



IBM Software Group

OMEGAMON XE For IMS Power User Tips And Techniques

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 Tivoli software



@business on demand.

Agenda – OMEGAMON XE For IMS

- OMEGAMON - A Choice Of Capabilities And Technologies
- OMEGAMON XE For IMS Capabilities
- Power User Techniques For 3270 Interface
- Power User Techniques For Tivoli Enterprise Portal



What Is A Power User?

- As defined by Webopedia.Com
 - ▶ “A sophisticated user of personal computers. A power user is typically someone who has considerable experience with computers and utilizes the most advanced features of applications”
- Ed Woods’ definition
 - ▶ A user of computer technology who takes that technology and customizes or crafts it to more fully fill their needs



OMEGAMON XE For IMS

Real Time Components And Facilities

- **Real Time Monitor**
 - ▶ *Subsystems, regions, resources, pools, DBs, Fast path*
 - ▶ *IMS Connect, OTMA*
- **Response Time Analysis (RTA)**
 - ▶ *Transaction Response time by user defined groups*
- **Bottleneck Analysis**
 - ▶ *Workload performance and task analysis*
- **Operator Assist & Integrated Console Facility**
 - ▶ *Consolidation of IMS MTO consoles*
- **Online TRF**
- **Trace Facilities**
- **Exceptions & Alerts**
- **Plex level information**
 - ▶ *Integrated alert/automation*
 - ▶ *N-way, MSC*



OMEGAMON XE For IMS Historical Facilities

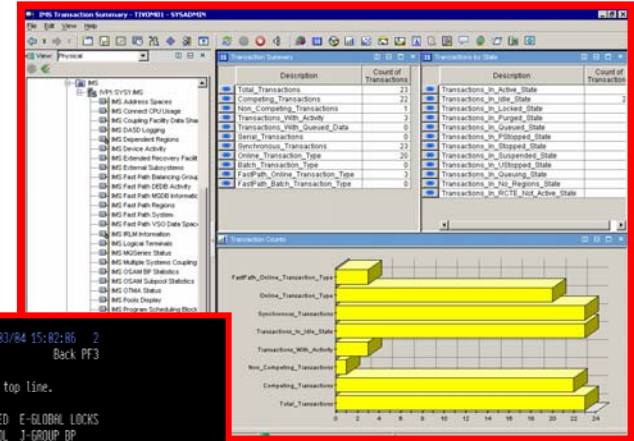
- ***EPILOG Historical***
 - ▶ Historical analysis of transaction response, bottlenecks and IMS resources
 - ▶ Stored in VSAM Epilog Data Store (EDS) by group and time interval
- ***TRF Historical***
 - ▶ Detailed transaction & database data – individual transactions
 - ▶ Suitable for performance analysis & chargeback
- ***XE Historical***
 - ▶ Snapshot historical



OMEGAMON XE For IMS

Choice Of Interfaces – Unique Capabilities

- **OMEGAMON XE GUI Interface**
 - ▶ Java client or web browser – Tivoli Portal
 - ▶ Real time and historical
 - ▶ Automation & alerts
 - ▶ Plex level information (CF, n-way)



OMEGAMON Classic

- ▶ 3270 Interface command interface
- ▶ Real Time & Historical
- ▶ RTA, Dexan
- ▶ Exceptions

```

ZTOIST VIM 02 VS48./C DBLX 85/83/84 15:02:06 2
> Help PF1 Back PF3
>
  THREAD INFORMATION: Enter a selection letter on the top line.
  > A-THREAD DETAIL B-LOCK COUNTS C-LOCK WAITS D-LOCKS OWNED E-GLOBAL LOCKS
  > F-CURRENT SOL G-SOL COUNTS H-DISTRIBUTED I-BUFFER POOL J-GROUP BP
  > K-PACKAGES L-RES LIMIT M-PARALLEL TASKS N-UTILITY O-OBJECTS
  > P-CANCEL THREAD Q-DB2 CONSOLE R-DSN ACTIVITY S-APPL TRACE T-ENCLAVE
  > U-LONG NAMES
  >
  .....
  DISTRIBUTED THREAD DETAIL
  PLAN
  * Thread: Plan=WKID Connid=RRSAF Corrid=MYCORRID Authid=PKENN
  * Attach: RRSAF JOB Name=.,PKENNV JOB Asid= 53K
  * Package: WKID Collection=
  rsum
  *
  * Distributed RRSAF Data
  *Location IP Addr Port Ctbuser Srvclsnam Prod ID Workstation
  *-----
  *N/A N/A N/A PKENNEY N/A N/A MY_WORKSTATION_NHM
  *
  *Transaction name: MYAPPL_EXE
  .....
    
```

- **OMEGAMON CUA**
 - ▶ 3270 interface
 - ▶ ICF & Operator Assist run in CUA
 - ▶ Different views from Classic
 - ▶ Warning & Critical exception alerts

The screenshot shows the OMEGAMON CUA 'System Overview' screen for K12P001 on 09/28/01 at 9:20:34 AM. It features a navigation menu at the top and a main display area with several panels:

- Response Times:** A list of components (All, Other, CLASS 1, GROUP 03-08) with corresponding status indicators.
- Status:** A grid showing status for Trans., Virt. Stor., IMS Status, Traces, and Buff. Pools, with sub-sections for CPU, I/O, XRF, and ESS.
- Alerts:** A list of alert types such as Pools, MessageQ, Regions, Logging, Databases, Fast Path, Conflicts, and Terminals.
- Operator Assist:** A section with buttons for Programs, Regions, Databases, Conversatn., Trans., Logging, Network, and Users.

OMEGAMON XE For IMS GUI Interface Versus 3270 – Strengths

- Tivoli Enterprise Portal (TEP) GUI Interface strengths and capabilities
 - ▶ Customizable high level overview of all IMS activity
 - Integrate information from a variety of sources
 - ▶ Data sharing performance information
 - ▶ The most flexible and customizable for alerts, automation, and corrective actions
- 3270 (Classic & CUA) Interface strengths and capabilities
 - ▶ Detailed analysis
 - Region and subsystem details
 - ▶ Display flexibility and granularity
 - ▶ Operator assist and I/CF facility



OMEGAMON XE For IMS GUI Interface Versus 3270 – When To Use

- Tivoli Enterprise Portal (TEP) GUI Interface
 - ▶ Correlation and high level analysis
 - ▶ Problem identification, notification, and isolation
 - ▶ Robust correlated alert generation
 - ▶ Integrated automation with corrective actions
- 3270 Classic and CUA Interface
 - ▶ Works best for deep dive detailed analysis
 - ▶ Command driven with the ability to build custom screen spaces
 - ▶ Screen logging and automated screen facility options
 - ▶ Classic alerts may drive actions and automation (with SA z/OS automation)



OMEGAMON IMS Classic 3270 Interface Main Menu

```

_____ ZMENU      VTM      OI-II      V550.M0 IMSA 09/13/06 13:56:32  0
> Help/News PF1      Exit PF3      Keys PF5      Command Mode PF1
> Return to CUA PA2    Colors PF18
>
      Enter a selection letter on the top line.
=====
_____
      OMEGAMON for IMS Performance Monitor Main Menu

_ E  EXCEPTIONS ..... Current and potential system problems, latch conflicts
_ R  RESPONSE TIME .... Transaction response times (RTA users)
_ B  BOTTLENECKS ..... Resource contention (bottleneck analysis) (DEXAN users)

_ M  MONITOR ..... IMS status, graphs, and time controlled operations
_ W  WORKLOAD ..... PSBs, DMBs, transactions, regions, and classes
_ L  LINES ..... Terminals, nodes, and lines
_ A  ALL POOLS ..... Communication, database, and program pools
_ C  COMPONENTS ..... I/O, logging, storage, and control blocks/modules

_ F  FAST PATH ..... IMS Fast Path information
_ O  OTHER SYSTEMS .... DB2 interface and XRF information

_ T  TOOLS ..... Operator tools
_ P  PROFILE ..... Profile maintenance and session settings
    
```

Select letter options to navigate to different displays



Classic Interface

Major & minor commands

```

_____ KOIRGNA VTM      OI-II      V550.M0 IMSA 09/13/06 14:04:45  0B
> Help PF1      Back PF3      Up PF7      Down PF8      Zoom PF11
> To Panel name, enter Version, profile, subsystem
>
> *-ALL REGIONS  B-CONTROL  C-DLI      D-DBRC      E-IRLM      F-MPP
> G-FASTPATH    H-BMP      I-DB2      J-USER LIST  K-DEPENDENT
=====
>
>                               All Regions
>
> For more information about a region (RGNA), logical terminal (TERM),
> transaction (TRAN), scheduling class (CLAS), current referenced database
> (CDMB), or program identification block (PSBN), place the cursor on the
> appropriate MAJOR command
#RGNA          5
RGNA  IMSAMAST  IMSADBRC  IMSADLI  IMSAIRLM  IMSAMSG1
rgid   --n/a--  --n/a--  --n/a--  --n/a--    1
term   --n/a--  --n/a--  --n/a--  --n/a--
tran   --n/a--  --n/a--  --n/a--  --n/a--
clas   --n/a--  --n/a--  --n/a--  --n/a--  --none--
cdmb   --n/a--  --n/a--  --n/a--  --n/a--  --n/a--
    
```

Minor commands



Classic Interface Examples

- Detailed IMS subsystem, transaction, and region analysis is a common usage of the Classic interface
 - ▶ Example - RGNA major commands with various minors
- Classic interface includes easy to use screen logging capabilities
 - ▶ Have screen spaces logged to OMEGAMON sysout for later review
- Classic interface includes timer and screen automation capabilities
 - ▶ Execute classic screen spaces at certain times of day (TSF)
 - ▶ Execute classic screen spaces based upon classic exceptions (ASF)



Creating A Custom Region Overview Screen

The RGNA major command shows all the regions in the IMS subsystem.

Options could include using RGND to just show dependent regions, etc.

```

>
>
-----
This is a customized region screen
-----
RGNA  IMSAMAST  IMSADBRC  IMSADLI  IMSAIRLM  IMSAMSG1  IMSAMSG2
clas  --n/a--   --n/a--   --n/a--   --n/a--   --none--   --none--
cpu   13.51    .12      .12      .07      .05      .10
ocup  --n/a--   --n/a--   --n/a--   --n/a--   .00%     .01%
tran  --n/a--   --n/a--   --n/a--   --n/a--   --none--   --none--
term  --n/a--   --n/a--   --n/a--   --n/a--   --n/a--   --n/a--
.rc
  
```

There are 105 minors for the RGNA major command. Creating a custom region screen allows the user to create a targeted region screen, and include more relevant information on that screen.

Save The Customized Screen Space

```

/SAVE EDREGN_____ EDREGN  VTM      OI-II    V550.M0  IMSA  09/13/06  14:35:00  0B
>
>          This is a customized region screen
=====
RGNA  IMSAMAST  IMSADBRC  IMSADLI  IMSAIRLM  IMSAMSG1  IMSAMSG2
clas  --n/a--   --n/a--   --n/a--   --n/a--   --none--   --none--
cpu   13.51    .12      .12      .07      .05      .10
ocup  --n/a--   --n/a--   --n/a--   --n/a--   .00%     .01%
tran  --n/a--   --n/a--   --n/a--   --n/a--   --none--  --none--
term  --n/a--   --n/a--   --n/a--   --n/a--   --n/a--
.rc

```

Use the /SAVE command to save the custom screen space.

Use the /REP command to replace an existing screen.

To invoke the screen enter the screen name on the command line.

Make screens for various filter options needed.



Making Custom Screen Spaces

```

_____ EWRGNA  VTM      OI-II      V550.M0  IMSA  09/13/06  14:44:32
>
>
=====
RGNA  IMSAMAST IMSADBRC  IMSADLI  IMSAIRLM  IMSAMSG1
>.EXM
+
>> 020170: 105 of 105 minor commands generated for RGNA <<
aenv  >> Environmental Display in Initialization <<
asid  X'00AC'  X'017B'  X'0095'  X'008
bftw  --n/a--  --n/a--  --n/a--  --n/a--
call  --n/a--
cdmb  --n/a--  --n/a--  --n/a--  --n/a--
clas  --n/a--  --n/a--  --n/a--  --n/a--  --none--
cntn  --n/a--  --n/a--  --n/a--  --n/a--  no cont
coba  --n/a--  --n/a--  --n/a--  --n/a--  ---no---
cpcb  --none--  --none--
cpu   13.59  .05
ctrm  ---N/A--
ctrn  ---N/A--  ---N/A--  ---N/A--  ---N/A--  ---N/A--
ctsk  ---N/A--
dbpt  --n/a--  --n/a--  --n/a--  --n/a--
dbt   --n/a--  --n/a--  --n/a--  --n/a--
dedc  --n/a--  --n/a--  --n/a--  --n/a--
dedr  --n/a--  --n/a--  --n/a--  --n/a--
    
```

MAJOR command

Use the .EXM command to execute all the minors for a major

Minor commands

Custom screens may be made using major and minor commands and saved using the /SAVE command and updated using /REP.

Screen Logging

```

/LOG ON                                KOIRGNA VTM LOG OI-II          V550.M0 IMSA 09/13/06
14:46:31 05
> Help PF1          Back PF3          Up PF7          Down PF8          Zoom PF11

> To view a topic below, enter a selection letter on the top line.

> *-ALL REGIONS    B-CONTROL    C-DLL          D-DBRC          E-
> G-FASTPATH      H-BMP        I-DB2          J-USER LIST    K-
=====
> All Regions

> For more information about a region (RGNA), logical term
> transaction (TRAN), scheduling class (CLAS), current refer
> (CDMB), or program specification block (PSBN), place the
> appropriate item and press PF11.

#RGNA          5

RGNA  IMSAMAST  IMSADBRC  IMSADLI  IMSAIRLM  IMSAMSG1
rgid   --n/a--  --n/a--  --n/a--  --n/a--    1
term   --n/a--  --n/a--  --n/a--  --n/a--  --n/a--
tran   --n/a--  --n/a--  --n/a--  --n/a--  --none--
clas   --n/a--  --n/a--  --n/a--  --n/a--  --none--
cdmb   --n/a--  --n/a--  --n/a--  --n/a--  --n/a--
dbt .R      .0        .0        .0        .0        .0
    
```

Classic screens may be logged.

/LOG ON to turn on

/LOG OFF to turn off

Log output goes to sysout on the OMEGAMON collector address space.

Useful to snapshot some screens, or screens over a period of time.

Executing A Screen Space Based Upon A Timer

TSF Command – Timed Screen Facility

```
_____ KOIRGNA  VTM LOG OI-II      V550.M0 IMSA 09/13/06 14:49:53  
  
.TSF01  TIME=1100  SS=EDREGN      DAY=DAILY
```

.TSF01 command to enter a timer. Enter the time and the screen to execute.

```
_____ KOIRGNA  VTM LOG OI-II      V550.M0 IMSA 09/13/06 14:49:53  
  
.TSF00  
+      1      TIME=1100  SS=EDREGN      DAY=DAILY  
+      2      TIME=0000  SS=*NONE*      DAY=DAILY  
+      3      TIME=0000  SS=*NONE*      DAY=DAILY  
+      4      TIME=0000  SS=*NONE*      DAY=DAILY  
+      5      TIME=0000  SS=*NONE*      DAY=DAILY
```

.TSF00 command to list all the current timers that have been set.



TSF Requirements

- For TSF to operate the following is needed
 - ▶ An active OMEGAMON classic session
 - ▶ OMEGAMON running in auto update mode - /AUP ON
 - ▶ TSF has been set to ON - /TSF ON
- To log the screens execute by timer the Log needs to be set to ON

```

_____ KOIOPEA  VTM LOG OI-II      V550.M0 IMSA 09/13/06 14:51:57  0B
> Help PF1          Back PF3          Save Profile PF22
=====
>
                SET DISPLAY OPTIONS

> To change the value of an option, type the new value over the current one.
> Press ENTER to record the change.

OPTN
:   ASF           = ON           BELL           = ON
:   BELLINT       = 60.00        DATEFORMAT    = USA
:   FIRSTSCREEN   = KOINITZZ     LOG           = ON
:   MINORCASE     = LOWER        SCREENCASE    = MIX
:   SCROLL        = PAGE         TSF          = ON
:   XLF           = ON           ZEROS        = ON
=====

```

Note Log is set to ON and TSF is set to ON.



A Note About Using Auto-update

```

_____ KOIOPEB  VTM LOG OI-II   V550.M0 IMSA 09/13/06 14:56:30  0B
> Help PF1                Back PF3                Save Profile PF22
=====
>                SET CONTROL FUNCTION OPTIONS

> To change the value of an option, type the new value over the current one.
> Press ENTER to record the change.

.SET
:   FGOLIMIT      =      64      FGOLOOP      = OFF
:   GDEVUCBS      =      200     INTERVAL     =      5.00
:   IODELAY       =       5      LOOPCOUNT  =     15000
:   LOOPTIME      =     10.00    PAGELIMIT   =      390
:   PEEKSIZE      =     16384    STATUSMODE  = OFF
:   OCMDMASTER   = ON
=====

```

The default auto update interval in Classic interface is 5 seconds.

RECOMMENDATION – Set the interval to a higher value – 30 or 60 seconds.



Classic Exceptions May Be Used To Interface With SA for z/OS Automation

```

_____ KOIDIM4 VTM LOG OI-II
> Help PF1      Back PF3      Up PF7
=====
>
> Set Message Queue Exceptions
>
> To display the threshold of an exception, remove the > preceding XACB,
> and type the exception name following LIST=.
>
> To change the setting for an exception, type over the current setting
> and press ENTER. To make your changes permanent, you must SAVE your
> OMEGAMON profile.

XACB LIST=TXIQ
: TXIQ
+   DISPLAY Parameters:  THRESHOLD Parameters:  XLF Parameters:
:   State=ON             Threshold=8             Auto=OFF
:   Group=IM             Display=CLR2           Log=OFF
:   Bell=OFF             Attribute=NONE         Limit=0 (0)
:   BOX Parameters:     CYCLE Parameters:     Repeat=NO
:   Boxchar=NO BOX      ExNcyc=0              Persist=0
:   Boxclr=NONE         Stop=0 (0)            SS=
:   Boxattr=NONE        Cumulative=0

```

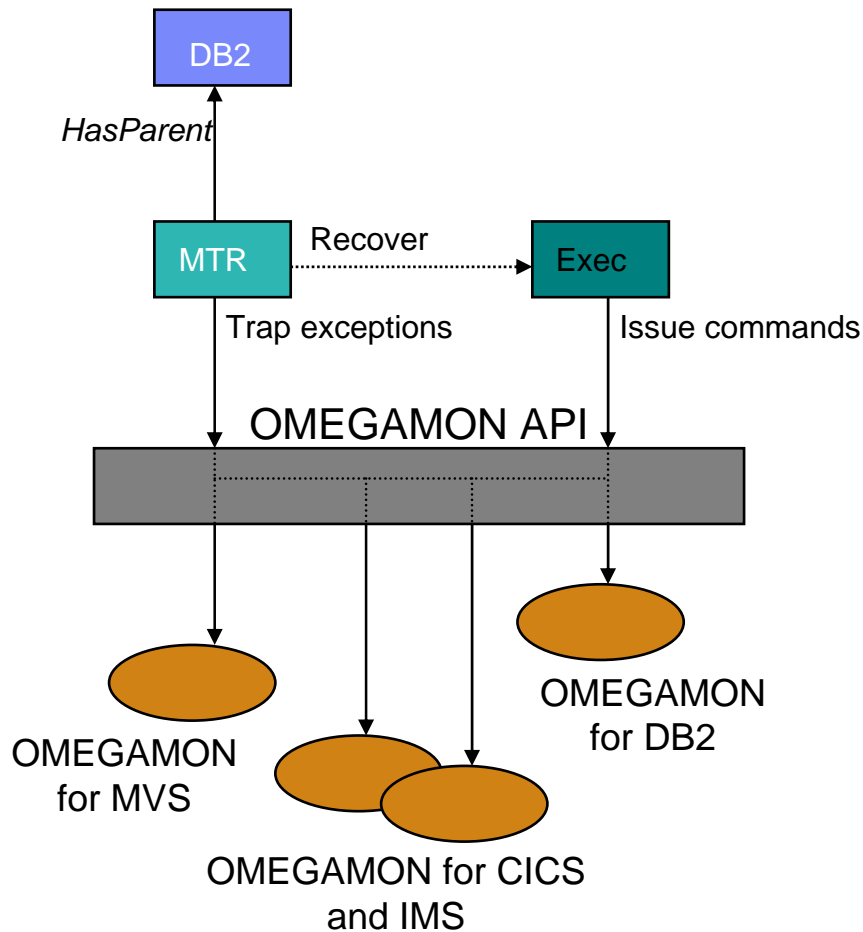
TXIQ classic exception

Threshold value

Thresholds may be stored in classic profiles. Classic exceptions may be referenced by automation.



OMEGAMON And SA Interoperation



- **Use of performance and availability information for application automation**
 - ▶ More facts, more accurate decisions
 - ▶ Sources: OMEGAMON MVS, DB2, CICS, IMS
- **Provides API to communicate with OMEGAMON monitors to**
 - ▶ Obtains and filters installation-defined exceptional conditions
 - ▶ Sends commands to OMEGAMON, for example to respond to such conditions
- **Provides exception monitor based on the Monitor Resource concept**
 - ▶ Monitors „interesting“ set of exceptions
 - ▶ Sets application health state based on existence of such exceptions
 - ▶ Provides means to react and resolve exceptional conditions



Tivoli Enterprise Portal (TEP) Interface Examples

- **Monitoring view customization and flexibility**
 - ▶ Create monitoring views specific to technical requirements
- **Correlation and high level analysis**
 - ▶ The ability to monitor from an integrated high level view
- **Problem identification, notification, and isolation**
 - ▶ Robust correlated alert generation
 - ▶ Ability to incorporate a broad array of information into an alert
- **Flexible linking and cross navigation**



Monitoring Flexibility And Customization Create A Stopped And Bottlenecked Resource View

- Example - Use OMEGAMON XE to determine the likely cause of transaction workload queues
 - ▶ Include information on stopped resources that may be needed by the transactions
 - ▶ Include status and throughput information for key regions
 - ▶ Highlight potential problems using the TEP



TEP Workspace Customization

- OMEGAMON XE For IMS provides the ability to build customized real time displays (workspaces)
- Any of the product provided workspaces may be adjusted to meet user needs
- The user may make new workspaces as needed to target specific monitoring needs
 - ▶ Create workspaces to target specific technical problems
- These new workspaces are stored in the Tivoli Enterprise Portal (TEP) server
 - ▶ New workspaces may be used by any user with appropriate authority and access to the TEP



Leverage The Power Of OMEGAMON XE

Create A 'Stopped Resource' Display

Tivoli Enterprise Portal
Log out

File Edit View Help

Create a 'Stopped Resource' workspace to highlight if any key resources are being stopped

Easy to view from a single screen

- IMS IRLM Information
- IMS VSAM/OSAM Activity
- IMS TM

Physical Demo Business View

IMS ID	Region Name	Type	Transaction Name	PSB Name	Database Calls	Region Occupancy Percentage	Locks Held Count	BMP Checkpoint Count	Transaction Elapsed Time	Tr
IVP1	IMS91F11	FastPath	--None--	DFSIVP4	0	22.1	0	0	00:00:00	
IVP1	IMS91F12	FastPath	--None--	DFSIVP5	0	33.4	0	0	00:00:00	
IVP1	IMS91F13	FastPath	--None--	DBFSAMP3	0	0.10	0	0		
IVP1	IMS91M11	Message	--None--			88.3	0			
IVP1	IMS91M12	Message	--None--			81.1	0			

Note Region Occupancy %

Regions

Input Queue Length	Status	Program Type	Processing Status	IMS ID	Transaction Name	PSB Name	Multi Segment	Messages Enqueued
Transactions								

DMBs Stopped

IMS ID	Database Name	DDName	Type	EXCP Count	Status	Message Ident
Databases						

PSBs Stopped

IMS ID	PSB Name	Scheduling State	Active Count	PSB Resident Status	Scheduling Type
IVP1	DFSIVP34	Program Stopped	0	NotInMemory	Serial
PSBs					

Hub Time: Mon, 06/19/2006 08:38 AM
Server Available
EW IMS Stopped Resources - 9.73.221.32 - SYSADMIN

How To Create A Custom Workspace

Go to 'Properties' and select the Filters Tab

Query controls what data appears on the screen

Specify which conditions will be included

Select which columns are to appear in the workspace.

The screenshot shows the 'Sources' dialog box in Tivoli Enterprise Console. The 'Filters' tab is selected, displaying a table of transaction data. The 'Status' column is highlighted, and a list of conditions is shown below it. The 'Data Snapshot' table at the bottom shows a list of transactions with their respective statuses and program types.

Input Queue Length	Status	Program Type	Processing Status	IMS ID	Transaction Name	PSB Name	S
0	Idle	Online	Non_Competing	IVP1	ADDINV	DFSSAM04	Ye
1	Queued	Online	Non_Competing	IVP1	ADDPART	DFSSAM04	Ye
0	Idle	Online	Competing	IVP1	CLOSE	DFSSAM05	Ye
0	Idle	Online	Competing	IVP1	DISBURSE	DFSSAM06	Ye
0	Idle	Online	Non_Competing	IVP1	DLETINV	DFSSAM04	Ye
0	Idle	Online	Non_Competing	IVP1	DLETPART	DFSSAM04	Ye
0	Idle	Online	Competing	IVP1	DSPALLI	DFSSAM07	Ye

Save The New Workspace

Select 'File' and 'Save As' to save the newly created workspace in the Tivoli Enterprise Portal Server

The screenshot shows the Tivoli Enterprise Portal interface. A 'Save Workspace As' dialog box is open, allowing the user to save a workspace. The 'Name' field is filled with 'EW IMS Stopped Resources'. The 'Workspace Options' section includes checkboxes for 'Assign as default for this Navigator Item', 'Do not allow modifications', and 'Only selectable as the target of a Workspace Link'. The background shows a 'Dependent Region Overview' table and a 'PSBs Stopped' table.

Base Is	Region Occupancy Percentage	Locks Held Count	BMP Checkpoint Count	Transaction Elapsed Time	Tr
0	0.00	0	0	00:00:00	
0	0.00	0	0	00:00:00	
0	0.00	0	0	00:00:00	
0	0.00	0	0	00:00:00	
0	0.00	0	0	00:00:00	

on	PSB Name	Multi Segment	Messages Enqueued
T	DFSSAM04	Yes	7

IMS ID	Database Name	DDName	Type	EXCP Count	Status	Message Ident
IVP1	DFSSAM04				Program Stopped	

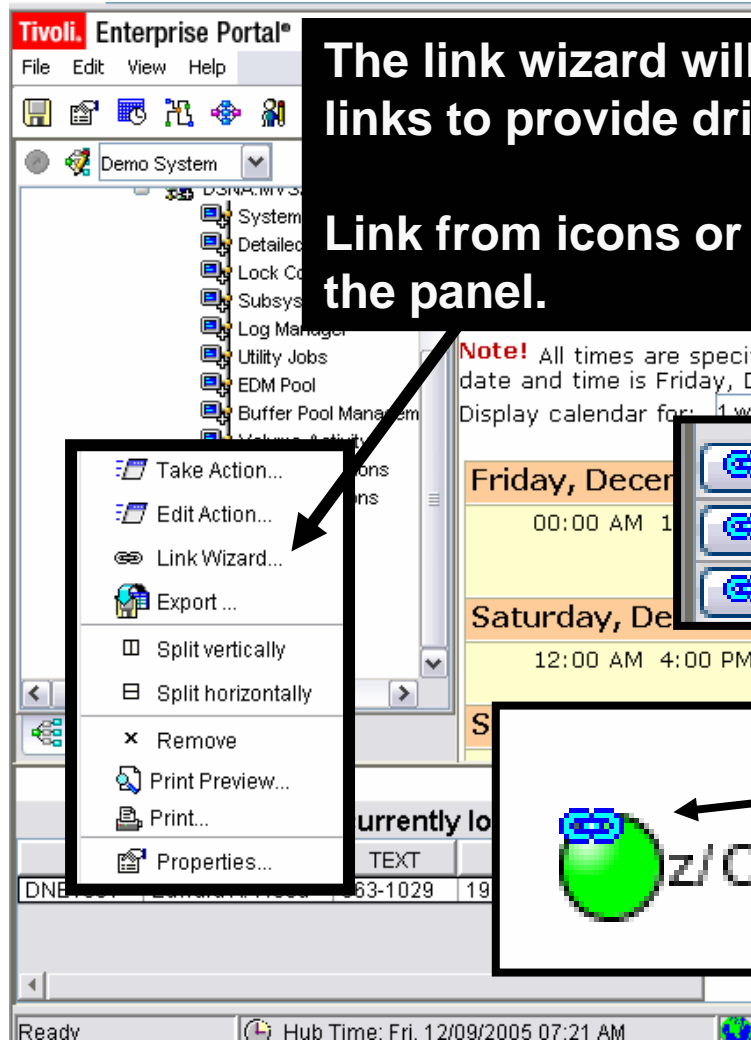
Hub Time: Mon, 06/19/2006 08:15 AM Server Available IMS TM - 9.73.221.32 - SYSADMIN

Correlation And Navigation

- Correlation may take many forms
 - ▶ An integrated graphic dashboard view
 - ▶ Intelligent linking and cross product navigation
 - Links may be from tabular detail views
 - Links may also be from graphics and icons
 - ▶ Intelligent alerts that integrate information from a variety of sources



Links May Be Built From Either Panel Detail Or Graphics

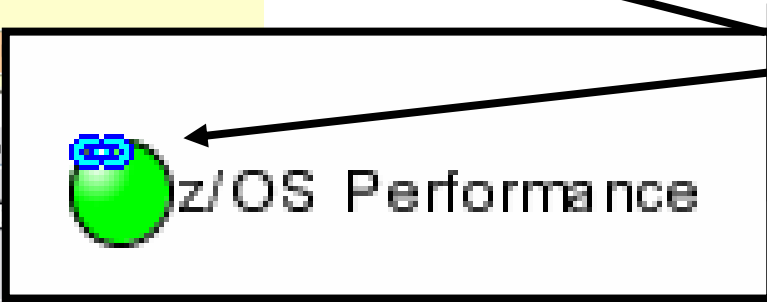


The link wizard will allow for building links to provide drill down navigation.

Link from icons or from other areas in the panel.

Note! All times are specific to the date and time is Friday, December 9, 2005. Display calendar for: 1 week

	12/09/05 07:28:46	0	BP0	4000
	12/09/05 07:28:46	0	BP1	4000
	12/09/05 07:28:46	0	BP2	4000



Link from the panel or link from an icon

Example – A Link From Panel Detail

The screenshot displays the IBM Tivoli software interface. On the left, a tree view shows the navigation structure, with 'IMS Transaction S' selected. The main area is divided into two panels: 'Transaction Summary' and 'Transactions by State'. The 'Transaction Summary' panel contains a table with the following data:

Description	Count of Transactions
Total_Transactions	325
Competing_Transactions	116
Non_Competing_Transactions	209
Transactions_With_Activity	23
Show Transactions with Activity	0
Show ALL Omegamon XE Messages	3
Link Wizard...	322
Link Anchor...	22
FastPath_Batch_Transaction_Typ	27
	0

The 'Transactions by State' panel contains a table with the following data:

Description	Count of Transactions
Transactions_In_Active_State	0
Transactions_In_Idle_State	300
Transactions_In_Locked_State	0
Transactions_In_Purged_State	0
Transactions_In_Queued_State	0
Transactions_In_PStopped_State	0
Transactions_In_Stopped_State	1
Transactions_In_Suspended_State	0
Transactions_In_UStopped_State	0
Transactions_In_Queueing_State	0
Transactions_In_No_Regions_State	24
Transactions_In_RCTE_Not_Active_State	0

Below these panels is a 'Transaction Counts' bar chart showing the distribution of transaction counts for 'Synchronous_Transactions', 'Transactions_In_Idle_State', and 'Total_Transactions'. The x-axis represents the count, ranging from 0 to 400.

A text box on the left explains the link navigation:

Link navigation may be done from panel detail.

Example – drill down to see transaction status detail.

The status bar at the bottom shows the time as 5:06:38 PM, the server status as 'Server Available', and the current view as 'IMS Transaction Summary - hqndt1.usca.ibm.com - EWOOD *ADMIN MODE*'.

Link Navigation May Be From Graphic Icons

The screenshot displays the Tivoli Enterprise Portal interface. On the left is a tree view for 'Demo Business View' containing various system components. The main area shows a 'Graphic View' of an 'Application View' diagram. This diagram illustrates the architecture of a z/OS system, including an App Server, Middleware, CICS, DB2, and IMS, all connected to a zLinux operating system. A callout box with a black background and white text points to several icons in the diagram, stating: 'Link navigation may be done from icons as well.'

Situations Allow For Powerful And Flexible Alerts

- OMEGAMON XE situation capabilities allow for more intelligent alerts that integrate and correlate status and information
- Situations may incorporate Boolean logic
- Situations may be correlated with other situations
- Situations may in turn drive automated corrections



Using Boolean Logic For More Alert Flexibility

The XE GUI provides much more flexibility for alerts and alerting

More detailed alerts mean more meaningful & useful alerts. May require fewer situations be created.

The screenshot shows the 'Situations for - IMS Transaction Summary' dialog box. The 'Formula' tab is active, displaying a table with columns 'Count of Transactions' and 'Description'. The first row contains the formula '> 0' and the description '== Transactions_In_Queued_St'. A black arrow points from a text box to this row. Below the table, there are instructions on how to add conditions and buttons for 'Add conditions...', 'Advanced...', 'Play', and 'Edit...'. At the bottom, there are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

	Count of Transactions	Description
1	> 0	== Transactions_In_Queued_St
2		
3		

Specify multiple attributes with And/Or logic

Click inside a cell of the formula editor to see a... and to compose the expression.

Add a condition by clicking **Add conditions** and selecting the situations to embed or attributes you want to include.

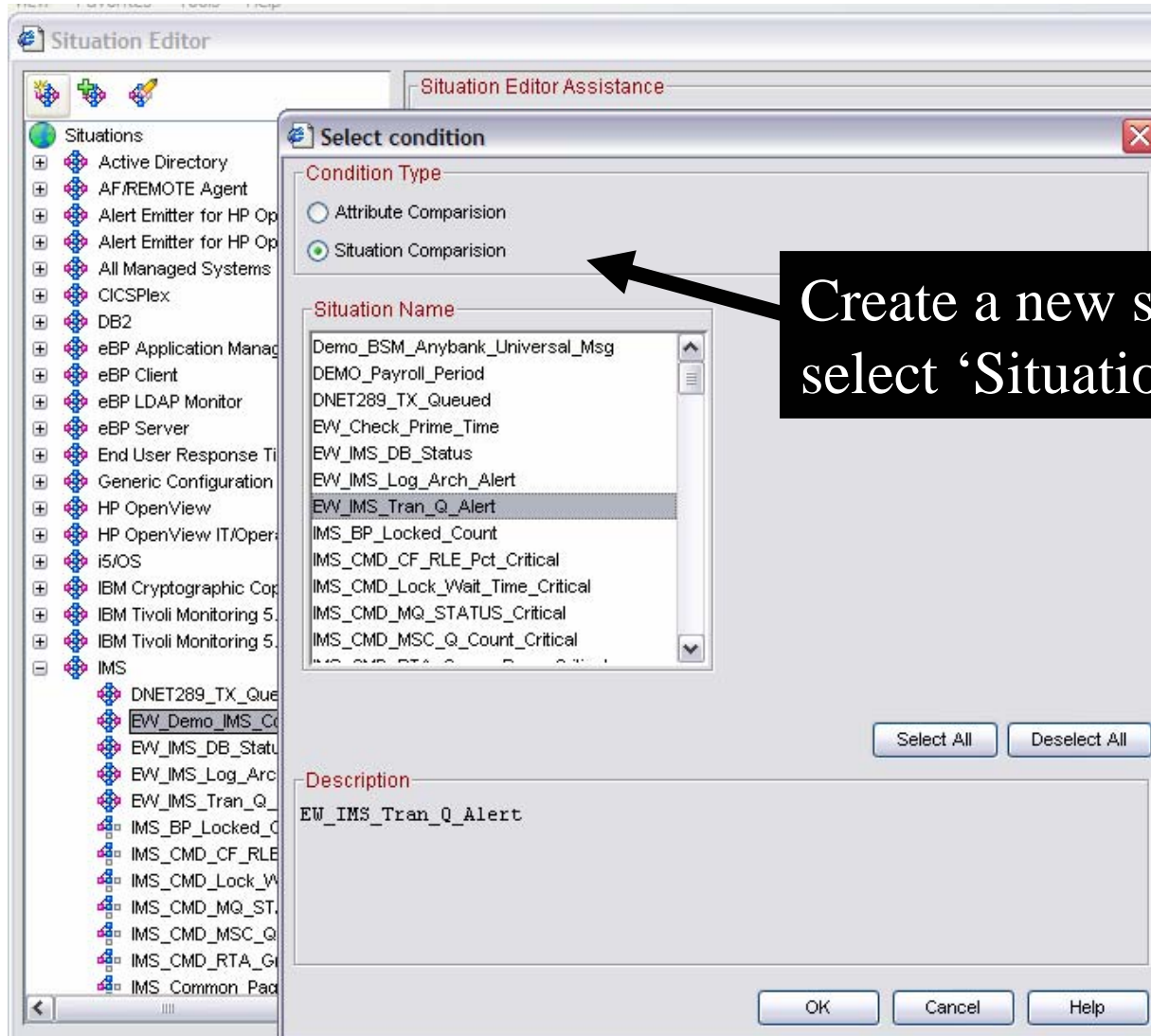
Situation Formula Capacity 13%

Enable critical.wav

Run at startup

OK Cancel Apply Help

Situation Correlation - Example



Correlated Alert Example

Situation Editor

Situations

- Active Directory
- AF/REMOTE Agent
- Alert Emitter for HP OpenView
- Alert Emitter for HP OpenView/IT
- All Managed Systems
- CICSplex
- DB2
- eBP Application Manager
- eBP Client
- eBP LDAP Monitor
- eBP Server
- End User Response Time
- Generic Configuration
- HP OpenView
- HP OpenView IT/Operations
- i5/OS
- IBM Cryptographic Coprocessor
- IBM Tivoli Monitoring 5.x Endpoint
- IBM Tivoli Monitoring 5.x Endpoint
- IMS
 - DNET289_TX_Queued
 - EVS_Demo_IMS_Corr_Alert**
 - EVS_IMS_DB_Status
 - EVS_IMS_Log_Arch_Alert
 - EVS_IMS_Trans_Q_Alert
 - IMS_BP_Locked_Count
 - IMS_CMD_CF_RLE_Pct_Critic
 - IMS_CMD_Lock_Wait_Time
 - IMS_CMD_MQ_STATUS_Critic
 - IMS_CMD_MSC_Q_Count_Critic
 - IMS_CMD_RTA_Group_Response
 - IMS_Common_PageIn_High

Formula

Description

Formula

	EVS_IMS_Trans_Q_Alert	EVS_IMS_DB_Status
1	== True	== True
2		
3		

Click inside a cell of the formula editor to see a description of the attribute and to compose the expression.

Add a condition by clicking **Add conditions** and selecting the situations to embed or attributes you want to include.

When you add a second attribute or situation to

Situation Formula Capacity 7%

Add conditions... **Advanced...**

Sampling interval

0 / 0 : 15 : 0

ddd hh mm ss

Run at startup

OK **Cancel** **Apply** **Help**

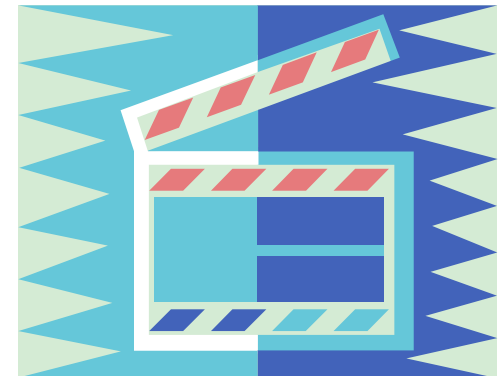
Correlates two situations. Both must be true for this situation to be true.

Select 'Add Conditions' to add additional logic.

OMEGAMON V4.1.0 – Trends and Directions

Objectives

- Customer Satisfaction
 - ▶ Globalization
 - ▶ Exploitation of new OS and middleware releases
 - ▶ Customer Enhancements
- Portfolio Simplification
 - ▶ Candle Management Workstation and OMEGAMON II continued movement to XE
 - ▶ Merging of functionality in product suites where it makes sense
- Integration
 - ▶ Dynamic Workspace Linking
 - ▶ Launch in Context
 - TSLA, TBSM, and more
 - ▶ Tivoli Data Warehouse – pruning and aggregation
- Serviceability
 - ▶ Problem Determination Guides
 - ▶ ICAT enhancements

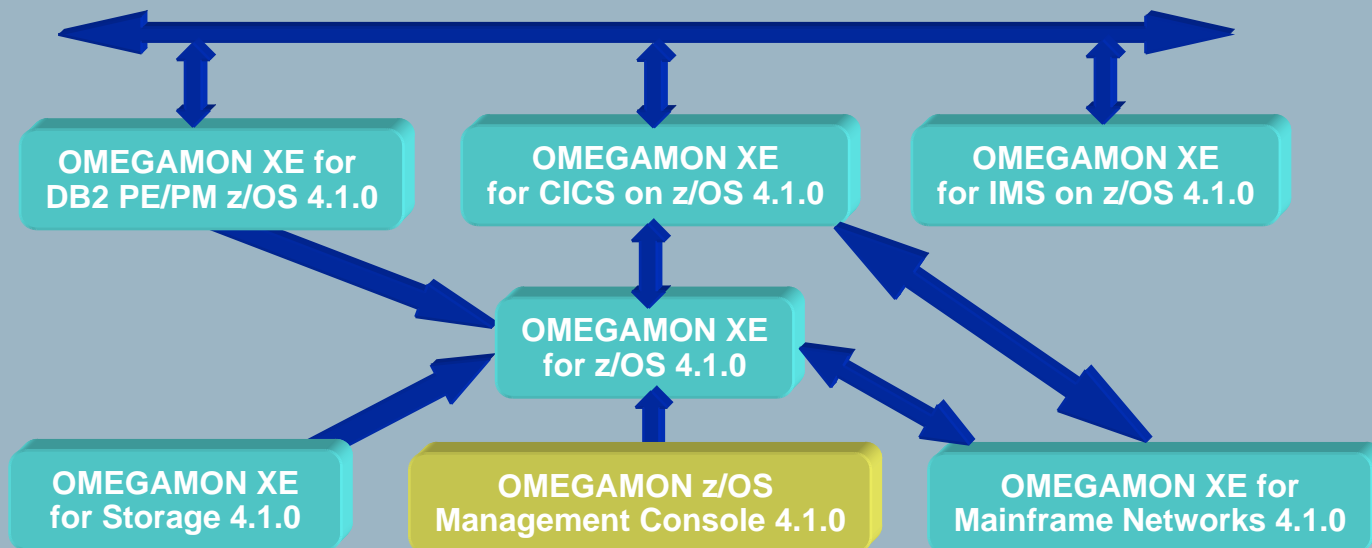


Dynamic Workspace Linking Functionality

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

Scenario: Dynamically link in context from CICS transaction to the associated DB2 thread

Solution: Dynamic Workspace Linking Product provided links & user customized



Summary And General Recommendations

- Understand and exploit the strengths of OMEGAMON
- Tivoli Enterprise Portal (TEP) GUI Interface
 - ▶ Correlation and high level analysis
 - ▶ Problem identification, notification, and isolation
 - ▶ Robust correlated alert generation
 - ▶ Integrated automation with corrective actions
- 3270 Classic Interface
 - ▶ Deep dive detailed analysis
 - ▶ Command driven with the ability to build custom screen spaces
 - ▶ Screen logging and automated screen facility options



**Thank
You!!!!!!**

