

Quantity 3X access switches 48X ports 4X uplinks ports 10G POE+

Scope of Work

- Supply, install, configure three (3) access switches with 48x 10/100/1000 PoE+ ports and 4x 10G ports uplinks, including all required accessories, Full required configuration, integration, and testing end-to-end.
- Provide the necessary 10G SFP+ transceivers and fiber/copper patch cords to complete uplink connectivity as per site topology.

Supplier Obligations

- Supplier shall supply, install, configure, and commission the three switches, including all required accessories, and deliver full integration with the existing switches and infrastructure based on a mandatory site survey and the approved final design.
- The supplier obligations include pre-installation preparations, testing, Hand over documentation, and handover of a ready-for-service solution in accordance with the Owner's requirements
- Site Survey is mandatory for building, switches, uplinks, Access points and core switches.
- Submit a detailed project schedule covering supply, installation, migration, risk mitigation, and rollback plan to minimize service impact.
- The supplier shall Assign a Project Manager and technical team
- Provide required 10G SFP+ transceivers, fiber/copper patch cords, rack-mount kits, and all accessories as per the approved design and site survey findings.
- The Supplier shall be responsible for implementing the current system configuration and any additional requirements requested by the SRТА-City Network Team.
- The Supplier shall configure voice VIANs and test voice quality with all types of our current ip Phones and jabber application.
- The Supplier will be full responsible in the event of any incompatibility of the delivered switches with the existing infrastructure, including wired and wireless WLC and access points, Call manger CUCM, and the core switches and agg. switches. The Supplier shall take all necessary measures to ensure full interoperability.
- SRТА-City reserves the full right to reject and not accept any of the supplied switches in the event of non-compatibility with any component of the existing environment (including Access switches, call manager, or core switches), without incurring any financial liability whatsoever
- Shutdown and dismount existing switches is supplier responsibility.
- Mount and turn on new switches is supplier responsibility.

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- Any required configuration in existing devices is supplier responsibility with SRTA-City Team supervising.
- Testing voice, video calls by IP phones that connected in new switches after voice VLANs configuration is supplier responsibility.

Security and Management

- Enable secure management: SSHv2, HTTPS, SNMPv3, Syslog, NTP; enforce AAA via RADIUS/TACACS+ per the SRTA-City security Policy.
- Apply password/secret policies, configuration backups, and upgrade devices to the latest stable firmware.

Warranty and Support

- One-year smart net support

Features As Minimum

enclosure type	Rack-mountable - 1U
Ports	(48) x 10/100/1000 (PoE) + 4 x 10G SFP+
Network management Interface	10/100 Mbps Ethernet (RJ-45)
Console ports	USB (Type-B), Ethernet (RJ-45)
Maximum stacking number	
Compliant Standards	• IEEE 802.1D Spanning Tree Protocol
	• IEEE 802.1p CoS Prioritization
	• IEEE 802.1Q VLAN
	• IEEE 802.1s
	• IEEE 802.1w
	• IEEE 802.1X
	• IEEE 802.1ab (LLDP)
	• IEEE 802.3ad
	• IEEE 802.3af and IEEE 802.3at
	• IEEE 802.3ah (100BASE-X single/multimode fiber only)
	• IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports

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System software	IOS LAN BASE or DNA essential
features	RPS Support - Jumbo Frames - VLANS - Voice Vlan -VTPv2-CDPv2 - LLDP - 802.3ad LACP - PVST/PVST+ - 802.1W/802.1S-Port Fast/Uplink Fast - port CoS Trust and Override - Trusted Boundary - ACL Classification - Ingress Policing - Auto QoS - 802.1p queues - Scheduling - Priority Queuing - Configure CoS Priority Queues - Configure CoS Priority Queues - Configure Queue Weights - Configure Buffers and Thresholds - Class & Policy Maps - Modify CoS and DSCP Mapping - Weighted Tail Drop - DSCP transparency
Network security	SSH, SSL and SCP - RADIUS and TACACS+ - SNMPv3 crypto - 802.1x - 802.1x Accounting / MIB • 802.1x w/ port security • 802.1x w/Voice VLAN • 802.1x Guest VLAN • 802.1x VLAN assignment•802.1x Auth-Fail VLAN • 802.1x AAA Fail Open •802.1x WOL •802.1x MAC-Auth Bypass •802.1x Web-Auth-802.1x Multi-Domain Auth • IPv6 First-Hop Security •Layer 2-4 ACLs (Port, Time, and DSCP-based) •DHCP Snooping •DHCP Option 82 •DHCP Server•IPv6 Host •IPv6 MLD Snooping •MVR • BPDU/Root Guard • Port Security • Private VALN Edge • Storm Control • Block unknown unicast and multicast • IGMP Snooping • IGMP Filter/Throttle
Switching bandwidth (capacity) stacking	256 Gbps with stacking
Voltage range (Auto)	110V-240V
Available PoE Power	740W (for 48 ports)
Power Consumption Operational	0.68 KVA at full ports traffic 100%

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