Wireless Management Toolkit
User Manual

Wireless Management Toolkit
Model WMT

Versions 1.57 or later

⚠ **Important Information to the User** ⚠

- Changes or modifications not expressly approved by the manufacturer may void the user's authority to operate the equipment.

- This computer program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under law.

- If the Wireless Management Toolkit (Honeywell Server) software is shutdown, the RS-485 network **MUST be physically disconnected** from the PC as the serial port is no longer being controlled by the software and may disrupt communications between the Base Radio(s) and Analog/Digital Output Module(s).

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About This Document

Revision Notes

The following list provides notes concerning all revisions of this document.

Doc ID	Rel ID	Date	Notes
34-XY-25-06	Rlse. 0	12/03	1st issue of document.
34-XY-25-06	Rev. 1	02/04	2nd issue of document.
34-XY-25-06	Rev. 2	06/04	Reformatted layout, updated technical information.

Contacts

World Wide Web

The following lists Honeywell's World Wide Web sites that will be of interest to our industrial automation and control customers.

Honeywell Organization	WWW Address (URL/e-mail)
Corporate	http://www.honeywell.com
Industrial Measurement and Control	http://content.honeywell.com/imc/
International	http://www.honeywell.com/Business/global.asp
Field Instruments	http://www.honeywell.com/imc
Technical Assistance Center	ACE@Honeywell.com (e-mail)

Telephone

Contact us by telephone at the numbers listed below.

	Organization	Phone Number	
United States and Canada	Honeywell Inc. Industrial Automation and Control Global Technical Support Center	1-800-343-0228 1-800-525-7439 1-800-423-9883	Sales Service
Asia Pacific	Honeywell Asia Pacific Inc. Hong Kong	(852) 8298298	
Europe	Honeywell PACE Brussels, Belgium	[32-2] 728-2111	
Latin America	Honeywell Inc. Sunrise, Florida U.S.A.	(305) 364-2355	

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Section 1: Introduction

1.1: USING THIS MANUAL

This manual is designed to assist in installing, operating, and maintaining Honeywell Wireless Management Toolkit software. The manual is broken into sections as follows:

Section 2: In a Hurry?
This section summarizes what must be done in order to get the software installed, configured and in operation quickly. However, it does not provide detailed or how-to information to perform the tasks outlined.

Section 3: Installation
This section explains how to correctly install, set up communications and run the software.

Section 4: Running the Honeywell Server
In order for the Wireless Management Toolkit to constantly record data from the Field Units and make this information available to the users, a program called the Honeywell Server needs to be running on the computer the Base Radio Network is plugged into at all times. This computer will also act as a server to all users who wish to log into Wireless Management Toolkit and use the Client software.

Section 5: Which Mode Should I Run?
The Wireless Management Toolkit software can be run in one of two modes: Configuration Mode or Management Mode. This section will aid the user in choosing the mode which best fits his or her needs.

Section 6: Running the Client Software
Once the user has set up and run the Honeywell Server the Client software can be run from the (Local) computer on which the Honeywell Server is running (available in both Management and Configuration Mode), or the Client software can be run from a remote computer over a TCP/IP (Network) connection (available only in Management Mode).

Section 7: Formatting and Maintaining the Database
If the user has selected to use the Wireless Management Toolkit software in Management Mode the database will store all Field Unit and Output Device configurations, as well as every transmitted sample of every Field Unit, within the Honeywell Server. Because the number of Field Units and frequency of data transmission varies with each Wireless Instruments installation, the rate at which this database grows also varies. To accommodate the different needs of different users, there are a series of database options the user should set.

Section 8: Understanding the User Interface
The Wireless Management Toolkit has multiple "Views" in which the user may monitor and configure devices, as well as, export data for use in other applications. This section will familiarize the user with each of these views.

Section 9: Device Monitoring, Configuration and Data Exporting
Once the user is familiar with the different views, this section explains how to monitor and configure devices. Also covered in this section is the ability of Wireless Management Toolkit to export data in various formats for use with other applications.

1.2: ABOUT THE SOFTWARE

The Honeywell Wireless Management Toolkit software is a real-time network configuration and monitoring software package. The Wireless Management Toolkit allows you to quickly and accurately perform data acquisition at a fraction of the cost of a wired system with a PLC or DCS. In addition, the Wireless Management Toolkit software allows for the remote configuration of Field Units and Output Devices that would normally be done at the device, saving time and money.

Wireless Management Toolkit also has exporting for analysis capabilities , which give you bigger and faster returns on your wireless instrumentation investments. This software can be used for long term monitoring in remote locations, for short-term data gathering on process conditions, or to quickly test the economic viability of a new installation.

The purpose of this Guide is to help you install and maintain your Honeywell Wireless Management Toolkit Software.

1.3: UNPACKING

Remove the Packing List and check off the actual equipment received. If you have any questions on your shipment, please call your Honeywell Representative. Upon receipt of shipment, inspect the container for any signs of damage in transit. Especially take note of any evidence of rough handling. Report any apparent damage immediately to the shipping agent.

Please note that sometimes units are assembled with accessories when shipped. Inspect the shipment carefully if you think that something is missing. This is rare, as we take considerable care to pack units for shipment, but it does sometimes happen. Please give us a call and we may be able to resolve this matter quickly over the phone.

NOTE
Please note that the carrier will not honor any claims for damage unless all shipping materials are saved for their examination. If damage is found during examining and removal of the contents, save the packing material and the carton.

1.4: SYSTEM REQUIRMENTS

Operating System Requirements:
Windows® 2000or Windows® XP

Hardware Requirements:
Processor: Intel/AMD 300 MHz
Memory: 256 MB RAM or Greater
Hard Disk Space: 150 MB for configuration,
                recommend 500 MB additional space if data
                collection enabled
Dedicated serial COM port

Section 2: In a Hurry?

This section summarizes what must be done in order to get the software installed, configured and in operation quickly. It does not provide detailed or how-to information to perform the tasks outlined.

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NOTE

The Honeywell Server is run automatically (if it is not already running) when the software is launched and a user connects.

If the software is run in Management Mode the Honeywell Server will not be shut down upon exiting the program as it must remain running to collect data and allow users to login remotely.

To shut down the Honeywell Server, right-click on the Honeywell icon in the system tray (lower right corner) and select **Exit**.

If the Honeywell Server is shutdown, the RS-485 network **MUST be physically disconnected** from the PC as the serial port is no longer being controlled by the software and may disrupt communications between the Base Radio(s) and Analog/Digital Output Module(s).

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</table>

1. Insert Wireless Management Toolkit CD in CD-ROM drive of the computer into which the Base Radio RS-485 Network will be plugged (this is called the Host computer).
2. Follow the installation instructions and install the software.
3. Run the **Honeywell Wireless** by clicking on the desktop icon.
4. When prompted (when run for the first time only) select Configuration Mode or Management Mode.
5. Connect to the Honeywell Server, which is automatically launched via the following settings in the connection view:
   - Local Computer
   - 127.0.0.1
   - Admin
   - Password
6. Wait for software to discover all the devices on the network.
7. Each yellow device is an unconfigured device. Configure these devices with appropriate settings and tag names. Upon configuration these devices will turn green.

The following only applies if you answered Management Mode to number four in the above list:
1. Set up user accounts and access levels via the **Accounts** view.
2. Set up database management options via **View? Server Options.**
3. Exit the software and verify that the blue and red RF icon remains running in the system tray (lower right corner). This must remain running at all times if want to log data into the database. It also must remain running if you to log in to the network via a remote computer.
4. You must find the IP Address of the Host computer. Follow the instructions below:
   - Click on the Start button
   - Select Run
   - Enter "cmd" for a Windows® 2000 or XP computer
   - Enter "ipconfig" into the command line and press return
   - Record the IP Address, e.g. 192.168.1.66

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NOTE

If your Base Radio is not plugged into COM Port 1 of the Host computer, then the user must right-click on the RF icon in the system tray (lower right corner) and select **Options**. This will allow the user to change the COM Port to the appropriate port number.

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</table>

The following applies if you are trying to log into Wireless Management Toolkit via a remote computer (Note: you must have selected Management Mode in task four above. If you did not select this mode go back to the Host computer, run the software, and under **View? Client Options** select **Management Tool**).
1. Insert Wireless Management Toolkit CD in CD-ROM drive of the computer (this is called the Client computer).
2. Follow the installation instructions and install the software.
3. Run the **Honeywell Wireless** by clicking on the desktop icon.
4. Connect to the Honeywell Server running on the Host computer via the following settings in the connection view:
   - TCP/IP
   - Enter IP Address of Host computer, e.g. 192.168.1.66
   - Enter a User and Password of an account you set up

<table>
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NOTE

If the Honeywell Server is not running on the Host computer, you will not be able to log in.

Also, a single user account cannot be logged into the Honeywell Server on more than one computer at a time.

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Section 3: Installation

Figure 3.1: InstallShield Wizard

To begin installation place the Wireless Management Toolkit CD in the computer's CD-ROM drive.

The InstallShield Wizard should be displayed on the monitor automatically as seen in Figure 3.1.

Once the InstallShield Wizard is up and running, Click the **Next** button.

Figure 3.2: Software User Agreement Screen

The following screen, shown in Figure 3.2, requires you to accept the license agreement.

Select **I accept the terms in the license agreement**, which indicates you have read and agree to the contents in the End User Software License Agreement.

Click **Next** to move to the screen shown in Figure 3.3.

Figure 3.3: User and Organization Screen

Enter a User Name and Organization, and then click **Next**.

Now, click on **Install**. The InstallShield Wizard will now install the Honeywell software to the computer. Note: the install process may take a few minutes.

Figure 3.4: Installation Path Screen

After the installation is complete the screen in Figure 3.4 will be displayed.

Click on **Finish** to exit the InstallShield Wizard and complete the installation.

Section 4: Running the Honeywell Server

Useful Definitions

Honeywell Server– a program that runs on the Host computer which stores all incoming data and provides this data to all the Clients logged in.

Host computer– the PC or server into which the Base Radio is plugged, and on which the Honeywell Server is being run.

Client computer– any computer that is running the Wireless Management Toolkit program. The Client computer can be the same computer as the Host computer.

Remote computer– a computer that is connected to the Host computer via a TCP/IP network connection.

Local Computer– a connection type that is used when the Host and Client are the same computer. This means that the Client can find the Honeywell Server "locally", (i.e., the same computer).

TCP/IP– a connection type that is used when the Client computer must use a network connection (e.g. an office intranet) to connect to the Honeywell Server running on the Host computer. This

Figure 4.1: Honeywell Server Icon

NOTE

The Honeywell Server program **must remain running** to collect data and allow users to login remotely.

If the Honeywell Server is not running on the Host computer, users will not be able to log in.

Also, a single user account cannot be logged into the Honeywell Server on more than one computer at a time.

In order for the Wireless Management Toolkit to constantly record data from the Field Units and make this information available to the users, a program called Honeywell Server needs to be running at all times on the computer the into which Base Radio is plugged (the Host computer). This computer will act as a Host to all users who log in via remote computers.

If you have not done so already, install the Wireless Management Toolkit software on the computer. Then follow these instructions to run the Honeywell Server:

- Click on the Start button
- Highlight Programs
- Highlight Honeywell WMT
- Select Honeywell Server

Once you have done this, you should see a Honeywell Server Icon in the lower right hand corner of Windows like the one shown in Figure 4.1. Because the Honeywell Server is intended to run in the background and constantly monitor and record data from the Base Radio through the COM Port, it has a limited user interface that can be seen by right-clicking the Honeywell Server Icon. To view the data being recorded the user can login using the Client program (See Section 6 for more details).

The Base Radio should be plugged into an available COM Port on the computer at this time. Right-clicking on the Honeywell Sever Icon will allow the user to select the appropriate COM Port. The default is COM Port 1.

NOTE

If you experience mouse issues, unplug and plug in the Base Radio. Also do not leave the Base Radio plugged in while rebooting the computer as this will cause the PC to recognize the Base Radio as a mouse an move the pointer erratically. Instead wait until you are ready to run the software.

In order for the Wireless Management Toolkit to receive data from the Base Radio, the Honeywell Server must be running on the Host computer. If this is not the case no data will be recorded, and you will not be able to connect and run any Clients from remote computers.

If you wish to shut the Honeywell Server application down, right-click on the Honeywell Icon and select **Exit**. Note that you must restart the Honeywell Server on the Host computer in order to receive data and run the Client software.

In order to allow the Client software to find the Honeywell Server, you must also specify where the Honeywell Server is located. If the Client and Host are the same computer the connection type is Local Computer. If the Client is a remote computer the connection type is TCP/IP and the IP Address of the Host computer must be specified.

To find the IP Address of the Host computer follow these instructions:

- Click on the Start button
- Select Run
- Enter "cmd" for a Windows® 2000 or XP computer
- Enter "ipconfig" into the command line and press return
- Record the IP Address, e.g. 192.168.1.66

Section 5: Which Mode Should I Run?

The Wireless Management Toolkit software can be run in one of two modes: Configuration Tool Mode or Management Tool Mode. This section will aid the user in choosing the mode which best fits his or her needs.

These modes are called Client (referring to the software) Options. When Wireless Management Toolkit is run for the first time the user is asked to make this decision. However, this setting may changed at any time by selecting **Client Options** from the **View** menu at the top of the program window.

5.1: Management Mode

The Management Tool setting should be used when the user wishes to only monitor and configure a single Wireless Instrumentation network that will not be disconnected and moved from network to network.

In Management Mode (See appropriate sections for clarification):
- Data is stored in database and NOT deleted when Honeywell Server is shut down   (Sec. 7)
- Multiple users can log in from remote computers (Sec. 6)
- User accounts and security levels can be created   (Sec. 8)
- User can connect via Local Computer and TCP/IP (Sec. 3)
- Requires user to manage database size and settings(Sec. 7)
- Server remains running when Client is closed   (Sec. 4)

NOTE

Once Wireless Management Toolkit is connected to a wireless network and the Wireless Management Toolkit is in Management Mode, certain Field Unit menus will no longer be locally accessible via the next and enter buttons. This is done to prevent Field Unit settings from being changed without the Administrator's knowledge.

Another **important** distinction is that unlike Configuration Mode, the Management Mode saves all the configuration data for the Output Modules and reconfigures these devices every time the Honeywell Server is launched. Thus if a different wireless network is plugged into the Host computer the old configuration data will be uploaded to the different devices that share that same ID's as the old devices, which may cause outputs to be not what is expected.

This issue can be mitigated by using separate Host computers or by running in Configuration Tool Mode.

5.2: Configuration Mode

The Configuration Tool setting should be used when the user wishes to plug into existing networks, (or move from network to network) in order to configure units without retaining the gathered data that is accumulated while the Honeywell Server is running.

In Configuration Mode (See appropriate sections for clarification):
- Data is stored in database and DELETED when Honeywell Server or Client software is shut down   (Sec. 7)
- Users CANNOT log in from remote computers   (Sec. 6)
- User accounts CANNOT be created   (Sec. 8)
- User can connect via Local Computer only   (Sec. 3)
- User does not need to manage database size   (Sec. 7)
- Server is shut down when Client is closed   (Sec. 4)

Another **important** distinction is that, unlike the Management Mode, the Configuration Mode does not save all the configuration data of the network. In this mode the software simply gathers as much configuration information from the network as it can. When configuration changes are made to any of the devices via the software, these changes are downloaded to the devices and preserved.

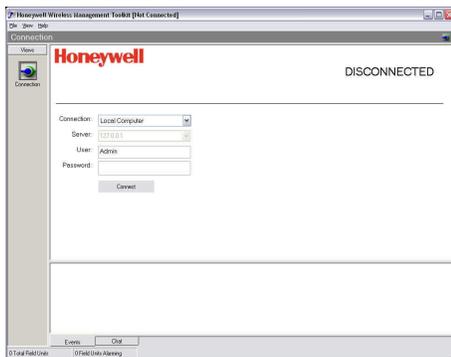# Section 6: Running the Client Software

Figure 6.1: Desktop Icon

Figure 6.2: The Connection View

The Wireless Management Toolkit client software is the application that is used to connect to the Honeywell Server in order to configure and monitor devices. This software can be run on the Honeywell Server Host computer or it can be run on a remote computer and connected to the Honeywell Server via a TCP/IP connection. Both cases shall be covered in this section of the manual.

Once you have installed the software, the Wireless Management Toolkit Client icon should appear on the desktop. This icon is indicated by the arrow in Figure 6.1.

Double-click on this icon to start the program, or the Wireless Management Toolkit can also be accessed by following these instructions:
- Click on the Start button.
- Highlight Programs.
- Highlight Honeywell WMT.
- Select Honeywell Wireless Management Toolkit

Once the Client software has been started the Connection View will be displayed. This view is shown in Figure 6.2.

6.1: Local Computer Connection

The Wireless Management Toolkit has two Client connection options. The first is a Local Computer Mode. This mode should be used when running the Client on the same computer on which the Honeywell Server will be run. (See Section 5 for more details)

Since the Client can find the Honeywell Server on the same computer from which it is being run, it is said that the Honeywell Server is being run "locally" or on the same computer. This type of connection does not require an IP Address to be specified. A Local connection would be performed as follows:
- Connection: Local Computer
- Server: no option
- User: Admin
- Password: password

NOTE

If you have selected to run in Configuration Tool Mode then the connection type is limited to Local Computer. (See Section 5 for more details.)

6.2: TCP/IP Connection

The second Client connection option is the TCP/IP Mode. This mode should be used when the Honeywell Server is being run on different computer and the user wishes to log in via a network connect on his/her computer.

Since the Client must find the Honeywell Server via a network, the Client must be given an IP Address where the server can be found. This type of connection is called a TCP/IP connection. A TCP/IP connection is performed as follows:
- Connection: TCP/IP
- Server: 192.168.1.88 (for example)
- User: Admin or any created user account
- Password: password

If you are unfamiliar on how to obtain the Host computers IP Address, see Section 5.

NOTE

If security is an issue, the Admin (or manager of the Wireless Network) should log in under the Admin account and setup new accounts for all users. The Admin account should then be deleted.

Also, note that Wireless Management Toolkit security, much like many programs, is only as good as the Host computers security. If security is an extreme issue then the Host computer should be accessible to the Admin only.

Section 7: Formatting and Maintaining the Database

Every transmitted sample of every Field Unit is logged into a database within the Wireless Management Toolkit software. Because the number of Field Units and frequency of data transmission varies with each Wireless Instruments installation, the rate at which this database grows also varies. To accommodate the different needs of different users, there is a series of database options the user should set.

These options can be found by clicking the **View** menu in the upper left-hand title bar and then selecting **Server Options**. When you have done so you should see a screen like the one shown in Figure 7.1.

The settings shown in Figure 7.1 are the default settings of the data storage options. The Save Data check-box allows the user to enable or disable the saving of incoming Field Unit data in the database.

If you do not want to export data, generate reports, save device configuration data, or see graphs of past Field Unit values, uncheck the save data box. Doing so will still allow the user to monitor alarms and real-time streaming data. No Field Unit history will be kept.

If you want to see past Field Unit data graphs or export data, check the box to save the incoming data. Note that this will use a varying amount of hard drive space.

If you have chosen to save data then you should also set the high and low resolution data settings according to your demands. A description of the function of each setting is located to the right of the settings.

- **High resolution data** consists of a data point for every transmitted value by every Field Unit.
- **Low resolution data** consists of one minute's worth of data points averaged to one data point for each Field Unit.

Figure 7.1: Database Storage Options View

If you wish to preserve the database beyond the 90-day low resolution data limit, you must make a copy of the database file. To do so, open **Windows Explorer** ? (C: or your hard drive) ? **Program Files** ? **HoneywellWMT\Database**. You may copy and paste the database folder in any folder you choose. It is suggested you rename the saved database with the date range, (e.g., Jun-Aug 2003).

If you run out of hard drive space due to the size of the database you may have to reduce the length of time that the low resolution data is retained. Doing so will reduce the size of the database.
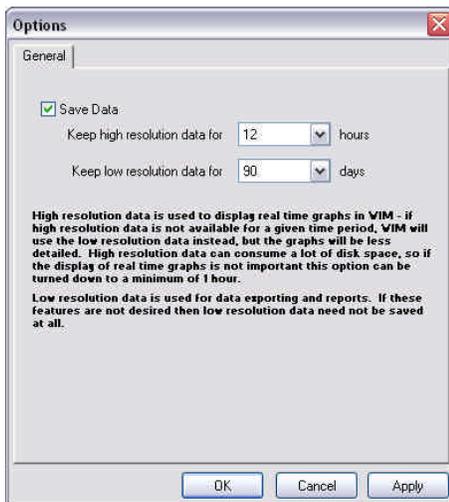
Section 8: Understanding the User Interface

Once you have connected the software to the Honeywell Server (See Sections 4 and 6), you will be able to select the Connection, Field Units, Base & Output Devices, Data Maps, Tasks, or Accounts views by clicking on the respective icon in the Views pane located on the left hand side of the Client program.

The following sections will step through each of these views and describe their functionality and features. The section outline is as follows:

> 8.1: The Field Unit View
> > *8.1.1: The Overall Field Units' Conditions*
> > *8.1.2: The Selected Field Unit Condition*
> > *8.1.3: The Field Units Pane*
> > *8.1.4: The Field Unit Group Tree*
> 8.2: The Base & Output Devices View
> 8.3: The Data Maps View
> 8.4: The Tasks View
> 8.2: The Accounts View

8.1: The Field Unit View

The view you will see upon connection is the Field Unit View. This view shows the Field Unit information, and allows you to configure and view individual Field Unit data. This view can be accessed at any time by clicking on the Field Units icon in the Views pane. The Field Unit View is shown in Figure 8.1.

The Events and Chat Log

At the bottom of every view an Events or Chat Log is displayed. The view of either of these is toggled by clicking either of the labeled tabs in the lower left hand corner of the Client software.

The Events Log records the last 50 changes that were made to the network (e.g. addition of new Field Unit, changing of Field Unit status). Each of these events is logged with a description, as well as a time and date stamp.

The Chat Log allows the user to chat with all users on the network and see which users are currently logged into the Honeywell Server via the Client program. The chat log works by posting a message to the user and allowing them to reply, much like an instant messenger service.
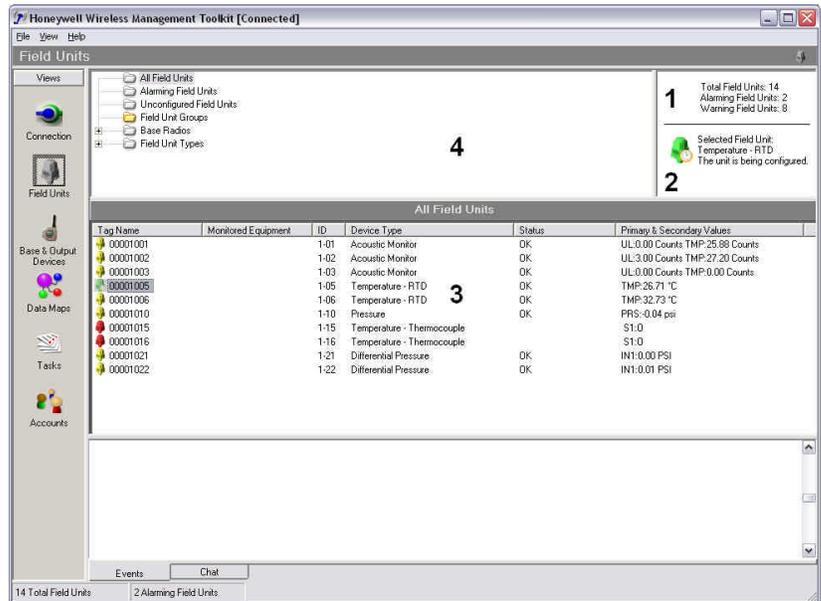

Figure 8.1: Field Unit View

Each of the four numbered areas in Figure 8.1 above, will be explained in following sections in respective order.

8.1.1: The Overall Field Units' Conditions

The Overall Field Units Conditions (labeled as #1 in Figure 8.1) box refers to all Field Units that are on the network. This box tells the user the total number of Field Units there are, how many Field Units are in an alarm condition (red), and how many Field Units are in a warning condition (yellow or orange).

8.1.2: The Selected Field Unit Condition

The Selected Field Unit Conditions box (labeled #2 in Figure 8.1) is different from the Overall Field Unit Conditions box, in that the Selected Field Unit shows only the condition or the Field Unit that is selected in the Field Units Pane. This box shows the Field Unit type and the current condition:

- **Green** - All systems are configured and OK. No Alarms
- **Yellow** - The Field Unit is un-configured
- **Orange** - There is a system warning with the Field Unit
- **Red** - An Alarm is being exceeded

8.1.3: The Field Units Pane

NOTE

Field Units are often referenced throughout the software by two numbers, such as 1-1 in Figure 8.1. The first number refers to the Base Radio ID and the second number refers to the Field Unit RF ID.

The Field Units Pane (labeled #3 in Figure 8.1) shows all the Field Units in the selected group from the Field Units Group Tree (#4). Each Field Unit in this pane has a color that indicates its current condition (see #2 for color description), the monitored equipment, the ID (See Note), device type, status of the Field Unit, and the current primary and secondary values that the Field Unit is reading. (For more information on how to configure and monitor individual Field Units see Section 9).

8.1.4: The Field Units Group Tree

The Field Unit Group Tree (labeled #4 in Figure 8.1) allows the user to select and group which Field Units are displayed in the Field Units Pane (#3).

- The **All Field Units** view is the default view and will display a scrollable list of every Field Unit that has been discovered on the network.

- The **Alarming Field Units** view will display only Field Units that are in an alarm condition (discussed in the Field Unit Configuring and Monitoring section).

- The **Unconfigured Field Units** view displays Field Units which have been discovered on the network, but have not been renamed or configured.

- The **Field Unit Groups** view allows the user to assign Field Units to individual groups, and then view the Field Units by those groups. Groups are added by right clicking on the Field Unit Groups folder and selecting Add Child Group. Deleting and Renaming of groups is done in the same fashion. To add Field Units to a group, click the desired Field Unit and drag it and drop it to the appropriate group folder.

- The **Base Radios** view displays the Field Units that are associated with selected Base Radio.

- The **Field Unit Types** view displays each set of Field Units on the network by type, e.g. Acoustic Field Unit .

8.2: The Base & Output Devices View

The next view is the Base & Output Devices View. This view shows the Base Radio and optional Analog/Digital Output Devices (see the Analog/Digital Output Module User Manual for more information on installation on configuring this device).

The Base & Output Devices view allows you to rename and view data about each of your Base Radios as well as any optional Analog/Digital Output Modules you have installed on the RS-485 network.

This view can be accessed at any time by clicking on the Base & Output Devices Icon in the Views pane. The Field Unit View is shown in Figure 8.2.

NOTE

The installation and configuration of the Analog/Digital Output Modules via Wireless Management Toolkit is covered in the Analog/Digital Output Module User Manual. Please see this manual for more specific details regarding this device.
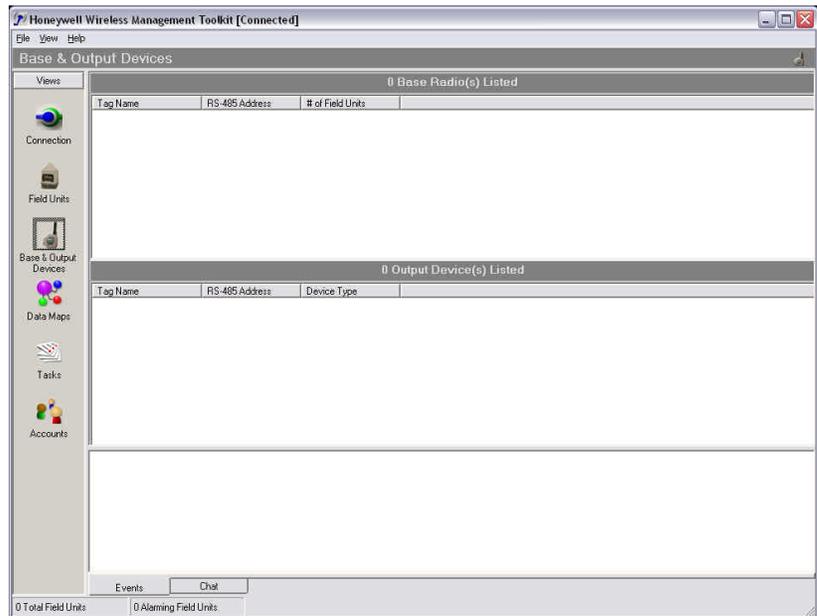

Figure 8.2: The Base & Output Devices View

The RS-485 address and number of Field Units communicating with each Base Radio are listed under the Base Radio pane. The RS-485 address and output device type are listed for each Analog/Digital Output Module under the Output Device pane.

The Events and Chat Log

At the bottom of every view an Events or Chat Log is displayed. The view of either of these is toggled by clicking either of the labeled tabs in the lower left hand corner of the Client software.

The Events Log records the last 50 changes that were made to the network (e.g. addition of new Field Unit, changing of Field Unit status). Each of these events is logged with a description, as well as a time and date stamp.

The Chat Log allows the user to chat with all users on the network and see which users are currently logged into the Honeywell Server via the Client program. The chat log works by posting a message to the user and allowing them to reply, much like an instant messenger service.

NOTE

If you have added a new device such as Field Unit or Analog/Digital Output Module to an existing wireless network the device may not show up automatically in the Client software. To force the program to search for new devices click **Discover Devices** under the **File** menu.

8.3: The Data Maps View

The next view is the Data Maps View. This view allows the user to "map" outputs of Field Units to a one of four 4-20mA output loops on a single Analog Output Module (WI-4AO) or Analog/Digital Output Module (WI-4AO-8SW).

If you have purchased a Analog/Digital Output Module you should refer to the Analog/Digital Output Module User Manual for more information on setting up the device and using the Wireless Management Toolkit to configure and map Field Unit outputs. The Data Maps View is shown in Figure 8.3.
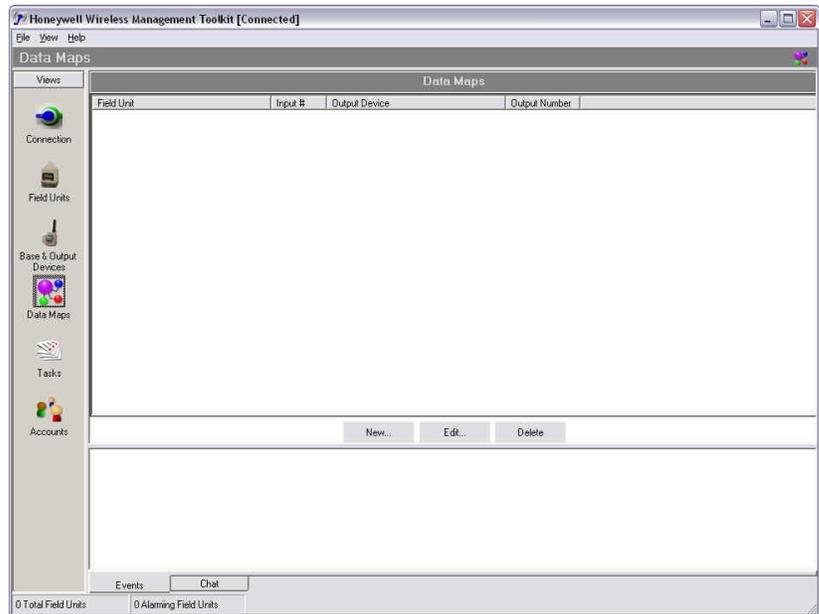
NOTE

The installation and configuration of the Analog/ Digital Output Modules via Wireless Management Toolkit is covered in the Analog/Digital Output Module User Manual. Please see this manual for more specific details regarding this device.

Figure 8.3: The Data Maps View

The Events and Chat Log

At the bottom of every view an Events or Chat Log is displayed. The view of either of these is toggled by clicking either of the labeled tabs in the lower left hand corner of the Client software.

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NOTE

If you have added a new device such as Field Unit or Analog/Digital Output Module to an existing wireless network the device may not show up automatically in the Client software. To force the program to search for new devices click **Discover Devices** under the **File** menu.

8.3: The Tasks View

The next view is the Tasks View. The Tasks view shows the scheduled tasks that need to take place, such as configuration information to be uploaded to the Field Units. This view can be accessed at any time by clicking on the Tasks icon in the Views Pane.

The importance of the Tasks view is to let the user know when the configuration changes made to the Field Unit have been successfully downloaded to the Field Unit. Thus, the user cannot expect to see the configuration changes at the unit until the task is completed.

8.4: The Accounts View

The next view is the Accounts View. This view allows management of all the user accounts. This view can be accessed at any time by clicking on the Accounts Icon in the Views Pane. However, only those with Administrative Access can make changes in this view. The Accounts View is shown in Figure 8.4:
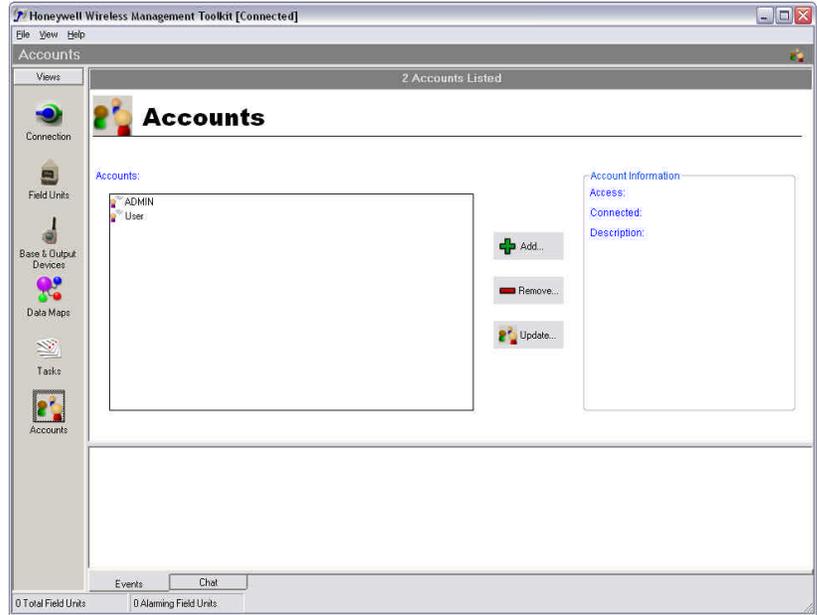
Figure 8.4: The Accounts View

This view allows the addition, deletion, and editing of user accounts to the software. Clicking **Add** allows the user to add a new user account. When adding a new account a name, password, and level of access must be given.

There are three levels of access that can be granted to a user:

- **Administrative** – able to make changes to anything.

- **Read/Write** – able to view data and change Field Units and Base Radio outputs and thresholds.

- **Read Only** – able only to view the collected Field Unit data, and the view the current configurations. Not allowed to make changes.

User accounts can be deleted by selecting the user account in the left-hand column and clicking the **Remove** button. User access levels and passwords can also be changed by selecting the user account in the left hand column and clicking the **Update** button.

The Events and Chat Log

At the bottom of every view an Events or Chat Log is displayed. The view of either of these is toggled by clicking either of the labeled tabs in the lower left hand corner of the Client software.

The Events Log records the last 50 changes that were made to the network (e.g. addition of new Field Unit, changing of Field Unit status). Each of these events is logged with a description, as well as a time and date stamp.

The Chat Log allows the user to chat with all users on the network and see which users are currently logged into the Honeywell Server via the Client program. The chat log works by posting a message to the user and allowing them to reply, much like an instant messenger service.

Section 9: Device Monitoring, Configuration and Data Exporting

Each device has its own monitoring, configuration and data exporting capability within the Wireless Management Toolkit software. The purpose of the this section is to give the user an overview of how to use these capabilities.

The following sections will step through each of these capabilities and describe their functionality and features. The section outline is as follows:

9.1: Monitoring a Field Unit

Each Field Unit has its own monitoring capabilities, which can be accessed through the Field Unit view. See Section 8.1 for more details on what the Field Unit view is, and where it is located.

When in the Field Unit view, double-clicking (or right-clicking and selecting View Field Unit Data) on a particular Field Unit's icon will bring up that Field Unit's Status Window as shown below in Figure 9.1.
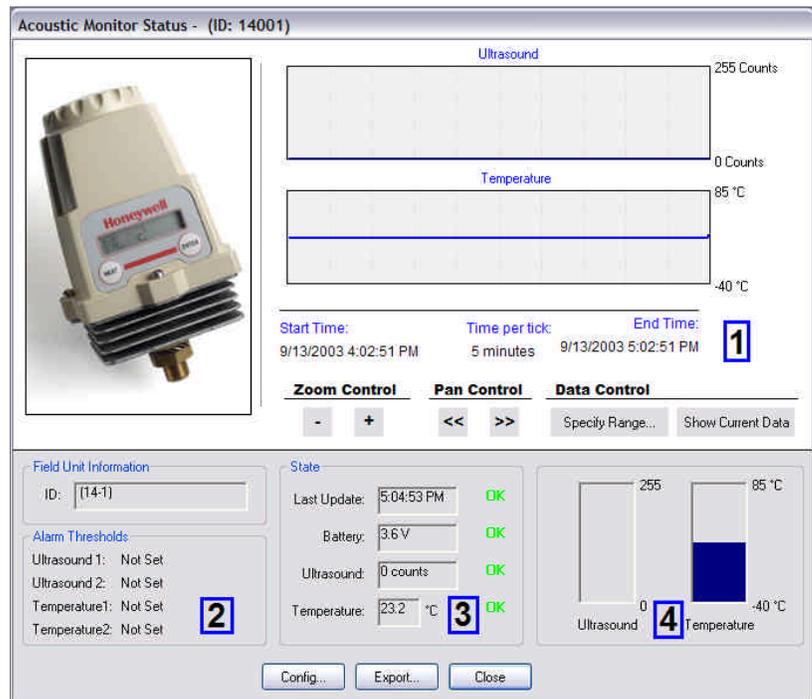

Figure 9.1: Field Unit Status View

The figure above has been numbered from one to four. Each of the following subsections will cover these areas of the Field Unit Status view.

9.1.1: Field Unit Data Graphs

The Field Unit data graphs (labeled #1 in Figure 9.1) show the current and all past data that is available in the Field Unit database. The upper graph is the Primary process variable (shown as ultrasound in Figure 9.1), and the lower graph is the Secondary process variable (shown as temperature in Figure 9.1). All process value points are shown in blue if they are within a user selected alarm threshold (indicated by a red line). Any data points exceeding an alarm threshold appear in red. These alarms can be set in the Field Unit **Configuration** menus under the **Alarms** tab.

The Y-axis resolution of the data graphs may be changed in the Field Unit **Configuration** menus under the **Range** tab.

The data graphs can be panned and zoomed via the control buttons located below the graphs. The graphs can also be specified to show a user selectable data range by using the **Specify Range** button.

If at any time you would like to see the most current data simply click the **Show Current Data** button. (NOTE: If the save data option for the database is disabled the graphs will not show any data. Any missing data on the graphs will appear as a gray area.)

NOTE

If the save data option for the database is disabled the graphs will not show any data. (See Section 7 for more details on database management)

Any missing data on the graphs will appear as a gray area. If the user has selected to run the software in Configuration Mode, only data gathered during the current run of the software will be displayed, as all database data is deleted when the software is closed in this mode. (See Section 5 for more details).

9.1.2: Software Alarm Thresholds

The Alarm Thresholds (labeled #2 in Figure 9.1) refer to alarm set points that have been set in the Wireless Management Toolkit software Field Unit **Configuration** menu to warn the user of important changes the Primary and Secondary process values. There are 4 alarm thresholds available for a single process variable unit, and there are 2 alarm thresholds available for each process in a dual process variable unit. The alarm thresholds are set in the Field Unit **Configuration** menu under the **Alarms** tab.

NOTE

The software alarms exist only within the Client software. These alarm thresholds are NOT downloaded into any devices, thus these alarms are not displayed on the Field Unit LCD's.

The purpose of these alarms is to notify a user looking at the Client software when a possible alarm condition exists.

9.1.3: Field Unit State

The Field Unit State box (labeled #3 in Figure 9.1) gives the user the time of the last update received from the Field Unit. All other information contained within the State box is specific to the time of the last update time.

The green "OK" message will change to a red exclamation point if the respective status reading is in concern or if either of the process values is above an alarm threshold.

9.1.4: Field Unit Primary & Secondary Values

The current Field Unit primary and secondary values (labeled #4 in Figure 9.1) are shown via graph levels in blue. If a process variable were exceeding a user set alarm threshold the graph level would appear in red.

9.2: Configuring a Field Unit

The Wireless Management Toolkit allows for the configuring of Field Unit settings that would normally be done using the next and enter buttons on the individual Field Unit. These changes are done via the configuration menu.

The configuration menus are displayed by clicking on the **Configure** button in the Field Unit's Status View (See Figure 9.1) or by right clicking on the Field Unit icon within the Field Unit View and selecting **Configure**. Doing so will bring up the Configure Menu.

NOTE

Once Wireless Management Toolkit is connected to a wireless network and the Wireless Management Toolkit is in Management Mode, certain Field Unit menus will no longer be locally accessible via the next and enter buttons. This is done to prevent Field Unit settings from being changed without the Administrator's knowledge. (See Section 5 for more details on the Management Mode setting).

Because each Field Unit has different configuration options available, the directions on how to configure a particular Field Unit is located within the respective Field Unit's User Manual. Please see the individual Field Unit User Manuals for more details on how to configure these devices using the Wireless Management Toolkit software.

9.3: Exporting Field Unit Data

The export function allows the user to export Field Unit data from the database, in comma separated value (.CSV) or text (.TXT) formats, to a separate file for use with different data analysis tools.

To export data for a Field Unit, click on the "Exports" button in the Field Unit's Status View (See Figure 9.1) Doing so will bring up the export wizard as shown in Figure 9.2:

Figure 9.2: The Data Export Wizard

Upon entering the export data wizard, the user is prompted to select the fields of data to be exported. To select a field, highlight the field in the left-hand column and click the right-pointing arrow. To remove a field from the export list, highlight that desired field and click the left-pointing arrow.

After selecting the fields to be exported the user is prompted to enter the date range of the data. NOTE: The export option is only available if the data save option for the database has been enabled (see the Formatting and Maintaining the Database section). After entering the range of data the user is asked to select an export file type and enter a file name.