



IBM Software Group

# OMEGAMON XE

## Recent Enhancements And Exploiting New Capabilities

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**Tivoli** software



# Agenda

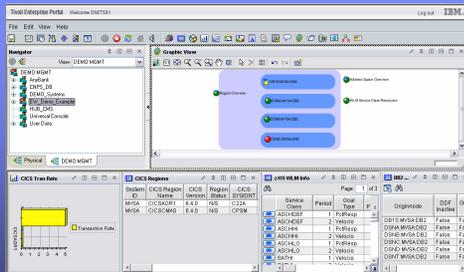
- Introduction
- OMEGAMON XE V4.1 Level Set
- New OMEGAMON monitoring solutions
  - ▶ IBM Tivoli OMEGAMON XE for z/VM and Linux v4.1.0
  - ▶ IBM Tivoli OMEGAMON XE for CICS TG on z/OS v4.1.0
- Enhancements to OMEGAMON since V4.1 GA
- Introduction to ITM 6.2
- New capabilities
  - ▶ Tivoli Common Reporter
  - ▶ OPAL
- Information
  - ▶ Examples of Tivoli RSS feeds



# Visibility – Control - Automation

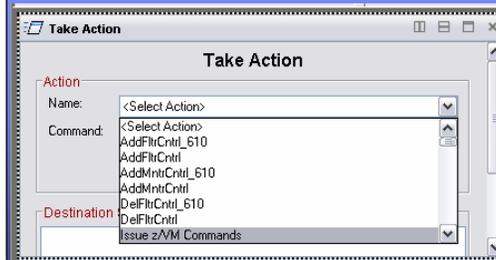
## Visibility

Observe & isolate critical issues



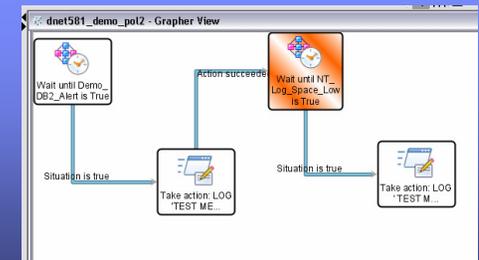
## Control

Correct performance & availability issues



## Automation

Correct issues at machine speed



# IBM And The Tivoli Enterprise Portal

## End to End Performance And Availability Management

Business Service Management

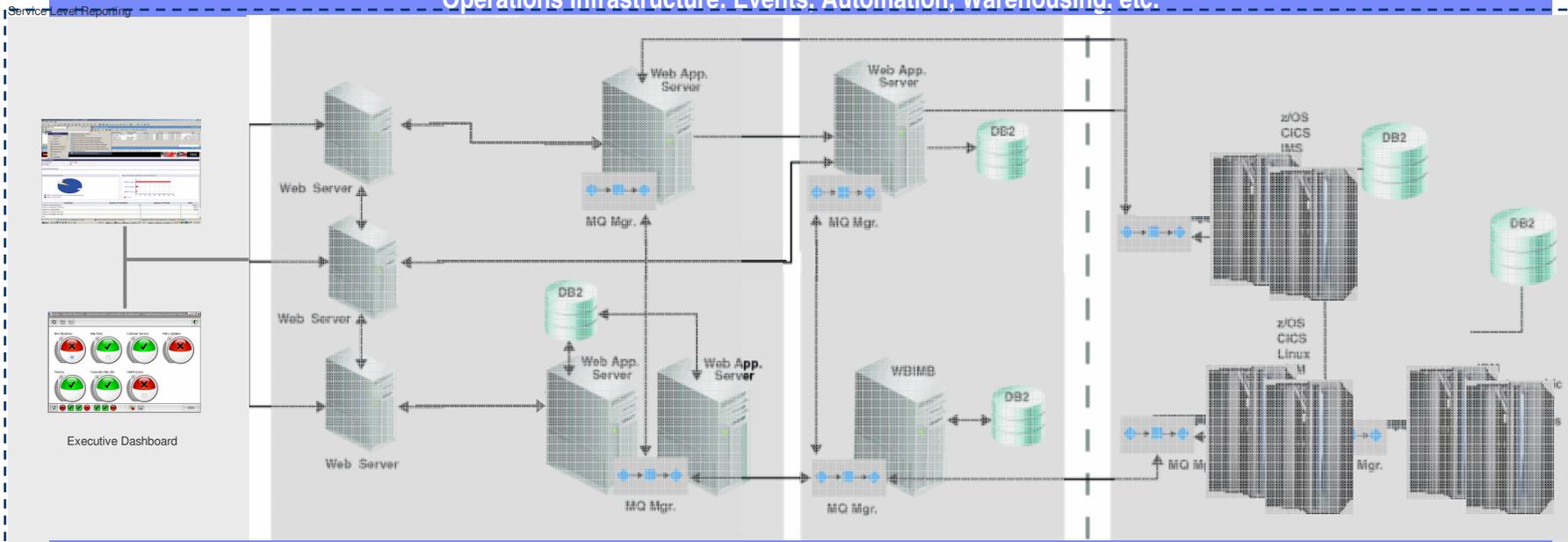
SOA Management

Composite Application Management

Network Management

Systems Management

Operations Infrastructure: Events, Automation, Warehousing, etc.



Operations Infrastructure: Events, Automation, Warehousing, etc.

Asset Management

Storage Management

Workload Management

Security Management

Usage & Accounting Management

# OMEGAMON XE Monitoring Solutions

IBM Tivoli OMEGAMON DE  
on z/OS v4.1.0

IBM Tivoli OMEGAMON XE  
on z/OS v4.1.0

IBM Tivoli OMEGAMON XE for  
Mainframe Networks v4.1.0

IBM Tivoli OMEGAMON XE  
for CICS on z/OS v4.1.0

IBM Tivoli OMEGAMON XE for  
Storage on z/OS v4.1.0

IBM Tivoli OMEGAMON XE  
for IMS on z/OS v4.1.0

IBM Tivoli OMEGAMON XE for  
Messaging on z/OS v6.0.1

IBM Tivoli OMEGAMON XE  
for DB2 Performance Expert  
on z/OS v4.1.0

IBM Tivoli OMEGAMON XE for  
z/VM and Linux v4.1.0

IBM Tivoli OMEGAMON XE  
for DB2 Performance  
Monitor on z/OS v4.1.0

IBM Tivoli OMEGAMON XE for  
CICS TG on z/OS v4.1.0

IBM OMEGAMON z/OS  
Management Console v4.1.0

**OMEGAMON XE  
monitoring solutions  
address the key  
performance and  
availability  
management  
requirements for z/OS**

**Integration via the  
Tivoli Enterprise  
Portal (TEP) with a  
wide array of Tivoli  
solutions**



# The TEP With OMEGAMON Dashboard Edition Enables Integrated End-To-End Views

**End To End Management View**

The diagram illustrates an integrated end-to-end view of a system architecture. Key components and their connections include:

- App Server** (UNIX Performance) connected to **WebSphere MQ** (Middleware).
- WebSphere MQ** (Middleware) connected to **DB2 Connect** (DB2 Connect Server) and **Network** (Network).
- DB2 Connect** (DB2 Connect Server) connected to **Network** (Network).
- Network** (Network) connected to **WebSphere MQ** (Middleware), **DB2** (DB2 Performance), and **z/VM** (z/VM Performance).
- WebSphere MQ** (Middleware) connected to **z/VM** (z/VM Performance).
- z/VM** (z/VM Performance) connected to **Sysplex Performance** and **DB2** (DB2 Performance).
- Sysplex Performance** connected to **DB2** (DB2 Performance).
- DB2** (DB2 Performance) connected to **DB2** (DB2 Performance) and **Storage** (Storage).
- DB2** (DB2 Performance) connected to **IMS** (IMS Performance).
- IMS** (IMS Performance) connected to **Storage** (Storage).
- Storage** (Storage) connected to **z/OS** (z/OS Performance).
- z/OS** (z/OS Performance) connected to **CICS** (CICS Performance).
- CICS** (CICS Performance) connected to **z/OS** (z/OS Performance).

**Customizable graphic overview**  
**User-definable drill downs for detail**  
**Combine information from multiple sources**

# OMEGAMON XE V4.1

## Major New Common OMEGAMON Capabilities

- Enhanced integration via Dynamic Workspace Linking
  - ▶ Intelligently link to other workspaces to reduce problem resolution time
  - ▶ Enclave DB2 and z/OS transplex, DWL between OMEGAMON XEs, NetView on z/OS, and z/OS Management Console (zMC)
- zIIP monitoring support added to OMEGAMON XE on z/OS and OMEGAMON XE for DB2 PE/PM
  - ▶ zIIP address spaces, service classes, LPAR data, DDF server thread data, workloads eligible for zIIP that are running on standard CPUs
- Exploitation of Tivoli Data Warehouse (TDW) with support for Pruning and Summarization
  - ▶ Automatic deletion of data and consolidated reporting by groups, dates, etc.
- Support for Agent Versioning added
- Support for ITM 6.x infrastructure
- Enhanced support for policy automation



# OMEGAMON XE

## Version 4.1 In Review

- OMEGAMON XE on z/OS v4.1.0
  - ▶ zIIP processor usage and reporting
  - ▶ TEP Enhancements
    - I/O rate by address space, Real Storage information from CUA, Tape drive situation support
  - ▶ z/OS Exploitation - CF structure duplexing reporting and Plex wide zAAP support
  - ▶ Merging of OM XE for USS into OM XE on z/OS
- OMEGAMON XE for CICS on z/OS v4.1.0
  - ▶ New Displays To Exploit CICS TS 3.1 Functionality
    - Business Transaction Services (BTS) Analysis, Enqueue Analysis, Enterprise Java Analysis, Exit Program Analysis, Recovery Manager Analysis, URIMAP Analysis, Web Services Analysis, Work Request Analysis
  - ▶ CUA Migration to XE – SLA and ATF
  - ▶ Integration with CICS PA



# OMEGAMON XE

## Version 4.1 In Review - Continued

- OMEGAMON XE for IMS on z/OS v4.1.0
  - ▶ TRF reporting capability has increased precision expanding transactions to the millisecond
  - ▶ DL/I call reporting
  - ▶ TEP Enhancement - Region occupancy %s added to Dependent Region statistics
  - ▶ HALDB support – DB summaries, partition details, VSAM / OSAM statistics.
  - ▶ DBCTL detailed thread reporting
  - ▶ Enhanced IMS Connect monitoring – requires IMS Connect Extensions
- OMEGAMON XE for DB2 PM/PE on z/OS v4.1.0
  - ▶ DB2 Version 9 support
  - ▶ Support for zIIP processor usage
  - ▶ Integration with SQL PA from OMEGAMON Classic
  - ▶ ATF: Allow extended collection time and externalize FLUSH parameter
  - ▶ Enhanced Thread Overview
  - ▶ IFCID 225 (DBM1 Virtual Storage) in Classic end user interface
  - ▶ Usability improvements in OMEGAMON Classic – Tab key usage on selected panels



# OMEGAMON XE

## Version 4.1 In Review - Continued

- OMEGAMON XE for Storage on z/OS v4.1.0
  - ▶ Add capability to quickly create or schedule commands to administer DASD
  - ▶ Top ten volume reports and new problem solving workspaces
  - ▶ New dataset attribute database allows versatile and granular reporting
- OMEGAMON XE for Mainframe Networks on z/OS v4.1.0
  - ▶ New VTAM buffer pool and address space workspaces and SNA information
  - ▶ Enhanced FTP information and Enterprise Extender (EE) reporting
  - ▶ TN3270 server session workspaces
  - ▶ Improved historical reporting
- OMEGAMON XE for Messaging v6.0.1
  - ▶ On-demand data collection mode for several channel and queue status workspaces
  - ▶ Expanded platform support
  - ▶ Ability to browse DLQ messages that are not on the dead-letter queue and the ability to forward messages from one queue to another
  - ▶ New and enhanced workspaces, and DWL links to OMEGAMON XE for CICS
  - ▶ Monitoring remote queue manager running on a platform not supported by OM XE for Messaging



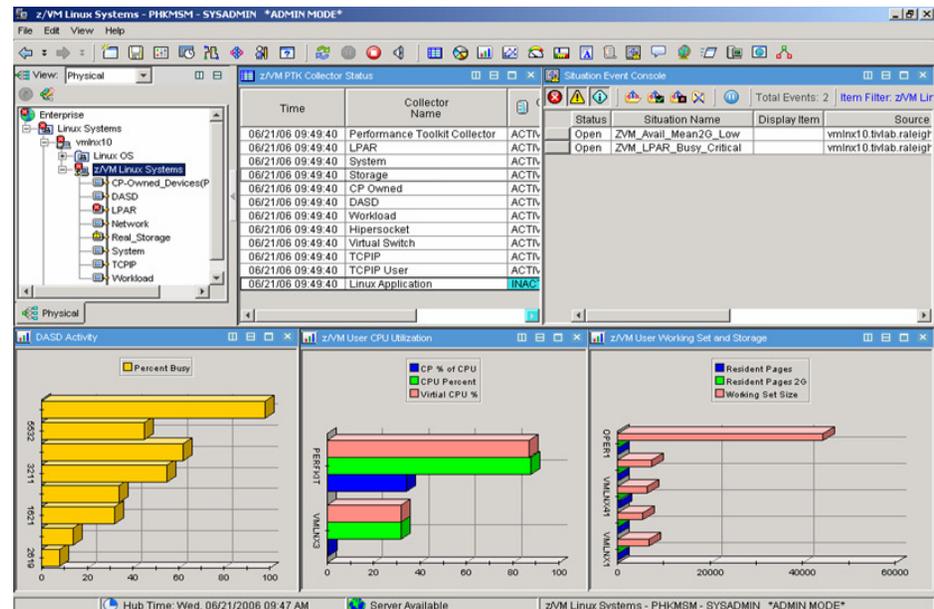
# OMEGAMON XE on z/VM and Linux

A New Solution targeted for z/VM and Linux on System Z

- Single solution for managing VM and Linux on System z
- Reflects most common implementation in marketplace
- Leverages value of z/VM Performance Toolkit

Provides workspaces that display:

- Overall System Health
- Workload metrics for logged-in users
- Individual device metrics
- LPAR Data
- Composite views of Linux running on z/VM

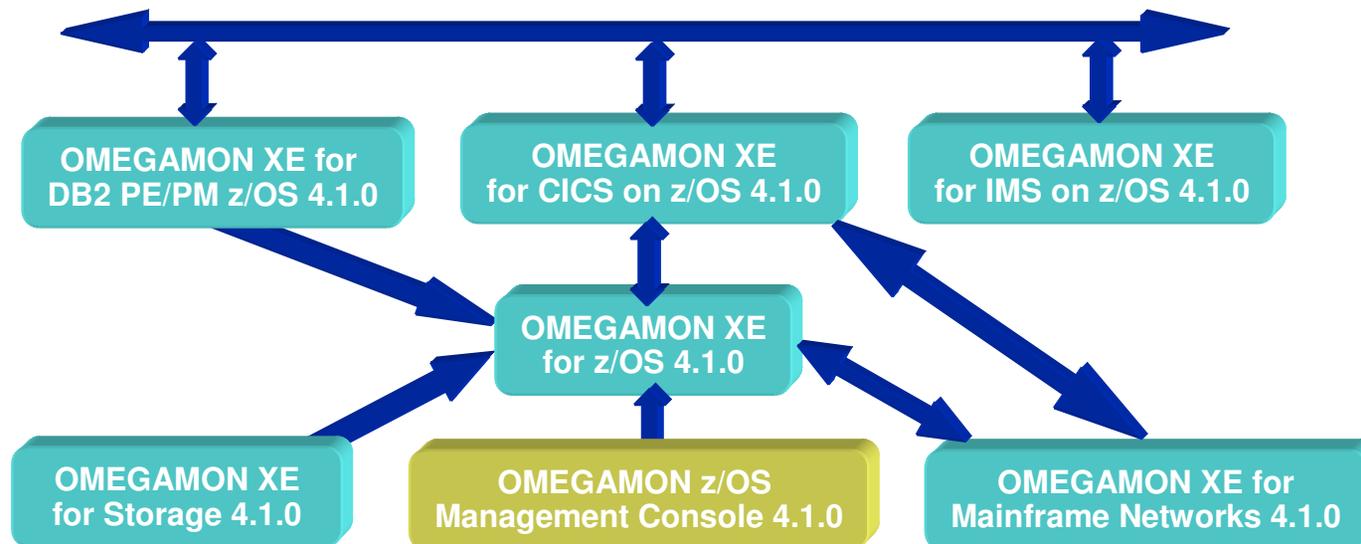


## V4.1 Added Dynamic Workspace Linking Functionality To The z/OS Monitoring Solutions

**Problem:** How do I quickly find a potential problem that requires multiple monitoring products?

**Scenario:** Dynamically link **IN CONTEXT** between various monitoring technologies

**Solution:** Dynamic Workspace Linking  
Product provided links & user customized links



## Examples

### Product Provided Dynamic Workspace Links With V4.1

- OMEGAMON XE On z/OS
  - ▶ TN3270 Server Sessions, Applications, TCP Listeners, TCP Listeners, Applications
- OMEGAMON XE For CICS
  - ▶ Temporary Storage Queues, Log Stream Analysis, Transaction Analysis, Transaction Analysis, DB2 Summary, DBCTL Summary, TCPIP Statistics, Message Queuing Analysis
- OMEGAMON XE For IMS
  - ▶ IMS Dependent Regions, IMS Dependent Regions, IMS DBCTL Thread Details, Global Lock Conflicts
- OMEGAMON XE For DB2 PM/PE
  - ▶ Enclave Thread Summary, Thread Enclave, IMS Thread Summary, Thread Detail, Detailed Thread Exception, CICS Thread Summary, Thread Detail, Detailed Thread Exception
- OMEGAMON XE For z/VM and Linux
  - ▶ Linux Workload and ApplData



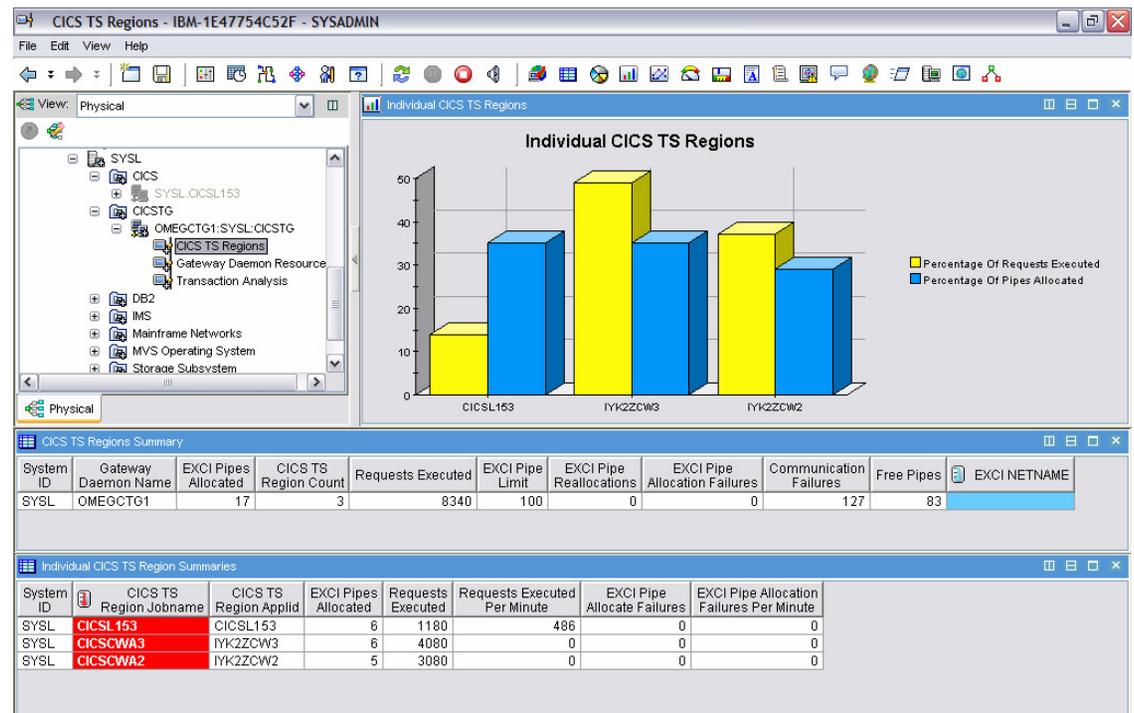
## What's Happened Since OMEGAMON V4.1 Was Released?

- New OMEGAMON solutions
  - ▶ OMEGAMON XE For CICS TG V4.1
- Enhancements to the OMEGAMON suite
  - ▶ Enhancements to classic 320 interface
  - ▶ Enhancements to Tivoli Enterprise Portal
- Support for ITM 6.2
  - ▶ Exciting new TEP capabilities
- Additional new capabilities
  - ▶ OPAL – downloadable tools and solutions
  - ▶ Tivoli Common Reporter
- Powerful support capabilities
  - ▶ RSS feeds



# OMEGAMON XE for CICS Transaction Gateway v4.1.0 A New OMEGAMON Solution!

- Automatically discover all active CICS Transaction Gateway regions, identified by their job names
- Provides a quick and easy way to monitor and manage CICS Transaction Gateway on z/OS
- Quickly identify the CTG transaction and associated CICS TS server
- CTG workload and resource utilization views
- Provides comprehensive CTG environment monitoring to ensure critical workload is available and running efficiently



# OMEGAMON XE on z/OS v4.1.0 Enhancements

- Support for z/OS V1.9
- OMEGAMON 3270 Classic enhancement for Work Load Manager (WLM) support
- OMEGAMON 3270 Classic enhancements in the area of CPU information for four hour MSU/capping and enclaves support
- z10 HiperDispatch support

The screenshot shows the IBM Tivoli OMEGAMON XE on z/OS support page. The main heading is "OMEGAMON XE on z/OS Interim Feature for New Classic commands including WLM support". Below this, there is a "Flash (Alert)" section, followed by an "Abstract" section which states: "PTF UA37434 (APAR OA22848) provides new OMEGAMON Classic Interface commands and Menu options for WLM, 4-Hour Rolling Average MSU and Address Space Owned Enclaves monitoring,". The "Content" section indicates that the attached document describes product enhancements delivered with PTF UA37434. A PDF icon is shown next to the link "Interim\_Feature\_Classic\_WLM\_UA37434.pdf". The left sidebar contains navigation links such as "Support & downloads", "Tivoli", "Products", "Solutions", "Software Demos", "Technical resources", "News", "Events", "Success stories", "Training", "Services", "Community", and "How to buy". The right sidebar, titled "Document information", lists "Product categories: Software, Systems and Asset Management, Systems Performance" and "Operating system(s): z/OS".

Continued enhancement and support of classic/3270 interface



# WLM Classic Command

```

ZWLMLVTMOM/DEXV550./C SYS 09/10/07 15:38:44
> Help PF1 Back PF3 Up PF7 Down PF8 Zoom PF11
=====
>
> WORK LOAD MANAGER OVERVIEW
>
> WLM and its minor commands, SDPD and SRVC display Work Load Manager
> policy installation information and current performance metrics.
>
> To view more detailed data for a service class place the cursor on a
> service class name under the srvc minor command and press PF11.

WLM >> Service Definition : prod Service Policy : FEB0502
sdpd
+
+Service Definition : prod
+Description : Production Goal Mode
+Installed : 09/09/07 at 23:35:51 by CMACN3 on SYSL
+
+Service Policy : FEB0502
+Description : TSO, STC, STCCMS ch
+Installed : 09/09/07 at 23:36:0
srvc
+
+Service Goal Perf
    
```

```

ZSRVC1VTMOM/DEXV550./C SYS 09/10/07 15:50:07
> Help PF1 Back PF3 Up PF7 Down PF8
=====
>
> WORK LOAD MANAGER PERFORMANCE DATA FOR SERVICE CLASS PERIOD
>
> WLM and its minor command, srvc display Work Load Manager performance data
> for the selected service class period.

WLM >> Service Definition : prod Service Policy : FEB0502

1srvc BATCH
+
+Workload Name : BATCH Description : Batch Jobs
+Service Class name : BATCH Description : Batch Jobs
+Service Class period : 1 Performance index : 0.00
+Importance : 3 (Medium)
+Goal Type : Velocity > 30%
+Duration : 700 (Service Units)
+Actual : 0
+Average Response Time : 0
+CPU % : 0.00
+IFA % : 0.00
+IFA on CP % : 0.00
+zIIP % : 0.00
    
```



# OMEGAMON XE for CICS v4.1.0 Enhancements

- **Support for CICS TS V3.2 and z/OS V1.9**
  - ▶ 64 bit support in Classic
  - ▶ INQUIRE WORKREQUEST information
  - ▶ INQUIRE DOCTEMPLATE information ; li.PIPELINE information
  - ▶ WEBSERVICE information
- **Classic enhancements to display current storage for a single instance of an executing transaction**
- **File enqueue analysis enhancements**
- **Dynamic Workspace Linking (DWL) to support new MQ workspace**

# OMEGAMON XE for IMS v4.1.0 Enhancements

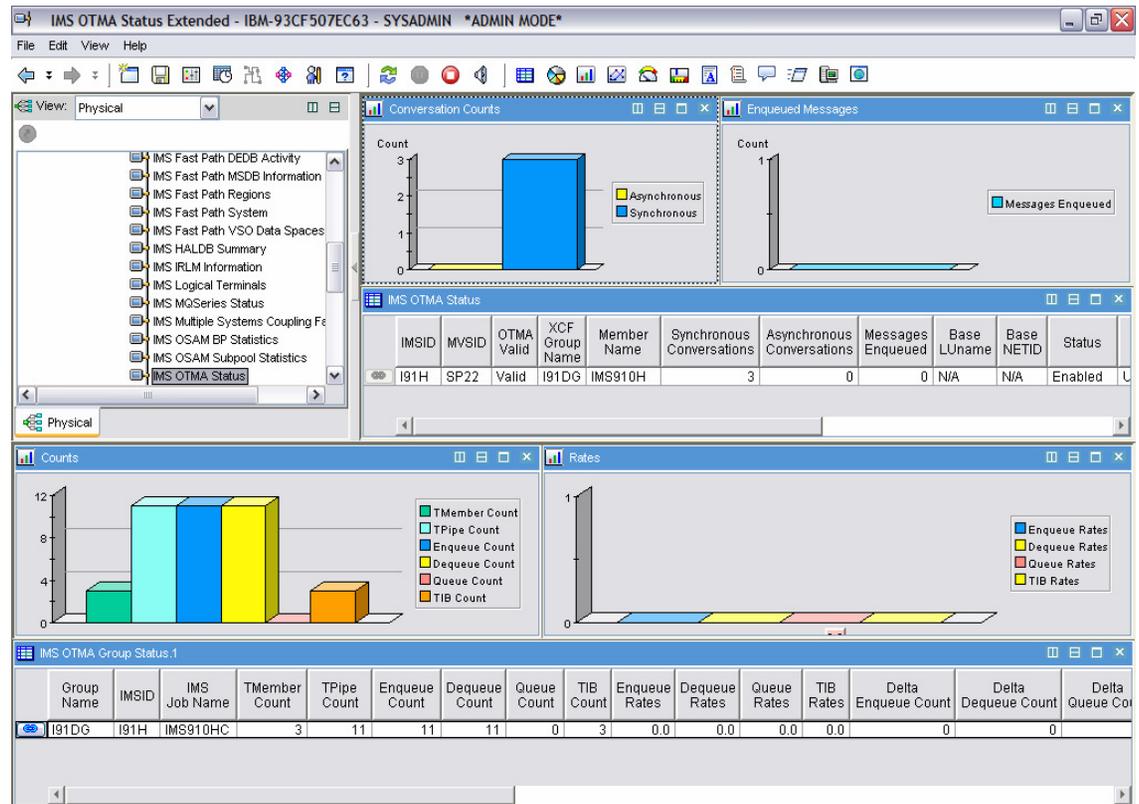
- Support for IMS V10 and z/OS V1.9
- Enhance TRF to report on IMS Control Region Overhead CPU time
- HALDB lock display enhancements
- OTMA monitoring enhancements

The screenshot shows the IBM Tivoli OMEGAMON XE for IMS on z/OS - 4.1.0-TIV-KIP-IF0003 support page. The page includes a navigation menu, a search result sidebar, and a main content area with sections for Downloadable files, Abstract, Download Description, Prerequisites, and Document information. A table at the bottom lists the downloadable files.

| URL                                                               | LANGUAGE | SIZE(Bytes) |
|-------------------------------------------------------------------|----------|-------------|
| <a href="#">IBM Tivoli Monitoring Platform Maintenance Tables</a> | English  | 1           |

# OMEGAMON XE For IMS V4.1 OTMA Redesign

- Simplified configuration
- Support multiple IMS systems within the same XCF group on the same LPAR.
- New OTMA data collector obtains data from IMS control blocks instead of issuing IMS display commands and parsing the output.
- Support provided for OTMA super member and flood control enhancements
- New product-provided situations to monitor percentage of TIBs in use, TPIPE output queue count exceeds a threshold, TPIPE stopped, and TPIPE waiting on ACK or NAK.



# OMEGAMON XE for DB2 PM/PE V4.1.0 Enhancements

- Improved navigation and other key usability enhancements
- Improved scalability
- Enhanced support for SAP and other distributed applications in OMEGAMON Near Term History
- Continued cross-OMEGAMON integration via DWL
- New DB2 Messages workspace for DB2 message management

The screenshot displays the IBM Support & Downloads page for the OMEGAMON XE for DB2 on z/OS (4.1.0.3-TIV-KD5-IF0002) update. The page includes a navigation bar with links for Home, Solutions, Services, Products, Support & downloads, and My IBM. The main content area is titled 'Support & downloads > IBM Tivoli Omegamon XE for DB2 on z/OS (4.1.0.3-TIV-KD5-IF0002)'. Below the title, there are sections for 'Downloadable files', 'Abstract', and 'Download Description'. The 'Abstract' section states: 'This is a cumulative fixpack for OMEGAMON XE for DB2 Performance Expert (Monitor) on z/OS Version 4.1.0'. The 'Download Description' section lists several APARs addressed in the update, including PK57640, PK60141, PK42628, PK46449, PK52845, PK55606, PK55619, PK36297, PK37802, OA17918, PK22692, PK27639, PK47408, PK47411, and PK48509. On the right side of the page, there is a 'Document information' section with details such as 'Product categories: Software, Data & Information Management, Database Management Tools, DB2 and IMS Tools', 'Operating system(s): AIX, Linux, Solaris, Windows', 'Software version: 4.1.0', 'Reference #: 4018311', 'IBM Group: Software Group', and 'Modified date: 2008-04-22'. A 'Translate My Page' button is also visible at the bottom right.

# OMEGAMON XE For DB2 PM/PE DB2 Messages Workspace

The screenshot displays the 'DB2 Messages - IBM-590C1A11DE1 - SYSADMIN \*ADMIN MODE\*' window. On the left is a tree view with 'DB2 Messages' selected. The main area shows a table of 'Critical DB2 Messages' with columns for Interval Start, Message ID, and Message Text. A tooltip is shown over a message with ID DSNT376I. Below this is a table of 'Most 10 Recent DB2 Messages'.

| Interval Start    | Message ID | Message Text                                                                                                |
|-------------------|------------|-------------------------------------------------------------------------------------------------------------|
| 12/10/07 21:11:50 | DSNT376I   | -SDF1 PLAN=DSNBIND WITH CORRELATION-ID=SUKAA C...                                                           |
| 12/10/07 21:11:50 | DSNT500I   | -SDF1 DSNTBCM1 RESOURCE UNAVAILABLE REASON 00E3...                                                          |
| 12/10/07 21:08:49 | DSNT500I   | -SDF1 DSNTBCM1 RESOURCE UNAVAILABLE REASON 00E3...                                                          |
| 12/10/07 21:08:49 | DSNT376I   | -SDF1 PLAN=DSNBIND WITH CORRELATION-ID=SUKAA C...                                                           |
| 12/10/07 21:05:48 | DSNT500I   | -SDF1 DSNTBCM1 RESOURCE UNAVAILABLE REASON 00E3...                                                          |
| 12/10/07 21:05:48 | DSNT376I   | -SDF1 PL...                                                                                                 |
| 12/08/07 08:04:22 | DSNT501I   | -SDF1 DS...                                                                                                 |
| 12/08/07 08:04:22 | DSNT376I   | -SDF1 PL=DSNBIND WITH CORRELATION-ID= SUKAA CONNECTION-ID=BATCH LUW-ID= DEIBMIPS.IPSASDF1.C1A0467A1E7E=1393 |
| 12/08/07 07:58:41 | DSNT501I   | -SDF1 DS...                                                                                                 |
| 12/08/07 07:58:41 | DSNT376I   | -SDF1 PL...                                                                                                 |
| 12/08/07 07:55:50 | DSNT501I   | -SDF1 DS...                                                                                                 |
| 12/08/07 07:55:50 | DSNT376I   | -SDF1 PL...                                                                                                 |
| 12/08/07 07:43:27 | DSNT376I   | -SDF1 PL...                                                                                                 |
| 12/08/07 07:43:27 | DSNT501I   | -SDF1 DS...                                                                                                 |

| Interval Start    | Message ID | Message Text                                                        |
|-------------------|------------|---------------------------------------------------------------------|
| 12/10/07 21:11:50 | DSNT376I   | -SDF1 PLAN=DSNBIND WITH CORRELATION-ID=SUKAA CONNECTION-ID=...      |
| 12/10/07 21:11:50 | DSNT500I   | -SDF1 DSNTBCM1 RESOURCE UNAVAILABLE REASON 00E30083 TYPE...         |
| 12/10/07 21:08:49 | DSNT500I   | -SDF1 DSNTBCM1 RESOURCE UNAVAILABLE REASON 00E30083 TYPE...         |
| 12/10/07 21:08:49 | DSNT376I   | -SDF1 PLAN=DSNBIND WITH CORRELATION-ID=SUKAA CONNECTION-ID=...      |
| 12/10/07 21:05:48 | DSNT500I   | -SDF1 DSNTBCM1 RESOURCE UNAVAILABLE REASON 00E30083 TYPE...         |
| 12/10/07 21:05:48 | DSNT376I   | -SDF1 PLAN=DSNBIND WITH CORRELATION-ID=SUKAA CONNECTION-ID=...      |
| 12/08/07 11:39:24 | DSN3201I   | -SDF1 ABNORMAL EOT IN PROGRESS FOR USER=SUK CONNECTION-ID=T80 CO... |
| 12/08/07 11:39:24 | DSN3201I   | -SDF1 ABNORMAL EOT IN PROGRESS FOR USER=SUK CONNECTION-ID=T80 CO... |
| 12/08/07 08:04:22 | DSNT501I   | -SDF1 DSNTLMCL RESOURCE UNAVAILABLE CORRELATION-ID=SUK C...         |
| 12/08/07 08:04:22 | DSNT376I   | -SDF1 PLAN=DSNESPSCS WITH CORRELATION-ID=SUK CONNECTION-ID=...      |

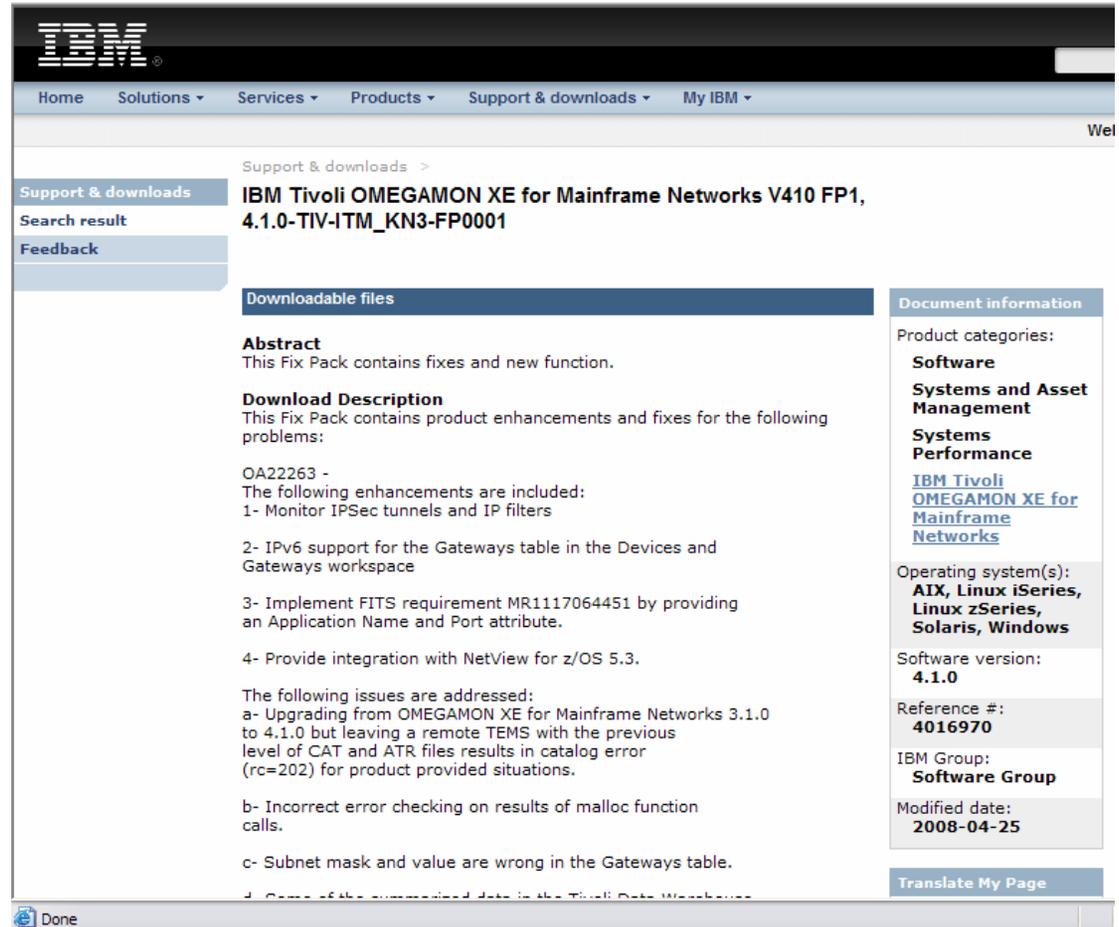
**A new navigator item for DB2 messages.**

**Identify DB2 problems such as utility issues, Deadlocks, Timeout.**

**Create situation alerts using these messages.**

# OMEGAMON XE for Mainframe Networks V4.1.0 Enhancements

- Monitor effectiveness of IP filters and the performance of IPSec tunnels for the TCP/IP stacks on a z/OS system
- Identify potential network attacks or configuration problems with IP filters and IPSec security associations
- For NetView for z/OS V5.3 customers - new DVIPA workspaces also included in the TEP



The screenshot shows the IBM Support & Downloads page for the product "IBM Tivoli OMEGAMON XE for Mainframe Networks V410 FP1, 4.1.0-TIV-ITM\_KN3-FP0001". The page includes a navigation menu with "Home", "Solutions", "Services", "Products", "Support & downloads", and "My IBM". The main content area is titled "Support & downloads" and "Search result". It features a "Downloadable files" section with an "Abstract" and a "Download Description". The abstract states: "This Fix Pack contains fixes and new function." The download description states: "This Fix Pack contains product enhancements and fixes for the following problems:"

**OA22263 -**  
The following enhancements are included:

- 1- Monitor IPSec tunnels and IP filters
- 2- IPv6 support for the Gateways table in the Devices and Gateways workspace
- 3- Implement FITS requirement MR1117064451 by providing an Application Name and Port attribute.
- 4- Provide integration with NetView for z/OS 5.3.

The following issues are addressed:

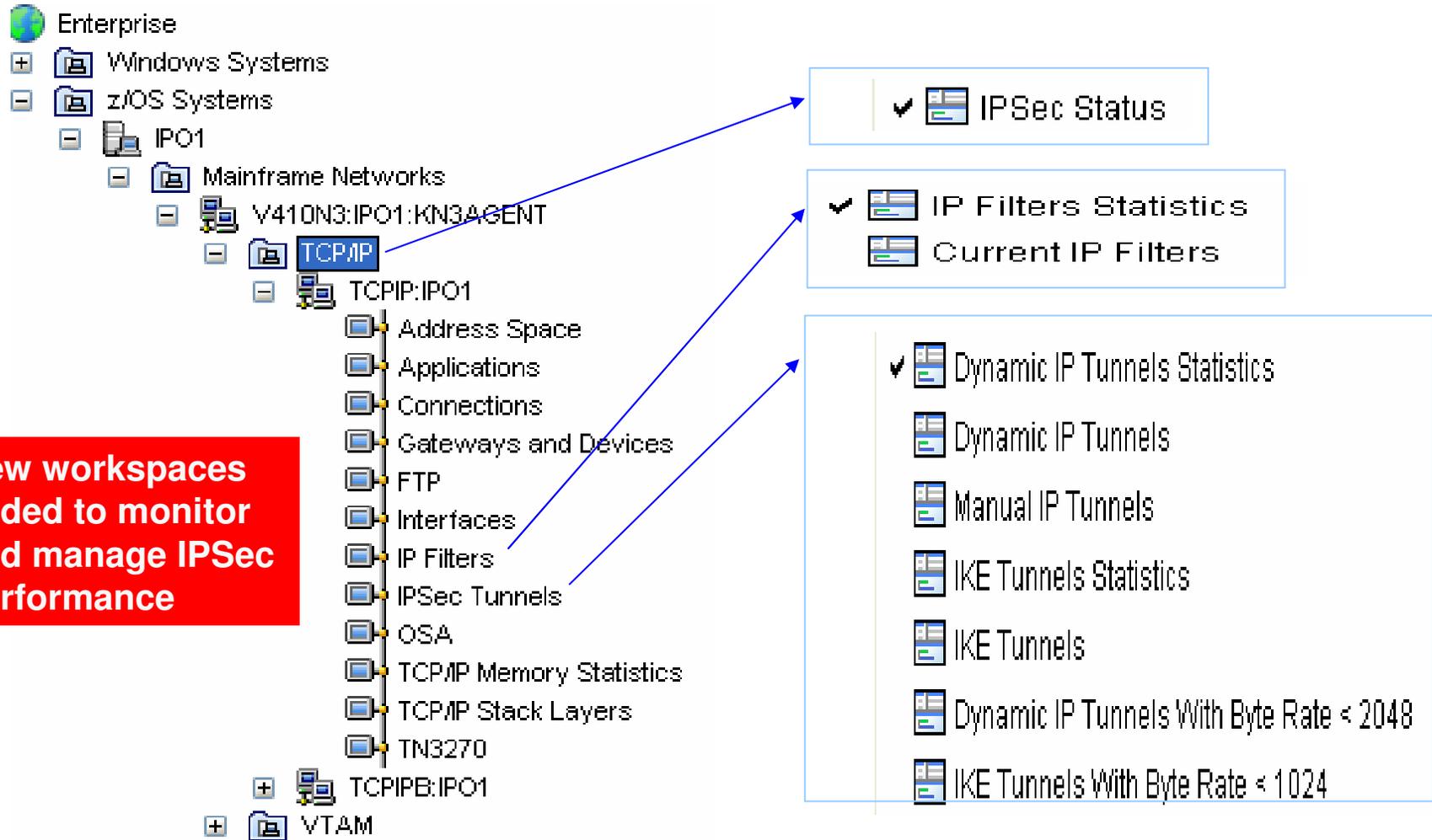
- a- Upgrading from OMEGAMON XE for Mainframe Networks 3.1.0 to 4.1.0 but leaving a remote TEMS with the previous level of CAT and ATR files results in catalog error (rc=202) for product provided situations.
- b- Incorrect error checking on results of malloc function calls.
- c- Subnet mask and value are wrong in the Gateways table.
- d- Some of the summarized data in the Tivoli Data Workspace

The right sidebar contains "Document information" with the following details:

- Product categories: **Software**, **Systems and Asset Management**, **Systems Performance**
- Operating system(s): **AIX, Linux iSeries, Linux zSeries, Solaris, Windows**
- Software version: **4.1.0**
- Reference #: **4016970**
- IBM Group: **Software Group**
- Modified date: **2008-04-25**

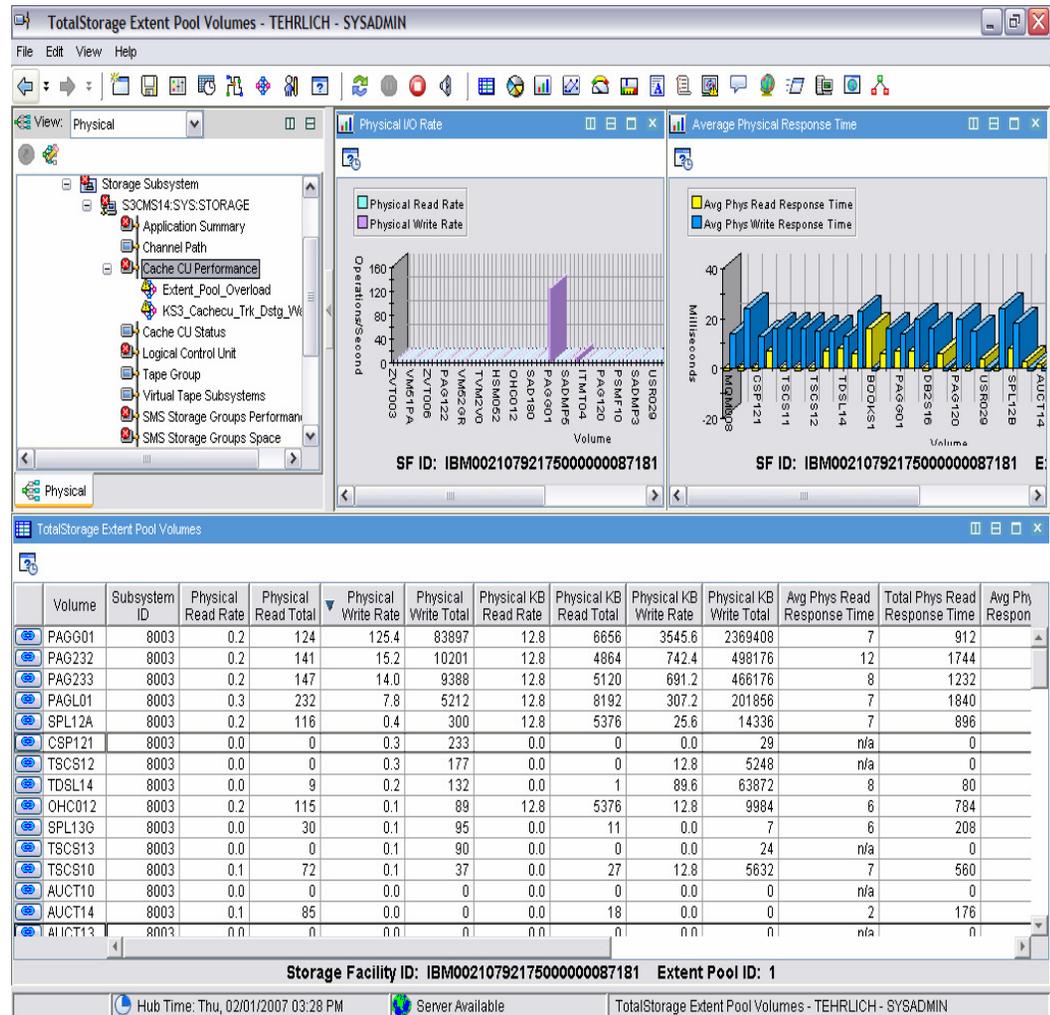
At the bottom of the page, there is a "Translate My Page" button and a "Done" status indicator.

# OMEGAMON XE For Mainframe Networks IP Security Workspaces



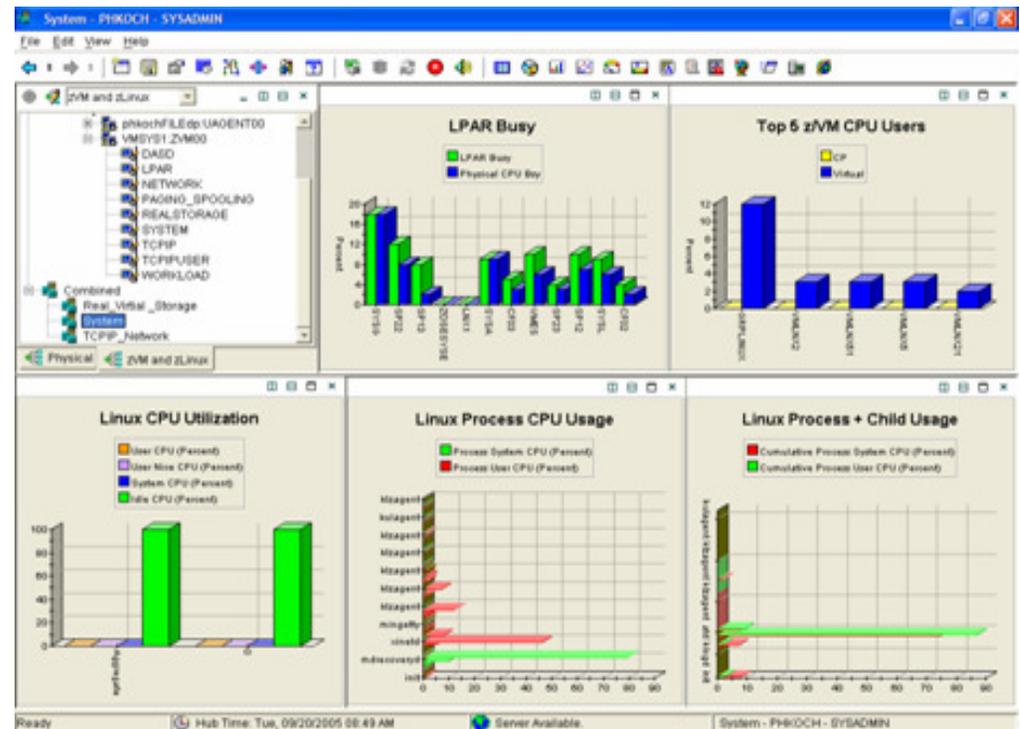
# OMEGAMON XE for Storage V4.1 Enhancements

- Provide Dynamic Workspace Link (DWL) from the cross system volume report to data set level performance view, allowing users to quickly diagnose a problems
- Provide an DFSMSHsm cancel command for active tasks, assisting in the daily storage administration function becoming easier



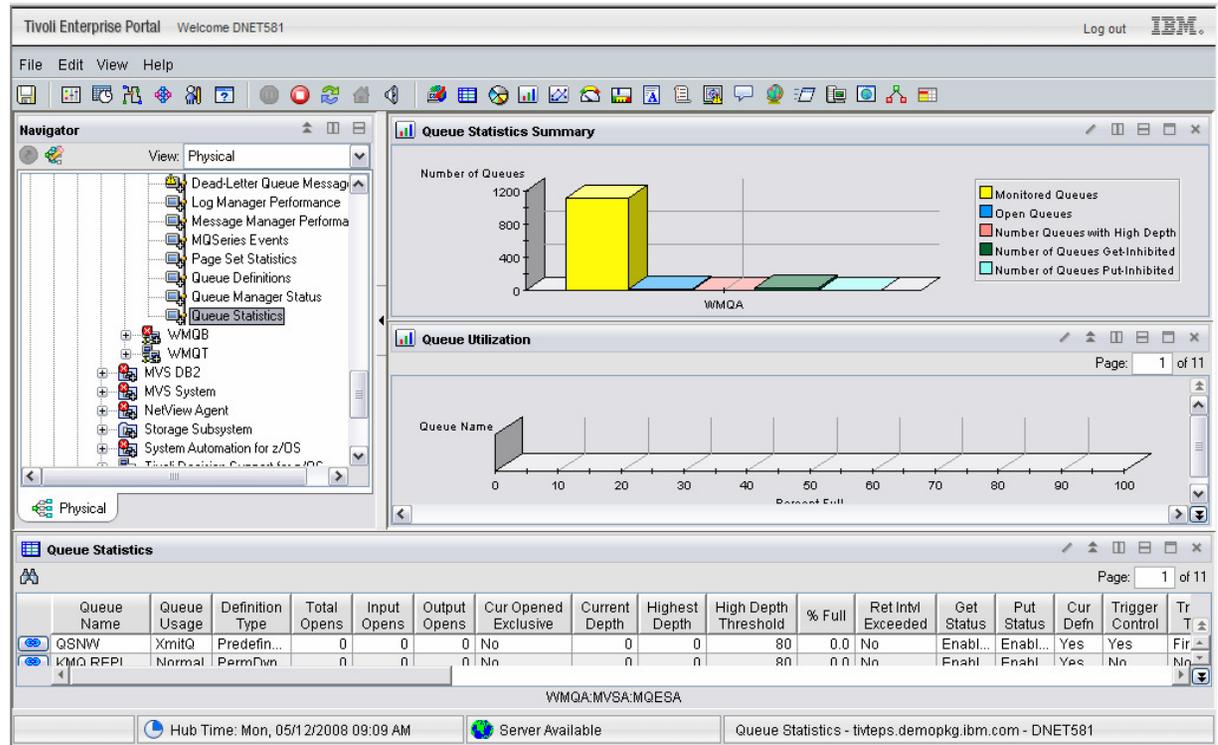
# OMEGAMON XE on z/VM and Linux V4.1 Enhancements

- Additional integrated monitoring of Channels, Mini Disk Cache, and Control Unit Cache, which allows users to identify bottlenecks in I/O subsystem
- Enhanced reporting of Linux CPU metrics, providing more detailed information to tune Linux guests
- Currency support for z/VM V5.3
- Linux platform support includes RHEL 5, and SLES 9 and 10.
- New, open standards, Eclipse-based reports which can be used for trending and capacity planning



# OMEGAMON XE for Messaging V6.0.1 Enhancements

- Launch in context from OMEGAMON XE for Messaging to OMEGAMON for CICS improves problem resolution time for messages that use CICS
- Auto discovery of Queue Managers and grouping of Queue Managers makes it easier for new customers to get started
- Real-time status data for Queues and Channels in MQ environments helps resolve problems effectively
- Remote monitoring and configuration of Queue Managers



OM XE For Messaging - latest fix - IF03 URL: <http://www-1.ibm.com/support/docview.wss?uid=swg24019154>

## A Fix That May Help TEP Performance

- ITM 6.1 Fixpack 6, Interim Fix 1
- APAR OA22849
- With some customers significantly reduced the amount of time it takes to transfer data between ITM base components. By reducing this transfer time, there were improvements to end user response time observed at the TEP client.



# ITM 6.2 Overview

## ITM 5.x to ITM 6.2 migration

ITM v5 -> ITM v6 automated upgrade of Resource Models to Situations  
Enhancements to v6 agents for parity

## Security

- User Authentication via LDAP
- Manage TEP Permissions using User Groups

## Advanced Event Integration

Enhance TEP/TEC Integration and Context Based Launching

Per-Situation Control of:

- Enable or Disable send event
- Destination TEC server(s)
- Event severity
- Set TEC Event Severity

Common Event Viewer integrates ITM, TEC and OMNIBUS events in a single console

## Broadening Integration and Improved Visualization

Enhance embedded HTML Browser

- Better HTML support
- Better Active Page support

Improve Topology View Integration  
Chart View improvements

- Multi-source support
- Multi-line support

## Infrastructure Enhancements

Serviceability:

- Problem Determination data gathering tool
- Operations Log Enhanced

Platform Updates:

- Support for Management Clusters
- Support VMware Management Servers
- Reduce Infrastructure (2500 agents/RTEMS)
- Use Java 1.5 for ITM Java-based components
- Support for DB2 V9.1 / Include DB2 V9.1 in ITM BOM
- Support Tivoli License Manager

## Agent Enhancements

- Monitor for the IBM AIX / System P environment
- Unix Agent Zone Support
- OS Agent ping response times and md5 checksums
- Support >64 characters in service names

## Agent Builder

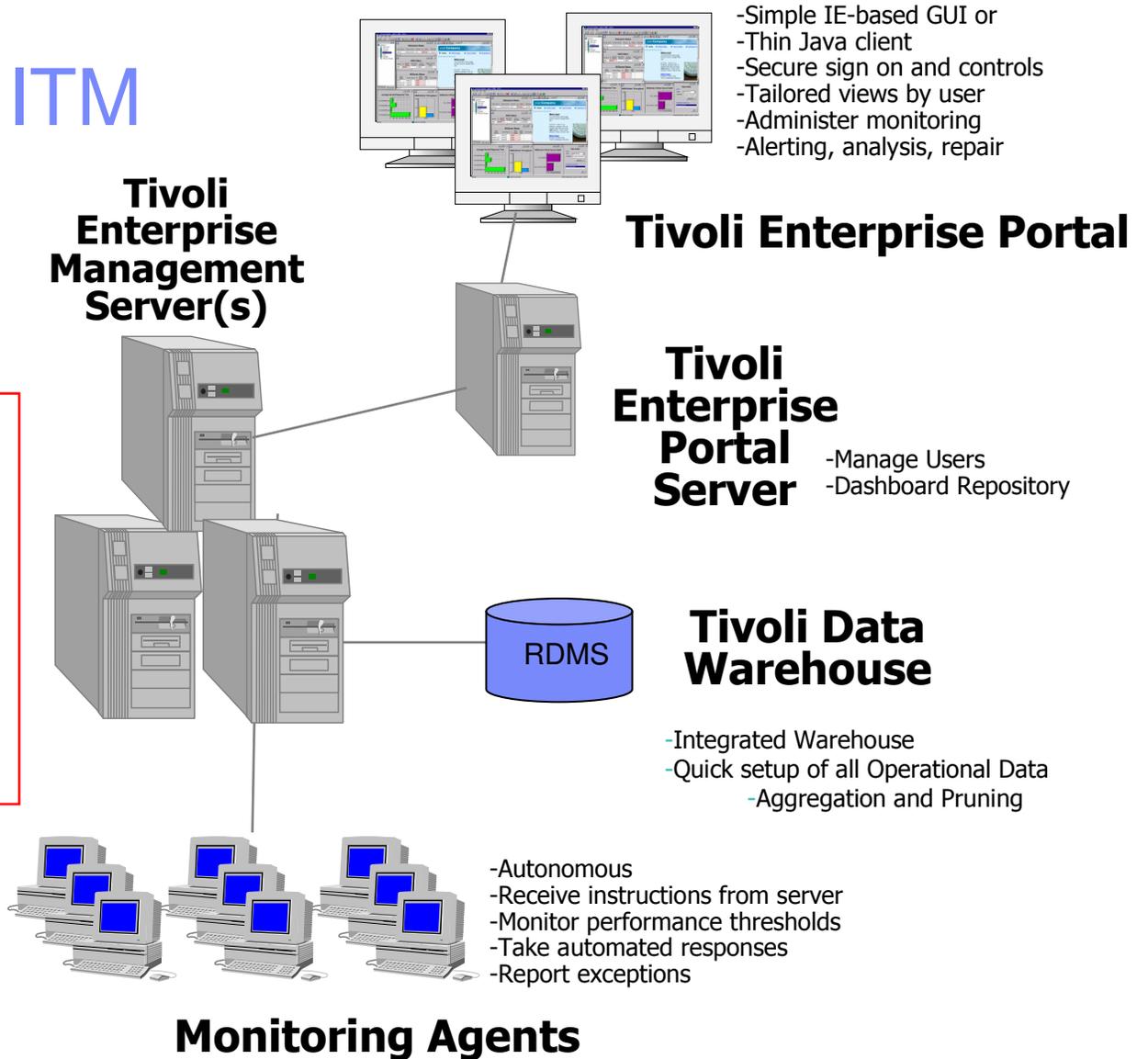
- Eclipse based toolkit for rapid development
- Use GUI wizards to create IRA-based agents
- Remote connection to browse data sources
- Enhanced Log file monitoring



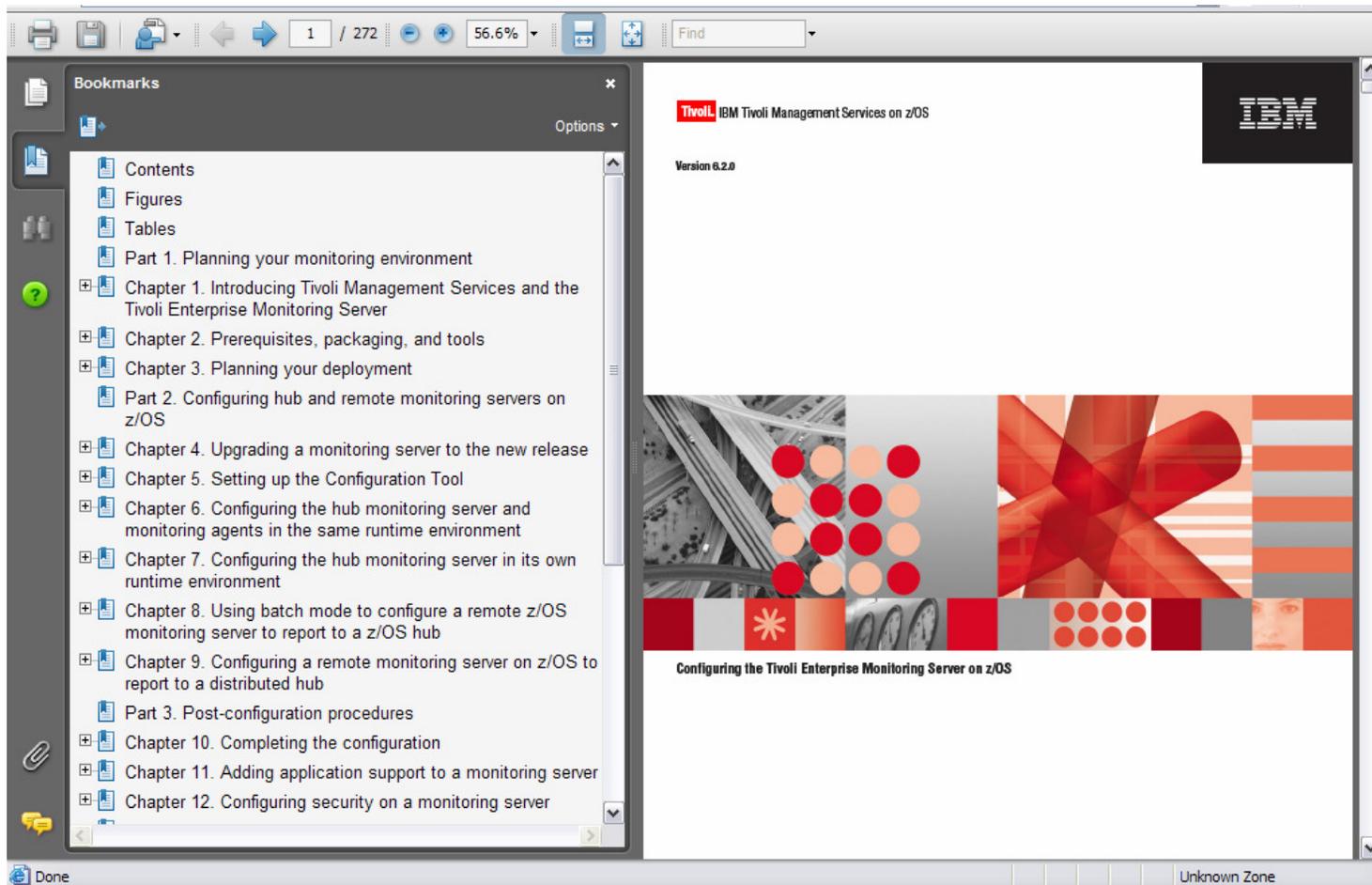
# ITM 6.2 Upgrading The ITM Infrastructure

Tivoli Management Services on z/OS, V6.2 includes the following components:

- Tivoli Enterprise Monitoring Server (FMID HKDS620)
- TMS Engine (FMID HKLV620)
- Configuration Tool (FMID HKCI310)



# Configuring the Tivoli Enterprise Monitoring Server on z/OS



<http://publib.boulder.ibm.com/infocenter/tivihelp/v15r1/topic/com.ibm.itm.doc/SC32-9463-01.pdf>

# ITM 6.2 TEP Usability Enhancements

**Click to enable tool bar**

**Find option allows for fast filtering**

**Specify a range**

**Address Space CPU Utilization Summary**

| Job Name | Step Name | Proc Step | Type | SvcClass | SvcClass Period | ASID   | JESJOBID | CPU Percent | TCB Percent | SRB Percent |
|----------|-----------|-----------|------|----------|-----------------|--------|----------|-------------|-------------|-------------|
| *MASTER* |           |           | STC  | SYSTEM   | 1               | 0X0001 | STC14404 | 0.0         | 0.0         | 0.0         |
| PCAUTH   | PCAUTH    |           | STC  | SYSTEM   | 1               | 0X0002 |          | 0.0         | 0.0         | 0.0         |
| RASP     | RASP      |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |
| TRACE    | TRACE     |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |
| DUMPSRV  | DUMPSRV   |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |
| XCFAS    | XCFAS     |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |
| GRS      | GRS       |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |
| SMSPDSE  | SMSPDSE   |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |
| CICSVR   | CICSVR    |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |
| CONSOLE  | CONSOLE   |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |
| WLM      | WLM       |           |      |          |                 |        |          | 0.0         | 0.0         | 0.0         |

**Find**

Find Criteria

For: Address Space CPU Utilization Summary

| Column   | Value  |
|----------|--------|
| JobName  | == GRS |
| StepName |        |
| ASID     | ==     |

**Range Parameters**

Start of range: 1 End of range: 100

Exclude range start and end from evaluation

OK Cancel Help

Case Sensitive  Wrap Search

Backwards

Find Find Next Close Help

# ITM 6.2 - TEP Usability Enhancements

## Shortcut To Properties View

Click to enable properties view

The screenshot shows the Tivoli Enterprise Portal interface. The main window displays a table titled 'Address Space CPU Utilization Summary'. A red arrow points from the text 'Click to enable properties view' to a pencil icon in the table's toolbar. A dialog box titled 'Properties - Address Space Overview' is open, showing a preview of the table and configuration options.

| Job      | Step   | Proc | Type | SvcClass | SvcClass | ASID   | JESJOBID | CPU     | TCB     | SRB     |
|----------|--------|------|------|----------|----------|--------|----------|---------|---------|---------|
|          |        |      |      |          |          |        |          | Percent | Percent | Percent |
| *MASTER* |        |      | STC  | SYSTEM   | 1        | 0X0001 | STC14404 | 0.0     | 0       | 0       |
| PCAUTH   | PCAUTH |      | STC  | SYSTEM   | 1        | 0X0002 |          | 0.0     | 0       | 0       |

The 'Properties - Address Space Overview' dialog box contains the following information:

- Preview:** Address Space CPU Utilization Summary
- Query:** Click here to assign a query.
- Description:**
  - Name: Address Space Overview
  - Description: Address Space resource utilization overview (V410)
- Formula:** ( Managed System == \$NODE\$ )

# ITM 6.2 - TEP Usability Enhancements View Swap

Tivoli Enterprise Portal - Welcome DNET581

File Edit View Help

Navigator View: Physical Page: 1 of 3

CPU Usage

Address Space CPU Utiliz...

Address Space Counts

| Address Space Count | Started Task Count | Batch Job Count | TSO Co |
|---------------------|--------------------|-----------------|--------|
| 298                 | 267                | 4               |        |

Central Storage Frame Count

**Click and drag tiles in the workspace to rearrange the display**

Tivoli Enterprise Portal - Welcome DNET581

File Edit View Help

Navigator View: Physical Page: 1 of 3

Address Space CPU Utiliz...

| Job Name | Step Name | Proc Step | Type | SvcCl |
|----------|-----------|-----------|------|-------|
| *MASTER* |           |           | STC  | SYSTE |
| PCAUTH   | PCAUTH    |           | STC  | SYSTE |
| RASP     | RASP      |           | STC  | SYSTE |
| TRACE    | TRACE     |           | STC  | SYSTE |
| DUMPSRV  | DUMPSRV   | DUMPSRV   | STC  | SYSTE |
| XCFAS    | XCFAS     | IEFPROC   | STC  | SYSTE |
| GRS      | GRS       |           | STC  | SYSTE |
| SMSPDSE  | SMSPDSE   |           | STC  | SYSTE |
| CICSVR   | CICSVR    | IEFPROC   | STC  | OPSD  |
| CONSOLE  | CONSOLE   |           | STC  | SYSTE |
| WLM      | WLM       | IEFPROC   | STC  | SYSTE |

Address Space Counts

| Address Space Count | Started Task Count | Batch Job Count | TSO Co |
|---------------------|--------------------|-----------------|--------|
| 298                 | 267                | 4               |        |

CPU Usage

Central Storage Frame Count

## TEP Chart Enhancements

- Bar Charts

- ▶ New overlay feature allows one or more related attributes to be plotted against the bar chart
- ▶ Build overlay charts to capture data from multiple sources in a single view
- ▶ Plot lines can be assigned a secondary value axis
- ▶ Time-scaled category axis allows x-axis to be scaled based on the historical time range derived from the result set being charted
- ▶ The bar chart can be “primed” with historical data
- ▶ Styling options added for modifying each bar’s fill pattern

- Plot Chart

- ▶ Now supports multi-row, multi-attribute result sets, both real-time and historical.
- ▶ Auto-refresh interval can be set that is independent of workspace refresh interval
- ▶ New overlay feature can be used in the plot chart view
- ▶ The plot chart can be “primed” with historical data
- ▶ Maximum duration of a real-time plot change increased from 1 hour to 24 hours.
- ▶ Styling options were added to modify each line’s pattern and width, and each symbol shape and size.



# Bar Chart Overlay Option

The screenshot shows the 'Properties - Address Space Overview' window. The main area displays a 'Selected Execution States' bar chart with three categories: DATA, DSNM, and DSNM. A blue line series is overlaid on the bars. A red callout box with the text 'Click to add overlay to bar chart' points to the 'Add Overlay...' button in the 'Style' tab. The 'Add Overlay' dialog box is open, showing the 'Attributes' section with 'Using CPU' assigned and 'ASID', 'Type', 'Period', and 'Using IFA' available. The 'Attribute Style' section is also visible, with options for Text, Line Style (Pattern, Width, Color), and Symbol Style (Shape, Size, Color).

**Click to add overlay to bar chart**

# Plot Chart Enhancements

**Plot chart**

**Plot duration**

**Specify refresh rate**

**Add overlay option**

| System ID | CICS Region Name | CICS Version | Region Status | CICS SYSIDNT | VTAM Applid | VTAM Generic Applid | VTAM ACB Open | SOS | Maximum Tasks Percent |
|-----------|------------------|--------------|---------------|--------------|-------------|---------------------|---------------|-----|-----------------------|
| MVSA      | CICSAOR1         | 6.4.0        | N/S           | C22A         | CICSACB1    | CICSACB1            | Yes           | No  | 3                     |

Properties - Region Overview

Preview

Transaction Rate

Plot Duration

Plot duration is 0 Hours 5 Minutes

Refresh Rate

Use Refresh Rate from Workspace

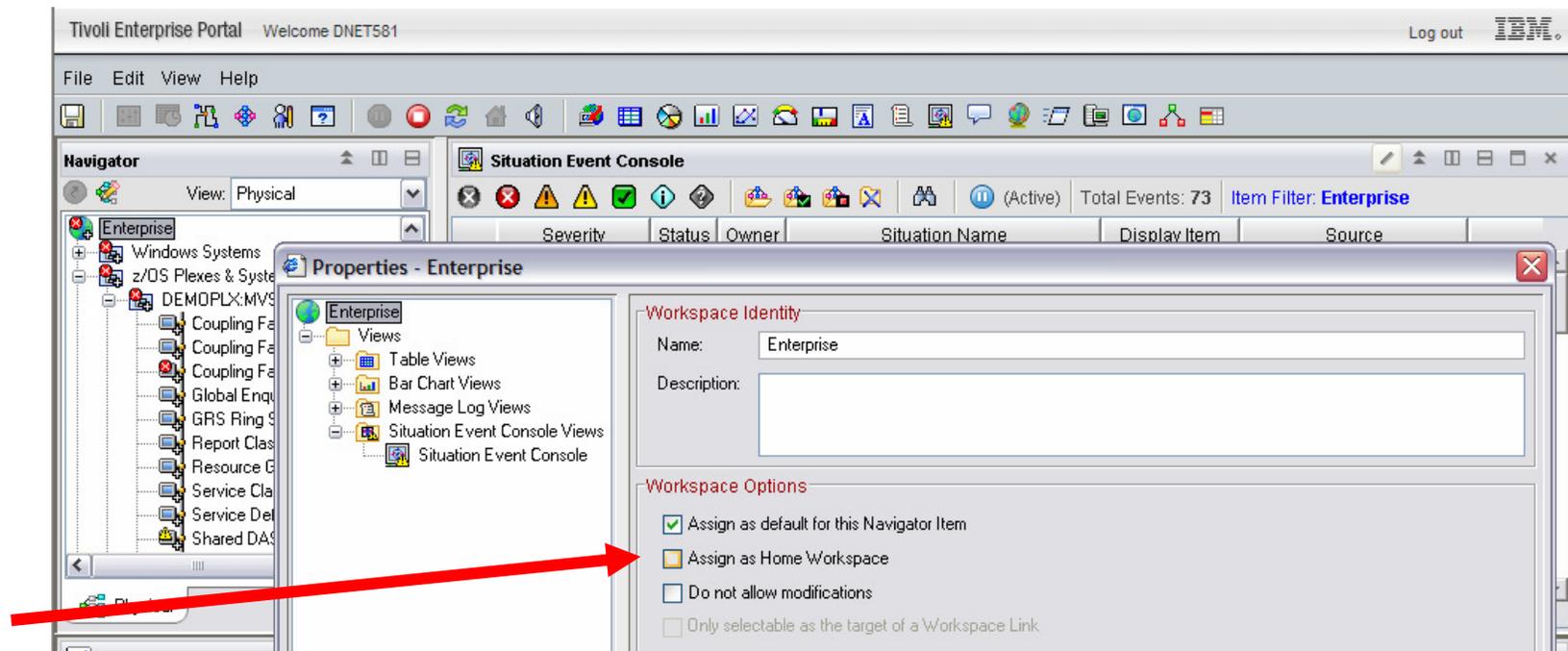
Refresh Plot Chart Every 30 Seconds

Overlay

Add Overlay...

# Home Workspace

- Enterprise Status initially is home workspace to be displayed
- Assign as Home Workspace option
  - ▶ Establish another workspace from any navigator level in any navigator view to be home workspace whenever TEP starts
- You can return via the Home Workspace tool button



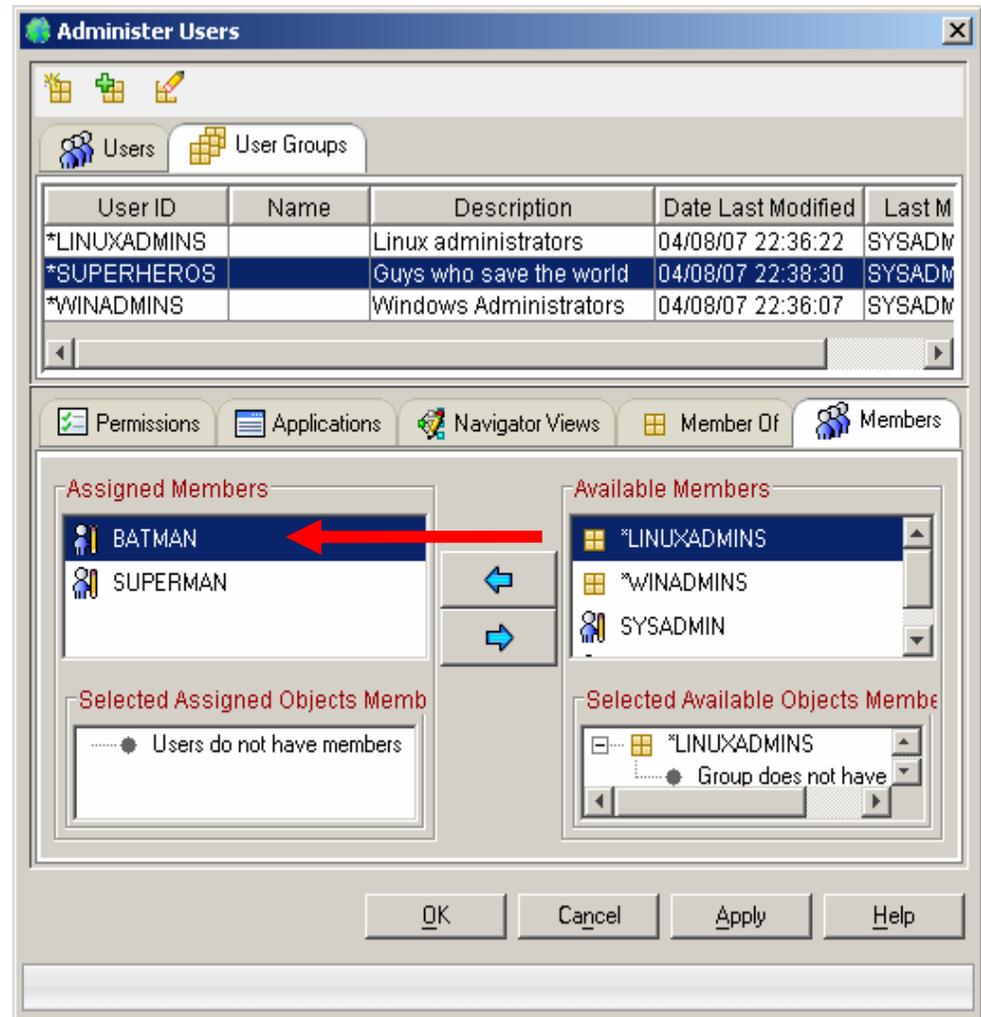
# User Groups

In ITM V6.1:

- Permissions were defined individually for each TEP user

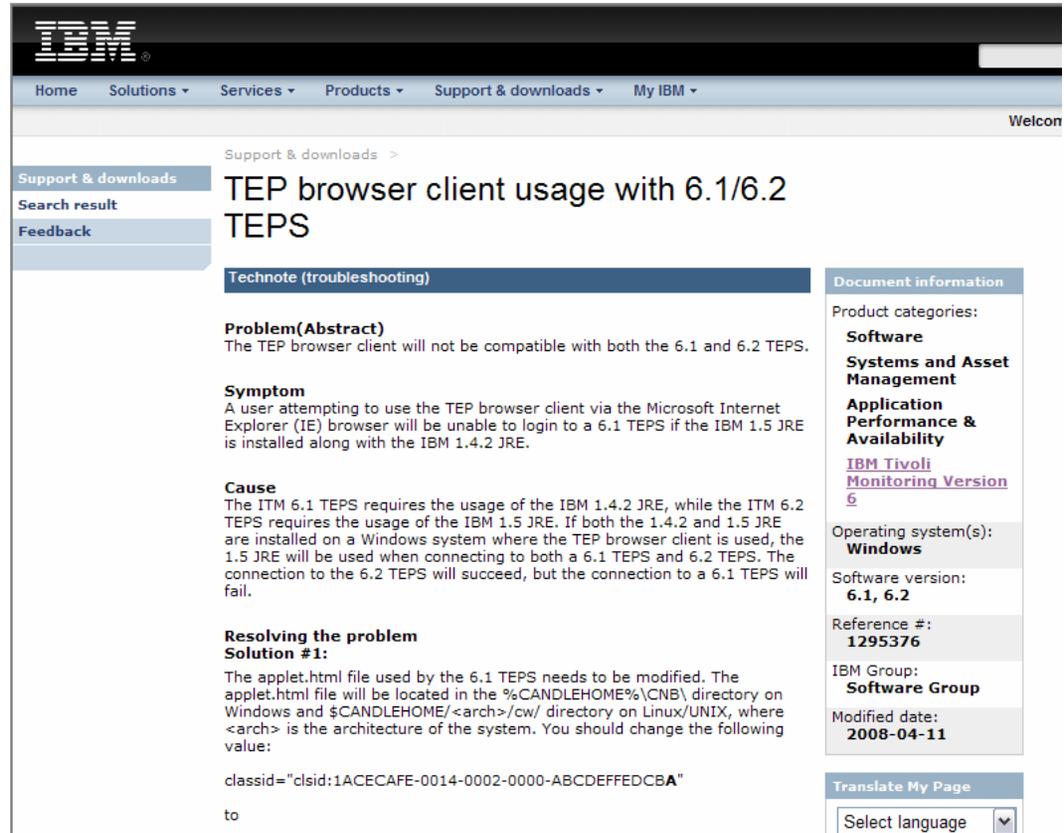
In ITM V6.2:

- Introduces User Groups
- Users with similar organization roles and permission needs can now be grouped together
- Permissions can be defined on a group basis and apply to all users within the defined user group
- This reduces administration effort



# ITM 6.2 And The TEP Java 1.5 Considerations

- ITM 6.2 requires IBM Java 1.5 for Windows and Linux 32-bit environments.
- The upgraded JRE is provided with the 6.2 image for both Windows and Linux.
- Existing ITM 6.1 needs to be upgraded to 1.5 when migrating to ITM 6.2.
- Both Java 1.4.2 and 1.5 can be installed and co-exist on the same physical machine, allowing concurrent execution of 6.1 and 6.2 TEP from the same box.

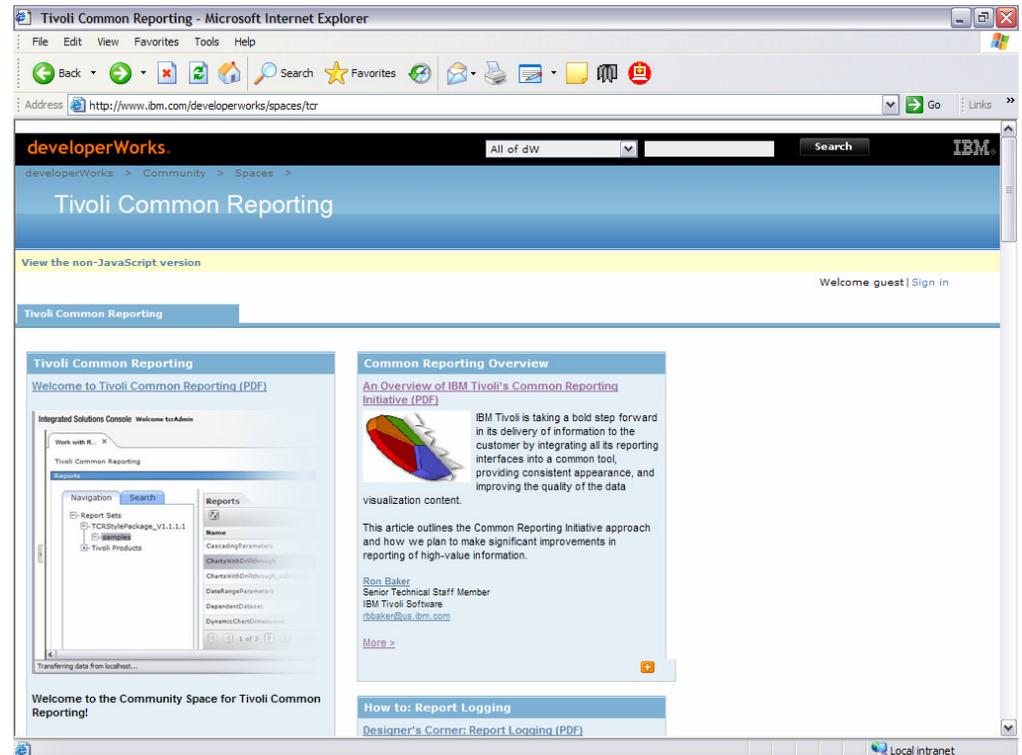


The screenshot shows the IBM Support & Downloads website. The main content area displays a technote titled "TEP browser client usage with 6.1/6.2 TEPS". The page includes a navigation menu at the top with options like Home, Solutions, Services, Products, Support & downloads, and My IBM. A search result sidebar on the left shows "Support & downloads", "Search result", and "Feedback". The main content area is divided into sections: "Technote (troubleshooting)", "Problem (Abstract)", "Symptom", "Cause", and "Resolving the problem". The "Resolving the problem" section includes a "Solution #1" with instructions on modifying the applet.html file. A "Document information" sidebar on the right provides details such as product categories, software version (6.1, 6.2), reference number (1295376), and modified date (2008-04-11). A "Translate My Page" section at the bottom right allows users to select a language.

<http://www.ibm.com/search?q=technote+1295376+&v=16&lang=en&cc=us>

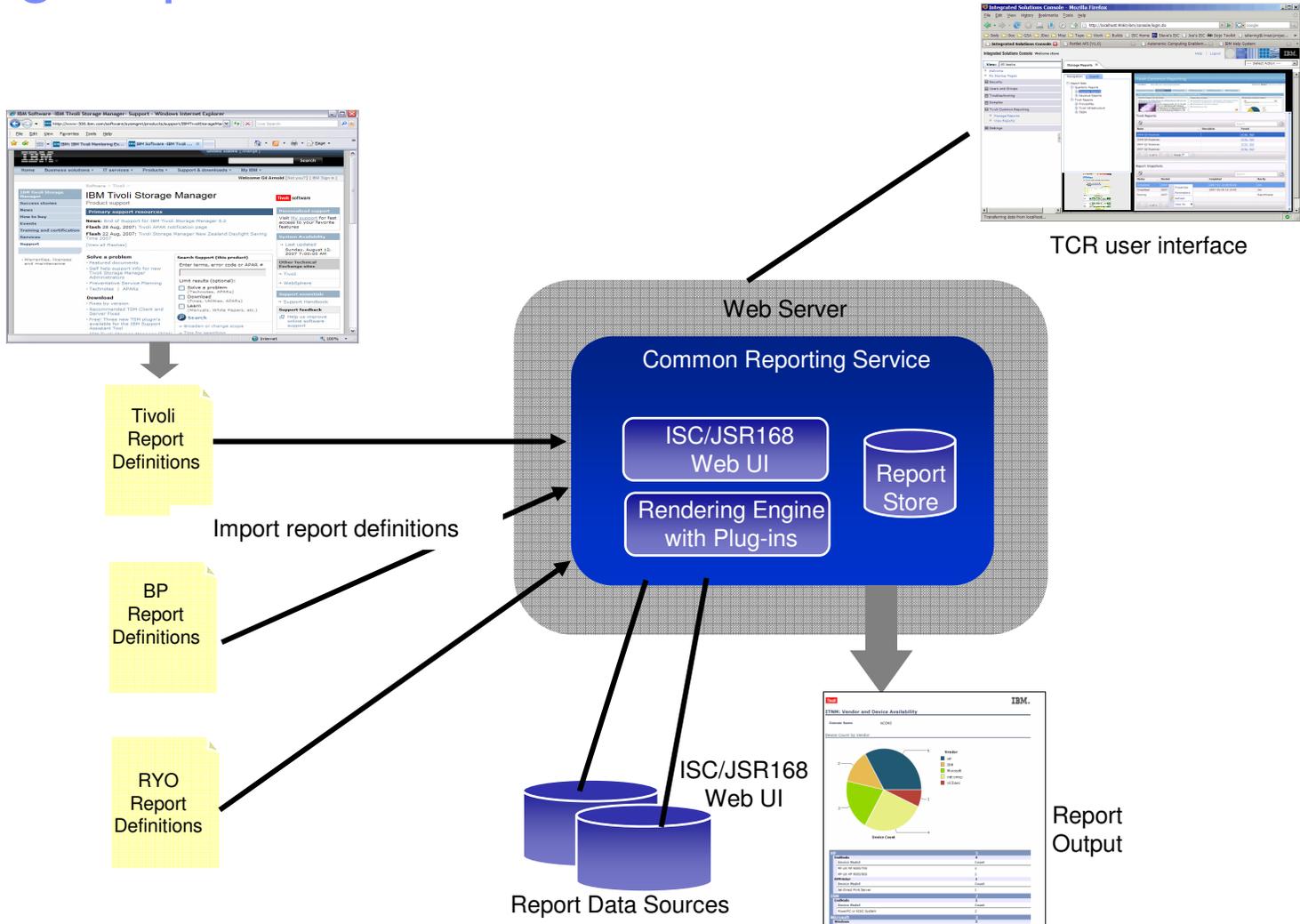
# Tivoli Common Reporting Overview

- Tivoli Common Reporting
  - ▶ Tivoli Common Reporting DVD included with ITM 6.2 and will ship with other Tivoli products
  - ▶ Tivoli standard infrastructure for creating, viewing, and managing Tivoli product reports
  - ▶ Helps customers get more value out of their Tivoli investments.
  - ▶ Mine the data collected by Tivoli products, and produce reports such as device availability, resource utilization, and outage history.
  
- Interaction with TCR can occur via browser using the web application or through the command line interface (CLI)



Tivoli Common Reporting Web Site  
 On IBM DeveloperWorks  
<http://www.ibm.com/developerworks/spaces/tcr>

# Tivoli Common Reporting Creating Reports



# Reports Available on OPAL

Tivoli Common Reporting

<http://catalog.lotus.com/wps/portal/topal>

Reports

Navigation Search

- Report Sets
  - Tivoli Products
    - NetView for z/OS
    - OMEGAMON XE Products on z/OS
      - + OMEGAMON XE for CICS on z/OS
      - + OMEGAMON XE for IMS on z/OS
      - OMEGAMON XE for Mainframe Networks
      - + OMEGAMON XE on z/OS
    - OMEGAMON XE on z/VM and Linux
    - + Tivoli Common Reporting

Reports

| Name                                                   | Description                                                                |
|--------------------------------------------------------|----------------------------------------------------------------------------|
| OMEGAMON XE for Mainframe Networks TN3270 Applications | Shows TN3270 server bytes transmitted by z/OS system and Application       |
| OMEGAMON XE for Mainframe Networks TN3270 Clients      | Shows bytes transmitted and response time by z/OS system and TN3270 client |

Reports

Search

| Name                                                                                | Description                                                                                                                  |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| OMEGAMON XE for Mainframe Networks IP Layer Utilization                             | Shows IP Layer datagram transmission rates, per success and failure type, by z/OS system                                     |
| OMEGAMON XE for Mainframe Networks OSA Adapter Ethernet Throughput                  | Shows packets transmitted, per frame type, by z/OS system, OSA Adapter and Port                                              |
| OMEGAMON XE for Mainframe Networks OSA Adapter Processor Utilization and Throughput | Shows OSA adapter processor utilization per hour by z/OS system, OSA adapter, channel and port                               |
| OMEGAMON XE for Mainframe Networks Response Time                                    | Shows TCP/IP round-trip-time by z/OS system and remote IP address. Drill through breaks out remote IP address per connection |
| OMEGAMON XE for Mainframe Networks TCP Applications Workload                        | Shows TCP connection usage, per connection type, by z/OS system and application                                              |
| OMEGAMON XE for Mainframe Networks TCP Layer Utilization                            | Shows TCP Layer transmission rate, connection rate and errors by z/OS system                                                 |

1 of 2 Rows 6

# RSS Feeds And Tivoli Support And Information Pages

- RSS 'feeds' are provided by a wide range of web sites - not just IBM
- Each time the content publisher posts a new item to the website, it updates an XML file that contains the RSS 'feed'
- Need an RSS client to view RSS
  - ▶ Use services provided by YAHOO or GOOGLE
  - ▶ Use Firefox browser
  - ▶ Other RSS clients

Support page with links to Tivoli RSS feeds

Software > Tivoli support

Tivoli software

IBM Software Support RSS feeds

These RSS feeds allow you to stay up-to-date with the latest content created for specific IBM Software products. Feeds are updated daily.

There are two basic steps to get an RSS feed:

- Download and install an RSS reader (see right column for some third party examples; these are not supported by IBM).
- Use your reader to subscribe to the feed. Some examples to subscribe are below. Consult your reader's Help section for more details.
  - Drag the orange RSS button into your RSS reader.
  - Right-click the RSS button and select Copy, then Paste into your RSS reader.
  - Other methods of reading RSS feeds are also available via browsers Plug-Ins, My Yahoo, Lotus Notes applications, Mobile User applications and screensavers.

For more information on RSS and how to get started, visit our [RSS help page](#).

Related links

- IBM Business Partners
- ISVs
- Developers

Other IBM RSS feeds

- Software Support
- developerWorks
- Redbooks
- More

Support feedback

Help us improve online software support

<http://www-306.ibm.com/software/support/rss/tivoli/index.html>

# RSS Example Using Google Reader

The image shows two browser windows. The top window is the IBM Software Support website, displaying RSS feeds for Tivoli software. A red box highlights the 'Copy Shortcut' option in a right-click context menu. The bottom window is Google Reader, showing the same RSS feed imported. A red box highlights the 'Add subscription' button. A large red box at the top right contains the text 'Click to drill down for detail Use search options' with an arrow pointing to the search bar in Google Reader. Another red box at the bottom center contains the text 'Select 'Add subscription' and paste in the shortcut' with an arrow pointing to the 'Add subscription' button.

Right click and copy shortcut

Select 'Add subscription' and paste in the shortcut

Click to drill down for detail  
Use search options

# RSS Example

## Get Relevant Information On ITM 6.2

The screenshot shows a Microsoft Internet Explorer browser window displaying Google Reader. The search bar contains the text '6.2' and the search button is highlighted. A red callout box with the text 'Enter 6.2 and click search' has an arrow pointing to the search bar. The search results are displayed in a list format, with the following items:

- Draft Redbooks - Certification Study Guide Series: IBM Tivoli Monitoring V 6.2**  
...Monitoring Version 6.2 and is aimed at the people who want to get an IBM Professional Certification for this product. The IBM Tivoli Monitoring Version 6.2 Certification, offered through the Professional Certification Program from IBM, is designed to validate the skills required of technical professionals who work in the implementation of the IB...  
Tivoli - IBM Tivoli Monitoring Version 6 - Apr 4, 2008 7:43 PM
- TEP browser client usage with 6.1/6.2 TEPS**  
...1 and 6.2 TEPS.  
Tivoli - IBM Tivoli Monitoring Version 6 - May 11, 2008 (23 hours ago)
- Compatibility of ITM 6.2 and Omegamon XE for Messaging 6.0 and 6.0.1**  
...with ITM 6.2 is v6.0.1 IF 01.  
Tivoli - IBM Tivoli Monitoring Version 6 - Apr 5, 2008 4:52 PM
- Recommended Maintenance Service Levels for OMEGAMON XE products on ITM V6.2**  
...Monitoring Version 6.2.0.  
Tivoli - IBM Tivoli Monitoring Version 6 - Feb 13, 2008 9:07 AM
- Redbooks - Deployment Guide Series: IBM Tivoli Monitoring V6.2**  
...Monitoring Version 6.2 is a powerful monitoring product from IBM, that is easily customizable and provides real-time and historical data that enables you to quickly diagnose and solve issues through the IBM Tivoli Enterprise Portal component. This common, flexible, and easy-to-use browser interface helps users to quickly isolate and resolve pote...  
Tivoli - IBM Tivoli Monitoring Version 6 - Feb 7, 2008 3:30 PM

At the bottom of the search results, there are navigation buttons for 'Previous item' and 'Next item', and a count of '9 items'. A red callout box with the text 'Recommended maintenance' has an arrow pointing to the 'Recommended Maintenance Service Levels' article. Another red callout box with the text 'OM Messaging compatibility issues' has an arrow pointing to the 'Compatibility of ITM 6.2 and Omegamon XE for Messaging' article.

**OM Messaging compatibility issues**

**Recommended maintenance**

## Summary – What's Happened With V4.1?

- OMEGAMON XE V4.1 (and OMEGAMON XE Messaging V6.0.1)
  - ▶ GA Q4 '06 and Q1 '07
- New OMEGAMON monitoring solutions
  - ▶ IBM Tivoli OMEGAMON XE for z/VM and Linux v4.1.0
  - ▶ IBM Tivoli OMEGAMON XE for CICS TG on z/OS v4.1.0
- Many enhancements to the various OMEGAMON solutions since GA
  - ▶ Enhancements provided in the SMP/E maintenance stream and fixpacks
  - ▶ Exciting new capabilities provided by ITM 6.2
- Additional new capabilities
  - ▶ OPAL
  - ▶ Tivoli Common Reporter
- Powerful support capabilities
  - ▶ RSS feeds



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- ▶ Replay this teleconference
- ▶ Replay previously broadcast teleconferences
- ▶ Register for upcoming events

