

Session 1212

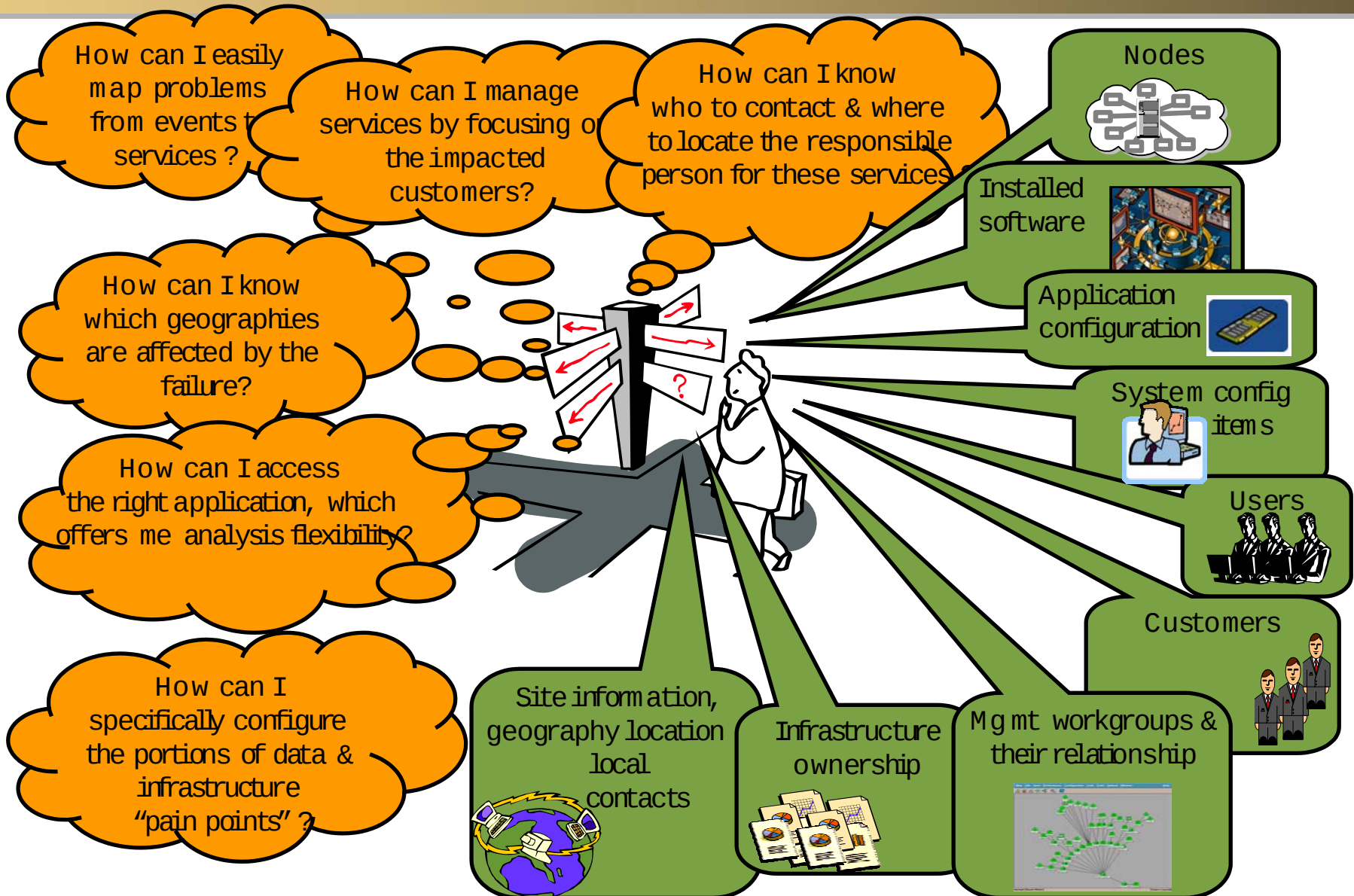
Adaptive, OpenView and Service Management (Service Management in Diverse IT Environments)

Jan-Maarten van Dongen

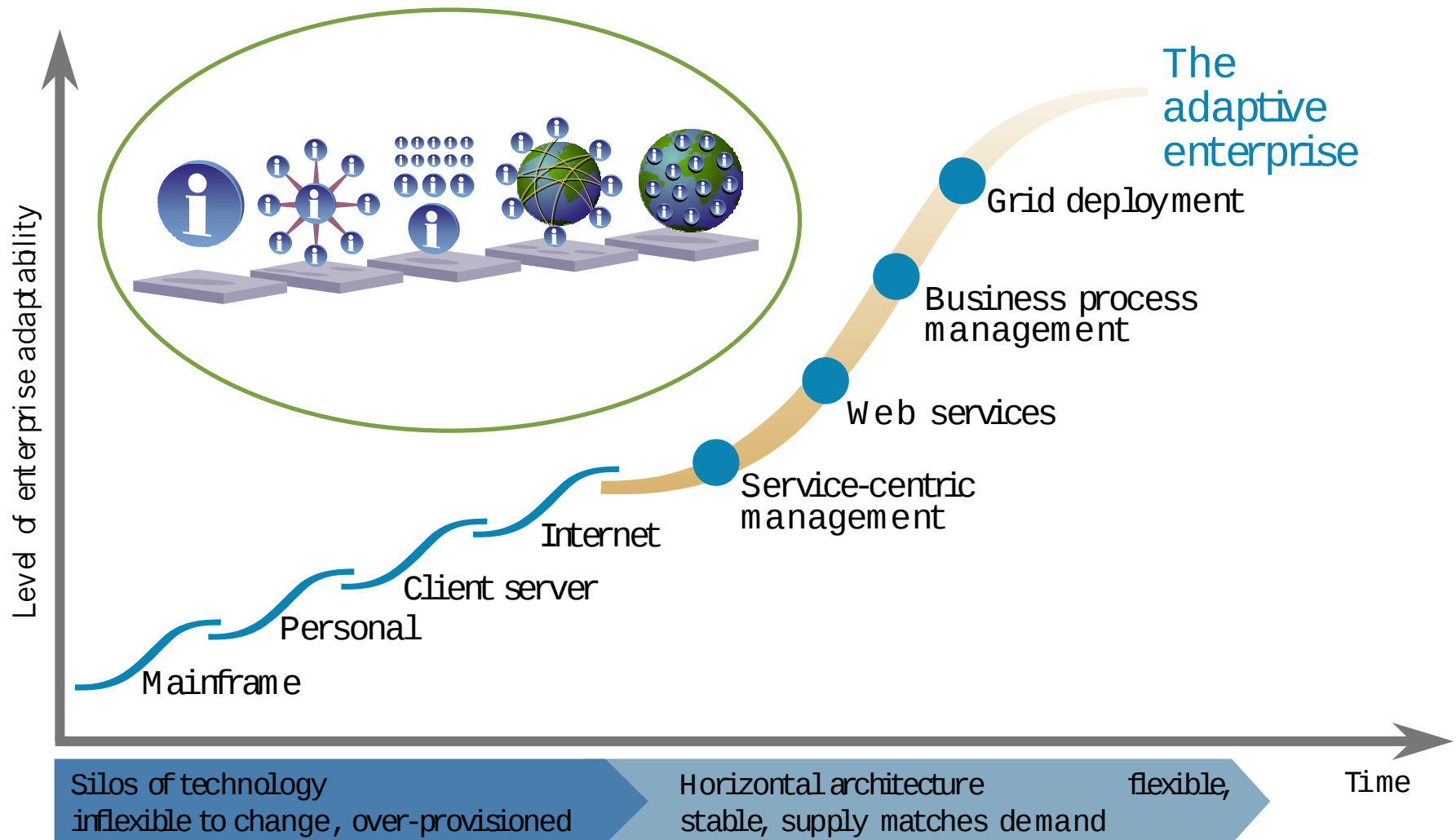
CTO hp OpenView
Hewlett-Packard Company



Problem Statement(s)



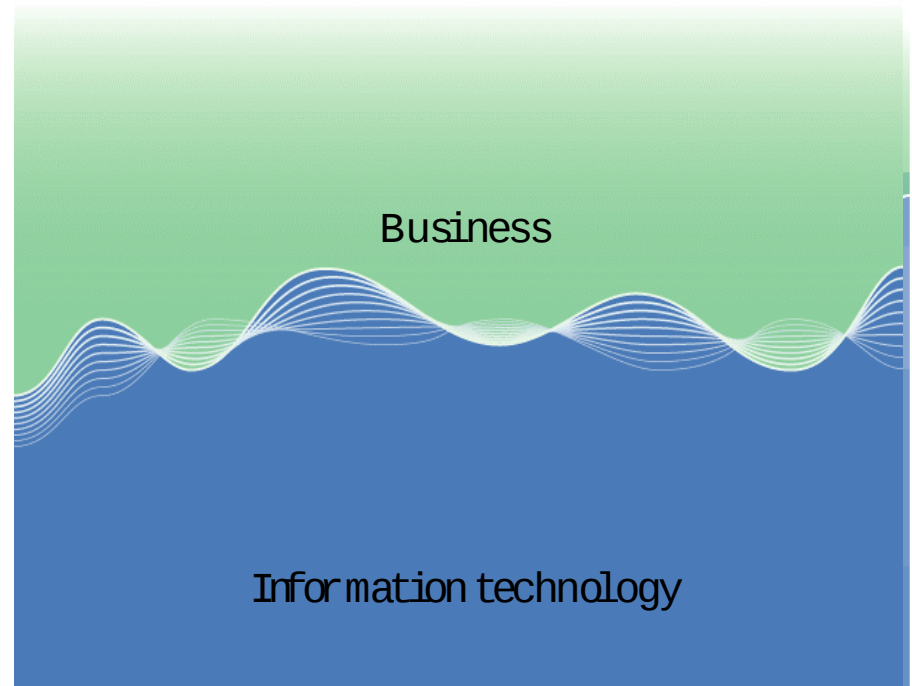
How did we get here?



HP's Adaptive enterprise

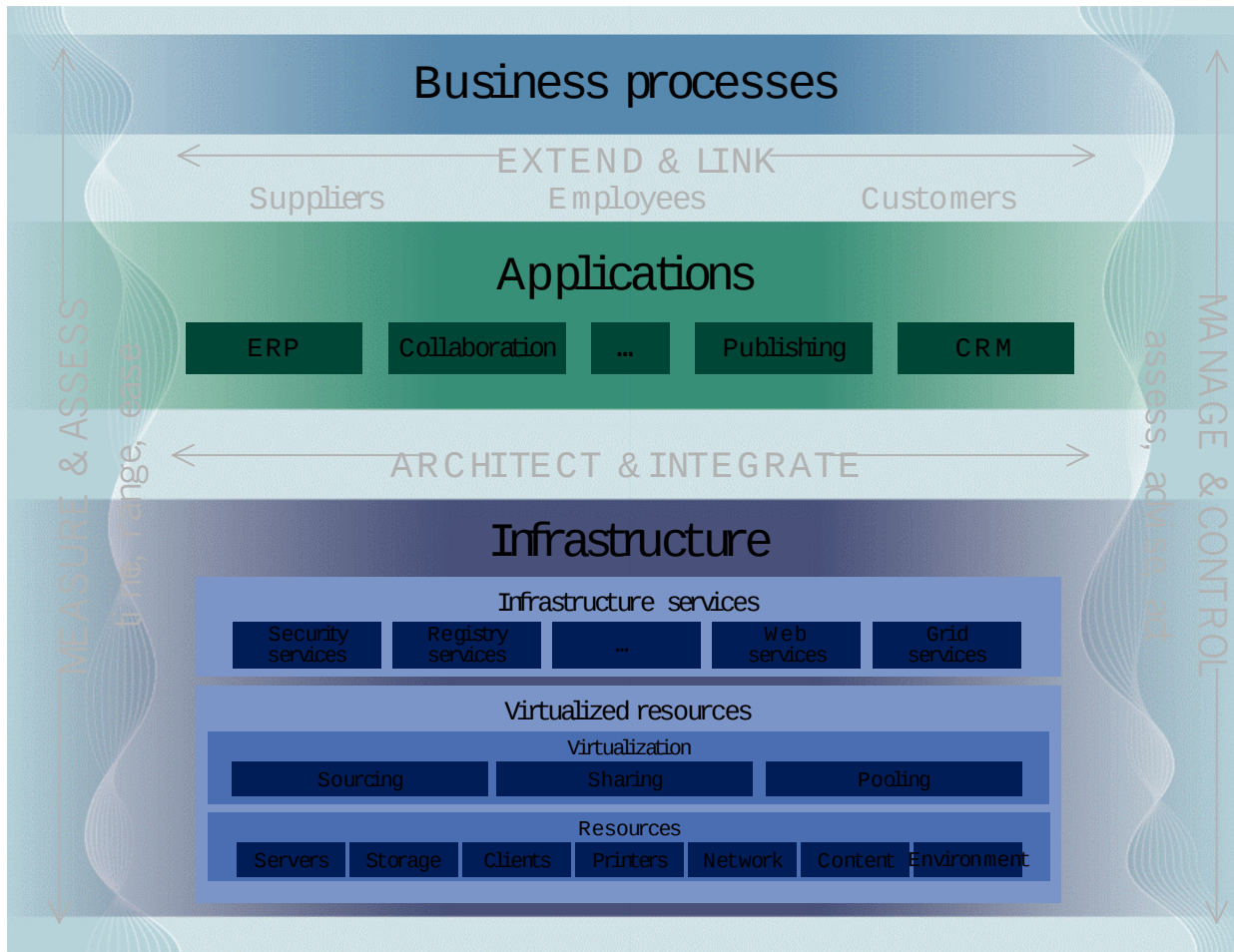
It's the ultimate state of fitness in a world where every business decision triggers an IT event.

1. Architect and integrate heterogeneous IT environments for stability and control
2. Establish and maintain a dynamic link between business and IT for business efficiency
3. Optimize resource utilization so supply flows to meet demand for maximum business agility



Darwin Reference Architecture

Elements of an adaptive architecture

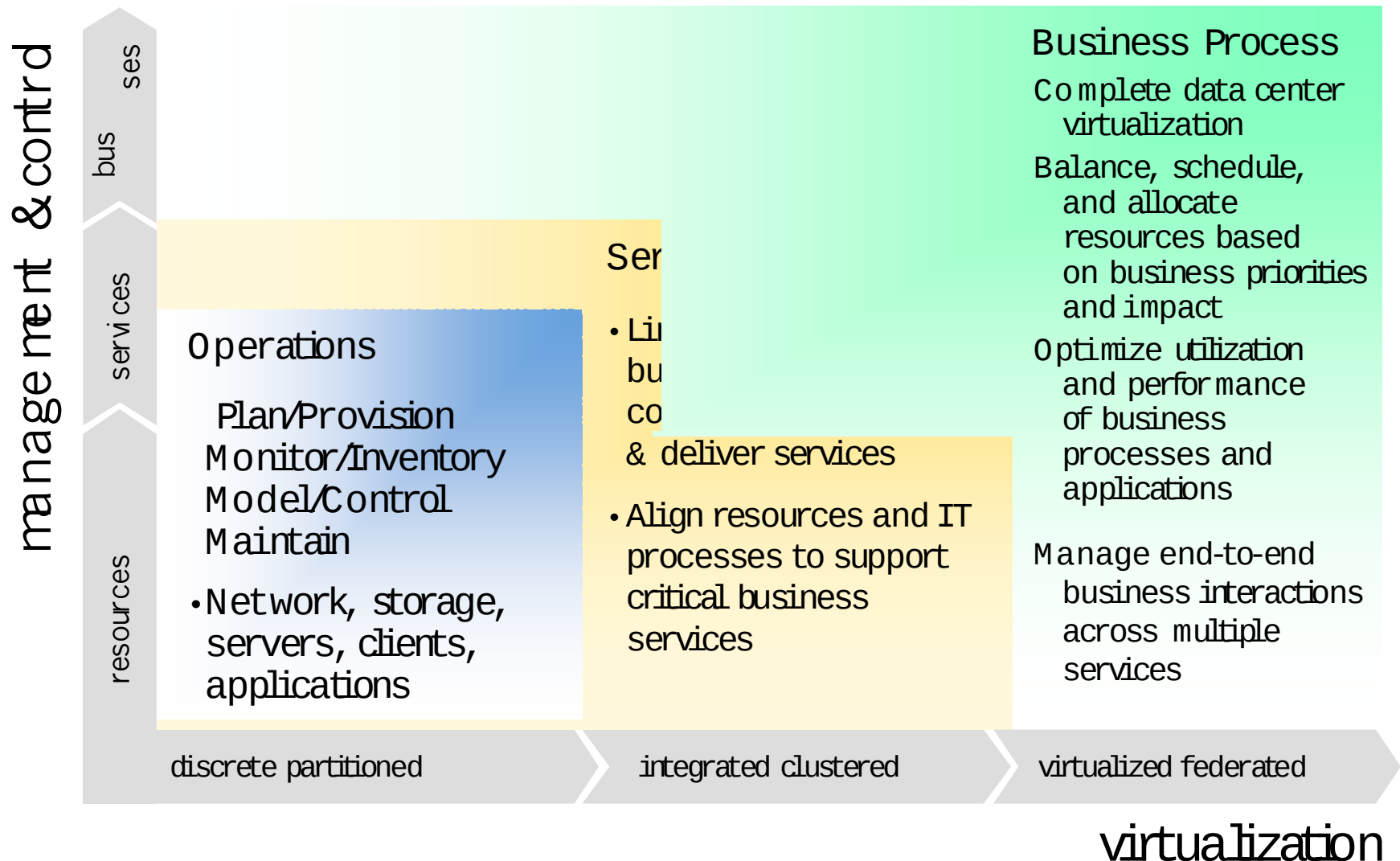


Automated intelligent management

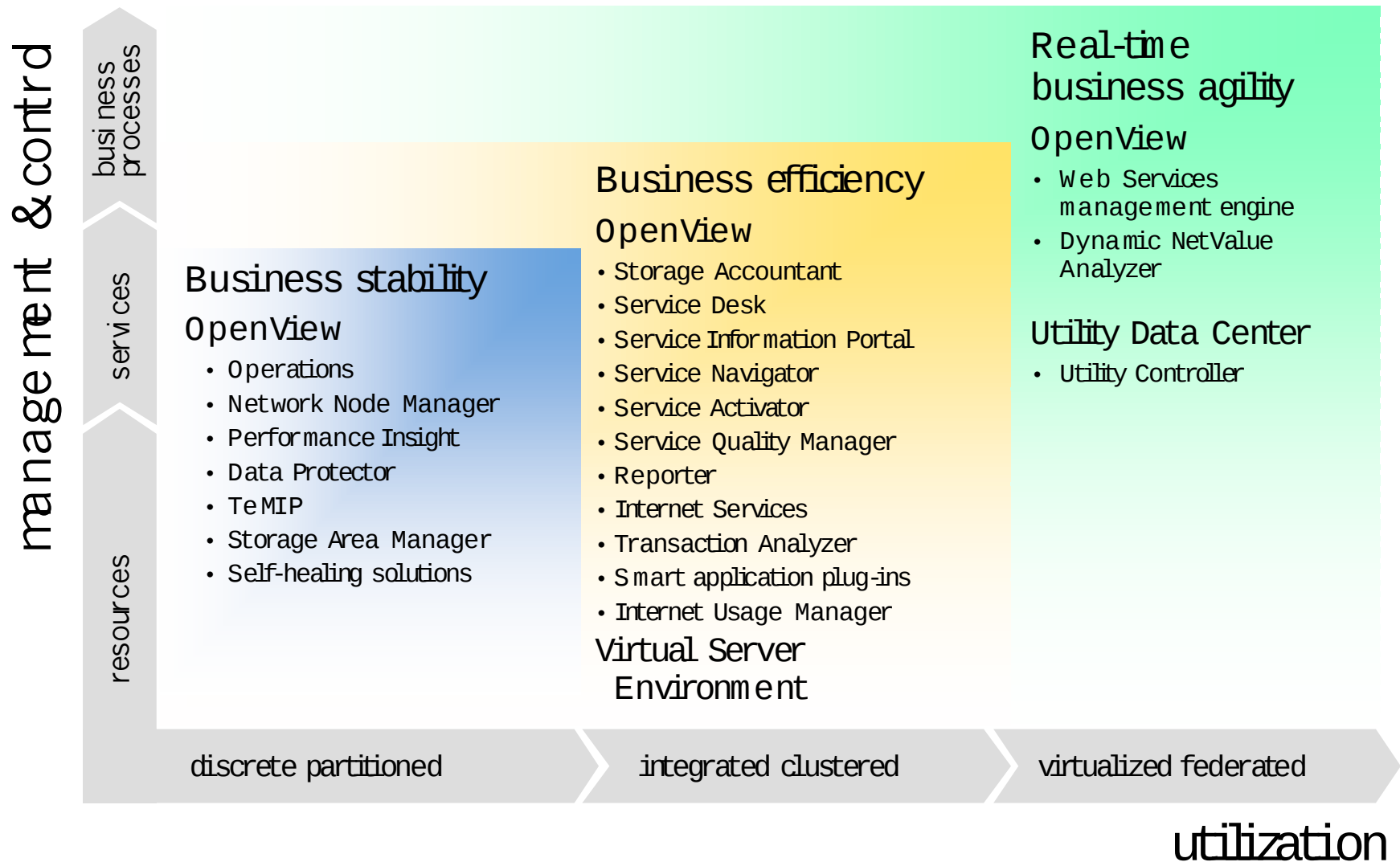
Dynamic resource optimization

Continuous secure operation

Management software directs virtualized resources

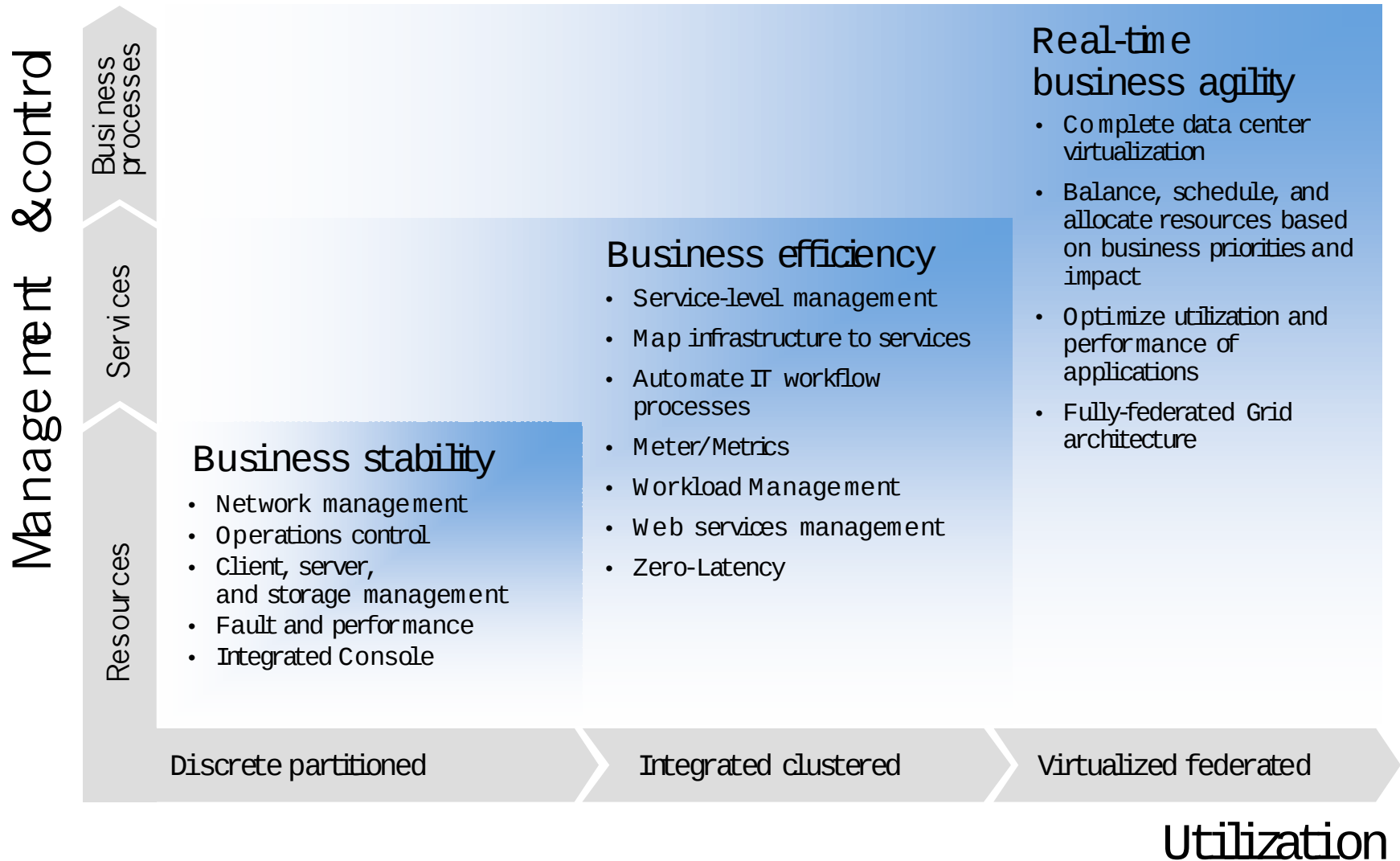


HP Software Offerings Today

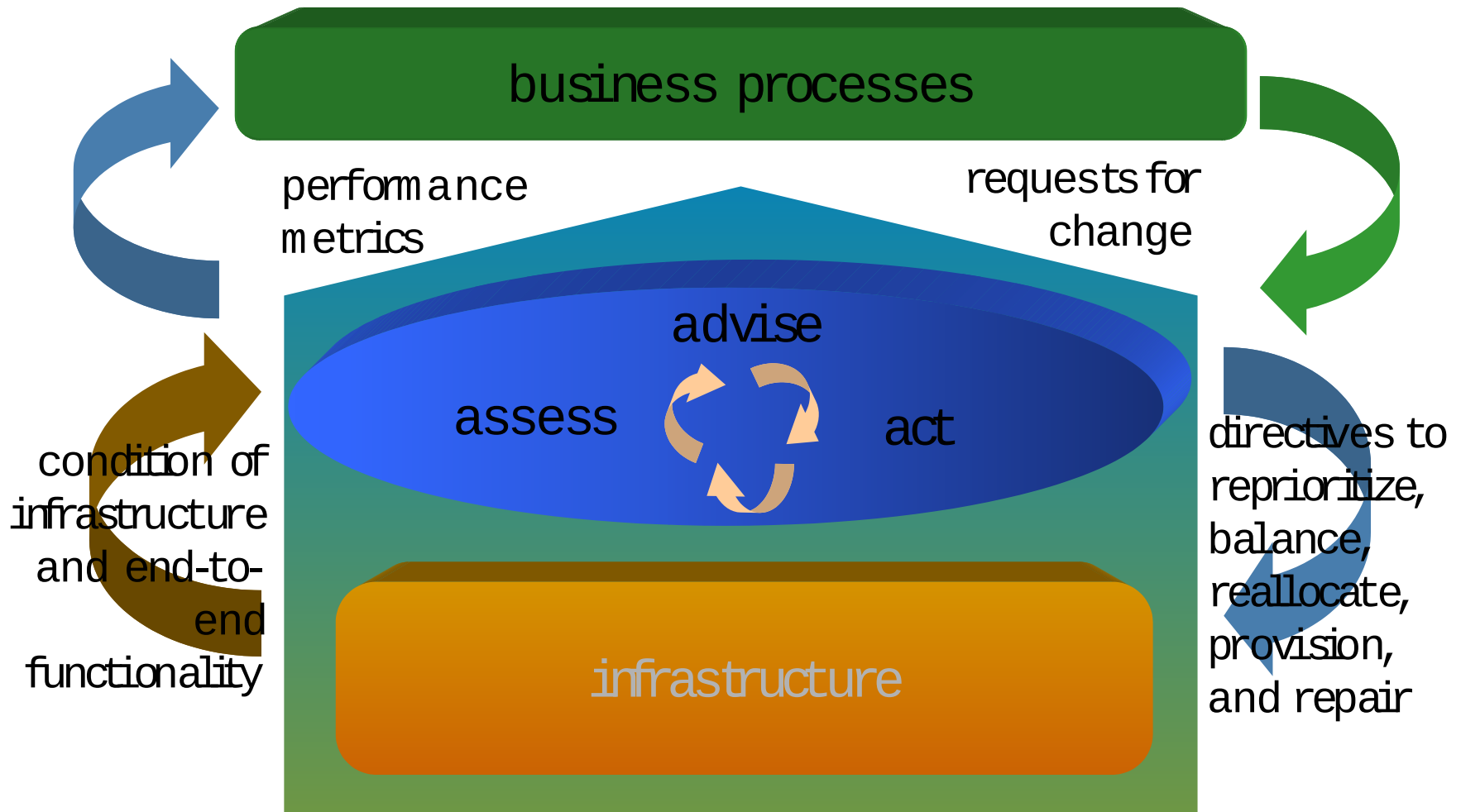


HP's mgmt software strategy

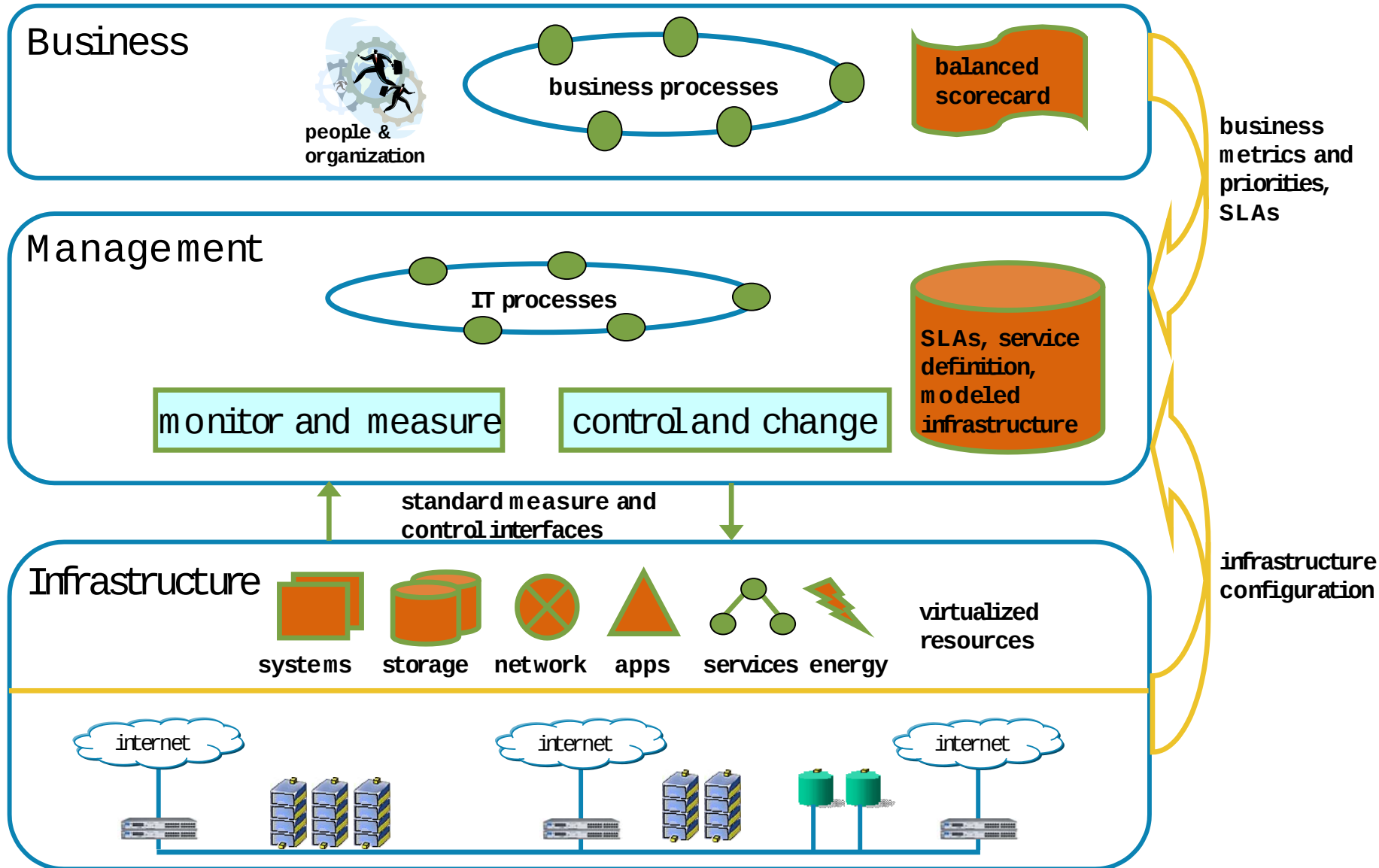
Automating mgmt is key to agility



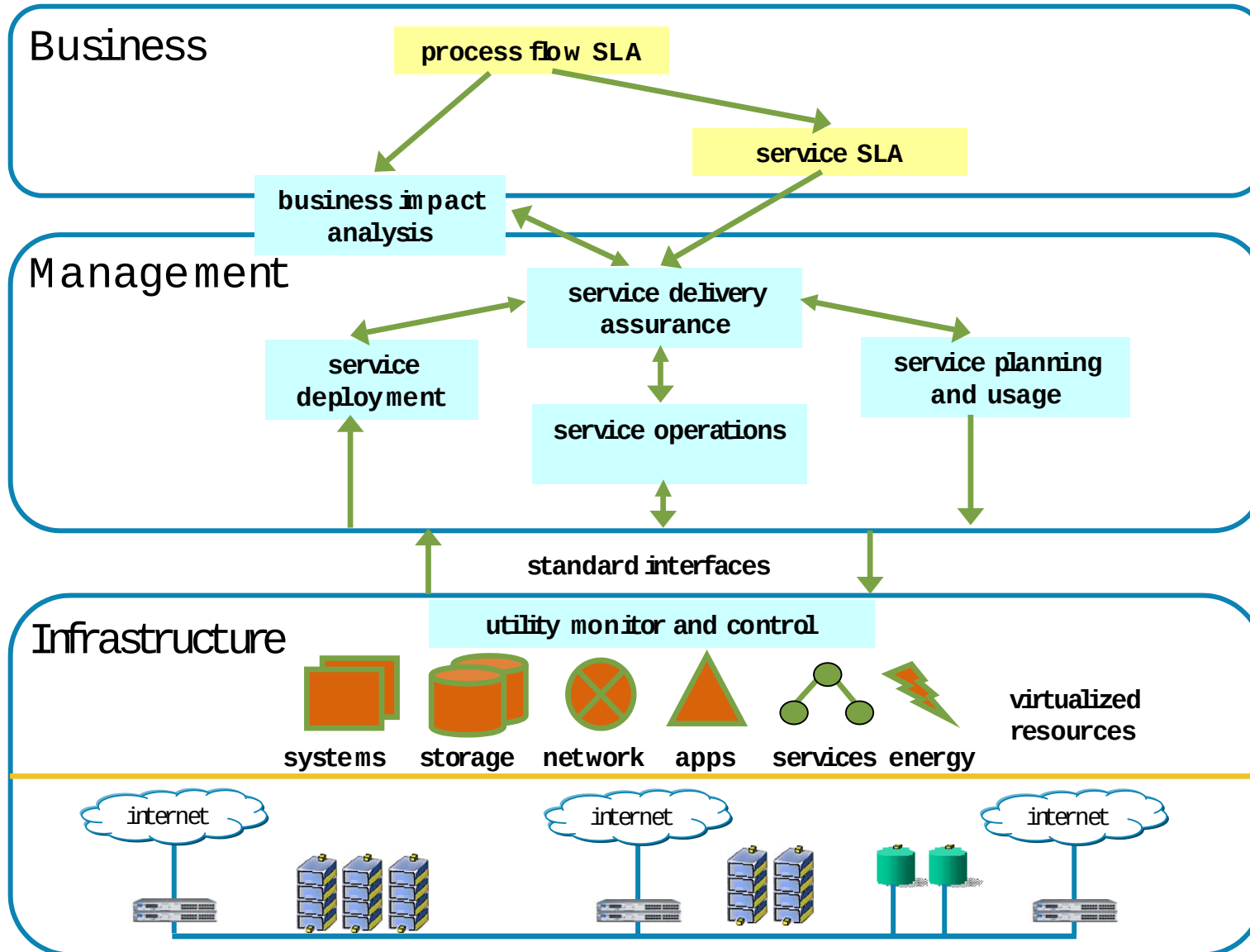
hp adaptive management - conceptual model



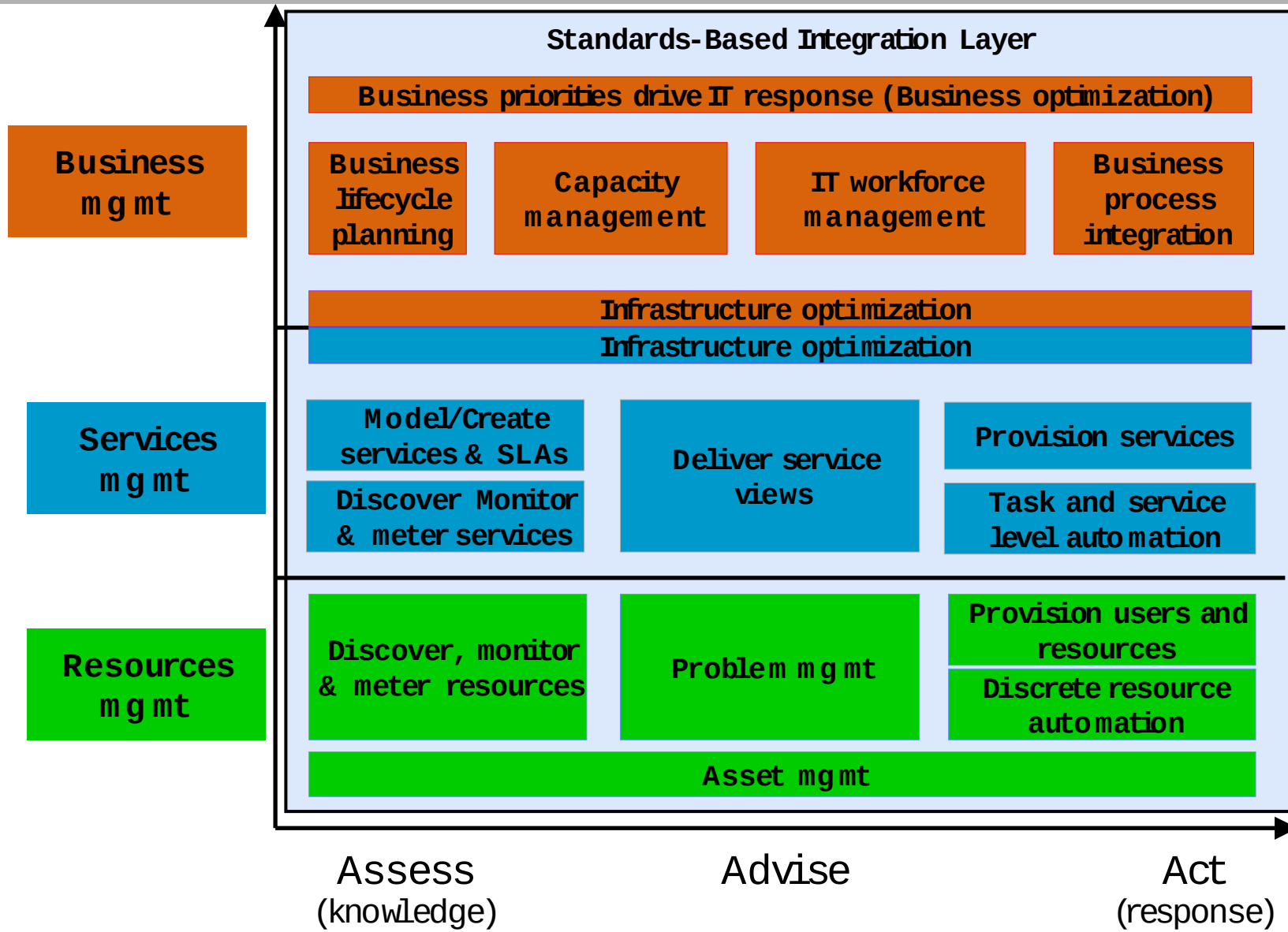
what is adaptive management



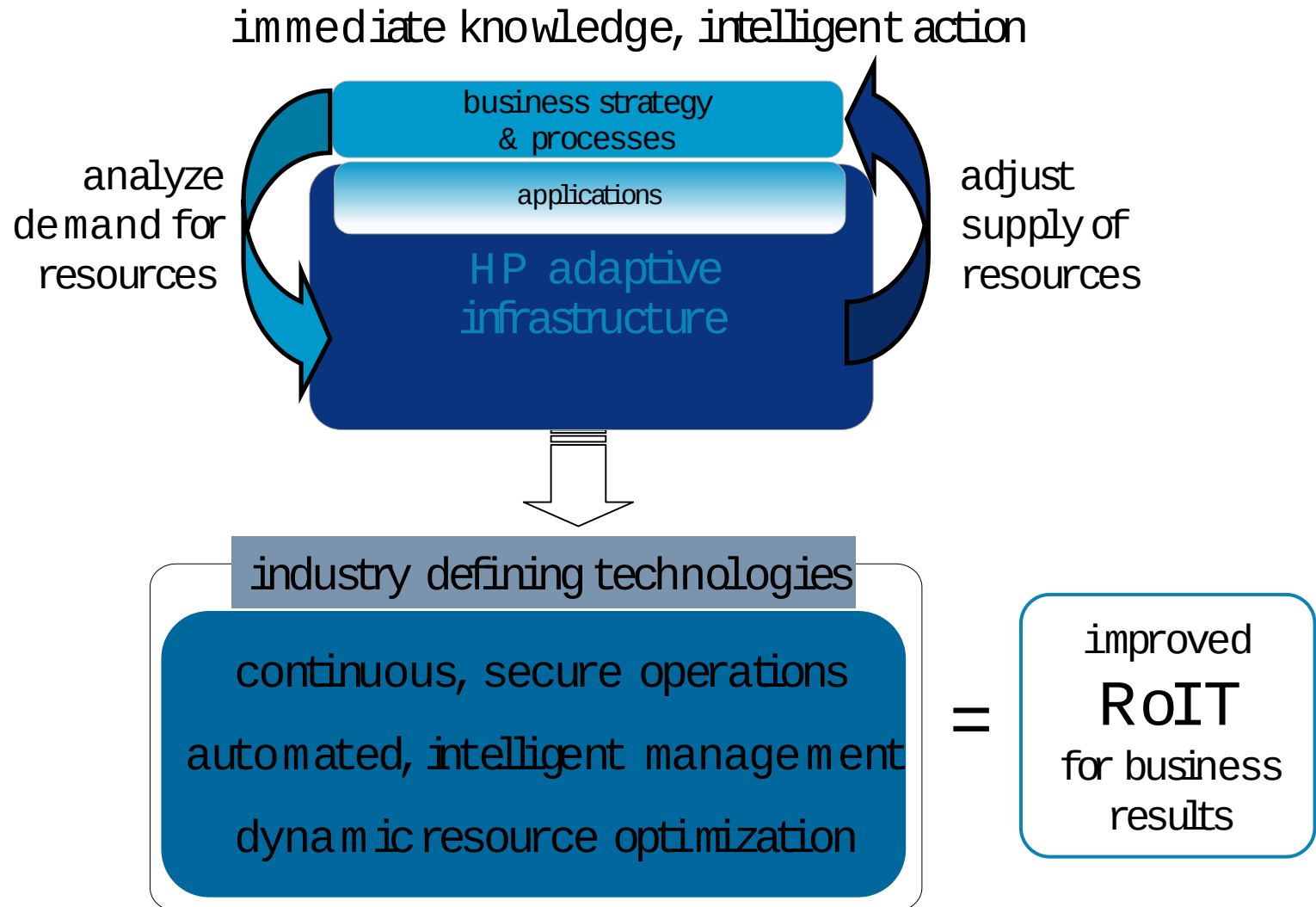
adaptive mgmt software - control points



What is Included in Adaptive Management?

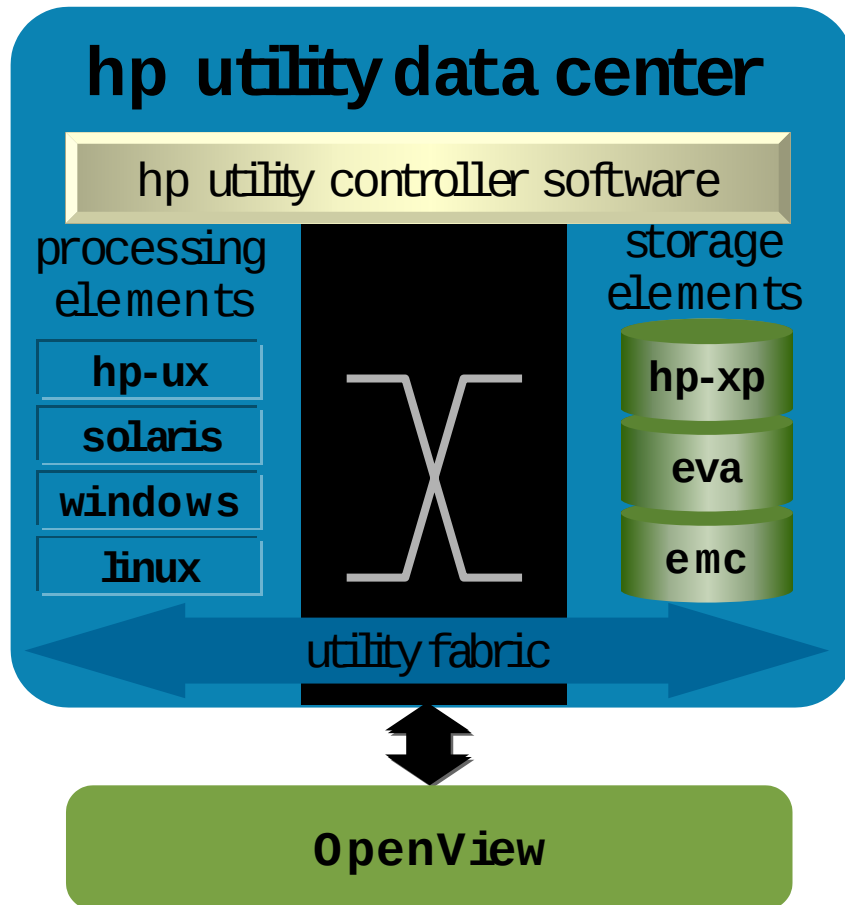


Business agility requires an HP adaptive enterprise



HP's Utility Data Center for Adaptive Infrastructure

consulting and
integration services



1. **wire once**
all components are wired once to support virtual allocation of resources for the entire system
2. **resource virtualization**
all networking, storage, and server components are wired once, and can be allocated and reallocated many times without having to rewire any physical components.
3. **utility controller**
simple user interface allows administrators to architect new systems and activate them using available resources

UDC Portal Interface

Hewlett-Packard Utility Controller Portal Editor - Microsoft Internet Explorer provided by Hewlett-Packard

hp invent

Main Editor Monitor

Help Account Logout

Editor

File Print Submit...

Elements

Farm Details

Name: newfarm1

State: Design Status: ☐ ☐

Service Type: Not Set

Service Core: Service Core 1

Requests:

Last Request Completed: N/A

Request Status: Ready to take new request

Resources:

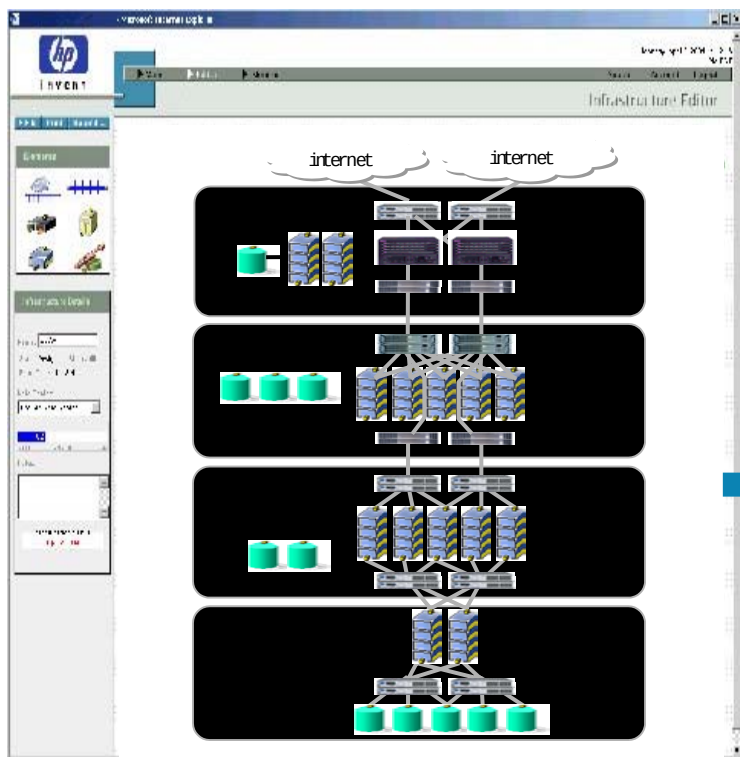
0	SU / hr	55
4	HP lp2000r	
0	HP rp2450	
0	HP rp5470	
0	HP rp7400	

Notes:

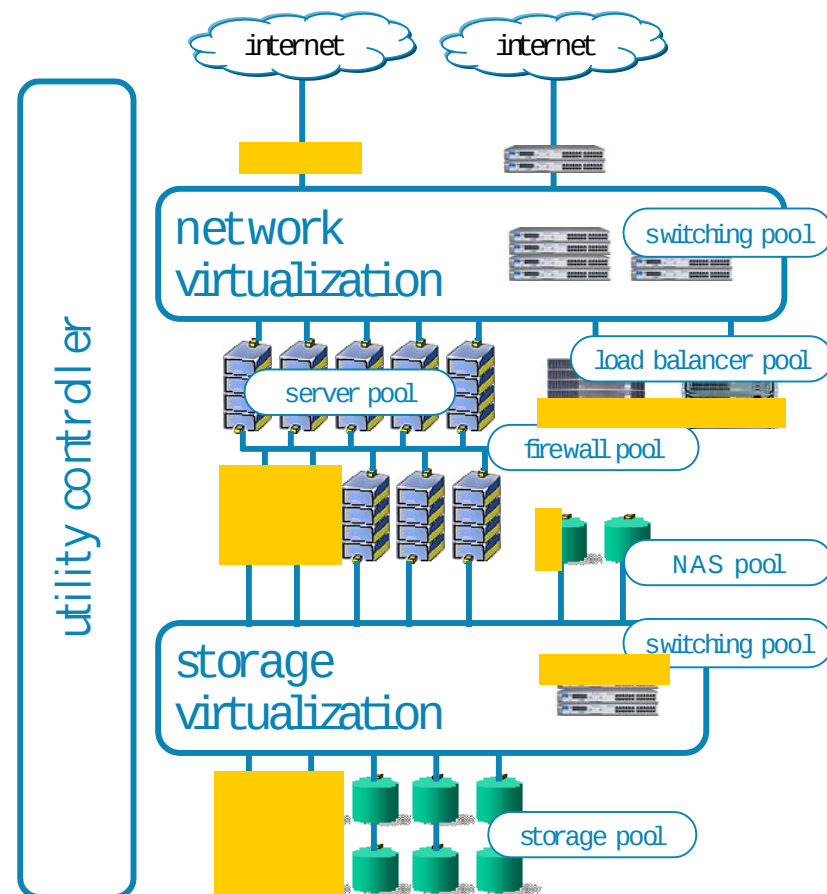
- Web-based interface
- Manages all UDC resources
- Enables configuration of new IT Services
- Enables changes to service definitions
- Automatic fault mgt. and rectification
- Tracks usage and bills users

the more things change

first, architect a new service in a simple web interface



then, activate it in the hp utility data center

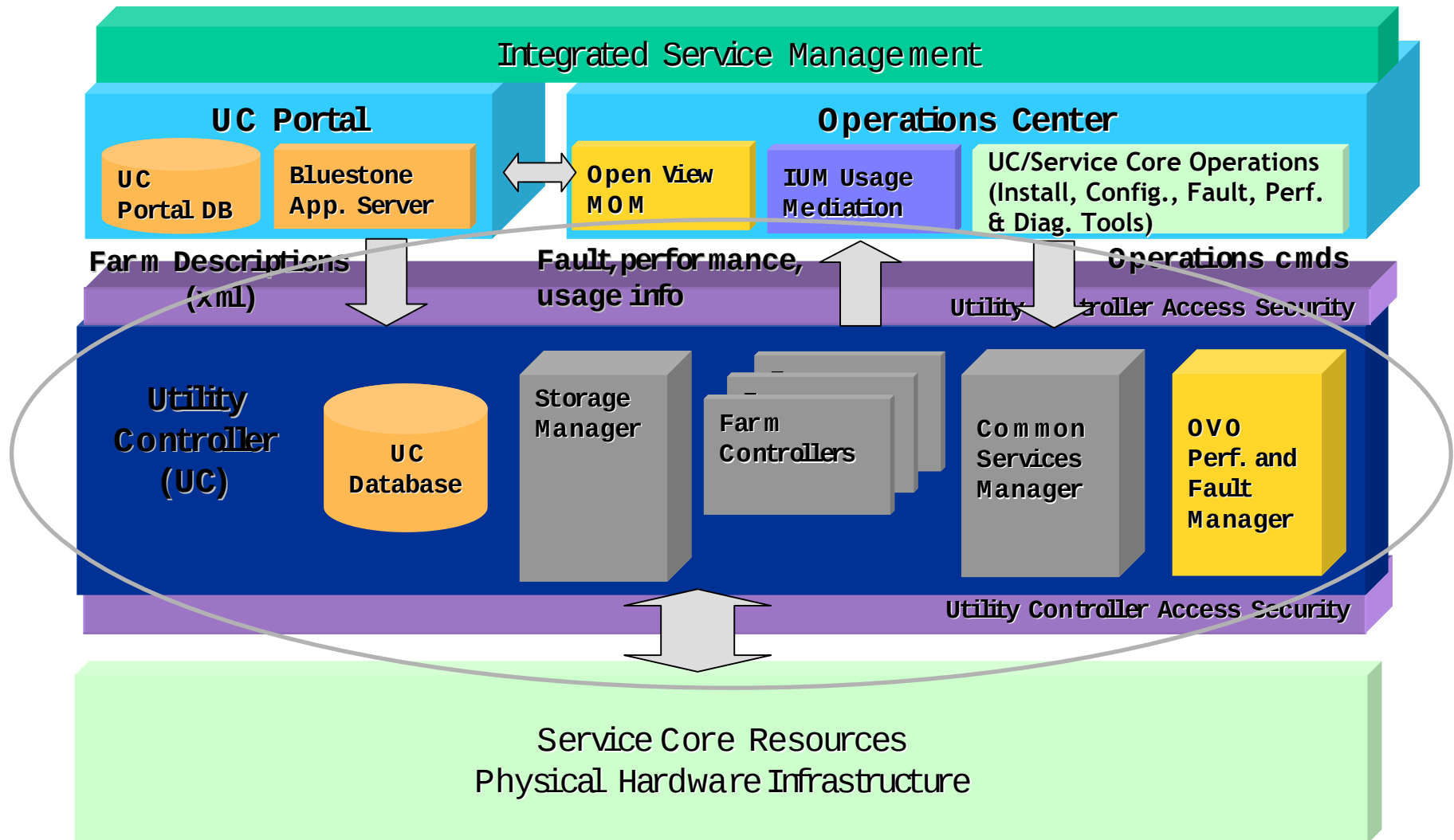


HP's Utility Data Center – the real thing!

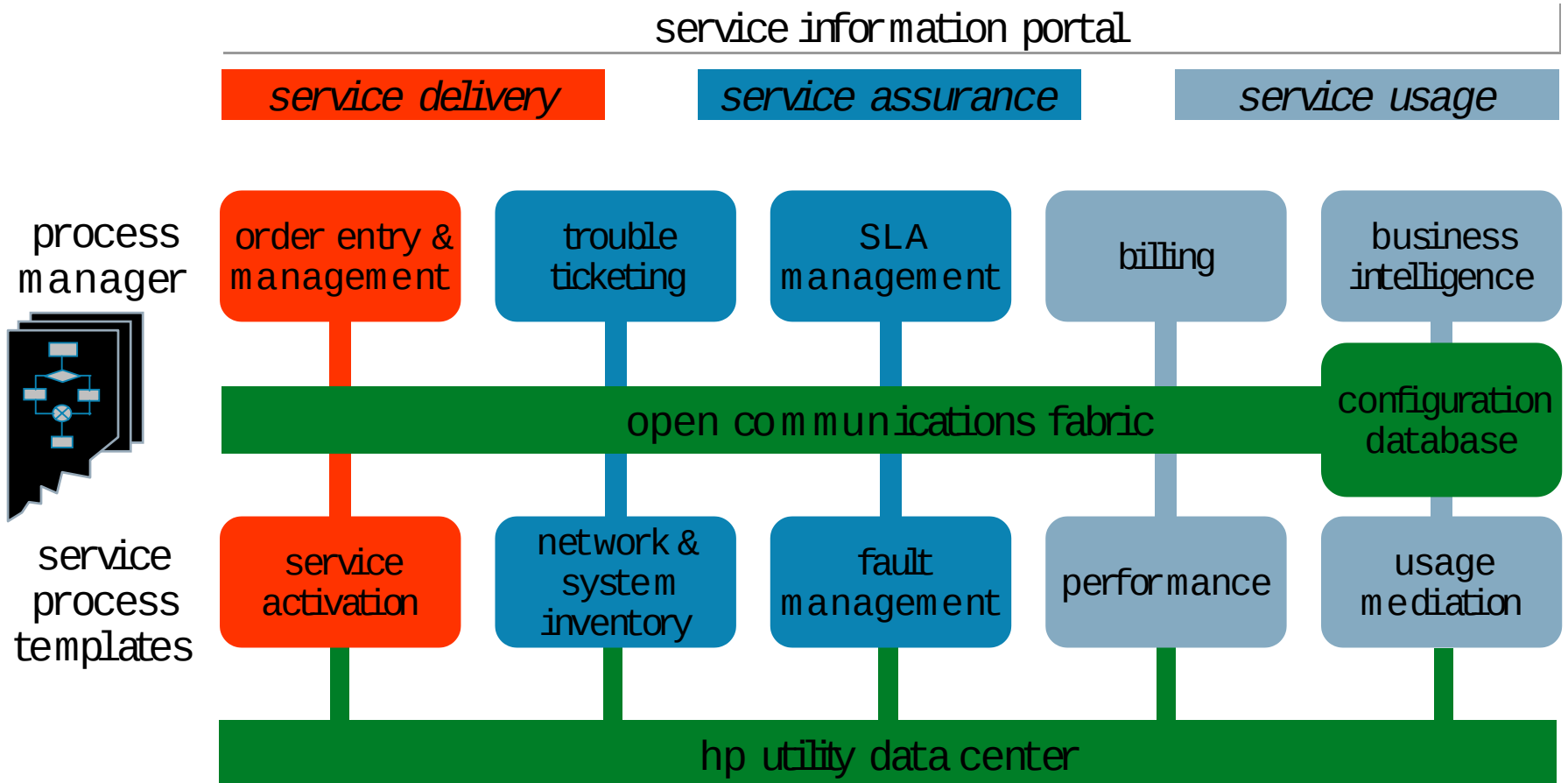


HP UDC at the Palo Alto Research Labs. 12/02

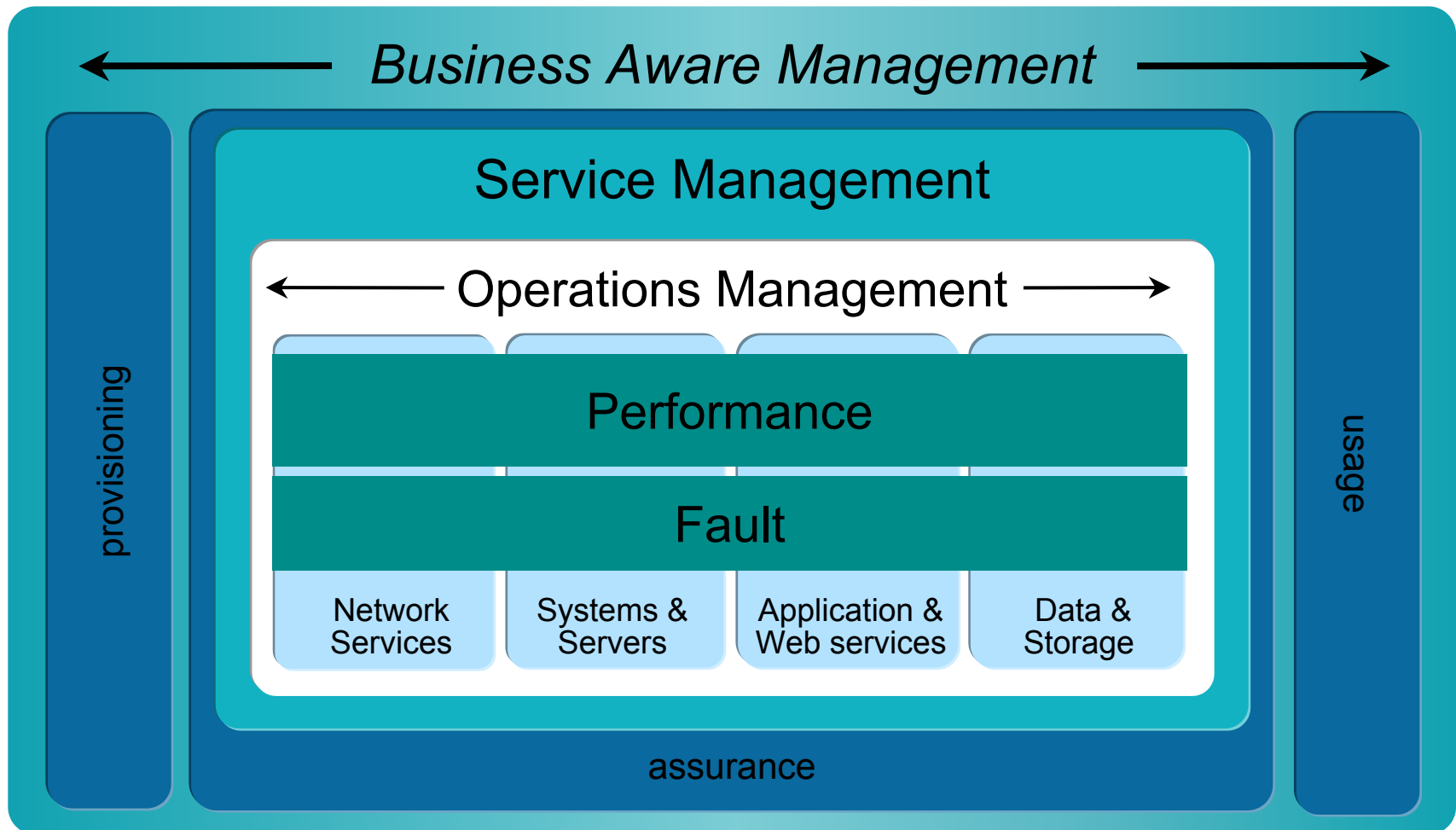
Utility Data Center Management - Architecture



HP UDC is a foundation for HP IT services management



HP OpenView Management Portfolio



HP OpenView Portfolio

Where the Products Fit



Service Activator

Service Desk, Service Navigator,
Reporter, Service Information
Portal

Service Monitor,
Service Quality Manager

OVPI
OVIS

OVPM/OVPA
GlancePlus

OVTA OVIS
SPI's

NNM Family
Network SPI's
TeMIP

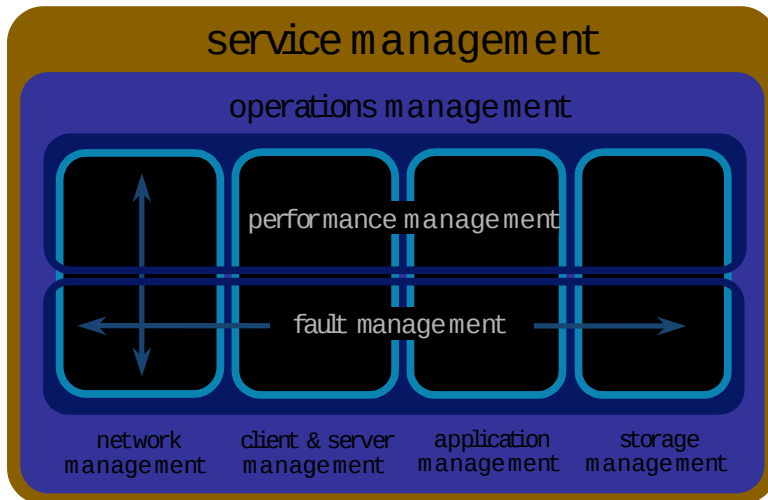
OVO
OS SPI's

WSM
Appl. SPI's
WSME

Storage Area Manager
Data Protector
Media Operations
Storage Virtual Replicator
Continuous Access Storage Appliance

Internet Usage Manager

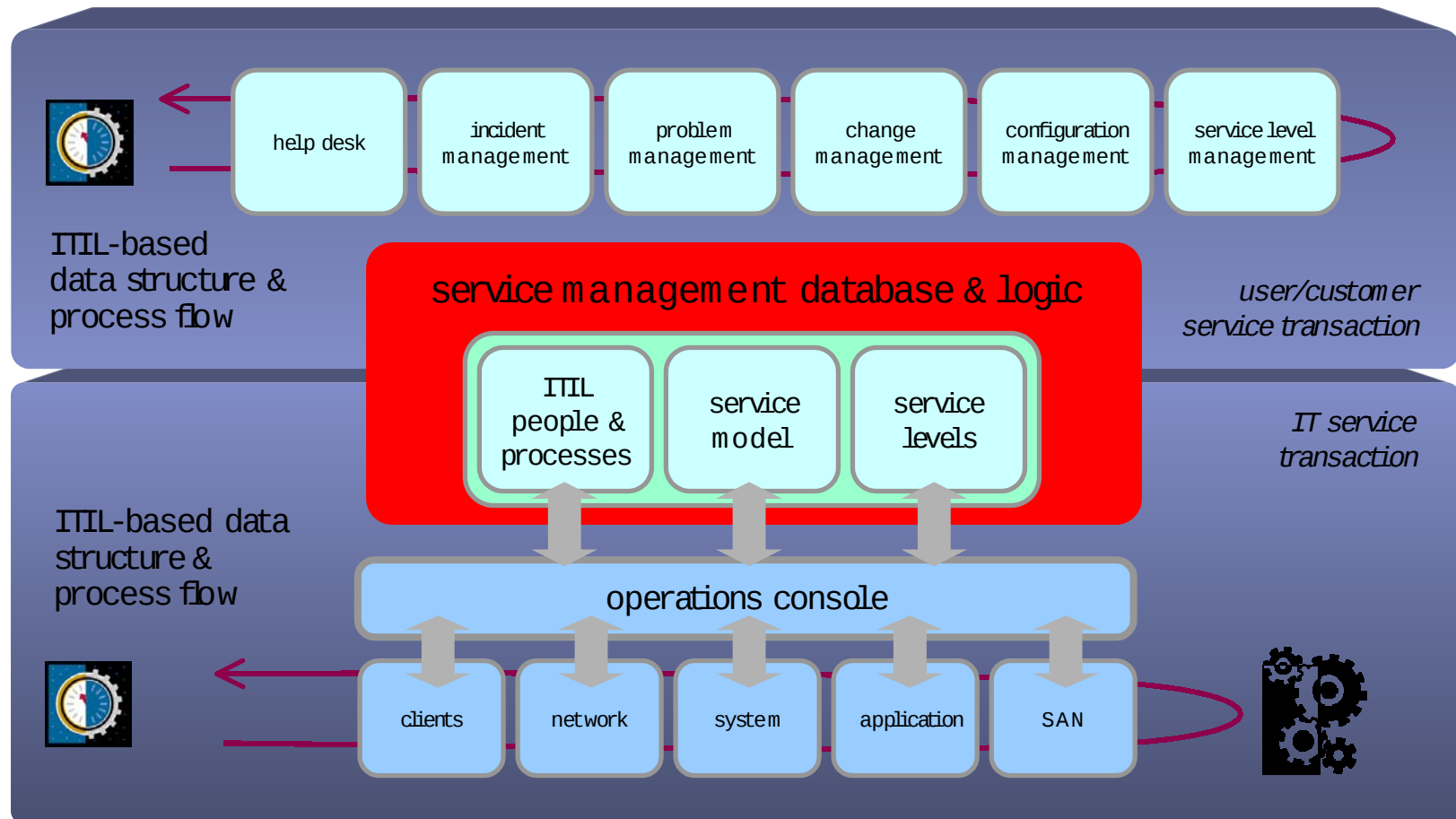
hp service level management: what's does it take



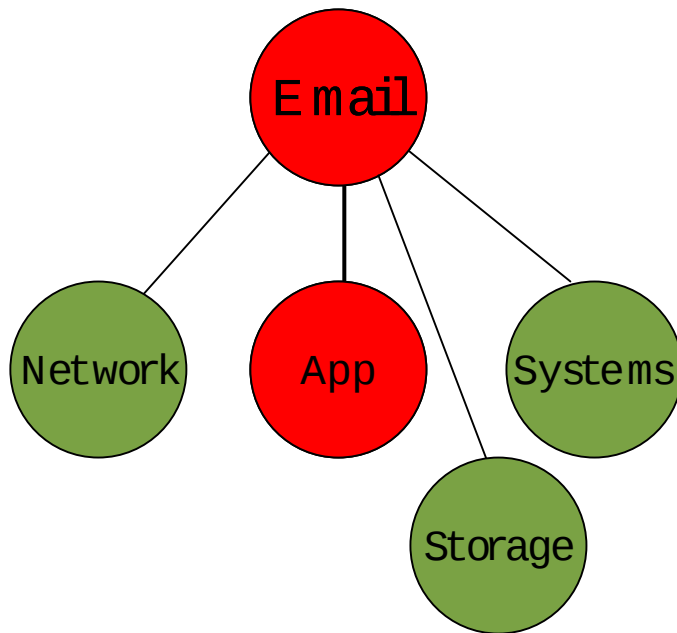
assess	■ model element/services dependencies ■ establish Service Level Agreements (SLAs) ■ populate CMDB with information about IT services, people, assets, SLAs ■ monitor SLAs by watching transactions and infrastructure ■ interface with customers through service desk, change and problem mgmt reporting
advise	■ evaluate impact of infrastructure problems on IT services ■ prioritize issues based on SLAs ■ deliver value and quality of service reports
act	■ establish automated actions to return services to agreed upon levels

hp service management: link top-down & bottom-up

linking people, processes and technology

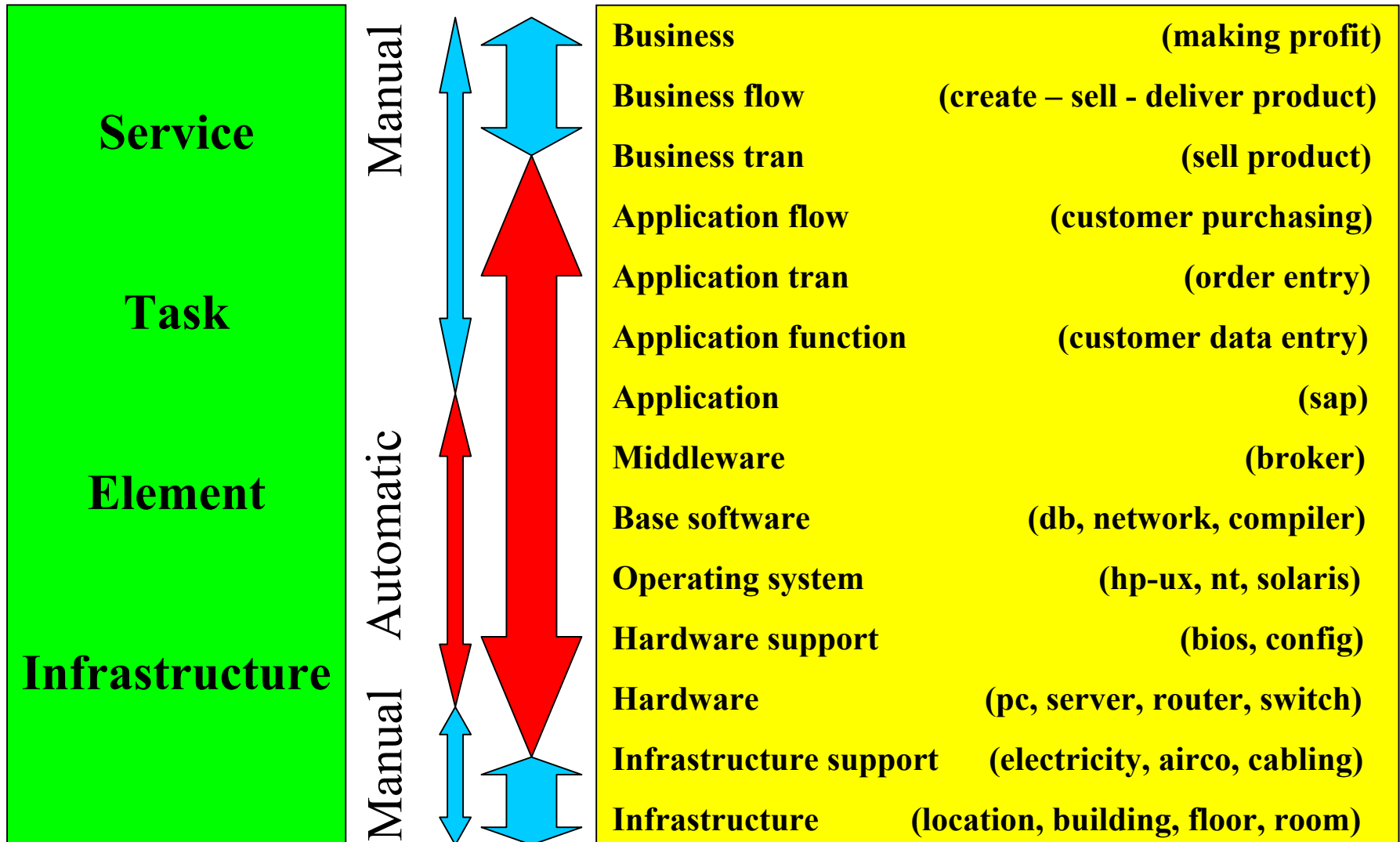


HP OpenView IT Service Management

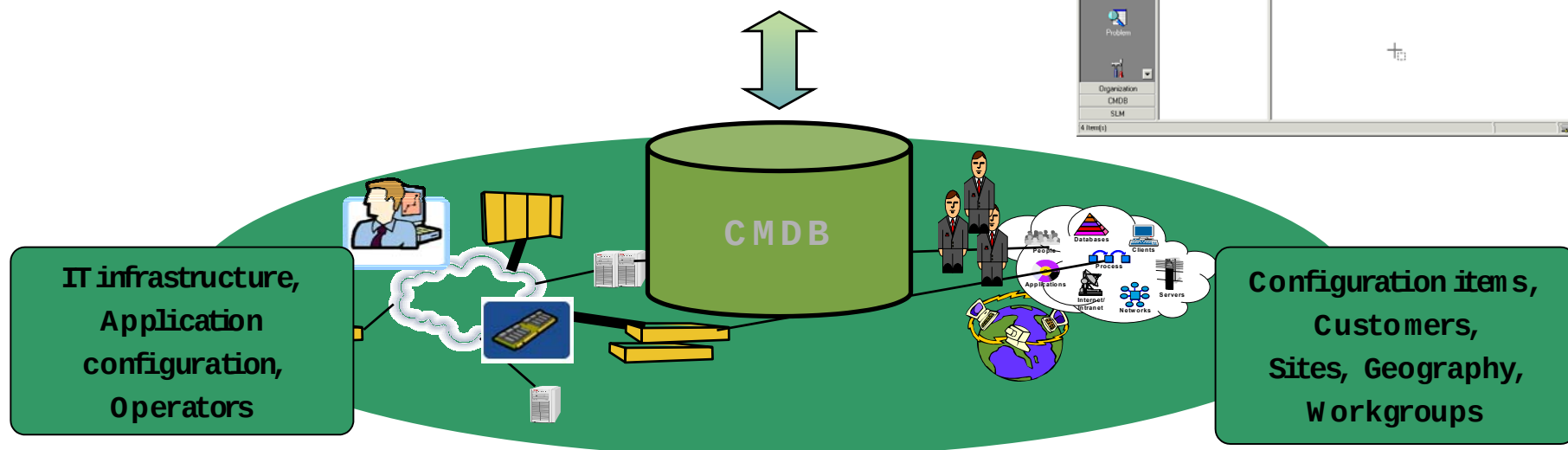
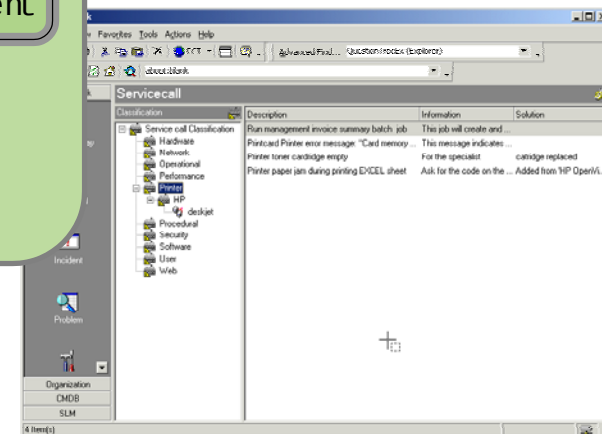
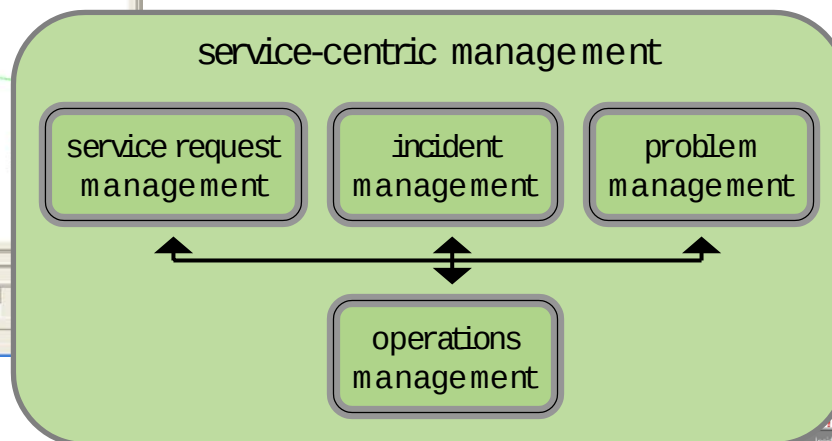
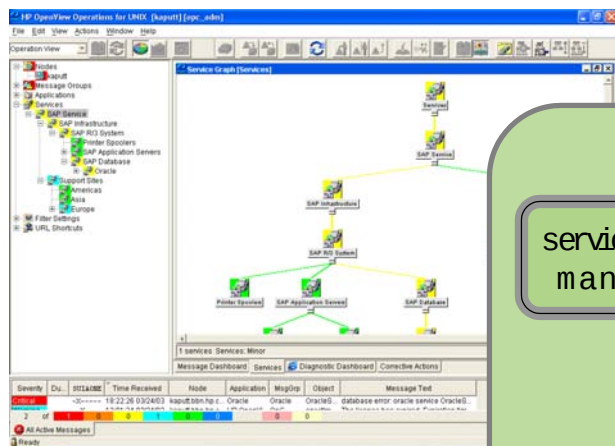


- Manage the availability and performance of each infrastructure component.
- Manage the availability, performance & customer experience of the service as seen by the user.
- Relates infrastructure elements to services so that:
 - The root cause of service level failures or degradation can be quickly identified.
 - The business impact of element failure can be determined.
- Demonstrate the value that IT delivers

Services : Linking, Mapping and Discovery



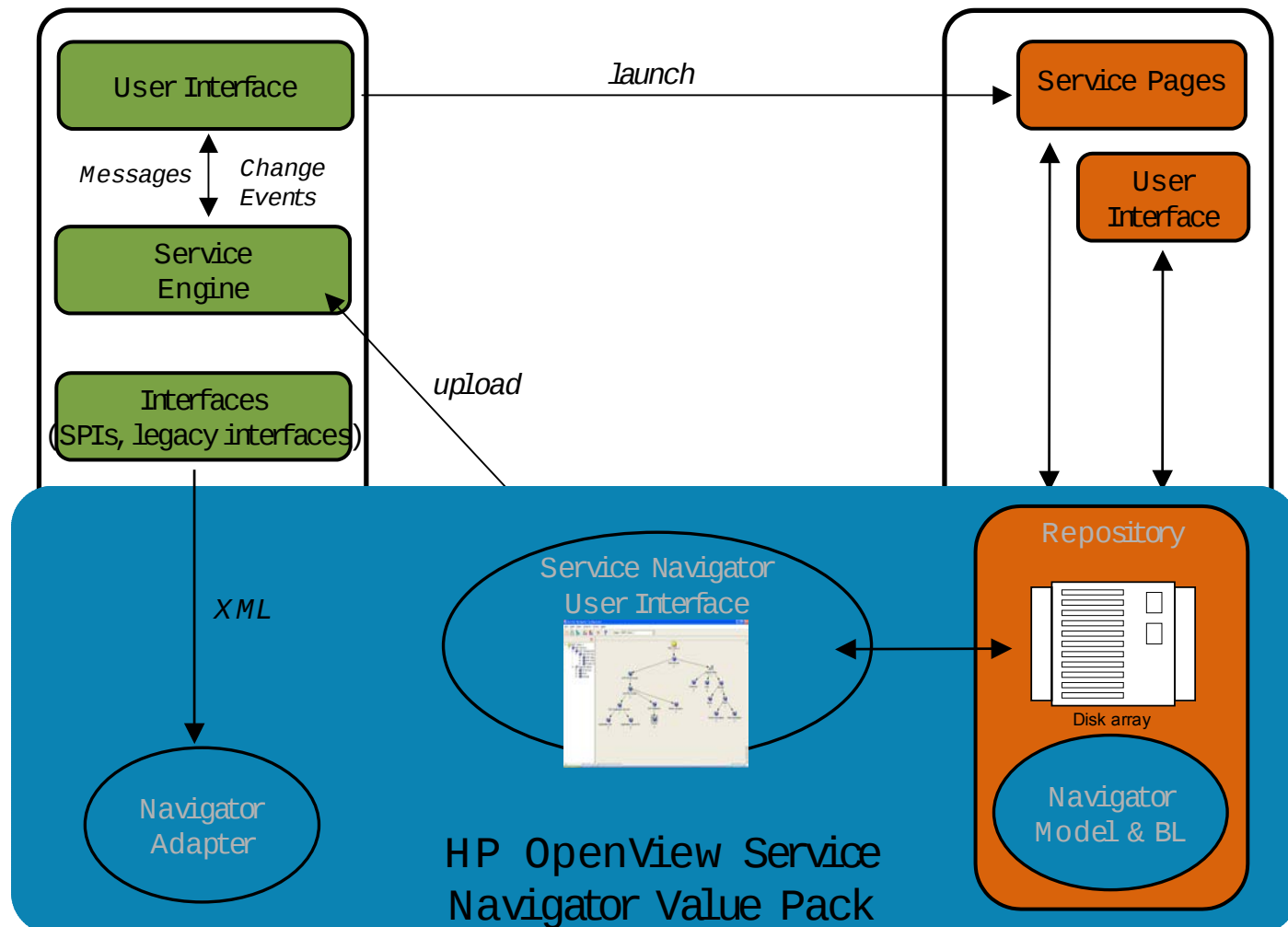
service-centric management: integrated views of service infrastructure & business data



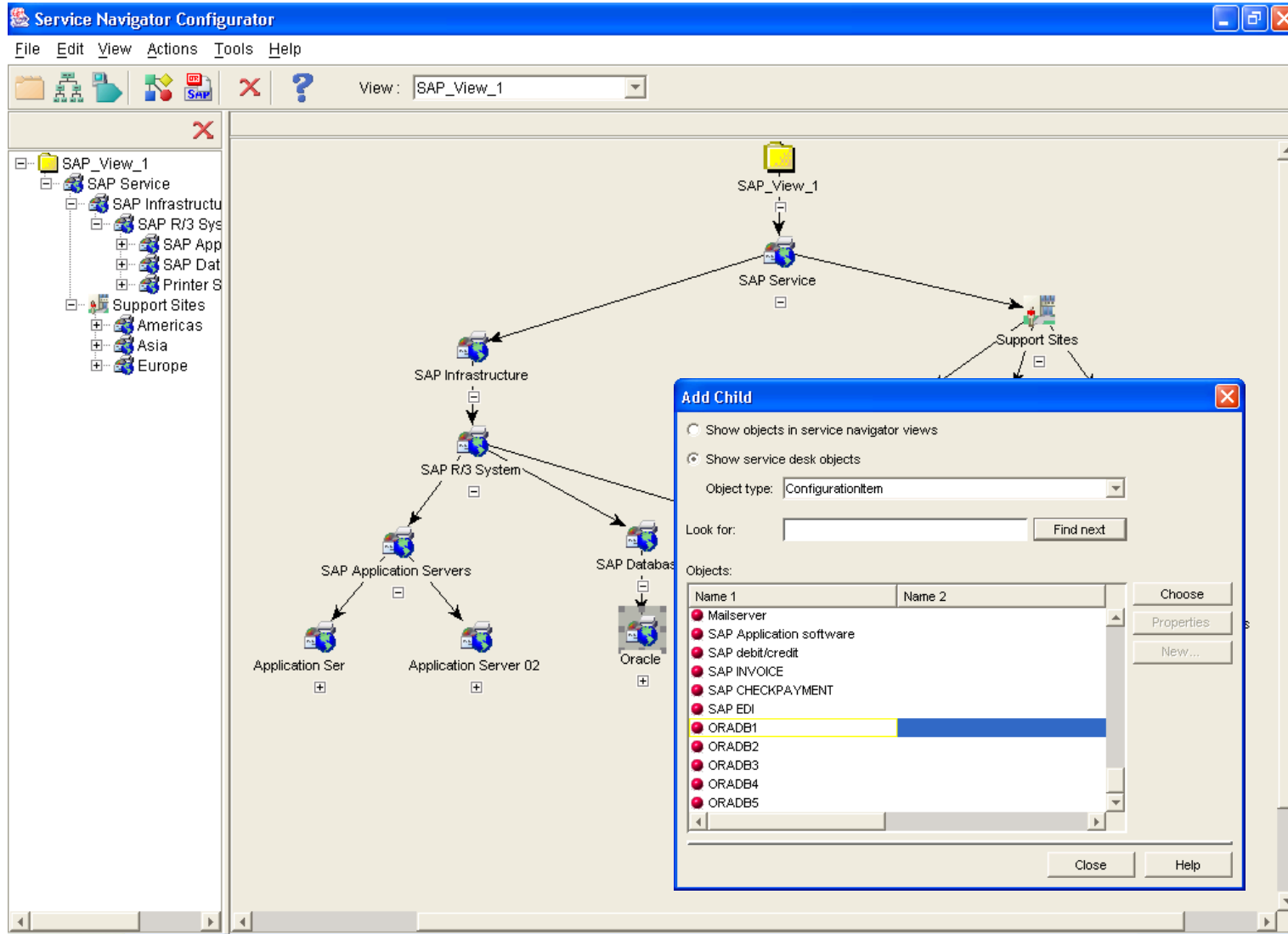
Integrating Operations and Service Desk

HP OpenView Service Navigator

HP OpenView Service Desk



service view configuration: based on a shared CMDB



service monitoring: root cause analysis

HP OpenView Operations for UNIX [kaputt] [opc_adm]

File Edit View Actions Window Help

Operation View

Nodes
Message Groups
Applications
Services
SAP Service
SAP Infrastr
SAP R/3
Support Site
America
Asia
Europe
Filter Settings
URL Shortcuts

Service Graph [SAP Service]

SAP Service

SAP Infrastructure

Printer Spoolers

SAP Application Se

Application Server 01

Properties...
Show Graph
Show Submap
Show in Custom map
Filter Active Browser
Filter History Browser
Get Root Causes
Get Impacted Services
Select Node in Object Pane
Select Service in Object Pane
Expand Service Tree
Collapse Service Tree
Start
Start Customized...

Service Root Cause Graph [SAP Infrastr]

SAP Infrastructure

SAP R/3 System

SAP Database

Oracle

ORADB1

2 services SAP Service: Minor

1 services SAP Infrastructure: Minor

Message Dashboard Services Diagnostic Dashboard Corrective Actions

Severity	Du...	SUITAONE	Time Received	N...	Application	MsgGrp	Object	Message Text
Critical	--X----		10:48:25 03/18/03	kap...	HP OpenVi...	OpC	opcctlm ...	Number of 75073 messages in history-message-table reached limit 50000. (OpC...
Critical	-X-----		09:57:22 03/18/03	kap...	Oracle	Oracle	OracleS...	database error: oracle service OracleServiceORADB1 is down
Critical	✓		11:48:47 03/18/03	kap...	HP OpenVi...	OpC	opcctlm ...	Number of 74974 messages in history-message-table reached limit 50000. (OpC...

9 of 5 0 0 4 0 0

All Active Messages

Get root cause services

service monitoring: impact analysis

HP OpenView Operations for UNIX [kaputt] [opc_admin]

File Edit View Actions Window Help

Operation View

Nodes
Message Groups
Applications
Services
SAP Service
SAP Infrastructure
SAP R/3 System
Printer Spoolers
SAP Application Ser
SAP Database
Oracle
Support Sites
Americas
Asia
Europe
Filter Settings
URL Shortcuts

Service Impact Graph [ORADB1] [static]

Support Sites
Europe
Paris
Oracle Specialists
SAP Service
SAP Infrastructure
SAP R/3 System
SAP Database
Oracle

Service Root Cause Graph [SAP In

ORADB1
Properties...
Show Graph
Show Submap
Show in Custom map
Filter Active Browser
Filter History Browser
Get Root Causes
Get Impacted Services
Select Node in Object Pane
Select Service in Object Pane
Expand Service Tree
Collapse Service Tree
Start
Start Customized...

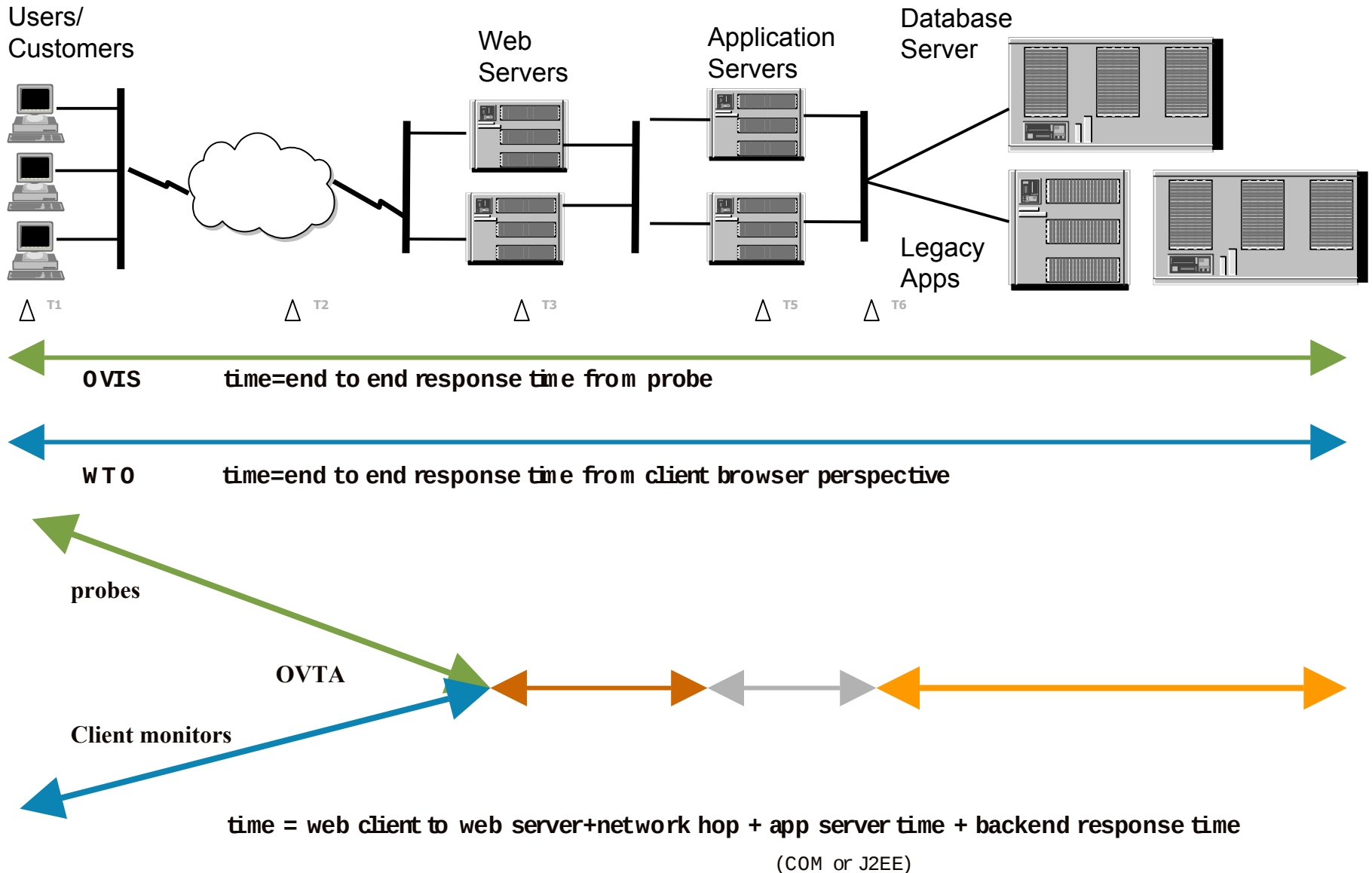
1 services ORADB1: Critical
1 services SAP Infrastructure: Minor

Message Dashboard Services Workspace 5 Diagnostic Dashboard Corrective Actions

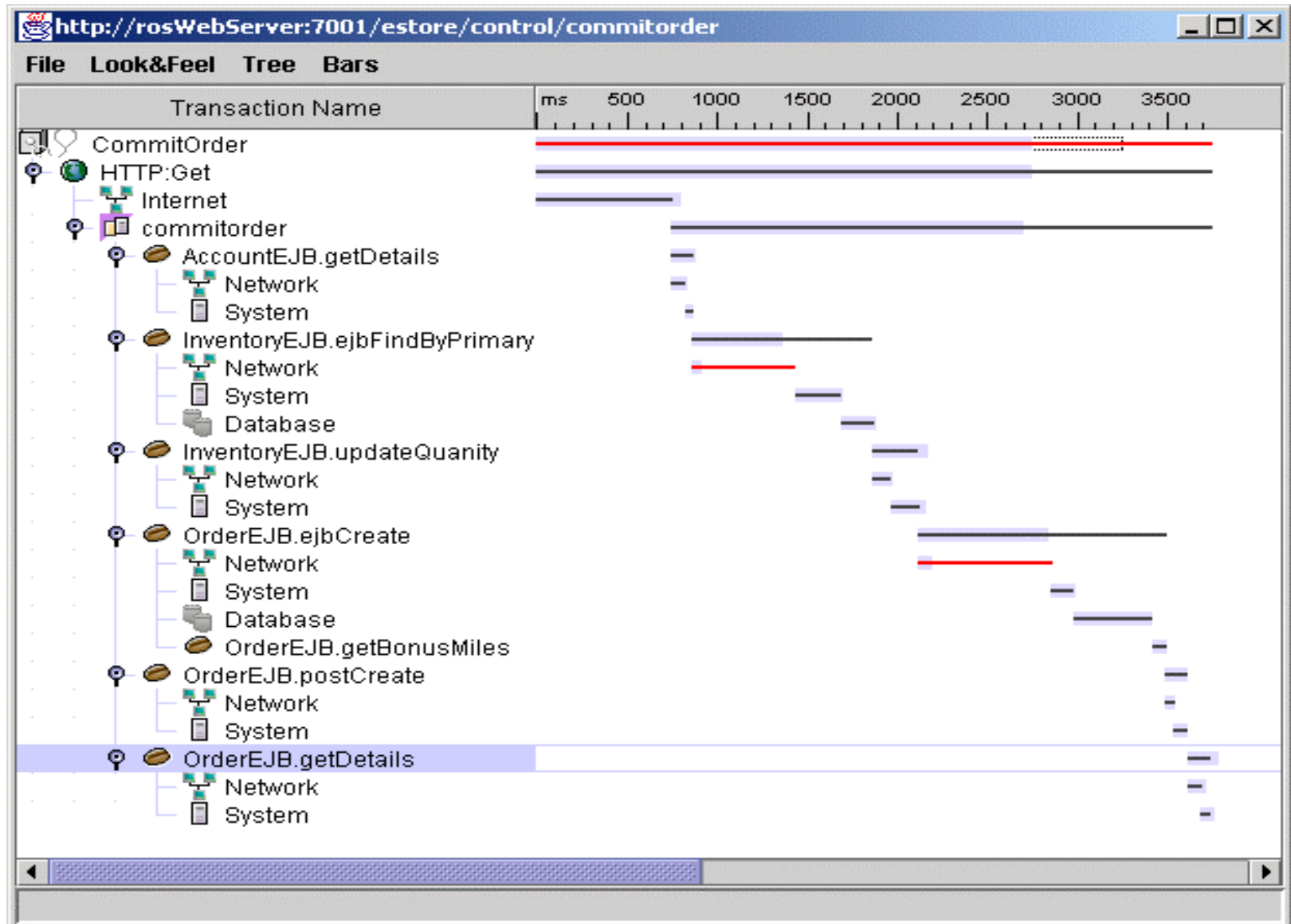
Severity	Du...	SUIAONE	Time Received	Node	Application	MsgGrp	Object	Message Text
Warning	--X----		11:56:33 03/18/03	kaputt@opc_admin	HP OpenView...	opc_admin	opc_admin	The license has expired. Expiration date...
10	of	6	0	0	4	0	0	

All Active Messages
Get impacted services

Distributed Transaction Management



Problem Resolution – by transaction breakdown



Breakthroughs in Management Productivity

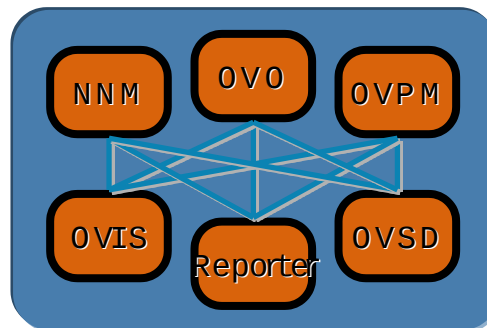
HP OpenView is driving beyond best-in-class management building blocks to providing the global view of business and infrastructure level management required by enterprise IT to quantify its contribution to the business

Past



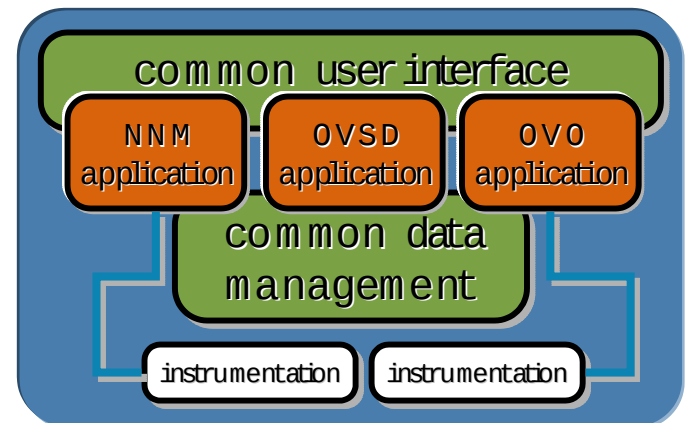
- Best in class management tools
- Multiple architectures
- Limited integrations

Present



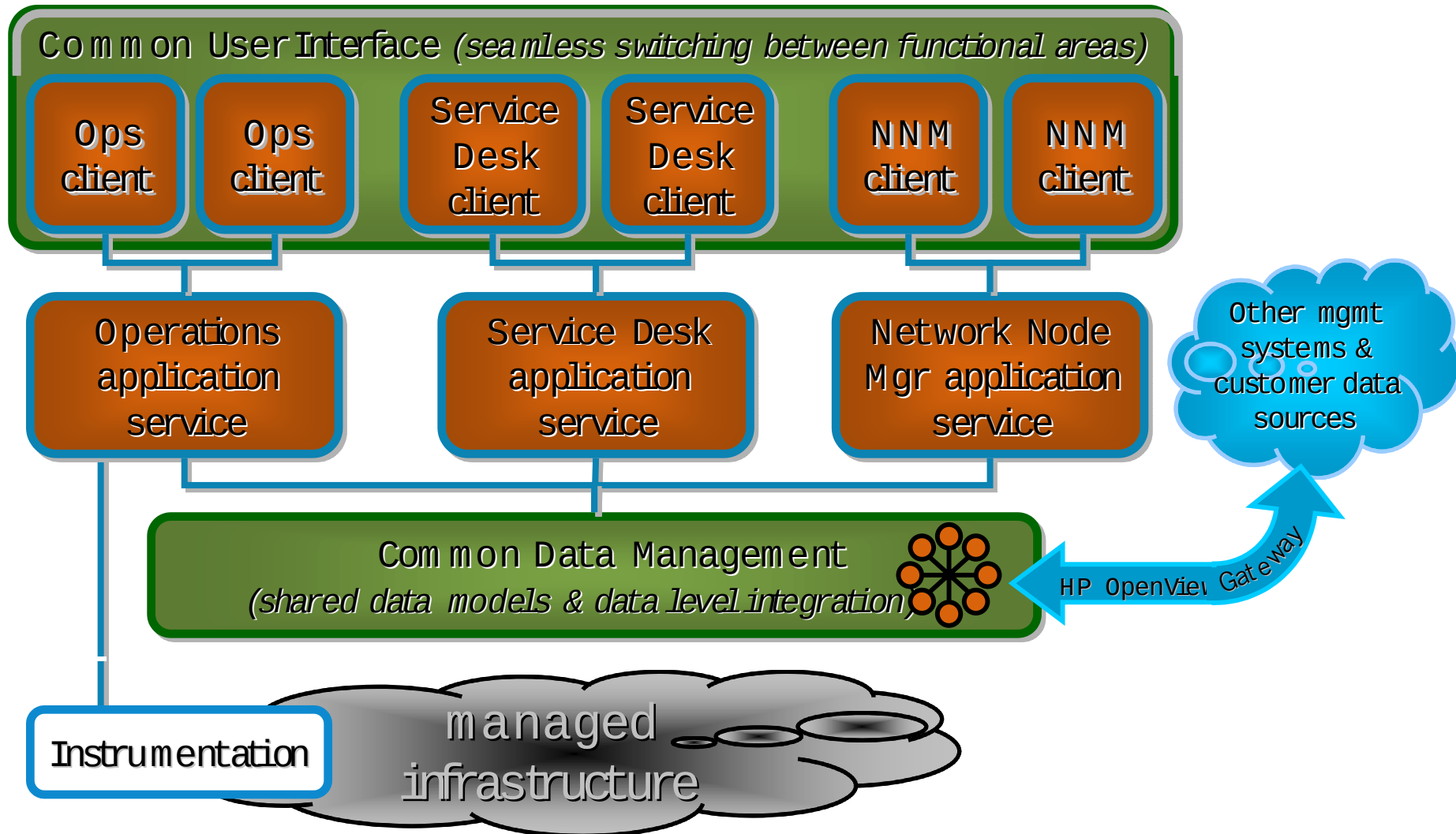
- Best in class management tools
- Modular building blocks
- Quick-time-to-value
- Robustness
- Multiple architectures
- Product to product integrations

Emerging



- Best in class management function
- Modular building blocks
- Quick-time-to-value
- Robustness
- Single architecture & common user interface
- Data level integration & common data model
- Integrate new technology with existing products

Common Management Environment (example)



Common Management Environment (example)

End-to-End Service-Centric Views (GUI)

Secure Communication

Events

Inventory

Topology

Common Data Model
(Object Server)

Other mgmt
systems &
customer data
sources

Gateway

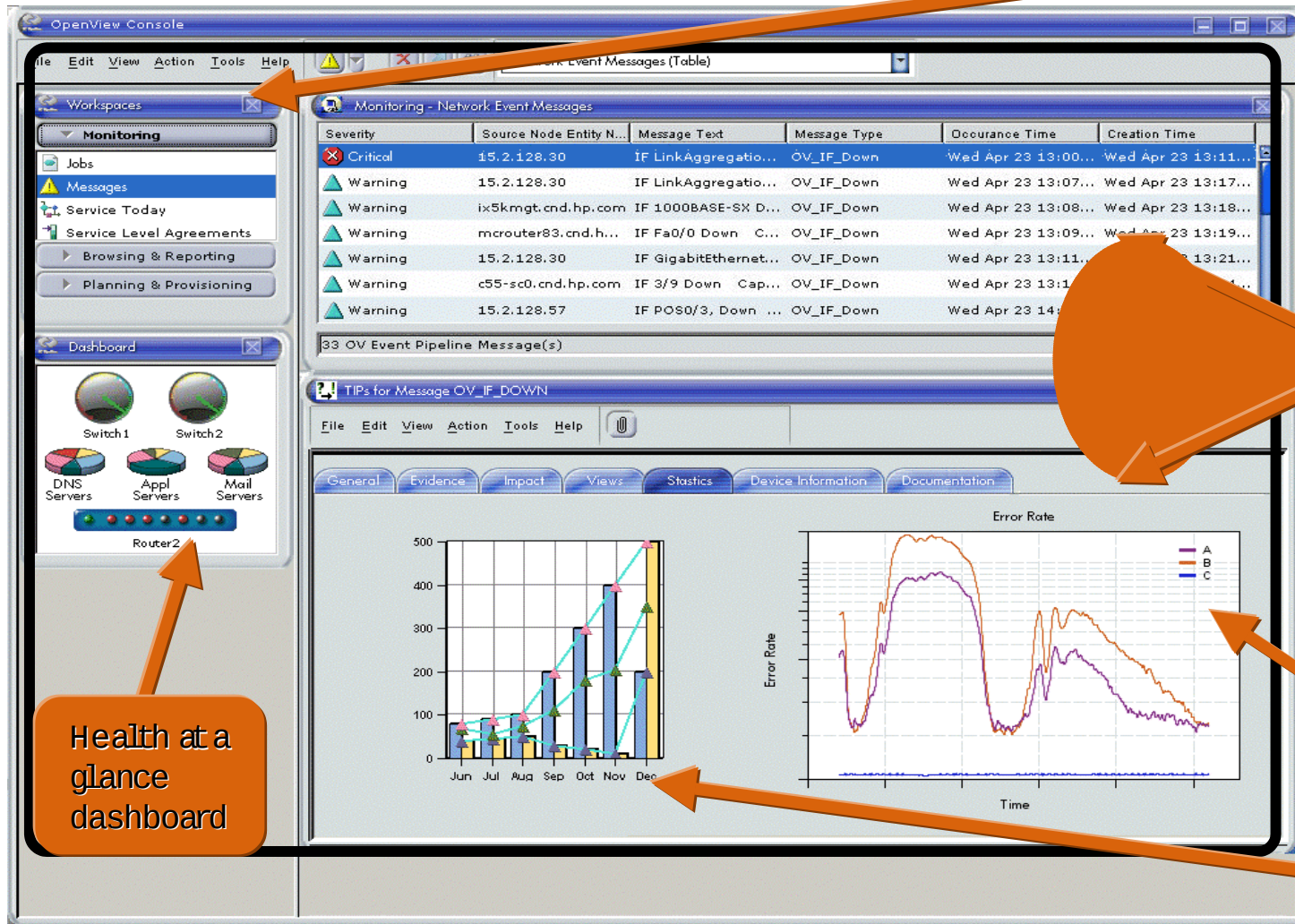
Secure Communication

Instrumentation

managed
infrastructure

Misc. Common Components (security, supportability, T18N, ...)

Emerging OpenView Console



Task-based navigation of information from all HP OpenView products

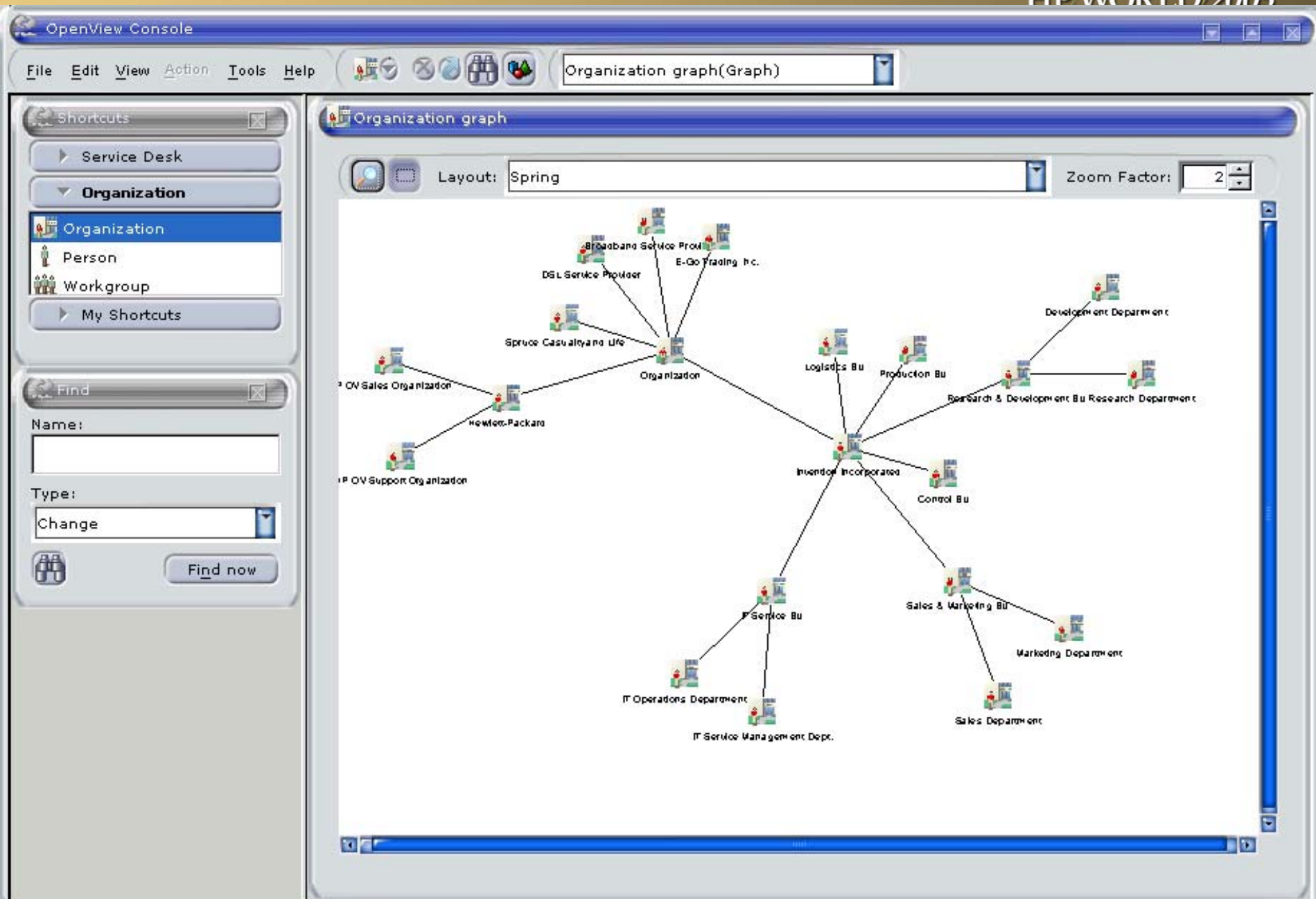
Seamlessly transfer with context between views from multiple HP OpenView products

Health at a glance dashboard

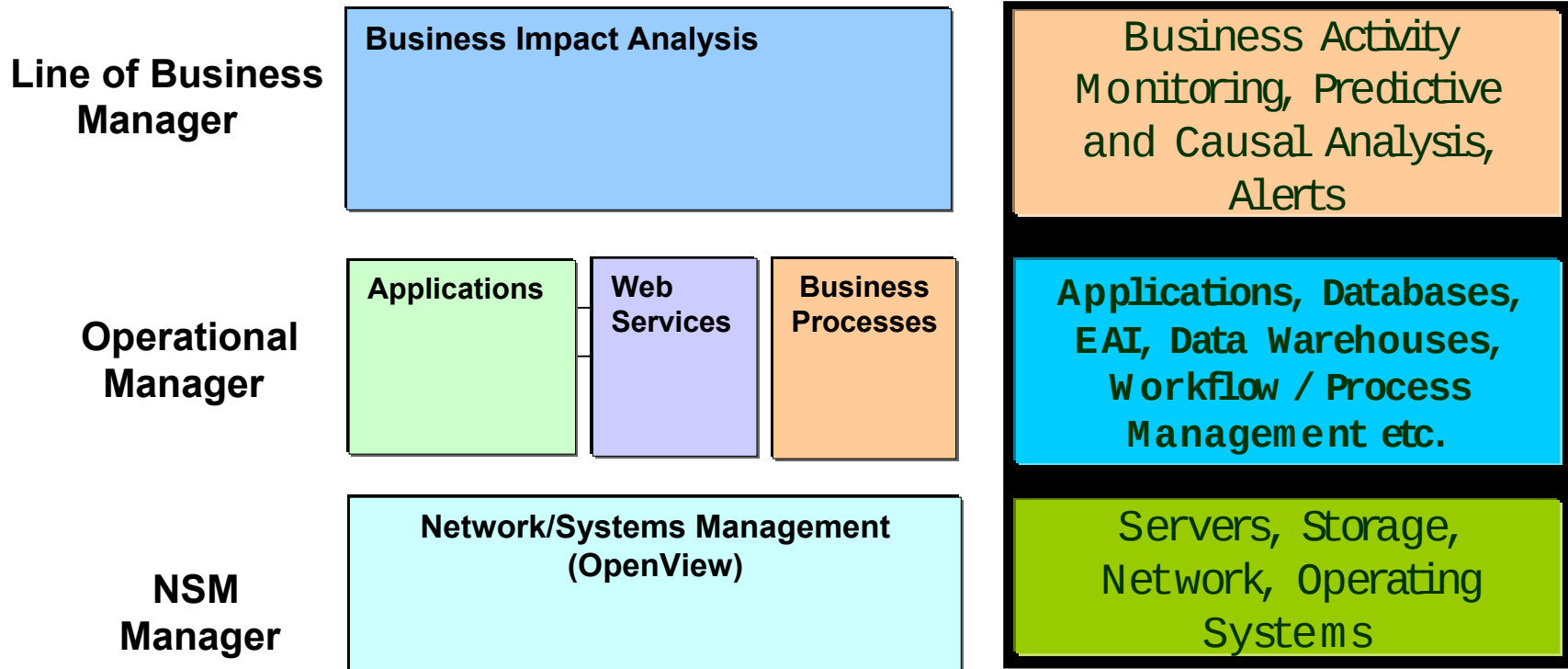
Many ways to visualize data including tables, trees, charts, graphs, treemaps, ...

Emerging OpenView Console

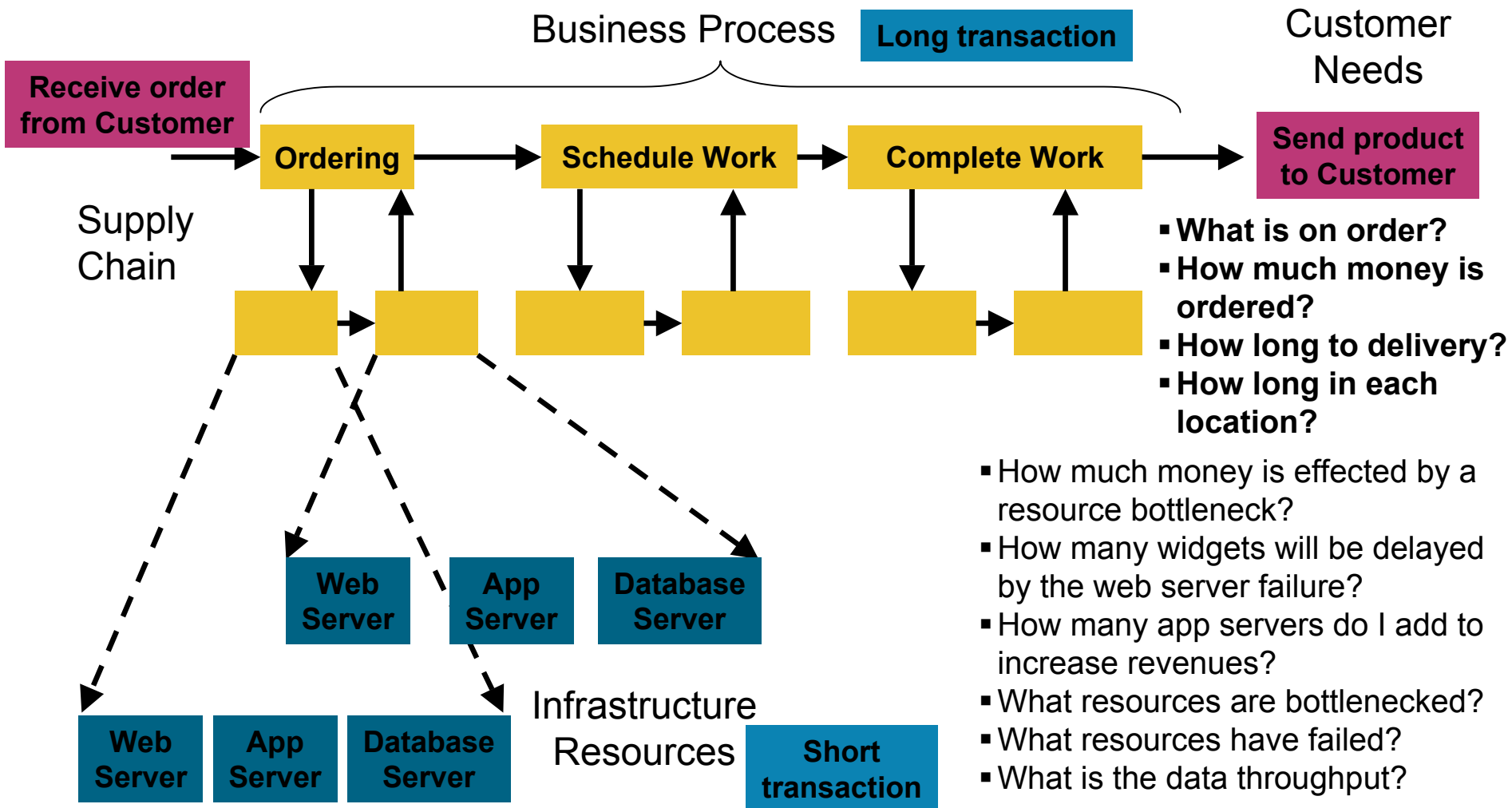
HP WORLD 2003



Positioning of Business Impact Analysis



Bridging the Gap Between Business and IT

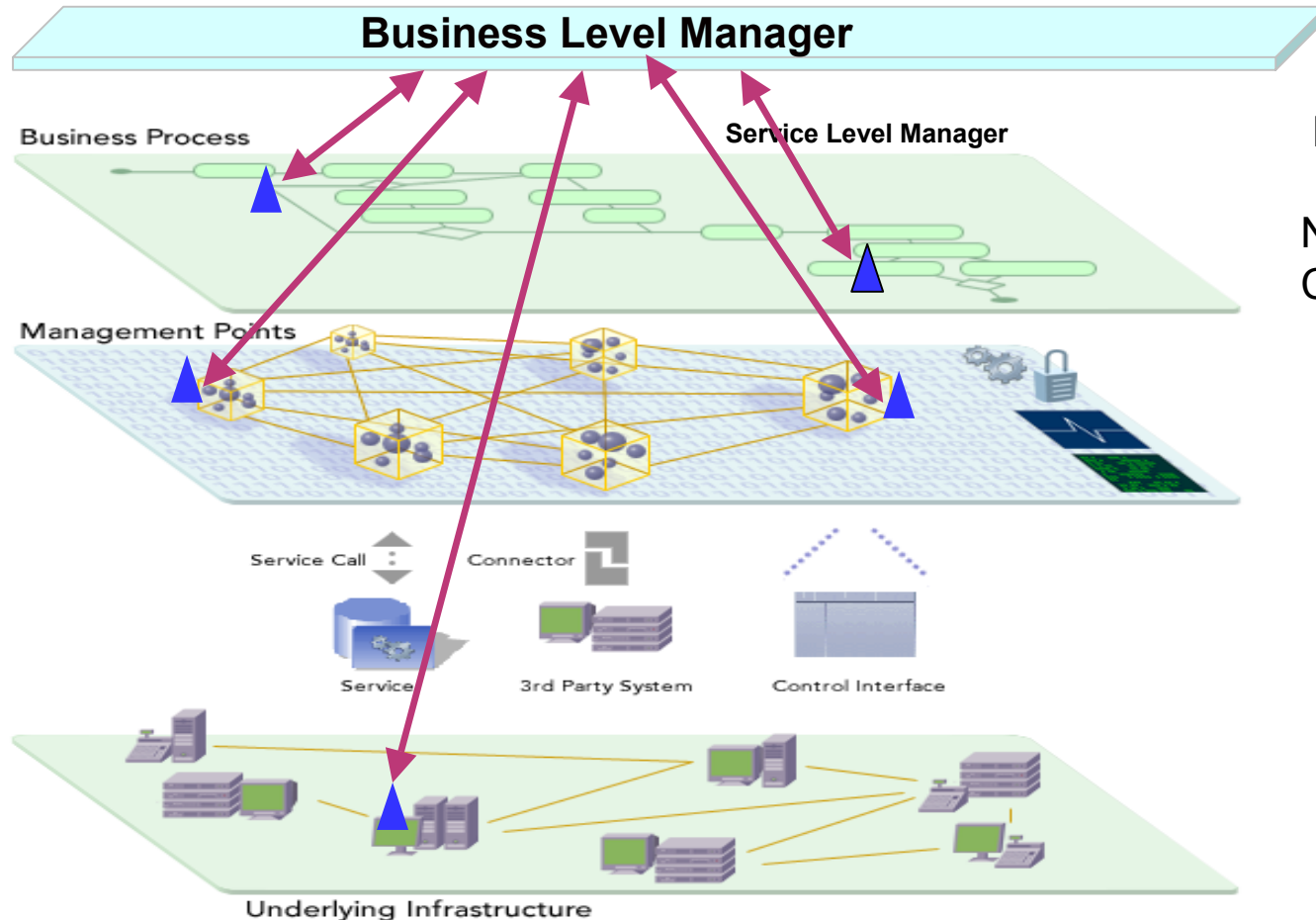


Business Impact & Management Correlation

▲ Adaptor /
instrumentation

Indurasort(ValueMatrix)
Digital Evolution, IBM, Systar, Business Objects,
Panacea, etc.

BizTalk, BEA,
WebMethods,
Informatica,
Tibco, etc

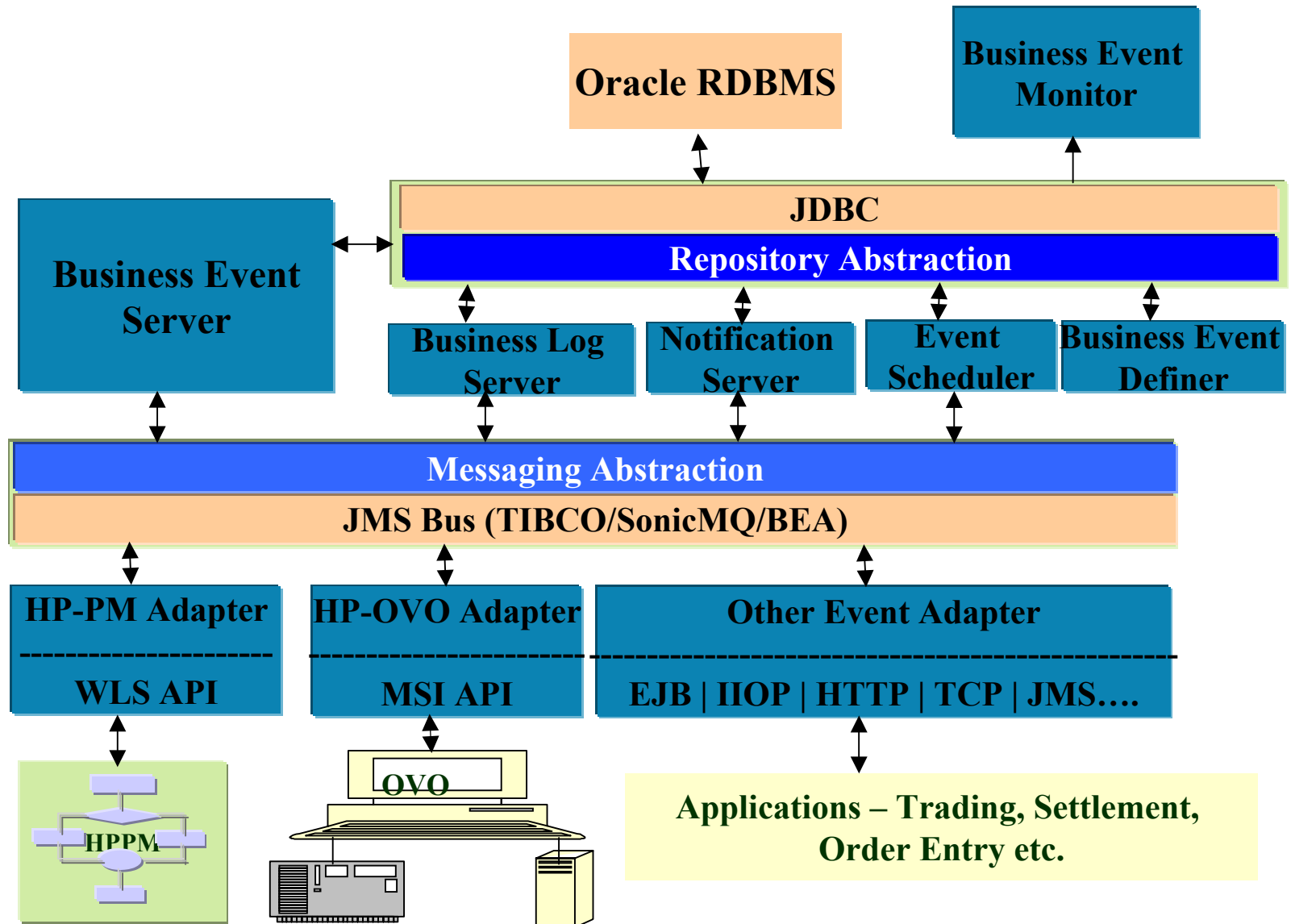


HP SLM,
OVO
Navigator,
CA, Tivoli,
BMC

Correlated Management

Business Impact Analysis

HP WORLD 2003
Solutions and Technology Conference & Expo





System Administrator

04:35 PM MDT - 25 April 2002

[Logout](#) [My Profile](#) [Admin](#)

- [Customer List](#)
- [Customer Detail](#)
- [Open Call Offs](#)
- [CM List](#)
- [Product Forecast](#)
- [Open Sales Orders](#)

Open Call Offs and In Transit

Search for

Product

Go

Customer: Dell-US/Austin

Total Call Offs	In Transit	Backlog	Total Ships
383	178	205	178

Updated: 04:35 PM MDT 25Apr

Call Off Orders

HP PO #	Order Date	Submitted By	Order Tracking #	Customer Product #	HP Product #	Option	Requested Ship Date	Commit Date	Revised Commit Date	Qty Req	Qty Shipped	Qty Recv'd	*Status
D71C51424	24Apr2002	Kelli Laffoon	239129	7G351	C9523DB	780	01May2002	01May2002		1	0	0	Open
D71C50665	24Apr2002	Kelli Laffoon	239128	7G350	C9522DB	780	01May2002	01May2002		12	0	0	Open
58Z200011	24Apr2002	Kelli Laffoon	239127	7G347	C9520DB	780	01May2002	01May2002		15	0	0	Open
58C650020	23Apr2002	Dawn Bryan	239124	7G681	C7370-00906		30Apr2002			100	0	0	Open
58C650026	23Apr2002	Dawn Bryan	239123	9G767	C7369-00906		30Apr2002			100	100	0	In Transit
D71C50328	19Apr2002	Kelli Laffoon	239121	7G350	C9522DB	780	26Apr2002	Overdue		7	7	0	In Transit
58Z200011	19Apr2002	Kelli Laffoon	239120	7G346	C9521DB	780	26Apr2002	Overdue		5	5	0	In Transit
58Z200011	19Apr2002	Kelli Laffoon	239119	7G347	C9520DB	780	26Apr2002	Overdue		10	10	0	In Transit
58C650020	18Apr2002	Dawn Bryan	239116	7G681	C7370-00906		22Apr2002	Overdue		100	25	0	In Transit

Event Log - Microsoft Internet Explorer

FileEditViewFavoritesToolsHelp

BackForwardStopHomeSearchFavoritesHistoryPrintCopyPasteAddress

cmd=admin-event-list&reportType=2&ITEM5_PER_PAGE=100&jumpToPage=0&LOG_TYPE=1&LOG_SEVERITY=1&LOG_SOURCE=&ITEM5_PER_PAGE=100&pageNumber=0GoLinks

hpOneSource®

invent

System Administrator10:35 PM MDT - 23 April 2002LogoutMy ProfileAdmin

Report MenuSystem SettingsMaster ListsSystem StatusUser ListRepositoryAdvanced PropertiesEvent LogUpload Files

Search forProductGo

Event Log

Check AllClear AllDelete SelectedRefreshDelete All

1781 eventsDisplaying 1 - 100Show100GoGo To Page1PreviousNext

	Time	TypeError	SeverityAlarm	SourceAll	Description	Event Details
☐	123Apr2002 13:36:12 MDT	Error	Alarm	IECInventoryUpdater	Failed to connect and get data!	Details
☐	223Apr2002 12:50:32 MDT	Error	Alarm	Hub_Inventory_FDX_Eindhoven	Failed to connect and get data!	Details
☐	323Apr2002 11:51:33 MDT	Error	Alarm	Hub_Inventory_FDX_Eindhoven	Failed to connect and get data!	Details
☐	423Apr2002 11:35:56 MDT	Error	Alarm	IECInventoryUpdater	Failed to connect and get data!	Details
☐	523Apr2002 11:32:11 MDT	Error	Alarm	NAVL_Sun_UnionCity	Failed to connect and get data!	Details
☐	623Apr2002 10:20:53 MDT	Error	Alarm	PenangInventoryUpdater	Failed to connect to ODBC datasource: jdbc:odbc:Driver={Microsoft Excel Driver (*.xls)};DBQ=c:/indura/forecasts/Dell Penang.xls	Details
☐	723Apr2002 10:18:07 MDT	Error	Alarm	EagleInventoryUpdater	Failed to connect to ODBC datasource: jdbc:odbc:Driver={Microsoft Excel Driver (*.xls)};DBQ=c:/indura/forecasts/eagle inventory.	Details
☐	823Apr2002 09:20:17 MDT	Error	Alarm	PenangInventoryUpdater	Failed to connect to ODBC datasource: jdbc:odbc:Driver={Microsoft Excel Driver (*.xls)};DBQ=c:/indura/forecasts/Dell Penang.xls	Details
☐	923Apr2002 09:18:27 MDT	Error	Alarm	EagleInventoryUpdater	Failed to connect to ODBC datasource: jdbc:odbc:Driver={Microsoft Excel Driver (*.xls)};DBQ=c:/indura/forecasts/eagle inventory.	Details
☐	1023Apr2002 03:50:44 MDT	Error	Alarm	Hub_Inventory_FDX_Eindhoven	Failed to connect and get data!	Details
☐	1123Apr2002 01:35:47	Error	Alarm	IECInventoryUpdater	Failed to connect and get data!	Details

DoneLocal intranet

StartInbox - Microsoft OutlookMy DocumentsMicrosoft PowerPoint - [R...Event Log - Microsoft L...

10:33 PM



i n v e n t