

Upgrading VMware Cloud Director Availability

A Natural Partnership

For Cloud and Service Providers

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Introduction

Upgrading your VMware Cloud Director Availability to its most recent version (4.3) enables you to utilize all its latest and greatest features and support integrating it with VMware Cloud Director 10.3.x.

Also, 3.5 reached its End of General Support date. (2021-11-14).

Upgrade path

The only supported upgrade paths are as follows:

- 3.5.x → 4.0.0.2 → 4.2.1 → 4.3
- 4.2.1 → 4.3
- 4.1.1 → 4.3

Interoperability

To guarantee your tenants will not experience any issues due to the VMware Cloud Director Availability upgrade, you need to make sure they are running a supported version of the VMware Cloud Director Availability on-premises appliance. You can see the supported versions in the table below:

VMware Cloud Director Availability On-Premises Appliance	Cloud Site 3.5	Cloud Site 4.0	Cloud Site 4.1	Cloud Site 4.2	Cloud Site 4.3
3.5	Supported	Supported	Supported	Unsupported	Unsupported
4.0	Supported	Supported	Supported	Supported	Unsupported
4.1	Supported	Supported	Supported	Supported	Supported
4.2	Unsupported	Supported	Supported	Supported	Supported
4.3	Unsupported	Unsupported	Supported	Supported	Supported

In case you have other Cloud sites connected to the one that is being upgraded, you need to verify their VMware Cloud Director Availability version is supported too. You can check the table below:

Source Cloud Site	Destination Cloud Site	Destination Cloud Site	Destination Cloud Site	Destination Cloud Site	Destination Cloud Site
VMware Cloud Director Availability	3.5	4.0	4.1	4.2	4.3
3.5	Supported	Supported	Supported	Unsupported	Unsupported
4.0	Supported	Supported	Supported	Supported	Unsupported
4.1	Supported	Supported	Supported	Supported	Supported
4.2	Unsupported	Supported	Supported	Supported	Supported
4.3	Unsupported	Unsupported	Supported	Supported	Supported

For ensuring the rest of your infrastructure will continue to operate without any disruptions, you can check the [VMware Interoperability Matrix](#).

Upgrade options

Each Cloud Provider environment has some specifics such as internet connectivity, webserver availability, access to the VMware Cloud Director Availability appliance VMs through SSH or just through the UI. Because of all these and other factors, there are two different ways to perform an upgrade:

- Using a repository – the VMware official repository or a custom one created locally in the Provider environment.
- Using an ISO file mounted locally to the appliances VM.

Each upgrade method can be achieved from the VMware Cloud Director Availability UI or through command-line.

How to obtain the VMware Cloud Director Availability ISO files

To start the upgrade procedure, you need to download the ISO files from <https://my.vmware.com/>.

If you are currently running VMware Cloud Director Availability 3.5.x, you need first to download and upgrade to 4.0.0.2 because with 4.0 there is a major change in the upgrade mechanism.

To obtain the proper ISO file, you need to:

1. Select VMware Cloud Director Availability from **My Products**, click on **View Download Components** and then change the version from the latest to 4.0.



Figure 1 - Select VMware Cloud Director Availability 4.0 from the version menu

2. Click on **GO TO DOWNLOADS**.

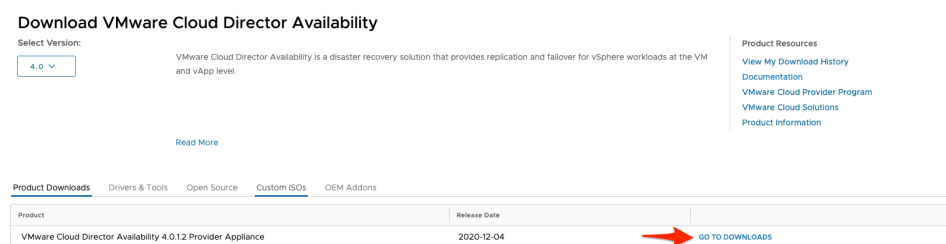


Figure 2 - Go to 4.0 downloads

3. Change the version once again from the latest 4.0.1.2 to 4.0.0.2.

Home / VMware Cloud Director Availability 4.0.1.2 Provider Appliance

Download Product

Select Version: 4.0.1.2

Documentation: 4.0.1.2

Release Date: 4.0.0.2

Type: Product Binaries

Figure 3 - Change from the latest 4.0.1.2 to 4.0.0.2

4. Download the upgrade disk.

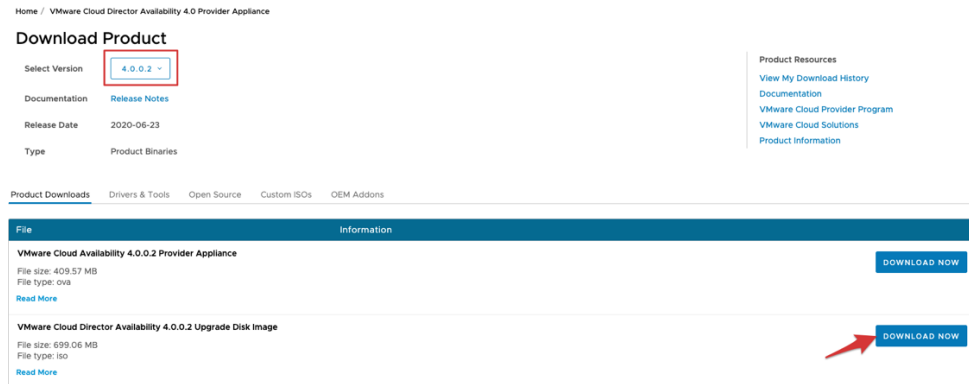


Figure 4 - Download VMware Cloud Director Availability 4.0.0.2 Upgrade Disk Image

If your version already is 4.0.0.2 or 4.0.1.2, you can skip this step.

Download 4.2.1:

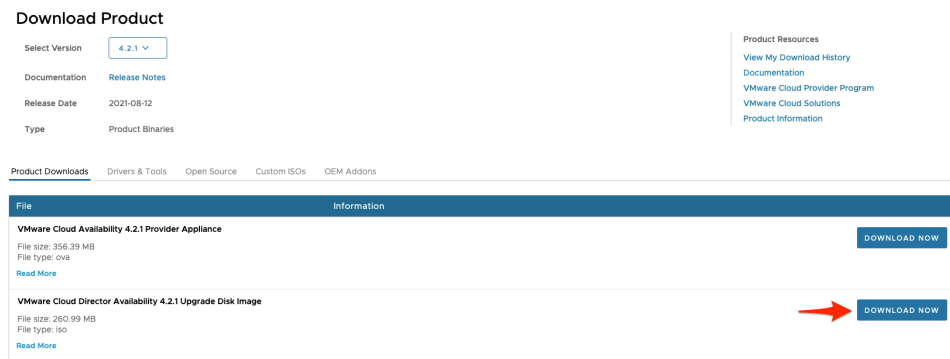


Figure 5 - Download VMware Cloud Director Availability 4.2.1 Upgrade Disk

Download 4.3:

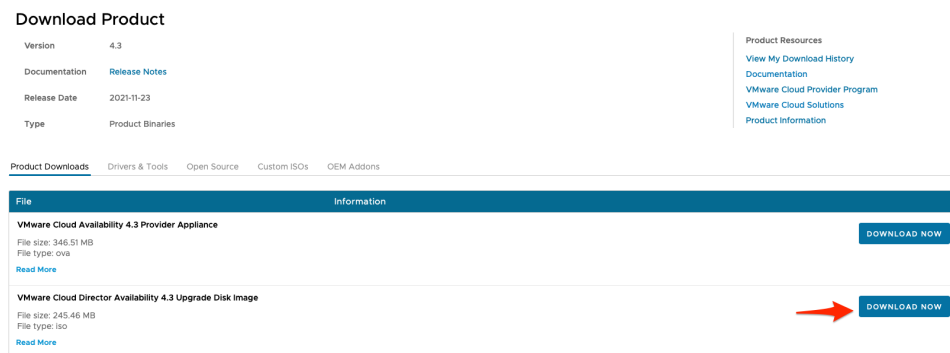


Figure 6 - Download VMware Cloud Director Availability 4.3 Upgrade Disk

VMware repositories

There are official VMware repositories that can be used during the upgrade procedure. They offer the latest VMware Cloud Director Availability releases.

- 4.2.1 - <https://packages.vmware.com/vcav/4.2>
- 4.3 - <https://packages.vmware.com/vcav/4.3>

Setting up a custom repository

Having an update repository is very convenient for keeping your tenants on the same VMware Cloud Director Availability version or securing them to have the proper binaries for following the upgrade path when updating them to the latest.

To set up a custom repository, you can use a webserver of your preference.

4.0.0.2

1. Mount the VMware Cloud Director Availability 4.0.0.2 ISO file on the webserver host.
2. From the mounted drive, copy the update folder and make sure the copied directory contains both manifest and package-pool subdirectories.
3. Ensure that the contents of <https://Web-Server-Address/update/> are accessible as this will be the repository URL that you or your tenants use for the upgrade.

4.2.1:

1. Mount the VMware Cloud Director Availability 4.2.1 ISO file on the webserver host.
2. From the mounted drive, copy the update folder and make sure the copied directory contains the dnf subdirectory.
3. Ensure that the contents of <https://Web-Server-Address/update/dnf/> are accessible as this will be the repository URL that you or your tenants use for the upgrade.

4.3:

1. Mount the VMware Cloud Director Availability 4.3 ISO file on the webserver host.
2. From the mounted drive, copy the update folder and make sure the copied directory contains the dnf subdirectory.
3. Ensure that the contents of <https://Web-Server-Address/update/dnf/> are accessible as this will be the repository URL that you or your tenants use for the upgrade.

Note: VMware Cloud Director Availability repository settings support providing webserver credentials (username & password) when submitting the repository URL only in version 3.5.x, but not in 4.0.0.2 and above.

Also, currently it is NOT supported to enter a proxy address.

Appliance upgrade order

To perform a successful upgrade, you need to follow this order strictly:

1. Cloud Replication Management Appliance
2. All Cloud Replicator(s) Appliance
3. Cloud Tunnel Appliance

Snapshots

Verify that before starting the upgrade, current snapshots of all the appliances exist in the site. Take snapshots only with all the VMware Cloud Director Availability services stopped or with the appliances powered off.

If the upgrade of any of the appliances fails, revert to the latest snapshot.

After a successful upgrade, delete all snapshots.

Upgrade from a repository

Prerequisites

- Connectivity to the repository URL from all the VMware Cloud Director Availability appliances - Cloud Replication Management, Cloud Replicator(s), and Cloud Tunnel.
- Valid license key for VMware Cloud Director Availability 4.x as it differs from the 3.x one.
- At least 60% or more free space in / on the Cloud Replication Management host.
- (For VMware repository only) Internet access to connect to the VMware repository.

Steps for an upgrade from a repository through the UI

3.5.x → 4.0.0.2

1. Log in to the management interface at <https://Appliance-IP-Address/ui/admin>.
2. Go to the **Configuration** menu.
3. At the bottom, in the **Version** submenu, you will see the current product version and the repository.

Version		
Product version	3.5.2.16421099-e6c2fa0	Check for update
Update repository	https://vapp-updates.vmware.com/vai-catalog/valm/vmw/00ce30da-df8b-48c7-bd2e-8775f3f7c968/3.5.2.4535.latest Edit	

Figure 7 - VMware Cloud Director Availability version

4. If you will use the default VMware repository, please go directly to step #7. In case you will use a custom repository, click **Edit** on the **Update repository** setting and select the **Use Specified Repository** option.
5. Enter the repository URL and username/password (only if required, otherwise leave blank).

Update Repository

×

Enter connection details for the update repository.

☐ Use Default Repository

Repository URL <https://vapp-updates.vmware.com/vai-catalog/valm/vmw/00ce30da-df8b-48c7-bd2e-8775f3f7c968/3.5.2.4535.latest>

☐ Use CDROM Updates

☒ Use Specified Repository

Repository URL *

Username

Password

http://172.26.46.251/40/update/

CANCEL

APPLY

Figure 8 - Change repository

6. Click **Apply**.
7. To start the upgrade process, click on **Check for update**.

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8. After a few seconds, you will see that an update is available.

Version			
Product version	3.5.2.16421099-e6c2fa0	(Updates available)	Update
Update repository	http://172.26.46.251/40/update/		Edit

Figure 9 - Updates check

9. Click on **Update**.
10. The window will indicate that version 4.0.0.4532 will be installed. Click on **Apply**.
11. Scroll to the bottom and accept the End User License Agreement.
12. Click on **Apply**.
13. The upgrade will start, and VMware Cloud Director Availability will be inaccessible while it finishes. Do NOT close the browser window.
14. Once it is completed, the page will be automatically reloaded. Clear the browser cache, reload the page, and you will be able to log in again.
15. Navigate again to the **Configuration** menu to verify that the version has changed.

Version			
Product version	4.0.0.16407624-26baaca		Check for updates

Figure 10 - VMware Cloud Director Availability version

4.0.0.2 → 4.2.1

1. Log in to the management interface at <https://Appliance-IP-Address/ui/admin>.
2. To proceed with the upgrade to 4.2.1, navigate to the **Configuration** and click on **Check for updates**.
3. Select **Use Specified Repository**, enter the repository URL (VMware repository URL or custom repository URL) and click **Next**.

Update

- Repository
- Available updates
- EULA Review
- Ready for update

Repository

Enter connection details for the update repository.

☐ Use Official Online Repository
☐ Use CDROM Updates
☒ Use Specified Repository

Repository URL: * https://172.26.46.251/421/update/dnf

Figure 11 - Change repository

4. Select version 4.2.1.XXXX and click **Next**.

Figure 12 - Select version for upgrade

5. Accept the End User License Agreement by clicking **Next**.
6. Click **Finish** to finalize the process.
7. The upgrade will start, and VMware Cloud Director Availability will be inaccessible while it finishes. Do NOT close the browser window.
8. Once it is completed, the page will be automatically reloaded. Clear the browser cache, reload the page, and you will be able to log in again.
9. Navigate to the **Settings** menu to verify that the version has changed.

Figure 13 - VMware Cloud Director Availability version after a successful upgrade to 4.2.1

Note: These steps are also valid for VMware Cloud Director Availability 4.0.1.2.

4.2.1 → 4.3

1. Log in to the management interface at <https://Appliance-IP-Address/ui/admin>.
2. To proceed with the upgrade to 4.3, navigate to the **Configuration** and click on **Check for updates**.
3. Select **Use Specified Repository**, enter the repository URL (VMware repository URL or custom repository URL) and click **Next**.

Figure 14 - Change repository

4. Select version 4.3.0.XXXX and click **Next**.

Figure 15 - Select version for upgrade

5. Accept the End User License Agreement by clicking **Next**.
6. Click **Finish** to finalize the process.
7. The upgrade will start, and VMware Cloud Director Availability will be inaccessible while it finishes. Do NOT close the browser window.
8. Once it is completed, the page will be automatically reloaded. Clear the browser cache, reload the page, and you will be able to log in again.
9. Navigate to the **Settings** menu to verify that the version has changed.

Figure 16 - VMware Cloud Director Availability version after a successful upgrade to 4.3

4.1.x → 4.3

1. Log in to the management interface at <https://Appliance-IP-Address/ui/admin>.
2. To proceed with the upgrade to 4.3, navigate to the **Configuration** and click on **Check for updates**.
3. Select **Use Specified Repository**, enter the repository URL (VMware repository URL or custom repository URL) and click **Next**.

Figure 17 - Change repository

4. Select version 4.3.0.XXXX and click **Next**.

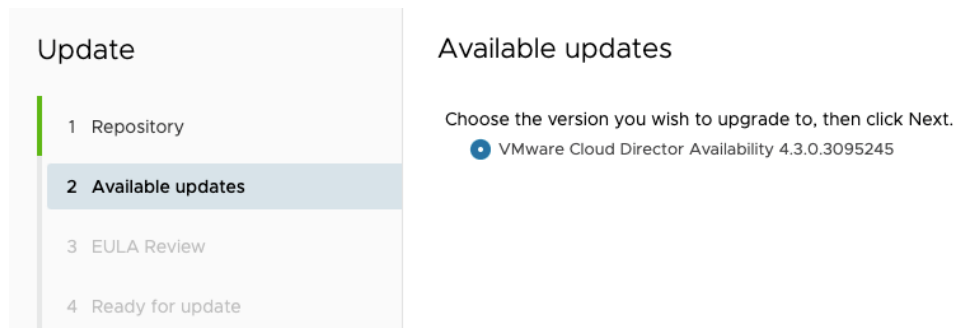


Figure 18 - Select version for upgrade

5. Accept the End User License Agreement by clicking **Next**.
6. Click **Finish** to finalize the process.
7. The upgrade will start, and VMware Cloud Director Availability will be inaccessible while it finishes. Do NOT close the browser window.
8. Once it is completed, the page will be automatically reloaded. Clear the browser cache, reload the page, and you will be able to log in again.
9. Navigate to the **Settings** menu to verify that the version has changed.

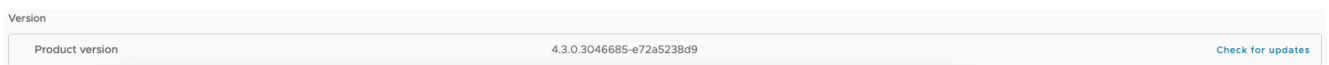


Figure 19 - VMware Cloud Director Availability version after a successful upgrade to 4.3

Steps for an upgrade from a repository through the command-line

3.5.x → 4.0.0.2

1. Connect to the appliance host through SSH and log in as **root**.
2. If you will use the default VMware repository, go directly to step #4. In case you will use a custom repository, specify the desired repository URL and webserver username/password (only if required) with the following command:

`sudo /opt/vmware/bin/vamcli update --repo "http://172.26.46.251/40/update/" --user "upgrade" --password "upgrade"`
3. The output should look like this:

```
root@vcda35-mgmt-70 [ ~ ]# sudo /opt/vmware/bin/vamcli update --repo "http://172.26.46.251/40/update/" --user "upgrade" --password "upgrade"
Set local repository address...
Done.
```

Figure 20 - Change repository command-line output

4. Check for updates with the following command:

`sudo /opt/vmware/bin/vamcli update --check`

5. The output should look like this:

```
[root@vcda35-mgmt-70 [ ~ ]# sudo /opt/vmware/bin/vamcli update --check

Checking for available updates, this process can take a few minutes...
...
Available Updates -
  4.0.0.4532 Build 16407624
```

Figure 21 - Check for updates from command-line

6. Install the update with the following command:
- ```
sudo /opt/vmware/bin/vamcli update --install latest --accepteula
```
7. After the upgrade is done, you will be disconnected from your SSH session due to a reboot.
8. Once the VM is accessible again, you can open the management interface and log in.
9. Verify that the version has changed under **Version** in the **Configuration** menu.

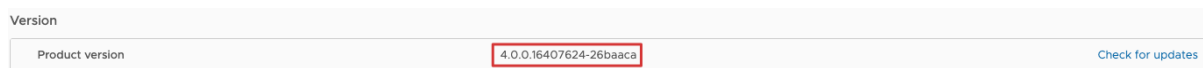


Figure 22 - VMware Cloud Director Availability version

#### 4.0.0.2 → 4.2.1

The only option for upgrading VMware Cloud Director Availability 4.0.0.2 to 4.2.1 through the command-line is using an ISO file. There is no option for a different repository.

You can perform the upgrade through the UI ([Upgrade steps for an upgrade through the UI](#)), or you can download the VMware Cloud Director Availability 4.2.1 upgrade disk ISO file and proceed with an offline upgrade through the command-line ([Upgrade steps for an upgrade through the command line](#)).

**Note:** These steps are also valid for VMware Cloud Director Availability 4.0.1.2.

#### 4.2.1 → 4.3

The only option for upgrading VMware Cloud Director Availability 4.2.1 to 4.3 through the command-line is using an ISO file. There is no option for a different repository.

You can perform the upgrade through the UI ([Upgrade steps for an upgrade through the UI](#)), or you can download the VMware Cloud Director Availability 4.3 upgrade disk ISO file and proceed with an offline upgrade through the command-line ([Upgrade steps for an upgrade through the command line](#)).

#### 4.1.x → 4.3

The only option for upgrading VMware Cloud Director Availability 4.1.x to 4.3 through the command-line is using an ISO file. There is no option for a different repository.

You can perform the upgrade through the UI ([Upgrade steps for an upgrade through the UI](#)), or you can download the VMware Cloud Director Availability 4.3 upgrade disk ISO file and proceed with an offline upgrade through the command-line ([Upgrade steps for an upgrade through the command line](#)).

## Upgrade from an ISO file

### Prerequisites

- VMware Cloud Director Availability 4.0.0.2, 4.2.1 and 4.3 update disk ISO files. See the [How to obtain ISO files](#) for more information.
- The downloaded ISO files need to be uploaded to a Datastore accessible by the VMware Cloud Director Availability host or directly uploaded to the VMware Cloud Director Availability host so they can be mounted to their CD/DVD drive.
- Valid license key for VMware Cloud Director Availability 4.x as it differs from the 3.x one.
- At least 60% or more free space in / on the Cloud Replication Management host.

### Steps for an upgrade from an ISO file through the UI

#### 3.5.x → 4.0.0.2

1. Log in to the management interface at <https://Appliance-IP-Address/ui/admin>.
2. Go to the **Configuration** menu.
3. At the bottom, in the **Version** submenu, you will see the current product version and the repository.

| Version           |                                                                                                                                                                                                                                                          |                                  |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Product version   | 3.5.2.16421099-e6c2fa0                                                                                                                                                                                                                                   | <a href="#">Check for update</a> |
| Update repository | <a href="https://vapp-updates.vmware.com/vai-catalog/vaim/vmw/00ce30da-df8b-48c7-bd2e-8775f37c968/3.5.2.4535.latest">https://vapp-updates.vmware.com/vai-catalog/vaim/vmw/00ce30da-df8b-48c7-bd2e-8775f37c968/3.5.2.4535.latest</a> <a href="#">Edit</a> |                                  |

Figure 23 - VMware Cloud Director Availability version

4. Change the repository to **CDROM** by clicking **Edit**.

Update Repository

×

Enter connection details for the update repository.

☐ Use Default Repository

Repository URL

<https://vapp-updates.vmware.com/vai-catalog/vaim/vmw/00ce30da-df8b-48c7-bd2e-8775f37c968/3.5.2.4535.latest>

☒ Use CDROM Updates

☐ Use Specified Repository

Repository URL \*

cdrom://

Username

Password

CANCEL

APPLY

Figure 24 - Change the repository to CDROM

5. To start the upgrade process, click on **Check for update**.
6. After a few seconds, you will see that an update is available.

| Version           |                                                 |                        |
|-------------------|-------------------------------------------------|------------------------|
| Product version   | 3.5.2.16421099-e6c2fa0 <b>Updates available</b> | <a href="#">Update</a> |
| Update repository | <a href="#">cdrom://</a> <a href="#">Edit</a>   |                        |

Figure 25 - Check for updates

7. Click on **Update**.
8. The window will indicate that version 4.0.0.4532 will be installed. Click on **Apply**.
9. Scroll to the bottom and accept the End User License Agreement.
10. Click on **Apply**.
11. The upgrade will start, and VMware Cloud Director Availability will be inaccessible while it finishes. Do NOT close the browser window.
12. Once it is completed, the page will be automatically reloaded. Clear the browser cache, reload the page, and you will be able to log in again.
13. Navigate again to the **Configuration** menu to verify that the version has changed.



Figure 26 - VMware Cloud Director Availability version

#### 4.0.0.2 → 4.2.1

1. Log in to the management interface at <https://Appliance-IP-Address/ui/admin>.
2. To proceed with the upgrade to 4.2.1, navigate to the **Configuration** menu click on **Check for updates**.
3. Select **Use CDROM Updates** and click **Next**.

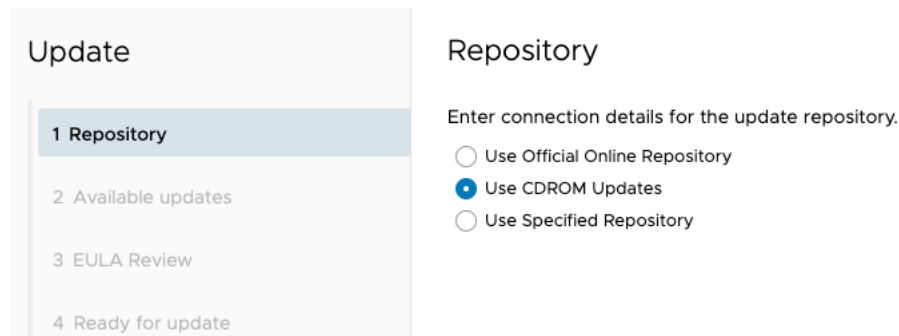


Figure 27 - Change the repository

4. Select version 4.2.1.XXXX and click **Next**.

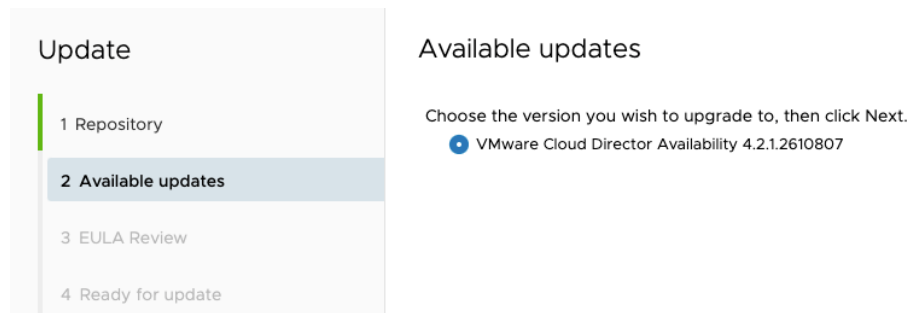


Figure 28 - Select a version to upgrade

5. Accept the End User License Agreement by clicking **Next**.

6. Click **Finish** to finalize the process.
7. The upgrade will start, and VMware Cloud Director Availability will be inaccessible while it finishes. Do NOT close the browser window.
8. Once it is completed, the page will be automatically reloaded. Clear the browser cache, reload the page, and you will be able to log in again.
9. Navigate to the **Settings** menu to verify that the version has changed.

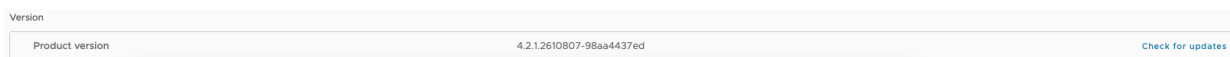


Figure 29 - VMware Cloud Director Availability version after a successful upgrade to 4.2.1

**Note:** These steps are also valid for VMware Cloud Director Availability 4.0.1.2.

**Note:** When upgrading from 4.0.0.2, in some cases, the upgrade finishes properly, but the UI still shows 4.0.0.2 instead of 4.2.1, or there is a failed task in System tasks. Also, the following error message is present at the end of the upgrade log file (/var/log/upgrade.log):

```
Complete!
Verifying...
Preparing...
package filesystem-1.1-4.ph3.x86_64 is already installed
Bad exit code: 256
{
 "code": "BadExitCode",
 "msg": "",
 "args": [
 "256"
]
}
```

The above message is harmless. To complete the process, please **reboot** the appliances manually after finishing the Upgrade job.

4.2.1 → 4.3

1. Log in to the management interface at <https://Appliance-IP-Address/ui/admin>.
2. To proceed with the upgrade to 4.3, navigate to the **Configuration** menu click on **Check for updates**.
3. Select **Use CDROM Updates** and click **Next**.

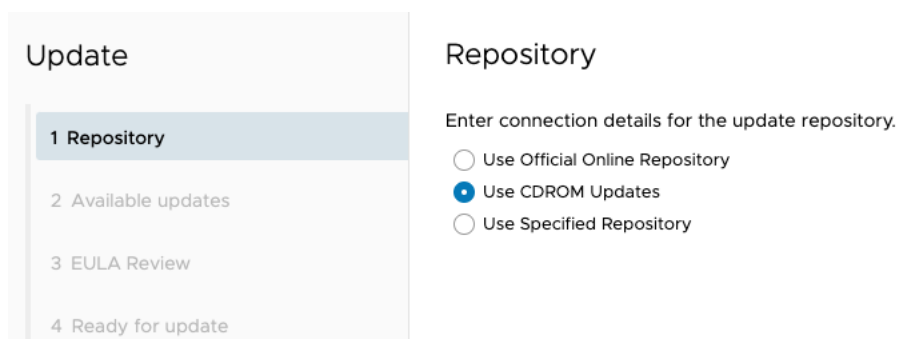


Figure 30 - Change the repository



4. Select version 4.3.0.XXXX and click **Next**.

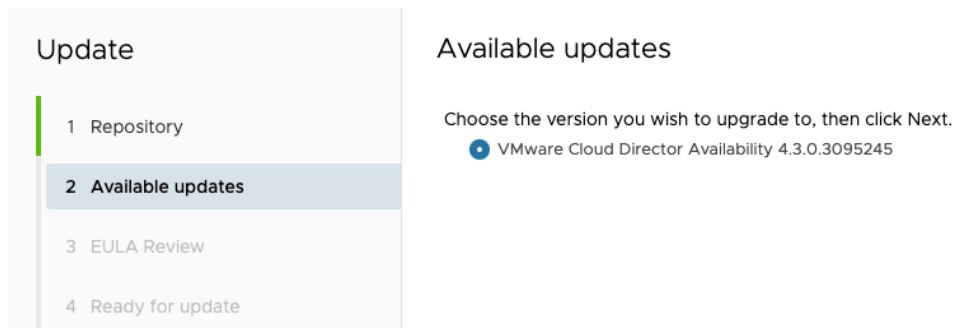


Figure 31 - Select a version to upgrade

5. Accept the End User License Agreement by clicking **Next**.
6. Check the **I have created a backup archive of the appliance** button and click **Finish** to finalize the process.
7. The upgrade will start, and VMware Cloud Director Availability will be inaccessible while it finishes. Do NOT close the browser window.
8. Once it is completed, the page will be automatically reloaded. Clear the browser cache, reload the page, and you will be able to log in again.
9. Navigate to the **Settings** menu to verify that the version has changed.

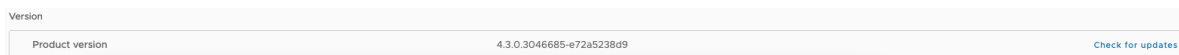


Figure 32 - VMware Cloud Director Availability version after a successful upgrade to 4.3

#### 4.1.x → 4.3

1. Log in to the management interface at <https://Appliance-IP-Address/ui/admin>.
2. To proceed with the upgrade to 4.3, navigate to the **Configuration** menu click on **Check for updates**.
3. Select **Use CDROM Updates** and click **Next**.

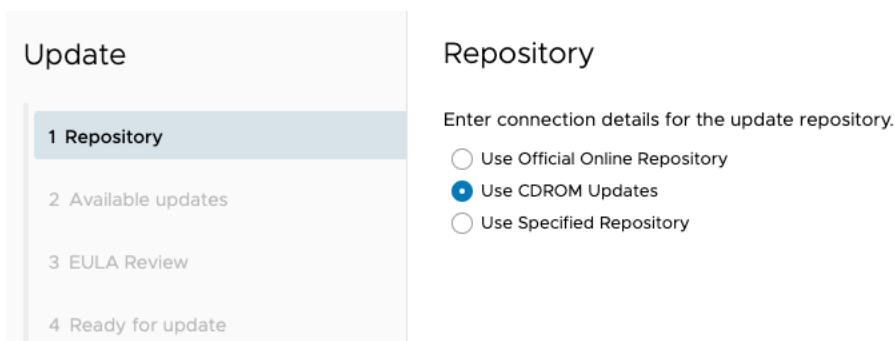


Figure 33 - Change the repository

4. Select version 4.3.0.XXXX and click **Next**.

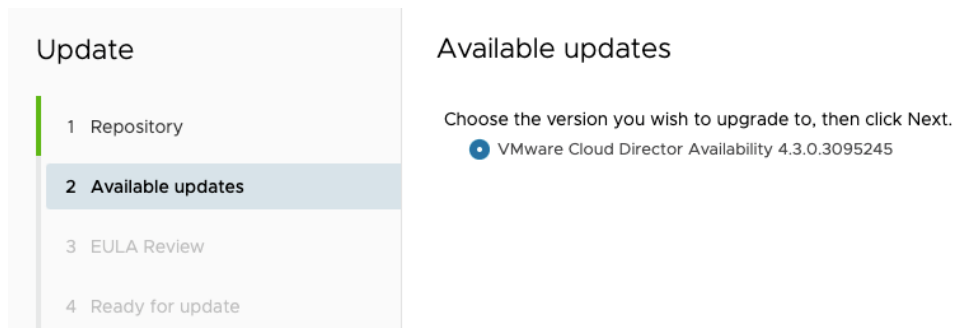


Figure 34 - Select a version to upgrade

5. Accept the End User License Agreement by clicking **Next**.
6. Click **Finish** to finalize the process.
7. The upgrade will start, and VMware Cloud Director Availability will be inaccessible while it finishes. Do NOT close the browser window.
8. Once it is completed, the page will be automatically reloaded. Clear the browser cache, reload the page, and you will be able to log in again.
9. Navigate to the **Settings** menu to verify that the version has changed.

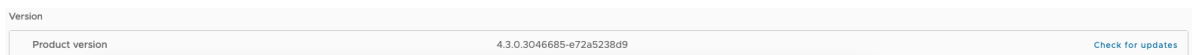


Figure 35 - VMware Cloud Director Availability version after a successful upgrade to 4.3

#### Steps for an upgrade from an ISO file through the command-line

3.5.x → 4.0.0.2

1. Mount the VMware Cloud Director Availability 4.0.0.2 ISO file to the appliance host CD/DVD drive through the vSphere Client and make sure the drive is connected.
2. Connect to the appliance host through SSH and log in as **root**.
3. Change the repository to CDROM with the following command:  
`sudo /opt/vmware/bin/vamcli update --repo cdrom://`
4. The output should look like this:

```
root@vcda35-mgmt-70 [/mnt/cdrom/update]# sudo /opt/vmware/bin/vamcli update --repo cdrom://
Set local repository address...
Done.
```

Figure 36 - Change the repository through the command-line

5. Check for updates with the following command:  
`/usr/bin/sudo /opt/vmware/bin/vamcli update --check`

6. The output should look like this:

```
[root@vcd435-mgmt-70 [/mnt/cdrom/update]# sudo /opt/vmware/bin/vamcli update --check

Checking for available updates, this process can take a few minutes...
.
Available Updates -
4.0.0.4532 Build 16407624
```

Figure 37 - Check for updates through the command-line

7. Install the update with the following command:  
`sudo /opt/vmware/bin/vamcli update --install latest --accepteula`
8. After the upgrade is done, you will be disconnected from your SSH session due to a reboot.
9. Once the VM is accessible again, you can open the management interface and log in.
10. Verify that the version has changed under **Version** in the **Configuration** menu.

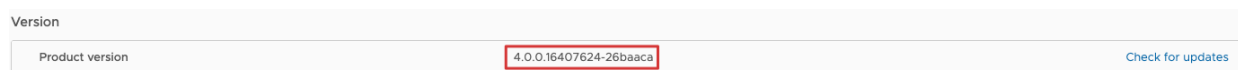


Figure 38 - VMware Cloud Director Availability version after a successful upgrade to 4.0

#### 4.0.0.2 → 4.2.1

1. Mount the VMware Cloud Director Availability 4.2.1 ISO file to the appliance host CD/DVD drive through the vSphere Client and make sure the drive is connected.
2. Connect to the appliance host through SSH and log in as **root**.
3. Mount the ISO file to the guest OS with the following command:  
`mount /mnt/cdrom`
4. Review the End User License Agreement with the following command:  
`python3 /mnt/cdrom/update/iso-upgrade.py eula | less`
5. Click **q** to accept it.
6. Install the update with the following command:  
`python3 /mnt/cdrom/update/iso-upgrade.py`
7. When the installation is done, reboot the system with the following command:  
`reboot`
8. Once the VM is accessible again, you can open the management interface and log in.
9. Navigate to the **Settings** menu to verify that the version has changed.

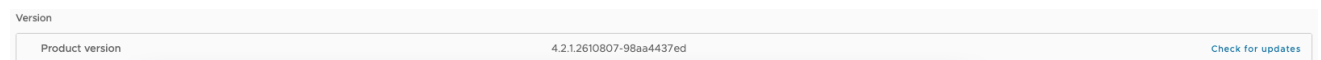


Figure 39 - VMware Cloud Director Availability version after a successful upgrade to 4.2

**Note:** If you encounter any problems with the upgrade, please check `/var/log/upgrade.log`.

**Note:** These steps are also valid for VMware Cloud Director Availability 4.0.1.2.

## 4.2.1 → 4.3

1. Mount the VMware Cloud Director Availability 4.3 ISO file to the appliance host CD/DVD drive through the vSphere Client and make sure the drive is connected.
2. Connect to the appliance host through SSH and log in as **root**.
3. Mount the ISO file to the guest OS with the following command:  
`mount /mnt/cdrom`
4. Review the End User License Agreement with the following command:  
`python3 /mnt/cdrom/update/iso-upgrade.py eula | less`
5. Click **q** to accept it.
6. Install the update with the following command:  
`python3 /mnt/cdrom/update/iso-upgrade.py`
7. When the installation is done, reboot the system with the following command:  
`reboot`
8. Once the VM is accessible again, you can open the management interface and log in.
9. Navigate to the **Settings** menu to verify that the version has changed.

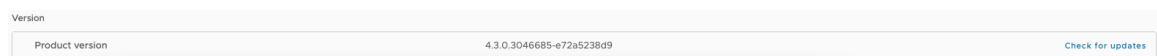


Figure 40 - VMware Cloud Director Availability version after a successful upgrade to 4.3

**Note:** If you encounter any problems with the upgrade, please check `/var/log/upgrade.log`.

## 4.1.x → 4.3

1. Mount the VMware Cloud Director Availability 4.3 ISO file to the appliance host CD/DVD drive through the vSphere Client and make sure the drive is connected.
2. Connect to the appliance host through SSH and log in as **root**.
3. Mount the ISO file to the guest OS with the following command:  
`mount /mnt/cdrom`
4. Review the End User License Agreement with the following command:  
`python3 /mnt/cdrom/update/iso-upgrade.py eula | less`
5. Click **q** to accept it.
6. Install the update with the following command:  
`python3 /mnt/cdrom/update/iso-upgrade.py`
7. When the installation is done, reboot the system with the following command:  
`reboot`
8. Once the VM is accessible again, you can open the management interface and log in.
9. Navigate to the **Settings** menu to verify that the version has changed.

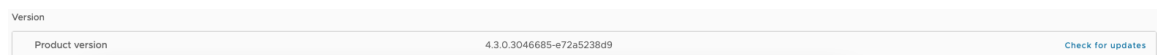


Figure 41 - VMware Cloud Director Availability version after a successful upgrade to 4.3

**Note:** If you encounter any problems with the upgrade, please check `/var/log/upgrade.log`.

## Post-upgrade procedures

1. Load a new license:
  - a. As the license for VMware Cloud Director Availability 3.x is different from the license for 4.x, after the upgrade you will see an error in the **Licensing** section under **Settings**.

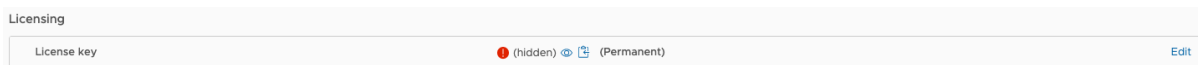


Figure 42 - License compatibility issue after an upgrade

- b. Load the 4.x license by clicking **Edit** and entering the correct 4.x license.
2. Reinstall the latest version of the VMware Cloud Director Availability plugin for VMware Cloud Director:
  - a. Log in to the management interface at <https://Appliance-IP-Address/ui/admin> as **root**.
  - b. In the left pane click **Settings**.
  - c. Find **VMware Cloud Director address** under **Service endpoints** and click **Edit**.

| Service endpoints             |                                                                                                       |               |      |
|-------------------------------|-------------------------------------------------------------------------------------------------------|---------------|------|
| Service Endpoint address      | <a href="https://172.26.46.72:8048">https://172.26.46.72:8048</a>                                     |               | Edit |
| Tunnel Service address        | <a href="https://172.26.46.72:8047">https://172.26.46.72:8047</a>                                     |               | Edit |
| Lookup Service Address        | <a href="https://172.26.46.100:443/lookupservice/sdk">https://172.26.46.100:443/lookupservice/sdk</a> | Remove        | Edit |
| VMware Cloud Director address | <a href="https://172.26.46.75:443/api">https://172.26.46.75:443/api</a>                               | Remove plugin | Edit |

Figure 43 - Reinstall VMware Cloud Director Availability plugin

- d. Enter the administrator username & password and click **Apply**.

VMware Cloud Director Details

VMware Cloud Director Endpoint address \*

<https://172.26.46.75:443/api>

VMware Cloud Director Username \*

administrator@system

VMware Cloud Director Password \*

.....

CANCEL

APPLY

Figure 44 - Enter VMware Cloud Director connection details

- e. Accept the VMware Cloud Director certificate.
3. Perform a backup of all the VMware Cloud Director Availability appliances. You can find more information about the backups at:

<https://blogs.vmware.com/cloudprovider/2020/12/vmware-cloud-director-availability-4-1-backup-and-restore-appliances.html>

## Changelog

| Date          | Release | Changes                                                                                                                         |
|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Mar 21</b> | 1.0     | Initial release that covers upgrade path from VMware Cloud Director Availability 3.5 to 4.1                                     |
| <b>Jul 21</b> | 1.1     | Added upgrade procedures for upgrading to VMware Cloud Director Availability 4.2                                                |
| <b>Nov 21</b> | 1.2     | Removed VMware Cloud Director Availability 3.0 from the Interoperability Matrix and the upgrade steps for 4.0.x -> 4.1 upgrade. |



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