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Installing EtherSeries Product Firmware Step-By-Step Instructions (Windows-Only)

Overview:

The EtherSeries product firmware may be updated in the field. The firmware is stored in flash RAM, and is replaced by running an update program on a Windows computer located on the same sub-net as the target EtherSeries device. The update occurs over the ethernet. A serial connection is not required or used. This note describes the process in detail.

EtherSeries Products: The procedure is the same for all EtherSeries products. You should have the appropriate firmware images for your product. EtherPath images are normally named EtherPath_V##.bin . EtherPoll images are named EtherPoll_V##.bin, etc. **To prevent hardware damage, do not attempt to install firmware from one EtherSeries product model into the hardware designated as another. Although the hardware platforms may look the same, there may be internal component and boot ROM differences. If you mistakenly tried this and damaged the hardware or overwrote the boot ROM, it may (or may not) be repairable by returning the unit to the factory. If it is repairable, there is a charge for re-initializing the hardware at the factory.**

Hardware and Software Requirements: The target EtherSeries device and Windows workstation must be on the same ethernet LAN. The workstation should have enough free space (several meg) to hold the firmware image and the update program. The update program is installed on the workstation along with the firmware image. It is good practice to also have a copy of the existing version firmware image on the workstation in case the target will not accept the update.

Contact DCB Technical Support to obtain the latest firmware version for your product. The firmware image may be downloaded via the Internet or supplied as an email attachment.

This document shows an update program that works for Windows versions 98, 2000, XP, 7, 8, 8.1 and 10. There is a program that works with Linux, but that version is not discussed here.

Procedure:

WARNING! Please read the entire instructions thoroughly, and if you are unsure about the process don't start it... return the units to your vendor or DCB for the upgrade operation. When storing new programs into flash RAM, there is always some risk that the process may fail and leave the unit inoperable. **If this is a critical unit and you can't take that risk, you should return the unit for upgrade at the factory.** As with all Windows application installations, it is better to have no other programs running on the workstation during the install.

There are several versions of the hardware platform in service. Different hardware platforms require different firmware, and the compatible firmware versions for each hardware generation

are shown at <http://www.dcbnet.com/download/etherseriesversions.html>. **It is very important to consult that website prior to attempting your firmware upgrade.**

If in doubt as to which version you currently have, run the terminal or telnet configuration screen. The first few lines of the screen should display the current firmware version.

A) Get the Installation and Firmware Files:

An installer for the upgrade utility is available on the DCB website, as are the firmware files necessary for each type of device. (See <http://www.dcbnet.com/download/index.html>: The current version of the installer may be accessed on this page at the link named, “**Upgrade Version x.y**”, where the x and y represent the version number.) After downloading the installer, launching it will create a directory similar to the one shown in Figure 1 below:

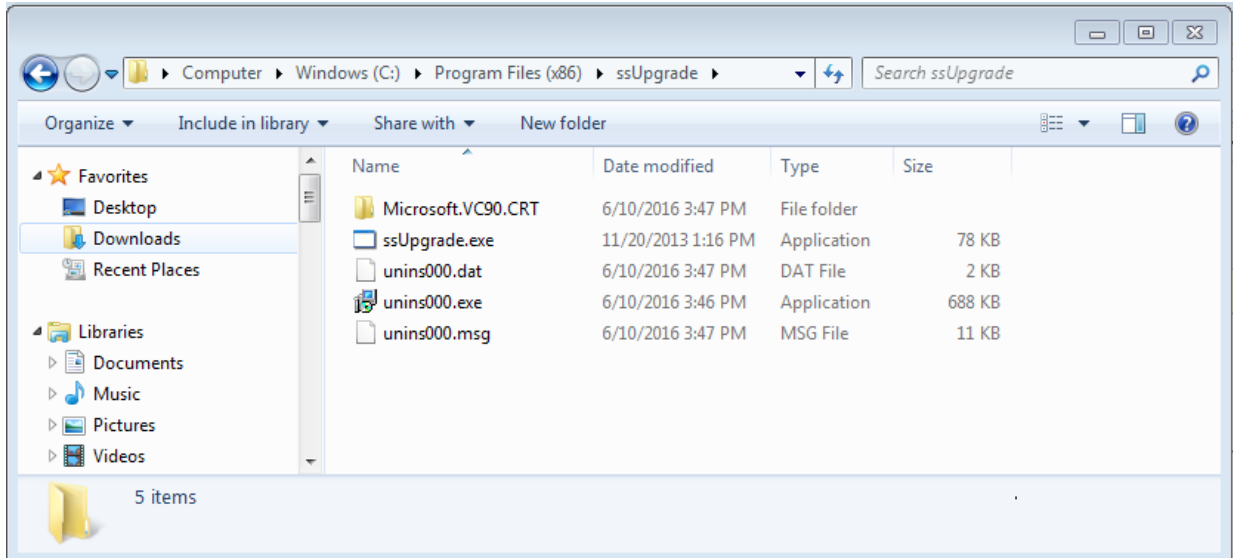


Figure 1 – Directory Installed on PC

On the same web page where the installer was obtained, there are links to download the latest firmware files for each type of EtherSeries device. The appropriate file should be saved to a convenient location on the PC (Downloads or Documents are recommended).

B) Connect the EtherSeries Device:

Make sure the one of the network interfaces of the PC is assigned to the same subnet as the EtherSeries device, then use a standard LAN cable to connect the PC to the device. Note that with newer models, either a straight-through or crossover cable may be used, but some older versions of hardware may require the crossover.

If it has not been done already, apply power to the EtherSeries device and give it several seconds to boot up.

C) Launch the Utility:

Double-clicking on the icon for ssUpgrade.exe will launch the utility and display the interface shown in Figure 2 below:

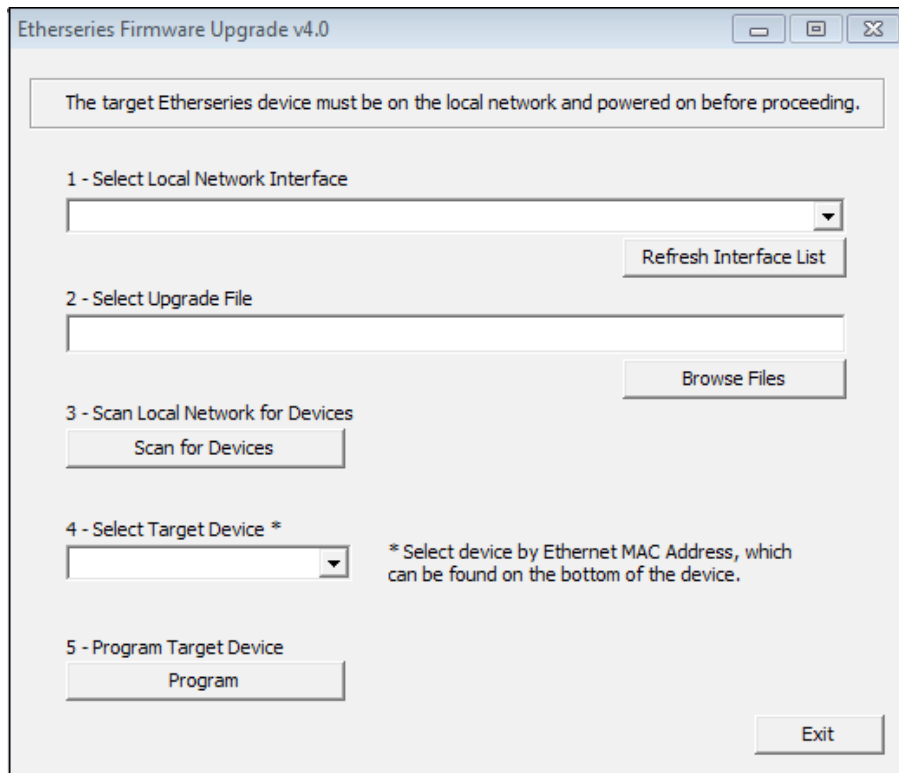


Figure 2 – User Interface of the ssUpgrade Program

On-screen instructions should be followed in order:

1 – Select Local Network Interface: This field should automatically be populated with a list of your PC's available network interfaces. If there are more than one, a drop-down list allows selection of the desired one. If an interface was activated after the program was launched, it may be added to the list by pressing the **Refresh Interface List** button.

2 – Select Upgrade File: Enter the path to the firmware file, or press the **Browse Files** button and navigate to the directory where the file was stored in step A), selecting the proper file either by double-clicking, or by highlighting it and pressing **Open**.

3 – Scan Local Network for Devices: Based on the firmware file selected above, pressing the **Scan for Devices** button will identify all EtherSeries devices of that type on the local network and populate the drop-down list used in the next step.

4 – Select Target Device: One or more device MAC address entries should be in the list, and the one selected must match that shown on the **Ethernet Address** sticker on the bottom of the device you are upgrading.

5 – Program Target Device: Once all the form fields are filled in, press the **Program** button to load the new firmware file to the selected device. This should take less than a minute, and the device will automatically reboot to activate the new firmware. ***Do not remove power to the unit while the update is in-process.***

If there are additional units of the same type needing updated, there is no need to quit the ssUpgrade program yet: Simply disconnect the unit that is completed, plug in and power up the next one and repeat steps 3, 4 and 5 for each unit.