

Request for Proposal – Jefferson County School District –updated 11/14/2023.

Internal Connections for Wired Network and Wireless Network

Description

The Jefferson County School District (JCSD) is accepting proposals for the upgrade and/or installation of its wired (LAN) and wireless local area network (WLAN) throughout the district. All schools will require installation of any required network devices, both wired and wireless, maximizing the use of the existing cable infrastructure and its upgrade, as necessary. **A Ruckus wireless and switching solution is preferred or equivalent.**

The installation of the network equipment will be a turnkey operation, placing the responsibility of the end-to-end network connectivity and warranty within the winning bidder's area of responsibility. **Subcontractors may not be used.**

Existing Network

The existing network consists of POE Ruckus Wireless 7000 series switches. POE 7100 series switches on the edge and fiber 7700 series at the 2 cores. The 7400 series switches provide routing and vlan services within the location and to the district office and are housed in each location's MDF. Network traffic between MDF/IDF transfers at 10 Gbps via multimode fiber. The local school LAN is laid out in a hub and spoke configuration, the MDF being the hub and IDFs making up the spoke endpoints.

JCSD's wide area network (WAN) also operates in a hub and spoke configuration, the district office (DO) being the hub. Four of the schools in the district are connected to the DO via leased, 10Gbps fiber optic circuit. The sixth school is connected to the DO via district owned fiber at a transmission rate of 10Gbps. Desktop rates are 1 Gbps.

Currently we have 100% wireless coverage throughout the district with clustered Ruckus Wireless SmartZone 100 Controllers and Ruckus Wireless R510 Access Points. We currently have 249 R510 wireless access points.

We currently have 40 UPS for all our networking closets.

Below is a break down per school:

School	Ruckus Wireless 7750 (48 port)	Ruckus Wireless 7450 (48 port)	Ruckus Wireless 7150 (48 port)	Ruckus Wireless 7150 (24 port)
BOE (Core)	1	1	5	
CES		3	5	
LA		2	10	1
WES	1	4	12	2
JCMS		4	10	1
JCHS		6	15	1
Total	2	20	57	5

Upgrade Network

1. The upgraded network will continue to provide 1 Gbps connectivity to the desktop and 10 Gbps connectivity between MDF/IDF's with the capability of providing 25GB connections between the MDF and all IDF's. The switching solution will provide a minimum of 2.5 Gbps for all new wireless access points. The MDFs at the other locations will be connected to the existing WAN circuits. All installations will be in adherence to the instructions below and/or to appropriate standards, at the discretion of the JCSD or their representative. The vendor will provide all infrastructure, network equipment installation and configuration as necessary. The configuration shall provide the best and most efficient use of the network including the use of, but not limited to security, VLANs, Quality of Service (QoS), Class of Service (CoS) and monitoring as determined by both the vendor and the JCSD. Power over Ethernet (PoE) will be provided using the latest standards. **JCSD prefers a Ruckus Wireless and Switching solution or equivalent. JCSD only wants 48 ports POE edge switches. Cloud based solutions will not be accepted.**
2. The wireless shall be configured to cover 100% of the schools and district office with the capability of handling mobile labs of 30 portable computers in every classroom simultaneously. They will conform to the latest standard of Wi-Fi transmission, which at the point of the creation of this document is 802.11ax. **High density wireless access points will conform to the Wi-Fi 7 standard.**

Instructions

The following information applies to both the wireless and wired LAN installations. The proposed installation must meet the following minimum requirements:

1. **Subcontractors may not be used for any part of this RFP.**
2. Installation, testing, and labeling is to be done in a professional manner. Documentation must be provided.
3. All patch cables are to be factory manufactured. One foot patch cables will be provided if needed.
4. A Site survey/walkthrough with the winning service provider will be required to be completed with a member of the Jefferson County District's technology staff to confirm location and wireless access points prior to installation.
5. The rack shall be cabled in a way that the patch point and switch port that it's connected to be readily identifiable. This can be done through labeling, cable management organization (i.e., Port 1 on the patch panel connects to Port 1 on a switch and so on), or any other method. This method shall be demonstrated and approved prior to the commencement of the installation phase of the project.
6. Patch panels and work area outlet (WAO) labeling scheme must be coordinated with the JCSD.
7. Each MDF/IDF must allow for 20% growth of data connections.
8. Bidders will bid to supply all needed racks, patch panels, and all needed network equipment. A layer 3/4 device shall be provided at each location. The District reserves the right to use existing switches and racks instead of the proposed.

9. **The wireless access point must be able to support 802.11ax at a minimum. High density wireless access points will support 802.11be (Wi-Fi 7).**
10. **The vendor must provide two on-premises wireless controllers configured in a cluster. Again, Cloud Based Solutions will not be accepted.**
11. Must support free, user-friendly guest access to allow administrators (or IT department members) to grant access to specific areas while limiting access to other areas.
12. Bidders will bid to supply Uninterruptible Power Supplies (UPS) in each MDF/IDF. The JCSD will work with the winning service provider to determine the quantity, size and type of UPS's needed to provide the minimum run time. The JCSD reserves the right to use existing UPSs in place of and/or in addition to the proposed.
13. All room/building penetrations must be sleeved and properly fire stopped by Georgia standards.
14. Upon completion, the entire system must be certified to run from point to point. Electronic copy of test results is to be provided to the JCSD.
15. Basic, on-site training on installed, E-RATE eligible equipment will be provided.
16. Label each piece of equipment with funding year and FRN # in a location that is easily sight accessible, for example: "FY 2024 FRN # 12345678".

Preferred Bill of Materials or Equivalent

Qty	Model	Description
3	ICX8200-24FX	ICX 8200 Switch
20	ICX8200-48ZP2-E2	ICX 89200 Switch-1480 W POE
62	ICX8200-48P	ICX 8200 Switch
40	10G-SFP-MM-85	10 Gigabit Optic Transceiver Multimode 850nm
12	10G-SFP-SM-10	10 Gigabit Optic Transceiver Singlemode 10K
8	10G-SFPP-TWX-P-0108	Direct Attach SFP+ to SFP+ passive copper cable
2	PE1-S144-US05	SmartZone 144 Controller Appliance
7	901-R770-US00	R770 Wifi 7 High Density Wireless Access Points
242	901-R650-US00	R650 dual band 802.11abgn/ac/ax Wireless Access Points
85	L09-00001-SGCX	Switch management license for SZ-144
40	OR2200PFCRT2U	Sinewave UPS
249	BNDL-SZWA-REC5	SZ AP Mgmt License for SZ144/vSZ – includes support for 5 years

Documentation

1. The vendor shall submit the following documentation to the JCSD within 30 days of installation. This documentation shall be provided in digital format. The following is a list of documentation to be used as a guideline for submission. The JCSD reserves the right to add to this list as it deems necessary. All digitally submitted documentation will be in an editable format and state, in order that it may be updated in the future as part of future enhancements and changes. If the JCSD does not have the means to edit this documentation, it is to be supplied as well.

2. End user manuals and guides.
3. A detailed inventory of each location will be submitted. Overall network equipment counts, the total number of terminations and the amount available are to be included. It will also include diagrams outlining network equipment location, layout and quantity with serial numbers, firmware and/or software versions.
4. A schematic layout of all patch panel/switch connections, a detailed rack elevation and wireless access point locations.
5. A network diagram depicting the actual location of all network work area outlets and wireless access points at a site including a table displaying drops by room. All WAOs (work area outlets) shall display labeling.
6. Documented and/or remarked network equipment configurations to include but not limited to:
 - a) IP Address List
 - b) Usage
 - c) Schemes
 - d) VLANs
 - e) Subnetting
7. Any other documentation related to the project.

Vendor Requirements

The service provider must meet the following minimum requirements:

1. Have a minimum of three years' experience in installation of data systems, including the installation, configuration and securing of wireless LANs.
2. Possess a current Georgia Electrical Contractor's license; license number to be submitted with bid.
3. Preference will be given to vendors that offer network equipment that provides a manufacturers' **lifetime warranty**. Include proof of current partnership with manufacturer with bid.
4. On-site vendor support should be available within a twenty-four (24) hour period.
5. Provide proof of liability insurance and worker's compensation insurance.
6. Provide references of three completed projects of similar size and complexity with bid. Include contact person's name, address, and telephone number.
7. Ability to complete the project within the negotiated time frame. **Subcontractors may not be used for any part of this RFP.**
8. Provide a Service Provider Information Number (SPIN) and agree to receive a portion of the payment from the Schools and Libraries E-Rate Funding program if such funding is awarded.

9. E-Verify affidavit must be submitted for all vendors and subcontractors.

Proposals/Bids

All contracts and work entered into as a result of this RFP will be contingent upon the specific funding of the FRN at the percentage rate submitted for.

The Jefferson County School District reserves the right to reject any or all responses, regardless of the SLD funding status. The JCSD will disqualify any proposal that is determined to be incomplete or non-responsive. The JCSD reserves the right to negotiate with the apparent acceptable vendor(s).

Price alone will not be the determining factor. Award will be based upon those considerations which are in the best interest of JCSD and will be made to the most responsive, responsible bidder whose proposal is judged to be the most effective and economical for the purpose intended, according to the requirements and specifications stated in the Request for Proposal and meet the qualifications as listed on the E-rate bidding process.

JCSD will utilize but not be limited to the following criteria in reviewing the submission:

1. Price
2. Prior Experience
3. Ability to meet the JCSD needs
4. Personnel Qualifications
5. Management Capabilities

Contracts will take effect July 1, 2024, and continue through June 30, 2025, pending USAC approval. The contracts will be extended accordingly should an extension be permitted by the USAC.

Proposals/Bids must be received by 12:30 pm (EST), December 20, 2023, via e-mail only to Lynn Hopper at the following address: hopperl@jefferson.k12.ga.us. Proposals received after the exact time and date noted will NOT be considered for the bid process.

Jefferson County School District (JCSD)
1001 Peachtree Street
Louisville, GA 30434
(478) 625-7626