



Upgrading a Clustered Connection Broker 8.2 Environment to Leostream 9.0

Connection Broker 9.0 is the next major release of the Leostream Connection Broker. It includes new Leostream Connect clients, Leostream Agents, and a new Leostream Gateway.

Important Notes!

1. Some Connection Broker 8.2 functionality has been removed in Leostream 9.0. Consult the [Leostream Release Notes](#) for a full list of obsolete features. You should not upgrade to 9.0 if you use any of the removed features.
2. Leostream Connection Broker 9.0 requires a new Leostream license key. You can not use your Connection Broker 8.x license key to run Leostream 9.0. Please, contact sales@leostream.com to discuss upgrade options.
3. Upgrade any Leostream Agents and Leostream Connect clients *after* you upgrade your broker to version 9.0. The Microsoft Windows version of the Leostream Agent is not compatible with older versions of the Connection Broker.
4. Define a maintenance window when user do not need to log into the Connection Broker. Your cluster will be momentarily unavailable while the current Connection Broker database is upgraded to the new version.

New Connection Broker Setup

1. Build your base Linux machines to host your 9.0 Connection Broker. Leostream suggests using the latest version of CentOS or Red Hat Enterprise Linux on the 7.x branch. Leostream packages are also available for Ubuntu 16.04 and SUSE Linux Enterprise Server 12 SP3.
2. Install the Connection Broker 9.0 packages. For installation instructions, see the [Leostream Installation Guide](#). After installing each Connection Broker:
 - a. Log into the Connection Broker using the default admin account.
 - b. Obtain and apply your Leostream license.

Database Backup

3. Back up the Microsoft SQL Server or PostgreSQL database used in your current Connection Broker cluster.



Decommission Older Connection Broker

4. Log into one of the Connection Brokers in your older, existing Leostream cluster.
5. 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 9.0 Connection Brokers.
6. If your current Connection Broker uses a custom SSL certificate, you can download the certificate for use in your 9.0 Connection Broker. Otherwise, skip to step 7.
 - a. In your 8.2 Connection Broker, 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.
7. 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 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 Connection Brokers is powered down before proceeding if you plan to reuse the IP addresses.

8. Log into the virtual machine console of your new 9.0 Connection Brokers and reset the Linux machines IP address to the value previously used by your 8.2 Connection Brokers. Reboot the Linux machine after resetting the IP address, to restart the Connection Broker.

Connect to and upgrade the Connection Broker database

9. Log into the Administrator Web interface for one of your new 9.0 Connection Broker.
 - a. Go to the > **System > Maintenance** page.
 - b. Select **Switch to Microsoft SQL Server database** or **Switch to PostgreSQL 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, set the **Site ID** to 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.
- g. Repeat steps a-e for the remainder of the Connection Brokers in your cluster. Because the database schema was already updated, you will not receive a warning when connecting subsequent Connection Brokers to the database.

Apply SSL Certificates

10. 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.