STARKVILLE OKTIBBEHA CONSOLIDATED SCHOOL DISTRICT

REQUEST FOR SEALED BID

SOCSD Ethernet Switch 2019 RFP

Starkville Oktibbeha Consolidated School District Technology Department 401 Greensboro Street Starkville, MS 39759

Specification Response Form Deadline: Friday, March 18, 2019, 9:30 AM Bid Time: March 18, 2019, 10:00AM Proposal Opening: Monday, March 18, 2019, 10:30AM

BIDDING OPENS AT 10:00 AM



BIDDER SHALL COMPLETE BY CHECKING THE FOLLOWING.

SOCSD Ethernet Switch RFP

Throughout this document, the word "District" or "SOCSD" refers to Starkville Oktibbeha Consolidated School District.

Subject

The Starkville Oktibbeha Consolidated School District is seeking proposals to add, upgrade and replace the network switches. SOCSD is looking to architect its campus using the most advanced technology currently available on the market. With the intent to be able to use the selected products for minimally 5-years. It is strongly encouraged that all versions of recommended product consist of the most current product lines available – not versions of older technology that simply have new or revised components.

Purpose

This RFP is for equipment only. No installation services are being sought. Support of the solution must be provided directly to district staff members rather than going through the vendor providing the quote. SOCSD is continually expanding our network infrastructure use by students and staff; therefore, we are upgrading and expanding the switch infrastructure to meet the growing needs. The purpose of this RFP is to purchase network switches for our schools as we expand our network infrastructure.

Background

The SOCSD network includes 10 campuses, which connect to the Overstreet Data Center via 10 GB fiber. All campuses share the 1 GB internet connection located there. All traffic in and out of the district will pass through the firewall. It is expected that both the connections to the campuses and the internet connection will increase within the next 2 years. There are approximately 5600 users in the district.

Terms used throughout this RFP

USAC – Universal Service Administrative Company SPAC - Service Provider Annual Certification

SPIN – Service Provider Identification Number Service Provider – Vendor (Used Interchangeably)

General Requirements

- Bids must include a network management solution that will allow for remote management, upgrades, and deployment of devices. Details of the preceding must be included within the submitted bid packet with proposal.
- The Partnership School must include two floor mount racks, one per closet.
 - These relay racks must be anchored to the floor,
- Switches must be able to support VoIP, Wireless, and Data.
- All School level Switches must be
 - o PoE+
 - o Minimum 2 10Gb SFP+ uplink ports that supports 10/25/40/50 GbE
- All Bid submitted packages must include specifications of exact module switches and accessories that are being bid.
- Data Center Core Switch must include enough SFP+ ports to accommodate all schools core connections and speeds. See

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attached SOCSD schematic.

- The bidder must be registered as a service provider with the Schools and Libraries Division (SLD), have a Service Provider Identification Number (SPIN), and comply with all SLD service provider requirements. The bidder must provide the SPIN number in the bid. SOCSD reserves the right to disallow any bid without a SPIN number included in the proposal.
- SOCSD reserves the right to adjust quantities depending on bid results and the amount budgeted.

This RFP package consists of the following sections

General Conditions
Detailed Specifications
District Responsibilities
The Vendor's responsibilities

Proposal Forms

Send sealed proposals (two copies) and supporting documentation to:

Dr. Eddie Peasant SOCSD NGFW 2018 RFP 401 Greensboro Street Starkville, MS 39759

Do Not Fax Proposals. Proposals will be received by the District at the address shown above **until 5:00 pm on 3/15/2019**. It must be mailed to the address above in time for delivery before the closing date or hand delivered. Proposals shall NOT include pricing.

Schedule of Events:

Release of RFP to vendors
Mandatory Site Visit
Specification Response Form Deadline
Bid Date/Time
Bid Proposal Opening

2/13/2019 02/26/2019 or 02/28/2019 03/18/2019 9:30 AM 03/18/2019 10:00 AM 03/18/2019 10:30 AM

Inquiries

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All correspondence and inquiries regarding this RFP must be done via Email:

<u>dhill@starkville.k12.ms.us, vaughn@southernprocurement.com, and tevans@starkville.k12.ms.us.</u> If a vendor does not receive a response within 24 hours, it is the responsibility of the vendor to call **David Hill or Tiffani Evans at 662-615-0010** and confirm that the email message was received.

Basis of Award

- 1. E-rate approval by USAC
- 2. Provider must have current USAC SPAC.
- 3. Overstreet Elementary School, Armstrong Middle School, and Starkville High School will be subject to the availability of funds
- 4. Approved by the Starkville Oktibbeha Consolidated School District School Board.
- 5. Must include three references of similar application, size, and complexity.
- 6. Must be able to secure any necessary permits.
- 7. Helpdesk and Network Management System. (24x7x365)
- 8. Lowest and/or best bid with price being the primary factor
- 9. Service Provider MUST complete the MANDATORY walk through. NO PROPOSALS WILL BE ACCEPTED FROM SERVICE PROVIDERS WHO DO NOT COMPLETE THE MANDATORY SITE VISIT.

General Conditions

Delivery of Bids

Any interpretation of the documents will be made by written addendum only issued by the Superintendent, Deputy Superintendent or Director of Technology and a copy of such addendum will be posted on the district web site. The district will not be responsible for any other explanation of the proposed document.

As per Mississippi Code of 1972, as amended; SEC. 31-7-13, Bid requirements and exceptions; (iv) no addendum to these bid specifications shall be issued by the district within twelve (12) hours of the date and time herein stated for receipt of bids.

All bids must be submitted in accordance with Section 31-7-13 of Mississippi code of 1972 as amended and must be properly executed and signed by a responsible officer or employee of the Bidder.

Bids shall be submitted online only at the Southern Procurement web portal located at www.southernprocurement.com. Bidders shall register and execute the Southern Procurement Supplier Agreement prior to bidding. No exceptions shall be made.

Bids should be checked before submission for accuracy and correctness since the SOCSD School Board WILL NOT be responsible for any errors for which the bidder is responsible.

The district, in its sole and absolute discretion, reserves the right to reject bids from Bidders who submit poorly completed bids.

Bid Information

All disclosures of bid information to interested parties will be made in compliance with the Starkville Oktibbeha Consolidated School District policies and procedures established in accordance with the Mississippi Public Records Act of 1983 defined in Section 25-61 of the Mississippi Code.

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Due to the nature and diversity of the proposals, a significant amount of time may be required to determine which proposal provides the best option for Starkville Oktibbeha Consolidated School District. The evaluation process will not be complete until the district has determined the best proposal based on all factors.

Right to Reject Bids

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The Starkville Oktibbeha Consolidated School Board reserves the right to reject any and/or all bids or any groups thereof and to waive any defect or informality in any bid or bidding procedures.

Line Items:

Line Item 1 – Partnership Schools Switches – Total Cost

Line Item 2 - Overstreet Switches - Total Cost

Line Item 3 – Armstrong Switches – Total Cost

Line Item 4 – Starkville High School Switches – Total Cost

Line Item 5 - Management Software - Total Cost

Detailed Specifications

The specifications provided in this section are intended to convey the characteristics of the ethernet switch, which must meet the following requirements:

School Edge Switches

The proposed solution must provide a 10/100/1000Base-TX Ethernet switch solution that meets the requirements provided below. Your response should describe how your offering would meet these requirements. Vendors must provide clear and concise responses, illustrations can be provided where appropriate. Any additional feature descriptions for your offering can be provided, if applicable.

I. DETAILED SPECIFICATIONS - SWITCHES

Must provide a stackable switch with 12, 24 or 48 10/100/1000Base-TX ports with flexible port configurations providing the ability to support 1000Base-X SFP or 10GBaseX-SFP+ uplink ports. Port density is determined per building/location as detailed below. Please detail the recommended solution for each building/location with details on the switching capacity and system performance of the recommended switch(es).			
All switches must support line rate performance with the 48 port switches supporting system performance of at least 176 Gbps aggregate switch bandwidth and 130 Mpps forwarding rate.			
Should support standalone switches in the same switch family that support extended temperatures with an operating range of OTC to 60TC. Please describe the available switch offerings including port densities.			
Must support flexible stacking options with an option for long distance stacking connectivity of up to 40km. Please describe the supported stacking capabilities.			
Must support stacking of up to eight units in a stack.			
Must support 802.3af and 802.3at PoE+ with the ability of supporting up to 30 watts of PoE power per switch port. Please describe how the solution can achieve this.			
Must support redundant power supplies as an option. Please describe the power supply configuration for the recommended switches.			
Must support SNMPv1, SNMPv2c, and SNMPv3			

Must support RMON (Statistics, History, Alarms, Events)	
Must support routing protocols including: static routes, RIPv2, RIPng, VRRP and OSPF v2 /v3 (edge-mode). Please describe if any licenses are required to enable these capabilities.	
Must support multicast protocols including: MVRP, IGMP v1/v2/v3, MLD v1/v2, PIM-SM and PIM-SSM. Please describe if any licenses are required to enable these capabilities.	
Must support the ability to authenticate multiple users on a single port via 802.1X, Web or MAC at the same time.	
Must support dynamic role-based policy, independent of the VLAN assigned to the port, to secure and provision network resources based upon the role the user or device plays within the network. Please describe the capabilities and integration with the SNMP management platform.	
Must support bandwidth policing and rate limiting. Please describe the implementation.	
Must support up to 8 QoS queues per port	
Must support high availability network protocols. Please describe any specific features supported by the switch to ensure high availability.	
Must support 802.1w Rapid Reconfiguration of Spanning Tree and 802.1s Multiple Spanning Trees	
Must support Port mirroring options (one-to-many, many-to-many)	
Must support 802.3ad Link Aggregation. Please specify the number of LACP groups.	
Must support LLDP and LLDP-MED	
Must support RADIUS Accounting and TACACS+	
Must support MAC security with lockdown and limit capabilities	

Must support IEEE 802.1 Audio Video Bridging to enable real-time audio/video transmission over Ethernet. Please describe if any licenses are required to enable this capability.			
Must support Denial of Service (DoS) protection. Please describe the switch capabilities to protect against DoS attacks.			
Must support a Lifetime Warranty that includes sustaining releases for software, phone support and advanced hardware replacement. Please describe the warranty that is provided.			
School MDF Switches			
The proposed solution must provide a stackable 10/100/1000Base-TX Ethernet switch solution that meets the requirements provided below.			
Port density is determined per building/location as detailed below. Please detail the recommended solution for each building/location with details on the switching capacity and system performance of the recommended switch(es).			
Must offer a stackable switching solution that supports flexible port configurations providing the ability to support 10/100/1000Base-TX and 1000Base-X SFP or 10GBaseX-SFP+ uplink ports. Please describe the available switch offerings including port densities.			
Must provide a stackable switch with 24 or 48 10/100/1000Base-TX ports and 1000Base-X SFP ports. 48 port switch must offer system performance of at least 188 Gbps switch bandwidth and 139 Mpps forwarding rate. Please describe the performance levels for the recommended switching solution.			
Must provide a stackable switch with 24 or 48 10/100/1000Base-TX ports and four 10GbE SFP+ ports. 48 port switch must offer system performance of at least 260 Gbps switch bandwidth and 193.4 Mpps forwarding rate. Please describe the performance levels for the recommended switching solution.			

Must support flexible stacking options with an option for high speed stacking of up to 84 Gbps using dedicated stacking ports. Please describe the available stacking methods	
It is preferred that the 10 Gigabit Ethernet modules will also be able to accept standard Gigabit SFP transceivers. Please describe the capability of your switch.	
Must support redundant modular power supplies. Please describe the power supply configuration for the recommended switches.	
Must support 802.3af and 802.3at PoE+ with the ability to support up to 30 watts of PoE power per switch port. Please describe how the solution can achieve this.	
Must support IEEE 803.3az Energy Efficient Ethernet	
Must support stacking of up to eight units in a stack	
Must support SNMPv1, SNMPv2c, and SNMPv3	
Must support RMON (Statistics, History, Alarms, Events)	
Must support routing protocols including: Static Routes, OSPF v2/v3, RIPv2, RIPng, VRRP. Please describe if any licenses are required to enable these capabilities.	
Must support multicast protocols including: MVRP, IGMP v1/v2/v3, MLD v1/v2, PIM-SM and PIM-SSM. Please describe if any licenses are required to enable these capabilities.	
Must support the ability to authenticate multiple users on a single port via 802.1X, web or MAC at the same time	
Must support dynamic role-based policy, independent of the VLAN assigned to the port. Please describe the capabilities and integration with the recommended SNMP management platform.	
Must support bandwidth policing and rate limiting. Please describe the implementation.	
Must support up to 8 QoS queues per port	
Must support high availability network protocols. Please describe any specific features supported by the switch to ensure high availability.	
Must support 802.1w Rapid Reconfiguration of Spanning Tree and 802.1s Multiple Spanning Trees	

Must support Port mirroring options (one-to-many, many-to-many)						
Must support 802.3ad Lir	nk Aggregation. Please specify the	e number of LA	CP groups			
Must support LLDP and L	LDP-MED					
Must support RADIUS Ac	counting and TACACS+					
Must support MAC secur	ity with lockdown and limit capab	oilities				
Must support sFlow v5						
1	to extract and transport raw netong and analysis by and analytics epact.			•		
Must support Denial of S attacks.	ervice (DoS) protection. Please d	escribe the sw	itch capabilities to pr	otect against DoS		
	Warranty that includes sustaining lease describe the warranty that	_	oftware, phone supp	ort and advanced		
The Partnership School Switch Needs: One Edge Switch Main Closet. Multi SFP+ ports. Six School MDF Switches Main Closet. All necessary stacking cables. Four MultiMode 10GB transceivers. Main Closet. Six School MDF Switches Second Floor Closet. All necessary stacking cables. Four MultiMode 10GB transceivers. Second Floor Closet.						
I am aware that a walkthrough is required, and that proposals lacking the walkthrough portion of this RFP shall be rejected.						
Data Connections:						
From: Location To: Location Qty Min Bandwidth Max Bandwidt					1	
Overstreet Elementary	Starkville High School	2 Pairs-	10 Gbps	40+ Gbps		
School Overstreet Elementary School	Armstrong Middle School	4 fibers 2 Pairs- 4 fibers	10 Gbps	40+ Gbps		
Overstreet Elementary School	Overstreet Elementary Henderson Ward Stewart 2 Pairs- 10 Gbps 40+				Gbps	
Overstreet Elementary School 2 Pairs-School 4 fibers 40+ 6				Gbps		
				Gbps		

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Overstreet Elementary	East Alternative School	2 Pairs-	10 Gbps	40+ Gbps		
School		4 fibers				
Overstreet Elementary	County Building Office	2 Pairs-	10 Gbps	40+ Gbps		
School		4 fibers				
Overstreet Elementary	Emerson Family Center	2 Pairs-	10 Gbps	40+ Gbps		
School		4 fibers				
District Building Informat	tion:					
School/Location		Address				
Overstreet Elementary S	chool	307 S Jackson St	treet			
		Starkville, MS 39759				
Starkville High School		603 Yellowjacket Drive				
<u>-</u>		Starkville, MS 39759				
Armstrong Middle School		303 McKee Street				
		Starkville, MS 39	9759			
Henderson Ward Stewart Elementary School		200A Dr Martin Luther King, Jr. Drive West				
		Starkville, MS 39	9759			
Sudduth Elementary School 101 Greenfield Street						
		Starkville, MS 39	9759			
West Elementary School		127 Sturgis Maben Road				
		Sturgis, MS 397	69			
East Alternative School		2926 16th Section Road				
		Starkville, MS 39	9759			
Emerson Family Center		1504 South Louisville Street				
		Starkville, MS 3	9759			
County Building Office		106 Main Street				
		Starkville, MS 3	9759			

II. WARRANTY

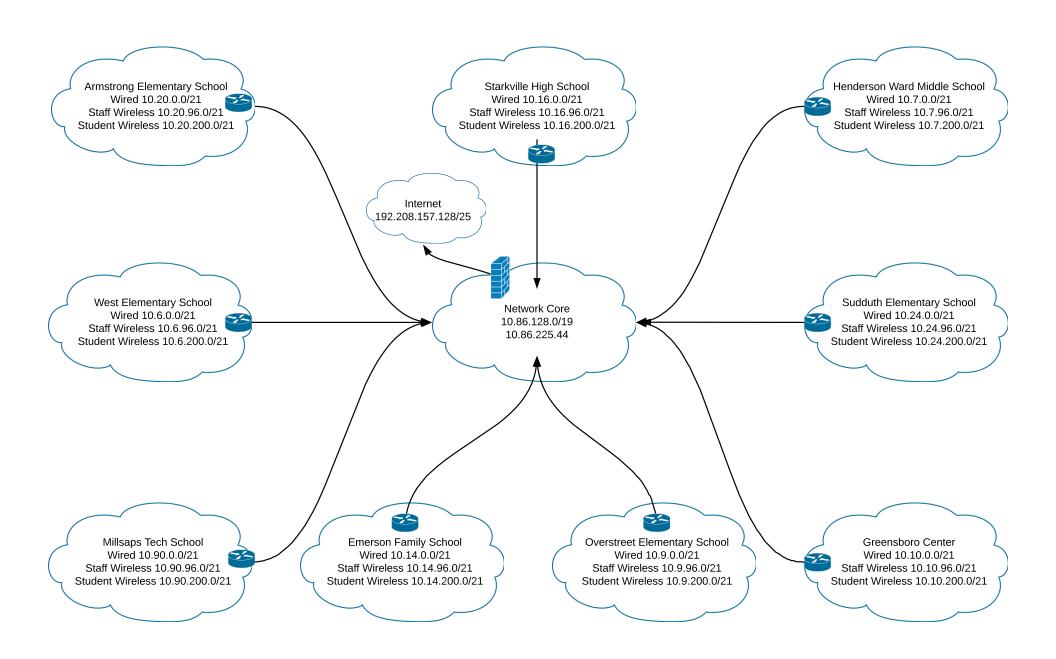
In the space below, describe your manufacturer warranty:	

Company Name of Service Provider	
Corporate Headquarters Address	
City State Zip	
Service Provider Contact Name	
Service Provider Contact Phone Number	
Service Provider Contact Email Address	
Address of Mississippi Office	
City State Zip	
24 Hour Toll Free Help Desk Phone Number	
VI. SPECIFICATION RESPONSE FORM COMPLETE DOCUMENT CHECKLIST AND BID TRAINING ACKNOWLEDGEMENT	
Please include all below documents in order for your Specification Response Form to be considered:	
Specification Response Form	
SP Supplier Agreement	
I have been trained in the use of the Southern Procurement Reverse Auction Platform and understand my responsibilities under the SP Supplier Agreement	

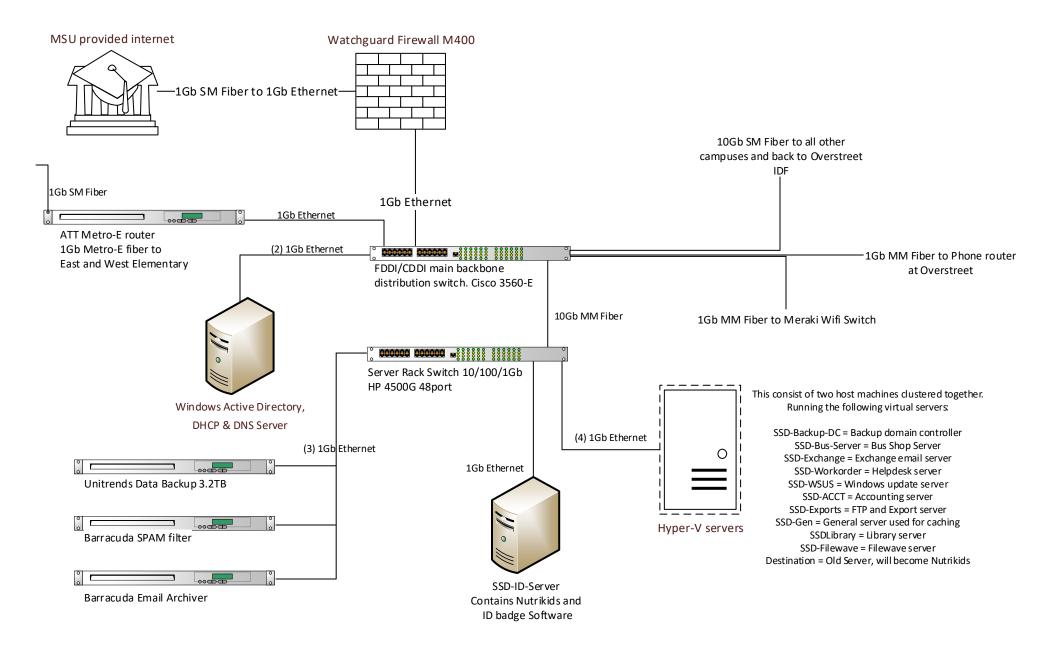
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INFORMATION REQUIRED BY SOUTHERN PROCUREMENT:

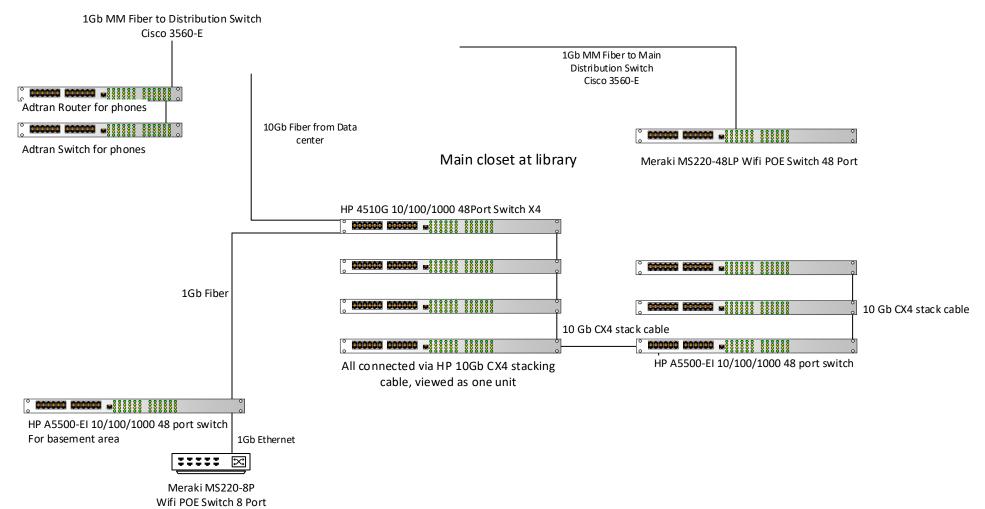
ON:		



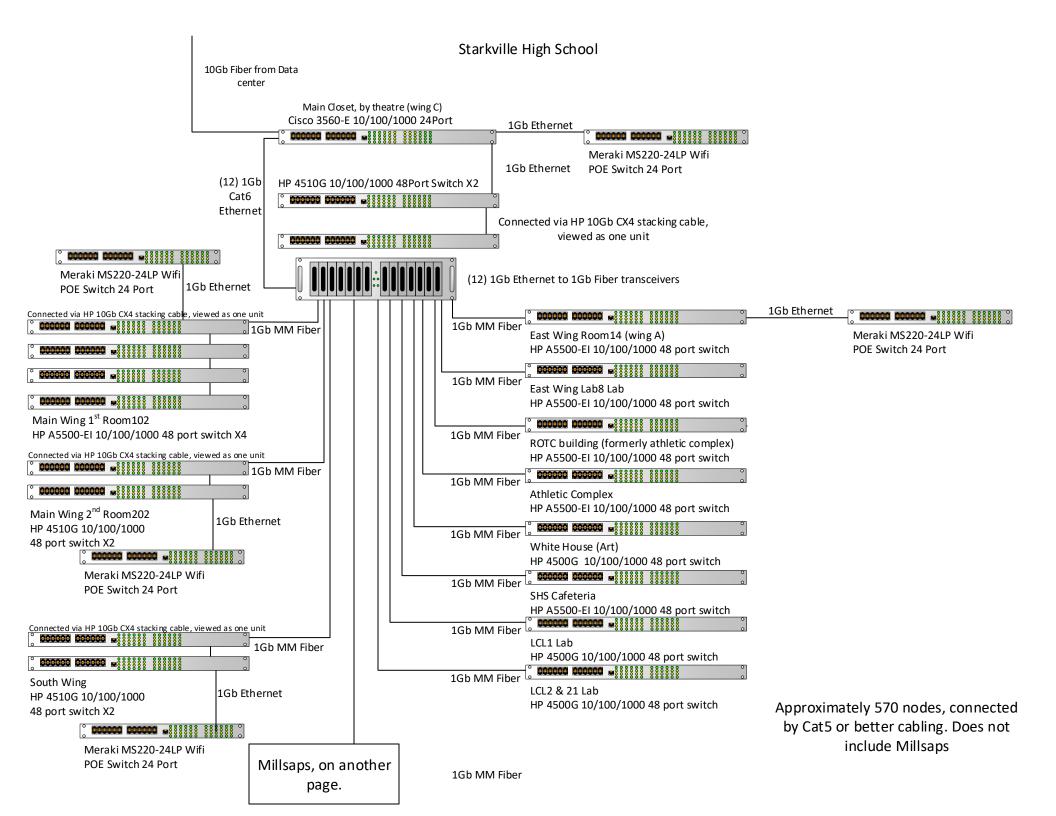
Main Datacenter



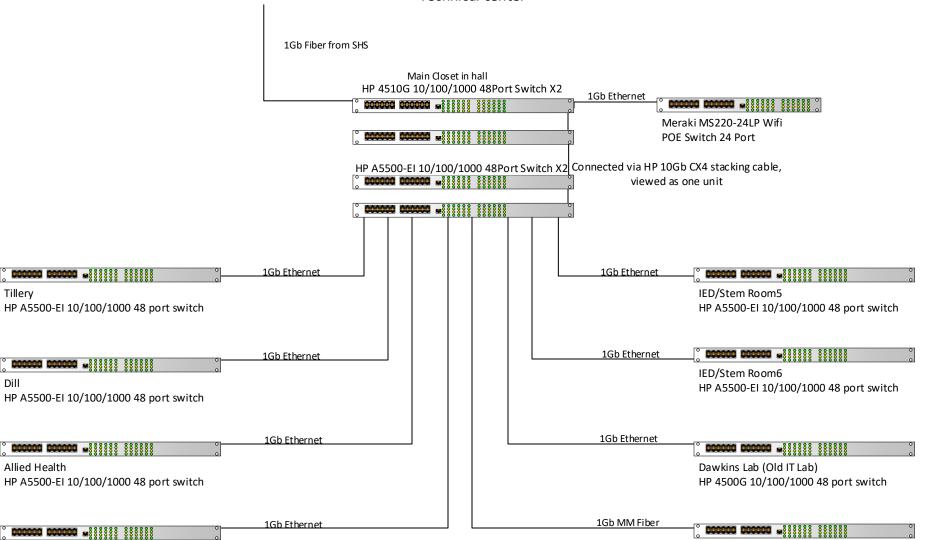
Overstreet



Approximately 190 nodes active, connected by Cat6



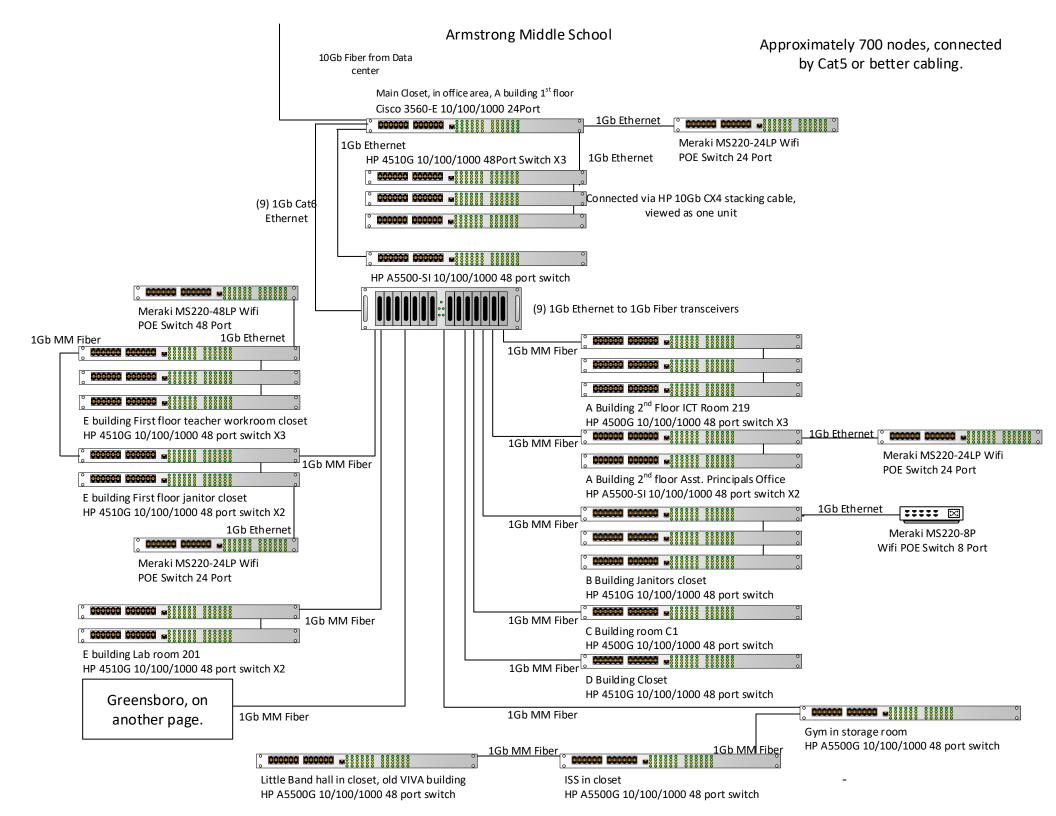
Millsaps Career and Technical center

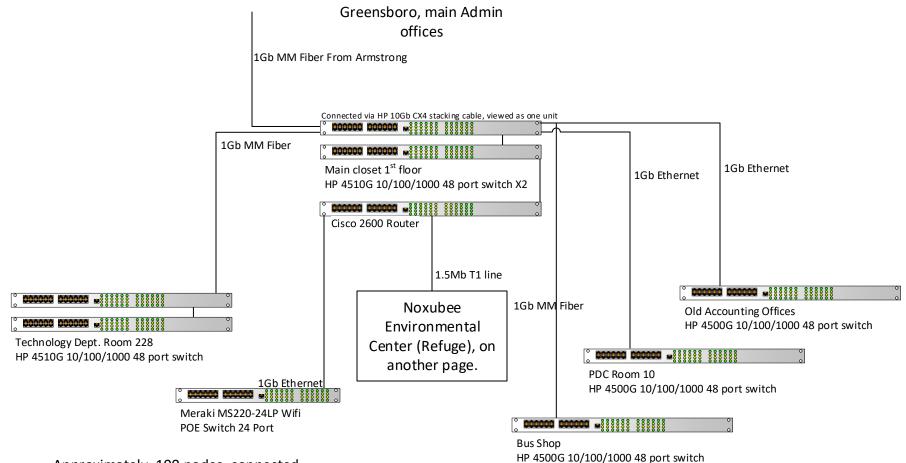


Business Lab, bottom of ramp on left HP A5500-EI 10/100/1000 48 port switch

Digital Tech Lab (In front of Dawkins, not used currently) HP 4500G 10/100/1000 48 port switch

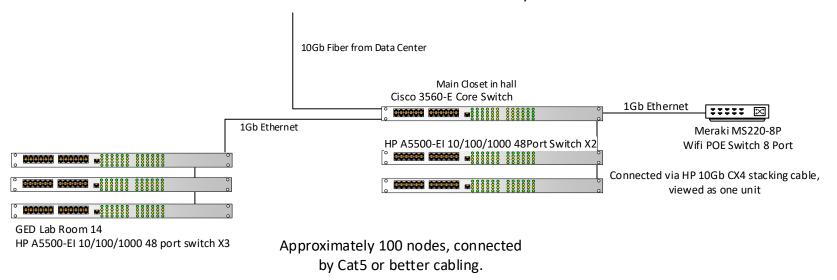
Approximately 570 nodes, connected by Cat5 or better cabling.



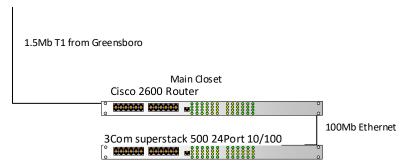


Approximately 100 nodes, connected by Cat5 or better cabling.

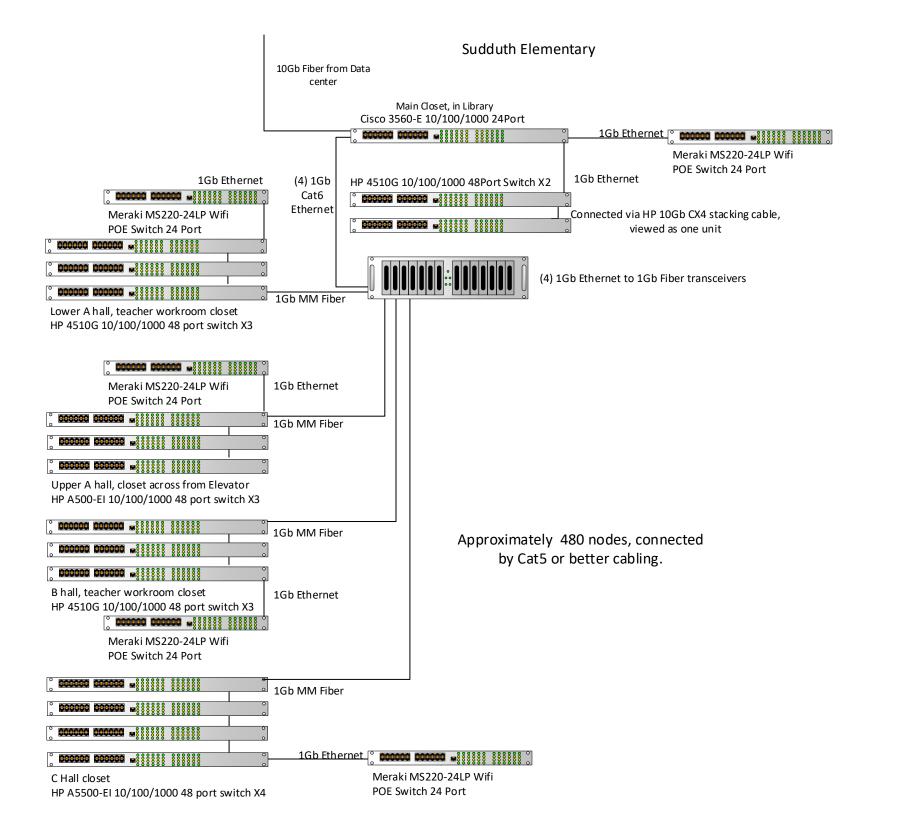
Emerson Family Center



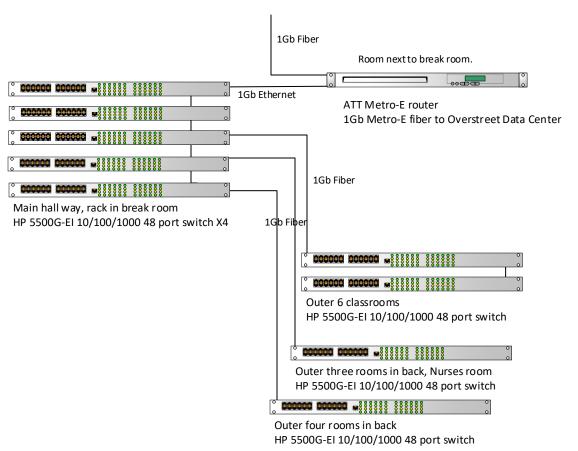
Noxubee Environmental Center (Refuge)



Approximately 10 nodes, connected by Cat5 or better cabling.



East Oktibbeha Elementary



Approximately 100 nodes, connected by Cat5 or better cabling.

West Oktibbeha Elementary

