



IBM Software Group

Tivoli Enterprise Portal – Dashboard to IT Service Management

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Tivoli software



ON DEMAND BUSINESS™

Agenda

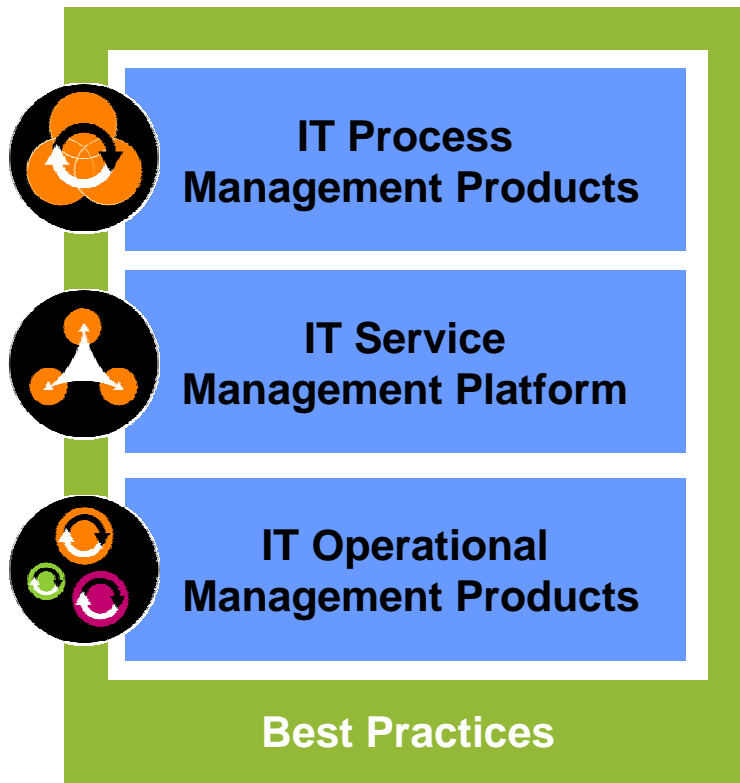
- Managing complexity – a people problem.
- Functional overview – how TEP makes people effective.
- Integration with TEP – how TEP solves problems.
- TEP Roadmap.
- Common questions.



Our Approach to IT Service Management

A Better Way to Manage the Business of IT

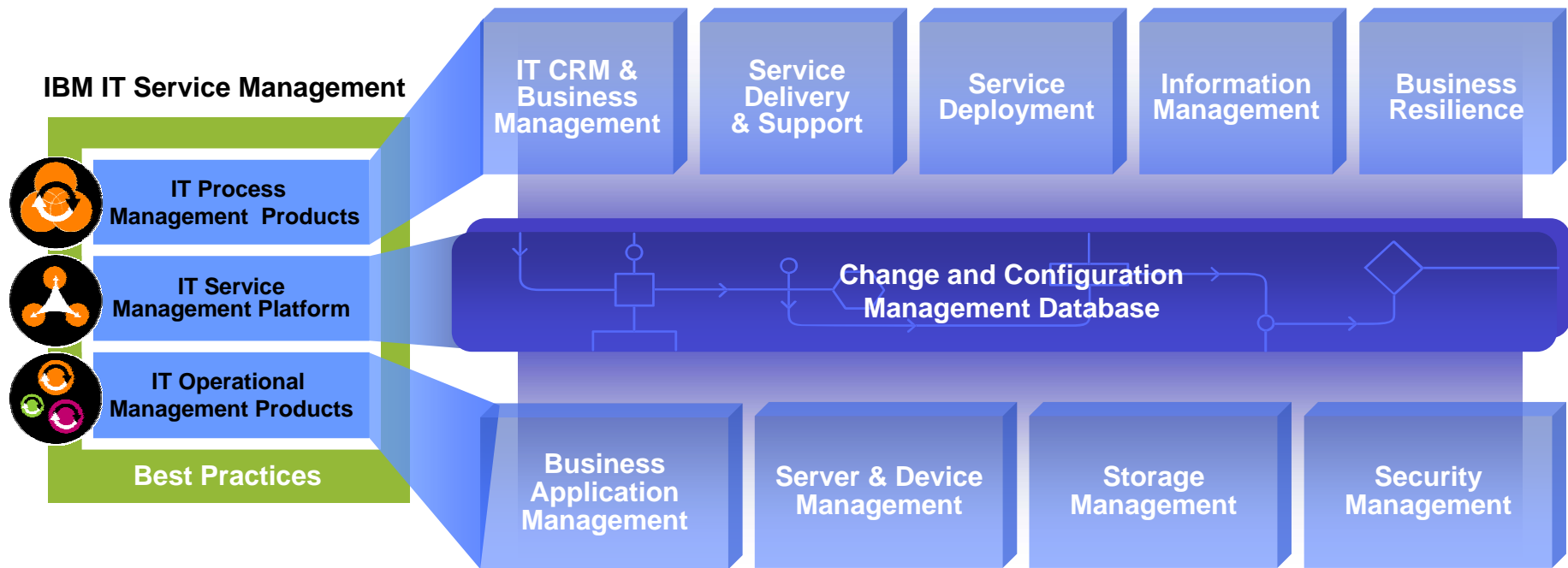
IBM IT Service Management



- Automated ITIL-aligned workflows
- Open, standards-based CMDB and workflow engine
- Automated infrastructure-aligned tasks
- Best Practices and Implementation Support

IBM IT Service Management

A Differentiated, Flexible Approach



IBM Best Practices and Implementation Support

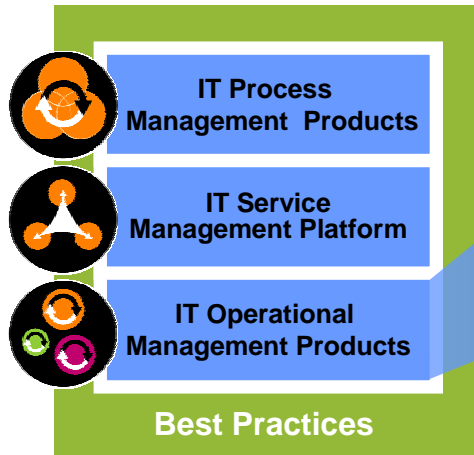
IBM IT Service Management



- **IBM Tivoli Unified Process**
 - IBM Process Reference Model for IT incorporates ITIL, COBIT, and IGS best practice processes in a complete, cohesive model
 - Tools Mentor - make ITIL actionable!
- **Open Process Automation Library (OPAL)**
- **IBM Global Services**
 - Innovation Workshops
 - Infrastructure Services Readiness Engagement
 - IT Service Management Design
 - Implementation Services

IT Operational Management Products

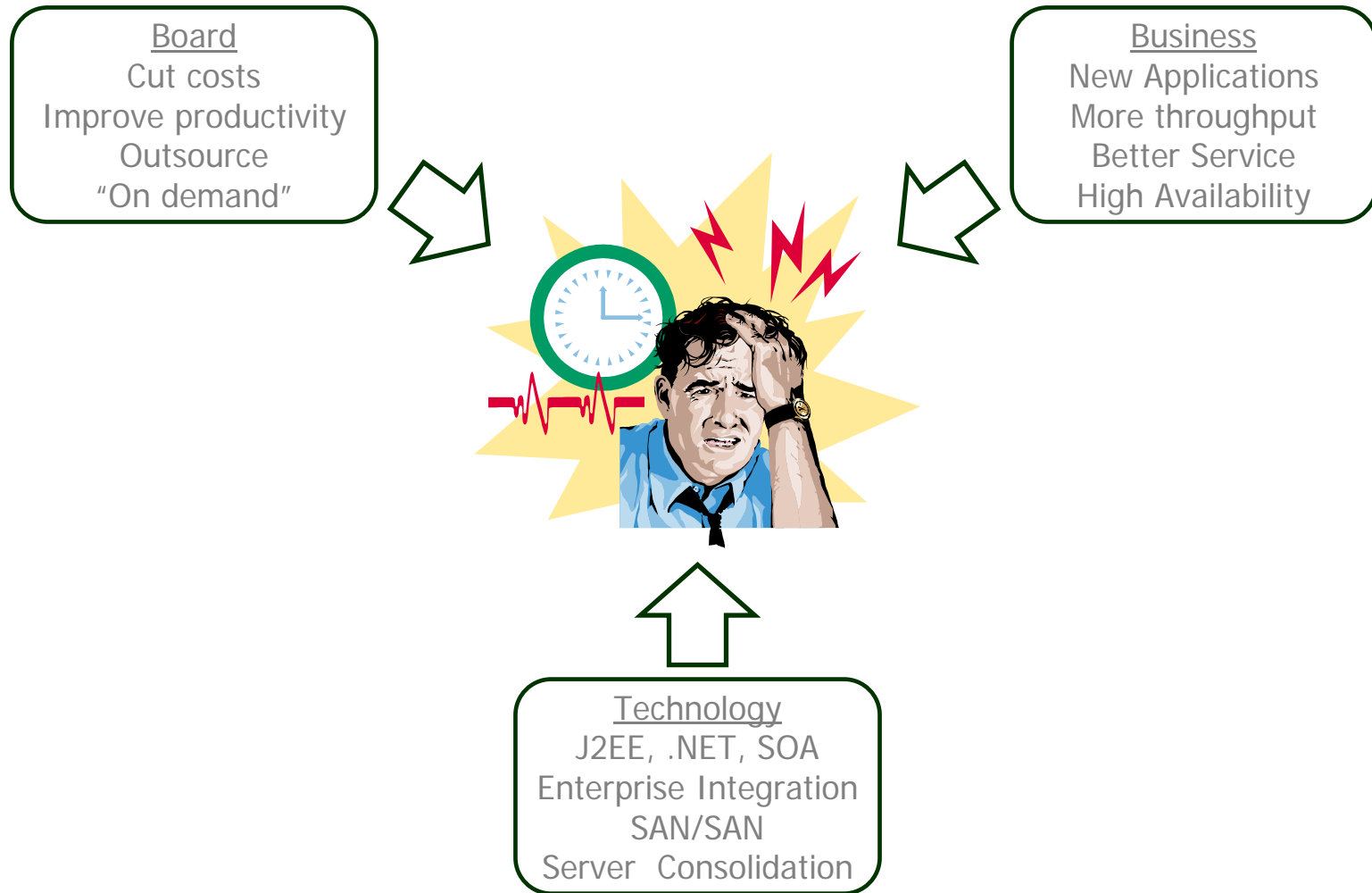
IBM IT Service Management



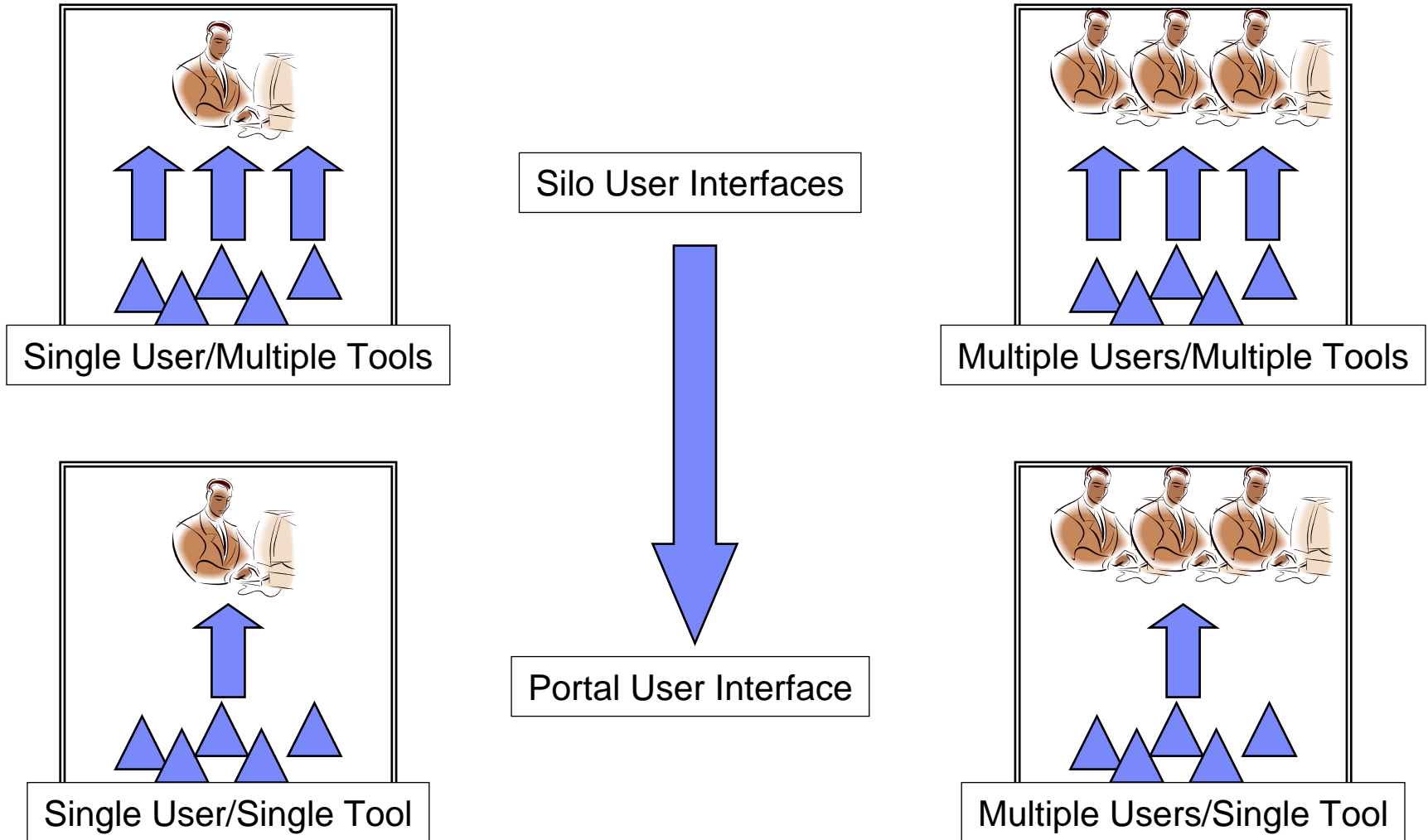
| Business Application Management | Server, Network & Device Management | Storage Management | Security Management |
|---|---|--|---|
| <p>Products include:</p> <ul style="list-style-type: none"> ▪ Tivoli Composite Application Management ▪ Tivoli Business Systems Manager ▪ Tivoli Intelligent Orchestrator ▪ Tivoli Service Level Advisor ▪ Tivoli License Manager ▪ Tivoli License Compliance Manager ▪ Tivoli Decision Support | <p>Products include:</p> <ul style="list-style-type: none"> ▪ Tivoli Enterprise Console ▪ Tivoli Monitoring ▪ Tivoli OMEGAMON ▪ Tivoli NetView ▪ Tivoli Remote Control ▪ Tivoli Systems Automation ▪ Tivoli Workload Scheduler ▪ Tivoli Provisioning ▪ Tivoli Configuration Manager | <p>Products include:</p> <ul style="list-style-type: none"> ▪ Tivoli Storage Manager ▪ Tivoli Continuous Data Protection for Files ▪ Totalstorage Productivity Center | <p>Products include:</p> <ul style="list-style-type: none"> ▪ Tivoli Access Manager ▪ Tivoli Identity Manager ▪ Tivoli Federated Identity Manager ▪ Tivoli Directory Server ▪ Tivoli Directory Integrator ▪ Security Compliance Manager |

Red = TEP integration

After Automation, Process and Products... People!



Making People and Workgroups More Effective

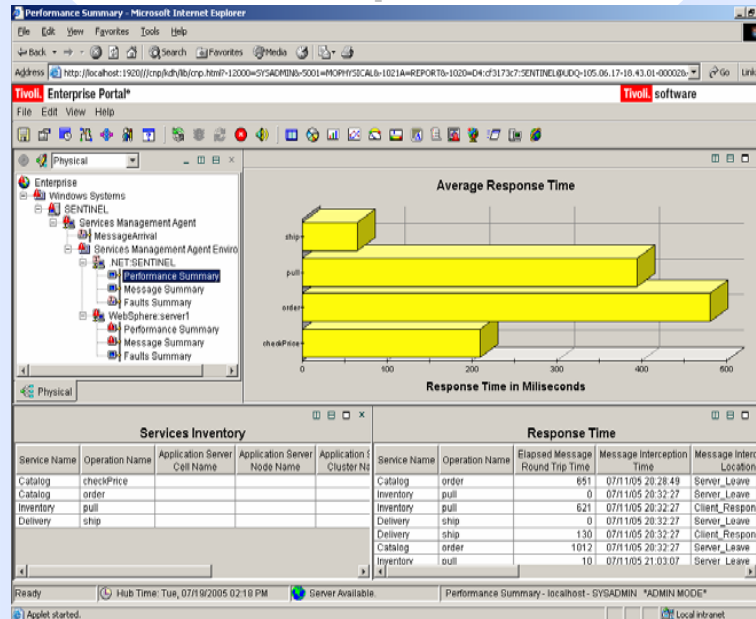


Integrating with TEP – Centralized Management

Mainframe

- zAAP processors
- Cryptographic Coprocessors
- CICS TS 3.1
- CICS JMV statistics
- IMS Connect
- DB2 Connect
- DB2 v8.1
- Comm Server Network Management Interface data
- IPv6 support in NetView
- IBM DS6000 & 8000 Storage
- Linux
- USS
- WebSphere AS
- WMQ, WIB

Tivoli Enterprise Portal



Composite Applications

- Response Time Tracking
- SOA
- WebSphere

Distributed

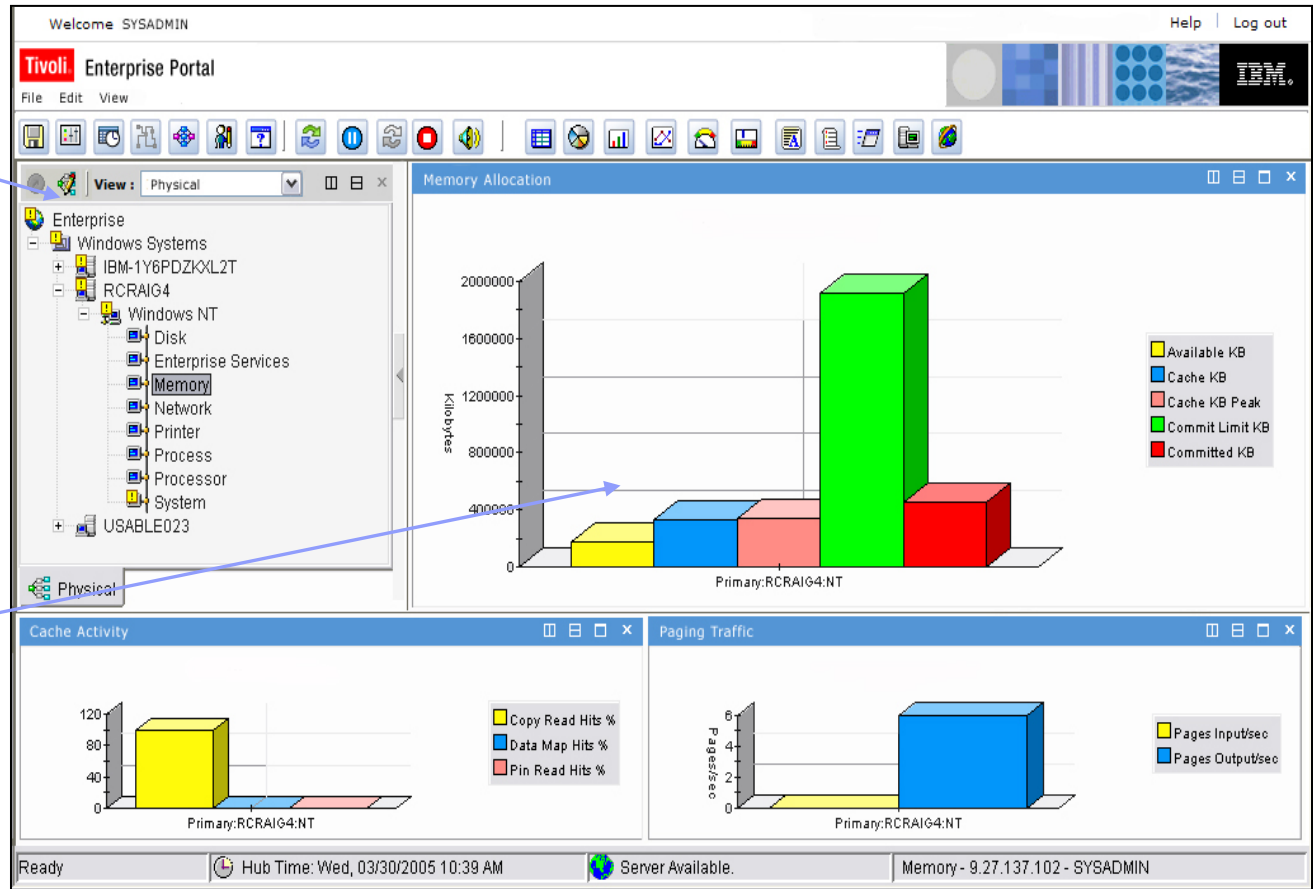
- UNIX
- Windows
- Linux
- OS/400
- DB2, Oracle, Microsoft SQL, Sybase
- Linux
- mySAP, Siebel
- HACMP
- Microsoft Exchange
- Microsoft .NET
- Virtual Servers - Citrix, VMWARE ESX
- WebSphere (Portal/Server)
- SOA
- WMQ, WICS, WBI
- Universal Agent

End To End Management

TEP puts the enterprise at your fingertips...

End-to-End Access to All Enterprise Components

Easily personalize to match responsibilities



So what's value to you?

- BY
 - ▶ Integrating multiple Tivoli management products under a common UI and adding personalization, event and status management, workflow automation, expert advise, 3rd party integration and more...
- TEP
 - ▶ Enables individuals and teams of end-users to improve their productivity, speed of response, and ability to collaborate on management tasks...
- WHICH MEANS
 - ▶ A more effective and productive working environment for individuals
 - ▶ A more cost effective environment though better leverage of scarce and expensive technical specialists
 - ▶ A more efficient organization through reduced time to resolving common system problems and outages
 - ▶ A strong foundation for building high-value business-aligned management organizations focused on improving service levels for critical bottom line applications



Workspaces

Thread Activity - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://hqdn12:1920///cnp/kdh/lb/cnp.html?~12000=DDMA3S-5001=MOPHYSICAL

CandleNet Portal Candle
Managing what matters most™

File Edit View Help

Physical

- DB2PLEX
 - MVS DB2
 - D71GRP:DB2plex:DSGROUP
 - Monitored Systems Summary
 - Thread Activity**
 - DB2_Thread_Waiting_Crit
 - Global Lock Conflicts
 - Coupling Facility Structures
 - Group Buffer Pool Structures
 - Group Buffer Pool Statistics
 - Object Analysis Database
 - GOA Thread Database
 - Group Object Activity Database
 - GOA Volume Thread

Threads Using CPU

Correlation Identifier

Threads that have Wait Times

Correlation Identifier

Thread Activity Table View

| | DB2ID | Plan Name | Correlation Identifier | Package Name | Collection Identifier | Thread Status | Thread Type | Authorization Identifier | Connection Identifier | Connection Type | Elapsed Time | CPU Time |
|--|-------|-----------|------------------------|--------------|-----------------------|---------------|-------------|--------------------------|-----------------------|-----------------|--------------|--------------|
| | D71C | MORT2 | CXEGA39 | MORTGAGE | MortApp | Not_In_DB2 | Allied | CXEGA39 | DB2CALL | DB2_CAF | 00-00:36.64 | 00:00:04.062 |
| | D71A | MORT5 | CXEGA18 | MORTGAGE | MortApp | WAIT_ASYNCRD | Allied | CXEGA18 | DB2CALL | DB2_CAF | 00-00:43.80 | 00:00:05.617 |
| | D71G | MORT1 | CXEGA29 | MORTGAGE | MortApp | Not_In_DB2 | Allied | CXEGA29 | DB2CALL | DB2_CAF | 00-00:43.86 | 00:00:09.565 |
| | D71E | MORT3 | CXEGA37 | MORTGAGE | MortApp | Not_In_DB2 | Allied | CXEGA37 | DB2CALL | DB2_CAF | 00-00:41.57 | 00:00:07.677 |

Data Sharing Group: D71GRP

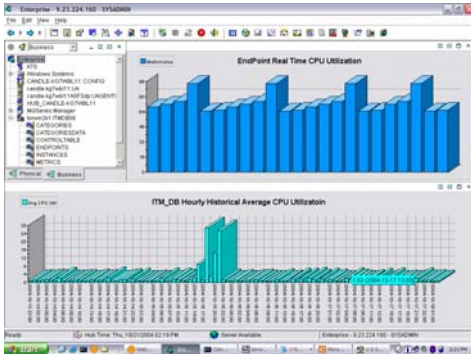
Ready Hub Time: Thurs, 09/09/2004 4:40 PM Server Available. Thread Activity - hqdn12 - DDMA3 *ADMIN MODE*

Applet started. Local intranet

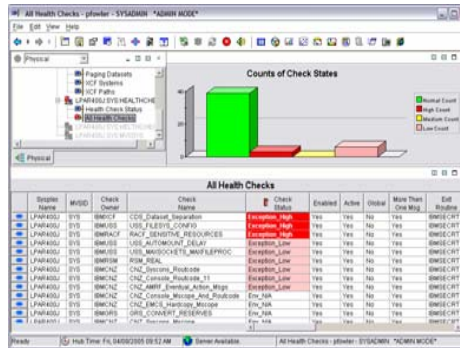
Create your own Composite Application Workspace

TEP included with ITM 6.1, OMEGAMON & ITCAM Products

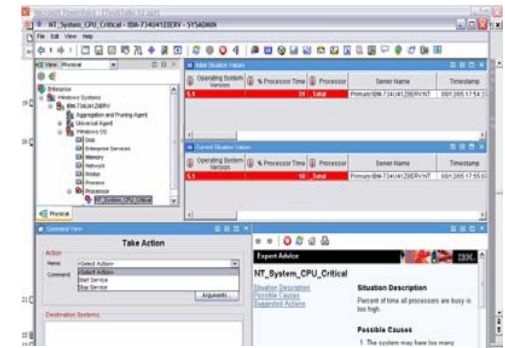
Multiple Customized Composite Application Management Views



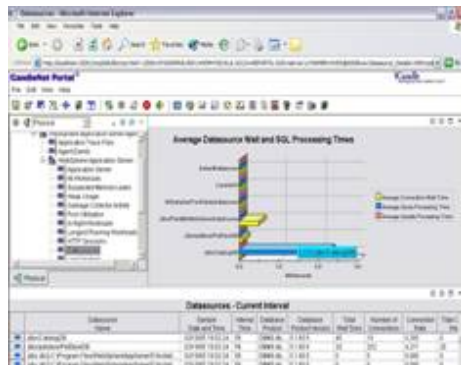
Operating Systems & MW



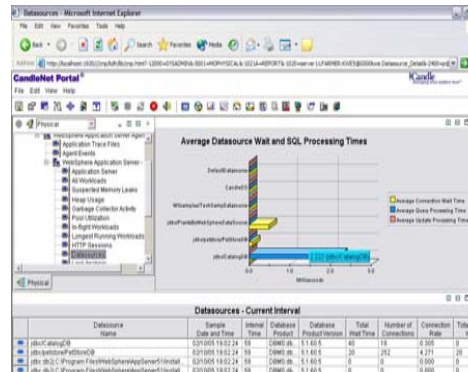
Native z/OS Health



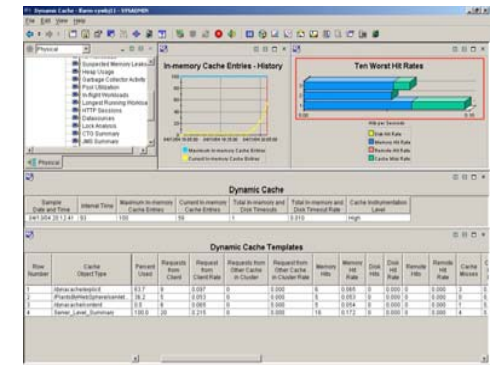
WS & J2EE Applications



End to End Transactions



WBI Infrastructure



Databases

Situation Analysis: Everything you need to respond to the problem!

The screenshot displays the Tivoli Enterprise Console interface for a critical situation. The main window shows a tree view on the left with the selected node 'NT_System_CPU_Critical'. The central pane displays two tables:

| Initial Situation Values | | | | |
|--------------------------|------------------|-----------|----------------------------|-------------------|
| Operating System Version | % Processor Time | Processor | Server Name | Timestamp |
| 5.1 | 31 | _Total | Primary:IBM-734U41Z8ERV:NT | 08/12/05 17:54:27 |

| Current Situation Values | | | | |
|--------------------------|------------------|-----------|----------------------------|-------------------|
| Operating System Version | % Processor Time | Processor | Server Name | Timestamp |
| 5.1 | 10 | _Total | Primary:IBM-734U41Z8ERV:NT | 08/12/05 17:54:27 |

At the bottom, the 'Take Action' panel shows a list of actions including 'Start Service' and 'Stop Service'. The 'Expert Advice' panel provides the following information:

NT_System_CPU_Critical

Situation Description
Percent of time all processors are busy is too high.

Possible Causes

1. The system may have too many...
2. The system may have a looping application...

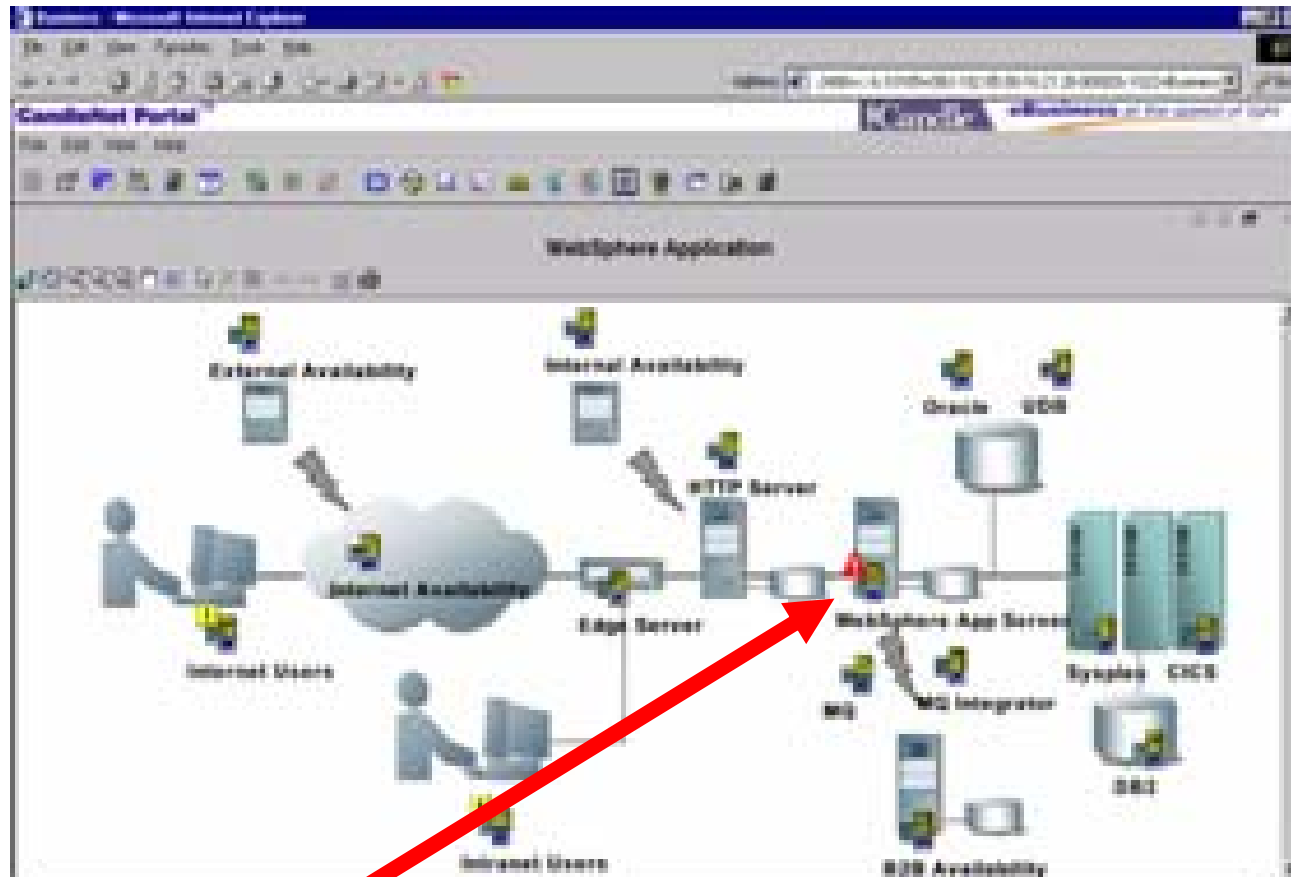
Initial Cause

Current State

Expert Advice

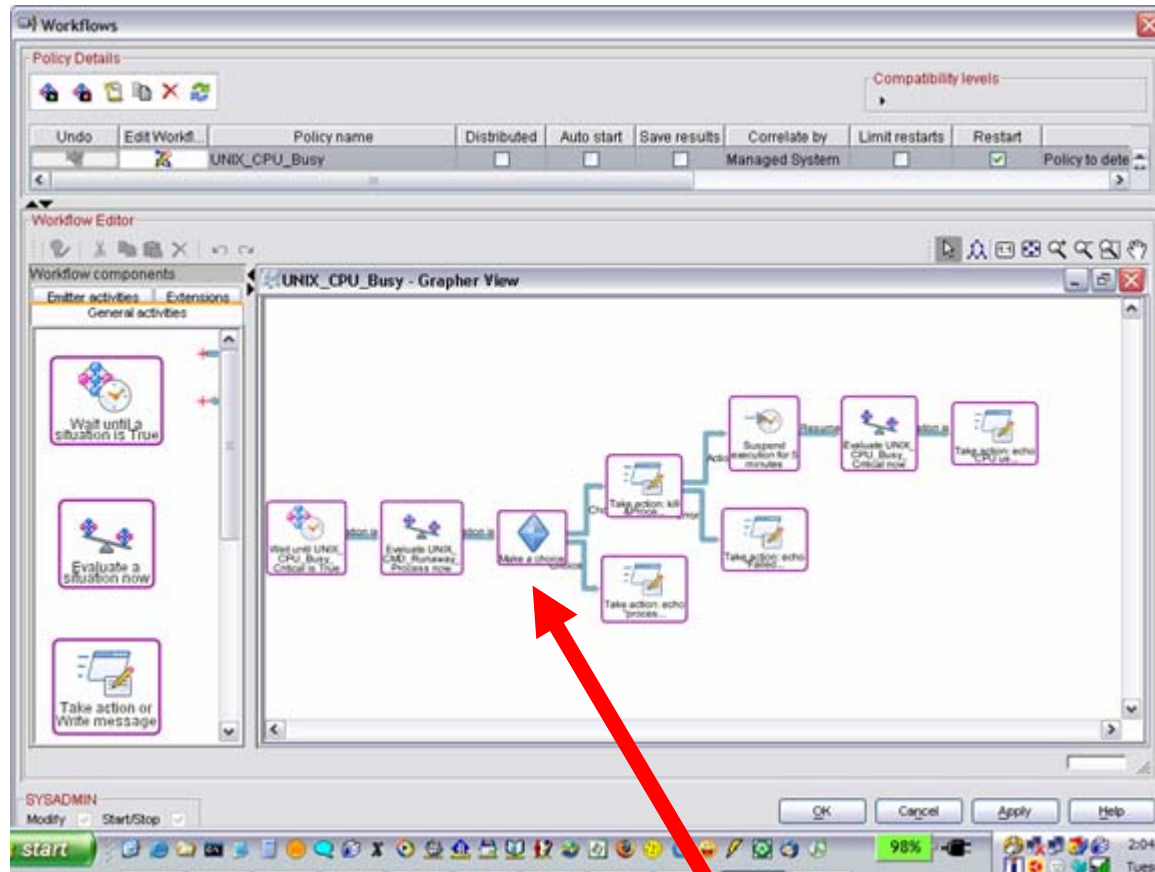
Take action to fix the problem

Graphic Views – covering the enterprise at a glance



Low-level problems can be rolled up into high-level status objects. Keep an eye on a complex environment and then drill down into the details when problems occur.

Workflow Automation



Policies automatically respond to situations, making problem resolution faster and more accurate.

Accessing Expert Advice

The screenshot displays the Tivoli Enterprise Performance Explorer interface. A 'Preview' window is open, showing expert advice for the situation 'NT_Available_Bytes_Critical'. The advice includes a situation description, possible causes, and suggested actions. A red arrow points from the 'Suggested Actions' section to a bar chart in the background.

NT_Available_Bytes_Critical

[Situation Description](#) **Situation Description**
Virtual memory on the Zeroed, Free and Standby lists is too high.

[Possible Causes](#) **Possible Causes**

1. An application on this system is leaking memory
2. Too many applications are running on this system.

[Suggested Actions](#) **Suggested Actions**

The system is running out of virtual memory. Consider moving workload to other servers or look for the program that is causing a memory leak. To determine the amount of memory required for the workload, look at the process report. To determine whether any program is causing memory leakage, use the short term report to see if any process memory requirement grows without shrinking with time.

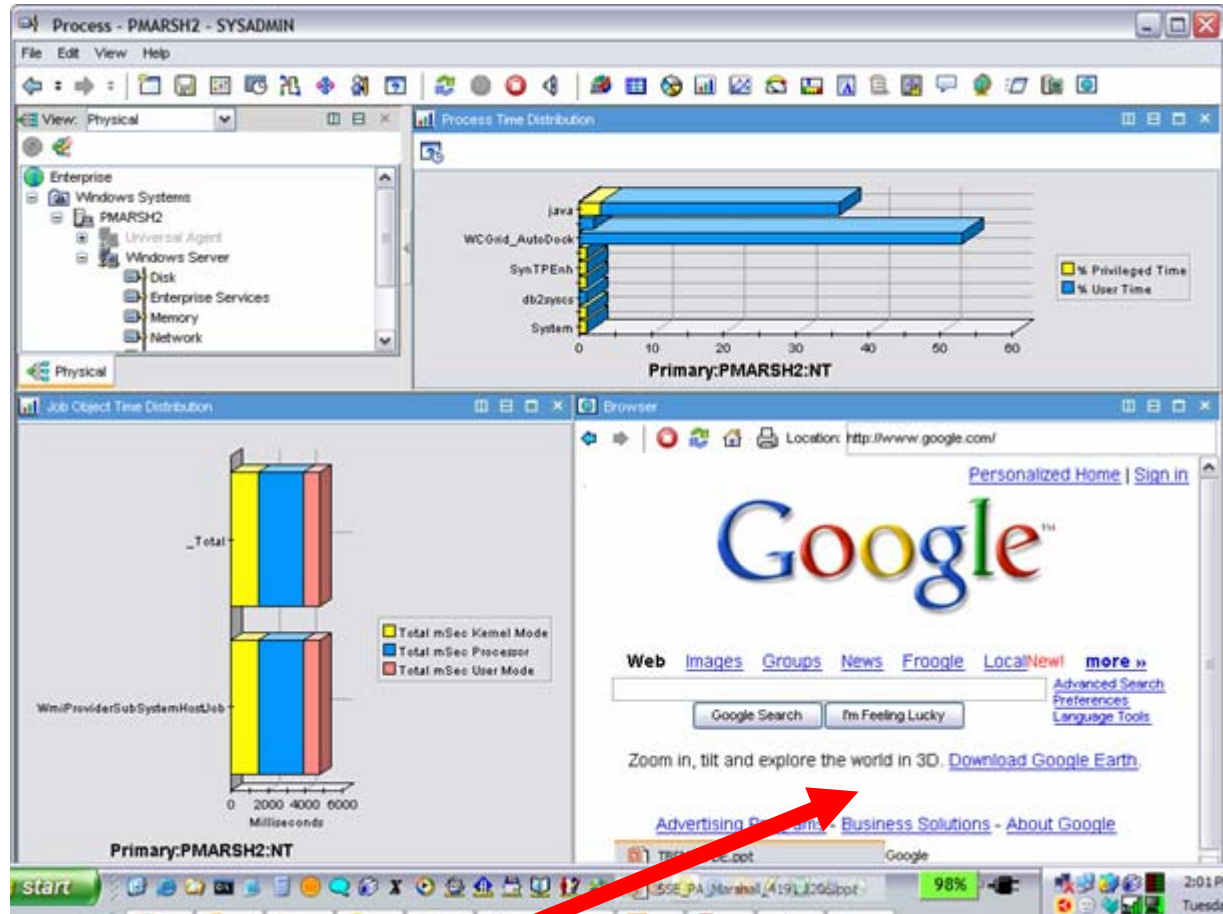
Copyright © 2006 IBM Corp. All Rights Reserved. US Government Users Restricted Rights - Use, duplication or disclosure restricted by OSA ADP Schedule Agreement with IBM Corp. (2002) IBM.

Available KB
Cache KB
Cache KB Peak
Commit Limit KB
Committed KB

Pages Inpooled
Pages Outpooled

Product provided or user-defined expert advice enables sharing of both industry-wide and enterprise-specific advice for managing systems.

Accessing Web-Based Information



Built in browser enables rapid access to web-based information and to external applications

Accessing Terminal-based Applications

The screenshot shows a Microsoft Internet Explorer browser window titled "TN3270 - Microsoft Internet Explorer". The browser's address bar shows "http://high.ibm.com". The page content is the Tivoli Enterprise Portal, which includes a navigation tree on the left and a main content area. The main content area displays a terminal window with a grid of characters and a login prompt. A red arrow points to the "Terminal" icon in the browser's toolbar.

Terminal Output:

```

NN NN W W
NNN NN EEEEE TTTTTT W W II EEEEE UU UU TH
NNNN NN EE TT W W II EE UU U UU
NN NN NN EEEE TT W W II EEEE UU UU UU
NN NNNN EE TT W W II EE UU UU UU
NN NN EEEEE TT W W II EEEEE UU UU
NN NN V

```

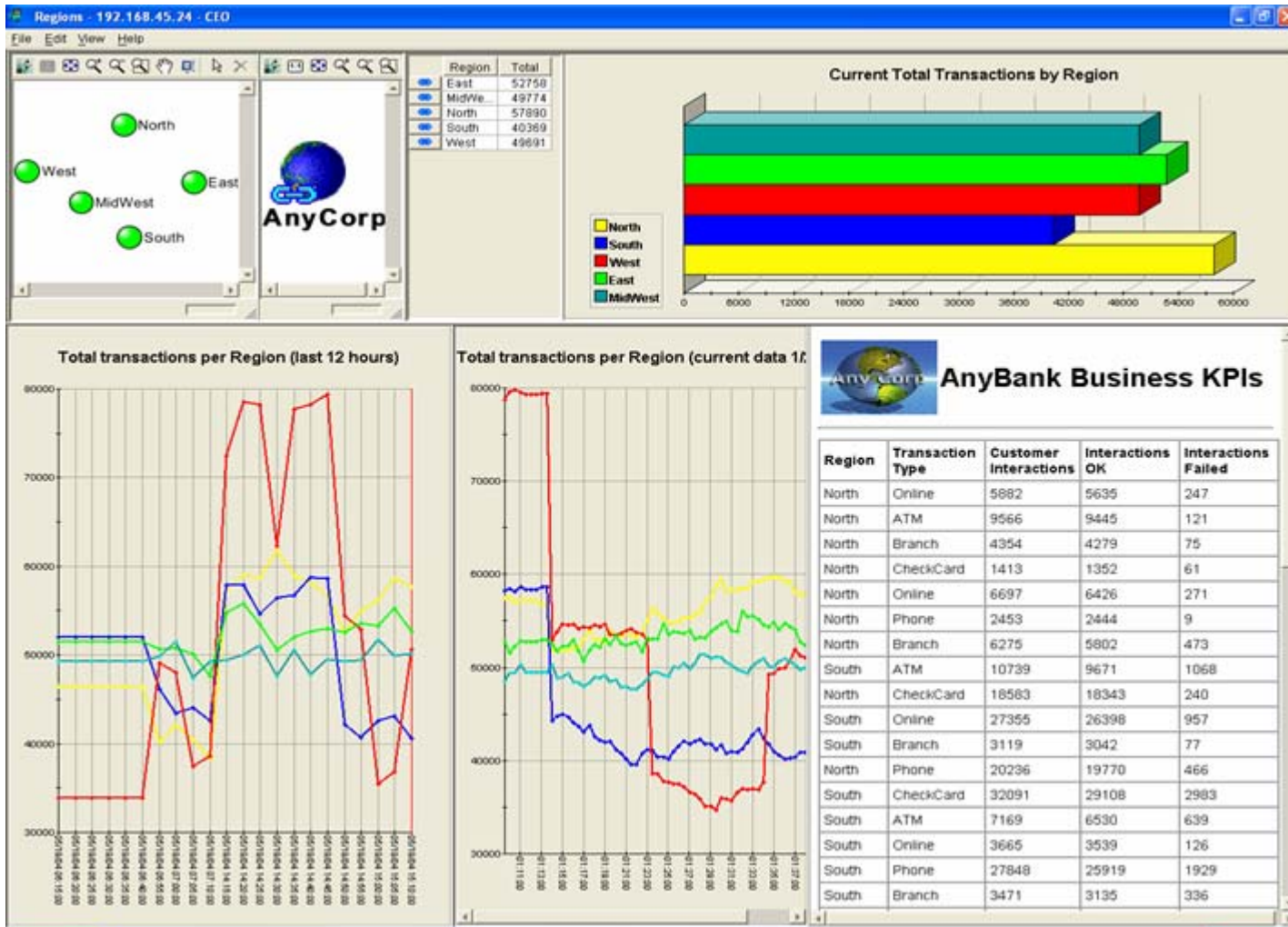
5697-ENU (C) Copyright IBM Corp. 1986, 2005 - All Rights Reserved
U.S. Government users restricted rights - Use, duplication, or disclosure
restricted by GSA ADP schedule contract with IBM corporation.
Licensed materials - Property of IBM Corporation
Domain = NTVT1 NetView VSR2

OPERATOR ID ==> or LOGOFF
PASSWORD ==> leave blank to change password
PROFILE ==> Profile name, blank=default
HARDCOPY LOG ==> device name, or NO, default=NO
RUN INITIAL COMMAND ==> YES or NO, default=YES
Takeover session ==> YES, NO, or FORCE, default=NO

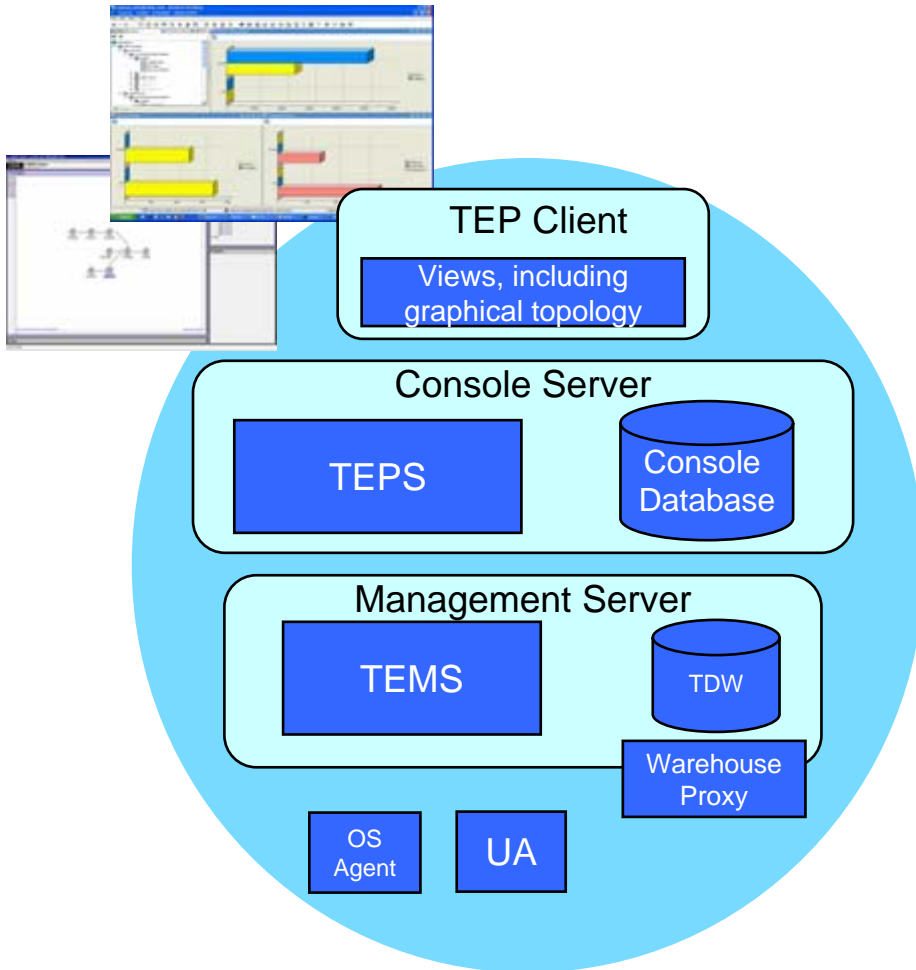
Enter login information or PF3/PF15 to logoff

Built in 3270 and Telnet access enables rapid access to external administration tools and applications.

Integrating Application Data



TEP Platform Integration Points



- Makes users effective through:
 - ▶ Workspace personalization
 - ▶ Launched applications (e.g. TEC)
 - ▶ Browser, telnet, and 3270 access
 - ▶ Situations, workflows, and expert advice
- Leverage management information via:
 - ▶ Command Line Interface
 - ▶ SOAP interface
- Analyze historical trends:
 - ▶ Open access to warehouse for OLAP, data mining, reporting tools
- An extensible solution:
 - ▶ Universal agent (UA) for “immediate” agent development (external agent developers) and for agentless monitoring

Simplifying z/OS Operations Using OMEGAMON and Tivoli Enterprise Portal Technology - *New management console*

Value

- Simplify z/OS management for the new generation of IT professionals
- Automating, eliminating, and streamlining tasks
- Easily upgradeable to full OMEGAMON solutions

Planned Capabilities

- Task oriented approach with GUI front end
- z/OS Health Checker data plus Tivoli Monitoring Services base capabilities
 - Expert Advice
 - Take Action

Configuration status metrics for z/OS resources displayed using Tivoli Enterprise Portal

Improved ease-of-use of z/OS management

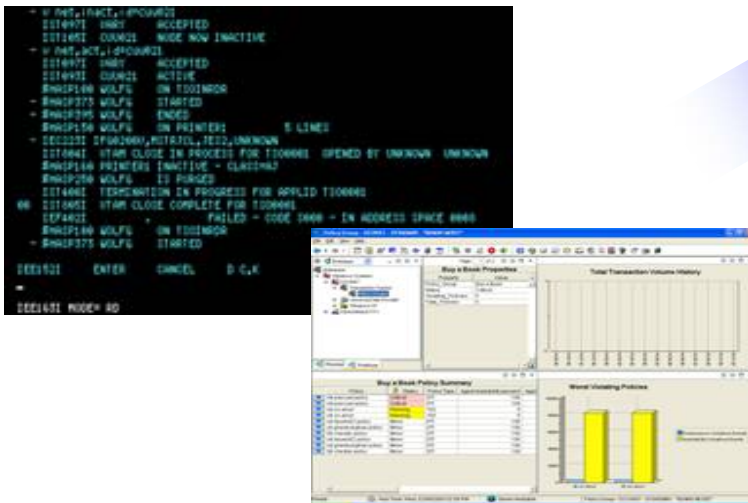
Value-add upgrades to comprehensive Tivoli Monitoring Services products



Intended to be available for no charge to z/OS customers

Modernizing the “Face” of z/OS

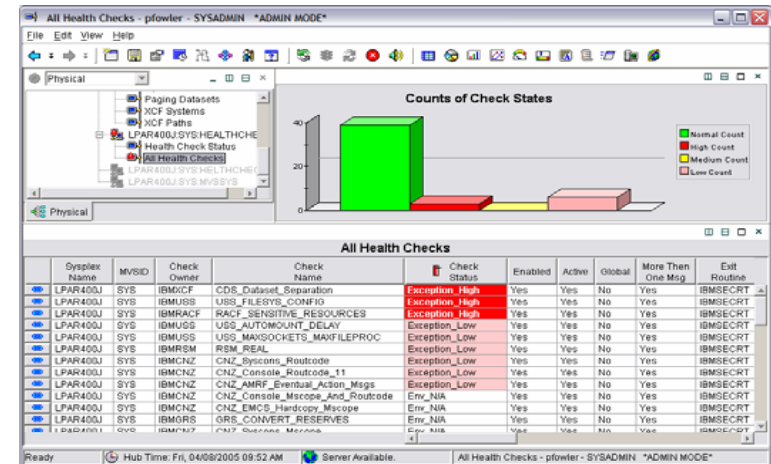
Yesterday



Expert-friendly, long learning curve for people new to platform

- Multiple, inconsistent UIs – no central system management portal
- Many interfaces foreign to those new to platform
- Manual tasks requiring extensive documentation

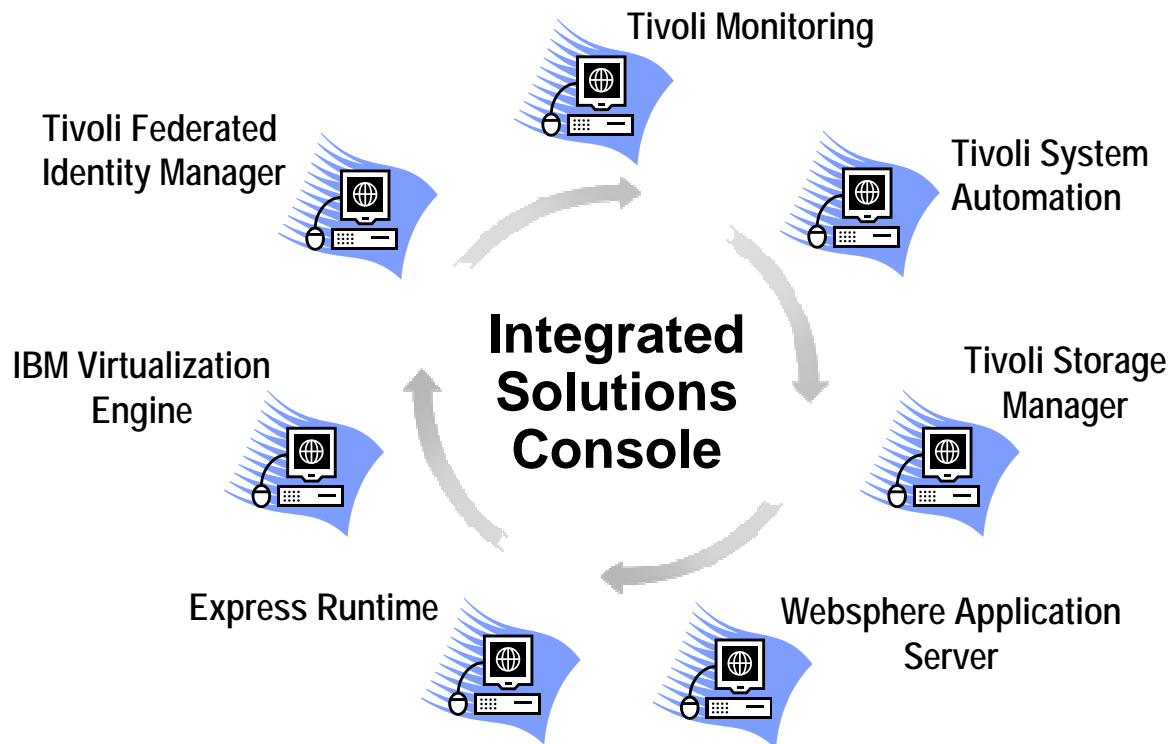
Today



- ✓ **Central** z/OS management portal
- ✓ **Simplified, automated** task-oriented mgmt interface, with integrated user assistance
- ✓ **Modern** look & feel; more familiar to those new to platform
- ✓ Focus on **customer goals**
- ✓ **Optional** for those who prefer traditional interfaces

TEP and the IBM Integrated Solutions Console Framework

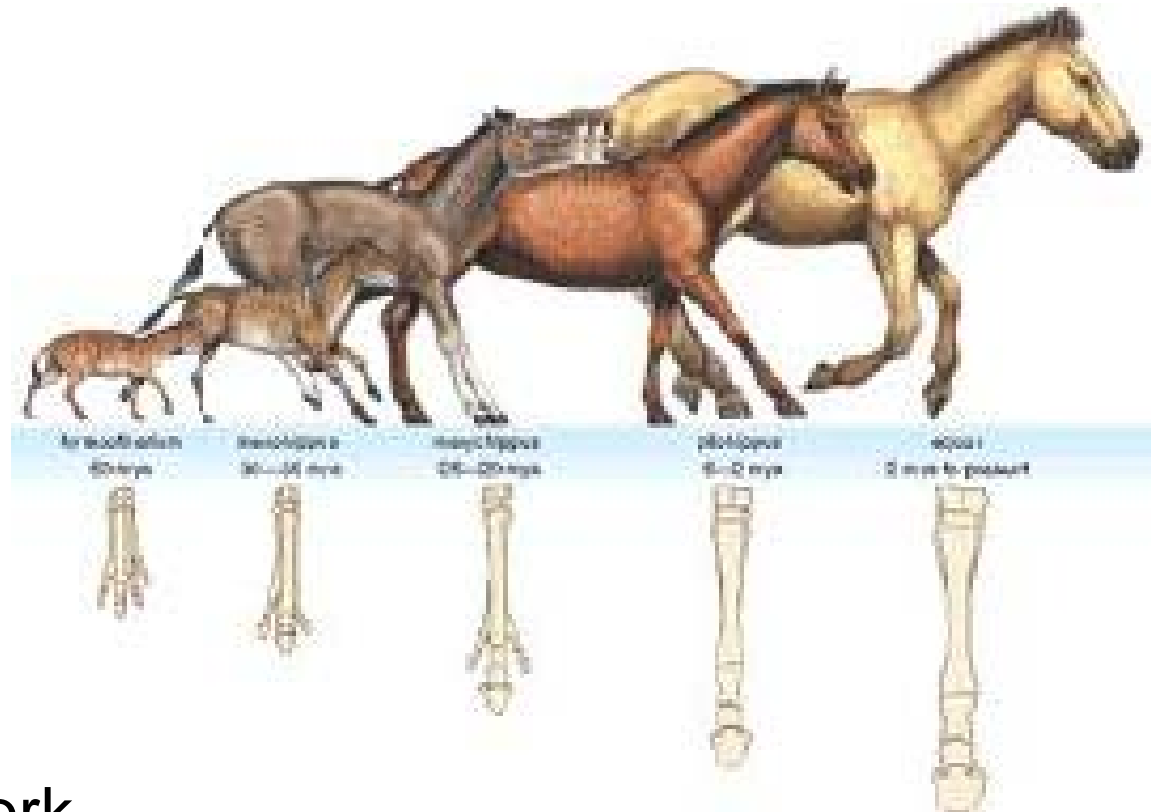
The Tivoli Enterprise Portal is a member of the ISC Family of Solutions – A Common Systems Administration initiative to evolve all product administration under a common, standards-based systems administration approach.



- Decreases training and required skills needed for the day-to-day management of IT
- Standardizes leading self-managing capabilities across IBM IT solutions
- Reduces IT operations and management costs for our clients

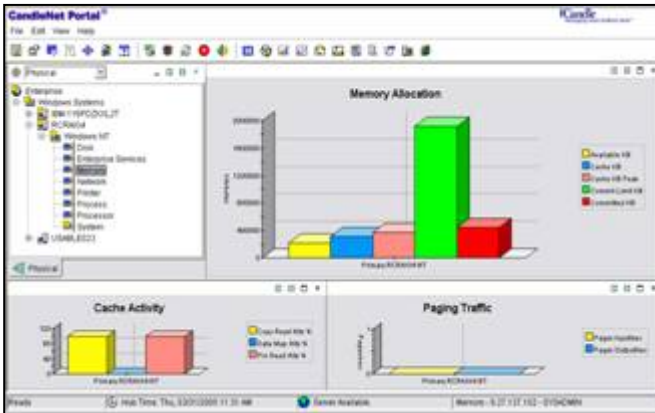
TEP Alignment Stages

- Conformance
 - ▶ Look and Feel
- Consolidation
 - ▶ Common views
- Aggregation
 - ▶ Data sharing
- Integration
 - ▶ Common framework

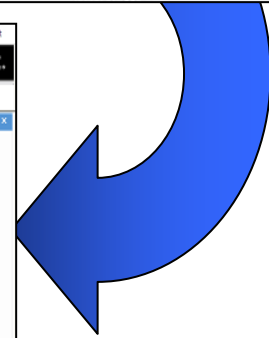
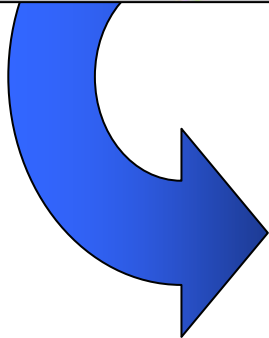


Conformance – Look And Feel

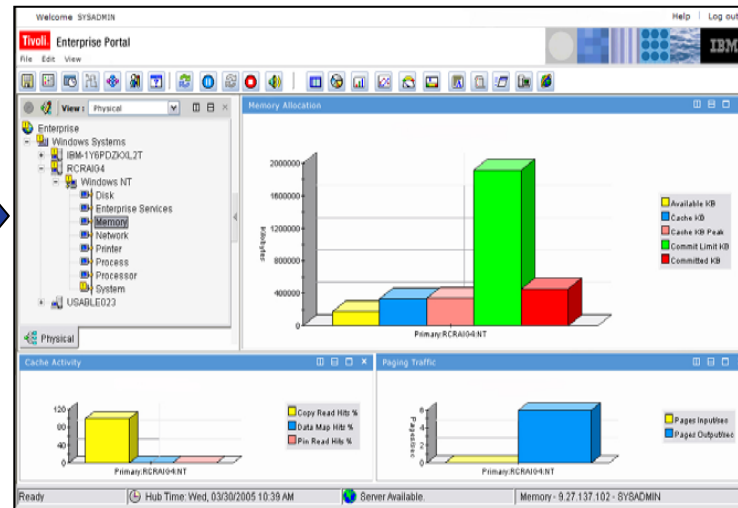
Original TEP Console



ISC Look and Feel



Cosmetic changes to TEP to align with new family



TEP with ISC Look and Feel

Summary

- TEP is the glue that makes Tivoli management solutions work together
 - ▶ It's what makes for solutions – not just products
- TEP is the connection that leverages your current investment in Tivoli
 - ▶ Seamless upgrades
 - ▶ In almost all cases, full entitlement from earlier versions
- TEP lets you achieve the benefits of end-to-end management from many perspectives



Thank You and Questions

