



LOCAL MUNICIPALITY – UMKHANDLU WENDAWO
SUPPLY CHAIN MANAGEMENT UNIT
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Reference no: SCM81/2013 -2014

Date: 10 Mar. 2013

RFQ FOR SUPPLY AND DELIVERY OF CONSUMEABLE

Quotations are hereby invited from interested suppliers with proven track record in terms of Section 83 of the Municipal System Act, Act 32 of 2000 (as amended) and Section 110 and 112 of the Municipal Finance Management Act, Act 56 of 2003, for supply and delivery of consumables as per list below:

- Network card for MSI H61M-P31 (G3) X 3
- DVR for VIVO tech 16 channel
- 3 X 5 Port switch
- 48 Ports managed switch X 3
- Power Supply X 3

The detailed specification for the above named items is also attached.

For more information the following IT officials can be contacted during office hours: Mr T Makhubu and Ms T Hlatshwayo on Tel: 036 448 8000.

QUOTE SUBMISSION

Quotations must be done on the company's letter head/ stamped, can only be submitted on a sealed envelope clearly marked the abovementioned reference number to Municipal tender box, not later than 18 March 2014 at 11:00.

The following conditions will apply:

- Suppliers must be registered at our database; forms can be e-mailed on request, downloaded from our website and collected at our municipal offices.
- Suppliers must also ensure that they submit their tax clearances, B-BBEE certificates that are still valid as they will have a big impact during the evaluation processes.
- Quotes will be evaluated on the 80/20 preferential points.
- Suppliers must also state the delivery period after receiving the initial order.

NO QUOTATION WILL BE CONSIDERED FROM PEOPLE IN SERVICE OF THE STATE.

Mr B Tshabalala
SCM Practitioner

Mr TE Gambu
Manager: Finance

Specification for a 48 port managed switch

Description Stackability

- **Virtual Stacking Support**
- Single IP Management
- Up to 32 devices per virtual stack
- Up to 20G stacking bandwidth
- **Physical Stacking**
- Supports Duplex Chain/Ring topology
- Up to 40G stacking bandwidth
- Up to 12 units per stack

L2 Features

- **MAC Address Table: 16K**
- **Flow Control**
- 802.3x Flow Control
- HOL Blocking Prevention
- **Jumbo Frame up to 13K Bytes**
- **IGMP snooping**
- IGMP v1/v2/v3 Snooping
- Supports 960 groups
- Port/Host-based
- IGMP Snooping
- Fast Leave
- **MLD Snooping**
- MLD v1/v2 Snooping
- Supports 480 groups
- Host-based MLD Snooping Fast Leave
- **Spanning Tree**
- 802.1D-2004 STP
- 802.1w RSTP

- 802.1Q-2005 MSTP
- BPDU filtering
- Root Restriction
- **Loopback Detection**
- 802.3ad Link Aggregation
- Max. 32 groups per device
- 8 Gigabit ports or 2 10 Gigabit ports per group
- **Port Mirroring**
- Support 4 Mirroring Groups
- Support One-to-One, Many-to-One, Flow-based, and RSPAN mirroring
- **L2 Protocol Tunneling**
- ERPS (Ethernet Ring Protection Switching)

VLAN

- **VLAN Group**
- Max. 4K Static VLAN Groups
- Max. 255 Dynamic VLAN Groups
- **802.1Q Tagged VLAN**
- **802.1v Protocol VLAN**
- **GVRP**
- Double VLAN (Q-in-Q)
- Port-based Q-in-Q
- Selective Q-in-Q2
- **MAC-based VLAN**
- **VLAN Trunking**
- **802.1Qbb2**

L3 Features

- 256 IP interfaces
- Loopback interface
- IPv6 Tunneling

- Proxy ARP
- Gratuitous ARP

L3 Routing

- **1K routing entries shared by IPv4/v6**
- Max. 1K IPv4 routes
- Max. 512 IPv6 routes
- **2K L3 forwarding entries shared by IPv4/v6**
- Max. 2K IPv4 entries
- Max. 1K IPv6 entries
- **256 static routing entries for IPv4, 128 entries for IPv6**
- **RIP v1/v2**
- **RIPng (IPv6)**

QoS (Quality of Service)

- 802.1p Class of Service (CoS)
- 8 queues per port
- Queue Handling
- Strict
- Weighted Round Robin (WRR)
- Strict + WRR
- CoS based on
- Switch Port
- VLAN ID
- 802.1p Priority Queues
- MAC Address
- IPv4/v6 Address
- DSCP
- Protocol Type
- IPv6 Traffic Class
- IPv6 Flow Label

- TCP/UDP Port
- User-defined Packet Content
- Supports following actions for flows:
 - Remark 802.1p Priority Tag
 - Remark TOS/DSCP Tag
 - Bandwidth Control
 - Flow Statistics
 - Committed Information Rate (CIR), min. granularity 1 Kbps.
 - Bandwidth Control
 - Port-based (Ingress/Egress, min. granularity 64 Kbps)
 - Flow-based (Ingress, min. granularity 64 Kbps)
 - Time-based QoS

ACL (Access Control List)

- Ingress ACL: support up to 6 profiles and 256 rules per profile
- Egress ACL: support up to 4 profiles and 128 rules per profile
- ACL based on
 - 802.1p Priority
 - VLAN ID
 - MAC Address
 - Ether Type
 - IPv4/v6 Address
 - DSCP
 - Protocol Type
 - TCP/UDP Port Number
 - IPv6 Traffic Class
 - IPv6 Flow Label
- User-defined Packet Content
- ACL Statistics
- Time-based ACL

- CPU interface filtering

Security

- SSH v2
- SSL v1/v2/v3
- Port Security up to 64 MAC addresses per port
- Broadcast/Multicast/Unicast Storm Control
- Traffic Segmentation
- IP-MAC-Port Binding
- ARP Packet Inspection
- IP Packet Inspection
- DHCP Snooping
- DHCPv6 and NDP Snooping
- Supports up to 500 Address Binding Entries per device
- Safeguard Engine
- DHCP Server Screening
- CPU Interface Filtering
- ARP Spoofing Prevention
- BPDU Attack Protection

AAA

- 802.1x
- Port-based Access Control
- Host-based Access Control
- Dynamic VLAN Assignment
- Web-based Access Control (WAC)
- Port-based Access Control
- Host-based Access Control
- Dynamic VLAN Assignment
- MAC-based Access Control (MAC)
- Port-based Access Control

- Host-based Access Control
- Dynamic VLAN Assignment
- Japan Web-based Access Control (JWAC)
- Host-based Access Control
- Microsoft® NAP
- Supports 802.1x NAP
- Supports DHCP NAP
- Guest VLAN
- RADIUS and TACACS+ authentication for switch access
- 4-Level user account

Management

- Web-based GUI
- Command Line Interface (CLI)
- Telnet Server
- Telnet Client
- TFTP Client
- ZModem
- SNMP v1/v2c/v3
- SNMP Trap
- System Log
- RMON v1
- Supports 1,2,3,9 Groups
- RMON v2
- Supports ProbeConfig Group
- sFlow
- LLDP/LLDP-MED
- BootP/DHCP Client
- DHCP Auto-Configuration
- DHCP Relay

- DHCP Relay Option 60, 61
- DHCP Relay Option 82
- DHCP Server
- Flash File System
- Multiple Images
- Multiple Configurations
- CPU Monitoring
- Debug Command
- SNTP
- ICMPv6
- DHCPv6 Client
- DHCPv6 Relay
- DHCPv6 Server
- Trusted Host
- MTU Setting
- Microsoft® NLB Support
- UDP helper 4

OAM

- 802.3ah Ethernet Link OAM
- IEEE1588 Precision Time Protocol (PTP)
- Cable Diagnostics 3
- 802.1ag Connectivity Fault Management (CFM)
- ITU-T Y.1731

Green

- Power saving by Link Status
- Power saving by Cable Length
- Time-based PoE

MIB/IETF Standards

- RFC1213 MIB-II
- RFC1493 Bridge MIB
- RFC1907 SNMPv2 MIB
- RFC2571~2576 SNMP MIB
- RFC1271, 2819 RMON MIB
- RFC2021 RMON v2 MIB
- RFC2665 Ether-like MIB
- RFC2668 MAU MIB
- RFC2674 802.1p MIB
- RFC2233, 2863 IF MIB
- RFC2618 RADIUS Authentication Client MIB
- RFC1724 RIP v2 MIB
- RFC2096 IP Forwarding Table MIB (CIDR)
- RFC2620 RADIUS Accounting Client MIB
- Ping MIB
- Traceroute MIB
- D-Link Private MIB
- RFC768 UDP
- RFC783 TFTP
- RFC 791 IP
- RFC 793 TCP
- RFC 826 ARP
- RFC854 Telnet
- RFC951, 1542 BootP
- RFC2068 HTTP
- RFC3056, 5214 IPv6 Tunnel
- RFC2138 RADIUS
- RFC2139 RADIUS Accounting
- RFC1492 TACACS

- RFC3176 sFlow
- RFC2598 DiffServ Expedited Forwarding

Specification for a 5-port switch

Hardware

Standards

- IEEE 802.3 10Base-T; IEEE 802.3u 100Base-TX IEEE 802.3ab 1000Base-T; IEEE 802.3x Flow Control

Network Media

- Ethernet: Cat. 3, 4, 5, up to 100m Fast Ethernet: Cat. 5, up to 100m Gigabit Ethernet: Cat. 5, 5e, 6, up to 100m

Data Rate

- Ethernet: 10Mbps/20Mbps (half/full-duplex) Fast Ethernet: 100Mbps/200Mbps (half/full-duplex) Gigabit Ethernet: 2000Mbps (full-duplex)

Protocol / Topology

- CSMA/CD, Star

Power Consumption

- 3w (max)

Switch Fabric

- 10Gbps forwarding capacity

Interface

- 5 x 10/100/1000Mbps Auto-MDIX RJ-45 Ports

Data RAM Buffer

- 104Kbytes

Filtering Table

- 1Kbytes entries

Diagnostic LED

- Power, Link/ACT, 100Mbps, 1000Mbps

Power Adapter

- 5V DC, 2.5A external power adapter

Dimension

- 150 x 105 x 33mm (5.9 x 4.1 x 1.3 in)

Weight

- 225g (8oz)

Temperature

- 0° ~ 50° C (32° ~ 122° F)

Humidity

- 10%~90% (non-condensing)

Certifications

- FCC, CE

Power supply Specification

Ac input	Input voltage: 230 v~ Input current: 4A Frequency: 50Hz				
DC OUTPUT	+3.3V	+5V	+12V	-12V	+5VSB
Max output current	15A	14A	16A	0.5A	2.1A
Max output power	90W	192W	6.0W	10.5W	