Dell EMC Unity™ Family
Dell EMC Unity All Flash, Unity Hybrid, UnityVSA

Unity shut down and restart the system (power down and power up)
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Complete the following procedures to perform a planned shut down and/or restart of your Unity Family system.

As part of a robust disaster recovery plan, it is recommended that you print off and follow this procedure to test the planned shut down and restart processes.

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**Note**

See the *Unity Family DC-Powered Enclosures Installation and Operation Guide* for instructions on how to power down and power up a DC powered system (physical deployments only).

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**CAUTION**

In a true emergency power down situation, when the consequence of corrupted data cannot be avoided, turn the cabinet power switches to the off position to immediately remove power from the all cabinet components.

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Additional resources

As part of an improvement effort, revisions of the software and hardware are periodically released. Therefore, some functions described in this document might not be supported by all versions of the software or hardware currently in use. The product release notes provide the most up-to-date information on product features. Contact your technical support professional if a product does not function properly or does not function as described in this document.

Where to get help
Support, product, and licensing information can be obtained as follows:

Product information
For product and feature documentation or release notes, go to Unity Technical Documentation at: www.emc.com/en-us/documentation/unity-family.htm.

Troubleshooting
For information about products, software updates, licensing, and service, go to Online Support (registration required) at: https://Support.EMC.com. After logging in, locate the appropriate Support by Product page.

Technical support
For technical support and service requests, go to Online Support at: https://Support.EMC.com. After logging in, locate Create a service request. To open a service request, you must have a valid support agreement. Contact your Sales Representative for details about obtaining a valid support agreement or to answer any questions about your account.

Special notice conventions used in this document

⚠️ DANGER
Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠️ WARNING
Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠️ CAUTION
Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE
Addresses practices not related to personal injury.

Note
Presents information that is important, but not hazard-related.
Unity system shut down (power down)

The system shut down or power down procedure involves shutting down the storage processors (SPs) before disconnecting optional disk-array enclosures from cabinet power. When all SPs are down, all I/O services stop and hosts lose access to the system.

Before you begin:

- It is recommended that you disconnect all network shares, LUNs, and VMware datastores from each host to prevent data loss. When the system is fully powered up, you can reconnect the hosts to these storage resources.
- The shutdown process can take between 10 and 20 minutes to complete. During this time, the connection to the system will be lost and you will not have access to Unisphere or the online help. It is important that you print the power up instructions on this page to be sure you have all of the information you need to power up the system.
- For physical deployments, working with hardware may cause electrostatic discharge that could damage your hardware. Before working with any hardware, review the precautions when removing or replacing components.
- Shutting down the system with this method shuts down the storage system without putting storage processors (SPs) into Service mode, and does not require any additional SP boots. When the system is powered back up, the SPs come up in the same mode that they were in when the system was shut down.

Power down the system

For virtual deployments:

Execute the **Shutdown System** task and confirm. The VM is automatically powered down. Or you can power down the system in the VMware vSphere Client. For more information, refer to the VMware documentation.

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**Note**

It is recommended that you use **Shut Down Guest OS** to gracefully power down the OS and VM. Do not use **Power Off**.

For physical deployments:

1. In Unisphere, select **Service**, under the **System** heading, then select **Service Tasks**.
2. Select **Storage System > Shut Down Storage System**, then **Execute**.
3. Check the status of the shutdown process by looking at the SP LED indicators. The shutdown process is complete when the two power supply LEDs are solid green and amber, the network management port LEDs are flashing amber and green, and all other SP LEDs are off.
4. After confirming successful SP shutdown, remove all power from the SPs by disconnecting the two power cables from the Disk Processor Enclosures (DPE). Wait 10 seconds and confirm that both the green and amber LEDs have turned off after the power cables are removed.
5. If you are relocating hardware, also disconnect the two power cables from each Disk Array Enclosure (DAE) to power them down.
Unity system restart (power up)

The system restart or power up procedure involves returning power to the system components in a specific order. When all SPs have returned to normal mode, you can reconnect the hosts to the storage resources on the system.

Upon restart, the SPs power up in the same mode that they were in when the system was shut down.

Power up the system
For virtual deployments:
Power up the system using the VMware vSphere Client. For more information, refer to the VMware documentation.

1. Launch VMware vSphere Client.
2. Locate the UnityVSA VM and select the Summary tab.
3. Select Power On to start the VM.

For physical deployments:
1. If applicable, reconnect the power cables to each DAE in the following exact order:
   a. DAE 0
   b. DAE 1
   c. DAE 2
   d. Power up any remaining DAEs in ascending order.
   The front blue Power Status LED on each DAE turns on.
2. Reconnect the power cables to each SP in exactly this order:
   a. SP A
   b. SP B
   The rear green SP Power LED on each SP turns on.
3. The SPs come up in the same mode that they were in when the system was shut down. If a single SP comes up in Service Mode, in Unisphere, you need to reboot the SP to return it to Normal Mode.

⚠️ CAUTION ⚠️
If both SPs reboot in Service Mode, always return SPA to Normal Mode first, to avoid management software conflicts. Once SPA is operating normally, you can return SPB to Normal Mode.
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