

## Section 5.2

# Upgrading Network System Firmware

The Uponor Configuration Tool (UCT) software (A9090000) includes a utility, or program, called Flashloader. Flashloader upgrades the firmware that resides on the cabinet controls and Digital Zone Control Modules (DZCMs). Firmware is computer code that controls low-level functions of an electronic device. In the Network System, firmware manages functions like communication between devices and indicator lights.

**Note:** Field modules, such as the Furnace and Air Conditioning Control (FAC), do not require firmware upgrades as they use a different type of logic board and a different communication network than the cabinet controls use.

This section covers the following topics:

- Verifying the firmware version for a control
- Using the Flashloader utility

Before proceeding, make sure the following steps are complete.

- All UCT components are installed (**Section 1.5**).
- The computer is correctly connected to the Network System (**Section 1.6**).

### Verifying Firmware Versions

All controls within a single Network System should run similar versions of firmware. Devices that have very different firmware versions (for example, 21548 and 63358) may have trouble communicating. Uponor recommends upgrading the device(s) with older versions; contact Uponor Technical Support at 888.594.7726 to verify when an upgrade is necessary.

**Note:** When working with a new Network System not yet configured, it is good practice to verify all controls are using the same firmware version. Visit the Uponor website at <http://www.uponorpro.com/en/Technical-Support/Downloads.aspx> to download a later version of firmware.

Refer to the following steps to check the firmware versions for Network System controls.

1. From the **Main Menu**, click the **General Maintenance** button to display the **Maintenance** screen.
2. Click the **Device Versions** button. This window will display a list of devices along with their network address, firmware version and database revision. Only controls currently communicating will be listed.

### Using the Flashloader Utility



**Caution:** When upgrading a control's firmware, it erases the control's database. You will need to reconfigure or re-enter the setup information for the control if the database is not backed up or saved prior to a firmware upgrade.

Save the control's database to a file before upgrading the firmware, and reload the database after the firmware upgrade. See **Section 5.3: Saving and Loading Databases** for instructions.

**Note:** Do not make any setup changes while a firmware upgrade is in process.

Refer to the following steps to upgrade the firmware for a Network System control.

1. From the **Main Menu**, click the **General Maintenance** button shown in **Figure 5.2-1**. This displays the **Maintenance** window shown in **Figure 5.2-2**.



Figure 5.2-1: Main Menu Screen

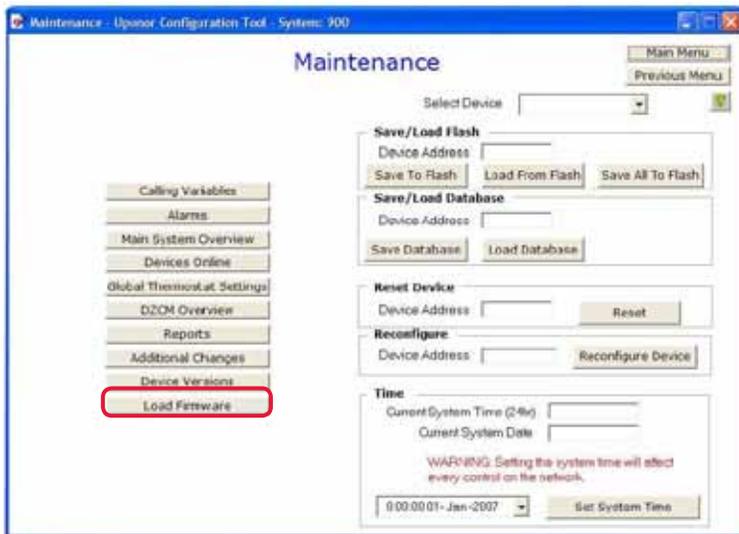


Figure 5.2-2: Maintenance Screen



Figure 5.2-3: Flashloader Dialog Box

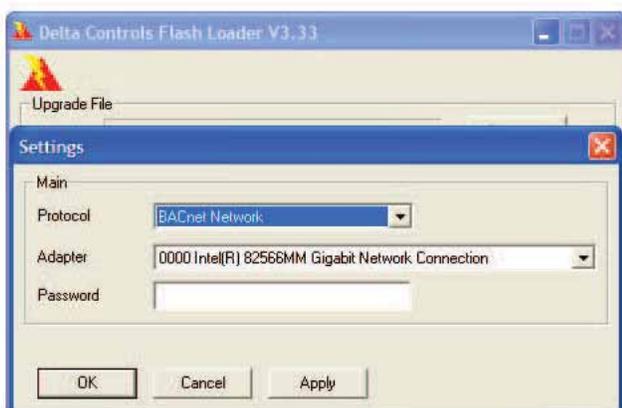


Figure 5.2-4: Flashloader Settings Dialog box

2. Click the **Load Firmware** button to open the Flashloader dialog box shown in **Figure 5.2-3**.
3. Click the **Settings** button to open a new dialog box shown in **Figure 5.2-4**.
4. Make sure the following fields are set correctly; refer to **Figure 5.2-4**.
  - a. The Protocol field should display “BACnet Network” to allow Ethernet communication.
  - b. In the Adapter field, select the driver for wireless or wired connection, depending on how the computer is connected to the Network System. If any symbols appear in this field (for example, \*\*\*\*), highlight and delete them. No password is required.
5. Click **Apply**.
6. Click **OK** to return to the Flashloader dialog box shown in **Figure 5.2-3**.
7. Verify the Filename field displays “UPONOR V333 B-73549.FLS”.

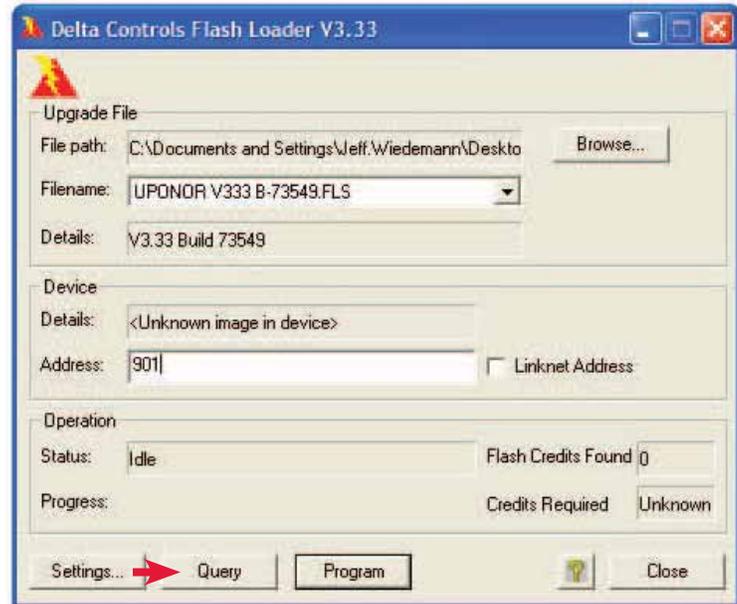
**Note:** As of January 2011, UPONOR V333 B-73549.FLS is the most current version of firmware. To download the most current firmware files, visit [www.uponorpro.com/en/technical-support/downloads.aspx](http://www.uponorpro.com/en/technical-support/downloads.aspx).

8. If this field shows another file, click the **Browse** button and navigate to the correct path and file. Highlight the file name. Click **OK**.
9. If Linknet Address is checked, uncheck it.
10. In the Address window, enter the address for the control that requires the firmware upgrade. **Section 2.2: Basic System Setup** explains how to find a control’s address.
11. Check the last two digits of the address to verify the right type of control is selected.
  - a. The Router Main Control (RTR) (A9011000) ends in 00.
  - b. The DZCMs (A9011500) end in 01 through 12.
  - c. The Primary Equipment Control (PEC) (A9012000) ends in 17.
  - d. The Supply Water Temperature Control (SWT) (A9013000) ends in 18.
  - e. The Zone Pump Control (ZPC) (A9014000) ends in 19.

12. Click on the **Query** button to verify the control is communicating. If the query is successful, the status window will display “Query Complete.”
13. In the new window that opens, click **Program** and then **OK**.

Flashloader will begin upgrading the firmware. When the upgrade is complete, the Status field, shown in **Figure 5.2-5**, will display “Update complete.”

 **Warning:** Make sure that communication to the control is not interrupted during the firmware upgrade. Disconnecting power to the control or unplugging the Cat5 wire will cause a loss of communication. An interruption in communication will erase system files and the control will no longer communicate. A control damaged in this way must be returned to Uponor for replacement or repair, and it will not be covered under the warranty policy.



**Figure 5.2-5: Flashload Upgrade Complete**

