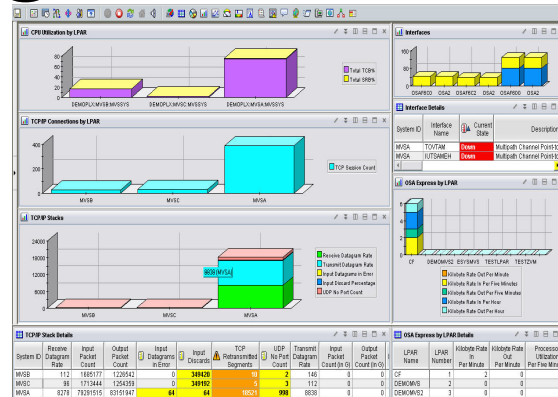


Leveraging Tivoli Enterprise Portal

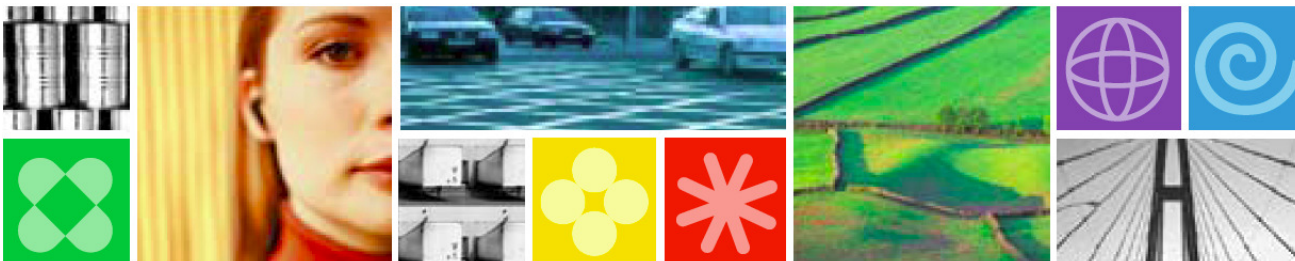


Ed Woods

IBM Consulting I/T Specialist

Tivoli on System z

woodse@us.ibm.com





Sometimes It's What You Don't See...



FunTimesHad

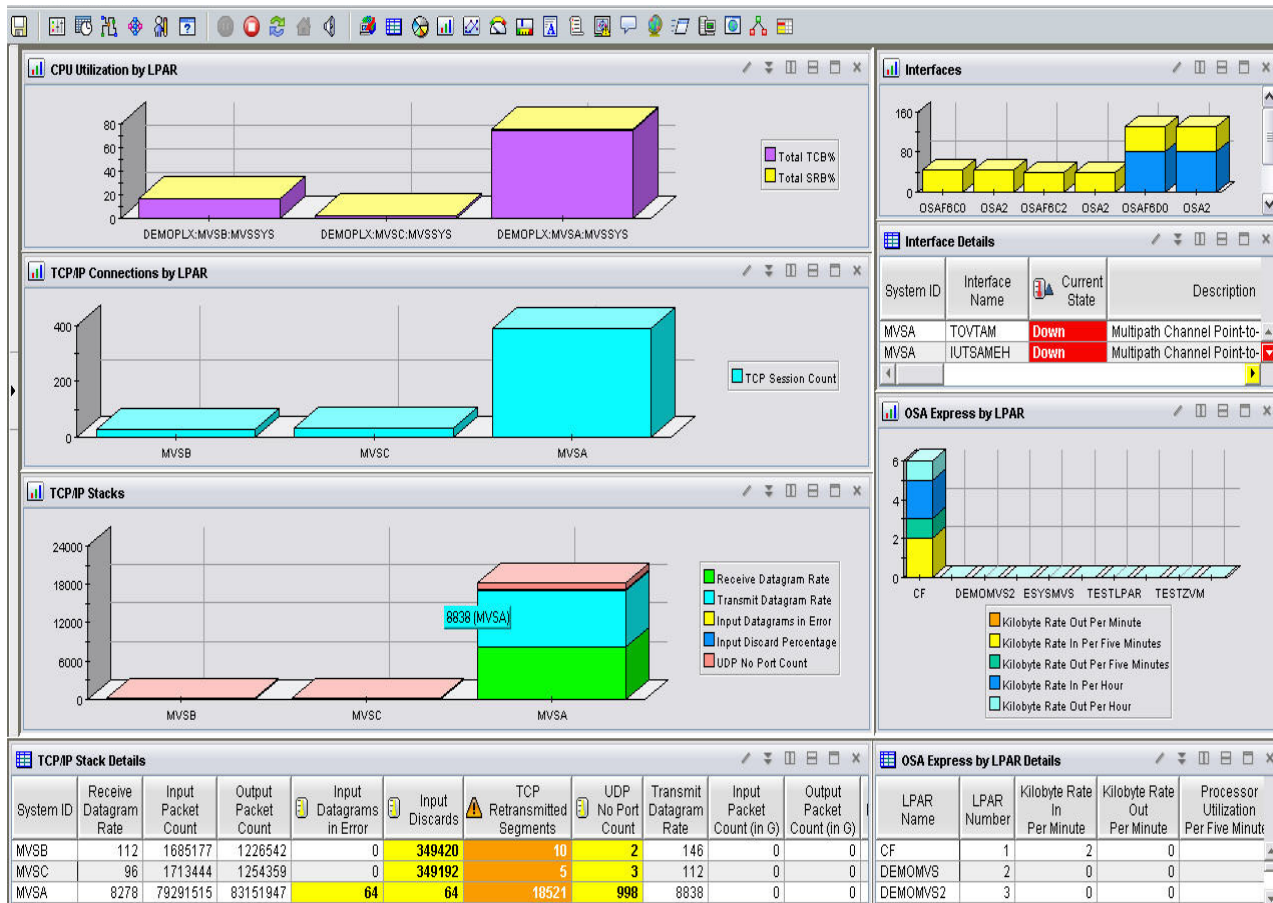


Abstract: Leveraging the TEP



Once you have installed the Tivoli Enterprise Portal (TEP), there are some simple changes you can make to dramatically enhance OMEGAMON and ITM's effectiveness.

This is an illustration of how simple it is to customize the TEP.





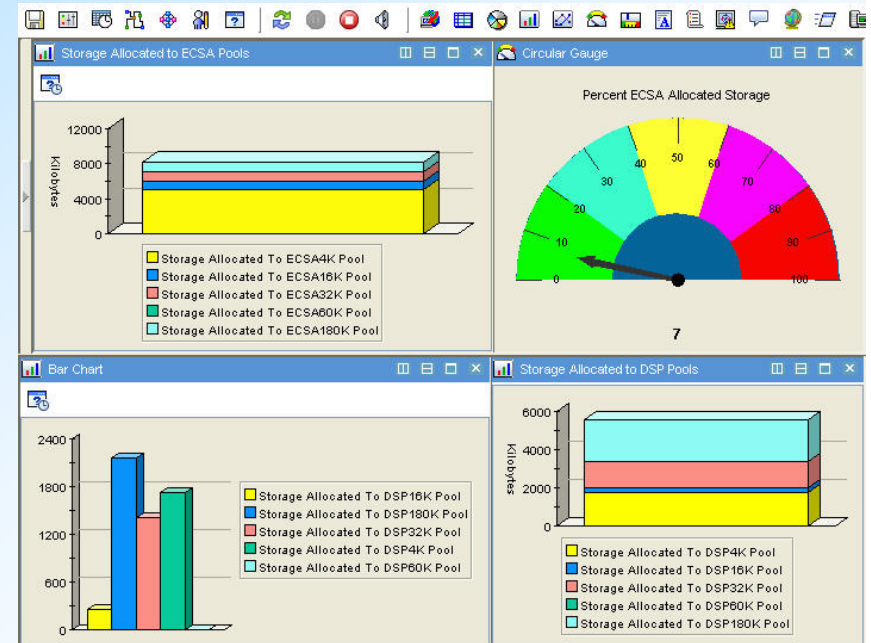
What is the TEP?



Tivoli Enterprise Portal (TEP)

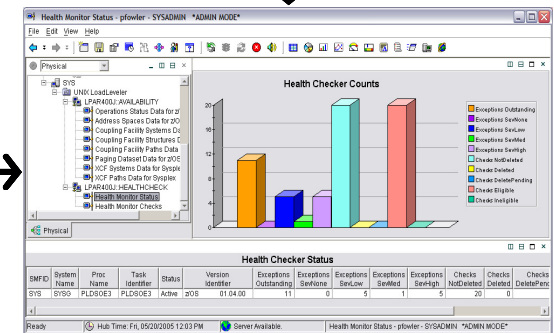
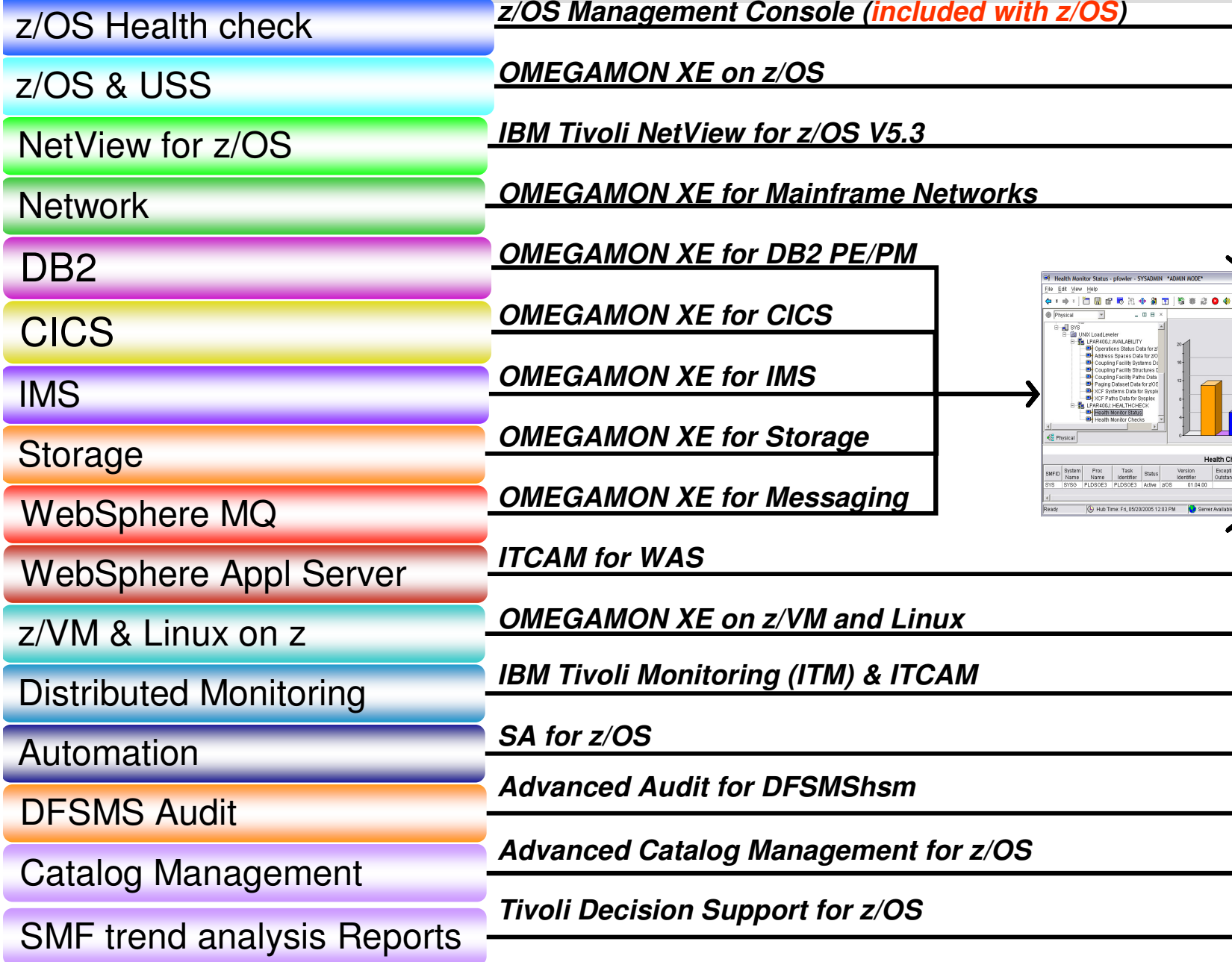
Common user interface

- Manage z/OS and distributed resources from a single browser interface.
- Displays data in graphs, charts and table formats
- View real time and historical data, at the same time
- Easy to configure, right from the TEP
- Out of the box Best Practices
 - Workspaces, Situations, and Expert Advice





Integrated with the TEP



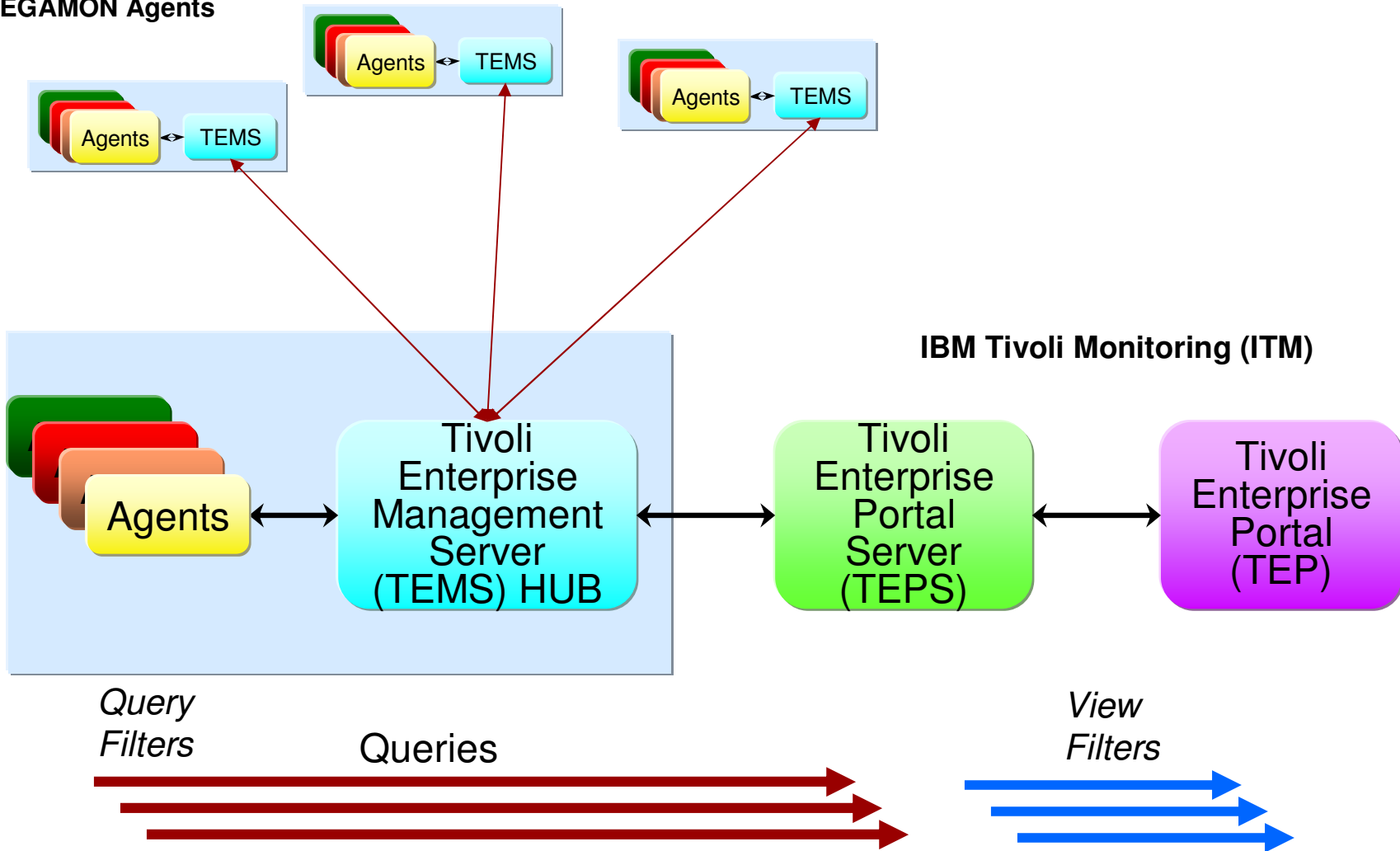
TEP



OMEGAMON XE TEP Infrastructure



OMEGAMON Agents





TEP - Terminology



File Edit View Help

View: zView

zView

z/OS Plexes & Systems

- DEMOPLX:MVS:SYSplex
 - Coupling Facility Policy Data for Sysplex
 - Coupling Facility Structures Data for Sysplex
 - Coupling Facility Systems Data for Sysplex
 - Global Enqueue Data for Sysplex
 - GRS Ring Systems Data for Sysplex
 - Report Classes Data for Sysplex
 - Resource Groups Data for Sysplex
 - Service Classes Data for Sysplex
 - Service Definition Data for Sysplex
 - Shared DASD Groups Data for Sysplex
 - XCF Groups Data for Sysplex
 - XCF Paths Data for Sysplex
 - XCF Systems Data for Sysplex
- z/OS Management Console
- MVSA
- MVSB
- MVSC
- DB2PLEX
- IMSA:MVSA:IMS

Physical

Navigator View

CPU Utilization by LPAR

DEMOPLX:MVSB:MVSSYS

View

Interfaces

OSAF6C0 OSA2 OSA2

TCP/IP Connections by LPAR

MVSB MVSC MVSA

TCP/IP Stacks

MVSB MVSC MVSA

21 (MVSC)

Interfac...

System ID	Interface Name	Control
MVSB	IUTSAMEH	Down
MVSB	TOVTAM	Down

OSA Expre...

CF DEMOZVM ZTECZVM

TCP/IP Stack Details

System ID	Receive Datagram Rate	Input Packet Count	Output Packet Count	Input Datagrams in Error	Input Discards
MVSB	94	3948947	2938377	0	804046

OSA Express by LPAR Details

LPAR Name	LPAR Number	Kilobyte Rate In Per Minute	Kilobyte Rate Out Per Minute	Processor Utilization Per Five Minutes	Kilobyte Rate In Per Five Minutes
CF	1	2	2	0	

Hub Time: Tue, 02/10/2009 01:50 PM Server Available IP Stacks and OSA cross LPAR - tivtpep.demopkg

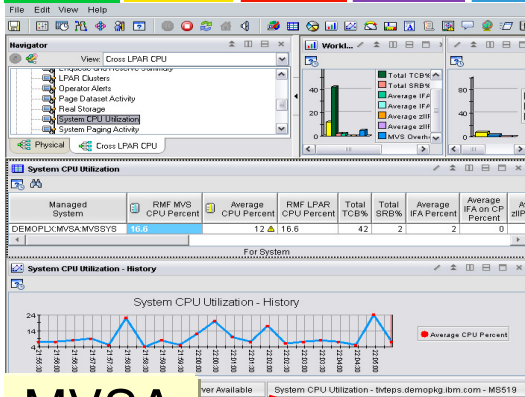
Workspace



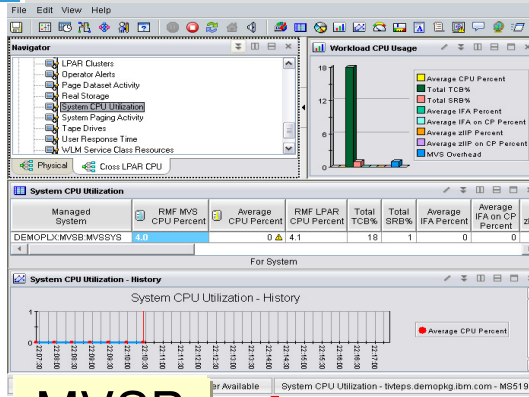
TEP top 10 TIPS	Benefit
<i>Cross LPAR Views</i>	View all LPARs in one View
<i>Creating a New Navigator View</i>	Organize workspaces by user and problem
<i>Cross Application Workspaces</i>	Integrate many views into one
<i>Eliminate Multiple pages</i>	Compact simplified views
<i>Filter Queries</i>	Faster Views
<i>Customizing Tables and Charts</i>	Highlight only what you need to see
<i>Situations</i>	Alert only on problems that need action
<i>Topology</i>	Verify Installation fix levels and connectivity
<i>Built-in Tutorials</i>	TEP Online Education
Tuning and ITMSUPER	Tune OMEGAMON Infrastructure



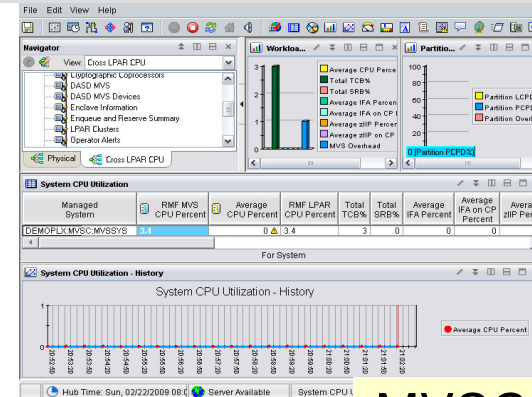
Cross LPAR View - Overview



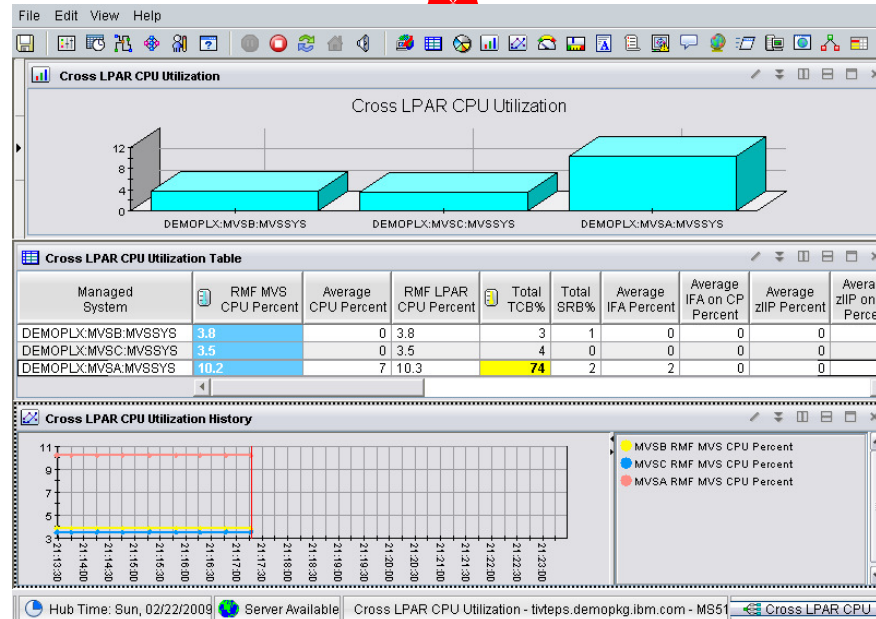
MVSA



MVSB



MVSC

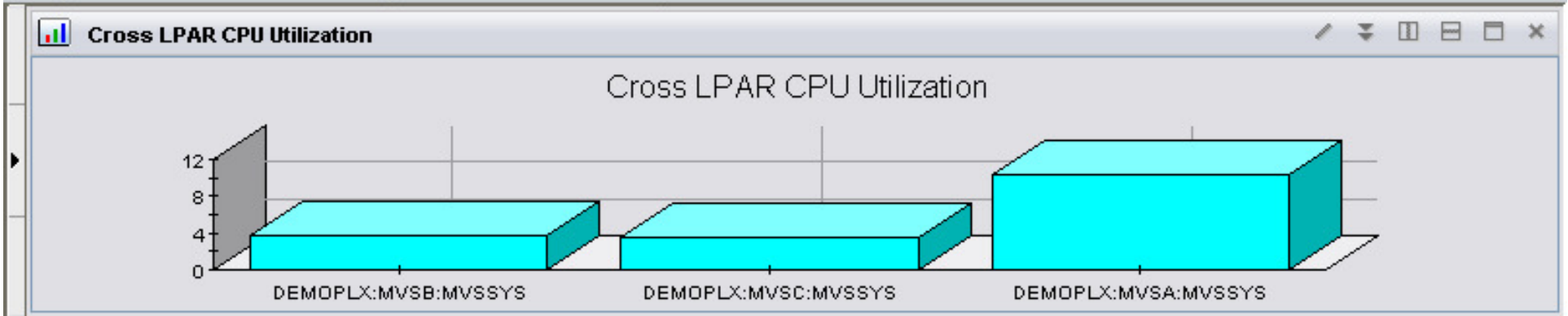


MVSA
MVSB
MVSC

Example: OMEGAMON XE on z/OS
Default Physical drill down to see one LPAR at a time

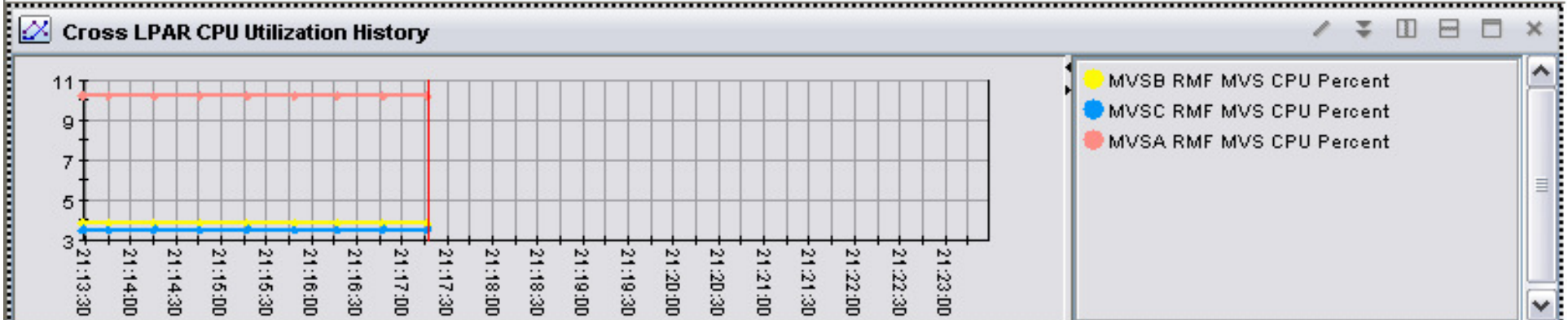


Cross LPAR View – Example



Cross LPAR CPU Utilization Table

Managed System	RMF MVS CPU Percent	Average CPU Percent	RMF LPAR CPU Percent	Total TCB%	Total SRB%	Average IFA Percent	Average IFA on CP Percent	Average zIIP Percent	Average zIIP on C Percent
DEMOPLX:MVSB:MVSSYS	3.8	0	3.8	3	1	0	0	0	0
DEMOPLX:MVSC:MVSSYS	3.5	0	3.5	4	0	0	0	0	0
DEMOPLX:MVSA:MVSSYS	10.2	7	10.3	74	2	2	0	0	0





New Navigator View



Navigator

1. Edit Navigator Views



View

2. Create a New Navigator View

Create New Navigator View

Navigator View Identity

Name: Cross LPAR CPU

Description: Show how to create a new Navigator View

Edit Navigator View

Target View: Cross LPAR CPU

Source View: Physical

3. Populate new Navigator view
Drag and drop

- Cross LPAR CPU
- + DEMOPLX:MVSA:MVSSYS
- + DEMOPLX:MVSB:MVSSYS
- DEMOPLX:MVSC:MVSSYS

- + NetView Agent
- + Services Management Agent
- + Storage Subsystem



Choose attributes to graph



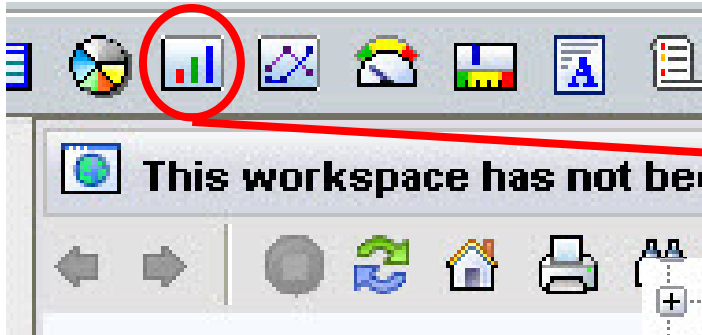
1. Select new Navigator view

2. Attribute to be graphed

3. Remember Query of Attribute to be graphed



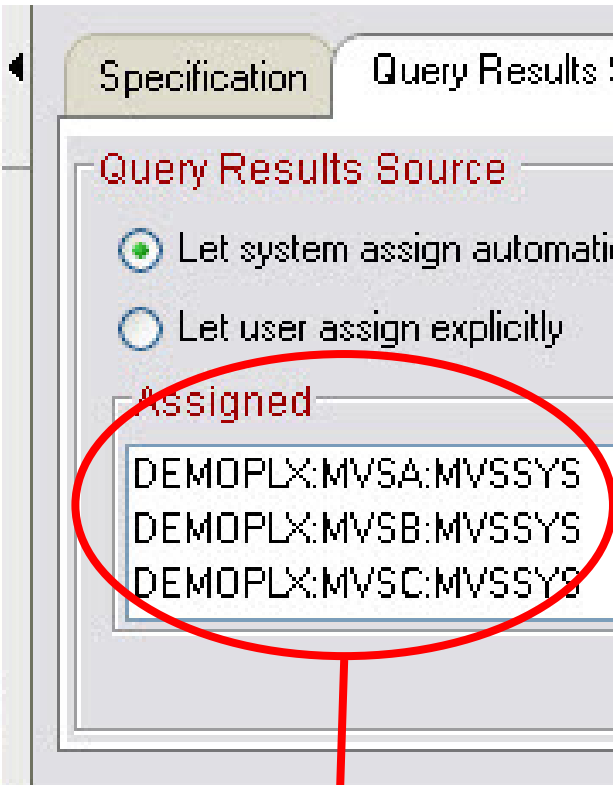
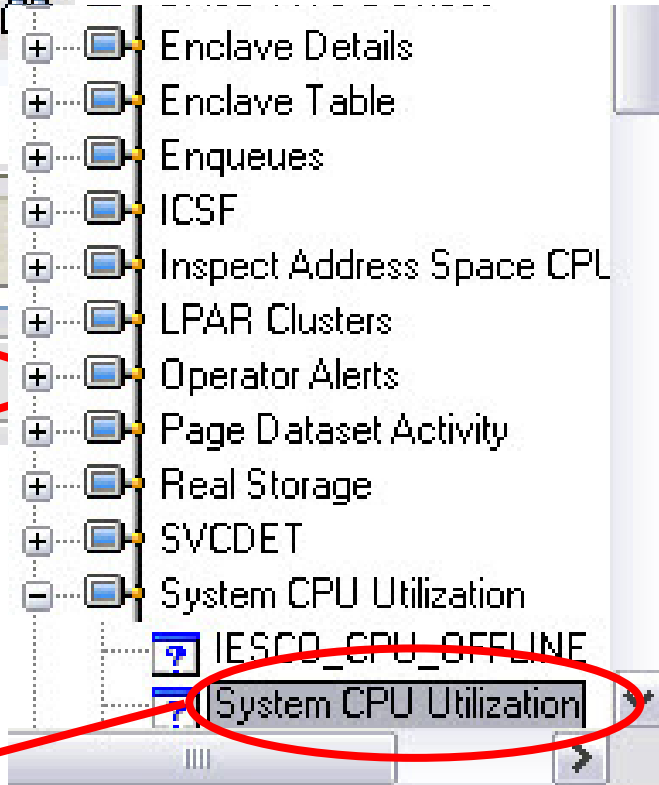
Select type of graph



1. Select Graph type (drag and drop)



2. Assign Query



3. Assign Systems (default)



Assign Attribute to Graph



Properties - Cross LPAR CPU

Preview

Bar Chart

Query Filters Style

Filters

	Managed System	Average CPU Percent	RMF MVS CPU Percent	RMF LPAR CPU Percent	Total TCB%	T SF
1		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2						
3						
4						

Data Snapshot

	Managed System	Average CPU Percent	RMF MVS CPU Percent	RMF LPAR CPU Percent
<input type="checkbox"/>	DEMOPLX:MVSB:MVSSYS	0	3.8	3.9
<input type="checkbox"/>	DEMOPLX:MVSC:MVSSYS	0	3.3	3.3
<input type="checkbox"/>	DEMOPLX:MVSA:MVSSYS	3	9.1	9.1

1. Assign What to Graph

2. See Data to be Graphed



Customize Graph



Properties - Cross LPAR CPU

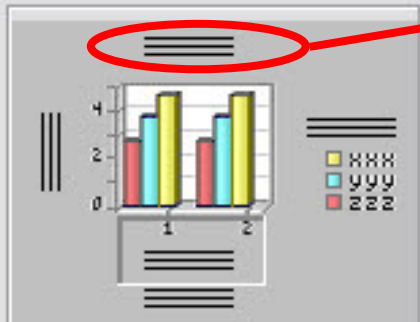
Preview

CPU Utilization



1. Enter Name of window
"CPU Utilization"

Query Filters Style



Text:

Font: Size: Style:

Orientation

Horizontal Vertical

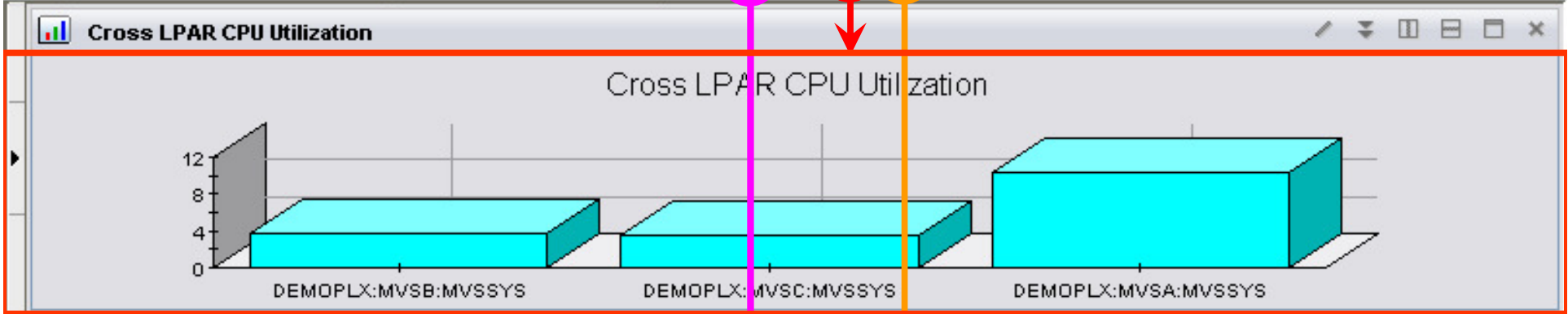
Attribute

2. Assign axis to display

Category Axis - General Axis Label Category Axis



Add Views and Save Workspace



Managed System	RMF MVS CPU Percent	Average CPU Percent	RMF LPAR CPU Percent	Total TCB%	Total SRB%	Average IFA Percent	Average IFA on CP Percent	Average zIIP Percent	Average zIIP on C Percent
DEMOPLX:MVSB:MVSSYS	3.8	0	3.8	3	1	0	0	0	0
DEMOPLX:MVSC:MVSSYS	3.5	0	3.5	4	0	0	0	0	0
DEMOPLX:MVSA:MVSSYS	10.2	7	10.3	74	2	2	0	0	0

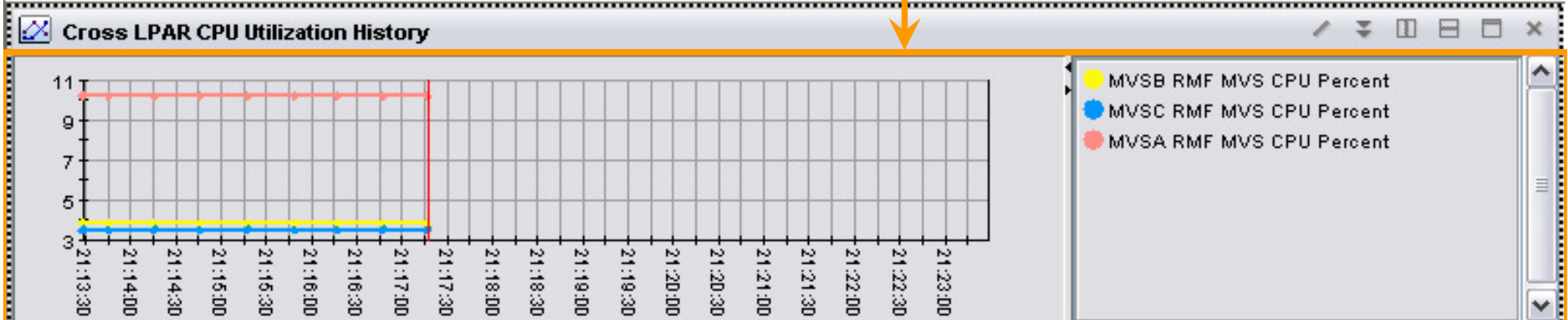




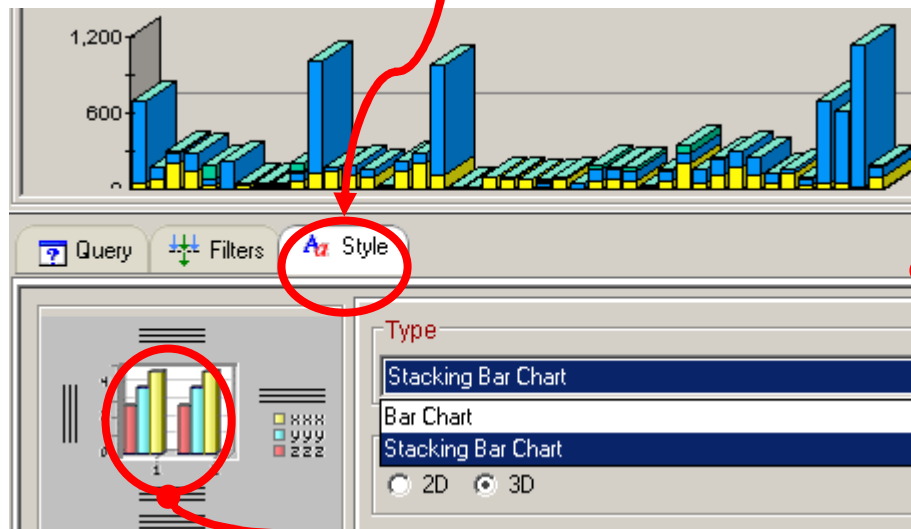
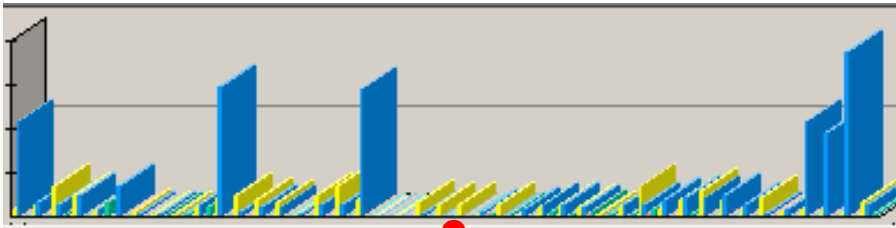
Chart Customization



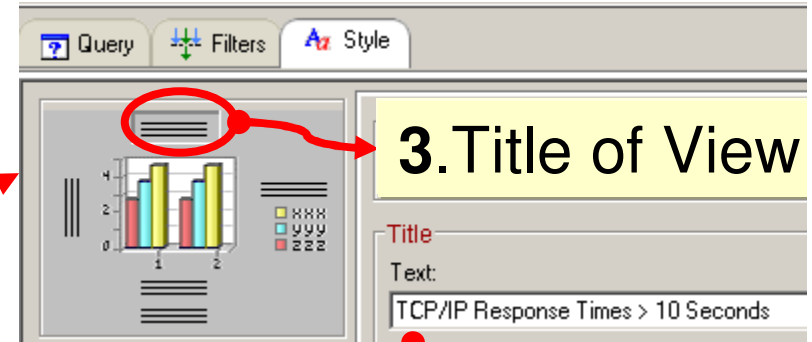
- Attribute Item
- Percent Segments Retransmitted
 - Response Time
 - Response Time Variance
 - Segments Retransmitted
 - Time Since Last Activity

1. Select attributes

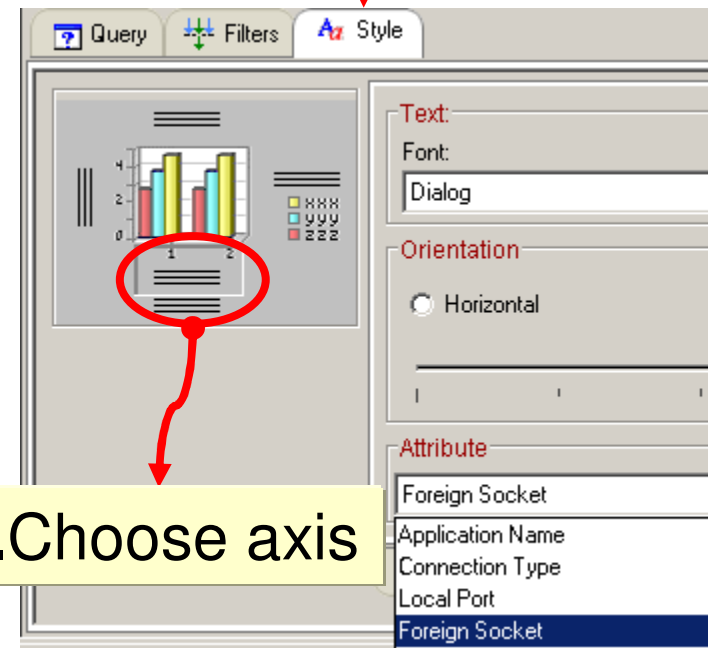
Change bar chart into a stacked bar chart



2. Stacked 3D bar chart



3. Title of View



4. Choose axis



Save Workspace



- Save Workspace Ctrl+S
- Save Workspace As...** F12
- Delete Workspace
- Restore Original Workspace
- Print Preview...
- Print Workspace... Ctrl+P
- Trace Options...
- Close
- Exit F3

Save Workspace As

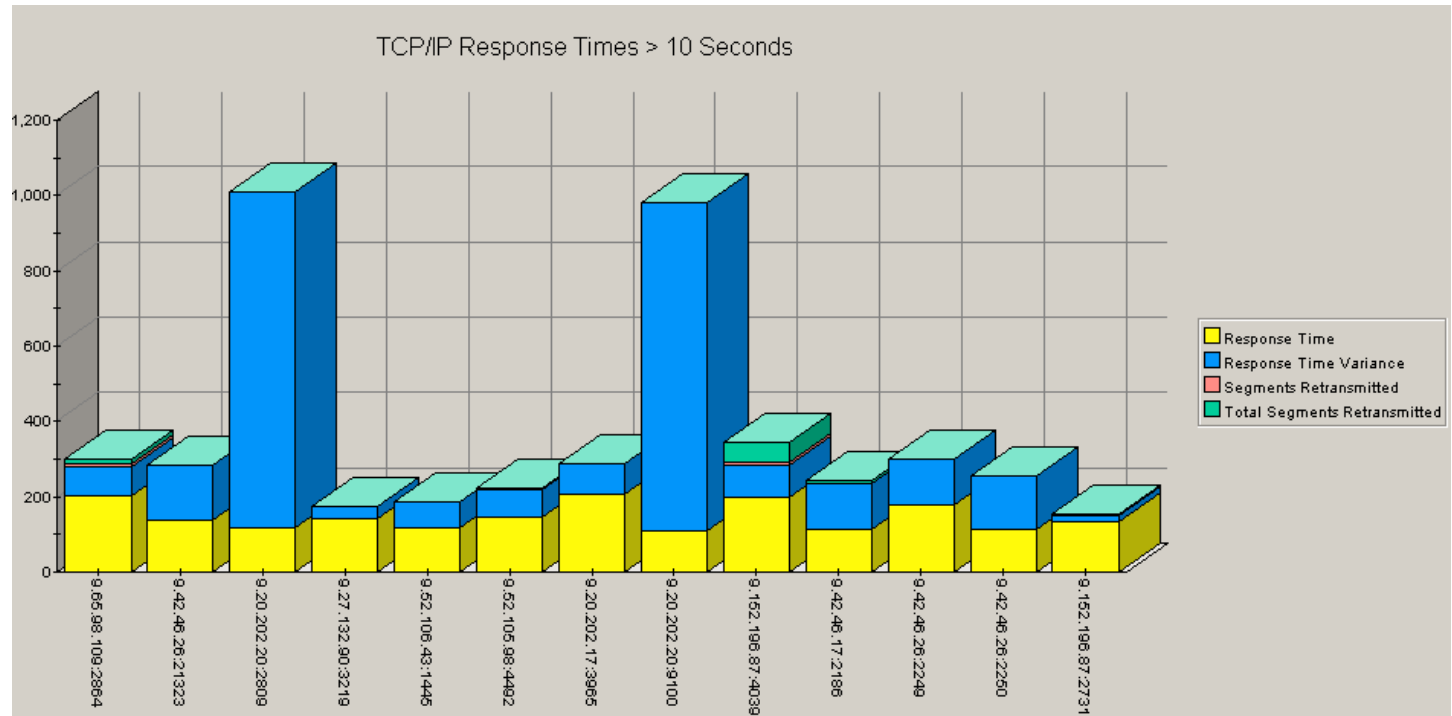
Workspace Identity

Name:

Description:

Workspace Options

- Assign as default for this Navigator Item
- Assign as Home Workspace
- Do not allow modifications
- Only selectable as the target of a Workspace Link
- Always open workspace in new window





Common Portal Customization Scenarios

- **The customized Subject Matter Expert (SME) view**
- **The integrated performance view**
- **The SME technical graphic overview**
- **The SME application specific view**
- **The end to end business application view**
- **The integrated alert management overview**
- **Management by exception view**



Example Customization Scenarios

Integrated Subject Matter Expert (SME) View

Welcome SYSADMIN Log out

Tivoli Enterprise Portal

File Edit View Help

View: Physical

In the integrated SME view pull together detailed information specific to a given component (such as z/OS, CICS, IMS, or DB2)

Structure Name	CF Name	Asynchronous Requests per minute	Synchronous Requests per minute	Storage Size	Duplex	AutoAlter	Ma
CICSRLS	CF01	0.0	0.0	589824	Disabled	No	LPAR40
CIXLG_DFHLOG_1	CF01	0.0	0.0	540999680	Disabled	Yes	LPAR40
DFHXQLS_SHAH	CF01	0.0	0.0	2064318464	Disabled	No	LPAR40

CF Performance

Group Name	Average True Percent Busy	Highest True Percent Busy	Highest True Percent Busy Volser	Average Device Contention Index	Highest Device Contention Index	Highest De Contention I Volser
PRIVATE NON-SMS VOLUMES	0.0	5.9	ST0002	56.254	100.000	CSP121
SGBLD				95	45.454	BLD003

Shared DASD Performance

Managed System	Page Fault Rate	Expanded Storage Pages Moved	Sy Pag
LPAR400J:MVS:MVSPLEX	17	0.0	

Storage paging and UIC stats

Unreferenced Interval Count
120

Cluster Name	LPAR Name	Physical %CPU	Overhead %CPU	Current Weight	Physical %Weight	CPU Index	Effective %Weight	Logical %Weight	Effective Weight Index	Logical %CPU	CPU %Ready	WLM Managed	Initial Weight	Maximur Weight
LPAR400J.B36A.2084	CANSYSL	6.4	0.0	3	3.1	2.1	88.7	41.9	2.1	85.9	11.0	NO	3	
LPAR400J.B36A.2084	CANSP12	0.4	0.0	3	3.1	0.1	16.7	27.9	0.6	4.0	19.9	NO	3	
LPAR400J.B36A.2084	_CLTotal	6.8	0.0	6	6.2	0.0		0.0	0.0	0.0	30.9	NO	0	

CPU info

As seen from System: SYSL



Another Example – Integrated Subject Matter Expert (SME) View

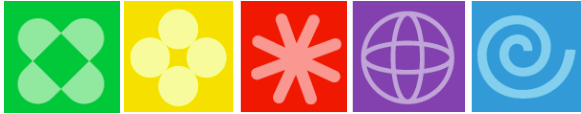
Integrated IMS analysis workspace

Baseline analysis and arithmetic functions

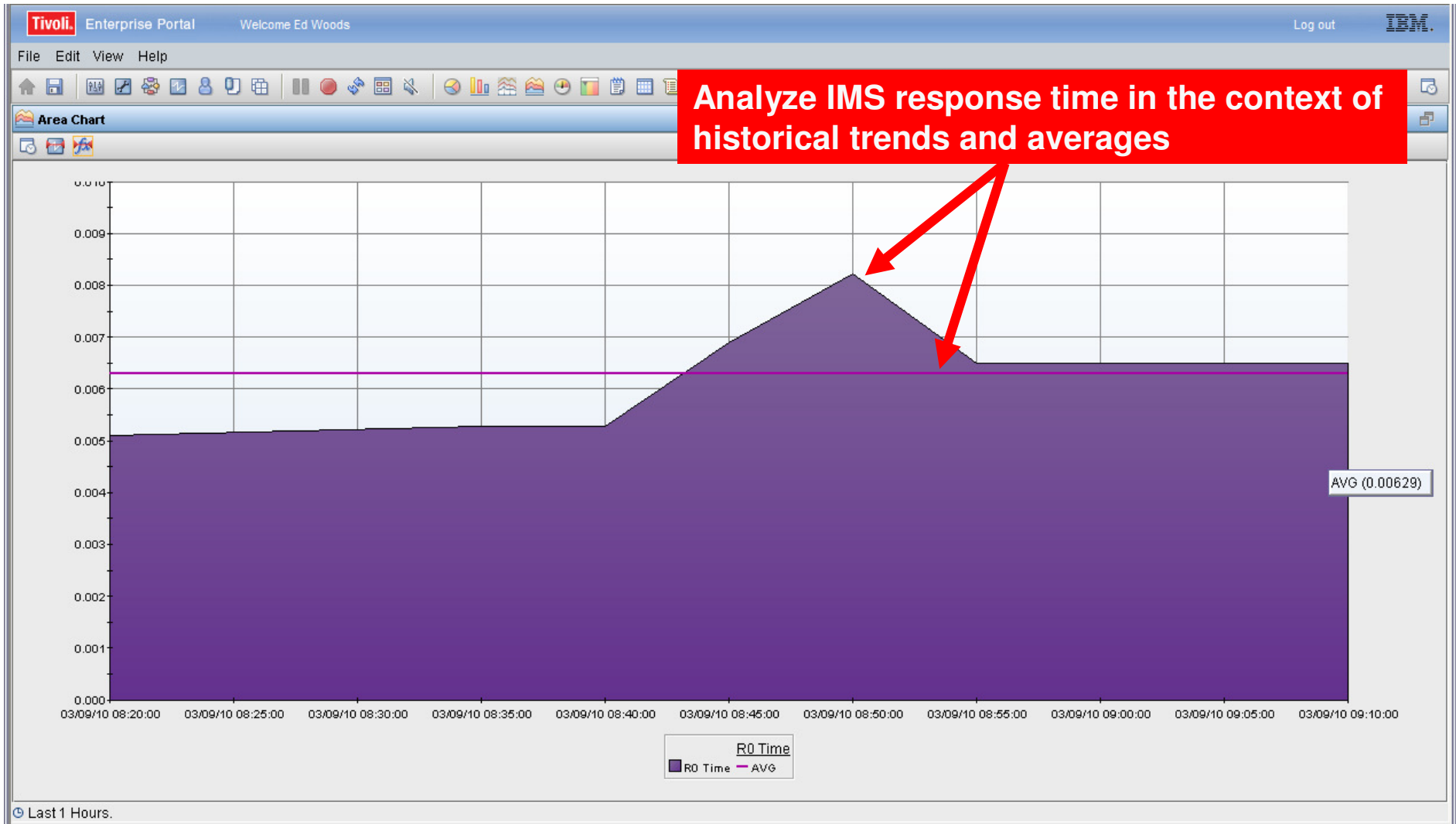
Name	Argument	Result
<input type="checkbox"/> RANGE - MIN/MAX		
<input checked="" type="checkbox"/> AVG	+/- 0 standard deviation	
<input type="checkbox"/> MIN	+/- 0 percent	
<input type="checkbox"/> MAX	+/- 0 percent	
<input type="checkbox"/> PERCENTILE	50	
<input type="checkbox"/> MODE		

ITM 6.2.2 provides new charting functions

Area plot charts provide a different perspective of history



Example – Area Plot Chart Of IMS R0 Response Time With Statistical Baseline





Example – The Integrated Performance View

In the integrated performance view pull together detailed performance information for multiple components

Network performance

Integrated graphic overview

CICS performance

IMS performance

DB2 performance

End To End Management View

Critical Applications Net...

Application Name	Connection Count	Transmit Byte Rate	Recei Byte Rate
CICSL153	3	221	2
DB1LDIST	2	0	
IMS9FCON	3	0	

CICS Response Time

CICS Region Name	Group Name	Response Time
CICSL153	TRAN GRP C*	00:00:00
CICSL153	TRAN GRP D*	00:00:00
CICSL153	TRAN GRP E*	00:00:00

IMS Response Time

IMSID	Item Name	Item Type	Input Queue Time (Secs.)	Program Queue (Sec)
I91F	PARTL	PSB	0.0000	

DB2 Distributed Performance

Originnode	SQL Calls Sent	SQL Calls Received	Data Rows Sent
D81L:SYSL:DB2	4	4	105

CICS Response Time Chart

IMS Response Time Chart

DB2 Distributed Performance Chart



Queries And Customization To Create The Integrated Performance View

End To End Management View

The diagram shows a flow of data from Network and DB2 to CICS and z/OS, and then to Storage and Operating System.

Query Editor - CICS Performance query

Description: Default Response Time Analysis Query
Data Source: TEMS_HUB_IBM-1E47754C52F Ip...
Last Modified on: Fri, 06/13/2008 10:53 AM
Last Modified by: SYSADMIN

Query Editor - Network Performance query

Description: This query returns
Data Source: TEMS H...

Table: Critical Applications Net...

Application Name	Connection Count	Transmit Byte Rate	Receiv Byte Rate
CICSL153	3	221	2
D81LDIST	2	0	
IMS9FCON	3	0	

Table: IMS Response Time

Group Name	Response Time	IMSID	Item Name	Item Type	Input Queue Time (Secs.)	Program Queue (S)
AN GRP C*	00:00:00					
AN GRP D*	00:00:00	I91F	PARTL	PSB	0.0000	
AN GRP E*	00:00:00					

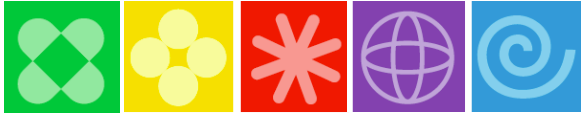
Table: CICS Response Time

Group Name	Response Time
AN GRP C*	00:00:00
AN GRP D*	00:00:00
AN GRP E*	00:00:00

Table: IMS Response Time (Graph)

Item Name	Response Time (Secs.)
RO Time (Secs.)	0.20

In the integrated performance queries and graphic overview from multiple agent types and sources may be integrated into a single composite view



The SME Technical Graphic Overview

Welcome SYSADMIN
Tivoli Enterprise Portal

File Edit View Help

View: Logical

Graphic View

Sysplex Performance Overview

The diagram illustrates a Sysplex configuration with three z/OS MVS systems (A, B, and C) connected to a central Sysplex. Each system includes a DB2 instance. The diagram shows data flow for Coupling Facility Structures and Shared DASD Groups. System A and C show System CPU Utilization, while System B shows System CPU Utilization. All systems show Thread Activity for their respective DB2 instances.

The focus of this view is technical and hardware/platform specific in nature. Target audience may be systems or operations.

Physical Logical



The SME Application Specific View A DB2 Monitoring Example

Tivoli Enterprise Portal **Tivoli** software

File Edit View Help

Physical

- XCF Paths Data for Sysplex
- XCF Systems Data for Sysplex
- MVSA
 - CICS
 - DB2
 - DSNA: MVSA: DB2
 - Take Action...
 - Edit Action...
 - Link Wizard...
 - Link Anchor...
 - Export ...
 - Split vertically
 - Split horizontally
 - Remove
 - Print Preview...
 - Print...
 - Properties...

Locks Owned

Detailed Thread Exceptions

Time	Plan Name	Package	Collection	Correlation	Connection	Authorization Identifier	DB2ID	MVS System	Interval Time		
01/06/06 04:06:31	DSNACLI					TC	DSNA	MVSA	00:04:58		
01/06/06 04:06:31	ASNTA820	ASNSQLCF	ASNCOMMON	DPROPCAPInit	RRSAF	SYSSTC	DSNA	MVSA	00:04:58		
01/06/06 04:06:31	ASNTA820	ASNSQLCF	ASNCOMMON	DPROPCAPInit	RRSAF	SYSSTC	DSNA	MVSA	00:04:58		
01/06/06 04:06:31	Allied	Unknown	ASNTC820	ASNSQLCF	RRSAF	SYSSTC	DSNA	MVSA	00:04:58		
01/06/06 04:06:31	Allied	Unknown	ASNTC820	ASNSQLCF	RRSAF	SYSSTC	DSNA	MVSA	00:04:58		
01/06/06 04:06:31	Allied	DB2_Call_Attach	ASNTA820	ASNMSGT	ASNCOMMON	DPROPPAPP	DB2CALL	SYSSTC	DSNA	MVSA	00:04:58

DB2 System: DSNA, MVS System: MVSA

Ready | Hub Time: Fri, 01/06/2006 04:20 AM | Server Available. | Detailed Thread Exception - hqdt2.demopkg.ibm.com - DNET581

Start with a product provided DB2 thread overview workspace

Select 'properties' to begin the customization process



Filter The Contents Of The Workspace

In this case filter for either DSNJDBC or DISTSERV threads.

Take advantage of the ability of the TEP to use and/or logic to highlight critical information

Select key columns to display

Connection Type	Plan Name	Package Name	Correlation Identifier	Authorization Identifier	DB2ID	CPU Utilization	DB2 CF Used
Unknown	DSNJDBC		BBOS001S	ASSR1	DSNA	0.0	00:00:02.54
Unknown	DSNIDBC		BBOS001S	ASSR1	DSNA	0.0	00:00:00.17

Connection Type	Plan Name	Package Name	Correlation Identifier	Authorization Identifier	DB2ID
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1	abc EQ DSNJDBC				
2	abc EQ DISTSERV				
3					
4					

Connection Type	Plan Name	Package Name	Correlation Identifier	Authorization Identifier	DB2ID
DB2_Call_Attach	ASNTA820	ASNAMAN	DPROPAPP	SYSSTC	DSNA
DB2_Call_Attach	ASNTA820	ASNSQLCF	DPROPAPP	SYSSTC	DSNA
DB2_Call_Attach	ASNTC820	ASNSQLCF	DPROPAPP	SYSSTC	DSNA
DB2_Call_Attach	ASNTC820	ASNSQLCF	DPROPAPP	SYSSTC	DSNA
DB2_Call_Attach	ASNTA820	ASNMSGT	DPROPAPP	SYSSTC	DSNA

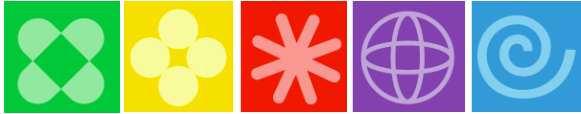


Specify Column To Graph And Add Filters To The Graphic

Specify the column to graph and the filter criteria.

Getpage Count	Originnode	Time	Thread Type	Connection Type	Plan Name	Percent
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	abc EQ DISTSERV	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	abc EQ DSNJDBC	

Originnode	Time	Thread Type	Connection Type	Plan Name	Percent
B:MVSA:DB2	01/06/06 ...	Allied	Unknown	KO2540IF	
B:MVSA:DB2	01/06/06 ...	Allied	DB2_Call_Att...	FPEPLAN	
B:MVSA:DB2	01/06/06 ...	Allied	DB2_Call_Att...	FPEPLAN	
B:MVSA:DB2	01/06/06 ...	Allied	DB2_Call_Att...	FPEPLAN	
66168	DSNB:MVSA:DB2	01/06/06 ...	Allied	DB2_Call_Att...	DB2PM
0	DSNB:MVSA:DB2	01/06/06 ...	Allied	DB2_Call_Att...	FPEPLAN



The Final SME Application Specific View

Tivoli Enterprise Portal Tivoli software

File Edit View Help

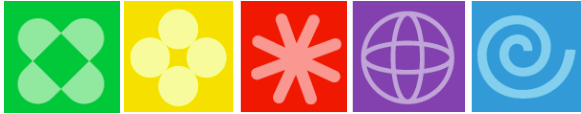
Physical

- DB2
 - DSNA:MVSA:DB2
 - System Status
 - Detailed Thread Exception**
 - Lock Conflicts
 - Subsystem Management
 - Log Manager
 - Utility Jobs
 - EDM Pool
 - Buffer Pool Management
 - Volume Activity
 - CICS Connections
 - IMS Connections

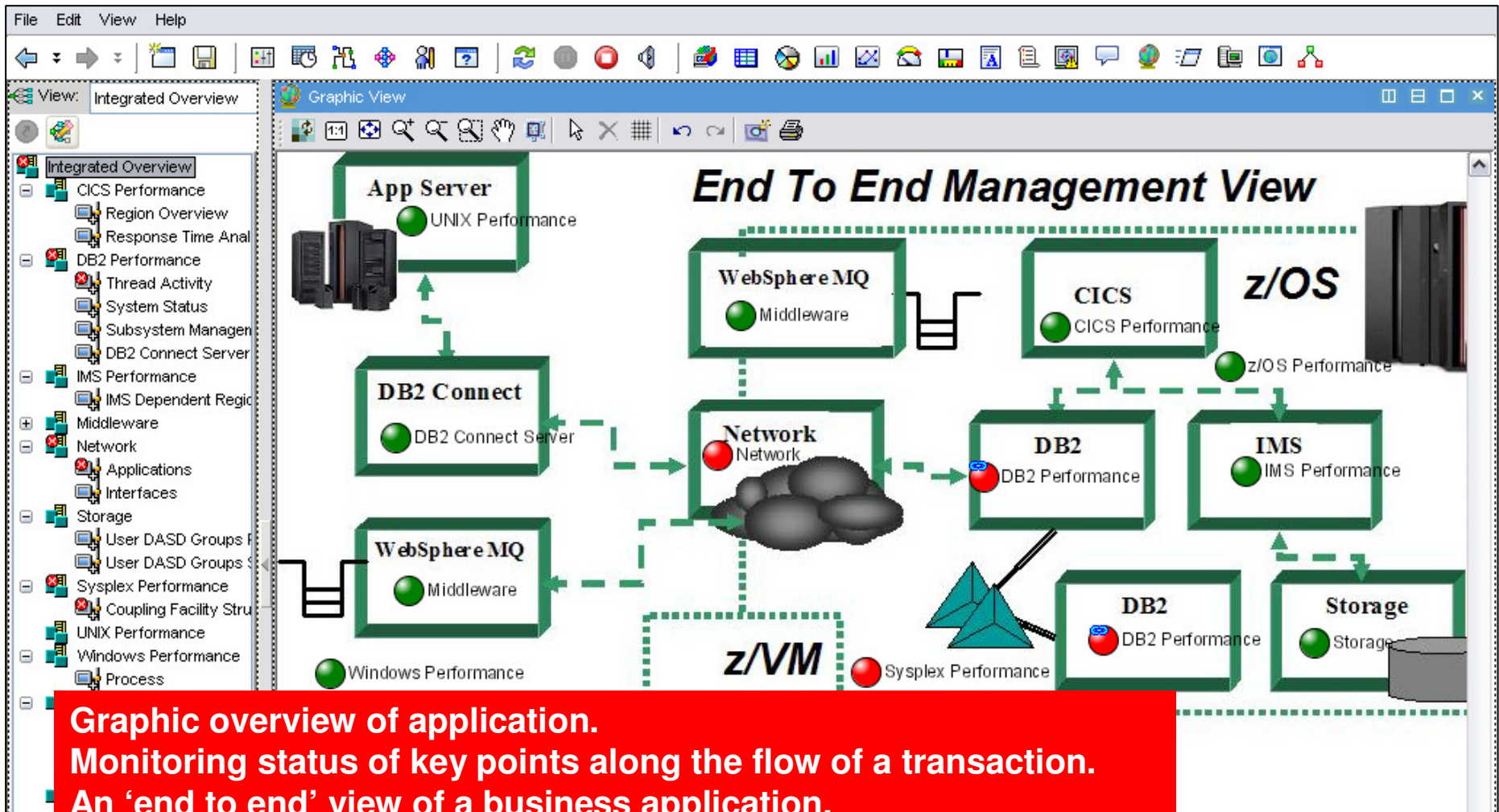
Getpage Counts

Connection Type	Plan Name	Package Name	Correlation Identifier	Authorization Identifier	DB2ID	CPU Utilization	DB2 CPU Used	DB2 Elapsed Time	Getpage Count	Locks Owned	Thread Status
Unknown	DSNJDBC		BBOS001S	ASSR1	DSNA	0.0	00:00:02.996	00:00:06.9	64	1	NOT_IN_DB2
Unknown	DSNJDBC		BBOS001S	ASSR1	DSNA	0.0	00:00:00.327	00:00:00.5	124	1	NOT_IN_DB2

The result is a filtered workspace that will target specific applications (DSNJDBC and DISTSERV) and highlight key performance indicators.



The End To End Business Application View





Business Application View Navigation Tree Customization

File Edit View Help

View: Integrated Overview

Graphic View

Icons to customize the navigation tree

App Server

End To End Management View

z/OS

z/OS Performance

IMS

IMS Performance

Storage

Storage Performance

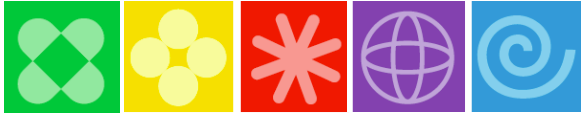
Enterprise

Windows Systems

z/OS Systems

Close Help

Customize the navigation tree to focus on key performance and availability information.



Customizing The End To End Business Application View

Click and drag

Use the navigation tree to create and populate icons on the graphic view.

Click and drag icons to the graphic.

Thread Activity

Sysplex Performance

DB2 Performance

Storage

App Server

WebSphere MQ

CICS

z/OS

Network

DB2

IMS

DB2

Storage

UNIX Performance

Middleware

CICS Performance

z/OS Performance

IMS Performance

DB2 Performance

Storage

Thread Activity

Sysplex Performance

DB2 Performance

Storage



The Integrated Alert Management Overview

Blank background with shapes option provides an easily visible alert view

CRITICAL
EW_Demo_Thread_Alert D81L:SYSL:DB2 06/13/08 10:43:11

KFWMTM1011 Select workspace link button to view situation event results.

Severity	Status	Owner	Situation Name
Critical	Open		EW_Demo_Thre
Critical	Open		Dist_DB2_Net_A
			EW_Demo_CF

Situation alert console

Browser interface

Take action to issue commands



Management By Exception View

Integrated view focused on key exception indicators.

Service Class	Period	Performance Index	Percent CPU	Percent IFA	Percent IFA on CP
IMSCL2	1	2,436.00	0.0	0.0	0.0
BATCH	1	4.28	0.0	0.0	0.0
CICS	1	4.10	0.0	0.0	0.0
STC	1	3.75	0.0	0.0	0.0
TSO	2	1.50	0.0	0.0	0.0

WLM issues

CPU Percent	Job Name	SvcClass	SvcClass Period	ASID	JESJOBID
80.0	SWONGAL	BATCH	2	0X002C	JOB15263
10.0	VC02H00L	STC	2	0X00AC	STC14973
2.1	NET31	SYSSTC	1	0X0068	STC14490

High CPU tasks

Managed System	Average CPU Percent	RMF MVS CPU Percent	RMF L CPU Percent
LPAR400J:SYSL:MVSSYS	91	87.1	79.7

High system CPU

Managed System	SYSLOG	RMF	SMF
LPAR400J:SYSL:MVSSYS	False	Not Active	Not Recording

Misc alerts

Severity	Status	Owner	Situation Name
Critical	Open		EW_Demo_Thread_Alert
Critical	Open		Dist_DB2_Net_Alert
Critical	Open		EW_Demo_CF_Alert

Misc alerts

Managed System	Dropped Ready	Tape Mounts Pending	Not Responding

Mount pending

Address	Volume	Storage Group	Response	I/O Rate	Cache Status	Per Res
0X32D0	PAGL03	N/A	2.6	13.7	Active	
0X32D1	PAGL04					
0X3842	TDSHR1					

DASD high MSR time

Take Action

Action Name: <Select Action>

Command:

Arguments...



Creating A Management By Exception Workspace

Specify a filter option of CPU greater than 'n' percent

Filters this portion of the display

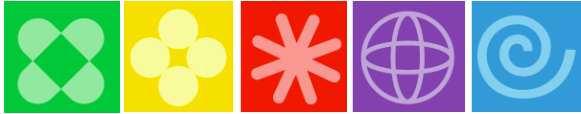
CPU Percent	Job Name	SvcClass	SvcClass Period	ASID	JESJOBID
80.0	SWONGA1	BATCH	2	0X002C	JOB15263
10.0	VC02H00L	STC	2	0X00AC	STC14973
2.1	NET31	SYS			

CPU Percent	Job Name	SvcClass	SvcClass Period	ASID	JES
80.0	SWONGA1	BATCH	2	0X002C	JOB1
10.0	VC02H00L	STC	2	0X00AC	STC1
2.1	NET31	SYS	1	0X0068	STC1
0.8	VCCTH00L	STCCMS	2	0X00D0	STC1
0.4	GRS	SYSTEM	1	0X0007	STC1
0.4	VC02H00L	SYSTEM	1	0X0006	STC1



Tivoli Enterprise Portal Customization General Recommendations

- **Understand the target audience**
 - Understand their technical or management requirements
 - Understand their capabilities (display types, etc.)
- **Understand the capabilities of the TEP**
 - Be aware of the ability to combine information from a variety of sources
- **Understand that custom TEP workspace design is an iterative process**
 - Create prototypes and test
 - You probably will not get it perfect the first time
 - Improve and optimize
- **Test thoroughly to ensure that displays are responsive and meet requirements**



•OMEGAMON on z/OS

- CPU Utilization for all LPARs
- Top Jobs by CPU for all LPARs

•OMEGAMON for DB2

- Top Thread Exceptions for all DBs all LPARs

•OMEGAMON MFN

- IPStack Status all stacks
- All HPR with ABR Yellow or Red for all Stacks
- Worst TCP/IP Connection Response times all Stacks
- FTPs by duration and bytes

•OMEGAMON on z/VM and Linux

- Top Linux CPU and Memory for all systems

•OMEGAMON CICS

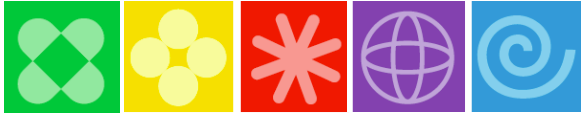
- Region overview cross system
- Dumps cross Region and LPAR
- Top Transactions by CPU cross system cross LPAR



Summary



TEP top 10 TIPS	Benefits
<i>Cross LPAR Views</i>	View all LPARs in one view
<i>Creating a New Navigator View</i>	Organize workspaces by user
<i>Cross Application Workspaces</i>	Combine OMEGAMONs for a given Application workspace
<i>Eliminate Multiple pages</i>	Allow columns to sort all rows at once
<i>Reduce Query data</i>	Query filter improves performance
<i>Customizing Tables and Charts</i>	View Thresholds to highlight problems
<i>Situations</i>	Turn off unnecessary situations
<i>Topology</i>	View fix levels and connectivity
<i>Built-in Tutorials</i>	TEP Online Education
<i>Tuning and ITMSUPER</i>	Tune OMEGAMON Infrastructure



References:



Narrated demos how to Create a cross LPAR workspace and Custom Query:

<http://www-01.ibm.com/software/os/systemz/telecon/oct29/prz/>

NOTE: Everyone should bookmark this page! Search on:

[Recommended Maintenance Service Levels for OMEGAMON XE products on ITM V6.x](#)

CCR2 OMEGAMON Tuning:

www.ibm.com/software/tivoli/features/ccr2/info.html

- [2004 Issue 2 Part 1: Common data collection overhead reduction tips](#)
- [2004 Issue 3 Part 2: Reducing on-demand CNPS client overhead](#)
- [2004 Issue 4 Part 3: OMEGAMON XE for CICS V100 and CICSplex V220](#)
- [2004 Issue 5 Workload Manager— Sysplex Tuning](#)
- [2004 Issue 6 Part 4: OS/390 and Sysplex from](#)
- [2004 Issue 7 The DB2 trace facility and OMEGAMON II for DB2 historical collection considerations](#)
- [2004 Issue 10 How to maintain time-dependent thresholds without the overhead of embedded situations](#)
- [2005 Issue 6 Sysplex Best Practices – Part 1](#)
- [2005 Issue 7 Sysplex Best Practices – Part 2](#)
- [2006 Issue 2 Part 5: OMEGAMON XE for IMS\(plex\)](#)
- [2008 Issue 3 Resource impact and optimization for Tivoli situation event processing](#)

Live ITM 6.1 DEMO with OMEGAMON 4.1 Simulation

Order (SK4T-0622-06) <http://www-01.ibm.com/support/docview.wss?uid=pub1sk4t062206>

