

# Re: NT to W2K3 Migration

---

*Source:*

[http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.active\\_directory/2006-05/msg00876](http://www.tech-archive.net/Archive/Windows/microsoft.public.windows.server.active_directory/2006-05/msg00876)

---

- *From:* "Joe" <[no-email@xxxxxxx](mailto:no-email@xxxxxxx)>
  - *Date:* Wed, 10 May 2006 16:42:19 -0400
- 

In a nutshell:

You cannot just promote a member server to AD. You would first need to upgrade your PDC to windows 2000 or 2003, whichever flavor of AD you want to use. During the final stage of the OS upgrade, DC promo runs which "converts" this former NT 4.0 PDC into an AD domain controller. This is a very abbreviated response as the process involves a bit more planning.

My first bit of advice before doing anything is to get another server online as a BDC in your 4.0 domain. Running with just a PDC is asking for problems. If that server dies, you will have some serious issues. This BDC can also be used as a rollback server that is taken offline just before you begin the upgrade process. If the migration goes south, you can bring this BDC back online and promote it to PDC which will bring your domain back to status quo prior to the upgrade.

"Deb-Mass" <[DebMass@xxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:DebMass@xxxxxxxxxxxxxxxxxxxxxxxxxxxx)> wrote in message [news:D2674D6A-C4C2-4A9F-A0D3-72F6C00F69DF@xxxxxxxxxxxxxxxxxxxx](mailto:news:D2674D6A-C4C2-4A9F-A0D3-72F6C00F69DF@xxxxxxxxxxxxxxxxxxxx)

Thanks for your help. It was doing all that reading that confused me in the first place. I'll figure it out. Thanks again.

--  
Deb-Mass

"Jorge Silva" wrote:

Hi

Informative Sites:  
Upgrading from Windows NT Server 4.0  
<http://www.microsoft.com/windowsserver2003/upgrading/nt4/default.mspx>

How to Upgrade from Windows NT Server 4.0

## Re: NT to W2K3 Migration

<http://www.microsoft.com/windowsserver2003/upgrading/nt4/howto/default.aspx>

Best Practice Active Directory Design for Managing Windows Networks

<http://www.microsoft.com/technet/prodtechnol/windows2000serv/technologies/activedirectory/plan/bp>

Considerations:

- Install the latest service pack.

<http://www.microsoft.com/downloads>

- Check Hardware.

Windows Catalog and HCL

<http://www.microsoft.com/whdc/hcl/default.aspx>

Active Directory Sizer

<http://www.microsoft.com/windows2000/techinfo/reskit/tools/new/adsizer-o.asp>

- Windows Application Compatibility

<http://www.microsoft.com/technet/prodtechnol/windows/appcompatibility/default.aspx>

- Document everything network related (users, groups, permissions, printers, etc).

Upgrade or migrate?

Reasons to Upgrade

Especially for small organizations, the ease of an upgrade rather than a new installation can make sense. Generally, with an upgrade, configuration is simpler, and your existing users, settings, groups, rights, and permissions are retained. Also, with an upgrade, you do not need to re-install files and applications.

Reasons to Migrate

There are good reasons to migrate rather than upgrade—especially when dealing with large organizations. If you want to practice careful configuration management, for example, for a server where high availability

## Re: NT to W2K3 Migration

is important, you might want to perform a new installation on that server instead of an upgrade. This is especially true for servers on which the operating system has been upgraded several times in the past.

Upgrading Windows NT 4.0 Domains to Windows Server 2003 Active Directory

<http://technet2.microsoft.com/WindowsServer/en/Library/b170bdc5-ba55-4184-8a8f-acb7705ff04a>

Migrating Windows NT Server 4.0 Domains to Windows Server 2003 Active Directory

<http://www.microsoft.com/windowsserver2003/evaluation/whyupgrade/nt4/nt4domtoad.msp>

Active Directory Migration Tool v.2.0

<http://www.microsoft.com/downloads/details.aspx?FamilyID=788975b1-5849-4707-9817-8c9773c2>

Planning:

- Failover.

- \* Backup the Servers.

- \* Take at least one BDC Offline (In case of UPGRADE FAILURE you always can promote it to a PDC). The only drawback to this method is that all changes that were made while the safe BDC was offline are lost. To minimize this loss, you could periodically turn the safe BDC on and off (when the domain is in a stable state) during the upgrade process, to update its safe copy of the directory.

To convert the BDC to a PDC: Start -> Programs -> Administrative Tools -> Server Manager -> Select the BDC, then go to the Computer Menu -> choose Promote to primary Domain Controller.

- \* Make sure that the Hardware and apps meets the requirements.

- \* Make sure that all Apps installed are compatible with W2K3 and don't cause problems with the upgrade process or pos upgrade process.

- \* Run from command prompt:

## Re: NT to W2K3 Migration

Cdsource\I386\winnt32.exe /checkupgradeonly

– Before Upgrade:

\* You can install a new computer (more powerful) make it a BDC, SYNCRONIZE and promote it to PDC and then perform the upgrade on the new PDC.

\* Windows 2000/XP always prefer Kerberos authentication, so if the newly upgraded NT4 to Windows 2003 goes down (Offline), the client machines won't be able to authenticate in the domain.

\* If this is the case, before upgrade the NT.4 PDC, make the necessary changes on the registry (NT4Emulator). If the NT4Emulator is configured on the newly PDC, and you want to upgrade the Existing BDCs, you also need to create a registry entry on the BDCs (NeutralizeNT4Emulator) before the upgrade.

Check:

Windows 2000-based clients connect only to the domain controller that was upgraded from Windows NT 4.0 in a mixed-mode domain

<http://support.microsoft.com/?kbid=284937>

How to prevent overloading on the first domain controller during domain upgrade

<http://support.microsoft.com/kb/298713/>

Once that all domain controllers are upgraded, remove the registry settings created in the previous steps.

Note: This sometimes may not need: E.g – if all existing BDCs will be subsequently upgraded to Windows 2003.

– Dns Planning:

Prior to beginning the upgrade from Windows NT Server 4.0 to the Windows Server 2003 Active Directory service, ensure that you have designed a DNS and Active Directory namespace and have either configured DNS servers or

## Re: NT to W2K3 Migration

are planning to have the Active Directory Installation Wizard automatically install the DNS service on the domain controller.

Active Directory is integrated with DNS in the following ways:

Active Directory and DNS have the same hierarchical structure. Although separate and implemented differently for different purposes, an organization's namespace for DNS and Active Directory have an identical structure. For example, microsoft.com is both a DNS domain and an Active Directory domain.

DNS zones can be stored in Active Directory. If you are using the Windows Server DNS service, primary zone files can be stored in Active Directory for replication to other Active Directory domain controllers.

Active Directory uses DNS as a locator service, resolving Active Directory domain, site, and service names to an IP address. To log on to an Active Directory domain, an Active Directory client queries its configured DNS server for the IP address of the Lightweight Directory Access Protocol (LDAP) service running on a domain controller for a specified domain. For more information on how Active Directory clients rely on DNS, see "Locating a Domain Controller" in the Windows Server 2003 on-screen Help and Support Center.

While Active Directory is integrated with DNS and they share the same namespace structure, it is important to distinguish the basic difference between them:

DNS is a name resolution service. DNS clients send DNS name queries to their configured DNS server. The DNS server receives the name query and either resolves the name query through locally stored files or consults another DNS server for resolution. DNS does not require Active Directory to function.

Active Directory is a directory service. Active Directory provides an information repository and services to make information available to users and applications. Active Directory clients send queries to Active Directory servers using LDAP. In order to locate an Active Directory server, an Active Directory client queries DNS. Active Directory requires DNS to function.

## Re: NT to W2K3 Migration

If use BIND DNS servers Make sure that you have BIND 8.1.2

– Supports: Srv records, Dynamic Updates, Doesn't Support Secure

Dynamic Updates (this is one disadvantage over the MS Dns server Servers, and represents security issues).

– Create Primary Zone

If Use 2003 DNS

\* Create Primary Zone

\* You can use an pre existent Dns or you can create it during the upgrade process.

\* Convert to AD–Integrated.

\* NetDiag /fix (This is an extra measure, to register the necessary dns records).

Check:

Troubleshooting DNS

<http://technet2.microsoft.com/WindowsServer/en/Library/de2aa69d-1155-4dc9-a651-e8362f6a81c8>

How to Verify the Creation of SRV Records for a Domain Controller

<http://support.microsoft.com/?id=241515>

Verify DNS server responsiveness using the nslookup command

<http://technet2.microsoft.com/WindowsServer/en/Library/f8761f04-d665-4507-9509-ebb92bbb66ef>

– The Upgrade.

\* Check if you're on the PDC -> Start -> Programs -> Administrative Tools -> Server Manager.

Right click on Network Neighborhood -> check the name.

Run from command prompt:

## Re: NT to W2K3 Migration

Cdsources\I386\winnt32

\* The first server running Windows NT Server 4.0 that you must upgrade is the primary domain controller (PDC), then you upgrade all remaining BDCs.  
To  
check if you're on the PDC: Start -> Programs -> Administrative Tools -> Server Manager.

Check:

How To Upgrade a Windows NT 4.0-Based PDC to a Windows Server 2003-Based

Domain Controller

<http://support.microsoft.com/?id=326209>

If you don't have windows 2000 (Only NT4 and Windows 2003) in the domain

choose the FFL (Forest Functional Level) Windows 2003 interim.

\* Make sure that your DCs Dns properties point to Right Dns server (usually the Dc is also a Dns server so it must point to itself).

\* Once you have upgraded the Windows NT Server 4.0 and earlier PDC, you can proceed to upgrade all remaining BDCs.

\* Make sure that you have 1 GC per site (GCs are needed unless: you only have one domain, or the DFL is prior to Windows 2000 or Windows 2003).

\* Make sure that network clients point to the Network Dns server only (Usually the DC).

\* If everything is ok, then and if all DCs are already Windows 2003, now it's time to remove the registry entries (NT4Emulator, NeutralizeNT4Emulator), and make the DFL and FFL windows 2003.

Verifying Active Directory Installation

<http://technet2.microsoft.com/WindowsServer/en/Library/3d157c1a-5c80-4947-ba8b-a02e5fb1dada>

---

I hop that helps

Good Luck  
Jorge Silva  
MCSA

Re: NT to W2K3 Migration

Systems Administrator

"Deb-Mass" <DebMass@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message  
[news:F2620F54-0B33-4920-8991-D3BB8AEE3EC5@xxxxxxxxxxxxxxxxxxxxx](mailto:news:F2620F54-0B33-4920-8991-D3BB8AEE3EC5@xxxxxxxxxxxxxxxxxxxxx)

I have a domain with an NT 4 PDC and two W2K3 Member  
Servers (I recently  
migrated them). I want to use ADMT to make one of the MS  
the DC. I  
want  
to  
do this without creating a separate domain. Is this possible?  
I'd  
really  
like to keep the same domain name and use a one domain  
structure.

—

Deb-Mass