

AD-Related Server 2008 feature	Description	Requirements
RO DC	A DC that doesn't replicate changes to other DCs, doesn't store any passwords by default, and doesn't allow changes to its local AD database.	Forest functional level (FFL) 2 (Windows Server 2003) and the domain PDC operations master running at least Windows 2003 SP2. (The primary DC Operations Master—FSMO—must run on either Server 2008 or Windows 2003 SP2 for the promotion of a new read-only DC.)
Administrator role separation	Allows granting users who aren't domain administrators the local administrator role on a specific RODC.	DC's OS must be Server 2008. Only works for RODCs, not for writable DCs.
Restartable AD DS	AD Domain Services can be stopped while the DC is running, without the need to boot the server into Directory Services (DS) Restore Mode. This allows performing an offline defragmentation of the AD database without rebooting the server, for example. It doesn't allow you to restore the AD database.	DC's OS must be Server 2008.
DNS enhancements	<p>There are various small DNS enhancements:</p> <p>Read-only zone for RODC</p> <p>Background zone loading (Instant On)</p>	DC's OS must be Server 2008.

	<p>GlobalNames zone for single-label names (WINS replacement)</p> <p>Auto-configuration installation</p> <p>New <i>find next closest site</i> locator</p> <p>Multi-cast DNS (Link-Local Multicast Name Resolution)</p> <p>UI now allows storing conditional forwarders in AD</p> <p>IPv6 support</p> <p>Client periodic renewal of its association with a DC.</p>	
Owner access restrictions	Ability to configure the permissions granted to a user (the owner) at creation time of new objects. Allows various enhancements for delegating rights in AD.	DC's OS must be Server 2008.
Auditing enhancements	Object auditing in AD now records last value and new value when auditing write activities on objects.	DC's OS must be Server 2008.
Updates to Ntdsutil	Various updates, including allowing creation of <i>Install from media files</i> directly from an existing operational AD instance; creation of AD snapshots, and mounting the snapshots for offline access.	DC's OS must be Server 2008.
AD data mining tool (DSAMain.exe)	Allows browsing offline AD versions (snapshots) via LDAP; very useful for recovery of data in AD.	DC's OS must be Server 2008.

Fine-grained password policies	Option to allow applying different password policies for users in the same domain.	Domain functional level (DFL) 3 (Server 2008).
Support for DFS replication for SYSVOL	The new DFS Replication engine (aka FRS version 2) available for SYSVOL replication.	DFL3 (Server 2008).
Domain-based DFS scalability and security enhancements	Domain-based DFS roots will be able to host more than 5000 links (no hard upper limit) and are supported with Access-based Enumeration to hide DFS links that users don't have access to.	DFL3 (Server 2008).
AES 256 support for Kerberos protocol	The key length for the Advanced Encryption Standard (AES) for data encryption in the Kerberos protocol is increased from 128 to 256 bits.	DFL3 (Server 2008).
Group Policy enhancements	The combination of Server 2008 and Windows Vista will allow various new Group Policy Object (GPO) settings such as lockdown of USB ports and other peripheral devices by inclusion of Policy Maker in Server 2008. Many new features in Server 2008 have added further settings that can be controlled via GPO.	Most GPO enhancements are applicable only to Server 2008 servers and Vista clients.
Microsoft Management Console(MMC) snap-In for AD UI enhancements	Various little enhancements will make life easier for you, such as the ability to search for DCs in the MMC AD Sites and Services snap-in, the addition of an attribute editor in the MMC's AD Users and Computers snap-in, or a check box to protect objects from accidental deletion.	No specific DC requirements (need to run Server 2008 version of AD MMC snap-ins for AD).