MTSW

Software Manual

EN

MTSW Automation Software V2.0

BOSCH

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1.1   Multi-Tenant System (MTS) Overview

MTS is a distributed security system for monitoring and controlling a large number of small sites. Examples include apartment and condominium complexes, retail plazas, office buildings, and educational and hospital campuses.

A typical MTS installation consists of the following components:

- **MTSW Security Station Software:** MTSW is a Microsoft® Windows-based application installed on a PC and monitored by guard station personnel.
- **MTR Communication Receiver:** The MTR receives and handles alarm events from devices connected to the CAN RS-485 bus. It monitors and reports CAN bus status and other system internal events, and interfaces with MTSW to synchronize system data.
- **MTGW CAN RS-485 Bus Gateway:** The MTGW converts data back and forth from an RS-485 format to a Controller Area Network (CAN) bus format. The system supports up to 100 MTGWs per CAN bus line. The MTGW provides three RS-485 loops that support a total of 120 RS-485 devices spread across the three loops.
- **RS-485 Bus Devices:** Refer to *Table 1* for a list of supported RS-485 devices.

Table 1: MTS RS-485 Bus Devices	
RS-485 Device	**Description**
DS6R2	6-zone self-contained control panel
DS12R	12-zone self-contained control panel
MT1-1	Single-zone input device
MT1-2	Two-zone input device
MT1-8	8-zone input device
MT2-8	8-output device
MT3-1	Single-zone input/output device

CAN bus wiring requirements are as follows:

- **CAN Bus Interface:** Connect the CAN bus to the MTR Communication Receiver with at least 1.5 mm (16 AWG) shielded twisted-pair wire; maximum length: 2,000 m (6,500 ft).
- **RS-485 Buses 1-3:** Use at least 1.0 mm (20 AWG) shielded twisted-pair wire for the RS-485 bus; maximum length: 1200 m (3900 ft). RS-485 bus wiring status is supervised.

1.2   MTS Device Address

You must assign an address to each device in the system. The address consists of at least four segments. For example:

1.2.5.3.6

- **1:** This segment identifies the number assigned to the MTR central receiver (01 to 99).
- **2:** This segment identifies the CAN bus number occupied by the MTGW (1 or 2).
- **5:** This segment identifies the MTGW's CAN bus address (1 to 100).
- **3:** This segment identifies the device's RS-485 address (1 to 120).
- **6:** This segment identifies the zone number of an input or output device connected to the RS-485 device.

1.3   Multi-Tenant System Software (MTSW) Overview

MTSW is the central management software for Bosch Multi-Tenant System, D6600/D6100 receivers and Bosch-VDP system. It can communicate with MTRs, D6600/6100 series receivers, and Bosch-VDPs.

Use MTSW to:

- View and update client and device information in real time.
- Dispatch alarms or system events.
- Send control commands from the monitoring center to the device.
- Monitor events with a multi-level navigation map.
- Send an SMS message to a client when an alarm report is received.

1.3.1   MTSW Applications

MTSW Setup

The MTSW system configuration tool is an independent application called MTSW Setup. The MTSW configuration program provides system configuration functionality, including the configuration of connections, Clients, Perimeters, Patrol Points and modifications to the MTSW main program interface.

MTSW Main Program (MTSW)

The MTSW main program, called MTSW, is used to receive and dispatch events, and to send control commands. Operators use MTSW regularly.

MTSW Report Tool

The MTSW Report Tool allows you to select History events, clients, perimeters, Forwarded and Received events, and logs. The resulting list is printed or exported to a text file or a Microsoft® Excel file.

MTSW System Maintenance Tool

The MTSW System Maintenance Tool allows you to back up MTSW data that you can use later to restore damaged databases. You can back up and restore several different data types, including client data and indexes. You can also compress large databases to maximize storage capacity.

1.3.2   Editions

MTSW has 5 versions controlled by different USB Sentinel keys, and a demo version.

- **Demo Version:** Supports 6 central devices, 5 site devices and 5 clients. If the central device is a DS7400 series or B/G series device, 5 device zones of the DS7400 can be associated with client zones; or 5 zones of the B/G can be associated with the client zones. If the device zones of the DS7400 are not associated with client zones, or if the zones of the B/G are not associated with client zones, all sent events are discarded. No key is required for the Demo version.

- **200 Client Version:** Supports 200 central devices, 200 site devices, and 200 clients. 200 device zones of the DS7400 can be associated with client zones; or 200 zones of the B/G can be associated with the client zones. If the device zones of the DS7400 are not associated with client zones, or if the zones of the B/G are not associated with client zones, all sent events are discarded. A key is required for the 200 client version.

- **500 Client Version:** Supports 200 central devices, 500 site devices, and 500 clients. 500 device zones of the DS7400 can be associated with client zones; or 500 zones of the B/G can be associated with the client zones. If the device zones of the DS7400 are not associated with client zones, or if the zones of the B/G are not associated with client zones, all sent events are discarded. A key is required for the 500 client version.

- **1,000 Client Version:** Supports 200 central devices, 1,000 site devices, and 1,000 clients. 1,000 device zones of the DS7400 can be associated with client zones; or 1,000 zones of the B/G can be associated with the client zones. If the device zones of the DS7400 are not associated with client zones, or if the zones of the B/G are not associated with client zones, all sent events are discarded. A key is required for the 1,000 client version.

- **3,000 Client Version:** Supports 200 central devices, 3,000 site devices, and 3,000 clients. 3,000 device zones of the DS7400 can be associated with client zones; or 3,000 zones of the B/G can be associated with the client zones. If the device zones of the DS7400 are not associated with client zones, or if the zones of the B/G are not associated with client zones, all sent events are discarded. A key is required for the 3,000 client version.

- **10,000 Client Version:** Supports 200 central devices, 10,000 site devices, and 10,000 clients. 10,000 device zones of the DS7400 can be associated with client zones; or 10,000 zones of the B/G can be associated with the client zones. If the device zones of the DS7400 are not associated with client zones, or if the zones of the B/G are not associated with client zones, all sent events are discarded.. A key is required for the 10,000 client version.

> If the DS3MX and the DS6MX connect with a DS7400 series device, although there are 3 zones for DS3MX and 6 zones for DS6MX, they use only 1 or 2 zones of DS7400 series device. For example, if there are 600 client zones in the system in the 200 client version, 200 DS3MXs or 100 DS6MXs can be connected.

2.0 Work Flow

To properly install, configure, and use an MTSW system, use the following workflow:

Step	Section Heading	Page
Table 2: Basic Work Flow		
Install the MTSW Software	Installation	**Error! Book mark not define d.**
Add central devices	Configuring Central Device Connections	**Error! Book mark not define d.**
Add clients	Configuring New Client Information	**Error! Book mark not define d.**
Configure client groups and maps	Configuring Groups and Maps	**Error! Book mark not define d.**
Configure perimeters, as desired	Configuring Perimeter Settings	**Error! Book mark not define d.**
Configure control points, as desired	Configuring Control Points and Control Point Tasks	**Error! Book mark not define d.**
Create secure MTSW users	Configuring User Settings	**Error! Book mark not define d.**
Create custom actions, as desired	Managing Actions	**Error! Book mark not define d.**
Create custom action buttons, as desired	Configuring Action Buttons	**Error! Book mark not define**

		d.
Create Event templates, as desired	Managing Event Templates	**Error! Book mark not define d.**
Distribute data to the MTSW main application	Distributing New Data	**Error! Book mark not define d.**
Change the ADMIN password	Changing the ADMIN Password	**Error! Book mark not define d.**
Receive events in MTSW	Receiving Events	**Error! Book mark not define d.**
Dispatch events	Dispatching Events	**Error! Book mark not define d.**
Generate reports with the MTSW Report Tool	MTSW Report Tool	**Error! Book mark not define d.**
Protect your system from data loss	MTSW System Maintenance Tool	**Error! Book mark not define d.**

3.0 Installation

3.1 Minimum System Requirements

- **CPU:** Intel PIII 2.4 GHz or higher
- **Operating System:**
  - Microsoft Windows 7(32/64bit)
  - Microsoft Windows 8(32/64bit)
  - Microsoft Windows 10(32/64bit)
- **Hard Drive Free Space:** 30 GB free space
- **Memory:** 8G RAM

3.2 System Installation

The system installation package uses an installation wizard so that you can easily install the software.

3.2.1 Fresh Installation

1. Insert the MTSW Installation CD into your CD drive. The **MTSW Installation** splash screen appears.

2. Click the link for your desired installation language. The splash screen progresses to the next page, which allows you to open a PDF version of the MTSW software manual.

3. Click the **Install MTSW** link. The **Welcome** page of the **InstallShield® Wizard** appears.

4. Click **Next**.

Figure 1:   InstallShield Wizard Welcome
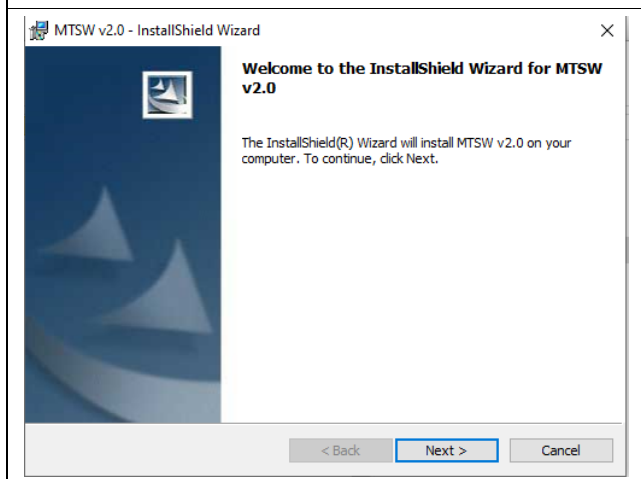
5. Click **Next** to accept the default install directory, or click **Browse** to select a different directory. Click **Next**.

6. Select the option button for your system's language.

The installation package installs the Sentinel System Key™ driver, but the key must not be inserted at the time of installation. If the Sentinel System Key is in a USB port, remove it before you continue.

7. Click **Install**. The installation begins.

Figure 2:   Ready to Install
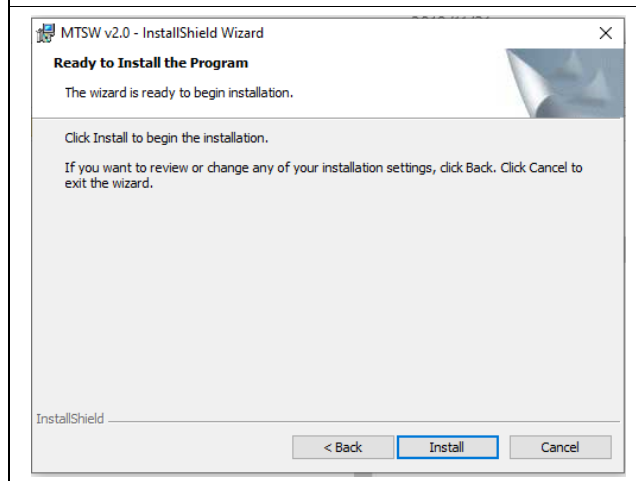
8. The **InstallShield Wizard Completed** page of the wizard appears when the installation is finished. Click **Finish**.

Figure 3:   Installation Completed
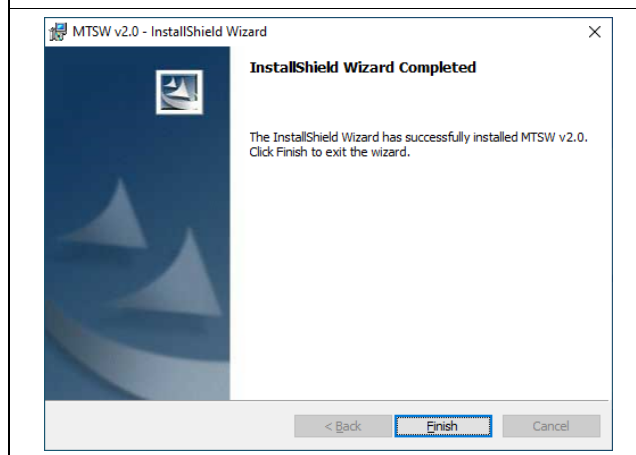
9. If the Sentinel System Key driver was not installed, the installation starts the installation of the driver.

   In Windows 7 and Windows 10, select automatic installation.

10. Ensure that the Sentinel System Key is not in the USB port and click **Next**.

**Figure 4:   Sentinel System Driver –
InstallShield Wizard**
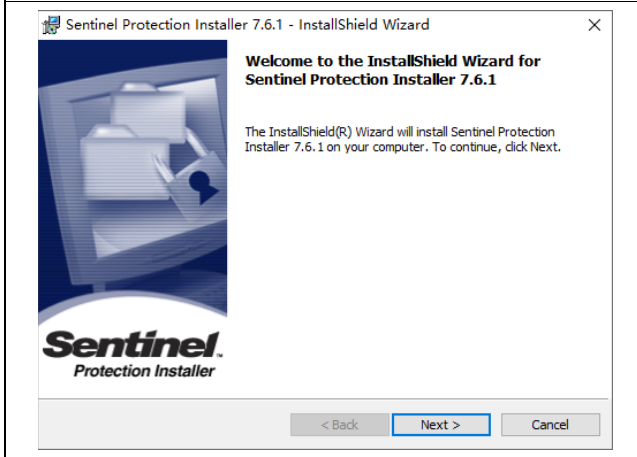
11. After the installation completes, insert the Sentinel System Key into the USB port and click **Finish**.

3.2.2   Upgrade Installation

If an earlier version of MTSW V1.3.04 or CAS6000 was previously installed, the system auto upgrades the software and updates data (exemption:CAS6000v1.0 receiver original data). You must perform an upgrade installation.

1. Insert the MTSW Installation CD into your CD drive. The **MTSW Installation** splash screen appears.
2. Click the link for your desired installation language. The splash screen progresses to the next page, which allows you to open a PDF version of the MTSW software manual.
3. Click the **Install MTSW** link. The **Welcome** page of the **InstallShield Wizard** appears and indicates that it found a previous version of MTSW.

Figure 5:   System Upgrade – Welcome
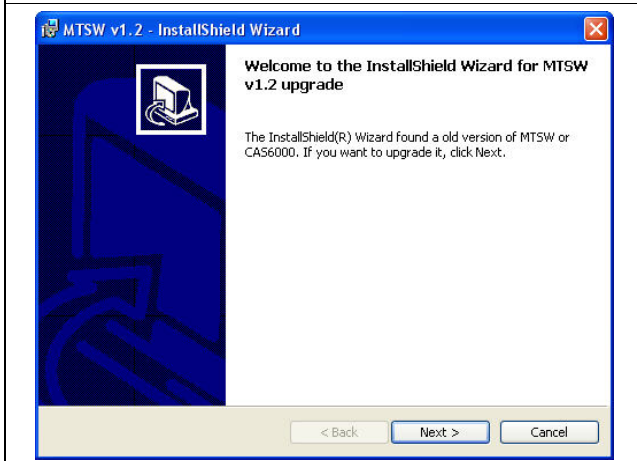
4. If you want to upgrade the system, click **Next**.
5. Choose the previous installation's installation directory, and then click **Next**.

    If the selected directory is incorrect, the installation wizard prompts you.

Figure 6:   System Upgrade – Select Folder
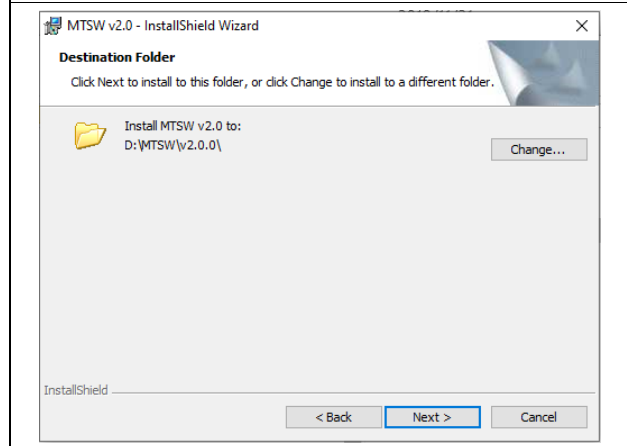
6. Click **Install**. The installation wizard upgrades the software.

Figure 7:   System Upgrade – Ready to Install
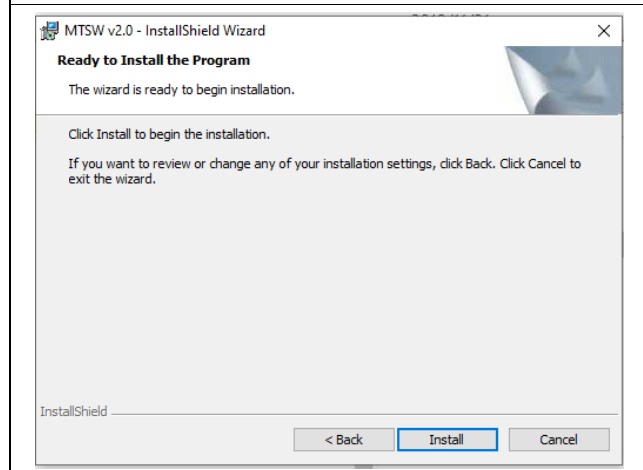
7. After copying the files, the installation upgrades the database.
    For large History databases, an **Upgrade History Database** menu item is added in the MTSW menu group.

If you upgrade CAS6000 to MTSW:
- The default actions and action buttons

in CAS6000 are replaced with new actions and action buttons in MTSW, and you must recreate all customized actions and action buttons.

- If you upgraded from CAS6000 v1.00 or v1.02, you must recreate the map structure and client or zone information.

- If you changed the defaulted event filters in CAS6000, you must redefine it in MTSW after the upgrade installation.

- If you changed the event codes in CAS6000, you must redefine it in MTSW after the upgrade installation.

- CAS6000v1.0 receiver original data is not updated.

3.3   System Uninstall

1. To uninstall MTSW, select **Start→(Settings)→ Control Panel** to open the **Windows Control Panel** applet.
2. Open the **Add or Remove Programs** panel, and then select **MTSW v1.2**.
3. Click the **Change/Remove** button and follow the prompts. All MTSW files are deleted from the computer.

Figure 8:   Uninstall MTSW with Add or Remove Programs
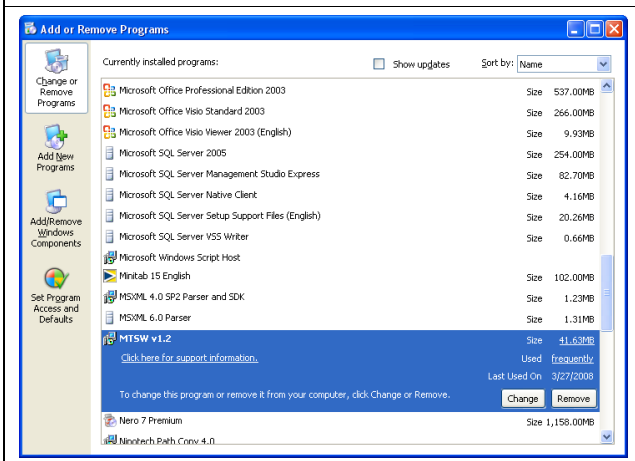
4.0 Configuring MTSW with MTSW Setup

The MTSW configuration program provides system configuration functionality, including the configuration of connections, clients, perimeters, patrol points and modifications to the MTSW main program interface. The system configuration is an independent application called MTSW Setup.

> ✓ To use MTSW Setup, you must sign in as a user with permissions to make system configurations.

4.1 Run MTSW Setup

4. Select **Start→(All) Programs→MTSW→MTSW Setup** or double-click **DSParameter.exe** in the installation directory.
5. The **MTSW Setup** application window opens and launches the **Log In** dialog box. Type your account and password and click **OK**.
   The default account and password is "ADMIN".

> ✓ The account and password are case-sensitive.

Figure 9: Log in Dialog Box

4.2 Run MTSW Setup from MTSW

6. In MTSW, select **Management →MTSW Setup** from the menu bar.
   The **MTSW Setup** application window opens and automatically logs in using the account and password you used to log in to MTSW.

4.3 MTSW Setup Interface Overview

MTSW Setup provides a full screen application window used to configure the system, including the MTSW main program window. MTSW Setup forwards changes made within the application to the MTSW application. Only users with administrator rights can log in to MTSW Setup.

4.3.1 MTSW Setup Operations

When you work within the windows and dialog boxes in MTSW Setup, you must add to the existing configuration information, save the data, and exit from the current window or dialog box when your configuration is finished.

> ✓ This manual indicates when you must click **Add** or **Save** to continue with the operation, but does not instruct you to exit from the window or dialog box. The assumption is that you will exit when you are finished.

4.3.2 MTSW Setup Dependies

The MTSW Setup configuration process requires that you initially perform steps in a particular order. For example, you must add central devices to MTSW Setup before you can configure a central device for a client. For the initial setup, follow the instructions in *Section 2.0 Work Flow* on page **Error! Bookmark not defined.**.

5.0 Configuring Central Device Connections

Many Input/Output devices can communicate with MTSW.

- **Input/Output Devices:** MTR, Bosch-VDP, DS7400 series and B/G series devices, other computers with MTSW installed.
- **Input Device:** D6600/6100 Receiver.
- **Output Device:** Serial DSR-32, GSM-Modem, or other software.

> Do not use a USB-to-RS-232 adapter for devices that connect with a computer through an RS-232 port. Some events might be lost with the USB-to-RS-232 adapter.

Use the Central Device tool to configure central devices.

5.1 Central Device Tool Overview

To open the **Central Device Settings** window from the MTSW Setup interface, select
Connection→Central Device from the menu bar. The **Central Device Settings** window appears.

Figure 10: Central Device Settings Window
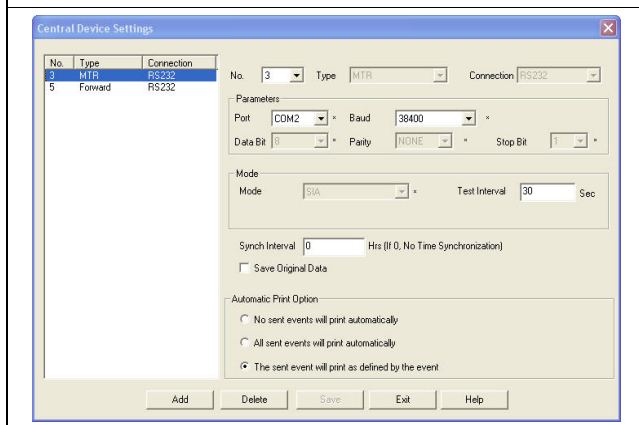
The list box on the left side of the central device window lists all existing central devices. Select a device from the list to view the detailed information for that item on the right side of the window.

MTSW supports 7 types of central devices: MTR, D6600/6100 Receiver, DS7400 series, B/G series, Bosch-VDP, GSM Modem, and Forward Data.

> Central devices other than the GSM Modem and Forward Data devices allow

you to select one of the following print options:

- No sent events print automatically.
- All sent events print automatically.
- Each sent event prints as defined by the event.

5.2 Configuring an MTR Device

7. In the **Central Device Settings** window (in MTSW Setup, select **Connection→Central Device**), click **Add**.
8. Select **MTR** from the **Type** drop-down list. The MTR settings appear.

Figure 11: MTR Settings
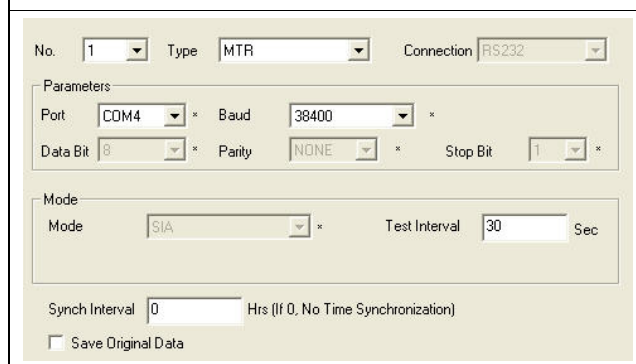
The MTR connection settings are:

- **No.:** Select the central device number from the **No.** drop-down list. The central device number should be the same as the MTR Receiver number to expedite supervisory tasks.
- **Type:** Select the central device type (MTR).
- **Connection:** RS-232 is selected by default and cannot be changed. MTR supports only the RS-232 connection in this version of MTSW.
- **Parameters:** Select the computer port connected with MTR. The baud rate, data bits, parity and stop bits must be same as the MTR settings.
- **Test Interval:** If the test interval is set, the system verifies the connection. If the test interval is exceeded and no data is received, the system produces a connection Trouble event. The test interval is in seconds.
- **Synch Interval:** If the synchronized value is more than 0, MTSW sets the MTR time.
- **Save Original Data:** If selected, the original data of this device is saved into a database.

9. Select the desired **Automatic Print** option button.
10. Click **Save**.

5.3   Configuring a D6600/6100 Device

11. In the **Central Device Settings** window (in MTSW Setup, select **Connection→Central Device**), click **Add**.

12. Select **D6600/6100** from the **Type** drop-down list. The D6600/6100 settings appear.

Figure 12:   D6600/6100 Settings
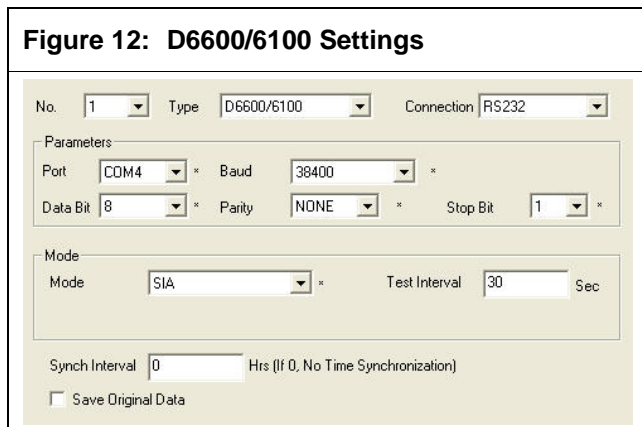
If you select **UDP** from the **Connection** drop-down list, the **Parameters** section of the window changes. Refer to *Figure 13*.

Figure 13:   UDP Connection Parameters
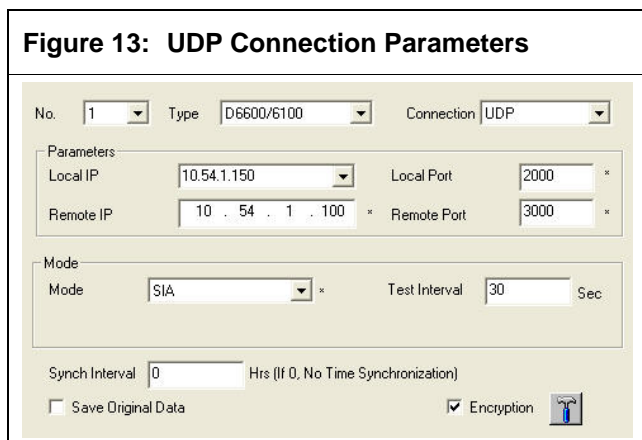
The D6600/6100 connection settings are:

- **No.:** Select the central device number from the **No.** drop-down list, which should be the same as the D6600/6100 Receiver No. to expedite supervisory tasks.
- **Type:** Select the central device type (D6600/6100).
- **Connection:** Select RS-232 or UDP.
- **Parameters:**
  - **RS-232:** Select the port of the computer connected with D6600/6100. The baud rate, data bits, parity and stop bits must be same as the D6600/6100 settings.

- **UDP:** The local IP is the address of the network adapter connected with the D6600/6100. The system uses the local port to communicate with the D6600/6100. The Remote IP and Remote Port are the D6600/6100 IP address and the communication port.
- **Comm Mode:** Choose from two modes in MTSW: D6500 and SIA. The selection must match the D6600/6100 setting. If D6500 is selected, you must enter a Head character and Tail character that matches the D6600/6100 setting.
- **Test Interval:** If the test interval is set, the system verifies the connection. If the test interval is exceeded and no data is received, the system produces a connection Trouble event. The test interval is in seconds.
- **Synch Interval:** If the synchronized value is more than 0, MTSW sets the D6600/6100 time.
- **Save Original Data:** If selected, the original data of this device is saved into a database.
- **Encryption:** If the D6600/6100 sends an event to the computer through a UDP connection, the event data can be encrypted. The AES algorithm is supported by D6600/6100. Click the button next to the Encryption check box to open the UDP encryption password dialog box.

The password is a hexadecimal value. It must match the password set in D6600/6100.

Figure 14:   UDP Encryption Password Dialog Box
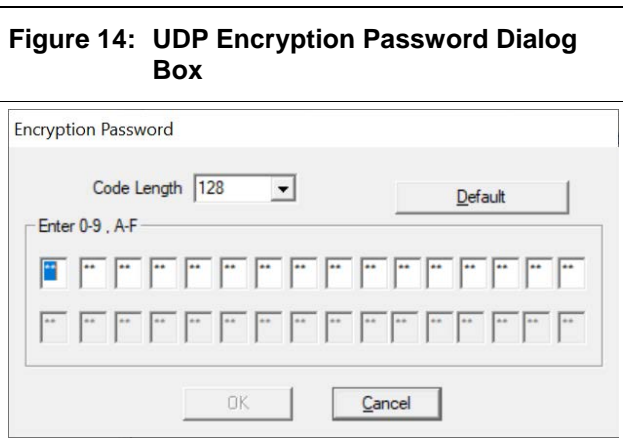
☑	If the encryption password does not match the D6600/6100 password, the system cannot recognize the event data. Encryption is not available for RS-232 connections.

13. Select the desired **Automatic Print Option** button.

14. Click **Save**.

5.4 Configuring a Bosch-VDP Device

15. In the **Central Device Settings** window (in MTSW Setup, select **Connection→Central Device**) click **Add**.
16. Select **BOSCH-VDP** from the **Type** drop-down list. The BOSCH-VDP settings appear.
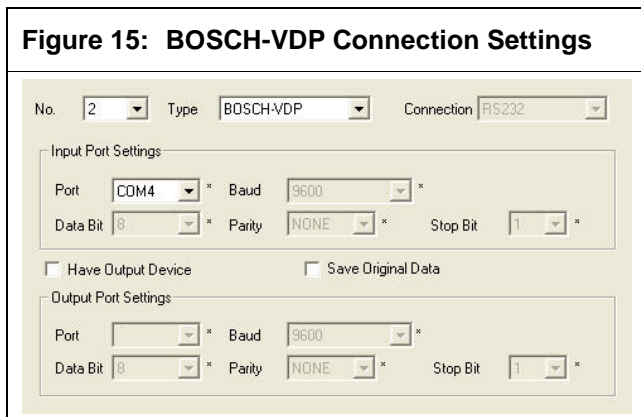
Figure 15: BOSCH-VDP Connection Settings

The BOSCH-VDP connection settings are:

- **No.**: Select the central device number from the **No.** drop-down list. The selected number must be the same as the Bosch-VDP Receiver number.
- **Type:** Select the central device type (BOSCH-VDP).
- **Connection:** RS-232 is selected by default and cannot be changed. Bosch-VDP supports only the RS-232 connection in this version of MTSW.
- **Input Port Settings:** Select the computer port to which the Bosch-VDP input device is connected. The baud rate, data bits, parity and stop bits are fixed. If you do not use an input device, select an unused port (for example, COM10).
- **Have Output Device:** If you connect a VDP output device, select the **Have Output Device** check box to enable the output device.
- **Save Original Data:** If selected, the original data of this device is saved into a database.
- **Output Port Settings:** Select the computer port to which the Bosch-VDP output device is connected. The baud rate, data bits, parity and stop bits are fixed.

17. Select the desired **Automatic Print Option** button.
18. Click **Save**.

5.5 Configuring a DS7400 Series Device

19. In the **Central Device Settings** window (in MTSW Setup, select **Connection→Central Device**), click **Add**.

20. Select **DS7400** from the **Type** drop-down list. The DS7400 settings appear.

Figure 16: DS7400 Series Connection Settings – CHI
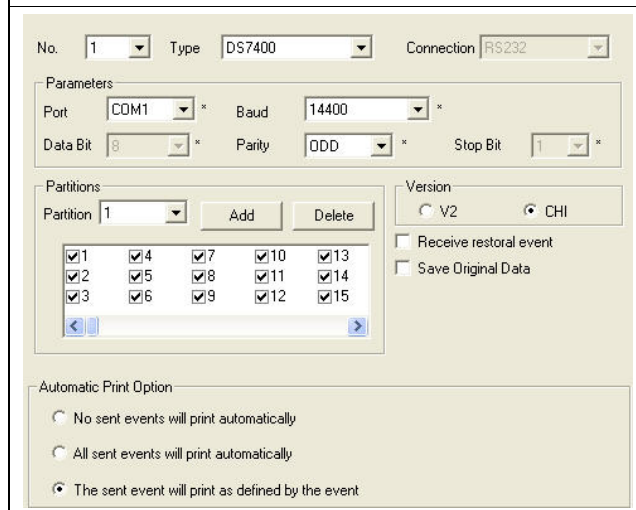
The DS7400 series connection settings are:

- **No.:** Select the central device number from the **No.** drop-down list. The selected number must be the same as the DS7400 series Receiver number.
- **Type:** Select the central device type (DS7400).
- **Connection:** RS-232 is selected by default and cannot be changed. DS7400 devices support only the RS-232 connection. IP7400XI-CHI support only UDP connection in this version of MTSW.
- **Parameters:** Select the port of the computer connected with the DS7400 device. The baud rate, data bits, parity, and stop bits must be same as the DS7400 settings; Select the IP address and port of the computer connected with the IP7400XI-CHI. The address must be same as the network module 1 or 2 in IP7400XI-CHI settings and the port must be same as the B426 settings; Select the IP address and port of the receiver connected with the IP7400XI-CHI and B426. The address and port must be same as the B426 settings.

- **Partitions**: The DS7400 series devices support 8 partitions. The operator can arm or disarm a partition using the keypad. Select a partition from the **Partition** drop-down list. The list box lists the DS7400 zones that belong to the selected partition. You can add or remove zones by selecting or deselecting the corresponding check boxes. Click **Add** to add a partition. Click **Delete** to delete the selected partition.
- **Version:** There are two versions for DS7400: V2 and CHI. MTSW only support CHI version.
- **Save Original Data:** If selected, the original data of this device is saved into a database.
21. If you selected **IP7400XI-CHI** from the **Type** drop-down list. The **IP7400XI-CHI** settings appear. Refer to *Figure 17*.
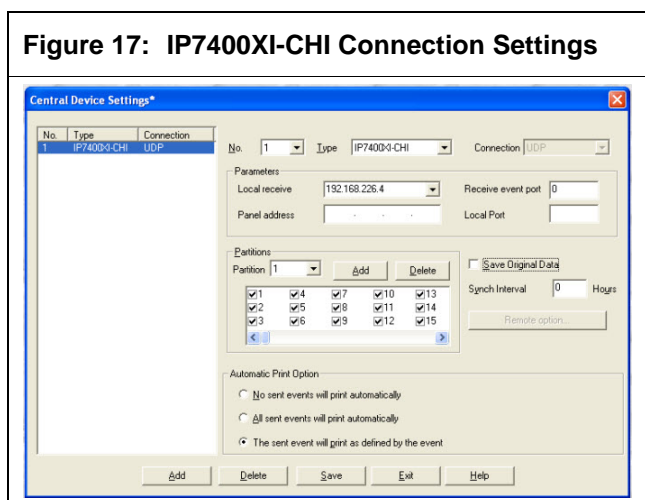
Figure 17: IP7400XI-CHI Connection Settings

The **Remote option** dialog box appears when dual NIC installed in the computer. Refer to *Figure 18*.
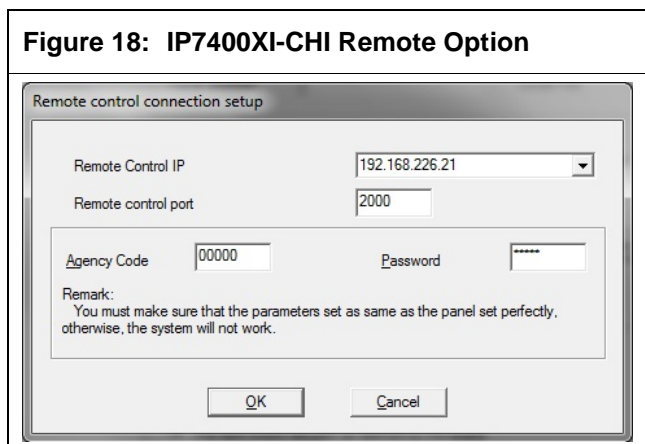
Figure 18: IP7400XI-CHI Remote Option

22. Enter information in the **Agency Code** and **Password** text boxes.
The agency code and password must be the same as the IP7400XI-CHI settings.
Click **OK**.

23. Select the desired **Automatic Print Option** button.
24. Click **Save**.

5.6 Configuring a B/G Series Device
25. In the **Central Device Settings** window (in MTSW Setup, select **Connection→Central Device**), click **Add**.
26. Select **B/G Host** from the **Type** drop-down list. The B/G settings appear.
The **Cloud connection property** is not required to configure.
Click the **Partition Setting**, select the zone numbers belongs to each partition. Be noted partition numbers of each B/G control panel are various.
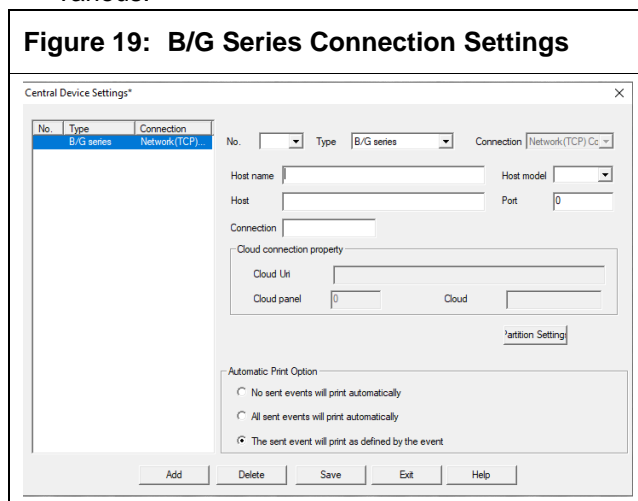
Figure 19: B/G Series Connection Settings

5.7 Configuring a GSM Modem Device
A GSM Modem is used to send SMS text messages to a mobile phone.
27. In the **Central Device Settings** window (in MTSW Setup, select **Connection→Central Device**) click **Add**.
28. Select **GSM Modem** from the **Type** drop-down list. The GSM Modem settings appear.
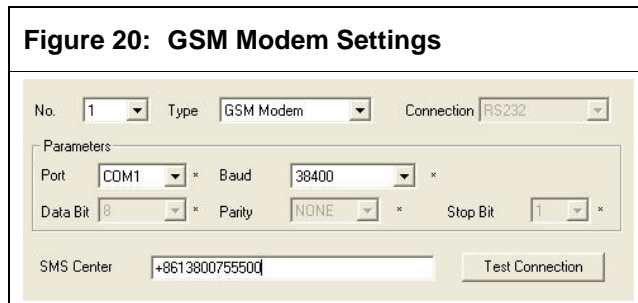
Figure 20: GSM Modem Settings

MTSW supports only the Siemens TC35 terminal.

The GSM Modem connection settings are:

- **No.:** Select the central device number from the **No.** drop-down list.
- **Type:** Select the central device type (GSM Modem).
- **Connection:** RS-232 is selected by default and cannot be changed. GSM Modem supports only the RS-232 connection in this version of MTSW.
- **Parameters:** Select the port of the computer connected with GSM Modem. The baud rate must be same as the GSM Modem settings. The data bits, parity and stop bits are fixed.
- **SMS Center:** Enter the SMS service center number.

29. Click the **Test Connection** button to test the connection.
30. Click **Save**.

5.8 Configuring a Forward Connection

The Forward feature allows you to integrate MTSW with other applications. You can forward data to two kinds of receivers: MTSW and the other software or device on another workstation.

You can use the Forward connection to send data to hardware or other software by serial port, or by network (UDP protocol), or by modem. The data can use fixed character strings or in text produced from a template filled with received event information. The data is sent as text.

5.8.1 Forwarding Data to MTSW

In a multi-level alarm center, clients (as in a client-server relationship) need to send the alarm data manually or automatically to the second level alarm center, as required after they received alarm events. The Forward function can transmit by modem, network, or direct cable connection.

31. In the **Central Device Settings** window (in MTSW Setup, select **Connection→Central Device**), click **Add**.
32. Select **Forward** from the **Type** drop-down list. The Forward settings appear.
33. Select the **Forward to MTSW** option button. The Forward to MTSW settings appear.
34. Select the desired central device number from the **No.** drop-down list.
35. Select the desired connection type from the **Connection** drop-down list. The settings for the selected Connection appear.
36. The following sections examine the options for each connection type. Once you have made your selections, click **Save**.

- Perimeter and Patrol Point events cannot be forwarded to another workstation.
- On the receiver workstation, the client is translated based on the account. If several workstations need to send events to one receiver, the accounts must be kept different for each sender. Use the Back Up Client Information function in the System Maintenance Tool to back up client information from the sender, and then restore it on the receiver.

RS-232 Connection

The Forward Data to MTSW settings for RS-232 are:

- **Parameters:** Select the RS-232 port of the computer connected with the sending hardware or software. The baud rate, data bits, parity and stop bits must match the hardware or software setting.
- **Role:** The local workstation's role: Sender or Receiver.
- **Remote Workstation No.:** The remote workstation's number.
- **Holding:** If selected, the connection is kept. Enter a Test Interval.
- **Test Interval:** The interval (in seconds) at which the system queries unsuccessful forwarding events. MTSW generates a Network Connection Error event if the connection fails.

Refer to *Figure 21*.

Figure 21: Forward Data – RS-232

Modem Connection

The Forward Data for MTSW settings for Modem are:

- **Modem:** Select any one modem that is connected to the local workstation.
- **Holding Time:** The number of seconds to keep the modem connection active after the transmission.

- **Redial Interval:** The number of seconds to wait before the modem redials if the previous connection attempt failed.
- **Role:** The local workstation's role: Sender or Receiver.
- **Remote Workstation No.:** The remote workstation's number.
- **Phone 1, Phone 2**, and **Phone 3:** The remote workstation's phone number. MTSW supports up to three phones for redundancy. If the Phone 1 connection fails, MTSW tries Phone 2, and then Phone 3.

Refer to *Figure 22*.
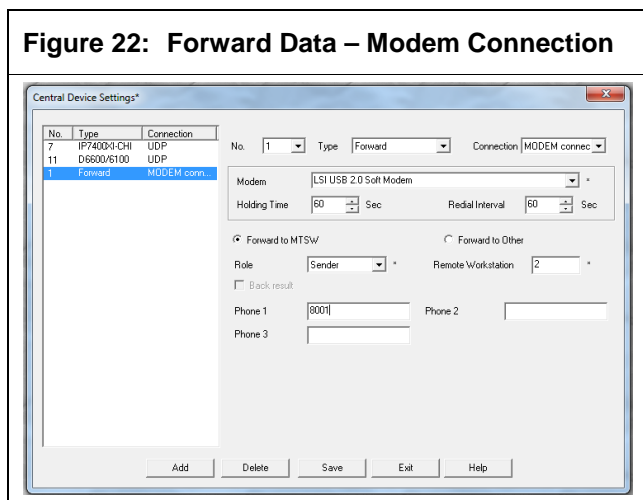
Figure 22: Forward Data – Modem Connection

UDP Connection

The Forward Data to MTSW settings for UDP are:

- **Parameters:** Select the local workstation's IP address. Enter the local port number, the remote workstation's (WS) IP address, and the remote workstation's (WS) port number.

> For UDP, the local IP is the IP address of the network adapter connected to the hardware or software that sends data. The system uses the local port to communicate with the hardware or software that sends data. The remote IP is the IP address of the hardware or software that receives data. The remote port is the listening port of the hardware or software that receives data.

- **Role:** The local workstation's role: Sender or Receiver.
- **Holding:** If selected, the connection is kept. Enter a Test Interval.
- **Test Interval:** The interval (in seconds) at which the system queries unsuccessful forwarding events. MTSW generates a Network Connection Error event if the connection fails.

- **Remote Workstation No.:** The remote workstation's number.

Refer to *Figure 23*.
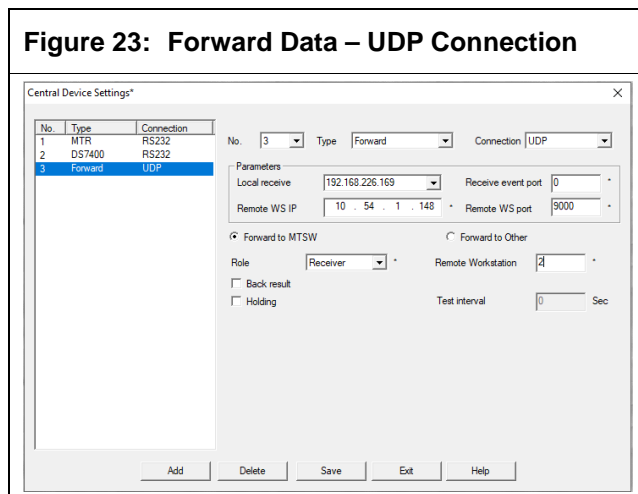
Figure 23: Forward Data – UDP Connection

5.8.2   Forwarding Data to Other

MTSW can use the same RS232, UDP, and Modem connection to send data to devices or applications other than MTSW (for example, DSR-32C). The data can be several fixed characters or produced by MTSW based on received events and the Event template used (refer to *Section 17.0 Managing Event Templates*). MTSW sends the one-way data as text. You can ensure that the receiving device or application successfully received the data only if you configure the ACK and NAK text boxes. Refer to *Figure 23* on page **Error! Bookmark not defined.**.

37. In the **Central Device Settings** window (in MTSW Setup, select **Connection→Central Device**), click **Add**.
38. Select **Forward** from the **Type** drop-down list. The Forward settings appear.
39. Select the **Forward to Other** option button. The Forward to Other settings appear.
40. Select the desired central device number from the **No.** drop-down list.
41. Select the desired connection type from the **Connection** drop-down list. The settings for the selected connection appear.
42. To add a head character to the string, enter a value in the **Head Char.** text box. The default value is 0 for disabled.
43. To add a tail character to the string, enter a value in the **Tail Char.** text box. The default value is 0 for disabled.

44. To configure MTSW to wait for an acknowledgement from the receiving device or application after forwarding data and before sending the next data string, enter a value in the **ACK** text box. The default value is 0 for disabled. If you enter a value, MTSW resends the data if it does not receive a response from the receiving device or application.

45. To configure MTSW to receive a fail notification from the receiving device or application, enter a value in the **NAK** text box. The default value is 0 for disabled. If you enter a value, MTSW resends the data if it receives a NAK response from the receiving device or application.

> When you configure **ACK** and **NAK** characters, MTSW uses global parameters for the timeouts. Refer to *Section 21.0 Configuring Global Parameters* on page **Error! Bookmark not defined.** to configure the resend count and resend interval.

RS-232 Connection

The Forward Data to Other settings for RS-232 are the parameters. Select the RS-232 port of the computer connected with the sending hardware or software. The baud rate, data bits, parity, and stop bits must match the hardware or software setting.

Refer to *Figure 24*.

Figure 24: Forward Data to Other – RS-232
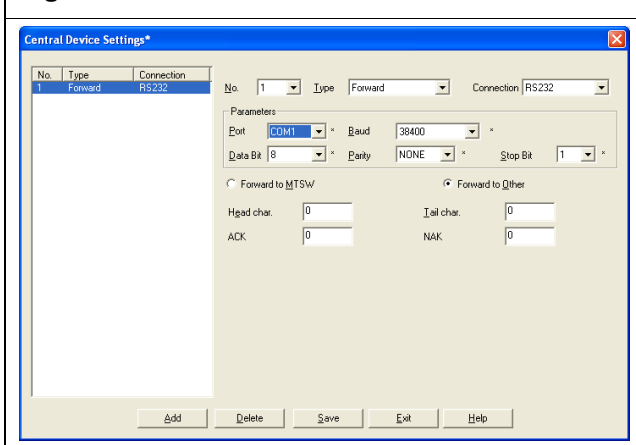
Modem Connection

The Forward Data to Other settings for Modem are:

- **Modem:** Select any one modem that is connected to the local workstation.
- **Holding Time:** The number of seconds to keep the modem connection active during the transmission.

- **Redial Interval:** The number of seconds to wait before the modem redials if the previous connection attempt failed.
- **Phone 1, Phone 2**, and **Phone 3:** The remote workstation's phone number. MTSW supports up to three phones for redundancy. If the Phone 1 connection fails, MTSW tries Phone 2, and then Phone 3.

Figure 25: Forward Data to Other — Modem
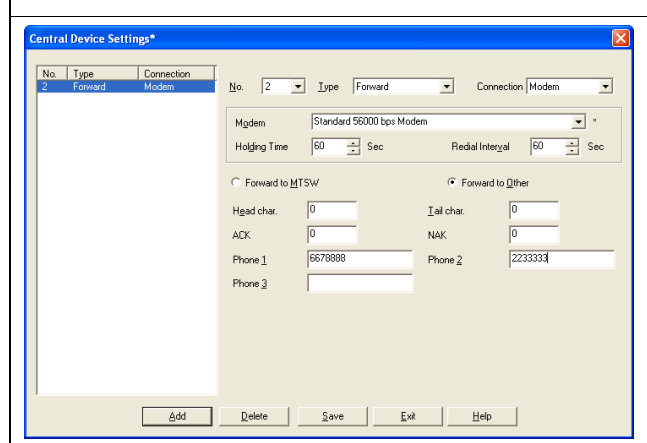
UDP Connection

The Forward Data settings for UDP are:

- **Parameters:** Select the local workstation's IP address. Enter the local port number, the remote workstation's (WS) IP address, and the remote workstation's (WS) port number.

> For UDP, the local IP is the IP address of the network adapter connected to the hardware or software that sends data. The system uses the local port to communicate with the hardware or software that sends data. The remote IP is the IP address of the hardware or software that receives data. The remote port is the listening port of the hardware or software that receives data.

Figure 26: Forward Data to Other - UDP
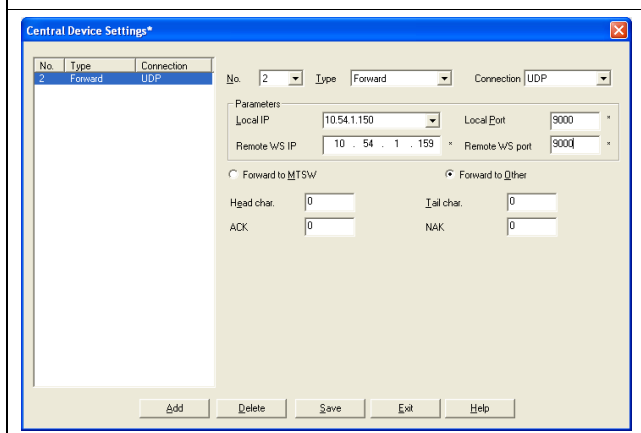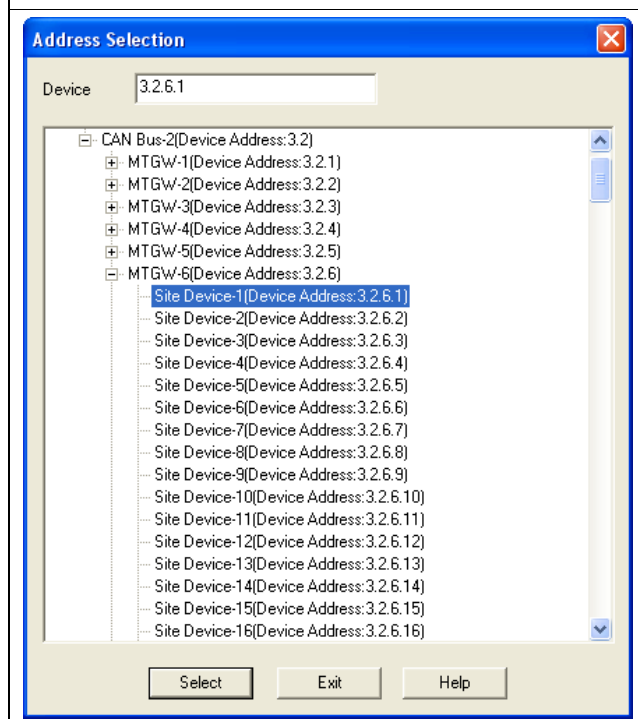
5.9 Address Selection Overview

After you add devices using the **Central Device Settings** window, you can select addresses while in other MTSW Setup windows. For example, when you add a new client, you choose the site devices associated with that client. You use the **Address Selection** dialog box to navigate to and select the desired address.

To view the **Address Selection** dialog box, click the **Browse** button to the right of any **Address** field on any **MTSW Setup** window. For example, select **Client→Perimeter Settings**. Refer to *Figure 26.*

> For MTR connections, all available device addresses are listed on the tree.
>
> For RS-232 devices, the device address appears in the list, and the Select button is available.
>
> A general RS-485 bus input device cannot be used by several different clients or used by a client perimeter and patrol point. These include the keypad, multi-zones input devices, such as DS6R2.
>
> **Exception:** The MT1-8, a no-key multi-zones input device, can be used by several different clients or used by a client perimeter and a patrol point.

Figure 277: Address Selection

5.10 Site Device Type Setting Overview

After you add devices using the **Central Device Settings** window, you can associate them with clients. When you do, you can determine the device type. With MTSW Setup, you can add custom device types as needed.

To use the **Site Device Type Setting** dialog box, follow the instructions in *Section 7.3 Configuring Site Devices* to open the **Site Device Type Setting** dialog box. Refer to *Figure 27.*

Figure 288: Site Device Type Setting

Type	Max Zone	Max Channel	Central Device
1-Input Module(DS7...	1		DS7400
2-Input Module(DS7...	2		DS7400
8-Input Module (DS7...	8		DS7400
8-O Solid Module(DS...		8	DS7400
8-Relay Module(DS7...		8	DS7400
DS3MX-CHI	3		DS7400
DS6MX-CHI	6		DS7400
DS6MX-CHI(V2)	6		DS7400
DS6R	6	1	MTR
DSR32		32	MTR
HC_3220	5		BOSCH-VDP
HCS_3300	5		BOSCH-VDP
HCS_3500S	5		BOSCH-VDP
ICP-MT1-2	2		MTR
ICP-MT2-8		8	MTR
ICP-MT3-1	1	1	MTR
In/Output Module(D...	1		DS7400
IUI-DS12R	12	1	MTR
MT1-1	1		MTR
MT1-8	8		MTR
MX Sensors/Contacts	1		DS7400
MX280/TH	1		DS7400
MX280THL	2		DS7400
Normal Sensors	1		DS7400
			D6600/6100

Type:

Max Zone: Max Channel:

○ MTS Device   ○ BOSCH-VDP Device   ● General Device   ○ MTS Output Dev.

Delete   Add   Save   Exit   Help

The Site Device Type Setting parameters are:

- **Type:** Name of the site device type.
- **Max Zone:** Maximum count for the zone the device type supports.
- **Max Channel:** Maximum count for the output channel the device type it supports.
- **Property:** Select **MTS Device, BOSCH-VDP Device**, **General Device**, or **MTS Output Dev.**

The default site device types cannot be deleted or edited.

6.0 Configuring Groups and Maps

A client group is a logical unit used to organize clients. A client group includes clients, perimeters, control points or client sub-groups. You can assign a client map to a client group.

Use the **Client Group and Map** window to set up client groups and group maps, dispatch clients, perimeters, and control points to a group, and locate clients, perimeters, and control points on the group map.

To open the **Client Group and Map** window from the MTSW Setup interface, select **Client→Client Group and Map** from the menu bar. The **Client Group and Map** window appears.

Figure 299: Client Group and Map
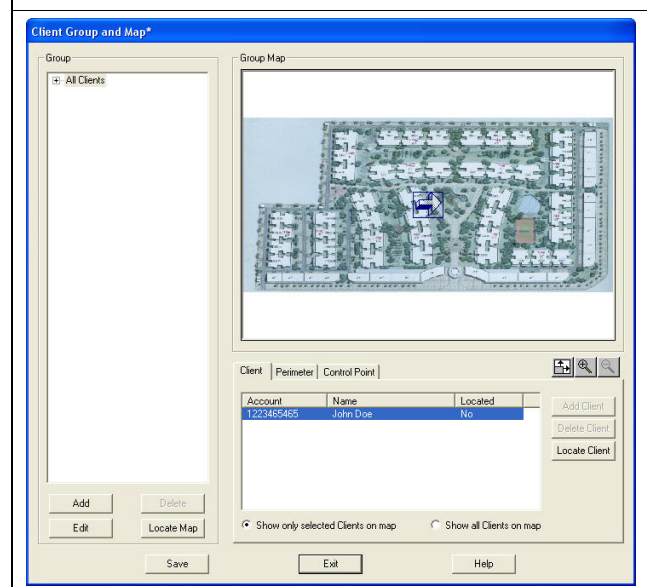
The **Group** list box on the left side of the **Client Group and Map** window lists all added groups in a tree format. You can add to the group list, edit groups, and add, edit, or delete the maps assigned to the group. The selected group map, clients and perimeter appear on the right side of the window.

6.1 Client Groups Overview

You can create multi-level client groups in the **Group** list box tree structure:

- **Top-level group:** Only one top-level group can exist in the system. The system automatically creates the top-level group. You can edit the top-level group, but you cannot delete it. The top-level group can contain one or more sub-groups. The default group of clients, perimeters and control points reside in the top-level group.

- **Sub-group:** You can organize your clients and perimeters in one or more sub-group levels. Sub-groups can contain other sub-groups. You can add, delete, and edit sub-groups.

6.2   Working with Client Groups

6.2.1   Creating Client Groups

46. To open the **Client Group and Map** window from the MTSW Setup interface, select **Client→Client Group and Map** from the menu bar. The **Client Group and Map** window appears.
47. In the **Group** list box, select the group (top-level group or sub-group) to which you want to add new sub-group from **Group** list box.
48. Click **Add**.
49. Type a group name in the resulting dialog box.
50. Click **OK** to add the new sub-group to the tree.

6.2.2   Editing Client Groups

In the **Group** list box, select the group you wish to edit and click **Edit**. Type a new group name in the dialog box and click **OK** to accept the change.

6.2.3   Deleting Client Groups

In the **Group** list box, select the group you wish to delete and click **Delete**. Click the **OK** button in the resulting dialog box to delete the group.

> ☑ When you delete a sub-group, you delete all sub-groups within it. All clients and perimeters belonging to the deleted sub-group are moved to the top-level group.
>
> The top-level group cannot be deleted.

6.2.4   Moving Client Sub-Groups

In a **Group** tree list, you can move a sub-group at any time. For example, if Stockport is a sub-group of Manchester, you can move it to Chelmsford or Harlow and it becomes a sub-group of that sub-group.

> ☑ When changing a sub-group's location, all sub-groups belonging to it are moved together, but otherwise remain unchanged.

6.3   Assigning a Map to a Client Group

You can assign a client map to a client group, and later locate clients on the map. The map and its located clients offer a visual aid to operators.

51. In the **Client Group and Map** window (in MTSW Setup, select **Client→Client Group and Map**), from the **Group** list box, select the group to which you wish to assign a map.
52. Click **Locate Map**. The **Locate Map** dialog box appears. Refer to *Figure 29*.

Figure 30: Locate Map Dialog Box
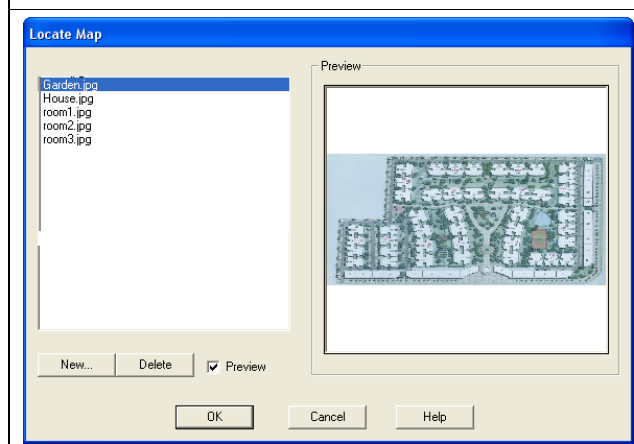
The list box on the left side of the dialog box lists all installed map files. When you select the **Preview** check box (default), a preview of the map you select appears in the **Preview** section of the dialog box.

53. Choose an existing map by selecting it in the list box and clicking **OK**, or by double-clicking it. The **Install Map** dialog box closes and the map appears in the **Group Map** section of the **Client Group and Map** window. If the group has sub-groups, all the sub group icons show at the center of map. If the group map is changed, all sub-groups that belong to it relocate.
54. Choose a custom map by clicking **New Map**. In the resulting **Open** dialog, navigate to and select your map and click **Open**. The image file is added to the system and the list box.
    The system supports .bmp, .jpg, and .wmf file formats.
55. To delete a map, select it in the list box and click the **Delete** button.

> ☑ Before deleting a map file, you must ensure that the file is not being used by a group. If a group is using a map file and it is deleted, when you try to access the group, the system shows a "Cannot find the file" message.

6.4   Assigning Clients to a Client Group

Each client group can have many clients. You cannot add or delete a client from the top-level group.

If you locate a top-level group client, you cannot add it to another group. If you need to move the client to another group, remove it from the top-level group map first. Refer to *Section 6.4.2 Locating a Client* on page **Error! Bookmark not defined.**.

Each client can belong to one group.

6.4.1 Adding a Client

56. In the **Client Group and Map** window (in MTSW Setup, select **Client→Client Group and Map**), from the **Group** list box, select the sub-group you wish to view or edit. The **Client**, **Perimeter**, and **Control Points** tabs appear. Refer to *Figure 30*.

Figure 31: Client Group and Map Window
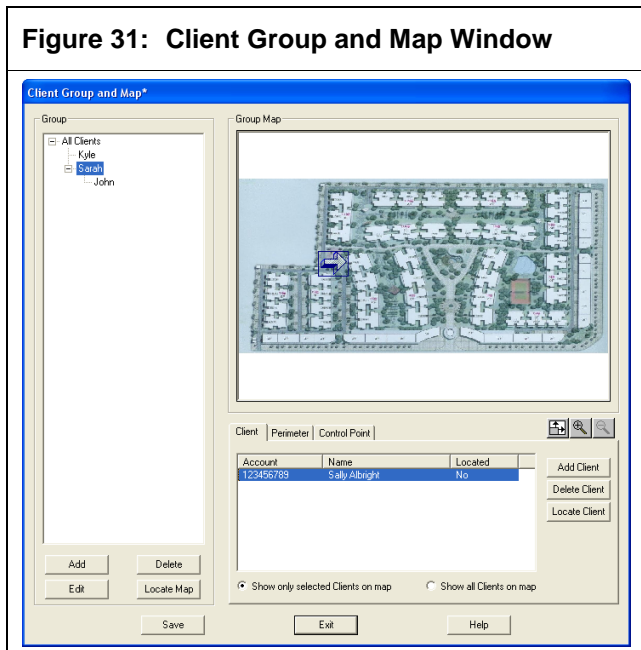
57. In the **Group** list box, select the sub-group to which you wish to add clients.
58. Click the **Client** tab. All clients belonging to the current group are listed.
59. Click **Add**.
60. In the resulting **Client List** dialog box, select the clients you wish to add to the selected group. Refer to *Figure 31.*

Figure 302: Client List Dialog Box
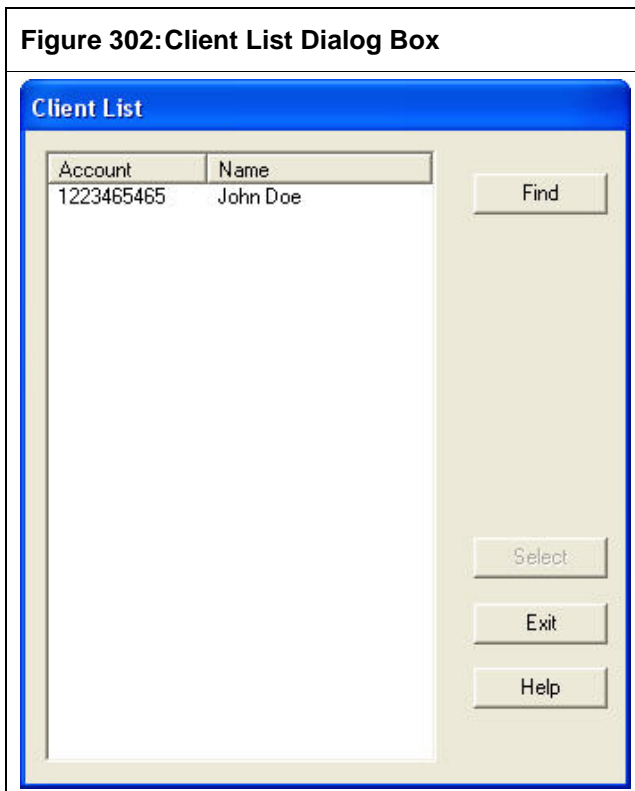
61. Click **Select**. The **Client List** dialog box closes and all selected clients appear in the **Client** tab.

> To delete a client from a client group.
> 1. In the **Group** list box, select the sub-group from which you wish to delete a client.
> 2. On the **Client** tab, select the client you wish to delete.
> 3. Click **Delete**. The client is removed from the **Client** tab.

6.4.2 Locating a Client

If you assigned a group map, you can locate each client of the client group on that map. Refer to *Section 6.3 Assigning a Map to a Client Group* on page **Error! Bookmark not defined.**.

62. In the **Group** list box, select the sub-group that you wish to configure.
63. On the **Client** tab, select the client you wish to locate.
64. Click **Locate**, or drag the client to the group map.
65. Drag the client to the desired location on the group map.
66. Select the **Show only the selected Clients on the map** or **Show all Clients on the map** option button. The default option is Show only the selected Clients on the map.

> To remove a client from a client map, drag it from the map to the **Client** tab.

6.5 Assigning Perimeters to a Client Group

67. In the **Client Group and Map** window (in MTSW Setup, select **Client→ Client Group and Map**), from the **Group** list box, select the sub-group you wish to view or edit. The **Client**, **Perimeter**, and **Control Points** tabs appear.
68. Click the **Perimeter** tab. All perimeters belonging to the current group are listed.

> ✓ You cannot add perimeters to a top-level group, but you can locate them.
>
> If you locate a perimeter on a top-level group map, you cannot add it to other groups.
>
> If you wish to move a perimeter to another group, you must remove it from the top-level group map.

69. Click **Add**.
70. In the resulting **Device List** dialog box, select the perimeters you wish to add to the selected group. Refer to *Figure 32.*

Figure 313: Device List for Perimeters
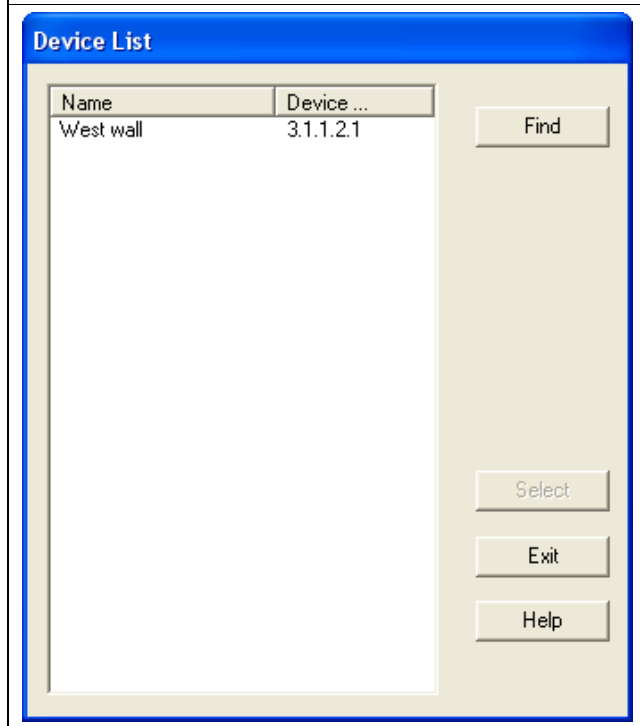
> ✓ To delete a perimeter from a client group.
> 71. In the **Group** list box, select the sub-group from which you wish to delete a perimeter.
> 72. On the **Perimeter** tab, select the perimeter you wish to delete.
> 73. Click **Delete**. The perimeter is removed from the **Perimeter** tab.

Locating a Perimeter

If you assigned a group map, you can locate each perimeter of the client group to that map. Refer to *Section 6.3 Assigning a Map to a Client Group* on page **Error! Bookmark not defined.**.

In the **Group** list box, select the sub-group that you wish to configure.

74. On the **Perimeter** tab, select the perimeter you wish to locate.
75. Click **Locate**, or drag the perimeter to the group map.
76. Select the **Show only the selected Perimeter on the map** or **Show all Perimeters on the map** option button. The default option is Show only the selected Perimeters on the map.

> ✓ To remove a perimeter from the group map, drag it from the map to the **Perimeter** tab.

6.6 Assigning Control Points to a Client Group

77. In the **Client Group and Map** window (in MTSW Setup, select **Client→Client Group and Map**), from the **Group** list box, select the sub-group you wish to view or edit. The **Client**, **Perimeter**, and **Control Points** tabs appear.
78. Click the **Control Point** tab. All control points that belong to the current group are listed.

**Figure 324: Client Group and Map Window –
Control Point List**
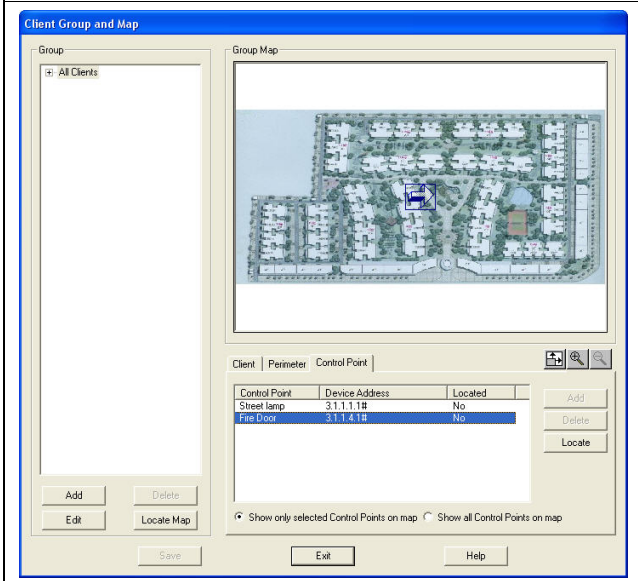
You cannot add control points to a top-level group, but you can locate them.

If you locate a control point on a top-level group map, you cannot add it to other groups.

If you wish to move a control point to another group, you must remove it from the top-level group map.

79. Click **Add**. In the resulting **Device List** dialog box, select the control points you wish to add to the selected group.

Figure 335: Device List for Control Points
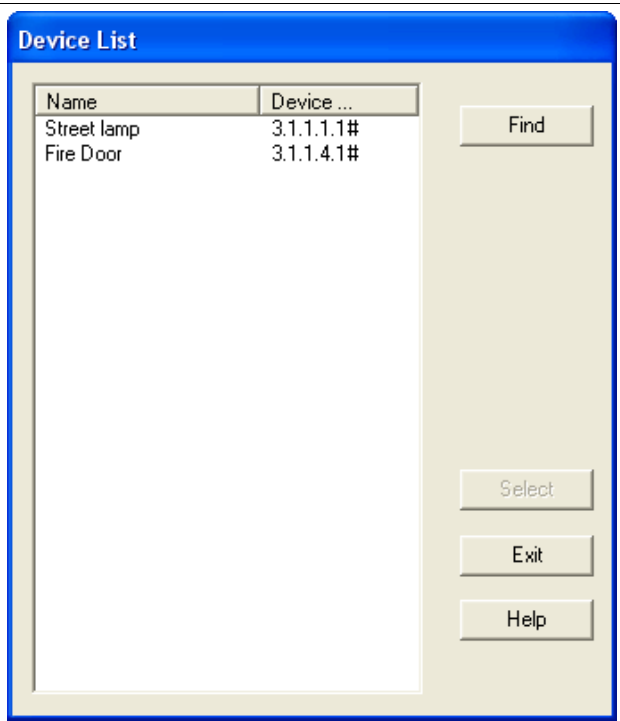
To remove a control point from a client group:

1. In the **Group** list box, select the sub-group from which you wish to remove a control point.
2. On the **Control Point** tab, select the control point you wish to remove.
3. Click **Delete**. The control point is removed from the **Control Point** tab.

Locating a Control Point

If you assigned a group map, you can locate each control point of the client group to that map.

In the **Group** list box, select the sub-group that you wish to configure.

80. On the **Control Point** tab, select the control point you wish to locate.
81. Click **Locate**, or drag the control point to the group map.
82. Select the **Show only the selected Control Point on the map** or **Show all Control Points on the map** option button. The default option is Show only the selected Control Point on the map.

To remove a control point from the group map, drag it from the map to the **Control Point** tab.

7.0 Configuring New Client Information

Use the **Client Information** window to add clients.

The **Client Information** window includes several tabs to configure different settings for a client. Refer to *Figure 35.* You can edit the tabs in any order.

To open the **Client Information** window from the MTSW Setup interface, select **Client→Add Client** from the menu bar. The **Client Information** window appears.

Figure 346:Client Information Window

7.1 Client Information Overview

83. In the **Client Information** window (in MTSW Setup, select **Client→Add Client**), select the tab to which you wish to enter data. The default active tab is **Basic Information**.
84. When you finish entering data, click **Save.**

> ☑ To duplicate an existing client, click the **Duplicate** button in the bottom left corner of the **Client Information** window.
>
> You cannot duplicate the following client information:
> - Account and Name
> - Site Device
> - Zone Address information
> - Client Map

7.2 Entering Basic Information

7.2.1 General Configuration

85. On the **Basic Information** tab of the **Client Information** window (in MTSW Setup, select **Client→Add Client**), enter the client's account number in the **Account** text box. Account numbers are hexadecimal and use a maximum of ten characters.
86. Enter the client's name in the **Name** text box.
87. Select the client's type from the **Type** drop-down list.

> ☑ There are no default client types. To add a client type:
> 1. Click the button to the right of the **Type** drop-down list. The **Client Type Setting** dialog box opens.
> 2. Click **Add**, and then enter a type in the Type text box. Click **Save**.
> 3. To delete a type, select it in the **Client Type Setting** dialog box and click **Delete**.

88. Select the client tree level to which you wish to assign the client from the **Level** drop-down list. You can create additional levels by clicking the button to the right of the **Level** drop-down list.
89. Enter the client's address and zip code in the **Address** and **Zip** text boxes.
90. Enter the responder's name, phone number, fax number, and SMS text number in the **Responder**, **Phone**, **Fax**, and **SMS Receiver** text boxes.
91. If you connect a D6600/6100 to the system, select a protocol from the **Protocol** drop-down list, if desired.

> ☑ When the meaning of an event data is confusing (for example, in the D6500 mode, the formatted character is '1', and in the SIA mode, the formatted character is '<TAB>'), the protocol of client information is important and is entered.
>
> The protocol can be defined (refer to *Event Codes Overview* on page **Error! Bookmark not defined.**). If the defined protocol is used, select the protocol here.

92. Enter a test interval, in minutes, in the **Test Interval** text box.

7.2.2 Configuring the Contract

93. On the **Basic Information** tab of the **Client Information** window (in MTSW Setup, select **Client→Add Client**), from the **Contract** section, enter the client's contract number in the **Contract No.** text box.

---

94. Select the interval at which you wish to charge the client from the **Charge Interval** drop-down list.

95. Select the **Start Date**, **End Date**, **Charge Date**, and **Stop Service Date** using the corresponding check boxes and spin boxes.

96. Select the **Expiration Date** check box to discard any events for this client that occur on or after the date you select from the drop-down list. The **Send SMS Before It Expires** check box appears.

97. Select the **Send SMS Before It Expires** check box to send an SMS text message to the client each of the three days before the account expires.

Figure 357: Contract Expiration Date
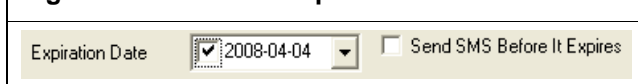
98. Enter a monthly charge in the **Monthly Charge** text box.

7.2.3   Configuring the Police Settings

99. On the **Basic Information** tab of the **Client Information** window (in MTSW Setup, select **Client→Add Client**), from the **Police** section, click the button to the right of the **Phone** button to open the **Police Setting 1** dialog box.

Figure 36: Police 1 Setting Dialog Box
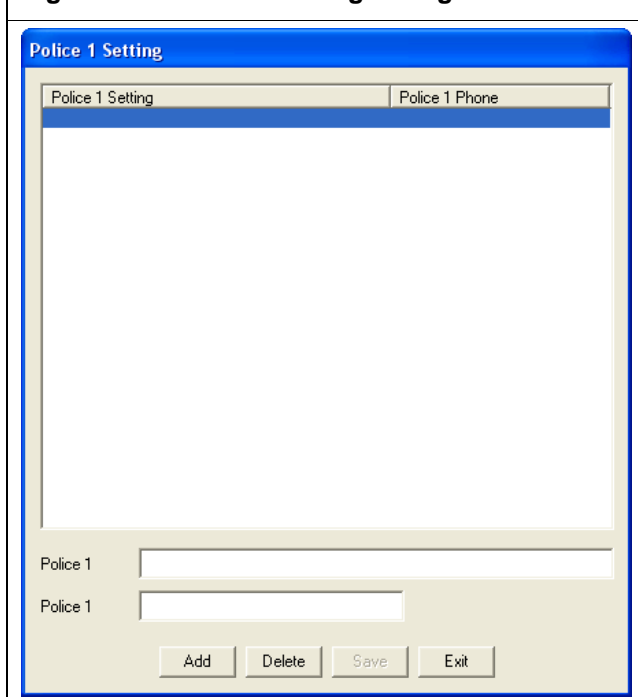
100. Use the dialog box to add Police 1 names and phone numbers. Click **OK**.

101. Select the desired Police 1 name from the **Police 1** drop-down list. The **Phone** text box for Police 1 automatically fills in.

102. Repeat steps 1 though 3 for the Police 2 settings.

7.2.4   Configuring the Following Command

Refer to *Section 27.1.2 Using Following Actions and Commands* on page **Error! Bookmark not defined.**.

7.2.5   Configuring the Event Dispatch Settings

In MTSW, you can dispatch events manually or automatically. If an event uses the automatic mode, the event is sent directly to the History database and not shown on the MTSW main window. You must set the mode for every client.

On the **Basic Information** tab of the **Client Information** window (in MTSW Setup, select **Client→Add Client**), from the **Event Dispatching section**, select the **Dispatch events based on the event definitions**, **Dispatch events manually**, or **Dispatch events automatically** option button. The default option is Dispatch events based on the event definitions. Click **Save**.

7.3   Configuring Site Devices

Site devices are any devices that reside at the client site. Examples include: control panels, video door phones, and motion detectors.

For MTS or DS7400 series device connection, the site device is set and is associated with the client. One client can have many site devices.

7.3.1   General Configurations

103. In the **Client Information** window (in MTSW Setup, select **Client→Add Client)**, select the **Site Device** tab.

Figure 37: Client Information – Site Device Tab
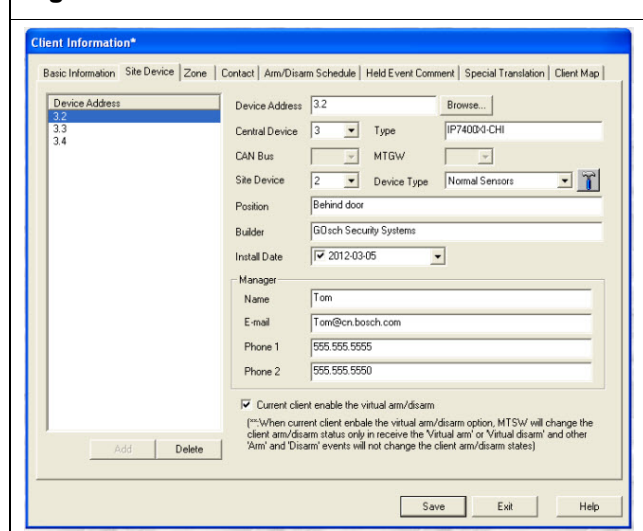
104. Click **Add** to add a site device.

---

105. Type the site device number in the **Device Address** text box, or to select a device address, click the **Browse** button to the right of the **Device Address** text box.
106. In the resulting **Address Selection** dialog box, navigate through the tree and select the desired device. Refer to *Figure 39.*
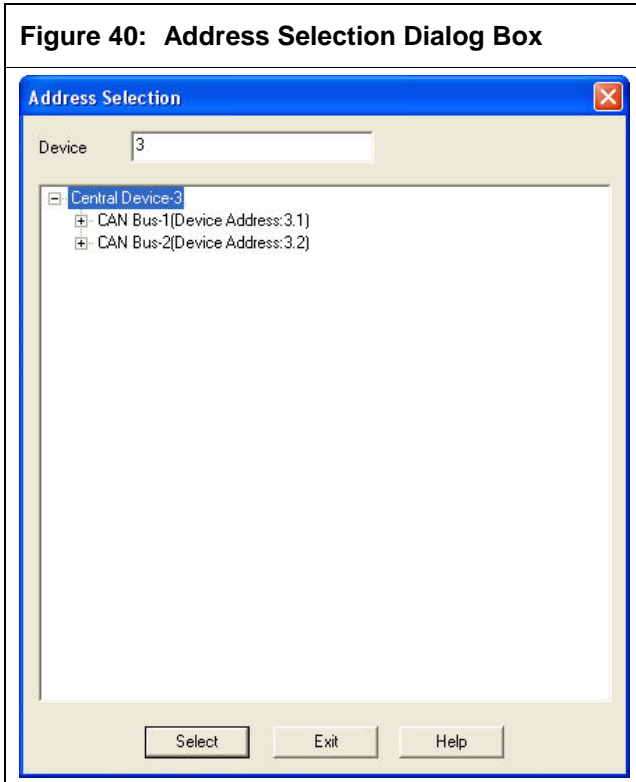
Figure 40: Address Selection Dialog Box

---

107. Click **Select**. The dialog box closes and the **Device Address** field fills in with the corresponding information.

> You cannot select a device address that is already assigned to another client. These include the keypad, multi-zones input devices, such as DS6R2.
>
> **Exception**: The MT1-8, a no-key multiple-zone input device, can be used by several different clients or used by a client perimeter and a patrol point.

108. The **Central Device**, **CAN Bus**, **MTGW**, and **Site Device** fields also fill in based upon the selected device address.
109. Select a device type from the **Device Type** drop-down list.

> Check box **Current client enable the virtual arm/disarm** is enabled only when the MTS or DS7400 series devices are associated with the client. When the checkbox is select, the current client arm/disarm status is controlled only by the MTSW, not by actual arm/disarm events. Refer to 29.4.1.

> The options in the **Device Type** drop-down vary based upon the chosen **Device Address**. To create additional device types:
> 1. Click the button to the right of the **Device Type** drop-down list. The **Site Device Type Setting** dialog box opens.
> 2. Click the **Add** button and then enter a type in the **Type** text box.
> 3. Select the option button for the device you want to configure.
> 4. Enter information in the **Max Zone** and **Max Channel** text boxes. You cannot enter a max zone for an MTS output device. Click **Save**.
> 5. You can delete a type by selecting it in the **Site Device Type Setting** dialog box and clicking **Delete**.

110. Enter the information in the **Position**, **Builder**, and **Install Date** fields on the **Site Device** tab.

7.3.2 Manager Configurations

On the **Site Device** tab of the **Client Information** window (in MTSW Setup, select **Client→Add Client**), in the **Manager** section, enter contact information for the manager in the corresponding text boxes, if desired. Click **Save**.

7.4 Configuring Zones

The zone's address cannot be empty if the all of the following apply:

- The site device connected with an MTR, a DS7400 connection, or a Bosch-VDP connection is assigned to a client
- Some of the device's zones are not assigned to a zone
- The address of the zone cannot be empty

For MTS, the event sent from a zone is translated based on zone type. For example, if the zone type is Burglary, when an alarm without a zone type is received, it is translated into Burglary; if a Restore event is received, it is translated into Burglary Restoral. In Special Translations, if a zone is assigned to an event, the event of this zone is translated based on the special translation.

111.   In the **Client Information** window (in MTSW Setup, select **Client→Add Client**), select the **Zone** tab.
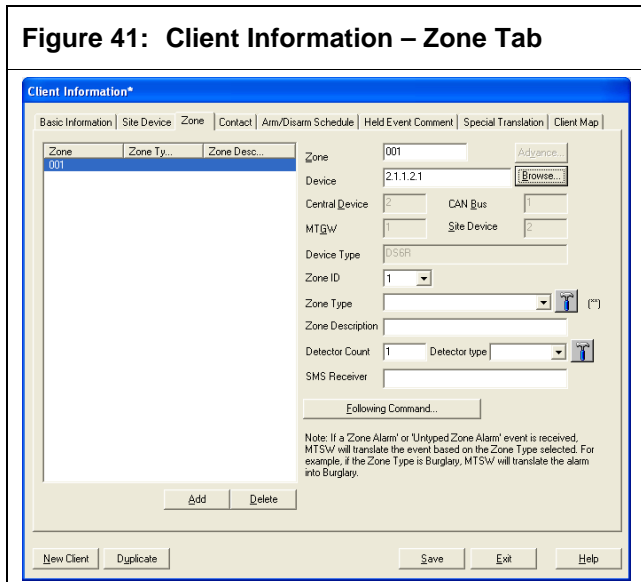
Figure 41: Client Information – Zone Tab

112.   Click **Add** to add a zone.
113.   Enter a zone number in the **Zone** text box.
114.   For zones assigned to MT1-1 or MT1-8 devices that have no keypad, click **Advance** to configure settings with the **Advanced Zone Settings** dialog box. Refer to *Figure 41.*
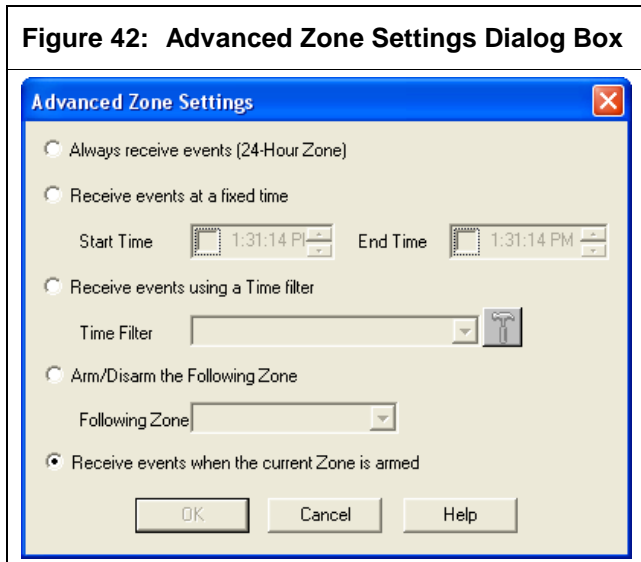
Figure 42: Advanced Zone Settings Dialog Box

> When **Current client enable the virtual arm/disarm** is set for the assigned client, its no keypad events are controlled by MTSW virtual arm or virtual disarm.

> You can choose one of five options using the **Advanced Zone Settings** dialog box.
> - **Always receive events (24-Hour Zone):** Events from this zone are received whenever the system is turned on.
> - **Receive events at a fixed time:** Events from this zone are received during the programmed time interval.
> - **Receive events based on a Time filter:** Events from this zone are received during the Time filter used.
> - **Arm/disarm the following Zone:** Events are received or discarded based on the selected Following Zone.
> - **Receive events when the current Zone is armed:** Events from this zone are received whenever the zone is armed.

115.   Type the site device number in the **Device** box, or to select a device address, click the **Browse** button to the right of the **Device** text box.
116.   In the resulting **Address Selection** dialog box, navigate through the tree and select the desired device. Refer to *Section 5.8 Address Selection Overview* on page **Error! Bookmark not defined.**.
117.   Click **Select**. The dialog box closes and the **Device** field fills in with the corresponding information.
118.   The **Central Device**, **CAN Bus**, **MTGW**, and **Site Device**, **Device Type** and **Zone ID** fields also fill in based upon the selected device address.
119.   Select a **Zone Type** from the drop-down list, and enter a description in the **Zone Description** text box.

> MTSW offers default zone types. You can add custom zone types. To add a zone type:
> 1. Click the button to the right of the **Zone Type** drop-down list. The **Zone Type Setting** dialog box opens.
> 2. Click **Add** and then enter a type in the **Zone Type** text box.
> 3. Double-click an event in the **Description** list box to configure the related events using the **Select Event** dialog box.
> 4. When you finish, click **Save**.
> 5. To delete a type, select it in the **Zone Type Setting** dialog box and click **Delete**.

In the **Client Tree** and **Client Panel**, the **Status** icons are available for clients, zones, perimeters to remind you to dispatch the pending events (for example, alarm, alarm restore, arm, and so on). When **all** events are dispatched, the status changes.

Zone type **Door Access** displays the zone status in real time in the **Client Tree** and **Client Panel**. That means in the disarm state of the related zones or perimeters, if an alarm event is received, the icon changes to **Alarm**, for the later received alarm restore or disarm events, the icon changes to **Disarm** whether the events are dispatched or not.

No alarm events for the Access zone when it is triggered in disarm state.

For example:

When select **Door Access** from the Zone Type drop-down list:

In **Virtual arm**, the zone icon changes to red when the zone is in alarm and alarm event is sent; the zone icon changes to yellow (arm status) when the zone is restored, restore event is sent and all events are dispatched.

In **Virtual disarm**, the zone icon changes to red when the zone is in alarm, but no event is sent; the zone icon changes to green (disarm status) when the zone is restored, but no restore event is sent.

120.   Select a **Detector Type** from the drop-down list, and enter a count in the **Detector Count** text box.

There are no default detector types. To add a detector type:

1. Click the button to the right of the **Detector Type** drop-down list. The **Detector Type Setting** dialog box opens.

2. Click **Add** and then enter a type in the **Type** text box. Click **Save**.

3. To delete a type, select it in the **Detector Type Setting** dialog box and click **Delete**.

121.   Enter an SMS receiver in the corresponding text box, if desired. If you enter an SMS receiver, when an event occurs in this zone, an SMS text message is sent to this receiver instead of to the client's SMS receiver.

For the D6600/6100 receiver, if the protocol is Contact-ID, when the count of zone code is 4 or 5, the latter 3 codes are the Zone ID and the first 1 or 2 codes are the Group ID.

122.   Click **Save**.

Configuring the Following Command

Refer to *Section 27.1.2 Using Following Actions and Commands* on page **Error! Bookmark not defined.**.

7.5   Configuring Contacts

To notify the person in charge, the client contact is attached to an Address filter, Event filter and Time filter. The system shows only the valid Contact according to the selected filter when an event is received.

For example, if a contact works from 18:00 to 23:50 in the evening and needs to be notified when a Fire event occurs in Zone 1, these filters are set for the contact. Otherwise the contact does not appear.

If no filter is set, the contact shows when any event is received.

123.   In the **Client Information** window (in MTSW Setup, select **Client→Add Client**), select the **Contact** tab. Refer to *Figure 42*.

124.   Click Add to add a contact.

125.   Enter the contact's information in the **Name**, **Key Word**, **Password**, and **Phone** in the text boxes.

Figure 43: Client Information – Contact Tab

126.   Select your options from the **Adr. Filter**, **Event Filter**, and **Time Filter** drop-down lists.

There are no default Valid Zone, Valid Event and Time filter options. To add them:

1. Click the button to the right of the corresponding drop-down list. The corresponding dialog box opens.
2. Refer to *Section 14.0 Managing Filter Settings* on page **Error! Bookmark not defined.**.

127.   Click **Save**.

7.6   Configuring the Arm/Disarm Schedule

128.   In the **Client Information** window (in MTSW Setup, select **Client→Add Client)**, select the **Arm/Disarm Schedule** tab.

Figure 38: Client Information – Arm/Disarm Schedule Tab
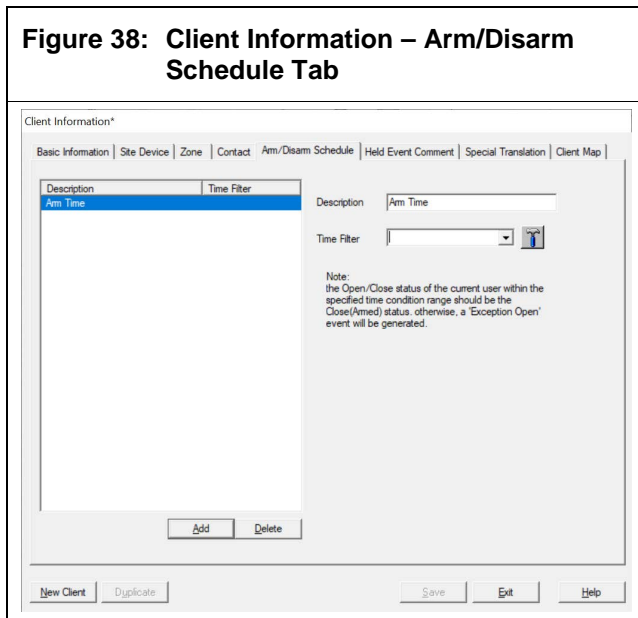
129.   Click **Add** to add a schedule.
130.   Enter a description in the **Description** text box.
131.   Select a Time filter from the **Time Filter** drop-down list.

> There are no default Time filters. To add a Time filter:
>
> 1. Click the button to the right of the Time Filter drop-down list. The corresponding dialog box opens.
> 2. Refer to Section 14.1 Configuring Time Filters on page **Error! Bookmark not defined.**.

132.   Select the desired **Type** option button.
133.   Select the desired **Force to Arm** check box.
134.   Click **Save**.

Additional notes for the **Time Filter** drop-down list:

1) The defined time set in this window is the time when the user should be armed. For example: a company that works from 8:30am to 12:00am, and from 13:00pm to 17:00pm.

According to the schedule, the company is in the disarming status from 8:30 to 12:00 and from 13:00 to 17:00 every day, the rest of the time should be in the arming status. When configuring arming or disarming schedule, a time condition should be set which includes 00:00-8:30 and 12:00-13:00 and 17:00-23:59.

2) MTSW monitors the user's disarming status according to the defined time conditions. If the user status becomes "disarmed" within the time that should be armed (that is, the defined time condition is met), MTSW will generate a "disarming during abnormal periods" event to remind the operator and relevant users for verification.

7.7   Configuring Held Event Comments

You can assign a held events comment to Address filters and to Event filters. When an event is received, only valid held event comments show.

If no filter is set, all held event comments appear when an event is received.

135.   In the **Client Information** window (in MTSW Setup, select **Client→Add Client**), select the **Held Event Comment** tab.

Figure 39: Client Information – Held Event Comment Tab
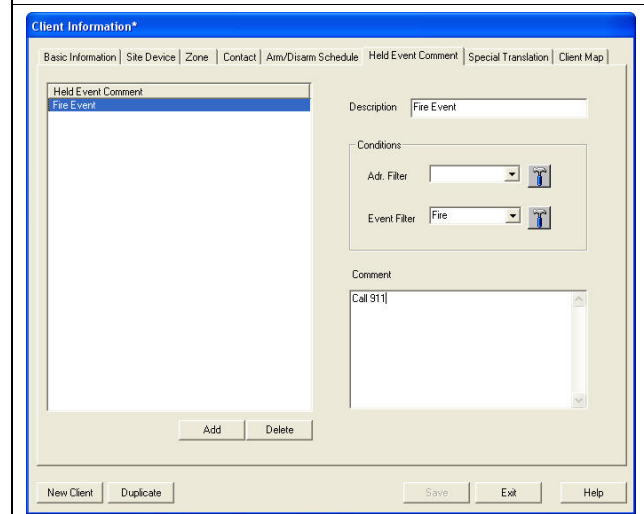
136.   Click **Add** to add a Held Event Comment.
137.   Enter a name in the **Description** text box.
138.   Select an Address filter and an Event filter from the **Adr. Filter** and **Event Filter** drop-down lists.

> There are no default Address or Event filters. To add them:
>
> Click the button to the right of the corresponding drop-down list. The corresponding dialog box opens. Refer to *Section 14.2 Configuring Event Filters* on page **Error! Bookmark not defined.** and *Section 14.3 Configuring Address Filters* on page **Error! Bookmark not defined.**.

139. Enter the desired comments in the **Comment** text box.
140. Click **Save**.

7.8 Configuring Special Translations

You can define special Translation Event Codes in this display. If an Event Code is received and it was defined with a Special Translation Code, the event is translated based on the translation code.

The Parameter type is the digital type following the event codes. For example, the code OPxx in MTP, where OP is disarmed and xx is the user ID. The parameter type must be a user ID. The AL of ALxx is alarm and xx is the alarm zone. The zone must be chosen from parameter type. The Parameter is the conversion in a special instance. For example, the code OP01 is defined in Disarm when 02 is entered into the parameter. When OP01 is received, the system translates it to Disarm by User 02.

There are no Special Event Codes for DS7400 series devices.

7.8.1 Creating New Special Translations

141. In the **Client Information** window (in MTSW Setup, select **Client→Add Client**), select the **Special Translation** tab. The **Special Translation** tab appears.

Figure 40: Client Information – Special Translation Tab
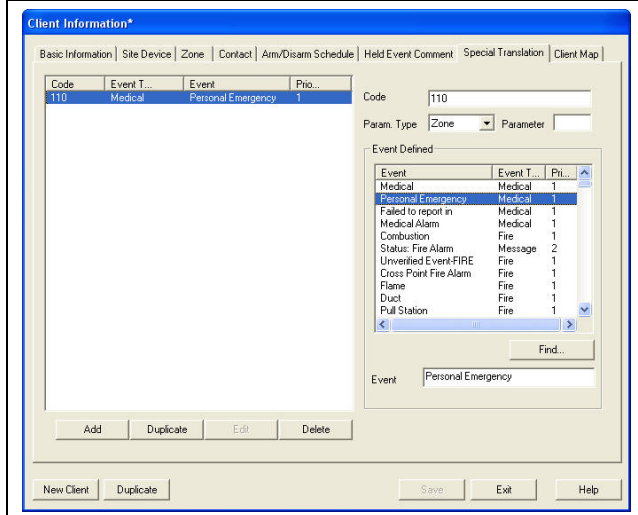
142. Click **Add** to create a new blank code.
143. Enter an alphanumeric code in the **Code** text box.
144. Select a type from the **Param. Type** drop-down list.
145. Enter a parameter in the Parameter text box, if desired.
146. Select an event from the **Event Defined** list box.

147. Click **Save**.

7.8.2 Creating Duplicate Special Translations

You can save time by duplicating existing Special Translations.

148. Click **Duplicate** to copy the special event codes from another client.
149. The **Client Special Event Code** dialog box appears.
150. From the **Client List** list box, select the client from which you want to copy codes.
151. Select the **Append event codes that are not included** or the **Overwrite** option button and click **OK**.
152. Click **Save**.

Figure 41: Client Special Event Code Dialog Box
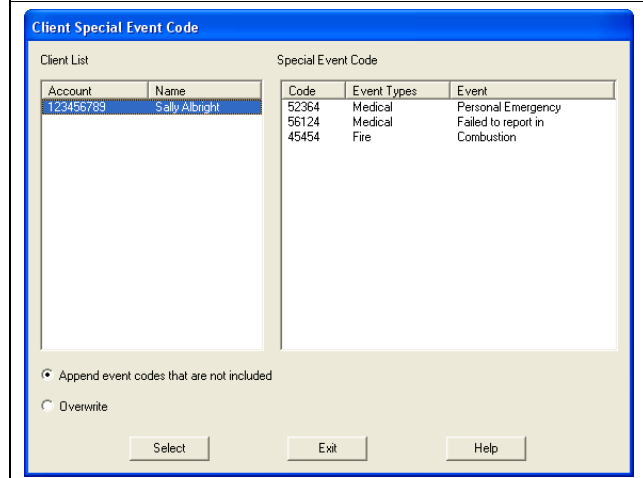
7.9 Configuring Client Maps

In the **Client Information** window (in MTSW Setup, select **Client→Add Client**), select the **Client Map** tab. The **Client Map** tab appears.

Figure 42: Client Information – Client Map Tab
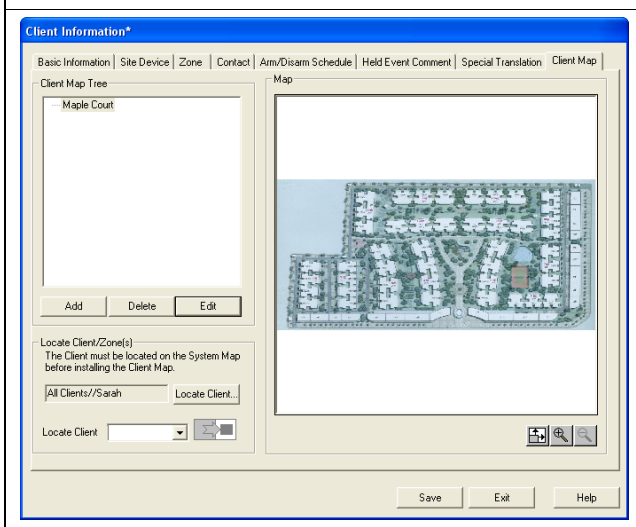
Add a client map group and then click **Locate Client** to open the **Locate Client** dialog box.

Refer to *Section 6.3 Assigning a Map to a Client Group* on page **Error! Bookmark not defined.**.

8.0 Configuring Existing Clients with the Client List

After you configure your clients, you can quickly find, edit, delete, or select a client using the Client List.

153. To open the **Client List** window from the MTSW Setup interface, select **Client→Client List** from the menu bar. The **Client List** window appears.

Figure 43: Client List Window
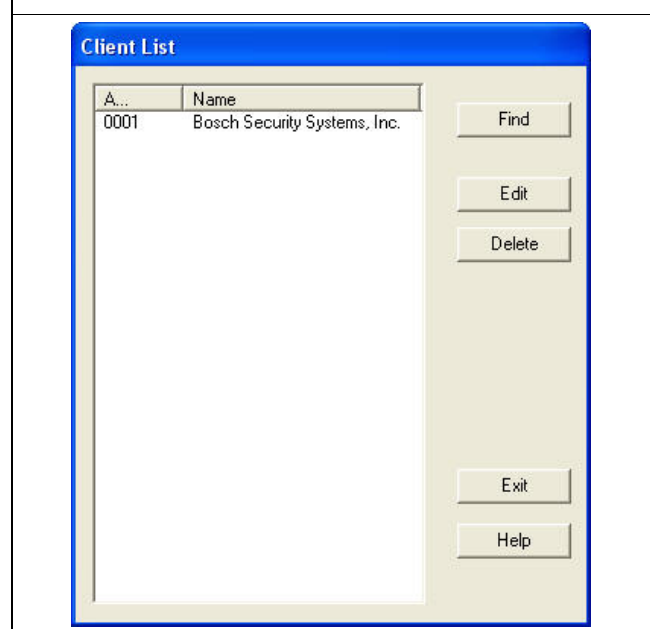
154. Select a client from the list box and click **Edit** to edit it using the **Client Information** window, or click **Delete** if you wish to delete the client.

> ☑ When you click **Delete**, a dialog box prompts you to confirm the deletions. When you delete a client or client zone, it is also deleted from the Address filter that includes it.
>
> If you click **Yes** on the dialog box, the selected client information is deleted.

155. To find a client in a long Client list, click **Find**. The **Find Client** dialog box appears. Refer to *Figure 50*.

Use the following features in the **Find Client** dialog box:

- **Match With:** Select **Account** or **Client Name**.
- **Search:** Enter the account number or name for which you wish to search.
- **Fuzzy:** Select the check box if you wish to search for partial field matches.

156.   Click **Find**. The **Find Client** dialog box closes, and then only the clients that match your search criteria appear in the client list.

Figure 44: Find Client Dialog Box
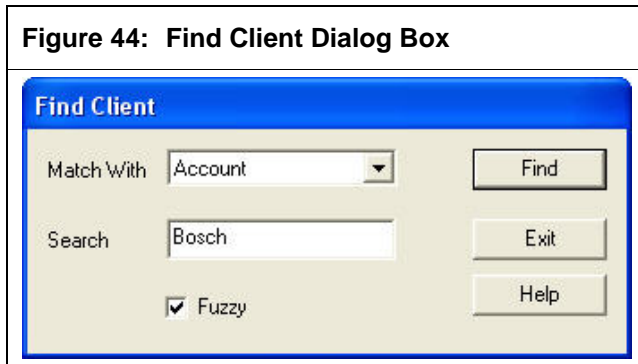
9.0 Configuring New Clients with the Client Wizard

You can use the **Client Wizard** instead of the **Client Information** window to add a new client. The **Client Wizard** steps you through the same options you use in the **Client Information** window, but offers more guidance than does the **Client Information** window.

157.   To open the Client Wizard from the MTSW Setup interface, select **Client→Client Wizard** from the menu bar. The **Client Wizard** appears.

Figure 45: Client Wizard
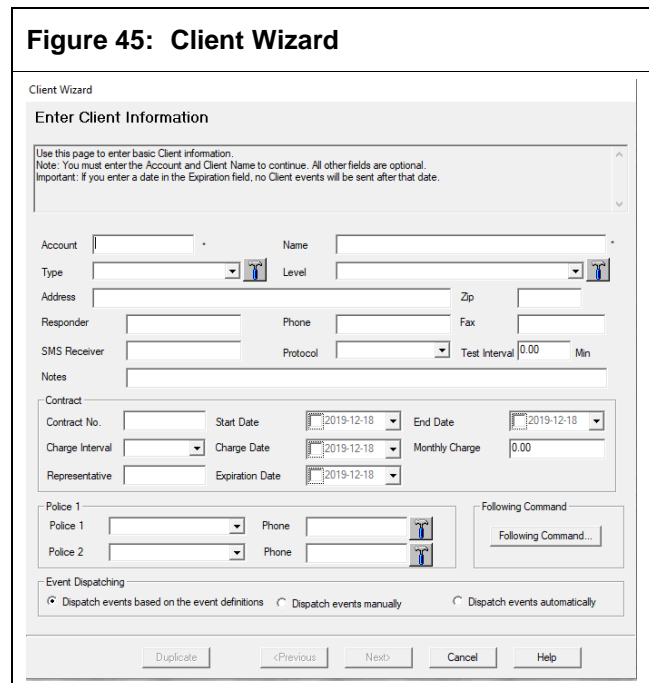
158.   Enter any mandatory items (Account and Name) on the first page of the wizard. The **Next** button becomes available.

159.   Enter optional information, as desired, and click **Next**.

160.   Repeat steps 2 and 3 to finish the wizard.

161.   Click **Save**.

Before you save the new client, you can click **Previous** to change information you entered on a previous page, or you can click **Cancel** to discard all the information you entered.

10.0 Query MT series device

MTSW can send query commands to MTR and retrieve the actual device types connected to MTSW through MTR. After MTSW retrieves information about the connected MT series devices, you can generate new clients, verify the device types, or reassign the device to another client with MTSW.

> ☑ You must add an MTR device as a central device in MTSW before you can use the **Query MT series device** feature.

162.   To open the **Query MT series device** window from the MTSW Setup interface, select **Client→ Query MT series device** from the menu bar. The **Query MT series device** window appears.

Figure 46: Query MT series device
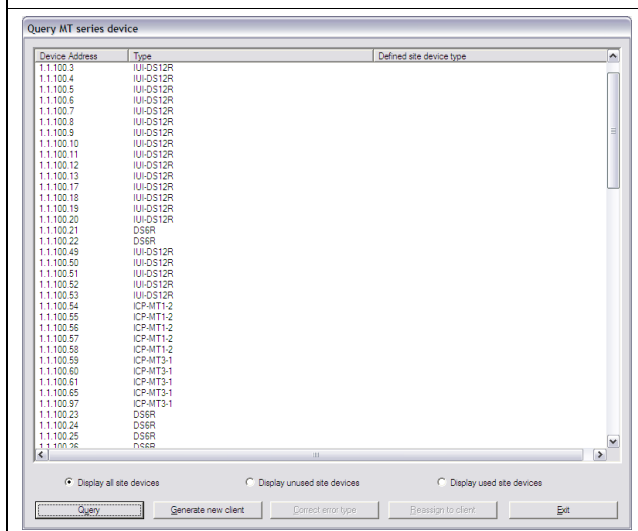
163.   To retrieve information for all the connected devices, click the **Query** button.

> ☑ The **Type** column lists the true type retrieved through the query; the **Defined site device type** column lists the MTSW operator settings, if different than the true type.

10.1 Generating New Clients

When a query completes, the **Generate new client** button is enabled if MTSW retrieved new devices.

> ☑ Devices added through MTR and now received through the query are indicated by a blank **Defined site device type** column.

You can use the button to generate new clients.

164.   In the **Query MT series device** window (in MTSW Setup, select **Client→Query MT series device**), click the **Generate new client** button.

165.   Enter the desired information in the resulting dialog box, and then click the **Generate client** button.

Figure 47: Generate new client dialog
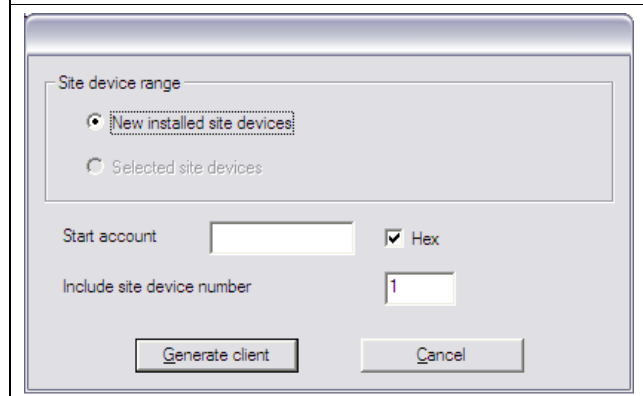
MTSW generates new clients with new devices. The new client names are generated in **[x.x.x.x] [device type]** format. The device addresses are generated in [x.x.x.x] format.

10.2 Correcting Error Types

When the query completes, the **Correct error type** button is enabled if MTSW retrieved incorrect devices, or devices that do not match the MTSW configuration.

> ☑ Devices added through MTR that are incorrect to the MTSW configuration are indicated by mismatched **Defined site device type** and **Type** columns.

In the **Query MT series device** window (in MTSW Setup, select **Client→Query MT series device**), click the **Correct error type** button. MTSW corrects the error device type and related parameters.

10.3 Reassigning Clients

When the query completes, select an item in the list to enable the **Reassign to client** button. You can use this button to reassign the device to a client.

166.   In the **Query MT series device** window (in MTSW Setup, select **Client→Query MT series device**), select an item from the list.

167.   Click the **Reassign to client** button. The **Client List** dialog box opens.

168.   Select a client and click the **Select** button.

169.   The **Client List** dialog box closes and MTSW reassigns the selected client and changes the related parameters.

11.0 Configuring Perimeter Settings

The site device of the perimeter is the same as the client's site device, except that the device used by the perimeter can connect only with MTR and DS7400 series devices. The events occurring for a perimeter are translated into a Perimeter event.

You can configure your perimeters using the **Perimeter Settings** window.

170.	To open the **Perimeter Settings** window from the MTSW Setup interface, select **Client→ Perimeter Settings** from the menu bar. The **Perimeter Settings** window appears.

171.	The **Site Device** tab is the same as the **Site Device** tab on the **Client Information** window. Refer to *Section 7.3 Configuring Site Devices* on page **Error! Bookmark not defined.**.

Figure 48: Perimeter Settings – Site Device Tab
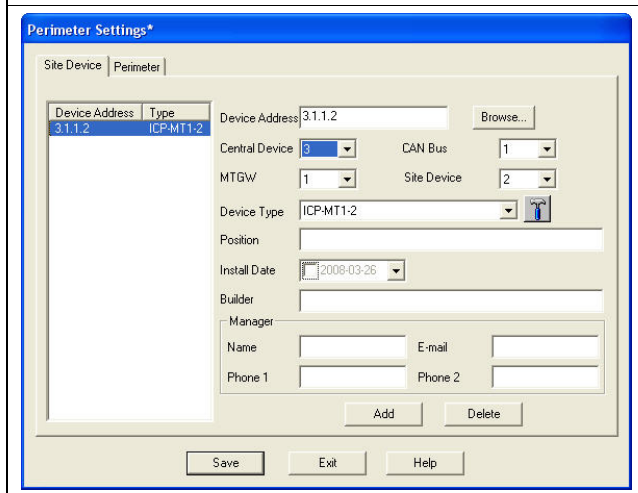
The system supports many perimeters, which you can configure with the **Perimeter** tab.

Figure 49: Perimeter Setting – Perimeter Tab
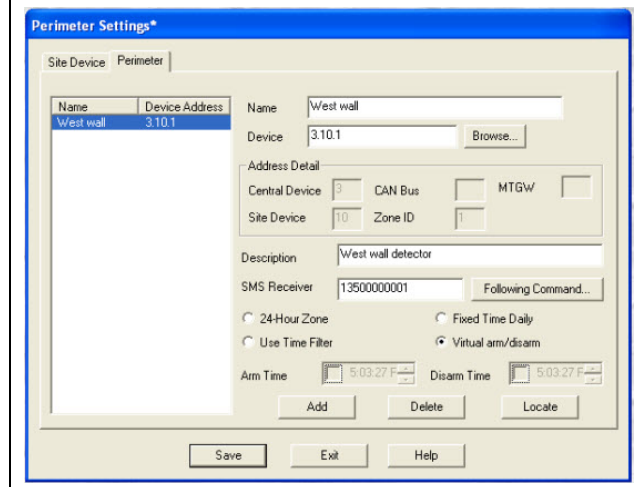
172.	In the **Perimeter Settings** window, select the **Perimeter** tab.

173.	Click **Add**.

The perimeter settings are:

- **Perimeter:** Enter a name for the perimeter.
- **Address:** Click **Browse** to select the zone address you wish to assign to the perimeter. Refer to *Section 7.4 Configuring Zones* on page **Error! Bookmark not defined.**.
- **Address Details:** The **Central Device**, **CAN Bus**, **MTGW**, and/or **Site Device**, **Device Type** and **Zone ID** fields also fill in based upon the selected zone address.
- **Description:** Enter a description for the perimeter.
- **SMS Receiver:** Enter information in the **SMS Receiver** text box, if desired. If you enter an SMS receiver, when an event occurs in this zone, an SMS text message is sent to this receiver instead of to the client SMS receiver.

For D6600/6100 receiver, if the protocol is Contact-ID, when the count of zone code is 4 or 5, the latter 3 codes are zone ID and the 1 or 2 codes are group ID.

Following Command: Refer to *Section 27.1.2 Using Following Actions and Commands* on page **Error! Bookmark not defined.**.

- **Arm/Disarm:** When the perimeter is disarmed, all events sent from it are discarded. There are four kinds of Perimeter Arm/Disarm modes:
	- **24-Hour Zone:** The perimeter is always armed.

– **Fixed Time every day:** The perimeter is armed or disarmed at the same time every day. The perimeter is in Armed status during the Arm schedule, and in Disarmed status during the Disarm schedule.

– **Arm/Disarm by Time filter:** The perimeter is in Armed or Disarmed based on a Time filter.

– **Virtual arm/disarm**: The perimeters is armed or disarmed by the MTSW virtual arm or virtual disarm settings.

● **Locate:** Click **Locate** to locate the perimeter on a map.

12.0 Configuring Control Points and Control Point Tasks

There are some devices that have one or more relays that you can connect to MTS and DS7400 series devices. MTSW can send command to control these relays. Use these relays to control other devices, such as a door, street lamp or water supply device. In MTSW, you can name every relay output channel and locate it on the system map (refer to *Section 6.6 Assigning Control Points to a Client Group* on page **Error! Bookmark not defined.**). In MTSW, each relay output channel is called a Control Point.

For MTS, the output device is connected with the RS-485 bus of MTGW. The output device can receive a command that is sent from MTGW, MTR or MTSW. For a DS7400 series devices, two octal relay modules can be connected, which can receive commands sent from MTSW or DS7400.

12.1 Configuring Control Points

To open the **Control Point Settings** window from the MTSW Setup interface, select **Client→Control Point→Control Point Settings** from the menu bar. The **Control Point Settings** window appears.

Figure 50: Control Point Settings – Site Device Tab
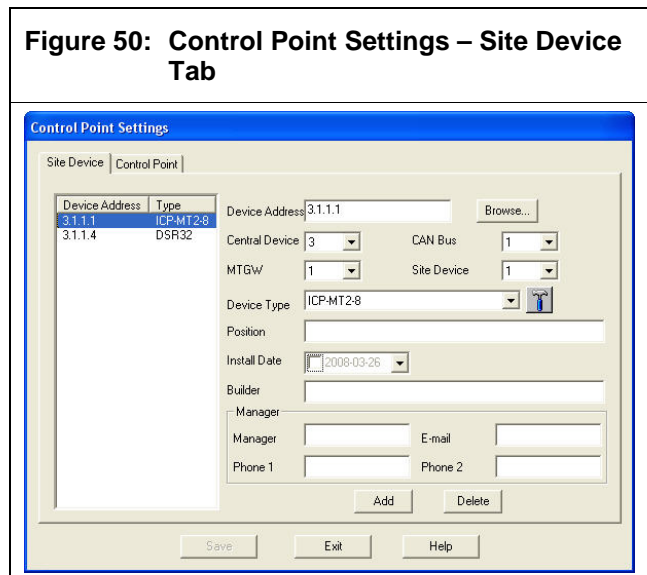
12.1.1 Configuring Site Device Settings

The site device of the control point is the output device. It is the same as the client's site device, except that the device used by the control point can connect only with MTR or DS7400 series devices.

174.   In the **Control Point Settings** window (in MTSW Setup, select **Client→Control Point→Control Point Settings**), click the **Site Device** tab.
175.   Enter information in the available text boxes. Refer to *Section 7.3 Configuring Site Devices* on page **Error! Bookmark not defined.**.
176.   Click **Save**.

12.1.2 Configuring Control Point Settings

177.   After you set the site device for the control point, you can configure the control point settings.
178.   In the **Control Point Settings** window (in MTSW Setup, select **Client→Control Point→Control Point Settings**), click the **Control Point** tab.

Figure 51: Control Point Settings – Control Point Tab

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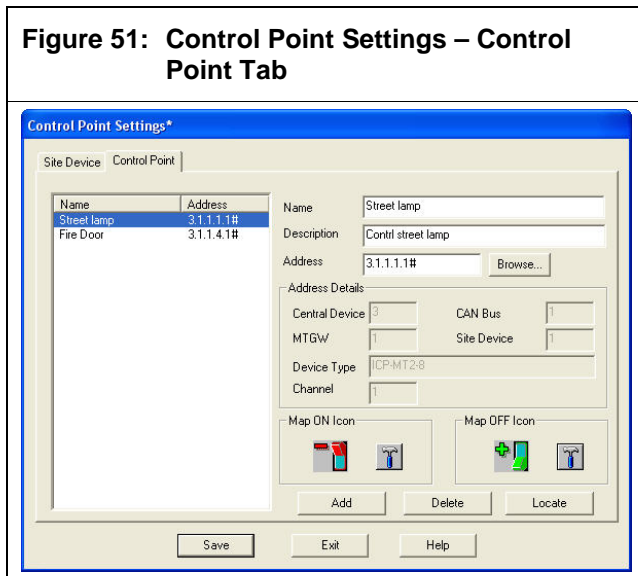
179.   Click **Add**.

The control point settings are:

- **Name:** Enter a name for the control point.
- **Description:** Enter a description of the control point.
- **Address:** Click **Browse** to select the zone address you wish to assign the control point. Refer to *Section 7.4 Configuring Zones* on page **Error! Bookmark not defined.**.
- **Address Details:** The **Central Device**, **CAN Bus**, **MTGW**, and/or **Site Device**, **Type** and **Channel** fields fill in based upon the selected zone address.
- **Map ON Icon:** Use the button to select the icon you wish to turn on if the control point is located on the map and the control point turns on.
- **Map OFF Icon:** Use the button to select the icon you wish to turn off if the control point is located on the map and the control point turns off.
180.   Click **Save**.

12.2 Configuring Control Point Scheduled Tasks

181.   To open the **Control Point Scheduled Tasks** window from the MTSW Setup interface, select **Client→Control Point→Control Point Scheduled Tasks** from the menu bar.

Figure 52: Scheduled Tasks Window

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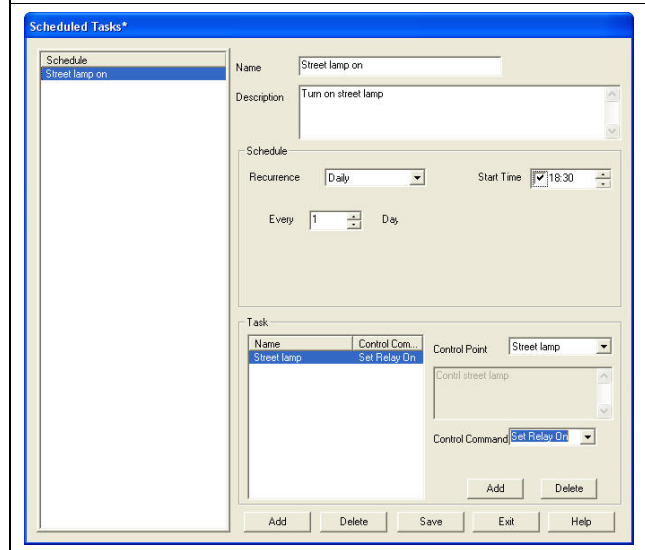
182.   Click **Add**.

The control point settings are:

- **Name:** Enter a name for the scheduled task.
- **Description:** Enter a description of the scheduled task.
- **Recurrence:** The interval used to run the schedule. Select from four options:
  - **Daily:** Select **Daily**, and select an interval from the **Every** spin box.
  - **Weekly:** Select **Weekly**, and select an interval from the **Every** spin box.
  - **Monthly:** Select **Monthly**, and select the interval from the **Every** spin box and a day of the month from the **Day** spin box.
  - **Only Once:** Select **Only Once**, and click the **Run On** check box. Select a date for the task to run from the **Run On** drop-down list.
- **Start Time:** Select the **Start Time** check box and enter a start time using the **Start Time** spin box, if desired.
- **Task:** Set the control point to receive a command, and which control command (Relay On or Relay Off) to send. One schedule can include several tasks. Click **Add** to add a new task.

13.0 Managing Event Definitions

MTSW Setup allows you to configure certain parameters of the system events. The events can be changed, except for individual alarms. The system can support a maximum of 1,000 events.

All supported system events are shown in the **Event** list at the left of the dialog box. Using the **Event Definitions** window, you can change the event description, event type, event definition detail, icon, sound, auto-print, auto-dispatch, and color of the foreground and background in the dialog.

> You are not allowed to modify some default events. For those events you can change the foreground or background, but you cannot preview the changes.
>
> To change the **Alarm definition detail** is to define what the events it is. For example, the MTSW displays the zone status in real time for the **Access zone** in disarm state following the event definitions: if the definition detail is changed as **Is zone alarm**, the zone status changes to **Alarm**; if the detail is changed as **Is zone alarm restore**, the zone status changes to **Disarm**…and so on. (Exception: **Is other report**)

To open the **Event Definitions** window from the MTSW Setup interface, select **Management→Event→Event Definitions** from the menu bar. The **Event Definitions** window appears.

Figure 53: Event Definitions Window
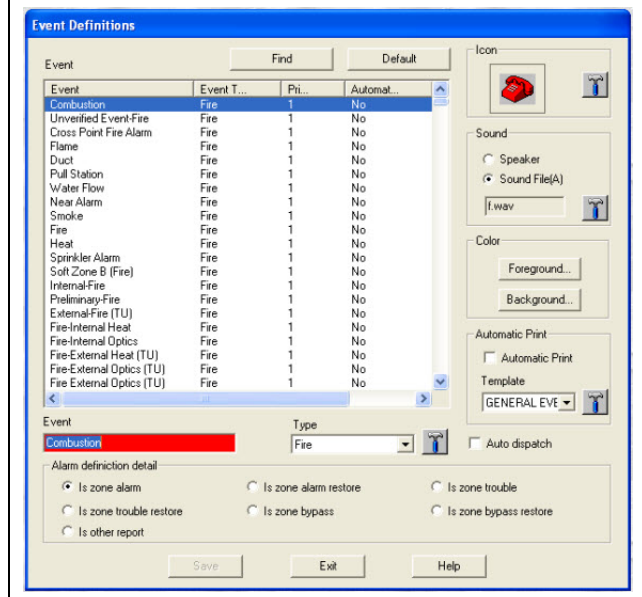
13.1 Finding Events
183. In the **Event Definitions** window (in MTSW Setup, select **Management→Event→Event Definitions**), click **Find**.

Figure 54: Find Dialog Box—Event

184. Enter your search text in the **Search** text box and select desired **Match** option button.
185. Select the **Fuzzy** check box if you wish to search for partial field matches.
186. Click **Find**. The **Find** dialog box closes. Only the events that match your search criteria appear in the **Event Definition** window.

> If no events match, the current selection does not change.

13.2 Defaulting Events

In the **Event Definitions** window (in MTSW Setup, select **Management→Event→Event Definitions**), click **Default** to discard all modifications made to events. All events in the system change to the default setting.

13.3 Configuring Event Types

187. In the **Event Definitions** window (in MTSW Setup, select **Management→Event→Event Definitions**), select the event you want to configure in the **Event** list.
188. Select an event type from the **Type** drop-down list.
189. To create additional event types, click the button to the right of the **Type** drop-down list. The **Event Types** dialog box appears.

Figure 55: Event Types Dialog Box

---
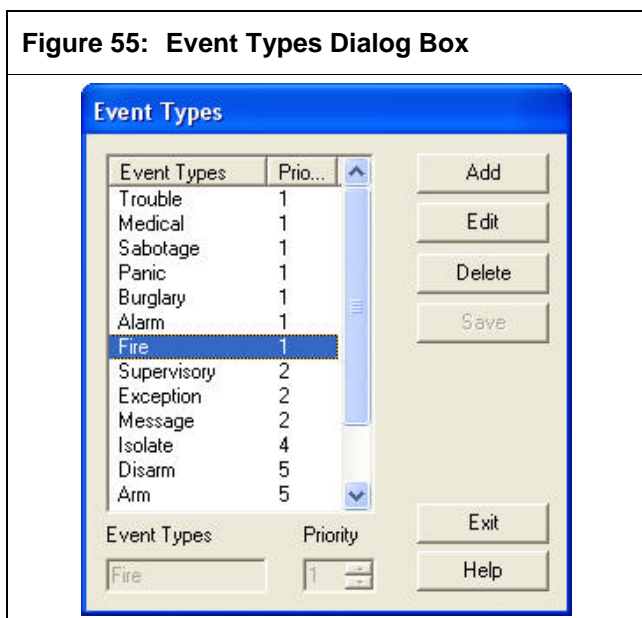
190. Click **Add**. A blank record appears in the list.
191. Enter an event type in the **Event Types** text box.
192. Enter a priority level in the **Priority** spin box.
193. The default priority level is 1, with the range being from 1 to 10.
194. Click **Save**.

13.4 Managing Event Icons

195. In the **Event Definitions** window (in MTSW Setup, select **Management→Event→Event Definitions**), select the event you want to configure in the **Event** list.
196. Click the button on the right side of the **Icon** section. The **Icon Settings** dialog box appears.

Figure 56: Icon Settings Dialog Box

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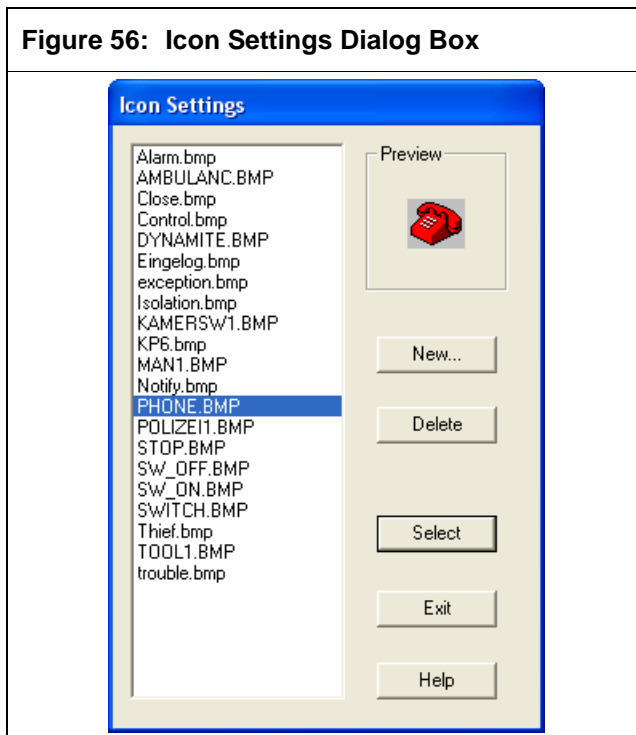
197. Select an icon from the list box and click **Select**, or click **New** to choose a custom icon.
198. In the resulting **Open** dialog, navigate to and select your icon and click **Open**. The image file is added to the system and the list box.
    The system supports only the .bmp format.
199. Click **Select**.

13.5 Configuring Audio Events

200. In the **Event Definitions** window (in MTSW Setup, select **Management→Event→Event Definitions**), select the event you want to configure in the **Event** list.
201. In the **Sound** section, select the **Speaker** or the **Sound File** option button.
202. If you selected **Sound File**, click the button to the right of the **Sound File** text box. The **Sound File** dialog box appears.

Figure 57: Sound File Dialog Box
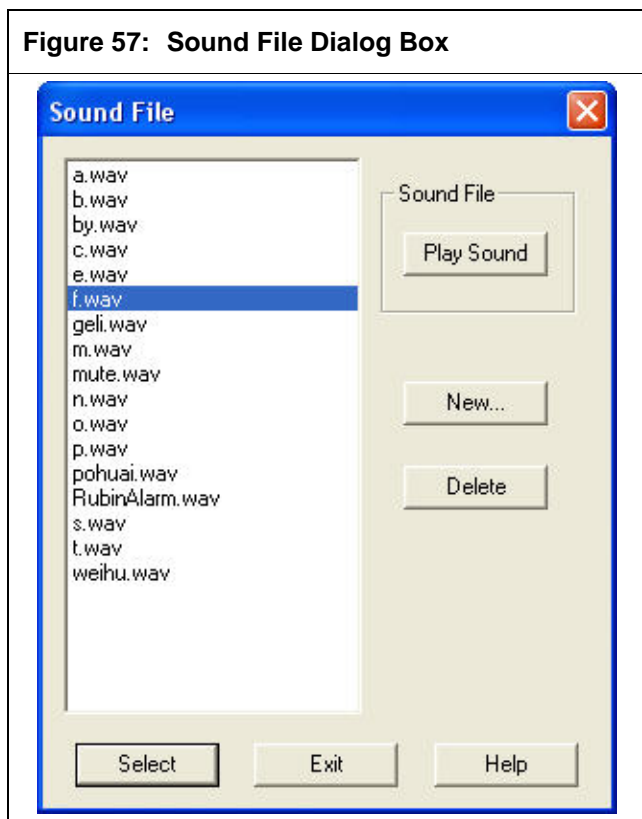
203. Select a sound file from the list box and click **Select**, or choose a custom icon by clicking the **New** button. In the resulting **Open** dialog box, navigate to and select your audio file and click **Open**. The audio file is added to the system and to the list box.
The system supports only the .wav format.

> You can listen to custom or system sound files by clicking the **Play Sound** button in the **Sound File** dialog box.

204. Click **Select** to select the sound file and close the **Sound File** dialog box.
205. Click **Save**.

13.6 Configuring Automatic Printing

In the **Event Definitions** window (in MTSW Setup, select **Management→Event→Event Definitions**), if you select the **Automatic Print** check box, the event prints automatically when that event type is received. Select an **Event** template from the drop-down list, or click the button to the right of the drop-down list to create a new **Event** template. Refer to *Section 17.0 Managing Event Templates* on page **Error! Bookmark not defined.**.

13.7 Configuring Auto Dispatching

In the **Event Definitions** window (in MTSW Setup, select **Management→Event→Event Definitions**), if you select the **Auto dispatch** check box, the system automatically adds this event to the History database. It is not shown in the MTSW Event list when this event is received.

13.8 Configuring Event Colors

You can configure the foreground and background colors for events in the **Event Definitions** window (in MTSW Setup, select **Management→Event→Event Definitions**).

206. Click the **Foreground** or **Background** button, as desired.
207. In the **Color** dialog box, do one of the following:
   - Choose a basic color from the palette and click **OK**.
   - Click **Define Custom Colors** and then click on an area of the spectrum to choose a custom color.
208. Click **Save**.

13.9 Event Codes Overview

Each site device communicates with the system using a protocol that requires an Event Code Table to translate code into a recognizable event.

To open the **Event Codes** window from the MTSW Setup interface, select **Management→Event→Event Codes** from the menu bar. The **Event Codes** window appears.

Figure 58: Event Codes Window
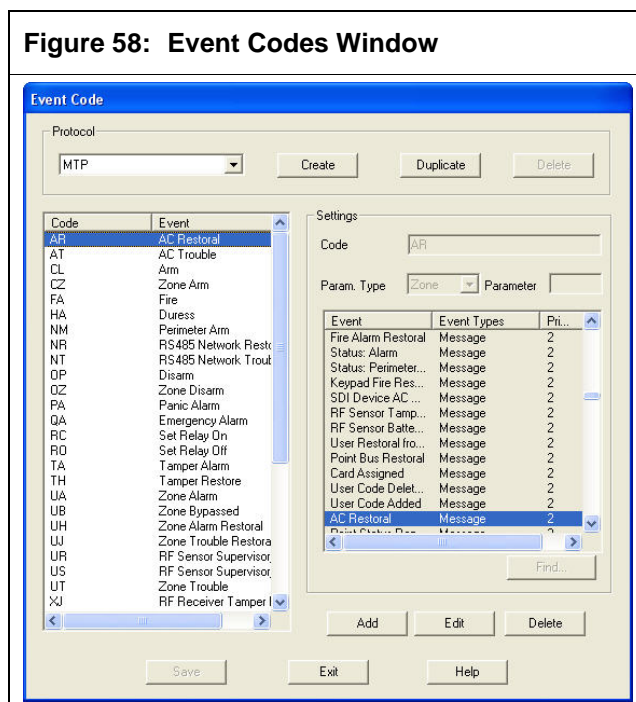
13.9.1 Protocols Overview

The system supports the following protocols:

- Acron Super Fast
- Ademco Express 4+1
- Ademco Express 4+2
- Ademco High Speed/Scancom 4-8-1, 5-8-1, 6-8-1
- BFSK
- CFSK
- Contact-ID
- DSC/Sur-Gard 4-3
- DTMF 4-1/4-2
- FBI Super Fast
- Modem II
- Modem IIIa2TM
- MTP
- PULSE 3-1/3-2/4-1/4-2/3-1E/4-1E
- Scancom 4-16-1, 5-16-1, 6-16-1
- Scancom 4-24-1, 5-24-1, 6-24-1
- Sescoa Super Speed
- SIA
- Bosch-VDP

> For MTS (connected with MTR), only MTP is used. Other protocols are used when connected with D6600/6100. No event code is used by the DS7400 and Bosch-VDP.

Because event code items BFSK, DTMF 4-1/4-2, Modem II, Modem IIIa2TM, and PULSE 3-1/3-2/4-1/4-2/3-1E/4-1E sent by the SIA mode are different from those sent by the 6500 mode, each mode is defined separately.

Event code items Ademco High Speed/Scancom 4-8-1, 5-8-1, 6-8-, Scancom 4-16-1, 5-16-1, 6-16-1, and Scancom 4-24-1, 5-24-1, 6-24-1 are fixed with the client and are defined on the **Client Special Translation** tab. These are not listed. Some protocols are listed in the *Appendices* starting on page **Error! Bookmark not defined.**.

In a protocol group, all available protocols are listed in the drop-down list. If a protocol is selected, all event codes related to it are listed on the **Event Code** list.

When an event code is selected, the details of the event are shown at the right side of the dialog box.

13.9.2 Adding New Protocols

You can create new protocols in the **Event Codes** window, but you must apply the protocols to clients using the **Basic Information** tab of the **Add Client** window. Refer to *Section 7.0 Configuring New Client Information* on page **Error! Bookmark not defined.**.

209. In the **Event Codes** window (in MTSW Setup, select **Management→Event→Event Codes**), in the **Protocol** section, click **Create** to open the **Create Protocol** dialog box.

Figure 59: Create Protocol Dialog Box
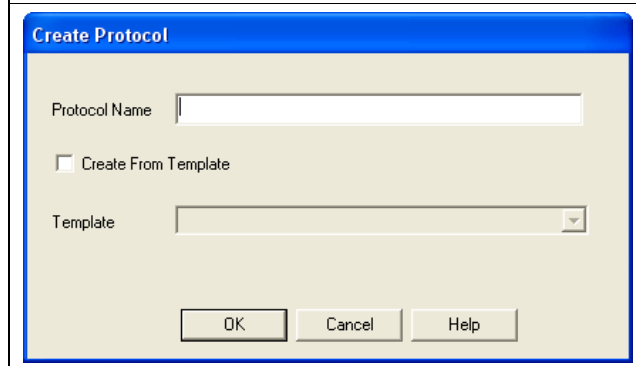
210. Enter a protocol name in the **Protocol Name** text box.
211. Select the **Create From Template** check box.
212. Select the protocol template you wish to use from the **Protocol Template** drop-down list.
213. Click **OK**.

13.9.3 Copying Existing Protocols

You can create a new protocol by copying an existing protocol.

214. In the **Event Codes** window (in MTSW Setup, select **Management→Event→Event Codes**), in the Protocol section, click **Duplicate** to open the **Duplicate Protocol** dialog box.

Figure 60: Duplicate Protocol Dialog Box
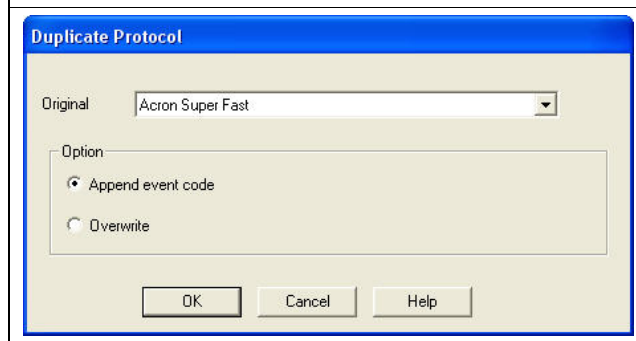
215. Select the protocol you wish to copy from the **Original** drop-down list.
216. Select the **Append Event Code** or the **Overwrite** option button.
217. Click **OK**.

13.9.4   Adding an Event Code

218.   In the **Event Codes** window (in MTSW Setup, select **Management→Event→Event Codes**), select a protocol from the drop-down list whose event code requires editing.

219.   Select an event code from the drop-down list, and click **Add**. A blank record appears at the end of the list.

220.   In the **Settings** section of the window, enter a code number or letter in the **Code** text box.

221.   Select a parameter type from the **Param. Type** drop-down list.

The parameter type is the digital type that follows the event codes. For example, the code OPxx in MTP, where OP is disarmed and xx is the user ID. The Parameter Type must be a user ID. The AL of ALxx is alarm and xx is the Alarm Zone.

222.   Select the zone from the **Param. Type** drop-down list. The Parameter is the conversion in a special instance. For example, the code OP01 is defined in Disarm when 02 is entered into the parameter. When OP01 is received, the system translates it to Disarm by User 02.

223.   Click **Save**.

13.9.5   Editing Existing Event Codes

224.   In the **Event Codes** window (in MTSW Setup, select **Management→Event→Event Codes**), select a **Protocol** from the drop-down list whose event code requires editing.

225.   Select an event code from the drop-down list, and click **Edit**.

226.   Refer to *Section 13.9.4 Adding an Event Code* on page **Error! Bookmark not defined.**.

227.   Click **Save**.

14.0 Managing Filter Settings

You can use three different filters throughout the system: Time, Event, and Address. Use these filters to create conditions to control and automate Multi-Tenant system behavior, including monitoring.

The number of Time filters is not limited in a system.

You can delete, rename, and edit existing Time filters.

> Deleting a filter removes the filter from all configurations.

14.1 Configuring Time Filters

228.   To open the **Time Filter Settings** window from the MTSW Setup interface, select **Management→Filter Settings→Time Filters** from the menu bar. The **Time Filter Management** window appears.

Figure 61: Time Filter Management Window
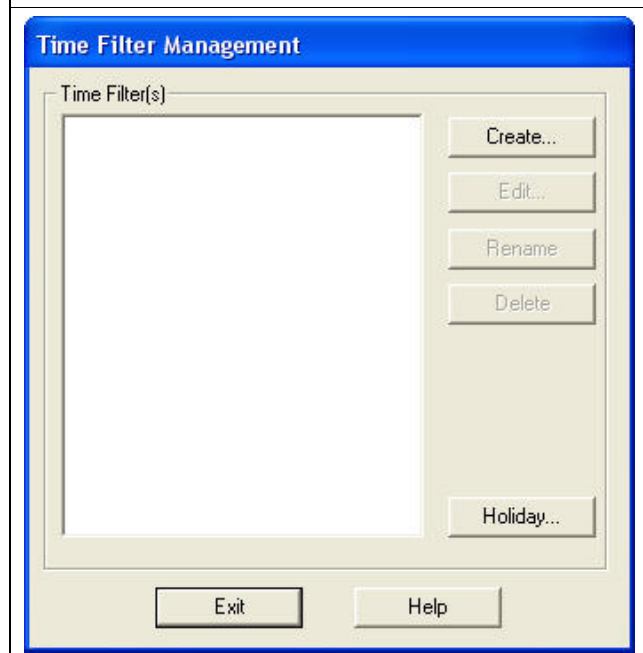
229.   Click **Create**. The **Time Filter** dialog box appears.

230.   Enter a name in the text box and click **OK**. The **Time Filter Settings** dialog box appears.

Figure 62: Time Filter Settings Dialog Box
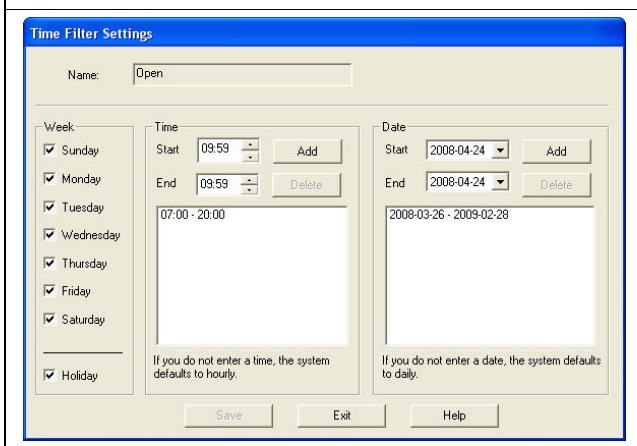
On the left side of the dialog box, the check boxes show whether each day of the week and holiday is included in the Time filter.

The **Date** and **Time** Filters sections show the date and time ranges included in the Time filter. Use the **Add** button and **Delete** button to add or delete date or time ranges. Each Time filter includes a date range and a time range.

> Ensure that the date and time ranges are not repeated.

231. Enter the desired settings.
232. Click **Save**.

Adding Holiday Time Filters

233. In the **Time Filter Management** window (in MTSW Setup, select **Management→Filter Settings→Time Filters**), click **Holiday**. The **Holiday** dialog box appears.

Figure 63: Holiday Dialog Box
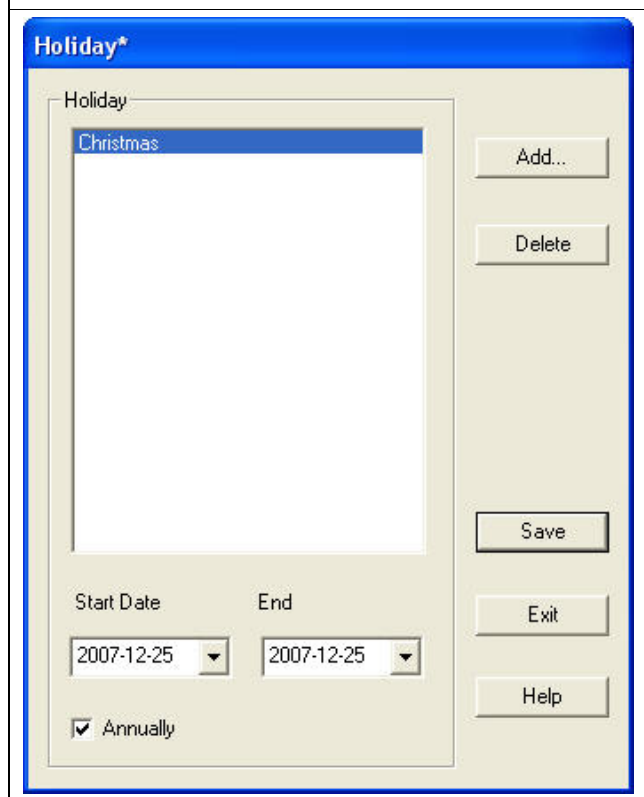
234. Click **Add**. A new holiday dialog box appears.
235. Enter a name in the text box and click **OK**. The holiday appears in the **Holiday** list box.
236. Select the dates from the **Start Date** and **End Date** drop-down lists.
237. Select the **Annually** check box if the holiday occurs on the same date every year.
238. Click **Save** to save the changes.
239. Click **Exit** to return to the **Time Filter Management** window.

14.2 Configuring Event Filters

240. To open the **Event Filter Management** window from the MTSW Setup interface, select **Management→Filter Settings→Event Filters** from the menu bar. The **Event Filter Management** window appears.

Figure 64: Event Filter Management Window
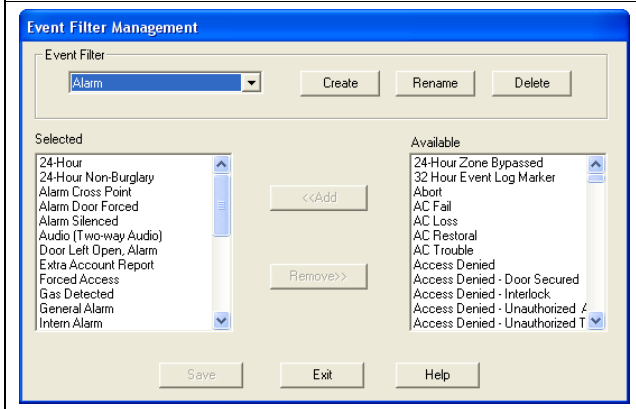
241. Click **Create**. The **Event Filter** dialog box appears.
242. Enter a name in the text box and click **OK**. The new filter appears in the **Event Filter** drop-down list.
243. In the **Available** list box, select events you wish to add to the Event filter and click **Add**. The events appear in the **Selected** list box.
244. In the **Selected** list box, select events you wish to remove from the Event filter and click **Remove**. The events disappear in the **Selected** list box and appear in the **Available** list box.

14.3 Configuring Address Filters

245. To open the **Address Filter Settings** window from the MTSW Setup interface, select **Management→Filter Settings→Address Filters** from the menu bar. The **Address Filter Management** window appears.

Figure 65: Address Filter Management Window
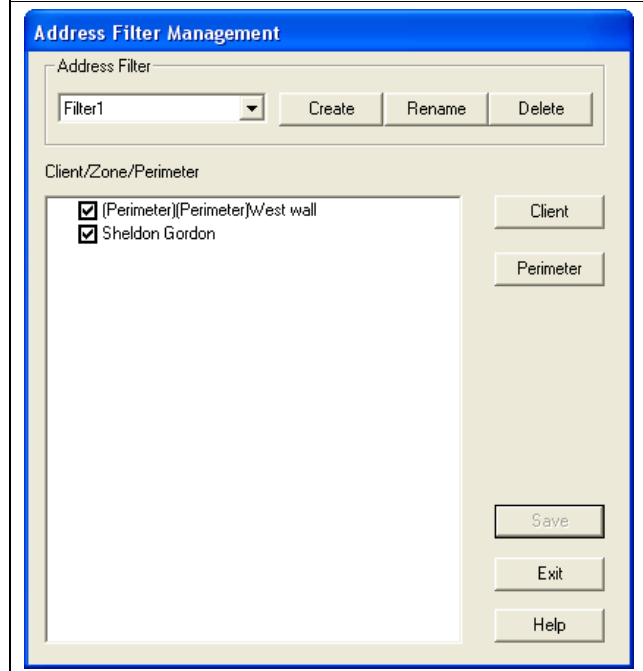
246. Click **Create**. The **Address Filter** dialog box appears.
247. Enter a name in the text box and click **OK**. The new filter appears in the **Address Filter** drop-down list.

14.3.1 Adding Clients to an Address Filter

248. In the **Address Filter Management** window (in MTSW Setup, select **Management→Filter Settings→Address Filters**), select the filter to which you wish to add a client from the **Address Filter** drop-down list.
249. To add a client, click **Client**. The **Client List** dialog box appears.
250. Select one or more clients from list and click **Select**. The selected clients and the clients' zones are added to the **Client/Zone/Perimeter** list box and are selected.
251. To remove a client or client zone from the filter, deselect the corresponding check box in the **Client/Zone/Perimeter** list box.
252. Click **Save**.

> If you remove a zone from the list, the client associated with it is also deselected.

14.3.2 Adding Perimeters to an Address Filter

253. In the **Address Filter Management** window (in MTSW Setup, select **Management→Filter Settings→Address Filters**), select the filter to which you wish to add a perimeter from the **Address Filter** drop-down list.
254. Click **Perimeter**. The **Perimeter List** dialog box appears.
255. Select one or more perimeters from the list and click **Select**. The selected perimeters and the perimeters' zones are added to the **Client/Zone/Perimeter** list box and are selected.
256. To remove a perimeter or perimeter zone from the filter, deselect the corresponding check box in the **Client/Zone/Perimeter** list box.
257. Click **Save**.

15.0 Managing Patrol Settings

> You configure the patrol member, patrol point, and patrol route in MTSW Setup, but create the patrol schedule in the MTSW main program.

15.1 Patrol Member Management

The patrol member is the person in charge of the patrol.

258. To open the **Patrol Member Management** window from the MTSW Setup interface, select **Management→Patrol Settings→Patrol Member Management** from the menu bar. The **Patrol Member Management** window appears.

Figure 66: Patrol Member Management Window

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259. Click **Add** to add a patrol member. The patrol member settings are:
    - **No.**: Enter the number assigned to the patrol member.
    - **Name:** Enter the patrol member's name.
    - **Native Country:** Enter the country where the patrol member was born.
    - **ID Type:** Enter the type of identification used by the patrol member.
    - **ID Card No.** Enter the patrol member's identification number.
    - **Phone:** Enter the patrol member's phone number.
    - **Birth Date** and **Hire Date:** Enter the patrol member's birth date and hire date.

> You must enter information in the **No**. and **Name** fields to save a patrol member.

260. Click **Save**.

15.2 Patrol Point Management

You manage patrol points in the **Patrol Point Settings** window.

First, set the site device used by the patrol point. The site device's zones are determined by the patrol point.

The number of patrol points is not limited.

Figure 67: Patrol Point Setting Window
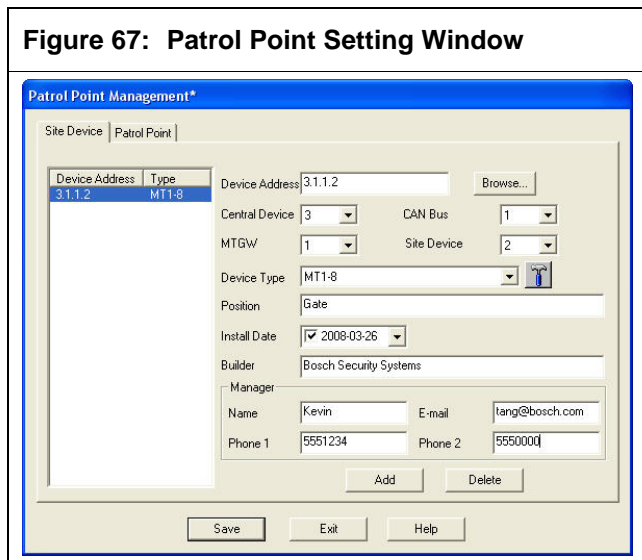
261.   In the **Patrol Point Management** window **(**in MTSW Setup select **Management→Patrol Settings→Patrol Point Management**), select the **Site Device** tab.
262.   Enter similar parameters to the client site device. The exception is that you can use only devices connected with MTR and DS7400 series devices.

Refer to *Section 7.3 Configuring Site Devices* on page **Error! Bookmark not defined.**.

263.   Click the **Patrol Point** tab.

Figure 68: Patrol Point Tab
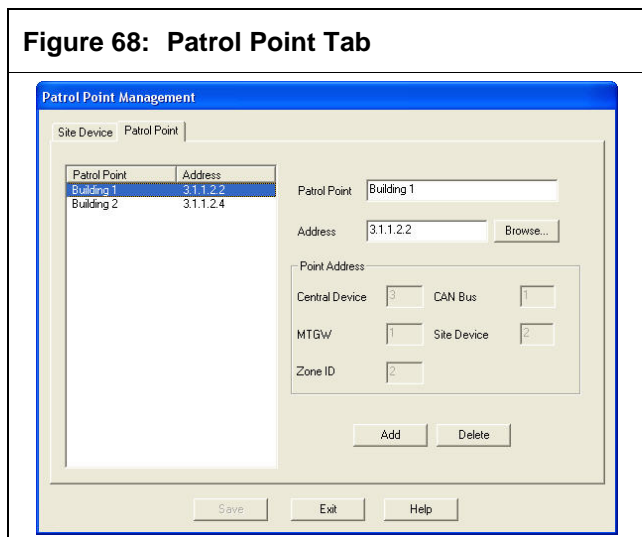
264.   Click **Add** on the **Patrol Member** tab. The patrol point settings are:

- **Patrol Point:** Enter a name for the patrol point.
- **Address:** Enter the zone address assigned to the patrol point in the **Address** text box, or click the **Browse** button to the right of the **Address** text box. Refer to *Section 7.4 Configuring Zones* on page **Error! Bookmark not defined.**.
- **Point Address:** The **Point Address** fields fill in automatically based on the address you selected.

265.   Click **Save**.

15.3 Patrol Route Management

The patrol route contains several patrol points arranged in order. The patrol route setting includes the patrol point and the bypass zone.

266.   To open the **Patrol Route Management** window from the MTSW Setup interface, select **Management→Patrol Settings→Patrol Route Management** from the menu bar. The **Patrol Route Management** window appears.
267.   Click the **Add Route** button at the bottom of the **Patrol Route Management** window.
268.   Enter the route name in the **Route** text box.
269.   Click **Save**.

15.3.1 Adding a Patrol Point to a Patrol Route

A route contains several patrol points.

270.   In the **Patrol Route Management** window (in MTSW Setup, select **Management→Filter Settings→Patrol Route Management**), after entering a route name in the **Route** text box, click **Add** in the **Patrol Point** section of the window. Refer to *Figure 75.*

Figure 69: Patrol Route Management Window — Setting the Patrol Point
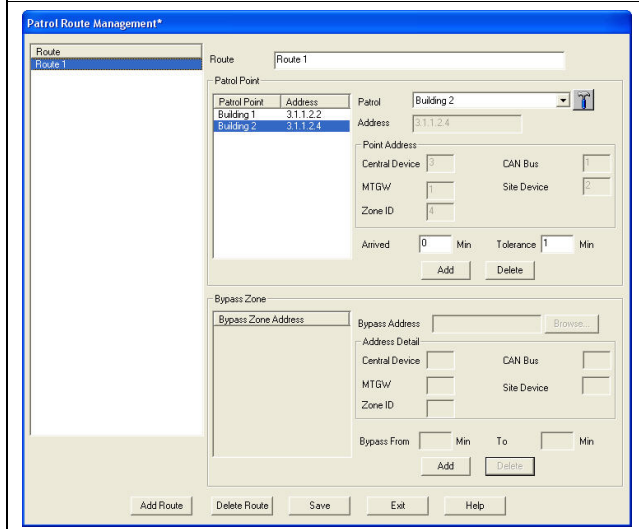
Figure 70: Patrol Route Management – Setting the Bypass Zone
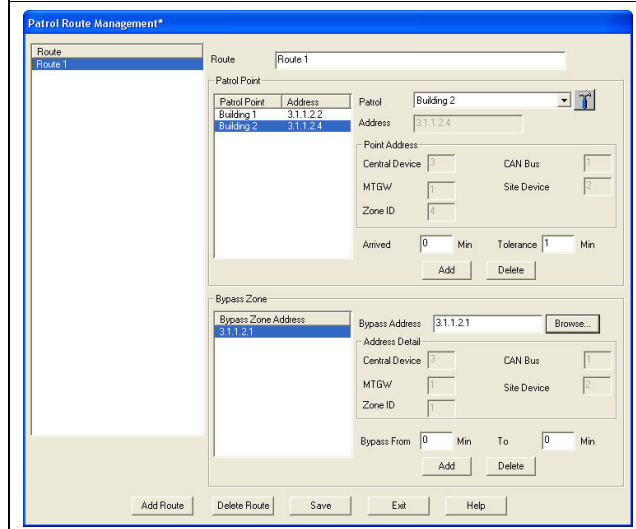
271. Select a patrol point from the **Patrol** drop-down list. To add a patrol point, click the button to the right of the drop-down list.

272. In the **Arrived** text box, enter a time interval from the beginning of the patrol guide to the time when the patrol member must arrive. The interval is in minutes.

273. In the **Tolerance** text box, enter the tolerated time range that the patrol member can arrive at the patrol point. The tolerated time is after or before the arrived time. If the patrol member does not arrive the patrol point in the valid time range, the system produces an event.

15.3.2 Adding a Bypass Zone to a Patrol Route

Events in the bypass zone are filtered in the time range of the patrol guide time. Enter the zone address in the **Address** text box or choose a device zone from the **Address Selection** dialog box by clicking the button next to the text box. Enter the start and end times. The time is counted from the start time of the patrol guide.

274. In the **Patrol Route Management** window (in MTSW Setup, select **Management→Filter Settings→Patrol Route Management**), after entering a route name in the **Route** text box, click **Add** in the *Bypass Zone* section of the window. Refer to *Figure 76.*

275. Click **Browse** to select a bypass address.

276. In the **Bypass From** text box, enter a time from the beginning of the patrol guide to the time when the patrol member must arrive. The interval is in minutes.

277. In the **To** text box, enter the tolerated time range that the patrol member can arrive at the patrol point after or before the arrived time. If the patrol member does not arrive the patrol point in the valid time range, the system produces an event.

16.0 Managing Actions

In MTSW, an action is any step or steps that you want MTSW to perform. For example, you can create an Action that allows you to open MTSW Setup from MTSW. Later, you use the **Action Buttons** window to assign each action to an action button that you design for use in MTSW. Refer to *Section 19.0 Configuring Action Buttons* on page **Error! Bookmark not defined.**.

When you create an action, you configure which commands the action will use to perform a task. Choose from Menu commands, Application commands, and Control commands.

To open the **Action Settings** window from the MTSW Setup interface, select **Management→Action Settings** from the menu bar. The **Action Settings Management** window appears.

> You can arrange the commands in a preferred order. To do so in the **Action Settings** window:
> 1. Select a command from the Command **Description** list box.
> 2. Click the **Up** or **Down** button in the **Move** section of the window.

Figure 71: Action Settings Management Window
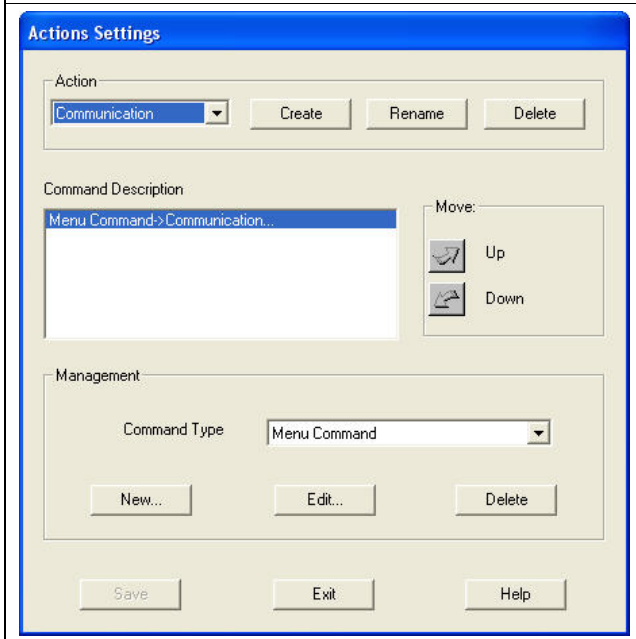
16.1 Configuring Menu Commands

A Menu command is an instruction issued by a user through an action button to MTSW to launch a menu option.

278. In the **Action Settings** window (in MTSW Setup, select **Management→Filter Settings→Patrol Route Management**), click the **Create** button in the **Action** section.
279. In the resulting **Action Settings Name** dialog box, enter a name for the action and click **OK**.
280. In the **Management** section of the window, select **Menu Command** from the **Command Type** drop-down list and click **New**. The **Menu Command** dialog box appears.

Figure 72: Menu Command Dialog Box
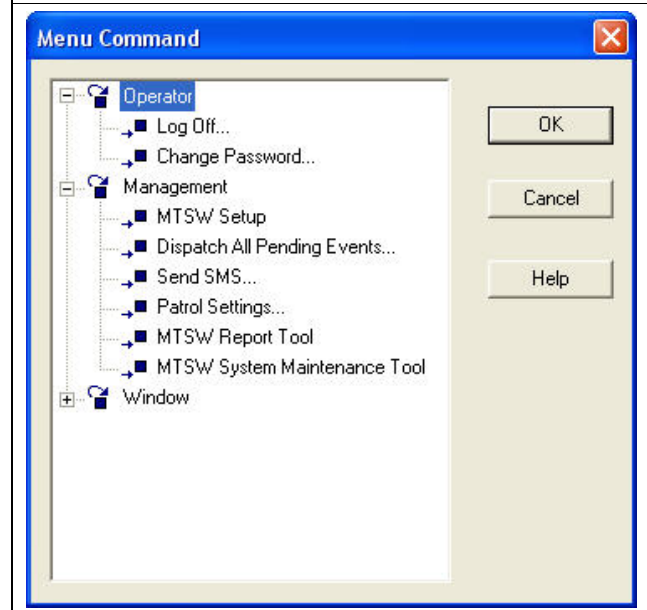
281. From the tree, select the Menu command you wish to use and click **OK**. The selected menu command appears in the **Command Description** list box.
282. Click **Save**.

16.2 Configuring Application Commands

An Application command is an instruction issued by a user through an action button to MTSW to launch another application.

283. In the **Action Settings** window (in MTSW Setup, select **Management→Action Settings)**, click the **Create** button in the **Action** section.
284. In the resulting **Action Name** dialog box, enter a name for the action and click **OK**.
285. In the **Management** section of the window, select **Application Command** from the **Command Type** drop-down list and click **New**. The **Application Comman**d dialog box appears.

Figure 73: Application Command Dialog Box
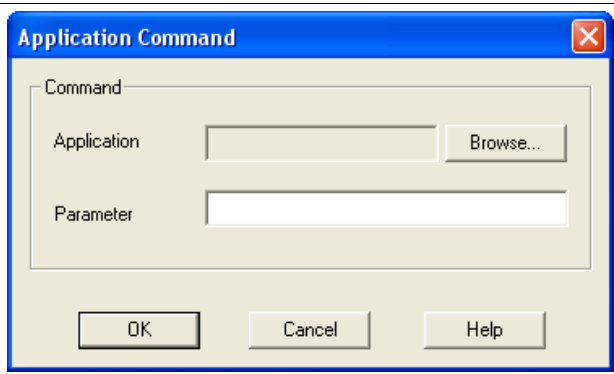
286.   Click **Browse**. The **Open** dialog box appears.

Figure 74: Open Dialog Box
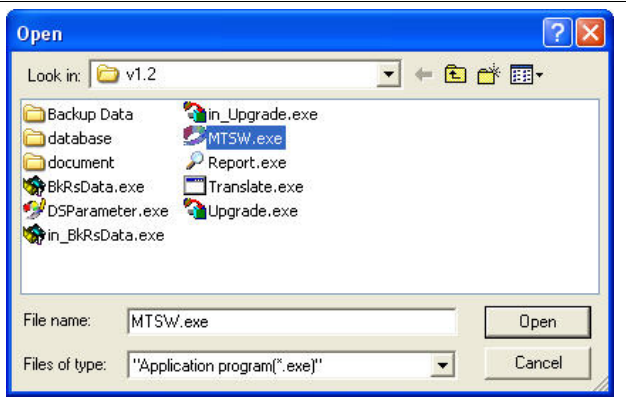
287.   Select an application (*.exe or *.bat) and click the **OK** button to close the **Open** dialog.
288.   If a parameter is needed to run this application, enter it in the **Parameter** text box.
289.   Click **OK** to close the **Application Command** dialog box. The selected Application command appears in the **Command Description** list box.
290.   Click **Save**.

16.3 Configuring Forward Data or Control Commands

A Control command is an instruction issued by a user to Multi-Tenant System software to control or query a device.

291.   In the **Action Settings** window (in MTSW Setup, select **Management→Action Settings)**, click the **Create** button in the **Action** section.
292.   In the resulting **Action Name** dialog box, enter a name for the action and click **OK**.
293.   In the **Management** section of the window, select **Forward Data or Control Command** from the **Command Type** drop-down list and click **New**. The **Forward Data or Control Command** dialog box appears.

Figure 75: Forward Data or Control Command Dialog Box
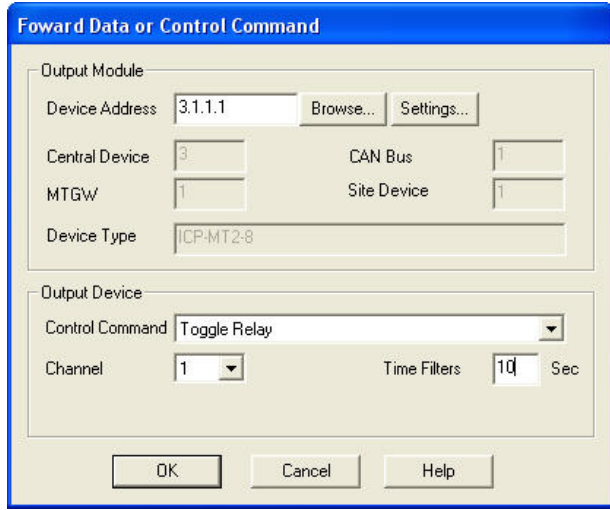
294.   In the **Output Module** section of the dialog box, click the **Browse** button to the right of the **Address** field to select a device address.
295.   In the resulting **Address Selection** dialog box, select an address and click **Select**.
296.   The **Control Command** and **Channel** drop-down list selections are based on the output device type. Select the correct **Control Command** and **Channel**.
297.   Click **OK**.
298.   Click **Save**.

> Rather than use control commands only with action buttons, you can issue control commands manually in MTSW.

Understanding the Device Type – Command Connection

- **ICP-MT2-8 or ICP-MT3-1:** You can use the Toggle Relay command. You must enter a time in the Time text box (from 1 to 99 seconds).
- **GSM Modem:** You can use only the SMS Text command for a GSM Modem. If you use a Forward Data device, you can use only one output message command for it. Both commands have the same parameters. A GSM Modem allows for one of two command options: Template or Text. Refer to *Section 17.0 Managing Event Templates* on page <mark>Error! Bookmark not defined.</mark> for more information on templates.
- **MTSW:** You can use the Forward Data command only to forward data to MTSW, other software, or other devices (e.g., RS232 DS32R).

17.0 Managing Event Templates

You can create an unlimited number of Event templates. Use Event templates to simplify events, such as choosing print options, or automatically sending SMS text messages.

299. To open the **Event Template Management** window from the MTSW Setup interface, select **Management→Event Template Management** from the menu bar. The **Event Template Management** window appears.

Figure 76: Event Template Management Window
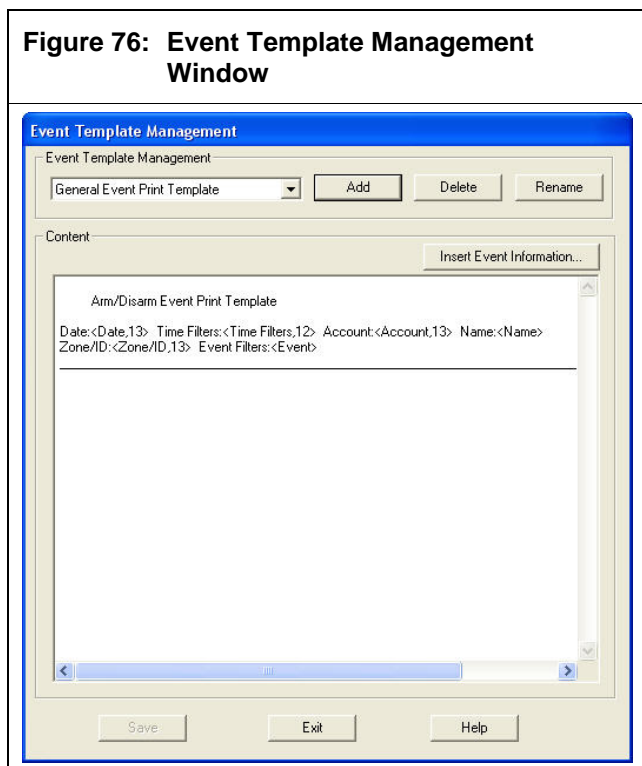
300. Click **Add** to create a new template. The **Event Template Name** dialog box appears.
301. Enter a name for the template in the **Name** text box and click **OK**. The new template name appears in the drop-down list.
302. Enter the event information in the **Content** text box using the following standards:
    - Enter event information placeholders by typing text between a pair of brackets <>.
    - Use the **Event Information** dialog box to insert the event information. Click **Insert Event Information** to open the dialog box, and add the selections by clicking **Add** or by double-clicking on the list. Refer to *Figure 83*.
    - The system automatically replaces the text placeholders with actual content when using the event.

- The number next to the event information is the length of the actual text (optional).
- To add additional event information, click the **Insert Event Information** button. Select one or many items from the **Event Information** dialog box. Add the selections by clicking the **Add** button or by double-clicking on the list.

Figure 77: Inserting Placeholders with the Event Information Dialog Box
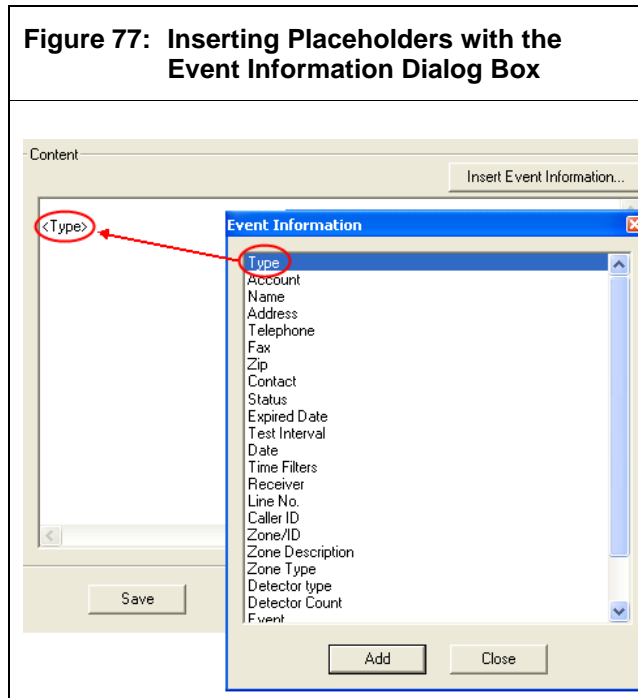
303. Click **Save** after creating each template.

18.0 Configuring History Counters

MTSW uses History counters to track events that occur. Use your Address and Event filters to configure the events you want to count, and also use the **Time** section of the **History Counters** window to designate times and days for MTSW to count.

304. To open the **History Counters** window from the MTSW Setup interface, select **MTSW Window→History Counters** from the menu bar. The **History Counters** window appears.
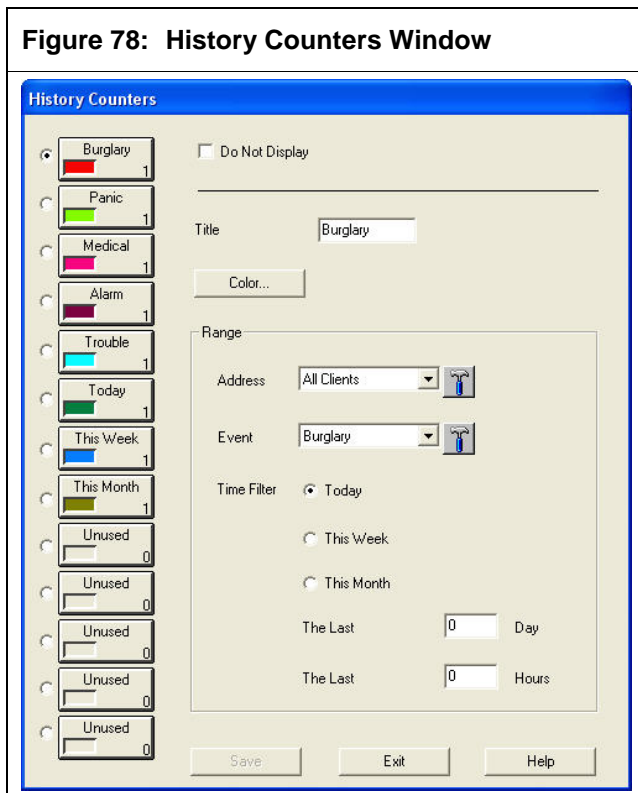
Figure 78: History Counters Window

The window lists all History counters on the left side of the window.

305. Click the corresponding option button to select the desired counter. The settings for the selected history counter appear. The history counters settings are:
   - **Do Not Display**: Select the check box if you do not want the selected history counter to appear on MTSW. When selected, the name of the selected History counter changes to "Unused."
   - **Title:** Enter the name for the History counter.
   - **Color:** Select the color of the bar shown below the Title of the button. In the MTSW main interface, the bar fills with the selected color when the count exceeds 0.

- **Range:** Use this section to set the conditions for accumulating data for the selected History counter.
   - **Address Filter:** Select a defined Address filter. When a location where the event occurred is included in this filter, the total count of the History counters increases. If there no suitable filters, click the button to the right of the **Address** drop-down list and add a new filter. Refer to *Section 14.3 Configuring Address Filters* on page **Error! Bookmark not defined.**.
   - **Event Filter:** Select a defined Event filter. If an event is received and is included in this filter, the total count of the History counters increases. If there are no suitable filters, click the button to the right of the **Event** drop-down list and add a new filter. Refer to *Section 14.2 Configuring Event Filters* on page **Error! Bookmark not defined.**.
   - **Time:** This sets the suitable total time to monitor the events. The system offers three fixed time conditions: **Today**, **This Week** (Sunday to Saturday), and **This Month**. Click the desired option button and use **The Last ## Days** and **The Last ## Hours** text boxes to enter the time frame.
306. Click **Save**.

19.0 Configuring Action Buttons

You can configure the action buttons for system default actions, as well as add and configure the action buttons for the actions you create. Refer to *Section 16.0 Managing Actions* on page **Error! Bookmark not defined.**.

To open the **Action Buttons** window from the MTSW Setup interface, select **MTSW Window→Action Buttons** from the menu bar. The **Action Buttons** window appears.

Figure 79: Action Buttons Window
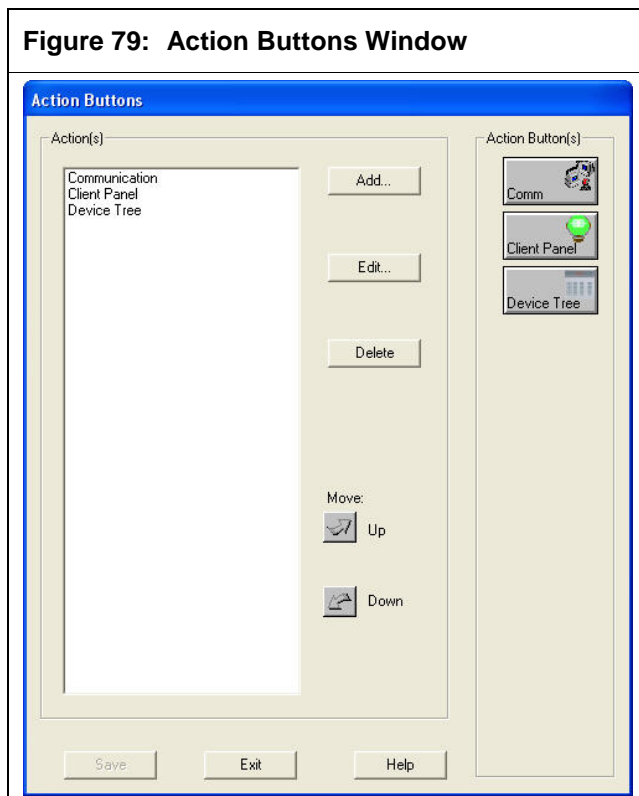
19.1 Adding Actions to the Action List Box

You can add custom actions to the **Action(s)** list box.

307.   In the **Action Buttons** window **(Select MTSW Window→Action Buttons)**, click **Add**. The **Select Action** dialog box appears.

Figure 80: Select Action Dialog Box
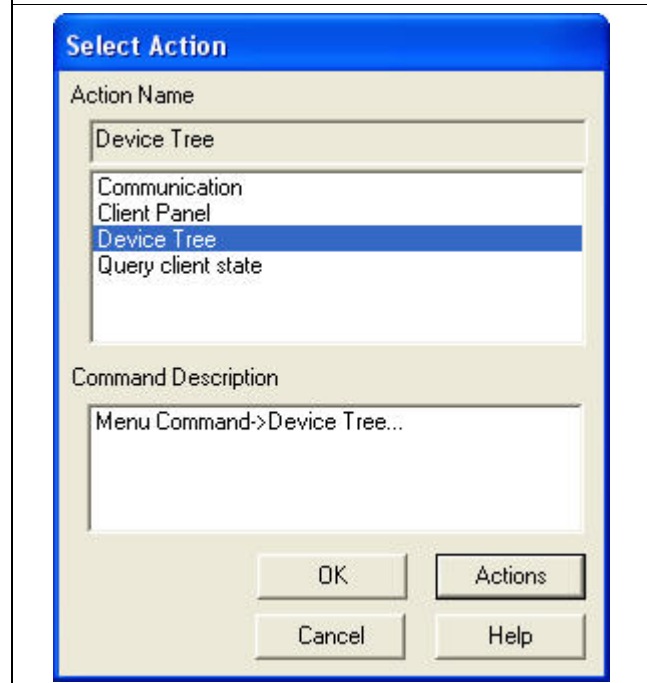
308.   Select the desired custom action name from the list. If no suitable action is available, click **Actions** to configure a new action. Refer to *Section 16.0 Managing Actions* on page **Error! Bookmark not defined.**.

309.   After selecting the desired action, click **OK**. The **Select Action** dialog box closes and the **Action Button Settings** dialog box appears. Refer to *Section 19.0 Configuring Action Buttons* on page **Error! Bookmark not defined.**.

19.2 Adding Action Buttons to the MTSW Main Interface

You can create action buttons for each custom action in the list box.

310.   In the **Action Buttons** window **(Select MTSW Window→Action Buttons)**, select the action for which you wish to create an action button and click **Edit**. The **Action Button Settings** dialog box appears, listing the action you are editing in the **Assign Action Button** section of the dialog box.

> If you add a new action to the **Action(s)** list box, the **Action Button Settings**

dialog box opens automatically. Refer to *Section 19.1 Adding Actions to the Action List Box.*

Figure 81: Action Button Settings Dialog Box
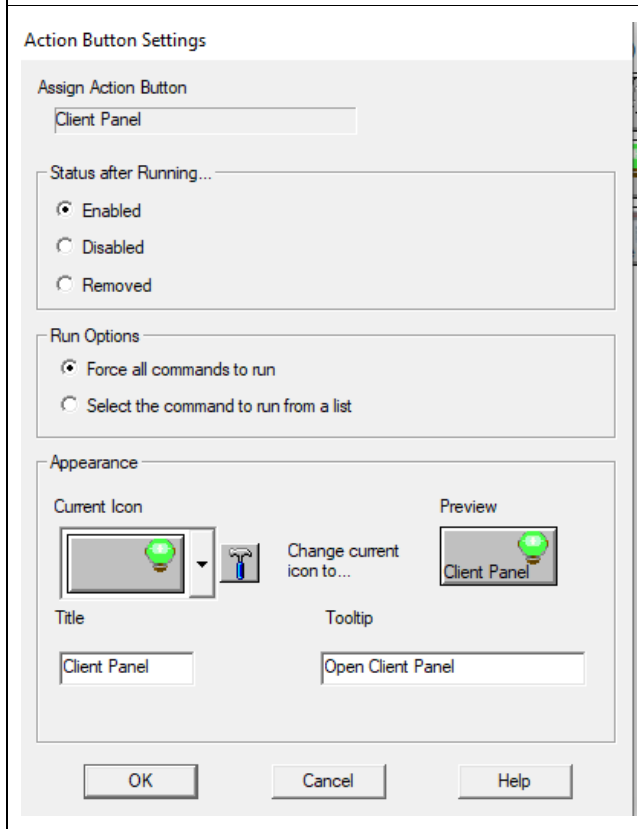
311.   In the **Status after Running** section, select the desired option button:
- **Enabled:** The button remains available.
- **Disabled:** The button runs the commands, becomes disabled, but remains on MTSW.
- **Removed:** The button runs the commands and then disappears from MTSW.

312.   In the **Run Options** section, select the desired option button for how the button runs a Menu or Application command that includes several commands:
- **Force all commands to run:** All commands included in this action are run and the system runs the command according to the sequence set.
- **Select a command to run from a list:** When this action button is clicked, a pop-up menu appears listing all the commands in the action. Select the action you wish to run.

313.   In the **Appearance** section, the **Preview** area shows a preview of the action button as you make appearance changes. To configure the appearance of the button:

- **Current Icon:** The current icon for the button appears in the **Current Icon** drop-down list. Select a different default icon from the drop-down list. To add a custom icon, click the button to the right of the **Current Icon** drop-down list. Refer to *Section 13.4 Managing Event Icons* on page **Error! Bookmark not defined.**.
- **Title:** Enter the title for the action button in the **Title** text box.
- **Tooltip:** Enter the tool tip that you wish to appear when you hover the mouse over the action button in MTSW.

314.   Click **OK** to close the **Action Button Settings** dialog box.

315.   To arrange the order of the action buttons on MTSW, select the corresponding action in the **Action(s)** list box and click the **Up** or **Down** button.

316.   Click **Save**.

20.0 Defining Dispatch Comments

The MTSW main program window shows the total number of pending events in the **Pending List** section of the window. The **Dispatch** button is located below the **Pending List** section. Each time you dispatch an event, you can add a dispatch comment by selecting it from the drop-down list. Refer to *Figure 88.*

Figure 82: Dispatch Comments Window
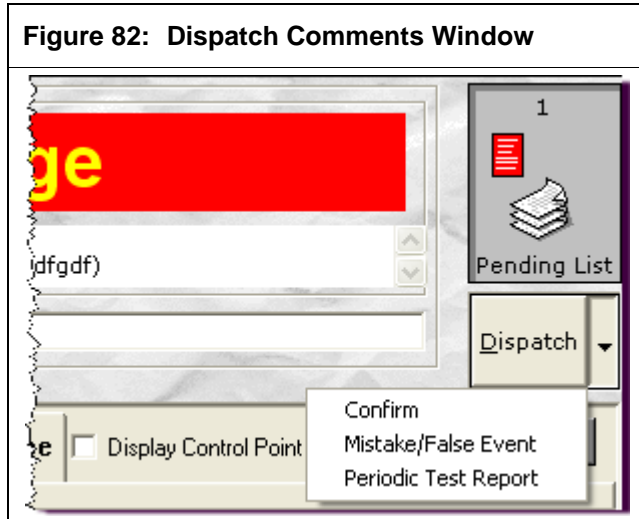
Figure 88 shows the system default comments as they appear in the **Dispatch** button's drop-down list. You can use the **Dispatch Comments** window to add custom comments.

317.   To open the **Dispatch Comments** window from the MTSW Setup interface, select **MTSW Window→Dispatch Comments** from the menu bar in the MTSW Setup interface. The **Dispatch Comments** window appears.

Figure 83: Define Dispatch Comment Window
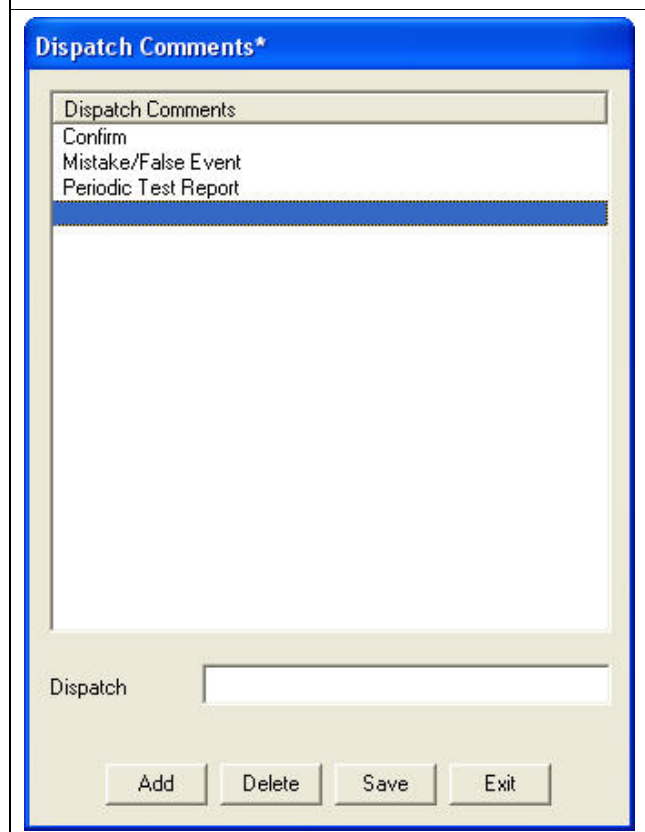
318.   Click **Add** to add a new comment.
319.   Enter the comment text in the **Dispatch** text box.
320.   Click **Save**.

21.0 Configuring Global Parameters

The Global Parameters set in MTSW Setup apply to the MTSW program.

You can set parameters, including configurations for: Main Window, Event Time, Arm/Disarm Tolerance, First Navigation Map, Log Off intervals, and Communication.

321.   To open the **Global Parameters** window from the MTSW Setup interface, select **MTSW Window→ Global Parameters** from the menu bar. The **Global Parameters** window appears.

Figure 84:   Global Parameters Window
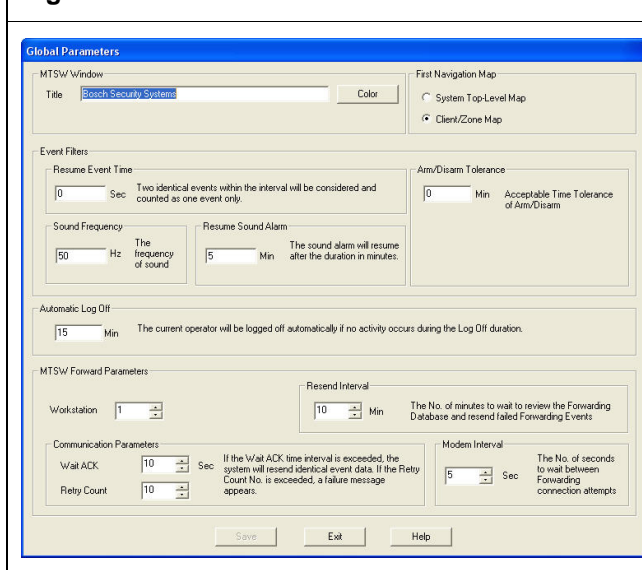
322.   When there are no events for MTSW to show, the Title appears at the top of the window. Refer to *Figure 91*. In the **MTSW Window** section of the **Global Parameters** window, enter a title for the program window in the **Title** text box. Select a color for the title text by clicking the **Color** button.

Figure 85:   MTSW Window Title Parameter Applied to the MTSW Window
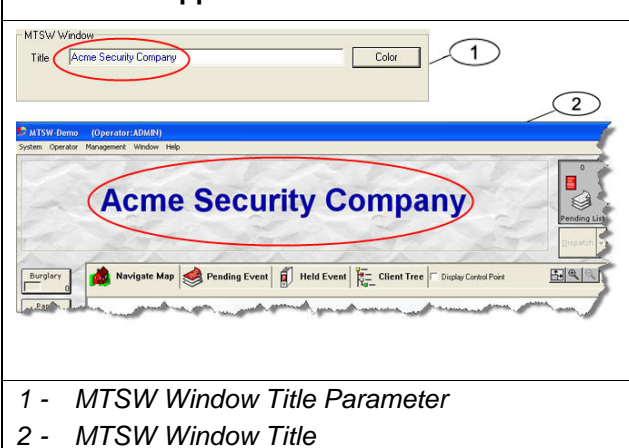
1 -   MTSW Window Title Parameter
2 -   MTSW Window Title

323.   In the **First Navigation Map** section, select the desired option. If no events appear on the list, the first navigation map shows at the navigate map position.

324.   Enter an **Event Time** (in seconds) in the corresponding text box. When the same client or client zone sends the same event, the system treats it as an event and only the event time updates. **The Resume Event Time in the Event Filters** section determines a time interval for counting the event. The system default is zero, which tells the system to show all events as they occur.

325.   Enter a sound frequency (in Hz) in the **Sound Frequency** text box. When an event occurs for which no sound is set, the system plays the system default. This feature is currently disabled in the program.

326.   Enter an **Arm/Disarm Tolerance** (in minutes) to decrease the possibility of errors.
    When a delay occurs of a signal transfer or system transaction, the system might produce an incorrect Arm or Disarm event. When the system checks whether the client is late to arm or disarm and early to disarm, the tolerance is added automatically. For example, if the disarm time is from 8:20 to 8:30 and the tolerance is five minutes, the real disarm time is from 8:15 to 8:35 with a default tolerance of zero.

327.   Enter your desired **Automatic Log Off** interval (in minutes) in the corresponding text box. When you do not interact (using the mouse or keyboard) with the active MTSW main program window, the system automatically logs you off for security purposes. To use the program again, you must enter your account and password.

328.   Enter the local **Workstation No.** you wish to use for all Forwarding connections.

The local Workstation No. is an exclusive number you enter once.

329. Enter a **Resend Interval** in minutes.
330. Enter a **WAIT ACK** interval in seconds.
331. Enter a **Retry Count**.
332. Enter a **Modem Interval** in seconds.
333. Click **Save**.

22.0 Configuring Following Actions

Use the **Following Actions** window to configure actions for the system to run when it receives an event. These actions are called following actions.

334. To open the **Following Actions** window from the MTSW Setup interface, select **MTSW Window→ Following Actions** from the menu bar. The **Following Actions** window appears.

Figure 86: Following Actions Window
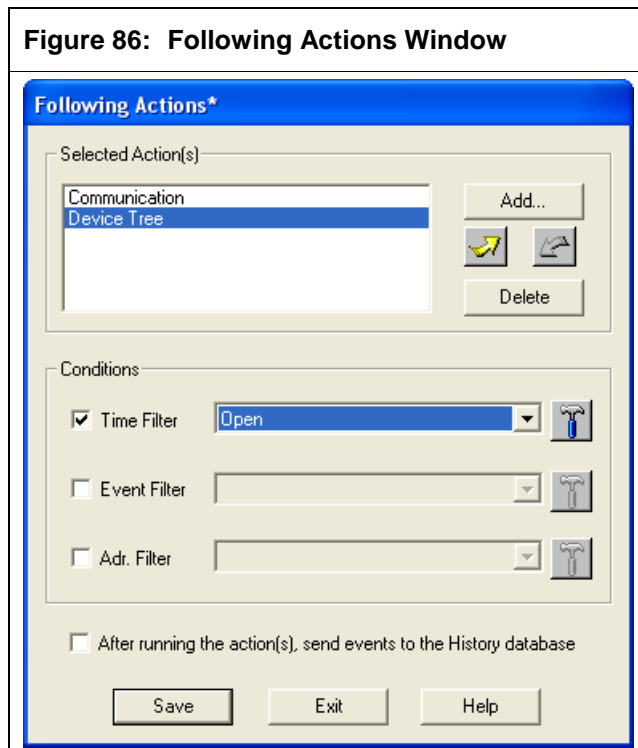
335. Click **Add** to add a forwarding action to the **Selected Action(s)** list box.
336. Select an action from the **Select Action** dialog box and click **OK**.
337. In the **Conditions** section, select the filters you want to apply to the following action. Choose from Time, Event, and Address filters.
338. Select the check box at the bottom of the window to send the event to the History database after the following action runs.
339. Click **Save**.

You can arrange the sequence in which the following actions run when multiple following actions are configured for an action. To do so in the **Following Actions** window:

1. Select an action from the **Selected Action(s)** list box.
2. Click the **Up** or **Down** button in the **Move** section of the window.

23.0 Configuring Automatic Backup Settings

You can configure MTSW to back up data automatically. The backup files include system and History event data. If a database becomes corrupted, you can use the backup data to restore the database.

340. To open the **Automatic Backup Settings** window from the MTSW Setup interface, select **MTSW Window**→**Automatic Backup** from the menu bar. The **Automatic Backup Settings** window appears.

Figure 87: Automatic Backup Settings Window
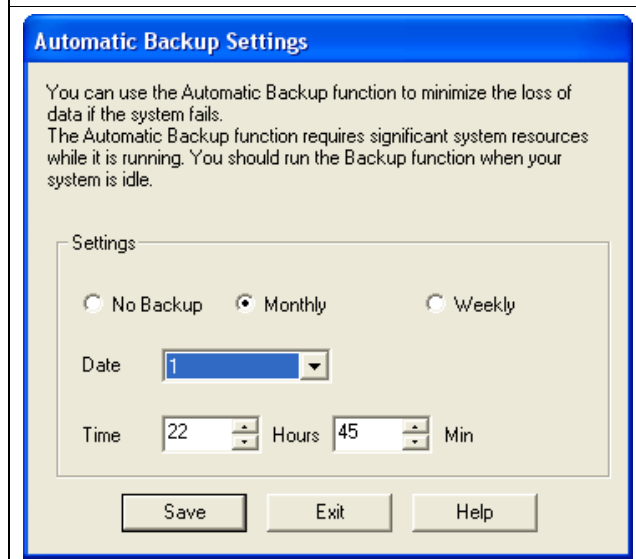
341. Select the option button for the desired interval between automatic back ups. Choose from **No Backup**, **Monthly**, and **Weekly**.
342. Select a date for the automatic back up from the **Date** drop-down list.
343. Enter the time of day in military hours and minutes in the **Hours** and **Min** spin boxes.
344. Click **Save**.

24.0 B426 Utility

Use the Bosch network utility via Ethernet to assign IP addresses to Bosch NIC (eg. B426). The network utility also allows to Ping devices, query device information and list all current B426 modules.

24.1 Assign IP address

345.   To open the **B426 Utility** window from the MTSW Setup interface, select **MTSW Window➔B426 Utility** from the menu bar. The **B426 Utility** window appears.

Figure 88: B426 Utility – Assign IP address Tab
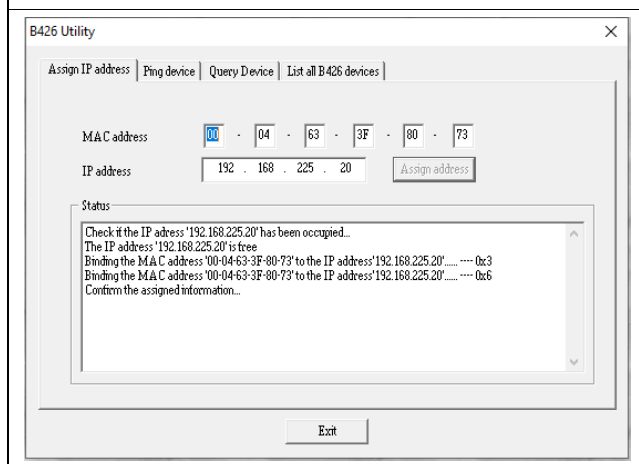
346.   Click Assign IP address tab.
347.   Enter B426 MAC address in the **MAC address**.
348.   Enter B426 IP address in the **IP address**.
349.   Click **Assign address**.

> To make sure the assigned IP address is saved when the control panel is powered down and restart, you must do followings before assign IP address:
>
> 1.   Run the browser in the control panel.
>
> 2.   Enter the B426 IP address that will be assigned.
>
> 3.   In the B426 **Advance Network Setting**, choose **Yes** for **Network Configuration Port Enable**.

24.2 Ping device

Ping device has the same function as the system Ping command. Use **Ping device** to test the communication state between the current PC and IP address assigned PC or device.

350.   Click **Ping device** tab.

Figure 89: B426 Utility – Ping device Tab
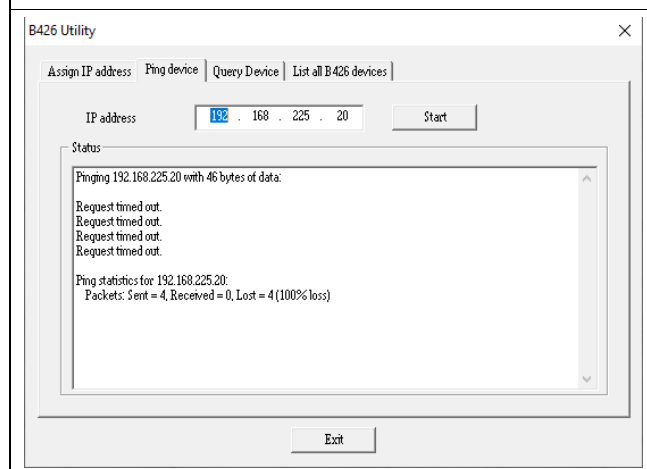
351.   Enter IP address in **IP address**.
352.   Click **Start**.

24.3 Query device

User **Query device** to find the IP assigned B426 information.

Figure 90: B426 Utility –Query device Tab
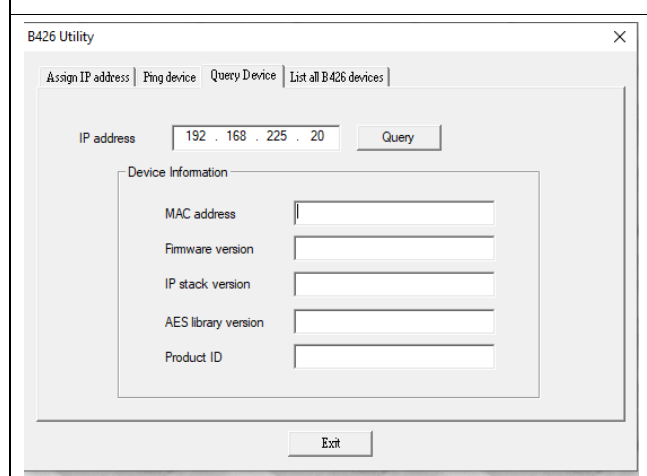
353.   Click **Query Device** tab.
354.   Enter IP address in **IP address**.
355.   Click **Query**.

The device information are:
- MAC address
- Firmware version
- IP stack version
- AES library version
- Product ID

24.4 List all B426 devices

Use **List all B426 devices** to query and list all the B426 devices information in the current LAN, and export the B426 version information to a text file or Microsoft® Excel file.

Figure 91: B426 Utility –List all B426 devices Tab
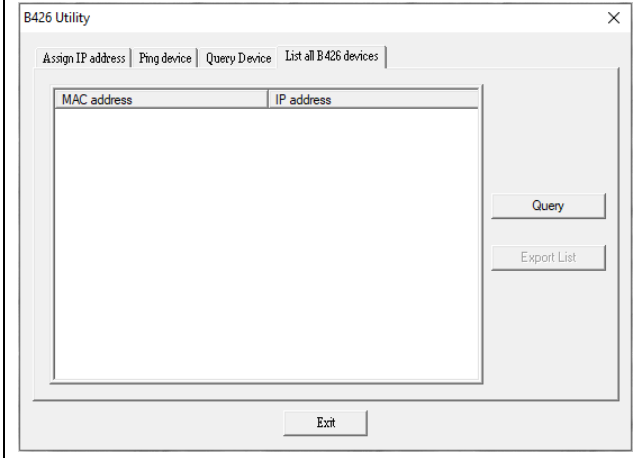
356. Click List all B426 devices tab.
357. Click **Query**.
358. Click **Export List** to export all the list B426 information.
   The **Save As** dialog box appears.

Figure 92: Save As Window
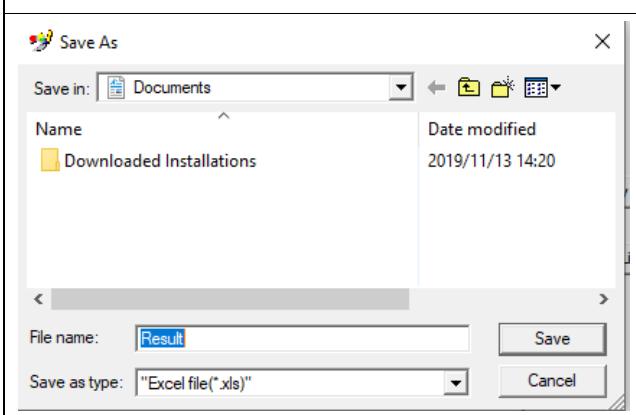
359. Enter the file name and click **Save**.

Exporting to Microsoft® Excel requires that the MTSW computer has compatible Excel versions.

25.0 Configuring User Settings

All MTSW users can log on to the system. You can add users, set their account names and passwords, and configure their permissions and access levels.

You should take advantage of the multiple-user capabilities in MTSW for security purposes. Using a single administrator account for everyone causes potential security risks (someone can intentionally steal client data for personal gain) and system configuration risks (someone can intentionally or accidentally change or delete client or configuration data). When you create individual accounts with limited access, you significantly reduce those risks.

25.1 Configuring Access Levels

Access levels in MTSW are similar to groups in Microsoft Windows: the set of permissions associated with the access level automatically applies to any account assigned to that level. MTSW has three default access levels: administrator, operator, and registrar. Each has different associated permissions. The default access levels are typically applied to accounts using the following assumptions:

- Administrators require full access to all system configuration and maintenance applications and tools.
- Operators typically use the MTSW main application, specifically for dispatching events and generating reports.
- Registrars only enter client information.
- You can modify the default permissions for the default access levels. You can also create custom access levels, as necessary.

360. To open the **Access Level Settings** window from the MTSW Setup interface, select **Operator→Access Level** from the menu bar.
   The **Access Level Settings** window appears.

Figure 93: Access Level Settings Window
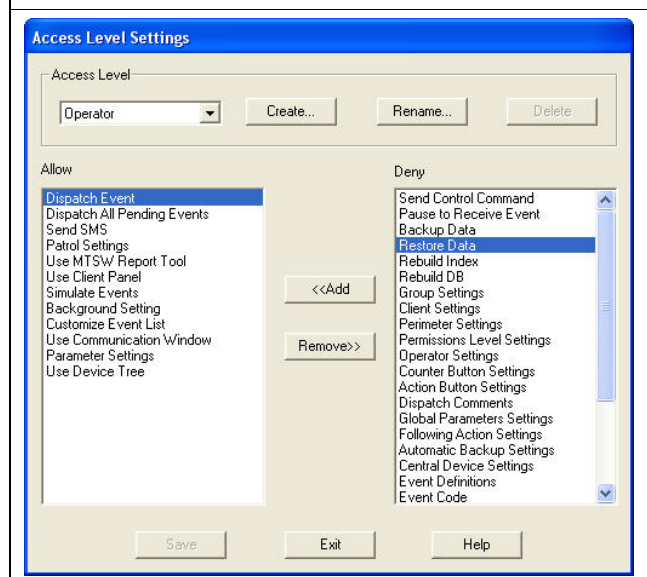
361. To add a new access level, click **Create**.

362.   In the resulting **Access Level Name** dialog box, enter a name in the **Name** text box and click **OK**.

363.   Select the access level you wish to modify from the **Access Level** drop-down list. Permissions allowed for the access level appear in the **Allow** list box. Permissions not allowed for the access level appear in the **Deny** list box.

364.   To add a permission, select a permission from the **Deny** list box and click **Add**. The permission appears in the **Allow** list box.

365.   To remove a permission, select a permission from the **Allow** list box and click **Remove**. The permission appears in the **Deny** list box.

366.   Click **Save**.

25.2 Adding and Modifying Operators

Operators in MTSW are similar to users in Microsoft Windows. MTSW has one default user: ADMIN. The ADMIN user has the Administrator access level. You can add an operator account for each person who logs in to MTSW (recommended for security).

367.   To open the **Operator Settings** window from the MTSW Setup interface, select **Operator→Operator Settings** from the menu bar. The **Operator Settings** window appears.

Figure 94: Operator Settings Window
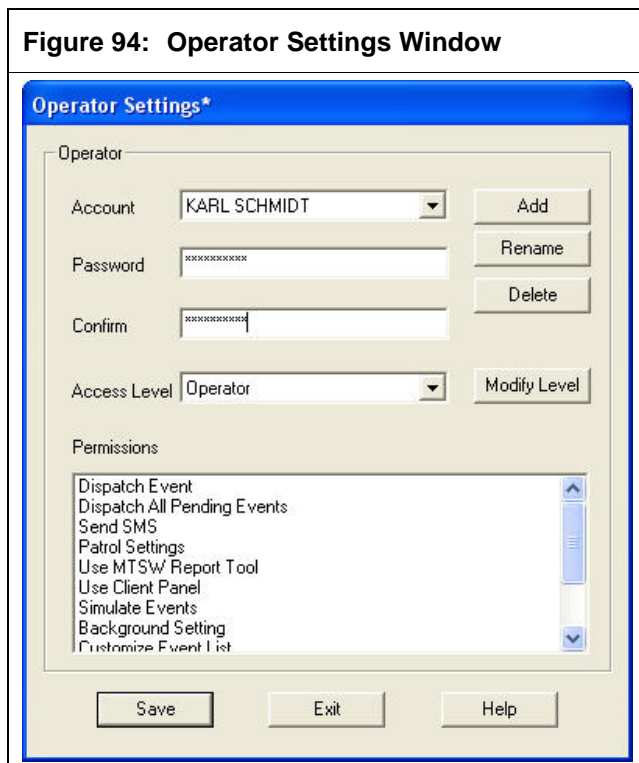
368.   To add a new operator, click **Add**.

369.   In the resulting **Operator Name** dialog box, enter a name in the **Name** text box and click **OK**. The name appears in the **Account** drop-down list.

370.   Enter a password in the **Password** text box. Enter the same password again in the **Confirm** text box.

371.   Select the access level that you wish to apply to the operator.

372.   The **Permissions** list box lists the permissions allowed by the Access Level. Click **Modify Level** to open the **Access Level Settings** window if you wish to modify the level. Refer to *Section 24.1 Configuring Access Levels* on page **Error! Bookmark not defined.**.

373.   Click **Save**.

> For security, you should change the password for the default ADMIN account. Refer to *Section 26.1 Changing the ADMIN Password* on page **Error! Bookmark not defined.**.

26.0 Distributing New Data

You must distribute your MTSW Setup changes to MTSW to ensure all changes are saved.

If you have not changed any parameters, the **Distribute** menu item and **Distribute** button on the toolbar are disabled.

If you close MTSW Setup without distributing the data, the system shows a prompt asking if you wish to distribute the data before closing.

To distribute data manually, in the MTSW Setup interface, select **System→Distribute** from the menu bar or click the **Distribute** button on the toolbar. The system validates that all device and zone addresses are assigned to client or zone, perimeter, output device, or patrol point. The system then distributes the data and closes MTSW Setup.

27.0 MTSW Overview

Use the MTSW main program to receive and dispatch events, and to send control commands. To open MTSW, select **Start→(All) Programs→MTSW v1. 3→MTSW v1.3**.

27.1 Changing the ADMIN Password

For security, it is critical that the administrative user change the password for the ADMIN account from the installed default password.

From the **MTSW** window, select **Operator→Change Password**. Enter your current and new password in the corresponding text boxes, and click **OK**.

Figure 95: Change Password Dialog Box

27.2 Changing the MTSW Window Background

You can change the background for the MTSW window at any time from MTSW.

374. In the **MTSW** window, select **Window→ Background** from the menu bar. The **Background** dialog box opens.

Figure 96: Background Dialog Box
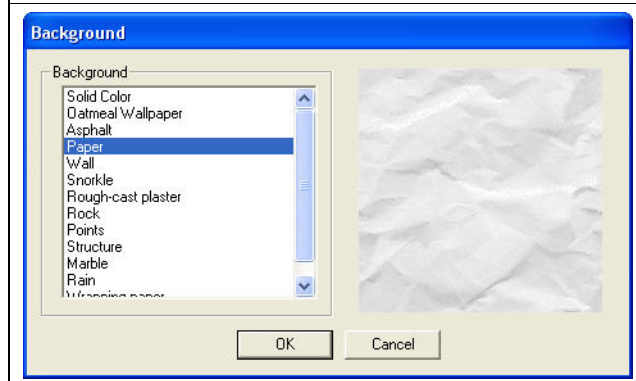
375.	Select an image from the **Background** list box. A preview of the image appears on the right.

376.	To choose a color, select **Solid Color** from the Background list box, and then click the resulting **Color** button on the right. The **Color** dialog box opens.

377.	In the **Color** dialog box, do one of the following:

- Choose a basic color from the palette and click **OK**.
- Click **Define Custom Colors** and then click on an area of the spectrum to choose a custom color. Click **OK**.

378.	Click **OK** to close the **Background** dialog box.

> ✓ You can also change the MTSW window's background from MTSW Setup. To do so, select **System→Background** from the menu bar.

27.3 MTSW Window without Events

When MTSW has no events to show, MTSW shows the system map. Refer to *Figure 98.*

Figure 97: MTSW Window with System Map

When MTSW has no events to show and you have not configured a system map, MTSW appears without the system map. Refer to *Figure 99.*

Figure 98: MTSW Window without System Map

27.4 MTSW Window with Events

MTSW contains the following:

- The top of the screen shows the automation center title. You can customize the tile and font color. Refer to *Section 21.0 Configuring Global Parameters* on page **Error! Bookmark not defined.**.
- The buttons on the left of the display are the history counters. Click the buttons to show History events. Refer to *Section 18.0 Configuring History Counters* on page **Error! Bookmark not defined.**.
- The buttons on the right are the action buttons. Click a button to run the defined action. Refer to *Section 19.0 Configuring Action Buttons* on page **Error! Bookmark not defined.**.
- The center of the display shows the **Navigation Map**, **Pending Event**, **Held Event**, and **Client Tree** tabs. The top-level map shows if no events are on the **Pending Event** or **Held Event** lists.
- The bottom of the display shows the **Pending Event** list with the latest events in the system when the **Navigate Map** or **Held Event** tab is selected. When an event is received while viewing the navigate map, or you select a **Held Event** list table, the display has a red background and a white foreground. When it is the current selected event, the display has a blue background and white foreground.

27.5 MTSW Received Events Window

When an event is received, MTSW appears with the top-level map, if configured.

27.5.1   Event Detail Information

When you select an event in the **Pending Event** or **Held Event** lists the **Event Detail Information** shows at the top of the main display. Refer to *Figure 100*. The default display shows the first event on the **Pending Event** list. The event type is shown with large font and customizable color (refer to *Section 13.8 Configuring Event Colors* on page **Error! Bookmark not defined.**). The event content and extended information show below the event type. The extended information includes device address, area ID, device ID, and modem III text.

Figure 99: MTSW Window Event Detail
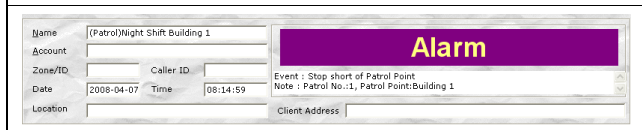
27.5.2   The Navigation Map

When an event is received and occurs in the area of the current map, the **Event** icon shows on the map. When the event area is a sub-level of the current map, the **Navigation** icon appears. The **Event** or **Navigation** icon blinks. Refer to *Figure 106* and *Figure 107.*

27.5.3   Pending Event List and Held Event List

When you select the **Pending Event** or **Held Event** tab, the **Pending Event** or **Held Event** list appears.

Figure 100: Pending Event and Held Event Tabs
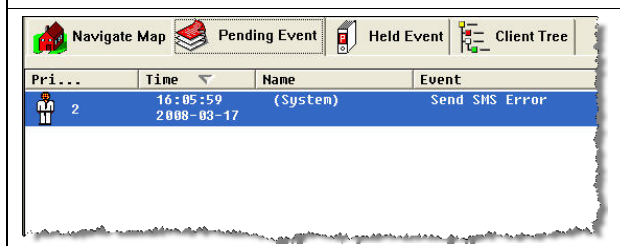
In each Event list, you can sort events according to priority or time by clicking the corresponding column heading. The default order setting is by time.

> ☑ The maximum number of events the **Pending Event** list holds is 5,000. When the event number reaches 5,000 and a new event is received, the oldest and lowest priority event is deleted from the **Pending Event** list and sent to the History database.

27.6 MTSW Window Buttons

The default buttons and their uses are:

- **Pending Event List:** Located at the top right of MTSW. The number at the top of the button is the number of pending events currently in the system. Refer to *Figure 102*.
- **Held Event List:** Located at the top right of MTSW. The number at the top is the number of held events currently in the system. Refer to *Figure 102*.

> ☑ To add change a pending event to a held event, select the event in the **Pending Event** list and click **Hold**. The event moves from the **Pending Event** list to the **Held Event** list.

- **Dispatch:** Removes an event from a list and sends it to the History database. Before dispatching an event, the dispatch comment is entered or selected from the drop-down menu of the dispatch button. The comment chosen from drop-down list is recorded into the History database. Refer to *Figure 102*.
- **Hold:** Located at the top right of MTSW. Adds an event to the **Held Event** list and to the count on the **Held Event** button.
- **Mute:** Located at the right of MTSW. Refer to *Figure 102*. When the system receives a new event, the speaker on the button blinks and sound is generated according to the operator settings. Refer to *Section 13.0 Managing Event Definitions* on page **Error! Bookmark not defined.**. Click **Mute** to stop the event sound. If the event is not dispatched within the allowed time interval, the event sound plays automatically. Refer to *Section 22.0 Configuring Following Actions* on page **Error! Bookmark not defined.**.

Figure 101: MTSW Buttons
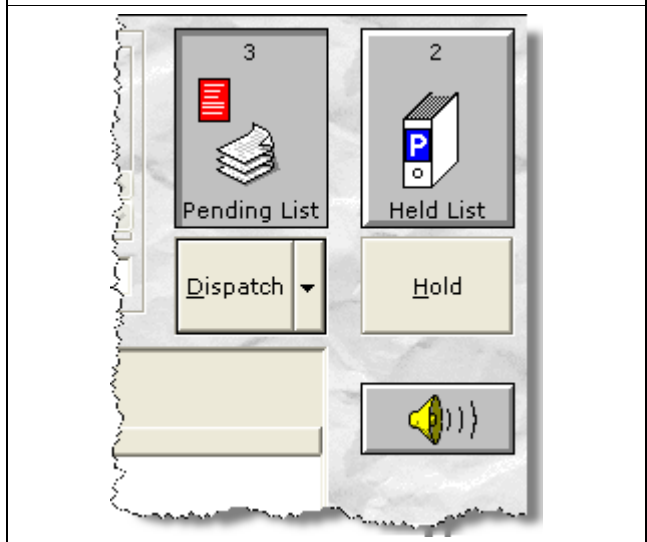
Right-click and hold the **Mute** button to show detailed information regarding the last event.

Figure 102:	Event Information
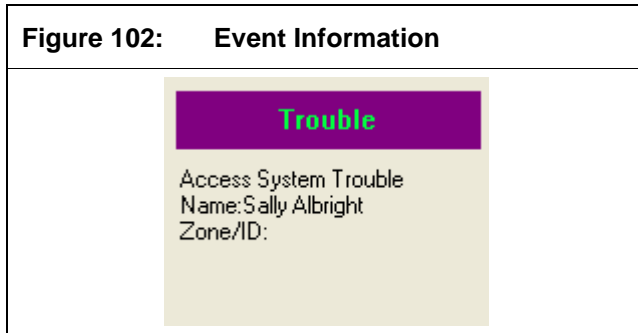
28.0 Receiving Events

MTSW acquires the latest system events as soon as possible, whether or not you select the Pending list. The system provides different methods to notify you that an event was received.

28.1 Using the Pending List

379.   To select the **Pending Event** list from the MTSW window, click the **Pending Event** tab.

Figure 103:	Pending Event List
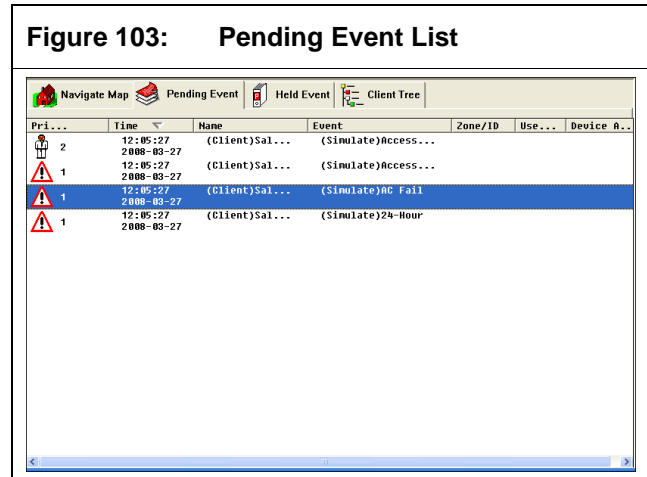
380.   Select an event in the **Pending Event** list to start the system timer:

- If no operation begins in 10 sec, the cursor jumps to the latest event in the list. When a new event is added, it is selected immediately.
- If another event is selected in 10 sec, the system timer starts again.
- If the **Navigate Map**, **Client Tree**, or **Held Event** tab is selected, the timer stops.

28.1.1 Minimizing the Pending List

When the **Navigate Map**, **Held Event** or **Client Detail Information** window appears, the **Pending** list minimizes and shows at the bottom of the main display.

Figure 104:   **Minimized Pending List**
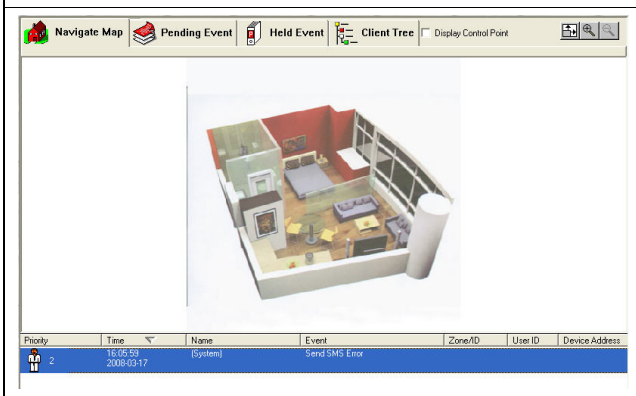
In the minimized list, you can sort but not select the events. The currently selected event in the system has a blue background and a white foreground. The new event, which scrolls to the top, has a red background and a white foreground.

28.1.2   Using Following Actions and Commands

When an event is received, the system checks for following commands and following actions and runs them in the following order:

- Zone Following Commands

- Client Following Commands

- Following Actions

In the process of executing commands, if a command has the same command type and parameter type as another command that must run, MTSW runs the command once.

28.2 Using the Navigation Map

28.2.1   Using the Event Icon

When the navigation map shows and some pending or held events exist (as noted on the current map), the **Event** or **Navigation** icon blinks on the map. You can navigate on the map to get detailed location information if the event that occurs does not show on the top-level map.

381.   Click the **Up Arrow** icon, if available, to view the top-level map of the current map.

382.   Click the **Right Arrow** icon on the map to show the sub-group map for the current map. Refer to *Figure 106*.

383.   If the event occurs in current map area, the **Event** icon shows. When the cursor is moved over any icon, detailed information of the icon shows. A full screen map appears and you can enlarge the maps by selecting the buttons at the upper right of the window.

Figure 105:   **Navigation Map with Event Icon**
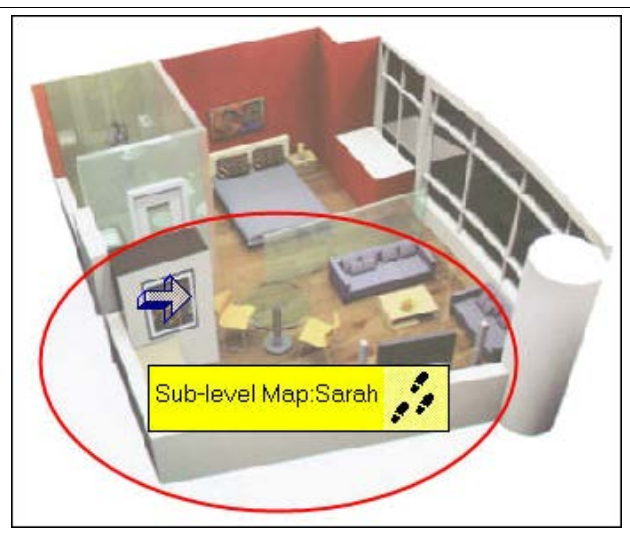
28.2.2   Perimeter Icon Overview

When a Perimeter event is received, a red line and an **Event** icon appear.

Figure 106:   **Navigation Map with Perimeter Event**
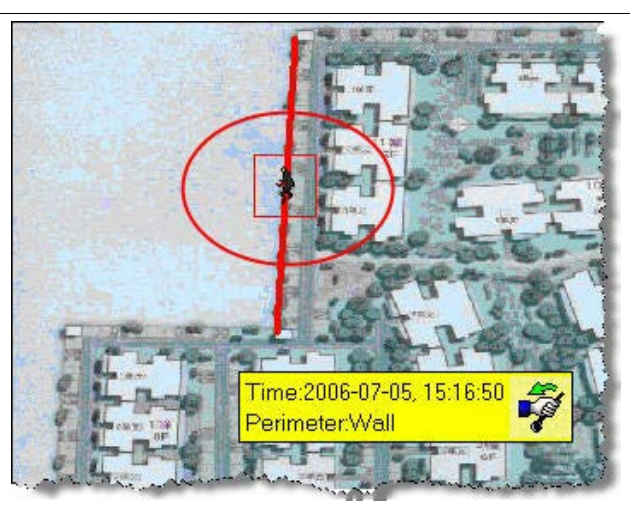
28.2.3   Displaying Control Points

When the navigation map is shown, select the **Display Control Point** check box to display all control points located on the current navigation map.

Figure 107:   **Display Control Point Check Box**
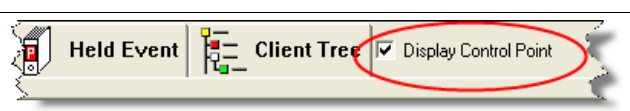
28.2.4 Location Display

If you located a group on a map, when you select the group from the client tree (refer to *Section 29.0 Using the Client Tree* on page **Error! Bookmark not defined.**), you can click **Display Group Location** to display the navigation map and the selected group position on the map. If the selected group is a perimeter, the icon has a blue line, otherwise a blue frame outlines the icon.

Figure 108: Navigation Map with Outlined Group Icon

28.3 Viewing Client Information for an Event

In MTSW, double-click on an event or the suitable icon on the navigation map to show detailed client information regarding the event.

Figure 109: Client Detail Information

Information regarding an event show on the **Client Information**, **Site Device**, **Zone**, **Contact**, **Arm/Disarm Schedule**, and **Dispatch Comment** tabs. Based on the Event, Time, and Address filters, the contact and held event comment are filtered and shown. (Refer to *Section 7.7 Configuring Held Event Comments* on page **Error! Bookmark not defined.**.)

Double-click a Perimeter event to view perimeters. You can view the Forward information for the current event at any time. When an event is forwarded, a **Forward** tab is added to the **Client Detail Information** window.

The received workstation is listed on the left and the detailed information shows on the right of the display. These include status, send date, send time, roll back transaction, and more.

- Click the **Refresh** button to obtain the latest Forward information.
- Close the **Forward** tab to view the Event list or navigation map.

29.0 Dispatching Events

29.1 Working with Dispatch Comments

384.   In MTSW, select an event you wish to dispatch or hold.
385.   Select the **Dispatch Comments** tab.
386.   Enter the comments in the **Held Event Comment** text box, or leave it blank.

Figure 110:   Dispatch Comments Tab
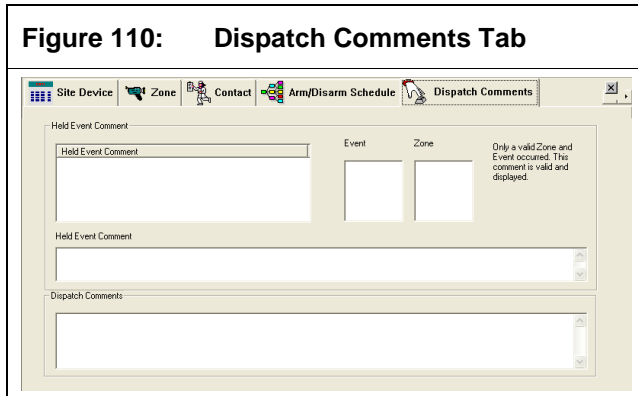
Holding Events

On the **Dispatch Comments** tab, after entering the comments in the **Held Event Comment** text box, click the **Hold** button on the MTSW Main Interface. The selected event is added to the **Held Event** list.

On the navigation map, the held events have a yellow background to distinguish them from Pending events.

Figure 111:   Held Event Tab

30.0 Using the Client Tree

30.1 Client Tree Overview

The client tree contains client groups, clients, zones, perimeters and control points. It uses different icons to mark the status of clients, zones, perimeters, and control points.

In MTSW, click the **Client Tree** tab. The **Client Tree** item appears on the left and the functions for finding items or sending control commands appear on the right. The examples are provided on the lower right. The **Status** icons are available for clients, zones, perimeters and control points, but not for groups. The status changes in real time.

For DS7400 series or B/G series devices, if a partition Arm or Disarm event is received, MTSW looks up all site devices (connected with zones) or zones belonging to the partition, and changes the related client or zone into the arm or disarm state.

Figure 112:   Client Tree Tab
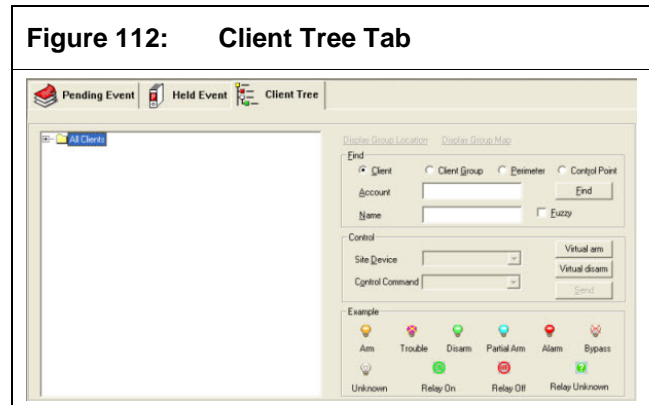
30.2 Displaying Group Locations and Maps from the Client Tree

Select a group from the client tree. If the group is located on a map, the **Display Group Location** link is available. Click the **Display Group Location** link to view its location on the navigation map. Refer to *Section 27.2 Using the Navigation Map* on page **Error! Bookmark not defined.**.

30.3 Finding a Client from the Client Tree

Use the **Find** function to find a client, client group, perimeter, or control point.

387.   On the **Client Tree** tab of MTSW, select the option button for the item you wish to find. The search parameters change depending on which option button you select.
388.   Enter your search text in the text boxes.
389.   Select the **Fuzzy** check box if you wish to search for partial field matches.

390. Click **Find**. All items that meet your search criteria appear in the client tree.

30.4 Using Controls in the Client Tree

The client tree has two controls: Virtual arm/disarm and Send.

30.4.1 Virtual arm/disarm

On the **Client Tree** tab of MTSW, the **Virtual arm** or **Virtual disarm** button is available for the devices with no keypads (exemption: D6600/6100). When the client or perimeter is assigned as virtual arm/disarm, the current client arm/disarm status is controlled only by the MTSW, not by actual arm/disarm events. Be careful to select the **Virtual arm/disarm**.

391. On the **Client Tree** tab of MTSW, choose a client that is enabled virtual arm/disarm.
392. When you are assigned the authority of enable the virtual arm/disarm, the **Virtual arm** and **Virtual disarm** buttons become available.
393. Click the **Virtual arm** or **Virtual disarm**. The **Password** dialog box appears.
394. Enter the password and click **OK**.

When the password is correct, a generated virtual arm/disarm event is discarded for the client, zone or perimeter. When the non-D6600/6100 zone or perimeter is in disarm state, the events belonging to the zone are not accepted, except for some vital events (for example, 24-Hour, Medical, and so on).

30.4.2 Sending a Control Command

MTSW can send a control command to control some site devices (for example, DS6R2). A text message can be sent to some devices that can receive text messages (for example, a Bosch-VDP device). You can search status of the partitions that connected to DS7400 series devices; and you can search the following information of B/G series devices: partition and partition status, zone and zone status, output and output status, host user, host user authority, connected doors, connected cameras. Additionally, you can perform the following actions for B/G series: arm, disarm, disable or enable alarms, bypass or un-bypass the zones, turn on/off the outputs, add/delete/change user, control the connected doors…etc.

395. On the **Client Tree** tab of MTSW, choose a client. All devices attached to the client are listed in the **Site Device** drop-down list.
396. When you select a device from the list, all control commands supported by it are added to the **Control Command** drop-down list.
397. To send a control command, choose the command from the drop-down list and click the **Send** button. The command is added to the control command queue. The queue appears only if there are delays in sending the command.

When the Relay On/Off command is sent, a pop-up dialog box appears with the channel choices.

When a device that sends and receives messages (for example, the output device of the Bosch-VDP) is installed, the device selects the Send Message command from the **Command** drop-down list. When you send a message to a group, all clients in the group receive the message.

30.4.3 Viewing Client Information from the Client Tree

On the **Client Tree** tab, double-click the **Client Group**. The **Client Information** window appears. The **Client Information** window in MTSW shows fewer tabs than in MTSW Setup.

You cannot edit the client information from MTSW.

Figure 113:   Client Information Window
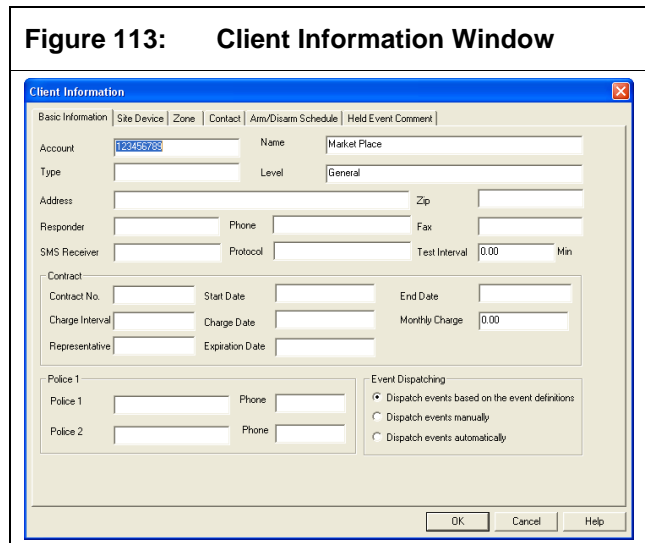
31.0 Simulating Events

You can simulate events for testing purposes.

All simulated events have a simulate tag before the event description, which is different from other events. Simulated events are not looked up. For example, if you look up all burglary events, the simulated burglary events are not listed.

In MTSW, select **System→Simulate Events** from the menu bar. The **Simulate Events** window appears.

Figure 114: Simulate Events Window—User Alarm
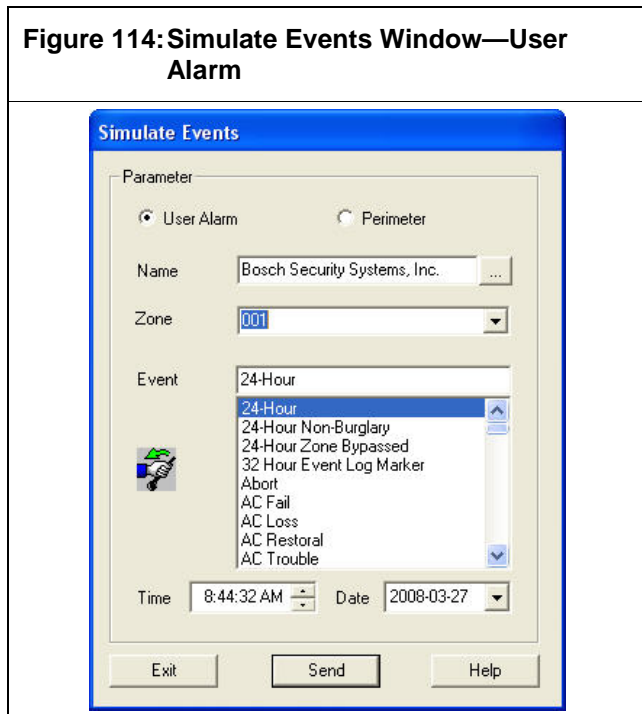
31.1 Simulating Client Events

398. From the **System→Simulate Events** window, select the **User Alarm** option button.
399. Enter the client name in the **Name** text box, or click the button to the right of the text box to select a client from the client list. All zones belonging to the selected client appear in the **Zone** drop-down list.
400. Select a zone from the **Zone** drop-down list.
401. Select an event from the **Event** list box.
402. Select a time and date from the spin boxes and drop-down lists.
403. Click **Send**. The simulated event is added to the Pending Event list.

31.2 Simulating Perimeter Events

404. From the **System→Simulate Events** window, select the **Perimeter** option button.
405. Enter the perimeter name in the *Name* text box, or click the button to the right of the text box to select a perimeter from the **Perimeter** list.

406. Select an event from the list box.
407. Select a time and date from the spin boxes and drop-down lists.
408. Click **Send**. The simulated event is added to the **Pending Event** list.

Figure 115: Simulate Events Window—Perimeter
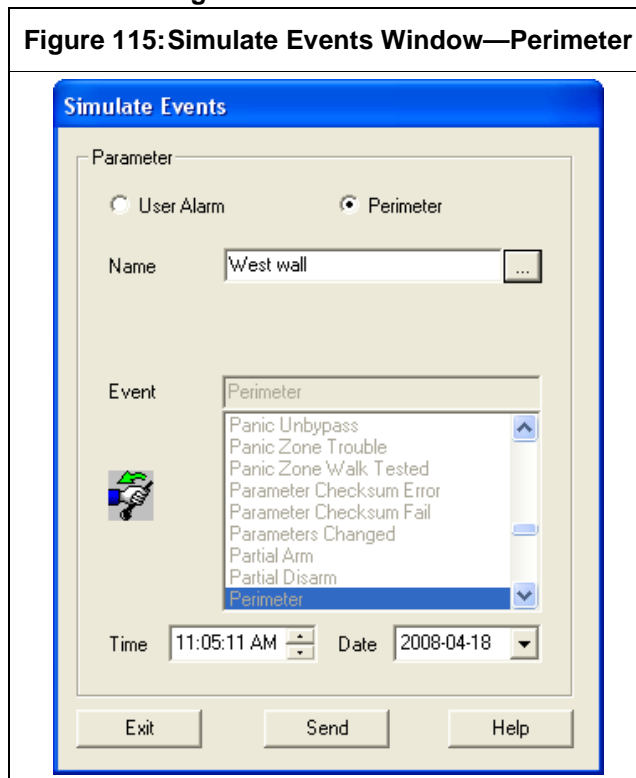
32.0 Customizing the MTSW Window

In MTSW, you can customize the appearance of the MTSW window for aesthetics, such as changing the background image. You can also view a variety of information by changing the columns the window shows, and by opening additional dialog boxes that do not appear on the main window by default.

32.1 Customizing the Pending Event List

You can customize the columns shown on the **Pending Event** tab.

32.1.1 Adding, Deleting, and Arranging Columns

409.   In MTSW, select **Window→Pending List Column Settings** from the menu bar. The **Column Settings** dialog box appears.

410.   Deselect the check box for any column you wish to remove. You cannot remove the **Priority**, **Time**, **Name**, **Event**, **ZoneID**, or **UserID** columns.

411.   Select the check box for any column you wish to add.

412.   Arrange the columns in a preferred order by selecting a column and then clicking the **Move Up** or **Move Down** button.

413.   Enter the number of pixels for the desired default column width.

414.   Click **OK**.

32.1.2 Changing Columns

415.   In MTSW, select **Window→Pending List Column Settings** from the menu bar. The **Column Settings** dialog box appears.

416.   Deselect the check box for any column you wish to remove. You cannot remove the **Priority**, **Time**, **Name**, **Event**, **ZoneID**, or **UserID** columns.

417.   Select the check box for any column with a status you wish to change.

418.   Click **Hide** to hide a column, or click **Show** to show a column.

419.   Arrange the columns in a preferred order by selecting a column and then clicking the **Move Up** or **Move Down** button.

420.   Enter the number of pixels for the desired default column width.

421.   Click **OK**.

33.0 Monitoring Events with the Communication Window

After a connection is established in MTSW Setup, MTSW receives data from the connection as soon as logging on is finished. Use the **Communication** window to monitor the communication of MTSW with the central device.

The current communication speed shows at the bottom of window.

In MTSW, select **Window→ Communication** from the menu bar. The Communication window appears. Close the window by clicking on the **X** in the top right corner of the window.

Figure 116: Communication Window
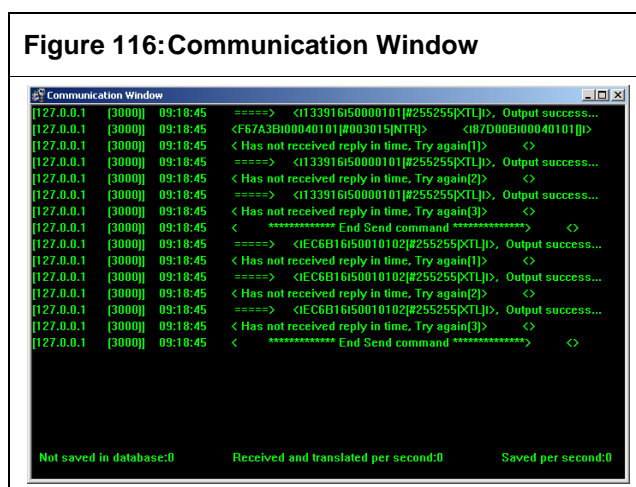
34.0 Viewing Clients with the Client Panel

Use the **Client Panel** to view client information or client zone/perimeter information, depending on panel type. The number of panels you can create is unlimited, but only one panel shows at a time. In the **Client Panel**, clients and client zone/perimeters are represented with buttons.

Client Panels and Zone Panels

MTSW has two panel types: Client panels and Zone panels. Buttons for Zone panels retain the alarm status icon until the 'restore' event or 'disarm' event is received, even if the event was dispatched.

You configure a panel as a Zone panel by selecting the **Display Zone status** check box in the Panel Settings dialog box. Refer to *Figure 119* on page **Error! Bookmark not defined.**.

34.1 Client Panel Overview

422.   In MTSW, select **Window→Client Panel** from the menu bar. The **Client Panel** dialog box appears.

423.   Choose a panel from the **Panel** drop-down list.

424.   Place your mouse over the **Panel** button. The client shows in the tooltip.
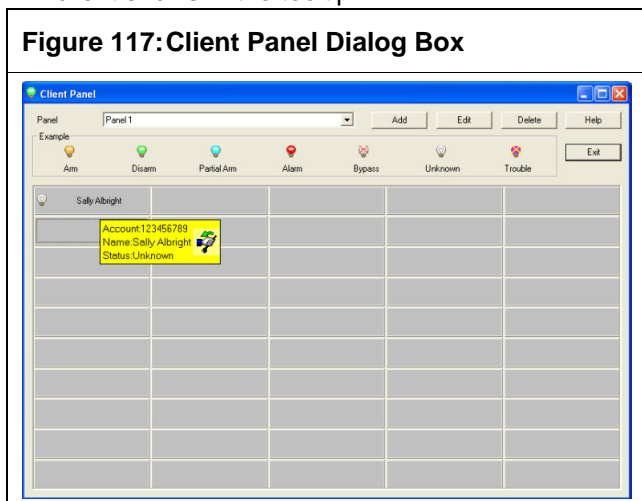
Figure 117: Client Panel Dialog Box

34.2 Adding Client Panels

425.   In the **Window→Client Panel** dialog box, on the desired **Client Panel**, click **Add**. The **Panel Settings** dialog box appears.
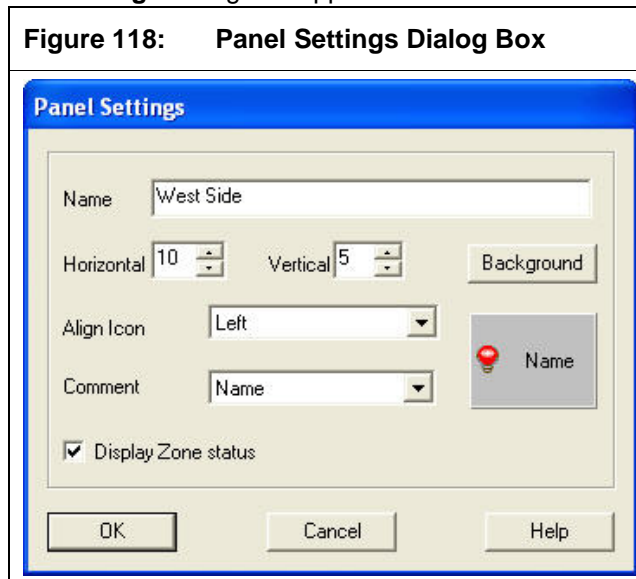
Figure 118:   Panel Settings Dialog Box

The panel parameters are:

* **Name:** The panel name. You must use a unique name for each panel.
* **Horizontal:** The number of horizontal buttons on the panel, with a maximum of 20.
* **Vertical:** The number of vertical buttons on the panel, with a maximum of 10.
* **Background:** The background color of the panel button.
* **Align Icons:** The icon position on the button.
* **Comment:** Shows the Name or the Account on the button.
* **Display Zone status:** The panel's status as a Client panel or a Zone panel. If selected, the panel is a Zone panel. If deselected, the panel is a Client panel.

426.   After you enter parameters, click **OK**.

34.3 Adding Clients or Client Zones/Perimeters to a Panel

Adding Clients

427.   In the **Client Panel** dialog box (in MTSW, select **Window→Client Panel)**, select a Client panel from the Panel drop-down list (refer to *Client Panels and Zone Panels* on page **Error! Bookmark not defined.**).

428.   Right-click a **Panel** button. If no client is attached to the button, the **Add** pop-up menu option appears.

429.   Click **Add**. The **Add Client** dialog box opens.

Figure 119:   Add Client Dialog Box

430.   You can add one or more clients to a Client panel. Enter the client's name or choose a client from the Client list to add one client.

431.   To add multiple clients, select the **Multiple** option button and enter a range of client accounts in the text box.

432.   After entering the client's name or account in the dialog box, click **OK** to add the client or clients to the panel.

Adding Client Zones/Perimeters

433.   In the **Client Panel** dialog box (in MTSW, select **Window→Client Panel)**, select a Zone panel from the Panel drop-down list (refer to *Client Panels and Zone Panels* on page **Error! Bookmark not defined.**).

434.   Right-click a **Panel** button. If no client is attached to the button, the **Add** pop-up menu option appears.

435.   Click **Add**. The **Add Zone** dialog box opens.

Figure 120:   Add Client zone/Perimeter Dialog Box
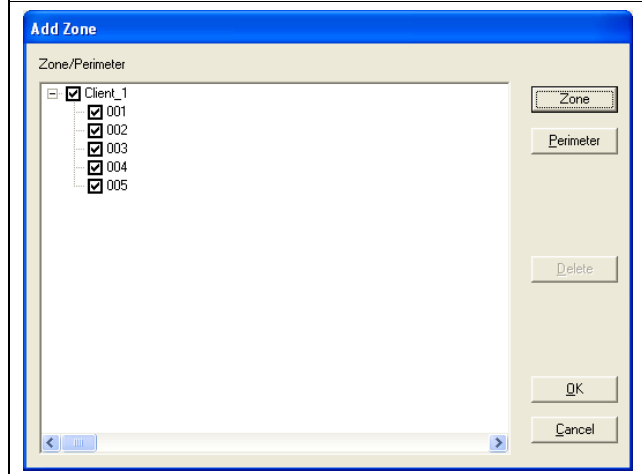
436.   You can add one or more client zones/perimeters to a Zone panel. Add zones and perimeters to the list box using the Zone and Perimeter buttons.

437.   Select the check boxes for the zones and perimeters you want to add, and then click **OK** to add your selections to the panel.

34.4 Editing a Zone Panel Account Number or Name

You can edit the account number or name for Zone panels.

438.   In the **Client Panel** dialog box (in MTSW, select **Window→Client Panel**), select a Zone panel from the Panel drop-down list (refer to *Client Panels and Zone Panels* on page **Error! Bookmark not defined.**).

439.   Right-click on a Zone panel button.

440.   Select **Edit account/name** from the pop-up menu. The **Edit account/name** dialog appears.

Figure 121:   Edit Account/Name Dialog Box
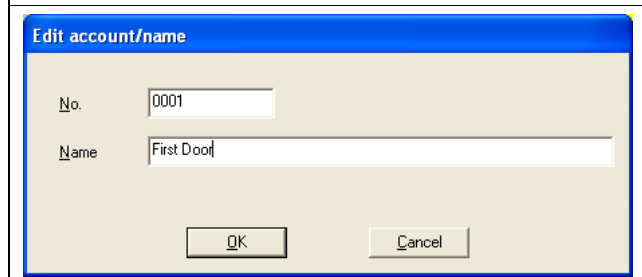
441.   Enter a new account or name in the corresponding text boxes and click **OK.**

34.5 Changing Panel Display Icons
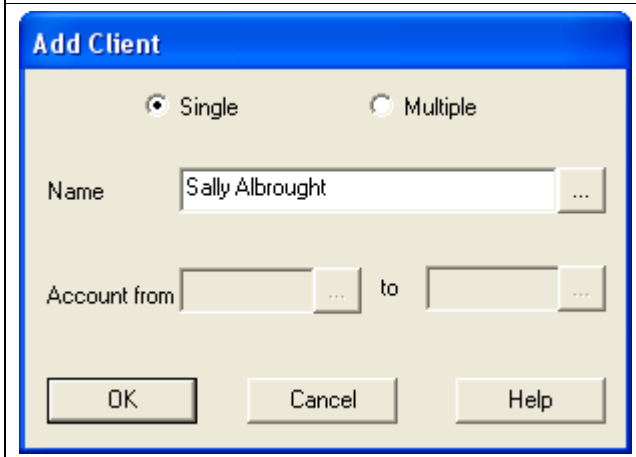
442.   In the **Client Panel** dialog box (in MTSW, select **Window→Client Panel**), select a Zone panel from the Panel drop-down list (refer to *Client Panels and Zone Panels* on page **Error! Bookmark not defined.**).

443.   Double-click on an icon in the **Example** area. The **Icon Settings** dialog box appears.

Figure 122:	Example Icons Area
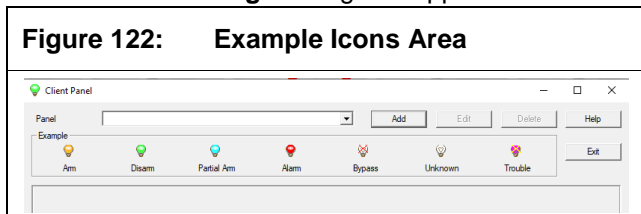
Figure 123:	Icon Settings Dialog Box
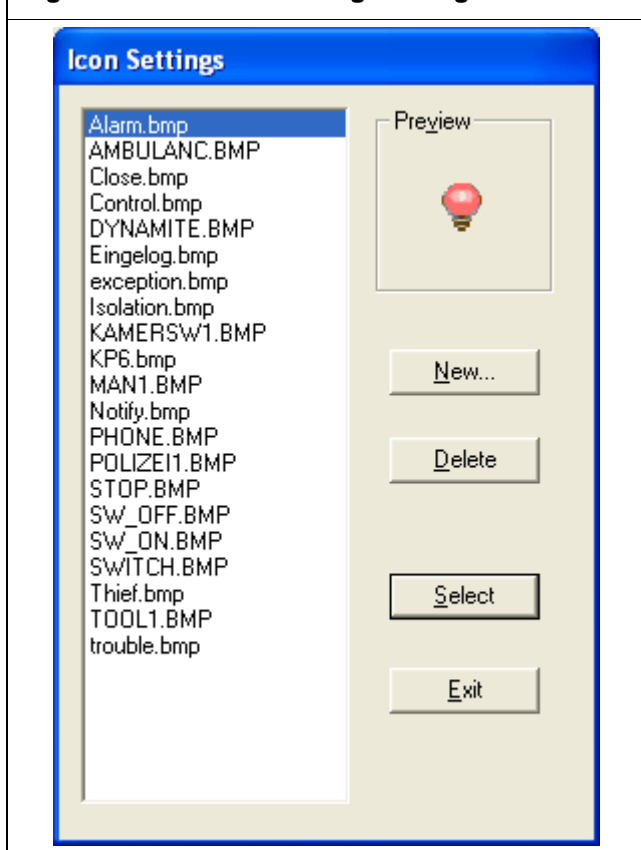
444.   Select an icon from the list box and click **Select**, or click **New** to choose a custom icon.

445.   In the resulting **Open** dialog, navigate to and select your icon and click **Open**. The image file is added to the system and the list box.
The system supports only the .bmp format.

446.   Click **Select**.

34.6 Sorting Buttons in the Client Panel Dialog Box

447.   In the **Client Panel** dialog box (in MTSW, select **Window→Client Panel)**, right-click a panel button.

448.   Select **Sort→Name** to sort by client name, or **Sort→Account** to sort by client account numbers.

Figure 124: Client Panel Pop-up Menus
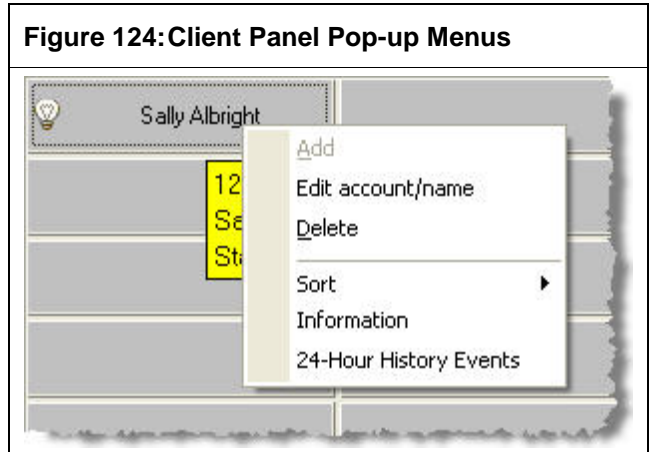
449.   You can also change the position of clients on the panel by dragging and dropping existing clients.

34.7 Viewing Client Histories in the Client Panel

450.   In the **Client Panel** dialog box (in MTSW, select **Window→Client Panel)**, right-click a **Client Panel** button.

451.   Select **24-Hour History Events**. (Refer to *Figure 125*.) The **History** dialog box appears.

Figure 125: History Dialog Box

All History events are listed at the top, and the total number of records appears at the lower left of the dialog box.

> You can select multiple History events at one time by using the [Shift]+click operation to select a group of consecutive events or the [Ctrl]+click operation to select events that are not consecutive.

34.7.1 Customizing History Dialog Box Columns

You can customize the columns shown in the History dialog box.

452. In the **History** dialog box (in MTSW, select **Window→Client Panel**, and right-click a **Client Panel** button and select **History**), click **Field**.
453. Select the check box for any column you wish to remove and click **Hide**. You cannot remove the Priority, Time, Name, Event, ZoneID, or UserID columns.
454. Select the check box for any column you wish to add and click **Show**.
455. Arrange the columns in a preferred order by selecting a column and clicking the **Move Up** or **Move Down** button.
456. Enter the number of pixels for the desired default column width.
457. Click **OK**.

34.7.2 History Dialog Box Print Preview

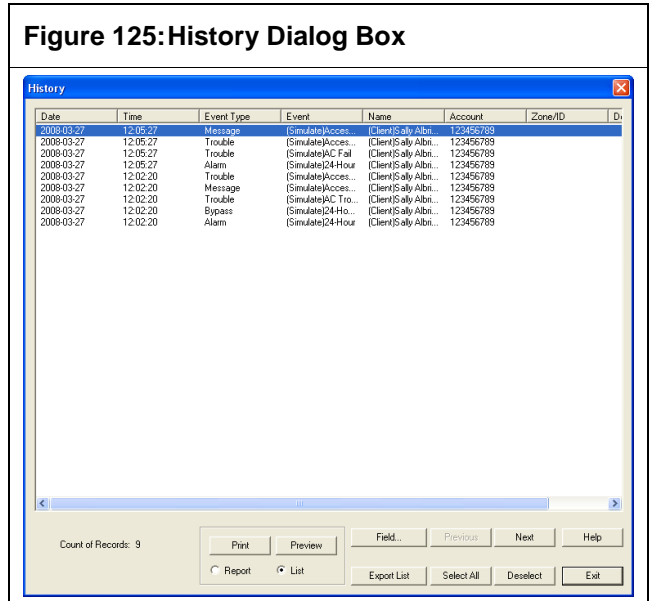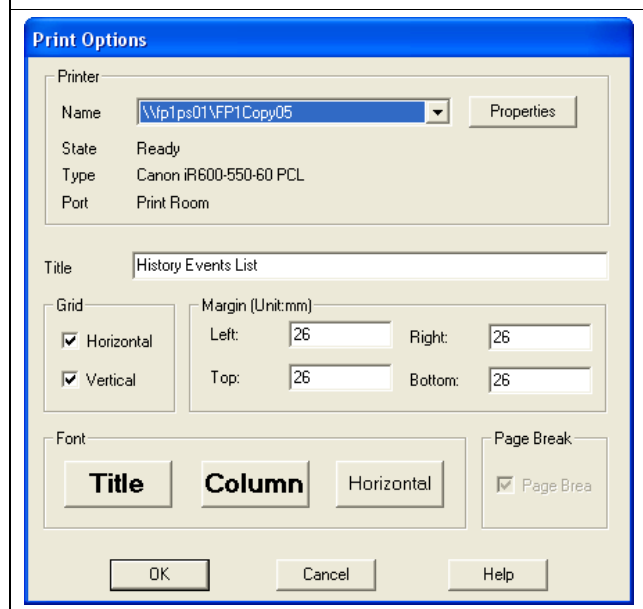You can print preview the results for the History events selected in the **History** dialog box.

458. In the **History** dialog box (in MTSW, select **Window→Client Panel**, and right-click a **Client Panel** button and select **History**), select the desired records from the list and click **Print Preview**. The **Print Options** dialog box appears.

Figure 126: Print Dialog Box

459. Select a printer from the **Name** drop-down list.
460. Click **Properties**. The system printer setting dialog box opens.

    The printer parameters are:
    - **Title:** Set the title for the printout.
    - **Grid:** In the **Grid** section, choose to add horizontal and vertical lines by selecting the **Horizontal** and **Vertical** check boxes. This setting is valid only while printing searched results.
    - **Margin:** In the **Margin** section, enter the desired margins for the printout in the **Left**, **Right**, **Top**, and **Bottom** text boxes.
    - **Font:** In the **Font** section, use the three buttons are used to set the font size for the title, column heading, and the content of the printed sheet.
    - **Page break:** The **Page Break** option allows several reports to be printed on one page.
461. Click **OK** to open the **Print Preview** window.

34.7.3 Printing from the History Dialog Box

462. In the **History** dialog box (in MTSW, select **Window→Client Panel**, and right-click a **Client Panel** button and select **History**), select the desired records from the list and click **Preview**. The **Print Preview** dialog box appears.
463. Click **OK**.

34.7.4 Exporting the History Events

464. In the **History** dialog box (in MTSW, select **Window→Client Panel**, and right-click a **Client Panel** button and select **History**), select the items from the list and click **Export List**. The **Save** dialog box appears. Enter the saved file name and click **Save**. The selected items are saved to a file.

465. Export to a text file or to a Microsoft® Excel 2000 or higher file.

> ☑ Exporting to Microsoft Excel requires Microsoft Excel version 2000 or higher on the MTSW computer.

34.7.5 Viewing Event Details

466. In the **History** dialog box (in MTSW, select **Window→Client Panel**, and right-click a **Client Panel** button and select **History**), double-click an item on the **Event** list. The **Detailed History Event Information** dialog box appears.

The dialog box shows the client's basic information, event details, held events, and dispatch information. If an event was forwarded, a **Forward** tab also appears on the dialog box.

467. Click **Refresh** to retrieve the forwarded event's status.

35.0 Viewing Devices in the Device Tree

You can view all configured devices through the Device Tree.

- For MTS, four structure levels are used: MTR, CAN Bus, MTGW, and Site Device.
- For Bosch-VDP or DS7400 series devices, two structure levels are used: Central Device and Site Device.
- For B/G series devices, only one structure level is used: Central Device.

In the MTSW window, select **Window→Device Tree** from the menu bar. The **Device Tree** dialog box appears.

Figure 127: Device Tree Dialog Box
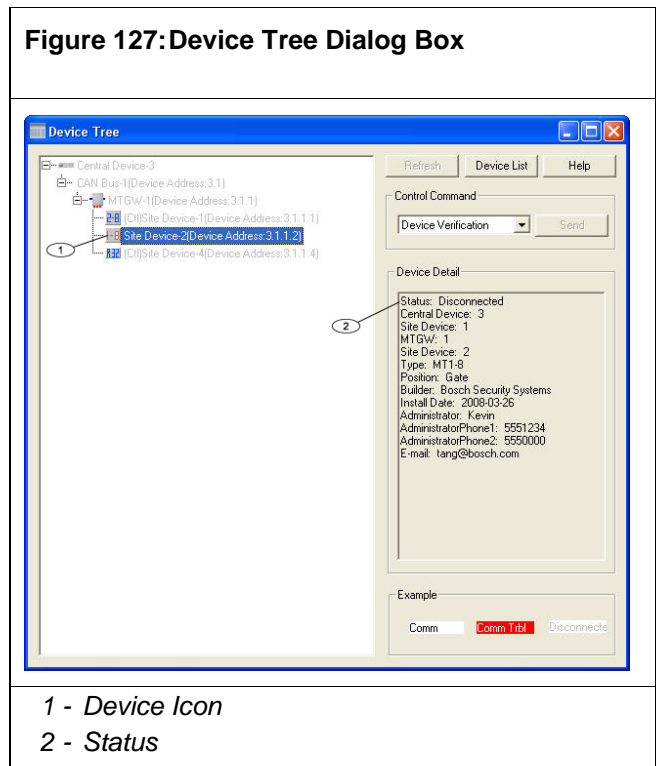
1 - Device Icon
2 - Status

The Device Tree parameters are:

- **Device Icon:** Each device has an icon to represent it. Because the CAN Bus is part of MTR, does not use an icon. Refer to *Figure 128*.
- **Control Command:** Select from the **Control Command** drop-down list and click Send. Refer to *Section 29.4.2 Sending a Control Command* on page **Error! Bookmark not defined.**. MTSW sends the command to the control command queue.

- **Device Status:** The **Status** is the first listing in the **Device Detail** section. Refer to *Figure 128*. There are three possible statuses for each device: Normal, Trouble, and Disconnected. Each one uses a different foreground color and background color. Use the **Refresh** button to obtain the latest status of the device. The statuses of the devices are:
    - **Normal:** The device operates normally.
    - **Trouble:** The device is in a Trouble state. If a device is set in MTR or MTGW, but it is not connected with MTR or MTGW, it is in Trouble.
    - **Disconnected:** The Disconnected status can occur in either of two situations: when MTSW receives no events from the Central Device when the system starts up, and the Device Address set in MTSW Setup exceeds the Address range that MTR or MTGW supports.
- **Device List:** Select the desired device from the device tree and click **Device List.** The Select Device dialog box appears. Refer to *Figure 129*. Click **OK** to list the devices. Refer to *Figure 130*.

Figure 128:   Select Device Dialog Box

Figure 129:   Device List Dialog Box
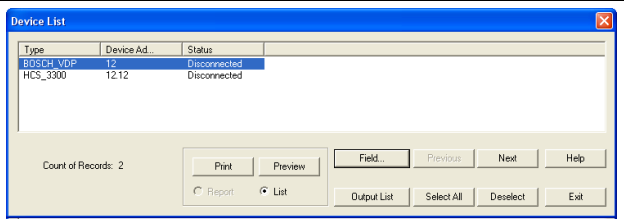
35.1 Remote Diagnosis and Control of B/G Series Panel

When the **Device Tree** dialog box appears, select **Remote diagnosis and control** from the **Control Command** drop-down list and click **Send**.

Figure 130:   Device Tree Dialog Box – Remote diagnosis and control
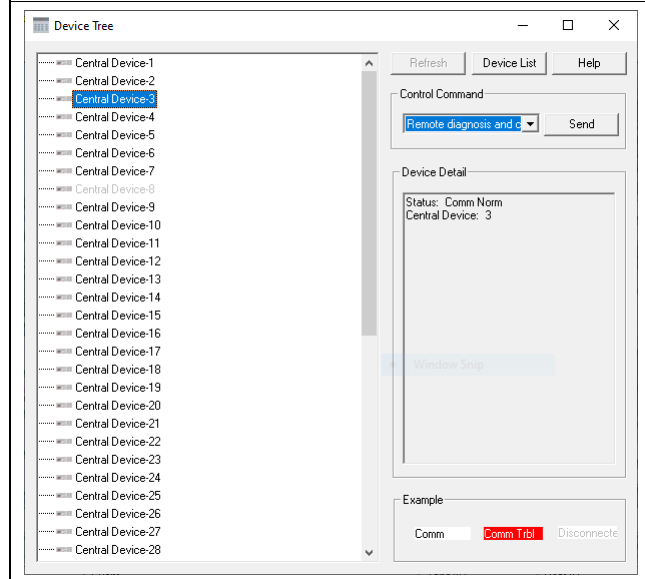
The **Remote diagnosis and control of B/G series Panel** dialog box appears.

Top half of the dialog box displays: Host name, Host model, Host address, Host port and Relevant information.

Bottom half of the dialog box includes multiple tabs to display specific device status, and you can send control commands accordingly.

Figure 131:   Remote diagnosis and control of B/G series panel
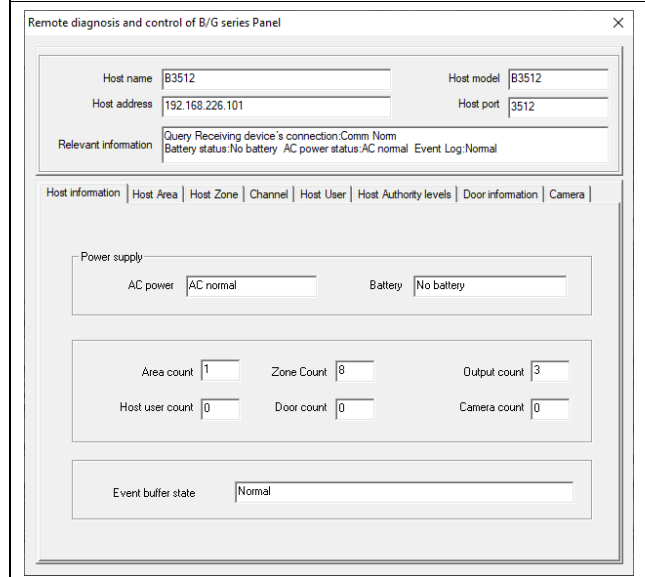
36.0 Viewing the Control Command Queue

All control commands sent by MTSW are sent to the control command queue first. The control command queue sends each command individually.

If you send the command by MTSW and the command is not sent, the control command queue appears automatically on the MTSW window. To view the control command queue manually, in the MTSW window, select **Window→Control Command Queue.**

Figure 132:   **Control Command Queue Window**

If a command is sent successfully, it is removed from the queue. Use the **Retry** or **Cancel** button to resend or delete a command from the queue, if desired.

Click **Delete All** to remove all commands from the queue.

If commands remain in the queue when exit from the system, MTSW warns you about the pending commands. If you exit from MTSW, all commands in the queue are discarded.
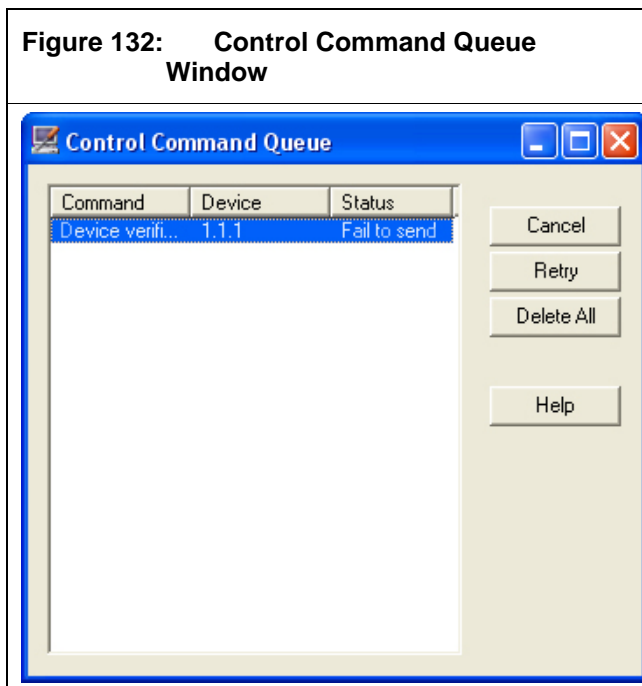
37.0 Managing the System with MTSW

You can access many management functions through the MTSW window. These management functions include other MTSW applications, sending SMS text messages, or managing the Patrol Guide.

37.1 Run MTSW Setup

To run MTSW Setup from MTSW, select **Management→MTSW Setup**. The MTSW Setup appplication opens. If you are logged in to MTSW as a user with the permissions to use MTSW Setup, you are not prompted to enter your account and password. If you are prompted, enter a valid account and password and click **OK**.

37.2 Dispatch All Pending Events

If the **Pending Event** list shows many events, it saves time to dispatch all events at once.

468.   In MTSW, select **Management→Dispatch All Pending Events**. The **Dispatch All Pending Events** dialog box appears.

    If no pending events exist, a message box warns "No event in pending list."
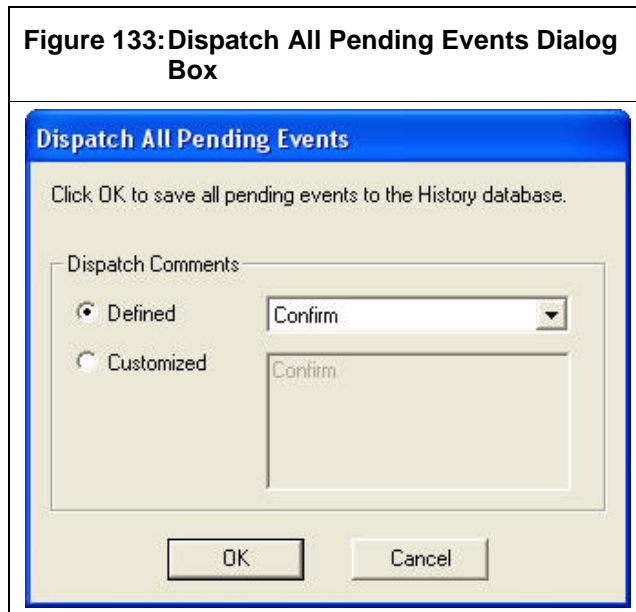

Figure 133: Dispatch All Pending Events Dialog Box

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469.   Choose the defined dispatch comment or select the **Customized** option button to enter a new comment.

470.   Click the **OK** button to send all events in the **Pending Event** list to the History database.

37.3 Send SMS Text

You can send an SMS text message to any SMS connection created in MTSW Setup.

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471. In MTSW, select **Management→Send SMS**. The **Send SMS** dialog box appears.
472. Select the desired GSM Model port, if applicable.
473. Enter the SMS text message content in the **Comment** text box.
474. Enter the number to which you wish to send the message in the **Receiver** text box, or select the **Select Receiver** option button and select the SMS text message receiver from the list box. You can select more than one telephone number at a time.

37.4 Using Patrol Settings

You can customize and cancel patrol guides, and query the History patrol record through the **Patrol Settings** dialog box.

475. Select **Management→Patrol Settings**. The **Patrol Settings** dialog box appears and shows all running patrol guides.

Figure 134: Patrol Settings Dialog Box
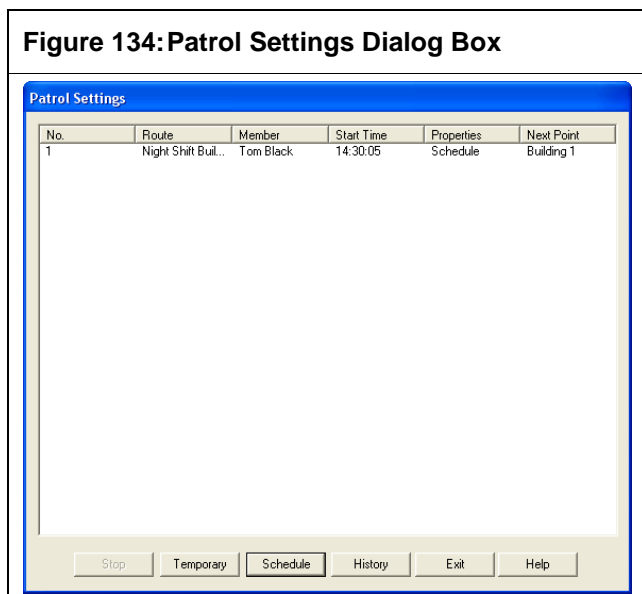
476. After the patrol guide is finished, remove it from the list. Click **Stop** to cancel the patrol guide. You cannot stop a patrol guide while it is running.

37.4.1 Temporary Patrol Guides

477. In the In the **Patrol Settings** dialog box (in MTSW, select **Management→Patrol Settings)**, click the **Temporary** button. The **Temporary Patrol Settings** dialog box appears.

Figure 135: Temporary Patrol Setting Dialog Box
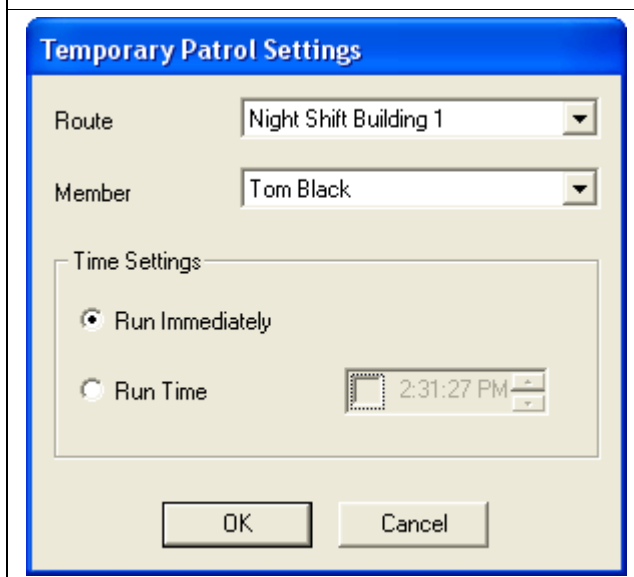
478. Select the **Route** and **Member** from the corresponding drop-down lists.
479. Set the patrol time using the **Time Settings** section of the dialog box.
480. Click **OK**.

37.4.2 Scheduled Patrol Guides

481. In the **Patrol Settings** dialog box (in MTSW, select **Management→Patrol Settings)**, click the **Schedule** button. The **Scheduled Patrol Settings** dialog box appears.

Figure 136: Scheduled Patrol Settings Dialog Box
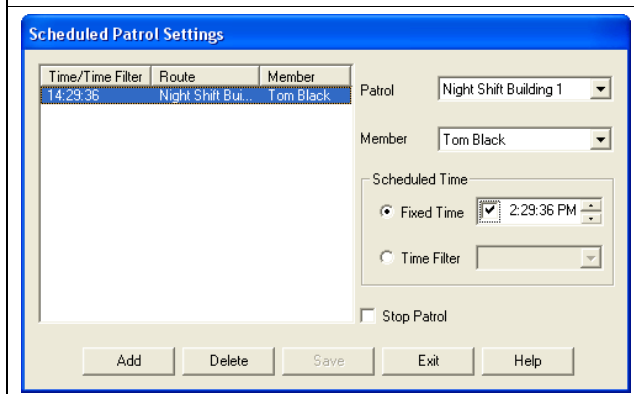
482. Click **Add**.
483. Select from the **Patrol** and **Member** drop-down lists.
484. In the **Scheduled Time** section of the dialog box, enter a **Fixed Time** or select a **Time Filter**.
485. Select the **Stop Patrol** check box to stop the patrol, if desired.
486. Click **Save**.

37.4.3 Patrol Histories

You can look up a patrol history in MTSW.

487. In the **Patrol Settings** dialog box (in MTSW, select **Management→Patrol Settings)**, click the **History** button on the **Patrol Settings** dialog box. The **Patrol History** dialog box appears.

Figure 137: Patrol History Dialog Box

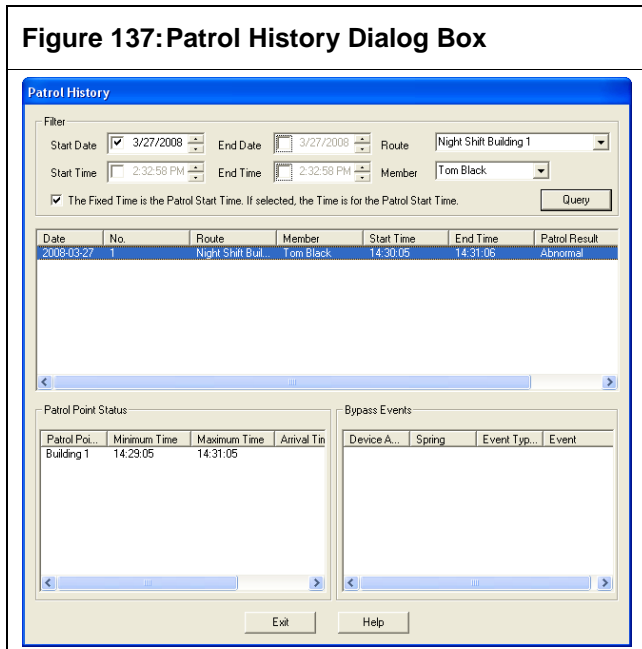488. Use the **Start Date**, **Start Time**, **End Date**, **End Time**, **Route**, and **Member** fields to filter the patrol guides. Enter the filters and click **Query** to list the patrol history.
489. Select an item from the list. The patrol guide appears on the bottom, including the patrol point status and the bypass events.

37.5 Run the MTSW Report Tool

In MTSW, select **Management→MTSW Report Tool**. Refer to *Section 37.0 MTSW Report Tool* on page **Error! Bookmark not defined.**.

37.6 MTSW System Maintenance Tool

In MTSW, select **Management→MTSW System Maintanence Tool**. Refer to *Section 38.0 MTSW System Maintenance Tool* on page **Error! Bookmark not defined.**.

37.7 Using the Operator Menu

You can log out of MTSW without closing the application.

37.7.1 Logging Off with the Operator Menu

490. In MTSW, select **Operator→Log Off** from the menu bar.
491. Confirm that you wish to log off. You must log in again to use MTSW.

37.7.2 Changing Your Password

For security, it is critical that the ADMIN user change the password for the ADMIN account from the installed default.

492. In MTSW, select **Operator→Change Password** from the menu bar.
493. Enter your current and new password in the corresponding text boxes, and click **OK**.

**Figure 138: Change Password Dialog Box**

38.0 MTSW Report Tool

The MTSW Report Tool allows you to select History events, clients, perimeters, forwarded and received events, and logs. The resulting list is printed or exported to a text file or a Microsoft® Excel file.

38.1 MTSW Report Tool Overview

Open the MTSW Report Tool by selecting **Start→(All) Programs→MTSW v1.2→MTSW Report Tool**. You can also open it from the MTSW window by selecting **Management→MTSW Report Tool**. The MTSW Report Tool application window opens.

Figure 139: MTSW Report Tool Window
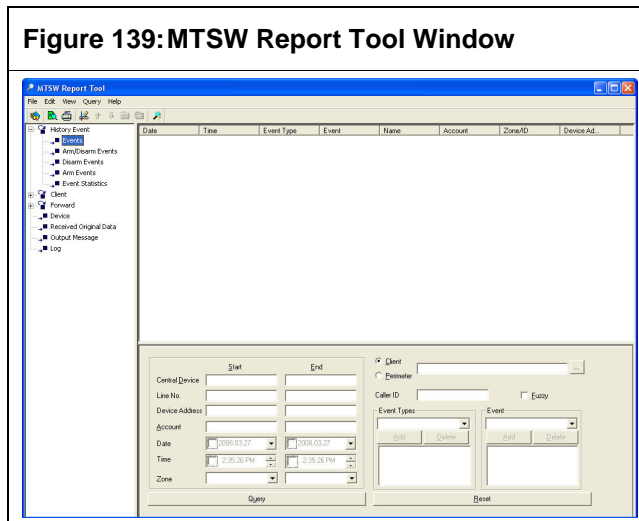
The available reports are shown as a tree in the left pane. The selected result is listed at the top of the pane The Query filter is entered at the bottom of the right pane.

The selection, print, and export functions are provided as toolbar buttons on the toolbar.

The item count on the list is shown on the status bar.

38.1.1 Querying with Filters

494.   In the MTSW Report Tool, select from the tree list the item you wish to query. The right pane updates with the corresponding information.

495.   Enter your filter conditions in the bottom pane.

496.   Click **Query**.

497.   Click **Reset** if you wish to reset all filter conditions.

38.1.2 Printing with MTSW Report Tool

In the MTSW Report Tool, select one or more items from the list and select **File→Print** from the menu bar. When you select History events or clients, the print content dialog box appears. Select the **List** or **Report** option button, as desired.

Figure 140: Print Content Dialog Box
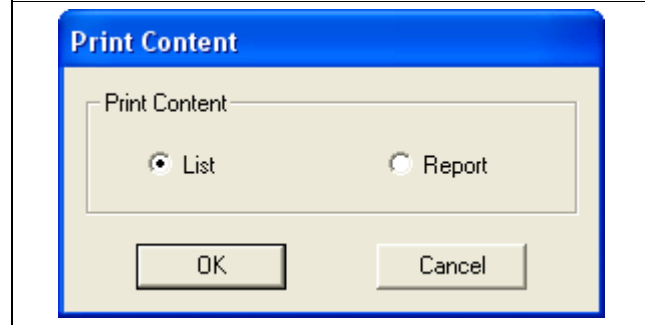
You can set the parameters for printing. Refer to *Section 33.7.2 History Dialog Box Print Preview* on page **Error! Bookmark not defined.**.

38.1.3 Exporting from the MTSW Report Tool

498.   In the MTSW Report Tool, select the items you wish to export from the Events list and select **File→Export List** from the menu bar.

499.   The **Save** dialog box appears. Enter the saved file name and select the **Save** button. The selected items are saved to a file.

500.   Export to a text file or to a Microsoft® Excel 2000 or higher file.

> Exporting to Microsoft® Excel requires that the MTSW computer has Excel 2000 or higher installed.

38.2 Working with Event Filters

The Arm/Disarm Events filter is the same as the events report, except that in the Events report, the events and event types are fixed. When you select an event from the MTSW Report Tool tree view, the events querying filter appears.

Figure 141: Events Querying Filter
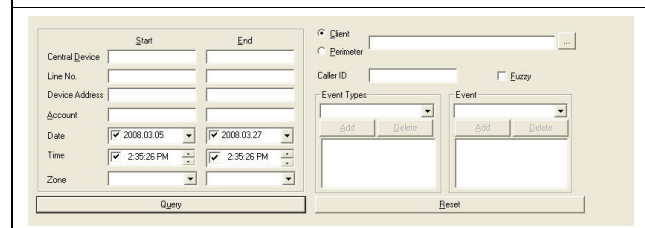
Use the filters to obtain suitable data, including the range of **Accounts**, **Event Time**, **Client** or Perimeter **Name**, **Caller ID**, **Event**, and **Event Type**. If you select the **Fuzzy** option, you can use the approximate match in the **Caller ID** field. The **Line No.** is available only for the D6600/6100 events.

Viewing Event Details

Double-click an item on the **Event** list provided by the query to view its details. In the resulting **Event Detail Information** window, the client's basic information, event detail, held events, and dispatch information show.

38.3 Working with Statistics Filters

Select a Statistics event from the MTSW Report Tool tree view and the Statistics options appear.

Figure 142: Statistics Options Window

The event statistics are based on date, device address, clients, or events. The statistics range is limited to the range of accounts, device address, event time, and the phone number of central devices and lines (available for the D6600/6100).
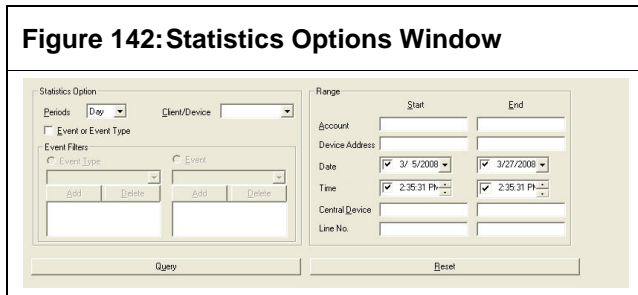
The 8 types of statistics are:

- **Client Type:** The number of clients that belong to each Type.
- **Police 1:** The number of clients that belong to each Police 1.
- **Police 2:** The number of clients that belong to each Police 2.
- **Client Level:** The number of clients that belong to each client level.
- **Client Status:** The number of clients in each status (such as Arm/Disarm).
- **Site Device Type:** The number of site devices that belong to each type.
- **Zone Type:** The number of zones that belong to each type.
- **Detector Type:** The number of detectors that belong to each type.

For each option you select, a different result is counted.

The date range is used to select a client. If the **Client Type**, **Police 1**, **Police 2**, **Client Level**, or **Client Status** is selected, the date is the client's contract start date. If you select site device type, zone type, or detector type, the date is the device installation date.

38.4 Working with Client Filters

Use Client filters to view events based upon client information. Select a Client event from the MTSW Report Tool tree view and the Client filter appears.

Figure 143: Client Filter
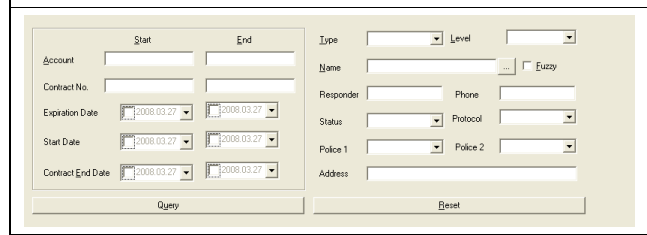
You can use the account, contract no., expiration date, contract start and end date, client type and level, client name, response, and phone to select the client.

If you double-click an item on the list and the **Client Information** window appears. Refer to *Section 27.3 Viewing Client Information for an Event* on page **Error! Bookmark not defined.**.

38.5 Working with Perimeter Filters

Select a Perimeter event from the MTSW Report Tool tree view and the Perimeter filter appears.

Figure 144: Perimeter Filter
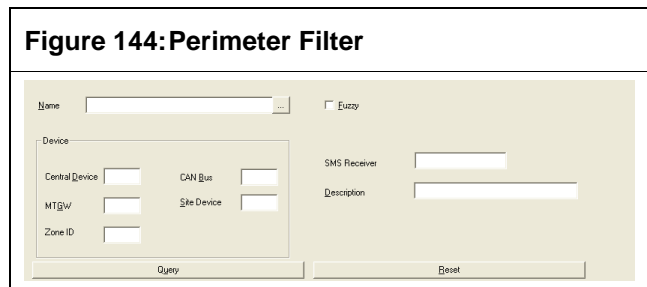
Use the name, central device, can bus, MTGW, site device, zone id, SMS receiver, and description to filter perimeters, as desired. Select the **Fuzzy** check box if you wish to search for partial field matches.

Double-click an item in the list, the **Perimeter Detail Information** window shows. Refer to *Section 27.3 Viewing Client Information for an Event* on page **Error! Bookmark not defined.**.

38.6 Working with Control Point Filters

Select a control point event from the MTSW Report Tool tree view and the Control Point filter appears.

Figure 145: Control Point Filter
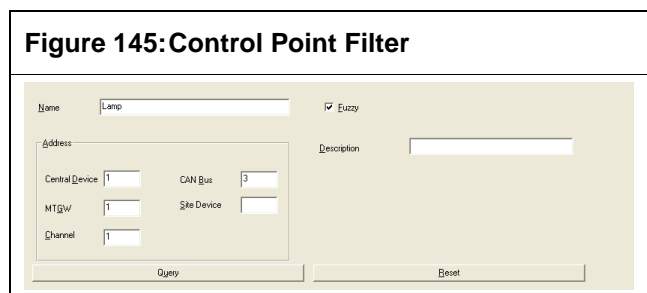
The **Name**, **Central Device**, **CAN Bus**, **MTGW**, **Site Device**, **Channel**, or **Description** field is used to filter control points. Select the **Fuzzy** option for the control point name to search for partial matches.

If you double-click an item the in the list, the **Control Point Detail Information** window appears. Refer to *Section 27.3 Viewing Client Information for an Event* on page **Error! Bookmark not defined.**.
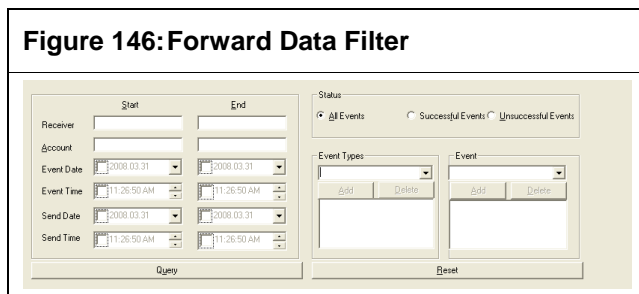
38.7 Working with Forward Data Filters

Forward data is the event data sent to or received from other workstations where MTSW is installed.

38.7.1 Forward Data

All forwarded data is recorded in the system, and you can search for it.

If you select a forwarded event from the MTSW Report Tool tree view. The Forward Data filter appears.

Figure 146: Forward Data Filter

The range of the receiver, account, event time, send time and send event result, event, and event type are used to filter the forwarded data.

38.7.2 Received Data

The received data includes events or backing dispatched results.

When you select a forwarded event with received data from the MTSW Report Tool tree view, the Received Data filter appears.

Figure 147: Received Data
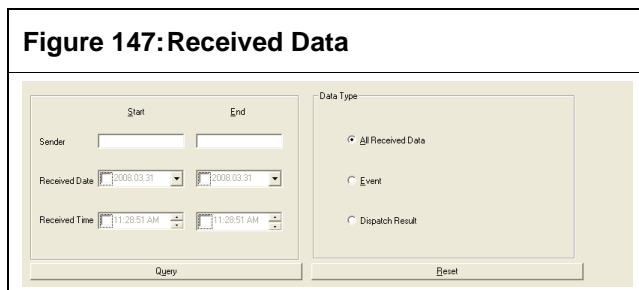
Use the **Sender**, **Received Date**, and **Received Time** ranges to filter the Received Data.

38.8 Working with Device Filters

The RS-485 Bus can be filtered. For the central device and MTGW, no filter is used.

Select a Device event from the MTSW Report Tool tree view and the Device filter appears.

Figure 148: Device Filter
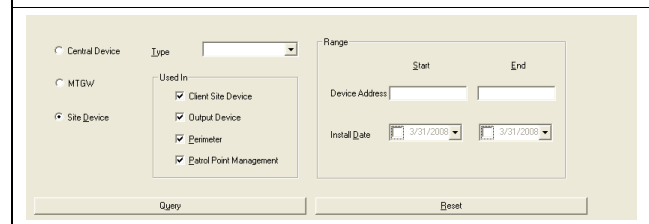
The type of site device, where to use it, the device address, and installation date are used to filter the site devices.

Double-click a central device item from the list to show the device's detailed information.

Double-clicking an MTGW item from the list shows no information.

Double-click a site device item from the list to show the **Device Used** dialog box. The dialog box lists all clients, perimeters, or patrol points that use the device.

Figure 149: Device Used Dialog Box
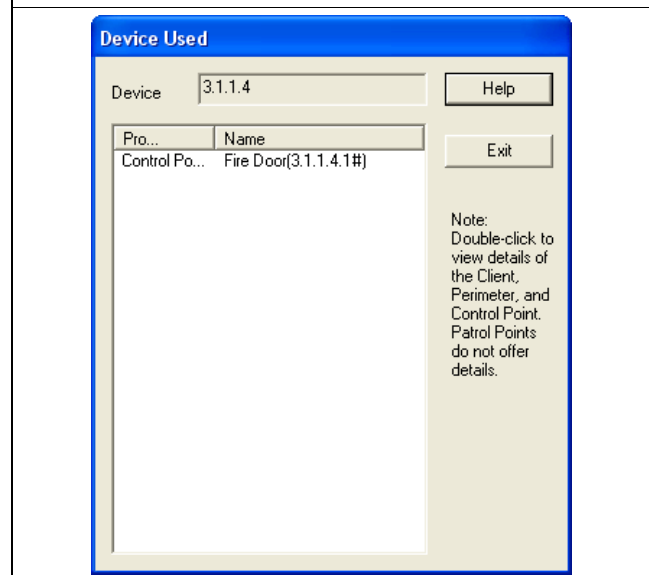
Double-click a client or perimeter item to show its details.

38.9 Working with Received Data Filters

If you selected the **Save Original Data** option in the **Central Device Settings** window, the most recent original received data of the central device is saved. The Original Data filter appears.

The Time and Date of the received data, Receiver, and Line No. (available for D6600/6100) are used to filter data.

Figure 150: Original Data Filter

38.10 Working with Output Message Filters

You can filter the sent SMS and VDP messages (including messages sent manually and automatically), to appear in the window. The operator is the user who was logged in when the message was sent.

Select an SMS or VDP event from the MTSW Report Tool tree view. The corresponding filter appears.

Figure 151: Output Message Filter

The **Operator**, **Send Date**, **Send Time**, **Message Type**, **Sending Mode**, **Received Phone** for SMS or **Device Address** for VDP, and **Receiver** fields are used to filter sent messages.

If you double-click an item on the list, the **Sent Message** information window appears, indicating the operator, time, date, send mode, and the comment.

38.11 Working with Operation Log Filters

The Operation Log is recorded in the system and includes settings, dispatching events, the send control commands, and more. Use the **Operator**, **Data** and **Time Range** to filter logs.

Figure 152: Operator Log Filter

39.0 MTSW System Maintenance Tool

The MTSW System Maintenance Tool is supplied with the MTSW. To start the maintenance tool, select **Start→(All) Programs→MTSW v1.2→System Maintenance Tool**. You must have permission to use the tool. You can also open it from the MTSW window by selecing **Management→ System Maintenance Tool**. The **System Maintenance Tool** application window opens.

Figure 153: MTSW System Maintenance Tool – Backup Data
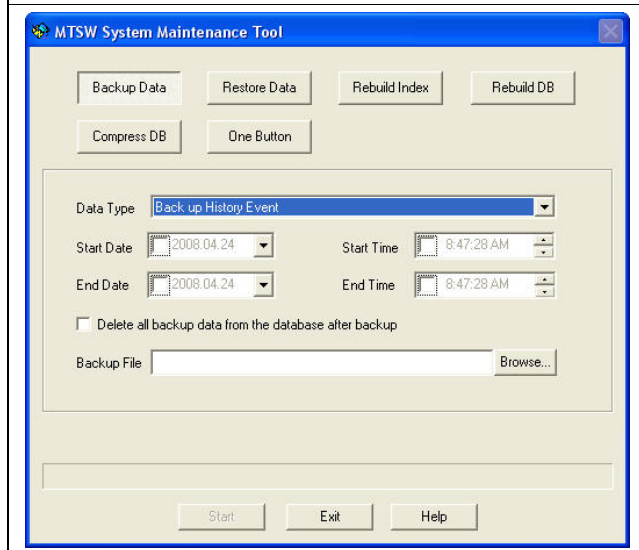
39.1 Using the Backup Data Function

By default, the System Maintenance Tool immediately selects the **Backup Data** button when you first launch the application window. The **Backup Data** function saves all selected data to a new data file that you can use later to restore the system.

You can back up the following types of data by selecting the option from the **Backup File** drop-down list:

- **History Event:** All events are stored in the History database including automatically dispatched events.
- **Original Receiver Data:** Backup original receiver data received in a time range.
- **All System Parameters:** All system parameters that the operator set are backed up, including client information, display settings, event definitions, and operator settings.

- **Client information:** Back up client information to one file. For the Multilevel Automation System, enter the client information once, back it up, and restore it on another workstation. The client device information is not saved.

Configure the following options for the backup:

- **Time Range:** This option is valid when you back up the History events and receiving device's original data. The start date, end date, start time, and end time are also set.
- **Delete All Backup Data.** When you select this check box, all backed up data is deleted from the database. This option is valid for backed up History events and receiving device's original data.
- **Backup File.** Enter the specific directory and file name for the backup file in the text box.

After setting the parameters, click **Start** to start the backup.

39.2 Using the Restore Function

The Restore Data function transfers data from the Backup data files.

501.   In the System Maintenance Tool, click the **Restore Data** button. The **Restore Data** parameters appear.

Figure 154: MTSW System Maintenance Tool – Restore Data
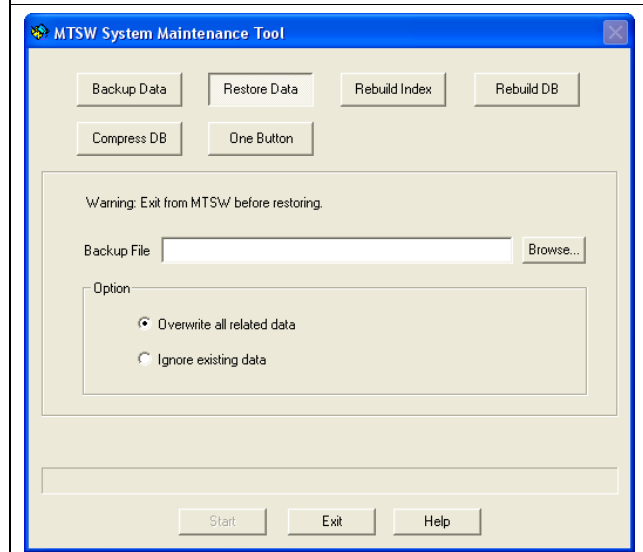
502.   In the **Backup File** text box, enter the specific directory and file name for the backup file you wish to restore.

> Before proceeding, confirm that you have selected a valid backup file based on the file name.

503.   If there is data in the system while restoring saved data, you can select one of the two available options:
- **Overwrite All Existing Data:** Select this option to overwrite all existing system data.
- **Ignore Existing Data:** Select this option to preserve all existing system data.

504.   After setting the parameters, click **Start** to start the restoration.

39.3 Using the Rebuild Index Function

If the database index becomes damaged, the Rebuild Index function repairs the index.

In the System Maintenance Tool, click the **Rebuild Index** button. The **Rebuild Index** parameters appear.

Figure 155: MTSW System Maintenance Tool – Rebuild Index
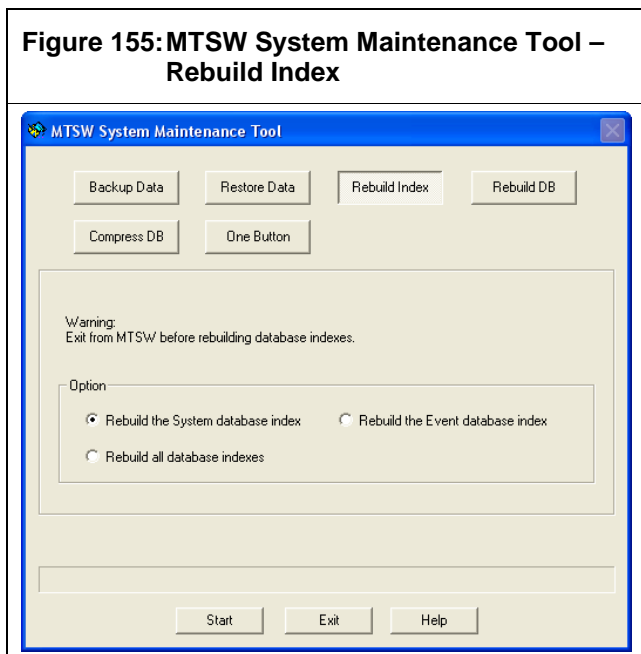
505.   Select the option button for the rebuild type you wish to perform:
- Rebuild the System database index
- Rebuild the Event database index
- Rebuild all database indexes

506.   Click **Start** to start the rebuilding operation.

39.4 Using the Rebuild Database Function

If the database index becomes damaged, the Rebuild Index function repairs the index.

507.   In the System Maintenance Tool, click the **Rebuild DB** button. The **Rebuild DB** parameters appear.

Figure 156: MTSW System Maintenance Tool – Rebuild DB
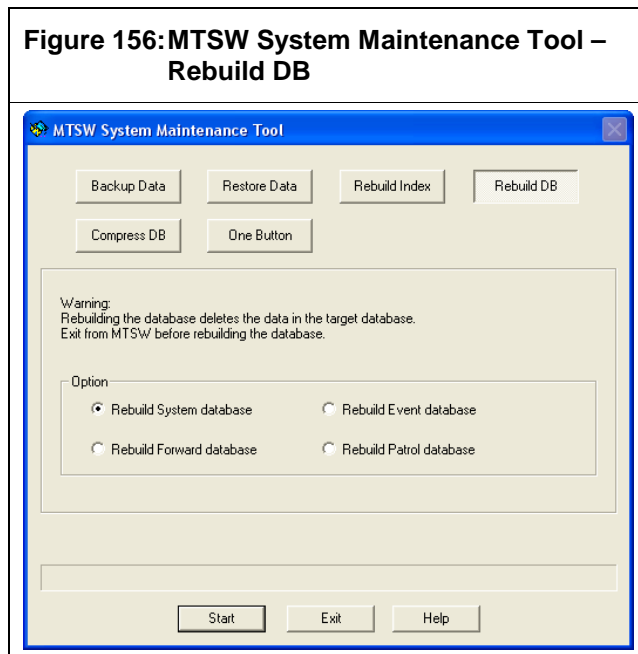
508.   Select the option button for the database type you wish to rebuild:
- **Rebuild System Database.** This includes Client Information, Display Settings, Connection and Event information.
- **Rebuild Event Database.** All event data.
- **Rebuild Forward Database.** All Forward or Received data.
- **Rebuild Patrol Database.** This includes the complete Log database.

509.   Click **Start** to start the restoration.

39.5 Using the Compress Database Function

The database becomes fragmented over time and degrades database performance. You can increase performance by compressing the database.

Use the Compress DB tool to compress all files in database directory of the system installation directory, including old History databases.

510.   In the System Maintenance Tool, click the **Compress DB** button. The **Compress Database** parameters appear.

Figure 157:MTSW System Maintenance Tool – Compress DB
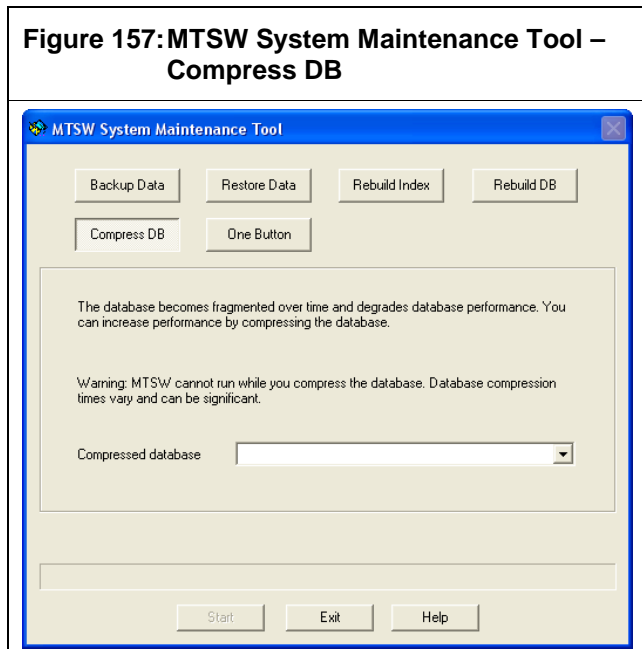
511.   Select a compressed database from the corresponding **Compressed Database** drop-down list.

512.   Click **Start**. All MTSW programs are closed to run the database compression. A large database requires a long time to compress.

When the compression process completes, a compressed database upgrades system performance.

39.6 Using the One-Button Function

If an exception occurred when the system is running, use the One Button tool to gather all system-related information.

513.   In the System Maintenance Tool, click **One Button**. The **One Button** parameters appear.

Figure 158:MTSW System Maintenance Tool – One Button
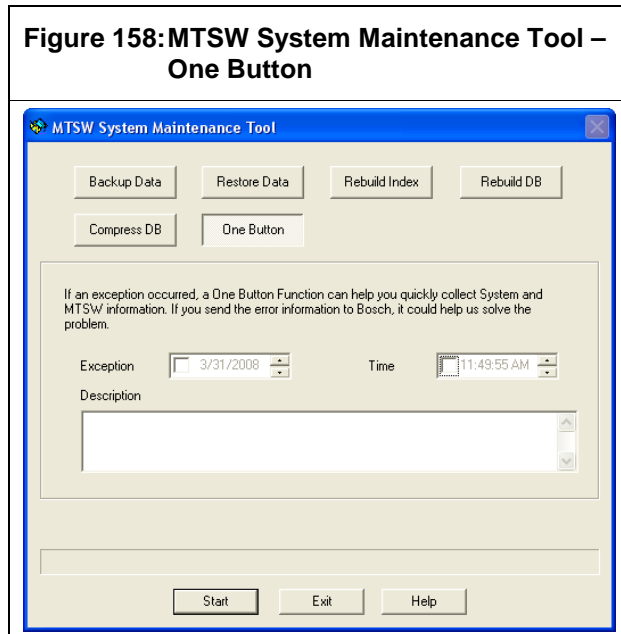
514.   Select the **Exception** start time and an end **Time** and enter the exception **Description**.

515.   Click **Start**. All the information is packed into one file. After the file location is finished, it shows in a message box.

516.   Send the file to Bosch Security Systems, Inc. to find the problem.

40.0 Appendices

40.1 Sample Message Formats for the D6600/6100 Receiver

40.1.1 Ademco Contact-ID

- The Ademco Contact ID has three-bit Event Codes. The first bit is Alarm/Restore or Arm/Disarm. In MTSW, because the Alarm and Restore (Arm and Disarm) events are defined separately, four-bit Event Codes are used. For example:
  – Event code 400 is Arm/Disarm, but in MTSW, 1400 is Disarm and 3400 is Arm.
  – Event code 110 is Fire, but in MTSW, 1110 is Fire and 3110 is Fire restore.
- In Ademco Contact-ID protocol, two-bit Group IDs and three-bit Zone IDs are used. In MTSW, Group IDs and Zone IDs must be defined together. For example, 1002 or 01002 is Zone 2 of Group 1. If no Group information is used, three-bit Zones are supported.

40.1.2 Ademco 4+2 Express

In the Ademco Express 4+2 default table, "?" represents the Zone. For example, "1?" is defined as Fire, and "11" represent Zone 1 Fire. Other conditions are referred to as client definitions.

40.1.3 Ademco High Speed

The following protocols are similar to Ademco High Speed. Scancom 4-8-1, 5-8-1 and 6-8-1, Scancom 4-16-1, 5-16-1 and 6-16-1, Scancom 4-24-1, 5-24-1 and 6-24-1, all those are described together.

In *Section 13.9.1 Protocols Overview* on page **Error! Bookmark not defined.**, all the previous protocols are not listed in the Protocol drop-down list. They are translated according to the following rules:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

D6500 mode: hfrrlaaaaaaas**CCCC**s**CCCC**s**S**t

SIA mode:
<LF><CRC><f><sequence#><receiver#><line#>[# aaaaaa|CCCCsCCCCs**S**]<CR>

For C-Channel Code:

1 = New event

2 = Disarming (status channel always = 2)

3 = Restore

4 = Arming (status channel always = 4)

5 = Normal (no event to report)

6 = Previously reported, not yet restored

For S-Aux alarm code:

1 = **Duress or state information of channels 9 to 15:** If channel digit 1 contains '1', the message means 'duress'. In all other cases, channel digits 2 to 8 represent the state of channels 9 to 15 being an Alarm or Restoral.

2 = Disarming: Signals deactivation of the alarm system. Channel digit 1 contains the HEX user code.

3 = Bypass: Signals channel bypass or channel un-bypass. Channel digits 1 to 8 contain the state of each channel. This state is not supported for channels 9 to 15.

4 = Arming: Signals activation of the alarm system. Channel digit 1 contains the HEX user code.

5 = Trouble: Signals channel trouble. Channel digits 1 to 8 represent the state of each channel. This is not supported for channels 9 to 15.

6 = System status: Channel1=AC loss, Channel2=Low battery, Channel3=Program Tamper, Channel4=Power on Reset, Channel5=Ignored.

7 = Normal alarm status: Channel digits 1 to 8 represent the alarm state of channels 1 to 8.

8 = Low Battery

9 = Test report: Channel digits 1 to 8 should have a value of '5' (normal).

40.2 Control Commands

The Control commands can be sent to devices on the **Client Tree** and the **Device Status Tree** interfaces. There are different Control commands for each device. The Control commands supported by MTSW are described below.

40.2.1 Open/Close

If MTR or DS7400 series connects with MTSW, and clients use the site device that supports the Open/Close command (for example, IP7400XI-CHI, DS6R2, and IUI-DS12R), you can use MTSW to send Open/Close commands to the device. The client or zone is armed or disarmed when the device receives the command, and an Open/Close event is sent to MTSW by the device.

40.2.2 Relay On/Off

If MTR or DS7400 series connects with MTSW, and the client uses the Site devices that support the Relay On/Off command (for example IP7400XI-CHI, DS6R2, IUI-DS12R, DSR32, ICP-MT2-8 and ICP-MT3-1), you can use MTSW to send Relay On/Off Commands to the device. The device turns the relay on or off when it receives the command and a Relay On/Off event is sent to MTSW by the device.

40.2.3 Toggle Relay

Only ICP-MT2-8 and ICP-MT3-1 support the Toggle Relay Command, which can be associated only with MTR. A Toggle Time must be configured before sending a Toggle Relay command. When a device receives the command, it turns on the relay, keeps the status for the toggle time, and then turns it off.

40.2.4 Time Synchronization

Time Synchronization uses the computer time to synchronize the device time. Only IP7400XI-CHI, D6600/6100 and MTR devices support it. Configure Time Synchronization on the Device Status tree.

40.2.5 Device Verification

MTSW can send device verification commands to MTR and devices connected with MTR. When a device receives the command, it reports the Device Type and firmware version.

40.2.6 Partition State Search

Partition state search is only available for IP7400XI-CHI. When a device receives the command, it reports the current status (arm, disarm, or not used) of all partitions.

40.2.7 Output Messages

If a VDP with an output module connects with MTSW, the output message command could be used. You must be sure the output module is connected normally, otherwise, the command will not appear.

- **Settings**
  - When setting the VDP connection, you must choose the **Have Output Device** option.
  - When setting client information, you must enter at least one indoor station as a site device. The second address of the device must be the same as the indoor station account. For example, for 1.1234, the 1234 is the account of the indoor station.
- **Output message**
  - When a top-level group outputs messages, all client indoor stations receives them.
  - When any other group outputs messages, all client indoor stations that belong to the group receive them.
  - When one client from the tree outputs messages, it goes to one station.

40.2.8 Remote diagnosis and control

Only when a B/G series control panel connects with MTSW, the remote diagnosis and control command could be used. You must be sure the B/G control panel is connected normally, otherwise, the command does not operate.

40.3 Multiple Monitors

40.3.1 Hardware Configuration

- An AGP display adapter and a PCI display adapter.
- Two PCI display adapters (refer to the display adapter manufacturer's manual).
- If one AGP and one PCI are used, in BIOS the boot display adapter must be set to PCI.
- If an AGP card is used in Windows® 2000, it is the primary display adapter. In Windows® XP, the primary display adapter is the boot adapter set in the BIOS.
- After the operating system starts, open the **Display Properties** dialog box and select the **Settings** tab. Then select the second monitor and select the Extend the windows desktop to the monitor check box. Click Apply and then exit from the Display Properties window.

40.3.2 Notes

- If multiple monitors are used, only the boot monitor is used during system startup. After you log into the OS, the two extended monitors are available.
- The software cannot detect the monitor state.

40.3.3 Operating System (OS) Support

- The OS can check if multiple display adapters are installed, and if the different cards are used as a mirror or as a desktop extension.
- Two adapters can use different resolutions, color, and refresh frequencies.
- The relative position of the extended monitor and the primary monitor can be adjusted.
- If a normal window should be full screen, it displays full screen on the Windows primary monitor.

40.3.4 MTSW Support

In MTSW, the extended monitor position and resolution does not affect the map.

40.4 Frequently Asked Questions (FAQ)

A receiver has been connected to the computer, but it has not received any data. Why?

517. Confirm that the receiver hardware is working correctly.
518. Run the MTSW Setup program, enter menu **Connection→Receiver**. If the receiver connection is not established, click **Add**. Otherwise, click **Edit**. The Receiver Set dialog box opens.
519. Select a valid connection mode and ensure that all parameters match the receiver settings. Check the communication mode. The head and tail characters must match the receiver characters.

The system does not start or I receive a database error when it has started. Why?

When there are sudden power outages, the database can be damaged.

- The system reports a database error when starting, and then the system exits from the program.
- After logging in, the system crashes while processing data.
- The system crashes while querying History events.

The System Maintenance Tool can be used to repair the damaged database. To repair the database:

520. Run the MTSW System Maintenance Tool, and click **Rebuild Index**. Select **Rebuild System Index.** If the error still occurs, then rebuild the next index.
521. If an error occurs while rebuilding the index, then the whole database must be rebuilt. We recommend that you rebuild the databases in order. First, rebuild the Real-time database, and then test it after rebuilding. If the error still occurs, rebuild the History Event database, and then test it. Continue with the Log database and then the System database, as necessary.
522. If the database that you rebuilt has backed up data, you could restore the saved data with the backup.
523. If you have no backed up data and want to preserve the existing data, please contact the call center.

Why does the system fail to create a file?

The database becomes fragmented over time and degrades database performance. The database also may reach the maximum size allowed by Microsoft Access. To continue recording data, when the database file size of 1.94GB is reached, the system creates a new database file to replace it, and the old file is renamed. If an exception occurred in this process, the system produces a "Failed to create file" message. There are several reasons for the exception:

- Disk fragmentation
- Number of temporary files
- The file system is corrupted

You could avoid it by doing the following:

- Do not install many applications on the MTSW computer.
- Defragment the hard disk
- Delete unused temporary files

When run MTSW Setup in Windows 7 64bit, warning dialogue box Do you want to allow the following program from an unknown publisher to make changes to this computer pops out. How do I resolve the problem?

1. Click **Change when these notification appear** in the dialogue box.
2. Select **Never notify** and then click **OK**.

If the MTSW machine cannot connect to a DS7400 series device. How do I get it to work?

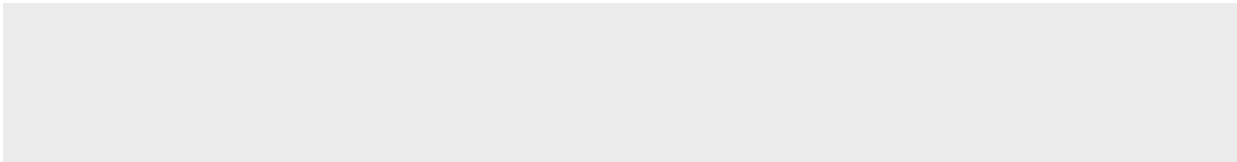If the DS7400 series device is connected to MTSW, confirm the following:

- The value of the DS7400 address 4019 is 10, the value of the address 4020 is 41, and the value of the address 3025 is 30.
- The line and interface device (DS7412 or DX4010i) are physically connected.
- The agency code and password of the DS7400 is the same as those for MTSW setting.
- Restore the DS7400 default setting if the agency code does not work.

If the partition settings in a DS7400 series device are different than in MTSW, the client status on the client tree and client panel cannot represent the actual status. How can I get the actual status?
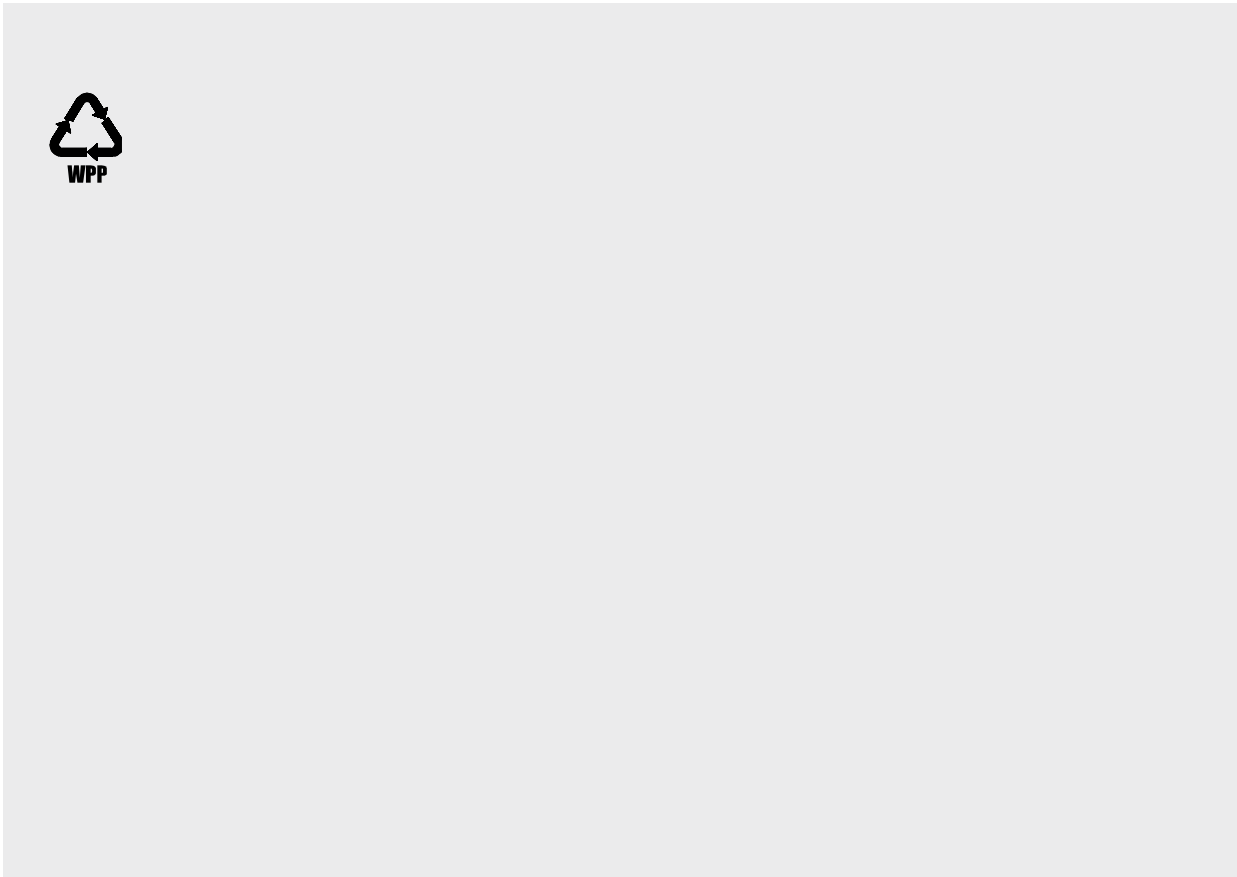
You can find the actual status for each partition Arm or Disarm via the keypad. Please check the partition settings.

MTSW received an event for an existing client, but the event cannot be translated. How do I solve this?

Events cannot be translated when the client count
exceeds 5 clients and no Sentinel key exists.
Check for the key first.

WPP