

Spectralink 80-Series Handset

# Handset Administration Tool

Installation

How to Use

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## Warranty

The *Product Warranty and Software License and Warranty* and other support documents are available at <http://support.spectralink.com>.

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# Chapter 1: About this Guide

The Handset Administration Tool is a software utility developed by Spectralink Corporation to automate the configuration of multiple Spectralink 80-Series Handsets and perform various administration tasks. This document explains how to install the Handset Administration Tool and use it to administer and configure the Spectralink 80-Series Handset.

Please refer to the configuration and administration document that pertains to the system in your facility for exact configuration options of the handset. Specific configuration options are explained in detail in the configuration and administration document for your system.

## *Spectralink Corporation Model Numbers*

This document covers the following model numbers:

Spectralink 802X, 803X, PCS1860

## *Product Support*

Spectralink wants you to have a successful installation. If you have questions please contact the Customer Support Hotline at 1-800-775-5330.

The hotline is open Monday through Friday, 6 a.m. to 6 p.m. Mountain time.

For Technical Support: <mailto:technicalsupport@spectralink.com>

For Knowledge Base: <http://support.spectralink.com>

For Return Material Authorization: <mailto:nalarma@spectralink.com>

## *Spectralink References*

All Spectralink documents are available at <http://support.spectralink.com>.

### To go to a specific product page:

Select the Product Category and Product Type from the dropdown lists and then select the product from the next page. All resources for that particular product are displayed by default under the All tab. Documents, downloads and other resources are sorted by the date they were created so the most recently created resource is at the top of the list. You can further sort the list by the tabs across the top of the list to find exactly what you are looking for. Click the title to open the link.

### Specific Documents

*Spectralink 80-Series Handset Administration Guide for SRP (1725-36030-001)*

*Spectralink 80-Series Handset and Accessories User Guide for SRP (1725-36023-001)*

*Spectralink 80-Series Handset Administration Guide for SIP Protocol (1725-36034-001)*

*Spectralink 80-Series Handset and Accessories User Guide for SIP Protocol (1725-36165-001)*

*LinkPlus Interface Guide (1725-361xx-001) where xx indicates a number corresponding to the type of PBX)*

## Conventions Used In This Document

### Icons

Icons indicate extra information about nearby text.



#### **Caution**

The *Caution* icon highlights information you need to know to avoid a hazard that could potentially impact device performance, application functionality, successful feature configuration and/or affect handset or network performance.



#### **Note**

The *Note* icon highlights information of interest or important information that will help you be successful in accomplishing a procedure or understanding a concept.

## Typography

A few typographic conventions, listed next, are used in this guide to distinguish types of in-text information.

<i>Convention</i>	<i>Description</i>
<b>Bold</b>	Highlights interface items such as menus, soft keys, file names, and directories. Also used to represent menu selections and text entry to the handset.
<i>Italics</i>	Used to emphasize text, to show example values or inputs, and to show titles of reference documents available from the Spectralink Support Web site and other reference sites.
<u><a href="#">Underlined blue</a></u>	Used for URL links to external Web pages or documents. If you click on text in this style, you will be linked to an external document or Web page.
<b>Bright orange text</b>	Used for cross references to other sections within this document. If you click on text in this style, you will be taken to another part of this document.
Fixed-width-font	Used for code fragments and parameter names.

This guide also uses a few writing conventions to distinguish conditional information.

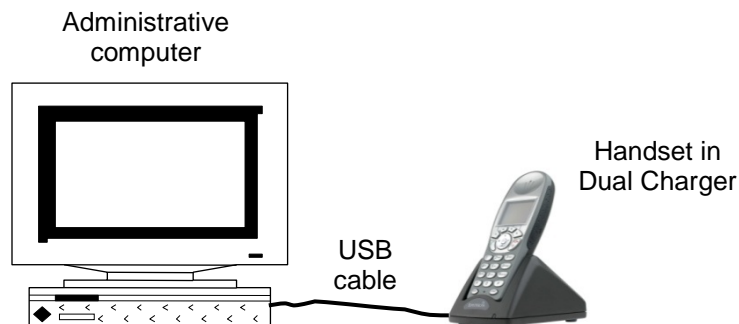
<i>Convention</i>	<i>Description</i>
<MACaddress>	Indicates that you must enter information specific to your installation, handset, or network. For example, when you see <MACaddress>, enter your handset's 12-digit MAC address. If you see <installed-directory>, enter the path to your installation directory.
>	Indicates that you need to select an item from a menu. For example, <b>Settings &gt; Basic</b> indicates that you need to select <b>Basic</b> from the <b>Settings</b> menu.



# Chapter 2: Handset Administration Tool

## Introduction

The Handset Administration Tool is a software utility installed on a PC with a USB port. It is designed as a time-saving device for rapid administration and configuration of a number of handsets. During operation, the USB cable must be connected from the PC's USB port to the Dual Charger's USB port.



The HAT software allows you to:

- Set all options on the Admin menu. See the Admin Guide for your protocol for detailed information on these options.
- Set all options on the Config menu. See the Admin Guide for your protocol for detailed information on these options.
- Record error information to assist troubleshooting.
- Upgrade handset software.
- Necessary components:
- PC with a USB port running Windows 7, Windows XP, or Windows Vista.



### Note

The USB driver supplied with HAT version 4.0 and above supports both 64 and 32 bit systems.

- Dual Charger for the Spectralink 80-Series Handset,
- Power supply for the appropriate country or region,
- Spectralink USB cable or comparable cable (with 5-pin “mini-B” connector).



**Note**

USB cables vary in their ability to make a proper connection to the Dual Charger's USB port. Please use the USB cable available through Spectralink to ensure compatibility.

## When to use the Handset Administration Tool

Although it is possible to configure all options manually through the Admin menu, this can be a tedious process, especially if you have many handsets to configure. However, the most efficient use of the HAT varies by protocol.



**Note**

HAT versions starting with 3.0.1.0 support both SIP and SRP protocols. You will be able to select your protocol from a dropdown box in the Settings tab.

## SRP Systems

In SRP systems, the HAT tool is useful for setting all configuration options and can be used instead of manually setting configuration options through the Admin and Config menus.

The Save function allows you to set configuration options on one handset and then copy these options to additional handsets.

## SIP Systems

SIP systems use a remote configuration file which allows handsets to download configuration options through the Wireless LAN. In SIP systems, the HAT tool is useful for configuring the options which establish the Wi-Fi connection (regulatory domain, wireless network access, etc.) after which the configuration file can be downloaded to activate the remaining options. After handset deployment and as configuration requirements change, the options on one or all handsets can be changed by the administrator by editing the configuration file.

The benefits of using the remote configuration method after the initial provisioning include:

- 1 You can update the handsets over the air; the physical handset is not required.
- 2 You can update handsets globally and on a per handset basis.
- 3 Handsets update automatically and in parallel, so you only need to change the configuration files once and then load it on the provisioning server. It's much faster than having to put one handset after another into HAT.

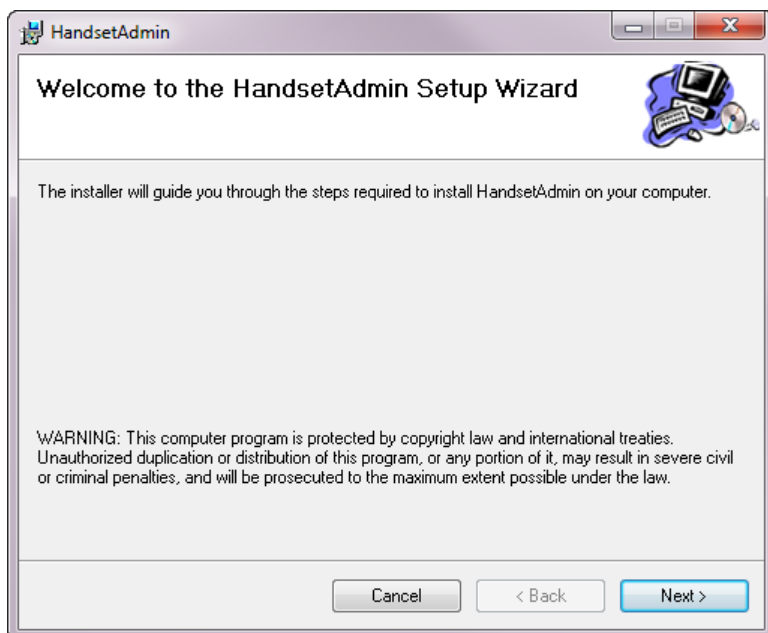
## Installing the Handset Administration Tool



### Note

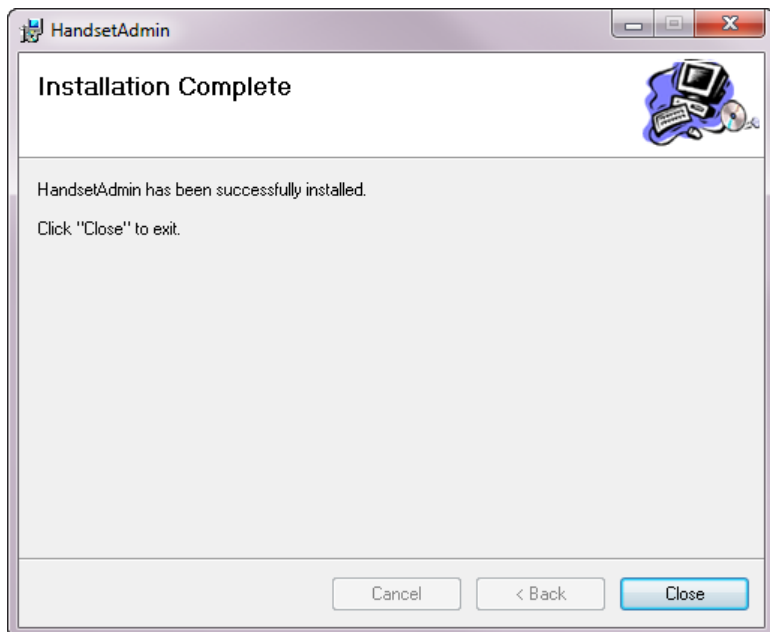
The HAT software zip file contains both the Handset Administration Tool software and the files necessary to install the USB driver. The USB driver must be installed as a separate process after the Handset Administration Tool is installed if it has never been installed before. See the next section for USB installation instructions.

- 1 Download the HAT software zip from the Spectralink support site.
- 2 Extract the files to a convenient folder in your local drive. You will see a Setup.msi file and a plcmusb.zip. The Setup.msi file is the HAT software. The plcmusb.zip is the USB driver.
- 3 Click the **Setup.msi** file to start the installation process.



The Wizard will continue with the install:

- 4 Click **Next** and continue through the installation process
- 5 The **Installation Complete** window indicates the installation has been successfully installed. Click **Close** to exit the Wizard.



**Note**

The Handset Administration Tool will appear in your Programs list under the **Start** menu and as an icon on your desktop. It may be launched like any other program.

## Installing the USB Driver

The USB driver installation allows the Dual Charger to be the communication link between the handset and the PC.



### Note

The USB driver is installed on a “per port” basis. If you plug the Dual Charger into a different port than the one you used to install the USB driver, you will need to install the driver on the second port as well.

- 1 When you unzip the HAT zip, you will see the plcmusb.zip. This is the USB driver. Extract this zip to another folder.
- 2 Place the Dual Charger on a flat, horizontal surface. Plug the power supply into the Dual Charger and into an appropriate wall outlet.
- 3 Plug the USB cable into the Dual Charger and into an available USB port on the PC.
- 4 Power off a Spectralink 80-Series Handset, remove the Battery Pack (optional), and place the handset in the Charger. If properly seated, the handset automatically powers up in USB mode and the handset screen displays **USB Mode: ON**.



### Note

If the handset is not properly seated in the Dual Charger, the USB connection will not be made and the Battery Pack may begin charging, and the handset screen will display a **Charging...** indication. If this occurs, reseal the handset, check the connections on the USB cable, and/or remove the Battery Pack and try again.

- 5 Your next steps will vary depending on the version of Windows you are running.

## For Windows 7

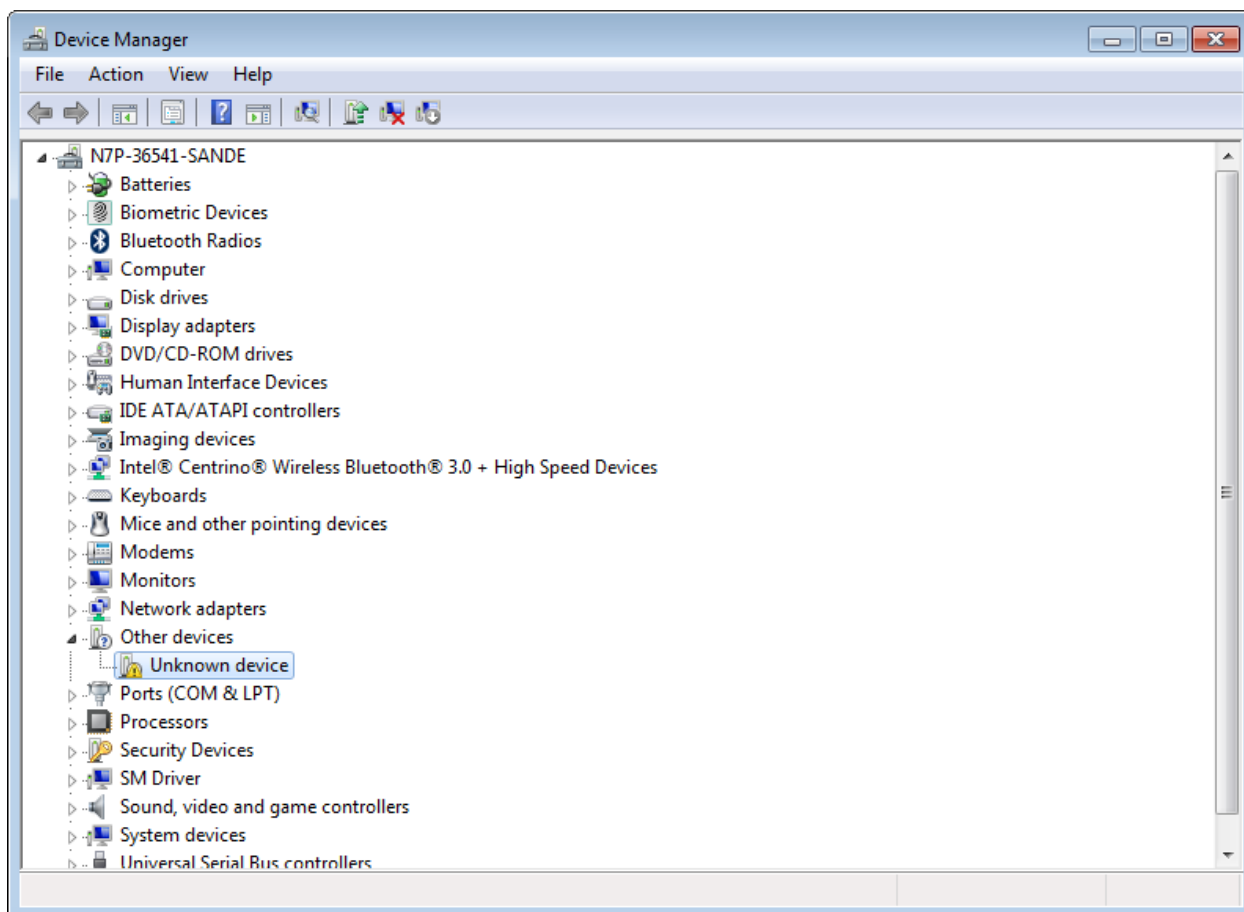


### Note

The process documented below is based on installations performed on Windows 7 Enterprise. The installation varies on different versions of Windows 7 but the basic process is the same.

When you connect the Dual Charger and insert the handset, Windows 7 may display a “Found new hardware” wizard. Close this window. You will need to find the Windows Device Manager and install the Dual Charger as an “unknown USB device”.

- 1 Click the **Start** icon and type **Device Manager** in the Search box or locate the **Device Manager** in the **Control Panel** window.



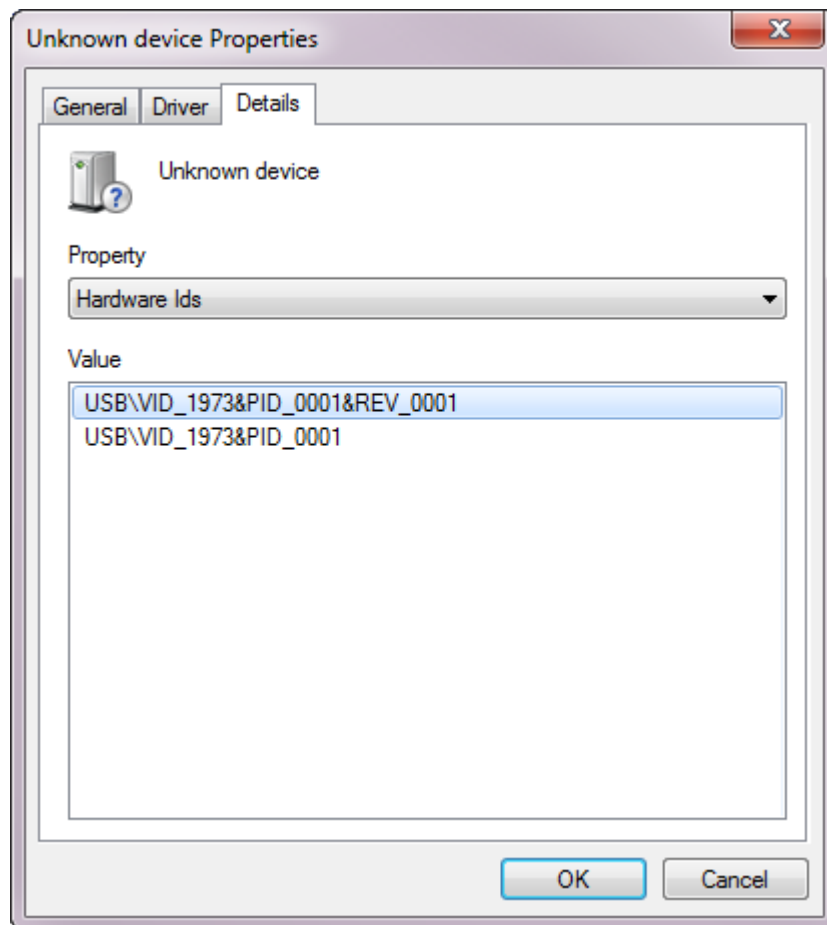
- 2 Right click **Unknown device** under **Other devices** and select **Install device driver**. Or **Update driver software**.



## Note

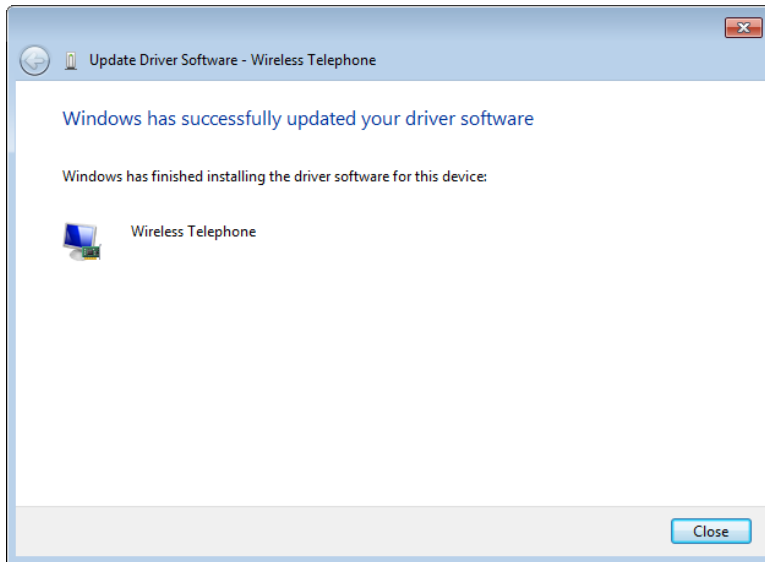
If you want to verify the wireless telephone is the correct unknown device, right click **Unknown device** and select **Properties**, then select the **Details** tab. A line in the window will display text to identify the device. Part of the text will be:

**VID\_1973&PID\_0001**. This is the vendor ID for Spectralink (1973) and the product ID for the wireless telephones (0001).



- 3 When you are asked to find the software, select **Browse**, locate and select the folder where you extracted the USB driver software.

- 4 Continue with the install. The following screen will appear when the installation is complete.



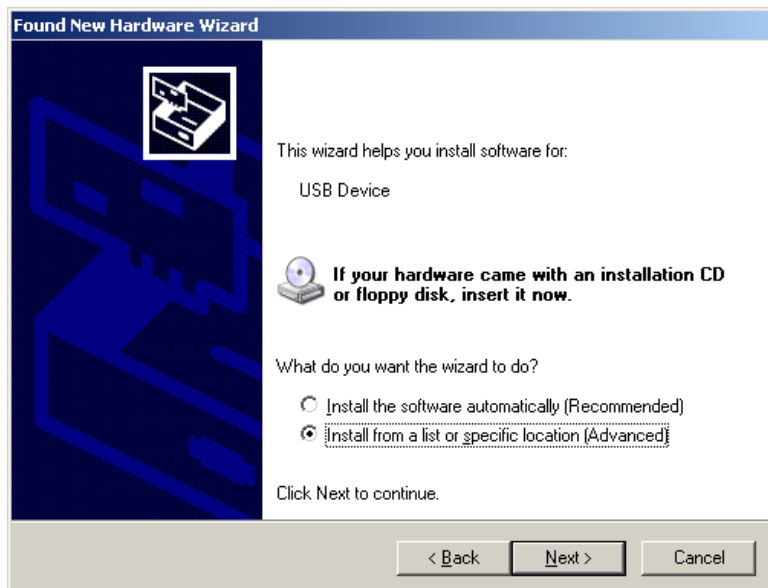
*For Windows XP*

- 1 Microsoft Windows will start the **Found New Hardware Wizard**. There is no need to connect to Windows Update, so select **No, not this time** and click **Next**.

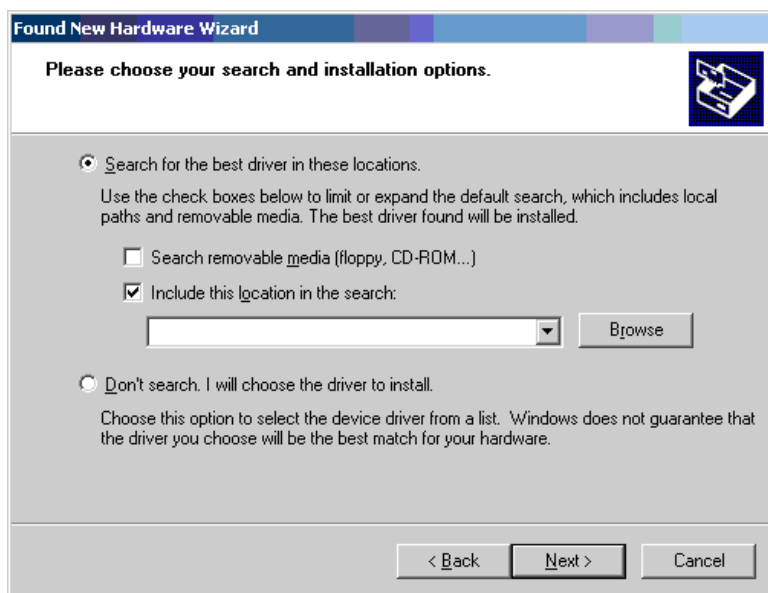




- 2 The files need to be installed from a specific location, so select **Install from a list or specific location (Advanced)** and click **Next**.



- 3 Select **Search for the best driver in these locations**.
- 4 Clear the check box **Search removable media**.
- 5 Select the check box **Include this location in the search**.
  - a Select Browse and locate the folder where you unzipped the USB driver software.
- 6 Click **Next**.



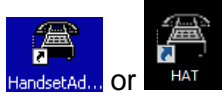
- 7 Microsoft Wizard installs the USB driver software.

- 8 The final screen indicates that the USB driver has been successfully installed. Click **Finish** to close the wizard and proceed with handset configuration.



# Chapter 3: Using the Admin Tabs

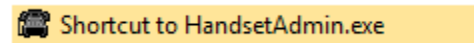
The HAT program is accessible as a shortcut icon on the Desktop:



It will also appear on the Start menu:



Or








Launch the Handset Admin program.

The Handset Administration Tool has two separate functional areas: the Admin Tabs and the Handset Settings Editor.

The Admin Tabs are used to connect to the handset, set and change the password, retrieve error messages, update handset software, and update the Handset Administration Tool software.

The Handset Settings Editor is used to configure handsets, as well as create, save and copy Admin menu options. See Chapter 3 [The Settings Editor](#) for detailed instructions on using the Handset Settings Editor.

The Handset Administration Tool uses indicators to alert you to the status of the action being performed.

-  Green – indicates ready status.
-  Yellow – indicates caution or attention.
-  Red – indicates an error
-  Gray – indicates not active status.
-  Blinking – indicates entry is needed or waiting on system response.



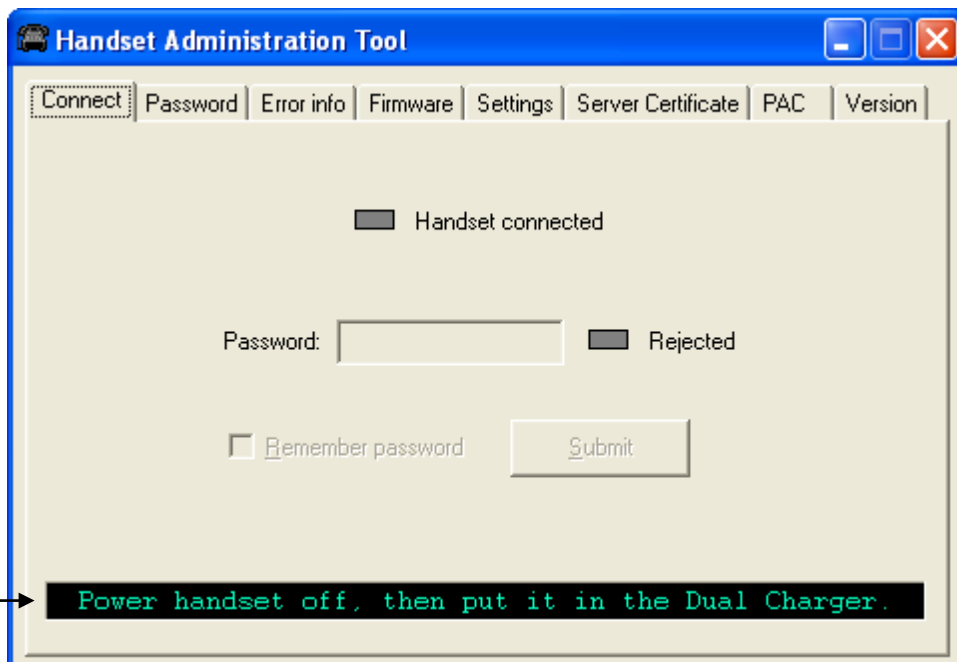
## Note

If closed, the Admin Tabs may be opened from the **Settings Editor** by selecting the **Admin** or **View** option on the **Settings Editor** menu bar.

## Connecting the Handset

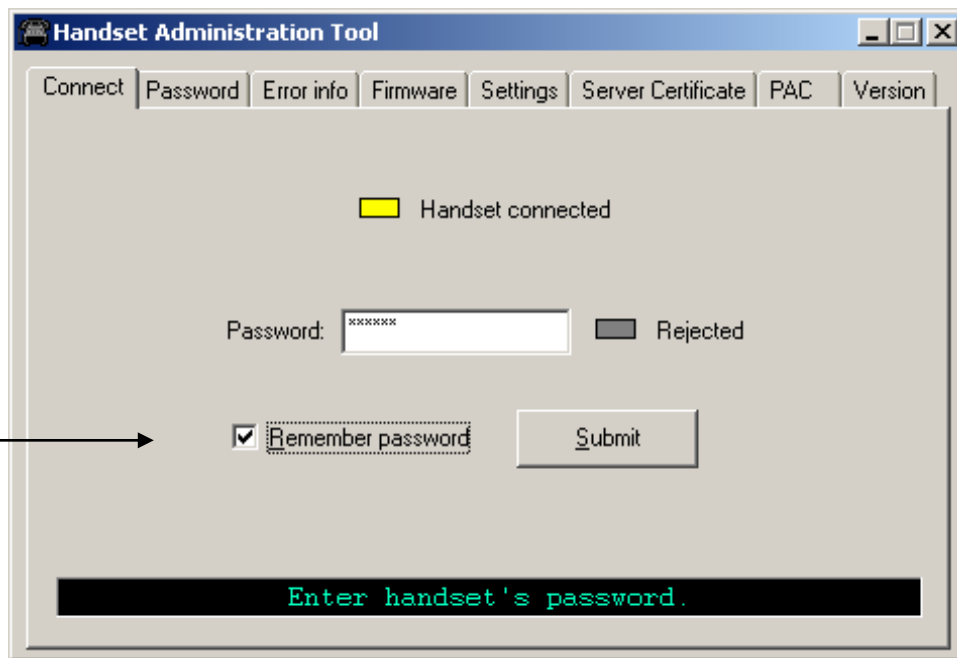
There are eight tab labels that describe each of the available functions. The tab labels are: **Connect**, **Password**, **Error info**, **Firmware**, **Settings**, **Server Certificate**, **PAC** and **Version**.

The **Connect** tab has a prompt line which will state one of three messages: **Power handset off, then put it in the Dual Charger**; **Enter handset's password**; or **Connected**.



The prompt line at the bottom of the window provides information about what action should be taken or the status of the utility.

Insert the handset into the Dual Charger and enter the password.



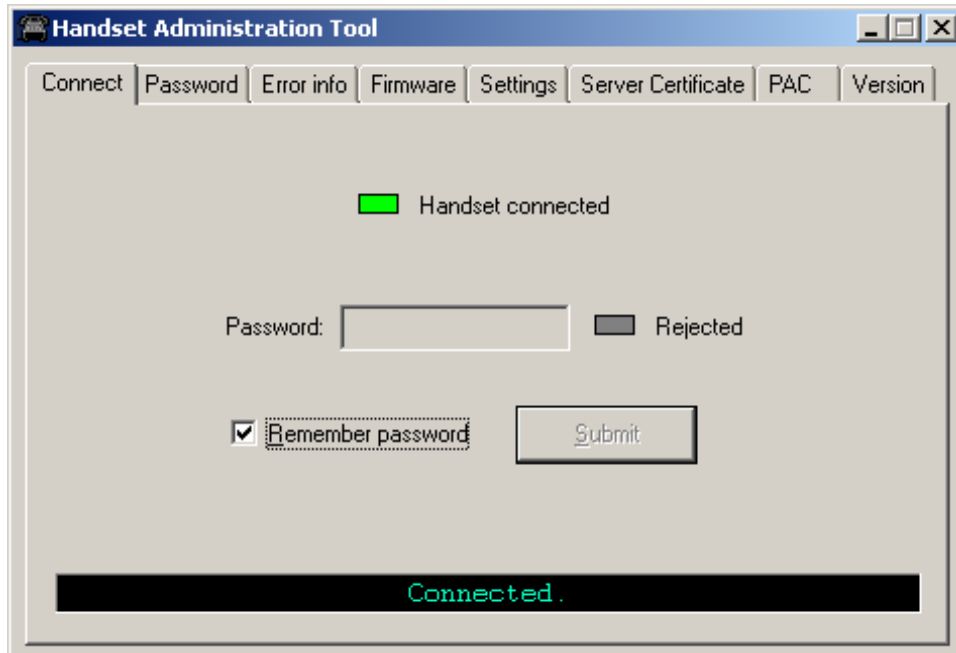
When the handset is inserted for the first time, the default password must be entered. As a convenience, if you select the **Remember password** check box, the password is retained as the default password for all handsets. This is useful if all phones use the same password. Note that the password is encrypted in a file on the PC. Enter the password and click **Submit**. The default password is **123456**.



**Note**

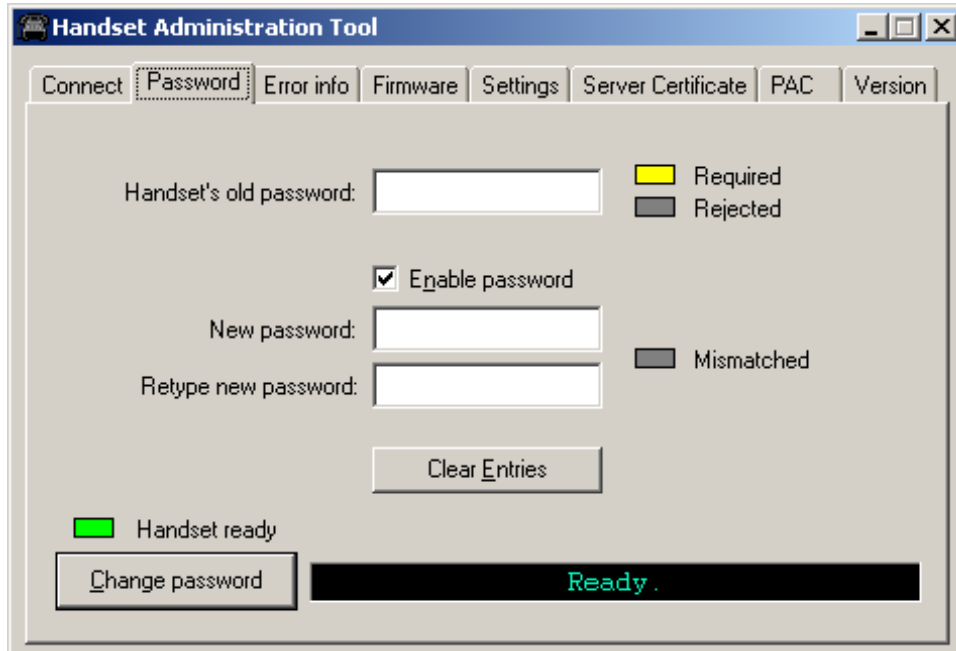
Unique passwords for each handset are not remembered.

When connection is established between the program and the handset, the **Handset connected** indicator turns green and **Connected** displays on the prompt line. The handset is now ready for configuration.



## Password Configuration

The password is a security measure to restrict access to the handset's Admin menu settings. Prior to changing a password, the existing password must be entered. The new password must be entered twice for confirmation. If a password is desired to gain access to the handset's Admin menu, select the **Enable password** checkbox. If no password is desired, clear the **Enable password** checkbox. A password may be up to 18 characters. Only numbers and letters are allowed.



## Character table

The following table illustrates how numbers and letters are entered on the handset's keypad. The **CAPS/caps** softkey toggles to allow both upper and lowercase letters. Only English characters are allowed.

Key	caps	CAPS
1	1	1
2	a b c 2	A B C 2
3	d e f 3	D E F 3
4	g h l 4	G H I 4
5	j k l 5	J K L 5
6	m n o 6	M N O 6
7	p q r s 7	P Q R S 7
8	t u v 8	T U V 8
9	w x y z 9	W X Y Z 9
0	0	0
*	* - _ . ! \$ % & ' ( ) + , ; / \ = @ ~	
#	# <space>	

## Error Information

The **Error info** tab provides a utility to assist the Spectralink customer service team to troubleshoot handset errors. When directed by customer service, this utility enables you to save any errors as a file, which can then be sent to Spectralink for handling.

### To save errors as a file

Use the **Browse** button to establish the path and enter the filename. Future saves will point to this same location as the default, so that the same file may be overwritten if desired. A drop-down list box displays the most recently used filenames.

The **File time** window displays the modification timestamp of the file in the **Save error info as file** window.

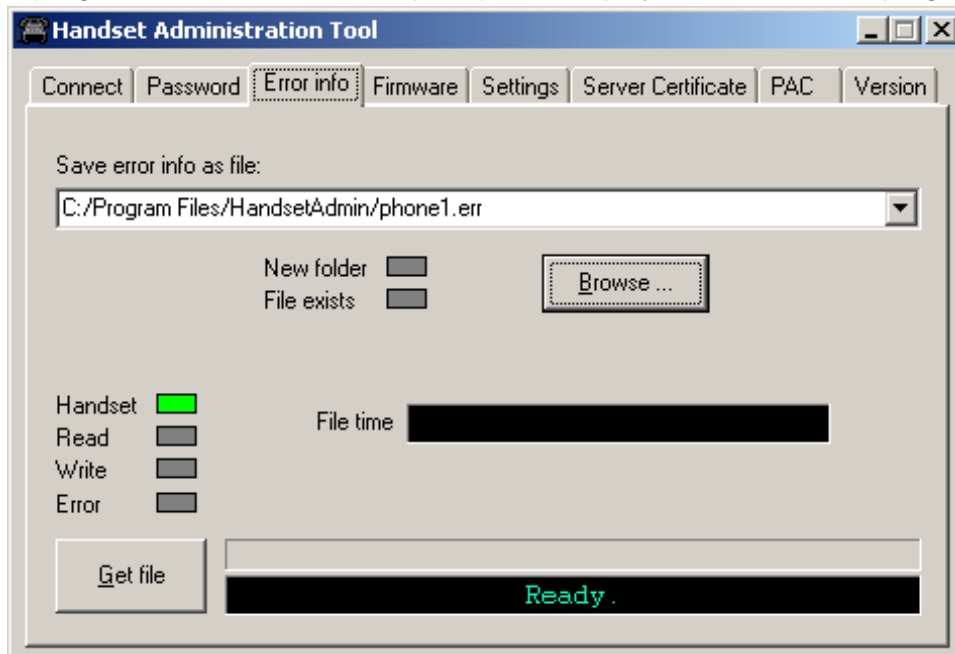
Power off handset and place it in the Dual Charger.

Click the **Get file** button to save the file.



The **Read/Write** indicators will reflect the action as it occurs.

A progress indicator above the prompt line displays the file transfer progress.



The file will be copied from the handset to the browse location.

## Software Updates

The **Firmware** tab allows you to copy software updates to the handset's memory after they are downloaded from a website.

### To install manual updates



#### Note

This method is recommended for manual or single handset updates. For over the air downloading methods see the Admin Guide for your protocol.

This is not an efficient method of updating any quantity of handsets, but it works for testing new code and in extremely small installations.

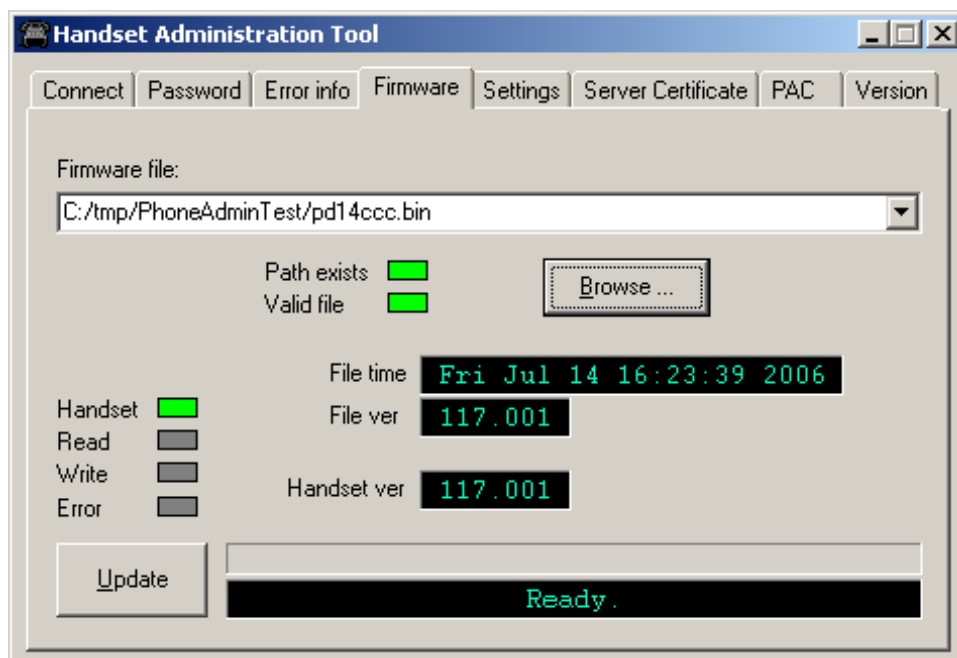
- 1 Download Spectralink 80-Series Handset software update from the Spectralink website at [http://www.polycom.com/usa/en/support/voice/wi-fi/spectralink\\_8030\\_wireless.html](http://www.polycom.com/usa/en/support/voice/wi-fi/spectralink_8030_wireless.html)
- 2 Extract the bin files from the zip file to a folder set up for this purpose. Each file must be individually downloaded into the handset.



### Caution

Be aware that if there is a TFTP server broadcasting a different version of the handset code, the handsets will continue to download code over the air and revert to the different version. Remove handset code from the TFTP server or disable broadcasting before relying on this update procedure.

- 3 Use the **Browse** button to locate the software file. The drop-down list box displays the most recently used filenames. The **File time** window displays the modification timestamp of the file in the **Firmware file** window.



- 4 Check the file version and handset version for comparison as they are shown in the two fields, **File ver** and **Handset ver**. Once the update is complete, the file version will have overwritten the handset version and these two file versions will match.

You may upgrade or downgrade code. The file version fields keep you informed about what you are doing.



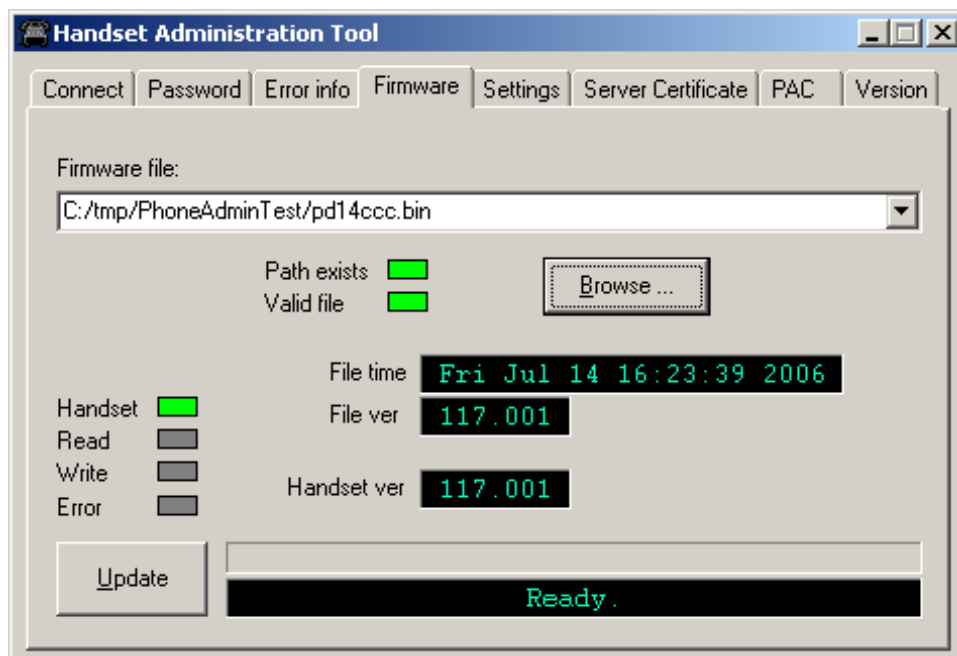
### Note

If the handset hardware is incompatible with the software, you will not be able to downgrade code. In this situation, the HAT displays a warning message.

- 5 Verify that the information in the **File ver** window is the correct file to be downloaded and then click the **Update** button. This file copies from the location to the handset. The **Read/Write** indicators reflect the action as it occurs.

While a firmware update is in progress, you may open other tabs and the handset indicators shown on those tables will inform you of the status of the update.

- 6 (Conditional) Should an **Error** indication occur, retry the update after ensuring that the handset is properly seated and that the USB cable is in good condition and connected securely. Contact Customer Service if an error persists. See [About This Guide](#) for contact information.



Note that the firmware file path, file time, file version and handset version shown in the above example screen are for illustration only.

## Certificate and PAC

The Handset Administration Tool (HAT) is used for enrolling a handset with a PEAP certificate. Choose the **Server Certificate** tab and use the file browser to identify the certificate to be loaded. Once chosen, HAT will perform a rudimentary check on the file to make sure the format is DER and that the certificate date is valid. If these tests pass, HAT will indicate that it is valid and enable the **Enroll** button. Click **Enroll** to install the certificate onto the handset.

New certificates overwrite existing certificates. Be sure you keep a copy in case you need to reinstall an old certificate.

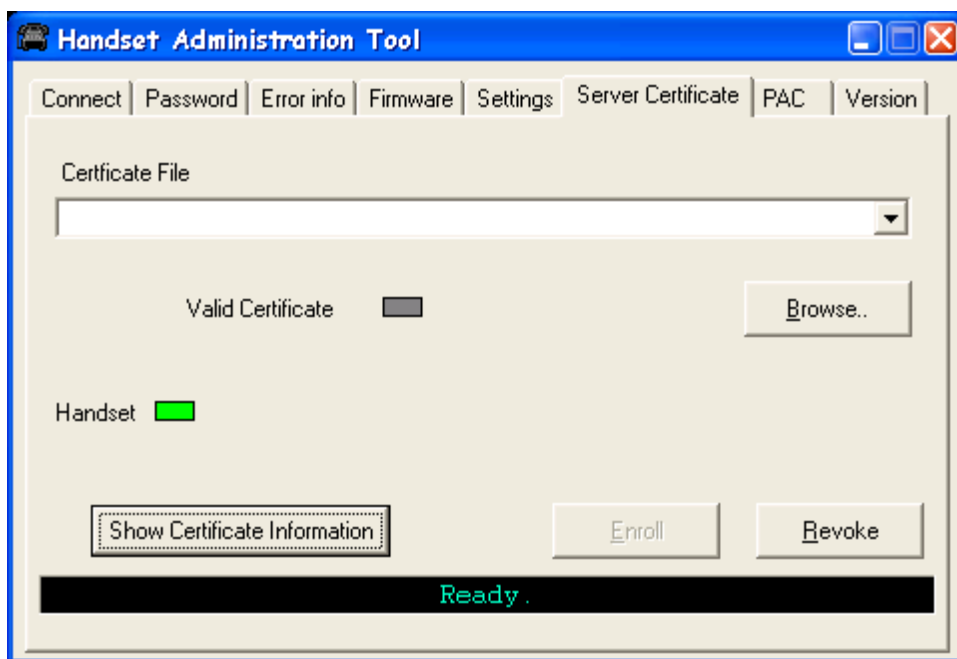


## Note

See the *Administration Guide* for complete instructions on server certificates and PAC. The information provided below is only a brief guide to the use of the HAT when configuring these parameters..

## Certificate

Browse to your certificate file to enter it in the window. The **Valid Certificate** indicator will turn green if the file you chose is a valid certificate. Press the **Enroll** button to activate it.



## Show Certificate Information

When you need to see information about the certificate currently on the handset, press the **Show Certificate Information** button and you will see a screen like this:



## PAC

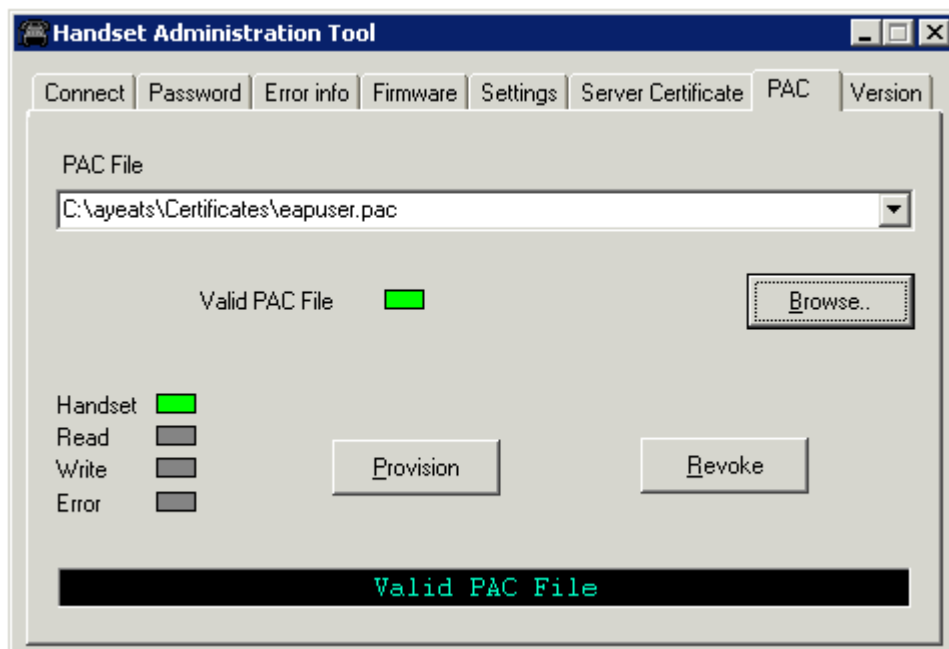


### Note

If anonymous in-band PAC provisioning is enabled on the RADIUS server, then it is not necessary to download PAC files through HAT. The handset will automatically re-acquire credentials from the RADIUS server over the air.

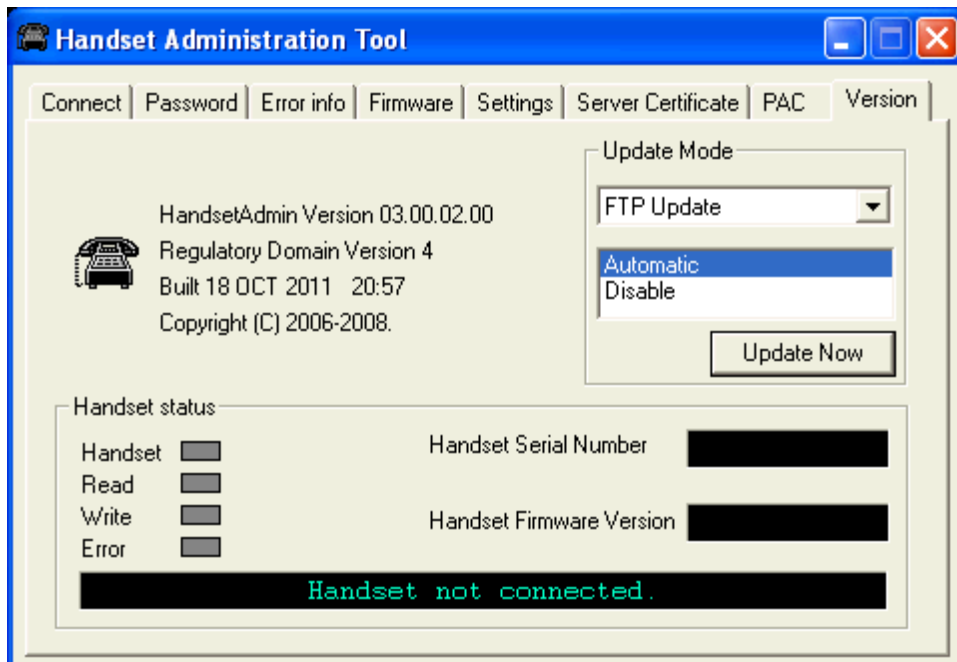
For EAP-FAST, HAT is also used for provisioning a handset with a Protected Access Credential (PAC). Choose the PAC file with the file browser. The user will be prompted to enter the password used to generate the PAC as part of its validation process. Once the PAC is considered to be valid, the **Provision** button will be available for installing the PAC onto the handset.

The screen below shows a valid PAC identified with the file browser after a valid password has been entered.



## Version

The **Version** tab displays the serial number of the handset and the current version of the Handset Administration Tool software.



**Update Mode** allows you to select where and how you want to check for updates to the program. The program can be updated from either of two locations--**FTP Update** or **Local File Update**.

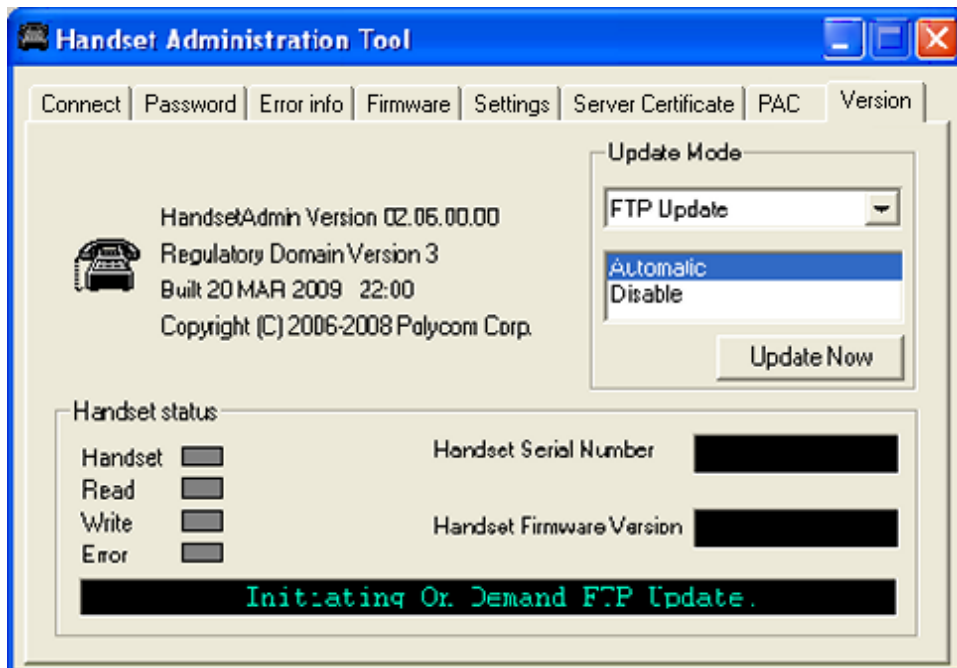
Updates may be installed either automatically or manually. The **Automatic** option sets the program to automatically check the FTP site for updates every time the HAT program is launched. The **Disable** option disables the automatic check and allows you to manually update the program by clicking the **Update Now** button. Any computer that is not connected to the internet should be set to **Disable**.

Depending on the **Update Mode** setting, the **Update Now** button can be used to check the FTP site for an update or to browse to a local location,

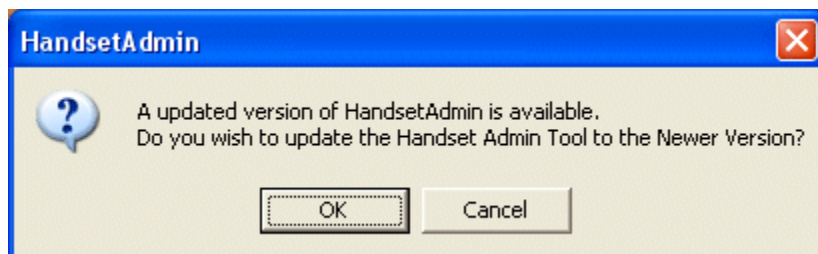
## FTP Update

The **FTP Update** option retrieves the update from an FTP site. During the update process, the program is downloaded to the connected computer and that computer's version of the program is updated. In order to use this option, the computer must have access to the internet.

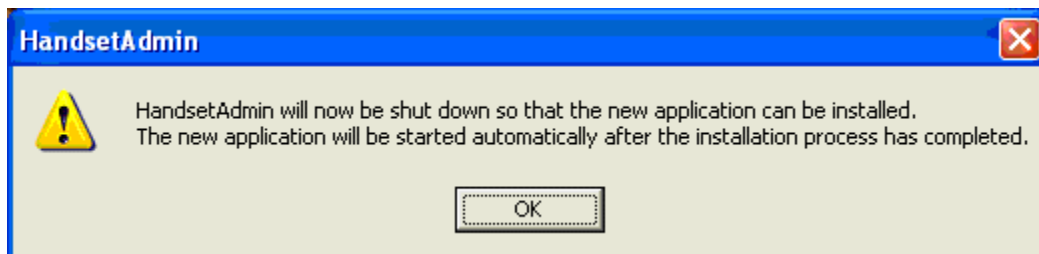
- 1 Click **Update Now** to start the FTP update process.



- 2 If the **Automatic** option is selected, the following prompt will appear before the update is installed. Click **OK** to continue.



- 3 The update will be installed by overwriting the previous version.



- 4 Once the update is downloaded, you can copy the .pkg file to a local location and update other computers using the **Local File Update** option. See below.

### Local File Update

You must obtain the .pkg file to perform a local update. Use the FTP update option explained above or a service option to obtain the .pkg file. Copy the .pkg file to an accessible location.



#### Note

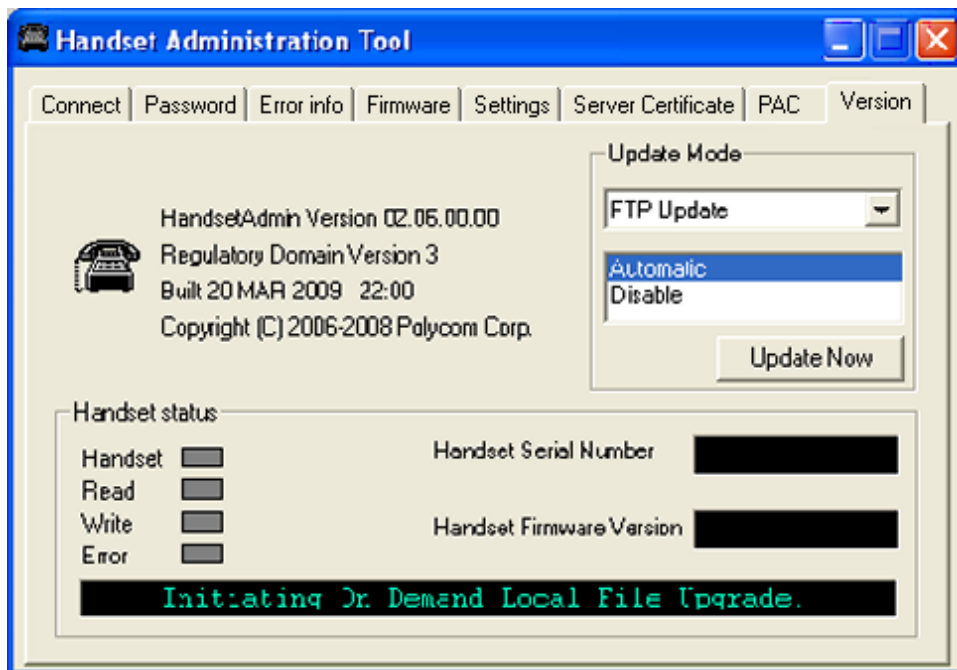
The Handset Administration Tool must already be installed on any computer that is being updated. Install the HAT software first, and then update it.

The following procedure is used for a local file update.

- 1 Open the Handset Administration Tool and click the **Version** tab.
- 2 Click the **Local File Update** option.

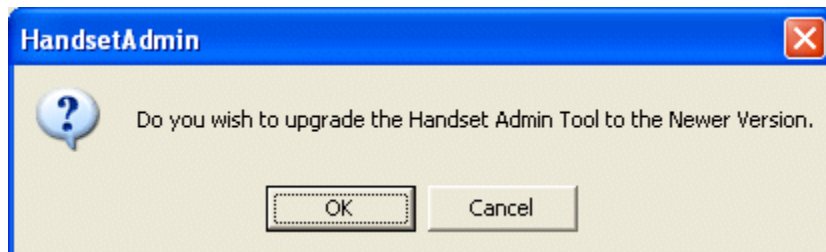


3 Click **Update Now**.

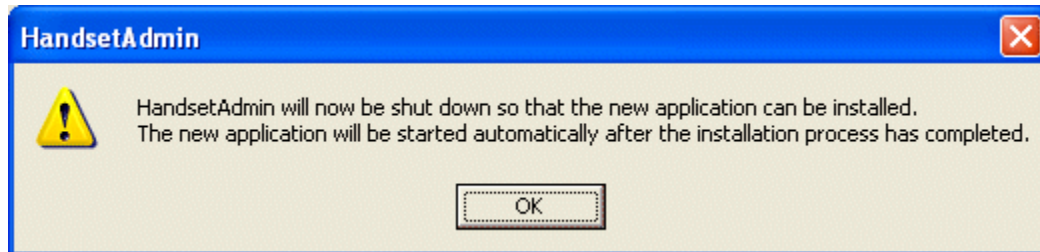


4 Browse to the location of the .pkg file and click it.

5 Click **OK** to continue.



6 Click **OK** to continue. This will install the update by overwriting the previous version.



# Chapter 4: Using the Settings Editor

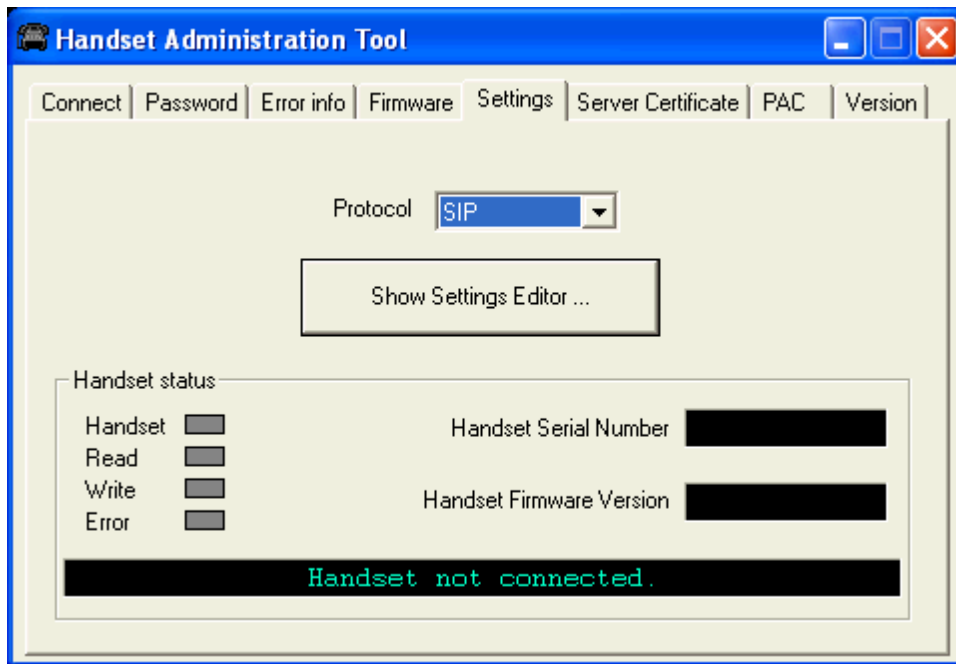
The handset has two menus with configurable options – the Admin menu and the Config menu. The Admin menu contains administrative options that can be password protected. The Config menu has options that enable the end user to customize settings for user preferences. The **Settings** tab allows you to configure both required and optional settings in the Admin and Config menus. Specific configuration requirements are detailed in the *Spectralink 80-Series Handset Administration Guide* document for the protocol you are using.

## Opening the Settings Editor

The **Settings** tab allows you to select the protocol you are using and displays the serial number of the handset and the software version being run.

Select your protocol from the dropdown list.

To enter and modify menu settings you will need to open the **Settings Editor**. Click the **Show Settings Editor** button.



When you have opened the **Settings Editor**, you may close the Admin Tabs.



### Note

If you plan on editing other handsets, consider checking the **Remember Password** checkbox located in the **Connect** tab.

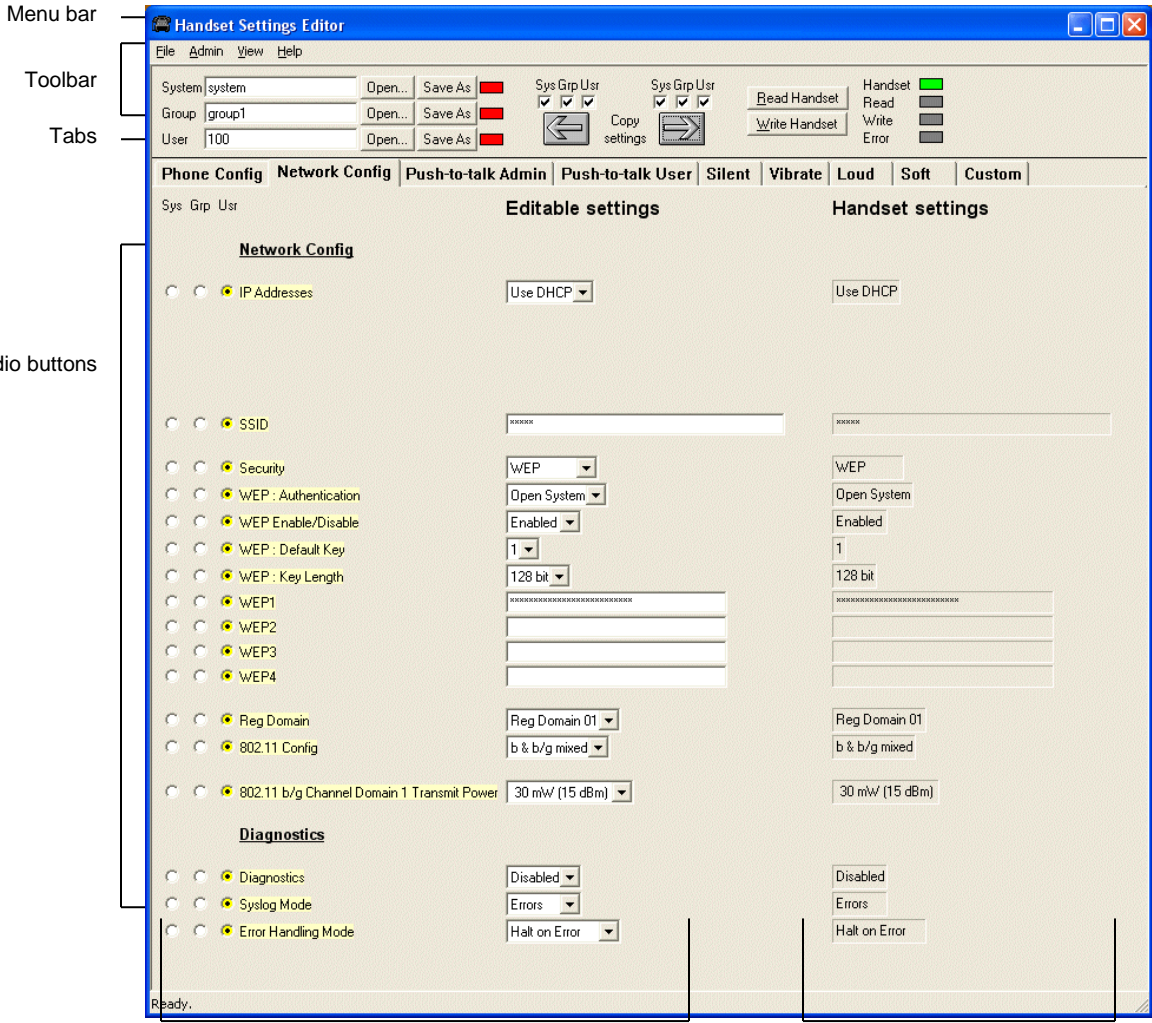
To open the Admin Tabs again, go to the **Settings Editor** menu bar and select either **View > Admin Functions**, or any of the options listed under the Admin menu item.

## *The Settings Editor Screen*

The **Settings Editor** is a powerful utility that allows you to edit or set any Admin menu or config menu option. Since protocol options vary, the tabs and options are different for each protocol but the general functionality is the same. The **Settings Editor** includes the following areas:

- Toolbar to execute configurations and save files
- Tabs to organize configuration options
- Radio buttons to define the type of option
- **Editable settings** that list handset options
- **Handset settings** that have either been uploaded from a handset or have been copied from **Editable settings** options to be downloaded to a handset.

[The Handset Settings Editor screen below shows default values and is for example only and may not match the options or settings available in your version.]

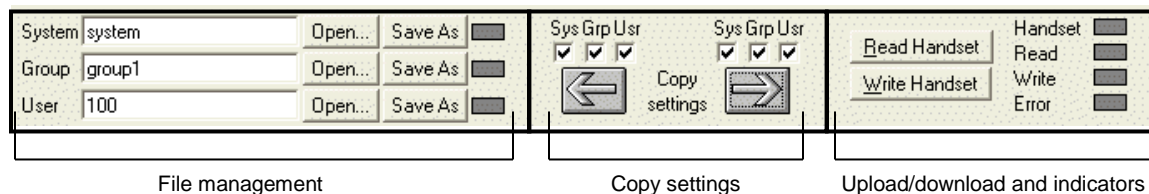


Options that can be edited

Options to/from the handset

## The Settings Editor Toolbar

The **Settings Editor** toolbar allows you to manage configuration files and download and upload configuration settings to and from the handset in the charger.



### File management

The three filename windows, **System**, **Group** and **User** match the three columns of radio buttons along the left side of the window. The **Sys Grp Usr** radio buttons allow you to designate the option(s) for System, Group or User files. The three windows in the File management section allow you to name, open, or save setting types as separate files.

For example, system types relate to network options such as security settings and regulatory domain. Group types relate to Push-to-talk options. User types reference name, extension and profile options. See [Creating your Configuration Plan](#) for more information about how to use these options.

The file indicators beside the **Save As** buttons have three colors to indicate the status of the file displayed in the window:

- **Red:** file does not exist. The filename in the window has not been saved.
- **Green:** unsaved edits. Changes made in the **Editable settings** field(s) which have not been saved to a file yet.
- **Gray:** file up-to-date. The settings have been saved.
- **Yellow:** file not yet loaded. The filename has been typed into the field but the Open button is not yet selected.

By default, the files will be saved in the **Application** folder under the folder where the program is stored. Use the File menu to set up your own file structure, if desired.

Make a backup of your files if you want to save them. There is no “undo” feature so if you accidentally overwrite a file, you will have to recreate it.

### Copy settings

The **Copy settings** arrows and checkboxes allow you to copy between the **Handset settings** column and the **Editable setting** column. The **Sys Grp Usr** checkboxes allow you to copy just the settings you require.

## Upload/download and indicators

When the **Read Handset** and **Write Handset** buttons are clicked, they initiate the transfer of configuration data from or to the handset in the charger. The handset indicators change color to indicate the state of the transfer. See the previous page for indicator color significance.

## Tab Options

A tab system organizes the options.

This is a SRP tab system:

Phone Config	Network Config	Push-to-talk Admin	Push-to-talk User	Silent	Vibrate	Loud	Soft	Custom
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This is a SIP tab system:

Push-to-talk Admin	Push-to-talk User	Silent	Vibrate	Loud	Soft	Custom
Phone Config	Network Config	SIP Config	SIP Proxies	SIP Lines		

Each tab contains options from the Admin menu and/or the Config menu. Admin menu options are password protected and usually set by the system administrator. Config menu options are available to the end user but are also offered here for initial configuration of key settings. Specific options vary by software release and protocol.



### Note

Handset options vary by protocol and release version. Consult your Admin Guide for the protocol you are using for a complete list of options.



### Note

For user convenience and efficiency, when the **Write Handset** button is clicked, every option set under the **Handset settings** column in all nine tabs is written at the same time. Each tab's options are NOT written separately. Be sure that you set all options before copying the configuration to the handset.



### Note

Your handsets may have different options than those available in the Handset Administration Tool. When a handset is placed in the cradle, it is checked for certain features, such as the Regulatory Domain version. The HAT will turn controls on/off based on the information that it gathers. If your handsets have options that are not yet programmed into the HAT, those options will require manual setting if the factory default is not desired.

## Creating Your Configuration Plan

Although not necessary for using the Handset Administration Tool, a configuration plan can maximize its efficiency and save countless hours of handset option management. An example of a configuration plan is provided in the next few pages.

### Organize the plan

Determine which options should be categorized as each type – system, group or user. Generally, system options are listed on the **Network** tab, group options are on the **PTT** tabs and user options are on the profile tabs. The **Phone Config** tab contains a mix of user and system types.



#### Note

Do not create a plan that saves an option in two different categories. Option categories should be established and should not overlap. Example: **Speakerphone** and **Push-to-talk** settings are typically tagged as **Grp** options and saved as **Group** files.

### Create the options and save the settings

Once you have established which options will be categorized as System, Group or User, enter the configuration information into the **Editable settings** fields.

Start with the System options and enter all system-level field values, such as IP addresses, security, and reg domain. Click the **Sys** radio button on the left side of the window for each option. Save these settings as a System file by entering a descriptive filename in the **System** filename field and clicking **Save As**. See the example on the next page.



#### Note

Note that when a setting is changed, the option label is highlighted in yellow until it is saved.

In the same way, create each Group plan by entering the values in the fields designated as Group types. Click the **Grp** radio button on the left side of the window for each option. Save each plan under a different name in the **Group** filename field. You may have several groups – possibly divided by sets of PTT users.

It is recommended that you establish one generic **User** file that has the default (or desired) values for each **User** field. Click the **Usr** radio button on the left side of the window for each option and save the generic user file.

If desired, user settings can be saved for each user, if desired, as each handset is configured. If you determine that each handset configuration should be saved, it is easiest to do this during the configuration process. See [Downloading a configuration plan to a handset](#), below.

Alternately, you can upload options from a correctly-configured handset; copy them to the **Editable settings** column, categorize them and save them. See [Uploading a configuration plan from a handset](#) below.

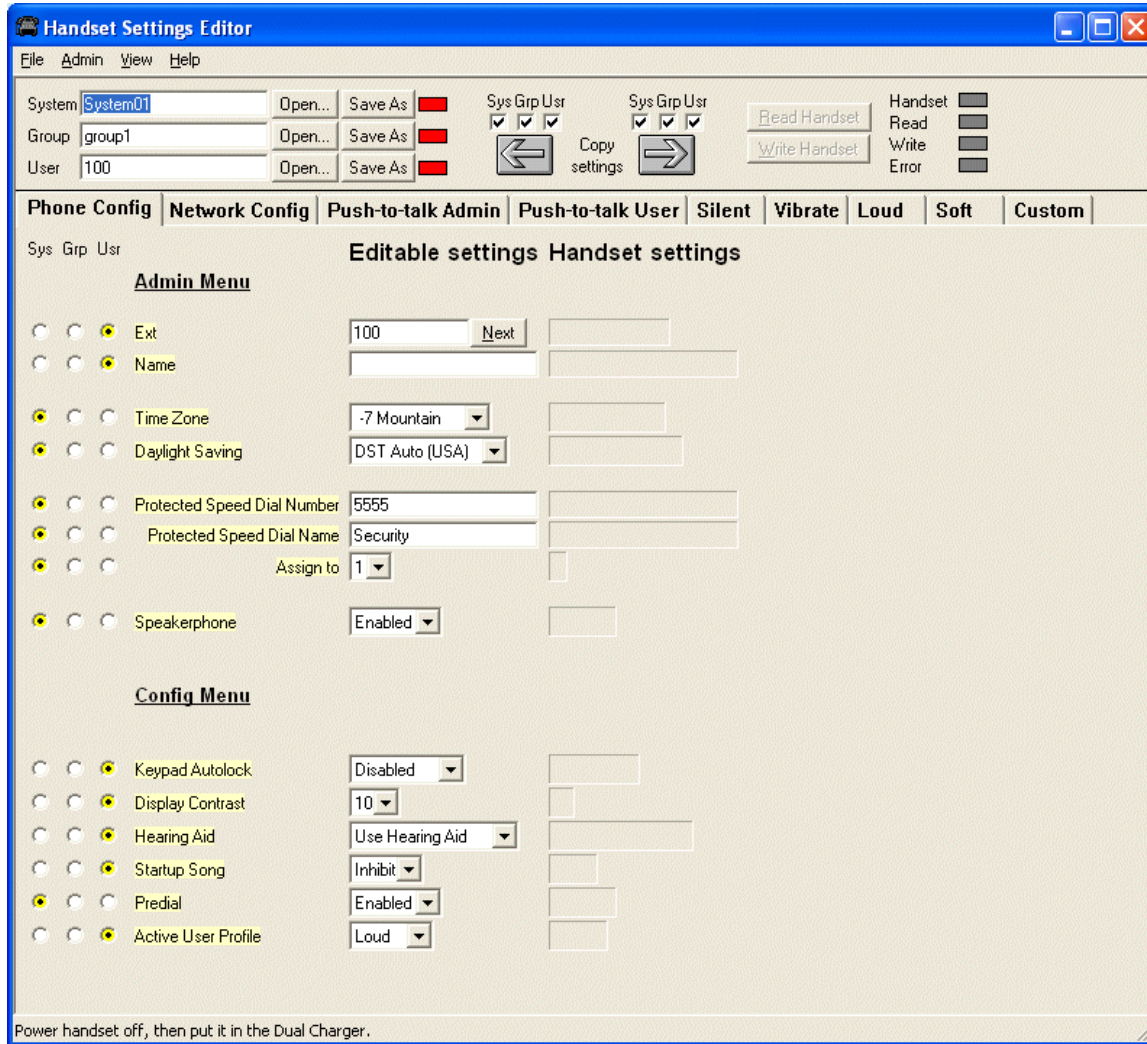
### Configuration planning worksheet (sample)

Use this or a similar worksheet to design your configuration plan.

Plan category		System	Filename	System01
Sys	Grp	Usr	Label	Editable Setting
X			Time Zone	-7 Mountain
X			Daylight Saving	DST Auto (USA)
X			Protected Speed Dial Number	5555
X			Protected Speed Dial Name	Security
X			Assign to	1
X			Speakerphone	Enabled
X			Predial	Enabled



The Handset Settings Editor screen below is for example only and may not match the options or settings in your software release.]



## Downloading and Uploading Configuration Plans

Once your configuration plans are established, the settings must be downloaded into the handsets.

### Downloading a configuration plan to a handset

- 1 Seat the handset in the charger.
- 2 Use the **Open** button located in the File management section on the toolbar to open the **System, Group** and **User** cfg files for this handset.
- 3 In the **Editable settings** fields, enter the **Extension** and **User name** for this handset. Note that the **Extension** field has a **Next** button that is useful when configuring a quantity of handsets.
- 4 Copy the settings to the **Handset settings** fields using the **Copy settings** arrow.
- 5 Click **Write Handset**.
- 6 You may want to save the configuration, load new files or edit settings for the next handset (steps 1 and 2) during the download.
- 7 (Conditional) If you wish to save the settings unique to this handset, enter the identifying information into the filename fields, such as user name or extension number and then click **Save As**.
- 8 When the **Handset** indicator turns off, the download has finished and the handset may be removed from the charger.

### Uploading a configuration plan from a handset

- 1 Click the **Read Handset** button to begin the upload.
- 2 You may copy these settings over to the **Editable settings** fields using the left **Copy settings** arrow to use them to create configuration plans as described above or to save them by user or extension.

# Appendix A: Regulatory Domain Mismatch Warning

The options that are available on the Settings Editor may not match the options currently enabled on the handset. This could happen if you update the software in the handset without also updating the Handset Administration Tool. Or you could update the Handset Administration Tool but not the handset software. In either of these situations different options may appear on the Handset Administration Tool than are available in the handset.

If the Regulatory Domains in the handset are not supported by the currently installed version of the Handset Administration Tool, a warning message will appear:

**Warning: A newer version of the Regulatory domain is supported by the handset. Upgrading this application is recommended.**

This message indicates that the Handset Administration Tool software needs to be updated. Please see the section [Software Updates](#).

If it is necessary to load earlier versions of the handset and Handset Administration Tool code, this message could also appear. If so, reset the handset defaults and proceed with configuration.