

Software Update Procedure

New features, functions, and bug-fixes are easily provided by software updates to the EcoZone Vivarium Controller.

Updating the software involves connecting the EcoZone Vivarium controller to an Ethernet network, downloading both the PC-based **Flash Loader Client** application `Flash_Loader_Client.exe`, and downloading the .hex programming file `Ez400_v<version>.hex`. Please note that as of this writing, the Flash Loader Client application, required to perform the update, is only available for Windows computers (sorry Mac and Linux users, but hopefully we can address this in a future release).

Once network connectivity is confirmed and the files are downloaded, the Ez400 Vivarium Controller must be power-cycled to enter software update mode, and the **Flash Loader Client** application is launched to perform the update.

Please review the detailed instructions below before beginning the update procedure, and check the ecozone vivarium website for new releases and additional information.

Steps for EcoZone Controller Setup

Before you begin, please review the summary and detailed procedures for updating Ez400 Vivarium Software. The steps are summarized below.

Step1: Verify the Ez400 Network Connectivity

These steps allow you to verify the IP address of the Ez400 Vivarium controller, and that it is connected to the network.



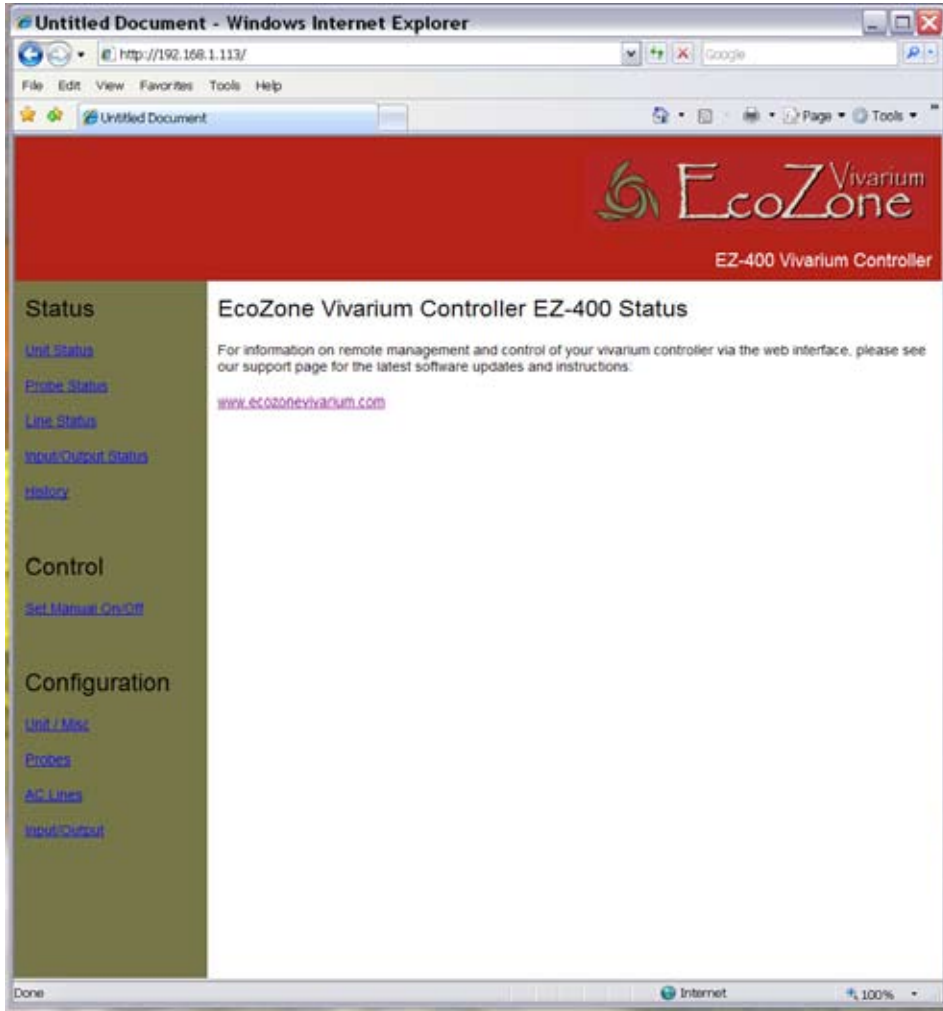
Network Address:
192.168.1.100

Verify your specific Ez400 unit IP address before you begin by checking the Network Address LCD display.

You should see something like the example, but your specific Ez400 IP address may differ.

To verify your Ez400 Vivarium Controller is connected and reachable on the network, open a web browser (internet explorer, Firefox, etc.), and type the Ez400 IP address into the address bar.

If the network connection is good, you should see something like that below:



Step2: Download the Flash Loader and Programming Files

Two download items are required for the software update. These are the Flash Loader Application, and the Ez400.hex programming file.

To download these files, navigate your web browser to the EcoZone Vivarium website support page <http://www.ecozonevivarium.com/support>, to locate and down-

load the necessary program files.

Download the 2 necessary files to your PC desktop, or other convenient location where you can easily locate them:

Flash Loader Client: Flash_Loader_Client.exe

Ez400 programming file: ez400_<version>.hex
<**version**> is a numerical field that indicates the SW version downloaded.

Step3: Place the Ez400 Unit into Software Update Mode

Place your Ez400 Vivarium Controller into Software Update Mode by power-cycling the Ez400 Vivarium Controller while holding the **BACK** key.

Once the Ez400 Vivarium Controller has entered software update mode, you will see the following on the LCD display:



```
SW Updater v1.00
192.168.1.100
```

Note that the actual IP address on your device may differ from that above!

Note:

To EXIT software update mode and return the “normal” running mode, Power-cycle the Ez400 Vivarium controller while holding the ENTER key.

Warning:

Only exit software update mode if the software update has **not** started, as indicated by the “progress” indicator of the Flash Loading Facilitator application.

If the Flash Update procedure has proceeded to the “Update Firmware” step, you must complete the process from beginning to end. Attempting to exit an in-process update may render your Ez400 unit inoperable!

Step4: Launch the Flash Loader Client Application

Click the *Flash Loader Client* icon to launch the previously downloaded Flash Loader Client application **Flash_Loader_Client.exe** from your desktop, or your download location.

**Note:**

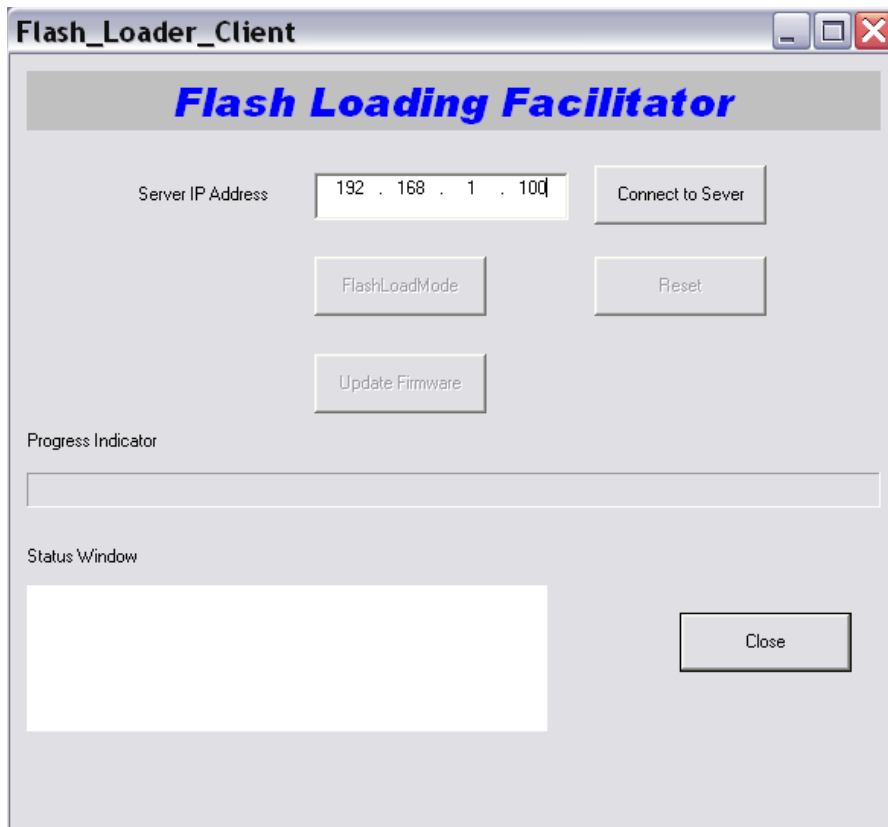
The Flash Loader Client application is downloaded from the EcoZoneVivarium website along with the Ez400 programming file.

The Flash Loader Client application, required to update the Ez400 Vivarium Controller software, is only supported on the PC.

Sorry, MAC and Linux users. Hopefully we can address this issue in a future release.

Step5: Connect to the Ez400 Vivarium Controller

Inside the *Flash Loader Client* window, type the Ez400 unit **IP address** as viewed on the front panel LCD screen, then click on the Connect to Server button.



After connecting to the Ez400 unit successfully, you will see the message Connection Established in the Status Window portion of the Flash Loader Client application. Also, the Upgrade Firmware button will no longer be grayed out.



Step6: Update the Firmware

Inside the *Flash Loader Client* window, click the **Update Firmware** box. When prompted, select the previously downloaded *ez400_<version>.hex* file for update.



Step7: Wait for Update Completion

Wait for the download to complete, DO NOT power cycle. The Ez400 Vivarium controller will reboot automatically when the update is completed.

As the Ez400 unit updates, the progress indicators on the LCD screen will increase. See the example below.

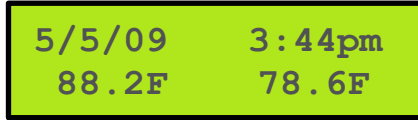
Ez400 Unit Update in Progress DO NOT DISTURB:



After the update is complete, the Ez400 unit will restart automatically, and the unit

will display the main screen.

Ez400 Unit Update Completed, After Restart:



Warning:

Do not disturb the unit power during an in-process software update, as indicated by the Progress indicator on the front panel LCD display. Once the update is complete, the unit will restart automatically.

Removing power while a software update is in-process update may render your Ez400 unit inoperable!

If this situation occurs, try performing a power-cycle while holding the BACK key to re-enter software update mode, to re-enter Software Update Mode.

If this does not work, then the unit must be returned to EcoZoneVivarium for re-programming.

