



Install & Configure FTP Services on Novell NetWare 4.11

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Hardware/Software Requirements

- The NetWare server must be running NetWare 4.11
- TCP/IP must be loaded and configured. Refer to “Installing TCP/IP Services on Novell NetWare Servers” at:

<http://www.more.net/technical/netserv/servers/novell/nw3x4x/nw312-41install-tcpip.html>

Before You Begin

1. Mount the FTP Services CD-ROM (NWUXPS) as a volume on the NetWare 4.11 server.
*Note: If you are using a **non-ide** disk, you might need to download the appropriate driver (aha1740.dsk) to communicate with the Host Bus Adapter to which the CD-ROM drive is attached. This driver should be placed in the `sys:system` directory. The driver can be loaded from the command prompt or included in the `startup.ncf` file.*
 - At server console type `load cdrom`
 - At server console type `cd device list` or `cd volume list` to display cd-rom volume name.
 - At server console type `cd mount nwuxps`
2. Verify NFS name space is added to the volume.
Note: NFS name space is not essential to the functionality of the FTP server. However, to be able to get or put files with names longer than 8.3 (DOS name space -- eight characters plus three extension characters) on the FTP server, NFS name space must be installed. NFS name space accepts file names up to 255 characters and is case sensitive.
 - At server console type `volumes`
 - To add NFS, at server console type `add name space nfs to <volume name>`
Note: You only need to add NFS name space to the volume once. You then need to edit `startup.ncf` to include the statement `load nfs`

Installation

1. At server console type `load install`
2. From the Install Menu select Product Options
3. Select Install a Product Not Listed
4. Press F3.
5. To change path to installation files type `nwuxps:install`
6. When “There is a `readme.txt` file on product...” statement appears press ESC.
7. When asked “Do you want to stop installation...?” select No.
8. To accept the default host name press ENTER.
9. To accept the default boot drive (usually drive `C:`) or specify correct boot drive press ENTER.
10. To install Online Documentation select Yes.
11. To install Document Viewer select Yes. (If document viewer is already installed, select No.)
12. Ignore “`hosts.db` does not exist” message if it appears.
13. After files have been copied, `unicon.nlm` automatically loads.
14. Enter User Name and Password for Admin account when prompted.
15. Select Local DNS and Local NIS
16. Complete DNS and NIS information.

Note: By default the domain server name ends with `.com` The name must be edited to reflect an appropriate extension: for example, `.k12.mo.us`, `.lib.mo.us`, etc. The NIS/DNS Server information should reflect the appropriate IP Address. For additional information see the document entitled “Domain Name Services & Naming Guide” at

<http://www.more.net/services/managed/dns/index.html>

17. When prompted to continue to install Name Services select Yes.
18. When asked “Do you want DNS for specific subnetworks?” select No.
19. From Initialize Databases window select No.

20. To start services in Running Services window:

- Press INSERT
- Select DNS Server
- Press INSERT
- Select FTP

21. To exit installation press ESC until installation program closes.

22. Restart server.

Configure FTP Services

1. At server console type `load unicon`
2. Enter User Name and Password for Admin account when prompted.
3. Select Manage Services.
4. Select FTP Server.
5. Select Set Parameters.

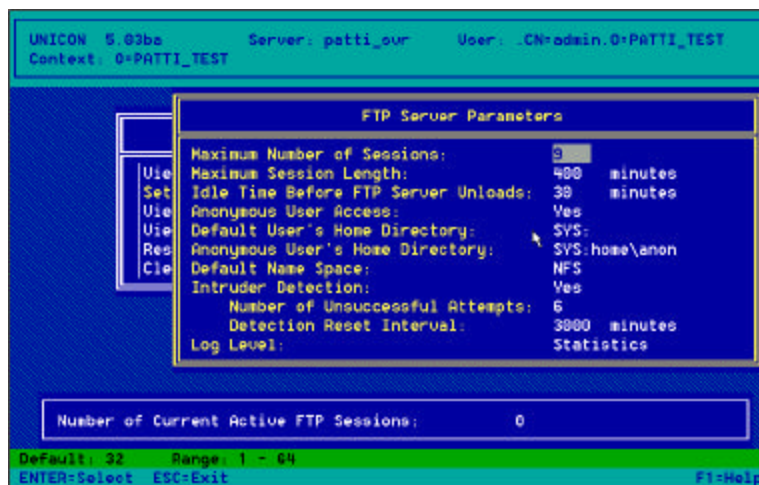


Figure 1 FTP Server Parameters Screen

The following options can be set from the FTP Server Parameters window (Figure 1).

- Maximum Number of Sessions---the number of FTP sessions that can run concurrently.
 - Maximum Session Length---how long a session can remain open.
 - Idle Time Before FTP Server Unloads---how long the FTP server remains loaded when there are no open sessions.
 - Anonymous User Access---whether an anonymous user can access the FTP server.
 - Default User's Home Directory---the home directory for a user who does not have a home directory on the NetWare server. The utility prompts you for the volume name and directory name.
 - Anonymous User's Home Directory---the home directory for anonymous users. The utility prompts you for the volume name and directory name.
 - Default Name Space---the default name space for all users. You can select DOS or NFS name space.
 - Intruder Detection -- When intruder detection is enabled, the server records unsuccessful login information in the Intruder Log File. The server also sends an SNMP alert message to the Network Management Console. The next two parameters control when the information is logged and the alert sent.
 - Number of Unsuccessful Attempts – Number of unsuccessful attempts allowed before information is logged. Number of attempts is tabulated only within the time period specified by the reset interval.
 - Detection Reset Interval -- Time interval within which unsuccessful login attempts are tabulated.
 - Log Level -- Information recorded in the FTP Log file. (None – records no information, Logins – records login information only, Statistics -- records the number of files copied to and from the FTP Server including login information, File -- records a description of all FTP transactions including login and statistics information.)
6. To exit press ESC. Save changes when prompted.

Configure an Anonymous FTP Account

The FTP service lets you create an account for general FTP use. The NetWare user account created is named Anonymous. When anonymous users log in, they are able to access the specified login directory and any subdirectories under it. Unless given specific permission, they cannot access files above their specific login directory. By default, the login directory for the anonymous user is `sys`. If security is a concern, it is better to specify an isolated subdirectory as the login directory.

1. At server console type `load unicon`
2. Enter User Name and Password for Admin account when prompted.
3. Select Manage Services.
4. Select FTP Server.
5. Select Set Parameters.
6. Enable Anonymous User Access field. Press ENTER to change default selection.
7. Specify path to Anonymous User's Home Directory. If the directory you want to designate as the home directory does not exist, select Yes when prompted to create it.
8. To exit FTP Administration press ESC. Save changes when prompted.
9. To return to Main Menu press ESC.
10. Select Perform File Operations.
11. Select View/Set File Permissions.
12. Press INSERT to list available volumes.
13. Highlight Anonymous User's home directory and press F9 to display the Directory Information (Figure 2).

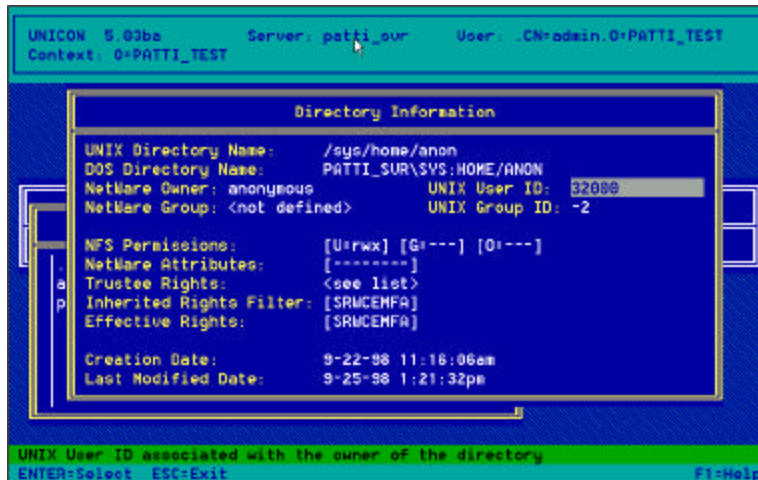


Figure 2 Directory Information Screen

14. Recommended NFS permissions for the Anonymous User are [U=r-x][G=---][O=---]

File permissions regulate file access. They control who can read, write, or execute files. File permissions in NFS are specified for each file and directory. The three basic permissions are:

- r (read) – Read permission on a file grants the right to read the contents of the file. Read permission on a directory implies the ability to list all the files in the directory.
- w (write) -- Write permission implies the ability to change the contents of the file or create new files in the directory.
- x (execute) -- Execute permission on files grants the right to execute them. This right applies to program files. Files that are not programs should not be given the execute permission. For directories, execute permission allows you to enter the directory and to access any of the files contained in the directory.

NFS permissions exist separately for user, group, and others. User (u) permissions apply to the owner of the file. Group (g) permissions apply to all members of the group associated with the file. Permissions for others (o) apply to anyone else. The default owner of a file is the creator. The group is inherited from the parent directory.

When connecting to a NetWare FTP server, users with existing NetWare accounts are automatically placed in the home directory specified by their NDS user object properties. The "Default User's Home Directory" setting in Unicon only applies to users who do not have a default directory set. Users can access any file or directory on the FTP server to which they have rights. Bindery servers can also be accessed, as long as the username and password match and file system rights have been granted.

15. To exit press ESC. Save changes when prompted.

16. To exit Unicon utility press ESC.

Access FTP Server Using User Account

1. Select Start, Programs, MS-Dos prompt.
2. Type `ftp <server_name>` RETURN (for example, `ftp wherever.k12.mo.us`).
3. Enter user name and password
4. The FTP server will place the user in the user's NDS home directory (if defined). If the user's home directory is in the `SYS:USERS` directory, the user will be placed in that directory by default.

Restrict FTP Access

You can restrict FTP access to specific users, client hosts, or IP addresses by editing the `RESTRICT.FTP` file using the Unicon utility.

1. At server console type `load unicon`
2. Enter User Name and Password for Admin account when prompted.
3. Select Manage Services.
4. Select FTP Server.
5. Select Restrict FTP Access.
6. Edit file.

Note: If the `RESTRICT.FTP` file is empty or has been deleted, no FTP access will be allowed.

7. To exit press ESC. Save changes when prompted.
8. To exit Unicon utility press ESC.

Start/Stop FTP Services

It might become necessary to stop and then restart FTP services if the FTP Server experiences problems or upgrades need to be made.

To stop FTP service:

1. At server console type `load unicon`
2. Select Start/Stop Services.

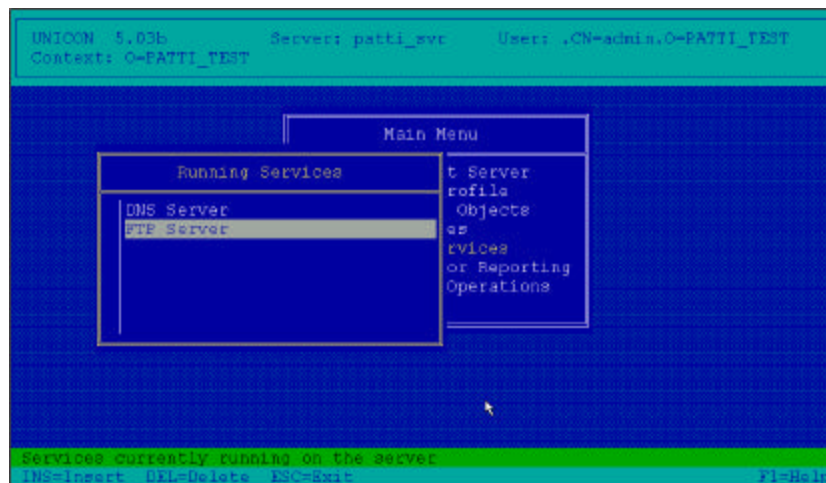


Figure 3 Start/Stop Services Screen

3. Highlight FTP Server in the running Services window (Figure 3).
4. Press DELETE.
5. To exit Unicon utility press ESC.

To start FTP service:

1. At server console type `load unicon`
2. Select Start/Stop Services.
3. Press INSERT.
4. Select FTP Server.
5. To exit Unicon utility press ESC.