Monitoring and Administration of Clusters With ServiceGuard Manager

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agenda

- HA overview
- serviceguard manager features
- cluster monitoring
- cluster administration
- integration with openview and service control manager
- live demo
- roadmap
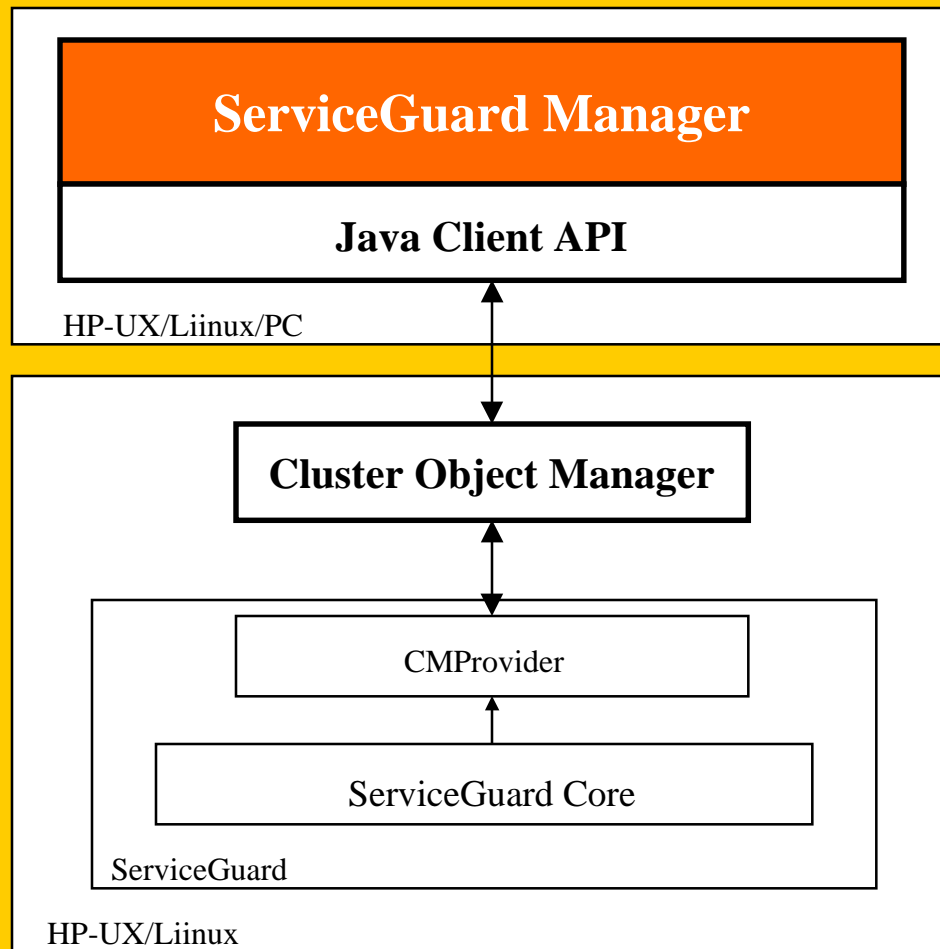- q&a

high availability is…

- hardware, systems, software, applications and IT processes designed to minimize both planned and unplanned downtime
- a computer system's application services being able to continue in spite of a hardware or software failure
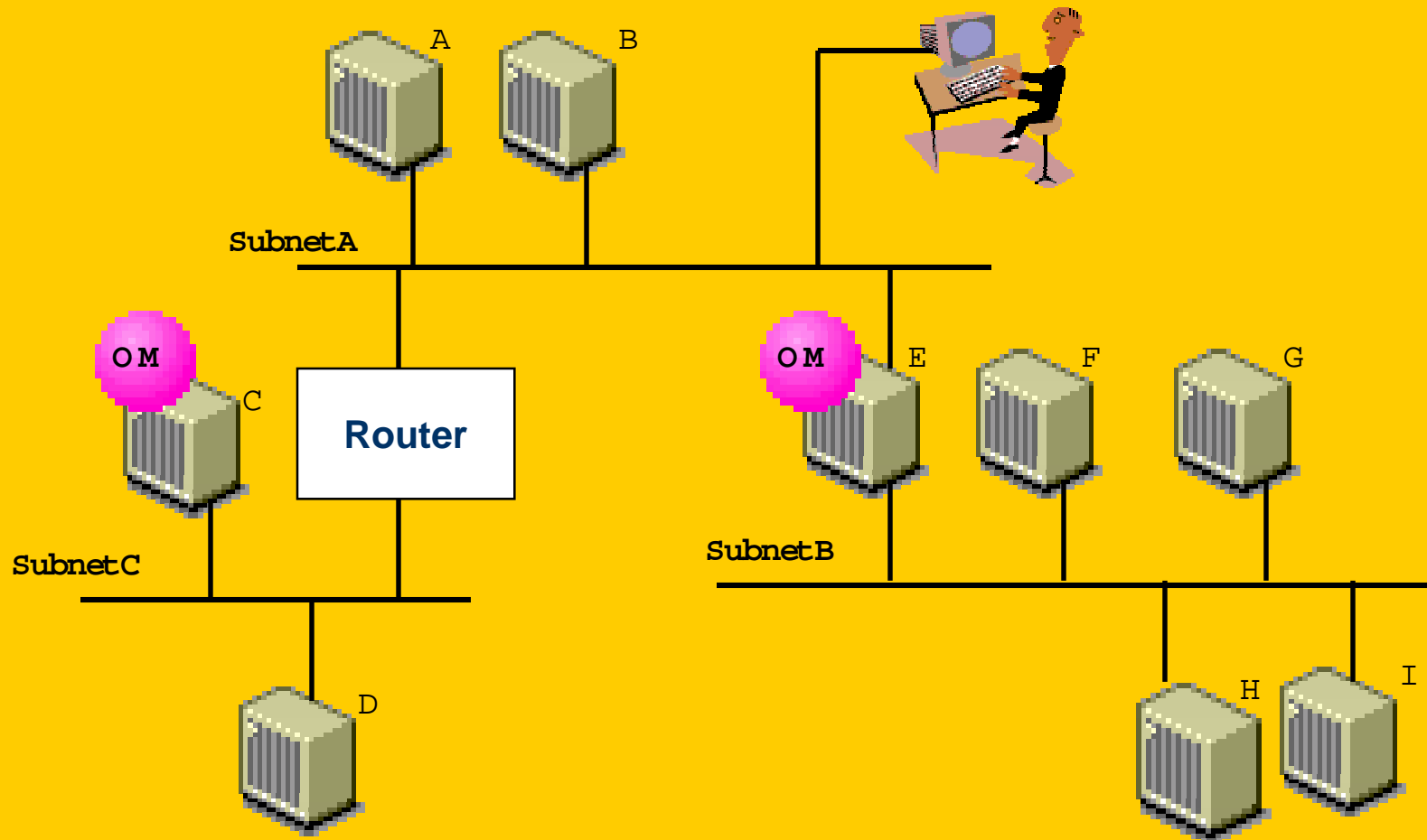- critical in today's 24x7 business environment

ServiceGuard Manager Features

- ✓ A pure-Java application runs on HP-UX, Windows and Linux
- ✓ Graphical representation of ServiceGuard clusters, nodes, and packages
- ✓ Status display
- ✓ Cluster, node, and package property sheets
- ✓ Cluster administration
- ✓ Save cluster environment to a file for future reference
- ✓ Map History
- ✓ Standalone or integrated with HP OpenView products (NNM and VPO) and launchable from Service Control Manager (SCM)
- ✓ Internationalization; localization in Japanese in process

ServiceGuard Components

ServiceGuard Manager

Java Client API

HP-UX/Liinux/PC

Cluster Object Manager

CMProvider

ServiceGuard Core

ServiceGuard

HP-UX/Liinux

Cluster Discovery

SG Manager User Interface

Logo (spins if busy)

Menu Bar

Tool Bar

Map Title/ Description

Tree

Map

Refresh Enabled

Auto- Refresh Timer

Progress Bar

Status Bar

Connection Status
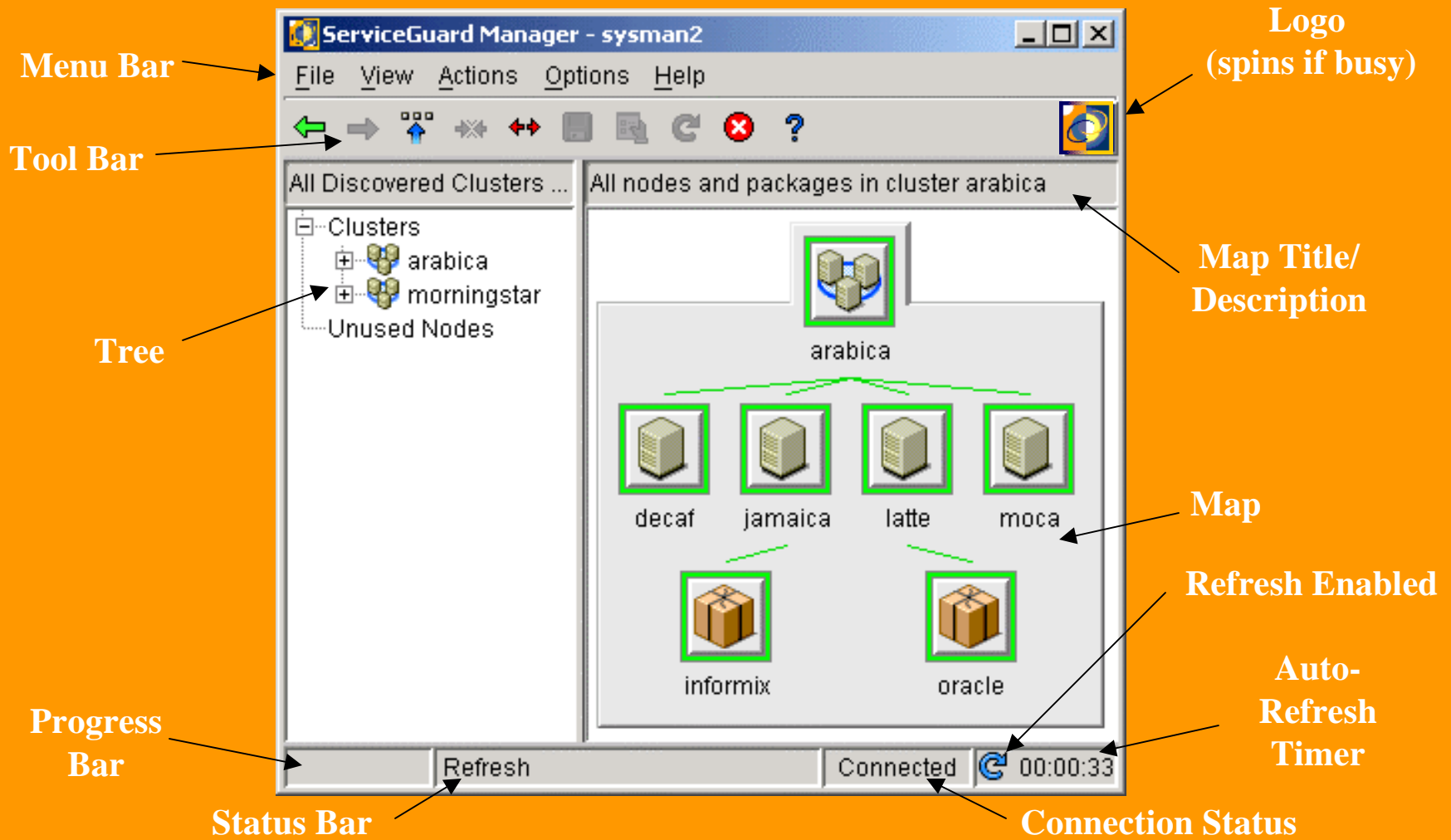
Map Objects, Badges, and Border Colors
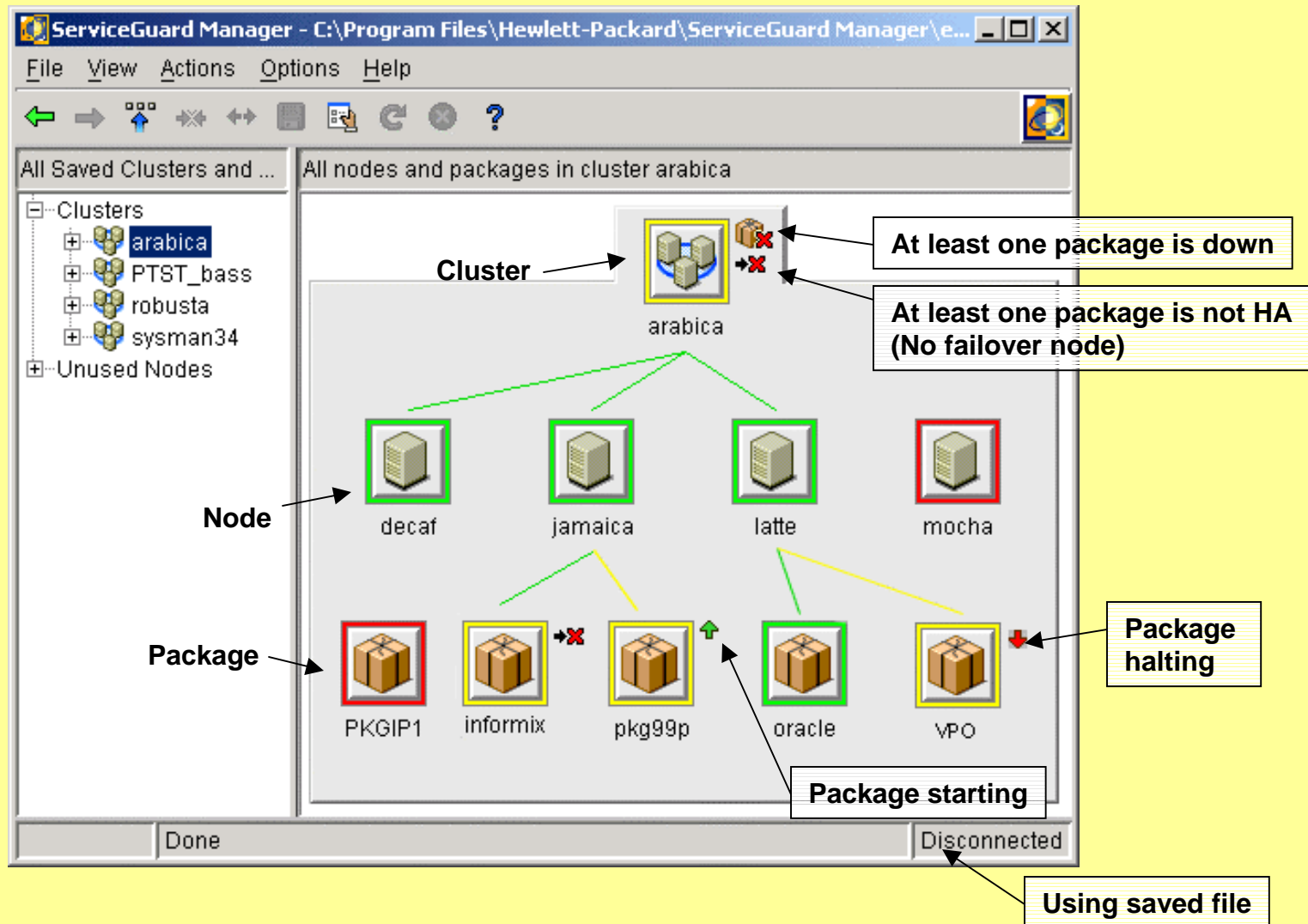
Property Sheet
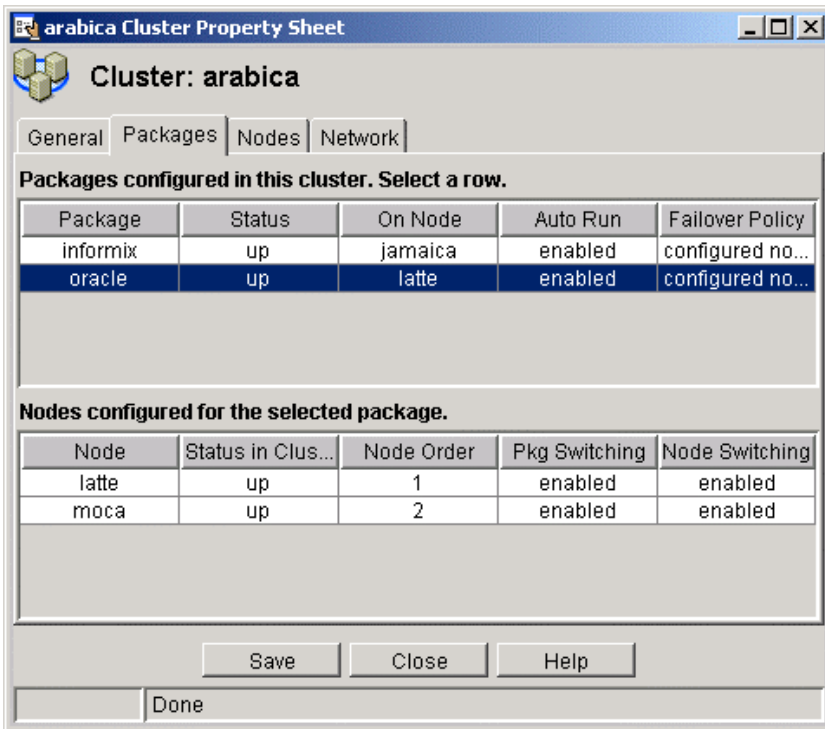
- Every map object has its own property sheet
- A property sheet is a collection of property tabs
- Two types of tabbed pane:
  - List tab
  - Table tab
- There is a status bar at the bottom.
  - Progress bar
  - Text panel to display status messages
- *Save* shows the ASCII summary information of the property sheet

Property Sheet
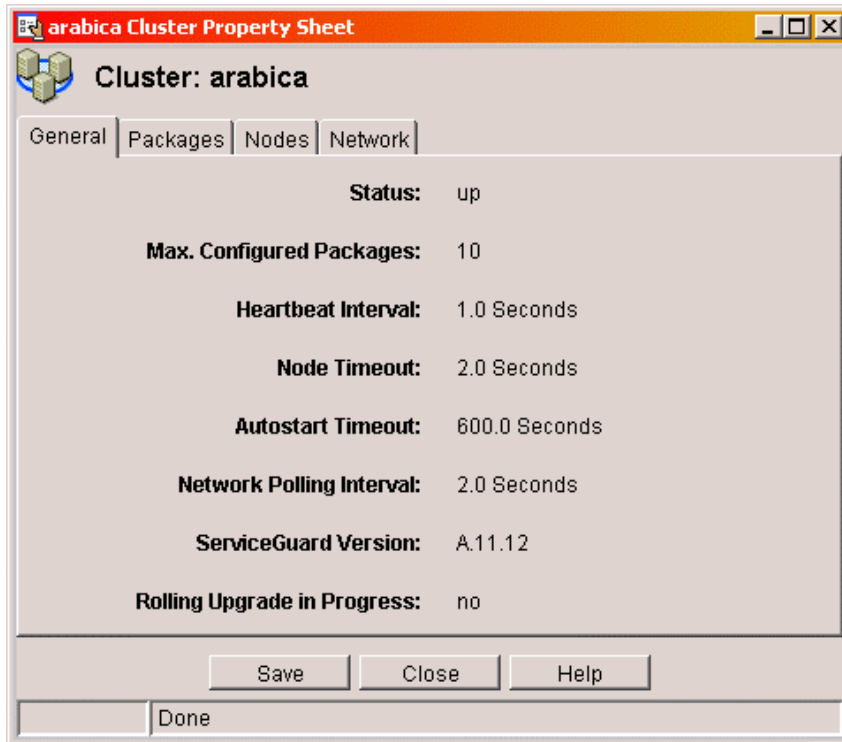
List tab displays general information about the map object

Save Environment
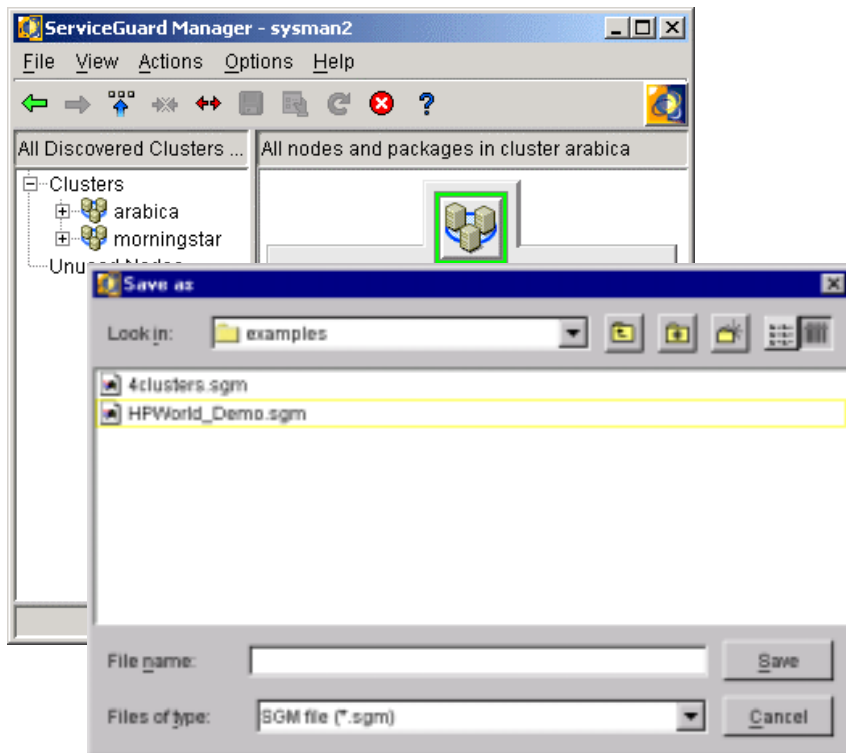
- Save map view in a static sgm file
- For future references: see what changed
- For demonstration purposes

Monitoring Clusters

✓ Scope – Select clusters to be monitored

✓ Security for cluster discovery

✓ Using map and tree for navigation

✓ Tooltips – Map objects and badges

✓ Auto-refresh – Enable/Disable, polling interval

Connect and Select Cluster to be Monitored

- •Connect to the OM on a ServiceGuard node with valid user name and password (root or non-root)

- •User can specify which clusters to monitor, choosing from all the clusters that can be discovered by the OM.

ServiceGuard Manager Security

- SG Manager allows you to limit the clusters to be managed based on customer security requirements.

- The OM cannot return information about a node without the node's permission. The discovered node can list the OM node in its .rhosts or in /etc/cmcluster/cmclnodelist.

- Passwords are encrypted before they are sent over the network, and if they are saved for the next session.

Cluster Focus vs. Node Focus
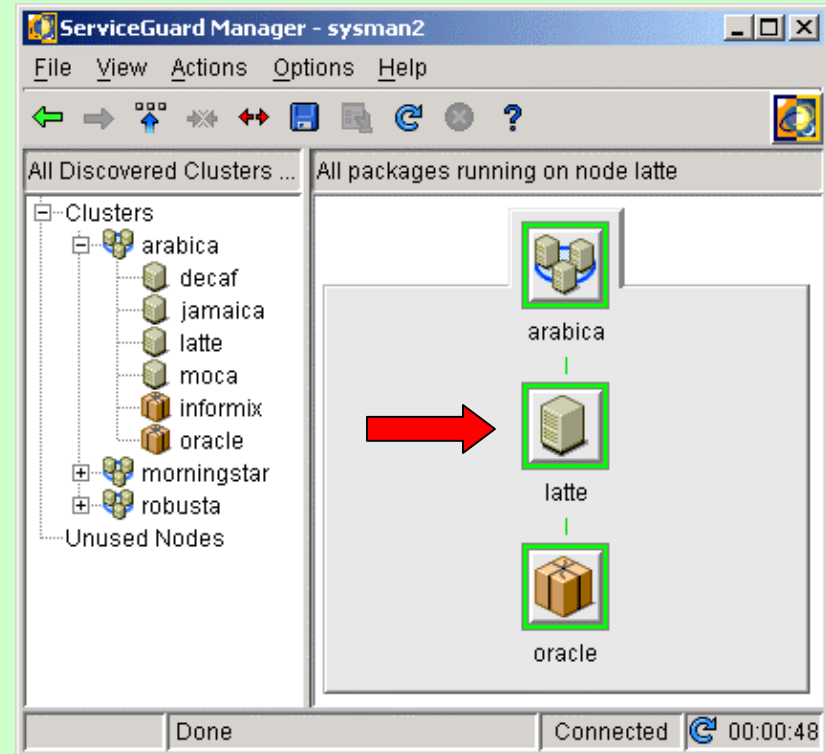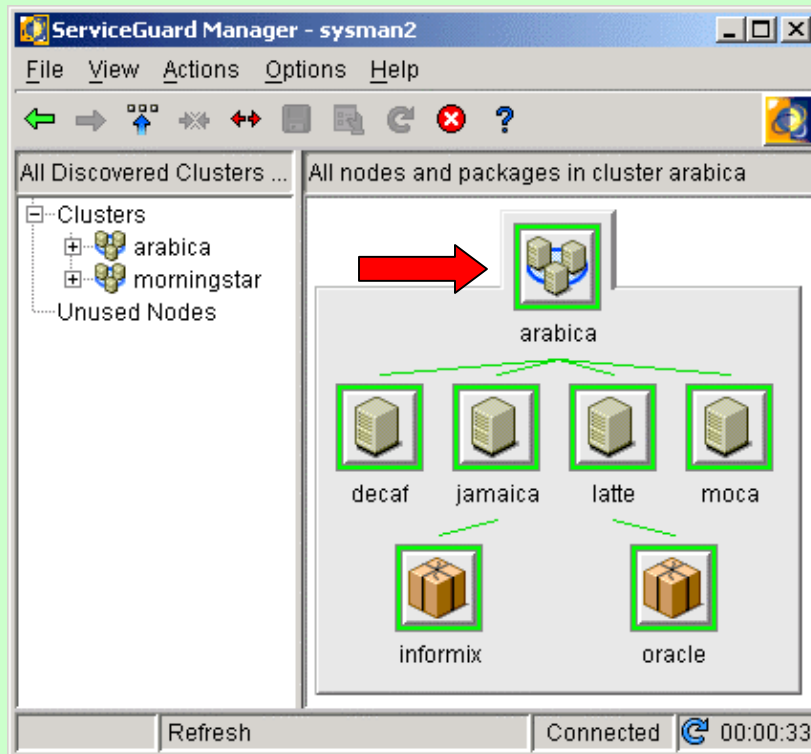
Node Focus vs. Package Focus

Cluster Administration

- ✓ What the administrator can do
- ✓ What's going on in the backend
- ✓ Comparison with command-line interface

As An Administrator, You Can…

- Run/halt cluster
- Run/halt node
- Run/halt package
- Move a package by drag&drop or through menu bar
- Enable/disable package and node switching

ServiceGuard Admin Commands

- ✓ Run cluster – cmruncl
- ✓ Halt cluster – cmhaltcl -f
- ✓ Run node – cmrunnode
- ✓ Halt node – cmhaltnode -f
- ✓ Run package – cmrunpkg
- ✓ Halt package – cmhaltpkg -f
- ✓ Enable/disable package switching – cmmodpkg -v -e pkg or cmmodpkg -v -d pkg
- ✓ Moving a package – cmhaltpkg -n node1 pkg and cmrunpkg -n node2 pkg

You cannot interrupt or undo an admin operation.

HP OpenView Integration

- ✓ ServiceGuard Manager Launcher
- ✓ ServiceGuard Event Templates
- ✓ Application Tools for Cluster Administration and Configuration in VPO toolbank
- ✓ Mib Browser

HP Service Control Manager Integration

- ✓ ServiceGuard Manager launchable from within SCM

NNM Integration (NT & HP-UX)

VPO Integration (HP-UX)

HA Tools for VPO

Application tools that comes with ServiceGuard Manager OV integration can be accessed from VPO's Application Bank.
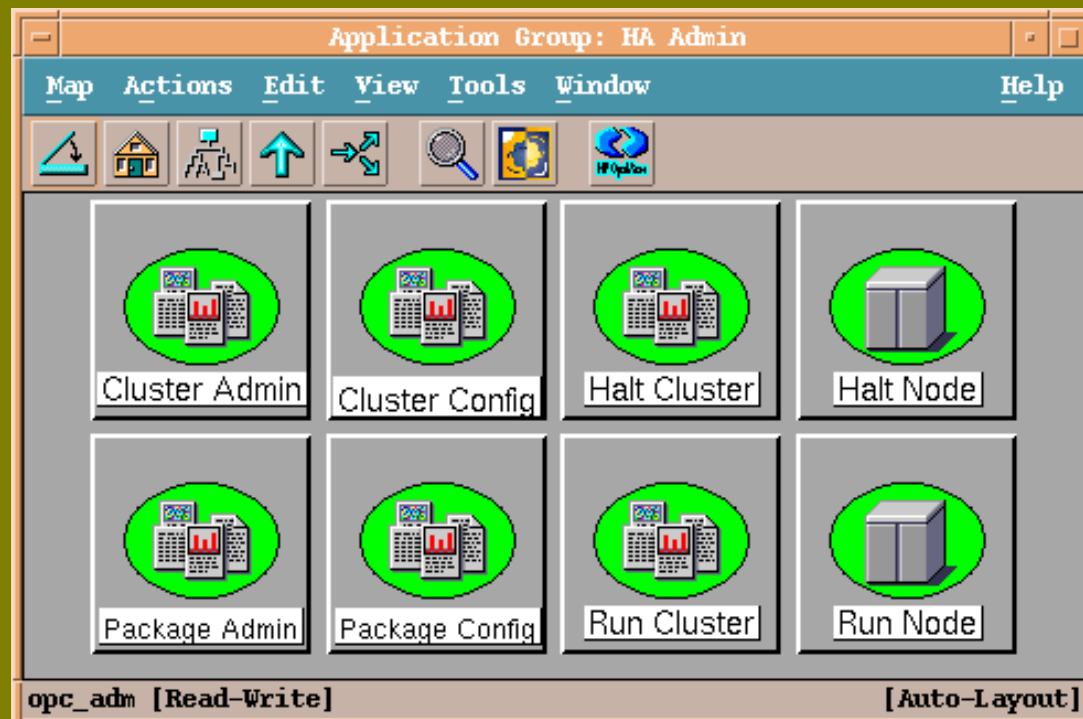
More HA Tools
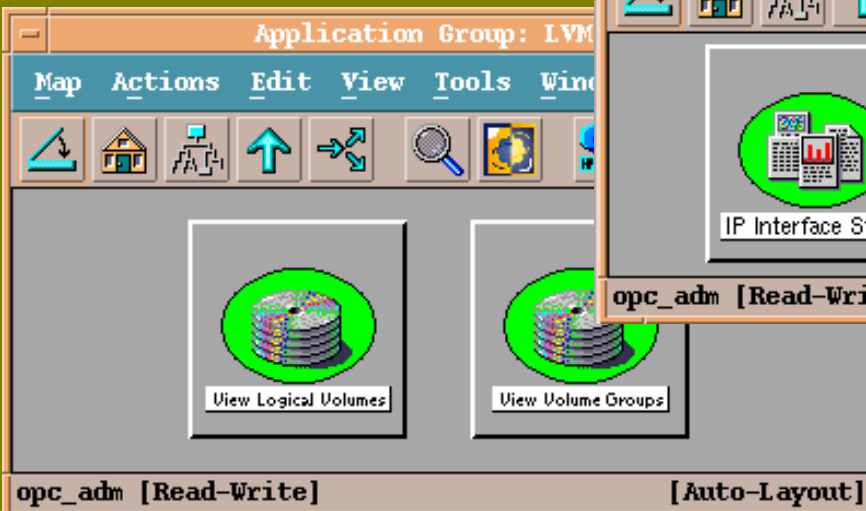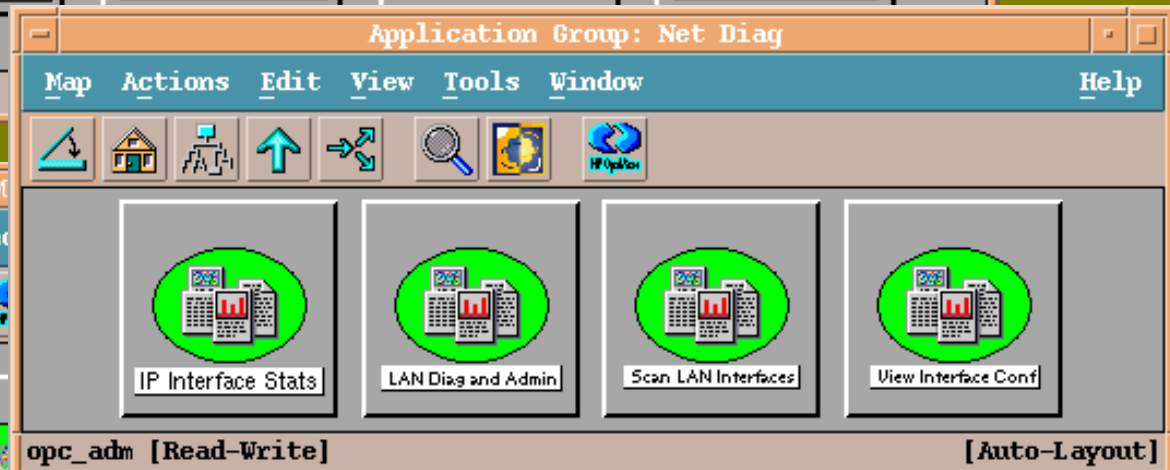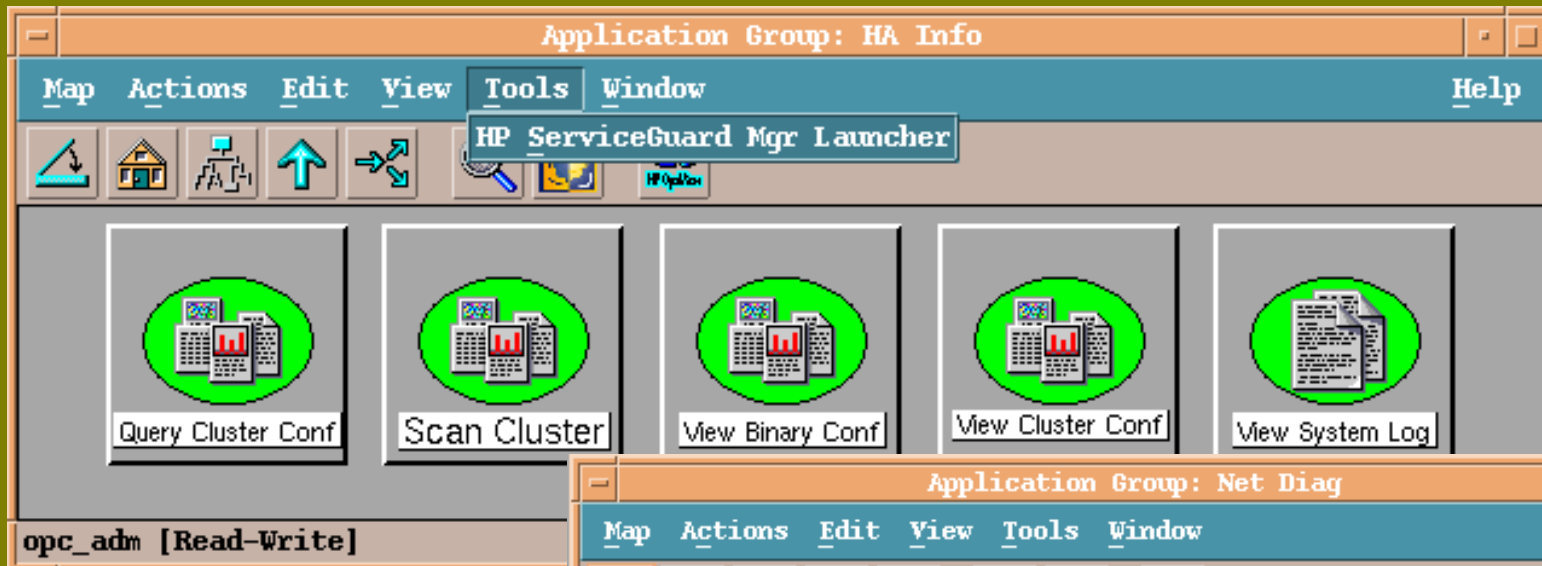
Live Demo

- ✓ Load saved file vs. connect live
- ✓ Using property sheet
- ✓ Identify SPOF… and fix it
- ✓ Manual and auto-eefresh… and get the latest data
- ✓ Package failover scenario
- ✓ Preview: Cluster Administration

ServiceGuard Manager Roadmap

- ✓ Future releases
- ✓ ClusterView replacement
- ✓ Where to get it

Q&A

Thanks for coming…

- ✓ **Remember to pick up some goodies before you leave (ServiceGuard Manager CD)**
- ✓ **Feel free to leave your business card and receive latest news about ServiceGuard Manager**