

**National Institute of Technology Karnataka, Surathkal
Central Computer Centre,**

Corrigendum – 02

Date: 22/10/2021

With reference to the Tender Notification No. “NITK/CCC/ONLINE-IntConn-SWITCH/2020-21/DOC4 Dated 23/09/2021” and Corrigendum – 01 dated 30/09/2021 for the procurement of Interconnect Switches, the following amendments have been made with respect to few components in the technical specification. Please note that the changes in the specification.

Further the last date for submission of Tender Document is extended upto 08/11/2021 @ 04:00 PM

Component	Description (Original specification/corrigendum-01)	Revised Description (Amended)
Device Type:	Switch supporting full enterprise layer-3 manageable (image supporting IPv6 and BGP with the latest Firmware as available with Line rate non-blocking performance) with minimum 24 Ports 10 Gb 10 Base-T and atleast 2 x 40G/100Gb QSFP28 Interface enabled from day one. Switch should also support SFP+(SM/MM) and BIDI Transceivers	Switch supporting full enterprise layer-3 manageable (image supporting IPv6 and BGP with the latest Firmware as available with Line rate non-blocking performance) with minimum 24 Ports 10 Gb 10 Base-T and atleast 2 x 40G/100Gb QSFP28 Interface enabled from day one. Switch should also support SFP+(SM/MM) and BIDI Transceivers. No Port should be combo port.
Uplink Interface/Cables Requirement	Uplink interface can be split into 10/25/40/50Gig interface with split cables and 2 Transceivers, 40GbE QSFP+ with appropriate connectivity cables for uplink and HA (Note: 10G/40G module/cable should also be provided to connect on the core switch end) and CAT 6a patch cords (quantity 6 nos. per switch) for Servers and NAS connecting to Switches in redundancy mode also to be provided along with Switch.	Uplink interface can be split into 10/25/40/50Gig interface with split cables and 4 Transceivers, 40GbE QSFP+ with appropriate connectivity cables for Core Switch (Brocade VDX 8770-8) and required cables for HA (Note: 10G/40G module/cable should also be provided to connect on the core switch end) and CAT 6a patch cords (quantity 6 nos. per switch) for Servers and NAS connecting to Switches in redundancy mode also to be provided along with Switch. (The Modules to be supplied should be of the above said Brocade Core Switches /compatible)
Switching /Routing	Switching bandwidth: Minimum 860 Gbps backplane with non blocking architecture and Forwarding rate should be atleast 700 Mpps	Switching bandwidth: Minimum 960 Gbps backplane with non blocking architecture and Forwarding rate should be atleast 720 Mpps
	Throughput: Minimum 700 Mpps or better	Throughput: Minimum 720 Mpps or better
	MAC Addresses: Minimum 256K MAC addresses	MAC Addresses: Minimum 272K MAC addresses
	Should Support 4K active user configuration vlans and 4K or more multicast group	Should Support 4K active user configuration vlans and 4K or more multicast group

	<p>Should support 802.1d spanning Tree and PVST+, 802.1w, 802.1s, DCBx,PFC,VXLAN. Should have BPDU Guard or equivalent feature on edge port to auto disable port for a configurable time period to if an accidental loop occurs in the network.</p> <p>Should Support MPLS for future requirement.</p> <p>Should support aggregating and load balancing of traffic to two or more peer switches within same VLAN Should support ITU G.8032 or equivalent standard based protocol for ring backbone Should have Port based VLAN, MAC based VLAN, private vlan and 802.1 AK for dynamic VLAN propagation Should have Local, Remote and multisession port mirroring</p>	<p>Should support 802.1d spanning Tree and PVST+, 802.1w, 802.1s, DCBx,PFC,VXLAN. Should have BPDU Guard or equivalent feature on edge port to auto disable port for a configurable time period to if an accidental loop occurs in the network.</p> <p>Should support aggregating and load balancing of traffic to two or more peer switches within same VLAN. Should have Port based VLAN, MAC based VLAN, private vlan and 802.1 AK for dynamic VLAN propagation Should have Local, Remote and multisession port mirroring</p>
	<p>Support Standard based protocols for lossless transport of real time data with dynamic QOS reservation. Should have 8 Hardware QOS Queues per port, Layer 2/3/4 Access Control Lists (ACLs), Q-in-Q from day 1.Switch should have IGMP Snooping, , MLDV1/MLDv2, IGMPV1/v2/v3 from day 1.Should have Link Layer Discovery Protocol and LLDP-MED for auto configuration Should have MAC address tracking and notification for mac address addition , delete or movement in the Network Should support policy based traffic redirection and IP route compressionShould have basic dynamic routing protocols like RIPv1/v2, RIPv6, PBR,VRRP,Lite OSPF and PIM-SM/SSM from day 1 and be Scalable to PIM-DM , BGP, ISIS in same hardware</p>	<p>Support Standard based protocols for lossless transport of real time data with dynamic QOS reservation. Should have 8 Hardware QOS Queues per port, Layer 2/3/4 Access Control Lists (ACLs), Q-in-Q from day 1.Switch should have IGMP Snooping, , MLDV1/MLDv2, IGMPV1/v2/v3 from day 1.Should have Link Layer Discovery Protocol and LLDP-MED for auto configuration Should have MAC address tracking and notification for mac address addition , delete or movement in the Network Should support policy based traffic redirection and IP route compressionShould have basic dynamic routing protocols like PBR,VRRP,Lite OSPF and PIM-SM/SSM from day 1 and be Scalable to PIM-DM , BGP in same hardware</p>
Storage protocols	Should support Data Center Infra, DCB considering all License.	Should support Data Center Infra, DCB, iSCSI FCoE considering all License.
Management Function		
Configuration	Should support encrypted communication between the user accessing the device namely using all access methods CLI, GUI or NMS via features like SSHv2, SSL, and SNMPv3 and Secure FTP/TFTP	Should support encrypted communication between the user accessing the device namely using all access methods CLI, GUI or NMS via features like SSHv2, SSL, and SNMPv3 and Secure FTP/TFTP
	Switch should have openflow 1.3 for SDN or RestAPI or Netconf/XML or equivalent functionality	Switch should have openflow 1.3 for SDN or equivalent or RestAPI or Netconf/XML or equivalent functionality

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