



hp technical
services

hp cluster
consistency
service

technical data

hp cluster consistency service

service description

Critical applications are often configured on clusters of HP-UX servers to gain the advantages of high availability and workload distribution. Server redundancy also provides protection against problems in a single server's hardware or operating system. However, high-availability server clustering can present certain risks:

- Cluster administration requires a high level of expertise about the HP-UX operating system, clustering strategies and applications configuration
- Configuration changes can lead to problems during failover, when configurations differ between servers (nodes) in a cluster
- Switchover testing is required for every configuration change, which means more downtime must be planned for applications
- Switchover tests may not cover shared resources—such as printing, fax, data exchange or archiving—that are only available to a running application

The HP Cluster Consistency Service delivers a diagnostic tool for spotting potential disruptions to critical applications. In this service, an HP engineer installs and configures the HP Cluster Consistency Monitor tool (CCMon) on a single cluster. During the configuration process, the engineer profiles the resources required for the running application and brings the entire cluster toward a consistent state. The HP engineer works with your IT staff in this process and provides a report on the resource profile and found configuration differences as a way to introduce you to CCMon features.

The HP engineer sets up CCMon as a background process that continuously checks thousands of data points for configuration differences. CCMon running in automatic operation triggers alarms when changes occur, and generates scheduled HTML or ASCII reports to provide advance warning of possible failures without the need for switchover testing.

The HP Cluster Consistency Service is the ideal solution for clustered applications that experience problems after failover. Originally designed for the SAP application, this service also works with other mission-critical applications running on HP ServiceGuard cluster solutions.

You may optionally order this service as a one-time consistency assessment. The assessment provides installation and configuration of CCMon under a temporary license, enabling you to evaluate CCMon for your enterprise.

benefits to you

- Increase cluster availability and stability
- Identify cluster configuration problems before they lead to unplanned application downtime
- Reduce planned downtime for cluster administration and switchover testing
- Enable efficient management of changes in cluster configuration
- Improve efficiency and productivity of cluster management for your IT department

service features

- Installation of CCMon tool under temporary or permanent license
- Profiling of application resources to create a consistent configuration of all servers in the cluster
- Reports on resource profile and node differences detected during configuration
- Training for your staff on CCMon features
- Setup of CCMon for automatic operation

table 1. hp cluster consistency service features

feature	delivery specifications
Service launch	The HP engineer contacts appropriate staff to discuss roles and responsibilities, and define the scope of work for the service
CCMon installation and configuration	The HP engineer performs the following tasks: <ul style="list-style-type: none">– Installs the CCMon tool archive on the cluster and identifies resources required by applications– Creates a resource profile for a single node on the cluster, then refines that profile based on testing– Copies the baseline node configuration identified by the profile to all other nodes in the cluster– Generates a temporary or permanent license as required– Configures other nodes to match the resource profile, bringing the entire cluster toward a consistent state. <i>Note: If discovered inconsistencies (e.g., kernel parameters) require rebooting, this activity is covered by additional HP services such as ServiceGuard Audit and additional consulting time.</i>
Customer introduction and orientation	<p>The HP engineer provides two HTML reports: one that describes the resource profile, and another explaining errors and inconsistencies detected by CCMon.</p> <p>Working with your staff, the HP engineer shows how to use CCMon automatic reports.</p> <p>The HP engineer can place the resource profile in a central server to facilitate configuration of other clusters.</p> <p>The HP engineer sets up CCMon as a background job, and shows your staff how to configure alarms.</p> <p>CCMon remains in operation on the cluster, automatically checking data points identified in the resource profile. CCMon triggers alarms on detected changes and generates scheduled reports in ASCII or HTML formats. (For the Cluster Consistency Assessment, the CCMon tool is removed upon conclusion of service delivery.)</p>
Service conclusion	A follow-up contact by an HP engineer verifies successful completion of the service and presents an opportunity to discuss issues revealed by CCMon automatic operation.

requirements

Before HP can deliver this service, you must provide the following:

- Access to your facility during normal business hours
- Appropriate staff for each service activity (preparatory discussions, software installation and training)
- Access to the site-specific data necessary to develop a resource profile for your application

service limitations

- The current implementation of CCMon is designed to run on HP-UX 10.20 and 11.x versions installed on 64-bit (default) and 32-bit cluster nodes.
- This service is provided during standard business hours, excluding HP holidays, unless otherwise agreed by HP.
- Applications will not be affected by the installation and configuration of CCMon. However, additional HP services will be required if correction of found problems will disturb the running application.
- Problems identified may be addressed by HP for an additional fee.

ordering information

Contact your local HP representative to order the HP Cluster Consistency service using the following product numbers:

- H8395AT: HP Cluster Consistency Service (first cluster)
- H8397AT: HP Cluster Consistency Service (each additional cluster)
- H8394AT: HP Cluster Consistency Assessment (one-time assessment and temporary license for CCMon tool)

These services can be purchased separately or under existing contracts for HP Critical Systems Support or HP Business Continuity Support.

for more information

HP offers an extensive portfolio of hardware, software and networking services to meet your IT needs. For additional information, contact your local HP representative.

For more information on HP Services, contact any of our worldwide sales offices or visit our worldwide Web site on the internet at:

<http://www.hp.com/go/4service>

For more information on HP and SAP, visit: <http://www.hp.com/go/sap>

Technical information in this document is subject to change without notice.

©Copyright Hewlett-Packard Company 2002. All Rights Reserved. Reproduction, adaptation, or translation without prior written permission is prohibited except as allowed under the copyright laws.

initial release 03/2002

