

Get-AllADDomainControllers

Gets a list of all Domain Controllers within the current domain.

Install Active Directory module for Windows PowerShell

Run PowerShell as administrator and run the command below to install Active Directory module for Windows PowerShell.

```
Add-WindowsFeature RSAT-AD-PowerShell
```

Important: You need to install the Active Directory module for Windows PowerShell. Otherwise, it can't load the Get-ADDomainController cmdlet, and an error appears.

Get-ADDomainController cmdlet

The [Get-ADDomainController](#) cmdlet is an excellent method to list the Domain Controller in the forest.

```
Get-ADDomainController
```

Get all Domain Controllers with full details

To get all Domain Controllers, you must run the **Get-ADDomainController** cmdlet, including the **-Filter** string with the wildcard (*).

```
Get-ADDomainController -Filter *
```

All the Domain Controllers appear in the PowerShell output.

In our example, we only copied the first section of the output, which is the Domain Controller **DC01-2019**.

```
ComputerObjectDN      : CN=DC01-2019,OU=Domain Controllers,DC=exoip,DC=local
DefaultPartition      : DC=exoip,DC=local
Domain                 : exoip.local
Enabled                : True
Forest                 : exoip.local
HostName               : DC01-2019.exoip.local
InvocationId           : b44dc8cf-ce37-4046-b908-8504ff700efe
IPv4Address            : 192.168.1.51
IPv6Address            :
IsGlobalCatalog       : True
IsReadOnly             : False
LdapPort               : 389
Name                   : DC01-2019
NTDSSettingsObjectDN  : CN=NTDS Settings,CN=DC01-2019,CN=Servers,CN=Default-First-Site-
Name,CN=Sites,CN=Configuration,DC=exoip,DC=local
OperatingSystem        : Windows Server 2019 Standard
OperatingSystemHotfix  :
OperatingSystemServicePack :
OperatingSystemVersion : 10.0 (17763)
OperationMasterRoles   : {SchemaMaster, DomainNamingMaster, PDCEmulator, RIDMaster...}
Partitions              : {DC=ForestDnsZones,DC=exoip,DC=local,
DC=DomainDnsZones,DC=exoip,DC=local, CN=Schema,CN=Configuration,DC=exoip,DC=local,
CN=Configuration,DC=exoip,DC=local...}
ServerObjectDN         : CN=DC01-2019,CN=Servers,CN=Default-First-Site-
Name,CN=Sites,CN=Configuration,DC=exoip,DC=local
ServerObjectGuid       : 01218cb8-7c17-4d26-bb2a-cc80bc43059c
Site                   : Default-First-Site-Name
SslPort                : 636
```

List all Domain Controllers and Operating System

We can add only the objects we want to display in the output.

```
Get-ADDomainController -Filter * | ft Name,Hostname,OperatingSystem,Enabled
```

The output appears.

| Name | Hostname | OperatingSystem | Enabled |
|-----------|-----------------------|------------------------------|---------|
| DC01-2019 | DC01-2019.exoip.local | Windows Server 2019 Standard | True |
| DC02-2019 | DC02-2019.exoip.local | Windows Server 2019 Standard | True |

Get all Domain Controllers and IP address

Get a list of Domain Controllers, including their IP address.

```
Get-ADDomainController -Filter * | ft Name,IP*
```

The PowerShell output appears.

| Name | IPv4Address | IPv6Address |
|-----------|--------------|-------------|
| DC01-2019 | 192.168.1.51 | |
| DC02-2019 | 192.168.1.52 | |

Filter Domain Controllers

Filter the Domain Controllers and list only the DCs with the **Windows Server 2019** Operating System.

```
Get-ADDomainController -Filter {OperatingSystem -like "Windows Server 2019*"} | ft Name,Hostname,OperatingSystem,Enabled
```

The output appears.

| Name | Hostname | OperatingSystem | Enabled |
|-----------|-----------------------|------------------------------|---------|
| DC01-2019 | DC01-2019.exoip.local | Windows Server 2019 Standard | True |

Count Domain Controllers

Get a count of all the Domain Controllers.

```
Get-ADDomainController -Filter * | Select-Object name | Measure-Object | Select Count
```

Export all Domain Controllers to CSV file

You can export a list of the Domain Controllers to a CSV file.

```
Get-ADDomainController -Filter * | Select-Object Name,Hostname,IP*,Enabled | Export-Csv "C:\temp\All-Domain-Controllers.csv" -NotypeInformation
```

Open the CSV file with your favorite application. In our example, it's Microsoft Excel.

Get all Domain Controllers with powershell CSV in Excel

That's it!

Read more: [Get Organizational Units with PowerShell »](#)

Conclusion

You learned how to get all Domain Controllers with PowerShell. The PowerShell cmdlet *Get-ADDomainController* is an excellent way to list all Domain Controllers in the organization.

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