

Updating Device Firmware Via FTP

Summary

For some tasks, updating a device's firmware via FTP is preferable to a standard update from a host system. In some situations, such as reverting to an older firmware build, an FTP update is the only way to accomplish a specific firmware management task. This guide will highlight the following steps in this process:

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Note that only current generation products support the option to update firmware via FTP. Legacy products do not support this feature. This guide covers the L300, M300, and N-series device models.

Acquiring Firmware Files

The files needed for a firmware update will vary depending on the device model(s) you're working with. Updated firmware files are included with each progressive build of vSpace. The latest versions of vSpace Server software and N-series firmware can be found at <http://www.ncomputing.com/support/software-downloads>.

vSpace 4 installations store individual firmware files in:

C:\Program Files\Common Files\NComputer

vSpace 6 installations store individual firmware files in:

C:\Program Files\NComputing\NComputing vSpace\Bootsrv

For the L-series, the following files should be copied from your vSpace folder(s) to your FTP host location:

- **Index2.txt**
- **l300_FW_ver_n_n_n_n.tar.gz** (where n_n_n_n is the version number)

For the M-series, the following files should be copied from your vSpace folder(s) to your FTP host location:

- **catalog.txt**
- **m300_FW_ver_n_n_n_n.tar** (where n_n_n_n is the version number)

For the N-series, firmware files are offered separately for download as the devices are intended for use with Citrix environments rather than vSpace servers. The N-series firmware file conforms to the following format:

- **Nxxx_FW_ver_n_n_n_n.tar.gz** (where n_n_n_n is the version number)

Setting up an FTP Host

Perhaps the easiest way to set up the needed FTP environment is to simply add a Windows FTP server onto one of your vSpace hosts.

NComputing doesn't recommend any one FTP server as better than another. However, open source options like FileZilla Server can easily be configured to perform the firmware update role. The configuration and feature set of each FTP application will vary from one manufacturer to the next, so be sure to research your options carefully to find the best match for your environment and needs. Refer to the user manual and support resources of your chosen FTP server for instructions on setup and administration. For the purpose of this guide, we'll provide an example setup using FileZilla.

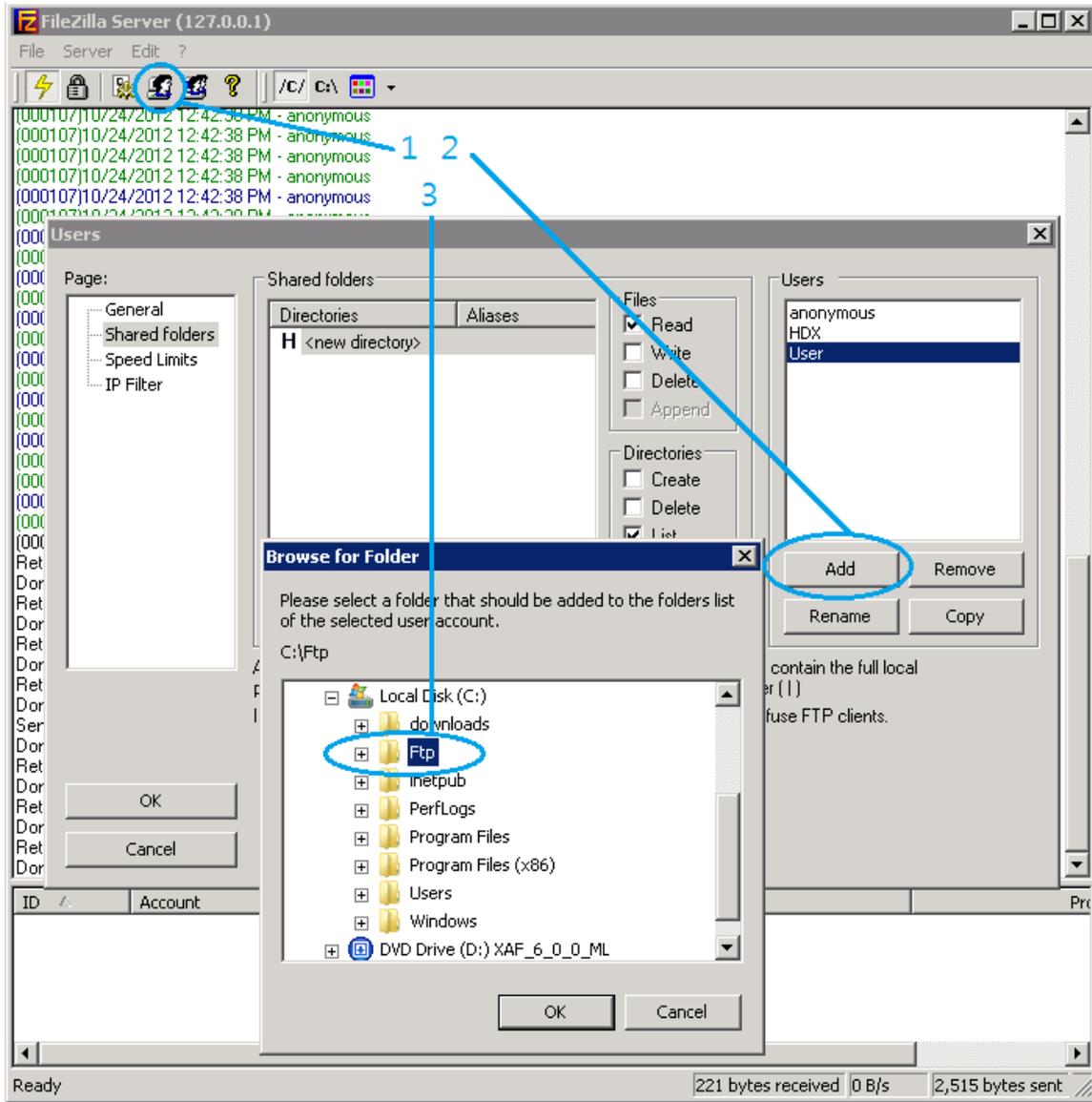
Note: Your FTP server's default file transfer type **MUST** be set to "binary mode." Since the installation default for many FTP server products is "ASCII mode," you may need to make a setup modification on your chosen server.

If you wish to use an FTP server that's completely separate from your vSpace hosts, you'll need to copy the files outlined in the previous section to the USERID's configured default folder on your FTP server. If you decide to use your vSpace server as your FTP server, most FTP server applications will let you simply flag the default vSpace folder(s) as shared via FTP.

FileZilla Example Setup

In the case of FileZilla, hosting an existing folder on your host system is a simple process. Once installed, open the FileZilla server interface and complete the following steps:

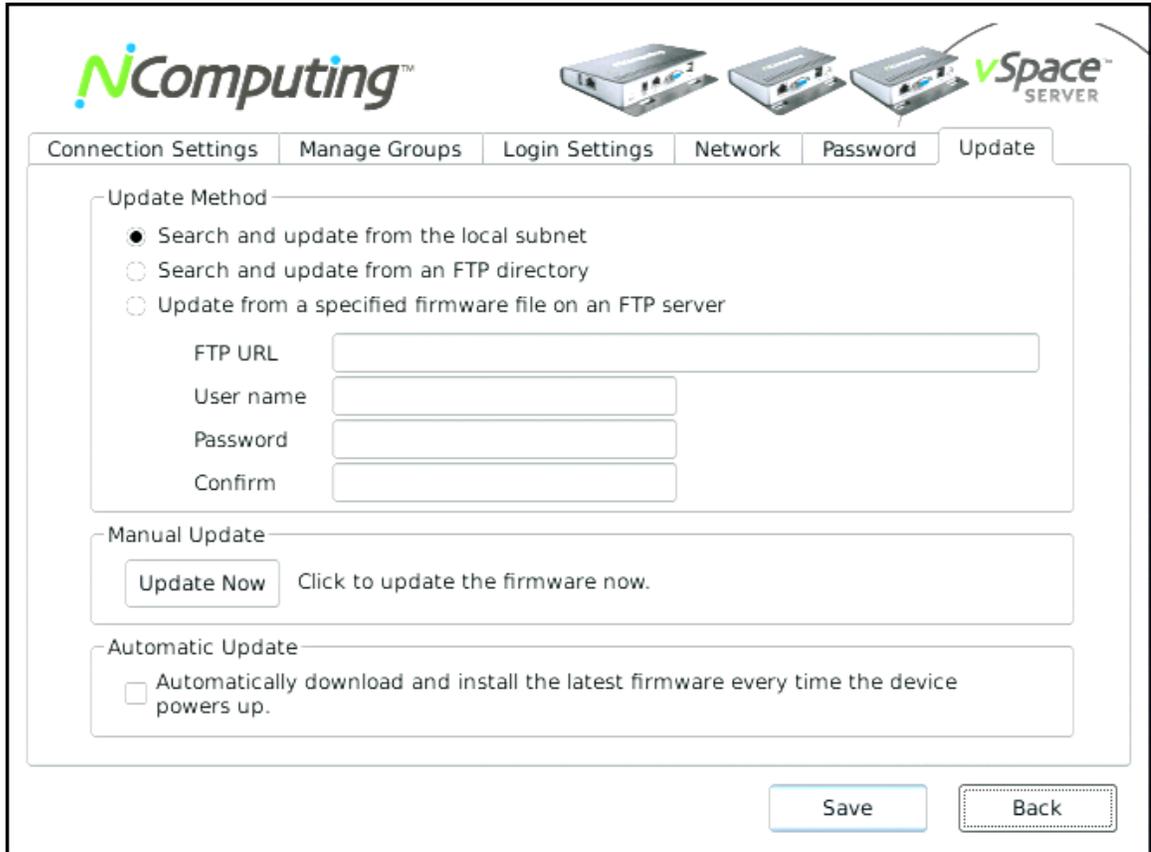
1. Click on the **Users** icon at the top left of the FileZilla Server window.
2. Click the **Add** button under the Users section to the right of the window and create a new user. (This will be the user account you add to your NComputing device later in this guide)
3. **Add a new folder** under the Shared Folders section and select the folder containing your firmware files. This can be the folder mentioned in the previous section, or any other folder if you've decided to host the files elsewhere. (Note the folder's path as it will be important later in this guide)



Your firmware files are now shared and available for download via FTP by your devices.

L300 / M300 Firmware Update Via FTP

1. From the device GUI (displayed prior to logging into a desktop session), click “Device Setup” and navigate to the Update Tab as pictured below.



The screenshot shows the NComputing GUI with the 'Update' tab selected. The 'Update Method' section contains three radio buttons: 'Search and update from the local subnet' (selected), 'Search and update from an FTP directory', and 'Update from a specified firmware file on an FTP server'. Below these are input fields for 'FTP URL', 'User name', 'Password', and 'Confirm'. The 'Manual Update' section features an 'Update Now' button and the text 'Click to update the firmware now.'. The 'Automatic Update' section has a checkbox for 'Automatically download and install the latest firmware every time the device powers up.'. At the bottom right are 'Save' and 'Back' buttons.

2. Select “Update from a specified firmware file on an FTP server” as your **Update Method**.
3. Next, enter the **FTP URL** for the firmware file and the **User Name** and **Password** needed to access the FTP Server. The FTP URL will include the IP address of the server that the FTP folder resides on and the full file name (eg: ftp://192.168.0.12/Nxxx_FW_ver_1_3_7_2.tar.gz).
4. Lastly, click the **Update Now** button to begin the update.

Note: The firmware update settings you’ve just configured can be saved as part of the device’s configuration profile and “pushed” to similar devices using the vSpace Console or vSpace Management Center. For instructions on configuring multiple devices using device profiles, consult the device or software user manual appropriate for your deployment at <http://www.ncomputing.com/support/documentation>.

N-series Firmware Update Via FTP

1. From the device GUI (displayed prior to logging into a desktop session), click the **Setup** button (gear icon) in the bottom left portion of the screen and navigate to the **Device Tab**.



The screenshot shows the NComputing device GUI with the 'Device' tab selected. The 'Firmware' section is active, showing options for 'Search for updates' and 'Update from URL'. The 'Update from URL' option is selected. Below this, there are input fields for 'User', 'Password', and 'URL' (containing 'ftp://1.1.1.1/file.tgz'). An 'Update' button is at the bottom of this section. The 'Management Server' section shows 'Discovery Enabled' and a 'Services' button. The 'Device info' section displays 'SN: 20001318', 'MAC: 00:0f:e0:26:c6:8d', and 'Firmware: 0.1.8-1-rc'. A 'Reset certificates' checkbox is also present. The status bar at the bottom shows 'Status: CONNECTED: 10.4.0.169'. A 'Save' button is located in the bottom left corner of the GUI.

2. Select "Update from URL" as your update method.
3. Next, enter the **User Name**, **Password**, and **URL** for the firmware file on your FTP server.
4. Lastly, click the **Update** button to begin the update.