



IBM Systems and Technology Group



IBM Virtualization Engine

Virtualization Engine Console R2.0

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IBM Systems Architect

Agenda

0 Preface: Learning Objectives & Target Audience

1 IBM VE Console Overview

2 IBM VE Common Installation

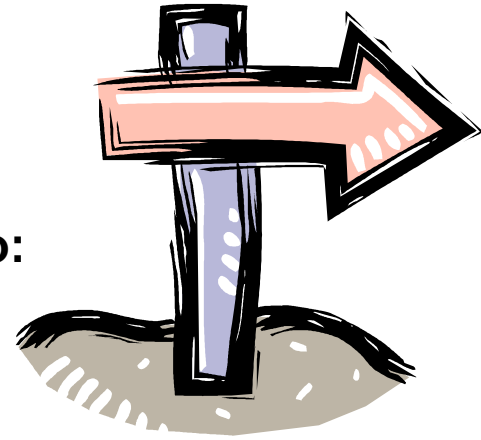
3 IBM VE Console Launch in Context

4 IBM VE Console Bridge Concepts

5 IBM VE Console Resource Topology

6 Wrap up - information sources and Q&A

Learning Objectives



At the conclusion of this material, you should be able to:

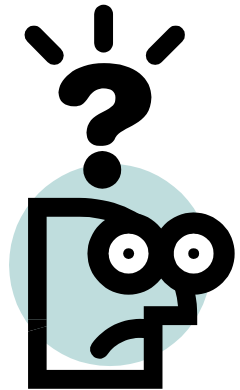
- Explain the function & purpose of the IBM VE Console.
- Describe the architecture of the IBM VE Console including Common Runtime.
- Understand which client pain points are addressed by the IBM VE Console.
- Articulate and justify the client benefit and business value of the IBM VE Console.
- Use this presentation foil set and web lecture to present to Clients and other IBM people.

Target Audience

Aimed at building skills necessary to sell and support the implementation of IBM's Virtualization Engine, with particular emphasis on the function and capabilities of the VE Console.

Target audience is professionals in the following types of job roles:

- Systems Group Systems Architects (SA)
- Systems Group Field Technical Sales Support (FTSS)
- Systems Group Advanced Technical Support (ATS)
- Systems Group TechLine
- IGS technical professionals involved in planning, installing and configuring Systems Group's products & solutions
- Non-IBM personnel with similar job roles & responsibilities (e.g., Business Partners)



Agenda continued...

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Consoles: Client Pain Points...

➤ Different Administration consoles

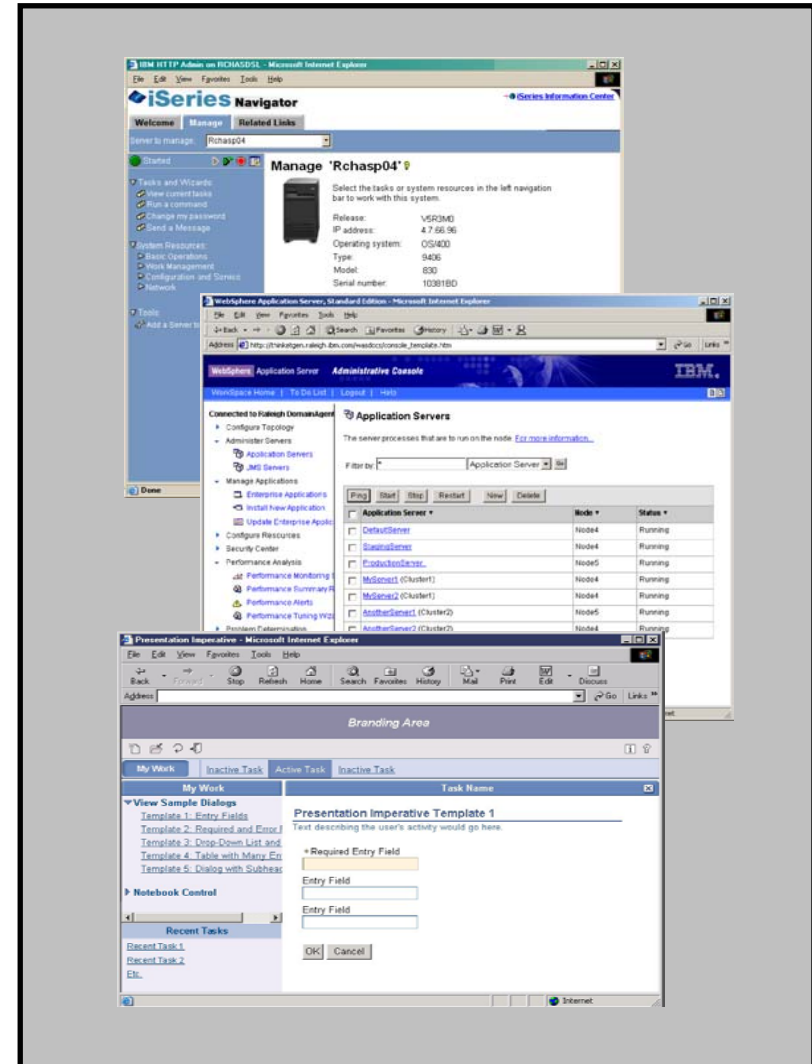
- No look & feel consistency
- No administration integration
- Proliferation of consoles and complexity of supporting infrastructure.

➤ Costly learning curves

- Delayed deployment of solution
- Increased administrator training costs

➤ Different technologies

- Java, C, C++, HTML, XML
- Installed Client
- Web based



IBM Console Strategy:

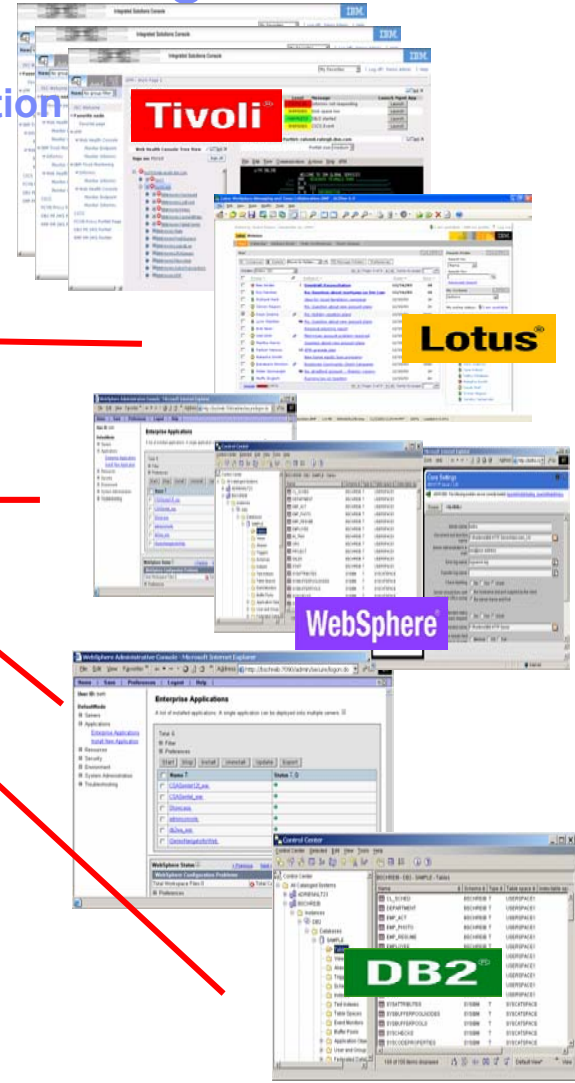
- **Begin with a “Customer Value” approach to the discussion of Console Convergence. Change the paradigm for console from a “Device-Based” model to a “User-Based” model.**
- **Adopt an Integrated Solutions Console - based architecture for all our console solutions, leveraging some new technologies to overcome problems previously encountered.**
- **Clients probably don’t want everything replaced with a single integrated console.**
- **An outside-in design/interaction design to provide client value.**
 - Look at user roles & workflow and design integration points
- **Enable others to enhance and customize the GUIs**

ISC Capabilities:

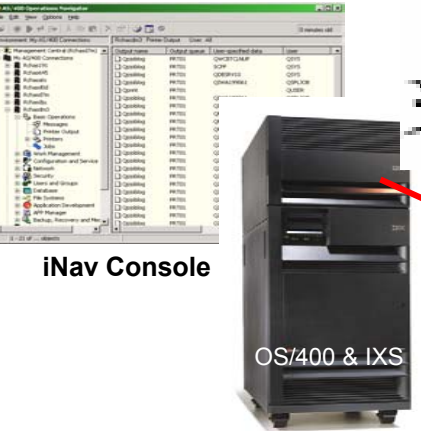
- **Enables an out-of-the-box organization of tasks based on persona definitions**
- **Augmentation of these tasks as new solution components are installed**
- **Presentation to each user only the tasks associated with the role**
- **Allows users to perform multiple tasks at the same time, ensuring that the state on one task is preserved as a user swaps to others**
- **A help system that will be augmented as other products are added to the solution**
- **Ability to launch UIs not based on ISC in the appropriate context**
- **A JSR 168 programming model opening up the console for business partner contributions.**

Integrated Solutions Console: Tomorrow's Integration

Middleware Administration



System Management Complexity



iNav Console

OS/400 & IXS

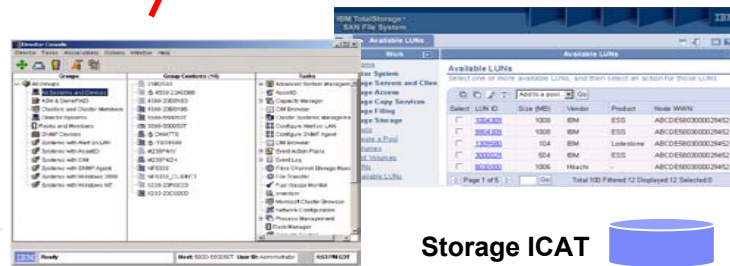


WebSM / Browser Console



Platform Mgmt

AIX, Linux



IBM Director

Storage ICAT



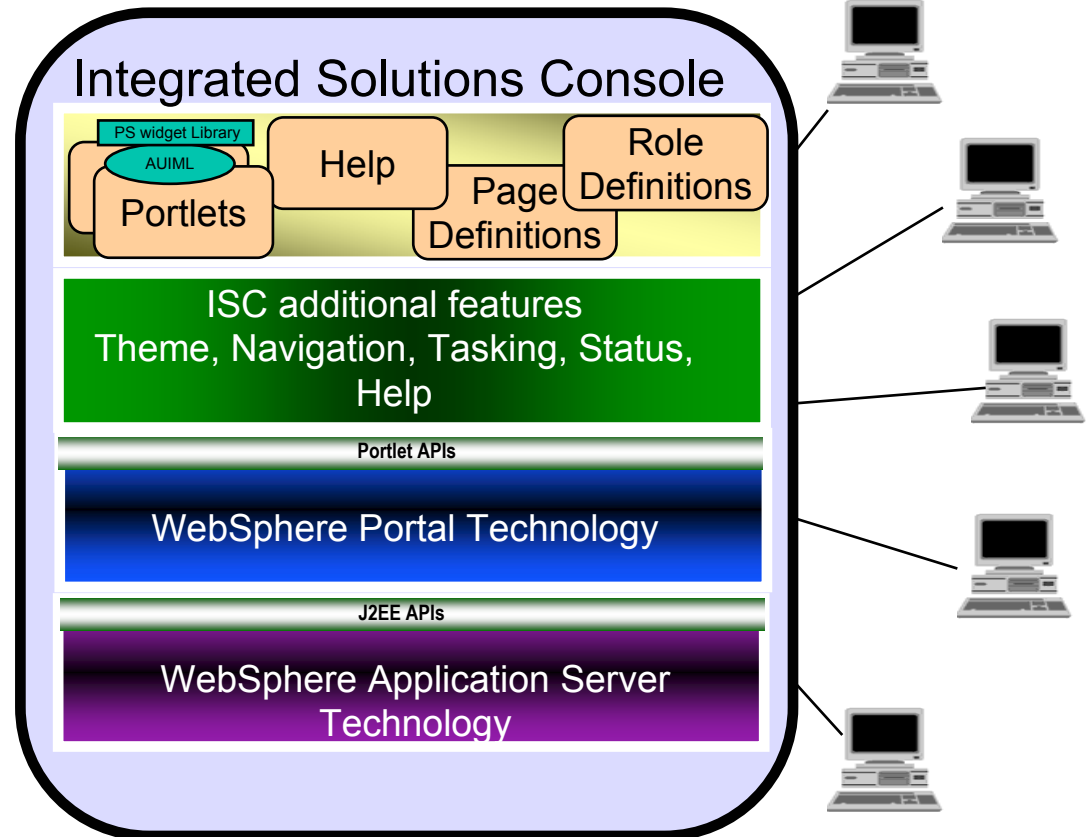
Integrated Solutions Console: Operation

➤ Standards-based architecture

- J2EE, Java, XML
- Portlet API's (JSR 168)

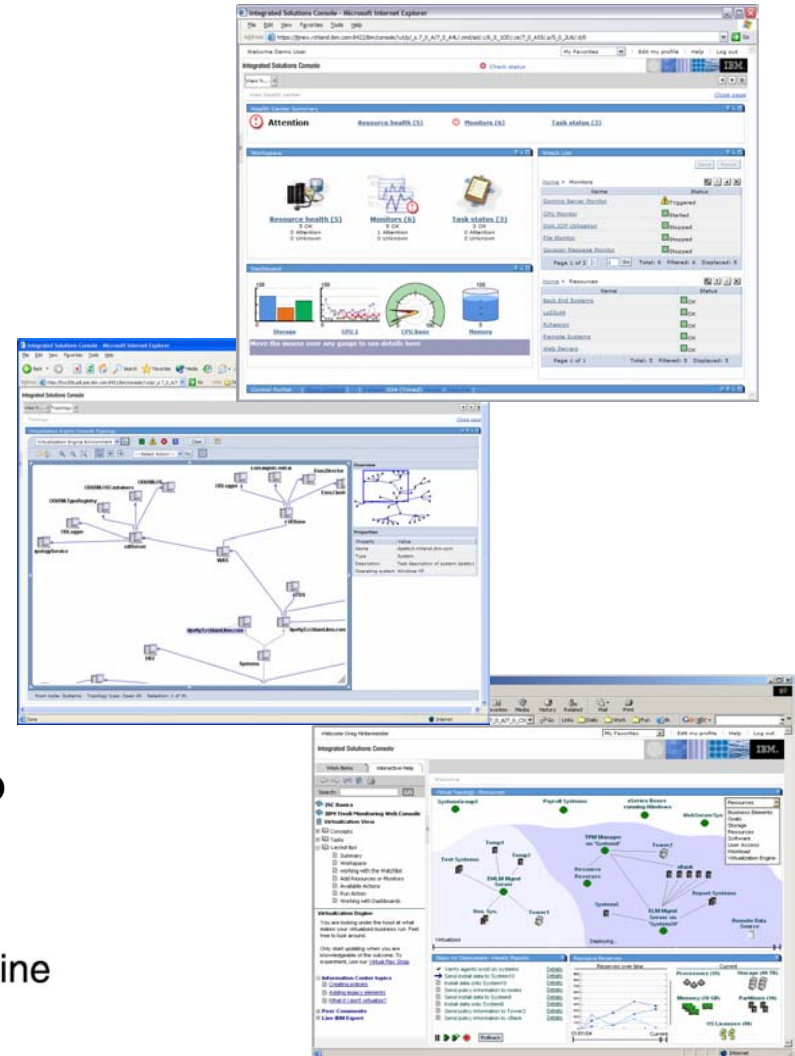
➤ Portlets enable the development of administration function in a solution-oriented manner

➤ Administration functions packaged and deployed like J2EE Web Applications



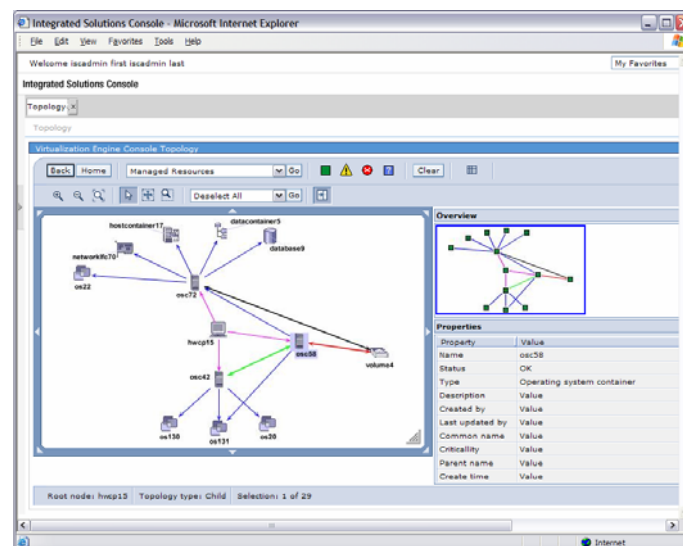
VE Console Overview

- **Management user interface to the Virtualization Engine (VE)**
- **Housed in Integrated Solutions Console (ISC) environment**
 - Web-based
 - Portal-oriented
- **Visual identity for the VE:**
 - I've installed it, now where do I find it?
 - Began as a single starting point
 - Growing into a single point of control
- **Abstracts OS and solution boundaries to deliver a simplified view**



VE Console

- **Single portal for administering virtual resources.**
- **Consolidated view of resource health across multiple operating systems.**
- **Graphical dashboard of monitored metrics.**
- **Graphical display of resource topology, relationships and dependencies.**
- **Deep Operating System management navigation without detailed OS knowledge.**
- **Fix acquisition for multiple VE systems from a single console.**



VE Console R2 Highlights

Customer Value:

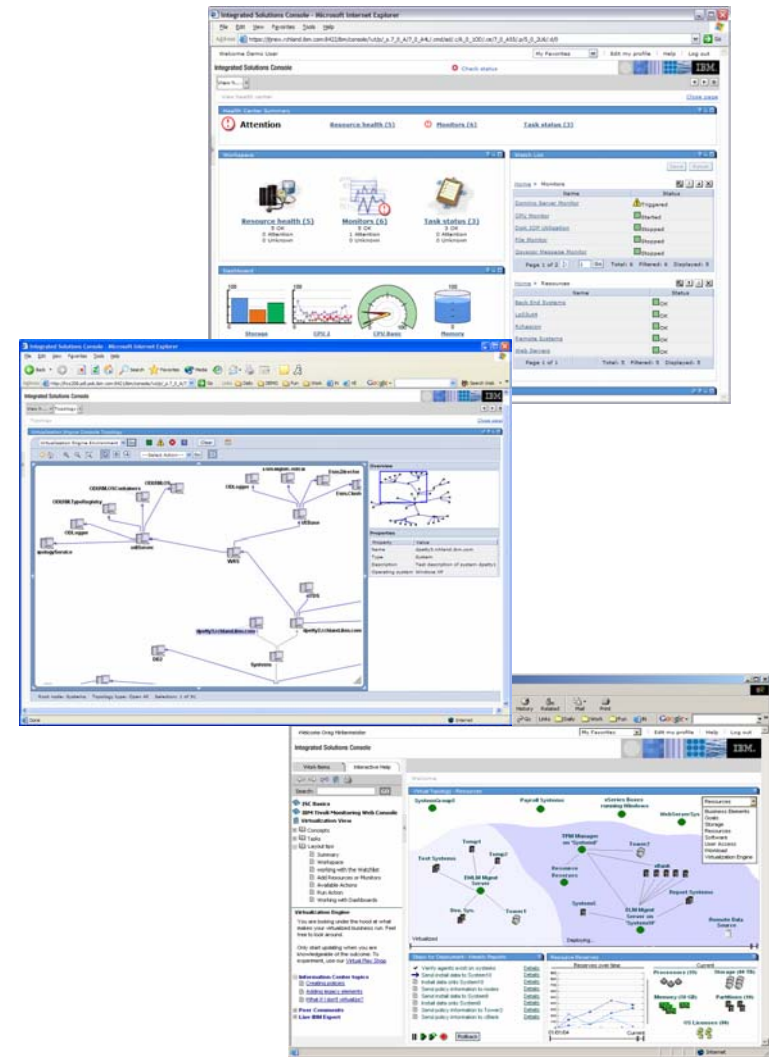
- Consolidated health of my environment
 - Health center
 - Hardware problems
- Relationships of my resources
 - Resource topology
 - Understanding resource dependencies
- Apply my expertise to new areas
 - Converged tasks
 - Launch-in-context (LiC)
- Drill deep into OS management
 - OS extensions for i5/OS
 - Launch-in-context for other OS's (LiC)
- Keep VE environment running smoothly with minimal/no effort
 - Software Updates (for VE solution)
 - Virtualization Readiness on welcome page
 - Setup wizard, SSO/RMS configuration
 - Single Signon

Functional Areas:

- Health Center
 - More sources of health
 - Usability enhancements
- Business Resource Topology
 - Exploits ODI RM
 - RTDS Management
- Hardware Management
 - Hardware Problems
 - Launch-in-Context
- OS Management
 - Launch-in-Context
 - Launchpad
- VE Management
 - VE Serviceability
 - Virtualization readiness
 - Setup wizard, SSO/RMS Configuration
 - Launchpad
 - Single Signon

VE Console User Experience Themes

- **Health of my environment**
 - Health center
 - Hardware status and problems
- **Relationships between my resources**
 - Resource topology
 - Understanding resource dependencies
- **Apply my expertise to new areas**
 - Converged tasks
 - Launch in context
- **Drill deep into OS management**
 - OS extensions for i5/OS
 - Launch in context for other OS's
- **Keep VE environment running smoothly**
 - Software Updates (for VE)
 - Virtualization Readiness on welcome page
 - Setup wizard, RDS configuration
 - Single Sign-on mgmt

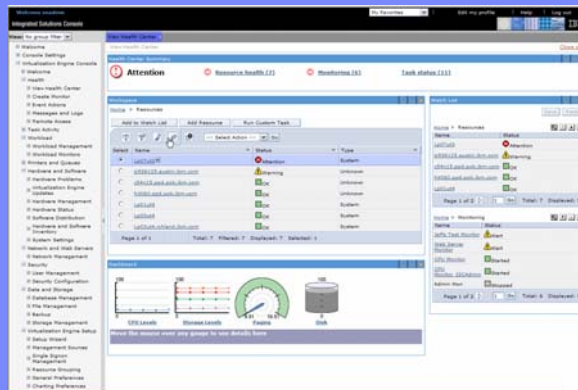


VE Console R2 Integration Perspectives

VE Console

Management Servers

ODI RM
Enterprise Workload Manager
Resource Mapping Services
IBM Director
VE Serviceability
VE Security
IBM Tivoli Monitoring
Cluster Systems Manager
Management Central
*Tivoli Enterprise Portal



Customer Resources

xSeries
iSeries
pSeries
zSeries
HMC
Storage systems
Storage devices

Common Tasks

Health
Topology
Workload
Printers and Queues
Hardware and Software
Network and Web Servers
Security
Data and Storage
Virtualization Engine Setup
My Custom Tasks

Launched Consoles

DB2 Control Center
IBM Director
i5/OS Extensions
iSeries Navigator
Multiple Device Manager
Web-based System Manager (HMC)
Tivoli SAN Manager
Tivoli Storage Resource Manager
EWLM Control Center
IBM Tivoli Directory Server
IBM TotalStorage Productivity Center

Operating Environments

Windows
Linux
i5/OS
AIX
z/OS
HMC
Tivoli
Storage
Network

•TEP Management Server integration is planned for 1Q2006 availability

- VE Console integrates management servers and harness their power onto one experience
- Common tasks hide divisions of where work is accomplished
- Customer Resources are shown in consistent ways
- Multiple operating environments are acted upon in similar ways

VE Console Key Values

➤ **Single point of administration**

- R1 provided a single starting point for all VE functions (portlets, console launch)
- R2 builds-out toward a single point of control (portlets, launch-in-context)

➤ **Provides a comprehensive set of management tasks**

- Many that leverage your existing management structure and tools
- Many that map to new, value-added simplification functions

➤ **Graphical resource topology**

- View resources in my environment and how they are related to one another.
- Understand the side effects associated of a change in a resource's status.

➤ **Consolidated health of your environment**

- Across multiple operating systems
- Across multiple management domains/disciplines

➤ **Graphical dashboard of monitored metrics**

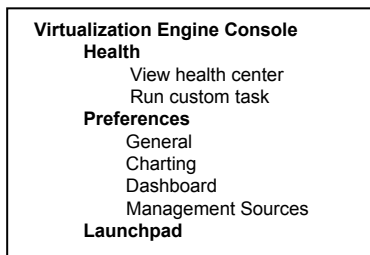
VE Console Navigation Portfolio

➤ **A gross measure of VE Console function is a look at its navigation portfolio.**

➤ **Release 1 was just a start, supporting only:**

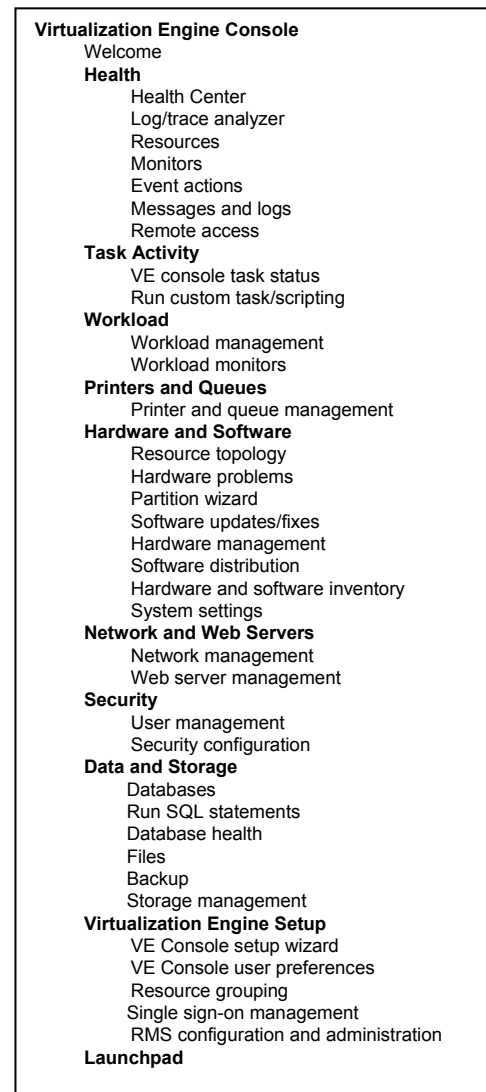
- Health Center
- Launchpad

➤ **Release 2 provides a significant functional increase.**



Release 1 Portfolio

Release 2 Portfolio



Major Functions:

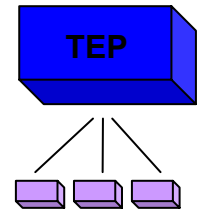
- **Health Center**
- **Resource Dependency Services (RDS) & Management**
- **Business Resource Topology**
- **Hardware Management**
- **OS Management**
- **Launch-in-Context**
- **Launchpad**
- **Security**
- **Serviceability**
- **Management**

Health Center

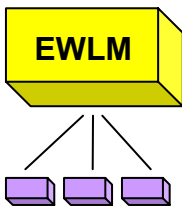
- Provides consolidated health of administrator's world
- Eliminates the need for an admin to look at multiple consoles just to determine whether everything is OK.
- Focus is:
 - Resource health
 - Monitoring
 - Problem identification
 - Corrective management



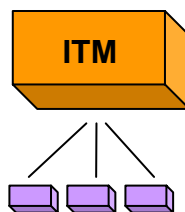
Tivoli Enterprise Portal Server
*planned 1Q2006



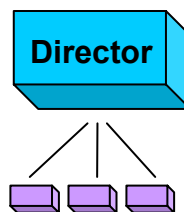
Enterprise Workload Mgr
Domain Manager



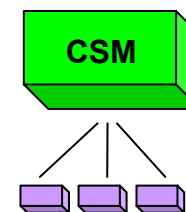
IBM Tivoli Monitoring 5.x
Monitoring Server



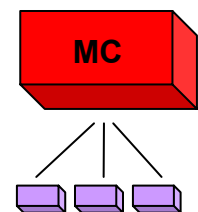
IBM Director
Mgmt Server



Cluster Systems Mgr
Mgmt Server



Mgmt Central (i5/OS)
Mgmt Server



Health Center continued...

Welcome veadmin | My Favorites | Edit my profile | Help | Log out

Integrated Solutions Console

View: No group filter

View Health Center x

View Health Center

Health Center Summary

Attention **Resource health (7)** **Monitoring (6)** **Task status (11)**

Workspace

Home > Resources

Add to Watch List | Add Resource | Run Custom Task

--- Select Action --- Go

Select	Name	Status	Type
<input checked="" type="radio"/>	Lp07ut3	Attention	System
<input type="radio"/>	jc936125.austin.ibm.com	Warning	Unknown
<input type="radio"/>	c54n15.ppd.pok.ibm.com	OK	Unknown
<input type="radio"/>	fv060.ppd.pok.ibm.com	OK	Unknown
<input type="radio"/>	Lp01ut4	OK	System
<input type="radio"/>	Lp03ut4	OK	System
<input type="radio"/>	Lp03ut4.rchland.ibm.com	OK	System

Page 1 of 1 | Total: 7 | Filtered: 7 | Displayed: 7 | Selected: 1

Dashboard

CPU Levels | Storage Levels | Paging | Disk

Move the mouse over any gauge to see details here

Watch List

Home > Resources

Name	Status
Lp07ut3	Attention
jc936125.austin.ibm.com	Warning
c54n15.ppd.pok.ibm.com	OK
fv060.ppd.pok.ibm.com	OK
Lp01ut4	OK

Page 1 of 2 | 1 | Go | Total: 7 | Displayed: 5

Home > Monitoring

Name	Status
Jeffer's Test Monitor	Alert
Web Server Monitor	Alert
CPU Monitor	Started
CPU Monitor ISCAAdmin	Started
Admin Mon	Stopped

Page 1 of 2 | 1 | Go | Total: 6 | Displayed: 5

20

VE Console r2 T3 Education | IBM Confidential | ON DEMAND BUSINESS™

Health Centre: Integration example

With the integration of Tivoli Enterprise Portal Server information into the Health Center, our users can instantly see the health across a wide breadth of their IT environment and quickly react to problems

Overall Status Includes TEP / ITM / Director & EWLM

Data from TEP Server

Data from EWLM

Data from TEP Server

Data from other Systems Management tools

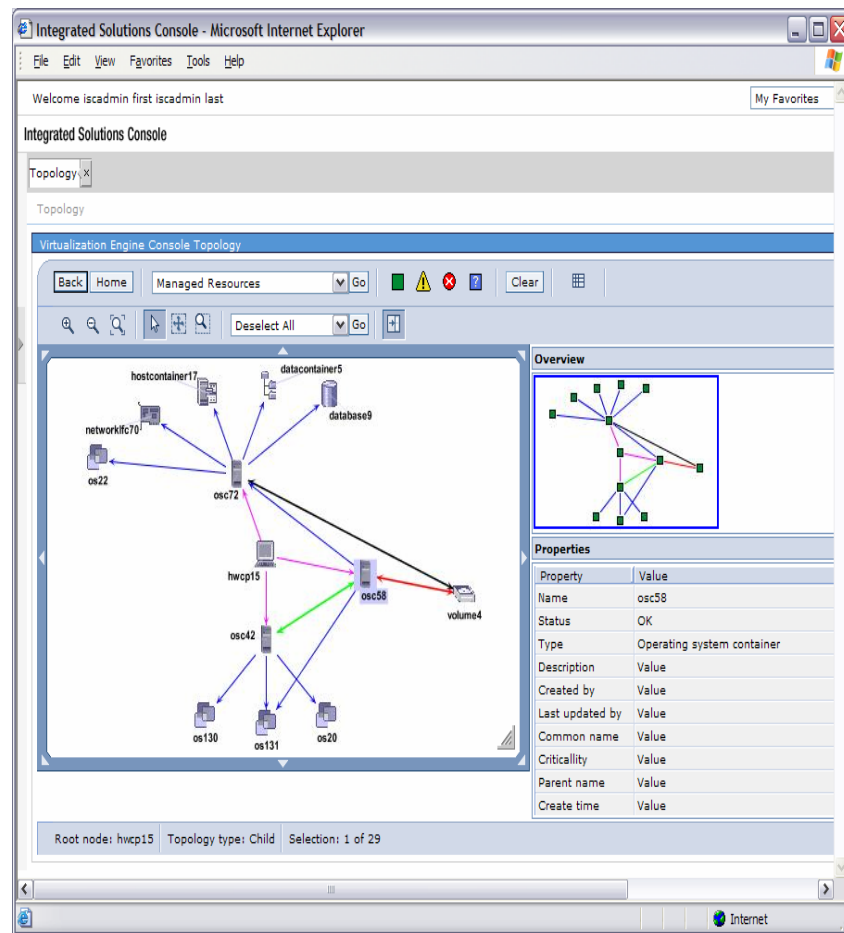
The screenshot displays the Integrated Solutions Console interface. At the top, a 'Health Center Summary' shows an overall status of 'OK'. Below this, there are sections for 'Resource health (5)', 'Monitors (6)', and 'Task status (3)'. A 'Workspace' section contains icons for these categories. A 'Dashboard' section features several gauges and charts: 'Performance indices', 'CPU 2', 'CPU Basic', 'Memory', 'Open Situations', 'Disk Storage', 'Memory', and 'Disk Byte Traffic'. On the right, a 'Watch List' table shows the status of various monitors, and a 'Resources' table shows the status of different system components. Arrows from external text boxes point to specific elements in the interface, such as the overall status, the dashboard gauges, and the tables.

Name	Status
Domino Server Monitor	Started
System Data for Sysplex	Started
Shared DASD Groups Data for Sysplex	Started
File Monitor	Started
Web Store Front	Started

Name	Status
LPAR400J:MVS:Sysplex	OK
Workload Systems	OK
CsfcIn1	OK
Remote Systems	OK
Web Servers	OK

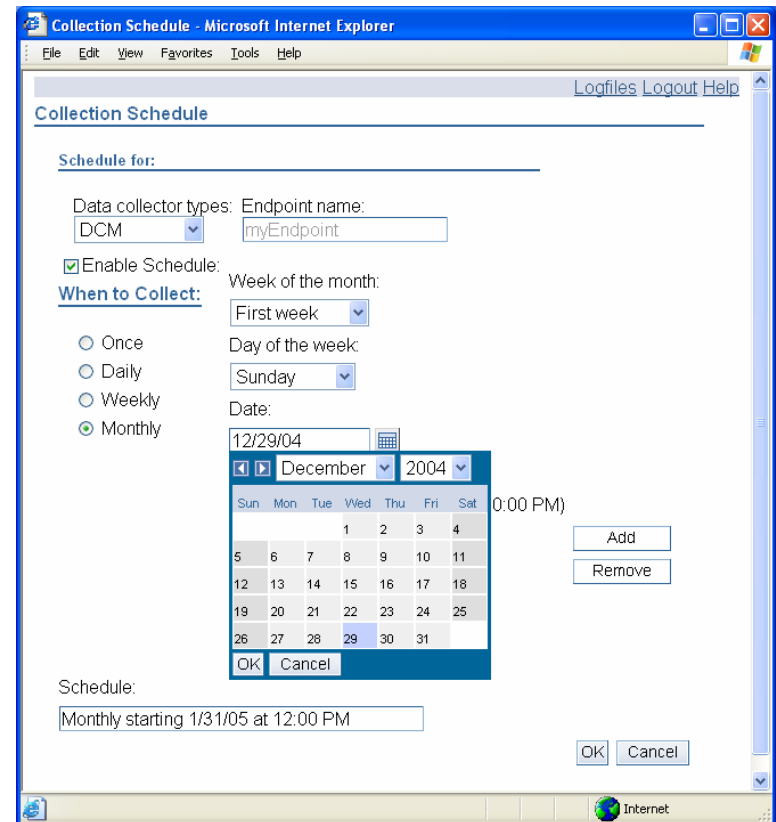
Resource Dependency Services

- **Automatic Discovery of IBM and non-IBM resources**
- **Identifies dependencies and relationships**
- **Graphical display of topology via VEC**
- **Customer may**
 - logically group resources to reflect business objectives.
 - View resource properties & status
 - Zoom, pan, etc.
- **Customer can view relationships to discover side effects of problem resources or operator actions**



Resource Dependency Services (RDS) Management

- **Manages the discovery engine within RDS.**
- **This discovery of resources ultimately populates the resources and relationships shown in the topology view.**



Business Resource Topology

Integrated Solutions Console - Microsoft Internet Explorer

Address: http://hcx194.pdl.pok.ibm.com:8421/ibm/console/tut/p/kcxml/04_Sj

Welcome veadmin

Integrated Solutions Console

View: No group filter

Resource Topology

Resource Topology

Virtualization Engine Environment

Overview

Properties

Property	Value
Name	Systems
Type	System List
Description	All computer systems in your Virtualization Engine environment

Root node: Systems | Topology type: Next Level | Selection: 1 of 29

Refresh | Last refreshed: Aug 23, 2005 2:31:23 PM EDT

Business Resource Topology: child view...

Managed Resources

---Select Action---

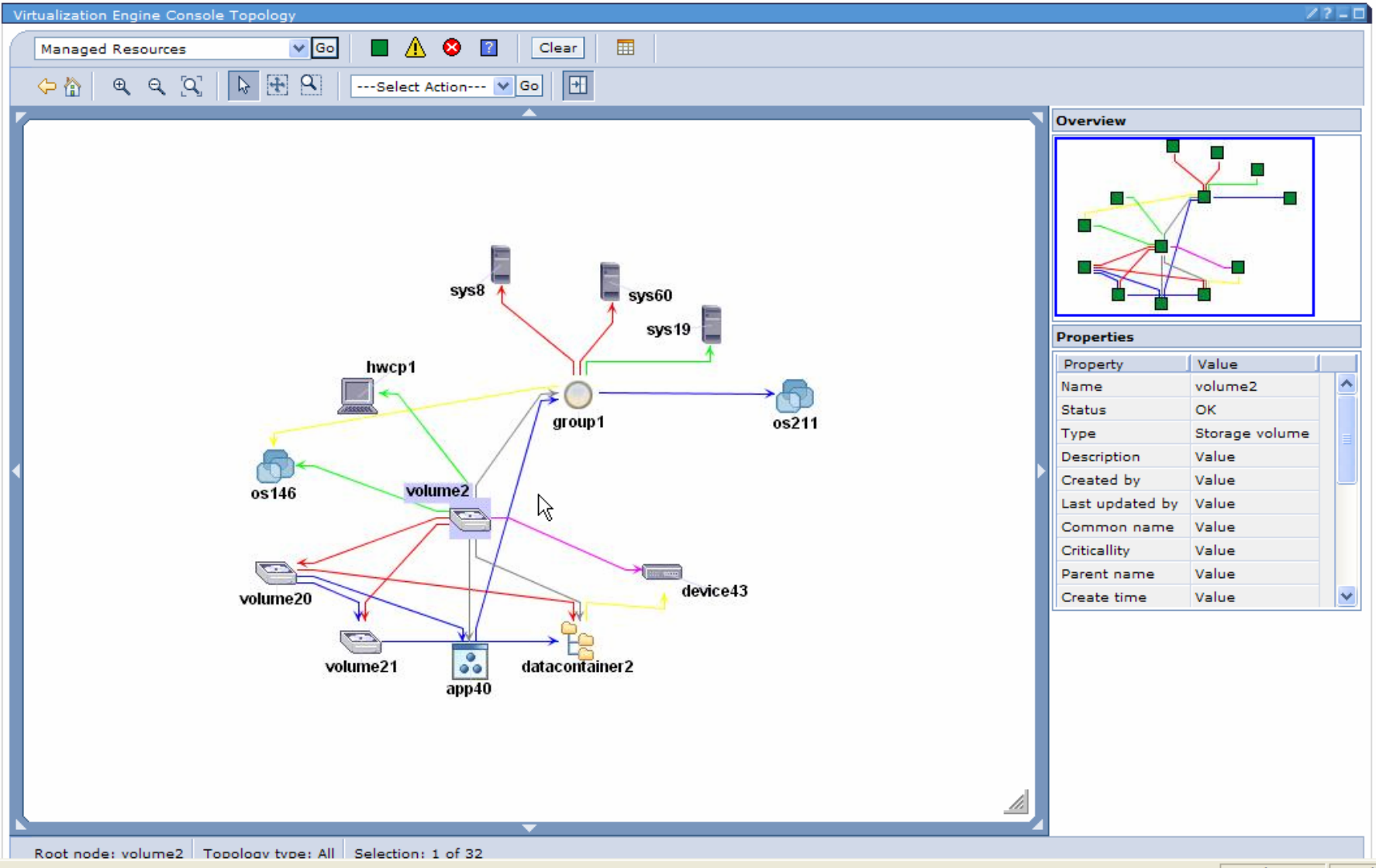
Overview

Properties

Property	Value
Name	sys22
Status	OK
Type	System
Description	Value
Created by	Value
Last updated by	Value
Common name	Value
Importance	Value
Parent name	Value
Create time	Value

Root node: sys22 | Topology type: Child | Selection: 1 of 25

Business Resource Topology: interdependencies.



Hardware Management

- **Hardware problem reporting from IBM Director**
- **Access to power management functions**
- **Launch-in-context for additional problem determination.**
 - Launch directly to iSeries and pSeries HMC tasks
 - Launch BladeCenter Management Module
- **User can view problems from multiple Director servers to gain better understanding of hardware health**

Hardware Problems - ELLINGTON-T

Hardware Problems

Target systems and groups: ELLINGTON-T [Can't find your system?](#)

... Select Action ... Go

Select	System Name	Severity	Source	Text	Date and Time
<input checked="" type="radio"/>	ELLINGTON-T	Critical	Fan 3	A fan failed	June 10, 2004 5:37:46
<input type="radio"/>	ELLINGTON-T	Critical	Fan 7	A fan failed	June 9, 2004 6:02:34
<input type="radio"/>	ELLINGTON-T	Warning	Fan 1	A fan is throttling	June 12, 2004 12:34:57
<input type="radio"/>	ELLINGTON-T	Warning	Fan 9	A fan is throttling	June 12, 2004 9:55:48
<input type="radio"/>	ELLINGTON-T	Warning	Memory	A memory dim is n...	June 8, 2004 8:16:32
<input type="radio"/>	ELLINGTON-T	Warning	NIC 1	Network card is offl...	June 8, 2004 3:32:45
<input type="radio"/>	ELLINGTON-T	Information	System	Informational mess...	June 7, 2004 2:46:56
<input type="radio"/>	ELLINGTON-T	Ignored Crit	Fan 2	A fan failed	June 6, 2004 6:02:34
<input type="radio"/>	ELLINGTON-T	Ignored Wa	Memory	A memory dim is n...	June 8, 2004 8:16:32
<input type="radio"/>	ELLINGTON-T	Ignored Inf.	server	Informational mess...	June 9, 2004 7:46:06

Page 1 of 1 Total: 7 Filtered: 7 Displayed: 7 Selected: 1

Hardware Management - iSeries HMC

Hardware Management

Target systems and groups: iSeries HMC [Can't find your system?](#)

[Server and Partition Management: Frame Management](#)
[Server and Partition Management: Server Management](#)
[Information Center and Guided Setup Wizard](#)
[Licensed Internal Code Maintenance: HMC Code Update](#)
[Licensed Internal Code Maintenance: Licensed Internal Code Updates](#)
[HMC Management: HMC Users](#)
[HMC Management: HMC Configuration](#)
[Service Applications: Service Focal Point](#)

OS Management

- **Navigate to and perform OS-specific management from the cross-platform console.**
- **Multiple techniques employed:**
 - Portlets for i5/OS management.
 - Launch-in-Context for OS management through:
 - IBM Director
 - WebSM
 - iSeries Navigator

The screenshot shows the iSeries Navigator interface. At the top, it displays 'Elapsed time: 00:00:00' and a 'Refresh' button. Below this is a toolbar with various icons and a 'Go' button. The main content is a table with the following columns: Select, Job Name, Detailed Status, Current User, Type, CPU %, Run Priority, and Thread Count. The table lists several jobs, including Qase5, Admin, Iwa50exp, Qase51, Iwa51exp, Qbatch, Qcmn, Qacsotp, Qlzpssrv, Qnmapingd, Qnmarexecd, Qnpsrvr, Qzrcsrvr, and Qzscsrvr.

Select	Job Name	Detailed Status	Current User	Type	CPU %	Run Priority	Thread Count
<input type="checkbox"/>	Qase5	Waiting for dequeue	Qsys	Subsystem	0	0	1
<input type="checkbox"/>	Admin	Waiting for Java program	Qejbsvr	Batch - Server	0	25	32
<input type="checkbox"/>	Iwa50exp	Waiting for Java program	Qejbsvr	Batch - Server	0	25	37
<input type="checkbox"/>	Qase51	Waiting for dequeue	Qsys	Subsystem	0	0	1
<input type="checkbox"/>	Iwa51exp	Waiting for Java program	Qejbsvr	Batch - Server	0	20	45
<input type="checkbox"/>	Qbatch	Waiting for dequeue	Qsys	Subsystem	0	0	1
<input type="checkbox"/>	Qcmn	Waiting for dequeue	Qsys	Subsystem	0	0	1
<input type="checkbox"/>	Qacsotp	Waiting for request	Quser	Prestart communications	0	20	1
<input type="checkbox"/>	Qlzpssrv	Waiting for request	Quser	Prestart communications	0	20	1
<input type="checkbox"/>	Qnmapingd	Waiting for request	Quser	Prestart communications	0	25	1
<input type="checkbox"/>	Qnmarexecd	Waiting for request	Quser	Prestart communications	0	25	1
<input type="checkbox"/>	Qnpsrvr	Waiting for request	Quser	Prestart communications	0	20	1
<input type="checkbox"/>	Qzrcsrvr	Waiting for request	Quser	Prestart communications	0	20	1
<input type="checkbox"/>	Qzscsrvr	Waiting for request	Quser	Prestart communications	0	20	1

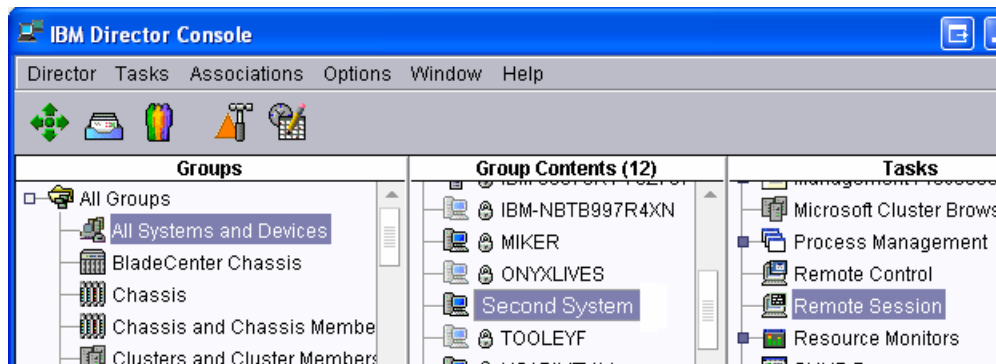
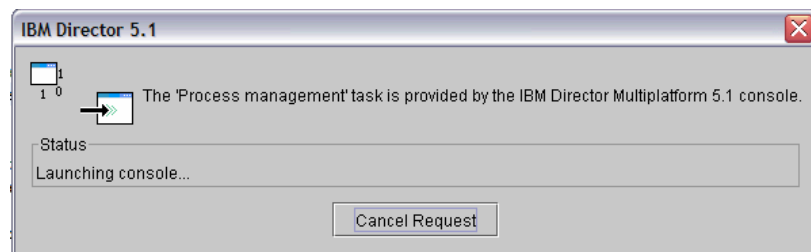
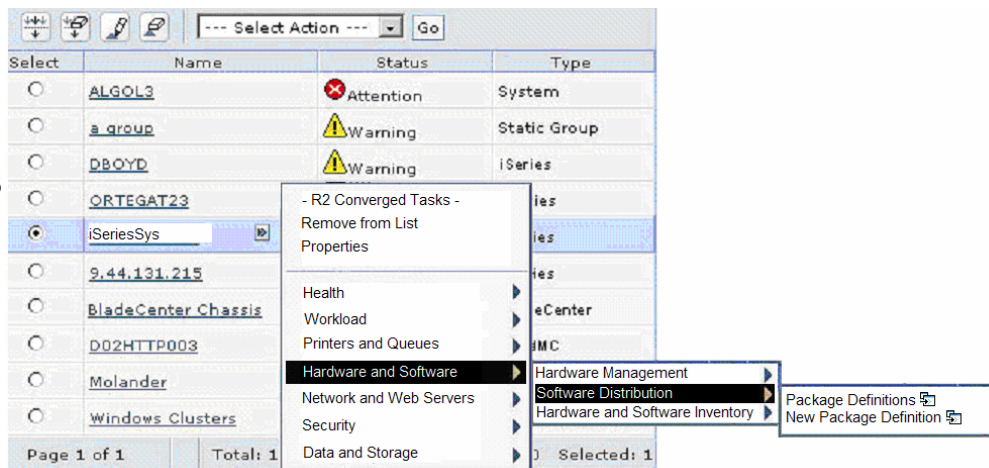
OS Management: extensions

The screenshot shows the Integrated Solutions Console (ISC) interface in Microsoft Internet Explorer. The main content area displays the 'iSeries OS Management Portlet' for 'TCP/IP Servers - Lp02ut4'. The portlet includes a 'Refresh' button and a table of services. The table has columns for 'Name', 'Status', and 'Description'. Below the table is a pagination bar showing 'Page 1 of 2', '1 Go', 'Total: 30 Filtered: 30 Displayed: 15 Selected: 0', and a 'Close' button.

Select	Name	Status	Description
<input type="checkbox"/>	ASFTomcat	Started	ASFTomcat Basic Servlet and JSP Engine for the Apache Web Server
<input type="checkbox"/>	BootP	Stopped	BootP Server
<input type="checkbox"/>	BootP DHCP Relay Agent	Stopped	BootP DHCP Relay Agent
<input type="checkbox"/>	CIMOM	Stopped	CIM Object Manager
<input type="checkbox"/>	DDM	Started	DRDA DDM Server TCP/IP
<input type="checkbox"/>	DHCP	Stopped	Dynamic Host Configuration Protocol
<input type="checkbox"/>	DLFM	Stopped	Datalink File Manager
<input type="checkbox"/>	EDRSQL	Stopped	Extended Dynamic Remote SQL
<input type="checkbox"/>	FTP	Started	File Transfer Protocol
<input type="checkbox"/>	HTTP Administration	Started	HTTP Server
<input type="checkbox"/>	IBM Directory Server	Started	IBM Directory Server for iSeries (LDAP)
<input type="checkbox"/>	INETD	Stopped	Internet Daemon (INETD) Super Server
<input type="checkbox"/>	iSeries Netserver	Started	iSeries Support for Windows Network Neighborhood
<input type="checkbox"/>	LPD	Started	Line Printer Daemon
<input type="checkbox"/>	Management central	Started	Management central

Launch-in-Context

- Console utility to launch specific-tasks in other consoles.
- Launches the most-used functions from
 - IBM Director Console
 - WebSM Console
 - iSeries Navigator Console
- Launching is done from within the flow of a VE Console scenario.
- Launch-in-Context is a tool for:
 - Coping with functions that have not yet migrated to the ISC
 - Leveraging function that will never migrate to the ISC
- Customers prefer to have access to an entire scenario, even if it launches another console within its flow.

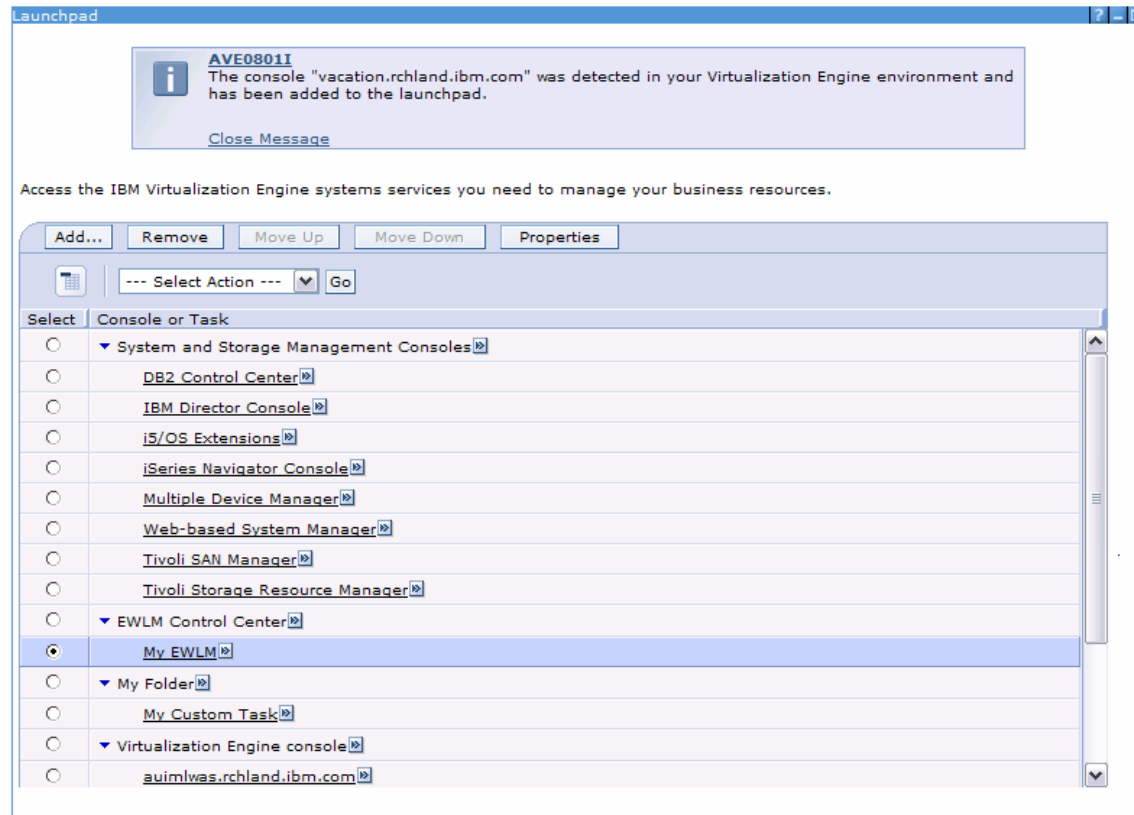


Launch-In-Context

The screenshot displays the IBM Integrated Solutions Console interface. On the left is a navigation tree with categories like 'Welcome', 'Console Settings', 'Virtualization Engine Console', 'Health', 'Task Activity', 'Workload', 'Printers and Queues', 'Hardware and Software', 'Network and Web Servers', 'Security', 'Data and Storage', and 'Virtualization Engine Setup'. The main area shows the 'View Health Center' page with a 'Health Center Summary' section. An 'Event Action Plan Wizard' dialog box is open in the foreground, featuring a left-hand menu with sections: 'Name', 'Systems', 'Event filters', 'Actions', 'Time frame', and 'Summary'. The 'Name' section is active, showing a text input field with the placeholder 'Name event action plan'. Below the input field are buttons for '< Back', 'Next >', 'Cancel', and 'Help'. The background page shows a table of resources with status indicators (Attention, Warning, OK) and a monitoring section with alerts.

Launchpad

- **Launch VE and other related consoles**
- **Launch user-defined customer applications and consoles**
- **Detects VE web consoles in the environment (e.g., EWLM Control Center); automatically creates links for them**
- **Create “Favorites with context” links with ability to group and organize.**
 - One-click to run a task on desired system
 - Subset favorite tasks on favorite systems
 - Create custom task list for users integrating VE tasks and customer tasks



Security

➤ **Goals**

- Lessen the cost of managing security of VE & other products launched with VE Console
- Exploit security customers have already configured to protect existing resources
- Build infrastructure on which can be exploited by future enterprise security management function in the VE.

➤ **Non Goals**

- Provide enterprise security management
- Develop “all encompassing” VE specific security environment

Single Sign-On

- **Provides integrated/consistent security throughout the VE Console**
- **Extensible single sign-on architecture**
- **Simplified VE Console based management interface for the single sign-on architecture**
- **Single sign-on experience to end users of the VE Console**
 - Once end users sign on to the console, they can successfully launch any application without being prompted again for another user ID and password for that application or system

Single Sign-on: basic setup

- **Target systems participating in Single Sign-on need to be configured**
- **Target applications participating in Single Sign-on should be registered**
- **Enroll VE console users to participate in Single Sign-on**
- **Associate target users on target systems with VE console users**
 - Password for target user cached if target applications on the target system do not support Identity Context References for authentication.

Single Sign-on: Welcome Portlet

The screenshot shows a Microsoft Internet Explorer browser window displaying the IBM Integrated Solutions Console. The address bar shows the URL: http://murphy1.rchland.ibm.com:8421/ibm/console/!ut/p/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_QjzIrMQADE0NH_yBfr8AAX48AJzc3F3MDYwOQerN4g3hjM_1IMG. The page title is "Welcome Mr. veadmin" and "Integrated Solutions Console". The main content area is titled "Welcome to the Virtualization Engine Console" and includes the following sections:

- Virtualization Engine Readiness:**
 - [Set Up Single Signon for Your Users](#): Start here to create associations needed to connect to the resources with which you want to work.
 - [Set Up the Health Center](#): There have been management sources defined for this user, but some are reporting as Not available.
 - [Configure Resource Dependency Service](#): Unable to establish connection to the RDS database.
- Virtualization Engine Resources:**
 - The IBM Director bridge to the Virtualization Engine console has been detected in your environment. The bridge allows you to work with IBM Director through the Virtualization Engine console.
 - [Set Up IBM Director by discovering systems and distributing agents](#)
 - [Ensure that you install the latest Virtualization Engine Updates](#): View, download, and install your Virtualization Engine software updates.
 - [Get to know the Virtualization Engine console](#): Find information on how to navigate and use the Virtualization Engine console.

- For single sign-on, this displays the status of the single sign-on configuration for the current (signed on) VE user. It checks to see if there are associations created for the management sources currently defined for the user.

Serviceability

- **Fix acquisition for VE management servers.**
- **Wizards that help you:**
 - Discover available fixes
 - Choose fixes to download
 - Download fixes
 - Distribute and Install fixes

The screenshot shows the Integrated Solutions Console (ISC) interface in Microsoft Internet Explorer. The interface is divided into several sections:

- ISC Header:** The top navigation bar containing 'Welcome wasadmin wasadmin', 'My Favorites', 'Edit my profile', 'Help', and 'Log out'.
- Software Updates Portlet:** The main content area with a 'Software updates' title bar. It includes a 'Systems' dropdown menu set to 'All Systems' and a 'Find software updates' link.
- System Chooser:** A 'Systems' dropdown menu that allows users to filter updates by system.
- Context Menu:** A menu that appears over the update table, offering actions like 'Install...', 'Distribute and Install...', 'View Update Details', and 'Delete...'.
- Update Details Portlet:** A detailed view of the selected update (UQ91456), showing its version (1.1.020), product (VE Console), supported OS (s/OS), and various requirements like 'Reboot required: Yes' and 'Log-in required: No'. It also includes prerequisite and co-requisite tables.

Select	Update	Version	Product	Supported OS	System	Size	Status
<input type="checkbox"/>	UQ91234	1.1.020	Director Server	ADX	System 1	78 MB	Downloaded
<input type="checkbox"/>	UQ91345	1.1.020	EWLM	Linux on xSeries	System 2	134 MB	Downloaded
<input checked="" type="checkbox"/>	UQ91456	1.1.020	VE Console	s/OS	System 3	121 MB	Downloaded
<input type="checkbox"/>	UQ90364			IX	System 1	89 MB	Downloaded

Product	Minimum Version	Maximum Version
WebSphere Application Server	6.0.010	6.0.030

Product	Minimum Version	Maximum Version
VE Console Bridge	1.2.010	1.2.030







Management

- **Simplified management of the VE**
 - Graphical topology of VE components installed within the customer's environments
 - Console setup wizard
 - Wizards to manage single-sign-on (SSO)
 - Welcome/Readiness page
 - VE Console Preferences

Welcome to the Virtualization Engine Console

Welcome to the Virtualization Engine Console

Virtualization Engine Readiness:

-  [Set Up Single Sign-on For Your Users](#)
Enable users to take advantage of single sign-on.
-  [Set Up the Health Center](#) | [Open the Health Center](#)
Start here to select what systems, monitors, workloads and other resources you care about.
-  [Resource Relationship Configuration](#) | [Resource Topology](#)
Collecting from 8 sources
-  [EWLM Domain Agents Need Installing](#)
You need to install the EWLM agents in order to start managing workload.
-  [IBM Director Multiplatform Agents Need Installing](#)
You need to install the Director Multiplatform agents in order to start managing your systems.
-  [Fixes Available for Virtualization Engine Agents](#)
There are Virtualization Engine agent fixes available to install

[Take a Tour of the Virtualization Engine](#)

[Start Using Virtualization Engine console Now](#)

Welcome to the Virtualization Engine Console Setup Wizard

Welcome to the Virtualization Engine console setup wizard. It will help set up the health center so the resources you care about are added to the health center and verifies your connections are in order.

You can click Cancel at any time to exit the wizard.

Click Next to continue.

< Back Next > Finish Cancel

VE Console Summary for Release 2:

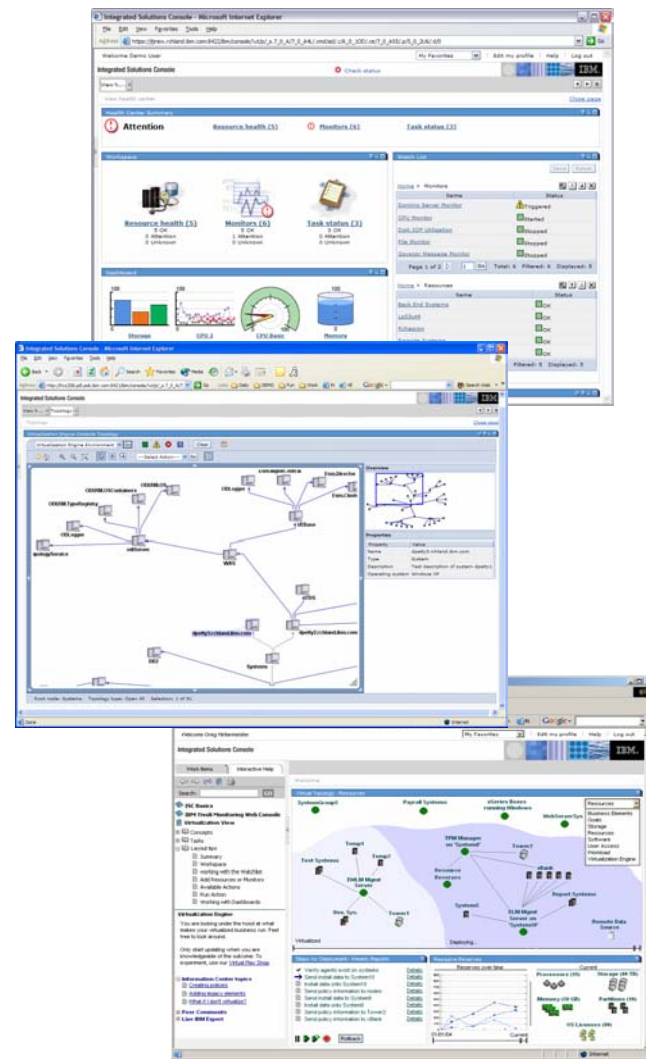
VE Console Release 2 will enable clients to:

- Lower the cost of system administration
- Provide better Qualities of Service
- Reduce the time to deploy new infrastructure

How?

VE Console function has been enhanced in R2 to be able to manage the:

- Health of the environment
- Relationships between resources
- Apply expertise to new areas
- Drill deep into Hardware & OS management
- Keep VE environment running smoothly



Bibliography

- **System Sales**

- [IBM Virtualization Engine Resource Kit](#)

- **IBM eServer Software Information Center**

- [IBM VE Console](#) > Topic Overview > VE Console

- **IBM links**

- [IBM Virtualization Engine](#)

- [Virtual management and Access](#)

- **pSeries Cluster System Management**

http://www-1.ibm.com/servers/aix/wsm/csm_cluster.html

- **iSeries Navigator - Management Central**

<http://publib.boulder.ibm.com/infocenter/series/v5r3/ic2924/index.htm> (Systems Management topic)

- **Lightweight Directory Access Protocol (LDAP)**

<http://publib-b.boulder.ibm.com/Redbooks.nsf/RedbookAbstracts/sg244986.html?Open>

- **Enterprise Identity Mapping (EIM)**

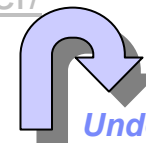
<http://publib.boulder.ibm.com/infocenter/series/v5r3/ic2924/index.htm> (eBusiness and Web Serving
→ Security and Directory Server Topic)

- **IBM Directory Server**

<http://www-306.ibm.com/software/tivoli/products/directory-server/>

- **WebSphere Application Server**

<http://www-306.ibm.com/software/webservers/appserv/was/>



Underlined text is hyperlinked