



# Upgrading ESC Active/Active High Availability

---

This chapter contains the following sections:

- [Upgrading ESC Active/Active High Availability, on page 1](#)

## Upgrading ESC Active/Active High Availability

Cisco Elastic Service Controller Active/Active HA supports local Active/Active to Active/Active simple upgrade.

### Local Active/Active to Active/Active Simple Upgrade

#### Procedure

---

- Step 1** Back up the database. For more information, see the section, [Backing up the Database, on page 1](#).
  - Step 2** Remove old VMs. For more information, see the section, [Removing the Old VMs, on page 2](#) [Removing Old VMs](#).
  - Step 3** Install new ESC Active/Active VMs. For more information, see the section, [Installing a New ESC Active/Active VM, on page 2](#).
  - Step 4** Restore the ESC database. For more information, see the section, [Restoring the ESC Database, on page 3](#).
- 

## Backing up the Database

Before upgrade, take the back up of database using the following procedure.

#### Procedure

---

- Step 1** Put the ESC leader VM in the maintenance mode, by running the following command:  

```
escadm op_mode set --mode=maintenance
```
- Step 2** Wait until all the ESC VMs stop processing transactions. To verify, run the following command:  

```
escadm ip_trans
```

**Step 3** Create a backup of database on the ESC leader by running the following command:

```
escadm backup --file dbback.tar, scp <dbback.tar>
```

**Step 4** Collect logs from all the ESC VMs by running the following command:

```
escadm log collect
scp
```

---

## Removing the Old VMs

### Procedure

---

**Step 1** Shutdown all the ESC follower VMs and the ESC leader VM running the following command:

```
nova stop
```

**Step 2** Remove old ESC Active/Active VMs from the OpenStack by running the following command:

```
openstack stack delete {stack name}
```

---

## Installing a New ESC Active/Active VM

After backing up the database and shutting down of the old ESC Active/Active VMs, a new/upgraded (based on new ESC package) Active/Active ESC VM must be installed.

### Procedure

---

**Step 1** For OpenStack, register a new image by running the following command:

```
glance image-create
```

**Step 2** Install the new ESC Active/Active VMs by running the following command:

```
openstack stack create {stack name} --template {location of the template file}
```

**Step 3** Check all the ESC VMs health, and stop the escadm service in the follower VMs by running the following command:

```
sudo escadm stop for all followers VMs
```

**Step 4** Once the escadm service is stopped in all the follower VMs, stop the escadm service in the leader VM by running the following command:

```
sudo escadm stop
```

---

## Restoring the ESC Database

Restore the ESC database on the new ESC instance, using the following procedure:

### Procedure

---

**Step 1** Copy the backup file to the new leader by running the following command:

```
scp
```

**Step 2** Restore the database on the ESC leader by running the following command:

```
sudo escadm restore --file <dbback.tar>
```

After restoring, the restore process starts the escadm service in the leader VM. However, the escadm service remains to be stopped in all the follower VMs.

**Step 3** Verify that the ESC leader VM is running all the services without any interruption.

**Step 4** Put the ESC leader VM into the operation mode by running the following command:

```
sudo escadm op_mode set --mode=operation
```

**Step 5** Start the ESC services on the follower VMs by running the following command:

```
sudo escadm start
```

---

