

StorageTek Automated Cartridge System Library Software

High Availability Solaris Support

Release 8.5.1

F31991-02

May 2020

ACSLS HA support for the Solaris Cluster was last certified using ACSLS 8.4, ACSLSHA 8.4, Solaris 11.2, and Solaris Cluster 4.2.

This document describes how to upgrade or install a certified ACSLS HA Solaris cluster version using ACSLS 8.5.1, ACSLSHA 8.4, Solaris 11.4, and Solaris Cluster 4.4.

Topics include:

- [Upgrading an Existing ACSLS HA 8.4 Solaris Environment to Use ACSLS 8.5.1](#)
- [Installing a New ACSLS HA Solaris Environment for ACSLS 8.5.1](#)

Note: If you are newly implementing an ACSLS HA solution, Oracle encourages you to explore the certified ACSLS HA 8.5.1 solution for Linux. Refer to the publication *ACSLs High Availability Linux Installation, Configuration, and Operation*.

Upgrading an Existing ACSLS HA 8.4 Solaris Environment to Use ACSLS 8.5.1

Use this procedure to upgrade an existing ACSLS HA 8.4 Solaris environment to use Solaris 11.4 SRU14, ACSLS 8.5.1, and Solaris Cluster 4.4.

Review all steps before performing the procedure and ensure that you perform all steps in the order listed.

Note:

- Be aware of component versions as updates proceed. Several reboots and additional steps for Solaris are required.
 - **Do not** uninstall ACSLSHA 8.4 at any time during this procedure.
 - Reference the following publications:
 - *ACSLs 8.4 Installation Guide*
 - *ACSLs 8.5 Installation Guide*
 - *ACSLs 8.4 HA Cluster Installation, Configuration, and Operation*
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Perform the following steps:

1. Quiesce all activity at any client nodes that may have access to ACSLS.

2. Shut down ACSLS on the primary node:

```
# su - acsss $acsss shutdown
```
3. Set the Solaris Cluster auto start feature to false to prevent the cluster from attempting start in the event of a reboot:

```
# clrg set -p Auto_start_on_new_cluster=false
```
4. Suspend ACSLS cluster group resources and ensure that ACSLS is shut down:

```
# clrg suspend acsls-rg
```

```
# su - acsss $acsss shutdown
```
5. On the node currently mounted to the zpool, perform either a backup of ACSLS 8.4 or an export of the database if you chose to restore or import your library configuration to ACSLS 8.5.1.

Optionally, you can skip this step and simply perform an audit after executing `acsss_config` with ACSLS 8.5.1.

Note: You are only required to back up ACSLS from one node.

6. Boot both nodes with the `-x` option to ensure that the cluster software is not started:

```
# boot -x
```
7. Uninstall the cluster software from both nodes:

```
# scuninstall -r -v
```
8. Reboot both nodes.
9. Update the first node:
 - a. Ensure that the zpool `acslspool` remains imported and that `/export/home` is mounted on the node.
 - b. Uninstall ACSLS 8.4:

```
# /opt/ACSLs/pkg_uninstall
```

Note: Do not uninstall ACSLSHA 8.4 at any time during this process.

- c. Update Solaris to 11.2 SRU15 (latest)
- d. Update Solaris to 11.3 Base (reboot required)
- e. Update Solaris to 11.3 SRU36 (reboot required)
- f. Update Solaris to 11.4. Base (reboot required and a new boot environment is created).

Note: The Solaris 11.4 update will fail if you have not successfully uninstalled ACSLS 8.4.

- g. Update Solaris to 11.4 SRU14 (reboot required).
- 10. Update the second node. Repeat all instructions in the previous step for this node.
- 11. Reboot both nodes. They are now running Solaris 11.4 SRU14.
- 12. Install ACSLS 8.5.1 and Solaris Cluster 4.4 on the first node:
 - a. Utilize the *ACSLs 8.5.1 Installation Guide* to install ACSLS 8.5.1 and either perform a restore from the backup that you created in Step 5 or configure your library (`acsss_config`).
 - b. Install Solaris Cluster 4.4 using the cluster installation instructions provided in the *ACSLSHA 8.4 Installation Guide*, but do not run the `scinstall` utility at this time. You will run `scinstall` from the second node in step 13.
 - c. Export the zpool `acslspool (/export/home is unmounted)`.
- 13. Install ACSLS 8.5.1 and Solaris Cluster 4.4 on the second node:
 - a. Import the zpool `acslspool (/export/home is mounted)`.
 - b. Utilize the *ACSLs 8.5.1 Installation Guide* to install ACSLS 8.5.1.

If you performed a restore of ACSLS on the first node (in step 12) do not run `acsss_config` or `restore` on the second node. The second node will import the database from the common `/export/home` mount point when it is started as the primary or when fail over occurs.
 - c. Install Solaris Cluster 4.4 using the cluster installation instructions provided in the *ACSLSHA 8.4 Installation Guide* and run the `scinstall` utility, specifying the same interconnect network devices previously used with Solaris Cluster 4.2.
 - d. Run the ACSLSHA command `acsAgt configure` (described in the *ACSLSHA 8.4 Installation Guide*) on the node on which the zpool `acslspool` is imported.

Respond to the prompts for network devices in the same manner in which they were assigned for the original ACSLSHA 8.4 environment.
- 14. Reboot both nodes and ensure that the cluster resources `acsls-rs`, `acsls-storage`, and `logicalHost` are online to one host using the `clrs status` command.

Installing a New ACSLS HA Solaris Environment for ACSLS 8.5.1

Use this procedure to install a new ACSLS HA Solaris environment with Solaris 11.4 SRU14, ACSLS 8.5.1, and Solaris Cluster 4.4.

Review all steps before performing the procedure and ensure that you perform all steps in the order listed.

Note:

- Be aware of component versions as updates proceed. Several reboots and additional steps for Solaris are required.
 - **Do not** uninstall ACSLSHA 8.4 at any time during this procedure.
 - Reference the following publications:
 - *ACSL 8.4 Installation Guide*
 - *ACSL 8.5 Installation Guide*
 - *ACSL 8.4 HA Cluster Installation, Configuration, and Operation*
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Perform the following steps for **each node**:

1. Install Solaris 11.4 and update Solaris to SRU14.
2. Utilize the publication *ACSL 8.4 HA Cluster Installation, Configuration, and Operation* to install ACSLS 8.4 and ACSLSHA 8.4.
 - If you are installing all hardware and software from scratch, then perform all installation steps with the exception of Solaris Cluster 4.2 installation.
 - If you are using a hardware configuration previously configured for an ACSLS HA 8.4 environment, then you do not need to perform steps relative to configuring hardware or software for the shared storage (zpool `acslspool`) or hardware network interface and library cabling.
 - You must configure the network interface configuration using `ipmp` or `ipadm`, in addition to additional software steps including configuration of `ssh` keys and `/etc/host` files, as described in the publication *ACSL 8.4 HA Cluster Installation, Configuration, and Operation*.
3. Import the zpool `acslspool` (`/export/home` is mounted).
4. Remove Solaris ACSLS 8.4.
5. Utilize the *ACSL 8.5.1 Installation Guide* to install ACSLS 8.5.1 for Solaris and configure your library using `acsss_config`.
6. Install Solaris Cluster 4.4 using the cluster installation instructions provided in the publication *ACSL 8.4 HA Cluster Installation, Configuration, and Operation* and run the `scinstall` utility, specifying the same interconnect network devices previously used with Solaris Cluster 4.2.
7. Run the ACSLSHA command `acsAgt configure` on the node on which the zpool `acslspool` is imported. Respond to the prompts for network devices in the same manner in which they were assigned in the publication *ACSL 8.4 HA Cluster Installation, Configuration, and Operation*.
8. Export the zpool `acslspool`.
9. Once you have completed steps 1-8 for each node, reboot both nodes and ensure that cluster resources `acsls-rs`, `acsls-storage`, and `LogicalHost` are online to one host using the `clrs status` command.

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ACSL5 High Availability Solaris Support, Release 8.5.1
F31991-02

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