





## I. Overview

The Campus Management Suite (CMS) is a PC-based system that governs digital bells and public address (PA) / intercom broadcasts. CMS runs as a Windows® service on a dedicated computer and streams real-time encoded audio to classroom decoders. This Operating Manual describes the user interface (UI) that enables scheduling and on-demand intercom broadcasting.

## II. Logging in

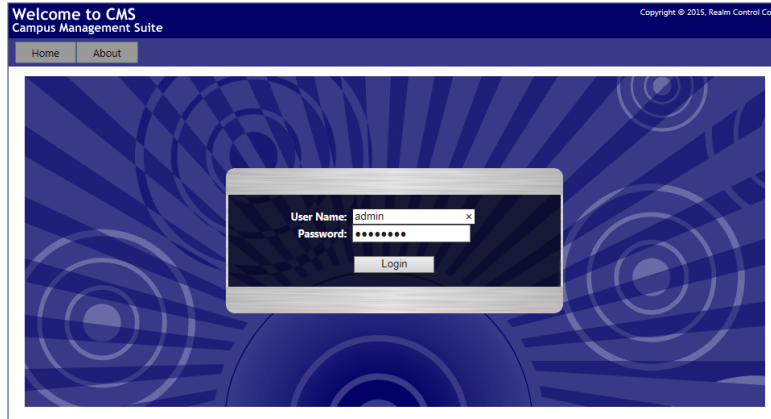


Figure 1: The Login Page

- a. The web address (URL) for the login screen will be provided by the System Administrator. The CMS UI serves up as an Internet Information Services (IIS) web application.
- b. The default User ID / Password is **admin / password**. Use this when logging in for the first time.

## III. The Home Page

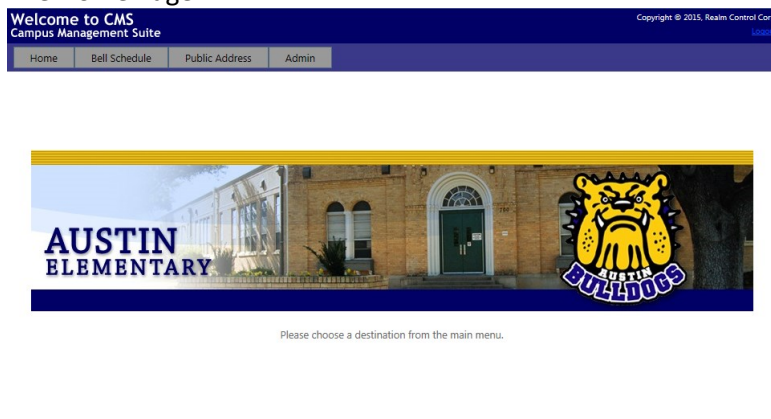


Figure 2: The CMS Home Page



- a. The CMS Home Page may display your school or district logo. This is the main navigation page where the following links are available on the main menu:
  - i. **Home:** Returns to the Home Page.
  - ii. **Bell Schedule:** Redirects to the bell schedule (see Section IV).
  - iii. **Public Address:** Redirects to the PA page (see Section V).
  - iv. **Admin:** Redirects the user to the administrative capabilities (see Section VI). This link is protected and is available only to users that login with Administrative privileges.

#### IV. The Bell Schedule

Figure 3: The Bell Schedule

- a. The bell schedule page is comprised of three sections:
  - i. **Bell Schedules:** a list of schedulable bell sequences, displayed by campus. If CMS is configured only to support your campus then the drop-down atop the list will contain only the name of your school. Otherwise, if CMS is configured to support the entire school district from a centralized server then the drop-down will contain a list of campuses. Selecting any campus will cause the bell schedule list to filter by campus. The following actions are available for the bell schedule list:
    1. Filter by campus using the drop-down atop the bell schedule list.
    2. Select a bell schedule. This will cause the “Edit Bell Schedule” section to be displayed.
    3. **[Add]** - add a new bell schedule to a campus.
    4. **[Delete]** - delete the selected bell schedule.
  - ii. **Add/Edit Bell Schedule:** the bell schedule name, the campus to which the schedule applies, the “Enabled” flag, and the list of bell events sorted by time.
    1. Click [Add] beneath the bell schedule list to display the “Add Bell Schedule” section.
      - a. Enter a name and select the campus for which the bell schedule applies.



- b. Select the [Enabled] checkbox if the bell schedule should be immediately active.
  - c. Click [Add] to create the new bell schedule, or [Cancel] to cancel the new bell schedule creation.
2. Click [Edit Schedule] to edit schedule properties or events.

### BELL SCHEDULE OVERVIEW

Name:

Campus:

Enabled:

#### Bell Events

```
[ -MTWTF- ] 08:00:00 AM: First Bell  
[ -MTWTF- ] 08:10:00 AM: Tardy Bell  
[ -MTWTF- ] 08:15:00 AM: Roll Call  
[ -MTWTF- ] 15:10:00 PM: Bus Dismissal  
[ -MTWTF- ] 15:15:00 PM: All Dismiss
```

The “Edit Bell Schedule” area provides a means of updating the schedule name, the parent campus, the [Enabled] flag, and the bell events.

### EDIT BELL SCHEDULE

Name:

Campus:

Enabled:

#### Bell Events

```
[ -MTWTF- ] 08:00:00 AM: First Bell  
[ -MTWTF- ] 08:10:00 AM: Tardy Bell  
[ -MTWTF- ] 08:15:00 AM: Roll Call  
[ -MTWTF- ] 15:10:00 PM: Bus Dismissal  
[ -MTWTF- ] 15:15:00 PM: All Dismiss
```

- a. Select any bell schedule event to display the “Edit Bell Event” section.



- b. The [Apply] button will become selectable if any schedule property is edited, such as the name or campus. Click this button for any changes to take effect.
    - c. Click [Cancel] to cancel the bell schedule event edit.
  - iii. **Edit Bell Event:** Event parameters may be edited within the “Edit Bell Event” section.

### EDIT BELL EVENT

Name:

Start Time:  :  :

Duration:  seconds

Sound ID:

Days:  Sunday  Monday  Tuesday  
 Wednesday  Thursday  Friday  
 Saturday

Zones: 

Zone 1
Zone 2
Zone 3
Zone 4
Zone 5
Zone 6
Zone 7

- a. **Name:** the name of the bell schedule event. Place the cursor in the text area and overwrite the existing name to update the event name.
- b. **Start Time:** the time when the bell should sound in HH:MM:SS AM/PM format.
- c. **Duration:** the length of time that the bell event should play.
- d. **Sound ID:** the numeric ID of the sound to play on the bell player. Determining the sound ID depends on the files that are loaded onto the MP3 player. Separate documentation specific to the bell player device at your facility will be provided.
- e. **Days:** the weekdays when the bell event should be played. Click each checkbox that applies to the event that you are editing.
- f. **Zones:** the destination zones where the bell event should broadcast. Zones are collections of destinations, each of which applies to a streaming audio decoder. Zone management is described in section VI.d. Use click / CTRL+click / SHIFT+click to select the zone(s) that should be included in the bell event.



- g. Any change to the bell event will enable the [Apply] and [Cancel] buttons. The [Delete] button is visible and can be used to delete a bell event entirely.

V. Public Address

PLEASE SELECT A ZONE:

Zone 2  
Zone 3  
Zone 4  
Zone 6  
Zone 7

Start PA Broadcast

Select any zone and click **[Start PA Broadcast]** to activate the intercom to any zone.

- a. One zones that you are authorized to select will be available in the list.
- b. Zone management is described in section VI.d.
- c. A zone is a grouping of destinations. The voice encoder for the campus that is attached to the zone will be used unless the zone itself overrides the campus encoder. Overriding the campus encoder is useful for broadcasts to zones that span multiple campuses. See section VI.d for more information.
- d. Zones that are broadcasting will be shown on the same page. Click the “End PA Broadcast” zone link to end the broadcast.

PLEASE SELECT A ZONE:

Zone 2  
Zone 3  
Zone 6  
Zone 7

End PA Broadcast: [Zone 4](#)

VI. Administrative functions

The Administrative functions allow authorized users to add/edit/delete campuses, users, destinations, and zones. A zone is typically associated with an individual campus but zones can also span campuses.



a. Campus Management

CMS CAMPUSES	CAMPUS OVERVIEW	
Austin Elementary	Campus Name:	Austin Elementary
Campus 5	Bell Player Type:	ECE <input type="button" value="v"/> Stream ID: 12
Campus 6	Bell Player Encoder IP:	192.168.0.214
Lower School	Voice Prompt Player Type:	Gilderfluke <input type="button" value="v"/> Stream ID: 30
Middle School	Voice Prompt Control IP:	192.168.0.215
Upper School	PA Encoder IP:	192.168.0.216 Stream ID: 25
	Street:	700 N Van Buren
	City:	San Angelo
	State:	TX
	Zip:	76901
	District:	San Angelo ISD
<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/>		

- i. Click **[Add]** to create a new campus. The following fields will be available for data entry:
1. Campus Name.
  2. Bell Player Type: the model of audio player that is dedicated to this campus. The two models supports as of the publication of this document are the Exhibit Control Engineering (ECE) Digital Message Repeater (DMR) and the Gilderfluke MP3 player.
    - a. Bell Player Stream ID: the ID of the encoder that is attached to the output of the bell sound audio player.
    - b. Bell Player IP: the IP address of the control device that communicates with the bell player. The bell player itself is controlled via RS-232. CMS sends commands to the bell player using an intermediary device on the network, such as an AMX control system, Extron IPLink device, Global Cache device, Crestron control system, etc. The control device is unique to your facility; separate documentation will be provided after the initial installation is complete.
  3. Voice Prompt Player Type: this hardware is identical to the bell player described above. This entry is applicable only if the dial-in interface is available whereby users can broadcast announcements using the telephone system.
    - a. Voice prompt Stream ID: the ID of the encoder that is attached to the output of the voice prompt audio player.
    - b. Voice Prompt Player IP: as with the bell player, this is the IP address of the device that controls the voice prompt player.
  4. PA Encoder IP: the IP address of the campus encoder that broadcasts the intercom.
    - a. Stream ID: the stream ID that the destination encoders “tune” to when an intercom broadcast is initiated.
  5. The Street, City, State, Zip Code, and District information are optional and for informational purposes only.





- ii. Select any campus and click **[Edit]** to edit the campus properties. The [Apply] and [Cancel] buttons will become available after updating any field.

b. User Management

### CMS USERS

Default Administrator
Burke, Riley
<b>Fulgium, Elijah</b>
Vizcaino, Ian
Williams, Hannah

### USER OVERVIEW

User Name:	efulgium
First Name:	Elijah
Last Name:	Fulgium
Rights Level:	Standard User
Permission(s):	Edit Schedule
E-Mail:	efulgium@RealmCtrl.com
Campus:	Austin Elementary Campus 5 Campus 6 Lower School

- i. User Name: this is the user name used on the login screen. It should not include spaces.
- ii. First Name: the user's proper name.
- iii. Last Name: the user's surname.
- iv. Password: the user's password.
- v. Rights level / Account Type: either Administrator, Standard User, or Super User
  1. The Administrator has rights to the "Admin" tab.
  2. The Standard User has rights to schedule bell events and broadcast announcements.
  3. The Super User has rights to schedule bell events, broadcast announcements, edit user permissions, and edit system settings. These user rights are individually configurable with checkboxes:

#### EDIT USER: FULGIUM, ELIJAH

User Name:	efulgium
First Name:	Elijah
Last Name:	Fulgium
Password:	••••••••
Account Type:	Administrator <b>Standard User</b> Super User
Permissions:	<input type="checkbox"/> Edit Users <input checked="" type="checkbox"/> Edit Schedule <input type="checkbox"/> Edit System
PIN:	
E-Mail:	efulgium@RealmCtrl.com
Campus:	Austin Elementary Campus 5 Campus 6 Lower School





4. The PIN applies to facilities that utilize the phone interface to broadcast intercom announcements. This is the PIN number that will authenticate the user into the PA system.
5. E-Mail: the user's e-mail address. Currently this is for informational purposes only.
6. Campus: the list of campuses that the user is authorized to manage. Use click / CTRL+Click, and SHIFT+Click to select campuses. The user will have rights to schedule bell events and broadcast announcements to the campus(es) that are selected here.

c. Destinations

### CMS DESTINATIONS

Room 100
Room 101
Room 102
Room 103
Room 104
Room 105
Room 106

### DESTINATION OVERVIEW

Name:	Room 101
IP Address:	192.168.1.101
Teacher:	Mrs. Burke
Decoder:	SVSi Transceiver ▾
Volume:	100 ▾
E-Mail:	Allison.Burke@RealmCtr
Phone:	8499
Grade Level:	2nd Grade
Campus:	Austin Elementary ▾
Out of Order:	<input checked="" type="checkbox"/>

Use the [Add], [Edit], [Delete] buttons to manage CMS destinations. The following fields are available to add or edit:

### EDIT DESTINATION

Name:	Room 101
IP Address:	192.168.1.101
Teacher:	Mrs. Burke
Decoder:	SVSi Transceiver ▾
Volume Level:	100 ▾
E-Mail:	Allison.Burke@RealmCtr
Phone:	8499
Grade Level:	2nd Grade
Campus:	Austin Elementary ▾
Out of Order:	<input checked="" type="checkbox"/>



- i. Name: the friendly room name.
- ii. IP Address: the IP address of the audio decoder within the destination.
- iii. Teacher: optional and for informational purposes only.
- iv. Decoder: the model of audio decoder within the destination.
- v. Volume: the volume level of the audio decoder. This level is set any time there is a PA broadcast or a bell event that includes the destination.
- vi. The teacher e-mail, phone extension, and grade level are optional and for informational purposes only.
- vii. Campus: the campus where the destination exists.
- viii. Out of Order: if checked then the classroom will be excluded from PA broadcasts and bell events.

d. Zones

CMS ZONES	EDIT ZONE
<ul style="list-style-type: none"><li>Zone 1</li><li>Zone 2</li><li style="background-color: #0070C0; color: white;">Zone 3</li><li>Zone 4</li><li>Zone 5</li><li>Zone 6</li><li>Zone 7</li></ul>	Name: <input type="text" value="Zone 3"/>
	Dialer PIN: <input type="text" value="1234"/>
	PA Encoder IP: <input type="text" value="192.168.1.100"/>
	<small>Leave PA Encoder IP blank to use campus PA voice encoder.</small>
	Filter by Campus: <input type="text" value="Austin Elementary"/>
<input type="button" value="Add"/>	Available: <input type="text" value="Room 102"/> <input type="button" value="&gt;&gt;"/>
	Included in Zone: <input type="text" value="Room 100, Room 101, Room 103, Room 104"/>

Use the [Add], [Edit], [Delete] buttons to manage CMS zones. The following fields are available to add or edit:

EDIT ZONE	
Name:	<input type="text" value="Zone 3"/>
Dialer PIN:	<input type="text" value="1234"/>
PA Encoder IP:	<input type="text" value="192.168.1.100"/>
	<small>Leave PA Encoder IP blank to use campus PA voice encoder.</small>
Filter by Campus:	<input type="text" value="Austin Elementary"/>
Available:	<input type="text" value="Room 102"/> <input type="button" value="&gt;&gt;"/>
Included in Zone:	<input type="text" value="Room 100, Room 101, Room 103, Room 104"/>

- i. Name.
- ii. Dialer PIN: applicable only if your facility uses the dial-in feature to broadcast PA announcements. This is the PIN number that will be used to start the intercom broadcast to the zone after authenticating with the user PIN number.
- iii. PA Encoder IP: the IP address of the audio encoder for the zone. If blank then the first campus attached to the zone will be used to determine which encoder



---

to use. Otherwise, if an IP address is in this field then it'll be used for the encoder. This is useful for zones that span multiple campuses.

- iv. Filter by Campus: this is a shortcut that'll cause the Destination list to filter by campus. This value is not saved in the CMS database.
  - v. Destinations: use Click / SHIFT+Click / CTRL+Click to select destinations to include within the zone, then click the right arrow button to add the selected destination(s). Destinations within the "Included in Zone" list can be removed by clicking the left arrow.
- e. System  
The System page is for purposes of future functionality.