

IMPORTANT NOTICE

Before installing or migrating to Windows 2000 there are important policies you must follow. Read the section below for more information on Security Policies and joining the MDCPS active directory forest.

The Office of Information Technology encourages schools to move from Windows NT 4.0 to Windows 2000. However, we realize the upgrade and/or migration path may take some time depending on the school's situation. A Windows 2000 upgrade or migration requires a lot of planning, especially if older servers are involved. The staff of OIT Network Services will be happy to assist you with both the planning and implementation phases.

The M-DCPS Security Policy requires that all schools utilizing the active directory features of Windows 2000 join the MDCPS active directory forest. This means if you intend to set up a Windows 2000 Domain, you must contact the Office of Information Technology for assistance. OIT must be present when a school sets up a Windows 2000 domain. If this is not done with the assistance of OIT, the school will not be able to join the MDCPS forest at a later time (a violation of the security policy). The school will be required to bring down the domain structure (losing the accounts and groups currently being used) and start over.

There are two terms used to refer to moving from NT 4.0 to Windows 2000. They are migration and upgrade. Migration refers to moving an NT 4.0 domain to a Windows 2000 domain. Upgrading involves converting an existing NT 4.0 server to a Windows 2000 server. It is important that you understand the difference. For example if you purchase a new server it is possible to install Windows 2000 Server on the new server and migrate without doing any upgrades. Without purchasing a new server, migration will always involve at least one upgrade. Each of these processes is discussed in more detail below.

UPGRADING

Upgrading requires a lot of planning. In some cases upgrading may be impossible. Before a server is upgraded the user needs to consider the following:

- Is the existing NT 4.0 server Windows 2000 compatible? If so, how about all of the optional hardware (tape backup units for example). Are they also Windows 2000 compatible? The user will need to check with the vendor(s).
- Even if the server and all of the optional hardware is Windows 2000 compatible it may still be necessary to download Windows 2000 drivers for the hardware ahead of time. Again check with the vendor.

- Does the server require a BIOS upgrade or other preparation before doing the upgrade? This is a very common requirement especially with servers more than a couple of years old. Windows 2000 utilizes plug and play. Since neither NT 4.0 nor Novell used plug and play this feature was frequently left out of the BIOS on servers. The user will need to check with the server vendor to see if a BIOS upgrade is available or necessary.
- Is there sufficient memory and hard disk space available for the upgrade? One of the biggest roadblocks to doing an upgrade is that there must be about 700 MB available on the system partition to upgrade. If there is not enough hard disk space on the system partition it may be necessary back up the data on the server, reformat the hard disk and install Windows 2000 from scratch.
- Is all of the software you want to run on the server Windows 2000 compatible? Often common utilities such as backup software and defragmenting software must be uninstalled or upgraded before attempting a Windows 2000 upgrade.

MIGRATION

Migration applies to a domain while upgrading applies to an individual server. As mentioned above, one way to migrate an existing domain to a Windows 2000 domain is to install a new Windows 2000 server and make it the primary domain controller for the already existing domain. It is not necessary to touch the other servers. The new Windows 2000 domain operates in what is called mixed mode. The old NT 4.0 servers are upgraded or retired and then replaced with new Windows 2000 servers. Once there are no more NT 4.0 servers in the domain the domain can be switched to what is known as native mode. Many of the Windows 2000 features require that the domain be running in native mode rather than mixed mode.

MIXING MIGRATION AND UPGRADING

OIT recommends that migrations begin with a new server if possible rather than attempting to upgrade an older existing server. Once the new server is installed critical files can be moved off of the old servers and onto the new server. Upgrades can then be attempted on the older servers. If necessary the older servers can have Windows 2000 server installed cleanly rather than go through the upgrade process. Once the upgrade is complete, the important files can then be copied back to the old server from the new server. Special consideration needs to be given to Exchange servers (contact OIT for assistance).