REQUEST FOR PROPOSAL

TELEPHONY SERVICES

For

School Administrative Unit #19 (The Goffstown and New Boston School Districts)
UPDATE #1: Vendor Submitted Questions

1. **Vendor Question:** Is the District amenable to providing a voice VLAN and transport bandwidth in support of any locations that are not currently lit?

   District Response: Yes, The District is currently carrying voice VLAN traffic to all locations and is amenable to continue doing so as part of this process.

2. *Vendor Question:* Could the District provide any additional information around the specifics of the Axis and SynApps integrations? What sort of specific connectivity is required to support current functionality? Additional VLAN/network or other technical considerations to be aware of around these integrations?

   District Response:

   Syn-Apps / Intrado Revolution – The District utilizes Syn-Apps / Intrado Revolution to perform in-building paging, alerting, and bells across the Telephone and PA-Systems in the school buildings. A general overview of the product can be found here: https://www.syn-apps.com/downloads/User%20Guides/Revolution_Help/en-us/Content/Overview.htm

   Currently the District utilizes Revolution in the following ways:
   - Scheduled Events – School bells are managed through the scheduled events in Intrado. These school bells are played across both the Phone and PA-Systems located in individual buildings.
   - Triggered Events – These are used for both emergency and non-emergency paging in both small sections of a building (such as a single wing), across the whole building, or across the entire Distict. There are telephone extensions assigned in Intrado Revolution that will either play a pre-recorded message (such as an emergency alert) or allow for the user to page to a group of devices.

   In both of the above scenarios, the list of endpoints is imported from the Cisco Call manager, and the groups are built automatically based on the phone location and Device Pool assignment in Call manager.

   Axis integration – The district utilizes Axis A8105-E Network Video Door Stations to control access to the school buildings. These door stations are located on the District's security VLAN and are integrated into the Access control, Video Surveillance, and Telephone systems. These Axis door stations are registered into the call manager as an external SIP endpoint.

   Axis Door station workflow:
   1. When a visitor presses the button on the axis door station, it will dial a pre-programmed telephone extension.
   2. Depending on the building, that telephone extension will ring on 1-or-more telephones in the school office.

3. Answering that incoming call will establish a point-to-point video call with the door station.
4. The person answering the call (operator) will be able to view the user at the doors station on the display on their phone using the camera built into the door station and speak to the user directly as the axis station will operate as an intercom.
5. Should the telephone operator decide to grant the visitor access. They will press a key on their keypad and the phone will send the "touchtone" to the door station instructing it to perform a set of pre-programmed actions. These actions are:
   a. Play a sound clip of a buzzer.
   b. The doorbell light will turn green
   c. Unlock the door for a pre-specified period of time.
   d. Disconnect the call.
   e. The doorbell light will turn red (once it re-locks)
6. Since these door stations are treated as SIP endpoints, calls between them and the telephone operator can be placed on hold, and transferred like any other incoming call.
7. Note: We have only found that for this to work properly, the operator must be using a phone equipped with a camera such as a Cisco 8865 series phone. Phones without a camera are unable to display the incoming video call.

3. *Vendor Question:* In lieu of a direct replacement of the existing ISR based SRST/Copper POTS functionality, is the District amenable to maintaining these existing third party POTS lines or perhaps a cellular solution for use as local voice connectivity of last resort?

   District Response: The preference is to have the same vendor who is providing the telephone system handle any POTS / Failover lines. If it's not possible, then we are willing to keeping existing POTS lines with our current provider. Cellular failover is not an option due to the poor service coverage at several of the school buildings.

4. *Vendor Question:* Can you please provide a summary breakdown of your existing Handsets, Conference units, and Door phone Units (Make/model, SIP/Digital/Analog)?

   District Response: Current inventory
   Desk Phones:
   - SIP Phones:
     - Cisco 7821 – QTY 48
     - Cisco 7841 – QTY 43
     - Cisco 8845 – QTY 25
     - Cisco 8851 – QTY 1
     - Cisco 8865 – QTY 86

- SCCP Phones:
    - Cisco 7911 – QTY 2
    - Cisco 7941 – QTY 15
    - Cisco 7942 – QTY 184
    - Cisco 7960 – QTY 16
    - Cisco 7961 – QTY 1
    - Cisco 7962 – QTY 13
- Notes: Typically 88XX series phones are found in offices, while 78XX and 79XX series phones are found in instructional spaces.

Conference Phones:
- SIP Phones:
    - Cisco 8831 – QTY 3
- SCCP Phones:
    - Cisco 7937G – QTY 7

Accessories:
- CP-8800-Video 28-Button Key Expansion Module – QTY 24 (Connected to 8865 series phones)

Other Hardware:
- SIP Devices
    - Cisco ATA 190 – QTY 1 (Interface to PA System & Panic Alarm at MVMS)
    - Axis A8105-E Network Video Door Station – QTY 18
- FXS Ports on Cisco 43X1 Series ISR
    - Connections to Panic Alarm System – 6
    - Connections to PA Systems – 5

Soft Phones:
- Cisco Jabber extensions (Soft phone deployments) – QTY 382

Other Notes:
- Each building has an assortment of POTS lines (anywhere from 3-6) connecting analog systems including the Xerox MFP (Fax), Elevator Phone lines, Fire alarm panels, burglar alarm panels, etc).
- The above POTS lines are used for both SRST failover AND we have a minimum of 2 of these lines connected to analog phones to support emergency communication when the building is without power.

5. **Vendor Question:** Do you have an actual breakdown of classroom versus office phones for each site?

    District Response: Below is a breakdown of phones by location:
    - Bartlett: 49
      - Offices: 10
      - Classrooms / Workrooms / Instructional Space: 38
      - Conference: 1
    - Maple: 54
      - Offices: 13
      - Classroom / Workrooms / Instructional Space: 40
      - Conference: 1
    - Glen Lake: 26
      - Offices:5
      - Classroom / Workrooms / Instructional Space:20
      - Conference: 1
    - Goffstown High School: 139
      - Offices: 30
      - Classroom / Workrooms / Instructional Space:107
      - Conference: 2
    - Mountain View: 102
      - Offices: 21
      - Classroom / Workrooms / Instructional Space: 80
      - Conference: 1
    - New Boston: 56
      - Offices: 9
      - Classroom / Workrooms / Instructional Space: 46
      - Conference: 1
    - SAU Office: 22
      - Offices:20
      - Classroom / Workrooms / Instructional Space: 0
      - Conference: 2
    - ALT: 9
      - Offices:8
      - Classroom / Workrooms / Instructional Space: 0
      - Conference: 1

    Note: Most instructional spaces have wall mounted phones.

6. *Vendor Question:* Do you require additional voice mail boxes for teachers/TA's and subs? If so, how many?

   District Response: At present, we currently have 566 extensions assigned to individual users. Each of these users have a voicemail box associated. This count will vary from year to year based on staffing levels and roles. The system should support up to 600 voice mail boxes. (Users will never be assigned only a voicemail box, they will be assigned a softphone with voicemail.)

7. *Vendor Question:* Can you please describe the existing district WAN connectivity facing New Boston, and applicability/availability of a voice VLAN across that transport?

   District Response: The District currently utilizes 2 strands of leased fiber for connectivity at each building including New Boston Central School. These strands run back to Goffstown High School utilizing a hub and spoke topology and are currently lit at 10GBps. We utilize a single VLAN (id 3096) for voice traffic across this fiber topology.

   At each building, the core switch hands off an access port of VLAN 3096 to the local Cisco 4331 or 4321 ISR. The Local ISR provides DHCP and SRST failover for the local phone network subnet. The vast majority of the phones at a single location are connected to a separate network segment which is connected directly to the ISR separate from the buildings data network.

   The ISR at each location utilizes OSPF to communicate between each other and the ISRs. The Core switch at GHS also connects to VLAN 3096 and provides internet connectivity for that VLAN. It also serves as the connection point for any phones not on the phone network segment. Any phones connected directly to the data network do not have SRST failover.

8. ***Vendor Question:*** Can you provide model numbers, current connection type, and zone (single/multi) for overhead paging systems by location?

    District Response: The district has a variety of overhead paging and intercom systems. In each building they are connected to either an FXS port on the school's ISR or to a Cisco ATA providing the same FXS ports.

    - Glen Lake – Single Zone (Bogen UTI1)
    - Bartlett – Single Zone (Bogen TAMB2)
    - Maple – Single Zone (Bogen UTI1)
    - New Boston – Multi Zone (Valcom V-2924A / V-2925A)
    - Mountain View – Single Zone (Bogen TAMB2)
    - Goffstown High School - Multi Zone (Dukane ACC5)
    - ALT – None
    - SAU Office – None

    Configuration for multi-zone paging through the phone system is managed by Intrado Revolution (See #2 above). Each paging zone is assigned a separate telephone extension in Call Manager which is mapped back to the corresponding FXS port. When a user initiates a building page, they dial the assigned paging extension which then rings the PA system which is connected to an ATA (via an FXS port). The call manager then sends a pre-programmed sequence of commands (to specify to page the zone) allowing the user to perform the page.

    All PA and intercom interconnections are analog and utilize these ATA / FXS connections.

9. ***Vendor Question:*** Has any consideration been given to the use of eFaxing to replace legacy Fax Machines? Would eFaxing suffice in place of legacy fax machines?

    District Response: Faxing is currently handled by our Xerox MFPs. We can consider eFax solutions, but this would not eliminate our current need for POTS lines as these lines are also used for other analog systems including Burglar alarm, Fire Alarm, Elevator Phones, FAX, and SRST failover.

10. ***Vendor Question:*** The two (minimum) POTs lines per building, are those provided from a separate service from a local carrier or are they just analog lines off of your current CUCM system with a VoIP to analog converter device (ATA or other

    District Response: They are separate analog lines provided by our local carrier.

11. *Vendor Question:* Would using a soft client with video capabilities on a PC suffice to answer calls from the video doorbells?

    District Response: No, A soft client is acceptable for answering the Axis door stations, but it would not be sufficient as the primary mechanism. This is due to the high volume of door traffic as some of the buildings,

12. *Vendor Question:* Section 1.2 Current Implementation, "Devices" Section, Page 6 denotes "The District would prefer to replace Jabber clients with MS Teams for off campus calling" does this mean there is a requirement for the new solution to integrate with MS Teams or is the district pursuing a separate project with call features in MS Teams?

    District Response: This is not a hard requirement but is preferred. The district is already paying for a Microsoft 365 A5 for a significant number of staff. The A5 subscription includes the teams calling service. The preference is to use MS teams as our soft client.

13. *Vendor Question:* How many analog lines provided via an analog telephony adapter (ATA) from the new phone system would be required at each site? Analog phone lines could be elevator phones, alarm panel lines, ATM lines, etc... unless those are provided via dedicated POTS line from a local provider.

    District Response: Each building currently has both the PA system and emergency alerting system connected via an ATA / FXS port.

14. *Vendor Question:* What are the current connections to PSTN – SIP or PRI ?

    District Response: SIP

15. *Vendor Question:* Does each location currently have its own or should we include this as part of the scope to migrate / port numbers to a new provider?

    District Response: No, our SIP trunk connect to Goffstown High School. All of the other locations are served from that location

16. *Vendor Question:* Is voice recording a requirement?

    District Response: No

17. *Vendor Question:* Is there a call/contact center in use today?

District Response: No

18. ***Vendor Question:*** Will there be any requirement for remote phones / external users?

    District Response: Yes, most of our users current have external access using Cisco Jabber.

19. ***Vendor Question:*** Are you able to provide a detailed diagram of the network showing the topology of the LAN and WAN networks?

    District Response: We will make them available upon request for this RFP.

20. ***Vendor Question:*** Does the district intend to reuse/repropose any existing equipment for use with the new phone system?

    District Response: We are happy to reuse any switching, routers, or phones that may be compatible with the proposed design. This includes both the Cisco 4331 and Cisco 4321 ISRs along with the Cisco Catalyst switches. Phones traffic can also be carried on our Aruba 6300M switching if that is the preference.

21. ***Vendor Question:*** Can you please provide an expected implementation timeline?

    District Response: We are looking to have the work completed over the summer with the installation being completed by August 26, 2024