

Azure DNS

Azure DNS is a hosting service for DNS domains (Can't use Azure DNS to buy a domain name. You need to buy a domain name from a third-party domain name registrar) that provides name resolution by using Microsoft Azure infrastructure (Your domains hosted in Azure DNS for record management).

Public Zone

It is to configure Azure DNS to resolve host names in your public domain.

For example, I purchased a domain abc.com domain from a third party domain name registrar and i configure Zones in Azure DNS to resolve www.abc.com and blogs.abc.com from my Azure resources.

Private Zone

The records contained in a private DNS zone are not resolvable from the Internet. DNS resolution against a private DNS zone works only from virtual networks that are linked to it.

Create a DNS zone

A DNS zone contains the DNS entries for a domain. For creation, login to portal then select Create a resource, then Networking, and then DNS zone.

Provide the details like exact name of the domain (abc.com) and resources group name and location. Create a new address record or 'A' record (www) to resolve a host name to an IPv4 address.

Below cli to create all to set

```
az group create --name rg-greenbag-demo --location "East US"
az network dns zone create -g rg-greenbag-demo -n greenbagdemo.com
az network dns record-set a add-record -g rg-greenbag-demo -z greenbagdemo.com -n www -a 192.168.5.10
```

List the DNS records in the zone

```
az network dns record-set list -g rg-greenbag-demo -z greenbagdemo.com
```

Results

```
PS /home/ase> az group create --name rg-greenbag-demo --location "East US"
```

```
{
  "location": "eastus",
  "managedBy": null,
  "name": "rg-greenbag-demo",
  "properties": {
    "provisioningState": "Succeeded"
  },
  "tags": null,
  "type": "Microsoft.Resources/resourceGroups"
}
```

```
PS /home/ase> az network dns zone create -g rg-greenbag-demo -n greenbagdemo.com
```

```
{
  "location": "global",
  "maxNumberOfRecordSets": 10000,
  "name": "greenbagdemo.com",
  "nameServers": [
    "ns1-04.azure-dns.com.",
    "ns2-04.azure-dns.net.",
  ]
}
```

```
"ns3-04.azure-dns.org.",
"ns4-04.azure-dns.info."
],
"numberOfRecordSets": 2,
"registrationVirtualNetworks": null,
"resolutionVirtualNetworks": null,
"resourceGroup": "rg-greenbag-demo",
"tags": {},
"type": "Microsoft.Network/dnszones",
"zoneType": "Public"
}
```

```
PS /home/ase> az network dns record-set a add-record -g rg-greenbag-demo -z greenbagdemo.com
-n www -a 192.168.5.10
```

```
{
  "arecords": [
    {
      "ipv4Address": "192.168.5.10"
    }
  ],
  "fqdn": "www.greenbagdemo.com.",
  "metadata": null,
  "name": "www",
  "provisioningState": "Succeeded",
  "resourceGroup": "rg-greenbag-demo",
  "targetResource": {
    "id": null
  },
  "ttl": 3600,
  "type": "Microsoft.Network/dnszones/A"
}
```

```
PS /home/ase> az network dns record-set list -g rg-greenbag-demo -z greenbagdemo.com
```

```
[
  {
    "aaaaRecords": null,
    "arecords": null,
    "caaRecords": null,
    "cnameRecord": null,
    "fqdn": "greenbagdemo.com.",
    "metadata": null,
    "mxRecords": null,
    "name": "@",
    "nsRecords": [
      {
        "nsdname": "ns1-04.azure-dns.com."
      },
      {
        "nsdname": "ns2-04.azure-dns.net."
      },
      {
        "nsdname": "ns3-04.azure-dns.org."
      },
    ]
  }
]
```

```
{
  "nsdname": "ns4-04.azure-dns.info."
}
],
"provisioningState": "Succeeded",
"ptrRecords": null,
"resourceGroup": "rg-greenbag-demo",
"soaRecord": null,
"srvRecords": null,
"targetResource": {
  "id": null
},
"ttl": 172800,
"txtRecords": null,
"type": "Microsoft.Network/dnszones/NS"
},
{
  "aaaaRecords": null,
  "arecords": null,
  "caaRecords": null,
  "cnameRecord": null,
  "fqdn": "greenbagdemo.com.",
  "metadata": null,
  "mxRecords": null,
  "name": "@",
  "nsRecords": null,
  "provisioningState": "Succeeded",
  "ptrRecords": null,
  "resourceGroup": "rg-greenbag-demo",
  "soaRecord": {
    "email": "azuredns-hostmaster.microsoft.com",
    "expireTime": 2419200,
    "host": "ns1-04.azure-dns.com.",
    "minimumTtl": 300,
    "refreshTime": 3600,
    "retryTime": 300,
    "serialNumber": 1
  },
  "srvRecords": null,
  "targetResource": {
    "id": null
  },
  "ttl": 3600,
  "txtRecords": null,
  "type": "Microsoft.Network/dnszones/SOA"
},
{
  "aaaaRecords": null,
  "arecords": [
    {
      "ipv4Address": "192.168.5.10"
```

```

    }
  ],
  "caaRecords": null,
  "cnameRecord": null,
  "fqdn": "www.greenbagdemo.com.",
  "metadata": null,
  "mxRecords": null,
  "name": "www",
  "nsRecords": null,
  "provisioningState": "Succeeded",
  "ptrRecords": null,
  "resourceGroup": "rg-greenbag-demo",
  "soaRecord": null,
  "srvRecords": null,
  "targetResource": {
    "id": null
  },
  "ttl": 3600,
  "txtRecords": null,
  "type": "Microsoft.Network/dnszones/A"
}
]

```

The screenshot shows the Azure portal interface for managing DNS zones. On the left, the 'DNS zones' page lists two zones: 'greenbagdemo.com' and 'myblog.asegk.xyz'. The 'greenbagdemo.com' zone is selected, and the right-hand pane displays its configuration. The 'Record set' view for the 'www' record is shown, with the following details:

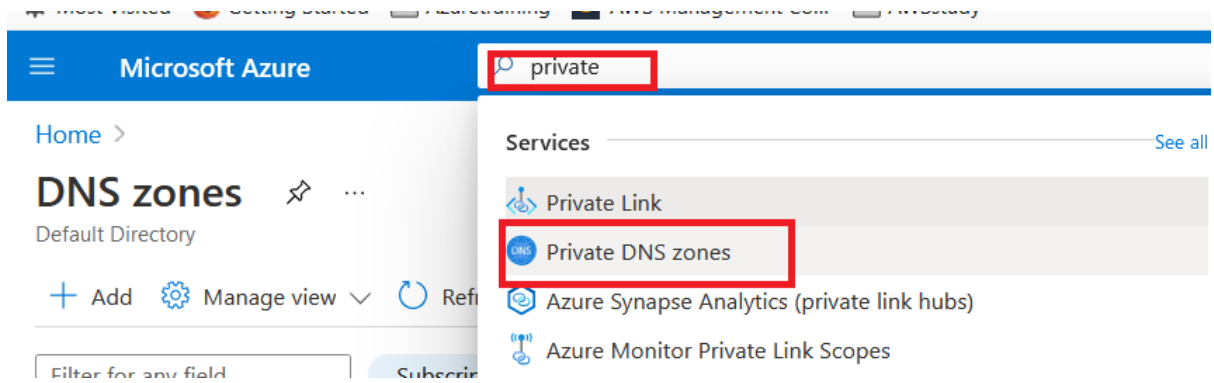
Name	Type	TTL	Value
@	NS	172800	ns1-04.azure-dns.com. ns2-04.azure-dns.net. ns3-04.azure-dns.org. ns4-04.azure-dns.info.
@	SOA	3600	Email: azuredns-host... Host: ns1-04.azure-d... Refresh: 3600 Retry: 300 Expire: 2419200 Minimum TTL: 300 Serial number: 1
www	A	3600	192.168.5.10

Create CNAME

```
az network dns record-set cname set-record --resource-group rg-greenbag-demo --zone-name greenbagdemo.com --record-set-name www --cname photo.greenbagdemo.com
```

Create a private DNS zone

From portal search private dns



```
az group create --name rg-grennbag-demo --location "East US"
```

Create a private DNS zone

```
az group create --name rg-grennbag-demo --location "East US"
```

```
az network vnet create --name greenbagVNet --resource-group rg-grennbag-demo --location eastus -
-address-prefix 10.2.0.0/16 --subnet-name backendSubnet --subnet-prefixes 10.2.0.0/24
```

```
az network private-dns zone create -g rg-grennbag-demo -n private.grennbagdemo.com
```

```
az network private-dns link vnet create -g rg-grennbag-demo -n MyDNSLink -z
private.grennbagdemo.com -v greenbagVNet -e true
```

List the Zone

```
az network private-dns zone list -g rg-grennbag-demo
```

or

```
az network private-dns zone list
```


List the DNS records in your zone

```
az network private-dns record-set list -g rg-grennbag-demo -z private.grennbagdemo.com
```





```
PS /home/ase> az network private-dns record-set list -g rg-grennbag-demo -z
```

```
private.grennbagdemo.com
```

```
[
{
  "fqdn": "private.grennbagdemo.com.",
  "name": "@",
  "resourceGroup": "rg-grennbag-demo",
  "soaRecord": {
    "email": "azureprivatedns-host.microsoft.com",
    "expireTime": 2419200,
    "host": "azureprivatedns.net",
    "minimumTTL": null,
    "minimumTtl": 10,
    "refreshTime": 3600,
    "retryTime": 300,
    "serialNumber": 1
  },
  "ttl": 3600,
  "type": "Microsoft.Network/privateDnsZones/SOA"
}
]
```

Showing 1 to 2 of 2 records. Show hidden types 

No grouping 

<input type="checkbox"/> Name 	Type 	Location
<input type="checkbox"/>  greenbagVNet	Virtual network	East US
<input type="checkbox"/>  private.grennbagdemo.com	Private DNS zone	Global

Home > Resource groups > rg-grennbag-demo >

<<  Record set  Move  Delete zone  Refresh

- Overview**
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

Name	Type	TTL	Value
@	SOA	3600	Email: azureprivatedns-host.microsoft.com Host: azureprivatedns.net Refresh: 3600 Retry: 300 Expire: 2419200 Minimum TTL: 10 Serial number: 1

Home > private.grennbagdemo.com

<<  Add  Refresh

- Overview
- Settings**
- Virtual network links**

Link Name	Link status	Virtual network	Auto-Registration
mydnslink	Completed	greenbagVNet	Enabled