Offline domain join scenario overview

Offline domain join is a new process that computers that run Windows® 7 or Windows Server® 2008 R2 can use to join a domain without contacting a domain controller. This makes it possible to join computers to a domain in locations where there is no connectivity to a corporate network.

For example, an organization might need to deploy many virtual machines in a datacenter. Offline domain join makes it possible for the virtual machines to be joined to the domain when they initially start after the installation of the operating system. No additional restart is required to complete the domain join. This can significantly reduce the overall time that is required for wide-scale virtual-machine deployments.

A domain join establishes a trust relationship between a computer running a Windows operating system and an Active Directory® domain. This operation requires state changes to Active Directory Domain Services (AD DS) and state changes on the computer that is joining the domain. To complete a domain join in the past using previous Windows® operating systems, the computer that joined the domain had to be running and it had to have network connectivity to contact a domain controller. Offline domain join provides the following advantages over the previous requirements:

- The Active Directory state changes are completed without any network traffic to the computer.
- The computer state changes are completed without any network traffic to a domain controller.
- Each set of changes can be completed at a differerent times

<u>To perform an offline domain join, you run commands by using a new tool named Djoin.exe</u>. You use Djoin.exe to provision computer account data into AD DS. You also use it to insert the computer account data into the Windows directory of the destination computer, which is the computer that you want to join to the domain.

You can run Djoin.exe only on computers that run Windows 7 or Windows

Server 2008 R2. The computer on which you run Djoin.exe to provision computer account data into AD DS must be running Windows 7 or Windows Server 2008 R2. The computer that you

into AD DS must be running Windows 7 or Windows Server 2008 R2. The computer that you want to join to the domain must also be running Windows 7 or Windows Server 2008 R2.

By default, the Djoin.exe commands target a domain controller that runs Windows Server 2008 R2. However, you can specify an optional /downlevel parameter if you want to

target a domain controller that is running a version of Windows Server that is earlier than Windows Server 2008 R2.

Run Djoin.exe at an elevated command prompt to provision the computer account metadata. When you run the provisioning command, the computer account metadata is created in a .txt file that you specify as part of the command. After you run the provisioning command, you can either run Djoin.exe again to request the computer account metadata and insert it into the Windows directory of the destination computer or you can save the computer account metadata in an Unattend.xml file and then specify the Unattend.xml file during an unattended operating system installation of the destination computer.