How to Update L-300 Device Firmware via FTP

This document explains how to update L-Series access terminal to a *specific* version of firmware. This way, you will have the ability to migrate your device(s) to any newer or earlier version of any vSpace platform.

We will use an example in order to illustrate the process. However, keep in mind that the file names below can vary depending of what firmware you you currently have at the terminal and what is the target firmware you are aiming to update to.

This is the scenario:

An L-300 device has firmware 1.8, the matching firmware of vSpace 7. This firmware is particular and great for this example. In fact, there are some steps in this document that may apply only to this specific firmware. We will highlight those for you later.

The goal at hand is to revert to version 1.8 to an earlier firmware version of vSpace: Build 1.6, which is the matching firmware of vSpace 6.

This process can only be done at the terminal. There will be no involvement through the vSpace Console.
You will need to enter the *Device Setup* and the *Update Tab*. There, you will see the option for **FTP update**.

1.0 Setting up the FTP

1.1 **Create the FTP folder.** Create a new folder in a location at hand. For example, you may choose to create your FTP folder in the *C:\Users \Administrator\Documents*. You will be copying your target firmware files to this location.

1.2 **Copy the firmware files of the target vSpace version you want to update to.** As we mentioned before, every version of vSpace you download and install, includes matching firmware files, which the NComputing devices access in case of an update. These firmware files reside in the following locations:

vSpace 4:
C:\Program Files\Common Files\NComputer

vSpace 6:
C:\Program Files\NComputing\NComputing vSpace\Bootsrv

vSpace 8:
C:\Program Files\NComputing\NComputing vSpace Server for Windows \Bootsrv
(Also, the firmware files are offered to you in the .zip folder containing the vSpace installer)

Once you have identified the folder containing the firmware files. You will only need to copy two files to your FTP folder:

- *index2.txt*
- *L300_FW_ver_x_x_x_x.tar.gz*
(Here, the "x" represents the numeric value of the desired firmware version)

1.3 **Configure your local security as your FTP software requires**. Make sure that your firewall and security protocols are configured to allow access to ports that your FTP software of your choice demands. For this example, we will assume that there is only a local Windows Firewall, and that it is turned off in order to allow free access to the FTP location.
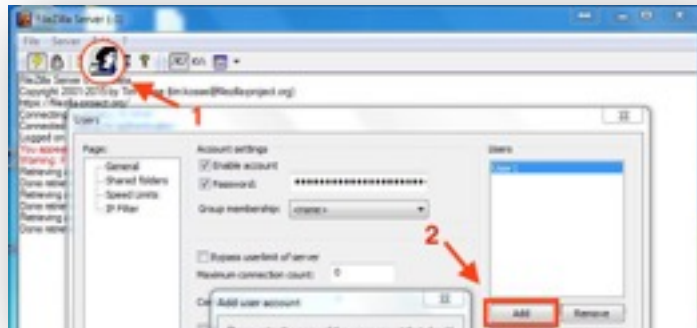
1.4 **Setup your FTP Server software.** For the purpose of this document, we will use *FileZilla* as an example. If you have a preference on FTP software that you may be more familiar with, feel welcome to skip over to the next section.

Download and install the **server version** of *FIleZilla*.

Through the installation process, you will be asked to configure startup settings, connection to server and added components. During this lab exercise, installation was configured leaving all defaults as they are. In a simple and isolated lab environment, there should be no need to configure anything. Feel free to configure according to the needs of your local environment.
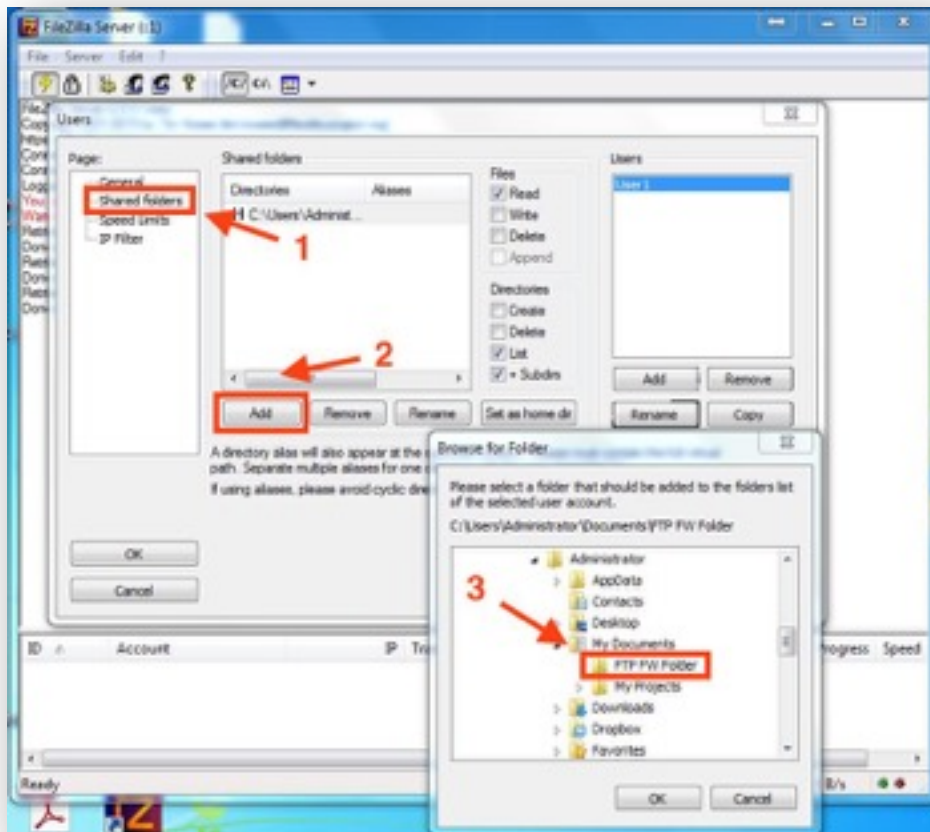
1.5 **Create your user in the FTP server software.** In the FileZilla Window, click the user icon located right under the *Edit* menu, (1) or go to *Edit>Users>General>Add.* (2)

When choosing a user name for this account, we suggest keeping it simple by adding no spaces and no special characters. A good example for a username can be: "User1".

Also, **a password must be set** on the user account. Still, under the *General* Page, click on the *Password* checkbox.

1.6 Set the shared folder in the FTP server software. Move to the *Shared Folders* page. [1] Click *Add*. [2] Browse for your FTP folder. [3] Once you click *OK*, the path of your FTP location will be clearly displayed in the *Shared Folders* section of this window.

2.0 Setting up the NComputing Access Terminal

2.1 Isolate the terminal from any vSpace servers. (vSpace 7 firmware only)
Be sure that your access terminal is out of reach from any vSpace Servers in your network. This will eliminate the possibility of having a set pre-configured profile pushed to the device by accident.

2.2 Reset the device to factory settings. (vSpace 7 firmware only) In the specific case of the 1.8 firmware, this step will help the terminal release the current management zone configuration.

Here is how to do the mentioned hard reset:

  • Set a password on the device. *Device Info>Password*
  • Once the terminal returns to the main menu, click on *Device Setup*. A dialog window will appear asking for the password. At that point, enter the key combo: *CTL+SHIFT+END*.
  • Another dialog window will confirm the factory settings command.
  • Your device will take about a minute to reboot.

The terminal will reboot and may display a dialog window that reads: *Scanning Local Network for Management Servers*. This is a good thing, since it indicates that the terminal successfully let go of the management zone configuration. For now, click cancel.

2.3 Set up the FTP folder location at the device firmware. Go to *Device Setup>Update Tab* and click on the radio button next to *"Update from a specified firmware file on an FTP server"*.

Enter the URL of the Server. You will need the IP address and target firmware filename.

You can obtain the **IP address** of your **host computer** using *Command prompt*.

following:

- FTP URL
- Go to the *Start* Menu
- On the query box to *search programs and files,* type *CMD*
- Click on *CMD.exe*
- Once you see the *Command Prompt* window, Type *ipconfig*
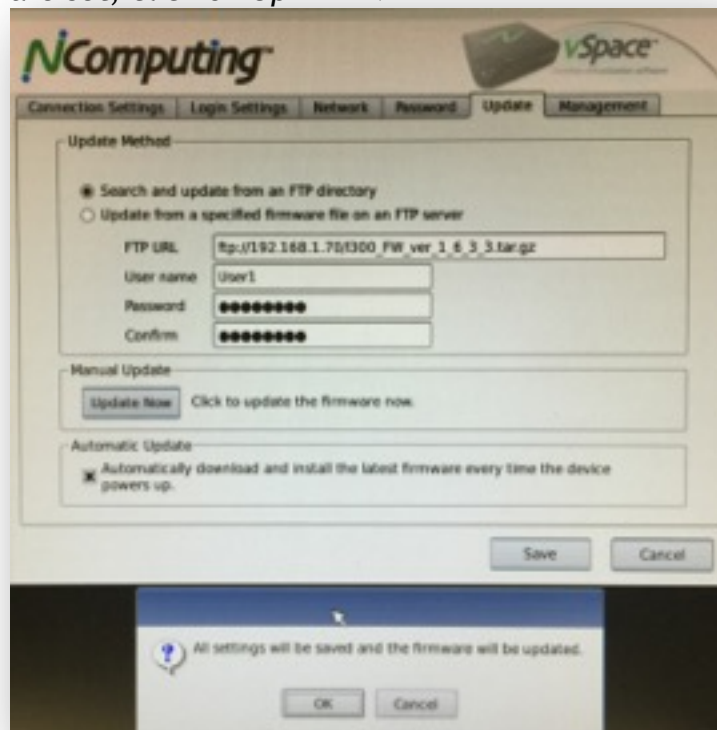- The information you need is the *IPV4 Address*

At the L-300 terminal, back in the *Device* tab, choose the radio button next to *Search and update from an FTP directory.*
The full URL is composed of the host IP and target filename **separated by a forward slash.**
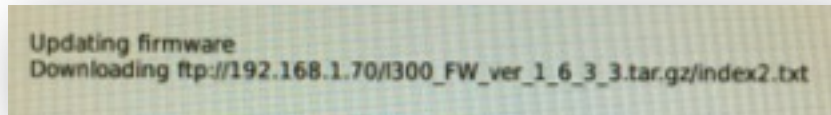A good example of this would be the following:

- FTP URL: *ftp://192.168.1.70/l300_FW_ver_1_6_3_3.tar.gz*
                      NOTE: The target filename is case sensitive.
- User name: *User1*
- Password: *(password)*

Once all fields are set, click on *Update Now*

A dialog will appear confirming: *All settings will be saved and the firmware will be updated.* Click *OK.*

At this point, the device should report progress downloading the firmware files.

Updating firmware
Downloading ftp://192.168.1.70/I300_FW_ver_1_6_3_3.tar.gz/index2.txt

Eventually, the terminal will show only one more dialog window before rebooting: *Updating firmware. Writing the latest firmware to the device, DO NOT TURN POWER OFF*.

(vSpace 7 firmware only) In case you get a secondary window insisting to scan for management servers. You do not have to click *Cancel*. This message should not interrupt the firmware burn.

Once the process is done, the device will restart by itself. The screen may not show an image for several seconds.

Once you see the main menu, if you click on *Device Info,* the firmware version should be at the desired target value.