



# Product Support Tool

## User Guide



**SIERRA**  
WIRELESS

21303977  
Rev 2

## Important Notice

Because of the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the Sierra Wireless modem are used in a normal manner with a well-constructed network, the Sierra Wireless modem should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Sierra Wireless accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the Sierra Wireless modem, or for failure of the Sierra Wireless modem to transmit or receive such data.

## Safety and Hazards

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The driver or operator of any vehicle should not operate the Sierra Wireless modem while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some states and provinces, operating such communications devices while in control of a vehicle is an offence.

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*Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. Sierra Wireless modems may be used at this time.*

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## Contact information

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Technical Support:	Included with the purchase of the SW Device Development Kit you receive five hours of tier 3 engineering integration support. You will have received instructions by e-mail on how to access the OEM Customer Support web site. For more details, please contact your account manager, or the Sierra Wireless sales desk	
RMA Support:	repairs@sierrawireless.com	
Post:	Sierra Wireless 13811 Wireless Way Richmond, BC Canada V6V 3A4	
Fax:	1-604-231-1109	
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Consult our website for up-to-date product descriptions, documentation, application notes, firmware upgrades, troubleshooting tips, and press releases: [www.sierrawireless.com](http://www.sierrawireless.com)

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# Introduction

This document describes how to install and use the Product Support Tool from Sierra Wireless.

The Product Support Tool allows the user to:

- [Upgrade software](#) in a Sierra Wireless modem
- [Provision the modem](#) (by loading a PRL and configuring certain settings)
- [Copy](#) a user's account and personal settings from one device to another.
- [Save/load](#) settings

## Revision history

Version	Summary of changes
<b>1.0 Apr 04</b>	Initial release
<b>1.1 May 09</b>	<p>The Product Support Tool no longer supports downloading software to the modem (page 11).</p> <p>Added:</p> <ul style="list-style-type: none"> <li>• This table</li> <li>• <a href="#">“Troubleshooting logs”</a> (page 17)</li> <li>• References to ExpressCard and USB modems, Windows Vista</li> <li>• References to pESN and MEID</li> </ul>
<b>2 Aug 12</b>	<p>New template.</p> <p>Changes to the patents section.</p>

## System requirements

To use the software, you need:

- PC running Windows Vista, Windows XP, or Windows 2000
- License key for the Product Support Tool. (If you don't have a license key, please contact your account manager, or the Sierra Wireless [sales desk](#)).

If the modem is a PC Card, your computer must have a PC Card slot or an adapter board that allows you to connect a PC Card.

If the modem is an ExpressCard, your computer must have an ExpressCard slot or an adapter board that allows you to connect an ExpressCard.

If the modem is a USB modem, your computer must have a USB slot.

If the modem is an embedded module or Mini Card, you also need the appropriate development kit board.

## Installing the Product Support Tool

1. If you already have the Product Support Tool installed (versions before 1.07), uninstall it. (To view the version, click Help > About SWPST).
2. If the modem is a PC Card, ExpressCard, or USB modem, install the software for the modem. For instructions, see the documentation of the modem. After the installation is complete, if the software for the modem is running, close it (it must not be running when you run the Product Support Tool).
3. If the modem is an embedded module or Mini Card, ensure the modem is inserted into the development kit board, and the board is connected to the PC.
4. Run the file SWPST Installer.exe.
5. Enter the license key. Click Next.
6. Follow the on-screen instructions.

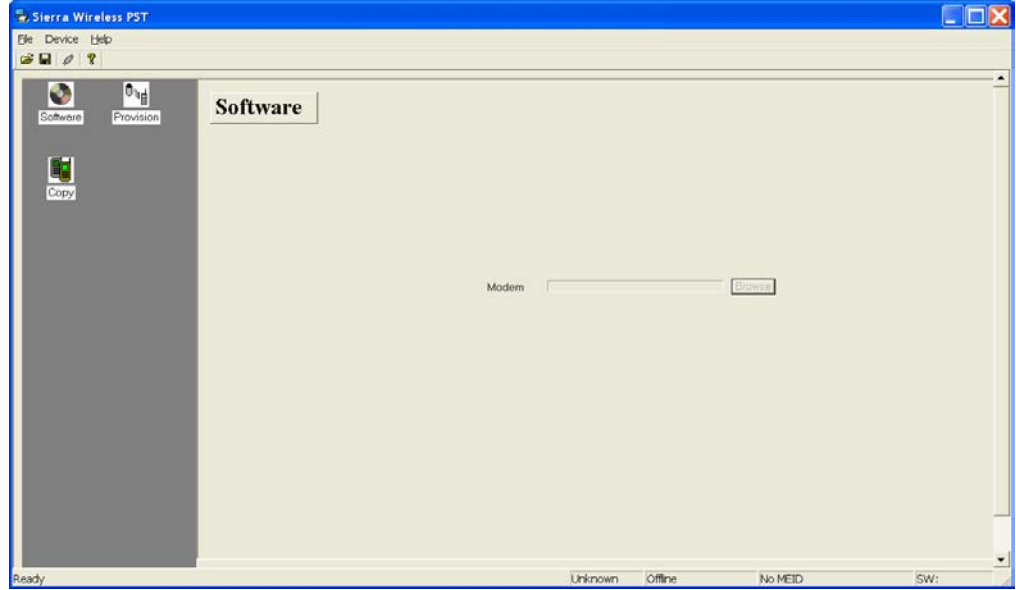
## Starting the Product Support Tool

To start the software:

1. On the desktop, double click the Sierra Wireless PST icon



The Software window of the Product Support Tool is displayed.



## Connected and offline mode

The Product Support Tool can be in connected or in offline mode. When the Product Support Tool starts, it is in offline mode.

In **offline** mode, the Product Support Tool cannot communicate with the modem. You cannot modify any settings on the modem.



In **connected** mode, the Product Support Tool communicates with the modem. You can modify settings on the modem.

[Table 1](#) shows the features available in each of the modes. [Table 2](#) describes the Connect button in each of the modes. (The Connect button is located in the upper left corner of the Product Support Tool window—under the menu items.)

Table 1 Offline vs. connected mode

	Offline mode	Connected mode
Can the Product Support Tool communicate with the modem?	No	Yes
<a href="#">Load/save</a> settings (from a file, to a file)	Yes	Yes
<a href="#">Load/save</a> settings (from a file to a modem, or from a <a href="#">modem to a file</a> )	No	Yes
<a href="#">Upgrade software</a>	No	Yes
<a href="#">Provision the modem</a>	No	Yes
<a href="#">Copy</a> a user's account and personal settings from one device to another	No	Yes

Table 2 **Connect** button

	Offline mode	Connected mode
Connect button	 (cables appear together)	 (cables appear apart)
Clicking the Connect button	Puts the Product Support Tool into connected mode	Puts the Product Support Tool into offline mode

For more information on offline mode, see “Work Offline” (below).


To modify any settings on the modem, you must [put the software into connected mode](#) (page 10).

## Work Offline

You can use offline mode, for example, when:

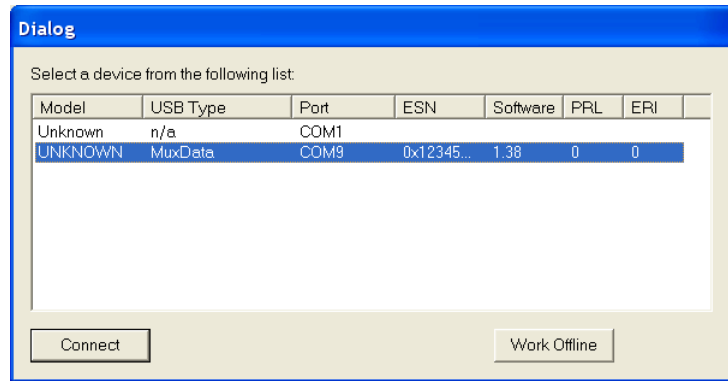
- You don't have a modem, but you want to see which parameters are configurable for a particular model of modem.
- You don't have a modem. You can load modem settings from a file (or create settings from scratch), modify them and save to the same or a new file. When the modem becomes available, [put the software into connected mode](#) and then load the new settings from the file onto the modem.
- You have a modem, and you want to create various modem settings files, for later testing (you currently don't want to modify the settings on the modem).

To select a modem to work with while in offline mode:

1. Click the Connect button  (in the toolbar, under the menu bar of the Product Support Tool window).

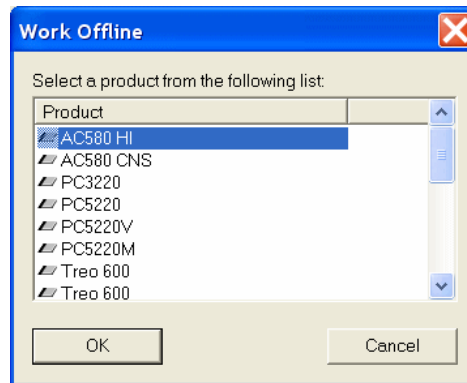
The software searches for the COM ports for the modem. This may take a few seconds.

When the COMM ports have been found, a list of devices is displayed:



2. Click Work Offline.

The Work Offline window is displayed. Select the product you want to work with.



The status bar shows the model of the selected device (for example, “SW Device” in the following screenshot), and “Offline”.





## Determining the connection mode of the software

When you start the software, the software is in **offline mode**, that is, the Product Support Tool cannot communicate with the modem. The right portion of the status bar displays “Offline”, as shown in the following table.


Once you **put the software into connected mode** (page 10), the status bar shows the model of the modem, the ESN (or pESN and MEID), and software version of the modem.

Table 3 Determining the connection mode of the Product Support Tool

Connection mode	Lower right corner of the Product Support Tool window	Connect button
Offline	<p>Unknown Offline</p> <p>or, when you choose <a href="#">Work Offline</a> and select a modem model,</p> <p>MC5725 Offline</p> <p>Model of modem</p>	 (cables appear together)
Connected	<p>MC5725 ESN: 0x6032679E No MEID SW: 0.40</p> <p>Model of modem ESN (or pESN and MEID) of the modem Software version of the modem</p>	 (cables appear apart)

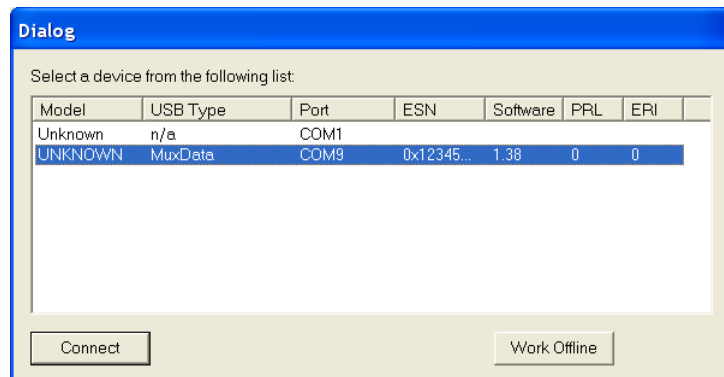
## Putting the software into connected mode

Before you configure a modem, you must put the Product Support Tool into [connected mode](#):

1. Click the Connect button  (in the toolbar, under the menu bar of the Product Support Tool window).

The software searches for the COMM ports for the modem. This may take a few seconds.

When the COMM ports have been found, a list of devices is displayed:



2. Select the desired modem and click Connect.

When the Product Support Tool has established a connection to the modem, the status bar shows the model of the modem (for example,

MC5725 in the following screenshot), the ESN (or pESN and MEID), and software version of the modem.

MC5725 ESN: 0x6032679E No MEID SW: 0.40

You can now [download software](#) (see the next section), and then use the Product Support Tool to [provision](#) the modem (page 11) and [copy settings](#) (page 14).

## Downloading software to the modem

To download the modem software, use the FlashCDMA or SWFlash software from Sierra Wireless, and then proceed to “[Provisioning the modem](#)” (the next section).

## Provisioning the modem

Through provisioning, you can program the modem’s PRL and, for certain models of modems, other parameters.

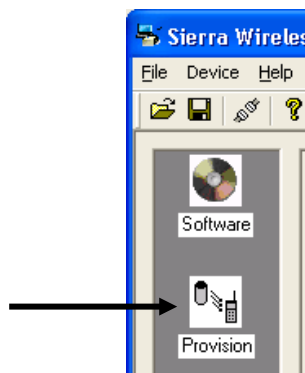
By [working offline](#), you can see which parameters are configurable for a particular model of modem, even if you don’t have such a modem on hand.

Provisioning is done through the Provision window.

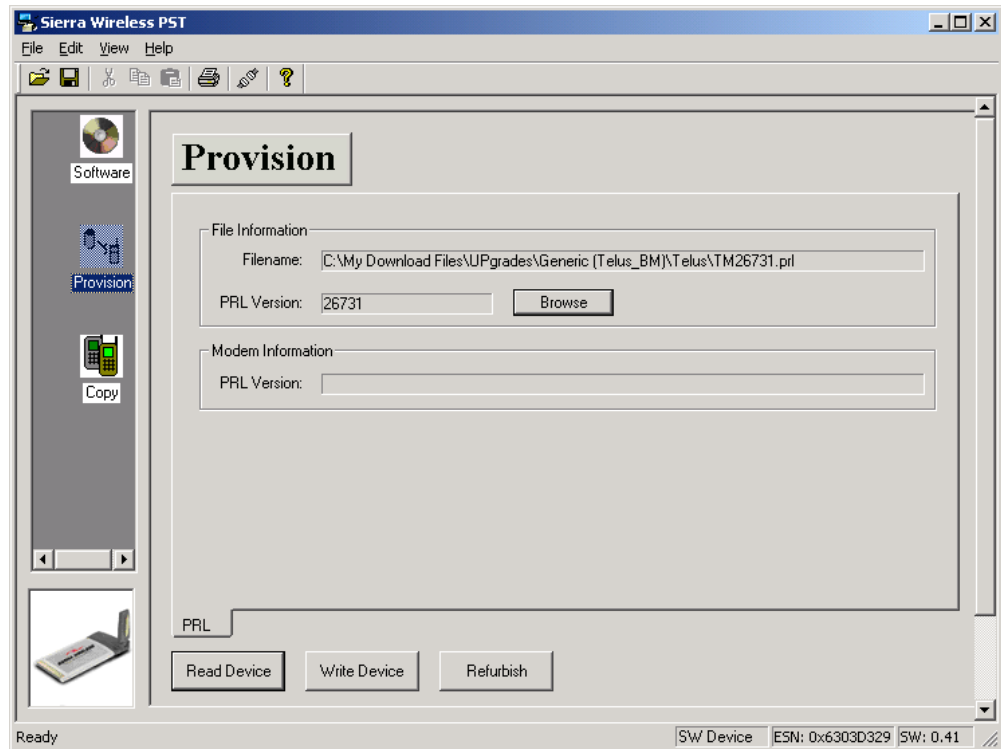
### Displaying the Provision window

To display the Provision window:

1. Unless you want to [work offline](#), ensure the Product Support Tool is in [connected mode](#) (page 7).
2. In the left pane of the Product Support Tool window, click Provision.



The Provision window is displayed. The number and type of tabs depends on the model of the modem.



## Retrieving information from the modem

1. Ensure the Product Support Tool is in [connected mode](#) (page 7).
2. In the Provision window, click Read Device.

The provisioning information is read from the modem and displayed in the Provision window. You can now use the tab(s) to view or change the information.

## Specifying the data and file(s) to write to the modem

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**Warning:** Edit the modem's parameters only if you know what you are doing. You can inadvertently make the modem **unusable**. The Refurbish button **erases data** for MIN and user profiles. The modem becomes non-activated.

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To specify the data and file(s) to be written to the modem:

1. Display the appropriate tab (in some cases, only one tab is displayed; this depends on the model of the modem). For example, to specify a PRL file, click the PRL tab.
2. Click Browse. Select the file.
3. Click Open.

The filename you selected is displayed in the Filename field (under File Information).

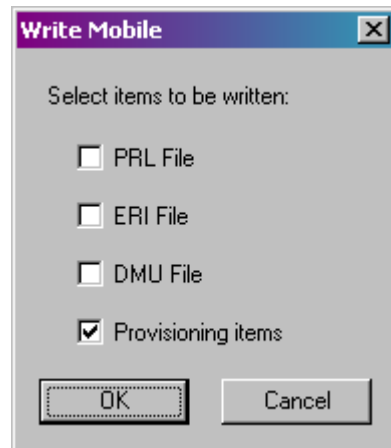
4. If required, modify the parameters.  
Depending on the tab you've selected, you may be able to change only certain parameters. For some tabs, you may not be able to change any parameters.
5. Repeat the above steps (with the other tabs available) for all the data and file(s) you want to write to the modem.

## Writing the settings to the modem

To write the settings to the modem:

1. Specify the file(s) to write to the modem (see the [previous section](#)).
2. Click Write Device (in the bottom part of the Provision window).

The Write Mobile window is displayed, from which you can select which settings to write to the modem.



3. Select the items you want to write to the modem and click OK.

## Saving NV items to a file

Optionally, you can save NV items<sup>1</sup> to a file:

1. [Retrieve the information](#) from the modem (page 12).
2. Select File > Save As. The default file extension type is .nvm.

## Loading NV items from a file

Optionally, you can load NV items from a file to which you have previously saved NV items:

1. Select File > Open.

The default file extension type is .nvm.

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<sup>1</sup> Items in the modem's non-volatile memory

# Copying settings

You can copy settings:

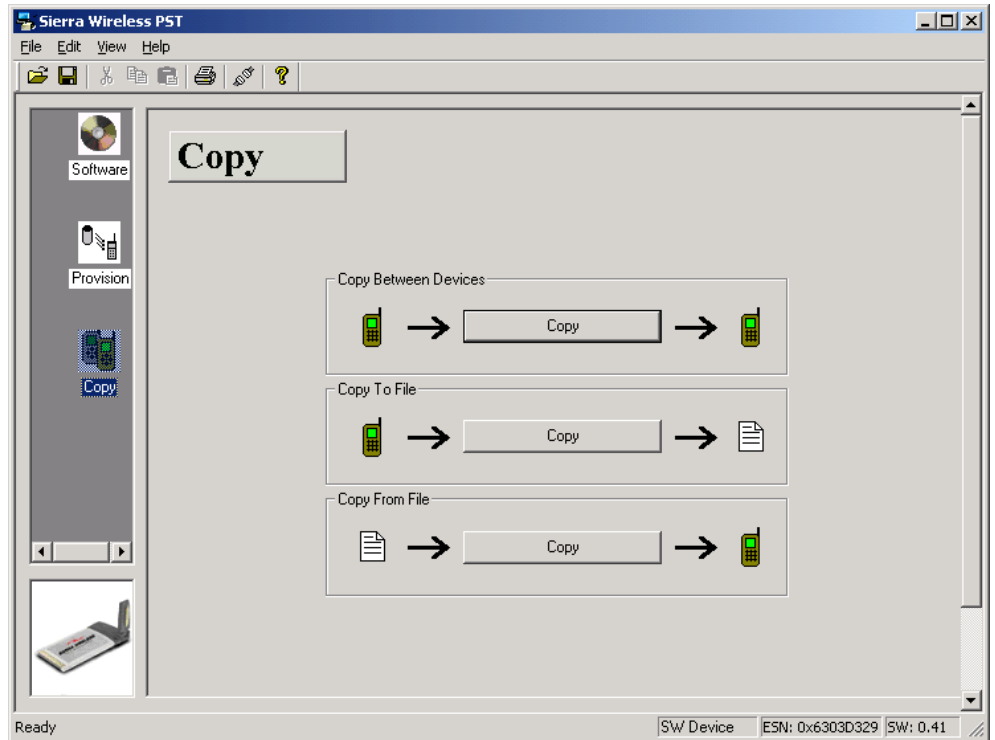
- [From one modem to another](#) (page 15)
- From a modem [to a file](#) (page 16)
- [From a file](#) to a modem (page 17)

To display the Copy window, from which you can copy settings:

1. Ensure the Product Support Tool is in connected mode (page 7).
2. In the left pane of the Product Support Tool window, click Copy.



The Copy window is displayed.



## Copy settings from one modem to another

When copying settings from one modem to another, they must both be of the same model.

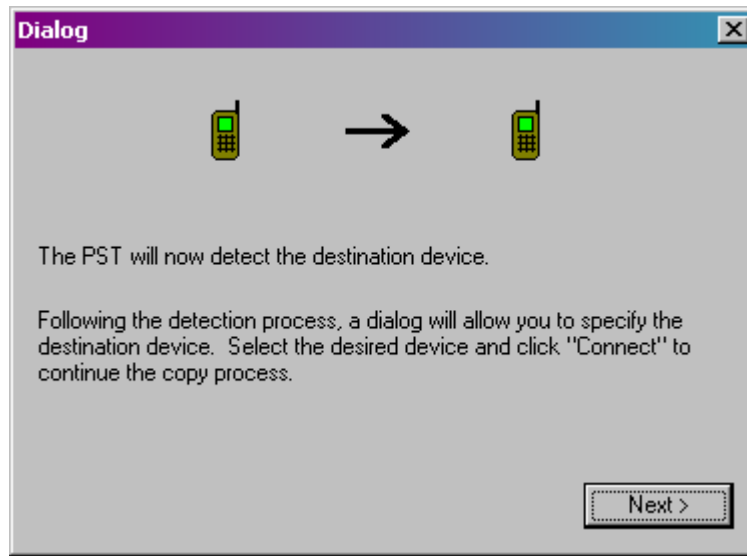
To copy settings from one modem to another:

1. In the [Copy window](#), under Copy Between Devices, click Copy.

The software reads the settings from the currently connected modem (that is, the source modem), then displays a window (Swap Devices) instructing you to connect the destination device.

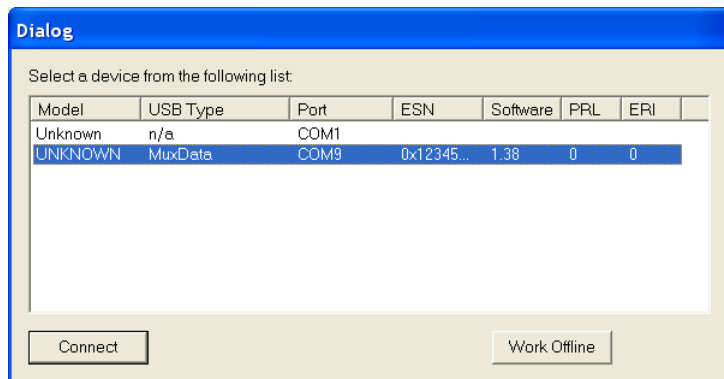
2. If the source modem is a PC Card, ExpressCard, or USB modem, before you remove it, stop the modem (use the icon in the Windows status area [typically, in the lower right corner of the screen]).
3. Remove the source device.
4. Insert the destination modem.
5. Click Next.

The Dialog window is displayed.



6. Click Next.

The software searches for modems and displays a window that lists devices.



7. Select your device and click Connect.

The software writes to the destination modem the settings it read from the source device, then resets the modem.

## Copy modem settings to a file

To copy a modem's settings to a file:

1. In the [Copy window](#), under Copy To File, click Copy.

A window is displayed, from which you can specify a filename (\*.cpy) and optionally change the path of the file to which the modem settings will be saved.

2. Specify the filename and click Save.

## Copy settings from a file

The file must have been saved from a modem that's the same model as the destination modem.

To load settings from a file into a modem:

1. In the [Copy window](#), under Copy From File, click Copy.

A window is displayed, from which you can browse to the file you want to load (\*.cpy).

2. Browse to the file, and click Open.

The software reads the settings from the file, writes the settings to the modem, then resets the modem.

# Troubleshooting logs

The following table describes the various logs that the Product Support Tool maintains; the logs that can be helpful for troubleshooting.

Table 4 Troubleshooting logs

Description of log	Path	Filename
Connection	C:\Program Files\Sierra Wireless\Sierra Wireless PST\Log\	SWPST_CONNECT.Log
OMADM Read	C:\Temp\Log\	LogFile_OMADM_READ.Log
OMADM Write	C:\Temp\Log\	LogFile_OMADM_WRITE.Log