
Software Key to Instant Information

InfoRad Watch-IT™

InfoRad®, Inc.



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Watch-IT User's Guide

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Introduction

Overview

InfoRad is the premier provider of instant information solutions since 1984. InfoRad presents InfoRad® Watch-IT™, a text messaging solution that turns your wireless receiver (alpha-numeric pagers, wireless PDA's, and PCS phones with short messaging capability) into a monitoring device for critical applications.

There are three separate versions of Watch-IT available:

Watch-IT ASCII, which provides automated dispatch of wireless messages by monitoring a file directory for ASCII text messaging files.

Watch-IT ASCII SV, which provides the same features as Watch-IT ASCII, but has been optimized to run as a Windows Service on Windows NT 4.0, 2000, XP, and 2003 Server).

Watch-IT Serial, which provides automated dispatch of wireless messages by monitoring a serial port information stream.

This user's guide covers all of these products, since they are similar in operation, with differences in setup and configuration. Please refer to the appropriate sections for the version of Watch-IT you have purchased.

Note: If you are using Watch-IT ASCII SV, please note that there are important user interface and functionality differences, which are covered in "Watch-IT ASCII SV General Operation" on page 78.

Other Products

Free 30 day Trial versions are available for download for most products at www.inforad.com/demos

Contact InfoRad Sales for more information or to purchase:

Phone: 800-228-8998

E-mail: sales@inforad.com

Products may be also purchased on-line at www.inforad.com/products

InfoRad Wireless Office	Wireless Office is a full-featured messaging platform, including Scheduled Paging, Installation and Set-up Wizards, and enhanced message logging and recall. Send messages over the Internet (via modem or network connection) directly to your Messaging Services Internet Server (SNPP & WCTP), or via Internet E-mail. Wireless Office's 32-bit technology takes advantage of the advanced features of Windows 95, 98, ME, NT, 2000, and XP including TAPI.
InfoRad Wireless Pro	Wireless Office features with expanded Groups (500 Receivers per Group), expanded Pre-defined Messages (500), expanded Scheduled Messages (500), and Direct Serial Connection messaging option for use with on-site paging systems or leased-line connections.
Monitor-IT™	Monitors the integrity of a wireless messaging system, reporting system failure via a secondary wireless system or computer generated voice call.
Serve-IT™	Customizable application that allows for integrating wireless messaging into an existing customer service environment.
InfoRad Enterprise™	A Client/Server solution for sharing the InfoRad Wireless Office messaging system over a LAN or WAN.
InfoRad Enterprise SV™	A Windows Service-based Client/Server solution for sharing the InfoRad Wireless Office messaging system over a LAN or WAN. The server runs as a Service on Windows NT, 2000, XP and Server 2003.

Support

Technical Support is only available to registered users of the software as detailed in the licensing agreement. Please register if you haven't already.

This program is licensed with 90-days free telephone technical support included. AlphaCare Subscription options are available that extend the support period, as well as offer priority telephone support and Upgrade Protection. Out-of-warranty support is also available on a per-incident basis..

Please call InfoRad Sales at (800) 228-8998 for details on AlphaCare, or e-mail to sales@inforad.com, or see our website at www.inforad.com.

InfoRad Software Technical Support is available Monday through Friday 8:30–5:30 ET.

A technical support section with solutions to common problems is also available at www.inforad.com/techsupport

Phone:	(216) 531-1369
Fax:	(216) 383-7020
Internet:	Techsupport@inforad.com
WWW:	www.inforad.com

InfoRad Watch-IT System Requirements



Watch-IT™

Watch-IT ASCII and *Watch-IT Serial* are designed to operate on computers equipped with at least two megabytes of hard disk space available, running Windows 95 or above.

Watch-IT ASCII SV is designed to operate exclusively on Windows NT 4.0, 2000, XP, and 2003 Server. The computer running the Watch-IT ASCII SV Service module must be equipped with a Hayes-compatible modem or Internet connection.



Watch-IT Features

- InfoRad Watch-IT is easy to install and provides fast, intuitive entry and dispatch of your text messages. Robust, highly refined.
- Message by Name, Group or Wireless Receiver phone or ID number easily through any Messaging Service that accepts remote alphanumeric/text messaging.
- Take advantage of sending messages while performing other tasks on your computer.
- Drop down selections and alphabetical search functions assist you with setup, directory features, and sending your messages.
- Message from home, office, or on the road by using Windows dialing options. You can even use your phone credit card.
- Message entry includes use of cut and paste functions, recall of previous messages, pre-programmed messages, and an optional Auto-Split feature for long messages - up to 1024 characters.
- Schedule messages to be sent at a specific date and time. Use messages as reminders for meetings, recurring events, and more.
- Directories can be listed by wireless receiver phone or ID #, Name, Group, and Wireless Messaging Service. Your listing also includes message and packet counts.
- Message logging with time/date stamp. Logs can be sorted by recipient or message count.
- Communications options offer you maximum setup flexibility and full compatibility with practically any modem.
- Experienced live technical support available.
- Long block/message chaining capable.
- PCS phone short messaging services (SMS).
- Send messages over the Internet (via modem or network connection) directly to your Messaging Services Internet Server via Internet messaging protocols WCTP & SNPP. Messaging via Internet E-mail (SMTP) also supported.
- Receive message responses to your e-mail address, or your wireless receivers e-mail address, from 2-way devices with WCTP and SMTP services.
- Send messages to on-site/customer-owned paging system or via leased-line connection to Messaging Service with Direct Serial Connection Option.
- Expanded Group Members, Scheduled and Predefined Messages
- HTTP Proxy Authentication support for WCTP Services.
- SMTP Authentication support for E-mail messaging.
- WCTP Authentication support.
- Extended AlphaCare™ Support Services available: Priority Technical Support, FREE updates. Keep your product current with changing Operating System and Wireless specifications.

Watch-IT Versions

There are four versions of Watch-IT available:

Watch-IT ASCII

Provides automated dispatch of wireless messages by monitoring a file directory for ASCII text messaging files.

Watch-IT ASCII-75: A limited version of Watch-IT ASCII: Allows up to 75 users in the messaging database. No manual messaging capabilities.

Watch-IT ASCII SV

Provides the same features as Watch-IT ASCII, but has been optimized to run as a Windows Service under Windows NT4.0 or above.

Watch-IT Serial

Provides automated dispatch of wireless messages by monitoring a serial port information stream.

For details on upgrading or purchasing other Watch-IT and InfoRad products, please refer to “Watch-IT ASCII Versions” and “InfoRad Wireless Enterprise Upgrade” [on page 123](#).

Important Terms Used in this Manual

The following terms are used throughout the Watch-IT user’s manual:

Network Drive: A logical or mapped drive or UNC path that is located on your network.

Program Drive: The location where the Watch-IT program and data files are stored.
This drive is a local drive.

Message Drive: The location where the Watch-IT message files used during the sending and processing of pages will be stored. This drive is usually a network drive, but can be a local drive.

***Note:** If the message drive for Watch-IT ASCII SV is located on a network drive, the Watch-IT ASCII SV Service Logon must use a logon that has network rights as well as Administrative rights on the Service computer. (Services Control Panel – Logon properties.)

Messaging Server: The computer which processes and sends the message files. This is the computer where the Watch-IT application was installed.

Requirements:

1. Read / Write access to both the program and message drives.
2. Messaging Service connection via one of the following: dial-out modem, leased-line modem, dial-up ISP or network Internet connection. Also, a direct serial connection is supported for customer-owned / on-site paging system).

Note: Please see “Access Rights and Watch-IT” [on page 9](#) for information on the specific directory and file rights required for proper operation of Watch-IT ASCII.

What You Need to Get Started

How does a text message get from your computer to your wireless receiver? Unlike sending a numeric message, sending a text message is a three-step process:

1. Messaging via the following options:
 - a. Dial-up TAP service: InfoRad Watch-IT uses your computer's modem to dial into the Wireless Messaging Service's modem Phone Number. This number is different from your Wireless Receiver number. If you don't have a Service Phone Number, contact your wireless messaging or short messaging service.
 - b. Internet service WCTP & SNPP: InfoRad Watch-IT uses your Internet connection (Dial-up ISP, broadband, or network) and connects to the service's Internet Server for WCTP & SNPP services. If you don't have the Internet address for the WCTP or SNPP service, contact your wireless messaging or short messaging service.
 - c. Internet E-mail (SMTP): InfoRad Watch-IT uses your Internet connection (Dial-up ISP, broadband, or network) to connect to your ISP or network e-mail server. If you do not have your e-mail server address, contact your ISP or network administrator.
 - d. Direct Connection:
 - I. InfoRad Watch-IT uses your computer's serial port and a leased-line modem to connect to your Wireless Messaging Service or on-site paging system.
 - II. InfoRad Watch-IT uses your computer's serial port and a serial cable connection to connect to your on-site paging system.
2. After a connection is made to your wireless messaging service, InfoRad Watch-IT uploads the wireless receiver ID number and the message you wish to send.
3. After InfoRad Watch-IT disconnects, your wireless messaging service broadcasts the message through their radio tower and out to your wireless receiver.

For every wireless receiver you wish to set up in InfoRad Wireless Watch-IT, you will need the following information:

1. The **Wireless Receiver Number**. If your wireless messaging service uses **PIN Numbers** or **Cap Codes**, you will need the PIN Number or Cap Code for your wireless receiver. Otherwise, you will just need the **Wireless Receiver Phone Number**. If using Email (SMTP) you will need the e-mail address for your wireless receiver.
2. The **Service Provider Phone Number** or **Service Provider SNPP or WCTP Internet Address and Port** or E-mail Server Address. The Service Provider phone number is the dialup number for your wireless messaging service, also sometimes called a Access Number, Terminal Number, Modem Number, Alpha Port phone number, or Short Messaging Service phone number. If you dial this number from a telephone, you should hear a screeching noise, like a fax machine. If connecting through the Internet, the SNPP or WCTP address and port are used to transmit your message to the service provider; the E-mail Server address is used to relay your message through the Internet mail system.

If you are unsure of any of the required information, contact your wireless messaging or short messaging service.

Installation

Access Rights and Watch-IT ASCII

For proper operation, Watch-IT ASCII requires certain file and directory access rights to be properly set, especially if the message directory is located on a network drive. Before installing Watch-IT, check that the following access rights are properly set.

Note: Novell rights are shown. If you are using a different network operating system, set the access rights to the equivalent rights on your network.

Key:

R Read
W Write
C Create File
E Erase or Delete File
M Modify File
F Filescan and Directory Control (i.e., rename a file)

Item	Rights
Program Directory	RWCEMF
Message Directory	RWCEMF

Note: If you are installing the message directory on a local hard drive, the access rights are probably set correctly. You will most likely only have to modify access rights if you set up the message directory on a network drive (see “ASCII File Options” on page 31 for details on setting up the message directory).

Windows Networks

For Windows networks, set the access type for file sharing to SHARED with FULL access for the drive and directory that is being shared.

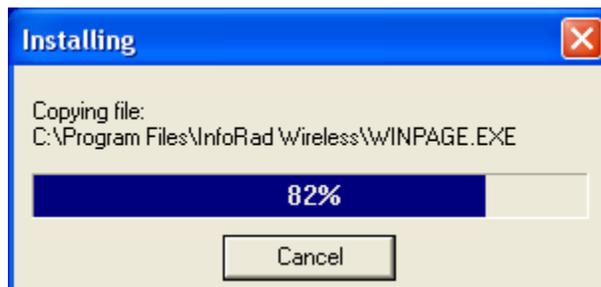
Installing Watch-IT

Note: The installation procedure listed here is for Watch-IT ASCII or Watch-IT Serial. If you are installing Watch-IT ASCII SV, please refer to “Installing Watch-IT ASCII SV” on page 12.

1. If Watch-IT has been provided on a floppy disk, make a back-up copy of your Watch-IT floppy disk before use.
2. To install InfoRad Watch-IT on your computer hard drive, click on the Start button, and select Run. Browse to your CD or floppy drive and select SETUP.EXE, and then click on OK.
3. The InfoRad Watch-IT Installation wizard license agreement screen will appear. Click on the “I agree” button to continue the installation of InfoRad Watch-IT.
4. The Watch-IT Installation wizard will appear. Click on the Next button or press Return to continue the installation of Watch-IT.
5. Next select Program Access for Current User or ALL Users. Selecting Current User will store Program Settings in the Windows Current User Registry. Selecting ALL Users will store the Program Settings in the Windows Local Machine Registry (All Users). Selecting ALL Users may require Administrative privileges.
6. You are then prompted for a destination directory for the installation. If you wish to change the directory where the Watch-IT application will be installed, click on the browse button and select a new directory. Otherwise, click on the Next button to continue the installation process.

Note: If you are re-installing or upgrading Watch-IT, the installer will also ask if you wish to use the existing messaging database files and program setup files, or replace them.

7. You are then asked if you wish to create a shortcut on the desktop for the Watch-IT application. Click on the Next button once you have made a selection.
8. Ready to Install! Click next and Setup will then install the program files.



Once the program files are installed, the program will prompt you for program setup information. Click on the Next button to begin the program setup.

9. Select whether you will be using a Modem (dial-up Messaging Service or ISP) or network/DSL/Cable Internet connection to send messages. If you will be using both, select Modem to start the Modem Setup Wizard.

10. If you selected Modem above, the Modem Setup Wizard will begin. Click Next to go to Communications Setup. (See “Communications Setup” on page 18 for full details on the communications setup procedure.) Please note if you are using a dial-up Internet connection, after Setup completes you will need to select the Internet Connection to use (Setup Menu / Internet Settings).
11. Next, if you purchased the retail version of InfoRad Wireless Office, the Wireless Messaging Service wizard is started. Enter the default wireless messaging service information as prompted. (See “Building Your Wireless Messaging Services Directory” on page 46 for details).
12. After you have entered a default wireless messaging service, the Add Wireless Receiver wizard is started. Enter at least one receiver number, and click Finish when finished. (See “Building Your Wireless Receiver Directory” on page 56 for details on adding wireless receivers to the messaging database).
13. After you have set up your default messaging service, the ASCII File Setup screen or Serial Monitoring Setup screen is opened, depending on which version of Watch-IT you are installing:
 - If you are installing Watch-IT ASCII, the ASCII File Setup screen allows you to configure how Watch-IT ASCII will process message files. See “Watch-IT ASCII and SV Setup” on page 29 for details.
 - If you are installing Watch-IT Serial, the Serial Monitoring Setup screen allows you to configure the serial port that Watch-IT Serial will monitor for message files. See “Watch-IT Serial Setup” on page 39 for details.
14. Next, the Registration Information dialog will appear. Enter your registration information, then click on the Register Now or Register later buttons.
 - If you select the Register now button, the program will automatically contact InfoRad and transfer the registration information you entered earlier. Registration is totally free, and is necessary for technical support and notification of future enhancements and upgrades.
15. Your Watch-IT installation is now complete. To run Watch-IT, click on the Watch-IT icon located in the InfoRad Wireless program manager group.

Installing Watch-IT ASCII SV

Note: The installation procedure listed below is for Watch-IT ASCII SV. If you are installing Watch-IT ASCII or Watch-IT Serial, please refer to “Installing Watch-IT” on page 10.

Watch-IT ASCII SV Installation Overview

There are two separate software “modules” for Watch-IT ASCII SV:

- | | |
|---|---|
| Watch-IT ASCII SV Service Module | This is the background messaging “engine.” There is no direct user interaction possible with this module – configuration is done through the Service Controller module. The Service module only runs on the computer designated as the messaging server. |
| Watch-IT ASCII SV Service Controller | The Services Controller is an administrative module for configuring and maintaining the Watch-IT ASCII SV Services messaging engine. This module can be run from the messaging server PC or remotely from any other PC on the network (running Windows NT4.0 or above). The user running the Service Controller must have administrative privileges on the system running the Service Module. |

To use InfoRad Watch-IT ASCII SV, you must have a modem-equipped computer available on the network to run the Service module (we will be referring to this computer as the “messaging server”). The service module should be installed directly onto this computer.

NOTE: The Service Controller module can be run from any computer, but the communications setup can only be accessed when the Service Controller is run directly on the messaging server.

SV Service Module and Controller Installation

To install the Watch-IT ASCII SV Service Module and Service Controller:

Watch-IT ASCII SV Service Module Installation

1. On the modem-equipped computer you have designated as the messaging server, **log in as the Administrator**.
2. Insert the installation disk into the floppy drive or CD drive.
3. Click on the Start button, and select Run. Browse to your CD or floppy drive and select SETUP.EXE, and then click on OK.
4. Select the directory where you would like to install the software. (By default this is "C:\Program Files\InfoRad Watch-IT ASCII SV Service".)
The service program and database files will then be installed into the specified installation directory.
5. When the module has been installed, reboot the computer when prompted.

Watch-IT ASCII SV Service Controller Installation

6. Once the computer has rebooted, **login again as the Administrator**.
Click on the Start button and select Run. Browse to your CD or floppy drive and select CNTSETUP.EXE, and then click on OK. (This is the "Controller Setup" from the installation diskette.)
7. Select the directory where you would like to install the Service Controller (by default this is C:\Program Files\InfoRad Watch-IT ASCII SV Controller).
8. Once the Controller installation is complete, select "InfoRad Watch-IT ASCII SV Controller" from the Start>Programs menu.
9. When the Service Controller asks which computer you would like to connect to, select "Service on This Computer."
10. When prompted to select the path to the database files, select the installation directory. Double-click on any of the .IRT files listed in the directory.
11. Set up the messaging server communication settings (Edit Menu, Communications. Reference the Watch-IT manual for Communications setup instructions).
12. If you wish, you can also set up the paging services, wireless receivers, and messaging groups at this time. (Edit Menu, Messaging Services, Receivers, Receiver Groups. Reference the Watch-IT Manual for further instruction.)
13. **Ensure that the installation directory for the service module is shared and that all client computers will have full rights to the directory. The installation program cannot share these directories automatically.**

Remote Service Controller Installation

1. If you wish to administer the service module from another computer on the network, take the installation disk to that computer, login as the administrator, and then run the “CNTSETUP . EXE” program on the installation disk to install the Service Controller.
2. When you run the Service Controller from a remote system you must be logged in with a Login that has Administrator rights on the system running the Service module. When the Service Controller asks which computer you would like to connect to, select “Service on a Remote Computer” and enter the name of the remote computer (such as “Server1”).
3. When prompted to select the path to the database files, select the installation directory. Double-click on any one of the .IRT files listed in the directory.
4. You can now access the Edit and Setup options from the Edit Menu.

NOTE: The Service Controller module can be run from any computer, but the communications setup can only be accessed when the Service Controller is run directly on the messaging server.

Installation Problems?

Should you require additional assistance with InfoRad Watch-IT, please briefly document your problem and questions, serial number and version number.

Technical Support Options

Technical Support is only available to registered users of the software as detailed in the licensing agreement. Please register if you haven't already.

This program is licensed with 90-days free telephone technical support included. AlphaCare Subscription options are available that extend the support period, as well as offer priority telephone support and Upgrade Protection. Out-of-warranty support is also available on a per-incident basis..

Please call InfoRad Sales at (800) 228-8998 for details on AlphaCare, or e-mail to sales@inforad.com, or see our website at www.inforad.com.

InfoRad Software Technical Support is available Monday through Friday 8:30–5:30 ET.

A technical support section with solutions to common problems is also available at www.inforad.com/techsupport

Phone:	(216) 531-1369
Fax:	(216) 383-7020
Internet:	Techsupport@inforad.com
WWW:	www.inforad.com

General Setup Options

Setup Overview



Your InfoRad Wireless Office software is configured for compatibility with your computer system during installation. InfoRad Wireless Office provides you with additional communications options should your system or personal needs require them. Access to these features is achieved by selecting the option from the Setup menu.

There are four main setup options:

- Communications Setup
- Internet Setup
- Preference Options
- Change Graphics Option

In addition, there are setup sections that are specific to each version of Watch-IT:

- Watch-IT ASCII and SV Setup
- Watch-IT Serial Setup

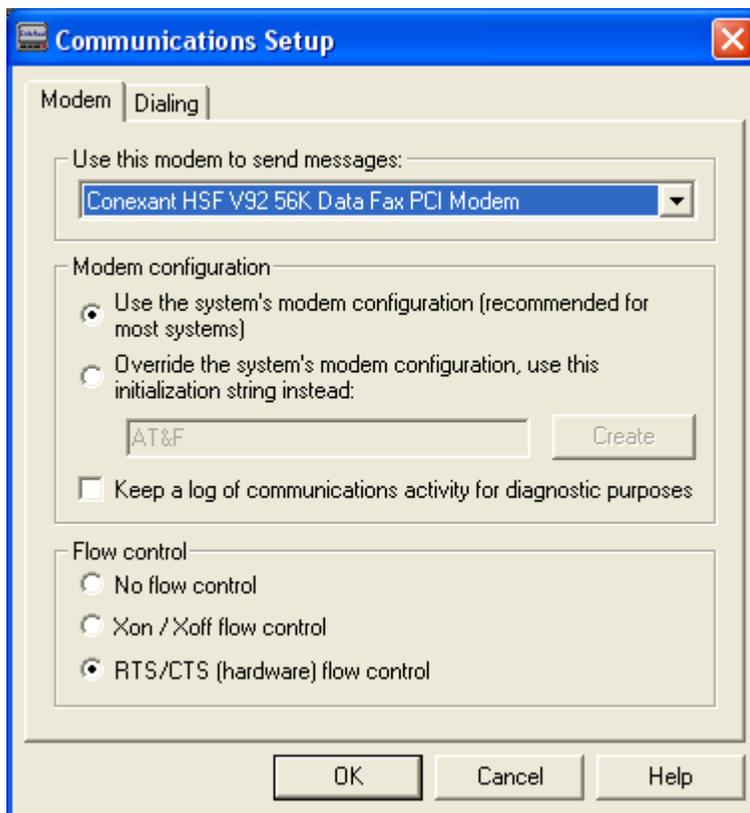
Please refer to the section appropriate to your version of Watch-IT.

Communications Setup

The Communications Setup defines the settings and options used by InfoRad Watch-IT when connecting to Messaging Services that are programmed to connect via 'modem dialup (TAP)'.

InfoRad Watch-IT uses the Windows communications settings and dialing properties, allowing you to easily use your current Windows modem settings when setting up InfoRad Watch-IT. In addition, there are several modem configuration options that you can use to further define how InfoRad Watch-IT uses your modem.

To setup InfoRad Watch-IT's communication settings, select Communications from the Setup menu. The Communications Setup dialog is displayed.



Modem Dialup Connection Settings

The Modem dialog lists all available modems on the current system and modem configuration settings.

When you are finished with the modem selection and configuration, click on OK to finish the communications setup process.

Use this modem to send messages: Click on the drop-down box to select the modem you wish to use with InfoRad Watch-IT.

Modem configuration: The standard Windows modem settings should work with InfoRad Watch-IT. However, if you should need to modify the modem settings for use with InfoRad Watch-IT, additional modem configuration settings are available from within the Modem dialog.

From this dialog you can change the following options:

- Modem Configuration
- Communications Log
- Flow Control



Modems

Note: InfoRad Watch-IT uses your Windows settings to determine what modems are available and how to dial phone numbers. To modify the dialing properties in Windows click on the Dialing tab in the Communications Setup screen.

Modem Configuration

If your modem requires a unique initialization string, select “Override the system’s modem configuration, use this initialization string instead.” and enter your modem’s initialization string:

1. If you are unsure of what initialization string you should use, try using the “Create” button. InfoRad Watch-IT will automatically build a custom modem initialization string for your modem.
2. If the custom initialization string built by “Create” does not work, enter a custom modem initialization string manually. See “Using High Speed and Fax Modems” on page 21 for more information on creating a custom initialization string.

Flow Control

The flow control settings allows you to enable/disable modem flow control, and select between software (XON/XOFF) flow control and hardware (RTS/CTS) flow control (default setting). Normally there is no need to change this setting.

Communications Log

The “Keep a log of communications activity for diagnostic purposes” checkbox enables communications logging of all modem connections to a files named CM*.txt, which is saved in the program installation directory.

The log filename is CM, followed by the day of the month, followed by the time of day - for example, a message or group of messages sent on the 6th day of the month at 9:15am would have a log file with the name CM060915 . txt.; at 9:15pm the filename would be CM062115 . txt

Using High Speed and Fax Modems

If you need to use a custom modem initialization string and are using a Fax modem, a high-speed modem (above 2400 baud), or a modem with error correction or data compression features, several of your modem's advanced features will typically need to be disabled to achieve successful communications with a wireless messaging service's answering modem.

If you are not familiar with the proper commands, syntax, or command order for your particular modem, please reference your modem user manual or contact your modem manufacturer's technical support staff. Also note the following settings for a typical initialization string:

- Select Bell mode (For U.S.)
- Select CCITT mode (For European and other countries)
- Error correction = OFF
- Data compression = OFF
- Auto baud adjust = OFF or ON
- Return verbal result codes = ON (typically Q0V1)
- Extended result codes (typically X4 to return BUSY, NO DIAL TONE and CONNECT message with speeds)
- Flow control = OFF
- Operation mode = Normal mode
- Modem reset on DTR transition = ON
- Trellis Encoding = OFF
- Communications mode = asynchronous

Note: Try adding an &F at the beginning of the init string to reset modem before issuing other commands. Try setting the operation mode to direct mode if normal mode fails. Some modems use the "+MS" command to set the speed of the modem. A typical setting will look like the following:

+MS=B103 for a 300 baud rate connection

+MS=B212 for a 1200 baud rate connection

For more information on modem configuration, please see
<http://www.inforad.com/modemtech.html>

Internet Setup

Access the Internet Setup by selecting Internet Settings from the Setup Menu.

Internet Setup section allows you to configure:

- *Internet Connection Settings*
- *Telnet Proxy Setup Options*
- *ReplyTO Address*

Internet Connection Settings

These settings are used for internet-based messaging services (WCTP, SNPP, SMTP(E-mail)). The following are the Internet connection options:

Connect to the Internet through: You can configure the software to connect to the Internet through your local network, or you can select a dial-up Internet connection. If you select a dial-up Internet connection, you will need to enter the login account name, account password, and optional domain name.

Reconnection options: These settings define the number of redial attempts to connect to Internet if a connection or logon problem occurs (such as a busy signal).

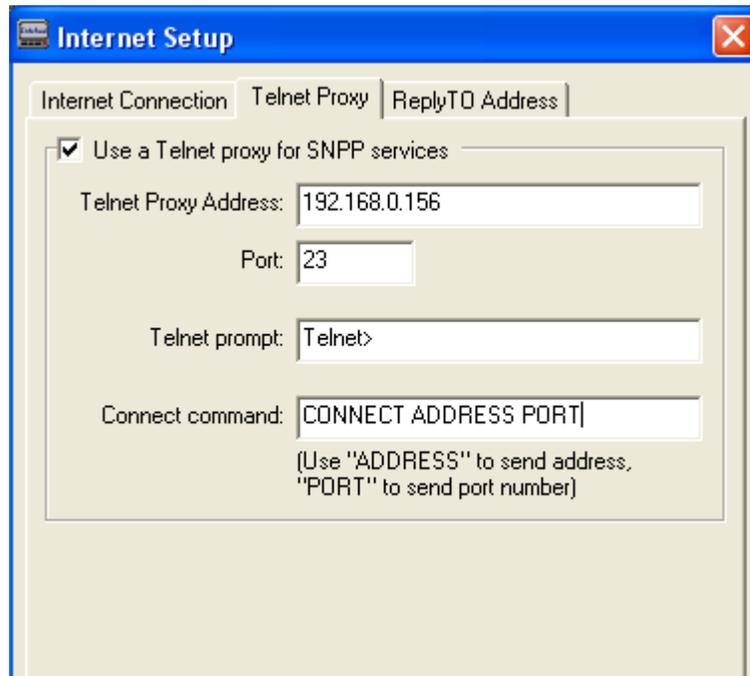
HTTP Proxy Server Authentication: WCTP Messaging Services utilize the HTTP Internet protocol in the same way as your Internet Browser. If your network contains a Proxy Server that requires Authentication to access the Internet, check 'Proxy server requires authentication' and enter your Username and Password required for Internet Access. (**Note** for Watch-IT ASCII SV: The Watch-IT ASCII SV Service accesses the HTTP Proxy. The Watch-IT ASCII SV Service Logon properties must use a logon account that will allow the Service both admin rights to the machine running the Service and network access to the HTTP Proxy.)

Keep a log of internet activity for diagnostic purposes: This option enables logging of all internet connections. This is useful to confirm that the computer is successfully connecting to the Internet to transmit messages. When this option is enabled, a file named "inetlog.txt" is saved in the program installation directory. This file contains a log of all internet activity generated by the program, including connection attempts and sent messages.

Telnet Proxy Setup Options

When sending messages via SNPP to a Messaging Service through a network Internet connection that utilizes a proxy server or firewall for network security, it may be necessary to setup InfoRad Watch-IT to use a telnet proxy. This may be required since SNPP is not a common port that is open on most Proxy servers or Firewalls. Check with your network administrator to determine if you must use a Telnet Proxy and for proper settings.

Select the “Use a telnet proxy for SNPP services” checkbox to enable the use of a telnet proxy in the Telnet Proxy tab of Internet Setup.



The screenshot shows the 'Internet Setup' dialog box with the 'Telnet Proxy' tab selected. The 'Use a Telnet proxy for SNPP services' checkbox is checked. The 'Telnet Proxy Address' field contains '192.168.0.156', the 'Port' field contains '23', and the 'Telnet prompt' field contains 'Telnet>'. The 'Connect command' field contains 'CONNECT ADDRESS PORT|'. Below the 'Connect command' field, there is a note: '(Use "ADDRESS" to send address, "PORT" to send port number)'. The dialog box has three tabs: 'Internet Connection', 'Telnet Proxy', and 'ReplyTO Address'.

Use a telnet proxy for SNPP services: If you are using a proxy or firewall with your internet connection, you can select this checkbox to enable proxy use and to specify the proxy settings, including the proxy address and port number. **Note** that telnet proxy is used *only* for SNPP Services. (WCTP and SMTP Services will not use a telnet proxy. WCTP connects via an HTTP Proxy if the network requires; SMTP connects via an SMTP server located on your network or at your ISP.)

Telnet Proxy Address and Port: This is the address and port number of the proxy server being used.

Telnet proxy responses: The “Telnet prompt” options specifies the prompt text that the proxy server displays to indicate that it is ready for input. Note that if your Telnet prompt contains a space after the prompt (and before the cursor), you must enter the space as part of your "Telnet prompt" text entry. (To determine your telnet prompt, open a command window and establish a telnet connection to your telnet proxy server. The command prompt that is returned is your "Telnet prompt".)

Telnet proxy commands: The “Connect command” is the command the proxy server will use to connect to the messaging service Internet server. Note: to send the proxy address, enter “ADDRESS”. To send the proxy port, enter “PORT”.

Example: If you enter “CONNECT ADDRESS PORT” in the Connect command field, and your Messaging Service SNPP Internet server address is “snpp.alphatech.com”, and the port is “444”, InfoRad Watch-IT will send the command “CONNECT snpp.alphatech.com 444” when connecting to the messaging service Internet server through the Telnet Proxy.

Normally, the proxy connect command is “ADDRESS PORT” or “CONNECT ADDRESS PORT”. Check with your network administrator for the proper commands for your proxy server.

Flow of a Telnet proxy connection: When sending a message utilizing a Telnet Proxy Server, InfoRad Watch-IT first establishes a telnet connection to the proxy as defined in the Telnet Proxy Address and Port. When InfoRad Watch-IT detects the Telnet prompt (as defined in the Telnet Proxy Setup), it then sends the Connect command (as defined in the Telnet Proxy Setup) using the ADDRESS and PORT as defined in the Messaging Service. The Telnet Proxy then establishes a connection to the Messaging service. InfoRad Watch-IT then sends the message to the Messaging Service via the connection established by the Telnet Proxy.

ReplyTO Address

InfoRad Watch-IT supports sending messages to wireless receivers via Internet E-mail using the standard Internet E-mail protocol SMTP.

To send messages via e-mail please reference the Messaging Service setup.

The ReplyTO Address tab in Internet Setup allows you to define the Reply Address for messages sent via E-mail (SMTP) and WCTP. Enter your Internet E-mail address in the field.

If no entry is made in the address field, then message responses and failed to send notices will not be returned.



NOTE: Some WCTP Messaging Services require the use of a senderID. This field will be used as the senderID (in addition to being used as the reply address) when connecting to WCTP services.

Preference Options

InfoRad Watch-IT offers you several wireless receiver preference options for handling long message input, entering a message “signature,” and more. To set or select your Preference Options, select Preferences under the Setup menu. The General Preferences dialog will appear.

The screenshot shows the 'Preferences' dialog box with the following settings:

- Message Signature:** An empty text input field.
- Password:** Password protect edit controls. A 'Change Password...' button is visible.
- General:**
 - Split long messages into multiple messages
 - Require confirmation for deleting and clearing items
 - Send button sends all queued messages
- Failed Message Retries:**
 - Retry failed manually entered messages
 - Retry failed scheduled messages
 - Retry up to times.
 - Pause for seconds between attempts.
 - Bring retry alert window to foreground

Message Signature: The message signature text allows you to define a short “signature” string of characters that will be attached to each message you send. For example, “John Smith, ARB Inc.” Type in the signature you wish to use in the Signature Text field, and select whether you want the signature inserted before or after each message. When you enter a text message, you will have the opportunity to turn the signature on or off.

Password protect edit controls: Access for editing any of the InfoRad Watch-IT setup or directory entries is restricted by selecting this option. Once disabled, access is allowed only by your password. The InfoRad Watch-IT default password is “priv”.

Change Password: The password governs the “Edit Controls” option. The default password is “priv”. To change the password, click on the Change Password button, enter your new password, and click on OK. Make sure to document the new password.

Split long messages into multiple pages: Selecting this option allows you to send messages up to 1024 characters long. Your message is automatically split into shorter messages based on the message length capability defined when you set up your wireless messaging service’s information (see “Building Your Wireless Messaging Services Directory” on page 46).

Require confirmation for deleting and clearing items: This option allows you to select whether InfoRad Watch-IT will ask for confirmation upon deleting or clearing items from the Receivers, Groups and Messing Service Directory.

Send button sends all queued messages: This option allows you to select whether InfoRad Watch-IT will send all messages in the queue when sending a newly entered message. When not selected the behavior is to send only the newly entered message and queued messages must be sent from the Queue Menu, Send Queue

Failed Message Retries Options

This option allows you to select the number of redial attempts that InfoRad Watch-IT will make upon the following conditions: receiving a telephone company busy signal while dialing the messaging service; if the modem is in use by another application; or if the phone line is in use (no dial tone).

There are several redial options available:

Redial when manually typed-in messages fail: This option allows you to select whether InfoRad Watch-IT will automatically attempt to redial when sending a message that you entered and sent manually.

Redial when scheduled messages fail: This option allows you to select whether InfoRad Watch-IT will automatically attempt to redial when sending scheduled messages.

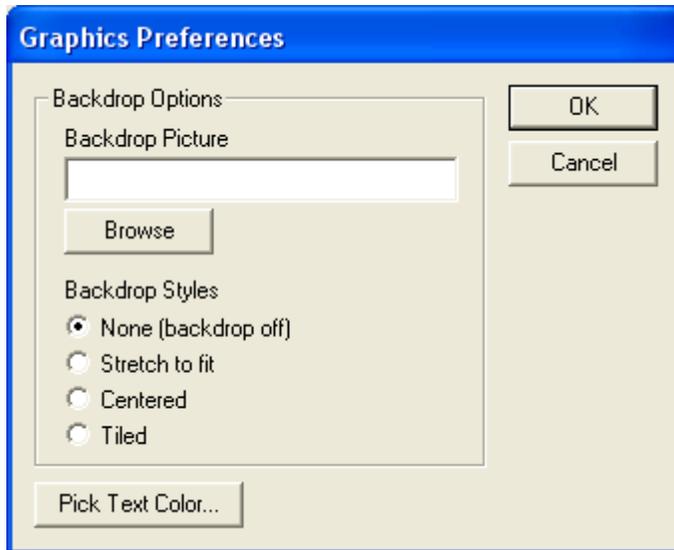
Redial attempts: Enter the number of times you wish the program to redial if the modem or phone line is busy.

Seconds between redials: Enter the number of seconds you wish the program to wait before redialing.

Bring redial window to foreground: If the program has to attempt to redial, selecting this option will bring the redial window to the foreground (in front of any other open windows).

Change Graphics Option

If you wish, you can change the background graphic and the text color used by the software. To modify the graphics, select the “Change Graphics...” option from the Setup menu.



To select a picture to use as the backdrop, enter the directory path and filename of the graphic, or click on the Browse button and then select the graphic file you wish to use.

Next, select a backdrop style: None, Stretch to fit, Centered, or Tiled.

To change the color of the text used in the main screen, click on the Pick Text Color button, and then select the color you wish to use.

When you click on the Ok button, your graphic preferences will be applied to the main screen.

Watch-IT ASCII and SV Setup

ASCII Setup Overview

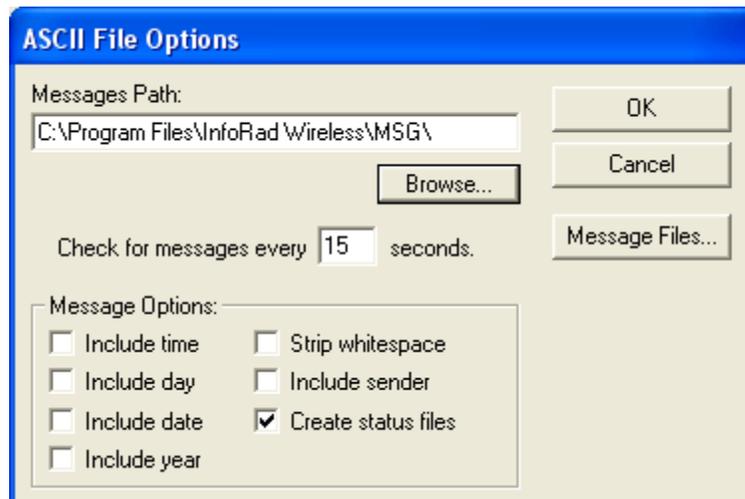
Note: This section applies to Watch-IT ASCII and Watch-IT ASCII SV only. For information on setting up Watch-IT Serial, please refer to “Watch-IT Serial Setup” on page 39.

The ASCII File Options dialog allows you to configure the Message Options Watch-IT ASCII will use to process message files. The ASCII File Options dialog can be accessed from the Setup menu (Edit menu in Watch-IT ASCII NT).

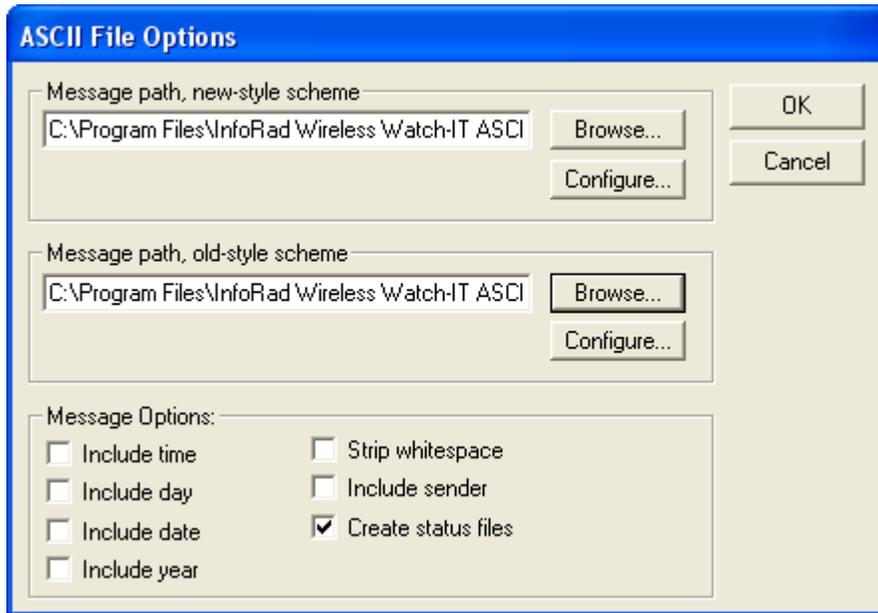
The ASCII File Setup dialog allows you to modify the message file parameters and status file behavior. The ASCII File Setup dialog is accessed using the “Message Files...” button in the ASCII File Options screen.

For specific information and instruction, please refer to the following sections:

- ASCII File Options
- ASCII File Setup



Watch-IT ASCII File Options Setup Screen



Watch-IT ASCII SV File Options Setup Screen

Note: The Watch-IT ASCII SV version does not include the “Check Interval” option. Watch-IT ASCII SV checks for messages every 10 seconds.

ASCII File Options

The following are the available ASCII File Setup processing options:

Message Directory The “Message Path” field allows you to enter the directory to check for new message files. By default this directory is “<program directory>\MSG\”, however it can be changed to any directory on local or network drives.

(**Note** for Watch-IT ASCII SV: The Watch-IT ASCII SV Service accesses the Message Directory. If the Message Directory is not located on the Service machine, but is located on a network location, the Watch-IT ASCII SV Service Logon properties must use a logon account that will allow the Service both admin rights to the machine running the Service and network access to the Message Directory.)

Check Interval (Watch-IT ASCII only) The check interval option sets how often Watch-IT checks the message directory for new message files to process. By default this is set to five seconds.

Strip whitespace The strip whitespace option automatically removes any excess spaces from the contents (or message) of a wireless receiver message, converting multiple spaces into a single space. For example, the message “Frank, give me a call -- John” would be sent as “Frank, give me a call -- John”. An example reason to turn off this option is if you are formatting messages to fit a specific wireless receiver’s line format and use spaces in the message to accomplish this task.

Include time Selecting this option will automatically insert the time that Watch-IT sent the wireless receiver message into the message text.

Include day Selecting this option will insert the day (abbreviated to three letters, such as Mon or Tue) that Watch-IT sent the wireless receiver message into the message text.

Include date Selecting this option will insert the date (without the year) that Watch-IT sent the wireless receiver message into the message text.

Include year Selecting this option will insert the year that Watch-IT sent the wireless receiver message into the message text. If the “Include date in page” option is also selected, the year is appended to the date.

Include sender Selecting this option will insert the text included on the “FROM:” line of the message file into the wireless receiver message. (Note: the “FROM:” delimiter can be user-modified. See “Message Delimiters Setup” on page 38 for more information on changing message delimiters.)

Create status files This option allows Watch-IT to create status files, which are files used to track the current status of pages being processed by the system. This option is explained in detail in “Status Files Filename Setup” on page 36.

ASCII File Setup

The ASCII File Setup dialog allows you to modify how Watch-IT processes message files, including changing the filenames that Watch-IT looks for, changing the names of the status files created after each wireless receiver message is sent, and modifying the delimiter text headers that specify the different sections within the message files.

The ASCII File Setup dialog box is accessed from the “Message Files” button in the ASCII File Options dialog.

Old-Style and New-Style File Conventions

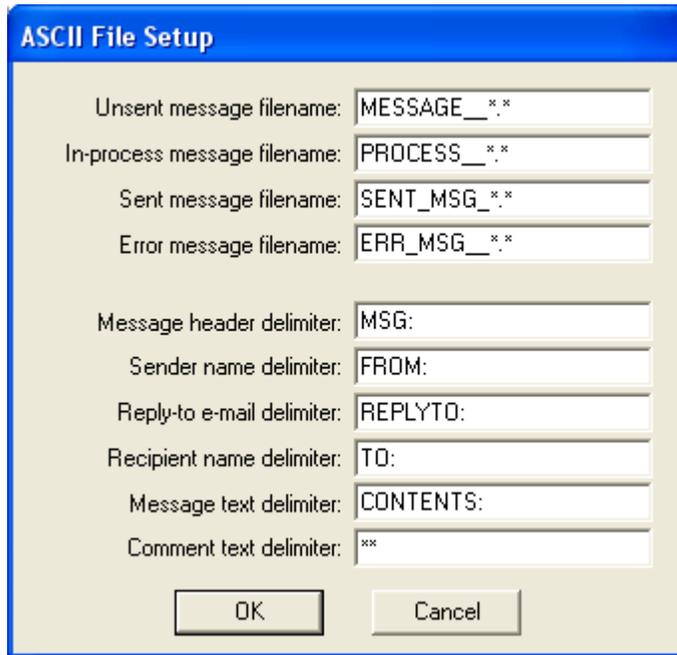
There are two ASCII file conventions used for naming status files, “old-style” and “new-style.” Watch-IT ASCII, AlphaPage Windows AFP, and AlphaPage DOS AFP support the convention known in Watch-IT ASCII SV as “old-style” scheme. In addition to the old-style scheme, Watch-IT ASCII SV also supports a new ASCII File convention known as the “new-style” scheme.

The ASCII File Options dialog in Watch-IT ASCII SV allows setup of either or both schemes. The Watch-IT ASCII SV supports both schemes for backward compatibility. Watch-IT ASCII SV can support either scheme independently or simultaneously.

Unsent message filename:	PAGEMSG.*
In-process message filename:	PAGEMSGI.*
Sent message filename:	PAGEMSGS.*
Error message filename:	PAGEMSGE.*
Message header delimiter:	MSG:
Sender name delimiter:	FROM:
Reply-to e-mail delimiter:	REPLYTO:
Recipient name delimiter:	TO:
Message text delimiter:	CONTENTS:
Comment text delimiter:	**

OK Cancel

ASCII File Setup “Old Style”



ASCII File Setup "New Style"

“Old-style” and “new-style” use different initial / default settings of File Names and Status File Names. The “new-style” utilizes a client ID in the “new-style” message file names (the use of a client ID is optional for your application – you may name the files as you desire, even use the “old-style” filenames in the “new-style” settings).

New-Style Message File Processing Example

When a message is sent from one of the external third part clients, the client:

1. obtains a message ID from its own local source (let’s suppose it’s 00008759 for our example)
2. updates its local source to the next message number (00008760 in our case)
3. obtains its client ID from its own local setup file (let’s suppose it’s 00000012 for our example)
4. creates a message file with its message ID and its client number (MESSAGE__00000012.00008759).

The server watches out for the appearance of MESSAGE_*. * files. When the server sees the message file (MESSAGE__00000012.00008759) it:

5. parses the file, attempts to read any messages contained in it
6. erases the MESSAGE__00000012.00008759 file.
7. creates a file to indicate that the message is in process: PROCESS__00000012.00008759
8. attempts to send the message

9. creates a file to indicate that the message was sent (SENT_MSG_00000012.00008759) or that the message failed (ERR_MSG__00000012.00008759).

The client waits, and watches for the presence of one of two filenames: SENT_MSG_00000012.00008759 or ERR_MSG__00000012.00008759.

10. If the ERR_MSG__ file is present, it is read to find out what went wrong.
11. If the SENT_MSG_ file is present, the client assumes the message was sent OK.
12. In either case, the client erases the PROCESS__00000012.00008759, SENT_MSG_00000012.00008759, and ERR_MSG__00000012.00008759 files, if they exist.

Old-Style Message File Processing Example

When a user sends a message from one of the clients, the client:

1. obtains a message ID from the global source (let's suppose it's 247 for our example)
2. updates the global source to the next message number (248 in our case)
3. creates a message file with the message ID (PAGEMSG.247 in our case)

The server watches out for the appearance of PAGEMSG.* files. When the server sees our message file (PAGEMSG.247) it:

4. parses the file, attempts to read any messages contained in it
5. renames the file to the in-process file name (PAGEMSGI.247 in our case)
6. attempts to send the message, if any
7. creates a file to indicate that the message was sent (PAGEMSGS.247) or that the message failed (PAGEMSGE.247).

The client waits, and watches for the presence of one of two filenames: PAGEMSGS.247 or PAGEMSGE.247.

8. If the PAGEMSGE file is present, it is read to find out what went wrong.
9. If the PAGEMSGS file is present, the client assumes the message was sent OK.
10. In either case, the client erases the PAGEMSGI.247, PAGEMSGS.247, and PAGEMSGE.247 files, if they exist.

Message Filename Setup

The first four fields in the Message File Setup dialog allow you to specify the filename which Watch-IT ASCII will use when checking for message files and when generating status files.

Message Filename Format

The Unsent message filename field in the Message File Setup dialog allows you to define the format of the filename that Watch-IT ASCII will search for when it checks the message directory for new message files.

Watch-IT supports standard DOS filename formats (8 characters, a period, and a three-character extension) and long filenames. You can enter a full filename, or replace a part of the filename with a wildcard (* or ?) character. The "*" wildcard character will match any number of characters, while the "?" wildcard character only matches a single character. Using wildcards allows you to set the filename or the extension as a variable.

For example, entering "PAGEMSG.*" into the Unsent message filename field would enable Watch-IT to match any filename placed into the message directory that began with PAGEMSG. This would allow you to use the extension to number the message files, such as PAGEMSG.001, PAGEMSG.002, and so forth. Entering "PAGEMSG.?" would only match single-character extensions, such as PAGEMSG.1, PAGEMSG.2, and so on—"PAGEMSG.12" would not match.

You can also define the extension, and leave the filename as a variable. For example, *.MSG would match any file that had the MSG extension, such as ACCESS.MSG, 00341.MSG, or JAN0197.MSG

Note: If you use the extension for wireless receiver message numbering, Watch-IT also supports base 36 numbering schemes in addition to standard decimal numbering (base 36 uses numbers ranging from 1 to Z, allowing numbers such as 03Z).

Default Old-Style Message Filename

The default old-style message filename format is PAGEMSG.*, where the extension is used for a message ID number. This number is incremented with each processed message file.

Sample Old-Style Message Filename:

PAGEMSG.764

Default New-Style Message Filename

The default new-style message filename format is MESSAGE_*.*, using both a client ID number and a message ID number.

Sample New-Style Message Filename:

MESSAGE_00000012.00008759

Status Files Filename Setup

Watch-IT ASCII and Watch-IT ASCII SV can create several kinds of status files that contain information about the success of the page sent. (This option is enabled by selecting the “Create status files” checkbox in the ASCII File Setup dialog.)

Status Files Format

You can define the filenames used for each of the following types of status files generated by Watch-IT:

Inprocess/Input Message Files: This is just the message file with a new name. The filename is changed to prevent the AFP from attempting to send the messages in it again. The system that created the message file can remove this file or use it for whatever purpose it chooses. If you have not selected the “Create AFP status files” checkbox, the message file is deleted once it has been processed.

Sent Message Files: This file contains the recipient name, the messaging service used, the exact message text sent to the wireless receiver, and the date and time that the message was sent. This can be useful if the system needs to keep track of what messages were sent when. This file is only created if the messages was sent successfully, so its presence is an indicator that the message was sent.

Error Message Files: This file is only created if there is a problem sending a wireless message. This file contains the same information as the Sent File, plus an error message to help diagnose the problem.

The names of each of these files can be user-specified. Watch-IT can be set up to leave separate error files for each message file, or to leave all status information in one set of three status files.

Default Old-Style Status Filenames

The following are the default status filename formats used in the old-style scheme:

Status File	Default Filename Format
In-process	PAGEMSGI . *
Sent Message	PAGEMSGS . *
Error Message	PAGEMSGE . *

In the old-style scheme, the extension is used for a message ID number. This number is incremented with each processed message file.

Sample Old-Style Status Filenames:

PAGEMSGI . 764
PAGEMSGS . 764
PAGEMSGE . 764

Default New-Style Status Filenames

The following are the default filenames used in the new-style scheme:

Status File	Default Filename Format
In-process	PROCESS_*. *
Sent Message	SENT_MSG_*. *
Error Message	ERR_MSG_*. *

In the new-style scheme, the extension is used for a message ID number, and a client ID number is appended to the end of the filename before the filename extension.

Sample New-Style Status Filenames:

```
PROCESS_00000012.00008759
SENT_MSG_00000012.00008759
ERR_MSG_00000012.00008759
```

Creating Individual Status Files for Each Wireless receiver Message

For individual (separate) status files for each wireless receiver message, use either a wildcard filename or a wildcard extension. For example:

```
*.INP
*.SNT
*.ERR
```

All wireless receiver status messages would be created with individual filenames, assuming every message file had a unique file name. For example, files MSG001.txt and MSG002.txt would result in MSG001.INP and MSG002.INP, and the same for sent or error files.

You can also use variable extensions like the old-style default setup:

```
pagemsgI.*
pagemsgS.*
pagemsgE.*
```

All status messages generated by this configuration would have the defined filename, and an individual extension, assuming every wireless receiver message file had a unique extension. For example, files pagemsg.001 and pagemsg.002 would result in pagemsgI.001 and pagemsgI.002, and the same for sent or error files.

Creating Just One Set of Status Files

To configure Watch-IT to generate just one of each type of status file (instead of creating a set of status files for each individual wireless receiver message file) use a static name with no wildcard:

```
pagemsg.inp
pagemsg.snt
pagemsg.err
```

Note: In this configuration, Watch-IT will append to the Sent Message and Error Message status files each time a wireless receiver message is sent. However, the Inprocess/input Message file (pagemsg.inp in the example above) is overwritten each time a message file is processed.

Message Delimiters Setup

Watch-IT ASCII and ASCII SV allow you to customize the delimiters that mark the different sections of a messaging message file, such as the “TO:” and “CONTENTS:” delimiters. This allows you to customize the way Watch-IT processes message files to match the application generating the files.

The following are the default message delimiters:

Section	Default Delimiter
Message Header	MSG:
Sender Name	FROM:
Recipient Name	TO:
Message Text	CONTENTS:
Comments	**

Watch-IT Serial Setup

Serial Setup Overview

Note: This section applies to Watch-IT Serial only. For information on setting up Watch-IT ASCII, please refer to “Watch-IT ASCII and SV Setup” on [page 29](#).

There are two setup sections used to set up Watch-IT Serial to monitor and process messaging information:

- Serial Monitoring Setup
- Serial Alarm Code Mapping

The **Serial Monitoring Setup** screen allows you to configure how Watch-IT Serial will monitor for records to process. The Serial Monitoring Setup dialog is automatically opened during the installation process, and can also be accessed from the Setup menu.

The **Serial Alarm Code Mapping** screen allows you to specify the codes which will cause Watch-IT Serial to generate a wireless message, and which receivers will receive the message for each alarm code.

Once you have configured the serial monitoring options and defined the alarm codes, Watch-IT Serial is ready for operation.

Serial Monitoring Setup

The Serial Monitoring Setup screen allows you to configure how Watch-IT Serial will monitor for records to process.

The Serial Monitoring Setup screen is automatically opened during the installation process, and can also be accessed from the Setup menu.

The screenshot shows the 'Serial Monitoring Setup' dialog box with the following configuration:

- Serial data input port settings:**
 - Serial port: COM1
 - Baud rate: 9600
 - 8 data, no parity, 1 stop
 - Keep a log of serial data for diagnostic purposes
- SIM input records end with:** (Empty text box)
- If an alert message fails:**
 - Attempt to resend: 0 times
 - Send warning to ADMIN receiver
- When adding new alarm codes, use these default settings:**
 - Alarm code starts: at column 1, anywhere
 - In the alert message, include:
 - record text from column 1 to column 80
 - additional record text from column 1 to column 1
 - the date and time

Buttons: OK, Cancel

Serial Monitoring Setup Options

The following are the setup options available from the Serial Monitoring Setup screen:

Serial Data Input Port Settings: These settings allow you to specify the communications port that Watch-IT Serial will monitor, as well as the port speed and parity settings. These settings should match the communication settings on the system that will be generating the serial communications.

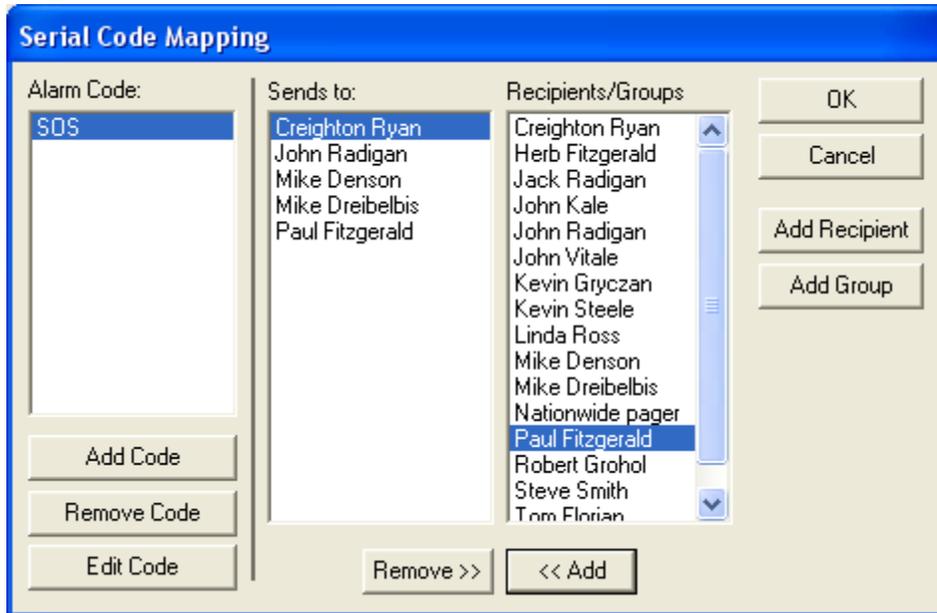
If Alert Message Fails: This option allows you to specify the number of times Watch-IT Serial should attempt to retry to send the message, and whether it should notify the receiver titled “ADMIN” if a message fails. For the ADMIN notification to work, you must have a wireless receiver defined with the name of “ADMIN” in the messaging database. Typically, this will be the system administrator. For details on adding wireless receivers, please refer to “Building Your Wireless Messaging Services Directory” on page 46.

SIM input records end with: This option specifies the character used to mark the end of a record. Typically, this is either a line feed or a carriage return – for Microsoft-based systems (Windows or DOS) it will most likely be a line feed. Select the appropriate option for your system. If your system does not use a line feed or carriage return to mark the end of a record, enter the ASCII code of the end of record character used by your system. Note that the character used to mark the end of a record *cannot* appear anywhere within the body of the record.

Alarm Code Default Settings: The alarm code default settings are the settings which will appear each time a new serial alarm code is added to the database. (See “Serial Alarm Code Mapping” on page 42 for full details on each of these options.)

Serial Alarm Code Mapping

The Serial Alarm Code Mapping screen allows you to specify the alarm “trigger” codes which will cause Watch-IT Serial to create a wireless message, and also specify which receivers will receive the message for each specific alarm code.



From the Serial Code Mapping screen, you can add, edit, and delete alarm codes.

- To add a new alarm code, click on the Add Code button.
- To edit an existing code, select the code from the “Alarm Code” column and click on the Edit Code button.
- To remove an alarm code, select the code and click on the Remove Code button.

Edit Serial Code Dialog

If you select the Add Code or Edit Code buttons from the Serial Alarm Code Mapping screen, the Edit Serial Code dialog will open.

The screenshot shows the 'Edit Serial Code' dialog box. The title bar is blue and contains the text 'Edit Serial Code'. The main area is light beige. The first section is titled 'When an input record containing this alarm code arrives:' and has a text input field containing 'SOS'. Below this, there are two radio buttons: 'at column' (selected) with a text input field containing '1', and 'anywhere'. The second section is titled 'Send an alert message that includes:' and has four checked checkboxes: 'record text from column' with a text input field containing '1' and 'to column' with a text input field containing '80'; 'additional record text from column' with a text input field containing '112' and 'to column' with a text input field containing '134'; 'additional text:' with a text input field containing 'auto-dispatch message'; and 'the date and time'. At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

The following are the available serial alarm code options:

Alarm Code: This is the text that specifies the alarm code. The alarm code should match the text generated by the host system. It could be a text message, such as “NOTICE” or an application-specific code, such as “AN534”.

Alarm Code Starts: This option allows you to specify whether the alarm code starts at a specific column position in the record, or if the code can appear anywhere within the record. If the alarm code starts at a specific location in the record, enter the starting column position.

Include Record Text: The Include Record Text option allows you to include a specific range of text from the record. Specify the starting and ending columns of the record text you wish to include in the wireless message.

Additional Record Text: If you wish to include a second range of text from the current record, select this option and enter the starting and ending columns of the second portion of the record text you wish to include in the wireless message.

Additional Text: The Additional Text option allows you to append a custom text string to each wireless message generated by the current alarm code. Enter the text you wish to include.

Date and Time: To include the date and time the wireless message was created, select this option.

Assigning or Removing Receivers to an Alarm Code

Once you have defined an alarm code, you will need to assign wireless receivers to receive the message. You can specify either individual recipients or groups, or a combination of both.

All recipients and groups in the messaging database are listed in the “Recipients/Groups” column of the Serial Code Mapping dialog. All recipients and groups assigned to the current alarm code are listed in the “Sends To” column.

To add a recipient or group to the current alarm code, select their name from the “Recipients/Groups” column and click on the “<<< Add” button. To remove a recipient or group, click on their name in the “Sends To” column and click on the “Remove >>>” button.

Note: If the recipient or group you wish to add is not listed, they are not currently defined in the database. To add a recipient or group, click on the “Add Recipient” or “Add Group” button to open the Wireless Receiver Directory or Group Directory. (See “Adding a New Wireless Receiver” on page 57 or “Adding a New Group” on page 61 for more information).

Building Your Wireless Messaging Directories

Messaging Directories Overview

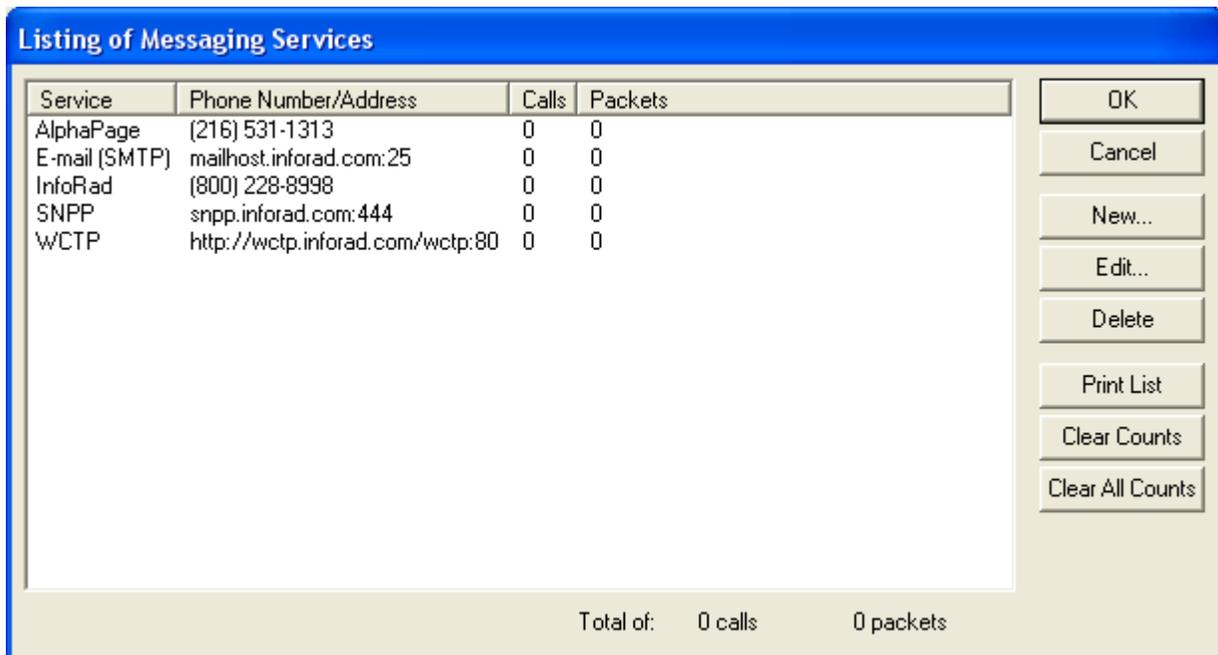
Watch-IT lets you select wireless receivers for text messages by Name and by Group. To do this, you must first create the following three messaging database directories (Wireless Messaging Service, Wireless Receivers, and Group) in the following order:

1. Building Your Wireless Messaging Services Directory
2. Building Your Wireless Receiver Directory
3. Building Your Group Directory (Optional)

These directories contain information about messaging service companies, individual wireless receiver numbers, and grouped listings of receivers that you wish to send text messages to as a set (such as a sales team or emergency action group).

Also note, you can send a message manually from the Watch-IT ASCII and Serial main screens by wireless receiver number (See “Sending Messages By Receiver Number” on page 86 for more details). This option is not available in Watch-IT ASCII SV.

Building Your Wireless Messaging Services Directory



The Wireless Messaging Service Directory is a database of messaging companies, including information on each company's wireless messaging service number (and related communications information). Watch-IT allows you to set up as many wireless messaging service entries as you require.

You will need a separate entry for each different company used by those wireless receivers you wish to message—for example, if you are sending messages to one wireless receiver using a nationwide messaging service and to another using a local messaging service, you will need to create two messaging service directory entries.

There are two messaging service setup methods. To quickly add a new modem-based wireless messaging service, you can use the "Add a Messaging Service" wizard. For more advanced setup options, or to edit an existing messaging service, you can manually edit the service's configuration.

To access either setup method, select "Messaging Services..." from the Edit menu to open the Listing of Messaging Services screen, which lists all currently defined wireless messaging services and their current call and packet counts. From this screen you can add, modify, or delete a messaging service.

Note: Setup wizards are not available in Watch-IT ASCII NT. To set up your wireless messaging services, please refer to "Manually Adding or Editing a Messaging Service" on page 47.

Manually Adding or Editing a Messaging Service

From the Listing of Messaging Services screen you can add a new service or edit an existing service. To add a new service, click on the New button. To edit an existing service, select the messaging service you wish to edit and then click on the Edit button. The Messaging Service Setup screen will open.

Messaging Service Setup

Name:

Password (if required):

Max message length:

Timeout (seconds): Log messages to this service

Send messages via:

Country:

Area Code:

Use Area Code, Country Code, and Dialing Properties (recommended)

Number will be dialed as:

CONSULT YOUR MESSAGING SERVICE for their system's connection method – dial-up or internet.

- Dial-up (TAP) connection is also sometimes called a Access Number, Terminal Number, Modem Number, Alpha Port phone number, or Short Messaging Service phone number), optional system log-on password and for changes in any of the default communications parameters (Port Settings).
- For Internet connections: SNPP & WCTP: Internet server address and port.
- For E-mail (SMTP): Consult your network administrator or ISP for Internet e-mail (SMTP) server address. Consult your Messaging Service for the e-mail address format of your wireless receiver for later entry of Receivers.

The Messaging Service Setup screen allows you to edit or create messaging service entries in the database.

The following are the Messaging Service Setup fields:

Messaging service name: Enter the name of the messaging service.

Password: If the messaging service requires a password, enter it here (most services do not require a password). Note that if a password is entered into this field and it is not required or is incorrect, a communications error can occur while logging onto the wireless messaging service's system.

Maximum Message Length: Enter the maximum number of characters that your wireless messaging service can accept for a text message if it is different from the default setting of 80 characters. If you exceed the wireless messaging service's maximum message capability, your message will typically be either truncated and partially sent or not sent.

Log messages to this service: If you wish for a log to be kept of all messages sent to this service, select this checkbox. (See "Message Logging" on page 94 for more information.)

Note: Message logging can also be turned on for individual receivers in the Wireless Receiver setup (See "Building Your Wireless Messaging Services Directory" on page 46.)

Connect to this paging service via: There are five connection methods supported – Modem Dial-up (TAP) connection, Internet (SNPP), Internet E-mail (SMTP), Internet (WCTP), and Direct Connection (via leased line modem or serial connection). Check with your messaging service if you are unsure of the connection method to use.

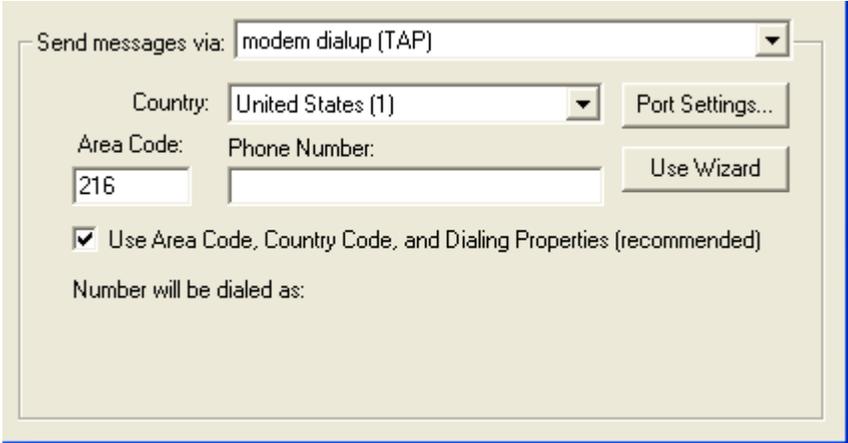
Note: Internet E-mail (SMTP) is not a direct connection to the Messaging Service. Internet E-mail (SMTP) utilizes the Internet E-mail routing system, and as such long delays could result. Do not use Internet E-mail (SMTP) for time critical messages.

Settings: The settings area of the dialog changes depending on the connection method chosen (Dial-up, SNPP, SMTP, WCTP or Direct Serial). See "*Messaging Service Connection Settings*" on page 49 for details on setting up each of the available connection methods.

Messaging Service Connection Settings

Depending on the connection method chosen, the setup options listed in the settings area of the Messaging Services setup screen vary. Listed below are the setup options for each connection method:

Modem Dial-up (TAP) Connection



The screenshot shows a dialog box titled "Send messages via: modem dialup (TAP)". It contains the following fields and controls:

- Country:** A dropdown menu set to "United States (1)".
- Area Code:** A text box containing "216".
- Phone Number:** An empty text box.
- Buttons:** "Port Settings...", "Use Wizard", and "Use Area Code, Country Code, and Dialing Properties (recommended)".
- Number will be dialed as:** A label for the final field.

Country: Select the proper country for this phone number.

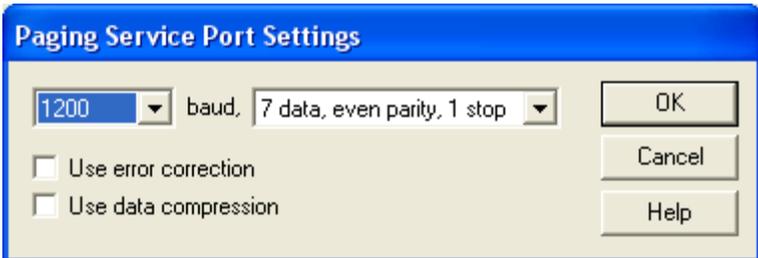
Area Code: Enter the phone number's area code.

Phone Number: Enter the messaging service phone number. Use of commas in the service phone number delays the dialing sequence by two seconds per comma. This is helpful for accessing an outside line in some telephone systems. Note that in most cases commas should be entered in your Windows Dialing Properties settings, and not in this field.

Use Area Code, Country Code, and Dialing Properties: If this checkbox is not selected, only the phone number will be dialed – the area code and country code will not be dialed. Use this only if you have a special dialing sequence that cannot be defined in the dialing properties.

Use Wizard: This button opens the "Add a Messaging Service" wizard.

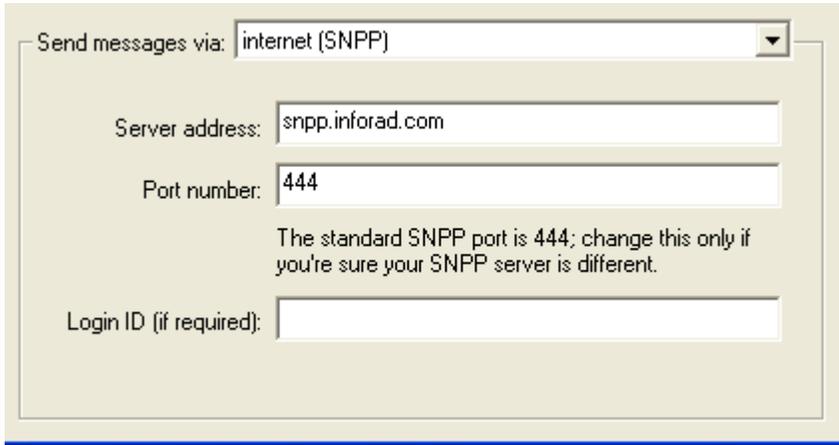
Port Settings: This button allows you to change the communications properties for this connection. The default settings should work with most messaging services – change these settings only if you know that your messaging service requires special settings.



The screenshot shows a dialog box titled "Paging Service Port Settings". It contains the following fields and controls:

- Speed:** A dropdown menu set to "1200".
- Parity:** A dropdown menu set to "7 data, even parity, 1 stop".
- Buttons:** "OK", "Cancel", and "Help".
- Checkboxes:** "Use error correction" and "Use data compression", both of which are unchecked.

Internet (SNPP) Connection



The screenshot shows a configuration window titled "Internet (SNPP) Connection". At the top, there is a dropdown menu labeled "Send messages via:" with "internet (SNPP)" selected. Below this are three input fields: "Server address:" containing "snpp.inforad.com", "Port number:" containing "444", and "Login ID (if required):" which is empty. A note below the port number field states: "The standard SNPP port is 444; change this only if you're sure your SNPP server is different."

Server Address: Enter the Internet address of the SNPP wireless messaging server. (Example: snpp.alphatech.com)

Port Number: Enter the port number of the messaging server (usually 444).

Login ID: If your messaging service requires a login ID, enter the login ID here (usually the login ID is left blank).

Internet E-mail (SMTP) Connection

Send messages via: internet e-mail (SMTP)

There may be delays associated with SMTP messaging. SMTP is usually very reliable, but is not recommended for emergency messaging.

E-mail Server: smtp.ix.netcom.com

Note that this is not an e-mail address, but the name or address of the SMTP server, like "smtp.mymail.com" or "mailhost.mymail.com".

Port number: 25

The standard SMTP port is 25; change this only if you're sure your SMTP server is different.

SMTP Authentication

Outgoing mail server requires authentication

Account name: miked

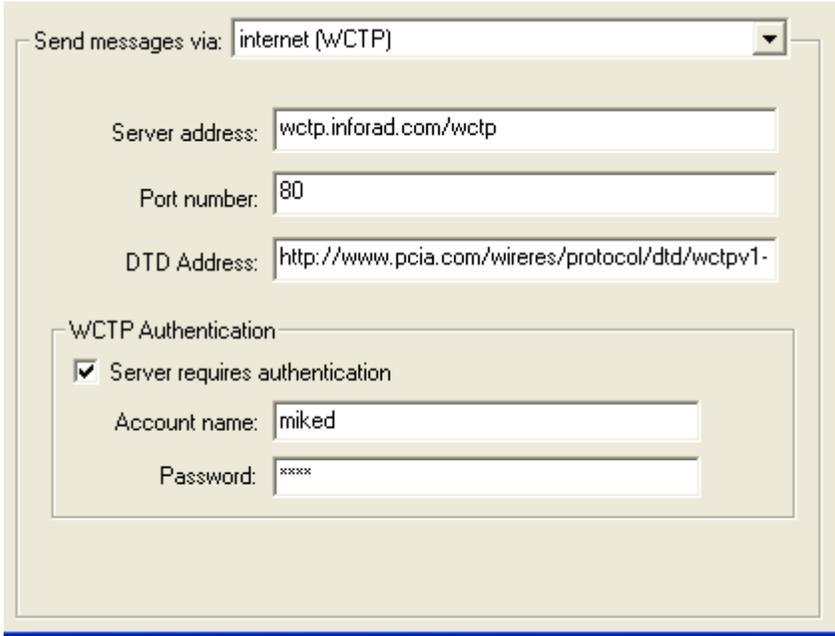
Password: xxxxx

Note: Internet E-mail (SMTP) is not a direct connection to the Messaging Service. Internet E-mail (SMTP) utilizes the Internet E-mail routing system, and as such long delays could result. Do not use Internet E-mail (SMTP) for time critical messages.

E-mail server and Port: Enter the e-mail server address and port used to send Internet e-mail. Check with your network administrator or your ISP for the correct setting.

SMTP Authentication: If your outgoing mail server requires Authentication enter the logon information.

Internet (WCTP) Connection



The screenshot shows a configuration window for an Internet (WCTP) connection. At the top, there is a dropdown menu labeled "Send messages via:" with "internet (WCTP)" selected. Below this are three text input fields: "Server address:" containing "wctp.inforad.com/wctp", "Port number:" containing "80", and "DTD Address:" containing "http://www.pcia.com/wireres/protocol/dtd/wctpv1-". A section titled "WCTP Authentication" contains a checked checkbox "Server requires authentication", followed by "Account name:" containing "miked" and "Password:" containing "*****".

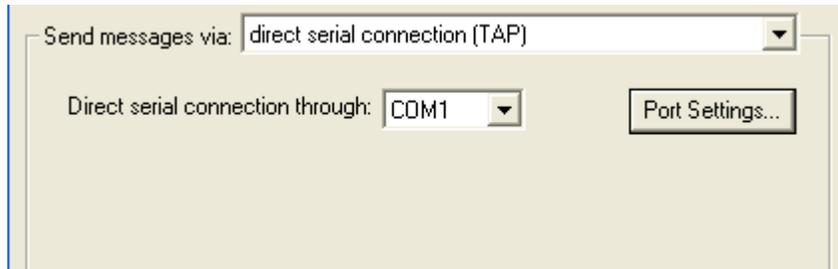
Server address and Port number: Enter the Internet address of the WCTP wireless messaging server. (Examples: www.inforad.com/wctp; wctp.inforad.com; wctp.inforad.com/wctp)

DTD Address: If your WCTP Service requires a special DTD address, enter their DTD address. Most providers use the default provided.

WCTP Authentication: Most WCTP Services do not require Authentication. If your WCTP provider requires Authentication enter your logon information. (Note: Verizon Wireless Messaging requires Authentication, and you must first register at:

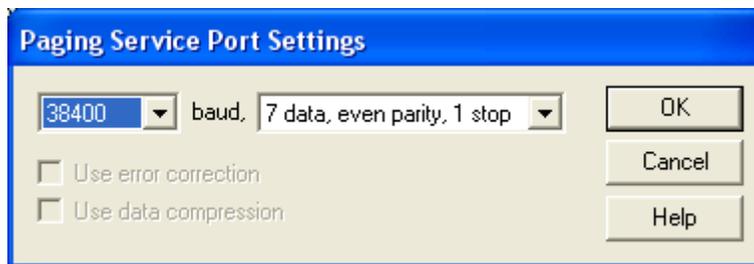
<http://wctp.myairmail.com/wctpRegistration/jsRegistration.jsp>

Direct Serial Connection



Direct serial connection through: Select the COM port that will be used for the direct serial or leased-line modem connection.

Port Settings: This button allows you to change the serial communications properties for this connection. The default settings should work with most messaging services – change these settings only if you know your messaging service requires special settings.



The "Add a Messaging Service" Setup Wizard

The "Add a Messaging Service" Setup Wizard helps guide you through the process of setting up a dial-up modem connection to a new wireless messaging service. To set up an Internet connection to a messaging service, please refer to "Manually Adding or Editing a Messaging Service" on page 47.

To start the wizard, select "Messaging Service..." from the Edit menu to open the Messaging Services Setup screen, then click on the New button. When the Add Messaging Service dialog appears, click on the Wizard button.



To begin using the wizard, click on the Next button.

1. You are first prompted to enter a name for the messaging service you wish to add. Enter the name of the messaging service company, and click on Next to continue.
2. You are then prompted to enter the phone number of the wireless messaging service's system (also sometimes called a Access Number, Terminal Number, Modem Number, Alpha Port phone number, or Short Messaging Service phone number). Your modem connects with this number and then relays the wireless receiver numbers and associated text messages that you wish to send.

Enter the messaging service's number. When you have entered a messaging service number, click on Next to continue.

3. Next, enter the maximum number of characters that your messaging service can accept for a text message if it is different from the default setting of 80 characters.

Note: If you exceed the messaging service's maximum message capability, your message will typically be either truncated and partially sent or not sent.

4. Next, select the baud rate that is used by your wireless messaging service. Usually, this is either 300, 1200, or 2400 baud. If you do not know the baud rate, use the default setting of 1200 baud. Click Next to continue.
5. The messaging service setup is complete. Click on Finish to add the new messaging service to the InfoRad Watch-IT messaging database or click on “Add another messaging service” if you wish to repeat the wizard.

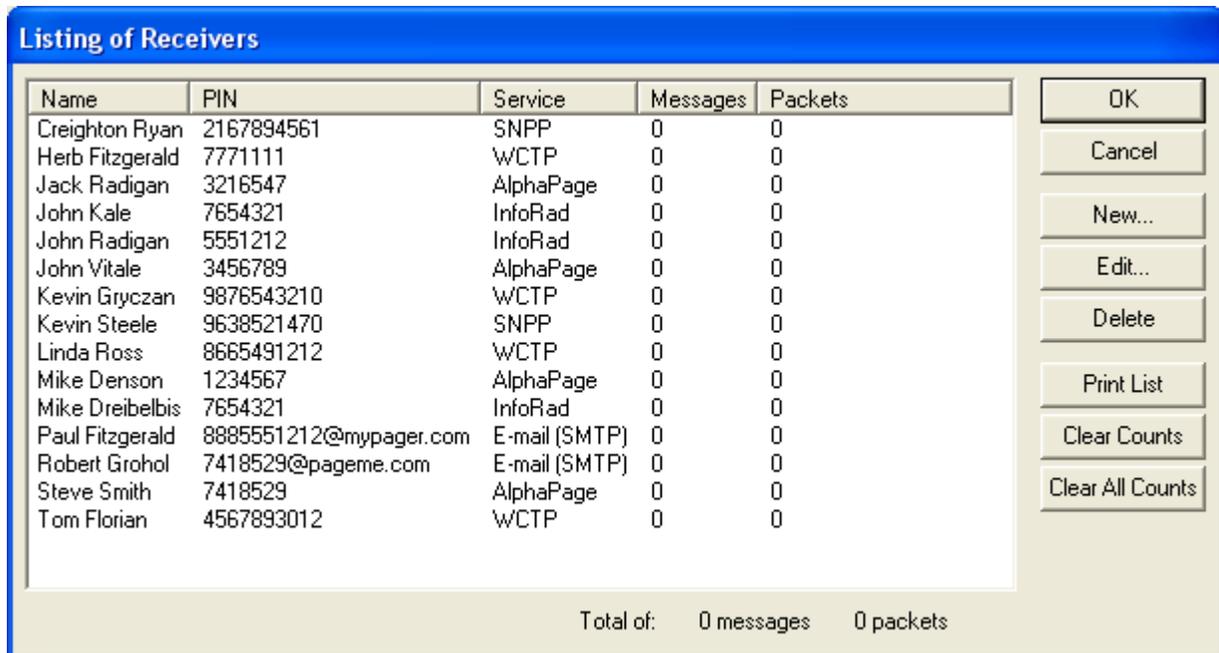
Building Your Wireless Receiver Directory

You should have already set up at least one messaging service before entering new receivers. (See Building Your Wireless Messaging Services Directory for details.)

InfoRad Watch-IT provides for easy entry or changes in your wireless receiver directory. The directory allows you to setup as many receivers as you require, and each receiver name entered can be assigned to any previously programmed messaging service. The InfoRad Watch-IT alphabetical search feature will quickly zoom you in on a receiver to view/modify and will also help you select from your messaging service directory.

There are two receiver entry setup methods, the “Add a Receiver” setup wizard and the Wireless Messaging Receivers screen. To quickly add a new wireless receiver, you can use the “Add a Receiver” Setup Wizard. For more advanced receiver setup options, or to edit an existing receiver entry, use the Wireless Messaging Receivers screen.

To access either method, select “Receivers...” from the Edit menu. This will open the Wireless Messaging Receivers screen, which lists all defined wireless receiver numbers, who carries the receiver, and the appropriate messaging service.



The screenshot shows a window titled "Listing of Receivers" with a table of receiver data and a vertical column of control buttons on the right. The table has five columns: Name, PIN, Service, Messages, and Packets. The data rows list various receivers with their respective details. At the bottom of the window, a summary line reads "Total of: 0 messages 0 packets".

Name	PIN	Service	Messages	Packets
Creighton Ryan	2167894561	SNPP	0	0
Herb Fitzgerald	7771111	WCTP	0	0
Jack Radigan	3216547	AlphaPage	0	0
John Kale	7654321	InfoRad	0	0
John Radigan	5551212	InfoRad	0	0
John Vitale	3456789	AlphaPage	0	0
Kevin Gryczan	9876543210	WCTP	0	0
Kevin Steele	9638521470	SNPP	0	0
Linda Ross	8665491212	WCTP	0	0
Mike Denson	1234567	AlphaPage	0	0
Mike Dreibelbis	7654321	InfoRad	0	0
Paul Fitzgerald	8885551212@mypager.com	E-mail (SMTP)	0	0
Robert Grohol	7418529@pageme.com	E-mail (SMTP)	0	0
Steve Smith	7418529	AlphaPage	0	0
Tom Florian	4567893012	WCTP	0	0

Control buttons on the right: OK, Cancel, New..., Edit..., Delete, Print List, Clear Counts, Clear All Counts.

Total of: 0 messages 0 packets

From the Wireless Messaging Receivers screen you can add, modify, or delete wireless receiver information from the InfoRad Watch-IT receiver directory.

Manually Adding or Editing a Wireless Receiver

Wireless Receiver Setup

Name of person carrying this receiver:

Receiver's ID number or E-mail address:

Messaging service:

- AlphaPage
- E-mail (SMTP)
- InfoRad
- SNPP**
- WCTP

Log messages to this receiver on my hard disk

The Wireless Receiver Setup screen allows you to enter a new receiver's information or edit the settings for an existing wireless receiver.

To access the Edit Wireless receiver screen, select "Receivers..." from the Edit menu or click on the Receivers button in the toolbar to display the Wireless Receivers Setup screen.

From this screen you can add or edit a wireless receiver's settings, including the name of the person carrying the wireless receiver, the wireless receiver's phone or PIN number, and the wireless messaging service used by the wireless receiver. You can also specify if wireless receiver messages sent to the wireless receiver will be logged or not.

Adding a New Wireless Receiver

1. When the Listing of Receivers screen appears, click on the New button.
2. Enter the person's name carrying the wireless receiver.
3. Tab or click to the next line and fill in the wireless receiver number.

Note: For Wireless Receivers utilizing a 'modem dial-up (TAP) connection, enter either the pager's PIN number or phone number as required by your messaging service, but *DO NOT* include the area code. (An exception for this rule would be if you are dialing in to a single, central TAP connection for a Messaging Service, versus individual TAP connections by city – then use the 10 digit phone number with area code.)

If you are using internet paging (SNPP, WCTP, SMTP) use the 10-digit phone number (including the area code) or the PIN number of the Receiver.

For PCS phones enter the phone number *including* the area code.

4. Click on the appropriate wireless messaging service. If you wish to add a new wireless messaging service, click on the Add button.
5. Optionally, you can enable message logging for this receiver.

Note: You can also select the message logging options when setting up your messaging service directory, to log all messages sent to a specific messaging service. (See “Building Your Wireless Messaging Services Directory” on page 46 for more information.)

6. When all the information is correct, click Ok.

Editing an Existing Wireless receiver

To view or edit information about a wireless receiver later, select Wireless receivers from the Edit menu.

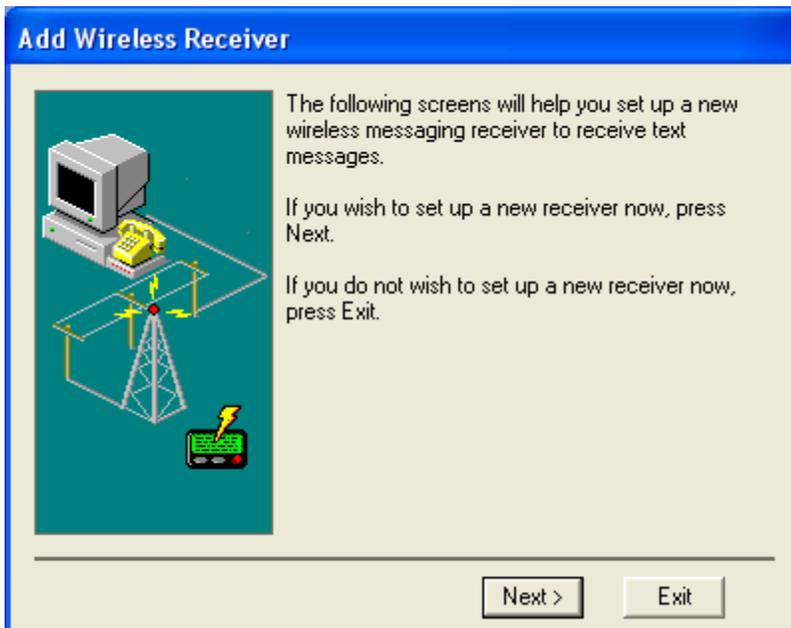
1. Select the wireless receiver you wish to edit from the list and click on the Edit button or double-click on the name. The system automatically displays the receiver information you entered earlier.
2. Tab down or click to any line and change the entry by typing over it or clicking the drop down to select the setting you want.
3. Click Ok to save your changes.

The "Add Wireless Receiver" Setup Wizard

The "Add Wireless Receiver" Setup Wizard helps guide you through the process of adding a new wireless receiver to your messaging database.

To use the wizard, select "Receivers..." from the Edit menu or click on the Receivers button in the toolbar.

Click on the Add button to open the Wireless Receiver Setup screen, then click on the “Use Wizard” button.



1. You are first prompted to enter a name for the new wireless receiver. Enter a name and click on Next to continue.
2. You are then prompted for the receiver's personal ID number (PIN) or wireless receiver number. Enter the wireless receiver number or PIN and click on Next to continue.

Note: For Wireless Receivers utilizing a 'modem dial-up (TAP) connection, enter either the pager's PIN number or phone number as required by your messaging service, but *DO NOT* include the area code. (An exception for this rule would be if you are dialing in to a single, central TAP connection for a Messaging Service, versus individual TAP connections by city – then use the 10 digit phone number with area code.) .

If you are using internet paging (SNPP, WCTP, SMTP) use the 10-digit phone number (including the area code) or the PIN number of the Receiver.

For PCS phones enter the phone number *including* the area code

3. Next, select the messaging service used by the receiver. If their messaging service is not listed, you can click on the "Add..." button to start the "Add a Messaging Service" wizard and enter their messaging service into the database. When you have selected the receiver's messaging service, click on Next to continue.
4. The new receiver setup is complete. If you wish to add another receiver, click on the "Add another receiver" button. Click on Finish if you are done using the Add Wireless Receiver wizard.

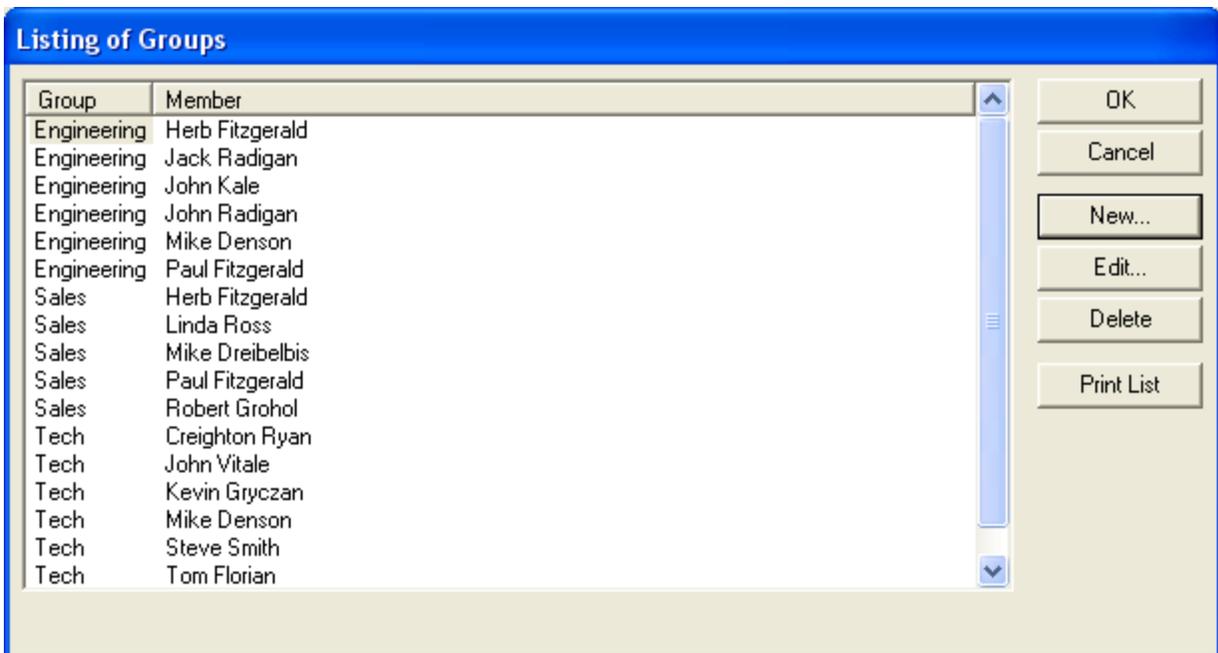
Note: If you later wish to edit this receiver's settings, you can use the Wireless Receiver Setup screen to make modifications (See "Editing an Existing Wireless receiver" on page 58 for details).

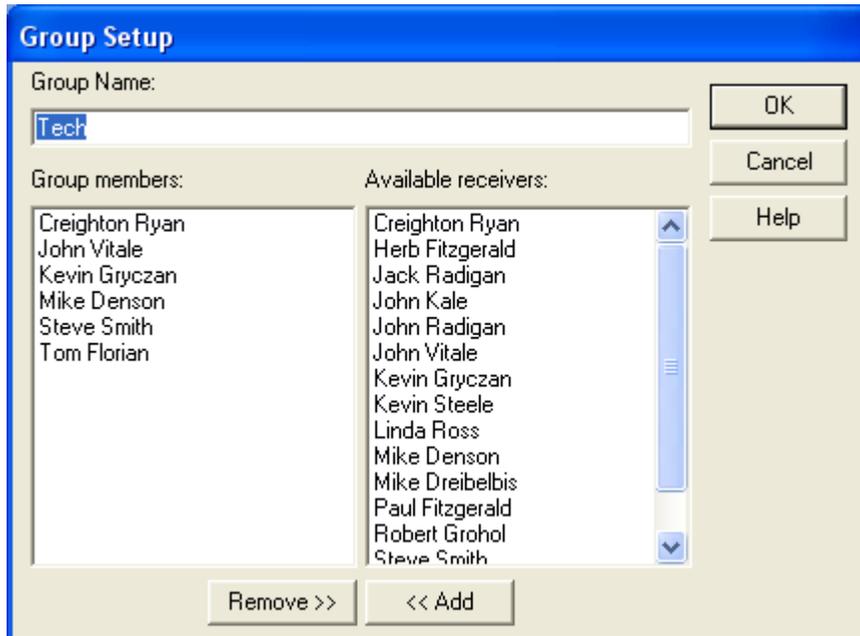
Building Your Group Directory (Optional)

Wireless receivers can be grouped together so you can send messages to a number of people simultaneously. When a group is messaged, InfoRad Watch-IT automatically sorts and combines all messages in the messaging dispatch queue according to their messaging service. This eliminates redialing and speeds up the messaging process when you have a large number of people to send messages.

To create a messaging group, select “Groups...” from the Edit menu. The Listing of Groups screen appears.

The Listing of Groups screen lists all of the defined messaging groups. From this screen you can add a new group or modify an existing group.





Adding a New Group

1. From the Listing of Groups screen, click the New button.
2. Enter a name for the new group.
3. To add a receiver, select that receiver from the “Available receivers” column and press “<< Add”.
4. To remove a receiver, select the receiver in the “Group Members” column and press “Remove >>”.
5. Repeat as needed to add additional receivers. When you are finished adding receivers to the group, click on Ok.

Note: InfoRad Watch-IT allows up to 500 Group members.

Modifying a Group

1. From the Listing of Groups screen, select the messaging group you want to modify and select the Edit button.
2. To add a receiver, select that receiver from the “Available receivers” column and press “<< Add”.
3. To remove a receiver, select the receiver in the “Group Members” column and press “Remove >>”.
4. When you are finished adding or removing receivers to the group, click on Ok to save the changes to the group.

Note: InfoRad Watch-IT allows up to 500 Group members.

Automated Messaging

Automated Messaging Overview

Watch-IT is designed to automatically process “message files” created by a user, another application, or a batch process. These message files contain all of the messaging information necessary for Watch-IT to automatically create a wireless receiver message and send it to the desired individual or group.

Watch-IT ASCII monitors a specific directory for message files, while Watch-IT Serial monitors a communications port for records containing an “alarm code” which triggers message processing of the record containing the code.

For details how each version of Watch-IT handles automated messaging, please refer to the following sections:

- “Watch-IT ASCII and ASCII SV Message Processing” on page 64
- “Watch-IT Serial Message Processing” on page 82

For general details on using Watch-IT ASCII SV, please refer to the following section:

- “Watch-IT ASCII SV General Operation” on page 78

Watch-IT ASCII and ASCII SV Message Processing

Note: This section covers Watch-IT ASCII and Watch-IT ASCII SV. For details on how Watch-IT Serial processes automated messages, please refer to “Watch-IT Serial Message Processing” on page 82.

Watch-IT ASCII and ASCII SV are designed to automatically process “message files” created by a user or generated by a custom application or batch process. These message files contain all of the messaging information necessary for Watch-IT ASCII to create a wireless message and send it to the desired receiver. Watch-IT ASCII monitors a specified file directory for message files.

For details on configuring how Watch-IT ASCII processes message files, please see “Watch-IT ASCII and SV Setup” on page 29.

The following is the normal sequence of events during Watch-IT ASCII message processing:

1. A message file is created and saved in the Watch-IT message directory. This file can be manually created by a user or automatically generated by a program, batch file, or process.
2. Watch-IT checks the message directory at a predetermined time interval, looking for files which match the expected filename format. (See “Message Filename Setup” on page 35 for details on filename setup.)
3. If the program finds a file which matches the correct filename format, Watch-IT opens the message file and processes the information inside to generate and send a wireless receiver message.
4. After a message file has been processed, Watch-IT optionally creates message status files, indicating whether the message was successfully sent or if there was an error in processing the file. (See “Message Status Files” on page 74 for details on using message status files.)

Message File Formats and Conventions

Message files are special ASCII text files that are formatted in a specific manner for automated processing. This section details the message file format, and includes some notes on developing custom messaging applications that can take advantage of this format.

A program (third party client) that wishes to send pages through the Watch-IT ASCII / NT service must adhere to the file naming convention and it is suggested to use a unique client number.

If multiple third party clients are to be used, it is optional (suggested) and up to the System Administrator to assign unique client numbers to each of those programs to ensure there will be no conflict.

Message File Format

A wireless receiver message file is an ASCII text document that can contain any number of messages to individuals or groups. The beginning of each wireless receiver message in the message file is marked by a single line with "MSG:", followed by between two and five of the following components:

Part	Description	Required?
FROM:	Who the message is from.	Optional
TO:	Who the message is to be sent to.	Mandatory
DATE:	Date the message was created.	Optional
REPLYTO:	Reply address. SMTP & WCTP only.	Optional
CONTENTS:	The actual message text.	Mandatory

Message files are formatted in a specific manner for automated processing. This section details the message file format, and includes some notes on developing custom messaging applications that can take advantage of this format. Note that multiple messages can be included in a single message file.

Sample Message File

```
MSG:
TO: George Brown
FROM: Server 128
CONTENTS: Power has failed, server 128 is now running on UPC
power. (Automated Message)
```

```
MSG:
TO: 555-1212 1-800-555-8081
FROM: Dispatch Central
CONTENTS: Proceed to I90&E.185th. Multi-car accident.
** This is a comment line. It is not sent. **
```

Message Delimiters

The following are the default delimiters used to mark the different parts of a wireless receiver message file. (See “Message Delimiters Setup” on page 38 for details on customizing these delimiters.)

- MSG:** Marks the beginning of a new wireless receiver message. This delimiter must be on a line by itself.
- FROM:** Indicates who the message is from. Inclusion is optional.
- TO:** Destination delimiter text. This is a programmed “User” or “Group” name from the Watch-IT directory files. (See “Manual Messaging in Message Files” on page 68 for TO: field formats without programmed directory files.)
- DATE:** Optional Date/Time Stamp delimiter text. Note: Many messaging services automatically “stamp” each message. A Date/Time Stamp requires 8-15 characters and will reduce your maximum message length by that amount.
- CONTENTS:** The message contents delimiter text. The message contents can be multiple lines of text.
- REPLYTO:** ‘Reply To’ address for SMTP & WCTP messages. Inclusion is optional.
- **** The comment delimiter text. Comments are not transmitted with the message. Comments must begin and end with the comment delimiter.

Message File Conventions

Each message in the wireless receiver message file must be preceded by the delimiter “MSG:”. This delimiter marks the beginning of a new wireless receiver message and must be the first element in any wireless receiver message.

The FROM:, TO:, and CONTENTS: sections may be in any order within the file but must contain the exact delimiter text followed by one blank (space) character.

Any text preceded by two asterisks (**) and a blank and followed by a blank and two asterisks is considered informational only and is not scanned as part of the page message information. This allows you to insert comments or additional notes into the message file that you do not wish to send as messaging data.

Note: Multiple messages can be entered in one message file.

Standard Messaging in Message Files

A standard sample Message File:

MSG:

TO: George Brown

FROM: Server 128

CONTENTS: Power has failed, server 128 is now running on UPC power.

The most common type of Watch-IT ASCII and ASCII SV operation utilizes the Watch-IT database for programming the Receivers and Messaging Services. The Message File then need only contain the Receiver name in the TO: field of the Message File. Upon processing the Message File, Watch-IT looks up the Receiver Name in the TO: field to find the ReceiverID / Address and the Messaging Service information to complete processing and sending of the Message File. For information on Message File formats utilizing external data for Wireless Receivers and Messaging Services see “Manual Messaging in Message Files” on [page 68](#) .

Manual Messaging in Message Files

Note: Manual messaging is supported only in the full versions of Watch-IT ASCII and ASCII SV. It is not supported in Watch-IT ASCII-75.

Watch-IT allows you to manually enter a wireless receiver and messaging service in place of a name in the "TO:" field.

This allows you to page someone who has not been entered into the Watch-IT messaging directory, or use messaging information stored elsewhere (such as in a custom database).

Manual 'Modem Dial-Up (TAP)' Message Files

To enter a manual messaging number, you need to enter the wireless receiver number of the person you wish to page first, then a space, and then the number or the name of the person's messaging service.

Note: You do not need to enter dashes in the phone number, and spaces are *not* allowed. For example, 555-1212 may be entered as either "555-1212" or "5551212", but not "555 1212". Also note that you can enter either the messaging service number or the name of the messaging service (if you have already defined the messaging service information). "The "Add a Messaging Service" Setup Wizard" on [page 54](#) can be used to define a 'modem dial-up(TAP)' messaging service.

Example:

```
MSG:
TO: 555-1212 1-800-555-8081
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.
```

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service at 1-800-555-8081, which in turn will transmit the message to wireless receiver number 555-1212.

```
MSG:
TO: 555-1212 PagerCentral
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.
```

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service PagerCentral, which in turn will transmit the message to wireless receiver number 555-1212.

```
MSG:
TO: 555-1212 tap://18005558081
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.
```

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service at 1-800-555-8081, which in turn will transmit the message to wireless receiver number 555-1212.

Manual Message Files for Internet Messaging

You can send manual messages to Internet services by including in the TO: field of a Message File the 10-digit Receiver phone number or Receiver PIN number followed by a space, and then one of the following protocol identifiers followed by the Messaging Service address. Optionally, the Messaging Service address can be followed by the Port number.

wctp:// identifies a WCTP Messaging Service address

http:// identifies a WCTP Messaging Service address

snpp:// identifies a SNPP Messaging Service address

smtp:// identifies a SMTP(E-mail) address

WCTP Examples:

TO: 2165551212 wctp://wctp.sample.com /wctp

or

TO: 2165551212 <http://wctp.sample.com/wctp>

SNPP Example:

TO: 2165551212 snpp://snpp.sample.com:7777

SMTP Example:

TO: 1234567@mypager.com smtp://smtp.sample.com

Also, for the Internet address you can use the IP address (for all the Internet protocols). For example :

TO: 2165551212 snpp://25.356.458.123

Manual 'Internet (WCTP)' Message Files

To enter a manual messaging number, you need to enter the wireless receiver number of the person you wish to page first, then a space, and then the name or address of the Receiver's messaging service.

Note: You do not need to enter dashes in the phone number / ReceiverID number, and spaces are *not* allowed. For example, 216-555-1212 may be entered as either "216-555-1212" or "2165551212", but not "216 555 1212". Also note that you can enter either the WCTP address (and optionally the Port number) of the messaging service or the name of the messaging service (if you have already defined the messaging service information). "Manually Adding or Editing a Messaging Service" on page 47 can be used to define an 'internet(WCTP)' messaging service.

Example:

MSG:

TO: 2165551212 PagerCentral

FROM: FRANK WEILER

CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service PagerCentral, which in this example is defined in the Messaging Service Directory as an Internet WCTP service, which in turn will transmit the message to wireless receiver number 216-555-1212.

MSG:

TO: 2165551212 wctp://wctp.sample.com/wctp

FROM: FRANK WEILER

CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service at Internet address wctp.sample.com on Port 80 via the WCTP protocol, which in turn will transmit the message to wireless receiver number 216-555-1212. When no Port assignment follows the WCTP address, Port 80 is assumed.

MSG:

TO: 2165551212 wctp://wctp.sample.com/wctp:80

FROM: FRANK WEILER

CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service at Internet address wctp.sample.com on Port 80 via the WCTP protocol, which in turn will transmit the message to wireless receiver number 216-555-1212.

MSG:
TO: 1234567 http://www.sample.com/wctp
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

For a WCTP service you can also use the “http://” address of the messaging service. In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service at Internet address www.sample.com/wctp on Port 80 via the WCTP protocol, which in turn will transmit the message to wireless receiver PIN number 1234567.

MSG:
TO: 1234567 wctp://123.25.456.78/wctp
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service at Internet address 125.25.456.78 on Port 80 via the WCTP protocol, which in turn will transmit the message to wireless receiver PIN number 1234567.

Manual ‘Internet (SNPP)’ Message Files

To enter a manual messaging number, you need to enter the wireless receiver number of the person you wish to page first, then a space, and then the name or address of the Receiver’s messaging service.

Note: You do not need to enter dashes in the phone number / ReceiverID number, and spaces are *not* allowed. For example, 216-555-1212 may be entered as either “216-555-1212” or “2165551212”, but not “216 555 1212”. Also note that you can enter either the SNPP address (and optionally the Port number) of the messaging service or the name of the messaging service (if you have already defined the messaging service information). “Manually Adding or Editing a Messaging Service” on page 47 can be used to define an ‘internet(SNPP)’ messaging service.

Example:

MSG:
TO: 2165551212 PagerCentral
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service PagerCentral, which in this example is defined in the Messaging Service Directory as an Internet SNPP service, which in turn will transmit the message to wireless receiver number 216-555-1212.

MSG:
TO: 2165551212 snpp://snpp.sample.com
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / WV will send the wireless receiver message to the messaging service at snpp.sample.com/wctp on Port 444 via the SNPP protocol, which in turn will transmit the message to wireless receiver number 216-555-1212. When no Port assignment follows the SNPP address, Port 444 is assumed.

MSG:
TO: 2165551212 snpp://snpp.sample.com:7777
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service at Internet address snpp.sample.com on Port 7777 via the SNPP protocol, which in turn will transmit the message to wireless receiver number 216-555-1212.

MSG:
TO: 1234567 snpp://123.25.456.78
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service at Internet address 125.25.456.78 on Port 444 via the SNPP protocol, which in turn will transmit the message to wireless receiver PIN number 1234567.

Manual 'Internet E-mail (SMTP)' Message Files

To enter a manual messaging number, you need to enter the wireless receiver e-mail address of the person you wish to page first, then a space, and then the name or address of the Receiver's messaging service.

Note: Do not enter dashes in the phone number / ReceiverID number portion of the Wireless Receiver's e-mail address, and spaces are *not* allowed. For example, Wireless Receiver 216-555-1212 must be entered as "2165551212@mypager.com", *not* "216 555 1212@mypager.com". Also note that you can enter either the SMTP address (and optionally the Port number) of the messaging service or the name of the messaging service (if you have already defined the messaging service information). "Manually Adding or Editing a Messaging Service" on page 47 can be used to define an 'internet e-mail(SMTP)' messaging service.

Example:

MSG:
TO: 2165551212@mypager.com MyISPEmail
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the messaging service MyISPEmail, which in this example is defined in the Messaging Service Directory as an Internet SMTP service, which in turn will relay the message to the Messaging Service's Internet e-mail server, which will process the message into the wireless network and to wireless receiver number 216-555-1212.

MSG:

TO: 2165551212@mypager.com smtp://smtp.sample.com
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the e-mail server at smtp.sample.com on Port 25 via the SMTP protocol, which in turn will relay the message to the Messaging Service's Internet e-mail server, which will process the message into the wireless network and to wireless receiver number 216-555-1212. When no Port assignment follows the SMTP address, Port 25 is assumed.

MSG:

TO: 2165551212@mypager.com smtp://smtp.sample.com:25
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the e-mail server at Internet address smtp.sample.com on Port 25 via the SMTP protocol, which in turn will relay the message to the Messaging Service's Internet e-mail server, which will process the message into the wireless network and to wireless receiver number 216-555-1212.

MSG:

TO: 1234567@mypager.com SMTP://123.25.456.78
FROM: FRANK WEILER
CONTENTS: Tom, page me when you get a chance.

In the example message, Watch-IT ASCII / SV will send the wireless receiver message to the e-mail server at Internet address 125.25.456.78 on Port 25 via the SMTP protocol, which in turn will relay the message to the Messaging Service's Internet e-mail server, which will process the message into the wireless network and to wireless receiver number 1234567.

Message Status Files

Status files are created during message file processing, and can be used to track the progress of Watch-IT ASCII / SV message processing. There are two conventions used for naming message status files, “old-style” and “new-style.”

The ASCII File conventions of Watch-IT ASCII, AlphaPage Windows AFP, and AlphaPage DOS AFP are referred to as the “old-style scheme.” Watch-IT ASCII SV also supports a new ASCII File convention known as “new-style scheme.”

The ASCII File Options dialog in Watch-IT ASCII SV allows setup of either or both schemes. The Watch-IT ASCII SV supports both schemes for backward compatibility. Watch-IT ASCII SV can support either scheme independently or simultaneously.

“Old-style” and “new-style” use different initial / default settings of File Names and Status File Names. The “new-style” utilizes a client ID in the “new-style” message file names (the use of a client ID is optional for your application – you may name the files as you desire, even use the “old-style” filenames in the “new-style” settings).

If you are using Watch-IT ASCII, please refer to “Old-Style Status Files (Watch-IT ASCII and ASCII SV)” [on page 77](#).

If you are using Watch-IT ASCII SV, also refer to “New-Style Status Files (Watch-IT ASCII SV Only)” [on page 75](#).

New-Style Status Files (Watch-IT ASCII SV Only)

InfoRad Watch-IT ASCII SV utilizes three different message status text files during and after processing a message file in addition to the original input message file. Below are the files created using the initial / default filenames – these filenames can be changed in the ASCII File Setup (Watch-IT ASCII in the Setup Menu; Watch-IT ASCII SV Service Controller in the Edit Menu).

Service Input File

The Watch-IT ASCII SV Service looks for files with this filename, and attempts to parse them. This is the filename created by the clients when first generating a message file:
MESSAGE__(client number).(message ID)

Service output: processing

The Watch-IT ASCII SV Service creates a file with this name to let the clients know that it has seen and parsed the corresponding input file. The system erases the input file: MESSAGE__(client number).(message ID) and creates a new file to indicate the file is being processed: PROCESS__(client number).(message ID)

Service output: sent

The Watch-IT ASCII SV Service creates a file with this name to indicate that the messages in the corresponding input file have been sent successfully:
SENT_MSG_(client number).(message ID)

Service output: failed

The Watch-IT ASCII SV Service creates a file with this name to indicate that the messages in the corresponding input file have not been sent. This file contains information on why the message or messages failed:
ERR_MSG__(client number).(message ID)

NOTE: The custom application that generates the message files must be responsible for removing the generated status files once the message status has been reported as Sent or Error by the creation of the appropriate status file (PROCESS__(client number).(message ID) and either (SENT_MSG_(client number).(message ID) or ERR_MSG__(client number).(message ID)).

New-Style Status Filename Format

Those who are familiar with the old system may find it helpful to compare the filenames used in the old and new systems:

File Type	Old Style System	New Style System
Service input	PAGEMSG.(message ID)	MESSAGE_(client number).(message ID)
Service output: processing	PAGEMSGI.(message ID)	PROCESS_(client number).(message ID)
Service output: sent	PAGEMSGS.(message ID)	SENT_MSG_(client number).(message ID)
Service output: failed	PAGEMSGE.(message ID)	ERR_MSG_(client number).(message ID)

(message ID)

In the old system, this was a 3 character base-36 number. This number was kept on a global basis, meaning all of the client programs had to share the same space of 46,000 numbers (and thus 46,000 filenames) the system allowed.

In the current system, message IDs are 8 character hexadecimal numbers. Because a client number is included (see below) and because the message IDs are kept by the client programs, not globally, each client has about 4 billion possible filenames it can use to generate message files.

(client number)

Every file in the current system also contains a client number (utilizing the default / initial settings). This ensures that no two clients will ever attempt to use the same filename. The system administrator assigns the client numbers to the third party clients. Use of a client number in the filename format is optional.

Old-Style Status Files (Watch-IT ASCII and ASCII SV)

If the “Create Status files” option is selected in the ASCII File Setup dialog, Watch-IT will create several different text files after sending a wireless receiver message.

There are three types of status files created by Watch-IT:

Input Files: This is just the message file with a new name. The filename is changed to prevent the AFP from attempting to send the messages in it again. The system that created the message file can remove this file or use it for whatever purpose it chooses.

Sent Files: This file contains the recipient name, the messaging service used, the exact message text sent to the wireless receiver, and the date and time that the page was sent. This can be useful if the system needs to keep track of what pages were sent when. This file is only created if the page was sent successfully, so its presence is an indicator that the page was sent.

Error Files: This file is only created if there is a problem sending a page. This file contains the same information as the Sent File, plus an error message to help diagnose the problem.

The filenames for each of these types of status files is user-definable. For details on customizing the filename for the message status files, please refer to “Status Files Filename Setup” on page 36.

Watch-IT ASCII SV General Operation

Note: Watch-IT ASCII SV is a version of InfoRad Watch-IT ASCII optimized for use on Windows NT and above. While it provides all of the functionality of InfoRad Watch-IT ASCII, the main application has been split into two separate programs: a messaging “engine,” which has been transformed from an application into a Windows Service, and a Service Controller application which acts as an administrative interface for managing the messaging engine.

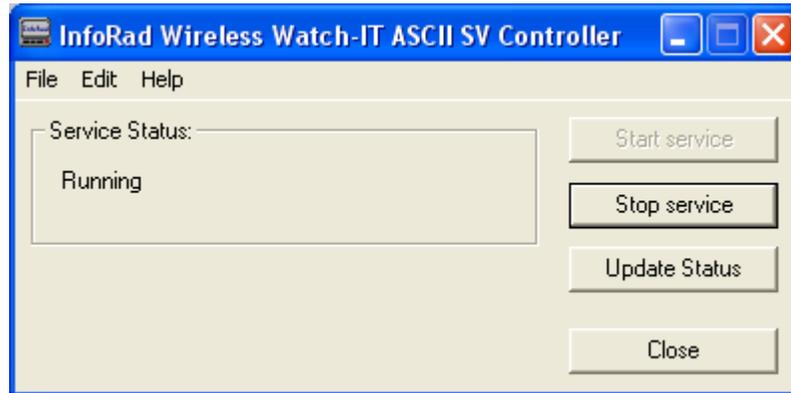
This change also affects certain portions of the program interface. This section covers the differences in Watch-IT ASCII SV program operation from the non-SV version.

There are two separate software modules Watch-IT ASCII SV:

- | | |
|---|---|
| Watch-IT ASCII SV Service Module | This is the background messaging “engine.” There is no direct user interaction possible with this module – configuration is done through the Service Controller module. The services module only runs on the computer designated as the messaging server. |
| Watch-IT ASCII SV Service Controller | The Services Controller is an administrative module for configuring and maintaining the Watch-IT ASCII SV Services messaging engine. This module can be run from the messaging server PC or remotely from any other PC on the network. |

Watch-IT ASCII SV Service Controller

To configure or modify Watch-IT ASCII SV settings, you need to use the Watch-IT ASCII SV Service Controller, which is available from the Windows Start>Programs menu.



From the Service Controller you can start or stop the Watch-IT ASCII SV messaging service, run the service from another computer on the network, or configure Watch-IT ASCII SV.

The original Watch-IT ASCII program accesses all setup and configuration options from the Setup menu. In the Watch-IT ASCII SV Service Controller, these setup options are accessed from the Edit menu.

Once you have configured the Watch-IT ASCII SV settings, you can close the Service Controller. The Watch-IT ASCII SV services do not require the service controller to be running.

Note: While the Service Controller can be run remotely from any computer on the network, the Communications Setup can *only* be run directly on the computer that has been setup as the messaging server.

Watch-IT ASCII SV Setup and Configuration

All configuration and setup of Watch-IT ASCII SV is done through the Service Controller. Setup options are accessed through the Edit menu, instead of the Setup menu (as in Watch-IT ASCII and Watch-IT Serial).

From the Edit menu you can add or change the messaging databases, including messaging services, receivers, and receiver groups. You can also change the program preferences, communication settings, and the ASCII message settings.



For details on each of these setup options, please refer to the following sections:

- “Communications Setup” on page 18
- “Preference Options” on page 26
- “ASCII File Setup” on page 32
- “Manually Adding or Editing a Messaging Service” on page 47
- “Manually Adding or Editing a Wireless Receiver” on page 57
- “Adding a New Group” on page 61

Note: While the Service Controller can be run remotely from any computer on the network, the communications setup procedure can *only* be run directly on the computer that has been setup as the messaging server. All other setup options can be run from any computer.

Watch-IT ASCII SV Service Module

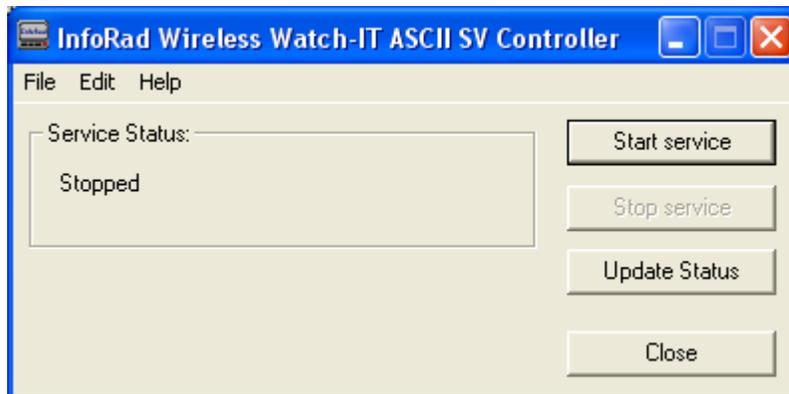
The Watch-IT ASCII SV Service module is a background messaging “engine.” There is no direct user interaction possible with this module – configuration is done through the Service Controller. The Service module only runs on the computer designated as the messaging server. When installed, the Service module is listed in the Service control panel of the computer where it was installed.

To configure the Service module, select “Connect to Service” from the File menu of the Service Controller. You will be prompted to select whether you wish to connect to the service on this computer or on another computer.



If you are currently on the computer designated as the messaging server, select “Service on this computer:” If you are running the Service Controller on another computer on the network, select “Service on a remote computer” and enter the name of the messaging server computer.

You can also start or stop the Watch-IT ASCII SV service from the Service Controller. The “Service Status” portion of the main screen lists the current status of the service module.



To Start or Stop the service, select the “Start service” or “Stop service” buttons as appropriate. The “Update Status” button can be used to update the current Service Status display.

Watch-IT Serial Message Processing

Note: This section covers Watch-IT Serial. For details on how Watch-IT ASCII processes automated messages, please refer to “Watch-IT ASCII and ASCII SV Message Processing” on page 64.

Watch-IT Serial does not use “message files,” but instead monitors a communications port for records containing an “alarm code” which then triggers message processing of the record containing the code.

There are two step areas needed to set up Watch-IT Serial to monitor and process messaging information:

- Serial Monitoring Setup
- Serial Alarm Code Mapping

The **Serial Monitoring Setup** screen allows you to configure how Watch-IT Serial will monitor for records to process. The Serial Monitoring Setup dialog is automatically opened during the installation process, and can also be accessed from the Setup menu.

The **Serial Alarm Code Mapping** screen allows you to specify the codes which will cause Watch-IT Serial to generate a wireless message, and which receivers will receive the message for each alarm code.

Once you have configured the serial monitoring options and defined the alarm codes, Watch-IT Serial is ready for operation.

To begin using Watch-IT Serial, select “Start Serial Monitoring” from the Setup menu. Watch-IT Serial will begin monitoring the specified serial port for records containing one of the specified alarm codes.

The following is the normal sequence of events during Watch-IT message processing:

1. A record is sent to the comm port being monitored. This record can be manually created by a user or automatically generated by a program, batch file, or process.
2. Watch-IT monitors the comm port, looking for records which contain one of the predefined “alarm codes”.
3. If the program finds a record which contains an alarm code, Watch-IT opens the record and processes the information inside according to the preset criteria to generate and send a wireless receiver message.
4. After a record has been processed, Watch-IT creates a wireless message and sends it to the appropriate wireless receivers.

Note: For details on setting up alarm codes, including message criteria and assigning recipients or groups, see “Serial Alarm Code Mapping” on page 42.

Sending Wireless Messages

Wireless Messaging Overview

Note: Sending wireless receiver messages directly from within the Watch-IT application is not supported in Watch-IT ASCII NT. If you are using Watch-IT ASCII SV, please disregard this section.

Sending wireless receiver messages directly from within Watch-IT (called “Console Messaging”) is possible from the Watch-IT ASCII and Watch-IT Serial versions once you have built your User, Group, and Messaging Service directories. The directory search feature can quickly assist you with your selections.

There are two main methods of messaging:

- Sending Messages by Name or Group
- Sending Messages By Receiver Number

In addition, there are several options available with each of these messaging methods, such as scheduled messages and predefined messages. For details on messaging options, please refer to “Message Options” on page 87.

Note: Automatic ASCII or serial messaging is halted while entering a console message. ASCII and serial messages will continue to queue, however, but will not be sent until the console message has been entered.

Also, please note that the time and date stamping feature is only available from automated processing, and cannot be used when using console messaging.

Sending Messages by Name or Group

1. In the “Select message recipients” window, click on the name of the person or group you wish to send a message to or type in the first few letters of the name.

Groups have a group icon  displayed next to the group name in the receivers list.

(If you have not set up any receivers yet, please see “Building Your Wireless Messaging Directories” on page 45.)

To choose a different name, just use the arrow keys or click on the new name to select it.

Note: You can message more than one person or group at a time (creating a temporary or “ad-hoc” group) by selecting multiple names from the list. To select more than one name, hold down the Control (or Ctrl) key when clicking on additional names. Also, the Shift key can be held down to select a range of names (from the currently selected name to where you click).



2. Once you have selected the recipients, press Tab to move to the “Type message” window to begin typing your message. The message you enter will be sent to all selected individuals and groups. (If you plan on often sending messages to the same group of individuals, you should set up a messaging group. See “Building Your Group Directory (Optional)” on page 60 for more information.)

A character and number of pages counters are visible above the message entry area.

Messages can be up to 1024 characters long and can be optionally auto-split into several pages depending on the capacity of the messaging service and receiver you are using. To

correct typing mistakes, use the Delete or Backspace keys to type over existing text. Also, you can use your mouse to move around within your message.

Note: You can also enter messages from other documents using Windows copy (Ctrl+C) and paste (Ctrl+V) functions. Just copy the desired text, and paste it into the message input screen.

3. When your message is complete, click on the Send button to send the message. When Send is selected, Watch-IT will inform you of its progress in sending your message. Optionally, you can queue the message for batch sending, or schedule when the message will be sent (See “The Message Queue” on page 93 and “Scheduled Messages” on page 91 for details).

Sending Messages By Receiver Number

Watch-IT allows you to send messages manually, without first defining a receiver. This is useful for one-time messaging needs, when you do not wish to add the receiver number to your directory.

1. Enter the message you wish to send or use the Options menu pull down to select the previous message and other options. A character counter is visible above the message entry area. Messages can be up to 1024 characters long and can be optionally auto-split depending on the capacity of your messaging service and the receiver you are using. (See “Preference Options” on page 26 for more information.)
2. Click on the Options button under the type message window, then select “Send to unlisted receiver.” The Send to Unlisted Receiver screen will appear.



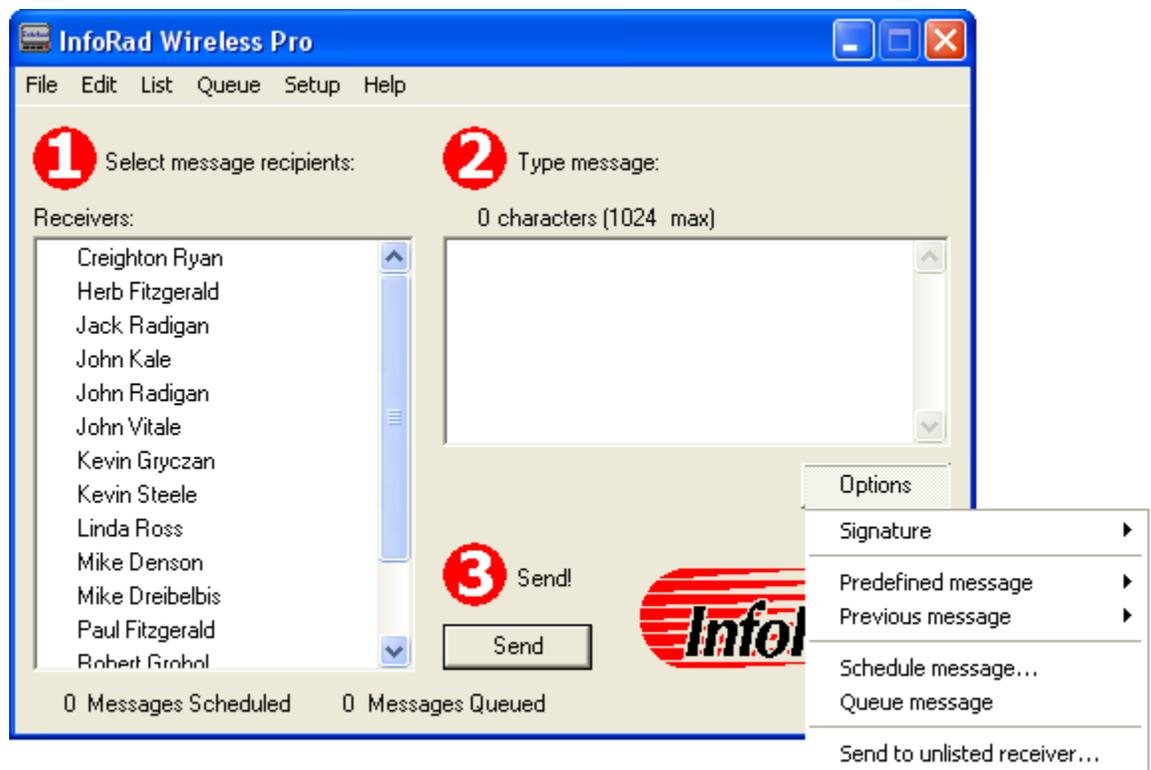
3. Enter the ID number of the receiver you wish to send to.
Note: For PCS phones enter the phone number *including* the area code. For text pagers, enter either the pager’s PIN number or phone number as required by your messaging service, but *DO NOT* include the area code, *unless* you are using internet (SNPP) paging, which may require a 10-digit pager phone number (including the area code) or PIN number.
4. Click on the drop down box and select a messaging service, or enter the messaging service phone number. Click on Ok.
5. When your message is complete, press Enter or click on the Ok button to send the message. Watch-IT will inform you of its progress in sending your message.

Message Options

Watch-IT offers you several different options for text message input, including the following:

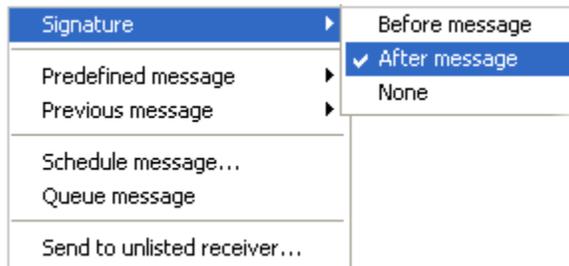
- Signature
- Predefined Messages
- Previous Message (Last Message Recall)
- Scheduled Messages
- The Message Queue (Queue Message)

These options are available by selecting them from the Options button drop-down menu.



Signature

If you wish to include your message signature with a message, click on the Options button below the message entry area, select Signature, and then select whether you'd like the signature placed before or after the message.



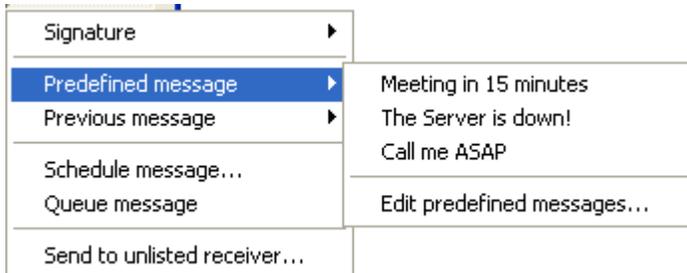
If either of these options is selected, your signature message will automatically be included with each message you send.

Note: Your message signature will not be displayed while you enter your message, but will be included with the message when it is sent.

(See “Preference Options” on [page 26](#) for details on setting up a message signature). If you include your message signature, the character count for the message will include the number of characters in your signature.

Predefined Messages

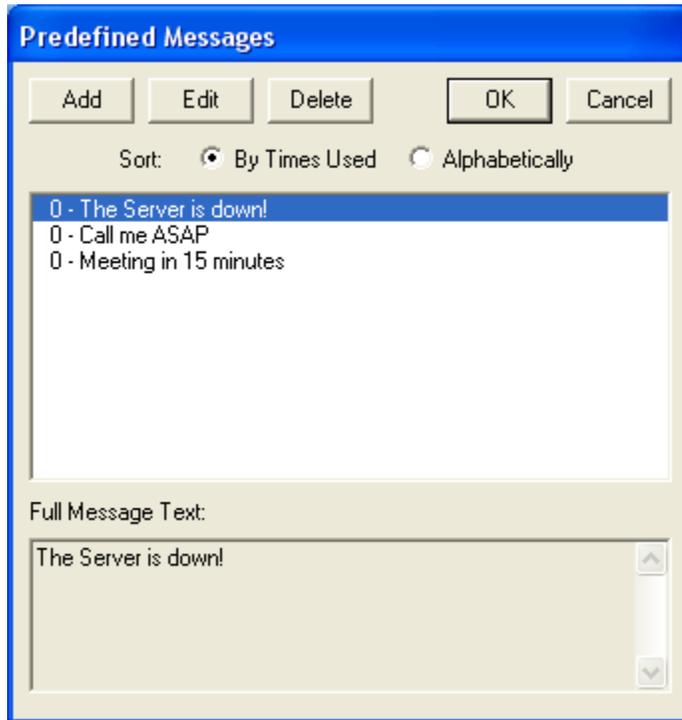
Watch-IT allows you to define up to 500 common messages into a custom list that can be easily accessed from the message input screen. To view or create a predefined message, click on the Options button under the message input window and then select the Predefined Message menu.



To send a predefined message, select the message you wish to send from the Predefined message menu. The message text is entered into the message input window, where it can then be modified and sent as an ordinary wireless receiver message.

To create a new predefined message or edit an existing predefined message, select “Edit predefined messages” from the Predefined message menu.

The Predefined Messages dialog will appear.



The Predefined Messages dialog allows you to add, edit, or delete custom messages. The list of predefined messages can be listed alphabetically, or by the number of times each message has been used.

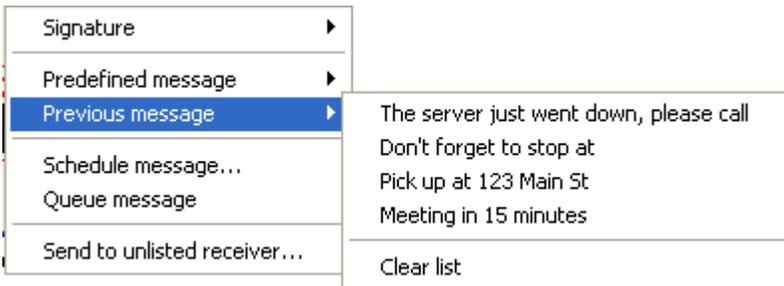
- To create a new predefined message, click on the Add button, then type in the new message you wish to save.
- To edit a message, first highlight the message you wish to modify and then click on the Edit button.
- To delete a message, click on the message you wish to delete and then click on the Delete button.

Previous Message (Last Message Recall)

You may want to repeat your last message entered, either to the same recipient or to someone else. Watch-IT allows you to access any of the last 10 messages sent.

To send a previous message, first select the Wireless receiver Name or Group that you want to send the message to.

To recall the text of a previous message, click on the Options button and then select the Previous Message menu.



A list of previous messages will be displayed. If you wish to delete all previous messages from the recall menu, select the “Clear list” option.

Select the desired previous message from the list. The message is entered into the message input window, where it can now be edited as needed for the new message.

When the new message is correct, click on the Send button to send your message.

Scheduled Messages

Watch-IT allows you to specify up to 500 messages to be sent at a specific time and date, if necessary. This allows you to send messages as meeting or appointment reminders. If you have entered your own receiver information into Watch-IT, you can even send yourself scheduled reminders.

To schedule a message, simply create a message as you normally would, then click on the Options button under the message input window and select the “Schedule message...” option from the Options menu to bring up the Scheduled Message dialog.

Scheduled Message

Send at time: 12 46 AM PM

<< Back Forward >>

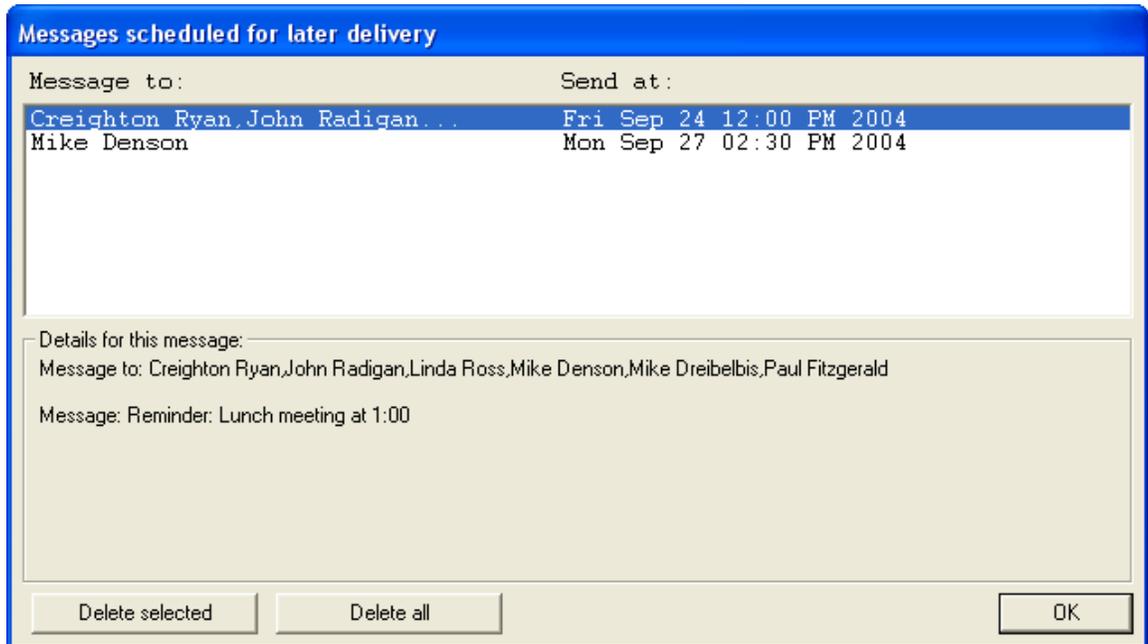
September 22, 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

OK Cancel

From this dialog you can set the time and date that you would like the wireless receiver message to be sent.

Once you have selected a date and time to send your message, click on the Ok button to place your message in the scheduled messages queue. The scheduled messages queue can be viewed by selecting Scheduled Messages from the List menu.



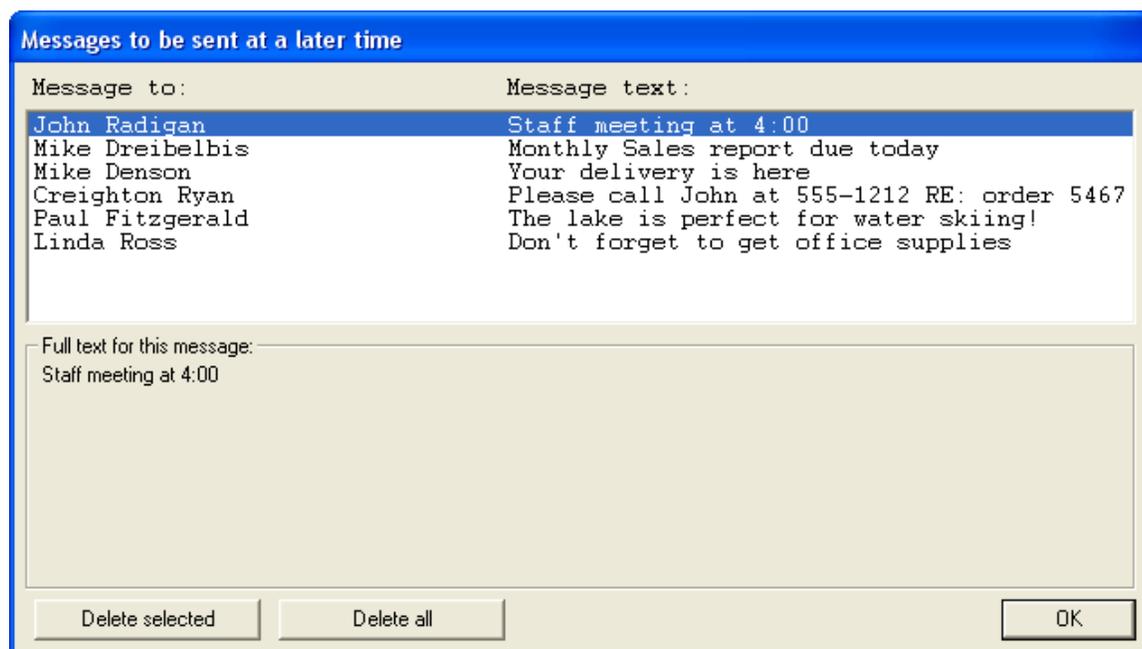
The Scheduled Message Queue window lists all upcoming scheduled messages. From this window you can view or delete any or all of the currently scheduled messages.

Note: Watch-IT will warn you if there are any scheduled messages pending when you try to exit the program. **Watch-IT cannot send a scheduled message if the program is not running at the specified date and time. If the software is not running when a message is scheduled to go out, the message will be sent immediately the next time Watch-IT is started.**

The Message Queue

When you select "Queue message" from the Options button menu after entering a message, Watch-IT automatically creates a Message Dispatch Queue, a holding line for messages waiting to be sent. This queue can be edited, allowing you to remove messages before they are sent.

When there are messages in the Message Dispatch Queue, the Send Queue and Edit Queue options under the Queue menu become active. If you select Edit Queue from the Queue menu, the Message Queue screen will be displayed.



In the Edit Queue screen you can selectively highlight and delete from the queue individual messages or all messages in your dispatch queue.

To mark a message for deleting, click on the message line. To delete all marked messages click on the "Delete selected" button.

Note: You can select more than one message at a time to delete. To select more than one message, hold down the Control (or Ctrl) key when clicking on pages, or use the Shift key to select a range of messages (from the currently selected message to where you click).

Click on Ok to close the Edit Queue screen and return to the main screen when you are done with editing or viewing the queue.

Message Logging

You can log all messages going to a wireless receiver, including a time/date stamp. You can select your logging preferences when creating or editing a Receiver or Messaging Service directory entry. Logging functions, when selected under a wireless messaging service name, affect any receiver entries who use that particular wireless messaging service.

When you select “Logged Messages” from the List Menu, the Logged Messages dialog is opened. From this window you can view, copy, delete, and print the information stored in your log files.

Logged Messages

Show Messages: From Date: 09/22/2004 To Date: 09/22/2004 Update

Sort By: Receiver Name Message Count

4 message(s) total Names Details

1	25.00%	Creighton Ryan
1	25.00%	John Radigan
1	25.00%	Mike Denson
1	25.00%	Nationwide pager

Full Message Text:

Delete All Print Copy to Clipboard Close

Today's messages are displayed by default. To view log messages for another date range, enter the date range you wish to view then press Enter or click on the Update button. The logged messages are summarized by the name of the person they were sent to.

If you wish to view specific messages sent to a individual, click on that person in the list and then click on the Details button. All of the logged messages sent to that specific person are then listed, including any errors that occurred when trying to send those messages.

To see the full text of any of the messages, simply click on that message. The text will be shown in the Full Message Text box. If you wish to copy the information, click on the Copy to Clipboard button. To delete all messages in the displayed date range, simply click on the Delete button.

A Note About Log Files

When information is logged on the hard disk, it is generated as a daily file in the InfoRad directory, such as "JUL17_99.LOG". In addition to viewing log files from within Watch-IT, you can also use Windows Notepad or any word processing program to view or print logged messages. Remember to purge your log files occasionally, to conserve hard disk space.

Directory Maintenance

Directory Listings

Watch-IT allows you to print your directory information, including detailed messaging information, such as the number of messages and packets sent. You can generate directory listings organized by Receiver name, Receiver number, Group name and Messaging Service. To view a directory listing, select the desired type of directory (Receivers, Groups, or Messaging Services) from the Edit menu.

If the directory listing display contains more information than can be displayed on the screen at one time, a scroll bar will appear on the right side of the listing so you can move through the listing.

To sort the directory listing, click on the title of the column you would like to sort by. To invert the sort order, click on the column title again.

To make a hard copy of the displayed directory information, click on the Print button. When you are finished viewing the listing, click Ok.

Clearing Message and Packet Counts

Once you have displayed and printed your listing, you may want to clear the message and packet counts. You can clear counts for an individual wireless receiver by clicking the name of the individual and then clicking on Clear Counts. If you click Clear All Counts, the system zeros all the counts in the listing. When you are finished with the directory listing, click OK.

Note: A wireless receiver's call count is recorded in increments of one per each message sent. The packet count is incremented by one per every 20 characters of message per message sent.

Backing Up and Restoring Directories

Watch-IT offers you the ability to backup and restore your directory database files. You can use this feature for backup and to transfer directory information.

Backing Up Your Directories

To backup your directory information:

1. Select "Save Database To" from the File menu. You will be prompted for a directory to backup the database files.
2. Select the directory or drive that you wish to save the backup files. *Do Not* select the Watch-IT directory.

Restoring Your Directories

To restore your directory information:

1. Select “Load Database From” from the File menu. You will be prompted for a directory where the backup files are located.
2. Select any one of the database files that you wish to restore (All database files end with the extension “.IRT”). All three of the database files will automatically be selected for restoring.
3. If you currently have database files, Watch-IT will ask if you are certain you wish to replace the current files. Click Ok to load the backup database files.

Removing Directory Entries

1. Select the directory you wish to change (Receiver, Group or Messaging Service) from the Edit menu.
2. Once the desired Edit screen is displayed, select the entry you wish to delete and click Delete to remove the entry.

Exiting Watch-IT

Exiting Watch-IT ASCII and Serial

To Exit Watch-IT, select Exit from the File menu or click on the close box in the upper right-hand corner of the main screen.

If you try to exit Watch-IT while there are messages in the message dispatch queue or scheduled messages, Watch-IT will warn you of their presence. You can choose to return to the Message screen or exit without saving the message queue.

Exiting Watch-IT ASCII SV

To exit Watch-IT ASCII SV, select “Stop Service” from the Service Controller.

Solving Problems

Technical Support

If you are having problems, first make certain that Watch-IT is configured properly:

- General Setup Options
- Watch-IT ASCII and SV Setup (For Watch-IT ASCII only)
- Watch-IT Serial Setup (For Watch-IT Serial only)
- Building Your Wireless Messaging Directories
- Building Your Wireless Messaging Services Directory
- Building Your Wireless Receiver Directory
- Building Your Group Directory (Optional)

Please review the following troubleshooting sections first to assist you with the Watch-IT software system:

- Errors Processing Pages (Access Rights-Related Problems)
- Installation Problems
- ASCII File Processing Problems
- Failed Messages Error Screen
- Error Codes
- ASCII File Processing (AFP) errors

Should you require additional assistance with InfoRad Watch-IT, please briefly document your problem and questions, serial number and version number.

Technical Support Options

Technical Support is only available to registered users of the software as detailed in the licensing agreement. Please register if you haven't already.

This program is licensed with 90-days free telephone technical support included. AlphaCare Subscription options are available that extend the support period, as well as offer priority telephone support and Upgrade Protection. Out-of-warranty support is also available on a per-incident basis..

Please call InfoRad Sales at (800) 228-8998 for details on AlphaCare, or e-mail to sales@inforad.com, or see our website at www.inforad.com.

InfoRad Software Technical Support is available Monday through Friday 8:30–5:30 ET.

A technical support section with solutions to common problems is also available at www.inforad.com/techsupport

Phone:	(216) 531-1369
Fax:	(216) 383-7020
Internet:	Techsupport@inforad.com
WWW:	www.inforad.com

Errors Processing Pages (Access Rights-Related Problems)

For proper operation of the Watch-IT messaging system, certain access rights must be properly set.

If you are having problems or errors when sending messages, try manually sending a page. If you can successfully send a page from within the application, you should check the access rights to directories and files. This is responsible for the majority of problems in processing wireless receiver message files.

If the access rights are correctly set, please call InfoRad technical support.

Access Rights Settings

Note: Novell rights are shown. If you are using a different network operating system, set the access rights to the equivalent rights on your network.

The following are the Watch-IT file access rights required:

Key:

R	Read
W	Write
C	Create File
E	Erase or Delete File
M	Modify File
F	Filescan and Directory Control (i.e., rename a file)

Item	Rights
Program Directory	RWCEMF
Message Directory	RWCEMF

Windows Networks

For Windows networks, set the access type for file sharing to SHARED with FULL access for the drive and directory that is being shared.

Installation Problems

If you are having problems installing Watch-IT, check the following:

1. Watch-IT installs to any drive and runs from any drive assignment. The standalone version of Watch-IT supports local drives only. The network version of Watch-IT supports local or network drives.
2. To install Watch-IT in Windows 95, Windows 98, Windows 2000, and Windows NT 4.0, click on the Start button and select Run. Browse to your CD or floppy drive and select SETUP.EXE, and then click on OK.
3. Watch-IT only requires 2mb of hard disk space for normal operation. Make sure that you have sufficient hard disk space for the installation.

ASCII File Processing Problems

If you are experiencing difficulty with ASCII file processing, examine the error status files.

Note: If you cannot find an error status file in the messages directory, ensure that the “Create Status Files” option is selected in the ASCII File Setup dialog (see “ASCII File Options” on page 31). Also, refer to “ASCII File Setup” on page 32 for details on configuring the error filename format.

Error status files are automatically generated when there is a problem processing an ASCII file, and can be viewed with any editor or by using the `TYPE` command in DOS. Error files contain a short error message describing the problem, and can be used as a troubleshooting aid.

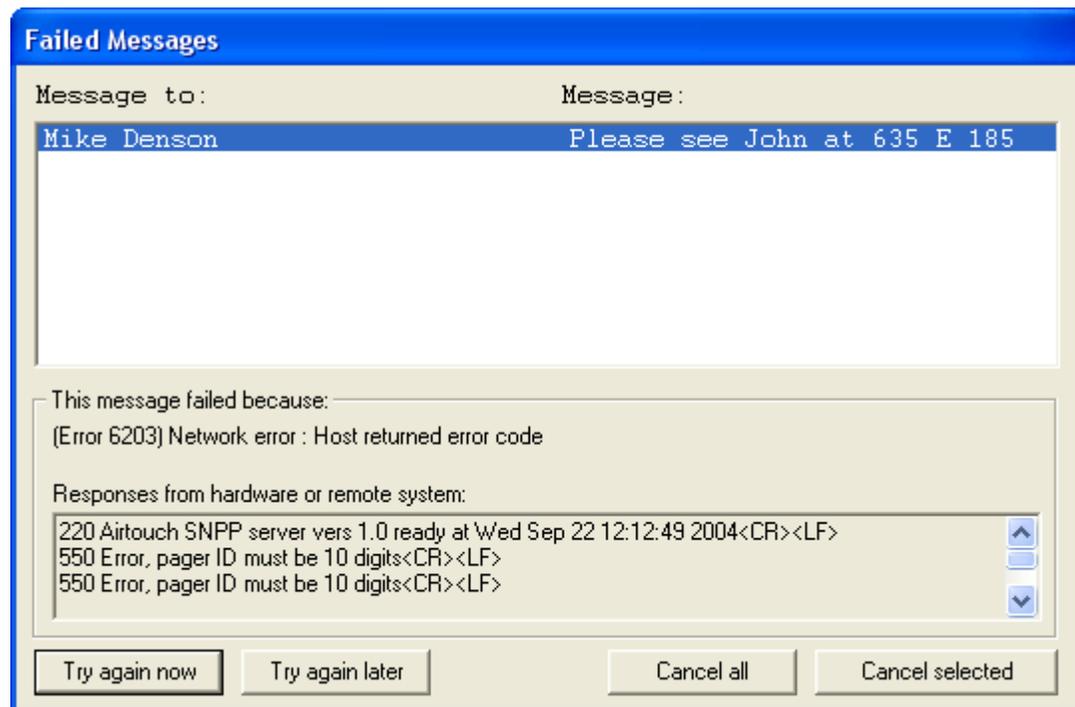
With Watch-IT ASCII and Serial, you can also send the message from the console (see “Sending Wireless Messages” on page 83) to help aid you in locating potential problems.

The Error Codes section contains typical errors and possible resolutions.

Failed Messages Error Screen (Watch-IT ASCII and Serial)

Note: The Failed Messages Error Screen is only available in Watch-IT ASCII and Watch-IT Serial. If you are using Watch-IT ASCII SV, the error codes are listed in the message status files.

The Failed Messages Error screen lists all messaging errors that have occurred, including the type of problem, the probable cause of the problem, and any messages from the messaging service. You can scroll through the errors to examine each error.



To cancel a message, click on the message line for that message. To cancel all messages click on the "Cancel All" button.

Note: You can select more than one message at a time to cancel. To select more than one message, hold down the Control (or Ctrl) key when clicking on the messages, or use the Shift key to select a range of messages (from the currently selected message to where you click).

To try and send the messages again, click on the "Try again now" button. If you wish to postpone Watch-IT from attempting to send the messages again, click on the "Try again Later" button. This moves the messages back into the send queue, where they can be sent at a later time by clicking on the "Send Queue" button from the main screen.

Error Codes

Local Errors

Local errors are errors that are the result of problems with the local computer; that is, the one InfoRad Wireless Enterprise is running on.

For local errors, check the following:

- Make sure the modem is properly connected and turned on.
- Verify your modem selection, advanced settings, and other modem options are correct in Communications Setup.
- Check to see if any other communications program is currently using your modem or hasn't properly disconnected from it.
- Reset or power down your modem. If it is an internal modem, power your system down and reboot.

(1104) Local Error: Could not access modem

This means InfoRad Watch-IT tried to open the comport and could not get a response from the modem. This could be because the port could not be opened (port was busy, or does not exist) or because the modem did not respond (modem was turned off, or is on another port, etc.).

(1105) Local Error: Line is not available

This means that the line device selected for sending pages is unavailable. Usually this means that the line is in use by some other application.

Remote Errors

Remote errors are what happens when the remote system (the wireless messaging service) reports a specific error or when there is difficulty communicating with the wireless messaging service. These errors happen after a connection with the messaging service has been established.

(1201) Remote Error: Could not handshake with service

InfoRad Watch-IT was able to CONNECT to the answering modem, but is receiving no further response from the messaging service.

- Check to insure the messaging service modem access number is correct. Note that it may also be called the Terminal phone number, Alpha Port phone number, Access number, or PCS short messaging service (SMS) phone number.
- Check the messaging service communication parameters – Baud Rate, Data Bits, Parity, and Stop Bit. (Note: Most wireless messaging services are 1200 Baud, sometimes 2400 or 300; and are almost always 7 data bits, even parity, 1 stop bit.)
- Check the modem selection in the Communications Setup for proper modem type.
- Select “Override” in the Modem Configuration dialog, and then click on the Create button to build a unique initialization string for your modem.
- Reference the ‘Using High Speed and Fax modems’ section of the manual or on-line Help and your modem’s manual (reference AT command section) to construct a modem initialization string for your modem.
- Check with your modem manufacturer to insure your modem supports the wireless messaging service Baud Rate and data settings (Ex: 1200, 7, even 1).

(1202) Remote Error: Service did not respond to message

The wireless messaging service did not return any response code after InfoRad Watch-IT sent a data block; generally a result of a poor connection, or can be a problem at the messaging service.

- Retry sending the message(s).
- If received when sending multiple messages, check with your wireless messaging service for any limit on the number of messages that can be sent in a single dial-up session.

(1203) Remote Error: Message was not acknowledged

The wireless messaging service responded to a data block with the NAK code.

- Retry sending the message.
- Remove the area code from the wireless receiver ID number (text pagers).
- Verify the proper wireless receiver ID number is entered.
- Use the wireless receiver’s PIN number.

(1204) Remote Error: Forced to abandon by service

The wireless messaging service responded with the abandon code. This means the wireless messaging service is rejecting the message.

- A “[P]” in error messages in the Failed Messages error screen indicates that the program is starting to send the message – if disconnects occur at this point it usually indicates an invalid wireless receiver ID number.
- Verify that the proper wireless receiver number is entered. Sometimes wireless receivers are assigned two numbers. One number for numeric messaging from a phone and another for the wireless receiver identifier when remote messaging (PIN number). Verify with your wireless messaging service which number to use.
- You may need to verify with the wireless messaging service that the wireless receiver number is activated, programmed for text or short messaging (not numeric-only messaging), and that you are using the correct service number for text messaging.
- If you are using a dialup modem connection, verify that there is no area code in the pager number. If you are using an internet connection, verify that the area code is included.
- Verify that you are dialing the correct service number for your wireless receiver—messaging companies sometimes have multiple service numbers, and your wireless receiver ID number must be valid on the system to which you are connecting.
- Some messaging companies will reject messages if the message is too long. Try sending a short message. If it successfully sends, verify the allowable message length with your wireless messaging service, and then set the message size in the wireless messaging service setup.

(1205) Remote Error: Service forced a disconnect

The wireless messaging service sent InfoRad Watch-IT the disconnect code. This can happen when the service does not accept InfoRad Watch-IT’s response to the login prompt.

- Check that any password is valid in the Wireless Messaging Service setup advanced properties. (Note that most wireless messaging services do *not* require a password.)
- A “[P]” in error messages in the Failed Messages error screen indicates that the wireless receiver ID # is incorrect—try and use the PIN number and not the wireless receiver phone number in the receiver’s ID Number field. Double-check the receiver ID to make sure it was correctly entered.
- Some messaging companies will reject messages if the message is too long. Try sending a short message. If it successfully sends, verify the allowable message length with your messaging company, and then set the message size in the wireless messaging service.
- Make sure the wireless receiver has been activated or not disconnected by the messaging company. Optionally, try messaging it from your phone as a numeric pager.
- Verify that you are dialing the correct access number for your receiver—wireless messaging services sometimes have multiple systems, and your wireless receiver number must be valid on the system to which you are connecting.

(1206) Remote Error: Invalid reply to login

The messaging service did not properly respond after InfoRad Watch-IT's login.

- Retry sending the message.
- Check the data bits and parity settings (Messaging Service Advanced Settings).
- Check that any password is valid.
- Try changing the baud rate (Messaging Service Advanced Settings).
- Check the modem selection in the Communications Setup to ensure that the proper modem is selected.
- Select "Override" in the modem configuration, and click on the Create button to build a custom initialization string for your modem.
- Reference the 'Using High Speed and Fax modems' section of the manual or on-line Help and your modem's manual (reference AT command section) to construct a modem initialization string for your modem.
- Check with your modem manufacturer to insure your modem supports the messaging service Baud Rate and data settings (Ex: 1200, 7, even, 1).

Communications Errors

These errors report problems establishing or maintaining the link between the wireless messaging service and the local computer, whether the source of the problem is the wireless messaging service, the local computer, the phone network, or anything else.

(1301) Communications Error: Could not connect with remote modem

This appears when the phone was successfully dialed, but no “CONNECT” message was received. Common causes are bad service phone numbers, bad modem initialization strings, bad modems (on either end), incorrectly installed modems (no dial tone) and so on.

- Verify that you correctly entered your messaging service phone number and parameters such as baud rate, data parity, and stop bits. You should always hear a high-pitched modem connection tone when dialing the correct number. If your modem speaker is turned off, try dialing the messaging service phone number from a telephone to verify that there is a modem connection tone when connecting.
- Verify your modem selection or custom init string. If you are using a Fax or high-speed modem disable the data compression and error correction features; see Using High Speed and Fax Modems section for more information.
- Verify that you are dialing the correct service number for your wireless receiver—messaging services sometimes have multiple service numbers, and your wireless receiver number must be valid on the number you are dialing.
- Verify your dialing location settings and selection.
- Check if the messaging service requires a password, and if so, verify that password (normally, messaging services don't use a password).
- Double-check the custom modem initialization string, if the “override” option was used during modem setup.
- Make sure the modem isn't attempting to connect to a fax number.
- The wireless messaging system may be experiencing technical difficulties. Check with your messaging service.

(1303) Communications Error: There was no dial tone on the dialing line

This appears when the local modem could not detect a dial tone, and so could not begin dialing.

- Verify the modem is correctly installed.
- Check to see if the phone line is in use or is working properly.
- Verify that your modem has power, that you have dial tone at your modem, and that your phone line is plugged into the modem jack labeled “line.”
- Verify that your dialing location and options are correct (Windows “Telephony” or “Modems” control panels).
- Verify your modem selection.
- If you have a digital phone system, you may need to use a special jack to access an analog phone line. Plugging your modem directly into a digital phone system will not work, and may damage the modem or the phone system.

(1304) Communications Error: The called number was busy

This appears when the program has already redialed the service provider the specified number of times, and received a busy signal every time.

- Verify the messaging service access number is correct.
- Check if the messaging service is busy or experiencing problems.
- Increase the re-dial on busy setting in Communications Setup, Advanced Modem Settings, Dialing Options.

(1399) Communications Error

The generic communications error that appears when there is some problem reading data from the communications port.

- Check for any device conflicts.

TAPI errors

TAPI errors report problems setting up and using the Windows telephony interface. These errors should represent problems that are specific to TAPI, and not to the process of sending pages in general.

For TAPI errors, unless specified below, check the following:

- Check other programs that utilize TAPI for a similar problem.
- Verify the TAPI setup/installation for the operating system.
- Verify that your system is using TAPI 1.4 or above.
- Verify that your modem is setup properly in the operating system.
- Check for any device conflicts.
- Check for any software conflicts.
- Try deleting the current modem configuration in the Modems Control Panel and then adding it back.
- Check your TAPI location selection and settings (dialing options) in the Windows “Telephony” or “Modems” control panels.

(1400) TAPI error: TAPI initialization failed

To start up TAPI, the program must load some TAPI / operating system DLLs. If the DLLs cannot be loaded, this error will appear.

(1401) TAPI error: Could not negotiate common API version

There are different versions of TAPI available. Windows 95 shipped with TAPI 1.4 and Windows NT 4.0 shipped with TAPI 2.0. InfoRad Wireless tells the system that it can support TAPI 1.4 and the system responds by enabling only the features available in that version. If there is some problem with this process (for example, if the system only supports TAPI 1.3 or lower), you may see this error.

(1402) TAPI error: Unable to query TAPI address capabilities

Before placing a call on a device, the program queries TAPI about the line’s capabilities. This message shows up when TAPI will not or can not respond to the request.

(1405) TAPI error: Selected device does not support data calls

TAPI devices include modems, fax boards, ISDN telephones, and other devices, not all of which can transfer data the way modems can. Before sending messages, InfoRad Wireless checks to be sure that the device the user selected is in fact a data modem, and not some other TAPI device.

(1410) TAPI error: Could not open line device

Before placing a call, InfoRad Wireless checks to be sure that the line is available (and shows error 1105 if it is not), but if there is some problem opening the line (even if TAPI claimed the line was available) this is the error message.

(1415) TAPI error: Could not specify status messages to monitor

After opening a line device, InfoRad Wireless informs TAPI which status messages are important for the call. If there is a problem doing this, this error appears.

(1425) TAPI error: Could not specify port settings prior to opening port

Before placing a call, InfoRad Wireless attempts to set the baud rate, data bits, stop bits, flow control, error correction and data compression settings specified for the modem and messaging service in use. If there is a problem doing this, this error appears.

- Verify with your modem manufacturer that your modem supports the baud rate and data settings required by your messaging service (usually 300, 100, or 2400 baud with 7 Data Bits, Even parity, 1 Stop Bit).

(1435) TAPI error: Could not create call parameters

This error appears if the data structure containing parameters for TAPI cannot be created. This would only happen if the computer ran out of memory.

(1440) TAPI error: Call to lineMakeCall() failed

InfoRad wireless uses the lineMakeCall() function of TAPI, which opens the serial port. This error appears when this call fails.

(1450) TAPI error: No response to lineMakeCall()

After placing a phone call with TAPI, InfoRad Wireless expects to get some responses back from TAPI, including an announcement that the modems have either connected or disconnected. If those responses don't arrive within 60 seconds, this error appears.

(1455) TAPI error: Couldn't get port handle from TAPI

After placing the phone call, InfoRad Wireless asks TAPI for direct access to the COM port, through which it can send and receive data. If the port handle is unavailable for some reason, this error appears.

(1460) TAPI error: Could not change call parameters

After dialing a call in Override mode (Modem Configuration), InfoRad Wireless attempts to switch back to standard TAPI mode to actually send pages, then hang up. If the switch back to standard TAPI mode does not work, this error appears.

(1499) TAPI error: Unexpected TAPI error

This is error message used in cases where InfoRad Wireless is able to detect that something has gone wrong with TAPI, but the error is not one of the above listed errors.

TAP Errors

The TAP protocol includes provision for a messaging terminal to report 3-digit error codes back to the InfoRad software that is trying to send a page. The last three digits of a TAP error are always the same as the digits reported by the paging system. For example, if the TAP terminal returns error code 501, InfoRad products would show the user error 2501.

(2112) TAP error: Maximum pages entered for session

Some Services limit the number of messages that can be sent in a single session. Check with your Messaging Service for their limit. Exceeding the maximum number allowed per session will result in this message. This message might result when sending to large groups, multiple groups, or a large ad hoc group.

(2113) TAP error: Maximum time reached for session

Some Services limit the session connection time when sending messages. Sending to large groups, multiple groups, or a large ad hoc group may result in this error. Check with your Messaging Service for their limit.

(2212) TAP error: Long message truncated and sent

Some services will automatically truncate and send a long message at the Services Maximum Message Length allowed by the system. Check with your Service for their Maximum Message Length. Make the change to the Messaging Service setup and turn On AutoSplit to avoid this error.

(2214) TAP error: Long message truncated and sent

Paging terminal sent the first X characters of the message, where X is the maximum characters per page allowed. These two errors differ only in that the terminal sends a message along with 2214 that indicates what X is. Since this information is not currently parsed or used in any way by InfoRad products, both errors show the same message text.

(2501) TAP error: A time out occurred while waiting for input

During Message sending if the Service does not see a response within a specified period this error results. Usually this is caused by a poor connection. Retry sending the message.

(2502) TAP error: Unexpected characters received before start of transaction

Terminal did not get either the <STX>(message block) or <EOT><CR> expected after the client software logged in OK. Could indicate line noise or a timing problem.

(2503) TAP error: Excessive attempts to send/re-send transaction

When the terminal finds that a page contains checksum errors (theoretically the result of line noise), the client software may try to send the message again. If this happens too much, the terminal can end the session with this error message.

(2504) TAP error: Message characters not allowed for this receiver

The page as the terminal received it contained message characters, and the terminal does not recognize that the PIN belongs to a pager with message receiving capabilities. The pager

could be a simple beeper or “tone only” device. Note differences between this message and 2505.

(2505) TAP error: Message text not allowed for this receiver

The page as the terminal received it contained alphabetic characters, and the terminal does not recognize that the PIN belongs to a pager with alphabetic message capabilities. The pager could be a standard numeric or “digital” pager. Note differences between this message and 2504.

(2506) TAP error: Excessive invalid pages received

Sending multiple messages that contain invalid Receiver ID's could result in this message. Check the programming of Receivers, or check if the Service has other Dial-up Modem ports for sending messages and for which Dial-up Modem port to use with your specific Receivers.

(2507) TAP error: Login failed, bad login sequence

If this message is received it could be a bad connection – try resending the message. Continued errors - check your Data Settings in the Message Service setup (typically should be 7 data, Even Parity, 1 Stop).

(2508) TAP error: Login failed, service not supported

The “service” in this error message refers to the service type specified just before the password in the standard TAP login sequence. The only services currently supported are “PG1(password)” (for automatic page entry) and “M” (for manual message entry), but InfoRad products only send the “PG1” sequence.

The TAP standard does mention that other services may be added to the TAP protocol, so there is the possibility that there could be a TAP terminal that did not support paging, that is, the “PG1” service type. This is the error that would result from using InfoRad products to send a page to such a terminal.

(2509) TAP error: Login failed, bad password

Incorrect password. Typically Services do not require a password and the password field in the Service setup should be blank.

(2510) TAP error: Illegal receiver ID

TAP system was expecting the receiver PIN to have a different number of digits, to not contain characters that it did contain, or otherwise be very different. The PIN as received is so screwed up, it can't even be looked for in a database of PIN numbers.

(2511) TAP error: Unrecognized receiver ID

TAP system does not have a record of any receiver with the PIN number sent. Very common problem with pagers, since the pager's telephone number and alphanumeric PIN number are sometimes different, and the people selling the pagers sometimes don't know that.

(2512) TAP error: Temporarily unable to deliver messages to this receiver

Possibly used on two-way systems that know the target pager is not in the service area.

(2513) TAP error: Message exceeds maximum length, rejected

Paging terminal has refused to send a message because it contained more than X characters, where X is the maximum characters per page allowed.

Check with your Messaging Service for their Maximum Message Length and change the settings in the Messaging Service setup and turn on AutoSplit to avoid this error.

(2517) TAP error: Message exceeds maximum length, rejected

Paging terminal has refused to send a message because it contained more than X characters, where X is the maximum characters per page allowed.

Check with your Messaging Service for their Maximum Message Length and change the settings in the Messaging Service setup and turn on AutoSplit to avoid this error.

(2514) TAP error: Bad checksum

This error is usually caused by a poor connection / noisy line. Retry sending the message.

(2515) TAP error: Message format error

May be caused by a poor connection / noisy line. Retry sending the message.

(2516) TAP error: Message quota temporarily exceeded

Some receivers may be limited to the number of messages per day or per month, or attempting to send too many messages in a short time period to a specific receiver that might exceed the receiver's capability. If this limit is exceeded this error may result. Check with your Messaging Service about any limits or restrictions on the specific pager.

ASCII File Processing (AFP) errors

Errors specific to the Watch-IT File Processor (AFP) module.

(4001) AFP error: Name does not exist in pager or group list

The AFP was able to read an ASCII file, but the word or words interpreted as the name of a pager or a group of pagers did not match any pager or pager group in the Watch-IT database.

- Check for correct spelling of the name or group name in Watch-IT or in the application generating the message.
- Remove any excess spaces in the name in Watch-IT.

(4002) AFP error: Service does not exist in service list

The AFP read an ASCII file which it determined contained a pager number and a messaging service name. The word or words interpreted as the service name did not match any messaging service in the database.

- Check for correct spelling of the messaging service in Watch-IT or in the application generating the message.

(4003) AFP error: Incomplete message file

The AFP did not find all of the mandatory entries (header, recipient, and message contents) in the ASCII message file.

- Check the application generating the message file for proper formatting.

(4005) AFP error: No Header found

The AFP did not find the mandatory header in the ASCII message file. The default header is "MSG: ".

Check the application generating the message file for proper formatting.

Network Errors

Network errors indicate a failure in the process of connecting to the internet, finding the paging server on the internet, or actually sending the page to the paging server.

(6001) Network error: Could not connect to internet

Winsoc services could not be started, RAS could not be started, or a RAS connection could not be established.

(6002) Network error: Could not connect to host

Most likely caused by problems with the host name or address as entered in the paging service setup or the telnet proxy setup. May also indicate that the host itself is down, or that part of the network connecting the user's computer to the host is down, or that the host is simply not accepting connections on the specified port.

(6101) Network error: Socket I/O operation failed

Some unexpected error occurred while sending or receiving data.

(6201) Network error: Host terminated connection

The remote host (the SNPP server, or possibly the telnet proxy server, if one is configured) disconnected without warning.

(6202) Network error: Timed out waiting for server

The timeout for the paging service (set up in the paging service properties screen) elapsed with no response from the SNPP server. This problem can sometimes be rectified by increasing the timeout, but it may indicate something wrong with the SNPP server or with the network connection.

(6203) Network error: Host returned error code

SNPP server responded to an SNPP protocol command with a failure code. When this error happens, the explanation text sent by the SNPP server will be included on the error screen along with this error message. That explanation should provide more detail on why the transaction failed. The explanation might be, for example, "550 Error, pager ID must be 10 digits" or "550 Error, pager ID cannot be identified" and so on.

(6301) Network error: Target address or URL appears to be invalid

The URL address for the Messaging Service could not be parsed in order to attempt a connection. Check the Messaging Service address.

WCTP Client-side Errors

(7000) WCTP Error: Could not read WCTP response

Message to a WCTP gateway was able to POST, but the WCTP gateway response was unreadable. Attempt to re-send.

(7001) WCTP Error: WCTP response was garbled, invalid, or unrecognized

The WCTP gateway reply to a message was OK, but the text of the reply cannot be read or is unrecognized. This can happen when a valid web page URL is entered in the Messaging Service WCTP address instead of a valid WCTP gateway address. (Any web server will send a reply back to an HTTP POST operation, but the reply will be HTML and not XML. XML is the expected format of a reply from a WCTP gateway.)

(7002) WCTP Error: Could not POST WCTP message to gateway

Could not connect to the WCTP gateway. Most likely an invalid address was entered in the Messaging Service WCTP address.

(7003) WCTP Error: Bad HTTP status code (check server address?)

The HTTP session returned an error code, or no response from the HTTP session was received. This can happen when a valid web page URL is entered in the Messaging Service WCTP address instead of a valid WCTP gateway address. The internet log (inetlog.txt) may contain the specific HTTP error for further clues.

(7004) WCTP Error: HTTP 407 Proxy Authentication Required

The HTTP session returned a Proxy Authentication error. This can happen when the Internet Connection uses a Proxy Server and you have not turned on Proxy Authentication in the program Internet Setup options. Turn on Proxy Authentication in the Setup Menu . Internet Settings. Enter your Username and Password.

(7005) WCTP Error: HTTP 407 Proxy Authentication – bad username/password

The HTTP session returned a Proxy Authentication error. This can happen when your Proxy Authentication setup contains an incorrect Username or Password. Edit the Proxy Authentication Username and Password in the Setup Menu . Internet Settings. Check with your Network Administrator for the correct Username and Password for Proxy Authentication.

WCTP Server-side Errors

These errors are of the format “7xxx” where “xxx” is the WCTP error code. These are errors returned by the WCTP gateway. The text of the error message indicates the problem.

Watch-IT ASCII SV Service Controller Error Messages

When a system error occurs in the InfoRad Watch-IT NT, the service controller application will display a dialog listing the Windows error number and description of the error.



The errors listed are Windows error messages. The following are some possible specific error messages:

System code 5: Access is denied (Windows NT)

You don't have administrator rights on the machine you are attempting to connect to. To use the service controller, you have to log in to an account that the service machine will recognize as having administrative rights. If your computers are part of a network domain, log in as the domain administrator.

System Error 53: The network path was not found

No computer with the name you typed is visible from your computer. It's possible that the computer you want to connect to is turned off or not logged in to the network, or maybe you made a typo when you typed the name.

System Error 997: Overlapped I/O operation

- 1) You don't have administrator rights on the machine you are attempting to connect to. To use the service controller, you have to log in to an account that the service machine will recognize as having administrative rights. If your computers are part of a network domain, log in as the domain administrator.
- 2) The service program is not installed on the computer you connected to. If you are sure you installed the service before running the service controller, check to be sure you typed the correct computer name

System code 1060: The specified service does not exist as an installed service

The service program is not installed on the computer you connected to. If you are sure you installed the service before running the service controller, check to be sure you typed the correct computer name.

Watch-IT ASCII SV Troubleshooting Tips

Clients send messages to the service, but the service never dials and never sends the page.

Check that the service is running. You can do this with the service controller or with the Services Control Panel applet on the service machine.

When I try to connect to the service computer, the service controller reports “System Error 997: Overlapped I/O operation”

Be sure that you’ve typed the computer’s name correctly. This message can show up if you’ve connected to the wrong computer (one that does not have the service installed) or if you have not installed the service yet; or if you do not have Admin rights on the computer running the Watch-IT ASCII SV Service.

You can use the Services control panel applet on the service computer to verify that the service is installed. You must be logged in as the Administrator to do so. From the start menu, pick Settings, then Control Panel. Double click on the Services icon. Installed services are listed in alphabetical order; the service for the InfoRad Watch-IT ASCII SV system should be listed as “InfoRad Watch-IT ASCII SV Service.”

Other errors

Modem is Not Dialing

General Notes on Dialing Problems:

- Check to see if any other application is using the modem.
- Make sure that the phone line is plugged into the “Line” jack of the modem, and not the “Phone” jack.
- To rule out software conflicts, turn off any fax receive software, communications software, or remote control software before trying to send a message.
- Verify your modem selection
- Check for possible device conflicts.

After dialing a voice or a ring and a beep is heard

- Verify the phone number you entered in your Messaging Service setup. You should always hear a modem connection tone when dialing the correct number.
- Hearing a “ring and a beep” means you have inadvertently programmed a receiver number into your messaging service access phone number.

“Tone Only” or a blank message, only numbers are sent, or message is garbled or incomplete.

If the message to a wireless receiver is incomplete or garbled, check for the following possible problems:

- Check for a “Message Sent” status in InfoRad Watch-IT. This indicates that the wireless receiver message was successfully sent to the wireless messaging service. The wireless messaging service then radio-transmits that message to the wireless receiver(s).
- Check for a low battery in the wireless receiver.
- The wireless receiver could be out of range or in a fringe coverage area for transmission.
- The wireless receiver could be in a building with strong RMI (Radio Magnetic Interference i.e., near many computers).
- The wireless receiver could be in a building or area of a building that is difficult to penetrate with radio transmissions.
- Weak or inoperative wireless receiver (i.e. bad wireless receiver).
- Pagers: Try using the PIN number instead of the pager phone number.
- Verify that the wireless receiver has been programmed at the wireless messaging service as an alphanumeric (text) pager or PCS short messaging receiver. If the wireless receiver is receiving numeric characters in the message but not the letter characters – the wireless receiver has been programmed as a numeric-only wireless receiver in the wireless messaging service system and needs to be programmed for alphanumeric/text.

Upgrading Watch-IT

Watch-IT ASCII Versions

There are several versions of Watch-IT ASCII available:

Watch-IT ASCII-75: Allows up to 75 users in the messaging database. No manual messaging capabilities.

Watch-IT ASCII-X: Unlimited number of users in the messaging database. Also allows message files to include “manual” entries of a wireless receiver number, allowing messaging information to be provided from outside of the Watch-IT ASCII application.

Watch-IT ASCII SV: Provides the same features as Watch-IT ASCII, but has been optimized to run as an Windows Service under Windows NT, 2000, XP, and 2003 Server.

Watch-IT Serial: Provides automated dispatch of wireless messages by monitoring a serial port information stream.

Please contact InfoRad Sales or see the InfoRad Website for more information and FREE / fully functional Trial downloads.

See “Contacting InfoRad Sales” on page 124.

InfoRad Wireless Enterprise Upgrade

InfoRad Wireless Enterprise is a client/server messaging system for local area networks (LAN) and wide area networks (WAN) or for networks that require message polling or central processing of text messages.

The InfoRad Wireless Enterprise upgrade utilizes Watch-IT ASCII as a messaging server and adds InfoRad Wireless Pro as the client application for network users. Add the power of client messaging while retaining the automated dispatch functions of Watch-IT. InfoRad Wireless Enterprise SV also available. Enterprise SV server runs as a Windows Service on Windows NT4.0 and greater.

Please contact InfoRad Sales or see the InfoRad Website for more information and FREE / fully functional Trial downloads.

See “Contacting InfoRad Sales” on page 124.

Contacting InfoRad Sales

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