Summary

2016-2017 E-Rate Network Upgrade

The Forrest County Agricultural High School District wishes to upgrade existing 10/100 network switches to Gigabit, POE, fiber connectivity and managed in order to support network growth over the next 5-7 years.

The project involves one school site located at 215 Old HWY 49 East, Brooklyn, MS 39425. Forrest County Agricultural High School District reserves the right to select the vendor who serves the best interest of the district's needs.

Schedule of Events

Event	Date
Release of RFP to service providers	01-29-2016
Deadline for Proposals/Responses	03-07-2016 3:30 PM CST
Opening of Proposals/Responses (IT & District Office)	03-08-2016
Board Approval of Bids	03-10-2016

An onsite walk through is not required of vendors submitting a proposal/response.

Proposal Binding Period

Prices quoted in The Vendor's response for all services and equipment will remain in effect for a period of at least 1 year from the issuance date of The Vendor's response. The Vendor must understand that the customer may use e-rate discounts for these services, in which case, within applicable filing window for submitting the response to the RFP, the customer will submit form 471 for funds based upon the pricing submitted by the Vendor. The SLD funding cycle may take as long as 12-18 months. In the event funding is not available, the RFP will become void.

Responses/Proposals/Quotes:

All responses/proposals/quotes must contain a notation that the chosen E-Rate billing method is Service Provider Invoice, also known as SPI.

Responses to this RFP may be submitted to Sherri McCain, Forrest County Agricultural High School District, 249 Old HWY 49 East, Brooklyn, MS 39425. <u>Do not fax or email responses</u>. All responses must be mailed to the above address or hand delivered by 3:30 pm on March 7, 2016. The responses will be opened and reviewed by the IT department and district office on March 8, 2016. The Forrest County Agricultural School Board will approve the winning bid(s) on March 10, 2016.

Basis of Award:

In keeping with the guidelines of USAC, this RFP will be awarded to the most cost effective provider that meets other bid guidelines contained in RFP. Prices will be the primary factor, but not necessarily the sole factor, in evaluating the RFP's. Other factors of consideration may be prior experience on Forrest County Agricultural High School District network, including past performance, and support personnel proximity to district. The Forrest County Agricultural High School District does not guarantee any award of contract by submitting an RFP.

These factors may be utilized in weighing the RFP responses as follows:

Factor Weight

Price - 30 points

Technological Solution (Hardware comparisons, scalability, future growth and compatibility with existing network infrastructure) – 20 points
Prior Experience (vendors experience with current network) 20 points
Turn Key Solution & Training (Vendor Setup, installation and training) – 15 points
Support Personnel located locally (Within 90 miles of district) - 15 points

Total 100 points

Vendor Registration with the Schools and Libraries Corporation

The Vendor must provide proof of registration with the Schools and Libraries Division (SLD) for reimbursement under E-Rate guidelines. If The Vendor fails to file the appropriate forms with the SLD or fails to receive an SLD Vendor Number, the Forrest County Agricultural High School District is not responsible for the discounted portion of The Vendor's bill. The Vendor must generate an invoice for the USF portion of the bill in accordance with SLD regulations. Vendor is responsible for supplying SLD Service Provider Identification Number (SPIN) with the RFP.

The Vendor must maintain Green light status with Federal Communications Commission for life of contract. If the vendor fails to maintain this status, then the customer reserves the right to cancel all contracts and agreements.

Universal Service Administrative Company Invoicing

USAC requires the Forrest County Agricultural School District to pay our share of the approved E-Rate discounted invoice, submitted by the vendor to USAC, within 90 days of the due date stated on the vendor's invoice. The awarded vendor will provide a copy of such invoice to/or notify in writing to the Forrest County Agricultural School District, prior to their invoicing USAC, for School Board approval.

All aspects of the project must comply with the Federal Communications Commission's competitive RFP requirement for Universal Service Fund (USF) support and services. It is not the policy of the Forrest County Agricultural School District to purchase on the basis of low bid only.

Quality, conformity with specifications, purpose for which required, terms of delivery, transportation charges, and dates of delivery are factors that may be used to determine the low responsible bidder.

All inquiries pertaining to this RFP should be directed in writing to:
Sherri McCain
Director of Technology
Forrest County Agricultural School District
215 Old HWY 49 East
Brooklyn, MS 39425
601.554.4140
smccain@forrestcountyahs.com

The preferred method of communication is email.

Core Server Room Switch replacements

The server room Core Switch replacement consists of replacing our current Cisco 6509 core and three 48-Port Copper blades with one (1) Cisco Catalyst 3850 (WS-C3850-24S-E) and three (3) Cisco Catalyst 2960X (WS-C2960X-48FPS-L) with stacking modules and all necessary cables or compatible equivalent.

This is a turnkey project which includes installation and configuration of the Core and three 48-Port replacement switches, including latest firmware, configuration of ports for existing PoE equipment, VLANS, support for 802.11 b/g/n/ac equipment (Access Points, Trendnet and Acti security cameras, all IP Phones and Informacast compliant IP speakers.) Vendor should provide all needed equipment including fiber patch cables, stacking modules, and fiber converters. Vendor will provide training to the IT staff on the replacement solutions.

Although our current network is Cisco based, the replacement equipment does not have to be of the Cisco brand – it must be of compatible equivalent specs and it must work on our current network, supporting all current equipment.

Core and Server Room Switch Requirements:

All new equipment

One (1) Cisco Catalyst 3850 (WS-C3850-24S-E) or compatible equivalent with the following specs:

- Integrated wireless controller capability
- Up to 40G of wireless capacity per switch (48-port RJ45 models)
- Support for up to 100 access points and 2000 wireless clients on each switching entity (switch or stack)
- 24 10/100/1000Mbps data PoE+
- 24 100Mbps/1/2.5/5/10 Gbps
- 12- and 24-port 1 Gigabit Ethernet
- Scalability and resiliency with 480 Gbps of stack throughput
- Power redundancy
- Dual redundant, modular power supplies and three modular fans providing redundancy
- Full IEEE 802.3at (PoE+) with 30W power on all copper ports in 1 rack unit (RU) form factor
- Software support for IPv4 and IPv6 routing, multicast routing, modular quality of service (QoS), Flexible NetFlow (FNF), and enhanced security features
- Enhanced limited lifetime warranty with next business day advance hardware replacement

- Multigigabit technology with autonegotiation of multiple speeds (100 Mbps, 1 Gbps, 2.5 Gbps, and 5 Gbps on Cat 5e cable and up to 10 Gbps over Cat 6a cabling) on switch ports
- Support for Cat 5e, Cat 6, and Cat 6a or above.
- PoE power (PoE, PoE+, and UPOE) for all the supported speeds and cable types
- IP unicast routing protocols, (static, RIPv1, RIPv2, RIPng, EIGRP stub)
- Limited static routing
- Layer 3 load balancing and redundancy
- Advanced IP unicast routing protocols (OSPF, EIGRP, BGPv4, and IS-ISv4)
- IPv6 routing (OSPFv3 and EIGRPv6).
- Policy-based routing (PBR)
- Protocol-independent multicast (PIM) for IP multicast routing
- IPv6 addressing
- Switch-port autorecovery

Three (3) Cisco Catalyst 2960X (WS-C2960X-48FPS-L) with stacking modules and cables or compatible equivalent with the following specs:

- 48 Gigabit Ethernet ports with line-rate forwarding performance
- Gigabit Small Form-Factor Pluggable (SFP) or 10G SFP+ uplinks
- FlexStack Plus for stacking of up to 8 switches with 80 Gbps of stack throughput (optional)
- Power over Ethernet Plus (PoE+) support with up to 740W of PoE budget
- USB and Ethernet management interfaces
- Application visibility and capacity planning with integrated NetFlow-Lite
- LAN Base
- Enhanced limited lifetime warranty (E-LLW) offering next-business-day hardware replacement
- MAC-based VLAN assignment
- Comprehensive 802.1X (Flexible Authentication, 802.1x Monitor Mode, and RADIUS Change of Authorization)
- IPv6 First-Hop
- Device Sensor and Device Classifier
- Private VLAN Edge
- Multidomain
- Access Control Lists (ACLs) for IPv6 and IPv4 for security and QoS ACEs (VLAN ACLs, Router ACLs, and Port-based ACLs)

- Secure Shell (SSH) Protocol, Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3)
- Switched Port Analyzer (SPAN), with bidirectional data support
- TACACS+ and RADIUS authentication
- MAC Address Notification
- Multilevel security on console access
- Bridge protocol data unit (BPDU) Guard
- Spanning Tree Root Guard (STRG)
- IGMP filtering
- Dynamic VLAN assignment
- Cross-stack EtherChannel
- Flexlink
- IEEE 802.1s/w Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP)
- Per-VLAN Rapid Spanning Tree (PVRST+)
- Switch-port auto-recovery

Outlying / Edge Switch replacements

The outlying / edge switch replacement consists of replacing approximately nineteen (19) of our outlying switches along with nineteen (19) UPS battery backups for the outlying switches, and Ten (10) 1000Base-SX SFP Transceiver Modules.

No installation or configuration is needed on the outlying / edge switches.

This project does not require a walk through.

Although our current network is Cisco based, the replacement equipment does not have to be of the Cisco brand – it must be of compatible equivalent specs and it must work on our current network, supporting all current equipment.

Outlying / Edge Switch Requirements:

All new equipment

- Nineteen (19) Cisco Catalyst 2960X (WS-C2960X-48FPS-L) or compatible equivalent with the following specs:
 - 48 Gigabit Ethernet ports with line-rate forwarding performance

- Gigabit Small Form-Factor Pluggable (SFP) or 10G SFP+ uplinks
- FlexStack Plus for stacking of up to 8 switches with 80 Gbps of stack throughput (optional)
- o Power over Ethernet Plus (PoE+) support with up to 740W of PoE budget
- USB and Ethernet management interfaces
- Application visibility and capacity planning with integrated NetFlow-Lite
- o LAN Base
- Enhanced limited lifetime warranty (E-LLW) offering next-business-day hardware replacement
- MAC-based VLAN assignment
- Comprehensive 802.1X (Flexible Authentication, 802.1x Monitor Mode, and RADIUS Change of Authorization)
- o IPv6 First-Hop
- Device Sensor and Device Classifier
- Private VLAN Edge
- Multidomain
- Access Control Lists (ACLs) for IPv6 and IPv4 for security and QoS ACEs (VLAN ACLs, Router ACLs, and Port-based ACLs)
- Secure Shell (SSH) Protocol, Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3)
- Switched Port Analyzer (SPAN), with bidirectional data support
- TACACS+ and RADIUS authentication
- MAC Address Notification
- Multilevel security on console access
- Bridge protocol data unit (BPDU) Guard
- Spanning Tree Root Guard (STRG)
- IGMP filtering
- Dynamic VLAN assignment
- Flexlink
- IEEE 802.1s/w Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP)
- Per-VLAN Rapid Spanning Tree (PVRST+)
- Switch-port auto-recovery
- Ten (10) Cisco GLC-SX-MMD= 1000Base-SX SFP MMF 850nm, DOM Transceiver Modules or compatible equivalent.
- Nineteen (19) APC SMART-UPS SC 450VA 280 Watt 450VA Rack mountable battery backups or compatible equivalent for the outlying switches.