Troubleshooting a Cisco Unified Presence Multi-node Deployment

July 2, 2014

Monitor a Multi-node System

Restriction

If you need to add hardware to your multi-node deployment, the hardware must comply with the multi-node hardware recommendations.

Procedure

Step 1 Use the Cisco Unified Presence Real-Time Monitoring Tool (RTMT) tool to monitor the CPU and memory usage of each Cisco Unified Presence node in the cluster.

Step 2 Use these guidelines to determine if you need additional hardware:

Deployment Model	Recommendation
No High Availability or Balanced Non-Redundant High Availability	If the CPU reaches more than 70% capacity for a sustained period on any Cisco Unified Presence node, Cisco recommends that you add hardware resources to your deployment.
Balanced Redundant High Availability	If the CPU reaches more than 35% capacity over a sustained period on either Cisco Unified Presence node in the subcluster, Cisco recommends that you add hardware resources to your deployment.
Active/Standby High Availability	If the CPU reaches more than 70% capacity for a sustained period of time on the active Cisco Unified Presence node, Cisco recommends that you add hardware resources to your deployment.

Related Topics

- Clustering over WAN for Intracluster and Intercluster Deployments, page 2-4
- Multi-node Deployment Models, page 17-1
- For information about the RTMT tool, see the *Serviceability Configuration and Maintenance Guide for* Cisco Unified Presence.

Resolve a Hardware Problem

Follow this procedure if there is a problematic server, or some general hardware failure.

Restrictions

If you need to add hardware to your multi-node deployment, the hardware must comply with the multi-node hardware recommendations.

Procedure

Step 1 Create a new node in system topology management GUI.

Step 2 Perform a fresh installation on this node.

Step 3 Unassign the users from the problematic node.

Step 4 Stop all services on the problematic node.

Step 5 Unassign the problematic node.

Step 6 Assign the new node to the subcluster, replacing the problematic node.

Step 7 Reassign the unassigned users to the new node.

Step 8 Delete the problematic node.

Step 9 Activate all services on the new node.

Troubleshooting Tip

You must turn off High Availability in a subcluster before you move or unassign a node in that subcluster.

Related Topics

- Clustering over WAN for Intracluster and Intercluster Deployments, page 2-4
- Create, Assign and Move Nodes in System Topology, page 17-10
- Configure User Assignment in System Topology, page 15-1

Cisco UP Replication Watcher Service

Note This section is only applicable to Cisco Unified Presence Release 8.5.x or higher.

The Cisco UP Replication Watcher monitors user database replication state on Cisco Unified Presence. Other Cisco Unified Presence services are dependent on the Cisco UP Replication Watcher service. These dependent services use the Cisco UP Replication Watcher service to delay startup until such time as user database replication is in a stable state.

On the subscriber nodes, the Cisco UP Replication Watcher service delays the startup of feature services until user database replication is successfully established. The Cisco UP Replication Watcher service only delays the startup of feature services on the problem subscriber node in a cluster, it will not delay the startup of feature services on all subscriber nodes due to one problem node. For example, if user database replication is successfully established on node1 and node2, but not on node3, the Cisco UP Replication Watcher service allows feature services to start on node1 and node2, but delays feature service startup on node3.

The Cisco UP Replication Watcher service behaves differently on the publisher node. It only delays the startup of feature services until a timeout expires. When the timeout expires, it allows all feature services to start on the publisher node even if user database replication is not successfully established.

The Cisco UP Replication Watcher service generates an alarm when it delays feature service startup on a node. It then generates a notification when user database replication is successfully established on that node.

The Cisco UP Replication Watcher service impacts both a fresh multi-node installation, and a software upgrade procedure. Both will only complete when the publisher and subscriber nodes are running the same Cisco Unified Presence release, and user database replication is successfully established on the subscriber nodes.

To check the status of the IDS replication on a node either:

- Use this CLI command:

  utils dbreplication runtimestate

- Use the Cisco Unified Reporting Tool (CURT). The ‘Unified CUP Database Status’ report displays a detailed status of the cluster.

Related Topics

- Add a New Node, page 17-7

- Upgrade from Cisco Unified Presence Release 7.0(x) to Release 8.5(x). For more information, see the *Upgrade Guide for Cisco Unified Presence Release 8.6*.