Description

The LC300SWP SCS software provides all system control for the LANcom SCS School Communications System. The application resides on the LC3100CC Control Computer utilizing the Microsoft Windows Server 2008 operating system. The software executes bell schedules, manages intercom functions, manges playback of digitally-stored messages, drives visual displays, adjusts system levels, and supervises all components in the system.

The LC3100CC hosts a web server that provides a browser-based interface to the system that allows control from any computer connected to the network. User access is restricted by using the built-in security server that only grants access to the system functions needed for each individual user. The system is configured using the built-in system setup wizard through the browser. The client interface is compatible with Internet Explorer, Mozilla Firefox, and Apple Safari internet browser applications.

Bell Schedules

The LANcom SCS software provides a flexible bell scheduler capable of meeting the needs of a wide variety of institutions. Templates are used to define schedules for different types of days. For example, individual templates can be created for a normal day, half day, testing day, etc.. The template determines the time of the bell event, the actual sound of the event, and the location where the event is to play. Thus, different bell tones can be used and only played in parts of the facility where necessary.

Schedules are activated by applying a specific template to a calendar day to define the events for that day. The system allows multiple calendars to be active simultaneously to allow for different schedules for High School, Middle School, etc. within the same system. Therefore, a single LANcom system will support a facility with multiple schools and multiple buildings.

Schedules can be quickly changed by editing the template to change all days using that template. The schedule for a single day can be changed by modifying how the assigned template will work only for that day. The number of available templates is limited only by the amount of disk space on the computer.
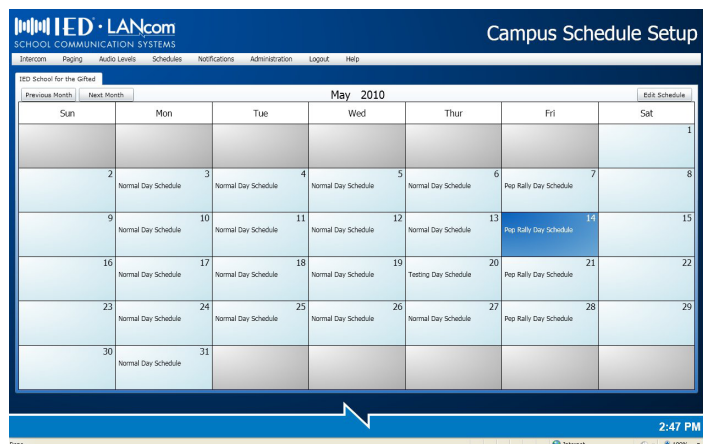

Campus Calendar

Intercom

The LANcom SCS system provides full duplex intercom communications between multiple office locations and classrooms. When a classroom initiates an intercom call request, an audible tone is played in the room to provide feedback that the call request has been placed. The office then receives a call request tone and the call will appear in the intercom call status panel. The office will see the name of the room requesting the call and the time the request was placed. A reminder tone will play as long as unanswered intercom requests are present in the queue. Emergency requests are placed at the top of the queue. They are highlighted in red and a different alert tone will play to indicate that an emergency request is pending.
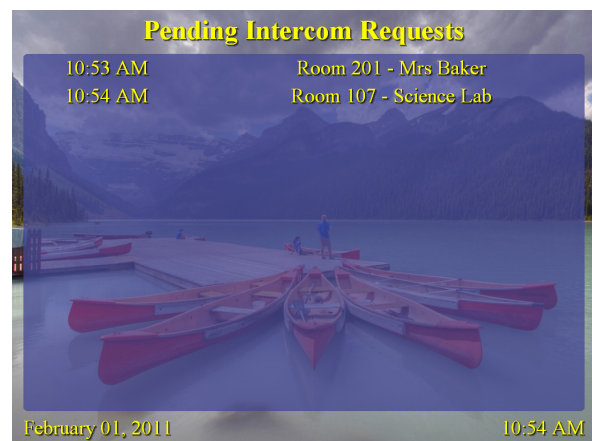
Intercom Call Status

Room Control

The software provides control over all audio for each individual room. The level of control depends on the specific hardware installed in each location. The software allows for program and background music sources to be selected as well as adjusting levels. Users log into the software using the web interface and select the room to control. The system will remember this room and it will be automatically selected the next time the user logs in from the same computer.
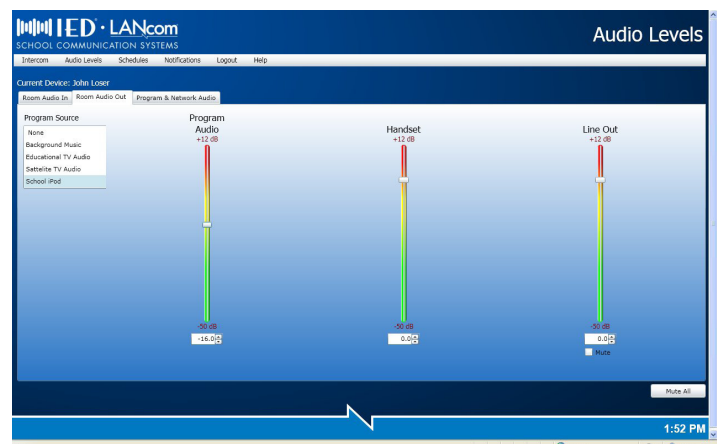

Room Source Selection and Levels

Paging and Messaging

The LANcom SCS system provides the ability to make announcements through the system using dedicated paging stations or through an interface to the telephone system. Individual output zones are grouped together in logical Zone Groups that allow a pre-defined area of the facility to be paged using a single button. For example, if the building is segmented into High School and Middle School, pages can be made to each school without interrupting the other. Overlap is allowed for common use areas in the facility.

Pre-recorded messages are stored on the system and can be played by pressing buttons on a microphone station, clicking on buttons on a web page, or using DTMF from the telephone system. These messages can also play on a schedule. These messages have the added benefit of appearing visually on any message displays used in the system. Notifications can appear on a bulletin board display, providing a reminder of any upcoming events or special announcements.
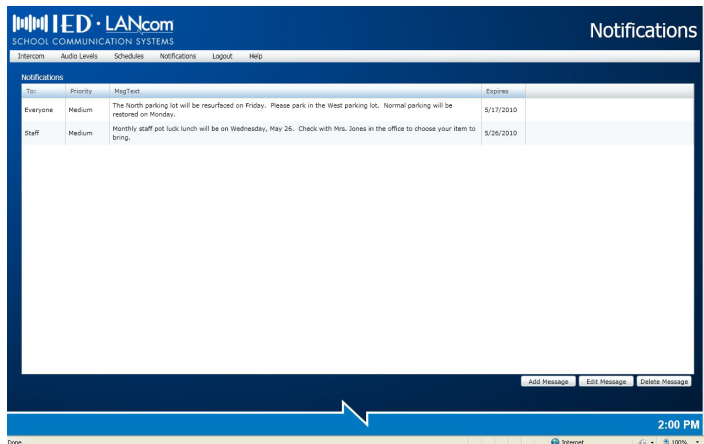
Notifications Display

Monitoring

Audio Monitoring

The system provides different levels of facility and system audio monitoring. Under normal situations, a room containing an intercom device can be monitored by administrative personnel through the telephone interface. When a room is being monitored, a periodic audible alert tone is played to indicate that monitoring is in progress. For emergency situations, individual rooms can be monitored without playing the alert tone.

System Operation Monitoring

Communication to each device in the system is continuously monitored. Any device failure will be reported and logged in the database. The presence of a system fault is then reported to maintenance personnel. Once a day, rooms that have loudspeakers and an intercom unit are tested. Noise is broadcast out of the loudspeaker and the level is read back using the microphone in the intercom unit. A failure is reported and logged in the database.

Minimum Server Requirements

Operating System
Microsoft Windows XP, Server 2003, 7, or Server 2008

Memory
1GB Minimum (2GB or more recommended)

Additional Software
Microsoft SQL2008 Express R2 or higher
Microsoft Internet Information Server (IIS) 6.0 or later
Microsoft XML 4.0 or Higher
Microsoft .Net Framework 4.0

Minimum Client Requirements

Operating System
Microsoft Windows XP/Vista/7
Mac OS X

Software
Microsoft Internet Explorer
Mozilla Firefox
Apple Safari

Architect & Engineering Specifications

The system will be managed from a server-based software package that operates on the Microsoft Windows Server platform. The software will provide a configuration wizard for system setup and configuration of any new devices. The software will manage all intercom functions, paging, pre-recorded messages, bell schedules, and system monitoring. A browser-based user interface will be included to allow system operation from Microsoft Internet Explorer, Mozilla Firefox, or Apple Safari.

The software will provide real-time control of all system hardware. Communications to each device will be continuously monitored and any failures logged and reported. In addition, function of all intercom devices will be verified once per day.

The software will include an integrated bell scheduler capable of supporting multiple overlapping schedules. The user will configure a template containing each bell event, the type of bell to play, as well as the zones to play the event. Templates will be mapped to calendar days and edited to change the schedule for any given day.

The system will include the ability to create emergency events and broadcast selected messages to pre-defined areas of the facility. Individual intercom units can be monitored through the telephone system or intercom handset interfaces to assess the nature of the emergency.