Upgrading Clustered AtScale

This document describes how to upgrade a running 7.4.0 or later installation of Clustered AtScale. It assumes that you've been running AtScale with a properly-configured data warehouse.

Note: Remember that the upgrade procedure should be applied to **all** hosts in the AtScale cluster. This includes any hosts running virtualized/compute instance services like supervisor, listener, worker, or query engine.

Before You Begin

- If you are upgrading from 2021.3.x or earlier version you must perform some additional upgrade steps. For details, see Upgrading from AtScale 2021.3 or earlier.
- Review the release notes for the version you plan to upgrade to. You can also log a support case to check on known issues and get assistance in planning your upgrade.
- These instructions are for CentOS/RedHat operating systems. You may have to modify for your supported OS.

Prerequisite Steps For Installation

Complete all prerequisite installation steps.

Install The AtScale Installer Package

On each of the hosts in the AtScale cluster, install the new AtScale Installer Package.

Installing the AtScale installer package does the following:

1. Creates the `atscale` user. This can be overridden by setting the `ATSCALE_USER` environment variable prior to installing.
2. Creates the AtScale home directory at `/opt/atscale`. This can be overridden when installing via `rpm` by passing `--prefix /my/custom/path` to the `rpm -i` command.
3. Sets up AtScale under the AtScale home directory.
4. Gives ownership of the AtScale home directory to the `atscale` user.

Identify the operating system user who owns and executes the existing AtScale installation. If the user is named anything other than `atscale` then assign the user name to the ATSCALE_USER environment variable:

```
export ATSCALE_USER=myatscaleuser
```

If you are the root user, install the downloaded AtScale installer package using the RPM Package Manager:

```
rpm -i installer_package_filename.rpm
```

or if using Debian packages:

```
dpkg --install installer_package_filename.deb
```

If you are not the root user but have sudo privileges, then install the rpm with the `sudo -E` option to preserve the ATSCALE_USER environment variable in the subshell.

```
sudo -E rpm -i installer_package_filename.rpm
```

or if using Debian packages:

```
sudo -E dpkg --install installer_package_filename.deb
```

Stop AtScale

Before activating the newly installed version of AtScale, the current version must be completely stopped across the entire cluster.

1. Identify the AtScale Application Host that's the current Database Leader.

Identify the current Database Leader member by running the `patronictl` utility on one of the AtScale Application Hosts.

```
$ /opt/atscale/current/bin/database/patronictl list
+-------------------------+-----------+-----------+--------+---------+-----------+
|        Cluster          |   Member  |    Host   |  Role  |  State  | Lag in MB |
+-------------------------+-----------+-----------+--------+---------+-----------+
| atscale_postgres_cluster | atscale-01 | atscale-01 | Leader | running |           |
| atscale_postgres_cluster | atscale-02 | atscale-02 |        | running |           |
+-------------------------+-----------+-----------+--------+---------+-----------+
```

2. Stop AtScale on each of the machines where it's still running.

Stop AtScale on each of the machines where it's still running, in the following order. If AtScale is currently not running on a given machine, you can proceed to the next one in the list.

1. AtScale Application Host that **is not** the current Database Leader
2. AtScale Application Host that **is** the current Database Leader
3. AtScale Coordinator

Stop AtScale:

```
$ /opt/atscale/bin/atscale_stop
```

Activate AtScale

Now that AtScale has been completely stopped across the entire cluster, the new version can be activated. Run the activation on each of the hosts, being sure to do so in reverse order to which they were stopped above.

1. AtScale Coordinator
2. AtScale Application Host that **is** the current Database Leader
3. AtScale Application Host that **is not** the current Database Leader

As `atscale` user, run the installed AtScale's `configurator.sh` script in `--activate` mode:

```
su - $ATSCALE_USER
cd /opt/atscale/versions/<package_version>
./bin/configurator.sh --activate
```

You will be asked:

- Do you want to apply these settings?

Answer `y` to start the activation process, which will configure and run AtScale. If you disagree with the configuration and want to make a change then answer `n`. To change the configuration, perform these steps:

1. Change the desired configuration setting in `/opt/atscale/conf/atscale.yaml`
2. Run `./bin/configurator.sh --activate`
3. Review and answer y to the confirmation questions if you agree with the configuration.

What To Do Next

1. Log into the Design Center at the URL that you are accustomed to using.
2. Check that the AtScale version number is correct. The version is listed on the landing page just below the Welcome message.
3. If you want to make changes to the host and port information for your data warehouse connections, follow these steps:

    1. Choose **Settings** from the main navigation, and go to **Data Warehouses**.
    2. Choose a data warehouse to see more details.
    3. Choose the **Edit** button for the connection for which you want to make changes.
    4. In the **Edit Connection** dialog, change the port or host settings as needed.