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Turbine Upgrade Guide

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1. Pre-Upgrade Health Check

Node Status

- Check that all Nodes are in Ready state

```
kubectl get nodes -owide
```

- If any nodes are in NotReady, SchedulingDisabled, etc then it would be recommended to review and fix them before upgrading.

Pod Status

- Check that all pods are in Running state and the pod values are matching 1/1, 3/3, etc.

```
kubectl get pods -A
```

- If any pods are not running i.e, 0/1, 2/3, CrashLoopBackoff, Error, etc then it would be advised to review the issue and fix it prior to upgrading

Cluster Status

- Check that Kubernetes is up and running and healthy.

```
kubectl cluster-info
```

- If Kubernetes indicates that it is not healthy then review and establish where the issue is prior to upgrading.

etcd health

- etcd needs to be in a stable state prior to upgrading any issues

```
for pod in $(kubectl get pods -l component=etcd -n kube-system \
-o jsonpath='{.items[*].metadata.name}')
do
  echo "### etcd pod : ${pod} ###"
  kubectl -n kube-system exec ${pod} -- /bin/sh \
  -c "ETCDCTL_API=3 etcdctl \
  --cert=/etc/kubernetes/pki/etcd/server.crt \
  --key=/etc/kubernetes/pki/etcd/server.key \
  --cacert=/etc/kubernetes/pki/etcd/ca.crt \
```

11. Turbine 25.3.2 Upgrade Instructions

Use these upgrade instructions to upgrade your instance of Turbine 25.3.2. The instructions are organized by subsections of this document that will help you upgrade by specific installation type, whether you have an embedded or existing cluster installation.

Upgrade Turbine on Embedded Cluster Installations

Use the following instructions to upgrade this version of Swimlane on an embedded cluster installation.

Prerequisites:

- Turbine version 25.1.2
- MongoDB 7.0.19

Important! Swimlane recommends that you perform a MongoDB backup prior to starting this update. For more information, see [Backup and Restore on an Embedded Cluster with Snapshots](#).

Upgrade Instructions

1. SSH into any node in your deployment.
2. Scale down EKCO and kotsadm-rglite.

Note: EKCO and Kotsadm-rglite will automatically scale back up after the script in Step 3 has completed.

```
kubectl -n kur1 scale deployment ekc-operator --replicas=0
```

```
kubectl -n default scale statefulsets kotsadm-rglite --replicas=0
```

3. Execute the following command to begin the Turbine Platform Installer component upgrade:

```
curl -sSL https://kur1.sh/turbine-turbine-25-3-2 | sudo bash -s ha
```

Note: If you have configured SELinux, firewall, or proxy add this to the end of the command above:

```
installer --no-file-perm-check
```

21. Turbine 25.0.7 Upgrade Instructions

Turbine Upgrade Instructions

Use these upgrade instructions to upgrade your instance of Turbine 25.x. The instructions are organized by subsections of this document that will help you upgrade by specific installation type, whether you have an embedded or existing cluster installation.

Prerequisite for Upgrading from Other 25.0.x Versions:

Note: This step is not required for fresh installations.

Before initiating the upgrade process, run the following commands to remove outdated certificates and secrets:

```
kubectl delete certificate swimlane-selfsigned-ca-cert -n <namespace>
kubectl delete secret root-ca-cert -n <namespace>
```

Upgrade Turbine on Embedded Cluster Installations

Use the following instructions to upgrade this version of Swimlane on an embedded cluster installation.

Prerequisites:

- Turbine version 24.3.2
- MongoDB 6.0.18

Important! Swimlane recommends that you perform a MongoDB backup prior to starting this update. For more information, see [Backup and Restore on an Embedded Cluster with Snapshots](#).

Upgrade Instructions

1. SSH into any node in your deployment.
2. Scale down EKCO and kotsadm-rqlite.

Note: EKCO and Kotsadm-rqlite will automatically scale back up after the script in Step 3 has completed.

31. Turbine 24.2.5 Upgrade Instructions

Use these upgrade instructions to upgrade your instance of Turbine 24.x. The instructions are organized by subsections of this document that will help you upgrade by specific installation type, whether you have an embedded or existing cluster installation.

Upgrade Turbine on Embedded Cluster Installations

Use the following instructions to upgrade this version of Swimlane on an embedded cluster installation.

Prerequisites:

- Turbine version 23.5.x+
- MongoDB 5.0.24

Important! Swimlane recommends that you perform a MongoDB backup prior to starting this update. For more information, see [Backup and Restore on an Embedded Cluster with Snapshots](#).

Upgrade Instructions

1. SSH into any node in your deployment.
2. Scale down EKCO and kotsadm-rglite.

Note: EKCO and Kotsadm-rglite will automatically scale back up after the script in Step 3 has completed.

```
kubectl scale deployment ekc-operator --replicas=0 -n kurl  
  
kubectl scale statefulsets kotsadm-rglite --replicas=0 -n default
```

NOTE: If you have configured SELinux, add this to the end of the command above:

```
installer-spec-file=se.yaml
```

2. Execute the following command to begin the Turbine Platform Installer component upgrade:

```
curl -s https://raw.githubusercontent.com/swimlane/turbine/24.2.5/installer/upgrade.sh | sh
```

41. How to Collect Diagnostic Data for Swimlane Support

Turbine

Support Bundle

A support bundle should be requested by a support engineer for initial triage. This bundle contains logs from all relevant pods, as well as other useful information from your deployment.

Using the Command Line (Online & Airgap)

1. Download and unarchive the latest release

```
curl -L https://github.com/replicatedhq/troubleshoot/releases/latest/download/support-bundle_linux_amd64.tar.gz | tar xzvf -
```

For airgap (offline) environments, run the above command from a host that is connected to the internet to download the plugin, then do the following:

- Copy the downloaded file to your offline Swimlane server

```
scp support-bundle_linux_amd64.tar.gz user@<turbineDNS>:/path/to/file
```

- Unarchive the downloaded file from the step above as follows:

```
tar -xzvf support-bundle_linux_amd64.tar.gz
```

2. Move the plugin to your \$PATH

```
sudo mv ./support-bundle /usr/local/bin/kubectl-support_bundle
```

- **NOTE:** If you choose not to put the plugin into your \$PATH, then replace all instances of kubectl support-bundle in the remainder of this document with ./support-bundle or with the absolute path to the binary where it was unzipped.

3. Gather the support bundle