

# VSA-31-IP Manager

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## Overview

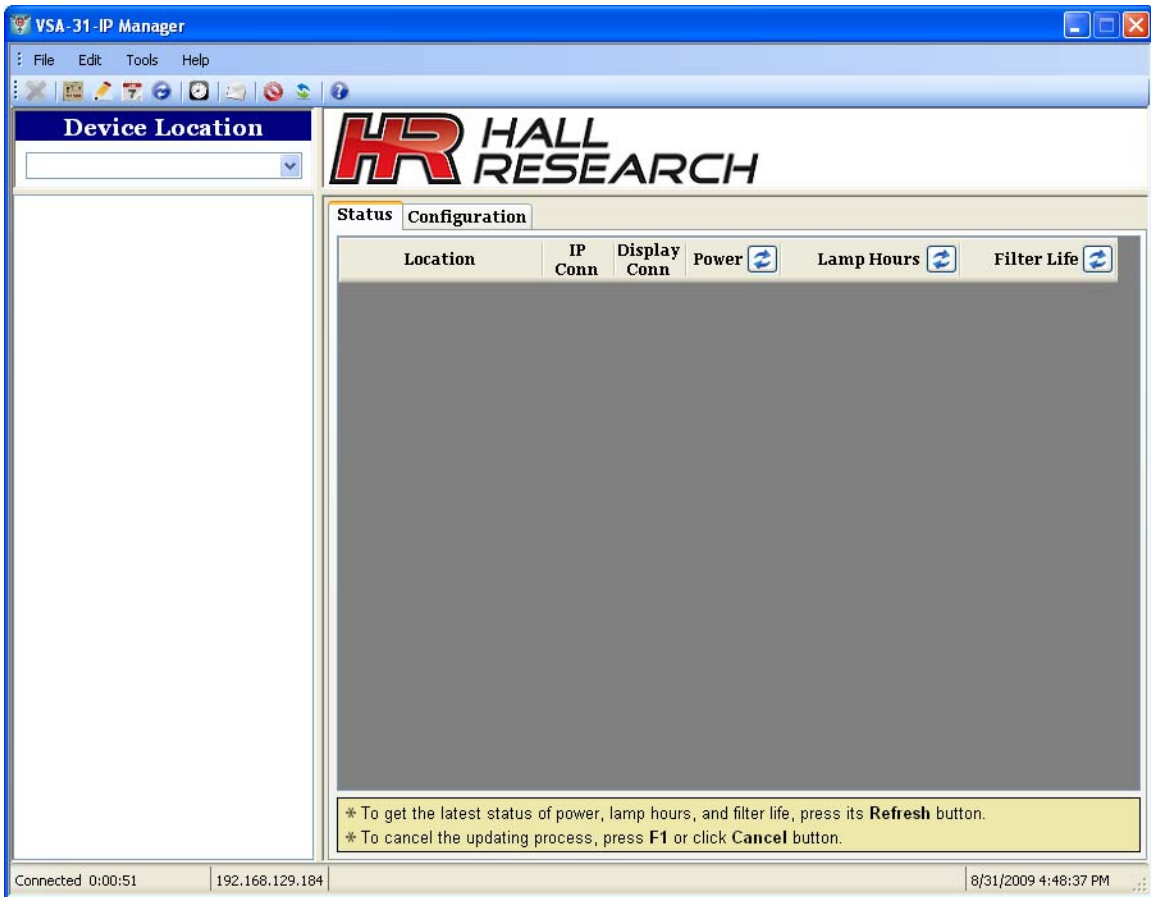
The VSA-31-IP Manager is a Windows GUI that can be installed on your PC to control or monitor multiple VSA-31 units and projectors through VSA-31-IP units.

## Getting Started

The VSA-31-IP Manager is recommended to run on PC with Windows XP or later version. The .NET Framework 2.0 is required prior to installing the VSA-31-IP Manager. Most new PCs running with Windows XP or later version come with Microsoft .NET Framework 2.0 installed. If .NET Framework 2.0 is not installed on your PC, you can install it from a folder called Framework 2.0 or download it from the Microsoft website.

Once the VSA-31-IP Manager installation is completed, its icon should appear on your desktop as well as under **Programs\Hall Research**.

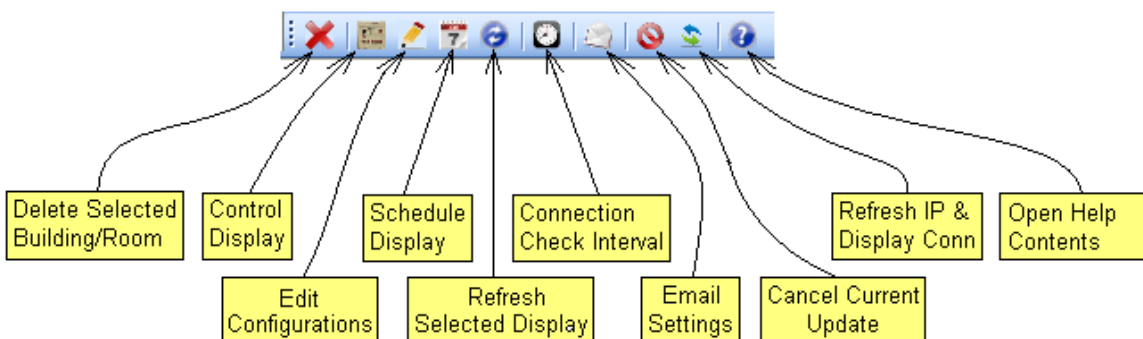
To run the VSA-31-IP Manager by double clicking its desktop icon or its program menu selection, the **Status** screen in Figure 1 will be displayed as below.



**Figure 1 – Status**

## Toolbar

The VSA-31-IP Manager has a Toolbar menu as shown in Figure 2, which allows users to quickly access the most commonly used functions in addition to the menus.



**Figure 2 – Toolbar Menu**

## Delete Building/Room

There are several ways to delete a building or a room. One is to select a building or a room and press the **X** button. Another is to right click a mouse after selecting a building or a room. A quick menu will then pop up, and users can delete it by selecting **Delete** 'xxxxxx' from this pop-up menu as shown in Figure 3. Users can also delete it from the **Edit** menu.

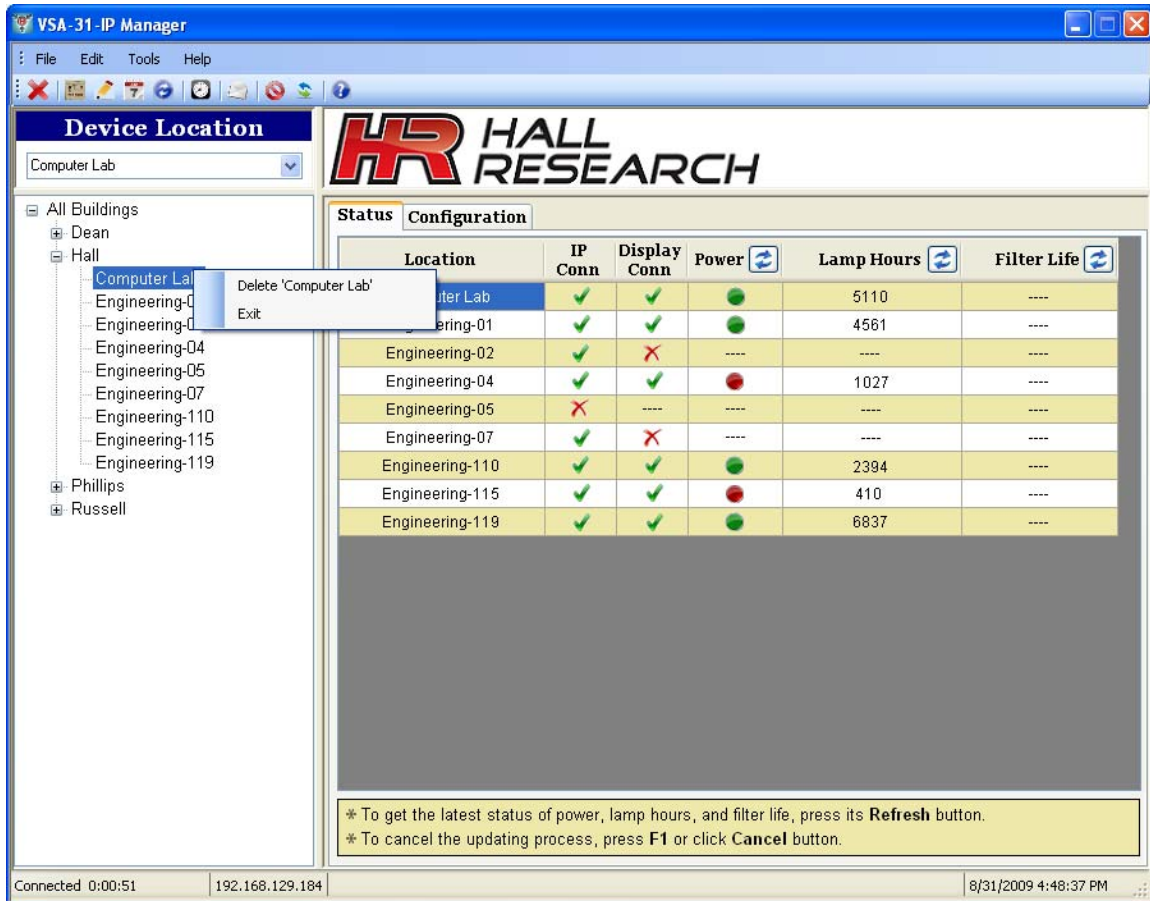

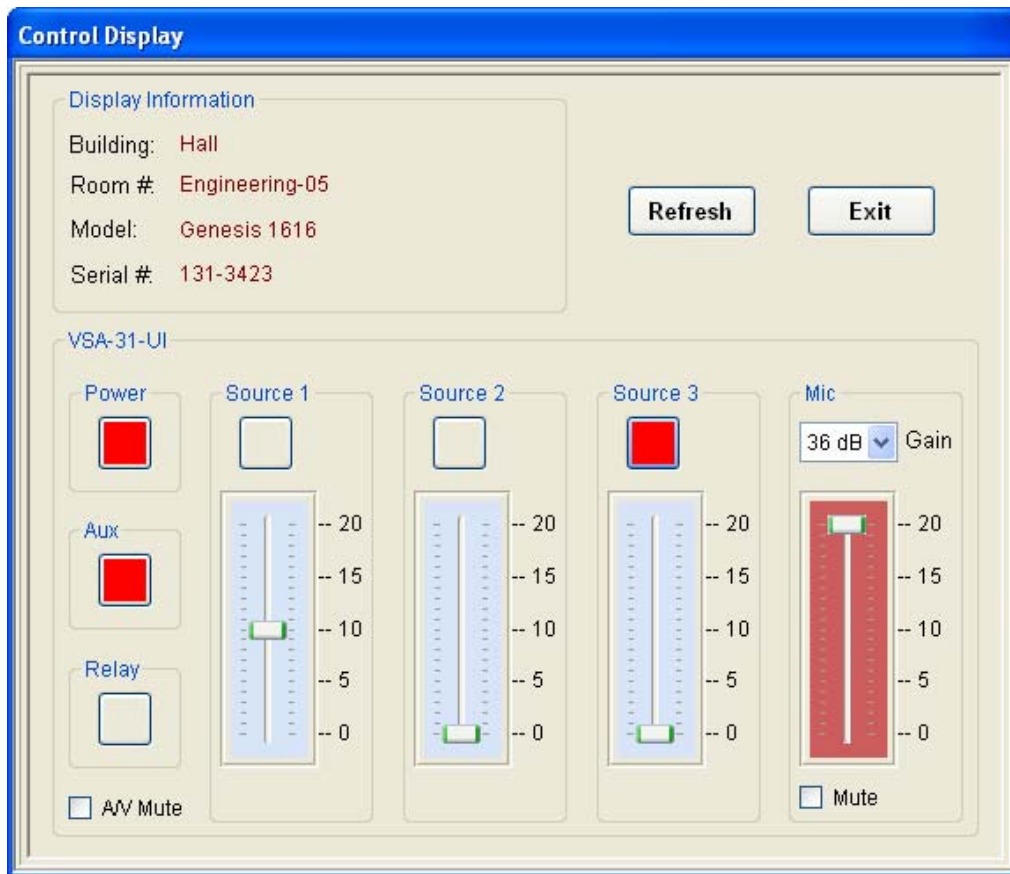


Figure 3 – Delete Building/Room

## Control Display

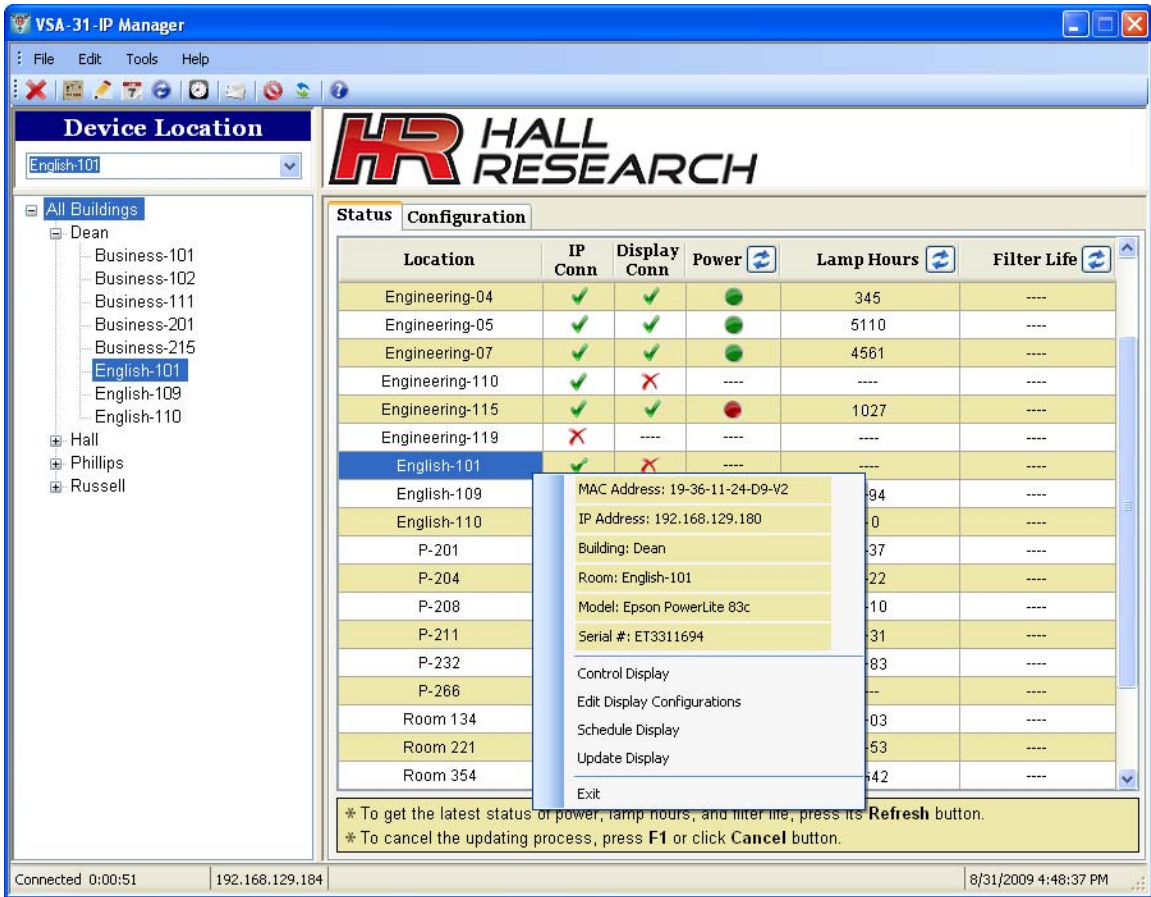
The VSA-31-IP Manager gives users a capability to remotely control the display in the specific room as if having a VSA-31-UI. Users can open the **Control Display** screen in Figure 4 in many different ways such as from the Toolbar menu by pressing the  button, from the pop-up menu or the Tools menu by selecting **Control Display**.

Users can select a desired display in a specific room to control from the pull-down menu under **Device Location**, which lists all rooms in alphabetical order, from the Building/Room hierarchy in the left panel, or from the device table listed in the **Status/Configuration** tab page.




**Figure 4 – Control Display**

Figure 5 shows a pop-up menu when users right click a mouse on the selected room.



**Figure 5 – Pop-up Menu**

## Edit Configurations

Users can edit all the device and display parameters as seen in Figure 6 including an IP address if needed. Then, press the **OK** button to save it when done. Selecting the  button from the Toolbar menu, or the **Edit Display Configurations** option from the pop-up or the Tools menu will bring up the **Edit Device Configurations** screen.

**Edit Device Configurations**

**Selected Device**  
 MAC Address: 19-38-11-24-D9-V2  
 IP Address: 192.168.129.180

**Device Location**  
 Building: Dean  
 Room #: English 101  
 Asset #: 11

**Display Properties**  
 Model: Epson PowerLite 83  
 Serial #: ET3311694  
 Asset #: 23

**Display Status**  
 Function:   
 Mode: Text  
 Baud: 19200  
 Parity: None  
 Command:   
 OK  
 Cancel

**Figure 6 – Edit Configurations**


## Schedule Display

The VSA-31-IP Manager allows users to schedule events such as turning on/off display, switch A/V sources, turning Relay on/off ...etc ...in a particular room, all rooms in a building, or all rooms in all buildings.

The schedule date can be as: Daily, Weekday, Weekend, Monday – Sunday, or a specific date using the calendar as shown in Figure 7.

The schedule time uses a 12-hour format (hh:mm tt).

To delete a particular scheduled event, users can select a desired event and press the **Delete** button.

Opening the **Schedule Display** screen as seen in Figure 7 can be done by selecting the  button from the Toolbar menu or the **Schedule Display** selection from the pop-up or the Tools menu.

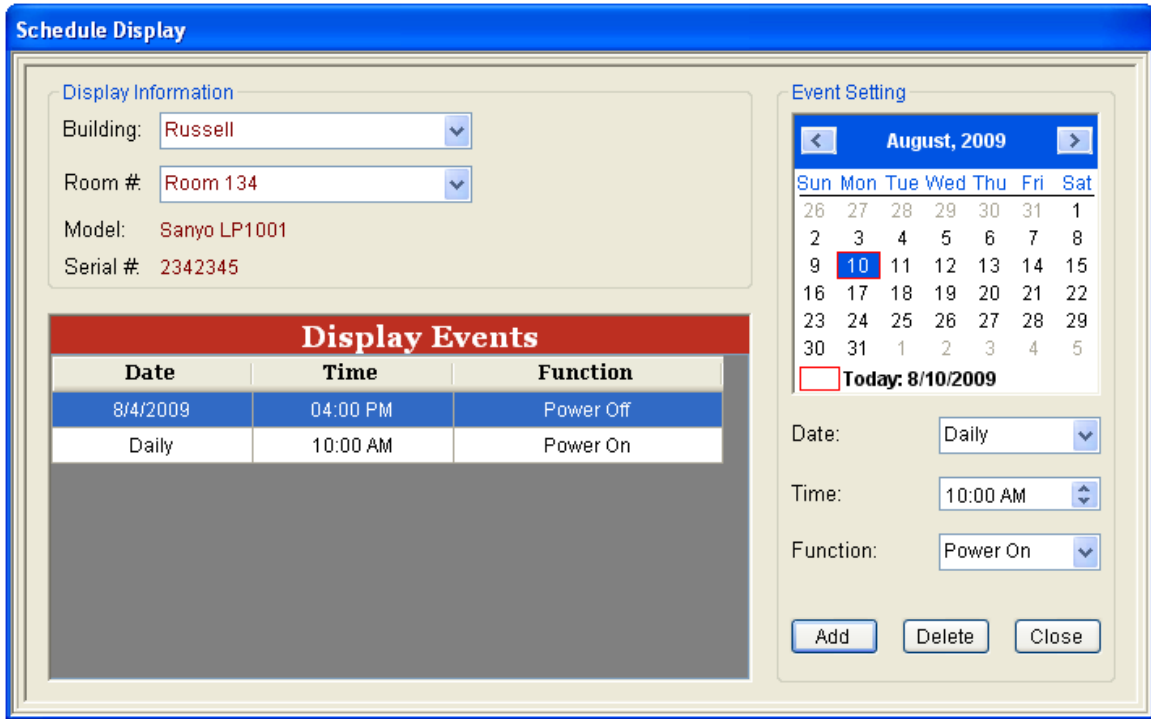




Figure 7 – Schedule Display

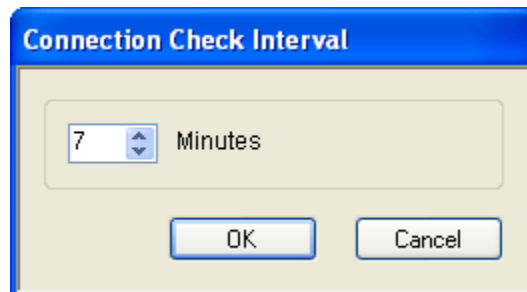
### Update Display

The IP and the display connections along with its power status, lamp hours, and filter life in a particular room can be updated by selecting the  button from the Toolbar menu or the **Update Display** selection from the pop-up or the Tools menu.

### Connection Check Interval


The **Connection Check Interval** screen is used to set the IP and the display connection update interval for all devices listed in the **Status/Configuration** tab page. The check interval can be set in minutes meaning every x minutes, the VSA-31-IP Manager will automatically check for an IP connection of each device and a display connection to that device in the list.

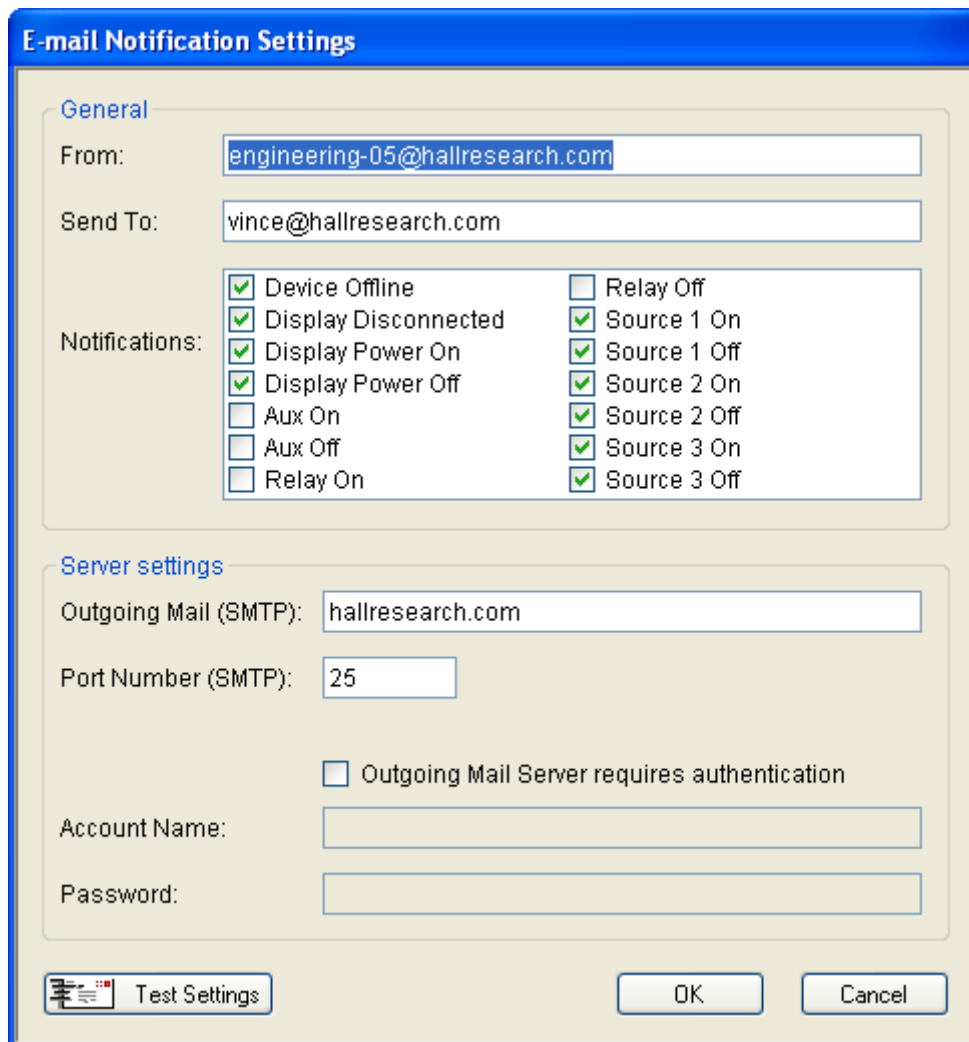
Selecting the  button from the Toolbar menu or the **Connection Check Interval** selection from the pop-up or the Tools menu to bring up the screen as shown in Figure 8.



**Figure 8 – Connection Check Interval**

## Email Settings

The VSA-31-IP Manager can be configured to send an email notification when an IP device or a display is disconnected, or when a task is completed. Selecting the  button from the Toolbar menu or the **Email Notification Settings** from the Tools menu to bring up the screen in Figure 10, which is used to specify the settings for the email notifications.



**E-mail Notification Settings**

**General**

From:

Send To:

Notifications:

<input checked="" type="checkbox"/> Device Offline	<input type="checkbox"/> Relay Off
<input checked="" type="checkbox"/> Display Disconnected	<input checked="" type="checkbox"/> Source 1 On
<input checked="" type="checkbox"/> Display Power On	<input checked="" type="checkbox"/> Source 1 Off
<input checked="" type="checkbox"/> Display Power Off	<input checked="" type="checkbox"/> Source 2 On
<input type="checkbox"/> Aux On	<input checked="" type="checkbox"/> Source 2 Off
<input type="checkbox"/> Aux Off	<input checked="" type="checkbox"/> Source 3 On
<input type="checkbox"/> Relay On	<input checked="" type="checkbox"/> Source 3 Off

**Server settings**


Outgoing Mail (SMTP):

Port Number (SMTP):

Outgoing Mail Server requires authentication

Account Name:

Password:



**Figure 9 – Email Notification Settings**

### From

A valid email address of the sender of the email notification is required in this field. This can be the email address of the user of the computer running VSA-31-IP Manager.

### Send To

A valid email address of the recipient of the email notification is required in this field.

Users can enter in more than one recipient's email address by separating each one with a comma.

### Notifications

Users can place a checkmark in the box of each event that they want to be notified of. The most common situation that an administrator wants to be notified of is when either an IP device or a display in the room is disconnected. It can also be very useful to be notified when a scheduled task is completed.

### Outgoing Mail (SMTP)

The name of the outgoing mail SMTP server is required in order to send email notifications.

### Port Number (SMTP)

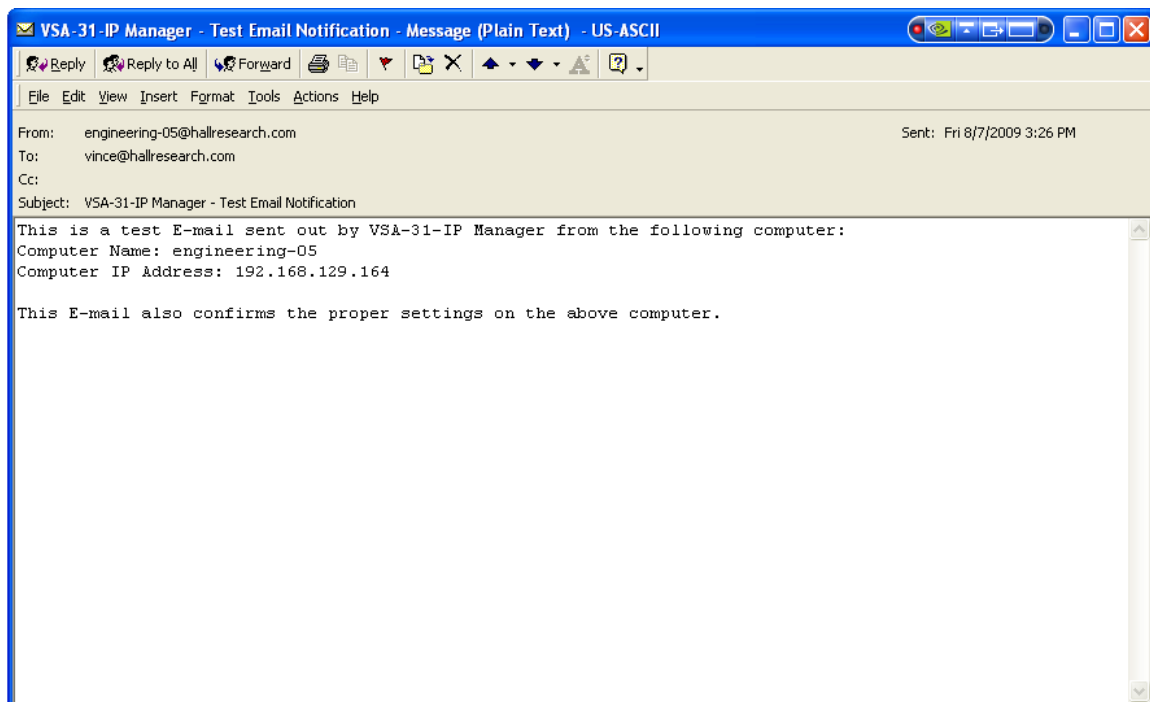
The port number of the outgoing mail SMTP server is required in order to send email notifications. The most common port number for mail SMTP server is 25.

### Server Requires Authentication

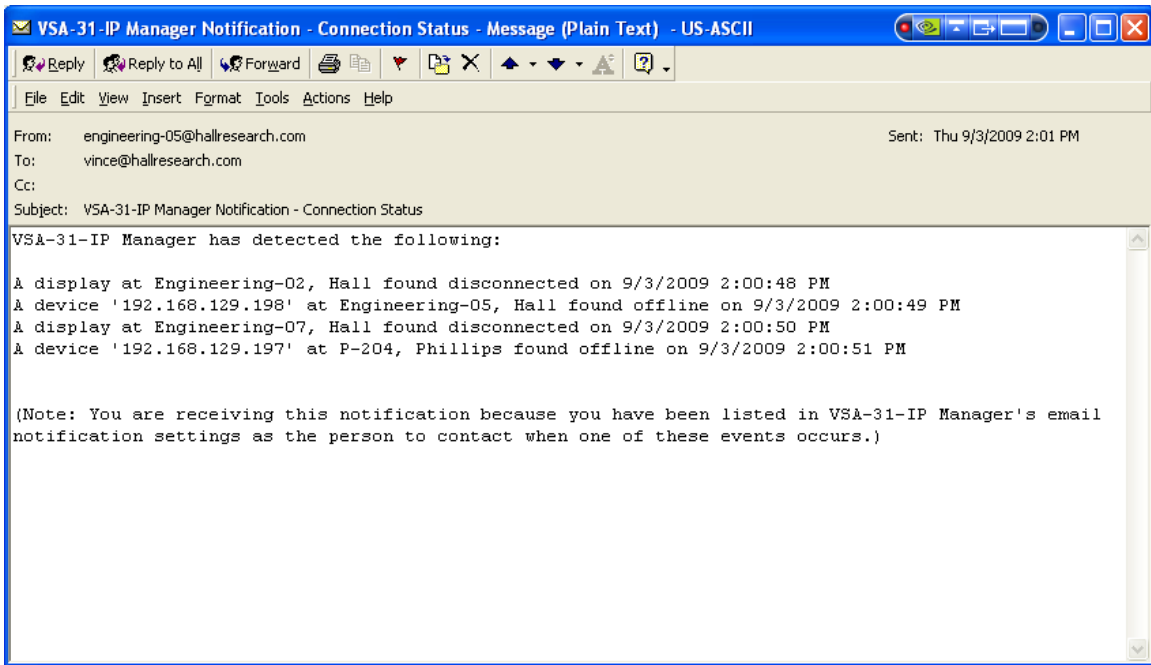
If the outgoing mail SMTP server requires authentication, check off this box and enter in the account name and account login in the **Account Name** and **Password** fields.

You can test your settings by pressing the **Test Settings** button. A test email will be sent to the recipient's mailbox.

Samples of test email and real notification email are shown below:



**Figure 10 – Test Email Sample**




**Figure 11 – Connection Status Email Sample**




**Figure 12 – Scheduled Events Email Sample**


## Cancel

During the current update of the IP and display connection status, users can press the  button from the Toolbar menu or **F1** at any time to stop it.

## Update IP & Display Connection

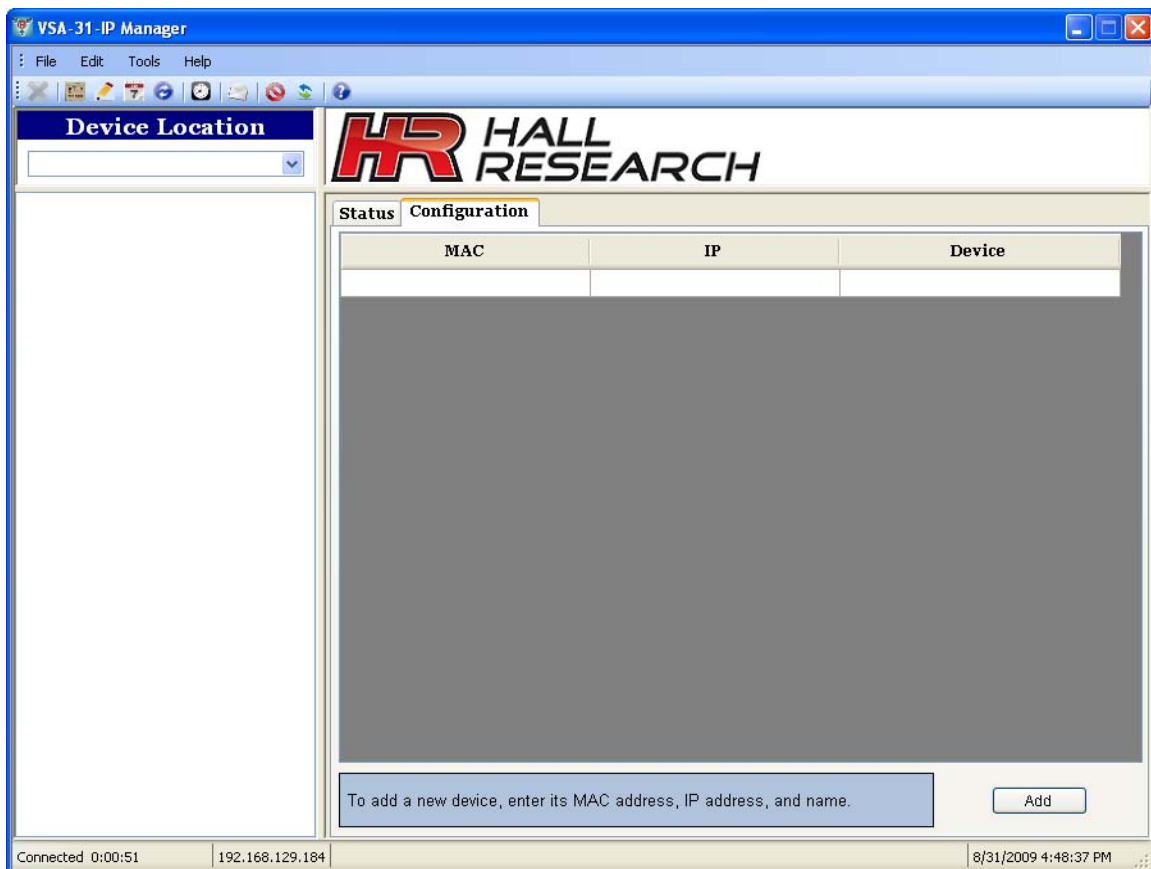
Press the  button to manually update the IP and display connection of all devices listed in the table. Users can also press **F5** or select **Refresh** from the Tools menu to get latest connection status of all devices and displays.

## Help

Press the  button from the Toolbar menu or **Contents** from the Help menu to open a help file on VSA-31-IP Manager. This help file is in pdf format. An Acrobat Reader is required to view it.

## Add Building/Room

First, select the **Configuration** tab page. Then, enter MAC address, IP address, and Room number under its respective column and press the **Add** button when done as shown in Figure 13.



**Figure 13 – Configuration**

This also brings up the **Add New Device** screen in Figure 14, where users can enter additional information such as a building where this new device is located, device asset number if desired, display model, serial number and display asset number if desired, serial commands of lamp hours, filter life of the specific display model, a text or hex mode for the display's serial commands, communication baud rate of the display, and its parity. When done, press **OK** button to save; otherwise, press **Cancel** button to exit without saving.

The screenshot shows a dialog box titled "Add New Device" with a blue header. It is divided into several sections:

- Selected Device:** Contains two text input fields: "MAC Address:" with the value "13-34-VB-D2-W8-12" and "IP Address:" with the value "192.168.129.185".
- Device Location:** Contains three fields: "Building:" (a dropdown menu), "Room #:" (a text input field containing "Conference Room"), and "Asset #:" (a text input field).
- Display Properties:** Contains three fields: "Model:" (a dropdown menu), "Serial #:" (a text input field), and "Asset #:" (a text input field).
- Display Status:** Contains four dropdown menus: "Function:", "Mode:" (set to "Text"), "Baud:" (set to "19200"), and "Parity:" (set to "None"). Below these is a "Command:" text input field.

At the bottom right of the dialog are two buttons: "OK" and "Cancel".

**Figure 14 – Add New Device**

### **Note**

***Once, entering serial commands for a specific display model, the VSA-31-IP Manager will save them. Users will not have to enter them again if a new added device is connected to the same display model. When a serial command of a specific display model is modified, every IP device connected to this display model will also get updated.***

All the added devices are being organized into location hierarchy, such as building and room number as seen in the left panel under **Device Location**. A drop-down menu **Device Location** lists all devices by room number in alphabetical order. It can be used to easily search for a room number. Once a room number is selected under **Device Location** menu, the VSA-31-IP Manager points right into that location in the **Status** page. This will give users a quick look at selected device's status info, such as IP connection, display connection, display power, display lamp hours, and display filter life.

Users have an option to view all rooms in all buildings by selecting **All Buildings** node in the left panel or to view rooms only in a specific building by selecting that building node. Selecting a specific room in this left panel also lists other rooms in the building where a specific room is in.

The VSA-31-IP Manager will automatically update all the IP device connection if any, along with a display connection status connected to each IP device at a specified interval. This connection status update will also be performed when a **Status** tab page is pressed, when a **Refresh** button is clicked, or when a new building is selected.

The display status of power, lamp hours, and filter life can be independently updated by clicking its corresponding **Refresh** button on the column header.

Users can also get the latest update of a specific room by selecting the **Update Display**. The IP and the display connections along with its power status, lamp hours, and filter life in that room will be updated.

**VSA-31-IP Manager**

File Edit Tools Help

Device Location: Business-215

**HR HALL RESEARCH**

All Buildings

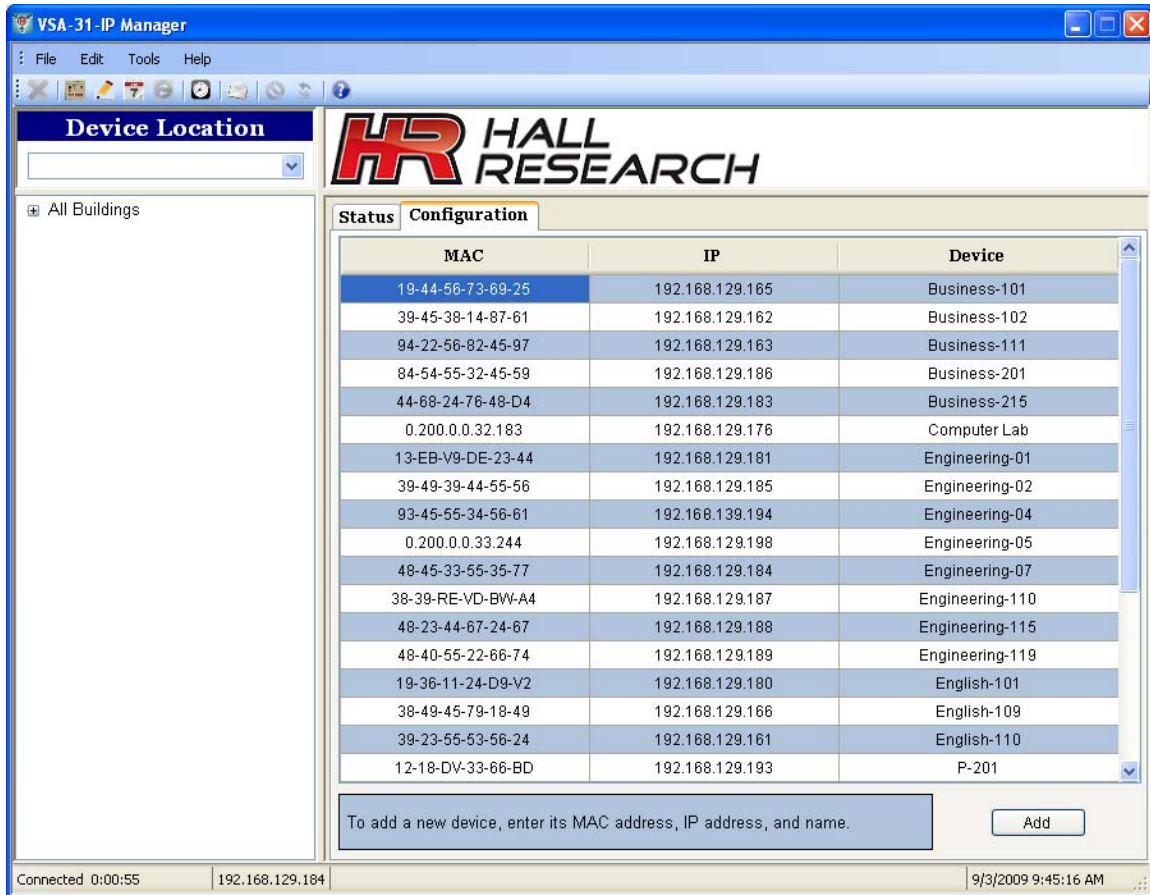
- Dean
  - Business-101
  - Business-102
  - Business-111
  - Business-201
  - Business-215**
  - English-101
  - English-109
  - English-110
- Hall
- Phillips
- Russell

Location	IP Conn	Display Conn	Power	Lamp Hours	Filter Life
Business-215	✓	✓	●	345	----
Computer Lab	✓	✓	●	5110	----
Engineering-01	✓	✓	●	4561	----
Engineering-02	✓	✗	----	----	----
Engineering-04	✓	✓	●	1027	----
Engineering-05	✗	----	----	----	----
Engineering-07	✓	✗	----	----	----
Engineering-110	✓	✓	●	2394	----
Engineering-115	✓	✓	●	410	----
Engineering-119	✓	✓	●	6837	----
English-101	✓	✓	●	5422	----
English-109	✓	✓	●	1010	----
English-110	✓	✓	●	2531	----
P-201	✓	✓	●	1283	----
P-204	✗	----	----	----	----
P-208	✓	✓	●	1203	----
P-211	✓	✓	●	1453	----
P-232	✓	✓	●	3642	----

\* To get the latest status of power, lamp hours, and filter life, press its **Refresh** button.  
 \* To cancel the updating process, press **F1** or click **Cancel** button.

Connected 0:00:51 | 192.168.129.184 | 8/31/2009 4:48:37 PM

**Figure 15 – Status Page**



**Figure 16 – Configuration Page**

## Format Display String

The display string such as lamp hours and filter life can be in many different formats. The VSA-31-IP Manager provides users a capability to parse these strings and display a desired value for lamp hours and filter life.

- To open a screen in Figures 17-19, select **Format Display String** from the Edit menu.
- Select the display model from the drop-down menu. This list of models is automatically populated when a new device is added. If a desired model is not listed, users can type it in.
- Next, select a display string mode such as text, hex, or character that is best to parse the string.
- Users can test parsing the display string by entering it in the Input text box and click the **Test** button to view the result.
- When done, press the **Save** button to save it and close the screen.

Figure 17 shows an example of response string in text for a projector Infocus IN5102. The unit has 350 lamp hours. 0-3000 is the range. ‘,’ is the header of the lamp hours, and ‘)’ is the terminal of the lamp hours.

The screenshot shows a 'Format Display String' dialog box. Under 'Format Parameters', the Model is 'Infocus IN5102', Mode is 'Text', Header is ',', and Terminal is ')'. Under 'Test String', the Input is '(0-3000, 350)' and the Output is '350'. There are buttons for 'Delete', 'Save', 'Close', and 'Test'.

**Figure 17 – Format Display String**

Figure 18 shows another example of response string in hex for a projector Dell 2400MP. This projector’s lamp hours string consists of 4 hex bytes where Byte0 (0x00 – Success), Byte1 (0x2F – the header of lamp hours), Byte2 (LSB data), and Byte3 (MSB data).

The screenshot shows a 'Format Display String' dialog box. Under 'Format Parameters', the Model is 'Dell 2400MP', Mode is 'Hex', 1st-Byte Position is '2', 2nd-Byte Position is '3', and 1st of Two Data Bytes is 'LSB'. Under 'Test String', the Input is '002F2003' and the Output is '800'. There are buttons for 'Delete', 'Save', 'Close', and 'Test'.

**Figure 18 – Format Display String**

Figure 19 shows one more example of response string in character for a projector Optoma EW1610. This projector returns a lamp hours string in the following format.

Response: OKabbbbccdddde

a : 1/0=On/Off

bbbb: LampHour  
cc: source 00/01/02/03/04/05=  
None/DVI-D/VGA1/VGA2/S-Video/Video  
dddd: FW version  
e : Display mode

**Format Display String**

**Format Parameters**

Model:  Mode:  1st-Char Position:  Last-Char Position:

**Test String**

Input:  Output:

**Figure 19 – Format Display String**