



## **Network Switches and Cabling Phase II (Submission deadline is October 8, 2020)**

### **Purpose**

The purpose of this Request for Proposal (RFP) is to solicit proposals from qualified vendors to upgrade access layer network switches, battery backups and access points in multiple locations.

### **Overview**

CCC's network experienced several outages over the years due to hub and spoke system design with single point of failure being the single switch and single fiber uplink. CCC deployed 24 pair and 48 strand fiber optic to each building in Phase I deployment of campus fiber infrastructure. Phase II is scheduled to begin this fall. The College aims to utilize multiple fibers between building and the campus core for redundancy and flexibility. In order to meet performance expectations, the College is looking to purchase 10G capable POE+ switches. All fiber optic patch panels, racks, and equipment will need to be properly grounded.

CCC reserves the right to reject any and all proposals, and award all or part of the bid and to make the award on merit/or features of design and quality, delivery and availability of parts and service to the best interest of CCC.

### **Location: H.F. Davis Memorial Library, IT Department Core Switch**

- 2 x Ruckus ICX7750-48C 48 Ports 10G/RJ45 Chassis Replacement Server Switch (ICX7750-48C or equivalent)
- 2 x ICX7750-48C Ruckus ICX 7750 with 48x1/10 GbE RJ-45 10GBASE-T ports
- 4 x RPS9+I 500 W AC power supply; power-supply-side intake (port-side exhaust) airflow
- 4 x ICX7750-FAN-I Fan kit of 4; fan-side intake (port-side exhaust) airflow
- 4x 5m 40G-QSFP-QSFP active direct-attach copper
- 83 x Ruckus Wireless: EU support for AP End user WatchDog Support Per SZ/vSZ AP 3YR (S01-0001-3LSG or equivalent)
- 83 x Ruckus 1 AP License Upgrade for SZ-100/VSZ 3.X/SCG200/SZ300 (L09-0001-SG00 or equivalent)
- 5 x Tripplite WEBCARDLX

### **Location: Health Science**

- 1 x 16-Port PoH and 32-Port PoE+ Entry-Level Enterprise-Class Stackable Access Switch (ICX7150-48ZP-E8X10GR or equivalent)
- 1 x 48-Port PoE+ Switch (ICX7150-48PF-4X10GR-RMT3 or equivalent)
- 1 x Wireless Network device fan tray (ICX-FAN11 or equivalent)
- 1 x Power Supply for ICX7150-48ZP or equivalent (RPS20-E or equivalent)
- 4 x 10G Transceiver Module (10G-SFPP-LR or equivalent)
- 2 x Twinax Cable (10G-SFPP-TWX-001 or equivalent)
- 1 x Tripplite SMART UPS 3000VA 2880W AVR 120VPERP 9 OUT 2URM LCD USB DB9 EXTENDED RUN (SMART3000RMXL2U or equivalent)
- 1 x Tripplite External 48V 3U Rack/Tower Battery Pack Enclosure + DC Cabling for select UPS Systems (BP48V60RT-3U or equivalent)

- 1 x Tripplite Web Management Accessory Card (WEBCARDLX or equivalent)
- 1 x Tripplite 4-Post 1U Universal Adjustable Rack-Mount Shelf Kit for Wall-Mount Racks (4POSTRAILKITWM or equivalent)
- 2 x 1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 2 x 4m (13ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 6 x RUCKUS R610 Indoor 802.11ac Wave 2 Wi-Fi Access Point for Dense Device Environments (901-R610-US00 or equivalent)
- 6 x Ruckus Secure Mounting Bracket (902-0120-0000 or equivalent)

#### **Location: Agricultural / Veterinary Nursing**

- 1 x 16-Port PoH and 32-Port PoE+ Entry-Level Enterprise-Class Stackable Access Switch (ICX7150-48ZP-E8X10GR or equivalent)
- 1 x 48-Port PoE+ Switch (ICX7150-48PF-4X10GR-RMT3 or equivalent)
- 1 x Wireless Network device fan tray (ICX-FAN11 or equivalent)
- 1 x Power Supply for ICX7150-48ZP or equivalent (RPS20-E or equivalent)
- 4 x 10G Transceiver Module (10G-SFPP-LR or equivalent)
- 2 x Twinax Cable (10G-SFPP-TWX-001 or equivalent)
- 1 x Tripplite SMART UPS 3000VA 2880W AVR 120VPERP 9 OUT 2URM LCD USB DB9 EXTENDED RUN (SMART3000RMXL2U or equivalent)
- 1 x Tripplite External 48V 3U Rack/Tower Battery Pack Enclosure + DC Cabling for select UPS Systems (BP48V60RT-3U or equivalent)
- 1 x Tripplite Web Management Accessory Card (WEBCARDLX or equivalent)
- 1 x Tripplite 4-Post 1U Universal Adjustable Rack-Mount Shelf Kit for Wall-Mount Racks (4POSTRAILKITWM or equivalent)
- 2 x 1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 2 x 4m (13ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 5 x RUCKUS R610 Indoor 802.11ac Wave 2 Wi-Fi Access Point for Dense Device Environments (901-R610-US00 or equivalent)
- 5 x Ruckus Secure Mounting Bracket (902-0120-0000 or equivalent)

#### **Location: Gymnasium**

- 1 x 16-Port PoH and 32-Port PoE+ Entry-Level Enterprise-Class Stackable Access Switch (ICX7150-48ZP-E8X10GR or equivalent)
- 1 x 48-Port PoE+ Switch (ICX7150-48PF-4X10GR-RMT3 or equivalent)
- 1 x Wireless Network device fan tray (ICX-FAN11 or equivalent)
- 1 x Power Supply for ICX7150-48ZP or equivalent (RPS20-E or equivalent)
- 4 x 10G Transceiver Module (10G-SFPP-LR or equivalent)
- 2 x Twinax Cable (10G-SFPP-TWX-001 or equivalent)
- 1 x Tripplite SMART UPS 3000VA 2880W AVR 120VPERP 9 OUT 2URM LCD USB DB9 EXTENDED RUN (SMART3000RMXL2U or equivalent)
- 1 x Tripplite External 48V 3U Rack/Tower Battery Pack Enclosure + DC Cabling for select UPS Systems (BP48V60RT-3U or equivalent)
- 1 x Tripplite Web Management Accessory Card (WEBCARDLX or equivalent)
- 1 x Tripplite 4-Post 1U Universal Adjustable Rack-Mount Shelf Kit for Wall-Mount Racks (4POSTRAILKITWM or equivalent)
- 2 x 1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 2 x 4m (13ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch

## Cable

- 4 x RUCKUS R610 Indoor 802.11ac Wave 2 Wi-Fi Access Point for Dense Device Environments (901-R610-US00 or equivalent)
- 5 x Ruckus Secure Mounting Bracket (902-0120-0000 or equivalent)

**Location: Cultural Arts Center**

- 1 x 16-Port PoH and 32-Port PoE+ Entry-Level Enterprise-Class Stackable Access Switch (ICX7150-48ZP-E8X10GR or equivalent)
- 1 x 48-Port PoE+ Switch (ICX7150-48PF-4X10GR-RMT3 or equivalent)
- 1 x Wireless Network device fan tray (ICX-FAN11 or equivalent)
- 1 x Power Supply for ICX7150-48ZP or equivalent (RPS20-E or equivalent)
- 4 x 10G Transceiver Module (10G-SFPP-LR or equivalent)
- 2 x Twinax Cable (10G-SFPP-TWX-001 or equivalent)
- 1 x Tripplite SMART UPS 3000VA 2880W AVR 120VPERP 9 OUT 2URM LCD USB DB9 EXTENDED RUN (SMART3000RML2U or equivalent)
- 1 x Tripplite External 48V 3U Rack/Tower Battery Pack Enclosure + DC Cabling for select UPS Systems (BP48V60RT-3U or equivalent)
- 1 x Tripplite Web Management Accessory Card (WEBCARDLX or equivalent)
- 1 x Tripplite 4-Post 1U Universal Adjustable Rack-Mount Shelf Kit for Wall-Mount Racks (4POSTRAILKITWM or equivalent)
- 2 x 1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 2 x 4m (13ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 7 x RUCKUS R610 Indoor 802.11ac Wave 2 Wi-Fi Access Point for Dense Device Environments (901-R610-US00 or equivalent)
- 7 x Ruckus Secure Mounting Bracket (902-0120-0000 or equivalent)

**Location: Living Center East**

- 4 x 16-Port PoH and 32-Port PoE+ Entry-Level Enterprise-Class Stackable Access Switch (ICX7150-48ZP-E8X10GR or equivalent)
- 4 x Wireless Network device fan tray (ICX-FAN11 or equivalent)
- 4 x Power Supply for ICX7150-48ZP or equivalent (RPS20-E or equivalent)
- 10 x 10G Transceiver Module (10G-SFPP-LR or equivalent)
- 4 x Tripplite SMART UPS 2200VA 1920W AVR 120VPERP 9 OUT 2URM LCD USB DB9 EXTENDED RUN (SMART2200RML2U or equivalent)
- 4 x Tripplite Web Management Accessory Card (WEBCARDLX or equivalent)
- 4 x Tripplite 2-Post Heavy-Duty 2-post Front Mounting Ear Kit (UPSHDEARKIT or equivalent)
- 2 x 1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 2 x 4m (13ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 9 x Ruckus Zoneflex R650 Indoor Wi-Fi 6 (802.11ax) 4x4:4 Wi-Fi Access Point with 2.5Gbps backhaul and 6 spatial streams (901-R650-US00 or equivalent)
- 9 x Ruckus Secure Mounting Bracket (902-0120-0000 or equivalent)

**Location: Living Center North**

- 4 x 16-Port PoH and 32-Port PoE+ Entry-Level Enterprise-Class Stackable Access Switch (ICX7150-48ZP-E8X10GR or equivalent)
- 4 x Wireless Network device fan tray (ICX-FAN11 or equivalent)
- 4 x Power Supply for ICX7150-48ZP or equivalent (RPS20-E or equivalent)
- 10 x 10G Transceiver Module (10G-SFPP-LR or equivalent)
- 4 x Tripplite SMART UPS 2200VA 1920W AVR 120VPERP 9 OUT 2URM LCD USB DB9

- EXTENDED RUN (SMART2200RML2U or equivalent)
- 4 x Tripplite Web Management Accessory Card (WEBCARDLX or equivalent)
- 4 x Tripplite 2-Post Heavy-Duty 2-post Front Mounting Ear Kit (UPSHDEARKIT or equivalent)
- 2 x 1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 2 x 4m (13ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 9 x Ruckus Zoneflex R650 Indoor Wi-Fi 6 (802.11ax) 4x4:4 Wi-Fi Access Point with 2.5Gbps backhaul and 6 spatial streams (901-R650-US00 or equivalent)
- 9 x Ruckus Secure Mounting Bracket (902-0120-0000 or equivalent)

#### **Location: Living Center North East**

- 2 x 16-Port PoH and 32-Port PoE+ Entry-Level Enterprise-Class Stackable Access Switch (ICX7150-48ZP-E8X10GR or equivalent)
- 2 x Wireless Network device fan tray (ICX-FAN11 or equivalent)
- 2 x Power Supply for ICX7150-48ZP or equivalent (RPS20-E or equivalent)
- 4 x 10G Transceiver Module (10G-SFPP-LR or equivalent)
- 2 x Twinax Cable (10G-SFPP-TWX-001 or equivalent)
- 1x Tripplite SMART UPS 3000VA 2880W AVR 120VPERP 9 OUT 2URM LCD USB DB9 EXTENDED RUN (SMART3000RML2U or equivalent)
- 2 x Tripplite External 48V 3U Rack/Tower Battery Pack Enclosure + DC Cabling for select UPS Systems (BP48V60RT-3U or equivalent)
- 1 x Tripplite Web Management Accessory Card (WEBCARDLX or equivalent)
- 1 x Tripplite 4-Post 1U Universal Adjustable Rack-Mount Shelf Kit for Wall-Mount Racks (4POSTRAILKITWM or equivalent)
- 2 x 1m (3ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 2 x 4m (13ft) LC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Fiber Optic Patch Cable
- 34 x Ruckus Zoneflex H510 Wall-Mounted 802.11ac Wave 2 Wi-Fi Indoor Access Point (AP) and Switch for Dense Client Environments (901-H510-WW00 or equivalent)
- 9 x Ruckus Zoneflex R650 Dual-Band 802.11ax Wireless Access Point (901-R650-US00 or equivalent)
- 9 x Ruckus Secure Mounting Bracket (902-0120-0000 or equivalent)

### Warranty Support

Please provide any and all warranty and or annual support renewal options for one-year, three-year, five-year, seven-year, and ten-year.

### Vendor Responsibilities

1. Vendor will provide the quantity of switches needed to replace our existing switches at each site with a minimum of two 10Gbps SFP+ uplinks in LAG/LACP or equivalent according to specifications below.
2. Vendor will provide the quantity of stacking modules, transceivers, etc. according to specifications below. Third-party optics are acceptable for transceivers.
3. Vendor must provide an adequate amount of field replaceable units on site. Due to CCC's geographic location it can take up to four days for an RMA to take place. The College must have what it needs onhand to repair for an outage.
4. All equipment provided must be in newcondition. No equipment with rapid EOL dates. No refurbished or used equipment will be accepted.
5. Vendor will provide on-premise physical appliance or virtual appliance for centralized management of the network devices.
6. Vendor will provide a on-premise network access controller solution

7. Vendor will provide online training services for I.T. staff
8. Vendor will provide configuration and deployment support assistance for initial deployment
9. I.T. staff will physically install and configure all switches on site
10. Equipment will be shipped by November 8, 2020.

## Exclusions

Any project exclusions or any portion of the proposal that cannot be provided must be disclosed in an area labeled exclusions.

## Past Performance and References

Please provide a list of three academic institutions who have received services on similar engagements as the one outlined by this RFP and include the information below.

- Client name and headquarter address
- Contact name
- Telephone number
- Email address
- Length of time using your services
- Brief description of the service provided

Failure to provide suitable references to Colby Community College will result in the Supplier's bid being rejected without further consideration.

## Deadline for Proposals

Proposals will be received to the Vice President of Business Affairs, Carolyn Kasdorf, [carolyn.kasdorf@colbycc.edu](mailto:carolyn.kasdorf@colbycc.edu), until October 8, 2020. Electronic submissions via email will be accepted or submission can be mailed to 1255 S Range, Colby, KS 67701 Attention: Carolyn Kasdorf.

Vendors are required to prepare and submit, at their own cost, one signed original proposal. Submission must include the Vendor's full response including all attachments, product services and specifications. Electronic submission must be PDF or Microsoft Word format.

## Award Date

The Board meeting will be held on Monday, October 19, 2020, to select a vendor. The selected vendor will be notified after approval has been received from the Board of Trustees.

Contact Information: Please direct questions or bids to [carolyn.kasdorf@colbycc.edu](mailto:carolyn.kasdorf@colbycc.edu) or contact directly at (785) 460-5407.

## Statement of Disclosure

The board reserves the right to reject any or all bids, to accept that bid which appears to be in the best interest of the college, to waive any informalities in any part of any bid, and to reject any or all bids received after the date and time specified. Any bid may be withdrawn prior to the scheduled time for the opening of bids. The bidder to whom the award is made may be required to enter into a written contract with the college and provide a performance or public works bond as required by law or the Board of Trustees (where applicable).