

Table of Contents

| | | |
|-------|---|---|
| 1 | Cluster Aware AIX updates in Service Pack 6100-06 SP8 & 7100-00 SP6 | 1 |
| 1.1 | Reference | 1 |
| 1.2 | Update Instructions for AIX 6100-06 SP8/AIX 7100-00 SP6..... | 1 |
| 1.2.1 | PowerHA SystemMirror 7.1.0: Update to AIX 6100-06 SP8 or 7100-00 SP6..... | 2 |
| 1.2.2 | Cluster Aware AIX: Update to AIX 6100-06 SP8 or 7100-00 SP6..... | 2 |
| 1.3 | Cluster Aware AIX Changes | 3 |

1 Cluster Aware AIX updates in Service Pack 6100-06 SP8 & 7100-00 SP6

Note that the following NOTES do not apply if you have not deployed PowerHA SystemMirror 7.1.0 (TL00) or Cluster Aware AIX in your AIX environment.

Please review and follow the guidelines provided in this document if you have currently deployed one of the following AIX levels

- AIX 6100-06 (TL06) **Service Pack 7** and below or
- AIX 7100-00 (TL00) **Service Pack 5** and below.

And plan to update to a later Service Pack of these AIX Technology levels.

Also refer to APARs: IV16480 (6100-06) and IV16481 (7100-00) for additional information.

1.1 Reference

| | |
|--------------------------------------|--|
| TL | Technology Level |
| SP | Service Pack |
| AIX 6100-06 | TL shipped for AIX 6.1 in 2010. Also referred to as AIX 6.1 TL06 |
| AIX 7100-00 | AIX 7.1 major release in 2010. Also referred to as AIX 7.1 TL00 |
| PowerHA SystemMirror 7.1 TL00 | PowerHA SystemMirror release in 2010. Also termed as version 7.1.0 |

1.2 Update Instructions for AIX 6100-06 SP8/AIX 7100-00 SP6

AIX 6100-06/7100-00 delivered the first version of the Operating System embedded cluster technology also called as Cluster Aware AIX (CAA). Service Packs SP8 (6100-06) and SP6(7100-00) have modified CAA significantly. Hence updating to these Service Packs requires that CAA based cluster be stopped from operation before the update. This document provides guidelines to customers for such an SP update procedure.

Note that PowerHA SystemMirror 7.1 exploits the CAA technology in the AIX Operating System and hence would require CAA cluster be stopped before the OS updates.

Following guidelines apply when you have deployed PowerHA SystemMirror 7.1 or Cluster Aware AIX and are planning for the following OS updates:

1. AIX 6100-06 SP7 (or lower SP) to AIX 6100-06 SP8 (or later SP)
2. AIX 7100-00 SP5 (or lower SP) to AIX 7100-00 SP6 (or later SP)

Note that once these updates are applied the Cluster Aware AIX code will be updated and can not be reversed. Hence updates should not be rejected.

1.2.1 PowerHA SystemMirror 7.1.0: Update to AIX 6100-06 SP8 or 7100-00 SP6

As indicated earlier, plan for stopping the cluster and perform the following steps to update the AIX Operating System with the service pack. Note that the cluster configuration information is retained and reused and does not require to be reentered.

1. Backup the cluster configuration using the PowerHA SystemMirror snapshot facility
2. Stop the PowerHA 7.1.0 Cluster Services through SMIT. Select the entire list of nodes names to stop cluster services on all nodes in the cluster: (smitty hacmp -> System Management(CSPOC) -> PowerHA System Mirror Services -> Stop Cluster Services).
3. Remove the CAA cluster using the AIX command rmcluster (syntax: rmcluster -n clusterName) on one of the nodes in the cluster.
4. Install the appropriate AIX Service Pack (6100-06 SP8 or 7100-00 SP6 or later AIX SP) on all nodes.
5. Obtain the RSCT Level 3.1.2 from FixCentral (<http://www-01.ibm.com/support/docview.wss?uid=isg1fileset-1429361625>) and install on all the nodes in the cluster.
6. Note that reboot would be necessary after the update of the AIX TL level.
7. Verify to make sure that the AIX and RSCT levels are the following:
 - a. AIX 6100-06 SP8 or 7100-00 SP6 or higher
 - b. RSCT Level 3.1.2.0 or higher
8. Recreate the CAA cluster from PowerHA SystemMirror: (smitty hacmp -> Cluster Nodes and Networks -> Verify and Synchronize the cluster configuration)
9. Restart the PowerHA SystemMirror 7.1 Cluster: (smitty hacmp -> System Management (CSPOC) -> PowerHA System Mirror Services -> Start Cluster Services).

1.2.2 Cluster Aware AIX: Update to AIX 6100-06 SP8 or 7100-00 SP6

If you are not using the PowerHA SystemMirror 7.1 and are using Cluster Aware AIX (AIX 6100-06/7100-00) directly, then use the following steps to update to the AIX 6100-06 SP8 or 7100-00 SP6.

1. Note down the CAA cluster configuration information.
2. Remove the CAA cluster using the AIX command `rmcluster`.
3. Install the relevant Service Pack on all the nodes in the cluster/
4. Download and install RSCT 3.1.2.0 on all the nodes
5. Redeploy the CAA cluster using `mkcluster` command.

1.3 Cluster Aware AIX Changes

Following are updates included in the Cluster Aware AIX in 6100-06 SP8/7100-00 SP6:

1. Third Party multipath based disks can be specified as repository disks.
2. Cluster Aware AIX provides for tunables in regards to many aspects of clustering (eg: node failure detection time etc)
3. Problem determination support has been enhanced in Cluster Aware AIX layer.
4. Cluster Aware AIX now does not make use of SolidDB database.
5. Disks are not renamed when added as shared disks to Cluster Aware AIX.
6. Repository disk name is not modified when the cluster is deployed.
7. Live Repository disk replacement is supported while the cluster is operational.