



ServiceCONTROL

HP-UX systems
management

hp word #326

Hewlett-Packard

Ute Albert

Pruneridge Ave

Cupertino, CA 95014

Phone: 408-447-5249

Fax: 408-447-4594

Email: ute_albert@hp.com

manageability NOW
with flexible end-to-end manageability



optimum
user experience

- cost-effective rapid control
- proactive problem solving
- optimized resource management

HP-UX servicecontrol ■ hp openview ■ outsourcing

flexible end-to-end
management

enterprise management

hp openview

CA Unicenter Tivoli BMC

SERVICECONTROL

single point, multi-system
configuration management

servicecontrol manager (SCM)

SAM Ignite/UX SD/UX online JFS

secure web console central web console

system configuration repository (SCR)

fault management

EMS

EMSHA monitors

workload management

HP-UX workload manager (WLM) PRM

glanceplus pack mc/serviceguard

web workload management

WebQoS

servicecontrol
manager for
cost-effective, rapid
central control

web-based GUI



servicecontrol manager
bundled with every
hp 9000 server

Up to 5X productivity gain

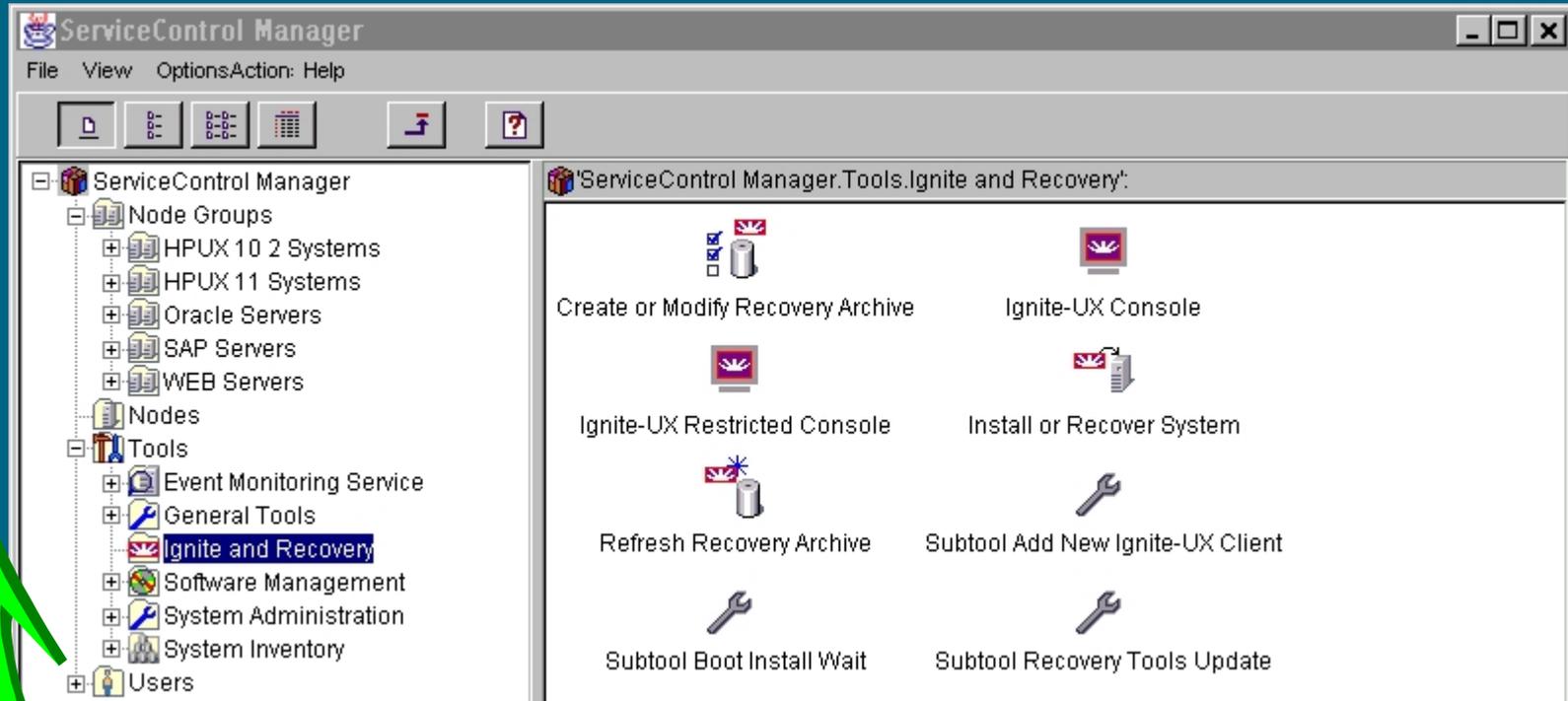
integrated single point of
administration
for hp 9000 hyperplex

distributed task facility -
define once execute
simultaneously

role-based security

launch point of hp and
non-hp tools through
user-defined scripts

servicecontrolmanager - toolview



Integrated Tools:

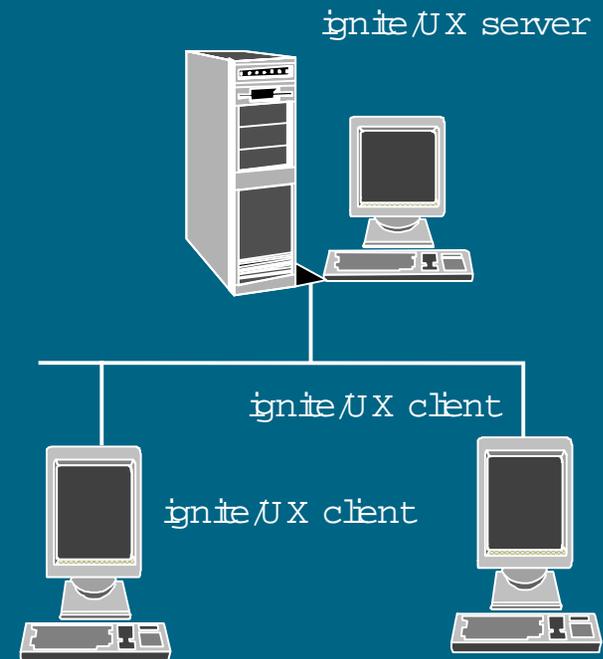
- Event Monitoring Service (EMS)
- Ignite/UX
- SD/UX
- System Configuration Repository (SCR)
- System Administration (SAM)
- Key HP-UX Commands (such as bdf, cat cp, find,...)

Note: Access also via an X-Windows and command-line interface

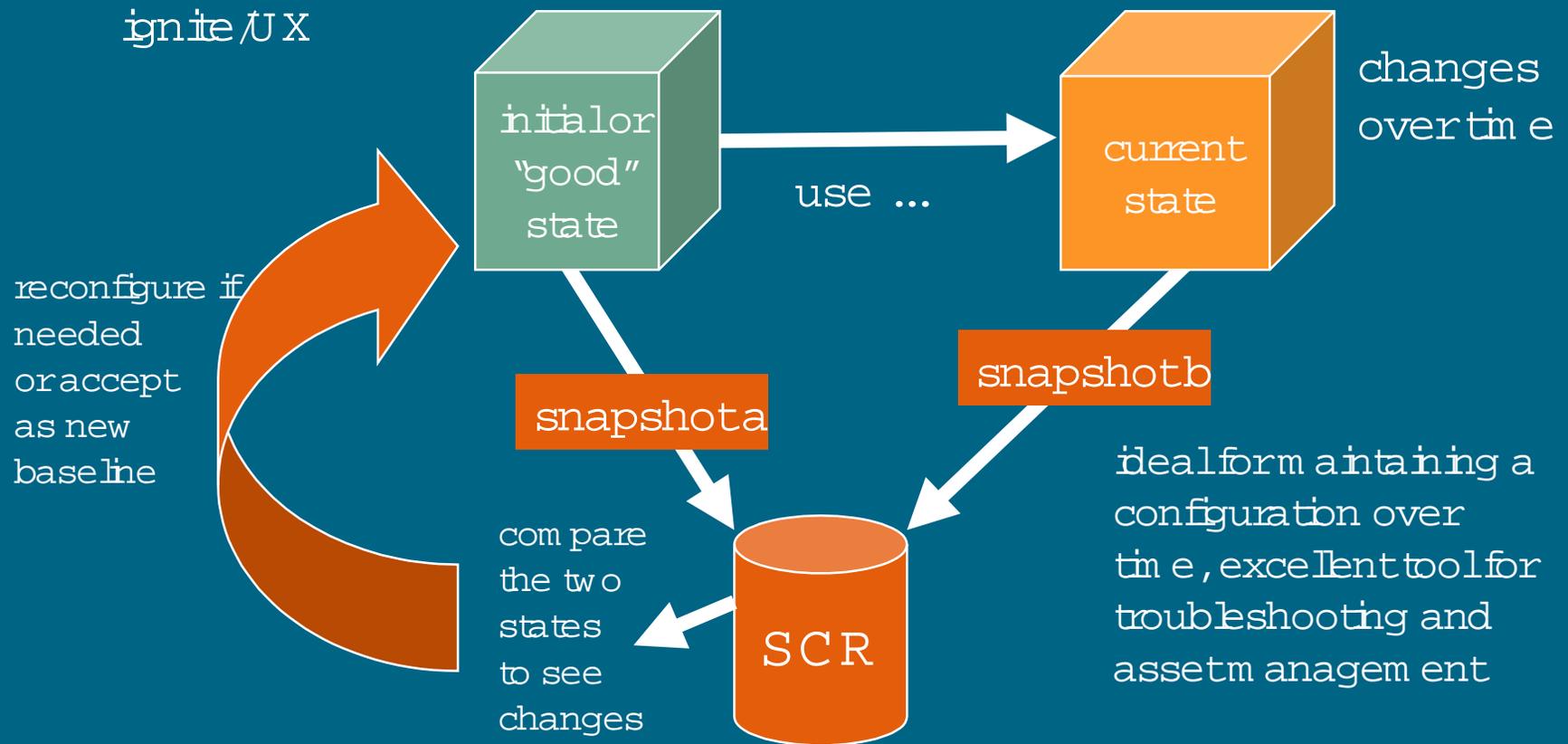
ignite/UX : configure one
dep by many from
a central location

- create system image once and replicate simultaneously on any number of up to 9000 servers
- remote network-based system install or update

reduced administrative overhead and costs with fewer errors



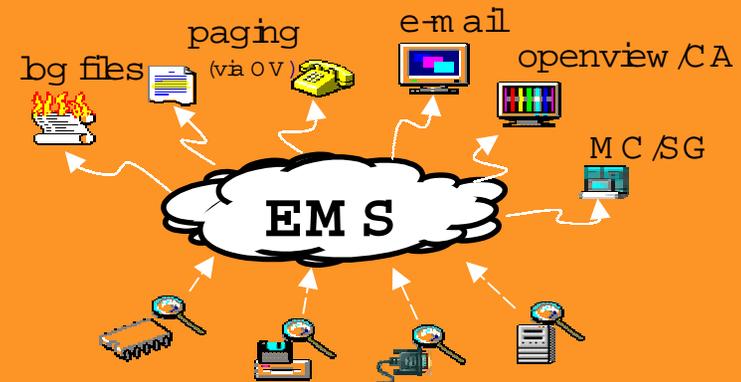
HP-UX service control configuration management: system configuration repository (SCR)



event monitoring service
for system component
fault detection and
avoidance

EMS supports a wide
variety of event notification
and actions:

- log files, paging, e-mail,
OV VP operations, and
CA uncenter
- MC /serviceguard
integration



- Disks, volume groups
- Network interface cards
- File systems
- Database

OpenView VantagePoint Operations Managing Application Quality of Service

End-to-End
Application
Management
with Total
Visibility of
Heterogeneous
systems

The screenshot displays the OpenView VantagePoint Operations interface. The main window is titled "Message Browser [opc_admin on hpptc27.rose.hp.com]". It shows a list of messages with columns for Severity, SUIAONE, Date, Time, Node, Application, MsgGroup, Object, and Message Text. The messages include system events like cron jobs, network connections, and application performance metrics. At the bottom of the message browser, there is a summary bar with colored segments representing message counts: 58 (red), 13 (orange), 172 (yellow), 239 (cyan), 61 (green), 8 (blue), 0 (pink), and 0 (light yellow). Below the summary bar are buttons for "Own", "Highlight", "Details...", "Perform Action", "Annotations...", and "Acknowledge". In the background, other windows are visible, including "ITO User Bank", "ITO Node Bank", and "Internet", along with a network diagram showing nodes and connections.

Sev.	SUIAONE	Date	Time	Node	Application	MsgGroup	Object	Message Text
Crit	----	01/25/00	23:55:23	hpptc27.ro	/usr/sbin/c	Job	27533	Cron command of root with pid 27
Norm	--X----	01/26/00	01:30:26	hpptc27.ro	/usr/sbin/c	Job	cron	> CMD: /opt/medusa/bin/watchlog
Min	--X-X--	01/26/00	01:51:45	hpptc27.ro	Oracle	Ora_Perf	openview	DBSPI-0023.1: Current buffer cac
?	-X----	01/26/00	03:03:42	hpptc27.ro	/usr/sbin/s	OS		Jan 26 03:03:27 hpptc27 inetd[66
Norm	-----	01/26/00	03:03:42	hpptc27.ro	Remshd	OS		Remsh connection from houdini (1
Min	--X-X--	01/26/00	03:51:46	hpptc27.ro	Oracle	Ora_Perf	openview	DBSPI-0023.1: Current buffer cac
Min	--X-X--	01/26/00	05:51:49	hpptc27.ro	Oracle	Ora_Perf	openview	DBSPI-0023.1: Current buffer cac
Norm	--X----	01/26/00	07:34:01	hpptc27.ro	HP IT/Opera	OpC	opchistdw	Download of history messages sta
Norm	-----	01/26/00	08:18:16	hpptc27.ro	/usr/bin/lo	Security	pittssu	Succeeded login of pittssu on dt
?	-X----	01/26/00	08:18:23	hpptc27.ro	/usr/sbin/s	OS		Jan 26 08:18:12 hpptc27 inetd[14

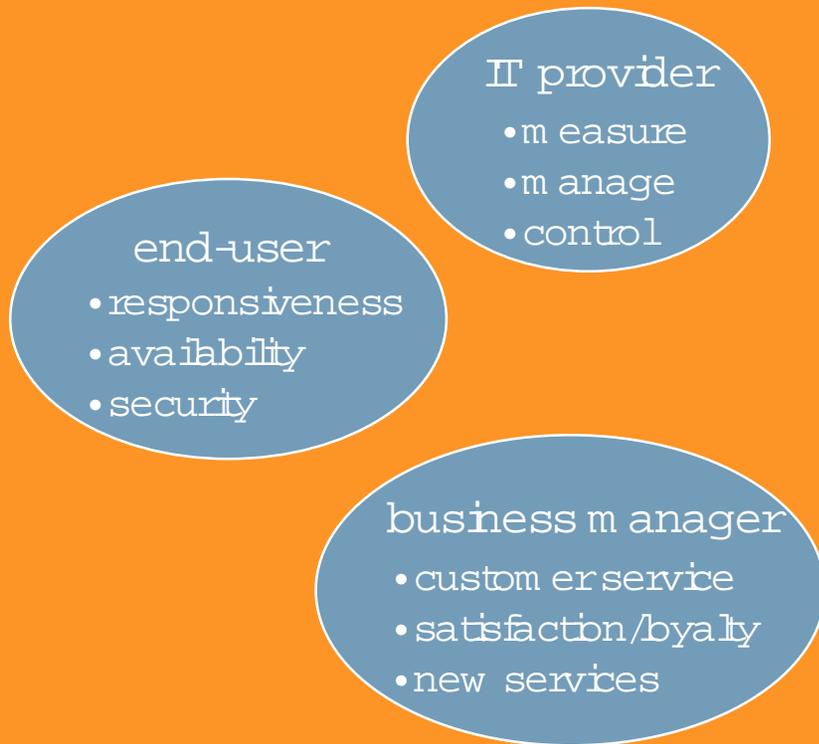
HP-UX servicecontrol: three-tier workload management tools

business-driven goals for multiple applications on a single

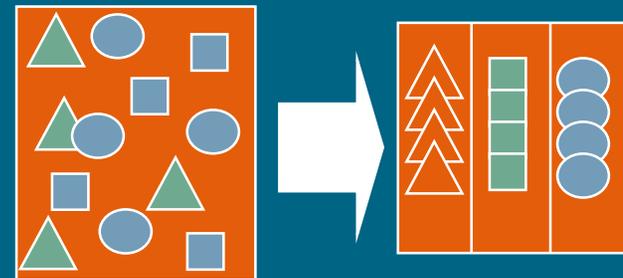
for every mission-critical environment	server HP-UX workload manager (includes PRM)	Goal-based resource management automatic change of CPU allocation
for every mid-tier application server	process resource manager (PRM)	Controls CPU, memory, disk I/O dynamic change of resource allocation
bundled with every hp 9000 server	WebQoS peak	management of peak demand for the web

optimized systems utilization only for hp 9000 servers

web quality of service (WebQoS)



- hp WebQoS peak = peak-usage-management, bad balancing
- hp WebQoS premium = user and service prioritization



internet today
unpredictable
inconsistent

internet with hp
predictable
consistent } service

user classes

- prioritizing users

service classes

- prioritizing applications

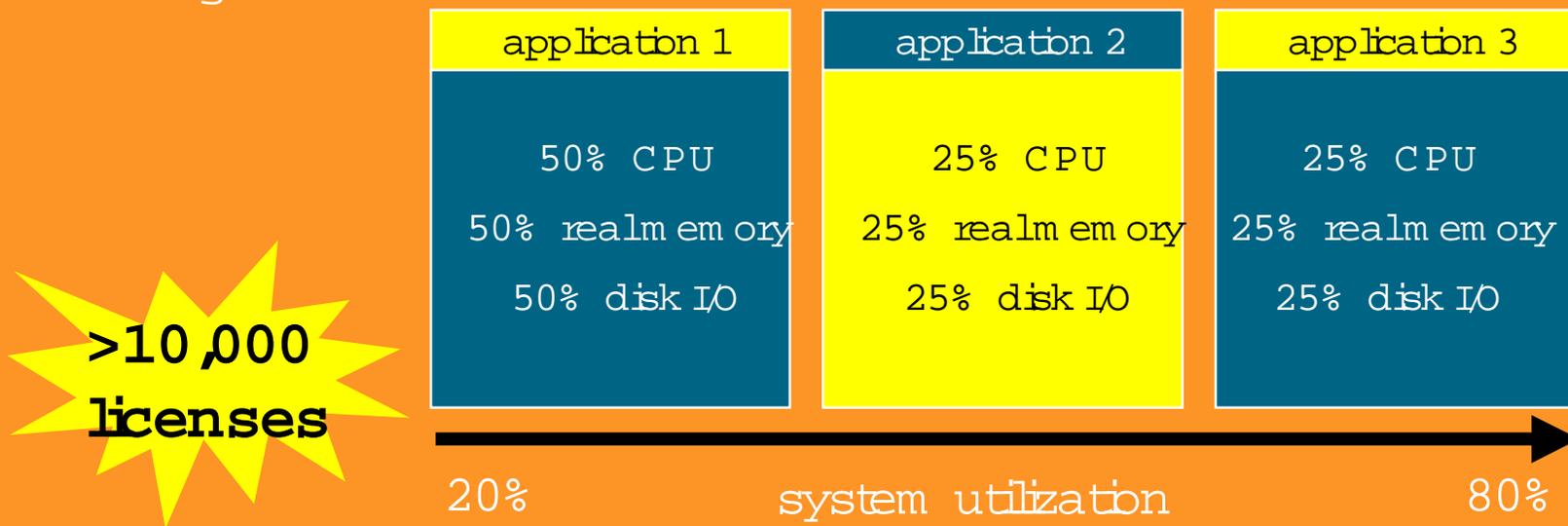
peak usage management

- handling the unexpected

hp process resource manager (PRM) : predictable service level management

PRM includes:

- PRM analyze to collect system accounting data for charge back and tuning



PRM allows you to drive up system utilization by running more applications per server: the result is a better ROI

HP-UX workload manager (WLM)

examples of service level objectives (SLOs)

application a

application
b

application c

response time SLO

transactions will complete
in less than 2 seconds.

response time SLO

transaction will complete
in less than 3 seconds

job duration SLO

batch job will finish in
less than 1 hour.

priority 1

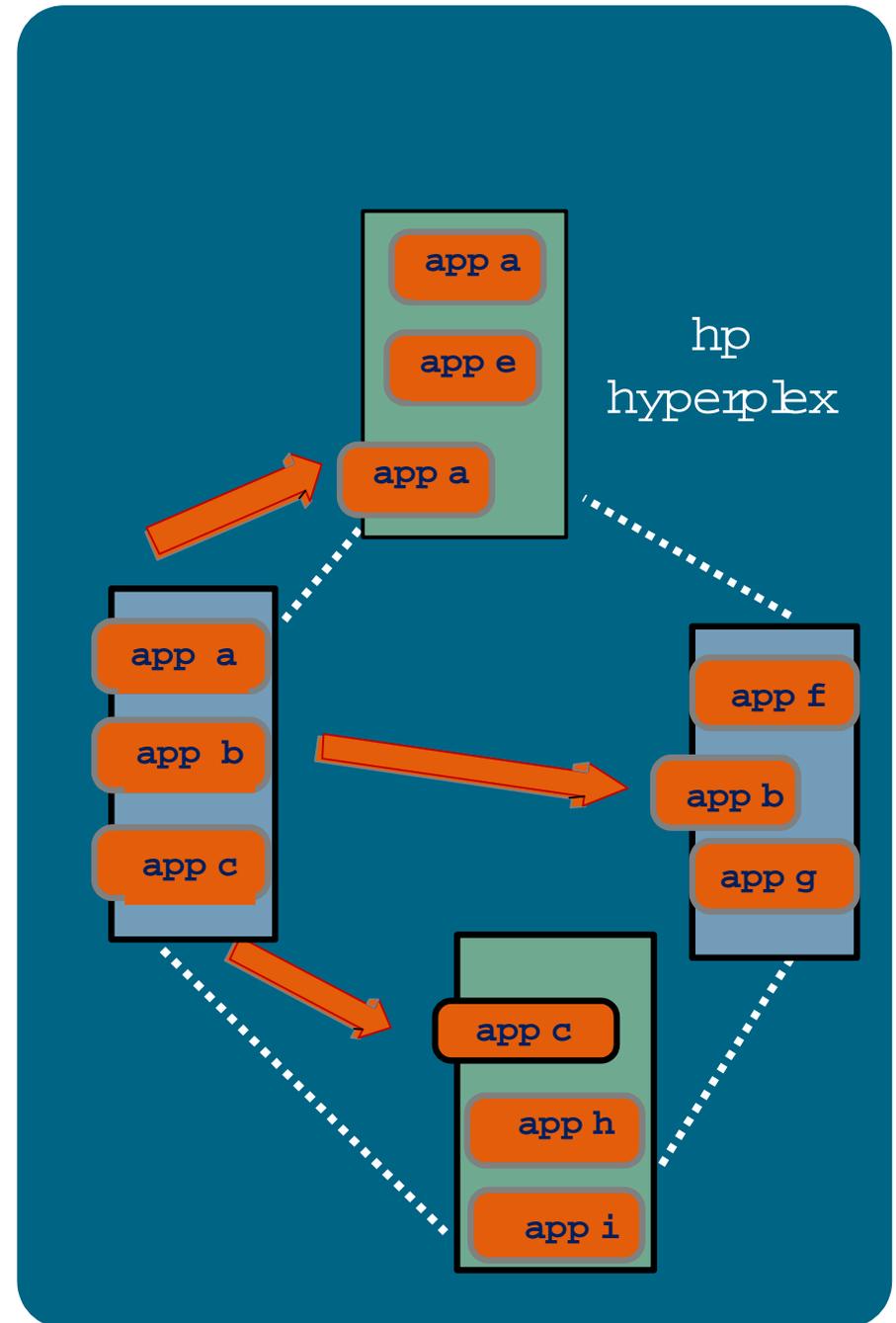
priority 2

priority 3

*HP-UX WLM automatically reconfigures CPU
entitlements to satisfy SLOs in priority order*

dynamic application
rehosting within an hp
hyperplex with
mc/serviceguard

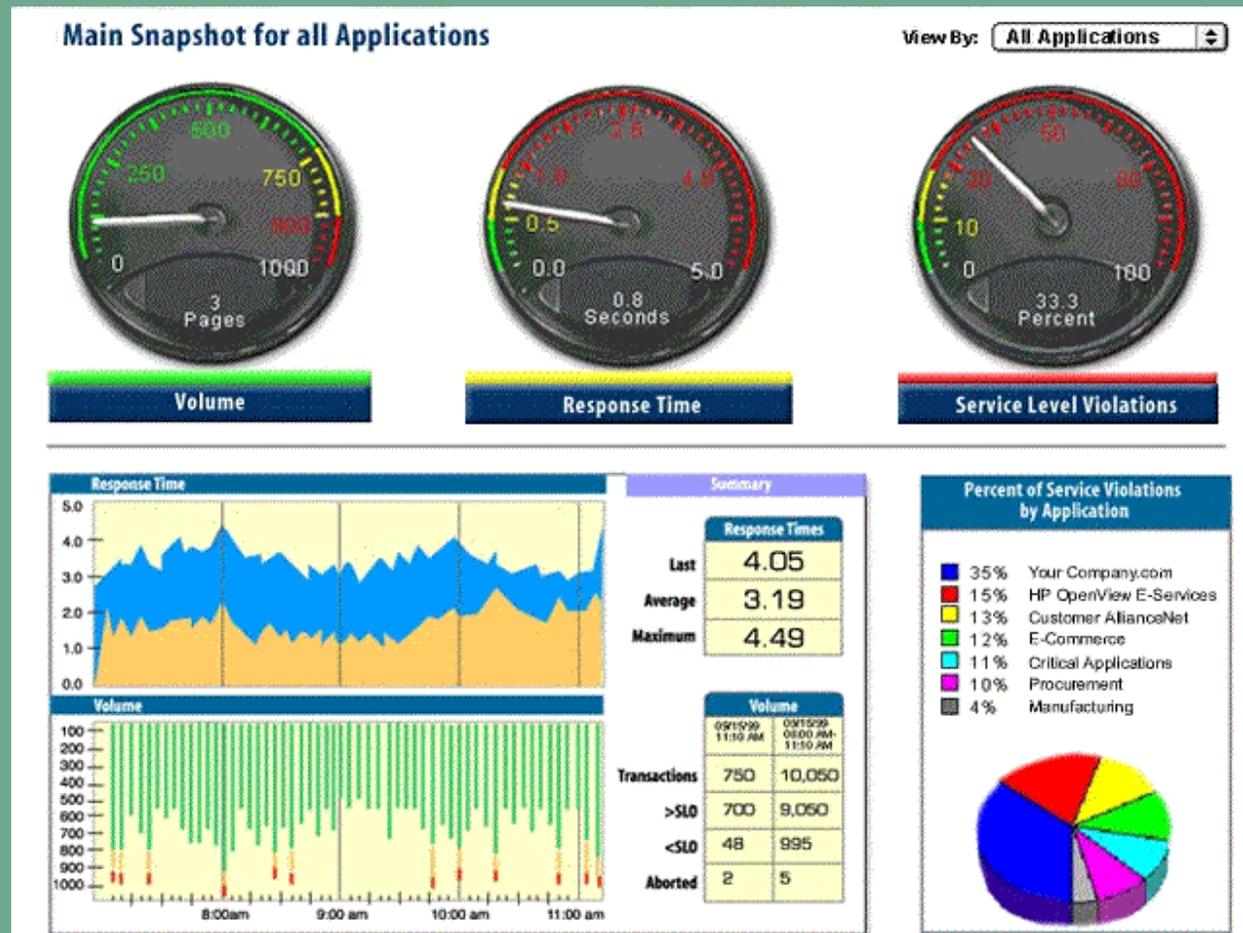
- minimize planned
service interruptions
- hardware/software
upgrades or
maintenance
- re-balance workloads
and processing
priorities with PRM



HP OpenView Vantage Point Web Transaction Observer

Your Customer's Perspective

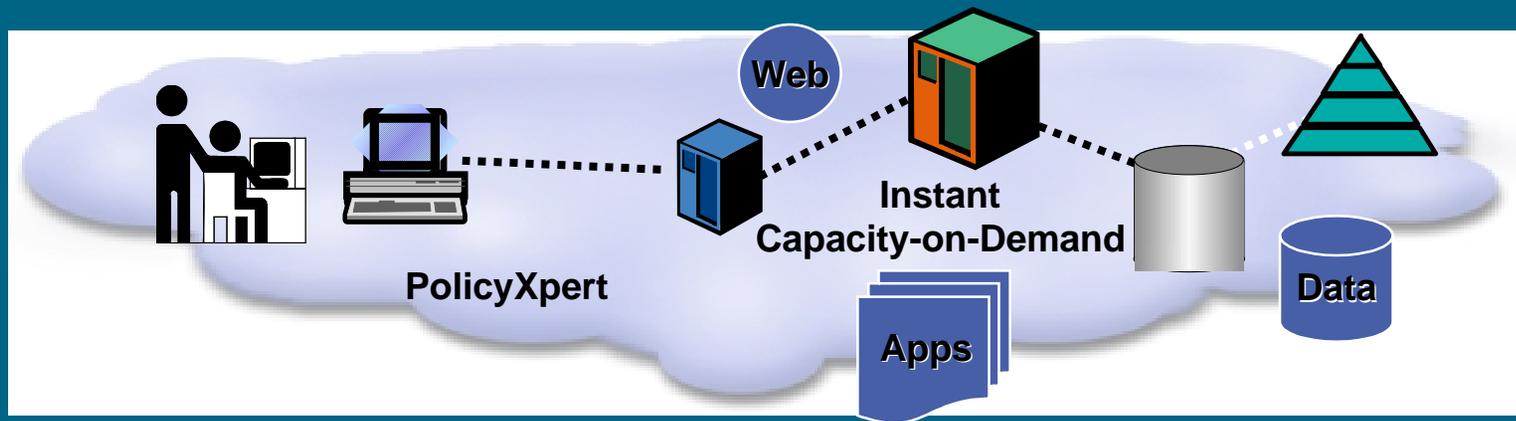
- Know how long customers had to wait to load your web page
- See point of failure in chain
- Drill down to specific reports



Manageability NOW :

Optimize your transactions end-to-end!

- **HP WebQoS** for peak workload & prioritization
- **HP VP Web Transaction Observer** to track customer's web experience & isolate bottlenecks



- **HP PRM/ HP-UX WLM** for optimized system resources
- **HP VP Operations:** End-to-end availability management solution for distributed, heterogeneous environments

ServiceControl

easy three-tier packaging

mission-critical environment

mid-tier application server

bundled with every hp 9000 server

servicecontrol mission-critical
HP-UX workload manager (*),
MC /serviceguard,
ECM (enterprise cluster manager) toolkit

servicecontrol enterprise
process resource manager,
hp online JFS, glanceplus Pak,
EMS HA monitors

servicecontrol essential
servicecontrol manager,
WebQoS peak, IgniteUX,
SAM, SDUX, EMS,
system configuration repository,
secure web console (for A L N -Class)

recommended add-on products: central web console, openview vantagepoint

(*) HP-UX WLM includes PRM

manageability NOW
with
flexible end-to-end
manageability

optimum user
experience

HP-UX servicecontrol
hp openview
outsourcing

