FIRE-LITE ALARMS by Honeywell

FS-Tools Help File

ES-50X
ES-50XC

Programming Guide

Table of Contents

Welcome to FS-Tools

FS-Tools lets you create and edit databases used to program fire panels and related fire system equipment. With the integrated Upload/Download facility, you can use it to configure fire panel settings and download it to the panel. Various information can also be uploaded from the panel to FS-Tools.

FS-Tools Features

- Maintains details of the fire panel customers
- Configures fire panel settings for a customer
- Verify Setup feature verifies configuration settings before downloading to panel
- Download Utility to download the configuration information to the fire panel
- Upload Utility to upload event logs, history data, and troubleshoot data from the fire panel
- File Comparison Utility allows location by location comparison of separate upload and download files
- Export Configuration feature to export the saved configuration to a file
- Graphical representation of installed detectors and modules
- Simulation feature displays the correlation of the input and output devices
- Fire panel troubles and events troubleshooting

Software Downloads

In order to supply the latest features and functionality in fire alarm and life safety technology to our customers, we make frequent upgrades to the embedded software in our products. To ensure that you are installing and programming the latest features, we strongly recommend that you download the most current version of software for each product prior to commissioning any system. Contact Technical Support with any questions about software and the appropriate version for a specific application.

Installing FS-Tools

Complete Setup versus Custom Setup

FS-Tools setup offers two installation options.

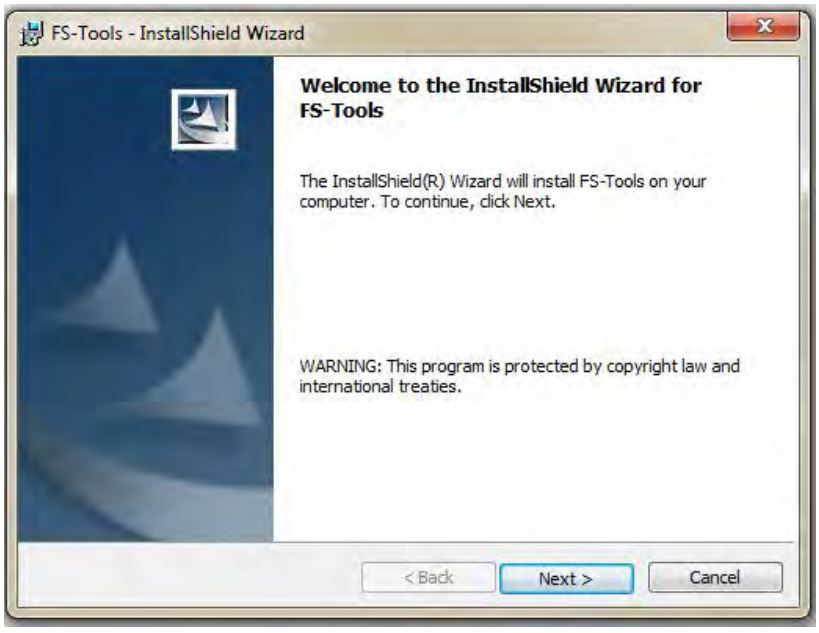
- **Complete Setup (default)** installs both the FS-Tools Client and Server. The Complete setup is used in stand-alone applications. In a stand-alone application, the FS-Tools Client and Server are installed on the same computer.

- **Custom Setup** can be used for installing either the FS-Tools Client or the FS-Tools Server. The Custom setup is typically used in network applications. In a network application, the FS-Tools Server (database) is installed at a central location. Multiple users (FS-Tools Client) can access customer records from the FS-Tools Server.

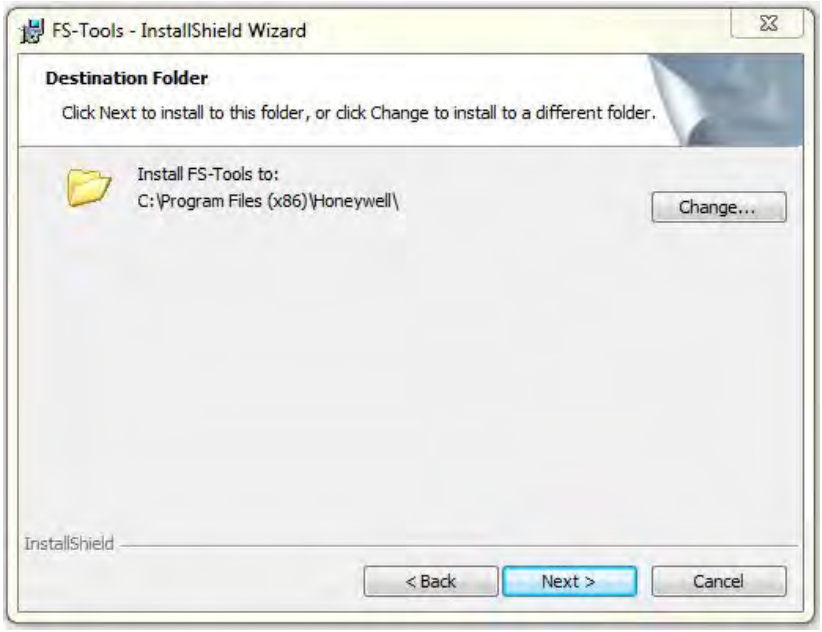
Installation

To install FS-Tools:

1. Run **FS-Tools Setup.exe**. The **FS-Tools - InstallShield Wizard** screen appears.



2. Click **Next**. The **Destination Folder** screen appears. By default, the destination folder is **C:\Program Files\Honeywell\FS-Tools**.

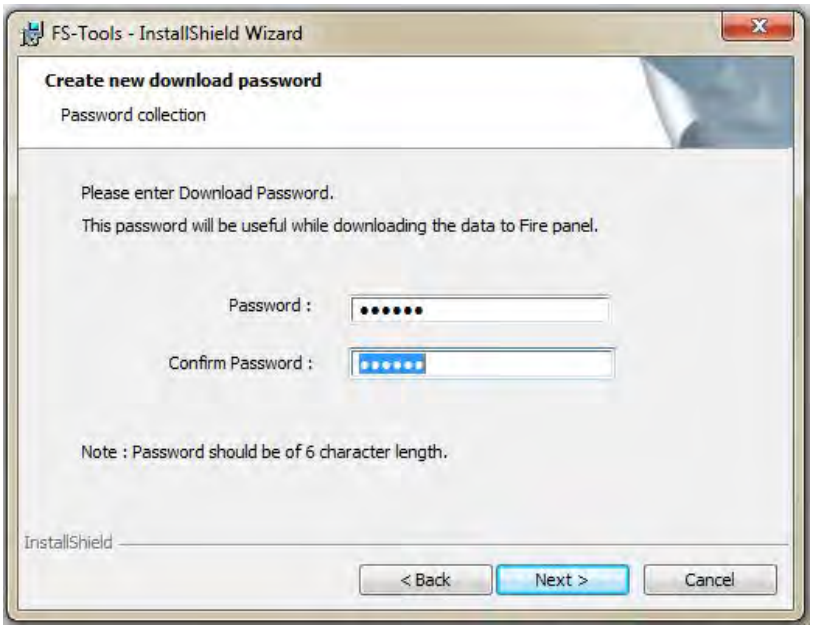


3. If desired, click **Change** to change the destination folder. Locate the folder where you want to install FS-Tools, and Click **OK**.

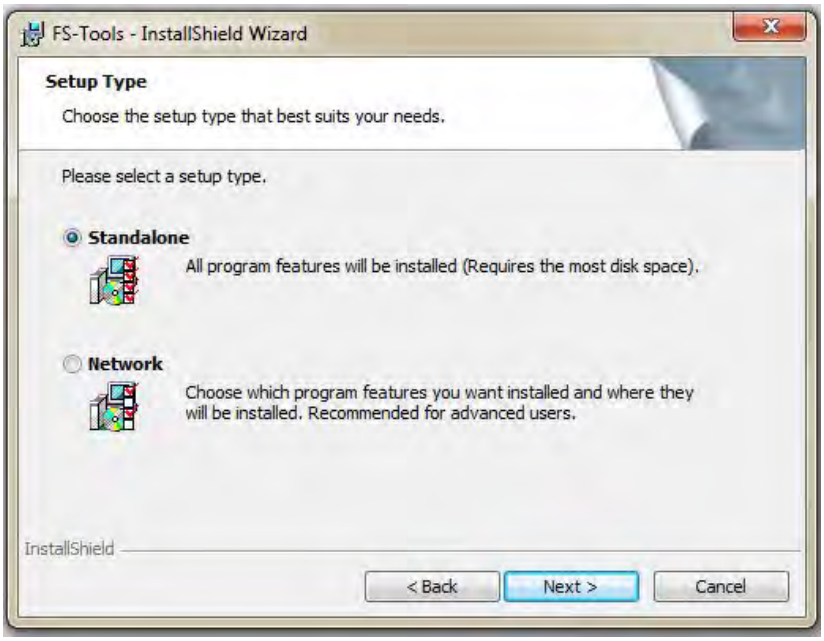
4. Click **Next** to continue with the installation.

5. If a database of a previously installed FS-Tools exists, a message indicating the folder path of the database appears. Click **OK** to continue.

6. The **Create new download password** screen appears. Type the download password in **Password** and then retype the password in the **Confirm Password** box. The password must be at least 6 characters long.



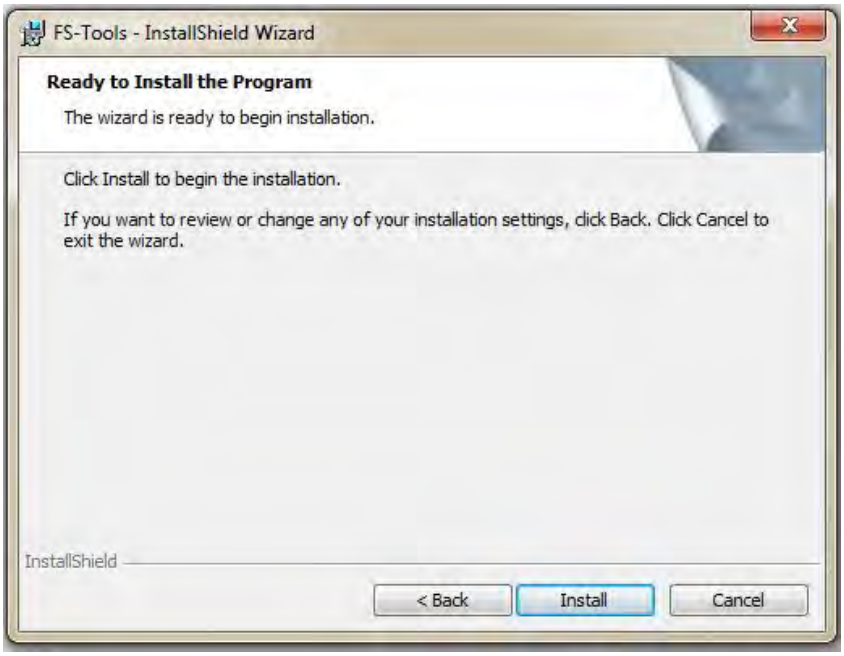
7. Click **Next**. The **Setup Type** screen appears. Review Setup Types.



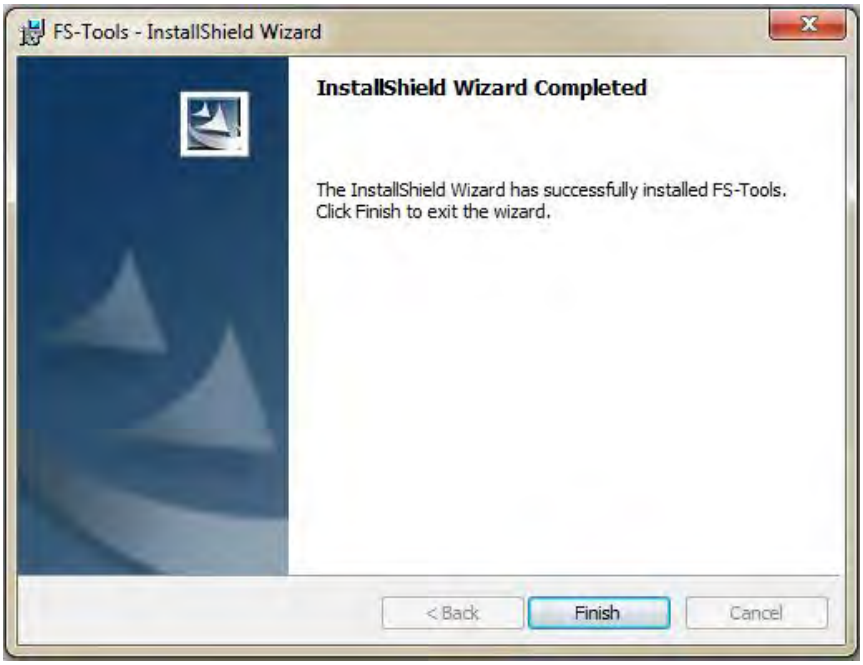
(Skip to Network Setup)

For Standalone Setup:

8. Select *Standalone* to install both the FS-Tools Client and Server. Click **Next**. The **Ready to Install** screen appears.

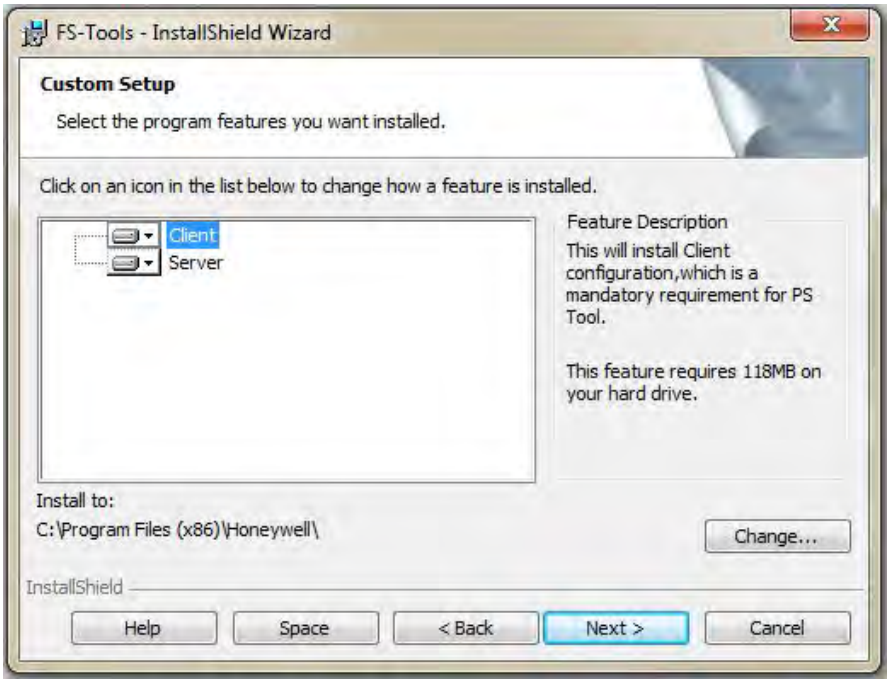


9. Click **Finish** after the installation is complete to close the **FS-Tools - Installation Wizard**.

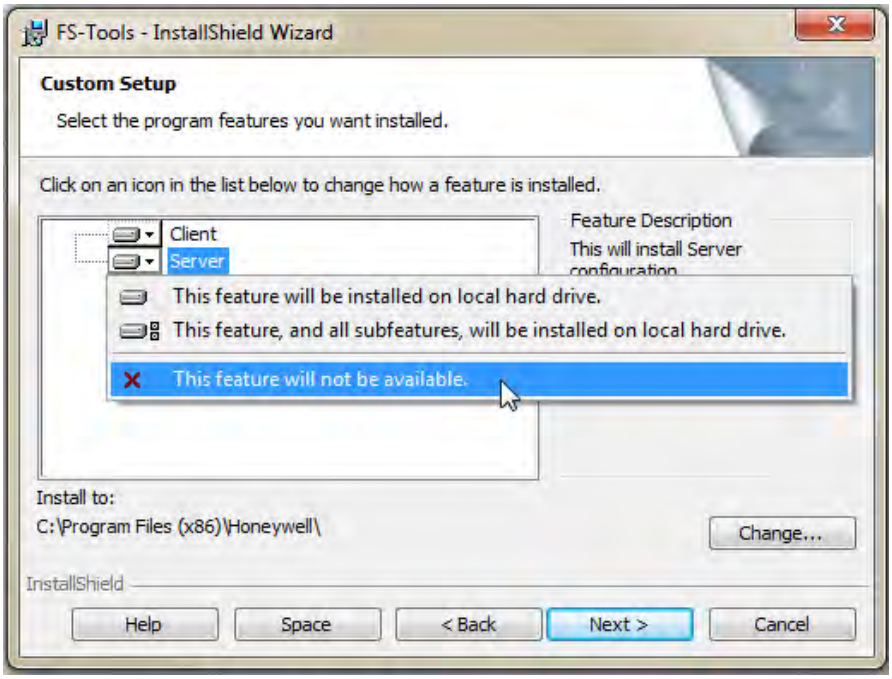


For Network Setup:

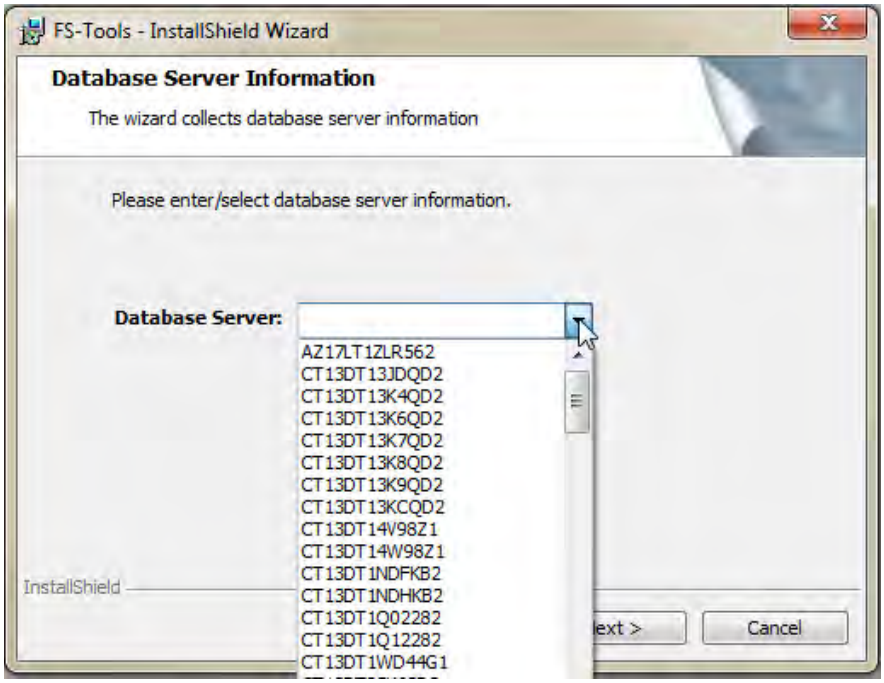
9. In the **Setup Type** screen, select **Network** setup to install only the FS-Tools Client. Click **Next**. The **Custom Setup** screen appears.



10. In the **Custom Setup** screen, select the option in the Server list to disable the FS-Tools Server, to install only the FS-Tools Client. Click **Next**.

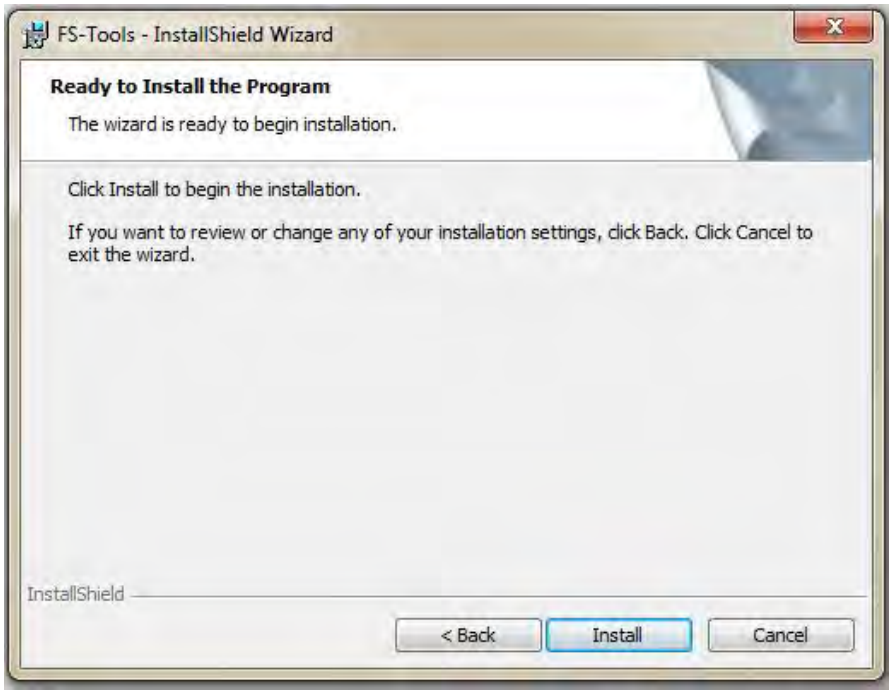


11. The **Database Server Information** screen appears.



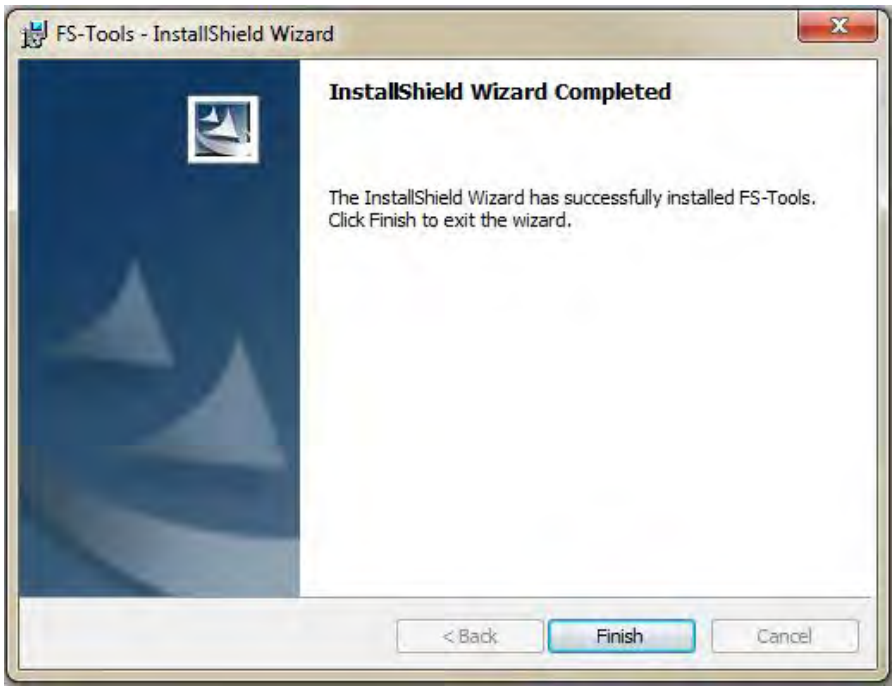
12. Select/type the IP address of the FS-Tools Server from the **Database Server** drop-down list. Click **Next**.

13. The **Ready to Install** screen appears. Click **Install**.



14. A screen indicating the installation progress appears.

15. Click **Finish** after the installation is complete to close the **FS-Tools - Installation Wizard**.



Windows Vista Users

If you want to install or upgrade FS-Tools in a Windows Vista operating system, the User Account Control (UAC) feature needs to be turned off.

To turn off the UAC:

1. Click **Start > Control Panel**. The **Control Panel** window appears.

2. In the **Control Panel** window, click **User Accounts**.

3. In the **User Accounts** window, click **User Accounts**.

4. On the right page of the User Accounts window, click **Turn User Account Control on or off**.

5. If the UAC is currently configured in Admin Approval Mode, the **User Account Control** message box appears. Click **Continue**. The **Turn User Account Control on or off** window appears.

6. Clear the **Use User Account Control (UAC) to help protect your computer** check box and then click **OK**. A message box appears.

7. Click **Restart Now** to apply the change immediately or click **Restart Later**, and then close the User Accounts tasks window.

8. Install FS-Tools.

9. Turn the UAC back on by reversing the steps above.

System Requirements

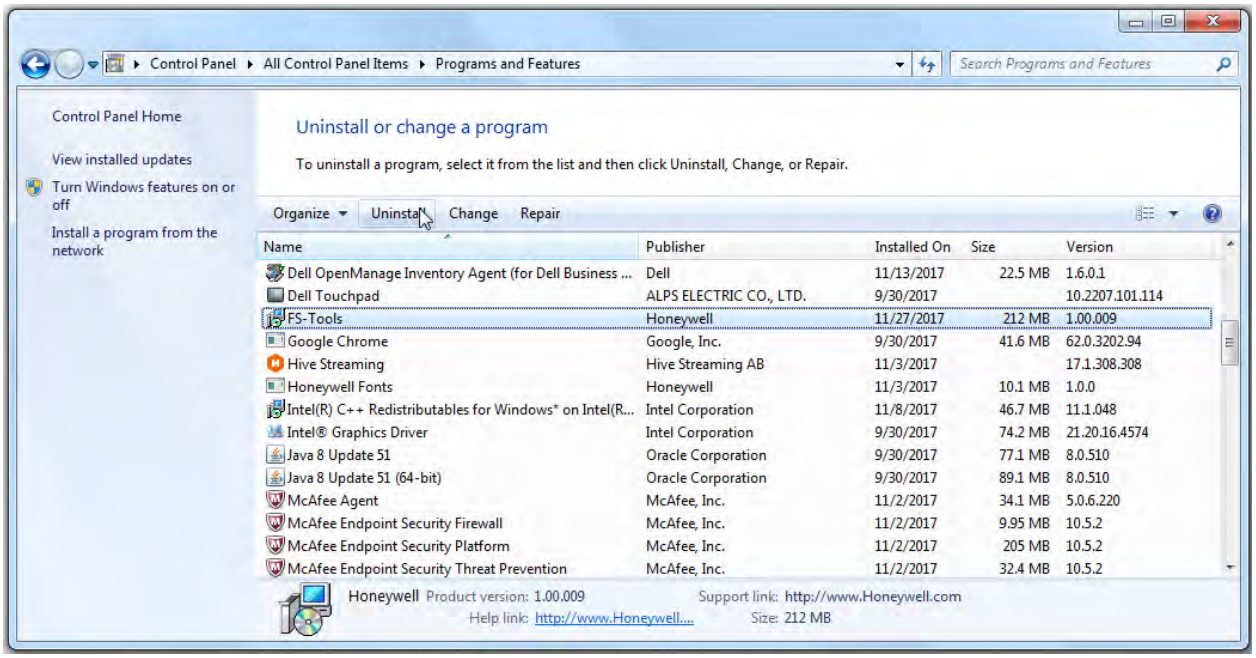
Before you begin the setup process, ensure that your laptop or computer has the minimum hardware, software, and support components.

Component	Requirement
Operating System	Windows XP, Windows Vista, Windows7, Windows 8, Windows 8.1, Windows 10 with Microsoft® Excel software
Processor	16 GHz P4 Processor
RAM	Minimum 256MB
Cache	512K
Hard Disk Drive	20GB with a minimum of 1GB available
Graphics Card and Monitor	1024 x 768 pixel resolution or higher
Color Palette	256 colors, True Color, Font size: small or large
Communication	USB Drive
Printer	HP LaserJet

Uninstalling FS-Tools

FS-Tools can be uninstalled using the Control Panel.

1. Click **Start**, and then choose **Control Panel**. The **Control Panel** window appears.
2. Double-click **Programs and Features**.
3. From the list of installed programs, select FS-Tools.
4. Click **Uninstall**. A message asking for your confirmation appears.
5. Click **Yes**. The FS-Tools application is uninstalled.



Note: Uninstalling FS-Tools removes the FS-Tools software but not the database. You must delete the database manually by navigating to the installed location and deleting the database folder. FS-Tools software will not work correctly if you install a later version of FS-Tools software without deleting the previous version database.

Getting Started

Logging On

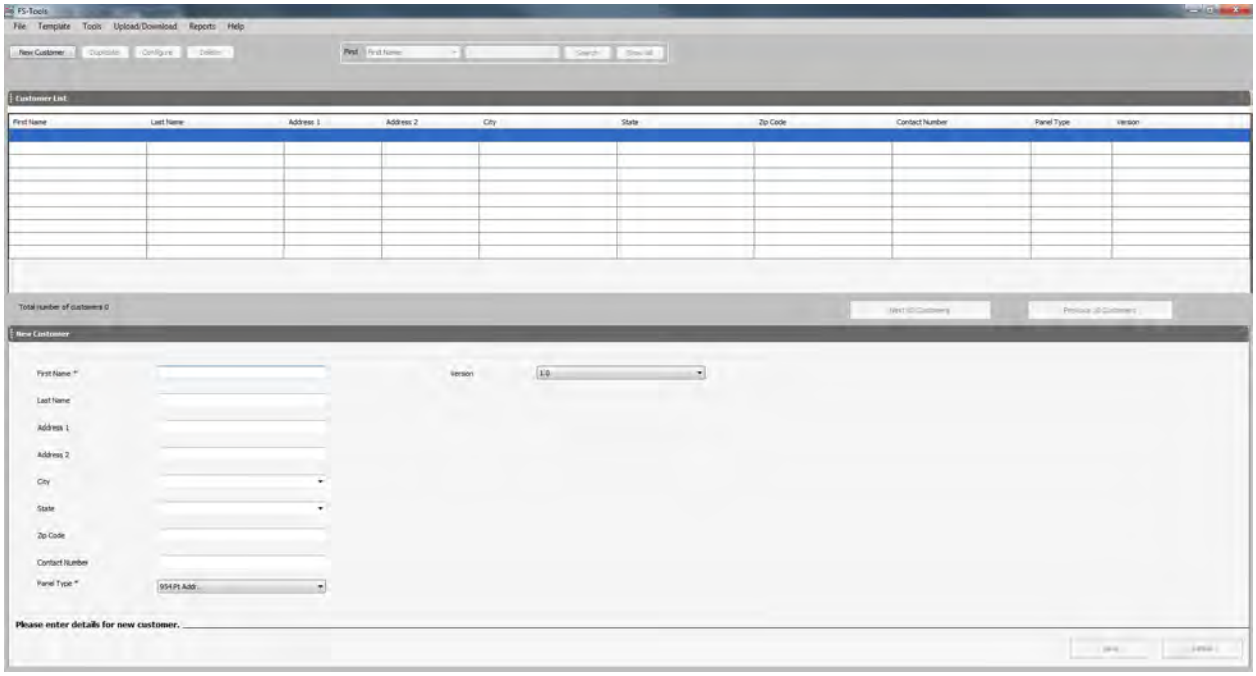
To log on to FS-Tools:

Click **Start**, and then choose **Programs** > **FSTools** > **FS-Tools.**

Or

Double click the  icon on the desktop.

The initial customer details window appears.



On this screen, you can add a customer, select their panel type, and then begin to configure the fire system.

Exiting

To exit the FS-Tools application, click  on the upper-right corner of the window

Or

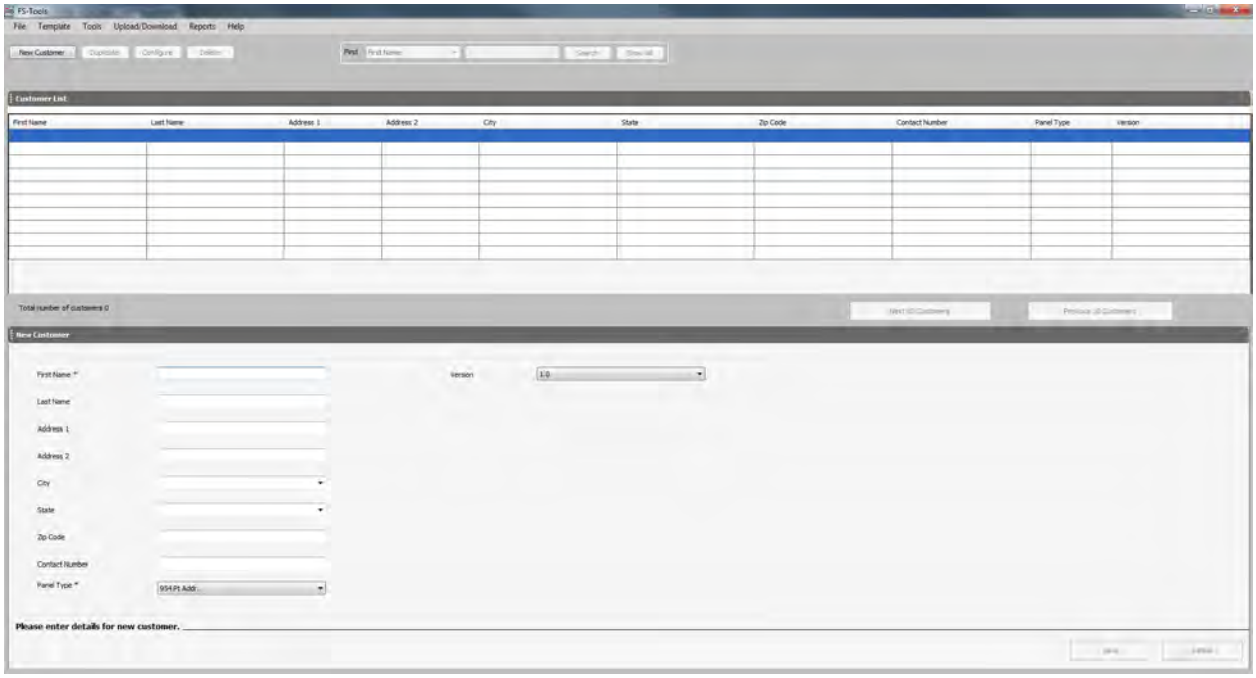
Click **Exit** from the **File** menu.

Customer Screen

Using FS-Tools, you can configure the settings of the 50 Point Addressable Fire Alarm Control Panel (FACP and in addition, maintain the details of the fire panel customers.

Before you can configure the fire panel settings, you need to add the customer information to the FS-Tools database. Customer details such as First Name, Last Name, Address, Contact Number, and Panel Type (panel version must be added.

When you log on to FS-Tools, the customer screen appears. This screen consists of the **Customer List** and the **Customer Details** sections. The **Customer List** section displays the list of existing customers for the fire panel and the **Customer Details** section displays the details for a selected customer. Upon first login of the application, the **Customer List** section will be empty. The **Customer Details** section will display **New Customer**, prompting an entry into the database.



The initial customer screen in FS-Tools allows you to:

- Add a new customer.
- Find an existing customer.
- Select and configure a fire panel for a customer.
- Edit customer details.
- Delete a customer record.

Adding a New Customer

A new customer can be the protection services staff for campuses such as museums, universities, or schools, where the 50 Point Addressable Fire Alarm system is installed. Details such as First Name, Last Name, Address, etc. can be added for each customer.

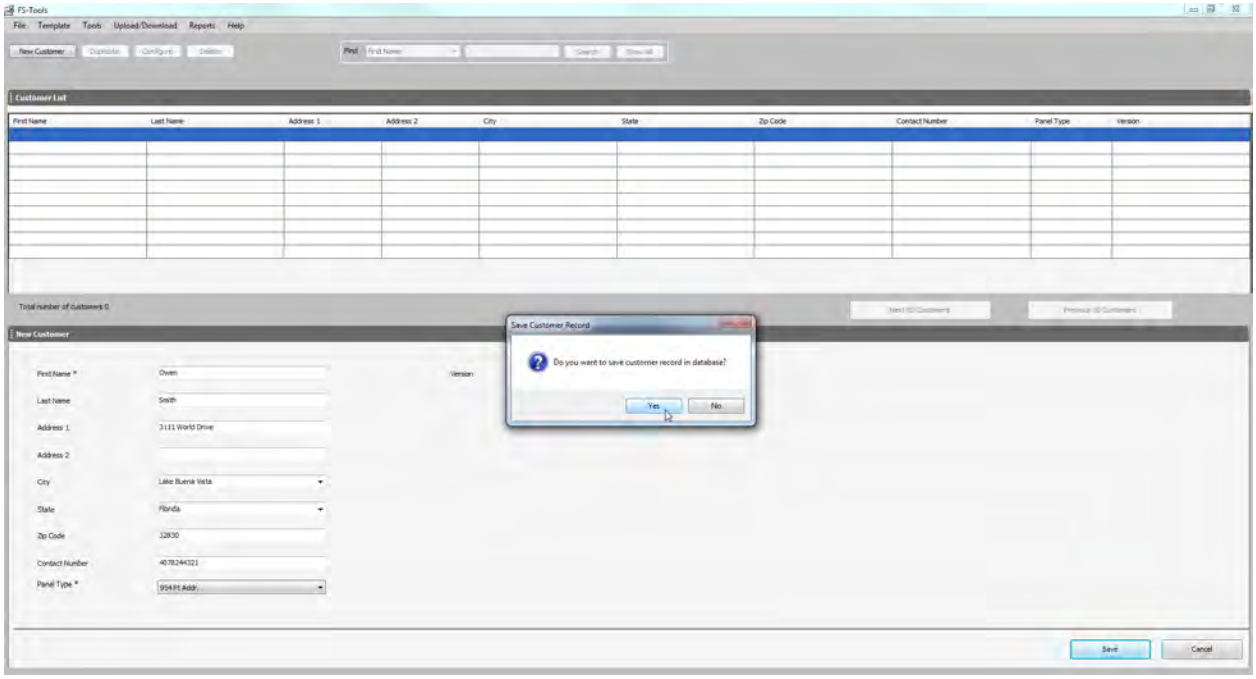
To enter new customer details:

1. Click **New Customer.**

2. Fill out the First Name, Last Name, Address 1, Address 2, City, State, Zip Code, and Contact Number fields for the customer. Fields marked with ***** are mandatory.

3. Select the appropriate fire panel type from the drop-down box.

4. Click **Save**. A confirmation message appears.



5. Click **Yes**. The details for the new customer are added in the FS-Tools database.

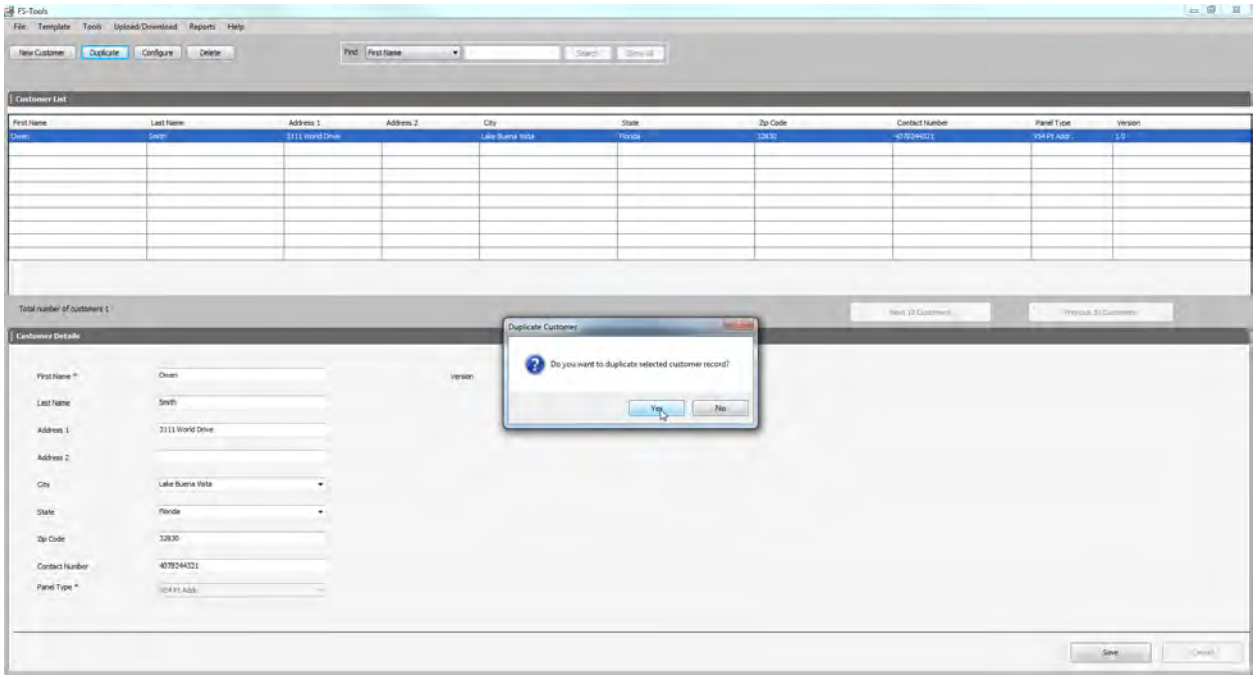
Duplicating a Customer Record

You can also add a new customer in FS-Tools by making a copy of an existing customer record and modifying the information.

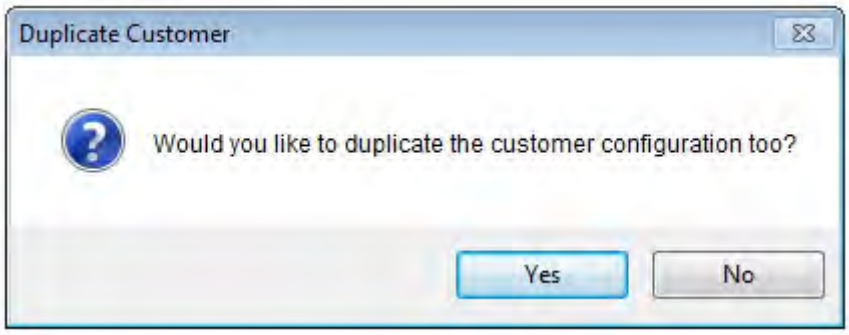
To duplicate a customer record:

1. Select the customer record and click **Duplicate**. A confirmation message appears.

2. Click **Yes** in the confirmation message to proceed.



3. If configuration settings exist for the selected customer, another confirmation will appear. To duplicate the configuration information along with the customer record, click **Yes** in the Duplicate Customer dialog box. To duplicate only the customer record, click **No**.



Finding a Customer

Using the **Find** option you can find the details for a customer when there are multiple customer records. You can search by the First Name, Last Name, Address 1, Address 2, City, State, Zip Code, or the Contact Number. The **Search** results are displayed in the **Customer List** section.

To find a customer:

1. In the **Find** list, select the field for the search. Options include First Name, Last Name, Address 1, Address 2, City, State, Zip Code, Contact Number, Panel Type, or Version,
2. In the text box provided, type the keyword for the search.
3. Click **Search.** The search results are displayed in the **Customer List**.

To retrieve all customer records, click **Show All**. All the customer records are retrieved in the Customer List.

Editing Customer Details

You can update all the customer details using the **Edit** option.

To edit the customer details:

1. Select the customer record you want to edit. You many want to use the **Find** option.
2. Update the customer data in the **Customer Details** section.
3. Click **Save**. If you select another customer record without saving, you are prompted to save the updated record.
4. Click **Yes** to update the customer details in FS-Tools.

Configuring a Fire Panel for a Customer

Using the **Configure** option, you can configure all the fire alarm system settings. Before you configure the fire panel, new customer details must be added to the FS-Tools database.

To configure the fire panel for a customer:

1. Using the **Find** option, select the customer record.
2. Click **Configure**.
   For more information about configuring the fire panels, click here.

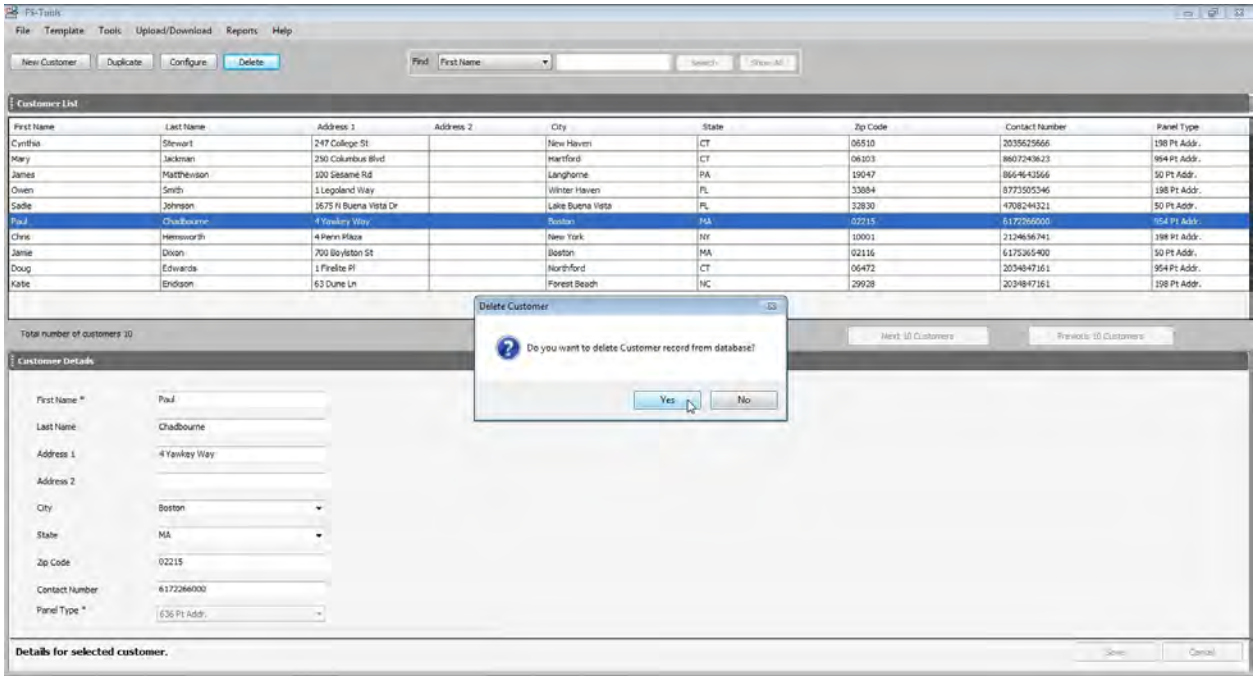
Deleting a Customer Record

When a customer account is considered inactive, you can delete the customer record. The saved configuration information for the fire panel also gets deleted when you delete a customer record.

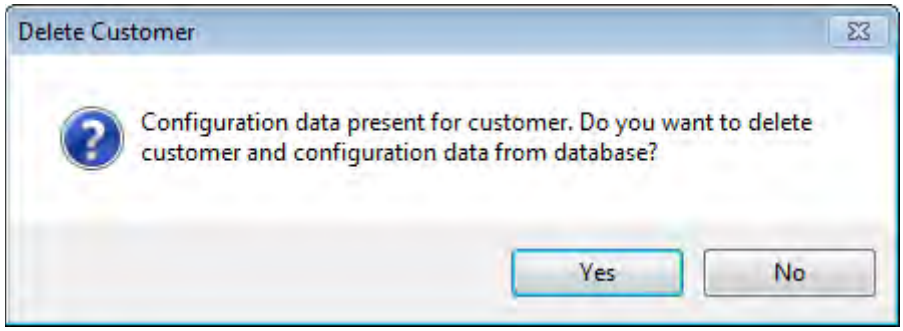
To delete a customer record:

1. Select the customer record you want to delete. You may want to use the **Find** option.

2. Click **Delete**. A message asking for confirmation appears.



3. Click **Yes** to delete the customer record. If configuration settings exist for the customer record, a message asking for confirmation to delete the configuration information is displayed. The following screen appears:



4. To delete the customer record along with the configuration information, click **Yes**.

Configuring the Fire Panel

Using FS-Tools, you can configure fire panel settings. This involves:

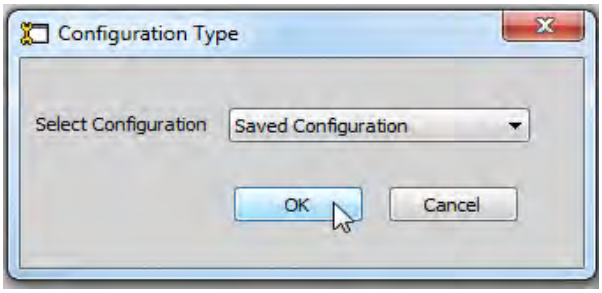
- configuring the settings for input and output modules.
- configuring the fire panel settings such as date and time, banner display, fire panel passwords, etc.
- configuring the SLC loop setup for the detectors and modules.
- verifying the SLC loop setup.
- simulating the setup to evaluate SLC loop.
- modifying the customer details in the server.

After you configure the fire panel settings, you must connect the computer to the fire panel and download the configuration settings. In addition, you can upload the configuration information from the fire panel, and view the fire alarm system settings in FS-Tools.

Selecting Configuration Type

1. Using the **Find** option from the initial screen, if necessary, select a customer record. For more information, see Finding a Customer.

2. Click **Configure** to program the fire panel settings. The **Configuration Type** dialog box appears.



3. In the **Select Configuration** list select the default option *Factory Default,* if you are configuring for the first time or select a previously saved configuration which appears in the list.

4. Click **OK**. The **System Info** programming page appears.

Configuring System Info

In FS-Tools, configuring the system information involves the following steps:

1. Configuring the communicator settings:
    a. Central Station
    b. Primary Central Station
    c. Secondary Central Station
2. Configuring the input/output modules:
    a. Relays
    b. Zones
    c. Special Zones
    d. NACs
3. Configuring the general system settings which include the timers, clock format, trouble reminder, and other settings
4. Configuring the ANN-Bus, Primary and Secondary
5. Editing the Function Keys' actions.
6. Configuring the SLC Loop Setup:
    a. Detectors
    b. Modules

Communicator Settings

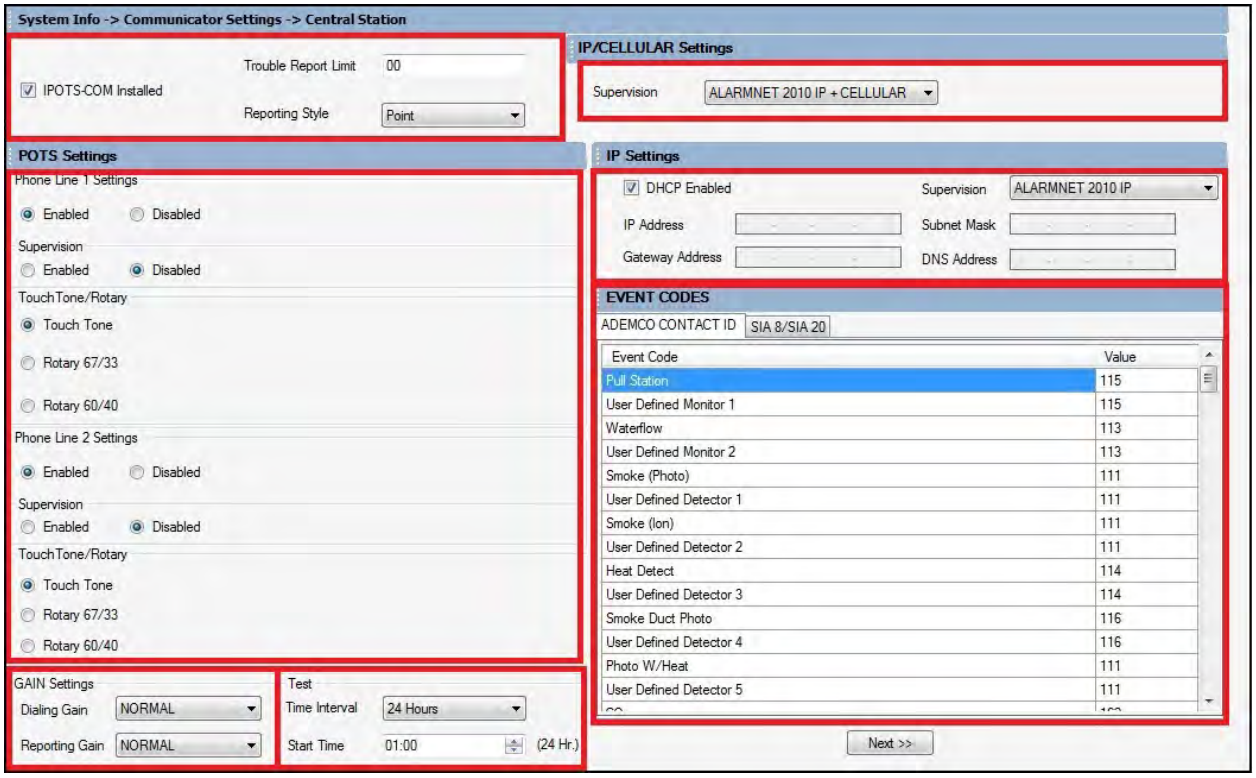
Central Station

The optional IP/POTS Communicator card transmits system status (alarms, troubles, AC loss, etc. to a Central Station via the public switched telephone network and via an ethernet connection.

In FS-Tools, you must enable reporting from the communicator to report the fire alarm system status, alarm, and trouble conditions to the central station. The **System Info -> Communicator Settings -> Central Station** pane appears after you select the configuration type.

Note: All programming features may not be applicable to the your panel's version of software.

See the following pages to learn more.



Click **Save to Database** to save the configuration to the FS-Tools database.

Click **Save as Template** to use these settings as a template for future panel's settings.

Click **Next** or click **Primary Central Station** in the left pane, to view the **Primary Central Station** configuration pane.

Click **IPOTS-COM Installed** if the IPOTS-COM telephone and IP communicator card is installed on the PCB. The communicator comes pre-installed on some models.

Trouble Call Limit: This field option limits the number of communicator trouble calls to the Central Station, to a programmed amount between 0 and 99, for each unique trouble within a 24 hour period. Separate limit counters keep track of each unique type of trouble. Note that the number of phone line (communication) faults called to the Central Station are not limited by this feature.

Reporting Style: Setting the Report Style to *Point* will program the IPOTS-COM to report individual point status to the Central Station. The control panel is capable of monitoring a total of 50 addressable devices. Setting the Report Style to *Zone* will program the communicator to report zone status to the Central Station. The control panel is capable of monitoring a total of 50 individual zones.

If telephone lines are connected to the IPOTS-COM board at J4 (Line 1) and/or J5 (Line 2), ensure that the **Enabled** checkbox is selected.

The **Supervised Phone Line** feature allows the user to disable the supervision of Phone Lines when using an alternate means of secondary transmission path. The factory default setting is Phone Line supervised.

Type: Select whether each phone line connected to the communicator uses *Touch Tone* format or one of two different types of the *Rotary* format.

Gains Settings

The Gains value is the telephone's transmitting "volume control". The Gains value can be adjusted for when the telephones lines are in use for Dialing and Reporting.

Select Low, Normal, or High from the drop-down boxes.

Test Times

Select the desired **Test Time Interval** (6, 8, 12, or 24 hours) to send the test report to the primary central station.

Enter the **Test Start Time** to program the time at which the communicator will transmit the 24 Hour Test to the Central Station. Enter a four digit number using military time (0000 refers to 12:00AM and 2359 refers to 11:59PM).

Supervision Settings: Choose one of the following from the drop-down menu where the Supervision Interval is the time from the "ping" at AlarmNet to the FACP, and the Fault Time is the duration of the communication loss between the FACP and the cell/ethernet infrastructure (eg. cell tower).

- 2010 IP+CELL: Supervision Interval: 24 Hours, IP Fault Time: 1 Hour, GSM Fault Time: 1 Hour
- 2010 IP: Supervision Interval: 5 min, IP Fault Time: 5 min
- 2013 IP+CELL: Supervision Interval: 6 Hours, IP Fault Time: 1 Hour, GSM Fault Time: 1 Hour
- 2013 IP: Supervision Interval: 1 Hour, IP Fault Time: 1 Hour

If the internet router used by the IPOTS-COM is configured for DHCP (Dynamic Host Configuration Protocol) where addresses are automatically assigned by the router, click the **DHCP Enabled** checkbox. Note that this field is automatically selected when the **IPOTS-COM Installed** checkbox is selected as most routers are configured for DHCP protocol.

Static Settings: These addresses must be set manually if the internet router is not configured for DHCP. Deselect **DHCP Enabled** to activate these fields for editing.

Supervision: Select the desired supervision type from the drop-down box.

Setting:	Supervision Interval:	IP Fault Time:	GSM Fault Time:
2010 IP	5 minutes	5 minutes	N/A
2010 IP + CELL	24 hours	1 hour	1 hour
2013 IP	1 hour	1 hour	N/A
2013 IP + CELL	6 hours	1 hour	1 hour

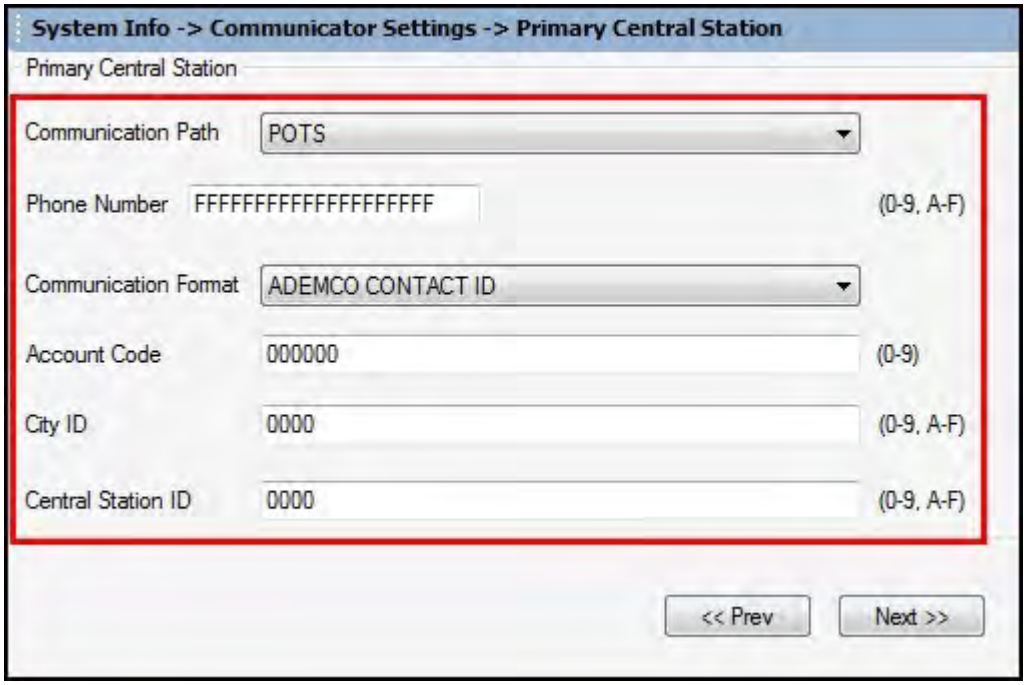
Central Station Event Codes

Here you can customize the **event codes**. Event codes are the Communicator's way of telling the central station what type of event is taking place. These codes vary based on the selected communication format. When the communication format is selected, the default event code values are shown. They may be changed in this section. Enter zero(es) to disable the reporting of a specific event.

Primary/Secondary Central Station

The FACP reports the fire alarm system status, alarms, and trouble events to the central station. The primary and secondary central station screen are almost identical and allow you to configure the *Communication Path*, *Communication Format, Central Station Account Information,* and *Event Codes*.

See the following page to learn more.



Click **Save to Database** to save the configuration.

Click **Next** or click **Secondary Central Station** in the left pane to configure the secondary central station.

Click **Prev** to go back to the central station settings.

Central Station Settings

Communication Path: Select the communication method for contacting the central station. POTS (Plain Old Telephone Service), Ethernet, or Cellular are available from the drop-down menu.

Note: Use of the CELL-CAB or CELL-MOD GSM Communicator Card is required for Cellular reporting to central station.

When **POTS** is selected:

Enter the **Phone Number** of the primary/secondary central station that the communicator will be contacting. You can enter a maximum of 20 characters with valid entries being 0 to 9 and A - C where A = *, B = # and C = 2 second pause.

Select the **Communication Format** of the reports sent to the primary control station. The primary event codes are displayed based on the communication format used. The Communication Format is determined by the type of receiver that the communicator is transmitting to. Consult your Central Station for proper selection or consult our factory representatives. For any format chosen, the control panel automatically programs all of the event codes. This field is only selectable when POTS is chosen as the communication path.

Type the **Account Code** for the panel assigned by the central station. Each panel has a unique account code depending on the primary central station and the communication format being used.

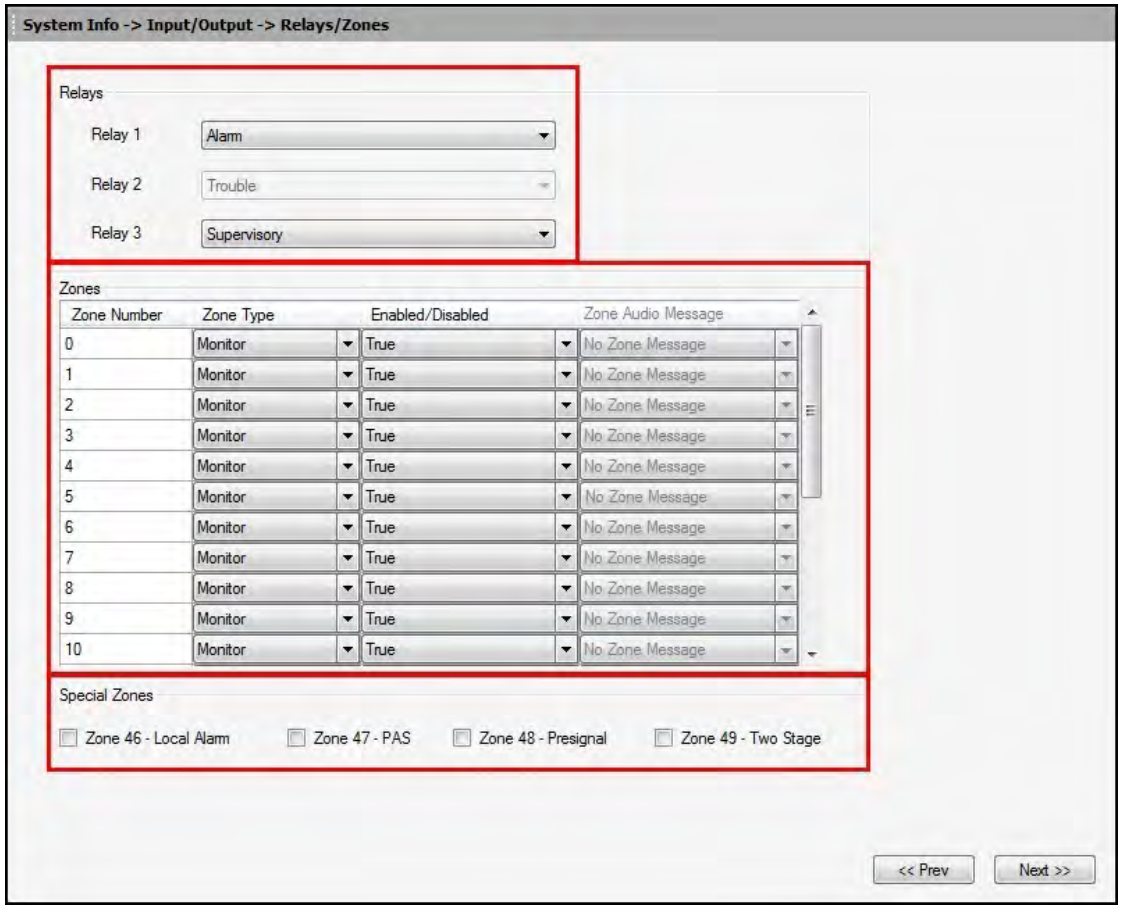
Type the **City ID** for the panel assigned by the central station.

Type the **Central Station ID** for the panel assigned by the central station.

Input/Output

Relays/Zones

From the **Input/Output** pane, you can configure the FACP's relays, zones, special zones and NACs.



Click **Save to Database** to save the configuration.

Click **Next** or click **NAC 1** in the left pane to start configuring the NAC circuits.

Click **Prev** to go back to the secondary central station settings.

Relays

The FACP offers one fixed and two fully programmable Form-C dry contact relays. Relay 1 is factory default programmed as Alarm and programmable Relay 3 is factory default programmed as Supervisory. The relay labeled Relay 2 is fixed as a Trouble relay and cannot be changed. It is a fail-safe relay which will transfer on any trouble or total power failure. Select the desired option for Relays 1 and 3 from the drop-down box.

Possible options are: **Alarm, Supervisory, Supervisory AR, Trouble, Communication Fail, Process Monitoring, Process Monitoring AR, AC Loss, Hazard, Medical,** and **Silenceable Alarm.**

Notes:

1. AR (AutoResettable) in SUPERVISORY AR and PROCESS MONITORING AR means that a relay with the Supervisory and/or Process Monitor type code, when activated, will automatically reset when the corresponding condition is cleared.

2. A relay programmed with the Silenceable Alarm type will activate upon any alarm and deactivate when the FACP Alarm Silenced LED is illuminated.

Zones

Zone Types: must be programmed only if a Communicator, programmed for zone reporting, is installed on the control panel. From the drop-down box, select the type of zone desired for each installed zone. Zone Types are only relevant for Central Station reporting. Changing a zone type will only change how it is reported to the Central Station. If a tornado zone is required, choose Zone Type “Hazard”.
Important! Selecting WATERFLOW will assign a Waterflow silenceable zone type to the selected zone. Any signaling devices programmed to the same zone can be silenced by pressing the Alarm Silence key or by using the auto-silence feature.

Enabled/Disabled: select *Enable* to enable the selected zone. If you select *Disable*, the zone is disabled by the fire panel, preventing the zone circuit from reporting alarms and troubles to the panel. Disabling a zone disables all the functionalities associated with that zone.

Special Zones

Zones 46, 47, 48, and 49 can be programmed for normal zone operation or for special purpose applications.

Zone 46: When Zone 46 is programmed On, a Local Alarm activation of any smoke detector will cause Zone 46 to activate. By assigning Zone 46 to a control module in the Programming Zone Assignment Screen, an output device connected to the control module can be used to indicate a local alarm condition in the control panel. *Local Alarm Zone alarms are not reported to the Central Station.*

Zone 47: When Zone 47 is selected as a special zone, a PAS (Positive Alarm Sequence) activation of any smoke detector will cause Zone 47 to activate. By assigning Zone 47 to a control module in the Zone Mapping section, an output device connected to the control module can be used to indicate a PAS condition in the control panel. *Do not assign Zone* 47 *to a Notification Appliance Circuit when using this zone to indicate a PAS condition.*

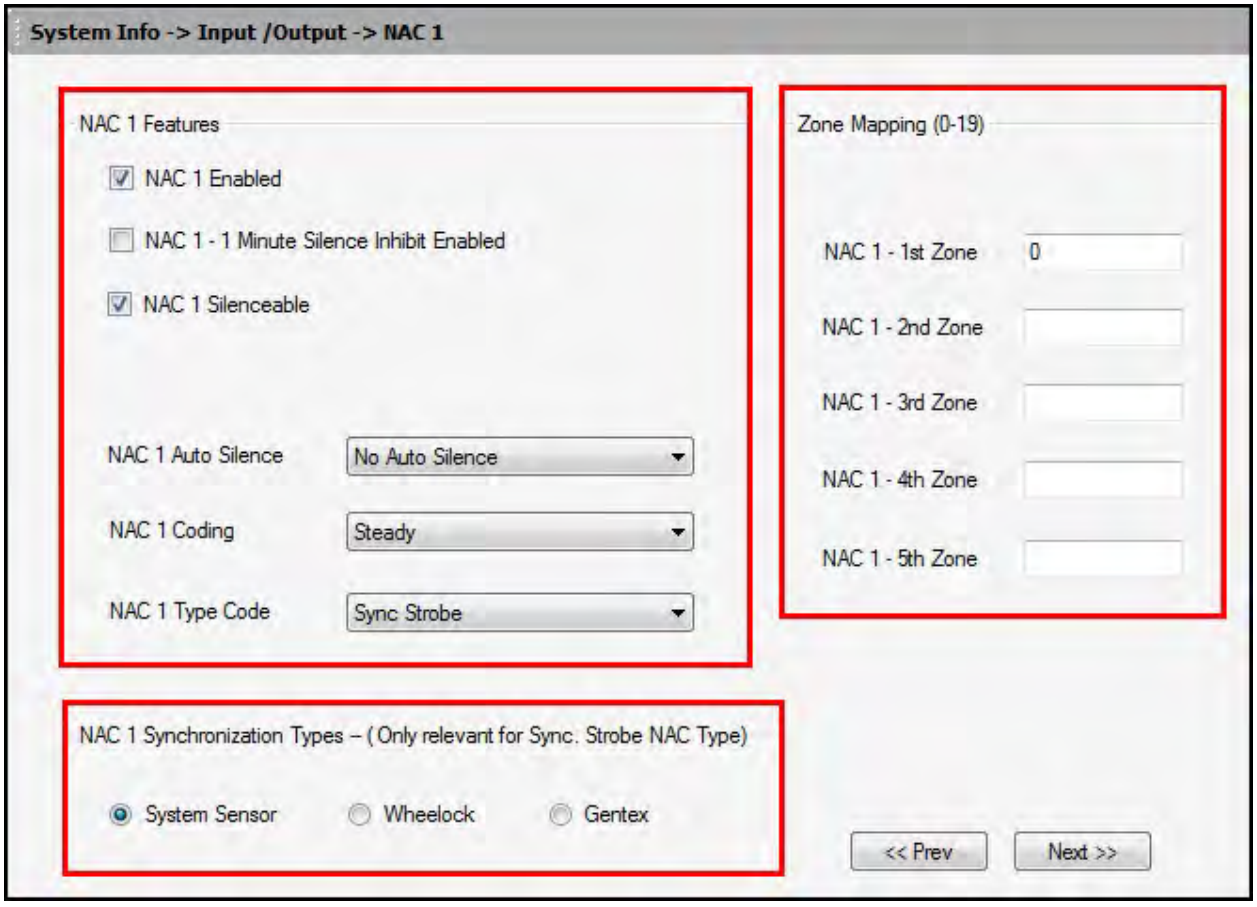
Zone 48: When Zone 48 is selected as a special zone, a Pre-signal activation of any device will cause Zone 48 to activate. By assigning Zone 48 to a control module in the Zone Mapping Section, an output device connected to the control module can be used to indicate a Pre-signal condition in the control panel. *Do not assign Zone* 48 *to a Notification Appliance Circuit when using this zone to indicate a Pre-signal condition.*

Zone 49: When Zone 49 is selected as a special zone, any time a NAC programmed for two-stage operation moves into the 2nd stage, Z49 will activate. Any control modules assigned to Special Zone 49 will also activate.

NACs

NACs include speakers, horns, strobes, bells, and other type of sounder appliances. There are two notification appliance circuitsNAC1 and NAC2, which can be configured for the 50 Point Addressable panel.

Each programming page is identical. See the following page to learn more.



Click **Save to Database** to save the configuration in the FS-Tools database.

Click **Next** or click **NAC 2** in the left pane to configure NAC 2.

Repeat the process to configure NAC 2.

Click **Next** or click **General System Settings** in the left pane, to view the **General System Settings** configuration pane.

Click **Prev** to go back to the Relays/Zones settings.

NAC Features

To enable each NAC, click the **NAC X Enabled** checkbox. If you do not select the Enable checkbox, the NAC is disabled and the fire panel prevents the selected NAC from activating its devices.

Click **Minute Silence Inhibit Enabled** to enable the silencing of the audible devices in NAC X, only after 60 seconds. If this option is enabled, the audible devices can be silenced by pressing the Alarm Silence key, only after 60 seconds.

Click **Silenceable** to indicate whether the NAC can be silenced by pressing the Alarm Silence key. If the Silenceable option is not enabled, the selected NACs cannot be silenced by pressing the Alarm Silence key or by the Auto Silence feature.

Select the delay time for **Auto Silence** from the list to automatically silence the main circuit board silenceable NACs after a programmed length of time. This option is disabled if the option is not selected.

Select the **Coding** option to specify the type of output the main circuit board notification appliances generates when activated. Click here for more information about each coding selection.

Select the NAC device type from the list in the **Type Code** drop-down box. Type code options are: Bell, Horn, Strobe, Synced Strobe (Synchronized to manufacturer), Strobe Sil Sync (same as Synced Strobe but Silence turns off audible & visual devices), or Blank.

NAC Synchronization Types

Select the **Synchronization Type** which can be *System Sensor*, *Wheelock*, or *Gentex*. Synchronization is a panel feature that controls the activation of notification appliances in such a way that devices turn on and off at exactly the same time. For more information about synchronization, see Synchronized NAC Operation.

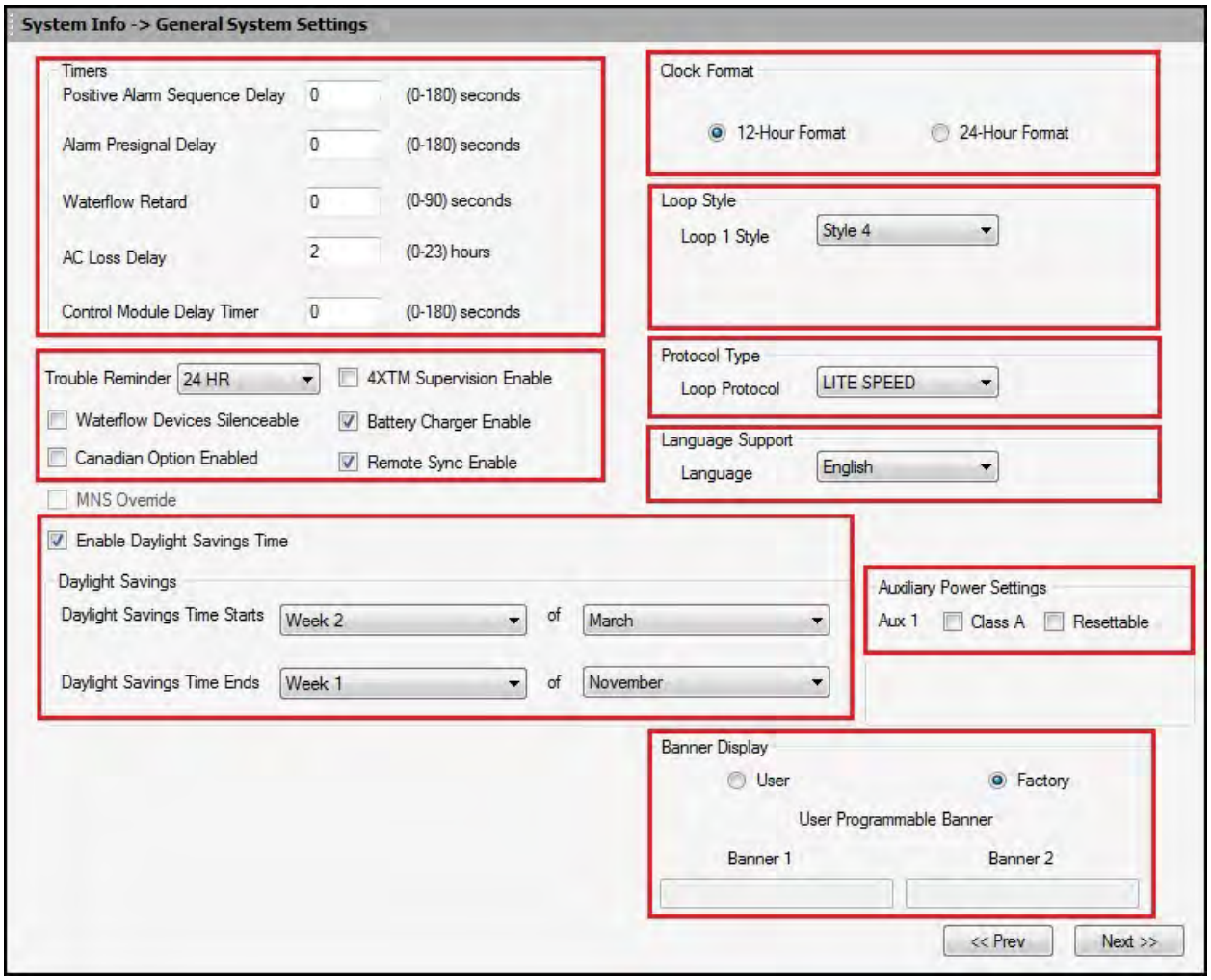
NAC Synchronization Type can be selected only for the *Sync Strobe* or *Strobe Sil Sync* **NAC Type Code**.

NAC Zone Mapping

Under **Zone Mapping**, enter the three digit number corresponding to the zone assigned to NAC X. A maximum of five zones can be configured for each main circuit board NAC. The factory default for an unprogrammed device is Z000 for general/local alarm zone.

General System Settings

In this screen, you can configure the FACP's general system settings. See the following pages to learn more.



Click **Save to Database** to save the configuration in the FS-Tools database.

Click **Next** or click **Global Options** in the left pane to configure the global ANN-BUS settings.

Click **Prev** to go back to the **NAC** settings.

Timers

The **Timers** option allows you to set the times for a:

PAS (Positive Alarm Sequence) delay can be programmed for a delay of 0-180 seconds. This option is unavailable if the Canadian Option if selected.

Pre-Signal delay can be programmed for a delay of 0-180 seconds. This option is unavailable if the Canadian Option if selected.

Waterflow Retard delay can be programmed for a delay of 0-90 seconds.

AC Loss delay can be programmed for a delay of 0-23 hours. The factory default setting is 2 hours.

Control Module Delay can be programmed for a delay of 0-180 seconds.

The **Trouble Reminder** feature provides an audible reminder that an alarm or trouble still exists on the FACP after the control panel has been silenced. The control panel piezo sounder will pulse once every 15 seconds during an alarm and every two minutes during a trouble condition, after the Alarm Silence or Acknowledge key is pressed. The piezo will continue to sound at these rates until the alarm or trouble condition is cleared. If the trouble condition is not cleared within the selected 4 or 24 hours, the panel will reactivate the trouble sounder and retransmit the trouble condition to the central station if connected.

The **Waterflow Devices Silenceable** option provides the ability to silence any output circuit activated by a monitor module programmed as a waterflow type.

The **Canadian Option** feature, when enabled, configures the FACP with the following as required by Canada:

- The following monitor module type codes are not available: monitor, non-latching supervisory, non-latching drill, non-latching process monitor, hazard, tornado, medical alert
- Addressable ionization smoke detector sensitivity is automatically monitored using Canadian specifications.
- The Positive Alarm Sequence, the Pre-Signal option, the Auto-Silence option, and the Silence Inhibit Timer are not available for Canadian applications.
- The Auto-silence timer is fixed at 20 minutes and cannot be changed.
- The F1 function key is automatically configured to perform a manual alarm signal activation when pressed.
- The F2 function key is automatically configured to perform a two-stage bypass when pressed.

For Canadian applications, remote annunciation must be done using the secondary ANN-BUS.

The **4XTM Supervision Enable** checkbox *must* be selected if a 4XTM(F) module is installed on the FACP.

The **Battery Charger Enable** option allows you to disable the onboard battery charger in the event an external battery charger is being used.

The **Remote Sync Enable** option allows you to sync NAC devices connected to an external power supply. The devices will sync will NAC1 on the FACP. Remote Sync requires wiring from the Remote Sync output terminal block to the Remote sync input on the FCPS power supply.

Daylight Savings Time

If selected, the control panel will automatically update the time for **daylight savings time**.

Use the drop-down boxes to select the week and month for daylight savings **start** and **end** times.

Clock Format

The **Clock Format** feature allows you to set the time display format (24 hour or 12 hour) in the FACP memory.

Loop Style

Loop Style option allows you to select the loop style for the panel's SLC (Signaling Line Circuit). The panel may be wired in Class B (Style 4), a two-wire circuit starting at the panel and ending at the last device, or Class A (Styles 6 or 7), a four-wire circuit starting at the panel going out to all the devices, and ending back at the panel. Style 7 wiring uses isolator modules, one on each side of the loop.

Protocol Type

Protocol Type: The FACP operates in two SLC polling styles, **LiteSpeed** or **CLIP** (Classic Loop Interface Protocol). LiteSpeed is a communication protocol that greatly enhances the speed of communication between analog intelligent devices. This is the default mode of operation for this FACP. CLIP mode polls devices in sequential order. All addressable FACPs can operate in CLIP mode.

Note that the legacy devices can operate only in CLIP mode while the newer devices are compatible with CLIP and LiteSpeed modes of operation. If any legacy, CLIP mode device is installed on the system, the Protocol type must then be set to CLIP.

Language Support

Language Support: The FACP is capable of displaying panel display text in either **English** or **French**. Select the desired language from the drop-down menu.

Aux Settings

The FACP provides one 24VDC outputs for powering auxiliary devices.

If these devices are wired in **Class A** configuration, the Class A checkbox must be selected.

The Aux power is configured for **Non-Resettable** power (suitable for powering annunciators). If **Resettable** Power is desired instead (suitable for powering smoke detectors), ensure that the **Resettable** checkbox is selected.

Banner Display

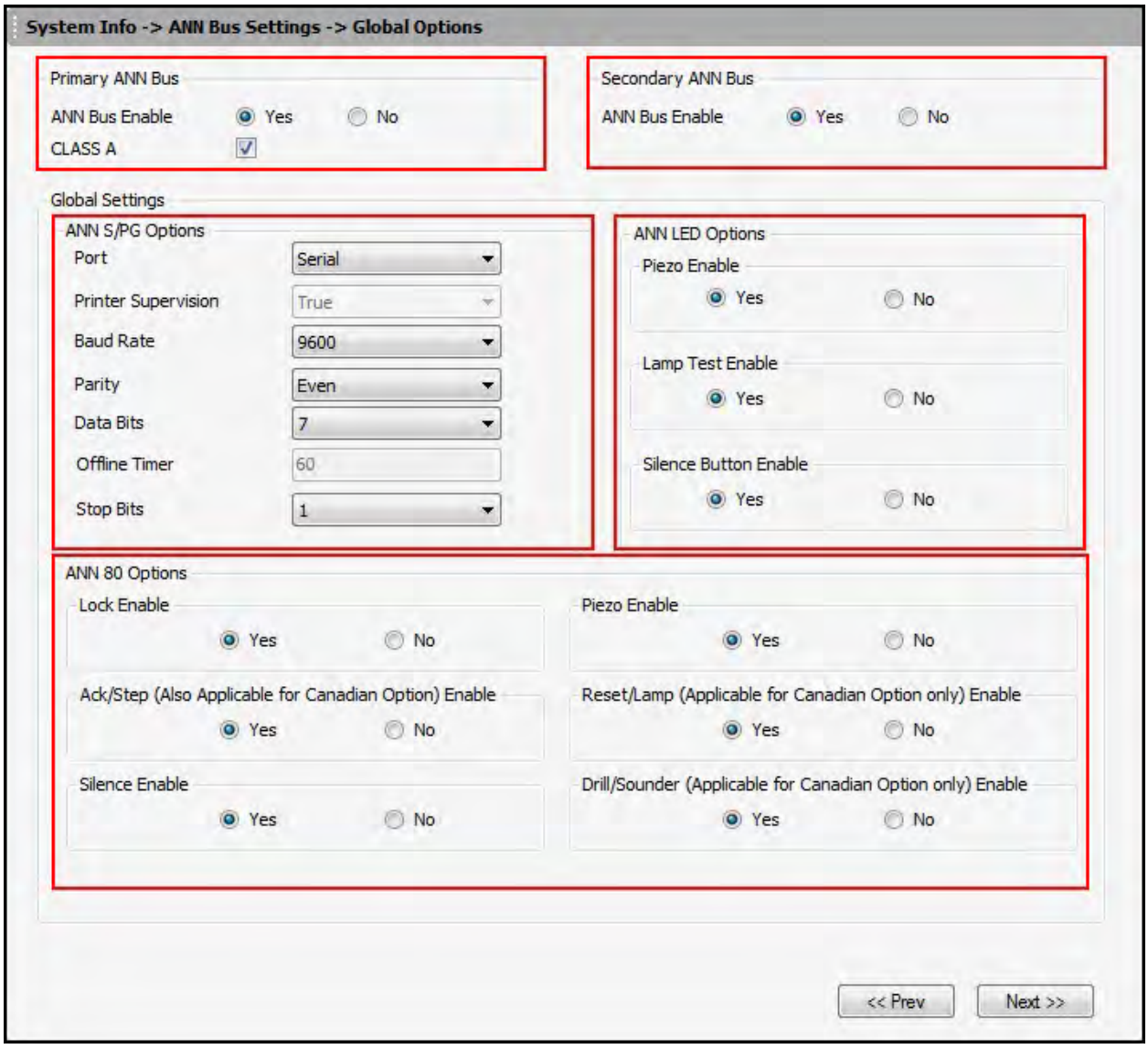
The **Banner Display** option allows you to choose from either a factory default or custom banner for the top two lines of the LCD display on the fire panel. You can change the factory default to a custom defined readout when the fire panel is in normal condition. A maximum of 20 characters, including spaces, can be entered for each line on the display.

ANN-Bus Settings

Global Options

The ANN-Bus is a communication circuit on the fire panel over which different ANN devices can be installed to communicate with the FACP. You can configure the ANN-Bus when any ANN devices are installed. See following pages to learn more.

Refer to the ANN-BUS Guidelines for more information when using both the primary ANN-BUS and the secondary ANN-BUS.



Click **Save to Database** to save the configuration in the FS-Tools database.

Click **Next** or click **Primary ANN Bus** in the left pane configure the **Primary ANN-Bus Settings**.

Click **Prev** to go back to the **General System Settings** pane.

ANN-BUS Guidelines

- A variety of optional annunciation devices can be connected to an ANN-BUS communication circuit. ANN Series devices can be connected to the primary communication circuit (EIA-485) terminals on TB9. A secondary communication circuit for these devices is available at TB10. Each ANN-BUS communication circuit supports up to eight (8) annunciators.
- When operating two ANN-BUS circuits, only one ANN-S/PG Printer module can be used in the system.
- The panel is capable of operating a primary ANN-BUS (TB9) and a secondary ANN-BUS (TB8) simultaneously.

Primary/Secondary ANN Bus

Click **Yes** to enable the Primary and/or Secondary ANN-Bus. You must enable the ANN-Bus if any modules are connected to the Primary ANN-Bus terminal at TB9 or to the Secondary ANN-Bus terminal at TB10 on the main circuit board.

The primary ANN-Bus is capable of operating in **Class A** configuration. Select the checkbox if the primary Ann-Bus is wired for Class A operation.

The following are the compatible devices that may be available for connection to the ANN-Bus communication circuit.

- ANN-80 LCD Annunciator
- ANN-100 (for FM and Canadian applications)
- ANN-S/PG Serial/Parallel Printer Interface Module
- ANN-I/O LED Driver Module
- ANN-(R)LED LED Annunciator Module (alarm, trouble, supervisory LEDs)
- ANN-RLY Relay Module

ANN-S/PG Options

The ANN-S/PG options allows you to the connect a remote serial or parallel printer to the FACP. This helps you to log system events, detector status reports and event history. If Parallel port is selected, you can supervise and set the offline timer for the printer. If Serial port is selected, you can set the Baud Rate, Parity, Data Bits, and Stop Bits.

Under **ANN S/PG options**, select the type of **Port** for the printer connection, either Serial or Parallel.

- If you select **Parallel** port, the following fields are activated:
- In the **Printer Supervision** list, select to enable or false to disable printer supervision.
- In the **Offline Timer** box, enter offline for delay, between 0 and 255 seconds, before loss of printer supervision is reported as a trouble.
- If you select **Serial** port, the following fields are activated:
- In **Baud Rate** list, select a baud rate in the range *2400*, *9600*, or *19200*.
- In **Parity** list, select *Even*, *Odd,* or *None*.
- In **Data Bits** list, select *7* or *8* bits.
- In **Stop Bits** list, select *0.5, 1,* or *2*.

ANN-LED Options

The **Piezo Enable** option allows you to select whether the piezo sounder on any installed ANN-LED module will ever sound. Select *yes* to enable or *no* to disable.

The **Lamp Test Enable** option allows you to select whether the Lamp Test button on any installed ANN-LED annunciator will function normally or always be ignored. Select *yes* to enable or *no* to disable.

The **Silence Button Enable** option allows you to select whether the Silence button on any installed ANN-LED annunciator will function normally or always be ignored. Select *yes* to enable or *no* to disable.

ANN-80 Options

The **Lock Enable** option allows you to select whether or not any installed ANN-80 annunciator must be unlocked by its key before any annunciator key presses will function. Select *yes* to enable (annunciator must be unlocked for keys to function) or *no* to disable (lock position is ignored).

The **Acknowledge/Step Enable** option allows you to select whether the Ack/Step button on any installed ANN-80 annunciator will function normally or always be ignored. Select *yes* to enable (Ack/Step button functions normally) or *no* to disable (Ack/Step button never functions).

The **Silence Enable** option allows you to select whether the Silence button on any installed ANN-80 annunciator will function normally or always be ignored. Select *yes* to enable (Silence button functions normally) or *no* to disable (Silence button never functions).

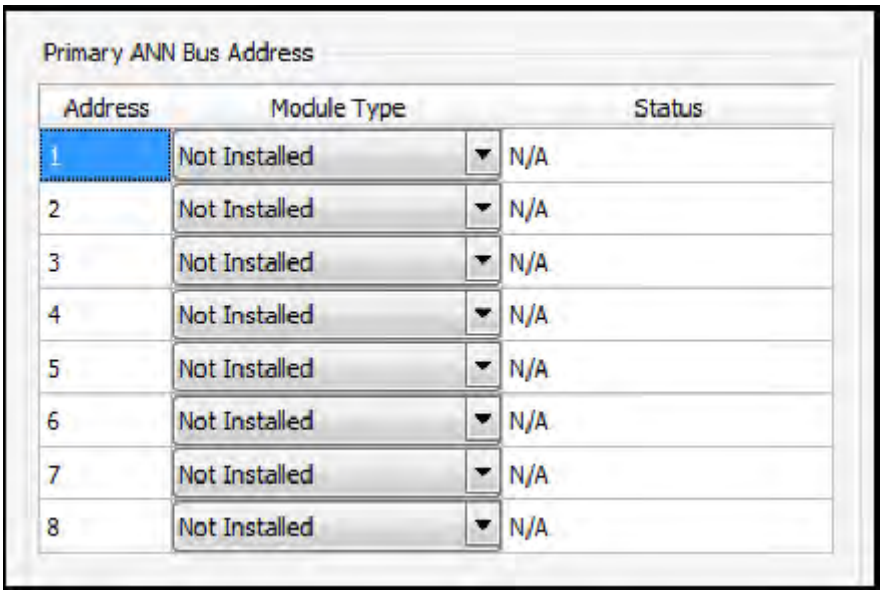
The **Piezo Enable** option allows you to select whether the piezo sounder on any installed ANN-80 module will ever sound. Select *yes* to enable or *no* to disable.

The **Reset/Lamp Enable** option allows you to select whether the Reset button on any installed ANN-80 annunciator will function normally or always be ignored. Select *yes* to enable (Reset button functions normally) or *no* to disable (Reset button never functions).

The **Drill/Sounder Enable** option allows you to select whether the Drill button on any installed ANN-80 annunciator will function normally or always be ignored. Select *yes* to enable (Drill button functions normally) or *no* to disable (Drill button never functions).

Primary/Secondary ANN-Bus

For each enabled ANN-Bus address, select the module type from the drop-down box. The Primary and Secondary ANN-Bus screens are identical.

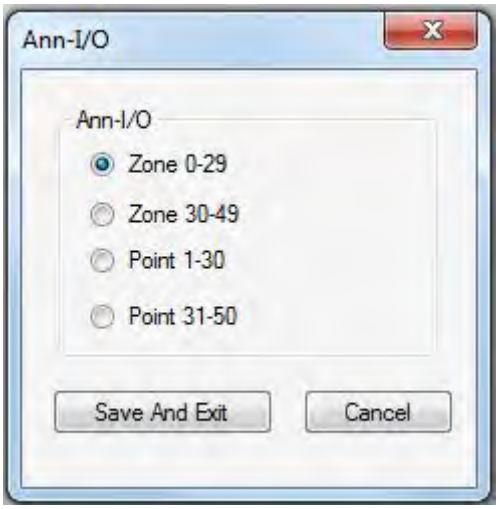


Available ANN-Bus modules may include the:

- ANN-80 LCD Annunciator
- ANN-100 LCD Annunciator
- ANN-I/O LED Driver Module
- ANN-S/PG Serial/Parallel Printer Interface Module
- ANN-LED Annunciator Module
- ANN-RLED Annunciator Module
- ANN-RLY Relay Module

The ANN-I/O, ANN-(R)LED, and ANN-RLY require input in the status field. After selecting one of these devices from the drop-down menu, double-click in the "Status" field to finish device setup.

ANN-I/O



Select whether the ANN-I/O will annunciate either Point (addressable device address) information or Zone information and select the Point Range to be annunciated. The only zone range that can be annunciated on the 50 Pt. Addressable panel is Zone 0-13.

ANN-I/O Point Option

If Point is selected as the module option, the first ten LED driver outputs on the first ANN-I/O module will display the system status information. The remaining 30 LED driver outputs on the first module and 20 LED driver outputs on the second module will be used to display the active/alarm status of each point in the Point Range programmed for that particular module. The points that will be annunciated on a particular ANN-I/O module depend on the programming options selected as far as the device type (detector or module) to be annunciated. The LED assignments for each ANN-I/O module will be as follows.

Module LED	ANN-I/O Module #1 Function	ANN-I/O Module #2 Function
1	AC Fault	Not Used
2	Fire Alarm	Not Used
3	Supervisory	Not Used
4	Trouble	Not Used
5	Alarm Silenced	Not Used
6	Not Used	Not Used
7	Not Used	Not Used
8	Not Used	Not Used
9	Not Used	Not Used
10	Not Used	Not Used
11	Point 001 - Active/Alarm	Point 031 - Active/Alarm

12	Point 002 - Active/Alarm	Point 032 - Active/Alarm
13	Point 003 - Active/Alarm	Point 033 - Active/Alarm
14	Point 004 - Active/Alarm	Point 034 - Active/Alarm
15	Point 005 - Active/Alarm	Point 035 - Active/Alarm
16	Point 006 - Active/Alarm	Point 036 - Active/Alarm
17	Point 007 - Active/Alarm	Point 037 - Active/Alarm
18	Point 008 - Active/Alarm	Point 038 - Active/Alarm
19	Point 009 - Active/Alarm	Point 039 - Active/Alarm
20	Point 010 - Active/Alarm	Point 040 - Active/Alarm
21	Point 011 - Active/Alarm	Point 041 - Active/Alarm
22	Point 012 - Active/Alarm	Point 042 - Active/Alarm
23	Point 013 - Active/Alarm	Point 043 - Active/Alarm
24	Point 014 - Active/Alarm	Point 044 - Active/Alarm
25	Point 015 - Active/Alarm	Point 045 - Active/Alarm
26	Point 016 - Active/Alarm	Point 046 - Active/Alarm
27	Point 017 - Active/Alarm	Point 047 - Active/Alarm
28	Point 018 - Active/Alarm	Point 048 - Active/Alarm
29	Point 019 - Active/Alarm	Point 049 - Active/Alarm
30	Point 020 - Active/Alarm	Point 050 - Active/Alarm
31	Point 021 - Active/Alarm	Not Used
32	Point 022 - Active/Alarm	Not Used
33	Point 023 - Active/Alarm	Not Used
34	Point 024 - Active/Alarm	Not Used
35	Point 025 - Active/Alarm	Not Used
36	Point 026 - Active/Alarm	Not Used
37	Point 027 - Active/Alarm	Not Used
38	Point 028 - Active/Alarm	Not Used
39	Point 029 - Active/Alarm	Not Used
40	Point 030 - Active/Alarm	Not Used

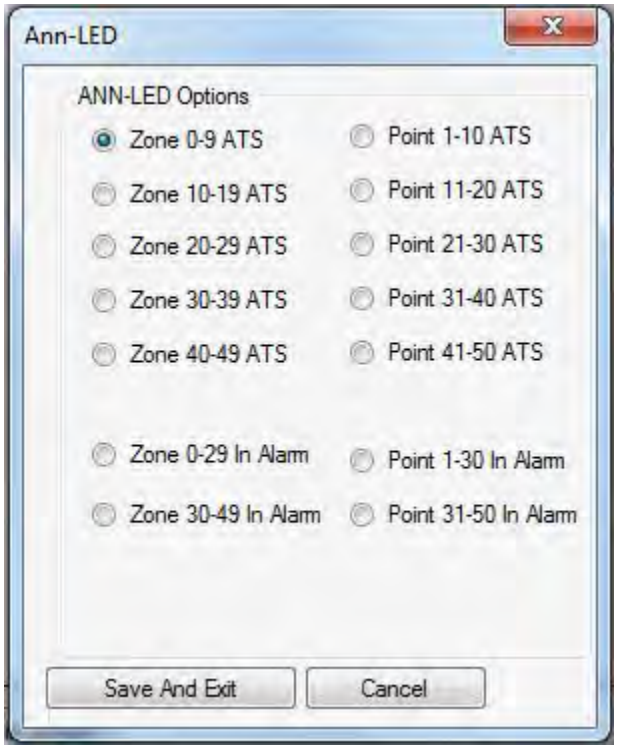
ANN-I/O Zone Option

If Zone is selected as the module option, the first ten LED driver outputs on the ANN-I/O module will display the system status information. The remaining 20 LED driver outputs on the module will display the active/alarm status of each zone. The LED assignments for the ANN-I/O module will be as follows.

Module LED	Zone Range 000-029 Function	Zone Range 030-049 Function
1	AC Fault	Zone 030 - Active/Alarm
2	Fire Alarm	Zone 031 - Active/Alarm
3	Supervisory	Zone 032 - Active/Alarm
4	Trouble	Zone 033 - Active/Alarm
5	Alarm Silenced	Zone 034 - Active/Alarm
6	Earth Fault	Zone 035 - Active/Alarm
7	Battery Fault	Zone 036 - Active/Alarm
8	Charger Fault	Zone 037 - Active/Alarm
9	NAC Fault	Zone 038 - Active/Alarm
10	Disabled	Zone 039 - Active/Alarm
11	Zone 000 - Active/Alarm	Zone 040 - Active/Alarm
12	Zone 001 - Active/Alarm	Zone 041 - Active/Alarm
13	Zone 002 - Active/Alarm	Zone 042 - Active/Alarm
14	Zone 003 - Active/Alarm	Zone 043 - Active/Alarm
15	Zone 004 - Active/Alarm	Zone 044 - Active/Alarm
16	Zone 005 - Active/Alarm	Zone 045 - Active/Alarm
17	Zone 006 - Active/Alarm	Zone 046 - Active/Alarm
18	Zone 007 - Active/Alarm	Zone 047 - Active/Alarm
19	Zone 008 - Active/Alarm	Zone 048 - Active/Alarm
20	Zone 009 - Active/Alarm	Zone 049 - Active/Alarm
21	Zone 010 - Active/Alarm	Not Used
22	Zone 011 - Active/Alarm	Not Used
23	Zone 012 - Active/Alarm	Not Used
24	Zone 013 - Active/Alarm	Not Used
25	Zone 014 - Active/Alarm	Not Used
26	Zone 015 - Active/Alarm	Not Used
27	Zone 016 - Active/Alarm	Not Used
28	Zone 017 - Active/Alarm	Not Used
29	Zone 018 - Active/Alarm	Not Used
30	Zone 019 - Active/Alarm	Not Used
31	Zone 020 - Active/Alarm	Not Used
32	Zone 021 - Active/Alarm	Not Used

33	Zone 022 - Active/Alarm	Not Used
34	Zone 023 - Active/Alarm	Not Used
35	Zone 024 - Active/Alarm	Not Used
36	Zone 025 - Active/Alarm	Not Used
37	Zone 026 - Active/Alarm	Not Used
38	Zone 027 - Active/Alarm	Not Used
39	Zone 028 - Active/Alarm	Not Used
40	Zone 029 - Active/Alarm	Not Used

ANN-(R)LED



Select whether the ANN-LED will annunciate either Point information (addressable device address) or Zone information and select whether the ANN-LED will annunciate alarms only or alarms, troubles, and supervisories.

ANN-LED Point Option

Alarm Only (for use with ANN-RLED module

If Point is selected as the module option and the module is programmed to annunciate alarms only, the first ten LEDs on the first ANN-RLED module will display the system status information. The remaining 30 LEDs on the first module and LEDs 11 - 30 on the second module will display the active/alarm status of each point in the Point Range programmed for that particular module. The LED assignments for each ANN-RLED module will be as follows.

Alarm Silenced	NAC 1 Fault	NAC 2 Fault	Not Used	Not Used
Earth Fault	Battery Fault	Charger Fault	Disabled	Maintenance
Point 001 Active/Alarm	Point 002 Active/Alarm	Point 003 Active/Alarm	Point 004 Active/Alarm	Point 005 Active/Alarm
Point 006 Active/Alarm	Point 007 Active/Alarm	Point 008 Active/Alarm	Point 009 Active/Alarm	Point 010 Active/Alarm
Point 011 Active/Alarm	Point 012 Active/Alarm	Point 013 Active/Alarm	Point 014 Active/Alarm	Point 015 Active/Alarm
Point 016 Active/Alarm	Point 017 Active/Alarm	Point 018 Active/Alarm	Point 019 Active Alarm	Point 020 Active/Alarm
Point 021 Active/Alarm	Point 022 Active/Alarm	Point 023 Active/Alarm	Point 024 Active/Alarm	Point 025 Active/Alarm
Point 026 Active/Alarm	Point 027 Active/Alarm	Point 028 Active/Alarm	Point 029 Active/Alarm	Point 030 Active/Alarm

ANN-RLED Module #1 (Point Range 001-030)

Not Used	Not Used	Not Used	Not Used	Not Used
Not Used	Not Used	Not Used	Not Used	Not Used
Point 031 Active/Alarm	Point 032 Active/Alarm	Point 033 Active/Alarm	Point 034 Active/Alarm	Point 035 Active/Alarm
Point 036 Active/Alarm	Point 037 Active/Alarm	Point 038 Active/Alarm	Point 039 Active/Alarm	Point 040 Active/Alarm
Point 041 Active/Alarm	Point 042 Active/Alarm	Point 043 Active/Alarm	Point 044 Active/Alarm	Point 045 Active/Alarm
Point 046 Active/Alarm	Point 047 Active/Alarm	Point 048 Active/Alarm	Point 049 Active Alarm	Point 050 Active/Alarm
Not Used	Not Used	Not Used	Not Used	Not Used
Not Used	Not Used	Not Used	Not Used	Not Used

ANN-RLED Module #2 (Point Range 031-050)

Alarm, Trouble and Supervisory

If Point is selected as the module option, and the module is programmed to annunciate alarms, troubles and supervisories, the first ten LEDs on the first ANN-LED module will display the system status information. The remaining 30 LEDs on the first module and the last 30 LEDs on the remaining modules will display the alarm, trouble and supervisory status for each of the ten points in the Point Range programmed for that particular module. The LED assignments for each ANN-LED module will be as follows.

Alarm Silenced	NAC 1 Fault	NAC 2 Fault	Not Used	Not Used
Earth Fault	Battery Fault	Charger Fault	Disable	Maintenance
Point 001 Active/Alarm	Point 002 Active/Alarm	Point 003 Active/Alarm	Poi t 004 Active/Alarm	Point 005 Active/Alarm
Point 001 Trouble	Point 002 Trouble	Point 003 Trouble	Point 004 Trouble	Point 005 Trouble
Point 001 Supervisory	Point 002 Supervisory	Point 003 Supervisory	Point 004 Supervisory	Point 005 Supervisory
Point 006 Active/Alarm	Point 007 Active/Alarm	Point 008 Active/Alarm	Point 009 Active Alarm	Point 010 Active/Alarm
Point 006 Trouble	Point 007 Trouble	Point 008 Trouble	Point 009 Trouble	Point 010 Trouble
Point 006 Supervisory	Point 007 Supervisory	Point 008 Supervisory	Point 009 Supervisory	Point 010 Supervisory

ANN-LED Module #1 (Point Range 001-010)

Not Used	Not Used	Not Used	Not Used	Not Used
Not Used	Not Used	Not Used	Not Used	Not Used
Point 011 Active/Alarm	Point 012 Active/Alarm	Point 013 Active/Alarm	Point 014 Active/Alarm	Point 015 Active/Alarm
Point 011 Trouble	Point 012 Trouble	Point 013 Trouble	Point 014 Trouble	Point 015 Trouble
Point 011 Supervisory	Point 012 Supervisory	Point 013 Supervisory	Point 014 Supervisory	Point 015 Supervisory
Point 016 Active/Alarm	Point 017 Active/Alarm	Point 018 Active/Alarm	Point 019 Active Alarm	Point 020 Active/Alarm
Point 016 Trouble	Point 017 Trouble	Point 018 Trouble	Point 019 Trouble	Point 020 Trouble
Point 016 Supervisory	Point 017 Supervisory	Point 018 Supervisory	Point 019 Supervisory	Point 020 Supervisory

ANN-LED Module #2 (Point Range 011-020)

The LED assignments for the modules annunciating Point Ranges 021-030, 031-040 and 041-050, will follow the same pattern as the second ANN-LED Module: third module Point Range 021-030, fourth module Point Range 031-040 and fifth module Point Range 041-050.

ANN-LED Zone Options

Alarm Only (for use with ANN-RLED module)

If Zone is selected as the module option, and the module is programmed to annunciate alarms only, the first ten LEDs on the ANN-RLED module will display the system status information. The remaining 30 LEDs on the first module and the last 30 LEDs on the second module will display the active/alarm status of each zone in the Zone Range programmed for that particular module. The LED assignments for each ANN-LED module will be as follows.

Alarm Silenced	NAC 1 Fault	NAC 2 Fault	Not Used	Not USed
Earth Fault	Battery Fault	Charger Fault	Disabled	Maintenance
Zone 000 Active/Alarm	Zone 001 Active/Alarm	Zone 002 Active/Alarm	Zone 003 Active/Alarm	Zone 004 Active/Alarm
Zone 005 Active/Alarm	Zone 006 Active/Alarm	Zone 007 Active/Alarm	Zone0 08 Active/Alarm	Zone 009 Active/Alarm
Zone 010 Active/Alarm	Zone 011 Active/Alarm	Zone 012 Active/Alarm	Zone 013 Active/Alarm	Zone 014 Active/Alarm
Zone 015 Active/Alarm	Zone 016 Active/Alarm	Zone 017 Active/Alarm	Zone 018 Active Alarm	Zone 019 Active/Alarm
Zone 020 Active/Alarm	Zone 021 Active/Alarm	Zone 022 Active/Alarm	Zone 023 Active/Alarm	Zone 024 Active/Alarm
Zone 025 Active/Alarm	Zone 026 Active/Alarm	Zone 027 Active/Alarm	Zone 028 Active/Alarm	Zone 029 Active/Alarm

ANN-RLED Module #1

Not Used	Not Used	Not Used	Not Used	Not Used
Not Used	Not Used	Not Used	Not Used	Not Used
Zone 030 Active/Alarm	Zone 031 Active/Alarm	Zone 032 Active/Alarm	Zone 033 Active/Alarm	Zone 034 Active/Alar
Zone 035 Active/Alarm	Zone 036 Active/Alarm	Zone 037 Active/Alarm	Zone 038 Active/Alarm	Zone 039 Active/Alarm
Zone 040 Active/Alarm	Zone 041 Active/Alarm	Zone 042 Active/Alarm	Zone 043 Active/Alarm	Zone 044 Active/Alar
Zone 045 Active/Alarm	Zone 046 Active/Alarm	Zone 047 Active/Alarm	Zone 048 Active Alarm	Zone 049 Active/Alarm
Not Used	Not Used	Not Used	Not Used	Not Used
Not Used	Not Used	Not Used	Not Used	Not Used

ANN-RLED Module #2

ANN-LED Zone Option - Alarm, Trouble and Supervisory

If Zone is selected as the module option, and the module is programmed to annunciate alarms, troubles, and supervisories, the first ten LEDs on the first ANN-LED module will display the system status information. The remaining 30 LEDs on the first module and the last 30 LEDs on the second module will display the alarm, trouble and supervisory status for each of the ten zones in the Zone Range programmed for that particular module. The LED assignments for each ANN-LED module will be as follows.

Alarm Silenced	NAC 1 Fault	NAC 2 Fault	Not Used	Not Used
Earth Fault	Battery Fault	Charger Fault	Disabled	Maintenance
Zone 000 Active/Alarm	Zone 001 Active/Alarm	Zone 002 Active/Alarm	Zone 003 Active/Alarm	Zone 004 Active/Alarm
Zone 000 Trouble	Zone 001 Trouble	Zone 002 Trouble	Zone 003 Trouble	Zone 004 Trouble
Zone 000 Supervisory	Zone 001 Supervisory	Zone 002 Supervisory	Zone 003 Supervisory	Zone 004 Supervisory
Zone 005 Active/Alarm	Zone 006 Active/Alarm	Zone 007 Active/Alarm	Zone 008 Active Alarm	Zone 009 Active/Alarm
Zone 005 Trouble	Zone 006 Trouble	Zone 007 Trouble	Zone 008 Trouble	Zone 009 Trouble
Zone 005 Supervisory	Zone 006 Supervisory	Zone 007 Supervisory	Zone 008 Supervisory	Zone 009 Supervisory

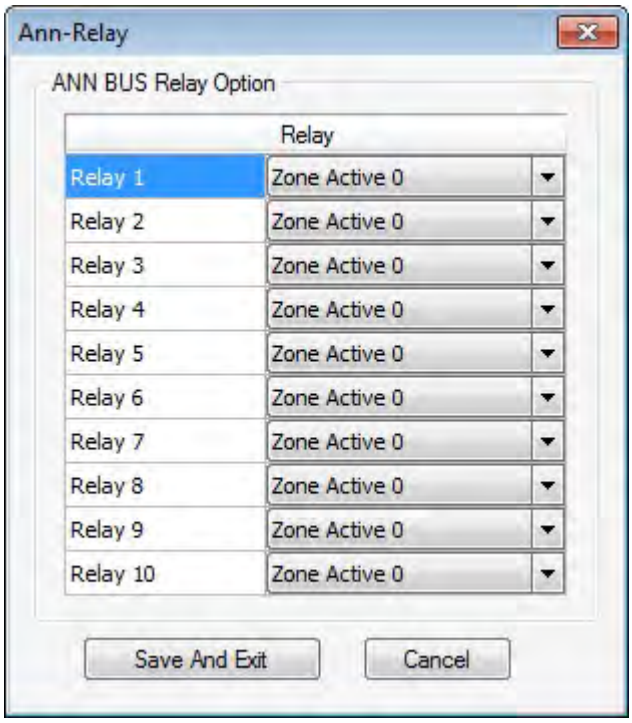
ANN-LED Module #1

Not Used	Not Used	Not Used	Not Used	Not Used
Not Used	Not Used	Not Used	Not Used	Not Used
Zone 010 Active/Alarm	Zone 011 Active/Alarm	Zone 012 Active/Alarm	Zone 013 Active/Alarm	Zone 014 Active/Alarm
Zone 010 Trouble	Zone 011 Trouble	Zone 012 Trouble	Zone 013 Trouble	Zone 014 Trouble
Zone 010 Supervisory	Zone 011 Supervisory	Zone 012 Supervisory	Zone 013 Supervisory	Zone 014 Supervisory
Zone 015 Active/Alarm	Zone 016 Active/Alarm	Zone 017 Active/Alarm	Zone 018 Active Alarm	Zone 019 Active/Alarm
Zone 015 Trouble	Zone 016 Trouble	Zone 017 Trouble	Zone 018 Trouble	Zone 019 Trouble
Zone 015 Supervisory	Zone 016 Supervisory	Zone 017 Supervisory	Zone 018 Supervisory	Zone 019 Supervisory

ANN-LED Module #2

The LED assignments for the modules annunciating Zone Ranges 020-029, 030-039, and 040-049 will follow the same pattern as the second ANN-LED module.

ANN-RLY



The ANN-RLY module provides ten Form-C relays which can be programmed for various functions. Select the desired relay function from the drop-down menu. Following is a list of the available programming options for each relay:

- Alarm
- Supervisory
- Supervisory AR
- Trouble
- Comm Fail
- Process Mon
- Process Mon AR
- AC Loss
- Hazard
- Medical
- Silenceable Alarm
- Carbon Monoxide
- Zone Active XXX (where XXX = programmed zone 000 to 049)

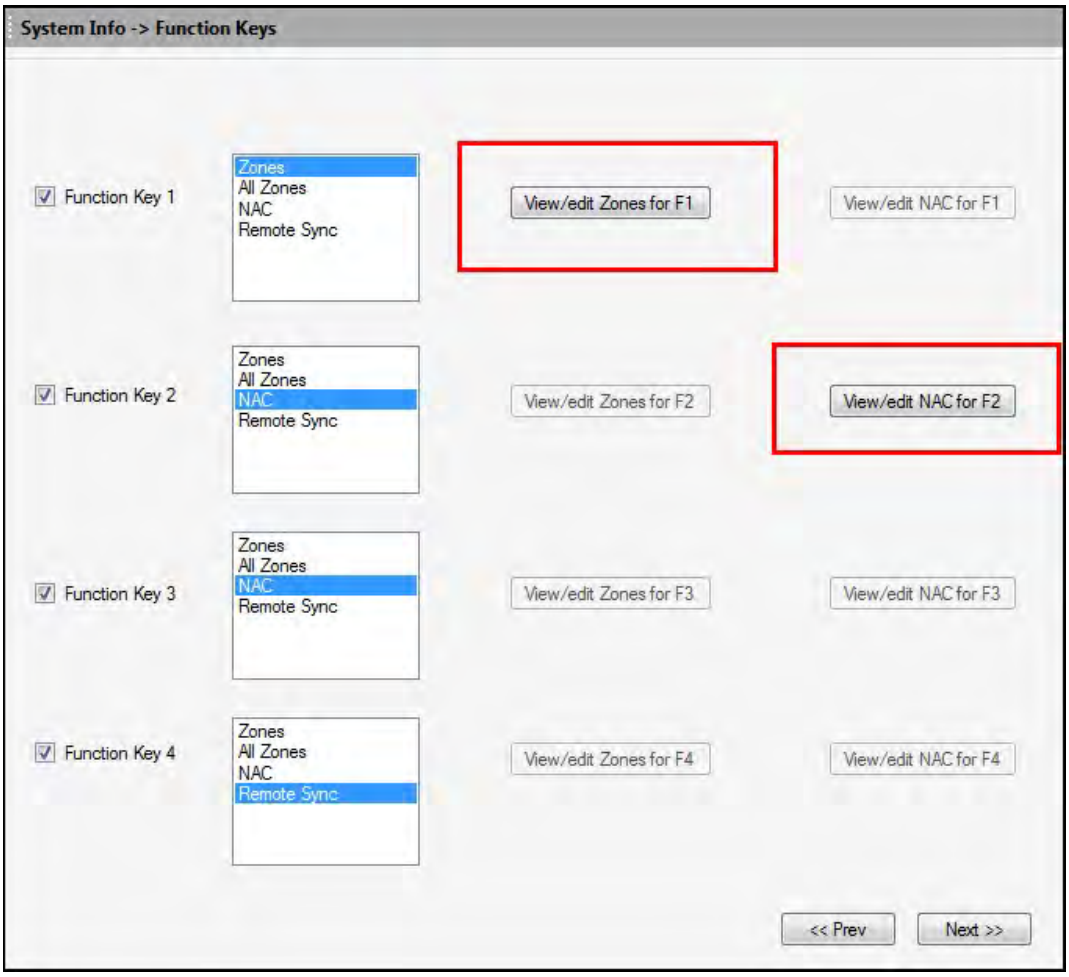
Click **Save to Database** to save the configuration in the FS-Tools database.

Click **Next** or click **Function Keys** in the left pane configure the four programmable keypad Function Keys.

Click **Prev** to go back to the **Global Options** pane.

Function Keys

The FACP keypad has 4 programmable function keys. These keys can be programmed to allow rapid disable/enable of various fire panel inputs and outputs during scheduled maintenance.



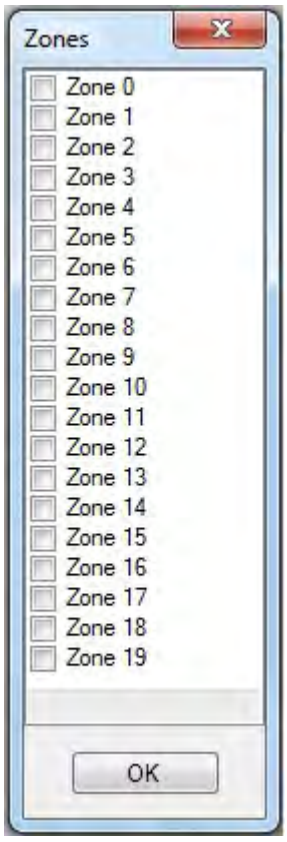
Click **Save to Database** to save the configuration in the FS-Tools database.

Click **Next** or click **SLC Loop Setup>Detectors** in the left pane to configure Input devices.

Click **Prev** to go back to the **Secondary ANN-Bus setup**.

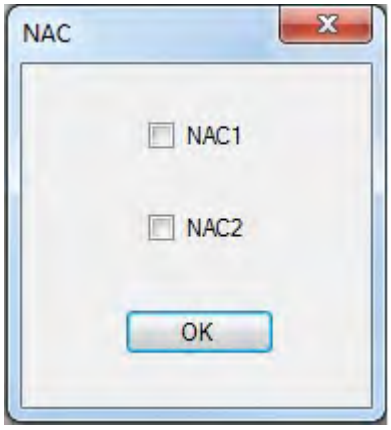
Function Key Zone Select

Select which **Zones** (0-19) that the Function Key will control.



Function Key NAC Select

Select which **NAC** (1 or 2) that the Function Key will control.



SLC Loop Set-up

SLC Loop

SLC loops provide communication to addressable detectors, monitor modules (initiating devices, and control modules (output devices. One SLC loop is available for use on the FACP. The device capacity is 50 devices total.

You can configure the SLC Loop for NFPA Class B (Style 4 or Class A (Styles 6 or 7. Wiring styles 4 or 6 are most common. Style 7 wiring is the same as Style 6 with the added requirement that each addressable device on the loop must have a pair of isolator modules, one on each side. To program a system for Style 7, you must select the loop setup for Style 6. Refer to your *SLC Wiring Manual* for more information.

Loop Style

Loop Style option allows you to select the loop style for the panel's SLC (Signaling Line Circuit). The panel may be wired in Class B (Style 4), a two-wire circuit starting at the panel and ending at the last device, or Class A (Styles 6 or 7), a four-wire circuit starting at the panel going out to all the devices, and ending back at the panel. Style 7 wiring uses isolator modules, one on each side of the loop.

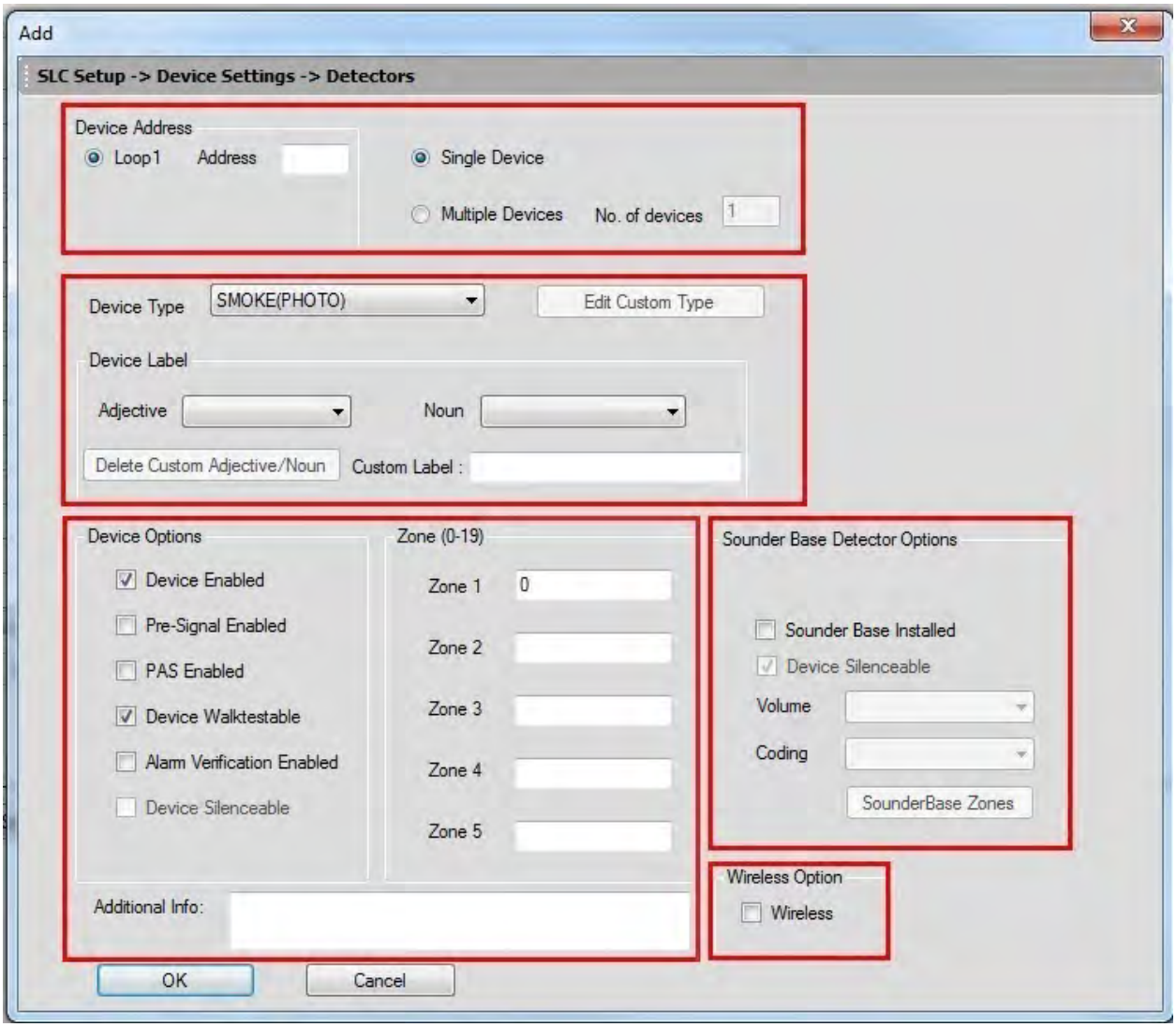
Detectors

From the detectors screen, you can:

- Add a new addressable detector to the SLC loop.
- View the added detector in a tabular or graphical form
- Edit the programming for an existing detector.
- Delete an existing detector from the loop.
- Search for detectors in a zone.

Adding Devices

From the bottom of the detector screen, select the Add Device(s) button. The following screen appears. See following pages to learn more.



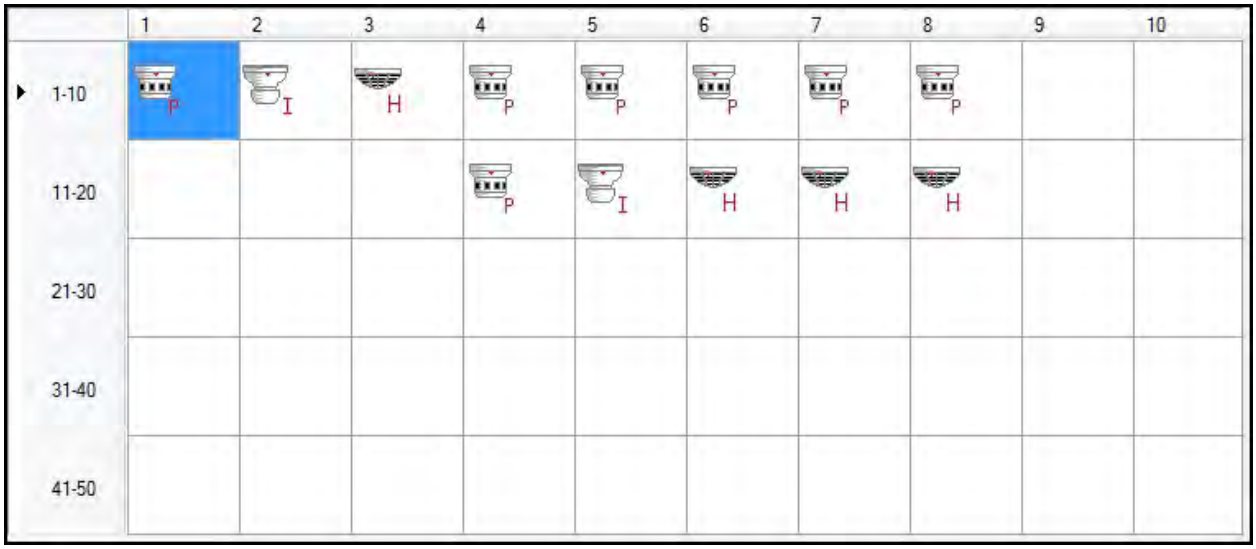
Click OK when finished and the device(s) will appear on the detector screen.

Viewing Devices

There are two ways the devices can be viewed. There is a **tabular view** which outlines the device information in a table view.

Loop	Address	Status	Type	Verification	Walktest	Presignal	PAS	Custom Label	SounderBase Installed	Coding
1	1	Enable	PHOTO BEAM	False	True	False	False	EAST FLOOR	False	
1	2	Enable	SMOKE (ION)	False	True	False	False	SOUTH CLASSR...	False	
1	3	Enable	SMOKE(PHOTO)	False	True	True	False	MAIN CORRIDOR	False	
1	4	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	STEADY
1	5	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	
1	6	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	
1	7	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	
1	8	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	
1	9	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	
1	10	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	True	
1	11	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	True	STEADY
1	12	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	True	
1	13	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	True	
1	14	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	
1	15	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	
1	16	Enable	PHOTO ADAPT	False	True	True	False	UPPER HALLWAY	False	

The graphical view offers a pictorial view of the devices on the loop.

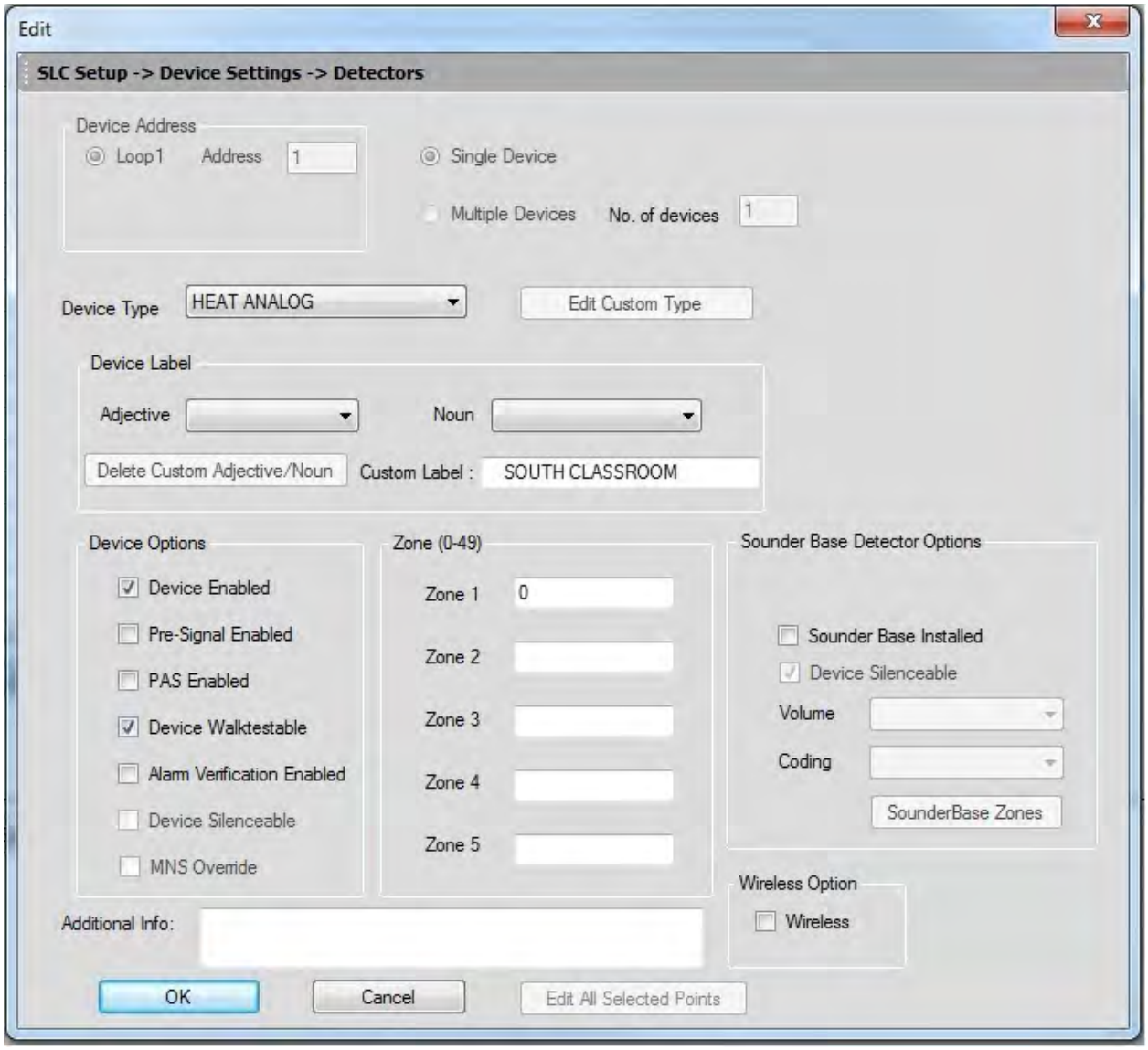


Editing Devices

Using the **Edit Devices** option, you can edit the device type, device options, and change the zone mapping.

Select the check box corresponding to the device you want to edit in the **Detectors** screen. You can select only one device at a time.

Click **Edit Device(s)** to edit the device information. The **Edit** dialog box appears.



Update the device information such as **Device Type, Device Label**, **Device Options, Zone** assignments, **Sound Base Options**, and **Wireless Options**.

Click **OK**. The device information is updated in SLC loop setup.

Note: You cannot modify the device address using the **Edit Device** option.

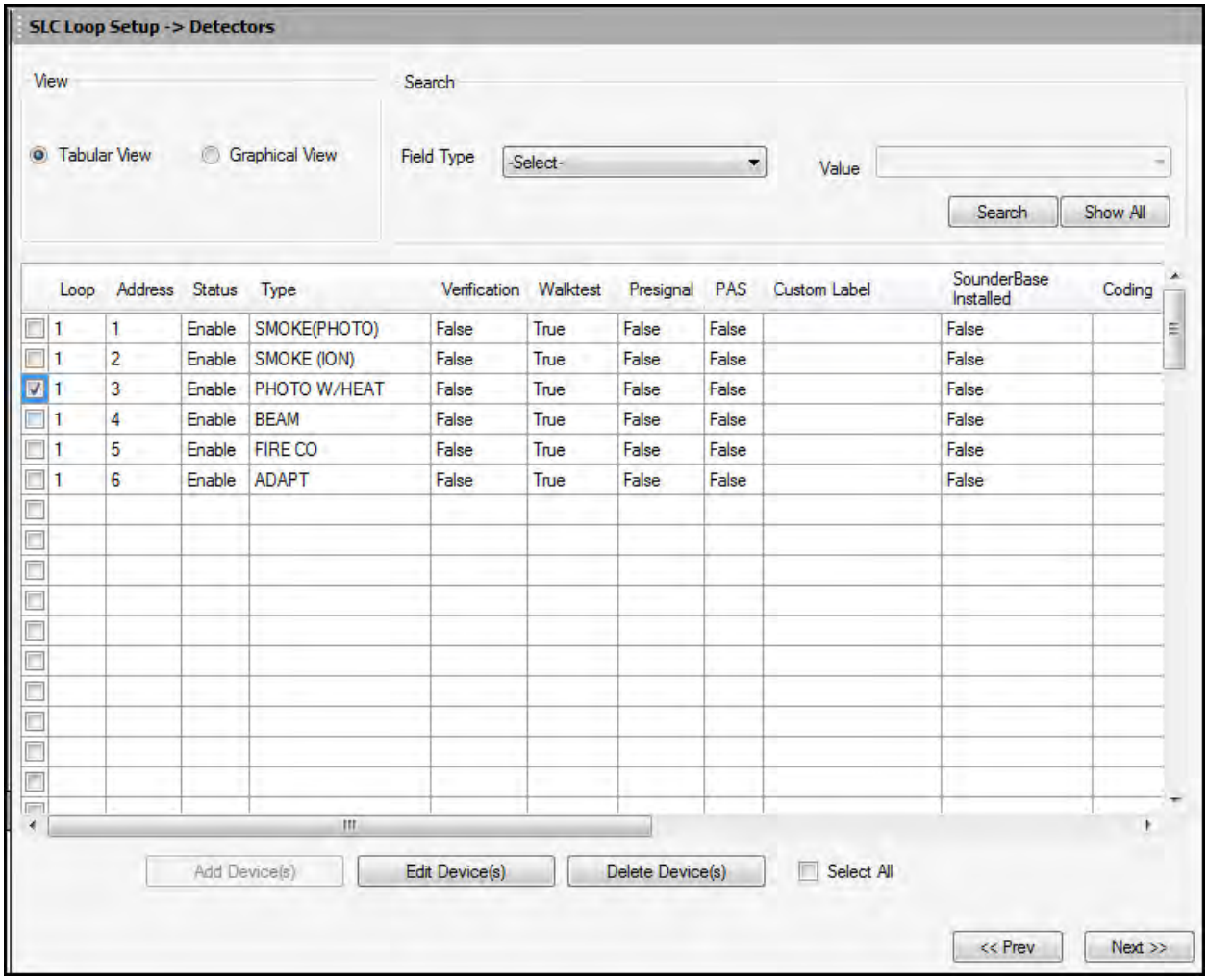
Deleting Devices

When a device is no longer used, you can delete the device from the SLC Loop.

To delete the devices in the SLC loop

Select the check box corresponding to the device you want to delete in the **Detectors** screen. You can select multiple devices at a time.

Click **Delete Device** to delete the device from the SLC loop. A message asking for confirmation appears. Click **Yes** to delete the device details. The detector device is deleted from the SLC Loop.



Finding Devices

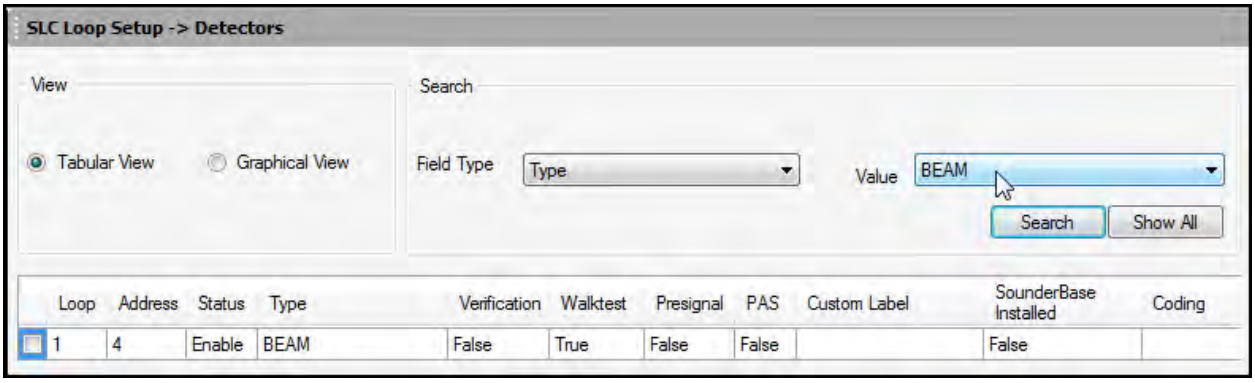
Using the **Search** option, you can find a device when there are multiple devices in the SLC loop. The **Search** option is available only with the **Tabular View**.

To find devices, select an option in **Field Type**. The available options are *Custom Label, Status, Address, Type, Verification, Walktest, Presignal, PAS, Sounder Base Installed, Coding, Sounder Base Volume, Wireless,* or *Sounder Base Silenceable*.

Select a **Value** from the drop-down list which corresponds to the selected **Field Type**.

Click **Search**. The search results are displayed in the **Tabular View**.

Click **Show All** to retrieve all the device records.



Click **Save to Database** to save the configuration in the FS-Tools database.

Click **Next** or click **Modules** in **SLC Loop Setup** in the left pane, to view the **SLC Loop Setup -> Modules** pane.

Click **Prev** to go back to the **Secondary ANN-Bus** configuration pane.

Device Address

In **Device Address**, specify the device address between 1 to 50.

To add only one device, click **Single Device**.

To add more than one device, click **Multiple Devices** and specify the number of devices you want to add in **No. of devices**. The **device address** will be the address for the first device. The next devices will have consecutive addresses.

You will get an error message if you select an invalid address.

Detector Device Type

Select the **Device Type** from the drop-down box. Available types are:

Detector Type	Action When Activated
Smoke Photo	Fire Alarm
User-Defined-1	same as previous (Smoke Photo)
Smoke Ion	Fire Alarm
User-Defined-2	same as previous (Smoke Ion)
Heat Detect	Fire Alarm
User-Defined-3	same as previous (Heat Detect)
Smoke Duct-P	Fire Alarm
User-Defined-4	same as previous (Smoke Duct-P)
Photo w/Heat	Fire Alarm
User-Defined-5	same as previous (Photo w/Heat)
Duct Superv	Supervisory, latching
User-Defined-7	same as previous (Duct Superv)
Photo-Super AR	Supervisory, nonlatching (works only in LiteSpeed)
User-Defined-8	same as previous (Photo-Super AR)
ADAPT	Fire Alarm
User-Defined-10	same as previous (ADAPT)
Beam	Fire Alarm
User-Defined-11	same as previous (Beam)
Fire/CO	response is programmable (Alarm, Supv, or None)
User-Defined-12	same as previous (Fire/CO)

To add a user defined device type, select *USER-DEF-1* from the list, and click **Edit Custom Type**. Enter the new type label in the displayed window and click **OK**.

In **Device Label**, select the **Adjective** and the **Noun** which specify the device location. The adjective and noun are specific descriptors to identify the device location. To add a custom adjective/noun, select the *Add New* option from the adjective/noun list and specify the custom adjective/noun in the displayed window. **Custom Label** displays the selected **Adjective** and **Noun**.

Detector Device Options

In **Device Options**, the **Device Enabled** option is selected by default (when you click Add Device). If this option is not selected, the detector is not polled by the control panel, which prevents the detector from reporting alarms and troubles to the panel. The control panel displays the device type and address of the disabled device and activates the Trouble and Disable LEDs.

To enable the Pre-Signal option for the device, click **Pre-Signal Enabled**. This option programs the detector to delay panel activation for a pre-programmed time delay of up to three minutes, while allowing for visual verification. The alarm relay and communicator respond to the initial alarm immediately. In addition, Zone 48 activates immediately and can be programmed to a control module, to activate a sounder or indicator designated for Pre-signal indication (*do not use a Notification Appliance Circuit for this purpose).*

To enable the PAS option for the device, click **PAS Enabled**. The PAS option programs the detector to delay panel activation (including alarm relay and communicator) for a period of fifteen seconds plus a programmable time of up to three minutes. Zone 47, however, activates immediately and can be used to connect a signaling device to indicate PAS activation (*do not use a Notification Appliance Circuit for this purpose).*

Note: For a device, you can enable the PAS option or the Pre-Signal option. You cannot enable both options together.

The **Device Walktestable** option is selected by default. The Walktest feature allows you to test the system devices without manually resetting the control panel after each device activation.

To enable the Alarm Verification option for the device, click **Alarm Verification Enabled**. Alarm verification is used to confirm that a smoke detector activation is a true alarm condition and not a false alarm.

You can map each device to five **Zones**. Enter the three digit number corresponding to the zone assigned to the device for **Zone 1** to **Zone 5**. The factory default for an unprogrammed device is *Z000* for a general alarm zone.

Enter the **Additional Information** about the detector being programmed. This information is displayed as part of the device label on the panel display.

Note: The **Device Silenceable** option is disabled for the detectors.

Sounder Base Options

If the selected detector is installed in a Sounder Base, ensure that the **Sounder Base Installed** option checkbox is selected.

To enable the sounder base at this address, select the **Sounder Base Enabled** checkbox.

Coding: from the drop-down box, select the output type desired from the sounder base. The following options are available:

- **Steady** - a continuous output with no coding
- **Temporal 3** - ½ Second On, ½ Second Off, ½ Second On, ½ Second Off, ½ Second On, 1½ Seconds Off
- **Temporal 4** - ½ Second On, ½ Second Off, ½ Second On, ½ Second Off, ½ Second On, ½ Second Off, ½ Second On, 1½ Seconds Off
- **March Time** - 120 ppm (pulse-per-minute) output

Volume: from the drop-down box, select the sounder base output volume. Available settings are **Low**, **Medium**, and **High**.

Zones: You can map each Sounder Base to five **Zones**. Enter the three digit number corresponding to the zone assigned to the device for **Zone 1** to **Zone 5**. The factory default for an unprogrammed device is *Z000* for a general alarm zone.

Wireless Option

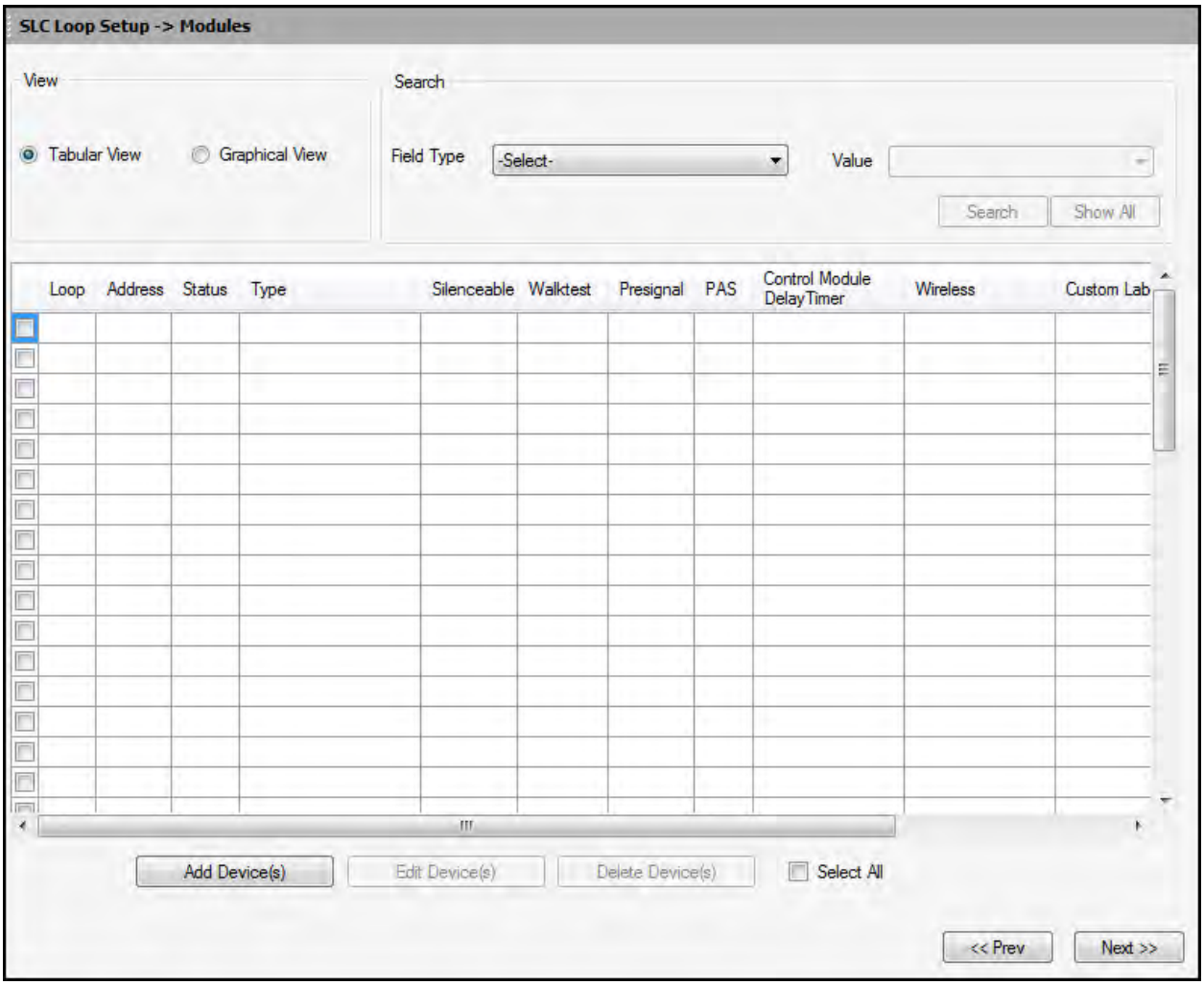
If the selected device is a wireless device, part of the SWIFT® Wireless System, select the **Wireless** checkbox.

For more information on the SWIFT Wireless system, refer to Document number #LS10036-000FL-E on www.firelite.com.

Modules

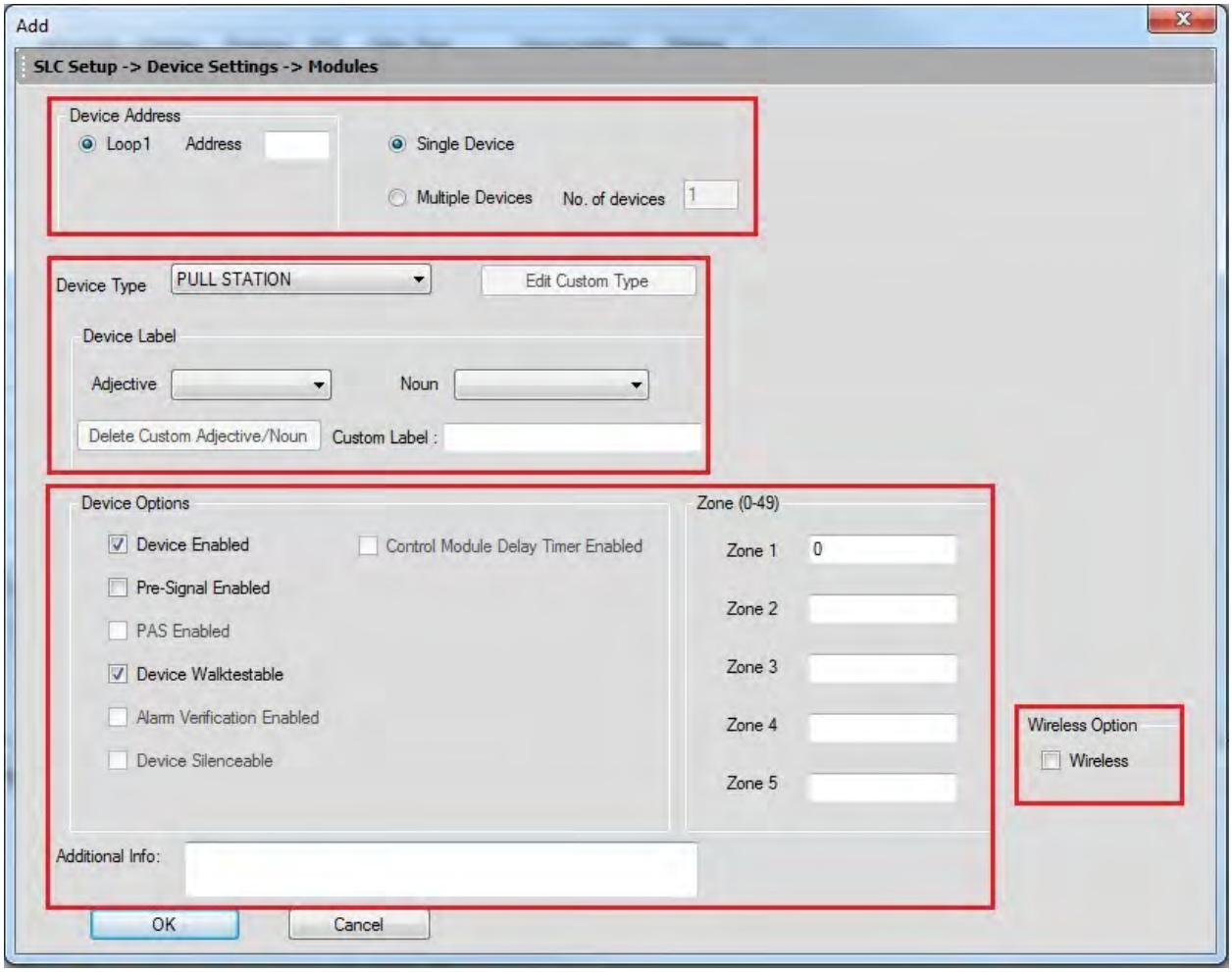
From the detectors screen, you can:

- Add a new addressable module to the SLC loop.
- View the added modules in a tabular or graphical form
- Edit the programming for an existing module.
- Delete an existing module from the loop.
- Search for modules in a zone.



Adding Devices

From the bottom of the detector screen, select the Add Device(s button. The following screen appears. See following pages to learn more.



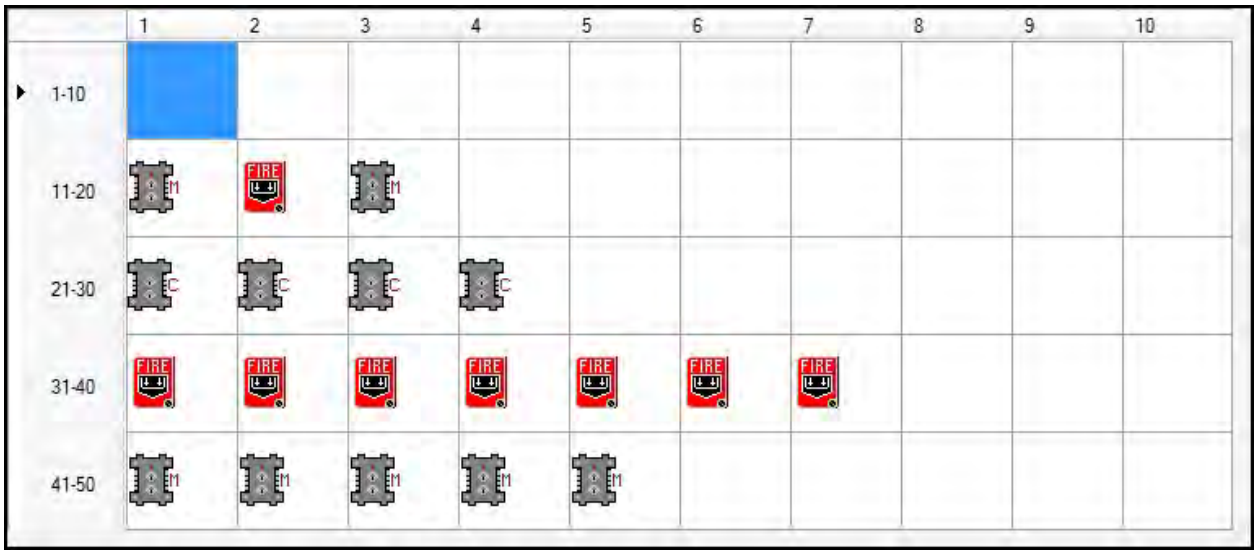
Click OK when finished and the device(s) will appear on the module screen.

Viewing Devices

There are two ways the devices can be viewed. There is a **tabular view** which outlines the device information in a table view.

Loop	Address	Status	Type	Silenceable	Walktest	Presignal	PAS	Delay Timer	Device Installed	Wireless
1	11	Enable	WATER FLOW	False	True	False	False	False	True	Disable
1	12	Enable	PULL STATION	False	True	False	False	False	True	Disable
1	13	Enable	MONITOR	False	True	True	False	False	True	Enable
1	21	Enable	CONTROL	True	True	False	False	False	True	Disable
1	22	Enable	CONTROL	True	True	False	False	True	True	Disable
1	23	Enable	CONTROL	True	True	False	False	True	True	Disable
1	24	Enable	CONTROL	True	True	False	False	False	True	Disable
1	31	Enable	PULL STATION	False	True	False	False	False	True	Disable
1	32	Enable	PULL STATION	False	True	False	False	False	True	Disable
1	33	Enable	PULL STATION	False	True	False	False	False	True	Disable
1	34	Enable	PULL STATION	False	True	False	False	False	True	Disable
1	35	Enable	PULL STATION	False	True	False	False	False	True	Disable
1	36	Enable	PULL STATION	False	True	False	False	False	True	Disable
1	37	Enable	PULL STATION	False	True	False	False	False	True	Disable
1	41	Enable	MONITOR	False	True	True	False	False	True	Disable
1	42	Enable	MONITOR	False	True	True	False	False	True	Disable
1	43	Enable	MONITOR	False	True	True	False	False	True	Disable
1	44	Enable	MONITOR	False	True	True	False	False	True	Disable

The **graphical view** offers a pictorial view of the devices on the loop.

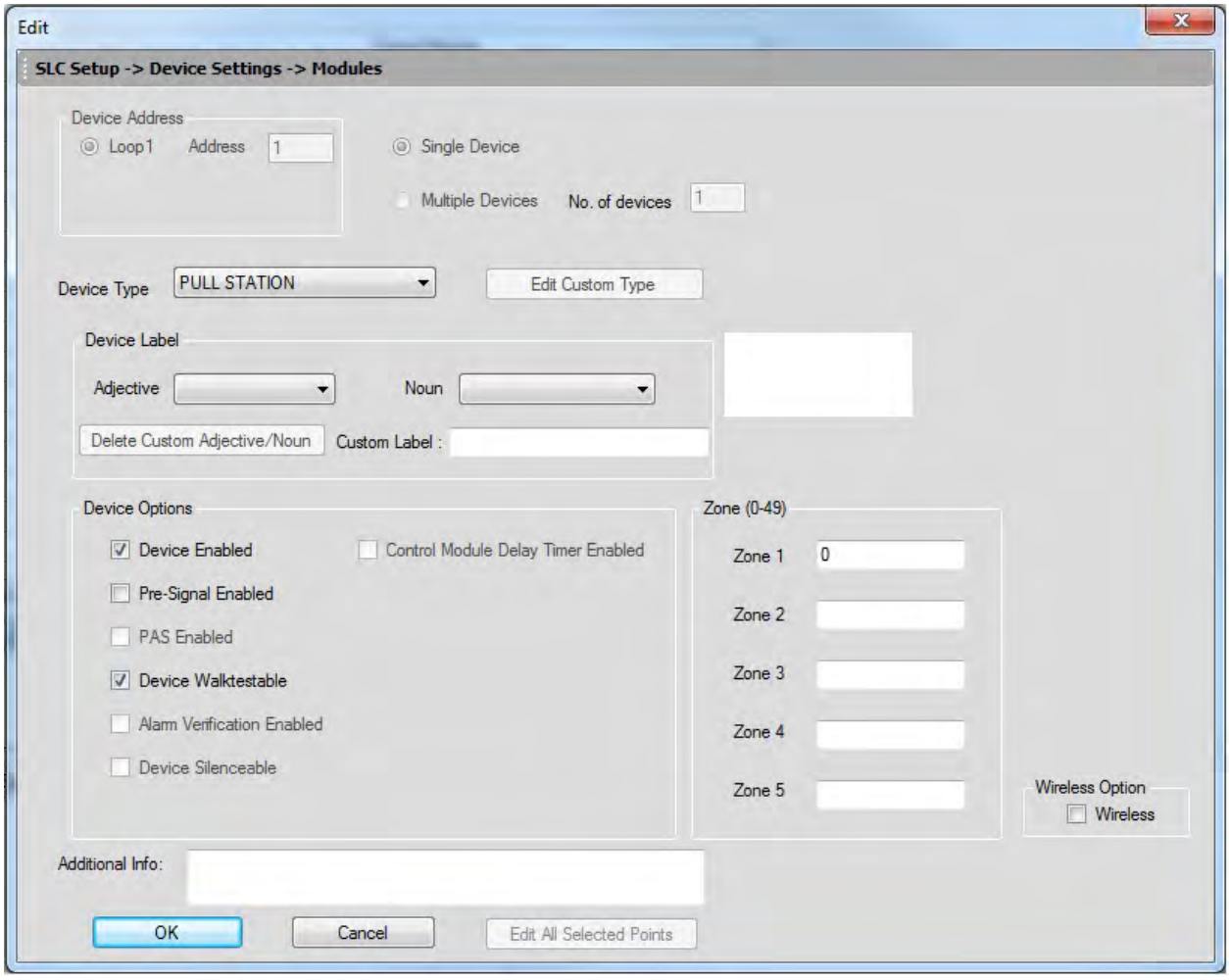


Editing Devices

Using the **Edit Devices** option, you can edit the device type, device options, and change the zone mapping.

Select the check box corresponding to the device you want to edit in the **Modules** screen. You can select only one device at a time.

Click **Edit Device(s)** to edit the device information. The **Edit** dialog box appears.



Update the device information such as **Device Type, Device Label**, **Device Options, Zone** assignments, and **Wireless** participation.

Click **OK**. The device information is updated in SLC loop setup.

Note: You cannot modify the device address using the **Edit Device** option.

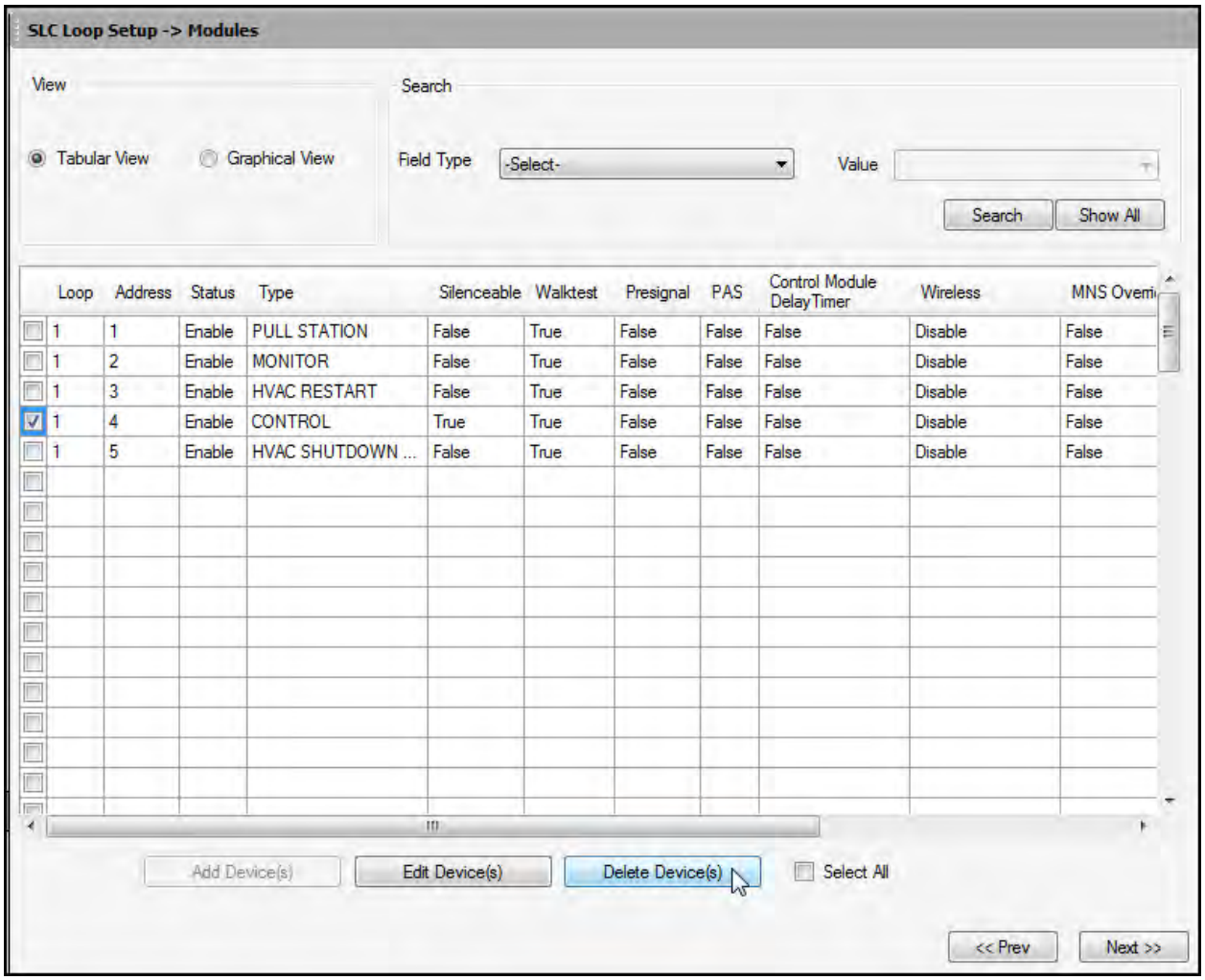
Deleting Devices

When a device is no longer used, you can delete the device from the SLC Loop.

To delete the devices in the SLC loop

Select the check box corresponding to the device you want to delete in the **Modules** screen. You can select multiple devices at a time.

Click **Delete Device** to delete the device from the SLC loop. A message asking for confirmation appears. Click **Yes** to delete the device details. The module device is deleted from the SLC Loop.



Finding Devices

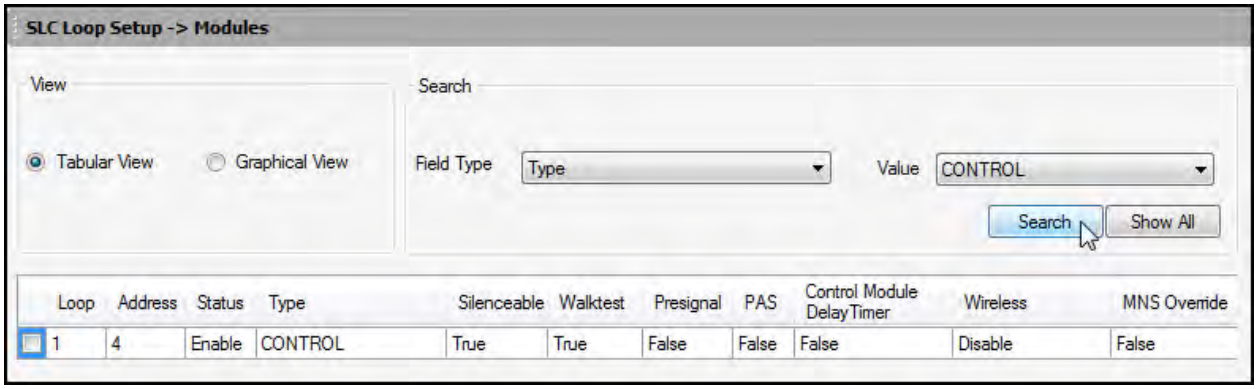
Using the **Search** option, you can find a device when there are multiple devices in the SLC loop. The **Search** option is available only with the **Tabular View**.

To find devices, select an option in **Field Type**. The available options are *Custom Label, Status, Address, Type, Silenceable, Walktest, Presignal, PAS, Wireless,* and *Control Module Delay Timer Enabled*.

Select a **Value** from the drop-down list which corresponds to the selected **Field Type**.

Click **Search**. The search results are displayed in the **Tabular View**.

Click **Show All** to retrieve all the device records.



Click **Save to Database** to save the configuration in the FS-Tools database.

Click **Save as Template** to save the configuration as a template. The saved template can be used for configuring other fire panels using the same computer or laptop. Type the new **Template Name** in the save as dialog box, then click **Save**, to save the fire panel configuration as a template.

Click **Next** or click **Verify Setup** in the left pane, to check input/output mapping.

Click **Prev** to go back to the **Detectors** pane.

Device Address

In **Device Address**, specify the device address between 1 to 50.

To add only one device, click **Single Device**.

To add more than one device, click **Multiple Devices** and specify the number of devices you want to add in **No. of devices**. The **device address** will be the address for the first device. The next devices will have consecutive addresses.

You will get an error message if you select an invalid address.

Module Device Type

Device types tell the panel what function each module will perform. Separate type codes are available for Monitor Modules and Control Modules.

Monitor Module Types

Select the **Monitor Device Type** from the drop-down box. Available types are:

Monitor Type	Action When Activated
Pull Station	Fire Alarm
User-Defined-1	same as previous (Pull Station)
Waterflow	Fire Alarm Delayed
User-Defined-2	same as previous (Waterflow)
Monitor	Fire Alarm
User-Defined-3	same as previous (Monitor)
Future	not used
Future	not used
Smoke-Conventional	Fire Alarm
User-Defined-5	same as previous (Smoke-Conventional)
Heat-Conventional	Fire Alarm
User-Defined-6	same as previous (Heat-Conventional)
Medic-Alert	General Purpose Signaling, latching
User-Defined-7	same as previous (Medic-Alert)
Hazard-Alert	General Purpose Signaling, latching
User-Defined-8	same as previous (Hazard-Alert)
Tornado-Alert	General Purpose Signaling, latching
User-Defined-9	same as previous (Tornado-Alert)
Phone	Active Phone (LCD display only)
User-Defined-10	same as previous (Phone)
Tamper	Supervisory, nonlatching (tracking)
User-Defined-11	same as previous (Tamper)
Supervisory	Supervisory, latching

User-Defined-12	same as previous (Supervisory)
Supervisory-AR	Supervisory, nonlatching (tracking)
User-Defined-13	same as previous (Supervisory-AR)
HVAC OVRRIDE	Switch Supervisory, nonlatching (tracking)
Power-Monitor	Power Fault
User-Defined-14	same as previous (Power Monitor)
Trouble-Monitor	Trouble
User-Defined-15	same as previous (Trouble Monitor)
Process-Monitor	General Purpose Signaling, latching
User-Defined 16	same as previous (Process-Monitor)
Process-Monitor-AR	General Purpose Signaling, nonlatching (tracking)
User-Defined 17	same as previous (Process-Monitor-AR)
Ack-Switch	Acts like panel Acknowledge Key
Sil Switch	Acts like panel Silence Key
Reset Switch	Acts like panel Reset Key
Drill Switch	Acts like panel Drill Key
PAS Bypass HVAC	PAS Disable
RESTART Drill	Switch
Switch AR	Acts like panel Drill Key, nonlatching (tracking)
Wireless Gateway	Reports wireless gateway troubles to the FACP (Using this type code replaces the need for a remote annunciator/display driver on the SWIFT network.)

To add a user defined device type, select *USER-DEF-1* from the list, and click Edit Custom Type. Enter the new type label in the displayed window and click OK.

Control Module Types

Select the **Control Device Type** from the drop-down box. Available types are:

Monitor Type	Action When Activated
Bell Circuit	NAC Type- supervised
Horn Circuit	NAC Type- supervised
Sounders	NAC Type- supervised
Relay	Relay Type- Ignore open circuit
Strobe Circuit	NAC Type- supervised
Control	NAC Type- supervised
Resettable Power	Relay Type- Ignore open circuit
HVAC Shutdown RLY	Relay Type- Ignore open circuit
HVAC Shutdown NAC	NAC Type- supervised

In **Device Label**, select the **Adjective** and the **Noun** which specify the device location. The adjective and noun are specific descriptors to identify the device location. To add a custom adjective/noun, select the *Add New* option from the adjective/noun list and specify the custom adjective/noun in the displayed window. **Custom Label** displays the selected **Adjective** and **Noun**.

Module Device Options

In **Device Options**, the **Device Enabled** option is selected by default (when you click Add Device). If this option is not selected, the module is not polled by the control panel, which prevents the module from reporting alarms and troubles to the panel. The control panel displays the device type and address of the device disabled and activates the Trouble and Disable LEDs.

To enable the Pre-Signal option for a module, click **Pre-Signal Enabled** option. The Pre-signal option programs the module to delay panel activation for a pre-programmed time delay of up to three minutes while allowing for visual verification. Set the delay time on the General System Settings Page.

Note: The **PAS Enabled**, **Alarm Verification Enabled**, and **Device Silenceable** options are disabled for modules.

The **Device Walktestable** option is selected by default. The Walktest feature allows you to test the system devices without manually resetting the control panel after each device activation.

The Delay Timer Enabled feature is only applicable to Control Modules. When enabled, this timer delays activation of the selected control module after being triggered by an alarm condition. Delay time varies from 0-180 seconds. Set the delay time on the General System Settings Page.

You can map each device to five **Zones**. Enter the three digit number corresponding to the zone assigned to the device for **Zone 1** to **Zone 5**. The factory default for an unprogrammed device is *Z000* for a general alarm zone.

Enter the **Additional Information** about the detector being programmed. This information is displayed as part of the device label on the panel display.

Wireless Option

If the selected device is a wireless device, part of the SWIFT® Wireless System, select the **Wireless** checkbox.

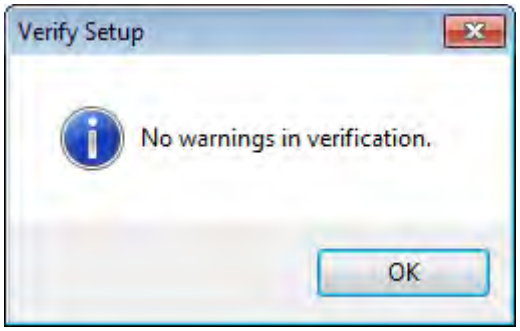
For more information on the SWIFT Wireless system, refer to Document number #LS10036-000FL-E on www.firelite.com.

Verify Setup

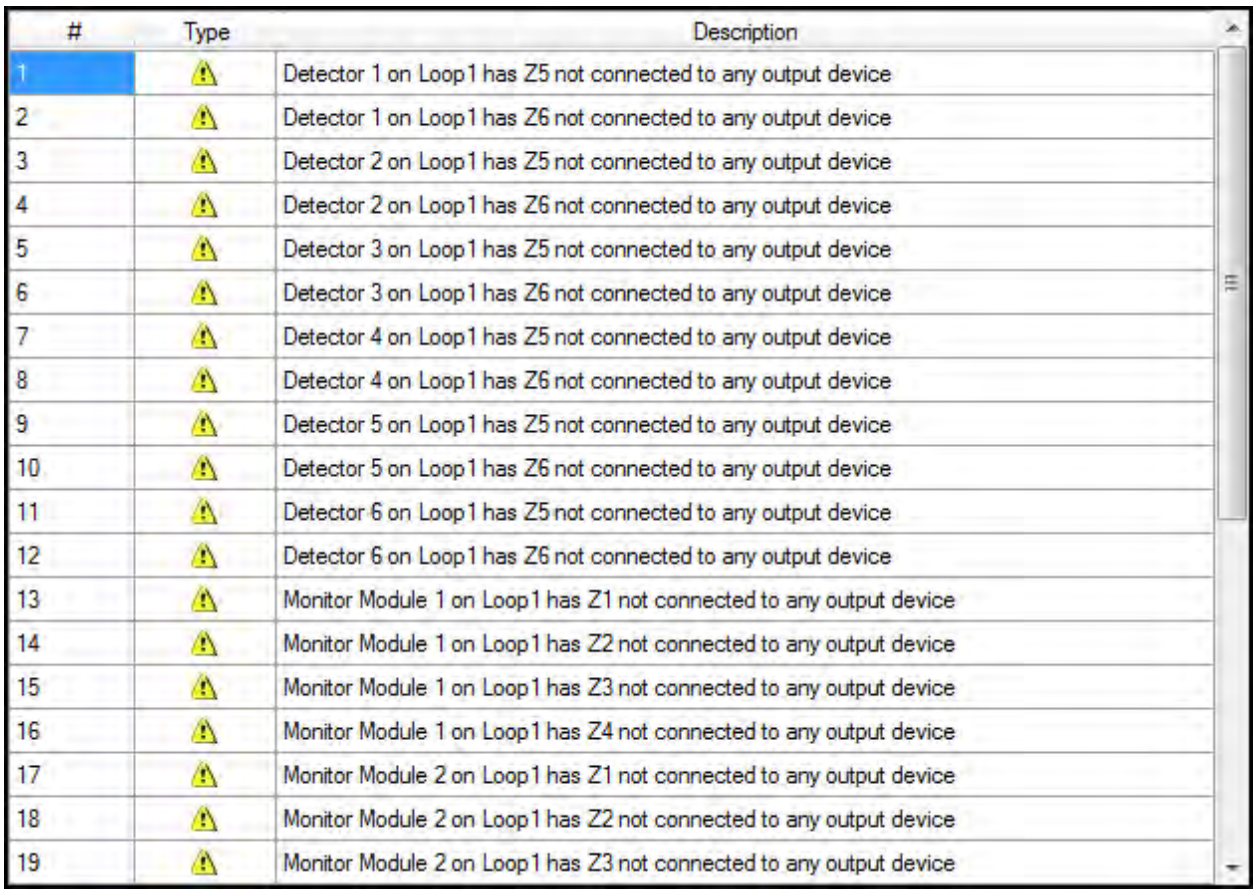
The **Verify Setup** feature checks to see whether each input device is programmed to at least one output device and vice versa. This feature verifies the loop configuration and displays a warning message if there is a mismatch.

Click **Verify Setup** to check the mapping of the input and output devices.

If there is a proper mapping between each input device and output device, a message appears to indicate there are no warnings in verification.



A warning is displayed listing if all the detector devices and monitor modules are not connected to an output/input device.



#	Type	Description
1	⚠	Detector 1 on Loop1 has Z5 not connected to any output device
2	⚠	Detector 1 on Loop1 has Z6 not connected to any output device
3	⚠	Detector 2 on Loop1 has Z5 not connected to any output device
4	⚠	Detector 2 on Loop1 has Z6 not connected to any output device
5	⚠	Detector 3 on Loop1 has Z5 not connected to any output device
6	⚠	Detector 3 on Loop1 has Z6 not connected to any output device
7	⚠	Detector 4 on Loop1 has Z5 not connected to any output device
8	⚠	Detector 4 on Loop1 has Z6 not connected to any output device
9	⚠	Detector 5 on Loop1 has Z5 not connected to any output device
10	⚠	Detector 5 on Loop1 has Z6 not connected to any output device
11	⚠	Detector 6 on Loop1 has Z5 not connected to any output device
12	⚠	Detector 6 on Loop1 has Z6 not connected to any output device
13	⚠	Monitor Module 1 on Loop1 has Z1 not connected to any output device
14	⚠	Monitor Module 1 on Loop1 has Z2 not connected to any output device
15	⚠	Monitor Module 1 on Loop1 has Z3 not connected to any output device
16	⚠	Monitor Module 1 on Loop1 has Z4 not connected to any output device
17	⚠	Monitor Module 2 on Loop1 has Z1 not connected to any output device
18	⚠	Monitor Module 2 on Loop1 has Z2 not connected to any output device
19	⚠	Monitor Module 2 on Loop1 has Z3 not connected to any output device

Click **Print** if you want to create a PDF file of the verification errors.

Click **Next** or click **Simulation -> Tabular View** in the left pane, to view the **Simulation** screen.

Click **Prev** to go back to the **SLC Loop Setup -> Modules** pane

Simulation

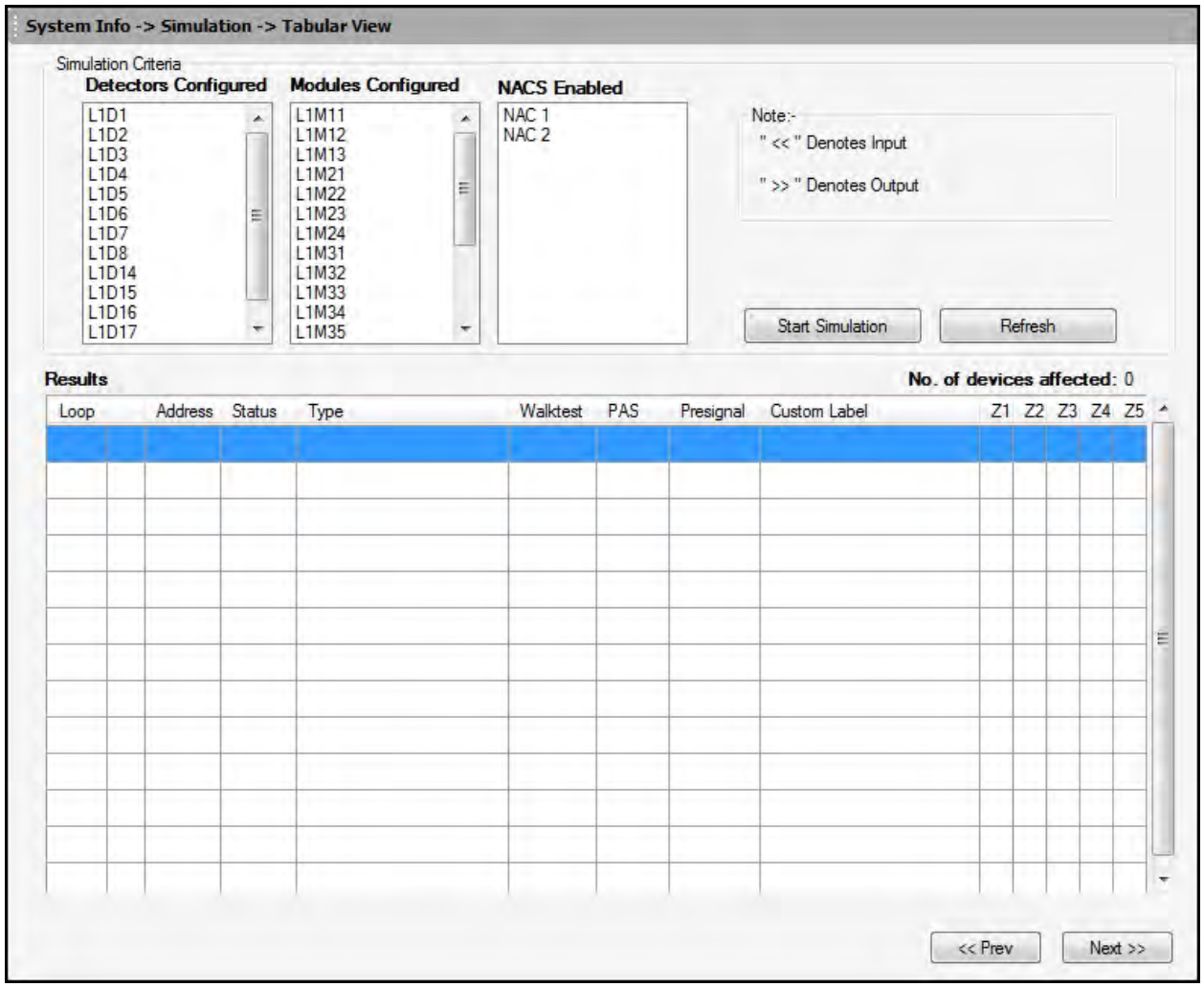
The **Simulation** feature allows you to view the zone correlations for the installed devices to confirm the programming. Using this feature, you can find any mismatch in the zone correlations not detected through the **Verify Setup** option. This feature is available with both the tabular and graphical views.

Tabular View

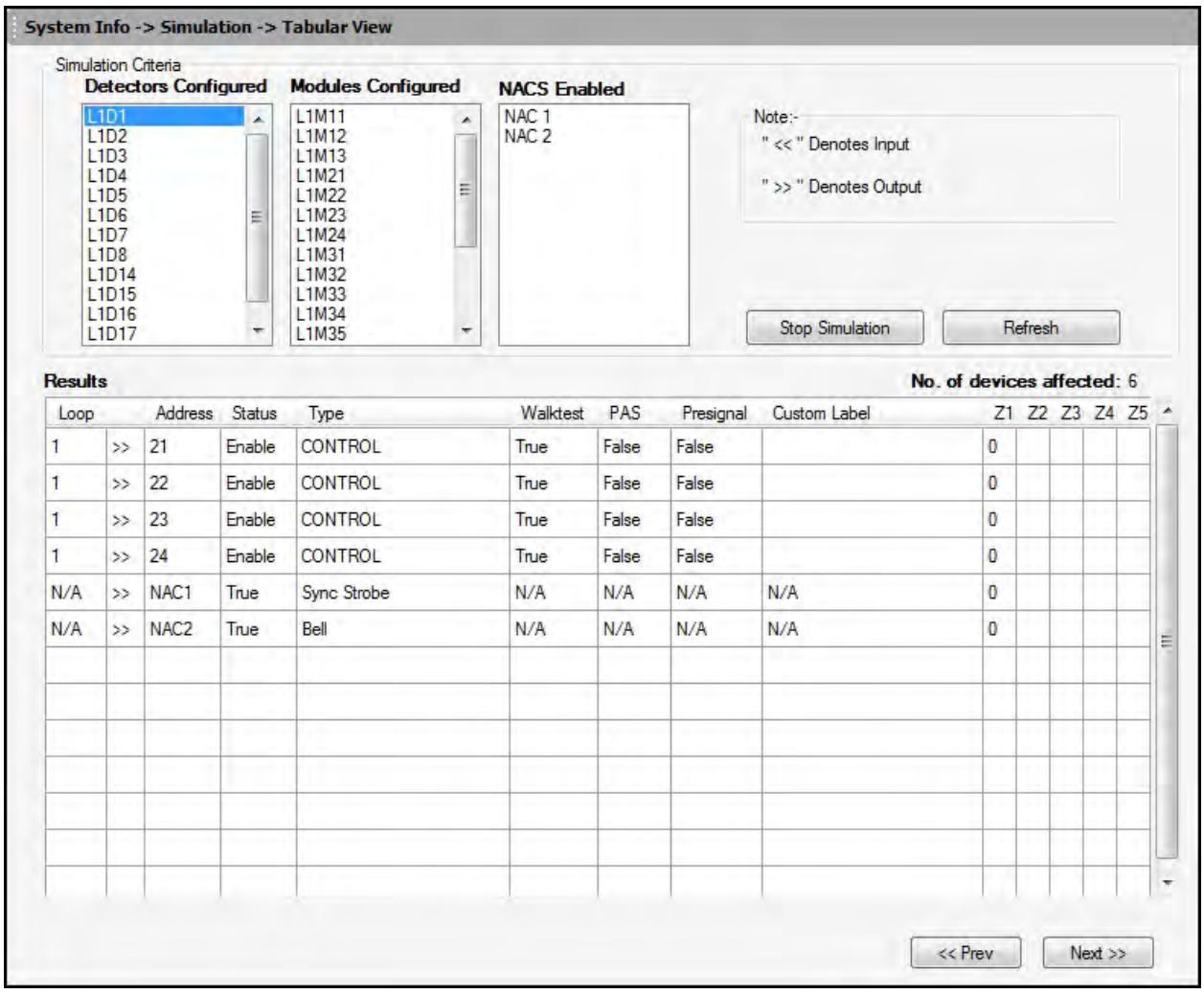
To perform a simulation in a tabular view:

Click **Start Simulation**.

Click the address of an input device to view the output correlations or click the address of an output device to view the input correlations.



The Input devices are denoted by << in the displayed **Results**.



The Output devices are denoted by >> in the displayed **Results**.

Click **Refresh** to refresh the displayed results when you select another detector.

Click **Stop Simulation** to stop the simulation.

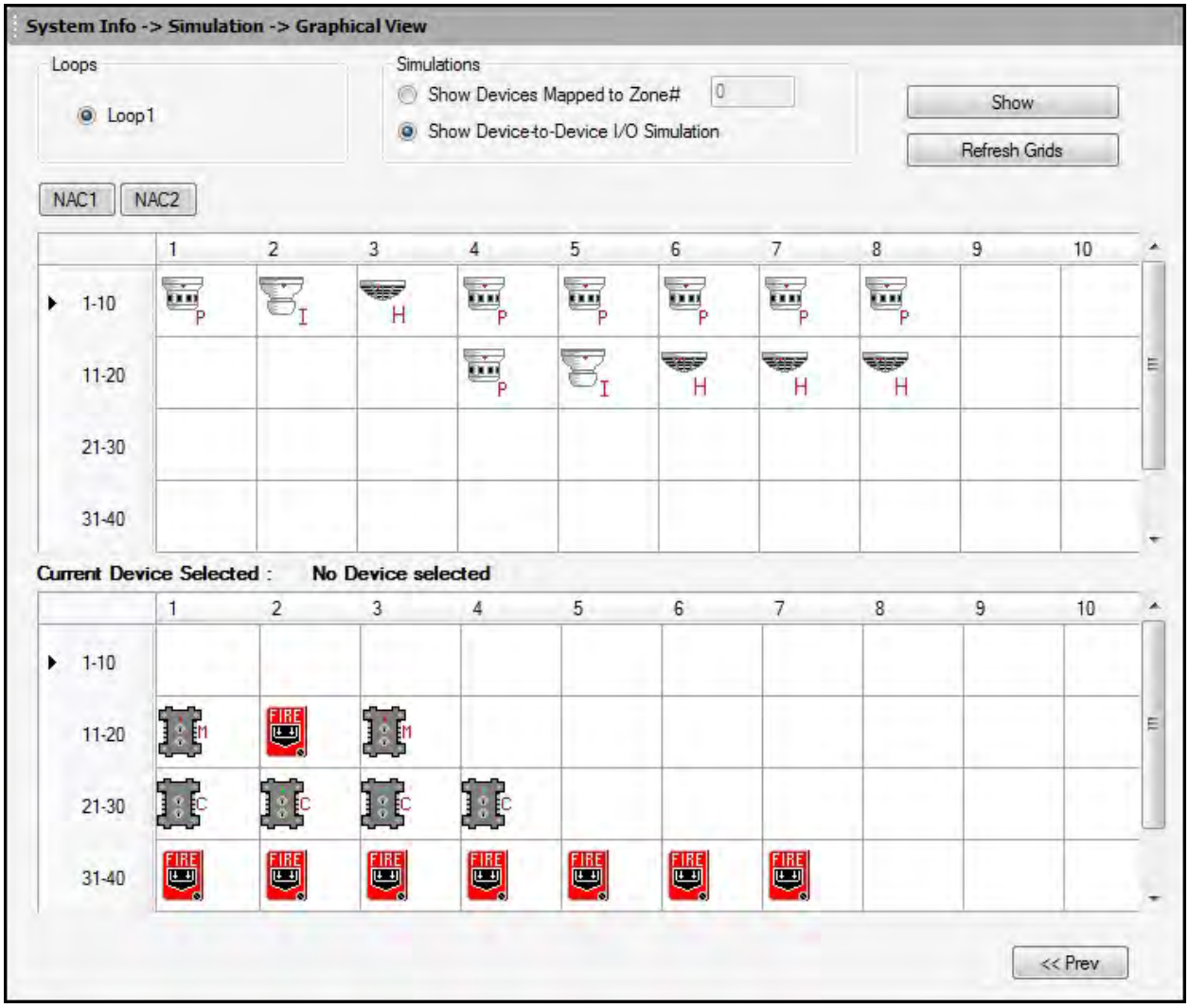
Graphical View

To perform simulation in graphical view:

Click **Graphical View** under **Simulation** in the left pane.

To view the devices mapped to a specific zone, click **Show Devices Mapped to Zone#**.

Enter the zone number.

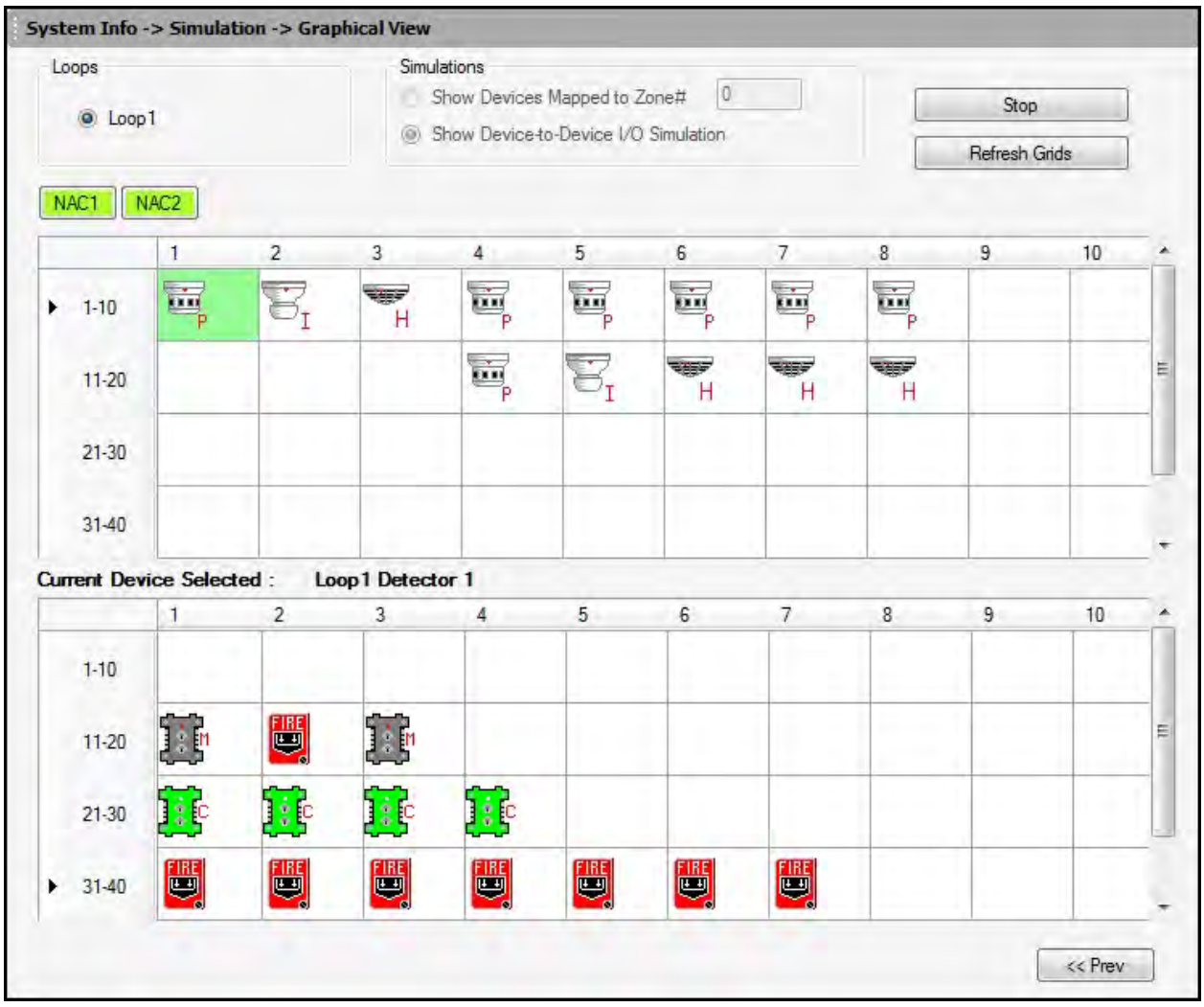


Click **Show** to display the detectors and modules mapped to the selected zone.

Click **Refresh Grid** to restore the normal display.

Click **Stop**.

To view the device-to-device mapping, click **Show Device-to-Device I/O Simulation**.



Click **Show** to display the output devices mapped to a selected input device.

Upload Information

The uploaded information displays all the configuration information retrieved from the fire panel to the computer, using FS-Tools. In addition to the configuration information, the following data can be uploaded from the fire panel.

Walktest Data

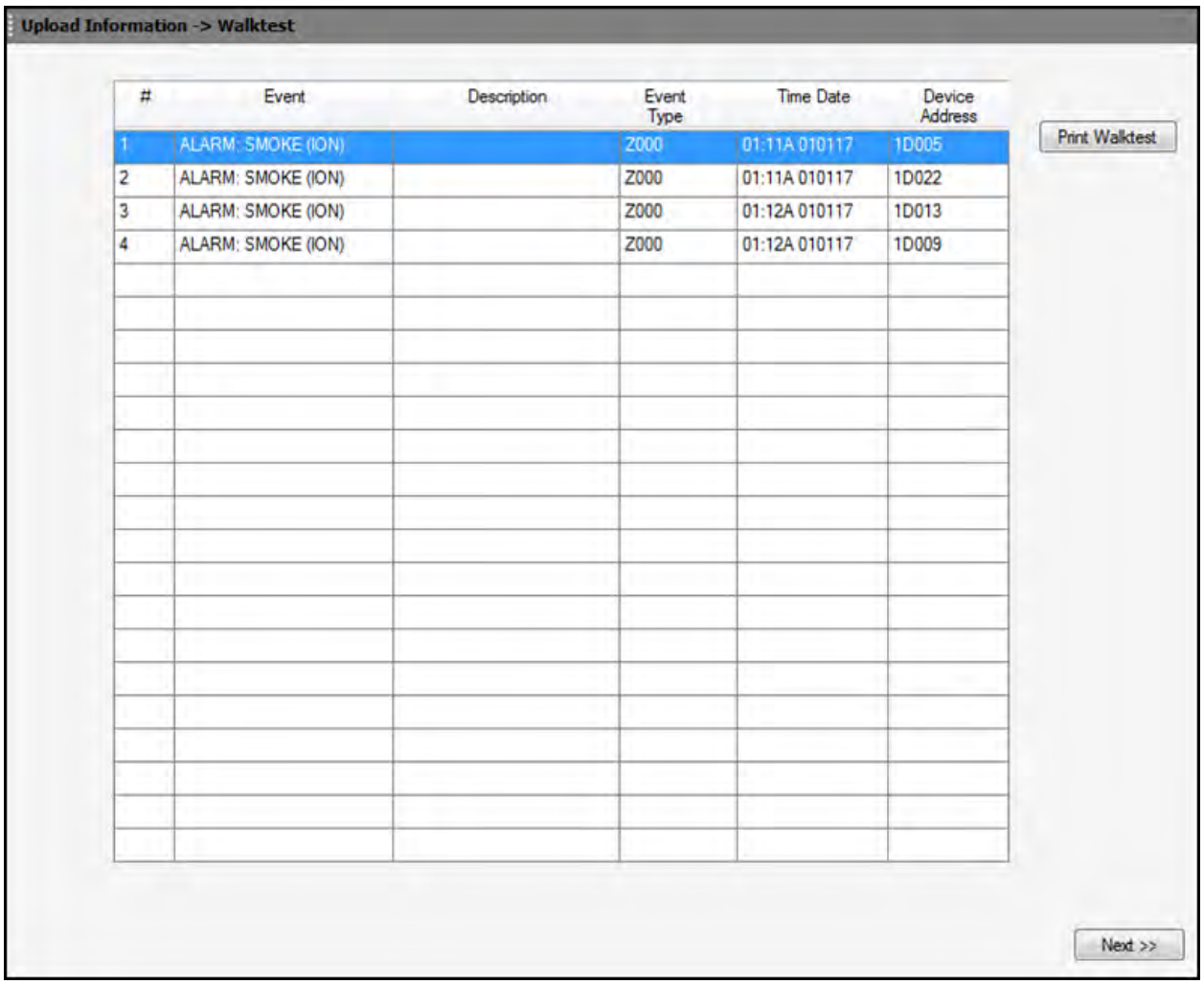
History Data

System Status Data

The uploaded information from the fire panel helps to monitor troubles, alarms, and other fire panel events.

Walktest Data

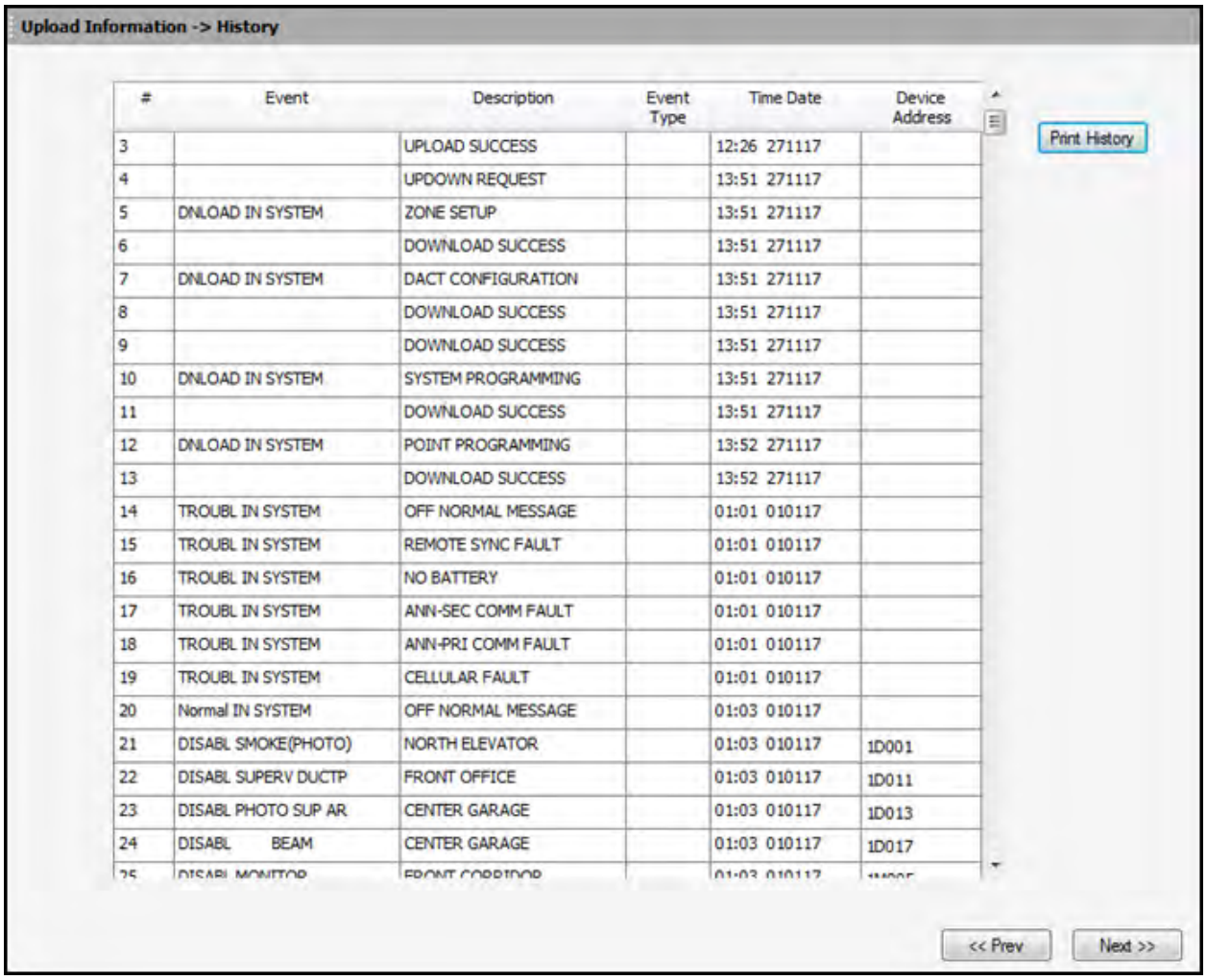
Walktest is a feature which allows you to test the fire alarm system. The walktest data displays the time and date of events at various zones in the fire alarm system, after you conduct a walktest.



#	Event	Description	Event Type	Time Date	Device Address
1	ALARM: SMOKE (ION)		Z000	01:11A 010117	1D005
2	ALARM: SMOKE (ION)		Z000	01:11A 010117	1D022
3	ALARM: SMOKE (ION)		Z000	01:12A 010117	1D013
4	ALARM: SMOKE (ION)		Z000	01:12A 010117	1D009

History Data

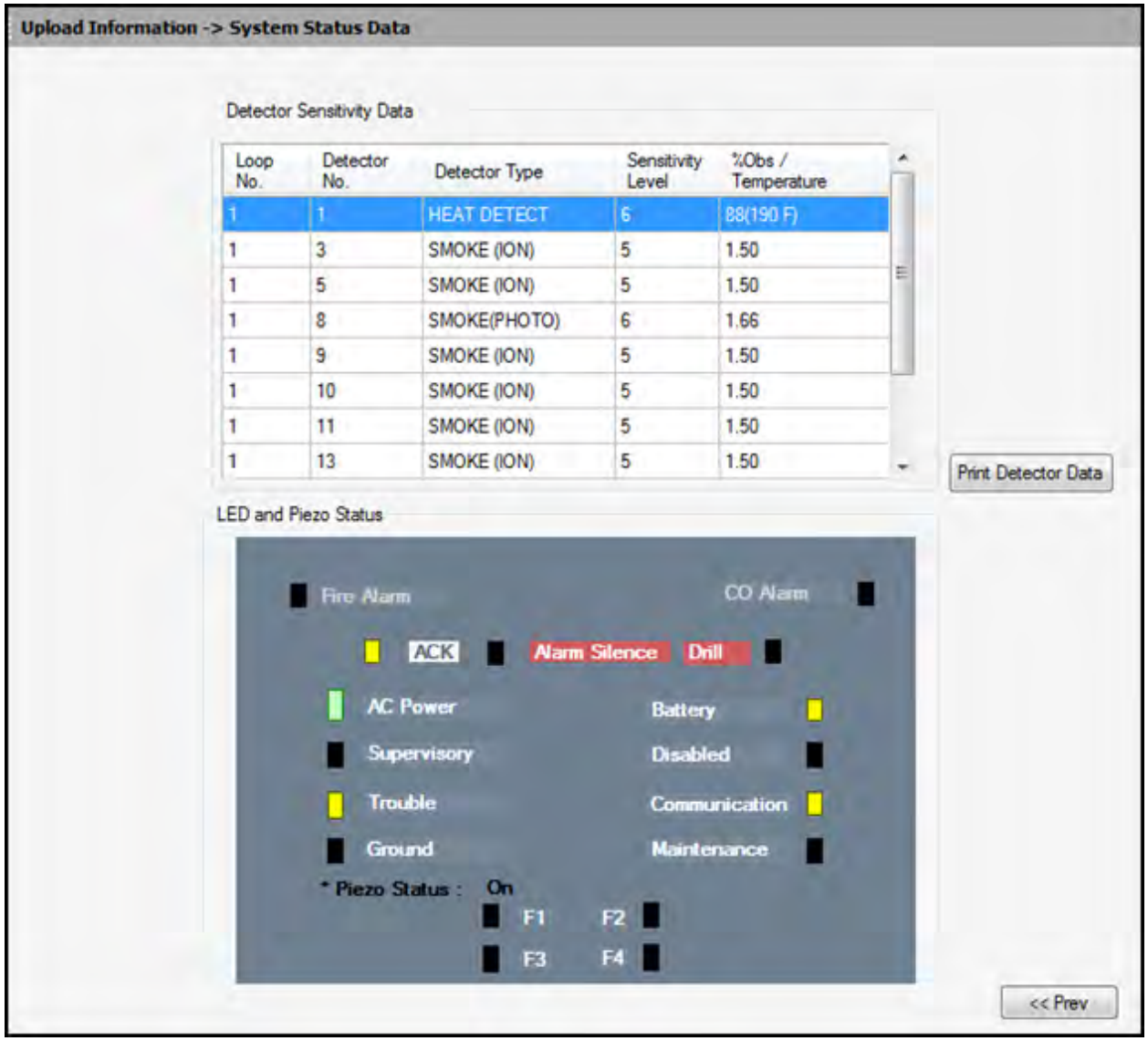
The history data lists all the events and event types such as alarms, troubles, activations, and other information with the date and time of occurrence.



#	Event	Description	Event Type	Time Date	Device Address
3		UPLOAD SUCCESS		12:26 271117	
4		UPDOWN REQUEST		13:51 271117	
5	DNLOAD IN SYSTEM	ZONE SETUP		13:51 271117	
6		DOWNLOAD SUCCESS		13:51 271117	
7	DNLOAD IN SYSTEM	DACT CONFIGURATION		13:51 271117	
8		DOWNLOAD SUCCESS		13:51 271117	
9		DOWNLOAD SUCCESS		13:51 271117	
10	DNLOAD IN SYSTEM	SYSTEM PROGRAMMING		13:51 271117	
11		DOWNLOAD SUCCESS		13:51 271117	
12	DNLOAD IN SYSTEM	POINT PROGRAMMING		13:52 271117	
13		DOWNLOAD SUCCESS		13:52 271117	
14	TROUBL IN SYSTEM	OFF NORMAL MESSAGE		01:01 010117	
15	TROUBL IN SYSTEM	REMOTE SYNC FAULT		01:01 010117	
16	TROUBL IN SYSTEM	NO BATTERY		01:01 010117	
17	TROUBL IN SYSTEM	ANN-SEC COMM FAULT		01:01 010117	
18	TROUBL IN SYSTEM	ANN-PRI COMM FAULT		01:01 010117	
19	TROUBL IN SYSTEM	CELLULAR FAULT		01:01 010117	
20	Normal IN SYSTEM	OFF NORMAL MESSAGE		01:03 010117	
21	DISABL SMOKE(PHOTO)	NORTH ELEVATOR		01:03 010117	1D001
22	DISABL SUPERV DUCTP	FRONT OFFICE		01:03 010117	1D011
23	DISABL PHOTO SUP AR	CENTER GARAGE		01:03 010117	1D013
24	DISABL BEAM	CENTER GARAGE		01:03 010117	1D017

System Status Data

The system status data displays the detector sensitivity data and LED and piezo status of the panel.



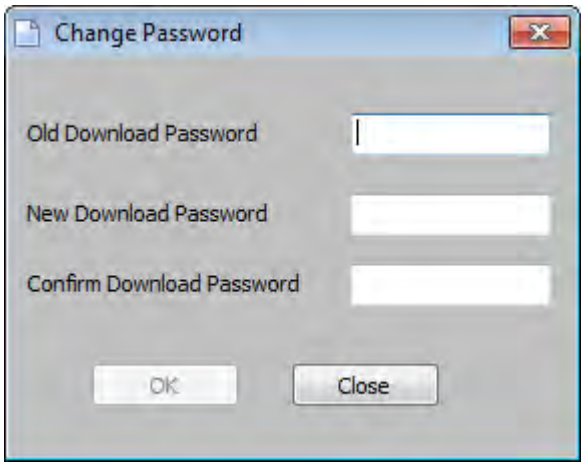
File Menu

Changing Download Password

To download the configuration data to the fire panel, you must connect the computer to the fire panel. In FS-Tools, you can change the download password for downloading the configuration data to the fire panel, only if you have administrator rights.

Note: You must add at least one customer record before changing the download password.

In the **File** menu in the initial customer screen, click **Change Download Password**. The **Change Password** window appears.



Type the **Old Password**.

Type the **New Password**, and then retype the password in **Confirm Password**.

Click **OK**. The download password is changed.

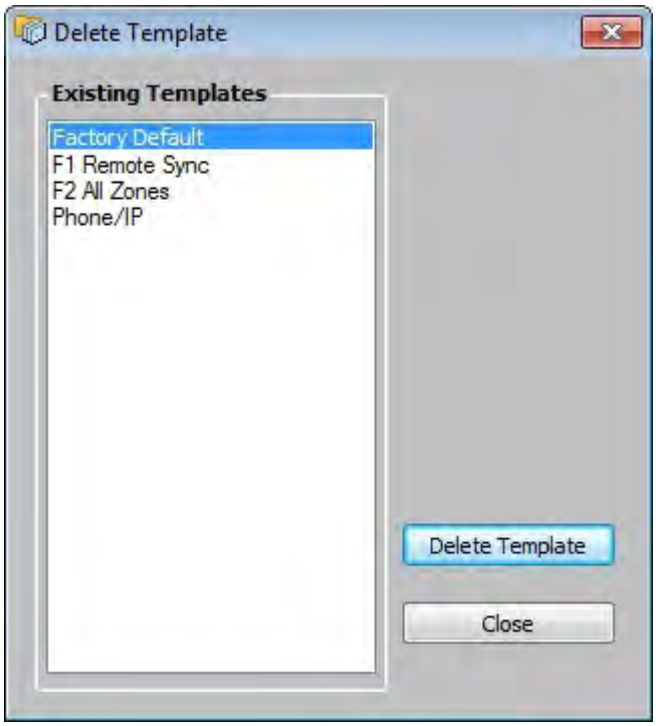
Template Menu

Delete a Template

A configuration template can be deleted when it is no longer needed.

To delete a template, choose **Template** > **Delete Template** in the initial customer screen in FS-Tools.

The **Delete Template** dialog box appears.



Select the template from the list displayed in **Existing Templates**.

Click **Delete Template**. This deletes the configuration template.

Note: The factory default template cannot be deleted.

Tools Menu

Compare Configuration

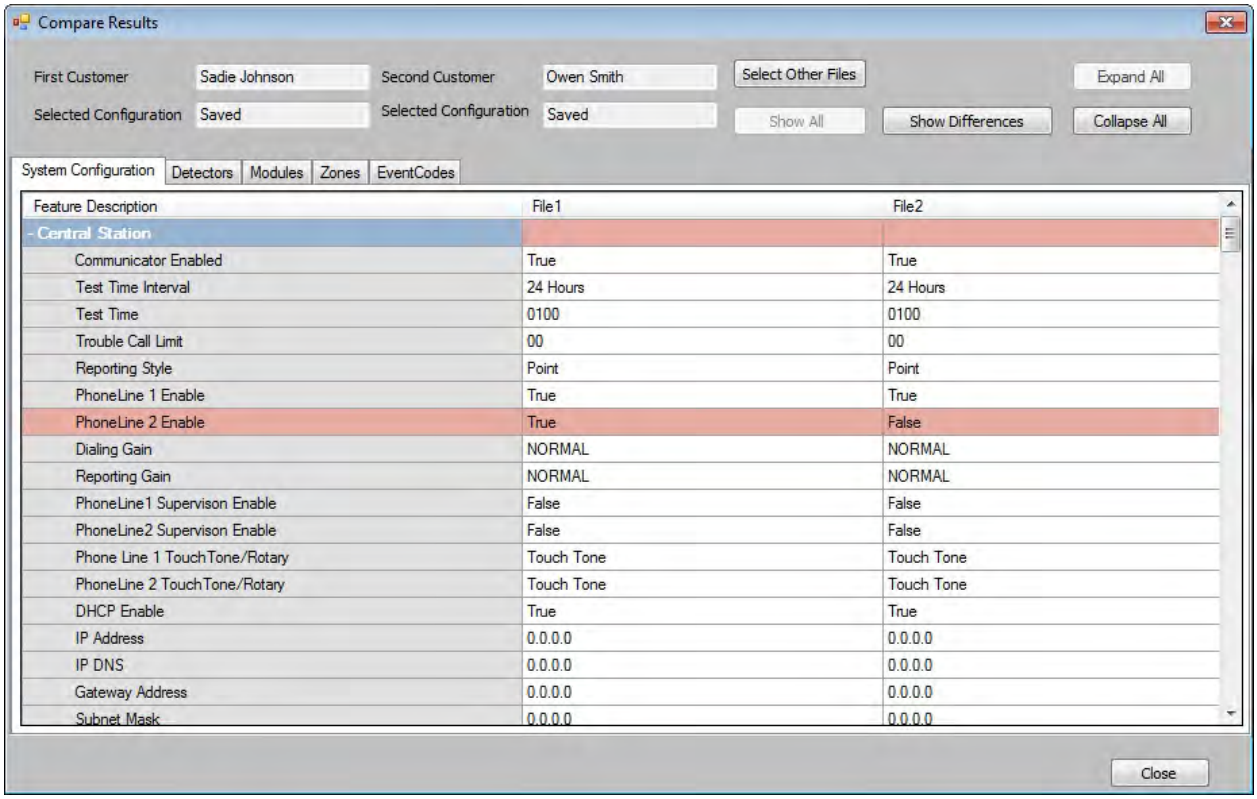
The **Compare Configuration** option shows the differences in fire panel configurations for two different customers or two different configurations for the same customer.

To compare two configurations, click **Tools** > **Compare Configuration** in the initial customer screen in FS-Tools. The **Compare Configuration** dialog box appears.

Select **Customer1** and **Customer2**.

Select the **Configuration** for **Customer1** and **Customer2**.

Click **Compare**. The **Compare Results** dialog box displays the compared **System Configuration** data for the two customers.



Using the Compare Results dialog box, you can also perform the following.

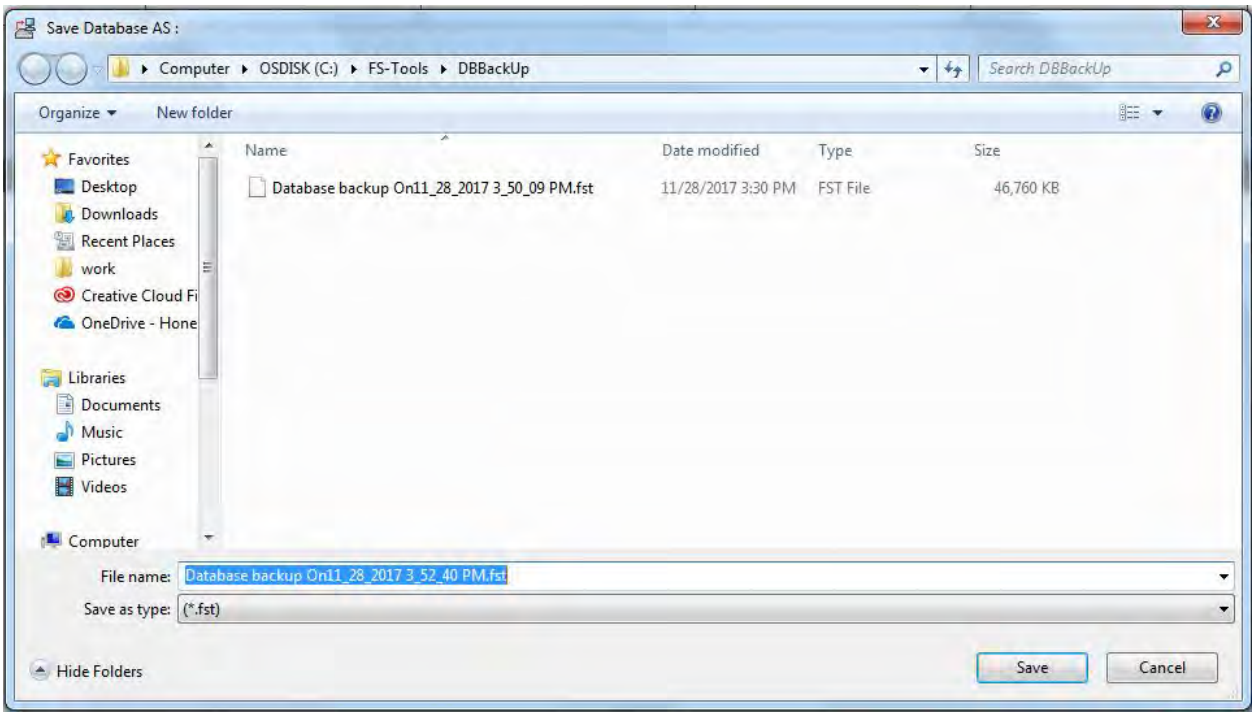
- Click **Expand All** for an expanded view of all the configuration data in **System Configuration** tab.

- Click **Collapse All** for an collapsed view of all the configuration data in **System Configuration** tab.

- Click **Show Differences** to view the differences in the configuration data in the **System Configuration** tab.
- Click the **Detectors**, **Modules**, **Zones**, or **EventCodes** tabs to view the configuration data.
- Click **Select Other Files** to select another customer for configuration.
- Click **Show All** to view the configuration details of both the customers.
- Click **Print** to generate a *PDF* file.

Database Backup

To save a backup of the database, click **Tools** > **Database Backup** in the initial customer screen in FS-Tools. The **Save Database As** dialog box appears.



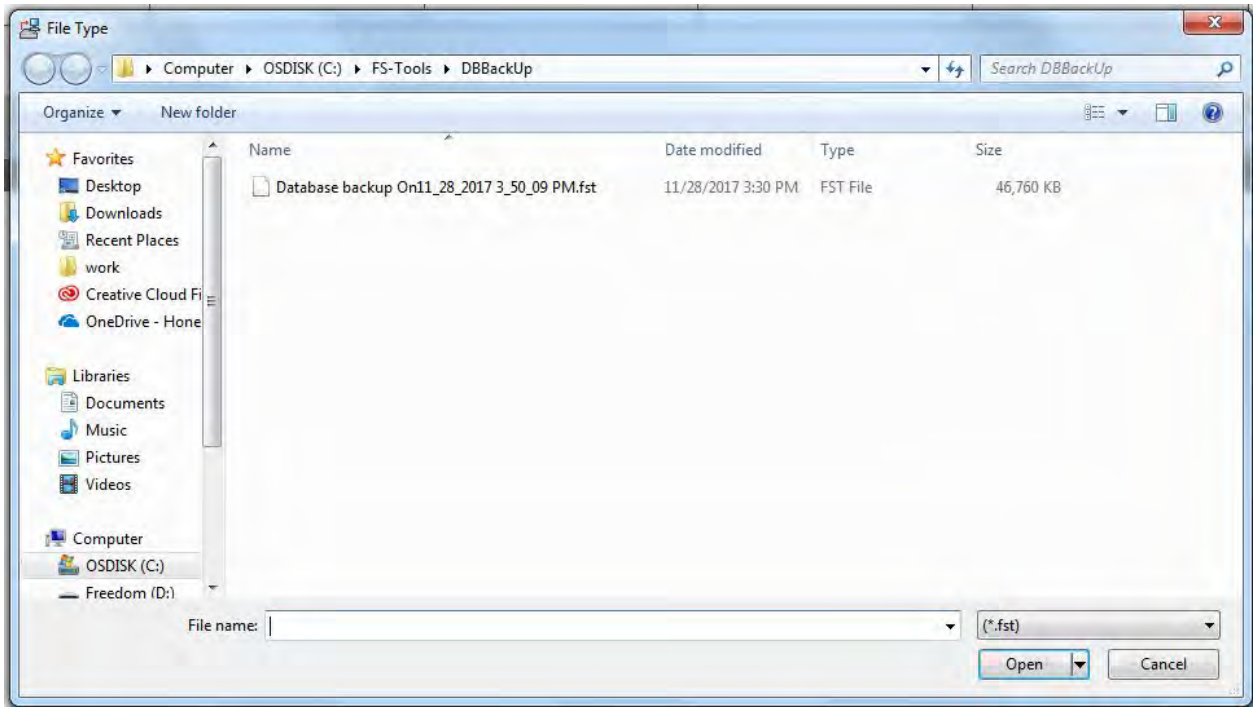
Select the folder to save the database backup.

Click **Save**. The database backup is saved in the selected folder.

Restore Backup

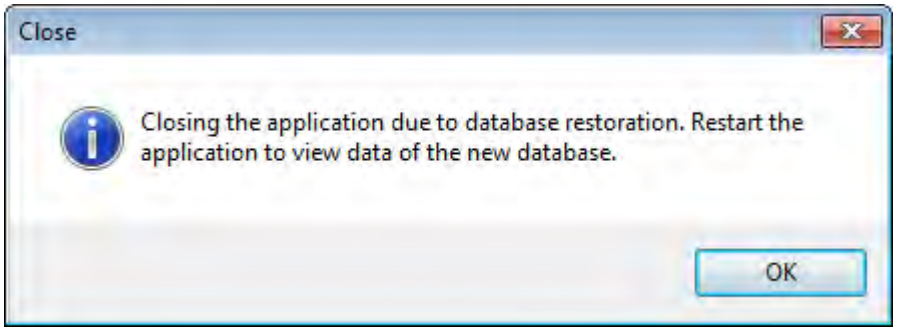
There can be situations where the current working database encounters problems. In such cases you can restore a backup of the working database. You can restore the database that was last backed up to ensure minimum data loss.

To restore the database, click **Tools** > **Restore Backup** in the initial customer screen in FS-Tools. The **File Type** dialog box appears.



Select the database file to restore and click **Open**.

A message informing you about the application being closed is displayed.



Click **OK**. FS-Tools will automatically close and need to be restarted.

Export a Configuration

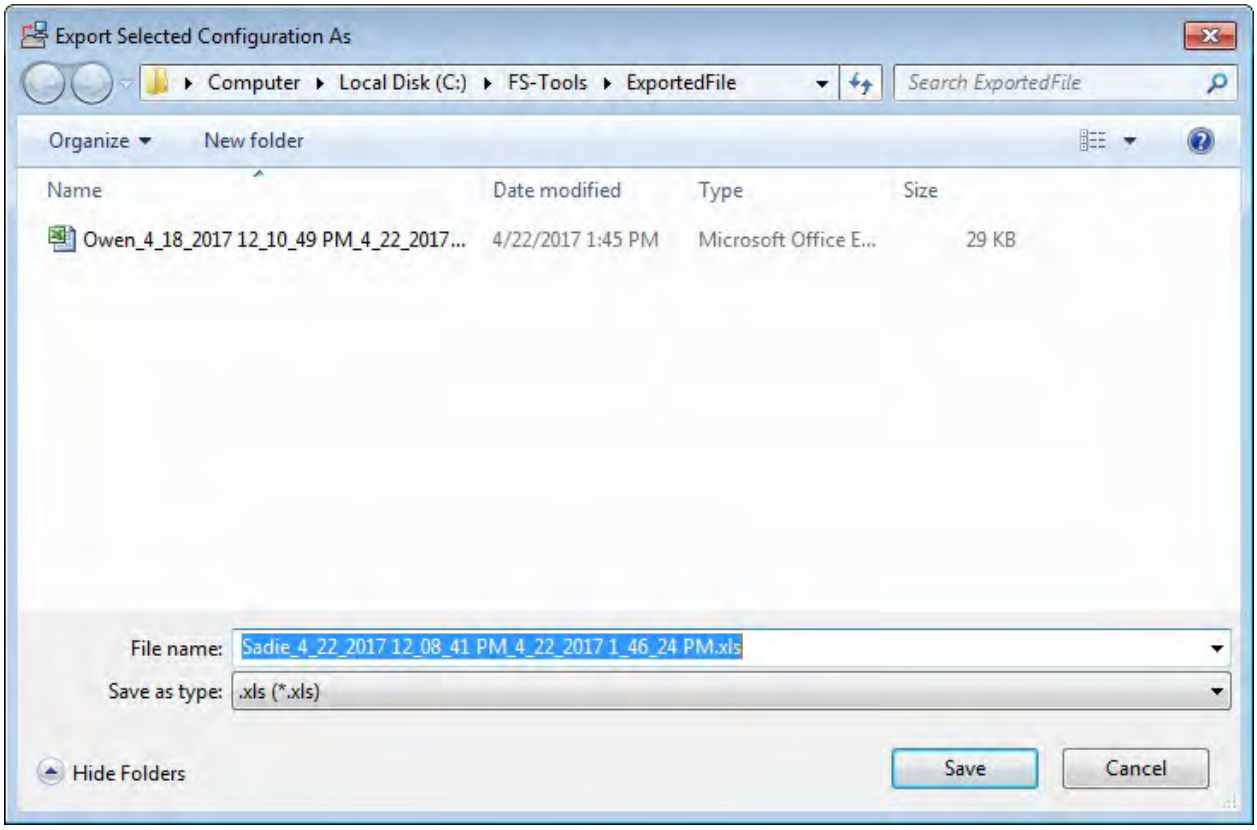
The export configuration option is used when the same configuration needs to be used for configuring a fire panel, in another location with a different computer. The exported configuration can be saved onto a floppy disk or a CD-ROM and reused.

You can export the configuration in two ways:

- Export To Excel
- Export To Disk

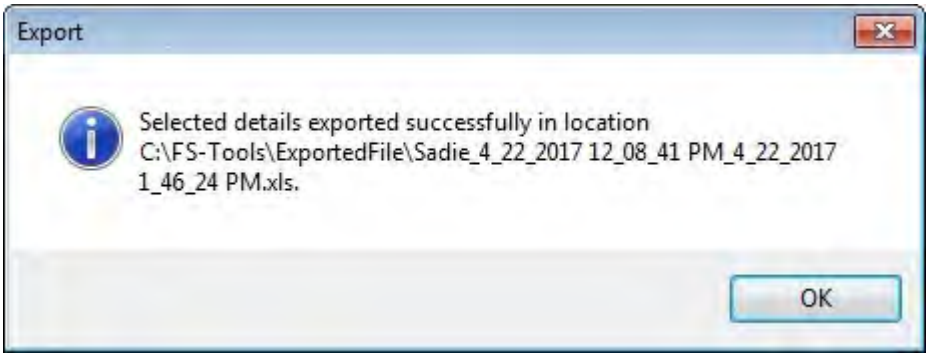
Export to Excel

To export the configuration to an excel sheet, choose **Tools** > **Export > Export To Excel** in the initial customer screen in FS-Tools. The **Export Selected Configuration As** dialog box appears.



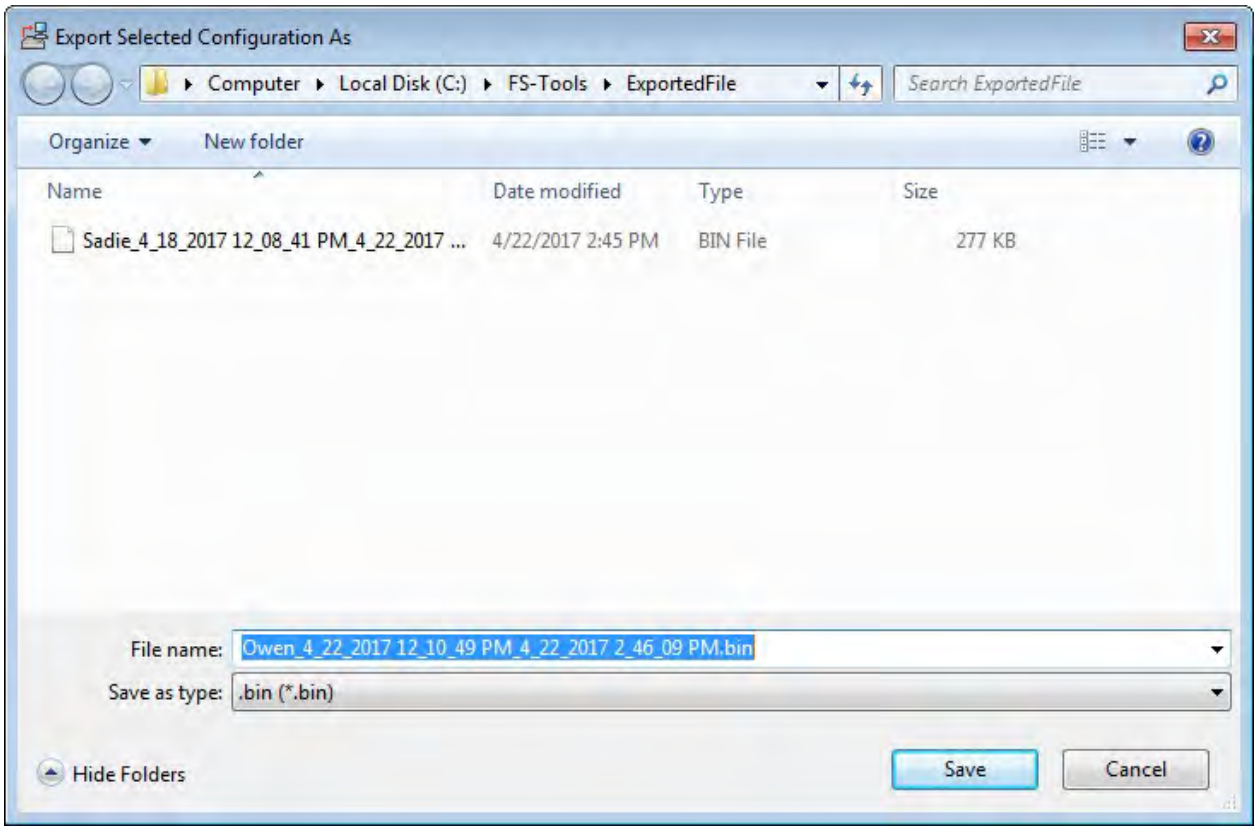
Select the folder in which the exported configuration will be saved.

Click **Save**. A message indicating that the details are successful exported is displayed.



Export to Disk

To export the configuration to a disk, choose **Tools** > **Export** > **Export To Disk** in the initial customer screen in FS-Tools. The **Export Selected Configuration As** dialog box appears.



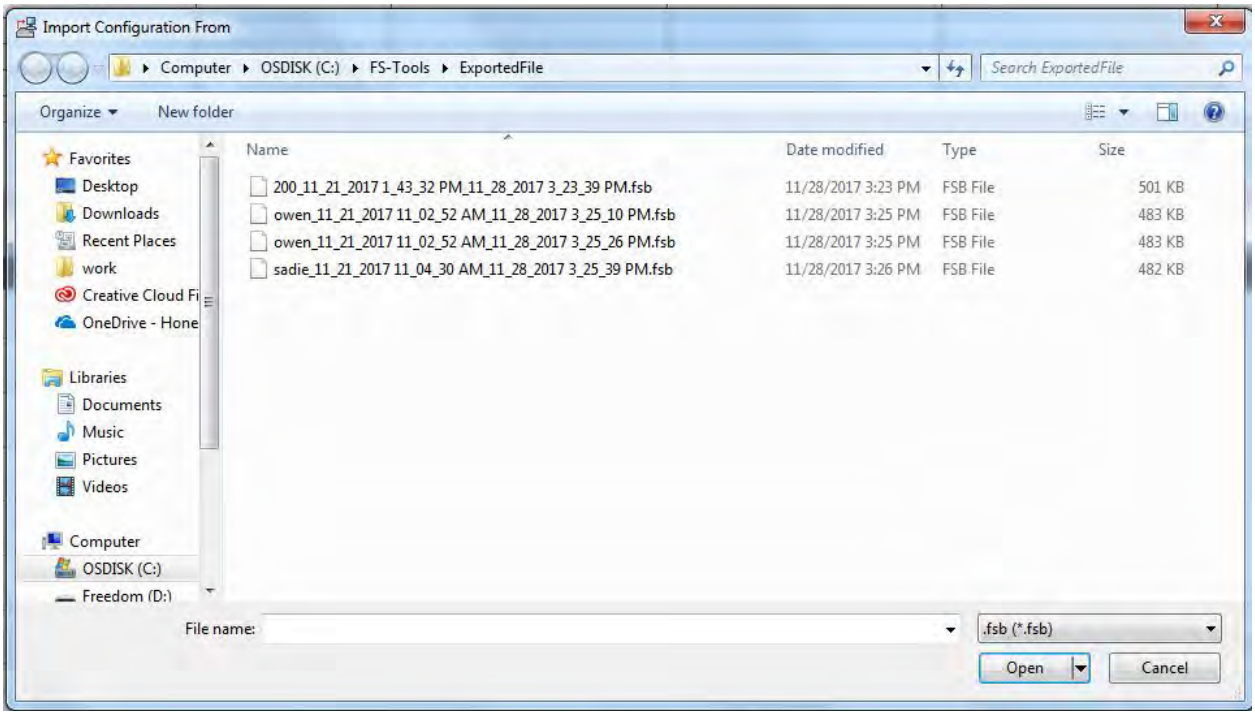
Select the folder in which the exported configuration will be saved.

Click **Save** to save the configuration information in the binary format. A message indicating that the details are successful exported is displayed.

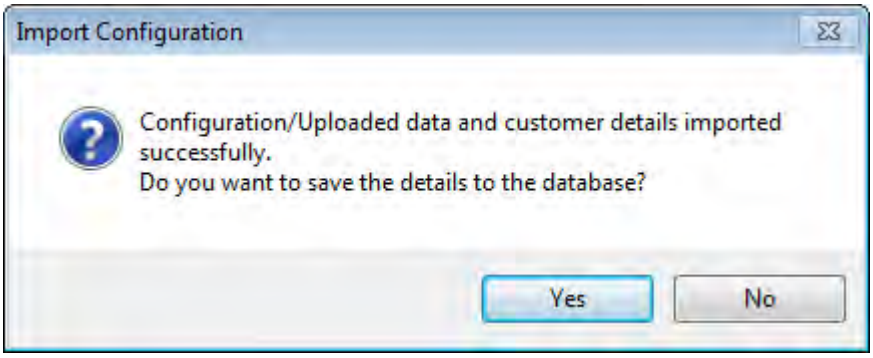
Import a Configuration

You can import configuration details from the panel to FS-Tools.

To import a configuration, choose **Tools** > **Import** in the initial customer screen in FS-Tools. The **Import Configuration From** dialog box appears.



Select a configuration file and then click **Open**. The configuration details are imported in the binary format. A message, prompting you to save the configuration details to the database is displayed.

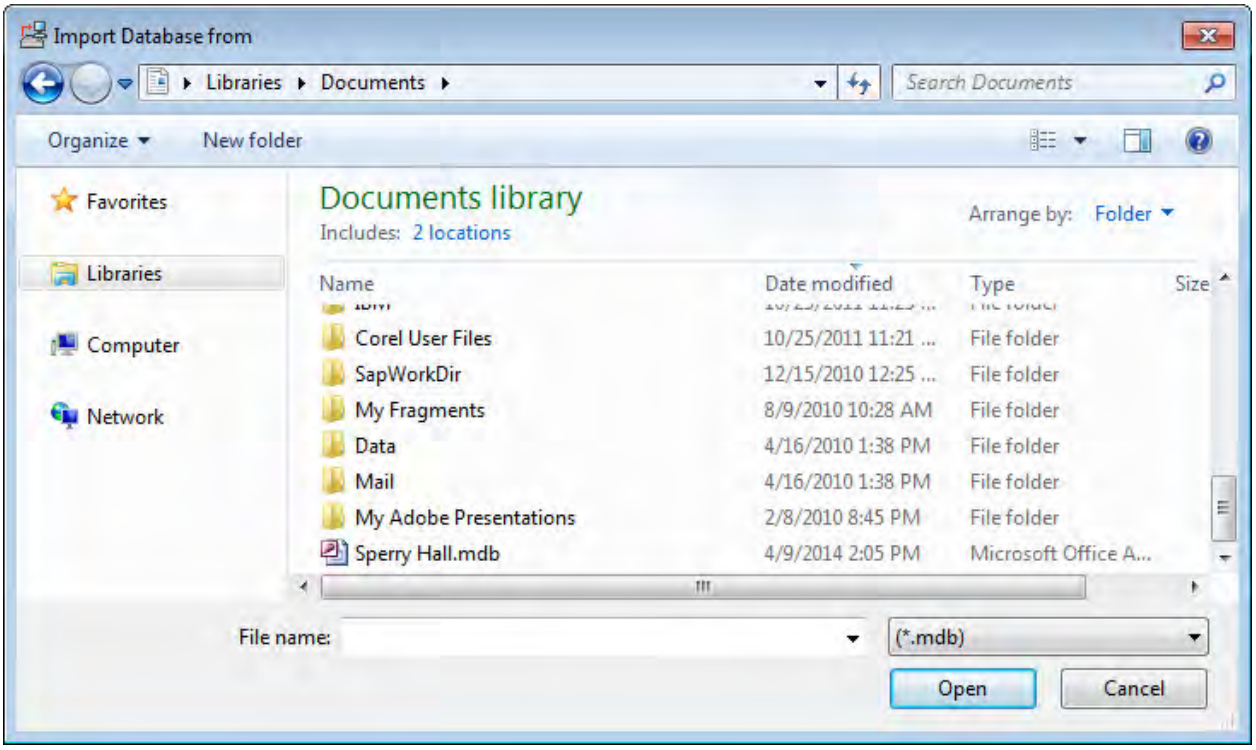


Click **Yes** to save the details to the database.

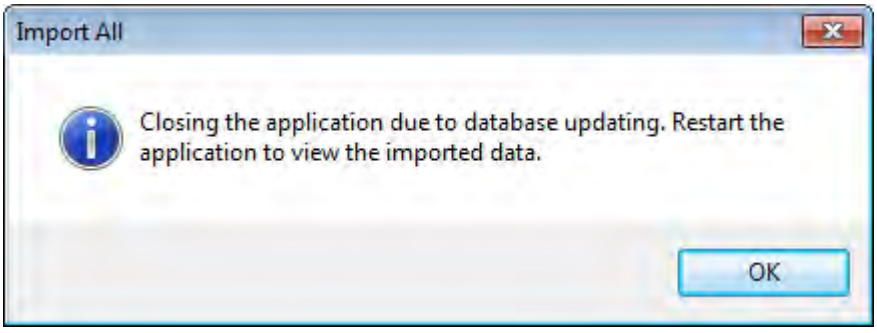
Import All Configurations

Using FS-Tools, You can import and update all the configuration details from to the FS-Tools database without modifying the existing information.

To import all the configurations, choose **Tools > Import All** from the initial customer details window in FS-Tools. The **Import Database from** dialog box appears.



Select the configuration files, and then click **Open**. The configuration details are updated. After updating the configuration details, a message appears, prompting you to restart the application, to view the changes.



Click **OK**.

Get Write Access

Modifying Customer Details

You can modify or view the customer details from the database server. To modify, you need to obtain write permission. To view, a read-only permission is sufficient.

To obtain write permission:

Select a **Customer**.

Choose **Tools** > **Get Write Access** in the initial customer screen in FS-Tools. A message, indicating the status for obtaining the write permission, appears. If the customer details are currently modified by another user, you might get only a read-only access. Try again after some time to obtain the write access.

After obtaining the write permission, click **Configure** in the initial customer screen in FS-Tools, to modify the configuration settings.

Note: If you click **Tools**->**Get Write Access** on a computer running Windows ®7/ Windows ® Vista/Windows ® XP SP2, the networked computer does not display any message. This is applicable only to Custom Setup.

To view the configuration details:

Select and double-click a **Customer**. A message asking for confirmation appears.

Click **OK** to view the customer details in read only mode.

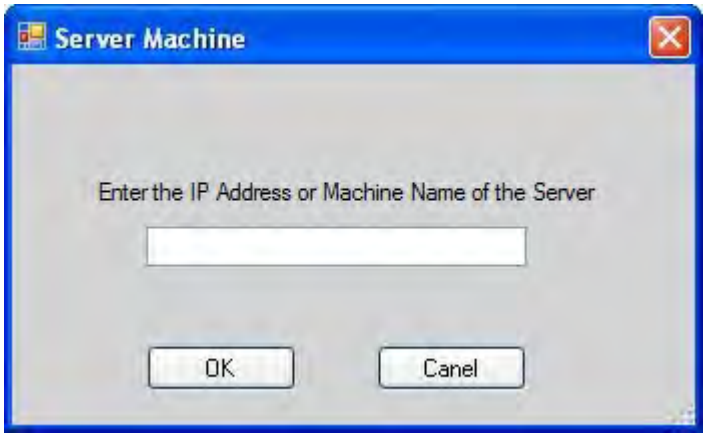
Run from Database

Using FS-Tools, you can connect to the database installed on your computer (client database or to the database installed on a remote computer (server database.

Note: If you have installed the client and the server on the same computer, then your computer acts as both client and server.

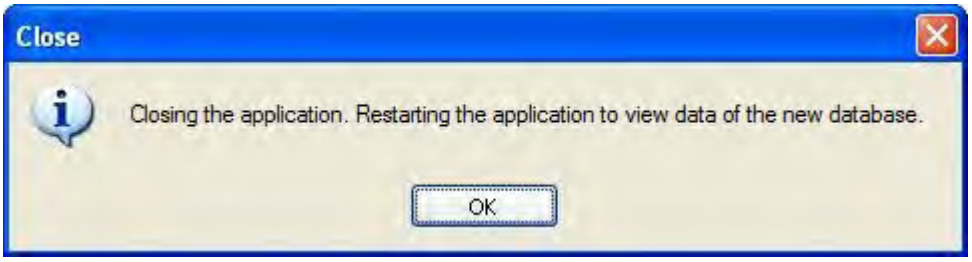
To Connect to the Server Database

Choose **Tools > Run from Database > Server Machine** from the initial customer details window in FS-Tools. The **Server Machine** dialog box appears.



In the **Enter the IP Address or Machine Name of the Server** text box, type the IP address or the machine name of the computer on which you have installed the database.

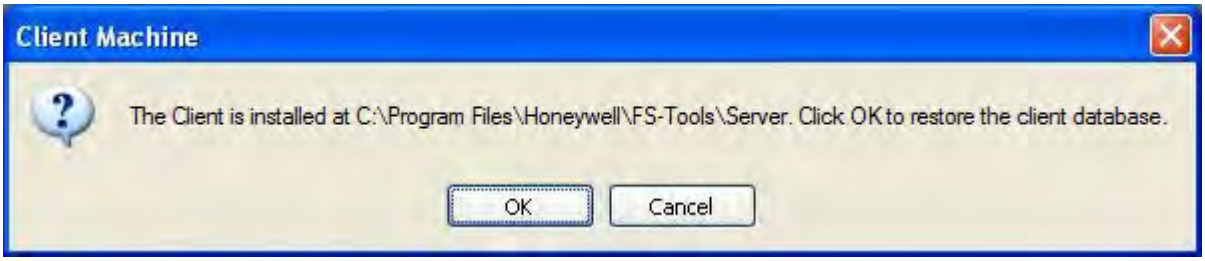
Click **OK**. A message informing you about the application being restarted, is displayed.



Click **OK**. The details of the server database are listed in the initial customer window in FS-Tools.

To Connect to the Client Database

Choose **Tools > Run from Database > Client Machine** from the initial customer details window in FS-Tools. A message appears, informing you about the path where you have installed the client database.



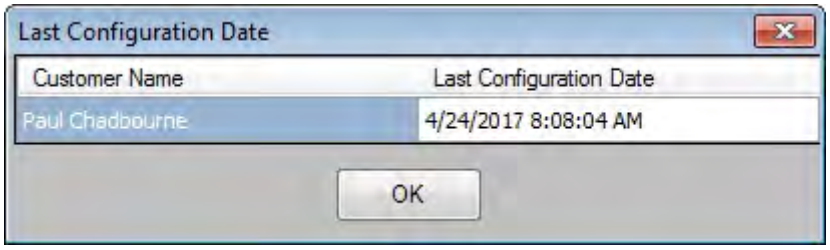
Click **OK** to restore the client database.

Last Configuration Date

Using FS-Tools, you can view the details of a particular customer such as configuration date, when there are multiple customers with the same name, panel type, etc.

To view the configuration date, select the Customer.

Click **Tools > Last Configuration Date** from the initial customer details window in FS-Tools. The **Last Configuration Date** dialog box appears, displaying the details of the particular customer.



Click **OK**.

Upload/Download Menu

Upload/Download Configuration Data

The configuration process is completed only when you download the saved configuration to the fire panel. Using the Upload/Download option in FS-Tools, you can:

- Download saved configuration and other panel settings to the fire panel.

- Upload Configuration Data, History Data, Walktest Data, Troubleshoot Data, System Status, and Point Status information from the fire panel to the computer.

- View all the uploaded data from the fire panel to monitor the fire alarm system and identify troubles, alarms, and other events.

Ensure the fire panel remains in the 'System Normal' state when you download or upload data to and from the fire panel. You can connect the computer to the fire panel using a USB port, or ethernet connection.

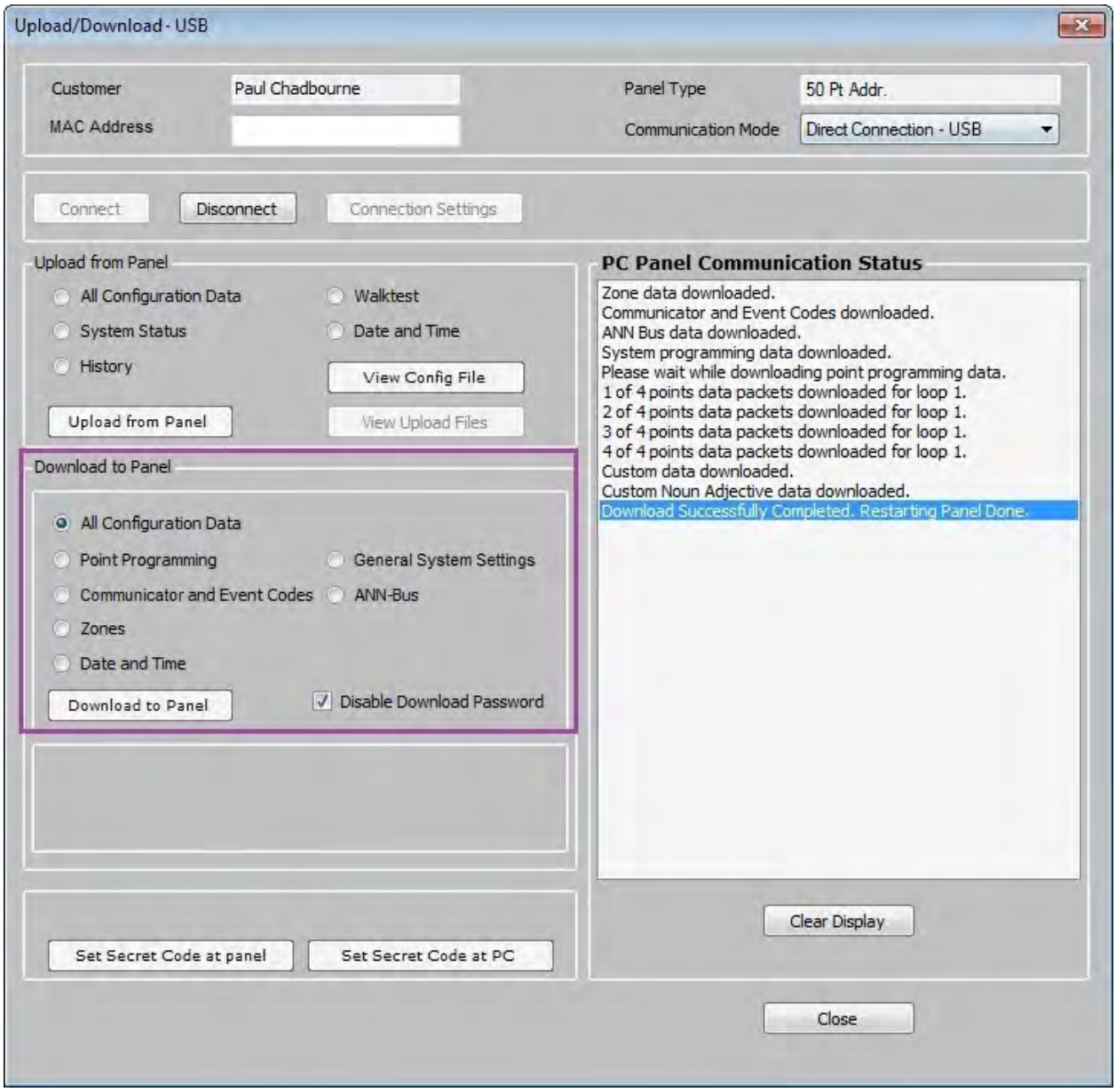
Upload/Download

Download Configuration Data to the FACP

Using the **Download to Panel** option, you can download the Point Programming, Communicator, Event Codes, Zones, General System Settings, ANN-Bus, Date and Time configuration data to the fire panel. When you download data for the first time, ensure that *all* the configuration data are downloaded to the fire panel.

To download the configuration information to the fire panel, click **Upload/Download** > **Upload/Download** from the initial customer details window in FS-Tools. The upload/download window opens.

Ensure that the FACP is available to accept downloads by pressing **Menu** on the FACP keypad. Then select option **3=FSTOOL UP/DOWNLOAD**. Otherwise, configuration download requests will be denied at the panel.



1. Select the **Communication Mode** from the drop-down menu. FS-Tools can connect **directly** with the FACP using a USB cable or **remotely** with an Ethernet connection to the IPOTS-COM communicator.

2. In the **Download to Panel** section of the window, you can select individual options to download (Point Programming, DACT, Event Codes, Zones, System Programming, Options, ANN-Bus, and Date and Time configuration data) or select **all configuration data** to send all information to download to the fire panel.

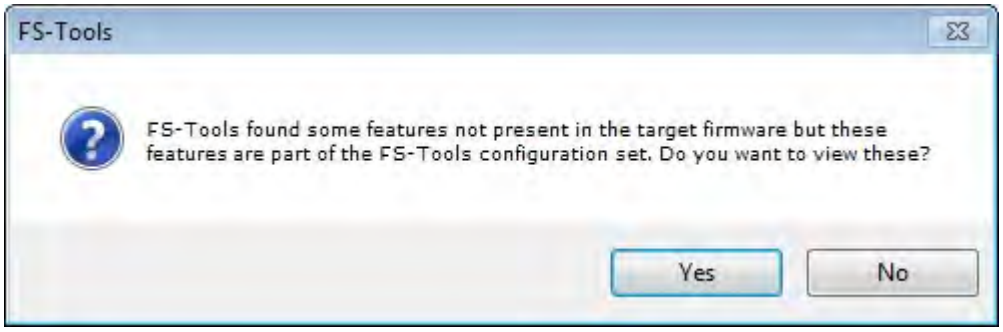
3. Click **Download to panel**.

4. Click **Clear Display** to clear the display of the status information in **PC Panel Communication Status**.

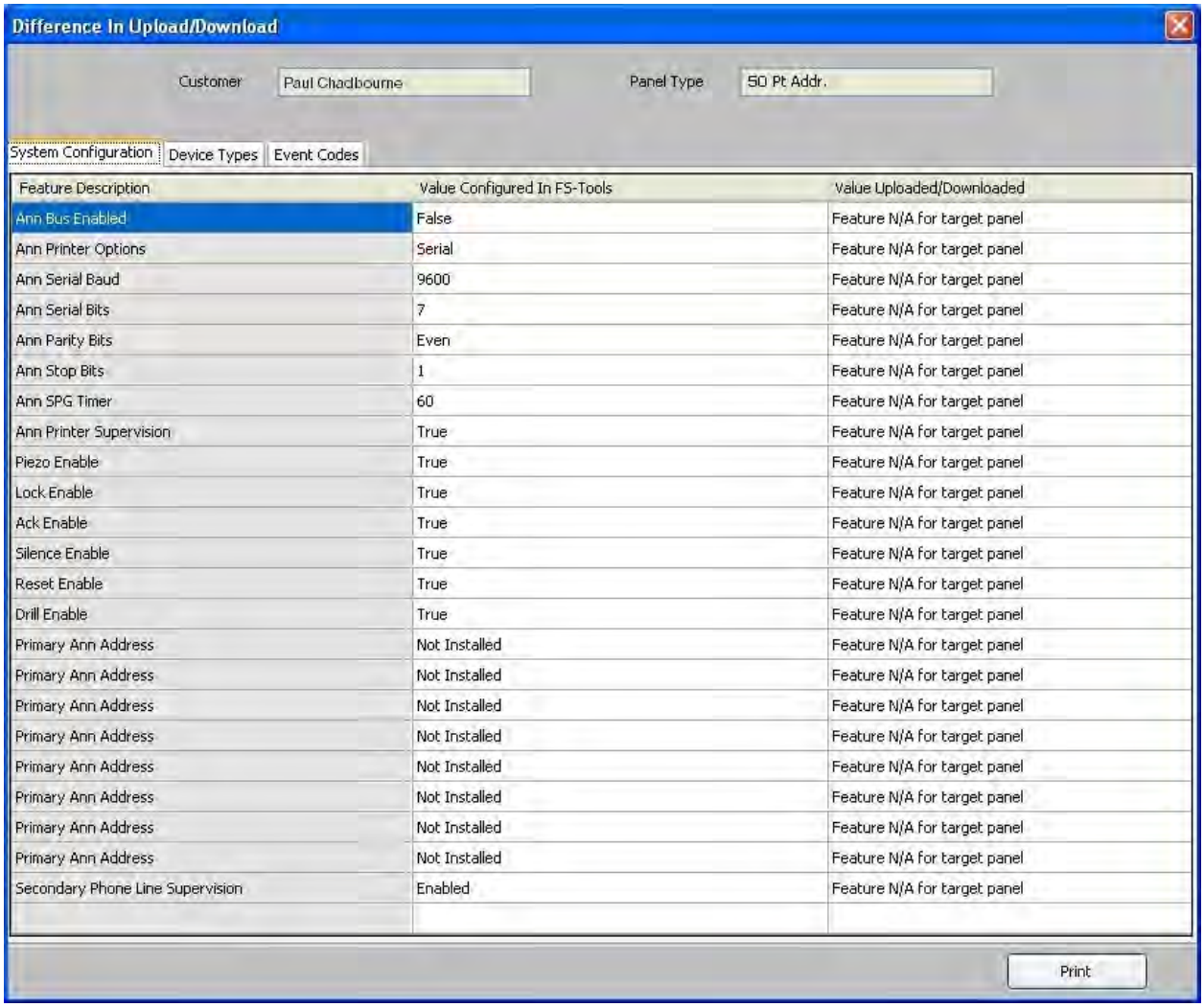
When the download is complete, the status that the configuration data is saved in the database is displayed in **PC Panel Communication Status**.

5. Click **Close** to close the **Upload/Download** dialog box after the upload/download process is completed.

If after clicking **Download to Panel**, the panel version does not match the FS-Tools version on the computer, a message asking you to view the difference in features appears.



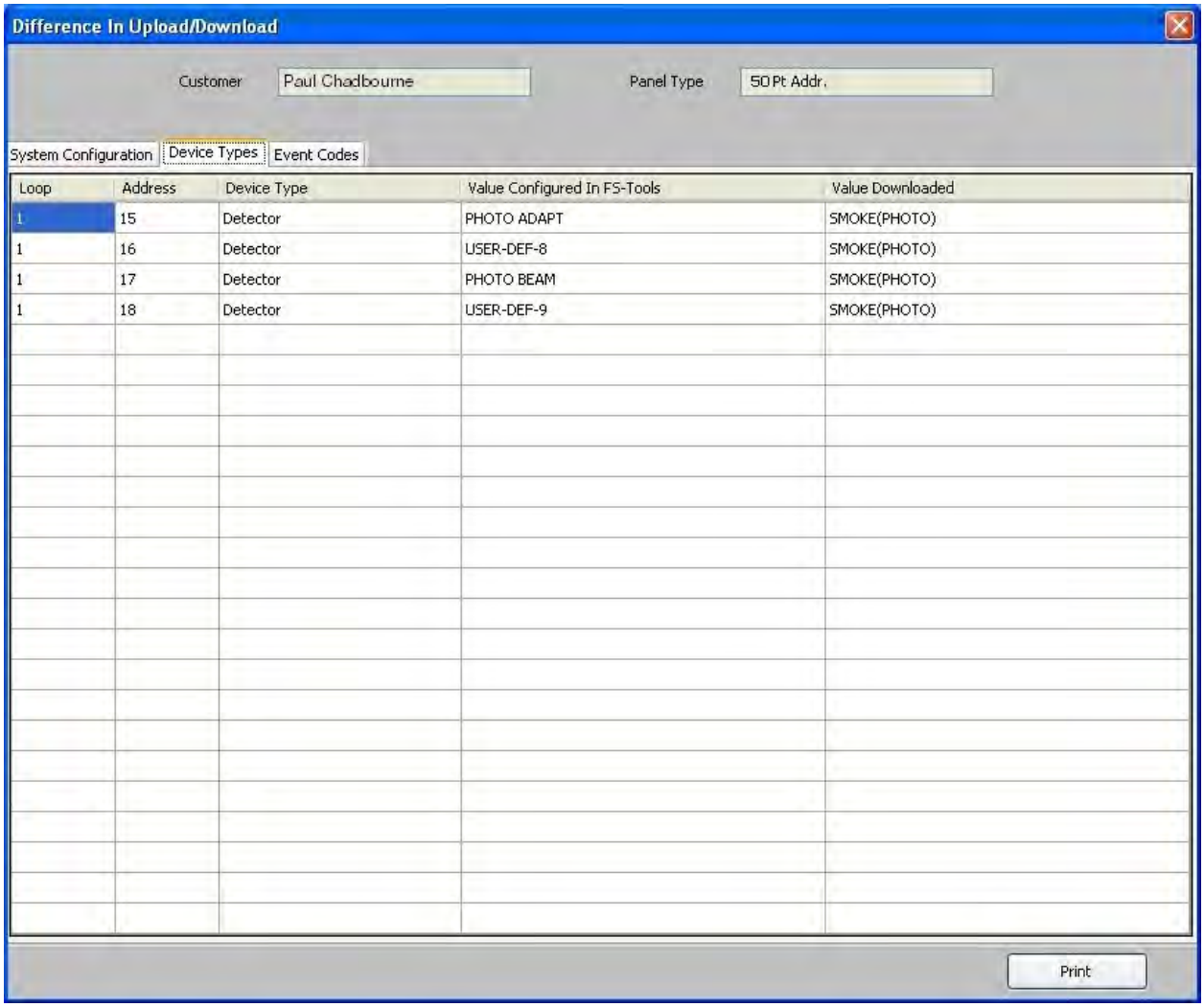
Click **Yes**. The **Difference in Upload/Download** window appears.



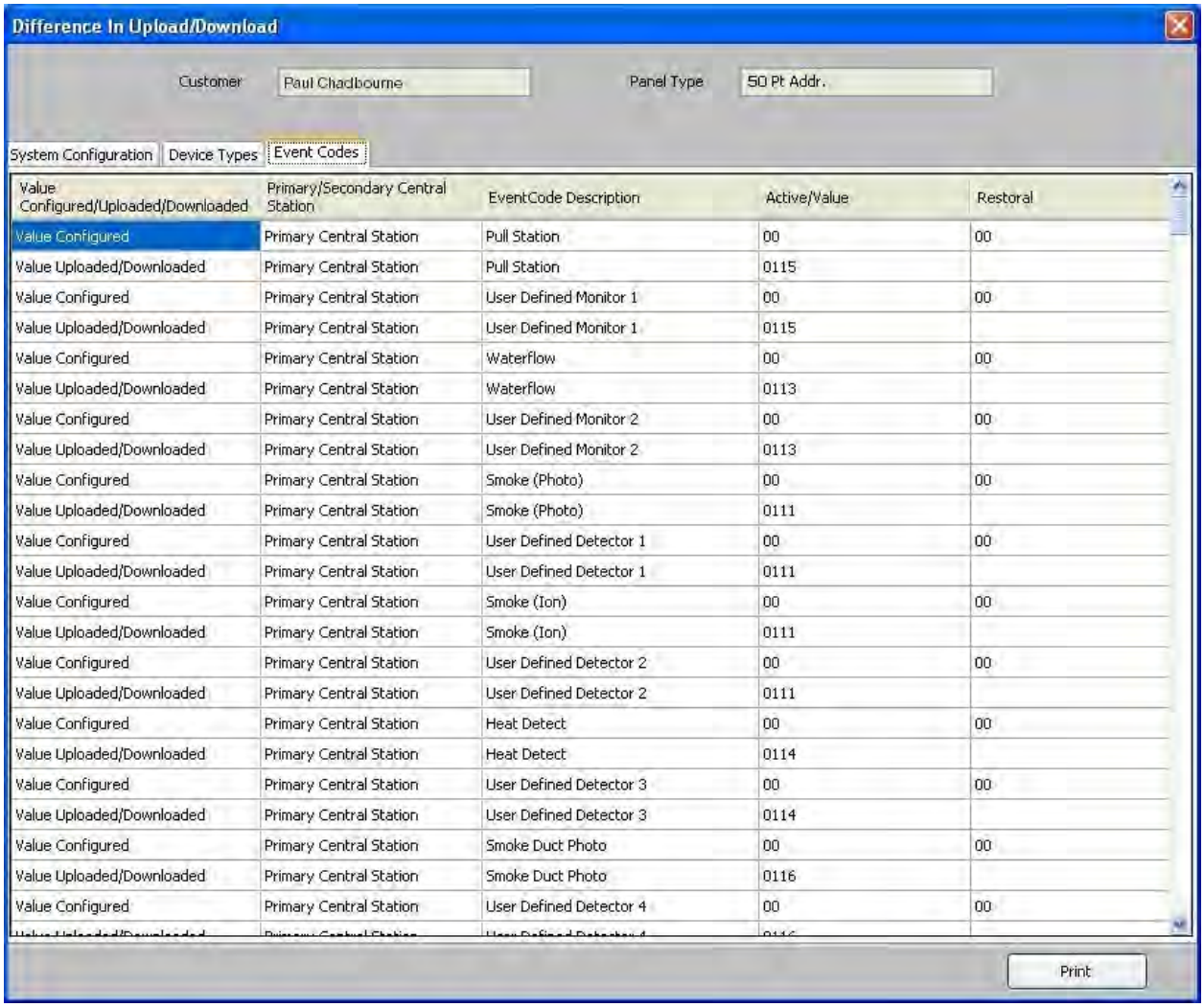
Feature Description	Value Configured In FS-Tools	Value Uploaded/Downloaded
Ann Bus Enabled	False	Feature N/A for target panel
Ann Printer Options	Serial	Feature N/A for target panel
Ann Serial Baud	9600	Feature N/A for target panel
Ann Serial Bits	7	Feature N/A for target panel
Ann Parity Bits	Even	Feature N/A for target panel
Ann Stop Bits	1	Feature N/A for target panel
Ann SPG Timer	60	Feature N/A for target panel
Ann Printer Supervision	True	Feature N/A for target panel
Piezo Enable	True	Feature N/A for target panel
Lock Enable	True	Feature N/A for target panel
Ack Enable	True	Feature N/A for target panel
Silence Enable	True	Feature N/A for target panel
Reset Enable	True	Feature N/A for target panel
Drill Enable	True	Feature N/A for target panel
Primary Ann Address	Not Installed	Feature N/A for target panel
Primary Ann Address	Not Installed	Feature N/A for target panel
Primary Ann Address	Not Installed	Feature N/A for target panel
Primary Ann Address	Not Installed	Feature N/A for target panel
Primary Ann Address	Not Installed	Feature N/A for target panel
Primary Ann Address	Not Installed	Feature N/A for target panel
Primary Ann Address	Not Installed	Feature N/A for target panel
Primary Ann Address	Not Installed	Feature N/A for target panel
Secondary Phone Line Supervision	Enabled	Feature N/A for target panel

In the **System Configuration** tab, you can view the information such as name of the feature, the value assigned to the feature in FS-Tools, and the values downloaded to the panel. Click **Print** to generate a PDF file.

Note: If the feature configured in FS-Tools is not present in the panel, a message is displayed corresponding to the value in FS-Tools.



In the **Device Types** tab, you can view the information such as loop, address, name of the device, the value assigned to the feature in FS-Tools, and values downloaded to the panel. Click **Print** to generate a PDF file.



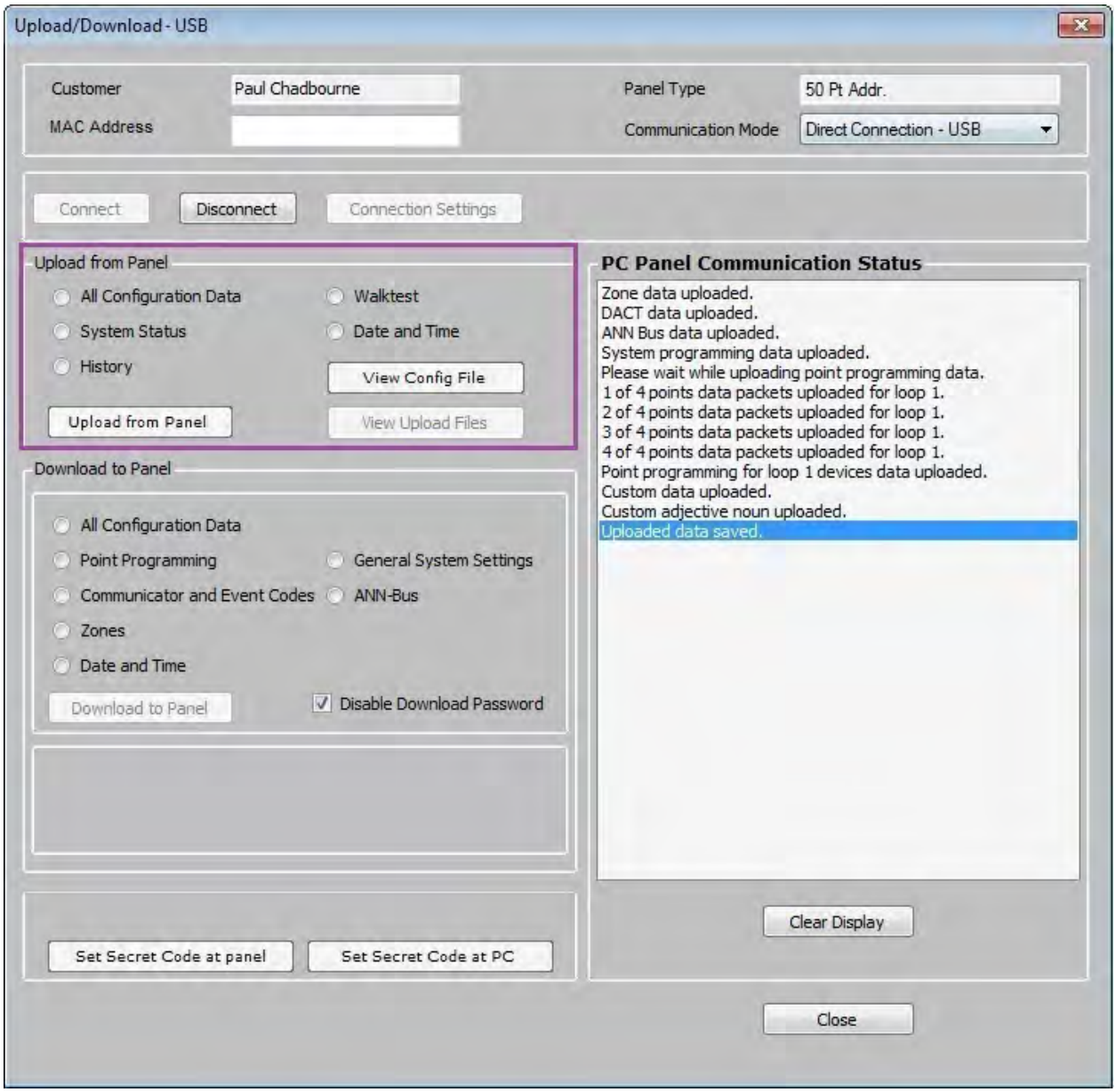
Value Configured/Uploaded/Downloaded	Primary/Secondary Central Station	EventCode Description	Active/Value	Restoral
Value Configured	Primary Central Station	Pull Station	00	00
Value Uploaded/Downloaded	Primary Central Station	Pull Station	0115	
Value Configured	Primary Central Station	User Defined Monitor 1	00	00
Value Uploaded/Downloaded	Primary Central Station	User Defined Monitor 1	0115	
Value Configured	Primary Central Station	Waterflow	00	00
Value Uploaded/Downloaded	Primary Central Station	Waterflow	0113	
Value Configured	Primary Central Station	User Defined Monitor 2	00	00
Value Uploaded/Downloaded	Primary Central Station	User Defined Monitor 2	0113	
Value Configured	Primary Central Station	Smoke (Photo)	00	00
Value Uploaded/Downloaded	Primary Central Station	Smoke (Photo)	0111	
Value Configured	Primary Central Station	User Defined Detector 1	00	00
Value Uploaded/Downloaded	Primary Central Station	User Defined Detector 1	0111	
Value Configured	Primary Central Station	Smoke (Ion)	00	00
Value Uploaded/Downloaded	Primary Central Station	Smoke (Ion)	0111	
Value Configured	Primary Central Station	User Defined Detector 2	00	00
Value Uploaded/Downloaded	Primary Central Station	User Defined Detector 2	0111	
Value Configured	Primary Central Station	Heat Detect	00	00
Value Uploaded/Downloaded	Primary Central Station	Heat Detect	0114	
Value Configured	Primary Central Station	User Defined Detector 3	00	00
Value Uploaded/Downloaded	Primary Central Station	User Defined Detector 3	0114	
Value Configured	Primary Central Station	Smoke Duct Photo	00	00
Value Uploaded/Downloaded	Primary Central Station	Smoke Duct Photo	0116	
Value Configured	Primary Central Station	User Defined Detector 4	00	00

In the **Event Codes** tab, you can view the information such as values configured to upload or download, details on central station, event codes description, active value, and restoral. Click **Print** to generate a PDF file.

Upload Configuration Data from the FACP

Using the **Upload from Panel** option, you can view the System Status data, History data, Walktest data, Date and Time data from the fire panel. The uploaded information is useful for monitoring the fire alarm system status and identifying troubles, alarms, and other events. When you upload information for the first time, ensure that *all* the information is uploaded from the fire panel.

To upload information from the fire panel, click **Upload/Download > Upload/Download** from the initial customer details window in FS-Tools. The upload/download window opens.



1. Select the **Communication Mode** from the drop-down menu. FS-Tools can connect **directly** with the FACP using a USB cable or **remotely** with an Ethernet connection to the IPOTS-COM communicator.

2. In the **Upload from Panel** section of the window, you can select individual options to upload (System Status, History, Walktest, or Date and Time) or select **all Configuration Data** to upload all information from the fire panel.

3. Click **Upload from Panel**.

4. A message appears to indicate the configuration data is *saved* in FS-Tools. Click **OK**.

5. Click **View Upload Files** to view all the uploaded information from the fire panel such as history data, system status data, and walktest data saved in the FS-Tools database. All the uploaded information is displayed in the **PC Panel Communication Status** window.

6. Click **Close** to close the **Upload/Download** dialog box after the upload/download process is completed.

Connection Settings

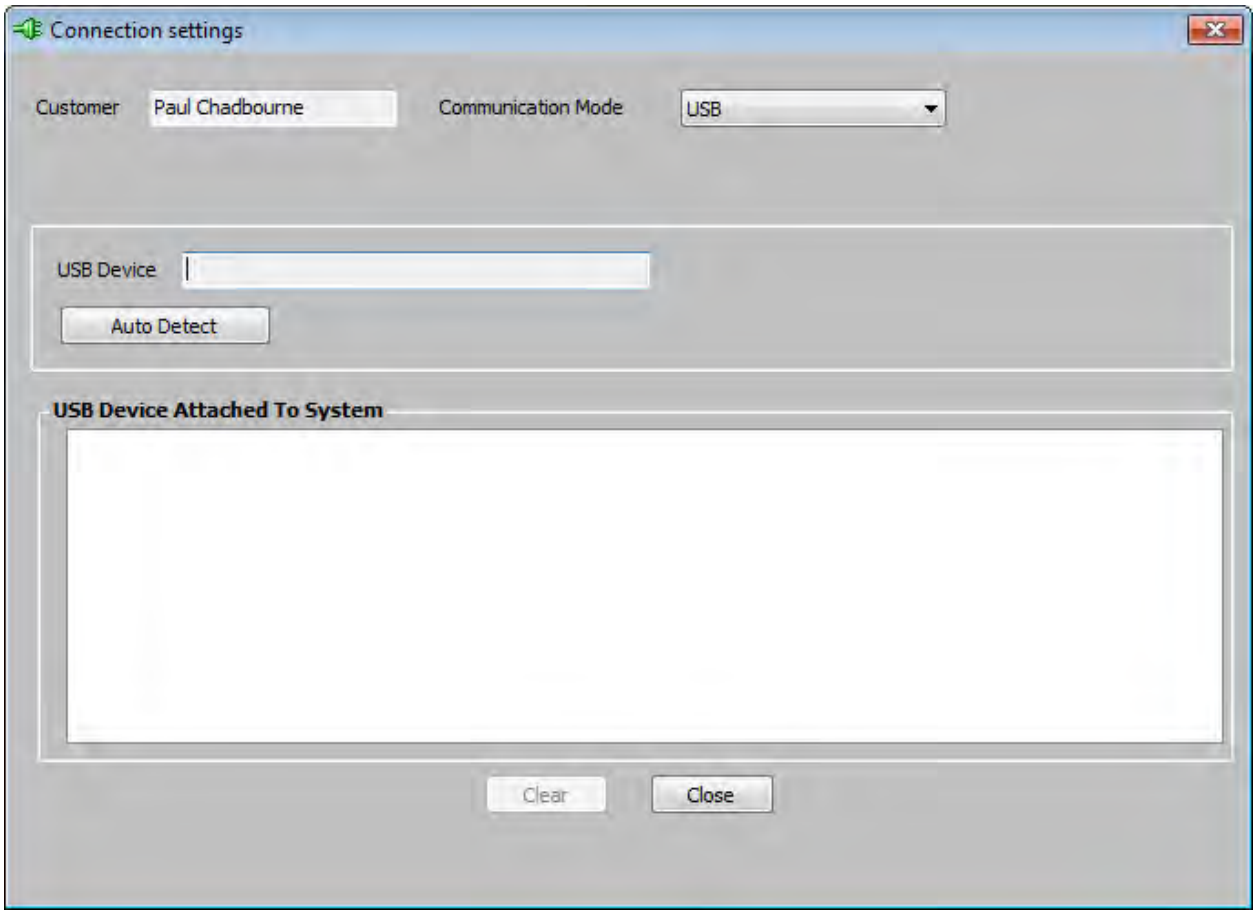
The connection settings option displays the details of the USB device, Modem or Serial port attached to the computer for communication with the fire panel. The modem can be a USB modem or a serial modem. For a USB modem, the modem vendor provides the driver that must be installed before launching FS-Tools.

USB Connection Settings

To view the USB device settings:

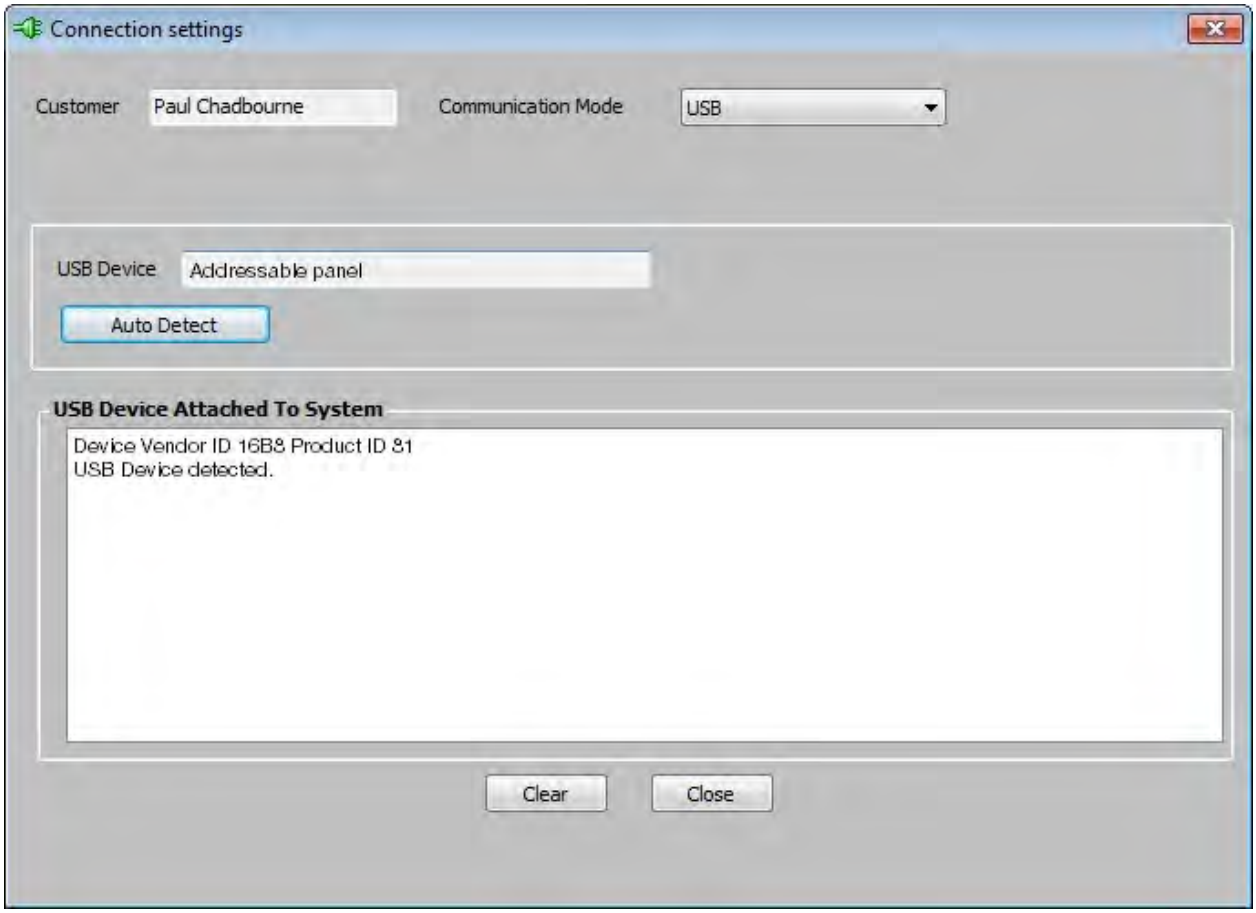
1. Select the customer for whom the connection settings needs to be viewed.

2. Click **Upload/Download > Connection Settings** in the initial customer screen in FS-Tools. The **Connection Settings** dialog box appears.



3. In **Communication Mode** list, select the *USB* option. The information to view/modify the USB settings appears in the **Connection Settings** dialog box

4. Click **Auto Detect** to detect any USB device attached to the system. The details of the attached USB Device (if any) are displayed in **USB Device Attached to System**.



5. Click **Clear** to clear the displayed data if there are multiple lines of data to scroll through in **USB Device Attached to System**.

6. Click **Close** to close the dialog box after you verify the connection settings between the computer and the fire panel.

Thumb Drive Upload/Download

Transfer Database To Flash Drive

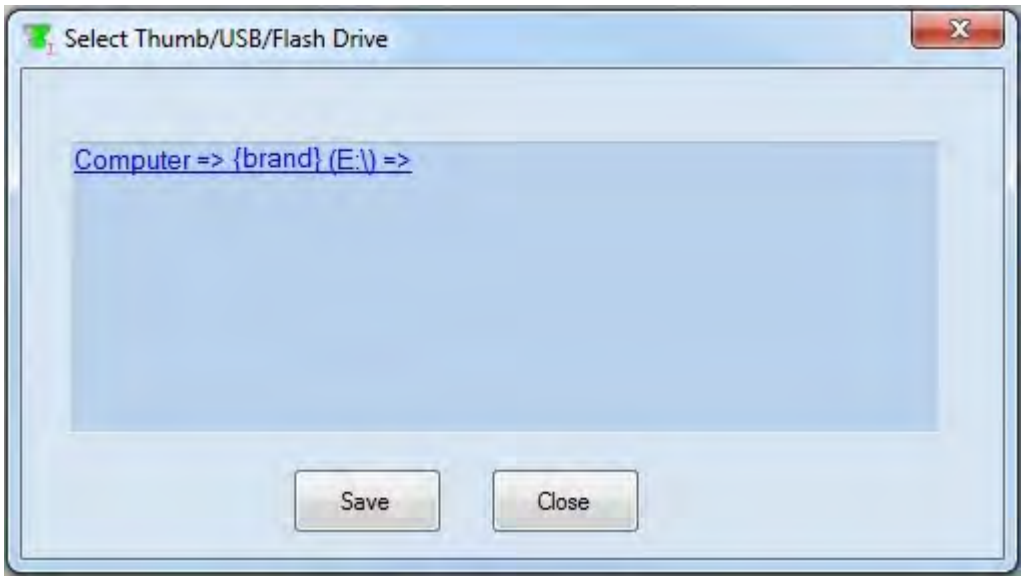
To transfer the panel database *to* a Flash Drive:

1. Insert a Flash Drive into the USB port of your PC.

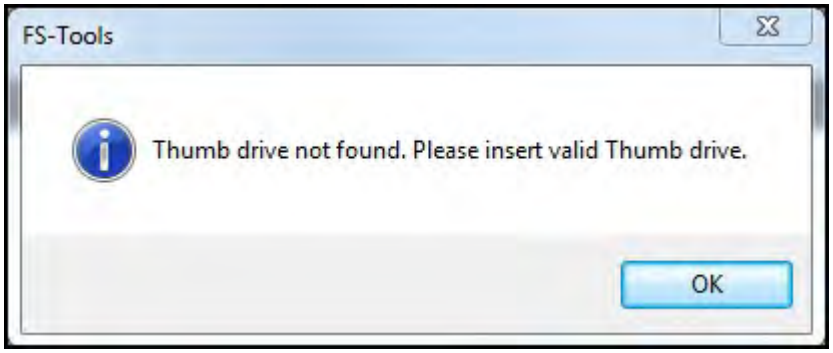
2. Select the customer for whom the panel settings are to be downloaded to a USB flash drive.

3. Click **Upload/Download > Thumb Drive Upload/Download > Transfer Configuration to Thumb/USB/Flash Drive** in the initial customer screen in FS-Tools.

4. Select the USB port with the Flash Drive from the selection box and click **Save.**



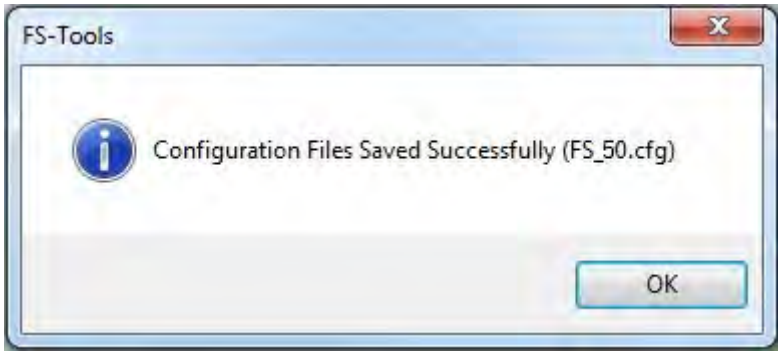
If a Flash Drive is not detected by FS-Tools, you will get a warning message.



FS-Tools will save the program database on the Flash Drive as "FS_50.cfg".

Note: Before loading the new database into the fire panel, the existing database will be saved as file, "FS_50_bak.cfg" on the USB flash drive. Only one new and one saved database can reside on the USB flash drive at a given time.

A confirmation dialog box displays when the database is successfully transferred to the USB drive.



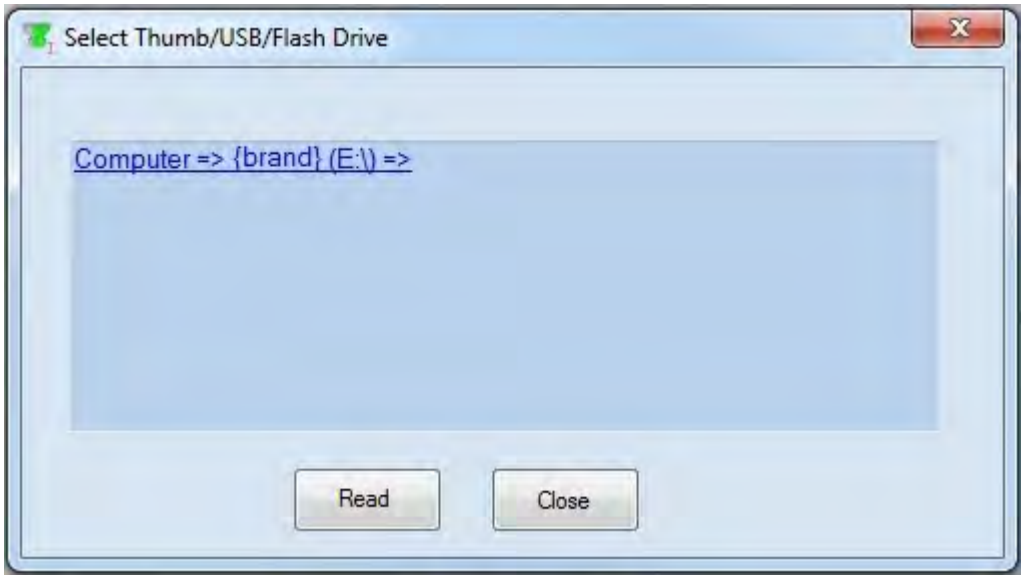
Transfer Database From Flash Drive

To transfer the panel database *from* a flash drive *to* FS-Tools,

1. Insert a Flash Drive into the USB port of your PC.

2. Select the customer from the main screen to where you want to save

3. Click **Upload/Download > Thumb Drive Upload/Download > Transfer Configuration Database From Thumb/USB/Flash Drive** in the initial customer screen in FS-Tools. The USB Selection screen displays.

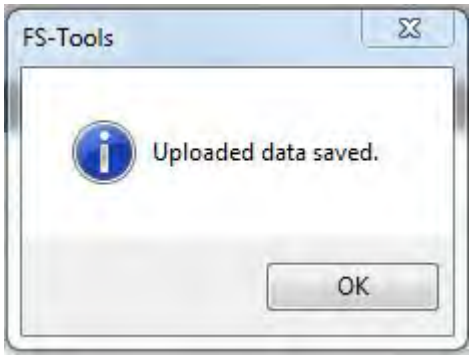


4. Select the drive with the desired USB stick and click **Read**.

5. Navigate to the configuration file saved to the USB drive from the FACP. The file will have a .bak extension.

6. Select file and click **Open**.

7. The confirmation dialog box displays and the panel configuration is saved to the database.



Configuring Reports

Configuring NFPA Reports

Using FS-Tools, you can configure the NFPA Report Requisites. Configuring the NFPA Reports involves:

- Configuring the Record of Completion
- Configuring the Inspection and Testing

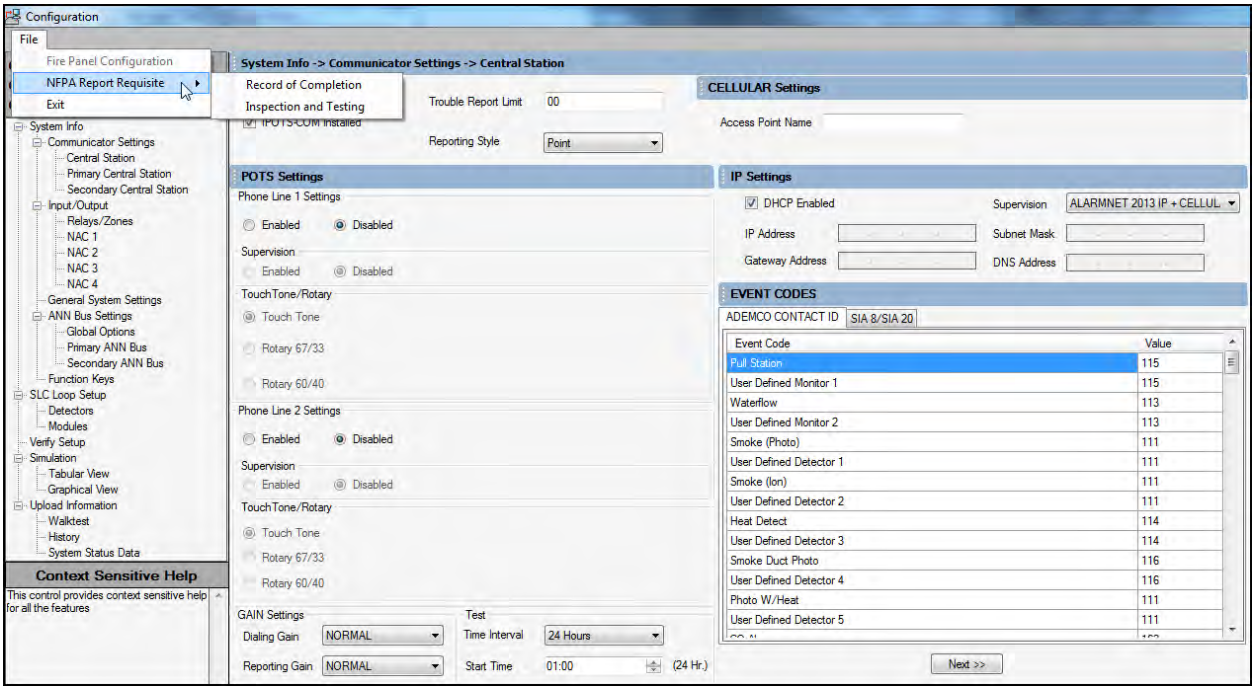
To configure the NFPA reports:

1. Using the **Find** option from the initial screen, if necessary, select a customer record. For more information, see Finding a Customer.

2. Click **Configure** to program the fire panel settings. The **Configuration Type** dialog box appears.

3. In the **Select Configuration** box, choose a previously saved configuration which appears in the list.

4. Click **OK**. The **System Info** programming page appears.



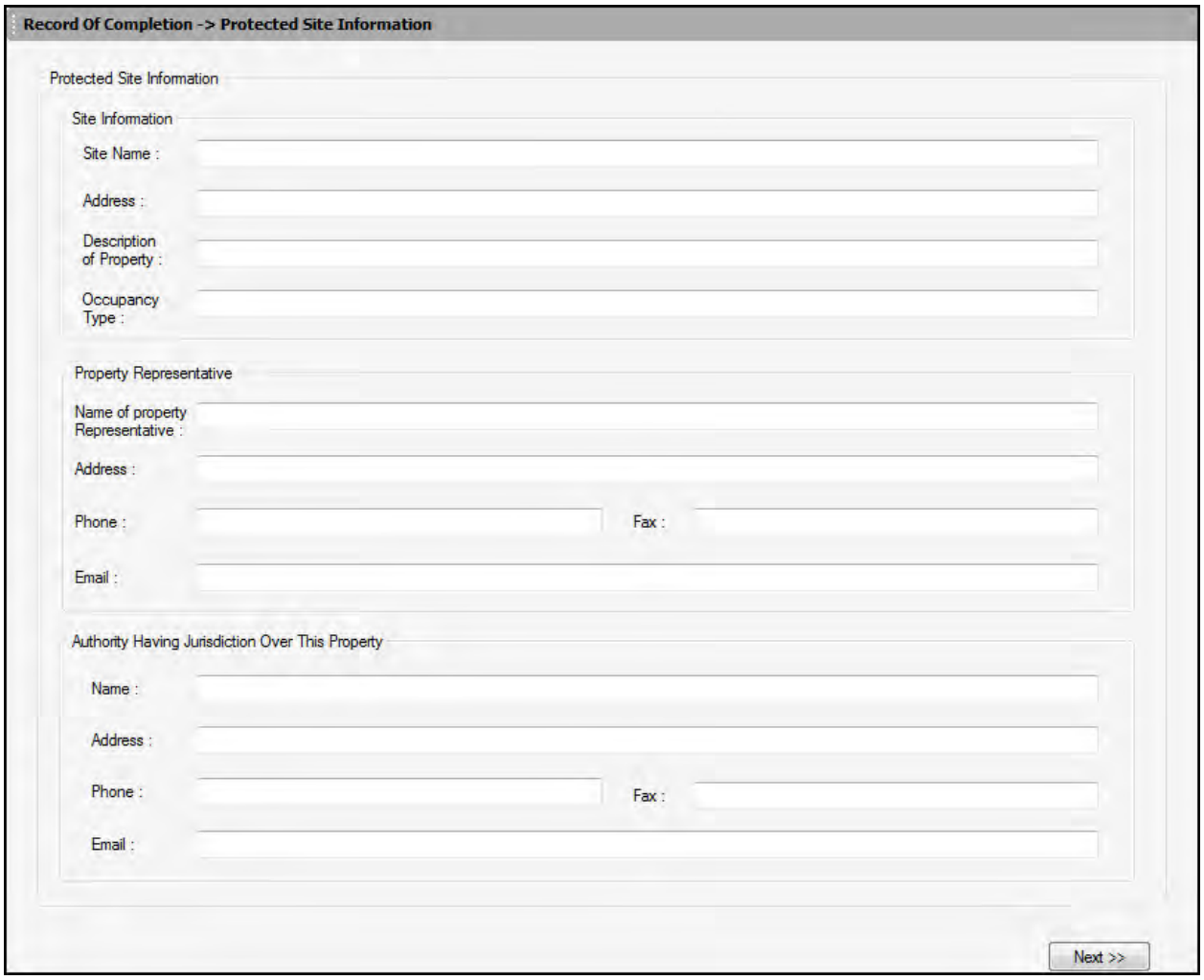
5. To open the NFPA report configuration, click **File > NFPA Report Requisite > Record of Completion** or **Inspection and Testing**.

Record of Completion

In FS-Tools, configuring the Record of Completion involves the following steps.

1. Configure the Protected Site Information
2. Configure the Fire Alarm System Information
3. Configure the Type of Fire Alarm System
4. Configure the System Software
5. Configure the Signaling Line Circuits
    a. Manual and Automatic Initiating Device
    b. Supervisory Signal- Initiating Devices and Circuits
6. Configure the Annunciators
7. Configure the Alarm Notification Devices and Circuits
8. Configure the System Power Supply
9. Configure the Record of system installation and System Operation
10. Obtain the Certifications and Approvals

Protected Site Information



To configure the Protected Site Information:

1. Under **Site Information**, type the **Site Name, Address, Description of Property** and **Occupancy Type** of the site.

2. Under **Property Representative**, type the **Name of the Property Representative, Address, Phone, FAX** and **E-mail** of the site representative.

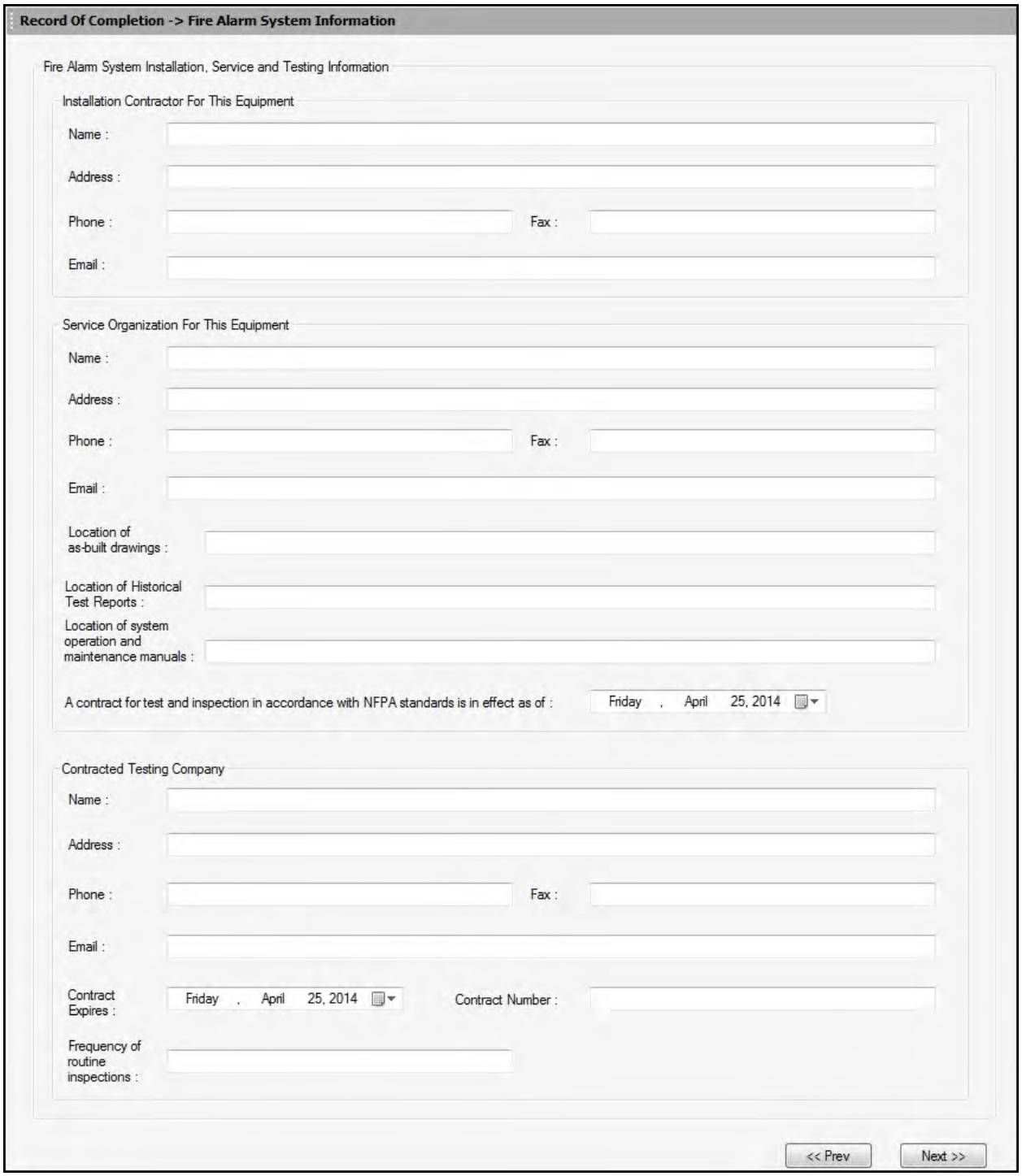
3. Under **Authority having jurisdiction over this property**, type the **Name, Address, Phone, FAX** and **E-mail** of the AHJ.

Click **Save to Database** to save the Record of Completion report requisites to database.

Click **Next** or click **Fire Alarm System Information** in the left pane, to view the **Fire Alarm System Information** configuration pane.

Fire Alarm System Information

The fire alarm system information provides information about Installation, Service and Testing.



To configure the Fire Alarm System Information:

1. Type the **Name, Address, Phone, FAX** and **E-mail** of the contractor under **Installation Contractor For This Equipment**.

2. Type the **Name, Address, Phone, FAX, E-mail, Location of as-built drawings, Location of Historical Test Reports** and **Location of system operation and maintenance manuals** of the service organization, under **Service Organization of this equipment**.

3. Select the effective date for a contract of test and inspection in accordance with NFPA standards from the drop-down box.

4. Type the **Name, Address, Phone, FAX, E-mail, Contact Number** and **Frequency of routine inspections** of the testing company under **Contracted Testing Company**.

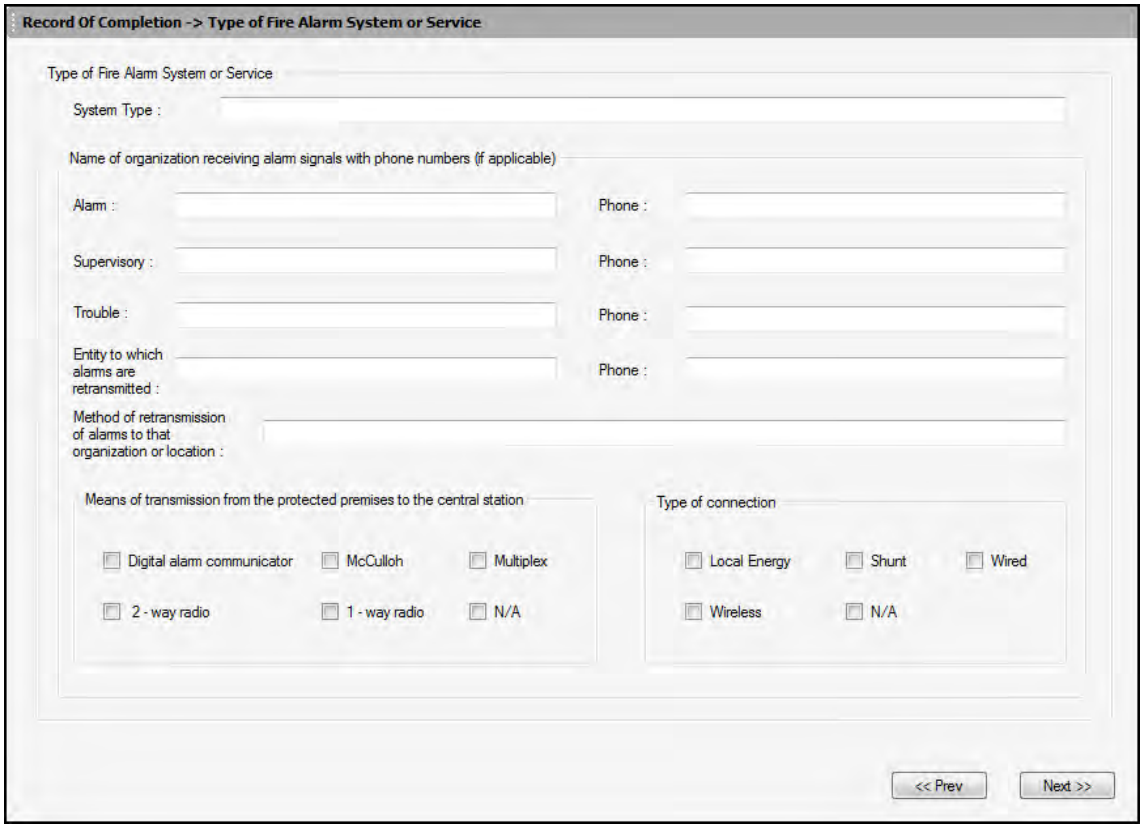
5. Select the **Contract Expires** date from the drop-down box.

Click **Next** or click **Type of Fire Alarm System** in the left pane, to configure the type of fire alarm system.

Click **Prev** to go back to the **Protected Site Information**.

Type of Fire Alarm System or Service

This pane allows you to enter information about the Fire Alarm system type and the details of the organization that is receiving alarm signals, means of transmission and the type of connection.



To configure the Type of Fire Alarm System:

1. Type the **System Type** of the fire alarm system.
2. Enter the name of the organization receiving **Alarm** signal along with the phone details.
3. Enter the name of the organization receiving **Supervisory** signal along with the phone details.
4. Enter the name of the organization receiving **Trouble** signal along with the phone details.
5. Type the name of the **Entity to which alarms are retransmitted** along with the **Phone** details.

Note: The Phone fields allow numbers 0 to 9 and capital letters from A to E only.

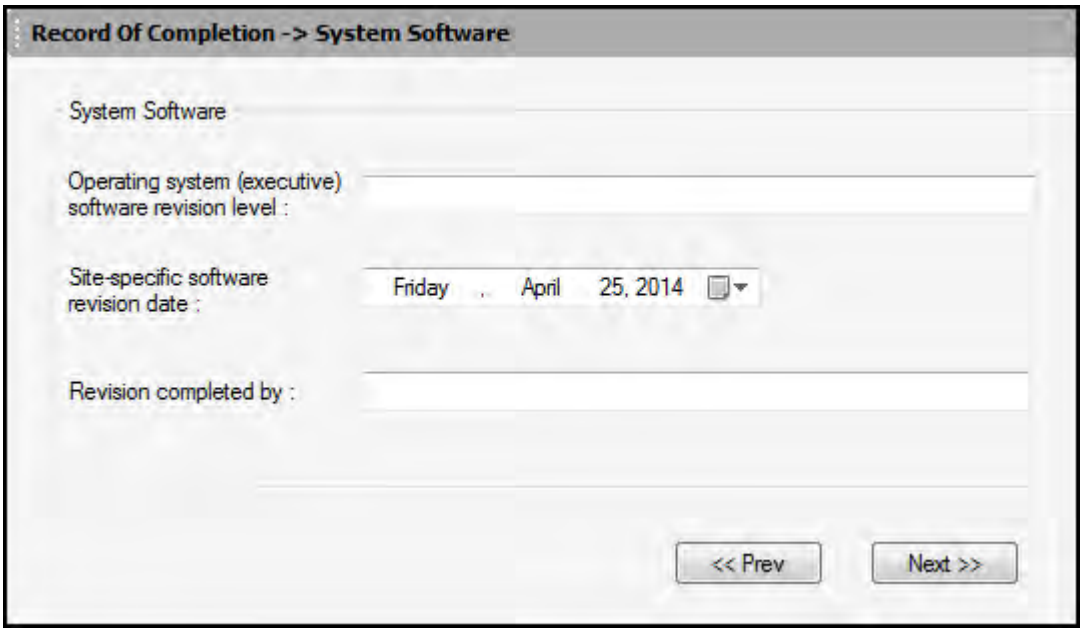
6. Type the name of the **Method of retransmission of alarms to that organization or location**.
7. Select the required check box under **Means of transmission from the protected premises to the central station**.
8. Select the required check box under **Type of connection**.

Click **Next** or click **System Software** in the left pane, to configure the System Software.

Click **Prev** to go back to Fire Alarm System Information.

System Software

This pane allows you to configure the Operating system revision level and date.



To configure the System Software:

1. Type the **Operating System (executive) software revision level** of the alarm software.
2. Select the **Site-specific software revision date**.
3. Type the name of the person in **Revision completed by**.

Click **Next** or click **Signaling Line Circuits** in the left pane, to configure the Signaling Line Circuit.

Click **Prev** to go back to **Type of Fire Alarm System**.

Signaling Line Circuit

Manual and Automatic Initiating Devices and Circuits

In this pane you can configure the Alarm Initiating Devices and Circuits, Manual Initiating Devices and Automatic Initiating Devices. It also allows you to configure the Supervisory Signal –Initiating Devices and Circuits.

To configure the Signaling Line Circuits:

1. Enter the total number of devices installed on the SLC in the **Quantity** box.

2. Select the wiring **Style** from the drop-down box.

3. Enter the wiring **Class** (Class A or Class B).

4. In **Alarm Initiating devices and circuits**, repeat the steps 1 through 3 of Signaling Line Circuits to fill the data.

Note: The number of detectors and input modules here depends on the number of devices mapped in the FACP. The maximum number of devices is 50 total.

5. Under **Manual Initiating Devices –Manual Pull Stations**, type the **Number of manual pull stations** added to the FACP configuration and click the required **Type of devices** check box.

6. Under **Automatic Initiating Devices – Duct Smoke Detectors**, type the **Number of Duct Smoke Detectors** added in FACP configuration and **Type of Coverage**.

7. Select the required **Type of devices** and **Type of smoke detector sensing technology** check boxes.

8. Under **Automatic Initiating Devices – Heat Detectors**, type the **Number of Heat Detectors** added in FACP configuration and select the required checkboxes for **Type of Coverage** and **Type of Devices**.

9. Under **Automatic Initiating Devices – Sprinkler Waterflow Detectors**, type the **Number of Waterflow Detectors** added in FACP configuration and click the required checkboxes for Type of devices.

10. Under **Automatic Initiating Devices – Area Smoke Detectors**, type the **Number of area Smoke Detectors** added in FACP configuration and click the required checkboxes for **Type of Coverage**, **Type of Devices** and **Type of smoke detector sensing technology**.

11. Under **Automatic Initiating Devices – Alarm Verification**, type the **Number of devices subject to alarm verification**.

12. Click **Enabled** if alarm verification on this system is enabled and type the number of seconds in the **Set for**.

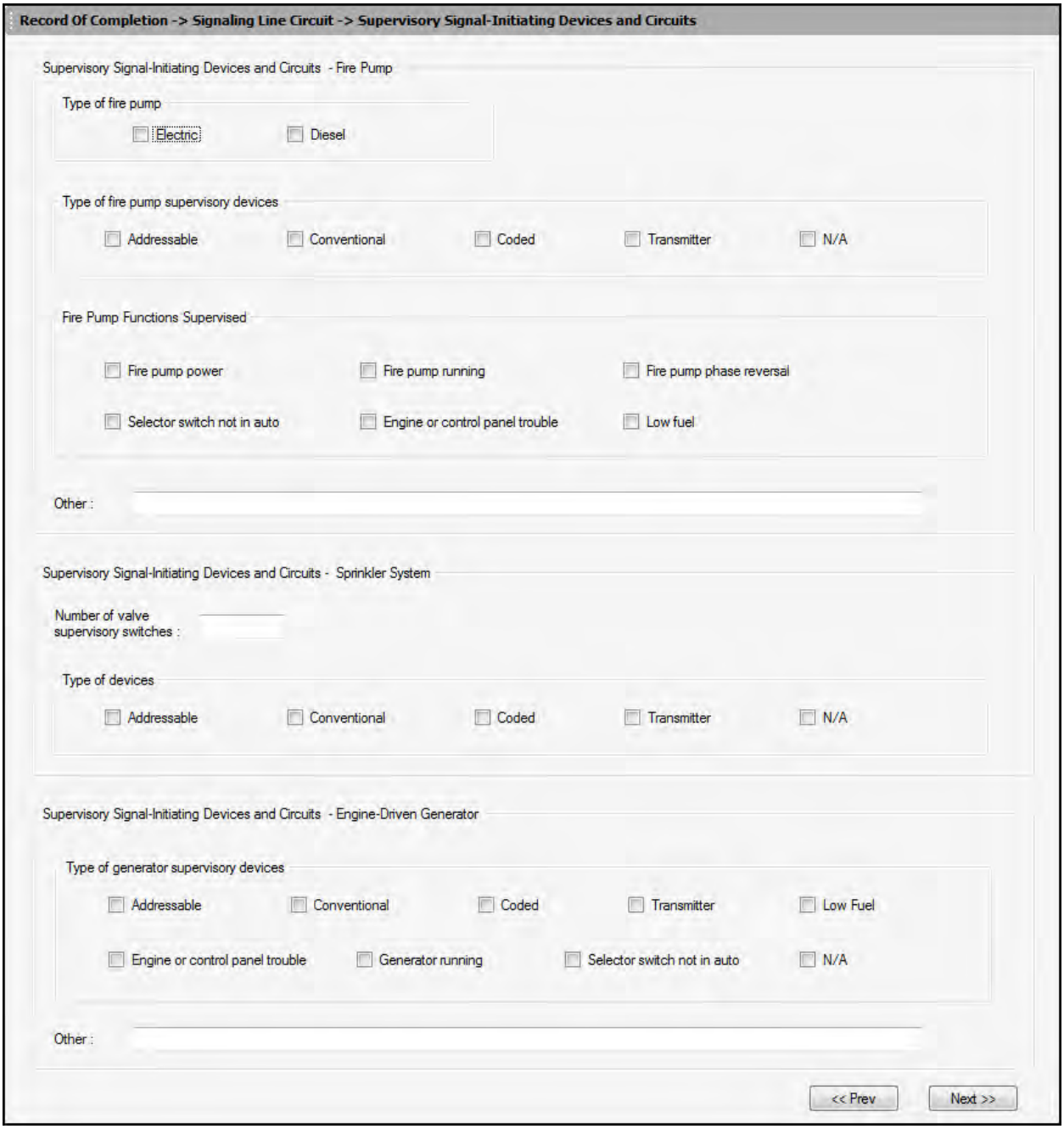
Note: This radio button is enabled if *all* the detectors on this system are in alarm verification otherwise it is disabled.

Click **Next** or click **Supervisory Signal** in the left pane to configure the Supervisory Signal- Initiating Devices and Circuits.

Click **Prev** to go back to **System Software**.

Supervisory Signal

The Supervisory Signal pane allows you to configure the Initiating Devices and Circuits namely Fire pump, Sprinkler System, and Engine Driven Generators.



To configure the Supervisory Signal:

1. Under **Supervisory Signal – Initiating Devices and Circuits – Fire Pump**, select the required check box for **Type of fire pump**.

2. Click the required check box for **Type of fire pump supervisory devices**.

3. Click the required check box for **Fire Pump Functions Supervised**.

4. Type the **Other** supervisory signals information in the box provided.

5. Under **Supervisory Signal – Initiating Devices and Circuits – Sprinkler System**, type the **Number of valve supervisory switches**.

6. Click the required check box for **Type of devices**.

7. Under **Supervisory Signal – Initiating Devices and Circuits** – **Engine-Driven Generator**, click the required check boxes for **Type of generator supervisory devices**.

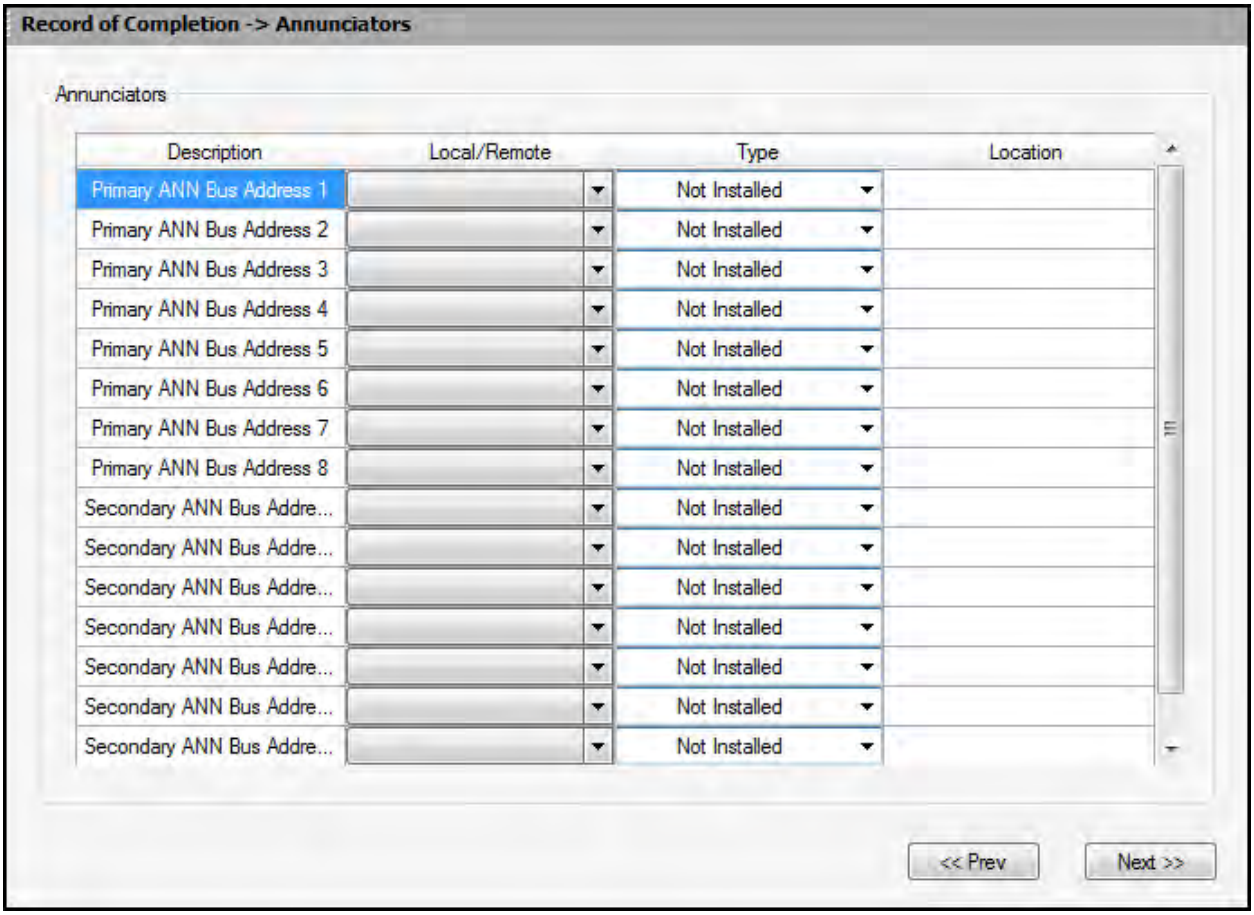
8. Type the **Other** supervisory signals information in the box provided.

Click **Next** or click **Annunciators** in the left pane to configure the annunciators.

Click **Prev** to go back to **Signaling Line Circuit.**

Annunciators

The **Annunciators** pane allows you to configure the Local/Remote, Type and Location for the Annunciators.



To configure the Annunciators:

1. Under **Local/Remote** select *local* or *remote* for each Annunciator address.

2. Select the required type (*Addressable, Directory, Graphic, N/A, Not Installed, ANN-80, ANN-I/O, ANN-S/PG, ANN-(R)LED, ANN-RLY,* or *ANN-100*) for each Annunciator address.

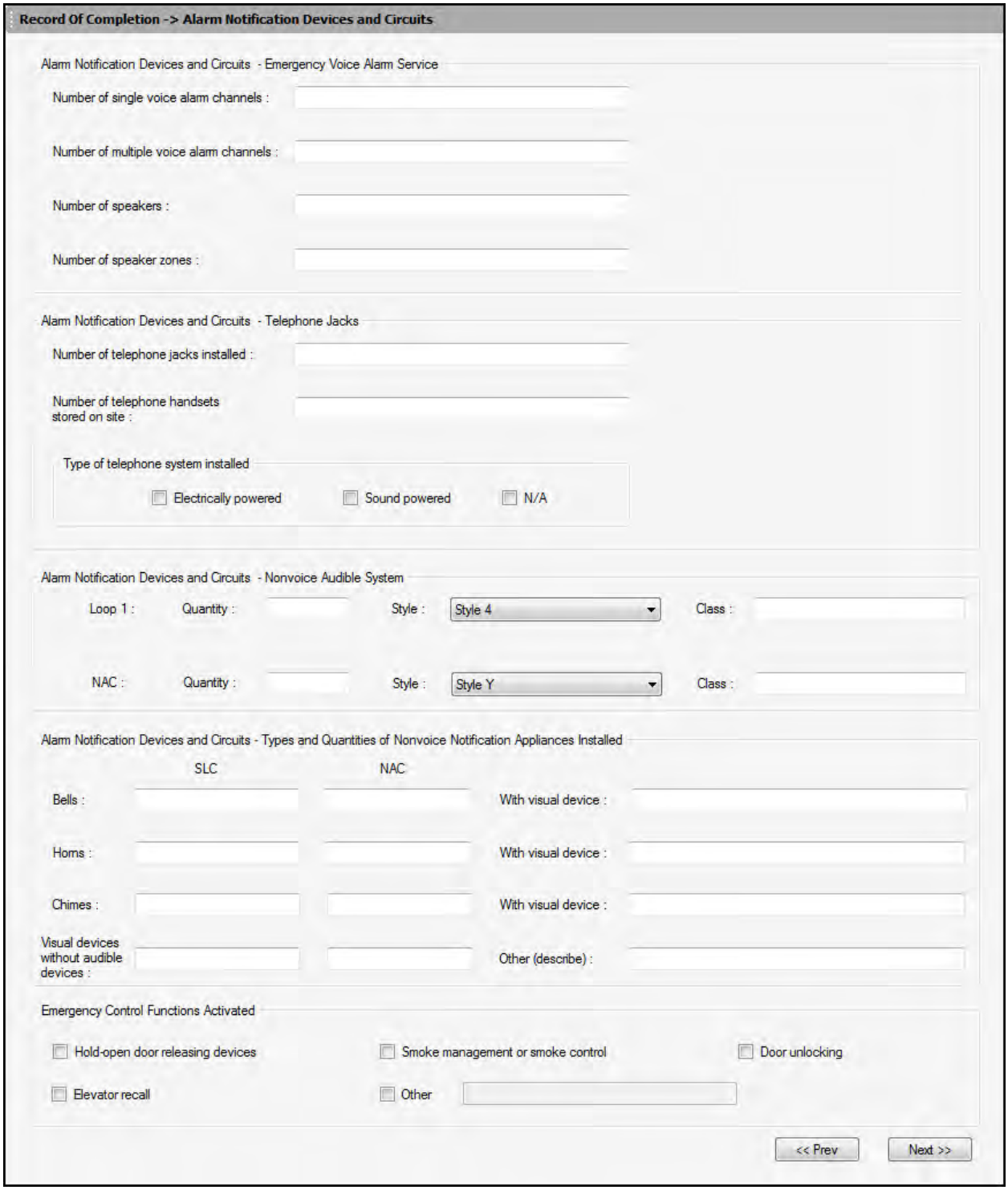
3. Type the **Location** of each annunciator.

Click **Next** or click **Alarm Notification Devices** in the left pane, to configure the alarm notification devices and circuits.

Click **Prev** to go back to **Supervisory Signal.**

Alarm Notification Devices and Circuits

The Alarm Notification devices and circuits pane allows you to configure the parameters namely Emergency Voice Alarm Service, Telephone jacks, Types and Quantities of Non-voice Notification Appliances Installed and Non-voice Audible System.



To configure the Alarm Notification Devices and Circuits:

1. Under **Emergency Voice Alarm Service**, enter the **Number of single** and **multiple voice alarm channels**.

2. Enter the **Number of Speakers** and **Number of Speaker Zones**.

3. Under **Telephone jacks**, enter the **Number of telephone jacks installed**.

4. Enter the **Number of telephone handsets store on site**.

5. Click the required check box in **Type of telephone system installed**.

6. Under the **Non-Voice Audible System option**, enter the **Quantity** for the SLC **Loop 1** and **NAC**.

7. Select the required **Style** for the **NAC** .

8. Type the **Class** for **NAC** .

9. Enter the number of **Bells** required under **NAC**, **With visual devices** in the boxes provided.

Note: Under **Types and Quantities of Non-voice Notification Appliances Installed**, the number of Bell devices displayed is based on the number of Bell devices added in **Output modules** of the fire panel configuration.

10. Enter the number of **Horns** required under **NAC**, **With visual devices** in the boxes provided

Note: The number of **Horn devices** displayed is based on the number of Horn devices added in **Output modules** of the fire panel configuration.

11. Enter the number of **Chimes** required under **NAC**, **With visual devices** in the boxes provided.

12. Enter the number of **Visual devices without audible** devices under **NAC**, in the boxes provided.

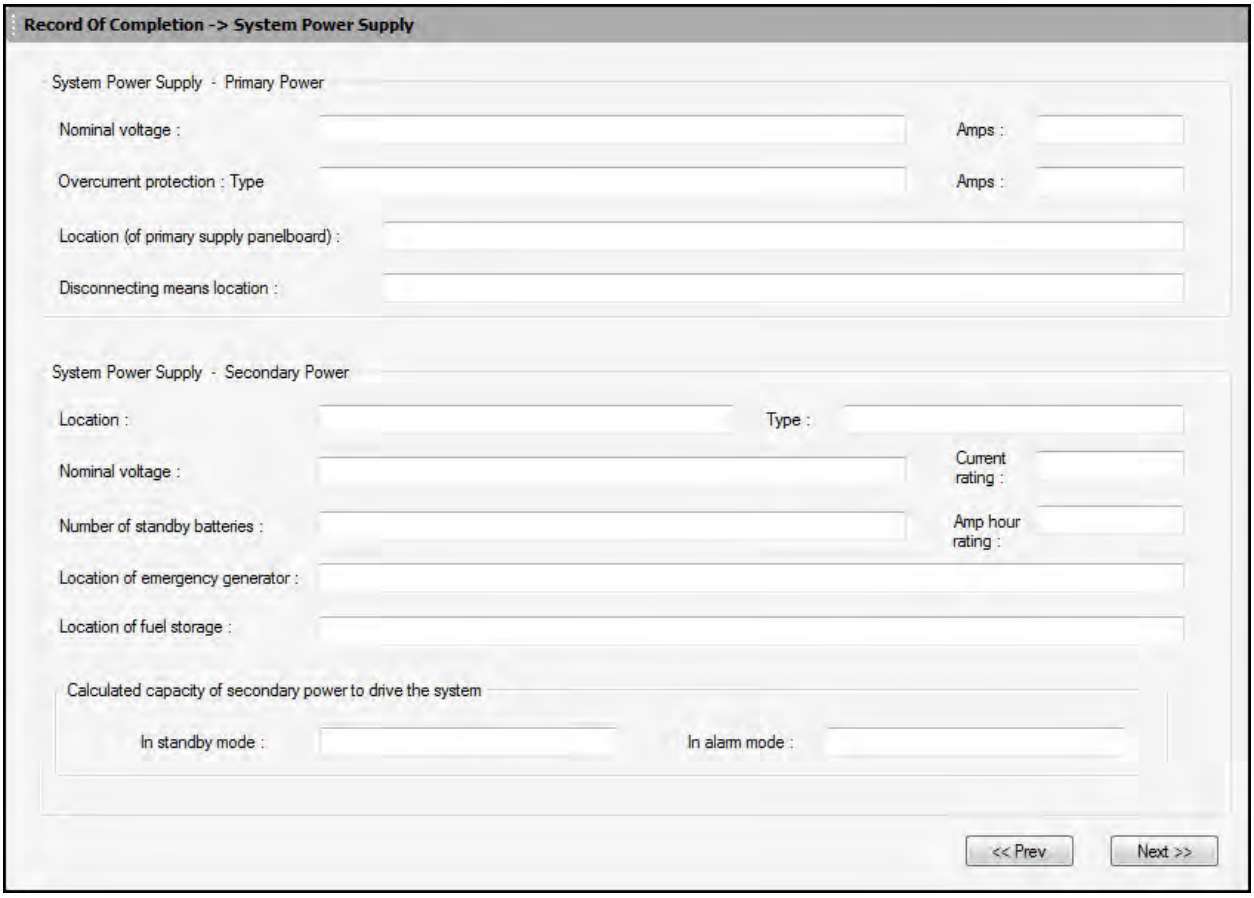
13. Under the **Emergency Control Functions Activated** option, select the required options by clicking the checkboxes.

Click **Next** or click **System Power Supply** in the left pane, to configure the alarm notification devices and circuits.

click **Prev** to go back to **Annunciators.**

System Power Supply

The system power supply pane allows you to configure the primary and the secondary power supply for the system.



To configure the system power supply:

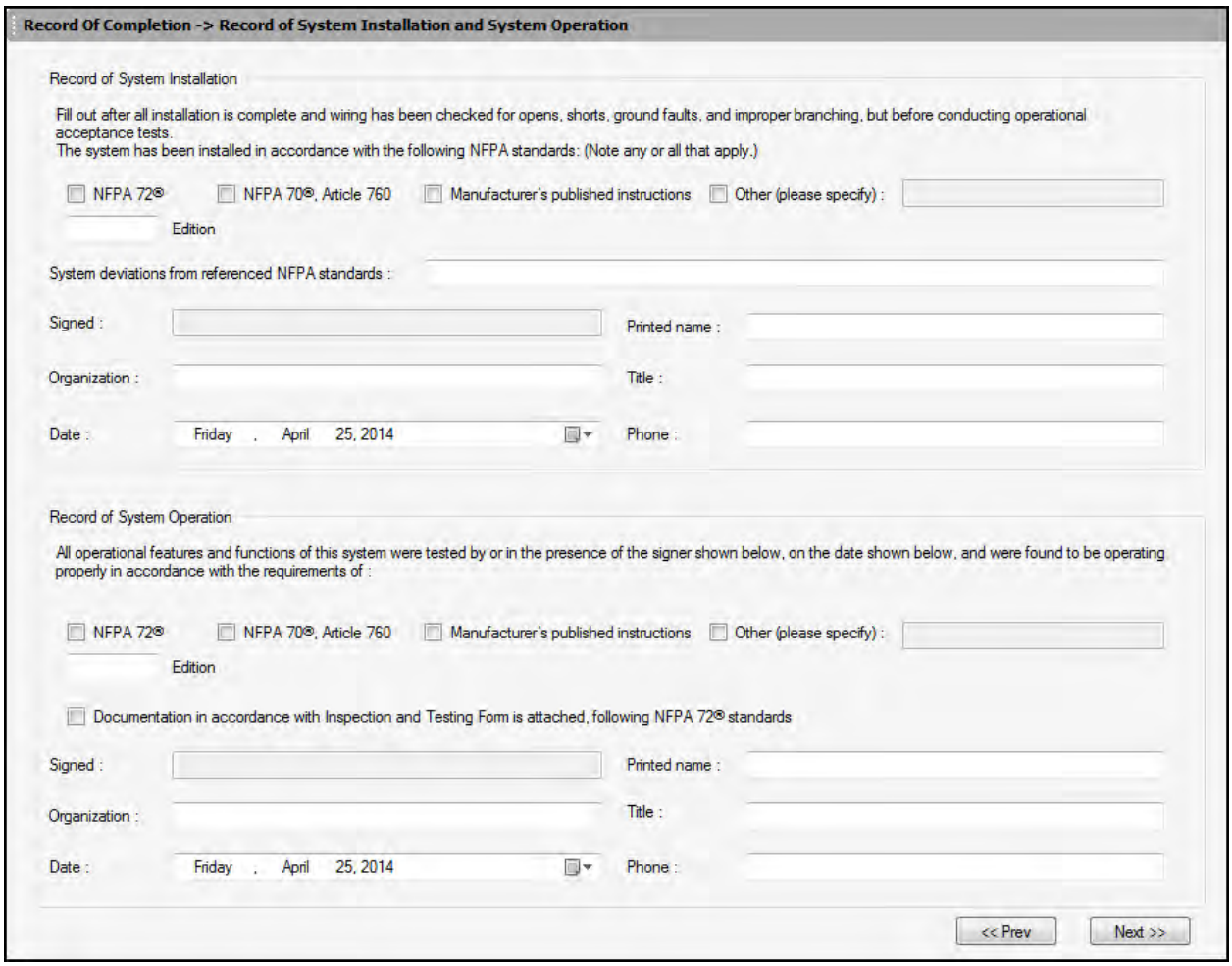
1. Enter the **Nominal voltage** value and **Amps** under primary power.
2. Enter the **Overcurrent protection Type** and **Amps**.
3. Enter the **Location of primary supply panel board for primary power**.
4. Enter the **Disconnecting means location of primary power**.
5. Under **Secondary power**, Enter the **Location** and **Type** of power supply.
6. Enter the **Nominal voltage value** and **Current rating** for the secondary power.
7. Enter the **Number of standby batteries** and Amp hour rating.
8. Enter the **location of emergency generator & location of fuel storage** for secondary power.
9. Under **Calculated capacity of secondary power to drive the system**, Enter the calculated capacity of secondary power in standby mode and in alarm mode.

Click **Next** or click **Record of System Installation and System Operation** in the left pane to configure the alarm notification devices and circuits.

click **Prev** to go back to **Alarm Notification Devices and Circuits**.

Record of System Installation and System Operation

This pane allows you to fill the attributes to ensure that the system installation and system operation is in accordance with the NFPA standards.



To configure the Record of system installation and system operation:

1. Under **Record of System Installation**, select the required checkboxes to ensure that the system is installed in accordance with the standards and enter the corresponding NFPA **Edition**.
2. Enter the **System deviations from referenced NFPA standards**.
3. Enter the **Printed name, Organization, Title, Date** and **Phone** details of the person verifying the system installation.
4. Under **Record of System Operation**, select the required checkboxes to ensure that the system operation is in accordance with the standards and enter the corresponding NFPA **Edition**.
5. Enter the **Printed name**, **Organization, Title, Date** and **Phone** details of the person monitoring the system operation.

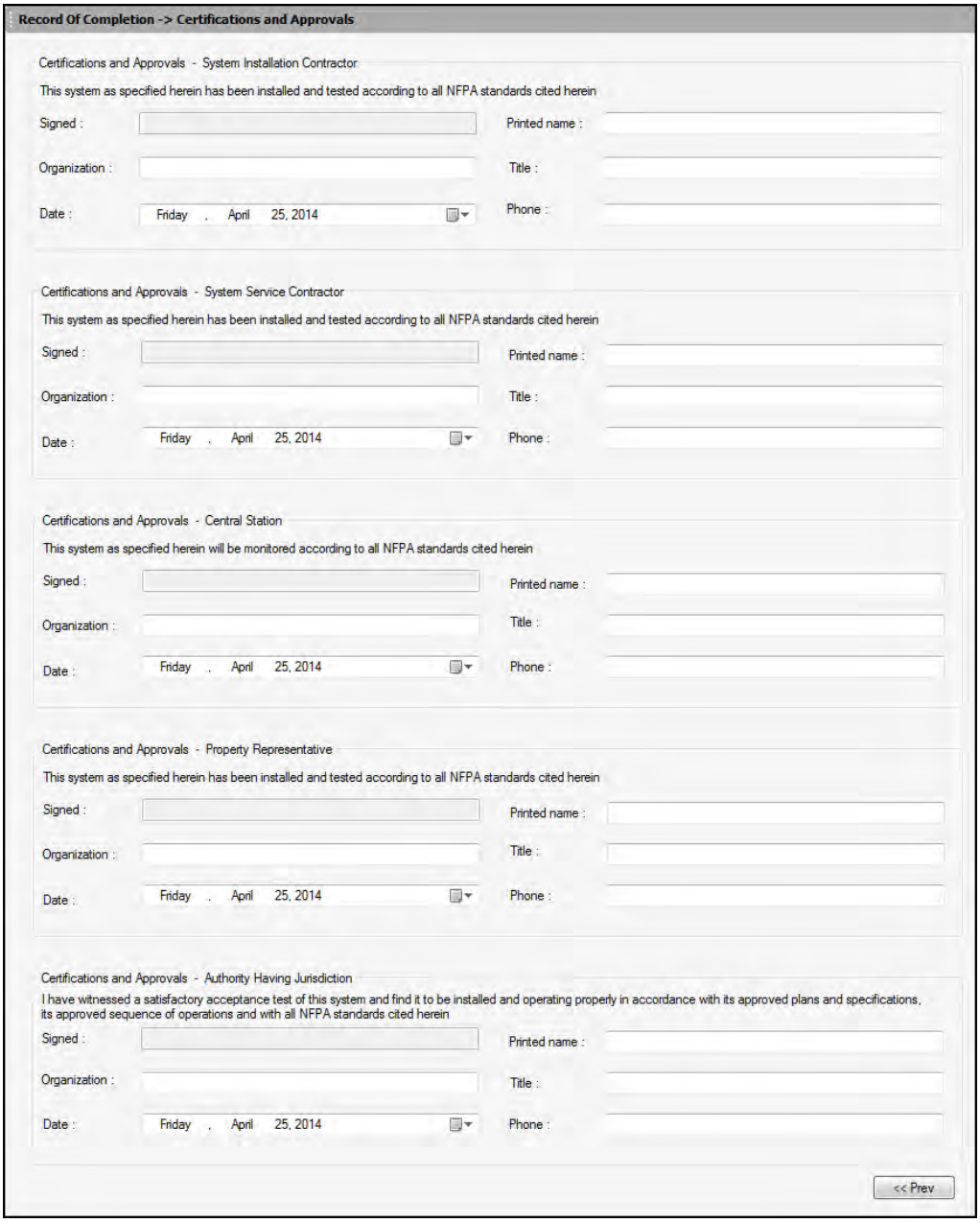
Click **Next** or click **Certifications and Approvals** in the left pane to certify and approve the **Record of completion**.

Click **Prev** to go back to **System Power Supply.**

Certifications and Approvals

This pane allows you to get the certification and approvals from the following personnel, specifying that the system is installed and tested according to the NFPA standards.

- System installation contractor
- System service contractor
- Central Station
- Property Representative
- Authority Having Jurisdiction



obtain the Certification and Approvals:

1. Type the **Printed name, Organization, Title, Date** and **Phone** details from the **System Installation Contractor**.

2. Similarly fill in the details for **System Service Contractor, Central Station, Property Representative and Authority Having Jurisdiction**.

Click Prev to go back to **Record of System Installation and System Operation**.
To configure the **Inspection and Testing** click **File > NFPA Report Requisite > Inspection and Testing**.

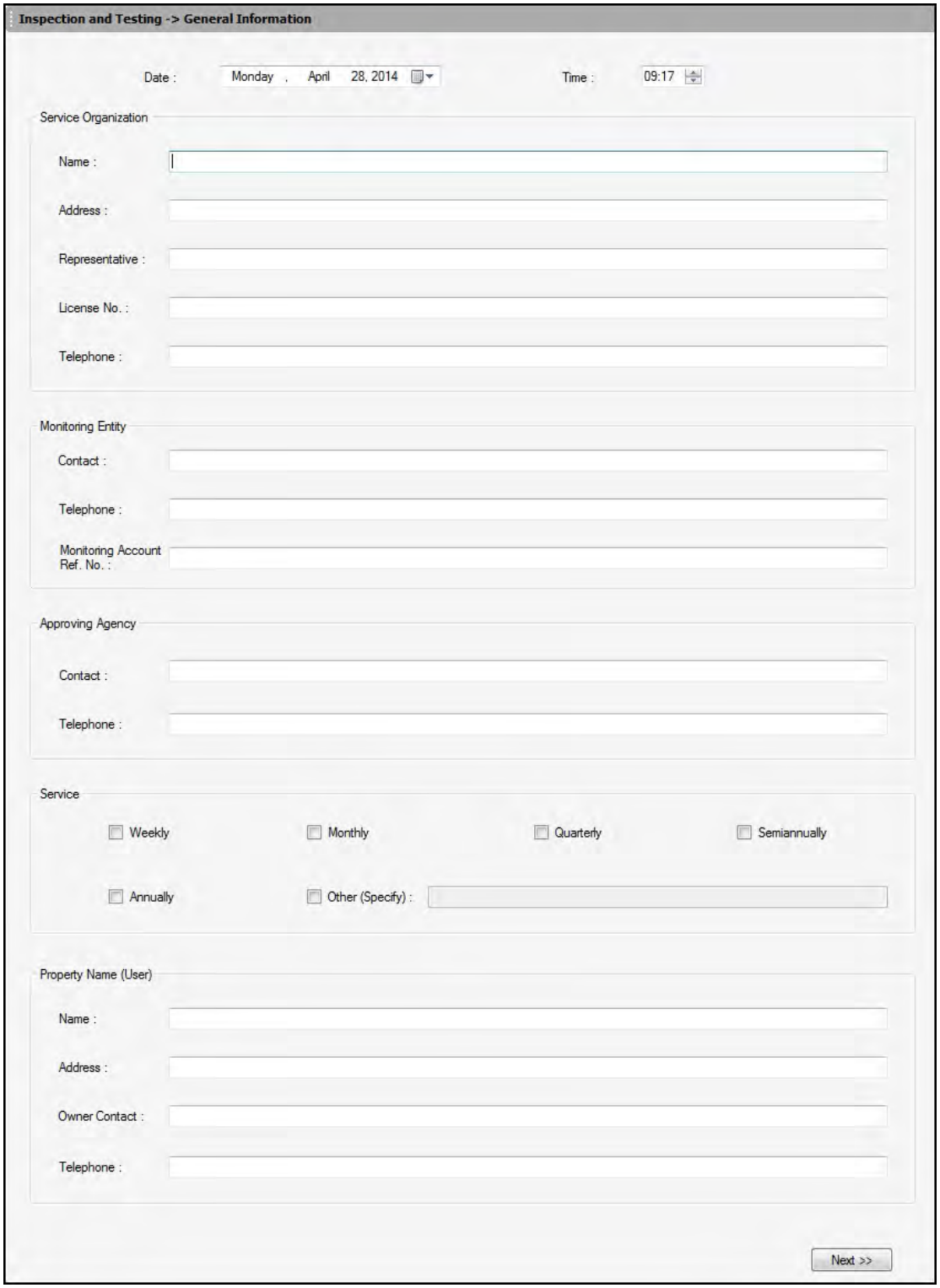
Configuring Inspection and Testing

In FS-Tools, configuring the Inspection and Testing involves the following steps.

1. Configuring General Information
2. Configuring Type Transmission
3. Configuring the Signaling Line Circuits
    a. Alarm Initiating Devices
    b. Alarm Notification Appliances
    c. Supervisory Signal-Initiating Devices
4. Configuring System Power supplies
5. Configuring Notifications Prior to Testing
6. Configuring System Tests and Inspections
7. Configuring Secondary Power
8. Configuring Combination Systems
9. Configuring Emergency Communication Equipment
10. Configuring Supervising Station Monitoring
11. Obtaining Notifications and Approvals

General Information

The General Information pane allows you to enter the information about Service Organization, Monitoring Entity, Approving Agency, Service and Property details.



To configure the General Information:

Select the **Date** and **Time** for general information from the drop-down menus.

1. Enter the **Name, Address, Representative, License Number** and **Telephone Number *of the* Service Organization**.

2. Enter the **Contact, Telephone**, and **Monitoring Account Ref Number** of the **Monitoring Entity**.

3. Enter the **Contact** and **Telephone Number** of the **Approving Agency**.

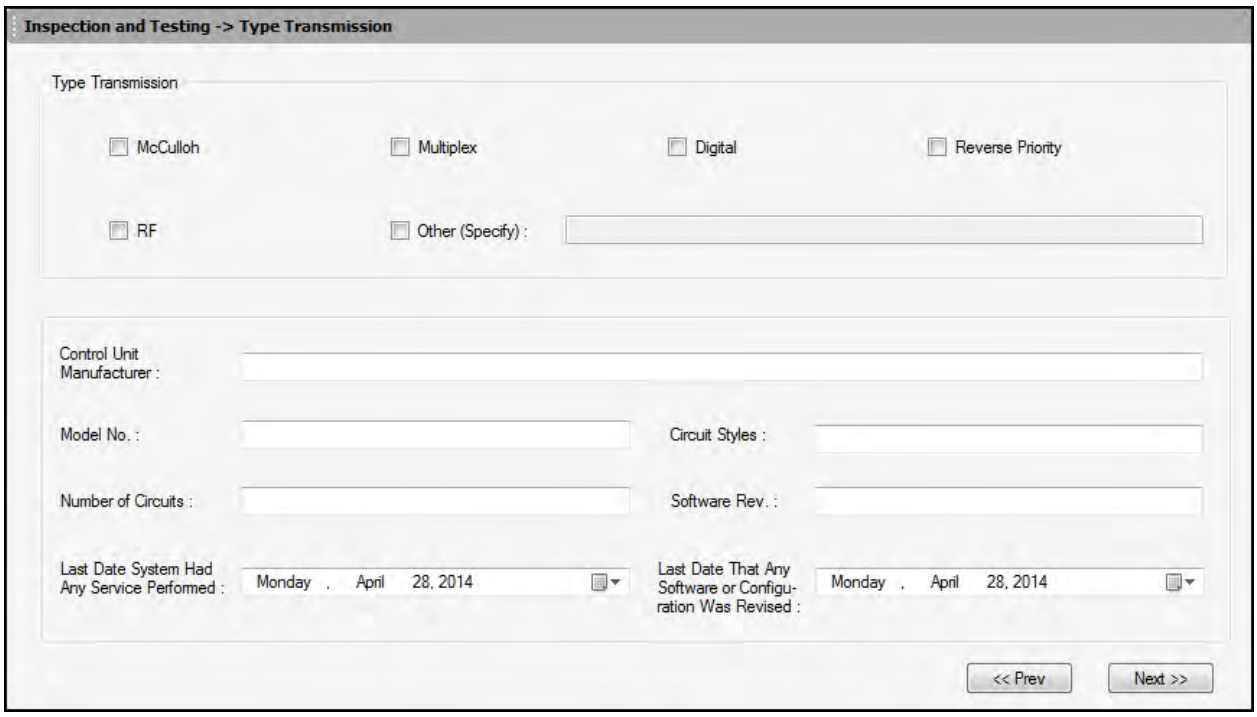
4. Select the required maintenance schedule from the **Service** checkbox.

5. Enter the **Name, Address, Owner Contact,** and **Telephone number** of the **Property Name (User)**.

Click **Next** or click **Type Transmission** node in the left pane to configure the transmission type.

Type Transmission

The Type Transmission pane allows you to enter the details about the type of transmission, control unit, Model Number, Software revisions, date of service and configuration revision.



To configure the Type Transmission:

1. Select the required check box for Transmission Type.

2. Enter the **Control Unit of the Manufacturer, Model No, Circuit Style, Number of Circuits** and **Software Rev** of the transmission.

3. Select the date of **Last Date of System service** and **Last date of Software or Configuration revision** from the drop-down menus.

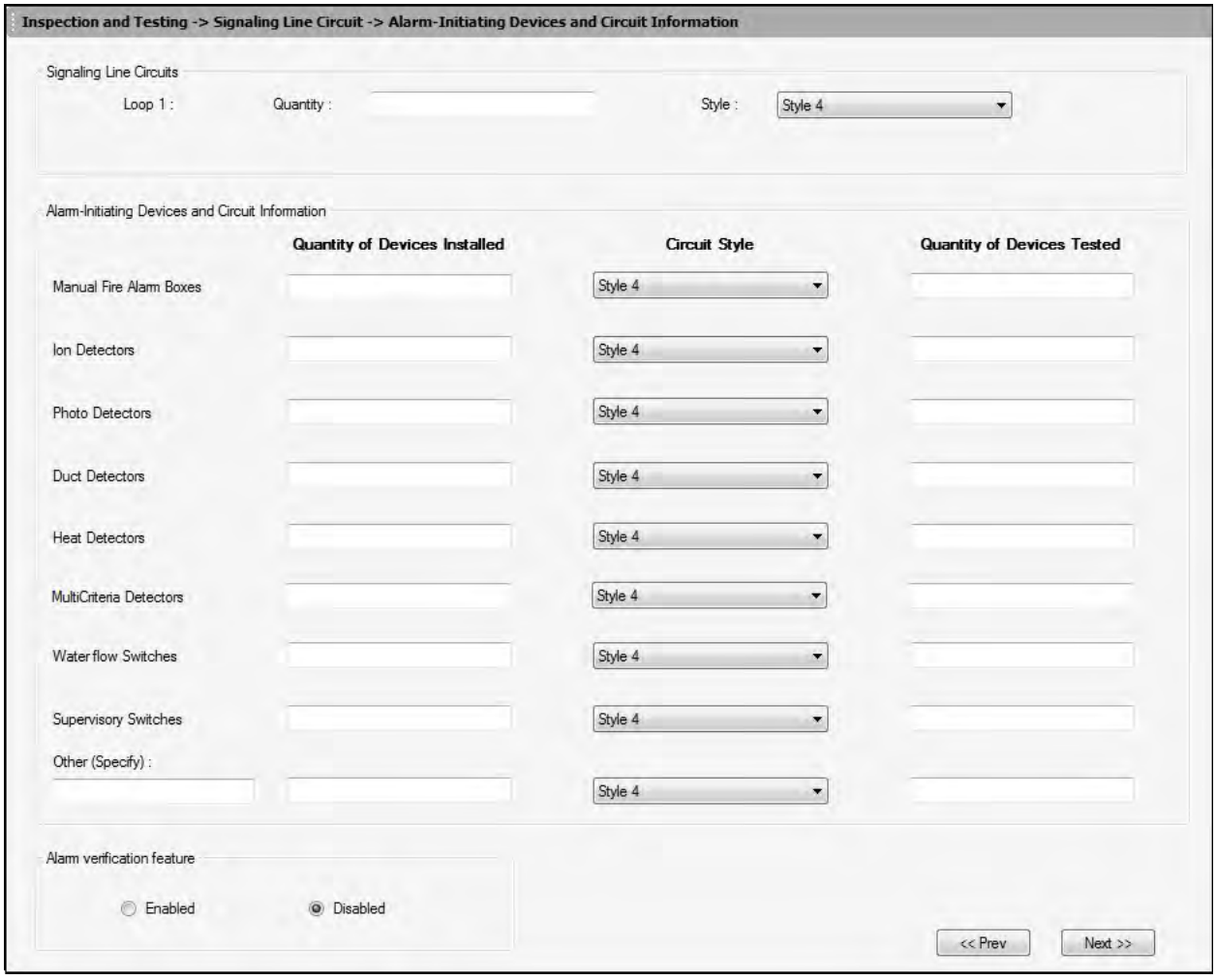
Click **Next** or click **Signaling Line Circuits** in the left pane to configure the signaling line circuits.

Click **Prev** to go back to **General Information.**

Signaling Line Circuit

Alarm Initiating Devices and Circuit Information

The Alarm Initiating Devices and Circuits pane allows you to enter the information about the quantity of devices installed, Circuit style and Quantity of devices tested.



To configure the Alarm-Initiating Devices and Circuit Information:

1. Under Signaling Line circuits, enter the number of devices configured in fire panel configuration in **Quantity** for **Loop1**.

2. Select the **Style** configured in FACP programming for **Loop1**.

3. Under **Alarm Initiating Devices and Circuit Information**, enter the **Quantity of Devices Installed** in panel configuration for each of the following:

- Manual Fire Alarm boxes
- Ion Detectors
- Photo Detectors
- Duct Detectors
- Heat Detectors
- Water flow switches
- Supervisory switches
- Other (Specify)

4. Select the corresponding **Circuit Style** for the devices installed

5. Enter the corresponding **Quantity of Devices Tested** from the devices installed.

6. Click **Enable** to enable the **Alarm Verification feature**.

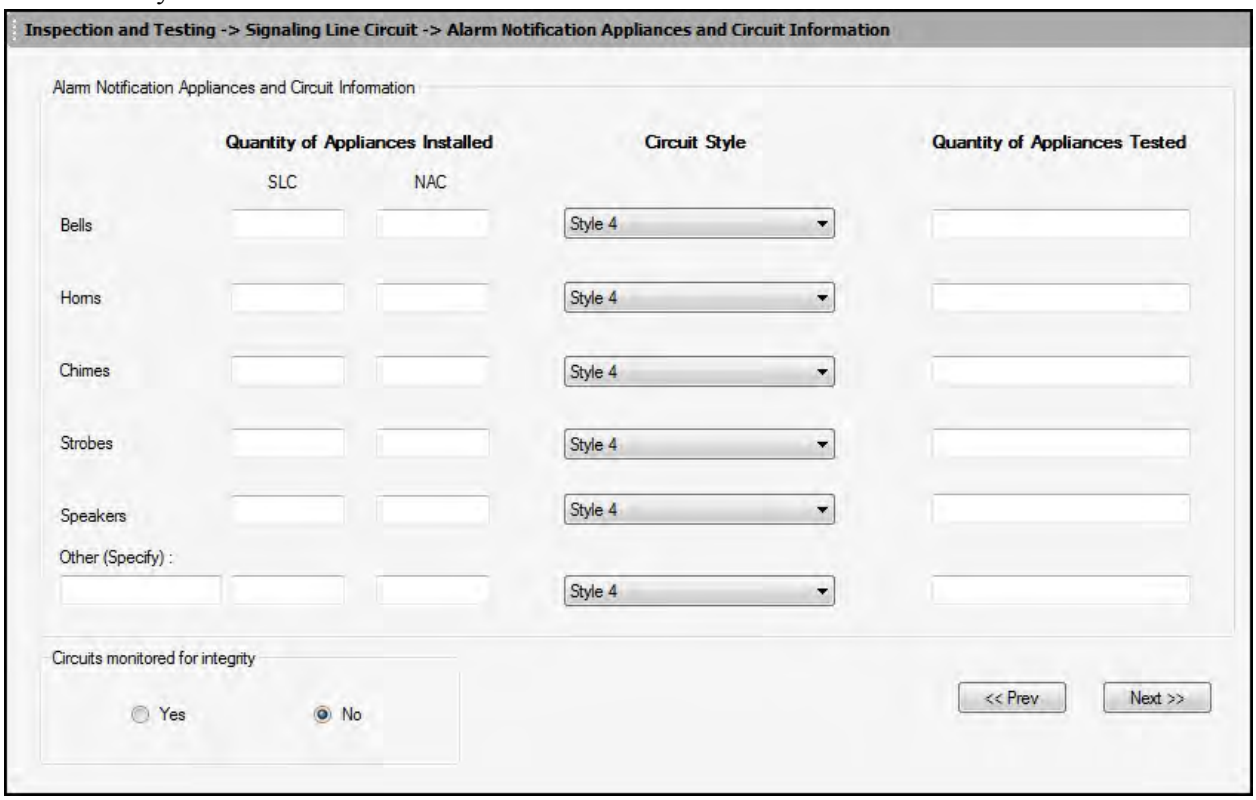
Note: When all the detectors are in alarm verification state, the radio button is enabled. By default, the button is disabled.

Click **Next** or click **Alarm Notification Appliances** in the left pane to configure the alarm notification appliances and circuit information.

Click **Prev** to go back to **Type Transmission.**

Alarm Notification Appliances

The alarm notification appliances pane allows you to configure the quantity of appliances installed, tested, and circuit style.



To configure the Alarm Notification Appliances and circuit information:

1. Under **Alarm Notification Appliances and Circuit Information**, enter the **Quantity of Appliances Installed** (configured in FACP programming under **SLC** and **NAC** for the following:

- Bells
- Horns
- Chimes
- Strobes
- Speakers
- Other (Specify)

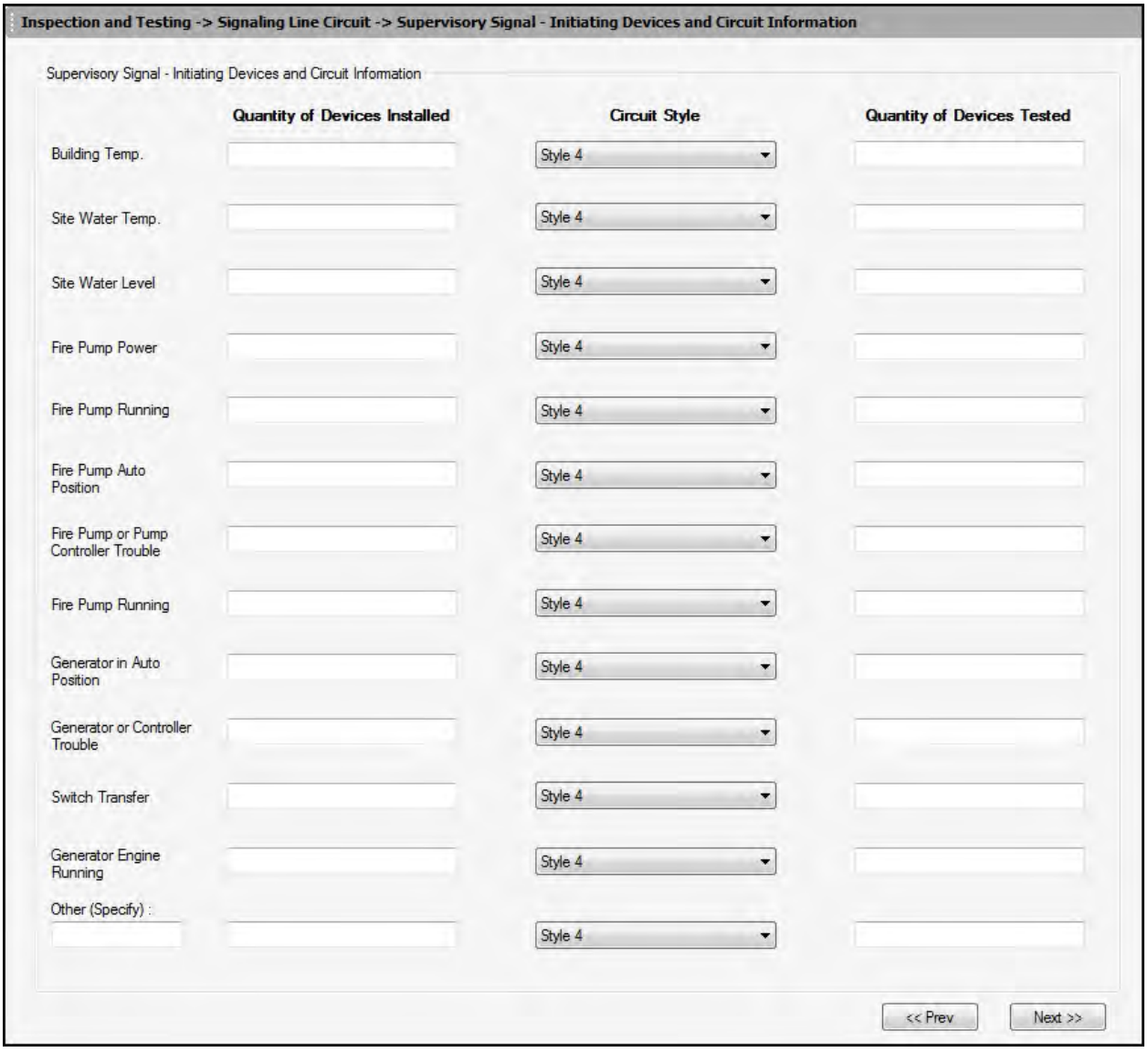
2. Select the corresponding **Circuit Style** for the Appliances installed.
3. Enter the corresponding **Quantity of Appliances Tested** from the Appliances installed.
4. Click **Yes** to confirm the circuits monitored for integrity.

Click **Next** or click **Supervisory Signal - Initiating Devices** in the left pane, to configure the Supervisory Signal - Initiating Devices and Circuit Information.

Click **Prev** to go back to **Signaling Line Circuits -Alarm Initiating Devices and Circuits.**

Supervisory Signal - Initiating Devices and Circuit Information

The Supervisory Signal - Initiating Devices pane allows you to enter the information about the quantity of devices installed, Circuit style and Quantity of devices tested.



To configure the Supervisory Signal - Initiating Devices and Circuit Information:

1. Under Supervisory Signal - Initiating Devices and Circuit Information, enter the **Quantity of Devices Installed** for the following:

- Building Temp
- Site Water Temp
- Site Water Level
- Fire Pump Power
- Fire Pump Running
- Fire Pump Auto Position
- Fire Pump or Pump Controller Trouble
- Generator in Auto Position
- Generator or Controller Trouble
- Switch Transfer
- Generator Engine Running
- Other (Specify)

2. Select the corresponding **Circuit Style** for the devices installed.

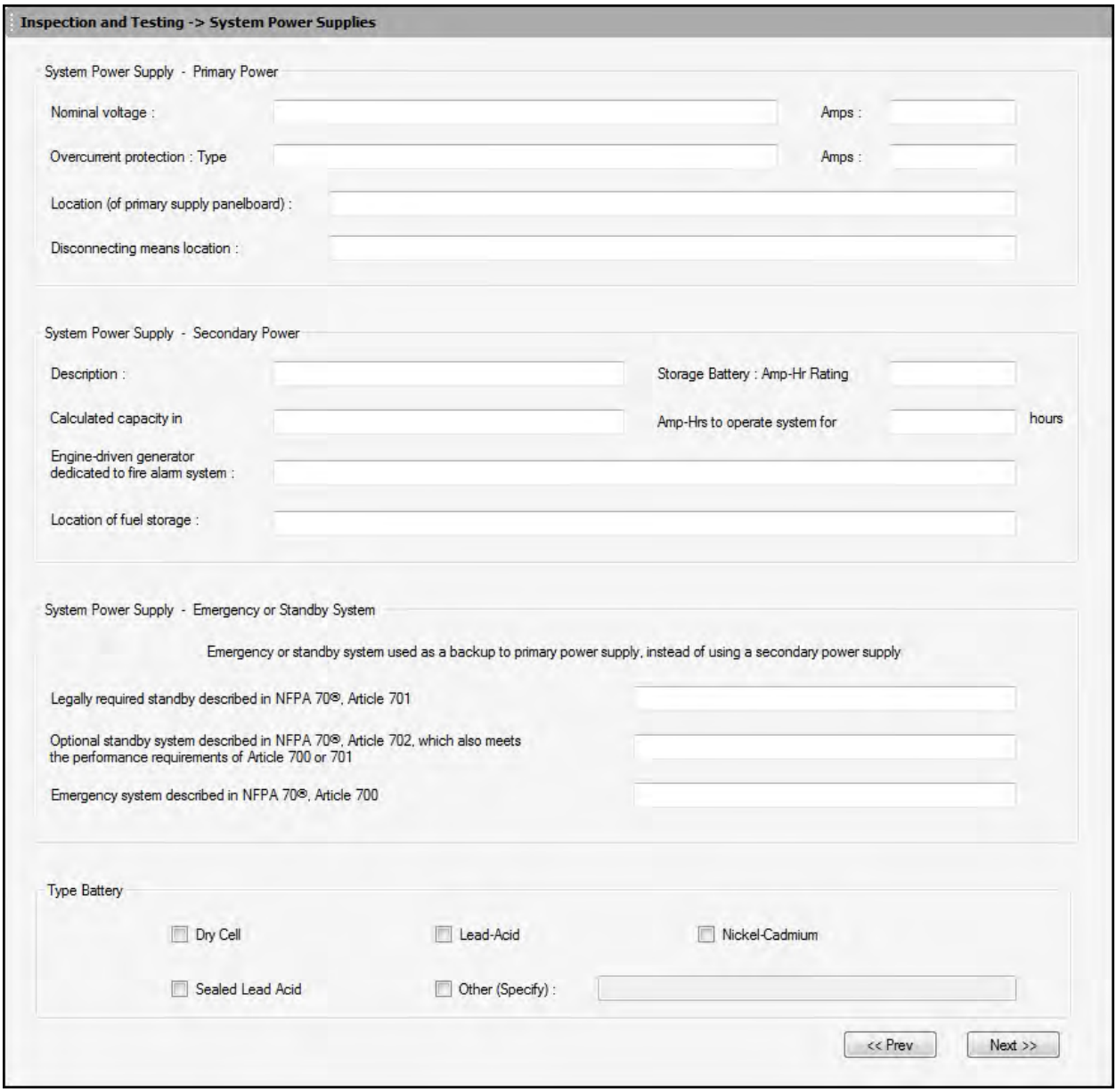
3. Enter the corresponding **Quantity of Devices Tested** from the devices installed.

Click **Next** or click **System Power Supplies** in the left pane to configure the System Power Supply.

Click **Prev** to go back to **Alarm Notification Appliances.**

System Power Supplies

The system power supplies pane allows you to configure the primary power, secondary power, and the standby System.



configure the system power supply:

1. Enter the **Nominal voltage value** and **Amps** for the primary power source.

2. Enter the **Overcurrent protection Type** and **Amps** for the primary power source.

3. Enter the **Location of primary supply panel board** for the primary power source.

4. Enter the **Disconnecting means location** for the primary power source.

5. Under Secondary power, enter the name of the **Storage Battery** and its **Amp Hr Rating** for the secondary power source.

6. Enter the **Calculated capacity** and **Amp Hrs** needed to operate the system for the secondary power source.

7. Enter the name of the **Engine driven generator dedicated to fire alarm system** and its **Amp hour rating**.

8. Enter the **Location of fuel storage.**

9. Under **Emergency or Standby System**, enter the name of the **legally required standby system described in NFPA 70, Article 701.**

10. Enter the **Optional standby system described in NFPA 70, Article 702**.

11. Enter the name of the **Emergency system described in NFPA 70, Article 700.**

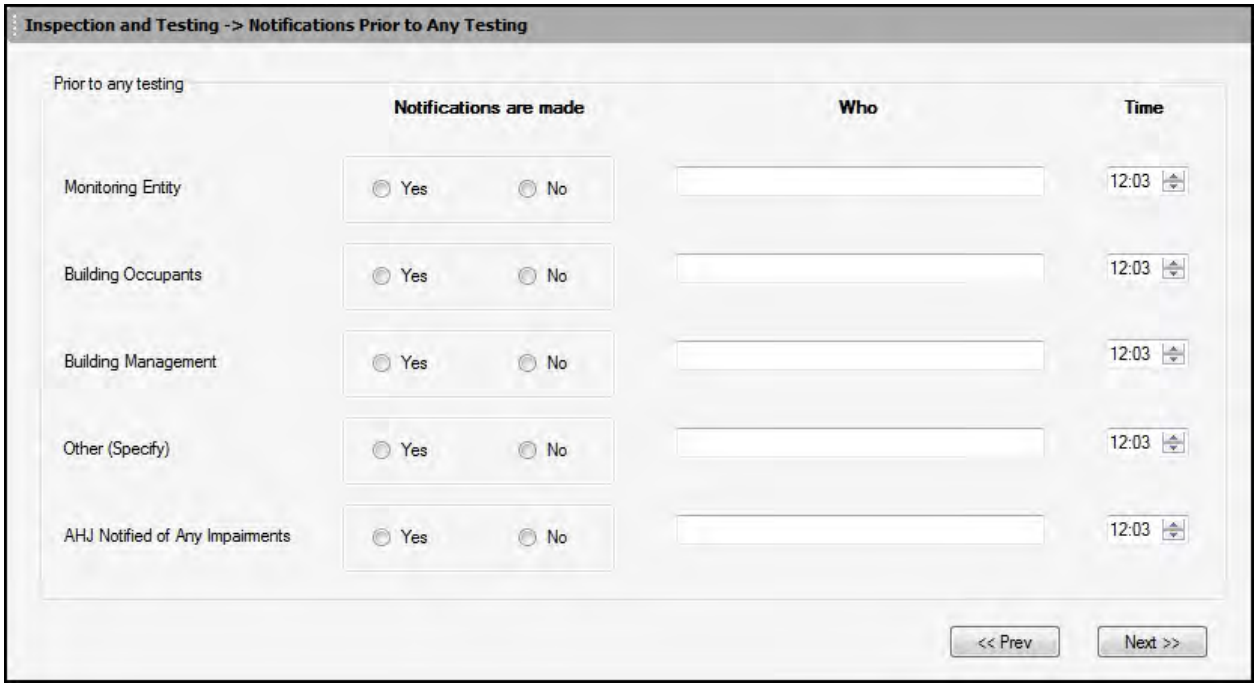
12. Select the required check box under **Battery type**.

Click **Next** or click **Notifications Prior to any Testing** in the left pane to configure the Notifications.

Click **Prev** to go back to **Supervisory Signal - Initiating Devices and Circuit Information**.

Notifications Prior to Testing

The Notifications Prior to any testing pane allows you to set the notifications and time on monitoring entities, building occupants, and building Management.



To configure the Notifications:

1. Click the specific option to confirm the **Notifications are made** by monitoring Entity.

2. In the **Who** text box type the name of the person through whom the notifications are made.

3. Select the **Time** at which the notifications are made.

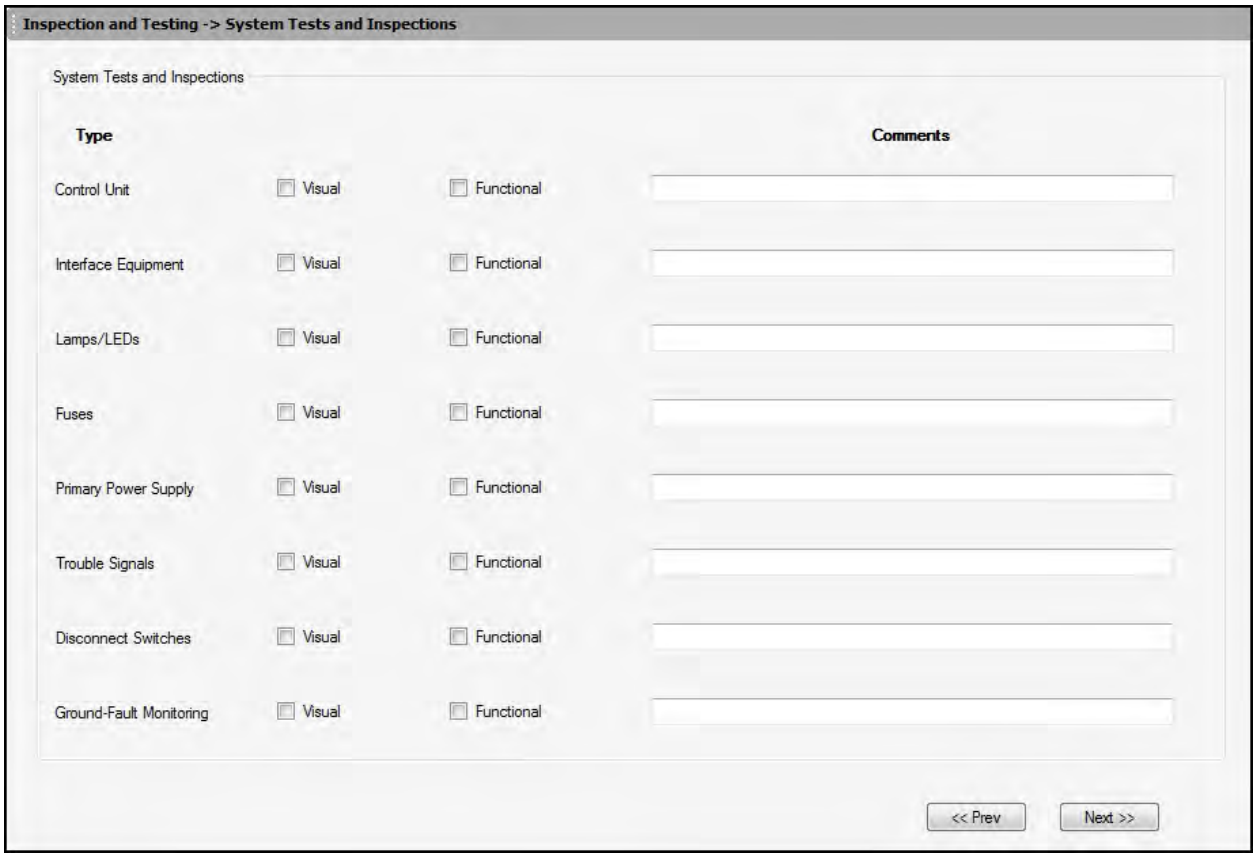
4. Repeat steps 1 through 3 for **Building Occupants, Building Management, Others** and **AHJ Notified of Any Impairments**.

Click **Next** or click **System Tests and Inspections** in the left pane to configure the system tests and inspections.

Click **Prev** to go back to **System Power Supplies.**

System Tests and Inspections

The system tests and inspection pane allows you to configure the test and inspections type for control units, interface equipment, lamps/LEDs, fuses, power supply, trouble signals, disconnect switches, and ground fault monitoring.



To configure the System Tests and Inspections:

Select the **Visual** or **Functional** checkbox for the following, and type any suitable comments:

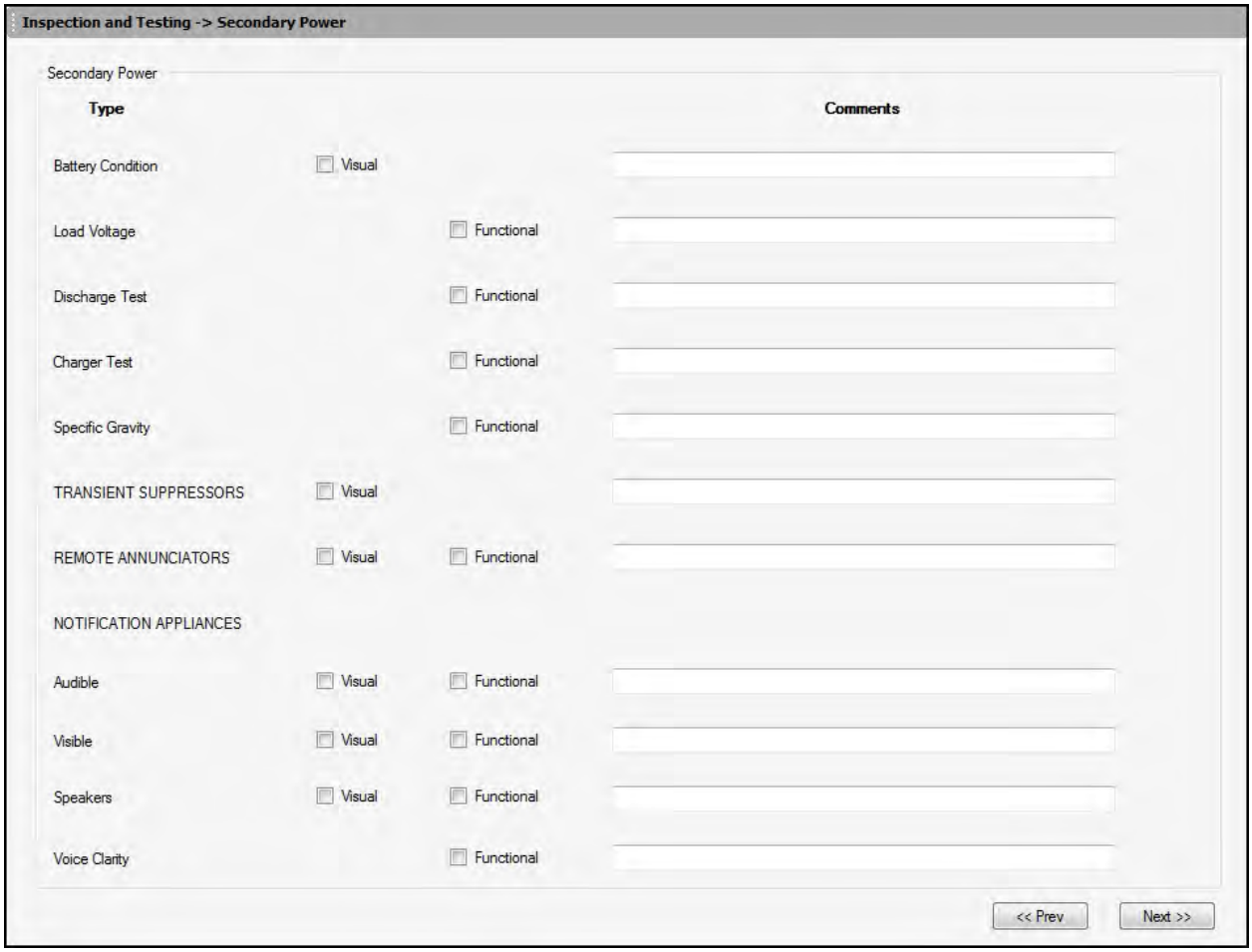
- Control Unit
- Interface Equipment
- Lamps/LEDs
- Fuses
- Primary Power Supply
- Trouble Signals
- Disconnect Switches
- Ground Fault Monitoring

Click **Next** or click **Secondary Power** in the left pane to configure the secondary power type.

Click **Prev** to go back to **Notifications Prior to any Testing.**

Secondary Power

The secondary power pane allows you configure the type of secondary power and notification appliances for panels.



To configure the Secondary power:

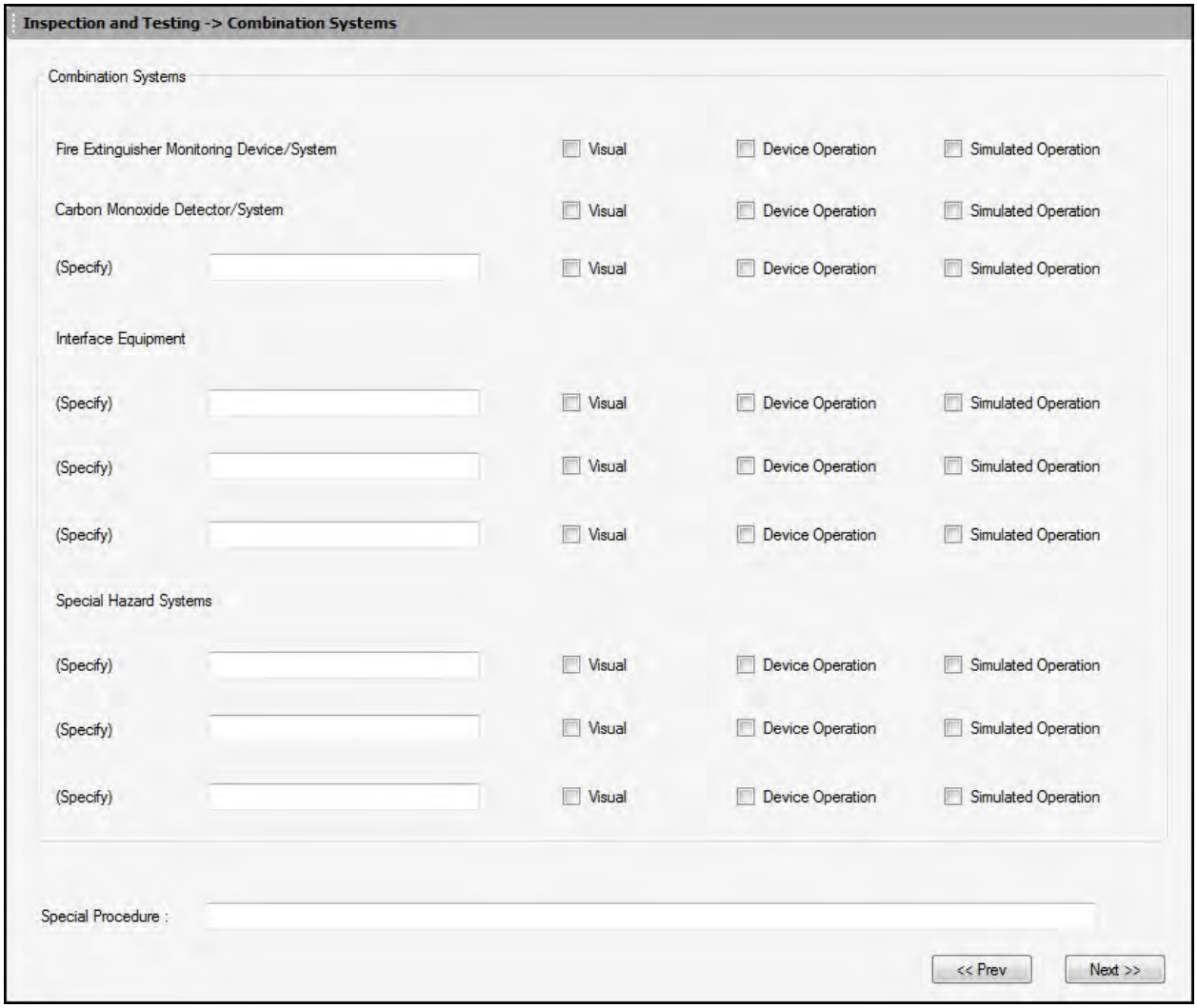
1. Under **Type,** select the **Visual** checkbox and type any comments for **Battery Condition**.
2. Select the **Functional** checkbox and type any comment for **Load Voltage, Discharge Test, Charger Test,** and **Specific Gravity**.
3. Select the **Visual** checkbox and type any comment for **Transient Suppressors**.
4. Select the required checkbox for **Remote Annunciators** and type any comment.
5. Under **Notification Appliances**, select the required checkbox and type any comments for the **Audible, Visible** and **Speakers** appliances.
6. Select the **Functional** checkbox and type any comment for **Voice Clarity**.

Click **Next** or click **Combination Systems** in the left pane, to configure the combination systems.

Click **Prev** to go back to **System Tests and Inspections.**

Combination Systems

The Combination Systems pane allows you to enter the information about different Devices/System and equipment.



To configure the Combination Systems:

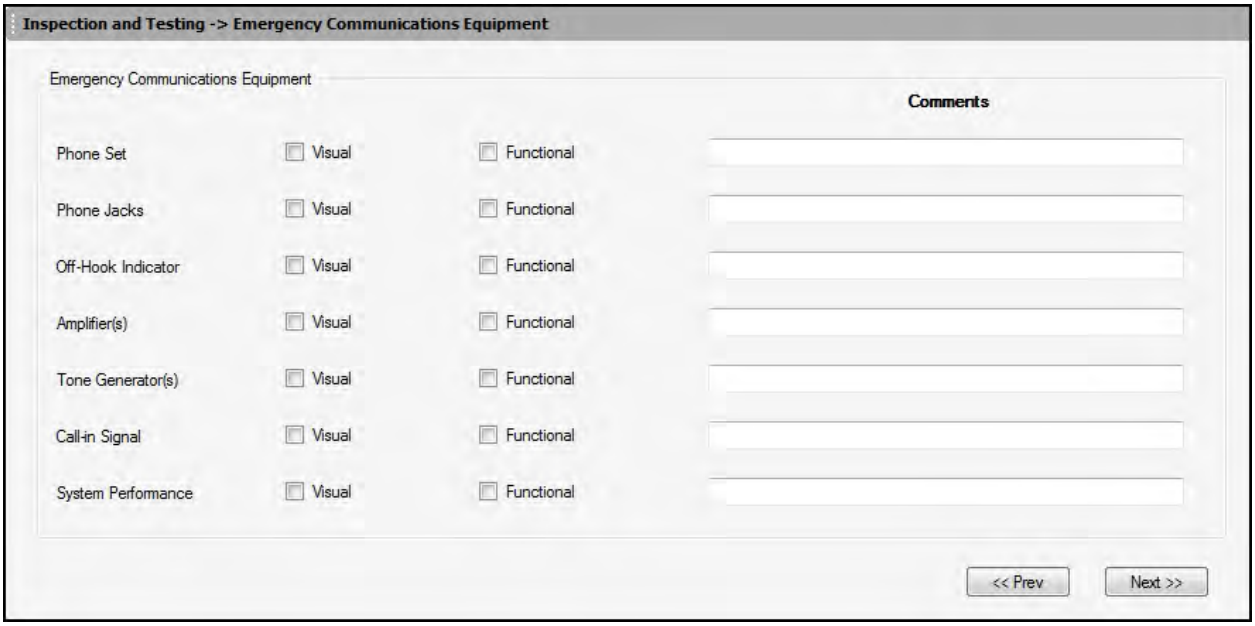
1. Select the required checkboxes for **Fire Extinguisher Device/System** and **Carbon Monoxide Detector/System**.
2. Specify other **Device/System** and select the appropriate checkboxes.
3. Under **Interface Equipment**, specify/type the equipment and click the required checkboxes.
4. Under **Special Hazard Systems**, specify/type the **Systems** and click the required checkboxes.
5. Enter the description of the **Special Procedure**.

Click **Next** or click **Emergency Communication Equipment** in the left pane to configure the Emergency Communication Equipment.

Click **Prev** to go back to **Secondary Power.**

Emergency Communication Equipment

The Emergency Communication Equipment pane allows you to configure the communication equipment.



To configure the Emergency Communication Equipment:

1. Under **Emergency Communication Equipment** select the appropriate checkbox and type the comments for the following:

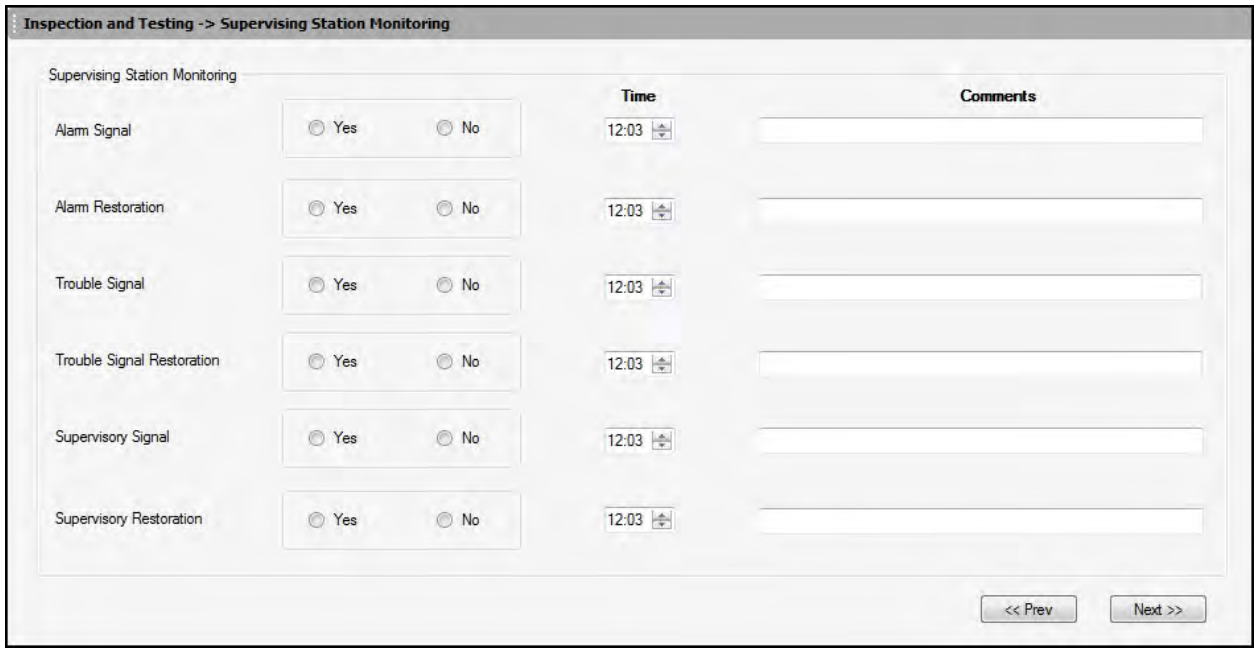
- Phone Set
- Phone Jacks
- Off Hook Indicator
- Amplifiers
- Tone Generators
- Call-in signal
- System Performance

Click **Next** or click **Supervising Station Monitoring** in the left pane to set the Notification and get the approvals.

Click **Prev** to go back to **Combination Systems.**

Supervising Station Monitoring

The Supervising Station Monitoring pane allows you to configure the Station Monitoring devices.



To configure the Supervising Station Monitoring:

1. Under **Supervising Station Monitoring**,

a. Click the required **Yes/No** options.

b. Type or select the required time in the **Time** box.

c. Type any comments in the **Comments** text box for the following:

- Alarm Signal
- Alarm Restoration
- Trouble Signal
- Trouble Signal Restoration
- Supervisory Signal
- Supervisory Restoration

Click **Next** or click **Notification and Approvals** in the left pane to set the Notification and get the approvals.

Click **Prev** to go back to **Emergency Communication Equipment.**

Notifications and Approvals

The Notification and Approvals pane allows you to set testing and functional notifications and to get approval in accordance with the applicable NFPA standards.

To set the Notifications and get the approval:

1. Under **Notification that testing is complete**,

a. Confirm whether or not **Notifications are made.**

b. Enter the name of the person through whom the notification and testing is completed in the **Who** text box.

c. Select the **Time** when the notifications are set for the following:

- Building Management
- Monitoring Agency
- Building Occupants
- Others

2. Under **Not functioning correctly**, enter the name of devices and system which are not functioning correctly and also enter the name of the system restored to normal operation.

3. Select the **Date** and **Time** to specify when the above testing is done.

4. Under **Approvals**, enter the **Name of the Inspector** who performed the testing in accordance with NFPA standards.

5. Select the **Date** and **Time** and get the **Signature**.

6. Enter the **Name** of the **Owner or Representative.**

7. Select the **Date** and **Time** and get the **Signature**.

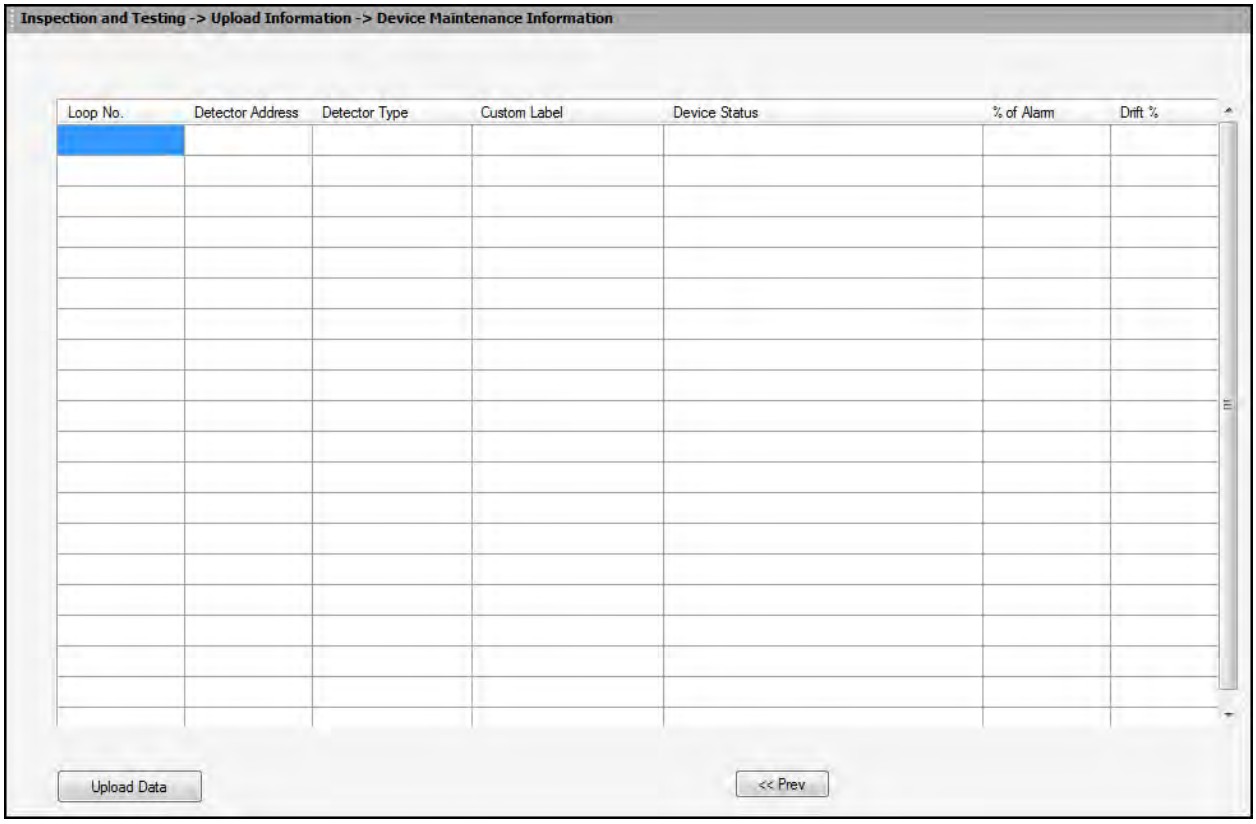
Click **Next** or click **Upload Information** in the left pane to upload the **Device Maintenance Information** in FS-Tools.

Click **Prev** to go back to **Emergency Communication Equipment.**

Upload Information

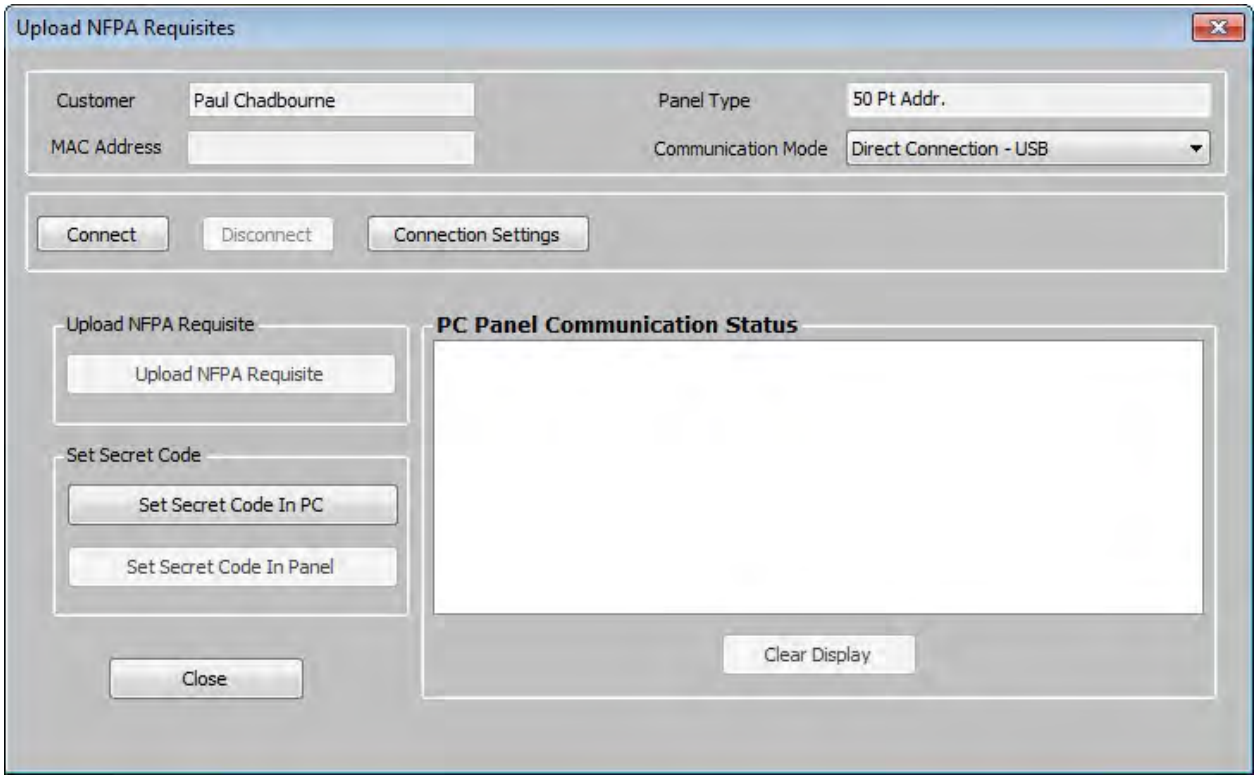
Device Maintenance Information

To upload the information, click **File > NFPA Report Requisite > Inspection and Testing > Upload Information > Device Maintenance Information.** The Device Maintenance Information pane appears.

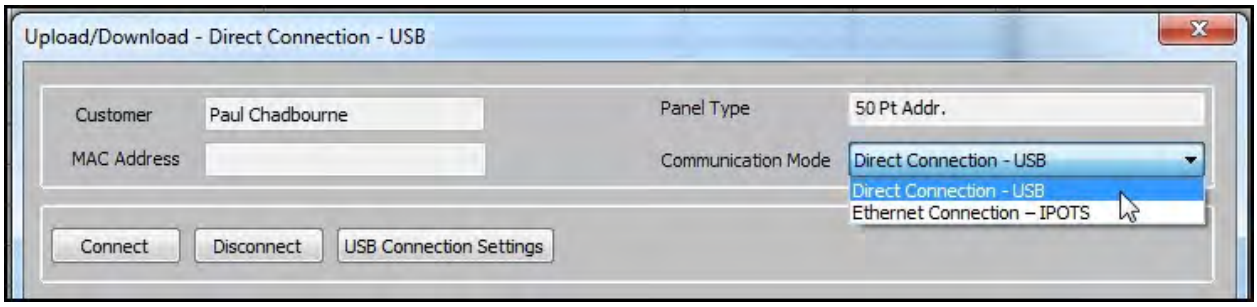


To upload Device Maintenance information from the fire panel:

1. In the Device Maintenance Information window, click the **Upload Data** button. The **Upload NFPA Requisites** dialog box appears.



2. Click the **Connection Settings** button. The **Connection Settings** dialog appears.

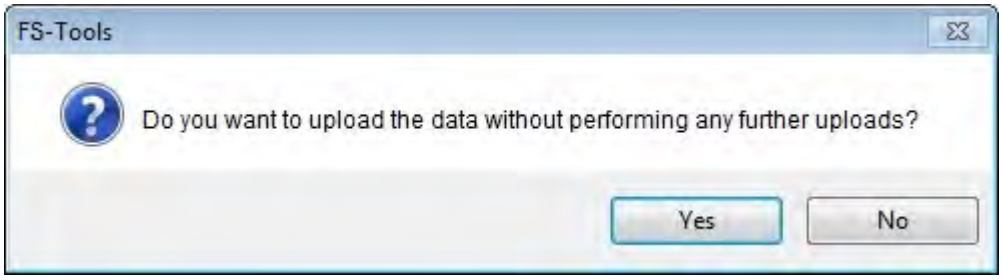


3. Select the required **Communication Mode** from the list. Settings for the selected communication mode are displayed.

4. Enter the required information in the fields and click the **Save and Exit** button. The selected **Communication Mode** is displayed in the corresponding field.

5. Click the **Connect** button. The **PC Panel Communication Status** displays the progress and communication status.

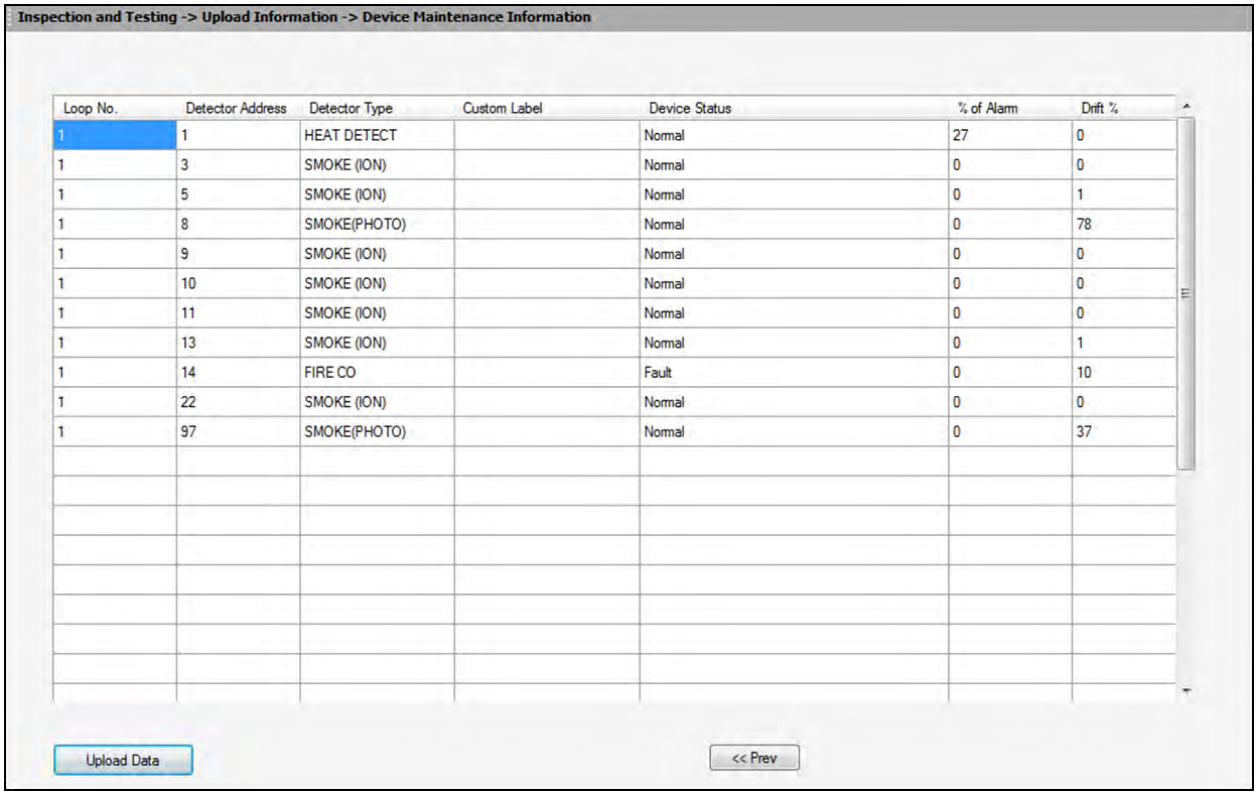
Note: If the connection to PC Panel is successful, the **Upload NFPA Requiste** and **View Upload Files** buttons are enabled under Upload NFPA Requisite.



6. Click **OK** in the confirmation message.

7. Click **Upload NFPA Requisite** button under **Upload NFPA Requisite**. The device maintenance information is uploaded from the fire panel and the **Device Maintenance Information** table displays the uploaded data as shown below.

Note: If the Device Maintenance Information is not uploaded, you cannot view the Uploaded Files.



8. Click the **Close** button to close the **Upload NFPA Requisites** dialog box.

9. Click the **Save to Database** button. The **Save confirmation** box appears.

10. Click **OK** to confirm.

Click the **Return to Main Screen** button to view the main screen.

Click **Prev** to go back to the **Notification and Approvals** dialog box.

Reports Menu

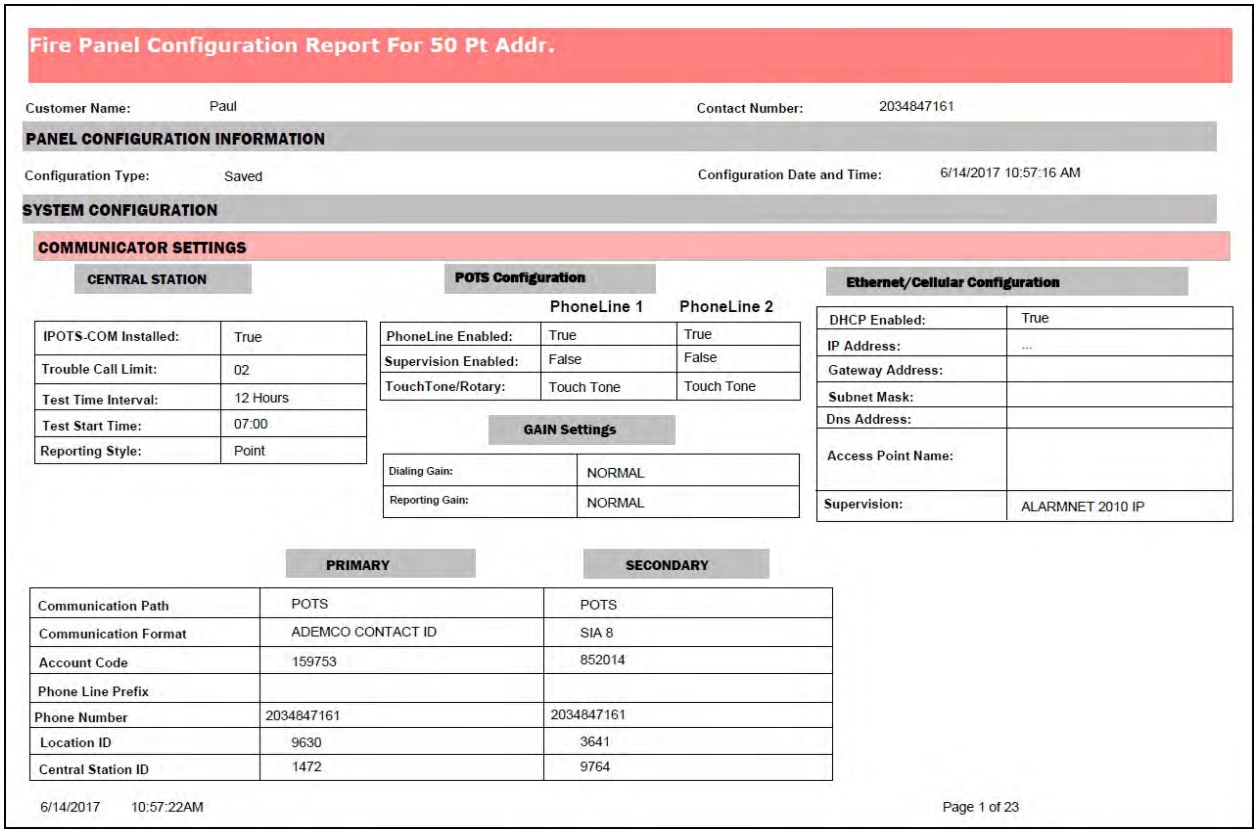
Configuration Data Report

Using the **Reports** option in FS-Tools, you can generate the configuration data report, which gives the configuration information of the input, output, and optional modules, and the fire alarm system settings. This report is generated as a *PDF* file. You can store the reports to maintain the configuration information of the fire panel at different times and dates. A printout of the configuration data report helps in manual verification of the fire alarm system settings.

To generate the report:

1. Select a customer record from the initial customer screen, using the **Find** option if necessary.

2. Choose **Reports** > **Configuration Data** in the initial customer screen in FS-Tools.



Fire Panel Configuration Report For 50 Pt Addr.

Customer Name: Paul Contact Number: 2034847161

PANEL CONFIGURATION INFORMATION

Configuration Type: Saved Configuration Date and Time: 6/14/2017 10:57:16 AM

SYSTEM CONFIGURATION

COMMUNICATOR SETTINGS

CENTRAL STATION

IPOTS-COM Installed:	True
Trouble Call Limit:	02
Test Time Interval:	12 Hours
Test Start Time:	07:00
Reporting Style:	Point

POTS Configuration

	PhoneLine 1	PhoneLine 2
PhoneLine Enabled:	True	True
Supervision Enabled:	False	False
TouchTone/Rotary:	Touch Tone	Touch Tone

GAIN Settings

Dialing Gain:	NORMAL
Reporting Gain:	NORMAL

Ethernet/Cellular Configuration

DHCP Enabled:	True
IP Address:	...
Gateway Address:	
Subnet Mask:	
Dns Address:	
Access Point Name:	
Supervision:	ALARMNET 2010 IP

	PRIMARY	SECONDARY
Communication Path	POTS	POTS
Communication Format	ADEMCO CONTACT ID	SIA 8
Account Code	159753	852014
Phone Line Prefix		
Phone Number	2034847161	2034847161
Location ID	9630	3641
Central Station ID	1472	9764

6/14/2017 10:57:22AM Page 1 of 23

Note: You can generate the configuration report only for the configuration saved in the FS-Tools database. You cannot generate the report for *Factory Default* configuration.

By default, the configuration data report is stored in the C:\FS-Tools\Reports folder.

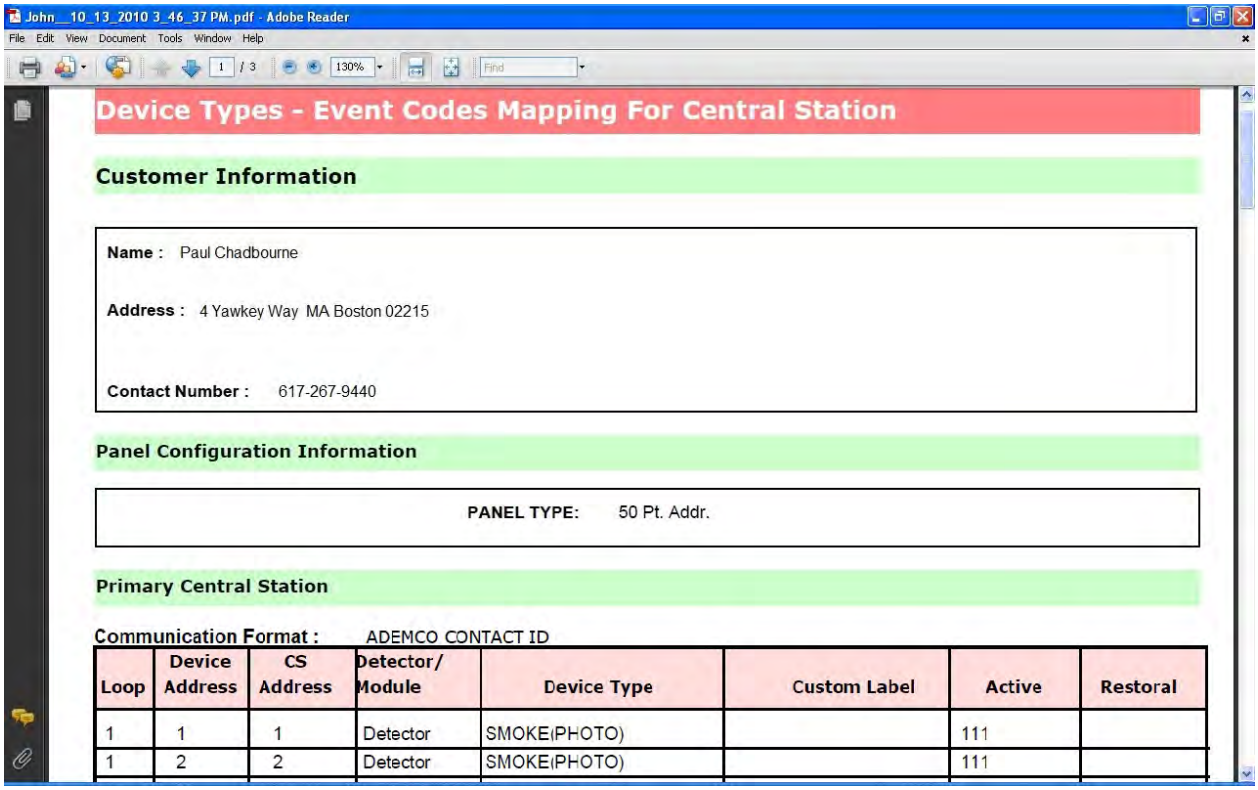
Central Station Report

Using the Reports option in FS-Tools, you can generate the central station report which prints the details of devices and their associated event codes. This report is displayed in a tabular format listing the Point troubles and their corresponding event codes. The report also displays the configured system event codes. This report can be generated as a *PDF* file and an *Excel* file.

Generate as PDF

1. Select a customer record from the initial customer screen. Use the **Find** option, if necessary.

2. Choose **Reports** > **Central Station Report** > **Export To PDF** in the initial customer screen in FS-Tools. The Central Station report for the selected customer is generated as a PDF file.



Note: You can generate the central station report only for the configuration saved in the FS-Tools database. You cannot generate the report for Factory Default configuration.

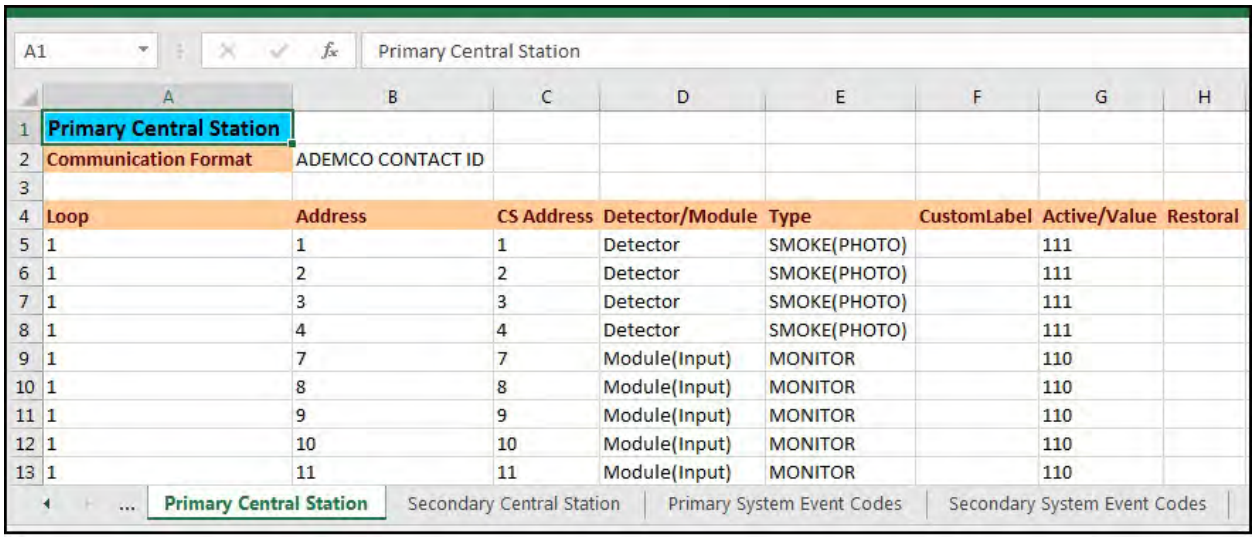
By default, the central station report is stored in the C:\FS-Tools\ReportsAddressable\PDFs.

Generate as Excel File

1. Select a customer record from the initial customer screen. Use the **Find** option, if necessary.

2. hoose **Reports** > **Central Station Report** > **Export To Excel** in the initial customer screen in FS-Tools.

3. A central Station report for the selected customer is generated as a Excel file. By default, the configuration data report is stored in the C:\FS-Tools\ReportsAddressable\Excel Folder. Save the file where desired.



	A	B	C	D	E	F	G	H
1	**Primary Central Station**							
2	**Communication Format**	ADEMCO CONTACT ID						
3								
4	**Loop**	**Address**	**CS Address**	**Detector/Module**	**Type**	**CustomLabel**	**Active/Value**	**Restoral**
5	1	1	1	Detector	SMOKE(PHOTO)		111	
6	1	2	2	Detector	SMOKE(PHOTO)		111	
7	1	3	3	Detector	SMOKE(PHOTO)		111	
8	1	4	4	Detector	SMOKE(PHOTO)		111	
9	1	7	7	Module(Input)	MONITOR		110	
10	1	8	8	Module(Input)	MONITOR		110	
11	1	9	9	Module(Input)	MONITOR		110	
12	1	10	10	Module(Input)	MONITOR		110	
13	1	11	11	Module(Input)	MONITOR		110	

Note: You can generate the configuration report only for the configuration saved in the FS-Tools database. You cannot generate the report for a *Factory Default* configuration.

NFPA Report

Record of Completion Report

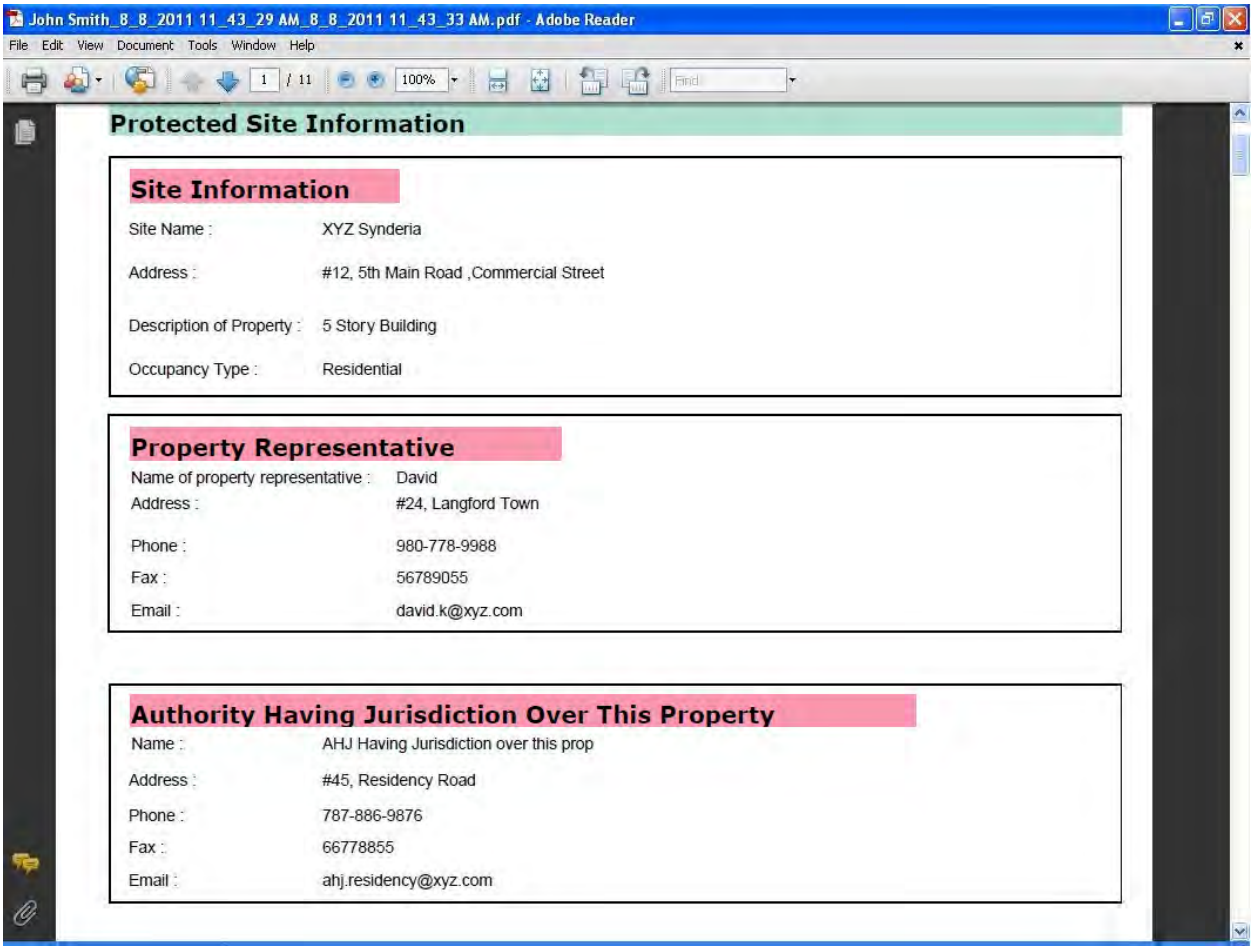
Generate as PDF

1. Select a customer record from the initial customer screen, using the **Find** option if necessary.

2. Choose **Reports > NFPA Report > Record of Completion > Export to PDF** in the initial customer screen in FS-Tools.

The Record of Completion Report for the selected customer is generated as a PDF file.

By default, the Record of Completion Report data is saved to the C:\FS-Tools\ReportsAddressable\PDF folder.



Note: You can generate the Record of Completion report only for the configuration saved in the FS-Tools database. You cannot generate the report for Factory Default configuration.

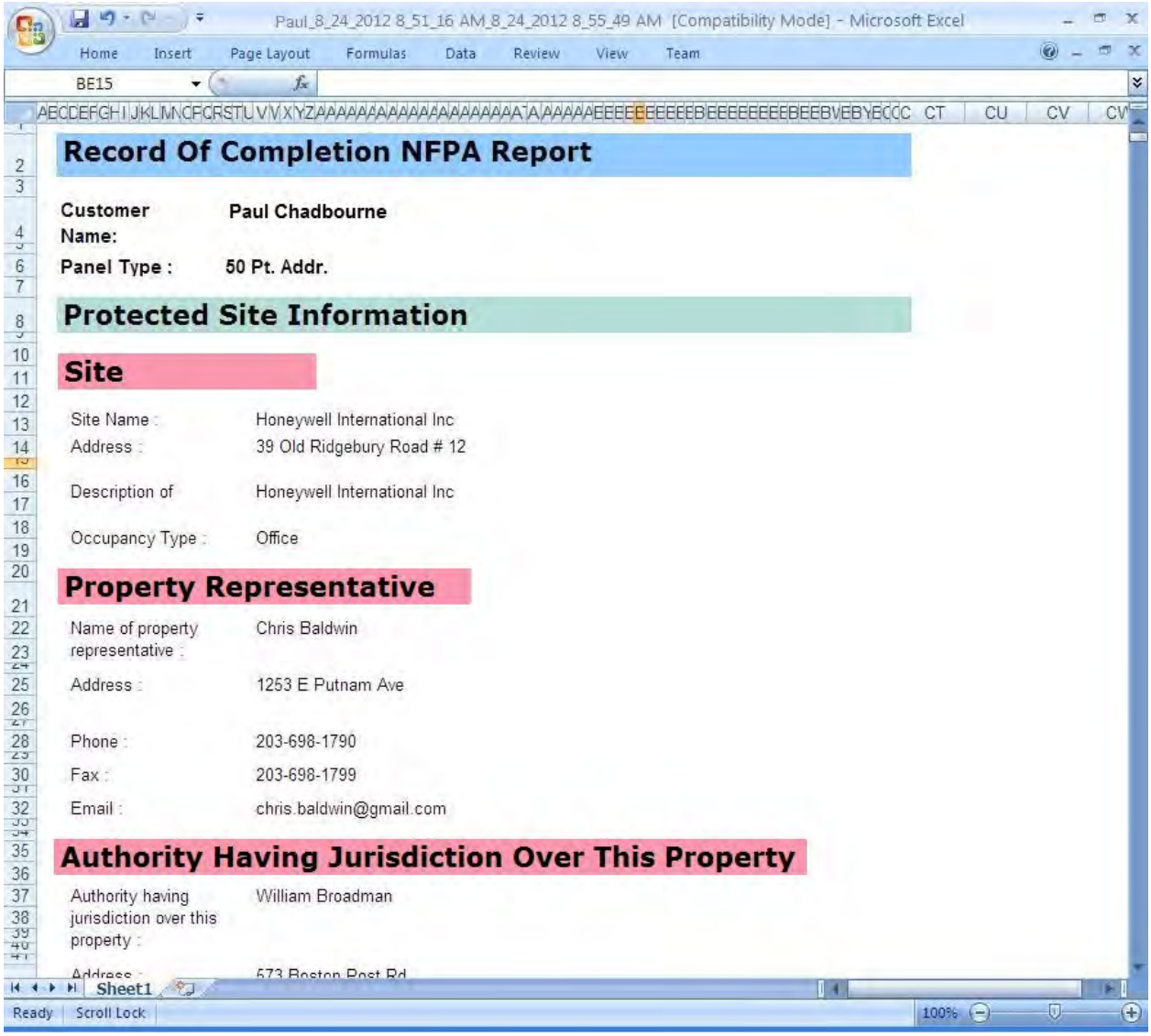
Generate as Excel File

1. Select a customer record from the initial customer screen, using the **Find** option if necessary.

2. hoose **Reports > NFPA Report > Record of Completion > Export to Excel** in the initial customer screen in FS-Tools.

The Record of Completion Report for the selected customer is generated as an Excel file.

By default, the Record of Completion Report data is saved to the C:\FS-Tools\ReportsAddressable\Excel folder.



Note: You can generate the Record of Completion report only for the configuration saved in the FS-Tools database. You cannot generate the report for Factory Default configuration.

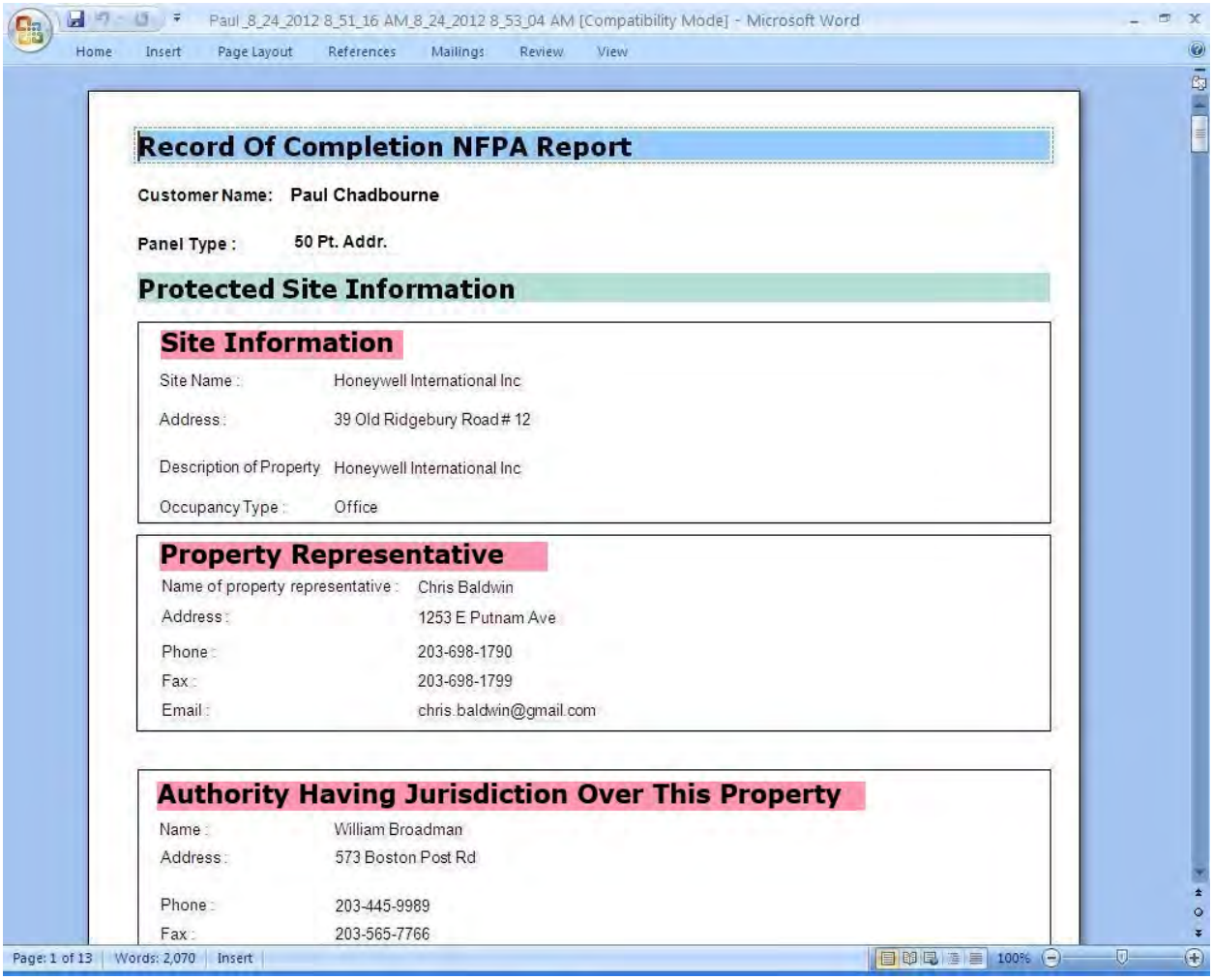
Generate as Word Document

1. Select a customer record from the initial customer screen, using the **Find** option if necessary.

2. Choose **Reports > NFPA Report > Record of Completion > Export to Word** in the initial customer screen in FS-Tools.

The Record of Completion Report for the selected customer is generated as a Word document.

By default, the Record of Completion Report data is stored in the C:\FS-Tools\ReportsAddressable\Word folder.



Note: You can generate the Record of Completion report only for the configuration saved in the FS-Tools database. You cannot generate the report for Factory Default configuration.

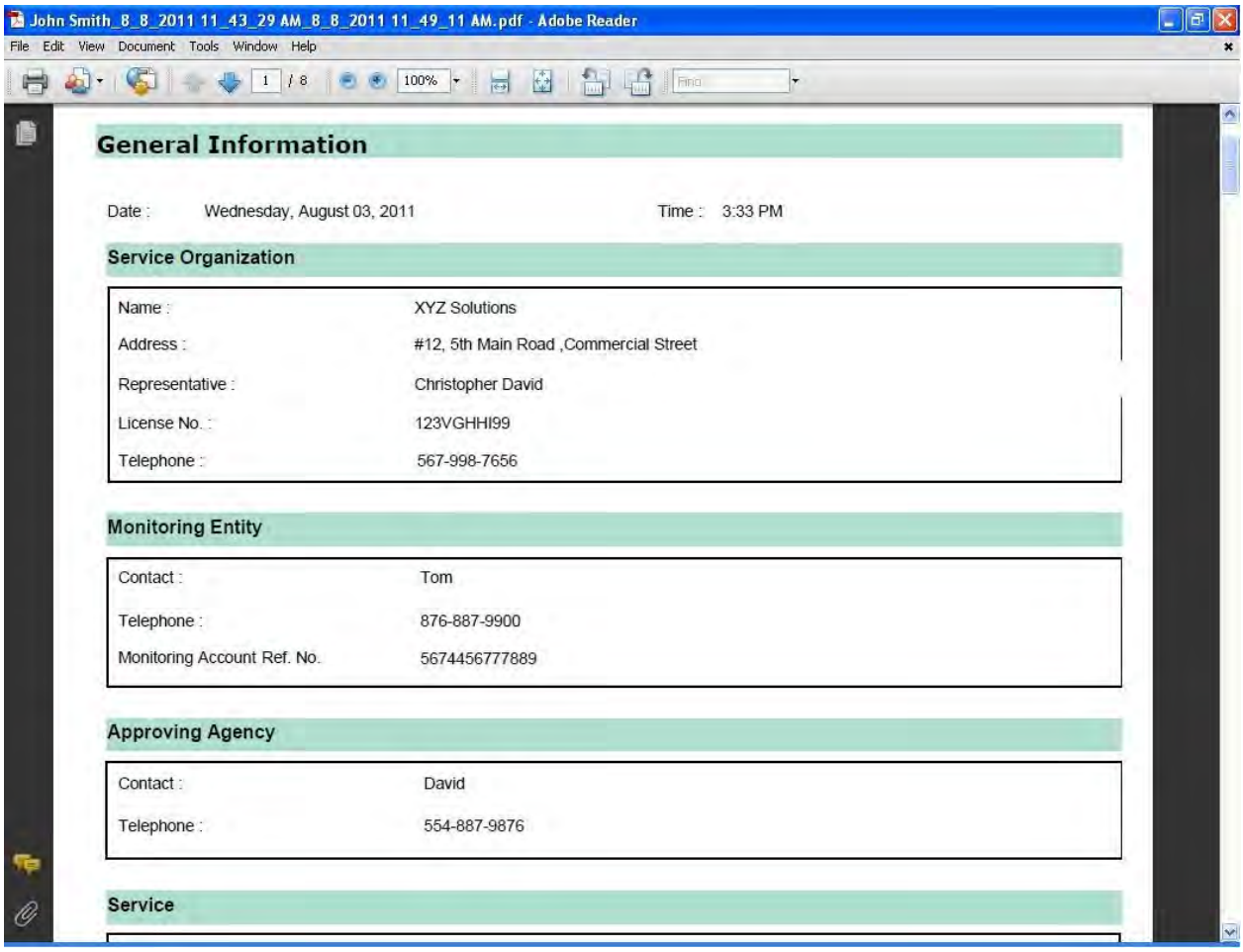
Inspection and Testing Report

Generate as PDF

1. Select a customer record from the initial customer screen, using the **Find** option if necessary.

2. Choose **Reports > NFPA Report > Inspection and Testing> Export to PDF** in the initial customer screen in FS-Tools.

The Inspection and Testing Report for the selected customer is generated as a PDF file.



Note: You can generate the Inspection and Testing report only for the configuration saved in the FS-Tools database. You cannot generate the report for Factory Default configuration.

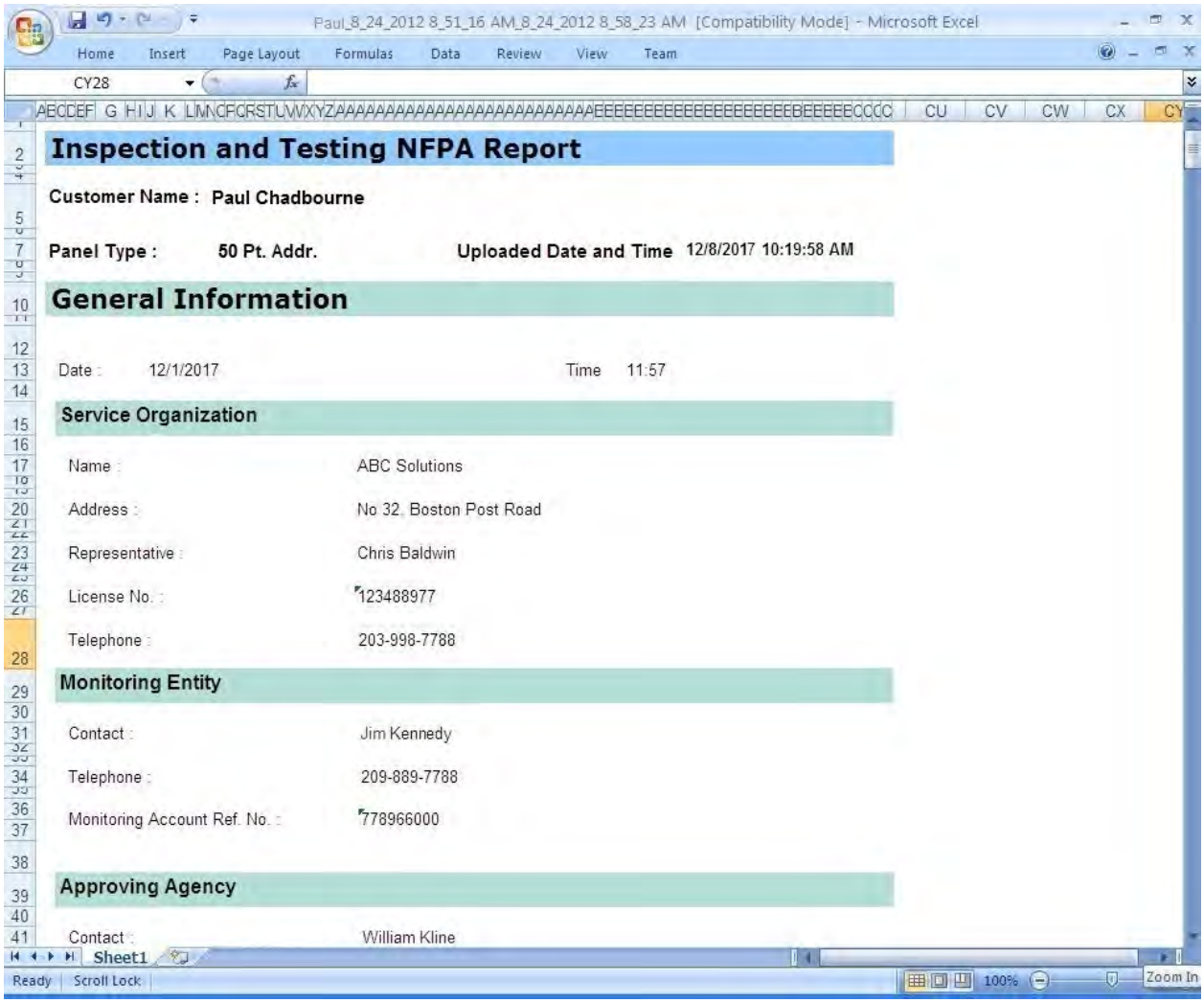
By default, the Inspection and Testing Report data is stored in the C:\FS-Tools\ReportsAddressable\PDF folder.

Generate as Excel File

1. Select a customer record from the initial customer screen, using the **Find** option if necessary.

2. Choose **Reports > NFPA Report > Inspection and Testing> Export to Excel** in the initial customer screen in FS-Tools.

The Inspection and Testing Report for the selected customer is generated as an Excel file.



Note: You can generate the Inspection and Testing report only for the configuration saved in the FS-Tools database. You cannot generate the report for Factory Default configuration.

By default, the Inspection and Testing Report data is stored in the C:\FS-Tools\ReportsAddressable\Excel folder.

Generate as Word Document

1. Select a customer record from the initial customer screen, using the **Find** option if necessary.

2. Choose **Reports > NFPA Report > Inspection and Testing> Export to Word** in the initial customer screen in FS-Tools.

The Inspection and Testing Report for the selected customer is generated as a Word document.

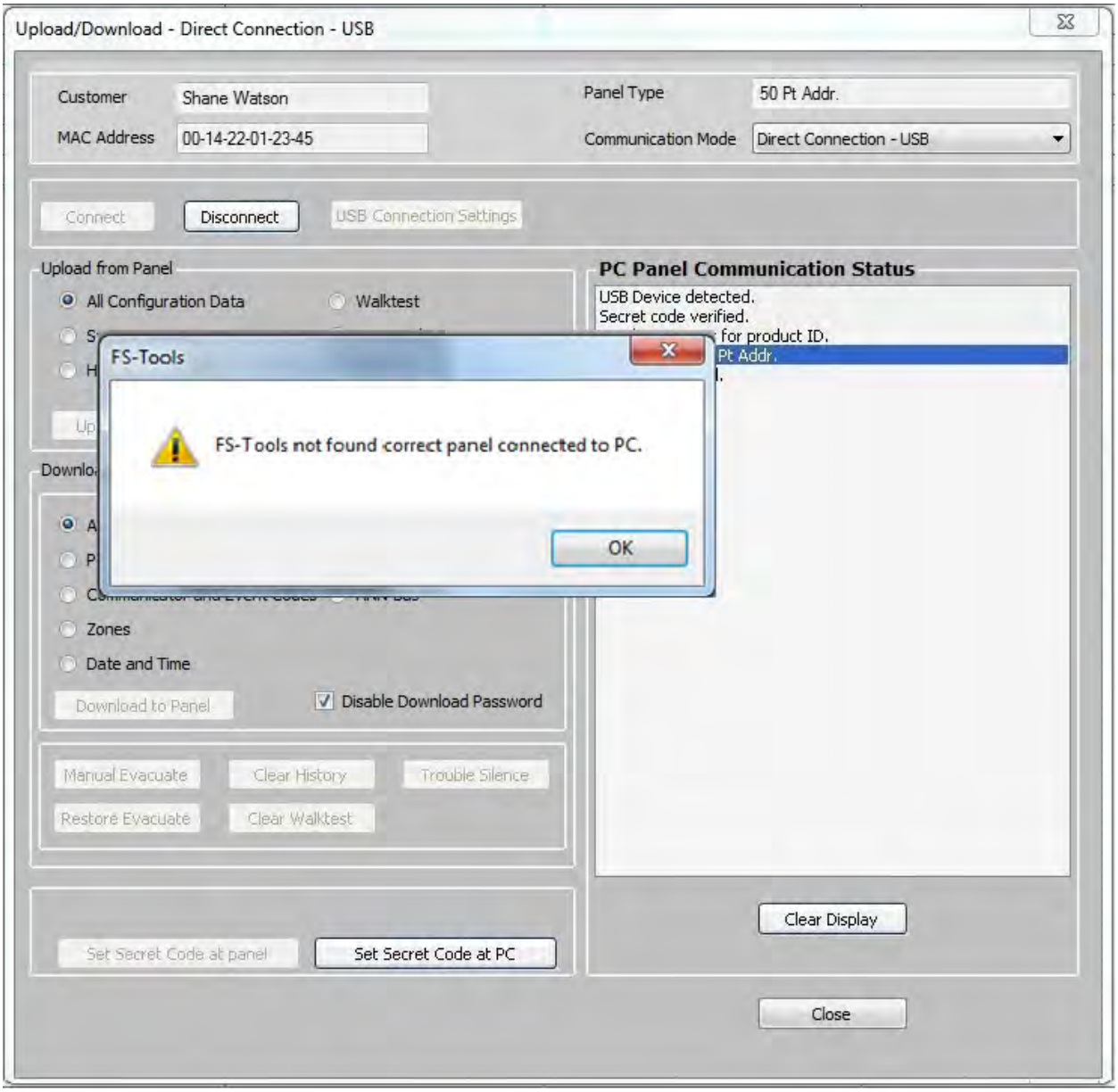
Note: You can generate the Inspection and Testing report only for the configuration saved in the FS-Tools database. You cannot generate the report for Factory Default configuration.

By default, the Inspection and Testing Report data is stored in the C:\FS-Tools\ReportsAddressable\Word folder.

Troubleshooting

Panel Connection Lost

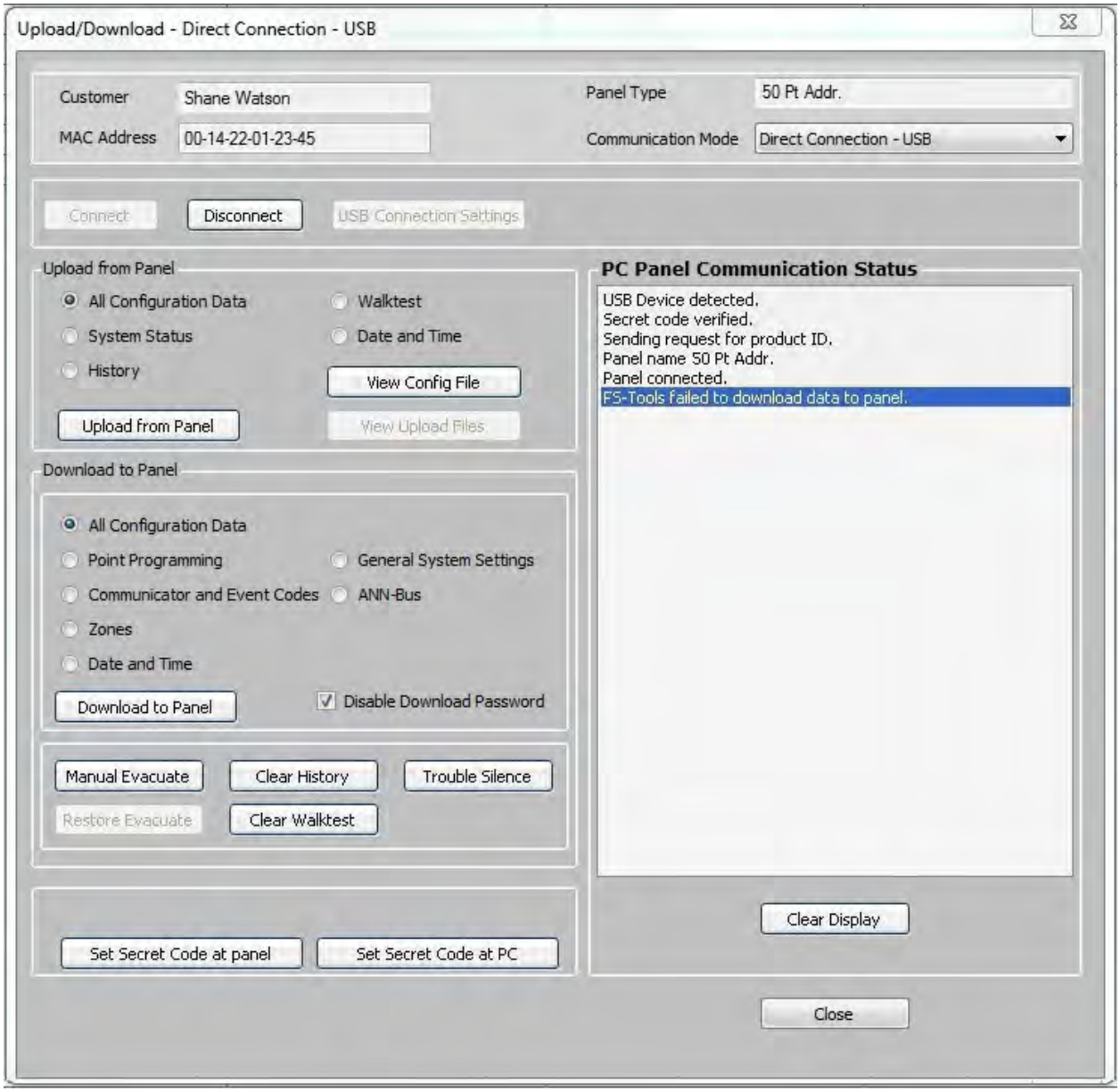
Trouble: The following message is displayed when the connection is lost between the computer and fire panel.



Resolution: Check the serial port connection between the computer and the fire panel.

FS-Tools Failed to Download Data to Panel

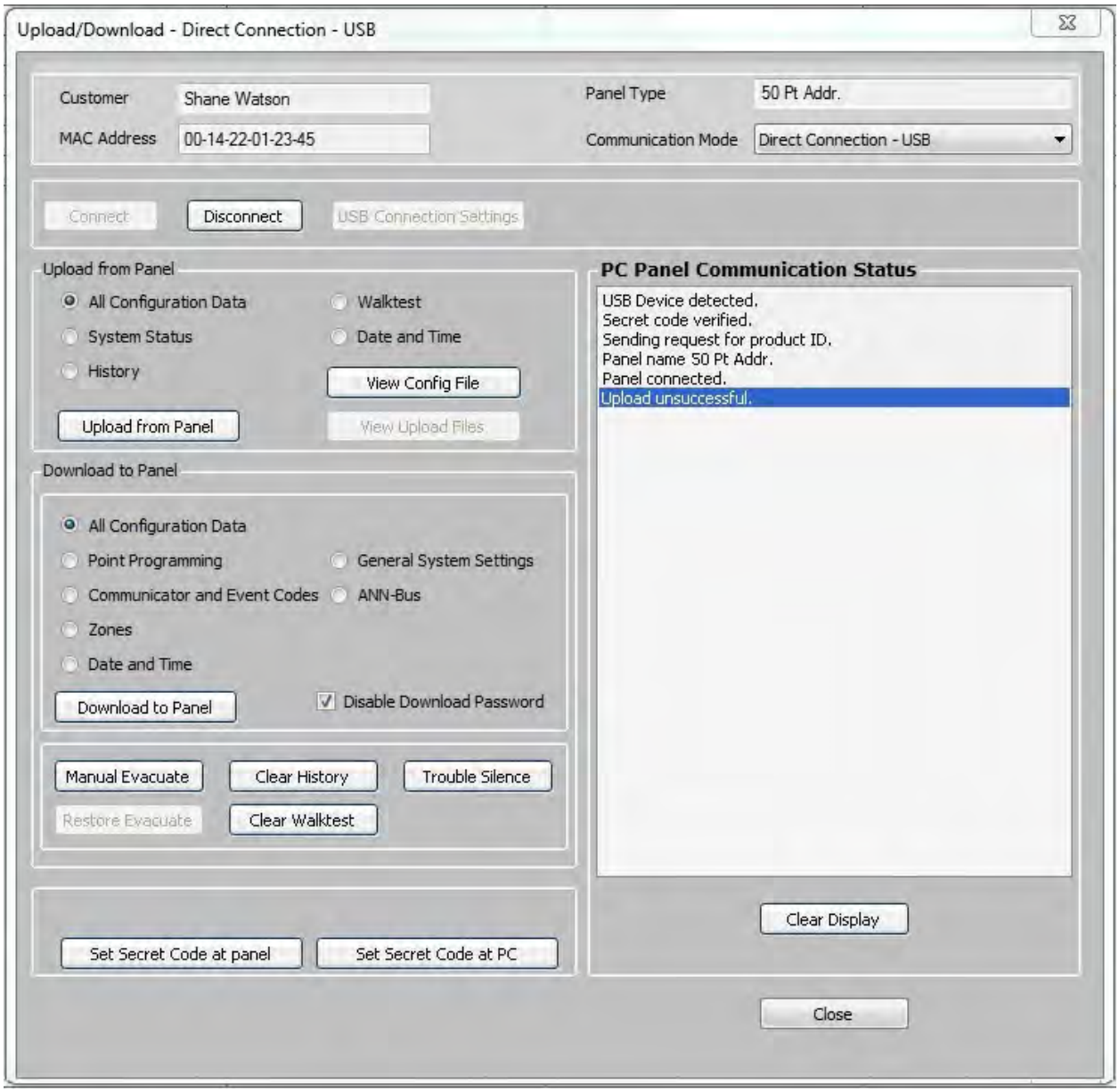
Problem: The following message is displayed in FS-Tools cannot download data to fire panel.



Resolution: Check the power connection for the fire panel which might be turned off.

FS-Tools Failed to Upload Data from Panel

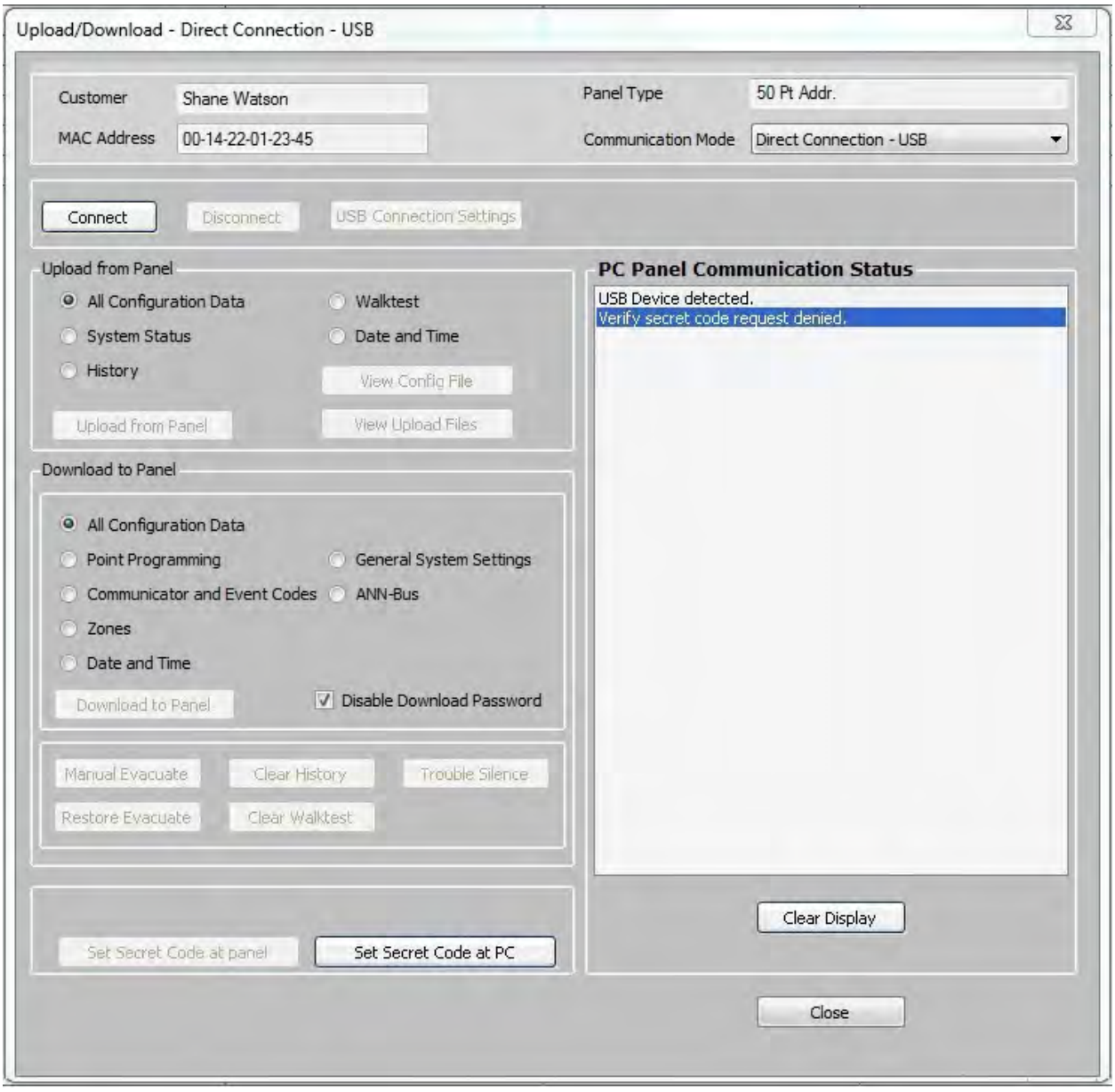
Problem: The following message is displayed when FS-Tools cannot upload data from fire panel.



Resolution: Check the power connection for the fire panel which might be turned off.

Verify Secret Code Request Denied

Trouble: The following message is displayed when the secret code verification fails and when the connection between the computer and fire panel fails.



Resolution: In the **Upload/Download** screen, use the **Set Secret Code at Panel** option to verify and if required, change the panel secret code.

Other Events

Problem: The troubleshoot data, uploaded from the fire panel into FS-Tools, displays the detector sensitivity data, and LED and piezo status.

Resolution: Supervise the field wiring for each zone for open circuits, shorts, and ground faults. All the faults are visually and audibly annunciated.

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