Broward County Public Schools
Education Technology Services

Telephone System Upgrade Guide:

Version 2

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Table of Contents

Telephone System Upgrade Guide

For E-Rate projects funded in Fiscal Year 2008 – 2009

Broward Schools' Education Technology Services Department is embarking on a long-range plan to update the district's telephone systems, and in the process, move from the traditional method of providing voice services to a new "Voice over IP" (VoIP) platform. As Broward Schools' phone systems continue to age, the importance of refreshing these systems is needed to continue providing high quality, highly reliable phone service. This is also part of larger effort to improve telecommunications services through advanced integration of voice, video and data systems - and to reduce costs through the convergence of network systems.

As a result of E-Rate funding approval for Broward Schools' 2008 – 2009 telephone system upgrade filings, your school will be receiving a completely new voice over IP (VoIP) telephone system in the coming months. You will receive not only a new phone gateway, but also all new phone sets in your offices and classrooms. This packet is designed to describe the upgrade process and explain the implications associated with the work that needs to be done on your campus.

Benefits

Immediate:
- Easier to move phones on your school campus – can be accomplished by school staff
- Message waiting notification for teachers
- Improved access to system reports and malicious call tracking
- Improved campus access to phone system reporting and monitoring
- Wi-Fi phones for campus mobility / roaming
- Customer controllable phone set features
- Advanced ad-hoc conferencing capabilities

Future:
- Text message alerts sent to phones
- District-wide message alerting
- Improved centralized voicemail management and broadcast capabilities
- Onboard phone directory – voice activated dialing
- Remote Office and softphone deployment
- Integration with educational and business operational applications

Changes

Global:
- Phone set appearance and operation
- The District's dialing plan will change as schools are migrated to the new phone system, including a move to 7-digit dialing on the school campus (as it currently exists between schools)

Project Contact Sheet

School/Site _____**Loc#** _____

    Principal/Director_____   _____

    Office Manager_____   _____

    School Project Contact _____   _____

    Technical Contact/TLC_____   _____

    Head Custodian_____   _____

Area Office

    Director_____   _____

    Area Instructional
    Technology Specialist_____   _____

Education Technology Services (ETS)

    ETS Project Manager   Jim Lavoie_____   754-321-0328_____

    Network Integration Area Contact_____   _____

    AT&T Project Management_Audrey Griffith_____   754-321-0445_____

    Customer Service Desk   Customer Service Specialist_____   754-321-0411_____

Training

    AT&T: Audrey Griffith_____   754-321-0445_____

    Teacher Technology Support Center_____   754-321-0411 Opt. 6___

Technology Agreement

The purpose of this document is to define school and ETS responsibilities related to services and products received through this initiative. In accordance with the District's system priorities, this document will serve as a tool of accountability. Please review this document and acknowledge your receipt and acceptance by signing the form where indicated.

ETS/Vendor Responsibilities:
- ETS will deliver a technology solution according to the current project plans. The solution will include a VoIP Phone gateway and new phone sets.
- AT&T and/or the Teacher Technology Support Center will assist in providing necessary training to administrative, support, and instructional staff members.
- AT&T will provide installation, setup, integration, and a quality assurance check of all system components. Installation schedules are posted at http://web/ets/ni/telecom/upgrades.htm
- ETS / AT&T will remove all out of service equipment at the close of the new system implementation.

School Responsibilities – Location Administrator or designee is responsible for assuring that the following tasks are carried out at their site:
- Assist ETS and AT&T in gathering site-specific data about the current phone system by completing the attached **School Information Survey** and returning it to the ETS Project Manager (J. Lavoie) within 5 SBBC working days.
- Clean out any items stored in the main telecommunications room and remote closets across the campus that are not part of the current data or voice networks.
- In certain instances, additional rack space is required in the main telecommunications room. This work will be performed by Quality communications, and schools should facilitate this effort.
- In certain instances, large pieces of furniture now block access to data jacks that will need new phone cable connections. School custodial staff is expected to assist AT&T in rewiring the new phone sets.
- Observe a "Freeze-Window" on phone changes after the date provided by ETS (about 3 weeks prior to new system installation).
- Designate an area for deliveries of new phone system equipment and provide secure storage for these items until the installation date. The equipment will arrive in several shipments. Details about the equipment deliveries are included on ATTACHMENT A.
- Acknowledge receipt of equipment deliveries from KGP, CATALYST-AVAYA, and ONEAC by sending an email to Audrey Griffith as they arrive.
- Designate an area to be used by AT&T for two days prior to cut-over for assembly and initial configuration of phone sets.
- Provide a master key to ATT staff for the day of the scheduled cut-over to the new system. All areas of the school will need to be visited including the Principal's and Cafeteria Manager's offices.
- Designate two to ten staff members to attend system training following system cut-over.
- Ensure that all instructional staff avail themselves of training opportunities in the use of the new phone sets and dialing plan changes (web training and access to user guides).
- Ensure that all staff members perform the initial set-up of their new voice mail box.

Principal/Director _____   Date _____

School_____

Refresh Project Deliverables

VoIP Gateway

Gateway Received   Date: _____
Gateway Installed   Date: _____

- Configured according to district standards
- Tested to ensure connectivity
- Training on General use and reporting capabilities including Malicious Call Trace

Phone Sets

Shipment Received   Date: _____
Phone Sets Installed   Date: _____   Qty: Office___   Qty: Classroom___

- Configured according to school requirements
- Tested to ensure connectivity

Staff Development

Office Staff Training (at installation by AT&T)   Date: _____
Faculty Training: Web-based on-demand tutorials and training and quick reference guides for instructional staff on the use of the new equipment and voicemail set-up.

Ongoing Support

Technical Support: All requests for service, repairs, and user assistance should be directed to the ETS Service Desk for the creation of a "Remedy" ticket and appropriate follow-up.

School_____

_____   _____
Principal/Designee   Date   ETS   Date

SCHOOL INFORMATION SURVEY

Automated Attendant:
In order to provide a seamless transition from your current method of handling incoming calls it is imperative that ETS/AT&T staff be given the information requested below. Please answer the questions below:

1) Does your school currently use an automated attendant on the main line?   yes____no____
2) If your school does not currently use an automated attendant, would you like to take this opportunity to implement this feature?   yes_____ no_____

If you have answered yes to either of the questions above, ETS requests that you complete the form at the end of ATTACHMENT A (included with this packet), and return it via FAX at 754-321-0907, or scan-to-email to the attention of Audrey Griffith at ETS. This form must be received by Audrey Griffith at least **three weeks prior** to your scheduled system installation.

Data Jack Numbers:
While ETS is conducting site surveys intended to capture jack/port numbers for all visible phone equipment, it's possible that the visiting technicians will not be aware of FAX machines or modems that may be in use on your campus. To ensure a seamless cut-over, please complete ATTACHMENT B recording the phone number and jack number for any of these devices

Requested Programming Changes:
AT&T will be replicating the phone system programming as it currently exists. However, if minor modifications are necessary, they can be accommodated within the scope of this project.   Please indicate on ATTACHMENT C, any changes that need to be made in the configuration of individual lines (ex: long distance, name appearance changes, etc.).

Wi-Fi Phone distribution:
Your new phone system includes several Wireless Wi-Fi phones. Elementary schools will initially be provided with 4 of these devices and middle schools have been allocated 6. These phones provide roaming capabilities at your school. Prior to installation, consideration should be given to which staff members would benefit most from this new capability. Best practice indicators would include:
- Principal
- Staff on cafeteria duty
- After-Care
- Head Custodian
- Technology Specialist

ATTACHMENT A

GUIDELINES FOR AUTO-ATTENDANT AND NIGHT-SERVICE USE IN SCHOOLS

PURPOSE

The purpose of these guidelines is to offer school-based leadership and staff guidance on the appropriate and effective deployment and use of the new telecommunications auto-attendant technology in the schools. The point is not to place unnecessary restrictions on the use of this new technology, but to offer practical suggestions on how to effectively incorporate it into the mix of telecommunications options in a manner that eases the burden on school-based staff, while at the same time making it easier for parents and the general public to conduct business with the schools through the telecommunications system.

GENERAL GUIDELINES

- The auto-attendant function permits schools to offer outside callers a short menu of destination options in the event school-based personnel who normally answer the phones are tied up with other callers.

- Larger schools – especially high schools with relatively large student enrollments – should consider instituting the destination menu option for all outside callers who dial the school's main number.

- Those schools with smaller enrollments may want to continue the practice of personally answering calls coming through the school's main switchboard. The menu option could be automatically initiated in the event school-based staff members, who normally answer the phones, are tied up with other callers.

- It is important that callers who access the auto-attendant menu be given the option of having their calls handled by a "live operator" either by pressing a designated key or simply waiting for someone to pick up the call.

- It is also important that the destinations listed in the auto-attendant menu be limited to those areas that are most frequently accessed by callers. Again, it is important that callers always have the immediate option of accessing a "live operator" by simply pressing a designated key or waiting for some to pick up their call.

- The following are suggestions for auto-attendant menu options for schools:

Middle Schools

1. Main office
2. Guidance office.
3. Attendance office.
4. Student Affairs office.
5. Community School (as appropriate)

Elementary Schools

1. Main office.
2. Attendance office.
3. Guidance office.

CONCLUSION

It is important that there be a degree of continuity and consistency in terms of how the auto-attendant system is deployed and used at schools. One reason for this involves the impact on parents and the general public who have to navigate the options menu to get to their ultimate destinations. As it is, most people are familiar with these systems from their dealings with businesses and other government organizations. However, it remains imperative that callers be quickly given the option of speaking to a live human voice in order to reduce the potential for frustration on the part of parents and the general public. It is also important that school-based staff be available at the destinations listed in the menu options to answer calls so that callers aren't placed in endless loops or bounced back and forth between the menu and destinations where no one is available to answer the calls.

ATTACHMENT A – Continued
AUTO-ATTENDANT / NIGHTSERVICE WORKSHEET

School Name: _____ Main Phone Number: _____

DAY SERVICE / AUTO-ATTENDANT

During normal hours of operation, calls that come into your main number can be initially be handled by an Automated Attendant. If you opt to have this configured, ETS/AT&T needs to know the call-paths that are needed. Callers will typically be prompted with:

"You have reached XYZ Elementary. If you know your party's extension you may dial it at any time. You may also….

- **PRESS 1**   **for Attendance**
- **PRESS 2**   **for   _____**
- **PRESS 3**   **for   _____**
- **PRESS 4**   **for   _____**
- **PRESS 5**   **for   _____**
- **PRESS 9 to repeat this menu**
- **PRESS 0 or stay on the line to be connected to an attendant**

       Some Suggestions:
- Guidance
- Student Affairs
- Grade Level Offices (examples: 6th Grade Office, 7th Grade Office, etc.)
- ESE
- Any special program   For ex. Headstart

NIGHT SERVICE

When your school is closed (nights, weekends and holidays) the Automated Attendant will handle incoming calls. Please build a brief script for the night service main greeting – you may want to include the website, school hours, or other information unique to your school. Please include the script with this attachment and plan on who will be recording the announcement. Remember to keep this brief and "to the point". This will be recorded for your school and implemented at the time of system cut-over.

If your school has an After-Care program, remember to include in the Night Service message any information needed to assist callers in reaching the alternative number for that program after your main office closes.

ATTACHMENT B

FAX and MODEM Survey

School Name: _____ Main Phone Number: _____

Please indicate the phone number and jack/port number for FAX or Modem lines in use on your campus in the chart below.

Type of Device	FISH Number	Phone Number	Ext. # (if known)	Long Distance (Yes/NO)	Jack /Port (# and color)

ATTACHMENT C

Please identify in the space below any changes to the basic way the phones on you campus are programmed. Examples of this type of change would be modifications to Long Distance provisioning on an extension, or a change to the name appearance on an office phone set.

ATTACHMENT D

Phone Set Pictures

Standard Administrator Phone / AVAYA 9650:

Standard Switchboard Phone / Avaya 9650 + Add-on Module:

Standard Office and Classroom Phone / AVAYA 9620: