Vashon Island School District

Request for Proposal

ERATE 470# 220018856

VISD 2022 Switching Refresh

Released: February 4th. 2022

Proposal Due Date: 5:00 PM PST March 4th, 2022

Visit http://rfp.vashonsd.org for more information and addenda

Contents

Background Information

The Vashon Island School District (VISD) wishes to receive quotes for layer 3 switches as part of a multi-year refresh of VISD's switching infrastructure. This equipment will enable VISD to provide a solid foundation to offer next-generation network services over our wireless and wired backbone. VISD prefers to procure the equipment from vendors who participate in Washington State/NJPA/KCDA/Omnia IT Partners- buyers

contracts or similar approved cooperative purchasing vehicles. This RFP is issued in conjunction with VISD's Form 470, Category 2, E-Rate submission.

Reminder: USAC SPI subsidy for support services can only be quoted for the first support year. All other years must be quoted with BEAR pricing.

Vashon Island School District reserves the right to award all, only a portion of the equipment and services listed in the bid, or none, to any one vendor.

VISD is seeking one bids for:

BID "Access port switching".

With this bid VISD is seeking to purchase access ports and its layer 3 switching.

Switch Requirements:

- VISD prefers Aruba/HPE switches 2930M series switches
- Redundant power supplies
- 3rd Party optics
- Support stacking sufficient to support outlined port density
- Support the protocols listed in section 1.6 "Required Feature List".
- Operate at wire speed, non blocking.
- Over-subscription is not desirable.
- Switches to include five (5) year software license and hardware support.

The decision to purchase switching equipment will be a cost benefit decision.

HP/Aruba Part Number	Description	Quantity
JL322A	48 port Switch	10
JL320A	24 port Switch	5
JL083A	10G card	5
JL086A	Power Supply	30
JL325A	Stacking Module	15
11559	Transceiver	10
J9734A	Short stacking cable 0.5M	14
J9735A	Medium stacking cable 1M	6
J9736A	Long stacking cable 3M	4

Notes

- All switches Aruba 2930M
- All 1G ports POE+
- Third party compatible optics

Vashon Island School District reserves the right to award all, only a portion of the equipment listed in the purchase agreement, or none, to any one vendor. Please be aware of this when providing a price quote for your services. **The successful bidder must be willing to bill USAC directly for VISD's subsidized portion (60%) using SPI invoicing. Please note this in the bid.**

The preferred method of receiving bids is via email.

Schedule of events:

Event	Date
RFP Released	February 4th, 2022
Last day for clarifying questions	Feb 22nd, 2022
Bid Due date	March 4th, 2022
Bid award announcement	Upon notification from USAC

School Building location information:

Chautauqua Elementary School 9309 SW Cemetery Rd. Vashon, WA 98070

Proposal Due Date: 5:00 PM PST March 4th, 2022

Instructions to Vendors

1. Electronic response packets/proposals shall be submitted to:

   Thane Gill
   Acting Technology Director
   Vashon Island School District
   rfp@vashonsd.org

2. All responses must be received via email no later than 4:00 p.m. Pacific Time**:** March 4th, 2022.
3. The Vendor must demonstrate to VISD's satisfaction that both the Vendor and the manufacturer(s) of the proposed equipment/systems/services are financially sound and are to remain strongly committed to the proposed equipment and the Puget Sound area for the next five (5) years.
4. Please provide manufactures EOL dates for hardware and software on equipment being bid.
5. Identify and list all intended subcontractors to be used for this project. The selected vendor shall be responsible to VISD for all work performed either by its own personnel or its subcontractors.
6. An individual authorized to legally bind Vendor must sign quotes.

7. Proposals must include a separate, clearly definable quote detailing the maintenance, support and licensing costs for the equipment and software being proposed for a period of five (5) years.
8. Proposals must include warranty terms for all equipment being proposed. This should include initial warranty, warranty periods, and warranty RMA procedures and costs if any.
9. Proposals will be evaluated based on the following categories in no specific order:
    - Acquisition Price
    - Ability to meet technical specifications
    - Five (5) year support costs
    - Interoperability and Management functionality
    - Installation costs if applicable
    - Warranty

Cost is the most important category, but not the only decision-making factor. Including cost and other factors, VISD reserves the right to award to the most cost-effective vendor based on the highest total number of points awarded across all categories.

Questions and addenda

10. Questions regarding the Request for Product shall be directed to:

    Thane Gill
    Acting Technology Director
    Vashon Island School District
    rfp@vashonsd.org

11. All questions must be submitted in writing via email to rfp@vashonsd.org. No questions will be accepted after February 22nd, 2022. VISD will attempt to provide answers to questions within 24 hours of receipt of questions, but cannot guarantee a response to all questions. All answered vendor questions and district responses will be posted to http://rfp.vashonsd.org . Vendors are responsible for monitoring their emails and the above website for addendums, changes and questions and answers regarding this RFP.

Required feature list

Specifications:

a. All “master” switches in stacking arrangements must contain redundant power supplies.
b. The successful bidder must provide ongoing access to corporate support, software/firmware updates and configuration tools needed to maintain the switches for five (5) years.
c. Stacked designs prefered to chassis based for redundancy and ease of management.
d. Proposals must include detail for the maintenance and support costs for the equipment and software being proposed for a period of five (5) years.
e. Proposals must include warranty terms for all equipment being proposed. This should include initial warranty, warranty periods, and warranty RMA procedures and costs if any.
f. It is prefered but not required that the switch should provide redundant management processors.
g. It is prefered but not required that the switch should provide Smart Rate/NBASE-T/Multi-Gig (2.5/5) ports.

h. All equipment should provide at a minimum support for the following standards and protocols. If the equipment does not meet one or more of the following specifications, please include a brief explanation:

• RFC 2918 Route Refresh Capability • RFC 4271 A Border Gateway Protocol 4 (BGP-4) • RFC 4456 BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP) • RFC 4724 Graceful Restart Mechanism for BGP • RFC 5492 Capabilities Advertisement with BGP-4 Denial of service protection • CPU DoS Protection Device management • RFC 1591 DNS (client) • RFC 2576 (Coexistence between SNMP V1, V2, V3) • RFC 2579 (SMIv2 Text Conventions) • RFC 2580 (SMIv2 Conformance) • RFC 3416 (SNMP Protocol Operations v2) • RFC 3417 (SNMP Transport Mappings) • HTML and telnet management General protocols • IEEE 802.1ad Q-in-Q • IEEE 802.1AX-2008 Link Aggregation • IEEE 802.1D MAC Bridges • IEEE 802.1p Priority • IEEE 802.1Q VLANs • IEEE 802.1s Multiple Spanning Trees • IEEE 802.1v VLAN classification by Protocol and Port • IEEE 802.1w Rapid Reconfiguration of Spanning Tree • IEEE 802.3ad Link Aggregation Control Protocol (LACP) • IEEE 802.3af Power over Ethernet • IEEE 802.3x Flow Control • IEEE 802.3bz 2.5 Gbps and 5 Gbps interfaces • RFC 768 UDP • RFC 783 TFTP Protocol (revision 2) • RFC 792 ICMP • RFC 793 TCP • RFC 826 ARP • RFC 854 TELNET • RFC 868 Time Protocol • RFC 951 BOOTP • RFC 1058 RIPv1 • RFC 1350 TFTP Protocol (revision 2) • RFC 1519 CIDR • RFC 1542 BOOTP Extensions	• RFC 4293 MIB for IP • RFC 4294 IPv6 Node Requirements • RFC 4419 Key Exchange for SSH • RFC 4443 ICMPv6 • RFC 4541 IGMP & MLD Snooping Switch • RFC 4861 IPv6 Neighbor Discovery • RFC 4862 IPv6 Stateless Address Auto-configuration • RFC 5095 Deprecation of Type 0 Routing Headers in IPv6 • RFC 5340 OSPFv3 for IPv6 • RFC 5453 Reserved IPv6 Interface Identifiers • RFC 5519 Multicast Group Membership Discovery MIB (MLDv2 only) • RFC 5722 Handling of Overlapping IPv6 Fragments • RFC 6620 FCFS SAVI • draft-ietf-savi-mix MIBs • IEEE 802.1ap (MSTP and STP MIB's only) • IEEE 8021-Bridge-MIB (2008) • IEEE 8021-Q-Bridge-MIB (2008) • RFC 1155 Structure & ID of Mgmt Info for TCP/IP Internets • RFC 1213 MIB II • RFC 1493 Bridge MIB • RFC 1724 RIPv2 MIB • RFC 1850 OSPFv2 MIB • RFC 2021 RMONv2 MIB • RFC 2096 IP Forwarding Table MIB • RFC 2578 Structure of Management Information Version 2 (SMIv2) • RFC 2613 SMON MIB • RFC 2618 RADIUS Client MIB • RFC 2620 RADIUS Accounting MIB • RFC 2665 Ethernet-Like-MIB • RFC 2668 802.3 MAU MIB • RFC 2674 802.1p and IEEE 802.1Q Bridge MIB • RFC 2737 Entity MIB (Version 2) • RFC 2787 VRRP MIB • RFC 2863 The Interfaces Group MIB • RFC 2925 Ping MIB • RFC 2932 IP (Multicast Routing MIB) • RFC 2933 IGMP MIB

• RFC 1918 Address Allocation for Private Internet
• RFC 2030 Simple Network Time Protocol (SNTP) v4
• RFC 2131 DHCP
• RFC 2453 RIPv2
• RFC 2548 (MS-RAS-Vendor only)
• RFC 3046 DHCP Relay Agent Information Option
• RFC 3575 IANA Considerations for RADIUS
• RFC 3576 Ext to RADIUS (CoA only)
• RFC 3768 VRRP
• RFC 4675 RADIUS VLAN & Priority
• RFC 5798 VRRP (exclude Accept Mode and sub-sec timer)
• RFC 5880 Bidirectional Forwarding Detection
• RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification
• UDLD (Uni-directional Link Detection)

IP multicast

• RFC 3376 IGMPv3
• RFC 3973 PIM Dense Mode
• RFC 4601 PIM

IPv6

• RFC 1981 IPv6 Path MTU Discovery
• RFC 2080 RIPng for IPv6
• RFC 2081 RIPng Protocol Applicability Statement
• RFC 2082 RIP-2 MD5
• RFC 2375 IPv6 Multicast Address Assignments
• RFC 2460 IPv6 Specification
• RFC 2464 Transmission of IPv6 over Ethernet Networks
• RFC 2710 Multicast Listener Discovery (MLD) for IPv6
• RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only)
• RFC 3019 MLDv1 MIB
• RFC 3315 DHCPv6 (client only)
• RFC 3484 Default Address Selection for IPv6
• RFC 3587 IPv6 Global Unicast Address Format
• RFC 3596 DNS Extension for IPv6
• RFC 3810 MLDv2 (host joins only)
• RFC 4022 MIB for TCP
• RFC 4087 IP Tunnel MIB
• RFC 4113 MIB for UDP
• RFC 4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
• RFC 4251 SSHv6 Architecture
• RFC 4252 SSHv6 Authentication
• RFC 4253 SSHv6 Transport Layer
• RFC 3411 SNMP Management Frameworks
• RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
• RFC 3413 Simple Network Management Protocol (SNMP) Applications
• RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)
• RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)
• RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
• RFC 4836 Managed Objects for 802.3 Medium Attachment
Units (MAU)
• RFC 7331 BFD MIB

Network management

• IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
• RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
• RFC 3176 sFlow
• RFC 5424 Syslog Protocol
• ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
• SNMPv1/v2c/v3
• XRMON

OSPF

• RFC 2328 OSPFv2
• RFC 3101 OSPF NSSA
• RFC 3623 Graceful OSPF Restart (Unplanned Outages only)
• RFC 5340 OSPFv3 for IPv6

QoS/CoS

• RFC 2474 DiffServ Precedence, including 8 queues/port
• RFC 2475 DiffServ Architecture
• RFC 2597 DiffServ Assured Forwarding (AF)
• RFC 2598 DiffServ Expedited Forwarding (EF)

Security

• IEEE 802.1X Port Based Network Access Control
• RFC 1321 The MD5 Message-Digest Algorithm
• RFC 2818 HTTP Over TLS RFC 1492 TACACS+
• RFC 2865 RADIUS (client only)
• RFC 2866 RADIUS Accounting
• RFC 3579 RADIUS Support For Extensible Authentication Protocol (EAP)
• Secure Sockets Layer (SSL)

• RFC 4254 SSHv6 Connection • RFC 4291 IP Version 6 Addressing Architecture	• SSHv2 Secure Shell

INSURANCE REQUIREMENTS for Bid Winner

If Vendor bid includes line items for installation or on-site configuration:

1. Provide an accurate summary of any claims initiated against your firm in the past five (5) years and any currently pending claims.
2. Provide a copy of your firm's insurance, confirm that your firm will maintain in effect at all times during the performance of work, insurance coverage with limits not less than those set forth below and with insurers and under forms of policies satisfactory to Vashon Island School District:
    - **Workers Compensation:** Statutory
    - **Employer's Liability:** to extent included under Workers Compensation Insurance Policy
    - **Comprehensive General Liability:**
    - Bodily Injury: $100,000.00 each person, $1,000,000.00 each occurrence
    - Property Damage: $1,000,000.00 each occurrence
    - **Comprehensive Automobile Liability:** (Owned, hired, and co-owned)
    - Bodily Injury: $100,000.00 each person, $1,000,000.00 each occurrence
    - Property Damage: $1,000,000.00 each occurrence

Certificates evidencing such coverage must be furnished to Vashon Island School District prior to the start of service. The certificates shall be provided by the Insurance Carrier and name Vashon Island School District as holder and additionally insured. Certificates shall not be cancelable without thirty (30) days prior written notice.

END OF RFP