

PCoIP License Server Administrators' Guide for Windows

24.07

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Overview

HP Anyware License Server Administrators' Guide

The HP Anyware License Server for Windows is a standalone service that handles registration and authorization of PCoIP session requests. It can be used with or without a connection to the public internet.

Note: The HP Anyware License Server is only required for local license management

This software is not required for organizations using Cloud Licensing.

This guide describes how to install, configure, and use the HP Anyware License Server service for Windows. It is intended for system administrators who are deploying an HP Anyware License Server as part of their HP Anyware solution.

This guide assumes that you have a thorough understanding of virtual machines and networking concepts, including firewall configuration. Knowledge of the Windows operating system will also be helpful, although all required Windows commands are included here.

These instructions apply to online (internet-connected) and darksite deployments

The instructions and specifications included in this guide are common to both online and offline deployments of the HP Anyware License Server, unless otherwise noted. Each section of this guide indicates whether it applies to online use cases, offline, or both.

Important: Access to teradici.flexnetoperations.com required

Before you can activate licenses with an offline license server, you must be given access to <https://teradici.flexnetoperations.com>. To request access, create a ticket with [HP Anyware Support](#). Be prepared to provide a valid activation key, and the name and email address of a contact person who should have access.

What's New In This Release

Release 24.07 of the includes the following:

Support for Windows Powershell

Administrative commands will now be executed using Windows PowerShell instead of Command Prompt.

Removal of Python Dependency

In version 24.07, Python dependencies have been eliminated. PowerShell scripts are used instead.

Support for New Administrative Commands

Version 24.07 of Windows Local License Server introduces support for new administrative commands. These commands are used for securely adding and removing passwords from environment variables.

Note: Detailed Instructions

Detailed instructions on setting up and managing the HP Anyware License Server for Windows in **online environments as well as offline environments** are available in this guide.

About The Windows License Server

About the Windows License Server

Offline Environments **Online Environments**

HP Anyware Local License Server is a standalone software service that handles PCoIP session license registration and authorization requests. The server maintains license activation and checkout states in a local trusted storage database.

Most PCoIP deployments use the HP Anyware Cloud Licensing Service, and do not need a local license server. The Local License Server is used for deployments that cannot use cloud licensing, either because the site is not connected to the public internet, or control of session licenses is required.

Note: Session license types

HP Anyware cloud licensing uses registration codes, which are different from the activation keys used by the local license server. The type of license is specified at purchase.

When an Anyware agent attempts to establish a new PCoIP session, it will first request authorization from its assigned HP Anyware License Server. The HP Anyware License Server checks to see if an activated PCoIP session license is available in its trusted storage. If a license is found, it authorizes the session. Each PCoIP session activation consumes one PCoIP session license.

The HP Anyware License Server can run as an online service with a connection to the internet, or in an offline environment without internet access. The installation and operation procedures differ slightly in each use case.

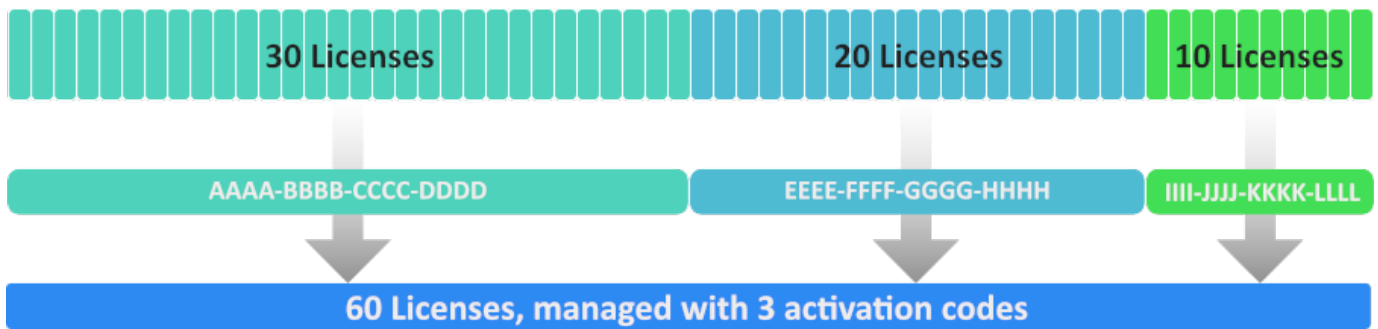
About PCoIP Session Licensing

Offline Environments Online Environments

PCoIP session licenses are managed in pools created at the time of purchase. Each pool is assigned an activation code for activating, viewing or returning the licenses. You can simultaneously use licenses from different pools.

For example, a purchase of 30 licenses has one applicable activation code. For subsequent purchase of license pools, you will receive an additional activation code each.

In this example, you own 60 licenses, managed by three different activation codes. You can activate them on the same license server or on multiple servers.



Using PCoIP Session Licenses

To use any PCoIP session licenses, they must be activated on an HP Anyware Local License Server. You can activate them on a single license server or on multiple servers depending on your deployment requirements.

Once installed and running, the HP Anyware License Server will authorize new Anyware sessions until it runs out of available active licenses.

About the Licensing Grace Period

Anyware agents request validation from their HP Anyware License Server each time a connection is established. Once a Anyware agent has successfully established a licensed PCoIP session, it will continue to work even if the HP Anyware License Server is subsequently unavailable or offline. This

grace period extends 7 days from the first unsuccessful validation attempt. This enables you to perform system maintenance or upgrades without disrupting your existing HP Anyware users.

Once a connection is re-established with the HP Anyware License Server, the grace period is reset. The next failed connection will initiate another 7-day grace period.


There is no user-facing indication that a Anyware agent is in a grace period. Administrators can check the status of individual Anyware agents by referring to the Anyware agent logs, or by using the `pcoip-validate-license` command on the Anyware Agent machine.

If the license is expired but within a day, the Anyware Agent may fall back to check out a license from grace period. This is the intended behavior and covers time-zone differences between a Anyware Agent and the license server.

If the license is expired by more than a day ago, the Anyware Agent will not check out this license.

 **Note: Not All Customers Experience This**

Not all customers experience this behavior. If you are geographically closer to the Flexnet operations server and your end users check out machines during daytime hours, then you will likely never experience this.

 **Note: Grace period has no UI representation**

There is no user-facing indication about a grace period. Administrator can check the status by referring to the Anyware Agent logs or by using the `pcoip-validate-license` command on a Anyware Agent machine.

For specific command information, refer to the appropriate Anyware Agent guide:

- [Graphics Agent for Windows Administrators' Guide](#)
- [Graphics Agent for Linux Administrators' Guide](#)
- [Standard Agent for Windows Administrators' Guide](#)
- [Standard Agent for Linux Administrators' Guide](#)

Managing PCoIP Session Licenses

PCoIP session licenses are purchased in bundles, with an activation code for each bundle to control activation and return of its session licenses. These licenses are validated by Flexera FlexNet Operations and are stored on the HP Anyware License Server's trusted storage.

Activated licenses remain linked to their license server until they are returned. No other license server can activate the licenses that are already allocated.

Note: Licenses can be lost

If a system hosting a HP Anyware License Server is destroyed or corrupted, then any licenses registered to it you can no longer return and are effectively lost. If this happens, open a ticket with HP Global Support Services at the Support Center.

System Requirements

Offline Environments Online Environments

The HP Anyware License Server for Windows requires an environment with the following minimum specifications:

	Requirement
Available disk space	60 GB
Available RAM	4 GB minimum available RAM
CPU	2GHz (2 cores)
Supported environments	<ul style="list-style-type: none">• Baremetal• ESXi 6.5 or higher• Azure• AWS EC2• GCP
Operating System	<ul style="list-style-type: none">• Windows 11• Windows Server 2022
Compatible Anyware agents	All Anyware Agents (Windows/Linux/macOS) version 23.06 or later

Installation Guide

Installing Windows License Server

Offline Environments Online Environments

To set up and run your HP Anyware License Server for Windows quickly, follow the installation steps. The same set of instructions works for both environments, online (internet-connected) and offline (darksite).

Note: Keeping Passwords Secure

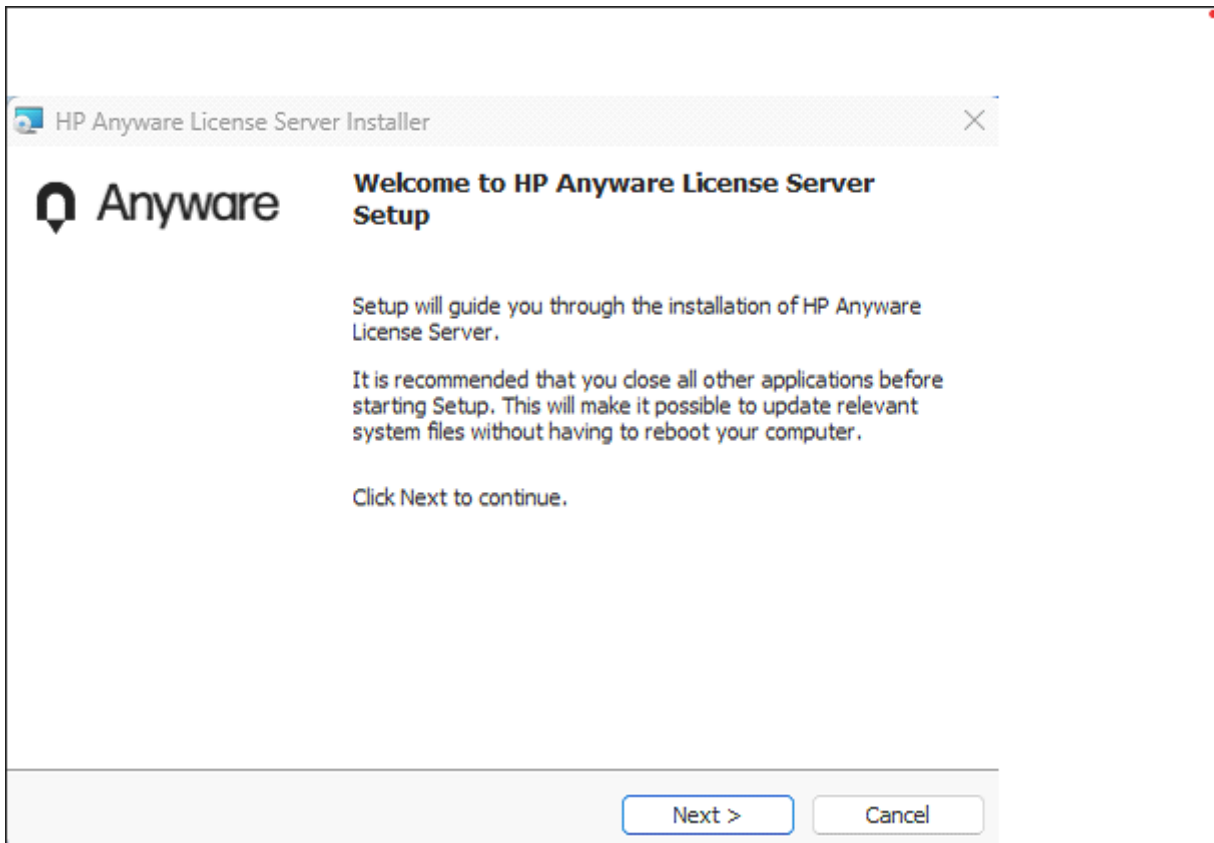
Some commands allow the use of the `-p` flag to provide passwords inline. Although HP Anyware License Server does not log or distribute passwords provided this way, it is difficult to say whether other system loggers (as bash history) are capturing them, leading to inadvertent disclosures. For this reason, **HP strongly discourages** the use of the `-p` flag (or the related `-n` flag used by `pcoip-set-password`).

Prerequisites

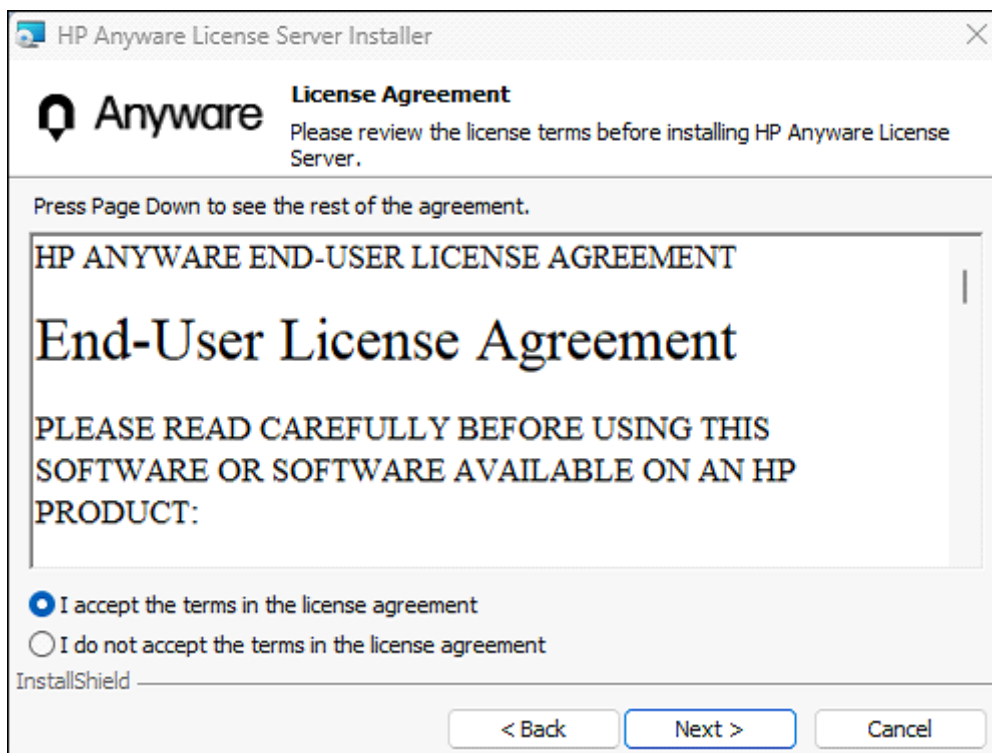
- To install HP Anyware License Server using the .msi file, log in as Windows administrator, and not as a user with admin privileges. This is because the default Windows behavior does not allow right click and "Run as administrator" for .msi files.
- Required operating system should be a clean resource.
- Prior engineering builds, if any, should be uninstalled.
- No other enterprise application should be running on the system on which you want to install the license server.
- Do not install any version of Java. This will be done by the installer.

Installation Procedure

1. Ensure that the MSI installer is available on the computer where you want to install the license server.
2. Log in to the system as administrator and double click the downloaded MSI file.
3. Click **Next** on the **HP Anyware License Server Installer** popup.



4. Select the **I accept the terms in the license agreement** radio button and click **Next**.

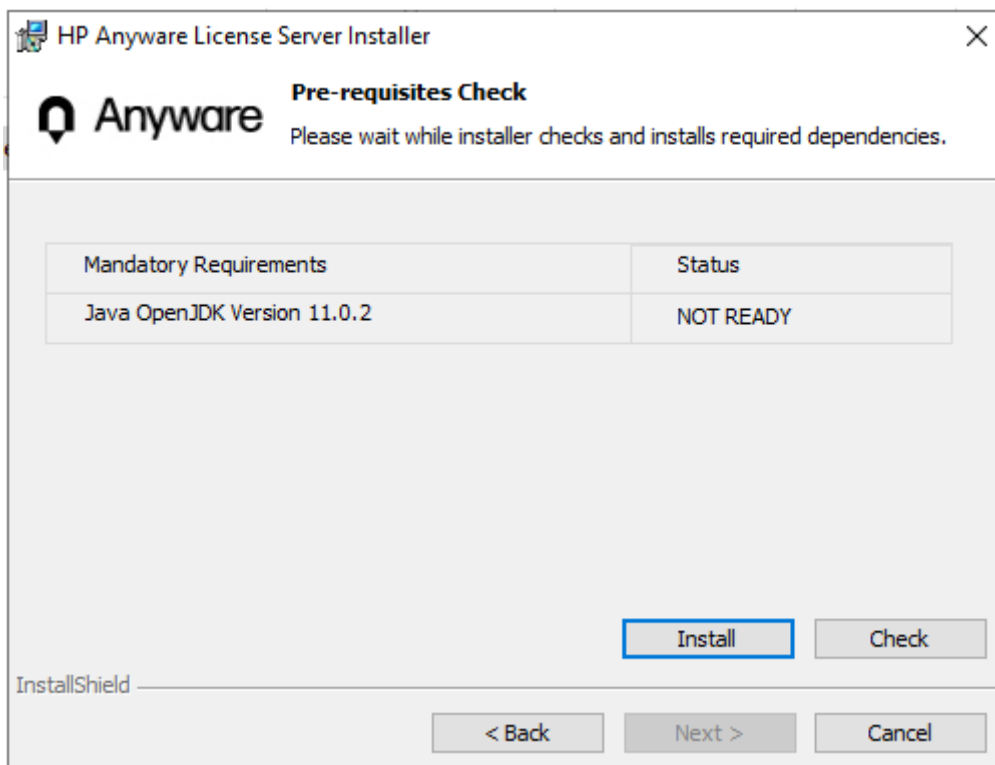


5. Click the **Check** button to verify that the required version of Java is available on your computer.

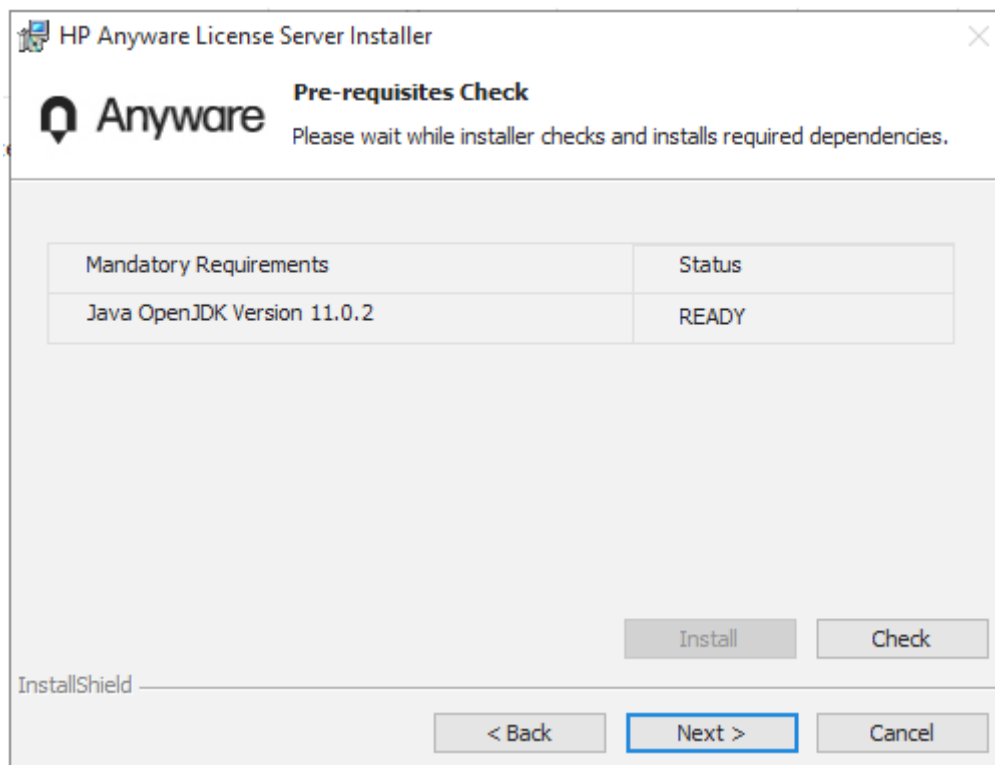
Note: Installing Java

If your system does not meet Java requirements, the **Install** button becomes available.

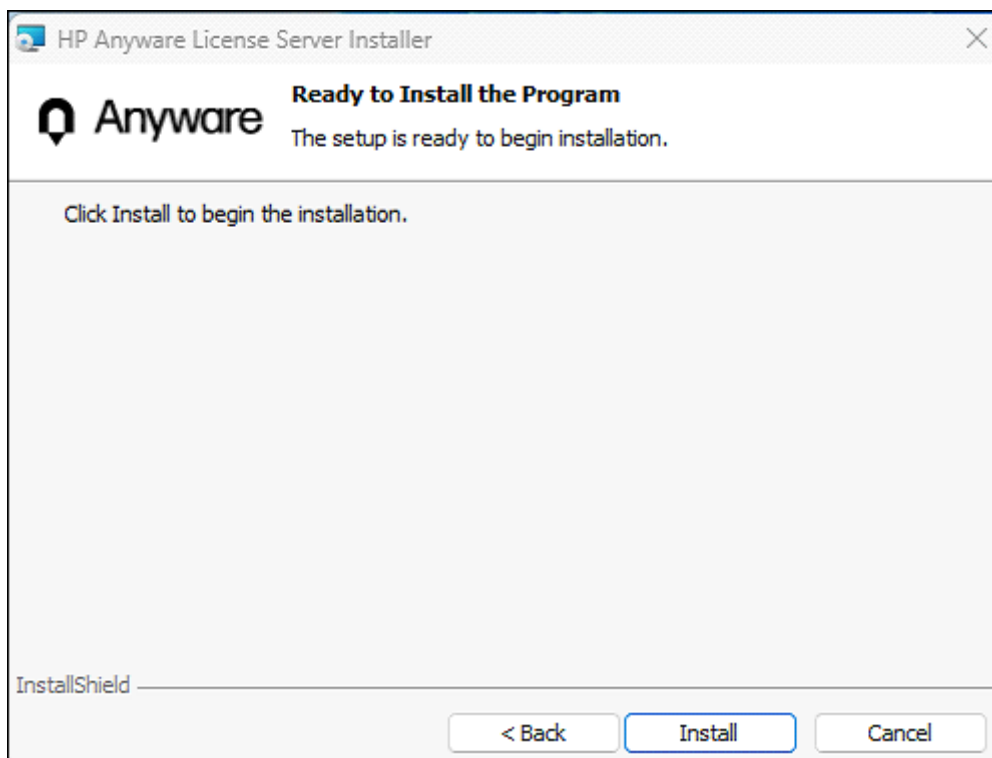
6. (Optional) Click **Install** to install Java.



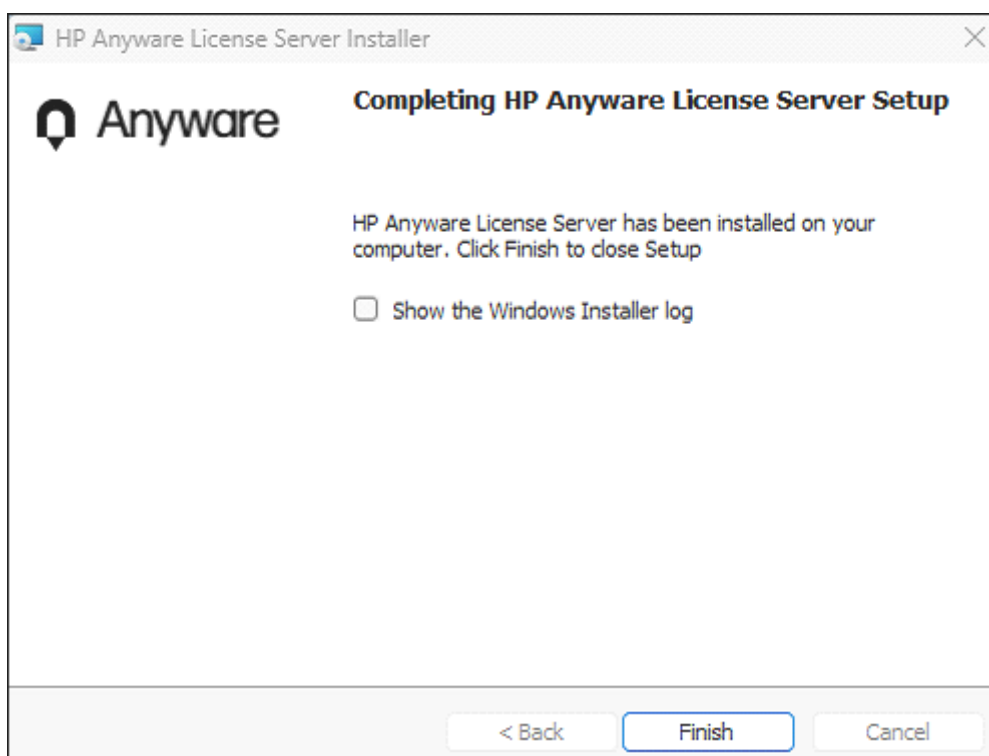
7. Click **Next**.



8. Click **Install** to proceed.



9. Click **Finish**.



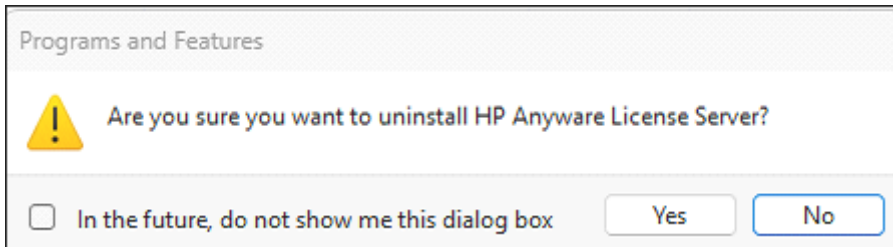
10. Navigate to Control Panel\Programs\Programs and Features and verify the HP Anyware License Server application.

11. Check the status of LLS in services.

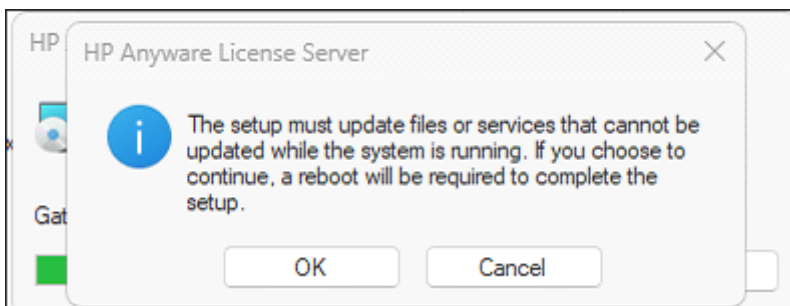
12. Once the license server is installed, [set the password](#).

Uninstallation Procedure

1. Navigate to Control Panel\Programs\Programs and Features and click **HP Anyware License Server**.
2. Click **Uninstall** and then **Yes**.



3. Click **OK** from the reboot pop-up.



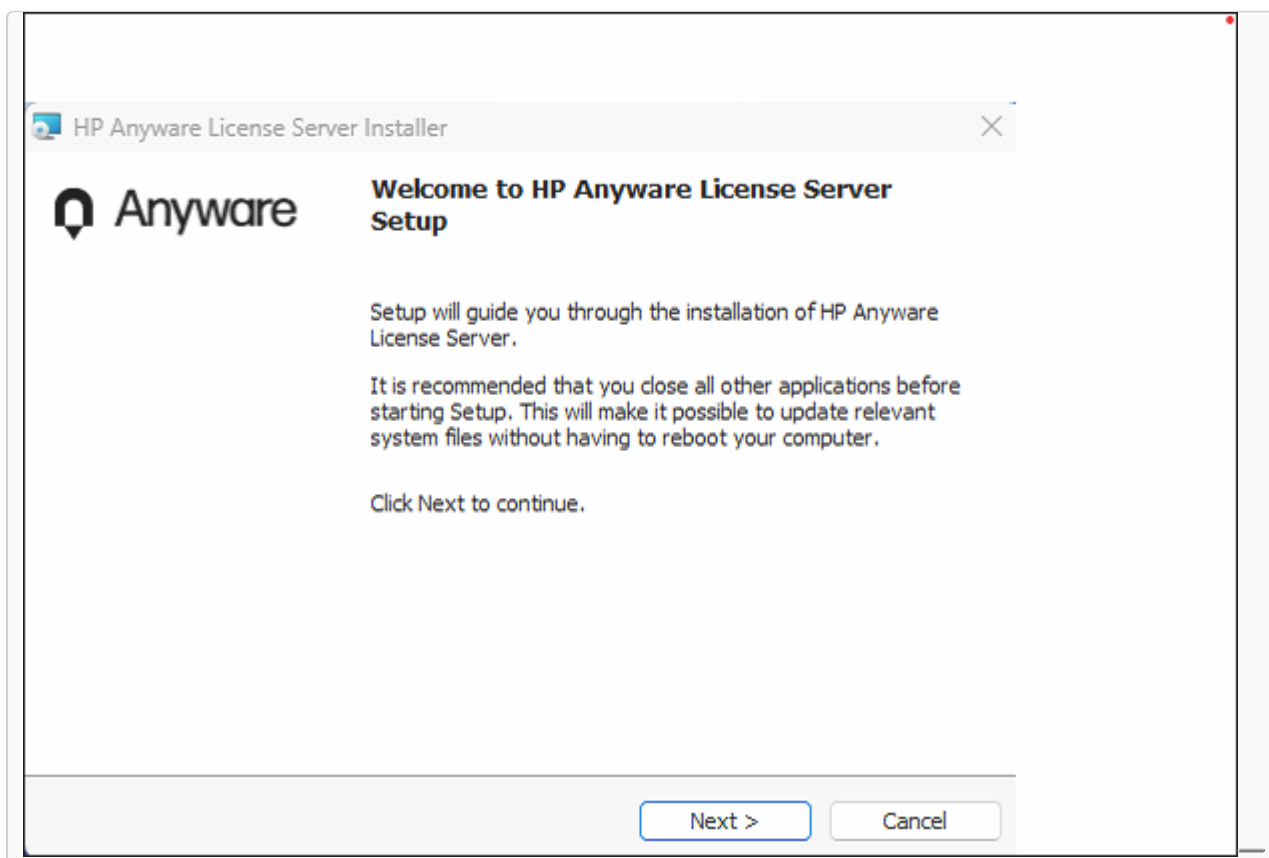
4. Wait until the uninstallation completes.

Upgrading Windows License Server

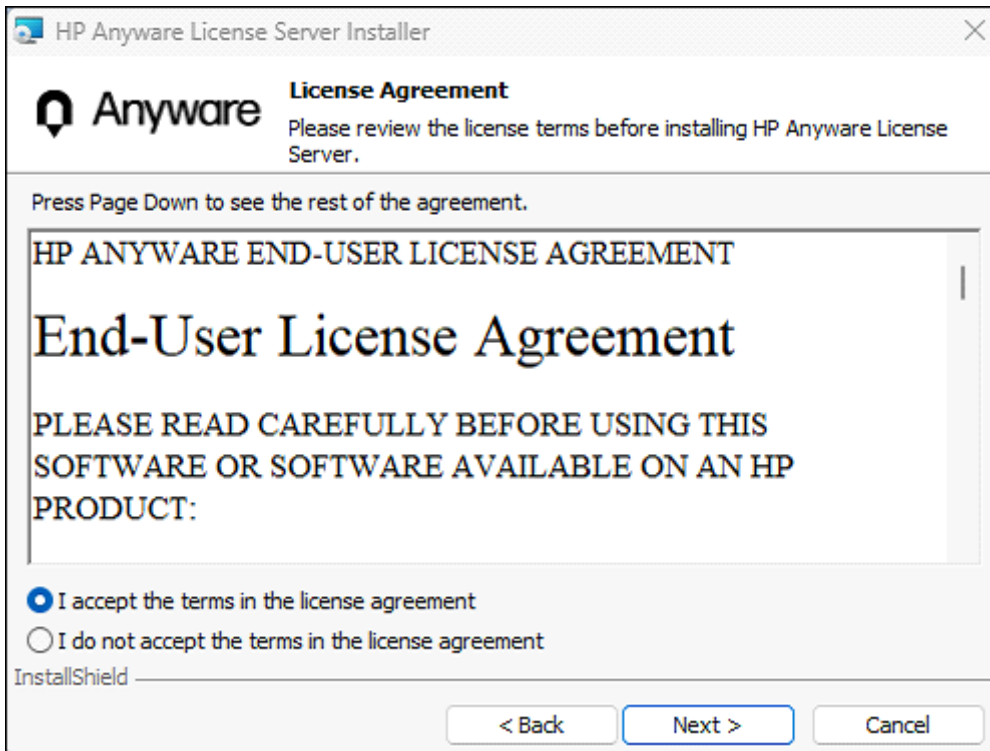
Offline Environments Online Environments

You can upgrade the license server, by running the MSI installer on an existing installation. Your settings and configuration will be preserved.

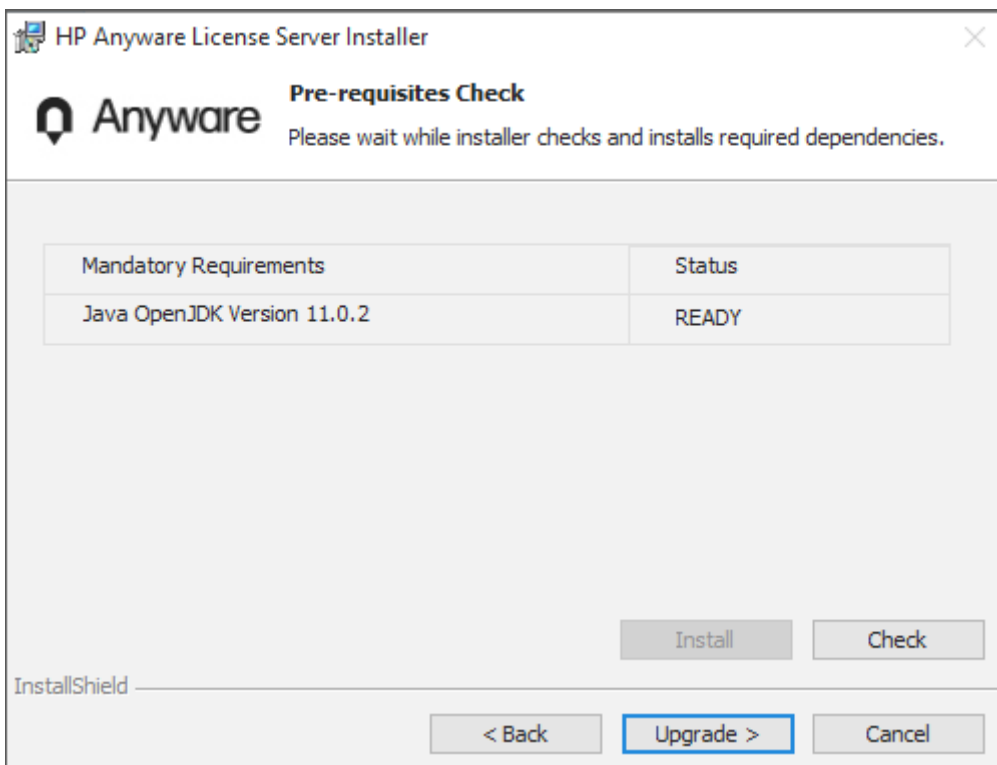
1. Download the latest MSI installer on the computer where you want to upgrade the license server.
2. Log in to the system as administrator.
3. Double click the downloaded MSI file, and click **Next** on the **HP Anyware License Server Installer** popup.



4. Select the **I accept terms in the license agreement** radio button and click **Next**.

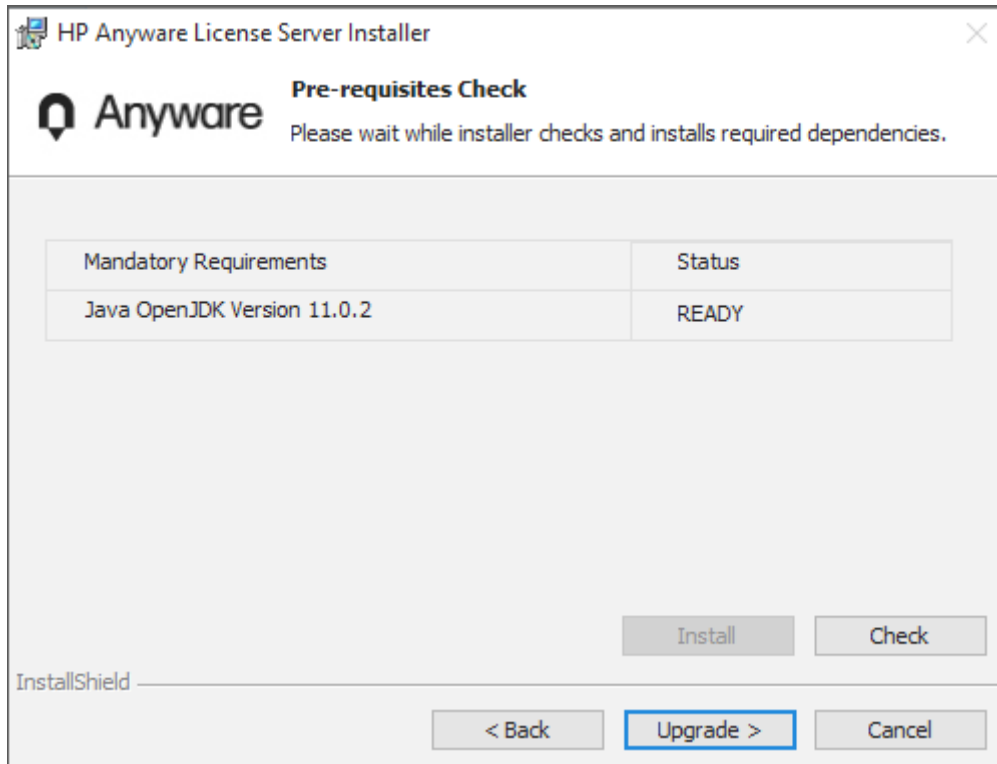


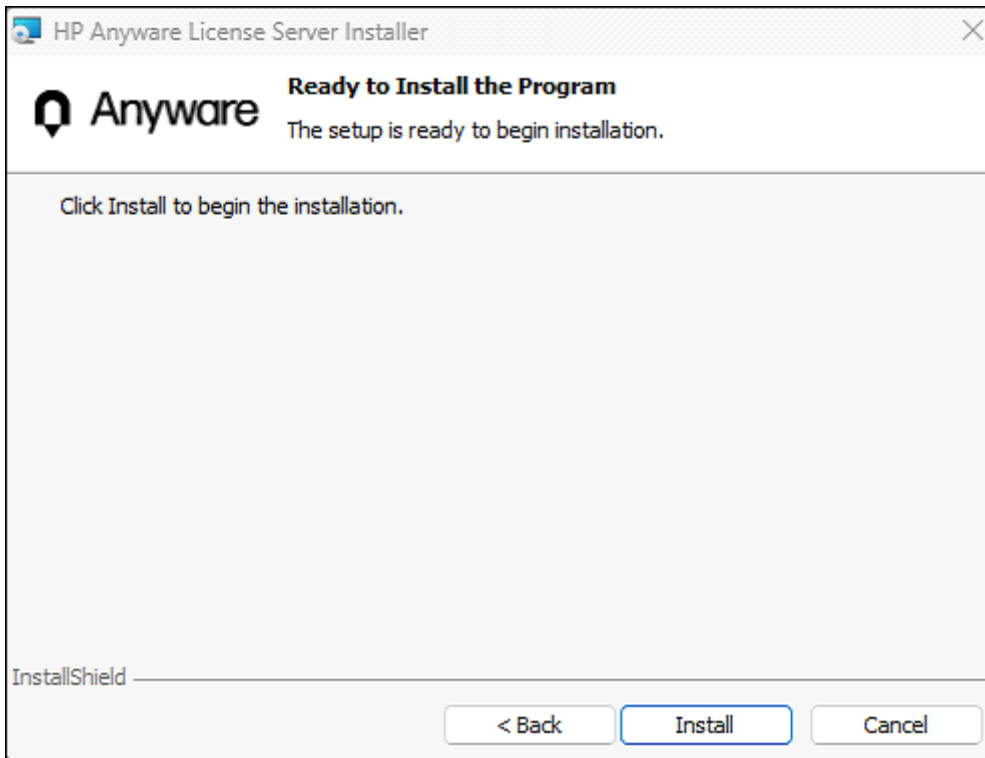
5. Click **Check** to verify the Java requirements.



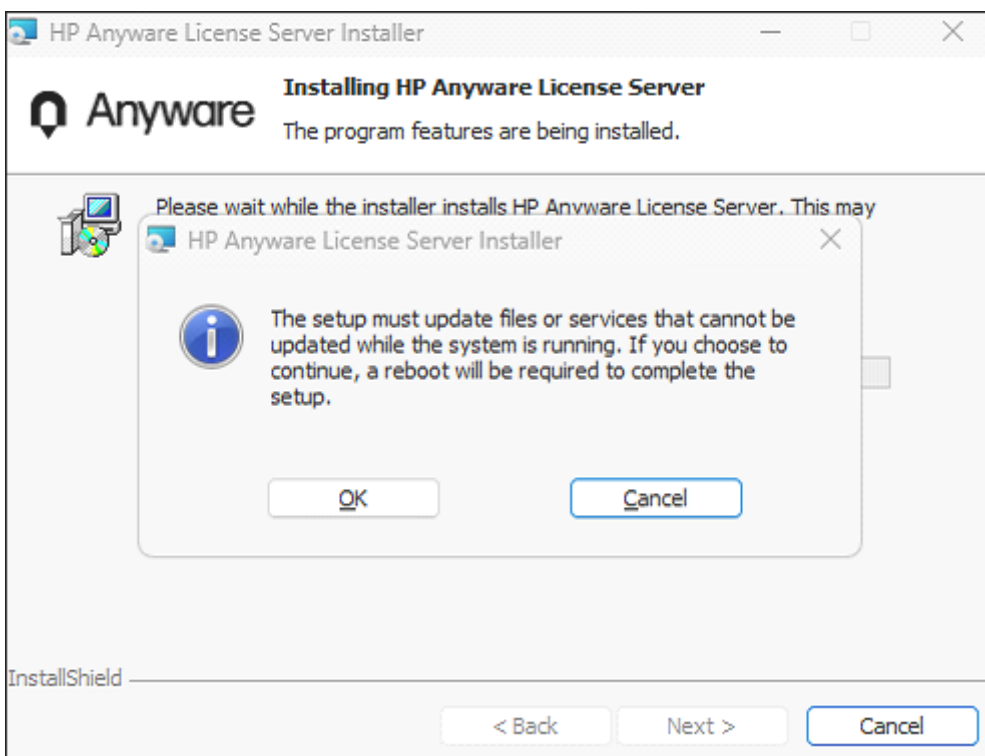
Note: Installing Java

If your system does not meet Java requirements, the **Install** button becomes available. Click this button to install the correct Java version.

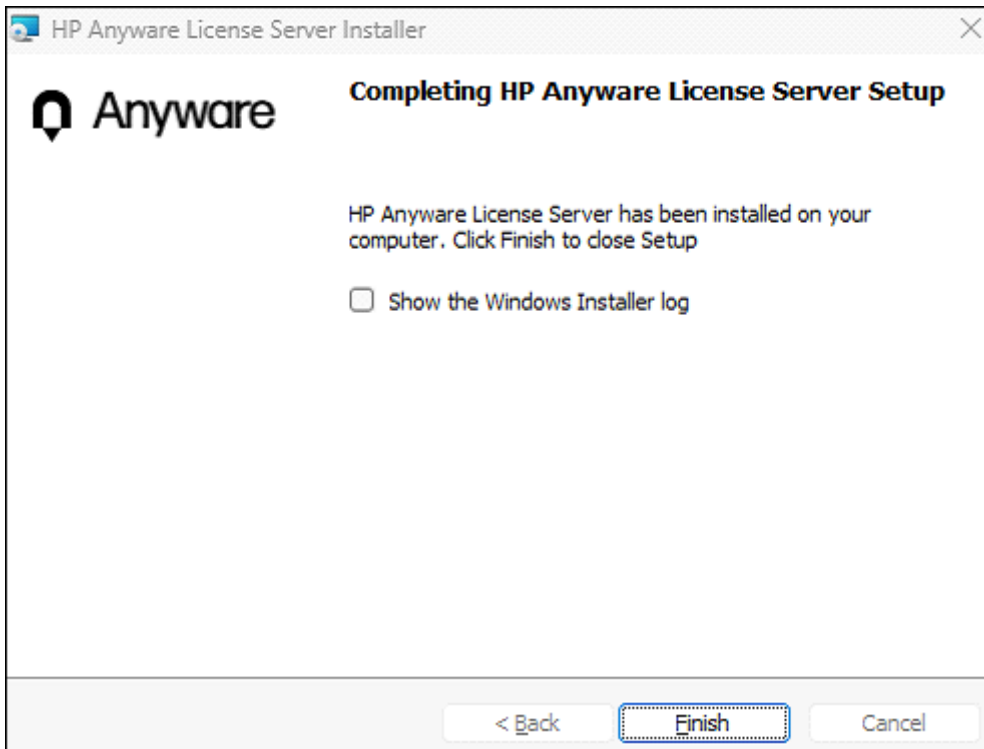
6. Click **Upgrade**.7. Click **Install**.



8. Click **OK** on the reboot pop-up.



9. Click **Finish**.



10. Navigate to Control Panel\Programs\Programs and Features to verify the HP Anyware License Server version.
11. Check the License Server version.
12. Check the status of the LLS in services.
13. Open Windows PowerShell to execute the admin commands.

Setting Up Failover Servers

About Failover Servers

Offline Environments Online Environments

If the main server fails or loses connectivity, the backup server will automatically begin validating PCoIP Sessions.

PCoIP Connection Managers and Anyware Agents do not automatically switch to a backup server; they must be configured to point to the backup server for the duration of the failover event, and then reverted once normal service is restored.

For detailed information on HP Anyware License Server configuration, follow these documents:

- [Connection Manager License Configuration](#)
- [Graphics Agent for Windows License Configuration](#)
- [Graphics Agent for Linux \(Ubuntu\) License Configuration](#)
- [Graphics Agent for Linux \(RHEL/CentOS\) License Configuration](#)
- [Standard Agent for Windows License Configuration](#)
- [Standard Agent for Linux \(Ubuntu\) License Configuration](#)
- [Standard Agent for Linux \(RHEL/CentOS\) License Configuration](#)

Configuring Failover Server in Offline Environments

Offline Environments

You can add a standalone HP Anyware License Server to act as a backup in case the main HP Anyware License Server fails. The main server periodically updates the backup server to keep it in sync. The two servers are registered as a pair called a *failover pair*.

In a failover situation, when the main server is down or is unreachable, the backup one can validate sessions. However, the backup server does not synchronize data with the main server. Hence, information about usage will be unreliable as long as the failover lasts.

Note: About Failover

Failover requires manual changes in PCoIP Connection Managers and Anyware Agents. Switching from the main HP Anyware License Server to the backup one requires configuration manually in your PCoIP Connection Managers and Anyware agents. See [Failover behavior](#) for more information.

Installation Notes

- The backup server must have the same version as the main server.
- Both license servers should be configured identically with some allowable differences. For example, you can specify different PORT values for these servers.
- The host IDs of both the main and backup servers must be the same type (for example, you can use two VM UUIDs or two Ethernet MAC addresses, but not one of each).
- The two servers should be in different physical locations if possible or at least on independent hypervisors so that an incident or a failure will not take down both servers.
- The host IDs of both the main and backup servers must be the same type (for example, you can use two VM UUIDs or two Ethernet MAC addresses, but not one of each).
- The clocks of both the servers must be accurate, synchronized, and in the same time zone. If they are not, unpredictable behavior can occur.

- You must configure the main server with the failover information **before the backup server is registered** with HP. If the backup server is registered with HP(FNO) before the configuration completes, create a ticket with HP Support for assistance.

Installing and Configuring a Failover Pair

Failover pairs can be configured [with an Internet connection](#), with a temporary Internet connection, or without it (true darksites). The main and backup servers must always have connectivity with each other.

- In offline environments, if you can make a temporary connection to the Internet, follow the **Connected Environment** steps. The temporary connection must be opened for both main and backup license servers
- If you cannot, follow the **Darksite Environment** steps instead.

1. SET THE HOST ID OF THE BACKUP SERVER ON THE MAIN SERVER

The main server needs to know the ID of the backup server to create a failover pair. Get the ID from the backup server and add it in the configuration file on the main server.

1. Start the backup HP Anyware License Server.
2. Execute the below command and note the host ID in a response:

```
pcoip-get - license-server - id
```

3. Stop the backup server:
 - a. Navigate to **Services** and select the **HP Anyware License Server**" service.
 - b. Stop the service.
4. Switch to the main server and start it:
 - a. Navigate to **Services** and select the **HP Anyware License Server**" service.
 - b. Start the service.
5. On the main server, use a text editor to edit C:\Program Files\HP\HP Anyware License Server\server\local-configuration.yaml.
6. Set the `backup-hostid` you recorded in step 2.

7. Save and exit the editor.
8. Shut down the main server:
 - a. Navigate to **Services** and select the **HP Anyware License Server** service.
 - b. Stop the service.
9. Shut down the backup server.

2. REGISTER HP ANYWARE LICENSE SERVERS

1. Start the main HP Anyware License Server.
 - a. Navigate to **Services** and select the **HP Anyware License Server** service.
 - b. Start the service.
2. Execute the following command:

```
pcoip-list-licenses
```

3. Start the backup server after you see a valid response from `pcoip-list-licenses`.

3. ENABLE FAILOVER SUPPORT ON THE BACKUP SERVER

Configure a few settings on the backup server to act as a backup and sync with the main server.

On the backup server, use the `flexnetlsadmin.bat` utility to set the following HP Anyware License Server policy settings. The `flexnetlsadmin.bat` utility is available at: `C:\Program Files\HP\HP Anyware License Server\enterprise`

Note: Password Prompts

You will be prompted for a password when using these commands. When prompted, provide the administrative password, as set by `pcoip-set-password`.

1. Navigate to the "enterprise" folder by running the following command:

```
cd "C:\Program Files\HP\HP Anyware License Server\enterprise"
```

2. Run the following commands:

3. `fne.syncTo.mainUri`: Set this in the URI of the main server using this format: `https://<licenseServerHostName>:<port>/fne/bin/capability`.

Example:

```
.\flexnetlsadmin.bat -server http://localhost:7070/api/1.0/instances/~ -  
authorize admin -passwordConsoleInput -config -set  
fne.syncTo.mainUri=http://<MainLicenseServerHostName>:7070/fne/bin/  
capability
```

4. `fne.syncTo.enabled`: Set this value to true.

Example:

```
.\flexnetlsadmin.bat -server http://localhost:7070/api/1.0/instances/~ -  
authorize admin -passwordConsoleInput -config -set fne.syncTo.enabled=true
```

4. CONFIGURE RESPONSE REFERENCE INFORMATION ON THE MAIN SERVER

Capability responses returned to client devices include the URIs for the main and backup servers. Configure one or both of these policy settings to include the corresponding URIs in the response reference information:

- Include the main server URI in client responses: Set the `licensing.main.uri` value using `flexnetlsadmin.bat`.

Example:

```
.\flexnetlsadmin.bat -server http://localhost:7070/api/1.0/instances/~ -  
authorize admin -passwordConsoleInput -config -set licensing.main.uri=http://  
<MainLicenseServerHostName>:7070/fne/bin/capability
```

- Include the backup server URI in client responses: Set the `licensing.backup.uri` value using `flexnetlsadmin.bat`.

Example:

```
.\flexnetlsadmin.bat -server http://localhost:7070/api/1.0/instances/~ -  
authorize admin -passwordConsoleInput -config -set  
licensing.backup.uri=http://<BackupLicenseServerHostName>:7070/fne/bin/  
capability
```

5. ACTIVATE LICENSES ON THE MAIN SERVER

Partially Internet-Connected Environments

If licenses are not activated on the main server at start, activate them now by executing `pcoip-activate-online-license` command. The active licenses automatically sync to the backup server. For more information, see [activate online license](#).

After this activation, **close the Internet connection for both the main and the backup servers.**

Note: Disconnect Internet

The main and backup servers still must have connectivity with each other even after the Internet is disconnected.

Darksite Environments

If licenses are not activated on the main server at start, activate them now by executing `response.bin` on both main and backup servers to keep them synchronized.

If you make changes on the main server that need to be synchronized with the backup, restart the service on the backup:

1. Navigate to **Services** and select the **HP Anyware License Server** service.
2. Stop the service.
3. Start the service.

6. VERIFY FAILOVER CONFIGURATION

After both servers receive their license rights, verify the failover scenario role of each server. The failover role for each server is included in the capability responses delivered to it.

Use the `flexnetlsadmin.bat` utility from each server to verify its failover role. As usual, replace the URI and port information here with yours.

- From the main HP Anyware License Server:

```
.\flexnetlsadmin.bat -server <http://localhost:7071/api/1.0/instances/>~ -  
authorize admin -passwordConsoleInput -status
```

You should see a backup server specified in the response.

- From the backup HP Anyware License Server:

```
.\flexnetlsadmin.bat -server <http://localhost:7071/api/1.0/instances/>~ -  
authorize admin -passwordConsoleInput -status
```

This response should not contain a backup server item.

Configuring Failover Server in Online Environments

Online Environments

You can add a standalone HP Anyware License Server to act as a backup in case the main HP Anyware License Server fails. The main server periodically updates the backup server to keep it in sync. The two servers are registered as a *failover pair*.

In a failover situation, when the main server is down or is unreachable, the backup one can validate sessions. However, the backup server does not synchronize data with the main server. Hence, information about usage will be unreliable as long as the failover lasts.

Note: About Failover

Failover requires manual changes in PCoIP Connection Managers and Anyware Agents. Switching from the main HP Anyware License Server to the backup one requires configuration manually in your PCoIP Connection Managers and Anyware agents. See [Failover behavior](#) for more information.

Installation Notes

- The backup server must have the same version as the main server.
- Both license servers should be configured identically with some allowable differences. For example, you can specify different PORT values for these servers.
- The host IDs of both the main and backup servers must be the same type (for example, you can use two VM UUIDs or two Ethernet MAC addresses, but not one of each).
- The two servers should be in different physical locations if possible or at least on independent hypervisors so that an incident or a failure will not take down both servers.
- The clocks of both the servers must be accurate, synchronized, and in the same time zone. If they are not, unpredictable behavior can occur.
- You must configure the main server with the failover information **before the backup server is registered** with HP. If the backup server is registered with HP(FNO) before the configuration completes, create a ticket with HP Support for assistance.

Installing and Configuring a Failover Pair

Failover pairs can be established either with a temporary Internet connection or [without it](#).

The main and backup servers must always have connectivity with each other. Once you install a new HP Anyware License Server as your backup, **DO NOT** register it with HP (FNO) right away.

1. SET THE HOST ID OF THE BACKUP SERVER ON THE MAIN SERVER

The main server needs to know the ID of the backup server to create a failover pair. Get the ID from the backup server and add it in the configuration file on the main server.

1. Start the backup HP Anyware License Server.
2. Execute the below command and note the host ID in a response:

```
pcoip-get-license-server-id
```

3. Stop the backup server:
 - a. Navigate to **Services** and select the **HP Anyware License Server**" service.
 - b. Stop the service.
4. Switch to the main server and start it:
 - a. Navigate to **Services** and select the **HP Anyware License Server**" service.
 - b. Start the service.
5. On the main server, use a text editor to edit C:\Program Files\HP\HP Anyware License Server\server\local-configuration.yaml.
6. Set the `backup-hostid` you recorded in step 2.
7. Save and exit the editor.
8. Shut down the main server.
 - a. Navigate to **Services** and select the **HP Anyware License Server**" service.
 - b. Stop the service.
9. Shut down the backup server.

2. REGISTER THE MAIN AND BACKUP SERVERS

1. Start the main HP Anyware License Server.
 - a. Navigate to **Services** and select the **HP Anyware License Server** service.
 - b. Stop the service.
2. Execute the following command:

```
pcoip-list-licenses
```

3. Start the backup server after you see a valid response from `pcoip-list-licenses`.

3. ENABLE FAILOVER SUPPORT ON THE BACKUP SERVER

Configure a few settings on the backup server to enable it to sync with the main server.

Note: Prompt for Password

You will be prompted for a password when using these commands. When prompted, provide the administrative password, as set by `pcoip-set-password`.

On the backup server, use the `flexnetlsadmin.bat` utility to set the following HP Anyware License Server policy settings. This utility is available in the following location: `C:\Program Files\HP\HP Anyware License Server\enterprise`.

1. Navigate to the "enterprise" folder by running the following command:

```
cd "C:\Program Files\HP\HP Anyware License Server\enterprise"
```

1. Run the following commands:

- `fne.syncTo.mainUri`: Set this in the URI of the main server using this format: `https://:/fne/bin/capability`.

Example:

```
.\flexnetlsadmin.bat -server http://localhost:7070/api/1.0/instances/~ -
authorize admin -passwordConsoleInput -config -set
fne.syncTo.mainUri=http://<MainLicenseServerHostName>:7070/fne/bin/
capability
```

- `fne.syncTo.enabled`: Set this value to true.

Example:

```
.\flexnetlsadmin.bat -server http://localhost:7070/api/1.0/instances/~ -
authorize admin -passwordConsoleInput -config -set fne.syncTo.enabled=true
```

4. CONFIGURE RESPONSE REFERENCE INFORMATION ON THE MAIN SERVER

Capability responses returned to client devices include the URIs for the main and backup servers. Configure one or both of these policy settings to include the corresponding URIs in the response reference information:

- Include the main server URI in client responses: Set the `licensing.main.uri` value using `flexnetlsadmin.sh`. Example (replace these host names and port numbers with yours):

```
.\flexnetlsadmin.bat -server http://localhost:7070/api/1.0/instances/~ -
authorize admin -passwordConsoleInput -config -set licensing.main.uri=http://
<MainLicenseServerHostName>:7070/fne/bin/capability
```

- Include the backup server URI in client responses: Set the `licensing.backup.uri` value using `flexnetlsadmin.sh`. For example (replace these host names and port numbers with yours):

```
.\flexnetlsadmin.bat -server http://localhost:7070/api/1.0/instances/~ -
authorize admin -passwordConsoleInput -config -set
licensing.backup.uri=http://<BackupLicenseServerHostName>:7070/fne/bin/
capability
```

5. ACTIVATE LICENSES ON THE MAIN SERVER

If licenses are not activated on the main server at start, activate them now by executing the `pcoip-activate-online-license` command. The active licenses automatically sync to the backup server. For more information, see [activate online license](#).

6. VERIFY FAILOVER CONFIGURATION

After both servers receive their license rights, verify the failover scenario role of each server. The failover role for each server is included in the capability responses delivered to it.

Use the `flexnetlsadmin.bat` tool from each server to verify its failover role. As usual, replace the URI and port information here with yours.

- From the main HP Anyware License Server:

```
.\flexnetlsadmin.bat -server http://localhost:7071/api/1.0/instances/~ -  
authorize admin -passwordConsoleInput -status
```

You should see a backup server specified in the response.

- From the backup HP Anyware License Server:

```
.\flexnetlsadmin.bat -server http://localhost:7071/api/1.0/instances/~ -  
authorize admin -passwordConsoleInput -status
```

This response should not contain a backup server item.

Configuring the HP Anyware License Server

Configuring the Windows License Server

Configuring the Windows License Server

Offline Environments Online Environments

The HP Anyware License Server requires minimal configuration. This section describes the configuration settings and options available.

Important: Configuring Your Deployment

The URL of your HP Anyware License Server must be provided to the Connection Manager managing your Anyware Agents or to each of your Anyware Agents if you are not using Connection Manager. The URL format of the HP Anyware License Server is: `https://<hp-anyware-license-server-address>:<port>/request`. If you have not configured your HP Anyware License Server to use HTTPS/TLS, use `http://` instead of `https://`.

Password Rules

The administrator password for HP Anyware License Server is set by executing the `pcoip-set-password` command. You must be logged in as a Windows administrator to execute this command.

Passwords must conform to the following rules:

- Must be between 8 and 30 characters long.
- Must contain at least one lowercase letter.
- Must contain at least one uppercase letter.
- Must contain at least one digit.

- Must contain at least one symbol, excluding ' (single quote), " (double quote), \ (backslash), < (less than), > (greater than), & (ampersand), | (vertical bar), and spaces.

Setting the Administrator Password

Note: Default Password

The default password in new installations is `1P@ssw0rd!`. Here the leading 1 is a numeral one and 0 is a zero. Use it as your current password when you set the password on a clean installation.

1. Log in as Windows administrator.
2. Set your password by running the following command:

```
pcoip-set-password
```

If you do not supply any flags, it will prompt you for your current and new passwords: You can also supply the current and new password inline by using `-p` and `-n` flags.

Configuring the Listening Port for HP Anyware License Server

HP Anyware License Server listens for communication from Anyware Agents in your deployment on a defined listening port. By default, this listening port is set to 7070, but can be changed by specifying the `PORT` setting in the `C:\Program Files\HP\HP Anyware License Server\server\local-configuration.yaml` configuration file.

Info

Anyware Agents are configured to use port 7070 by default. If you change the license server port, you must also change the configuration of all Anyware Agents that use it.

To change the listening port of the license server:

1. Open `C:\Program Files\HP\HP Anyware License Server\server\local-configuration.yaml` in a text editor.

2. Locate the port assignment line:
3. Change the value of port to the new one. The port number must be an integer between 1 and 65535.
4. Save the file and exit the editor.
5. Restart the license server for the new value to take effect:
 - a. Navigate to the **Services** app.
 - b. Select the "HP Anyware License Server" service.
 - c. Stop and then start this service.
6. Update the configuration of any Anyware Agents that communicate with this HP Anyware License Server. For instructions, see one of the following guides:
7. [HP Anyware® Graphics Agent for Windows Administrators' Guide] (https://www.teradici.com/web-help/pcoip_agent/graphics_agent/windows/23.12/)
8. [HP Anyware® Graphics Agent for Linux Administrators' Guide] (https://www.teradici.com/web-help/pcoip_agent/graphics_agent/linux/23.12/)
9. [HP Anyware® Standard Agent for Windows Administrators' Guide] (https://www.teradici.com/web-help/pcoip_agent/standard_agent/windows/23.12/)
10. [HP Anyware® Standard Agent for Linux Administrators' Guide] (https://www.teradici.com/web-help/pcoip_agent/standard_agent/linux/23.12/)

Enabling HTTPS/TLS for HP Anyware License Server

Offline Environments Online Environments

The following instructions document the use of HTTPS with TLS. The default communication protocol is HTTP, which is less secure than HTTPS. **HP strongly recommends HTTPS** for communicating with the local HP Anyware License Server.

Warning: Only internal network usage is supported

The HP Anyware License Server supports only a company internal network. It is not designed to receive connections from the public Internet.

Using Self-signed Certificates

HP recommends against using a self-signed certificate. Use a CA-signed certificate whenever possible.

1. If you must use a self-signed certificate, generate one using the following command:

```
keytool -genkeypair -v -alias HPLicenseServer -keyalg RSA -keysize 4096 -storetype PKCS12 -keystore HPLicenseServer.p12 -validity 365
```

2. Convert pkcs12 to JKS

```
keytool -importkeystore -srckeystore HPLicenseServer.p12 -srcstoretype PKCS12 -destkeystore HPLicenseServer.jks -deststoretype JKS
```

Using HTTPS/TLS on HP Anyware License Server

1. Get a valid certificate along with its private key and save it in the JKS (Java Key Store) format. Ensure that the JKS file has a keystore password and storepass, and they are the same.

2. Create a new C:\Program Files\HP\certs directory and copy the .jks file into it. To avoid overwriting by future upgrades, **do not** place the .jks file under C:\Program Files\HP\HP Anyware License Server.
3. Create an obfuscated password using Flexera's password by replacing with yours:

```
cd C:\Program Files\HP\HP Anyware License Server\server
java -jar flexnetls.jar -password <password>
```

The output from this command shows the original and the obfuscated passwords. Copy the obfuscated password (including OBF:) for use in the next step.

1. Configure the Local License Server settings to use the JKS:
 - a. Open C:\Program Files\HP\HP Anyware License Server\server\local-configuration.yaml in a text editor.
 - b. Edit the following lines by replacing with the password you copied in 3.

The configuration options are:

```
# local-configuration.

# HTTP listening port. Default is 7070. You can bind to an interface
with this syntax: '[127.0.0.1].7070'.
  port: 7070

# HTTPS server mode
https-in:
# Set to true to enable
enabled: true
# HTTPS listening port
port: 7071
# Path to keystore
keystore-path: C:\Program Files\HP\certs\HPLicenseServer.jks
# Keystore password. You can obfuscate this with java -jar
flexnetls.jar -password your-password-here
keystore-password: <obfuscated password>
```

where,

- **port**: The HTTP listening port. This is required to run the license server commands internally on the license server host. You can safely block this port externally.

- `https-in/enabled`: HTTPS-in enable. Set this to true to enable HTTPS for incoming connections to the license server.
- `https-in/port`: HTTPS-in port number. Set this to the HTTPS listening port for the license server.
- `https-in/keystore-path`: Set this to the full path for the JKS file used for encryption.
- `https-in/keystore-password`: Set this to the keypass/storepass, preferably the obfuscated password you created earlier.

2. Restart the license server:

- a. Navigate to **Services > HP Anyware License Server**.
- b. Stop the service and start it again.

3. Add a rule to allow incoming TCP traffic on port 7071:

```
netsh advfirewall firewall add rule name="Allow Port 7071 TCP" dir=in  
action=allow protocol=TCP localport=7071
```

4. Verify that you can see the licenses:

```
pcoip-list-licenses
```

If you can see the licenses, you will see output similar to the following example:


```

=====
Name                Count          Version        Type
Expiration
=====
Agent-Graphics      1              2019.0209     CONCURRENT
2019-02-09
Agent-Session       1              2019.0209     CONCURRENT
2019-02-09

Total number of features : 2

=====
Feature ID          Feature Name          Feature Version    Feature Count
Used/Available
=====
1                   Agent-Graphics       2019.0209         0/1
2                   Agent-Session        2019.0209         0/1
=====

Device Information:

-----
Device Name          Feature Registered(Used Count)
-----
=====

Total feature count      : 2
Total feature count used : 0
Total uncounted features : 0
=====

```

8. Verify that the license server setting in the Connection Manager is configured correctly.

When using HTTPS, it should be configured as (replace `<ip>` with the IP or FQDN of your license server and `<port>` with the port number you specified in step 5):

```
LicenseServerAddress = https://<License-Server-IP-or-FQDN>:<https-listen-
port>/request
```

9. Verify whether Anyware Agents check out licenses:

a. Move to an Anyware Agent desktop that uses this license server.

- b. Verify that the HP Anyware License Server's firewall is open by opening the following page: `https://<License-Server-IP-or-FQDN>:<https-listen-port>/api/1.0/health`.
- c. If the page loads, the firewall configuration is correct.
- d. If the page loads but throws a certificate error, then the port is open, but the certificate is invalid; [see below](#) for guidance.
- e. If the page does not load, the port is most likely closed.
- f. Verify that Anyware Agent can view license information from the License Server:

```
pcoip-validate-license
```

Fixing Certificate Validation Error

If the certificate fails to validate, it is likely because the Common Name is incorrect, or the certificate is invalid because it is not issued by a trusted Certificate Authority. If this happens, do the following:

- Install or import the certificate for Anyware Agents on Linux machines by following the instructions [here](#).
- Install or import the certificate for Anyware Agents on Windows machines by following the instructions [here](#).

Configuring the Windows License Server in Online Environments

Online Environments

Configuring Proxy Settings

HP Anyware License Server connects to the Internet via a proxy server to activate, return and update its licenses. The proxy server is specified by its address and port number.

Proxy settings are configured by executing `pcoip-configure-proxy` command. You must be logged in as a Windows administrator to run this command.

- To configure and use a proxy, run `pcoip-configure-proxy` with `-s`, where,
 - The address and port number of the proxy server are in the following format: `<address>:<port>`
 - If the proxy server requires authentication, provide username and password with the `-u` and `-p` options.

This example configures HP Anyware License Server to proxy Internet traffic via a proxy server at `proxy.domain.local` on port 1234:

```
pcoip-configure-proxy -s proxy.domain.local:1234
```

This example configures the license server to proxy Internet traffic via a proxy server at `192.168.0.12` on port 10443 and provides credentials using `-u` and `-p`.

```
pcoip-configure-proxy -s 192.168.0.12:10443 -u username -p password
```

Viewing Proxy Settings

Run `pcoip-configure-proxy` with `-v`. For example:

```
pcoip-configure-proxy -v
```

Clearing Proxy Settings

Run `pcoip-configure-proxy` with `-c` to clear proxy settings, which stops HP Anyware License Server to use a proxy. For example:

```
pcoip-configure-proxy -c
```

Command Reference

Offline Environments **Online Environments**

Commands for Online Deployments

The following commands are applicable to online deployments of the license server.

pcoip-activate-online-license

Run this command to activate licenses when HP Anyware License Server is connected to the Internet.

```
pcoip-activate-online-license -a <activation-code> -c <license count>
```

pcoip-configure-proxy

Run this command to view, set, and clear proxy configuration for HP Anyware License Server.

Task	Command
Set proxy configuration	<code>pcoip-configure-proxy -s proxy.domain.local:1234</code>
Clear proxy configuration	<code>pcoip-configure-proxy -c</code>
View proxy configuration	<code>pcoip-configure-proxy -v</code>

pcoip-return-online-license

Run this command to return all activated PCoIP session licenses specific to an activation code in an online environment.

```
pcoip-return-online-license -a <activation-code>
```

Command for Offline Deployments

The following command is applicable to offline deployments of the license server.

pcoip-activate-offline-license

Run this command to activate licenses when HP Anyware License Server is installed in darksite environments.

Task	Command
Generate request file	<code>pcoip-activate-offline-license -g -a <activation code> -c <license count></code>
Process response file	<code>pcoip-activate-offline-license -r <path/to/response.bin></code>

You can return all active licenses by supplying a count of 0 (zero):

```
pcoip-activate-offline-license -g -a <Activation code> -c 0
pcoip-activate-offline-license -r <response.bin>
```

Common Commands

The following commands are applicable to online environments as well as offline environments.

pcoip-list-licenses

Run this command to provide information about the activated PCoIP session licenses.

```
pcoip-list-licenses
```

pcoip-set-password

Run this command to set the administrator password for HP Anyware License Server.

```
pcoip-set-password
```

pcoip-get-license-server-id

Run this command to return the unique ID of the HP Anyware License Server. This may be required for debugging or for support.

```
pcoip-get-license-server-id
```

pcoip-setenv-password

Run this command for setting the administrative password, as well as removing the password using environment variables.

```
pcoip-setenv-password
```

pcoip-removeenv-password

Run this command to remove the administrative password, as well as removing the password using environment variables.

```
pcoip-removeenv-password
```

pcoip-support-bundler

Run this command to gather information useful to HP support in troubleshooting and diagnosing problems.

```
pcoip-support-bundler
```

Administration Guide

Managing Offline Licenses

Offline Environments

Unmapping Licenses Prior to Activation

By default, license codes are mapped to a default cloud license server provided by HP Anyware. If you are using an offline Local License Server, **the license code must be unmapped first** from the cloud license server before it becomes available for your Local License Server.

Unmap license codes on the HP Anyware License Portal.

1. List your HP Anyware license servers by selecting the License Servers menu. You should see a server with the alias "Default hosted server".
2. Click the **license server ID** of this server.
3. Click the **Remove Add-Ons** link, which displays the current license codes and their quantity.
4. In the **Qty to Remove** box associated with the code, enter the the number of licenses to be removed.
5. Select **Remove Add-Ons**. The status "Copies decreasing" is displayed, indicating that unmapping is in progress.
6. To save your changes, click the **Download capability Response** link.
7. Delete the *.bin file that is downloaded.
8. Refresh your browser.

The status displays "License generated", which indicates that licenses are now available to be used with your local license server.

Activating Licenses

Since offline environments have no access to the Internet, PCoIP session license activation is done indirectly. To activate licenses, you must have an internet-connected machine available and a means of transferring licensing files between the connected machine and your offline HP Anyware License Server.

If you cannot transfer files to an internet-connected machine, create a ticket with [support](#) for assistance. HP Global Support Services will facilitate license activation for you.

Select Licensing in your ticket as the case reason and include the `HOST-ID(VM_UUID or ETHERNET)` of the HP Anyware License Server in your description. Run the following command to get the `HOST-ID`.

```
pcoip-get-license-server-id
```

Important: Required Access


Access to HP.flexnetoperations.com is required.

Before activating licenses with an offline license server, you need access to `https://HP.flexnetoperations.com`. To request access, create a ticket with [support](#). Be prepared to provide a valid activation key, the name, and email address of a contact person who should have access.

To activate licenses:


1. Login to HP Anyware License Server as a Windows administrator user.
2. Open Windows PowerShell.
3. Invoke `pcoip-activate-offline-license` with `-g`, the activation code, and the number of licenses. Use `-p` to provide administrator password. If not provided, you will be prompted for a password later. This will generate a file named **request.bin**, which is stored in the current working directory.

```
pcoip-activate-offline-license -g -a <activation code> -c <license count>
```

 **Note: About License Count**

License count (-c) sets the total number of active licenses for each activation code. It does not add additional licenses. For example, if you use `pcoip-activate-online-license -a 1234567890 -c 5` and then `pcoip-activate-online-license -a 1234567890 -c 10`, you will have 10 active licenses—not 15.

4. Transfer **request.bin** to a computer with an internet connection using any acceptable method such as a USB flash drive.
5. Submit **request.bin** to FlexNet Operations:
 - a. Log in to `https://HP.flexnetoperations.com` on the internet-connected machine with the email you set up on FlexNet Activations.

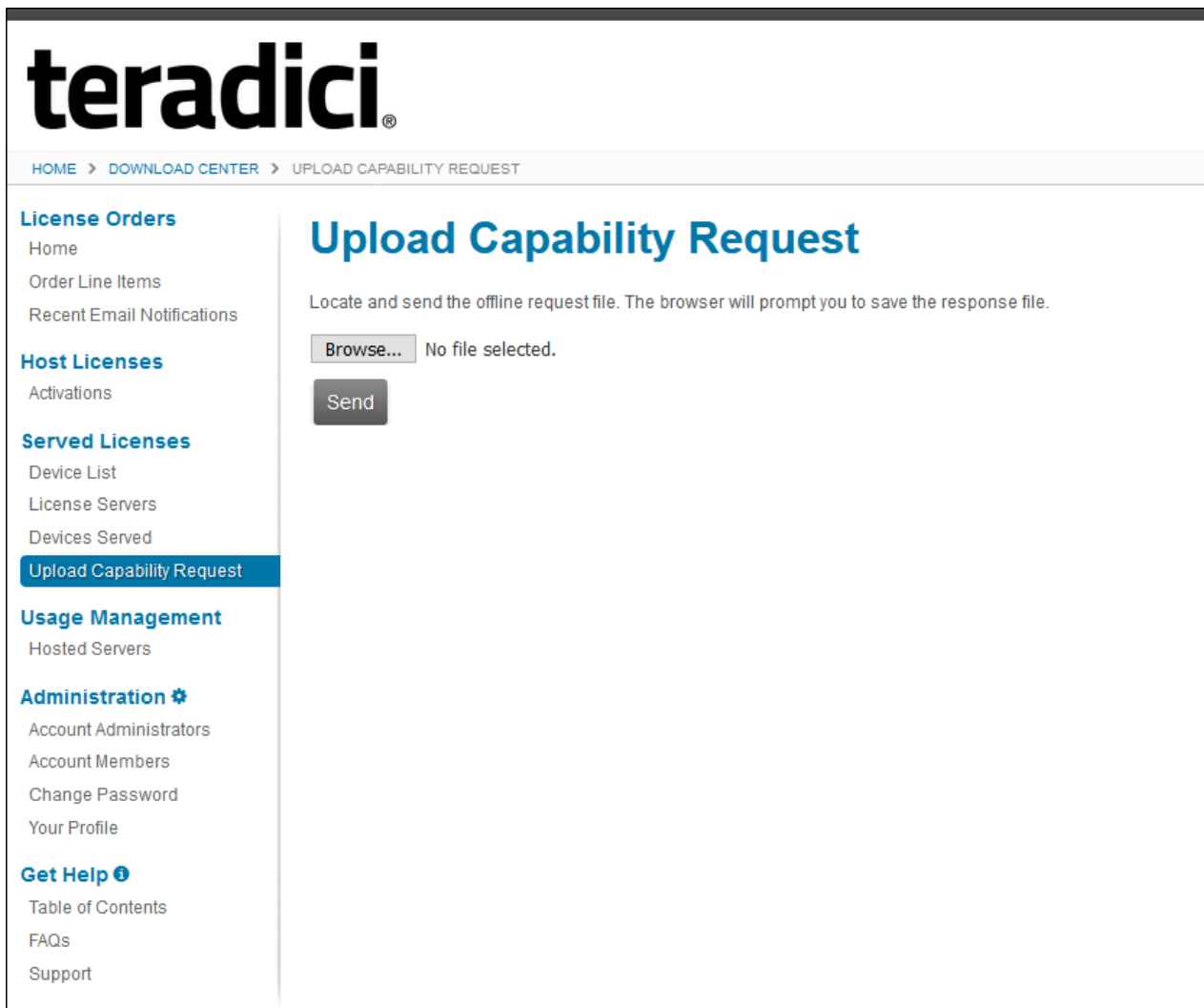
 **Note: First-time only password reset**

The first time you log in to FlexNet Operations, reset your password. Click **Password Finder** on the login page to reset it.

 **Important: Resolving login difficulties**

If you experience difficulties logging in, get in touch with the owner of the email with which the license code is associated to add you as a user on that account. Alternatively, contact HP for help.

- b. In the side bar, find the Served Licenses section and click **Upload Capability Request**:



The screenshot shows the Teradici web interface. The top navigation bar includes the Teradici logo and a breadcrumb trail: HOME > DOWNLOAD CENTER > UPLOAD CAPABILITY REQUEST. A left sidebar menu is organized into sections: License Orders (Home, Order Line Items, Recent Email Notifications), Host Licenses (Activations), Served Licenses (Device List, License Servers, Devices Served, Upload Capability Request), Usage Management (Hosted Servers), Administration (Account Administrators, Account Members, Change Password, Your Profile), and Get Help (Table of Contents, FAQs, Support). The main content area is titled "Upload Capability Request" and contains the instruction: "Locate and send the offline request file. The browser will prompt you to save the response file." Below this instruction are two buttons: "Browse..." (with the text "No file selected." to its right) and "Send".

- c. Click **Browse** and provide the request.bin file you transferred from HP Anyware License Server.
- d. Click **Send** to submit the request and download a response file.

Important: Flexnet Errors

If FlexNet Operations returns an error, there is a problem with your request file. Generate a new request.bin file and try again.

6. Transfer the received response file to License Server using any acceptable method such as a USB flash drive.
7. The response.bin file can only be used on the machine that generated the request.bin file.

- Invoke `pcoip-activate-offline-license` again with `-r` and the response file received from FlexNet Operations:

```
pcoip-activate-offline-license -r 'path/to/response.bin'
```

 **Note: response.bin expires after 7 days**

The response.bin file expires after 7 days, after which the License Server rejects it. If this occurs, repeat this procedure from the beginning with fresh request.bin and response.bin files.

- Verify the activation:

```
pcoip-list-licenses
```

Returning Licenses

Licenses are registered on a license server where they are activated. To activate these licenses on a different license server, they must be returned or released first back into the available license pool.

You can return licenses by executing `pcoip-activate-offline-license` which decreases the active license count and returns the remaining license count by activating them. To do this, follow the procedure for the Activating Licenses in an Offline Environment and supply the reduced license count for `pcoip-activate-offline-license` in Step 3.

For example, if this activation code 1234-ABCD-EF12-3456 has 25 active licenses and you want to return 5, then you set the number of active licenses to 20:

```
pcoip-activate-offline-license -g -a 1234-ABCD-EF12-3456 -c 20
```

Return all the active licenses by supplying a count of 0 (zero):

```
pcoip-activate-offline-license -g -a 1234-ABCD-EF12-3456 -c 0
```

Managing Online Licenses

Online Environments

Unmapping Licenses Prior to Activation

By default, license codes are mapped to a default cloud license server provided by HP Anyware. If you are using an offline Local License Server, **the license code must be unmapped first** from the cloud license server before it becomes available for your Local License Server.

1. List your HP Anyware license servers by selecting the License Servers menu. You should see a server with the alias "Default hosted server".
2. Click the **license server ID** of this server.
3. Click the **Remove Add-Ons** link, which displays the current license codes and their quantity.
4. In the **Qty to Remove** box associated with the code, enter the the number of licenses to be removed.
5. Select **Remove Add-Ons**. The status "Copies decreasing" is displayed, indicating that unmapping is in progress.
6. To save your changes, click the **Download capability Response** link.
7. Delete the *.bin file that is downloaded.
8. Refresh your browser.

The status displays "License generated", which indicates that licenses are now available to be used with your local license server.

Activating Licenses

PCoIP session licenses can be activated directly when the license server is connected to the Internet. To activate licenses, you must supply the activation code for a group of licenses and the total number of licenses along with the command.

Note: About License Count

The license count (-c) sets the total number of licenses that will be active for a given activation code. It does not add additional licenses.

For example, if you use `pcoip-activate-online-license -a 1234567890 -c 5` and then `pcoip-activate-online-license -a 1234567890 -c 10`, you will have 10 active licenses—not 15.

1. Login to HP Anyware License Server as Administrator and open Windows PowerShell.
2. Invoke `pcoip-activate-online-license` by supplying the following arguments:
 - `-a` followed by the activation code.
 - `-c` followed by the number of licenses to activate.
 - Optionally, `-p` followed by the license server password. If you omit this option, you will be prompted for the password later.

For example, this command would activate 50 licenses with the activation code 1234-ABCD-EF12-5678. Since the `-p` option is not used, you would be prompted for the password:

```
pcoip-activate-online-license -a 1234-ABCD-EF12-5678 -c 50
```

3. For license pools with their activation codes, invoke `pcoip-activate-online-license` again for each license pool.
4. Verify the activation:

```
pcoip-list-licenses
```

Returning Licenses

Licenses are registered on a license server where they are activated. To activate these licenses on a different license server, they must be returned or released first back into the available license pool.

1. Login to HP Anyware License Server as Administrator and open Windows PowerShell.
2. Execute `pcoip-list-licenses` to view information about your license usage.

```
pcoip-list-licenses
```

3. Execute `pcoip-return-online-license` to return all the licenses for an activation code. You can provide the password inline using `-p`. If you do not, it will prompt you for a password later.

This returns all the licenses related to that activation code on this license server; if there are activated licenses related to the same code on a different license server, they must be returned on that server as well.

```
pcoip-return-online-license -a 1234-ABCD-EF12-3456
```

Note: Returning a subset of licenses

`pcoip-return-online-license` returns all licenses associated with an activation code. If you want to return some of the licenses, you can execute `pcoip-activate-online-license` which decreases the total license count (`-c`) and effectively returns the remaining count.

Viewing License Information

Offline Environments Online Environments

To view the status of the licenses, use the `pcoip-list-licenses` command. This command requires administrator password, and provides information about licenses that have been activated on HP Anyware License Server.

You can provide the administrator password inline using `-p`. If you do not, it will prompt you for a password.

The command for viewing license information is as follows:

```
pcoip-list-licenses
```

The information returned by `pcoip-list-licenses` includes:

- The number of activated licenses
- The number of used licenses
- The expire dates of features or session licenses

Troubleshooting and Support

Locating License Server Files

Offline Environments Online Environments

License server files are available in the following locations.

File or directory	Location
Log files	C:\ProgramData\HP\HP Anyware License Server\logs
Server configuration file	C:\Program Files\HP\HP Anyware License Server\server
Admin commands	C:\Program Files\HP\HP Anyware License Server\enterprise
Executable files	C:\Program Files\HP\HP Anyware License Server\server
Trusted storage	C:\ProgramData\HP\HP Anyware License Server\trustStorage
Support bundle file	C:\pcoiptemp

Getting Support

Offline Environments Online Environments

If you are having trouble, help is always available. Here's how to contact support and connect with the user community.

Contacting Support

If you encounter problems installing or using our technology, you can:

- Check for updated release notes which may address the issue you are experiencing. Release notes are published on [Support](#).
- Browse the [Teradici Knowledge Base](#).
- [Submit a support ticket](#).

The Community Forum

The HP Anyware Community Forum allows users to have conversations with other IT professionals to learn how they resolve issues, find answers to common questions, have peer group discussions on various topics, and access the HP Anyware Technical Support Service team. Our staff are actively involved in the forums.

To join the community, visit the [Community Forum](#).

Creating Support Bundles

Support bundles include relevant log files, current configuration, license server and operating system information useful for HP Support in diagnosing problems and recommending actions. Your HP Support representative may ask you for support bundles while troubleshooting.

1. To create a support bundle, run the following command:

```
pcoip-support-bundler
```

2. Find the generated output in zip file format in the following location:

```
C:\pcoiptemp\pcoip-support-bundle-<date-time>.zip
```

Troubleshooting Common Issues

Offline Environments **Online Environments**

This section describes the common issues and workarounds while working with the license server

General Issues

My PCoIP session licenses have disappeared

Your licenses have most likely expired. Contact HP Sales to re-activate your licenses.

I forgot the administrative user password of my Anyware License Server

FOR ONLINE SERVERS

If you forget the administrative user password of your HP Anyware License Server, you will no longer run most administrative commands. However, you can still adjust proxy settings and change the listening port.

The administrative user password HP Anyware License Server is not recoverable; however, you can restore the default password if you destroy and rebuild the license server's trusted storage. If trusted storage contains any active licenses, FlexNet Operations will restore them once the trusted storage is rebuilt.

Rebuild Trust Storage in Online Environment

1. Stop the LLS service:
 - a. Navigate to **Services > HP Anyware License Server**.
 - b. Stop the service.
2. Make a copy the Trust Storage of the license server available at: C:\ProgramData\HP\HP Anyware License Server\trustStorage\tsBackup.
3. Delete the Trust Storage.
4. Delete the **trustStorage** folder.

5. Start the LLS service:
 - a. Navigate to **Services > HP Anyware License Server**.
 - b. Start the service.

Restore the Trust Storage Backup

1. Stop the license server.
 - a. Navigate to **Services > HP Anyware License Server**.
 - b. Stop the service.
2. Use the `-restore-database` or `-restore-service-database` argument with the command that runs the license server script to restore trusted storage.

```
cd "C:\Program Files\HP\HP Anyware License Server\server"  
flexnetls.bat -restore-database "C:\ProgramData\HP\HP Anyware License  
Server\trustStorage\tsBackup\flexnetls_licenses.mv.db.ts"
```

3. Start the license server.
 - a. Navigate to **Services > HP Anyware License Server**.
 - b. Start the service.

Note: Best Practice

The best practice is to never delete any files in directory containing the corrupted trusted storage; allow the restoration process to fix the issue. However, if for some reason you need to remove the corrupted data, delete only `flexnetls_licenses.mv.db`.

One basic method to verify a restored trusted storage to its previous uncorrupted state is to check the feature counts using `pcqip-list-license` command.

FOR OFFLINE SERVERS

If you forget the Anyware License Server administrative password, you will not be able to run most of the administrative commands. However, you will be able to adjust proxy settings and change the listening port.

The Anyware License Server administrative password is not recoverable. Follow these steps to restore the administrative access.

Restore the Administrative access

Note: DO NOT Destroy the Machine

Do not destroy the Anyware License Server machine. If the license server machine is destroyed, the licenses activated on the machine will be lost.

1. Destroy the Anyware License Server's trusted storage folder available at: C:\ProgramData\HP\HP Anyware License Server\trustStorage\tsBackup
2. Reinstall the Anyware License Server.
3. Set a new Anyware License Server administrative password.
4. Reactivate any licenses that were previously activated on the Anyware License Server. The activation code (or keys) used must be identical to the original activations in order to preserve your licenses.

I've renewed my existing licenses, but the expiration date has not been updated

It can take up to 24 hours for the license server to retrieve an update from FlexNet Operations. This delay will not impact your users who will be covered by a 7-day grace period.

To force an immediate update, either restart the license server or re-activate an activation code.

When I activate additional licenses under an existing activation code, the number of activated licenses I get is wrong.

When you supply an activation count (`-c`) to `pcoip-activate- *-license`, you are setting the total number of licenses that should be active under that code. If you have 10 licenses and want to activate 5 more, you should run the activation command with `-c 15` (not `-c 5`).

The Anyware Agent reports that there are no available licenses.

If the Anyware Agent reports that that no licenses are available, consider the following possibilities:

- The HP Anyware License Server may be incorrectly configured and unable to communicate with your PCoIP Agents. The Anyware License Server should be available at `https://<license-server-address>:<port(default=7070)>/request`.
- Anyware Agents must be configured to use the same port number as your HP Anyware License Server. By default, this is 7070. If you change the listening port on the PCoIP License Server, you must also configure your Anyware Agents to use the new value.
- The HP Anyware License Server may not have enough free licenses. Use `pcoip-list-licenses` to verify your available license count.

Error Messages

ERROR: CONNECTION TO SERVER FAILED OR REFUSED

Check that the license server service is running:

```
Navigate to Services app > Check the status of "HP Anyware License Server" service
```

If it is, ensure that the listening port is open (the default listening port is 7070). To quickly check that the correct listening port is open, use a browser to visit the following URL:

```
**Synchronizing the changes from main server to the backup**  
  
https://<license-serve-ip-address>:<port>/api/1.0/health
```

TOO MANY FAILED LOGINS

This error means that the provided password has been incorrect three consecutive times while attempting to access the HP Anyware License Server trusted storage. If the incorrect password has been provided three or more times consecutively, the license server will block access to administrative commands for 10 minutes or until the license server is restarted.

ACTIVATION_ID_COUNT_EXCEEDED

This error means you are attempting to activate more licenses than the activation code allows. Most likely, one or both of these conditions has been met:

Some or all of the licenses for this activation code have already been activated on other HP Anyware License Server instances and are still not available enough to complete your request. To activate these licenses on the current HP Anyware License Server instance, you must first return them on the other instances. You have specified a larger license count than the given activation code manages.

ACTIVATION_ID_INVALID

This error means you have provided an invalid activation code. Make sure you have entered the activation code string correctly, including any symbols like dashes (-).

Logs

License Server logs are located in C:\ProgramData\HP\HP Anyware License Server\logs

NETWORK IS UNREACHABLE

Check the firewall to ensure the license server has network access.

NAME OR SERVICE UNKNOWN

The specified server address could not be resolved. Ensure that the server is a valid target and the DNS is properly configured.

CONNECTION TO _____ HAS BEEN REFUSED

Ensure that your proxy is configured correctly. See [Configuring Proxy Settings](#).

ERROR MESSAGE COULD NOT BE RETRIEVED

Ensure that your proxy is configured correctly. See [Configuring Proxy Settings](#).

PROXY AUTHENTICATION REQUIRED

The proxy server requires authentication, but it was not provided in the proxy configuration. See [Configuring Proxy Settings](#).