

What's New in HP-UX, Linux, and Disaster-Tolerant Clustering Solutions?

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Agenda

- **Overview**
- hp's ha strategy
- MC/ServiceGuard Review
- **What's New with HP's HA Clustering Solutions**
- What's new in MC/ServiceGuard for HP-UX
- What's new in MC/ServiceGuard for Linux
- What's new in ServiceGuard OPS Edition
- What's new with Disaster Tolerant Solutions
- **For More Details...**

Agenda

Overview

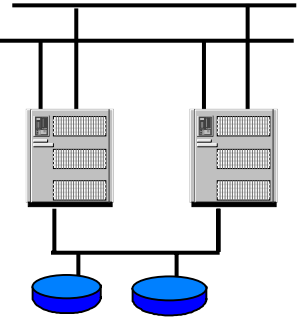
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HA technology components

Overview

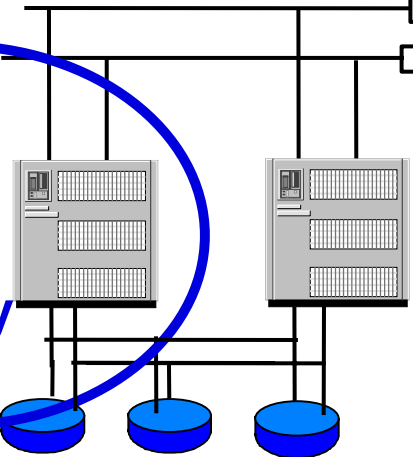
Availability through Manageability:

- Mainframe capabilities
- Monitoring & Mgmt
- Ease of Use



Disaster Tolerance

WAN



Single system Availability

Multi-system Availability

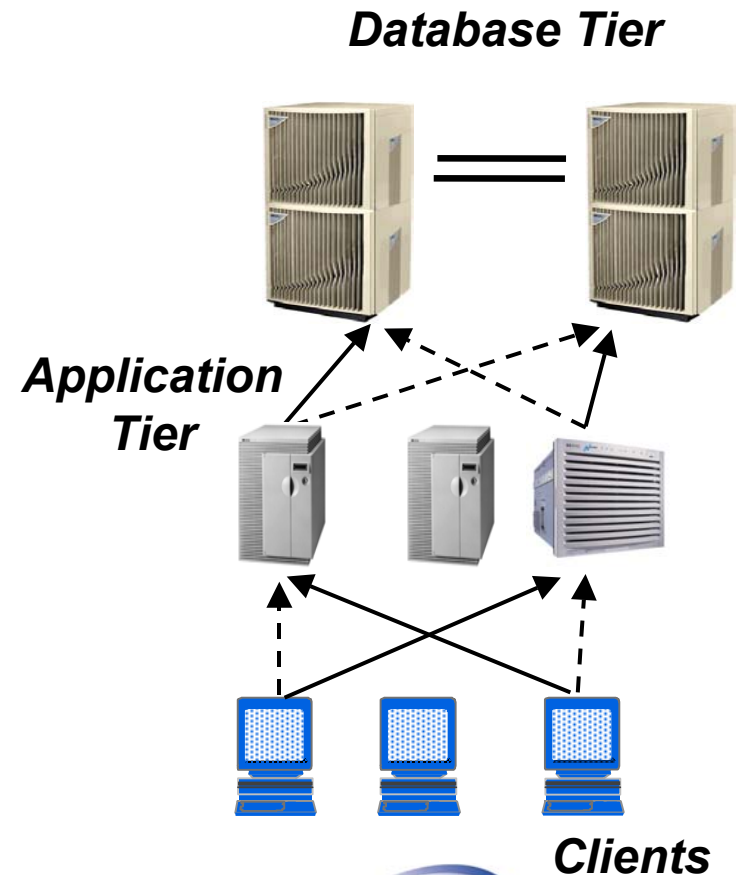
Work with partners to improve end-to-end availability including application stack

NW
Web
App
DB

Improved customer service with mc/serviceguard

Overview

- **Features**
 - Multi OS
 - One-stop GUI
 - Rolling upgrade
 - Tape sharing
 - 16 nodes
 - No idle system
 - Online reconfiguration
 - Automatic Failback
 - Rotating standby
- **Closely integrated with OS**



hp mc/serviceguard: application packages

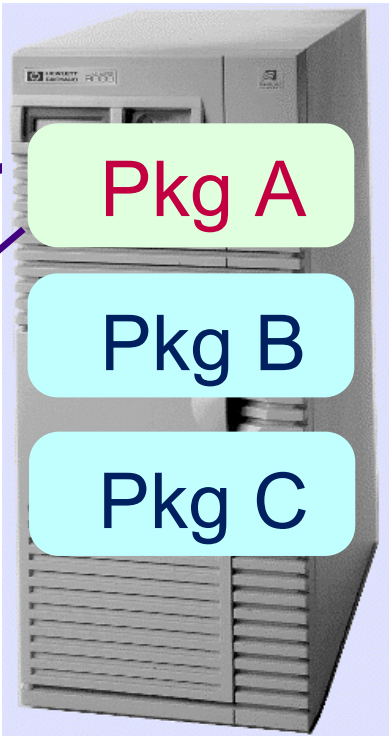
Overview

- Simple, flexible framework for managing application resources

Processes:
App_Process_1
App_Process_2
Middleware_1
Middleware_2

Disks:
lvol_data1
lvol_data2

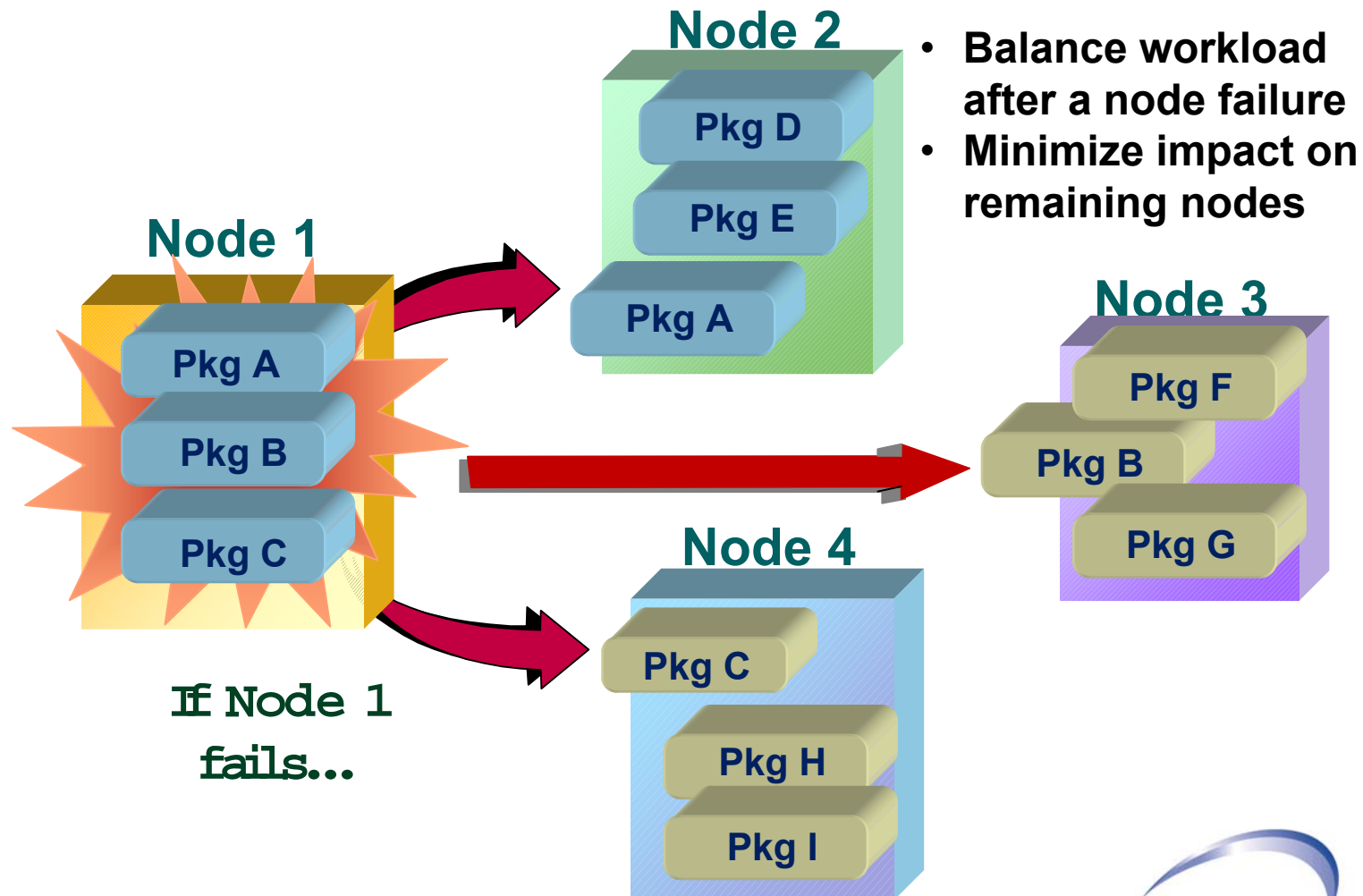
Network:
IP 56.23.101.44



Node 1

hp mc/serviceguard and built-in workload balancing

Overview



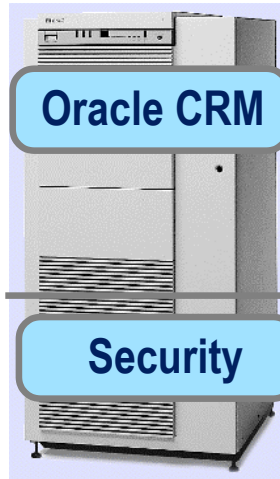
PRM with mc/serviceguard: superior load balancing

Overview



Node 1

100%



Oracle CRM

80%

Security

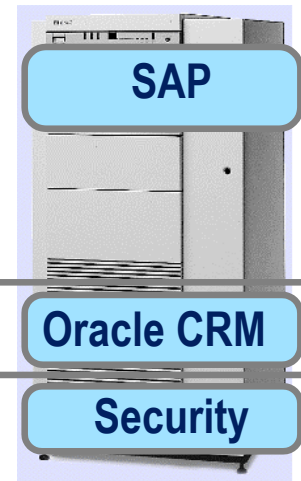
20%

Node 2

If Node 1 fails



Node 1



SAP

70%

Oracle CRM

20%

Security

10%

Node 2

- Dynamic allocation of system resources
- Load balancing for normal and post-failure operation

mc/serviceguard: rolling upgrade

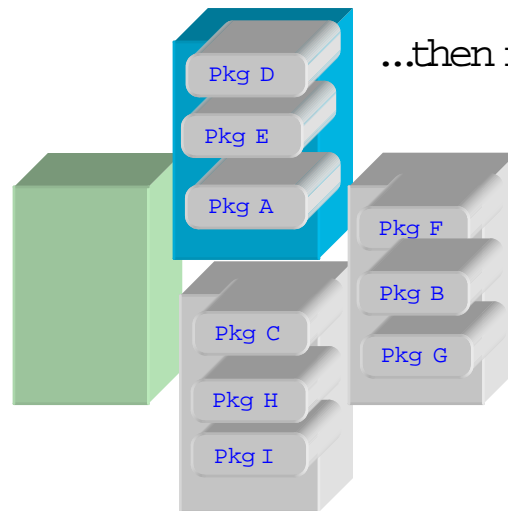
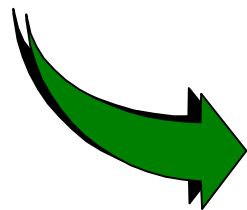
Overview

- Rolling upgrade: minimize planned downtime
- Maximize application uptime
- Cluster remains up

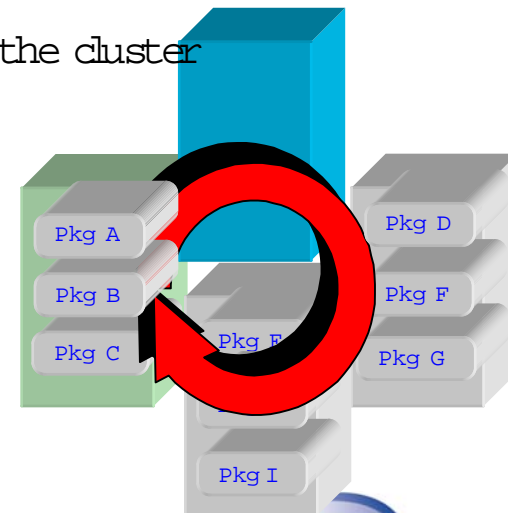
Backward compatibility:

- Operating system
- MC/ServiceGuard

Hardware or software upgrades...



...then roll through the cluster



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- **For More Details...**

What's new in MC/ServiceGuard for HP-UX

What's
New

- Some of the recent enhancements to MC/ServiceGuard for HP-UX:
 - Quorum server
 - Performance improvements in large system environments for package startup and shutdown
 - IPv6 phase 1 (dual IPv4/IPv6 kernel)
 - VERITAS 3.2 (VxVM and CVM)
 - Support for 150 packages in a cluster
 - VLAN support
 - Extended distance clusters up to 100 km using DWDM
 - vPar and SuperDome support
 - ServiceGuard Manager – cluster administration, SNMP dynamic event notification and support for Windows XP
 - ECMT enhancements: Oracle 9i and Informix 9.21
 - Support of IPF (Itanium Processor Family) systems (HP-UX 11i version 1.6)
 - And more...

What's new in MC/ServiceGuard for Linux

What's
New

- Some of the recent enhancements to MC/ServiceGuard for Linux:
 - 8 node fibrechannel clusters,
 - Support for new XP arrays, VA and SCSI storage,
 - Support additional NetServers,
 - AutoPath support,
 - Disaster Tolerant Cluster Solutions integrating MC/SG for Linux and Cluster Extension XP software (CLX) for the HP StorageWorks XP Disk Arrays
 - And more...

What's new in ServiceGuard OPS Edition

What's
New

- Some of the recent enhancements to ServiceGuard OPS Edition:
 - Support 9i RAC (new name for Oracle OPS)
 - Online add/delete nodes using CVM/11i
 - 16 nodes support with LVM
 - VERITAS VxVM and CVM (max 4 nodes) Support
 - 127 OPS instances per cluster
 - Quorum server
 - Performance improvements in large system environments for package startup and shutdown
 - IPv6 phase 1 (dual IPv4/IPv6 kernel)
 - VERITAS 3.2 (VxVM and CVM)
 - Support for 150 packages in a cluster
 - VLAN support
 - Support of IPF systems (HP-UX 11i version 1.6)
 - Support for Oracle RAC 8.1.7, 9.1 and IA RAC 9.2
 - Name change on IA: ServiceGuard Extension for RAC (SGeRAC)
 - And more...

What's new with Disaster Tolerant Solutions

What's
New

- Some of the recent enhancements to MetroCluster and ContinentalClusters:
 - MetroCluster
 - Support for Quorum Server
 - Support for XP128/1024 arrays
 - MetroCluster support up to 100 km using DWDM
 - vPar and SuperDome Support
 - ContinentalClusters
 - Support for Quorum Server
 - Support DWDM configurations
 - Support synchronous CA over IP
 - Support EMC MxN configurations
 - vPar and SuperDome Support
 - And more...

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[More
Details](#)

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**More
Details**

For more Details

- For the complete slide set with additional details on each enhancement, please attend the live presentation at HP World 2002.
- You can also request the complete slide set following HP World 2002 by sending and email request to:
John_Foxcroft@hp.com