




Upgrading a Clustered Connection Broker 9 Environment to Leostream 2022

Leostream 2022 is the next major release of the Leostream platform. It installs only on Red Hat® Enterprise Linux® 8 operating systems and its derivatives, such as Rocky Linux and AlmaLinux OS.

 You cannot upgrade an existing Leostream 9.x environment to the 2022 version. You can, however, copy your Leostream 9.x configuration to your new 2022 environment, to avoid implementing your deployment from scratch.

Before You Begin

Your Leostream 2022 environment requires a new Leostream Serial number. Before you begin your update to Leostream 2022, please contact sales@leostream.com to obtain a new Serial number for use with 2022.

Important Note!

Some Leostream 9.x functionality has been removed in Leostream 2022. Consult the [Leostream Release Notes](#) for a full list of obsolete features. You should not upgrade to 2022 if you use any of the removed features.

Connection Broker 2022 Installation

1. Build base Linux machines to host your 2022 Connection Brokers, using the latest version Red Hat Enterprise Linux 8.x, or a derivative such as Rocky Linux or AlmaLinux OS. Connection Broker requires the following resources:
 - 2 vCPUs
 - 8.0 GB of RAM
 - At least 20 GB of hard drive space
 - One NIC, optionally with Internet connectivity

2. Download the Connection Broker 2022 RPM-file
 - a. Go to the Leostream Downloads server at:

<https://license.leostream.com/download.html>

The following form opens.

Leostream downloads

Serial number

This is the serial number sent to you by Leostream sales or support

Email address

The email address associated with your Leostream license

[Access downloads](#)

- b. Enter your Leostream Serial number – It must provide access to Leostream 2022 in order for you for you to access the Connection Broker 2022 RPM-file.
- c. Enter the email address listed as the Contact Email for that serial number. This may not be the email address you used to generate any previous Leostream license keys.
- d. Click **Access downloads**

If you receive an error that your Serial number or Email address are invalid for any reason, please contact sales@leostream.com.

If you successfully log in, but see only Leostream 9.1 downloads, please contact sales@leostream.com to obtain a new Serial number to use with Leostream 2022.

3. For each Linux machine that will host one of the Connection Brokers in your Leostream 2022 cluster, copy the downloaded file to the Connection Broker machine and install the Connection Broker using the following two commands.

```
sudo dnf -y install RPM_FILENAME  
sudo /sbin/reboot
```

4. After installing the Connection Broker, apply your new Leostream 2022 license:
 - a. Log into one of the Connection Brokers using the default admin account.
 - b. Click the link to go to <https://license.leostream.com> to generate a new 2022 license
 - c. Apply the new license to your new Connection Broker.

Database Backup

5. Back up the Microsoft SQL Server, PostgreSQL or AzureSQL database used in your 9.x Connection Broker cluster.

Decommission Connection Broker 9

6. Log into one of the Connection Brokers in your Leostream 9.x cluster.
7. Go to the > **System > Cluster Management** page and note the IP addresses and Site IDs for all Connection Broker's in your cluster. Note, this is optional. You can assign new IP addresses and Site IDs to all your 2022 Connection Brokers.
8. If your current Connection Broker uses a custom SSL certificate, you can download the certificate for use in your 2022 Connection Broker. Otherwise, skip to step 9.
 - a. In one of your Connection Broker 9, go to the > **System > Maintenance** page.
 - b. Select the **Download the SSL credentials for installation on another Connection Broker** option.
 - c. Follow through the wizard to create the credentials file.
9. Gracefully power off your old Connection Brokers.
 - a. Go to the > **System > Maintenance** page on one of your old Connection Brokers.
 - b. Select **Shutdown the Connection Broker** from the **Reset** options.
 - c. Click **Next**. After five seconds passes, the Connection Broker stops.

If this is the first Connection Broker you shut down, log into the Administrator Web interface for another Connection Broker in the cluster and go to the > **System > Cluster Management** page. Ensure that the powered down Connection Broker changed to a status of **Stopped**. You do not need to remove the Connection Broker from the cluster, only verify that it is stopped.

- d. Repeat steps a through c for the remaining Connection Brokers in the cluster.

Reassign Static Connection Broker IP Addresses (Optional)

Ensure that the guest operating system for all your old Connection Brokers is powered down before proceeding if you plan to reuse the IP addresses.



10. Log into the virtual machine console of your new 2022 Connection Brokers and reset the Linux machines' IP addresses to the values previously used by your 9.0 Connection Brokers. Reboot the Linux machine after resetting the IP address, to restart the Connection Broker.

Connect the First 2022 Connection Broker to the Leostream database

11. Log into the Administrator Web interface of the 2022 Connection Broker you used in step 4 to apply your new Leostream 2022 license.
 - a. Go to the > **System > Maintenance** page.
 - b. Select the appropriate option to switch to your external database, for example **Switch to Microsoft SQL Server database**.
 - c. Click **Next**.
 - d. In the **Switch database** form, enter in the information for the database used by the previous cluster. If you are reusing your site IDs, enter the **Site ID** associated with the IP address used by the Connection Broker you are logged into.
 - e. Click **Switch**. The Connection Broker issues a warning indicating you are attaching to an older database, and that it will be upgraded.
 - f. Click **Switch**, again. The Connection Broker updates the database schema and attaches to the database, before rebooting. Your Leostream 2022 license is now applied to this external database.

Connect the remaining 2022 Connection Brokers to the Leostream database

12. Log into another 2022 Connection Broker using the default admin credentials.
 - a. On the **Leostream License** page, select **Connect to an existing Leostream database which is already licensed** from the **How do you want to enter your license** key drop-down menu.
 - b. Enter in the information for the database used by the previous cluster.

If you are reusing your site IDs, set the **Site ID** to the site ID associated with the IP address used by the Connection Broker you are logged into
 - c. Check the **I have read and accept the License Agreement** check box.
 - d. Click **Save**.
 - e.



Apply SSL Certificates

13. If you downloaded SSL certificates information from your previous Connection Broker, you can upload them to the new Connection Brokers, as follows.
 - a. Go to the > **System** > **Maintenance** page.
 - b. Select the **Install the SSL credentials from another Connection Broker** option.
 - c. Click **Next**.
 - d. Enter or browse for the file name of the SSL credentials downloaded from the older Connection Brokers.
 - e. Click **Load the SSL credentials**.

Repeat this step for every Connection Broker in your cluster.

Remember! If you reused your Connection Broker IP address, do not power on your old Connection Broker after reassigning the IP address to your new Connection Broker.

Note: If your 9.1 Leostream environment leveraged any Leostream Gateways, you can continue to use those Gateways with your Connection Broker 2022 cluster. You cannot upgrade your existing Leostream Gateways to version 2022 and, instead, must install new Leostream Gateways (as described in the Leostream Installation Guide), add them to your 2022 Connection Broker, and update all your Protocol Plans to reference your new Leostream Gateways.