IBM Network Station Family of Thin Clients
Access for today, flexibility for tomorrow

Network Station Manager V2R1 Separation of Servers

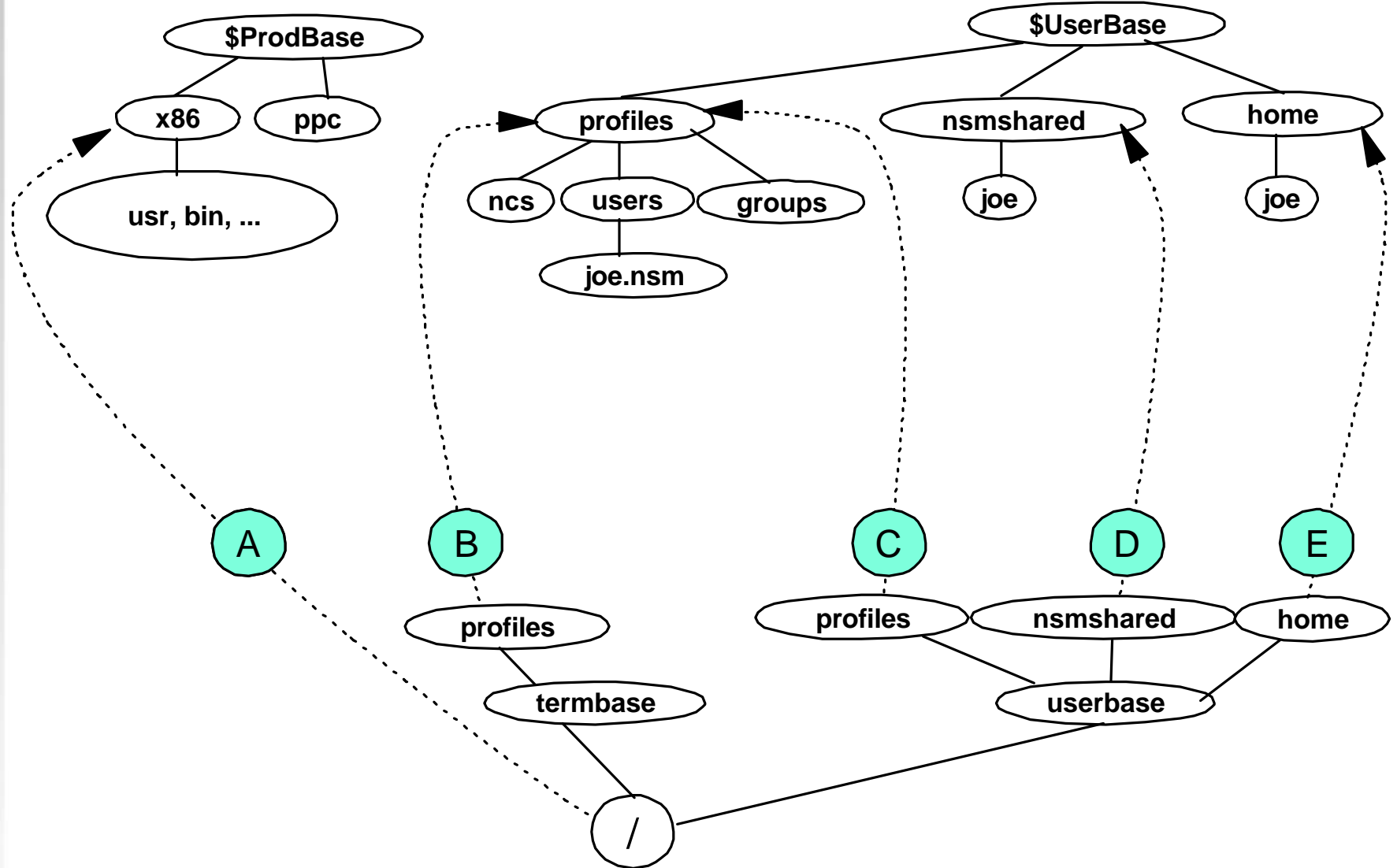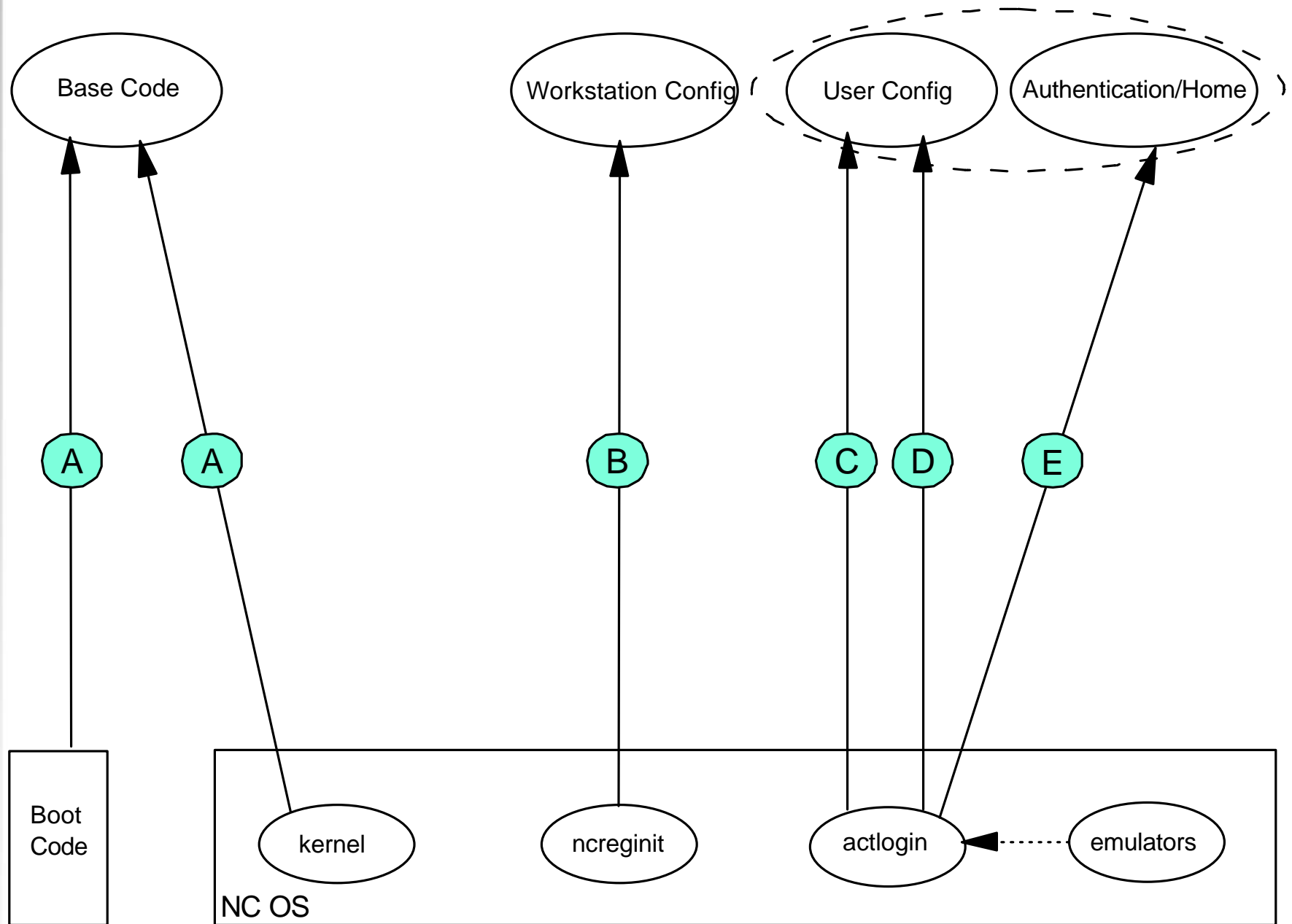**August 29, 1999**

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Topics

- **Client-Server File System Mapping**

- **Server Types**

- **Separation of Servers Configuration**

- **Installable Units**
  - ▶ **AIX and Microsoft Windows NT examples**

- **Changes for V2R1**

- **Troubleshooting**

Client-Server File System Mapping

S2200/2800 File System

Server Types

Base Code

Workstation Config

User Config

Authentication/Home

A

A

B

C

D

E

Boot Code

kernel

ncreginit

actlogin

emulators

NC OS

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Separation of Servers Configuration

Server Type	Purpose	Must Be Configured?	Default Server	Default Paths
A. Base Code	Boot File Location, Root File System	Yes	None	None
B. Workstation Config	Workstation Profiles	No	A	Ncreginit determines based on platform
C. User Config	User and group profiles	No	A	From login service
D. User Config	User shared directories	No	A	From login service
E. Authentication/Home	User home directories	No	A	From login service

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Separation of Servers Configuration (continued)

Server Type	Configuration Mechanism	S300/1000?	S2200/2800?
A. Base Code	NVRAM Settings DHCP Options 66,67,211 DHCP Option 219	Yes Yes Yes	Yes Yes Yes
B. Workstation Config	NVRAM Setting DHCP Options 212,213,214	Yes Yes	Yes Yes
C,D. User Config	Login Service Configuration File	Yes	Yes
E. Authentication/Home	NVRAM Setting DHCP Option 98	No Yes	Yes Yes

Installable Units

- **Installable units can be used to create each server type.**

- **This feature is only supported on AIX and Windows NT.**

- **Creating custom servers may require additional system administration steps before and after installation.**

- **See the Advanced Information publication for examples.**
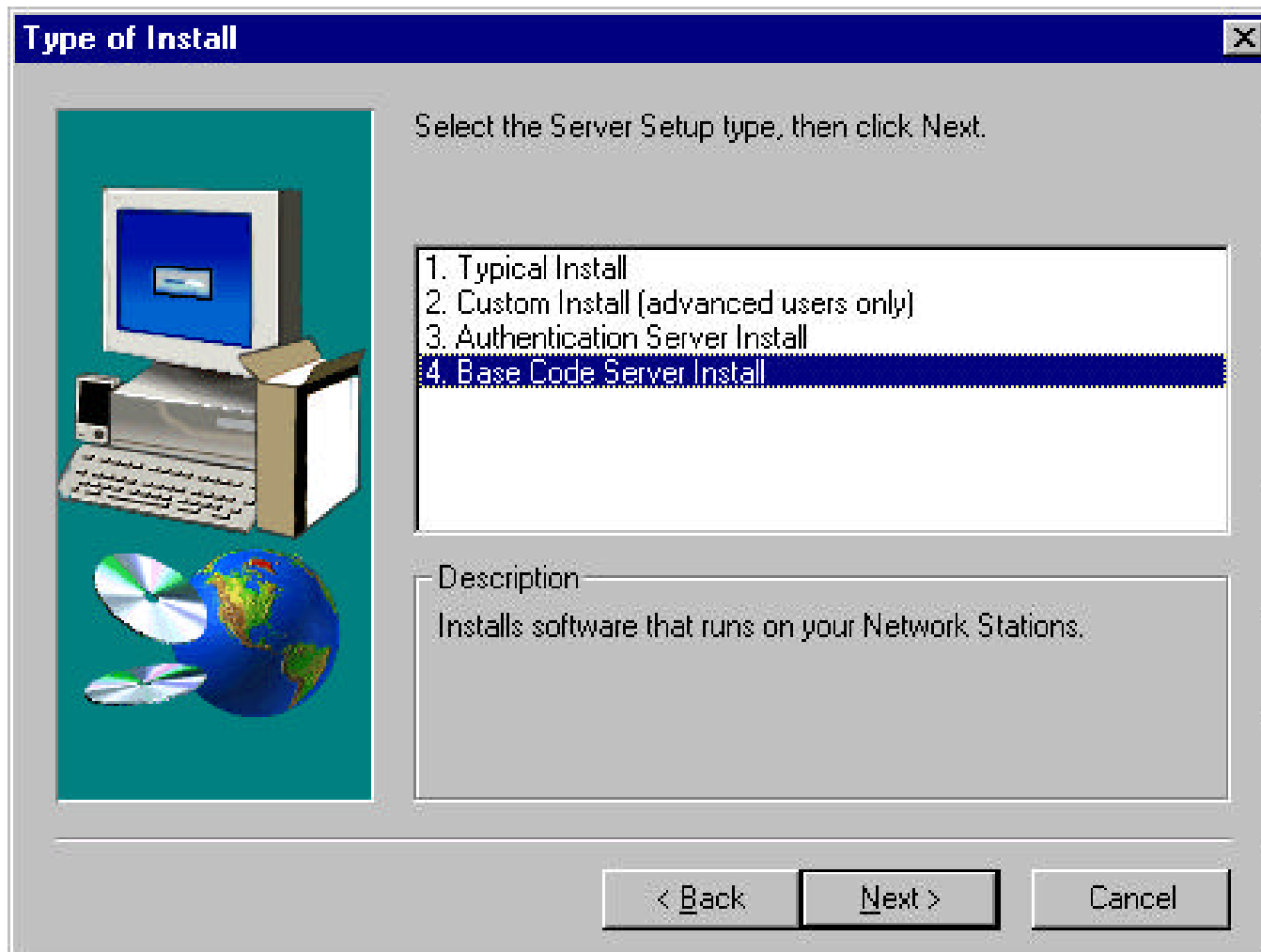
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Base Code Server (AIX)

- **Install the following filesets:**
  - ▶ **eNetstation.base**
  - ▶ **eNetstation.S2x00.base**
  - ▶ **eNetstation.S300_1000.base**

- **The client filesets may be installed separately or together depending upon the type of IBM Network Station hardware models in your network.**

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Base Code Server (Windows NT)

- **Installs eNetwork On Demand and client files.**

- **Equivalent to V1R3 -bs install switch.**

- **No custom install is needed.**

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Base Code Server (Windows NT continued)

# Combined Authentication and Configuration Server (AIX)

- **Install the following filesets:**
  - ▶ **eNetstation.base**
  - ▶ **eNetstation.nsm**
  - ▶ **eNetstation.login**
  - ▶ **eNetstation.msg.<lang>**
  - ▶ **eNetstation.nsm.<lang>**
  - ▶ **eNetstation.tools (optional)**

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Combined Authentication and Configuration Server (Windows NT)

- Installs eNetwork On Demand, Network Station Manager Web application, and login service.

- Similar to V1R3 -as install switch, except does not install client files.

- No custom install is needed.

- Note that name for this option on install panel is somewhat misleading, since it creates a combined authentication and configuration server.

Combined Authentication + Configuration Server (Windows NT continued)
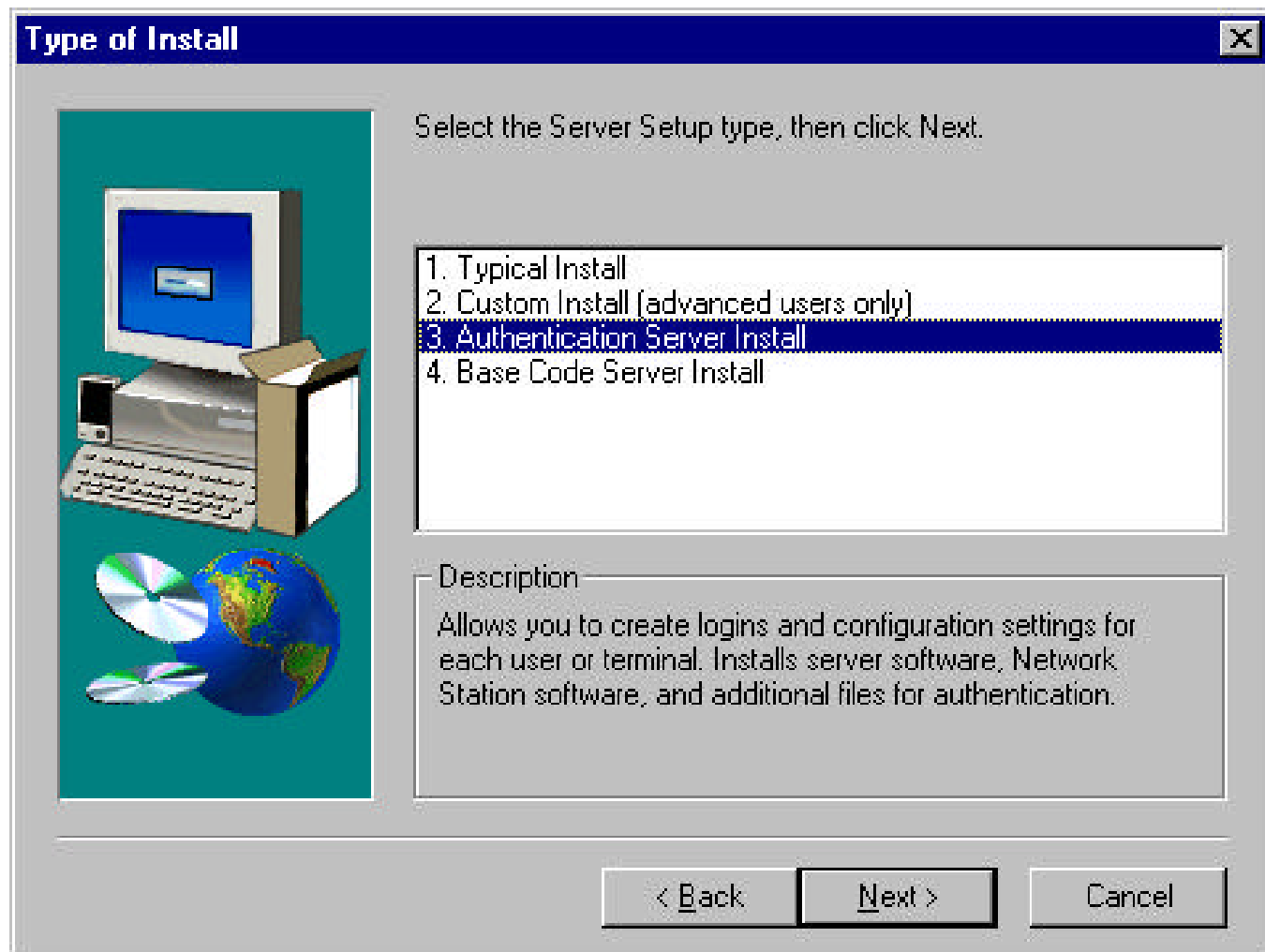
Other Server Types

- Other server types can be created by combining the appropriate components.

- On AIX, this is done by installing specific filesets.

- On Windows NT, this is done by choosing Custom Install on the "Type of Install" panel.

- Creating these servers may require additional system administration steps before and after installation.

- See the Advanced Information publication for examples of authentication server, configuration server, and file server for replicated NSM files.

Changes for V2R1

- **Series 300/1000 and Series 2200/2800 have different boot code.**

- **DHCP Option 98 is used to specify authentication server.**

- **TFTP is only supported for downloading kernel, not for workstation configuration protocol.**

- **AIX and Windows NT have added installable units for client and server components.**

- **The server directory structure and exports have changed.**

- **The NCDi file service table has been replaced by standard UNIX file system mounts.**

- **NC OS processes created before authentication have uid/gid 0/0 as NFS credentials, instead of -2/-2.**

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Troubleshooting

- **To see boot options, open an Advanced Diagnostics window and type "ncregget /boot/dhcp".**

- **To see existing mount points, open an Advanced Diagnostics window and type "mount".**

- **To see environment variables, open an Advanced Diagnostics window. Type "echo $YourEnvVar" to see the variable you are interested in:**
  - ▶ **SERVER_ADDRESS, BOOT_FS_TYPE**
  - ▶ **NC_AUTH_URL**
  - ▶ **HOME, PROFILES, NSMSHARED**

- **To see file system activity during boot sequence, use tools specific to your platform, such as NFS or RFS traces.**

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