

Hughes 9502 Upgrader User Guide (PC)

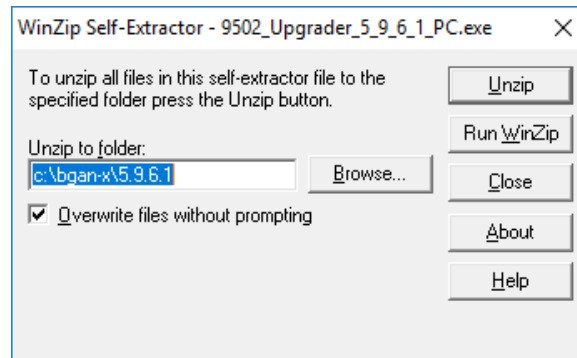
Rev 3.7 (12-Dec-19)

This document explains how to use the Hughes Upgrader program for the 9502 User Terminal using a PC.

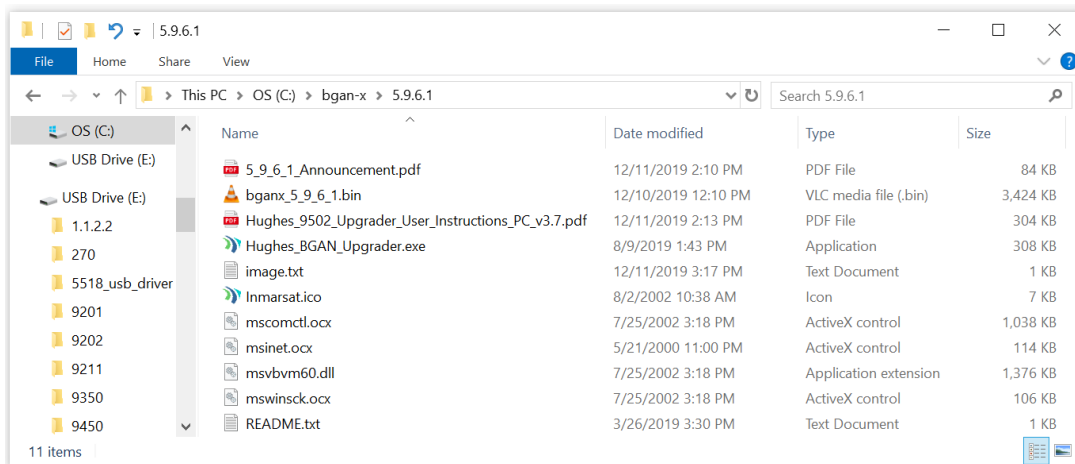
1 Getting and Extracting the Upgrader

The Hughes Upgrader is a zip file that contains the binary software required for software upgrade of the Hughes 9502 User Terminal (UT). Only the software appropriate at time of release is provided with the upgrader (i.e., it may not include all the upgrade options detailed below).

If you downloaded the zip file version, the self-extracting exe file is within it; unzip that file first (you can extract and then run the exe from the Desktop, or you can just run it directly from the zip file). Note: examples below are from 5.9.6.1.



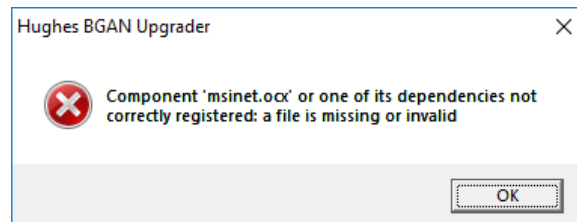
The destination directory contains the upgrader executable, as well as support files (including this instruction file). If you used the default destination, the directory should look something like this:



2 Running the Upgrader

Before Running the Upgrader:

- Connect to the 9502 UT via Ethernet or USB directly to the PC (if using USB, be sure the Hughes USB Driver has been installed first). **Note: Do not connect the PC to the UT through a router.**
- The UT antenna may or may not be connected during the upgrade (optional).
- The SIM may or may not be inserted during the upgrade (optional).
- Your PC's network (Ethernet) interface to the UT should be set to "Obtain an IP Address Automatically" (i.e., DHCP should be used by the UT to assign your PC an IP address); if your UT is configured with its on-board DHCP server disabled, you will need to setup an appropriate static address for your PC instead.
- **NOTE:** If you have changed the IP address of your UT, you must enter the UT IP address in the upgrader so it knows how to reach the UT. From the *Tools* menu, select the *Configure Modem Interface* option and enter the UT IP address.
- **NOTE:** Be aware that depending on your PC's operating system (e.g. Windows 7), it may require you to run the Upgrader with Administrator rights. If you see an error regarding a missing component, such as **MSWINSCK.OCX**, **MSCOMCTL.OCX**, or similar, right-click on the Hughes_BGAN_Upgrader.exe file and select **Run as administrator**. Here is a sample error dialog if this problem occurs:



- **NOTE:** You may also need to turn OFF your PC's firewall settings in order to allow the Upgrader to operate correctly. Also, be aware that various third-party programs may interfere with the Upgrader's functions because they act as a firewall.

Upgrader Start-up Procedure:

Run the upgrader by clicking on Hughes_BGAN_Upgrader.exe. The following appears:

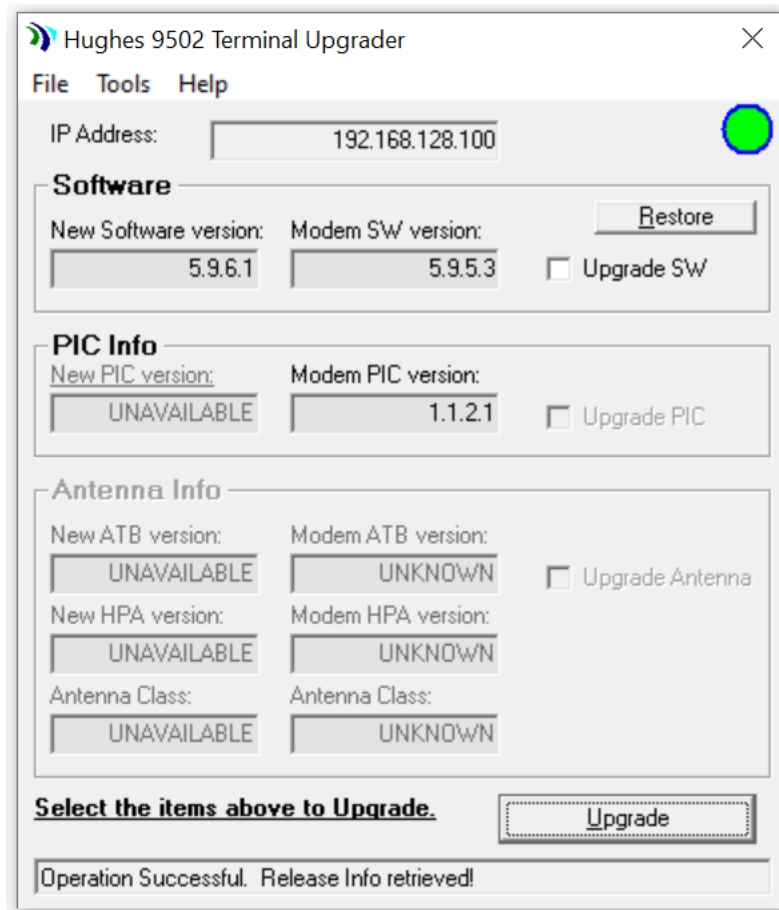


Figure 1: Sample Upgrader Screen while in Normal Mode

- This main Upgrader window shows the currently installed software versions on the UT, along with the upgrades available with this Upgrader package.
- The Upgrader gives you the option to upgrade the HUGHES Application Software, and when applicable, the PIC (Peripheral Interface Controller) Software. If any of these sections on the Upgrader screen are dim, that means an upgrade to that component is not available/not possible at this time (*Note: the Antenna Software doesn't apply to the 9502, so these options will always be grayed out*).

Upgrader Window Fields:

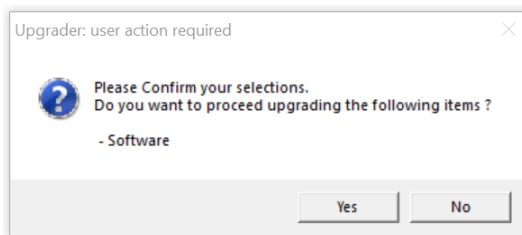
- ❖ **IP Address** field shows the local IP address of the UT. This is the address the upgrader uses when communicating with the UT. A green circle indicates good Ethernet connectivity, and a red circle indicates no connectivity. *If you are using a custom UT IP address, this value can be changed in the [Tools](#) menu explained below.*

- ❖ **Restore** button will restore the UT to the prior installed software release, if available.
- ❖ **Upgrade** button is used to perform the upgrade in conjunction with the Upgrade selections (**Software and/or PIC**; note that the **Antenna Info** section is not applicable to the 9502 UT, and will always be grayed out).
- ❖ The status bar at the bottom of Upgrader window provides progress information during the upgrade process.

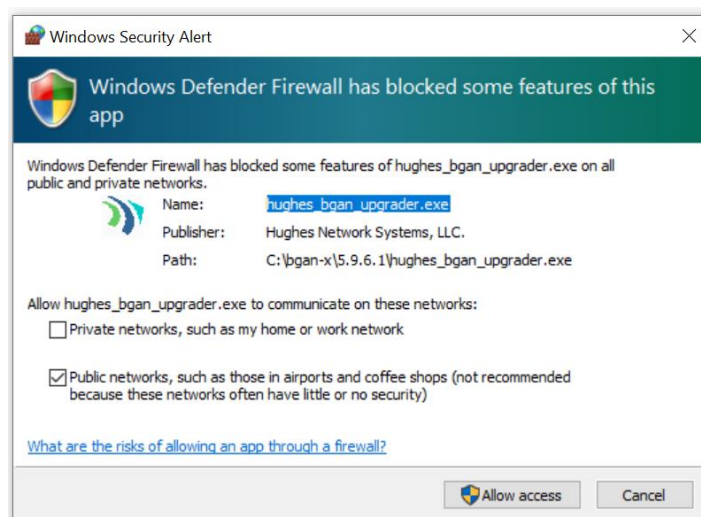
3 Performing Upgrade(s):

NOTE: *Do not disrupt any upgrade while it is in progress and ensure the power supply is stable.*

- To perform an upgrade, select from the available upgrade selections and click the **Upgrade** button.
 - Upgrades may be selected and performed individually or altogether. The Upgrader will upgrade each selected component in sequence.
 - Unavailable selections are grayed out, dependent on the released software upgrade(s) provided with the Upgrader package.
- Once you click **Upgrade**, a Pop-up window appears, asking to confirm your choices (the selected items to upgrade are listed):



- Click **Yes** (**No** cancels the selection)
- Note that if this is the first time you have run the Upgrader (or if you have changed the PC's firewall settings), the following may appear:



Be sure that the "Public" box is checked, then select **Allow access** to continue.

- The section being upgraded will be then highlighted in green and the upgrade process will begin.
 - The Status bar will show a series of progress messages as the upgrade proceeds.
 - Please wait for the upgrade(s) to complete. Note that any one Upgrade operation (Software, PIC, etc) can take up to 10 minutes to complete. *Do not interrupt any upgrade since this may leave the UT in an unknown state.*
- Refer to the following figures for sample screens of an upgrade in progress.

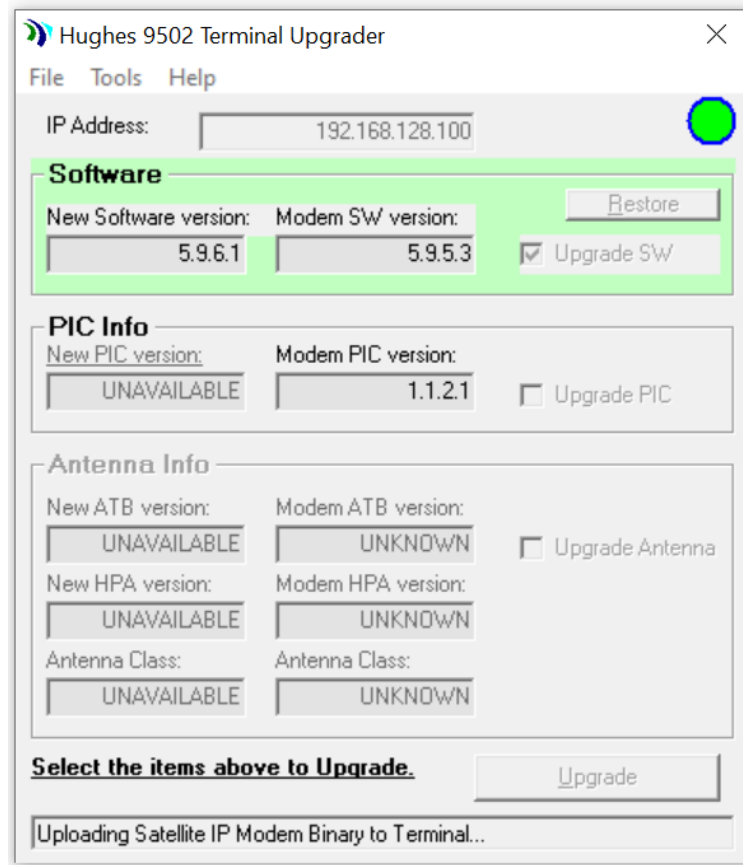


Figure 2: Normal Mode Upgrade in Progress

- When the upgrade completes, the green highlight disappears. A few moments later, the *New Software version* field should show the updated version. The *Status* bar should show *Operation Successful. Release Info retrieved.*

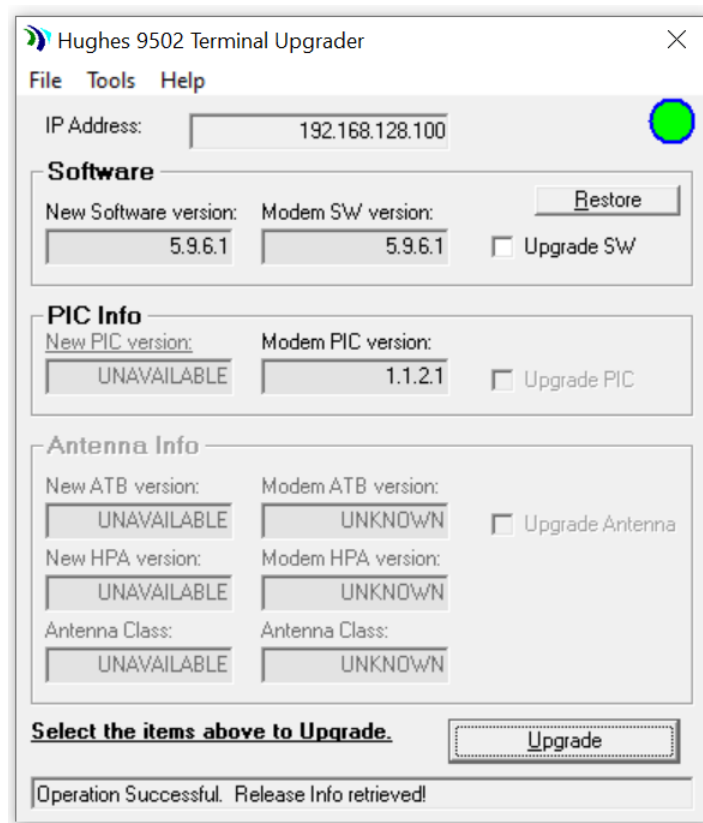


Figure 3: Successful Upgrade Example

- At this point, the upgrade has completed.
 - If multiple upgrade selections have been made, the Upgrader will continue with the next upgrade in the sequence.
- Check the Upgrader window and verify that the updated version matches the new version supplied with the Upgrader.

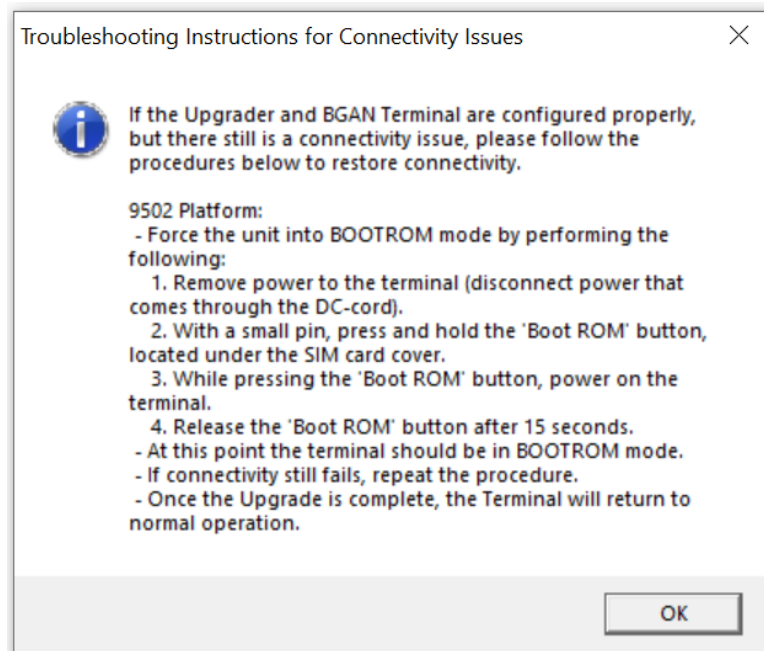
Upgrader Menu Descriptions:

- ❖ **File** drop-down menu:
 - **Upgrade Selections** – same as **Upgrade** button
 - **Restore Software** – same as **Restore** button
 - **Upgrade Antenna (Standalone)** – (not applicable to the 9502)
 - **Upgrade PIC (Standalone)** – same as **Upgrade PIC** checkbox
 - **Exit** – exits the Upgrader
- ❖ **Tools** drop-down menu:
 - **Configure Modem Interface** – allows you to enter the IP address of the UT. Default is 192.168.128.100
 - **Get Software Version** – refreshes the Upgrader window and displays software versions currently installed and available for upgrade from the Upgrader
 - **Reset Modem** – reboots the UT

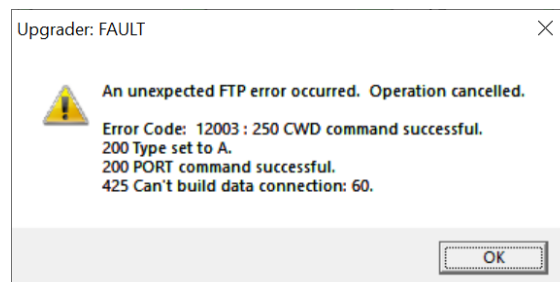
- ❖ **Help** drop-down menu:
 - [About Upgrader](#) – displays Upgrader version
 - [Troubleshooting](#) – displays Troubleshooting information

4 Troubleshooting:

Here is the Troubleshooting dialog that can be accessed from the Help menu – it describes how to force the UT into Boot mode, in case of connectivity issues between the Upgrader and the UT. If you succeed in bringing the UT up in Boot mode, do not use a custom IP (in the [Configure Modem Interface](#) menu), and note that the *Modem SW version* field shown in the Upgrader will report BOOTROM:



As an additional tip, if you have connectivity, but the following dialog box appears during use of the Upgrader, it may mean your firewall settings did not allow access to Public networks; to correct, enable for Public networks or completely disable the firewall on your computer and re-attempt the upgrade.



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