Manitou 2.0 Functional Overview

October 2017

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About This Guide

This guide is a functional overview (living document) and provides conceptual and summary operational information. This guide does not define all fields within the application; the application provides some definitions while other field names are familiar terms to those in the security industry. The assumption is that the reader is familiar with central station automation systems, as well as web services technology and terminology.

Bold Local Utility Service

This Windows service handles the background communication between the workstation and the Manitou server system. It passes the Workstation ID to the Application Server for authentication and verification against the authorized workstation's data within the Supervisor Workstation.

Important: You must stop this service when updating Manitou 2.0.

To stop the Bold Local Utility Service, do the following:

1. Open the Windows Task Manager.
2. Click the **Services** tab.
3. Right-click **BOLD_LOCAL_UTIL** and click **Stop** from the shortcut menu.

Note: If you don't have the Local Utility Service or the Bold Launcher running, you will get the following error (and/or ones like it) under the following conditions:

1. Open a Customer with a contact that has a phone number.
2. Click the phone icon beside the number.
3. Press the Enter key on your keyboard.
4. Note the following error:

Status: Error

Duration: 00:00:00

Message: SignalR: Connection must be started before data can be sent. Call .start() before .send()

Bold Launcher

This Windows utility N resides in the system tray and launches local files or applications on request.

Note: If you don't have the Local Utility Service or the Bold Launcher running, you will get the following error (and/or ones like it) under the following conditions:

1. Open a Customer with a contact that has a phone number.
2. Click the phone icon beside the number.
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4. Note the following error:

Status: Error

Duration: 00:00:00

Message: SignalR: Connection must be started before data can be sent. Call .start() before .send()

Manitou 2.0 Overview

The following is a list of the new key features that Manitou 2.0 provides:

- Web Browser Technology

Web browser technology is used for modern applications because it works with local or cloud-based systems. Manitou 2.0 uses this technology to benefit technicians, dealers, and end users by providing:

Device Independence: You access the platform with a compatible device such as a smartphone, tablet, or laptop. Remote staff access through existing devices, eliminating the need to purchase new equipment, and reducing downtime with use of a familiar system.

Dynamic Screens: Web browser technology enables Manitou 2.0 to dynamically reorganize content and use screen space efficiently. You can have multiple screens open, zoom in to better see content, and use Accessibility mode within their device.

- Dynamic Customer Wizard

Quick and accurate Customer entry is important to any central station. Manitou 2.0's new Customer Wizard leads you through the data entry process, allowing easy navigation while showing the current level of completion.

- Enhanced Action Patterns

Action Patterns deliver step-by-step instructions on how to handle an alarm and ensure consistency. Enhanced Action Patterns can be constructed using logic statements like "if," "then," and "else." Other programming constructs like loops and variables are also available.

Once initiated, Enhanced Action Patterns look at history, run SQL statements, and execute external programs.

- Interactive Communication Center

Manitou 2.0 is the first automation software with a universal Communication Center built into the platform. An operator on the phone can concurrently email, text, or send notifications to Customers during alarm handling.

- Built-In Dashboard

The Dashboard displays system conditions including time in designated time zones, alarm/signal queue, signal status counts, database usage, and more. Display the dashboard on a large screen so monitoring center staff can see statistics at a glance, or check statistics on a mobile device during travel.

And, of course, Manitou 2.0 provides all of the following features contained in standard Manitou:

- Manage Alarms
- Track Alarms
- Send Manual Signals
- Put Accounts On Tests
- Create and Manage Accounts
- Create and Manage Schedules
- Record and Monitor Maintenance Issues for Accounts and System Records
- Generate System and Scheduled Reports

Log on to Manitou 2.0 Web Client

At the Manitou 2.0 Web Client Sign In page, enter your User ID and Password to log on.

Important:

- If while using Manitou 2.0 you encounter any “Permissions Denied” errors, ensure that you have Permissions set up correctly in the Manitou Supervisor Workstation.
- **If you are using a Firefox browser**, you need to perform the following additional steps to log on to Manitou 2.0:

Notice that the **LOG IN** button is disabled.

1. Go to https://localhost:7020.
2. Authorize the self-signed certificate.
3. Reload the Web Client Sign In page.

Important: You will need to perform these steps on each client machine.

Standard Icons

The following are standard options throughout Manitou 2.0.

Important: Some options are only visible once you place your pointing device on a card or near a particular field.

Icon	Description
	**Main Menu –** Click to display the central menu or a drop-down list on cards.
	**Data Entry / Alarm Mode –** Indicates which “mode” you are in, Data Entry or Alarm Mode. Data Entry is the process where you create records for Customers, Dealers, and other entities within the system for all other functions to work properly. Alarm Mode is where you process an event by verifying and taking specific actions. Clicking **Data Entry** switches you to **Alarm Mode**. Clicking **Alarm Mode** switches you to **Data Entry**.
	**Close –** Click to exit the current Customer or card you’re on.
	**Clear –** Click to undo any edits you’ve made.
	**Save –** Click to keep any changes you’ve made.
	**Search –** Click to perform a search.
	**Settings –** Click to change your settings.
	**Log Off –** Click to close Manitou 2.0 or to log on as a Global Keyholder with the option to choose an associated account.
	**Operations –** Click for additional alarm handling options and to display On Test status.
	**Actions –** Click to select from a variety of actions you can perform on an alarm.

Icon	Description
	**Defer –** Click to return an alarm to the queue, Suspend an alarm, or Defer an alarm to the **Auto-Client** for automated processing.
	**Finish –** Click to close an alarm once the Action Patterns have been satisfied, you determine to cancel the alarm, or you close the alarm based on a Customer request.
	**Disaster Mode –** Click to add, edit, and remove Disaster Mode settings.
	**Zone Status –** Click to display any currently unrestored items. An unrestored item might be an alarm event that has a restore required and the restoring event has yet to arrive, or it could be a system item such as a Late To Test.
	**Dialer –** Click to load the first available contact and phone number into the **Auto-Dialer**.
	**Display Address On Map** – Click to display the address on a map while in **Alarm Mode**.
	**Legend –** Click to view the description for alarms in the **Alarm Queue**.
	**Filter –** Click to screen Alarm Queues, Activity Logs, Maintenance Issues, and so on.  = Indicates a filter is at its default settings  = Indicates custom settings have been applied to the filter  = Click to reset the filter to its default settings
	**Edit Headers –** Click to change table column headers.
	**Details –** Click to expand or collapse specifics for a given field.
	**Add –** Click to add information on a particular card.

Icon	Description
	**Delete –** Click to remove information on a particular card.
	**Edit –** Click to revise information on a particular card.
	**Refresh –** Click to see the latest updates on a particular card.
	**Start Watch / Stop Watch –** Click to place a Customer on a Watch List.
	As you advance in completing a process, for example, the **Customer Wizard** or Report generation, you can click sections of the progress bar to move backward/forward in your steps. The system indicates which step you're on with a box highlighting the related label (waypoint).
	**Home –** Click to return to the home panel. In **Data Entry** mode, the options are **My Dashboard**, Custom Dashboard, Current (a list of recent accounts you've opened from which you can select), and Open (account options for the currently selected account). In **Alarm Mode** you options are selecting from the **Alarm Queue** and **Alarm Handling**.
	**Notes –** Click to open the **Notes** option.
	**IM (Instant Messenger) –** Click to open the **Instant Messenger** option. IM flashes when you have a new message. Whenever you receive a message, it pops up informing you that you have a message and the name of the sender (top-right of the application as a toast). You can click and view the message from there.
	**Auto-Dialer –** Click to open the **Auto-Dialer**.

Icon	Description
	**Texting –** Click to open the **Texting** option. Using this card you type a text message, select an output device, service provider, and contact, and key in a phone number.
	**Email –** Click to open the **Email** option. Using this card you type an email message, address, and subject, and select an output device and service provider.
	**Lookup –** Click to perform a search for a given field.
	**RLP/TX Search –** Click to search by the combination of RLP (Receiver Line Prefix) and TX (Transmitter ID) to locate a Customer.
	**Copy/Move –** For Transmitters, Areas, and Zones, you can copy or move data from one system to another.
	**Copy/Paste –** Anywhere you see the **Copy/Paste Requirements** icon it indicates that you can copy data from a tab-delimited text file and paste the data into a related grid within Manitou 2.0. Clicking the icon provides details on the allowable copy/paste parameters.
	Indicates a Dealer or Branch.
	Indicates a Monitoring Company.
	Indicates a Customer, and in some instances, you can click for advanced options.

Keyboard Shortcuts

Manitou 2.0 offers a variety of keyboard shortcuts including: standard shortcuts, alarm processing shortcuts, and shortcuts that simplify navigation of the Customer record. Press the Shift + ? keys at the same time on your keyboard to see a complete list of all keyboard shortcuts while in Manitou 2.0.

Settings

When you click **Settings**  , you have the following options:

- You can select a default setting for descriptions of options. If you select **Beginner**, all descriptions display by default. If you select **Advanced**, you collapse (hide) all descriptions by default, but they can be expanded. A horizontal dotted line "" indicates the collapsed view and
  a vertical dotted line ⋮ indicates the expanded view.
- You can change your current password by clicking **Change Password**. The **Change Password** card displays where you change your password and view **Password Requirements**.
- You can change the default locale for the language setting by clicking **Change Localization**.
- You can change the system color theme simply by clicking a color.
- You can view the following application information: Manitou 2.0 version, application server connection, and the session ID.

Manitou 2.0 My Dashboard

Once you log on to Manitou 2.0, the **My Dashboard** is the first window to appear which provides a "snapshot" of important data and alarms. From this view you can use a standard dashboard or create one or more custom dashboards. The following options are available from the **My Dashboard**:

Home Desktop

In **Data Entry** mode, the options are:

- **My Dashboard** – Returns you to the **Home** panel, **Recent Customer** card, and **Statistics** from within the system.
- **Current** – A list of recent accounts you've opened from which you can select.
- **Open** – Account options for the currently selected account.

Standard Dashboard

The Standard Dashboard provides the following information:

Recent Customers

This is a selectable list of the most recent Customer accounts you've viewed or worked on. If you select a Customer, you have access to Customer related **Details**, **Contacts**, **Customer Activity Log**, **On Test information**, and **System** information.

Recent Alarm Customers

This is a selectable list of the most recent Customer accounts that have been "in alarm." If you select a Customer, you have access to Customer related **Details**, **Contacts**, **Customer Activity Log**, **On Test information**, and **System** information.

Customer Watch List

This is a selectable list of Customer accounts that are on a Watch List meant to be easily accessible for close monitoring of events. If you select a Customer, you have access to Customer related **Details**, **Contacts**, **Customer Activity Log**, **On Test information**, and **System** information.

Statistics

You can view and select **Customer Counts**, **Customer Status Summary**, and **Customer TX Summary** information from where you can navigate through more detailed statistical information for a selected Customer.

- **Customer Counts** – Lists the total number of Active, Inactive, Pending, and Deactivated Customers (includes a related pie chart).
- **Customer Status Summary** – Lists the number of Customers in various conditions within alarm monitoring, maintenance, permits, and so on.
- **Customer TX Summary** – Lists the number of transmitters in various conditions.

Note: You can filter the statistics by selecting **All Customers**, **Customers with No Dealer**, and **Customers with No Branch** from **All Customers** All Customers.

Custom Dashboards

Note: The Custom Dashboard is only available at the Monitoring Company level.

Overview

With the Custom Dashboard you can tailor one or more dashboard views to fit your needs and wants, for example, you can add the following:

- Widgets, for example, Alarm Queues, Clocks, Customer Watch Lists, and Weather Charts.
- Alarm Counts, for example, Alarm Priority Levels.
- Statistics, for example, New Alarms, Manually Closed Alarms, and Maximum Customer Users Allowed.
- External data which is third-party data in the form of a table for the dashboard to interpret and display. **Note:** This is an additionally licensed feature and is not available in BoldNet Neo.
- Health which reads the server environmental information.

Additionally, you can:

- Select Themes, for example, a Dark or Light Theme.
- Select how you display data, for example, Bars, Pie Charts, and Tables.
- Set the Axis Value for a given display.
- Use the Health option which monitors the server environmental information.

Features of Custom Dashboards and Layouts

Dashboards

Click the **Edit** icon to manage dashboards. When you click the icon, the **Layout Design** card appears. On this card you can:

- Select a Layout to edit.
- Add, Remove, and Import a Layout.
- Set a Default Layout.
- Provide a Description for the Layout.
- Set a Refresh Interval in seconds. The minimum refresh time is five seconds.

Layouts

Click the **Select Data** icon to manage a particular layout. When you click the icon, the **Select Data** card appears. On this card you can:

- Select the display type for the data, for example, Bar chart, Pie chart, or Table.
- Type a Title for the layout display.
- Search for and filter a Description, for example, Priority 1 Alarms.
- Select a Theme.
- Change the Depth and 3D Angle of the display.
- Select and manage Widgets, Alarm Counts, Statistics, and External data.
- Adjust the numerical scale of the Value Axis on certain charts, for example, a Bar chart, by setting the Minimum and Maximum values for the display.
- Filter data on Donut charts, for example, if you are displaying Priority Alarms 1 through 5, you can select from the list related on the Donut chart to include or exclude different levels of priority alarms.

Change labels of Layouts by clicking the **Change Labels** icon. This option can be especially useful if labels are overlapping one another on the layout display.

- Move Layouts simply by using the drag-and-drop operation on the dashboard. Note that some layouts will auto adjust in size based on what column or row you place the item.

- Get specific details on a chart by pausing your pointing device over a specific area of the chart. For example, if you pause your pointing device on a single bar of a Bar chart, an exact count of alarms by postal code appears.

UL Monitoring Layout

If UL monitoring is a requirement for you operation, create a custom UL layout as follows:

1. On the **Home** page, click **Edit** then **Add Layout**.
2. Create a new layout for UL requirements, for example, *UL Tracking*.
3. Click **Select Details** for the layout. The **Select Data** card appears.
4. Select the **Health** option.
5. Select options from the **Health Specification** drop-down list and configure these options per your UL requirements.

Adding and Maintaining Account Records

There are different account types in Manitou, listed below, and the following sections detail each type. These records can be accessed in a variety of ways to include clicking **main menu** and then selecting **File | New** or **Maintenance**, or by double-clicking an account record from a list.

The account records include:

- **Customer** – Private residence or organization that has purchased and receives security monitoring, emergency, and alarm handing services.
- **Dealer** – Independent businesses that typically handle Customer installations of alarm and monitoring equipment.
- **Authority** – Emergency response Agencies such as police, fire, ambulance, and so on.
- **Agency** – Businesses that access secure business locations or private residences and offer some sort of service (for example, cleaning service or cash transportation service).
- **Branch** – Sub-offices of a main Customer location.
- **Monitoring Company** – The central station running Manitou.
- **Global Keyholder** – Primary contacts who can connect to multiple Customer records.
- **TX Types** – This allows for the designation of a specific set of Transmitter Types used by the system. This is useful when dealing with a large entity using numerous Transmitters Types.

Customer Wizard

When selected (**main menu** | **File | New | Customer**), the **Customer Wizard** appears. The wizard takes you through the following for the Customer you're creating:

Initial Setup

This is where you enter opening Contract ID, Country, Time Zone, Language, and Monitoring Status for the Customer.

Notes:

- If you leave the **Contract ID** blank, one will be automatically generated for you if you have this configured in the Manitou Supervisor Workstation – go to **Tools | Options | Account/Creation Maintenance | Auto-Generate Contract Number**.
- You have the option to pause where you're at within the **Customer Wizard** and return later.

Fields

- **Customer ID** – This field is discretionary which you base on any alpha/numeric/special character sequence. It can also be set up for auto-generation. For more information on auto-generating Customer ID's, see the supervisor or manager at the facility.
- **A/R Company** – The Accounts Receivable company for the Dealer.
- **A/R Number** – The Account Receivable number for the Dealer.

Name & Address

You use this card to enter the Customer Type, Name, and Address information. You can also edit information that you entered on the **Initial Setup** card.

Note: When you enter a Name, the **Search By** field automatically populates with the same information.

Important:

- Bold Technologies recommends not to use punctuation or uncommon abbreviations in these fields.
- Authorities use cross-street and subdivision information to locate the Customer site in emergency situations.

Contact Points

You use this card to enter additional contact information for the Customer such as Contact Type, Phone Number, Extension, Script (defined call communication), Schedule, Email Address, and Web address.

Note:

- At this step in the process of adding a Customer, you can add a General Schedule by clicking **New Schedule** in the **Schedule** section. General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, Reminder Schedules, and when you can put an account On Test.
- There are instances where a site or person might want to make their numbers private to operators. When you select the **Private** check box, asterisks appear throughout the Manitou system in place of the phone number. The actual phone number is stored in the database and the **Auto-Dialer** can use the number.

  Private phone numbers and reports:

  When a report fails to publish, the System Log entry created replaces hidden destination addresses with "******". The address is saved in the database for auditing purposes, but not revealed to the clients.

  Private contacts have the potential to be exposed by the following:

  - Contact Points that are synchronized with accounting systems. The Contact Points are still hidden in Manitou, but might be visible in the accounting software.
  - The Monitoring Company's callback number for notifications (**Options** setting) is linked to a company's Contact Point. This means that if this number is marked private, you can view it on the **Options** card in the Manitou Supervisor Workstation.
  - Retransmission Reverse Commands can embed Contact Points in their parameter values. The FEP (Front-End Processor) logs the resulting signals in the System Application Log and in FEP debug files.

Monitoring Details

You use this card to enter Codes, Fills, General Monitoring Options, and Passwords, to include a "Duress" Password.

Sections & Fields

Codes

- **Group Code** – Categorizes businesses that have multiple Branches.
- **Class Code** – User-created options for grouping certain Signals or Resolutions together. For example, a central station might want to assign all monitored banking companies to a large Class Code, but a particular Branch of banks to one Group Code.
- **Monitoring Group** – Designations to categorize and distribute signals to specific operator groups. At the time of the Manitou installation, it has a default Monitoring Group setting of “0”. But, Bold Technologies recommends that all installations create a Monitoring Group of their own, instead of using the default "0" group.

Fills

- **Area Fill** – Automatically add any Areas not already programmed to the account data.
- **Zone Fill** – Automatically add any Zones not already programmed to the account data.

Underwriters Laboratories (UL)

The UL section pertains to those accounts that require a UL Grade category selection as well as a Response Time. This section is rarely used.

Important: You must enable and indicate UL compliant Customers in the Manitou Supervisor Workstation. Within the Supervisor Workstation, click **Maintenance | Setup | Country**. Next, select **Country Setup** from the **Jump To** menu, and then select **UL Policy Licensed** from the **Country Options** section.

Default Script Messages

You use default Script Messages with fax, email, and/or texting notifications. You click the available field and type the default Script Message — there is no character limit for Script Messages.

When it is necessary to add an element from the listing, click the appropriate item to highlight, then click **Add**. Repeat this process until the Script Message is complete. For a demo of the text, click **Demo** for the example text to appear. If you do not use fax, email, or texting, there is no need to add any Script Messages.

Note: You can configure Script Messages globally through the Manitou Supervisor workstation and apply individually.

Systems

You use this card to set the configuration of how a signal will find this account when it arrives from a receiver. The **Systems** card covers four different types of systems: Event Monitoring, Access Control, GPS, and Other (user-defined).

Important: Once you apply and save a System Number, you cannot change the number.

Types of Systems

- **Event Monitoring** – This system is for checking the type of alarm that presents.
- **Access Control** – This system is for recording the in/out access by people for a given property.
- **GPS Tracker** – This system provides location information about assets for tracking, locating, and other directional-based services.

  Note: A transmitter is considered to belong to a GPS system if it is not a VertX Transmitter and its remote address looks like a phone number.
- **Other** – This system is a catchall to give Monitoring Companies a way to include other types of systems that don't fall into Event Monitoring, Access Control, or GPS categories. By creating an "Other" system, you can tie it to a Monitoring Service which the central station can automate billing for through accounting integration.

Fields

- **System ID** – A system identifier for an accounting system if Manitou links to an accounting system.
- **Monitoring Type** – The kind of monitoring you want to set for the Customer. In most cases, this will be **Alarms Only**. This means you are monitoring the alarm events and bringing them to your attention. On a new system, **Alarms Only** and **Log Only** are the two options available. You can add additional Monitoring Type options for accounting purposes. For more information on Monitoring Types, speak with an on-site supervisor or manager for the facility.
- **Panel Type** – The manufacturer and model number for a Control Panel.
- **Panel Type Comments** – Used often by Customers to describe the panel, pieces housed within it, how to disarm, and other related instructions.

  Note: Bold Technologies recommends to place these details within the **Special Instructions** field of the **Customer Record/Comments** card instead of **Panel Type Comments**, so that they are available for alarm handling, if wanted.

Adding a Transmitter

A Transmitter is how a signal finds a Customer account.

- **TX Type** – This allows for the designation of a specific set of Transmitter Types used within the system. This is useful when dealing with a large entity using numerous types of transmitters.
- **Receiver Line Prefix** – This is the prefix for the device that received the alarm signal. Receiver Line Prefixes provide Manitou with information about the origin of received signals and the Customer accounts associated with them. Also, adding Receiver Line Prefixes increases the number of incoming signals that a single receiver can handle.
- **TX ID** – You use this to specify a particular range of Transmitter IDs that have been given to you. You can assign blocks of Transmitter IDs to different Dealers/Branches using the same Receiver Line Prefix. A Transmitter ID is the account number coming from the panel out at the location through the receiver.

  Transmitter Ranges

  - Customers must have Transmitter Ranges at the Monitoring Company or Dealer levels.
  - Transmitter Ranges are required to prevent duplication of Transmitter IDs.
  - Transmitter Ranges determine which Transmitter IDs are allocated to a Dealer for use with the Dealer's accounts. When adding new Customer accounts to the system, consider that the Customer's Transmitter ID should be within the Transmitter Range of its associated Dealer. The purpose of assigning a range of transmitters to Dealer records is that more information about incoming signals is immediately available. When a signal is received with a TXID (Transmitter Identification) within a particular Dealer's range, it is clear that the signal is from one of that Dealer's accounts. This gives more information when handling alarms.
- **Transmitter Type** – What Manitou uses for default programming and event translation. If only a single type of signaling site is used, the DFLT (Default) Transmitter Type might be the only selection needed.
- **Receiver Line Prefix** – This is how you can separate account numbers by the line or telephone number dialed.
- **TX Protocol Type** – The communications properties normally used by the Transmitter Device.
- **TX Dates** – Primarily used for tracking, this section allows you to specify the actual dates the Transmitter was set up and when that connection was terminated.

- **Interval** – Used to ensure that the transmitter is functioning every day, week, or month. If the system does not receive its expected test or qualifying signal within the test period, the system will then generate a Late to Test alarm.
- **Caller ID** – The Caller Identification phone number.
- **Remote Address** – The IP address for the transmitter.

Adding Areas and Zones

Areas and Zones are places inside the residence or site where you can establish and use monitoring to direct Customers or Authorities to specific Areas that alarms are sending a signal. Zones are a smaller unit and several Zones can fit inside one Area.

- **Area** – An alphanumeric code of your choosing associated with the Area.
- **Zone** – An alphanumeric code of your choosing associated with the Zone.
- **Description** – A brief explanation of an Area or Zone.
- **Schedule** – You can select **All Access**, **No Schedule**, or **New Schedule**. **All Access** allows a system to send opening and closing signals for the sole purpose of logging the signals. By attaching an All Access Schedule to an Area, it will now force a Monitoring Service which will trigger additional billing for the Opening/Closing activity. This eliminates the central station from having to enter a dummy "All Access" Schedule on each Customer record whenever they needed to allow an Open/Close service without an attached Area, such as residential systems that send opening and closing signals so that the central station will know if the system is armed or not. If you select **New Schedule**, please see the following section for more information.
- **Expected Signals** – You can set the numerical signal you expect to receive from the Zone.

Open/Close Schedules

When adding an Area to a transmitter, you can add Open/Close Schedules. The **Open/Close Schedules** option consists of the following cards:

- **O/C Schedules** – You can add an O/C Schedule and edit an existing one by double-clicking it.
- **<O/C Schedule Name>** – Displays a list of O/C Schedules from which you can select and edit. This card contains the following selectable tabs:
    - **Permanent** – The normal, regular Schedule.
    - **Alternate** – A Temporary Schedule for a period greater than 24 hours.
    - **Holidays** – A specific date that takes precedence over a Permanent and Alternate Schedule.

    - **Temporary** – A single-day Schedule override.
- **Overall** – This card displays a “quick view” summary of the Schedule for the current week.

Notes:

- You must configure a normal Open/Close Schedule prior to setting up a Temporary Schedule.
- Schedule hierarchy works from left to right per the tabs as follows: The Permanent Schedule details the normal situation, the Alternate schedule (if there is one) replaces the Permanent Schedule, the Holiday Schedule (if there is one) replaces the Alternate and Permanent Schedule, and Temporary Schedule (if there is one) replaces everything else.

Open/Close Schedules Wizard

When you add an Open/Close Schedule, you have the option to click **Use Wizard for Permanent and Alternate Schedules**.

Window Codes

You can set up Window Codes and use them to add a specific amount of time to allow a Schedule more flexibility. For example, a Customer might want to allow a five-minute "buffer" to the Schedule to allow for an early open or a late close. Thus, the Window Code would allow an open to occur anywhere between 7:55 A.M. and 8:05 A.M.

Notes:

- You set up Window Codes in the Manitou Supervisor Workstation.
- If you do not designate a Window Code, it defaults to five minutes before and five minutes after the open and close times.
- You can use Window Codes without the **Schedule Wizard**.

Programming

Programming is required for every system to ensure proper account processing. The Programming items define and decode the information coming in from the transmitters through the receivers. For example, some transmitters send a generic message that an alarm sounded in a specific Area or Zone. The receiver then passes this message to the application. However, the system doesn't know what that activation on that Area or Zone means without the Programming. The Programming is there to translate the activation on that Zone to a burglary,

fire, or other alarm on that Zone. Also, Programming will allow for the definition of specific actions to complete on the alarm, such as call the police and then the Keyholder on the account.

The **Input** section communicates to Manitou which type of signals should be associated with this Programming entry. You should enter the information here very carefully and note that it will vary from account to account.

- **Event** – Manitou Event Code associated with the alarm. You can type a valid code or select from the drop-down list.
- **Sensor** – The control sensor for the alarm. You can type in a sensor, or use an asterisk (*) to designate "Any."

The **Output** section communicates to Manitou what the incoming (Input) signal information means. You mainly use this for non-intelligent signal formats.

- **Event** – Manitou Event Code associated with alarm. You can type a valid code or select from the drop-down list.
- **Description** – The Description will auto-fill based on the Event Code selected; however, you can overwrite this description.
- **Sensor** – The control sensor for the alarm. You can type in a sensor, or use an asterisk (*) to designate "Any."
- **Point ID** – Area, Zone, or Point identifier description defining the alarm location or detail.

For **Special Processing** commands, see Transmitter Programming Commands (Special Processing).

Color Indicators

Please note what the colors mean for transmitters listed on the **TX Programming** card:

- **White** – This color indicates the programming was created by a Customer.
- **Green** – This color indicates the programing was created at the Transmitter Type level.
- **Pink** – This color indicates the programming was created at the Dealer level.

Filters

The transmitters listed can be filtered by **All**, **None**, or “Specific Transmitter.”

- **All** – This option displays merged data Transmitter Types and Dealer level entries.
- **None** – This option displays Customer level entries only.
- **Specific Transmitter** – This option displays the selected Transmitter Type and Dealer level entries.

Contacts

You use this card to enter the contact's information. Additionally, you can select Related Entities, such as police, fire, and medical, and the related PSAP (public safety answering point information).

Note: You must first set up a system before you can provide details for a contact.

With Advance Edit, you can add the following:

- **Profile** – Used to enter the contact's Access Levels, Credentials, and Availability.

  Fields

  - **Access** – Use the check boxes to indicate the Keyholder's access levels. Note that there are some items that are mutually exclusive of one another. If you select both items, an error will appear.

    Note: If a user's permissions are set to **Can Open/Close Any Time**, the system will check the user's open/close against a schedule. Without a schedule, the operator will see an **Unscheduled Open** signal.
  - **Password** – If the Customer wants each Keyholder to have a unique password, type it in this field.
  - **Web Access ID** – The Manitou account identification to which the Web Membership is tied. If the contact indicates BoldNet is installed and licensed, enter the Web Access ID in this field.
  - **Acct Company ID** – The accounting company's identification number.
  - **Question** – The challenge question to ask the contact if the person can't remember the password.

    Note: By answering the security question with the answer given on the **Web Membership User** card, the user will then have the username and password sent to the email address provided on the **Web Membership User** card. The user will then be able to reset the password by way of the link given in the email.
  - **Answer** – The contact's answer to the challenge question.
  - **Max Test Time** – If you enter a password along with a VRT ID (Voice Response Terminal ID) or Web ID, then this field becomes available. This is the maximum test time, in minutes, that this contact can put the account On Test.
  - **Web Profile** – The contact's Web permissions. If BoldNet is installed and licensed, select a Web Profile.
  - **Acct Technician ID** – The account technician's identification number.
  - **Notes** – Used to enter any notes related to this contact.

- **Availability** – The date range the selected person is a valid contact.

Note: You have the option at this point to add a Template to the Customer account. Templates allow you to apply previously entered contact information and settings to the new account. You click **Advanced Edit**, then at the **Profile** step, you can add a Template by clicking **Template** on the **Web Profile** section.

- **Contact Points** – The **Contact Points** card lists all the different Contact Point types available within the system. These include telephone numbers, email addresses, pager and fax numbers, and web addresses.

  Notes:

  - To protect high profile Customers, you can't attach a schedule to a private number. You must change a private number to attach a schedule.
  - As with the earlier Contact Points step in the **Customer Wizard**, you have the option at this point to add a General Schedule in the process of adding a Customer. You click **Advanced Edit**, and once you're at the Contact Points step, you click **Add** on the **Phone Number** section and then select **New Schedule** on the **Schedule** section. General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, and Reminder Schedules, and defines when you can put accounts On Test.

- **Systems** – See Systems.
- **Access Control Gateway** – Use the card to enter access card information and the level of contact that user has.
- **Name & Address** – You use this window to enter the Contact Type, Name, and Address information.

  Important:

  - Bold Technologies strongly recommends not to use punctuation or uncommon abbreviations in these fields as it might cause issues within the database.
  - You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

- **User Defined Fields** – The **User Defined** card displays any data for the organization that might not have had a proper location within the Customer record. These are Customer-specific designations that can contain a variety of different fields (radio buttons, check boxes, and so on) or simple text. You add **User Defined** fields in the Manitou Supervisor Workstation.

Call Lists

You use this card to add details for all the people, Agencies, Authorities, Dealers, and/or Branches requiring contact for a given alarm. Call Lists are especially useful for commercial sites that might have differing shifts based on the time of day.

Customer Records

The Customer record contains all pertinent information regarding the Customer account. This information automatically populates into the **Alarm Mode** window at the time an alarm presents to Manitou.

Details

Address

- The **Details** card displays the current address information.
- You can start a Watch list, edit the Address, and expand/collapse address Details.
- The Customer serial number appears on the top of the card and you can use it to search by serial number.

Contacts

You use this card to enter additional contact information such as site type, phone numbers and extensions, scripts (defined call communication), Contact Schedules, email address, and web information.

On Test Status

There are two On Test options, **Simple** and **Advanced**. The **Simple** On Test mode allows you to enter a **Reason** for the test and to designate a duration in **Hours** and **Minutes**. The Advanced On Test mode allows you to set day and time durations, and to select specific system components for the test.

Note: Once a Customer has been put On Test, the **Current On Test** section of the **Customer** card displays the day and time information for the On Test, as well as the **Reason**.

For the definition of **Advanced On Test** fields, see [Advanced On Test] Fields.

Customer Status

The Customer Status provides the condition for the following:

Note: You can select from and act upon these Account Statuses by clicking the related item.

- **Alarm (OK, In Alarm)** – The color that relates to an alarm status can be customized and is defined through the Manitou Supervisor Workstation.
- **Monitoring (Active/Inactive/Deactivated)** – A green vertical bar indicates the system is active, yellow is inactive, and red is deactivated.
- **Maintenance (Resolved/Unresolved)** – A green vertical bar indicates no maintenance issues, red indicates there are one or more unresolved maintenance issues.
- **Service (Full Service, Partially On Test, Whole System On Test)** – A green vertical bar indicates Full Service and nothing is On Test, yellow indicates the system is partially On Test, but not the entire system, and red indicates the whole system is On Test.
- **Area (Open, Closed, Unknown)** – A yellow vertical bar indicates the system is open and disarmed, blue indicates the system is closed and armed, and red indicates an unknown system status (the system has not received an open or closing event to identify current status and is therefore unknown).

System Status

You identify each system on the account by name (for example, System 1).

Note: You can select from and act upon these Account Statuses by clicking the related item.

TX – Displays the transmitter status.

- **Green** – The Area is good.
- **Blue** – The Area is closed.
- **Yellow** – The Area is open.
- **Red** – A warning or issue.

Area – Displays the Area status.

- **Yellow** – The system is open and disarmed.
- **Blue** – The system is closed and armed.
- **Red** – The system has not received an open or closing event to identify current status and is therefore “unknown.”

Customer Activity Log

The Activity Log lists all actions taken on the Customer record. This includes:

- Signals/Alarms
- Views/Edits/Saves
- Password Validation

- Comments Addition
- Alarms and Processing

When viewing the Customer Activity Log, the most recent activity is always located at the top of the record, in chronological order. To see the details of a particular activity, simply double-click the activity.

Adding Comments

When you first open a customer account, note the “selected comment” icon to the left of the first activity log listed on the **Customer Activity Log** card – this is the icon’s default location upon opening a customer account. However, using your pointing device, you can click any activity log and the comment icon will move to the activity log you selected allowing you to add a related comment just below the selected activity log.

To add a comment for an activity log, do the following:

1. Select the activity log for which you want to add the comment. Notice that the selected comment icon moves to the selected activity log.
2. Click **Comment**. The **Add Customer Log Comment** card appears.
3. Select the **Add to Selected Event** button so the comment appears below the selected activity log.
4. Type a **Summary**.
5. Type a **Comment**.

   Note: If you want the comment to be a “system comment” and only viewable during an audit, select **Hidden**.
6. Click **Done**. The comment displays below the selected activity log.

Systems

If you click **Systems**, a summary of Customer Systems and Monitoring Details appear. You use systems to set the configuration of how a signal will find this account when it arrives from a receiver.

Notes:

- You can select from and act upon these Account Statuses by clicking the related item.
- You have the ability to add systems and edit Monitoring Details. For more information, see Monitoring Details, and Systems, and their related subsections.

As you click and navigate through systems, they are structured as follows:

Types of Systems

- **Event Monitoring** – This system is for checking the type of alarm that presents.
- **Access Control** – This system is for recording the in and out access by people for a given property.
- **GPS Tracker** – This system provides location information about assets for tracking, locating, and other directional-based services.

  Note: You consider a transmitter to belong to a GPS system if it is not a VertX Transmitter and its remote address looks like a phone number.
- **Other** – This system is a catchall to give you a way to include other types of systems that don't fall into Event Monitoring, Access Control, or GPS categories. By creating an "Other" system, you can tie it to a Monitoring Service which the central station can automate billing for through accounting integration.

Names of Systems

This is the next level of detail indicating the names of systems.

Features of Systems

- **<System Name>** – You use this to manage system information, and view Users and Transmitter Summary information associated with the system.
- **<Transmitter Name>** – The transmitter communicates with the alarm communication receivers connected to the system. You use this option to view transmitter details and manage specific transmitter options. The specific transmitter is identified, along with associated details such as the Protocol Type that it is using. Additionally, you can add Notes in regards to a transmitter. For details on adding a transmitter, see Adding a Transmitter, And, if needed, see Open/Close Schedules, and Open/Close Schedules Wizard.
- **Areas and Zones** – Once transmitters have been set up for the Event Monitoring, you can add Areas and Zones. Areas and Zones are places inside the property where monitoring can be established and used to direct Authorities to specific areas where alarms are sending a signal. The Zones are physical locations within an Area or location, such as a front door. For details on adding Areas and Zones, see Adding Areas and Zones. And, if needed, see Open/Close Schedules, and Open/Close Schedules Wizard.

  System and Query Tests

  You can perform system and Query tests once an Area and Zone have been set up. The system test will test the Zones/Areas to see if the system receives a signal. Once the system receives a signal, the **Signal Status** will change to **Received Signal**. If the system does not receive a signal, the status will change to **Never Received**.

- **Programming** – The following cards are defined for Programming:
    - **TX Programming** – You need Programming for every system to ensure proper account processing. The Programming items define and decode the information coming in from the transmitters through the receivers. You can add and edit TX Programming. For details on adding Programming, see Programming. And, if needed, see Open/Close Schedules, and Open/Close Schedules Wizard.

      Example:

      Some transmitters send a generic message that an alarm sounded in a specific Area or Zone. The receiver then passes this message to the application. However, the system doesn't know what that activation on that Area or Zone means without the Programming. The Programming is there to translate the activation on that Zone to a Burglary or Fire or other alarm on that Zone. Also, Programming will allow for the definition of specific actions to complete on the alarm, such as to call the police and then the Keyholder on the account.
    - **Event Programming** – You can add and edit Event Programming to specify how Manitou handles particular types of alarms, whether detailed in a report, sent to an email, and
      so on.
    - **Post Processing** – After an event has occurred and been addressed, Post Processing is where you define how the event was handled by selecting the Event, the Zone where it occurred, and the Action Pattern that was used.
    - **Devices** – You use Devices for additional monitoring, which you can configure for cameras, microphones, control/sensor, door, or URL. These items can be put on a Plan and actioned if a connect or control device is added.

      A transmitter is a Device located on the Customer premises that communicates with the alarm communications receivers connected to the system. You identify the specific transmitters within this card, along with related details.

      Note: The ability to add or edit Devices is based on your Permissions in the Manitou Supervisor Workstation.
- **User View** – A listing of persons on the Contact List with User Numbers.
- **Reminders** – Reminders provide a way to perform one-time or periodic actions and checks as a service to the Customer.

  Note: The ability to add or edit Reminders is based on your Permission in the Manitou Supervisor Workstation.

Connecting to the Video Control Center (VCC) Through Devices

When you receive an alarm signal from a site that is video enabled, you can show an alarm video that spans from some pre-alarm time to some post-alarm time, enabling you to prioritize

and verify alarms effectively and efficiently. Video verification also allows you to replay a video file held in the database with the alarm signal.

Streaming video monitoring allows for immediate identification of the true nature of an event.

Manitou VCC connects to cameras for remote viewing and cameras with pan, tilt, and zoom (PTZ) that you can control remotely as well.

Note: For details on VCC, refer to the *Manitou Video Control Center Functional Overview* which is available at the Bold Support Portal.

Launch Video

To launch a video in Manitou 2.0, do the following:

1. Open the **Devices** card for the selected camera device.
2. Click the **Connect** icon on the “device” card.

   VCC launches from where you can view the video.

Take Snapshot from Video

To take a snapshot from a VCC video in Manitou 2.0, do the following:

1. Open the **Devices** card for the selected camera device.
2. Click the **Connect** icon on the “device” card.

   VCC launches from where you can view the video.
3. Click **Add** on the **Reference** card.

   The **Reference Add** card appears. Your options are either to **Upload** a previously saved reference file from a drive or take a **Snapshot From VCC** and then saving the file.
4. While viewing the video in VCC, click **Snapshot From VCC** in Manitou 2.0 to take a snapshot from the VCC video and import it into Manitou 2.0.

   Note: The size of the snapshot image is the same as the size of that video on screen, so it is recommended, but not necessary, to maximize the video before taking the snapshot.

GPS Tracking

GPS Tracking is essentially BoldTrak integrated into Manitou 2.0. It is a tool used to establish boundaries and track devices. With GPS Tracking you can:

- Track and monitor anything from people to vehicles to devices.
- Pinpoint any location on its built-in map.

- Respond to remote and independent alarms and incidents.
- Locate users and devices.
- Configure device settings (speed dials, speed travel restrictions, and so on).
- Manage device and user location.
- Locate addresses and geographical sites.
- Create geological boundaries (to keep people and devices in or out of an area).

Functions

GPS Tracking consists of two main functions, **GeoFences** and **Tracking**.

- GeoFences consists of the following:
  - GeoFences and Groups
  - Devices
  - Mapping
- Tracking consists of the following:
  - Devices
  - Legend
  - Filter
  - Mapping

Important:

- Data is not present in GPS Tracking until GeoFences and devices are set up properly.
- For U.S. maps, you need to download and install the **Shapefile** from the U.S. Census Bureau for mapping to work. And for other countries, you need to download a similar file. https://catalog.data.gov/dataset/2015-cartographic-boundary-file-5-digit-zip-code-tabulation-area-for-united-states-1-500000

Prerequisites

- You must have the proper BoldTrak licensing in place.
- All machines that will be using BoldTrak must have active internet access to work properly.

Permissions

You must set up user Permissions in the Manitou Supervisor Workstation for GPS Tracking to work properly.

To set user Permissions, do the following:

1. Open the Manitou Supervisor Workstation.
2. Click **Maintenance | Setup | Permissions**.
3. The following minimum Permissions must be designated as described:

   Note: Although you can grant more user Permissions than those described, granting fewer Permissions could result in degraded functionality.

   - **GeoFences** – Expand the **Maintenance** node and then expand the **General** node. You must designate Manitou 2.0 Permissions for **GeoFences** as **Visible**.
   - **Customer** – Expand the **Maintenance** node and then select **Customer**. You must designate Manitou 2.0 Permissions for **Customer** as **Visible**.
   - **Activity Log** – Expand the **Maintenance** node and then expand **Customer**. You must designate Manitou 2.0 Permissions for **Activity Log** as **Visible**.
   - **Alarms and Signals** – Expand the **Maintenance** node and then expand **Customer**. Expand **Activity Log**. You must designate Manitou 2.0 Permissions for **Alarms and Signals** as **Visible**.
   - **Systems** – Expand the **Maintenance** node and then expand Customer. You must designate Manitou 2.0 Permissions for **Systems** as **Visible**.
   - **Areas** – Expand the **Maintenance** node and then expand **Customer**. Expand the **Systems** node. You must designate Manitou 2.0 Permissions for **Areas** as **Visible**.
   - **Areas Description** – Expand the **Maintenance** node and then expand **Customer**. Expand the **Systems** node and then expand the **Areas** node. You must designate Manitou 2.0 Permissions for **Description** as **Visible**.
   - **Transmitters** – Expand the **Maintenance** node and then expand **Customer**. Expand the **Systems** node. You must designate the Manitou 2.0 Permissions for **Transmitters** as **Visible**.
   - **Transmitters Description** – Expand the **Maintenance** node and then expand **Customer**. Expand the **Systems** node and then expand **Transmitters**. You must designate Manitou 2.0 Permissions for **Description** as **Visible**.

GeoFences Option

A GeoFence is a virtual barrier that you use to trigger an alarm when someone or something enters and/or exits the perimeter of the GeoFence.

If you search for and/or select a Customer, and then click **GPS Tracking**, the GPS Tracking function appears. With the **GeoFences** option, you can add, edit, and delete GeoFence specification information by clicking the related icon on the **GeoFences and Groups** card.

Adding Groups, GeoFences, and Boundaries

Depending on how you're logged on – Company, Dealer, or Customer – you can add a Group and GeoFence to that user category.

Groups

- When you click the add icon + the **Add GeoFence/GeoFence Group** card appears.
    - You must first establish a Group when adding a GeoFence, so leave the **Group** option selected.
    - **Group Name** – Use this field to add a label for the Group. Bold Technologies recommends to make the Group name directly relatable to the Group information for easy reference. Example: If setting up a Group for ABC Corp drivers, consider "ABC Corp" or "ABC Corp Drivers" as the Group name.
    - **Enabled** – This option is selected by default. Selecting or clearing this check box indicates whether or not you want the Group to be enable or disabled within the system.
    - **Auto-Include Dealer/Global Groups** – This option is selected by default. If the system should not show the Dealer and Global Groups associated with this Group, clear this check box.

Geofences

- When you click the add icon + the **Add GeoFence/GeoFence Group** card appears.
    - Once you have added a Group, next you need to add a related GeoFence by selecting the **GeoFence** option.
    - **For Group** – Use this field to select the Group to which you want to associate the GeoFence.
    - **GeoFence Name** – Use this field to add a label for the GeoFence. Bold Technologies recommends to make the GeoFence name directly relatable to the GeoFence information for easy reference.

- **GeoFence Type** – Select Polygon or Circle for the click-and-define boundaries.
- **Enabled** – This option is selected by default. Selecting or clearing this check box indicates whether or not you want the GeoFence to be enable or disabled within the system.
- **Area ID (Optional)** – You can give the GeoFence a unique identifier. This must be in hexadecimal format.
- **Max Speed (Optional)** – The maximum speed allows a top speed limit to be set. While within the GeoFence, if a vehicle exceeds the maximum speed settings, an alarm triggers.
- **Alarm Condition** – Select whether the GeoFence will notify upon entry into the boundary, exit out of the boundary, or both.

Boundaries

- Once you have established a Group and GeoFence, you return to the map and the pointer becomes crosshairs, where you can:
  - Click and drag to create a circle around the GeoFence boundary or click the map for each point in the polygon. Once you've completed the boundary, release the mouse button to set the circle GeoFence or to close the polygon, click on the starting point again.
- Use the available map functions while designing the GeoFence as follows:
  - Move the map, by clicking and holding the cursor and dragging the map position across the screen.
  - Use the **Zoom In** and **Zoom Out** functions by clicking the plus or minus buttons.
  - Use the **Enter Address** (magnifying glass) function to locate a specific area quickly.
- The GeoFence will show under the group with which it is associated. It will also show whether the GeoFence is an entrance, exit, or cross boundary.
- On the map, you can change the view and themes if you pause your pointing device over the view icon and select from the options.

Adding Devices

A device is any piece of security equipment supported by the GPS Tracking feature. You must first create a device as a GPS Transmitter in the Systems of a Customer Account. See Adding a Transmitter, for more information.

Note: Because devices might be moving in and out of several different GeoFences, you can only assign devices to Groups.
Once you've established a GPS Transmitter, it displays on the **Devices** card. To link a Device,

select a Device from the **Devices** card then select the Group from the **GeoFences and Groups** card. Next you would click **Link** to establish the link between the Device and the Group. (And, you click **Unlink** to remove the Device/Group relationship.)

Tracking Option

You can use the map to track the location of devices for determining where a device is or what device may be closest to a particular incident or event. To track a device, click **Tracking** above the map area.

From the list of Devices on the **Devices** card, click the appropriate Device for tracking.

Alarms

Once a person or vehicle violates an established boundary in a GeoFence, Manitou 2.0 generates an alarm, allowing you to handle it according to normal processing procedures. GPS Tracking will show the location of the device and GeoFence information at the time the violation was committed.

Devices

From the list of Devices on the **Devices** card, click the appropriate Device for tracking. The map will zoom in on the appropriate device. On the map you can change the view and themes if you pause your pointing device over the view icon and select from the options.

When you create a Transmitter for a Device, Manitou 2.0 assigns a color for that device. When you select the Device from the **Devices** card, the Legend icons change to the assigned color for that Device.

Legend

The **Legend** card defines the icons that can appear on the map.

Filter

You can use the **Filter** card and related **Change Filter** to narrow the list of **Locates**, **Signals**, and **Alarms** for a **Selected Device** or **Other Devices**. When you click **Change Filter** the **Tracking Filter** card displays from where you can filter by number of and/or date range for **Locates**, **Signals**, and **Alarms**.

Speed Monitoring

Just as with GeoFence violations, speed violations will send in an alarm as well.

Monitoring Services

You can view existing Monitoring Services that are contracted. Additionally, you have the ability to:

- Add or edit Monitoring Services.
- Select from the different Monitoring Service Groups on the **Monitoring Services** card and view the details on the related card.

Contact List

From these cards you can add and edit detailed information for selected Customer contacts.

The Contact List contains all persons and entities that have access to a property. Not everyone may be contacted in the event of an alarm. However, if a person has any sort of access to the property, the person must be listed on the **Contact List**. Having everyone with access listed allows for tracking as well as contact should a particular individual set off an alarm.

Notes:

- To see the **Temp Open Time** for a selected technician, the **Can Open/Close Within Temp Open Window** option must be selected on the **Contact Edit** card.
- Removing persons from the Contact List will also remove any Asset Tracking entries that are links to the individual. When you remove a tracking entry, Manitou 2.0 removes all Transmitter and Event Programming for that Tracking ID.

Contacts Card

- You can add a contact by clicking **Add** + . When adding a contact, you can use the **Advanced Edit** mode, which takes you through the **Initial Setup**, **Profile**, **Contact Points**, **Name & Address**, and **User Defined** cards, similar to the **Customer Wizard**.
- You can double-click a current contact from the list to edit the contact's information. Again, Manitou takes you through the Add/Edit process, similar to the **Customer Wizard**, where you edit Profile, Contact Points, and Name & Address information.
- You can arrange the order of Contacts by clicking **Sort** on the **Contacts** card. The **Contact List Ordering** dialog box appears where you can order Contacts as you want.
- Bold Technologies recommends that the contact photo be no larger than 300 pixels for optimum display. Manitou scales down anything larger and scales up anything smaller with a possible loss in clarity.

Notes:

- You can create Script Messages and General Schedules through the cards, as well.

- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.
- Bold Technologies recommends that the contact photo be no larger than 300 pixels for optimum display. Manitou scales down anything larger and scales up anything smaller with a possible loss in clarity.

Contact Points Card

The **Contact Points** card lists all the different Contact Point types available within the system. These include telephone numbers, email addresses, pager and fax numbers, and web addresses.

You can add and edit Contact Points by clicking **Edit** . Adding a Contact Point takes you through the **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.

Notes:

- You can create Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Fields

- **Suppress** – Select to suppress the contact's birthday.
- **VRT ID** – Voice Response Terminal. A Dealer logs into VRT (Voice Response Terminal) or BoldNet Neo to put the account On Test outside of the schedule.
- **Web Profile** – The contact's Web permissions.

Attentions

You use Attentions for the purpose of printing and mailing paper copies of invoices, reports, and shipping information run through Manitou. If an Attention exists, Manitou will print that attention prior to printing out the physical address of the recipient.

Call Lists

You use this card to add details for all the people, Agencies, Authorities, Dealers, and/or Branches requiring contact for a given alarm. Call Lists are especially useful for commercial sites that might have differing shifts based on the time of day.

A Call List also provides the ability to rotate the members of a list. You often place rotation lists to ensure that one Keyholder is not the only Keyholder contacted each time an alarm occurs.

General Schedules

The General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, and Reminder Schedules, and when you can put accounts On Test.

Note: You can add, edit, and delete General Schedules by clicking the related icon.

Open/Close Schedules

See Open/Close Schedules, and Open/Close Schedules Wizard, for details on using the **Schedules** option.

Activity Log

See Customer Activity Log, for details using the **Activity Logs** option.

Comments

See Comments, for details on using the **Comments** option.

User Defined Fields

The **User Defined** card displays any data for the Customer that might not have had a proper location within the Customer record.

The **User Defined** option is for the specific use of individual central stations. You add **User Defined** fields within the Manitou Supervisor Workstation to store additional necessary information about the Customer. Examples of this additional information might be salesperson information or internal accounting information.

You can edit data on the **User Defined Fields Edit** card. Since central stations define these fields, data entry is dictated by what has been added and by the procedures in place at your location.

Managing Plans

Plans are images of the account property (if configured). Plans can show video snapshots, schematics, drawings, floor plans, and so on. In use with an alarm, these Plans can show valuable information such as a tripped Zone and all other Zones of an Area, as well as provide access to Devices such as cameras.

A Plan is the framework or canvas on which Layers of information are built. Plans themselves (for example, a map, blueprint, picture, and so on) are considered "Layers." Devices, Zones, Areas, Linking Elements, Labels, and so on are "Objects" and information that you add to these Layers.

Adding Plans

You can add Plans by clicking **Add** + on the **Plans** card. When you click the icon, the **Add Plans** card displays where you type a **Description** for the Plan.

Once you add, the initial **Plan the Layers** card becomes active. Click **Add** + on the **Layers** card. When you click the icon the **Add Layers** card displays where you:

- Select **Customer Layers** (zero, positive, and negative numbers).
- Type a **Description**.
- Click **Upload** to transfer an image to Manitou.

Adding Objects to Plans

Once you upload an image, the following options appear on the **Areas** card. To add or edit objects, click **Edit** to enable the edit mode. Once you click this icon you will see add and delete options for
the objects.

- **Drop Pin** – You use this object to mark on Plans where camera views converge.
- **Areas** – Areas are physical spaces and Zones are contained within Areas. For example, an Area could consist of a hallway and several office spaces and conference rooms.
- **Zones** – Zones are physical locations within an Area or location. For example, Zone 1 could be the front door of a facility.
- **Sectors** – You can use Sectors to track where persons are located. For example, an office building might have two Sectors. You might set up the first Sector for outside of the building and the Second Sector is the inside of the building. When a person uses an access card to gain entry into the building, Access Control will record that a person went from outside the building to inside the building based on the sectors set up on the reader.

- **Fields of View** – Is the extent of the observable view either by the human eye or optical device, or the “angle” of space that can be detected by a sensor.
- **Devices** – You can use Devices, which are monitoring instruments, to help establish security. For example, cameras, motion detectors, microphones, controls/sensors, and so on.
- **Video Routes** – Indicates cameras that are linked together in order. For example, cameras linked together in a stairwell.
- **Links** – Links allow you to connect multiple Plan Layers together. For example, if two floor plans exist for a two-story building, you can insert a graphical icon into one Plan that links to the other. This allows you the ability to switch quickly between each Plan with a single mouse click.

  There are a variety of icons available. For example, using an up arrow on a staircase could graphically indicate the ability to navigate up or down to another Layer or Plan. When you click this arrow, you connect to that other Plan. When you use your pointing device to point to a link, a graphical summary will also reveal the linked Plan.
- **Labels** –Allows you to create and place labels on your uploaded images.
- **Compass** – Used to orient you to compass headings in relation to the Plans.

Filtering and Editing Plans

You can edit or delete a Plan by directing your pointing device anywhere in the designated Plan and clicking **Edit** or **Delete** .

You can use the toolbar to zoom in or out on a Plan, or temporarily filter in and out objects on the Plan by clicking the related icon. Directing your pointing device to one of the toolbar items displays a hint as to its use. For example, you could click **Labels** to filter temporarily in or out the Labels you’ve placed on a Plan.

Dealer

Dealers are independent entities that typically handle Customer installations of alarm and monitoring equipment. The Dealer record contains all the information associated with a Dealer on record.

Adding a Dealer

With the **Dealer** card, you can create and maintain a database of Dealers that a central station might need to contact or call out in the event of an alarm or other emergency. You can also add Dealers, once created, to Action Patterns and Call Lists as needed.

Note: Deleting an inactive Dealer will provide a dialog box to delete all Customers of the Dealer as well as the Dealer record.

Details

Address and Contacts Information

With this option, you can edit Dealer Address and Contact information.

Notes:

- You can add Script Messages and General Schedules when creating your Contact information.
- Adding a General Schedule is similar to that when adding a General Schedule for a Dealer through the **Customer Wizard** or **New Dealer** option.
- If you create a default Script Message, the selected Event Types are used to automatically fill Event Details for the Script Message based on the selected parameters. You use default Script Messages with emails, faxes, and text notifications.

Dealer Card

The **Dealer** card maintains Dealer-specific options allowing for Customer put On-Test designation,
third-party billing specifications, time format, and email address for sending reports.

- **Allow Jobs On Test** – Allows the Customer to be able to put the account On Test in the event that the Customer would like to test the service.
- **Monitoring Group** – Designations to categorize and distribute signals to specific operator groups. At the time of the Manitou installation, it has a default Monitoring Group setting of “0”. But, Bold Technologies recommends that all installations create a Monitoring Group of their own, instead of using the default "0" group.
- **A/R Company** – The Accounts Receivable company for the Dealer.
- **A/R Lookup** – The Account Receivable number for the Dealer.
- **Time Format** – Set the time to a 12-hour or 24-hour time format.
- **Email Address to Use** – Dealer email address to use for sending reports.

Contact List

From these cards you can add and edit detailed information for selected Dealers.

The Contact List contains all persons and entities that have access to a property. Not everyone may be contacted in the event of an alarm. However, if a person has any sort of access to the property, the person must be listed on the **Contact List**. Having everyone with access listed allows for tracking as well as contact should a particular individual set off an alarm.

Notes:

- To see the **Temp Open Time** for a selected technician, the **Can Open/Close Within Temp Open Window** option must be selected on the **Contact Edit** card.
- Removing persons from the Contact List will also remove any Asset Tracking entries that are links to the individual. When you remove a tracking entry, Manitou 2.0 removes all Transmitter and Event Programming for that Tracking ID.

Contacts Card

- You can add a contact by clicking **Add** + . When adding a contact, you can use the **Advanced Edit** mode, which takes you through the **Initial Setup**, **Profile**, **Contact Points**, **Name & Address**, and **User Defined** cards, similar to the **Customer Wizard**.
- You can double-click a current contact from the list to edit the contact's information. Again, Manitou takes you through the Add/Edit process, similar to the **Customer Wizard**, where you edit Profile, Contact Points, and Name & Address information.
- You can arrange the order of Contacts by clicking **Sort** on the **Contacts** card. The **Contact List Ordering** dialog box appears where you can order Contacts as you want.
- Bold Technologies recommends that the contact photo be no larger than 300 pixels for optimum display. Manitou scales down anything larger and scales up anything smaller with a possible loss in clarity.

Notes:

- You can create Script Messages and General Schedules through the cards, as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.
- Bold Technologies recommends that the contact photo be no larger than 300 pixels for optimum display. Manitou scales down anything larger and scales up anything smaller with a possible loss in clarity.

Contact Points Card

The **Contact Points** card lists all the different Contact Point types available within the system. These include telephone numbers, email addresses, pager and fax numbers, and web addresses.

You can add and edit Contact Points by clicking **Edit** . Adding a Contact Point takes you through the **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.

Notes:

- You can create Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Fields

- **Suppress** – Select to suppress the contact's birthday.
- **VRT ID** – Voice Response Terminal. A Dealer logs into VRT (Voice Response Terminal) or BoldNet Neo to put the account On Test outside of the schedule.
- **Web Profile** – The contact's Web permissions.

Attentions

You use Attentions for the purpose of printing and mailing paper copies of invoices, reports, and shipping information run through Manitou. If an Attention exists, Manitou will print that attention prior to printing out the physical address of the recipient.

General Schedules

The General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, and Reminder schedules, and when you can put accounts On Test.

Note: You can add, edit, and delete General Schedules by clicking the related icon.

Call Lists

Call Lists contain the details of all the people requiring contact for a given alarm type. Rotation lists are often in place to ensure that one Keyholder is not the only Keyholder contacted each time there is an alarm. Call Lists consist of Main and Sub Lists of contacts, grouped and ordered based on alarm types and priority.

Notes: You can add, edit, and delete Call Lists by clicking the related icon.

Call Lists might or might not be used on a Dealer record. Most often, you use Call Lists to rotate those persons contacted in the event of an alarm or to set differing contacts based on the day of the week or time of the day.

Transmitter Types

A Transmitter is how a signal finds a Customer account. With the **Transmitter Types** cards, you can select and delete all transmitters the Dealer services.

TX Type

This allows for the designation of a specific set of Transmitter Types used within the system. This is useful when dealing with a large entity using numerous types of transmitters.

Transmitter Ranges

- Customers must have Transmitter Ranges at the Monitoring Company or Dealer levels.
- Transmitter Ranges are required to prevent duplication of Transmitter IDs.
- Transmitter Ranges determine which Transmitter IDs are allocated to a Dealer for use with the Dealer's accounts. When adding new Customer accounts to the system, consider that the Customer's Transmitter ID should be within the Transmitter Range of its associated Dealer. The purpose of assigning a range of transmitters to Dealer records is that more information about incoming signals is immediately available. When a signal is received with a TXID (Transmitter Identification) within a particular Dealer's range, it is clear that the signal is from one of that Dealer's accounts. This gives more information when handling alarms.

Fields

- **Receiver Line Designation** – Used to select the applicable Receiver Line. This information should be available from the administrator or manager of the central station. It is important to know which Customers and Dealers are assigned to which receivers and Receiver Line Designations.
- **TX ID From** – Starting number of the Transmitter Range.
- **TX ID To** – Ending number of the Transmitter Range.
- **Next TX ID** – The next Transmitter ID to use for the selected Dealer.
- **TX ID Type** – Indicates the format of the Transmitter ID (Decimal, Hex [Include A], Hex [Exclude A]). This is based on the **TX ID** format used by the central station and/or the selected Dealer.

- **Range Full** – Select this check box if the Transmitter ID range is full at this time. You can use this to block out a particular number of Transmitter IDs that you plan to use for a specific account.
- **Restart** – If this check box is selected, it is okay to start looking again for empty Transmitter ID numbers.

Programming

The **Dealer Programming** section within the Dealer interface contains all the Dealer-level items that trigger Action Patterns. You use this to select and edit programming information. This is a simpler interface than the programming associated with Customer records because Dealer programming only deals with Action Patterns, not signal reassignment.

You can change Event Programming at the Dealer level to specify how particular types of alarms are handled, whether detailed in a report, sent to an email, and so on.

Fields

- **Event** – The Manitou Event Code associated with alarm.
- **Alarm** – The applicable value for the alarm. This value indicates to the system whether or not this event will trigger an alarm or just display in the log as a signal. The Default value tells the system to treat the event as whatever the system default is. For example, a BA (Burglar Alarm) would always be an alarm unless otherwise defined; so, left at “Default” value BA continues to always trigger an alarm. Change the value to “No” and BA will only log as a signal instead of being displayed and handled as an alarm.
- **Action ID** – An identifier for an Action Pattern tied to alarm type. Global and Dealer-level Action Patterns are available.
- **Instructions** – Specific directions for the event.
- **Event Category** – The assigned group for an event. This assists with management of Monitoring Groups and Disaster Mode.

Comments

Comments contains Temporary, Standing, or Special instructions for a Customer. Comments also offer you access to view expired Comments about a Customer.

- **Temporary** – Only active for a specified amount of time.
- **Standing** – Active until deleted.
- **Special** – Particular instructions or scenarios that apply to the Customer record and are active until deleted.
- **Show On Open** – Indicates when to show the Comment.

- **Auto-Client: Operator Must See** – Select whether the **Auto-Client** should ignore the Comment or require the operator to see it.

Note: You can add, edit, and delete Comments by clicking the related icon.

Billing

Dealers can set up billing cycles and charges through Manitou. Dealer Billing can be by Class Code or by Monitoring Service Billing Code, which you entered on the **Monitoring Type** card within the Manitou Supervisor Workstation. Additionally, an Activity-based billing utility for a Dealer is available for Sedona and QuickBooks accounting systems. The amounts are determined by the information entered into the Dealer's **Billing Charges** card. The system option for billing by Class Code or Monitoring Service Billing Code controls how the charges are generated for this process.

Billing Charges

Billing Charges can be set up on a Recurring, Add, Signal Overage, or Time basis.

Recurring

You can set up a Recurring charge if the service occurs every month. You might want to set up a Recurring charge if the service occurs every month.

For example, with an active price, a $10.00 charge is assessed every month for alarm monitoring. You can change the frequency of the charges and also charge for an inactive account. If the account is inactive, but the Monitoring Company is still monitoring the site, you can apply the inactive rate. Remember, in the **Billing Code** field, add the Billing Code for the service that is defined on the **Monitoring Types** card in the Manitou Supervisor Workstation. This must also match the Billing Code in the accounting software.

Fields

- **Item Code** – The Manitou billing identifier for the entry.
- **Recurring Charge Defined** – This check box enables the Recurring Charge for the selected Dealer and allows input into the related fields.
- **Active Price** – The fee being charged for a particular active service.
- **Active Rate** – The Manitou billing identifier based on certain requirements for the Active Rate.
- **Inactive Price** – The fee being charged for a particular inactive service.
- **Inactive Rate** – The Manitou billing identifier based on certain requirements for the Inactive Rate.
- **Frequency** – The regularity at which a given price/rate can be charged.

- **Billing Code** – The billing identifier that controls how the charges are generated for a process or service.

Add

You add an Add charge in circumstances where a one-time charge might be applied, such as a set-up fee.

Fields

- **Item Code** – The Manitou billing identifier for the entry.
- **Add Charge Defined** – This check box enables the Add Charge for the selected Dealer and allows input into the related fields.
- **Add Price** – The one-time fee being charged for a particular service.
- **Add Rate** – The Manitou billing identifier based on certain requirements for the one-time rate.
- **Billing Code** – The billing identifier that controls how the charges are generated for a one-time fee.

Signal Overage

Using the **Billing Charges** card for Signals allows the Monitoring Company or Dealer to bill based on the number of overage signals received in a given time period. Here, you can enter specifications based on the total price, or by signal and alarm price.

Fields

- **Item Code** – The Manitou billing identifier for the entry.
- **Signal Overage Charge Defined** – This check box enables the Signal Overage Charge for the selected Dealer and allows input into the related fields.
- **Total Price** – You can select a Total Price for Signal Overages that occur.
- **Total Rate** – The Manitou billing identifier based on certain requirements for the Total Rate.
- **Signal Price** – The fee for Signal Overages based on per signal.
- **Signal Rate** – The Manitou billing identifier based on certain requirements for the Signal Rate.

  Selecting **<use price>** option will use the price entered into the **Signal Price** and **Alarm Price** fields. Selecting **Basic Alarms** will use the price for basic alarms, and selecting **False Alarms** will use the rate based on False Alarms. These rates are determined on the **Billing Rates** card.
- **Alarm Price** – The fee for Signal Overages based on per alarm.

- **Alarm Rate** – The Manitou billing identifier based on certain requirements for the Alarm Rate.
- **Total Limit** – The maximum number of Signal and Alarm Overages that are allowed before overages charges occur.
- **Signal Limit** – The maximum number of Signal Overages that are allowed before overages charges occur.
- **Alarm Limit** – The maximum number of Alarm Overages that are allowed before overages charges occur.
- **Billing Code** – The billing identifier that controls how the charges are generated for an overage fee.

Time Charges

The **Time Charges** card allows for time-based billing items. The Time Increment value determines the value to which each specific time charge (per signal event) will be rounded. For example, if the time spent on an alarm is 6 minutes and 45 seconds, the time rounds to 7 minutes.

You use time-based billing in conjunction with soft programming attributes that are attached to Event Codes. This programming attribute is "q" and can be set in the Manitou Supervisor Workstation under **Events | Event Codes**. The signal processing system will recognize the new attribute and set a new flag on the Customer Activity record to indicate that time-based billing is active for the event.

Fields

- **Item Code** – The Manitou billing identifier for the entry.
- **Time Charge Defined** – This check box enables the Time Charge for the selected Dealer and allows input into the related fields.
- **Time Price** – You can select a price per a selected unit of time for billing purposes.
- **Time Rate** – The Manitou billing identifier based on certain requirements for the Time Rate.
- **Time Unit** – The measurement of time you apply to the Time Price.
- **Time Limit** – The extent of time used for the Price Time. For example, a Time Price of $1.00 is used for every 10 minutes (600 seconds) spent on an alarm.
- **Time Increment** – This determines the value to which each specific time charge (per signal event) will be rounded. For example, if the time spent on an alarm is 6 minutes and 45 seconds, the time rounds to 7 minutes.
- **Billing Code** – The billing identifier that controls how the charges are generated for a time-based fee.

Billing Rates

The **Billing Rates** card allows you to attach a rate table to an item price and/or time price. On the **Billing Charges** card, you use these rate tables to calculate rates based on certain requirements. For instance, if a service exists for monitoring basic alarms, the Monitoring Company might create a rate table based on the number of alarms.

Fields

- **Rate Code** – The Manitou billing identifier for the rate.
- **Description** – An explanation for the Rate Code.
- **Calculation Type** – Dealer and Customer Calculation types will change which rate table you use to calculate charges. For example, if Dealer Addison has two Customers, A and B, and Customer A receives 5 signals over the limit in the last month, and Customer B receives 6 signals over the limit. If the rate table associated with the billing charge for those signal overages is using the Dealer Calculation, then all 11 signals would be charged to Dealer Addison at the rate for 11 signals specified in the table. However, if the rate table associated with the billing charge is the Customer Calculation type, then Dealer Addison would be charged for 5 signals at the rate for 5 signals, and charged for 6 signals at the rate of six signals.
- **Min Quantity** – This number indicates the threshold for additional charges, for example, the number of False Alarms.
- **Base Price** – Initial fee for a particular service.
- **Additional Price** – Extra fees for a service, for example, a Customer exceeds a certain amount of False Alarms.

Crediting an Account

Generally, credits are taken for the portion of the already billed period that is being canceled. For example, if at 10 days into March, a service is canceled, and assuming it was billed through the end of March already (on a monthly frequency), Manitou credits 21 out of 31 days of the total invoice. It is the remaining days (not including the day of the change) divided by the total days of that specific period that will be credited. Rate tables have no bearing on credits, as they are used to calculate charges. Actual billed days are used to calculate credits.

Action Patterns

Dealer Action Patterns speed the processing of specific alarms by displaying to the operator who to call and what actions to take on each alarm.

See Action Patterns and Enhanced Action Patterns, and the related subsections for more information on Action Patterns and Enhanced Action Patterns.

Maintenance Issues

With the **Maintenance Issues** card you can create maintenance/repair items relating to the Dealer record.

When adding a Maintenance Item, the **Priority** slider defaults to **Not Assigned**. The highest priority is “1” and the lowest priority is “10”.

Note: You can add, edit, refresh, filter, and delete Maintenance Issues by clicking the related icon.

Tech Maintenance

The **Technician Maintenance Issues** card is where you can view, filter, and edit information and technicians assigned to various maintenance issues.

Reports

See Reports, for details on using the **Reports** option.

All Activity Web Printer

The All Activity Web Printer allows you to view Dealer signal activity.

Note: The All Activity Web Printer displays the last 20 minutes of activity or the last 50 Customer signals, whichever threshold is reached first.

If you want to filter the **All Activity** log, type a Customer ID or a Customer Name in the **Filter to Customer ID** field.

If you want to prevent temporarily a new activity from displaying on the **All Activity** log, click **Pause** .

If you want to display the latest Customer activity, click **Refresh** .

Fields

- **Signal Date** – The date and time the signal was received.
- **Customer ID** – The identifier for the Customer account.
- **Customer Name** – The name of the Customer.
- **Event Description** – Further information regarding the event.
- **Event Code** – The Manitou Event Code associated with the signal.
- **Transmitter** – The number of the transmitter where the signal originated.
- **Area** – The Area in which the event occurred.
- **Zone** – The Zone in which the event occurred.
- **Additional** – Any further relevant information.
- **Caller ID** – The number where the signal originated.

Branding

- Monitoring Companies can change color schemes and logos for themselves, Dealers, and Customers, and give permission to Dealers and Customers to change color schemes and logos.
- Dealers, with permissions enabled, can change color schemes and logos for themselves and Customers, and give permission to Customers to change color schemes and logos.
- You change color schemes by simply clicking a color.
- You can upload logos by clicking **Upload**.

Control Panels

Much like Transmitter IDs, you can select and remove particular Control Panels within this section to narrow a list down for a specific Dealer.

Once you select a Control Panel, make any changes to the Maximum Areas, Transmitters, Zones, and/or User's values. Most often, the defaults should be correct. However, this card provides the ability to change those values if they differ for some reason.

Reverse Protocols

Reverse Protocols allow Manitou to communicate back to a device. These protocols are specific to device and manufacturer.

Note: You set up Reverse Protocols within the Manitou Supervisor Workstation. See the facility supervisor for more information on Reverse Protocols.

Reverse Commands

Reverse Commands are command strings you can use to send commands to devices. While you can create them, they are more commonly preloaded into the Manitou system. You can also specify when a Reverse Command should apply (for example, in all circumstances or only when an alarm arrives). Reverse Commands are typically defined at Monitoring Company level and then applied to a Customer. When you use a Reverse Command to send a command to a device, Manitou 2.0 receives a Reverse Command Response Code which indicates the status of the Reverse Command, for example, succeeded or failed.

Dealer Reverse Commands

You can use Reverse Commands for Dealers to send a command back to a panel to test to see if it is working properly.

Statistics

The Statistics area of a Dealer account shows specific counts for Customers, Customer status, and Customer transmitter data. The time can be set to 24-, 48-, or 72-hour inquiries and sub-Dealer statistics can be included or removed from the compiled Statistics.

You can view and select Customer Counts, Customer Status Summary, and Customer TX Summary information from where you can navigate through more detailed statistical information for a selected Customer.

- **Customer Counts** – Lists the total number of Active, Inactive, Pending, and Deactivated Customers (includes a related pie chart).
- **Customer Status Summary** – Lists the number of Customers in various conditions within alarm monitoring, maintenance, permits, and so on.
- **Customer TX Summary** – Lists the number of transmitters in various conditions.

Note: You can filter the statistics by selecting **All Customers**, **Customers with No Dealer**, and **Customers with No Branch** from **All Customers** 

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Authority

Adding an Authority

With the **Authority** card you can create and maintain a database of police, fire and other emergency services that a central station might need to contact in the event of an alarm or other emergency. Once created, you can add Authorities to the Action Pattern and Call Lists for a Customer as needed.

Details

Details

You use the **Details** card to enter and edit Authority address information. The serial number appears on the top of the card and you can use it to search by serial number.

Contacts

You use this window to enter additional contact information for the Authority such as Contact Type, Phone Number, Extension, Script (defined call communication), Schedule, Email Address, and Web address.

Note: There are instances where Authorities might want to make their numbers private to operators. When you select the **Private** check box, asterisks appear throughout the Manitou system in place of the phone number. The actual phone number is stored in the database, which the **Auto-Dialer** can use.

Authority Options

The **Authority Options** card contains additional details on permits, False Alarm tracking, and dispatch charges. It is important to have this information verified when entering Authority records as it can affect how alarms are handled when an Authority needs to be dispatched.

Fields

- **Permit Required** – Select this option if a permit is required for a given Authority.
- **False Alarm Tracking** – Based on the Authority's policies about False Alarms, select whether the False Alarm Tracking is a Sliding Window, Calendar Period, or Forever.

  Based on the **False Alarm Tracking** selection, the options below can be made available:

  - **False Alarm Limit** – How many False Alarms the Authority allows.
  - **False Alarm Period** – The time period, in seconds, for the False Alarm.
  - **False Alarm Starting Month** – The designated month (in numerals, 1 – 12) the False Alarm tracking will begin.
- **Dispatch Charges** – Used to enter a billing Charge Code for dispatch. Your central station administrator should know the Charge Codes.

Contact List

From these cards you can add and edit detailed information for a selected Authority.

The Contact List contains all persons and entities that have access to a property. Not everyone may be contacted in the event of an alarm. However, if a person has any sort of access to the property, the person must be listed on the **Contact List**.

You make most entries under contacts. It is possible to associate another Authority as a contact for an Authority record. For example, the Fire Authority might be associated with the police Authority to prepare for complex emergency situations. Having everyone with access listed allows for tracking as well as contact should a particular individual set off an alarm.

Notes:

- To see the **Temp Open Time** for a selected technician, the **Can Open/Close Within Temp Open Window** option must be selected on the **Contact Edit** card.
- Removing persons from the Contact List will also remove any Asset Tracking entries that are links to the individual. When you remove a tracking entry, Manitou 2.0 removes all Transmitter and Event Programming for that Tracking ID.

Contacts Card

- You can add a contact by clicking **Add** . When adding a contact, you can use the **Advanced Edit** mode, which takes you through the **Initial Setup**, **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.
- You can double-click a current contact from the list to edit the contact's information. Again, Manitou takes you through the Add/Edit process, similar to the **Customer Wizard**, where you edit **Profile**, **Contact Points**, and **Name & Address** information.
- You can arrange the order of Contacts by clicking **Sort** on the **Contacts** card. The **Contact List Ordering** dialog box appears where you can order Contacts as you want.
- Bold Technologies recommends that the contact photo be no larger than 300 pixels for optimum display. Manitou scales down anything larger and scales up anything smaller with a possible loss in clarity.

Notes:

- You can create Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.
- Bold Technologies recommends that the contact photo be no larger than 300 pixels for optimum display. Manitou scales down anything larger and scales up anything smaller with a possible loss in clarity.

Contact Points Card

The **Contact Points** card lists all the different Contact Point types available within the system. These include telephone numbers, email addresses, pager and fax numbers, and web addresses.

You can add and edit Contact Points by clicking **Edit** . Adding a Contact Point takes you through the **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.

Notes:

- You can create Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Attentions

You use Attentions for the purpose of printing and mailing paper copies of invoices, reports, and shipping information run through Manitou. If you enter an Attention, Manitou will print that Attention prior to printing out the physical address of the recipient.

Call Lists

Call Lists contain the details of all the people requiring contact for a given alarm type. Rotation lists are often in place to ensure that one Keyholder is not the only Keyholder contacted each time there is an alarm. Call Lists consist of Main and Sub Lists of contacts, grouped and ordered based on alarm types and priority.

Notes: You can add, edit, and delete Call Lists by clicking the related icon.

Comments

Comments contains Temporary, Standing, or Special instructions for a Customer. Comments also offer you access to view expired Comments about a Customer.

- **Temporary** – Only active for a specified amount of time.
- **Standing** – Active until deleted.
- **Special** – Particular instructions or scenarios that apply to the Customer record and are active until deleted.
- **Show On Open** – Indicates when to show the Comment.
- **Auto-Client: Operator Must See** – Select whether the **Auto-Client** should ignore the Comment or require the operator to see it.

Note: You can add, edit, and delete Comments by clicking the related icon.

General Schedules

General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, and Reminder schedules, and when you can put accounts On Test.

Note: You can add, edit, and delete General Schedules by clicking the related icon.

Maintenance Issues

With the **Maintenance Issues** card, you can create maintenance/repair items relating to the Authority record.

When adding a Maintenance Item, the **Priority** slider defaults to **Not Assigned**. The highest priority is “1” and the lowest priority is “10”.

Note: You can add, edit, refresh, filter, and delete Maintenance Issues by clicking the related icon.

Agency

Add an Agency

Agencies are companies that assist a central station in business-related areas, such as facility maintenance, alarm equipment providers, IT support consultants, and others.

Details

Details

You use the **Details** card to enter and edit Agency address information. The serial number appears on the top of the card and you can use it to search by serial number.

Contacts

You use this window to enter the Phone Number, Email Address, and Web address for the Agency.

Agency Options

The **Agency Options** section contains additional information regarding the verification of the Agency, as well as Charge Codes for dispatch.

Fields

- **Question** – The question the Agency representative should answer for identity verification.
- **Answer** – The expected answer from the Agency representative for the verification question.
- **Dispatch Charges** – Used to enter a billing Charge Code for dispatch. Your central station administrator should know the Charge Codes.

Contact List

From these cards you can add and edit detailed information for a selected Agency.

The Contact List contains all persons and entities that have access to a property. Not everyone may be contacted in the event of an alarm. However, if a person has any sort of access to the property, the person must be listed on the **Contact List**. Having everyone with access listed allows for tracking as well as contact should a particular individual set off an alarm.

Notes:

- To see the **Temp Open Time** for a selected technician, the **Can Open/Close Within Temp Open Window** option must be selected on the **Contact Edit** card.
- Removing persons from the Contact List will also remove any Asset Tracking entries that are links to the individual. When you remove a tracking entry, Manitou 2.0 removes all Transmitter and Event Programming for that Tracking ID.

Contacts Card

- You can add a contact by clicking **Add** + . When adding a contact, you can use the **Advanced Edit** mode, which takes you through the **Initial Setup**, **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.
- You can double-click a current contact from the list to edit the contact's information. Again, Manitou takes you through the Add/Edit process, similar to the **Customer Wizard**, where you edit Profile, Contact Points, and Name & Address information.
- You can arrange the order of Contacts by clicking **Sort** on the **Contacts** card. The **Contact List Ordering** dialog box appears where you can order Contacts as you want.
- Bold Technologies recommends that the contact photo be no larger than 300 pixels for optimum display. Manitou scales down anything larger and scales up anything smaller with a possible loss in clarity.

Notes:

- You can create Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Contact Points Card

The **Contact Points** card lists all the different Contact Point types available within the system. These include telephone numbers, email addresses, pager and fax numbers, and web addresses.

You can add and edit Contact Points by clicking **Edit** . Adding a Contact Point takes you through the **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.

Notes:

- You can create Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Attentions

You use Attentions for the purpose of printing and mailing paper copies of invoices, reports, and shipping information run through Manitou. If you enter an Attention, Manitou will print that Attention prior to printing out the physical address of the recipient.

Call Lists

Call Lists contain the details of all the people requiring contact for a given alarm type. Rotation lists are often in place to ensure that one Keyholder is not the only Keyholder contacted each time there is an alarm. Call Lists consist of Main and Sub Lists of contacts, grouped and ordered based on alarm types and priority.

Notes: You can add, edit, and delete Call Lists by clicking the related icon.

Comments

Comments contains Temporary, Standing, or Special instructions for a Customer. Comments also offer you access to view expired Comments about a Customer.

- **Temporary** – Only active for a specified amount of time.
- **Standing** – Active until deleted.
- **Special** – Particular instructions or scenarios that apply to the Customer record and are active until deleted.
- **Show On Open** – Indicates when to show the Comment.
- **Auto-Client: Operator Must See** – Select whether the **Auto-Client** should ignore the Comment or require the operator to see it.

Note: You can add, edit, and delete Comments by clicking the related icon.

General Schedules

General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, and Reminder schedules, and when you can put accounts On Test.

Note: You can add, edit, and delete General Schedules by clicking the related icon.

Maintenance Issues

With the **Maintenance Issues** card, you can create maintenance/repair items relating to the Agency record.

When adding a Maintenance Item, the **Priority** slider defaults to **Not Assigned**. The highest priority is “1” and the lowest priority is “10”.

Note: You can add, edit, refresh, filter, and delete Maintenance Issues by clicking the related icon.

Branch

Add a Branch

The **Branch** card allows you to create and maintain a database of Branches, which are sub-offices of main Customer locations.

Details

Details

You use the **Details** card to enter and edit Branch address information. The serial number appears on the top of the card and you can use it to search by serial number.

Contacts

You use this window to enter the Phone Number, Email Address, and Web address for the Agency.

Contact List

From these cards you can add and edit detailed information for a selected Branch.

The Contact List contains all persons and entities that have access to a property. Not everyone may be contacted in the event of an alarm. However, if a person has any sort of access to the property, the person must be listed on the **Contact List**. Having everyone with access listed allows for tracking as well as contact should a particular individual set off an alarm.

Notes:

- To see the **Temp Open Time** for a selected technician, the **Can Open/Close Within Temp Open Window** option must be selected on the **Contact Edit** card.
- Removing persons from the Contact List will also remove any Asset Tracking entries that are links to the individual. When you remove a tracking entry, Manitou 2.0 removes all Transmitter and Event Programming for that Tracking ID.

Contacts Card

- You can add a contact by clicking **Add** + . When adding a contact, you can use the Advanced Edit mode, which takes you through the **Initial Setup**, **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.
- You can double-click a current contact from the list to edit the contact's information. Again, Manitou takes you through the Add/Edit process, similar to the **Customer Wizard**, where you edit Profile, Contact Points, and Name & Address information.
- You can arrange the order of Contacts by clicking **Sort** on the **Contacts** card. The **Contact List Ordering** dialog box appears where you can order Contacts as you want.
- Bold Technologies recommends that the contact photo be no larger than 300 pixels for optimum display. Manitou scales down anything larger and scales up anything smaller with a possible loss in clarity.

Notes:

- You can create Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Contact Points Card

The **Contact Points** card lists all the different Contact Point types available within the system. These include telephone numbers, email addresses, pager and fax numbers, and web addresses.

You can add and edit Contact Points by clicking **Edit** . Adding a Contact Point takes you through the **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.

Notes:

- You can create Script Messages and General Schedules through the cards as well.

- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Attentions

You use Attentions for the purpose of printing and mailing paper copies of invoices, reports, and shipping information run through Manitou. If you enter an Attention, Manitou will print that Attention prior to printing out the physical address of the recipient.

Call Lists

Call Lists contain the details of all the people requiring contact for a given alarm type. Rotation lists are often in place to ensure that one Keyholder is not the only Keyholder contacted each time there is an alarm. Call Lists consist of Main and Sub Lists of contacts, grouped and ordered based on alarm types and priority.

Notes: You can add, edit, and delete Call Lists by clicking the related icon.

Comments

Comments contains Temporary, Standing, or Special instructions for a Customer. Comments also offer you access to view expired Comments about a Customer.

- **Temporary** – Only active for a specified amount of time.
- **Standing** – Active until deleted.
- **Special** – Particular instructions or scenarios that apply to the Customer record and are active until deleted.
- **Show On Open** – Indicates when to show the Comment.
- **Auto-Client: Operator Must See** – Select whether the **Auto-Client** should ignore the Comment or require the operator to see it.

Note: You can add, edit, and delete Comments by clicking the related icon.

General Schedules

General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, and Reminder schedules, and when you can put accounts On Test.

Note: You can add, edit, and delete General Schedules by clicking the related icon.

Reports

See Reports for details on using the **Reports** option.

Maintenance Issues

With the **Maintenance Issues** card, you can create maintenance/repair items relating to the Branch record.

When adding a Maintenance Item, the **Priority** slider defaults to **Not Assigned**. The highest priority is “1” and the lowest priority is “10”.

Note: You can add, edit, refresh, filter, and delete Maintenance Issues by clicking the related icon.

Statistics

The Statistics area of a Dealer account shows specific counts for Customers, Customer status, and Customer transmitter data. The time can be set to 24-, 48-, or 72-hour inquiries and sub-Dealer statistics can be included or removed from the compiled Statistics.

You can view and select Customer Counts, Customer Status Summary, and Customer TX Summary information from where you can navigate through more detailed statistical information for a selected Customer.

- **Customer Counts** – Lists the total number of Active, Inactive, Pending, and Deactivated Customers (includes a related pie chart).
- **Customer Status Summary** – Lists the number of Customers in various conditions within alarm monitoring, maintenance, permits, and so on.
- **Customer TX Summary** – Lists the number of transmitters in various conditions.

Note: You can filter the statistics by selecting **All Customers**, **Customers with No Dealer**, and **Customers with No Branch** from **All Customers** All Customers.

Monitoring Company Accounts

Adding a Monitoring Company

The **Monitoring Company** cards display all of the specifics about the central station running Manitou. The central station record is created upon the initial installation of the system. If not completed during the implementation process, the Monitoring Company record details should be entered as soon after implementation as possible.

Details

Address and Contacts Information

With this option you can edit Dealer Address and Contact information.

Notes:

- You can add Script Messages and General Schedules when creating your contact information.
- Adding a General Schedule is similar to that when adding a General Schedule for a Monitoring Company through the **Customer Wizard**.
- If you create a default Script Message, the selected Event Types are used to automatically fill Event Details for the Script Message based on the selected parameters. Default Script Messages are used with emails, faxes, and text notifications.

Contact List

From these cards you can add and edit detailed information for a selected Monitoring Company.

The Contact List contains all persons and entities that have access to a property. Not everyone may be contacted in the event of an alarm. However, if a person has any sort of access to the property, the person must be listed on the **Contact List**. Having everyone with access listed allows for tracking as well as contact should a particular individual set off an alarm.

Notes:

- To see the **Temp Open Time** for a selected technician, the **Can Open/Close Within Temp Open Window** option must be selected on the **Contact Edit** card.
- Removing persons from the Contact List will also remove any Asset Tracking entries that are links to the individual. When you remove a tracking entry, Manitou 2.0 removes all Transmitter and Event Programming for that Tracking ID.

Contacts Card

- You can add a contact by clicking **Add** + . When adding a contact, you can use the **Advanced Edit** mode, which takes you through the **Initial Setup**, **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.
- You can double-click a current contact from the list to edit the Contact's information. Again, Manitou takes you through the Add/Edit process, similar to the **Customer Wizard**, where you edit Profile, Contact Points, and Name & Address information.

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Notes:

- You can create Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Contact Points Card

The **Contact Points** card lists all the different Contact Point types available within the system. These include telephone numbers, email addresses, pager and fax numbers, and web addresses.

You can add and edit Contact Points by clicking **Edit** . Adding a Contact Point takes you through the **Profile**, **Contact Points**, and **Name & Address** cards, similar to the **Customer Wizard**.

Notes:

- You can add Script Messages and General Schedules through the cards as well.
- You can select **Suppress** on the **Name & Address** card if the contact should be prevented from displaying on the **Call List** card. The default is the **Suppress** check box being selected when the contact has no Contact Points.

Call Lists

Call Lists contain the details of all the people requiring contact for a given alarm type. Rotation lists are often in place to ensure that one Keyholder is not the only Keyholder contacted each time there is an alarm. Call Lists are lists of contacts, grouped and ordered based on alarm types and priority.

Notes: You can add, edit, and delete Call Lists by clicking the related icon.

Comments

Comments contains Temporary, Standing, or Special instructions for a Customer. Comments also offer you access to view expired Comments about a Customer.

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- **Special** – Particular instructions or scenarios that apply to the Customer record and are active until deleted.

Note: You can add, edit, and delete Comments by clicking the related icon.

General Schedules

General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, and Reminder schedules, and when you can put accounts On Test.

Note: You can add, edit, and delete General Schedules by clicking the related icon.

Reverse Commands

Reverse Commands are command strings you can use to send commands to devices. While you can create them, they are more commonly preloaded into Manitou. You can also specify when a Reverse Command should apply (for example, in all circumstances or only when an alarm arrives). Reverse Commands are typically defined at Monitoring Company level and then applied to a Customer. When you use a Reverse Command to send a command to a device, Manitou 2.0 receives a Reverse Command Response Code which indicates the status of the Reverse Command, for example, succeeded or failed.

Monitoring Company Reverse Commands

You can use Reverse Commands for Monitoring Companies to send a command back to a panel to test to see if it is working properly.

Transmitter Ranges

- Customers must have Transmitter Ranges at the Monitoring Company or Dealer levels.
- Transmitter Ranges are required to prevent duplication of Transmitter IDs.

Transmitter Ranges determine which Transmitter IDs are allocated to a Dealer for use with the Dealer's accounts. When adding new Customer accounts to the system, consider that the Customer's Transmitter ID should be within the Transmitter Range of its associated Dealer. The purpose of assigning a range of transmitters to Dealer records is that more information about

incoming signals is immediately available. When a signal is received with a TXID (Transmitter Identification) within a particular Dealer's range, it is clear that the signal is from one of that Dealer's accounts. This gives more information when handling alarms.

Unused Transmitters

Unused Transmitters are transmitter numbers within a Transmitter Range, set up within the Dealer and Monitoring Company records that are not yet assigned to a transmitter on a Customer record.

Billing

Monitoring companies can set up billing cycles and charges through Manitou. Dealer Billing can be by Class Code or by Monitoring Service Billing Code, which you enter on the **Monitoring Type** card within the Manitou Supervisor Workstation. Additionally, an Activity-based billing utility for a Dealer is available for Sedona and QuickBooks accounting systems. The amounts are determined by the information entered into the **Dealer's Billing Charges** card. The system option for billing by Class Code or Monitoring Service Billing Code controls how the charges are generated for this process.

Billing Rates

The **Billing Rates** card allows a rate table to be attached to an item price and/or time price. On the **Billing Charges** card, you use these rate tables to calculate rates based on certain requirements. For instance, if a service exists for monitoring basic alarms, the Monitoring Company might create a rate table based on the number of alarms.

Fields

- **Rate Code** – The Manitou billing identifier for the rate.
- **Description** – An explanation for the Rate Code.
- **Calculation Type** – Dealer and Customer Calculation types will change which rate table you use to calculate charges. For example, if Dealer Addison has two Customers, A and B, and Customer A receives 5 signals over the limit in the last month, and Customer B receives 6 signals over the limit. If the rate table associated with the billing charge for those signal overages is using the Dealer Calculation, then all 11 signals would be charged to Dealer Addison at the rate for 11 signals specified in the table. However, if the rate table associated with the billing charge is the Customer Calculation type, then Dealer Addison would be charged for 5 signals at the rate for 5 signals, and charged for 6 signals at the rate of six signals.
- **Min Quantity** – This number indicates the threshold for additional charges, for example, the number of False Alarms.

- **Base Price** – Initial fee for a particular service.
- **Additional Price** – Extra fees for a service, for example, a Customer exceeds a certain amount of False Alarms.

Billing Charges

Billing Charges can be set up on a Recurring, Add, Signal Overage, or Time basis.

Recurring

You can set up a Recurring charge if the service occurs every month. You might want to set up a Recurring charge if the service occurs every month.

For example, with an active price, a $10.00 charge is assessed every month for alarm monitoring. You can change the frequency of the charges and also charge for an inactive account. If the account is inactive, but the Monitoring Company is still monitoring the site, you can apply the inactive rate. Remember, in the **Billing Code** field, add the Billing Code for the service that is defined on the **Monitoring Types** card in the Manitou Supervisor Workstation. This must also match the Billing Code in the accounting software.

Fields

- **Item Code** – The Manitou billing identifier for the entry.
- **Recurring Charge Defined** – This check box enables the Recurring Charge for the selected Dealer and allows input into the related fields.
- **Active Price** – The fee being charged for a particular active service.
- **Active Rate** – The Manitou billing identifier based on certain requirements for the Active Rate.
- **Inactive Price** – The fee being charged for a particular inactive service.
- **Inactive Rate** – The Manitou billing identifier based on certain requirements for the Inactive Rate.
- **Frequency** – The regularity at which a given price/rate can be charged.
- **Billing Code** – The billing identifier that controls how the charges are generated for a process or service.

Add

You can add an Add Charge in circumstances where a one-time charge might be applied, such as a
set-up fee.

Fields

- **Item Code** – The Manitou billing identifier for the entry.

- **Add Charge Defined** – This check box enables the Add Charge for the selected Dealer and allows input into the related fields.
- **Add Price** – The one-time fee being charged for a particular service.
- **Add Rate** – The Manitou billing identifier based on certain requirements for the one-time rate.
- **Billing Code** – The billing identifier that controls how the charges are generated for a one-time fee.

Signal Overage

Using the **Billing Charges** card for signals allows the Monitoring Company or Dealer to bill based on the number of overage signals received in a given time period. Here, you can enter specifications based on the total price, or by signal and alarm price.

Fields

- **Item Code** – The Manitou billing identifier for the entry.
- **Signal Overage Charge Defined** – This check box enables the Signal Overage Charge for the selected Dealer and allows input into the related fields.
- **Total Price** – You can select a Total Price for Signal Overages that occur.
- **Total Rate** – The Manitou billing identifier based on certain requirements for the Total Rate.
- **Signal Price** – The fee for Signal Overages based on per Signal.
- **Signal Rate** – The Manitou billing identifier based on certain requirements for the Signal Rate.

  Selecting **<use price>** option will use the price entered into the **Signal Price** and **Alarm Price** fields. Selecting **Basic Alarms** will use the price for basic alarms, and selecting **False Alarms** will use the rate based on False Alarms. These rates are determined on the **Billing Rates** card.
- **Alarm Price** – The fee for Signal Overages based on per alarm.
- **Alarm Rate** – The Manitou billing identifier based on certain requirements for the Alarm Rate.
- **Total Limit** – The maximum number of Signal and Alarm Overages that are allowed before overages charges occur.
- **Signal Limit** – The maximum number of Signal overages that are allowed before overage charges occur.
- **Alarm Limit** – The maximum number of Alarm Overages that are allowed before overage charges occur.

- **Billing Code** – The billing identifier that controls how the charges are generated for an overage fee.

Time Charges

The **Time Charges** card allows for time-based billing items. The Time Increment value determines the value to which each specific time charge (per signal event) will be rounded. For example, if the time spent on an alarm is 6 minutes and 45 seconds, the time will be rounded to 7 minutes.

You use time-based billing in conjunction with soft programming attributes that are attached to Event Codes. This programming attribute is "q" and can be set in the Manitou Supervisor Workstation under **Events | Event Codes**. The signal processing system will recognize the new attribute and set a new flag on the Customer Activity record to indicate that time- based billing is active for the event.

Fields

- **Item Code** – The Manitou billing identifier for the entry.
- **Time Charge Defined** – This check box enables the Time Charge for the selected Dealer and allows input into the related fields.
- **Time Price** – You can select a price per a selected unit of time for billing purposes.
- **Time Rate** – The Manitou billing identifier based on certain requirements for the Time Rate.
- **Time Unit** – The measurement of time to be applied to the Time Price.
- **Time Limit** – The extent of time used for the Time Price. For example, a Time Price of $1.00 is used for every 10 minutes (600 seconds) spent on an alarm.
- **Time Increment** – This determines the value to which each specific time charge (per signal event) will be rounded. For example, if the time spent on an alarm is 6 minutes and 45 seconds, the time will be rounded to 7 minutes.
- **Billing Code** – The billing identifier that controls how the charges are generated for a time-based fee.

Reports

See Reports, for details on using the **Reports** option.

Maintenance Issues

With the **Maintenance Issues** card, you can create maintenance/repair items relating to the Dealer record.

When adding a Maintenance Item, the **Priority** slider defaults to **Not Assigned**. The highest priority is “1” and the lowest priority is “10”.

Note: You can add, edit, refresh, filter, and delete Maintenance Issues by clicking the related icon.

Branding

- Monitoring Companies can change color schemes and logos for themselves, Dealers, and Customers, and give permission to Dealers and Customers to change color schemes and logos.
- Dealers, with permissions enabled, can change color schemes and logos for themselves and Customers, and give permission to Customers to change color schemes and logos.
- You change color schemes by simply clicking a color.
- You can upload logos by clicking **Upload**.

Action Patterns

Monitoring company Action Patterns speed the processing of specific alarms by displaying to the operator who to call and what actions to take on each alarm.

See Action Patterns and Enhanced Action Patterns, and the related subsections for more information on Action Patterns and Enhanced Action Patterns.

Statistics

The Statistics area of a Dealer account shows specific counts for Customers, Customer status, and Customer transmitter data. The time can be set to 24-, 48-, or 72-hour inquiries and sub-Dealer statistics can be included or removed from the compiled Statistics.

You can view and select Customer Counts, Customer Status Summary, and Customer TX Summary information from where you can navigate through more detailed statistical information for a selected Customer.

- **Customer Counts** – Lists the total number of Active, Inactive, Pending, and Deactivated Customers (includes a related pie chart).
- **Customer Status Summary** – Lists the number of Customers in various conditions within alarm monitoring, maintenance, permits, and so on.
- **Customer TX Summary** – Lists the number of transmitters in various conditions.

Note: You can filter the statistics by selecting **All Customers**, **Customers with No Dealer**, and **Customers with No Branch** from **All Customers** All Customers.

Reminders

Reminders provide a way for a Monitoring Company to perform one-time or periodic actions/checks as a service to their Customers. The Overdue Checker picks up Reminders that are due and generates an internal message to create an alarm for the Reminder. Each Reminder must specify a standard Alarm Code, which the Signal Handler uses to assign an appropriate Action Pattern.

The Reminder can include help text (notes) attached to the alarm for your use. Users must have a Reminder Service set up on the **Monitoring Types** card for the **Reminders** option to perform properly.

You add Reminders through Event Programming, Access Control, or GPS systems.

Fields

- **Event** – The standard alarm Event Code for the generated reminder alarm and allows Event Programming to assign an Action Pattern.
- **Description** – Text description of the Reminder.
- **Area** – The Area of where the Reminder is occurring. You use Area for Event Type systems only.
- **Zone/Asset** – Apply a Zone or Asset Tracking ID to the Reminder if applicable. This is dependent on System Type.
- **Point ID** – Area, Zone, or Point identifier description defining the alarm location or detail.
- **Schedule** – select a General Schedule to attach to the Reminder.
- **Next Reminder** – Next Date and time for the Reminder alarm to occur.
- **Randomize** – Randomize the intervals, which will render them unpredictable. For example, if a schedule is set to record video footage every half hour between 11 A.M. and 2 P.M., the Randomize action will set video to record at random times within the set schedule.
- **Start Minus** – Number of minutes preceding the beginning of the schedule window where the first Reminder will occur.
- **Interval Minus** – Number of minutes preceding the next Reminder within a schedule window where the Reminder can occur.
- **End Plus** – Number of minutes past the end of the schedule window where the last Reminder can occur.
- **Interval Plus** – Number of minutes past the next Reminder within a schedule window where the Reminder can occur.

- **Interval** – Number of minutes, hours, or days between Reminders.
- **Count** – Number of Reminders to generate.
- **Expiration** – Expiration date of the Reminder.
- **Auto Purge** – Indicates that the Overdue Checker should automatically purge the Reminder when it is expired or the number of occurrences is complete.
- **Notes** – Enter any helpful Notes or Comments. These Comments are attached to the alarm through the Transmitter Programming notes mechanism. Note that if the event created by the Reminder matches a line of Transmitter Programming with notes, the Transmitter Programming notes will take precedence.

Global Keyholder Accounts

Note: You can click **Log Off**  to then log on as a Global Keyholder with the option to choose an associated account.

Details

Address and Contacts Information

With this option you can edit Global Keyholder Address and Contact information.

Notes:

- You can add Script Messages and General Schedules when creating your contact information.
- Adding a General Schedule is similar to adding a General Schedule for a Global Keyholders through the **Customer Wizard**.
- If you create a default Script Message, the selected Event Types are used to automatically fill Event Details for the Script Message based on the selected parameters. Default Script Messages are used with emails, faxes, and text notifications.

General Schedules

General Schedules define the availability of Keyholders, Programming, Access Control, Call List Availability, and Reminder schedules, as well as when you can put accounts On Test.

Note: You can add, edit, and delete General Schedules by clicking the related icon.

Maintenance Issues

With the **Maintenance Issues** card, you can create maintenance/repair items relating to the Global Keyholder record.

When adding a Maintenance Item, the **Priority** slider defaults to **Not Assigned**. The highest priority is “1” and the lowest priority is “10”.

Note: You can add, edit, refresh, filter, and delete Maintenance Issues by clicking the related icon.

Maintenance Issues

With the **Maintenance Issues** card, you can create maintenance/repair items relating to the Dealer record.

When adding a Maintenance Item, the **Priority** slider defaults to **Not Assigned**. The highest priority is “1” and the lowest priority is “10”.

Note: You can add, edit, refresh, filter, and delete Maintenance Issues by clicking the related icon.

Reports

See Reports, for details on using the **Reports** option.

Reverse Send

The Reverse Send function allows you to send certain commands to alarm panels and other equipment located at the Customer site. You typically use this function to reset remotely an alarm panel. You can also issue Reverse Send commands to test or make changes to transmission equipment at the Customer site.

Notes:

- Reverse Commands are generally applicable when using add-on modules such as Access Control or through custom additions to the software.
- While you can create Reverse Sends, they are typically defined at the Monitoring Company level for Customers and preloaded into Manitou.
- When you use a Reverse Command to send a command to a device, Manitou 2.0 receives a Reverse Command Response Code which indicates the status of the Reverse Command, for example, succeeded or failed.

Fields

- **TX** – A transmitter is how a signal finds a Customer account. You select from this drop-down list the transmitter that will send the Reverse Command.
- **Reverse Commands Available** – You select from this drop-down list the type of Reverse Command that will be transmitted.
- **Route** – The specific channel needed to send the Reverse Command. Manitou, by default, selects what is determined to be the best channel for the Reverse Send.
- **Override** – Manitou, by default, selects what is determined to be the best channel for the Reverse Send. However, in selecting this option, you can override the system selection and choose your own.
- **Send** – Clicking **Send** brings up the **Reverse Command Parameters** card where you enter further details for the Reverse Send.
- **Transmitter ID** – The identification number for the transmitter sending the Reverse Send.
- **Raw No.** – The identification number, in its original format, for the transmitter sending the Reverse Send.
- **<Device ID>** – The identification number for the specific device you want to send the Reverse Send.

Action Patterns and Enhanced Action Patterns

Action Patterns are a vital part of alarm handling and processing. They are a set of instructions for you to follow while handling an alarm. You configure Action Patterns based on the type of alarm, whether fire, burglary, and so on, and can be set up at various levels including:

- Global (affects all accounts and is configured at the Monitoring Company level)
- Dealer
- Customer

During an alarm, Manitou looks to Customer-level, then Dealer-level, then Global-level Global Action Patterns.

Important:

- Manitou 2.0 categorizes Action Patterns added to the Monitoring Company as **Global Action Patterns** and therefore are available when viewing Customer and Dealer accounts. (**Note:** This guide uses Monitoring Company and Global Action Patterns synonymously.) It is important to keep this in mind when creating Global Action Patterns (since you can use them at multiple levels). For example, you might want to create

Monitoring Company/Global Action Patterns that will contain actions that many Customer and Dealer accounts will use to help increase efficiency and simplicity.

- If you do not specify a specific Action Pattern for an account it will use the Global Action Pattern.
- Customer Action Patterns are the most specific.
- Temporary Contacts are contacts that have expired based on the Valid To/From date that was configured at the time of the Temporary Contact creation. These will appear highlighted in green within an Action Pattern.

Enhanced Action Patterns can be constructed using logic statements like “if,” “then,” and “else.” Other programming constructs like loops and variables are also available. Once initiated, Enhanced Action Patterns look at history, run SQL statements, and execute external programs.

Licensing Requirements

There are two licenses available:

- **Action Pattern Plus** – Used to enter post-processing Action Patterns.
- **Enhanced Action Patterns**, which includes the following commands:
    - **Wait** – Delays action on an event for a period of seconds to await a response.
    - **Set** – Allows the ability to set a value to a variable for comparisons that the command can test to be greater than, less than, or equal to a value.
    - **Jump To** – Jumps to Labels in Action Patterns, for example, attempt to reach a Customer until you make contact.
    - **Send** – This command relates to the Reverse Commands used to communicate with systems that can receive commands through Manitou. You configure individually each system that can receive these commands and they are enabled when licensed and configured.
    - **Connect** – This command connects to cameras and other devices based on device and zone triggered and is based on configuration and licensing.
    - All of the SQL **Logic** items – If, End If, Else, Select, End Select, Case, and Otherwise.

    Notes:

    - The “commands” in Manitou 2.0.0 are known as “categories” in Manitou 2.0.
    - Legacy Manitou users have automatic access to these features. If you do not see these features active in your system, please contact your sales representative for more information.

Grouping Action Patterns

You can group Action Patterns into Categories. As one might expect, this allows you to organize Action Patterns. This is especially helpful for sites that have a large amount of Action Patterns and for any site that wants to create a specific Action Pattern structure. Action Pattern Categories are established and configured in the Manitou Supervisor Workstation **Subtypes** Setup.

Enhanced Action Patterns

The Enhanced Action Patterns feature offers decision-tree functionality and allows you to link Action Patterns together. Because Enhanced Action Patterns offer decision points, they allow you to implement dynamic and incident-specific actions. Finally, Enhanced Action Patterns provide you with a means of collecting data and logging information along the path to closing an incident.

You must plan out Enhanced Action Patterns. Prior to designing a new Enhanced Action Pattern, Bold Technologies recommends taking the following steps:

- Identify the Customer, Dealer, or Global alarm needs.
- Plan the Enhanced Action Pattern steps.
- Script out the Enhanced Action Pattern plan.
- Test the Enhanced Action Pattern by considering all possible scenarios.

You can designate Enhanced Action Patterns and the associated components at the Monitoring Company, Dealer, or Customer level with one superseding the other. An Enhanced Acton Pattern set up on the Dealer level overrides any Enhanced Action Pattern set up for the Monitoring Company for any alarm associated with that particular Dealer. An Enhanced Action Pattern set up on the Customer level overrides any Enhanced Action Patterns set up for the Dealer or Monitoring Company in regard to any alarm associated with that particular Customer.

Permissions for Action Patterns and Enhanced Action Patterns

Before using the Enhanced Action Patterns functionality included in Manitou, you must first set the Action Patterns permission by user or User Group in the Manitou Supervisor Workstation. See the “Permissions” section in the *Manitou CS Supervisor Workstation User Manual* for information on setting up permissions. Additionally, for users to have the ability to use Action Patterns, they must also have permissions set for Systems, Programming, Transmitters, Areas, and Zones.

Adding Action Patterns and Enhanced Action Patterns

To add an Enhanced Action Pattern in Manitou, do the following:

1. Open the account to which you want to add the Enhanced Action Pattern.
2. Select **Action Patterns** from the sidebar.
3. Click **Add** + on the **Action Patterns** card. The **Action Pattern Add** card appears.
4. Complete the card and click **Next**.

   The **Action Pattern Edit** card appears. From this card you can add and edit Action Patterns and Enhanced Action Patterns.
5. Note the following when adding or editing Action Patterns and Enhanced Action Patterns on the **Action Pattern Edit** card:
   - A list of Action Pattern categories and related actions are located on the upper-right section of the **Action Pattern Edit** card. Once you select an Action Pattern category and then select an action from that category, the related fields and options appear on the lower-right section of the card. Once you complete fields and options, click **Finish** to add. As you build an Action Pattern, it appears on the left side of the card.
   - You know the number of steps by the line numbers on the left-hand side of the Action Pattern.
   - You can edit an Action Pattern action item by selecting the item on the left side of the card. You do NOT have to delete and then re-add an action to modify the action. Once an action item is selected, the following options are available to you:
     - Related information displays on the right sections of the card for the selected action item, where you can perform edits.
     - The **search box** appears below the selected action item, indicating where you will add the next action item. You can move the **search box** up and down the Action Pattern by using the Up and Down Arrow keys on your keyboard. You can move selected action items by using the combination of the Ctrl key and the Up and Down Arrow keys on your keyboard.
     - When typing in the **search box**, note the following:
       - Manitou starts to narrow down the available commands based on your search string.
       - If you type a search string that doesn't match any commands, the box turns red.

        - If you type a search string that is valid, the box remains black as long as there are multiple options that have the potential to match the command for which you are searching.
        - If you type a search string that is a specific match, the box turns green. If you press the Enter key, you add the command.
        - Blue is the standard initial search color for the **search box**.
    - You can also move individual action items and groups of action items (that is, a parent-child relationship) by using the standard Windows drag-and-drop method. A parent-child list of items is indicated by a minus or plus sign to the left of the parent item. A minus sign indicates an expanded list and a plus sign indicates a collapsed list that you can expand. When you expand a parent-child list, you can move individual action items within the Action Pattern. If it is a collapsed parent-child list, you will move the parent and all related child action items within the Action Pattern. You can also drag-and-drop by line number.
    - To delete a selected action item, you can:
        - Click the **Trash Can**.
        - Drag the selected action item to the **Trash Can**.
        - Press the Ctrl and the X key on your keyboard.
- If you add an Enhanced Action Pattern at the Monitoring Company level, it's Global, same as Action Patterns.
- You can use the **Include** action to link Action Patterns, forming **Enhanced Action Patterns**. You can nest Action Patterns in the "If/Then" or with the "Go To" command, depending how they are set.

6. **Important:** Once you have all of the commands you want for the Action Pattern, ensure they are in the correct order and test the Action Pattern thoroughly before implementing it into a real alarm event.
7. See Action Pattern and Enhanced Action Pattern Categories, for more information on Action Pattern categories and related actions.

Fields/Options

- **Copy From** – If you want to use an existing Action Pattern as a template, select it from the
drop-down list.
- **Code** – The unique Action Pattern ID.

  Note: Action Pattern IDs do not have specific character or length requirements. However, it might be helpful to name Action Patterns in accordance with their functions (for example, Burglary, Fire, and so on).

- **Description** – A brief explanation of the Action Pattern.
- **Category** – A group to which the Action Pattern belongs. This field might or might not be applicable. If not, leave at its default.
- **Valid From / Valid To** – The start and end date the Action Pattern is available. If you leave these fields blank, the Action Pattern is available until deleted or disabled.
- **Critical First Contact** – The first action listed in the Action Pattern that will run automatically.

Action Pattern and Enhanced Action Pattern Categories

The following is a list of available Action Pattern categories and related actions:

Fields/Options

The following fields span several Action Pattern categories:

- **Mask** – A Mask is a text overlay of the code instructions used to build Action Patterns. For example, you could type, "We need to count the number of NT events in the history", and SQL code would be behind this command statement. Additionally, when using Masks, you can format action items for emphasis (that is, bold, italics, underline, and color).
- **Auto-Run** – Select Auto-Run if the Action Pattern should run certain events automatically during an alarm. Similar to the Auto-Client, Auto-Run can perform simple tasks such as sending emails and closing certain types of alarms, and so on.

  Note: You can select which individual events to run automatically and which ones not to run. Auto-Run will not attempt to run automatically every event in the Action Pattern.
- **Show Suppressed Contacts** – Select this check box to display any contacts for accounts previously blocked.
- **Attention** – Displays an Attention Line to you with additional information or to fulfill UL requirements.
    - **Signal Qualifier** – Signal Qualifiers are user-defined conditions that, when met, allow the system to run the selected action item.
        - **Any** – The default selection and means the Enhanced Action Pattern will run regardless of the state of the Signal Qualifier condition.
        - **Yes** – The Signal Qualifier condition must exist for the Enhanced Action Pattern action to run.

- **No** – The Signal Qualifier must not exist in order for the Enhanced Action Pattern action to run.

Important: You must enable and indicate UL compliant Customers in the Manitou Supervisor Workstation. Within the Supervisor Workstation, click **Maintenance | Setup | Country**. Next, select **Country Setup** from the **Jump To** menu, and then select **UL Policy Licensed** from the **Country Options** section.

Alarm Handling

- **Defer** – Returns the alarm as follows:
  - **Normal** – Returns the alarm to the alarm queue as if the alarm operator clicked **Hold | Defer**. If the alarm is the oldest highest priority alarm in the queue the alarm will return to the tracked operator.
  - **To Operator** – Returns the alarm to the alarm operator. You use this generally when Notification actions are completed and there are other actions that the Virtual Operator could do, but it is important that an operator receive and review the alarm.
  - **To Auto-Client (Virtual Operator)** – Works as the manual process does in the legacy system where the operator is able to send the alarm to the Virtual Operator for completion of actions that do not require human-to-human interactions.
- **Suspend** – Action to suspend the alarm for an allotted period of time at some point in the Action Pattern.
  - **Suspend Until** is now managed through a General Schedule. This allows the ability to have different times based on the day of the week, time of the day and even the date.
  - You have the ability to change the Priority within the **Suspend** command. You can lower the alarm priority of the alarm, after it is actioned, to ensure that the newer alarms are not overtaken by the older alarm when the suspension expires.
- **Close** – Closes the alarm if all Action Pattern commands are satisfied.
- **Escalate** – You can create a new alarm on the current, or a completely new, account as needed. The alarm can be of higher, or lower, priority, as required.

Entity Handling

An entity is any person, business, authority, agency, or agent, that responds to a location for alarm processing.

- **Contact** – Adds contacts to the Action Pattern and assumes a two-way conversation whether by telephone, SMS, IM, or other means.

- **Type** – Specifies the person's role such as a technician or cleaning person, and so on.
- **Contact Point Type** – Specifies the type of device or service that the system will call such as cell phone, home/business landline, email, and so on.
- **Script Details** – Refers to any defined Call Scripts (procedures).
- **Call Lists** (Global Action Patterns only) – Refers to any defined Call Lists.

- **Notify** – Notify is an outbound one-way communication where no response is expected and only works on specific Contact Points.
- **Validate** – Validates passwords related to the alarm account. **(License Required)**
- **Report** – Sends out an alarm report which is a list of everyone who has been contacted; this is usually the last item in an Action Pattern.
- **Search** – You can enter search parameters in regards to the Customer record. **(License Required)**

Action Handling

Action Handling focuses on items specific to steps taken to continue the alarm process moving forward.

- **Wait** – Delays action on an event for a period of seconds to await a response. **(License Required)**
- **Include** – Adds another Action Pattern into an existing one (an Enhanced Action Pattern) based on qualifying conditions such as schedules, GPS alarm, recently On-Test, and so on.
- **Jump To** – Jumps to Labels in Action Patterns, for example, attempt to reach a Customer until contact is made. **(License Required)**

  ### Notes:

  - Some of the commands you add might require additional Programming. For example, the **Jump To** command requires you to define which Enhanced Action Pattern action you want to jump to when you reach that point in the Enhanced Action Pattern.
  - If you want to log everything that you entered during the Enhanced Action Pattern, insert either of the following two commands into your Enhanced Action Pattern:
    - **Insert Collected Script Buffer into Activity Log** – Records into the Activity Log anything that precedes this command.
    - **Insert Collected Script Buffer into Maintenance List** – Records into the Maintenance List anything that precedes this command.

- **Label** – A label is an explicit name or number assigned within the Action Pattern. You reference it with an Enhanced Action pattern control statement appearing elsewhere in the Action Pattern.

Data Handling

Data Handling focuses on specific data items to display during alarm handling.

- **Launch** – The Launch action initiate access to external data or applications. You can configure user-defined applications in the Manitou Supervisor Workstation which are available as an action Launch type. The three built-in types are URL (Web browser link), Validate P/W module, and Customer Search module. **(License required for all options)**
- **Show** – Displays the help text directly from the Event Category, Event Definition, and so on, as part of the Action Pattern. “Show” can also be a display of any floor plans, notes, and so on, that are attached to the Customer record.
- **Prompt** – You use Prompts to acknowledge an action or do a variety of things on a Customer record driven by “If-Then” statements. Additionally, you can use for script variables here. And, Prompts can affect a Mask.
- **Set** – The new Set command allows the ability to “set” a value to a variable for comparisons that can be then tested to be greater than, less than, or equal to a value. **(License Required)**
- **Remark** – Pop-ups that are either reminders or questions to ask when speaking with a contact.
- **Log Line** – The Log Line allows the ability to insert items from the Prompts (variables) into the alarm activity. You can run this automatically to prevent any operator failure to include this information in the alarm processing.

External Handling

- **Send** – This command relates to the Reverse Commands used to communicate with systems that can receive commands through Manitou. Each system that can receive these commands are configured individually and are enabled when licensed and configured.
- **Connect** – This command Connects to cameras and other devices based on device and zone triggered and is based on configuration and licensing.

Logic Handling

- **If** – An element of an “If-Then-Else” conditional statement. If a condition evaluates to “True,” then only those actions that are “True” are completed. If a condition evaluates to “Else,” only those that are “False” are completed. The “Then” is implied.

- **Else** – An element of an “If-Then-Else” conditional statement. If a condition evaluates to “True,” then only those actions that are “True” are completed. If a condition evaluates to “Else,” only those that are “False” are completed. The “Then” is implied.
- **End If** – This statements ends an “If” command and control returns after the “End If” command.
- **Select** – You use the Select command to identify one or more conditions and an associated group of commands to process when that condition is “True.”
- **Case** – The Case option allows the ability to enhance the query of the Manitou database by building case statements where the true statements provide specific results.
- **Otherwise** – The Otherwise statement is used in the Case statements for items that do not fall within the case.
- **End Select** – This statements ends a “Select” command and control returns after the “End Select” command.

Enhanced Action Pattern Details

The Enhanced Action Patterns builds upon the original Manitou actions and combines Workflow functionality – Scripts, Prompts, and the recording of responses. There are also a number of new action types that are now available including the ability to test and jump (skip/loop). You can use user-defined variables to hold “prompted” responses or “set” values. Variable names always begin with an @ and can contain letters and the underscore (_) character only. The response, if any, from a Send command is placed in the @RESULT variable. You can then test this in an IF or SELECT logic action to present different actions to the user based on the command result.

You use string type comparisons unless both the value of the variable and the value you test are both numeric. For string comparisons, “ME” is greater than “ABC,” but “2A” is also greater than “11A.” Variable tests can be “equal,” “less than,” “greater than,” “less than or equal,” “greater than or equal” or “not equal” (=, <, >, <=, >=, <> respectively). Tests of a variable can be against a fixed value or another variable. You use the new SET action to give a variable a value. Examples include “SET @A = 1” or “SET @A = @A + 1.”

The Enhanced Action Patterns allow a powerful use of a template-like structure at a higher level (Company or Dealer) and then specifics can be specified and/or overridden at a lower level (Dealer or Customer) to make dynamic, custom actions (via the INCLUDE action).

The system attempts to resolve as much of the action items as possible when you first access an alarm. All non-variable and non-live alarm state values based IF/ELSE, SELECT/CASE logic trees are evaluated and only the specific, correct sections will be included in the presented actions list with all of the surrounding logic and “false” sections removed. This includes resolving INCLUDE actions and any embedded logic items within them.

```
SELECT EVENT CATEGORY
```

```
CASE = BURG
  INCLUDE ACTIONS FROM ACTION PATTERN ‘BURG’
CASE = FIRE
  INCLUDE ACTIONS FROM ACTION PATTERN ‘FIRE’
CASE = PANIC
  INCLUDE ACTIONS FROM ACTION PATTERN ‘PANIC’
OTHERWISE
  INCLUDE ACTIONS FROM ACTION PATTERN ‘GENERAL’
END SELECT
```

You could use the above template-like action pattern on most alarms where you find the included details based on the specific Dealer/Customer context. Since the SELECT is based on an Event Value, it will be resolved prior to being presented to the user. The only actions that the user will see are the included ones from the appropriate branch. Actions are included by name. If no Action Pattern by the given name can be found, no actions will be included at that place (does not generate any kind of error). The search order is first Customer, then its Dealer, then its Master Dealer chain, then the Company.

Differences from Prior Versions

CALL LIST Action (Elimination of)

Manitou 2.0 has eliminated the **CALL LIST** action by incorporating Call List selection as part of the CONTACT action.

Critical First Action

There is a new property on the Action Pattern set called **Critical First Action**. Selecting this option skips all of the normal introductory comments and notices when an alarm first presents to an operator until a “First Action” is completed. The actions that qualify as a critical action are CONTACT, NOTIFY, SEND, REPORT, PROMPT, CONNECT, and ESCALATE. In addition, cancelling the alarm by operator action also qualifies as a critical action even though it is not explicitly an Action Pattern action.

DEFER Action

DEFER now allows you to direct the alarm to the client type that can pick up the alarm after being deferred (Auto-Client or user). This is useful when creating action sets that contain actions that can be performed by the Auto-Client and then transitioning to others that a user should or must perform (and conversely).

INCLUDE Action

The **INCLUDE** action used to have many selectable parameters to determine whether it was included or not – this has been eliminated. It is expected that the new Logic actions will be used to qualify whether the INCLUDE action is a part of the actions or not.

LAUNCH Action

Manitou 2.0 adds the **LAUNCH** action as a place to initiate access to external data or applications. You can configure user-defined applications in the Manitou Supervisor Workstation which are available as an action LAUNCH type. The three built-in types are URL (Web browser link), Validate P/W module, and Customer Search module.

LOG Action

The **LOG** action can now log the text as a new Maintenance Issue or to the Customer Log as before. The system parses the text to replace action variables with current values as well as any system script variables (for example, {NA} which is the Customer's name).

NOTIFY Action

NOTIFY is a new action type which is similar to CONTACT, except that it is not two-way (for example, send a Text message). Thus, a phone call cannot be a NOTIFY Contact Point Type. The "SMS Phone" type of Contact Point can be either a phone type call or a text message and is thus eligible for NOTIFYs.

CONTACT and **NOTIFY** can specify automation functions (Reverse Commands). This replaces the OVERRIDE WITH OPEN VOICE and the OVERRIDE WITH AUTOTEXT.

Prior Action Completed Action

A new action status that can be tested in an IF statement is **Prior Action Completed**. This will test to see if the action line just above this IF test has a status of "Actioned" or not (labels are excluded, the line above the label will be used).

PROMPT Action

The new **PROMPT** action can prompt for simple text, such as a name or worded recap of the just prior phone conversation. It can also be set to enter a value based upon a range, such as 1 to 5 or a list of values – "1," "2," "5." The list can be set up in such a way as to present descriptive selections with underlying values. For example, the operator can pick from either "Was not happy," "Was okay," or "Was very happy" with values 1, 2, and 3 respectively that get applied to the variable.

PROMPT Action Details

You must select the type of data entered on the PROMPT action. It is either "Number," "Hex Number," "Text," "Upper Case Text," or "List." If the type is "Number," then you can use the Mask field to limit the entry to a particular range (for example, 1-5). For "Text" and "Upper Case Text," the Mask can be a Mask which describes letters, digits, characters, and fixed characters

that describe what the entered value must look like. The mask characters can be any of the following:

- 0 – Digit placeholder (0-9)
- & – Any character (space, letter, number, or symbol)
- A – Any letter or digit (upper or lower case) – entry required
- a – Any letter or digit (upper or lower case) – entry optional
- 9 – Digit placeholder for text prompts – entry optional
- C – Any character (space, letter, number or symbol) – same as “&”
- L – Any letter (upper or lower case)

As a short cut, the square brackets surrounding a numeric value act as a “repeat.” For example, C[20] would set a 20 character prompt Mask that accepts any character (limits the response to 20 characters. 00/00/0000 would prompt for a date like entry.)

For “List” type of data, you must supply a list of possible responses and option descriptions. For example, “0|1|2|4” specifies that there are one of four possible entries (0, 1, 2, or 4). “Y;Yes|N;No|M;Maybe” specifies a list in which “Yes,” “No,” and “Maybe” will be presented to the operator which variable set values of “Y,” “N,” or “M” respectively.

SET Action

You use the new **SET** action to give a variable a value. Examples include “SET @A = 1” or “SET @A =
@A + 1.”

You can use the SET action to give a variable a value. In addition to this, you can use it to perform a database search to return a value (text or number) which the system can test. For example, a SET action could check to see how many alarms from the same zone and area you receive in the four hours. Based upon that result, the system could present different actions to the operator.

Using SQL Statements (SET action)

- The SET action can execute a SQL statement (Select) to populate a variable. An example is:

```
SELECT COUNT(*) FROM CLOG{0} WHERE SERIALNO={ME} AND EVTYPE
IN(0,1,9) AND EVCAT=”{CA}” AND AREA=”{AR}” AND ZONE=”{ZN}” AND
EVDATE >= DATEADD(n, -10, “{DU}”)
```

  The above selects the number of signals, alarms, and ignored signals with the same Event Category, Area, and Zone of the current alarm within the last ten minutes of the

alarm and forward. The result of this query will be at least one (1) since it should at least count the current alarm.

- Note that the customer activity (CLOG) records in UTC time. You must use UTC dates to select the appropriate data.
- {ME} is a special replacement variable for the SET action SQL. It is replaced with the current alarm Customer's Serial Number (how data is recorded in Customer Activity).
- Note that you must use the double quote characters around string fields (not the typical single quote).
- Since Customer Activity is in separate tables by month, the notation CLOG{0} selects the current month. CLOG{1} is the prior month and so forth. Since UTC day transitions could happen within the last ten minutes (as this example), the query really needed to check the current month and the prior month. Standard SQL applies. This query would be more accurate regarding the above qualification as follows:

```
SELECT ( SELECT COUNT(*) FROM CLOG{0} WHERE SERIALNO = {ME} AND
EVTYPE IN(0,1,9) AND EVCAT=”{CA}” AND AREA=”{AR}” AND ZONE=”{ZN}”
AND EVDATE >= DATEADD(n, -10, “{DU}” ) + (SELECT COUNT(*) FROM
CLOG{1} WHERE SERIALNO = {ME} AND EVTYPE IN(0,1,9) AND
EVCAT=”{CA}” AND AREA=”{AR}” AND ZONE=”{ZN}” AND EVDATE >=
DATEADD(n, -10, “{DU}” )
```

or,

```
BEGIN;  DECLARE @A INT;   DECLARE @B INT;   SET @A = ( SELECT
COUNT(*) FROM CLOG{0} WHERE SERIALNO = {ME} AND EVTYPE IN(0,1,9)
AND EVCAT=”{CA}” AND AREA=”{AR}” AND ZONE=”{ZN}” AND EVDATE >=
DATEADD(n, -10, “{DU}” );   SET @B = ( SELECT COUNT(*) FROM
CLOG{1} WHERE SERIALNO = {ME} AND EVTYPE IN(0,1,9) AND
EVCAT=”{CA}” AND AREA=”{AR}” AND ZONE=”{ZN}” AND EVDATE >=
DATEADD(n, -10, “{DU}” );   SELECT SUM(@A + @B);   END;
```

The query is not limited to just Customer Activity. A person knowledgeable in both SQL and Manitou table schema should construct the SQL for a SET statement.

SHOW Action

The **SHOW** action is now the place to select to view a customer.

Workflow (Elimination of)

Manitou 2.0 has **eliminated Workflows** and incorporates any unique functionality into the new Enhanced Action Patterns.

Script Messages

Script Messages can be attached to any CONTACT action and is required for any NOTIFY action (text of one-way message to send).

Label Names

Label Names must be unique within an Action Pattern set. However, included actions can have a label name that duplicates a label in the main set of actions, but the system is able to distinguish between them (even if included multiple times).

JUMP TO Label

A **JUMP TO** label reference must exist in the current set of actions (that is, it can't jump to a label inside an included set of actions). If jumping "up," the system assumes that it should retry the block of actions between the JUMP TO and the label specified. This will cause the system to clear any previous action status except for CONTACT or NOTIFY attempts that were completely successful.

System Scrips Variables

Manitou 2.0 adds several **new system script variables**:

- {GC} = Customer Group Code.
- {CT} = Customer Type.
- {DN} = Alarm event date/time – The local time the event occurred in Manitou 2.0.
- {DT} = Event Date – The date the event was sent into Manitou 2.0.
- {DU} = Alarm Event date/time – The UTC time the event occurred in Manitou 2.0.
- {TM} = Event Time – The time the event was sent into Manitou 2.0.
- {AT} = Alarm Event audible type (Silent or Audible).
- {ET} = Event Description – The description of the alarm event sent into Manitou 2.0, such as: Burglary Alarm, Fire Alarm, Opening, Closing, and so on.
- {PR} = Event Priority – The priority of the alarm event sent into Manitou 2.0.
- {DE} = Event Code – The Manitou 2.0 code of the event sent into Manitou 2.0, such as: BA, FA, MA, PA, *E, and so on.
- {CA} = Event Category – The Event Category that contains the alarm sent into Manitou 2.0, such as: FIRE, BURG, SYS, and so on.
- {AR} = Event Area – The number of the Area tripped for the event sent into Manitou 2.0.
- {AD} = Area Description – The description of the Area tripped for the event sent into Manitou 2.0, such as: Main Floor, Warehouse, Basement, and so on.
- {ZN} = Event Zone – The number of the Zone tripped for the event sent into Manitou 2.0.
- {ZD} = Zone Description – The description of the Zone tripped for the event sent into Manitou 2.0, such as: Front Door, Back Door, 3rd Floor Pull Station, and so on.

- {PO} = Event Point ID – The description of the event tied to the Programming Point ID column for the event sent into Manitou 2.0, such as: Heat Sensor #3, Water System, and so on.
- {CM} = Event Comment – The description of the person or other comment tied to event sent into Manitou 2.0.
- {FE} = FEP No. – The number of the Front End Processor that received the event passed into Manitou 2.0.
- {RE} = Receiver No. – The number of the Receiver that received the event passed into Manitou 2.0.
- {LI} = Line No. – The physical line on the Receiver that received the event passed into Manitou 2.0.
- {RL} = RL Prefix – The prefix assigned to the physical line on the receiver or to the DNIS digits.
- {TX} = Transmitter ID – The account number of the equipment at the location.
- {TT} = Transmitter Type – The default Transmitter Type assigned to the Transmitter receiving the signal into Manitou.
- {CN} = Customer ID – The Customer Account Number.
- {NA} = Customer Name – The display name of the Customer record.
- {A_1} = Customer Address Line 1 – The primary street address for the Customer record.
- {A_2} = Customer Address Line 2 – The secondary street address for the Customer record. Such as: Apartment Number, Suite Number, and so on.
- {A_3} = Customer Address Line 3 – The third street address for the Customer record.
- {CS} = Customer Cross Street.
- {CV} = Customer Subdivision.
- {AC} = Customer City/Town – The city in which the Customer record resides.
- {AS} = Customer State/Province – The region in which the Customer record resides.
- {AP} = Customer Zip/Post Code – The zip code or postal code in which the Customer record resides.
- {CC} = Customer Class Code.
- {CG} = Customer Group Code.
- {PH} = Customer Telephone Number – The primary telephone number for the Customer record.
- {BC} = Customer A/R Company.

- {BN} = Customer A/R Number.
- {AN} = Alarm Company Name – The name listed on the Monitoring Company record.
- {RN} = Callback Telephone Number – The number provided to the recipient to call back.
- {DI} = Dealer ID – The Dealer ID listed on the customer record.
- {DL} = Dealer Name – The installer listed on the customer record.
- {BI} = Branch ID – The Branch listed on the customer record.
- {BR} = Branch Name – The name of the Branch listed on the customer record.
- {PT} = Panel Type – The Panel type listed for the System on the customer record.
- {PD} = Panel Description – The Panel description listed for the System on the customer record.
- {PC} = Panel Type Comment – The Panel Type comment listed for the Panel Type listed on the System for the customer record.
- {YN} = System Number – The number of the system for the event tripped on the customer record.
- {YD} = System Description – The description of the system for the event tripped on the customer record.
- {YT} = System Type – The type of system for the event tripped on the customer record.
- {YI} = System ID – The ID of the system for the event tripped on the customer record.
- {SN} = Event Sensor – The sensor tripped on the event for the customer record.
- {DV} = Event Device ID.
- {DD} = Event Device Description.
- {SC} = Event Sector.
- {SD} = Event Sector Description.
- {UC} = Contact Name – The name of the person on the Contact List for the Customer record.
- {UP} = Contact's Contact Point – The phone number, or other contact point, of the person on the contact list.
- {UT} = Contact's Contact Point Type – Phone, email, or other contact point type of the person on the contact list.
- {US} = Contact's Subtype Description – How the person is listed based the number correlation to the Subtypes card. (Found in the Supervisor Workstation – Subtypes)
- {UD} = Contact's Contact ID.

- {VR} = Event Confirmed Status.
- {UL} = UL Grade – Pulls from the UL Grade list found within the Supervisor Workstation that is applied to the customer record.
- {RT} = UL Response Time.
- {UI} = User/Operator ID – The ID of the Manitou 2.0 user.
- {RD} = Report Description – The name of the report included in the outgoing email. This is ONLY used for Email body text.
- {AF} = Attach Data File (When applicable).
- {ME} = The serial number of the customer record, used for Enhanced Action Pattern (EAP) queries.
- CLOG{$_0$} = The Customer Activity Log for this current month.
- CLOG{$_1$} = The Customer Activity Log for the previous month each number in the {} represent how many months back. They must be in order 0, 1, 2, and so on.
- {U_1} through {U??} = User Defined Fields – The link to the applicable user Defined field to be included in the outgoing message.

Qualify Action Pattern Set

You can **qualify an Action Pattern set** with a “From” and/or “To” Date. This allows the set to be valid starting from a particular date in the future, cease to be valid upon reaching a particular date in the future, or be valid for a particular range of dates. You can use this to create an Action Pattern set that you will use temporarily to override a more general one at a higher level. This can be a main Action Pattern set or an included one to do something different for a period of time.

INSCHED() Programming

There is a new IF test of **INSCHED()**. This will test the selected General Schedule, of Action Pattern type, to see if it is currently scheduled (uses Customer local time). This allows the system to perform different actions based on time of day.

All IF tests that are Yes/No (True/False) can be inverted with a NOT property (for example, IF NOT Site On Test). You can also use this with INSCHED (for example, IF NOT INSCHED(x)).

Silent() Programming

There is a new **Silent() programming** function which marks an alarm as being silent (holdup). By default, the assumption is to be “Audible.” This can be tested on an IF logic line to do something different if silent v. audible.

Auto Property

There is a new property that applies to all actionable items which is **Auto** (the system automatically performs the action if it is the next “to do”).

Hidden Property

Hidden is an additional property which will cause the action to not show in the list of actions presented to the user. An item must first be Auto before it can be Hidden. LOG and SET are currently the only two types of actions that can be Hidden.

Specifics of Alarm Handling in Relation to Enhanced Action Patterns

1. Alarm Handling
    a. Defer
        i. Normal
        ii. To Auto-Client (signals the end of actions to be performed by the user)
        iii. To operator (signals the end of actions to be performed by the Auto-Client)
    b. Suspend (with optional new alarm priority setting)
        i. Seconds
        ii. Minutes
        iii. Hours
        iv. Until (selected Action Pattern type General Schedule becomes “in schedule”)
    c. Close (with optional Resolution Code pre-fill)
    d. Escalate (create a new alarm – can be directed to a different customer)
        i. Customer (with option to allow user to change before new alarm is created)
        ii. Event Code
        iii. Monitoring Group
        iv. Transmitter Number (with option to allow user to change before new alarm is created)
        v. Area (with option to allow user to change before new alarm is created)
        vi. Zone (with option to allow user to change before new alarm is created)
        vii. Force Close of original alarm
        viii. Resolution Code pre-fill (when original is force closed)
2. Entity Handling
    a. Contact (select entity and optional Contact Point or call list if not a person – optional Automation Type and optional Script Message)
    b. Notify (select entity and optional Contact Point or Call List if not a person – optional automation type and optional script message – optional Broadcast setting will cause automated notification to all of the appropriate Contact Points of the specified Call List)
    c. Report (select entity and optional Contact Point or Call List if not a person)
3. Action Handling
    a. Wait (was Workflow function)
    b. Include
    c. Jump To (changes the next “to do” to be the first un-actioned item below the selected label – can jump up or down)

    d. Label (marker for Jump To action – must be unique for a given Action Pattern)
4. Data Handling
    a. Launch (pick type and optional application)
    b. Show
    c. Prompt (describe data type and range/select list)
    d. Set
    e. Remark
    f. Log Line (select whether to log to Customer Activity or create a Maintenance Issue)
5. External Handling
    a. Send
    b. Connect
6. Logic Handling
    a. If
    b. Else (optional section if the IF test failed)
    c. End If (required for each IF)
    d. Select
    e. Case (one or more – if only one, then IF may be a better choice)
    f. Otherwise (optional ketch-all if none of the preceding CASE tests were true)
    g. End Select (required for each SELECT)

Check-Ins

The Check-In function allows a central station to provide a service for periodic or scheduled Check-Ins by an individual or asset. Check-Ins can occur through a variety of ways, such as a cell phone. For example, an individual can call into the Voice Response module of the Bold MediaGateway to perform a Check-In by navigating through MediaGateway's menus and providing identifying information that satisfies certain parameters set up by the Customer. When available, the cell phone can also provide GPS coordinates to plot the location onto a map. MediaGateway would then submit a signal into the core Manitou system to complete the operation.

Most users will use the Check-In functionality through the use of a schedule or on an ad-hoc basis. If using schedules, it will define the days and times the Check-In service is active, as well as the interval in which Check-In signals are expected. On an as-needed basis, however, the individual will initiate contact by delivering a "Start Check-In" signal. As-needed tracking still requires a proper tracking entry for the individual or asset with an appropriate General Schedule. Until Manitou receives a “Stop Check-In” signal, it will continue to provide the service.

You can use Check-Ins with the following systems:

- Event Monitoring
- Access Control
- GPS Tracker

General Schedules and Check-Ins

Manitou uses General Schedules as the schedule for Check-In services. You create them similarly to other General Schedules; however, you must select **Check-In** from the **Schedule** drop-down list.

From the **General Schedule**s card, enter the appropriate schedule parameters and set the Check-In Interval (in minutes). The **Schedule Type** should be **Check-In**.

The **Start1/End1** columns in the schedule establish both the start time and the window in which a Check-In can occur. For example, setting a **Start1/End1** combination of 09:00 and 09:10 both sets the start time at 09:00 and establishes a Check-In window of 10 minutes, allowing Check-Ins between 09:00 and 09:10. Outside that window, Check-Ins will be unexpected.

Depending on the Check-In Interval, the current Check-In cycle's Check-In window will be the previous Check-In window plus the interval. Generally, the window should be smaller than the interval, otherwise the Check-In and Check-In late behavior will not be correct. A possible side effect of a larger window will cause the next Check-In to push progressively out until it hits the end of the window. If this occurs, unexpected Check-Ins will not occur until the Check-In is pushed out as far as it can be pushed. With an interval of 60 minutes and a **Start1/End1** combination of 09:00 and 09:10, a Check-In occurring between 9:00 and 9:10 will cause the subsequent Check-In window to start at 10:00 (though not displayed in the client) and the Check-In late to be 10:10.

The **Start 2/End** 2 columns govern the window in which the final Check-In will occur.

Tracking Entries / Asset Tracking

You add tracking entries on the **Customer Systems** card through the GPS system. The **Asset Tracking** card displays the Customer's tracking grid for the system.

Note: If you set a System Monitoring Type's Asset Tracking Limit to zero, the **Asset Tracking** card will not display for the system. You configure Monitoring Types in the Manitou Supervisor Workstation.

Fields

- **ID** – Used to enter the five-digit unique identifier within the system. You define this ID number and it can be any series of characters: letters, numbers, or special.
- **Ad Hoc** – Select this check box if Check-In will occur as needed, at unplanned intervals. Please note that a General Schedule is still required for ad-hoc entries.
- **Linked to Contact** – A read-only field that marks whether or not the entered contact name links to a contact.
- **Schedule** – Used to add a schedule to the Asset Tracking in which the Check-In must occur. These schedules are set up on the **General Schedules** card.

- **Interval** – Sets the minutes between Check-Ins. This value is pre-populated off the General Schedule interval values when a General Schedule is assigned to the asset. However, you can change the value for intervals if needed. Intervals cannot be less than five minutes.
- **Last Status** – Displays the current tracking status and you use it to determine if a Late-to-Check-In has occurred.
- **Last Location** – Displays the last GPS coordinates received for an active tracking entry. The field clears when the tracking status is changed to "stopped."
- **Check-In Late** – Displays the end date and time for the current expected Check-In signal window.
- **Cycle End** – Displays when the current tracking cycle will end. If the Asset Tracking record is not ad-hoc, you can adjust this value to end a tracking session early or to extend it later. For example, if a schedule protecting an individual ends at 17:00, the person can notify the Monitoring Company to be monitored until 21:00.

The *Next Check-In Cycle* items allow you to modify the next Check-In cycle manually.

Note: Ad-hoc configurations cannot make use of the **Next-Check-in Cycle** options.

- **Check-in Start** – The start date and time for the next expected Check-In signal window.
- **Check-in Late** – Displays the end date and time for the next expected Check-In signal window.
- **Cycle End** – Displays when the next tracking cycle will end. This allows you to adjust the next tracking cycle if it is not ad-hoc. For example, if a schedule specifies 08:00 – 17:00, M – F, and on Friday, the contact notifies the Monitoring Company that the contact will work from
  08:00 – 7:00 on Saturday and need tracking, the Monitoring Company can make the necessary changes.

Note: You can delete tracking entries by highlighting the asset row and pressing the **Delete** button.

Transmitter Programming

You can find the Transmitter Programming for Asset Tracking in the **Track ID** column. This column links each line of Programming to a matching asset entry. GPS Programming lines that omit the Track ID are not associated with tracking functionality, even if it is a Tracking Event Code (or includes soft Programming attributes).

Event Maps

Event Maps provide definitions of Event Codes used within Manitou and can be used to view any Event Code that might appear in Manitou. This function is particularly useful for identifying less-frequently encountered codes.

Event Maps is a read-only display summary. You can select a Protocol from the **Protocol Format**
drop-down list and view the configured Event Maps and associated protocols, but you will not be able to change settings, and so on. For a full explanation on how to set up Event Codes and Event Maps, please refer to the *Manitou Supervisor Workstation User Guide*.

Transmitter Linking

When you add a second system to Event Monitoring, Transmitter Linking becomes available. You use Transmitter Linking with sub-accounts and to direct signals to other systems of the same Customer or to other systems of a sub-account. This allows for more control of signal redirection.

You can also use Transmitter Linking to map messages to a different Event Monitoring system within the same account (for example, separate Fire and Burglary systems are set up, but the messages are physically received from the same transmitter).

Sub-account directing is no longer on the Area and Zone grids. A new grid exists at the Transmitter Level that is used to direct signals to other systems of the same Customer or to other systems of a
sub-account. This replaces the Transmitter Linking grid that is no longer needed. This allows for more control of signal redirection. For example, Zone 1 signals from transmitter 1 of System 1 can be redirected, but Zone 1 signals from transmitter 2 of the same system can be left alone.

Multiple Test Timers

Multiple test timers are first set up in the Manitou Supervisor Workstation under Event Codes. You must take the code that is coming in and change it to a code with the soft programming attribute of "t". This lets the system know that the test signal should not be applied to the main transmitter.

In Manitou, programming must be set up at the Customer Transmitter Programming level to redirect the incoming signal. You cannot specify zero as the zone; it must be left blank as Manitou will strip zeros. You can also use an asterisk (*) instead of a blank Zone, but note that if different panels exist with the same signal number, they all might be sending the same signal, but with different Zone numbers. Using an asterisk will take precedence over all other programming lines when used with raw programming.

Web Membership User

You use the **Web Membership User** card to manage BoldNet Neo users by allowing addition, edits, or deletion of accounts, or to temporarily locking users out of BoldNet Neo access. All of the user accounts are associated with the Contact List person(s).

Note: If Contact Web information is missing, the following message displays next to the **Add** button: *Contact must have a password, Web Access ID, and web profile to add a web profile.*

Fields

- **Password** (User Account Security Details) – The user's password.
- **Security Question** – The challenge question to ask the user if the person can't remember the password.
- **Security Answer** – The user's answer to the challenge question.

  Note: By answering the security question with the answer given on the **Web Membership User** card, the user will then have the username and password sent to the email address provided on the **Web Membership User** card. The user will then be able to reset the password by way of the link given in the email.
- **Locked Out** – There are times when a user might need to be locked out of BoldNet Neo. In such a case, select this check box. Once access has been reinstated, you can clear the check box.
- **Web Access ID** – The Manitou account identification to which the Web Membership is tied.
- **Password** (Manitou Credentials) – The user's password for Manitou.

Permits

The **Permits** card lists all permits held by security companies and other protective services like the police, fire, and medical services. Additionally, **Permit** cards detail the types of alarm each company handles as well as the active dates and expiration dates for each Permit. Information on this card depends on the Permit Type information entered through the Manitou Supervisor Workstation.

Fields

- **Permit No.** – The permit number. You might need to contact the central station administrator for numbering instructions.
- **Authority/Permit Type** – The type of permit, for example, for the police.
- **Status** – Indicate the number of allowable False Alarms for the account.
  - **Unknown** – Indicates that the number of allowed False Alarms is unknown and it is unknown if Authorities are able to respond.

    - **Normal** – Indicates the normal number of allowed False Alarms, while **May Respond** indicates that Authorities may respond to the Customer site.
    - **May Respond** – Indicates that the Authorities may respond to the instance.
    - **No Response** – Indicates that Authorities may not respond to the Customer site.
- **False Alarms** – An auto-filled column which shows how many False Alarms have come in associated with that particular Permit.

Transmitter Types

A Transmitter is a device located at a Customer premises that communicates with the alarm communications receivers connected to the system. You can identify the specific transmitter within the Customer record, along with associated details such as the protocol that it is using.

With the **Transmitter Types** card, you can create a list of communicator types that are in common use throughout the central station's Customer base. Creating and maintaining a list greatly simplifies setting up new Customers and Dealers since information contained in this list is made available to the operator when creating a new Customer or Dealer record.

To go to the **Transmitter Types** card, click **main menu**  **| Maintenance | TX Types**.

Fields

- **Copy From** – Used to copy from a transmitter system that already exists. If yes, select it from the drop-down list. If no, leave this field blank.
- **ID** – The transmitter identification or Reference Code.
- **Type** – The System Type or Monitoring Category in which the system uses.
- **Protocol Type** – The communications procedure normally used by the Transmitter Device.
- **Reverse Command Protocol** – The protocol that will identify how Manitou handles Reverse Commands for this transmitter. If your central station will not be using Reverse Commands, select **None**.
- **Transmitter Input ID** (section) – Select whether the Base is Decimal (10 as its base) or Hexadecimal (16 as its base). Enter the Minimum and Maximum values for Group 1, 2 and 3 (as applicable), and if there is a Separator for Groups 1 and 2.
- **Transmitter Input ID** – The Transmitter Data Feed identification number.
- **Audio Capable** – This option indicates if the transmitter is capable of Transmitting audio signals for alarm confirmation.
    - **Create Call Session (no listen in)** – Manitou normally receives audio signals in two parts. The first part of an audio signal is the alarm. The second part of the signal informs Manitou that an audio communication will soon arrive, and that it needs to listen in for its arrival. Certain signals, however, arrive in two parts like

audio signals, but are not solely comprised of audio. The Linear 4200 Panel, for example, sends an IP signal and then sends a cellular voice call. Selecting this check box creates a session to receive cellular voice calls for signals when no listen-in session is created.

    - **Drop Listen In if No Alarm** – Select this option to end the listen-in session if no audio component arrives within the timeout time.

- **Video Capable** – Select this option if the transmitter is capable of transmitting video signals for alarm confirmation.
- **Raw Event Programming** – This option indicates that raw Event Programming is possible for this Transmitter Type.
- **Monitored Transmission Path** – Select this option if the communications path between the transmitter and the central station is monitored, for example, in the case of BT Red Care.
- **Generate L-T-T Only When Closed** – Select this option if Manitou will generate a Late-to-Test alarm ONLY when the premises are closed.

Transmitter Programming

Programming is required for every system to ensure proper account processing. The Programming items define and decode the information coming in from the transmitters through the receivers. For example, some transmitters send a generic message that an alarm sounded in a specific Area or Zone. The receiver then passes this message to the application. However, the system doesn't know what that activation on that Area or Zone means without the Programming. The Programming is there to translate the activation on that Zone to a burglary, fire, or other alarm on that Zone. Also, Programming will allow for the definition of specific actions to complete on the alarm, such as to call the police and then the Keyholder on the account.

The **Input** section communicates to Manitou which type of signals should be associated with this Programming entry. You should enter the information here very carefully and it will vary from account to account.

- **Event** – Manitou Event Code associated with the alarm. You can type a valid code or select from the drop-down list.
- **Sensor** – The control sensor for the alarm. You can type in a sensor, or use an asterisk (*) to designate "Any."

The **Output** section communicates to Manitou what the incoming (Input) signal information means. You mainly use this for non-intelligent signal formats.

- **Event** – Manitou Event Code associated with alarm. You can type a valid code or select from the drop-down list.

- **Description** – The Description will auto-fill based on the Event Code selected; however, you can overwrite the description.
- **Sensor** – The control sensor for the alarm. You can type in a sensor, or use an asterisk (*) to designate "Any."
- **Point ID** – Area, Zone, or Point identifier description defining the alarm location or detail.

Color Indications

Please note what the colors mean for transmitters listed on the **TX Programming** card:

- **White** – This color indicates the programming was created by a Customer.
- **Green** – This color indicates the programing was created at the Transmitter Type level.
- **Pink** – This color indicates the programming was created at the Dealer level.

Filters

The transmitters listed can be filtered by **All**, **None**, or “Specific Transmitter.”

- **All** – This option displays merged data Transmitter Types and Dealer level entries.
- **None** – This option displays Customer level entries only.
- **Specific Transmitter** – This option displays the selected Transmitter Type and Dealer level entries.

Transmitter Programming Commands (Special Processing)

To add or edit Transmitter Programming Commands, do the following:

1. Select a Customer.
2. Select **Systems** .
3. Select a specific subsystem.
4. Select **Programming**.
5. On the **Transmitter Programming** card, click **Edit** .
6. Under the **Special Processing** section of the **TX Programming Edit** card, click **Edit** . Please note that depending on your screen size, you might have to scroll to the right to see
   the **Edit** icon.
7. Add or edit at the **Transmitter Programmer Commands** card.

Audio

The Audio command indicates that the signal has audio capabilities as well as defines what audio commands are available. When adding a transmitter to a system, you must select the **Audio Capable** check box to use this command. When the Audio command is added to the programming, you can select between **Yes** and **Listen**.

At times, an active Customer might receive an audio signal which is not in test. When this occurs, this Programming Command will force the signal to become an alarm so that operators can respond accordingly.

Fields

- **Type** – Select **Yes** for two-way and **Listen** if no-talk mode is allowed.
- **Delay** – Amount of seconds the alarm will be delayed, waiting for the audio to become available.

CanCancel

The CanCancel command allows a signal to be canceled (removed from the **Alarm Queue** and logged) when a second qualifying cancel signal arrives. To enable this command, you must select the
Auto-Cancel check box on the **Options** card.

Selecting the **Auto-Cancel** option indicates that alarms can be canceled out of the **Alarm Queue** without operator interaction if a qualifying signal or alarm arrives within the specified amount of time.

Once the **CanCancel** programming option has been added, you have several options from which to choose.

Note: For the **CanCancel** command to work, the expected cancel signal must have "Cancel" capability from the Event Code, or by using the CanCancel command and the signal containing the same Transmitter and Area.

Fields

- **Event** – Select the Event Code that can cancel the alarm, or asterisk (*) for any event. The Event System is looking to receive the signal on the output side of the programming. Therefore, if an activation (*A) is translated to a restore (*R), the event will be the Restore.
- **Zone** – Select the Zone that the cancel signal should come from, asterisk (*) for any zone or equal sign (=) for the current signal's Zone.

- **Timeout** – The timeout is the window in seconds that a cancel signal is allowed to cancel the alarm. The alarm is initially hidden for this timeout period.
- **Abort** – Selecting the **Abort** option will force a close of the alarm if the signal arrives within the timeout period.

Note: The CanCancel keeps the event in a pre-alarm state and will not drop to the alarm-handling operator until the time-out is complete. If this is set to the maximum number of seconds (3600 seconds or one hour), the event will be an hour old before an operator sees it if the cancel event does not arrive to cancel it.

Check to ensure that the following parameters are set for the CanCancel to work as wanted:

- The Event Code that will be canceled.
- The Event Code that can do the canceling.
- The programming line indicating the event in a certain Zone can be canceled by another event.
- The canceling event indicating it is the canceling event.
- Setting permissions to Auto-Cancel at the Customer level.

Cancel

The Cancel command gives the signal cancel abilities so that it is capable of canceling another signal. The canceling signal must have cancel properties for the Cancel Programming Command to work. If the event does not have cancel properties, the soft programming (Signal Processing Commands) will only cancel a "CanCancel" event within 10 minutes of the alarm arrival. If the CanCancel is set for a timeout greater than 10 minutes (600 seconds), you must attach the Cancel property to the canceling event, regardless of whether or not the event has the property by default.

Confirmed

The Confirmed command will change an Event Code from a signal to the Event Code specified in this Programming Command. The system must receive the second signal within the timeout period in order for this to occur.

The first signal is suspended for the designated timeout seconds, waiting for a possible second signal. If the second signal is received within the timeout period of the first signal, the first signal is logged and the second signal will become the Event Code that was specified. If a second signal is not received within the timeout period, the first signal presents as a normal event. A Line Fault signal can be considered to be the first signal for any ID group and is indicated by setting ID to “*”.

You can use Line fault signals as the first confirmation signal, regardless of the Confirmation ID. However, this will not be delayed or force logged as with other signals, but it will still hold the alarm. The line fault signal must have this command specified with the Confirm ID set to “*”. Using an asterisk indicates that the Event Code has no meaning for line fault signals.

Fields

- **ID** – This is the identifier to link together signals of the same confirm group. Use “*” for Line Fault.
- **Event** – This is the Event (Code) that the signal becomes. This only applies if this is the second signal to be received.
- **Timeout** – This is the delay time (in seconds) that the first signal will wait for a second signal in the same group.

Dual

You use the Dual command when there are two signals from two different transmitters expected for the same event, and the signals should be paired together. These two signals must have the same dual Signal ID and same Event Category.

The signals are marked as primary or secondary signals, with the primary signal needing to be received first. A signal should be chosen as Primary if it has the most detail regarding the event. The secondary is the signal with the least amount of detail. If the secondary signal is received first, it will be delayed based on the amount of time set in the Manitou Supervisor Workstation options. In the event that this occurs, a Missing Dual alarm is generated.

Note: You must select the Dual Signal Monitoring Service on the Customer record for this command to work properly.

Fields

- **ID** – Identifier to link together signals of the same dual group.
- **TX NO.** – Transmitter number that will also send a signal for this same event.
- **Type** – Dual signal type: "Pri" = Primary; "Sec" = Secondary; "Dis" = Dispatchable Secondary.

EntryExit (EntryType)

You use the Entry/Exit command when signals are sent prior to an Opening signal, and after a Closing signal. Please note that the panel itself does not handle Entry/Exit Delays.

You must select Entry/Exit Delay on the **Transmitter Programming Commands** card. In addition, the record must also have Open/Close service and the signals must be for the same Area. Entry Type is set to “1” for the signal to be tripped at the start of the entry process. This is

also the last one to be tripped on the exit process. Entry Type is set to “2” for all other signals or to “3” if there are multiple Entry/Exit signals which might be the first/last signal. Entry Type “4” ends an Exit cycle and you can use it as an immediate signal, while “5” starts an Entry cycle or ends an Exit cycle.

The Customer Monitoring Service for Open/Close is required and must be active for this system and Area. The Monitoring Service for Entry/Exit is also required and must be active for this system or the command will be ignored. This Monitoring Service specifies the timeout period for the entry or exit cycle.

The signals that will participate in this process must also contain the Signal Processing attribute of “m” and “n”. The “m” attribute is not set on any events by default to ensure that each company sets this based on their specific company practices and makes a reasoned decision before using this feature. The “n” attribute, if ”c,” “d,” or “e” is true, then this option tells the Signal Handler to delete the alarm if it has been canceled when the alarm state is new or new/suspended. If the wanted outcome is to remove this alarm from the **Alarm Queue** if the opening or closing occurs within the prescribed time period, then the “n” command is also required.

IfClosed (Event, Alarm)

You use the IfClosed command to change a signal to a specified Event Code if the Area associated with the signal is closed when it is received. Customers must have an Open/ Close Monitoring Service for this command to work properly.

Fields

- **Event** – Event (Code) that the signal becomes if the Area is closed.
- **Alarm** – Alarm indicator: Yes = Signal is forced to be an alarm; No = Signal is forced to be logged; Default = Alarm or Signal depending upon Event Programming or event default.

IfOpen (Event, Alarm)

You use the IfOpen command to change a signal to an Event Code if the Area associated with this signal is open when it is received. This is only allowed if an Open/Close Monitoring Service is active.

Fields

- **Event** – Event (Code) that the signal becomes if the Area is open.
- **Alarm** – Alarm indicator: Yes = Signal is forced to be an alarm; No = Signal is forced to be logged;
  Default = Alarm or Signal depending upon Event Programming or event default.

InSched (Sched No., Event, Alarm)

You use the InSched command to change a signal's Event Code to another specified Event Code if it is received according to the acceptable times and days of the specified general programming schedule indicated when it is received. Users can set up a programming schedule under General Schedules as well.

Fields

- **Sched No.** – General (programming) Schedule to be used.
- **Event** – Event (Code) that the signal becomes if the signal is scheduled.
- **Alarm** – Alarm indicator: Yes = Signal is forced to be an alarm; No = Signal is forced to be logged; Default = Alarm or Signal depending upon Event Programming or event default.

InTest (Event, Alarm)

You use the InTest command to change a signal to an Event Code if the signal is On Test when it is received. In other words, if a specified signal arrives and the Customer's system is currently On Test, the command will convert the original signal to the signal that is specified. This way, the signal can be actioned by an operator.

Fields

- **Event** – Event (Code) that the signal becomes if the signal is In Test.
- **Alarm** – Alarm indicator: Yes = Signal is forced to be an alarm; No = Signal is forced to be logged; Default = Alarm or Signal depending upon Event Programming or event default.

Pri (Priority)

You use the Priority command to change a signal's priority by overriding the default Event Priority. This is only valid if the signal becomes an alarm. Users can override the priority by selecting a Priority Number.

RestCat (EvCat)

The RestCat command gives restore by Event Category qualities to the signal that might not otherwise be known as a Category Restore. Users can choose the Event Category of signals to restore.

Restore ()

The Restore command gives restore by Event Category qualities to the signal that might not otherwise be known as a restore.

ResRq (Event, Zone, Timeout)

You use the ResRq command to indicate that this signal requires a Restore, but is not dependent on whether or not the signal becomes an alarm. This might be of help if a Burglary Alarm on a Zone is mistakenly set off. The system should be sending a restore signal to restore the Zone back to a normal state. This way, the next time the alarm trips, it is not a secondary trip of the same Zone, but rather a first trip of the same Zone.

If Timeout is non-zero and the transmitter has **Generate Restore Overdues** enabled, a Restore Overdue signal generates after Timeout minutes, if an appropriate restore signal is not received.

Note that the restore signal must have "Restore" capability from the Event Code or by using one of the Restore-type Programming Commands. If the Programming Commands are used, the signal must be from the same Transmitter and same Area.

Fields

- **Event** – Event (Code) of the expected Restore signal.
- **Zone** – Zone of the expected Restore signal or “*” if any Zone of type event is to restore this signal, or “=” for the current signal’s Zone.
- **Timeout** – Delay time in minutes that this signal will wait for a Restore signal before generating a Restore Overdue event, or “0” if no Restore Overdue is to be generated.

Suspend (Timeout, Hidden)

The Suspend command will suspend and optionally hide alarms when first received. If the signal is hidden while on suspension, it will not display on the **Alarm Queue**. If the signal is not hidden, it will display on the **Alarm Queue** with a status of **Suspended** and will not be auto-dispatched to an operator until Suspend time has expired. An operator can select the alarm from the queue which would have the effect of canceling any remaining suspend time.

Note: Bold Technologies recommends not to combine this command with any other command that performs an initial hidden Suspend, such as a Confirm command.

- **Timeout** – Delay time in seconds that this signal will suspend.
- **Hidden** – Hidden indicator: Yes = Signal is hidden while suspended; No = Signal is not hidden.

TempClose (Window)

The TempClose command creates a Temporary Close window when an Open signal is received. Customers must have an Open/Close service for this signal to work properly. The **Window** field indicates the time of the Temporary Close window in minutes.

TwoTrip (ID)

The TwoTrip command will require two signals of the same ID to be received before considering the event to be a real signal and generate an alarm. Also, the Customer must not have **UL Policy Licensed** selected, and the signal must be allowed through its signal processing attributes to participate in Two-trip delays.

Important: To disable UL compliance for a Customer, open the Manitou Supervisor Workstation. Click **Maintenance | Setup | Country**. Next, select **Country Setup** from the **Jump To** menu, and if selected, clear **UL Policy Licensed** from the **Country Options** section.

The timeout for expecting the second signal is a system parameter setting in the Manitou Supervisor Workstation options. The first signal is ignored, but logged. If a second or following signal is received within the timeout period of the first signal, then the subsequent signals are handled normally. The Transmitter Number and Event Category on the Event Code must be the same for Two-Trip to work.

Monitoring Service for Two-Trip must also be active on a Customer account, or the command will be ignored.

You must apply the Two-Trip signal processing attributes to the output Event Codes, not the input. Therefore, if an activation on Zone one translates to a Burglary Alarm, then the attribute must be on the Burglary Alarm, not the activation. The signal's Event Code must have the **Two-Trip Delay** attribute specified.

- **ID** – Identifier to link together signals of the same Two-Trip group.

User (ID, Override)

The User (ID, Override) command sets the signal’s User ID information (effective panel User ID) if not already supplied in the signal itself. Generally, the ID is sent in as part of the signal or as the Zone number when the signal is an Open or a Close type of event.

- **ID** – Panel User ID or “*” if the signal’s Zone is to be used as the User ID.

Video ()

The Video command indicates that the signal has Video capability. You must select **Video Capable** on the **Transmitter** card on the Customer record to use this command.

This command will force the signal to become an alarm if the Customer is active and the signal is not in test. This is so the operator can respond appropriately.

- **1** – Function ignored if back-dated signal.
- **2** – Function ignored if a manual signal.

Alarm Handling

Alarm Handling is the core function of the Manitou system. An "alarm" in Manitou, by definition, is
"an event that an operator must interact with and process by verifying an event and taking specific action."

- To access the alarm queue, select **Operations | Alarm Queue** from the main menu .
- To begin handling, or processing alarms, select **Operations | Alarm Handling** from the main menu . When you do so, notice that **Alarm Handler** appears on the left toolbar and the option for the types of alarms you want to handle appear on the right pane. You can toggle between actively handling alarms and pausing by clicking **Alarm Handler**.
- If you switch to **Data Entry** mode while in an alarm, **Alarm Handler** appears on the **Home** section and the active **Alarm <*Customer ID and Alarm Type*>** and **Queue** appear on the **Current** section to remind you that you're still handling an alarm. You can click **Alarm <*Customer ID and Alarm Type*>** to go back to the alarm or click **Queue** to return to the **Alarm Queue**.

Alarm Queue

Using the **Alarm Queue,** you can view and access alarms presenting to Manitou. Alarms in the queue are in order with the "oldest and highest priority" alarm at the top and are color-coded to help determine the level of importance of each. Alarms range in priority from 1 – 100, with 1 being the highest priority.

Important: The **Alarm Queue** provides an audible "ding" to prompt action. If you filter out all alarms in the **Alarm Queue** there is no "ding." If there's an available alarm, with or without filtering, the "ding" will sound.

Alarm Queue Status Bar

Additionally, the number of alarms for a given priority display on the **Alarm Queue** Status Bar near the bottom of the Alarm Queue. The first number is the priority, ranging from 1 – 10+ and the second number indicates the number of alarms in queue at that priority level.

Fields

- **Suspended** – The number of alarms "postponed" by operators or the Auto-Client.

- **New** – The number of new alarms in the alarm queue.
- **Viewed** – The number of alarms opened and looked at by operators, but not actioned on.
- **Actioned** – The number of alarms operators or the Auto-Client are working.
- **Hidden** – The number of closed alarms that have Post Processing (Action Patterns) either from the Dealer or Customer record.

  Note: For Post Processing, you must have a licensed Auto-Client.

Important: You can define which alarms priorities belong to which "bucket" (or category). You do this by defining buckets, the numbered priority fields as displayed on the **Alarm Handling** Notification Ribbon.

To do this configuration, do the following:

1. Open the Manitou Supervisor Workstation.
2. Click **Tools | Options**, then select **Alarm Queue Priority Buckets** under **Alarm Handling**.

   The **Alarm Queue Priority Buckets** card displays where you can define what alarm priorities belong to which category.

Color Coding for Alarms

The **Alarm Queue** uses colors to help you quickly assess the status of alarms. You can click **Alarm Legend** on the **Alarm Queue**, which displays the following legend so you know what each color indicates:

Note: You can configure colors and settings for the **Alarm Queue** to specification in the Manitou Supervisor Workstation; the visuals referenced here are examples of the default configuration for Manitou.

Alarms also change colors within the **Alarm Queue** as they begin to age, for example:

- **Yellow** – Alarm has reached Warning level.
- **Red** – Alarm has reached Danger level and needs immediate attention.

Columns, Sorting, and Filters

You can manipulate columns within the **Alarm Queue** to accommodate your preference. You can hide, show, move, sort, and filter columns. Certain columns are fixed, meaning that when you do not select optional columns, these will still be present, while you can add and remove others from view.

Fixed Columns

- **Time** – Posted date and time the alarm arrived in the queue.
- **Priority** – Number designating the level or importance of the alarm; numbers range from 1 – 100, with 1 being the highest priority.
- **Customer** – Customer name.
- **Event** – Description of alarm.
- **Availability** – Shows whether or not an alarm is available for an operator to handle.
- **Status** – Suspended, New, Deferred, or Actioned.
- **Suspend Time** – Date and time when alarm was suspended.

Optional Columns

You can add and remove these columns from the **Alarm Queue** list by simply clicking **Change Header**  and selecting or clearing options.

- **Alarm No.** – Combination of the account's Unique Identifier within the system, and Alarm Sequence Number as it came in to the queue which you can provide to Authorities upon request.
- **Action ID** – Action Pattern number tied to alarm.
- **RLP** – Receiver Line Prefix assigned to account/signal; clearly separates and defines accounts.
- **TX ID** – Transmitter ID; account number of the dialer/radio/GSM (Global System for Mobile Communications) sending in the signal.
- **Code** – Manitou Event Code associated with the alarm.
- **Dealer** – The Dealer number associated with a given Customer’s alarm.
- **Event Category** – Assigned category; allows for management for Monitoring Groups and Disaster Mode.
- **P/F/M** – Police/Fire/Medical; Yes or No, depending on whether P/F/M has been contacted.

- **Last Activity Time** – Last time an action was taken on the alarm.
- **Post Code** – Postal/Zip Code on Customer record.
- **Customer ID** – The identifier for the Customer account.
- **Area** – Area presented with alarm. Areas and Zones are places inside the residence or site where you can establish monitoring and use this information to direct Customers or Authorities to specific Areas that alarms are sending a signal. Zones are a smaller unit and several Zones can fit inside one Area.
- **Zone** – Zone presented with alarm. Areas and Zones are places inside the residence or site where you can establish monitoring and use this information to direct Customers or Authorities to specific Areas that alarms are sending a signal. Zones are a smaller unit and several Zones can fit inside one Area.
- **User** – The operator number of the person who has accepted and is currently handling the alarm.
- **Point ID** – Area, Zone, or Point identifier description defining the alarm location or detail.
- **Language** – Language tied to Customer account.
- **More Act** – Yes or No, if additional signal or alarm activity on event exists.

Sorting

Columns within the **Alarm Queue** can be sorted in either ascending (A – Z, 1 – 10, or chronological order) or descending (Z – A, 10 – 1, or reverse chronological order) depending on the direction of the arrow that displays when you click a column Header.

Important: The **Alarm Queue** will stay sorted by selection even when navigating away from the window. To revert back to default sorting order, click once on the **Priority** column.

You can also adjust the column order by selecting then dragging and dropping individual columns. To move a column, click and hold on the **Column Name** and drag it to the preferred location.

Filtering the Alarm Queue

Filtering allows you to set specific criteria that must be met before an alarm displays. Only those alarms matching the filter requirements will display in the **Alarm Queue**. You most commonly use filtering in emergency situations where seeing specific events might be useful.

Important: The **Alarm Queue** provides an audible “ding” to prompt action. If you filter out all alarms in the **Alarm Queue** there is no “ding.” If there’s an available alarm, with or without filtering, the “ding” will sound.

To set up a filter:

1. Click **Filter** .
2. Choose the filtering parameters by clicking the appropriate check boxes.
3. Once complete, click **Done** to apply the filter and return to the **Alarm Queue**.

Clearing Alarms

From time to time it might become necessary to clear alarms from the **Alarm Queue**. You perform this using the **Finish** option.

Note: Typically, bulk clearing of alarms occurs during mass emergency situations such as storms or power outages.

To clear alarms, do the following:

1. Select the event to clear on the **Alarm Queue** list.
2. Click **Finish** | **Operator Cancel**.
3. Type your **Password** and press Enter on the keyboard.
4. Select from the **Event Code** drop-down list, which is the alarm type.

   Notes:

   - You cannot cancel all alarms from the **Alarm Queue** – priority events 1, 2, 3, and 4 are not allowed to be cleared from the alarm list.
   - You cannot flag some Event Categories for clearing.
5. Enter or select the applicable **Resolution Code** for the event, which is the reason you are clearing the alarm.
6. Type the reason for canceling alarm in the **Comment** box.
7. Click **Cancel Alarms**.
8. At the warning, stating that you must be an alarm handler in order to continue, click **Yes**.

Note: This action will clear all alarms of that type with the same Resolution Code and reason, as well as the one just canceled.

Important: This appends the operator User ID to the cleared events within the Customer Activity Log.

Alarm Mode Window

Designed to contain all the information needed to successfully process alarms, the Manitou **Alarm Mode** window helps you manage alarms without the need to navigate away from the window.

In addition to alarm handling information, the card provides access to the following:

- **Customer Address Information**

  This section contains details of the Customer record to include .

  Notes:

  - Clicking **Display Address on Map** displays the address on a map while in **Alarm Mode**.
  - If available, cross street and subdivision names aid dispatching. Many times the physical address might not be helpful when directing Authorities or others to the alarm location. Offering the cross street and/or subdivision can speed alarm response.
- **Dealer Contact Information**

  This section provides Dealer ID and name.

  Note: Not all Customer records contain Dealer information.
- **Tracking**

  Alarm tracking, when configured, tracks alarms to the operators handling them to prevent double dispatching. See Alarm Tracking for details.

Alarm Details

The **Alarm Details** section is designed to draw attention to the alarm displayed. It presents a colored bar containing the alarm description. This description immediately notifies you of what alarm you're handling.

Note: Colors will vary from alarm to alarm.

The following are definitions of the details included within the **Alarm Details** section:

- **Priority** – Rated importance of the alarm, numbers range from 1 – 99 (with 1 being the highest priority).
- **Alarm Time** – Includes the date and time the alarm arrived into the system.
- **System** – System on the account to which the alarm applies.
- **TX** – Transmitter associated with the alarm.
- **Area** – Area (partition) where the alarm was tripped.

- **Zone** – Number of the Zone where the alarm was tripped.
- **Point ID** – Area, Zone, or Point identifier description defining the alarm location or detail.
- **Alarm Reports** – Lists of all persons contacted while handling the alarm. The Alarm Report generates a unique identifier called the **Alarm Report Number**. It is made up of the Account Serial Number and the Sequence Number for the individual alarm separated by a hyphen.

  In conjunction with listing each person contacted, the Alarm Report also contains the times each contact was made. The report also notes the initial contact (**On Location** column), as well as if the person calls in (**Notify** column) and when the alarm is cleared.

  Note: You can find this report information within the **Alarm Detail Report** as well as send it to the Customer if **Report Action** is listed as an Action Pattern item.
- **Zone Status** – Displays any currently unrestored items. An unrestored item might be an alarm event that has a restore required and the restoring event has yet to arrive or it could be a system item such as a Late To Test.

UL Mandated Priority

- **Priority 1:** Fire
- **Priority 2:** Panic/Duress/Holdup
- **Priority 4:** Burglary
- **Priority 5 – 99:** All levels of supervisory or trouble (might mean problems with equipment; not a danger to life or property)

Important: You must enable and indicate UL compliant Customers in the Manitou Supervisor Workstation. Within the Supervisor Workstation, click **Maintenance | Setup | Country**. Next, select **Country Setup** from the **Jump To** menu, and then select **UL Policy Licensed** from the **Country Options** section.

Alarm Reports

Click **Alarm Report** to display a list of all persons contacted while handling the alarm. The Alarm Report generates a unique identifier called the **Alarm Report Number**. It is made up of the account serial number and the sequence number for the individual alarm separated by a hyphen.

In conjunction with listing each person contacted, the Alarm Report also contains the times each contact was made. The report will also note initial contact (**On Location** column), as well as if they call in (**Notify** column) and when the alarm is cleared.

Note: You can find this report information within the **Alarm Detail Report**, as well as send it to the Customer if **Report Action** is listed as an Action Pattern item.

Alarm Comment

Click **Add Comment** to add any alarm-related Comment to the alarm itself.

Reverse Send

Click **Reverse Send** to send certain commands to alarm panels and other equipment located at the Customer site. You commonly use this function to reset remotely an alarm panel. You can also issue Reverse Channel commands to test or make changes to transmission equipment at the Customer site.

Once you select the appropriate Reverse Channel data and click **Send**, the **Reverse Command Parameters** box will appear. Based on the Transmitter Type selected, various parameters will be available. Once you complete the information, click **OK**, and the command will be sent to the transmitter. When the transmitter receives the command sent from Manitou, a summary will appear in the **Command Summary** portion of the card.

Call In

If an Action Pattern contact calls in with reference to the alarm, click **Call In**. You can enter contact information and any Comments made by the contact.

Action Patterns in Alarms

The **Action Pattern** section contains the step-by-step instructions on how to handle the presented alarm. Action Patterns contain all the information necessary to handle the alarm from beginning to end. Not only does the Action Pattern display what to do (who to call) and in what order, it also provides clear, complete instructions.

See Action Patterns and Enhanced Action Patterns, and the related subsections for more information on Action Patterns and Enhanced Action Patterns.

Action Pattern Color Coding

- **Red** – Completed task.
- **Yellow** (with arrow) – Current task.
- **Green** – A task yet to be completed/upcoming task(s).
- **Gray** – A task that was intentionally skipped for a variety of reasons.

Action Pattern Buttons

- **View Contacts** – Shows all available contacts listed on the account, this can include contacts, Keyholders, Dealers, and Authorities.
- **View Call Lists** – Displays the preferred order of contact (persons/entities listed in order of preferred contact).
- **View Plans** – Plans are images of the account property, if configured. Plans can show schematics, drawings, floor plans, and so on. See Plans, for additional information.

Enhanced Action Patterns in Alarms

The Enhanced Action Patterns feature offers decision-tree functionality and allows you to link Action Patterns together. Because Enhanced Action Patterns offer decision points, they allow you to implement dynamic and incident-specific actions. Finally, Enhanced Action Patterns provide you with a means of collecting data and logging information along the path to closing an incident.

See Action Patterns and Enhanced Action Patterns, and the related subsections for more information on Action Patterns and Enhanced Action Patterns.

Important Information Regarding Enhanced Action Patterns

- Call Lists and related contacts are a large part of Enhanced Action Patterns. Call Lists within Enhanced Action Patterns can connect you to sub Call Lists. And contacts connect you to an account's Contact Point. Using the Auto-Dialer, you have the ability to make an outbound connection in conjunction with the Enhanced Action Pattern decision-tree functionality.

  Important: Because contacts are a large part of Enhanced Action Patterns, it is important to ensure that contact phone numbers are accurate and valid.

- Contacts within Enhanced Action Patterns can get involved, for example, while you're handling one alarm, you might get a contact who calls in on an alarm that another operator is handling, in which case you'll have to transfer that contact to the appropriate alarm and operator.
- The most common actions within Action Patterns are Contacts, Show, and Log.
- When you double-click an Action Pattern, pre-designated programming runs in the background.
- The Enhanced Action Patterns decision-tree is a "dynamic" navigation that can change based upon the action that you take.
- Action Patterns are designed to be keyboard driven for speed and simplicity. The two most common keyboard shortcuts you will use within Action Patterns are A + A, which initiates the "Alarm" and "Actions" commands; and pressing the D key for "Do." As stated earlier in this guide, to see a complete list of all keyboard shortcuts, press the Shift + ? keys at the same time on your keyboard while in Manitou.
- You can select options from the **Actions**  menu to act upon Action Patterns.

Customer Activity Log

The Customer Activity Log displays the signals and alarms received on the account over the last seven days by default and you can change this to show the last month. This log sorts by the most recent activity, displaying it immediately underneath the event line.

To change the view from one week to one month, or vice versa, select the appropriate option, **Week** or **Month**. The Activity Log automatically refreshes upon receipt of new signals.

Find Current Alarm

It is easy to lose track of the current alarm while scrolling through the alarm list.
The **Find Current Alarm** icon locates the current alarm, highlighting it for ease of reference.

Note: New activity will continue to occur on the account; the current alarm will be highlighted and any subsequent alarms received will fall into the log above it.

Search

Click **Search** to locate a specific Activity Log item.

Viewing More Activity Logs

The Activity Log shows up to 1,000 lines by default. When the log contains more than 1,000 lines, the **More** button becomes enabled, and you can use it to load the next 1,000 lines. Each click of the button brings in an additional 1,000 lines at a time (as applicable). If the **More** button is not active, there are less than 1,000 lines currently in the log, or all lines have already been added to the log.

Alarm Notifications and Information

Just below the **Alarm Mode** toolbar you can see a variety of icons that link to information related to the alarm as well as some time information related to the alarm.

Time Information

The following time information is displayed for the current alarm:

- **Customer** – This field displays the time in the Customer's time zone.
- **Created** – This field displays how long the alarm has existed in minutes and seconds.
- **User** – This field displays how long you have been handling this alarm in minutes and seconds.

Alarm Notifications

As stated earlier in this section, you can see a variety of icons that link to additional information related to the alarm. The following icons are available:

	Audio is available.
	Audio command information is available.
	Call session is in use.
	Existing call session, but has been adopted.

	PSAP authority exists. A PSAP (Public-Safety Answering Point) is a call center responsible for answering calls to an emergency telephone number for police, fire, and medical services.
	A Group or Class Code needs notification.
	A media clip is available.
	A video clip is available.
	A map location is available.
	Customer comments.
	A solid bell indicates a new alarm for the Customer.
	An “open” bell indicates a higher priority alarm exists for the Customer.
	Indicates a Pre-Cancel alarm exists.
	Multiple people are handling multiple alarms for the same customer. You should use caution so as not to interrupt another operator handling an alarm.
	Customer was in alarm, then suspended, and the suspension has ended.
	Customer is On Test.
	A calendar indicates a backdated alarm generated after the alarm has in fact occurred.
	A maintenance issue exists.
	A UL warning exists. The Customer Monitoring Details have a UL grade. This pertains to those accounts that require a UL Grade category selection as well as a Response Time.
	A service history is tied to the account indicating and there are one or more tickets (Maintenance Issues).

Notification Ribbon

A ribbon of notifications can display on the bottom of the **Alarm Mode** window. This ribbon indicates different notices that might come up during alarm processing. When you receive a notification, the relevant icon(s) will appear, letting you know a notification is available for review and/or processing.

Fields

- **New Alarm** – Additional alarm activity on the account.
- **Higher Priority Alarm** – When a plus sign is attached, a higher priority alarm is available. Click this button to select the higher priority alarm.
- **Pre-Cancel** – If a Pre-Cancel has been received and validated for this account; click to view the **Pre-Cancel** dialog box.
- **Notified Contact** – If a returned phone call comes in from a previously "notified contact," the **Device** icon flashes.
- **Concurrent Alarm Handlers Warning** – When more than one operator is handling the account. Clicking this button will show the other operators working the account.
- **UL Account** – Indicates that the account is UL certified and you should handle accordingly; it reveals UL handling instructions.
- **Backdated Alarm** – The alarm occurred in the past; most commonly occurs on manual backdated alarms.
- **Account On Test** – Indicates that components currently On Test for this account were not On Test when the alarm arrived. This can also relay that the test time has expired for an account recently On Test.
- **Contact List Comments** – Identifies that there are Comments to read associated with this account and/or alarm.
- **Group/Class Codes** – Announces a specific Group or Class Code associated with the alarm.
- **Alarm Suspension Expired** – Notifies time expired on a previously suspended alarm.
- **Media Clip Available** – Indicates media is available; when selected, a dialog box presents available media options such as audio, video, and so on.
- **Map Location Available** – Information available related to geographical data.
- **Call Session** — A call session is available. Please note that this feature works only in conjunction with MediaGateway and PBX Assistant features.
- **Call Session Adopted** – Another operator took over a call session related to this alarm. Please note that this feature works only in conjunction with MediaGateway and PBX Assistant features.

- **PSAP Authority** – Indicates the PSAP (public safety answering point information) Authority database, such as Pitney Bowes, provided the Authority information for this event.

Customer Status

This section is a "snapshot" of the health and welfare of the account. Each item gives you important information about the Customer account.

- **Alarm** – A red vertical bar indicates active alarms in queue for a particular account, the number in parenthesis shows how many alarms in queue. If there are any unrestored items for this account, they will also display here.
- **Monitoring** – A Green vertical bar indicates the account is active; Yellow is inactive, and Red is deactivated.
- **Maintenance** – A red vertical bar indicates Unresolved Maintenance Issues.
- **Time Zone** – Displays the time zone where the Customer record resides.
- **Service** – Indicates if account is currently On Test.
    - **Green** – Full Service, nothing On Test.
    - **Yellow** – Partially On Test, some portion(s) of the account is On Test, but not entire account.
    - **Red** – Whole System On Test, the entire account record is On Test.

System Status

Each system on the account is identified by name (for example, System 1).

Note: You can select from and act upon these Account Statuses by clicking the related item.

TX – Displays the Transmitter status.

- **Green** – The Area is good.
- **Blue** – The Area is “closed.”
- **Yellow** – The Area is “open.”
- **Red** – A warning or issue.

Area – Displays the Area status.

- **Yellow** – The system is open and disarmed.
- **Blue** – The system is closed and armed.
- **Red** – The system has not received an open or closing event to identify current status and is therefore “unknown.”

Plans

Plans are images of the account property, if configured. Plans can show schematics, drawings, floor plans, and so on. In use with an alarm, these Plans can show valuable information such as a tripped Zone and all other Zones of an Area, as well as provide access to devices such as cameras. For more information, see Managing Plans.

When an account is in alarm, you can view any assigned Plans by clicking **View Plans** on the **Action Pattern** section of the **Alarm Mode** window.

If an Area is in alarm (and has been defined in the account's Plan), it will be highlighted in red.

Connecting to the Video Control Center (VCC) Through Plans

When you receive an alarm signal from a site that is video enabled, you can show an alarm video that spans from some pre-alarm time to some post-alarm time, enabling you to prioritize and verify alarms effectively and efficiently. Video verification also allows you to replay a video file held in the database with the alarm signal.

Streaming video monitoring allows for immediate identification of the true nature of an event.

Manitou VCC connects to cameras for remote viewing and cameras with pan, tilt, and zoom (PTZ) that you can control remotely as well.

Note: For details on VCC, refer to the *Manitou Video Control Center Functional Overview* which is available at the Bold Support Portal.

To launch video in Manitou 2.0, do the following:

1. Open the selected **Plans** card.
2. Click the green dot related to the camera on the **Plans** page. Click the blue dot related to the camera to launch the VCC reference image.

Schedule

The Schedule displays the current week's combined schedule (Monday through Sunday). When available, this shows the actual schedule for an account based on the Permanent, Alternate, Holiday, and Temporary Schedules.

Note: Manitou displays the current day in black text while all other days display in grey.

Comments

All Comments related to this account or entities tied to this account. This can include Temporary, Permanent and Special Instructions for the Customer, Dealer, Authority, Agency, or other entities with a relationship to this account.

- **Temporary** – Only active for a specified amount of time.

- **Standing** – Active until deleted.
- **Special** – Particular instructions or scenarios that apply to the Customer record and are active until deleted.

Zone Status

Clicking **Zone Status** displays any currently unrestored items. An unrestored item might be an alarm event that has a restore required and the restoring event has yet to arrive, or it could be a system item such as a Late To Test.

Reverse Channel

The Reverse Channel, when applicable, enables the sending of reverse commands that interact with external pieces of software or equipment.

Note: Reverse commands are generally applicable when using add-on modules such as Access Control or through custom additions to the software.

Service Tickets

When the Manitou system connects to an accounting package, such as SedonaOffice®, you can access, view, and create service tickets using the **Service Tickets** option.

User Defined

These are Customer-specific designations that can contain a variety of different fields (radio buttons, check boxes, and so on) or simple text.

Receiving Alarms

You can receive an alarm in the following ways:

- While in **Alarm Mode**, select **Alarm Queue** from the sidebar, and then click an available alarm
- The menu selection: **Operations | Alarm Handling** from the main menu . When you do so, notice that **Alarm Handler** appears on the left toolbar and the option for the types of alarms you want to handle appear on the right pane. You can toggle between actively handling alarms and pausing by clicking **Alarm Handler**.
- If you switch to **Data Entry** mode while in an alarm, **Alarm Handler** appears on the **Home** section and the active **Alarm <*Customer ID and Alarm Type*>** and **Queue** appear on the **Current** section to remind you that you're still handling an alarm. You can

click **Alarm <*Customer ID and Alarm Type*>** to go back to the alarm or click **Queue** to return to the **Alarm Queue**.

- When you select an alarm within the **Alarm Queue**; this is called "Cherry-Picking" and is only recommended in instances where you have been organized into groups handling specific types of alarms or particular cases where it might be necessary to handle select alarms.

  Important: While there are times when it is necessary to pull a specific alarm from the **Alarm Queue**, Cherry Picking is not the recommended alarm handling process. Cherry Picking can negatively affect alarm processing by creating a situation where two operators are handling the same Customer record at the same time, which can cause double dispatching.

We recommend receiving alarms in the **Alarm Queue** in one of two ways:

- **Manual Alarm Handling** (default setting) – A new alarm presents to you with a dialog box that offers you three choices: **Yes**, **Pause**, and **Exit**.
- **Auto-Get** – When Auto-Get is on, the alarms will auto-populate the **Alarm Mode** window. The alarm presents with a single audible "ding" when the alarm loads to the window.

Note: Alarm Mode is typically set as a global function.

Setting Alarm Mode

1. While in an alarm, select **Operations | Alarm Handling Options**. **Alarm Handler** appears on the left toolbar and the option for the types of alarms you want to handle appear on the right pane.
2. You can toggle between actively handling alarms and pausing by clicking **Alarm Handler** and you can choose the types of alarms you want to handle from **Get Alarm Type** options.

Manual Alarm Handling

When in manual **Alarm Mode**, a new alarm presents to each operator with a dialog box that offers the operator three choices: **Yes**, **Pause**, and **Exit**.

- **Yes** – Accepts the alarm and loads it to your screen.
- **Pause** – Denies the alarm and places you into a **Paused** status; to restart alarm handling, click **Operations** and select **Start Alarm Handling**.
- **Exit** – Denies alarms and removes the operator as an alarm handler.

Auto-Get

When Auto-Get is on, the alarms will auto-populate the **Alarm Mode** window. The alarm presents with a single audible "ding" when the alarm loads to the window. Manitou balances the load while presenting alarms to operators within Auto-Get, rotating alarms to operators.

Processing Alarms

All alarms will have either an Action Pattern or Enhanced Action Pattern to follow or work through.

Note: For basic alarm handling through an Action Pattern, you can:

- Click **Do** on the **Actions** menu to initiate the first action.
- Click **Action** on the **Actions** menu to reinitiate the selected competed action.
- Click **Ignore** on the **Actions** menu to disregard the selected Action Pattern item.

The Action Pattern lists all of the actions, in order, so you can process the alarm.

Important: If the alarm comes up with the Action Pattern grayed out, click **View Contacts** and follow standard procedures for the type of alarm it is. Example: If you receive a medical alarm and it is standard procedure for your facility to contact the local emergency Authorities, then that would be the number in the **All Contacts** to use.

See Enhanced Action Patterns in Alarms, for more information on using Enhanced Action Patterns while in an alarm.

Confirm Alarm

When in **Alarm Mode**, click **Actions** and then **Confirm Alarm** to verify that the event is a true alarm. You use this option based on your central station's operating procedures.

Two-Way Audio Alarm

If you get an alarm in Manitou 2.0, a two-way audio can be tied to a specific alarm. However, there are instances where you can get a non-two-way alarm that becomes a two-way audio alarm. In this instance, you will receive the notification, *"There are audio alarm(s) available. Do you want to switch to one of them?"* You would then click **Switch to Alarm** to select from a list of available two-way audio alarms for the customer and defer your current non-two-way alarm.

View Customer

When in **Alarm Mode**, click **Actions** and then **View Customer** to load Customer details in regard to the Customer listed on the alarm.

Contact Action

A Contact Action is an action that requires you to pick up the telephone and contact a responsible party, Customer, Dealer, or Authority. When the Action Pattern contains a Contact Action, such as contact Customer, the **Auto-Dialer** appears. Depending on the telephone system, the **Auto-Dialer** will either begin dialing automatically, prompt you to select a line to use and click **Dial**, or it might be necessary to pick up the telephone and manually dial.

The key reason for this interaction is to log the Call Response. The Call Response is the result of the attempt to contact.

Clicking **Dialer** loads the first available contact and phone number into the **Auto-Dialer**.

Notes:

- You can also access the phone Dialer by clicking **Auto-Dialer** on the **Alarm Mode** window.
- You will receive an expected error under the following condition:
    1. Open a Customer with a contact that has a phone number.
    2. Click the phone icon beside the number.
    3. Press the Enter key on your keyboard.
    4. Note the following error:

        Status: Error

        Duration: 00:00:00

        Message: SignalR: Connection must be started before data can be sent. Call .start() before .send()

    You will get this error (and/or ones like it) if you don't have the Local Utility Service or the Bold Launcher running.

Available Call Responses are:

- **Contacted** – Someone responsible answered the call and provided additional details and/or took responsibility of the alarm.
- **Busy** – The line contacted was busy; the call was unable to complete.
- **No Answer** – The call was not answered by a person, answering service, message machine, or voicemail.
- **Left Message** – The operator left a message for contact with a reliable source, answering service or machine, or voicemail.

  Important: Do not consider a child at the location as a reliable source and should not be used for message delivery.

Note: It is possible to create a Notified Contact List to manage those persons for whom you're awaiting a response. The system will prompt the operator with the ability to create a Notified Contact.

- **Not In** – The contact person is not available. Bold Technologies recommends to select this choice if you leave a message with a child.
- **Won't Respond** – The contact person will not respond to the alarm.
- **Abort** – Cancel the call.
- **Error** – Error with the phone number, such as disconnected or incorrect, and cannot complete the call. When selected, the system will prompt you to create a Maintenance issue. This documents the issue and will generate warnings to others attempting to contact this number.
- **Unknown** – Unable to determine the issue for call not completed; generally, the line usually goes dead or silent.

Note: Pressing Enter on the keyboard closes the phone Dialer. Use a mouse or other pointing device to select the appropriate action and button.

Validate Password

When in **Alarm Mode**, click **Actions**  and then **Validate Password** to perform this operation.

Password verification provides authenticity for use in a variety of situations, including the following:

- Customer
- Manual Signal
- Notified Contacts
- Pre-cancel
- Temporary Comments
- Temporary Schedule

Users can also use the Question/Answer mode as an alternative to having to provide a password. Only Customer contacts, Agencies, and Agency contacts are allowed to have questions. This means that the question mode is only enabled for the Customer (Keyholder), Technician, Agency, and Unknown verification options, and gets written to the log as "VERIFICATION – Customer Question Answered Correctly."

You can also validate Customers that appear on other Customers' Contact Lists on the **Verify Password** card by way of their general/duress passwords or the passwords of their contacts. Customers can also have their own set of access permissions and valid date ranges, which are merged with those access permissions of their contacts.

Fields

- **Call In** – Select this check box to indicate that the contact initiated a call in to the central station.
- **Password** – Your password or the password of the person calling in (depends on whether you selected the **Operator** or **Other** option).
- **Context** – The User Group to which the contact belongs, for example, Dealer, Customer, and so on.
- **Cancel Alarm** – Select this check box if the alarm was stopped.
- **Close Alarm** – Select this check box if you take the alarm to conclusion through the system.
- **Resolution Code** – A drop-down list to select the reason the alarm is being cleared.

Suspending Alarms

An alarm is typically suspended in situations where more information is needed or waiting for a reply from a contact. If not listed as an Action Pattern item, it is possible to manually place an alarm On Hold (Suspend).

1. From the **Alarm Mode** window, click **Hold**  then select **Suspend** to bring up the **Suspend Alarm** options.
2. Select one of the following options to suspend the alarm:
    - **Select interval** – Puts the alarm on hold for a specified period of time; can designate seconds, minutes, or hours.

      Note: If a new alarm of the same event and Zone arrives while this alarm is still on hold, it will release and return to the queue and/or the operator handling the alarm.

    - **Select date and time in Customer local time** – Select a specific, localized date and time to place the alarm on hold. Selecting this option determines when the alarm will next be available for an operator.

      Note: This option keeps the alarm on hold until the specified date and time have been reached, regardless of any new Event Activity.
3. Click **OK** to accept.

Setting Alarm Priority

When an alarm is already dispatched, the alarm no longer has its original priority. It is possible to lower the event's priority to ensure it doesn't overtake a new alarm of the same type. You can do this on the **Suspend Alarm** card. To set a Priority, click **Hold** on the **Alarm Mode** window, then **Suspend**, and then modify the **Priority** field.

Suggested ideas for offsetting priority:

- Add a 1 to the front of the original priority number, turning a priority 1 alarm into 11, 2 into 12, and so on.
- Add the same number to the priority, turning a 1 into 11, 2 into 22, and so on.
- Change the priority to a level below the most common priority events, such as priority 6.

Note: Tracked alarms "wait" for the tracked operator upon expiration of the suspension time unless tracking is removed or the operator exits Manitou.

Deferring Alarms

If an alarm displays to you and you cannot handle it at that time, you can defer the alarm back to the **Alarm Queue**, making it available to other operators. This option is only available to you when you have actually accepted the alarm from the **Alarm Queue**.

- To defer an alarm, click **Hold** on the **Alarm Mode** window, and then **Defer**.
- When selected, the **Defer** option will prompt you if you would like to keep alarm tracking.
- If you choose **Yes**, then future alarms for that same account will go to you. If you choose **No**, then future alarms for that same account will go to a different operator.

Deferring to Auto-Client

The Defer to **Auto-Client** option sends the currently-handled alarm to the **Auto-Client**. Select **Auto-Client** by clicking **Hold** and then **Defer to Auto-Client**. You receive a confirmation message. By clicking **Yes** at the confirmation message, the **Auto-Client** handles the alarm.

Closing Alarms

You must close the alarm upon completion of all actions. Many Action Patterns might contain a Close command. However, if it is not present, it is possible to close the alarm manually using the **Finish** icon.

1. Click **Finish** .
2. Select one of the options available to complete the alarm:

- **Close** – When all required actions are complete, the Close command closes the alarm.

  # Fields

  - **Group** – Description for what caused the alarm.
  - **Comment** – Any Comments related to the alarm.

- **Operator Cancel** – Requires you to enter the assigned password used to log on to Manitou, then click **Cancel Alarm** to complete the alarm.

  # Fields

  - **Password** – Your password.
  - **Group** – Description for what caused the alarm.
  - **Comment** – Any Comments related to the alarm.

- **Customer Cancel** – Requires a valid Customer general password or contact's password to close the alarm, then click **Done**.

  # Fields

  - **Call In** – Select this check box to indicate the contact initiated a call to the central station.
  - **Password** – Your password or the password of the person calling in (depends on whether you selected the **Operator** or **Other** option).
  - **Cancel Alarm** – Select this check box if the alarm was stopped.
  - **Close Alarm** – Select this check box if you took the alarm to conclusion through the system.
  - **Resolution Code** – A drop-down list to select the reason the alarm is being cleared.

3. Click **Cancel Alarm** or **Done**, depending on the close card you are using.

Note: For additional information on processing alarms, please refer to the UL Alarm Handling Summary – Operation.

Extending a Late-to-Close Schedule with an Alarm

Manitou allows you to extend an O/C Schedule that has already generated a Late-to-Open or Late-to-Close alarm.

The following is a brief summary:

- **Late-to-Close** signals indicate that a site was not armed at its scheduled time. When this signal is received, you have the option to extend the account's close time (schedule). If you extend the schedule, Manitou will automatically create a Must-Close, which specifies when that site needs to be armed. If the site is not armed by that time, another Late-to-Close signal will be generated.

- **Late-to-Open** signals indicate that a site was not unarmed at its scheduled time. When this signal is received, you have the option to extend the account's opening time (schedule). If you extend the schedule, Manitou will automatically create a Must-Open, which specifies when that site needs to be unarmed. If the site is not unarmed by that time, Manitou will generate a
  Late-to-Open signal.

- **Unscheduled Open** signals indicate that a site was unarmed outside of its scheduled time. When this signal is received, you have the option to extend the account's opening time (schedule). If you extend the schedule, Manitou will automatically create a Must-Close, which specifies when that site needs to be re-armed. If the site is not armed by that time, Manitou will generate a Late-to-Close signal.

- **Unscheduled Close** signals indicate that a site was armed outside of its scheduled time. When this signal is received, you have the option to extend the account's closing time (schedule). If you extends the schedule, Manitou will automatically create a Must-Open, which specifies when that site needs to be unarmed. If the site is not unarmed by that time, Manitou will generate a Late-to-Open signal.

Late-to-Close alarms cannot be closed without first extending the schedule. Likewise, the Application Server does not allow a close to take place on a Late-to-Open/Close or Unscheduled Open/Close alarm. The following are some additional notes about extending a Late-to-Close schedule:

- An *LC (Late-to-Close) Event Code must be received for the **Extend Schedule** option to take place.

- The maximum time you can enter for the Temporary Schedule extension is 23 hours.

- Canceling the **Extend Close Schedule** dialog box will close the dialog box and cancel the current operation.

- Must-Close extensions take place in the Customer's local time.

Late-To-Close with Temporary Schedule Alarm Handling – Example

You receive a Late-to-Close alarm for Customer 001. When closing the alarm, you are prompted with the **Extend Close Schedule** dialog box.

Validate the Customer and password and then prepare to extend the schedule.

Note: The schedule can be extended by minutes, or to a specific time, in hours, minutes (HH:MM), but not both.

- The **Actions**  icon contains the **Temporary Actions** option on the **Alarm Mode** window. From here, you can make any number of Temporary Schedule changes, as well as viewing the schedule for any given day.
- Once you extend the schedule, click **Continue** to proceed to the **Close Alarm by Resolution Code** card.
- You must click **Save** when exiting this card as it automatically opens the card in Edit mode. After saving, you are prompted to close the **Temporary Schedule** card and return to the **Alarm Mode** window.

If you are using the **Auto-Dialer**, you might notice that an **Extend** button is also available.

This button will display the previous **Extend Close Schedule** dialog.

Note: This option is only available with an *LC (Late-to-Close) Code.

Error Messages

You might receive an error message if a schedule extension overrides an existing schedule. Such messages are only warnings and will not prevent the schedule extensions from working.

Schedule Extension Items to Note

- You can enable Extend Schedule functionality in the Manitou Supervisor Workstation. Please refer to the *Manitou Supervisor Workstation User Guide* for instructions on how to enable this feature.
- The Application Server checks up to seven days in the future for a temporary Must-Close schedule. You cannot close the alarm without a Temporary Schedule, whether from a previously-entered (and temporary) Must-Close, or from the **Extend Close Schedule** card that was entered during alarm handling.
- Any Temporary Schedule that was created using the **Extend Close Schedule** card enters a May Open/Close time at the current (and local) time and a Must-Close time at the future specified (and local) time. It also overrides any schedules in between the two times, with the exception of Temporary Opens.

- Unless a new Extend Schedule is written, you only receive one warning (per alarm allocation) that the Temporary Schedule is too far in the future. If the alarm is suspended or deferred, the allocation ends.

Alarm Processing Example – Fire

Below is an example of alarm processing using an Action Pattern.

1. Click the Fire Alarm from the **Alarm Queue**.
2. The first action in the Action Pattern is **Contact Customer using Call List Customer Fire**. Clicking this action opens a sub-list with the following actions:
    - Contact Customer
    - Contact Fire Department
    - Contact Primary Keyholder
3. Click the first action (Contact Customer). This opens the **Auto-Dialer** which will dial the first contact. If the Customer tells you that the Fire Alarm signal was a False Alarm, the Customer's password will be required to validate the False Alarm.
4. Click **Finish** to close the **Auto-Dialer**.
5. Enter the Customer's password into the **Validate** field.
6. Enter Comments into the **Comment** field.
7. Select the check box for **Cancel Alarm** and **Close Alarm**.
8. Select a **Resolution Code**.
9. Click **Validate**. The alarm has now been processed and closed. All Comments are entered into the **Customer Activity Log** and you are returned to the **Alarm Mode** window.

Notified Contacts

The **Notified Contacts** card allows you to view the contacts who have recently been contacted. From this card you can also handle the alarm, send notifications to other operators or remove the contact from the list. You can sort columns on the **Notified Contacts** card with the exception of Call Time and Message.

To view the Notify Contacts information, do the following:

1. Click **Operations** | **Notified Contacts**.

2. To view only the Notified Contacts for a specific account/Customer, enter the Customer Identification Number in the **Customer** field or click **Search**  . If searching, the **Advanced Customer** card displays. Select and enter the search parameters or use an asterisk (*) for all results including blanks or a double asterisk (**) for all results without blanks and click **Search**. Choose a record from the search results provided by clicking on the row.

   Note: To view all of the recent notifications for every Customer, enter an asterisk (*) in the **Customer** field on the **Notified Contacts** card.

   The recent Notified Contacts display in the results section. The Customer ID, contact information, call time, status, and message information are all included within the card.

   The **Handle** button above the results section will allow you to select, manage, and complete an alarm with a valid Alarm Status. The **Handle** button is unavailable until an alarm has been selected from the list and password verified.

3. Once you select an alarm, click **Handle** to manage the alarm.

   The **Notified Contact Call In** card appears.

4. Fill in the **Contact Name** and **Comment** fields and then click **OK**.

   The **Notified Contacts** card is replaced with the **Alarm Handing** card. You can now complete the alarm.

   You can use the Send Notification to notify other operators about an alarm. The **Send Notification** button is unavailable until an alarm has an **Unavailable Status** and there has been no action on the alarm for a specified amount of time. Once you select this alarm from the results list, the **Send Notification** button will become available.

5. Click **Send Notification** and the **Notified Contact Call In** card appears.

6. Click **On Location** or **Cleared** and type a **Comment** and then click **OK**. The Comment will be entered into the **Activity Log**.

   You can use the **Remove** button to eliminate the notification information from the results lists.

7. Highlight a row and click **Remove**. The **Notified Contact Call In** card appears.

8. Type **Comments** and then click **OK**.

   All the notifications related to the alarm are removed from the **Notified Contacts** card.

Alarm Tracking

Alarm tracking, when configured, tracks alarms to the operators handling them to prevent double dispatching. You access tracked alarms on either the **Alarm Queue** or **Alarm Mode** window by clicking **Operations**  , then **Tracking**.

Tracking

The **Tracking** card enables you to direct all alarms for a particular Customer to yourself for a period of time.

For example, if you are handling an alarm for ABC Company and know that the Customer site will be sending periodic alarms or signals throughout the day, you can opt to track all alarms and signals received by the ABC Company. Once you handle an alarm, you are prompted to discontinue tracking alarms for that Customer. Selecting **No** means that future alarms from ABC Company will continue to be routed to you until the designated time period has expired, and you choose to discontinue tracking or log out.

Note: The default time tracking is 30 minutes, but you can configure within Manitou.

Tracking Display

- The **Priority High** and **Low** fields designate the priority range an operator can work. If left blank, all alarms will be tracked for this Customer to the operator. Priority ranges are set within Manitou based on user access.
- Additionally, when exiting Manitou while in **Alarm Mode** mode (and tracking alarms), you will be prompted with "Would you like to keep your alarm tracking?"
    - **Yes** – Tracking entries will be recovered when the client is run again within the timeout period specified.
    - **No** – Tracking will be discontinued.

Add Tracking

Alarms tracked to you are displayed on the **Recent Alarms** section on **My Dashboard**.

For accounts you have access to, the **Tracking** card allows you to add alarm tracking, displays all alarms currently being tracked, and provides a way to remove tracking. You can also designate tracking while in **Alarm Mode**; you can add to the list of tracked Customer accounts.

To add tracking to an account, do the following:

1. Switch to **Alarm Mode** by clicking **Data Entry** on the taskbar.

You can only edit items on the **Tracking** card while in **Alarm Mode**. Otherwise, it is read-only.

2. Click **Operations**  **| Tracking** to display the **Tracking** card.
3. Type a Customer name or Customer ID in the **Customer** field to start a search.
4. Indicate the **Tracking Type** by selecting the appropriate option:
    - **User** (operator) – The account is tracked by the operator currently logged into the Manitou system.
    - **Monitoring Group** – Designations to categorize and distribute signals to specific operator groups. At the time of the Manitou installation, it has a default Monitoring Group setting of “0”. But, Bold Technologies recommends that all installations create a Monitoring Group of their own, instead of using the default "0" group.
    - **System** – The Manitou system tracks the account.
    - **All Sessions** – This is for tracking entries for you from all sessions. And, you must log on to Manitou from more than one client to get more than one session at the same time. You could be handling an alarm for more than one client, in which case, this would show the tracking for all of the user sessions.
5. Click **Add** to load the Customer account information into the **Tracking** list.

Fields

- **Priority High/Priority Low** – These designate the priority range you can work. If left blank, all alarms are tracked for this Customer to you. Priority ranges are set within Manitou based on user access.
- **Status** – See Alarm State (Phase).

Adopt Tracking

To take over tracking for another operator, find the appropriate Customer account in the **Tracking List**, and click **Adopt**.

An operator adopting tracking might not have the same level of permissions as the previous operator – as such, adopting tracking will behave as follows:

Priority

- If the previous operator’s priority range matches the takeover operator’s priority range, the entry is adopted.

- If the previous operator's priority range does not match the new operator's priority range, but the new range fully encompasses the previous' range, the entry is adopted, and the priority range is expanded (that is, priority range 4 – 6 adopted by a user with range 2 –7 range
becomes 2 – 7).

- If the two ranges do not match and the adopting range does not fully encompass the previous, the original tracking is left as is.

Note: For more information on Priority, refer to Setting Alarm Priority.

Alarm State (Phase)

- If the previous and adopting users' alarm states match, the tracking entry is adopted.

- If the previous state is **New** or **Viewed** and the adopter's state is **Both**, the entry is adopted, and the tracking alarm state is changed to **Both**.

- If the previous state is **Both** and the adopter's state is **New** or **Viewed**, the entry is adopted, and the tracking alarm state is changed to **New** or **Viewed** (adopter's value).

- If the previous state is **New** or **Viewed** and the adopter's state is also **New** or **Viewed**, but they do not match (that is, previous is **New**, adopter is **Viewed**), then the original tracking is left as is.

Remove Tracking

To remove tracking prior to the time limit expiring, select the appropriate Customer account from the tracking list, and then click **Remove**. To remove all tracked accounts in the list, click **Remove All**.

Note: Tracking expires at the end of your session if you click the **No** button at the **Continue Tracking** prompt when you log out of Manitou.

New Alarm Notification

All operators with tracking for a given Customer will receive notifications that a new alarm within the specified priority range is available.

If an operator is handling an alarm and a higher priority alarm for the tracked account is received that the operator is capable of handling, the system will ask if the operator wants to defer the current alarm in favor of the new alarm.

If you choose to defer in favor of the new alarm, Manitou will allocate the new alarm before deferring the current alarm. This is done in case multiple operators are handling alarms for the Customer and are eligible to take the new alarm. This is done so that you can opt not to defer the current alarm if you cannot get the new one.

If you are not eligible to handle the newly received alarm because of your set priority range, you are still notified that a new alarm has occurred, but you are not given the option to handle it.

Concurrent Alarm Handling

When allocating an alarm, Manitou will notify you if any other alarm handlers are working alarms for the same Customer.

New Tracking Entry

Manitou creates a new tracking entry if the alarm falls outside the priority range for an operator.

Example:

Operator A is tracking Company ABC and has a priority range of 4 – 7.

Operator B can work alarms with a range of 1 – 3 and receives a priority 2 alarm for Company ABC. Operator B selects tracking for this alarm.

A new tracking entry is created because this priority level is outside the original tracking instance created by operator A.

Additional Functions within Alarm Handling

You can perform several other functions within the **Alarm Mode** window. You use these additional functions to manage requests and Customer needs.

Manual Signals

There are times when it is necessary to send a manual signal through Manitou to restore an unrestored event or to generate an event for tracking within a Customer record.

Creating Manual Signals

1. Select **Tools | Manual Signal** from the main menu  .
2. Type the **Customer ID** or search for the Customer using the find Customer feature.

   Select the appropriate search criteria (Search Key 1, 2...) and the value associated with the search (what to look for).

3. Select the transmitter the alarm will be sent on.

   If only one transmitter is present in the list, it will be selected automatically.

4. Designate a **Signal Time**.

   Use either the current time or a specific time.

Note: If the alarm needs to show as occurring in the past, you can designate this as well; however, you can only do this for the recent past, not days or weeks ago.

5. Identify the **Monitoring Group** to which you want to send the event.
6. Populate the information for the event.
7. Select an **Event** from the pull-down menu.
8. The **Description** auto-populates off the event selection.
9. You select **Area**, **Zone**, **Sensor**, and **User ID** using the available pull-down menus.
10. Input **Point ID** – Identifier given to specific devices within a specific Area or Zone, if necessary (can be up to 49 characters in length).
11. Click **Send**.

Fields

- **Customer ID** – The identifier for the Customer account.
- **Monitoring Group** – Designations to categorize and distribute signals to specific operator groups. At the time of the Manitou installation, it has a default Monitoring Group setting of “0”. But, Bold Technologies recommends that all installations create a Monitoring Group of their own, instead of using the default "0" group.
- **Areas** – An alphanumeric code associated with the Area. Areas are physical spaces and Zones are contained within Areas. For example, an Area could consist of a hallway and several office spaces and conference rooms.
- **Zones** – An alphanumeric code associated with the Zone. Zones are physical locations within an Area or location. For example, Zone 1 could be the front door of a facility.
- **Sensor** – An alphanumeric code associated with the sensor and is the control sensor associated with the alarm.
- **User ID** – The Manitou User ID of the person logged on who made the change to the account. This could be an operator, a data entry person, or an administrator, just to name a few examples.
- **Point ID** – Area, Zone, or Point identifier description defining the alarm location or detail.

FEP Manual Signals – Collecting Raw Data

It is possible to send a signal through the FEP (Front-End Processor) to emulate the signal passing through the receiver. To create a FEP manual signal, it is necessary to collect first the "raw" signal from the Raw Data Log or Customer Activity.

Raw Data Log

1. Select **Tools | Raw Data Log** from the main menu.
2. If the event is not already present in the log, select the date range to search for it and click **Search**.
3. Once the event is located, double-click to bring up the **Log Details** card.
4. Highlight and copy the information found in the **Event Data** field.
5. Continue with the steps in Creating the FEP Manual Signal.

Customer Activity

1. From the **Customer** card, select **Activity Log**.
2. Double-click the event to bring up the **Log Details** card.

   If the event does not show in the current list, a search option is available.
3. Highlight and copy the information found in the **Raw Data Code** field.
4. Continue with the steps in the next section, “Creating the FEP Manual Signal.”

Creating the FEP Manual Signal

Once the raw data information has been copied to the Clipboard, you can create the manual signal.

1. Select **Tools | Manual Signal** from the main menu.
2. Click **FEP Manual Signal**.
3. Select the active **FEP No** and applicable **Receiver No**.

   You can also gather the receiver and FEP (Front-End Processor) details from the **Log Details** card accessed through the Raw Data Log or Customer Activity.
4. Paste the raw data from the Clipboard to the **FEP Signal** field.
5. Click **Send**.

On Test

On Test Status

The On Test query provides you with a read-only list of all On-Test entries that are on record in the Manitou 2.0 system.

Select **Operations**  **| On Test**.

The following information and options appear: On Test ID

- **Customer ID.** – The identifier for the Customer as entered in Manitou 2.0.
- **Customer** – The Customer or Company name.
- **ID** – The On Test identifier.
- **Type** – The kind of On Test period, Temporary or Permanent.
- **From** – The beginning date and time of the On Test period.
- **To** – The ending date and time of the On Test period.
- **Remaining** – The remaining amount of time before the On Test expires.
- **Details** – Information about which parts of the system are On Test (or Whole System).

Color Coding

The following are the default color-coding which can differ per your operation. Please confirm with your supervisor or system administrator.

- Current On Test accounts display in red.
- Expired accounts display in grey.
- Future On Test accounts display in green.
- You can sort by **Expired**, **Current**, or **Future** On Tests by selecting the related filter.
- You can sort by the **On Test** column headings and dates are presented in Customer local times.

Note: To refresh the list, click **Refresh**.

Put an Account On Test

There are times when an alarm arrives while a technician is testing an account. Upon validation, you can put the account temporarily On Test from the **Alarm Mode** window.

1. From **My Dashboard** or the **Alarm Mode** window, select **Operations | On Test** from the main menu .

2. Click **Add**.

   An option to prefill alarm-specific information for this On Test record appears.

   - **Yes**, if it is necessary to place this one exact event On Test.
   - **No**, if you place more than this exact event On Test.

   The **Advanced Search** dialog box appears.

3. Complete the On Test Advance card.

   - **Reason** is why you are putting the system On Test.
   - **Temporary On Test** is automatically selected and you use it for the majority of On Test situations; this type expires based on date/time provided.
   - **Permanent On Test** is primarily used in extreme situations such as extensive damage, facility down, construction, and so on, and does not expire. If you don't select this option, On Test defaults to Temporary which you use in the majority of On Test situations; this type expires based on date/time provided.
   - Complete the date and time fields.

4. Click **Save**.

   Once the time has expired on the Temporary On Test, the system will automatically return the account "to Service".

Fields

- **Systems** – A system is how a signal will find this account when it arrives from a receiver. There are four different types of systems: Event Monitoring, Access Control, GPS, and Other
(user-defined).
- **TX** – The transmitter identifier or Reference Code. A transmitter is a device located on the Customer premises that communicates with the alarm communications receivers connected to the system.
- **Area** – An alphanumeric code associated with the Area. Areas are physical spaces and Zones are contained within Areas. For example, an Area could consist of a hallway and several office spaces and conference rooms.
- **Zone** – An alphanumeric code associated with the Zone. Zones are physical locations within an Area or location. For example, Zone 1 could be the front door of a facility.

- **Event Category** – The assigned group for an event. This assists with management of Monitoring Groups and Disaster Mode.
- **Event Code** – The Manitou Event Code associated with the signal.

Manually Returning an Account to Service

In instances where an account has been placed on **Permanent On Test** or an account needs to be active prior to expiration of the On Test, you can take the account out of On Test manually.

There is no automatic expiration for an account placed on **Permanent On Test**. You must remove the test from the **On Test Advanced** card to return the account to active status.

1. From the **My Dashboard** or **Alarm Mode** window, select **Operations | On Test** from the main menu .
2. If necessary, load the Customer ID or search for the Customer record.
3. Validate the password.
4. Select the line(s) to remove and then click **Remove** or **Remove All**.
5. Enter a Return to Service Comment.
6. Click **OK**.

Pre-Cancel

When a Customer trips an alarm by accident, or knows an alarm will be triggered, the Customer can call to cancel the alarm. To counteract this, the Manitou system allows the ability to create a Pre-Cancel event to notify any operator managing that account's alarms. When created, the Pre-Cancel warning is sent to the alarm handler.

Note: Pre-Cancel warnings can be sent out and received while the alarm is in process or upon alarm receipt.

To create a Pre-Cancel event, do the following:

1. Select **Operations | Pre-Cancel Alarms** from the main menu .
2. Select the alarm from the **Alarm Queue**, or if needed, search for the Customer record by clicking in the **Customer** field and typing search data.
3. Confirm the contact using the **Validate** dialog box.
4. Select a **Resolution Code**.
5. Complete the **Comment** and **Instructions** field.
6. Click **Add**.

The Pre-Cancel notification displays in the **Pre-Cancel Data** grid.

Removing a Pre-Cancel Notification

There might be an instance that a Pre-Cancel alert is incorrect or should otherwise be removed.

1. To remove a Pre-Cancel alert, select the Pre-Cancel notification.
2. Click **Delete**.
3. Click **Yes** when prompted to confirm the deletion, or **No** to cancel action.

Review Pre-Cancel

Loads the Pre-Cancel record pertaining to the loaded alarm. (Click **Operations**  **| Pre-Cancel** from the **Alarm Mode** window).

Temporary Comments

Sometimes when a contact is made, the Customer provides additional information pertinent to the account. Examples of this might be a Customer going on vacation or scheduled construction on the property. These situations call for the creation of a Temporary Comment.

1. On the **Alarm Mode** window, select **Actions | Add Temporary Comment**.
2. Confirm the contact using the **Validate** dialog box.
3. Type a **Description** for the Temporary Comment and select the **Comment Type**.
4. Enter the additional specifics for the Comment:
   - **Show On Open** – Options pertaining to when to show the Temporary Comment.
   - **Valid From/To** – Dates and times through which the Comment will be valid; if the Comment does not apply to Automatic Actions, select **Ignore Comment** from the **Auto-Client** drop-down list.
   - **Auto Purge** – Whether or not the Comment is purged, once expired.
   - **Follow Up** – Date and time to follow up with the Customer.
5. Enter the **Comment** details in the space provided.
6. Click **Save** and confirm to return to the **Alarm Mode** window.

Remove a Temporary Comment

To remove a Temporary Comment prior to expiration, select the Comment from the list on the **Temporary Comment** card and click **Remove**. Upon confirmation, the Comment is deleted.

Temporary Schedules

When managing a schedule exception event, such as an Unscheduled Open or Late to Close, it is possible to update the Open/Close Schedule temporarily based on the Customer feedback.

Creating a Temporary Schedule

A normal Open/Close Schedule must have been configured for the Customer prior to setting up a Temporary Schedule. To configure a normal Open/Close Schedule or for more information on Temporary Schedules, see Open/Close Schedules, and Open/Close Schedules Wizard.

1. On the **Alarm Mode** window, select **Actions | Add Temporary Schedule**.
2. Validate the system password.
3. Select the applicable date to change the schedule (the current date loads by default).
4. Update the applicable schedule lines.
5. Click **Save** and confirm to return to the **Alarm Mode** window.

Modify or Delete a Temporary Schedule

It is also possible to edit or remove an existing Temporary Schedule from an account. For more information on schedules, see Open/Close Schedules, and Open/Close Schedules Wizard.

1. Open a Customer record.
2. Click **Open/Close Schedules** from the sidebar.
3. Click **Edit** on the **O/C Schedules** card.
4. Click **Temporary** on the **OC/Schedule Edit** card.
5. Edit the fields as needed or click **Remove** next to the scheduling line you want to delete.
6. Click **Done** to save your changes.

Disaster Mode

At times, a central station might run into problems that affect the ability to perform necessary duties. Such instances might be severe weather or catastrophic conditions which affect the Monitoring Area and cause problems with false or multiple alarms sent at a rapid rate. Setting Manitou to Disaster Mode allows the central station to change the way alarms are received and processed, and will allow operators to reassign priorities for event alarms, customize the system to log certain signals, filter the signals from the affected Monitoring Area to a specific operator or group of operators, or suspend activity.

Important: Disaster Events are tied to postal codes. If you don't create a postal code(s) for a given location, you can't manage Disaster Events for that location.

Add a Disaster Mode

1. Select **Operations | Disaster Mode** from the main menu .
2. Click **Add** + on the **Disaster Events** card.
3. Select if the event is a **Warning** or a **Watch**.
   - **Watch** does not trigger any action and you use it to broadcast a potential concern.
   - **Warning** will generate actions based on the settings.
4. Type a brief **Description** (a required field).

   Note: If the **Description** field is not populated, clicking **Done** will not process the **Disaster Mode** event.
5. Type any **Comments**.
6. Ensure you set the **Monitoring Group** to the default **Monitoring Group 0**.
7. Select the date range from the **From** and **To** drop-down list boxes and type in the time (hours and minutes) for the related date. Should you need to schedule the event for some time in the future, click the related drop-down arrow and select a date from the calendar, or type a date directly into the date fields.
8. Select the location(s) affected by either **Zip Code (Postal Code)** or **City**.
9. Select a **Country** and **State**.
10. Click **Add**.

    Note: Customer logs do not log signals as "Disaster." It is necessary for you to select individual lines in the log to view Disaster Flags.

Edit a Disaster Mode Event

To change the time or duration of a Disaster Mode event or to adjust the notes, quick edits are available within the **Disaster Mode** card.

1. Select **Operations | Disaster Mode** from the main menu .
2. Click **Edit** on the **Disaster Event** card.
3. Select a line from the event list.
4. Make edits as needed in the **Modify** section.
5. Click **Update** to save your changes.

Using Enhanced Action Patterns in Alarm Handling

From the **Alarm Mode** window, click an Enhanced Action Pattern item from the **Action Pattern** section.

Respond to each prompt at the **Enhanced Action Pattern** card by either by clicking **Do**, or by entering responses into the text box, and then clicking **Accept**.

See Enhanced Action Patterns in Alarms, for more information on using Enhanced Action Patterns while in an alarm.

Maintenance Issues

The Maintenance Issues function allows you to record details of any administrative issues with particular system records as they are encountered. A system administrator or supervisor can then address Items entered into the list.

Please note the following:

- You can only edit Maintenance Issues that you created.
- When adding a Maintenance Item, the **Priority** slider defaults to **Not Assigned**. The highest priority is “1” and the lowest priority is “10”.
- At the **Person** field, enter the name of the individual who reported the Maintenance Issue.
- Maintenance Issues in the grid display gray once they have been marked as resolved and saved. You can modify these settings in the Manitou Supervisor Workstation by clicking **Tools | Options | Color Options**.
- In the Manitou Supervisor Workstation you can also resolve an existing Maintenance Issue by selecting it from the grid, and then clicking **Resolve Selected**. The **Resolve Selected** button automatically designates a Maintenance Issue as resolved, and causes it to display gray in the grid. A user who resolves a Maintenance Issue through the **Resolve Selected** button does not get an opportunity to enter additional notes.

- You can add a technician through the **Maintenance** option. If you select the **Suppress** option when creating a technician profile, the technician's information is hidden from Call Lists.

Reports

Reports has two types of report formats available: System Reports and Scheduled Reports. System Reports are individual reports you must create each time you want one to generate. Scheduled Reports are created once and then generate according to your designated interval.

Notes:

- You can display, download, publish, re-queue (Scheduled Reports only), delete, and email by clicking the available option.
- You must have Bold Support Portal access to view linked documents. If you do not yet have the necessary access, contact Bold Support.
- In regards to selecting report options, checking all categories is the same as unchecking all categories. In order to keep the parameter list as short as possible, when you select all items of a particular category, the parameter sent to the report server is empty (meaning "all" is requested).
- Reports that group by dealers (including sub-dealers) are not broken out by sub-dealers. Instead, they are consolidated and their information is displayed below the main dealer.
- If your browser blocks a report, a dialog box displays indicating so, and you have the option to unblock the report per the standard operation in your browser.

System Reports

Activity

- **Agency Response**

  The Agency Response Report provides details regarding the question the Agency representative should answer for identity verification and the expected answer from the Agency representative for the verification question. You can filter this report by a number of options to include Event Codes, Event Categories, Monitoring Status, and Advanced.

- **Alarm Cause Summary**

  The Alarm Cause Summary Report provides details regarding a summary of what caused alarms, that is, Burglary or False Alarm during a set time period. The report ultimately provides a listing of the Event Category, Alarm Causes (Resolution Codes) and the number of genuine and False Alarms.

  You can enter various search criteria into the fields provided on the **Alarm Cause Summary** card.

- **Alarm Detail**

The Alarm Detail Report contains the alarm activity details for a single or for several Customer records. When you run the report with the defaults, the report groups by Customer and lists each alarm in sequential order.

Note: The Alarm Detail Report satisfies all requirements of UL 1981, the automation system shall be able to output the information contained in sections 10.1.3 – 10.1.6 by account specific reports.

- **Alarm Detail by Alarm Number**

  The Alarm Detail by Alarm Number Report is a more specific version of the Alarm Detail Report required by UL. You must know the alarm number to run this report correctly.

- **Alarm Grading**

  The Alarm Grading Report rates various types of signals into categories and lists how many were in and out of compliance upon you viewing them within a specified time period for that type.

- **Alarm Resolution**

  The Alarm Resolution Report produces the details and summary information about alarms and how they were resolved, including if the alarm was dispatched or not. The report results also total the number of genuine and False Alarms and the percentages of each including the numbers and percentages of dispatched False Alarms.

- **Alarm Response**

  The Alarm Response Report produces activity and shows how long it took for the alarm to receive its first contact action.

  Note: The Contact Action requires an operator to pick up the telephone and dial out to an actual Contact. If a pager, fax, or email is used to contact a responsible party, that is not considered a true Contact Action.

- **Customer Activity**

  The Customer Activity Report is the most detailed report available for obtaining Customer account activity information. The Customer Activity Report includes information on most Customer activities including Opening, Closing, Out of Service, and Comments. It excludes instances where someone accessed the Customer record only for viewing or editing. The Customer Activity Report displays results by Contract Number and then by the Alarm Report Number.

  This report differs from the Alarm Detail Report, which concentrates only on the alarm activity. The Customer Activity Report collects and returns information on the entire activity: Open, Close, On Test, Comments, and so on. The standard Activity Report runs with no changes, except perhaps narrowing the criteria by Customer or Dealer, and produces a report showing the alarms, signals, and related details from the Customer Activity Log.

Note: The report excludes the entries when someone opened the Customer record for viewing or editing.

- **Daily Signals**

  The Daily Signals Report is similar to the Customer Activity Report, with the exception of the manner in which the results appear. While the Customer Activity Report displays results by the Contract number and then by the Alarm Report number, the Daily Signals Report displays results by date only.

  The Daily Signals Report has the same advanced options as the Customer Activity Report to narrow the results, with the exception of the **Log Record Types**. Since this report does not list alarm details, there is no need for the option.

  The Daily Signals Report will list the signals for a day or date range based on the entered criteria. The default results produce the signal date then list the signals by time with Customer ID, Signal Type (A=Alarm, S=Signal), Event Category, Signal, or Alarm Description, and if the alarm was dispatched.

- **Handled Signals by Operator**

  The Handled Signals by Operator Report is a useful management tool to view the number of alarms operators are handling.

  The report results display the operator's User ID, Operator Name, the number of alarms acknowledged, along with the total number of alarms closed by that operator. The total number of alarms could differ greatly from the number of alarms acknowledged if:

  - The ability to cancel alarms from the Alarm Queue is allowed.
  - The operator is able to close alarms of equal or lower priority along with the alarm the operator just acknowledged and completed.

- **Last Signal Date**

  The Last Signal Date Report lists the last signal date logged to the Customer account by day or series of days. You can use a variety of filters and options.

- **Signal Count by Customer**

  The Signal Count by Customer Report will produce a report detailing the number of Signals, Alarms, and Ignored Signals for each Customer. An Ignored Signal is one that was ignored by the system, often when using a programming feature such as Entry/Exit delay. The Entry/Exit delay process will ignore any signals that are part of the Entry or Exit process if followed or preceded by an Open or Close signal.

- **UL Response**

  The UL Response Report typically is for Alarm Investigators, these will be persons of an Agency. The person subtype that represents "runner" (for which the report will be looking for) is set as one of the two options. The other option is the minimum alarm priority level that requires a UL Runner.

"D-N-A" on a report stands for "Did Not Arrive." This means that the alarm should have had a runner (investigator), but sent none to Manitou. Therefore, "***" for the Average will be shown when there is one or more D-N-A's since that average cannot be calculated.

- **Unrestored Signals**

  The Unrestored Signals Report typically is run to verify if alarms received a Restore Signal, or if the account requires maintenance to clear out closed, but unrestored alarms. The report lists all alarms that are in Restore Required status, but have not yet been restored.

  Also, if the optional setting of **Track Additional Statuses** is set to **Yes**, the additional panel statuses could also be unrestored. These additional panel statuses are not restored by an alarm restore and therefore, can pile up and create Restore Overdue Signals when the alarm itself is restored.

  Note: When run on default settings, the report will find all signals that are unrestored for greater than ten minutes and sort the results by date.

- **User History**

  The User History Report is designed to show operator log on and log off information. You can choose to include all history information or limit the report to log on or log off information.

Maintenance

- **Access Control Card Lookup**

  The Access Control Card Lookup Report provides a list of specific Access Control Cards detailed in one report. This list can be useful as a scheduled report for Customers who use Access Control to view when employees have accessed the building.

- **Access Control Cards/PINs**

  The Access Control Cards/PINs Report provides a detailed list of Customers at a site who use Access Control and might want to view a master report of employees at the site with Access Control Cards or PIN numbers. The report includes the Transmitter ID, the Card ID, the name of the person to whom the card belongs, and the Type of card.

- **ASAP Validate**

  The ASAP Validate Report lists bulk validation of Customers with CSAA ASAP retransmission to Authorities. You can use a variety of filters and options.

- **Audit Trail**

  The Audit Trail Report is a system trace that details transactions relating to a Customer account. You can use a variety of filters and options.

- **Billing Reconciliation**

The Billing Reconciliation Report produces a list of Customers who have inconsistent billing setup information between Sedona and Manitou CS. This helps to find inaccuracies and make necessary corrections to Customer accounts.

Note: The report allows you to designate Dealer, Branch, and Customer, and includes a reverse check and inactive accounts as well as specify **Errors Only**.

- **Customer Add/Del**

  The Customer Add/Delete Report shows all added and removed Customer records for a specific period of time. The Customer Add/Delete Report produces two different sets of results depending on whether or not you select the **Include Details** check box, which is selected by default. It is also automatically set to the current day and to **Include All** additions and deletions, grouping the **Summary By Date** by default as well.

- **Customers with Transmitter Type**

  The Customers with Transmitter Type Report is a useful maintenance tool, as it produces a list of Customers and their Transmitter Types within the Manitou system. This report can help with moving Customers to newer and better equipment.

- **Maintenance Issues**

  The Maintenance Issues Report lists all maintenance issues listed for Customer accounts through the Service Manager. You can use a variety of filters and options.

- **Permit Exception**

  A Permit Exception occurs when an Authority requires a permit and the Customer cannot produce one. You can customize this report by **Customer Name** or **ID**, **Dealer ID**, or **Branch ID** and narrow down by a specific **Group**, **Class**, and **Authority ID**.

- **Permit Expiration**

  The Permit Expiration Report is designed to list all the police, fire, and medical permits that have expired. If a permit expires, the Customer must renew it or they might not get service from the Authorities.

- **Where Used on Contact List**

  The Where Used on Contact List Report will produce a listing of the Customer, Dealer, Branch, Authority, Agency, records where the selected entity is listed on the Contact List.

  Entities that can be listed on a Contact List:

  - Monitoring Company
  - Dealer
  - Agency
  - Branch

- Authority
- Customer
- Global Keyholder (Contact)

Master File

- **Access Control Card Formats**

  The Access Control Card Formats Report provides a list of Access Control Cards associated with a certain format. The only search criteria needed to run this report is a **Format Number**. If no format number is entered, the report will list all Access Control Cards.

- **Accounting Companies**

  The Accounting Companies Report provides a report of all accounting companies linked to the Manitou system, the direction it is linked (for instance, Accounting to Manitou), as well as the DSN, username password, and server associated with the particular accounting company.

- **Agency Master File**

  The Agency Master File Report lists the details of the Agencies within the Manitou database. This report can include or exclude as much or as little information as wanted.

- **Application Types**

  The Application Types Report produces the same information that is available within the **Application Types** form in the Manitou Supervisor Workstation. The report does not require any user-entered criteria.

- **Audio**

  The Audio Report provides an itemized list of all audio device types in the system.

- **Authority Master File**

  The Authority Master File Report lists the details of the Authorities within the Manitou database. This report can include or exclude as much or as little information as wanted.

- **Branch Master File**

  The Branch Master File Report lists the details of the Branches within the Manitou database. This report can include or exclude as much or as little information as wanted.

- **Cities**

  The Cities Report lists the cities based on entered criteria.

  Important: The information entered into the **Region** and **City** fields must match the spelling of the city and state/region as it has been entered in the database.

- **Class Codes**

The Class Codes Report lists the Class Codes currently available within the database. It is not necessary to enter or select any criteria to receive a listing of all the Class Codes within the database; however, if you want to view Class Codes within a specific range, then criteria can be entered into the **Class From** and **To** fields.

- **Contact Point Types**

  The Contact Point Types Report lists all the different Contact Point Types available within the Manitou system. These include Telephone Numbers, Email Addresses, Pager and Fax Numbers, and Web Addresses. There is no user-entered criteria because the report only has one output.

- **Control Panels**

  The Control Panels Report lists the control panels within Manitou and their details. It is possible to run this report with and without details; however, you can enter search criteria in the **From** and **To** fields as well as specify a detailed view, if needed.

- **Countries**

  The Countries Report produces the country details available in the Manitou Supervisor Workstation. Most companies will only have one country; however, if necessary, this report can be limited to one or all selected countries. The report output only displays the Country Options Telephone and Time information and the Mailing Address Layout information.

- **Customer Master File**

  The Customer Master File Report contains all the data housed within the **Customer** form. Operators can adjust the report parameters to view as much or as little of the Customer information as needed. The report is designed to provide a reference if Customer data has been lost and it is necessary to enter the data back into Manitou. The report is not designed for manual alarm handling.

  Note: The Customer Master File Report can be run in several forms to provide account-specific details from Customer records.

  Search Criteria

  - **Commission Date** – The date the account was activated.
  - **Create Date** – The date that the account was initially created within the database. This is not a date easily located through the user interface.
  - **Last Updated Date** – The date the last data change occurred within the Customer record. If an operator edits and saves the record without making any change to the Customer data, this does not update the last updated date.
  - **Marked for Reprint** – The check box on the **Customer Save Notes** dialog box, where **Mark Customer for Reprint** is selected, sets this value and the report server, then looks for the records with this value. This value is reset when the **Reset Reprint** box is selected.

- **Reset Reprint Flag after Publishing to Printer** – This will reset the **Marked for Reprint** flag on all Customer records included in this report's parameters. This value is reset when the **Reset Reprint** check box is selected.
- **Suppress Passwords** – This will change the passwords printed in this report to asterisks.
- **Suppress AR No**. – This will change the accounts receivable number printed in this report to asterisks.
- **Mail Format** – This will output the reports in a format that is ready for folding and placing in window envelopes. This option is not enabled unless the **Page Breaks** option is cleared. **Mailing Format** assumes page breaks, therefore, there is no need for the additional check box.
- **Page Breaks** – This check box will force page breaks between the groups by options.

- **Dealer Master File**

  The Dealer Master File Report allows the ability to generate a hard copy of the Dealer account information. This report will only contain Dealer-specific information.

- **DNIS Maps**

  The DNIS (Dialed Number Identification Service) Maps Report will display mappings used within the system.

- **Event Categories**

  The Event Categories Report allows for narrowing of Event Category data. If there are Event Categories specified for a single Monitoring Group, this information will also be listed. The default results show all the Event Categories for all Monitoring Groups. The only filtering for this report is based on the **Monitoring Groups**.

  All Event Categories for this report will print every time. The only restriction is based on the Monitoring Group.

- **Event Codes**

  The Event Codes Report will list Event Codes and their details. This could potentially be a very large report when run on the defaults, so Bold Technologies recommends narrowing the results by selecting specific search criteria.

- **Event Maps**

  The Event Maps Report shows the relationship of how a signal arrives into automation and how Manitou translates it. This information will show where it is not necessary to program signals that Manitou already knows how to translate.

  Users can streamline the report by selecting **Dealer ID** and choosing **Protocol Types** as well as how the report is grouped.

- **Global Holidays**

The Global Holiday Report lists the entered global holidays listed within the Manitou system by country. You can simply select which countries you want to view global holidays, as well as the format (**Month, Day** or **Day, Month**) in which the report will format the report results.

- **Global Keyholder Master File**

  The Global Keyholder Report lists the Keyholders that have Contact IDs tied to their information. Bold Technologies suggests to run this report without parameters to produce the best results. You can customize the report to display as little or as much information as necessary.

- **Group Codes**

  The Group Codes Report lists the Group Codes for the Manitou system.

  You use Group Codes to categorize Customer accounts. These are very similar to Class Codes; however, reporting and Dealer billing is designed for Class Codes. Select the appropriate **Group Code** from the drop-down list and click **Next** to continue running the report.

- **Locales**

  The Locales (also known as Languages) Report produces a list of the languages within the system. This report does not require any user-entered data.

- **Monitoring Company Master File**

  Like the Customer Master File, the Monitoring Company Master File Report produces details of the Monitoring Company record. You can adjust the report parameters to view as much or as little of the information as needed. The report is designed to have a reference if the Monitoring Company data has been lost and it is necessary to enter the data back into Manitou.

- **Monitoring Groups**

  The Monitoring Groups Report will display a list of all current Monitoring Groups.

- **Monitoring Types**

  The Monitoring Types Report will display a list of current Monitoring Types in Manitou.

- **Output Device Types**

  The Output Device Types Report provides a list of all Output Devices currently configured in the Manitou system. The report includes the attributes, Device Type (such as a numeric pager), Protocol, Rows, Columns, Scripts, whether the text is wrapped, Pager Entry, and Service Codes associated with each differing Device Type.

- **Permit Types**

  The Permit Types Report provides a list of all permits for certain countries. For example, if a Permit Types Report is run on the United States, Permit Types for the police, fire, and medical will be displayed in the report.

- **Post Codes**

  The Post Codes Report simply lists all postal codes (or zip codes) within a certain region or city. For example, entering the city "Colorado Springs" into the **City** field will bring up a list of all postal codes currently entered into the Manitou system for the city of Colorado Springs.

- **Receiver Line Prefixes**

  The Receiver Line Prefixes Report lists all Receiver Line Prefixes currently configured in the Manitou system.

- **Receiver Types**

  The Receiver Types Report provides a list of all Receiver Types currently configured in the Manitou system.

- **Receivers**

  The Receivers Report provides a detailed list of configuration criteria of each type of Receiver for each FEP (Front-End Processor). The report includes the Receiver Number, Receiver Code, Receiver Description, Type, Port, Settings, Default Line Prefix, Default Monitoring Group, Line Prefix, and Transmitter ID.

- **Regions**

  The Regions Report provides a list of all regions and abbreviations currently in the Manitou system.

- **Resolution Codes**

  The Resolution Codes Report lists all Resolution Codes for a particular country or "group." The report shows the two-letter code, a description of the code, and the alarm condition. Users might want to use this report as a listing of alarms or signals closed with a specific Resolution Code, such as False Alarms.

- **Reverse Channel Routes**

  The Reverse Channel Routes Report displays a list of all protocols currently configured in the Manitou system, as well as description of the Protocol, Application Type, Receiver Line Prefix, if the Reverse Channel is associated with a Dealer, the FEP Number, Receiver Number, Line Number, and Receiver Code.

- **Script Messages**

  The Script Messages Report provides a report of all current Script Messages entered into the Manitou system. This report includes details on the Script Message name, the type of Script Message (such as email), and the text of the Script Message.

- **Service Provider Device Types**

  The Service Provider Types Report gives a detailed list of all Service Provider Types currently configured in the system. The report includes the Protocol Type (such as TAP), Address, ID, Account Name/Password, if the protocol is Dialup, Timeouts, Values and Port Settings.

- **Subtypes**

  The Subtypes Report provides a detailed list of all subtypes currently configured in the Manitou system. The report lists the Type (such as Agency) and the Subtypes and Description.

- **Temporary Comment**

  The Temporary Comments Report lists the Temporary Comments listed in Customer's records. The Temporary Comments in a Customer record display to operators upon loading an alarm for that Customer. Users might want to use this report to see vital comments, such as a Customer vacationing during a specific time period, or other special instructions regarding an account.

- **Time Zones**

  The Time Zones Report provides a list of all time zones currently entered in the Manitou system.

- **Transmitter Protocol Formats**

  The Transmitter Protocol Format Report provides a list of all Transmitter Protocol Formats currently configured in the Manitou system. The report includes the Transmitter Type, Signal Type, and Condition Picture, as well as other Area and Zone details.

- **Transmitter Types**

  The Transmitter Types Report provides a list of all Transmitter Types currently entered into the Manitou system. Users can choose to filter the report by **Transmitter Type** or **Reverse Command Protocol**. The report also has the option to **Include Programming** in the report details.

- **User Groups**

  The User Groups Report provides details pertaining to all User Groups currently entered in the Manitou system. The report lists the name of the User Group, Maximum Activity, Accounting User ID, as well as the Call Types accepted by the User Group, such as Cancel Alarm, Confirm Alarm, or Schedule Change.

- **Users**

  The Users Report provides details pertaining to all users currently entered in the Manitou system. The report includes details on User ID, Name, Contact Point, Locale, Country, Profile, Password Changes, Alarm Queue Accessibility, and Accounting Access.

- **Window Codes**

  The Window Codes Report lists all Schedule window codes currently entered into the Manitou system. The report will list the Code, Description, and Minutes Before/After.

- **Workstation Group**

  The Workstation Groups Report lists all workstation groups currently entered into the Manitou system. This report requires no user-entered data.

- **Workstations**

  The Workstations Report provides a list of all workstations currently entered into the Manitou system. The report includes details on a specific workstation, such as which workstation is associated with a Manitou 2.0 client, the Description, Security Level, when the workstation was last active, Monitoring Group, Attributes, Locale and Time Zone.

System

- **Customer Count**

  The Customer Count Report lists Customer status for all Customers in the system. You can group the report by **Dealer**, **Branch**, or **Class Code**, and the report includes summaries. You can choose to order the report by **Customer ID** or **Customer Name**.

- **Customer Services**

  The Customer Services Report will produce a list of all current monitored services, including Pending, Active, Inactive, and Deactivated statuses. The report also has the option to include only services that are chargeable.

- **Customer Status**

  The Customer Status Report displays only the current status of the Customer or Customers for which the report is run. You can also run this report to find the Out-of-Service status of Customers. To get a proper On Test Report, leave all options blank with the exception of the **Report Description** and **Priority**.

  Note: The Customer Status Report provides different outputs, depending on what options you select.

- **Customer Status Change**

  The Customer Status Change Report lists all status changes in a specified date range. You can search data **Dealer ID**, **Branch ID**, or **Class**. The **Class** search parameters are defined by **Weekly Activity**, **Monthly Open Close Activity**, or **Regular Account Activity**.

The details in this report lists all signal/alarm details, Open and Close activity, and any Exception activity (for example, unexpected Openings/Closings).

- **Dealer Billing**

  The Dealer Billing Report calculates a Dealer's billing invoice based on his or her specific Dealer charges housed within the record. You can only specify this report by **Dealer ID** and you can include either mail format or specific details.

- **False Alarm Summary**

  The False Alarm Summary Report gives a listing of all False Alarms received within a specific date range. Search parameters can be limited to **Dealer ID**, **Branch ID**, or **Authority ID** and you can group them by either **Dealer** or **Branch**, if preferred.

- **On Test**

  The On Test Report lists all systems that are recently, currently, or will be On Test. You can search by **Customer ID**, **Dealer ID**, **Branch ID**, **Group**, or **Class**.

- **Operator Time Cards**

  The Operator Time Cards Report lists the times an operator logs in and out of Manitou. Search parameters are limited to searching by **Date** (time) and **User ID**.

- **Raw Data Log**

  The Raw Data Log Report displays details of all alarms and other signals received from the alarm receivers connected to the system based on a specific date range. You must specify a **Receiver Line Prefix** and/or a **Transmitter ID**.

  Note: If you do not specify search parameters, the report will not list any details.

- **Receiver Line Loading**

  The Receiver Line Loading Report lists either all or the selected receiver’s limits, usage and availability. Limits refers to the UL specific guidelines for the number of Opens or Closes allowed on the particular receivers.

  Central station managers and operators should refer to their UL representative for more information. See UL Requirements.

- **System Connection Status**

  The System Connection Status Report lists the system status of Customers under certain Dealers, Branches, Authorities, Groups, or Classes. You can also run the report on just one Customer without any additional search parameters.

- **System Log**

  The System Log Report provides a detailed list of all log on and log offs to the system, and the **Category** where a user adjusted, Qualifiers, and Event Text.

- **Transmitter Count by Receiver**

  The Transmitter Count by Receiver Report provides a list of all Receiver Types or Receiver Line Prefixes based on FEPs (Front-End Processors) or receivers. The report includes details of FEP number, Receiver number, Receiver Types, and Receiver Line Prefixes, among other details.

- **Transmitter Count by TX Type**

  The Transmitter Count by TX Type Report lists all transmitters currently in the system by **Transmitter Type**. You can limit the search to include only a specific **Transmitter Type**, by **Customer ID**, **Dealer ID**, or **Branch ID**.

- **Unused Transmitters**

  Unused Transmitters are Transmitter Numbers within a Transmitter Range, set up within the Dealer and Monitoring Company records that have not yet been assigned to a transmitter on a Customer record.

- **User Statistics**

  The User Statistics Report provides the details of each operator's user session including the log on and log off times, total session time, number of accounts edited, added and deleted, and the number of alarms handled of priorities 1 – 4 and 5 – 10. This information is mined from the
  User Status form found in the Manitou Supervisor Workstation.

Scheduled Reports

The **Scheduled Reports** option provides the means to create reports that can be published automatically by Manitou according to a specified schedule.

The **Scheduled Reports** card contains a list of all reports that currently exist in the system. You can select any report contained in the list for viewing or editing by clicking the appropriate report. The Distribution step provides a list of recipients for the instruction selected on the **Scheduled Reports** card.

To add a Scheduled Report click **Add** + on the card. The first thing you're prompted to do is to select a report from the **Report List**. Once you select a report, enter the parameters for the report type at each card until done.

Custom Reports

Custom Reports are reports that have required special development to be entered into the Manitou system.

Customer Signal Count Generator

The Customer Signal Count Generator is an exception report used to find accounts that do not contain class codes or other information that will enable the Dealer Signal Count Report to run and give accurate results. The report runs by default on the current date (the most preferred); however, you can adjust the date range.

Dealer Billing Deferred Revenue

The Dealer Billing Deferred Revenue tracks when enhanced billing is licensed. The report will display the necessary deferred revenue adjustments that need to be made.

Notes:

- Populate the **Dealer ID** or **Dealer ID** range by inputting or searching for a Dealer ID in the **From** and **To** fields.
- You must enter adjustments manually into the accounting software.

Dealer Billing Generate

The Dealer Billing Generate Report will report on all billing discrepancies, which can then be resolved in Manitou.

Notes:

- Populate the **Dealer ID** or **Dealer ID** range by inputting or searching for a Dealer ID in the **From** and **To** fields.
- The **Prorate Date Limit** field sets the date from which a charge is allowed. For example, if an account adds an additional pay feature on June 3rd but has an agreement that doesn't begin charging until June 15th, the **Prorate Date Limit** field could be used to specify the prorated date of June 15th.

Dealer Billing Post

Important: Do not perform the Dealer Billing Post Report unless absolutely certain of all information. Once performed, the Post Report CANNOT be undone.

Once you run the Dealer Billing Preview Report, the Dealer Billing Post Report is the final step to post the billing to the accounting system. The only editable fields in this report are the **Report Description** and the **Invoice Date**. Selecting the **Invoice Date** check box will post the billing to that exact date in the accounting software.

Dealer Billing Preview

The Dealer Billing Preview Report will list all transactions that you are ready to post to the accounting system for Dealer billing. You can run this preview as many times as needed and should be the last report run before running the Dealer Billing Post.

You have several options for this report, including sending out the report to individual Dealers or Customers by selecting a specific **Dealer ID** and/or **Customer ID**. Parameters for this report include **Dealer** options and **Grand Totals** options.

The **Dealer** options allow you to select whether the report should include all details or should be summarized by charge type and/or billing code.

The **Grand Totals** options will display a total amount of charge types or you can use it to show just the Charge Type Summary or the Billing Code Summary.

Dealer Excess Billing

The Dealer Excess Billing Report shows any excesses above the set amount for a particular Dealer. This report can be set up to specify limit, price, and actual count of excess instances.

To run the Dealer Excess Billing Report, you must first create a user-defined date field within the Manitou Supervisor Workstation.

Note: To generate the report, specify or search for **Dealer ID** and select the **Include Non-Overage Customers** check box, if appropriate.

Dealer Signal Count

The Dealer Signal Count Report lists the number of signals for each Customer based on the Dealer and the Dealer's billing settings.

Report History

The **Report History** form displays a list of reports that you have run. When you select a report, you are then prompted to take an action for the selected report: **Display Now**, **Download**, **Publish**, **Re-Queue**, or **Delete**.

Report Queue

The **Report Queue** allows you to view the current Manitou Report Queue or to search the queue by specific criteria (for example, date/time range or by system user name). Once a report is run, it is sent to the Report Queue to be viewed.

Preview a Queued Report

To preview a report in the queue list, select the wanted report by clicking it in the list and then clicking **Preview**. The selected report displays for viewing.

Note: You can edit the preview copy or print it locally. Changes made in the report viewer will not affect the report of the copy held in the queue.

View Reports for a Specific User

By default, only reports published or queued for preview by the current user appears.

To display reports queued for a specific user, type the user name into the **User** field in the filter area of the workspace and then click **Filter**. Reports for the specific user will display in the report queue area.

To remove a filter you have applied, click **Remove Filter**.

Filter the Queue by a Specific Date/Time

To view reports that have been queued for publishing at a specific date or time, but have not yet been published, specify the date range and times in the fields provided within the filter area.

You can also view reports according to how they will be published by checking or un-checking the following parameters.

- **Ad-Hoc** – Reports that have been requested by system users on an "as required" basis.
- **Scheduled (run once)** – Reports that have been pre-programmed to publish automatically at a specific time or date.
- **Scheduled (repeating)** – Reports that have been pre-programmed to publish automatically at a certain time or day on a recurring basis.

Note: Once you select the required parameters, click **Filter**. Only reports that fully meet the selected criteria appear.

Show All Reports

Clicking **Show All** located on the **Scheduled Reports** form will display all reports currently scheduled.

Scheduled Reports

The **Scheduled Reports** option provides the means to create reports that can be published automatically by Manitou according to a specified schedule. The **Scheduled Reports** form contains a list of all report publishing instructions that currently exist in the system. You can select any instruction contained in the list for viewing or editing by clicking the appropriate row. The **Publishing Destinations** section provides a list of recipients for the instruction selected.

Please note that scheduling reports cannot be done from the **Reports** option, but rather in the Customer, Dealer, Monitoring Company, Agency, Branch, and Global Keyholder records.

For example, to schedule a report for a Dealer, you must select a Dealer and then select the **Reports** option.

Edit an Existing Publishing Instruction

At times, it might be necessary to change the content of existing publishing instructions.

1. Open the **Report Queue**.
2. Select the publishing instruction that you need to change by clicking the appropriate row of the **Scheduled Reports** list.

3. Click **Edit**.
4. Click **Edit Selected**.
5. Change any necessary details on the reports pages, distribution criteria, or the frequency criteria.
6. When the editing is complete, click **Finish**.
7. Click **Save**.

Audit Trails

The Audit Trail is designed to keep a detailed log or record of changes made during data entry management. Previously, change logs were limited to the change itself, the Manitou user who made the change, the Contact Type, the serial number of the account that was changed, and basic category designation. With the Audit Trail feature, logging and reporting of additions, updates, and deletions of any portion of an account in Manitou will be logged.

The Audit Trail is not intended to be “change rollback” or “visual difference” functionality. The information that will be logged is related to data entry information. Some items such as images for mug shots and plan objects will not record old and new values. The audit will simply record the fact that an item was added, changed, or deleted. This also does not include operation data changes (such as changing an Area’s status to **Open** or updating the next expected test signal for a transmitter). It also does not include changes related to Maintenance Issues.

Selecting a Customer shows the dates and times at which edits, additions, or deletions were made to the account.

Note: You can resize column widths so they can be easily viewed on one screen without having to scroll across the **Audit Trail Details** card.

The Audit Trail does the following:

- Log any additions, updates, or deletions of any portion of the account.
- Captures anything in a contact record transaction.

The Audit Trail does NOT do the following:

- Record operation data changes (changing an Area’s status to open).
- Log the next expected test signal for a transmitter.
- Include changes related to maintenance issues.
- Rollback changes.
- Show details on additions or deletions of data.

Fields

- **User ID** – The Manitou User ID of the person logged on who made the change to the account. This could be an operator, a data entry person, or an administrator, just to name a few examples.
- **Change Type** – This field describes the type of change that took place.
- **Category** – The category gives an indication as to what card was changed, added, or deleted on the account or entity. For example, if a transmitter was added to an account, the Category would indicate that the **Systems** card changed.
- **Item** – This indicates the item type (such as an address or the field) that was changed.
- **Field** – In the case of an edit to an account or entity, the field in the actual account that was changed will display on the **Field** card.
- **Old Value/New Value** – These fields display what the previous data in the field was, and what the changed data is.
- **Review ID/Review Date** – These fields indicate the date that a review of the change was made and marked as approved/unapproved, and who authorized the change. Approval and disapproval of the changes occur in the Manitou Supervisor Workstation.
- **Comment** – Any note given by the authorized person on the changed account.

Notes:

- The status of the change is noted by the color of the log line. Yellow indicates un-reviewed changes, while green indicates an approved change. Red means that the change was rejected, but note that this does not automatically undo the change that was made. You must manually go back to the account and undo the changes made to the account.
- You can quickly access the changed account by right-clicking on the log line on the **Audit Trail Review** card. If you're unsure where a change was made, or you just want to view the card, right-click and select **Go to Record**. This displays the card where the change was made. But, while it won't highlight the actual field, it will at least give you quick access to review the changes, which is useful in the event that changes are unapproved.

Audit Details

The **Audit Details** card summarizes any changes on one card.

Audit Trail in the Activity and System Logs

You can also access an Audit Trail detail by clicking on the Customer's Activity Log and double-clicking on any log line that contains a **SAVE** edit.

The **Log Details** card is similar to the **Audit Trail** card when displaying details of that particular edit. You can right-click and select **Go To Record** option to go to the card where the change was made. It contains the same fields as the Audit Trail. Additionally, you can access an Audit Trail detail by clicking on the **System Log** and double-clicking on any log line that contains an **EDITS** entry. A summary of changes displays on one card.

Search Filter

The **Audit Trail Search** form is similar to other search forms in Manitou. You can filter out searches by **Review Code**, **Source of Change** (such as an operator or the Manitou User ID), **Change Date**, **Contact Type**, **Review Date**, **User**, or **Contact ID**.

Note: You can only select dates in the **Filter by Review Date** fields if the check box is selected.

Account Maintenance

Account Maintenance in Manitou consists of viewing and editing records as well as viewing logs and making other adjustments within the system.

Record Search

To perform a search, you select **Maintenance** from the main menu  and then a record type, which displays the **Advanced Search** card. Once a record is loaded, the default display will show basic details to include ID, name, and address information.

Customers

The Customer record provides the means to view or edit an existing Customer record. Once displayed, you can access any page of the Customer record.

Fields

- **Related Type** – Records directly associated with this Customer record.
- **Account Type** – The different kinds of accounts maintained by Manitou, for example, Customer, Dealer, Authority, and so on.
- **A/R Company** – The Accounts Receivable company for the Dealer.
- **A/R Number** – The Account Receivable number for the Dealer.

Quick Load

The Customer Quick Load feature is a real-time search for specific records, looking in six different fields to match information as you type. This feature makes it easy to locate Customer information even in cases where you can only know partial information, such as part of the Customer company name.

The search fields include: **Customer ID**, **Customer Name**, **Address, City**, **State**, and **Contact Name** with the blank field on the right being a "floater." This floater field searches all remaining fields for any relatable verbiage and displays this information as well, for example, Password, Email Address, Telephone Number, and so on.

Double-click any line in the search results to load that particular record.

Change Customer ID

The Change Customer ID function provides the ability to quickly change the Customer ID (or contract number) of an existing Customer without creating a new account. To change a Customer ID, click **main menu**  **| Maintenance | Change Customer ID**.

Unsuccessful Change Error

If the new Customer ID number was not successfully changed, an error dialog box might appear. Possible reasons for an error include the following:

- A unique Customer ID was not entered. Retry the change using a confirmed unique Customer ID.
- An alarm is queued for the Customer whose ID you are attempting to change. Retry once the alarm is cleared from the queue.

Deleted Customers

The **Deleted Customers** card displays Customers that have recently been deleted from the Manitou system, but have not yet been purged from the database. With this function you can also view and filter deleted Customer's logs.

The **Deleted Customers** card is divided into three sections: **Details**, **Logs**, and **Filter**.

Details

The **Details** page is automatically loaded when the **Deleted Customers** card is selected. This page consists of a date range area with an optional **Customer ID** field and a **Search** button.

By entering search parameters, you can find specific deleted Customers within a Date Range or by Customer ID. Once the search is completed, a list of Customers will appear in the **Deleted Customer** list you can select from and display related information.

Logs

The **Logs** card displays the Customer logs pertaining to the particular Customer selected on the **Details** card. This information is complete up until the time the Customer is/was deleted. The

deleted Customer's log is stored to comply with UL standards and will remain in the system until the record is purged. You can add a Comment to the deleted Customer's log.

To add a Comment, click **Comment** and enter the details in the dialogue box.

Filter

You can filter through the Deleted Customers list by using the **Filter** card and entering search parameters.

Users can filter deleted Customers by:

Fields

- Date and Time
- Log Record Type
- Standard Event Type
- Associated Objects
- Event Categories
- Other (Transmitter, Point ID, User Initials, and so on)

Deleting an Existing Record

If you have the appropriate user permission, the option to delete a Customer record is available.

While in the Customer record, click **Delete** . You will be prompted as to whether or not you want to continue with the deletion of the Customer record.

Note: There is no way to reverse a deletion within the Manitou system. If a record has been deleted in error, you must re-create it as a new record to be put back into the system.

Logs

Manitou uses logs to help Customers track account and alarm activity. These logs are set up to be easily accessed and used through search and filter options.

System Log

The System Log provides users with details of operator log-in and log-out activity. Users can also view activities with the Report Server, Publisher, and Watchdog Messages. To view a System Log, click **main menu** **| Maintenance | System Log**.

Note: If more than 300 entries are available, the **More** button will be available (clicking it will display additional entries). To refresh the list, click **Refresh**.

Search and Filter Log

It is possible to search and filter the System Logs to locate specific information or group certain logged activities together.

Searching the System Log

You can also perform searches on the System Log to locate specific data.

Date and Time Searches

Date and Time parameters can be set using the drop-down list in the **Date and Time** area of the filter display.

Notes:

- To restrict the search results to an exact time, enter that time in the **Time** field and select the **Time Range** check box.
- To exclude a date and/or time, select the date or time you want to exclude in the search and select the **Except Time** check box.
- You might notice that the **Reverse** check box is selected by default. This returns the search with the most recent activity at the top of the list. Clearing this check box will return the search with the oldest activity at the top of the list.
- When ready to search using the criteria you specified, click **Search**. If you want to clear the date range, click **Clear**.

Time Zone Searches

Central stations that have operations spanning several time zones might want to use the **Time Zone** search field.

Note: The Manitou system clock automatically updates any Daylight Savings time settings.

Other Searches

There are additional search fields in the **Other** section of the **System Log Filter** card including **Category**, **Qualifier**, and **User Id**.

The **Category** field includes such items as Log On/Off, Report Server, Publisher, and so on. When you select a Category as part of the search, additional options can appear in the **Qualifier** field. These additional search parameters are subsets of the **Category** field and help qualify a search – that is, further specify the Category item you selected.

For example, when you select the **Report Scheduler** in the **Category** field, you are given the option to search for Messages in the **Qualifier** drop-down list.

You can also search for a specific operator's activity by entering the Operator's ID into the **User ID** field.

Note: Each of the **Other** fields contains an **Except** check box. When selected, these **Except** check boxes exclude the selected item from the search.

Example: If you chose **Edits** from the **Category** field, then **Company** in the **Qualifier** field, and then selected the **Except Qualifier** check box, your search would look for all Edits logs EXCEPT for logs relating to a Company.

Raw Data Log

The Raw Data Log provides alarms and other signal details from the alarm receivers connected to the Manitou system. The data displays in the original format received by the FEPs (Front-End Processors). You primarily use the Raw Data Log for diagnostics, but can be useful in tracing a particular signal or group of signals from a particular Customer. To view a Raw Data Log, click **main menu**  **| Maintenance| Raw Data Log**.

Initially, all raw data received by the FEP during the current date displays. Up to 300 entries can be displayed and can be viewed by scrolling up and down using the scroll bar. In the event that more than 300 records are available, the **More** button enables (clicking it will display additional entries).

Date and Time Searches

Date and Time parameters can be set using the drop-down list in the date and time area of the filter display.

- To restrict the search results to an exact time, input that time in the **Time** field and select the **Time Range** check box.
- To exclude a date and/or time, select the date or time to be excluded in the search and select the **Except Time** check box.
- You might notice that the **Reverse** check box is selected by default. This returns the search with the most recent activity at the top of the list. Clearing this box will return the search with the oldest activity at the top of the list.

When ready to search using the criteria you specified, click **Search**. If you want to clear the card, click **Clear**.

FEP List

The FEP (Front-End Processor) list displays on the left-hand side of the **Raw Data Log** card.

The FEP list shows all installed FEPs and corresponding receivers (REC) and can help in identifying all available raw data acquired by the Manitou system.

When searching for specific data, you can select a FEP and all sub-items (receivers, lines, and so on), or a specific receiver or line, and so on. You can also search for one specific Transmitter ID by inputting the ID in the **TX ID** field.

Note: You can only search with one parameter at a time (for example, you can only select one FEP
at a time).

Time Zone Searches

Central stations that have operations spanning several time zones can use the **Time Zone** search field.

Note: Any Daylight Savings time settings are automatically updated by the Manitou system clock.

Receiver Line Prefix and TX ID Searches

You can specify a particular Receiver Line Prefix (Rec. Line Prefix) or a Transmitter ID (TX ID) to search for in the raw data. Select the Receiver Line Prefix from the pre-populated drop-down list, or enter the Transmitter ID into the text field.

Dealer Takeover

Dealer Takeover is a function that moves all of the Customers (and sub-Dealers) of one Dealer, to another. Information such as Transmitter Types allowed, Control Panels allowed, and Reverse Protocols will be moved to the inheriting Dealer. If the inheriting Dealer does not have a system account and the original Dealer does, the inheriting Dealer will inherit the system account. Likewise, the last week of alarm and signal activity will be copied to the inheriting Dealer's system account. If both Dealers have system accounts, the original Dealer's system account will be deleted.

Important: Once a Dealer Takeover is done, it cannot be undone. Use extra care when doing Dealer Takeovers.

For the Dealer Takeover to be active, the correct permissions must first be set up in the Manitou Supervisor Workstation profiles. In the Supervisor Workstation, click **Maintenance | Setup | Permissions**. Determine what profiles (administrator, operator, and so on) should be allowed to use Dealer Takeover. Set the permissions to **Visible/Enabled**, and save the changes.

Note: You must log out and log back in to Manitou for changes to take place.

To perform a Dealer Takeover, click **main menu**  **| Maintenance | Dealer Takeover**.

Appendices

Appendix A – Add-on Modules

Bold Technologies offers additional modules to improve efficiency and allow for more control within the Manitou monitoring system.

MediaGateway

MediaGateway is a compilation of independent products working together to provide unique solutions to the business problems of central stations. These products are grouped into two modules, which can be provided individually as either the Bold Efficiency Collection or the Personal Safety Collection, or combined into the Bold Efficiency and Personal Safety Collections.

- **Bold Efficiency Collection** provides an increased level of efficiency through the use of such tools as customized voice responses, automatic text notifications, receiver line tests, auto-respond features, social media monitoring, even a real-time graphical display (dashboard), and much more.
- **Personal Safety Collection** enables talk and listen capabilities by way of two-way voice functionality as well as the ability to use any phone as an alarm system, routing a voice call to a central station operator as an alarm. The Personal Safety Collection also provides additional safety and protection for the lone worker as well as GPS information from mobile devices.

Location & Address Services

Address Verification

Address validation verifies the physical address of a record (whether Customer, Dealer, Branch, or Contacts associated with the record) through a 3rd party vendor, backed by the USPS. In addition to updating individual records, Address Services allows for bulk address updates as well. This function enables a large group of addresses to be compared against the USPS national database for validity.

By designating simple search criteria, a single address or a bulk group of addresses (up to 500 records at one time) can be compared against a national database for accuracy and verification. Then, with a few quick clicks, you can edit, update, and save addresses back in the system. Users can even choose to include updates to PSAP (public safety answering point information)

facilities, include contact addresses or show only those Addresses that have already been updated and verified.

When added to a Manitou system, you can access Address Services module through any record by first populating the address (either through input or Customer/Dealer/Branch lookup) and clicking **House**.

Location Services

Location Services, using a nationally recognized mobile emergency service, provides a seamless way to determine the location of both smartphones (such as an iPhone) that can deliver GPS location information as well as traditional mobile phones, which can only initiate a voice call. By integrating the Location Services module with the Manitou system, you can quickly determine the location of a caller and relay that information to the associated Authorities.

- **Device Location Determination** – Receipt of mobile emergency voice call, with or without GPS location data from the device, received as an InstantConnect call through MediaGateway, then parsed and submitted for handling through the Signal Handling. The Signal Handler will initiate GPS location lookup and determine appropriate Authorities to call, and will include the associated alarm number as well as any other identifying information.
- **PSAP Integration** – Provides detailed Authority information through integration with the Pitney Bowes or West [Intrado] PSAP (public safety answering point information) service. Immediate PSAP lookup for a specific Authority Type (police, fire, medical), notifies alarm handlers if information is available.
- **Bing Mapping Integration** – Integrate Bing mapping service data into the Manitou software.
- **Simple Address Verification** – Through the Location Server, you can perform a simple check for address verification by clicking **Verify**. If verification is successful but returns an updated address, the Manitou system will prompt you to change or discard the address. If Address Services has been added to the account, once you select **Verify**, this module will take over.

BoldNet Neo

BoldNet Neo enables you to quickly access and edit Customer accounts, as well as customize the BoldNet Neo web page. BoldNet Neo includes the following features:

- **Filtering**

  Many of the BoldNet Neo item lists are filterable, based on criteria you specify.

- **Help File Customization**

  Central stations can add their own help sections to BoldNet Neo as needed.

- **Logon Messages**

  Central stations can create a logon message that users will see when they logon to BoldNet Neo (for example, maintenance items, updates, and so on).

- **Paging**

  Most lists containing over 20 items are “paged” – lists will automatically be split into pages
  of 20.

- **Permissions**

  Set, Manage, and Enable/Disable permissions.

- **Sorting**

  Many of the BoldNet Neo lists are sortable by way of column selection.

- **Templates**

  Significantly reduce data entry time by using pre-populated BoldNet Neo templates.

- **BoldNet PDA**

  Accessibility to BoldNet Neo through SmartPhones/PDA devices.

- **User Dashboard**

  Allows for Customer assessment and quick access to common features like search Customer base, run a report, adjust personal settings, and so on.

- **Editing Capabilities**

  BoldNet Neo gives the capability to edit Customers and user settings.

- **Account Management**

  Put an account on test, edit basic Customer information, or input a new Customer.

BoldTrak

BoldTrak is a device tracking application that is integrated within Manitou 2.0. It offers a robust set of features you can use to track and monitor anything from people to vehicles and pinpoint virtually any location on its built-in map.

With BoldTrak, it is easy to manage user and device locations, configure device settings, geographical sites, as well as create geographical boundaries through the use of Geo-Fences. BoldTrak also allows for text messaging on any enabled device and can provide directions, whether from device-to-device or from one location to another, independent of any devices.

You access the feature within Manitou 2.0 Web Client through the GPS Tracking option.

Stealth Logger and WatchDog

Supplying an additional level of data and system protection, Stealth Logger and WatchDog work with Manitou to provide and log important messages pertaining to business functions.

Stealth Logger and Viewer

Stealth Logger and Viewer provides an easy way to take your central station paperless, saving money and the environment. Stealth Logger replaces your impact printers that capture receiver output and consume paper at an overwhelming rate. Stealth Logger also lets you monitor signal traffic, receiver and line usage in a convenient graphical display.

Plus, Stealth Logger data is stored separately from the Manitou database, providing another protection against data loss.

WatchDog

WatchDog monitors all of the system functions and resources and receives reports of any warnings, errors, or failures. You can then configure these reports to scroll across the bottom of the Manitou screen and/or sent to a specified Contact List.

Access Point

The Access Point module provides integration access to receive and acknowledge access control-related signals such as forced door, invalid card, access denied, and so on. These signals can then be read and submitted as alarms into the Manitou system.

VSI-Fax

VSI-Fax is a “virtual fax machine” that looks for information to put into an outbound fax. When added to the Manitou system, VSI-Fax checks the auto-send folder for specific information at regular time intervals.

Appendix B – Retransmission

It is possible to retransmit, or "forward," an alarm from one location to another. A good example of this would be retransmitting a Fire Alarm that is received at an alarm company directly to the Fire Authority for action.

Note: For more information on Retransmission, please see the facility supervisor or manager.

Retransmission forwards Action Pattern alarm information to a receiver (or device) by way of the FEP (Front-End Processor). Retransmission is similar to Reverse Commands, except that the data can be sent to a different receiver or device (as opposed to the initiating one).

Service Provider Devices

The Service Provider Devices link a Contact Point to the Reverse Command for Retransmission. This is done in the Manitou Supervisor Workstation under the **Maintenance menu | Setup | Service Provide Devices**.

The following values are required:

- **Protocol** – This must be set to “R” (Retransmission).
- **Reverse Protocol** – This defines the type of reverse command requested.
- **Reverse Command** – This is the type of reverse command that will be transmitted.
- **Reverse Route** – This specifies which FEP (Front-End Processor) driver to use.

Output Device Types

Output Device Type configuration links Contact Points with a service and/or device, by way of Retransmission. You can also use this configuration to connect a default Script Message to a specific Contact Point. To configure Output Device Types, open the Manitou Supervisor Workstation and go to **Maintenance | Setup | Output Device Types**.

Input all needed values. The following values will need to be set with “R” (Retransmission):

- Attribute
- Type
- Protocol

You should select the **Service Code Required** check box so that the Contact Point is linked to a service/device.

Reverse Commands

Reverse Commands are used to send signals back to the Customer's panel to test to see if the panel is working properly. Reverse Commands also allow you to interact with hardware in the field, such as requesting a picture from a surveillance camera or connecting to a door with Access Control.

The Reverse Command specifies the data to send, as well as the protocol or format the data is in so that the receiver will understand it.

When you use a Reverse Command to send a command to a device, Manitou 2.0 receives a Reverse Command Response Code which indicates the status of the Reverse Command, for example, succeeded or failed.

Reverse Channel Command Fields

- **Type** – This is the protocol type.
- **Group** – Retransmission commands do not specify a group.
- **Command** – This is any command mnemonic understood by the receiver to identify the request.
- **Description** – A meaningful description of the command.
- **User Group** – Defines what class of user (and above) have access to the command.
- **Response Type** – Currently, all FEP (Front-End Processor) Reverse Commands are asynchronous (delayed).
- **Response Delay** – Defines the number of seconds the FEP (Front-End Processor) should wait for a response to the command from the receiver until it considers it timed out.
- **Command Level** – Must set to Customer.
- **Command Detail** – Determines how specific the Reverse Channel route needs to be to send the command.
- **Availability** – Retransmission is for alarms only, so you must select **Alarm Only**.
- **Attributes** – You must select **Retransmission**.
- **Optional Parameters** – Many optional parameters can be included. The Contact Point and Script Message database parameters can only use them in conjunction with a Retransmission command.
    - **Contact Point** – This is the Contact Point associated with the Retransmission (might point to a pager, email address, and so on).

- **Script Message** – This is the Script Message attached to the Contact Point, or the default Script Message attached to the Output Device Type.

Contact Point

You can add Retransmission Contact Points directly for a Customer, and so on. When adding the Contact Point, select the Retransmission Contact Point Type set up in the Manitou Supervisor Workstation. You must set up Retransmission Contact Points using the **Contact Point Properties** dialog box.

The following values are required:

- **Output Device Type** – Output Device Type set up in the Manitou Supervisor Workstation.
- **Service Provider** – Service Provider Device set up in the Manitou Supervisor Workstation.
- **Retransmission Point** – Pager number, email address, and so on. This links to the Contact Point Reverse Command database parameter.

The following value is optional:

- **Script** – Script Message to include in the transmission. This links to the Script Message Reverse Command database parameter.

Sending Retransmission

During alarm handling, you can incorporate the Retransmission into an Action Pattern by using the Contact Point as part of a contact action. Additionally, taking action on the Contact Point will also send the Retransmission.

Appendix C – Manitou Service Descriptions

Dates on Services

With the exception of the Standard service, all other services can have a start and end date. The Manitou application will enable and disable those services based on those dates.

Standard

The Standard service (previously Alarms Only) is used to define an account in Manitou. If there is a Customer account in Manitou, it should have the Standard service. This simply makes sure that the programming is enabled for the record.

User-Defined Services

You can add this service multiple times provided you change the description name to something different each time. This is provided to the Monitoring Company to add services they offer that are not listed in Manitou's default services list.

Open/Close

The Open/Close service turns on the schedules and enables the monitoring or recording of openings and closings of the system. When you set this service to **Monitor**, any exceptions will trigger alarm events requiring some sort of operator intervention. When this service is set to **Record no events**, exception or not, it will trigger alarms. Exception events can be reviewed through the Activity Log and Reporting.

Fire Test

The Fire Test service is for Fire systems that want to separate out the Test and Standard service. This doesn't turn any other functions on or off within the application, it is just for reference purposes only. This service, like all others, you can flag as chargeable.

Executive Protection

This service is designed for personal protection services. This does not turn on any other functions within Manitou. Generally how Manitou would track Executive Protection would most often be through a schedule where the application would expect a "Check-In" at certain times of day. If no "Check-In" happened (operators would send in a manual signal when they received the telephone call), the system would then generate a "late-to" signal and the operator would then attempt to contact the protection agent and the protected person. If they were unable to contact them, they would then dispatch to the last known location.

Lone Worker

This service is designed for someone like a door-to-door salesperson who works a route or region alone, or a person who works in a business alone. Like Executive Protection, generally how Manitou would track a lone worker would most often be through a schedule where the application would expect a Check-In at certain times of day. If no Check-In happened (operators

would send in a manual signal when they received the telephone call), the system would then generate a “late-to” signal and the operator would then attempt to contact the worker. If they were unable to contact the person, the operator would then dispatch to the last known location.

Log Only (All Signals Logged)

This service will override all other services on the account. You most often use this when an account is either not yet ready to receive live signals or has reached its contract end date and has not yet renewed. You use this to override the existing services without having to remove the services.

Transmitter Test

The Transmitter Test service enables the Transmitter Test interval on the **Transmitter** card within the Customer record. The default test interval set when this service is selected is seven days. You most often use this service to ensure that the transmitter is indeed functioning every day, week, or month. If the system doesn’t receive its expected test or qualifying signal within the test period, the system will then generate a Late-to-Test alarm.

Dual Signaling

You use the Dual Signaling service when an account has two transmitters and one backs up the other. For example, a telephone line transmitter can be backed up by a radio transmitter. Obviously, the Monitoring Company doesn’t want to have to deal with two alarms each time, so it is possible to link the two signals together through Transmitter Programming. If the telephone line alarm comes into the system, it waits for the radio signal for a defined period of time and if the radio signal does not arrive, the system gets an additional alarm stating that the alarm was missing its dual signal. If the radio signal does arrive, the one becomes a signal and the other becomes the alarm.

Two-Trip Signaling

The Two-Trip service turns on the Programming Commands to enable the ability to wait for a second alarm before triggering an alarm. You would often use this when a door contact might not be the most secure, so the Customer wants to wait for a secondary Zone to trigger before generating an alarm. This requires some very specific programming and the signals themselves must have the ability to participate in Two-Trip signaling.

Entry/Exit Delay

You use the Entry/Exit Delay service when a person might take longer than the standard length of time and/or trigger multiple Zones prior to reaching the key panel to disarm, or exit, the location.

Reports

This service does not turn anything on or off within the Manitou application, it is for tracking or display purposes only.

Audio Monitoring

This service does not turn anything on or off within the Manitou application, it is for tracking or display purposes only.

Video Monitoring

This service does not turn anything on or off within the Manitou application, it is for tracking or display purposes only.

UL Account

This service enables the UL features for the Customer record. UL is for United States and Canada and refers to specific response times required for certain alarms.

Verify Open/Close User

This service is designed for the system to bring Open and Close signals to the operator's attention so that the Open and Closing users are verified. It is important that there is an appropriate Action Pattern applied to these Open and Close signals so that the Authorities are not contacted unless the verification is not successfully completed.

Guard Tour

The Guard Tour service enables the advanced Programming Commands and is designed so that when a guard on a property does his/her tour of the property, the guard triggers specific Zones in a specific order. If the guard does not trigger the Zones in order, or misses a Zone, this will generate an exception at the Monitoring Company. This requires some very specific programming, and the Event Codes themselves must be programmed for inclusion in a guard tour.

Maintenance Services

This service does not turn anything on or off within the Manitou application, it is for tracking or display purposes only.

Appendix D – Entry/Exit Programming

This command is used when signals are sent prior to an Opening signal and after a Closing signal (and the panel does not itself handle Entry/Exit Delays). The following rules apply to the Entry/Exit Delay process:

- You must select the Entry/Exit Delay service for the Customer record to use this command. Time out must be reasonable for the individual site and must be greater than zero.
- You must select the Open/Close service for the Customer record. If a signal with this command is received while the Area is closed and within an Opening window, the signal does delay (doesn't drop into the alarm queue) waiting for the Opening signal. If the Opening signal arrives within the prescribed period of time set on the Entry/Exit Delay service, you can cancel the alarm, if wanted. If the Opening signal is received within the timeout period, the delayed signal is ignored. If a signal with this command is received within timeout seconds after a recent closing signal, the received signal is ignored, providing the status is new or new/suspended.
- The Area upon which the signal is to be received must have an Open/Close Schedule attached
  to it.

Entry delay processing will only work when it is within a scheduled Opening window. Exit ignore processing will always happen following a Closing (scheduled or not). It is possible to set up a schedule such that an Opening or Closing can happen at any time. However, it is important to realize that any signals flagged, as being Entry/Exit signals, will always be delayed for the entire Entry/Exit Delay time (since it could be followed by an Opening signal). We do not recommended that you use an "Anytime Access" schedule for that reason. It should have some reasonable start and end boundaries to
the window.

Entry Type

The final piece is the entry of the right Entry/Exit Delay Type (EntryExit() command parameter) on the signals. With the current implementation, the following examples describe the required Delay Types needed:

Type Numbers

1 – Signifies the Start of Entry, but Intermediate for Exit.

2 – All other signals.

3 – Any part of the Entry/Exit process.

4 – Intermediate for Entry, but Final for Exit.

5 – Start of Entry and Final for Exit.

Openings

The first is for systems that report restore on the initial entry point (perimeter burglary from the door being opened):

- BA zone <x> signal: E/E Delay Type = 3 – This is the alarm signal when the door is opened.
- BR zone <x> signal: E/E Delay Type = 3 – This is the restore for the above signal <any other zones and restores that would be received as part of a normal Open/Close cycle would be Type = 2>. The reason for the above types is because on the entry, the BA for the door is the first signal received.

Closings

On the way out (Closing cycle), the BR for the restore of the door is the last signal received. With this programming, the Exit Delay is not terminated upon any particular signal, it must expire. If the BA is set to Type = 1 and the BR is set to Type = 2, then the final BR restore on the way out will be in Customer activity as a signal and not ignored (Activity will show Closing followed by the Restore).

- BA zone <x> signal: E/E Delay Type = 1 – This is the alarm signal when the door is opened.
- BR zone <x> signal: E/E Delay Type = 4 – This is the restore for the above signal (any other zones and restores would be Type = 2). This would then terminate the Exit cycle upon receiving the restore signal. Any further signal would be an alarm (unless it is in an Opening window which might start a new Entry cycle).

This example is for systems that do not report a restore on the door alarm. This is not recommended. The restore will ensure that the front door closed on the way out. The first example should also have RestRq() command on the door alarm with a timeout value to enable an Unrestored Alarm event should the door not close all of the way and Restore() property on the restore event (should be automatic based upon the restore signal's Event Definition's signal processing attributes):

BA zone <x> signal: E/E Delay Type = 1 – this is the first and last signal (any other zones and restores would be Type = 2)

Schedule Examples

Open/Close at any time (not recommended)

The following schedule will cause the Entry Delay process to happen at any time (can open at any time):

Mon	00:00	May Open/Close
Tue	00:00	May Open/Close
Wed	00:00	May Open/Close
Thu	00:00	May Open/Close
Fri	00:00	May Open/Close
Sat	00:00	May Open/Close
Sun	00:00	May Open/Close

Open/Close with no Late-to for Open or Close

The following schedule allows any access between 6 A.M. and 11 P.M. (no Late-To for Open or Close):

Mon	06:00	May Open/Close
Mon	23:00	No Activity
Tue	06:00	May Open/Close
Tue	23:00	No Activity
Wed	06:00	May Open/Close
Wed	23:00	No Activity
Thu	06:00	May Open/Close
Thu	23:00	No Activity
Fri	06:00	May Open/Close
Fri	23:00	No Activity
Sat	06:00	May Open/Close
Sat	23:00	No Activity

You can replace the “No Activity” action in the above schedule with “Must Close” which would then generate a Late-To-Close alarm to ensure that the system is armed by that per normal Open/Close scheduling. Opening and Closing signals will automatically be processed as if they were part of an Entry/Exit cycle – no Entry/Exit() command function should be designated, the Open or Closing signals do not need any special soft programming options apart from the ones that signify that it is an Opening or Closing signal.

Signal Processing Commands

m – Entry/Exit

Signifies that this event can participate in Entry/Exit Delays. The signals that participate in this process must also contain the Signal Processing attribute of “m”.

n – Delete alarm if it is canceled

If “c,” “d,” or “e” is true, then this option notifies the Signal Handler to delete the alarm if it has been canceled when the alarm state is New or New/Suspended. If the wanted outcome is to remove this alarm from the alarm queue if the closing occurs within the prescribed time period, then the “n” command is also required.

Note: These attributes are not set on any events by default to ensure that each company sets them based on their specific company practices and makes a reasoned decision before using this feature.

Service Setting

Enter the delay time (in seconds) in the **Delay Time** field under the Service.

Programming

The specific signals to be delayed (the ones that normally get tripped as a part of entering the building to access the keypad/panel to disarm the system) must have the Entry/Exit() programming function attached to them. This includes any restore signals.

TwoTrip() cannot be used in conjunction with any E/E signal – TwoTrip will cause E/E to be ignored. The Event Definitions for the signal types to be delayed must have the “m” soft programming option enabled.

m – Entry/Exit

Signifies that this event can participate in Entry/Exit Delays.

n – Delete alarm if it is canceled

If “c,” “d,” or “e” is true, then this option notifies the Signal Handler to delete the alarm if it has been canceled when the alarm state is New or New/Suspended.

Appendix E – Delaying Signals for Future Handling

The purpose of this Appendix is to provide information on how to delay signals such as AC failure or power outages so that operators are not overwhelmed with activity.

In a central station, there are some scenarios where acting on an event immediately when it happens is neither desirable or in the best interests of the Customer or the central station. Most often these signals are trouble signals coming from a sensor such as an AC or power failure.

Delaying Signals with Restore Overdue

Methodology of a Restore Overdue

In the case of an AC failure or power loss, a central station can program the Manitou system not to treat the failure as an alarm, but instead, system handle the signal. You can create a command to require a corresponding restoral within a specific time period to be received or an overdue signal will be generated. In this case, the operator does not handle the actual event, but instead acts upon an overdue signal that corresponds to the original power failure.

This option prevents the alarm queue from displaying any traffic other than the signal that is generated from restorals not being received.

Setting the Overdue Option

This option needs to be set per Customer. If this option is not set, an overdue will not be generated. To access the option, open the **Transmitter** card for the selected Customer and select the **Generate Restore Overdues** option.

Command Programming for the Restore Overdue

The **Restore Required** command (RestRq) notifies the Manitou system that this signal needs a restoral in a specific amount of time. The options are:

Event

The event is the code that can restore the alarm. You can use the "*" to have any signal restore the alarm, but in most cases, you will want a specific Event Code that will act as the restoral signal. In our case, this is AR for an AC Restoral.

Zone

If you want to be specific, you can enter the Zone for the signal that you want the restore signal to come from. Entering a "*" will allow any Zone. If you want the same Zone that came in with the AC failure, you can use the "=" to represent it.

Timeout

This is the number of minutes before a restore overdue is generated. If you want operators to handle the alarm an hour after the original signal came in, you would set this to “60”. You need to have the **Generate Overdue Restores** option selected for this to work.

Restored

Indicates if the Alarm Zone or all Zones are required to be restored to close the alarm. In some cases, you might want this selected so that the operator cannot close the generated alarm until the restore has been received.

Event Actions Programming for the Restore Overdue

Since we do not want to handle the actual AC Trouble, we have added a line of programming to the Event Actions to make the AC Trouble system handled. With this done, the basics of the restore overdue have been completed.

Event Actions Programming

Event = AT	TX = *	Area = *	Zone = *	Alarm = No AC Trouble programmed not to show as an alarm, but to be system handled.

Other Considerations for the Restore Overdue

Some central stations might find that the default priority of the Restore Overdue (*RO) might be too low for the event generated. You can also change this through the Transmitter Programming. By using the Pri() command, it is possible to change the priority. The Pri() command has one option which is the new priority of the alarm.

Programming at the Transmitter Level

You can make this programming more global by adding the commands to the Event Programming on the Transmitter Types. You still need to add the option for **Generate Restore Overdues** to each account. You will also need to add the **Transmitter Type** to each account that you want to have the programming.

Appendix F – Manitou System Configuration

Core Components

Manitou is not a single application. It is actually a collection of components working in concert to accomplish the complicated task of central station automation. These components can be Windows applications or Windows services. Collectively, they create the Manitou system. There are eight core components of Manitou required by every Manitou system.

Database

Manitou uses Microsoft SQL Server.

Broker

The Broker serves as the heart of Manitou. It controls communication between the other components, holds global information, manages alarms tracking, and controls record locking.

Sentry

The Sentry controls access to Manitou by validating a user's basic access, priority, and permissions. The IP address of the server running Sentry is the only published IP address to the system. Upon receiving an authentication request, it returns an access token and the IP address of the Application Server to the client software. This allows Sentry to load balance between multiple Application Servers.

Application Server

The Application Server works on behalf of the client to access the database, apply business rules, and cache data.

Front-End Processor (FEP)

Each FEP communicates with multiple receivers. Signals are then translated from various incoming formats to a standard format used by Manitou. Each signal is also stored locally on the hard drive. This prevents loss of signals due to failure of other system components.

Marshaller

The Marshaller controls the distribution of signals to the Signal Processor. It ensures that time-dependent signals are sent in the correct order, and reports processing times to the Signal Handler.

Signal Handler

The Signal Handler takes incoming signals from the Marshaller and manages proper insertion to the database.

Watchdog

The hardware Watchdog connects to Manitou to provide audio and visual alerts corresponding with hardware failure, software failure, or predefined system triggers. Hardware Watchdog alerts correspond with the Watchdog messages displayed in the status area of the Manitou 2.0 Client and Manitou Supervisor Workstation. For example, failure of any system-critical component will trigger the hardware Watchdog to beep and light one of the three component-related LEDs. Operators use the switch on the front of the hardware Watchdog to reset each time an alert sounds. The fourth LED monitors a constant heartbeat signal between the hardware and software Watchdog components. If that signal is not received on the expected interval, the hardware Watchdog will emit a beep and the fourth LED will light up.

Optional Server Components

Publisher

Manitou's Publisher distributes all information external to the central station. This can include alphanumeric or numeric notifications, faxes, email, or printed reports.

Voice Response Terminal (VRT)

A hardware and software communications system that provides technicians and Dealers remote access to Manitou using only a phone.

Bypassing the operator technicians and Dealers can remotely place systems On Test, end system tests, and hear test results.

Supervisor Workstation

One or more Manitou Supervisor Workstations will be required to configure and manage the Manitou system. The Manitou Supervisor Workstation allows administrator-level access to system options. It also receives Watchdog Reports and signal handling statistics.

Manitou 2.0 Client

One Manitou 2.0 client will be required for each central station operator as well as any data entry personnel. The Manitou 2.0 client provides for data entry and alarm processing.

System Scalability

One of the principal goals of Manitou is scalability of the system. Adding additional hardware enables it to expand from a small single-user system to a system capable of handling a large central station. You can group Manitou components differently to support systems of different sizes. This means that having to throw away hardware is a thing of the past. If you need more computing power, you simply separate a task and put it on its own server.

Sample Configurations

All base systems will include the Manitou core components as described in the first section of this Appendix. You can add optional server components to any base configuration.

Appendix G – Manitou Remote Access

You must properly configure remote access to Manitou through the Internet to provide adequate safety of the data.

- The remote access server should be isolated from the rest of the Manitou system in a perimeter network (DMZ) by a hardware-based firewall.
- The firewall should be commercially available from a reputable vendor. Examples of an adequate firewall include:
    - Cisco PIX
    - Checkpoint FW
    - SonicWALL Pro
- Access rules should be in place on the firewall to prevent any inbound connection other than the necessary TCP ports required by Manitou.
    - These ports should be accessible only by the remote access server.
    - No inbound access should be available to the Manitou system from the Internet.
- You should connect the remote computer to the Internet by an access device that provides protection from the Internet.
    - At a minimum, the device should provide Network Address Translation (NAT) and a private IP address to prevent inbound connection from the Internet.
    - This device might also include full firewall capability.
    - The remote computer should be password protected including a password-protected screen saver.

Appendix H – Language tools

Manitou Language Utility

A Language Utility is available for translation use in Manitou. Manitou and the Manitou Supervisor Workstation have been made to be fully translatable, making it possible to set language preferences per user. Each workstation has a default language (Locale) assigned to it. However, when an operator logs in, the workstation will use the language setting specified for that user.

The user must create an ODBC (open database connectivity) connection to the Manitou database and then point the utility to the ODBC. To do this, create a shortcut and then put the name of the new ODBC connection at the end of the target line. For example, `"C:\Program Files\Bold Technologies\Manitou\LanguageUtility.exe" SPAIN`

Language Settings

To translate text that might appear before a server connection is established, you can place a text file named “Startup.txt” in the same directory as the workstation clients. If this file exists, translation text will be used from it until a server connection is established, in which case, translation text will be pulled from the database. The file is a simple text file with two double-quoted pieces of text separated by a comma. The “right-side” text is the original text from the client that you must not change in any way. The “left-side” text is the translated text to be displayed in its place. Each physical workstation can have a different Startup.txt file, if wanted (though not likely). The default file supplied contains the same text on both “sides”. Only use this in cases where the client is being translated. It will otherwise unnecessarily slow down the client if not needed.

Using the **Locale** option on the **Translation Utility**, Manitou attempts to translate all default English text. The database of translated text is self-learning. Any text not found will automatically be added with the original English text as the translated text. A translation tool is available for editing the translated text.

For new installations needing translated text, Manitou will also display the license agreement text from an external file, if installed in the same directory as the client. The file name is “ManitouLicense.rtf”. If this file is installed, all requirements, implications, limitations, exclusions, and assertions of the legal statements, must be conveyed with the same meaning as the original English version with regard to Bold Technologies, Ltd.

Non-Latin Character Sets

Since the ANSI (American National Standards Institute) Character Set supports Latin characters without a problem, the Manitou Language Utility will support English, as well as the following languages:

Afrikaans	Galician	Occitan
Albanian	German	Portuguese
Basque	Icelandic	Rhaeto-Romanic
Breton	Irish (New Conventional Spelling System)	Scottish Gaelic
Catalan	Italian	Spanish
Danish	Latin (Basic Classical Spelling System)	Swahili
Estonian	Leonese	Swedish
Finnish	Luxembourgish	Walloon
French	Norwegian	

Additionally, Manitou supports the following languages, but due to characters missing from the character set, they do not have complete coverage:

Dutch

Hungarian

Maori

Welsh

The Unicode Character Set supports the above listed Latin-derived languages, but also adds support for all languages based on the following scripts:

Arabic	Han (Chinese, Japanese, Korean Characters)	Oriya
Armenian	Hangul	Sinhala
Bengali	Hebrew	Syriac
Canadian Aboriginal Syllabics	Hiragana	Tamil

Cherokee	Kannada	Telugu
Cyrillic	Katakana	Thaana
Devanagari	Khmer	Thai
Ethiopic	Lao	Tibetan
Georgian	Malayalam	Yi
Greek	Mongolian	
Gurmukhi	Myanmar	

Translating into a Latin-Based Language

The default for writing to the Manitou database occurs in ANSI (American National Standards Institute). For those languages based on the Unicode List, there is an additional tool, the Manitou Translation Utility, which allows data to be written to the database without converting it to ANSI.

To translate Manitou into a Latin-Based language, please follow the steps below (further detail for each step is listed in the sub-topics below this list):

1. Create the language (locale) in Manitou.
2. Create an ODBC (open database connectivity) connection to the database.
3. Use the Manitou Language Utility to import the sample language (Spanish) into the database.
4. Use the Manitou Language Utility to make changes to the wanted language.
5. (Optional) If you intend to use again, export the translation.

For languages from the Unicode List, the following ADDITIONAL steps are required:

6. Open the Manitou Translation Utility.
7. Translate for the Unicode Language.
8. (Optional) Export the translation.

Creating the Language in Manitou

1. Open the Manitou Supervisor Workstation.
2. Click **Maintenance | Setup | Locales**.
3. Click **Edit**, then **Add** your new language, making sure to select **Translation Enabled**.
4. Click **Save**.

Creating an ODBC Connection

1. Click **Start | Administrative Tools | Data Sources (ODBC)**.
2. Click the **System DSN** tab, then click **Add**.
3. On the **Create New Data Source** dialog box, scroll down and select **SQL Server**, then click **Finish**.
4. Type **Manitou** in the **Name** and **Description** fields. Type the name of your server in the **Server** field and continue.
5. For your SQL connection type the **Login ID** and **Password**, and continue.
6. Select the **Change the default database to** check box, type **Manitou** in the related field, and continue.
7. Click **Finish** on the last dialog box.
8. Click **Test Data Source** on the **ODBC Microsoft SQL Server Setup** dialog box.

   A success dialog box appears.

Using the Language Utility to Import the Sample Language File

To run another language, it is necessary to import a sample language file. Use the following steps to accomplish this task. We use the Spanish language file in this example.

1. Create a shortcut to the LanguageUtility.exe file.
2. Right-click the shortcut and click **Properties**.
3. After the end quote in the **Target** field, type the name of the ODBC (open database connectivity) connection (**Manitou**, in this case), then click **OK**.
4. Open the Language Utility from the recently edited shortcut and click **Connect to Database**.
5. Type the **DB User** and **Password**, then click **OK**.
6. Click **Import from File** and select the Spanish Translation.txt file.

   A success dialog box appears.

Using the Manitou Translation Utility to Edit the Database

You can edit the database using the Manitou Translation Utility.

1. Open the Manitou Translation Utility.
2. Type the **Server name**, then select the **Authentication**, **Database**, and **Locale**.
3. Locate the words in Manitou that need you need to translate. Notice there is Spanish translated text on the bottom. This is because the source data was Spanish. It is okay, however, since we are going to be translating it to another language.
4. Type or copy/paste the translated text into the **Translated Text** field.

5. By clicking another line, you save the just-edited lines. Repeat this process to translate all the words in the database. Entries where an Ampersand (&) appears, show which letter will be highlighted in the English word. You can ignore the placement of Ampersand characters during translation.

Windows Regional Settings

It is necessary to make sure that you set up the Windows Regionals Settings to the wanted language once created and imported. You can do this working with Server 2012 R2.

Set Windows Regional Settings to Wanted Language (Server 2012)

1. Open the Control Panel and select Region and Language. In the **Region and Language** dialog box, click the **Administrative** tab, then click **Change system locale**.
2. From the **Current system locale** drop-down list, select the locale that is appropriate for your needs.

A reboot is required, and you must complete it at this point. Once you reboot the system, and you restart the Manitou services, log on using a user whose main locale is the newly created language. Items that were translated are now changed.

UL Requirements

This section covers the software and hardware requirements necessary for meeting the UL Standard for Safety for Central-Station Automation Systems, UL 1981 – Third Edition, Dated October 29, 2014 when using the Manitou platform. For further details regarding the standard please contact Underwriter Laboratories to request a copy of the UL Standard for Safety for Central-Station Automation Systems, UL 1981 – Third Edition.

General Information

Minimum Manitou Software Components Needed for UL 1981

A basic Manitou system will contain the following standard components when setup for UL 1981.

Program Name	Function
Broker	Controls the communication between processes.
Sentry	Validates initial client connection and sends token for running Application Server.
Application Server	Program that interfaces the database and business rules to the various clients.
Marshaller	Manages the events captured by the FEP and forwards to the signal handler.
FEP	Front End Processor, controls and monitors the individual receiver drivers and captures the alarm events from the receivers and forwards to them to the Marshaller.
Signal Handler	Processes the alarm events based on programming rules and controls if an event needs further processing (alarm) or if the event system handled (signal).
Overdue Checker	Performs housekeeping tasks and creates events based upon open and close schedules and test timers.
Report Server	Gathers information from various sources for user readable output
Report Scheduler	Queues reports based on user-entered schedules and sends them to the report server for execution.

Publisher	Send the reports created by the Report Server to available printers, email or other technology available means.
MSM	Manitou System Manager – Process to start and stop the various Manitou services
MMonitor	Manitou Monitor – Located on each machine that runs at a minimum of one Manitou Service. Monitors the current state of the process and reports on system statistics. Used by the MSM to start and stop Manitou services and processes.
Distributer	Process used to send updates to operator workstations.
Distributer Client	Process on the operator workstations used to accept patches from the Distributer.
Web Gateway	Process to control web connections from BoldNet to the Application Server
BoldNet Neo	Web user interface for Dealers and End Users (Optional if no external access to Manitou System)
Manitou 2.0 Client	Web user interface for Central-Station Users
Virtual Operator	Automates certain actions in the Manitou environment such as sending emails and SMS messages without human interaction.
Watchdog	Controls the communication between Manitou and hardware and software watchdogs.

Minimum Manitou Hardware and Operating System Components Needed for UL 1981

These are the minimum environment requirements to run Manitou. Please consult the UL 1981 and UL 827 standards for the minimum redundancy requirements. The Manitou system can run in a traditional hardware setting as well as in a virtual machine environment.

Server Environment for Manitou 2.0

- Microsoft Windows Server 2012 R2 or higher
- Microsoft SQL Server 2012 or higher
- RAM: 8 GB
- Processor: Dual Core 2 gigahertz (GHz) or faster
- Free hard disk space: 120 GB

Client Environment for Manitou 2.0

- Microsoft Windows 10 Professional
- RAM: 8 GB Memory
- Processor: 1 gigahertz (GHz) or faster.
- Free hard disk space: 40 GB
- Graphics Card: Microsoft DirectX 9 device or later with WDDM driver
- Sound card and speakers for audible alerts
- Display: 1920 X 1080 pixels for web client, 1680 X 1050 pixels for legacy client
- Google Chrome, Microsoft Edge or other compatible HTML 5 browser if running the web client

Additional component information for Manitou 2.0

- For printing reports, most Microsoft Windows compatible printers that are network based will work for Manitou. Please consult with a Bold Technologies technical support representative if you have questions regarding printer compatibility.
- It is possible to add an additional watchdog timer to the system. Please see Appendix A – Stealth Logger and Watchdog as well as section 7.2.1 in the UL 1981 Standard for Safety – Central-Station Automation Systems.

The computer systems must have the following minimum specifications (See UL 827 Section 17.3 for additional information)

- Designed for continuous use, 24 hours per day, 7 days per week;
- Be specified by the manufacturer as a “high-availability” system;
- Have no less than two cooling fans;
- Have no less than two power supplies, each of which can supply power for the entire system;
- Have no less than two network connections, each of which can service all the system’s needs.

Computer system used in an automation system shall comply with the Standard for Information Technology Equipement – Safety – Part1: General Requirements, UL 60950-1 and the Standard for Central-Station Alarm Services, UL 827.

In order to conform to the Redundancy requirement of section 7.1 of UL 1981, the primary system shall be capable of supporting a “hot back-up” redundant system, that shall be capable of being on-line, monitoring signals, within 90 seconds. This may take the form of:

- Another hot computer system;
- A fault-tolerant computer system; or
- A computer cluster.

For more details on which configuration will work best in your environment, please contact your Bold Technologies representative to discuss the available options.

The minimum revision level to meet UL 1981 Rev 3. Requirements for Manitou 2.0 is 2.XX.XX update 13. The revision level is displayed in the Supervisor Workstation | Help |About screen.

Maintenance

Monthly, review the following items and act where necessary:

- Hard Drive space
- Microsoft Software Updates
- Manitou Software Updates
- Manitou System Configuration including FEP Configuration

Apply updates to the secondary server first and then teste by a failing over to the secondary system.

Testing

The recommended testing frequency for basic operations is once a month. Tests need to include the following:

- Failing from Primary to Backup Servers
- Failing from Primary to Secondary Receivers
- Failing from Primary Configuration to Secondary Configuration

If three servers are involved, an alternate testing by failing over to the secondary servers the first month and then tertiary servers the next month.

A quarterly testing frequency to test advanced operations if the site has a secondary site. Testing of all redundant systems including phone lines, receivers, servers, etc. must run at the secondary site.

Automation Installation Software

Manitou 2.0 is highly customizable which leads to large variances between how each site is installed and configured. To provide the most flexibility for each customer, the customer shall create a bare metal backup of each of the Manitou 2.0 systems once the original install is complete to ensure all components of the install can be restored in the event of a system failure. By completing a bare metal backup, the customer will have full copy of all critical components of the software including license keys, which alternately would have to involved Bold Technologies technical support. This is the recommended method to meet UL 827 Section 17.2 - Automation Installation Software.

To maintain system readiness, a refresh of the bare metal backups must be completed every six months or at any major configuration change.

Security

General Security Practices

By default, a new Windows computer's settings may not be enough to make sure the system is secure. Please review the following items to enhance security:

- Firewall settings
    - Place external web servers in a DMZ (demilitarized zone) to prevent access to internal servers.
    - Open only the necessary ports needed to communicate between the DMZ and internal servers.
    - Open only the necessary ports to communicate from the client's web browser to the web server. In most cases only port 443 (SSL) should be open.
- Antivirus software
    - Run antivirus software on the servers and the client machines.
    - Exclude database files from antivirus monitoring to prevent performance issues
- Passwords
    - Use strong passwords for logging into the Windows environment.
    - To meet the minimum UL password compliance in Manitou the following options must be changed in the Supervisor Workstation | Tools | Options | Passwords options:
        - Restrict Password Reuse: Checked
        - Minimum alpha characters: 1
        - Minimum numeric characters: 1
        - Minimum password length: 6
        - Restrict character sets: Checked
        - Login retries before lockout: 5
        - Lockout period (min): 10
    - The password system will enforce the following password rules:
        - You cannot use letter or number sequences (for example, 567 or ghi).
        - You cannot use any previous passwords.
        - You cannot use the user name as part of the password (for example, User1 cannot have a password of User159).
        - The password cannot contain the User ID itself.
        - The User ID must be at least six characters.
        - The password cannot be "password."
- Browser Passwords
    - To prevent accidental unauthorized access to the alarm-monitoring environment it is necessary to disable the automatic saving of passwords from within the browser. Please check with your IT department or with Bold Technologies support for the details of how to disable this feature.
- System Log Off Time

    - To meet UL requirements for detecting idle sessions the following options need to be set:
        - Supervisor Workstation | Tools | Options | Web timeout
            - Set to 15
        - Supervisor Workstation | Maintenance | User Groups | Maximum inactivity time (minutes)
            - Set to 15
        - C:\inetpub\wwwroot\Manitou\manitou\Web.config
            - Add the <add key="Timeout" value="15" /> key to the <appSettings> section
- Perform System Updates
    - To prevent the system from automatically rebooting, turn off Windows automatic updates on the Manitou servers. Apply Windows updates on a regular schedule. Update the backup system first and then failover to the backup configuration to test the updates. Finally update what was the primary system.
- External Connections
    - Any connection to the system that permits access from a point outside of the central-station shall be through a secure, end-to-end connection that utilizes encryption certified by NIST. To meet this requirement for the web interface a SSL certificate must be use as well as the Windows Servers must be hardened for the correct protocols and ciphers. See the section titled “Hardening the Windows Servers” for more details.
    - A VPN connection using equipment that is NIST certified and that is using either Triple DES, AES 128 or AES 256 may also be used.

Hardening the Windows Servers

Microsoft Windows Servers must undergo a server hardening which is the process of enhancing server security by turning off specific features and options to mitigate network attacks. To meet the different UL standards, specific cipher suites and protocols need to be disabled. Failure to disable these suites will leave the server vulnerable to numerous attacks such as FREAK, POODLE, DROWN and others. Please see https://support.microsoft.com/en-us/help/245030/how-to-restrict-the-use-of-certain-cryptographic-algorithms-and-protoc for additional details. Tools such as NARTAC Software’s IIS Crypto can make the process of hardening easier to manage.

In order to meeting the UL requirements for a National Institute of Standards and Technologies (NIST) certified algorithm, only the following protocols and ciphers can remain active.

Protocols:

- TLS 1.0
- TLS 1.1
- TLS 1.2

Ciphers:

- Triple DES 168
- AES 128/128
- AES 256/256

Please check with your internal IT department to see if there are additional hardening requirements that required for your environment that they have in place.

Manitou Feature Requirements for UL 1981

In accordance with UL 1981, the following options are required for UL compliance.

- UL Restores must be enabled in the Events Action Programming for UL Accounts at either the Account, Dealer or Monitoring company level. Please see the section Restore() for details on how to program this. Unrestored events will be shown in the zone status form.
- UL Restore Event Codes must have the Alarm option found in the Supervisor Workstation | Maintenance | Event Codes set to “Yes” to conform to UL 1981 Section 11.1.2.d.
- The Manitou Alarm Queue option found in Supervisor Workstation | Tools | Options | Alarm queue display style must be set to Detailed to conform to UL 1981 Section 11.1.2.d.
- All client workstations that are handling alarm events require audible alerts to be enabled to conform to UL 1981 11.1.6. Manitou will produce audible alerts automatically providing the volume has been adjusted accordingly on the workstation.
- Event codes for UL accounts must be set to a warning level of forty-five (45) seconds and a danger level of forty-five (45) seconds to meet the 90 second UL requirement in section 11.2.5. Event code settings are modified in the Supervisor Workstation | Maintenance | Event Codes.
- Remote users using either the web interface or the Operator Workstation as a restricted dealer must have their permissions set to comply with section 12 of UL 1981. See the “Permissions” section in the *Manitou CS Supervisor Workstation User Manual* for information on setting up permissions. Remote users must be restricted to only have view, print and email permissions. Data entry must be limited to adding accounts and putting the system on and off test. The user shall not have the capability to change a user account.
- The following UL certificate types need to be defined in the Supervisor Workstation | Maintenance | Setup | Subtypes under the UL Grades Subtype. The UL Grades Subtype is a three to four character acronym for the full certificate type and is used to produce statistics for UL reporting.
    - FAS = Fire Alarm Systems
    - CSB = Central Station Burglar Alarm Systems
    - PRB = Proprietary Burglar Alarm Systems

    - NIBG = National industrial Burglar Alarm Systems
    - MBG = Mercantile Burglar Alarm Systems
    - RBG = Residential Burglar Alarm Systems
- UL certificate types must be applied on each UL account under the Account Options form in the UL Grade section. Additionally. In the same section, the response time must be applied based on the certificate type.
- Notifications must be send to designated end users any time a data change is made to a subscriber account in order to conform to UL 1981 Section 12.7. The Supervisor Workstation | Tools | Options | Email Script to Notify Customer on Account Update must have a valid Email script set as well as the Supervisor Workstation | Tools | Options | Notify Customer on Account Update must be set to “Yes”.

UL Related System Messages

In the event that there of a potential problem with the Manitou Windows services one of the following messages may be displayed in either the Operator Workstation on in the Manitou web client. In the event that one of the messages are presented it is necessary for the central stations to investigate the servers for potential issues. Please note the following messages and their potential resolution:

- **Manitou connection issue – Please wait, attempting to reconnect**
    - There is either an issue with the Manitou Sentry, Application Server or a problem within the network that would prevent the connection to the Manitou server. Please check the Manitou services to make sure they are running and then check the servers and / or the network for problems. Notification should be made immediately to your IT department and/or Bold Technologies so they may assist in correcting the problem.
- **System configuration violates UL minimum requirements! (…)**
    - In the event of this message there will be details in the parentheses the will explain the failure. These can range from a failure of the minimum requirements for passwords to UL options that have not been set correctly. Please contact Bold Technologies support and they can assist in making recommendations on how to remedy the situation.
- **Server <Server Name> … utilization exceeding threshold averaging xx.xx% for the last 10 minute(s)**
    - These messages indicate an issue with the server health. Notification of the issue should be made to your IT department and potentially Bold Technologies technical support so that they may assist in correcting the issue.

Reports and Records

In accordance with UL 1981, the automation system shall be able to output the information contained in sections 10.1.3 – 10.1.6 by account specific reports (contained in this section and related subsections), to include account number or account number range.

Alarm Signals Received and Recording

Upon resolution of any incident resulting in an alarm signal being received, the automation system shall record the following information about all accounts which shall include the following items, as applicable:

a) The name and address of the subscriber.

b) The type of alarm.

c) The designated response time.

d) If the alarm system has line security, whether it is standard or encrypted line security.

e) The time the alarm was received by the automation system.

f) The time the alarm signal was acknowledged.

g) Alarm verification (if used).

h) The time the police/fire department was notified.

i) The identification of the police or fire department personnel that were notified.

j) The time the Alarm Runner No. 1, if any, was dispatched and the Investigator's name and Employee ID.

k) The time the Alarm Runner No. 2, if any, was dispatched, and the Investigator's name and Employee ID.

l) The time the Alarm Runner No. 1 arrived (if dispatched).

m) The time the Alarm Runner No. 2 arrived (if dispatched).

n) The elapsed time between the receipt of the alarm signal at the central-station automation system and the arrival of the runner at the protected premises.

o) The method used to verify the alarm arrival of the runner such as radio, telephone, or other means.

p) Whether the central station holds keys.

q) Whether the keys were used or not used.

r) The time the subscriber(s) was notified.

s) The name of the notified subscriber.

t) The alarm resolution.

u) Identification of the operator who processed the alarm.

Opening and Closing Record without a Schedule

Where the system is operated in accordance with section 35.2, Openings and Closings without a Schedule, of the Standard for Central-Station Alarm Services, UL 827, records of opening (disarming) and closing (arming) a system shall include the following:

a) The name associated with the personal identification number (PIN) of the authorized user of the system making the opening or closing.

b) The actual time of the opening or closing.

Opening and Closing Record with a Schedule

Where the system is operated in accordance with section 35.3, Openings and Closings with a Schedule, of the Standard for Central-Station Alarm Services, UL 827, records shall include the actual time of the opening or closing.

Irregular Openings and Closings

Records of any Irregular Openings and Closings shall include the following:

a) The time the unscheduled opening or closing was arranged.

b) The actual time the unscheduled opening or closing occurred.

c) The name of the subscriber or subscriber's representative scheduling and/or making an unscheduled opening or closing.

Records of Inspection, Testing, and Maintenance

If supported by the manufacturer, records of any Inspection, Testing, and Maintenance action shall include the following:

a) Nature of service.

b) Specific equipment inspected, tested, or serviced.

c) Name of central-station representative performing service.

d) Any follow-up or additional action taken on unwanted alarms.

System-Wide Reports

The automation system shall be able to output the following standardized statistical reports both by certificated accounts, non-certificated accounts, and both combined as indicated below:

a) If the central station has multiple locations, then the totals must also be broken down by each central station location that is responsible for delivering Monitoring Services.

b) Certificated account activity shall include the statistics as specified in the “Calculating Performance” subsection, immediately below.

Certified Account Activity – Calculating Performance

You use the following in calculating this performance:

a) Use, as a minimum, the most recent full month in which 100 or more alarm investigations have occurred.

b) Use, at a maximum, the alarm investigations that occurred in the most recent six months.

c) Alarms for which a runner was required but not dispatched, or did not arrive, shall be included in the calculation.

d) Break down all statistics by certificate type, such as Fire Alarm systems, central station Burglar Alarm systems, Proprietary Burglar Alarm systems, National Industrial Burglar Alarm systems, Mercantile Burglar Alarm systems, or Residential Burglar Alarm systems, and account number.

e) Total number of events, requiring operator action, that occurred in certificated accounts.

f) List operator acknowledgement time by longest time, average time, and shortest time.

g) List runner response elapsed time by longest time, average time, and shortest time. Elapsed time shall be determined by using the difference between the time recorded for the receipt of the alarm signal (see Alarm Signals Received and Recording [e], at the central station, and the time recorded at the central station as a result of a signal given by the runner representing the operating company upon arrival at the entrance of the subscriber’s premises. See Alarm Signals Received and Recording [i].

Alarm Detail Report

By running the Alarm Detail Report for a specific day (date), an operator can look up alarm numbers on which to run the Alarm Detail by Alm Num Report. This report contains all of the requirements in the Alarm Signals Received and Recording section, and can be run on-demand by operators.

All UL Certificated Customers must have an Action Pattern that gathers the following information:

- Authority responding to the alarm (fire department, police department, and so on).
- Alarm Investigator (Agency) responding to the alarm (guarding Agency, inspection Agency, and so on).
- Verification of contact with the Customer or a Keyholder on the account.

- Attention field denoting whether or not the central station possesses keys for the premises.

Warning: If the above items are not gathered, the Alarm Ticket does not satisfy UL 1981 requirements.

Performance Monitoring Report

The amount of unused capacity of the central processing unit (CPU) and data storage systems for each computer and the bandwidth of networks shall be stored as a report. If the utilization exceeds 80%, announce this status with an audible and visual notice in the operating room and notify the technical support staff. The technical staff shall retain a record of the notice.

The report shall include the following:

a) Record the percentage of utilization of the central processing unit (CPU) in at least 20% increments, starting at less than 20% and going up.

b) Record the percentage of utilization of the disk drive arrays in at least 20% increments, starting at less than 20% and going up. When applicable to both:

    1. Record any constraints to the database resulting from its configuration.
    2. Record any constraints of the data storage system.

c) Record the percentage of the utilization of the bandwidth for any local area networks or wide area networks that are used in conjunction with the automation system in at least 20% increments, starting at less than 20% and going up. If the utilization of any of these exceeds 80%, averaged over 15 minutes, announce this information in an audible and visual notice in the operating room.

UL Alarm Handling Summary – Operation

Logging into Receive Alarms

An operator logs into the Manitou and brings up the **Alarm Mode** window, either by selecting **Operations | Alarm Handling** from the main menu or by selecting **Data Entry | Alarm Handling** from the menu bar. When you select **Operations | Alarm Handling**, notice that **Alarm Handler** appears on the left toolbar and the option for the types of alarms you want to handle appear on the right pane. You can toggle between actively handling alarms and pausing by clicking **Alarm Handler**.

Checking Status

The **Alarm Mode** window shows the Customer's current status on the **Customer Status** card. The **Comments** card is available just below the **Customer Status** card. Also available are

notes that relate to the Customer in alarm, and they should be checked by clicking **Notes** . Additional Customer information is available on the other **Alarm Mode** window cards and options.

Performing Actions

The Action Patterns associated with an alarm are available on the **Action Patterns** card located on the **Alarm Mode** window. The first item has an arrow to the left of the line and is ready to be "actioned." To start working on action, double-click it.

Next, the operator can perform each action within the Action Pattern list and sub-lists.

For example:

Double-clicking the action **Contact Customer** opens the **Contact Customer** card.

1. The **Auto-Dialer** card opens automatically upon receiving or selecting the alarm and attempts to dial the Customer.
2. The Customer tells the operator that it is a false Fire Alarm.
3. The operator selects **Finish** **| Customer Cancel**.
4. The **Validate** card displays and the operator confirms the Customer's password and clicks **Validate**.
5. The operator types **Comments** and the **Cancel Alarm** check box is selected by default.
6. The operator selects a **Resolution Code**, in this case "FA" for False Alarm.
7. The operator clicks **Done**, the alarm is closed, and the operator returns to the **Alarm Mode** window to receive the next available alarm.

Additional Information

In the above example, the operator did not need to contact and dispatch the fire department or contact the Dealer. Instead, the system closed the alarm and recorded the information that it was a False Alarm.

In other situations, where there are multiple contacts to make or actions to perform, each contact is handled similarly until every contact or action in the Action Pattern has been completed. If a contact is unavailable or unreachable, the system or the operator will note that before moving on to the next action. If necessary, the operator can use the **View Contacts** option (next to the **Action Patterns** section) to select other contacts, or get alternate numbers.

Deferred Alarms

If the alarm is not handled within the required time-out period (varies for each alarm type) the system will prompt the operator that the alarm is about to be deferred. A deferred alarm returns

to the queue and is forwarded to the next available operator. An operator who is busy can choose to manually defer an alarm, by selecting **Hold | Defer**, to allow another operator to handle the alarm.

Suspended Alarms

An operator can also choose to suspend an alarm, if necessary, while performing other tasks. Selecting **Hold | Suspend** brings up a prompt. The operator selects the time period for which the alarm will be suspended. When that time expires, the system prompts the operator again to handle that alarm.

UL Transmitter

UL requires that you enable certain transmitter monitoring options.

- **Regular Activity Expected** – Determines whether or not an account is active; when selected, this indicates that a transmitter receives a minimum of one signal per day.
- **Monitored Transmission Path** – Monitors signal path; when selected, provides standard line supervision.
- **Encryption** – Additional line security feature, encrypted or standard; when selected along with **Monitored Transmission Path**, provides complete data entry and line supervision.

These Transmitter Monitoring options are also supported within the Alarm Detail Report, which displays information about a particular alarm, including whether the transmitter associated with the alarm is designated for **Monitored Transmission Path** and **Encrypted**.

UL Compatible Receiver List

Specific receivers have been identified as compatible by UL. The following table includes all models of receivers Bold Technologies is compatible with in accordance with UL Compatibility.

Manufacturer	Model	UL Listed Manitou
Sur-Gard	System III	Y
Sur-Gard	System IV	Y
Radionics	D6600	Y
AlarmNet	7810ir	Only if behind an Ademco 685
Ademco	685	Y
FBI	CP-220	Y
ITI	CS-4000	Y
Sur-Gard	MLR2	Y
Sur-Gard	MLR2E	Y
DMP	SCS-1R	Y
Teldat	VisorAlarm	Y
Napco	Net Link	Y
Osbourn Hoffman	2000	Y
AES	7705i	Y

Revision History

Updates	Revision/Date	Reviser
Updated to Bold Group format.	Revision 6 – 05/22/2019	C. Morgan

• Added Alarm Queue audible “ding” information to the “Alarm Queue” and “Filtering the Alarm Queue” sections.
• Added the following reports to “Reports” sections:
  ○ Agency Response
  ○ ASAP Validate
  ○ Audit Trail
  ○ Last Signal Date
  ○ Maintenance Issues
• Added to “Reports” section: If your browser blocks a report, a dialog box displays indicating so, and you have the option to unblock the report per the option in your browser.”
• Added the following information for when in Data Entry mode:
  ○ Notification of alarms: Can pause Alarm Handling mode and select the types of alarms you want to handle.
  ○ If you’re in an alarm, but switch to Data Entry mode, a reminder and options appear.
• Added the following to the “Standard Icons” section in reference to a progress bar: “The system indicates which step you’re on with a box highlighting the related label (waypoint).”
• Instant Messenger: Whenever you receive a message, it pops up informing you that you have a message and the name of the sender (top-right of the application as a toast). You can click and view the message from there.
• Added the following to the “Customer Wizard” section: “You have the option to pause where you’re at within the Customer Wizard and return later.”
• Added the following to all of the “Contacts Card” sections: “You can arrange the order of Contacts by clicking **Sort** on the **Contacts** card. The **Contact List Ordering** dialog box appears where you can order Contacts as you want.”
	Revision 4 – 03/27/2017	T. Danikolas

Updates	Revision/Date	Reviser
• Added the following to the “Web Membership User” section: “**Note:** If Contact Web information is missing, the following message displays next to the **Add** button: *Contact must have a password, Web Access ID, and web profile to add a web profile*.”		
Added Action Pattern and Enhanced Action Pattern licensing information.	Revision 3 – 03/02/2017	T. Danikolas
• Updated “Standard Icons” section with the following:  **RLP/TX Search –** Click to search by the combination of RLP (Receiver Line Prefix) and TX (Transmitter ID) to locate a Customer. • Added “Alarm Notifications and Information” section. • Updated “On Test” section under “Additional Functions within Alarm Handling.” • Updated “Alarm Queue Status Bar” section. Added “Important” note to “Disaster Mode” section under “Additional Functions within Alarm Handling.”	Revision 2 – 02/24/1017	T. Danikolas