



Download and Upload Instructions with the ASC/3 Software Utility

Purpose

This application note tells you how to use the ASC/3 software utility to:

- Upgrade the ASC/3 software or the Operating System.
- Download and upload configuration and database files, and logs to and from the ASC/3 controller.
- Upload logs from the ASC/3 Controller.


Introduction

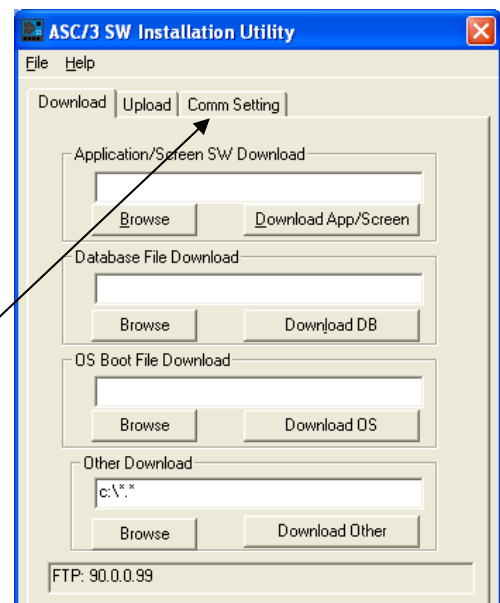
There are several ways to upgrade the ASC/3 software. The easiest way to upgrade is to use the ASC/3 Software Utility together with this application note.

Some sections of this bulletin refer to a serial connection. This serial connection is with a cable between the PC and the ASC/3, with the pins as given in the table below.

PC	ASC/3, Port 3A
9-Pin Female	9-Pin Female
Pin 2	Pin 3
Pin 3	Pin 2
Pin 5	Pin 5

Start Communication

1. If the software package is zipped, uncompress the Software Upgrade package.
2. Double-click the ASC3-NEMA-Software_Utility.exe (icon: ).
3. Select the "Comm Setting" tab.





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There are two possible types of communication between your PC and an ASC/3 controller, Ethernet and Serial. For your type of communication, obey the applicable instructions below.

1. Ethernet (FTP)

WARNING: The instructions that follow are written as if you know how to work with networks. If necessary, before you continue, get aid from an IT professional.

- a. Under “Communication Method,” select “FTP”.
 - b. Connect the Controller to your PC:
 - i. Use an available Ethernet port on your PC with a cross-over cable.
- OR
- ii. Use an Ethernet hub or Switch and a pair of patch cables.
 - c. Find the IP address and subnet of your controller.

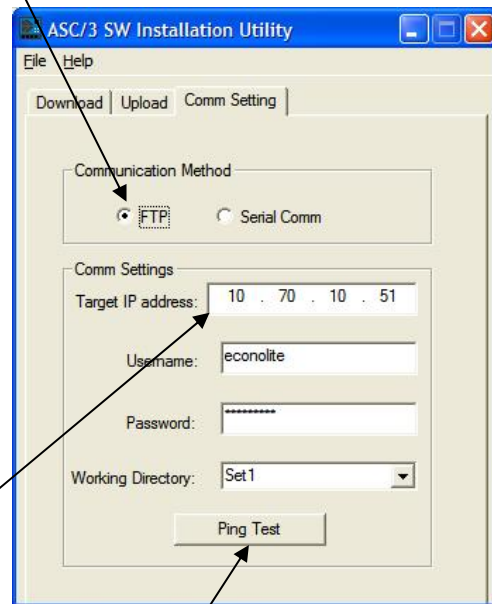
- i. Refer to ASC/3 application menu MM-1-5-5 or boot menu BOOT-9 (the typical default is IP 10.70.10.51 and subnet 255.255.0.0).

- d. Make sure your PC and Controller are on the same subnet (for example, if the controller IP address is 192.168.1.100, your PC IP address — of the Ethernet port selected — should could be 192.168.1.1, and the subnet mask should be 255.255.255.0 on both the controller and the PC). Select one of the methods below:

- i. Set the Controller IP address and subnet the same as that of the Ethernet port you selected on your PC.
- OR

- ii. Set the PC Ethernet port the same as that of the controller.

- e. Click [Ping Test] to make sure the 2 devices communicate — you should see reply messages from the ASC/3.





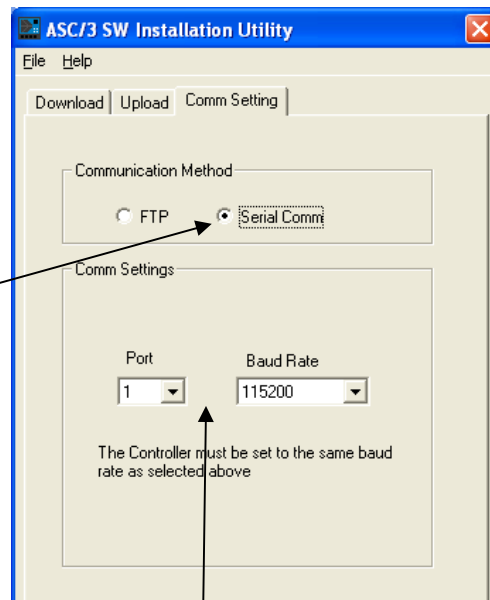
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2. Serial (Serial Comm)

- a. The ASC/3 controller must be in Boot Mode if you use serial communications.
 - i. To enter Boot Mode, simultaneously press [1] and [CLEAR] while you apply power to the ASC/3.
- b. Under “Communication Method,” select “Serial Comm.”
- c. Make the PC baud rate the same as the controller baud rate:
 - i. Select the baud rate as defined by the DOWNLOAD BAUD RATE parameter in BOOT-9.

OR
 - ii. Adjust the baud rate on the controller from BOOT-4-5.
- d. Prepare a Female-to-Female DE-9 null-modem cable.
- e. Connect the Controller Port 3A (TELEM) to an available serial communications port on your PC.
- f. Select the corresponding port and applicable baud rate in the controller.





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Download

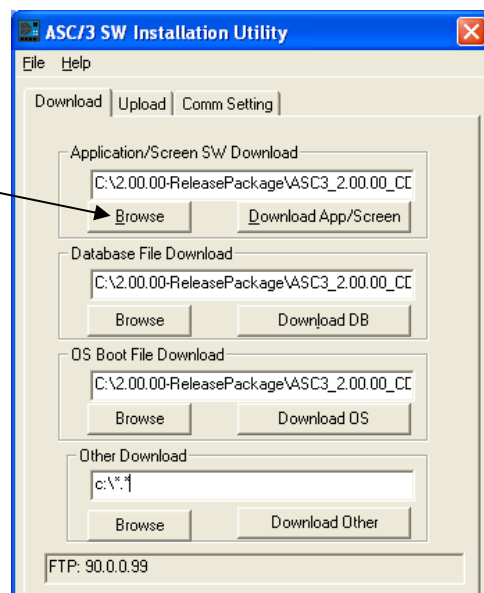
NOTE: These instructions are for the ASC/3 software utility in directory F:\ASC3\Release 2.5\ASC3v2.00.00

1. Application Download

- a. Make sure the directory specified by “Application/Screen SW Download” is found on your hard disk where you want to install the software utility and application version.
 - i. If not, click [Browse] to find the correct directory.
- b. Click [Download App/Screens].
- c. Make sure of the download.
 - i. If you use FTP, your transfer starts immediately.
 - ii. If you use Serial, obey the instructions on the display.
- d. If there were no errors, click [Finish].
 - i. If the transfer failed, start again at Step 1b.
- e. From the boot menu BOOT-5, select the asc3App that you installed recently.
 - i. If you are upgrading, asc3App will already be selected.
- f. Select one of the methods below to reboot your controller:
 - i. From the front panel, select BOOT-0 and press [1].

OR

 - ii. Power-cycle the controller.
- g. To make sure that the software application has updated, look at the SOFTWARE VERSION that is shown on the ASC/3 SIGN ON display (MM-8-5).
 - i. If the version has not changed, start again at Step 1a.





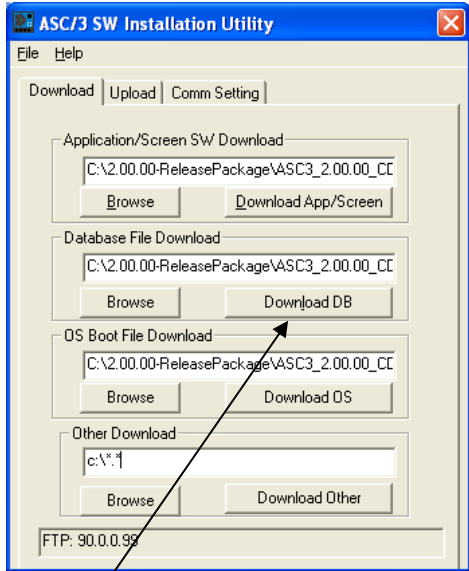
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2. Database Download

WARNING: Database download is a destructive operation that may change the input and output mapping of the controller. If you download an incorrect mapping, the intersection goes into flash. Before you download a database, use the ASC/3-Configurator to make sure you have the correct mapping for that controller and cabinet configuration.

- a. Make sure the correct path to the desired ASC3.DB database file is in the “Database File Download” field.
 - i. If not, click [Browse] and find the correct directory with the ASC3.DB file you want to transfer.
- b. If you selected the Serial download procedure, the working database can NOT be changed on a live intersection with this procedure. Thus, make sure your controller is in Boot Mode.

If you selected the FTP procedure, you can transfer the database while in Application Mode.
- c. Click [Download DB], 
 - i. Before the download starts, a dialog box comes into view and prompts you to select the database to download. This dialog box also shows the default database of the controller. If you select “Yes,” the database downloads to asc3.db and also makes another file, n9999.db, in the controller file system.
 - ii. This starts the transfer of your database of the ASC/3 controller.
 - For FTP transfers, the dialog shows the current status.
 - For Serial transfers, obey the instructions on the display.
- d. When you have completed the procedure, click [Finish].
- e. When you click [Finish], the Utility sends an NTCIP command to the controller to use the new database immediately.



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- f. If you use Serial communications for database download, it is necessary to reboot your controller. Select one of the procedures that follow:
 - i. If you are in boot mode, from the front panel, select Main Menu-0 and press [1].
OR
 - ii. Power-cycle the controller.
- g. After the Database is downloaded and takes effect, make sure that the communication ports are configured correctly.



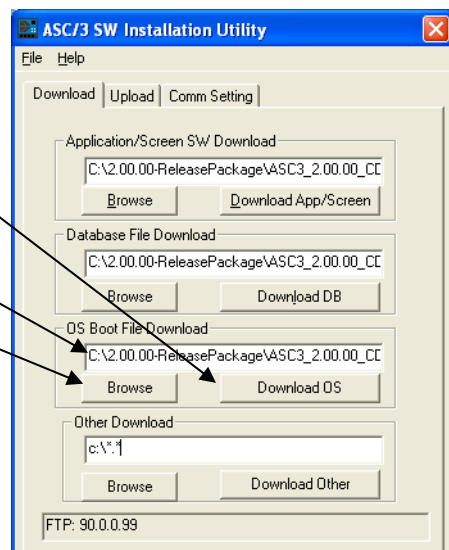
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3. OS Upgrade through a Serial Connection

NOTE: As of Version 3.00.04, the utility does NOT support a Serial Connection because the data transfer to the controller is NOT stable. Thus, it is necessary to upgrade the controller OS with the FTP server, as given below in Paragraph 4.

- a. Make sure the .OS image file is in the directory shown. An OS file has file extension “.os”
 - i. If not, click [Browse] to locate the correct directory.
- b. Click [Download OS]. This downloads the OS file shown.
- c. Obey the instructions on the display.
- d. When you have completed the procedure, click [Finish].



4. OS Upgrade through an FTP Server

WARNING: The instructions that follow are written as if you know how to work with networks. If necessary, before you continue, get aid from an IT professional.

- a. Make sure an FTP server is running with an IP address on the same subnet as the controller.
- b. Copy the OS image, included with the software utility application release, to the root of the anonymous user home directory.
- c. Change the name of the OS image to **osImage**.
- d. Put the ASC/3 in Boot Mode: simultaneously press [CLEAR] and [1] while you power-up the controller.
- e. Set the IP of the FTP server from menu BOOT-4-3.
- f. Go to BOOT-1-3-1 to start the transfer of the OS image file.
- g. To reboot your controller, select one of the procedures below:
 - i. From the front panel, select BOOT-0 and press [1].

OR

 - ii. Power-cycle the controller.



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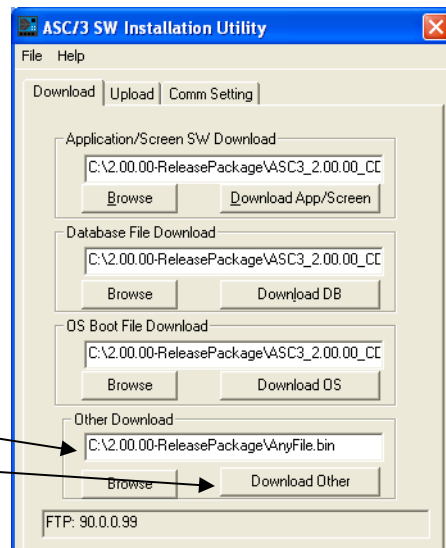
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5. Other Download (Auxiliary Files)

You can download auxiliary files (database and auxiliary applications) to the ASC/3 controller with the “Other Download” function. If there is enough free space, you can easily transfer the file with the SW Installation Utility.

NOTE: The utility keeps the same filename after it transfers the file to the controller.

- a. Write the full path and file name to the file you want to download to the controller.
- b. Click [Download Other]
 - i. If you have a Serial Connection, obey the instructions on the display.
- c. When you have completed the procedure, click [Finish].





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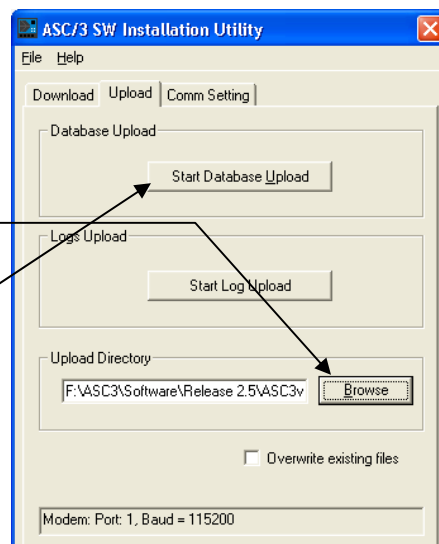
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Upload

6. Database Upload

Use “Database Upload” to get the database upload of a controller for documentation purposes or to transfer a configuration to another controller. At this time, to store these files, you do NOT need to select the directory and name.

1. Browse to the path where you want to upload the database.
2. To upload the database, press [Start Database Upload] and obey the instructions on the display.
3. During the upload procedure, the ASC/3 Software Utility continuously shows you the status.
4. When you are told to, press [Finished].
5. Lastly, the ASC/3 SW Utility will tell you to select a directory and a file name.





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7. Log File Upload

Use Log Upload to get the logs that are generated and stored in the ASC/3.

1. Browse to the path where you want to upload the database.
2. To upload the logs, click [Start Log Upload] and obey the instructions on the display.
3. During the upload procedure, the ASC/3 Software Utility continuously shows you the status.
4. When you are told to, press [Finished].

