Hewlett Packard Enterprise

HPE Cluster Consistency Service

HPE Lifecycle Event Services

Service benefits

- Help improve or maintain system uptime
- Enable efficient management of changes in the cluster configuration
- Help to reduce planned downtime for cluster administration and switchover testing
- Identify cluster configuration problems before they lead to unplanned application downtime
- Help improve or maintain system uptime

Service feature highlights

- HPE Cluster Consistency Service (2-3 nodes)
- HPE Cluster Consistency Service (additional node)

HPE Cluster Consistency Service helps minimize the risks associated with the operation of the business-critical applications within your cluster environment. The service provides continuous monitoring of your application environment with alerts of configuration changes between the servers in your cluster.

These risks arise because:

- Cluster administration requires a high level of skills regarding the operating system, clustering strategies, and application configuration.
- Configuration changes can lead to problems during failover if configurations differ between servers or nodes in a cluster.
- Companies typically avoid required switchover testing after configuration changes are made because they cannot afford the associated system downtime.
- Switchover tests usually do not cover the complete process workflow of an application.

Because a company depends on the high availability of its business processes and applications, only very small maintenance windows are allowed during normal operations. These maintenance windows are typically consumed by required changes, limiting the time available to perform extensive checks and verifications of the results.

Implementing changes in business-critical applications in complex IT environments increases the risk of system instability.

HPE Cluster Consistency Service is not only for HPE Serviceguard cluster solutions. It may be used for any server combination logically composing a cluster and where configuration consistency needs to be ensured and therefore monitored for proper operation.

Table 1. Service features

Feature	Delivery specifications
HPE Cluster Consistency Service (2-3 nodes)	This service delivers a comprehensive diagnosis that helps to identify potential disruptions to critical applications running on clusters. The Hewlett Packard Enterprise engineer will: • Install and configure an HPE diagnostic tool on the cluster • Profile the resources required for the running application • Work with the Customer's IT staff in this process and provide a report on the resource profile and configuration differences identified • Demonstrate the customization features The HPE Cluster Consistency Service also includes the HPE Change Alert Service with its diagnosis of configuration changes over time on each node. The diagnostic tool for Change Alert monitors, tracks, and logs these changes, helping to minimize change-related system failures on the node. All configuration settings in the operating system, as well as those for applications or middleware, can be recorded in a resource database at periodic intervals. Settings are compared day by day and differences can be documented. The Hewlett Packard Enterprise engineer will: • Install and customize the diagnostic tool to specific customer needs relative to the application or role of the node • Create an alert definition based on node requirements to automatically trigger alerts • Demonstrate the customization features The diagnostic tools for Cluster Consistency and Change Alert continue to check thousands of data points for configuration differences. These tools automatically trigger defined alerts when changes occur, and they generate scheduled HTML or ASCII reports to provide advance warning of possible failures. The reports may be forwarded to a Web server or reside at the local node.
HPE Cluster Consistency Service (additional node)	This service extends the coverage of the Cluster Consistency Service (2-3 nodes) (including Change Alert Service) for clusters larger than 3 nodes and is purchased on a per-node basis for each additional node.

Service limitations

- These services are provided during standard business hours excluding HPE holidays, unless otherwise agreed by Hewlett Packard Enterprise.
- Applications will not be affected by the installation and configuration of the diagnostic tools. However, additional Hewlett Packard Enterprise services will be required if the correction of any problems found will disturb the running application.
- Assistance to address the problems identified by Hewlett Packard Enterprise during the delivery of the services is available through additional services and fees.

Service eligibility

To be eligible for this service, the Customer must:

- Be running the HP-UX operating system, version 11.ix in 64-bit or be running the Linux operating system distributions from SUSE (SLES) or Red Hat (RHEL) in 64-bit versions
- Have 200 MB of disk space available
- For the HPE Change Alert Service, provide a separate logical volume on the node with a minimum size of 200 MB

Customer responsibilities

The Customer will:

- Assign a designated person from the Customer's staff who, on behalf of the Customer, will grant all approvals, provide information, and otherwise be available to assist Hewlett Packard Enterprise in facilitating the delivery of this service
- Allow Hewlett Packard Enterprise full and unrestricted access to all locations where the service is to be performed
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required
- Contact a Hewlett Packard Enterprise service specialist within 90 days of date of purchase to schedule the delivery of the service
- Ensure that all hardware, firmware, and software that the Hewlett Packard Enterprise service specialist will need in order to deliver this service are available and, for software products, are properly licensed
- Be responsible for all data backup and restore operations
- Provide a network environment that is currently running and in good working order
- Ensure that all service prerequisites as identified in "Service eligibility" have been met
- Provide access to the site-specific data necessary to develop a resource profile for the Customer's applications

Ordering information

- HPE Cluster Consistency Service (2-3 nodes) — The Hewlett Packard Enterprise service engineer installs and configures the diagnostic tool for 2-3 nodes in a cluster: HA243A1, HA243AE, HA243AC
- HPE Cluster Consistency Service (additional node) — The Hewlett Packard Enterprise service engineer installs and configures the diagnostic tool for one additional node in the cluster. For example, for a cluster with 5 nodes, order 1 x HA243A1 and 2 x HA244A1: HA244A1, HA244AE, HA244AC

"Cluster node" refers to physical servers building a cluster, without reference to which cluster solution, such as HPE Serviceguard, might be in use, nor to whatever logically makes the "cluster".

An "additional node" refers to an additional physical server that is part of the cluster.

For more information

For more information on Hewlett Packard Enterprise support services, contact any of our worldwide sales offices or visit the following website:

hpe.com/services/support
hpe.com/services/lifecycleevent

5982-8674ENE, October 2016, Rev. 2