What Is Active Directory-Integrated DNS Zone?

In an organization, if a DNS server is installed and configured on the computer that is also playing the role of the Active Directory Domain Controller, the administrators can configure the Active Directory-Integrated DNS zone to allow a smooth DNS replication without any administrative overhead.

If the administrators do not configure the Active Directory-Integrated DNS zone, they are required to configure a separate DNS replication topology through which the DNS records are replicated with the other DNS servers that the organization may have. On the other hand, if the Active Directory-Integrated DNS zone is configured, the administrators are not required to create a separate replication topology, and the DNS replication takes place along with the Active Directory replication process among all the available Active Directory domain controllers that the organization has.



Note: Active Directory-Integrated DNS zone cannot be configured on a server on which only the DNS services are installed, and the server does not have the Active Directory

Domain Services installed on it, i.e. the server is not an Active Directory domain controller.

Another advantage of having an Active Directory-Integrated DNS zone, apart from eliminating the requirement of separately configuring replication topologies, is that just like normal DNS server, it also supports secure dynamic updates. By enabling the secure dynamic updates on the DNS server, the administrators can limit the DNS server to automatically update only the DNS records of the DNS client computers that are the members of the Active Directory domain. In case any computer that is not the member of Active Directory domain tries to register its record with the DNS server, the DNS server refuses to accept the record.

Important

After enabling the Active Directory-Integrated DNS zone on the DNS server (which of course is also playing the role of an Active Directory domain controller), it is important for the administrators to plan and create a secure Active Directory replication topology. While configuring the topology, the administrators must take utmost care about the security measures, and must make the entire network infrastructure and replication topology as secure as possible.

Also, the administrators must configure the replication topologies of the Active Directory domain and the DNS records only among the limited number of computers that are placed in highly secured area, and have decent network security measures in place

Note: Creating replication topology with too frequent replication schedules, or between huge numbers of Active Directory domain controllers might remarkably slow down the network, hence ending up having bottlenecks. Because of this, the users may experience degraded network performance.

http://www.tomshardware.com/faq/id-1932439/active-directory-integrated-dns-zone.html