

EPIC Intercom Paging System:

1. The system shall be a software-controlled system, whose primary interface is a web-based portal, accessible from any authorized computer. The system shall utilize a 1U rack server, operating as an appliance, dedicated to the operation of the IPB & SAFE System only. The rack server shall have industry standard redundancy, including RAID1, dual power supplies, and hot swappable hard drives. The entire system shall be Linux based.
2. The system shall be SIP Integrated to the VoIP telephone system.
3. The system shall provide a simple calendar-based scheduling system for bells. It shall ~~must~~ provide the ability to have an unlimited number of bell schedules.
4. The system shall provide a map-based user interface. All major functions, including intercom, paging, notifications and alerts shall be done using the map as the foundation for those actions. Paging shall clearly show on the map where the page audio will be transmitted to.
5. Bell Schedules shall be easily assigned to days and changed simply with authenticated access to the system through any browser-based device.
6. The system shall utilize a shared data network (VLAN enabled) or dedicated network as means of distribution for all voice overhead paging, emergency paging, emergency tones, intercom, and class change tones.
7. The system shall be capable of accessing remote classrooms (trailers, temporary classrooms etc.) via IP interface or room audio system with room microphone. It shall provide intercom, class change tones, emergency tones, and normal / emergency paging via a wired network to these remote locations.
8. Exterior speakers shall be capable of being on separate zones and programmed separately.
9. The system shall have the ability to synchronize to the same NTP server utilized for the Master Clock system.
10. The system shall have the ability to produce user defined tone signals for time tones or emergency tones.
11. The system shall have SIP Integration to connect all talk-paths to the VoIP phone system of choice.
12. The system shall provide the ability to support a SIP trunk from the building's VOIP phone system to provide two-way communication from all administrative telephones to any location equipped with a talkback speaker or audio system with room microphone.
13. The system shall interface with any VoIP telephone system using SIP type integration. It shall allow the school(s) to upgrade or replace their telephone system without suffering a requirement to replace, or lose any feature of, their internal communications (intercom) system. Any system that limits system features based upon any selected telephone system and is not SIP based shall not be acceptable.
14. The system shall provide its own SIP environment, and in the case of a failure of the schools VoIP telephone system, be capable of operating completely independently for all functions, save access from the handsets connected to the schools VoIP system.
15. The system shall provide web access, which will give ability to monitor operations and functions of the system.
16. The system shall provide web-based off-site programming and diagnostics of the system. It shall also be capable of determining basic circuit faults.
17. The system shall have a Web based administration programming tool which allows the administrative personnel to easily manage audio sources, class change schedules, paging groups, time updates, holiday schedules and day/night mode operation from an internet browser.
18. The system shall provide calendar-based scheduling up to four years in advance. The system shall be capable of displaying a fully year calendar and differentiating which bell program is scheduled to run on each day. The calendar shall be based on a standard school year and provide a selectable start month. For example, the system # can be configured to run from August to July.

19. The system shall be capable of being fully integrated with the school's existing LDAP or active directory system. Systems that do not provide LDAP or active directory integration will not be considered.
20. The system shall provide discreet control over roles for the system. Roles shall be definable down to the individual feature level and provide the district with the ability to restrict or grant access to any roll individual features or groups of features.
21. The system shall provide web browser access to the system specifically for a teacher. Teacher access shall be assigned through LDAP or active directory. The teacher screen shall provide information specific to the room that the teacher is assigned to. That information shall consist of, but not limited to, the next scheduled event for the room (Bell, Announcement, etc.), Audio/Visual controls for their classroom technology, teacher name, room number, an intercom call button, and an emergency call button.
22. The system shall have the ability to carry IP Communications to the edge of the classroom Audio/Visual systems. It shall be able to control connected A/V Devices, provided that those devices are controllable by RS-232.
23. The system shall be based on a database structure, utilizing a robust commercially available database such as SQL.
24. The system shall provide 2-way handsfree communication in each classroom.
25. System classroom and common zone network interfaces shall be capable of utilizing standard Cat 6/6a infrastructure for installation from the intermediate distribution frames only to the classroom and/or zone, ~~thus~~ allowing for only one type of wiring infrastructure within the school. Distribution of all voice signaling shall utilize a shared or dedicated network. Systems that require home-run, dedicated, wiring shall not be acceptable.
26. The system shall provide two I/O Ports on each classroom network interface, and common zone network interface which can be used as programmable inputs or outputs to control contact closures. Contact closures can be activated manually to turn on cameras, unlock doors, emergency lockdown, etc.
27. The system shall provide a flexible and robust event engine, and in addition~~t~~ to pre-programmed events and actions, the event engine shall be capable of accepting Java based programming to accomplish advanced integrations and functions.
28. The system shall automatically broadcast page emergency instructions throughout an entire school when an alarm (e.g. lockdown, lockout, security, fire) is tripped or manually activated. The emergency instructions shall be preprogrammed and require no user intervention. The system shall provide a redundant alarm annunciation over intercom/paging speakers and is not meant to replace primary fire alarm or security systems.
29. The system shall provide the ability for the school to upload their own recorded files for both Bell Tones, and Notifications.
30. The platform shall provide the ability to initiate school safety paging announcements, evacuation tones and take cover tones from any telephone within the facility or outside the facility to any other location within the facility or district.
31. IP-enabled two-way voice communication shall be available from any provided telephone or administrative console through any speaker in the system. This shall allow hands-free communication to any classroom or any individual loudspeaker unit. A pre-announce tone shall sound immediately before the intercom path is opened.
32. The system shall provide for a complete personal alert function for each teacher. The alert functionality shall be an integrated part of the administrative head end software and shall not require any separate application or hardware to support this functionality.
33. The teacher personal alert functionality shall be integrated into the classroom microphones and the teacher web screen.
34. The system shall be capable of displaying the location of the alert on the map in the case of a microphone being within range of its paired receiver, or from the teacher's web access screen. The system shall also be capable of approximately locating the location of the alert in the case of a microphone that is not in range of its paired receiver. A system, either the microphone system, or the administrative system that is not capable of receiving an alert from a microphone that is not within range of its paired receiver shall not be considered.

35. Upon alert, the system shall have the ability to provide notification on the dedicated console at the front office, or on any other computer which is currently logged into the administrative interface and has the appropriate credentials. The system must provide both an audible tone, and a change on the screen that clearly indicates that an emergency alert has been received.
36. Upon alert, the system shall also be capable of sending e-mail and SMS text messages to designated school personnel. These alerts shall include a web link to the administrative console.
37. If cameras are installed in the classrooms, the system shall be capable of showing a live video from the classroom that received an alert. This shall only be shown in the case of an alert where the microphone is within range of its paired receiver.
38. The system shall have the ability to acknowledge the receipt of the alert by changing the indicators on the classroom microphone receiver in the room where the alert was received from. In the case of an alert received from a microphone not in range of its paired receiver, no acknowledge shall be sent.
39. The system shall have the capability of maintaining a record of all alerts that are received and provide appropriate school personnel the capability to enter information about the alert, which shall be maintained in the systems database. That information shall also be made available to appropriate school personnel in the form of a report that shows all alerts that have occurred, their date, time, and the end alert information.