

Deploy the Domain Controller for your Extended Environment in a PrivateDomain

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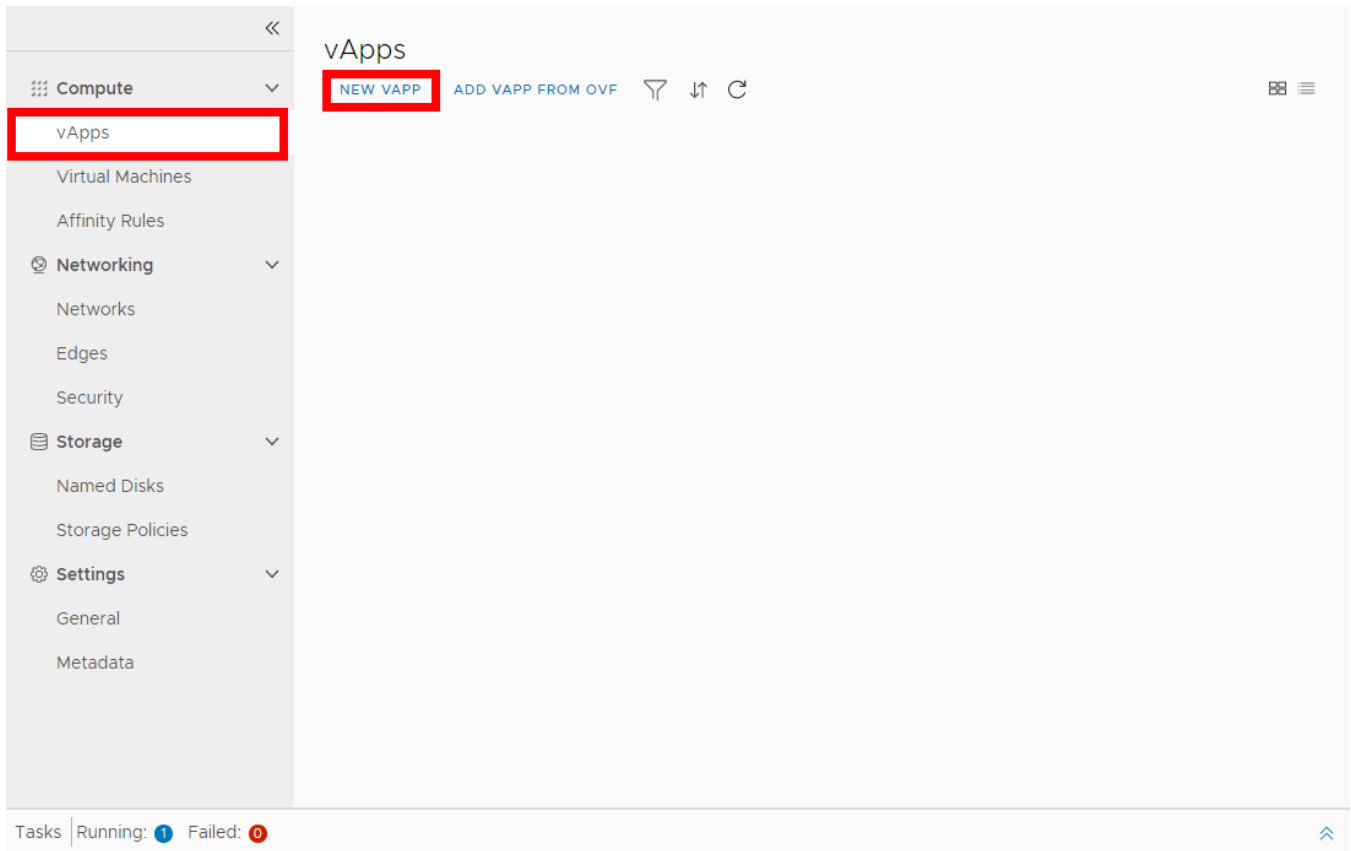
Background: In this procedure, we will walk through deploying a new virtual machine on the CloudConnect platform, promoting it to a Domain Controller, and joining it to an on-premise or preexisting domain to extend an on-premise environment. As a prerequisite, a VPN tunnel must exist between the CloudConnect Org VDC Network and the existing on-premise network. For more information, see: [Create a VPN Tunnel \(PrivateDomain\)](#)

Process: Begin by accessing your organization's vCloud Director instance.

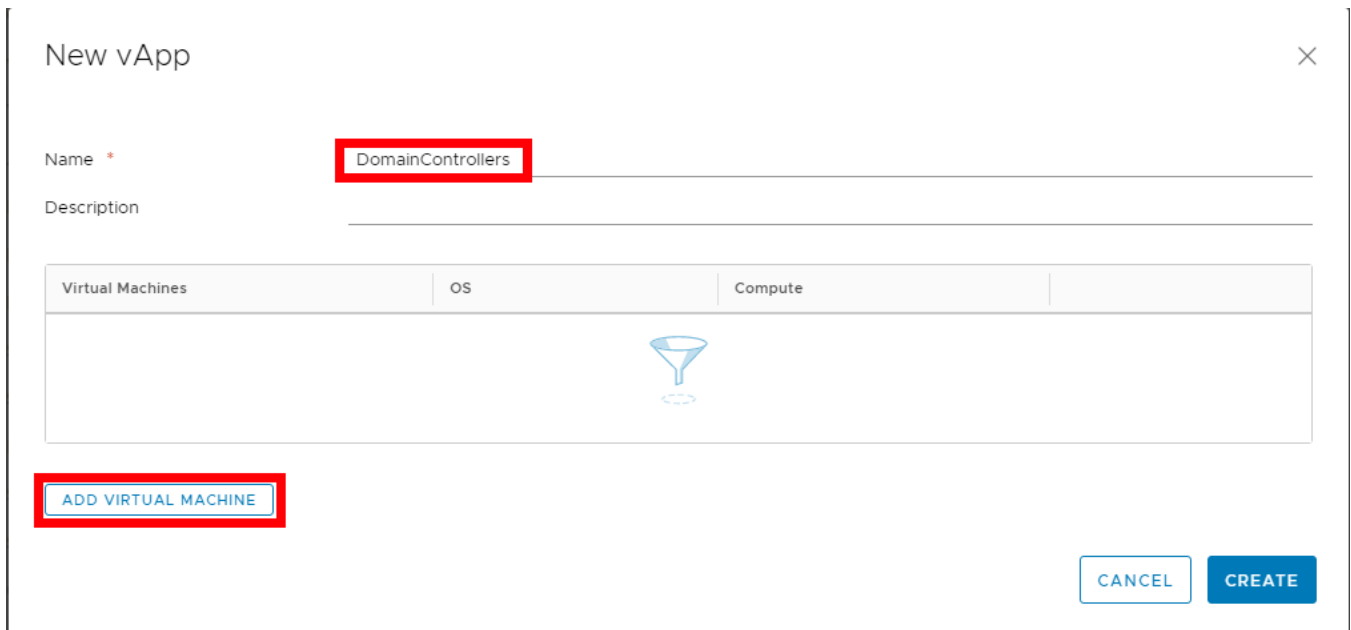
1.) Open the PrivateDomain's virtual datacenter.

The screenshot shows the vCloud Director interface. At the top, there is a navigation bar with 'vm vCloud Director' and 'Datacenters'. Below this, the 'Virtual Datacenters' section is visible. It includes a summary row with 'Environment' (1 location, 1 datacenter, 2 clouds), 'Running Applications' (36 icons, 14 icons), and 'Used Resources' (204 GHz, 135 GB, 2 TB). A search bar labeled 'Find by Name' is on the right. The main content area displays two datacenter cards. The first card, 'privateDomain:acme.local', is highlighted with a red box. It shows 26 of 30 running VMs, 150 GHz CPU, 95 GB Memory, and 2 TB Storage, all with 'pay-as-you-go unlimited allocation' pricing. The second card, 'demo1.com, vcloud-bos.cloudconnect.net', shows 0 of 0 running VMs, 0 GHz CPU, 0 GB Memory, and 0 GB Storage, also with 'pay-as-you-go unlimited allocation' pricing.

2.) Navigate to vApps and select *NEW VAPP*.



3.) Name the vApp 'DomainControllers', and select 'Add Virtual Machine.'



4.) Give the new domain controller an appropriate Name and Computer Name, select its Type as 'From Template', and enable the 'Power on' checkbox. Select Windows Server 2019 Standalone from the set of available templates, and click 'OK' to deploy the VM.

New VM

Name *

Computer Name *

Description

Type * New From Template

Power on

Templates

	Name	vApp Name	Catalog
<input type="radio"/>	WinSvr2008R2	Windows Server 2008 R2 Standalone	CloudCon
<input checked="" type="radio"/>	Windows Server 2019 Standalone	Windows Server 2019 Standalone	CloudCon
<input type="radio"/>	Windows 10 Enterprise VDA (1909) w/ Citrix XenApp 7.15	Windows 10 Enterprise (1909) VDA w/ Citrix XenDesktop 7.15	CloudCon

5.) Access the newly created vApps' Details.

vApps

NEW VAPP

ADD VAPP FROM OVF



vApp

DomainControllers

Stopped



Virtual Machines
1

Lease
Never



Total CPUs
2

Expires



Total Storage
40.00 GB

Networks

...



Total Memory
6144 MB

Snapshot

-

ACTIONS ▾

DETAILS

6.) Navigate to the 'Network Diagram' tab.

All vApps > DomainControllers

DomainControllers

Details **Network Diagram** Networks Metadata

VMs

Name	Status	OS
Cloud-DC	Powered off	Microsoft Windows Server 2016 (64-bit)

General

Name: DomainControllers

Description:

7.) Select 'Add Network.'

All vApps > DomainControllers

DomainControllers

Details **Network Diagram** Networks Metadata

ADD VM

ADD NETWORK



Cloud-DC
1 NIC's | 0 Connected
★

8.) Select the 'Domain Controllers' OrgVDC Network, and click 'Add.'

Add Network to DomainControllers ✕

Type OrgVDC Network vApp Network

Status	Name	Org VDC	Gateway CIDR	Routing	Connected To	IP Pool Consumed
✓	CloudConnect	PrivateDomain...	10.10.10.0/24	Direct	CloudConnect	36%
✓	Domain Control...	PrivateDomain...	10.10.10.0/24	Routed	EdgeGateway-004-...	0%


CANCEL ADD

9.) Navigate to the Details of the newly deployed Domain Controller VM.

Virtual Machines

[NEW VM](#) Look in All VMs ⌵ 🔍 ↕ 🔄

Virtual Machine
Cloud-DC
Microsoft Windows Server 20...
Powered off




CPUs
2

Memory
6144 MB

Networks
-

Lease
Never Expires

VMware Tools


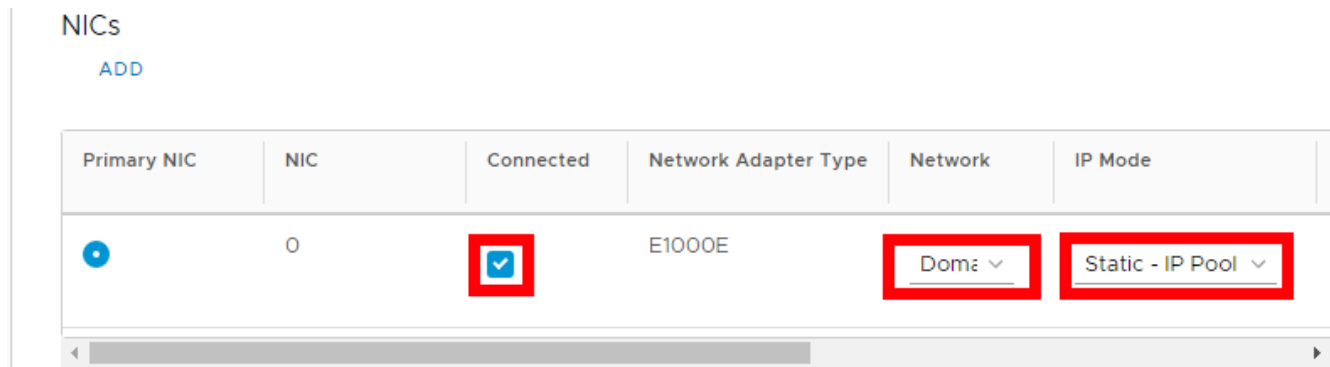
Snapshot
-

ACTIONS ⌵ **DETAILS**

10.) Navigate to the 'Hardware' tab.



11.) Navigate to the 'NICs' section, and ensure that NIC 0 is Connected, select the Domain Controllers Network, and set the IP mode to Static - IP Pool.



12.) In the 'Guest OS Customization' tab, and ensure the following settings are enabled:

- Enable guest customization
- Change SID
- Allow local administrator password
- Auto generate password
- Enable this VM to join a domain
- Override organization's domain

Fill the 'Domain Name', 'Username', and 'Password' fields with proper information/credentials for the on-premise/existing domain.

All Virtual Machines > Cloud-DC

Cloud-DC | ACTIONS ▾

- > General
- > Hardware
- ▼ Guest OS Customization

General <ul style="list-style-type: none"><input checked="" type="checkbox"/> Enable guest customization<input checked="" type="checkbox"/> Change SID	Join Domain <ul style="list-style-type: none"><input checked="" type="checkbox"/> Enable this VM to join a domain<ul style="list-style-type: none"><input type="radio"/> Use organization's domain<input checked="" type="radio"/> Override organization's domain
Password Reset <ul style="list-style-type: none"><input checked="" type="checkbox"/> Allow local administrator password<input type="checkbox"/> Require Administrator to change password on first login<input checked="" type="checkbox"/> Auto generate password	Domain Name: acme.local
Specify password: _____	Username: administrator@acme.local
	Password: *****
	Account organizational unit: _____

13.) Click 'Save.'

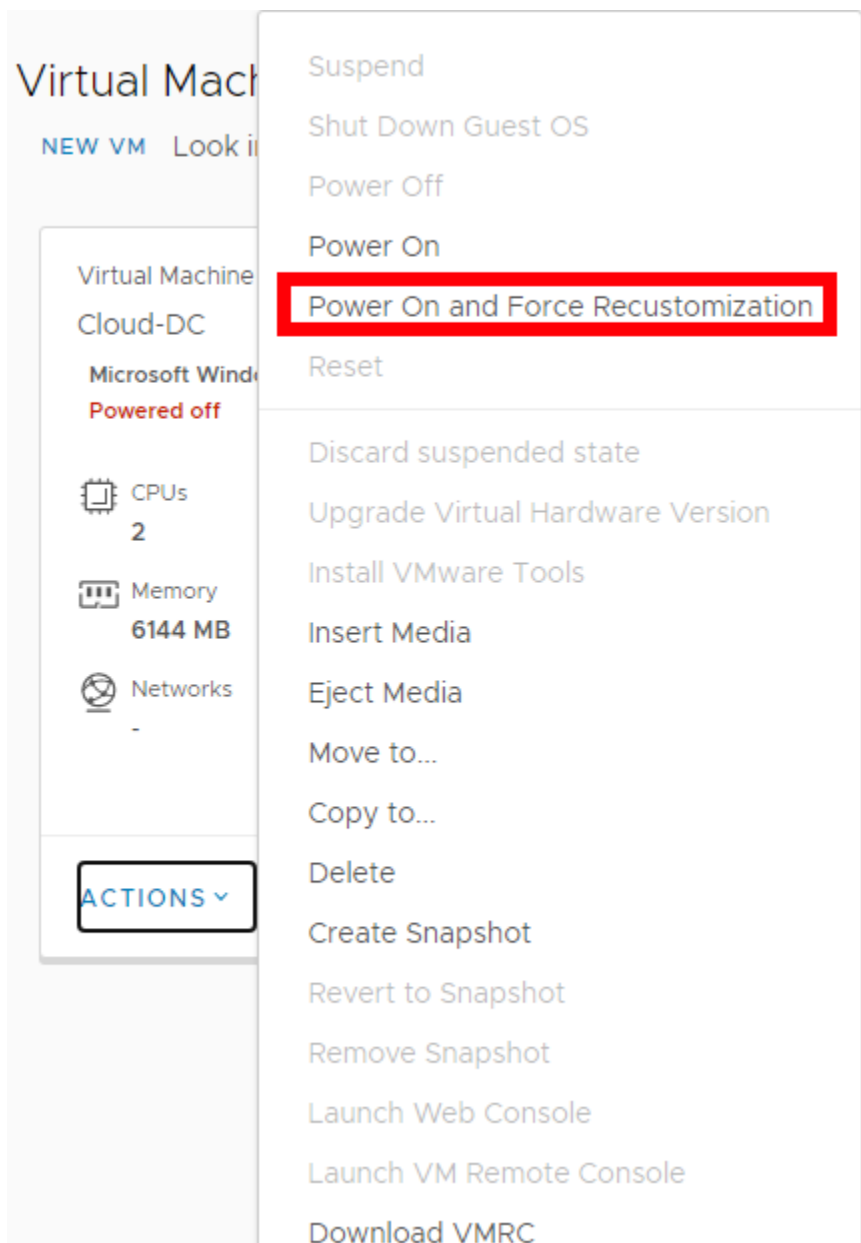
All Virtual Machines > Cloud-DC

Cloud-DC | ACTIONS ▾

- > General
- > Hardware
- > Guest OS Customization
- > Guest Properties
- > Advanced

DISCARD CHANGES | **SAVE**

14.) In the VM's actions, select 'Power On and Force Recustomization.'



18.) Open a console to the VM. During this time, Guest Customization will take place and the VM may reboot multiple times.

Virtual Machine

NEW VM Look in

Virtual Machine


Cloud DC

Microsoft Windows

Powered on

 CPUs
2

 Memory
6144 MB

 Networks
-

ACTIONS ▾

- Suspend
- Shut Down Guest OS
- Power Off
- Power On
- Power On and Force Recustomization
- Reset

- Discard suspended state
- Upgrade Virtual Hardware Version
- Install VMware Tools
- Insert Media
- Eject Media
- Move to...
- Copy to...
- Delete
- Create Snapshot
- Revert to Snapshot
- Remove Snapshot
- Launch Web Console**

CTRL+ALT+DEL

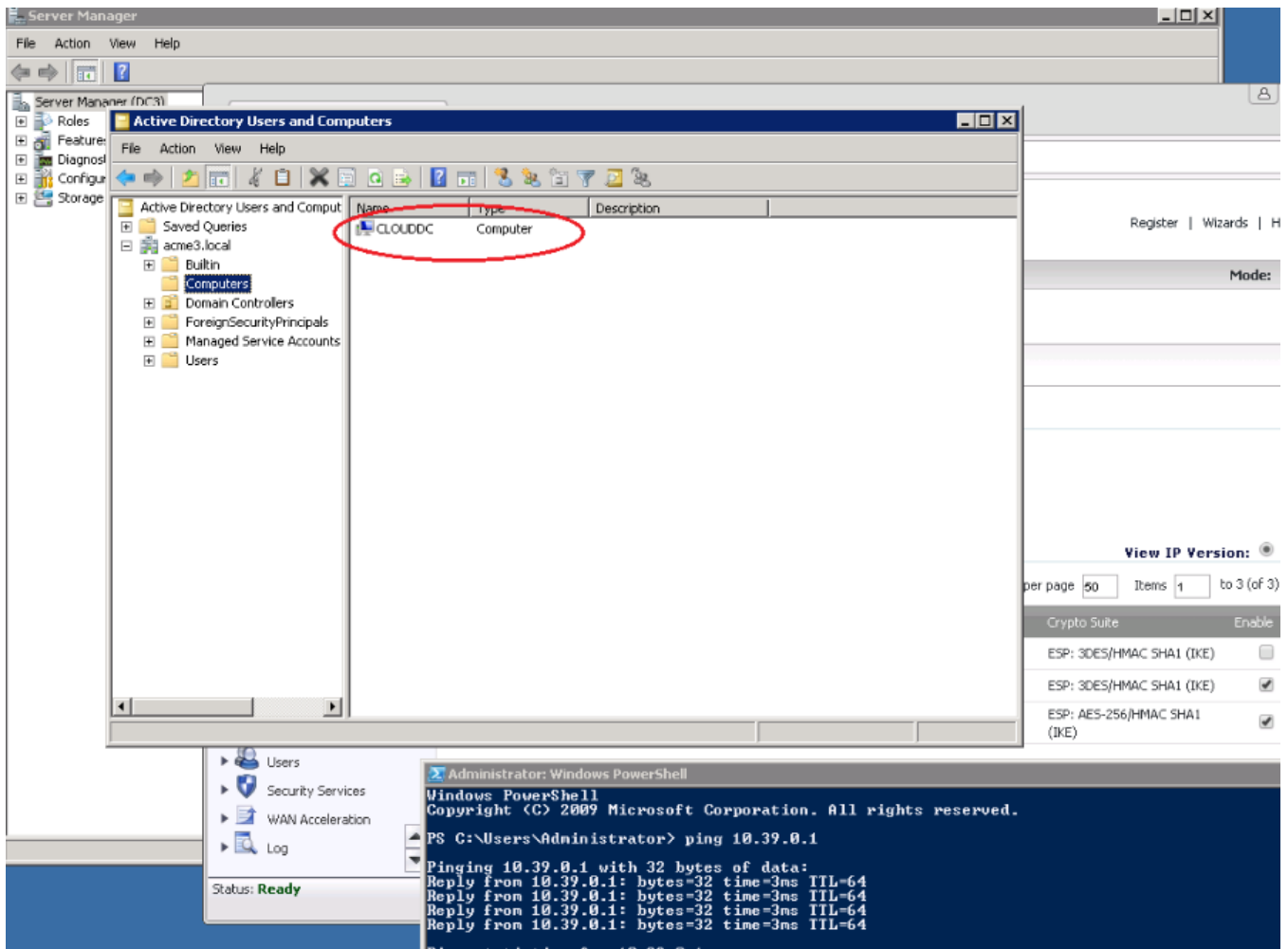
OPTIONS

VMware image customization is in progress ...

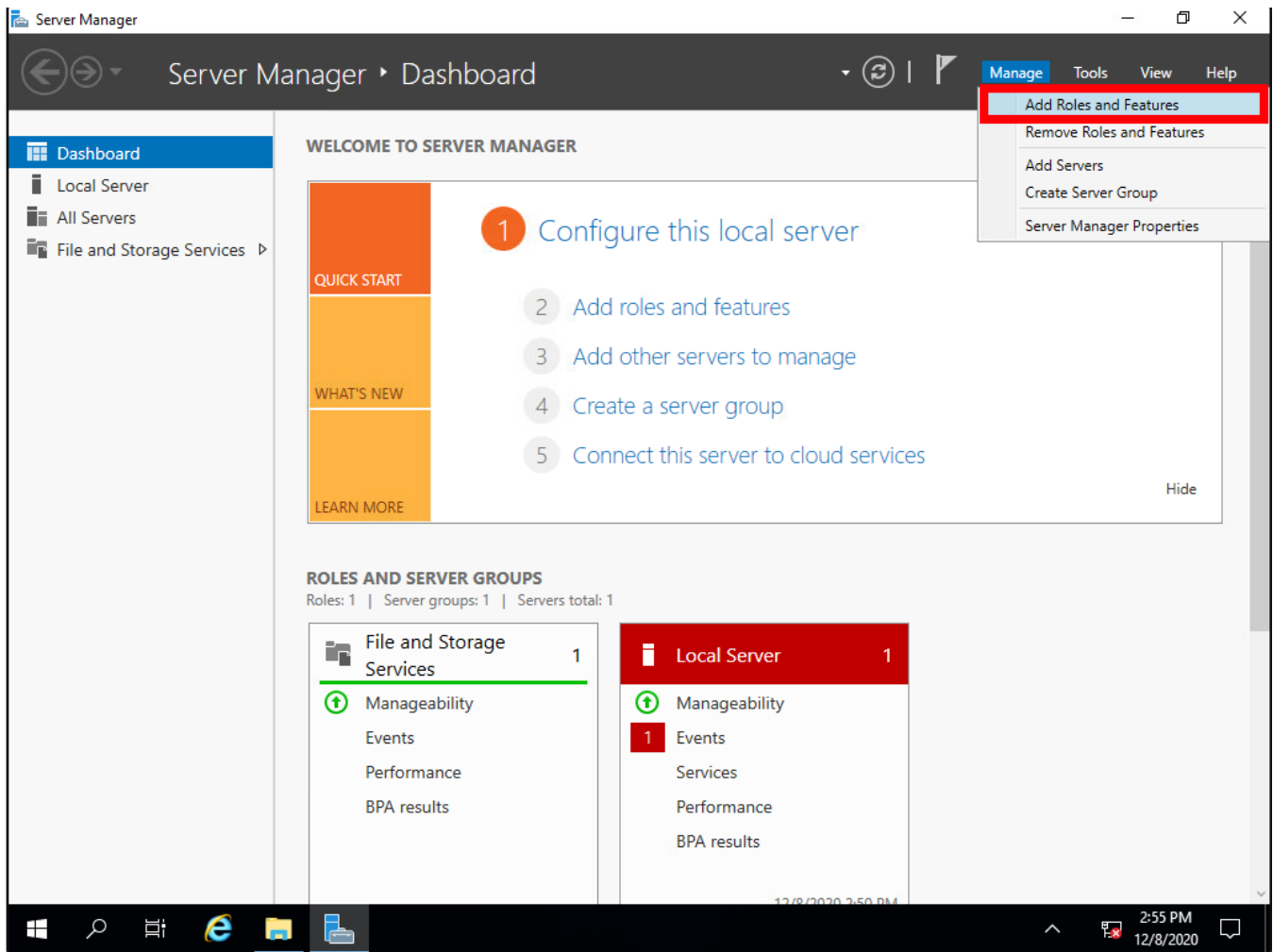


Connected

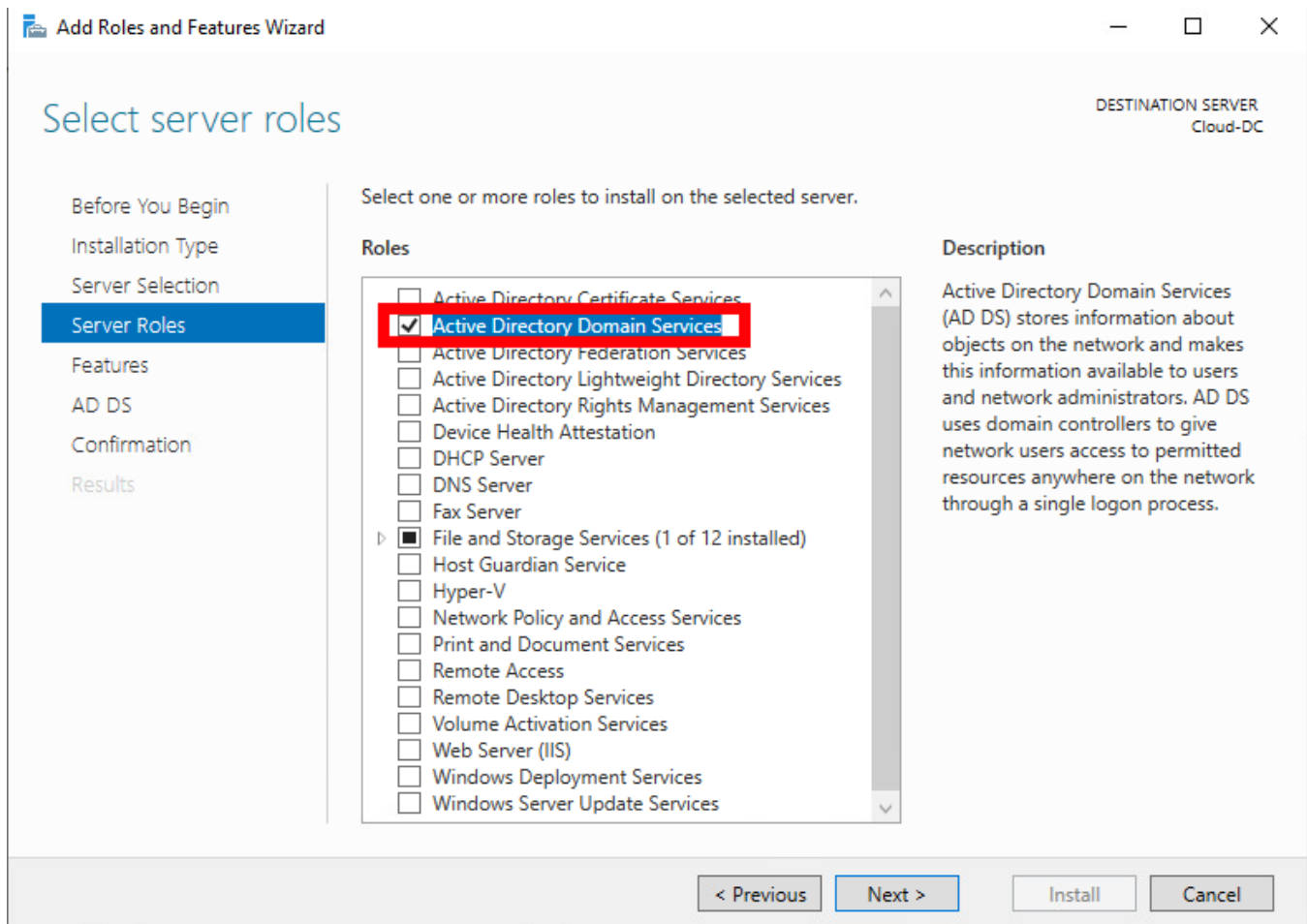
19.) Wait 10-15 minutes until the on-premise/existing Domain Controller shows that the newly deployed CloudDC is joined to the domain.



20.) Log into the newly deployed Cloud DC and select 'Add Roles and Features' from the Manage menu in Server Manager.



20.) Select 'Active Directory Domain Services' upon reaching the 'Server Roles' step, then click 'Next' to continue.



21.) Click 'Install' to begin the installation, and wait for completion.

Confirm installation selections

DESTINATION SERVER
Cloud-DC

Before You Begin

Installation Type

Server Selection

Server Roles

Features

AD DS

Confirmation

Results

To install the following roles, role services, or features on selected server, click Install.

Restart the destination server automatically if required

Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes.

Active Directory Domain Services
Group Policy Management
Remote Server Administration Tools
 Role Administration Tools
 AD DS and AD LDS Tools
 AD DS Tools
 Active Directory Administrative Center
 AD DS Snap-Ins and Command-Line Tools

[Export configuration settings](#)
[Specify an alternate source path](#)

< Previous

Next >

Install

Cancel

22.) Click 'Promote this server to a domain controller.'

Add Roles and Features Wizard

DESTINATION SERVER
Cloud-DC.totalcounselor.com

Installation progress

- Before You Begin
- Installation Type
- Server Selection
- Server Roles
- Features
- AD DS
- Confirmation
- Results**

View installation progress

i Feature installation

Configuration required. Installation succeeded on Cloud-DC.totalcounselor.com.

Active Directory Domain Services
Additional steps are required to make this machine a domain controller.
Promote this server to a domain controller

Group Policy Management

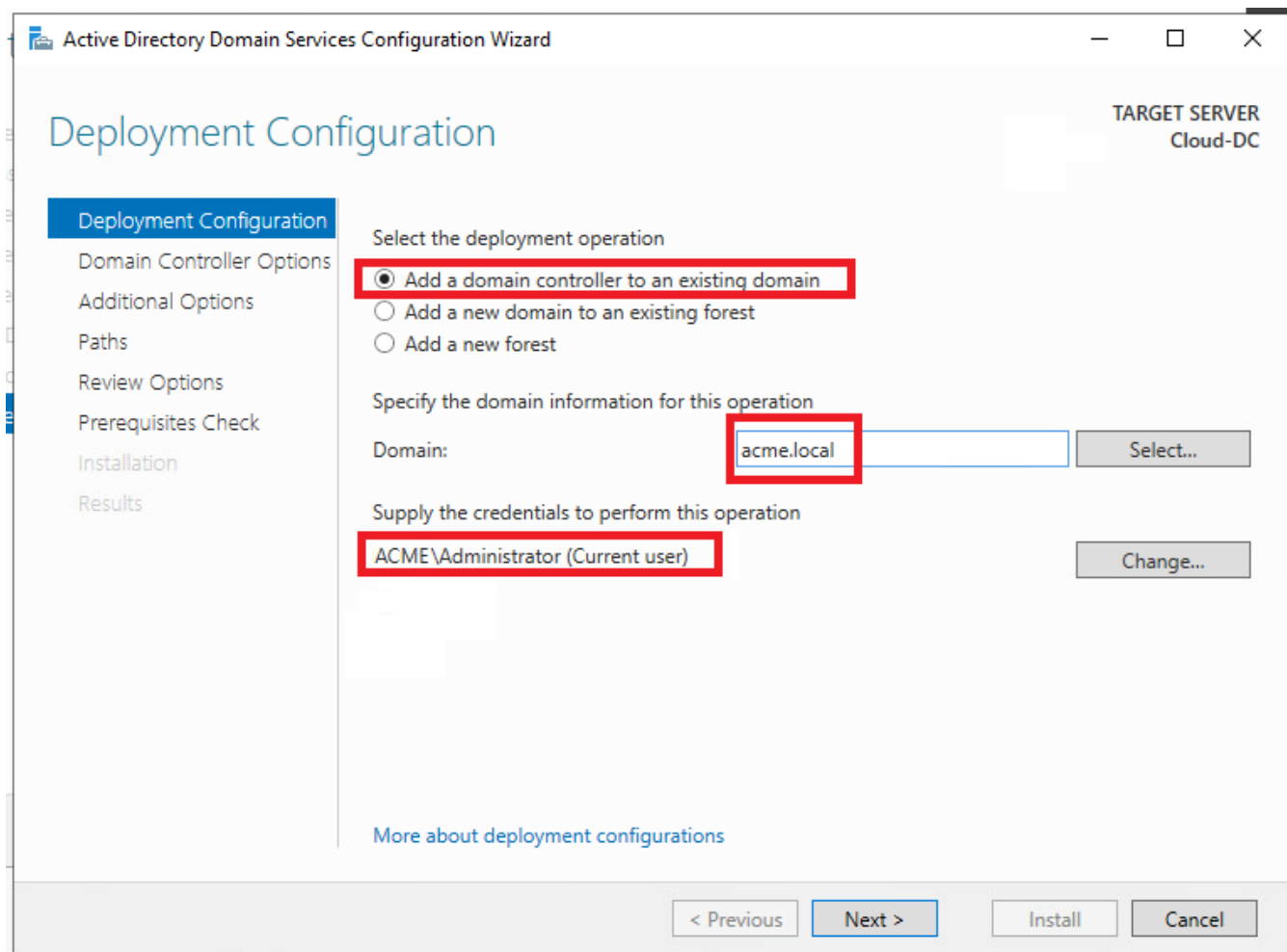
Remote Server Administration Tools
Role Administration Tools
AD DS and AD LDS Tools
AD DS Tools
Active Directory Administrative Center
AD DS Snap-Ins and Command-Line Tools

i You can close this wizard without interrupting running tasks. View task progress or open this page again by clicking Notifications in the command bar, and then Task Details.

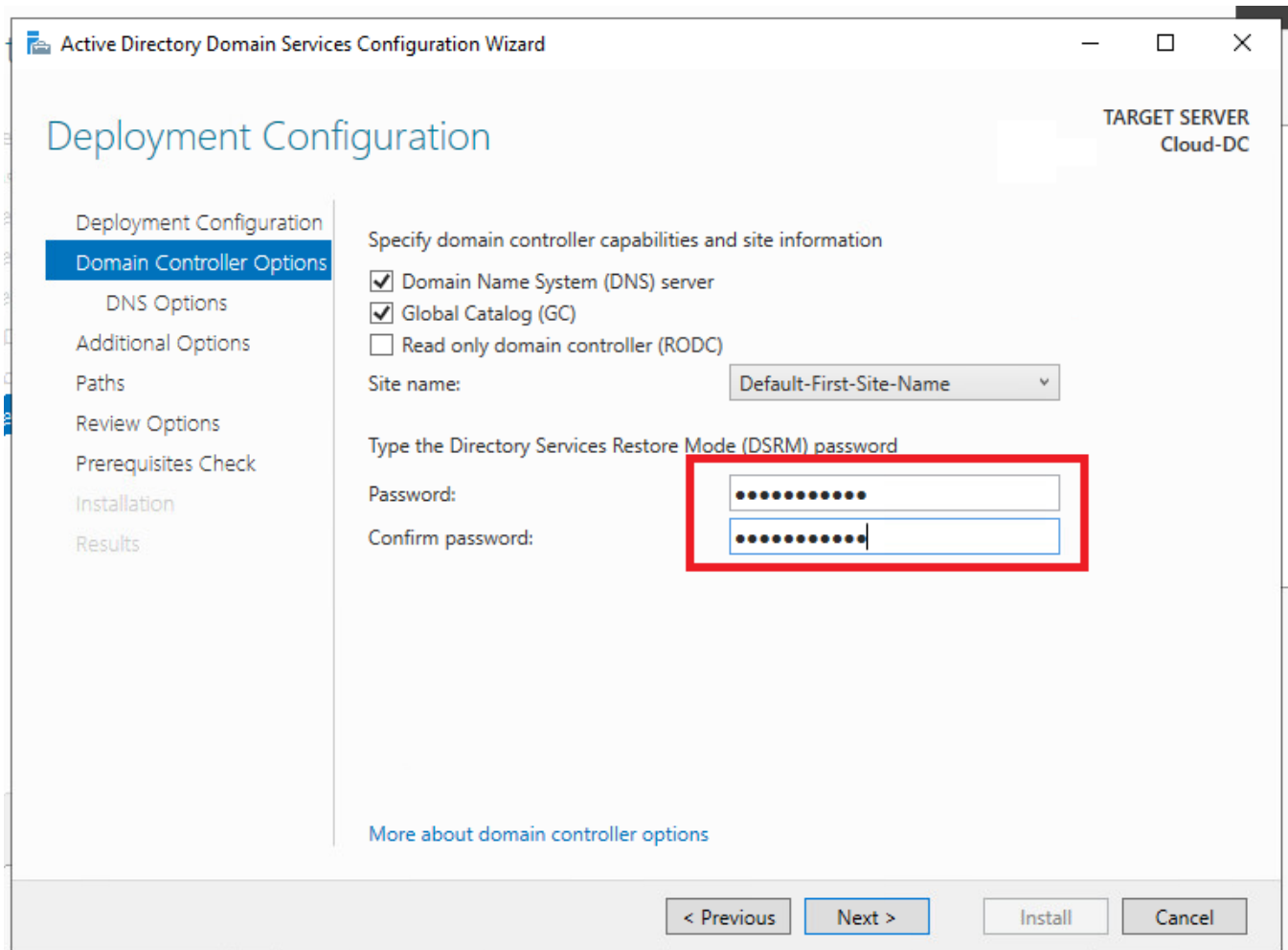
[Export configuration settings](#)

< Previous Next > Close Cancel

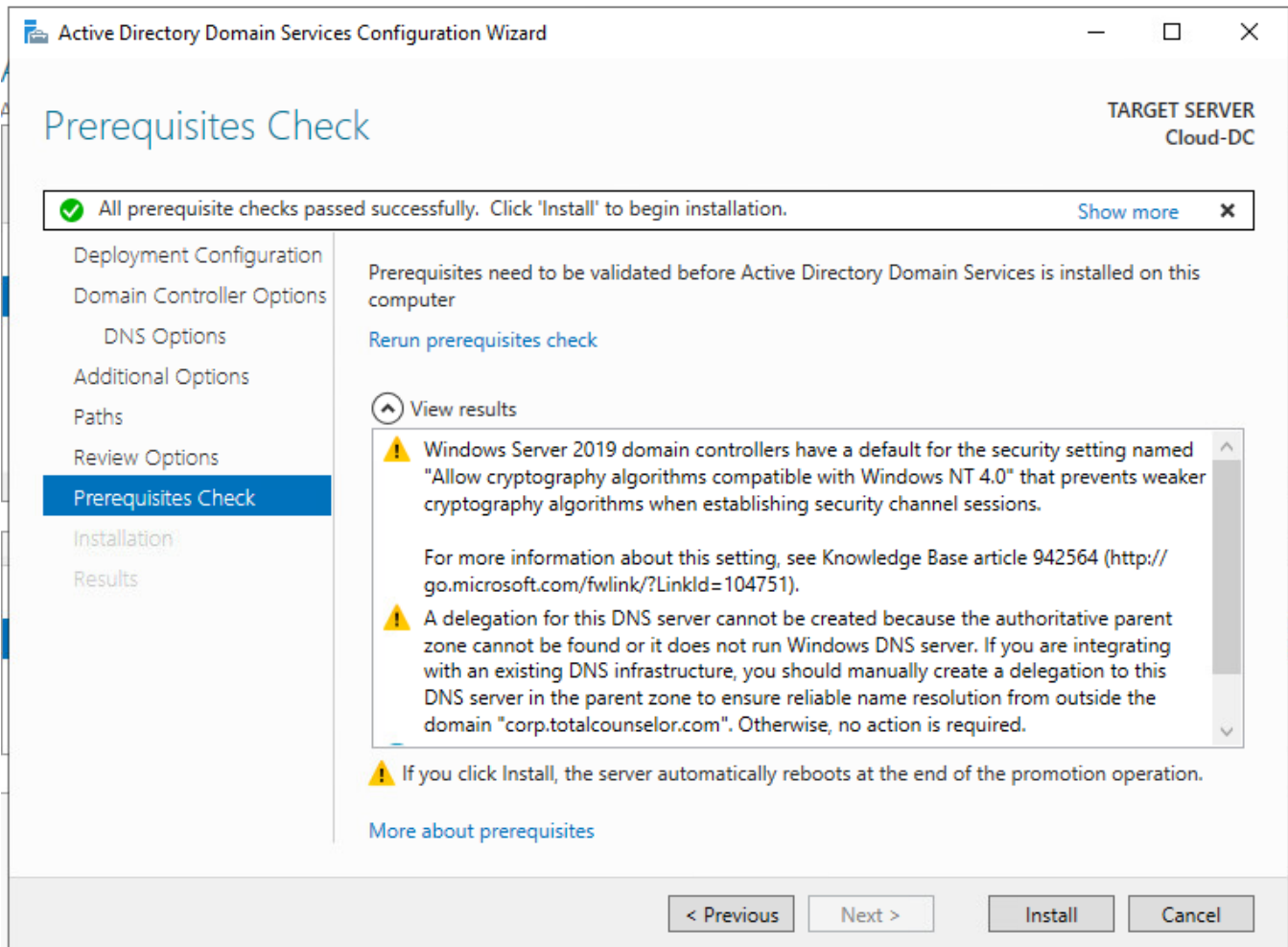
23.) Select 'Add a domain controller to an existing domain,' and verify that the correct domain and user account are specified. Click 'Next' to continue.



24.) Specify a DSRM password. You can use either the same password from the existing Domain Controller, or a different one. Click 'Next' several times.



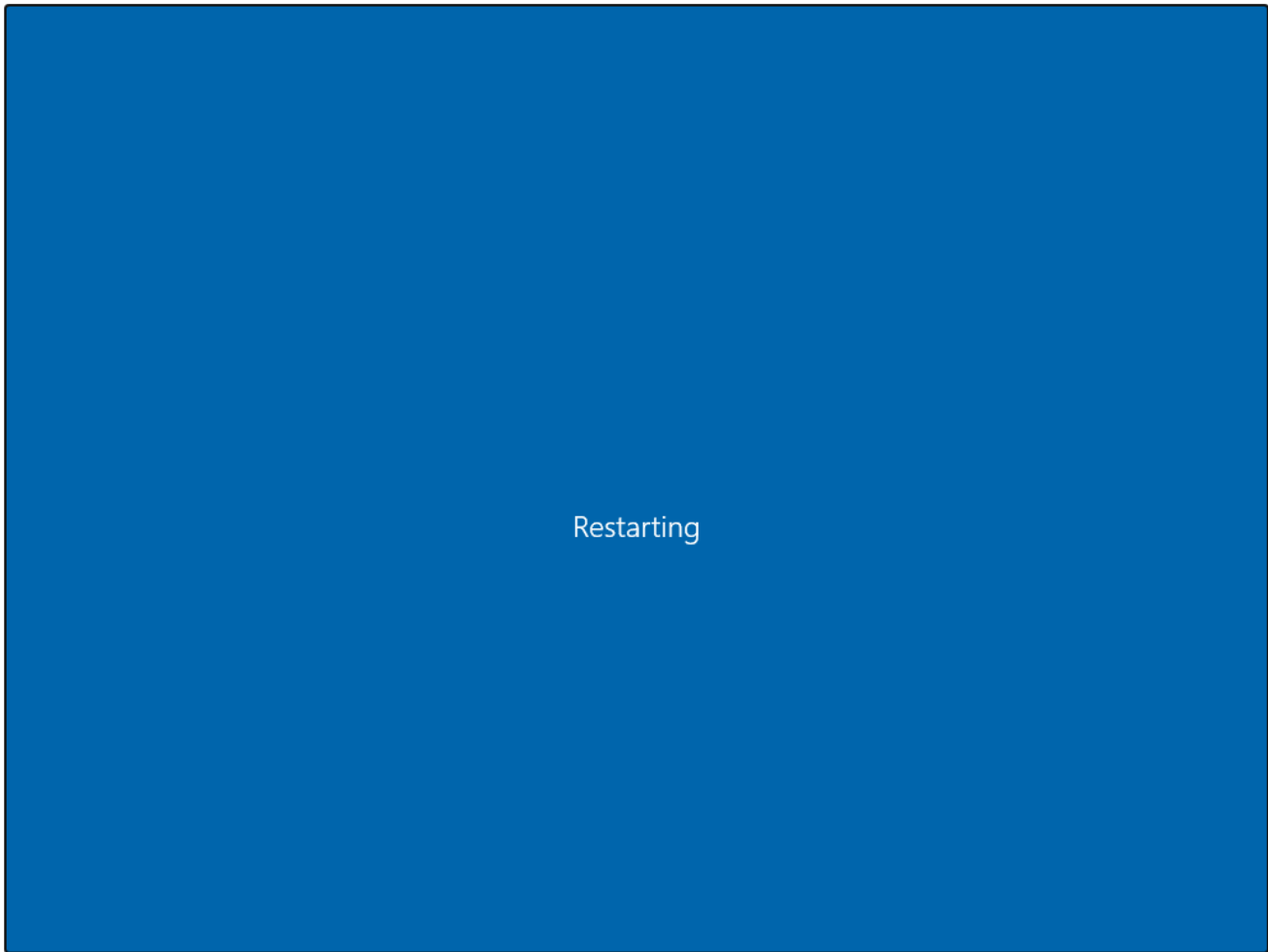
25.) Click 'Install,' and wait for installation to complete.



26.) Reboot server.

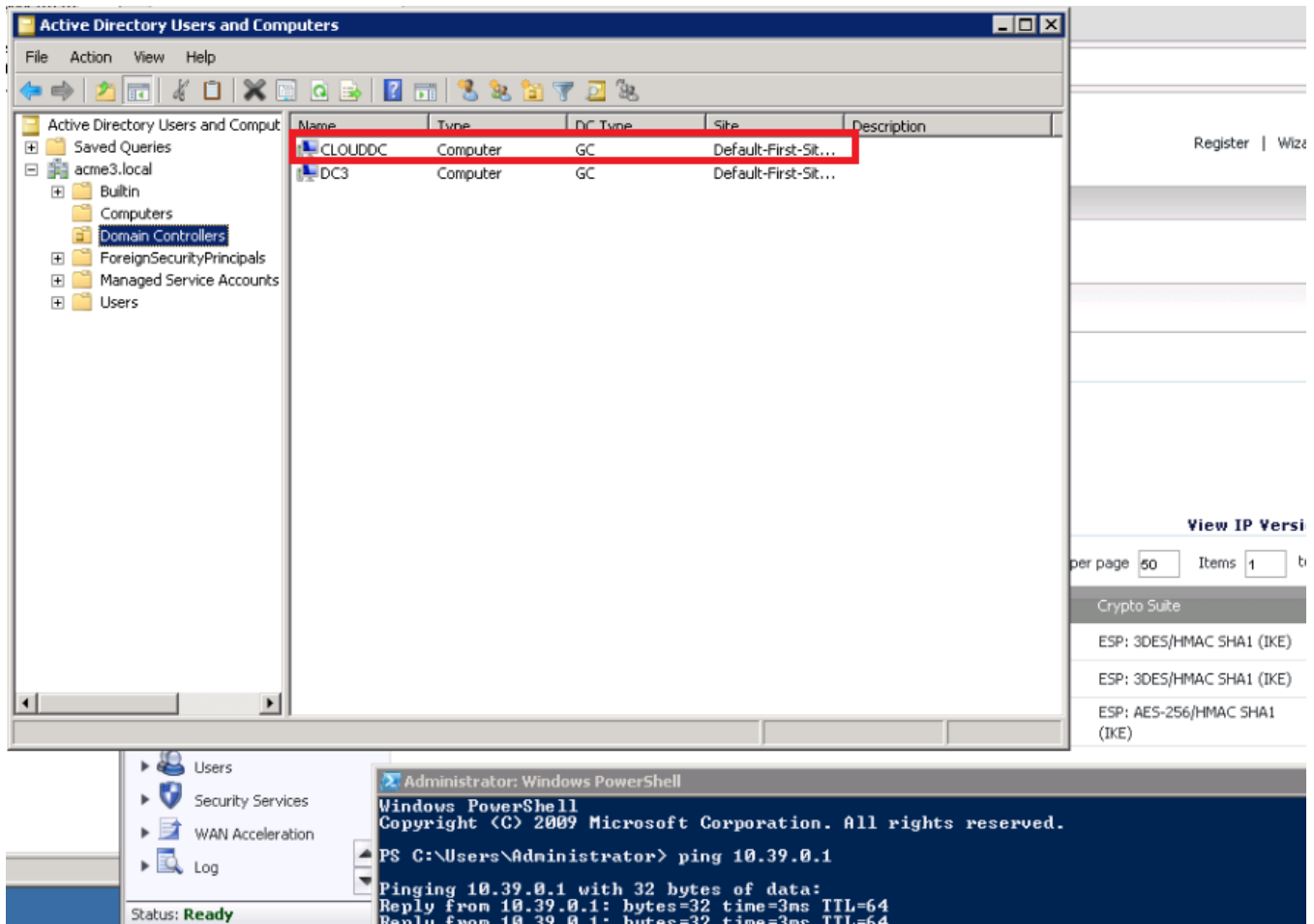
CTRL+ALT+DEL

OPTIONS



Connected

27.) Verify that the new Domain Controller is recognized in Active Directory.



Congratulations! The new Domain Controller has been deployed and joined to your existing environment. For steps regarding activation of the Domain Controller, see: [Activate the Domain Controller for your Extended Environment \(PrivateDomain\)](#)

Applies to: CloudConnect Partners