

Overview

Models

PDC/O1000 Cluster Kit for OPS 8.1.7 on Windows 2000

224396-B23

Introduction

Compaq Parallel Database Cluster solutions provide high availability, scalability, and manageability for applications and data in a business-critical environment. The Compaq Parallel Database Cluster Model PDC/O1000 for Oracle Parallel Server is a hardware and software configuration specifically designed and tested for use with the Oracle Server and Oracle Parallel Server in support of database opportunities such as data warehousing, web Back-end databases, custom database application development, packaged applications and database migration from other platfo

Description

The Compaq Parallel Database Cluster Model PDC/O1000 for Oracle Parallel Server (PDC/O1000) allows a two to six node cluster of Compaq ProLiant servers to simultaneously share a single Oracle database. Certified for Oracle8i Parallel Server option Release 8.1.7, PDC/O1000 integrates Compaq's unique Operating System Dependent (OSD) enabling software with Compaq's industry standard, fault-resilient hardware:

- Compaq ProLiant Servers (Please refer to the PDC/O1000 Certification Matrix for supported ProLiant Server models in the PDC/O1000 cluster configurations)
 - Compaq Raid Array RA4000/RA4100 as shared storage
 - Ethernet as dedicated cluster Interconnect
- Compaq provides a Cluster Kit for the PDC/O1000 configurations, which contain the Compaq OSD modules for Oracle Parallel Server, and an administrator guide.

Compaq provides an Enhanced Cluster Kit for the PDC/O5000 configurations, which contains the SecurePath Multipath Software, and an Administrator Guide.

Maximum Availability, Minimum Cost

The PDC/O1000 exploits fully redundant and optimized Windows NT Server-based Compaq ProLiant servers and other highly reliable, industry-standard hardware. It provides significantly improved uptime and lower operating costs than multiple single-server or proprietary database implementations.

Increased Throughput and Simplified Management with Oracle Software

All nodes within the PDC/O1000 Cluster share a single Oracle database. Oracle Parallel Server software increases throughput to the Oracle database by coordinating each server's access to the data and allows the entire cluster to be managed from a single workstation-providing increased performance and simplified management of the database.

Automatic online recovery

In the event of a node failure, the remaining nodes can continue to have access to the database. Meanwhile, users on the failed node can switch to another node and continue processing. The remaining nodes automatically recover all of the transactions performed by the applications before the failure occurred, ensuring data integrity.

Data integrity and database consistency

Each copy of the Oracle database is allocated its own mirrored, multi-segment redo logs that store transactions not yet written to the database. If a node or an Oracle copy fails, the remaining nodes use the redo log from the failed node to bring the database back to a consistent state.

Hardware Configuration Elements

- Select Compaq ProLiant Servers (two to six nodes of the same model. Please refer to the PDC/O1000 Certification Matrix for supported ProLiant Server models in the PDC/O1000 cluster configurations).
- Compaq Raid Array RA4000/RA4100 as shared storage.
- 100BaseTX Ethernet Interconnect or ServerNet I Interconnect.

Overview

Components

Servers

The PDC/O1000 cluster supports 2 to 6 nodes of select Compaq ProLiant server. Please refer to the PDC/O1000 Certification Matrix for supported ProLiant Server models in the PDC/O1000 configurations.

PDC/O1000 Cluster must be identically configured, including:

- Minimum memory: Each ProLiant server in the PDC/O1000 Cluster must have a minimum of 256 MB of memory.
- Balanced servers: The servers within a PDC/O1000 cluster must be balanced. That is, each server must have the same type and number of processors, the same amount of primary and secondary cache, and the same type and amount of memory.
- Same server model: Using more than one server model in a PDC/O1000 cluster configuration is currently not supported.

Storage

The PDC/O1000 cluster configurations have been certified with Compaq Raid Array RA4000/RA4100 as shared storage. This innovative storage solution from Compaq provides the capacity, scalability, and performance needed for the explosive data growth in the enterprise. The StorageWorks Raid Array can scale from several GB to over 1.6 TB per server slot allowing you to purchase only the storage capacity you need today and feel confident that you have enough bandwidth to easily expand in the future. For additional information on Compaq StorageWorks Raid Array 4000/RA4100 please see: <http://www.compaq.com/products/storageworks/raidstoragesystems.html>.

NOTE: This Web site is available in English only.

The PDC/O1000 cluster configuration supports Fibre Channel Arbitrated Loop (FCAL) with Short Wave GBIC and multi-mode Fibre optical cable. The RA4000s are connected using a 7-port or 12-port Compaq Fiber Channel Storage hub.

Cluster Interconnect

The PDC/O1000 cluster supports the following cluster interconnects:

- Ethernet PCI adapters in conjunction with a 100BaseTX Ethernet hub/switch
OR
- ServerNet I Interconnect with ServerNet Switches

Cluster Kits

The PDC/O1000 cluster requires the Compaq PDC/O1000 cluster Kit which contains:

- Compaq's OSD software components
- User installation and Administrators Guide for Cluster Specific components, including site preparation information.

Supported Operating Systems

The PDC/O1000 supports Windows NT Server Enterprise Edition and Windows NT Server 4.0 with Service Pack 5 or later.

Service and Support

Compaq Customer Services organization has participated in the definition and delivery of supporting services for the PDC/O5000 product. Please call

1-800-289-9052 to request the details on available services for the hardware, the software and the clusters.

Compaq also offers the initial Oracle Parallel Database Cluster Installation & Configuration Service, which can be procured by ordering the Compaq Part # QR-SMPDC-BZ. Additional information about the initial Oracle Parallel Database Cluster Installation & Configuration Service is available at:

http://www.compaq.com/services/available/av_opsinstall.html.

NOTE: This Web site is available in English only.

Compaq servers and storage systems are protected by Compaq Services including a three-year limited warranty, 7 x 24 hardware technical phone support and on-line support through CompuServe, Prodigy, America Online and the Internet.

For more information on support offerings for your Compaq hardware, contact your Compaq Authorized Service Provider.

NOTE: Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details.

Technical Specifications

Client Browser Support	Microsoft® Internet Explorer 5.5 or later
Supported Operating Systems	Red Hat 7.2 Professional, Red Hat 7.3 Professional, SuSE Linux Enterprise Server 7
Client System Support	Microsoft Windows® 98 Microsoft Windows 2000 and 2000 Professional Microsoft Windows 2000 XP Professional Edition Microsoft Windows NT® 4.0 Server and Enterprise Edition Microsoft Windows 2000 Server and Advanced Server Microsoft Windows Server 2003 (when available) and Advanced Server Red Hat Linux 7.2 Professional, Red Hat Linux 7.3 Professional, Red Hat Linux Advanced Server 2.1 SuSE Linux Enterprise Server 7 Novell NetWare 5.x, 6.x
Supported Servers	ProLiant DL380 G2 Packaged Cluster
Warranty	HP will replace defective delivery media replacement for a period of one year (12 months) following the date of purchase

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