



CISNTWK-11

Microsoft Windows Server

User Profiles

- A collection of settings that defines the user's working environment
 - Contains personal settings on a per-user basis
 - Examples include: Desktop, Start Menu, Recent Documents, Favorites
 - Contains the "HKEY_CURRENT_USER" Registry root key for a logged on user
 - the on-disk Registry hive is named "ntuser.dat"
 - They are implemented as a collection of directories and settings stored on a file system
- Were introduced with Windows NT 4
- Are supported on the Windows NT family (Windows NT 4 and later)
 - The use on these systems is transparent to the end-user
- Are supported on Windows 9x
 - Windows 9x profiles are implemented differently
 - Must be enabled on each Windows 9x system ("Control Panel -> Passwords")
 - Windows 9x profiles are located in the Windows NT family "home" directory location
 - they contain links (".lnk") and Program Information Files (".pif") only

- User Profiles exist on all computers that are running
 - Windows 7
 - Windows Server 2008
 - Windows Vista
 - Windows Server 2003
 - Windows XP
 - Windows 2000
 - Windows NT 4
- Profiles are Operating System specific
 - A user logging on from both Windows 9x and Windows NT family requires two distinct profiles
- Profiles are *generally* compatible only with specific versions of Windows (and are *generally* incomparable between versions of Windows)
 - Windows NT 4 profiles are *generally* not compatible with Windows 2000 (and later) profiles
 - Windows 2000, Windows XP, and Windows Server 2003 profiles are *generally* not compatible with Windows 7, Windows Vista and Windows Server 2008 profiles

User Profiles (continued)

- The on-disk location of the User Profiles
 - For Windows 7, Windows Server 2008, and Windows Vista
 - **%SystemDrive%\Users \<user account>**
 - For Windows Server 2003, Windows XP Professional, and Windows 2000
 - **%SystemDrive%\Documents and Settings \<user account>**
 - For Windows NT 4 and systems upgraded from Windows NT 4
 - **%SystemRoot%\Profiles\<user account>**
- Located in each profile directory is the Registry hive named “**ntuser.dat**”
 - This becomes the “**HKEY_CURRENT_USER**” for this user

Types of User Profiles

- **Local**
 - The “default” profile
 - A user logging on from different computers will have independent “Local Profiles”
 - These profiles are stored locally on each system where a user logs onto

- **Roaming**

- Allows a user logging on from different computers to use the same profile
 - the profile will follow the user from computer to computer
- The profile is stored on a Server
- The profile is cached on the local computer
 - it is copied to the local computer at logon and is copied back to the Server at logout
 - for fault tolerance and performance
 - in case the Server is unavailable at logon or logoff
- Caching of Roaming profile can be controlled by the end-user (for performance reasons)
 - **Control Panel -> System -> Advanced system settings -> Advanced -> User Profiles -> Settings -> Change Type**
 - Windows 7, Windows Server 2008, and Windows Vista
 - **Control Panel -> System -> Advanced -> User Profiles -> Settings -> Change Type**
 - Windows Server 2003 and Windows XP Professional
 - **Control Panel -> System -> User Profiles -> Change Type**
 - Windows 2000 and Windows NT 4

- **Mandatory**
 - Variation of “Roaming Profile” - profile is not copied back to the Server at logout
 - changes are not permanent - exist for current logon session only
 - The “ntuser.dat” Registry file is named “ntuser.man”
 - Useful when multiple users share a common User Account
 - user “Guest” behaves as though it is a mandatory profile ¹
 - With Windows 2000 (and later), a Mandatory profile should only be considered as a last resort
 - the use of Group Policy is generally a more robust solution

¹ This behavior does not apply to Windows XP (and later) systems that are not joined to a Domain. See slides titled “Resources” for details - Microsoft Knowledge Base Article ID 321584

- The following directories (folders) are included within a Windows NT / 2000 / XP / 2003 profile

Name of Directory	2003/XP Profile	2000 Profile	NT 4 Profile	Included with Roaming Profiles	Directory Attributes
Application Data	Yes	Yes	Yes	Yes	Hidden
Cookies	Yes	Yes	Yes	Yes	System
Desktop	Yes	Yes	Yes	Yes	
Favorites	Yes	Yes	Yes	Yes	
History	Yes ¹	Yes ¹	Yes	No (Yes for NT 4)	System
Local Settings	Yes	Yes	Yes	No	Hidden
My Documents	Yes	Yes	No	Yes	
My Recent Documents	Yes	No	No	Yes	Hidden
NetHood	Yes	Yes	Yes	Yes	Hidden
Personal	No	No	Yes	Yes	
PrintHood	Yes	Yes	Yes	Yes	Hidden
Recent	No	Yes	Yes	Yes	Hidden
SendTo	Yes	Yes	Yes	Yes	Hidden
Start Menu	Yes	Yes	Yes	Yes	
Templates	Yes	Yes	Yes	Yes	Hidden

¹ This is a subdirectory within "Local Settings"

Contents of User Profiles (continued)

- The following shows the mapping between the directories (folders) within a Windows 7/Vista/2008 User Profile and a Windows 2000/XP/2003 User Profile

Windows XP Directory Name	Windows 7 and Windows Vista Directory Name
N/A	AppData
N/A	AppData\Local\LocalLow
N/A	Contacts
N/A	Downloads
N/A	Links
N/A	Saved Games
N/A	Searches
Application Data	AppData\Roaming
Cookies	AppData\Roaming\Microsoft\Windows\Cookies
Desktop	Desktop
Favorites	Favorites
Local Settings	N/A
Local Settings\Application Data	AppData\Local

Contents of User Profiles (continued)

- The following shows the mapping between the directories (folders) within a Windows 7/Vista/2008 User Profile and a Windows 2000/XP/2003 User Profile

Windows XP Directory Name	Windows 7 and Windows Vista Directory Name
Local Settings\History	AppData\Local\Microsoft\Windows\History
Local Settings\Temp	AppData\Local\Temp
Local Settings\Temporary Internet Files	AppData\Local\Microsoft\Windows\Temporary Internet Files
My Documents	Documents
My Documents\My Music	Music
My Documents\My Pictures	Pictures
My Documents\My Videos	Videos
NetHood	AppData\Roaming\Microsoft\Windows\Network Shortcuts
PrintHood	AppData\Roaming\Microsoft\Windows\Printer Shortcuts
Recent	AppData\Roaming\Microsoft\Windows\Recent
SendTo	AppData\Roaming\Microsoft\Windows\SendTo
Start Menu	AppData\Roaming\Microsoft\Windows\Start Menu
Templates	AppData\Roaming\Microsoft\Windows\Templates

Contents of User Profiles (continued)

- The following “new” directories (folders) are included within a User Profile that is created with Windows 7, Windows Vista, and Windows Server 2008

Name of Directory	Description	Included with Roaming Profiles	Directory Attributes
AppData	Per-user application settings and data	N/A	Hidden
AppData\Local	For data too large to roam or should not roam	No	
AppData\LocalLow	Provides write access for low integrity processes	No	
AppData\Roaming	For data that should roam	Yes	
Contacts	Default location for storing user's contacts	Yes	
Downloads	Default location for saving downloaded content	Yes	
Links	Default location for storing Internet Explorer Favorite links	Yes	
Saved Games	Default location for storing saved games	Yes	
Searches	Default location for storing saved searches	Yes	

- There are special “profiles” located in the Profiles storage area
- **“Public”** (Windows Server 2008, Windows 7, and Windows Vista)
- **“All Users”** (Windows Server 2003 and earlier)
 - A common set of directories available to all users on the local system
 - Some of these directories get “merged” with a user’s logon environment
 - for example, the Start Menu and Desktop
 - this acts as a simple way to deploy common Start Menu and Desktop items to users
 - By default, this is local to each computer, but can be located on a Server
 - this functionally exists primarily for Windows NT 4
 - Group Policy has largely replaced this for Windows 2000 (and later)
 - See next slide for the subdirectories contained within this directory

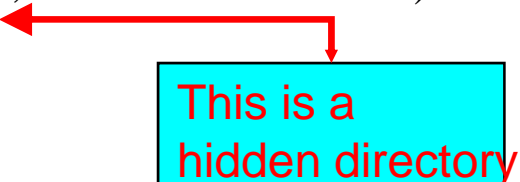
- The following directories (folders) are included within the “Public” or “All Users” special profile

Name of Directory [All Users]	Name (or Location) of Directory [Public]	Directory Attributes (for Windows 7/Vista/ 2008)
Application Data	%SystemDrive%\ProgramData	System
Desktop	Desktop	Hidden
Documents	Documents	
N/A	Downloads	
Favorites	Favorites	Hidden
N/A	Music	
N/A	Pictures	
N/A	Recorded TV ¹	
Start Menu	%SystemDrive%\ProgramData\ Microsoft\Windows\Start Menu	System ²
Templates	%SystemDrive%\ProgramData\ Microsoft\Windows\Templates	System ²
N/A	Videos	

¹ This directory was added in Windows 7

² The directory attribute is within the path leading to the directory (not on the directory itself)

- There are special “profiles” located in the Profiles storage area
- **“Default”** (Windows Server 2008, Windows 7, and Windows Vista)
- **“Default User”** (Windows Server 2003 and earlier)
 - Acts as a “template” profile
 - this is where newly created profiles obtain their contents
 - By default, this is local to each computer, but can be located on a Server
 - for Domain wide default profiles
 - this functionally exists primarily for Windows NT 4
 - Group Policy has largely replaced this for Windows 2000 (and later)



This is a
hidden directory

- Local profiles get created the first time a user logs on locally
 - It is copied from the “Default User” profile
- Roaming profiles can be established prior to logon by an Administrator
 - **Control Panel -> System -> [Advanced system settings] [Advanced] -> User Profiles -> [Settings] -> Copy To**
- Roaming profiles not established prior to logon are created like Local profiles
- Mandatory profiles **must** be established prior to logon
- A special profile is active when no one is logged on
 - **%SystemRoot%\System32\Config\default**
 - it is the system’s “NTUSER.DAT” Registry Hive (HKEY_CURRENT_USER)
- Microsoft has made available the “**User Profile Hive Cleanup Service**” (**UPHClean**)
 - It is a service to help with slow log off and unreconciled profile problems
 - It is supported on Windows Server 2003, Windows XP, and Windows 2000
 - To obtain the service, refer to the UPHClean Service in “Resources”
 - Note that the functionality this tool provides has been incorporated into Windows 7, Windows Vista, and Windows Server 2008

- In a Domain environment, for a user who is a member of “Domain Guests” Domain global security Group
 - His/her Local profile is removed at logout
 - This behavior acts as if a Mandatory profile is in effect
- In a non-Domain environment, for a user who is a member of the “Guests” local security Group
 - His/her Local profile is removed at logout ¹
 - This behavior acts as if a Mandatory profile is in effect

¹ This behavior does not apply to Windows XP (and later) systems that are not joined to See slides titled “Resources” for details - Microsoft Knowledge Base Article ID 321584

- When a User Account is deleted, the Local profile remains
 - Local profiles may be removed via
 - Control Panel -> System -> [Advanced system settings] [Advanced] -> User Profiles -> [Settings] -> Delete
 - Local profiles may also be removed via “**Delprof**” with Windows 2000, Windows XP, and Windows Server 2003 ¹
 - this utility is included with the Windows Server 2003 Resource Kit
 - this utility is included with the Windows XP Professional Resource Kit
 - this utility is included with the Windows 2000 Resource Kit ²
 - You will need to remove this profile from every local computer the user logged onto

¹ This utility does not work correctly with Windows Vista (and later), and is not supported on those platforms

² See slides titled “Resources” for details - Microsoft Knowledge Base Article ID 315411

- When a User Account is deleted, the Local profile remains
 - Since Roaming profiles are also “cached” locally, they too will remain
 - a Policy (Registry setting) can be used to automatically delete cached roaming profiles
 - for Group Policy
 - refer to “**Delete cached copies of roaming profiles**” on the slide titled “Roaming Profiles Configuration”
 - for System Policy
 - **Computer -> Windows NT User Profiles -> Delete cached copies of roaming profiles**
 - Starting with Windows Vista, profiles can be automatically deleted after “x” days of inactivity on the computer
 - refer to “**Delete user profiles older than a specified number of days on system restart**” on the slide titled “Roaming Profiles Configuration”

- Starting with Windows XP, additional profiles are created (for Windows use)
 - **LOCAL SERVICE** Windows 7, Windows Server 2008 and Windows Vista
 - **LocalService** Windows Server 2003 and Windows XP
 - these are used by services that are local to the system
 - these services don't need network access or specialized privileges
 - example services include
 - “Windows Audio” and “Windows Event Log” (Windows Vista)
 - “Remote Registry” and “TCP/IP NetBIOS Helper” (Windows XP)
 - **NETWORK SERVICE** Windows 7, Windows Server 2008 and Windows Vista
 - **NetworkService** Windows Server 2003 and Windows XP
 - these are used by services that do require network access
 - these services run under the security context (SID) of the local computer
 - example services include “DNS Client” and “Remote Procedure Call (RPC)”

- Regarding the “Local Service” and “Network Service”
 - These profiles are connected with special identities (users or accounts) that the system automatically logs on to when the system starts
 - these special accounts are not visible within Active Directory or the local users
 - these special accounts reduce the need for the built-in “System” account
 - which runs with full privileges on the local system
 - which has even more privileges than the Administrator account
 - since these accounts run with reduced privileges, the system is (in theory) more secure
 - in the event these special accounts are exploited through a security vulnerability
 - Beginning with Windows Vista, these accounts have been made more secure
 - Windows Firewall is configured with outbound port filtering for “Network Service” related processes
 - to minimize any “damage” if the process has been compromised by Malware
 - only those privileges that are specifically needed by the Service are granted
 - in general, each individual process is isolated from other processes with the same name
 - to minimize any “damage” if the process has been compromised by Malware
 - the individual Service has a Security ID (SID)
 - they are protected by an Integrity Level of “System”, which prevents users (including Administrator) from accessing it

Profile Changes Introduced with Windows XP

- With Windows XP Professional, you can logon to the computer before the computer has completed the startup process
 - This is the default behavior
 - This gives the illusion that the system starts up quicker
 - This “default” behavior can be confusing to the users, as things “show up” later
 - This “default” behavior affects users when certain changes are made to a user within Active Directory
 - roaming profile path is changed by an Administrator
 - home directory path is changed by an Administrator
 - login script is changed by an Administrator
 - This behavior can be changed with the following Group Policy setting
 - **Computer Configuration -> [Policies ->] Administrative Templates -> System -> Logon**
 - **Always wait for the network at computer startup and logon**
 - note that this setting is enabled on Windows Server 2008/2003 systems (and can't be disabled)
 - note that this setting is implied on Windows 2000
 - conflicting information from Microsoft makes it unclear whether this setting has any effect on Windows Vista and/or Windows 7

Profile Changes Introduced with Windows XP (continued)

- When a user logs off with Roaming profiles
 - The system attempts to disconnect (unload) the local user registry hive (“**ntuser.dat**”)
 - This will fail when an application has opened a key within the “**HKEY_CURRENT_USER**” and has not yet closed the key
 - In the event the unload fails
 - the system will wait one second
 - the system will attempt to unload the local user registry hive
 - the system will repeat these steps 60 times (for one minute)
 - this is the default value - it can be configured via Group Policy
 - If after 60 (default) seconds the system is still unable to unload the local user registry hive
 - the system will force copy the “**ntuser.dat**” file back to the Roaming profile directory on the Server
 - this ensures a more stable and robust infrastructure for Roaming profiles
- When a user logs onto a system with Roaming profiles
 - If the user had a previous Local profile on this system
 - the previous Local profile and the current Roaming profile are “merged”
 - except for the local user registry hive (“**ntuser.dat**”)
 - any unique files that were in the Local profile will be copied to the Roaming profile directory on the Server when the user logs off

Profile Changes Introduced with Windows Vista

- Windows Vista and later (including Windows Server 2008) has made a number of significant changes with regard to the Profile directory structure
 - The “root” of the Profile directory has changed from “**%SystemDrive%\Documents and Settings**” to “**%SystemDrive%\Users**”
 - all user profiles in Windows Vista (and later) are now located in this directory
 - The “**All Users**” profile has been renamed “**Public**”
 - and some of the subdirectories that were previously located within this path have been moved to “**%SystemDrive%\ProgramData**”
 - The “**Default User**” profile has been renamed “**Default**”
 - the Domain “default” profile located in the NETLOGON share remains as “**Default User**”
 - A new hidden directory now exists named “**%SystemDrive%\ProgramData**”
 - the “Application Data” that existed in the “All Users” profile has been moved to this directory
 - the “Start Menu” and “Templates” that existed in the “All Users” profile has been moved into this directory
 - The directory structure of individual profiles have changed
 - the “My ...” prefix has been dropped
 - a number of directories have “moved” around within the structure
 - additional directories have been created at the “top” of a user’s profile

- The location where users can store their personal files
 - The location for “open” and “save as” for programs without a “Working Directory”
 - Home directories exist to support older (legacy) applications and down level clients (Windows NT 4 / Windows 9x)
 - in a strict Active Directory environment, with Windows 2000 (and later) systems
 - they have largely been replaced with Group Policy / Folder Redirection
- Home directories
 - Can be local to the computer (D:\Users\Common)
 - Can be a share on a Server
 - works well with “Roaming Profiles” so files also migrate from computer to computer
 - principal advantage is that home directories can be centrally managed and backed up
 - Are specified on a per-user basis
- Home directories have no quota enforcement on NT 4
 - Windows 2000 (and later) does support quotas when located on NTFS file systems
- If a user does not have a “home directory”, the “default” directory will be one of the following (depending on the version of Windows, and if it was upgraded)
 - The root of the “%SystemRoot%” drive
 - “%UserProfile% “ or “%UserProfile%\Desktop”

- Is a program or script file that executes automatically when a user logs on
 - It runs in the context (privileges) of the user who is logging on
 - It can be a file with the extension of
 - .bat, .cmd, or .exe
 - It can be a file with a different extension
 - assuming it is a “registered” extension on the system you are logging in from
 - assuming it is some script or command file that is associated with the “registered” application
- A “logon script” is optional, and may be specified on a per-user basis
- Logon scripts are used to
 - Map drive letters
 - profiles on 2000 (and later), and 9x can re-establish network connections
 - but not make new ones
 - “Force” behavior for a client OS which does not support Policies or Profiles
 - Automatically launch application(s) at logon
 - Integrate other network operating systems (Novell NetWare, LAN Manager, Unix)

- Logon scripts are designed primarily for Domains
 - Logon scripts are located on a Domain Controller in the “NETLOGON” share
 - Logon scripts may be specified as a file name (without a path)
 - which means the filename is located at the “root” of the “NETLOGON” share
 - this is generally the method used
 - Logon scripts may be specified as a relative path
 - which means the relative path is located at the “root” the “NETLOGON” share
 - the right most component of the relative path is the file name (or script name)
- Logon scripts exist primarily to support Windows NT 4 and Windows 9x clients
 - in a strict Active Directory environment, with Windows 2000 (and later) systems
 - they have largely been replaced with Group Policy / Scripts

- Is used to “support” Domain Logons, and contains
 - Logon scripts (excluding those supported by “Group Policy”)
 - The Domain wide “default profile”
 - takes priority over the local “Default User” profile template
 - in a mixed NT 4 / 2000 environment, this profile must be created using NT 4
 - System Policies used by Windows NT 4 and Windows 9x clients
 - **ntconfig.pol** [Windows NT 4 and later]
 - **config.pol** [Windows 9x]
- Exists only on Domain Controllers
 - **%SystemRoot%\sysvol\sysvol\\scripts** (Windows 2008/2003/2000)
 - **%SystemRoot%\System32\Repl\Import\Scripts** (Windows NT 4)
 - The use is optional (by default the share is “empty”)
 - This share is “read only” for end-users
- When a user logs on (authenticates to a Domain Controller), the NETLOGON share for that computer (Domain Controller) is used
 - For NT 4, you must use “Directory Replication” to keep the shares synchronized
 - For Windows 2000 (and later), the replication (synchronization) is done automatically
 - it is done with the File Replication Service (FRS)

- Windows 2000 (and later) supports a technology known as “Folder Redirection”
 - This is designed for a Domain environment
 - There is limited support outside of a Domain environment
 - using the “**Tweak UI**” tool from Microsoft
- Folder Redirection allows directories that are normally included in a User profile to be placed onto a Server
 - This speeds up logon/logoff time for Roaming profiles as the directories do not need to be copied to and from the Server as the user Profile is being copied
 - This allows the placement of selected directories onto a Server even if Roaming profiles are not being used
- The following directories can be configured for Folder Redirection (Windows Server 2003, Windows XP, and Windows 2000)
 - **Application Data**
 - **Desktop**
 - **My Documents**
 - **Start Menu**

- The following directories can be configured for Folder Redirection (Windows 7, Windows Server 2008, and Windows Vista)
 - **AppData**
 - **Contacts**
 - **Desktop**
 - **Documents**
 - **Downloads**
 - **Favorites**
 - **Links**
 - **Music**
 - **Pictures**
 - **Saved Games**
 - **Searches**
 - **Start Menu**
 - **Videos**

- If you want to configure users to use Roaming Profiles, follow these steps
 - 1) Create a Directory on a Windows Server that will house the Roaming Profiles (**Make sure the directory is created on an NTFS Partition/Volume**)
 - assign the following permissions to this directory
 - SYSTEM: Full Control
 - Administrators: Full Control
 - Authenticated Users: Modify
 - 2) Create a Share on the Windows Server that maps to the directory created in step 1
 - you may wish to name the share with a trailing \$ (dollar sign) so it is not visible
 - if it is named with a trailing \$, it must be included when referencing the Share
 - assign the following permissions to this share
 - SYSTEM: Full Control
 - Administrators: Full Control
 - Authenticated Users: Change
 - make sure that “**Allow Caching of files in this shared folder**” is not checked
 - by default, it is enabled (checked)

How to Use Roaming Profiles (continued)

- If you want to configure users to use Roaming Profiles, follow these steps
 - 3) For users that you will configure to use Roaming Profiles
 - from “**Active Directory Users and Computers**”
 - right click on the appropriate user, and select “Properties”
 - select the “Profile” tab
 - enter the share name created in step 2 into the field titled “Profile Path”, followed by the name of the user (the syntax is “**\\ServerName\ShareName\NameOfUser**”)
 - replace **ServerName** with the name of the Server identified in step 1
 - replace **ShareName** with the name of the Share created in step 2
 - replace **NameOfUser** with the actual user name (identified in step 3)
 - in place of “**NameOfUser**”, you may use the constant “**%UserName%**”
 - the user interface will replace the actual user name in place of “**%UserName%**” syntax
 - this special syntax allows multiple users to be configured at the same time

How to Use Roaming Profiles (continued)

- If you want to configure users to use Roaming Profiles, follow these steps
 - 4) By default, Administrators will not have access to the Roaming Profile directory structure
 - if you wish to allow Administrators access to a user's Roaming Profile
 - configure the policy
“Add the Administrators security group to roaming user profiles”
 - note that for this to work, it must be done prior to the creation of the Roaming Profile directory
 - see the slide titled “Notes on Roaming Profiles” for details

- Roaming Profile directories are normally created when the user logs on for the first time
 - Or the first time after an existing user has been configured to use Roaming Profiles
- When a user with a Roaming Profile logs onto the system for the first time
 - The directory will be created with the user as the owner
 - The permissions for this directory will be set as follows
 - SYSTEM: Full Control
 - <NameOfUser>: Full Control
 - Note that only the Operating System and user will have access to the Roaming Profile directory structure
- There is a Group Policy named “**Add the Administrators security group to roaming user profiles**” that will add “Full Control” to the Roaming Profile directory
 - This will occur only if the directory does not already exist
 - This is a “Computer” based policy
 - and may therefore be difficult to implement at the enterprise
 - because users can login from any computer in a (trusted) Domain

Notes on Roaming Profiles (continued)

- Roaming profiles are saved only when a user logs off
 - This means that the “central store” of a roaming profile (stored on a Server) may not be up-to-date when a backup is performed on the Server
- Roaming profiles do not support multiple (simultaneous) logons by a user across several computers
 - For example, if a user logs into two computers at the same time, makes configuration changes on one or both of them
 - it is generally unpredictable as to which changes will permanently take
 - although *usually* the “last logoff” changes will be the one that take effect
- Roaming profiles cause all settings for the user to roam
 - Even for applications that do not have roaming capabilities
 - Even for data and settings that have not changed
 - for example, when logging onto a computer where the “local” profile does not exist for this user
- In absence of Folder Redirection, user profiles can grow quite large over time
 - And some the directories the end-user has no control over
 - “Application Data” (or “AppData”) for example

Best Practices with Roaming Profiles

- Redirect the “[My] Documents” directory outside of the Roaming Profile
 - This decreases logon and logoff time
- Consider redirecting the “Desktop” directory outside of the Roaming Profile
 - Especially if users do not place shortcuts on their desktop
 - This can decrease logon and logoff time
- Consider setting the Home Directory to match the redirected “[My] Documents” directory
 - This helps legacy applications that are not compatible with Folder Redirection
- Be very careful using disk quotas with Roaming Profiles
 - It is possible for the Roaming Profile synchronization to fail if disk quotas are enabled and are set too restrictive
 - Users may have little or no control of the contents of their profile (the notable exception being the “Desktop” and “My Documents” directory)
 - the “Application Data” (or “AppData” directory can become very large
 - this directory structure is used by applications and the content is usually not under control of the user

Best Practices with Roaming Profiles (continued)

- Ideally, all computers that a user roams to should be running the same version of Windows
 - And is installed in the same location on all systems
 - And the Local Profiles are located in the same location on all systems
 - At a minimum, users should not
 - logon to both Windows NT and Windows 2000 (and later) using the same Roaming Profile
 - logon to both (Windows XP or Windows 2000) and (Windows Vista or Windows 7) using the same Roaming Profile
 - In theory, a Roaming Profile should work between Windows 2000 and Windows XP and between Windows Vista and Windows 7
- Ideally, all computers that a user roams to should be running the same version of an application
 - And the application is installed in the same location on all systems
 - Unless the application has been designed to support multiple (concurrent) versions
 - Often subtle issues arise as a result of roaming between two versions of the same application
 - Office 2003 and Office 2007 is one example