



## Getting Started

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## Connecting to Cisco UCS Central

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**Step 1** Launch Cisco UCS Central PowerTool from the desktop shortcut

**Step 2** View all cmdlets, functions, and aliases supported by the Cisco UCS Central PowerTool.

```
Get-Command -Module Cisco.UCSCentral
Get-Command -Module Cisco.UCSCentral | group CommandType
Get-Command -Module Cisco.UCSCentral | measure
```

**Step 3** Connect to UCS Central system.

```
$handle = Connect-UcsCentral <ip or hostname> -NotDefault
```

**Note** If sign-in is successful `Connect-UcsCentral`, by default, the UCS Central handle is added to the Default UCS Central list, unless the `-NotDefault` option is specified. Every cmdlet that operates on UCS Central takes the `-UcsCentral` parameter, where the handle can be specified.

**Step 4** Use the following cmdlets:

a) Get org objects.

```
Get-UcsCentralOrg -UcsCentral $handle
```

**Step 5** Disconnect.

```
Disconnect-UcsCentral -UcsCentral $handle
```

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## Default UCS Central

If no handle or name is specified, the UCS Central handle is added to a Default UCS Central list. Unless the `-UcsCentral` parameter is specified, the first cmdlet in the pipeline operates on the default UCS Central list.

```
Connect-UcsCentral <ip or hostname>
```

Get the Default UCS Central list.

```
Get-UcsPSSession
```

Get the set of all chassis objects.

```
Get-UcsCentralChassis
```

Get the object pertaining to chassis 1.

```
Get-UcsCentralChassis -Id 1
```

Get the set of blades, pertaining to chassis 1.

```
Get-UcsCentralChassis -Id 1 | Get-UcsCentralBlade
```

Disconnect.

```
Disconnect-UcsCentral
```

## Default UCS Central List with Multiple UCS Central Systems

PowerTool cmdlets can work with multiple UCS Central systems by specifying multiple handles.

Connect to a Cisco UCS Central system.

```
$handle1 = Connect-UcsCentral <ip1> -NotDefault
```

```
$handle2 = Connect-UcsCentral <ip2> -NotDefault
```

```
Disconnect-UcsCentral-UcsCentral $handle1,$handle2
```

By default, multiple Cisco UCS Central handles are not allowed in Default UCS Central. You can be override using the `Set-UcsPowerToolConfiguration` cmdlet.

```
Get-UcsPowerToolConfiguration
```

```
Set-UcsPowerToolConfiguration -SupportMultipleDefaultUcs $true
```

```
Connect-UcsCentral <ip1>
```

```
Connect-UcsCentral <ip2>
```

```
Get-UcsPSSession
```

```
Disconnect-UcsCentral
```

Connect to multiple Cisco UCS Central systems using the same login credentials.

```
$user = "<username>"
```

```
$password = "<password>" | ConvertTo-SecureString -AsPlainText -Force
$cred = New-Object System.Management.Automation.PSCredential($user, $password)
$servers = @("<ucsc1>", "<ucsc2>", "<ucsc3>")
Connect-UcsCentral $servers -Credential $cred
```

## Credentials To and From a File

```
Connect-UcsCentral <ip1>
```

```
Connect-UcsCentral <ip2>
```

Credentials can be stored to a file. The stored credentials are encrypted with a specified Key.

```
Export-UcsPSSession -LiteralPath C:\work\labs.xml
```

```
Disconnect-UcsCentral
```

Login can be initiated from credentials stored in a file.

```
Connect-UcsCentral -LiteralPath C:\work\labs.xml
```

Log in to an extra system and add the credentials to the file.

```
Connect-UcsCentral <ip3>
```

```
Export-UcsPSSession -Path C:\work\lab?.xml -Merge
```

## SSL Handling

When connected to Cisco UCS Central server, the server does not recognize any valid certificates. The, the connection depends on InvalidCertificateAction. InvalidCertificateAction is set to Ignore by default. By default PowerTool is configured to establish the connection without considering the validity of the certificate.

You can override this using the Set-UcsPowerToolConfiguration cmdlet.

```
Get-UcsPowerToolConfiguration
```

```
Set-UcsPowerToolConfiguration -InvalidCertificateAction Fail
```

Status	Description
Fail	The cmdlet does not establish a connection if the certificate is not valid.
Ignore	The cmdlet establishes the connection without considering the validity of the certificate.
Default	(Windows default) The cmdlet establishes a connection if the certificate is valid.

# Aliases

Aliases are the simplified cmdlets which can be used to perform Cisco UCS Central operations.

```
gal | ? {$_Name -like "*-UcsCentral*" } | select Name
```

Aliases	Cmdlets
Acknowledge-UcsCentralBlade	Set-UcsCentralComputePhysicalOperation -Lc rediscover
Acknowledge-UcsCentralChassis	Set-UcsCentralEquipmentChassisOperation -AdminState re-acknowledge
Acknowledge-UcsCentralFault	Confirm-UcsCentralFault
Acknowledge-UcsCentralFex	Set-UcsCentralEquipmentFexOperation -AdminState re-acknowledge
Acknowledge-UcsCentralRackUnit	Set-UcsCentralComputePhysicalOperation -Lc rediscover
Acknowledge-UcsCentralServerUnit	Set-UcsCentralComputePhysicalOperation -Lc rediscover
Acknowledge-UcsCentralSlot	Set-UcsCentralFabricComputeSlotEpOperation -AdminState reacknowledge
Add-UcsCentralMo	Add-UcsCentralManagedObject
Associate-UcsCentralServiceProfile	Connect-UcsCentralServiceProfile
Compare-UcsCentralMo	Compare-UcsCentralManagedObject
Decommission-UcsCentralBlade	Set-UcsCentralComputePhysicalOperation -Lc decommission
Decommission-UcsCentralChassis	Set-UcsCentralEquipmentChassisOperation -AdminState decommission
Decommission-UcsCentralFex	Set-UcsCentralEquipmentFexOperation -AdminState decommission
Decommission-UcsCentralRackUnit	Set-UcsCentralComputePhysicalOperation -Lc decommission
Decommission-UcsCentralServerUnit	Set-UcsCentralComputePhysicalOperation -Lc decommission
Disassociate-UcsCentralServiceProfile	Disconnect-UcsCentralServiceProfile
Get-UcsCentralMo	Get-UcsCentralManagedObject
Get-UcsCentralUcsDomain	Get-UcsCentralExtPolClient
Recommission-UcsCentralBlade	Set-UcsCentralFabricComputePhEpOperation -AdminState enabled

Recommission-UcsCentralChassis	Set-UcsCentralFabricSwChPhEpOperation -AdminState enabled
Recommission-UcsCentralFex	Set-UcsCentralFabricSwChPhEpOperation -AdminState enabled
Recommission-UcsCentralRackUnit	Set-UcsCentralFabricComputePhEpOperation -AdminState enabled
Recommission-UcsCentralServerUnit	Set-UcsCentralFabricComputePhEpOperation -AdminState enabled
Remove-UcsCentralBlade	Set-UcsCentralComputePhysicalOperation -Lc remove
Remove-UcsCentralCartridge	Set-UcsCentralComputeCartridgeOperation -Lc remove
Remove-UcsCentralFex	Set-UcsCentralEquipmentFexOperation -AdminState remove
Remove-UcsCentralMo	Remove-UcsCentralManagedObject
Remove-UcsCentralRackUnit	Set-UcsCentralComputePhysicalOperation -Lc remove
Set-UcsCentralMo	Set-UcsCentralManagedObject
Sync-UcsCentralMo	Sync-UcsCentralManagedObject

