

# Upgrading to version 32.1

- i** If you are running a software version between v27 and v31.1 inclusive, you must first upgrade to version **31.3** and then upgrade again to version 32.1; see [Upgrading from versions 27-31.1 to version 32.1](#).
- i** If you are running software version v31.2, you should upgrade directly to version 32.1.

## Upgrading from version 31.2, 31.3 or 32.0 to version 32.1

When the upgrade process starts, the Management Node is upgraded first. Then up to 10 Conferencing Nodes are selected and are automatically placed into maintenance mode. When all calls have finished on a node that is in maintenance mode, that node is upgraded and then put back into active service. Another Conferencing Node is then selected, placed into maintenance mode and upgraded, and so on until all Conferencing Nodes have been upgraded.

If all of the calls on a Conferencing Node that is in maintenance mode have not cleared after 1 hour, the node is taken out of maintenance mode and put at the back of the queue of nodes to be upgraded. A further attempt to upgrade that node will be made after all other nodes have been upgraded (or had upgrade attempts made). Up to 10 Conferencing Nodes may simultaneously be in maintenance mode or in the process of being upgraded at any one time.

Alternatively, to avoid unpredictable system behavior due to Conferencing Nodes running conflicting software versions, you may want to manually put **all** of your Conferencing Nodes into maintenance mode before initiating the upgrade process. This will allow all existing calls to finish, but will not admit **any** new calls. You should then actively monitor your Conferencing Nodes' status and manually take each node out of maintenance mode after it has been upgraded to the new software version, so that the system can start taking new calls again on those upgraded nodes.

### Remove any MD5/SHA1 certificates before upgrading to v32

- i** You must remove any existing MD5/SHA1 certificates before upgrading to v32.

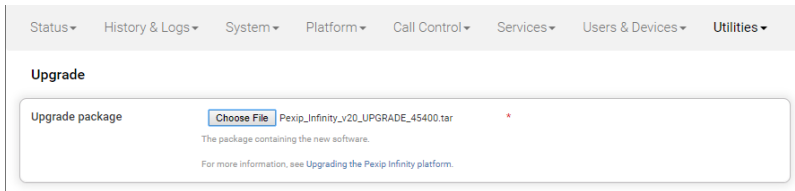
You can check all your existing certificates by the following methods:

- Go to **Certificates > TLS Certificates**, **Certificates > Root Trust CA Certificates** and **Certificates > Intermediate CA Certificates**, and then view the **Certificate contents** for each certificate and check the **Signature Algorithm** for references to md5 or sha1.
- Go to [https://<manageraddress>/api/admin/configuration/v1/tls\\_certificate/](https://<manageraddress>/api/admin/configuration/v1/tls_certificate/) and [https://<manageraddress>/api/admin/configuration/v1/ca\\_certificate/](https://<manageraddress>/api/admin/configuration/v1/ca_certificate/) and search for references to md5 or sha1.

### How to upgrade

To upgrade Pexip Infinity software from v31.2, v31.3 or v32.0 to v32.1:

- Before upgrading an on-premises deployment, we recommend that you use your hypervisor's snapshot functionality to take a full VMware/Hyper-V snapshot of the Management Node. You may also want to take a snapshot of each Conferencing Node, although depending on the size and complexity of your deployment it may be easier to simply redeploy these from the Management Node (after it has been rolled back) in the unlikely event that this is required.  
Before upgrading a cloud-based deployment (Azure, AWS, GCP or Oracle), you should backup the Management Node via Pexip Infinity's inbuilt mechanism (**Utilities > Backup/Restore**).
- Download the Pexip Infinity upgrade package for v32.1 from the [Pexip download page](#).
- Before upgrading, ensure that all "always-on" Conferencing Nodes are powered on and are reachable (i.e. no Connectivity Loss errors), and are all running the same version from which you are upgrading. You do not need to power on any cloud bursting nodes.
- From the Pexip Infinity Administrator interface, go to **Utilities > Upgrade**.
- Select **Choose File** and browse to the location of the upgrade package.



6. Select **Continue**. There will be a short delay while the upgrade package is uploaded.  
After the upgrade package has been uploaded, you are presented with a confirmation page showing details of the existing software version and the upgrade version.
7. To proceed, select **Start upgrade**.  
You are taken to the **Upgrade Status** page, showing the current upgrade status of the Management Node and all Conferencing Nodes. This page automatically refreshes every 5 seconds.
8. When the upgrade completes, all nodes will show a status of **No upgrade in progress** and have the new **Installed version**.
  - If a Conferencing Node fails to upgrade, for example if it remains on a **Waiting for calls to clear** status, it should be rebooted. The upgrade process will then continue as expected.
  - If the upgrade process completes and there are some nodes that have failed to upgrade, you can restart the upgrade process by uploading the upgrade package to the Management Node again via **Utilities > Upgrade**. This will skip over any nodes that have already been upgraded.
  - If you are using these instructions to first upgrade from v25.0 or v25.1 to version 27 before upgrading to version 32, due to a known issue it is possible that the upgrade will complete on the Management Node but not automatically proceed to the Conferencing Nodes. To resolve this issue, simply upload the upgrade package again via **Utilities > Upgrade**.
9. If you have Pexip CVI for Microsoft Teams you must also upgrade your associated Teams Connector deployment in Azure to the same version as your Pexip Infinity deployment (including minor/"dot" releases).

**i** When upgrading your Teams Connector to version 32:

#### New upgrade steps for version 32

- Az module version: ensure that you are using Az module version 9.0.1 minimum.
- Microsoft Graph PowerShell is now used for deploying the Teams Connector.
- i** **Microsoft.Graph modules of version 2.0.0 and higher are currently not supported.** This will be addressed in a future Teams Connector release. Make sure that you follow the instructions [below](#) to ensure that your Teams Connector upgrades successfully.

#### Standard upgrade steps

- When upgrading from a previous major release (e.g. from v30.n to v32.1), you must use the latest version of the redeploy script as contained within the v32 documentation. You can use your existing redeploy script if you are upgrading to a new minor/ "dot" release for the same major version (e.g. from 32.0 to 32.1).
- You must be using Az module version 9.0.1 minimum.
  - To check your installed version you can run:  
`Get-InstalledModule -Name Az -AllVersions`
  - To install the latest appropriate Az version you can run:  
`Install-Module -Name Az -MinimumVersion 9.0.1 -AllowClobber -Scope AllUsers`
- If you (the person performing the upgrade) did not perform the initial installation, you should ensure that you have all the relevant PowerShell modules and versions installed. If you are connecting to Azure Resource Manager / Microsoft Graph from your Windows PC for the first time, you must run the following PowerShell commands (as Administrator):  
`Install-Module -Name Az -MinimumVersion 9.0.1 -AllowClobber -Scope AllUsers`  
`Install-Module Microsoft.Graph -RequiredVersion 1.28.0 -Force -AllowClobber`

#### Note that:

- The installation of Microsoft Graph PowerShell SDK can take 5-10 minutes. Wait until you the get PS prompt back (several minutes after the install reports as completed) before continuing.
- The Az PowerShell module collects telemetry data (usage data) by default, however you can opt out from this data collection using `Disable-AzDataCollection` (see [this article](#) for more information).
- The Az PowerShell module remembers login information by default (i.e. you're not automatically logged out when closing your PowerShell window), but you can disable this with `Disable-AzContextAutosave` if required (see [this article](#) for more information).

- Microsoft.Graph modules of version 2.0.0 and higher are currently not supported. This will be addressed in a future Teams Connector release.

You can check your currently installed versions with the Powershell command:

```
Get-InstalledModule -Name Microsoft.Graph -AllVersions
```

Any Microsoft.Graph modules of version 2.0.0 and higher have to be uninstalled. This can be achieved with the procedure below:

- i. Close all Powershell windows.
- ii. Open an Administrator Powershell window.
- iii. Execute the following commands:

```
Remove-Module Microsoft.Graph -ErrorAction SilentlyContinue
Uninstall-Module Microsoft.Graph -MinimumVersion 2.0.0 -ErrorAction SilentlyContinue
Get-InstalledModule Microsoft.Graph.* | ForEach-Object { if ($_.Version.Major -ge "2") { Write-Host "Uninstalling
$(($_.Name) (version $(($_.Version))))"; Remove-Module $_.Name -ErrorAction SilentlyContinue; Uninstall-Module $_.Name -
RequiredVersion $_.Version -Force } }
```

- If you have deployed multiple Teams Connectors, you must follow the same redeploy process (with the appropriate variable initialization script) for each Teams Connector.
- As with all upgrades, you can continue to use the Pexip CVI app from your existing deployment.
- Your Pexip Infinity and Teams Connector installations must both be running the same software version (including minor/"dot" releases).

Full instructions are available at [https://docs.pexip.com/admin/teams\\_managing.htm#upgrading](https://docs.pexip.com/admin/teams_managing.htm#upgrading).

If you are using VMware snapshots for backup purposes, we recommend that you delete those snapshots after approximately two weeks, providing your upgraded system is operating as expected. This is because Virtual Machines, in general, should not run with snapshots over time.

For full details on upgrading Pexip Infinity, see [Upgrading the Pexip Infinity platform](#).

## Upgrading from versions 27-31.1 to version 32.1

If you are running a software version between v27 and v31.1 inclusive, you must first upgrade to version **31.3** and then upgrade again to version 32.1. To do this:

1. Before upgrading, ensure that all "always-on" Conferencing Nodes are powered on and are reachable (i.e. no Connectivity Loss errors), and are all running the same version from which you are upgrading. You do not need to power on any cloud bursting nodes.
2. Download the Pexip Infinity **v31.3** [upgrade file](#).
3. Follow the steps outlined in [Upgrading from version 31.2, 31.3 or 32.0 to version 32.1](#), but when asked to Choose File browse to the location of the **v31.3** upgrade file.
4. Verify that the upgrade has completed successfully.
5. Download the Pexip Infinity **v32.1** upgrade file.
6. Follow the steps outlined in [Upgrading from version 31.2, 31.3 or 32.0 to version 32.1](#), and when asked to Choose File browse to the location of the **v32.1** upgrade file.

## Upgrading from versions 22-26 to version 32.1

If you are running a software version between v22 and v26 inclusive, you must first upgrade to version **27.4**, and then upgrade again to version 31.3, and then upgrade again to 32.1. To do this:

1. Before upgrading, ensure that all "always-on" Conferencing Nodes are powered on and are reachable (i.e. no Connectivity Loss errors), and are all running the same version from which you are upgrading. You do not need to power on any cloud bursting nodes.
2. Download the Pexip Infinity **v27.4** [upgrade file](#).
3. Follow the steps outlined in [Upgrading from version 31.2, 31.3 or 32.0 to version 32.1](#), but when asked to Choose File browse to the location of the **v27.4** upgrade file.

4. Verify that the upgrade has completed successfully.
5. Download the Pexip Infinity **v31.3** [upgrade file](#).
6. Follow the steps outlined in [Upgrading from version 31.2, 31.3 or 32.0 to version 32.1](#), but when asked to **Choose File** browse to the location of the **v31.3** upgrade file.
7. Verify that the upgrade has completed successfully.
8. Download the Pexip Infinity **v32.1** upgrade file.
9. Follow the steps outlined in [Upgrading from version 31.2, 31.3 or 32.0 to version 32.1](#), and when asked to **Choose File** browse to the location of the **v32.1** upgrade file.