

MODELS

Compaq ProLiant Clusters for UnixWare U/100 Kit

155370-B21

The U/100 Kit is designed to enable a two-node, highly available cluster solution. The kit offers cluster capability on many of Compaq's entry, midrange, and high-end ProLiant servers. The added Enhancements CD (with *NonStop*[™] Clusters Verification, and UPS Power Management Utilities), Cluster Install Guide, and Configuration Poster provide the user with systems verification and installation tools to insure a successful configuration for an entry Compaq Cross Node Mirrored Storage to an External Fibre Channel Storage implementation.

Note: Clusters built from the U/100 Kit require UnixWare 7.1.1 and NonStop Clusters 7.1.1+IP software license keys; the licenses must be purchased separately from a Caldera reseller or distributor.

Description

Compaq ProLiant Clusters for UnixWare 7 - U/100 Kit is designed to enable a highly available 2 node clusters. The kit supports nearly the entire range of Compaq's industry-leading ProLiant servers, Cross Node Mirrored storage, Compaq StorageWorks Raid Array 4000 (RA4000) and Raid Array 4100 (RA4100), ServerNet I or Ethernet IP cluster interconnects, and Compaq's installation and systems management utilities.

Compaq ProLiant Clusters for UnixWare 7 - U/100 Kit and Compaq hardware are combined with Caldera's UnixWare 7.1.1 Operating System and NonStop[™] Clusters 7.1.1+IP software. UnixWare NonStop[™] Clusters software, provides extremely high levels of system availability for applications and data in business-critical UnixWare environments.

STANDARD FEATURES

Investment Protection

Both existing and new Compaq ProLiant servers, storage, and options are certified for use with the Compaq ProLiant Clusters for UnixWare 7 - U/100 Kit. Customers can build clusters using existing servers, or by mixing old and new servers.

Maximum Availability, Minimum Cost

Because Compaq ProLiant Clusters are built from industry-standard components, Compaq delivers high levels of application availability at a much lower cost than traditional, proprietary cluster solutions. The Compaq ProLiant Clusters for UnixWare 7 - U/100 Kit utilizes Compaq's industry-leading ProLiant servers, the fast and reliable fibre-connected Compaq StorageWorks Raid Array 4000 (RA4000) and RAID Array 4100 (RA4100). Using standard Compaq Fast Ethernet or Gigabit Ethernet network controllers (NICs), an Ethernet IP cluster interconnect can be configured. The very economical Cross Node Mirroring reliable storage is also available which provides completely redundant and reliable storage by mirroring (across the cluster interconnect) the drives in both the two nodes. Only one hard drive per server is necessary to implement this storage solution.

Integrated Solutions

All Compaq ProLiant Clusters integrate hardware and software to provide a total solution. The solution brings industry-leading cluster technology to industry-standard servers for the UNIX community. Compaq ProLiant servers, interconnect options, system management software, configuration flexibility, and implementation documentation have all been tested in cluster configurations.

Sophisticated Cluster Management

All Compaq ProLiant Clusters for UnixWare 7 utilize Compaq SmartStart and Compaq Insight Manager software to further enable simplified installation, configuration, and management.

COMPONENTS

Servers

From the economical ProLiant ML330 to the high performance 8-way SMP ProLiant DL760, a very broad range of ProLiant servers are supported.



COMPONENTS *(continued)*

Cluster Interconnect

Compaq ProLiant Clusters for UnixWare 7 - U/100 Kit offers the economical Ethernet IP cluster interconnect capability. The Ethernet NIC is included with the ProLiant servers or one of the certified Compaq Fast Ethernet or Gigabit controllers may be used for the interconnect hardware.

Public LAN

A wide variety of single and multi-port 10/100 and Gigabit Ethernet controllers (NICs) are supported for public local area network (LAN) communications.

Storage

The U/100 Kit supports both internal disk storage clusters using the Cross Node Mirroring, the ProLiant CL380 shared storage array, and external storage using the Compaq StorageWorks Raid Array 4000 (RA4000) or the Raid Array 4100 (RA4100) capability in a redundant, reliable implementation. The Cross Node Mirroring option is a very economical storage option that mirrors the internal drives across two nodes. The ProLiant CL380 storage array is included with every ProLiant CL380 and supports up to six drives in a shared RAID environment. The StorageWorks Raid Array option is a high performance reliable storage solution. Tape back up drives may even be added to generate additional copies of the data.

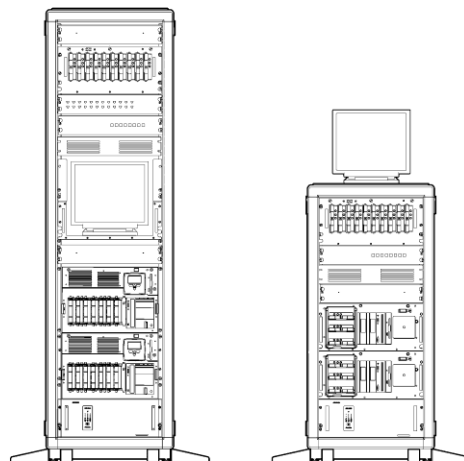
Supported Operating Systems

Clusters built for the U/100 Kit require UnixWare 7.1.1 and NonStop Clusters 7.1.1+IP software. Please contact your local Caldera reseller or distributor to obtain the license keys for this software or see the following URL for a Caldera reseller or distributor closest to you:
<http://www.sco.com/partners/locator/>.

Note: This Web site is available in English only.

Compaq ProLiant Clusters for UnixWare 7 - U/100 Kit Contents

- Compaq ProLiant Clusters for UnixWare 7 - U/100 Install Guide [\(in English\)](#)
- Compaq ProLiant *Compaq NonStop™* Clusters Enhancements CD
- Compaq ProLiant Clusters for UnixWare 7 NonStop Clusters U/100 Configuration Poster [\(in English\)](#)
- UnixWare 7.1.1 Compact Media Kit [\(in English\)](#) and NonStop Clusters 7.1.1+IP Media Kit [\(in English\)](#)
- Cluster Integrity Serial Cable (12 FT)
- Ethernet IP Interconnect Cable (12 FT)
- Cluster Node Labels
- Kit Contents Card (including "Read Me First")



REQUIRED COMPONENTS

Cluster Kit	Compaq ProLiant Clusters for UnixWare 7 U/100 Kit <i>Note: One kit is required per cluster.</i>	255566-B21
-------------	--	------------

Servers	<p><i>Note:</i> The U/100 Kit supports 2 server nodes per cluster. The first two nodes must be identical in terms of model type, processor type, memory capacity, and type and number of internal hard drives. A very broad range of ProLiant server models are supported. Please check the certification matrix for the U/100 Kit on Compaq's High Availability Web site at: http://www.compaq.com/solutions/enterprise/highavailability/sco/cpqnsc.html for an up to date listing of certified configurations, restrictions, and releases notes.</p>	
	Compaq ProLiant DL360	
	Compaq ProLiant DL380	
	Compaq ProLiant DL580	
	Compaq ProLiant DL760	
	Compaq ProLiant ML330	
	Compaq ProLiant ML350	
	Compaq ProLiant ML370	
	Compaq ProLiant ML530	
	Compaq ProLiant ML570	
	Compaq ProLiant 800 (Pentium III Models)	
	<i>Note:</i> The ProLiant 800 product has been discontinued.	
	Compaq ProLiant 1600 (Pentium III Models)	
	<i>Note:</i> The ProLiant 1600 product has been discontinued.	
	Compaq ProLiant 1850R (Pentium III Models)	
	<i>Note:</i> The ProLiant 1850R product has been discontinued.	
	Compaq ProLiant 3000 (Pentium III Models)	
	<i>Note:</i> The ProLiant 3000 product has been discontinued.	
	Compaq ProLiant 5500 (Pentium III Xeon Models)	
	<i>Note:</i> The ProLiant 5500 product has been discontinued.	
	Compaq ProLiant 6400R (Pentium III Xeon Models)	
	<i>Note:</i> The ProLiant 6400R product has been discontinued.	
	Compaq ProLiant 8500 (All Models)	

Reliable Storage	<p>The Ethernet NIC provided with the ProLiant server and the listed Ethernet controllers certified for use as a cluster interconnect are supported. For single Ethernet IP connected clusters, the Ethernet NIC is included with the ProLiant server and the Ethernet interconnect cable included with the U/100 Kit is all that is required for a 2-node cluster. The Ethernet IP cluster interconnect is configured as a private network on its own subnet. A different physical Ethernet connection is required for the public local area network (LAN). Not all ProLiant servers support the complete list of Ethernet controllers; refer to the server's documentation for a list of the supported Ethernet controllers.</p> <p>Please check the certification matrix for the U/100 Kit on Compaq's High Availability Web site at http://www.compaq.com/solutions/enterprise/highavailability/sco/cpqnsc.html for an up to date listing of certified configurations, restrictions, and releases notes.</p>	
------------------	--	--

Ethernet Controller Included with the ProLiant Server	(embedded or add-in)
Compaq NC3123 Fast Ethernet NIC PCI 10/100 WOL	174830-B21
Compaq NC3131 Fast Ethernet NIC 64 Dual Base 10/100 PCI Adapter	338456-B21
Compaq NC3133 Fast Ethernet 100 FX Upgrade Module for the NC3134 and NC3131	338456-B25
Compaq NC3134 Fast Ethernet NIC 64 Dual Port 10/100 PCI Adapter	138603-B21
Compaq NC3135 Fast Ethernet Upgrade Module, Dual 10/100	138604-B21
Compaq NC6132 Gigabit Upgrade Module 1000 SX	338456-B23
Compaq NC6133 Gigabit Upgrade Module 1000 LX	338456-B24
Compaq NC6136 Gigabit Server Adapter, 64-bit/66MHz, PCI, 1000 SX	203539-B21
Compaq NC7131 Gigabit Server Adapter, 64 bit/66MHz PCI, 10/100/1000-T	158575-B21

REQUIRED COMPONENTS *(continued)*

Internal Hard Drives	<p>Note: Each server must have at least a 9.1-GB or greater internal hard disk drive. The drive type and number must be identical between the first two nodes (they may be different within a node).</p>		
	<p>Note: The U/100 Kit supports the internal hard disk drives options offered on each server. Not all ProLiant servers support the complete list of hard drives; refer to the server's documentation for the list of the supported hard drives. Also, please check the certification matrix for the U/100 Kit on Compaq's High Availability Web site at http://www.compaq.com/solutions/enterprise/highavailability/sco/cpqnsc.html for an up to date listing of certified configurations, restrictions, and releases notes.</p>		
	<p>Wide Ultra3 Non-Hot Plug Drives</p>		
	<table border="1"> <tr> <td>9.1GB Wide Ultra3 SCSI 10,000 rpm Drive 1"</td> <td>142672-B21</td> </tr> </table>	9.1GB Wide Ultra3 SCSI 10,000 rpm Drive 1"	142672-B21
9.1GB Wide Ultra3 SCSI 10,000 rpm Drive 1"	142672-B21		
	<table border="1"> <tr> <td>18.2GB Wide Ultra3 SCSI 10,000 rpm Drive 1"</td> <td>142674-B21</td> </tr> </table>	18.2GB Wide Ultra3 SCSI 10,000 rpm Drive 1"	142674-B21
18.2GB Wide Ultra3 SCSI 10,000 rpm Drive 1"	142674-B21		
	<table border="1"> <tr> <td>36.4GB Wide Ultra3 SCSI 10,000 rpm Drive 1"</td> <td>176497-B21</td> </tr> </table>	36.4GB Wide Ultra3 SCSI 10,000 rpm Drive 1"	176497-B21
36.4GB Wide Ultra3 SCSI 10,000 rpm Drive 1"	176497-B21		
	<p>Universal Wide Ultra3 Hot Plug Drives</p>		
	<table border="1"> <tr> <td>9.1GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"</td> <td>142671-B22</td> </tr> </table>	9.1GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	142671-B22
9.1GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	142671-B22		
	<table border="1"> <tr> <td>18.2GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"</td> <td>142673-B22</td> </tr> </table>	18.2GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	142673-B22
18.2GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	142673-B22		
	<table border="1"> <tr> <td>36.4GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"</td> <td>176496-B22</td> </tr> </table>	36.4GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	176496-B22
36.4GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	176496-B22		
	<table border="1"> <tr> <td>18.2GB Pluggable Wide Ultra3 SCSI 15,000 rpm Drive 1"</td> <td>188122-B22</td> </tr> </table>	18.2GB Pluggable Wide Ultra3 SCSI 15,000 rpm Drive 1"	188122-B22
18.2GB Pluggable Wide Ultra3 SCSI 15,000 rpm Drive 1"	188122-B22		
Storage Controllers	<p>Note: The U/100 Kit supports the internal SCSI adapter options offered on each server. Not all ProLiant servers support the complete list of SCSI adapters; refer to the server's documentation for the list of the supported adapters. Also, please check the certification matrix for the U/100 Kit on Compaq's High Availability Web site at http://www.compaq.com/solutions/enterprise/highavailability/sco/cpqnsc.html for an up to date listing of certified configurations, restrictions, and releases notes.</p>		
	<table border="1"> <tr> <td>64-Bit/66Mhz Single Channel Wide Ultra3 SCSI Adapter</td> <td>154457-B21</td> </tr> </table>	64-Bit/66Mhz Single Channel Wide Ultra3 SCSI Adapter	154457-B21
64-Bit/66Mhz Single Channel Wide Ultra3 SCSI Adapter	154457-B21		
	<table border="1"> <tr> <td>64-Bit/66Mhz Single Channel Wide Ultra3 SCSI Adapter (Japan)</td> <td>154457-291</td> </tr> </table>	64-Bit/66Mhz Single Channel Wide Ultra3 SCSI Adapter (Japan)	154457-291
64-Bit/66Mhz Single Channel Wide Ultra3 SCSI Adapter (Japan)	154457-291		
	<table border="1"> <tr> <td>64-Bit/66Mhz Dual Channel Wide Ultra3 SCSI Adapter</td> <td>129803-B21</td> </tr> </table>	64-Bit/66Mhz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21
64-Bit/66Mhz Dual Channel Wide Ultra3 SCSI Adapter	129803-B21		
	<table border="1"> <tr> <td>64-Bit/66Mhz Dual Channel Wide Ultra3 SCSI Adapter (Japan)</td> <td>129803-291</td> </tr> </table>	64-Bit/66Mhz Dual Channel Wide Ultra3 SCSI Adapter (Japan)	129803-291
64-Bit/66Mhz Dual Channel Wide Ultra3 SCSI Adapter (Japan)	129803-291		
Reliable Storage	<p>Note: The U/100 Kit supports three different reliable storage options: 1) Cross Node Mirroring (CNM), 2) ProLiant CL380 shared storage, and 3) and external shared FC-AL. The cluster must be configured with one reliable storage option; multiple reliable storage options may not be mixed in a single cluster. Please check the certification matrix for the U/100 Kit on Compaq's High Availability Web site at http://www.compaq.com/solutions/enterprise/highavailability/sco/cpqnsc.html for an up to date listing of the certified configurations, restrictions, and releases notes.</p>		
	<p>Cross Node Mirroring</p>		
	<p>Note: To enable the CNM reliable storage, at least one internal hard disk drive per server and one UnixWare 7 Mirroring Option or Online Data Manager (ODM) license are required. Contact an authorized Caldera distributor or reseller to obtain the license. Refer to the server's documentation for a list of supported internal disk drive options. The internal disk drives must be identical on both server nodes.</p>		
	<p>ProLiant CL380 Shared Storage</p>		
	<p>Note: The ProLiant CL380 shared storage is only supported on the ProLiant CL380. The shared storage array must contain at least two 9.1-GB or greater hard disk drives. Refer to the ProLiant CL380 documentation for a list of supported internal disk options.</p>		
	<table border="1"> <tr> <td>Shared Storage RAID CR3500 Controller</td> <td>388332-B21</td> </tr> </table>	Shared Storage RAID CR3500 Controller	388332-B21
Shared Storage RAID CR3500 Controller	388332-B21		
	<p>Note: One Shared Storage RAID CR3500 Controller is included with the ProLiant CL380. A second controller may be added for redundancy.</p>		
	<table border="1"> <tr> <td>Shared Storage RAID CR3500 Controller (Japan)</td> <td>388332-291</td> </tr> </table>	Shared Storage RAID CR3500 Controller (Japan)	388332-291
Shared Storage RAID CR3500 Controller (Japan)	388332-291		
	<p>Note: One Shared Storage RAID CR3500 Controller is included with the ProLiant CL380. A second controller may be added for redundancy.</p>		

REQUIRED COMPONENTS *(continued)*

Reliable Storage *(continued)*

StorageWorks RAID Array 4100

Note: The external FC-AL storage utilizes one fibre adapter installed in the active storage node and one in a corresponding failover storage node comprising a node pair.

Note: One Fibre Channel host bus adapter per server, and one RA4000 redundant controller and at least two hard disk drives per array are required. Also, two fibre hubs or switches are required for each node pair that will connect to multiple arrays. Please check the certification matrix for the U/100 Kit on Compaq's High Availability Web site at <http://www.compaq.com/solutions/enterprise/highavailability/sco/cpgnsc.html> for an up to date listing of the certified configurations, restrictions, and releases notes.

StorageWorks Raid Array 4100 (rack)	146013-001
StorageWorks Raid Array 4100 (rack) (Int'l)	146013-B31
StorageWorks Raid Array 4100 (rack) (Japan)	146013-291
StorageWorks FC-AL Switch 8	177862-B21
StorageWorks FC-AL Switch 8 (Japan)	177862-291
StorageWorks FC-AL Switch 3 Port Expansion Module	177863-B21
Fibre Channel Storage Hub 7	234453-001
Fibre Channel Storage Hub 7 (Int'l)	234453-B31
Fibre Channel Storage Hub 7 (Japan)	234453-291
Compaq Storage Hub 7 Universal Rack Mount Kit	136127-B21
StorageWorks Raid Array 4000 Redundant Array Controller	223187-B21
64-Bit/66MHz Fibre Channel Host Adapter	120186-B21
64-Bit/66MHz Fibre Channel Host Adapter (Japan)	120186-291
18.2GB Pluggable Wide Ultra3 SCSI 15,000 rpm Drive 1"	188122-B22
9.1GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	142671-B22
18.2GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	142673-B22
36.4GB Pluggable Wide Ultra3 SCSI 10,000 rpm Drive 1"	176496-B22
GBIC-SW Connector Kit (2 each)	234459-B21
GBIC-LW Connector Kit (2 each)	340412-B21
FC Short Wave GBIC	380561-B21
FC Long Wave GBIC	127508-B21
FC Connection Kit 3 SW GBICS, 2 Cables	380579-B21
FC Connection Kit 2 SW GBICS, 2 Cables	380596-B21
2 Meter Multi-Mode Fibre Channel Cable	234457-B21
5 Meter Multi-Mode Fibre Channel Cable	224206-001
15 Meter Multi-Mode Fibre Channel Cable	297162-B21
30 Meter Multi-Mode Fibre Channel Cable	136127-B21
50 Meter Multi-Mode Fibre Channel Cable	296324-B21
Compaq Storage Hub 7 Universal Rack Mount Kit	136127-B21
Fibre Channel Troubleshooting Kit	234468-B21
Fibre Channel Array Controller 64MB Cache Upgrade Kit	262398-B21

OPTIONS

Cluster Options

A wide variety of optional disk, tape backup, network interface controllers, remote management, rack cabinets and accessories, and more are supported. Please check the certification matrix for the U/100 Kit on Compaq's High Availability Web site at <http://www.compaq.com/solutions/enterprise/highavailability/sco/cpqnc.html> for an up to date listing of the certified options, restrictions, and releases notes.

Hardware Service and Support Options (CarePacs)

Compaq servers and storage systems are protected by Compaq Services including a three-year limited warranty, 7 x 24 hardware technical phone support and online support through CompuServe, Prodigy, America Online and the Internet. Pre-Failure Warranty is included and applies to certain hard drives, memory, and processors for servers monitored by Compaq Insight Manager 2.0 or later.

Compaq CarePac service upgrades are available for your Compaq server and storage hardware including:

CarePac Category	Service Name	Service Description
Hardware Services	Next Business Day On-site Service	5-Day x 9-Hour Coverage
Hardware Services	4-Hour On-site Service	5-Day x 9-Hour Coverage
Hardware Services	4-Hour On-site Service	7-Day x 24-Hour Coverage
Installation & Start-up Services	Hardware Installation	

For specific part numbers and additional information, contact your Compaq Authorized Service Provider or see the CarePac server options listed at <http://www.compaq.com/services/carepac/>.
