

## What is Global Name Zone in DNS Server 2008 / 2012 Server?

- 1) Global Name Zone is alternative solution to retire WINS from the Microsoft network and planning on deploying IP resolution will depend on DNS.
- 2) WINS and NetBIOS does not support IPV6 Address, hence forth from windows 2000, started using DNS.
- 3) To retrieve WINS infrastructure and migrate to DNS for all name resolution, Global Name Zone (GNZ) was introduced 2008 server onwards.
- 4) GNZ is designed to enable the resolution of these single-label, static, global names for servers using DNS.
- 5) GNZ does not support automatic secure or non-secure dynamic updates.
- 6) After enabling Global Names Zone, the administrators should create, add, and edit records to that Zone manually.

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### [Creating the GlobalNames zone](#)

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- [Using the Windows interface](#)
- Using commandline
- Using Powershell

### [To create the GlobalNames zone using the Windows interface](#)

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1. Open DNS Manager. To open DNS Manager, click **Start**, point to **Administrative Tools**, and then click **DNS**.
2. In the console tree, right-click a Domain Name System (DNS) server, and then click **New Zone** to open the New Zone Wizard.
3. On the **Welcome to the New Zone Wizard** page, click **Next**.
4. On the **Zone Type** page, ensure that **Primary zone** and **Store the zone in Active Directory (available only if DNS server is a writeable domain controller)** are selected, and then click **Next**.

5. Click **To all DNS servers in this forest:** <ForestName>, and then click **Next**.
6. Click **Forward lookup zone**, and then click **Next**.
7. In **Zone name**, type **GlobalNames**, and then click **Next**.
8. Click **Do not allow dynamic updates**, and then click **Next**.
9. Click **Finish** to create the GlobalNames zone.

### [To create the GlobalNames zone using a command line](#)

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1. Open a command prompt. To open an elevated Command Prompt window, click **Start**, point to **All Programs**, click **Accessories**, right-click **Command Prompt**, and then click **Run as administrator**.
2. At the command prompt, type the following command, and then press ENTER:

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```
dnscmd <ServerName> /ZoneAdd  
GlobalNames /DsPrimary [/a  
<AdminEmail>] /DP /forest
```

## Deploying a GlobalNames Zone

A common requirement in computer networks is the ability to resolve simple, single-label names. The use of single-label names makes it possible for a computer to access hosts such as file and Web servers by using short, easy-to-remember names instead of the fully qualified domain names (FQDNs) that form the default naming convention for Domain Name System (DNS). To make the use of single-label names possible, many networks deploy Windows Internet Name Service (WINS) technology and servers in their environment. As a name resolution protocol, WINS is an alternative to DNS. It is an older service that uses NetBIOS over TCP/IP (NetBT). WINS and NetBT do not support Internet Protocol version 6 (IPv6) protocols; therefore, they are being phased out in many networks.

To help network administrators migrate to DNS for all name resolution, the DNS Server role in Windows Server 2008/2012 support a specially named zone, called GlobalNames. By deploying a zone with this name, you can have the static, global records with single-label names, without relying on WINS. These single-label names typically refer to records for important, well-known

and widely-used servers—servers that are already assigned static IP addresses and that are currently managed by IT-administrators using WINS.

The GlobalNames zone is not designed to be a complete replacement for WINS. You should not use the GlobalNames zone to support the name resolution of records that are dynamically registered in WINS, records which typically are not managed by IT administrators. Support for these dynamically registered records is not scalable, especially for larger customers with multiple domains or multiple forests.

## Deciding if you need to deploy a GlobalNames zone

Consider deploying a GlobalNames zone if:

- You are retiring WINS or you are planning to deploy only IPv6 in your environment, so that all name resolution will depend on DNS.
- Your need for single-label name resolution is limited to important servers or Web sites that can be statically registered in DNS. (Typically, these names are also configured statically and globally in the WINS database.) Host names cannot be registered in the GlobalNames zone by dynamic updates.
- You cannot rely on the suffix search lists on client computers to provide single-label name resolution; for example, because the number of target domains is too great or the domains cannot be centrally managed to guarantee that host names will be unique. For more information about using suffix search lists, see [Understanding DNS Client Settings](#).
- All the DNS servers that are authoritative for your zones are servers running Windows Server 2008. To resolve names that are registered in the GlobalNames zone, all DNS servers that are authoritative for a zone and that serve client query requests must be running Windows Server 2008 and they must either be configured with a local copy of the GlobalNames zone or they must be able to contact remote DNS servers that host the GlobalNames zone.

We also recommend that the GlobalNames zone be integrated with Active Directory Domain Services (AD DS). This integration with AD DS ensures easier management and future scalability.

## Deploying a GlobalNames zone

The specific steps for deploying a GlobalNames zone can vary somewhat, depending on the AD DS topology of your network.

### Step 1: Create the GlobalNames zone

The first step in deploying a GlobalNames zone is to create the zone on a DNS server that is a domain controller running Windows Server 2008. The GlobalNames zone is not a special zone type; rather, it is simply an AD DS-integrated forward lookup zone that is called GlobalNames. For information about creating a primary forward lookup zone, see [Add a Forward Lookup Zone](#).

### Step 2: Enable GlobalNames zone support

The GlobalNames zone is not available to provide name resolution until GlobalNames zone support is explicitly enabled by using the following command on every authoritative DNS server in the forest:

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```
dnscmd <ServerName> /config /enableglobalnamesupport 1
```

where *ServerName* is the DNS name or IP address of the DNS server that hosts the GlobalNames zone. To specify the local computer, replace *ServerName* with a period (.), for example, `dnscmd . /config /enableglobalnamesupport 1`.

### Step 3: Replicate the GlobalNames zone

To make the GlobalNames zone available to all DNS servers and clients in a forest, replicate the zone to all domain controllers in the forest, that is, add the GlobalNames zone to the forest-wide DNS application partition. For more information, see [Change the Zone Replication Scope](#).

If you want to limit the servers that will be authoritative for the GlobalNames zone, you can create a custom DNS application partition for replicating the GlobalNames zone. For more information, see [Understanding DNS Zone Replication in Active Directory Domain Services](#).

### Step 4: Populate the GlobalNames zone

For each server that you want to be able to provide single-label name resolution for, add an alias (CNAME) resource record to the GlobalNames zone. For more information, see [Add an Alias \(CNAME\) Resource Record to a Zone](#).

### **Step 5: Publish the location of the GlobalNames zone in other forests**

If you want DNS clients in other forests to use the GlobalNames zone for resolving names, add service location (SRV) resource records to the forest-wide DNS application partition, using the service name `_globalnames._msdcs` and specifying the FQDN of the DNS server that hosts the GlobalNames zone. For more information, see [Add a Resource Record to a Zone](#) and [Service Location \(SRV\) Resource Record Dialog Box](#).

You can also use the Windows PowerShell cmdlets

**Get-DnsServerGlobalNameZone** and **Set-DnsServerGlobalNameZone** to configure GlobalNames zones.