

Network Station Manager Version 2

Installation on Windows NT

Network Station Education IBM Network Computer Division March 1999



Objectives/Contents



- Prerequisites
- Selectable components
- Post Install tasks
- Re-install and uninstall
- Co-existence with V1R3
- Sample custom install panels
- The time server



The topic of this presentation is installing Network Station Manager Version2 Release 1 (V2R1) on Microsoft Windows NT.

The objective is to present only a very brief overview of the install process in order to mainly highlight the differences with the previous version for those who are very familiar with the V1R3 install process.

We briefly touch the prerequisites, the selectable components during install, the uninstall and reinstall, the coexistence with the previous release and a few pieces of information on the time server.

Please reference the product publication for a detailed guide to installation which describes all the required steps.

Windows NT Install Prequisites



 Same prerequisites as for previous release except that both Windows NT server 4.0 and Terminal Server Edition 4.0 must be at the Service Pack 4 level (instead of SP3)

Operating System

- Windows NT Server 4.0 and Service Pack 4, or Windows NT Server 4.0
 Terminal Server Edition with Service Pack 4
- An NTFS partition of at least 500 MB
- Base TCP/IP Services
- A user with Admin privileges

An HTTP Server

Microsoft IIS 4.0, or Lotus Domino Go 4.6.2.2

A Web Browser

Microsoft IE 4.0 plus SP1, or Netscape 4.5

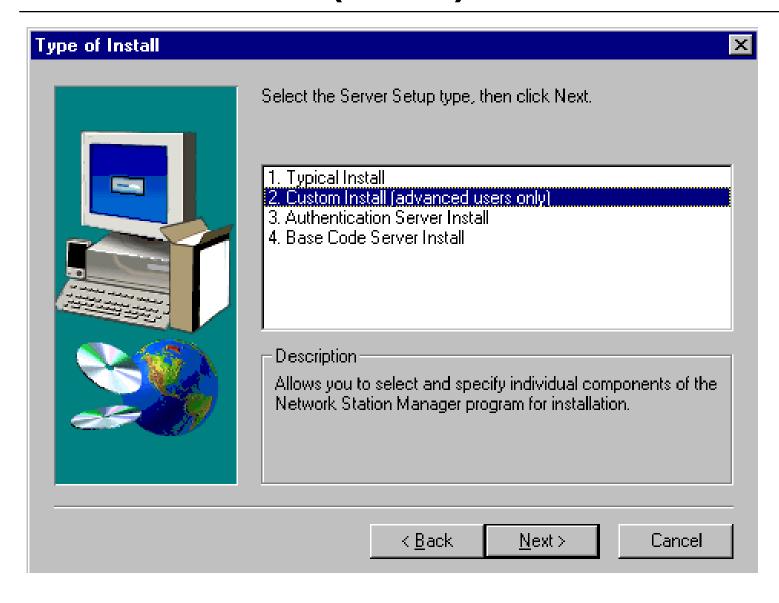


The prerequisites for installing on a Windows NT Server 4.0 platform are the same as the previous version except that both Windows NT and the Terminal Server Edition must be at the Service Pack 4 level.

The other prerecs are an HTTP server and a Web browser when installing a full server.

Custom Install (1 of 2)





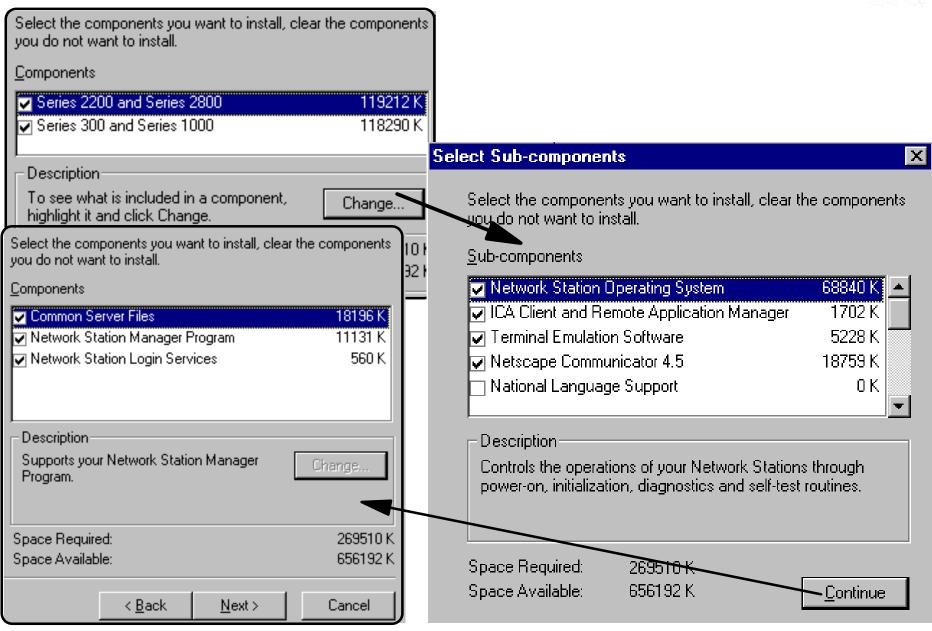


The general installation procedure is very similar as well from the previous version, except for the following, as illustrated in this panel:

- Notice that from the GUI installation panel, one can now choose to install an Authentication server or a base code install. In the previous version, these special installs were also possible but only by issuing the setup command from the command line and specifying special install switches.
- There is now also a Custom install capability that allows an advanced user to manually select the components that are to be installed.

Custom Install







These are the panels presented to the user, in sequence, when selecting Custom Install.

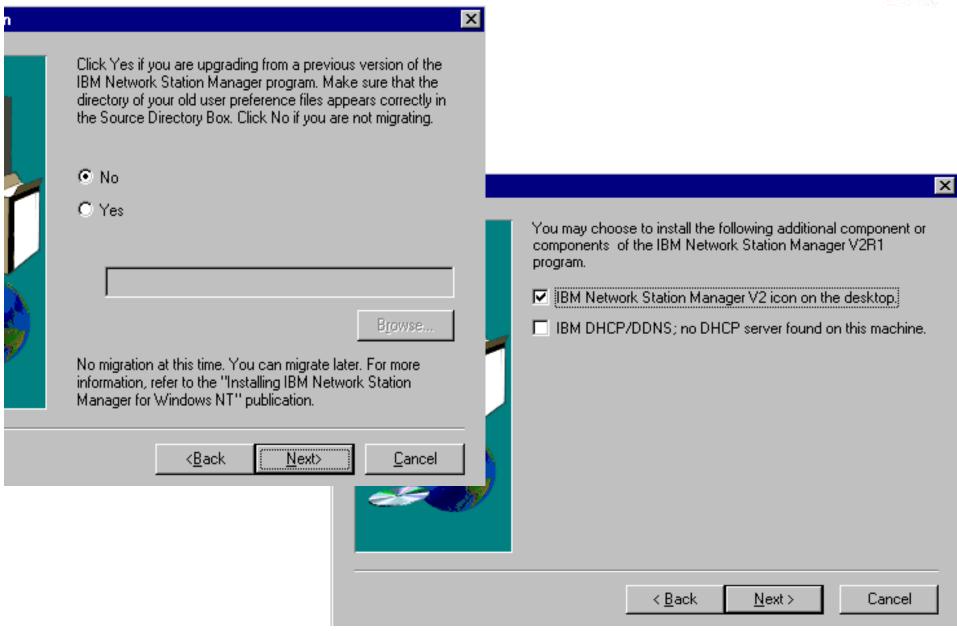
The first allows to eliminate the support for either the Power PC based Network Stations or the X86 based Network Stations in the case where the server being installed is only required to support one of these two families.

The second panel lists the components that can be selectively chosen for inclusion or exclusion during a Custom install. This capability allows the administrator a much finer control over the components that are required and therefore the space needed to install the product. For example, if Emulation and ICA are never used, those components can be completely removed from the installed code.

The last panel deals with the Network Station manager program itself (which is not required on a base code server for example) and the Network Station Login service which is only required on an authentication server.

Migration and DHCP Questions







There are two more important panels

- One where the user chooses to migrate files from a previous release, and this panel is in fact similar to the previous release. See the migration information in the product publication for more details on the types of migration available.
- One where the user decides to:
 - Install a Network Station Manager icon on the desktop that allows launching the NSM application on the server
 - Install the IBM DHCP and DDNS server support on this same server. Typically however, the DHCP server is located on a separate server

Post Install Processing Tasks



- Creates a file \$PRODBASE/x86/etc/resolv.conf
 - Adds domain name
 - Adds nameserver
 - Adds lookup file bind
- Creates a file PRODBASE/x86/etc/hosts
 - -Add 127.0.0.1
 - Add IP address, hostname and domain name of server
- Creates a file .../etc/localtime that contains the proper time zone information based on the server settings
- Updates the TZ environment variable in the .profile file
 - Adds export TZ=US/Central (for example)
 - Adds rdate -su server (Windows NT server only)



There are a few tasks that take place after the install that are important:

- Two files are created based on the configuration information found on the server
 - The resolv.conf file which contains the required DNS information
 - The hosts file that contains, as a minimum, the loopback address and the address of the server
- Adds the appropriate information to set the right time zone based on the time zone settings of the server

Reinstall and Uninstall



A V2R1 Reinstall does NOT automatically uninstall a previous V2R1 install

 If there is a need to move to a different install drive, manually uninstall first, and then reinstall

An Uninstall GUI is available to:

- Uninstall V2R1 completely
 - ► Replaces V1R3 service entries if V1R3 still present
- Reinstall an equivalent system
- Install new components not previously installed
- Uninstall V1R3 with no reboot required



A V2R1 Reinstall does NOT automatically uninstall a previous V2R1 install. For example, if there is a need to move to a different install drive, manually uninstall first, and then reinstall.

An Uninstall GUI is available to uninstall V2R1 completely. It also replaces V1R3 service entries if V1R3 is still present on the system.

An uninstall is also available to reinstall an equivalent system, install new components not previously installed or uninstall V1R3 with no reboot required

Coexistence with V1R3



- V2R1 can be installed with or without the presence of V1R3, so presence of V1R3 not verified before installing
- Coexistence allowed by
 - Altering the base path (adding V2 to the base path)
 - Modifying NSM and NSLD to handle coexistence
 - V2R1 NSLD handles both V1R3 and V2R1 login requests
 - ► V1R3 NSLD daemon is stopped and the V2R1 version started
 - At uninstall of V2R1 where V1R3 is present, the old V1R3 NSLD is re-instated



In this release, it is possible to have V2R1 coexist on the same server with the previous V1R3 release.

This is possible because the two releases use a difference root base directory, and it is provided to allow an easier migration path to the new release.

V2R1 can be installed with or without the presence of V1R3, therefore the presence of V1R3 not verified before installing.

Coexistence allowed by:

- Altering the base path and adding V2 to the base path
- Modifying NSM and NSLD to handle coexistence
 - V2R1 NSLD handles both V1R3 and V2R1 login requests
 - V1R3 NSLD daemon is stopped and the V2R1 version started
 - At uninstall of V2R1 where V1R3 is present, the old V1R3 NSLD is reinstated

Time Zone Setting



- The install program, based on the server's time zone settings, does the following:
 - For all platforms, it adds TZ=US/Central (for example) to the .profile file
 - For Windows NT, it also adds the command "rdate -su server", where server is the boot server's IP address.
 - Creates the ../etc/localtime file to contain ../usr/share/zoneinfo/US/Central
- During the boot sequence, the time is obtained from the boot server
 - For AS/400 and AIX, it is obtained from the file system on the boot server
 - For NT, it is obtained from the time server on the boot server (time server) must be configured to give out GMT (which is the default) and not local time)
- The Network Station clock is set to Universal Coordinated Time (UCT) which is the number of seconds since Jan 1, 1970
- The system time on the launchbar is displayed based on the TZ set in the .profile file
- The system time displayed from a Java application is based on the TZ set in NSM, if present, otherwise on the TZ set in .profile
 v2/PM/NAM/WRZYOS/RATION Technical Education on the Network Network Network



Here are a few more details on how the time zone setting is accomplished.

Based on the server's time zone settings, the install process does the following:

- For all platforms, it adds TZ=US/Central (for example) to the .profile file
- For Windows NT, it also adds the command "rdate -su server", where server is the boot server's IP address
- It creates the ../etc/localtime file to contain ../usr/share/zoneinfo/US/Central

During the boot sequence, the time is obtained from the boot server as follows:

- For AS/400 and AIX, it is obtained from the file system on the boot server
- For Windows NT, it is obtained from the time server on the boot server (time server must be configured to give out GMT (which is the default) and not local time)

The Network Station clock is set to Universal Coordinated Time (UCT) which is the number of seconds since Jan 1, 1970

The system time on the launchbar is displayed based on the TZ set in the .profile file

The system time displayed from a Java application is based on the TZ set in NSM, if present, otherwise on the TZ set in .profile

Where to go for additional information?



- Main Web Site
 - -www.ibm.com/nc
- Current Network Station Redbook
 - -SG24-5844 Network Station Manager V2R1 Guide
- Previous Network Station Redbooks
 - -SG24-5187 AS/400 Techniques for Deployment in a WAN
 - -SG24-5221 Windows NT NSM Release 3
 - -SG24-5212 Printing
 - -SG24-2127 Windows NT/WinCenter
 - -SG24-4954 S/390, SG24-2016 RS/6000, SG24-2153 AS/400
- Product Publications
 - -SC41-0684 Installing NSM for AS/400
 - -SC41-0685 Installing NSM for RS/6000
 - -SC41-0688 Installing NSM for Windows NT
 - -SC41-0690 Using NSM
 - -IBM Network Station Advanced Information (On the Web Site)



In particular, please reference the product publication SC41-0688 for a detailed description of all the installation steps for a Windows NT server.