

ACTIVE DIRECTORY DOMAIN SERVICES

Active Directory Domain Services (AD DS) is a server role in [Active Directory](#) that allows admins to manage and store information about resources from a network, as well as application data, in a distributed database. AD DS can also help admins manage a network's elements (computers and end users) and reorder them into a custom hierarchy.

The structure of the hierarchy includes an [AD forest](#), the forest's domains and [organizational units](#) in those domains. AD DS integrates security by authenticating logons and controlling who has access to directory resources.

The makeup of AD DS includes:

- AD Users and Computers
- AD Administrative Center
- AD Domains and Trusts
- AD Sites and Services
- AD [PowerShell](#) module
- A server for [Network Information Service](#) tools
- Additional command-line tools and snap-ins

A number of new features were added to AD DS when [Windows Server 2012](#) was released. Some of these new features include a global catalog with information about all objects in the directory, a replication service to dispense a directory's data across the network and a flexible single master options role to have a consistent directory without conflicting entries.

Installing Active Directory

1. Open the **Server Manager** from the task bar.
2. From the **Server Manager** Dashboard, select **Add roles and features**.

This will launch the Roles and Features Wizard allowing for modifications to be performed on the Windows Server 2012 instance.

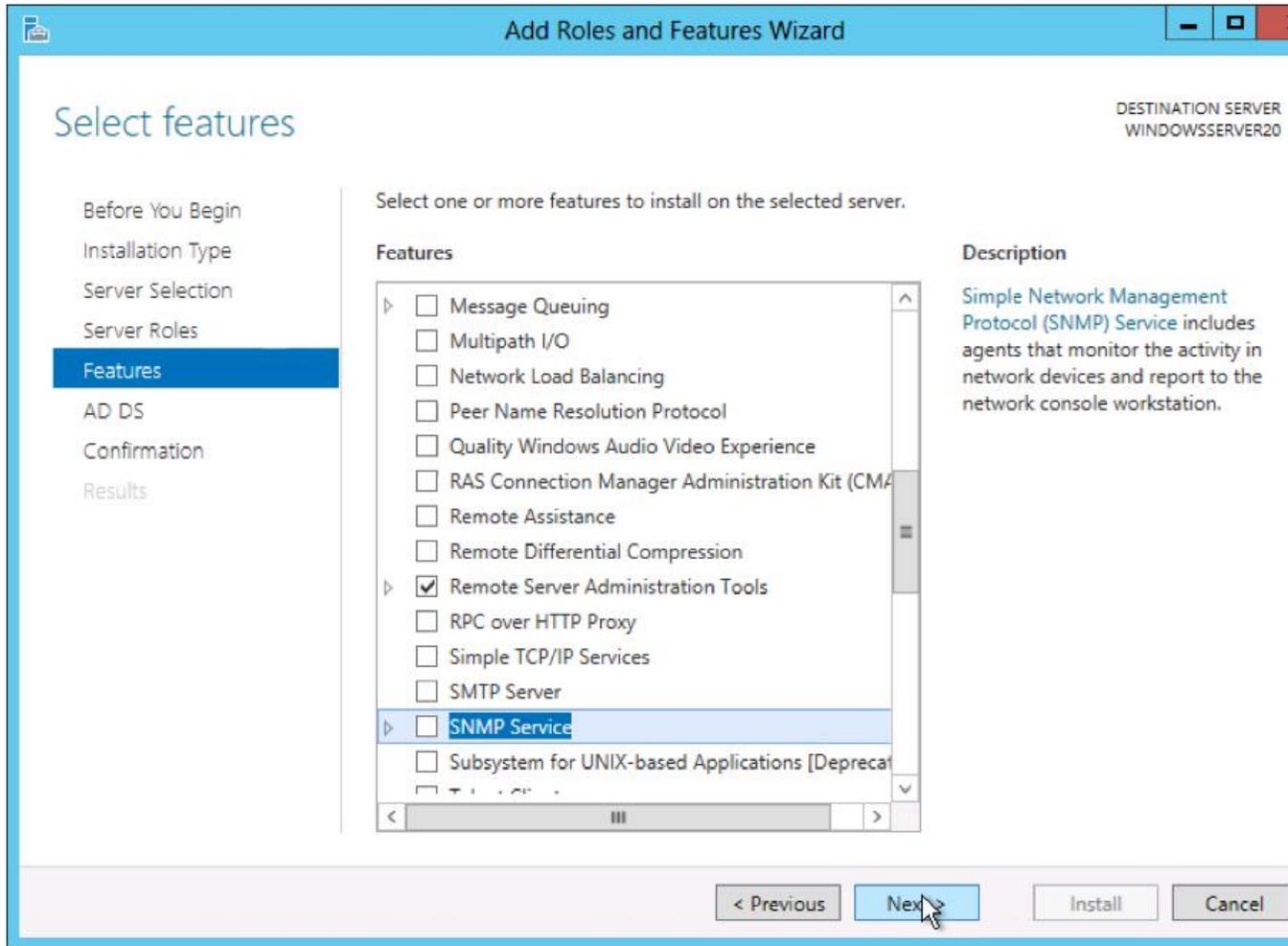
3. Select **Role-based or features-based** installation from the Installation Type screen and click **Next**.

Note: Roles are the major feature sets of the server, such as IIS, and features provide additional functionality for a given role.

4. The current server is selected by default. Click **Next** to proceed to the Server Roles tab.
5. From the Server Roles page place a check mark in the check box next to **Active Directory Domain Services**. A notice will appear explaining additional roles services or features are also required to install domain services, click **Add Features**.

Note: There are other options including, Certificate services, federation services, lightweight directory services and rights management. Domain Services is the glue that holds this all together and needs to be installed prior to these other services.

6. Review and **select optional features** to install during the AD DS installation by placing a check in the box next to any desired features, and then click **Next**.



7. Review the information on the **AD DS tab** and click **Next**.
8. On the **Confirm installation selections** screen, review the installation and then click **Install**.

Note: The installation progress will be displayed on the screen. Once installed, the AD DS role will be displayed on the 'Server Manager' landing page.

Start remote registry service

Before promoting the server to domain controller, the remote registry service must be started.

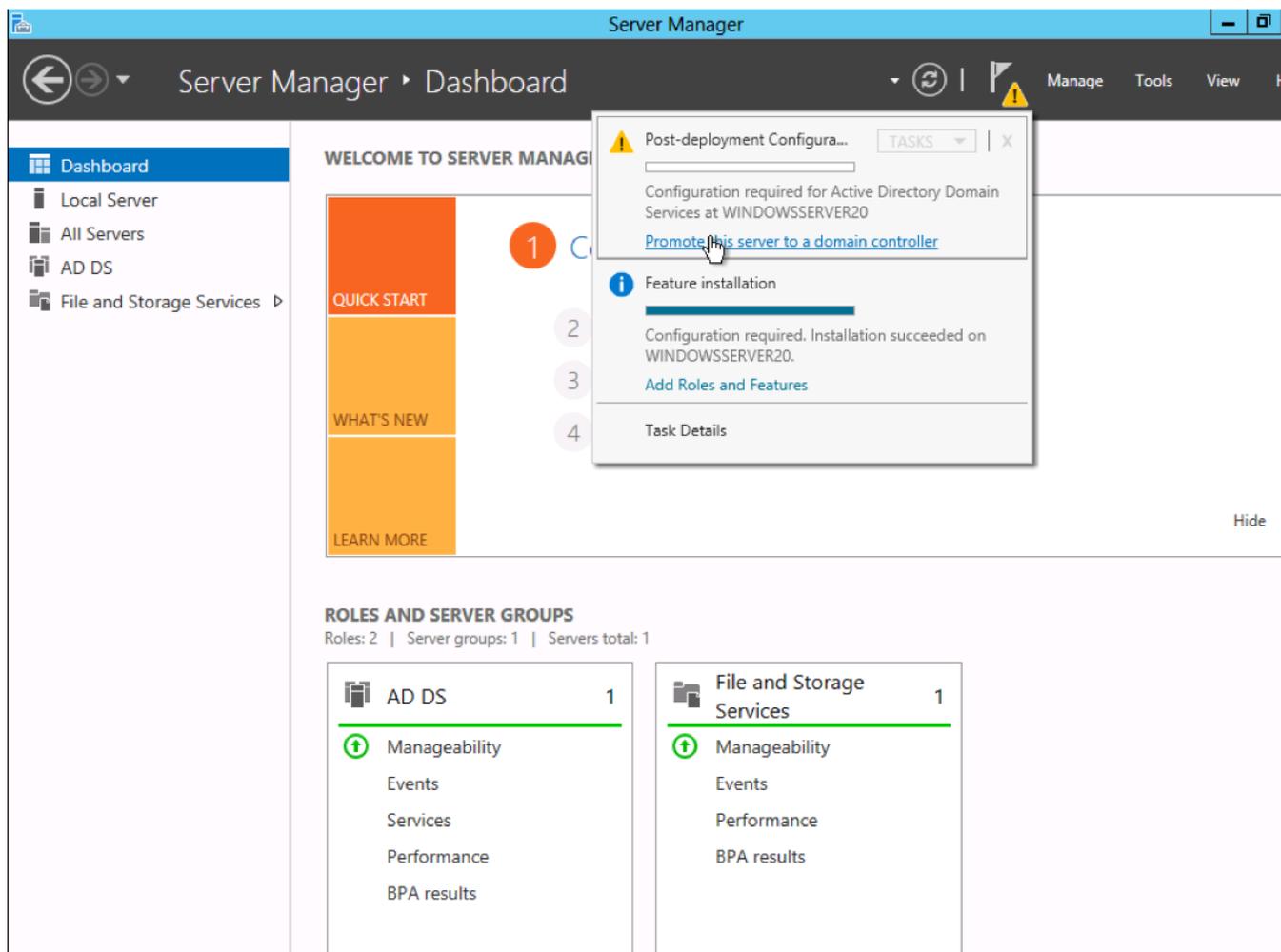
1. Click **Start > Control Panel**.
2. Under **Services**, right-click **Remote Registry** and open the **Properties** menu.
3. From the ***Startup type:*** drop-down menu, select **Automatic**.
4. Under **Service Status**, select **Start**.

The remote registry service will start.

Configure Active Directory

Once the AD DS role is installed the server will need to be configured for your domain.

1. If you have not done so already, **Open the Server Manager** from the task bar.
2. Open the Notifications Pane by selecting the **Notifications icon** from the top of the Server Manager. From the notification regarding configuring AD DS, click **Promote this server to a domain controller**.



3. From the Deployment Configuration tab select **Add a new forest** from the radial options menu. Insert your root domain name into the **Root domain name** field, and then click **Next**.
4. Select a Domain and Forest functional level, and then input a password for the Directory Services Restore Mode (DSRM) in the provided password fields.

The DSRM password is used when booting the Domain Controller into recovery mode.

Note: The selection made here will have lasting effects to features and server domain controller eligibility. For further information on Domain/Forest functional levels, see official Microsoft documentation.

5. Review the warning on the DNS Options tab and select **Next**.
6. Confirm or enter a NetBIOS name and click **Next**.
7. Specify the location of the Database, Log files, and SYSVOL folders and then click **Next**.
8. Review the configuration options and click **Next**.
9. The system checks to ensure all necessary prerequisites are installed on the system prior to moving forward. If the system passes these checks, proceed by clicking **Install**.

Note: The server automatically reboots after the installation is complete.