UiO **Department of Informatics** University of Oslo

# Network Performance study on OpenStack Cloud Computing

Merhawit B.Gebreyohannes Master's Thesis Spring 2014



### Network Performance study on OpenStack Cloud Computing

Merhawit B.Gebreyohannes

18th June 2014

### Abstract

Cloud computing is gaining increasing popularity because of its higher scalability, more flexibility and ease of availability of its services.

Cloud Computing enables service providers to build a large pool of resources to their customers so that users will have resources accessible on demand. To this end, cloud computing service providers use Virtualization, since it gives them the ability to effectively share resources among their users. OpenStack, a relatively new open source cloud computing platform, focuses on delivering network as a service (NaaS) using virtualization technology.

OpenStack promises massively scalable cloud infrastructures. Being new, it remains to be investigated on how it delivers those abilities, and what the exact workings of its internal details are. The aim of this project is to study the internal network performance of OpenStack based on Neutron implementation. Network performance parameters like throughput, packet loss and packet delay will be evaluated under TCP and UDP traffic using IPERF benchmarking tool.

This research work is partly inspired by the fact that HIOA's Faculty of Technology, Art and Design uses OpenStack for its own cloud based infrastructure.

The investigation about network flow pattern confirm that VMs on the same network communicate at layer 2 and those at different networks communicate at layer 3, irrespective of their compute node locations. The results from network performance experiments showed that OpenStack Neutron guarantees a performance with virtually no network bandwidth bottleneck. In addition, the results shows that the location of machines in terms of compute node and network address affect network performance. The results also showed that OpenStack Neutron is scalable.

## Acknowledgement

First and foremost, I offer my sincerest gratitude to God for His love, Provision and wisdom throughout my life.

It is with great gratitude that I acknowledge the support of my advisors Tore Jonassen and Kyrre Begnum. Kyrre, this thesis would not have been possible without your help and guidance.

I would like to acknowledge the entire Network and system Administration staff: -Hårek Haugerud, Ismail Hassen, and Prof.Aeleen Frisch for giving me a diverse knowledge in network and system administration. I would also like to thank HIOA for providing me with necessary tools, devices and platform to undertake this project.

I am most grateful to my Mom, Mrs Mahari, and my sister, Mrs Almaz, who help me to bring my dreams true and taking care of my child.

My special thanks also goes to my brother, Mr. Michael, and my best friends, Selam and Isayas, for supporting me.

To my friends, Mr. Ephrem and Mr. Samuel, I say many thanks for supporting me in many ways throughout this project.

Last, but by no means least, I would like to thank my husband, Mr. Yohannes , my sweet baby , Abel, and my second unborn baby for their great patience.

## Contents

| 1 | Intr | oductio  | n  | 1  |
|---|------|----------|--|----|
|   | 1.1  | Motiva   | ations   | 2  |
|   | 1.2  | Proble   | m statement  | 3  |
| 2 | Bac  | kground  | d and Literature   | 5  |
|   | 2.1  | Cloud    | computing  | 5  |
|   |      | 2.1.1    | IaaS   | 6  |
|   |      | 2.1.2    | PaaS   | 6  |
|   |      | 2.1.3    | SaaS   | 6  |
|   | 2.2  | OpenS    | Stack  | 6  |
|   |      | 2.2.1    | OpenStack Architecture                                   | 7  |
|   |      | 2.2.2    | Network Evolution of OpenStack                           | 9  |
|   |      | 2.2.3    | OpenStack Network Operationalization                     | 12 |
|   | 2.3  | Netwo    | prk performance  | 14 |
|   |      | 2.3.1    | Measurable Network Performance Metrics                   | 15 |
|   |      | 2.3.2    | Tools for measuring network performance                  | 16 |
|   | 2.4  | Relate   | d works  | 18 |
| 3 | App  | oroach a | and Methodology  | 23 |
|   | 3.1  | Experi   | mental setup   | 24 |
|   | 3.2  | -        | mental Design  | 25 |
|   |      | 3.2.1    | Topology Case1 Experiment                                | 25 |
|   |      | 3.2.2    | Topology Case2 Experiment                                | 25 |
|   |      | 3.2.3    | Topology Case3 Experiment                                | 26 |
|   |      | 3.2.4    | Topology Case4 Experiment                                | 26 |
|   | 3.3  | Studyi   | ing the Network Performance                              | 27 |
| 4 | Res  | ult      |  | 29 |
|   | 4.1  | Result   | s for Network Traffic flow                               | 30 |
|   |      | 4.1.1    | Results for Same Compute node and same Network           | 32 |
|   |      | 4.1.2    | Results for Same Compute but different Network           | 33 |
|   |      | 4.1.3    | Results for Different Compute node but the same Network  | 33 |
|   |      | 4.1.4    | Results for Different Compute node and Different Network | 34 |
|   | 4.2  | Result   | s for Network Performance                                | 35 |
|   |      | 4.2.1    | Results for Tiny-sized instances                         | 35 |
|   |      | 4.2.2    | Results for Medium-sized instances                       | 38 |

|   |            | 4.2.3    | Results for multiple tiny-sized VMs                 | 41 |
|---|------------|----------|---|----|
| 5 | 5 Analysis |          |   |    |
|   | 5.1        | Tiny s   | sized instances Comparison                          | 45 |
|   |            | 5.1.1    | TCP Throughput comparison between case1 and case2 . | 45 |
|   |            | 5.1.2    | UDP Throughput comparison between case1 and case2.  | 46 |
|   |            | 5.1.3    | Packet Delay (Latency) comparison between case1 and |    |
|   |            |          | case2   | 47 |
|   |            | 5.1.4    | Packet loss comparison between case1 and case2      | 47 |
|   |            | 5.1.5    | TCP Throughput comparison between case3 and case4 . | 48 |
|   |            | 5.1.6    | UDP Throughput comparison between case3 and case4.  | 48 |
|   |            | 5.1.7    | Packet Delay comparison between case3 and case4     | 49 |
|   |            | 5.1.8    | Packet Loss comparison between case3 and case4      | 49 |
|   | 5.2        | Mediu    | um sized instances Comparison                       | 50 |
|   |            | 5.2.1    | TCP Throughput comparison between case1 and case2 . | 50 |
|   |            | 5.2.2    | UDP Throughput comparison between case1 and case2.  | 50 |
|   |            | 5.2.3    | Packet delay comparison between case1 and case2     | 51 |
|   |            | 5.2.4    | Packet Loss comparison between case1 and case2      | 51 |
|   |            | 5.2.5    | TCP Throughput comparison between case3 and case4 . | 52 |
|   |            | 5.2.6    | UDP Throughput comparison between case3 and case4.  | 52 |
|   |            | 5.2.7    | Packet Delay comparison between case3 and case4     | 53 |
|   |            | 5.2.8    | Packet Loss comparison between case3 and case4      | 54 |
| 6 | Dis        | cussior  | ı   | 55 |
| 7 | Cor        | clusio   | n and Future work                                   | 59 |
| - | 7.1        |          | lusion  | 59 |
|   | 7.2        |          | e work  | 60 |
| A | Det        | ailed re | esults from performance experiments                 | 61 |

# **List of Figures**

| 2.1<br>2.2<br>2.3<br>2.4   | Basic Architecture of OpenStackTraffic isolation using Flat managerTraffic isolation using VLANQuantum Deploynment  | 8<br>10<br>10<br>13        |
|--|---|----------------------------|
| 3.1<br>3.2<br>3.3<br>3.4<br>3.5  | Simple infrastructure of Alto Network   | 24<br>25<br>25<br>26<br>26 |
| 3.6  | VMs on different compute node and different network address   | 20<br>27                   |
| <ul> <li>4.1</li> <li>4.2</li> <li>4.3</li> <li>4.4</li> <li>4.5</li> <li>4.6</li> </ul> | Briges and interfaces of Compute and Network node          Traffic Flow for Case1          Traffic Flow for Case2          Traffic Flow for Case3          Traffic Flow for Case4 | 31<br>32<br>33<br>34<br>35 |
| 4.6<br>4.7   | Average TCP throughput found for all scenariosAverage UDP throughput found for all scenarios  | 36<br>37                   |
| 4.8<br>4.9<br>4.10   | Average packet delay for all scenariosTotal packet loss for all scenariosAverage TCP throughput found for all scenarios under medium  | 38<br>38                   |
|  | sized VMs   | 39                         |
| 4 1 2  | dium sized VMs  | 39<br>40                   |
|  | Total packet loss for all scenarios under medium sized VMs  | 41                         |
| 4.14   | Average TCP throughput for each VM pairs  | 41                         |
|  | Average UDP throughput for each VM pairs  | 42                         |
|  | Average Packet delay for each VM pairsTotal Packet loss for each VM pairs   | 42<br>43                   |
| 5.1<br>5.2   | Comparing case1 vs case2 for TCP throughput   | 46<br>46                   |
| 5.2<br>5.3   | Comparing packet delay for case1 vs case2   | 40<br>47                   |
| 5.4  | Comparing packet loss for case1 vs case2  | 47                         |
| 5.5  | Comparing TCP throughput for case3 with case4   | 48                         |

| 5.6  | Comparing UDP throughput for case3 with case4            | 48  |
|------|--|-----|
| 5.7  | Comparing packet delay for case3 with case4              | 49  |
| 5.8  | Comparing packet loss for case3 with case4               | 49  |
| 5.9  | Comparing TCP throughput case1 with case2 for medium VMs | 50  |
| 5.10 | Comparing UDP throughput case1 with case2 for medium VMs | 51  |
| 5.11 | Comparing packet delay for case1 with case2              | 51  |
| 5.12 | Comparing packet delay for case1 with case2              | 52  |
| 5.13 | Comparing TCP throughput case3 with case4 for medium VMs | 52  |
| 5.14 | Comparing UDP throughput case3 with case4 for medium VMs | 53  |
| 5.15 | Comparing packet Delay case3 with case4 for medium VMs   | 53  |
| 5.16 | Comparing packet Loss case3 with case4 for medium VMs    | 54  |
|      |  |     |
| A.1  | Results of Average packet delay for Tiny-sized VMs       | 108 |
|      | Results of Average packet delay for Medium-sized VMs     | 108 |
| A.3  | Results for Multiple tiny-sized VMs                      | 108 |

## List of Tables

|     | Open Source Cloud Computing           |    |
|-----|---------------------------------------|----|
| 2.2 | OpenStack Releases                    | 1  |
| 3.1 | Virtual Machine Specification         | 24 |
|     | Tiny VM Pairs of experimental setup   |    |
| 4.2 | Medium VM Pairs of experimental setup | 30 |

### Chapter 1

### Introduction

One of the greatest advancement in Information Technology in the recent decades is the innovation of Cloud computing. Cloud computing is a great design of technology ever made which provides services, applications and resources through a network [1].

Unlike traditional service provision, cloud computing gives the opportunity to use very large amount of resources on demand. Cloud computing has made services to be accessible via Internet regardless where they are located and types of hardware that are in use. The opportunity to provide unlimited resources and its cost effective nature made the demand for cloud computing services to increase tremendously. This has contributed for companies that provide cloud computing service such as Amazon, Google, Microsoft, Rackspace and Justcloud to generate more revenue [1].

Users of cloud computing are charged based on usage time, and amount of resources they get. For instance, a user can be billed based on the amount of time he/she uses the resource. Furthermore, consumers get high performance services as well as low cost services or resources instead of building their own highly costly infrastructure [1].

Thus, customers are more aware of the quality of services they get. Quality can be in terms of availability, scalability and efficiency. Qualities of services are difficult to predict where users use the same resources. Therefore, it is the job of system administrators to ensure resource allocation.

In this research, network quality (network performance) in cloud computing is the focus of investigation. Specifically, it will be investigating the network performance of OpenStack cloud computing.

In order to know the scalability and predictability of network performance of an OpenStack cloud computing, first, the network traffic characteristics will be studied. Then, the network performance will be investigated. The study will be conducted within an existing cloud infrastructure of HIOA. Key words: Cloud computing, OpenStack and performance.

#### 1.1 Motivations

Cloud computing is a technology that provides services and/or applications through internet. It gives the ability to get data and information from wherever the system is located at any moment. However there may be possible interruptions and severe failure of the system due to some technical problems. Therefore it should be kept in mind that there is high requirement of maintenance despite the advantages cloud services provide [2].

In this service, the quality of services in terms of latency, packet loss and speed are readily noticed by customers who are using the service, no matter how small or big services they are using. Moreover, in order to provide a good quality of service, a good capacity of network layer(Layer3) or data link layer(Layer2) performance is a necessity. Such demand from customers leads to the need for more study on network performances in general. Studying this also enables to have knowledge of predictability and scalability of network traffic.

The main functional technology behind cloud computing is *virtualization*. Virtualization is a technology where physical hardware components are made to be more easily manageable and utilizable. Furthermore, Virtualization is the method where it underlies an abstraction layer either between the hardware and operating system or between the operating system and applications [3].

Thus, usefulness of virtualization has been applied by most cloud providers due to its pliable and efficient use of resources among customers. A particular physical server hosts several virtual machines using virtualization techniques. For instance, Xen Virtualization is used by the most famous cloud provider Amozon EC2 [4]. The same physical processors and I/O interfaces are typically shared among several virtual machines. Therefore the computing process and connection performance is anticipated to be affected by virtualization[27].

A research on impact of virtualization on network performance [27] showed that there was strange value of packet delay variety between Amazon EC2 instances. They believe this packet delay variation is caused by large amount of queuing time differences at the driver domains of the virtualized machines. Furthermore, Throughput of TCP/UDP traffic was significantly fluctuating due to use of same processor among the virtual machine instances resulting in unstable network performance. They were also able to show medium sized virtual machines shares only 40-50% of the processor. Finally they concluded that processor sharing and virtualization causes network performance to be unstable among virtual machine servers.

Therefore, different software programs and techniques have been developed to address performance issues on virtualized cloud services.

This case study aims to help service providers to effectively manage virtual machines to meet their customers' needs better. It will also help system administrators to predict the performance of the system when the number of users increasing. Furthermore, applications that are running on the virtual machines would be managed effectively to reduce for unexpected performance influences and obtain the required performance.

While the need of high performance computing has been increasing tremendously, cloud providers are not still using the full advantage of the underlined high performance infrastructure they have, like network capacity. Though the network can support 1Gbps, users are unlikely to use even 100Mbps. This kind of inefficiency can happen due to the lack of efficient inspection of performance issues.

Therefore, a highly efficient HPC system requires a high-bandwidth, lowlatency network to connect multiple nodes and clusters.

#### **1.2** Problem statement

Cloud computing is a hot issue in this era and researchers come with brilliant ideas in this field. So far a lot of cloud computing operating system comes to exist for cloud platforms. Some of them are Openstack, EC2, OpenNebula, CloudStack etc...

Cloud computing provides several services. Those services are IaaS (Infrastructure as a Service), PaaS (Platform as a Service), DaaS (Data as a Service) and SaaS(Software as a Service).

As the demand of cloud computing is growing very fast, its performance has to be good enough to satisfy the need of its users weather it is private or public cloud. One of the most important concern of cloud computing is to achieve a better network performance because a system without good network performance is almost impossible to be regarded as a high performance clouding system.

This project will focus specially on OpenStack cloud computing that provides an infrastructure as a service.

The problem statements of this research are:-

- 1. To identify the Network traffic flow in the Open-Stack platform.
- 2. To evaluate network performance in cloud computing based on Open stack.

### 3. To analyze the predictability and scalability of the existing OpenStack based on the network performance.

It is believed that the study will lead to predict the behavior of network traffic on Open-stack and Users can know what network performance features they will get using open-stack cloud computing. The study will only be based on the local network performance with in Open-stack environment.

This paper is organized as follows: Literature and related works will be briefly discussed on chapter 2. Chapter 3 presents the approach and methodology used in this research. Chapter 4 gives the actual results obtained. Chapter 5 will analyze the obtained results. Conclusion will be represented on Chapter 7 preceded by the discussion section done in chapter 6.

### **Chapter 2**

## **Background and Literature**

#### 2.1 Cloud computing

Cloud computing is atechnology where a distributed- computing resources are served by a network-based mechanism[1].

The advancement of cloud computing minimizes the job of system administrators when there is a need a very huge amount of resourced system with the ability of consolidation of resources for better management. The idea of cloud computing started to emerge in the early 1960 where there was only an idea of "computation may someday be organized as a public utility"[1]. Then in 2000 Amazon which was the first company to start the use cloud computing in its data centers using a small amount of its capacity.

Eucalyptus and OpenNebula are the first open source cloud computing OS in the early 2008. Since then many open source software have been created including OpenStack.

| Name       | Year        | Description         | Deployment                 |
|------------|-------------|---------------------|----------------------------|
| Eucalyptus | Early 2008  | AWS API-            | AWS API-compatible plat-   |
|            |             | compatible platform | form                       |
| OpenNebula | Early 2008  | RESERVOIR           | private and hybrid clouds, |
|            |             | European            | and for the federation of  |
|            |             | Commission-         | clouds                     |
|            |             | funded project      |                            |
| CloudStack | In May 2010 | Began at cloud.com  | Public, private and hybrid |
|            |             |                     | cloud services             |
| OpenStack  | 2010        | By Rackspace and    | Public and private cloud   |
| _          |             | NASA                | platform                   |

The growth of Open source Cloud computing is shown on the below table.

Table 2.1: Open Source Cloud Computing [1]

Cloud-computing systems continue to grow, both in number and scale. As

this goes on, studies are required so that how to make future cloud computing services successful might be determined more precisely. With the current state being that most existing cloud-computing offerings are either proprietary or depend on software that is not amenable to experimentation or instrumentation, the need for such a study is unwarranted [19].

Today, there are three famous types of services for the end consumers of cloud. These are IaaS (infrastructure as a service), PaaS (platform as a service), and SaaS (software as a service).

#### 2.1.1 IaaS

Infrastructure as a Service (IaaS) model delivers users physical resources or virtual machines in terms of CPU, storage, load balancers or operating system. However, Some IaaS service providers provide disk image library and file-based storage. End users are charged on pay per use basis. Today most of cloud computing companies is able to deliver IaaS for end-users.

#### 2.1.2 PaaS

In this type of service, cloud providers provide database or web servers for consumers and consumers has full control to software deployment and configurations.

#### 2.1.3 SaaS

For few years ago, users were obliged to install their own platform. However today, due to cloud computing users are provided with application software such as web-based email or games which run under cloud provider's infrastructure and platforms. In such case users uses the resources effectively regardless constrains of IT implantations problems. Furthermore it minimizes users maintain and support cost. Customers are charged on pay per use basis monthly or yearly. The billing is adjustable when the users stop to use the cloud services.

Even though SaaS has many advantages, there is a security drawback. Unauthorized users may try to access others' information on remote servers.

#### 2.2 OpenStack

OpenStack is an open source platform for cloud computing designed using python programming. It can also be defined as compute, networking and storage that provides a pool of services like CPU, memory and storage. It is made available to consumers as building box through applications.

It was first launched in 2010 by the cooperation of RAKSPACE and NASA.

Today they are called OpenStack foundation [5]. Since 2010, a numbers of releases has been released. The following table shows the progress of OpenStack and the different features added in each release.

| Release  | Release Date           | Component names        | Status              |
|----------|------------------------|------------------------|---------------------|
| Name     |                        | included               |                     |
| Austin   | 21 October 2010        | Nova, Swift            | Deprecated          |
| Bexar    | 3 February 2011        | Nova, Glance,<br>Swift | Deprecated.         |
| Cactus   | 15 April 2011          | Nova, Glance,<br>swift | Deprecated          |
| Diablo   | 22 September 2011      | Nova, Glance,          | EOL(End of life) no |
|          |                        | swift                  | longer supported    |
| Essex    | 5 April 2012           | Nova, Glance,          | EOL                 |
|          |                        | Swift, Horizon,        |                     |
|          |                        | Keystone               |                     |
| Folsom   | 27 September 2012      | Nova, Glance,          | EOL                 |
|          |                        | Swift, Hori-           |                     |
|          |                        | zon, Keystone,         |                     |
|          |                        | Quantum, cinder        |                     |
| Grizzly  | 4 April 2013           | Nova, Glance,          | Security-supported  |
|          |                        | Swift, Hori-           |                     |
|          |                        | zon, Keystone,         |                     |
|          |                        | Quantum, Cinder        |                     |
| Havana   | 17 October 2013        | Nova, Glance,          | Current stable      |
|          |                        | Swift, Horizon,        | release, security-  |
|          |                        | Keystone, Neut-        | supported           |
|          |                        | ron, Cinder, Heat,     |                     |
|          |                        | Ceilometer             |                     |
| Icehouse | Expected 17 April 2014 | Under develop-         | Under develop-      |
|          |                        | ment                   | ment                |

Table 2.2: OpenStack Releases [5][6]

#### 2.2.1 OpenStack Architecture

OpenStack has been developing from time to time and it has been improving its architecture by separating its components/nodes according their use. Thus, the architecture of OpenStack is in a distributed fashion.

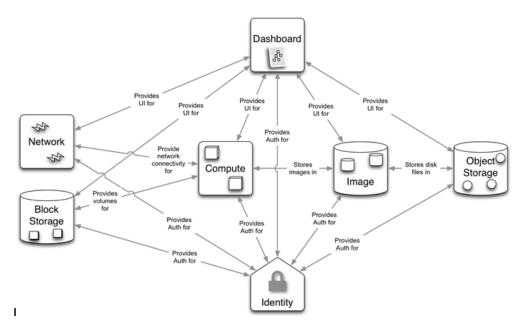


Figure 2.1: Basic Architecture of OpenStack [7]

In order to understand the design of OpenStack, details of each component is necessary albeit the focus of this research is on the networking part. In this research, Havana which is the stable release of OpenStack will be discussed in detail.

#### Nova (Compute node)

This component provides virtual machines (instances) and servers. It also provides different flavors of virtual machines that are pre-defined in terms of CPU, memory or storage. Different types of instances can normally be created that shares the same physical processors and I/O interfaces. The standard instances are tiny, small, medium, large and xlarge.

#### Neutron (Network Node)

This component provides dynamic networking by creating networks, subnets, routers and ports when users create virtual machines. In other words, it provides network as a Service between devices that are managed by compute node.

#### Cinder (Block Storage)

This provides the ability of creating volumes and taking snapshots.

#### Glance (Image Storage)

It is a registry for disc images for creating virtual machines. It also stores the metadata of the images.

#### Swift (Object Storage)

It stores object of user's data in containers.

#### Identity(Keystone)

This is the identity component that defines users, roles of users, services, tenants and so on. Tenants are group of users that shares the same resources of server, network or block storage.

#### Horizon (dashboard)

It is web user interface where users can login and create virtual machines. Moreover, it gives the overview of the whole OpenStack.

#### Heat (Orchestration)

This provides the ability to define application in terms of the template. "Heat Keeps the OpenStack Up". It has the possibilities to scale up or scale down the OpenStack cloud.

#### **Ceilometer (Metering)**

This component provides the ability of billing users measuring and tracking how much of services they used.

#### 2.2.2 Network Evolution of OpenStack

Due to the increase of routing protocols, security rules and IP addresses, conventional network management system is limited to support next-generation network system. Furthermore, customers have big expectation to manage the system. Thus the need of further devices like storage, network devices, and security tools has grown to large extent that can spilt into virtual devices and networks [24].

Like other cloud computing components, OpenStack network handles IP addresses and other networking services. It is an API-guided and flexible system that assures network as unlimited element in the deployed cloud resources. Moreover, it provides its users truly self-service beyond its network setup[24].

The OpenStack network has come a long way from its first release. In the early release of OpenStack, networking was a sub-component of Nova called nova-network. It was easy to configure was only component which is responsible for networking.

Nova-network had different network managers for the isolation of network traffic. Such as FlatManager, FlatDHCPManager and VlanManger. Traffic are isolated with a network bridge inside compute nodes in case of flat manager technique and the bridge is set as their default gateway for every virtual machines within the same compute node.

Figure 2.2 shows how network traffic is isolated in flat-networking inside One Compute node. However, flat isolation had limitations, as it does not isolate traffic between tenants. Moreover, it has only single IP pools.

Then developers came with new idea of vlan networking with the ability

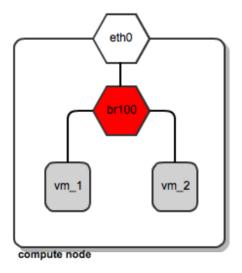


Figure 2.2: Traffic isolation using Flat manager [8]

of isolating traffic by given vlan tagging over the physical interface while bridging the network of virtual machines as shown in figure 2.3. Here it is able to separate traffic between tenants. Perhaps, the scaling of vlan tagging is limited to value of 4096.

Those types of networking have some key issues. VLAN is the only way

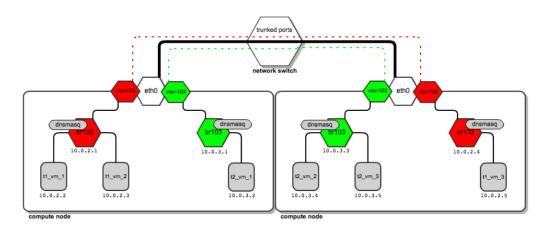


Figure 2.3: Traffic isolation using VLAN [8]

of doing multi-tenancy and they support only Linux bridges, which do not

support advanced network services ACLs, QoS, firewall and monitoring. Furthermore, the only point of failure will be Nova-network. Thus, the Open-Stack foundation came with new project to tackle the above-mentioned problems. A new networking project Quantum has emerged which basically works based on software-defined networking (SDN) with OpenVSwitch as a plugin. Quantum is named Neutron in the newly release of OpenStack.

This new networking component supplies different networking service like DNS, DHCP, IP addressing management, load balancing and firewall managements for cloud service users. It gives also a structure for SDN to consolidate with different pluggable networking solutions. Furthermore, it provides tenants (cloud users) to administrate their network setups and network security services such as traffic segregation and availability and so on [9].

#### 2.2.2.1 Software-defined networking (SDN)

Today the cloud is stressing the network due to massive scale of high-density, multi-tenancy cloud environments. They are trying to keep up with the explosive, dynamic nature of these virtualized environments where work-loads are moved, added or removed on the fly to address new requirements, and multiple tenants are leveraging shared resources to drive their bussiness [18].

Therefore, neutron is trying to deliver networking as a service in the cloud so that the network in the cloud environments can be relieved the network stress. It is actually designed to supply a plugin mechanism that will provide an option for network operators to enable different technologies via the quantum API and it lets tenants create multiple private networks and control the IP addressing on them. As a result of API extensions, organizations have additional control over security and compliance policies [10].

Software-defined networking(SDN) provides delicated and flexible contol of network for devices with OpenFlow enabled. This technology helps to provide Network-as-a-service for cloud environment despite some challengs like the amount of ACL-based tables that maintaines and update's the state rate [18].

#### 2.2.2.2 OpenvSwitch

OpenVswitch is mutli-layer virtual Switch plugin which is mostly used today. Like a hardware switch, it operates in Layer 2 but it also works on layer 3 and layer 4, i.e it not only works with mac address but it can forward packets with IP addresses. This plugin helps hypervisors to enable bridging traffic between VMs of internal and external networks [11].

OpenVswitch provides two types of technologies when creating virtual networks [12].

1. VLAN (virtual LAN) is where traffic is isolated from each other by adding a 4-byte VLAN tag to Ethernet header. This tag varies from 1 to

4095. OpenVSwitch enabled switch and routers know how to translate the VLAN tag. Those packets that are tagged with one VLAN shares are only shared with other devices configured to be that VLAN, even through all devices are on the same physical network.

2. GRE (Generic Routing Encapsulation) which encapsulate IP packets that makes new packet with new routing information. Then the packet is deencapsulated and routed when it reaches its destination. Here, neutron creates GRE tunnels. They are basically ports on a bridge that allow them to acts as single bridge and enable the compute and network nodes to perform as a one in routing the packets.

There are two bridges in neutron which are emerged with the OpenvSwitch plugin: - integration bridge (br-int) and external bridge. The integration bridge enables communications between internal VMs whereas the external bridges connect VMs to external network [12].

#### 2.2.3 OpenStack Network Operationalization

Quantum which is newly named neutron uses network virtualization that provides Network as a Service. Quantum will be used mostly in this research. It uses an API to setup and offer virtual networks (vNIC) that links with other OpenStack services. Moreover, those APIs determines other network services like QoS, networking monitoring and so forth [13].

Figure 2.4 shows the relationships of network component with other Open-Stack components.

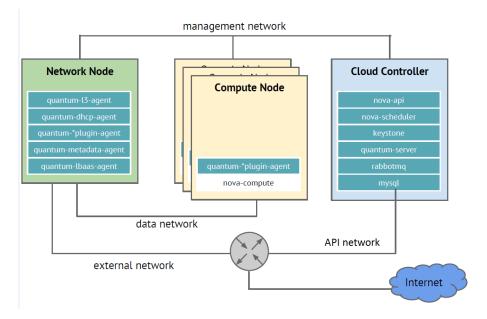


Figure 2.4: Quantum Deploynment [13]

The management network provides connectivity of OpenStack component with in the datacenter. On the other hand, Virtual machines communicate through the Data network. All OpenStack APIs are pointed out by API network.

#### 2.2.3.1 Components of Neutron

#### • Neutron Server

This component starts Quantum API and its extensions accomplishes network services like network, subnet and port. Moreover it assigns IP address to each port.

#### • Neutron Plugin

Each virtual machine runs the plugin that connects to network port.

#### Neutron DHCP agent

It starts or stops DHCP server and keeps up its DHCP configuration. Each compute node runs this agent in case of multi-host mode.

#### • Neutron L3-agent

Every network runs L3-agent in order to implement floating IPs and other L3 features like Network Address Translation(NAT).

#### • Neutron Metadata-agent

This component mediates between Quantum L3-agent, DHCP agent with OpenStack nova metadata API server.

During creation of a virtual machine, the neutron creates a network, and associate the create network with a subnet. When the virtual machine boots, it connects to the network [14].

Each virtual machine can have two IP address. These IP adress are private IP and floating IP.

A DHCP server assigns a private IP address from a private network to the virtual machine interface and is visible by "ifconfig" command from its terminal i.e, the guest operating system has knowledge about it. Thus, virtual machines (VMs) communicates each other via virtual switch on each compute node using those private IPs. Whereas floating IP address is a service given by Neutron to VMs. The delivery of packets to the interface with the assigned floating adress is the responsibility of Neutron's L3 agent. Moreover,floating IP address is used to access VMs from external network. A Vm can attain both private and floating IPs on a single interface at the same time.

#### 2.3 Network performance

Today parameters of HPC have to be evaluated with various configurations and different types of resources because the performance of networks becomes increasingly limited by different virtual constrains in High performance networks.network information like network channel state, network topology, network protocol and traffic information are fundamental and significant elements. In general if more information of network is collected, it can be much easier to improve network performance[22]. Thus, Measuring such characteristics is important for both users and providers to proof the SLS (Service Level Specification) auditing and assures the network behaves as specified inthe contract [15].

In cloud computing, specifically OpenStack, the configuration and use of various hypervisor technologies, implementing of different network switching technologies like VLANs or GRE tuning, and variety of filesystem play a great role in the overall determination of system performance [26]. In this research paper, more emphasis will be given to analyze performance of TCP and UDP traffic. Those protocols provide network services and is very important to understand briefly.

#### • TCP (Transmission Control Protocol)

It is a transport protocol in the Suite of TCP/IP. It provides reliable delivery of packets through a connection-oriented service. It is used by many higher layer applications such as WWW, FTP and E-mail due to secure delivery of packets.

The TCP header structure format explains its various functionality. For example the window size format manages the flow of packet in the network hence prevents buffer overflow. Its size can be regulated by the receiver in order to protect congestion.

#### • UDP (User Datagram Protocol)

This transport protocol model delivers packets without guarantee and/or order to the upper layer. However it is more suitable for time-sensitive applications where small error or packet loss would not affect the flow of data for instance VOIP application.

Unlike TCP, UDP has no any means of congestion control. Therefore applications that uses high bandwidth need to implement congestion control mechanism in its application level.

#### 2.3.1 Measurable Network Performance Metrics

Here different network performance metrics that can be measured will be explained briefly.

#### • Transmission Bandwidth

Bandwidth (throughput) measures the speed how quick data can be transmitted once it start to flow. In other words, throughput is the amount of data that is sent over a certain amount of time or the amount of time consumed to transfer a certain amount of data between two devices.

There is a big differentiation between actual and theoretical bandwidth. Theoretically a network can support very high bandwidth however practically due to the existence of overhead in hardware and operating system is much lower bandwidth.

#### • Packet latency

Latency is a value that tells how long communication across network links take. Packet transmission consumes a certain amount of time regardless the network traffic capacity or CPU speed of a system. There are several ways in which packet transmission can be influenced by latency. Data protocols, queuing and buffing, and routing and switching are few to mention. Packet loss

In network communication, packet loss refers to the failure of packets in transmission due to weak signal strength, interference by nature or human, noise, hardware, software failure. The loss of a packet in networking causes evident performance issue or jitter, which will affect the network application in general. Since TCP does not report loss to the user, it was found UDP tests are helpful to see packet loss along a path.

#### 2.3.2 Tools for measuring network performance

The task of computer network Performance measurements consumes plenty of time unless proper tools are used. Moreover, choosing of appropriate tool for generating and transmitting of packets would be so difficult task as there exist plenty of tools [25].

In this section, the main tools which will be used in this research will be described briefly.

#### • IPerf (Intelligent PERFormance)

It is one of the most popular and powerful benchmarking tool used for network performance today [25]. It measures end to end obtainable bandwidth using both UDP and TCP streams. It allows parameter variations such as TCP window size, maximum segment size and multiple parallel streams.

It was originally developed by DAST (Distributed Applications Support Team at the National Laboratory for Applied Network Research (NLANR). Iperf is written in C programming. In general iperf reports parameters as throughput, jitter, and packet loss. Iperf works in a clientserver model in order to measure the throughput in bps between two of them by generating packets.By default iperf calculates the throughput for 10 seconds.

Tools like iperf measures very large amount data. Iperf utilized the client architecture sending a selected amount of data from iperf client to iperf server and measuring the time that it takes to transfer or receive the data.

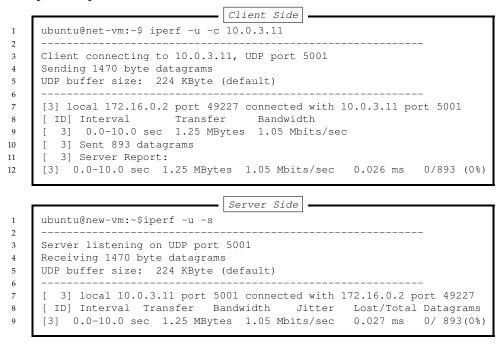
There is also a GUI version of iperf called jperf that is developed in java programming. Iperf works witth both IPv4 and IPv6.

A simple Iperf TCP output format looks like the following on both client and server side:-

Client Side ubuntu@net-vm:~\$ iperf -c 10.0.3.11 1 2 Client connecting to 10.0.3.11, TCP port 5001 3 TCP window size: 23.5 KByte (default) 4 5 [3] local 172.16.0.2 port 51435 connected with 10.0.3.11 port 5001 6 7 [ ID] Interval Transfer Bandwidth [ 3] 0.0-10.0 sec 530 MBytes 445 Mbits/sec 8 \_ Server Side \_ ubuntu@new-vm:~\$iperf -s 1 2 \_\_\_\_\_ 3

The client reported that the amount of TCP packets generated is 586 MBytes and a throughput of 492 Mbits/sec which is used to transmit the packets. By default, Iperf generates packet for 10 seconds.

Iperf output for UDP traffic is as shown below:-



Here a total of 1.25 MBytes are send to the server with a bandwith of 1.05 Mbits/sec. Then ther server reported that there was no packet loss but there was a jitter (arrival time variation of packets) of 0.026ms.

#### Ping

Ping is a software utility used to test a connectivity of a remote network (host) usually by sending an Internet Control Message Protocol (ICMP) Echo Request packet to its destination, where it then returns the packet to the source. The request is send in a given intervals and measures the round-trip time. The RTT is measured in milliseconds. In this measurement, the lower is the better. Ping is also used for troubleshooting.

#### Tcpdump

Tcpdump is a network sniffer that captures and displays packet headers by comparing to a predefined criteria. It is an open source command line tool, which can search based on a given arguments such as host names, protocols, IP addresses etc.

#### 2.4 Related works

A number of research and efforts has been done for the development and enhancement of high performance cloud computing in the past few years. Today those efforts can be categorized into resources performance, security performance and performance comparison between different cloud platforms. Given that the focus of this research is on the evaluation of network performance earlier related research works will be briefly explained under this section.

### "Analysis of Security in Cloud Platforms using OpenStack as Case Study"[20].

Despite the advantage of cloud computing on improving better use of large resources, the concern of security and privacy is an obstruction for many in implementing it. This research is conducted to examine the characteristics and problem of security of cloud platforms specifically based on OpenStack [20]. Cloud customers are afraid of attackers as their information and IT resources are more exposed to them. On the other hand, implementing security in cloud computing is very hard due to various attacks that can happen on application and hardware components [20].

This study of security investigation of cloud computing based on OpenStack was to find out the lack of trust on Authentication and Identity Management (IAM), and Data Management. The current security of cloud computing is very complicated, the paper reviewed various schemes that can efficiently attain information privacy in cloud. Some of them are a powerful user authentication framework, which gives mutual authentication, user privacy and a better way of security against intruders, access control approach, and privacy

and data protection solution were proposed by a number of researchers [20]. The research investigated security issues on OpenStack Object Storage (Swift) and found out that low permission administrators are able to get credentials of highly permissioned administrators. Furthermore, they concluded that isolated files can be compromised and most cloud service provides are weak to afford encrypted users' information [20].

#### "Deployment and Performance Evaluation of Virtual Network based on OpenStack"[29].

This article was first conducted on the international workshop on cloud Computing and Information Security in 2013.

The research paper was written to address performance of Quantum (the network component of OpenStack) when it is deployed on single-host and/or multiple hosts[29].

The research described that in early release of OpenStack. Compute node (nova) was responsible to create network function for the instances. However Quantum, which was released in Folsom and Grizzly version of OpenStack, is excluded form Nova. It obtained new APIs and was able to provide users to set up their network topology[29].

The study also stated that Multi-host virtualization routing is a new idea that emerged in Grizzly OpenStack version. Therefore the deployment performance of virtual networks is yet doubtful.

The experiment of this research was to design a number of practical deployment strategies and examine communication tests and evaluate their performance. In the deployment of single-host, a single network node and multiple compute nodes are implemented. In this scenario, the risk of failure is very high as the network node is a single point of failure (SPoF). Moreover, if there is high network traffic on the system, then network node will be the bottleneck for the performance of the system[29].

Therefore this study designed a new deployment strategies called multi-host deployment to increase better network services reliability and avoid SPoF on OpenStack platform. In this scenario, the network traffic will be uniformly distributes among the compute nodes. Connectivity tests were conducted on different instances on the same compute node, among VMs located on different compute nodes and between VMs in the cloud and outside the cloud for both single-host and multi-host deployments. The research concluded that the connectivity test of the deployed virtual machines was successful.

In the performance evaluation experiments, they made an approximately estimation of delay and packet loss rate using D-ITG software under both scenarios. The result shows time delay increases as the size of sent data increases in the single-host deployment whereas there was double increases of time delay of different VMs within the cloud than a VM communicates with external VM( as external VM is close to the router) in multi-host deployment. However, multi host deployment has advantage over single host deployment because as the data size increases, the time-delay and packet delay was almost distributed uniformly[29].

Some of the future works that the research highlighted are it is difficult to investigate the exact number of redundant routers and design an efficient agent algorithm for scheduling and allocation of resources[29].

#### "The Eucalyptus Open-source Cloud-computing System"[24].

The research presented an open source platform called Eucalyptus which implements Infrastructure as a Service. They described its fundamental concepts and functionality. Eucalyptus is made to enable researchers substitute their own experimental system using other cloud solutions like Amazon EC2 and S3 user interface. Eucalyptus have four main components called Node controller, cluster controller, storage controller and cloud controller and each component has its own functionality to the creation of VMs[24].

In cloud computing, resources allocation to users depends on different features such as storage, memory and network capacity, and as well as geographical location. Perhaps the process of the allocation associates with resource availability, software service requirements and so on [24].

In this work, they addressed cloud computing problems like VM scheduling, VM interconnectivity and building of virtual networks. The solution for VM network must deal with communication, separation and performance of the network traffic [24].

#### "Comparison of Open-Source Cloud Management Platforms: Open-Stack and OpenNebula"[28].

This research study is conducted in the 9th International Conference on Fuzzy Systems and Knowledge Discovery in 2012.

The research focused on comparison of open and free source cloud computing platforms OpenStack and OpenNubla which provides Infrastructure as a Service. Those two platforms were compared based on theirs architecture, hypervisors, security, and other important features [28].

The paper showed that OpenStack has stable and easy architecture. A project called Keystone provides services for security by managing and authorizing users. Moreover OpenStack supports Xen, KVM, Hyperv, XenServer, VMware, and LXC whereas OpenNebula does not support HyperV and LXC virtualizations [28].

By looking at the comparison outcome, the researchers suggested that Open-Stack is more applicable for an enterprise due to its ability to encapsulate its services. Whereas OpenNebula is more advisable for research institutions, universities and for large data centers enterprises [28].

#### "Impact of Information on Network Performance – An Information-Theoretic Perspective"[22].

This research paper is conducted by Jun Hong and Victor O. K. Li at the University of Hong Kong in 2009. The main objective of this paper was to investigate the relation between network information and network performance by considering network information as a very vital factor to decide network performance. They studied network performance considering the fundamental network information that should be transferred along the network. Furthermore, they had to answer basic questions such as how much information is needed for deciding how much a network is efficient and how the transmission traffic overhead can affect the network performance [22].

The main idea of this paper is develop a theoretical information framework and relate network information and network performance quantitatively based on the rate of distortion theory concept. Network performance metrics such as packet loss rate and network traffic capacity can be extracted from the rate of distortion [22].

This study is performed to analyze traffic information on a wireless network. Network information like traffic information, network topology, and channel state are very vital factors that can affect network performance. They assumed Time Division Multiple Access (TDMA) as a channel access protocol where a sender in each link tells the controller if there is a packet waiting to be transmitted in each time slot. Thus the controller will plan depending on the information received and informs the nodes the schedule. Here they tried to measure the network metrics like network transmission delay, throughput, and packet loss from the obtained information. Those results were related to the traffic information between to nodes [22].

The research concluded by saying network throughput improves when the scheduler gathers more information without considering the overhead of gathering the traffic information [22].

#### "High performance network virtualization with SR-IOV"[21].

This project was conducted to address how I/O virtualization performance can be improved using SR-IOV (single-root I/O virtualization) device driver standard. When implementing SR-IOV, it enables I/O device to share its resources without distorting its performance. Furthermore the research investigated the performance of SR-IOV through several experiments[21].

In a high performance computer environment, the performance I/O is crucial because the need of high computing capability system is increasing extremely. However long latency PCI Express due to fixed number of PCIs slots and the constraint hardware scalability are still limiting the I/O performance[21].

A technique to over the aforementioned problem is to sue virtualization where multiple users share the same resources. An abstraction layer called Virtual Machine Monitor (VMM) or Hypervisor is introduced on the top of the hard-ware. Each VM (user) then assumes as it owns the whole resource[21].

Nevertheless, virtualization overhead keeps the CPU busy decreasing the performance of the system. Different methods have been introduced to eliminate the above mentioned problem. Such as interrupt mask and unmask acceleration, virtual End of Interrupt (EOI) acceleration, and adaptive interrupt coalescing. In this experiment, generic virtualization architecture for SR-IOV-capable devices and a dynamic network interface switching (DNIS) scheme were proposed which helped the SR-IOV capable device driver in order to simplify VM immigration respectively [21].

The paper analyzed a throughput of 9.48Gbps was able to attain using SR-IOV. The network was scaled to host about 60 VMs with only increase of 1.76% of CPU per VM[21].

# Chapter 3

# **Approach and Methodology**

The research will be carried out in two phases. The first phase of the experiment is to investigate traffic flow pattern and the second to study network performance in terms of throughput, packet loss and delay. The research will be conducted by deploying virtual machines(VMs) on same and/or different compute nodes. All VMs will be using 64-bit Ubuntu 12.04 operating system as their base OS.

### Phase 1. Investigation of Network Traffic flow on OpenStack

Nowadays virtualization is a fundamental function which has huge contribution in a cloud computing environment. It is needed for network transport and computing as well as storage. Network virtualization enables instances to communicate in a secure and pliable way during migration. It also creates virtual networks that provide an intelligent abstraction that makes easy to deploy and manage network services and underlying network resources. Virtual switches like Cisco Nexus have capabilities of port-profile portability in addition to features like QoS [16].

In such system, traffic segmentation is achieved using VLAN tagging or GRE tunneling for each tenant. Thus, the different alternative of network switching system plays a big role in the complexity of networking architecture in cloud computing.

In the architectural setup of the experiment environment for this research on OpenStack, Vlan-tagging is activated for network traffic isolation.

By studying different flowing pattern across the network, cloud providers will be able to find out the nature of Vlan-tagging service with other network service such as GRE Tunneling. To investigate traffic flow characteristics, a number of tools will be required. Those tools will be capable of tracing the flow of the traffic over the network. The tools that are going to be applied in this research will be **traceroute or tracepath/route** and **tcpdump** in order to observe the network flow.

## Phase 2. Network Performance on OpenStack

The second thing to investigate is network performance in OpenStack cloud computing environment, which is a high performance computing network. In order to carry out this investigation, benchmarking tools, with the ability to report about throughput, packet loss and packet delay about both TCP and UDP traffic, are needed.

# 3.1 Experimental setup

This experiment is conducted on the Alto OpenStack cloud, which is already deployed at Høgskolen i Oslo og Akershus (HiOA). The system consists 12 compute and 1 network nodes. Each compute node has two 10GB and 1 GB physical network cards, 256GB ram and 2\*1TB in RAID1 disk. Figure 3.1 illustrates the connectivity of network node, compute nodes and controller node in Alto deployment.

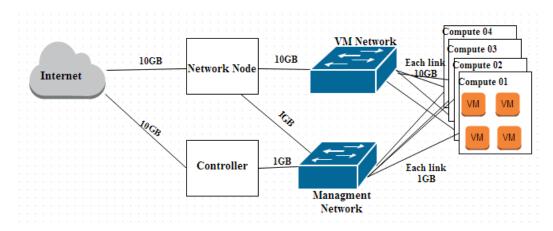


Figure 3.1: Simple infrastructure of Alto Network

Cloud computing service providers provide different virtual instances which differ in their machine hardware, virtualization technology and hosting setup. Instances in the lower tier have slower CPU, less VCPU cores, less RAM size and less amount of disk size than instances in the higher tier. Therefore, the experiments done should be able to show how the difference in parameters affects network performance. In this case, i.e. Open Stack, experiments will be performed on both M1.medium and M1.tiny flavored virtual machines.Their specifications is as in table 3.1.

| Virtual Machine Type | CPU     | Memory(RAM) size | Storage(Disk size) |
|----------------------|---------|------------------|--------------------|
| Tiny                 | 1VCPU   | 512MB            | 2GB                |
| Medium               | 2 VCPUs | 4GB              | 40GB               |

Table 3.1: Virtual Machine Specification

# 3.2 Experimental Design

The concrete experimental plan for the investigation task is as follows:

# 3.2.1 Topology Case1 Experiment

Experiment will be done to investigate the traffic flow between two virtual machines located at same compute node and same network. Figure 3.2 portraits the logical flow of network traffic.

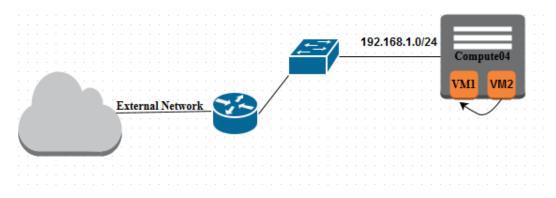


Figure 3.2: VMs on the same compute node and same network address

## 3.2.2 Topology Case2 Experiment

This test will be performed in order to study the traffic flow between two virtual machines located at same compute node but different network. The two different network can be attached to the same router or they can attached to two different routers. Figure 3.3 and Figure 3.4 portrait the logical flow of network traffic for both networks respectively.

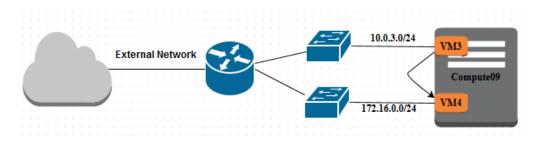


Figure 3.3: VMs on the same compute node but different network address

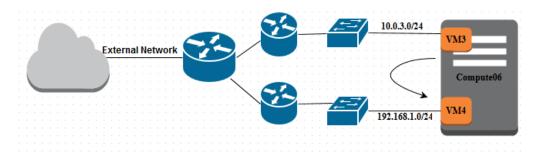


Figure 3.4: VMs on for the same case above

### 3.2.3 Topology Case3 Experiment

Here traffic flow pattern will be investigated between two virtual machines located at different compute nodes but same network as shown in figure 3.5.

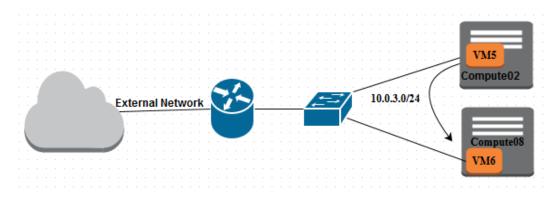


Figure 3.5: VMs on different compute node but same network address

#### 3.2.4 Topology Case4 Experiment

This experiment will be conducted to examine the traffic flow between two virtual machines located at different compute nodes and different networks. It's setup is as in figure 3.6

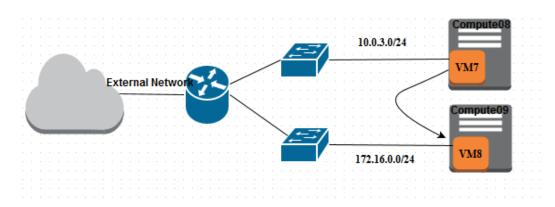


Figure 3.6: VMs on different compute node and different network address

# 3.3 Studying the Network Performance

This section will evaluate the network behavior between instances within OpenStack cloud. Due to the use of different type of network equipment like switches, VLAN configuration and so forth, network properties within one cloud and network between different clouds have quite different behavior. Many providers promise high bandwidth from Mbps to Gbps inside their cloud infrastructure [23].

To compare the network performance, matrices like throughput, latency and loss will be measured. Both TCP and UDP will be used to measure the throughput. All these metrics will contribute awareness to customers on how OpenStack cloud provider's network is provisioned.

In the second experiment, the network throughput, which is a major factor, will be evaluated. It will also examine the behavior of bandwidth sharing in case of multiple Virtual machines in one compute node. Simultaneously round-trip packet delay and packet loss will be measured between two specified virtual machines.

In order to carry out the throughput and packet loss experiments **Iperf** which is a benchmark tool that generates TCP and UDP traffic will be used. **Iperf** uses a default bandwidth of 1.05 Mbps in case of UDP traffic. However in order to have accuracy in measuring achievable bandwidth, the maximum available bandwidth which is 10 Gbps will be set using –b option. The default maximum transmission unit (MTU) and UDP buffer size is 1500 bytes and 224 Kbytes respectively. For TCP, default TCP window size is 23.5 Kbytes.

To minimize complexity in measuring and evaluating the network performance, all factors that can affect the performance are kept as their defaults values. Factors like TCP window size, maximum transmission unit, UDP buffer size, datagram length and parallel transmission will keep unchanged because the problem statement address how is the bandwidth sharing between instances with their defaults. Furthermore, the experiment will be huge if experiments are done by changing those parameters.

To measure packet round-trip delay (RTT), **ping** tool will be used. Basically ping command is used to check the existence of a network connection of a remote host by sending ICMP packets. If the host is reachable then it tells how much time it uses until the response comes back to its source that is the delay time of the packet. For better effectiveness the tool will send ping packet for 1500 times and collect the average delay time.

In order to measure the above-mentioned metrics, a pair of instances will be allocated as shown in section 3.2.

First, tests will be done for a single pair of VMs by running one pair at a time. Next, multiple of pairs of VMs which are located on the same compute node will be made to execute Iperf simultaneously.

Finally, the experiment will be repeated for different flavors of virtual machines in order to analyze the sharing of available bandwidth among the processes and/or virtual machines.

# **Chapter 4**

# Result

This section includes the test result found from the actual experimental set up to address the problem statement section 1.2. The results are collected while 36 VMs were running in OpenStack cloud computing at Alto. The results are categorized according to the classification mentioned in section 3.2.

Table 4.1 and 4.2 summarize the locations of tiny and medium-sized instances and their IPs addresses for the different scenarios mentioned in section 3.2. VM1 and VM2 are in the same compute node that belongs to the same network and is taken as **Case1**. While VM3 and VM4 have different network address but they belong to the same compute node and treated as **Case2**. VM5 and VM6 reside on different compute node but on the same network, which is **Case3** where as VM7 and VM8 are on different compute node and different network and is considered as **Case4**.

| Name of Scen- | Name of VM  | Private IP ad- | Compute node |
|---------------|-------------|----------------|--------------|
| arios         |             | dress          | name         |
| Case1         | VM1 and VM2 | 192.168.1.2    | Compute04    |
|               |             | and            |              |
|               |             | 192.168.1.4    |              |
| Case2         | VM3 and VM4 | 10.0.3.8       | Compute09    |
|               |             | and            |              |
|               |             | 172.16.0.2     |              |
| Case3         | VM5 and VM4 | 10.0.3.8       | Compute08    |
|               |             | and            | and          |
|               |             | 10.0.3.9       | Compute02    |
| Case4         | VM7 and VM8 | 10.0.3.2       | Compute08    |
|               |             | and            | and          |
|               |             | 172.16.0.2     | Compute09    |

Table 4.1: Tiny VM Pairs of experimental setup

| Name of   | Name of VM      | Private IP ad- | Compute node |
|-----------|-----------------|----------------|--------------|
| Scenarios |                 | dress          | name         |
| Case1     | VM_M1 and VM_M2 | 10.0.3.12      | Compute06    |
|           |                 | and            |              |
|           |                 | 10.0.3.16      |              |
| Case2     | VM_M3 and VM_M4 | 172.16.0.5     | Compute08    |
|           |                 | and            |              |
|           |                 | 10.0.3.15      |              |
| Case3     | VM_M5 and VM_M6 | 10.0.3.13      | Compute03    |
|           |                 | and            | and          |
|           |                 | 10.0.3.14      | Compute04    |
| Case4     | VM_M7 and VM_M8 | 10.0.3.12      | Compute10    |
|           |                 | and            | and          |
|           |                 | 192.168.1.5    | Compute08    |

| Table 4.2: Medium | VM Pairs | of experimental | setup |
|-------------------|----------|-----------------|-------|
|-------------------|----------|-----------------|-------|

# 4.1 **Results for Network Traffic flow**

For each case as mentioned on section 3.2, one VM sent continuously ping packet to its respective destination. At the same time, packets were tracked on both internal and external bridge interfaces of compute node and network node using **tcpdump** in order to see the traffic flow as in the following command:-

|   |         | Tcpdump Command                    |
|---|---------|------------------------------------|
| 1 | tcpdump | -n -e -i interface host ip address |
| 2 | -n      | To display addressess by names     |
| 3 | -е      | To display link-level header       |
| 4 | -i      | To specifyinterface name           |

However it is necessary to know how VMs are interconnected inside one compute node and how OpenvSwitch is configured to use VLAN to isolate traffic flows on the physical network. On compute node, OpenVSwitch is configured as follows:-

|   | OpenVSwich setup                                   |
|---|--|
| 1 | [OVS]  |
| 2 | <pre>tenant_network_type = vlan</pre>              |
| 3 | <pre>network_vlan_ranges = default:3000:3999</pre> |
| 4 | <pre>bridge_mappings = default:br-eth7</pre>       |
|   |  |

This shows that vlan is used to isolate traffic, which has tagging id ranging from 3000 to 3999 and bridge eth7 was used for data forwarding. Br-eth7 was created on each compute node and added to the physical network.

Then the OVS-agent of each node connected bridges br-int and br-eth7 by adding ports int-br-eth7 and physical-br-eth7 and connecting them with a veth

pair. These ports do not have tags. Therefore they are trunk ports.

Then when creating a VM, it is associated with previously create network. When VMs boot, the DHCP-agent created a tap device for each network and openvswitch-agent created local VLANs to them.

These local VLANs are local to br-int and isolate different networks on br-int. However if a packet needs to go to VM running on another compute node, then it will have to go via br-eth7, and its VLAN id will be translated to the provider: segmentation\_id of its neutron network that provides different types of flow matches i.e, another VLAN tagging.

Diagram 4.1 shows the internal view of a compute and network node along with its interfaces and bridges.

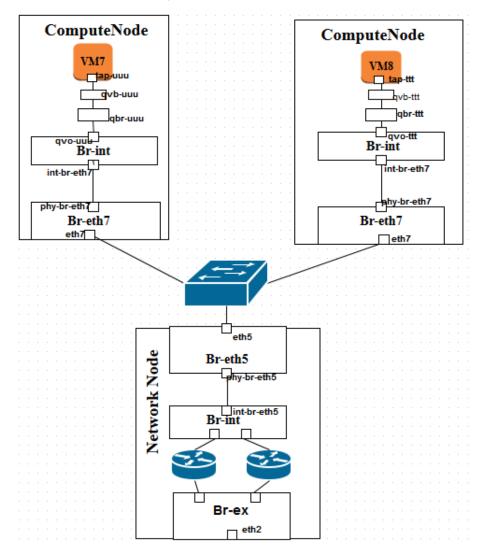


Figure 4.1: Briges and interfaces of Compute and Network node

To investigate the traffic flow, a source VM (i.e. client VM) pings its corresponding destination as shown in table 4.1 and on each interfaces of internal and external bridges, packet were tracked using *tcpdump*. While pinging and tracing the packets, private IPs are used because the floating IPs are assigned by Neutron's L3 agent. Thus, packets will definitly go to network node interfaces. If two private downs are connected as in shown in figure -3.4, then floating IP must be used in order to ping each other.

The results of each scenario are explained below.

#### 4.1.1 Results for Same Compute node and same Network

When instances are on the same compute node and on the same network, the traffic flow was traced on all the interfaces of the br-int and br-eth7. Then the flow was traced on only two interfaces inside the br-int switch.

On interfaces qvo -XX that connects client VM to br-int and qvo-YY which connects br-int to Destination VM were the data flow tracked and can be shown in figure 4.2:-

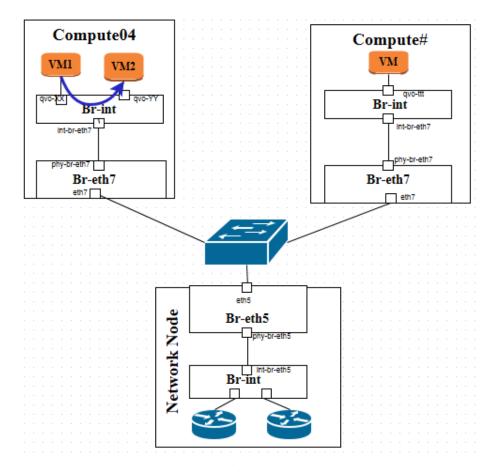


Figure 4.2: Traffic Flow for Case1

#### 4.1.2 Results for Same Compute but different Network

To study the flow pattern of VMs on same compute node but different network, tcpdump data was collected on interfaces of br-int and interfaces on br-eth7 of the compute node09 to collect icmp packets. On two interfaces qvo-xxx, qvo-yyy and int-br-eth7 of br-int and on interfaces of phy-br-eth7 and eth7 of br-eth7 were packets traced as shown in the diagram 4.3. The results from the traced packets showed that packets were going out of the compute node. Next network node interfaces were traced for the icmp packets. Then, there were packets passing through interfaces of eth5, phy-br-eth5, int-br-eth5 and two qvo-interfaces.

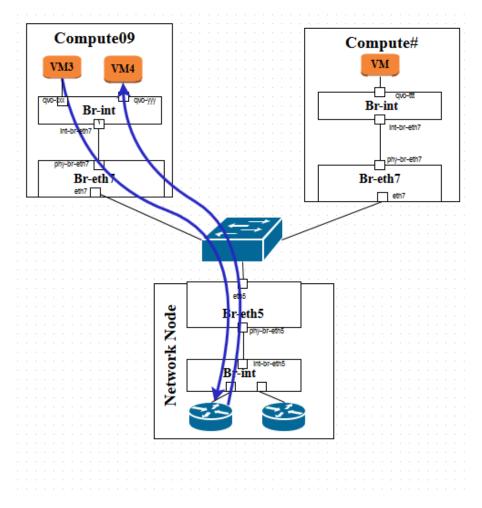


Figure 4.3: Traffic Flow for Case2

#### 4.1.3 Results for Different Compute node but the same Network

Here two VMs are on different compute node but the same network, therefore packets were traced on the two different compute nodes. On the compute node where the client VM is located, packets were traced on

interfaces qvo-vvv and int-br-eth7 of the br-int and phy-br-eth7 and eth7 of the br-eth7. Next, Network node interfaces were investigated if ICMP packets are passing through them, but there were no packets detected. Then on the compute node where the other VM is situated, traffic was tracked on interfaces eth7, phy-br-eth7, int-br-eth7 and qvo-zzz before reaching its destination VM.

The flow is illustrated in the figure 4.4:-

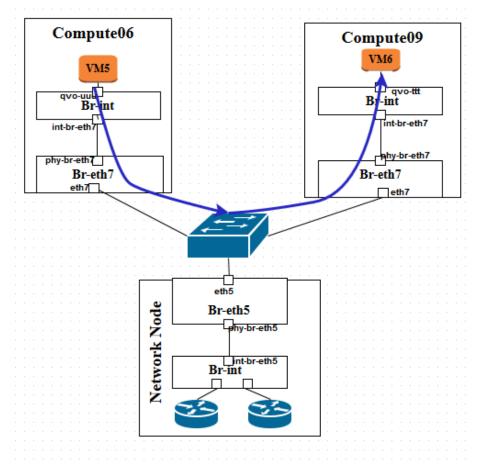


Figure 4.4: Traffic Flow for Case3

#### 4.1.4 Results for Different Compute node and Different Network

Network traffic flow between VMs on different compute node and different network was investigated here. The result showed packets were passing through interfaces qvo-uuu, int-br-eth7, phy-br-eth7 and eth7 of client compute node, then they went to network node on interfaces of eth5, br-eth5, phy-br-eth5 and on int-br-eth5 and reached its destination compute node. On the destination node packets passed through eth7 to phy-br-eth5 and in the internal bridges. The packet flow is shown in figure 4.5:-

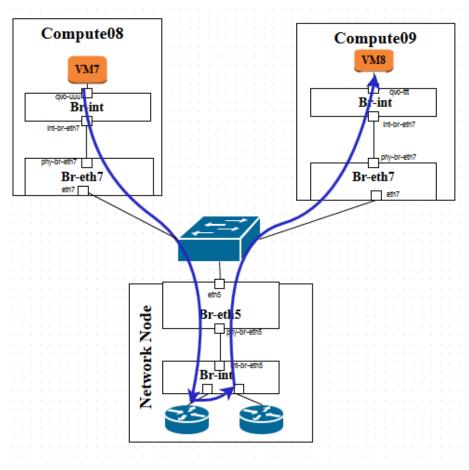


Figure 4.5: Traffic Flow for Case4

# 4.2 Results for Network Performance

This subsection explains the calculated average values of all network performance parameters considered in this project.

## 4.2.1 Results for Tiny-sized instances

The following subsection will present results for average TCP and UDP throughput, packet delay and packet loss for tiny-sized VMs representing all the scenarios. Only one pair of instances run at a time for measuing each parameter.

# 4.2.1.1 Average TCP Throughput

To measure TCP throughput, **IPERF** was executed for 15 minutes and data was collected every 5 seconds. The command was executed on the client side. While collecting data for one scenario, the other scenarios were not running.

| ·               | Iperf Command for | TCP traffic |
|-----------------|-------------------|-------------|
| iperf -c server | _ip -i 5 -t 900   |             |

Figure 4.6 depicts the average TCP throughput found from client VMs for all cases mentioned in section 3.2. On this experiment IPERF run for 900 seconds that collected throughput for every 5 seconds and then average value is calculated. As it can be seen from the figure, the network performs quite

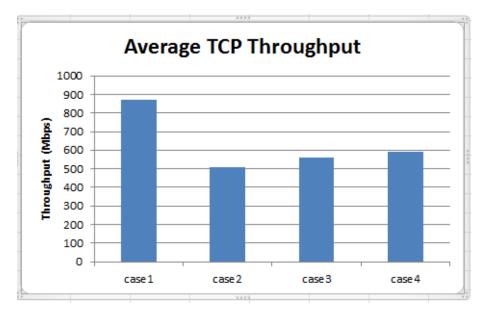


Figure 4.6: Average TCP throughput found for all scenarios

differently depending on instances locations. The first case has the highest average while the second case displays the lowest average.

#### 4.2.1.2 Average UDP Throughput

1

In order to collect throughput and loss for UDP traffic, the following command was executed for 15 minutes and it reported data every 5 seconds.

| _ |          |        | Iperf  | Com  | mand | for | UDP  | traffic |
|---|----------|--------|--------|------|------|-----|------|---------|
| 1 | iperf -u | -c ser | ver_ip | ) -i | 5 -t | 900 | ) –b | 10G     |

The -b option is used in order to specify the total available bandwidth for accuracy purpose because by default IPERF benchmark tool uses 1.05Gbps for UDP traffic.

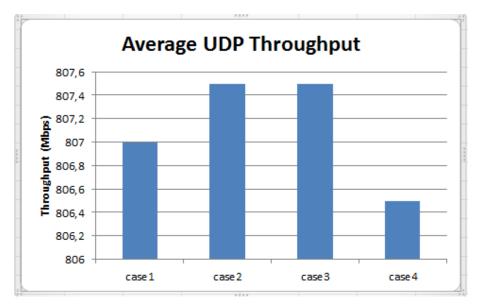


Figure 4.7: Average UDP throughput found for all scenarios

Figure 4.7 depicts the result of average UDP throughput for case1, case2, case3 and case4 respectively.

# 4.2.1.3 Average Packet Delay (Latency)

**Ping** command was executed on the client side for 1500 times in order to measure round-trip delay. During collection of data, no other processes were running on the VM. Figure 4.8 displays the average latency for each case considered for this project.

```
1 ping -c 1500 server_ip
Ping command
```

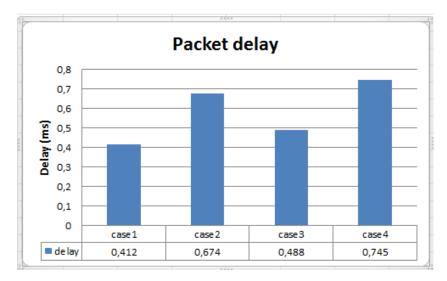


Figure 4.8: Average packet delay for all scenarios

#### 4.2.1.4 Total Packet loss

Packet loss was obtained during the collection of UDP throughput. Figure 4.9 depicts packet loss for UDP packets. In case3, UDP packet loss was very high comparing to other cases addressed in this research work.

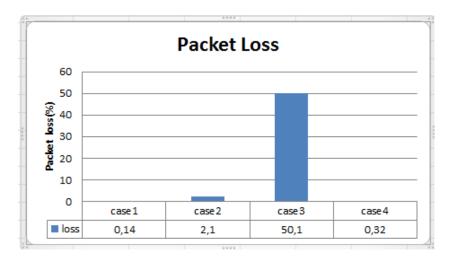


Figure 4.9: Total packet loss for all scenarios

## 4.2.2 Results for Medium-sized instances

The following subsection will present results for average TCP and UDP throughput, packet delay and packet loss for medium-sized VMs representing all the scenarios. When measuring the throughput, packet latency and packet loss, only one pair of instances run at a time.

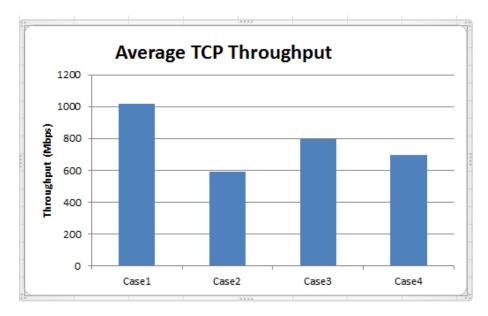


Figure 4.10: Average TCP throughput found for all scenarios under medium sized VMs

Figure 4.10 depicts average achieved TCP throughput for medium type of instances. As shown case1, case2, case3 and case4 attained 1017 Mbps, 591 Mbps, 798 Mbps and 693,5 Mbps respectively.

#### 4.2.2.2 Average UDP Throughput

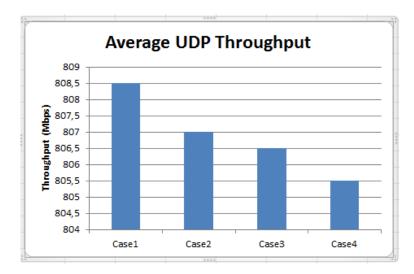


Figure 4.11: Average UDP throughput found for all scenarios under medium sized VMs

As can be seen from figure 4.11, the average UDP throughput obtained for all cases. It is shown that 808,5Mbps, 807Mbps, 806,5Mbps and 805,5Mbps for case1, case2, case3 and case4 respectively.

#### 4.2.2.3 Average Packet Delay

Figure 4.12 shows the average packet delay for medium instances under case1, case2, case3 and case4 were 0,449ms, 0,741 ms, 0,526ms and 0,784ms respectively.

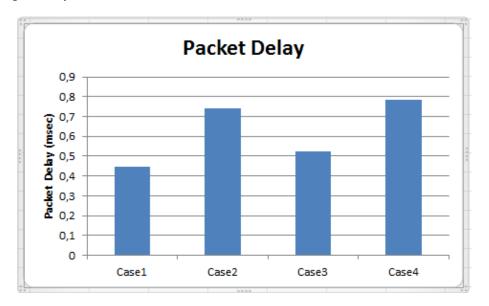


Figure 4.12: Average packet delayfor all scenarios under medium sized VMs

## 4.2.2.4 Total Packet loss

Packet loss for UDP traffic for the four different cases is shown in figure **??**. During the whole experimental period, the measured packet loss for case1, case2, case3 and case4 are 0.12%,2.9%, 39% and 1.1% respectively.

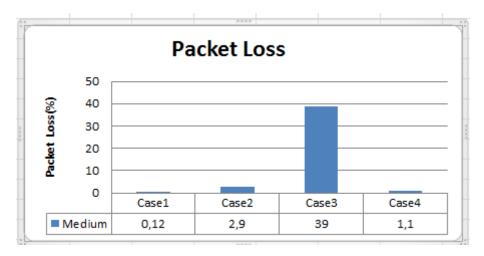


Figure 4.13: Total packet loss for all scenarios under medium sized VMs

### 4.2.3 Results for multiple tiny-sized VMs

In this experiment, more than one pair of instances were tested at the same time and on the same compute node having the same network. This helps to investigate the network performance when multiple VMs use the network resource at the same time, which is the scenario in real conditions. To automate running the VMs at the same time, iperf script was run by crontab.

#### 4.2.3.1 Average TCP Throughput

Figure 4.14 depicts the average TCP throughput for multiple pairs of tiny sized instances.

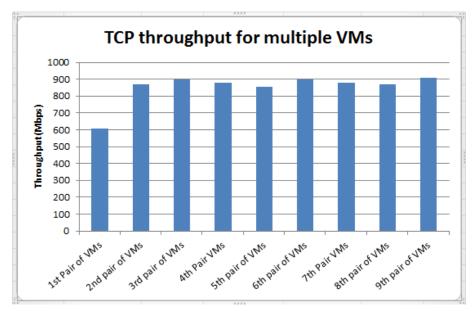


Figure 4.14: Average TCP throughput for each VM pairs

# 4.2.3.2 Average UDP Throughput

Figure 4.15 depicts the results of the average throughput for UDP traffic of each pair.

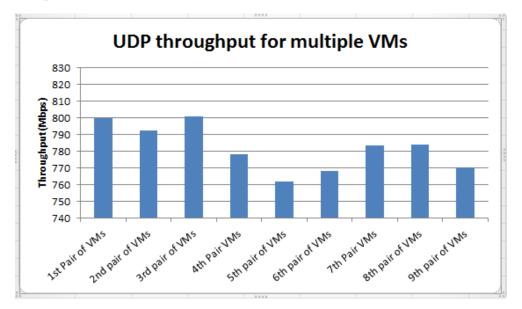


Figure 4.15: Average UDP throughput for each VM pairs

## 4.2.3.3 Average Packet Delay

Figure 4.16 illustrates the obtained result for average packet delay in milliseconds.

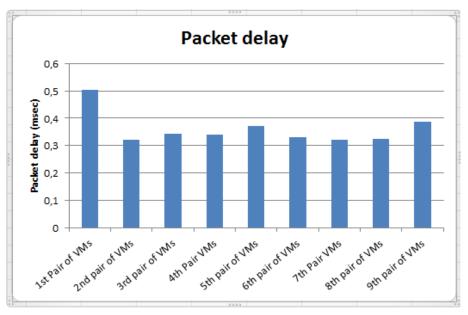


Figure 4.16: Average packet delay for each VM pairs

# 4.2.3.4 Total Packet loss

The measured packet loss for each pair of VMs is shown in figure 4.17.

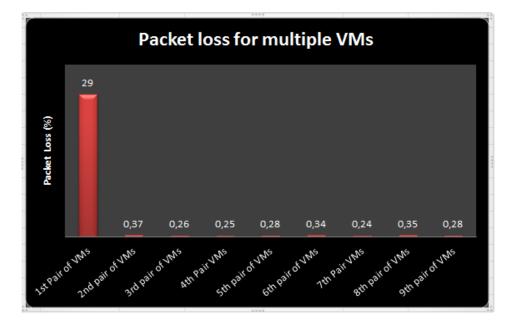


Figure 4.17: Total packet loss for each VM pairs

# **Chapter 5**

# Analysis

In this section, the attempt is to explain and elaborate the meaning of the results obtained. Different network performance metrics will be compared for different scenarios.

# 5.1 Tiny sized instances Comparison

There are four scenarios to compare and analyze for tiny flavored VMs. Case1 refers to VMs on same compute node and same network. Case2 refers to VMs on the same compute node but different network. On the other hand, Case3 refers to VMs on different compute node but same network, while Case4 refers to VMs on different compute node and different network. The focus in this comparison is to evaluate TCP/UDP throughput, packet delay and packet loss.

## 5.1.1 TCP Throughput comparison between case1 and case2

Figure 5.1 shows the first value of TCP throughput collected every 5 seconds for 200 seconds. This is drawn to show how the throughput looks like along the time of collection. The throughput for VMs on the same compute node and network oscillates around 900Mbps while for VMs on the same compute node but different network is around 500Mbps.

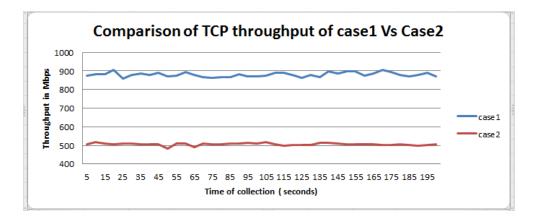


Figure 5.1: Comparing case1 vs case2 for TCP throughput

As it has been illustrated in section 4.2.1.1, the throughput for VMs on the same compute node and network is much higher than the TCP throughput for VMs on the same compute node and different network, i.e. while the first achieved an average throughput of 870Mbps, the later was 500Mbps. Therefore case 1 performs better than case2, i.e. VMs in case1 have more access to the network resources than VMs in case2.

#### 5.1.2 UDP Throughput comparison between case1 and case2

Figure 5.2 shows the UDP throughput between case1 and case2. The UDP

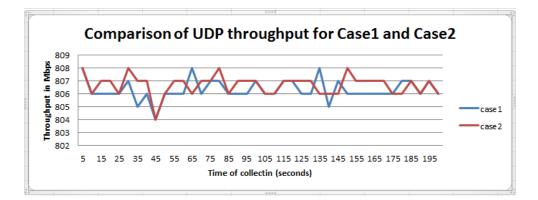


Figure 5.2: Comparing case1 vs case2 for UDP throughput

throughput for case1 and case2 varies in between the range of 804 and 808 Mbps. According to section 4.2.1.2, average UDP throughput for case1 and case2 was 807 Mbps and 807.5 Mbps respectively. From their average UDP values, there seems no considerable difference between instances whether they are on the same or different network as long as they are on the same compute node.

# 5.1.3 Packet Delay (Latency) comparison between case1 and case2

Figure 5.3 shows the average delay time obtained for VMs which are located on the same compute node and same network against VMs on same compute node but different network. Latency for VMs that are located on same compute

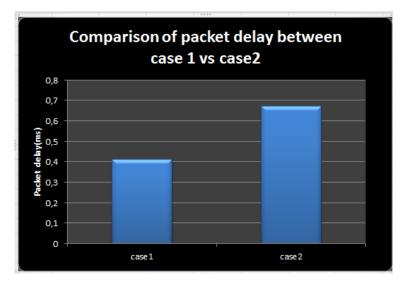


Figure 5.3: Comparing packet delay for case1 vs case2

node and the same network is lower than for VMs on same compute node but different network. Lower packet delay shows packets arrive at faster speed to their destination. This result is verified true from the previous TCP throughput. Higher throughput implies lower packet delay.

## 5.1.4 Packet loss comparison between case1 and case2

Packet loss for UDP traffic was measured using iperf tool for UDP traffic as illustrated in section 4.2.1.2.

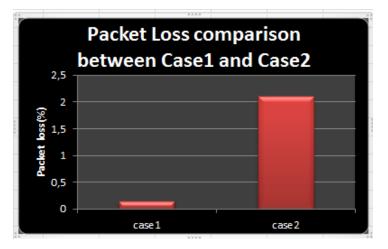


Figure 5.4: Comparing packet loss for case1 vs case2

Packet loss is higher in case2 than case1. Therefore VMs on the same compute node but different network perform less than VMs on the same node and network.

#### 5.1.5 TCP Throughput comparison between case3 and case4

Figure 5.5 shows the TCP throughput comparison of case3 vs case4 collected every 5 seconds for about 200 seconds. Their values are almost the same whether they are on the same network or different network as long as they are on different compute node. This similarity is also confirmed by the results for average TCP throughput value as demonstrated in figure 4.2.1.1.

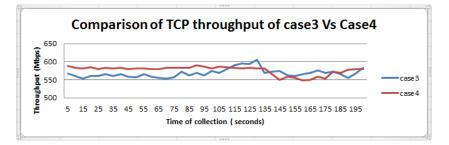


Figure 5.5: Comparing TCP throughput for case3 with case4

#### 5.1.6 UDP Throughput comparison between case3 and case4

The throughput of UDP traffic for VMs on different compute node and same network or different network address lies between 803 Mbps and 808 Mbps. This clearly shows that in case of UDP traffic, the system performs the same no matter where VMs are located. The average values of those two cases as shown in section 4.2.1.2 have no significant differences.

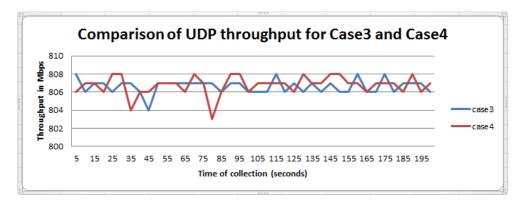


Figure 5.6: Comparing UDP throughput for case3 with case4

### 5.1.7 Packet Delay comparison between case3 and case4

As shown in figure 5.7 packet delay for TCP traffic is higher for VMs on different compute node and different network than on the different compute node but the same network. This result is as expected due to the fact that VMs on the same network communicate each other through virtual switches between the compute nodes while VMs on different network must go through the network node as demonstrated on section 4.4.

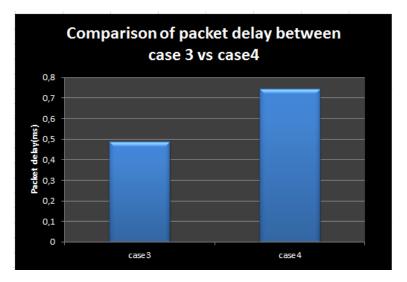


Figure 5.7: Comparing packet delay for case3 with case4

#### 5.1.8 Packet Loss comparison between case3 and case4

Packet loss for case3 is considerably higher than for case4 as shown in figure 5.8. Thus, VMs which are on different compute node but the same network perform worse than VMs which are on different compute node and different network.

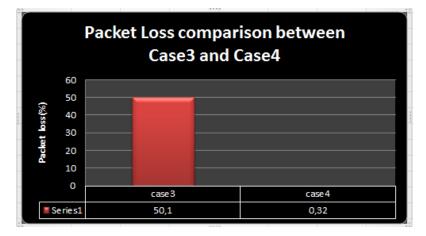


Figure 5.8: Comparing packet loss for case3 with case4

# 5.2 Medium sized instances Comparison

As was the case for tiny sized VMs, there are four scenarios for medium sized machines too. Case1 refers to VMs on same compute node and same network. Case2 refers to VMs on the same compute node but different network. On the other hand, Case3 refers to VMs on different compute node but same network, while Case4 refers to VMs on different compute node and different network.

# 5.2.1 TCP Throughput comparison between case1 and case2

Figure 5.9 compares TCP throughput between VMs on the same compute node having the same or different network. The throughput for case1 rises from 900Mbps to 1.1 Gbps and keeps constant while the throughput for case2 reaches only 700Mbps. Thus, case1 has better performance than case2.

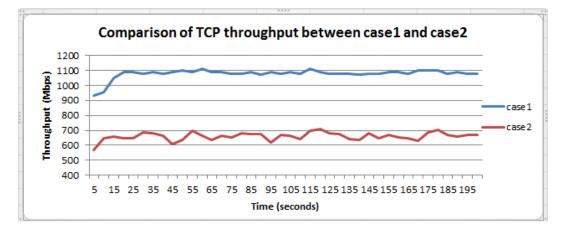
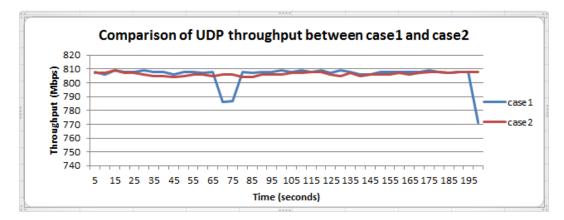
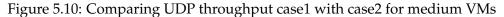


Figure 5.9: Comparing TCP throughput case1 with case2 for medium VMs

# 5.2.2 UDP Throughput comparison between case1 and case2

Figure 5.10 portrays UDP throughput for case1 and case2 measured every 5 seconds for 200 seconds. As it can be seen, there is no significant difference between them. Thus, in case of UDP traffic, VMs have the same performance whether they are on the the same or different network when they are on different compute node. This is also verified from their average UDP throughput as shown in figure 4.7.





#### 5.2.3 Packet delay comparison between case1 and case2

Figure 5.12 depicts the packet delay for case1 and case2. The result shows case2 has higher delay than case1. Accordingly, case1 has better performance than case2. The result is also as anticipated because when VMs are on different network, packet travels through network node to reach its destination.

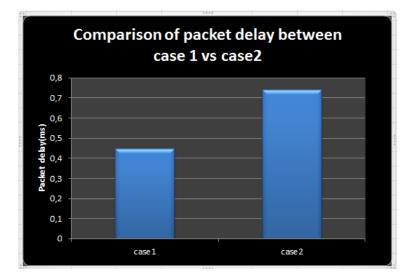


Figure 5.11: Comparing packet delay for case1 with case2

#### 5.2.4 Packet Loss comparison between case1 and case2

Figure 5.12 depicts packet loss value for case1 and case2. The result illustrates that VMs on the same compute node and the same network has slightly better performance than when they are on the same compute node having different network.

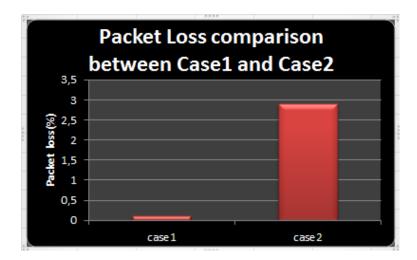


Figure 5.12: Comparing packet delay for case1 with case2

#### 5.2.5 TCP Throughput comparison between case3 and case4

The TCP throughput for case3 is higher than case4 as shown in figure 5.13. This result is different to the case of tiny VMs. In fact, the result depends on how the two network is attached each other. Here tests were taken on the scenario as in figure 3.4 setup.

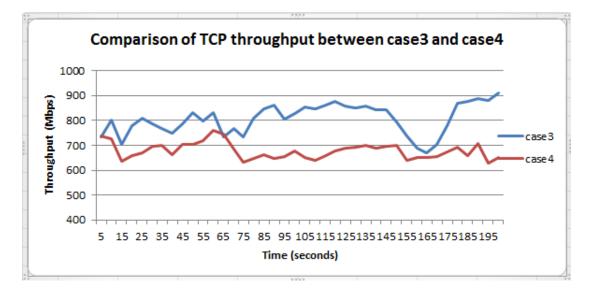


Figure 5.13: Comparing TCP throughput case3 with case4 for medium VMs

#### 5.2.6 UDP Throughput comparison between case3 and case4

Figure 5.14 depicts the UDP throughput measured every 5 seconds for 200 seconds. There isn't significant difference between the values. Thus, both cases achieved the same UDP throughput.

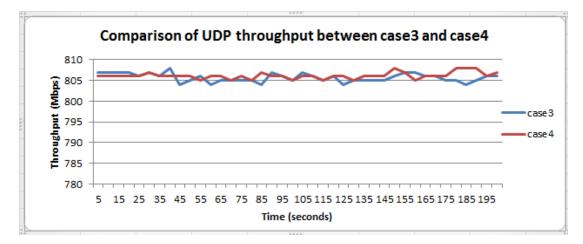


Figure 5.14: Comparing UDP throughput case3 with case4 for medium VMs

## 5.2.7 Packet Delay comparison between case3 and case4

Figure 5.15 illustrates packet delay for VMs on different compute node when they are on the same and different network. As can be seen, VMs located on different network have higher packet delay than when they are on the same network.

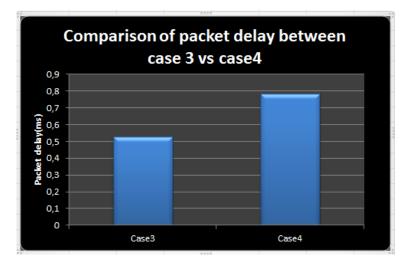


Figure 5.15: Comparing packet Delay case3 with case4 for medium VMs

### 5.2.8 Packet Loss comparison between case3 and case4

Figure 5.16 compares packet loss for case3 and case4. As it can be seen, packet loss for VMs on different compute node but the same network is higher than for VMs located on different compute node and network. Thus, case3 performs better than case4.

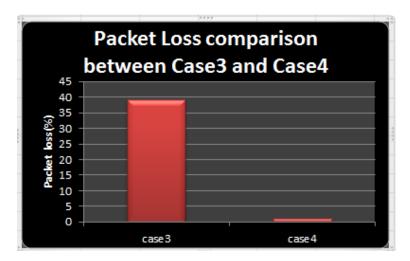


Figure 5.16: Comparing packet Loss case3 with case4 for medium VMs

# Chapter 6

# Discussion

OpenStack networking project (Neutron) which is based on software-defined networking (SDN) is a relatively new technology that provides ability to manage network resources through an abstraction layer and OpenVSwitch is used as its plugin for its network services which will enhance multi-tenancy for its users.

This research was carried out in the newly established Alto cloud computing infrastructure at HIOA network.

In this project, research has been made with an intention to investigate how the neutron shares the available network bandwidth among cloud users.

Pertaining to network bandwidth, OpenStack provided two options. One, each machine will have a predetermined amount of bandwidth. Two, the bandwidth is left for any available machine to use as needed. The second option means that machines will practically share the available bandwidth among themselves. This gives, in principle, an unlimited network bandwidth for the active machines unless there is a real congestion, which happens only when there are fairly many machines.

The specific purpose of this research was to investigate what the real practical network performance of OpenStack is in the second scenario, i.e., in the unlimited bandwidth scenario.

The first experimental setup was to study the traffic characteristics. Accordingly, it was arranged that the OpenStack that was deployed at HIOA, have four different network flow patterns.

- Virtual machines located on same compute node with the same network.
- Virtual machines located on same compute node with different network.
- Virtual machines located on different compute node with the same network.

• Virtual machines located on different compute node with different network.

In the scenario that VMs are located on same compute node with the same network, icmp packets were detected at the data link layer but not at the network layer. On the other hand, when VMs were located on same compute node with different network, icmp packets were detected at both data link and network layer. This means that on the latter scenario, a router was involved.

The same detection of icmp packets, indicating the existence of a router was also observed on case of VMs located on different compute node with different network. VMs located on different compute node with the same network did not indicate the existence of a router.

The results found from this led us to conclude that when VMs are on the same compute node having the same network, trafficflow is within the compute node whereas the traffic goes out of compute node to network node when VMs areon different network even though they are on the same compute Node.

In the second phase, studying the network performance, the above four different setup scenarios were also used, on tiny and medium sized instances.

So this gives a total of eight scenarios, where the important parameters investigated were:-

- TCP throughput
- UDP throughput
- Packet delay
- Datagram loss

From the network performance study, when two tiny sized VMs are located on the same compute node and same network, they perform better than when they are on the same compute node but different network. Thus, the measurement showed that VMs on the same compute node and same network achieved an average TCP throughput of 42% better than VMs on same compute node but different network.

Where as in the case where VMs are located on different network, they perform better when they are on different compute node than when they are on the same compute node. On the other hand, there is no significant difference between their average UDP throughputs.

In the case of packet delay, VMs on the same compute node but different network have higher values than VMs that are located on the same compute node and same network. This result is expected because when VMs are on different network, traffic flows through more hops than when they are on the same network.

The measurement of packet (datagram) loss shows that the highest recorded packet loss obtained from VMs located on different compute node but same network. This result seems contradictory with the results of UDP throughput. This is because, if UDP throughput is similar between the two cases, so should their UDP loss be similar too. But, the result deviated from expectation. Therefore, a more thorough investigation becomes necessary to find the root cause of this deviation. First, the error may be due to defect in the VMs. For this case, different VMs were created and tested several times, but the result remained the same. Next, the compute node was changed several times, and the tests done. Still, the result remained the same. Then, the VMs were tested in a different scenario, and the results were confirming that there was no defect on the VMs or the compute nodes. Finally, the VMs were attached to a floating ip and the tests conducted. This is because, in this research, only private IPs were used throughout the whole experiment. This time, i.e. using floating ips, the loss came significantly down, eventhough the delay increased as expected. But this decrease in loss does not clarify why the previous losses were very high. More investigation is needed to conclusively explain this result, which could not be covered in the time scope of this thesis.

For the medium sized VMs, the same pattern of result was observed as for the tiny sized VMs. Except for the TCP throughput performance is better on the case when VMs are located on different compute node and different network than when VMs are on different compute node but the same network. This is because the test was done on a scenario where the two network are attached with two routers unlike on tiny VMs, where the two network is connected with one router. Of course, the difference of values are somewhat larger between medium sized VMs than the tiny ones.

From the observed results, latency is higher for VMs that are situated on different network independent of on which compute node they are located.

In case of packet loss, VMs on same compute node has less packet loss than VMs on different compute node.

In order to study sharing of bandwith within the same compute node, multiple VM pairs on the same network, were tested. Then the result showed that they attained almost the same amount TCP and UDP throughput, packet delay and packet loss except for one VM pair. This exception could be due to system debugs because its result was persistant for all parameters.

During the experiment, it was noticed, in most of the cases, that TCP throughput in case of small instances and medium instances is much more less than UDP throughput. TCP throughput can be affected by several factors like TCP window size or network congestion. However in this experiment it is hard to say there is network congestion because the cloud infrastructure is being used only by few people so far.

In this research, there were certain limitations. This study could have been expanded by including measurements for congested environments for all the four scenarios considered. However it was unable to be done due to resources limitations and sharing resources other students who were involved in order to carry their research later on.

### Chapter 7

## **Conclusion and Future work**

#### 7.1 Conclusion

Owing to its importance and impact on improving network and distributed services, there is an ongoing research and innovation in cloud computing. As new innovations arrive, it is tantamount to evaluate new technologies applied on cloud computing environment, so that to enhance the correct understanding about the new technology.

This research investigated the possible internal traffic flow pattern and evaluated network performance of each pattern on OpenStack cloud computing environment.

Openstack falls into this category of new arrivals in cloud computing. Thus, this research aimed to add some contribution towards understanding the detail workings of Openstack. To that end, it investigated the possible internal traffic flow pattern and evaluated network performance of each pattern on OpenStack cloud computing environment. From the investigation, it can be confirmed that when Virtual machines (VMs) with private IPs are located on the same network, then they only use switches in order to communicate with each other independent of their location on the compute nodes.

The results showed that the location of machines in terms of compute node and network address matters for the network performance. Thus, when VMs are on the same compute node and the same network , they perform better than other scenarios. This is because the transmission path, for example, is shorter ( in case of delay) than the other scenarios.

In OpenStack, bandwidth is unlimited in principle. What exactly is the effect of this unlimited bandwidth on performance? Since it is intuitive that network performance cannot be unlimited in practice, what exactly did Openstack provide by making unlimited bandwidth available? This needed an investigation to understand, and thus the investigation on network performance was conducted. And, the results from the study of network performance

showed that, by providing unlimited network bandwidth, OpenStack didn't assure unlimited network performance. Rather it ensured that there will be no network bandwidth bottleneck.

The results also showed that the existing Alto OpenStack cloud computing is scalable, a conclusion drawn due to the fact that there is high network capacity. By the scope of this research, it is difficult to predict the network performance. Therefore in order to evaluate predictability of Alto more study is needed.

It is expected that OpenStack users in general and HIOA which has deployed it for practical use in particular, will benefit from this research.

#### 7.2 Future work

In this research, unforeseen results have been seen and unanswered questions were popped up. Having experienced the unknown challenges as well as considering the importance of dealing with some problems, it can be suggested further research work on the following events:-

- 1. Since Neutron gives higher bandwidth for medium-sized than for tiny VMs, it would be important to investigate CPU and memory usage of VMs.
- 2. Since Alto infrastructure has a very huge network capacity and VMs attained only limited throughput, it is important to test its performance under congested environment for the four different scenarios considered in this project in order to further study predictability of the network performance in short and long term expansion of Alto.
- 3. Since Neutron gives lower performance in terms of bandwidth for each VM, it would be important to study how to improve its network performance.

## Appendix A

# Detailed results from performance experiments

| <pre>ient connecting to 192.168.1.4, TCP port 5001 P window size: 23.5 KByte (default)  1 local 192.168.1.2 port 49412 connected with 192.168.1.4 port 500 ID Interval Transfer Bandwidth 3 0.0-5.0 sec 521 MBytes 875 Mbits/sec 3 5.0-10.0 sec 526 MBytes 881 Mbits/sec 3 15.0-20.0 sec 540 MBytes 906 Mbits/sec 3 20.0-25.0 sec 512 MBytes 878 Mbits/sec 3 20.0-25.0 sec 512 MBytes 885 Mbits/sec 3 30.0-35.0 sec 528 MBytes 886 Mbits/sec 3 35.0-40.0 sec 528 MBytes 886 Mbits/sec 3 30.0-35.0 sec 528 MBytes 886 Mbits/sec 3 30.0-35.0 sec 528 MBytes 889 Mbits/sec 3 35.0-40.0 sec 524 MBytes 880 Mbits/sec 3 35.0-40.0 sec 528 MBytes 887 Mbits/sec 3 50.0-45.0 sec 518 MBytes 889 Mbits/sec 3 50.0-55.0 sec 518 MBytes 889 Mbits/sec 3 50.0-55.0 sec 518 MBytes 887 Mbits/sec 3 50.0-55.0 sec 516 MBytes 867 Mbits/sec 3 65.0-70.0 sec 516 MBytes 867 Mbits/sec 3 70.0-75.0 sec 516 MBytes 867 Mbits/sec 3 70.0-75.0 sec 516 MBytes 865 Mbits/sec 3 80.0-85.0 sec 526 MBytes 871 Mbits/sec 3 80.0-85.0 sec 516 MBytes 865 Mbits/sec 3 90.0-95.0 sec 516 MBytes 865 Mbits/sec 3 100.0-105.0 sec 526 MBytes 871 Mbits/sec 3 100.0-105.0 sec 526 MBytes 871 Mbits/sec 3 100.0-105.0 sec 526 MBytes 871 Mbits/sec 3 100.0-105.0 sec 520 MBytes 874 Mbits/sec 3 120.0-125.0 sec 515 MBytes 874 Mbits/sec 3 120.0-125.0 sec 515 MBytes 874 Mbits/sec 3 135.0-140.0 sec 528 MBytes 898 Mbits/sec 3 135.0-140.0 sec 528 MBytes 898 Mbits/sec 3 135.0-140.0 sec 534 MBytes 898 Mbits/sec 3 135.0-140.0</pre>   | TCP I | raffic                                   |
|--|-------|--|
| P window size: 23.5 KByte (default)<br>3] local 192.168.1.2 port 49412 connected with 192.168.1.4 port 500<br>1D Interval Transfer Bandwidth<br>3] 0.0 - 5.0 sec 521 MBytes 875 Mbits/sec<br>3] 5.0 - 10.0 sec 525 MBytes 881 Mbits/sec<br>3] 10.0 - 15.0 sec 526 MBytes 882 Mbits/sec<br>3] 15.0 - 20.0 sec 540 MBytes 906 Mbits/sec<br>3] 25.0 - 30.0 sec 523 MBytes 859 Mbits/sec<br>3] 25.0 - 30.0 sec 523 MBytes 859 Mbits/sec<br>3] 35.0 - 40.0 sec 524 MBytes 885 Mbits/sec<br>3] 35.0 - 40.0 sec 524 MBytes 885 Mbits/sec<br>3] 45.0 - 50.0 sec 524 MBytes 889 Mbits/sec<br>3] 45.0 - 50.0 sec 520 MBytes 889 Mbits/sec<br>3] 50.0 - 55.0 sec 518 MBytes 869 Mbits/sec<br>3] 60.0 - 65.0 sec 520 MBytes 873 Mbits/sec<br>3] 60.0 - 65.0 sec 523 MBytes 873 Mbits/sec<br>3] 60.0 - 65.0 sec 523 MBytes 877 Mbits/sec<br>3] 60.0 - 65.0 sec 523 MBytes 867 Mbits/sec<br>3] 70.0 - 75.0 sec 514 MBytes 867 Mbits/sec<br>3] 70.0 - 75.0 sec 514 MBytes 865 Mbits/sec<br>3] 70.0 - 75.0 sec 516 MBytes 865 Mbits/sec<br>3] 70.0 - 75.0 sec 516 MBytes 865 Mbits/sec<br>3] 70.0 - 0 sec 516 MBytes 865 Mbits/sec<br>3] 90.0 - 95.0 sec 518 MBytes 871 Mbits/sec<br>3] 90.0 - 95.0 sec 519 MBytes 873 Mbits/sec<br>3] 100.0 - 105.0 sec 520 MBytes 873 Mbits/sec<br>3] 100.0 - 105.0 sec 520 MBytes 873 Mbits/sec<br>3] 100.0 - 105.0 sec 518 MBytes 871 Mbits/sec<br>3] 100.0 - 105.0 sec 520 MBytes 873 Mbits/sec<br>3] 100.0 - 105.0 sec 521 MBytes 874 Mbits/sec<br>3] 120.0 - 125.0 sec 515 MBytes 874 Mbits/sec<br>3] 120.0 - 125.0 sec 517 MBytes 874 Mbits/sec<br>3] 120.0 - 125.0 sec 517 MBytes 874 Mbits/sec<br>3] 125.0 - 130.0 sec 528 MBytes 878 Mbits/sec<br>3] 125.0 - 130.0 sec 528 MBytes 898 Mbits/sec<br>3] 135.0 - 140.0 sec 536 MBytes 898 Mbits/sec<br>3] 145.0 - 150.0 sec 528 MBytes 896 Mbits/sec<br>3] 145.0 - 150.0 sec 528 MBytes 896 Mbits/sec<br>3] 145.0 - 150.0 sec 528 MBytes 896 Mbits/sec<br>3] 150.0 - 155.0 sec 535 MBytes 896 Mbits/sec<br>3] 150.0 - 155.0 sec 528 MBytes 896 Mbits/sec<br>3] 150.0 - 155.0 sec 528 MBytes |       |  |
| 3] local 192.168.1.2 port 49412 connected with 192.168.1.4 port 500           D] Interval         Transfer         Bandwidth           3] 0.0-5.0 sec         521 MBytes         875 Mbits/sec           3] 10.0-15.0 sec         525 MBytes         881 Mbits/sec           3] 10.0-15.0 sec         526 MBytes         882 Mbits/sec           3] 10.0-25.0 sec         512 MBytes         859 Mbits/sec           3] 20.0-25.0 sec         512 MBytes         878 Mbits/sec           3] 30.0-35.0 sec         528 MBytes         885 Mbits/sec           3] 30.0-35.0 sec         528 MBytes         880 Mbits/sec           3] 40.0-45.0 sec         518 MBytes         880 Mbits/sec           3] 5.0-60.0 sec         512 MBytes         877 Mbits/sec           3] 50.0-55.0 sec         520 MBytes         873 Mbits/sec           3] 50.0-60.0 sec         521 MBytes         867 Mbits/sec           3] 65.0-70.0 sec         516 MBytes         867 Mbits/sec           3] 75.0-80.0 sec         516 MBytes         865 Mbits/sec           3] 80.0-85.0 sec         516 MBytes         871 Mbits/sec           3] 95.0-100.0 sec         518 MBytes         871 Mbits/sec           3] 95.0-100.0 sec         526 MBytes         873 Mbits/sec           3] 100.0-115.0 sec   |       |  |
| 3] local 192.168.1.2 port 49412 connected with 192.168.1.4 port 500         D] Interval       Transfer       Bandwidth         3] 0.0-5.0 sec       521 MBytes       875 Mbits/sec         3] 5.0-10.0 sec       526 MBytes       881 Mbits/sec         3] 10.0-15.0 sec       526 MBytes       882 Mbits/sec         3] 10.0-20.0 sec       540 MBytes       906 Mbits/sec         3] 20.0-25.0 sec       512 MBytes       859 Mbits/sec         3] 30.0-35.0 sec       528 MBytes       885 Mbits/sec         3] 30.0-35.0 sec       524 MBytes       880 Mbits/sec         3] 40.0-45.0 sec       520 MBytes       889 Mbits/sec         3] 40.0-45.0 sec       520 MBytes       873 Mbits/sec         3] 50.0-60.0 sec       520 MBytes       873 Mbits/sec         3] 60.0-65.0 sec       520 MBytes       877 Mbits/sec         3] 60.0-65.0 sec       516 MBytes       867 Mbits/sec         3] 70.0-75.0 sec       516 MBytes       865 Mbits/sec         3] 80.0-80.0 sec       516 MBytes       865 Mbits/sec         3] 90.0-95.0 sec       519 MBytes       871 Mbits/sec         3] 90.0-95.0 sec       519 MBytes       873 Mbits/sec         3] 90.0-95.0 sec       519 MBytes       873 Mbits/sec         3] 105.0-110.0 sec<  | ICP W |  |
| ID]       Interval       Transfer       Bandwidth         3]       0.0-5.0 sec       521 MBytes       875 Mbits/sec         3]       5.0-10.0 sec       526 MBytes       881 Mbits/sec         3]       10.0-15.0 sec       526 MBytes       882 Mbits/sec         3]       15.0-20.0 sec       512 MBytes       859 Mbits/sec         3]       20.0-25.0 sec       512 MBytes       878 Mbits/sec         3]       20.0-35.0 sec       528 MBytes       878 Mbits/sec         3]       30.0-35.0 sec       524 MBytes       880 Mbits/sec         3]       40.0-45.0 sec       520 MBytes       873 Mbits/sec         3]       40.0-50.0 sec       518 MBytes       869 Mbits/sec         3]       50.0-55.0 sec       520 MBytes       877 Mbits/sec         3]       65.0-70.0 sec       516 MBytes       867 Mbits/sec         3]       60.0-65.0 sec       516 MBytes       865 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       861 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       870 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       870 Mbits/sec   | [ 3]  |  |
| 3]       0.0-5.0 sec       521 MBytes       875 Mbits/sec         3]       10.0-15.0 sec       526 MBytes       881 Mbits/sec         3]       10.0-15.0 sec       526 MBytes       906 Mbits/sec         3]       20.0-25.0 sec       512 MBytes       859 Mbits/sec         3]       20.0-25.0 sec       512 MBytes       878 Mbits/sec         3]       20.0-25.0 sec       523 MBytes       878 Mbits/sec         3]       30.0-35.0 sec       528 MBytes       880 Mbits/sec         3]       30.0-40.0 sec       524 MBytes       880 Mbits/sec         3]       40.0-45.0 sec       530 MBytes       889 Mbits/sec         3]       50.0-50.0 sec       518 MBytes       892 Mbits/sec         3]       50.0-60.0 sec       512 MBytes       877 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       60.0-65.0 sec       516 MBytes       865 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       520 MBytes       873 Mbits/sec         3]       90.0-100.0 sec       518 MBytes       870 Mbi   |       |  |
| 3]       10.0-15.0 sec       526 MBytes       882 Mbits/sec         3]       15.0-20.0 sec       540 MBytes       906 Mbits/sec         3]       20.0-25.0 sec       512 MBytes       859 Mbits/sec         3]       20.0-25.0 sec       523 MBytes       885 Mbits/sec         3]       30.0-35.0 sec       528 MBytes       885 Mbits/sec         3]       30.0-35.0 sec       524 MBytes       880 Mbits/sec         3]       40.0-45.0 sec       530 MBytes       889 Mbits/sec         3]       45.0-50.0 sec       520 MBytes       873 Mbits/sec         3]       55.0-60.0 sec       523 MBytes       877 Mbits/sec         3]       60.0-65.0 sec       524 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       514 MBytes       862 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       516 MBytes       870 Mbits/sec         3]       90.0-95.0 sec       516 MBytes       870 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       887  | [ 3]  |  |
| 3]       15.0-20.0 sec       540 MEytes       906 Mbits/sec         3]       20.0-25.0 sec       512 MBytes       859 Mbits/sec         3]       25.0-30.0 sec       523 MBytes       878 Mbits/sec         3]       30.0-35.0 sec       528 MBytes       885 Mbits/sec         3]       30.0-45.0 sec       530 MBytes       889 Mbits/sec         3]       40.0-45.0 sec       530 MBytes       869 Mbits/sec         3]       50.0-55.0 sec       520 MBytes       873 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       892 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       65.0-70.0 sec       516 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       867 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       867 Mbits/sec         3]       90.0-95.0 sec       510 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       520 MBytes       871 Mbits/sec         3]       90.0-105.0 sec       520 MBytes       871 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       887 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       8   | [ 3]  | 5.0-10.0 sec 525 MBytes 881 Mbits/sec    |
| 3] 20.0-25.0 sec       512 MBytes       859 Mbits/sec         3] 32.0-35.0 sec       523 MBytes       878 Mbits/sec         3] 30.0-35.0 sec       528 MBytes       885 Mbits/sec         3] 35.0-40.0 sec       524 MBytes       880 Mbits/sec         3] 40.0-45.0 sec       520 MBytes       889 Mbits/sec         3] 45.0-50.0 sec       518 MBytes       869 Mbits/sec         3] 50.0-55.0 sec       520 MBytes       873 Mbits/sec         3] 60.0-65.0 sec       523 MBytes       892 Mbits/sec         3] 60.0-65.0 sec       523 MBytes       877 Mbits/sec         3] 60.0-65.0 sec       514 MBytes       867 Mbits/sec         3] 70.0-75.0 sec       514 MBytes       862 Mbits/sec         3] 85.0-90.0 sec       516 MBytes       865 Mbits/sec         3] 90.0-95.0 sec       518 MBytes       871 Mbits/sec         3] 90.0-95.0 sec       518 MBytes       871 Mbits/sec         3] 100.0-105.0 sec       520 MBytes       873 Mbits/sec         3] 100.0-105.0 sec       520 MBytes       873 Mbits/sec         3] 110.0-115.0 sec       531 MBytes       891 Mbits/sec         3] 125.0-130.0 sec       515 MBytes       864 Mbits/sec         3] 125.0-140.0 sec       526 MBytes       898 Mbits/sec  | [ 3]  | 10.0-15.0 sec 526 MBytes 882 Mbits/sec   |
| 3]       25.0-30.0 sec       523 MBytes       878 Mbits/sec         3]       30.0-35.0 sec       528 MBytes       885 Mbits/sec         3]       30.0-45.0 sec       524 MBytes       880 Mbits/sec         3]       40.0-45.0 sec       530 MBytes       889 Mbits/sec         3]       40.0-45.0 sec       518 MBytes       869 Mbits/sec         3]       50.0-55.0 sec       520 MBytes       873 Mbits/sec         3]       55.0-60.0 sec       522 MBytes       877 Mbits/sec         3]       60.0-65.0 sec       516 MBytes       867 Mbits/sec         3]       60.0-70.0 sec       516 MBytes       865 Mbits/sec         3]       70.0-75.0 sec       514 MBytes       862 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       90.0-95.0 sec       516 MBytes       870 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       870 Mbits/sec         3]       105.0-110.0 sec       530 MBytes       891 Mbits/sec         3]       105.0-110.0 sec       531 MBytes       891 Mbits/sec         3]       112.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       125.0-130.0 sec       523 MBytes <t< td=""><td>[ 3]</td><td>15.0-20.0 sec 540 MBytes 906 Mbits/sec</td></t<>  | [ 3]  | 15.0-20.0 sec 540 MBytes 906 Mbits/sec   |
| 3]       30.0-35.0 sec       528 MBytes       885 Mbits/sec         3]       35.0-40.0 sec       524 MBytes       880 Mbits/sec         3]       40.0-45.0 sec       530 MBytes       889 Mbits/sec         3]       45.0-50.0 sec       518 MBytes       869 Mbits/sec         3]       50.0-55.0 sec       520 MBytes       873 Mbits/sec         3]       50.0-55.0 sec       523 MBytes       892 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       65.0-70.0 sec       516 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       865 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       873 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       520 MBytes       881 Mbits/sec         3]       105.0-10.0 sec       524 MBytes <td< td=""><td>[ 3]</td><td>20.0-25.0 sec 512 MBytes 859 Mbits/sec</td></td<>   | [ 3]  | 20.0-25.0 sec 512 MBytes 859 Mbits/sec   |
| 3]       35.0-40.0 sec       524 MBytes       880 Mbits/sec         3]       40.0-45.0 sec       530 MBytes       889 Mbits/sec         3]       45.0-50.0 sec       518 MBytes       869 Mbits/sec         3]       50.0-55.0 sec       520 MBytes       873 Mbits/sec         3]       50.0-55.0 sec       522 MBytes       877 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       65.0-70.0 sec       516 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       862 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-125.0 sec       511 MBytes       891 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       874 Mbits/sec         3]       125.0-130.0 sec       524 MBytes  | [ 3]  | 25.0-30.0 sec 523 MBytes 878 Mbits/sec   |
| 3]       40.0-45.0 sec       530 MBytes       889 Mbits/sec         3]       45.0-50.0 sec       518 MBytes       869 Mbits/sec         3]       50.0-55.0 sec       520 MBytes       873 Mbits/sec         3]       50.0-60.0 sec       532 MBytes       892 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       60.0-65.0 sec       516 MBytes       867 Mbits/sec         3]       75.0-80.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       870 Mbits/sec         3]       90.0-100.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       531 MBytes       891 Mbits/sec         3]       110.0-115.0 sec       515 MBytes       867 Mbits/sec         3]       125.0-130.0 sec       517 MBytes       867 Mbits/sec         3]       125.0-130.0 sec       528 MBytes       898 Mbits/sec         3]       130.0-135.0 sec       536 MBytes   | [ 3]  | 30.0-35.0 sec 528 MBytes 885 Mbits/sec   |
| 3]       45.0-50.0 sec       518 MBytes       869 Mbits/sec         3]       50.0-55.0 sec       520 MBytes       873 Mbits/sec         3]       55.0-60.0 sec       532 MBytes       892 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       60.0-65.0 sec       516 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       514 MBytes       862 Mbits/sec         3]       70.0-75.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-100.0 sec       531 MBytes       891 Mbits/sec         3]       100.0-105.0 sec       524 MBytes       873 Mbits/sec         3]       102.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       125.0-130.0 sec       528 MBytes       898 Mbits/sec         3]       130.0-135.0 sec       536 MBytes  | [ 3]  | 35.0-40.0 sec 524 MBytes 880 Mbits/sec   |
| 3]       50.0-55.0 sec       520 MBytes       873 Mbits/sec         3]       55.0-60.0 sec       532 MBytes       892 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       65.0-70.0 sec       516 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       514 MBytes       862 Mbits/sec         3]       75.0-80.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       530 MBytes       891 Mbits/sec         3]       110.0-115.0 sec       514 MBytes       877 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       120.0-125.0 sec       517 MBytes       867 Mbits/sec         3]       130.0-135.0 sec       517 MBytes       898 Mbits/sec         3]       140.0-145.0 sec       524 MBytes  | [ 3]  | 40.0-45.0 sec 530 MBytes 889 Mbits/sec   |
| 3]       55.0-60.0 sec       532 MBytes       892 Mbits/sec         3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       65.0-70.0 sec       516 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       514 MBytes       862 Mbits/sec         3]       75.0-80.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-100.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       530 MBytes       891 Mbits/sec         3]       115.0-120.0 sec       524 MBytes       878 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       120.0-125.0 sec       517 MBytes       867 Mbits/sec         3]       125.0-130.0 sec       528 MBytes       898 Mbits/sec         3]       135.0-140.0 sec       528 MBytes   | [ 3]  | 45.0-50.0 sec 518 MBytes 869 Mbits/sec   |
| 3]       60.0-65.0 sec       523 MBytes       877 Mbits/sec         3]       65.0-70.0 sec       516 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       514 MBytes       862 Mbits/sec         3]       75.0-80.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-90.0 sec       518 MBytes       870 Mbits/sec         3]       90.0-100.0 sec       518 MBytes       871 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       891 Mbits/sec         3]       105.0-110.0 sec       530 MBytes       891 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       874 Mbits/sec         3]       120.0-125.0 sec       517 MBytes       867 Mbits/sec         3]       130.0-135.0 sec       517 MBytes       898 Mbits/sec         3]       130.0-145.0 sec       528 MBytes   | [ 3]  | 50.0-55.0 sec 520 MBytes 873 Mbits/sec   |
| 3]       65.0-70.0 sec       516 MBytes       867 Mbits/sec         3]       70.0-75.0 sec       514 MBytes       862 Mbits/sec         3]       75.0-80.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       90.0-95.0 sec       518 MBytes       870 Mbits/sec         3]       90.0-100.0 sec       518 MBytes       871 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-100.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-100.0 sec       520 MBytes       817 Mbits/sec         3]       100.0-100.0 sec       521 MBytes       816 Mbits/sec         3]       110.0-115.0 sec       515 MBytes       864 Mbits/sec         3]       120.0-125.0 sec       517 MBytes       867 Mbits/sec         3]       125.0-130.0 sec       528 MBytes       898 Mbits/sec         3]       130.0-135.0 sec       528 MBytes   | [ 3]  | 55.0-60.0 sec 532 MBytes 892 Mbits/sec   |
| 3]       70.0-75.0 sec       514 MBytes       862 Mbits/sec         3]       75.0-80.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       85.0-90.0 sec       526 MBytes       883 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       95.0-100.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       530 MBytes       899 Mbits/sec         3]       105.0-110.0 sec       531 MBytes       891 Mbits/sec         3]       110.0-115.0 sec       531 MBytes       891 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       120.0-125.0 sec       517 MBytes       867 Mbits/sec         3]       130.0-135.0 sec       528 MBytes       898 Mbits/sec         3]       140.0-145.0 sec       528 MBytes       896 Mbits/sec         3]       140.0-145.0 sec       534 MBytes       896 Mbits/sec         3]       155.0-160.0 sec       532 MBytes       898 Mbits/sec         3]       155.0-160.0 sec       528 MByte  | [ 3]  | 60.0-65.0 sec 523 MBytes 877 Mbits/sec   |
| 3]       75.0-80.0 sec       516 MBytes       865 Mbits/sec         3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       85.0-90.0 sec       526 MBytes       883 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       95.0-100.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       530 MBytes       889 Mbits/sec         3]       105.0-110.0 sec       531 MBytes       891 Mbits/sec         3]       10.0-115.0 sec       524 MBytes       878 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       120.0-125.0 sec       517 MBytes       867 Mbits/sec         3]       130.0-135.0 sec       517 MBytes       867 Mbits/sec         3]       140.0-145.0 sec       528 MBytes       898 Mbits/sec         3]       145.0-150.0 sec       534 MBytes       896 Mbits/sec         3]       145.0-150.0 sec       535 MBytes       898 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       160.0-165.0 sec       528 MByt  | [ 3]  | 65.0-70.0 sec 516 MBytes 867 Mbits/sec   |
| 3]       80.0-85.0 sec       516 MBytes       865 Mbits/sec         3]       85.0-90.0 sec       526 MBytes       883 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       95.0-100.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       530 MBytes       889 Mbits/sec         3]       105.0-110.0 sec       531 MBytes       891 Mbits/sec         3]       105.0-120.0 sec       524 MBytes       878 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       125.0-130.0 sec       523 MBytes       877 Mbits/sec         3]       120.0-135.0 sec       517 MBytes       867 Mbits/sec         3]       130.0-135.0 sec       536 MBytes       898 Mbits/sec         3]       140.0-145.0 sec       528 MBytes       896 Mbits/sec         3]       145.0-150.0 sec       532 MBytes       896 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       160.0-165.0 sec       528 M  | [ 3]  | 70.0-75.0 sec 514 MBytes 862 Mbits/sec   |
| 3]       85.0-90.0 sec       526 MBytes       883 Mbits/sec         3]       90.0-95.0 sec       519 MBytes       871 Mbits/sec         3]       95.0-100.0 sec       518 MBytes       870 Mbits/sec         3]       100.0-105.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       520 MBytes       873 Mbits/sec         3]       105.0-110.0 sec       530 MBytes       889 Mbits/sec         3]       105.0-110.0 sec       531 MBytes       891 Mbits/sec         3]       110.0-115.0 sec       531 MBytes       891 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       878 Mbits/sec         3]       125.0-130.0 sec       523 MBytes       877 Mbits/sec         3]       130.0-135.0 sec       517 MBytes       867 Mbits/sec         3]       135.0-140.0 sec       528 MBytes       898 Mbits/sec         3]       145.0-150.0 sec       534 MBytes       896 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       898 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       886 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       165.0-170.0 sec       532  | [ 3]  | 75.0-80.0 sec 516 MBytes 865 Mbits/sec   |
| 3] 90.0-95.0 sec       519 MBytes       871 Mbits/sec         3] 95.0-100.0 sec       518 MBytes       870 Mbits/sec         3] 100.0-105.0 sec       520 MBytes       873 Mbits/sec         3] 105.0-110.0 sec       530 MBytes       889 Mbits/sec         3] 105.0-110.0 sec       531 MBytes       891 Mbits/sec         3] 110.0-115.0 sec       531 MBytes       891 Mbits/sec         3] 115.0-120.0 sec       524 MBytes       878 Mbits/sec         3] 120.0-125.0 sec       515 MBytes       864 Mbits/sec         3] 125.0-130.0 sec       523 MBytes       877 Mbits/sec         3] 130.0-135.0 sec       517 MBytes       867 Mbits/sec         3] 130.0-135.0 sec       517 MBytes       867 Mbits/sec         3] 140.0-145.0 sec       528 MBytes       898 Mbits/sec         3] 140.0-145.0 sec       534 MBytes       896 Mbits/sec         3] 145.0-150.0 sec       534 MBytes       896 Mbits/sec         3] 150.0-160.0 sec       522 MBytes       876 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 160.0-170.0 sec       541 MBytes       907 Mbits/sec         3] 17.0-175.0 sec       532 MBytes       892 Mbits/sec </td <td>[ 3]</td> <td>80.0-85.0 sec 516 MBytes 865 Mbits/sec</td>   | [ 3]  | 80.0-85.0 sec 516 MBytes 865 Mbits/sec   |
| 3] 95.0-100.0 sec       518 MBytes       870 Mbits/sec         3] 100.0-105.0 sec       520 MBytes       873 Mbits/sec         3] 105.0-110.0 sec       530 MBytes       889 Mbits/sec         3] 10.0-115.0 sec       531 MBytes       891 Mbits/sec         3] 110.0-115.0 sec       524 MBytes       878 Mbits/sec         3] 115.0-120.0 sec       524 MBytes       878 Mbits/sec         3] 120.0-125.0 sec       515 MBytes       864 Mbits/sec         3] 125.0-130.0 sec       523 MBytes       877 Mbits/sec         3] 130.0-135.0 sec       517 MBytes       867 Mbits/sec         3] 135.0-140.0 sec       536 MBytes       898 Mbits/sec         3] 144.0-145.0 sec       528 MBytes       896 Mbits/sec         3] 145.0-150.0 sec       534 MBytes       896 Mbits/sec         3] 150.0-155.0 sec       532 MBytes       898 Mbits/sec         3] 150.0-155.0 sec       532 MBytes       896 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 165.0-170.0 sec       541 MBytes       907 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       892 Mbits/sec         3] 170.0-175.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 85.0-90.0 sec 526 MBytes 883 Mbits/sec   |
| 3] 100.0-105.0 sec       520 MBytes       873 Mbits/sec         3] 105.0-110.0 sec       530 MBytes       889 Mbits/sec         3] 115.0-110.0 sec       531 MBytes       891 Mbits/sec         3] 115.0-120.0 sec       524 MBytes       878 Mbits/sec         3] 120.0-125.0 sec       515 MBytes       864 Mbits/sec         3] 120.0-125.0 sec       515 MBytes       864 Mbits/sec         3] 125.0-130.0 sec       523 MBytes       877 Mbits/sec         3] 130.0-135.0 sec       517 MBytes       867 Mbits/sec         3] 135.0-140.0 sec       536 MBytes       898 Mbits/sec         3] 140.0-145.0 sec       536 MBytes       898 Mbits/sec         3] 145.0-150.0 sec       534 MBytes       896 Mbits/sec         3] 150.0-155.0 sec       535 MBytes       898 Mbits/sec         3] 155.0-160.0 sec       522 MBytes       876 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 165.0-170.0 sec       541 MBytes       907 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       892 Mbits/sec         3] 170.0-175.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 90.0-95.0 sec 519 MBytes 871 Mbits/sec   |
| 3]       105.0-110.0 sec       530 MBytes       889 Mbits/sec         3]       110.0-115.0 sec       531 MBytes       891 Mbits/sec         3]       115.0-120.0 sec       524 MBytes       878 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       125.0-130.0 sec       523 MBytes       877 Mbits/sec         3]       130.0-135.0 sec       517 MBytes       867 Mbits/sec         3]       135.0-140.0 sec       536 MBytes       898 Mbits/sec         3]       140.0-145.0 sec       528 MBytes       885 Mbits/sec         3]       145.0-150.0 sec       534 MBytes       896 Mbits/sec         3]       150.0-155.0 sec       532 MBytes       898 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       165.0-170.0 sec       522 MBytes       886 Mbits/sec         3]       165.0-170.0 sec       541 MBytes       907 Mbits/sec         3]       170.0-175.0 sec       532 MBytes       892 Mbits/sec         3]       170.0-175.0 sec       532 MBytes       892 Mbits/sec  | [ 3]  | 95.0-100.0 sec 518 MBytes 870 Mbits/sec  |
| 3] 110.0-115.0 sec       531 MBytes       891 Mbits/sec         3] 115.0-120.0 sec       524 MBytes       878 Mbits/sec         3] 120.0-125.0 sec       515 MBytes       864 Mbits/sec         3] 125.0-130.0 sec       523 MBytes       877 Mbits/sec         3] 130.0-135.0 sec       517 MBytes       867 Mbits/sec         3] 130.0-135.0 sec       517 MBytes       867 Mbits/sec         3] 135.0-140.0 sec       528 MBytes       898 Mbits/sec         3] 140.0-145.0 sec       528 MBytes       885 Mbits/sec         3] 145.0-150.0 sec       534 MBytes       896 Mbits/sec         3] 150.0-155.0 sec       535 MBytes       898 Mbits/sec         3] 150.0-165.0 sec       522 MBytes       876 Mbits/sec         3] 160.0-165.0 sec       522 MBytes       876 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 160.0-170.0 sec       541 MBytes       907 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       892 Mbits/sec         3] 170.0-175.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 100.0-105.0 sec 520 MBytes 873 Mbits/sec |
| 3]       115.0-120.0 sec       524 MBytes       878 Mbits/sec         3]       120.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       125.0-130.0 sec       523 MBytes       877 Mbits/sec         3]       130.0-135.0 sec       517 MBytes       867 Mbits/sec         3]       135.0-140.0 sec       536 MBytes       898 Mbits/sec         3]       140.0-145.0 sec       528 MBytes       885 Mbits/sec         3]       145.0-150.0 sec       534 MBytes       896 Mbits/sec         3]       150.0-155.0 sec       535 MBytes       898 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       165.0-170.0 sec       528 MBytes       886 Mbits/sec         3]       165.0-170.0 sec       522 MBytes       886 Mbits/sec         3]       165.0-170.0 sec       532 MBytes       892 Mbits/sec         3]       170.0-175.0 sec       532 MBytes       892 Mbits/sec         3]       170.0-175.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 105.0-110.0 sec 530 MBytes 889 Mbits/sec |
| 3]       120.0-125.0 sec       515 MBytes       864 Mbits/sec         3]       125.0-130.0 sec       523 MBytes       877 Mbits/sec         3]       130.0-135.0 sec       517 MBytes       867 Mbits/sec         3]       135.0-140.0 sec       536 MBytes       898 Mbits/sec         3]       140.0-145.0 sec       528 MBytes       885 Mbits/sec         3]       145.0-150.0 sec       534 MBytes       896 Mbits/sec         3]       150.0-155.0 sec       535 MBytes       898 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       160.0-165.0 sec       522 MBytes       876 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       167.0-170.0 sec       541 MBytes       907 Mbits/sec         3]       170.0-175.0 sec       532 MBytes       892 Mbits/sec         3]       175.0-180.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 110.0-115.0 sec 531 MBytes 891 Mbits/sec |
| 3]       125.0-130.0 sec       523 MBytes       877 Mbits/sec         3]       130.0-135.0 sec       517 MBytes       867 Mbits/sec         3]       135.0-140.0 sec       536 MBytes       898 Mbits/sec         3]       140.0-145.0 sec       528 MBytes       885 Mbits/sec         3]       145.0-150.0 sec       534 MBytes       896 Mbits/sec         3]       150.0-155.0 sec       535 MBytes       898 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       160.0-165.0 sec       522 MBytes       876 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       167.0-170.0 sec       541 MBytes       907 Mbits/sec         3]       170.0-175.0 sec       532 MBytes       892 Mbits/sec         3]       175.0-180.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 115.0-120.0 sec 524 MBytes 878 Mbits/sec |
| 3] 130.0-135.0 sec       517 MBytes       867 Mbits/sec         3] 135.0-140.0 sec       536 MBytes       898 Mbits/sec         3] 140.0-145.0 sec       528 MBytes       885 Mbits/sec         3] 145.0-150.0 sec       534 MBytes       896 Mbits/sec         3] 150.0-155.0 sec       535 MBytes       898 Mbits/sec         3] 150.0-155.0 sec       535 MBytes       898 Mbits/sec         3] 155.0-160.0 sec       522 MBytes       876 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 165.0-170.0 sec       528 MBytes       886 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       886 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       892 Mbits/sec         3] 175.0-180.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 120.0-125.0 sec 515 MBytes 864 Mbits/sec |
| 3]       135.0-140.0 sec       536 MBytes       898 Mbits/sec         3]       140.0-145.0 sec       528 MBytes       885 Mbits/sec         3]       145.0-150.0 sec       534 MBytes       896 Mbits/sec         3]       150.0-155.0 sec       535 MBytes       898 Mbits/sec         3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       165.0-170.0 sec       528 MBytes       886 Mbits/sec         3]       165.0-170.0 sec       528 MBytes       886 Mbits/sec         3]       170.0-175.0 sec       541 MBytes       907 Mbits/sec         3]       170.0-175.0 sec       532 MBytes       892 Mbits/sec         3]       175.0-180.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 125.0-130.0 sec 523 MBytes 877 Mbits/sec |
| 3] 140.0-145.0 sec       528 MBytes       885 Mbits/sec         3] 145.0-150.0 sec       534 MBytes       896 Mbits/sec         3] 150.0-155.0 sec       535 MBytes       898 Mbits/sec         3] 155.0-160.0 sec       522 MBytes       876 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 165.0-170.0 sec       541 MBytes       907 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       892 Mbits/sec         3] 175.0-180.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 1  |
| 3] 145.0-150.0 sec       534 MBytes       896 Mbits/sec         3] 150.0-155.0 sec       535 MBytes       898 Mbits/sec         3] 155.0-160.0 sec       522 MBytes       876 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 165.0-170.0 sec       541 MBytes       907 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       892 Mbits/sec         3] 175.0-180.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  |  |
| 3] 150.0-155.0 sec       535 MBytes       898 Mbits/sec         3] 155.0-160.0 sec       522 MBytes       876 Mbits/sec         3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 165.0-170.0 sec       541 MBytes       907 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       892 Mbits/sec         3] 175.0-180.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | 140.0-145.0 sec 528 MBytes 885 Mbits/sec |
| 3]       155.0-160.0 sec       522 MBytes       876 Mbits/sec         3]       160.0-165.0 sec       528 MBytes       886 Mbits/sec         3]       165.0-170.0 sec       541 MBytes       907 Mbits/sec         3]       170.0-175.0 sec       532 MBytes       892 Mbits/sec         3]       175.0-180.0 sec       524 MBytes       880 Mbits/sec  | [ 3]  | ···· ··· ··· ··· ··· ··· ··· ··· ··· ·   |
| 3] 160.0-165.0 sec       528 MBytes       886 Mbits/sec         3] 165.0-170.0 sec       541 MBytes       907 Mbits/sec         3] 170.0-175.0 sec       532 MBytes       892 Mbits/sec         3] 175.0-180.0 sec       524 MBytes       880 Mbits/sec  |       |  |
| 3] 165.0-170.0 sec 541 MBytes 907 Mbits/sec<br>3] 170.0-175.0 sec 532 MBytes 892 Mbits/sec<br>3] 175.0-180.0 sec 524 MBytes 880 Mbits/sec  |       |  |
| 3] 170.0-175.0 sec 532 MBytes 892 Mbits/sec<br>3] 175.0-180.0 sec 524 MBytes 880 Mbits/sec   |       | 1  |
| 3] 175.0-180.0 sec 524 MBytes 880 Mbits/sec  |       |  |
| -  |       |  |
| 3] 180.0-185.0 sec 519 MBytes 871 Mbits/sec  |       |  |
|  | [ 3]  | 180.0-185.0 sec 519 MBytes 871 Mbits/sec |

| 45  | [ | 3] | 185.0-190.0 | sec |     | MBytes | 880        | Mbits/sec |
|-----|---|----|-------------|-----|-----|--------|------------|-----------|
| 46  | [ | 3] | 190.0-195.0 | sec | 530 | MBytes | 890        | Mbits/sec |
| 47  | [ | 3] | 195.0-200.0 | sec | 519 | MBytes | 870        | Mbits/sec |
| 48  | [ | 3] | 200.0-205.0 | sec | 524 | MBytes | 880        | Mbits/sec |
| 49  | [ | 3] | 205.0-210.0 | sec | 522 | MBytes | 876        | Mbits/sec |
| 50  | [ | 3] | 210.0-215.0 | sec | 514 | MBytes | 862        | Mbits/sec |
| 51  | [ | 3] | 215.0-220.0 | sec | 517 | MBvtes | 867        | Mbits/sec |
| 52  | [ | 3] | 220.0-225.0 | sec | 529 | MBytes | 888        | Mbits/sec |
| 53  | [ | 3] | 225.0-230.0 | sec | 520 | MBytes | 873        | Mbits/sec |
| 54  | [ | 3] | 230.0-235.0 | sec | 513 | MBytes | 861        | Mbits/sec |
| 55  | [ | 3] | 235.0-240.0 | sec | 533 | MBytes | 895        | Mbits/sec |
| 56  | [ | 3] | 240.0-245.0 | sec | 521 | MBytes | 874        | Mbits/sec |
| 57  | [ | 3] | 245.0-250.0 | sec | 520 | MBytes | 872        | Mbits/sec |
|     | [ | 3] | 250.0-255.0 |     |     | MBytes | 863        | Mbits/sec |
| 58  |   | -  | 255.0-260.0 | sec | 515 | -      |            | Mbits/sec |
| 59  | [ | 3] |             | sec | 521 | MBytes | 874        |           |
| 60  | [ | 3] | 260.0-265.0 | sec | 521 | MBytes | 874        | Mbits/sec |
| 61  | [ | 3] | 265.0-270.0 | sec | 520 | MBytes | 873        | Mbits/sec |
| 62  | [ | 3] | 270.0-275.0 | sec | 527 | MBytes | 884        | Mbits/sec |
| 63  | [ | 3] | 275.0-280.0 | sec | 524 | MBytes | 880        | Mbits/sec |
| 64  | [ | 3] | 280.0-285.0 | sec | 525 | MBytes | 881        | Mbits/sec |
| 65  | [ | 3] | 285.0-290.0 | sec | 521 | MBytes | 875        | Mbits/sec |
| 66  | [ | 3] | 290.0-295.0 | sec | 533 | MBytes | 894        | Mbits/sec |
| 67  | [ | 3] | 295.0-300.0 | sec | 524 | MBytes | 879        | Mbits/sec |
| 68  | [ | 3] | 300.0-305.0 | sec | 528 | MBytes | 885        | Mbits/sec |
| 69  | [ | 3] | 305.0-310.0 | sec | 523 | MBytes | 877        | Mbits/sec |
| 70  | [ | 3] | 310.0-315.0 | sec | 525 | MBytes | 880        | Mbits/sec |
| 71  | [ | 3] | 315.0-320.0 | sec | 524 | MBytes | 879        | Mbits/sec |
| 72  | ] | 3] | 320.0-325.0 | sec | 535 | MBytes | 897        | Mbits/sec |
| 73  | [ | 3] | 325.0-330.0 | sec | 518 | MBvtes | 870        | Mbits/sec |
| 74  | [ | 3] | 330.0-335.0 | sec | 516 | MBytes | 866        | Mbits/sec |
| 75  | [ | 3] | 335.0-340.0 | sec | 520 | MBytes | 873        | Mbits/sec |
| 76  | [ | 3] | 340.0-345.0 | sec | 524 | MBytes | 880        | Mbits/sec |
| 77  | [ | 3] | 345.0-350.0 | sec | 524 | MBytes | 880        | Mbits/sec |
| 78  | [ | 3] | 350.0-355.0 | sec | 520 | MBytes | 872        | Mbits/sec |
| 79  | [ | 3] | 355.0-360.0 | sec | 517 | MBytes | 867        | Mbits/sec |
| 80  | [ | 3] | 360.0-365.0 | sec | 517 | MBytes | 867        | Mbits/sec |
| 81  | [ | 3] | 365.0-370.0 |     | 522 | MBytes | 875        | Mbits/sec |
|     |   | -  |             | sec |     | -      | 878        | Mbits/sec |
| 82  | [ | 3] | 370.0-375.0 | sec | 523 | MBytes |            |           |
| 83  | [ | 3] | 375.0-380.0 | sec | 516 | MBytes | 866<br>862 | Mbits/sec |
| 84  | [ | 3] | 380.0-385.0 | sec | 514 | MBytes |            | Mbits/sec |
| 85  | [ | 3] | 385.0-390.0 | sec | 519 | MBytes | 870        | Mbits/sec |
| 86  | [ | 3] | 390.0-395.0 | sec | 518 | MBytes | 868        | Mbits/sec |
| 87  | [ | 3] | 395.0-400.0 | sec | 517 | MBytes | 868        | Mbits/sec |
| 88  | [ | 3] | 400.0-405.0 | sec | 517 | MBytes | 868        | Mbits/sec |
| 89  | [ | 3] | 405.0-410.0 | sec | 521 | MBytes | 874        | Mbits/sec |
| 90  | [ | 3] | 410.0-415.0 | sec | 528 | MBytes | 886        |           |
| 91  | [ | 3] | 415.0-420.0 | sec |     | MBytes |            | Mbits/sec |
| 92  | [ | 3] | 420.0-425.0 | sec |     | MBytes |            | Mbits/sec |
| 93  | [ | 3] | 425.0-430.0 | sec | 520 | MBytes | 872        | Mbits/sec |
| 94  | [ | 3] | 430.0-435.0 | sec | 527 | MBytes | 885        | Mbits/sec |
| 95  | [ | 3] | 435.0-440.0 | sec | 524 | MBytes | 879        | Mbits/sec |
| 96  | [ | 3] | 440.0-445.0 | sec | 526 | MBytes | 883        | Mbits/sec |
| 97  | [ | 3] | 445.0-450.0 | sec | 513 | MBytes | 861        | Mbits/sec |
| 98  | [ | 3] | 450.0-455.0 | sec | 523 | MBytes | 877        | Mbits/sec |
| 99  | [ | 3] | 455.0-460.0 | sec | 523 | MBytes | 878        | Mbits/sec |
| 100 | [ | 3] | 460.0-465.0 | sec | 522 | MBytes | 876        | Mbits/sec |
| 101 | [ | 3] | 465.0-470.0 | sec | 522 | MBytes | 876        | Mbits/sec |
| 102 | [ | 3] | 470.0-475.0 | sec | 530 | MBytes | 890        | Mbits/sec |
| 103 | [ | 3] | 475.0-480.0 | sec | 530 | MBytes | 889        | Mbits/sec |
| 104 | [ | 3] | 480.0-485.0 | sec | 539 | MBytes |            | Mbits/sec |
| 105 | [ | 3] | 485.0-490.0 | sec | 522 | MBytes | 875        | Mbits/sec |
| 106 | [ | 3] | 490.0-495.0 | sec | 518 | MBytes | 868        | Mbits/sec |
| 107 | [ | 3] | 495.0-500.0 | sec | 524 | MBytes | 878        | Mbits/sec |
| 108 | [ | 3] | 500.0-505.0 | sec | 528 | MBytes |            | Mbits/sec |
| 100 | [ | 3] | 505.0-510.0 | sec | 515 | MBytes | 864        | Mbits/sec |
| 110 | [ | 3] | 510.0-515.0 | sec |     | MBytes |            | Mbits/sec |
|     |   | 01 |             | 200 | 010 |        | 500        |           |
|     |   |    |             |     |     |        |            |           |

| 111 | [   | 3] | 515.0-520.0 | sec | 513 | MBytes | 861 | Mbits/sec |
|-----|-----|----|-------------|-----|-----|--------|-----|-----------|
| 112 | [   | 3] | 520.0-525.0 | sec | 513 | MBytes | 861 | Mbits/sec |
| 113 | ī   | 3] | 525.0-530.0 | sec | 523 | MBytes | 877 | Mbits/sec |
|     | Ĩ   | 3] |             |     | 514 | -      | 862 | Mbits/sec |
| 114 | -   | -  | 530.0-535.0 | sec |     | MBytes |     |           |
| 115 | [   | 3] | 535.0-540.0 | sec | 509 | MBytes | 854 | Mbits/sec |
| 116 | [   | 3] | 540.0-545.0 | sec | 518 | MBytes | 870 | Mbits/sec |
| 117 | ] [ | 3] | 545.0-550.0 | sec | 515 | MBytes | 863 | Mbits/sec |
| 118 | ī   | 3] | 550.0-555.0 | sec | 523 | MBytes | 878 | Mbits/sec |
|     | -   | -  |             |     |     | -      |     |           |
| 119 | [   | 3] | 555.0-560.0 | sec | 516 | MBytes | 865 | Mbits/sec |
| 120 | [   | 3] | 560.0-565.0 | sec | 521 | MBytes | 875 | Mbits/sec |
| 121 | [   | 3] | 565.0-570.0 | sec | 526 | MBytes | 882 | Mbits/sec |
| 122 | ſ   | 3] | 570.0-575.0 | sec | 516 | MBytes | 866 | Mbits/sec |
| 123 | ĺ   | 3] | 575.0-580.0 | sec | 520 | MBytes | 873 | Mbits/sec |
|     |     | -  |             |     |     | -      |     |           |
| 124 | [   | 3] | 580.0-585.0 | sec | 511 | MBytes | 857 | Mbits/sec |
| 125 | [   | 3] | 585.0-590.0 | sec | 521 | MBytes | 874 | Mbits/sec |
| 126 | [   | 3] | 590.0-595.0 | sec | 531 | MBytes | 891 | Mbits/sec |
| 127 | 1   | 3] | 595.0-600.0 | sec | 527 | MBytes | 884 | Mbits/sec |
|     |     | -  |             |     |     | -      | 891 | Mbits/sec |
| 128 | ] [ | 3] | 600.0-605.0 | sec | 531 | MBytes |     |           |
| 129 | [   | 3] | 605.0-610.0 | sec | 518 | MBytes | 869 | Mbits/sec |
| 130 | [   | 3] | 610.0-615.0 | sec | 530 | MBytes | 889 | Mbits/sec |
| 131 | ſ   | 3] | 615.0-620.0 | sec | 520 | MBytes | 873 | Mbits/sec |
| 132 | ī   | 3] | 620.0-625.0 | sec | 511 | MBytes | 857 | Mbits/sec |
|     |     | -  |             |     |     | -      |     |           |
| 133 | [   | 3] | 625.0-630.0 | sec | 518 | MBytes | 868 | Mbits/sec |
| 134 | [   | 3] | 630.0-635.0 | sec | 514 | MBytes | 863 | Mbits/sec |
| 135 | ]   | 3] | 635.0-640.0 | sec | 515 | MBytes | 864 | Mbits/sec |
| 136 | ī   | 3] | 640.0-645.0 | sec | 518 | MBytes | 870 | Mbits/sec |
|     |     | 3] |             |     | 527 | MBytes | 884 | Mbits/sec |
| 137 | ] [ |    | 645.0-650.0 | sec |     | -      |     |           |
| 138 | [   | 3] | 650.0-655.0 | sec | 514 | MBytes | 863 | Mbits/sec |
| 139 | ]   | 3] | 655.0-660.0 | sec | 520 | MBytes | 872 | Mbits/sec |
| 140 | ]   | 3] | 660.0-665.0 | sec | 517 | MBytes | 867 | Mbits/sec |
| 141 | ĺ   | 3] | 665.0-670.0 | sec | 523 | MBytes | 878 | Mbits/sec |
|     |     | -  |             |     |     | -      |     |           |
| 142 | ][  | 3] | 670.0-675.0 | sec | 521 | MBytes | 874 | Mbits/sec |
| 143 | ][  | 3] | 675.0-680.0 | sec | 522 | MBytes | 876 | Mbits/sec |
| 144 | [   | 3] | 680.0-685.0 | sec | 524 | MBytes | 880 | Mbits/sec |
| 145 | ] [ | 3] | 685.0-690.0 | sec | 515 | MBytes | 864 | Mbits/sec |
| 146 | ī   | 3] | 690.0-695.0 | sec | 522 | MBytes | 875 | Mbits/sec |
|     | -   | -  |             |     |     | -      |     |           |
| 147 | [   | 3] | 695.0-700.0 | sec | 527 | MBytes | 884 | Mbits/sec |
| 148 | [   | 3] | 700.0-705.0 | sec | 534 | MBytes | 896 | Mbits/sec |
| 149 | [   | 3] | 705.0-710.0 | sec | 533 | MBytes | 894 | Mbits/sec |
| 150 | ] [ | 3] | 710.0-715.0 | sec | 524 | MBytes | 879 | Mbits/sec |
| 151 | ī   | 3] | 715.0-720.0 | sec | 525 | MBytes | 881 | Mbits/sec |
|     |     | -  |             |     |     | -      |     |           |
| 152 | [   | 3] | 720.0-725.0 | sec | 533 | MBytes | 894 | Mbits/sec |
| 153 | [   | 3] | 725.0-730.0 | sec | 531 | MBytes | 891 | Mbits/sec |
| 154 | [   | 3] | 730.0-735.0 | sec | 518 | MBytes | 870 | Mbits/sec |
| 155 | 1   | 3] | 735.0-740.0 | sec | 532 | MBytes | 892 | Mbits/sec |
|     |     | 3] | 740.0-745.0 | sec | 526 | MBytes | 883 | Mbits/sec |
| 156 | ]   | -  |             |     |     | -      |     |           |
| 157 | [   | 3] | 745.0-750.0 | sec | 530 | MBytes | 889 | Mbits/sec |
| 158 | [   | 3] | 750.0-755.0 | sec | 526 | MBytes | 882 | Mbits/sec |
| 159 | [   | 3] | 755.0-760.0 | sec | 516 | MBytes | 866 | Mbits/sec |
| 160 | ſ   | 3] | 760.0-765.0 | sec | 526 | MBytes | 883 | Mbits/sec |
| 161 | ī   | 3] | 765.0-770.0 | sec |     | MBytes | 874 | Mbits/sec |
|     |     | -  |             |     |     | -      |     |           |
| 162 | [   | 3] | 770.0-775.0 | sec |     | MBytes | 887 | Mbits/sec |
| 163 | [   | 3] | 775.0-780.0 | sec | 524 | MBytes | 880 | Mbits/sec |
| 164 | [   | 3] | 780.0-785.0 | sec | 535 | MBytes | 898 | Mbits/sec |
| 165 | ſ   | 3] | 785.0-790.0 | sec | 516 | MBytes | 865 | Mbits/sec |
|     |     |    |             |     |     | -      |     |           |
| 166 | ]   | 3] | 790.0-795.0 | sec |     | MBytes | 888 | Mbits/sec |
| 167 | [   | 3] | 795.0-800.0 | sec |     | MBytes | 883 | Mbits/sec |
| 168 | [   | 3] | 800.0-805.0 | sec | 518 | MBytes | 868 | Mbits/sec |
| 169 | ſ   | 3] | 805.0-810.0 | sec | 514 | MBytes | 862 | Mbits/sec |
| 170 | i   | 3] | 810.0-815.0 | sec |     | MBytes | 873 | Mbits/sec |
|     |     |    |             |     |     | -      |     |           |
| 171 | ]   | 3] | 815.0-820.0 | sec | 521 | MBytes | 874 | Mbits/sec |
| 172 | [   | 3] | 820.0-825.0 | sec | 518 | MBytes | 869 | Mbits/sec |
| 173 | ]   | 3] | 825.0-830.0 | sec | 518 | MBytes | 869 | Mbits/sec |
| 174 | ſ   | 3] | 830.0-835.0 | sec | 532 | MBytes | 893 | Mbits/sec |
| 175 | i   | 3] | 835.0-840.0 | sec | 517 | MBytes | 867 | Mbits/sec |
|     |     |    |             |     |     | -      |     |           |
| 176 | [   | 3] | 840.0-845.0 | sec | 518 | MBytes | 868 | Mbits/sec |
|     |     |    |             |     |     |        |     |           |

| 177        |  |
|------------|--|
|            | [ 3] 845.0-850.0 sec 515 MBytes 865 Mbits/sec  |
| 178<br>179 | [ 3] 850.0-855.0 sec       524 MBytes       879 Mbits/sec         [ 3] 855.0-860.0 sec       537 MBytes       900 Mbits/sec      |
| 179<br>180 | [ 3] 855.0-860.0 sec 537 MBytes 900 Mbits/sec<br>[ 3] 860.0-865.0 sec 528 MBytes 887 Mbits/sec                                   |
| 181        | [ 3] 865.0-870.0 sec 519 MBytes 871 Mbits/sec  |
| 182        | [ 3] 870.0-875.0 sec 527 MBytes 885 Mbits/sec  |
| 182        | [ 3] 875.0-880.0 sec 530 MBytes 890 Mbits/sec  |
| 184        | [ 3] 880.0-885.0 sec 523 MBytes 878 Mbits/sec  |
| 185        | [ 3] 885.0-890.0 sec 511 MBytes 858 Mbits/sec  |
| 186        | [ 3] 890.0-895.0 sec 526 MBytes 882 Mbits/sec  |
| 187        | [ 3] 895.0-900.0 sec 518 MBytes 870 Mbits/sec  |
| 188        | [ 3] 0.0-900.0 sec 91.9 GBytes 877 Mbits/sec   |
| 189        |  |
| 190        | UDP Traffic  |
| 191        |  |
| 192        | Client connecting to 192.168.1.4, UDP port 5001  |
| 193        | Sending 1470 byte datagrams  |
| 194        | UDP buffer size: 224 KByte (default)   |
| 195        |  |
| 196        | [ 3] local 192.168.1.2 port 42027 connected with 192.168.1.4 port 5001   |
| 197        | [ ID] Interval Transfer Bandwidth  |
| 198<br>199 | [ 3]       0.0-5.0 sec       481 MBytes       808 Mbits/sec         [ 3]       5.0-10.0 sec       480 MBytes       806 Mbits/sec |
| 200        | [ 3] 5.0-10.0 sec 480 MBytes 806 Mbits/sec<br>[ 3] 10.0-15.0 sec 480 MBytes 806 Mbits/sec  |
| 200<br>201 | [ 3] 15.0-20.0 sec 480 MBytes 806 Mbits/sec  |
| 201        | [ 3] 20.0-25.0 sec 480 MBytes 806 Mbits/sec  |
| 203        | [ 3] 25.0-30.0 sec 481 MBytes 807 Mbits/sec  |
| 204        | [ 3] 30.0-35.0 sec 480 MBytes 805 Mbits/sec  |
| 205        | [ 3] 35.0-40.0 sec 480 MBytes 806 Mbits/sec  |
| 206        | [ 3] 40.0-45.0 sec 479 MBytes 804 Mbits/sec  |
| 207        | [ 3] 45.0-50.0 sec 481 MBytes 806 Mbits/sec  |
| 208        | [ 3] 50.0-55.0 sec 480 MBytes 806 Mbits/sec  |
| 209        | [ 3] 55.0-60.0 sec 480 MBytes 806 Mbits/sec  |
| 210        | [ 3] 60.0-65.0 sec 481 MBytes 808 Mbits/sec  |
| 211        | [ 3] 65.0-70.0 sec 481 MBytes 806 Mbits/sec  |
| 212        | [ 3] 70.0-75.0 sec 481 MBytes 807 Mbits/sec  |
| 213        | [ 3] 75.0-80.0 sec 481 MBytes 807 Mbits/sec  |
| 214        | [ 3] 80.0-85.0 sec 481 MBytes 806 Mbits/sec  |
| 215        | [ 3] 85.0-90.0 sec 480 MBytes 806 Mbits/sec  |
| 216        | [ 3] 90.0-95.0 sec 480 MBytes 806 Mbits/sec  |
| 217        | [ 3] 95.0-100.0 sec 481 MBytes 807 Mbits/sec   |
| 218        | [ 3] 100.0-105.0 sec 480 MBytes 806 Mbits/sec  |
| 219        | [ 3] 105.0-110.0 sec 480 MBytes 806 Mbits/sec  |
| 220        | [ 3] 110.0-115.0 sec 481 MBytes 807 Mbits/sec  |
| 221        | [ 3] 115.0-120.0 sec       481 MBytes       807 Mbits/sec         [ 3] 120.0-125.0 sec       481 MBytes       806 Mbits/sec      |
| 222<br>223 | [ 3] 120.0-125.0 sec 481 MBytes 806 Mbits/sec<br>[ 3] 125.0-130.0 sec 480 MBytes 806 Mbits/sec                                   |
| 223<br>224 | [ 3] 130.0-135.0 sec 481 MBytes 808 Mbits/sec  |
| 225        | [ 3] 135.0-140.0 sec 480 MBytes 805 Mbits/sec  |
| 225        | [ 3] 140.0-145.0 sec 481 MBytes 807 Mbits/sec  |
| 227        | [ 3] 145.0-150.0 sec 480 MBytes 806 Mbits/sec  |
| 228        | [ 3] 150.0-155.0 sec 480 MBytes 806 Mbits/sec  |
| 229        | [ 3] 155.0-160.0 sec 480 MBytes 806 Mbits/sec  |
| 230        | [ 3] 160.0-165.0 sec 480 MBytes 806 Mbits/sec  |
| 231        | [ 3] 165.0-170.0 sec 480 MBytes 806 Mbits/sec  |
| 232        | [ 3] 170.0-175.0 sec 481 MBytes 806 Mbits/sec  |
| 233        | [ 3] 175.0-180.0 sec 481 MBytes 807 Mbits/sec  |
| 234        | [ 3] 180.0-185.0 sec 481 MBytes 807 Mbits/sec  |
| 235        | [ 3] 185.0-190.0 sec 481 MBytes 806 Mbits/sec  |
| 236        | [ 3] 190.0-195.0 sec 481 MBytes 807 Mbits/sec  |
| 237        | [ 3] 195.0-200.0 sec 480 MBytes 806 Mbits/sec  |
| 238        | [ 3] 200.0-205.0 sec 480 MBytes 806 Mbits/sec  |
| 239        | [ 3] 205.0-210.0 sec 481 MBytes 807 Mbits/sec  |
| 240        | [ 3] 210.0-215.0 sec 481 MBytes 806 Mbits/sec  |
|            | 1  1  0  0  0  0  0  0  0  0   |
| 241<br>242 | [ 3] 215.0-220.0 sec       481 MBytes       807 Mbits/sec         [ 3] 220.0-225.0 sec       480 MBytes       806 Mbits/sec      |

|     | 1.2 | ~ 1 | 0.05 0.000 0 |     | 4.0.1 |        | 0.07 |           |
|-----|-----|-----|--------------|-----|-------|--------|------|-----------|
| 243 | ] [ | 3]  | 225.0-230.0  | sec |       | MBytes | 807  | Mbits/sec |
| 244 | [   | 3]  | 230.0-235.0  | sec | 481   | MBytes | 806  | Mbits/sec |
| 245 | [   | 3]  | 235.0-240.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 246 | [   | 3]  | 240.0-245.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 247 | 1   | 3]  | 245.0-250.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 248 | Ī   | 3]  | 250.0-255.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 249 | ī   | 3]  | 255.0-260.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 250 | ĺ   | 3]  | 260.0-265.0  | sec | 480   | MBytes | 806  | Mbits/sec |
|     |     | -   |              |     |       | -      |      |           |
| 251 | ]   | 3]  | 265.0-270.0  | sec | 481   | MBytes | 808  | Mbits/sec |
| 252 | ]   | 3]  | 270.0-275.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 253 | [   | 3]  | 275.0-280.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 254 | [   | 3]  | 280.0-285.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 255 | [   | 3]  | 285.0-290.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 256 | [   | 3]  | 290.0-295.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 257 | ]   | 3]  | 295.0-300.0  | sec | 481   | MBytes | 806  | Mbits/sec |
| 258 | 1   | 3]  | 300.0-305.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 259 | [   | 3]  | 305.0-310.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 260 | ī   | 3]  | 310.0-315.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 261 | ĺ   | 3]  | 315.0-320.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 262 | Ē   | 3]  | 320.0-325.0  | sec | 481   | MBytes | 807  | Mbits/sec |
|     | -   | -   |              |     |       | -      |      |           |
| 263 | [   | 3]  | 325.0-330.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 264 | ]   | 3]  | 330.0-335.0  | sec | 481   | MBytes | 808  | Mbits/sec |
| 265 | [   | 3]  | 335.0-340.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 266 | [   | 3]  | 340.0-345.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 267 | [   | 3]  | 345.0-350.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 268 | [   | 3]  | 350.0-355.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 269 | ]   | 3]  | 355.0-360.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 270 | [   | 3]  | 360.0-365.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 271 | [   | 3]  | 365.0-370.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 272 | ]   | 3]  | 370.0-375.0  | sec | 481   | MBvtes | 808  | Mbits/sec |
| 273 | Ī   | 3]  | 375.0-380.0  | sec | 481   | MBytes | 808  | Mbits/sec |
| 274 | ĺ   | 3]  | 380.0-385.0  | sec | 482   | MBytes | 809  | Mbits/sec |
| 275 | ī   | 3]  | 385.0-390.0  | sec | 482   | MBytes | 808  | Mbits/sec |
| 276 | ĺ   | 3]  | 390.0-395.0  | sec | 482   | MBytes | 809  | Mbits/sec |
| 277 | Ē   | 3]  | 395.0-400.0  | sec | 482   | MBytes | 808  | Mbits/sec |
| 278 | Ē   | 3]  | 400.0-405.0  | sec | 480   | MBytes | 806  | Mbits/sec |
|     |     | -   | 405.0-410.0  |     |       | -      | 806  | Mbits/sec |
| 279 | [   | 3]  |              | sec | 480   | MBytes |      |           |
| 280 | [   | 3]  | 410.0-415.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 281 | ]   | 3]  | 415.0-420.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 282 | ]   | 3]  | 420.0-425.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 283 | [   | 3]  | 425.0-430.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 284 | [   | 3]  | 430.0-435.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 285 | [   | 3]  | 435.0-440.0  | sec | 481   | MBytes | 806  | Mbits/sec |
| 286 | [   | 3]  | 440.0-445.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 287 | [   | 3]  | 445.0-450.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 288 | ]   | 3]  | 450.0-455.0  | sec | 481   | MBytes | 806  | Mbits/sec |
| 289 | [   | 3]  | 455.0-460.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 290 | [   | 3]  | 460.0-465.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 291 | [   | 3]  | 465.0-470.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 292 | ]   | 3]  | 470.0-475.0  | sec | 481   | MBytes | 808  | Mbits/sec |
| 293 | Ī   | 3]  | 475.0-480.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 294 | ĺ   | 3]  | 480.0-485.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 295 | ī   | 3]  | 485.0-490.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 296 | ĺ   | 3]  | 490.0-495.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 297 | Ē   | 3]  | 495.0-500.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 298 | Ē   | 3]  | 500.0-505.0  | sec | 481   | MBytes | 807  | Mbits/sec |
|     |     |     | 505.0-510.0  |     |       | -      |      | Mbits/sec |
| 299 | ]   | 3]  |              | sec | 481   | MBytes | 807  |           |
| 300 | [   | 3]  | 510.0-515.0  | sec | 481   | MBytes | 806  | Mbits/sec |
| 301 | [   | 3]  | 515.0-520.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 302 | ]   | 3]  | 520.0-525.0  | sec | 480   | MBytes | 806  | Mbits/sec |
| 303 | [   | 3]  | 525.0-530.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 304 | [   | 3]  | 530.0-535.0  | sec | 481   | MBytes | 806  | Mbits/sec |
| 305 | [   | 3]  | 535.0-540.0  | sec | 481   | MBytes | 807  | Mbits/sec |
| 306 | [   | 3]  | 540.0-545.0  | sec | 481   | MBytes | 808  | Mbits/sec |
| 307 | ] [ | 3]  | 545.0-550.0  | sec | 481   | MBytes | 806  | Mbits/sec |
| 308 | [   | 3]  | 550.0-555.0  | sec | 481   | MBytes | 808  | Mbits/sec |
|     | -   |     |              |     |       |        |      |           |

| 10         [         3] 560.0-565.0 sec         481 MBytes         807 Mbits/sec           311         [         3] 570.0-575.0 sec         481 MBytes         807 Mbits/sec           313         [         3] 575.0-580.0 sec         480 MBytes         806 Mbits/sec           314         [         3] 570.0-595.0 sec         480 MBytes         806 Mbits/sec           315         [         3] 595.0-590.0 sec         481 MBytes         807 Mbits/sec           315         [         3] 595.0-500.0 sec         481 MBytes         807 Mbits/sec           318         [         3] 600.0-605.0 sec         481 MBytes         807 Mbits/sec           319         [         3] 600.0-625.0 sec         481 MBytes         807 Mbits/sec           321         [         3] 625.0-630.0 sec         480 MBytes         806 Mbits/sec           322         [         3] 640.0-645.0 sec         480 MBytes         807 Mbits/sec           323         [         3] 640.0-645.0 sec         481 MBytes         807 Mbits/sec           324         [         3] 650.0-660.0 sec         481 MBytes         807 Mbits/sec           325         [         3] 665.0-670.0 sec         481 MBytes         807 Mbits/sec           331         [  |     |   |     |             |     |     |        |     |           |
|---|-----|---|-----|-------------|-----|-----|--------|-----|-----------|
| 110       [ 3] 560.0-565.0 sec       481 MBytes       807 Mbits/sec         311       [ 3] 570.0-575.0 sec       481 MBytes       807 Mbits/sec         313       [ 3] 575.0-580.0 sec       481 MBytes       807 Mbits/sec         314       [ 3] 580.0-595.0 sec       481 MBytes       806 Mbits/sec         315       [ 3] 580.0-590.0 sec       481 MBytes       807 Mbits/sec         316       [ 3] 595.0-600.0 sec       481 MBytes       807 Mbits/sec         318       [ 3] 605.0-610.0 sec       481 MBytes       807 Mbits/sec         319       [ 3] 610.0-615.0 sec       481 MBytes       807 Mbits/sec         321       [ 3] 620.0-622.0 sec       481 MBytes       807 Mbits/sec         322       [ 3] 620.0-655.0 sec       481 MBytes       807 Mbits/sec         323       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         324       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         325       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         326       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 665.0-670.0 sec       481 MBytes <td< td=""><td>309</td><td>[</td><td>3]</td><td>555.0-560.0</td><td>sec</td><td>481</td><td>MBytes</td><td>807</td><td>Mbits/sec</td></td<>   | 309 | [ | 3]  | 555.0-560.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 131         131         575.0.5         sec         481         MBytes         807         Mbits/sec           314         1         31         575.0.5         sec         481         MBytes         806         Mbits/sec           315         [3]         580.0.550.0         sec         480         MBytes         806         Mbits/sec           316         [3]         595.0.600.0         sec         481         MBytes         807         Mbits/sec           317         [3]         605.0.601.0         sec         481         MBytes         807         Mbits/sec           316         1610.0.615.0         sec         481         MBytes         807         Mbits/sec           321         [3]         615.0.622.0         sec         481         MBytes         807         Mbits/sec           322         [3]         635.0.640.0         sec         481         MBytes         807         Mbits/sec           323         [1]         645.0.650.0         sec         481         MBytes         807         Mbits/sec           323         [1]         650.0.660.0         sec         481         MBytes         807         Mbits/sec   | 310 |   | 3]  |             | sec |     | -      | 807 | Mbits/sec |
| 131       [ 3] 575.0-580.0 sec       480 MBytes       806 Mbits/sec         314       [ 3] 580.0-580.0 sec       480 MBytes       806 Mbits/sec         315       [ 3] 590.0-595.0 sec       480 MBytes       807 Mbits/sec         316       [ 3] 595.0-600.0 sec       481 MBytes       807 Mbits/sec         317       [ 3] 600.0-605.0 sec       481 MBytes       807 Mbits/sec         319       [ 3] 615.0-620.0 sec       481 MBytes       807 Mbits/sec         321       [ 3] 620.0-625.0 sec       481 MBytes       807 Mbits/sec         322       [ 3] 620.0-625.0 sec       481 MBytes       807 Mbits/sec         323       [ 3] 620.0-645.0 sec       481 MBytes       807 Mbits/sec         324       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         325       [ 3] 645.0-665.0 sec       481 MBytes       807 Mbits/sec         326       [ 3] 665.0-660.0 sec       481 MBytes       807 Mbits/sec         327       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 670.0-705.0 sec       481 MBytes       807 Mbits/sec         334       [ 3] 670.0-705.0 sec       481 MBytes <td< td=""><td>311</td><td>[</td><td>3]</td><td>565.0-570.0</td><td>sec</td><td>481</td><td>MBytes</td><td>807</td><td>Mbits/sec</td></td<>   | 311 | [ | 3]  | 565.0-570.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 14         [ 3] 580.0-585.0 sec         480 MBytes         806 Mbits/sec           315         [ 3] 585.0-590.0 sec         480 MBytes         806 Mbits/sec           317         [ 3] 595.0-600.0 sec         481 MBytes         807 Mbits/sec           318         [ 3] 600.0-605.0 sec         481 MBytes         807 Mbits/sec           318         [ 3] 600.0-615.0 sec         481 MBytes         807 Mbits/sec           320         [ 3] 610.0-615.0 sec         481 MBytes         807 Mbits/sec           321         [ 3] 620.0-625.0 sec         480 MBytes         806 Mbits/sec           322         [ 3] 620.0-625.0 sec         480 MBytes         807 Mbits/sec           323         [ 3] 640.0-645.0 sec         481 MBytes         807 Mbits/sec           324         [ 3] 650.0-650.0 sec         481 MBytes         807 Mbits/sec           325         [ 3] 660.0-665.0 sec         481 MBytes         807 Mbits/sec           331         660.0-665.0 sec         481 MBytes         807 Mbits/sec           332         [ 3] 660.0-665.0 sec         481 MBytes         807 Mbits/sec           333         [ 650.0-670.0 sec         481 MBytes         807 Mbits/sec           334         [ 3] 660.0-685.0 sec         481 MBytes         807 Mbits/sec <td>312</td> <td>[</td> <td>3]</td> <td>570.0-575.0</td> <td>sec</td> <td>481</td> <td>MBytes</td> <td>807</td> <td>Mbits/sec</td> | 312 | [ | 3]  | 570.0-575.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 315       [ 3] 585.0-590.0 sec       481 MBytes       806 Mbits/sec         316       [ 3] 595.0-600.0 sec       481 MBytes       807 Mbits/sec         317       [ 3] 600.0-605.0 sec       481 MBytes       807 Mbits/sec         318       [ 3] 605.0-610.0 sec       481 MBytes       807 Mbits/sec         319       [ 3] 610.0-615.0 sec       481 MBytes       807 Mbits/sec         320       [ 3] 625.0-630.0 sec       481 MBytes       807 Mbits/sec         321       [ 3] 625.0-630.0 sec       480 MBytes       806 Mbits/sec         322       [ 3] 640.0-645.0 sec       480 MBytes       807 Mbits/sec         324       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         325       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         326       [ 3] 650.0-660.0 sec       481 MBytes       807 Mbits/sec         330       [ 65.0-670.0 sec       481 MBytes       807 Mbits/sec         331       [ 650.0-690.0 sec       481 MBytes       807 Mbits/sec         333       [ 650.0-690.0 sec       481 MBytes       807 Mbits/sec         333       [ 650.0-690.0 sec       481 MBytes       807 Mbits/sec         334       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/se   | 313 | [ | 3]  | 575.0-580.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 16         1         39         590.0-595.0 sec         481 MBytes         807 Mbits/sec           317         1         395.0-600.0 sec         481 MBytes         807 Mbits/sec           318         1         31         600.0-605.0 sec         481 MBytes         807 Mbits/sec           319         1         31         610.0-615.0 sec         481 MBytes         807 Mbits/sec           320         1         31         625.0-630.0 sec         480 MBytes         806 Mbits/sec           323         1         625.0-630.0 sec         481 MBytes         807 Mbits/sec           323         1         640.0-645.0 sec         481 MBytes         807 Mbits/sec           324         1         31         650.0-650.0 sec         481 MBytes         807 Mbits/sec           326         1         640.0-665.0 sec         481 MBytes         807 Mbits/sec           337         1         660.0-665.0 sec         481 MBytes         807 Mbits/sec           338         1         660.0-665.0 sec         481 MBytes         807 Mbits/sec           333         1         660.0-665.0 sec         481 MBytes         807 Mbits/sec           333         1         660.0-665.0 sec         481 MBytes         807 Mbits/s  | 314 | [ | 3]  | 580.0-585.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 117       [ 3] 595.0-600.0 sec       481 MBytes       807 Mbits/sec         138       [ 3] 600.0-605.0 sec       481 MBytes       807 Mbits/sec         130       [ 3] 615.0-610.0 sec       481 MBytes       807 Mbits/sec         131       [ 3] 615.0-620.0 sec       481 MBytes       807 Mbits/sec         132       [ 3] 620.0-625.0 sec       480 MBytes       806 Mbits/sec         131       635.0-640.0 sec       481 MBytes       807 Mbits/sec         132       [ 3] 643.0-645.0 sec       481 MBytes       807 Mbits/sec         131       645.0-650.0 sec       481 MBytes       807 Mbits/sec         132       [ 3] 660.0-655.0 sec       481 MBytes       807 Mbits/sec         133       665.0-670.0 sec       481 MBytes       807 Mbits/sec         1331       [ 3] 660.0-665.0 sec       481 MBytes       807 Mbits/sec         1331       [ 3] 660.0-665.0 sec       481 MBytes       807 Mbits/sec         1333       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         1333       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         1333       [ 3] 690.0-700.0 sec       481 MBytes       807 Mbits/sec         1334       [ 3] 700.0-710.0 sec       480 MBytes       806 Mbit   | 315 | [ | 3]  | 585.0-590.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 318         [ 3]         600.0-605.0 sec         481 MBytes         807 Mbits/sec           319         [ 3]         605.0-610.0 sec         481 MBytes         807 Mbits/sec           321         [ 3]         615.0-620.0 sec         481 MBytes         807 Mbits/sec           322         [ 3]         620.0-625.0 sec         480 MBytes         806 Mbits/sec           323         [ 3]         635.0-640.0 sec         481 MBytes         807 Mbits/sec           324         [ 3]         630.0-645.0 sec         481 MBytes         807 Mbits/sec           325         [ 3]         640.0-645.0 sec         481 MBytes         807 Mbits/sec           327         [ 3]         650.0-650.0 sec         481 MBytes         807 Mbits/sec           328         [ 3]         650.0-660.0 sec         481 MBytes         807 Mbits/sec           330         [ 3]         660.0-665.0 sec         481 MBytes         807 Mbits/sec           331         [ 3]         675.0-680.0 sec         481 MBytes         807 Mbits/sec           333         [ 3]         670.0-675.0 sec         481 MBytes         807 Mbits/sec           333         [ 3]         670.0-675.0 sec         481 MBytes         807 Mbits/sec           334   | 316 | [ | 3]  | 590.0-595.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 318         [ 3]         600.0-605.0 sec         481         MEytes         807         Mbits/sec           319         [ 3]         610.0-615.0 sec         481         MEytes         807         Mbits/sec           321         [ 3]         610.0-625.0 sec         481         MEytes         807         Mbits/sec           322         [ 3]         620.0-630.0 sec         480         MEytes         807         Mbits/sec           323         [ 3]         630.0-645.0 sec         481         MEytes         807         Mbits/sec           324         [ 3]         640.0-645.0 sec         481         MEytes         807         Mbits/sec           325         [ 3]         645.0-650.0 sec         481         MEytes         807         Mbits/sec           326         [ 3]         650.0-660.0 sec         481         MEytes         807         Mbits/sec           331         [ 3]         661.0-670.0 sec         481         MEytes         807         Mbits/sec           333         [ 3]         670.0-675.0 sec         481         MEytes         807         Mbits/sec           333         [ 3]         670.0-675.0 sec         481         MEytes         807         M   | 317 | [ | 3]  | 595.0-600.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 320       [ 3] 610.0-615.0 sec       481 MBytes       807 Mbits/sec         321       [ 3] 625.0-630.0 sec       480 MBytes       806 Mbits/sec         323       [ 3] 625.0-630.0 sec       480 MBytes       806 Mbits/sec         324       [ 3] 630.0-635.0 sec       480 MBytes       807 Mbits/sec         325       [ 3] 640.0-640.0 sec       481 MBytes       807 Mbits/sec         326       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         327       [ 3] 650.0-660.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 660.0-665.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 660.0-671.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 665.0-690.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         334       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 690.0-700.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 720.0-725.0 sec       481 MBytes <td< td=""><td>318</td><td>[</td><td>3]</td><td>600.0-605.0</td><td>sec</td><td>481</td><td>-</td><td>807</td><td>Mbits/sec</td></td<>  | 318 | [ | 3]  | 600.0-605.0 | sec | 481 | -      | 807 | Mbits/sec |
| 320       [ 3] 610.0-615.0 sec       481 MBytes       807 Mbits/sec         321       [ 3] 625.0-630.0 sec       480 MBytes       806 Mbits/sec         323       [ 3] 625.0-630.0 sec       480 MBytes       806 Mbits/sec         324       [ 3] 630.0-635.0 sec       480 MBytes       807 Mbits/sec         325       [ 3] 640.0-640.0 sec       481 MBytes       807 Mbits/sec         326       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         327       [ 3] 650.0-660.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 660.0-665.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 660.0-671.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 665.0-690.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         334       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 690.0-700.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 720.0-725.0 sec       481 MBytes <td< td=""><td>319</td><td></td><td>3]</td><td></td><td>sec</td><td>481</td><td>-</td><td>807</td><td>Mbits/sec</td></td<>  | 319 |   | 3]  |             | sec | 481 | -      | 807 | Mbits/sec |
| 322       [ 3] 620.0-625.0 sec       480 MBytes       806 Mbits/sec         323       [ 3] 632.0-630.0 sec       480 MBytes       806 Mbits/sec         324       [ 3] 635.0-640.0 sec       481 MBytes       807 Mbits/sec         325       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         326       [ 3] 640.0-650.0 sec       481 MBytes       807 Mbits/sec         327       [ 3] 650.0-650.0 sec       481 MBytes       807 Mbits/sec         328       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         334       [ 3] 680.0-680.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 700.0-710.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 695.0-720.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 710.0-725.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 720.0-735.0 sec       481 MBytes <td< td=""><td>320</td><td></td><td>3]</td><td></td><td>sec</td><td></td><td>MBytes</td><td>807</td><td>Mbits/sec</td></td<>  | 320 |   | 3]  |             | sec |     | MBytes | 807 | Mbits/sec |
| 322       [ 3] 620.0-625.0 sec       480 MBytes       806 Mbits/sec         323       [ 3] 632.0-630.0 sec       480 MBytes       806 Mbits/sec         324       [ 3] 635.0-640.0 sec       481 MBytes       807 Mbits/sec         325       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         326       [ 3] 640.0-650.0 sec       481 MBytes       807 Mbits/sec         327       [ 3] 650.0-650.0 sec       481 MBytes       807 Mbits/sec         328       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         334       [ 3] 680.0-680.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 700.0-710.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 695.0-720.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 710.0-725.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 720.0-735.0 sec       481 MBytes <td< td=""><td>321</td><td></td><td>3]</td><td>615.0-620.0</td><td>sec</td><td></td><td>-</td><td>807</td><td>Mbits/sec</td></td<>  | 321 |   | 3]  | 615.0-620.0 | sec |     | -      | 807 | Mbits/sec |
| 323       [ 3] 625.0-630.0 sec       480 MBytes       806 Mbits/sec         324       [ 3] 630.0-635.0 sec       481 MBytes       807 Mbits/sec         325       [ 3] 630.0-645.0 sec       481 MBytes       806 Mbits/sec         326       [ 3] 640.0-645.0 sec       481 MBytes       807 Mbits/sec         327       [ 3] 655.0-660.0 sec       481 MBytes       807 Mbits/sec         328       [ 3] 655.0-660.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 660.0-675.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 660.0-675.0 sec       481 MBytes       806 Mbits/sec         333       [ 3] 680.0-685.0 sec       481 MBytes       806 Mbits/sec         334       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         343       [ 3] 725.0-730.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 750.0-760.0 sec       481 MBytes <td< td=""><td>322</td><td></td><td>3]</td><td>620.0-625.0</td><td>sec</td><td>480</td><td>-</td><td>806</td><td>Mbits/sec</td></td<>   | 322 |   | 3]  | 620.0-625.0 | sec | 480 | -      | 806 | Mbits/sec |
| 324       [ 3] 630.0-635.0 sec       481 MBytes       807 Mbits/sec         325       [ 3] 640.0-645.0 sec       480 MBytes       807 Mbits/sec         326       [ 3] 645.0-650.0 sec       481 MBytes       807 Mbits/sec         327       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         328       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         329       [ 3] 655.0-670.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 675.0-680.0 sec       481 MBytes       806 Mbits/sec         331       [ 3] 680.0-685.0 sec       481 MBytes       806 Mbits/sec         333       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         334       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 700.0-715.0 sec       480 MBytes       806 Mbits/sec         336       [ 3] 700.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 720.0-720.0 sec       481 MBytes       807 Mbits/sec         341       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes <td< td=""><td>323</td><td></td><td>3]</td><td></td><td>sec</td><td>480</td><td>-</td><td>806</td><td>Mbits/sec</td></td<>  | 323 |   | 3]  |             | sec | 480 | -      | 806 | Mbits/sec |
| 325       [ 3] 635.0-640.0 sec       481 MBytes       807 Mbits/sec         326       [ 3] 640.0-645.0 sec       480 MBytes       806 Mbits/sec         327       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         328       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 660.0-655.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         332       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 680.0-695.0 sec       481 MBytes       806 Mbits/sec         334       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 720.0-735.0 sec       481 MBytes       807 Mbits/sec         343       [ 3] 730.0-735.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 755.0-760.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td>481</td><td>-</td><td></td><td></td></td<>   |     |   | -   |             |     | 481 | -      |     |           |
| 326       [ 3] 640.0-645.0 sec       480 MBytes       806 Mbits/sec         327       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         328       [ 3] 655.0-660.0 sec       481 MBytes       807 Mbits/sec         329       [ 3] 655.0-670.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 675.0-680.0 sec       481 MBytes       806 Mbits/sec         333       [ 3] 680.0-695.0 sec       481 MBytes       806 Mbits/sec         334       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 695.0-710.0 sec       480 MBytes       806 Mbits/sec         336       [ 3] 700.0-715.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 750.0-750.0 sec       481 MBytes       806 Mbits/sec         344       [ 3] 750.0-770.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 327       [ 3] 645.0-650.0 sec       481 MBytes       807 Mbits/sec         328       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         329       [ 3] 650.0-660.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 670.0-675.0 sec       481 MBytes       806 Mbits/sec         332       [ 3] 675.0-680.0 sec       481 MBytes       806 Mbits/sec         334       [ 3] 690.0-695.0 sec       481 MBytes       806 Mbits/sec         335       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 700.0-715.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 700.0-715.0 sec       480 MBytes       806 Mbits/sec         338       [ 3] 715.0-720.0 sec       481 MBytes       807 Mbits/sec         341       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         341       [ 3] 735.0-740.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 750.0-750.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 750.0-750.0 sec       481 MBytes       806 Mbits/sec         345       [ 3] 750.0-750.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 328       [ 3] 650.0-655.0 sec       481 MBytes       807 Mbits/sec         329       [ 3] 665.0-660.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 665.0-670.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 665.0-670.0 sec       481 MBytes       806 Mbits/sec         332       [ 3] 670.0-675.0 sec       481 MBytes       806 Mbits/sec         333       [ 3] 680.0-685.0 sec       481 MBytes       807 Mbits/sec         334       [ 3] 680.0-690.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 700.0-715.0 sec       480 MBytes       806 Mbits/sec         338       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 710.0-720.0 sec       481 MBytes       807 Mbits/sec         341       [ 3] 725.0-730.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-760.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 765.0-770.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 329       [ 3] 655.0-660.0 sec       481 MBytes       807 Mbits/sec         330       [ 3] 660.0-665.0 sec       481 MBytes       806 Mbits/sec         331       [ 3] 670.0-670.0 sec       481 MBytes       806 Mbits/sec         332       [ 3] 670.0-675.0 sec       481 MBytes       806 Mbits/sec         333       [ 3] 680.0-685.0 sec       481 MBytes       806 Mbits/sec         334       [ 3] 680.0-695.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 700.0-705.0 sec       480 MBytes       806 Mbits/sec         337       [ 3] 700.0-715.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 720.0-735.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 730.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes       806 Mbits/sec         354       [ 3] 745.0-750.0 sec       481 MBytes       806 Mbits/sec         355       [ 3] 760.0-765.0 sec       481 MBytes <td< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>   |     | - | -   |             |     |     | -      |     |           |
| 330       [ 3] 660.0-665.0 sec       481 MBytes       807 Mbits/sec         331       [ 3] 670.0-675.0 sec       481 MBytes       806 Mbits/sec         332       [ 3] 675.0-680.0 sec       481 MBytes       806 Mbits/sec         333       [ 3] 675.0-680.0 sec       481 MBytes       806 Mbits/sec         334       [ 3] 685.0-690.0 sec       481 MBytes       806 Mbits/sec         335       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 690.0-700.0 sec       481 MBytes       807 Mbits/sec         337       [ 3] 695.0-700.0 sec       480 MBytes       806 Mbits/sec         338       [ 3] 700.0-715.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 710.0-712.0 sec       481 MBytes       807 Mbits/sec         341       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         342       [ 3] 730.0-740.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 750.0-750.0 sec       481 MBytes       806 Mbits/sec         344       [ 3] 760.0-765.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 760.0-775.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 331       [ 3] 665.0-670.0 sec       481 MBytes       806 Mbits/sec         332       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 675.0-680.0 sec       481 MBytes       806 Mbits/sec         333       [ 3] 680.0-685.0 sec       481 MBytes       806 Mbits/sec         335       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 690.0-705.0 sec       480 MBytes       807 Mbits/sec         337       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         339       [ 3] 710.0-715.0 sec       480 MBytes       807 Mbits/sec         341       [ 3] 710.0-725.0 sec       481 MBytes       807 Mbits/sec         341       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-760.0 sec       481 MBytes       806 Mbits/sec         345       [ 3] 745.0-750.0 sec       481 MBytes       806 Mbits/sec         346       [ 3] 745.0-750.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 760.0-765.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 332       [ 3] 670.0-675.0 sec       481 MBytes       807 Mbits/sec         333       [ 3] 675.0-680.0 sec       480 MBytes       806 Mbits/sec         334       [ 3] 680.0-685.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 685.0-690.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         337       [ 3] 695.0-700.0 sec       480 MBytes       806 Mbits/sec         338       [ 3] 700.0-75.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 715.0-720.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         343       [ 3] 735.0-740.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         345       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 740.0-745.0 sec       481 MBytes       806 Mbits/sec         349       [ 3] 745.0-750.0 sec       481 MBytes       806 Mbits/sec         349       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 775.0-780.0 sec       481 MBytes  |     | - | -   |             |     |     | -      |     |           |
| 333       [ 3] 675.0-680.0 sec       480 MEytes       806 Mbits/sec         334       [ 3] 680.0-685.0 sec       481 MBytes       807 Mbits/sec         335       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 690.0-700.0 sec       481 MBytes       807 Mbits/sec         337       [ 3] 700.0-705.0 sec       480 MBytes       806 Mbits/sec         338       [ 3] 700.0-710.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 715.0-720.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 715.0-720.0 sec       480 MBytes       807 Mbits/sec         341       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 760.0-775.0 sec       481 MBytes       806 Mbits/sec         346       [ 3] 760.0-775.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 760.0-765.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 760.0-776.0 sec       481 MBytes       807 Mbits/sec         352       [ 3] 780.0-780.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 334       [ 3] 680.0-685.0 sec       481 MBytes       806 Mbits/sec         335       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 690.0-700.0 sec       481 MBytes       807 Mbits/sec         337       [ 3] 695.0-700.0 sec       480 MBytes       806 Mbits/sec         338       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         341       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 735.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       806 Mbits/sec         344       [ 3] 750.0-755.0 sec       481 MBytes       806 Mbits/sec         346       [ 3] 760.0-765.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 760.0-775.0 sec       481 MBytes       807 Mbits/sec         351       [ 3] 760.0-790.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 335       [ 3] 685.0-690.0 sec       481 MBytes       807 Mbits/sec         336       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         337       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         338       [ 3] 700.0-705.0 sec       480 MBytes       806 Mbits/sec         339       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 715.0-720.0 sec       481 MBytes       807 Mbits/sec         341       [ 3] 725.0-730.0 sec       481 MBytes       807 Mbits/sec         343       [ 3] 735.0-740.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 750.0-750.0 sec       481 MBytes       806 Mbits/sec         348       [ 3] 760.0-765.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 760.0-765.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         352       [ 3] 770.0-795.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 785.0-790.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 336       [ 3] 690.0-695.0 sec       481 MBytes       807 Mbits/sec         337       [ 3] 695.0-700.0 sec       481 MBytes       806 Mbits/sec         338       [ 3] 700.0-705.0 sec       480 MBytes       806 Mbits/sec         339       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 715.0-720.0 sec       481 MBytes       807 Mbits/sec         342       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       806 Mbits/sec         344       [ 3] 750.0-760.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 760.0-775.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         352       [ 3] 785.0-780.0 sec       481 MBytes       806 Mbits/sec         353       [ 3] 790.0-795.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 337       [ 3] 695.0-700.0 sec       481 MBytes       807 Mbits/sec         338       [ 3] 700.0-705.0 sec       480 MBytes       806 Mbits/sec         339       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 715.0-720.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 715.0-720.0 sec       481 MBytes       807 Mbits/sec         342       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         347       [ 3] 740.0-745.0 sec       481 MBytes       806 Mbits/sec         348       [ 3] 760.0-765.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         352       [ 3] 785.0-780.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 780.0-785.0 sec       481 MBytes       806 Mbits/sec         354       [ 3] 790.0-795.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 338       [ 3] 700.0-705.0 sec       480 MBytes       806 Mbits/sec         339       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 715.0-720.0 sec       481 MBytes       807 Mbits/sec         342       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         343       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         345       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 76.0-755.0 sec       481 MBytes       806 Mbits/sec         348       [ 3] 760.0-755.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 760.0-765.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 760.0-785.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 770.0-775.0 sec       481 MBytes       806 Mbits/sec         354       [ 3] 780.0-790.0 sec       481 MBytes       806 Mbits/sec         355       [ 3] 790.0-795.0 sec       481 MBytes  |     |   | -   |             |     |     | -      |     |           |
| 339       [ 3] 705.0-710.0 sec       480 MBytes       806 Mbits/sec         340       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 715.0-720.0 sec       481 MBytes       807 Mbits/sec         342       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         343       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 745.0-740.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         348       [ 3] 755.0-760.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 760.0-755.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         355       [ 3] 790.0-795.0 sec       481 MBytes       807 Mbits/sec         355       [ 3] 790.0-795.0 sec       481 MBytes       807 Mbits/sec         355       [ 3] 790.0-795.0 sec       481 MBytes       807 Mbits/sec         355       [ 3] 795.0-800.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 340       [ 3] 710.0-715.0 sec       480 MBytes       806 Mbits/sec         341       [ 3] 715.0-720.0 sec       481 MBytes       807 Mbits/sec         342       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 735.0-740.0 sec       480 MBytes       806 Mbits/sec         345       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         347       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         348       [ 3] 750.0-755.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 765.0-770.0 sec       481 MBytes       807 Mbits/sec         351       [ 3] 760.0-755.0 sec       481 MBytes       807 Mbits/sec         352       [ 3] 770.0-775.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 785.0-790.0 sec       481 MBytes       807 Mbits/sec         354       [ 3] 795.0-800.0 sec       481 MBytes       806 Mbits/sec         355       [ 3] 795.0-800.0 sec       481 MBytes       806 Mbits/sec         356       [ 3] 800.0-815.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 341       [ 3] 715.0-720.0 sec       481 MBytes       807 Mbits/sec         342       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         343       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 735.0-740.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 745.0-750.0 sec       481 MBytes       807 Mbits/sec         347       [ 3] 745.0-750.0 sec       481 MBytes       806 Mbits/sec         348       [ 3] 750.0-755.0 sec       481 MBytes       806 Mbits/sec         349       [ 3] 755.0-760.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 760.0-755.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         352       [ 3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         354       [ 3] 790.0-795.0 sec       481 MBytes       807 Mbits/sec         355       [ 3] 790.0-795.0 sec       481 MBytes       807 Mbits/sec         356       [ 3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         357       [ 3] 800.0-835.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 342       [ 3] 720.0-725.0 sec       481 MBytes       807 Mbits/sec         343       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         347       [ 3] 745.0-750.0 sec       481 MBytes       806 Mbits/sec         348       [ 3] 750.0-755.0 sec       481 MBytes       806 Mbits/sec         349       [ 3] 760.0-765.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 770.0-775.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 770.0-795.0 sec       481 MBytes       807 Mbits/sec         354       [ 3] 780.0-790.0 sec       481 MBytes       807 Mbits/sec         355       [ 3] 785.0-790.0 sec       481 MBytes       806 Mbits/sec         356       [ 3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         357       [ 3] 800.0-805.0 sec       481 MBytes       806 Mbits/sec         358       [ 3] 800.0-805.0 sec       481 MBytes <td< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>   |     | - | -   |             |     |     | -      |     |           |
| 343       [ 3] 725.0-730.0 sec       480 MBytes       806 Mbits/sec         344       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         345       [ 3] 735.0-740.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         347       [ 3] 745.0-750.0 sec       481 MBytes       806 Mbits/sec         348       [ 3] 750.0-755.0 sec       481 MBytes       806 Mbits/sec         349       [ 3] 755.0-760.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 770.0-775.0 sec       481 MBytes       807 Mbits/sec         352       [ 3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 785.0-790.0 sec       481 MBytes       807 Mbits/sec         354       [ 3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         355       [ 3] 795.0-800.0 sec       481 MBytes       806 Mbits/sec         356       [ 3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         357       [ 3] 800.0-805.0 sec       481 MBytes       807 Mbits/sec         358       [ 3] 800.0-815.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 344       [ 3] 730.0-735.0 sec       480 MBytes       806 Mbits/sec         345       [ 3] 735.0-740.0 sec       481 MBytes       807 Mbits/sec         346       [ 3] 740.0-745.0 sec       481 MBytes       807 Mbits/sec         347       [ 3] 745.0-750.0 sec       480 MBytes       806 Mbits/sec         348       [ 3] 750.0-755.0 sec       481 MBytes       806 Mbits/sec         349       [ 3] 755.0-760.0 sec       481 MBytes       806 Mbits/sec         350       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         352       [ 3] 770.0-775.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         354       [ 3] 780.0-795.0 sec       481 MBytes       807 Mbits/sec         355       [ 3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         356       [ 3] 790.0-800.0 sec       481 MBytes       806 Mbits/sec         357       [ 3] 800.0-805.0 sec       481 MBytes       807 Mbits/sec         360       [ 3] 810.0-815.0 sec       481 MBytes       807 Mbits/sec         361       [ 3] 820.0-825.0 sec       481 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 345[ 3] 735.0-740.0 sec481 MBytes807 Mbits/sec346[ 3] 740.0-745.0 sec481 MBytes807 Mbits/sec347[ 3] 745.0-750.0 sec480 MBytes806 Mbits/sec348[ 3] 750.0-755.0 sec481 MBytes806 Mbits/sec349[ 3] 755.0-760.0 sec481 MBytes807 Mbits/sec350[ 3] 760.0-765.0 sec481 MBytes806 Mbits/sec351[ 3] 765.0-770.0 sec481 MBytes806 Mbits/sec352[ 3] 770.0-775.0 sec481 MBytes807 Mbits/sec353[ 3] 780.0-780.0 sec481 MBytes807 Mbits/sec354[ 3] 780.0-780.0 sec481 MBytes807 Mbits/sec355[ 3] 785.0-790.0 sec481 MBytes806 Mbits/sec356[ 3] 790.0-795.0 sec481 MBytes806 Mbits/sec357[ 3] 795.0-800.0 sec481 MBytes806 Mbits/sec358[ 3] 800.0-805.0 sec481 MBytes807 Mbits/sec359[ 3] 810.0-815.0 sec481 MBytes807 Mbits/sec361[ 3] 815.0-820.0 sec481 MBytes806 Mbits/sec362[ 3] 825.0-830.0 sec481 MBytes806 Mbits/sec363[ 3] 825.0-830.0 sec481 MBytes806 Mbits/sec364[ 3] 835.0-840.0 sec481 MBytes806 Mbits/sec365[ 3] 850.0-850.0 sec481 MBytes806 Mbits/sec366[ 3] 840.0-845.0 sec481 MBytes806 Mbits/sec366[ 3] 845.0-860.0 sec481 MBytes806 Mbits/sec366[ 3] 845.0-860.0   |     | - | -   |             |     |     | -      |     |           |
| 346[ 3] 740.0-745.0 sec481 MBytes807 Mbits/sec347[ 3] 745.0-750.0 sec480 MBytes806 Mbits/sec348[ 3] 750.0-755.0 sec481 MBytes806 Mbits/sec349[ 3] 755.0-760.0 sec481 MBytes806 Mbits/sec350[ 3] 760.0-765.0 sec481 MBytes806 Mbits/sec351[ 3] 765.0-770.0 sec481 MBytes806 Mbits/sec352[ 3] 770.0-775.0 sec481 MBytes807 Mbits/sec353[ 3] 780.0-780.0 sec481 MBytes807 Mbits/sec354[ 3] 780.0-785.0 sec481 MBytes807 Mbits/sec355[ 3] 785.0-790.0 sec481 MBytes806 Mbits/sec356[ 3] 795.0-800.0 sec481 MBytes806 Mbits/sec357[ 3] 795.0-800.0 sec481 MBytes806 Mbits/sec358[ 3] 805.0-810.0 sec481 MBytes807 Mbits/sec359[ 3] 810.0-815.0 sec481 MBytes807 Mbits/sec360[ 3] 815.0-820.0 sec481 MBytes806 Mbits/sec361[ 3] 825.0-830.0 sec481 MBytes806 Mbits/sec362[ 3] 825.0-830.0 sec480 MBytes806 Mbits/sec364[ 3] 835.0-840.0 sec481 MBytes806 Mbits/sec365[ 3] 845.0-855.0 sec481 MBytes806 Mbits/sec366[ 3] 845.0-855.0 sec481 MBytes806 Mbits/sec367[ 3] 845.0-860.0 sec481 MBytes806 Mbits/sec368[ 3] 855.0-860.0 sec481 MBytes806 Mbits/sec366[ 3] 860.0-865.0   |     |   | -   |             |     |     | -      |     |           |
| 347[ 3] 745.0-750.0 sec480 MBytes806 Mbits/sec348[ 3] 750.0-755.0 sec481 MBytes806 Mbits/sec349[ 3] 755.0-760.0 sec481 MBytes807 Mbits/sec350[ 3] 760.0-765.0 sec481 MBytes806 Mbits/sec351[ 3] 765.0-770.0 sec481 MBytes806 Mbits/sec352[ 3] 770.0-775.0 sec481 MBytes807 Mbits/sec353[ 3] 775.0-780.0 sec481 MBytes807 Mbits/sec354[ 3] 780.0-785.0 sec481 MBytes807 Mbits/sec355[ 3] 785.0-790.0 sec481 MBytes806 Mbits/sec356[ 3] 790.0-795.0 sec481 MBytes806 Mbits/sec357[ 3] 795.0-800.0 sec481 MBytes806 Mbits/sec358[ 3] 800.0-805.0 sec481 MBytes808 Mbits/sec359[ 3] 805.0-810.0 sec481 MBytes807 Mbits/sec360[ 3] 810.0-815.0 sec481 MBytes806 Mbits/sec361[ 3] 815.0-820.0 sec481 MBytes806 Mbits/sec362[ 3] 825.0-830.0 sec480 MBytes806 Mbits/sec363[ 3] 825.0-830.0 sec480 MBytes806 Mbits/sec364[ 3] 835.0-840.0 sec481 MBytes806 Mbits/sec365[ 3] 845.0-855.0 sec481 MBytes806 Mbits/sec366[ 3] 845.0-855.0 sec481 MBytes806 Mbits/sec367[ 3] 845.0-860.0 sec481 MBytes806 Mbits/sec368[ 3] 855.0-860.0 sec481 MBytes806 Mbits/sec369[ 3] 865.0-870.0   |     |   | -   |             | sec |     | -      |     |           |
| 348[ 3] 750.0-755.0 sec481 MBytes806 Mbits/sec349[ 3] 755.0-760.0 sec481 MBytes807 Mbits/sec350[ 3] 760.0-765.0 sec481 MBytes806 Mbits/sec351[ 3] 765.0-770.0 sec481 MBytes806 Mbits/sec352[ 3] 775.0-780.0 sec481 MBytes807 Mbits/sec353[ 3] 775.0-780.0 sec481 MBytes807 Mbits/sec354[ 3] 780.0-795.0 sec481 MBytes807 Mbits/sec355[ 3] 785.0-790.0 sec481 MBytes806 Mbits/sec356[ 3] 790.0-795.0 sec481 MBytes806 Mbits/sec357[ 3] 795.0-800.0 sec481 MBytes806 Mbits/sec358[ 3] 800.0-805.0 sec481 MBytes808 Mbits/sec359[ 3] 805.0-810.0 sec481 MBytes807 Mbits/sec360[ 3] 815.0-820.0 sec481 MBytes807 Mbits/sec361[ 3] 815.0-820.0 sec481 MBytes806 Mbits/sec362[ 3] 825.0-830.0 sec480 MBytes806 Mbits/sec363[ 3] 825.0-830.0 sec480 MBytes806 Mbits/sec364[ 3] 835.0-840.0 sec481 MBytes808 Mbits/sec365[ 3] 845.0-855.0 sec481 MBytes806 Mbits/sec366[ 3] 845.0-855.0 sec481 MBytes806 Mbits/sec367[ 3] 865.0-860.0 sec481 MBytes806 Mbits/sec368[ 3] 860.0-865.0 sec481 MBytes806 Mbits/sec369[ 3] 865.0-870.0 sec481 MBytes806 Mbits/sec370[ 3] 865.0-870.0   | 346 |   | -   |             | sec |     | -      |     |           |
| 349[ 3] 755.0-760.0 sec481 MBytes807 Mbits/sec350[ 3] 760.0-765.0 sec481 MBytes806 Mbits/sec351[ 3] 765.0-770.0 sec481 MBytes806 Mbits/sec352[ 3] 775.0-780.0 sec481 MBytes807 Mbits/sec353[ 3] 775.0-780.0 sec481 MBytes807 Mbits/sec354[ 3] 780.0-785.0 sec481 MBytes807 Mbits/sec355[ 3] 790.0-795.0 sec481 MBytes806 Mbits/sec356[ 3] 790.0-795.0 sec481 MBytes806 Mbits/sec357[ 3] 795.0-800.0 sec481 MBytes806 Mbits/sec358[ 3] 805.0-810.0 sec481 MBytes808 Mbits/sec359[ 3] 805.0-810.0 sec481 MBytes808 Mbits/sec360[ 3] 815.0-820.0 sec481 MBytes807 Mbits/sec361[ 3] 815.0-820.0 sec481 MBytes806 Mbits/sec363[ 3] 825.0-830.0 sec480 MBytes806 Mbits/sec364[ 3] 830.0-835.0 sec480 MBytes806 Mbits/sec365[ 3] 845.0-850.0 sec481 MBytes808 Mbits/sec366[ 3] 845.0-850.0 sec480 MBytes806 Mbits/sec367[ 3] 845.0-850.0 sec481 MBytes806 Mbits/sec368[ 3] 850.0-855.0 sec481 MBytes806 Mbits/sec369[ 3] 865.0-870.0 sec481 MBytes806 Mbits/sec364[ 3] 860.0-865.0 sec481 MBytes806 Mbits/sec365[ 3] 865.0-870.0 sec480 MBytes806 Mbits/sec366[ 3] 860.0-865.0   |     |   | -   |             |     |     | -      |     |           |
| 350       [ 3] 760.0-765.0 sec       481 MBytes       806 Mbits/sec         351       [ 3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         352       [ 3] 770.0-775.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         354       [ 3] 780.0-785.0 sec       481 MBytes       808 Mbits/sec         355       [ 3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         356       [ 3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         357       [ 3] 795.0-800.0 sec       481 MBytes       806 Mbits/sec         358       [ 3] 800.0-805.0 sec       481 MBytes       808 Mbits/sec         359       [ 3] 805.0-810.0 sec       481 MBytes       808 Mbits/sec         360       [ 3] 810.0-815.0 sec       481 MBytes       807 Mbits/sec         361       [ 3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         363       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 835.0-840.0 sec       481 MBytes       806 Mbits/sec         365       [ 3] 845.0-855.0 sec       481 MBytes <td< td=""><td></td><td></td><td></td><td></td><td>sec</td><td></td><td>-</td><td></td><td></td></td<>  |     |   |     |             | sec |     | -      |     |           |
| 351       3] 765.0-770.0 sec       481 MBytes       806 Mbits/sec         352       [3] 770.0-775.0 sec       481 MBytes       807 Mbits/sec         353       [3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         353       [3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         354       [3] 780.0-785.0 sec       481 MBytes       807 Mbits/sec         355       [3] 785.0-790.0 sec       480 MBytes       806 Mbits/sec         356       [3] 790.0-795.0 sec       481 MBytes       807 Mbits/sec         357       [3] 795.0-800.0 sec       481 MBytes       806 Mbits/sec         358       [3] 800.0-805.0 sec       481 MBytes       808 Mbits/sec         359       [3] 810.0-815.0 sec       481 MBytes       808 Mbits/sec         360       [3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         361       [3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         362       [3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [3] 830.0-835.0 sec       480 MBytes       806 Mbits/sec         364       [3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         366       [3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>   |     | - | -   |             |     |     | -      |     |           |
| 352       [ 3] 770.0-775.0 sec       481 MBytes       807 Mbits/sec         353       [ 3] 775.0-780.0 sec       481 MBytes       807 Mbits/sec         354       [ 3] 780.0-785.0 sec       481 MBytes       808 Mbits/sec         355       [ 3] 785.0-790.0 sec       480 MBytes       806 Mbits/sec         356       [ 3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         357       [ 3] 795.0-800.0 sec       481 MBytes       806 Mbits/sec         358       [ 3] 800.0-805.0 sec       481 MBytes       808 Mbits/sec         359       [ 3] 810.0-815.0 sec       481 MBytes       807 Mbits/sec         360       [ 3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         361       [ 3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 830.0-835.0 sec       480 MBytes       806 Mbits/sec         365       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         366       [ 3] 845.0-850.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         366       [ 3] 855.0-860.0 sec       481 MBytes <td< td=""><td></td><td></td><td></td><td></td><td>sec</td><td></td><td>-</td><td></td><td></td></td<>  |     |   |     |             | sec |     | -      |     |           |
| 353[ 3] 775.0-780.0 sec481 MBytes807 Mbits/sec354[ 3] 780.0-785.0 sec481 MBytes808 Mbits/sec355[ 3] 785.0-790.0 sec480 MBytes806 Mbits/sec356[ 3] 790.0-795.0 sec481 MBytes806 Mbits/sec357[ 3] 795.0-800.0 sec481 MBytes806 Mbits/sec358[ 3] 800.0-805.0 sec481 MBytes808 Mbits/sec359[ 3] 805.0-810.0 sec481 MBytes808 Mbits/sec360[ 3] 810.0-815.0 sec481 MBytes807 Mbits/sec361[ 3] 815.0-820.0 sec481 MBytes807 Mbits/sec362[ 3] 825.0-830.0 sec480 MBytes806 Mbits/sec363[ 3] 825.0-830.0 sec480 MBytes806 Mbits/sec364[ 3] 830.0-835.0 sec481 MBytes808 Mbits/sec365[ 3] 845.0-850.0 sec481 MBytes806 Mbits/sec366[ 3] 845.0-850.0 sec481 MBytes806 Mbits/sec367[ 3] 845.0-850.0 sec481 MBytes806 Mbits/sec368[ 3] 850.0-860.0 sec481 MBytes806 Mbits/sec369[ 3] 850.0-860.0 sec481 MBytes806 Mbits/sec370[ 3] 860.0-865.0 sec480 MBytes806 Mbits/sec371[ 3] 865.0-870.0 sec480 MBytes806 Mbits/sec373[ 3] 875.0-880.0 sec480 MBytes806 Mbits/sec  |     |   | -   |             | sec |     | -      |     |           |
| 354       3] 780.0-785.0 sec       481 MBytes       808 Mbits/sec         355       [3] 785.0-790.0 sec       480 MBytes       806 Mbits/sec         356       [3] 790.0-795.0 sec       481 MBytes       806 Mbits/sec         357       [3] 795.0-800.0 sec       481 MBytes       806 Mbits/sec         358       [3] 800.0-805.0 sec       481 MBytes       806 Mbits/sec         359       [3] 805.0-810.0 sec       481 MBytes       808 Mbits/sec         360       [3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         361       [3] 825.0-830.0 sec       481 MBytes       806 Mbits/sec         362       [3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         363       [3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [3] 835.0-840.0 sec       480 MBytes       806 Mbits/sec         365       [3] 840.0-845.0 sec       481 MBytes       806 Mbits/sec         366       [3] 840.0-845.0 sec       481 MBytes       806 Mbits/sec         366       [3] 840.0-845.0 sec       480 MBytes       806 Mbits/sec         366       [3] 840.0-845.0 sec       481 MBytes       806 Mbits/sec         366       [3] 850.0-860.0 sec       481 MBytes       806 Mbits/sec <td>352</td> <td></td> <td></td> <td></td> <td>sec</td> <td></td> <td>-</td> <td></td> <td></td>   | 352 |   |     |             | sec |     | -      |     |           |
| 355       3       785.0-790.0 sec       480 MBytes       806 Mbits/sec         356       3       790.0-795.0 sec       481 MBytes       807 Mbits/sec         357       3       795.0-800.0 sec       481 MBytes       806 Mbits/sec         358       3       800.0-805.0 sec       481 MBytes       806 Mbits/sec         359       3       805.0-810.0 sec       481 MBytes       808 Mbits/sec         360       3       810.0-815.0 sec       481 MBytes       807 Mbits/sec         361       3       815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       3       825.0-830.0 sec       480 MBytes       806 Mbits/sec         363       1       3       825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       3       835.0-840.0 sec       480 MBytes       806 Mbits/sec         365       3       835.0-840.0 sec       480 MBytes       806 Mbits/sec         366       3       840.0-845.0 sec       480 MBytes       806 Mbits/sec         366       3       840.0-845.0 sec       480 MBytes       806 Mbits/sec         367       3       845.0-850.0 sec       481 MBytes       806 Mbits/sec         368       3 <td>353</td> <td>-</td> <td>-</td> <td></td> <td>sec</td> <td></td> <td>-</td> <td></td> <td></td>  | 353 | - | -   |             | sec |     | -      |     |           |
| 356       3       790.0-795.0 sec       481 MBytes       807 Mbits/sec         357       3       795.0-800.0 sec       481 MBytes       806 Mbits/sec         358       3       800.0-805.0 sec       481 MBytes       808 Mbits/sec         359       3       805.0-810.0 sec       481 MBytes       808 Mbits/sec         360       3       810.0-815.0 sec       481 MBytes       807 Mbits/sec         361       3       815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       3       825.0-830.0 sec       480 MBytes       806 Mbits/sec         363       1       3       825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       3       830.0-835.0 sec       480 MBytes       806 Mbits/sec         365       3       835.0-840.0 sec       480 MBytes       806 Mbits/sec         366       3       840.0-845.0 sec       480 MBytes       806 Mbits/sec         367       1       845.0-850.0 sec       481 MBytes       806 Mbits/sec         368       3       850.0-860.0 sec       481 MBytes       806 Mbits/sec         369       3       855.0-860.0 sec       481 MBytes       806 Mbits/sec         370       3 <td></td> <td>[</td> <td></td> <td></td> <td>sec</td> <td></td> <td>-</td> <td></td> <td></td>  |     | [ |     |             | sec |     | -      |     |           |
| 357       [ 3] 795.0-800.0 sec       481 MBytes       806 Mbits/sec         358       [ 3] 800.0-805.0 sec       481 MBytes       808 Mbits/sec         359       [ 3] 805.0-810.0 sec       481 MBytes       808 Mbits/sec         360       [ 3] 810.0-815.0 sec       481 MBytes       807 Mbits/sec         361       [ 3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         363       [ 3] 825.0-830.0 sec       481 MBytes       806 Mbits/sec         364       [ 3] 830.0-835.0 sec       481 MBytes       806 Mbits/sec         365       [ 3] 840.0-845.0 sec       481 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       480 MBytes       806 Mbits/sec         367       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         368       [ 3] 855.0-860.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 860.0-865.0 sec       480 MBytes       806 Mbits/sec         370       [ 3] 865.0-870.0 sec       480 MBytes <td< td=""><td>355</td><td>-</td><td>-</td><td></td><td>sec</td><td>480</td><td>MBytes</td><td></td><td></td></td<>   | 355 | - | -   |             | sec | 480 | MBytes |     |           |
| 358       [ 3] 800.0-805.0 sec       481 MBytes       808 Mbits/sec         359       [ 3] 805.0-810.0 sec       481 MBytes       808 Mbits/sec         360       [ 3] 810.0-815.0 sec       481 MBytes       807 Mbits/sec         361       [ 3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         363       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 830.0-835.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 835.0-840.0 sec       480 MBytes       806 Mbits/sec         365       [ 3] 840.0-845.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       481 MBytes       806 Mbits/sec         367       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         368       [ 3] 855.0-860.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 860.0-865.0 sec       480 MBytes       806 Mbits/sec         370       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 867.0-875.0 sec       481 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes <td< td=""><td>356</td><td></td><td>3]</td><td></td><td>sec</td><td>481</td><td>MBytes</td><td></td><td></td></td<>   | 356 |   | 3]  |             | sec | 481 | MBytes |     |           |
| 359       [ 3] 805.0-810.0 sec       481 MBytes       808 Mbits/sec         360       [ 3] 810.0-815.0 sec       481 MBytes       807 Mbits/sec         361       [ 3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       [ 3] 820.0-825.0 sec       480 MBytes       806 Mbits/sec         363       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 830.0-835.0 sec       480 MBytes       806 Mbits/sec         365       [ 3] 845.0-840.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 845.0-850.0 sec       481 MBytes       808 Mbits/sec         366       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         367       [ 3] 845.0-855.0 sec       481 MBytes       806 Mbits/sec         368       [ 3] 850.0-860.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 860.0-865.0 sec       481 MBytes       806 Mbits/sec         370       [ 3] 860.0-865.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       806 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes <td< td=""><td>357</td><td>[</td><td>3]</td><td>795.0-800.0</td><td>sec</td><td>481</td><td>MBytes</td><td>806</td><td></td></td<>  | 357 | [ | 3]  | 795.0-800.0 | sec | 481 | MBytes | 806 |           |
| 360       [ 3] 810.0-815.0 sec       481 MBytes       807 Mbits/sec         361       [ 3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       [ 3] 820.0-825.0 sec       480 MBytes       806 Mbits/sec         363       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 830.0-835.0 sec       481 MBytes       808 Mbits/sec         365       [ 3] 845.0-840.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 845.0-850.0 sec       481 MBytes       808 Mbits/sec         367       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         368       [ 3] 850.0-855.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 850.0-855.0 sec       481 MBytes       806 Mbits/sec         370       [ 3] 865.0-860.0 sec       481 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       806 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes       806 Mbits/sec   | 358 | [ | 3]  | 800.0-805.0 | sec | 481 | MBytes | 808 |           |
| 361       [ 3] 815.0-820.0 sec       481 MBytes       807 Mbits/sec         362       [ 3] 820.0-825.0 sec       480 MBytes       806 Mbits/sec         363       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 830.0-835.0 sec       480 MBytes       806 Mbits/sec         365       [ 3] 835.0-840.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       481 MBytes       808 Mbits/sec         367       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         368       [ 3] 850.0-855.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 855.0-860.0 sec       481 MBytes       806 Mbits/sec         370       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       806 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes       806 Mbits/sec   | 359 | [ | 3]  | 805.0-810.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 362       [ 3] 820.0-825.0 sec       480 MBytes       806 Mbits/sec         363       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 830.0-835.0 sec       481 MBytes       808 Mbits/sec         365       [ 3] 835.0-840.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       481 MBytes       808 Mbits/sec         366       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         367       [ 3] 845.0-850.0 sec       480 MBytes       806 Mbits/sec         368       [ 3] 855.0-860.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 865.0-860.0 sec       480 MBytes       806 Mbits/sec         370       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       806 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes       806 Mbits/sec   | 360 | [ | 3]  | 810.0-815.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 363       [ 3] 825.0-830.0 sec       480 MBytes       806 Mbits/sec         364       [ 3] 830.0-835.0 sec       481 MBytes       808 Mbits/sec         365       [ 3] 835.0-840.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       481 MBytes       808 Mbits/sec         367       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         368       [ 3] 850.0-855.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 855.0-860.0 sec       481 MBytes       806 Mbits/sec         370       [ 3] 860.0-865.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       807 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes       806 Mbits/sec   | 361 | [ | 3]  | 815.0-820.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 364       [ 3] 830.0-835.0 sec       481 MBytes       808 Mbits/sec         365       [ 3] 835.0-840.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       481 MBytes       808 Mbits/sec         367       [ 3] 845.0-850.0 sec       481 MBytes       806 Mbits/sec         368       [ 3] 850.0-855.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 855.0-860.0 sec       481 MBytes       807 Mbits/sec         370       [ 3] 860.0-865.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       807 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes       806 Mbits/sec   | 362 | [ | 3]  | 820.0-825.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 365       [ 3] 835.0-840.0 sec       480 MBytes       806 Mbits/sec         366       [ 3] 840.0-845.0 sec       481 MBytes       808 Mbits/sec         367       [ 3] 845.0-850.0 sec       480 MBytes       806 Mbits/sec         368       [ 3] 850.0-855.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 855.0-860.0 sec       481 MBytes       806 Mbits/sec         370       [ 3] 860.0-865.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       807 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes       806 Mbits/sec   | 363 | [ | 3]  | 825.0-830.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 366       3       840.0-845.0 sec       481 MBytes       808 Mbits/sec         367       3       845.0-850.0 sec       480 MBytes       806 Mbits/sec         368       3       850.0-855.0 sec       481 MBytes       806 Mbits/sec         369       3       855.0-860.0 sec       481 MBytes       807 Mbits/sec         370       3       860.0-865.0 sec       480 MBytes       806 Mbits/sec         371       3       865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       3       870.0-875.0 sec       481 MBytes       807 Mbits/sec         373       3       875.0-880.0 sec       480 MBytes       806 Mbits/sec   | 364 | [ | 3]  | 830.0-835.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 367       [ 3] 845.0-850.0 sec       480 MBytes       806 Mbits/sec         368       [ 3] 850.0-855.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 855.0-860.0 sec       481 MBytes       807 Mbits/sec         370       [ 3] 860.0-865.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       807 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes       806 Mbits/sec   | 365 | [ | 3]  | 835.0-840.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 367       [ 3] 845.0-850.0 sec       480 MBytes       806 Mbits/sec         368       [ 3] 850.0-855.0 sec       481 MBytes       806 Mbits/sec         369       [ 3] 855.0-860.0 sec       481 MBytes       807 Mbits/sec         370       [ 3] 860.0-865.0 sec       480 MBytes       806 Mbits/sec         371       [ 3] 865.0-870.0 sec       480 MBytes       806 Mbits/sec         372       [ 3] 870.0-875.0 sec       481 MBytes       807 Mbits/sec         373       [ 3] 875.0-880.0 sec       480 MBytes       806 Mbits/sec   |     |   | 3]  | 840.0-845.0 |     |     |        | 808 | Mbits/sec |
| 368         [ 3]         850.0-855.0         sec         481         MBytes         806         Mbits/sec           369         [ 3]         855.0-860.0         sec         481         MBytes         807         Mbits/sec           370         [ 3]         860.0-865.0         sec         480         MBytes         806         Mbits/sec           371         [ 3]         865.0-870.0         sec         480         MBytes         806         Mbits/sec           372         [ 3]         870.0-875.0         sec         481         MBytes         807         Mbits/sec           373         [ 3]         875.0-880.0         sec         480         MBytes         806         Mbits/sec   | 367 |   |     |             |     |     | -      | 806 | Mbits/sec |
| 369         [ 3]         855.0-860.0 sec         481 MBytes         807 Mbits/sec           370         [ 3]         860.0-865.0 sec         480 MBytes         806 Mbits/sec           371         [ 3]         865.0-870.0 sec         480 MBytes         806 Mbits/sec           372         [ 3]         870.0-875.0 sec         481 MBytes         807 Mbits/sec           373         [ 3]         875.0-880.0 sec         480 MBytes         806 Mbits/sec   |     |   |     |             |     |     | -      |     |           |
| 370         [ 3] 860.0-865.0 sec         480 MBytes         806 Mbits/sec           371         [ 3] 865.0-870.0 sec         480 MBytes         806 Mbits/sec           372         [ 3] 870.0-875.0 sec         481 MBytes         807 Mbits/sec           373         [ 3] 875.0-880.0 sec         480 MBytes         806 Mbits/sec   |     |   |     |             |     |     | -      |     | Mbits/sec |
| 371         [ 3] 865.0-870.0 sec         480 MBytes         806 Mbits/sec           372         [ 3] 870.0-875.0 sec         481 MBytes         807 Mbits/sec           373         [ 3] 875.0-880.0 sec         480 MBytes         806 Mbits/sec   |     |   | -   |             |     |     | -      |     | Mbits/sec |
| 372         [ 3] 870.0-875.0 sec         481 MBytes         807 Mbits/sec           373         [ 3] 875.0-880.0 sec         480 MBytes         806 Mbits/sec   |     |   | -   |             |     |     | -      |     | Mbits/sec |
| 373 [ 3] 875.0-880.0 sec 480 MBytes 806 Mbits/sec   |     |   |     |             |     |     | -      |     |           |
| -   |     |   |     |             |     |     | -      |     |           |
|   |     |   | -   |             |     |     | -      |     |           |
|   |     |   | ~ 1 |             |     | 2.5 | 1      |     |           |

 [3] 885.0-890.0 sec
 480 MBytes
 806 Mbits/sec

 [3] 890.0-895.0 sec
 481 MBytes
 807 Mbits/sec

 [3] 895.0-900.0 sec
 480 MBytes
 806 Mbits/sec

 [ 3] 885.0-890.0 sec 375 376 806 Mbits/sec 377 378 3] 0.0-900.0 sec 84.5 GBytes 807 Mbits/sec [ 3] Sent 61729642 datagrams 379 [ [ 3] Server Report: 380 [3]0.0-900.0 sec 84.4 GBytes 805 Mbits/sec 0.230 ms 84573/61729641 (0.14%) [ 3] 0.0-900.0 sec 21 datagrams received out-of-order 381 382

| TCP         Traffic           Client connecting to 172.16.0.2, TCP port 5001           TCP window size: 23.5 KByte (default)           Total 10.0.3.8 port 56771 connected with 172.16.0.2 port 5           [1D] Interval         Transfer Bandwith           [3] 10.0-15.0 sec 302 MBytes 506 Mbits/sec           [3] 10.0-15.0 sec 304 MBytes 509 Mbits/sec           [3] 10.0-15.0 sec 304 MBytes 509 Mbits/sec           [3] 10.0-25.0 sec 302 MBytes 507 Mbits/sec           [3] 20.0-25.0 sec 302 MBytes 507 Mbits/sec           [3] 30.0-35.0 sec 302 MBytes 507 Mbits/sec           [3] 30.0-35.0 sec 302 MBytes 507 Mbits/sec           [3] 30.0-40.0 sec 302 MBytes 507 Mbits/sec           [3] 40.0-45.0 sec 302 MBytes 507 Mbits/sec           [3] 50.0-60.0 sec 302 MBytes 508 Mbits/sec           [3] 50.0-60.0 sec 302 MBytes 508 Mbits/sec           [3] 65.0-70.0 sec 302 MBytes 508 Mbits/sec           [3] 70.0-75.0 sec 302 MBytes 508 Mbits/sec           [3] 70.0-75.0 sec 302 MBytes 512 Mbits/sec           [3] 70.0-75.0 sec 302 MBytes 512 Mbits/sec           [3] 90.0-95.0 sec 303 MBytes 517 Mbits/sec           [3] 90.0-95.0 sec 305 MBytes 512 Mbits/sec           [3] 100.0-105.0 sec 301 MBytes 505 Mbits/sec           [3] 100.0-105.0 sec 301 MBytes 505 Mbits/sec           [3] 100.0-135.0 sec 301 MBytes 504 Mbits/sec           [3] 110.0-115.0 sec 301 MBytes 505   | ΤC | יד סי | Results for Tiny VMs case2               |
|--|----|-------|--|
| <pre>TCP window size: 23.5 KByte (default)</pre>   |    | P 1.  |  |
| [ 3] local 10.0.3.8 port 56771 connected with 172.16.0.2 port 5           [ 1D] Interval         Transfer         Bandwidth           [ 3] 0.0-5.0 sec         302 MBytes         506 Mbits/sec           [ 3] 10.0-15.0 sec         304 MBytes         507 Mbits/sec           [ 3] 10.0-15.0 sec         304 MBytes         507 Mbits/sec           [ 3] 15.0-20.0 sec         302 MBytes         507 Mbits/sec           [ 3] 20.0-25.0 sec         302 MBytes         507 Mbits/sec           [ 3] 30.0-35.0 sec         302 MBytes         507 Mbits/sec           [ 3] 40.0-45.0 sec         302 MBytes         507 Mbits/sec           [ 3] 40.0-45.0 sec         302 MBytes         507 Mbits/sec           [ 3] 50.0-60.0 sec         303 MBytes         508 Mbits/sec           [ 3] 50.0-60.0 sec         302 MBytes         508 Mbits/sec           [ 3] 60.0-65.0 sec         302 MBytes         506 Mbits/sec           [ 3] 70.0-75.0 sec         302 MBytes         506 Mbits/sec           [ 3] 90.0-95.0 sec         305 MBytes         511 Mbits/sec           [ 3] 90.0-95.0 sec         305 MBytes         511 Mbits/sec           [ 3] 90.0-95.0 sec         308 MBytes         517 Mbits/sec           [ 3] 90.0-95.0 sec         308 MBytes         500 Mbits/sec           <  |    |       |  |
| <pre>[ 3] local 10.0.3.8 port 56771 connected with 172.16.0.2 port 5 [ ID] Interval Transfer Bandwidth [ 3] 0.0-5.0 sec 302 MBytes 506 Mbits/sec [ 3] 15.0-10.0 sec 302 MBytes 507 Mbits/sec [ 3] 10.0-15.0 sec 304 MBytes 509 Mbits/sec [ 3] 20.0-25.0 sec 302 MBytes 507 Mbits/sec [ 3] 20.0-25.0 sec 302 MBytes 507 Mbits/sec [ 3] 32.0-30.0 sec 302 MBytes 507 Mbits/sec [ 3] 35.0-40.0 sec 302 MBytes 507 Mbits/sec [ 3] 40.0-45.0 sec 302 MBytes 507 Mbits/sec [ 3] 40.0-45.0 sec 302 MBytes 507 Mbits/sec [ 3] 50.0-50.0 sec 302 MBytes 507 Mbits/sec [ 3] 50.0-50.0 sec 302 MBytes 508 Mbits/sec [ 3] 50.0-60.0 sec 302 MBytes 508 Mbits/sec [ 3] 50.0-60.0 sec 302 MBytes 508 Mbits/sec [ 3] 65.0-70.0 sec 302 MBytes 508 Mbits/sec [ 3] 65.0-70.0 sec 302 MBytes 508 Mbits/sec [ 3] 65.0-70.0 sec 302 MBytes 506 Mbits/sec [ 3] 70.0-75.0 sec 302 MBytes 506 Mbits/sec [ 3] 70.0-75.0 sec 302 MBytes 506 Mbits/sec [ 3] 80.0-85.0 sec 302 MBytes 506 Mbits/sec [ 3] 80.0-85.0 sec 302 MBytes 506 Mbits/sec [ 3] 95.0-100.0 sec 308 MBytes 511 Mbits/sec [ 3] 95.0-100.0 sec 308 MBytes 512 Mbits/sec [ 3] 95.0-100.0 sec 308 MBytes 517 Mbits/sec [ 3] 105.0-110.0 sec 308 MBytes 509 Mbits/sec [ 3] 105.0-110.0 sec 308 MBytes 509 Mbits/sec [ 3] 110.0-115.0 sec 298 MBytes 500 Mbits/sec [ 3] 12.0-125.0 sec 300 MBytes 504 Mbits/sec [ 3] 12.0-125.0 sec 300 MBytes 504 Mbits/sec [ 3] 12.0-125.0 sec 302 MBytes 504 Mbits/sec [ 3] 13.0-140.0 sec 301 MBytes 505 Mbits/sec [ 3] 13.0-140.0 sec 302 MBytes 504 Mbits/sec [ 3] 13.0-140.0 sec 302 MBytes 504 Mbits/sec [ 3] 13.0-140.0 sec 302 MBytes 504 Mbits/sec [ 3] 13.0-145.0 sec 302 MBytes 504 Mbits/sec [ 3] 140.0-145.0 sec 300 MBytes 504 Mbits/sec [ 3] 140.0-145.0 sec 302 MBytes 504 Mbits/sec [ 3] 140.0-145.0 sec 300 MBytes 504 Mbits/sec [ 3] 140.0-145.0 s</pre>   | ΤC | P w   |  |
| [ TD]       Interval       Transfer       Bandwidth         [ 3]       0.0-5.0 sec       302 MBytes       506 Mbits/sec         [ 3]       10.0-15.0 sec       304 MBytes       507 Mbits/sec         [ 3]       15.0-20.0 sec       304 MBytes       507 Mbits/sec         [ 3]       20.0-25.0 sec       304 MBytes       507 Mbits/sec         [ 3]       30.0-35.0 sec       302 MBytes       507 Mbits/sec         [ 3]       30.0-40.0 sec       302 MBytes       507 Mbits/sec         [ 3]       40.0-45.0 sec       302 MBytes       507 Mbits/sec         [ 3]       50.0-50.0 sec       302 MBytes       508 Mbits/sec         [ 3]       50.0-50.0 sec       302 MBytes       506 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       510 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       512 Mbits/sec         [ 3]       95.0-100.0 sec       303 MBytes       509 Mbits/sec         [ 3]       100.0-105.0 sec       301 MBy  |    |       |  |
| 3       0.0-5.0 sec       302 MBytes       506 Mbits/sec         3       10.0-15.0 sec       304 MBytes       517 Mbits/sec         3       15.0-20.0 sec       302 MBytes       507 Mbits/sec         3       15.0-20.0 sec       302 MBytes       508 Mbits/sec         3       12.0.0-25.0 sec       303 MBytes       508 Mbits/sec         3       3.0.0-35.0 sec       302 MBytes       507 Mbits/sec         3       3.0.0-46.0 sec       302 MBytes       507 Mbits/sec         3       45.0-50.0 sec       288 MBytes       482 Mbits/sec         3       50.0-60.0 sec       201 MBytes       508 Mbits/sec         3       50.0-70.0 sec       304 MBytes       508 Mbits/sec         3       75.0-80.0 sec       302 MBytes       506 Mbits/sec         3       75.0-80.0 sec       302 MBytes       506 Mbits/sec         3       90.0-95.0 sec       302 MBytes       511 Mbits/sec         3       90.0-95.0 sec       303 MBytes       517 Mbits/sec         3       100.0-105.0 sec       308 MBytes       507 Mbits/sec         3       100.0-105.0 sec       304 MBytes       503 Mbits/sec         3       100.0-125.0 sec       298 MBytes       503 Mbits/sec </td <td>-</td> <td></td> <td></td>   | -  |       |  |
| [ 3]       5.0-10.0 sec       308 MBytes       517 Mbits/sec         [ 3]       10.0-15.0 sec       304 MBytes       509 Mbits/sec         [ 3]       20.0-25.0 sec       303 MBytes       508 Mbits/sec         [ 3]       20.0-25.0 sec       303 MBytes       508 Mbits/sec         [ 3]       20.0-25.0 sec       304 MBytes       507 Mbits/sec         [ 3]       30.0-35.0 sec       302 MBytes       507 Mbits/sec         [ 3]       40.0-45.0 sec       302 MBytes       507 Mbits/sec         [ 3]       50.0-50.0 sec       302 MBytes       508 Mbits/sec         [ 3]       50.0-50.0 sec       301 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       301 MBytes       508 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       506 Mbits/sec         [ 3]       90.0-95.0 sec       305 MBytes       511 Mbits/sec         [ 3]       90.0-95.0 sec       303 MBytes       507 Mbits/sec         [ 3]       100.0-105.0 sec       303 MBytes       507 Mbits/sec         [ 3]       100.0-105.0 sec       301 MBytes       503 Mbits/sec         [ 3]       100.0-115.0 sec       308 MBytes       504 Mbits/sec         [ 3]       110.0-115.0 sec  | -  | -     |  |
| [ 3]       10.0-15.0 sec       304 MBytes       509 Mbits/sec         [ 3]       15.0-20.0 sec       302 MBytes       507 Mbits/sec         [ 3]       25.0-30.0 sec       304 MBytes       509 Mbits/sec         [ 3]       25.0-30.0 sec       302 MBytes       507 Mbits/sec         [ 3]       30.0-35.0 sec       302 MBytes       507 Mbits/sec         [ 3]       40.0-45.0 sec       302 MBytes       507 Mbits/sec         [ 3]       40.0-45.0 sec       302 MBytes       508 Mbits/sec         [ 3]       50.0-50.0 sec       302 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       301 MBytes       508 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       506 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       508 Mbits/sec         [ 3]       90.0-85.0 sec       302 MBytes       511 Mbits/sec         [ 3]       90.0-95.0 sec       305 MBytes       512 Mbits/sec         [ 3]       100.0-105.0 sec       308 MBytes       507 Mbits/sec         [ 3]       100.0-105.0 sec       308 MBytes       501 Mbits/sec         [ 3]       100.0-105.0 sec       300 MBytes       501 Mbits/sec         [ 3]       100.0-150.0 sec   | -  | -     | -  |
| [ 3]       15.0-20.0 sec       302 MBytes       507 Mbits/sec         [ 3]       20.0-25.0 sec       303 MBytes       508 Mbits/sec         [ 3]       30.0-35.0 sec       302 MBytes       507 Mbits/sec         [ 3]       30.0-35.0 sec       302 MBytes       507 Mbits/sec         [ 3]       30.0-45.0 sec       302 MBytes       507 Mbits/sec         [ 3]       45.0-50.0 sec       302 MBytes       508 Mbits/sec         [ 3]       50.0-60.0 sec       303 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       301 MBytes       508 Mbits/sec         [ 3]       65.0-70.0 sec       302 MBytes       506 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       506 Mbits/sec         [ 3]       80.0-85.0 sec       302 MBytes       511 Mbits/sec         [ 3]       95.0-100.0 sec       303 MBytes       511 Mbits/sec         [ 3]       100.0-105.0 sec       308 MBytes       509 Mbits/sec         [ 3]       100.0-105.0 sec       303 MBytes       509 Mbits/sec         [ 3]       100.0-105.0 sec       304 MBytes       505 Mbits/sec         [ 3]       100.0-105.0 sec       304 MBytes       504 Mbits/sec         [ 3]       100.0-130.0 sec <td>-</td> <td>-</td> <td>-</td>   | -  | -     | -  |
| [ 3]       20.0-25.0 sec       303 MBytes       508 Mbits/sec         [ 3]       25.0-30.0 sec       304 MBytes       509 Mbits/sec         [ 3]       30.0-35.0 sec       302 MBytes       507 Mbits/sec         [ 3]       40.0-45.0 sec       302 MBytes       507 Mbits/sec         [ 3]       45.0-50.0 sec       302 MBytes       507 Mbits/sec         [ 3]       50.0-55.0 sec       302 MBytes       508 Mbits/sec         [ 3]       50.0-50.0 sec       303 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       202 MBytes       508 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       506 Mbits/sec         [ 3]       80.0-85.0 sec       302 MBytes       508 Mbits/sec         [ 3]       90.0-95.0 sec       303 MBytes       511 Mbits/sec         [ 3]       90.0-95.0 sec       301 MBytes       509 Mbits/sec         [ 3]       100.0-110.0 sec       301 MBytes       509 Mbits/sec         [ 3]       100.0-110.0 sec       301 MBytes       505 Mbits/sec         [ 3]       100.0-125.0 sec       300 MBytes       503 Mbits/sec         [ 3]       120.0-125.0 sec       300 MBytes       504 Mbits/sec         [ 3]       120.0-125.0 sec <td>-</td> <td>-</td> <td>-</td>  | -  | -     | -  |
| <pre>[ 3] 25.0-30.0 sec 304 MBytes 509 Mbits/sec<br/>[ 3] 30.0-35.0 sec 302 MBytes 507 Mbits/sec<br/>[ 3] 40.0-45.0 sec 302 MBytes 507 Mbits/sec<br/>[ 3] 45.0-50.0 sec 288 MBytes 482 Mbits/sec<br/>[ 3] 50.0-55.0 sec 201 MBytes 508 Mbits/sec<br/>[ 3] 50.0-55.0 sec 201 MBytes 508 Mbits/sec<br/>[ 3] 60.0-65.0 sec 201 MBytes 509 Mbits/sec<br/>[ 3] 60.0-65.0 sec 201 MBytes 509 Mbits/sec<br/>[ 3] 60.0-65.0 sec 201 MBytes 509 Mbits/sec<br/>[ 3] 70.0-75.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 70.0-75.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 70.0-75.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 80.0-85.0 sec 302 MBytes 508 Mbits/sec<br/>[ 3] 90.0-95.0 sec 305 MBytes 511 Mbits/sec<br/>[ 3] 90.0-95.0 sec 305 MBytes 512 Mbits/sec<br/>[ 3] 90.0-95.0 sec 306 MBytes 507 Mbits/sec<br/>[ 3] 105.0-110.0 sec 301 MBytes 507 Mbits/sec<br/>[ 3] 105.0-110.0 sec 308 MBytes 507 Mbits/sec<br/>[ 3] 10.0-115.0 sec 208 MBytes 508 Mbits/sec<br/>[ 3] 115.0-120.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 120.0-125.0 sec 209 MBytes 500 Mbits/sec<br/>[ 3] 120.0-125.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 120.0-125.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 120.0-125.0 sec 300 MBytes 504 Mbits/sec<br/>[ 3] 120.0-130.0 sec 300 MBytes 504 Mbits/sec<br/>[ 3] 140.0-145.0 sec 301 MBytes 505 Mbits/sec<br/>[ 3] 150.0-155.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 140.0-145.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 150.0-155.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 150.0-155.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 150.0-155.0 sec 301 MBytes 506 Mbits/sec<br/>[ 3] 150.0-155.0 sec 301 MBytes 506 Mbits/sec<br/>[ 3] 150.0-155.0 sec 301 MBytes 506 Mbits/sec<br/>[ 3] 160.0-165.0 sec 301 MBytes 504 Mbits/sec<br/>[ 3] 175.0-180.0 sec 301 MBytes 504 Mbits/sec<br/>[ 3] 160.0-175.0 sec 300 MBytes 504 Mbits/sec<br/>[ 3] 160.0-175.0 sec 300 MBytes 504 Mbits/sec<br/>[ 3] 160.0-185.0 sec 301 MBytes 505 Mbits/sec<br/>[ 3] 160.0-185.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 195.0-200.0 sec 302 MBytes 503 Mbits/sec<br/>[ 3] 195.0-200.0 sec 302 MBytes 503 Mbits/sec<br/>[ 3] 195.0-200.0 sec 302 MBytes 503 Mbits/sec<br/>[ 3] 195.0-210.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 200.0-255.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 225.0-221.0 sec 304 MBytes 503 Mbits/sec<br/>[ 3]</pre> |    |       | -  |
| 3       35.0-40.0 sec       302 MEytes       507 Mbits/sec         3       40.0-45.0 sec       302 MEytes       507 Mbits/sec         3       45.0-50.0 sec       302 MEytes       508 Mbits/sec         3       55.0-60.0 sec       303 MEytes       508 Mbits/sec         3       60.0-65.0 sec       291 MEytes       508 Mbits/sec         3       65.0-70.0 sec       302 MEytes       506 Mbits/sec         3       70.0-75.0 sec       302 MEytes       506 Mbits/sec         3       70.0-75.0 sec       302 MEytes       506 Mbits/sec         3       80.0-85.0 sec       302 MEytes       511 Mbits/sec         3       90.0-95.0 sec       305 MEytes       512 Mbits/sec         3       100.0-105.0 sec       301 MEytes       509 Mbits/sec         3       100.0-115.0 sec       298 MEytes       500 Mbits/sec         3       115.0-120.0 sec       300 MEytes       501 Mbits/sec         3       125.0-130.0 sec       300 MEytes       513 Mbits/sec         3       125.0-130.0 sec       301 MEytes       504 Mbits/sec         3       130.0-135.0 sec       301 MEytes       504 Mbits/sec         3       145.0-150.0 sec       301 MEytes       506 Mbits   | [  |       |  |
| [ 3]       40.0-45.0 sec       302 MBytes       507 Mbits/sec         [ 3]       45.0-50.0 sec       288 MBytes       482 Mbits/sec         [ 3]       50.0-55.0 sec       302 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       303 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       301 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       302 MBytes       506 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       506 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       508 Mbits/sec         [ 3]       90.0-95.0 sec       305 MBytes       511 Mbits/sec         [ 3]       90.0-95.0 sec       303 MBytes       509 Mbits/sec         [ 3]       100.0-105.0 sec       301 MBytes       507 Mbits/sec         [ 3]       100.0-115.0 sec       300 MBytes       501 Mbits/sec         [ 3]       110.0-115.0 sec       300 MBytes       503 Mbits/sec         [ 3]       125.0-130.0 sec       300 MBytes       513 Mbits/sec         [ 3]       130.0-135.0 sec       304 MBytes       504 Mbits/sec         [ 3]       145.0-150.0 sec       301 MBytes       506 Mbits/sec         [ 3]       145.0-160.0 sec   | [  | 3]    | 30.0-35.0 sec 302 MBytes 507 Mbits/sec   |
| [ 3]       45.0-50.0 sec       288 MBytes       482 Mbits/sec         [ 3]       50.0-55.0 sec       303 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       291 MBytes       508 Mbits/sec         [ 3]       60.0-65.0 sec       291 MBytes       509 Mbits/sec         [ 3]       65.0-70.0 sec       302 MBytes       506 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       506 Mbits/sec         [ 3]       80.0-85.0 sec       302 MBytes       508 Mbits/sec         [ 3]       90.0-95.0 sec       302 MBytes       511 Mbits/sec         [ 3]       90.0-95.0 sec       303 MBytes       517 Mbits/sec         [ 3]       100.0-105.0 sec       308 MBytes       507 Mbits/sec         [ 3]       100.0-105.0 sec       300 MBytes       503 Mbits/sec         [ 3]       110.0-115.0 sec       298 MBytes       502 Mbits/sec         [ 3]       120.0-125.0 sec       300 MBytes       503 Mbits/sec         [ 3]       120.0-125.0 sec       300 MBytes       513 Mbits/sec         [ 3]       130.0-135.0 sec       301 MBytes       506 Mbits/sec         [ 3]       140.0-145.0 sec       301 MBytes       506 Mbits/sec         [ 3]       145.0-150.0 s   | [  | 3]    | 35.0-40.0 sec 302 MBytes 507 Mbits/sec   |
| [3] 50.0-55.0 sec       302 MBytes       508 Mbits/sec         [3] 55.0-60.0 sec       303 MBytes       508 Mbits/sec         [3] 60.0-65.0 sec       291 MBytes       489 Mbits/sec         [3] 65.0-70.0 sec       302 MBytes       506 Mbits/sec         [3] 75.0-80.0 sec       302 MBytes       506 Mbits/sec         [3] 75.0-80.0 sec       302 MBytes       506 Mbits/sec         [3] 80.0-85.0 sec       302 MBytes       508 Mbits/sec         [3] 80.0-85.0 sec       305 MBytes       511 Mbits/sec         [3] 95.0-100.0 sec       305 MBytes       512 Mbits/sec         [3] 105.0-110.0 sec       303 MBytes       509 Mbits/sec         [3] 105.0-110.0 sec       301 MBytes       505 Mbits/sec         [3] 105.0-110.0 sec       300 MBytes       501 Mbits/sec         [3] 105.0-110.0 sec       300 MBytes       503 Mbits/sec         [3] 110.0-115.0 sec       300 MBytes       504 Mbits/sec         [3] 125.0-130.0 sec       300 MBytes       513 Mbits/sec         [3] 145.0-150.0 sec       301 MBytes       505 Mbits/sec         [3] 145.0-150.0 sec       301 MBytes       506 Mbits/sec         [3] 145.0-160.0 sec       301 MBytes       504 Mbits/sec         [3] 160.0-165.0 sec       301 MBytes       504 Mbits  | [  | 3]    | · · · · · · · · · · · · · · · · · · ·    |
| [3] 55.0-60.0 sec       303 MBytes       508 Mbits/sec         [3] 60.0-65.0 sec       291 MBytes       489 Mbits/sec         [3] 70.0-75.0 sec       304 MBytes       509 Mbits/sec         [3] 70.0-75.0 sec       302 MBytes       506 Mbits/sec         [3] 70.0-75.0 sec       302 MBytes       506 Mbits/sec         [3] 75.0-80.0 sec       302 MBytes       506 Mbits/sec         [3] 80.0-85.0 sec       305 MBytes       511 Mbits/sec         [3] 90.0-95.0 sec       305 MBytes       517 Mbits/sec         [3] 100.0-105.0 sec       301 MBytes       507 Mbits/sec         [3] 101.0-115.0 sec       298 MBytes       500 Mbits/sec         [3] 115.0-120.0 sec       300 MBytes       502 Mbits/sec         [3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         [3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         [3] 140.0-145.0 sec       301 MBytes       505 Mbits/sec         [3] 140.0-145.0 sec       302 MBytes       506 Mbits/sec         [3] 155.0-160.0 sec       301 MBytes       506 Mbits/sec         [3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [3] 160.0-165.0 sec       301 MBytes       504 Mbits/sec         [3] 160.0-185.0 sec       300 MBytes       503 Mbit  | -  |       | -  |
| 3)       60.0-65.0 sec       291 MBytes       489 Mbits/sec         3)       65.0-70.0 sec       304 MBytes       509 Mbits/sec         3)       75.0-80.0 sec       302 MBytes       506 Mbits/sec         3)       80.0-85.0 sec       302 MBytes       506 Mbits/sec         3)       80.0-85.0 sec       302 MBytes       508 Mbits/sec         3)       90.0-95.0 sec       305 MBytes       511 Mbits/sec         3)       90.0-95.0 sec       305 MBytes       512 Mbits/sec         3)       100.0-105.0 sec       308 MBytes       509 Mbits/sec         3)       100.0-105.0 sec       301 MBytes       505 Mbits/sec         3)       110.0-115.0 sec       298 MBytes       500 Mbits/sec         3)       112.0-125.0 sec       299 MBytes       502 Mbits/sec         3)       125.0-130.0 sec       306 MBytes       513 Mbits/sec         3)       130.0-135.0 sec       304 MBytes       505 Mbits/sec         3)       140.0-145.0 sec       301 MBytes       506 Mbits/sec         3)       140.0-145.0 sec       301 MBytes       506 Mbits/sec         3)       150.0-150.0 sec       302 MBytes       506 Mbits/sec         3)       150.0-160.0 sec       301 MBytes </td <td>-</td> <td></td> <td>-</td>   | -  |       | -  |
| [ 3]       65.0-70.0 sec       304 MBytes       509 Mbits/sec         [ 3]       70.0-75.0 sec       302 MBytes       506 Mbits/sec         [ 3]       75.0-80.0 sec       302 MBytes       508 Mbits/sec         [ 3]       85.0-90.0 sec       302 MBytes       508 Mbits/sec         [ 3]       90.0-95.0 sec       305 MBytes       511 Mbits/sec         [ 3]       90.0-95.0 sec       303 MBytes       512 Mbits/sec         [ 3]       100.0-105.0 sec       308 MBytes       505 Mbits/sec         [ 3]       105.0-110.0 sec       301 MBytes       503 Mbits/sec         [ 3]       110.0-115.0 sec       298 MBytes       503 Mbits/sec         [ 3]       1125.0-120.0 sec       300 MBytes       513 Mbits/sec         [ 3]       125.0-130.0 sec       306 MBytes       513 Mbits/sec         [ 3]       130.0-135.0 sec       304 MBytes       505 Mbits/sec         [ 3]       140.0-145.0 sec       301 MBytes       506 Mbits/sec         [ 3]       140.0-145.0 sec       301 MBytes       506 Mbits/sec         [ 3]       155.0-160.0 sec       302 MBytes       506 Mbits/sec         [ 3]       165.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3]       165.0-   |    | -     | -  |
| [ 3] 70.0-75.0 sec       302 MBytes       506 Mbits/sec         [ 3] 75.0-80.0 sec       302 MBytes       506 Mbits/sec         [ 3] 80.0-85.0 sec       302 MBytes       508 Mbits/sec         [ 3] 80.0-95.0 sec       305 MBytes       511 Mbits/sec         [ 3] 90.0-95.0 sec       303 MBytes       512 Mbits/sec         [ 3] 90.0-95.0 sec       303 MBytes       509 Mbits/sec         [ 3] 100.0-105.0 sec       303 MBytes       507 Mbits/sec         [ 3] 100.0-115.0 sec       300 MBytes       507 Mbits/sec         [ 3] 110.0-115.0 sec       300 MBytes       500 Mbits/sec         [ 3] 110.0-125.0 sec       298 MBytes       500 Mbits/sec         [ 3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         [ 3] 120.0-125.0 sec       300 MBytes       513 Mbits/sec         [ 3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       301 MBytes       506 Mbits/sec         [ 3] 150.0-150.0 sec       301 MBytes       506 Mbits/sec         [ 3] 150.0-150.0 sec       301 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 161.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 162.0-170.0 sec       300 MBytes<   | -  |       | · · · · · · · · · · · · · · · · · · ·    |
| 3] 75.0-80.0 sec       302 MBytes       506 Mbits/sec         3] 80.0-85.0 sec       302 MBytes       508 Mbits/sec         3] 85.0-90.0 sec       305 MBytes       511 Mbits/sec         3] 90.0-95.0 sec       305 MBytes       512 Mbits/sec         3] 95.0-100.0 sec       303 MBytes       509 Mbits/sec         3] 100.0-105.0 sec       308 MBytes       507 Mbits/sec         3] 100.0-115.0 sec       298 MBytes       500 Mbits/sec         3] 110.0-115.0 sec       298 MBytes       500 Mbits/sec         3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         3] 121.0-130.0 sec       300 MBytes       513 Mbits/sec         3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         3] 145.0-140.0 sec       301 MBytes       505 Mbits/sec         3] 145.0-150.0 sec       302 MBytes       506 Mbits/sec         3] 145.0-160.0 sec       301 MBytes       506 Mbits/sec         3] 150.0-165.0 sec       301 MBytes       506 Mbits/sec         3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         3] 161.0-170.0 sec       300 MBytes       504 Mbits/sec         3] 175.0-180.0 sec       300 MBytes       504 Mbits/sec   | -  | -     | -  |
| [ 3] 80.0-85.0 sec       302 MBytes       508 Mbits/sec         [ 3] 90.0-95.0 sec       305 MBytes       511 Mbits/sec         [ 3] 90.0-95.0 sec       305 MBytes       512 Mbits/sec         [ 3] 95.0-100.0 sec       303 MBytes       509 Mbits/sec         [ 3] 100.0-105.0 sec       303 MBytes       507 Mbits/sec         [ 3] 100.0-115.0 sec       301 MBytes       507 Mbits/sec         [ 3] 110.0-115.0 sec       298 MBytes       500 Mbits/sec         [ 3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         [ 3] 120.0-125.0 sec       300 MBytes       513 Mbits/sec         [ 3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       301 MBytes       505 Mbits/sec         [ 3] 140.0-145.0 sec       302 MBytes       506 Mbits/sec         [ 3] 150.0-160.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MB   | -  | -     |  |
| [ 3] 85.0-90.0 sec       305 MBytes       511 Mbits/sec         [ 3] 90.0-95.0 sec       305 MBytes       512 Mbits/sec         [ 3] 95.0-100.0 sec       303 MBytes       517 Mbits/sec         [ 3] 100.0-105.0 sec       308 MBytes       517 Mbits/sec         [ 3] 100.0-105.0 sec       300 MBytes       505 Mbits/sec         [ 3] 100.0-115.0 sec       298 MBytes       500 Mbits/sec         [ 3] 115.0-120.0 sec       300 MBytes       503 Mbits/sec         [ 3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         [ 3] 125.0-130.0 sec       306 MBytes       513 Mbits/sec         [ 3] 135.0-140.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       301 MBytes       505 Mbits/sec         [ 3] 145.0-150.0 sec       301 MBytes       506 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 165.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 165.0-160.0 sec       301 MBytes       504 Mbits/sec         [ 3] 160.0-165.0 sec       300 MBytes       503 Mbits/sec         [ 3] 160.0-170.0 sec       300  | -  |       | · · · · · · · · · · · · · · · · · · ·    |
| [ 3] 90.0-95.0 sec       305 MBytes       512 Mbits/sec         [ 3] 95.0-100.0 sec       303 MBytes       509 Mbits/sec         [ 3] 100.0-105.0 sec       301 MBytes       517 Mbits/sec         [ 3] 105.0-110.0 sec       301 MBytes       505 Mbits/sec         [ 3] 115.0-120.0 sec       298 MBytes       500 Mbits/sec         [ 3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         [ 3] 120.0-125.0 sec       299 MBytes       504 Mbits/sec         [ 3] 125.0-130.0 sec       300 MBytes       513 Mbits/sec         [ 3] 135.0-140.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       302 MBytes       505 Mbits/sec         [ 3] 140.0-145.0 sec       302 MBytes       506 Mbits/sec         [ 3] 150.0-150.0 sec       301 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-205.0 sec       30   | -  | -     | 1  |
| [ 3] 100.0-105.0 sec       308 MBytes       517 Mbits/sec         [ 3] 105.0-110.0 sec       301 MBytes       505 Mbits/sec         [ 3] 115.0-120.0 sec       298 MBytes       500 Mbits/sec         [ 3] 115.0-120.0 sec       299 MBytes       502 Mbits/sec         [ 3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         [ 3] 120.0-125.0 sec       299 MBytes       504 Mbits/sec         [ 3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         [ 3] 130.0-145.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       303 MBytes       509 Mbits/sec         [ 3] 140.0-145.0 sec       301 MBytes       505 Mbits/sec         [ 3] 150.0-150.0 sec       302 MBytes       506 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-185.0 sec       301 MBytes       503 Mbits/sec         [ 3] 180.0-190.0 sec       297 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-205.0 sec <td< td=""><td>-</td><td></td><td>-</td></td<>  | -  |       | -  |
| <ul> <li>[3] 105.0-110.0 sec</li> <li>[3] 105.0-110.0 sec</li> <li>[3] 110.0-115.0 sec</li> <li>[3] 115.0-120.0 sec</li> <li>[3] 115.0-120.0 sec</li> <li>[3] 125.0-120.0 sec</li> <li>[3] 125.0-120.0 sec</li> <li>[3] 125.0-120.0 sec</li> <li>[3] 125.0-130.0 sec</li> <li>[3] 130.0-135.0 sec</li> <li>[3] 130.0-135.0 sec</li> <li>[3] 130.0-145.0 sec</li> <li>[3] 145.0-140.0 sec</li> <li>[3] 145.0-140.0 sec</li> <li>[3] 145.0-150.0 sec</li> <li>[3] 145.0-150.0 sec</li> <li>[3] 145.0-150.0 sec</li> <li>[3] 150.0-155.0 sec</li> <li>[3] 150.0-155.0 sec</li> <li>[3] 150.0-155.0 sec</li> <li>[3] 160.0-165.0 sec</li> <li>[3] 165.0-170.0 sec</li> <li>[3] 170.0-175.0 sec</li> <li>[30] MBytes</li> <li>[3] 170.0-175.0 sec</li> <li>[30] MBytes</li> <li>[3] 185.0-180.0 sec</li> <li>[30] MBytes</li> <li>[31] 185.0-190.0 sec</li> <li>[31] 185.0-190.0 sec</li> <li>[32] 185.0-190.0 sec</li> <li>[32] 185.0-190.0 sec</li> <li>[31] 190.0-195.0 sec</li> <li>[32] 195.0-200.0 sec</li> <li>[32] 195.0-200.0 sec</li> <li>[32] 205.0-210.0 sec</li> <li>[33] 205.0-210.0 sec</li> <li>[34] 205.0-210.0 sec</li> <li>[35] 215.0-220.0 sec</li> <li>[35] 215.0-220.0 sec</li> <li>[36] 225.0-230.0 sec</li> <li>[36] 225.0-230.0 sec</li> <li>[37] 225.0-230.0 sec</li> <li>[38] 225.0-230.0 sec</li> <li>[39] 235.0-240.0 sec</li> <li>[30] 235.0-240.0 sec</li> &lt;</ul>   | [  | 3]    | 95.0-100.0 sec 303 MBytes 509 Mbits/sec  |
| <ul> <li>[ 3] 110.0-115.0 sec 298 MBytes 500 Mbits/sec</li> <li>[ 3] 115.0-120.0 sec 300 MBytes 503 Mbits/sec</li> <li>[ 3] 120.0-125.0 sec 299 MBytes 502 Mbits/sec</li> <li>[ 3] 125.0-130.0 sec 300 MBytes 504 Mbits/sec</li> <li>[ 3] 130.0-135.0 sec 306 MBytes 513 Mbits/sec</li> <li>[ 3] 135.0-140.0 sec 306 MBytes 513 Mbits/sec</li> <li>[ 3] 140.0-145.0 sec 303 MBytes 509 Mbits/sec</li> <li>[ 3] 145.0-150.0 sec 301 MBytes 506 Mbits/sec</li> <li>[ 3] 155.0-160.0 sec 302 MBytes 506 Mbits/sec</li> <li>[ 3] 165.0-165.0 sec 301 MBytes 506 Mbits/sec</li> <li>[ 3] 165.0-165.0 sec 301 MBytes 506 Mbits/sec</li> <li>[ 3] 165.0-170.0 sec 301 MBytes 506 Mbits/sec</li> <li>[ 3] 165.0-170.0 sec 301 MBytes 506 Mbits/sec</li> <li>[ 3] 165.0-170.0 sec 301 MBytes 506 Mbits/sec</li> <li>[ 3] 170.0-175.0 sec 300 MBytes 504 Mbits/sec</li> <li>[ 3] 170.0-175.0 sec 300 MBytes 504 Mbits/sec</li> <li>[ 3] 170.0-175.0 sec 300 MBytes 505 Mbits/sec</li> <li>[ 3] 180.0-185.0 sec 301 MBytes 505 Mbits/sec</li> <li>[ 3] 190.0-195.0 sec 300 MBytes 503 Mbits/sec</li> <li>[ 3] 190.0-195.0 sec 302 MBytes 503 Mbits/sec</li> <li>[ 3] 190.0-195.0 sec 302 MBytes 503 Mbits/sec</li> <li>[ 3] 195.0-200.0 sec 302 MBytes 507 Mbits/sec</li> <li>[ 3] 195.0-201.0 sec 297 MBytes 507 Mbits/sec</li> <li>[ 3] 205.0-210.0 sec 299 MBytes 501 Mbits/sec</li> <li>[ 3] 205.0-210.0 sec 301 MBytes 505 Mbits/sec</li> <li>[ 3] 215.0-220.0 sec 301 MBytes 503 Mbits/sec</li> <li>[ 3] 220.0-225.0 sec 304 MBytes 503 Mbits/sec</li> <li>[ 3] 220.0-225.0 sec 304 MBytes 503 Mbits/sec</li> <li>[ 3] 220.0-225.0 sec 304 MBytes 503 Mbits/sec</li> <li>[ 3] 220.0-225.0 sec 305 MBytes 512 Mbits/sec</li> <li>[ 3] 230.0-235.0 sec 305 MBytes 512 Mbits/sec</li> <li>[ 3] 230.0-235.0 sec 305 MBytes 512 Mbits/sec</li> </ul>   | [  | 3]    | 100.0-105.0 sec 308 MBytes 517 Mbits/sec |
| [ 3] 115.0-120.0 sec       300 MBytes       503 Mbits/sec         [ 3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         [ 3] 125.0-130.0 sec       300 MBytes       504 Mbits/sec         [ 3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         [ 3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       303 MBytes       509 Mbits/sec         [ 3] 140.0-145.0 sec       301 MBytes       509 Mbits/sec         [ 3] 145.0-150.0 sec       301 MBytes       506 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 161.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       302 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       302 MBytes       507 Mbits/sec         [ 3] 190.0-205.0 sec       302 MBytes       501 Mbits/sec         [ 3] 200.0-205.0 sec       301 MBytes       501 Mbits/sec         [ 3] 210.0-215.0 sec <td< td=""><td>[</td><td>3]</td><td>-</td></td<>  | [  | 3]    | -  |
| [ 3] 120.0-125.0 sec       299 MBytes       502 Mbits/sec         [ 3] 125.0-130.0 sec       300 MBytes       504 Mbits/sec         [ 3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         [ 3] 130.0-140.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       303 MBytes       509 Mbits/sec         [ 3] 145.0-150.0 sec       301 MBytes       505 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 150.0-165.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 165.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 205.0-210.0 sec       302 MBytes       501 Mbits/sec         [ 3] 205.0-210.0 sec       302 MBytes       501 Mbits/sec         [ 3] 210.0-215.0 sec       301 MBytes       503 Mbits/sec         [ 3] 210.0-225.0 sec <td< td=""><td>-</td><td>-</td><td>-</td></td<>   | -  | -     | -  |
| [ 3] 125.0-130.0 sec       300 MBytes       504 Mbits/sec         [ 3] 130.0-135.0 sec       306 MBytes       513 Mbits/sec         [ 3] 135.0-140.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       303 MBytes       509 Mbits/sec         [ 3] 140.0-145.0 sec       301 MBytes       505 Mbits/sec         [ 3] 145.0-150.0 sec       302 MBytes       506 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 160.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 200.0-205.0 sec       302 MBytes       501 Mbits/sec         [ 3] 201.0-215.0 sec       301 MBytes       503 Mbits/sec         [ 3] 210.0-225.0 sec <td< td=""><td>-</td><td></td><td></td></td<>   | -  |       |  |
| 3       130.0-135.0 sec       306 MBytes       513 Mbits/sec         3       135.0-140.0 sec       306 MBytes       513 Mbits/sec         3       140.0-145.0 sec       303 MBytes       509 Mbits/sec         3       145.0-150.0 sec       301 MBytes       505 Mbits/sec         3       150.0-155.0 sec       302 MBytes       506 Mbits/sec         3       160.0-165.0 sec       301 MBytes       506 Mbits/sec         3       165.0-170.0 sec       300 MBytes       504 Mbits/sec         3       170.0-175.0 sec       300 MBytes       504 Mbits/sec         3       170.0-175.0 sec       300 MBytes       504 Mbits/sec         3       175.0-180.0 sec       301 MBytes       505 Mbits/sec         3       175.0-180.0 sec       300 MBytes       503 Mbits/sec         3       185.0-190.0 sec       297 MBytes       498 Mbits/sec         3       190.0-195.0 sec       302 MBytes       503 Mbits/sec         3       190.0-205.0 sec       302 MBytes       507 Mbits/sec         3       195.0-200.0 sec       302 MBytes       501 Mbits/sec         3       205.0-210.0 sec       301 MBytes       503 Mbits/sec         3       205.0-220.0 sec       304 MBytes   |    |       | -  |
| [ 3] 135.0-140.0 sec       306 MBytes       513 Mbits/sec         [ 3] 140.0-145.0 sec       303 MBytes       509 Mbits/sec         [ 3] 145.0-150.0 sec       301 MBytes       505 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 150.0-160.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 165.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 175.0-180.0 sec       301 MBytes       505 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-190.0 sec       297 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       302 MBytes       503 Mbits/sec         [ 3] 190.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 201.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 210.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 210.0-225.0 sec       304 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 220.0-235.0 sec <td< td=""><td>-</td><td></td><td>-</td></td<>  | -  |       | -  |
| [ 3] 140.0-145.0 sec       303 MBytes       509 Mbits/sec         [ 3] 145.0-150.0 sec       301 MBytes       505 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 155.0-160.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       300 MBytes       504 Mbits/sec         [ 3] 165.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 175.0-180.0 sec       301 MBytes       505 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-190.0 sec       297 MBytes       498 Mbits/sec         [ 3] 190.0-195.0 sec       302 MBytes       503 Mbits/sec         [ 3] 195.0-200.0 sec       302 MBytes       507 Mbits/sec         [ 3] 200.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 210.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 210.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 230.0-235.0 sec <td< td=""><td>-</td><td></td><td>±</td></td<>  | -  |       | ±  |
| [ 3] 145.0-150.0 sec       301 MBytes       505 Mbits/sec         [ 3] 150.0-155.0 sec       302 MBytes       506 Mbits/sec         [ 3] 155.0-160.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 160.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 175.0-180.0 sec       301 MBytes       505 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       302 MBytes       503 Mbits/sec         [ 3] 195.0-200.0 sec       302 MBytes       507 Mbits/sec         [ 3] 200.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 201.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 210.0-215.0 sec       301 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 230.0-235.0 sec <td< td=""><td>-</td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td></td<>  | -  |       | · · · · · · · · · · · · · · · · · · ·    |
| <pre>[ 3] 150.0-155.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 155.0-160.0 sec 302 MBytes 506 Mbits/sec<br/>[ 3] 160.0-165.0 sec 301 MBytes 506 Mbits/sec<br/>[ 3] 165.0-170.0 sec 300 MBytes 504 Mbits/sec<br/>[ 3] 170.0-175.0 sec 300 MBytes 504 Mbits/sec<br/>[ 3] 175.0-180.0 sec 301 MBytes 505 Mbits/sec<br/>[ 3] 180.0-185.0 sec 301 MBytes 503 Mbits/sec<br/>[ 3] 180.0-185.0 sec 297 MBytes 498 Mbits/sec<br/>[ 3] 185.0-190.0 sec 297 MBytes 503 Mbits/sec<br/>[ 3] 190.0-195.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 195.0-200.0 sec 302 MBytes 507 Mbits/sec<br/>[ 3] 200.0-205.0 sec 302 MBytes 507 Mbits/sec<br/>[ 3] 201.0-215.0 sec 301 MBytes 507 Mbits/sec<br/>[ 3] 210.0-215.0 sec 301 MBytes 505 Mbits/sec<br/>[ 3] 215.0-220.0 sec 301 MBytes 505 Mbits/sec<br/>[ 3] 215.0-220.0 sec 301 MBytes 503 Mbits/sec<br/>[ 3] 220.0-225.0 sec 304 MBytes 503 Mbits/sec<br/>[ 3] 220.0-225.0 sec 304 MBytes 503 Mbits/sec<br/>[ 3] 225.0-230.0 sec 305 MBytes 512 Mbits/sec<br/>[ 3] 230.0-235.0 sec 306 MBytes 513 Mbits/sec</pre>   | -  |       | -  |
| [ 3] 155.0-160.0 sec       302 MBytes       506 Mbits/sec         [ 3] 160.0-165.0 sec       301 MBytes       506 Mbits/sec         [ 3] 165.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 175.0-180.0 sec       301 MBytes       505 Mbits/sec         [ 3] 175.0-180.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-190.0 sec       297 MBytes       498 Mbits/sec         [ 3] 195.0-200.0 sec       302 MBytes       503 Mbits/sec         [ 3] 195.0-200.0 sec       302 MBytes       507 Mbits/sec         [ 3] 200.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 201.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 215.0-220.0 sec       300 MBytes       503 Mbits/sec         [ 3] 215.0-220.0 sec       304 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec         [ 3] 235.0-240.0 sec <td< td=""><td>-</td><td></td><td></td></td<>   | -  |       |  |
| [ 3] 165.0-170.0 sec       300 MBytes       504 Mbits/sec         [ 3] 170.0-175.0 sec       300 MBytes       504 Mbits/sec         [ 3] 175.0-180.0 sec       301 MBytes       505 Mbits/sec         [ 3] 175.0-180.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       302 MBytes       507 Mbits/sec         [ 3] 195.0-200.0 sec       302 MBytes       507 Mbits/sec         [ 3] 200.0-205.0 sec       302 MBytes       501 Mbits/sec         [ 3] 201.0-215.0 sec       301 MBytes       501 Mbits/sec         [ 3] 215.0-220.0 sec       304 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  |    | 3]    |  |
| 3)       170.0-175.0 sec       300 MBytes       504 Mbits/sec         3)       175.0-180.0 sec       301 MBytes       505 Mbits/sec         3)       180.0-185.0 sec       300 MBytes       503 Mbits/sec         3)       185.0-190.0 sec       297 MBytes       498 Mbits/sec         3)       190.0-195.0 sec       300 MBytes       503 Mbits/sec         3)       190.0-205.0 sec       302 MBytes       507 Mbits/sec         3)       205.0-200.0 sec       302 MBytes       507 Mbits/sec         3)       205.0-210.0 sec       302 MBytes       501 Mbits/sec         3)       205.0-210.0 sec       301 MBytes       505 Mbits/sec         3)       210.0-215.0 sec       301 MBytes       505 Mbits/sec         3)       210.0-225.0 sec       304 MBytes       509 Mbits/sec         3)       220.0-225.0 sec       304 MBytes       509 Mbits/sec         3)       220.0-235.0 sec       305 MBytes       512 Mbits/sec         3)       230.0-235.0 sec       306 MBytes       513 Mbits/sec         3)       230.0-235.0 sec       306 MBytes       512 Mbits/sec  | [  | 3]    |  |
| [ 3] 175.0-180.0 sec       301 MBytes       505 Mbits/sec         [ 3] 180.0-185.0 sec       300 MBytes       503 Mbits/sec         [ 3] 185.0-190.0 sec       297 MBytes       498 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 195.0-200.0 sec       302 MBytes       507 Mbits/sec         [ 3] 200.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 205.0-210.0 sec       299 MBytes       501 Mbits/sec         [ 3] 210.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 215.0-220.0 sec       300 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  | [  | 3]    | -  |
| <pre>[ 3] 180.0-185.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 185.0-190.0 sec 297 MBytes 498 Mbits/sec<br/>[ 3] 190.0-195.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 195.0-200.0 sec 302 MBytes 507 Mbits/sec<br/>[ 3] 200.0-205.0 sec 302 MBytes 507 Mbits/sec<br/>[ 3] 205.0-210.0 sec 299 MBytes 501 Mbits/sec<br/>[ 3] 210.0-215.0 sec 301 MBytes 505 Mbits/sec<br/>[ 3] 215.0-220.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 220.0-225.0 sec 304 MBytes 509 Mbits/sec<br/>[ 3] 225.0-230.0 sec 305 MBytes 512 Mbits/sec<br/>[ 3] 230.0-235.0 sec 306 MBytes 513 Mbits/sec<br/>[ 3] 235.0-240.0 sec 305 MBytes 512 Mbits/sec</pre>   | -  |       | -  |
| [ 3] 185.0-190.0 sec       297 MBytes       498 Mbits/sec         [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 195.0-200.0 sec       302 MBytes       507 Mbits/sec         [ 3] 200.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 205.0-210.0 sec       299 MBytes       501 Mbits/sec         [ 3] 210.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 215.0-220.0 sec       300 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  | -  |       |  |
| [ 3] 190.0-195.0 sec       300 MBytes       503 Mbits/sec         [ 3] 195.0-200.0 sec       302 MBytes       507 Mbits/sec         [ 3] 200.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 205.0-210.0 sec       299 MBytes       501 Mbits/sec         [ 3] 210.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 215.0-220.0 sec       300 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  | -  |       | -  |
| <pre>[ 3] 195.0-200.0 sec 302 MBytes 507 Mbits/sec<br/>[ 3] 200.0-205.0 sec 302 MBytes 507 Mbits/sec<br/>[ 3] 205.0-210.0 sec 299 MBytes 501 Mbits/sec<br/>[ 3] 210.0-215.0 sec 301 MBytes 505 Mbits/sec<br/>[ 3] 215.0-220.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 220.0-225.0 sec 304 MBytes 509 Mbits/sec<br/>[ 3] 225.0-230.0 sec 305 MBytes 512 Mbits/sec<br/>[ 3] 230.0-235.0 sec 306 MBytes 513 Mbits/sec<br/>[ 3] 235.0-240.0 sec 305 MBytes 512 Mbits/sec</pre>   | -  | . *   |  |
| [ 3] 200.0-205.0 sec       302 MBytes       507 Mbits/sec         [ 3] 205.0-210.0 sec       299 MBytes       501 Mbits/sec         [ 3] 210.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 215.0-220.0 sec       300 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  |    |       | -  |
| <pre>[ 3] 205.0-210.0 sec 299 MBytes 501 Mbits/sec<br/>[ 3] 210.0-215.0 sec 301 MBytes 505 Mbits/sec<br/>[ 3] 215.0-220.0 sec 300 MBytes 503 Mbits/sec<br/>[ 3] 220.0-225.0 sec 304 MBytes 509 Mbits/sec<br/>[ 3] 225.0-230.0 sec 305 MBytes 512 Mbits/sec<br/>[ 3] 230.0-235.0 sec 306 MBytes 513 Mbits/sec<br/>[ 3] 235.0-240.0 sec 305 MBytes 512 Mbits/sec</pre>   | -  |       | -  |
| [ 3] 210.0-215.0 sec       301 MBytes       505 Mbits/sec         [ 3] 215.0-220.0 sec       300 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  | -  |       | -  |
| [ 3] 215.0-220.0 sec       300 MBytes       503 Mbits/sec         [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  | -  | -     | -  |
| [ 3] 220.0-225.0 sec       304 MBytes       509 Mbits/sec         [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  | -  | -     |  |
| [ 3] 225.0-230.0 sec       305 MBytes       512 Mbits/sec         [ 3] 230.0-235.0 sec       306 MBytes       513 Mbits/sec         [ 3] 235.0-240.0 sec       305 MBytes       512 Mbits/sec  | -  | -     |  |
| [ 3] 235.0-240.0 sec 305 MBytes 512 Mbits/sec  | [  |       |  |
|  | [  | 3]    |  |
| [ 3] 240.0-245.0 sec 294 MBvtes 493 Mbits/sec  | -  | -     | · · · · · · · · · · · · · · · · · · ·    |
| [ 3] 245.0-250.0 sec 302 MBytes 506 Mbits/sec  | [  |       | 240.0-245.0 sec 294 MBytes 493 Mbits/sec |

| 58       | [      | 3] | 250.0-255.0 | sec | 302 | MBytes           | 507        | Mbits/sec |
|----------|--------|----|-------------|-----|-----|------------------|------------|-----------|
| 59       | ſ      | 3] | 255.0-260.0 | sec | 290 | MBytes           | 487        | Mbits/sec |
| 60       | [      | 3] | 260.0-265.0 | sec | 305 | MBytes           | 511        | Mbits/sec |
| 61       | [      | 3] | 265.0-270.0 | sec | 306 | MBytes           | 514        | Mbits/sec |
| 62       | [      | 3] | 270.0-275.0 | sec | 301 | MBytes           |            | Mbits/sec |
| 63       | ĺ      | 3] | 275.0-280.0 | sec | 299 | MBytes           | 501        | Mbits/sec |
| 64       | [      | 3] | 280.0-285.0 | sec | 289 | MBytes           | 485        | Mbits/sec |
| 65       | ĺ      | 3] | 285.0-290.0 | sec | 302 | MBytes           | 506        | Mbits/sec |
| 66       | [      | 3] | 290.0-295.0 | sec | 302 | MBytes           |            | Mbits/sec |
| 67       | [      | 3] | 295.0-300.0 | sec | 287 | MBytes           | 482        | Mbits/sec |
| 68       | l<br>[ | 3] | 300.0-305.0 | sec | 300 | MBytes           | 504        | Mbits/sec |
|          |        | 3] |             |     | 302 | -                |            | Mbits/sec |
| 69       | [      | -  | 305.0-310.0 | sec |     | MBytes           |            |           |
| 70       | [      | 3] | 310.0-315.0 | sec | 303 | MBytes           |            | Mbits/sec |
| 71       | [      | 3] | 315.0-320.0 | sec | 303 | MBytes           | 508        | Mbits/sec |
| 72       | [      | 3] | 320.0-325.0 | sec | 302 | MBytes           | 506        | Mbits/sec |
| 73       | [      | 3] | 325.0-330.0 | sec | 301 | MBytes           | 505        | Mbits/sec |
| 74       | [      | 3] | 330.0-335.0 | sec | 303 | MBytes           | 508        | Mbits/sec |
| 75       | [      | 3] | 335.0-340.0 | sec | 302 | MBytes           | 507        | Mbits/sec |
| 76       | [      | 3] | 340.0-345.0 | sec | 300 | MBytes           | 504        | Mbits/sec |
| 77       | [      | 3] | 345.0-350.0 | sec | 298 | MBytes           | 501        | Mbits/sec |
| 78       | [      | 3] | 350.0-355.0 | sec | 301 | MBytes           | 505        | Mbits/sec |
| 79       | [      | 3] | 355.0-360.0 | sec | 302 | MBytes           | 507        | Mbits/sec |
| 80       | [      | 3] | 360.0-365.0 | sec | 301 | MBytes           | 505        | Mbits/sec |
| 81       | [      | 3] | 365.0-370.0 | sec | 300 | MBytes           | 504        | Mbits/sec |
| 82       | [      | 3] | 370.0-375.0 | sec | 300 | MBytes           | 503        | Mbits/sec |
| 83       | [      | 3] | 375.0-380.0 | sec | 303 | MBytes           | 508        | Mbits/sec |
| 84       | [      | 3] | 380.0-385.0 | sec | 300 | MBytes           | 504        | Mbits/sec |
| 85       | [      | 3] | 385.0-390.0 | sec | 302 | MBytes           | 506        | Mbits/sec |
| 86       | [      | 3] | 390.0-395.0 | sec | 303 | MBytes           | 508        | Mbits/sec |
| 87       | ]      | 3] | 395.0-400.0 | sec | 299 | MBytes           | 502        | Mbits/sec |
| 88       | [      | 3] | 400.0-405.0 | sec | 299 | MBytes           | 502        | Mbits/sec |
| 89       | [      | 3] | 405.0-410.0 | sec | 302 | MBytes           | 507        |           |
| 90       | [      | 3] | 410.0-415.0 | sec | 301 | MBytes           | 505        | Mbits/sec |
| 91       | ĺ      | 3] | 415.0-420.0 | sec | 308 | MBytes           | 517        | Mbits/sec |
| 92       | [      | 3] | 420.0-425.0 | sec | 302 | MBytes           | 507        | Mbits/sec |
| 93       | [      | 3] | 425.0-430.0 | sec | 302 | MBytes           |            | Mbits/sec |
| 94       | [      | 3] | 430.0-435.0 | sec | 301 | MBytes           |            | Mbits/sec |
| 95       | [      | 3] | 435.0-440.0 | sec | 304 | MBytes           |            | Mbits/sec |
| 96       | [      | 3] | 440.0-445.0 | sec | 300 | MBytes           | 503        | Mbits/sec |
| 97       | [      | 3] | 445.0-450.0 | sec | 301 | MBytes           | 505        | Mbits/sec |
| 98       | [      | 3] | 450.0-455.0 | sec | 302 | MBytes           |            | Mbits/sec |
| 90<br>99 | l<br>[ | 3] |             |     |     | -                |            | Mbits/sec |
|          |        | -  | 455.0-460.0 | sec | 298 | MBytes           |            | Mbits/sec |
| 100      | [      | 3] | 460.0-465.0 | sec | 300 | MBytes<br>MBytes | 503        |           |
| 101      | [      | 3] |             | sec | 301 | -                | 505<br>504 |           |
| 102      | [      | 3] | 470.0-475.0 | sec | 300 | MBytes           |            |           |
| 103      | [      | 3] | 475.0-480.0 | sec | 302 | MBytes           | 507        | Mbits/sec |
| 104      | [      | 3] | 480.0-485.0 | sec |     | MBytes           | 504        |           |
| 105      | [      | 3] | 485.0-490.0 | sec |     | MBytes           |            | Mbits/sec |
| 106      | [      | 3] | 490.0-495.0 | sec |     | MBytes           | 508        | Mbits/sec |
| 107      | [      | 3] | 495.0-500.0 | sec | 300 | MBytes           |            | Mbits/sec |
| 108      | ]      | 3] | 500.0-505.0 | sec | 302 | MBytes           |            | Mbits/sec |
| 109      | [      | 3] | 505.0-510.0 | sec | 301 | MBytes           | 505        |           |
| 110      | [      | 3] | 510.0-515.0 | sec | 303 | MBytes           | 508        | Mbits/sec |
| 111      | [      | 3] | 515.0-520.0 | sec | 288 | MBytes           |            | Mbits/sec |
| 112      | [      | 3] | 520.0-525.0 | sec | 300 | MBytes           | 504        | Mbits/sec |
| 113      | [      | 3] | 525.0-530.0 | sec | 297 | MBytes           | 498        | Mbits/sec |
| 114      | [      | 3] | 530.0-535.0 | sec | 299 | MBytes           | 502        |           |
| 115      | [      | 3] | 535.0-540.0 | sec | 302 | MBytes           | 507        | Mbits/sec |
| 116      | [      | 3] | 540.0-545.0 | sec | 302 | MBytes           | 507        | Mbits/sec |
| 117      | [      | 3] | 545.0-550.0 | sec | 301 | MBytes           | 505        |           |
| 118      | [      | 3] | 550.0-555.0 | sec | 301 | MBytes           | 505        | Mbits/sec |
| 119      | [      | 3] | 555.0-560.0 | sec | 301 | MBytes           | 505        | Mbits/sec |
| 120      | [      | 3] | 560.0-565.0 | sec | 304 | MBytes           | 509        | Mbits/sec |
| 121      | [      | 3] | 565.0-570.0 | sec | 299 | MBytes           | 502        | Mbits/sec |
| 122      | [      | 3] | 570.0-575.0 | sec | 301 | MBytes           | 505        | Mbits/sec |
| 123      | [      | 3] | 575.0-580.0 | sec | 300 | MBytes           | 504        | Mbits/sec |
|          | -      |    |             |     |     |                  |            |           |

| 124        | [      | 3]       | 580.0-585.0                | sec        | 299        | MBytes           | 502        | Mbits/sec              |
|------------|--------|----------|----------------------------|------------|------------|------------------|------------|------------------------|
| 125        | [      | 3]       | 585.0-590.0                | sec        | 301        | MBytes           | 505        | Mbits/sec              |
| 126        | [      | 3]       | 590.0-595.0                | sec        | 296        | MBytes           | 496        | Mbits/sec              |
| 127        | [      | 3]       | 595.0-600.0                | sec        | 301        | MBytes           | 505        | Mbits/sec              |
| 128        | [      | 3]       | 600.0-605.0                | sec        | 301        | MBytes           | 505        | Mbits/sec              |
| 129        | [      | 3]       | 605.0-610.0                | sec        | 301        | MBytes           | 504        | Mbits/sec              |
| 130        | [      | 3]       | 610.0-615.0                | sec        | 303        | MBytes           | 508        | Mbits/sec              |
| 131        | [      | 3]       | 615.0-620.0                | sec        | 301        | MBytes           | 505<br>505 | Mbits/sec              |
| 132<br>133 | ]<br>[ | 3]<br>3] | 620.0-625.0<br>625.0-630.0 | sec<br>sec | 301<br>302 | MBytes<br>MBytes | 505        | Mbits/sec<br>Mbits/sec |
| 135        | L<br>[ | 3]       | 630.0-635.0                | sec        | 302        | MBytes           | 503        | Mbits/sec              |
| 135        | [      | 3]       | 635.0-640.0                | sec        | 302        | MBytes           | 505        | Mbits/sec              |
| 136        | [      | 3]       | 640.0-645.0                | sec        | 302        | MBytes           | 506        | Mbits/sec              |
| 137        | ĺ      | 3]       | 645.0-650.0                | sec        | 301        | MBytes           | 506        | Mbits/sec              |
| 138        | [      | 3]       | 650.0-655.0                | sec        | 302        | MBytes           | 506        | Mbits/sec              |
| 139        | [      | 3]       | 655.0-660.0                | sec        | 299        | MBytes           | 501        | Mbits/sec              |
| 140        | [      | 3]       | 660.0-665.0                | sec        | 299        | MBytes           | 501        | Mbits/sec              |
| 141        | [      | 3]       | 665.0-670.0                | sec        | 304        | MBytes           | 509        | Mbits/sec              |
| 142        | [      | 3]       | 670.0-675.0                | sec        | 302        | MBytes           | 506        | Mbits/sec              |
| 143        | [      | 3]       | 675.0-680.0                | sec        | 306        | MBytes           | 513        | Mbits/sec              |
| 144        | [      | 3]       | 680.0-685.0                | sec        | 304        | MBytes           | 511        | Mbits/sec              |
| 145        | [      | 3]       | 685.0-690.0                | sec        | 305        | MBytes           | 511        | Mbits/sec              |
| 146        | [      | 3]       | 690.0-695.0                | sec        | 306        | MBytes           | 513        | Mbits/sec              |
| 147        | [      | 3]       | 695.0-700.0                | sec        | 304        | MBytes           | 510        | Mbits/sec              |
| 148        | [      | 3]       | 700.0-705.0                | sec        | 299        | MBytes           | 502        | Mbits/sec              |
| 149        | [      | 3]       | 705.0-710.0                | sec        | 294        | MBytes           | 494<br>497 | Mbits/sec<br>Mbits/sec |
| 150<br>151 | ]<br>[ | 3]<br>3] | 710.0-715.0                | sec<br>sec | 296<br>296 | MBytes<br>MBytes | 497        | Mbits/sec              |
| 151        | l<br>[ | 3]       | 720.0-725.0                | sec        | 302        | MBytes           | 506        | Mbits/sec              |
| 152        | [      | 3]       | 725.0-730.0                | sec        | 301        | MBytes           | 505        | Mbits/sec              |
| 154        | ĺ      | 3]       | 730.0-735.0                | sec        | 302        | MBytes           | 507        | Mbits/sec              |
| 155        | [      | 3]       | 735.0-740.0                | sec        | 303        | MBytes           | 508        | Mbits/sec              |
| 156        | [      | 3]       | 740.0-745.0                | sec        | 302        | MBytes           | 507        | Mbits/sec              |
| 157        | [      | 3]       | 745.0-750.0                | sec        | 304        | MBytes           | 510        | Mbits/sec              |
| 158        | [      | 3]       | 750.0-755.0                | sec        | 304        | MBytes           | 510        | Mbits/sec              |
| 159        | [      | 3]       | 755.0-760.0                | sec        | 302        | MBytes           | 506        | Mbits/sec              |
| 160        | [      | 3]       | 760.0-765.0                | sec        | 303        | MBytes           | 509        | Mbits/sec              |
| 161        | [      | 3]       | 765.0-770.0                | sec        | 306        | MBytes           | 513        | Mbits/sec              |
| 162        | [      | 3]       | 770.0-775.0                | sec        | 303        | MBytes           | 509        | Mbits/sec              |
| 163        | [<br>[ | 3]<br>3] | 775.0-780.0                | sec        | 302<br>299 | MBytes           | 506<br>502 | Mbits/sec<br>Mbits/sec |
| 164<br>165 | L<br>[ | 3]       | 785.0-790.0                | sec<br>sec | 300        | MBytes<br>MBytes | 502        | Mbits/sec              |
| 166        | [      | 3]       | 790.0-795.0                | sec        | 303        | MBytes           | 502        | Mbits/sec              |
| 167        | [      | 3]       | 795.0-800.0                | sec        | 286        | MBytes           | 480        | Mbits/sec              |
| 168        | ī      | 3]       | 800.0-805.0                | sec        | 300        | MBytes           | 504        | Mbits/sec              |
| 169        | [      | 3]       | 805.0-810.0                | sec        | 304        | MBytes           | 509        | Mbits/sec              |
| 170        | [      | 3]       | 810.0-815.0                | sec        | 303        | MBytes           | 509        | Mbits/sec              |
| 171        | [      | 3]       | 815.0-820.0                | sec        | 302        | MBytes           | 507        | Mbits/sec              |
| 172        | [      | 3]       | 820.0-825.0                | sec        | 302        | MBytes           | 506        | Mbits/sec              |
| 173        | [      | 3]       | 825.0-830.0                | sec        | 301        | MBytes           | 505        |                        |
| 174        | [      | 3]       | 830.0-835.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 175        | [      | 3]       | 835.0-840.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 176        | [      | 3]       | 840.0-845.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 177        | [      | 3]       | 845.0-850.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 178<br>179 | ]<br>[ | 3]<br>3] | 850.0-855.0<br>855.0-860.0 | sec<br>sec |            | MBytes<br>MBytes | 507<br>512 | Mbits/sec<br>Mbits/sec |
| 179        | l<br>[ | 3]       | 860.0-865.0                | sec        |            | MBytes           | 514        | Mbits/sec              |
| 180        | l<br>[ | 3]       | 865.0-870.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 182        | l<br>[ | 3]       | 870.0-875.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 183        | [      | 3]       | 875.0-880.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 184        | [      | 3]       | 880.0-885.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 185        | [      | 3]       | 885.0-890.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 186        | [      | 3]       | 890.0-895.0                | sec        | 307        | MBytes           | 515        | Mbits/sec              |
| 187        | [      | 3]       | 895.0-900.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 188        | [      | 3]       | 0.0-900.0 s                | sec        | 53.0 (     | GBytes           | 505 1      | Mbits/sec              |
| 189        |        |          |                            |            |            |                  |            |                        |

| Se     | endi     | c connecting to 1<br>ng 1470 byte data<br>affer size: 224 |                          | -                              |     |
|--------|----------|---|--------------------------|--------------------------------|-----|
| <br>[  | 3]       | local 10.0.3.8 p  |                          | nnected with 172.16.0.2 port   | 500 |
| [      | ID]      | Interval 7  | Fransfer                 | Bandwidth                      |     |
| [      | 3]       | 0.0- 5.0 sec  | 481 MBytes               | 808 Mbits/sec                  |     |
| [      | 3]       | 5.0-10.0 sec  | 481 MBytes               | 806 Mbits/sec                  |     |
| [      |          | 10.0-15.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      | -        | 15.0-20.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      |          | 20.0-25.0 sec   | 480 MBytes               | 806 Mbits/sec                  |     |
| ]<br>[ | -        | 25.0-30.0 sec   | 481 MBytes<br>481 MBytes | 808 Mbits/sec<br>807 Mbits/sec |     |
| L<br>[ | 3]       | 30.0-35.0 sec<br>35.0-40.0 sec                            | 481 MBytes<br>481 MBytes | 807 Mbits/sec                  |     |
| L<br>[ | -        | 40.0-45.0 sec   | 479 MBytes               | 804 Mbits/sec                  |     |
| [      | -        | 45.0-50.0 sec   | 481 MBytes               | 806 Mbits/sec                  |     |
| [      |          | 50.0-55.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      |          | 55.0-60.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      |          | 60.0-65.0 sec   | 481 MBytes               | 806 Mbits/sec                  |     |
| [      |          | 65.0-70.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      | 3]       | 70.0-75.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      | 3]       | 75.0-80.0 sec   | 481 MBytes               | 808 Mbits/sec                  |     |
| [      | 3]       | 80.0-85.0 sec   | 481 MBytes               | 806 Mbits/sec                  |     |
| [      | 3]       | 85.0-90.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      | 3]       | 90.0-95.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      | 3]       | 95.0-100.0 sec  | 481 MBytes               | 807 Mbits/sec                  |     |
| [      | -        | 100.0-105.0 sec   | 480 MBytes               | · · · · · · ·                  |     |
| [      | 3]       |   | 481 MBytes               |                                |     |
| [      |          | 110.0-115.0 sec   | 481 MBytes               |                                |     |
| [      |          | 115.0-120.0 sec   | 481 MBytes               |                                |     |
| [      |          | 120.0-125.0 sec   | 481 MBytes               |                                |     |
| ]<br>[ |          | 125.0-130.0 sec<br>130.0-135.0 sec                        | 481 MBytes               | · · · · · · ·                  |     |
| [      |          | 135.0-140.0 sec   | 481 MBytes<br>480 MBytes |                                |     |
| [      |          | 140.0-145.0 sec   | 481 MBytes               |                                |     |
| [      |          | 145.0-150.0 sec   | 481 MBytes               |                                |     |
| [      |          | 150.0-155.0 sec   | 481 MBytes               |                                |     |
| [      |          | 155.0-160.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 160.0-165.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      | 3]       | 165.0-170.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 170.0-175.0 sec   | 480 MBytes               | 806 Mbits/sec                  |     |
| [      | 3]       | 175.0-180.0 sec   | 481 MBytes               | 806 Mbits/sec                  |     |
| [      | 3]       | 180.0-185.0 sec   | 481 MBytes               |                                |     |
| [      | -        | 185.0-190.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 190.0-195.0 sec   | 481 MBytes               | 807 Mbits/sec                  |     |
| [      | 3]       | 195.0-200.0 sec   | 481 MBytes               | 806 Mbits/sec                  |     |
| [      | 3]       | 200.0-205.0 sec   | 481 MBytes               | · · · · · ·                    |     |
| [      | 3]       | 205.0-210.0 sec   | 480 MBytes               |                                |     |
| [      | 3]       | 210.0-215.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 215.0-220.0 sec   | 481 MBytes               |                                |     |
| ]      | 3]<br>3] | 220.0-225.0 sec<br>225.0-230.0 sec                        | 481 MBytes               |                                |     |
| L<br>[ | 3]       | 230.0-235.0 sec   | 481 MBytes<br>481 MBytes |                                |     |
| L<br>[ | 3]       | 235.0-240.0 sec   | 481 MBytes<br>481 MBytes |                                |     |
| [      | 3]       | 240.0-245.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 245.0-250.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 250.0-255.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 255.0-260.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 260.0-265.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 265.0-270.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 270.0-275.0 sec   | 481 MBytes               |                                |     |
| [      | 3]       | 275.0-280.0 sec   | 481 MBytes               | · · · · · ·                    |     |
| [      | 3]       | 280.0-285.0 sec   | 481 MBytes               | 806 Mbits/sec                  |     |
| [      | 3]       | 285.0-290.0 sec   | 481 MBytes               | 808 Mbits/sec                  |     |

| 256 | [      | 3] | 290.0-295.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
|-----|--------|----|-------------|-----|-----|------------------|-----|-----------|
| 257 | [      | 3] | 295.0-300.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 258 | [      | 3] | 300.0-305.0 | sec | 480 | MBytes           | 805 | Mbits/sec |
| 259 | [      | 3] | 305.0-310.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 260 | ſ      | 3] | 310.0-315.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 261 | ſ      | 3] | 315.0-320.0 | sec | 481 | MBvtes           | 806 | Mbits/sec |
| 262 | ī      | 3] | 320.0-325.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 263 | i      | 3] | 325.0-330.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 264 | ľ      | 3] | 330.0-335.0 |     | 481 | MBytes           | 807 | Mbits/sec |
|     |        | -  |             | sec |     | -                |     |           |
| 265 | ]      | 3] | 335.0-340.0 | sec | 480 | MBytes           | 805 | Mbits/sec |
| 266 | ]      | 3] | 340.0-345.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 267 | [      | 3] | 345.0-350.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 268 | [      | 3] | 350.0-355.0 | sec | 480 | MBytes           | 806 | Mbits/sec |
| 269 | [      | 3] | 355.0-360.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 270 | [      | 3] | 360.0-365.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 271 | [      | 3] | 365.0-370.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 272 | ſ      | 3] | 370.0-375.0 | sec | 480 | MBytes           | 806 | Mbits/sec |
| 273 | ſ      | 3] | 375.0-380.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 274 | ĺ      | 3] | 380.0-385.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 275 | ]      | 3] | 385.0-390.0 | sec | 482 | MBytes           | 808 | Mbits/sec |
| 276 | i      | 3] | 390.0-395.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 277 | l [    | 3] | 395.0-400.0 |     | 481 | MBytes           | 807 | Mbits/sec |
|     |        | -  |             | sec |     | -                |     |           |
| 278 | ]      | 3] | 400.0-405.0 | sec | 480 | MBytes           | 806 | Mbits/sec |
| 279 | ]      | 3] | 405.0-410.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 280 | [      | 3] | 410.0-415.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 281 | [      | 3] | 415.0-420.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 282 | [      | 3] | 420.0-425.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 283 | [      | 3] | 425.0-430.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 284 | [      | 3] | 430.0-435.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 285 | [      | 3] | 435.0-440.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 286 | ]      | 3] | 440.0-445.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 287 | [      | 3] | 445.0-450.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 288 | ſ      | 3] | 450.0-455.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 289 | ſ      | 3] | 455.0-460.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 290 | ſ      | 3] | 460.0-465.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 291 | ĺ      | 3] | 465.0-470.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 292 | ī      | 3] | 470.0-475.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 293 | i      | 3] | 475.0-480.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 294 | Ĩ      | 3] | 480.0-485.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 295 | ĺ      | 3] | 485.0-490.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
|     |        | 3] | 490.0-495.0 |     | 481 | -                | 807 | Mbits/sec |
| 296 | [      | -  |             | sec |     | MBytes<br>MBytes |     | Mbits/sec |
| 297 | [      | 3] | 495.0-500.0 | sec | 481 | -                | 806 |           |
| 298 | ]      | 3] | 500.0-505.0 | sec | 481 | MBytes           | 808 | Mbits/sec |
| 299 | [      | 3] | 505.0-510.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 300 | [      | 3] | 510.0-515.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 301 | [      | 3] | 515.0-520.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 302 | [      | 3] | 520.0-525.0 | sec | 480 | MBytes           | 805 | Mbits/sec |
| 303 | [      | 3] | 525.0-530.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 304 | [      | 3] | 530.0-535.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
| 305 | [      | 3] | 535.0-540.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 306 | ]      | 3] | 540.0-545.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 307 | ]      | 3] | 545.0-550.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 308 | 1      | 3] | 550.0-555.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 309 | ſ      | 3] | 555.0-560.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 310 | ſ      | 3] | 560.0-565.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 311 | ſ      | 3] | 565.0-570.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 312 | ĺ      | 3] | 570.0-575.0 | sec | 481 | MBytes           | 807 | Mbits/sec |
| 313 | ĺ      | 3] | 575.0-580.0 | sec | 480 | MBytes           | 806 | Mbits/sec |
| 314 | ĺ      | 3] | 580.0-585.0 | sec | 480 | MBytes           | 806 | Mbits/sec |
| 315 | l [    | 3] | 585.0-590.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
|     | l<br>[ | 3] | 590.0-595.0 |     |     | MBytes           | 807 | Mbits/sec |
| 316 | L<br>[ | 3] | 595.0-600.0 | sec | 481 | -                | 806 | Mbits/sec |
| 317 |        | -  |             | sec | 481 | MBytes           |     |           |
| 318 | [      | 3] | 600.0-605.0 | sec | 481 | MBytes           | 808 | Mbits/sec |
| 319 | [      | 3] | 605.0-610.0 | sec | 480 | MBytes           | 806 | Mbits/sec |
| 320 | [      | 3] | 610.0-615.0 | sec | 481 | MBytes           | 808 | Mbits/sec |
| 321 | [      | 3] | 615.0-620.0 | sec | 481 | MBytes           | 806 | Mbits/sec |
|     |        |    |             |     |     |                  |     |           |

| 1          | TC      | рт         | raffic                     |     | Re    | sults f          | or Tin  | y VMs case3                          |               |         |
|------------|---------|------------|----------------------------|-----|-------|------------------|---------|--------------------------------------|---------------|---------|
| 362        | L       | 2]         | 0.0 900.0 S                |     | _     |                  |         |                                      | uc t          |         |
| 381<br>382 | ι3<br>Γ | ]0.0<br>3] | 0-900.0 sec<br>0.0-900.0 s |     | -     |                  |         | sec 0.122 ms 129<br>ceived out-of-or |               | (∠・⊥る)  |
| 380        | [       |            | Server Repor               |     | D.++  |                  | Noite / | 100 0 100 mg 100                     | 0601/61720702 | (2 1 %) |
| 379        | [       | -          | Sent 6173878               |     | ıgrai | ns               |         |                                      |               |         |
| 378        | [       | 3]         | 0.0-900.0 s                |     |       | GBytes           | 807 I   | Abits/sec                            |               |         |
| 377        | [       | 3]         | 895.0-900.0                | sec | 481   | MBytes           |         | Mbits/sec                            |               |         |
| 376        | [       | -          | 890.0-895.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 375        | [       |            | 885.0-890.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 373        | L<br>[  |            | 880.0-885.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 372<br>373 | ]<br>[  | -          | 875.0-880.0                |     |       | MBytes<br>MBytes |         | Mbits/sec<br>Mbits/sec               |               |         |
| 371        | [<br>r  |            | 865.0-870.0<br>870.0-875.0 |     |       | MBytes<br>MBytes |         | Mbits/sec<br>Mbits/sec               |               |         |
| 370        | [<br>r  |            | 860.0-865.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 369        | [       |            | 855.0-860.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 368        | [       | -          | 850.0-855.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 367        | [       |            | 845.0-850.0                | sec |       | MBytes           | 806     | Mbits/sec                            |               |         |
| 366        | [       | 3]         | 840.0-845.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 365        | [       | 3]         | 835.0-840.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 364        | [       | 3]         | 830.0-835.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 362        | [       | 3]         | 820.0-825.0                |     |       | MBytes<br>MBytes |         | Mbits/sec                            |               |         |
| 361<br>362 | [<br>[  |            | 815.0-820.0<br>820.0-825.0 |     |       | MBytes<br>MBytes |         | Mbits/sec<br>Mbits/sec               |               |         |
| 360        | [<br>r  | 3]         | 810.0-815.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 359        | [       | 3]         | 805.0-810.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 358        | [       | 3]         | 800.0-805.0                |     | 480   | MBytes           |         | Mbits/sec                            |               |         |
| 357        | [       | 3]         | 795.0-800.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 356        | [       | 3]         | 790.0-795.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 355        | [       | 3]         | 785.0-790.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 354        | [       | 3]         | 780.0-785.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 352        | [       | 3]         | 775.0-780.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 351<br>352 | ]<br>[  | 3]<br>3]   | 765.0-770.0<br>770.0-775.0 |     |       | MBytes<br>MBytes |         | Mbits/sec<br>Mbits/sec               |               |         |
| 350        | [<br>r  | 3]         | 760.0-765.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 349        | [       | 3]         | 755.0-760.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 348        | [       | 3]         | 750.0-755.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 347        | [       | 3]         | 745.0-750.0                | sec | 480   | MBytes           | 806     | Mbits/sec                            |               |         |
| 346        | [       | 3]         | 740.0-745.0                | sec | 481   | MBytes           | 807     | Mbits/sec                            |               |         |
| 345        | [       | 3]         | 735.0-740.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 344        | [       | 3]         | 730.0-735.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 343        | l<br>[  | 3]         | 725.0-730.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 341        | l<br>[  | 3]         | 720.0-725.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 340<br>341 | ]       | 3]<br>3]   | 710.0-715.0<br>715.0-720.0 |     |       | MBytes<br>MBytes |         | Mbits/sec<br>Mbits/sec               |               |         |
| 339        | [<br>r  | 3]         | 705.0 - 710.0              |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 338        | [       | 3]         | 700.0-705.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 337        | [       | 3]         | 695.0-700.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 336        | [       | 3]         | 690.0-695.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 335        | [       | 3]         | 685.0-690.0                | sec | 481   | MBytes           | 807     | Mbits/sec                            |               |         |
| 334        | [       | 3]         | 680.0-685.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 333        | [       | 3]         | 675.0-680.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 332        | [       | 3]         | 670.0-675.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 331        | [       | 3]         | 665.0-670.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 329        | [       | 31         | 655.0-660.0<br>660.0-665.0 |     |       | MBytes<br>MBytes |         | Mbits/sec                            |               |         |
| 328<br>329 | ]<br>[  | 3]<br>3]   |                            |     |       | MBytes           |         | Mbits/sec<br>Mbits/sec               |               |         |
| 327        | [<br>r  | 3]         | 645.0-650.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 326        | [       | 3]         | 640.0-645.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 325        | [       | 3]         | 635.0-640.0                | sec | 481   | MBytes           | 807     | Mbits/sec                            |               |         |
| 324        | [       | 3]         |                            |     |       | MBytes           | 806     | Mbits/sec                            |               |         |
| 323        | [       | 3]         | 625.0-630.0                |     |       | MBytes           |         | Mbits/sec                            |               |         |
| 322        | ] [     | 3]         | 620.0-625.0                | sec | 481   | MBytes           | 806     | Mbits/sec                            |               |         |
|            |         |            |                            |     |       |                  |         |                                      |               |         |

TCP Traffic 1 \_\_\_\_\_

\_\_\_\_\_ \_\_\_\_ Client connecting to 10.0.3.9, TCP port 5001 TCP window size: 23.5 KByte (default)

2 3 4

\_\_\_\_

| 5        |              |  |
|----------|--------------|--|
| 6        | [ 3]         | local 10.0.3.8 port 48739 connected with 10.0.3.9 port 5001                            |
| 7        | [ ID]        | Interval Transfer Bandwidth  |
| 8        | [ 3]         | -  |
| 9        | [ 3]         | -  |
| 10       |              | 10.0-15.0 sec 329 MBytes 553 Mbits/sec   |
| 11<br>12 | [ 3]         | -  |
| 12       |              | 20.0-25.0 sec 335 MBytes 561 Mbits/sec<br>25.0-30.0 sec 337 MBytes 566 Mbits/sec       |
| 13       |              | 30.0-35.0 sec 334 MBytes 560 Mbits/sec   |
| 15       |              | 35.0-40.0 sec 337 MBytes 566 Mbits/sec   |
| 16       |              | 40.0-45.0 sec 332 MBytes 558 Mbits/sec   |
| 17       | [ 3]         | 45.0-50.0 sec 332 MBytes 557 Mbits/sec   |
| 18       | [ 3]         | 50.0-55.0 sec 337 MBytes 565 Mbits/sec   |
| 19       |              | 55.0-60.0 sec 332 MBytes 558 Mbits/sec   |
| 20       |              | 60.0-65.0 sec 331 MBytes 555 Mbits/sec   |
| 21       |              | 65.0-70.0 sec 330 MBytes 554 Mbits/sec   |
| 22       |              | 70.0-75.0 sec 332 MBytes 557 Mbits/sec   |
| 23       |              | 75.0-80.0 sec 341 MBytes 573 Mbits/sec   |
| 24<br>25 |              | 80.0-85.0 sec 335 MBytes 562 Mbits/sec<br>  85.0-90.0 sec 339 MBytes 569 Mbits/sec     |
| 25<br>26 |              | 85.0-90.0 sec 339 MBytes 569 Mbits/sec<br>  90.0-95.0 sec 335 MBytes 562 Mbits/sec     |
| 20       |              | 95.0-100.0 sec 342 MBytes 574 Mbits/sec  |
| 28       |              | 100.0-105.0 sec 340 MBytes 570 Mbits/sec   |
| 29       |              | 105.0-110.0 sec 346 MBytes 580 Mbits/sec   |
| 30       | [ 3]         | 110.0-115.0 sec 352 MBytes 590 Mbits/sec   |
| 31       | [ 3]         | 115.0-120.0 sec 355 MBytes 596 Mbits/sec   |
| 32       | [ 3]         | 120.0-125.0 sec 354 MBytes 593 Mbits/sec   |
| 33       |              | 125.0-130.0 sec 361 MBytes 606 Mbits/sec   |
| 34       |              | 130.0-135.0 sec 340 MBytes 570 Mbits/sec   |
| 35       |              | 135.0-140.0 sec 342 MBytes 573 Mbits/sec   |
| 36       |              | 140.0-145.0 sec 343 MBytes 575 Mbits/sec   |
| 37<br>38 | [ 3]<br>[ 3] | 145.0–150.0 sec 336 MBytes 563 Mbits/sec<br>  150.0–155.0 sec 334 MBytes 560 Mbits/sec |
| 39       |              | 155.0-160.0 sec 338 MBytes 566 Mbits/sec   |
| 40       |              | 160.0-165.0 sec 339 MBytes 569 Mbits/sec   |
| 41       |              | 165.0-170.0 sec 343 MBytes 576 Mbits/sec   |
| 42       | [ 3]         | -  |
| 43       | [ 3]         | 175.0-180.0 sec 341 MBytes 572 Mbits/sec   |
| 44       | [ 3]         | 180.0-185.0 sec 338 MBytes 566 Mbits/sec   |
| 45       |              | 185.0-190.0 sec 332 MBytes 556 Mbits/sec   |
| 46       |              | 190.0-195.0 sec 338 MBytes 568 Mbits/sec   |
| 47       |              | 195.0-200.0 sec 348 MBytes 584 Mbits/sec   |
| 48       |              | 200.0-205.0 sec 339 MBytes 568 Mbits/sec   |
| 49<br>50 |              | 205.0-210.0 sec 327 MBytes 549 Mbits/sec   |
| 50<br>51 |              | 210.0-215.0 sec 341 MBytes 572 Mbits/sec<br>  215.0-220.0 sec 357 MBytes 599 Mbits/sec |
| 52       |              | 220.0-225.0 sec 331 MBytes 556 Mbits/sec   |
| 53       | [ 3]         |  |
| 54       | [ 3]         | · · · · · · · · · · · · · · · · · · ·  |
| 55       | [ 3]         | -  |
| 56       | [ 3]         | 240.0-245.0 sec 335 MBytes 561 Mbits/sec   |
| 57       | [ 3]         | · · · · · · · · · · · · · · · · · · ·  |
| 58       | [ 3]         | · · · · · · · · · · · · · · · · · · ·  |
| 59       | [ 3]         | · · · · · · · · · · · · · · · · · · ·  |
| 60       | [ 3]         | -  |
| 61<br>62 | [ 3]<br>[ 3] | · · · · · · · · · · · · · · · · · · ·  |
| 62<br>63 | [ 3]<br>[ 3] |  |
| 63<br>64 | [ 3]         | · · · · · · · · · · · · · · · · · · ·  |
| 65       | [ 3]         | -  |
| 66       | [ 3]         | · · · · · · · · · · · · · · · · · · ·  |
| 67       | [ 3]         | · · · · · · · · · · · · · · · · · · ·  |
| 68       | [ 3]         |  |
| 69       | [ 3]         |  |
| 70       | [ 3]         | ] 310.0-315.0 sec 326 MBytes 547 Mbits/sec   |
|          |              |  |

| 71       | [      | 3] | 315.0-320.0 | sec | 335 | MBytes | 563 | Mbits/sec |
|----------|--------|----|-------------|-----|-----|--------|-----|-----------|
| 72       | [      | 3] | 320.0-325.0 | sec | 323 | MBytes | 543 | Mbits/sec |
| 73       | [      | 3] | 325.0-330.0 | sec | 344 | MBytes | 577 | Mbits/sec |
| 74       | [      | 3] | 330.0-335.0 | sec | 333 | MBytes | 559 | Mbits/sec |
| 75       | [      | 3] | 335.0-340.0 | sec | 333 | MBytes | 559 | Mbits/sec |
| 76       | [      | 3] | 340.0-345.0 | sec | 327 | MBytes | 549 | Mbits/sec |
| 77       | [      | 3] | 345.0-350.0 | sec | 330 | MBytes | 553 | Mbits/sec |
| 78       | ĺ      | 3] | 350.0-355.0 | sec | 322 | MBytes | 541 | Mbits/sec |
| 79       | [      | 3] | 355.0-360.0 | sec | 342 | MBytes | 574 | Mbits/sec |
| 80       | [      | 3] | 360.0-365.0 | sec | 346 | MBytes | 581 | Mbits/sec |
| 81       | ĺ      | 3] | 365.0-370.0 | sec | 337 | MBytes | 565 | Mbits/sec |
| 82       | [      | 3] | 370.0-375.0 | sec | 333 | MBytes | 559 | Mbits/sec |
| 83       | [      | 3] | 375.0-380.0 | sec | 364 | MBytes |     | Mbits/sec |
| 83<br>84 | [      | 3] | 380.0-385.0 | sec | 342 | MBytes | 574 | Mbits/sec |
| 85       | l<br>[ | 3] | 385.0-390.0 |     | 335 | -      | 561 | Mbits/sec |
|          |        | 3] |             | sec | 343 | MBytes |     | Mbits/sec |
| 86       | [      | -  | 390.0-395.0 | sec |     | MBytes |     |           |
| 87       | [      | 3] | 395.0-400.0 | sec | 343 | MBytes |     | Mbits/sec |
| 88       | [      | 3] | 400.0-405.0 | sec | 335 | MBytes | 562 |           |
| 89       | [      | 3] | 405.0-410.0 | sec | 331 | MBytes | 555 | Mbits/sec |
| 90       | [      | 3] | 410.0-415.0 | sec | 333 | MBytes | 559 | Mbits/sec |
| 91       | [      | 3] | 415.0-420.0 | sec | 326 | MBytes | 547 | Mbits/sec |
| 92       | [      | 3] | 420.0-425.0 | sec | 329 | MBytes | 552 | Mbits/sec |
| 93       | [      | 3] | 425.0-430.0 | sec | 329 | MBytes | 552 | Mbits/sec |
| 94       | [      | 3] | 430.0-435.0 | sec | 325 | MBytes | 545 | Mbits/sec |
| 95       | [      | 3] | 435.0-440.0 | sec | 343 | MBytes | 575 | Mbits/sec |
| 96       | [      | 3] | 440.0-445.0 | sec | 341 | MBytes | 573 | Mbits/sec |
| 97       | [      | 3] | 445.0-450.0 | sec | 339 | MBytes | 569 | Mbits/sec |
| 98       | [      | 3] | 450.0-455.0 | sec | 334 | MBytes | 560 | Mbits/sec |
| 99       | [      | 3] | 455.0-460.0 | sec | 333 | MBytes | 559 | Mbits/sec |
| 100      | [      | 3] | 460.0-465.0 | sec | 321 | MBytes | 539 | Mbits/sec |
| 101      | [      | 3] | 465.0-470.0 | sec | 326 | MBytes | 548 | Mbits/sec |
| 102      | [      | 3] | 470.0-475.0 | sec | 330 | MBytes | 553 | Mbits/sec |
| 103      | [      | 3] | 475.0-480.0 | sec | 322 | MBytes | 540 | Mbits/sec |
| 104      | [      | 3] | 480.0-485.0 | sec | 320 | MBytes | 538 | Mbits/sec |
| 105      | [      | 3] | 485.0-490.0 | sec | 344 | MBytes | 576 | Mbits/sec |
| 106      | [      | 3] | 490.0-495.0 | sec | 334 | MBytes | 561 | Mbits/sec |
| 107      | [      | 3] | 495.0-500.0 | sec | 326 | MBytes | 547 | Mbits/sec |
| 108      | [      | 3] | 500.0-505.0 | sec | 351 | MBytes | 589 | Mbits/sec |
| 109      | [      | 3] | 505.0-510.0 | sec | 344 | MBytes | 578 | Mbits/sec |
| 110      | [      | 3] | 510.0-515.0 | sec | 337 | MBytes | 565 | Mbits/sec |
| 111      | [      | 3] | 515.0-520.0 | sec | 320 | MBytes | 537 | Mbits/sec |
| 112      | [      | 3] | 520.0-525.0 | sec | 328 | MBytes | 551 | Mbits/sec |
| 113      | [      | 3] | 525.0-530.0 | sec | 326 | MBytes | 548 | Mbits/sec |
| 114      | [      | 3] | 530.0-535.0 | sec | 328 | MBytes | 551 | Mbits/sec |
| 115      | [      | 3] | 535.0-540.0 | sec | 323 | MBytes | 541 | Mbits/sec |
| 116      | [      | 3] | 540.0-545.0 | sec | 326 | MBytes | 547 | Mbits/sec |
| 117      | [      | 3] | 545.0-550.0 | sec | 333 | MBytes | 559 | Mbits/sec |
| 118      | [      | 3] | 550.0-555.0 | sec | 333 | MBytes | 559 | Mbits/sec |
| 119      | [      | 3] | 555.0-560.0 | sec | 349 | MBytes | 585 | Mbits/sec |
| 120      | [      | 3] | 560.0-565.0 | sec | 335 | MBytes | 563 | Mbits/sec |
| 121      | [      | 3] | 565.0-570.0 | sec | 338 | MBytes | 567 | Mbits/sec |
| 122      | [      | 3] | 570.0-575.0 | sec | 325 | MBytes | 546 | Mbits/sec |
| 123      | [      | 3] | 575.0-580.0 | sec | 333 | MBytes | 559 | Mbits/sec |
| 124      | [      | 3] | 580.0-585.0 | sec | 317 | MBytes | 532 | Mbits/sec |
| 125      | [      | 3] | 585.0-590.0 | sec | 320 | MBytes | 536 | Mbits/sec |
| 126      | [      | 3] | 590.0-595.0 | sec | 342 | MBytes | 574 |           |
| 127      | [      | 3] | 595.0-600.0 | sec | 331 | MBytes | 556 | Mbits/sec |
| 128      | ĺ      | 3] | 600.0-605.0 | sec | 332 | MBytes | 557 | Mbits/sec |
| 129      | ĺ      | 3] | 605.0-610.0 | sec | 327 | MBytes | 549 | Mbits/sec |
| 130      | [      | 3] | 610.0-615.0 | sec | 336 | MBytes | 565 | Mbits/sec |
| 131      | [      | 3] | 615.0-620.0 | sec | 337 | MBytes | 565 | Mbits/sec |
| 132      | ĺ      | 3] | 620.0-625.0 | sec | 345 | MBytes | 579 | Mbits/sec |
| 133      | ĺ      | 3] | 625.0-630.0 | sec |     | MBytes | 547 | Mbits/sec |
| 134      | ĺ      | 3] | 630.0-635.0 | sec | 341 | MBytes |     | Mbits/sec |
| 135      | [      | 3] | 635.0-640.0 | sec | 341 | MBytes | 572 |           |
| 136      | [      | 3] | 640.0-645.0 | sec |     | MBytes |     | Mbits/sec |
| -        |        |    |             |     |     | 1.000  |     |           |

| 137 | [ 3]  | 645.0-650.0  | sec   | 338   | MBytes  | 568    | Mbits/sec            |
|-----|-------|--------------|-------|-------|---------|--------|----------------------|
| 138 | [ 3]  | 650.0-655.0  | sec   | 338   | MBytes  | 568    | Mbits/sec            |
| 139 | [ 3]  | 655.0-660.0  | sec   | 341   | MBytes  | 572    | Mbits/sec            |
| 140 | [ 3]  |              | sec   |       | MBytes  | 558    | Mbits/sec            |
| 141 | [ 3]  |              |       |       | MBytes  |        | Mbits/sec            |
| 142 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 142 | [ 3]  |              | sec   |       | -       |        | Mbits/sec            |
|     |       |              |       |       | MBytes  |        |                      |
| 144 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 145 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 146 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 147 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 148 | [ 3]  | 700.0-705.0  | sec   | 334   | MBytes  | 561    | Mbits/sec            |
| 149 | [ 3]  | 705.0-710.0  | sec   | 344   | MBytes  | 578    | Mbits/sec            |
| 150 | [ 3]  | 710.0-715.0  | sec   | 333   | MBytes  | 558    | Mbits/sec            |
| 151 | [ 3]  | 715.0-720.0  | sec   | 340   | MBytes  | 571    | Mbits/sec            |
| 152 | [ 3]  | 720.0-725.0  | sec   | 332   | MBytes  | 557    | Mbits/sec            |
| 153 | [ 3]  |              | sec   |       | MBytes  | 549    | Mbits/sec            |
| 154 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 155 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
|     | [ 3]  |              |       |       | -       |        | Mbits/sec            |
| 156 |       |              | sec   |       | MBytes  |        |                      |
| 157 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 158 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 159 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 160 | [ 3]  | 760.0-765.0  | sec   | 323   | MBytes  | 541    | Mbits/sec            |
| 161 | [ 3]  | 765.0-770.0  | sec   | 331   | MBytes  | 555    | Mbits/sec            |
| 162 | [ 3]  | 770.0-775.0  | sec   | 327   | MBytes  | 549    | Mbits/sec            |
| 163 | [ 3]  | 775.0-780.0  | sec   | 327   | MBytes  | 549    | Mbits/sec            |
| 164 | [ 3]  | 780.0-785.0  | sec   | 321   | MBytes  | 538    | Mbits/sec            |
| 165 | [ 3]  | 785.0-790.0  | sec   | 328   | MBytes  | 551    | Mbits/sec            |
| 166 | [ 3]  |              | sec   |       | MBytes  | 538    | Mbits/sec            |
| 167 | [ 3]  |              |       |       | MBytes  |        | Mbits/sec            |
| 168 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 169 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
|     |       |              |       |       | -       |        |                      |
| 170 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 171 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 172 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 173 | [ 3]  |              | sec   | 336   | MBytes  |        | Mbits/sec            |
| 174 | [ 3]  | 830.0-835.0  | sec   | 346   | MBytes  |        | Mbits/sec            |
| 175 | [ 3]  | 835.0-840.0  | sec   | 328   | MBytes  | 551    | Mbits/sec            |
| 176 | [ 3]  | 840.0-845.0  | sec   | 336   | MBytes  | 563    | Mbits/sec            |
| 177 | [ 3]  | 845.0-850.0  | sec   | 337   | MBytes  | 565    | Mbits/sec            |
| 178 | [ 3]  | 850.0-855.0  | sec   | 329   | MBytes  | 552    | Mbits/sec            |
| 179 | [ 3]  | 855.0-860.0  | sec   | 336   | MBytes  | 564    | Mbits/sec            |
| 180 |       | 860.0-865.0  | sec   |       | MBytes  |        | Mbits/sec            |
| 181 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
| 182 | [ 3]  |              | sec   |       | MBytes  |        | Mbits/sec            |
|     | [ 3]  |              |       |       | -       |        | Mbits/sec            |
| 183 |       | 880.0-885.0  | sec   | 222   | MBytes  | 500    | Mbits/sec            |
| 184 |       |              |       |       |         |        |                      |
| 185 | [ 3]  | 885.0-890.0  | sec   | 323   | MBytes  | 541    |                      |
| 186 | [ 3]  | 890.0-895.0  | sec   | 352   | MBytes  | 591    | Mbits/sec            |
| 187 |       | 895.0-900.0  |       |       |         |        |                      |
| 188 | [ 3]  | 0.0-900.0 :  | sec 5 | 8.9 ( | GBytes  | 562 I  | Mbits/sec            |
| 189 |       |              |       |       |         |        |                      |
| 190 | UDP 1 | reaffic      |       |       |         |        |                      |
| 191 |       |              |       |       |         |        |                      |
| 192 | Clier | t connecting | to 10 | .0.3  | .9, UDP | port   | 5001                 |
| 193 |       | ng 1470 byte |       |       | -       | -      |                      |
| 194 |       | ouffer size: |       |       | (defau) | 1+)    |                      |
| 195 |       |              |       |       |         |        |                      |
|     |       |              |       |       |         |        | d with 10.0.3.9 port |
| 196 |       |              | -     |       |         |        |                      |
| 197 |       | Interval     |       |       | er H    |        |                      |
| 198 | [ 3]  | 0.0- 5.0 se  | ec 4  | ST W  | Bytes   | SUS MI | olts/sec             |
| 199 |       | 5.0-10.0 se  |       |       |         |        |                      |
| 200 |       | 10.0-15.0 se | ec 4  | 81 M  | Bytes   | 807 MI | bits/sec<br>bits/sec |
| 201 |       | 15.0-20.0 se |       |       |         |        |                      |
| 202 | [ 3]  | 20.0-25.0 se | ec 4  | 81 M  | Bytes   | 806 M  | bits/sec             |
|     |       |              |       |       |         |        |                      |

| 203        | [      | 3]       | 25.0-30.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
|------------|--------|----------|------------------------------------|--------------------------|--------------------------------|
| 204        | [      | 3]       | 30.0-35.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 205        | [      | 3]       | 35.0-40.0 sec                      | 481 MBytes               | 806 Mbits/sec                  |
| 206        | [      | 3]       | 40.0-45.0 sec                      | 479 MBytes               | 804 Mbits/sec                  |
| 207        | [      | 3]       | 45.0-50.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 208        | [      | 3]       | 50.0-55.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 209        | [      | 3]       | 55.0-60.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 210        | [      | 3]       | 60.0-65.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 211        | [      | 3]       | 65.0-70.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 212        | [      | 3]       | 70.0-75.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 213        | [      | 3]       | 75.0-80.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 214        | [      | 3]       | 80.0-85.0 sec                      | 480 MBytes               | 806 Mbits/sec                  |
| 215        | [      | 3]       | 85.0-90.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 216        | [      | 3]       | 90.0-95.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 217        | [      | 3]       | 95.0-100.0 sec                     | 480 MBytes               | 806 Mbits/sec                  |
| 218        | [      | 3]       | 100.0-105.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 219        | [      | 3]       | 105.0-110.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 220        | [      | 3]       | 110.0-115.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 221        | [      | 3]       | 115.0-120.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 222        | [      | 3]       | 120.0-125.0 sec                    | 481 MBytes               | 807 Mbits/sec<br>806 Mbits/sec |
| 223        | [      | 3]       | 125.0-130.0 sec                    | 480 MBytes               |                                |
| 224        | [      | 3]       | 130.0-135.0 sec                    | 481 MBytes               |                                |
| 225        | [      | 3]       | 135.0-140.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 226        | [      | 3]       | 140.0-145.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 227        | [      | 3]       | 145.0-150.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 228        | [      | 3]       | 150.0-155.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 229        | [      | 3]       | 155.0-160.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 230        | [      | 3]       | 160.0-165.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 231        | [      | 3]       | 165.0-170.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 232        | [      | 3]       | 170.0-175.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 233        | [      | 3]       | 175.0-180.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 234        | [      | 3]       | 180.0-185.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 235        | [      | 3]       | 185.0-190.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 236        | [      | 3]       | 190.0-195.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 237        | [      | 3]<br>3] | 195.0-200.0 sec                    | 481 MBytes<br>481 MBytes | 806 Mbits/sec<br>807 Mbits/sec |
| 238        | [      | -        | 200.0-205.0 sec                    | =                        |                                |
| 239        | [      | 3]<br>3] | 205.0-210.0 sec                    | 481 MBytes<br>481 MBytes | 806 Mbits/sec<br>806 Mbits/sec |
| 240<br>241 | [<br>[ | 3]       | 210.0-215.0 sec                    |                          | 807 Mbits/sec                  |
| 241        | l<br>[ | 3]       | 215.0-220.0 sec<br>220.0-225.0 sec | 481 MBytes<br>480 MBytes | 806 Mbits/sec                  |
| 242        | [      | 3]       | 225.0-230.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 243        | l<br>[ | 3]       | 230.0-235.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 244        | l<br>[ | 3]       | 235.0-240.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 245        | [      | 3]       | 240.0-245.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 247        | [      | 3]       | 245.0-250.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 247        | l<br>[ | 3]       | 250.0-255.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 240        | [      | 3]       | 255.0-260.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 250        | [      | 3]       | 260.0-265.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 251        | ĺ      | 3]       | 265.0-270.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 252        | ĺ      | 3]       | 270.0-275.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 253        | ĺ      | 3]       | 275.0-280.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 254        | ĺ      | 3]       | 280.0-285.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 255        | ĺ      | 3]       | 285.0-290.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 256        | ĺ      | 3]       | 290.0-295.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 257        | ĺ      | 3]       | 295.0-300.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 258        | ĺ      | 3]       | 300.0-305.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 259        | ĺ      | 3]       | 305.0-310.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 260        | ĺ      | 3]       | 310.0-315.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 261        | ĺ      | 3]       | 315.0-320.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 262        | ĺ      | 3]       | 320.0-325.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 263        | ĺ      | 3]       | 325.0-330.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 264        | ĺ      | 3]       | 330.0-335.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 265        | ĺ      | 3]       | 335.0-340.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 266        | [      | 3]       | 340.0-345.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 267        | [      | 3]       | 345.0-350.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 268        | [      | 3]       | 350.0-355.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
|            | • *    | -        |                                    | 4                        |                                |

| 269 | [      | 3] | 355.0-360.0 | sec |     | MBytes | 806 | Mbits/sec |
|-----|--------|----|-------------|-----|-----|--------|-----|-----------|
| 270 | [      | 3] | 360.0-365.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 271 | [      | 3] | 365.0-370.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 272 | [      | 3] | 370.0-375.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 273 | ſ      | 3] | 375.0-380.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 274 | ſ      | 3] | 380.0-385.0 | sec | 481 | MBvtes | 807 | Mbits/sec |
| 275 | ī      | 3] | 385.0-390.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 276 | ī      | 3] | 390.0-395.0 | sec | 481 | MBytes | 807 | Mbits/sec |
|     |        | -  |             |     |     | -      |     |           |
| 277 | ]      | 3] | 395.0-400.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 278 | [      | 3] | 400.0-405.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 279 | [      | 3] | 405.0-410.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 280 | [      | 3] | 410.0-415.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 281 | [      | 3] | 415.0-420.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 282 | 1      | 3] | 420.0-425.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 283 | ſ      | 3] | 425.0-430.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 284 | ĺ      | 3] | 430.0-435.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 285 | i      | 3] | 435.0-440.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 286 | l [    | 3] | 440.0-445.0 | sec | 481 | MBytes | 807 | Mbits/sec |
|     |        | -  |             |     |     | -      |     |           |
| 287 | ]      | 3] | 445.0-450.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 288 | [      | 3] | 450.0-455.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 289 | [      | 3] | 455.0-460.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 290 | [      | 3] | 460.0-465.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 291 | [      | 3] | 465.0-470.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 292 | [      | 3] | 470.0-475.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 293 | ]      | 3] | 475.0-480.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 294 | ]      | 3] | 480.0-485.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 295 | i      | 3] | 485.0-490.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 296 | ī      | 3] | 490.0-495.0 | sec | 480 | MBytes | 806 | Mbits/sec |
|     |        | -  |             |     |     | -      |     | Mbits/sec |
| 297 | ]      | 3] | 495.0-500.0 | sec | 481 | MBytes | 806 |           |
| 298 | ]      | 3] | 500.0-505.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 299 | ]      | 3] | 505.0-510.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 300 | [      | 3] | 510.0-515.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 301 | [      | 3] | 515.0-520.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 302 | [      | 3] | 520.0-525.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 303 | ſ      | 3] | 525.0-530.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 304 | ſ      | 3] | 530.0-535.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 305 | [      | 3] | 535.0-540.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 306 | ĺ      | 3] | 540.0-545.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 307 | ī      | 3] | 545.0-550.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 308 | ī      | 3] | 550.0-555.0 | sec | 481 | MBytes | 807 | Mbits/sec |
|     |        | -  | 555.0-560.0 |     |     | -      | 807 | Mbits/sec |
| 309 | ]      | 3] |             | sec | 481 | MBytes |     |           |
| 310 | ]      | 3] | 560.0-565.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 311 | [      | 3] | 565.0-570.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 312 | [      | 3] | 570.0-575.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 313 | [      | 3] | 575.0-580.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 314 | [      | 3] | 580.0-585.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 315 | ]      | 3] | 585.0-590.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 316 | [      | 3] | 590.0-595.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 317 | ĺ      | 3] | 595.0-600.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 318 | ĺ      | 3] | 600.0-605.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 319 | i      | 3] | 605.0-610.0 | sec |     | MBytes | 806 | Mbits/sec |
| 320 | Ē      | 3] | 610.0-615.0 | sec | 481 | MBytes | 806 | Mbits/sec |
|     |        | -  |             |     |     | -      |     |           |
| 321 | ]      | 3] | 615.0-620.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 322 | ]      | 3] | 620.0-625.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 323 | [      | 3] | 625.0-630.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 324 | [      | 3] | 630.0-635.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 325 | [      | 3] | 635.0-640.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 326 | [      | 3] | 640.0-645.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 327 | [      | 3] | 645.0-650.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 328 | [      | 3] | 650.0-655.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 329 | ĺ      | 3] | 655.0-660.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 330 | i      | 3] | 660.0-665.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 331 | Ē      | 3] | 665.0-670.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 332 | l<br>[ | 3] | 670.0-675.0 | sec | 480 | MBytes | 806 | Mbits/sec |
|     |        |    |             |     |     | -      |     |           |
| 333 | [      | 3] | 675.0-680.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 334 | [      | 3] | 680.0-685.0 | sec | 481 | MBytes | 807 | Mbits/sec |
|     |        |    |             |     |     |        |     |           |

| 335        |                             | MBytes 807 Mbits/sec                             |
|------------|-----------------------------|--|
| 336        |                             | MBytes 807 Mbits/sec                             |
| 337        |                             | MBytes 806 Mbits/sec                             |
| 338        |                             | MBytes 807 Mbits/sec                             |
| 339        |                             | MBytes 806 Mbits/sec                             |
| 340        |                             | MBytes 808 Mbits/sec                             |
| 341        |                             | MBytes 806 Mbits/sec                             |
| 342        |                             | MBytes 806 Mbits/sec                             |
| 343        |                             | MBytes 808 Mbits/sec                             |
| 344        |                             | MBytes 806 Mbits/sec                             |
| 345        |                             | MBytes 807 Mbits/sec                             |
| 346        |                             | MBytes 807 Mbits/sec                             |
| 347        |                             | MBytes 806 Mbits/sec                             |
| 348        |                             | MBytes 807 Mbits/sec                             |
| 349        |                             | MBytes 807 Mbits/sec                             |
| 350        |                             | MBytes 806 Mbits/sec                             |
| 351        |                             | MBytes 807 Mbits/sec                             |
| 352        |                             | MBytes 807 Mbits/sec                             |
| 353        |                             | MBytes 807 Mbits/sec                             |
| 354        |                             | MBytes 806 Mbits/sec                             |
| 355        |                             | MBytes 808 Mbits/sec                             |
| 356        |                             | MBytes 806 Mbits/sec                             |
| 357        |                             | MBytes 807 Mbits/sec                             |
| 358        |                             | MBytes 806 Mbits/sec                             |
| 359        |                             | MBytes 806 Mbits/sec                             |
| 360        |                             | MBytes 807 Mbits/sec                             |
| 361        |                             | MBytes 806 Mbits/sec<br>MBytes 807 Mbits/sec     |
| 362<br>363 |                             | -  |
| 363<br>364 |                             | MBytes 807 Mbits/sec<br>MBytes 807 Mbits/sec     |
| 365        |                             | MBytes 806 Mbits/sec                             |
| 366        |                             | MBytes 807 Mbits/sec                             |
| 367        |                             | MBytes 806 Mbits/sec                             |
| 368        |                             | MBytes 807 Mbits/sec                             |
| 369        |                             | MBytes 807 Mbits/sec                             |
| 370        |                             | MBytes 807 Mbits/sec                             |
| 371        |                             | MBytes 807 Mbits/sec                             |
| 372        |                             | MBytes 808 Mbits/sec                             |
| 373        |                             | MBytes 807 Mbits/sec                             |
| 374        |                             | MBytes 807 Mbits/sec                             |
| 375        |                             | MBytes 807 Mbits/sec                             |
| 376        | [ 3] 890.0-895.0 sec 481    | MBytes 807 Mbits/sec                             |
| 377        | [ 3] 895.0-900.0 sec 481    | MBytes 807 Mbits/sec                             |
| 378        | [ 3] 0.0-900.0 sec 84.5     | GBytes 807 Mbits/sec                             |
| 379        | [ 3] Sent 61740013 datagram | ms   |
| 380        | [ 3] Server Report:         |  |
| 381        | [3]0.0-900.0 sec 41.2 GByte | s 393 Mbits/sec 0.145 ms 31654985/61740009 (51%) |
| 382        | [ 3] 0.0-900.0 sec 309 d    | atagrams received out-of-order                   |
|            |                             | esults for Tiny VMs case4                        |
| 1          | TCP Traffic                 |  |
| 2          |                             |  |
| 4          | Client connecting to 172 16 |  |

| -  |  |       |            |       |        |         |         |                               |  |  |  |
|----|--|-------|------------|-------|--------|---------|---------|-------------------------------|--|--|--|
| 3  | Client connecting to 172.16.0.2, TCP port 5001 |       |            |       |        |         |         |                               |  |  |  |
| 4  | ΤC   | CP wi | indow size | : 23. | 5 KByt | te (def | ault)   |                               |  |  |  |
| 5  |  |       |            |       |        |         |         |                               |  |  |  |
| 6  | [  | 3]    | local 10.0 | 0.3.2 | port   | 56102   | connect | ted with 172.16.0.2 port 5001 |  |  |  |
| 7  | [  | ID]   | Interval   |       | Tran   | sfer    | Bandı   | width                         |  |  |  |
| 8  | [  | 3]    | 0.0- 5.0   | sec   | 351    | MBytes  | 589     | Mbits/sec                     |  |  |  |
| 9  | [  | 3]    | 5.0-10.0   | sec   | 347    | MBytes  | 583     | Mbits/sec                     |  |  |  |
| 10 | [  | 3]    | 10.0-15.0  | sec   | 347    | MBytes  | 582     | Mbits/sec                     |  |  |  |
| 11 | [  | 3]    | 15.0-20.0  | sec   | 348    | MBytes  | 585     | Mbits/sec                     |  |  |  |
| 12 | [  | 3]    | 20.0-25.0  | sec   | 346    | MBytes  | 580     | Mbits/sec                     |  |  |  |
| 13 | [  | 3]    | 25.0-30.0  | sec   | 348    | MBytes  | 584     | Mbits/sec                     |  |  |  |
| 14 | [  | 3]    | 30.0-35.0  | sec   | 346    | MBytes  | 581     | Mbits/sec                     |  |  |  |
| 15 | [  | 3]    | 35.0-40.0  | sec   | 348    | MBytes  | 584     | Mbits/sec                     |  |  |  |
| 16 | [  | 3]    | 40.0-45.0  | sec   | 346    | MBytes  | 580     | Mbits/sec                     |  |  |  |
| 17 | [  | 3]    | 45.0-50.0  | sec   | 346    | MBytes  | 581     | Mbits/sec                     |  |  |  |
|    |  |       |            |       |        |         |         |                               |  |  |  |

| 18       | [      | 3]       | 50.0-55.0 se               | €C         |            | Bytes            | 582 Mł     | bits/sec               |
|----------|--------|----------|----------------------------|------------|------------|------------------|------------|------------------------|
| 19       | [      | 3]       | 55.0-60.0 se               | ЭC         | 345 MH     | Bytes            | 579 Mł     | bits/sec               |
| 20       | [      | 3]       | 60.0-65.0 se               | €C         | 345 MH     | Bytes            | 579 Mł     | bits/sec               |
| 21       | [      | 3]       |                            | ec         |            | Bytes            |            | bits/sec               |
| 22       | [      | 3]       | 70.0-75.0 se               |            |            | Bytes            |            | pits/sec               |
| 23       | [      | 3]       |                            | ec         |            | Bytes            |            | bits/sec               |
| 24       | [      | 3]       |                            | ec         |            | Bytes            |            | bits/sec               |
| 25       | [      | 3]<br>3] |                            | ec         |            | Bytes            |            | bits/sec<br>bits/sec   |
| 26<br>27 | [<br>[ | 3]       |                            | ec<br>sec  |            | Bytes<br>MBytes  |            | Abits/sec              |
| 28       | [      | 31       | 100.0-105.0                | sec        | 349        | MBytes           |            | Mbits/sec              |
| 29       | ĺ      | 3]       | 105.0-110.0                | sec        | 348        | MBytes           | 585        | Mbits/sec              |
| 30       | [      | 3]       | 110.0-115.0                | sec        | 348        | MBytes           | 583        | Mbits/sec              |
| 31       | [      | 3]       | 115.0-120.0                | sec        | 346        | MBytes           | 581        | Mbits/sec              |
| 32       | [      | 3]       | 120.0-125.0                | sec        | 347        | MBytes           | 583        | Mbits/sec              |
| 33       | [      | 3]       | 125.0-130.0                | sec        | 346        | MBytes           | 581        | Mbits/sec              |
| 34       | [      | 3]       | 130.0-135.0                | sec        | 347        | MBytes           | 582        | Mbits/sec              |
| 35       | [      | 3]       | 135.0-140.0                | sec        | 337        | MBytes           | 565        | Mbits/sec              |
| 36       | [      | 3]       | 140.0-145.0                | sec        | 329        | MBytes           | 551        | Mbits/sec              |
| 37       | [<br>r | 3]<br>31 | 145.0-150.0                | sec        | 333        | MBytes           | 559<br>555 | Mbits/sec<br>Mbits/sec |
| 38<br>39 | [<br>[ | 3]       | 150.0-155.0<br>155.0-160.0 | sec<br>sec | 331<br>328 | MBytes<br>MBytes | 549        | Mbits/sec              |
| 40       | L<br>[ | 3]       | 160.0-165.0                | sec        | 328        | MBytes           | 550        | Mbits/sec              |
| 41       | ĺ      | 3]       | 165.0-170.0                | sec        | 332        | MBytes           | 558        | Mbits/sec              |
| 42       | ĺ      | 3]       | 170.0-175.0                | sec        | 330        | MBytes           | 554        | Mbits/sec              |
| 43       | [      | 3]       | 175.0-180.0                | sec        | 341        | MBytes           | 573        | Mbits/sec              |
| 44       | [      | 3]       | 180.0-185.0                | sec        | 340        | MBytes           | 570        | Mbits/sec              |
| 45       | [      | 3]       | 185.0-190.0                | sec        | 344        | MBytes           | 578        | Mbits/sec              |
| 46       | [      | 3]       | 190.0-195.0                | sec        | 345        | MBytes           | 579        | Mbits/sec              |
| 47       | [      | 3]       | 195.0-200.0                | sec        | 346        | MBytes           | 580        | Mbits/sec              |
| 48       | [      | 3]       | 200.0-205.0                | sec        | 345        | MBytes           | 579        | Mbits/sec              |
| 49<br>50 | [<br>r | 3]<br>3] | 205.0-210.0                | sec        | 348<br>350 | MBytes           | 584<br>587 | Mbits/sec<br>Mbits/sec |
| 50<br>51 | [<br>[ | 3]       | 210.0-215.0<br>215.0-220.0 | sec<br>sec | 345        | MBytes<br>MBytes | 578        | Mbits/sec              |
| 52       | l<br>[ | 3]       | 220.0-225.0                | sec        | 350        | MBytes           | 588        | Mbits/sec              |
| 53       | ĺ      | 3]       | 225.0-230.0                | sec        | 351        | MBytes           | 589        | Mbits/sec              |
| 54       | [      | 3]       | 230.0-235.0                | sec        | 346        | MBytes           | 580        | Mbits/sec              |
| 55       | [      | 3]       | 235.0-240.0                | sec        | 347        | MBytes           | 583        | Mbits/sec              |
| 56       | [      | 3]       | 240.0-245.0                | sec        | 348        | MBytes           | 583        | Mbits/sec              |
| 57       | [      | 3]       | 245.0-250.0                | sec        | 348        | MBytes           | 584        | Mbits/sec              |
| 58       | [      | 3]       | 250.0-255.0                | sec        | 346        | MBytes           | 581        | Mbits/sec              |
| 59       | [      | 3]       | 255.0-260.0                | sec        | 347        | MBytes           | 583        | Mbits/sec              |
| 60       | [      | 3]       | 260.0-265.0                | sec        | 350        | MBytes           | 587        | Mbits/sec              |
| 61<br>62 | [<br>[ | 3]<br>3] | 265.0-270.0<br>270.0-275.0 | sec<br>sec | 351<br>349 | MBytes<br>MBytes | 589<br>585 | Mbits/sec<br>Mbits/sec |
| 63       | L<br>[ | 3]       | 275.0-280.0                | sec        | 350        | MBytes           | 588        | Mbits/sec              |
| 64       | [      | 3]       | 280.0-285.0                | sec        |            | MBytes           | 591        | Mbits/sec              |
| 65       | [      | 3]       | 285.0-290.0                | sec        |            | MBytes           | 589        | Mbits/sec              |
| 66       | [      | 3]       | 290.0-295.0                | sec        | 352        | MBytes           | 591        | Mbits/sec              |
| 67       | [      | 3]       | 295.0-300.0                | sec        | 355        | MBytes           | 595        | Mbits/sec              |
| 68       | [      | 3]       | 300.0-305.0                | sec        | 352        | MBytes           | 591        | Mbits/sec              |
| 69       | [      | 3]       | 305.0-310.0                | sec        | 354        | MBytes           | 593        | Mbits/sec              |
| 70       | [      | 3]       | 310.0-315.0                | sec        | 352        | MBytes           | 590        | Mbits/sec              |
| 71       | [      | 3]       | 315.0-320.0                | sec        | 353        | MBytes           | 592        | Mbits/sec              |
| 72<br>73 | [<br>[ | 3]<br>31 | 320.0-325.0                | sec        | 350<br>350 | MBytes<br>MBytes | 587<br>588 | Mbits/sec<br>Mbits/sec |
| 73<br>74 | l<br>[ | 3]<br>3] | 325.0-330.0<br>330.0-335.0 | sec        | 348        | MBytes<br>MBytes | 588<br>585 | Mbits/sec              |
| 74<br>75 | L<br>[ | 3]       | 335.0-340.0                | sec<br>sec | 347        | MBytes           | 582        | Mbits/sec              |
| 76       | ĺ      | 3]       | 340.0-345.0                | sec        | 348        | MBytes           | 583        | Mbits/sec              |
| 77       | ĺ      | 3]       | 345.0-350.0                | sec        | 347        | MBytes           | 583        | Mbits/sec              |
| 78       | [      | 3]       | 350.0-355.0                | sec        | 347        | MBytes           | 582        | Mbits/sec              |
| 79       | ĺ      | 3]       | 355.0-360.0                | sec        | 348        | MBytes           | 584        | Mbits/sec              |
| 80       | [      | 3]       | 360.0-365.0                | sec        | 349        | MBytes           | 586        | Mbits/sec              |
| 81       | [      | 3]       | 365.0-370.0                | sec        | 346        | MBytes           | 580        | Mbits/sec              |
| 82       | [      | 3]       | 370.0-375.0                | sec        | 345        | MBytes           | 579        | Mbits/sec              |
| 83       | [      | 3]       | 375.0-380.0                | sec        | 348        | MBytes           | 583        | Mbits/sec              |
|          |        |          |                            |            |            |                  |            |                        |

| 1         3         380.0-385.0 sec         330 MBytes         587 Mbits/sec           86         (3)         390.0 sec         349 MBytes         585 Mbits/sec           87         (3)         395.0-400.0 sec         349 MBytes         585 Mbits/sec           87         (3)         400.0-405.0 sec         347 MBytes         582 Mbits/sec           89         (3)         410.0-415.0 sec         347 MBytes         582 Mbits/sec           91         (3)         415.0-420.0 sec         349 MBytes         585 Mbits/sec           92         (3)         425.0-430.0 sec         349 MBytes         585 Mbits/sec           93         (3)         430.0-435.0 sec         350 MBytes         586 Mbits/sec           94         (3)         440.0-445.0 sec         350 MBytes         588 Mbits/sec           96         (3)         440.0-445.0 sec         350 MBytes         591 Mbits/sec           97         (3)         450.0-470.0 sec         352 MBytes         591 Mbits/sec           100         (3)         465.0-470.0 sec         352 MBytes         591 Mbits/sec           101         (3)         465.0-470.0 sec         352 MBytes         591 Mbits/sec           102         (3)         490.0-495.0  |     |   |     |             |     |     |        |     |           |
|---|-----|---|-----|-------------|-----|-----|--------|-----|-----------|
| 66         [ 3] 390.0-395.0 sec         349 MBytes         584 Mbit/sec           87         [ 3] 400.0-405.0 sec         347 MBytes         582 Mbit/sec           88         [ 3] 400.0-405.0 sec         347 MBytes         582 Mbit/sec           89         [ 3] 415.0-420.0 sec         347 MBytes         582 Mbit/sec           91         [ 3] 415.0-420.0 sec         347 MBytes         586 Mbit/s/sec           92         [ 3] 425.0-430.0 sec         349 MBytes         586 Mbit/s/sec           93         [ 3] 430.0-435.0 sec         349 MBytes         586 Mbit/s/sec           94         [ 3] 440.0-445.0 sec         350 MBytes         588 Mbit/s/sec           95         [ 3] 440.0-445.0 sec         352 MBytes         591 Mbit/s/sec           98         [ 3] 450.0-460.0 sec         352 MBytes         590 Mbit/s/sec           101         [ 3] 460.0-465.0 sec         352 MBytes         591 Mbit/s/sec           102         [ 3] 470.0-475.0 sec         353 MBytes         592 Mbit/s/sec           103         [ 4] 3.00.0-505.0 sec         353 MBytes         592 Mbit/s/sec           104         [ 3] 490.0-495.0 sec         353 MBytes         592 Mbit/s/sec           105         [ 3] 505.0-550.0 sec         353 MBytes         592 Mbit/s/sec   | 84  | [ | 3]  | 380.0-385.0 | sec | 350 | MBytes | 587 | Mbits/sec |
| 87         [         3] 395.0-400.0 sec         349 MEytes         585 Mbits/sec           88         [         3] 405.0-410.0 sec         347 MEytes         582 Mbits/sec           90         [         3] 410.0-415.0 sec         347 MEytes         582 Mbits/sec           91         [         3] 415.0-420.0 sec         349 MEytes         585 Mbits/sec           92         [         3] 420.0-425.0 sec         349 MEytes         586 Mbits/sec           93         [         3] 420.0-445.0 sec         350 MEytes         581 Mbits/sec           94         [         3] 445.0-445.0 sec         350 MEytes         591 Mbits/sec           96         [         3] 445.0-465.0 sec         352 MEytes         591 Mbits/sec           99         [         3] 450.0-465.0 sec         354 MEytes         591 Mbits/sec           100         [         3] 460.0-485.0 sec         353 MEytes         592 Mbits/sec           101         [         3] 460.0-490.0 sec         353 MEytes         592 Mbits/sec           103         [         3] 490.0-495.0 sec         353 MEytes         592 Mbits/sec           104         [         3] 490.0-495.0 sec         353 MEytes         592 Mbits/sec           105         [  | 85  | [ | 3]  | 385.0-390.0 | sec | 349 | MBytes | 585 | Mbits/sec |
| 88         [         3]         400.0-405.0 sec         347 MBytes         582 Mbits/sec           89         []         3]         410.0-411.0 sec         347 MBytes         582 Mbits/sec           91         []         3]         415.0-420.0 sec         347 MBytes         582 Mbits/sec           92         []         3]         425.0-430.0 sec         349 MBytes         586 Mbits/sec           93         []         3]         430.0-435.0 sec         350 MBytes         588 Mbits/sec           94         []         3]         440.0-445.0 sec         350 MBytes         590 Mbits/sec           96         []         3]         450.0-455.0 sec         352 MBytes         591 Mbits/sec           98         []         3]         465.0-470.0 sec         352 MBytes         591 Mbits/sec           100         []         3]         465.0-470.0 sec         353 MBytes         592 Mbits/sec           101         []         3]         465.0-470.0 sec         353 MBytes         592 Mbits/sec           103         4]         490.0-495.0 sec         353 MBytes         592 Mbits/sec           103         4]         490.0-495.0 sec         353 MBytes         592 Mbits/sec           106  | 86  | [ | 3]  | 390.0-395.0 | sec | 348 | MBytes | 584 | Mbits/sec |
| 89         [         3]         405.0-410.0 sec         347 MBytes         582 Mbits/sec           90         [         3]         415.0-420.0 sec         347 MBytes         582 Mbits/sec           92         [         3]         420.0-425.0 sec         349 MBytes         586 Mbits/sec           93         [         3]         425.0-430.0 sec         349 MBytes         586 Mbits/sec           94         [         3]         435.0-445.0 sec         350 MBytes         589 Mbits/sec           94         [         3]         450.0-445.0 sec         352 MBytes         591 Mbits/sec           97         [         3]         455.0-460.0 sec         352 MBytes         591 Mbits/sec           100         [         3]         460.0-465.0 sec         349 MBytes         586 Mbits/sec           101         [         3]         470.0-475.0 sec         352 MBytes         591 Mbits/sec           102         [         3]         480.0-490.0 sec         353 MBytes         592 Mbits/sec           103         490.0-495.0 sec         353 MBytes         592 Mbits/sec         104           114         500.0-505.0 sec         353 MBytes         592 Mbits/sec           107         [  | 87  | [ | 3]  | 395.0-400.0 | sec | 349 | MBytes | 585 | Mbits/sec |
| 89         [ 3] 405.0-410.0 sec         346 MBytes         582 Mbits/sec           90         [ 3] 415.0-420.0 sec         346 MBytes         582 Mbits/sec           91         [ 3] 425.0-420.0 sec         349 MBytes         585 Mbits/sec           93         [ 3] 425.0-430.0 sec         349 MBytes         585 Mbits/sec           94         [ 3] 430.0-445.0 sec         349 MBytes         585 Mbits/sec           95         [ 3] 445.0-445.0 sec         350 MBytes         588 Mbits/sec           97         [ 3] 445.0-445.0 sec         352 MBytes         591 Mbits/sec           98         [ 3] 455.0-460.0 sec         352 MBytes         591 Mbits/sec           100         [ 3] 460.0-465.0 sec         352 MBytes         591 Mbits/sec           101         [ 3] 470.0-477.0 sec         352 MBytes         591 Mbits/sec           102         [ 3] 470.0-495.0 sec         353 MBytes         592 Mbits/sec           103         485.0-490.0 sec         353 MBytes         592 Mbits/sec           104         [ 3] 500.0-505.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 500.0-552.0 sec         352 MBytes         592 Mbits/sec           108         [ 3] 525.0-530.0 sec         352 MBytes         592 Mbits/sec  | 88  | [ | 3]  | 400.0-405.0 | sec | 347 | MBytes | 582 | Mbits/sec |
| 90         [         3]         410.0-415.0 sec         347 MBytes         580 Mbits/sec           91         []         3]         420.0-420.0 sec         349 MBytes         586 Mbits/sec           92         []         3]         420.0-430.0 sec         349 MBytes         586 Mbits/sec           94         []         3]         430.0-435.0 sec         350 MBytes         586 Mbits/sec           95         []         3]         440.0-445.0 sec         350 MBytes         588 Mbits/sec           96         []         3]         450.0-450.0 sec         352 MBytes         590 Mbits/sec           98         []         3]         450.0-470.0 sec         352 MBytes         591 Mbits/sec           100         []         3]         465.0-470.0 sec         352 MBytes         591 Mbits/sec           101         []         3]         460.0-485.0 sec         353 MBytes         592 Mbits/sec           103         []         490.0-495.0 sec         353 MBytes         592 Mbits/sec           105         []         3]         490.0-550.0 sec         353 MBytes         592 Mbits/sec           106         []         3]         505.0-550.0 sec         353 MBytes         592 Mbits/sec  |     | - | -   |             |     |     | -      | 582 |           |
| 91         [ 3] 415.0-420.0 sec         347 MBytes         562 Mbits/sec           92         [ 3] 425.0-425.0 sec         349 MBytes         566 Mbits/sec           94         [ 3] 430.0-435.0 sec         348 MBytes         566 Mbits/sec           95         [ 3] 443.0-445.0 sec         350 MBytes         588 Mbits/sec           96         [ 3] 445.0-445.0 sec         350 MBytes         581 Mbits/sec           97         [ 3] 445.0-455.0 sec         350 MBytes         581 Mbits/sec           98         [ 3] 455.0-460.0 sec         350 MBytes         586 Mbits/sec           100         [ 3] 465.0-470.0 sec         334 MBytes         566 Mbits/sec           101         [ 3] 475.0-480.0 sec         352 MBytes         591 Mbits/sec           103         140.0-475.0 sec         353 MBytes         592 Mbits/sec           104         [ 3] 475.0-480.0 sec         353 MBytes         592 Mbits/sec           105         [ 3] 445.0-490.0 sec         353 MBytes         592 Mbits/sec           106         [ 3] 50.0-510.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 450.0-520.0 sec         352 MBytes         590 Mbits/sec           108         [ 3] 50.0-551.0 sec         352 MBytes         590 Mbits/sec   |     | - | -   |             |     |     | -      |     |           |
| 92         [ 3] 420.0-425.0 sec         349 MBytes         585 Mbits/sec           94         [ 3] 435.0-435.0 sec         349 MBytes         586 Mbits/sec           95         [ 3] 445.0-445.0 sec         350 MBytes         589 Mbits/sec           96         [ 3] 445.0-445.0 sec         350 MBytes         589 Mbits/sec           97         [ 3] 445.0-445.0 sec         352 MBytes         591 Mbits/sec           98         [ 3] 450.0-455.0 sec         352 MBytes         586 Mbits/sec           100         [ 3] 460.0-465.0 sec         352 MBytes         556 Mbits/sec           101         [ 3] 460.0-470.0 sec         352 MBytes         551 Mbits/sec           102         [ 3] 445.0-440.0 sec         352 MBytes         591 Mbits/sec           103         [ 3] 440.0-445.0 sec         352 MBytes         591 Mbits/sec           104         [ 3] 445.0-500.0 sec         353 MBytes         592 Mbits/sec           105         [ 3] 490.0-495.0 sec         353 MBytes         592 Mbits/sec           108         [ 3] 501.0-515.0 sec         353 MBytes         592 Mbits/sec           108         [ 3] 520.0-525.0 sec         352 MBytes         590 Mbits/sec           111         [ 3] 520.0-555.0 sec         349 MBytes         585 Mbits/sec     <   |     | - | -   |             |     |     | -      |     |           |
| 93         [ 3] 425.0-430.0 sec         349 MBytes         586 Mbits/sec           94         [ 3] 430.0-435.0 sec         348 MBytes         585 Mbits/sec           95         [ 3] 440.0-445.0 sec         350 MBytes         588 Mbits/sec           96         [ 3] 440.0-445.0 sec         350 MBytes         598 Mbits/sec           97         [ 3] 445.0-460.0 sec         352 MBytes         590 Mbits/sec           100         [ 3] 465.0-460.0 sec         352 MBytes         586 Mbits/sec           101         [ 3] 465.0-470.0 sec         332 MBytes         560 Mbits/sec           103         [ 3] 470.0-475.0 sec         352 MBytes         591 Mbits/sec           104         [ 3] 480.0-490.0 sec         353 MBytes         592 Mbits/sec           105         [ 3] 495.0-490.0 sec         353 MBytes         592 Mbits/sec           106         [ 3] 50.0-505.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 495.0-530.0 sec         353 MBytes         592 Mbits/sec           108         [ 3] 510.0-515.0 sec         353 MBytes         592 Mbits/sec           109         [ 3] 510.0-545.0 sec         347 MBytes         585 Mbits/sec           114         [ 3] 550.0-550.0 sec         349 MBytes         585 Mbits/sec     <   |     | - | -   |             |     |     | -      |     |           |
| 94         [ 3] 430.0-435.0 sec         348 MBytes         585 Mbits/sec           96         [ 3] 443.0-445.0 sec         351 MBytes         588 Mbits/sec           97         [ 3] 445.0-450.0 sec         352 MBytes         591 Mbits/sec           98         [ 3] 450.0-460.0 sec         352 MBytes         591 Mbits/sec           100         [ 3] 455.0-460.0 sec         350 MBytes         586 Mbits/sec           101         [ 3] 455.0-470.0 sec         324 MBytes         566 Mbits/sec           102         [ 3] 470.0-475.0 sec         334 MBytes         556 Mbits/sec           103         [ 3] 470.0-480.0 sec         353 MBytes         592 Mbits/sec           104         [ 3] 490.0-495.0 sec         353 MBytes         592 Mbits/sec           105         [ 3] 490.0-505.0 sec         353 MBytes         592 Mbits/sec           106         [ 3] 500.0-515.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 510.0-520.0 sec         352 MBytes         590 Mbits/sec           118         [ 3] 520.0-535.0 sec         349 MBytes         582 Mbits/sec           119         [ 3] 540.0-545.0 sec         349 MBytes         584 Mbits/sec           114         [ 3] 540.0-555.0 sec         349 MBytes         584 Mbits/sec   |     | - | -   |             |     |     | -      |     |           |
| 95         [ 3] 445.0-440.0 sec         351 MBytes         589 Mbits/sec           96         [ 3] 440.0-445.0 sec         350 MBytes         588 Mbits/sec           97         [ 3] 445.0-450.0 sec         352 MBytes         590 Mbits/sec           98         [ 3] 455.0-460.0 sec         352 MBytes         586 Mbits/sec           100         [ 3] 465.0-470.0 sec         352 MBytes         591 Mbits/sec           101         [ 3] 470.0-475.0 sec         334 MBytes         586 Mbits/sec           103         [ 3] 470.0-480.0 sec         352 MBytes         591 Mbits/sec           104         [ 3] 480.0-485.0 sec         352 MBytes         592 Mbits/sec           105         [ 3] 490.0-495.0 sec         353 MBytes         592 Mbits/sec           106         [ 3] 495.0-500.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 510.0-515.0 sec         353 MBytes         592 Mbits/sec           111         [ 3] 520.0-530.0 sec         352 MBytes         590 Mbits/sec           114         [ 3] 530.0-555.0 sec         347 MBytes         581 Mbits/sec           115         [ 3] 540.0-545.0 sec         349 MBytes         584 Mbits/sec           114         [ 3] 540.0-555.0 sec         349 MBytes         584 Mbits/sec   |     | - | -   |             |     |     | -      |     |           |
| 96         [ 3] 440.0-445.0 sec         350 MBytes         588 Mbits/sec           97         [ 3] 445.0-455.0 sec         352 MBytes         591 Mbits/sec           99         [ 3] 450.0-465.0 sec         350 MBytes         588 Mbits/sec           100         [ 3] 455.0-460.0 sec         350 MBytes         586 Mbits/sec           101         [ 3] 470.0-475.0 sec         334 MBytes         566 Mbits/sec           103         [ 3] 475.0-480.0 sec         352 MBytes         591 Mbits/sec           104         [ 3] 480.0-495.0 sec         353 MBytes         592 Mbits/sec           105         [ 3] 490.0-495.0 sec         353 MBytes         592 Mbits/sec           106         [ 3] 490.0-505.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 500.0-515.0 sec         353 MBytes         592 Mbits/sec           108         [ 3] 500.0-515.0 sec         352 MBytes         590 Mbits/sec           110         [ 3] 520.0-528.0 sec         347 MBytes         582 Mbits/sec           111         [ 3] 520.0-540.0 sec         347 MBytes         584 Mbits/sec           112         [ 3] 540.0-545.0 sec         347 MBytes         585 Mbits/sec           114         [ 3] 540.0-545.0 sec         349 MBytes         585 Mbits/sec  |     | - | -   |             |     |     | -      |     |           |
| 97         1         3         445.0-450.0 sec         352 MBytes         591 Mbits/sec           98         1         450.0-455.0 sec         352 MBytes         590 Mbits/sec           100         1         3         460.0-465.0 sec         352 MBytes         588 Mbits/sec           101         1         3         465.0-470.0 sec         352 MBytes         591 Mbits/sec           102         1         3         475.0-480.0 sec         352 MBytes         591 Mbits/sec           103         1         485.0-490.0 sec         353 MBytes         592 Mbits/sec           104         1         3         485.0-490.0 sec         353 MBytes         592 Mbits/sec           105         1         495.0-500.0 sec         353 MBytes         592 Mbits/sec           107         1         3         500.0-510.0 sec         353 MBytes         592 Mbits/sec           108         1         510.0-520.0 sec         352 MBytes         590 Mbits/sec           111         1         515.0-520.0 sec         347 MBytes         585 Mbits/sec           114         1         530.0-550.0 sec         349 MBytes         581 Mbits/sec           118         1         550.0-560.0 sec         349 MBytes <t< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></t<>  |     | - | -   |             |     |     | -      |     |           |
| 98         [ 3]         450.0-455.0         sec         352         MBytes         590         Mbits/sec           99         [ 3]         465.0-460.0         sec         350         MBytes         588         Mbits/sec           100         [ 3]         465.0-470.0         sec         352         MBytes         586         Mbits/sec           101         [ 3]         475.0-480.0         sec         352         MBytes         581         Mbits/sec           103         [ 3]         485.0-490.0         sec         353         MBytes         592         Mbits/sec           104         [ 3]         495.0-500.0         sec         353         MBytes         592         Mbits/sec           107         [ 3]         500.0-505.0         sec         353         MBytes         592         Mbits/sec           108         [ 3]         500.0-510.0         sec         353         MBytes         592         Mbits/sec           111         [ 3]         515.0-520.0         sec         352         MBytes         580         Mbits/sec           113         [ 3]         520.0-550.0         sec         349         MBytes         581         Mbits/sec </td <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>   |     | - | -   |             |     |     | -      |     |           |
| 99         [ 3] 455.0-460.0 sec         350 MBytes         588 Mbits/sec           100         [ 3] 460.0-465.0 sec         349 MBytes         586 Mbits/sec           101         [ 3] 470.0-475.0 sec         334 MBytes         560 Mbits/sec           102         [ 3] 470.0-475.0 sec         334 MBytes         586 Mbits/sec           103         [ 3] 485.0-480.0 sec         352 MBytes         591 Mbits/sec           104         [ 3] 485.0-490.0 sec         353 MBytes         592 Mbits/sec           105         [ 3] 490.0-495.0 sec         353 MBytes         592 Mbits/sec           106         [ 3] 500.0-505.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 510.0-515.0 sec         353 MBytes         592 Mbits/sec           111         [ 3] 510.0-520.0 sec         352 MBytes         590 Mbits/sec           112         [ 3] 520.0-530.0 sec         349 MBytes         582 Mbits/sec           114         [ 3] 540.0-545.0 sec         349 MBytes         581 Mbits/sec           115         [ 3] 540.0-555.0 sec         349 MBytes         585 Mbits/sec           116         [ 3] 540.0-546.0 sec         349 MBytes         581 Mbits/sec           117         [ 3] 555.0-550.0 sec         349 MBytes         581 Mbits/sec  |     | - | -   |             |     |     | -      |     |           |
| 100         [ 3] 460.0-465.0 sec         349 MBytes         586 Mbits/sec           101         [ 3] 470.0-475.0 sec         352 MBytes         591 Mbits/sec           103         [ 3] 475.0-480.0 sec         349 MBytes         585 Mbits/sec           104         [ 3] 480.0-485.0 sec         352 MBytes         591 Mbits/sec           105         [ 3] 480.0-495.0 sec         353 MBytes         592 Mbits/sec           106         [ 3] 490.0-495.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 500.0-505.0 sec         353 MBytes         592 Mbits/sec           108         [ 3] 500.0-510.0 sec         353 MBytes         592 Mbits/sec           111         [ 3] 510.0-515.0 sec         352 MBytes         590 Mbits/sec           113         [ 3] 520.0-525.0 sec         352 MBytes         590 Mbits/sec           114         [ 3] 530.0-530.0 sec         347 MBytes         585 Mbits/sec           115         [ 3] 540.0-545.0 sec         340 MBytes         581 Mbits/sec           116         [ 3] 540.0-555.0 sec         349 MBytes         584 Mbits/sec           117         [ 3] 550.0-560.0 sec         348 MBytes         584 Mbits/sec           118         [ 3] 550.0-580.0 sec         348 MBytes         584 Mbits/sec   |     |   | -   |             |     |     | -      |     |           |
| 101         [ 3] 465.0-470.0 sec         352 MBytes         591 Mbits/sec           102         [ 3] 470.0-475.0 sec         334 MBytes         560 Mbits/sec           103         [ 3] 470.0-475.0 sec         334 MBytes         550 Mbits/sec           104         [ 3] 480.0-485.0 sec         352 MBytes         591 Mbits/sec           105         [ 3] 495.0-490.0 sec         353 MBytes         592 Mbits/sec           106         [ 3] 495.0-500.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 500.0-515.0 sec         353 MBytes         592 Mbits/sec           108         [ 3] 510.0-510.0 sec         353 MBytes         592 Mbits/sec           110         [ 3] 520.0-522.0 sec         352 MBytes         590 Mbits/sec           113         [ 3] 520.0-535.0 sec         347 MBytes         582 Mbits/sec           114         [ 3] 530.0-535.0 sec         349 MBytes         585 Mbits/sec           115         [ 3] 540.0-545.0 sec         349 MBytes         584 Mbits/sec           116         [ 3] 550.0-550.0 sec         349 MBytes         584 Mbits/sec           117         [ 3] 550.0-560.0 sec         348 MBytes         583 Mbits/sec           118         [ 3] 550.0-570.0 sec         344 MBytes         584 Mbits/sec   |     | - | -   |             |     |     | -      |     |           |
| 102       [ 3] 470.0-475.0 sec       334 MBytes       560 Mbits/sec         103       [ 3] 480.0-485.0 sec       352 MBytes       591 Mbits/sec         104       [ 3] 480.0-495.0 sec       353 MBytes       592 Mbits/sec         105       [ 3] 490.0-495.0 sec       353 MBytes       592 Mbits/sec         106       [ 3] 500.0-505.0 sec       353 MBytes       592 Mbits/sec         107       [ 3] 500.0-515.0 sec       353 MBytes       592 Mbits/sec         109       [ 3] 510.0-515.0 sec       353 MBytes       592 Mbits/sec         111       [ 3] 510.0-515.0 sec       352 MBytes       590 Mbits/sec         112       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 530.0-540.0 sec       346 MBytes       582 Mbits/sec         114       [ 3] 540.0-545.0 sec       346 MBytes       584 Mbits/sec         115       [ 3] 540.0-550.0 sec       348 MBytes       584 Mbits/sec         117       [ 3] 550.0-560.0 sec       348 MBytes       584 Mbits/sec         118       [ 3] 550.0-570.0 sec       346 MBytes       584 Mbits/sec         119       [ 3] 550.0-570.0 sec       345 MBytes       584 Mbits/sec         120       [ 3] 560.0-570.0 sec       345 MBytes <td< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>                                       |     | - | -   |             |     |     | -      |     |           |
| 103       [ 3] 475.0-480.0 sec       349 MBytes       585 Mbits/sec         104       [ 3] 480.0-485.0 sec       352 MBytes       591 Mbits/sec         105       [ 3] 485.0-490.0 sec       353 MBytes       592 Mbits/sec         106       [ 3] 495.0-500.0 sec       353 MBytes       592 Mbits/sec         107       [ 3] 500.0-505.0 sec       353 MBytes       592 Mbits/sec         108       [ 3] 500.0-515.0 sec       353 MBytes       592 Mbits/sec         109       [ 3] 510.0-515.0 sec       353 MBytes       592 Mbits/sec         111       [ 3] 520.0-520.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 530.0-530.0 sec       352 MBytes       590 Mbits/sec         114       [ 3] 530.0-530.0 sec       349 MBytes       585 Mbits/sec         115       [ 3] 540.0-555.0 sec       349 MBytes       585 Mbits/sec         117       [ 3] 550.0-560.0 sec       348 MBytes       584 Mbits/sec         119       [ 3] 565.0-570.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-585.0 sec       341 MBytes       584 Mbits/sec         121       [ 3] 560.0-585.0 sec       341 MBytes       584 Mbits/sec         122       [ 3] 570.0-570.0 sec       346 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td>sec</td><td></td><td>-</td><td></td><td></td></td<>                                     |     |   | -   |             | sec |     | -      |     |           |
| 104       [ 3] 480.0-485.0 sec       352 MBytes       591 Mbits/sec         105       [ 3] 490.0-495.0 sec       353 MBytes       592 Mbits/sec         106       [ 3] 490.0-495.0 sec       353 MBytes       592 Mbits/sec         107       [ 3] 495.0-500.0 sec       353 MBytes       592 Mbits/sec         108       [ 3] 500.0-515.0 sec       353 MBytes       592 Mbits/sec         100       [ 3] 510.0-520.0 sec       353 MBytes       592 Mbits/sec         111       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         114       [ 3] 530.0-540.0 sec       347 MBytes       582 Mbits/sec         115       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         116       [ 3] 540.0-555.0 sec       349 MBytes       584 Mbits/sec         117       [ 3] 560.0-566.0 sec       348 MBytes       584 Mbits/sec         118       [ 3] 550.0-570.0 sec       344 MBytes       584 Mbits/sec         120       [ 3] 560.0-575.0 sec       348 MBytes       584 Mbits/sec         121       [ 3] 580.0-580.0 sec       343 MBytes       576 Mbits/sec         122       [ 3] 575.0-580.0 sec       346 MBytes <td< td=""><td>102</td><td>-</td><td>-</td><td></td><td>sec</td><td></td><td>MBytes</td><td></td><td></td></td<>                            | 102 | - | -   |             | sec |     | MBytes |     |           |
| 105       [ 3] 485.0-490.0 sec       353 MBytes       592 Mbits/sec         106       [ 3] 490.0-495.0 sec       353 MBytes       592 Mbits/sec         107       [ 3] 500.0-505.0 sec       353 MBytes       592 Mbits/sec         108       [ 3] 500.0-515.0 sec       353 MBytes       592 Mbits/sec         109       [ 3] 510.0-515.0 sec       353 MBytes       592 Mbits/sec         111       [ 3] 510.0-520.0 sec       352 MBytes       590 Mbits/sec         112       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 530.0-535.0 sec       347 MBytes       582 Mbits/sec         114       [ 3] 540.0-545.0 sec       346 MBytes       581 Mbits/sec         115       [ 3] 540.0-555.0 sec       349 MBytes       585 Mbits/sec         117       [ 3] 550.0-550.0 sec       349 MBytes       588 Mbits/sec         119       [ 3] 565.0-570.0 sec       348 MBytes       588 Mbits/sec         120       [ 3] 580.0-585.0 sec       341 MBytes       584 Mbits/sec         121       [ 3] 570.0-575.0 sec       348 MBytes       584 Mbits/sec         122       [ 3] 585.0-590.0 sec       343 MBytes       584 Mbits/sec         123       [ 3] 500.0-585.0 sec       351 MBytes <td< td=""><td>103</td><td>[</td><td>3]</td><td>475.0-480.0</td><td>sec</td><td>349</td><td>MBytes</td><td>585</td><td>Mbits/sec</td></td<> | 103 | [ | 3]  | 475.0-480.0 | sec | 349 | MBytes | 585 | Mbits/sec |
| 106         [ 3] 490.0-495.0 sec         353 MBytes         592 Mbits/sec           107         [ 3] 500.0-505.0 sec         353 MBytes         592 Mbits/sec           108         [ 3] 500.0-505.0 sec         353 MBytes         592 Mbits/sec           109         [ 3] 500.0-515.0 sec         353 MBytes         592 Mbits/sec           110         [ 3] 510.0-515.0 sec         353 MBytes         592 Mbits/sec           111         [ 3] 520.0-525.0 sec         352 MBytes         590 Mbits/sec           113         [ 3] 520.0-530.0 sec         347 MBytes         582 Mbits/sec           114         [ 3] 530.0-535.0 sec         347 MBytes         585 Mbits/sec           115         [ 3] 540.0-550.0 sec         349 MBytes         585 Mbits/sec           117         [ 3] 540.0-550.0 sec         348 MBytes         584 Mbits/sec           118         [ 3] 550.0-570.0 sec         348 MBytes         584 Mbits/sec           120         [ 3] 560.0-575.0 sec         348 MBytes         584 Mbits/sec           121         [ 3] 560.0-570.0 sec         347 MBytes         584 Mbits/sec           122         [ 3] 570.0-575.0 sec         345 MBytes         576 Mbits/sec           123         [ 3] 500.0-595.0 sec         351 MBytes         584 Mbits/sec   | 104 | [ | 3]  | 480.0-485.0 | sec | 352 | MBytes | 591 | Mbits/sec |
| 107       [ 3] 495.0-500.0 sec       352 MBytes       591 Mbits/sec         108       [ 3] 505.0-510.0 sec       353 MBytes       592 Mbits/sec         109       [ 3] 505.0-510.0 sec       353 MBytes       592 Mbits/sec         110       [ 3] 510.0-515.0 sec       353 MBytes       592 Mbits/sec         111       [ 3] 510.0-515.0 sec       352 MBytes       592 Mbits/sec         112       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 520.0-540.0 sec       347 MBytes       582 Mbits/sec         114       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         115       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-550.0 sec       349 MBytes       584 Mbits/sec         119       [ 3] 560.0-565.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-570.0 sec       345 MBytes       576 Mbits/sec         121       [ 3] 580.0-585.0 sec       351 MBytes       581 Mbits/sec         122       [ 3] 580.0-585.0 sec       351 MBytes       584 Mbits/sec         123       [ 3] 595.0-600.0 sec       348 MBytes       584 Mbits/sec         124       [ 3] 595.0-600.0 sec       351 MBytes <td< td=""><td>105</td><td>[</td><td>3]</td><td>485.0-490.0</td><td>sec</td><td>353</td><td>MBytes</td><td>592</td><td>Mbits/sec</td></td<> | 105 | [ | 3]  | 485.0-490.0 | sec | 353 | MBytes | 592 | Mbits/sec |
| 108       [ 3] 500.0-505.0 sec       353 MBytes       592 Mbits/sec         109       [ 3] 510.0-515.0 sec       353 MBytes       592 Mbits/sec         111       [ 3] 510.0-525.0 sec       352 MBytes       590 Mbits/sec         112       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 525.0-530.0 sec       352 MBytes       590 Mbits/sec         114       [ 3] 530.0-535.0 sec       347 MBytes       582 Mbits/sec         115       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         117       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-550.0 sec       349 MBytes       584 Mbits/sec         120       [ 3] 560.0-570.0 sec       348 MBytes       584 Mbits/sec         121       [ 3] 580.0-580.0 sec       343 MBytes       584 Mbits/sec         122       [ 3] 580.0-580.0 sec       344 MBytes       584 Mbits/sec         123       [ 3] 585.0-590.0 sec       348 MBytes       584 Mbits/sec         124       [ 3] 585.0-590.0 sec       348 MBytes       584 Mbits/sec         125       [ 3] 585.0-690.0 sec       351 MBytes       584 Mbits/sec         126       [ 3] 595.0-600.0 sec       351 MBytes <td< td=""><td>106</td><td>[</td><td>3]</td><td>490.0-495.0</td><td>sec</td><td>353</td><td>MBytes</td><td>592</td><td>Mbits/sec</td></td<> | 106 | [ | 3]  | 490.0-495.0 | sec | 353 | MBytes | 592 | Mbits/sec |
| 109       [ 3] 505.0-510.0 sec       353 MBytes       592 Mbits/sec         110       [ 3] 510.0-515.0 sec       353 MBytes       592 Mbits/sec         111       [ 3] 510.0-520.0 sec       357 MBytes       592 Mbits/sec         112       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         114       [ 3] 520.0-530.0 sec       347 MBytes       582 Mbits/sec         114       [ 3] 530.0-535.0 sec       347 MBytes       582 Mbits/sec         115       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         117       [ 3] 545.0-550.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-550.0 sec       349 MBytes       583 Mbits/sec         119       [ 3] 560.0-565.0 sec       348 MBytes       583 Mbits/sec         121       [ 3] 560.0-575.0 sec       345 MBytes       578 Mbits/sec         122       [ 3] 570.0-575.0 sec       345 MBytes       578 Mbits/sec         123       [ 3] 580.0-590.0 sec       341 MBytes       581 Mbits/sec         124       [ 3] 580.0-590.0 sec       346 MBytes       581 Mbits/sec         125       [ 3] 595.0-600.0 sec       350 MBytes       581 Mbits/sec         126       [ 3] 605.0-610.0 sec       351 MBytes <td< td=""><td>107</td><td>[</td><td>3]</td><td>495.0-500.0</td><td>sec</td><td>352</td><td>MBytes</td><td>591</td><td>Mbits/sec</td></td<> | 107 | [ | 3]  | 495.0-500.0 | sec | 352 | MBytes | 591 | Mbits/sec |
| 110       [ 3] 510.0-515.0 sec       353 MBytes       592 Mbits/sec         111       [ 3] 515.0-520.0 sec       347 MBytes       582 Mbits/sec         112       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 525.0-530.0 sec       347 MBytes       582 Mbits/sec         114       [ 3] 530.0-535.0 sec       347 MBytes       582 Mbits/sec         115       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         116       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         117       [ 3] 550.0-550.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-570.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-575.0 sec       348 MBytes       584 Mbits/sec         121       [ 3] 570.0-570.0 sec       343 MBytes       578 Mbits/sec         122       [ 3] 570.0-590.0 sec       346 MBytes       584 Mbits/sec         123       [ 3] 590.0-595.0 sec       346 MBytes       584 Mbits/sec         124       [ 3] 590.0-595.0 sec       346 MBytes       584 Mbits/sec         125       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         126       [ 3] 600.0-610.0 sec       351 MBytes <td< td=""><td>108</td><td>[</td><td>3]</td><td>500.0-505.0</td><td>sec</td><td>353</td><td>MBytes</td><td>592</td><td>Mbits/sec</td></td<> | 108 | [ | 3]  | 500.0-505.0 | sec | 353 | MBytes | 592 | Mbits/sec |
| 111       [ 3] 515.0-520.0 sec       347 MBytes       582 Mbits/sec         112       [ 3] 525.0-520.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 525.0-530.0 sec       352 MBytes       590 Mbits/sec         114       [ 3] 530.0-535.0 sec       347 MBytes       585 Mbits/sec         115       [ 3] 535.0-540.0 sec       346 MBytes       585 Mbits/sec         116       [ 3] 545.0-550.0 sec       349 MBytes       585 Mbits/sec         117       [ 3] 555.0-550.0 sec       349 MBytes       585 Mbits/sec         119       [ 3] 560.0-555.0 sec       349 MBytes       584 Mbits/sec         120       [ 3] 560.0-565.0 sec       348 MBytes       584 Mbits/sec         121       [ 3] 560.0-570.0 sec       347 MBytes       588 Mbits/sec         122       [ 3] 570.0-575.0 sec       345 MBytes       578 Mbits/sec         123       [ 3] 570.0-595.0 sec       341 MBytes       584 Mbits/sec         124       [ 3] 580.0-596.0 sec       350 MBytes       586 Mbits/sec         125       [ 3] 580.0-595.0 sec       346 MBytes       581 Mbits/sec         126       [ 3] 590.0-600.0 sec       350 MBytes       587 Mbits/sec         127       [ 3] 605.0-610.0 sec       351 MBytes <td< td=""><td>109</td><td>[</td><td>3]</td><td>505.0-510.0</td><td>sec</td><td>353</td><td>MBytes</td><td>592</td><td>Mbits/sec</td></td<> | 109 | [ | 3]  | 505.0-510.0 | sec | 353 | MBytes | 592 | Mbits/sec |
| 111       [ 3] 515.0-520.0 sec       347 MBytes       582 Mbits/sec         112       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 525.0-530.0 sec       347 MBytes       580 Mbits/sec         114       [ 3] 530.0-535.0 sec       347 MBytes       582 Mbits/sec         115       [ 3] 540.0-545.0 sec       346 MBytes       585 Mbits/sec         116       [ 3] 540.0-550.0 sec       349 MBytes       585 Mbits/sec         117       [ 3] 555.0-560.0 sec       349 MBytes       585 Mbits/sec         119       [ 3] 560.0-565.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-570.0 sec       347 MBytes       582 Mbits/sec         121       [ 3] 560.0-570.0 sec       348 MBytes       584 Mbits/sec         122       [ 3] 570.0-570.0 sec       343 MBytes       576 Mbits/sec         123       [ 3] 580.0-590.0 sec       348 MBytes       584 Mbits/sec         124       [ 3] 580.0-590.0 sec       346 MBytes       581 Mbits/sec         125       [ 3] 600.0-605.0 sec       351 MBytes       586 Mbits/sec         126       [ 3] 600.0-605.0 sec       351 MBytes       588 Mbits/sec         127       [ 3] 610.0-615.0 sec       351 MBytes <td< td=""><td>110</td><td>[</td><td>3]</td><td>510.0-515.0</td><td>sec</td><td>353</td><td>MBytes</td><td>592</td><td>Mbits/sec</td></td<> | 110 | [ | 3]  | 510.0-515.0 | sec | 353 | MBytes | 592 | Mbits/sec |
| 112       [ 3] 520.0-525.0 sec       352 MBytes       590 Mbits/sec         113       [ 3] 525.0-530.0 sec       352 MBytes       590 Mbits/sec         114       [ 3] 530.0-535.0 sec       347 MBytes       582 Mbits/sec         115       [ 3] 535.0-540.0 sec       349 MBytes       585 Mbits/sec         116       [ 3] 540.0-545.0 sec       349 MBytes       585 Mbits/sec         117       [ 3] 540.0-555.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-550.0 sec       349 MBytes       584 Mbits/sec         119       [ 3] 560.0-570.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-570.0 sec       347 MBytes       582 Mbits/sec         121       [ 3] 560.0-570.0 sec       347 MBytes       578 Mbits/sec         122       [ 3] 570.0-580.0 sec       341 MBytes       576 Mbits/sec         123       [ 3] 580.0-595.0 sec       346 MBytes       584 Mbits/sec         124       [ 3] 590.0-595.0 sec       346 MBytes       581 Mbits/sec         125       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         126       [ 3] 590.0-595.0 sec       351 MBytes       588 Mbits/sec         127       [ 3] 600.0-605.0 sec       351 MBytes <td< td=""><td>111</td><td></td><td>31</td><td></td><td>sec</td><td></td><td>-</td><td>582</td><td>Mbits/sec</td></td<>                     | 111 |   | 31  |             | sec |     | -      | 582 | Mbits/sec |
| 113       [ 3] 525.0-530.0 sec       352 MBytes       590 Mbits/sec         114       [ 3] 530.0-535.0 sec       347 MBytes       582 Mbits/sec         115       [ 3] 535.0-540.0 sec       349 MBytes       581 Mbits/sec         116       [ 3] 540.0-545.0 sec       349 MBytes       581 Mbits/sec         117       [ 3] 545.0-550.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-550.0 sec       349 MBytes       585 Mbits/sec         119       [ 3] 550.0-550.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-570.0 sec       347 MBytes       582 Mbits/sec         121       [ 3] 575.0-580.0 sec       345 MBytes       578 Mbits/sec         122       [ 3] 570.0-580.0 sec       341 MBytes       581 Mbits/sec         123       [ 3] 580.0-590.0 sec       341 MBytes       584 Mbits/sec         124       [ 3] 590.0-595.0 sec       346 MBytes       581 Mbits/sec         125       [ 3] 590.0-595.0 sec       346 MBytes       586 Mbits/sec         126       [ 3] 600.0-610.0 sec       350 MBytes       587 Mbits/sec         127       [ 3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         128       [ 3] 610.0-615.0 sec       351 MBytes <td< td=""><td>112</td><td>[</td><td>31</td><td>520.0-525.0</td><td>sec</td><td></td><td>-</td><td>590</td><td></td></td<>                  | 112 | [ | 31  | 520.0-525.0 | sec |     | -      | 590 |           |
| 114       [ 3] 530.0-535.0 sec       347 MBytes       582 Mbits/sec         115       [ 3] 535.0-540.0 sec       349 MBytes       585 Mbits/sec         116       [ 3] 540.0-545.0 sec       346 MBytes       581 Mbits/sec         117       [ 3] 545.0-550.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-555.0 sec       349 MBytes       585 Mbits/sec         119       [ 3] 550.0-560.0 sec       348 MBytes       583 Mbits/sec         120       [ 3] 560.0-570.0 sec       348 MBytes       582 Mbits/sec         121       [ 3] 570.0-570.0 sec       343 MBytes       578 Mbits/sec         123       [ 3] 575.0-580.0 sec       343 MBytes       576 Mbits/sec         124       [ 3] 585.0-590.0 sec       343 MBytes       584 Mbits/sec         125       [ 3] 590.0-595.0 sec       346 MBytes       581 Mbits/sec         126       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         127       [ 3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         128       [ 3] 601.0-615.0 sec       351 MBytes       587 Mbits/sec         129       [ 3] 612.0-620.0 sec       351 MBytes       588 Mbits/sec         130       [ 10.0-615.0 sec       351 MBytes       587   |     | - | -   |             |     |     | -      |     |           |
| 115       [ 3] 535.0-540.0 sec       349 MBytes       585 Mbits/sec         116       [ 3] 540.0-545.0 sec       346 MBytes       581 Mbits/sec         117       [ 3] 545.0-550.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-550.0 sec       349 MBytes       585 Mbits/sec         119       [ 3] 555.0-560.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-565.0 sec       348 MBytes       583 Mbits/sec         121       [ 3] 565.0-570.0 sec       344 MBytes       582 Mbits/sec         122       [ 3] 570.0-575.0 sec       345 MBytes       578 Mbits/sec         123       [ 3] 570.0-575.0 sec       343 MBytes       576 Mbits/sec         124       [ 3] 580.0-585.0 sec       351 MBytes       584 Mbits/sec         125       [ 3] 585.0-590.0 sec       346 MBytes       584 Mbits/sec         126       [ 3] 595.0-600.0 sec       349 MBytes       586 Mbits/sec         127       [ 3] 600.0-615.0 sec       351 MBytes       587 Mbits/sec         128       [ 3] 610.0-615.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 610.0-625.0 sec       351 MBytes       587 Mbits/sec         131       [ 3] 620.0-625.0 sec       351 MBytes <td< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>                                       |     | - | -   |             |     |     | -      |     |           |
| 116       [ 3] 540.0-545.0 sec       346 MBytes       581 Mbits/sec         117       [ 3] 545.0-550.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-555.0 sec       349 MBytes       585 Mbits/sec         119       [ 3] 555.0-560.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-565.0 sec       348 MBytes       583 Mbits/sec         121       [ 3] 565.0-570.0 sec       344 MBytes       582 Mbits/sec         122       [ 3] 570.0-575.0 sec       343 MBytes       576 Mbits/sec         123       [ 3] 580.0-585.0 sec       351 MBytes       584 Mbits/sec         124       [ 3] 590.0-590.0 sec       348 MBytes       584 Mbits/sec         125       [ 3] 590.0-590.0 sec       346 MBytes       581 Mbits/sec         126       [ 3] 590.0-600.0 sec       349 MBytes       586 Mbits/sec         127       [ 3] 605.0-610.0 sec       350 MBytes       587 Mbits/sec         128       [ 3] 610.0-615.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 625.0-630.0 sec       351 MBytes       587 Mbits/sec         131       [ 3] 620.0-635.0 sec       351 MBytes       587 Mbits/sec         133       [ 3] 645.0-650.0 sec       351 MBytes <td< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>                                       |     | - | -   |             |     |     | -      |     |           |
| 117       [ 3] 545.0-550.0 sec       349 MBytes       585 Mbits/sec         118       [ 3] 550.0-555.0 sec       349 MBytes       585 Mbits/sec         119       [ 3] 555.0-560.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-565.0 sec       348 MBytes       583 Mbits/sec         121       [ 3] 560.0-570.0 sec       347 MBytes       582 Mbits/sec         122       [ 3] 575.0-580.0 sec       345 MBytes       578 Mbits/sec         123       [ 3] 575.0-580.0 sec       345 MBytes       584 Mbits/sec         124       [ 3] 580.0-585.0 sec       351 MBytes       590 Mbits/sec         125       [ 3] 590.0-595.0 sec       346 MBytes       584 Mbits/sec         126       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         127       [ 3] 600.0-615.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 610.0-615.0 sec       351 MBytes       588 Mbits/sec         131       [ 3] 625.0-630.0 sec       351 MBytes       588 Mbits/sec         132       [ 3] 625.0-630.0 sec       351 MBytes       587 Mbits/sec         133       [ 3] 645.0-650.0 sec       350 MBytes       587 Mbits/sec         134       [ 3] 645.0-650.0 sec       346 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 118       [ 3] 550.0-555.0 sec       349 MBytes       585 Mbits/sec         119       [ 3] 555.0-560.0 sec       348 MBytes       584 Mbits/sec         120       [ 3] 560.0-565.0 sec       348 MBytes       583 Mbits/sec         121       [ 3] 565.0-570.0 sec       347 MBytes       582 Mbits/sec         122       [ 3] 575.0-580.0 sec       345 MBytes       578 Mbits/sec         123       [ 3] 575.0-580.0 sec       345 MBytes       578 Mbits/sec         124       [ 3] 580.0-595.0 sec       346 MBytes       584 Mbits/sec         125       [ 3] 595.0-600.0 sec       346 MBytes       581 Mbits/sec         126       [ 3] 595.0-600.0 sec       349 MBytes       586 Mbits/sec         127       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         128       [ 3] 601.0-615.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 612.0-620.0 sec       351 MBytes       588 Mbits/sec         131       [ 3] 620.0-635.0 sec       351 MBytes       589 Mbits/sec         132       [ 3] 620.0-640.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 635.0-640.0 sec       350 MBytes       587 Mbits/sec         134       [ 3] 635.0-650.0 sec       340 MBytes <td< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>                                       |     | - | -   |             |     |     | -      |     |           |
| 119[ 3] 555.0-560.0 sec348 MBytes584 Mbits/sec120[ 3] 560.0-565.0 sec348 MBytes583 Mbits/sec121[ 3] 565.0-570.0 sec347 MBytes582 Mbits/sec122[ 3] 570.0-575.0 sec345 MBytes578 Mbits/sec123[ 3] 575.0-580.0 sec343 MBytes576 Mbits/sec124[ 3] 580.0-585.0 sec351 MBytes590 Mbits/sec125[ 3] 585.0-590.0 sec346 MBytes584 Mbits/sec126[ 3] 595.0-600.0 sec349 MBytes586 Mbits/sec127[ 3] 600.0-605.0 sec350 MBytes587 Mbits/sec128[ 3] 600.0-605.0 sec350 MBytes587 Mbits/sec129[ 3] 605.0-610.0 sec351 MBytes588 Mbits/sec130[ 3] 610.0-615.0 sec353 MBytes592 Mbits/sec131[ 3] 620.0-625.0 sec351 MBytes588 Mbits/sec132[ 3] 620.0-625.0 sec351 MBytes588 Mbits/sec133[ 3] 625.0-630.0 sec350 MBytes587 Mbits/sec134[ 3] 630.0-635.0 sec350 MBytes587 Mbits/sec135[ 3] 645.0-650.0 sec346 MBytes581 Mbits/sec136[ 3] 640.0-645.0 sec347 MBytes580 Mbits/sec137[ 3] 665.0-670.0 sec346 MBytes581 Mbits/sec138[ 3] 650.0-660.0 sec339 MBytes569 Mbits/sec140[ 3] 665.0-670.0 sec334 MBytes560 Mbits/sec141[ 3] 665.0-670.0 sec332 MBytes557 Mbits/sec142[ 3] 665.0-670.0   |     |   | -   |             |     |     | -      |     |           |
| 120[ 3] 560.0-565.0 sec348 MBytes583 Mbits/sec121[ 3] 565.0-570.0 sec347 MBytes582 Mbits/sec122[ 3] 570.0-575.0 sec345 MBytes578 Mbits/sec123[ 3] 575.0-580.0 sec343 MBytes576 Mbits/sec124[ 3] 580.0-585.0 sec351 MBytes590 Mbits/sec125[ 3] 585.0-590.0 sec346 MBytes584 Mbits/sec126[ 3] 590.0-595.0 sec346 MBytes581 Mbits/sec127[ 3] 595.0-600.0 sec349 MBytes586 Mbits/sec128[ 3] 600.0-605.0 sec350 MBytes587 Mbits/sec129[ 3] 605.0-610.0 sec351 MBytes588 Mbits/sec130[ 3] 615.0-620.0 sec351 MBytes588 Mbits/sec131[ 3] 620.0-625.0 sec351 MBytes588 Mbits/sec132[ 3] 620.0-625.0 sec351 MBytes588 Mbits/sec133[ 3] 625.0-630.0 sec350 MBytes587 Mbits/sec134[ 3] 630.0-635.0 sec350 MBytes587 Mbits/sec135[ 3] 645.0-650.0 sec346 MBytes588 Mbits/sec136[ 3] 645.0-650.0 sec347 MBytes588 Mbits/sec137[ 3] 665.0-670.0 sec344 MBytes563 Mbits/sec138[ 3] 665.0-670.0 sec334 MBytes563 Mbits/sec140[ 3] 665.0-670.0 sec334 MBytes560 Mbits/sec141[ 3] 665.0-670.0 sec332 MBytes563 Mbits/sec142[ 3] 675.0-680.0 sec332 MBytes553 Mbits/sec143[ 3] 675.0-680.0   |     | - | -   |             |     |     | -      |     |           |
| 121       [ 3] 565.0-570.0 sec       347 MBytes       582 Mbits/sec         122       [ 3] 570.0-575.0 sec       345 MBytes       578 Mbits/sec         123       [ 3] 575.0-580.0 sec       343 MBytes       576 Mbits/sec         124       [ 3] 580.0-585.0 sec       351 MBytes       590 Mbits/sec         125       [ 3] 585.0-590.0 sec       348 MBytes       584 Mbits/sec         126       [ 3] 590.0-595.0 sec       346 MBytes       581 Mbits/sec         127       [ 3] 595.0-600.0 sec       349 MBytes       586 Mbits/sec         128       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         129       [ 3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 610.0-615.0 sec       351 MBytes       589 Mbits/sec         131       [ 3] 620.0-625.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 625.0-630.0 sec       350 MBytes       587 Mbits/sec         134       [ 3] 630.0-645.0 sec       347 MBytes       588 Mbits/sec         135       [ 3] 645.0-650.0 sec       347 MBytes       582 Mbits/sec         136       [ 3] 645.0-650.0 sec       347 MBytes       581 Mbits/sec         137       [ 3] 645.0-650.0 sec       347 MBytes <td< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>                                       |     | - | -   |             |     |     | -      |     |           |
| 122       [ 3] 570.0-575.0 sec       345 MBytes       578 Mbits/sec         123       [ 3] 575.0-580.0 sec       343 MBytes       576 Mbits/sec         124       [ 3] 580.0-585.0 sec       351 MBytes       590 Mbits/sec         125       [ 3] 585.0-590.0 sec       348 MBytes       584 Mbits/sec         126       [ 3] 590.0-595.0 sec       346 MBytes       581 Mbits/sec         127       [ 3] 595.0-600.0 sec       349 MBytes       586 Mbits/sec         128       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         129       [ 3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 610.0-615.0 sec       351 MBytes       588 Mbits/sec         131       [ 3] 612.0-620.0 sec       351 MBytes       588 Mbits/sec         132       [ 3] 625.0-630.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 625.0-630.0 sec       350 MBytes       592 Mbits/sec         134       [ 3] 630.0-645.0 sec       347 MBytes       588 Mbits/sec         135       [ 3] 645.0-650.0 sec       347 MBytes       582 Mbits/sec         136       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         137       [ 3] 645.0-650.0 sec       346 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 123[3]575.0-580.0 sec343 MBytes576 Mbits/sec124[3]580.0-585.0 sec351 MBytes590 Mbits/sec125[3]585.0-590.0 sec348 MBytes584 Mbits/sec126[3]590.0-595.0 sec346 MBytes581 Mbits/sec127[3]595.0-600.0 sec349 MBytes586 Mbits/sec128[3]600.0-605.0 sec350 MBytes587 Mbits/sec129[3]605.0-610.0 sec351 MBytes588 Mbits/sec130[3]610.0-615.0 sec351 MBytes588 Mbits/sec131[3]615.0-620.0 sec351 MBytes588 Mbits/sec132[3]620.0-625.0 sec351 MBytes588 Mbits/sec133[3]625.0-630.0 sec350 MBytes592 Mbits/sec134[3]630.0-635.0 sec350 MBytes587 Mbits/sec135[3]635.0-640.0 sec349 MBytes585 Mbits/sec136[3]640.0-645.0 sec340 MBytes581 Mbits/sec137[3]645.0-650.0 sec346 MBytes581 Mbits/sec138[3]650.0-670.0 sec336 MBytes563 Mbits/sec140[3]660.0-665.0 sec336 MBytes560 Mbits/sec141[3]665.0-670.0 sec332 MBytes557 Mbits/sec142[3]670.0-675.0 sec332 MBytes557 Mbits/sec143[3]675.0-680.0 sec340 MBytes571 Mbits/sec144[3]680.0-685.0 sec330 MBytes553  |     | - | -   |             |     |     | -      |     |           |
| 124       [ 3] 580.0-585.0 sec       351 MBytes       590 Mbits/sec         125       [ 3] 585.0-590.0 sec       348 MBytes       584 Mbits/sec         126       [ 3] 590.0-595.0 sec       346 MBytes       581 Mbits/sec         127       [ 3] 595.0-600.0 sec       349 MBytes       586 Mbits/sec         128       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         129       [ 3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 610.0-615.0 sec       351 MBytes       589 Mbits/sec         131       [ 3] 615.0-620.0 sec       351 MBytes       589 Mbits/sec         132       [ 3] 620.0-625.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 620.0-625.0 sec       351 MBytes       588 Mbits/sec         134       [ 3] 630.0-635.0 sec       350 MBytes       587 Mbits/sec         135       [ 3] 640.0-645.0 sec       347 MBytes       588 Mbits/sec         136       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         137       [ 3] 645.0-660.0 sec       346 MBytes       580 Mbits/sec         138       [ 3] 655.0-660.0 sec       336 MBytes       560 Mbits/sec         140       [ 3] 665.0-670.0 sec       332 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 125       [ 3] 585.0-590.0 sec       348 MBytes       584 Mbits/sec         126       [ 3] 590.0-595.0 sec       346 MBytes       581 Mbits/sec         127       [ 3] 595.0-600.0 sec       349 MBytes       586 Mbits/sec         128       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         129       [ 3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 610.0-615.0 sec       353 MBytes       592 Mbits/sec         131       [ 3] 615.0-620.0 sec       351 MBytes       589 Mbits/sec         132       [ 3] 620.0-625.0 sec       351 MBytes       589 Mbits/sec         133       [ 3] 625.0-630.0 sec       350 MBytes       592 Mbits/sec         134       [ 3] 630.0-635.0 sec       350 MBytes       587 Mbits/sec         135       [ 3] 645.0-650.0 sec       347 MBytes       582 Mbits/sec         136       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         137       [ 3] 655.0-660.0 sec       346 MBytes       563 Mbits/sec         138       [ 3] 665.0-670.0 sec       336 MBytes       560 Mbits/sec         139       [ 3] 665.0-670.0 sec       336 MBytes       560 Mbits/sec         140       [ 3] 665.0-670.0 sec       332 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 126       [3] 590.0-595.0 sec       346 MBytes       581 Mbits/sec         127       [3] 595.0-600.0 sec       349 MBytes       586 Mbits/sec         128       [3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         129       [3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         130       [3] 610.0-615.0 sec       353 MBytes       592 Mbits/sec         131       [3] 615.0-620.0 sec       351 MBytes       588 Mbits/sec         132       [3] 625.0-630.0 sec       351 MBytes       588 Mbits/sec         133       [3] 625.0-630.0 sec       351 MBytes       587 Mbits/sec         134       [3] 630.0-645.0 sec       350 MBytes       592 Mbits/sec         135       [3] 635.0-640.0 sec       349 MBytes       587 Mbits/sec         135       [3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         136       [3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         137       [3] 655.0-660.0 sec       336 MBytes       569 Mbits/sec         138       [3] 665.0-670.0 sec       336 MBytes       560 Mbits/sec         140       [3] 665.0-670.0 sec       336 MBytes       560 Mbits/sec         141       [3] 665.0-670.0 sec       332 MBytes       557 Mbits/sec </td <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>  |     |   | -   |             |     |     | -      |     |           |
| 127       [3] 595.0-600.0 sec       349 MBytes       586 Mbits/sec         128       [3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         129       [3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         130       [3] 610.0-615.0 sec       353 MBytes       592 Mbits/sec         131       [3] 615.0-620.0 sec       351 MBytes       588 Mbits/sec         132       [3] 625.0-630.0 sec       351 MBytes       588 Mbits/sec         133       [3] 625.0-630.0 sec       351 MBytes       587 Mbits/sec         134       [3] 630.0-635.0 sec       350 MBytes       592 Mbits/sec         135       [3] 635.0-640.0 sec       349 MBytes       587 Mbits/sec         135       [3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         136       [3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         137       [3] 650.0-655.0 sec       336 MBytes       569 Mbits/sec         138       [3] 650.0-670.0 sec       336 MBytes       560 Mbits/sec         139       [3] 665.0-670.0 sec       336 MBytes       560 Mbits/sec         140       [3] 665.0-670.0 sec       332 MBytes       560 Mbits/sec         141       [3] 665.0-670.0 sec       332 MBytes       557 Mbits/sec </td <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>                                       |     | - | -   |             |     |     | -      |     |           |
| 128       [ 3] 600.0-605.0 sec       350 MBytes       587 Mbits/sec         129       [ 3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 610.0-615.0 sec       353 MBytes       592 Mbits/sec         131       [ 3] 615.0-620.0 sec       351 MBytes       588 Mbits/sec         132       [ 3] 620.0-625.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 625.0-630.0 sec       351 MBytes       588 Mbits/sec         134       [ 3] 630.0-635.0 sec       350 MBytes       592 Mbits/sec         135       [ 3] 635.0-640.0 sec       350 MBytes       587 Mbits/sec         136       [ 3] 640.0-645.0 sec       349 MBytes       582 Mbits/sec         137       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         138       [ 3] 650.0-655.0 sec       346 MBytes       580 Mbits/sec         139       [ 3] 650.0-660.0 sec       336 MBytes       569 Mbits/sec         140       [ 3] 660.0-675.0 sec       336 MBytes       560 Mbits/sec         141       [ 3] 665.0-670.0 sec       334 MBytes       560 Mbits/sec         142       [ 3] 675.0-680.0 sec       342 MBytes       573 Mbits/sec         143       [ 3] 675.0-680.0 sec       340 MBytes <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>   |     |   |     |             |     |     | -      |     |           |
| 129       [ 3] 605.0-610.0 sec       351 MBytes       588 Mbits/sec         130       [ 3] 610.0-615.0 sec       353 MBytes       592 Mbits/sec         131       [ 3] 615.0-620.0 sec       351 MBytes       589 Mbits/sec         132       [ 3] 620.0-625.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 625.0-630.0 sec       351 MBytes       588 Mbits/sec         134       [ 3] 630.0-635.0 sec       350 MBytes       592 Mbits/sec         135       [ 3] 635.0-640.0 sec       349 MBytes       588 Mbits/sec         136       [ 3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         136       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         137       [ 3] 655.0-660.0 sec       346 MBytes       580 Mbits/sec         138       [ 3] 655.0-660.0 sec       336 MBytes       569 Mbits/sec         139       [ 3] 660.0-665.0 sec       336 MBytes       563 Mbits/sec         140       [ 3] 665.0-670.0 sec       334 MBytes       560 Mbits/sec         141       [ 3] 665.0-670.0 sec       332 MBytes       557 Mbits/sec         142       [ 3] 675.0-680.0 sec       342 MBytes       553 Mbits/sec         143       [ 3] 675.0-680.0 sec       340 MBytes <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     |   | -   |             |     |     | -      |     |           |
| 130       [ 3] 610.0-615.0 sec       353 MBytes       592 Mbits/sec         131       [ 3] 615.0-620.0 sec       351 MBytes       589 Mbits/sec         132       [ 3] 620.0-625.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 625.0-630.0 sec       353 MBytes       592 Mbits/sec         134       [ 3] 630.0-635.0 sec       353 MBytes       592 Mbits/sec         135       [ 3] 635.0-640.0 sec       350 MBytes       587 Mbits/sec         136       [ 3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         137       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         138       [ 3] 650.0-655.0 sec       346 MBytes       580 Mbits/sec         139       [ 3] 650.0-650.0 sec       346 MBytes       580 Mbits/sec         139       [ 3] 655.0-660.0 sec       336 MBytes       569 Mbits/sec         140       [ 3] 660.0-675.0 sec       336 MBytes       560 Mbits/sec         141       [ 3] 665.0-670.0 sec       332 MBytes       557 Mbits/sec         142       [ 3] 675.0-680.0 sec       342 MBytes       573 Mbits/sec         143       [ 3] 675.0-680.0 sec       340 MBytes       573 Mbits/sec         144       [ 3] 685.0-690.0 sec       340 MBytes <td< td=""><td></td><td>-</td><td>-</td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>                                       |     | - | -   |             |     |     | -      |     |           |
| 131       [ 3] 615.0-620.0 sec       351 MBytes       589 Mbits/sec         132       [ 3] 620.0-625.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 625.0-630.0 sec       353 MBytes       592 Mbits/sec         134       [ 3] 630.0-635.0 sec       350 MBytes       587 Mbits/sec         135       [ 3] 635.0-640.0 sec       349 MBytes       585 Mbits/sec         136       [ 3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         137       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         138       [ 3] 650.0-655.0 sec       346 MBytes       580 Mbits/sec         139       [ 3] 665.0-660.0 sec       339 MBytes       569 Mbits/sec         140       [ 3] 665.0-670.0 sec       336 MBytes       563 Mbits/sec         141       [ 3] 665.0-670.0 sec       334 MBytes       560 Mbits/sec         142       [ 3] 675.0-680.0 sec       342 MBytes       573 Mbits/sec         143       [ 3] 675.0-680.0 sec       340 MBytes       573 Mbits/sec         144       [ 3] 680.0-685.0 sec       330 MBytes       553 Mbits/sec         145       [ 3] 685.0-690.0 sec       340 MBytes       571 Mbits/sec         145       [ 3] 690.0-695.0 sec       329 MBytes <td< td=""><td></td><td>l</td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>  |     | l |     |             |     |     | -      |     |           |
| 132       [ 3] 620.0-625.0 sec       351 MBytes       588 Mbits/sec         133       [ 3] 625.0-630.0 sec       353 MBytes       592 Mbits/sec         134       [ 3] 630.0-635.0 sec       350 MBytes       587 Mbits/sec         135       [ 3] 635.0-640.0 sec       349 MBytes       588 Mbits/sec         136       [ 3] 640.0-645.0 sec       349 MBytes       582 Mbits/sec         137       [ 3] 645.0-650.0 sec       347 MBytes       581 Mbits/sec         138       [ 3] 650.0-655.0 sec       346 MBytes       580 Mbits/sec         139       [ 3] 655.0-660.0 sec       346 MBytes       569 Mbits/sec         140       [ 3] 660.0-655.0 sec       336 MBytes       563 Mbits/sec         141       [ 3] 665.0-670.0 sec       334 MBytes       560 Mbits/sec         141       [ 3] 665.0-670.0 sec       332 MBytes       557 Mbits/sec         142       [ 3] 675.0-680.0 sec       332 MBytes       557 Mbits/sec         143       [ 675.0-680.0 sec       330 MBytes       553 Mbits/sec         144       [ 3] 680.0-685.0 sec       330 MBytes       553 Mbits/sec         145       [ 3] 690.0-695.0 sec       329 MBytes       552 Mbits/sec         146       [ 3] 690.0-695.0 sec       329 MBytes       55   |     | l |     |             |     |     | -      |     |           |
| 133       [ 3] 625.0-630.0 sec       353 MBytes       592 Mbits/sec         134       [ 3] 630.0-635.0 sec       350 MBytes       587 Mbits/sec         135       [ 3] 635.0-640.0 sec       349 MBytes       585 Mbits/sec         136       [ 3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         137       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         138       [ 3] 650.0-655.0 sec       346 MBytes       580 Mbits/sec         139       [ 3] 655.0-660.0 sec       334 MBytes       569 Mbits/sec         140       [ 3] 660.0-655.0 sec       336 MBytes       563 Mbits/sec         141       [ 3] 665.0-670.0 sec       334 MBytes       560 Mbits/sec         142       [ 3] 670.0-675.0 sec       332 MBytes       557 Mbits/sec         143       [ 3] 675.0-680.0 sec       332 MBytes       557 Mbits/sec         144       [ 3] 680.0-685.0 sec       330 MBytes       553 Mbits/sec         145       [ 3] 680.0-690.0 sec       340 MBytes       551 Mbits/sec         146       [ 3] 690.0-695.0 sec       329 MBytes       552 Mbits/sec         147       [ 3] 695.0-700.0 sec       324 MBytes       560 Mbits/sec         148       [ 3] 700.0-705.0 sec       329 MBytes <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>  |     |   |     |             |     |     |        |     |           |
| 134       [3] 630.0-635.0 sec       350 MBytes       587 Mbits/sec         135       [3] 635.0-640.0 sec       349 MBytes       585 Mbits/sec         136       [3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         137       [3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         138       [3] 650.0-655.0 sec       346 MBytes       580 Mbits/sec         139       [3] 655.0-660.0 sec       334 MBytes       569 Mbits/sec         140       [3] 660.0-655.0 sec       336 MBytes       563 Mbits/sec         141       [3] 665.0-670.0 sec       334 MBytes       560 Mbits/sec         142       [3] 670.0-675.0 sec       332 MBytes       557 Mbits/sec         143       [3] 675.0-680.0 sec       332 MBytes       557 Mbits/sec         144       [3] 680.0-685.0 sec       330 MBytes       553 Mbits/sec         143       [3] 680.0-685.0 sec       330 MBytes       553 Mbits/sec         144       [3] 680.0-690.0 sec       340 MBytes       571 Mbits/sec         145       [3] 690.0-695.0 sec       329 MBytes       552 Mbits/sec         146       [3] 695.0-700.0 sec       324 MBytes       560 Mbits/sec         147       [3] 695.0-700.0 sec       329 MBytes       552 Mbits/sec </td <td>132</td> <td>[</td> <td>-</td> <td></td> <td>sec</td> <td></td> <td>-</td> <td></td> <td></td>                                 | 132 | [ | -   |             | sec |     | -      |     |           |
| 135       [ 3] 635.0-640.0 sec       349 MBytes       585 Mbits/sec         136       [ 3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         137       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         138       [ 3] 650.0-655.0 sec       346 MBytes       580 Mbits/sec         139       [ 3] 655.0-660.0 sec       334 MBytes       569 Mbits/sec         140       [ 3] 660.0-665.0 sec       336 MBytes       563 Mbits/sec         141       [ 3] 665.0-670.0 sec       334 MBytes       560 Mbits/sec         142       [ 3] 670.0-675.0 sec       332 MBytes       557 Mbits/sec         143       [ 3] 675.0-680.0 sec       342 MBytes       573 Mbits/sec         144       [ 3] 680.0-685.0 sec       340 MBytes       573 Mbits/sec         144       [ 3] 685.0-690.0 sec       340 MBytes       571 Mbits/sec         145       [ 3] 690.0-695.0 sec       329 MBytes       552 Mbits/sec         146       [ 3] 695.0-700.0 sec       324 MBytes       560 Mbits/sec         147       [ 3] 695.0-700.0 sec       329 MBytes       552 Mbits/sec         148       [ 3] 700.0-705.0 sec       329 MBytes       552 Mbits/sec   | 133 |   | -   |             | sec |     | -      |     |           |
| 136       [ 3] 640.0-645.0 sec       347 MBytes       582 Mbits/sec         137       [ 3] 645.0-650.0 sec       346 MBytes       581 Mbits/sec         138       [ 3] 650.0-655.0 sec       346 MBytes       580 Mbits/sec         139       [ 3] 655.0-660.0 sec       339 MBytes       569 Mbits/sec         140       [ 3] 660.0-665.0 sec       336 MBytes       563 Mbits/sec         141       [ 3] 665.0-670.0 sec       334 MBytes       560 Mbits/sec         142       [ 3] 670.0-675.0 sec       332 MBytes       557 Mbits/sec         143       [ 3] 675.0-680.0 sec       342 MBytes       573 Mbits/sec         144       [ 3] 680.0-685.0 sec       330 MBytes       553 Mbits/sec         144       [ 3] 680.0-685.0 sec       340 MBytes       571 Mbits/sec         145       [ 3] 690.0-695.0 sec       329 MBytes       552 Mbits/sec         146       [ 3] 690.0-695.0 sec       329 MBytes       560 Mbits/sec         147       [ 3] 695.0-700.0 sec       324 MBytes       560 Mbits/sec         148       [ 3] 700.0-705.0 sec       329 MBytes       552 Mbits/sec   | 134 | [ | 3]  | 630.0-635.0 | sec | 350 | -      | 587 |           |
| 137[ 3] 645.0-650.0 sec346 MBytes581 Mbits/sec138[ 3] 650.0-655.0 sec346 MBytes580 Mbits/sec139[ 3] 655.0-660.0 sec339 MBytes569 Mbits/sec140[ 3] 660.0-665.0 sec336 MBytes563 Mbits/sec141[ 3] 665.0-670.0 sec334 MBytes560 Mbits/sec142[ 3] 670.0-675.0 sec332 MBytes557 Mbits/sec143[ 3] 675.0-680.0 sec342 MBytes573 Mbits/sec144[ 3] 680.0-685.0 sec330 MBytes553 Mbits/sec145[ 3] 685.0-690.0 sec340 MBytes571 Mbits/sec146[ 3] 690.0-695.0 sec329 MBytes552 Mbits/sec147[ 3] 695.0-700.0 sec324 MBytes560 Mbits/sec148[ 3] 700.0-705.0 sec329 MBytes552 Mbits/sec  | 135 | [ | 3]  | 635.0-640.0 | sec | 349 | MBytes | 585 | Mbits/sec |
| 138[ 3] 650.0-655.0 sec346 MBytes580 Mbits/sec139[ 3] 655.0-660.0 sec339 MBytes569 Mbits/sec140[ 3] 660.0-665.0 sec336 MBytes563 Mbits/sec141[ 3] 665.0-670.0 sec334 MBytes560 Mbits/sec142[ 3] 670.0-675.0 sec332 MBytes557 Mbits/sec143[ 3] 675.0-680.0 sec342 MBytes573 Mbits/sec144[ 3] 680.0-685.0 sec330 MBytes553 Mbits/sec145[ 3] 685.0-690.0 sec340 MBytes571 Mbits/sec146[ 3] 690.0-695.0 sec329 MBytes552 Mbits/sec147[ 3] 695.0-700.0 sec324 MBytes560 Mbits/sec148[ 3] 700.0-705.0 sec329 MBytes552 Mbits/sec  | 136 | [ | 3]  | 640.0-645.0 | sec | 347 | MBytes | 582 | Mbits/sec |
| 139[ 3] 655.0-660.0 sec339 MBytes569 Mbits/sec140[ 3] 660.0-665.0 sec336 MBytes563 Mbits/sec141[ 3] 665.0-670.0 sec334 MBytes560 Mbits/sec142[ 3] 670.0-675.0 sec332 MBytes557 Mbits/sec143[ 3] 675.0-680.0 sec342 MBytes573 Mbits/sec144[ 3] 680.0-685.0 sec330 MBytes553 Mbits/sec145[ 3] 685.0-690.0 sec340 MBytes571 Mbits/sec146[ 3] 690.0-695.0 sec329 MBytes552 Mbits/sec147[ 3] 695.0-700.0 sec324 MBytes560 Mbits/sec148[ 3] 700.0-705.0 sec329 MBytes552 Mbits/sec  | 137 | [ | 3]  | 645.0-650.0 | sec | 346 | MBytes | 581 | Mbits/sec |
| 140[ 3] 660.0-665.0 sec336 MBytes563 Mbits/sec141[ 3] 665.0-670.0 sec334 MBytes560 Mbits/sec142[ 3] 670.0-675.0 sec332 MBytes557 Mbits/sec143[ 3] 675.0-680.0 sec342 MBytes573 Mbits/sec144[ 3] 680.0-685.0 sec330 MBytes553 Mbits/sec145[ 3] 685.0-690.0 sec340 MBytes571 Mbits/sec146[ 3] 690.0-695.0 sec329 MBytes552 Mbits/sec147[ 3] 695.0-700.0 sec334 MBytes560 Mbits/sec148[ 3] 700.0-705.0 sec329 MBytes552 Mbits/sec  | 138 | [ | 3]  | 650.0-655.0 | sec | 346 | MBytes | 580 |           |
| 140[ 3] 660.0-665.0 sec336 MBytes563 Mbits/sec141[ 3] 665.0-670.0 sec334 MBytes560 Mbits/sec142[ 3] 670.0-675.0 sec332 MBytes557 Mbits/sec143[ 3] 675.0-680.0 sec342 MBytes573 Mbits/sec144[ 3] 680.0-685.0 sec330 MBytes553 Mbits/sec145[ 3] 685.0-690.0 sec340 MBytes571 Mbits/sec146[ 3] 690.0-695.0 sec329 MBytes552 Mbits/sec147[ 3] 695.0-700.0 sec334 MBytes560 Mbits/sec148[ 3] 700.0-705.0 sec329 MBytes552 Mbits/sec  | 139 | [ | 3]  | 655.0-660.0 | sec | 339 | MBytes | 569 | Mbits/sec |
| 142       [3] 670.0-675.0 sec       332 MBytes       557 Mbits/sec         143       [3] 675.0-680.0 sec       342 MBytes       573 Mbits/sec         144       [3] 680.0-685.0 sec       330 MBytes       553 Mbits/sec         145       [3] 685.0-690.0 sec       340 MBytes       571 Mbits/sec         146       [3] 690.0-695.0 sec       329 MBytes       552 Mbits/sec         147       [3] 695.0-700.0 sec       334 MBytes       560 Mbits/sec         148       [3] 700.0-705.0 sec       329 MBytes       552 Mbits/sec  | 140 | [ | 3]  | 660.0-665.0 | sec | 336 | MBytes | 563 |           |
| 143[ 3] 675.0-680.0 sec342 MBytes573 Mbits/sec144[ 3] 680.0-685.0 sec330 MBytes553 Mbits/sec145[ 3] 685.0-690.0 sec340 MBytes571 Mbits/sec146[ 3] 690.0-695.0 sec329 MBytes552 Mbits/sec147[ 3] 695.0-700.0 sec334 MBytes560 Mbits/sec148[ 3] 700.0-705.0 sec329 MBytes552 Mbits/sec  | 141 | [ | 3]  | 665.0-670.0 | sec | 334 | MBytes | 560 | Mbits/sec |
| 143[ 3] 675.0-680.0 sec342 MBytes573 Mbits/sec144[ 3] 680.0-685.0 sec330 MBytes553 Mbits/sec145[ 3] 685.0-690.0 sec340 MBytes571 Mbits/sec146[ 3] 690.0-695.0 sec329 MBytes552 Mbits/sec147[ 3] 695.0-700.0 sec334 MBytes560 Mbits/sec148[ 3] 700.0-705.0 sec329 MBytes552 Mbits/sec  | 142 | [ | 3]  | 670.0-675.0 | sec | 332 | MBytes | 557 | Mbits/sec |
| 144       [3] 680.0-685.0 sec       330 MBytes       553 Mbits/sec         145       [3] 685.0-690.0 sec       340 MBytes       571 Mbits/sec         146       [3] 690.0-695.0 sec       329 MBytes       552 Mbits/sec         147       [3] 695.0-700.0 sec       334 MBytes       560 Mbits/sec         148       [3] 700.0-705.0 sec       329 MBytes       552 Mbits/sec  |     |   |     |             |     |     | -      |     |           |
| 145       [3] 685.0-690.0 sec       340 MBytes       571 Mbits/sec         146       [3] 690.0-695.0 sec       329 MBytes       552 Mbits/sec         147       [3] 695.0-700.0 sec       334 MBytes       560 Mbits/sec         148       [3] 700.0-705.0 sec       329 MBytes       552 Mbits/sec   |     |   |     |             |     |     | -      |     |           |
| 146         [ 3] 690.0-695.0 sec         329 MBytes         552 Mbits/sec           147         [ 3] 695.0-700.0 sec         334 MBytes         560 Mbits/sec           148         [ 3] 700.0-705.0 sec         329 MBytes         552 Mbits/sec   |     |   | -   |             |     |     | -      |     |           |
| 147         [ 3] 695.0-700.0 sec         334 MBytes         560 Mbits/sec           148         [ 3] 700.0-705.0 sec         329 MBytes         552 Mbits/sec   |     |   |     |             |     |     | -      |     |           |
| 148 [ 3] 700.0-705.0 sec 329 MBytes 552 Mbits/sec   |     |   |     |             |     |     | -      |     |           |
|   |     |   |     |             |     |     | -      |     |           |
|   |     |   |     |             |     |     | -      |     |           |
|   |     |   | - 1 |             |     | 200 | 000    | 201 |           |

|     | 1     | <b>F</b> 4.0 0 <b>F</b> 4.5 0 |                          |                   |
|-----|-------|-------------------------------|--------------------------|-------------------|
| 150 |       |                               | 28 MBytes 550 Mbits/sec  |                   |
| 151 |       |                               | 32 MBytes 557 Mbits/sec  |                   |
| 152 |       |                               | 26 MBytes 547 Mbits/sec  |                   |
| 153 | [ 3]  | 725.0-730.0 sec 3             | 34 MBytes 560 Mbits/sec  |                   |
| 154 | [ 3]  |                               | 30 MBytes 553 Mbits/sec  |                   |
| 155 | [ 3]  | 735.0-740.0 sec 3             | 36 MBytes 563 Mbits/sec  |                   |
| 156 | [ 3]  | 740.0-745.0 sec 3             | 32 MBytes 557 Mbits/sec  |                   |
| 157 | [ 3]  | 745.0-750.0 sec 3             | 47 MBytes 582 Mbits/sec  |                   |
| 158 | [ 3]  | 750.0-755.0 sec 3             | 53 MBytes 592 Mbits/sec  |                   |
| 159 | [ 3]  | 755.0-760.0 sec               | 52 MBytes 591 Mbits/sec  |                   |
| 160 | [ 3]  |                               | 52 MBytes 590 Mbits/sec  |                   |
| 161 |       |                               | 50 MBytes 587 Mbits/sec  |                   |
| 162 |       |                               | 48 MBytes 584 Mbits/sec  |                   |
| 162 |       |                               | 48 MBytes 584 Mbits/sec  |                   |
| 165 |       |                               | 47 MBytes 582 Mbits/sec  |                   |
|     |       |                               | -                        |                   |
| 165 |       |                               | -                        |                   |
| 166 |       |                               | 47 MBytes 582 Mbits/sec  |                   |
| 167 |       |                               | 46 MBytes 581 Mbits/sec  |                   |
| 168 |       |                               | 53 MBytes 593 Mbits/sec  |                   |
| 169 |       |                               | 53 MBytes 592 Mbits/sec  |                   |
| 170 |       |                               | 51 MBytes 589 Mbits/sec  |                   |
| 171 | [ 3]  | 815.0-820.0 sec 3             | 52 MBytes 590 Mbits/sec  |                   |
| 172 | [ 3]  | 820.0-825.0 sec               | 51 MBytes 589 Mbits/sec  |                   |
| 173 | [ 3]  | 825.0-830.0 sec               | 50 MBytes 587 Mbits/sec  |                   |
| 174 | [ 3]  | 830.0-835.0 sec 3             | 52 MBytes 591 Mbits/sec  |                   |
| 175 | [ 3]  | 835.0-840.0 sec 3             | 52 MBytes 591 Mbits/sec  |                   |
| 176 | [ 3]  | 840.0-845.0 sec 3             | 52 MBytes 591 Mbits/sec  |                   |
| 177 | [ 3]  | 845.0-850.0 sec 3             | 52 MBytes 591 Mbits/sec  |                   |
| 178 | [ 3]  | 850.0-855.0 sec               | 51 MBytes 589 Mbits/sec  |                   |
| 179 |       |                               | 49 MBytes 585 Mbits/sec  |                   |
| 180 |       |                               | 48 MBytes 585 Mbits/sec  |                   |
| 181 |       |                               | 51 MBytes 589 Mbits/sec  |                   |
| 182 |       |                               | 49 MBytes 585 Mbits/sec  |                   |
| 183 |       |                               | 50 MBytes 588 Mbits/sec  |                   |
| 185 |       |                               | -                        |                   |
|     |       |                               | -                        |                   |
| 185 |       |                               | 48 MBytes 583 Mbits/sec  |                   |
| 186 |       |                               | 49 MBytes 586 Mbits/sec  |                   |
| 187 |       |                               | 52 MBytes 590 Mbits/sec  |                   |
| 188 | [ 3]  | 0.0-900.0 sec 60.             | 9 GBytes 581 Mbits/sec   |                   |
| 189 |       |                               |                          |                   |
| 190 | UDP T | raffic                        |                          |                   |
| 191 |       |                               |                          |                   |
| 192 |       | -                             | 16.0.2, UDP port 5001    |                   |
| 193 | Sendi | ng 1470 byte datagra          | ms                       |                   |
| 194 | UDP b | uffer size: 224 KBy           | te (default)             |                   |
| 195 |       |                               |                          |                   |
| 196 | [ 3]  | local 10.0.3.2 port           | 58882 connected with 172 | .16.0.2 port 5001 |
| 197 | [ ID] | Interval Trar                 | sfer Bandwidth           |                   |
| 198 | [ 3]  | 0.0- 5.0 sec 481              | MBytes 806 Mbits/sec     |                   |
| 199 | [ 3]  | 5.0-10.0 sec 481              | MBytes 807 Mbits/sec     |                   |
| 200 | [ 3]  |                               | MBytes 807 Mbits/sec     |                   |
| 201 | [ 3]  |                               | MBytes 806 Mbits/sec     |                   |
| 202 | [ 3]  |                               | MBytes 808 Mbits/sec     |                   |
| 203 | [ 3]  |                               | MBytes 808 Mbits/sec     |                   |
| 203 | [ 3]  |                               | MBytes 804 Mbits/sec     |                   |
| 204 | [ 3]  |                               | MBytes 806 Mbits/sec     |                   |
|     |       |                               | -                        |                   |
| 206 | [ 3]  |                               | MBytes 806 Mbits/sec     |                   |
| 207 | [ 3]  |                               | MBytes 807 Mbits/sec     |                   |
| 208 | [ 3]  |                               | MBytes 807 Mbits/sec     |                   |
| 209 | [ 3]  |                               | MBytes 807 Mbits/sec     |                   |
| 210 | [ 3]  |                               | MBytes 806 Mbits/sec     |                   |
| 211 | [ 3]  |                               | MBytes 808 Mbits/sec     |                   |
| 212 | [ 3]  |                               | MBytes 807 Mbits/sec     |                   |
| 213 | [ 3]  | 75.0-80.0 sec 479             | MBytes 803 Mbits/sec     |                   |
| 214 | [ 3]  |                               | MBytes 806 Mbits/sec     |                   |
| 215 | [ 3]  | 85.0-90.0 sec 481             | MBytes 808 Mbits/sec     |                   |
| 215 |       |                               |                          |                   |

| 216        | [      | 3]       | 90.0-95.0 se               |            | 481 MH     | -                |            | oits/sec               |
|------------|--------|----------|----------------------------|------------|------------|------------------|------------|------------------------|
| 217        | [      | 3]       | 95.0-100.0                 |            |            | 4Bytes           |            | Abits/sec              |
| 218        | [      | 3]       | 100.0-105.0                | sec        |            | MBytes           | 807        | Mbits/sec              |
| 219        | [      | 3]       | 105.0-110.0                | sec        | 481        | -                | 807        |                        |
| 220        | [      | 3]       | 110.0-115.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 221        | [      | 3]       | 115.0-120.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 222        | ]      | 3]       | 120.0-125.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 223<br>224 | L<br>[ | 3]<br>3] | 125.0-130.0<br>130.0-135.0 | sec<br>sec | 481<br>481 | MBytes<br>MBytes | 808<br>807 | Mbits/sec<br>Mbits/sec |
| 224        | L<br>[ | 3]       | 135.0-140.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 225        | [      | 3]       | 140.0-145.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 220        | [      | 3]       | 145.0-150.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 228        | [      | 3]       | 150.0-155.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 229        | [      | 3]       | 155.0-160.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 230        | [      | 3]       | 160.0-165.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 231        | Ĩ      | 3]       | 165.0-170.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 232        | [      | 3]       | 170.0-175.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 233        | [      | 3]       | 175.0-180.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 234        | [      | 3]       | 180.0-185.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 235        | [      | 3]       | 185.0-190.0                | sec        | 482        | MBytes           | 808        | Mbits/sec              |
| 236        | [      | 3]       | 190.0-195.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 237        | [      | 3]       | 195.0-200.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 238        | [      | 3]       | 200.0-205.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 239        | [      | 3]       | 205.0-210.0                | sec        | 482        | MBytes           | 808        | Mbits/sec              |
| 240        | [      | 3]       | 210.0-215.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 241        | [      | 3]       | 215.0-220.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 242        | [      | 3]       | 220.0-225.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 243        | [      | 3]       | 225.0-230.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 244        | [      | 3]       | 230.0-235.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 245        | [      | 3]       | 235.0-240.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 246        | [      | 3]       | 240.0-245.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 247        | [      | 3]       | 245.0-250.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 248        | [      | 3]       | 250.0-255.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 249        | [      | 3]       | 255.0-260.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 250        | [      | 3]       | 260.0-265.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 251        | [      | 3]       | 265.0-270.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 252        | [      | 3]       | 270.0-275.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 253<br>254 | ]<br>[ | 3]<br>3] | 275.0-280.0<br>280.0-285.0 | sec        | 481<br>481 | MBytes<br>MBytes | 807<br>806 | Mbits/sec<br>Mbits/sec |
| 255        | [      | 3]       | 285.0-290.0                | sec<br>sec | 481        | MBytes           | 808        | Mbits/sec              |
| 255        | [      | 3]       | 290.0-295.0                | sec        | 481        | MBytes           | 806        |                        |
| 257        | [      | 3]       | 295.0-300.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 258        | [      | 3]       | 300.0-305.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 259        | ĺ      | 3]       | 305.0-310.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 260        | [      | 3]       | 310.0-315.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 261        | [      | 3]       | 315.0-320.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 262        | [      | 3]       | 320.0-325.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 263        | [      | 3]       | 325.0-330.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 264        | [      | 3]       | 330.0-335.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 265        | [      | 3]       | 335.0-340.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 266        | [      | 3]       | 340.0-345.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 267        | [      | 3]       | 345.0-350.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 268        | [      | 3]       | 350.0-355.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 269        | [      | 3]       | 355.0-360.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 270        | [      | 3]       | 360.0-365.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 271        | [      | 3]       | 365.0-370.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 272        | [      | 3]       | 370.0-375.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 273        | [      | 3]       | 375.0-380.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 274        | [      | 3]       | 380.0-385.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 275        | [<br>  | 3]       | 385.0-390.0                | sec        | 482        | MBytes           | 808        | Mbits/sec              |
| 276        | [<br>r | 3]       | 390.0-395.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 277<br>278 | ]<br>[ | 3]<br>3] | 395.0-400.0<br>400.0-405.0 | sec        | 481<br>481 | MBytes<br>MBytes | 807<br>807 | Mbits/sec<br>Mbits/sec |
| 278<br>279 | L<br>[ | 3]       | 400.0-403.0                | sec<br>sec | 481        | MBytes           | 807        | Mbits/sec              |
| 280        | [      | 3]       | 410.0-415.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 281        | [      | 3]       | 415.0-420.0                | sec        |            | MBytes           | 807        | Mbits/sec              |
|            | L L    | 21       |                            |            | 101        | 000              | 201        |                        |

|     | 1.2    | ~ 1 | 100 0 105 0 |     | 4.0.1 |                  | 0.0.6 |           |
|-----|--------|-----|-------------|-----|-------|------------------|-------|-----------|
| 282 | ]      | 3]  | 420.0-425.0 | sec |       | MBytes           | 806   | Mbits/sec |
| 283 | [      | 3]  | 425.0-430.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 284 | [      | 3]  | 430.0-435.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 285 | [      | 3]  | 435.0-440.0 | sec | 480   | MBytes           | 806   | Mbits/sec |
| 286 | 1      | 3]  | 440.0-445.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 287 | ſ      | 3]  | 445.0-450.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 288 | ī      | 3]  | 450.0-455.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 289 | i      | 3]  | 455.0-460.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 290 | ľ      | 3]  | 460.0-465.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
|     |        | -   |             |     |       | -                |       |           |
| 291 | ]      | 3]  | 465.0-470.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 292 | ]      | 3]  | 470.0-475.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 293 | [      | 3]  | 475.0-480.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 294 | [      | 3]  | 480.0-485.0 | sec | 480   | MBytes           | 806   | Mbits/sec |
| 295 | [      | 3]  | 485.0-490.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 296 | [      | 3]  | 490.0-495.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 297 | [      | 3]  | 495.0-500.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 298 | ſ      | 3]  | 500.0-505.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 299 | ſ      | 3]  | 505.0-510.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 300 | ĺ      | 3]  | 510.0-515.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 301 | ī      | 3]  | 515.0-520.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 302 | i      | 3]  | 520.0-525.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 303 | ĺ      | 3]  | 525.0-530.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
|     |        | -   |             |     |       | -                |       | Mbits/sec |
| 304 | ]      | 3]  | 530.0-535.0 | sec | 481   | MBytes           | 807   |           |
| 305 | ]      | 3]  | 535.0-540.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 306 | [      | 3]  | 540.0-545.0 | sec | 480   | MBytes           | 806   | Mbits/sec |
| 307 | [      | 3]  | 545.0-550.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 308 | [      | 3]  | 550.0-555.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 309 | [      | 3]  | 555.0-560.0 | sec | 482   | MBytes           | 808   | Mbits/sec |
| 310 | [      | 3]  | 560.0-565.0 | sec | 482   | MBytes           | 809   | Mbits/sec |
| 311 | [      | 3]  | 565.0-570.0 | sec | 482   | MBytes           | 809   | Mbits/sec |
| 312 | [      | 3]  | 570.0-575.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 313 | [      | 3]  | 575.0-580.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 314 | ſ      | 3]  | 580.0-585.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 315 | ſ      | 3]  | 585.0-590.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 316 | ſ      | 3]  | 590.0-595.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 317 | ĺ      | 3]  | 595.0-600.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 318 | ī      | 3]  | 600.0-605.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 319 | i      | 3]  | 605.0-610.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 320 | Ĩ      | 3]  | 610.0-615.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 321 | Ē      | 3]  | 615.0-620.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
|     |        | 3]  | 620.0-625.0 |     | 481   | -                | 808   | Mbits/sec |
| 322 | [      | -   | 625.0-630.0 | sec |       | MBytes<br>MBytes |       | Mbits/sec |
| 323 | [      | 3]  |             | sec | 482   | -                | 808   |           |
| 324 | ]      | 3]  | 630.0-635.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 325 | [      | 3]  | 635.0-640.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 326 | [      | 3]  | 640.0-645.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 327 | [      | 3]  | 645.0-650.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 328 | [      | 3]  | 650.0-655.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 329 | [      | 3]  | 655.0-660.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 330 | [      | 3]  | 660.0-665.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 331 | [      | 3]  | 665.0-670.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 332 | ]      | 3]  | 670.0-675.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 333 | [      | 3]  | 675.0-680.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 334 | 1      | 3]  | 680.0-685.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 335 | ſ      | 3]  | 685.0-690.0 | sec | 482   | MBytes           | 808   | Mbits/sec |
| 336 | ſ      | 3]  | 690.0-695.0 | sec | 481   | MBytes           | 808   | Mbits/sec |
| 337 | ĺ      | 3]  | 695.0-700.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 338 | i      | 3]  | 700.0-705.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 339 | ĺ      | 3]  | 705.0-710.0 | sec | 481   | MBytes           | 806   | Mbits/sec |
| 340 | ĺ      | 3]  | 710.0-715.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 341 | l [    | 3]  | 715.0-720.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
|     | l<br>[ | 3]  | 720.0-725.0 |     |       | MBytes           | 807   | Mbits/sec |
| 342 | L<br>[ | -   |             | sec | 481   | -                | 807   | Mbits/sec |
| 343 |        | 3]  | 725.0-730.0 | sec | 481   | MBytes           |       |           |
| 344 | [      | 3]  | 730.0-735.0 | sec |       | MBytes           | 808   | Mbits/sec |
| 345 | [      | 3]  | 735.0-740.0 | sec |       | MBytes           | 807   | Mbits/sec |
| 346 | ]      | 3]  | 740.0-745.0 | sec | 481   | MBytes           | 807   | Mbits/sec |
| 347 | [      | 3]  | 745.0-750.0 | sec | 482   | MBytes           | 808   | Mbits/sec |
|     |        |     |             |     |       |                  |       |           |

|     | -  |     |  |
|-----|----|-----|--|
| 348 | [  | 3]  | 750.0-755.0 sec 481 MBytes 807 Mbits/sec                               |
| 349 | [  | 3]  | 755.0-760.0 sec 481 MBytes 807 Mbits/sec                               |
| 350 | [  | 3]  | 760.0-765.0 sec 481 MBytes 806 Mbits/sec                               |
| 351 | [  | 3]  | 765.0-770.0 sec 481 MBytes 806 Mbits/sec                               |
| 352 | [  | 3]  | 770.0-775.0 sec 481 MBytes 807 Mbits/sec                               |
| 353 | [  | 3]  | 775.0-780.0 sec 481 MBytes 807 Mbits/sec                               |
| 354 | [  | 3]  | 780.0-785.0 sec 481 MBytes 807 Mbits/sec                               |
| 355 | [  | 3]  | 785.0-790.0 sec 481 MBytes 808 Mbits/sec                               |
| 356 | [  | 3]  | 790.0-795.0 sec 481 MBytes 808 Mbits/sec                               |
| 357 | [  | 3]  | 795.0-800.0 sec 481 MBytes 807 Mbits/sec                               |
| 358 | [  | 3]  | 800.0-805.0 sec 481 MBytes 808 Mbits/sec                               |
| 359 | [  | 3]  | 805.0-810.0 sec 482 MBytes 808 Mbits/sec                               |
| 360 | [  | 3]  | 810.0-815.0 sec 481 MBytes 807 Mbits/sec                               |
| 361 | [  | 3]  | 815.0-820.0 sec 481 MBytes 807 Mbits/sec                               |
| 362 | [  | 3]  | 820.0-825.0 sec 481 MBytes 807 Mbits/sec                               |
| 363 | [  | 3]  | 825.0-830.0 sec 481 MBytes 807 Mbits/sec                               |
| 364 | [  | 3]  | 830.0-835.0 sec 481 MBytes 807 Mbits/sec                               |
| 365 | [  | 3]  | 835.0-840.0 sec 481 MBytes 807 Mbits/sec                               |
| 366 | [  | 3]  | 840.0-845.0 sec 480 MBytes 806 Mbits/sec                               |
| 367 | [  | 3]  | 845.0-850.0 sec 481 MBytes 808 Mbits/sec                               |
| 368 | [  | 3]  | 850.0-855.0 sec 481 MBytes 807 Mbits/sec                               |
| 369 | [  | 3]  | 855.0-860.0 sec 481 MBytes 807 Mbits/sec                               |
| 370 | [  | 3]  | 860.0-865.0 sec 481 MBytes 808 Mbits/sec                               |
| 371 | [  | 3]  | 865.0-870.0 sec 482 MBytes 808 Mbits/sec                               |
| 372 | [  | 3]  | 870.0-875.0 sec 481 MBytes 808 Mbits/sec                               |
| 373 | [  | 3]  | 875.0-880.0 sec 481 MBytes 807 Mbits/sec                               |
| 374 | [  | 3]  | 880.0-885.0 sec 481 MBytes 807 Mbits/sec                               |
| 375 | [  | 3]  | 885.0-890.0 sec 481 MBytes 807 Mbits/sec                               |
| 376 | [  | 3]  | 890.0-895.0 sec 481 MBytes 806 Mbits/sec                               |
| 377 | [  | 3]  | 0.0-900.0 sec 84.6 GBytes 807 Mbits/sec                                |
| 378 | [  | 3]  | Sent 61764867 datagrams  |
| 379 | [  | 3]  | Server Report:   |
| 380 | [3 | ]0. | 0-900.0 sec 84.3 GBytes 804 Mbits/sec 0.008 ms 196586/61764866 (0.32%) |
| 381 | [  | 3]  | 0.0-900.0 sec 3718 datagrams received out-of-order                     |
|     |    |     |  |

| _      |          |                       | Results for Medium VMs case1                  |
|--------|----------|-----------------------|---|
| Т      | CP T     | raffic                |   |
| -<br>C | <br>lien | <br>t connecting to 1 | 0.0.3.16, TCP port 5001                       |
|        |          | indow size: 23.5      |   |
| -      |          |                       |   |
|        |          |                       | port 43973 connected with 10.0.3.16 port 5001 |
| [      | -        |                       | 'ransfer Bandwidth                            |
| [      |          |                       | 557 MBytes 934 Mbits/sec                      |
| [      |          |                       | 569 MBytes 954 Mbits/sec                      |
| [      | -        |                       | 623 MBytes 1.05 Gbits/sec                     |
| [      | -        |                       | 648 MBytes 1.09 Gbits/sec                     |
| [      | -        |                       | 651 MBytes 1.09 Gbits/sec                     |
| [      | -        |                       | 643 MBytes 1.08 Gbits/sec                     |
| [      | -        |                       | 648 MBytes 1.09 Gbits/sec                     |
| [      | 3]       | 35.0-40.0 sec         | 641 MBytes 1.08 Gbits/sec                     |
| [      | 3]       | 40.0-45.0 sec         | 651 MBytes 1.09 Gbits/sec                     |
| [      | 3]       | 45.0-50.0 sec         | 658 MBytes 1.10 Gbits/sec                     |
| [      | 3]       | 50.0-55.0 sec         | 652 MBytes 1.09 Gbits/sec                     |
| [      | 3]       | 55.0-60.0 sec         | 662 MBytes 1.11 Gbits/sec                     |
| [      | 3]       | 60.0-65.0 sec         | 648 MBytes 1.09 Gbits/sec                     |
| ]      | 3]       | 65.0-70.0 sec         | 651 MBytes 1.09 Gbits/sec                     |
| [      | 3]       | 70.0-75.0 sec         | 646 MBytes 1.08 Gbits/sec                     |
| [      | 3]       | 75.0-80.0 sec         | 646 MBytes 1.08 Gbits/sec                     |
| ]      | 3]       | 80.0-85.0 sec         | 647 MBytes 1.09 Gbits/sec                     |
| [      | 3]       | 85.0-90.0 sec         | 638 MBytes 1.07 Gbits/sec                     |
| ]      | 3]       | 90.0-95.0 sec         | 651 MBytes 1.09 Gbits/sec                     |
| [      | 3]       | 95.0-100.0 sec        | 646 MBytes 1.08 Gbits/sec                     |
| [      | 3]       | 100.0-105.0 sec       | 649 MBytes 1.09 Gbits/sec                     |
| [      | 3]       | 105.0-110.0 sec       | 644 MBytes 1.08 Gbits/sec                     |
| [      | 3]       | 110.0-115.0 sec       | 659 MBytes 1.11 Gbits/sec                     |
| [      | 3]       | 115.0-120.0 sec       | 652 MBytes 1.09 Gbits/sec                     |

|    | ı.  |    |             |     |     |        |      |           |
|----|-----|----|-------------|-----|-----|--------|------|-----------|
| 32 | [   | 3] | 120.0-125.0 | sec | 642 | MBytes | 1.08 | Gbits/sec |
| 33 | [   | 3] | 125.0-130.0 | sec | 645 | MBytes | 1.08 | Gbits/sec |
| 34 | [   | 3] | 130.0-135.0 | sec | 642 | MBytes | 1.08 | Gbits/sec |
| 35 | [   | 3] | 135.0-140.0 |     | 636 | MBytes | 1.07 | Gbits/sec |
|    | -   | -  |             | sec |     | -      |      |           |
| 36 | [   | 3] | 140.0-145.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
| 37 | ]   | 3] | 145.0-150.0 | sec | 646 | MBytes | 1.08 | Gbits/sec |
| 38 | ]   | 3] | 150.0-155.0 | sec | 650 | MBytes | 1.09 | Gbits/sec |
|    | -   | -  |             |     |     | -      |      |           |
| 39 | [   | 3] | 155.0-160.0 | sec | 652 | MBytes | 1.09 | Gbits/sec |
| 40 | [   | 3] | 160.0-165.0 | sec | 642 | MBytes | 1.08 | Gbits/sec |
| 41 | ] [ | 3] | 165.0-170.0 | sec | 656 | MBytes | 1.10 | Gbits/sec |
| 42 | ]   | 3] | 170.0-175.0 | sec | 656 | MBytes | 1.10 | Gbits/sec |
|    | -   | -  |             |     |     | -      |      |           |
| 43 | [   | 3] | 175.0-180.0 | sec | 656 | MBytes | 1.10 | Gbits/sec |
| 44 | [   | 3] | 180.0-185.0 | sec | 646 | MBytes | 1.08 | Gbits/sec |
| 45 | [   | 3] | 185.0-190.0 | sec | 652 | MBytes | 1.09 | Gbits/sec |
| 46 | [   | 3] | 190.0-195.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
|    |     | -  |             |     |     | -      |      |           |
| 47 | [   | 3] | 195.0-200.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
| 48 | [   | 3] | 200.0-205.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
| 49 | [   | 3] | 205.0-210.0 | sec | 654 | MBytes | 1.10 | Gbits/sec |
| 50 | ĺ   | 3] | 210.0-215.0 | sec | 648 | MBytes | 1.09 | Gbits/sec |
|    |     | -  |             |     |     | -      |      |           |
| 51 | [   | 3] | 215.0-220.0 | sec | 661 | MBytes | 1.11 | Gbits/sec |
| 52 | ]   | 3] | 220.0-225.0 | sec | 653 | MBytes | 1.10 | Gbits/sec |
| 53 | ]   | 3] | 225.0-230.0 | sec | 651 | MBytes | 1.09 | Gbits/sec |
|    |     | -  |             |     | 650 | -      |      |           |
| 54 | [   | 3] | 230.0-235.0 | sec |     | MBytes | 1.09 | Gbits/sec |
| 55 | [   | 3] | 235.0-240.0 | sec | 664 | MBytes | 1.11 | Gbits/sec |
| 56 | ]   | 3] | 240.0-245.0 | sec | 652 | MBytes | 1.09 | Gbits/sec |
| 57 | ]   | 3] | 245.0-250.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
|    | -   | -  |             |     |     | -      |      |           |
| 58 | [   | 3] | 250.0-255.0 | sec | 650 | MBytes | 1.09 | Gbits/sec |
| 59 | [   | 3] | 255.0-260.0 | sec | 648 | MBytes | 1.09 | Gbits/sec |
| 60 | ]   | 3] | 260.0-265.0 | sec | 646 | MBytes | 1.08 | Gbits/sec |
| 61 | ]   | 3] | 265.0-270.0 | sec | 648 | MBvtes | 1.09 | Gbits/sec |
|    | -   | -  |             |     |     | -      |      |           |
| 62 | [   | 3] | 270.0-275.0 | sec | 654 | MBytes | 1.10 | Gbits/sec |
| 63 | [   | 3] | 275.0-280.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
| 64 | ]   | 31 | 280.0-285.0 | sec | 654 | MBytes | 1.10 | Gbits/sec |
| 65 | ī   | 3] | 285.0-290.0 | sec | 650 | MBytes | 1.09 | Gbits/sec |
|    |     | -  |             |     |     | -      |      |           |
| 66 | [   | 3] | 290.0-295.0 | sec | 658 | MBytes | 1.10 | Gbits/sec |
| 67 | [   | 3] | 295.0-300.0 | sec | 657 | MBytes | 1.10 | Gbits/sec |
| 68 | [   | 3] | 300.0-305.0 | sec | 648 | MBytes | 1.09 | Gbits/sec |
| 69 | ĺ   | 3] | 305.0-310.0 | sec | 649 | MBytes | 1.09 | Gbits/sec |
|    |     | -  |             |     |     | -      |      |           |
| 70 | [   | 3] | 310.0-315.0 | sec | 645 | MBytes | 1.08 | Gbits/sec |
| 71 | [   | 3] | 315.0-320.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
| 72 | [   | 3] | 320.0-325.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
|    | [   | 3] | 325.0-330.0 | sec | 650 | MBvtes | 1.09 | Gbits/sec |
| 73 | -   | -  |             |     |     | -      |      |           |
| 74 | [   | 3] | 330.0-335.0 | sec | 655 | MBytes | 1.10 | Gbits/sec |
| 75 | [   | 3] | 335.0-340.0 | sec | 655 | MBytes | 1.10 | Gbits/sec |
| 76 | ſ   | 3] | 340.0-345.0 | sec | 645 | MBytes | 1.08 | Gbits/sec |
| 77 |     | 3] | 345.0-350.0 |     | 638 | MBytes | 1.07 | Gbits/sec |
|    | [   | -  |             | sec |     | -      |      |           |
| 78 | [   | 3] | 350.0-355.0 | sec | 661 | MBytes | 1.11 | Gbits/sec |
| 79 | [   | 3] | 355.0-360.0 | sec | 658 | MBytes | 1.10 | Gbits/sec |
| 80 | [   | 3] | 360.0-365.0 | sec | 653 | MBytes | 1.10 | Gbits/sec |
|    | -   | 3] |             | sec |     | -      | 1.08 | Gbits/sec |
| 81 | [   | -  | 365.0-370.0 |     | 646 | MBytes |      |           |
| 82 | [   | 3] | 370.0-375.0 | sec | 652 | MBytes | 1.09 | Gbits/sec |
| 83 | [   | 3] | 375.0-380.0 | sec | 645 | MBytes | 1.08 | Gbits/sec |
| 84 | [   | 3] | 380.0-385.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
|    |     | -  | 385.0-390.0 |     |     | -      |      |           |
| 85 | [   | 3] |             | sec | 644 | MBytes | 1.08 | Gbits/sec |
| 86 | [   | 3] | 390.0-395.0 | sec | 643 | MBytes | 1.08 | Gbits/sec |
| 87 | [   | 3] | 395.0-400.0 | sec | 644 | MBytes | 1.08 | Gbits/sec |
| 88 | [   | 3] | 400.0-405.0 | sec | 649 | MBytes | 1.09 | Gbits/sec |
|    |     | -  |             |     |     | -      |      |           |
| 89 | [   | 3] | 405.0-410.0 | sec | 642 | MBytes | 1.08 | Gbits/sec |
| 90 | [   | 3] | 410.0-415.0 | sec | 646 | MBytes | 1.08 | Gbits/sec |
| 91 | [   | 3] | 415.0-420.0 | sec | 662 | MBytes | 1.11 | Gbits/sec |
| 92 | [   | 3] | 420.0-425.0 | sec | 656 | MBytes | 1.10 | Gbits/sec |
|    | -   | -  |             |     |     | -      |      |           |
| 93 | [   | 3] | 425.0-430.0 | sec | 641 | MBytes | 1.08 | Gbits/sec |
| 94 | [   | 3] | 430.0-435.0 | sec | 650 | MBytes | 1.09 | Gbits/sec |
| 95 | [   | 3] | 435.0-440.0 | sec | 648 | MBytes | 1.09 | Gbits/sec |
| 96 | [   | 3] | 440.0-445.0 | sec | 645 | MBytes | 1.08 | Gbits/sec |
|    |     |    |             |     |     | -      |      |           |
| 97 | [   | 3] | 445.0-450.0 | sec | 650 | MBytes | 1.09 | Gbits/sec |
|    |     |    |             |     |     |        |      |           |

|            | 1      | ~ 1      | 450 0 455 0                |            | 646        |                  | 1 0 0 |                        |
|------------|--------|----------|----------------------------|------------|------------|------------------|-------|------------------------|
| 98         | [      | 3]       | 450.0-455.0                | sec        |            | MBytes           | 1.08  | Gbits/sec              |
| 99         | [      | 3]       | 455.0-460.0                | sec        | 652        | MBytes           | 1.09  | Gbits/sec              |
| 100        | [      | 3]       | 460.0-465.0                | sec        | 659        | MBytes           | 1.10  | Gbits/sec              |
| 101        | [      | 3]       | 465.0-470.0                | sec        | 652        | MBytes           | 1.09  | Gbits/sec              |
| 102        | [      | 3]       | 470.0-475.0                | sec        | 649        | MBytes           | 1.09  | Gbits/sec              |
| 103        | [      | 3]       | 475.0-480.0                | sec        | 660        | MBytes           | 1.11  | Gbits/sec              |
| 104        | [      | 3]       | 480.0-485.0                | sec        | 641        | MBytes           | 1.08  | Gbits/sec              |
| 105        | [      | 3]       | 485.0-490.0                | sec        | 651        | MBytes           | 1.09  | Gbits/sec              |
| 106        | [      | 3]       | 490.0-495.0                | sec        | 649        | MBytes           | 1.09  | Gbits/sec              |
| 107        | [      | 3]       | 495.0-500.0                | sec        | 642        | MBytes           | 1.08  | Gbits/sec              |
| 108        | [      | 3]       | 500.0-505.0                | sec        | 647        | MBytes           | 1.09  | Gbits/sec              |
| 109        | [      | 3]       | 505.0-510.0                | sec        | 648        | MBytes           | 1.09  | Gbits/sec              |
| 110        | [      | 3]       | 510.0-515.0                | sec        | 646        | MBytes           | 1.08  | Gbits/sec              |
| 111        | [      | 3]       | 515.0-520.0                | sec        | 642        | MBytes           | 1.08  | Gbits/sec              |
| 112        | [      | 3]       | 520.0-525.0                | sec        | 650        | MBytes           | 1.09  | Gbits/sec              |
| 113        | [      | 3]       | 525.0-530.0                | sec        | 650        | MBytes           | 1.09  | Gbits/sec              |
| 114        | [      | 3]       | 530.0-535.0                | sec        | 654        | MBytes           | 1.10  | Gbits/sec              |
| 115        | [      | 3]       | 535.0-540.0                | sec        | 646        | MBytes           | 1.08  | Gbits/sec              |
| 116        | [      | 3]       | 540.0-545.0                | sec        | 644        | MBytes           | 1.08  | Gbits/sec              |
| 117        | [      | 3]       | 545.0-550.0                | sec        | 645        | MBytes           | 1.08  | Gbits/sec              |
| 118        | [      | 3]       | 550.0-555.0                | sec        | 648        | MBytes           | 1.09  | Gbits/sec              |
| 119        | [      | 3]       | 555.0-560.0                | sec        | 662        | MBytes           | 1.11  | Gbits/sec              |
| 120        | [      | 3]       | 560.0-565.0                | sec        | 644        | MBytes           | 1.08  | Gbits/sec              |
| 121        | [      | 3]       | 565.0-570.0                | sec        | 648        | MBytes           | 1.09  | Gbits/sec              |
| 122        | [      | 3]       | 570.0-575.0                | sec        | 653        | MBytes           | 1.10  | Gbits/sec              |
| 123        | [      | 3]       | 575.0-580.0                | sec        | 649        | MBytes           | 1.09  | Gbits/sec              |
| 124        | [      | 3]       | 580.0-585.0                | sec        | 646        | MBytes           | 1.08  | Gbits/sec              |
| 125        | [      | 3]       | 585.0-590.0                | sec        | 650        | MBytes           | 1.09  | Gbits/sec              |
| 126        | [      | 3]       | 590.0-595.0                | sec        | 662        | MBytes           | 1.11  | Gbits/sec              |
| 127        | [      | 3]       | 595.0-600.0                | sec        | 660        | MBytes           | 1.11  | Gbits/sec              |
| 128        | [      | 3]       | 600.0-605.0                | sec        | 648        | MBytes           | 1.09  | Gbits/sec              |
| 129        | [      | 3]       | 605.0-610.0                | sec        | 647        | MBytes           | 1.09  | Gbits/sec              |
| 130        | [      | 3]       | 610.0-615.0                | sec        | 647        | MBytes           | 1.09  | Gbits/sec              |
| 131        | [      | 3]       | 615.0-620.0                | sec        | 643        | MBytes           | 1.08  | Gbits/sec              |
| 132        | [      | 3]       | 620.0-625.0                | sec        | 642        | MBytes           | 1.08  | Gbits/sec              |
| 133        | [      | 3]       | 625.0-630.0                | sec        | 650        | MBytes           | 1.09  | Gbits/sec              |
| 134        | [      | 3]       | 630.0-635.0                | sec        | 650        | MBytes           | 1.09  | Gbits/sec              |
| 135        | [      | 3]       | 635.0-640.0                | sec        | 662        | MBytes           | 1.11  | Gbits/sec              |
| 136        | [      | 3]       | 640.0-645.0                | sec        | 657        | MBytes           | 1.10  | Gbits/sec              |
| 137        | [      | 3]       | 645.0-650.0                | sec        | 646        | MBytes           | 1.08  | Gbits/sec<br>Gbits/sec |
| 138        | [      | 3]<br>3] | 650.0-655.0<br>655.0-660.0 | sec        | 650        | MBytes           | 1.09  | Gbits/sec              |
| 139        | [      | -        |                            | sec        | 660<br>646 | MBytes           | 1.08  | Gbits/sec              |
| 140<br>141 | [<br>[ | 3]<br>3] | 660.0-665.0<br>665.0-670.0 | sec        | 646<br>645 | MBytes<br>MBytes | 1.08  | Gbits/sec              |
| 141        | l<br>[ | 3]       | 670.0-675.0                | sec<br>sec | 642        | MBytes           | 1.08  | Gbits/sec              |
| 142        | [      | 3]       | 675.0-680.0                | sec        | 649        | MBytes           | 1.03  | Gbits/sec              |
| 143        | [      | 3]       | 680.0-685.0                | sec        | 641        | MBytes           |       | Gbits/sec              |
| 145        | [      | 3]       | 685.0-690.0                | sec        |            | MBytes           | 1.09  | Gbits/sec              |
| 146        | [      | 3]       | 690.0-695.0                | sec        | 660        | MBytes           | 1.11  | Gbits/sec              |
| 147        | ĺ      | 3]       | 695.0-700.0                | sec        | 654        | MBytes           | 1.10  | Gbits/sec              |
| 148        | ĺ      | 3]       | 700.0-705.0                | sec        | 655        | MBytes           | 1.10  | Gbits/sec              |
| 149        | ĺ      | 3]       | 705.0-710.0                | sec        | 652        | MBytes           | 1.09  | Gbits/sec              |
| 150        | [      | 3]       | 710.0-715.0                | sec        | 658        | MBytes           | 1.10  | Gbits/sec              |
| 151        | [      | 3]       | 715.0-720.0                | sec        | 649        | MBytes           | 1.09  | Gbits/sec              |
| 152        | [      | 3]       | 720.0-725.0                | sec        | 655        | MBytes           | 1.10  | Gbits/sec              |
| 153        | [      | 3]       | 725.0-730.0                | sec        | 642        | MBytes           | 1.08  | Gbits/sec              |
| 154        | [      | 3]       | 730.0-735.0                | sec        | 653        | MBytes           | 1.10  | Gbits/sec              |
| 155        | [      | 3]       | 735.0-740.0                | sec        | 642        | MBytes           | 1.08  | Gbits/sec              |
| 156        | [      | 3]       | 740.0-745.0                | sec        | 647        | MBytes           | 1.09  | Gbits/sec              |
| 157        | [      | 3]       | 745.0-750.0                | sec        | 645        | MBytes           | 1.08  | Gbits/sec              |
| 158        | [      | 3]       | 750.0-755.0                | sec        | 640        | MBytes           | 1.07  | Gbits/sec              |
| 159        | [      | 3]       | 755.0-760.0                | sec        | 645        | MBytes           | 1.08  | Gbits/sec              |
| 160        | [      | 3]       | 760.0-765.0                | sec        | 648        | MBytes           | 1.09  | Gbits/sec              |
| 161        | [      | 3]       | 765.0-770.0                | sec        | 645        | MBytes           | 1.08  | Gbits/sec              |
| 162        | [      | 3]       | 770.0-775.0                | sec        | 652        | MBytes           | 1.09  | Gbits/sec              |
| 163        | [      | 3]       | 775.0-780.0                | sec        | 655        | MBytes           | 1.10  | Gbits/sec              |
|            |        |          |                            |            |            |                  |       |                        |

| 164   |  | 780.0-785.0 sec  | 644 MBytes   |  |     |
|---|--|--|--|--|-----|
| 165   | [ 3]   | 785.0-790.0 sec  | -  |  |     |
| 166   | [ 3]   | 790.0-795.0 sec  | 643 MBytes   | 1.08 Gbits/sec   |     |
| 167   | [ 3] 7   | 795.0-800.0 sec  | 643 MBytes   | 1.08 Gbits/sec   |     |
| 168   | [ 3] 8   | 800.0-805.0 sec  | 648 MBvtes   | 1.09 Gbits/sec   |     |
| 169   |  | 805.0-810.0 sec  | -  | 1.10 Gbits/sec   |     |
|   |  |  | -  | 1.10 Gbits/sec   |     |
| 170   |  | 810.0-815.0 sec  | -  |  |     |
| 171   |  | 815.0-820.0 sec  | -  | 1.05 Gbits/sec   |     |
| 172   | [ 3] 8   | 820.0-825.0 sec  | 660 MBytes   | 1.11 Gbits/sec   |     |
| 173   | [ 3] 8   | 825.0-830.0 sec  | 649 MBytes   | 1.09 Gbits/sec   |     |
| 174   | [ 3] 8   | 830.0-835.0 sec  | 664 MBvtes   | 1.11 Gbits/sec   |     |
| 175   |  | 835.0-840.0 sec  | -  | 1.11 Gbits/sec   |     |
| 176   |  | 840.0-845.0 sec  | -  | 1.09 Gbits/sec   |     |
|   |  |  | -  |  |     |
| 177   |  | 845.0-850.0 sec  | -  | 1.09 Gbits/sec   |     |
| 178   | [ 3] 8   | 850.0-855.0 sec  | -  | 1.10 Gbits/sec   |     |
| 179   | [ 3] 8   | 855.0-860.0 sec  | 642 MBytes   | 1.08 Gbits/sec   |     |
| 180   | [ 3] 8   | 860.0-865.0 sec  | 653 MBytes   | 1.10 Gbits/sec   |     |
| 181   | [ 3] 8   | 865.0-870.0 sec  | 653 MBvtes   | 1.10 Gbits/sec   |     |
| 182   |  | 870.0-875.0 sec  | -  | 1.09 Gbits/sec   |     |
|   |  |  | -  |  |     |
| 183   |  | 875.0-880.0 sec  | -  | 1.10 Gbits/sec   |     |
| 184   | [ 3] 8   | 880.0-885.0 sec  | 646 MBytes   | 1.08 Gbits/sec   |     |
| 185   | [ 3] 8   | 885.0-890.0 sec  | 647 MBytes   | 1.09 Gbits/sec   |     |
| 186   | [ 3] 8   | 890.0-895.0 sec  | 655 MBvtes   | 1.10 Gbits/sec   |     |
| 187   |  |  |  | 1.10 Gbits/sec   |     |
|   |  | 0.0-900.0 sec  |  |  |     |
| 188   | [ 3]   | 0.0-900.0 Sec  | II4 GBytes   | 1.09 GDIUS/Sec   |     |
| 189   |  |  |  |  |     |
| 190   | UDP Tra  |  |  |  |     |
| 191   |  |  |  |  |     |
| 192   | Client   | connecting to 1  | 10.0.3.16, UDH   | P port 5001  |     |
| 193   | Sending  | g 1470 byte data   | agrams   | -  |     |
| 194   |  | ffer size: 224   |  | 1+)  |     |
|   |  |  |  |  |     |
| 195   |  |  |  |  |     |
|   |  |  |  |  |     |
| 196   | [ 3] ]   |  |  | onnected with 10.0.3.16 port 50  | 001 |
| 196<br>197  | [ ID] :  | Interval 1   | Fransfer H   | Bandwidth  | 001 |
|   | [ ID] :  | Interval 1   | Fransfer H   | Bandwidth  | 001 |
| 197   | [ ID] :<br>[ 3]  | Interval I<br>0.0- 5.0 sec   | Iransfer H<br>482 MBytes   | Bandwidth<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199   | [ ID] :<br>[ 3]<br>[ 3]  | Interval 5<br>0.0- 5.0 sec<br>5.0-10.0 sec   | Fransfer H<br>482 MBytes<br>480 MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200  | [ ID] :<br>[ 3]<br>[ 3]<br>[ 3] :  | Interval 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec  | Fransfer H<br>482 MBytes<br>480 MBytes<br>482 MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201   | [ ID] [<br>[ 3]<br>[ 3]<br>[ 3] [<br>[ 3] ]  | Interval 2<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec   | Iransfer H<br>482 MBytes<br>480 MBytes<br>482 MBytes<br>482 MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :<br>[ 3] :  | Interval 2<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec  | Iransfer H<br>482 MBytes<br>480 MBytes<br>482 MBytes<br>482 MBytes<br>482 MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :<br>[ 3] :  | Interval 2<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec  | Iransfer H<br>482 MBytes<br>480 MBytes<br>482 MBytes<br>482 MBytes<br>482 MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :<br>[ 3] :<br>[ 3] :<br>[ 3] :  | Interval 2<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec  | Iransfer H<br>482 MBytes<br>480 MBytes<br>482 MBytes<br>482 MBytes<br>482 MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :<br>[ 3] :<br>[ 3] :<br>[ 3] :  | Interval 20.0-5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>30.0-35.0 sec   | Iransfer H<br>482 MBytes<br>480 MBytes<br>482 MBytes<br>482 MBytes<br>482 MBytes<br>482 MBytes<br>481 MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :<br>[ 3] :<br>[ 3] :<br>[ 3] :<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec   | Iransfer H<br>482 MBytes<br>480 MBytes<br>482 MBytes<br>482 MBytes<br>482 MBytes<br>482 MBytes<br>481 MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>203<br>204<br>205<br>206   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec  | Iransfer         I           482         MBytes           480         MBytes           482         MBytes           482         MBytes           482         MBytes           482         MBytes           482         MBytes           482         MBytes           481         MBytes           481         MBytes           480         MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>206<br>207  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec   | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         481       MBytes         480       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>203<br>204<br>205<br>206   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3 | Interval 20.0-5.0 sec 5.0-10.0 sec 10.0-15.0 sec 20.0-25.0 sec 20.0-25.0 sec 25.0-30.0 sec 30.0-35.0 sec 35.0-40.0 sec 40.0-45.0 sec 45.0-50.0 sec 50.0-55.0 sec 50.000000 | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         481       MBytes         480       MBytes         481       MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>206<br>207  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec   | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         481       MBytes         480       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>807 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval 20.0-5.0 sec 5.0-10.0 sec 10.0-15.0 sec 20.0-25.0 sec 20.0-25.0 sec 25.0-30.0 sec 30.0-35.0 sec 35.0-40.0 sec 40.0-45.0 sec 45.0-50.0 sec 50.0-55.0 sec 50.000000 | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         481       MBytes         480       MBytes         481       MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec  | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>807 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3 | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>65.0-70.0 sec   | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         482       MBytes         483       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>65.0-70.0 sec<br>70.0-75.0 sec  | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         482       MBytes         483       MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>786 Mbits/sec<br>787 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>20.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec  | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         482       MBytes         483       MBytes         484       MBytes         485       MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>807 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>20.0-35.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec<br>80.0-85.0 sec  | Irransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         482       MBytes         481       MBytes         481       MBytes         482       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         482       MBytes         483       MBytes         484       MBytes         485       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>786 Mbits/sec<br>787 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>20.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec  | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         482       MBytes         483       MBytes         484       MBytes         485       MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>807 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>20.0-35.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec<br>80.0-85.0 sec  | Irransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         482       MBytes         481       MBytes         481       MBytes         482       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         482       MBytes         483       MBytes         484       MBytes         485       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>786 Mbits/sec<br>787 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>20.0-35.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec<br>85.0-85.0 sec<br>85.0-90.0 sec  | Iransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         468       MBytes         481       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         483       MBytes         484       MBytes         485       MBytes         482       MBytes         483       MBytes         484       MBytes         485       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>806 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>786 Mbits/sec<br>787 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>20.0-35.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec<br>80.0-85.0 sec<br>80.0-85.0 sec<br>90.0-95.0 sec<br>95.0-100.0 sec   | Irransfer       I         482       MBytes         480       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         483       MBytes         484       MBytes         485       MBytes         482       MBytes   | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>786 Mbits/sec<br>786 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>212<br>213<br>214<br>215<br>216<br>217<br>218  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval 2<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>20.0-35.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-75.0 sec<br>65.0-75.0 sec<br>75.0-80.0 sec<br>80.0-85.0 sec<br>80.0-85.0 sec<br>90.0-95.0 sec<br>95.0-100.0 sec<br>100.0-105.0 sec   | Irransfer       H         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>807 Mbits/sec<br>808 Mbits/sec<br>786 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec<br>80.0-85.0 sec<br>85.0-90.0 sec<br>90.0-95.0 sec<br>95.0-100.0 sec<br>100.0-105.0 sec   | Iransfer       I         482       MBytes         481       MBytes         482       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>60.0-65.0 sec<br>85.0-90.0 sec<br>85.0-90.0 sec<br>90.0-95.0 sec<br>90.0-95.0 sec<br>100.0-105.0 sec<br>100.0-115.0 sec<br>110.0-115.0 sec   | Iransfer       I         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219   | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec<br>80.0-85.0 sec<br>85.0-90.0 sec<br>90.0-95.0 sec<br>95.0-100.0 sec<br>100.0-105.0 sec   | Iransfer       I         482       MBytes         481       MBytes         482       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220  | [ ID] :<br>[ 3]<br>[ 3] :<br>[ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>30.0-35.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>60.0-65.0 sec<br>85.0-90.0 sec<br>85.0-90.0 sec<br>90.0-95.0 sec<br>90.0-95.0 sec<br>100.0-105.0 sec<br>100.0-115.0 sec<br>110.0-115.0 sec   | Iransfer       I         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes  | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220<br>221   | [ ID]         [ 3]  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>10.0-25.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>40.0-45.0 sec<br>50.0-55.0 sec<br>55.0-60.0 sec<br>60.0-65.0 sec<br>60.0-65.0 sec<br>75.0-80.0 sec<br>80.0-85.0 sec<br>90.0-95.0 sec<br>90.0-95.0 sec<br>90.0-105.0 sec<br>100.0-105.0 sec<br>100.0-115.0 sec<br>115.0-120.0 sec<br>120.0-125.0 sec  | Irransfer       I         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>807 Mbits/sec  | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220<br>221<br>220<br>221<br>222<br>223   | [ ID] :         [ 3]         [ 3] :          [ 3] :  | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>10.0-25.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>35.0-40.0 sec<br>45.0-50.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>70.0-75.0 sec<br>70.0-75.0 sec<br>80.0-85.0 sec<br>90.0-95.0 sec<br>90.0-95.0 sec<br>90.0-95.0 sec<br>100.0-105.0 sec<br>100.0-105.0 sec<br>110.0-115.0 sec<br>115.0-120.0 sec<br>122.0-130.0 sec  | Irransfer       I         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220<br>221<br>221<br>220<br>221<br>222<br>223<br>224   | [ ID]         [ 3]   | Interval 2<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>70.0-75.0 sec<br>70.0-75.0 sec<br>80.0-85.0 sec<br>90.0-95.0 sec<br>90.0-95.0 sec<br>95.0-100.0 sec<br>100.0-105.0 sec<br>115.0-120.0 sec<br>120.0-125.0 sec<br>125.0-30.0 sec   | Irransfer       H         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220<br>221<br>229<br>220<br>221<br>222<br>223<br>224<br>225  | [ ID]         [ 3]   | Interval 2<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>70.0-75.0 sec<br>70.0-75.0 sec<br>80.0-85.0 sec<br>90.0-95.0 sec<br>95.0-100.0 sec<br>100.0-105.0 sec<br>105.0-110.0 sec<br>115.0-120.0 sec<br>125.0-130.0 sec<br>135.0-140.0 sec  | Irransfer       H         482       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220<br>221<br>221<br>222<br>223<br>224<br>225<br>226   | [ ID]         [ 3]   | Interval 2000 - 5.0 sec 5.0-10.0 sec 10.0-15.0 sec 15.0-20.0 sec 20.0-25.0 sec 20.0-25.0 sec 20.0-35.0 sec 35.0-40.0 sec 35.0-40.0 sec 40.0-45.0 sec 40.0-45.0 sec 55.0-60.0 sec 55.0-60.0 sec 55.0-60.0 sec 65.0-70.0 sec 70.0-75.0 sec 75.0-80.0 sec 80.0-85.0 sec 80.0-85.0 sec 80.0-85.0 sec 80.0-95.0 sec 90.0-95.0 sec 90.0-95.0 sec 100.0-105.0 sec 100.0-105.0 sec 110.0-115.0 sec 115.0-120.0 sec 125.0-130.0 sec 135.0-140.0 sec 135.0-140.0 sec 135.0-140.0 sec 140.0-145.0 sec 140.00 sec 140.00 sec 140.00 sec 140.00 sec 140.000 | Irransfer       H         482       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220<br>221<br>229<br>220<br>221<br>222<br>223<br>224<br>225  | [ ID]         [ 3]   | Interval 2<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>20.0-25.0 sec<br>25.0-30.0 sec<br>35.0-40.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>70.0-75.0 sec<br>70.0-75.0 sec<br>80.0-85.0 sec<br>90.0-95.0 sec<br>95.0-100.0 sec<br>100.0-105.0 sec<br>105.0-110.0 sec<br>115.0-120.0 sec<br>125.0-130.0 sec<br>135.0-140.0 sec  | Irransfer       H         482       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec   | 001 |
| 197<br>198<br>199<br>200<br>201<br>202<br>203<br>204<br>205<br>206<br>207<br>208<br>209<br>210<br>211<br>212<br>213<br>214<br>215<br>216<br>217<br>218<br>219<br>220<br>221<br>221<br>222<br>223<br>224<br>225<br>226   | [ ID]         [ 3]   | Interval 2000 - 5.0 sec 5.0-10.0 sec 10.0-15.0 sec 15.0-20.0 sec 20.0-25.0 sec 20.0-25.0 sec 20.0-35.0 sec 35.0-40.0 sec 35.0-40.0 sec 40.0-45.0 sec 40.0-45.0 sec 55.0-60.0 sec 55.0-60.0 sec 55.0-60.0 sec 65.0-70.0 sec 70.0-75.0 sec 75.0-80.0 sec 80.0-85.0 sec 80.0-85.0 sec 80.0-85.0 sec 80.0-95.0 sec 90.0-95.0 sec 90.0-95.0 sec 100.0-105.0 sec 100.0-105.0 sec 110.0-115.0 sec 115.0-120.0 sec 125.0-130.0 sec 135.0-140.0 sec 135.0-140.0 sec 135.0-140.0 sec 140.0-145.0 sec 140.00 sec 140.00 sec 140.00 sec 140.00 sec 140.000 | Irransfer       H         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec   | 001 |
| 197         198         199         200         201         202         203         204         205         206         207         208         209         210         211         212         213         214         215         216         217         218         219         220         221         222         223         224         225         226         227 | [ ID]         [ 3]   | Interval<br>0.0- 5.0 sec<br>5.0-10.0 sec<br>10.0-15.0 sec<br>15.0-20.0 sec<br>20.0-25.0 sec<br>20.0-35.0 sec<br>35.0-40.0 sec<br>35.0-40.0 sec<br>40.0-45.0 sec<br>55.0-60.0 sec<br>55.0-60.0 sec<br>65.0-70.0 sec<br>75.0-80.0 sec<br>80.0-85.0 sec<br>80.0-85.0 sec<br>90.0-95.0 sec<br>90.0-95.0 sec<br>100.0-105.0 sec<br>105.0-100.0 sec<br>105.0-120.0 sec<br>125.0-130.0 sec<br>135.0-140.0 sec<br>140.0-145.0 sec<br>145.0-150.0 sec   | Irransfer       H         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         482       MBytes         481       MBytes         481       MBytes | Bandwidth<br>808 Mbits/sec<br>806 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec<br>809 Mbits/sec<br>808 Mbits/sec | 001 |

| 230 | [ | 3] | 160.0-165.0 | sec | 481 | MBytes | 808 | Mbits/sec |
|-----|---|----|-------------|-----|-----|--------|-----|-----------|
| 231 | [ | 3] | 165.0-170.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 232 | [ | 3] | 170.0-175.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 233 | [ | 3] | 175.0-180.0 | sec | 482 | MBytes | 808 | Mbits/sec |
|     | - | -  |             |     |     | -      |     |           |
| 234 | [ | 3] | 180.0-185.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 235 | [ | 3] | 185.0-190.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 236 | [ | 3] | 190.0-195.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 237 | [ | 3] | 195.0-200.0 | sec | 459 | MBytes | 771 | Mbits/sec |
| 238 | [ | 3] | 200.0-205.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 239 | [ | 3] | 205.0-210.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 240 | [ | 3] | 210.0-215.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 241 | ĺ | 3] | 215.0-220.0 | sec | 482 | MBytes | 808 | Mbits/sec |
|     |   | -  |             |     |     | -      |     |           |
| 242 | [ | 3] | 220.0-225.0 | sec | 482 | MBytes | 809 |           |
| 243 | [ | 3] | 225.0-230.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 244 | [ | 3] | 230.0-235.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 245 | [ | 3] | 235.0-240.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 246 | [ | 3] | 240.0-245.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 247 | [ | 3] | 245.0-250.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 248 | [ | 3] | 250.0-255.0 | sec | 481 | MBytes | 807 | Mbits/sec |
|     | - | -  |             |     |     | -      |     |           |
| 249 | [ | 3] | 255.0-260.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 250 | [ | 3] | 260.0-265.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 251 | [ | 3] | 265.0-270.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 252 | [ | 3] | 270.0-275.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 253 | [ | 3] | 275.0-280.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 254 | [ | 3] | 280.0-285.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 255 | [ | 3] | 285.0-290.0 | sec | 482 | MBytes | 808 | Mbits/sec |
|     | [ | 3] | 290.0-295.0 |     | 482 | -      | 809 | Mbits/sec |
| 256 |   | -  |             | sec |     | MBytes |     |           |
| 257 | [ | 3] | 295.0-300.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 258 | [ | 3] | 300.0-305.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 259 | [ | 3] | 305.0-310.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 260 | [ | 3] | 310.0-315.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 261 | [ | 3] | 315.0-320.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 262 | [ | 3] | 320.0-325.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 263 | ĺ | 3] | 325.0-330.0 | sec | 482 | MBytes | 809 | Mbits/sec |
|     |   | 3] |             |     | 482 | -      |     | Mbits/sec |
| 264 | [ | -  | 330.0-335.0 | sec |     | MBytes | 808 |           |
| 265 | [ | 3] | 335.0-340.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 266 | [ | 3] | 340.0-345.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 267 | [ | 3] | 345.0-350.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 268 | [ | 3] | 350.0-355.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 269 | [ | 3] | 355.0-360.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 270 | [ | 3] | 360.0-365.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 271 | [ | 3] | 365.0-370.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 272 | ĺ | 3] | 370.0-375.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 273 | [ |    | 375.0-380.0 |     | 480 | -      | 805 | Mbits/sec |
|     |   | 3] |             | sec |     | MBytes |     |           |
| 274 | [ | 3] | 380.0-385.0 | sec | 482 | MBytes | 809 |           |
| 275 | [ | 3] | 385.0-390.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 276 | [ | 3] | 390.0-395.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 277 | [ | 3] | 395.0-400.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 278 | [ | 3] | 400.0-405.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 279 | [ | 3] | 405.0-410.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 280 | [ | 3] | 410.0-415.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 281 | ĺ | 3] | 415.0-420.0 | sec | 482 | MBytes |     | Mbits/sec |
|     | [ | 3] | 420.0-425.0 |     | 481 | MBytes | 807 | Mbits/sec |
| 282 |   | -  |             | sec |     | -      |     |           |
| 283 | [ | 3] | 425.0-430.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 284 | [ | 3] | 430.0-435.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 285 | [ | 3] | 435.0-440.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 286 | [ | 3] | 440.0-445.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 287 | [ | 3] | 445.0-450.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 288 | [ | 3] | 450.0-455.0 | sec | 482 | MBytes | 809 |           |
| 289 | ĺ | 3] | 455.0-460.0 | sec | 482 | MBytes | 808 |           |
|     |   |    |             |     |     | -      |     |           |
| 290 | [ | 3] | 460.0-465.0 | sec | 482 | MBytes | 809 |           |
| 291 | [ | 3] | 465.0-470.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 292 | [ | 3] | 470.0-475.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 293 | [ | 3] | 475.0-480.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 294 | [ | 3] | 480.0-485.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 295 | [ | 3] | 485.0-490.0 | sec | 481 | MBytes | 807 | Mbits/sec |
|     | • | -  |             |     |     | -      |     |           |

| 296 | [      | 3] | 490.0-495.0 | sec | 482 | MBytes | 809 | Mbits/sec |
|-----|--------|----|-------------|-----|-----|--------|-----|-----------|
| 297 | [      | 3] | 495.0-500.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 298 | ] [    | 3] | 500.0-505.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 299 | ]      | 3] | 505.0-510.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 300 | ī      | 3] | 510.0-515.0 | sec | 482 | MBytes | 809 | Mbits/sec |
|     | [      | 3] | 515.0-520.0 | sec | 481 | -      | 808 | Mbits/sec |
| 301 |        | -  |             |     |     | MBytes |     |           |
| 302 | ]      | 3] | 520.0-525.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 303 | [      | 3] | 525.0-530.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 304 | [      | 3] | 530.0-535.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 305 | [      | 3] | 535.0-540.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 306 | [      | 3] | 540.0-545.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 307 | ] [    | 3] | 545.0-550.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 308 | [      | 3] | 550.0-555.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 309 | ĺ      | 3] | 555.0-560.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 310 | Ē      | 3] | 560.0-565.0 | sec | 482 | MBytes | 809 | Mbits/sec |
|     |        | -  |             |     |     | -      |     |           |
| 311 | ] [    | 3] | 565.0-570.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 312 | [      | 3] | 570.0-575.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 313 | [      | 3] | 575.0-580.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 314 | [      | 3] | 580.0-585.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 315 | [      | 3] | 585.0-590.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 316 | [      | 3] | 590.0-595.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 317 | ] [    | 3] | 595.0-600.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 318 | ]      | 3] | 600.0-605.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 319 | ī      | 3] | 605.0-610.0 | sec | 481 | MBytes | 807 | Mbits/sec |
|     | l<br>[ | 3] | 610.0-615.0 |     | 481 | -      | 808 | Mbits/sec |
| 320 |        | -  |             | sec |     | MBytes |     |           |
| 321 | ]      | 3] | 615.0-620.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 322 | [      | 3] | 620.0-625.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 323 | [      | 3] | 625.0-630.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 324 | [      | 3] | 630.0-635.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 325 | [      | 3] | 635.0-640.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 326 | ]      | 3] | 640.0-645.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 327 | 1      | 3] | 645.0-650.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 328 | ]      | 3] | 650.0-655.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 329 | ī      | 3] | 655.0-660.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 330 | ĺ      | 3] | 660.0-665.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 331 | [      | 3] | 665.0-670.0 |     | 482 | -      | 808 | Mbits/sec |
|     | -      | -  |             | sec |     | MBytes |     |           |
| 332 | ]      | 3] | 670.0-675.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 333 | [      | 3] | 675.0-680.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 334 | [      | 3] | 680.0-685.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 335 | [      | 3] | 685.0-690.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 336 | [      | 3] | 690.0-695.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 337 | [      | 3] | 695.0-700.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 338 | 1      | 3] | 700.0-705.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 339 | Ī      | 3] | 705.0-710.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 340 | [      | 3] | 710.0-715.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 341 | ī      | 3] | 715.0-720.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 342 | [      | 3] | 720.0-725.0 | sec | 481 | MBytes | 808 | Mbits/sec |
|     |        | -  |             |     |     | -      |     |           |
| 343 | ]      | 3] | 725.0-730.0 | sec |     | MBytes | 808 | Mbits/sec |
| 344 | [      | 3] | 730.0-735.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 345 | [      | 3] | 735.0-740.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 346 | [      | 3] | 740.0-745.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 347 | [      | 3] | 745.0-750.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 348 | ]      | 3] | 750.0-755.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 349 | [      | 3] | 755.0-760.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 350 | ] [    | 3] | 760.0-765.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 351 | Ī      | 3] | 765.0-770.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 352 | ī      | 3] | 770.0-775.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 353 | Ē      | 3] | 775.0-780.0 | sec | 482 | MBytes | 808 | Mbits/sec |
|     | L<br>[ | 3] | 780.0-785.0 |     | 481 | MBytes | 807 | Mbits/sec |
| 354 |        |    |             | sec |     | -      |     |           |
| 355 | [      | 3] | 785.0-790.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 356 | ]      | 3] | 790.0-795.0 | sec | 480 | MBytes | 805 | Mbits/sec |
| 357 | [      | 3] | 795.0-800.0 | sec | 480 | MBytes | 805 | Mbits/sec |
| 358 | [      | 3] | 800.0-805.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 359 | [      | 3] | 805.0-810.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 360 | [      | 3] | 810.0-815.0 | sec | 482 | MBytes | 809 | Mbits/sec |
| 361 | [      | 3] | 815.0-820.0 | sec | 482 | MBytes | 808 | Mbits/sec |
|     | •      |    |             |     |     |        |     |           |

| 362 | [  | 3]  | 820.0-825.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
|-----|----|-----|------------------|---------------|--|
| 363 | [  | 3]  | 825.0-830.0 sec  | 482 MBytes    | 808 Mbits/sec                            |
| 364 | [  | 3]  | 830.0-835.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
| 365 | [  | 3]  | 835.0-840.0 sec  | 482 MBytes    | 808 Mbits/sec                            |
| 366 | [  | 3]  | 840.0-845.0 sec  | 480 MBytes    | 806 Mbits/sec                            |
| 367 | [  | 3]  | 845.0-850.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
| 368 | [  | 3]  | 850.0-855.0 sec  | 482 MBytes    | 808 Mbits/sec                            |
| 369 | [  | 3]  | 855.0-860.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
| 370 | [  | 3]  | 860.0-865.0 sec  | 482 MBytes    | 808 Mbits/sec                            |
| 371 | [  | 3]  | 865.0-870.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
| 372 | [  | 3]  | 870.0-875.0 sec  | 482 MBytes    | 808 Mbits/sec                            |
| 373 | [  | 3]  | 875.0-880.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
| 374 | [  | 3]  | 880.0-885.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
| 375 | [  | 3]  | 885.0-890.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
| 376 | [  | 3]  | 890.0-895.0 sec  | 482 MBytes    | 808 Mbits/sec                            |
| 377 | [  | 3]  | 895.0-900.0 sec  | 482 MBytes    | 809 Mbits/sec                            |
| 378 | [  | 3]  | 0.0-900.0 sec    | 84.6 GBytes   | 808 Mbits/sec                            |
| 379 | [  | 3]  | Sent 61806161 da | ltagrams      |  |
| 380 | [  | 3]  | Server Report:   |               |  |
| 381 | [3 | ]0. | 0-900.0 sec 84.5 | GBytes 807 Mb | bits/sec 0.161 ms 77203/61806160 (0.12%) |
| 382 | [  | 3]  | 0.0-900.0 sec    | 25 datagrams  | received out-of-order                    |
|     |    |     |                  |               |  |

|        |       | raffic                             | Results fo               | r Medium VMs case2                |
|--------|-------|------------------------------------|--------------------------|-----------------------------------|
| С      | lient | connecting to 10                   |                          |                                   |
|        |       | indow size: 23.5 K                 |                          |                                   |
|        |       |                                    |                          | connected with 10.0.3.15 port 500 |
| L<br>r | -     |                                    | -                        | Bandwidth                         |
| [      | -     |                                    |                          | 569 Mbits/sec                     |
| ſ      | 31    |                                    |                          |                                   |
| [      | -     | 10.0-15.0 sec 3                    |                          |                                   |
| [      |       |                                    | -                        | 648 Mbits/sec                     |
| [      | -     |                                    | -                        | 647 Mbits/sec                     |
| [      |       |                                    | 09 MBytes                | 686 Mbits/sec                     |
| [      | 3]    |                                    |                          | 679 Mbits/sec                     |
| [      | 3]    | 35.0-40.0 sec 3                    | 95 MBytes                | 663 Mbits/sec                     |
| [      | 3]    | 40.0-45.0 sec 3                    | 62 MBytes                | 607 Mbits/sec                     |
| [      | 3]    |                                    |                          | 638 Mbits/sec                     |
| [      | 3]    | 50.0-55.0 sec 4                    | 15 MBytes                | 696 Mbits/sec                     |
| [      | 3]    |                                    |                          | 664 Mbits/sec                     |
| [      | 3]    |                                    |                          | 635 Mbits/sec                     |
| [      | 3]    |                                    | -                        | 664 Mbits/sec                     |
| [      | -     |                                    | -                        | 652 Mbits/sec                     |
| [      | -     |                                    |                          | 681 Mbits/sec                     |
| [      | -     | 80.0-85.0 sec 4                    | 01 MBytes                | 673 Mbits/sec                     |
| ]      | -     |                                    | -                        | 674 Mbits/sec                     |
| [      | -     |                                    | -                        | 619 Mbits/sec                     |
| [      | -     |                                    | -                        | 670 Mbits/sec                     |
| [      | -     | 100.0-105.0 sec                    | 394 MBytes               |                                   |
| [      | -     | 105.0-110.0 sec                    | 416 MBytes               | 640 Mbits/sec<br>699 Mbits/sec    |
| ]<br>[ | -     | 110.0-115.0 sec                    |                          | 709 Mbits/sec                     |
| L<br>[ | -     | 115.0-120.0 sec<br>120.0-125.0 sec | _                        | 679 Mbits/sec                     |
| L<br>[ | -     | 125.0-130.0 sec                    | 403 MBytes<br>401 MBytes |                                   |
| L<br>[ | -     | 130.0-135.0 sec                    | 384 MBytes               |                                   |
| L<br>[ | -     | 135.0-140.0 sec                    | -                        | 636 Mbits/sec                     |
| [      | -     | 140.0-145.0 sec                    | 407 MBytes               |                                   |
| ſ      | -     | 145.0-150.0 sec                    | 386 MBytes               |                                   |
| [      | -     | 150.0-155.0 sec                    | 399 MBytes               |                                   |
| [      | -     | 155.0-160.0 sec                    | 388 MBytes               |                                   |
| [      |       | 160.0-165.0 sec                    | 384 MBytes               |                                   |
| [      | -     | 165.0-170.0 sec                    | 377 MBytes               |                                   |
| [      |       | 170.0-175.0 sec                    | 408 MBytes               |                                   |
| [      | 3]    | 175.0-180.0 sec                    | 420 MBytes               | 705 Mbits/sec                     |
| [      | 31    | 180.0-185.0 sec                    | 397 MBytes               | 667 Mbits/sec                     |

| 45  | [      | 3] | 185.0-190.0 | sec | 391 | MBytes |     | Mbits/sec |
|-----|--------|----|-------------|-----|-----|--------|-----|-----------|
| 46  | [      | 3] | 190.0-195.0 | sec | 398 | MBytes | 668 | Mbits/sec |
| 47  | [      | 3] | 195.0-200.0 | sec | 400 | MBytes | 672 | Mbits/sec |
| 48  | [      | 3] | 200.0-205.0 | sec | 395 | MBytes | 662 | Mbits/sec |
| 49  | [      | 3] | 205.0-210.0 | sec | 376 | MBytes | 631 | Mbits/sec |
| 50  | [      | 3] | 210.0-215.0 | sec | 358 | MBytes | 600 | Mbits/sec |
| 51  | [      | 3] | 215.0-220.0 | sec | 397 | MBytes | 666 | Mbits/sec |
| 52  | [      | 3] | 220.0-225.0 | sec | 396 | MBytes | 665 | Mbits/sec |
|     | [      | 31 | 225.0-230.0 |     | 363 | MBytes | 610 | Mbits/sec |
| 53  | -      | -  |             | sec |     | -      |     |           |
| 54  | [      | 3] | 230.0-235.0 | sec | 396 | MBytes | 664 | Mbits/sec |
| 55  | [      | 3] | 235.0-240.0 | sec | 388 | MBytes | 651 | Mbits/sec |
| 56  | [      | 3] | 240.0-245.0 | sec | 386 | MBytes | 648 | Mbits/sec |
| 57  | [      | 3] | 245.0-250.0 | sec | 411 | MBytes | 690 | Mbits/sec |
| 58  | [      | 3] | 250.0-255.0 | sec | 371 | MBytes | 622 | Mbits/sec |
| 59  | [      | 3] | 255.0-260.0 | sec | 381 | MBytes | 640 | Mbits/sec |
| 60  | [      | 3] | 260.0-265.0 | sec | 374 | MBytes | 628 | Mbits/sec |
| 61  | [      | 3] | 265.0-270.0 | sec | 364 | MBytes | 610 | Mbits/sec |
| 62  | [      | 3] | 270.0-275.0 | sec | 384 | MBytes | 643 | Mbits/sec |
| 63  | [      | 3] | 275.0-280.0 | sec | 410 | MBytes | 687 | Mbits/sec |
| 64  | [      | 3] | 280.0-285.0 | sec | 386 | MBytes | 647 | Mbits/sec |
| 65  | [      | 3] | 285.0-290.0 | sec | 368 | MBvtes | 618 | Mbits/sec |
| 66  | [      | 3] | 290.0-295.0 | sec | 400 | MBytes | 672 | Mbits/sec |
| 67  | [      | 31 | 295.0-300.0 |     | 404 | MBytes | 678 | Mbits/sec |
|     | -      | -  |             | sec |     | -      |     |           |
| 68  | [      | 3] | 300.0-305.0 | sec | 378 | MBytes | 634 | Mbits/sec |
| 69  | [      | 3] | 305.0-310.0 | sec | 386 | MBytes | 648 | Mbits/sec |
| 70  | [      | 3] | 310.0-315.0 | sec | 366 | MBytes | 614 | Mbits/sec |
| 71  | [      | 3] | 315.0-320.0 | sec | 376 | MBytes | 631 | Mbits/sec |
| 72  | [      | 3] | 320.0-325.0 | sec | 381 | MBytes | 640 | Mbits/sec |
| 73  | [      | 3] | 325.0-330.0 | sec | 386 | MBytes | 648 | Mbits/sec |
| 74  | [      | 3] | 330.0-335.0 | sec | 394 | MBytes | 661 | Mbits/sec |
| 75  | [      | 3] | 335.0-340.0 | sec | 391 | MBytes | 656 | Mbits/sec |
| 76  | [      | 3] | 340.0-345.0 | sec | 385 | MBytes | 646 | Mbits/sec |
| 77  | [      | 3] | 345.0-350.0 | sec | 375 | MBytes | 630 | Mbits/sec |
| 78  | [      | 3] | 350.0-355.0 | sec | 403 | MBytes | 677 | Mbits/sec |
| 79  | [      | 3] | 355.0-360.0 | sec | 408 | MBytes | 684 | Mbits/sec |
| 80  | [      | 3] | 360.0-365.0 | sec | 410 | MBytes | 687 | Mbits/sec |
| 81  | [      | 3] | 365.0-370.0 | sec | 371 | MBytes | 623 | Mbits/sec |
| 82  | [      | 3] | 370.0-375.0 | sec | 390 | MBytes | 654 | Mbits/sec |
| 83  | [      | 3] | 375.0-380.0 | sec | 386 | MBytes | 648 | Mbits/sec |
| 84  | [      | 3] | 380.0-385.0 | sec | 389 | MBytes | 653 | Mbits/sec |
| 85  | [      | 3] | 385.0-390.0 | sec | 370 | MBytes | 621 | Mbits/sec |
| 86  | [      | 3] | 390.0-395.0 | sec | 391 | MBytes | 656 | Mbits/sec |
| 87  | [      | 3] | 395.0-400.0 |     | 414 | MBytes | 695 | Mbits/sec |
|     |        | 3] |             | sec | 386 | MBytes | 648 | Mbits/sec |
| 88  | [      | -  | 400.0-405.0 | sec |     | MBytes | 676 | Mbits/sec |
| 89  | [      | 3] | 405.0-410.0 | sec | 403 | -      |     |           |
| 90  | [      | 3] | 410.0-415.0 | sec | 375 | MBytes | 629 | Mbits/sec |
| 91  | [      | 3] | 415.0-420.0 | sec | 401 | MBytes | 673 | Mbits/sec |
| 92  | [      | 3] | 420.0-425.0 | sec |     | MBytes | 661 | Mbits/sec |
| 93  | [      | 3] | 425.0-430.0 | sec | 404 | MBytes | 678 | Mbits/sec |
| 94  | [      | 3] | 430.0-435.0 | sec | 400 | MBytes | 672 | Mbits/sec |
| 95  | [      | 3] | 435.0-440.0 | sec | 423 | MBytes | 710 | Mbits/sec |
| 96  | [      | 3] | 440.0-445.0 | sec | 369 | MBytes | 619 | Mbits/sec |
| 97  | [      | 3] | 445.0-450.0 | sec | 386 | MBytes | 648 | Mbits/sec |
| 98  | [      | 3] | 450.0-455.0 | sec | 402 | MBytes | 675 | Mbits/sec |
| 99  | [      | 3] | 455.0-460.0 | sec | 418 | MBytes | 702 | Mbits/sec |
| 100 | [      | 3] | 460.0-465.0 | sec | 392 | MBytes | 658 | Mbits/sec |
| 101 | [      | 3] | 465.0-470.0 | sec | 399 | MBytes | 669 | Mbits/sec |
| 102 | [      | 3] | 470.0-475.0 | sec | 402 | MBytes | 674 | Mbits/sec |
| 103 | [      | 3] | 475.0-480.0 | sec | 364 | MBytes | 610 | Mbits/sec |
| 104 | [      | 3] | 480.0-485.0 | sec | 394 | MBytes | 662 | Mbits/sec |
| 105 | [      | 3] | 485.0-490.0 | sec | 396 | MBytes | 665 | Mbits/sec |
| 106 | [      | 3] | 490.0-495.0 | sec | 369 | MBytes | 619 | Mbits/sec |
| 100 | [      | 3] | 495.0-500.0 | sec | 381 | MBytes | 639 | Mbits/sec |
| 107 | [      | 3] | 500.0-505.0 | sec | 361 | MBytes |     | Mbits/sec |
| 103 | [      | 3] | 505.0-510.0 | sec | 382 | MBytes | 642 | Mbits/sec |
| 109 | L<br>[ | 3] | 510.0-515.0 | sec |     | MBytes | 697 | Mbits/sec |
| 110 | L      | 51 | 510.0 515.0 | 500 | 110 |        | 521 |           |
|     |        |    |             |     |     |        |     |           |

| 111        | [      | 3]       | 515.0-520.0                | sec        | 406        | MBytes           | 682        | Mbits/sec              |
|------------|--------|----------|----------------------------|------------|------------|------------------|------------|------------------------|
| 112        | [      | 3]       | 520.0-525.0                | sec        | 345        | MBytes           | 579        | Mbits/sec              |
| 113        | [      | 3]       | 525.0-530.0                | sec        | 369        | MBytes           | 619        | Mbits/sec              |
| 114        | [      | 3]       | 530.0-535.0                | sec        | 385        | MBytes           | 646        | Mbits/sec              |
| 115        | [      | 3]       | 535.0-540.0                | sec        | 400        | MBytes           | 671        | Mbits/sec              |
| 116        | [      | 3]       | 540.0-545.0                | sec        | 406        | MBytes           | 681        | Mbits/sec              |
| 117        | [      | 3]       | 545.0-550.0                | sec        | 393        | MBytes           | 659        | Mbits/sec              |
| 118        | [      | 3]       | 550.0-555.0                | sec        | 376        | MBytes           | 631        | Mbits/sec              |
| 119        | [      | 3]       | 555.0-560.0                | sec        | 392        | MBytes           | 657        | Mbits/sec              |
| 120        | [      | 3]       | 560.0-565.0                | sec        | 398        | MBytes           | 668        | Mbits/sec              |
| 121        | [      | 3]       | 565.0-570.0                | sec        | 388        | MBytes           | 652        | Mbits/sec              |
| 122        | [      | 3]       | 570.0-575.0                | sec        | 425        | MBytes           | 713        | Mbits/sec              |
| 123        | [      | 3]       | 575.0-580.0                | sec        | 378        | MBytes           | 635        | Mbits/sec              |
| 124        | [      | 3]       | 580.0-585.0                | sec        | 384        | MBytes           | 644        | Mbits/sec              |
| 125        | [      | 3]       | 585.0-590.0                | sec        | 363        | MBytes           | 608        | Mbits/sec              |
| 126        | [      | 3]       | 590.0-595.0                | sec        | 379        | MBytes           | 636        | Mbits/sec              |
| 127        | [      | 3]       | 595.0-600.0                | sec        | 390        | MBytes           | 654        | Mbits/sec              |
| 128        | [      | 3]       | 600.0-605.0                | sec        | 385        | MBytes           | 646        | Mbits/sec              |
| 129        | [      | 3]       | 605.0-610.0                | sec        | 407        | MBytes           | 683        | Mbits/sec              |
| 130        | [      | 3]       | 610.0-615.0                | sec        | 403        | MBytes           | 677        | Mbits/sec              |
| 131        | [      | 3]       | 615.0-620.0                | sec        | 368        | MBytes           | 617        | Mbits/sec              |
| 132        | [      | 3]       | 620.0-625.0                | sec        | 399        | MBytes           | 670        | Mbits/sec              |
| 133        | [      | 3]       | 625.0-630.0                | sec        | 407        | MBytes           | 682        | Mbits/sec              |
| 134        | [      | 3]       | 630.0-635.0                | sec        | 392        | MBytes           | 657        | Mbits/sec              |
| 135        | [      | 3]       | 635.0-640.0                | sec        | 373        | MBytes           | 626        | Mbits/sec              |
| 136        | [      | 3]       | 640.0-645.0                | sec        | 380        | MBytes           | 638        | Mbits/sec              |
| 137        | [      | 3]       | 645.0-650.0                | sec        | 359        | MBytes           | 603        | Mbits/sec              |
| 138        | [      | 3]       | 650.0-655.0                | sec        | 381        | MBytes           | 639        | Mbits/sec<br>Mbits/sec |
| 139        | [      | 3]<br>3] | 655.0-660.0<br>660.0-665.0 | sec        | 396<br>399 | MBytes           | 665<br>669 | Mbits/sec              |
| 140        | [<br>[ | 3]       | 665.0-670.0                | sec        | 374        | MBytes           | 627        | Mbits/sec              |
| 141<br>142 | l<br>[ | 3]       | 670.0-675.0                | sec<br>sec | 374        | MBytes<br>MBytes | 627        | Mbits/sec              |
| 142        | [      | 3]       | 675.0-680.0                | sec        | 399        | MBytes           | 670        | Mbits/sec              |
| 143        | l<br>[ | 3]       | 680.0-685.0                | sec        | 402        | MBytes           | 675        | Mbits/sec              |
| 145        | [      | 3]       | 685.0-690.0                | sec        | 394        | MBytes           | 660        | Mbits/sec              |
| 146        | [      | 3]       | 690.0-695.0                | sec        | 395        | MBytes           | 663        | Mbits/sec              |
| 147        | [      | 3]       | 695.0-700.0                | sec        | 407        | MBytes           | 682        | Mbits/sec              |
| 148        | ĺ      | 3]       | 700.0-705.0                | sec        | 351        | MBytes           | 588        | Mbits/sec              |
| 149        | [      | 3]       | 705.0-710.0                | sec        | 375        | MBytes           | 629        | Mbits/sec              |
| 150        | ĺ      | 3]       | 710.0-715.0                | sec        | 391        | MBytes           | 655        | Mbits/sec              |
| 151        | ĺ      | 3]       | 715.0-720.0                | sec        | 372        | MBytes           | 624        | Mbits/sec              |
| 152        | [      | 3]       | 720.0-725.0                | sec        | 403        | MBytes           | 676        | Mbits/sec              |
| 153        | [      | 3]       | 725.0-730.0                | sec        | 394        | MBytes           | 661        | Mbits/sec              |
| 154        | [      | 3]       | 730.0-735.0                | sec        | 389        | MBytes           | 653        | Mbits/sec              |
| 155        | [      | 3]       | 735.0-740.0                | sec        | 408        | MBytes           | 684        | Mbits/sec              |
| 156        | [      | 3]       | 740.0-745.0                | sec        | 400        | MBytes           | 672        | Mbits/sec              |
| 157        | [      | 3]       | 745.0-750.0                | sec        | 376        | MBytes           | 631        | Mbits/sec              |
| 158        | [      | 3]       | 750.0-755.0                | sec        | 376        | MBytes           | 631        | Mbits/sec              |
| 159        | [      | 3]       | 755.0-760.0                | sec        | 362        | MBytes           | 608        | Mbits/sec              |
| 160        | [      | 3]       | 760.0-765.0                | sec        | 358        | MBytes           | 600        | Mbits/sec              |
| 161        | [      | 3]       | 765.0-770.0                | sec        | 367        | MBytes           | 616        | Mbits/sec              |
| 162        | [      | 3]       | 770.0-775.0                | sec        | 377        | MBytes           | 632        | Mbits/sec              |
| 163        | [      | 3]       | 775.0-780.0                | sec        | 393        | MBytes           | 660        | Mbits/sec              |
| 164        | [      | 3]       | 780.0-785.0                | sec        | 378        | MBytes           | 634        | Mbits/sec              |
| 165        | [      | 3]       | 785.0-790.0                | sec        | 381        | MBytes           | 639        | Mbits/sec              |
| 166        | [      | 3]       | 790.0-795.0                | sec        | 405        | MBytes           | 679        | Mbits/sec              |
| 167        | [      | 3]       | 795.0-800.0                | sec        | 368        | MBytes           | 617        | Mbits/sec              |
| 168        | [      | 3]       | 800.0-805.0                | sec        | 400        | MBytes           | 670        | Mbits/sec              |
| 169        | ]      | 3]       | 805.0-810.0                | sec        | 392        | MBytes           | 658        | Mbits/sec              |
| 170        | [      | 3]       | 810.0-815.0                | sec        | 379        | -                | 636        | Mbits/sec              |
| 171        | ]      | 3]       | 815.0-820.0                | sec        | 393        | MBytes           | 659        | Mbits/sec              |
| 172        | [      | 3]       | 820.0-825.0                | sec        | 397        | MBytes           | 665        | Mbits/sec              |
| 173        | [      | 3]       | 825.0-830.0                | sec        | 381        | MBytes           | 640        | Mbits/sec              |
| 174        | [      | 3]       | 830.0-835.0                | sec        | 368        | MBytes           | 618        |                        |
| 175        | [      | 3]       | 835.0-840.0                | sec        | 397        | MBytes           | 666        | Mbits/sec              |
| 176        | [      | 3]       | 840.0-845.0                | sec        | 406        | MBytes           | 681        | Mbits/sec              |
|            |        |          |                            |            |            |                  |            |                        |

| [           |          | 845.0-850.0 sec                                       | -                      | Mbits/sec                           |
|-------------|----------|---|------------------------|-------------------------------------|
| [           |          | 850.0-855.0 sec                                       | -                      | Mbits/sec                           |
| [           |          | 855.0-860.0 sec                                       | -                      | Mbits/sec                           |
| [           |          | 860.0-865.0 sec<br>865.0-870.0 sec                    | -                      | Mbits/sec<br>Mbits/sec              |
| [           | -        | 870.0-875.0 sec                                       | 1                      | Mbits/sec                           |
| [           |          | 875.0-880.0 sec                                       | -                      | Mbits/sec                           |
| [           |          | 880.0-885.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 885.0-890.0 sec                                       |                        | Mbits/sec                           |
| [           | 3]       | 890.0-895.0 sec                                       | 386 MBytes 648         | Mbits/sec                           |
| [           | 3]       | 895.0-900.0 sec                                       | 365 MBytes 613         | Mbits/sec                           |
| [           | 3]       | 0.0-900.0 sec   | 68.4 GBytes 653 M      | bits/sec                            |
|             |          | caffic  |                        |                                     |
|             |          |   | <br>0.0.3.15, UDP port |                                     |
|             |          | ng 1470 byte data                                     |                        |                                     |
| UDP         | bι       | affer size: 224                                       | KByte (default)        |                                     |
| [           | 31       | local 172 16 0 5                                      | port 41446 connect     | <br>ed with 10.0.3.15 port 5001     |
| -           |          |   | ransfer Bandwid        | _                                   |
| [           | 3]       | 0.0- 5.0 sec  |                        | its/sec                             |
| [           | 3]       | 5.0-10.0 sec  | -                      | its/sec                             |
| [           | 3]       | 10.0-15.0 sec   | 482 MBytes 809 Mb      | its/sec                             |
| [           | 3]       | 15.0-20.0 sec   | 481 MBytes 807 Mb      | its/sec                             |
| [           |          | 20.0-25.0 sec   | -                      | its/sec                             |
| [           |          | 25.0-30.0 sec   | -                      | its/sec                             |
| [           |          | 30.0-35.0 sec   | -                      | its/sec                             |
| [           | -        | 35.0-40.0 sec<br>40.0-45.0 sec                        | -                      | its/sec<br>its/sec                  |
| [           |          | 45.0-50.0 sec   | -                      | its/sec                             |
| [           |          | 50.0-55.0 sec   | -                      | its/sec                             |
| [           |          | 55.0-60.0 sec   | -                      | its/sec                             |
| [           | 3]       | 60.0-65.0 sec   | 480 MBytes 805 Mb      | its/sec                             |
| [           | 3]       | 65.0-70.0 sec   | 480 MBytes 806 Mb      | its/sec                             |
| [           | 3]       | 70.0-75.0 sec   | 480 MBytes 806 Mb      | its/sec                             |
| [           |          | 75.0-80.0 sec   | 2                      | its/sec                             |
| [           |          | 80.0-85.0 sec   | -                      | its/sec                             |
| [           |          | 85.0-90.0 sec   | -                      | its/sec                             |
| [           |          | 90.0-95.0 sec<br>95.0-100.0 sec                       | -                      | its/sec<br>bits/sec                 |
| [           | -        | 100.0-105.0 sec                                       | -                      | Mbits/sec                           |
| [           | -        | 105.0-110.0 sec                                       | -                      | Mbits/sec                           |
| [           | -        | 110.0-115.0 sec                                       | 1                      | Mbits/sec                           |
| [           |          | 115.0-120.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 120.0-125.0 sec                                       | 480 MBytes 806         | Mbits/sec                           |
| [           | 3]       | 125.0-130.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 130.0-135.0 sec                                       | =                      | Mbits/sec                           |
| [           | 3]       | 135.0-140.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 140.0-145.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 145.0-150.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]<br>3] | 150.0-155.0 sec                                       |                        | Mbits/sec<br>Mbits/sec              |
| [           | 3]       | 155.0-160.0 sec<br>160.0-165.0 sec                    | -                      | Mbits/sec<br>Mbits/sec              |
| [           | 3]       | 165.0-170.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 170.0-175.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 175.0-180.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 180.0-185.0 sec                                       | 481 MBytes 807         | Mbits/sec                           |
| [           | 3]       | 185.0-190.0 sec                                       | 481 MBytes 808         | Mbits/sec                           |
| [           | 3]       | 190.0-195.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 195.0-200.0 sec                                       | -                      | Mbits/sec                           |
| -           | 3]       | 200.0-205.0 sec                                       | -                      | Mbits/sec                           |
| [           | 3]       | 205.0-210.0 sec                                       | -                      | Mbits/sec                           |
| ]           |          |   | 480 MBytes 805         |                                     |
| [<br>[<br>] | 3]       | 210.0-215.0 sec                                       |                        | Mbits/sec                           |
| ]           |          | 210.0-215.0 sec<br>215.0-220.0 sec<br>220.0-225.0 sec | 481 MBytes 807         | Mbits/sec<br>Mbits/sec<br>Mbits/sec |

| 243        | [      | 3]       | 225.0-230.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
|------------|--------|----------|----------------------------|------------|------------|------------------|------------|------------------------|
| 244        | [      | 3]       | 230.0-235.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 245        | [      | 3]       | 235.0-240.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
| 246        | [      | 3]       | 240.0-245.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
| 247        | [      | 3]       | 245.0-250.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 248        | [      | 3]       | 250.0-255.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 249        | [      | 3]       | 255.0-260.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 250        | [      | 3]       | 260.0-265.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 251        | [      | 3]       | 265.0-270.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 252        | [      | 3]       | 270.0-275.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 253        | [      | 3]       | 275.0-280.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 254        | [      | 3]       | 280.0-285.0                | sec        | 480        | MBytes           | 806        | Mbits/sec<br>Mbits/sec |
| 255        | [      | 3]<br>3] | 285.0-290.0<br>290.0-295.0 | sec        | 480<br>481 | MBytes<br>MBytes | 806        | Mbits/sec              |
| 256<br>257 | [<br>[ | 3]       | 295.0-300.0                | sec<br>sec | 481        | MBytes           | 808        | Mbits/sec              |
| 258        | [      | 3]       | 300.0-305.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 259        | [      | 3]       | 305.0-310.0                | sec        | 482        | MBytes           | 808        | Mbits/sec              |
| 260        | [      | 3]       | 310.0-315.0                | sec        | 482        | MBytes           | 809        | Mbits/sec              |
| 261        | [      | 3]       | 315.0-320.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 262        | [      | 3]       | 320.0-325.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 263        | [      | 3]       | 325.0-330.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 264        | [      | 3]       | 330.0-335.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 265        | [      | 3]       | 335.0-340.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 266        | [      | 3]       | 340.0-345.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 267        | [      | 3]       | 345.0-350.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
| 268        | [      | 3]       | 350.0-355.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
| 269        | [      | 3]       | 355.0-360.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 270        | [      | 3]       | 360.0-365.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 271        | [      | 3]       | 365.0-370.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 272        | [      | 3]       | 370.0-375.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 273        | [      | 3]       | 375.0-380.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 274        | [      | 3]       | 380.0-385.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 275        | [      | 3]       | 385.0-390.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 276        | [      | 3]       | 390.0-395.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 277        | [      | 3]       | 395.0-400.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 278        | [      | 3]       | 400.0-405.0                | sec        | 479        | MBytes           | 804        | Mbits/sec              |
| 279        | [      | 3]       | 405.0-410.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
| 280        | [      | 3]       | 410.0-415.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 281        | [      | 3]       | 415.0-420.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 282        | [      | 3]       | 420.0-425.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 283        | [      | 3]       | 425.0-430.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 284        | [      | 3]<br>3] | 430.0-435.0                | sec        | 481        | MBytes<br>MBytes | 808<br>807 | Mbits/sec<br>Mbits/sec |
| 285<br>286 | [<br>[ | 3]       | 435.0-440.0<br>440.0-445.0 | sec<br>sec | 481<br>481 | MBytes           | 807        | Mbits/sec              |
| 287        | [      | 3]       | 445.0-450.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 288        | [      | 3]       | 450.0-455.0                | sec        | 482        | MBytes           | 808        | Mbits/sec              |
| 289        | [      | 3]       | 455.0-460.0                | sec        | 481        | MBytes           | 808        |                        |
| 290        | [      | 3]       | 460.0-465.0                | sec        |            | MBytes           |            | Mbits/sec              |
| 291        | [      | 3]       | 465.0-470.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 292        | [      | 3]       | 470.0-475.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
| 293        | [      | 3]       | 475.0-480.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 294        | [      | 3]       | 480.0-485.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 295        | [      | 3]       | 485.0-490.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
| 296        | [      | 3]       | 490.0-495.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 297        | [      | 3]       | 495.0-500.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 298        | [      | 3]       | 500.0-505.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 299        | [      | 3]       | 505.0-510.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 300        | [      | 3]       | 510.0-515.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 301        | [      | 3]       | 515.0-520.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 302        | [      | 3]       | 520.0-525.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
| 303        | [      | 3]       | 525.0-530.0                | sec        | 480        | MBytes           | 805        | Mbits/sec              |
| 304        | [      | 3]       | 530.0-535.0                | sec        | 481        | MBytes           | 806        | Mbits/sec              |
| 305        | [      | 3]       | 535.0-540.0                | sec        | 481        | MBytes           | 808        | Mbits/sec              |
| 306        | [      | 3]       | 540.0-545.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 307        | [      | 3]       | 545.0-550.0                | sec        | 481        | MBytes           | 807        | Mbits/sec              |
| 308        | [      | 3]       | 550.0-555.0                | sec        | 480        | MBytes           | 806        | Mbits/sec              |
|            |        |          |                            |            |            |                  |            |                        |

| 309        | [   | 3] | 555.0-560.0 | sec | 481 | MBytes | 806 | Mbits/sec |
|------------|-----|----|-------------|-----|-----|--------|-----|-----------|
| 310        | [   | 3] | 560.0-565.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 311        | ] [ | 3] | 565.0-570.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 312        | ]   | 3] | 570.0-575.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 313        | ī   | 3] | 575.0-580.0 | sec | 480 | MBytes | 806 | Mbits/sec |
|            |     | -  |             |     |     | -      | 806 | Mbits/sec |
| 314        | ]   | 3] | 580.0-585.0 | sec | 481 | MBytes |     |           |
| 315        | [   | 3] | 585.0-590.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 316        | [   | 3] | 590.0-595.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 317        | [   | 3] | 595.0-600.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 318        | [   | 3] | 600.0-605.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 319        | 1   | 3] | 605.0-610.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 320        | ] [ | 3] | 610.0-615.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 321        | [   | 3] | 615.0-620.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 322        | ĺ   | 3] | 620.0-625.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 323        | Ē   | 3] | 625.0-630.0 |     | 481 | MBytes | 807 | Mbits/sec |
|            |     | -  |             | sec |     | -      |     |           |
| 324        | ]   | 3] | 630.0-635.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 325        | [   | 3] | 635.0-640.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 326        | [   | 3] | 640.0-645.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 327        | [   | 3] | 645.0-650.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 328        | [   | 3] | 650.0-655.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 329        | [   | 3] | 655.0-660.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 330        | ]   | 3] | 660.0-665.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 331        | ī   | 3] | 665.0-670.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 332        | Ē   | 3] | 670.0-675.0 | sec | 481 | MBytes | 808 | Mbits/sec |
|            |     | -  |             |     |     | -      |     |           |
| 333        | ]   | 3] | 675.0-680.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 334        | [   | 3] | 680.0-685.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 335        | [   | 3] | 685.0-690.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 336        | [   | 3] | 690.0-695.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 337        | [   | 3] | 695.0-700.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 338        | [   | 3] | 700.0-705.0 | sec | 480 | MBytes | 805 | Mbits/sec |
| 339        | 1   | 3] | 705.0-710.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 340        | ]   | 3] | 710.0-715.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 341        | ī   | 3] | 715.0-720.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 342        | Ē   | 3] | 720.0-725.0 | sec | 481 | MBytes | 808 | Mbits/sec |
|            |     | -  |             |     |     | -      |     |           |
| 343        | [   | 3] | 725.0-730.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 344        | ]   | 3] | 730.0-735.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 345        | [   | 3] | 735.0-740.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 346        | [   | 3] | 740.0-745.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 347        | [   | 3] | 745.0-750.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 348        | ] [ | 3] | 750.0-755.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 349        | 1   | 3] | 755.0-760.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 350        | ]   | 3] | 760.0-765.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 351        | ĺ   | 3] | 765.0-770.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 352        | ī   | 3] | 770.0-775.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 353        | ſ   | 3] | 775.0-780.0 | sec | 481 | MBytes | 808 | Mbits/sec |
|            |     | -  | 780.0-785.0 |     |     | -      | 806 | Mbits/sec |
| 354        | [   | 3] |             | sec | 480 | MBytes |     |           |
| 355        | ] [ | 3] | 785.0-790.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 356        | [   | 3] | 790.0-795.0 | sec |     | MBytes | 805 | Mbits/sec |
| 357        | [   | 3] | 795.0-800.0 | sec | 479 | MBytes | 804 | Mbits/sec |
| 358        | [   | 3] | 800.0-805.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 359        | [   | 3] | 805.0-810.0 | sec | 479 | MBytes | 804 | Mbits/sec |
| 360        | ] [ | 3] | 810.0-815.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 361        | 1   | 3] | 815.0-820.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 362        | ]   | 3] | 820.0-825.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 363        | ĺ   | 3] | 825.0-830.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 364        | ī   | 3] | 830.0-835.0 | sec | 481 | MBytes | 808 | Mbits/sec |
|            | Ĩ   | 3] | 835.0-840.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 365<br>266 |     | -  |             |     |     | MBytes |     | Mbits/sec |
| 366        | [   | 3] | 840.0-845.0 | sec | 481 | -      | 808 |           |
| 367        | [   | 3] | 845.0-850.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 368        | [   | 3] | 850.0-855.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 369        | [   | 3] | 855.0-860.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 370        | ]   | 3] | 860.0-865.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 371        | [   | 3] | 865.0-870.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 372        | [   | 3] | 870.0-875.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 373        | ī   | 3] | 875.0-880.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 374        | ī   | 3] | 880.0-885.0 | sec | 481 | MBytes | 808 | Mbits/sec |
|            |     |    |             |     |     | 1      |     | -,        |

375 [ 3] 885.0-890.0 sec 481 MBytes 806 Mbits/sec 376 [ 3] 890.0-895.0 sec 481 MBytes 808 Mbits/sec 377 [ 3] 0.0-900.0 sec 84.5 GBytes 807 Mbits/sec 378 [ 3] Sent 61730492 datagrams 379 [ 3] Server Report: 380 [3]0.0-900.0 sec 82.0 GBytes 783 Mbits/sec 0.010 ms 1811588/61730491 (2.9%) 381 [ 3] 0.0-900.0 sec 8195 datagrams received out-of-order

| тс     | יד קי | affic Resul                                    | ts for Me  | dium VMs case3                |
|--------|-------|--|------------|-------------------------------|
|        | ·     | .u±±±¢   |            |                               |
| 21     | ient  | connecting to 10.0.3.1                         | 4, TCP po: | rt 5001                       |
|        |       | ndow size: 23.5 KByte (                        | · ·        |                               |
|        |       |  |            |                               |
| [      | 3]    | local 10.0.3.13 port 56                        | 416 conne  | cted with 10.0.3.14 port 5001 |
| [      | ID]   | Interval Transfer                              | Band       | width                         |
| [      | 3]    | 0.0- 5.0 sec 436 MBy                           |            | Mbits/sec                     |
| [      | 3]    | 5.0-10.0 sec 478 MBy                           |            | Mbits/sec                     |
| [      |       | 10.0-15.0 sec 419 MBy                          |            | Mbits/sec                     |
| [      |       | 15.0-20.0 sec 464 MBy                          |            | Mbits/sec                     |
| [      | -     | 20.0-25.0 sec 481 MBy                          |            | Mbits/sec                     |
| [      |       | 25.0-30.0 sec 470 MBy                          |            | Mbits/sec                     |
| [      | -     | 30.0-35.0 sec 456 MBy                          |            | Mbits/sec                     |
| [      | -     | 35.0-40.0 sec 447 MBy                          |            | Mbits/sec                     |
| [<br>r |       | 40.0-45.0 sec 468 MBy                          |            | Mbits/sec                     |
| [      |       | 45.0-50.0 sec 496 MBy<br>50.0-55.0 sec 475 MBy |            | Mbits/sec<br>Mbits/sec        |
| [      |       |  |            | Mbits/sec                     |
| [      | -     | 55.0-60.0 sec 496 MBy<br>60.0-65.0 sec 437 MBy |            | Mbits/sec                     |
| [      |       | 65.0-70.0 sec 458 MBy                          |            | Mbits/sec                     |
| [      |       | 70.0-75.0 sec 438 MBy                          |            | Mbits/sec                     |
| [      |       | 75.0-80.0 sec 481 MBy                          |            | Mbits/sec                     |
| [      |       | 80.0-85.0 sec 506 MBy                          |            | Mbits/sec                     |
| [      | -     | 85.0-90.0 sec 513 MBy                          |            | Mbits/sec                     |
| [      |       | 90.0-95.0 sec 480 MBy                          |            | Mbits/sec                     |
| [      |       | =  |            | 6 Mbits/sec                   |
| [      | -     |  | -          | 55 Mbits/sec                  |
| [      |       |  | -          | 46 Mbits/sec                  |
| [      | -     |  | -          | 60 Mbits/sec                  |
| [      |       |  | -          | 77 Mbits/sec                  |
| [      | -     |  | -          | 58 Mbits/sec                  |
| [      |       |  |            | 52 Mbits/sec                  |
| [      | 3]    | 130.0-135.0 sec 511 M                          | Bytes 8    | 58 Mbits/sec                  |
| [      | 3]    | 135.0-140.0 sec 502 M                          | Bytes 8    | 43 Mbits/sec                  |
| [      | 3]    | 140.0-145.0 sec 502 M                          | Bytes 8    | 42 Mbits/sec                  |
| [      | 3]    | 145.0-150.0 sec 472 M                          | Bytes 7    | 92 Mbits/sec                  |
| [      | 3]    | 150.0-155.0 sec 439 M                          | Bytes 7    | 37 Mbits/sec                  |
| [      | 3]    | 155.0-160.0 sec 410 M                          | Bytes 6    | 87 Mbits/sec                  |
| [      |       |  | -          | 68 Mbits/sec                  |
| [      |       |  | -          | 02 Mbits/sec                  |
| [      |       |  | -          | 80 Mbits/sec                  |
| [      | -     |  | -          | 69 Mbits/sec                  |
| [      |       |  | -          | 78 Mbits/sec                  |
| [      | -     |  | -          | 86 Mbits/sec                  |
| [      | -     |  | -          | 82 Mbits/sec                  |
| l      | 3]    | 195.0-200.0 sec 542 M                          | -          | 10 Mbits/sec                  |
| [      |       |  | -          | 97 Mbits/sec                  |
| [      | 3]    |  | -          | 49 Mbits/sec                  |
| [      | 3]    |  | -          | 73 Mbits/sec                  |
| [      |       |  | -          | 31 Mbits/sec                  |
| [      | 3]    |  | -          | 43 Mbits/sec                  |
| [      | 3]    |  | -          | 80 Mbits/sec                  |
| [      | 3]    |  | -          | 73 Mbits/sec                  |
| [      | 3]    |  | -          | 05 Mbits/sec                  |
| [<br>r |       |  | -          | 88 Mbits/sec<br>97 Mbits/sec  |
| l      | 3]    |  | -          |                               |
| [      | ر د   | 250.0-255.0 sec 487 M                          | Bytes 8    | 17 Mbits/sec                  |

| 59  | [      | 3] | 255.0-260.0 | sec | 495 | MBytes | 830 | Mbits/sec |
|-----|--------|----|-------------|-----|-----|--------|-----|-----------|
| 60  | [      | 3] | 260.0-265.0 | sec | 494 | MBytes | 829 | Mbits/sec |
| 61  | [      | 3] | 265.0-270.0 | sec | 453 | MBytes | 760 | Mbits/sec |
| 62  | [      | 3] | 270.0-275.0 | sec | 471 | MBytes | 790 | Mbits/sec |
| 63  | ſ      | 3] | 275.0-280.0 | sec | 440 | MBytes | 738 | Mbits/sec |
| 64  | [      | 3] | 280.0-285.0 | sec | 436 | MBytes | 732 | Mbits/sec |
| 65  | [      | 3] | 285.0-290.0 | sec | 448 | MBytes | 752 | Mbits/sec |
| 66  | l<br>[ | 3] | 290.0-295.0 |     | 468 | MBytes | 785 | Mbits/sec |
|     |        | -  |             | sec |     | -      |     |           |
| 67  | [      | 3] | 295.0-300.0 | sec | 461 | MBytes | 774 | Mbits/sec |
| 68  | [      | 3] | 300.0-305.0 | sec | 500 | MBytes | 839 | Mbits/sec |
| 69  | [      | 3] | 305.0-310.0 | sec | 544 | MBytes | 912 | Mbits/sec |
| 70  | [      | 3] | 310.0-315.0 | sec | 439 | MBytes | 736 | Mbits/sec |
| 71  | ]      | 3] | 315.0-320.0 | sec | 443 | MBytes | 743 | Mbits/sec |
| 72  | [      | 3] | 320.0-325.0 | sec | 478 | MBytes | 801 | Mbits/sec |
| 73  | ]      | 3] | 325.0-330.0 | sec | 497 | MBytes | 833 | Mbits/sec |
| 74  | Ĩ      | 3] | 330.0-335.0 | sec | 468 | MBytes | 786 | Mbits/sec |
| 75  | [      | 3] | 335.0-340.0 | sec | 418 | MBytes | 702 | Mbits/sec |
|     |        | -  |             |     |     | -      |     |           |
| 76  | [      | 3] | 340.0-345.0 | sec | 445 | MBytes | 747 | Mbits/sec |
| 77  | [      | 3] | 345.0-350.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 78  | [      | 3] | 350.0-355.0 | sec | 503 | MBytes | 845 | Mbits/sec |
| 79  | [      | 3] | 355.0-360.0 | sec | 513 | MBytes | 861 | Mbits/sec |
| 80  | [      | 3] | 360.0-365.0 | sec | 528 | MBytes | 885 | Mbits/sec |
| 81  | [      | 3] | 365.0-370.0 | sec | 518 | MBytes | 869 | Mbits/sec |
| 82  | ſ      | 3] | 370.0-375.0 | sec | 513 | MBytes | 861 | Mbits/sec |
| 83  | [      | 3] | 375.0-380.0 | sec | 504 | MBytes | 845 | Mbits/sec |
| 84  | [      | 3] | 380.0-385.0 | sec | 429 | MBytes | 719 | Mbits/sec |
|     | -      | -  |             |     |     | MBytes | 800 | Mbits/sec |
| 85  | [      | 3] | 385.0-390.0 | sec | 477 | -      |     |           |
| 86  | [      | 3] | 390.0-395.0 | sec | 487 | MBytes | 817 | Mbits/sec |
| 87  | [      | 3] | 395.0-400.0 | sec | 450 | MBytes | 754 | Mbits/sec |
| 88  | [      | 3] | 400.0-405.0 | sec | 475 | MBytes | 797 | Mbits/sec |
| 89  | [      | 3] | 405.0-410.0 | sec | 497 | MBytes | 834 | Mbits/sec |
| 90  | [      | 3] | 410.0-415.0 | sec | 516 | MBytes | 865 | Mbits/sec |
| 91  | [      | 3] | 415.0-420.0 | sec | 546 | MBytes | 917 | Mbits/sec |
| 92  | ]      | 3] | 420.0-425.0 | sec | 494 | MBytes | 828 | Mbits/sec |
| 93  | Ĩ      | 3] | 425.0-430.0 | sec | 505 | MBytes | 847 | Mbits/sec |
| 94  | [      | 3] | 430.0-435.0 | sec | 520 | MBytes | 872 | Mbits/sec |
|     |        | -  |             |     |     | -      | 902 | Mbits/sec |
| 95  | [      | 3] | 435.0-440.0 | sec | 538 | MBytes |     |           |
| 96  | [      | 3] | 440.0-445.0 | sec | 479 | MBytes | 804 | Mbits/sec |
| 97  | [      | 3] | 445.0-450.0 | sec | 463 | MBytes | 777 | Mbits/sec |
| 98  | [      | 3] | 450.0-455.0 | sec | 455 | MBytes | 763 | Mbits/sec |
| 99  | [      | 3] | 455.0-460.0 | sec | 419 | MBytes | 704 | Mbits/sec |
| 100 | [      | 3] | 460.0-465.0 | sec | 476 | MBytes | 798 | Mbits/sec |
| 101 | [      | 3] | 465.0-470.0 | sec | 498 | MBytes | 835 | Mbits/sec |
| 102 | ſ      | 3] | 470.0-475.0 | sec | 546 | MBytes | 916 | Mbits/sec |
| 103 | ]      | 3] | 475.0-480.0 | sec | 531 | MBytes | 890 | Mbits/sec |
| 104 | ĺ      | 3] | 480.0-485.0 | sec | 476 | MBytes | 799 | Mbits/sec |
| 101 | [      | 3] | 485.0-490.0 | sec | 494 | MBytes | 828 | Mbits/sec |
|     | -      | -  |             |     |     | -      |     |           |
| 106 | [      | 3] | 490.0-495.0 | sec |     | MBytes |     | Mbits/sec |
| 107 | [      | 3] | 495.0-500.0 | sec | 525 | MBytes | 881 | Mbits/sec |
| 108 | [      | 3] | 500.0-505.0 | sec | 535 | MBytes | 897 | Mbits/sec |
| 109 | [      | 3] | 505.0-510.0 | sec | 475 | MBytes | 797 | Mbits/sec |
| 110 | [      | 3] | 510.0-515.0 | sec | 400 | MBytes | 672 | Mbits/sec |
| 111 | [      | 3] | 515.0-520.0 | sec | 404 | MBytes | 678 | Mbits/sec |
| 112 | [      | 3] | 520.0-525.0 | sec | 442 | MBytes | 741 | Mbits/sec |
| 113 | [      | 3] | 525.0-530.0 | sec | 480 | MBytes | 804 | Mbits/sec |
| 114 | [      | 3] | 530.0-535.0 | sec | 499 | MBytes | 837 | Mbits/sec |
| 115 | ī      | 3] | 535.0-540.0 | sec | 511 | MBytes | 857 | Mbits/sec |
| 115 | l<br>[ | 3] | 540.0-545.0 | sec | 506 | MBytes | 850 | Mbits/sec |
|     |        |    |             |     |     | MBytes |     |           |
| 117 | [      | 3] | 545.0-550.0 | sec | 504 | -      | 846 | Mbits/sec |
| 118 | [      | 3] | 550.0-555.0 | sec | 520 | -      | 873 | Mbits/sec |
| 119 | [      | 3] | 555.0-560.0 | sec | 458 | MBytes | 769 | Mbits/sec |
| 120 | [      | 3] | 560.0-565.0 | sec | 454 | -      | 763 | Mbits/sec |
| 121 | [      | 3] | 565.0-570.0 | sec | 438 | MBytes | 735 | Mbits/sec |
| 122 | [      | 3] | 570.0-575.0 | sec | 460 | MBytes | 772 | Mbits/sec |
| 123 | [      | 3] | 575.0-580.0 | sec | 405 | MBytes | 679 | Mbits/sec |
| 124 | [      | 3] | 580.0-585.0 | sec | 471 | MBytes | 790 | Mbits/sec |
|     | •      |    |             |     |     |        |     |           |

| 125 | [  | 3]   | 585.0-590.0 | sec | 496 | MBytes | 832 Mbits/sec | 2 |
|-----|----|------|-------------|-----|-----|--------|---------------|---|
| 126 | [  | 3]   | 590.0-595.0 | sec | 506 | MBytes | 849 Mbits/sec | 2 |
| 127 | [  | 3]   | 595.0-600.0 | sec | 506 | MBytes | 850 Mbits/sec | 2 |
| 128 | [  | 3]   | 600.0-605.0 | sec | 508 | MBytes | 851 Mbits/sec | 2 |
| 129 | [  | 3]   | 605.0-610.0 | sec | 512 | MBytes | 860 Mbits/sec | 2 |
| 130 | [  | 3]   | 610.0-615.0 | sec | 517 | MBytes | 867 Mbits/sec | 2 |
| 131 | [  | 3]   | 615.0-620.0 | sec | 496 | MBytes | 833 Mbits/sec | 2 |
| 132 | [  | 3]   | 620.0-625.0 | sec | 506 | MBytes | 848 Mbits/sec | 2 |
| 133 | [  | 3]   | 625.0-630.0 | sec | 506 | MBytes | 849 Mbits/sec | 2 |
| 134 | [  | 3]   | 630.0-635.0 | sec | 439 | MBytes | 736 Mbits/sec | 2 |
| 135 | [  | 3]   | 635.0-640.0 | sec | 440 | MBytes | 739 Mbits/sec | 2 |
| 136 | [  | 3]   | 640.0-645.0 | sec | 476 | MBytes | 798 Mbits/sec | 2 |
| 137 | [  | 3]   | 645.0-650.0 | sec | 456 | MBytes | 766 Mbits/sec | 2 |
| 138 | [  | 3]   | 650.0-655.0 | sec | 457 | MBytes | 767 Mbits/sec | 2 |
| 139 | [  | 3]   | 655.0-660.0 | sec | 468 | MBytes | 786 Mbits/sec | 2 |
| 140 | [  | 3]   | 660.0-665.0 | sec | 455 | MBytes | 763 Mbits/sec | 2 |
| 141 | [  | 3]   | 665.0-670.0 | sec | 464 | MBytes | 779 Mbits/sec | 2 |
| 142 | [  | 3]   | 670.0-675.0 | sec | 488 | MBytes | 819 Mbits/sec | 2 |
| 143 | [  | 3]   | 675.0-680.0 | sec | 508 | MBytes | 852 Mbits/sec | 2 |
| 144 | [  | 3]   | 680.0-685.0 | sec | 451 | MBytes | 756 Mbits/sec | 2 |
| 145 | [  | 3]   | 685.0-690.0 | sec | 451 | MBytes | 757 Mbits/sec | 2 |
| 146 | [  | 3]   | 690.0-695.0 | sec | 437 | MBytes | 733 Mbits/sec | 2 |
| 147 | [  | 3]   | 695.0-700.0 | sec | 427 | MBytes | 716 Mbits/sec | 2 |
| 148 | [  | 3]   | 700.0-705.0 | sec | 423 | MBytes | 710 Mbits/sec | 2 |
| 149 | [  | 3]   | 705.0-710.0 | sec | 438 | MBytes | 735 Mbits/sec | 2 |
| 150 | [  | 3]   | 710.0-715.0 | sec | 452 | MBytes | 759 Mbits/sec | 2 |
| 151 | [  | 3]   | 715.0-720.0 | sec | 435 | MBytes | 729 Mbits/sec | 2 |
| 152 | [  | 3]   | 720.0-725.0 | sec | 424 | MBytes | 711 Mbits/sec | 2 |
| 153 | [  | 3]   | 725.0-730.0 | sec | 447 | MBytes | 750 Mbits/sec | 2 |
| 154 | [  | 3]   | 730.0-735.0 | sec | 478 | MBytes | 802 Mbits/sec | 2 |
| 155 | [  | 3]   | 735.0-740.0 | sec | 503 | MBytes | 843 Mbits/sec | 2 |
| 156 | [  | 3]   | 740.0-745.0 | sec | 503 | MBytes | 843 Mbits/sec | 2 |
| 157 | [  | 3]   | 745.0-750.0 | sec | 388 | MBytes | 650 Mbits/sec | 2 |
| 158 | [  | 3]   | 750.0-755.0 | sec | 427 | MBytes | 716 Mbits/sec | 2 |
| 159 | [  | 3]   | 755.0-760.0 | sec | 434 | MBytes | 728 Mbits/sec | 2 |
| 160 | [  | 3]   | 760.0-765.0 | sec | 472 | MBytes | 791 Mbits/sec | 2 |
| 161 | [  | 3]   | 765.0-770.0 | sec | 434 | MBytes | 729 Mbits/sec | 2 |
| 162 | [  | 3]   | 770.0-775.0 | sec | 439 | MBytes | 737 Mbits/sec | 2 |
| 163 | [  | 3]   | 775.0-780.0 | sec | 448 | MBytes | 752 Mbits/sec | 2 |
| 164 | [  | 3]   | 780.0-785.0 | sec | 454 | MBytes | 763 Mbits/sec | 2 |
| 165 | [  | 3]   | 785.0-790.0 | sec | 435 | MBytes | 729 Mbits/sec | 2 |
| 166 | [  | 3]   | 790.0-795.0 | sec | 429 | MBytes | 719 Mbits/sec | 2 |
| 167 | [  | 3]   | 795.0-800.0 | sec | 476 | MBytes | 798 Mbits/sec | 2 |
| 168 | [  | 3]   | 800.0-805.0 | sec | 508 | MBytes | 853 Mbits/sec | 2 |
| 169 | [  | 3]   | 805.0-810.0 | sec | 474 | MBytes | 795 Mbits/sec | 2 |
| 170 | [  | 3]   | 810.0-815.0 | sec | 394 | MBytes | 662 Mbits/sec | 2 |
| 171 | [  | 3]   | 815.0-820.0 | sec | 423 | MBytes | 709 Mbits/sec | 2 |
| 172 | [  | 3]   | 820.0-825.0 | sec |     | MBytes | 803 Mbits/sec |   |
| 173 | [  | 3]   | 825.0-830.0 | sec | 497 | MBytes | 833 Mbits/sec | 2 |
| 174 | [  | 3]   | 830.0-835.0 | sec | 481 | MBytes | 807 Mbits/sec | 2 |
| 175 | [  | 3]   | 835.0-840.0 | sec | 431 | MBytes | 723 Mbits/sec | 2 |
| 176 | [  | 3]   | 840.0-845.0 | sec | 460 | MBytes | 771 Mbits/sec | 2 |
| 177 | [  | 3]   | 845.0-850.0 | sec | 472 | MBytes | 793 Mbits/sec | 2 |
| 178 | [  | 3]   | 850.0-855.0 | sec | 498 | MBytes | 836 Mbits/sec | 2 |
| 179 | [  | 3]   | 855.0-860.0 | sec | 506 | MBytes | 849 Mbits/sec | 2 |
| 180 | [  | 3]   | 860.0-865.0 | sec | 512 | MBytes | 859 Mbits/sec | 2 |
| 181 | [  | 3]   | 865.0-870.0 | sec | 472 | MBytes | 793 Mbits/sec | 2 |
| 182 | [  | 3]   | 870.0-875.0 | sec | 462 | MBytes | 775 Mbits/sec | 2 |
| 183 | [  | 3]   | 875.0-880.0 | sec |     | MBytes | 715 Mbits/sec | 2 |
| 184 | [  | 3]   | 880.0-885.0 | sec |     | MBytes | 769 Mbits/sec |   |
| 185 | ī  | 3]   | 885.0-890.0 | sec |     | MBytes | 812 Mbits/sec |   |
| 186 | [  | 3]   | 890.0-895.0 | sec |     | MBytes | 852 Mbits/sec |   |
| 187 | ī  | 3]   | 895.0-900.0 | sec |     | MBytes | 864 Mbits/sec |   |
| 188 | Ĩ  | 3]   | 0.0-900.0   |     |     | GBytes | 801 Mbits/sec |   |
| 189 |    |      |             |     |     |        |               |   |
| 190 | UD | P T: | raffic      |     |     |        |               |   |
|     | •  |      |             |     |     |        |               |   |

-----

|        |          |                  | yte (default)  |
|--------|----------|------------------|--|
| <br>[  |          |                  |  |
| [      | ID]      | Interval Tra     | nsfer Bandwidth                                      |
| [      | 3]       | 0.0- 5.0 sec 48  | 1 MBytes 807 Mbits/sec                               |
| [      | 3]       | 5.0-10.0 sec 48  | 1 MBytes 807 Mbits/sec                               |
| [      | 3]       | 10.0-15.0 sec 48 | 1 MBytes 807 Mbits/sec                               |
| [      |          |                  | 1 MBytes 807 Mbits/sec                               |
| [      |          |                  | 1 MBytes 806 Mbits/sec                               |
| [      | -        |                  | 1 MBytes 807 Mbits/sec                               |
| [      |          |                  | 0 MBytes 806 Mbits/sec                               |
| [      |          |                  | 1 MBytes 808 Mbits/sec                               |
| [      |          |                  | 9 MBytes 804 Mbits/sec                               |
| [      | -        |                  | 0 MBytes 805 Mbits/sec                               |
| [      |          |                  | 0 MBytes 806 Mbits/sec                               |
| ]<br>[ |          |                  | 9 MBytes 804 Mbits/sec<br>0 MBytes 805 Mbits/sec     |
| [      |          |                  | 0 MBytes 805 Mbits/sec<br>0 MBytes 805 Mbits/sec     |
| L<br>[ | -        |                  | -  |
| [      |          |                  | 0 MBytes 805 Mbits/sec<br>0 MBytes 805 Mbits/sec     |
| [      | -        |                  | 9 MBytes 804 Mbits/sec                               |
| [      |          |                  | 1 MBytes 807 Mbits/sec                               |
| [      | -        |                  | 0 MBytes 806 Mbits/sec                               |
| [      |          |                  | 80 MBytes 805 Mbits/sec                              |
| [      | -        |                  | 481 MBytes 807 Mbits/sec                             |
| [      |          |                  | 481 MBytes 806 Mbits/sec                             |
| [      |          |                  | 480 MBytes 805 Mbits/sec                             |
| ĺ      |          |                  | 480 MBytes 806 Mbits/sec                             |
| Ĩ      |          |                  | 479 MBytes 804 Mbits/sec                             |
| [      |          |                  | 480 MBytes 805 Mbits/sec                             |
| Ĩ      |          |                  | 480 MBytes 805 Mbits/sec                             |
| [      |          |                  | 480 MBytes 805 Mbits/sec                             |
| [      | 3]       | 140.0-145.0 sec  | 480 MBytes 805 Mbits/sec                             |
| [      | 3]       | 145.0-150.0 sec  | 481 MBytes 806 Mbits/sec                             |
| [      | 3]       | 150.0-155.0 sec  | 481 MBytes 807 Mbits/sec                             |
| [      | 3]       | 155.0-160.0 sec  | 481 MBytes 807 Mbits/sec                             |
| [      | 3]       | 160.0-165.0 sec  | 480 MBytes 806 Mbits/sec                             |
| [      | 3]       | 165.0-170.0 sec  | 480 MBytes 806 Mbits/sec                             |
| [      | 3]       | 170.0-175.0 sec  | 480 MBytes 805 Mbits/sec                             |
| [      | 3]       | 175.0-180.0 sec  | 480 MBytes 805 Mbits/sec                             |
| [      |          |                  | 479 MBytes 804 Mbits/sec                             |
| [      |          |                  | 480 MBytes 805 Mbits/sec                             |
| [      | -        |                  | 480 MBytes 806 Mbits/sec                             |
| [      | 3]       |                  | 481 MBytes 806 Mbits/sec                             |
| [      |          |                  | 481 MBytes 807 Mbits/sec                             |
| [      | 3]       |                  | 479 MBytes 804 Mbits/sec                             |
| [      | 3]       |                  | 480 MBytes 805 Mbits/sec                             |
| [      | 3]       |                  | 480 MBytes 805 Mbits/sec                             |
| [      | 3]       |                  | 481 MBytes 806 Mbits/sec<br>479 MBytes 804 Mbits/sec |
| [<br>r | 3]       |                  | 479 MBytes 804 Mbits/sec<br>479 MBytes 804 Mbits/sec |
| [<br>r | 3]<br>3] |                  | -  |
| [<br>[ | 3]       |                  | 480 MBytes 805 Mbits/sec<br>479 MBytes 804 Mbits/sec |
| [      | 3]       |                  | 480 MBytes 805 Mbits/sec                             |
| [      | 3]       |                  | 480 MBytes 805 Mbits/sec                             |
| [      | 3]       |                  | 479 MBytes 804 Mbits/sec                             |
| [      | 3]       |                  | 479 MBytes 804 Mbits/sec                             |
| [      | 3]       |                  | 481 MBytes 806 Mbits/sec                             |
| [      | 3]       |                  | 480 MBytes 806 Mbits/sec                             |
| [      | 3]       |                  | 481 MBytes 807 Mbits/sec                             |
|        | · ·      |                  | -  |
| [      | 3]       | 280.0-285.0 sec  | 482 MBytes 808 Mbits/sec                             |

| 257 | [   | 3] | 295.0-300.0 | sec | 481 | MBytes | 807 | Mbits/sec |
|-----|-----|----|-------------|-----|-----|--------|-----|-----------|
| 258 | [   | 3] | 300.0-305.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 259 | [   | 3] | 305.0-310.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 260 | ĺ   | 3] | 310.0-315.0 | sec | 481 | MBytes | 806 | Mbits/sec |
|     |     | -  |             |     |     | -      |     |           |
| 261 | [   | 3] | 315.0-320.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 262 | [   | 3] | 320.0-325.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 263 | [   | 3] | 325.0-330.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 264 | [   | 3] | 330.0-335.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 265 | [   | 3] | 335.0-340.0 | sec | 480 | MBytes | 805 | Mbits/sec |
| 266 | [   | 3] | 340.0-345.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 267 | [   | 3] | 345.0-350.0 | sec | 481 | MBytes | 806 | Mbits/sec |
|     |     | -  |             |     |     | -      |     |           |
| 268 | [   | 3] | 350.0-355.0 | sec | 481 | MBytes |     | Mbits/sec |
| 269 | [   | 3] | 355.0-360.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 270 | [   | 3] | 360.0-365.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 271 | [   | 3] | 365.0-370.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 272 | [   | 3] | 370.0-375.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 273 | [   | 3] | 375.0-380.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 274 | ĺ   | 3] | 380.0-385.0 |     | 478 | MBytes | 803 | Mbits/sec |
|     |     | -  |             | sec |     | -      |     |           |
| 275 | [   | 3] | 385.0-390.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 276 | [   | 3] | 390.0-395.0 | sec | 479 | MBytes | 804 | Mbits/sec |
| 277 | [   | 3] | 395.0-400.0 | sec | 480 | MBytes | 805 | Mbits/sec |
| 278 | [   | 3] | 400.0-405.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 279 | [   | 3] | 405.0-410.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 280 | ĺ   | 3] | 410.0-415.0 | sec | 480 | MBytes | 806 | Mbits/sec |
|     |     | -  | 415.0-420.0 |     |     | -      |     |           |
| 281 | [   | 3] |             | sec | 480 | MBytes | 805 | Mbits/sec |
| 282 | [   | 3] | 420.0-425.0 | sec | 479 | MBytes | 804 | Mbits/sec |
| 283 | [   | 3] | 425.0-430.0 | sec | 480 | MBytes | 805 | Mbits/sec |
| 284 | [   | 3] | 430.0-435.0 | sec | 479 | MBytes | 804 | Mbits/sec |
| 285 | [   | 3] | 435.0-440.0 | sec | 479 | MBytes | 804 | Mbits/sec |
| 286 | ]   | 3] | 440.0-445.0 | sec | 480 | MBytes | 806 | Mbits/sec |
| 287 | ĺ   | 3] | 445.0-450.0 | sec | 481 | MBytes | 806 | Mbits/sec |
|     |     | 3] |             |     |     | -      |     | Mbits/sec |
| 288 | [   | -  | 450.0-455.0 | sec | 481 | MBytes | 807 |           |
| 289 | [   | 3] | 455.0-460.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 290 | [   | 3] | 460.0-465.0 | sec | 480 | MBytes | 805 | Mbits/sec |
| 291 | [   | 3] | 465.0-470.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 292 | [   | 3] | 470.0-475.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 293 | [   | 3] | 475.0-480.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 294 | [   | 3] | 480.0-485.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 295 | [   | 3] | 485.0-490.0 |     | 481 | MBytes | 807 | Mbits/sec |
|     |     | -  |             | sec |     | -      |     |           |
| 296 | [   | 3] | 490.0-495.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 297 | [   | 3] | 495.0-500.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 298 | [   | 3] | 500.0-505.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 299 | [   | 3] | 505.0-510.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 300 | [   | 3] | 510.0-515.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 301 | [   | 3] | 515.0-520.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 302 | ĺ   | 3] | 520.0-525.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 303 | [   | 3] | 525.0-530.0 | sec |     | MBytes |     | Mbits/sec |
|     | -   | -  |             |     |     | -      |     |           |
| 304 | [   | 3] | 530.0-535.0 | sec |     | MBytes | 807 | Mbits/sec |
| 305 | [   | 3] | 535.0-540.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 306 | [   | 3] | 540.0-545.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 307 | [   | 3] | 545.0-550.0 | sec | 481 | MBytes | 808 | Mbits/sec |
| 308 | ] [ | 3] | 550.0-555.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 309 | [   | 3] | 555.0-560.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 310 | ĺ   | 3] | 560.0-565.0 | sec | 480 | MBytes | 806 | Mbits/sec |
|     |     | -  | 565.0-570.0 |     |     | -      |     |           |
| 311 | [   | 3] |             | sec | 481 | MBytes | 807 | Mbits/sec |
| 312 | [   | 3] | 570.0-575.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 313 | [   | 3] | 575.0-580.0 | sec | 481 | MBytes | 806 | Mbits/sec |
| 314 | [   | 3] | 580.0-585.0 | sec | 482 | MBytes | 808 | Mbits/sec |
| 315 | [   | 3] | 585.0-590.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 316 | [   | 3] | 590.0-595.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 317 | [   | 3] | 595.0-600.0 | sec | 481 | MBytes | 806 | Mbits/sec |
|     |     |    |             |     |     | -      |     |           |
| 318 | [   | 3] | 600.0-605.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 319 | [   | 3] | 605.0-610.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 320 | [   | 3] | 610.0-615.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 321 | [   | 3] | 615.0-620.0 | sec | 481 | MBytes | 807 | Mbits/sec |
| 322 | [   | 3] | 620.0-625.0 | sec | 481 | MBytes | 806 | Mbits/sec |
|     |     |    |             |     |     |        |     |           |

|   |              | 625.0-630.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|---|--------------|---------------------------------------|--------------------------|---|
|   |              | 630.0-635.0 sec                       | 481 MBytes               | 806 Mbits/sec                             |
|   |              | 635.0-640.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   | [ 3]         |                                       | 482 MBytes               | 808 Mbits/sec                             |
|   |              | 645.0-650.0 sec                       | 481 MBytes               | 806 Mbits/sec                             |
|   |              | 650.0-655.0 sec                       | 481 MBytes               | 808 Mbits/sec<br>807 Mbits/sec            |
|   | [ 3]<br>[ 3] |                                       | 481 MBytes               | 807 Mbits/sec                             |
|   | [ 3]         |                                       | 481 MBytes<br>481 MBytes | 807 Mbits/sec                             |
|   | [ 3]         | 670.0-675.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   | [ 3]         |                                       | 481 MBytes               | 806 Mbits/sec                             |
|   |              | 680.0-685.0 sec                       | 481 MBytes               | 808 Mbits/sec                             |
|   |              | 685.0-690.0 sec                       | 480 MBytes               | 806 Mbits/sec                             |
|   | [ 3]         |                                       | 481 MBytes               | 807 Mbits/sec                             |
|   | [ 3]         | 695.0-700.0 sec                       | 481 MBytes               | 806 Mbits/sec                             |
|   | [ 3]         | 700.0-705.0 sec                       | 481 MBytes               | 808 Mbits/sec                             |
|   | [ 3]         | 705.0-710.0 sec                       | 481 MBytes               | 808 Mbits/sec                             |
|   | [ 3]         | 710.0-715.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   | [ 3]         | 715.0-720.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 720.0-725.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 725.0-730.0 sec                       | 481 MBytes               | 806 Mbits/sec                             |
|   | [ 3]         | 730.0-735.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 735.0-740.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 740.0-745.0 sec                       | 480 MBytes               | 806 Mbits/sec                             |
|   |              | 745.0-750.0 sec                       | 481 MBytes               | 808 Mbits/sec                             |
|   |              | 750.0-755.0 sec<br>755.0-760.0 sec    | 480 MBytes               | 806 Mbits/sec<br>807 Mbits/sec            |
|   |              | 760.0-765.0 sec                       | 481 MBytes<br>481 MBytes | 807 Mbits/sec                             |
|   | [ 3]         | 765.0-770.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 770.0-775.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 775.0-780.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 780.0-785.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 785.0-790.0 sec                       | 481 MBytes               | 806 Mbits/sec                             |
|   | [ 3]         | 790.0-795.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   | [ 3]         | 795.0-800.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   | [ 3]         | 800.0-805.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   | [ 3]         | 805.0-810.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 810.0-815.0 sec                       | 478 MBytes               | 803 Mbits/sec                             |
|   |              | 815.0-820.0 sec                       | 480 MBytes               | 804 Mbits/sec                             |
|   |              | 820.0-825.0 sec                       | 480 MBytes               | 806 Mbits/sec                             |
|   |              | 825.0-830.0 sec                       | 481 MBytes               | 808 Mbits/sec                             |
|   |              | 830.0-835.0 sec                       | 481 MBytes               | 806 Mbits/sec                             |
|   |              | 835.0-840.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 840.0-845.0 sec                       | 481 MBytes               | 807 Mbits/sec<br>807 Mbits/sec            |
|   |              | 845.0-850.0 sec<br>850.0-855.0 sec    | 481 MBytes<br>481 MBytes | 807 MDILS/Sec<br>806 Mbits/sec            |
|   | [ 3]         | 855.0-860.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 860.0-865.0 sec                       | 481 MBytes               | 807 Mbits/sec                             |
|   |              | 865.0-870.0 sec                       | 481 MBytes               | 806 Mbits/sec                             |
|   |              | 870.0-875.0 sec                       | -                        | 807 Mbits/sec                             |
|   |              | 875.0-880.0 sec                       | -                        |   |
|   |              | 880.0-885.0 sec                       |                          | 808 Mbits/sec                             |
|   |              | 885.0-890.0 sec                       |                          |   |
|   |              | 890.0-895.0 sec                       | -                        |   |
|   |              | 895.0-900.0 sec                       | -                        | 806 Mbits/sec                             |
|   |              | 0.0-900.0 sec                         | -                        | 806 Mbits/sec                             |
|   |              | Sent 61703902 da                      | tagrams                  |   |
|   |              | Server Report:                        | 7 CDute - 400 *          | Abita/2002 0 206 mg 22050457/61702001 (20 |
|   |              |                                       | -                        | Abits/sec 0.306 ms 23950457/61703901 (39  |
| L | [ 3]         | 0.0-900.0 SeC                         | JZ4 UALAGEAMS            | received out-of-order                     |
| Г | TOD          | maffia                                | _ Results for            | Medium VMs case4                          |
| 1 | ICP I        | raffic<br>                            |                          |   |
| I |              |                                       |                          |   |
|   | Clion        | t connecting to 1                     | 28 39 191 102            | 1'CP port 5001                            |
|   |              | t connecting to 1<br>indow size: 23.5 |                          | -   |

| 6         [13]         1 totevul         Transfer         Bandwidth           8         [13]         0.0         5.0         966         434 MBytes         737 Mbits/sec           9         [13]         10.0         15.0         986         434 MBytes         736 Mbits/sec           10         [15]         15.0         906         344 MBytes         636 Mbits/sec           11         31         15.0         906         344 MBytes         658 Mbits/sec           11         31         5.0         90.0         906         Mbits/sec           12         13         20.0         90.0         90.0         Mbits/sec           13         40.0         90.0         90.0         90.0         Mbits/sec           13         40.0         90.0         90.0         90.0         Mbits/sec           13         60.0         90.0         90.0         90.0         90.0         90.0           13         10.0         90.0         90.0         90.0         90.0         90.0         90.0         90.0           13         10.0.0         90.0         90.0         90.0         90.0         90.0         90.0         90.0 <td< th=""><th>6</th><th>Гſ</th><th>31</th><th>local 10 0 3 12</th><th>port 58926 c</th><th>onnected with 128 39 121 193 port 5001</th></td<>  | 6  | Гſ  | 31 | local 10 0 3 12 | port 58926 c | onnected with 128 39 121 193 port 5001 |
|---|----|-----|----|-----------------|--------------|--|
| 8         [ 3]         0.0 - 5.0 sec         349 MBytes         737 Mbits/sec           10         [ 3]         10.0 - 15.0 sec         339 MBytes         636 Mbits/sec           11         [ 3]         20.0 - 25.0 sec         398 MBytes         668 Mbits/sec           13         13         20.0 - 25.0 sec         398 MBytes         668 Mbits/sec           13         13         20.0 - 25.0 sec         418 MBytes         668 Mbits/sec           14         13         30.0 - 35.0 sec         418 MBytes         700 Mbits/sec           15         13         34.0 - 43.0 sec         418 MBytes         700 Mbits/sec           17         13         45.0 - 50.0 sec         418 MBytes         702 Mbits/sec           18         13         50.0 - 50.0 sec         424 Mbytes         718 Mbits/sec           13         65.0 - 70.0 sec         436 Mbytes         638 Mbits/sec           14         13         60.0 - 65.0 sec         346 Mbytes         638 Mbits/sec           15         13         60.0 - 65.0 sec         346 Mbytes         638 Mbits/sec           16         13         10.0 - 10.0 sec         386 Mbytes         638 Mbits/sec           16         13         10.0 - 10.0 sec         380  |    | ſ   |    |                 | -            | -                                      |
| 9         (3)         5.0-10.0 sec         344 Mäytes         728 Mbits/sec           11         10.0-15.0 sec         394 Mäytes         660 Mbits/sec           12         (3)         25.0-20.0 sec         344 Mäytes         660 Mbits/sec           14         (13)         25.0-20.0 sec         414 Mäytes         660 Mbits/sec           14         (13)         35.0-40.0 sec         418 Mäytes         700 Mbits/sec           15         (13)         35.0-40.0 sec         396 Mäytes         644 Mbits/sec           16         (13)         45.0-55.0 sec         429 Mäytes         710 Mbits/sec           16         (13)         65.0-66.0 sec         444 Mäytes         710 Mbits/sec           16         (13)         65.0-75.0 sec         376 Mäytes         631 Mbits/sec           16         (13)         65.0-75.0 sec         376 Mäytes         631 Mbits/sec           16         31         80.0-85.0 sec         384 Mäytes         651 Mbits/sec           16         31         90.0-95.0 sec         384 Mäytes         651 Mbits/sec           16         31         90.0-95.0 sec         384 Mäytes         651 Mbits/sec           16         31         90.0-95.0 sec         384 Mäytes  |    | -   | -  |                 |              |  |
| 1           |    | -   | -  |                 |              |  |
| 11       [ 3] 15.0-20.0 sec       394 NBytes       660 Nbits/sec         13       13.0.0-35.0 sec       414 NBytes       700 Mbits/sec         14       ( 3] 30.0-35.0 sec       418 NBytes       700 Mbits/sec         15       [ 3] 45.0-50.0 sec       418 NBytes       702 Mbits/sec         16       [ 3] 45.0-50.0 sec       418 NBytes       702 Mbits/sec         17       [ 3] 50.0-55.0 sec       429 NBytes       702 Mbits/sec         18       [ 3] 50.0-65.0 sec       444 NBytes       716 Nbits/sec         20       [ 3] 70.0-75.0 sec       376 NBytes       631 Mbits/sec         21       [ 3] 50.0-60.0 sec       394 NBytes       631 Mbits/sec         22       [ 3] 70.0-75.0 sec       394 NBytes       631 Mbits/sec         23       [ 3] 90.0-95.0 sec       394 NBytes       631 Mbits/sec         24       [ 3] 90.0-95.0 sec       394 NBytes       632 Mbits/sec         25       [ 3] 95.0-100.0 sec       404 NBytes       631 Mbits/sec         26       [ 3] 10.0-0-13.0 sec       394 NBytes       638 Mbits/sec         27       [ 3] 130.0-135.0 sec       312 MBytes       638 Mbits/sec         38       MBytes       651 Mbits/sec         39       10.0-0-135.0 sec<   | 10 |     | 3] |                 | -            | 636 Mbits/sec                          |
| 13       [ 3]       25.0-30.0 sec       414 Mäytes       655 Maits/sec         14       [ 3]       30.0-55.0 sec       418 Mäytes       702 Maits/sec         15       [ 3]       40.0-45.0 sec       418 Mäytes       702 Maits/sec         16       [ 3]       40.0-45.0 sec       418 Mäytes       702 Maits/sec         18       [ 3]       50.0-55.0 sec       429 Mäytes       710 Maits/sec         20       [ 3]       60.0-55.0 sec       444 Mäytes       745 Maits/sec         21       [ 3]       70.0-75.0 sec       376 Mäytes       631 Maits/sec         22       [ 3]       70.0-75.0 sec       376 Mäytes       631 Maits/sec         23       [ 3]       70.0-75.0 sec       384 Mäytes       678 Mbits/sec         24       [ 3]       80.0-95.0 sec       388 Mäytes       653 Mbits/sec         25       [ 3]       100.0-105.0 sec       380 Mäytes       638 Mbits/sec         25       [ 3]       100.0-105.0 sec       380 Mäytes       638 Mbits/sec         26       [ 3]       100.0-105.0 sec       414 Mäytes       679 Mbits/sec         27       [ 3]       100.0-105.0 sec       380 Mäytes       638 Mbits/sec         26       [ 3]   | 11 | [   |    |                 |              | 660 Mbits/sec                          |
| 14       [ 3]       3)       3)       3)       5)       -4)       Nutry construction         15       [ 3]       40.0-45.0 acc       418 MBytes       702 Mbits/sec         17       [ 3]       50.0-50.0 acc       418 MBytes       702 Mbits/sec         18       [ 3]       50.0-55.0 acc       418 MBytes       701 Mbits/sec         19       [ 3]       50.0-55.0 acc       444 MBytes       761 Mbits/sec         21       [ 3]       60.0-65.0 acc       454 MBytes       761 Mbits/sec         22       [ 3]       60.0-65.0 acc       346 MBytes       631 Mbits/sec         23       [ 3]       60.0-65.0 acc       386 MBytes       638 Mbits/sec         24       [ 3]       80.0-85.0 acc       386 MBytes       638 Mbits/sec         25       [ 3]       80.0-85.0 acc       386 MBytes       638 Mbits/sec         26       [ 3]       100.0-10.0 acc       380 MBytes       638 Mbits/sec         26       [ 3]       100.0-10.0 acc       380 MBytes       638 Mbits/sec         27       [ 3]       100.0-10.0 acc       380 MBytes       638 Mbits/sec         28       [ 3]       100.0-10.0 acc       380 MBytes       638 Mbits/sec   | 12 | [   |    |                 | 398 MBytes   | 668 Mbits/sec                          |
| 13       33       35.0-40.0 sec       396 MBytes       702 Mbits/sec         14       13       40.0-45.0 sec       418 MBytes       702 Mbits/sec         15       1       31       50.0-50.0 sec       429 MBytes       716 Mbits/sec         16       1       35.0-60.0 sec       444 MBytes       716 Mbits/sec         20       1       31       60.0-55.0 sec       444 MBytes       745 Mbits/sec         21       13       60.0-65.0 sec       376 MBytes       631 Mbits/sec         22       1       37.5.0-80.0 sec       394 MBytes       661 Mbits/sec         23       13       70.0-65.0 sec       394 MBytes       653 Mbits/sec         24       1       31       85.0-90.0 sec       389 MBytes       658 Mbits/sec         25       1       31       85.0-90.0 sec       389 MBytes       658 Mbits/sec         26       1       31.00.0-155.0 sec       410 MBytes       658 Mbits/sec         26       1       31.00.0-155.0 sec       410 MBytes       690 Mbits/sec         27       1       31.05.0-130.0 sec       410 MBytes       690 Mbits/sec         26       1       31.05.0-130.0 sec       410 MBytes       690 Mbits/sec   | 13 | [   | 3] | 25.0-30.0 sec   | 414 MBytes   | 695 Mbits/sec                          |
| 16       3       40.0-45.0 sec       418 MBytes       702 Mbits/sec         17       3       45.0-45.0 sec       418 MBytes       702 Mbits/sec         19       1       3       50.0-45.0 sec       429 MBytes       720 Mbits/sec         19       1       60.0-45.0 sec       444 MBytes       745 Mbits/sec         21       1       60.0-45.0 sec       440 MBytes       631 Mbits/sec         22       1       70.0-75.0 sec       376 MBytes       641 Mbits/sec         23       1       70.0-75.0 sec       376 MBytes       648 Mbits/sec         24       1       80.0-85.0 sec       384 MBytes       648 Mbits/sec         25       1       31 80.0-85.0 sec       389 MBytes       653 Mbits/sec         26       1       31 00.0-10.0 sec       380 MBytes       658 Mbits/sec         27       1       305.0-110.0 sec       380 MBytes       658 Mbits/sec         28       1       31.0.0-10.0 sec       340 MBytes       650 Mbits/sec         29       1       31.0.0-10.0 sec       411 MBytes       700 Mbits/sec         31       100.0-10.0 sec       410 MBytes       690 Mbits/sec         31       115.0-120.0 sec       410 MBytes  | 14 | [   | 3] | 30.0-35.0 sec   | 418 MBytes   | 700 Mbits/sec                          |
| 1       3       45.0-50.0 sec       418 MEytes       702 Mbits/sec         18       (3)       55.0-60.0 sec       429 MEytes       710 Mbits/sec         20       (3)       60.0-65.0 sec       444 MEytes       745 Mbits/sec         21       (3)       60.0-70.0 sec       474 MEytes       631 Mbits/sec         22       (3)       70.0-75.0 sec       376 MEytes       631 Mbits/sec         23       (3)       90.0-95.0 sec       380 MEytes       648 Mbits/sec         24       (3)       90.0-95.0 sec       380 MEytes       653 Mbits/sec         25       (3)       90.0-95.0 sec       380 MEytes       651 Mbits/sec         26       (3)       100.0-10.0 sec       380 MEytes       651 Mbits/sec         27       (3)       90.0-93.0 sec       412 MEytes       692 Mbits/sec         38       (100.0-10.0 sec       410 MEytes       652 Mbits/sec         39       103.0-135.0 sec       412 MEytes       692 Mbits/sec         31       120.0-125.0 sec       412 MEytes       692 Mbits/sec         31       130.0-135.0 sec       415 MEytes       692 Mbits/sec         31       143.0-145.0 sec       382 MEytes       651 Mbits/sec         31  | 15 | [   | 3] | 35.0-40.0 sec   | 396 MBytes   | 664 Mbits/sec                          |
| 18       [ 3]       50.0-55.0 sec       429 MEyres       720 Mbits/sec         19       [ 3]       60.0-65.0 sec       444 MEyres       761 Mbits/sec         21       [ 3]       60.0-70.0 sec       407 MEyres       683 Mbits/sec         21       [ 3]       60.0-70.0 sec       376 MEyres       683 Mbits/sec         23       [ 3]       70.0-75.0 sec       376 MEyres       648 Mbits/sec         24       [ 3]       80.0-85.0 sec       389 MEyres       648 Mbits/sec         25       [ 3]       90.0-95.0 sec       389 MEyres       653 Mbits/sec         26       [ 3]       90.0-95.0 sec       389 MEyres       658 Mbits/sec         27       [ 3]       95.0-100.0 sec       404 MEyres       678 Mbits/sec         28       [ 3]       100.0-110.0 sec       380 MEyres       653 Mbits/sec         28       [ 3]       100.0-110.0 sec       405 MEyres       679 Mbits/sec         31       101.0-110.0 sec       411 MEyres       670 Mbits/sec         32       [ 3]       102.0-125.0 sec       417 MEyres       670 Mbits/sec         33       [ 3]       10.0-145.0 sec       415 MEyres       690 Mbits/sec         34       [ 3]       125.0-120.0 s  | 16 | [   | 3] | 40.0-45.0 sec   | 418 MBytes   | 702 Mbits/sec                          |
| 19       [ 3] 55.0-60.0 sec       454 MBytes       761 Mbits/sec         20       [ 3] 65.0-70.0 sec       407 MBytes       683 Mbits/sec         21       [ 3] 70.0-73.0 sec       307 MBytes       683 Mbits/sec         22       [ 3] 70.0-73.0 sec       307 MBytes       681 Mbits/sec         23       [ 3] 70.0-80.0 sec       384 MBytes       661 Mbits/sec         24       [ 3] 90.0-95.0 sec       380 MBytes       653 Mbits/sec         25       [ 3] 95.0-100.0 sec       380 MBytes       653 Mbits/sec         26       [ 3] 100.0-105.0 sec       388 MBytes       653 Mbits/sec         27       [ 3] 100.0-105.0 sec       388 Mbytes       653 Mbits/sec         28       [ 3] 100.0-105.0 sec       388 Mbytes       650 Mbits/sec         31       110.0-115.0 sec       380 Mbytes       661 Mbits/sec         32       [ 3] 120.0-125.0 sec       411 Mbytes       690 Mbits/sec         33       13.0.0-135.0 sec       412 Mbytes       690 Mbits/sec         34       [ 3] 145.0-130.0 sec       415 Mbytes       690 Mbits/sec         35       [ 3] 140.0-145.0 sec       389 Mbytes       651 Mbits/sec         34       [ 3] 160.0-165.0 sec       389 Mbytes       652 Mbits/sec   | 17 | [   | 3] | 45.0-50.0 sec   | 418 MBytes   | 702 Mbits/sec                          |
| 20       [ 3]       60.0-65.0 sec       444 MBytes       745 Mbits/sec         21       [ 3]       70.0-75.0 sec       376 MBytes       683 Mbits/sec         23       [ 3]       75.0-80.0 sec       386 MBytes       648 Mbits/sec         24       [ 3]       80.0-85.0 sec       389 MBytes       648 Mbits/sec         25       [ 3]       80.0-85.0 sec       389 MBytes       653 Mbits/sec         26       [ 3]       90.0-95.0 sec       389 MBytes       650 Mbits/sec         27       [ 3]       95.0-100.0 sec       404 MBytes       678 Mbits/sec         28       [ 3]       105.0-110.0 sec       380 MBytes       658 Mbits/sec         30       [ 1]       10.0-115.0 sec       404 MBytes       678 Mbits/sec         31       101.0-115.0 sec       412 MBytes       690 Mbits/sec         32       [ 3]       125.0-130.0 sec       411 MBytes       690 Mbits/sec         33       125.0-130.0 sec       412 MBytes       641 Mbits/sec         34       [ 3]       135.0-140.0 sec       382 MBytes       651 Mbits/sec         35       [ 3]       155.0-160.0 sec       382 MBytes       652 Mbits/sec         361       3]       160.0-165.0 sec <td< th=""><th>18</th><th>[</th><th>3]</th><th>50.0-55.0 sec</th><th>429 MBytes</th><th>720 Mbits/sec</th></td<>   | 18 | [   | 3] | 50.0-55.0 sec   | 429 MBytes   | 720 Mbits/sec                          |
| 1       3] 65.0-70.0 sec       407 MBytes       631 Mbits/sec         2       [3] 75.0-80.0 sec       336 MBytes       631 Mbits/sec         24       [3] 80.0-80.0 sec       386 MBytes       661 Mbits/sec         24       [3] 95.0-10.0 sec       389 MBytes       661 Mbits/sec         25       [3] 95.0-10.0 sec       389 MBytes       653 Mbits/sec         26       [3] 95.0-10.0 sec       380 MBytes       653 Mbits/sec         28       [3] 100.0-15.0 sec       380 MBytes       650 Mbits/sec         29       [3] 110.0-115.0 sec       380 MBytes       658 Mbits/sec         31       120.0-125.0 sec       412 MBytes       659 Mbits/sec         33       13.00-135.0 sec       412 MBytes       690 Mbits/sec         34       [3] 140.0-145.0 sec       411 MBytes       690 Mbits/sec         35       [3] 140.0-145.0 sec       418 MBytes       666 Mbits/sec         36       [3] 140.0-150.0 sec       389 MBytes       651 Mbits/sec         37       [3] 150.0-155.0 sec       389 MBytes       651 Mbits/sec         38       [3] 150.0-155.0 sec       389 MBytes       651 Mbits/sec         39       [3] 160.0-155.0 sec       389 MBytes       651 Mbits/sec         41  | 19 | [   | 3] | 55.0-60.0 sec   | 454 MBytes   |  |
| 22       [ 3] 70.0-75.0 sec       376 MBytes       641 Mbits/sec         23       [ 3] 80.0-80.0 sec       386 MBytes       648 Mbits/sec         24       [ 3] 80.0-80.0 sec       386 MBytes       648 Mbits/sec         25       [ 3] 90.0-95.0 sec       390 MBytes       653 Mbits/sec         26       [ 3] 90.0-95.0 sec       380 MBytes       653 Mbits/sec         27       [ 3] 100.0-100.0 sec       380 MBytes       653 Mbits/sec         30       [ 3] 100.0-115.0 sec       392 MBytes       658 Mbits/sec         31       111.0-115.0 sec       392 MBytes       658 Mbits/sec         31       122.0-125.0 sec       411 MBytes       690 Mbits/sec         31       130.0-145.0 sec       412 MBytes       690 Mbits/sec         31       140.0-145.0 sec       416 MBytes       698 Mbits/sec         31       140.0-145.0 sec       380 MBytes       651 Mbits/sec         31       150.0-150.0 sec       380 MBytes       651 Mbits/sec         31       140.0-145.0 sec       380 MBytes       651 Mbits/sec         32       131 150.0-160.0 sec       380 MBytes       651 Mbits/sec         33       140.0-145.0 sec       390 MBytes       651 Mbits/sec         41   |    | -   |    |                 |              |  |
| 1       3] 75.0-80.0 sec       386 MBytes       648 Mbits/sec         24       [3] 80.0-85.0 sec       394 MBytes       661 Mbits/sec         25       [3] 90.0-95.0 sec       389 MBytes       663 Mbits/sec         26       [3] 90.0-95.0 sec       389 MBytes       678 Mbits/sec         27       [3] 90.0-910.0 sec       404 MBytes       678 Mbits/sec         28       [3] 100.0-115.0 sec       380 MBytes       658 Mbits/sec         29       [3] 110.0-115.0 sec       405 MBytes       658 Mbits/sec         31       120.0-125.0 sec       412 MBytes       698 Mbits/sec         31       120.0-125.0 sec       411 MBytes       690 Mbits/sec         34       [3] 130.0-135.0 sec       411 MBytes       690 Mbits/sec         35       [3] 140.0-145.0 sec       416 Mbytes       690 Mbits/sec         36       [3] 140.0-145.0 sec       416 Mbytes       610 Mbits/sec         37       [3] 150.0-155.0 sec       382 MBytes       651 Mbits/sec         38       [3] 150.0-155.0 sec       380 MBytes       651 Mbits/sec         39       [3] 150.0-160.0 sec       390 MBytes       651 Mbits/sec         41       [3] 160.0-170.0 sec       390 MBytes       651 Mbits/sec         42   |    |     |    |                 | -            |  |
| 1       3] 80.0-85.0 sec       394 MBytes       661 Mbits/sec         25       [3] 90.0-95.0 sec       386 MBytes       648 Mbits/sec         27       [3] 95.0-100.0 sec       399 MBytes       653 Mbits/sec         28       [3] 100.0-105.0 sec       388 MBytes       653 Mbits/sec         29       [3] 105.0-110.0 sec       388 MBytes       653 Mbits/sec         30       [1] 110.0-115.0 sec       392 MBytes       658 Mbits/sec         31       110.0-115.0 sec       392 MBytes       658 Mbits/sec         31       125.0-130.0 sec       411 MBytes       690 Mbits/sec         31       130.0-145.0 sec       412 MBytes       690 Mbits/sec         31       140.0-145.0 sec       416 MBytes       690 Mbits/sec         31       150.0-150.0 sec       388 MBytes       651 Mbits/sec         31       150.0-160.0 sec       380 MBytes       651 Mbits/sec         31       150.0-160.0 sec       380 MBytes       651 Mbits/sec         44       [3] 170.0-175.0 sec       401 MBytes       610 Mbits/sec         45       [3] 170.0-175.0 sec       401 MBytes       613 Mbits/sec         45       [3] 195.0-200.0 sec       394 MBytes       651 Mbits/sec         45   |    | -   | -  |                 |              |  |
| 25       [ 3] 85.0-90.0 sec       386 MBytes       653 Mbits/sec         26       [ 3] 90.0-95.0 sec       389 MBytes       653 Mbits/sec         27       [ 3] 105.0-100.0 sec       388 MBytes       650 Mbits/sec         28       [ 3] 105.0-110.0 sec       380 MBytes       658 Mbits/sec         30       [ 3] 115.0-120.0 sec       320 MBytes       658 Mbits/sec         31       [ 13] 115.0-120.0 sec       405 MBytes       679 Mbits/sec         33       [ 3] 120.0-125.0 sec       411 MBytes       690 Mbits/sec         34       [ 3] 135.0-140.0 sec       411 MBytes       690 Mbits/sec         35       [ 3] 145.0-140.0 sec       417 MBytes       690 Mbits/sec         36       [ 3] 145.0-140.0 sec       416 MBytes       696 Mbits/sec         37       [ 3] 145.0-150.0 sec       328 MBytes       651 Mbits/sec         38       [ 3] 150.0-155.0 sec       328 MBytes       654 Mbits/sec         40       [ 3] 160.0-165.0 sec       330 MBytes       654 Mbits/sec         41       [ 3] 160.0-165.0 sec       330 MBytes       654 Mbits/sec         42       [ 3] 195.0-190.0 sec       411 MBytes       706 Mbits/sec         43       [ 3] 190.0-195.0 sec       375 MBytes       628 Mbits/sec  |    | -   |    |                 | -            |  |
| 26       [ 3] 90.0-95.0 sec       369 Mbytes       653 Mbits/sec         27       [ 3] 100.0-105.0 sec       380 MBytes       650 Mbits/sec         28       [ 3] 100.0-105.0 sec       380 MBytes       650 Mbits/sec         29       [ 3] 115.0-115.0 sec       380 MBytes       658 Mbits/sec         31       [ 3] 115.0-120.0 sec       405 MBytes       679 Mbits/sec         32       [ 3] 120.0-125.0 sec       411 MBytes       690 Mbits/sec         34       [ 3] 130.0-135.0 sec       411 MBytes       690 Mbits/sec         35       [ 3] 140.0-146.0 sec       411 MBytes       690 Mbits/sec         36       [ 3] 150.0-160.0 sec       380 MBytes       652 Mbits/sec         37       [ 3] 150.0-160.0 sec       380 MBytes       651 Mbits/sec         38       [ 3] 150.0-170.0 sec       380 MBytes       652 Mbits/sec         41       [ 3] 160.0-165.0 sec       390 MBytes       654 Mbits/sec         42       [ 3] 170.0-175.0 sec       412 MBytes       679 Mbits/sec         43       [ 3] 180.0-185.0 sec       393 MBytes       659 Mbits/sec         44       [ 3] 180.0-185.0 sec       375 MBytes       629 Mbits/sec         45       [ 3] 190.0-205.0 sec       410 MBytes       673 Mbits/sec <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th>  |    | -   |    |                 |              |  |
| 27       [ 3] 95.0-100.0 sec       404 MBytes       678 Mbits/sec         28       [ 3] 100.0-105.0 sec       388 MBytes       638 Mbits/sec         30       [ 3] 110.0-115.0 sec       380 MBytes       638 Mbits/sec         31       [ 110.0-125.0 sec       380 MBytes       638 Mbits/sec         31       [ 115.0-120.0 sec       411 MBytes       690 Mbits/sec         33       [ 120.0-125.0 sec       411 MBytes       690 Mbits/sec         34       [ 3] 120.0-125.0 sec       411 MBytes       690 Mbits/sec         35       [ 3] 135.0-140.0 sec       411 MBytes       690 Mbits/sec         36       [ 3] 145.0-140.0 sec       411 MBytes       690 Mbits/sec         37       [ 3] 140.0-145.0 sec       416 MBytes       698 Mbits/sec         38       [ 3] 150.0-165.0 sec       382 MBytes       652 Mbits/sec         39       [ 3] 150.0-170.0 sec       300 MBytes       654 Mbits/sec         41       [ 3] 160.0-185.0 sec       338 MBytes       652 Mbits/sec         42       [ 3] 190.0-195.0 sec       316 MBytes       659 Mbits/sec         43       [ 3] 190.0-195.0 sec       375 MBytes       652 Mbits/sec         44       [ 3] 190.0-195.0 sec       375 MBytes       652 Mbits/sec </th <th></th> <th>-</th> <th></th> <th></th> <th>-</th> <th></th>  |    | -   |    |                 | -            |  |
| 28       [ 3] 100.0-105.0 sec       388 MBytes       650 Mbits/sec         29       [ 3] 100.0-115.0 sec       380 MBytes       658 Mbits/sec         31       110.0-115.0 sec       392 MBytes       658 Mbits/sec         31       [ 3] 110.0-125.0 sec       411 MBytes       679 Mbits/sec         32       [ 3] 120.0-125.0 sec       411 MBytes       679 Mbits/sec         34       [ 3] 130.0-135.0 sec       411 MBytes       690 Mbits/sec         35       [ 3] 130.0-140.0 sec       411 MBytes       690 Mbits/sec         36       [ 3] 140.0-145.0 sec       411 MBytes       690 Mbits/sec         37       [ 3] 145.0-150.0 sec       322 MBytes       641 Mbits/sec         38       [ 3] 150.0-160.0 sec       380 MBytes       651 Mbits/sec         41       [ 3] 165.0-170.0 sec       380 MBytes       654 Mbits/sec         42       [ 3] 175.0-180.0 sec       412 MBytes       679 Mbits/sec         44       [ 3] 185.0-190.0 sec       412 MBytes       654 Mbits/sec         45       [ 3] 190.0-195.0 sec       375 MBytes       652 Mbits/sec         45       [ 3] 190.0-195.0 sec       375 MBytes       652 Mbits/sec         45       [ 3] 120.0-225.0 sec       410 MBytes       733 Mbits/sec  |    | -   | -  |                 | -            |  |
| 29       [ 3]       105.0-110.0 sec       380 MBytes       638 Mbits/sec         30       [ 3]       110.0-115.0 sec       320 MBytes       658 Mbits/sec         31       [ 3]       115.0-120.0 sec       411 MBytes       690 Mbits/sec         31       [ 3]       125.0-130.0 sec       411 MBytes       690 Mbits/sec         33       [ 3]       125.0-130.0 sec       411 MBytes       690 Mbits/sec         33       [ 3]       130.0-135.0 sec       411 MBytes       690 Mbits/sec         34       [ 3]       135.0-140.0 sec       411 MBytes       690 Mbits/sec         37       [ 3]       145.0-150.0 sec       312 Mbytes       696 Mbits/sec         38       [ 3]       150.0-155.0 sec       382 MBytes       651 Mbits/sec         38       [ 3]       150.0-160.0 sec       380 MBytes       651 Mbits/sec         41       [ 3]       160.0-165.0 sec       390 MBytes       651 Mbits/sec         42       [ 3]       170.0-170.0 sec       391 MBytes       651 Mbits/sec         43       [ 3]       160.0-165.0 sec       393 MBytes       652 Mbits/sec         44       [ 3]       180.0-185.0 sec       393 MBytes       651 Mbits/sec         45  |    | -   |    |                 | -            |  |
| 30       [ 3] 110.0-115.0 sec       302 MBytes       658 Mbits/sec         31       [ 3] 115.0-120.0 sec       405 MBytes       679 Mbits/sec         32       [ 3] 122.0-130.0 sec       411 MBytes       690 Mbits/sec         33       [ 3] 123.0-135.0 sec       411 MBytes       690 Mbits/sec         34       [ 3] 130.0-135.0 sec       411 MBytes       690 Mbits/sec         35       [ 3] 145.0-130.0 sec       411 MBytes       690 Mbits/sec         36       [ 3] 145.0-150.0 sec       416 MBytes       690 Mbits/sec         37       [ 3] 145.0-150.0 sec       328 MBytes       651 Mbits/sec         38       [ 3] 150.0-160.0 sec       339 MBytes       651 Mbits/sec         40       [ 3] 160.0-165.0 sec       339 MBytes       651 Mbits/sec         41       [ 3] 160.0-185.0 sec       410 MBytes       691 Mbits/sec         42       [ 3] 170.0-175.0 sec       411 MBytes       691 Mbits/sec         43       [ 3] 180.0-185.0 sec       339 MBytes       652 Mbits/sec         44       [ 3] 195.0-200.0 sec       320 MBytes       652 Mbits/sec         45       [ 3] 195.0-201.0 sec       411 MBytes       703 Mbits/sec         45       [ 3] 210.0-215.0 sec       410 MBytes       703 Mbits/sec </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>  |    |     |    |                 |              |  |
| 1       [ 3] 115.0-120.0 sec       405 MBytes       679 Mbits/sec         22       [ 3] 120.0-125.0 sec       411 MBytes       690 Mbits/sec         34       [ 3] 123.0-130.0 sec       417 MBytes       690 Mbits/sec         34       [ 3] 135.0-140.0 sec       411 MBytes       690 Mbits/sec         35       [ 3] 140.0-145.0 sec       415 MBytes       690 Mbits/sec         36       [ 3] 140.0-145.0 sec       415 MBytes       696 Mbits/sec         37       [ 3] 145.0-150.0 sec       382 MBytes       691 Mbits/sec         38       [ 3] 150.0-155.0 sec       382 MBytes       651 Mbits/sec         39       [ 3] 150.0-170.0 sec       401 MBytes       673 Mbits/sec         40       [ 3] 150.0-170.0 sec       401 MBytes       673 Mbits/sec         41       [ 3] 170.0-175.0 sec       390 MBytes       654 Mbits/sec         42       [ 3] 170.0-175.0 sec       391 Mbytes       673 Mbits/sec         43       [ 3] 180.0-190.0 sec       421 MBytes       706 Mbits/sec         44       [ 3] 190.0-215.0 sec       312 Mbytes       672 Mbits/sec         45       [ 3] 120.0-215.0 sec       410 MBytes       723 Mbits/sec         45       [ 3] 220.0-225.0 sec       410 MBytes       733 Mbits/sec <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th>   |    | -   |    |                 |              |  |
| 32       [ 3] 120.0-125.0 sec       411 MBytes       690 Mbits/sec         33       [ 3] 125.0-130.0 sec       412 MBytes       692 Mbits/sec         34       [ 3] 130.0-135.0 sec       417 MBytes       690 Mbits/sec         35       [ 3] 135.0-140.0 sec       415 MBytes       690 Mbits/sec         36       [ 3] 140.0-145.0 sec       416 MBytes       690 Mbits/sec         37       [ 3] 145.0-150.0 sec       382 MBytes       641 Mbits/sec         38       [ 3] 150.0-155.0 sec       382 MBytes       651 Mbits/sec         39       [ 3] 160.0-155.0 sec       380 MBytes       654 Mbits/sec         41       [ 3] 165.0-170.0 sec       390 MBytes       654 Mbits/sec         42       [ 3] 170.0-175.0 sec       401 MBytes       673 Mbits/sec         44       [ 3] 180.0-185.0 sec       393 MBytes       659 Mbits/sec         45       [ 3] 190.0-195.0 sec       375 MBytes       652 Mbits/sec         46       [ 3] 190.0-205.0 sec       410 MBytes       706 Mbits/sec         47       [ 3] 190.0-215.0 sec       417 MBytes       703 Mbits/sec         51       [ 3] 210.0-225.0 sec       410 MBytes       672 Mbits/sec         52       [ 3] 220.0-235.0 sec       373 MBytes       626 Mbits/sec </th <th></th> <th>-</th> <th></th> <th></th> <th>-</th> <th></th>  |    | -   |    |                 | -            |  |
| 33       [ 3] 125.0-130.0 sec       412 MBytes       692 Mbits/sec         34       [ 3] 130.0-135.0 sec       417 MBytes       700 Mbits/sec         36       [ 3] 130.0-145.0 sec       411 MBytes       690 Mbits/sec         36       [ 3] 140.0-145.0 sec       415 MBytes       696 Mbits/sec         37       [ 3] 145.0-150.0 sec       416 MBytes       698 Mbits/sec         38       [ 3] 150.0-160.0 sec       389 MBytes       651 Mbits/sec         40       [ 3] 160.0-165.0 sec       388 MBytes       651 Mbits/sec         41       [ 3] 165.0-170.0 sec       401 MBytes       673 Mbits/sec         42       [ 3] 170.0-175.0 sec       401 MBytes       671 Mbits/sec         43       [ 3] 170.0-175.0 sec       393 MBytes       659 Mbits/sec         44       [ 3] 180.0-190.0 sec       421 MBytes       691 Mbits/sec         45       [ 3] 190.0-205.0 sec       375 MBytes       629 Mbits/sec         46       [ 3] 200.0-205.0 sec       410 MBytes       673 Mbits/sec         47       [ 3] 201.0-215.0 sec       419 MBytes       703 Mbits/sec         58       [ 3] 210.0-215.0 sec       419 MBytes       733 Mbits/sec         59       [ 3] 220.0-225.0 sec       410 MBytes       680 Mbits/sec </th <th></th> <th>-</th> <th>-</th> <th></th> <th></th> <th></th>  |    | -   | -  |                 |              |  |
| 34       [ 3]       130.0-135.0 sec       417 MBytes       700 Mbits/sec         35       [ 3]       135.0-140.0 sec       411 MBytes       690 Mbits/sec         36       [ 3]       140.0-145.0 sec       415 MBytes       698 Mbits/sec         37       [ 3]       145.0-150.0 sec       416 MBytes       698 Mbits/sec         38       [ 3]       150.0-155.0 sec       382 MBytes       651 Mbits/sec         40       [ 3]       160.0-165.0 sec       389 MBytes       651 Mbits/sec         41       [ 3]       160.0-165.0 sec       390 MBytes       654 Mbits/sec         41       [ 3]       170.0-175.0 sec       390 MBytes       654 Mbits/sec         43       [ 3]       175.0-180.0 sec       412 MBytes       691 Mbits/sec         44       [ 3]       180.0-185.0 sec       393 MBytes       659 Mbits/sec         45       [ 3]       190.0-195.0 sec       375 MBytes       629 Mbits/sec         46       [ 3]       190.0-205.0 sec       410 MBytes       728 Mbits/sec         47       [ 3]       205.0-210.0 sec       410 MBytes       672 Mbits/sec         50       [ 3]       210.0-225.0 sec       410 MBytes       687 Mbits/sec         51  |    | -   | -  |                 | -            |  |
| 35       [ 3] 135.0-140.0 sec       411 MBytes       690 Mbits/sec         36       [ 3] 140.0-145.0 sec       415 MBytes       696 Mbits/sec         37       [ 3] 145.0-150.0 sec       382 MBytes       641 Mbits/sec         38       [ 3] 150.0-155.0 sec       382 MBytes       652 Mbits/sec         39       [ 3] 165.0-160.0 sec       389 MBytes       652 Mbits/sec         40       [ 3] 165.0-170.0 sec       390 MBytes       654 Mbits/sec         41       [ 3] 165.0-170.0 sec       401 MBytes       673 Mbits/sec         42       [ 3] 170.0-175.0 sec       401 MBytes       673 Mbits/sec         43       [ 3] 185.0-190.0 sec       412 MBytes       691 Mbits/sec         44       [ 3] 190.0-195.0 sec       375 MBytes       652 Mbits/sec         45       [ 3] 190.0-195.0 sec       375 MBytes       652 Mbits/sec         46       [ 3] 200.0-205.0 sec       400 MBytes       672 Mbits/sec         47       [ 3] 201.0-211.0 sec       414 MBytes       703 Mbits/sec         51       [ 3] 215.0-220.0 sec       410 MBytes       680 Mbits/sec         52       [ 3] 220.0-235.0 sec       373 MBytes       626 Mbits/sec         53       [ 3] 230.0-245.0 sec       400 MBytes       651 Mbits/sec </th <th></th> <th>-</th> <th></th> <th></th> <th>-</th> <th></th>  |    | -   |    |                 | -            |  |
| 36       [ 3] 140.0-145.0 sec       415 MBytes       696 Mbits/sec         37       [ 3] 150.0-150.0 sec       416 MBytes       698 Mbits/sec         38       [ 3] 150.0-155.0 sec       382 MBytes       651 Mbits/sec         39       [ 3] 155.0-160.0 sec       389 MBytes       651 Mbits/sec         40       [ 3] 160.0-165.0 sec       388 MBytes       651 Mbits/sec         41       [ 3] 165.0-170.0 sec       401 MBytes       673 Mbits/sec         42       [ 3] 175.0-180.0 sec       412 MBytes       691 Mbits/sec         43       [ 3] 175.0-180.0 sec       412 MBytes       691 Mbits/sec         44       [ 3] 190.0-195.0 sec       375 MBytes       659 Mbits/sec         45       [ 3] 195.0-200.0 sec       375 MBytes       652 Mbits/sec         46       [ 3] 200.0-205.0 sec       410 MBytes       706 Mbits/sec         47       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 225.0-230.0 sec       410 MBytes       681 Mbits/sec         52       [ 3] 230.0-235.0 sec       373 MBytes       653 Mbits/sec         54       [ 3] 230.0-240.0 sec       389 MBytes       651 Mbits/sec         55       [ 3] 245.0-250.0 sec       406 MBytes       651 Mbits/sec </th <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th>   |    | -   |    |                 |              |  |
| 37       [ 3] 145.0-150.0 sec       416 MBytes       698 Mbits/sec         38       [ 3] 150.0-155.0 sec       382 MBytes       641 Mbits/sec         39       [ 3] 155.0-160.0 sec       389 MBytes       651 Mbits/sec         40       [ 3] 160.0-165.0 sec       388 MBytes       651 Mbits/sec         41       [ 3] 170.0-175.0 sec       401 MBytes       654 Mbits/sec         42       [ 3] 170.0-175.0 sec       401 MBytes       651 Mbits/sec         44       [ 3] 180.0-185.0 sec       393 MBytes       659 Mbits/sec         45       [ 3] 190.0-195.0 sec       370 MBytes       652 Mbits/sec         46       [ 3] 195.0-200.0 sec       412 MBytes       706 Mbits/sec         47       [ 3] 195.0-210.0 sec       410 MBytes       672 Mbits/sec         48       [ 3] 200.0-215.0 sec       410 MBytes       703 Mbits/sec         50       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         51       [ 3] 220.0-230.0 sec       437 MBytes       653 Mbits/sec         52       [ 3] 220.0-245.0 sec       410 MBytes       651 Mbits/sec         53       [ 3] 235.0-240.0 sec       373 MBytes       651 Mbits/sec         54       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec </th <th></th> <th>-</th> <th></th> <th></th> <th>-</th> <th></th>  |    | -   |    |                 | -            |  |
| 39       [ 3] 155.0-160.0 sec       389 MBytes       652 Mbits/sec         40       [ 3] 160.0-165.0 sec       388 MBytes       651 Mbits/sec         41       [ 3] 160.0-175.0 sec       390 MBytes       654 Mbits/sec         42       [ 3] 170.0-175.0 sec       401 MBytes       673 Mbits/sec         43       [ 3] 175.0-180.0 sec       412 MBytes       691 Mbits/sec         44       [ 3] 180.0-185.0 sec       393 MBytes       659 Mbits/sec         45       [ 3] 190.0-195.0 sec       375 MBytes       629 Mbits/sec         46       [ 3] 190.0-200.0 sec       389 MBytes       652 Mbits/sec         47       [ 3] 200.0-205.0 sec       400 MBytes       728 Mbits/sec         48       [ 3] 200.0-210.0 sec       434 MBytes       703 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 220.0-225.0 sec       410 MBytes       681 Mbits/sec         52       [ 3] 225.0-230.0 sec       373 MBytes       626 Mbits/sec         53       [ 3] 235.0-240.0 sec       389 MBytes       651 Mbits/sec         54       [ 3] 240.0-245.0 sec       403 MBytes       651 Mbits/sec         55       [ 3] 240.0-255.0 sec       422 MBytes       651 Mbits/sec </th <th>37</th> <th>[</th> <th></th> <th></th> <th></th> <th>698 Mbits/sec</th>                            | 37 | [   |    |                 |              | 698 Mbits/sec                          |
| 40       [ 3] 160.0-165.0 sec       388 MBytes       651 Mbits/sec         41       [ 3] 165.0-170.0 sec       390 MBytes       654 Mbits/sec         42       [ 3] 170.0-175.0 sec       401 MBytes       673 Mbits/sec         43       [ 3] 175.0-180.0 sec       412 MBytes       691 Mbits/sec         44       [ 3] 180.0-185.0 sec       393 MBytes       659 Mbits/sec         45       [ 3] 190.0-195.0 sec       375 MBytes       629 Mbits/sec         46       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         47       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         48       [ 3] 200.0-205.0 sec       400 MBytes       672 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         52       [ 3] 220.0-235.0 sec       373 MBytes       668 Mbits/sec         53       [ 3] 240.0-245.0 sec       373 MBytes       651 Mbits/sec         54       [ 3] 240.0-245.0 sec       403 MBytes       651 Mbits/sec         55       [ 3] 240.0-245.0 sec       388 MBytes       651 Mbits/sec         56       [ 3] 260.0-265.0 sec       360 MBytes       605 Mbits/sec </th <th>38</th> <th>[</th> <th></th> <th></th> <th>382 MBytes</th> <th>641 Mbits/sec</th>                  | 38 | [   |    |                 | 382 MBytes   | 641 Mbits/sec                          |
| 41       [ 3] 165.0-170.0 sec       390 MBytes       654 Mbits/sec         42       [ 3] 175.0-180.0 sec       401 MBytes       673 Mbits/sec         43       [ 3] 175.0-180.0 sec       412 MBytes       691 Mbits/sec         44       [ 3] 180.0-185.0 sec       333 MBytes       659 Mbits/sec         45       [ 3] 185.0-190.0 sec       421 MBytes       706 Mbits/sec         46       [ 3] 190.0-195.0 sec       375 MBytes       652 Mbits/sec         47       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         48       [ 3] 200.0-205.0 sec       410 MBytes       728 Mbits/sec         49       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         50       [ 3] 220.0-225.0 sec       410 MBytes       637 Mbits/sec         51       [ 3] 220.0-235.0 sec       373 MBytes       653 Mbits/sec         52       [ 3] 240.0-245.0 sec       389 MBytes       651 Mbits/sec         54       [ 3] 240.0-255.0 sec       422 MBytes       708 Mbits/sec         55       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         56       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         57       [ 3] 245.0-250.0 sec       393 MBytes       660 Mbits/sec </th <th>39</th> <th>[</th> <th>3]</th> <th>155.0-160.0 sec</th> <th>389 MBytes</th> <th>652 Mbits/sec</th> | 39 | [   | 3] | 155.0-160.0 sec | 389 MBytes   | 652 Mbits/sec                          |
| 42       [ 3] 170.0-175.0 sec       401 MEytes       673 Mbits/sec         43       [ 3] 175.0-180.0 sec       412 MBytes       691 Mbits/sec         44       [ 3] 180.0-185.0 sec       393 MBytes       659 Mbits/sec         45       [ 3] 185.0-190.0 sec       421 MBytes       706 Mbits/sec         46       [ 3] 190.0-195.0 sec       375 MBytes       629 Mbits/sec         47       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         48       [ 3] 200.0-205.0 sec       400 MBytes       672 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         52       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 230.0-235.0 sec       373 MBytes       668 Mbits/sec         54       [ 3] 230.0-245.0 sec       389 MBytes       653 Mbits/sec         55       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         56       [ 3] 240.0-245.0 sec       402 MBytes       610 Mbits/sec         57       [ 3] 260.0-255.0 sec       422 MBytes       610 Mbits/sec         58       [ 3] 260.0-265.0 sec       360 MBytes       610 Mbits/sec </th <th>40</th> <th>[</th> <th>3]</th> <th>160.0-165.0 sec</th> <th>388 MBytes</th> <th>651 Mbits/sec</th> | 40 | [   | 3] | 160.0-165.0 sec | 388 MBytes   | 651 Mbits/sec                          |
| 43       [ 3] 175.0-180.0 sec       412 MBytes       691 Mbits/sec         44       [ 3] 180.0-185.0 sec       393 MBytes       659 Mbits/sec         45       [ 3] 185.0-190.0 sec       421 MBytes       706 Mbits/sec         46       [ 3] 190.0-195.0 sec       375 MBytes       629 Mbits/sec         47       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         47       [ 3] 205.0-210.0 sec       400 MBytes       672 Mbits/sec         48       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         50       [ 3] 215.0-220.0 sec       437 MBytes       703 Mbits/sec         51       [ 3] 225.0-230.0 sec       410 MBytes       687 Mbits/sec         52       [ 3] 230.0-235.0 sec       410 MBytes       688 Mbits/sec         53       [ 3] 240.0-245.0 sec       373 MBytes       626 Mbits/sec         54       [ 3] 240.0-245.0 sec       403 MBytes       671 Mbits/sec         55       [ 3] 250.0-260.0 sec       388 MBytes       651 Mbits/sec         56       [ 3] 260.0-255.0 sec       422 MBytes       708 Mbits/sec         57       [ 3] 260.0-265.0 sec       360 MBytes       605 Mbits/sec         60       [ 3] 260.0-270.0 sec       393 MBytes       605 Mbits/sec </th <th>41</th> <th>[</th> <th>3]</th> <th>165.0-170.0 sec</th> <th>390 MBytes</th> <th>654 Mbits/sec</th> | 41 | [   | 3] | 165.0-170.0 sec | 390 MBytes   | 654 Mbits/sec                          |
| 44       [ 3] 180.0-185.0 sec       393 MBytes       659 Mbits/sec         45       [ 3] 185.0-190.0 sec       421 MBytes       706 Mbits/sec         46       [ 3] 190.0-195.0 sec       375 MBytes       629 Mbits/sec         47       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         48       [ 3] 200.0-205.0 sec       400 MBytes       672 Mbits/sec         49       [ 3] 200.0-205.0 sec       410 MBytes       728 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 225.0-230.0 sec       410 MBytes       687 Mbits/sec         52       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 225.0-230.0 sec       406 MBytes       687 Mbits/sec         54       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [ 3] 240.0-245.0 sec       389 MBytes       651 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [ 3] 255.0-260.0 sec       407 MBytes       605 Mbits/sec         58       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         61       [ 3] 260.0-255.0 sec       393 MBytes       660 Mbits/sec </th <th>42</th> <th>[</th> <th>3]</th> <th>170.0-175.0 sec</th> <th>401 MBytes</th> <th>673 Mbits/sec</th> | 42 | [   | 3] | 170.0-175.0 sec | 401 MBytes   | 673 Mbits/sec                          |
| 45       [ 3] 185.0-190.0 sec       421 MBytes       706 Mbits/sec         46       [ 3] 190.0-195.0 sec       375 MBytes       629 Mbits/sec         47       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         48       [ 3] 200.0-205.0 sec       400 MBytes       672 Mbits/sec         49       [ 3] 205.0-210.0 sec       434 MBytes       728 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 225.0-220.0 sec       410 MBytes       687 Mbits/sec         52       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 230.0-235.0 sec       373 MBytes       680 Mbits/sec         54       [ 3] 240.0-245.0 sec       373 MBytes       651 Mbits/sec         55       [ 3] 245.0-260.0 sec       403 MBytes       651 Mbits/sec         56       [ 3] 245.0-260.0 sec       407 MBytes       605 Mbits/sec         58       [ 3] 250.0-265.0 sec       320 MBytes       605 Mbits/sec         59       [ 3] 261.0-275.0 sec       393 MBytes       660 Mbits/sec         61       [ 3] 261.0-275.0 sec       402 MBytes       605 Mbits/sec         62       [ 3] 275.0-280.0 sec       402 MBytes       605 Mbits/sec </th <th>43</th> <th>[</th> <th>3]</th> <th>175.0-180.0 sec</th> <th>412 MBytes</th> <th></th>              | 43 | [   | 3] | 175.0-180.0 sec | 412 MBytes   |  |
| 46       [ 3] 190.0-195.0 sec       375 MBytes       629 Mbits/sec         47       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         48       [ 3] 200.0-205.0 sec       400 MBytes       672 Mbits/sec         49       [ 3] 205.0-210.0 sec       434 MBytes       728 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       728 Mbits/sec         51       [ 3] 210.0-225.0 sec       419 MBytes       703 Mbits/sec         52       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         54       [ 3] 235.0-240.0 sec       389 MBytes       653 Mbits/sec         55       [ 3] 240.0-245.0 sec       388 MBytes       651 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [ 3] 250.0-255.0 sec       422 MBytes       708 Mbits/sec         58       [ 3] 260.0-265.0 sec       360 MBytes       605 Mbits/sec         60       [ 3] 265.0-270.0 sec       393 MBytes       606 Mbits/sec         61       [ 3] 275.0-280.0 sec       393 MBytes       606 Mbits/sec         62       [ 3] 270.0-275.0 sec       393 MBytes       606 Mbits/sec </th <th></th> <th>-</th> <th>-</th> <th></th> <th></th> <th></th>  |    | -   | -  |                 |              |  |
| 47       [ 3] 195.0-200.0 sec       389 MBytes       652 Mbits/sec         48       [ 3] 200.0-205.0 sec       400 MBytes       672 Mbits/sec         49       [ 3] 205.0-210.0 sec       434 MBytes       728 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 215.0-220.0 sec       417 MBytes       703 Mbits/sec         52       [ 3] 225.0-230.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 225.0-230.0 sec       406 MBytes       680 Mbits/sec         54       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [ 3] 240.0-245.0 sec       403 MBytes       673 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       651 Mbits/sec         57       [ 3] 250.0-250.0 sec       388 MBytes       651 Mbits/sec         58       [ 3] 260.0-265.0 sec       407 MBytes       605 Mbits/sec         60       [ 3] 260.0-275.0 sec       393 MBytes       605 Mbits/sec         61       [ 3] 260.0-275.0 sec       393 MBytes       606 Mbits/sec         62       [ 3] 270.0-275.0 sec       393 MBytes       606 Mbits/sec         63       [ 3] 270.0-275.0 sec       410 MBytes       674 Mbits/sec </th <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th>   |    | -   |    |                 |              |  |
| 48       [ 3] 200.0-205.0 sec       400 MBytes       672 Mbits/sec         49       [ 3] 205.0-210.0 sec       434 MBytes       728 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 215.0-220.0 sec       417 MBytes       733 Mbits/sec         52       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 225.0-230.0 sec       406 MBytes       680 Mbits/sec         54       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [ 3] 240.0-245.0 sec       373 MBytes       626 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       653 Mbits/sec         57       [ 3] 250.0-250.0 sec       422 MBytes       708 Mbits/sec         58       [ 3] 250.0-260.0 sec       300 MBytes       605 Mbits/sec         60       [ 3] 260.0-265.0 sec       302 MBytes       605 Mbits/sec         61       [ 3] 270.0-275.0 sec       393 MBytes       606 Mbits/sec         62       [ 3] 270.0-275.0 sec       393 MBytes       600 Mbits/sec         63       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         64       [ 3] 280.0-285.0 sec       410 MBytes       674 Mbits/sec </th <th></th> <th>-</th> <th></th> <th></th> <th>-</th> <th></th>  |    | -   |    |                 | -            |  |
| 49       [ 3] 205.0-210.0 sec       434 MBytes       728 Mbits/sec         50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 215.0-220.0 sec       437 MBytes       733 Mbits/sec         52       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 225.0-230.0 sec       406 MBytes       680 Mbits/sec         54       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [ 3] 240.0-245.0 sec       373 MBytes       653 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [ 3] 250.0-250.0 sec       388 MBytes       651 Mbits/sec         58       [ 3] 250.0-255.0 sec       422 MBytes       708 Mbits/sec         59       [ 3] 260.0-265.0 sec       360 MBytes       605 Mbits/sec         60       [ 3] 260.0-265.0 sec       361 MBytes       605 Mbits/sec         61       [ 3] 270.0-275.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         63       [ 3] 280.0-290.0 sec       410 MBytes       690 Mbits/sec         64       [ 3] 20.0-295.0 sec       410 MBytes       646 Mbits/sec <th></th> <th></th> <th></th> <th></th> <th>-</th> <th></th>   |    |     |    |                 | -            |  |
| 50       [ 3] 210.0-215.0 sec       419 MBytes       703 Mbits/sec         51       [ 3] 215.0-220.0 sec       437 MBytes       733 Mbits/sec         52       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 225.0-230.0 sec       406 MBytes       680 Mbits/sec         54       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [ 3] 240.0-245.0 sec       379 MBytes       676 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       671 Mbits/sec         57       [ 3] 245.0-250.0 sec       407 MBytes       681 Mbits/sec         58       [ 3] 250.0-260.0 sec       407 MBytes       683 Mbits/sec         59       [ 3] 260.0-265.0 sec       360 MBytes       605 Mbits/sec         60       [ 3] 260.0-270.0 sec       393 MBytes       660 Mbits/sec         61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 270.0-275.0 sec       361 MBytes       674 Mbits/sec         63       [ 3] 280.0-285.0 sec       402 MBytes       670 Mbits/sec         64       [ 3] 290.0-295.0 sec       410 MBytes       690 Mbits/sec         65       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec </th <th></th> <th>-</th> <th>-</th> <th></th> <th></th> <th></th>  |    | -   | -  |                 |              |  |
| 51       3       215.0-220.0 sec       437 MBytes       733 Mbits/sec         52       [3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [3] 225.0-230.0 sec       406 MBytes       680 Mbits/sec         54       [3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [3] 240.0-245.0 sec       389 MBytes       653 Mbits/sec         56       [3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         58       [3] 250.0-255.0 sec       422 MBytes       708 Mbits/sec         59       [3] 260.0-265.0 sec       300 MBytes       605 Mbits/sec         60       [3] 260.0-265.0 sec       393 MBytes       660 Mbits/sec         61       [3] 270.0-275.0 sec       393 MBytes       660 Mbits/sec         62       [3] 270.0-275.0 sec       393 MBytes       660 Mbits/sec         63       [3] 270.0-275.0 sec       393 MBytes       660 Mbits/sec         64       [3] 280.0-280.0 sec       393 MBytes       660 Mbits/sec         65       [3] 285.0-290.0 sec       411 MBytes       690 Mbits/sec         65       [3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec   |    | -   |    |                 |              |  |
| 52       [ 3] 220.0-225.0 sec       410 MBytes       687 Mbits/sec         53       [ 3] 225.0-230.0 sec       406 MBytes       680 Mbits/sec         54       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [ 3] 240.0-245.0 sec       403 MBytes       653 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [ 3] 245.0-250.0 sec       422 MBytes       708 Mbits/sec         58       [ 3] 255.0-260.0 sec       422 MBytes       708 Mbits/sec         59       [ 3] 260.0-265.0 sec       407 MBytes       660 Mbits/sec         60       [ 3] 260.0-265.0 sec       393 MBytes       660 Mbits/sec         61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 270.0-275.0 sec       393 MBytes       660 Mbits/sec         63       [ 3] 270.0-275.0 sec       393 MBytes       660 Mbits/sec         64       [ 3] 280.0-280.0 sec       393 MBytes       660 Mbits/sec         65       [ 3] 280.0-290.0 sec       411 MBytes       690 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 290.0-295.0 sec       410 MBytes       780 Mbits/sec </th <th></th> <th>-</th> <th></th> <th></th> <th></th> <th></th>   |    | -   |    |                 |              |  |
| 53       [ 3] 225.0-230.0 sec       406 MBytes       680 Mbits/sec         54       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [ 3] 235.0-240.0 sec       389 MBytes       653 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         58       [ 3] 250.0-255.0 sec       422 MBytes       708 Mbits/sec         59       [ 3] 260.0-265.0 sec       407 MBytes       683 Mbits/sec         60       [ 3] 260.0-265.0 sec       393 MBytes       660 Mbits/sec         61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 270.0-275.0 sec       393 MBytes       660 Mbits/sec         63       [ 3] 270.0-275.0 sec       393 MBytes       660 Mbits/sec         64       [ 3] 280.0-280.0 sec       393 MBytes       660 Mbits/sec         65       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         65       [ 3] 280.0-290.0 sec       411 MBytes       690 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 300.0-305.0 sec       455 MBytes       780 Mbits/sec </th <th></th> <th></th> <th>-</th> <th></th> <th>-</th> <th></th>  |    |     | -  |                 | -            |  |
| 54       [ 3] 230.0-235.0 sec       373 MBytes       626 Mbits/sec         55       [ 3] 235.0-240.0 sec       389 MBytes       653 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         58       [ 3] 255.0-260.0 sec       422 MBytes       708 Mbits/sec         59       [ 3] 260.0-265.0 sec       407 MBytes       683 Mbits/sec         60       [ 3] 265.0-270.0 sec       393 MBytes       605 Mbits/sec         61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 275.0-280.0 sec       393 MBytes       660 Mbits/sec         63       [ 3] 275.0-280.0 sec       393 MBytes       660 Mbits/sec         64       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         65       [ 3] 280.0-285.0 sec       411 MBytes       690 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         68       [ 3] 300.0-305.0 sec       450 MBytes       780 Mbits/sec         69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>  |    |     |    |                 |              |  |
| 55       [ 3] 235.0-240.0 sec       389 MBytes       653 Mbits/sec         56       [ 3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         58       [ 3] 250.0-255.0 sec       422 MBytes       708 Mbits/sec         59       [ 3] 260.0-265.0 sec       407 MBytes       683 Mbits/sec         60       [ 3] 260.0-265.0 sec       300 MBytes       605 Mbits/sec         61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 275.0-280.0 sec       393 MBytes       660 Mbits/sec         63       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         64       [ 3] 280.0-285.0 sec       411 MBytes       690 Mbits/sec         65       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         66       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         67       [ 3] 300.0-305.0 sec       450 MBytes       750 Mbits/sec         68       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         69       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec  |    | -   |    |                 | -            |  |
| 56       [ 3] 240.0-245.0 sec       403 MBytes       676 Mbits/sec         57       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         58       [ 3] 250.0-255.0 sec       422 MBytes       708 Mbits/sec         59       [ 3] 255.0-260.0 sec       407 MBytes       683 Mbits/sec         60       [ 3] 260.0-265.0 sec       300 MBytes       605 Mbits/sec         61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 270.0-275.0 sec       361 MBytes       605 Mbits/sec         63       [ 3] 275.0-280.0 sec       393 MBytes       660 Mbits/sec         64       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         65       [ 3] 280.0-285.0 sec       410 MBytes       690 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         68       [ 3] 300.0-305.0 sec       450 MBytes       780 Mbits/sec         69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec  |    | -   | -  |                 | -            |  |
| 57       [ 3] 245.0-250.0 sec       388 MBytes       651 Mbits/sec         58       [ 3] 250.0-255.0 sec       422 MBytes       708 Mbits/sec         59       [ 3] 255.0-260.0 sec       407 MBytes       683 Mbits/sec         60       [ 3] 260.0-265.0 sec       360 MBytes       605 Mbits/sec         61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 270.0-275.0 sec       361 MBytes       605 Mbits/sec         63       [ 3] 275.0-280.0 sec       393 MBytes       660 Mbits/sec         64       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         65       [ 3] 285.0-290.0 sec       411 MBytes       687 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         68       [ 3] 300.0-305.0 sec       450 MBytes       780 Mbits/sec         68       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec   |    |     | -  |                 | -            |  |
| 58       [ 3] 250.0-255.0 sec       422 MBytes       708 Mbits/sec         59       [ 3] 255.0-260.0 sec       407 MBytes       683 Mbits/sec         60       [ 3] 260.0-265.0 sec       360 MBytes       605 Mbits/sec         61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 270.0-275.0 sec       361 MBytes       605 Mbits/sec         63       [ 3] 275.0-280.0 sec       393 MBytes       660 Mbits/sec         64       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         65       [ 3] 285.0-290.0 sec       411 MBytes       690 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         68       [ 3] 300.0-305.0 sec       450 MBytes       780 Mbits/sec         69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec  | 57 | [   |    |                 |              | 651 Mbits/sec                          |
| 60[ 3] 260.0-265.0 sec360 MBytes605 Mbits/sec61[ 3] 265.0-270.0 sec393 MBytes660 Mbits/sec62[ 3] 270.0-275.0 sec361 MBytes605 Mbits/sec63[ 3] 275.0-280.0 sec393 MBytes660 Mbits/sec64[ 3] 280.0-285.0 sec402 MBytes674 Mbits/sec65[ 3] 285.0-290.0 sec411 MBytes690 Mbits/sec66[ 3] 290.0-295.0 sec410 MBytes687 Mbits/sec67[ 3] 295.0-300.0 sec385 MBytes646 Mbits/sec68[ 3] 300.0-305.0 sec465 MBytes780 Mbits/sec69[ 3] 305.0-310.0 sec450 MBytes755 Mbits/sec70[ 3] 310.0-315.0 sec441 MBytes740 Mbits/sec   | 58 | [   | 3] | 250.0-255.0 sec |              | 708 Mbits/sec                          |
| 61       [ 3] 265.0-270.0 sec       393 MBytes       660 Mbits/sec         62       [ 3] 270.0-275.0 sec       361 MBytes       605 Mbits/sec         63       [ 3] 275.0-280.0 sec       393 MBytes       660 Mbits/sec         64       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         65       [ 3] 290.0-295.0 sec       411 MBytes       690 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         68       [ 3] 300.0-305.0 sec       450 MBytes       780 Mbits/sec         69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec   | 59 | [   | 3] | 255.0-260.0 sec | 407 MBytes   | 683 Mbits/sec                          |
| 62[ 3] 270.0-275.0 sec361 MBytes605 Mbits/sec63[ 3] 275.0-280.0 sec393 MBytes660 Mbits/sec64[ 3] 280.0-285.0 sec402 MBytes674 Mbits/sec65[ 3] 285.0-290.0 sec411 MBytes690 Mbits/sec66[ 3] 290.0-295.0 sec410 MBytes687 Mbits/sec67[ 3] 295.0-300.0 sec385 MBytes646 Mbits/sec68[ 3] 300.0-305.0 sec465 MBytes780 Mbits/sec69[ 3] 305.0-310.0 sec450 MBytes755 Mbits/sec70[ 3] 310.0-315.0 sec441 MBytes740 Mbits/sec   | 60 | [   | 3] | 260.0-265.0 sec | 360 MBytes   | 605 Mbits/sec                          |
| 63       [ 3] 275.0-280.0 sec       393 MBytes       660 Mbits/sec         64       [ 3] 280.0-285.0 sec       402 MBytes       674 Mbits/sec         65       [ 3] 285.0-290.0 sec       411 MBytes       690 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         68       [ 3] 300.0-305.0 sec       465 MBytes       780 Mbits/sec         69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec   | 61 | [   | 3] | 265.0-270.0 sec | 393 MBytes   | 660 Mbits/sec                          |
| 64[ 3] 280.0-285.0 sec402 MBytes674 Mbits/sec65[ 3] 285.0-290.0 sec411 MBytes690 Mbits/sec66[ 3] 290.0-295.0 sec410 MBytes687 Mbits/sec67[ 3] 295.0-300.0 sec385 MBytes646 Mbits/sec68[ 3] 300.0-305.0 sec465 MBytes780 Mbits/sec69[ 3] 305.0-310.0 sec450 MBytes755 Mbits/sec70[ 3] 310.0-315.0 sec441 MBytes740 Mbits/sec   | 62 | [   |    |                 | 361 MBytes   |  |
| 65       [ 3] 285.0-290.0 sec       411 MBytes       690 Mbits/sec         66       [ 3] 290.0-295.0 sec       410 MBytes       687 Mbits/sec         67       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         68       [ 3] 300.0-305.0 sec       465 MBytes       780 Mbits/sec         69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec   |    | -   |    |                 | -            |  |
| 66[ 3] 290.0-295.0 sec410 MBytes687 Mbits/sec67[ 3] 295.0-300.0 sec385 MBytes646 Mbits/sec68[ 3] 300.0-305.0 sec465 MBytes780 Mbits/sec69[ 3] 305.0-310.0 sec450 MBytes755 Mbits/sec70[ 3] 310.0-315.0 sec441 MBytes740 Mbits/sec   |    | -   | -  |                 | -            |  |
| 67       [ 3] 295.0-300.0 sec       385 MBytes       646 Mbits/sec         68       [ 3] 300.0-305.0 sec       465 MBytes       780 Mbits/sec         69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec   |    | -   |    |                 | -            |  |
| 68       [ 3] 300.0-305.0 sec       465 MBytes       780 Mbits/sec         69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec  |    | -   |    |                 | -            |  |
| 69       [ 3] 305.0-310.0 sec       450 MBytes       755 Mbits/sec         70       [ 3] 310.0-315.0 sec       441 MBytes       740 Mbits/sec   |    | -   |    |                 | -            |  |
| 70 [ 3] 310.0-315.0 sec 441 MBytes 740 Mbits/sec  |    | -   |    |                 |              |  |
|   |    |     |    |                 |              |  |
| I I J JIJ.0 JZ0.0 Sec R00 MBytes (01 MBTts/Sec  |    | -   | -  |                 | -            |  |
|   | /1 | I L | 2] | 313.0 320.0 380 | 100 HDYCES   | 701 H0105/300                          |

|     | 1.     | ~ 1 | 200 0 205 0 |     | 475 |                  |     |           |
|-----|--------|-----|-------------|-----|-----|------------------|-----|-----------|
| 72  | [      | 3]  | 320.0-325.0 | sec | 475 | MBytes           | 797 | Mbits/sec |
| 73  | [      | 3]  | 325.0-330.0 | sec | 503 | MBytes           | 844 | Mbits/sec |
| 74  | [      | 3]  | 330.0-335.0 | sec | 434 | MBytes           | 729 | Mbits/sec |
| 75  | [      | 3]  | 335.0-340.0 | sec | 407 | MBytes           | 683 | Mbits/sec |
| 76  | [      | 3]  | 340.0-345.0 | sec | 400 | MBytes           | 670 | Mbits/sec |
| 77  | ]      | 3]  | 345.0-350.0 | sec | 383 | MBytes           | 643 | Mbits/sec |
| 78  | Ĩ      | 3]  | 350.0-355.0 | sec | 412 | MBytes           | 691 | Mbits/sec |
| 79  | [      | 31  | 355.0-360.0 | sec | 406 | MBytes           | 681 | Mbits/sec |
| 80  | [      | 3]  | 360.0-365.0 |     | 415 | MBytes           | 696 | Mbits/sec |
|     | -      | -   |             | sec |     | -                |     |           |
| 81  | [      | 3]  | 365.0-370.0 | sec | 427 | MBytes           | 717 | Mbits/sec |
| 82  | [      | 3]  | 370.0-375.0 | sec | 425 | MBytes           | 713 | Mbits/sec |
| 83  | [      | 3]  | 375.0-380.0 | sec | 470 | MBytes           | 789 | Mbits/sec |
| 84  | [      | 3]  | 380.0-385.0 | sec | 437 | MBytes           | 733 | Mbits/sec |
| 85  | [      | 3]  | 385.0-390.0 | sec | 417 | MBytes           | 699 | Mbits/sec |
| 86  | [      | 3]  | 390.0-395.0 | sec | 460 | MBytes           | 772 | Mbits/sec |
| 87  | [      | 3]  | 395.0-400.0 | sec | 470 | MBytes           | 788 | Mbits/sec |
| 88  | ſ      | 3]  | 400.0-405.0 | sec | 464 | MBytes           | 778 | Mbits/sec |
| 89  | ]      | 3]  | 405.0-410.0 | sec | 412 | MBytes           | 690 | Mbits/sec |
| 90  | [      | 3]  | 410.0-415.0 | sec | 424 | MBytes           | 712 | Mbits/sec |
| 91  | Ĩ      | 3]  | 415.0-420.0 | sec | 433 | MBytes           | 726 | Mbits/sec |
| 92  | [      | 3]  | 420.0-425.0 | sec | 470 | MBytes           | 789 | Mbits/sec |
| 93  | l<br>[ | 3]  | 425.0-430.0 | sec | 416 | MBytes           | 699 | Mbits/sec |
|     |        | -   |             |     |     | MBytes           |     | Mbits/sec |
| 94  | [      | 3]  | 430.0-435.0 | sec | 439 | -                | 737 |           |
| 95  | [      | 3]  | 435.0-440.0 | sec | 390 | MBytes           | 655 | Mbits/sec |
| 96  | [      | 3]  | 440.0-445.0 | sec | 368 | MBytes           | 617 | Mbits/sec |
| 97  | [      | 3]  | 445.0-450.0 | sec | 398 | MBytes           | 667 | Mbits/sec |
| 98  | [      | 3]  | 450.0-455.0 | sec | 374 | MBytes           | 627 | Mbits/sec |
| 99  | [      | 3]  | 455.0-460.0 | sec | 380 | MBytes           | 638 | Mbits/sec |
| 100 | ]      | 3]  | 460.0-465.0 | sec | 386 | MBytes           | 647 | Mbits/sec |
| 101 | [      | 3]  | 465.0-470.0 | sec | 402 | MBytes           | 675 | Mbits/sec |
| 102 | [      | 3]  | 470.0-475.0 | sec | 386 | MBytes           | 648 | Mbits/sec |
| 103 | [      | 3]  | 475.0-480.0 | sec | 379 | MBytes           | 636 | Mbits/sec |
| 104 | [      | 3]  | 480.0-485.0 | sec | 373 | MBytes           | 626 | Mbits/sec |
| 105 | [      | 3]  | 485.0-490.0 | sec | 379 | MBytes           | 636 | Mbits/sec |
| 106 | ]      | 3]  | 490.0-495.0 | sec | 384 | MBytes           | 644 | Mbits/sec |
| 107 | [      | 3]  | 495.0-500.0 | sec | 407 | MBytes           | 682 | Mbits/sec |
| 108 | ī      | 3]  | 500.0-505.0 | sec | 395 | MBytes           | 663 | Mbits/sec |
| 109 | ĺ      | 3]  | 505.0-510.0 | sec | 391 | MBytes           | 657 | Mbits/sec |
| 110 | [      | 3]  | 510.0-515.0 | sec | 395 | MBytes           | 663 | Mbits/sec |
| 111 | [      | 3]  | 515.0-520.0 | sec | 388 | MBytes           | 652 | Mbits/sec |
|     | l<br>[ | 3]  | 520.0-525.0 |     | 366 | -                | 614 | Mbits/sec |
| 112 |        | -   |             | sec |     | MBytes<br>MBytes |     | Mbits/sec |
| 113 | [      | 3]  | 525.0-530.0 | sec | 390 | -                | 653 |           |
| 114 | [      | 3]  | 530.0-535.0 | sec | 386 | MBytes           | 647 | Mbits/sec |
| 115 | [      | 3]  | 535.0-540.0 | sec | 413 | MBytes           | 693 | Mbits/sec |
| 116 | [      | 3]  | 540.0-545.0 | sec | 428 | MBytes           | 719 | Mbits/sec |
| 117 | [      | 3]  | 545.0-550.0 | sec | 421 | MBytes           | 707 | Mbits/sec |
| 118 | [      | 3]  | 550.0-555.0 | sec | 389 | MBytes           | 653 | Mbits/sec |
| 119 | [      | 3]  | 555.0-560.0 | sec | 443 | MBytes           | 743 | Mbits/sec |
| 120 | ]      | 3]  | 560.0-565.0 | sec | 438 | MBytes           | 736 | Mbits/sec |
| 121 | [      | 3]  | 565.0-570.0 | sec | 465 | MBytes           | 780 | Mbits/sec |
| 122 | [      | 3]  | 570.0-575.0 | sec | 389 | MBytes           | 652 | Mbits/sec |
| 123 | [      | 3]  | 575.0-580.0 | sec | 408 | MBytes           | 684 | Mbits/sec |
| 124 | [      | 3]  | 580.0-585.0 | sec | 430 | MBytes           | 722 | Mbits/sec |
| 125 | ſ      | 3]  | 585.0-590.0 | sec | 386 | MBytes           | 648 | Mbits/sec |
| 126 | [      | 3]  | 590.0-595.0 | sec | 399 | MBytes           | 670 | Mbits/sec |
| 127 | [      | 3]  | 595.0-600.0 | sec | 384 | MBytes           | 645 | Mbits/sec |
| 128 | ī      | 3]  | 600.0-605.0 | sec | 391 | MBytes           | 656 | Mbits/sec |
| 129 | l<br>[ | 3]  | 605.0-610.0 | sec | 381 | MBytes           | 639 | Mbits/sec |
| 130 | l<br>[ | 3]  | 610.0-615.0 | sec | 372 | MBytes           | 625 | Mbits/sec |
| 130 | ι<br>[ | 3]  | 615.0-620.0 |     | 438 | MBytes           | 734 | Mbits/sec |
|     |        |     |             | sec | 430 | -                | 750 | Mbits/sec |
| 132 | [      | 3]  | 620.0-625.0 | sec |     | MBytes           |     |           |
| 133 | [      | 3]  | 625.0-630.0 | sec | 414 | MBytes           | 694 | Mbits/sec |
| 134 | [      | 3]  | 630.0-635.0 | sec | 459 | -                | 770 | Mbits/sec |
| 135 | [      | 3]  | 635.0-640.0 | sec |     | MBytes           | 765 | Mbits/sec |
| 136 | [      | 3]  | 640.0-645.0 | sec | 465 | MBytes           | 780 | Mbits/sec |
| 137 | [      | 3]  | 645.0-650.0 | sec | 432 | MBytes           | 726 | Mbits/sec |
|     |        |     |             |     |     |                  |     |           |

| 138 | [ 3] | 650.0-655.0 sec    | 454 MBytes 763  | Mbits/sec                        |
|-----|------|--------------------|-----------------|----------------------------------|
| 139 | [ 3] | 655.0-660.0 sec    | 456 MBytes 765  | Mbits/sec                        |
| 140 | [ 3] | 660.0-665.0 sec    | 461 MBytes 773  | Mbits/sec                        |
| 141 | [ 3] | 665.0-670.0 sec    | 444 MBytes 746  | Mbits/sec                        |
| 142 | [ 3] | 670.0-675.0 sec    | 409 MBytes 686  | Mbits/sec                        |
| 143 | [ 3] | 675.0-680.0 sec    | 385 MBytes 647  | Mbits/sec                        |
| 144 | [ 3] | 680.0-685.0 sec    | 384 MBytes 645  | Mbits/sec                        |
| 145 | [ 3] | 685.0-690.0 sec    | 378 MBytes 634  | Mbits/sec                        |
| 146 | [ 3] | 690.0-695.0 sec    | 386 MBytes 647  | Mbits/sec                        |
| 147 | [ 3] | 695.0-700.0 sec    | 382 MBytes 641  | Mbits/sec                        |
| 148 | [ 3] | 700.0-705.0 sec    | 374 MBytes 627  | Mbits/sec                        |
| 149 | [ 3] | 705.0-710.0 sec    | 392 MBytes 658  | Mbits/sec                        |
| 150 | [ 3] | 710.0-715.0 sec    | 392 MBytes 658  | Mbits/sec                        |
| 151 | [ 3] | 715.0-720.0 sec    |                 | Mbits/sec                        |
| 152 | [ 3] | 720.0-725.0 sec    | 381 MBytes 640  | Mbits/sec                        |
| 153 | [ 3] | 725.0-730.0 sec    | 409 MBytes 686  | Mbits/sec                        |
| 154 | [ 3] | 730.0-735.0 sec    | 405 MBytes 680  | Mbits/sec                        |
| 155 | [ 3] | 735.0-740.0 sec    |                 | Mbits/sec                        |
| 156 |      | 740.0-745.0 sec    |                 | Mbits/sec                        |
| 157 |      | 745.0-750.0 sec    | -               | Mbits/sec                        |
| 158 | [ 3] |                    |                 | Mbits/sec                        |
| 159 |      | 755.0-760.0 sec    | -               | Mbits/sec                        |
| 160 |      | 760.0-765.0 sec    | -               | Mbits/sec                        |
| 161 |      | 765.0-770.0 sec    | -               | Mbits/sec                        |
| 162 |      | 770.0-775.0 sec    | 396 MBytes 664  | Mbits/sec                        |
| 163 | [ 3] | 775.0-780.0 sec    |                 | Mbits/sec                        |
| 164 |      | 780.0-785.0 sec    | -               | Mbits/sec                        |
| 165 |      | 785.0-790.0 sec    | 370 MBytes 621  | Mbits/sec                        |
| 166 | [ 3] | 790.0-795.0 sec    | 378 MBytes 634  | Mbits/sec                        |
| 167 | [ 3] | 795.0-800.0 sec    | 412 MBytes 691  | Mbits/sec                        |
| 168 | [ 3] | 800.0-805.0 sec    | 412 MBytes 692  | Mbits/sec                        |
| 169 | [ 3] | 805.0-810.0 sec    | 398 MBytes 667  | Mbits/sec                        |
| 170 | [ 3] | 810.0-815.0 sec    | 385 MBytes 646  | Mbits/sec                        |
| 171 | [ 3] | 815.0-820.0 sec    | 396 MBytes 665  | Mbits/sec                        |
| 172 | [ 3] | 820.0-825.0 sec    | 386 MBytes 648  | Mbits/sec                        |
| 173 | [ 3] | 825.0-830.0 sec    | 390 MBytes 655  | Mbits/sec                        |
| 174 | [ 3] | 830.0-835.0 sec    | -               | Mbits/sec                        |
| 175 | [ 3] | 835.0-840.0 sec    | 335 MBytes 562  | Mbits/sec                        |
| 176 |      | 840.0-845.0 sec    | -               | Mbits/sec                        |
| 177 |      | 845.0-850.0 sec    | -               | Mbits/sec                        |
| 178 |      | 850.0-855.0 sec    | -               | Mbits/sec                        |
| 179 |      | 855.0-860.0 sec    | -               | Mbits/sec                        |
| 180 |      | 860.0-865.0 sec    | -               | Mbits/sec                        |
| 181 |      | 865.0-870.0 sec    | -               | Mbits/sec                        |
| 182 |      | 870.0-875.0 sec    | -               | Mbits/sec                        |
| 183 |      | 875.0-880.0 sec    | -               | Mbits/sec                        |
| 184 | [ 3] |                    |                 | Mbits/sec                        |
| 185 |      | 885.0-890.0 sec    |                 |                                  |
| 186 |      | 890.0-895.0 sec    |                 |                                  |
| 187 |      | 895.0-900.0 sec    | -               |                                  |
| 188 |      | 0.0-900.0 sec 7    | -               |                                  |
| 189 |      |                    |                 |                                  |
| 190 |      | raffic             |                 |                                  |
| 191 |      |                    |                 |                                  |
| 192 |      | t connecting to 12 |                 | port 5001                        |
| 193 |      | ng 1470 byte datag |                 |                                  |
| 194 |      | ouffer size: 224 K |                 |                                  |
| 195 |      |                    |                 |                                  |
| 196 |      |                    |                 | ed with 128.39.121.193 port 5001 |
| 197 |      | Interval Tr        |                 |                                  |
| 198 |      | 0.0-5.0 sec 4      | -               |                                  |
| 199 |      | 5.0-10.0 sec 4     | -               |                                  |
| 200 |      | 10.0-15.0 sec 4    |                 |                                  |
| 201 |      | 15.0-20.0 sec 4    |                 |                                  |
| 202 |      | 20.0-25.0 sec 4    | -               |                                  |
| 203 | [ 3] | 25.0-30.0 sec 4    | 81 MBytes 807 M | IDITS/SEC                        |
|     |      |                    |                 |                                  |

| 204        | [      | 3]       | 30.0-35.0 sec                      | 481 MBytes               | 806 Mbits/sec                  |
|------------|--------|----------|------------------------------------|--------------------------|--------------------------------|
| 205        | [      | 3]       | 35.0-40.0 sec                      | 481 MBytes               | 806 Mbits/sec                  |
| 206        | [      | 3]       | 40.0-45.0 sec                      | 480 MBytes               | 806 Mbits/sec                  |
| 207        | [      | 3]       | 45.0-50.0 sec                      | 480 MBytes               | 806 Mbits/sec                  |
| 208        | [      | 3]       | 50.0-55.0 sec                      | 480 MBytes               | 805 Mbits/sec                  |
| 209        | [      | 3]       | 55.0-60.0 sec                      | 480 MBytes               | 806 Mbits/sec                  |
| 210        | [      | 3]       | 60.0-65.0 sec                      | 480 MBytes               | 806 Mbits/sec                  |
| 211        | [      | 3]       | 65.0-70.0 sec                      | 480 MBytes               | 805 Mbits/sec                  |
| 212        | [      | 3]       | 70.0-75.0 sec                      | 480 MBytes               | 806 Mbits/sec                  |
| 213        | [      | 3]       | 75.0-80.0 sec                      | 480 MBytes               | 805 Mbits/sec                  |
| 214        | [      | 3]       | 80.0-85.0 sec                      | 481 MBytes               | 807 Mbits/sec                  |
| 215        | [      | 3]       | 85.0-90.0 sec                      | 480 MBytes               | 806 Mbits/sec                  |
| 216        | [      | 3]       | 90.0-95.0 sec                      | 480 MBytes               | 806 Mbits/sec                  |
| 217        | [      | 3]       | 95.0-100.0 sec                     | 480 MBytes               | 805 Mbits/sec                  |
| 218        | [      | 3]       | 100.0-105.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 219        | [      | 3]       | 105.0-110.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 220        | [      | 3]       | 110.0-115.0 sec                    | 480 MBytes               | 805 Mbits/sec                  |
| 221        | [      | 3]       | 115.0-120.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 222        | [      | 3]       | 120.0-125.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 223        | [      | 3]       | 125.0-130.0 sec                    | 480 MBytes               | 805 Mbits/sec                  |
| 224        | [      | 3]       | 130.0-135.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 225        | [      | 3]       | 135.0-140.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 226        | [      | 3]       | 140.0-145.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 227        | [      | 3]       | 145.0-150.0 sec                    | 482 MBytes               | 808 Mbits/sec                  |
| 228        | [      | 3]       | 150.0-155.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 229        | [      | 3]       | 155.0-160.0 sec                    | 480 MBytes               | 805 Mbits/sec                  |
| 230        | [      | 3]       | 160.0-165.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 231        | [      | 3]       | 165.0-170.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 232        | [      | 3]       | 170.0-175.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 233        | [      | 3]       | 175.0-180.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 234        | [      | 3]       | 180.0-185.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 235        | [      | 3]       | 185.0-190.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 236        | [      | 3]       | 190.0-195.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 237        | [      | 3]       | 195.0-200.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 238        | [      | 3]       | 200.0-205.0 sec                    | 482 MBytes               | 808 Mbits/sec                  |
| 239        | [      | 3]       | 205.0-210.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 240        | [      | 3]       | 210.0-215.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 241        | [      | 3]       | 215.0-220.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 242        | [      | 3]       | 220.0-225.0 sec                    | 480 MBytes               | 805 Mbits/sec                  |
| 243        | [      | 3]       | 225.0-230.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 244        | [      | 3]       | 230.0-235.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 245        | [      | 3]       | 235.0-240.0 sec                    | 480 MBytes               | 805 Mbits/sec                  |
| 246        | [      | 3]       | 240.0-245.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 247        | [      | 3]       | 245.0-250.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 248        | [      | 3]       | 250.0-255.0 sec                    | 480 MBytes               | 806 Mbits/sec                  |
| 249        | [      | 3]       | 255.0-260.0 sec                    | 480 MBytes               | 805 Mbits/sec                  |
| 250        | l      | 3]       | 260.0-265.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 251        | [      | 3]       | 265.0-270.0 sec                    | 481 MBytes               | 806 Mbits/sec                  |
| 252        | [      | 3]       | 270.0-275.0 sec                    | 482 MBytes               | 808 Mbits/sec                  |
| 253        | [      | 3]       | 275.0-280.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 254        | [      | 3]       | 280.0-285.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 255        | [      | 3]       | 285.0-290.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 256        | [      | 3]       | 290.0-295.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 257        | [      | 3]       | 295.0-300.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 258        | [      | 3]       | 300.0-305.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 259        | [<br>r | 3]       | 305.0-310.0 sec                    | 481 MBytes               | 807 Mbits/sec                  |
| 260        | [<br>r | 3]       | 310.0-315.0 sec<br>315.0-320.0 sec | 481 MBytes<br>481 MBytes | 808 Mbits/sec                  |
| 261        | [<br>r | 3]       |                                    | -                        | 807 Mbits/sec                  |
| 262        | [<br>r | 3]       | 320.0-325.0 sec                    | 482 MBytes               | 808 Mbits/sec                  |
| 263        | [<br>r | 3]       | 325.0-330.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 264<br>265 | [<br>r | 3]       | 330.0-335.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 265        | [<br>r | 3]       | 335.0-340.0 sec                    | 481 MBytes               | 808 Mbits/sec                  |
| 266        | [<br>r | 3]<br>3] | 340.0-345.0 sec                    | 481 MBytes               | 808 Mbits/sec<br>808 Mbits/sec |
| 267        | ]<br>r |          | 345.0-350.0 sec<br>350.0-355.0 sec | 481 MBytes               |                                |
| 268<br>269 | [<br>[ | 3]<br>3] | 350.0-355.0 sec<br>355.0-360.0 sec | 481 MBytes<br>481 MBytes | 808 Mbits/sec<br>807 Mbits/sec |
| 207        | I L    | 2]       | 200.0 000.0 880                    | IOT UDYCES               | 00, mics/sec                   |
|            |        |          |                                    |                          |                                |

| 270 | [ | 3] | 360.0-365.0                | sec | 481 | MBytes           | 807 | Mbits/sec              |
|-----|---|----|----------------------------|-----|-----|------------------|-----|------------------------|
| 271 | [ | 3] | 365.0-370.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 272 | [ | 3] | 370.0-375.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 273 | [ | 3] | 375.0-380.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 274 | [ | 3] | 380.0-385.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 275 | [ | 3] | 385.0-390.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 276 | [ | 3] | 390.0-395.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 277 | [ | 3] | 395.0-400.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 278 |   | 3] | 400.0-405.0                |     | 480 | -                | 805 | Mbits/sec              |
|     | [ | -  |                            | sec |     | MBytes           | 805 | Mbits/sec              |
| 279 | [ | 3] | 405.0-410.0                | sec | 480 | MBytes           |     |                        |
| 280 | [ | 3] | 410.0-415.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 281 | [ | 3] | 415.0-420.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 282 | [ | 3] | 420.0-425.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 283 | [ | 3] | 425.0-430.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 284 | [ | 3] | 430.0-435.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 285 | [ | 3] | 435.0-440.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 286 | [ | 3] | 440.0-445.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 287 | [ | 3] | 445.0-450.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 288 | [ | 3] | 450.0-455.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 289 | [ | 3] | 455.0-460.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 290 | [ | 3] | 460.0-465.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 291 | [ | 3] | 465.0-470.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
|     | [ | 3] |                            |     | 480 | -                | 805 | Mbits/sec              |
| 292 |   | -  | 470.0-475.0                | sec |     | MBytes           |     |                        |
| 293 | [ | 3] | 475.0-480.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 294 | [ | 3] | 480.0-485.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 295 | [ | 3] | 485.0-490.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 296 | [ | 3] | 490.0-495.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 297 | [ | 3] | 495.0-500.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 298 | [ | 3] | 500.0-505.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 299 | [ | 3] | 505.0-510.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 300 | [ | 3] | 510.0-515.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 301 | [ | 3] | 515.0-520.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 302 | [ | 3] | 520.0-525.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 303 | [ | 3] | 525.0-530.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 304 | [ | 3] | 530.0-535.0                | sec | 481 | MBytes           | 807 | Mbits/sec              |
| 305 | [ | 3] | 535.0-540.0                |     | 481 | -                | 808 | Mbits/sec              |
|     |   | -  |                            | sec |     | MBytes           |     |                        |
| 306 | [ | 3] | 540.0-545.0                | sec | 481 | MBytes           | 807 | Mbits/sec              |
| 307 | [ | 3] | 545.0-550.0                | sec | 481 | MBytes           | 807 | Mbits/sec              |
| 308 | [ | 3] | 550.0-555.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 309 | [ | 3] | 555.0-560.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 310 | [ | 3] | 560.0-565.0                | sec | 482 | MBytes           | 808 | Mbits/sec              |
| 311 | [ | 3] | 565.0-570.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 312 | [ | 3] | 570.0-575.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 313 | [ | 3] | 575.0-580.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 314 | [ | 3] | 580.0-585.0                | sec | 481 | MBytes           | 807 | Mbits/sec              |
| 315 | [ | 3] | 585.0-590.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 316 | ſ | 3] | 590.0-595.0                | sec | 481 | MBytes           |     | Mbits/sec              |
| 317 | [ | 3] | 595.0-600.0                | sec | 481 | MBytes           | 807 |                        |
| 318 | [ | 3] | 600.0-605.0                | sec | 481 | MBytes           | 807 | Mbits/sec              |
|     |   | 3] | 605.0-610.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 319 | [ | -  |                            |     |     | -                |     |                        |
| 320 | [ | 3] | 610.0-615.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 321 | [ | 3] | 615.0-620.0                | sec | 480 | MBytes           | 805 |                        |
| 322 | [ | 3] | 620.0-625.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 323 | [ | 3] | 625.0-630.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 324 | [ | 3] | 630.0-635.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 325 | [ | 3] | 635.0-640.0                | sec | 481 | MBytes           | 807 | Mbits/sec              |
| 326 | [ | 3] | 640.0-645.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 327 | [ | 3] | 645.0-650.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 328 | [ | 3] | 650.0-655.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 329 | [ | 3] | 655.0-660.0                | sec | 481 | MBytes           | 807 | Mbits/sec              |
| 330 | [ | 3] | 660.0-665.0                | sec | 481 | MBytes           | 808 | Mbits/sec              |
| 331 | [ | 3] | 665.0-670.0                | sec | 480 | MBytes           | 805 | Mbits/sec              |
| 332 | [ | 3] | 670.0-675.0                | sec | 480 | MBytes           | 806 | Mbits/sec              |
| 333 | [ | 3] | 675.0-680.0                | sec | 480 | MBytes           |     | Mbits/sec              |
|     | [ | 3] |                            |     |     | -                |     | Mbits/sec              |
| 334 |   | 3] | 680.0-685.0<br>685.0-690.0 | sec | 480 | MBytes<br>MBytes |     | Mbits/sec<br>Mbits/sec |
| 335 | [ | 2] | 000.0                      | sec | 481 | . my ces         | 500 | 100103/360             |
|     |   |    |                            |     |     |                  |     |                        |

|     |   | ~ 1   |  |  |  |  |  |  |  |
|-----|---|---|--|--|--|--|--|--|--|
| 336 | l | -   | 690.0-695.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 337 | [ | -   | 695.0-700.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 338 | [ | -   | 700.0-705.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 339 | [ | -   | 705.0-710.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 340 | [ | 3]  | 710.0-715.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 341 | [ | 3]  | 715.0-720.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 342 | [ | 3]  | 720.0-725.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 343 | [ | 3]  | 725.0-730.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 344 | [ | 3]  | 730.0-735.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 345 | [ | 3]  | 735.0-740.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 346 | [ | 3]  | 740.0-745.0 sec 481 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 347 | [ | 3]  | 745.0-750.0 sec 482 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 348 | [ | 3]  | 750.0-755.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 349 | [ | 3]  | 755.0-760.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 350 | [ | 3]  | 760.0-765.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 351 | [ | 3]  | 765.0-770.0 sec 479 MBytes 804 Mbits/sec |  |  |  |  |  |  |
| 352 | [ | 3]  | 770.0-775.0 sec 480 MBytes 805 Mbits/sec |  |  |  |  |  |  |
| 353 | [ | 3]  | 775.0-780.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 354 | [ | 3]  | 780.0-785.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 355 | [ | 3]  | 785.0-790.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 356 | [ | 3]  | 790.0-795.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 357 | [ | 3]  | 795.0-800.0 sec 482 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 358 | [ | 3]  | 800.0-805.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 359 | [ | 3]  | 805.0-810.0 sec 482 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 360 | [ |   | 810.0-815.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 361 | Ē | 3]  | 815.0-820.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 362 | Ē | 3]  | 820.0-825.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 363 | Ē | 3]  | 825.0-830.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 364 | [ | 3]  | 830.0-835.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 365 | [ | 3]  | 835.0-840.0 sec 481 MBytes 807 Mbits/sec |  |  |  |  |  |  |
| 366 | [ | 3]  | 840.0-845.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 367 | [ | 3]  | 845.0-850.0 sec 480 MBytes 805 Mbits/sec |  |  |  |  |  |  |
| 368 | [ |   | 850.0-855.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 369 | [ | -   | 855.0-860.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 370 | [ | 3]  | 860.0-865.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 371 | [ | 3]  | 865.0-870.0 sec 482 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 372 | [ |   | 870.0-875.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 373 | [ | -   | 875.0-880.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 374 | [ |   | 880.0-885.0 sec 481 MBytes 808 Mbits/sec |  |  |  |  |  |  |
| 375 | [ |   | 885.0-890.0 sec 479 MBytes 804 Mbits/sec |  |  |  |  |  |  |
| 376 | [ |   | 890.0-895.0 sec 480 MBytes 806 Mbits/sec |  |  |  |  |  |  |
| 377 | [ | -   | 895.0-900.0 sec 480 MBytes 805 Mbits/sec |  |  |  |  |  |  |
| 378 | [ | 31  | 0.0-900.0 sec 84.5 GBytes 806 Mbits/sec  |  |  |  |  |  |  |
| 379 | [ |   | Sent 61718544 datagrams                  |  |  |  |  |  |  |
| 380 | ſ | -   | Server Report:                           |  |  |  |  |  |  |
| 381 | - | [3] 0.0-989.3 sec 83.5 GBytes 725 Mbits/sec 0.141 ms 695559/61718543 (1.1%) |  |  |  |  |  |  |  |
| 382 | - | [3] 0.0-989.3 sec 38422 datagrams received out-of-order                     |  |  |  |  |  |  |  |
| 383 | - | Average packet delay results for Tiny-sized VMs                             |  |  |  |  |  |  |  |
|     |   |   |  |  |  |  |  |  |  |

| Tiny-sized VMs | Average Packet Delay<br>(milliseconds) |
|----------------|--|
| Case1          | 0,412                                  |
| Case2          | 0 <mark>,</mark> 674                   |
| Case3          | 0,488                                  |
| Case4          | 0,745                                  |

Figure A.1: Results of Average packet delay for Tiny-sized VMs

| Medium sized<br>VMs | Average Packet<br>Delay(milliseconds) |
|---------------------|---------------------------------------|
| Case1               | 0,449                                 |
| Case2               | 0,741                                 |
| Case3               | 0,526                                 |
| Case4               | 0,745                                 |

Figure A.2: Results of Average packet delay for Medium-sized VMs

| Multiple Tiny-<br>sized VMs pairs | TCP Throughput<br>(Mbps) | UDP Throughput<br>(Mbps) | Packet<br>Loss(%) | Average<br>Packet Delay<br>(milliseconds) |
|-----------------------------------|--------------------------|--------------------------|-------------------|---|
| 1st pair of VMs                   | 606                      | 799                      | 29                | 0,502                                     |
| 2nd pair of VMs                   | 869                      | 792                      | 0,37              | 0,322                                     |
| 3rd pair of VMs                   | 897                      | 800                      | 0,26              | 0,342                                     |
| 4th pair of VMs                   | 878                      | 778                      | 0,25              | 0,341                                     |
| 5th pair of VMs                   | 855                      | 762                      | 0,28              | 0,372                                     |
| 6th pair of VMs                   | 897                      | 768                      | 0,34              | 0,332                                     |
| 7th pair of VMs                   | 880                      | 783                      | 0,24              | 0,32                                      |
| 8th pair of VMs                   | 870                      | 784                      | 0,35              | 0,323                                     |
| 9th pair of VMs                   | 909                      | 770                      | 0,28              | 0,388                                     |

Figure A.3: Results for Multiple tiny-sized VMs

## Bibliography

- [1] http://en.wikipedia.org/wiki/Cloud\_computing/. [Online; accessed 03-February-2014].
- [2] http://mobiledevices.about.com/od/additionalresources/a/Cloud-Computing-ls-lt-Really-All-That-Beneficial.html. [Online; retrieved February 2014].
- [3] http://en.wikipedia.org/wiki/Virtualization/. [Online; accessed 03-February-2014].
- [4] http://en.wikipedia.org/wiki/Amazon\_Elastic\_Compute\_Cloud/. [Online; accessed 19-January-2014].
- [5] http://www.openstack.org/. [Online; accessed 31-January-2014].
- [6] http://en.wikipedia.org/wiki/OpenStack. [Online; accessed 31-January-2014].
- [7] http://commons.wikimedia.org/wiki/File:Openstack-conceptual-archfolsom.jpg. [Online; accessed 31-January-2014].
- [8] http://www.mirantis.com/blog/openstack-networking-flatmanager-and-flatdhcpmanager/. [Online; accessed 20-January-2014].
- [9] http://docs.openstack.org/security-guide/content/ch004\_bookintroduction.html. [Online; accessed 1-january-2014].
- [10] http://www.sdncentral.com/what-is-openstack-quantum-neutron/. [Online; accessed 06-february-2014].
- [11] http://git.openvswitch.org/cgi-bin/gitweb.cgi?p=openvswitch;a=blob\_ plain;f=WHY-OVS;hb=HEAD. [Online; accessed 08-february-2014].
- [12] http://docs.openstack.org/havana/install-guide/install/apt/content/ concepts - neutron.openvswitch.html. [Online; accessed 08-february-2014].
- [13] http://activity.openstack.org/data/display/OPNSTK2/neutronl. [Online; retrieved February 2014].
- [14] http://docs.openstack.org/api/openstack-network/2.0/content/Overviewd1e71.html. [Online; retrieved February 2014].
- [15] http://archiv.cesnet.cz/doc/techzpravy/2001/07/. [Online; retrieved February 2014].

- [16] http://www.cisco.com/c/en/us/products/collateral/routers/asr-9000series - aggregation - services - routers/white\_paper\_c11 - 694882.pdf. [Online; accessed 04-April-2014].
- [17] http://openmaniak.com/iperf.php. [Online; accessed 02-MAY-2014].
- [18] Theophilus Benson et al. 'CloudNaaS: A Cloud Networking Platform for Enterprise Applications'. In: *Proceedings of the 2Nd ACM Symposium* on Cloud Computing. SOCC '11. Cascais, Portugal: ACM, 2011, 8:1–8:13. ISBN: 978-1-4503-0976-9. DOI: 10.1145/2038916.2038924. URL: http:// doi.acm.org/10.1145/2038916.2038924.
- [19] Rahul Bhatnagar, Suyash Raizada and Pramod Saxena. 'ISSUE IN CLOUD-COMPUTING'. In: ().
- [20] John David Cooper. 'Analysis of security in cloud platforms using OpenStack as case study'. In: (2013).
- [21] Yaozu Dong et al. 'High performance network virtualization with SR-IOV'. In: *Journal of Parallel and Distributed Computing* 72.11 (2012), pp. 1471–1480.
- [22] Jun Hong and V.O.-K. Li. 'Impact of Information on Network Performance - An Information-Theoretic Perspective'. In: *Global Telecommunications Conference*, 2009. GLOBECOM 2009. IEEE. Nov. 2009, pp. 1–6. DOI: 10.1109/GLOCOM.2009.5425421.
- [23] Ang Li et al. 'CloudCmp: Comparing Public Cloud Providers'. In: *Proceedings of the 10th ACM SIGCOMM Conference on Internet Measurement*. IMC '10. Melbourne, Australia: ACM, 2010, pp. 1–14. ISBN: 978-1-4503-0483-2. DOI: 10.1145/1879141.1879143. URL: http://doi.acm.org/10.1145/1879141.1879143.
- [24] Daniel Nurmi et al. 'The eucalyptus open-source cloud-computing system'. In: *Cluster Computing and the Grid*, 2009. CCGRID'09. 9th IEEE/ACM International Symposium on. IEEE. 2009, pp. 124–131.
- [25] Georgios Z Papadopoulos. 'Experimental Assessment of Traffic Generators'. In: (2012).
- [26] Daniele Venzano and Pietro Michiardi. 'A measurement study of data-intensive network traffic patterns in a private cloud'. In: *IEEE Transactions on Parallel and Distributed Systems* 22.12 (2011).
- [27] Guohui Wang and T.S.E. Ng. 'The Impact of Virtualization on Network Performance of Amazon EC2 Data Center'. In: *INFOCOM*, 2010 Proceedings IEEE. Mar. 2010, pp. 1–9. DOI: 10.1109/INFCOM.2010.5461931.
- [28] Xiaolong Wen et al. 'Comparison of open-source cloud management platforms: OpenStack and OpenNebula'. In: *Fuzzy Systems and Knowledge Discovery (FSKD), 2012 9th International Conference on.* 2012, pp. 2457–2461. DOI: 10.1109/FSKD.2012.6234218.
- [29] Shaoka Zhao et al. 'Deployment and Performance Evaluation of Virtual Network based on OpenStack'. In: (2013).