

## Table of Contents

1	AIX Updates and PowerHA SystemMirror 7.1 .....	1
1.1	Reference.....	1
1.2	Install notes: To update from AIX 6100-06/7100-00 to later AIX releases .....	1
1.2.1	PowerHA SystemMirror 7.1: AIX 6100-06/7100-00 to later AIX release update.....	2
1.2.2	Cluster Aware AIX: AIX 6100-06/7100-00 to later AIX release update steps.....	2
1.3	Cluster Aware AIX Updates.....	3

## **1 AIX Updates and PowerHA SystemMirror 7.1**

Note that the following NOTES do not apply if you have not deployed PowerHA SystemMirror 7.1 or Cluster Aware AIX in your AIX environment.

Please review and follow the guidelines provided in this document if you are updating AIX level from **6100-06/7100-00** to a later AIX level.

### **1.1 Reference**

<b>TL</b>	Technology Level
<b>SP</b>	Service Pack
<b>AIX 6100-06</b>	TL shipped for AIX 6.1 in 2010. Also referred to as AIX 6.1 TL06
<b>AIX 7100-00</b>	AIX 7.1 major release in 2010. Also referred to as AIX 7.1 TL00
<b>AIX 6100-07</b>	TL shipped for AIX 6.1 in 2011. Also referred to as AIX 6.1 TL07
<b>AIX 7100-01</b>	TL shipped for AIX 7.1 in 2011. Also referred to as AIX 7.1 TL01

### **1.2 Install notes: To update from AIX 6100-06/7100-00 to later AIX releases**

AIX 6100-06/7100-00 delivered the first version of the Operating System embedded cluster technology also called as Cluster Aware AIX (CAA). AIX releases later to these technology levels have modified CAA significantly. Hence updating to these later AIX levels from 6100-06 or 7100-00 requires that CAA based cluster be stopped from operation before the OS update. This document provides guidelines to customers for such an OS 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 SytemMirror 7.1 or Cluster Aware AIX and are planning for the following OS updates:

1. AIX 6100-06 to “6100-07/Any future TL” Update install

2. AIX 7100-00 to “AIX 7100-01/Any future TL” Update install
3. AIX Operating System Migration install from AIX 6100-06 to “AIX 7100-01 /Any other major AIX release”

It is also highly recommended that customer deploy the Service Pack 1 for the 6100-07 or 7100-01 releases before redeploying the PowerHA SystemMirror or Cluster Aware AIX cluster.

Note that the following guidelines do not apply when a customer is deploying PowerHA SystemMirror 7.1 for the first time. It is suggested that in those cases customer deploy 6100-07 or 7100-01 (or later) AIX release and then deploy the PowerHA SystemMirror 7.1 directly on the latest AIX releases.

Following guidelines apply for both of the following scenarios:

1. Updates from one Technology Level to another within the same major release (eg: AIX 6100-06 to 6100-07)
2. AIX Operating System Migration from AIX 6100-06 to AIX 7100-01 (or later AIX release)

#### **1.2.1 PowerHA SystemMirror 7.1: AIX 6100-06/7100-00 to later AIX release update.**

As indicated earlier, plan for stopping the cluster and perform the following steps to update the AIX Operating System Technology Levels (AIX 6100-07/7100-01 or later AIX releases). 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 desired AIX Level (6100-07 or 7100-01 or later AIX Technology Level) on all nodes. Note that this step will also install the latest level of RSCT.
5. Note that reboot would be necessary after the update of the AIX TL level.
6. Verify to make sure that the AIX and RSCT levels are the following:
  - a. AIX 6100-07 or 7100-01 or higher
  - b. RSCT Level 3.1.2.0 or higher
7. Recreate the CAA cluster from PowerHA SystemMirror: (smitty hacmp -> Cluster Nodes and Networks -> Verify and Synchronize the cluster configuration)
8. 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: AIX 6100-06/7100-00 to later AIX release update steps**

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 6100-07/7100-01 or later AIX levels.

1. Note down the CAA cluster configuration information.
2. Remove the CAA cluster using the AIX command `rmcluster`.
3. Install the desired 2011 AIX Technology Level (6100-07/7100-01) or later AIX releases on all nodes. Reboot the node as necessary.
4. Redeploy the CAA cluster using `mkcluster` command.

### **1.3 Cluster Aware AIX Updates**

Here are some of the changes in Cluster Aware AIX in 6100-07/7100-01 AIX releases (Please review the release notes for complete details):

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.