



OMEGAMON XE for IMS

What's new in v5.3.0

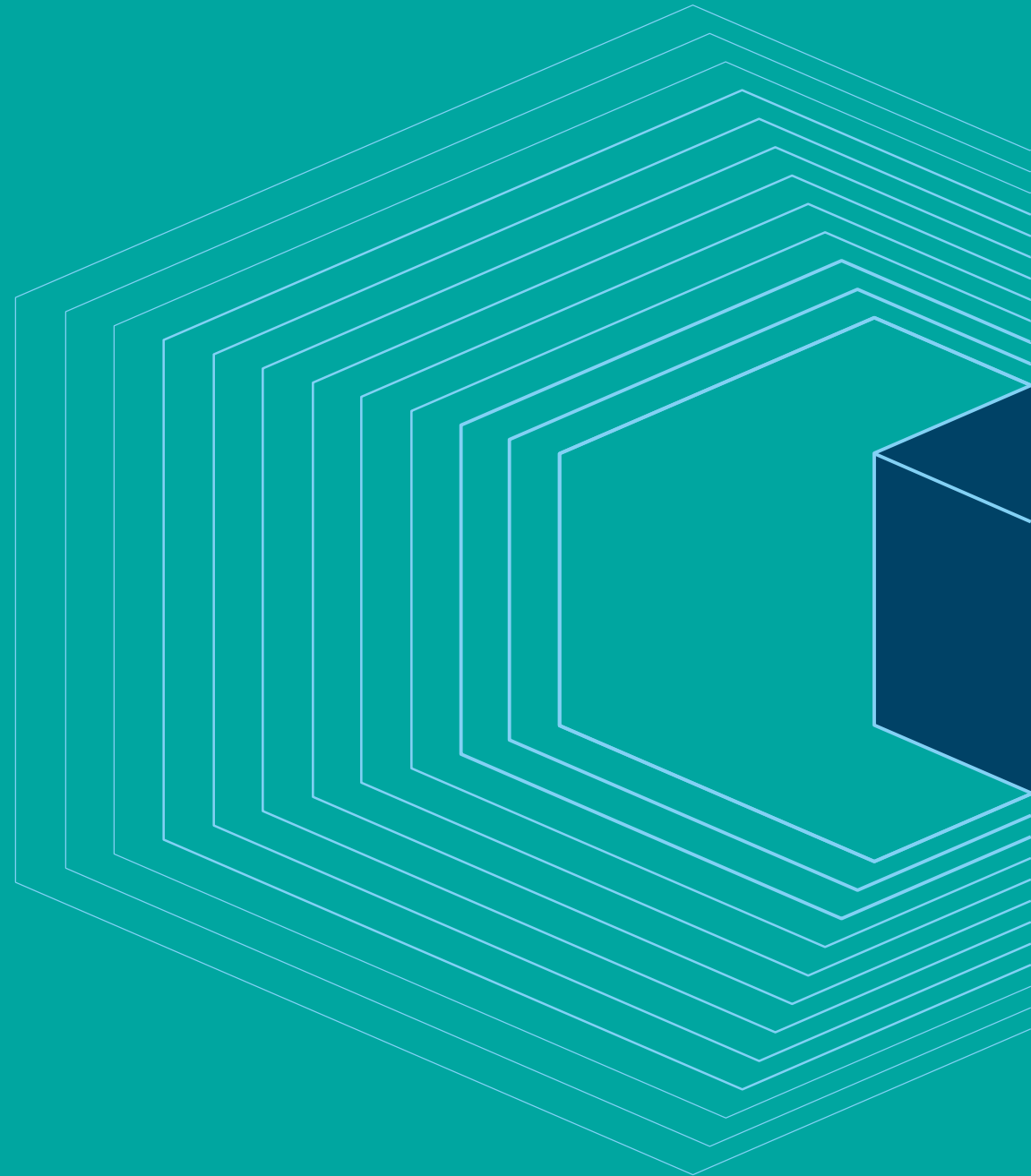
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OMEGAMON XE for IMS – what's new in v5.3.0

IMS Technical Symposium 2016

Date: 03/08/2016

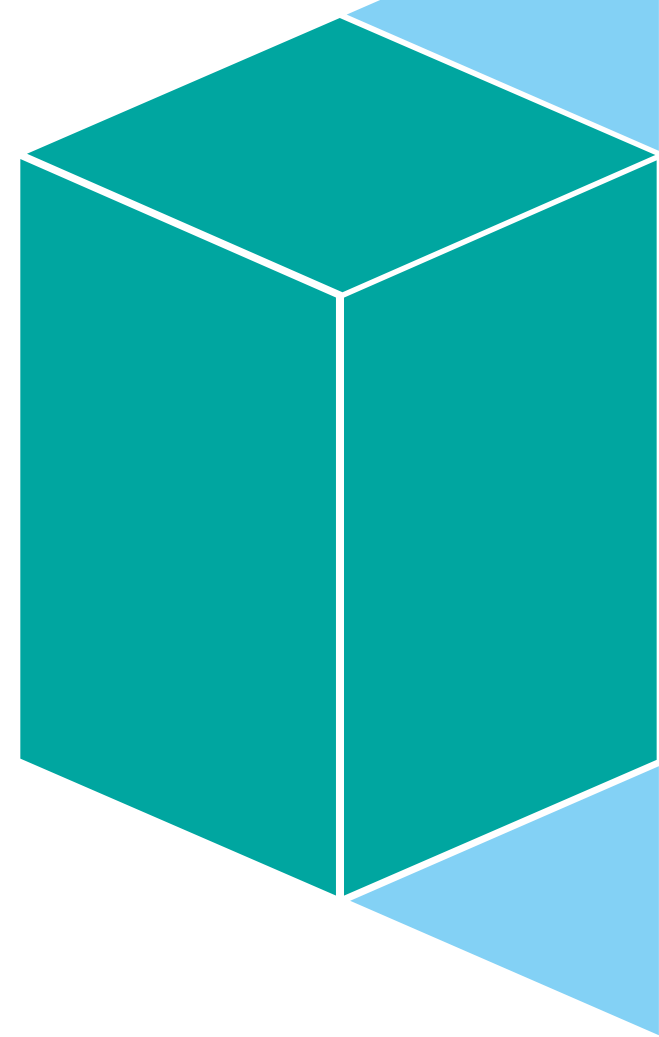
Session: C03

■ (Looking Back) Over My Shoulder

- v3.1.0 - Retrospection
- v4.1.0 - Retrospection
- v5.1.0 - Retrospection
- Components and Facilities

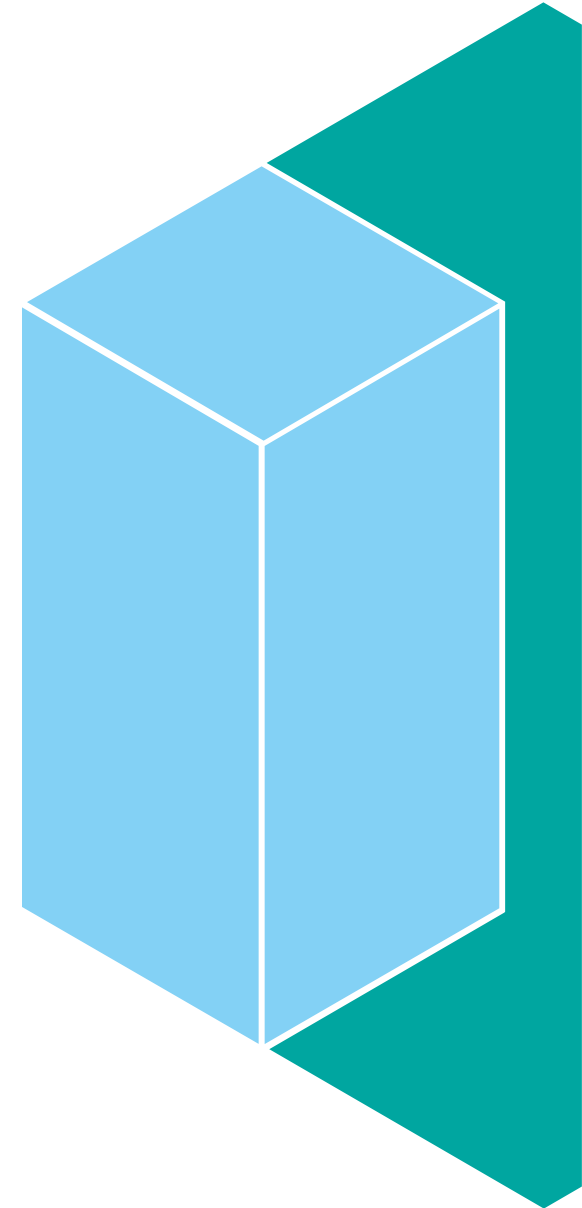
■ Hey! Ho! Let's Go!

- v5.3.0 - what's new
- v5.3.0 - e3270ui enhancements



(Looking Back) Over My Shoulder

<https://www.youtube.com/watch?v=Cr9-v1GZutg>



OMEGAMON XE for IMS v3.1.0

IBM Tivoli OMEGAMON XE for IMS on z/OS v3.1.0 - „what was new“

➤ **OMEGAMON IMS V100 & OMEGAMON IMSplex V220 were combined to a single product**

➤ **Small Programming Enhancements (SPEs) added to previous release**

- OTMA Support
- Exception Analysis
- New Product Provided Situations
- Shared OTMA Queues
- Historical Support

➤ **New enhancements to v3.1.0**

- Remove z/OS CMS Hub dependency
- On demand (real time) collection
- IMS System and IMSplex views in different TEP Hierarchy
- IMS Connect (Phase 1) support
- Cold Queues and APPC support for Shared Queues
- Lock owners/waiters displayed on same line
- FP WFI Support
- TRF Batch support for shared IMS Queue environment



IBM announced the acquisition of !Candle

01. April 2004

OMEGAMON XE for IMS v4.1.0

IBM Tivoli OMEGAMON XE for IMS on z/OS v4.1.0 - „what was new“

- Multiple enhancements of the Application Trace Facility to expand breadth and depth of information. It provides additional DL/I, DB2, and MQSeries® call detail, as well as archival to VSAM for greatly increased data retention
- Near-Term History (formally Online-TRF) has been enhanced to provide greatly increased data retention allowing for 24x7 data collection and viewing. Automatic trace collection is also enabled at OM startup
- Locking enhancements - Program isolation (PI) conflicts and a list of locks held awaiting for the lock owner is displayed in the TEP interface to quickly identify inhibitors to processing
- Global locking has also been enhanced to display top-blocker allowing for quicker and easier identification of lock conflicts
- Bottleneck Analysis ported into the Tivoli Enterprise Portal (TEP) XE interface. Full support of both long and short term information, which displays wait reasons for executing and competing transactions
- Response Time Analyzer (RTA) ported into the Tivoli Enterprise Portal (TEP) XE interface. Full support of Interval response, Slotted Time Response, Group Response, and End-to-End Response
- Additional enhancements include Input and Output Shared Queue time as well as reporting response time to milliseconds in both Classic 3270 and XE TEP interfaces
- Additional MQSeries® performance metrics are displayed in the Tivoli Enterprise Portal (TEP) interface
- Additional wait reasons have been added for MQSeries® to Dependent Region. Status and Bottleneck Analysis providing earlier problem detection of IMS applications using MQSeries® resources

OMEGAMON XE for IMS v5.1.0

IBM Tivoli OMEGAMON XE for IMS on z/OS v5.1.0 - „what was new“

- **Total Cost of Ownership and Time to Value Improvements**
[reduces Full Time Employees (FTE) and improves Return On Investment (ROI)]
 - Self-Describing Agents (SDA)
 - PARMGEN Configuration
 - Enhanced 3270 User Interface (e3270ui) problem solving scenarios

- **IMS command support**
 - Ability to issue IMS commands
 - Type-1 and Type-2 commands
 - IMS commands can be directed to an **individual IMS** or an **IMSplex**
 - Security checking performed to ensure user is authorized to issue the command
 - Command support provided in Enhanced 3270 User Interface (e3270ui)
 - ICMD collector must be enabled

- **MIPS reduction**
 - Application Trace Facility (ATF) ECSA VSCR
 - TRF Near Term History (NTH) removal
 - CPU hotspots were identified and reduced where possible

IBM Tivoli OMEGAMON XE for IMS on z/OS v5.1.0 - „what was new“

➤ PARMGEN – new Configuration Method

- PARMGEN is the preferred method for configuring OMEGAMON XE Family and Tivoli Management Services (TMS) products on z/OS
- OMEGAMON XE for IMS on z/OS v5.1.0 will fully support configuration with PARMGEN
- ICAT Batch and interactive also supported in v5.1.0

➤ Enhanced 3270 User Interface

- Initial support for Enhanced 3270 User Interface
- Includes IMSplex support
- Workspaces are designed to have the same look and feel as other OMEGAMON products and are based on problem solving scenarios such as
 - Overall health – (general navigation)
 - Resource Contention (lock conflicts)
 - High CPU usage (looping transaction)

IBM Tivoli OMEGAMON XE for IMS on z/OS v5.1.0 - „what was new“

➤ **Application Trace Facility (ATF) ECSA VSCR**

- **Problem**

- ECSA is a critical system resource
- Under high volume IMS workloads, an ATF trace may result in a shortage of ECSA causing the ATF data collection to be suspended until ECSA becomes available resulting in loss of trace data

- **Solution**

- ATF has replaced its use of ECSA for data collection with the use of 64-bit common
 - ATF storage has been optimized to occupy a smaller footprint for each record by using variable lengths
- ATF was updated in v5.1.0 to use 64-bit common storage, using “large pages” where available

IBM Tivoli OMEGAMON XE for IMS on z/OS v5.1.0 - „what was new“

➤ Use of Large Page Frames

- JLF was updated via PTF in v4.2.0 to use Large Page Frames of 1M versus 4K pages
 - Performance improvement. Large Pages are fixed in real memory resulting in much less paging overhead, 30% reduction in paging
 - This dramatically reduces the working set size as we are removing 16,384 4K pages from virtual storage for each 64Mb memory object/segment we allocate
- Encourage customers to configure LFAREA in IEASYSxx.
 - New minor of RMLF for SYS command
 - New minor of LPAG for PEEK command
 - DISPLAY VIRTSTOR,LFAREA
- ATF was updated in v5.1.0 to use 64-bit common storage
 - ATF is using “large pages” where available

Components and Facilities

IBM Tivoli OMEGAMON XE for IMS on z/OS – „Components & Facilities“

Real Time

- **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**
 - IMS resource commands
- **Multiple System and Plex level information**
 - N-way data sharing, Global Locking, Multiple Systems Coupling, shared queues
- **Exceptions, Alerts, Integration**
 - Integrated alert/automation and analysis

Historical

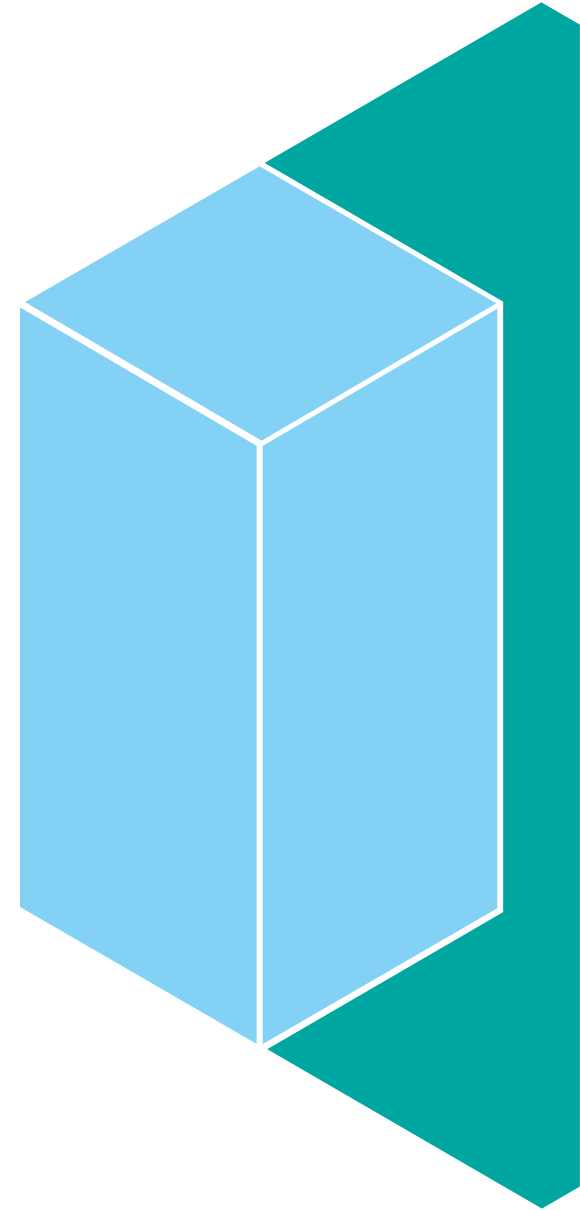
- **EPILOG Historical**
 - Historical analysis of transaction response, bottlenecks and IMS resources by group & interval
 - Stored in Epilog Data Store (EDS)
- **Application Trace Facility**
 - Detailed application API metrics
 - Transaction summary metrics
- **Near Term History**
 - Eligible enhanced 3270 workspaces are enabled for history mode
- **XE Snapshot Historical**
 - Snapshot historical stored in the Tivoli Data Warehouse
 - Reporting, trending, baselines
- **Integration**
 - IMS Performance Analyzer (IMS/PA)
 - IMS Problem Investigator (IMS/PI)

IBM Tivoli OMEGAMON XE for IMS on z/OS – „can solve problems about ...“

- **Delays** what is going on with the coupling facility structures
- **Outages** details on the Shared Queues Counts
- **System Slowdowns** details on database lock conflicts
- **Response Times** a transaction and why it is being delayed in the IMS domain
- **Transactions** with details on input/output queue time, processing time, internal response time and total response time
- **Databases** especially high availability large databases (HALDBs) monitoring and reporting including summary and partition details
- **Currency** with the new features and functions on IMS V14 and IMS Connect
- **Resource Constraints** with a single point of control for managing SYSplex IMS environments
- **Bottlenecks** with DBCTL thread activity real-time monitoring and DL/I call reporting and statistics for Full Function regions and for Fast Path WFI (Waiting For Input) regions

Hey! Ho! Let's Go!

<https://www.youtube.com/watch?v=yjPn8ygmmBY>



What's new in v5.3.0



IBM Tivoli OMEGAMON XE for IMS on z/OS v5.3.0 - „what's new“

➤ Currency

- Day 1 support of IMS v14.1
- Latest CICS release support
- Toleration of 128 CPUs per LPAR
- Removed 10+ hooks into IMS and now use IMS exits where available

➤ Deprecated Components

- **JLF** has been replaced with **z/OS log streams** to record **ATF data**
- **TRF** has been removed (see above)
 - Use ATF and IMS Performance Analyzer instead to produce charge-back or performance reports (requires APAR PI44855)
 - Use ATF and IMS Problem Investigator instead to produce performance reports (requires APAR PI44856)
- **SAP/R2** has been removed
- **ETE** has been removed
- **IMS 9.1** support has been removed

➤ Global Definitions moved to a Text Member

- **KOIGLBxx** has been deprecated, replaced with **KIPGLBxx**
- **KIPGLBCR** sample will create the default KIPGLBxx member
- **KIPGLBCV** sample will convert **KOIGLBxx** to **KIPGLBxx**
- **KIPGLBVR** sample will verify the syntax of a **KIPGLBxx** member
- **PARMGEN** allows sharing the global member repository dataset across an RTE boundary

IBM Tivoli OMEGAMON XE for IMS on z/OS v5.3.0 - „what's new“

➤ Application History (ATF) Enhancements

- JLF has been replaced with z/OS log streams reducing storage footprint, especially 64-bit memory which was the subject of an RFE
- New startup parameters to support the ATF log streams
 - SUMMLOGR
 - DETLLOGR
 - SUMXLOGR
 - DETXLOGR
- Following startup parameters are deprecated for ATF
 - BUFFSIZE – ECSAMAX – TOTTRANS - TRACE
- Hooks have been removed in favor of IMS Monitor exit in IMS 14.1
- New Trace options
 - Transaction count limit
 - BMP trace by message/CHKP (each CHKP treated as separate transaction)
- New status field to show if trace stopped due to transaction count limit ATVD events are now shown in chronological order
- Changed startup parameter default for 64-bit memory – ATFBUFF now defaults to 512
- Data is written synchronously to system logger eliminating another 64-bit memory queue and improving throughput
- ATF trace definitions may now use Backup/Restore/Deploy utility (REXX)
 - Define common traces in one Classic region and deploy to others
 - Backup/Restore ATF trace definitions

IBM Tivoli OMEGAMON XE for IMS on z/OS v5.3.0 - „what's new“

➤ IMS Exit Usage


- xKANMODR is locating all IMS Exits and their Support Routines
- xKANMODR is now concatenated in IMS control region STEPLIB rather than the entire xKANMOD library reducing the need to cycle the IMS control region to apply maintenance
- All IMS exits are release agnostic reducing configuration effort
- **LOGWRT** is the **Log Writer User Exit** and is used by the RTA component.
- **PPUE** is the **Product Partner User Exit** used by our IMS type-1 command support
- **IMSMON** is the **IMS Monitor User Exit** used by the ATF component for IMS v14.1 only

➤ Miscellaneous Items

- | | |
|----------------|---|
| • RFE | Automatically start RMON |
| • RFE | Add SQ Affinity count to IMS Health workspace |
| • RFE | Add startup message to console for automation |
| • Feedback | Added ATF Status column to Monitored IMS Systems |
| • Feedback | Added Zoom capability to several e3270ui workspaces |
| • Feedback | Added ASIDX to KIPDEPS for use with Take Action |
| • ICAT removal | PARMGEN is <u>only</u> configuration tool now |
| • zIIP | NTH (Near Term History) |

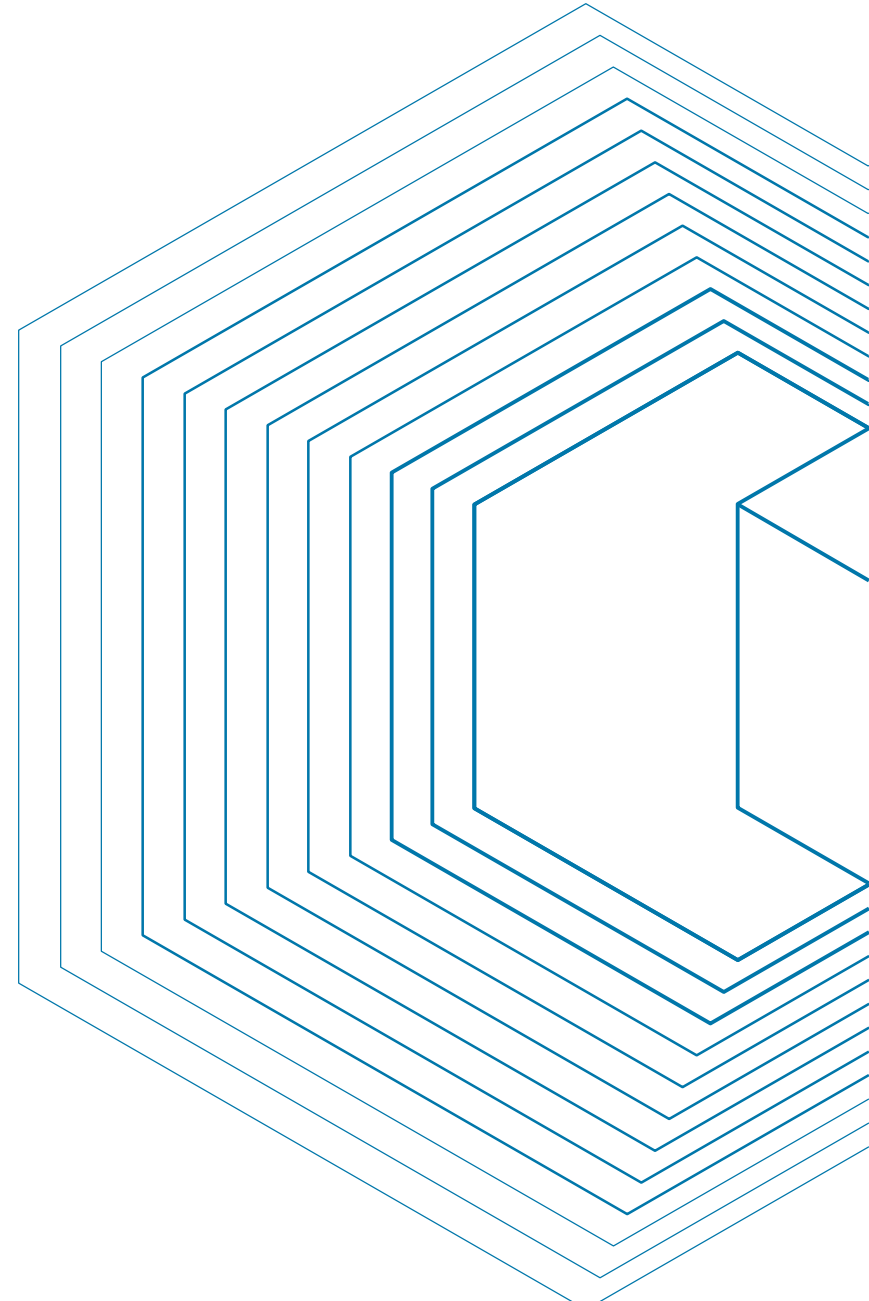
IBM Tivoli OMEGAMON XE for IMS on z/OS v5.3.0 - „what's new“

New enhanced e3270ui Contents

- ❑ **ATF** (Application Trace Facility)
- ❑ **NTH** (Near Term History) 
- ❑ **Bottleneck Analysis**
- ❑ **DBCTL Threads**
- ❑ **MSC** (Multiple Systems Coupling)
- ❑ **RTA** (Response Time Analysis)
- ❑ **SQ** (Shared Queues)
- ❑ **OTMA, TMember and TPipe**
- ❑ **Storage Pools and Subpools**
- ❑ **VSAM, OSAM and Database Buffer Pools**
- ❑ **Embedded CICS Data Subpanels** in
Locks and **DBCTL Thread** workspaces
- ❑ **IMS Command Support** for **Type-1** and **Type-2** (Type-1 added)

- **IMS and IMSplex Health and System Information**
- **Address Spaces**
- **Dependent Regions**
- **Global and Local locks**
- **Shared Queues**
- **DBCTL Threads**
- **MSC (Multiple Systems Coupling)**
- **OTMA**
- **Storage Pools and Subpools**

e3270ui Enhancements



Application Trace Facility (ATF)

File Edit View Tools Navigate Help 03/24/2015 15:29:02
 Auto Update : Off
 IMSplex :
 IMSid : IB1U

Command ==> KIPATF

IMS ATF Trace Definitions

Defined Traces

Columns 3 to 6 of 6 Rows 1 to 3 of 3

IMS ID	Trace ID	Start Date/Time	Duration	Trace Type	Trace Status
IB1U	TRACE3	15/03/24 15:23:00	Forever	Both	Active
IB1U	TRACE2	15/03/11 09:48:00	30	Excpn Only	Inactive
IB1U	TRACE1	15/03/11 09:48:00	30	App History	Inactive

om IP KIPATFL Auto Update : Off

Specify Trace Filters

Start Date.(YYYYMMDD) Last nn minutes.(1-99) 5
 Start Time...(HHMMSS) Last nn hours...(1-99)
 End Date...(YYYYMMDD) Today.....(Y/N) N
 End Time.....(HHMMSS) Yesterday.....(Y/N) N

Tran Name Job Name..
 Class.... PSB Name..
 User ID.. DBD Name..
 LTERM.... Abend Code
 Exclude (Y/N) BMP N MPP N IFP N JMP N JBP N CICS N ODBA N

Elapsed Time Total > (nn.nnnnnn seconds)
 DLI > DB2 > MQ >
 CPU Time Total > (nn.nnnnnn seconds)
 DLI > DB2 > MQ >
 DEP > CTL > DLS >

Group By **TRAN** (Tran/PSB/Region/Lterm)

15/03/11 09:52:19	PART	DFSSAM02	IMSBUMS1	CDICK
15/03/11 09:52:08	PART	DFSSAM02	IMSBUMS1	CDICK
15/03/11 09:51:56	PART	DFSSAM02	IMSBUMS1	CDICK

Tuesday March 24 2015

File Edit View Tools Navigate Help					
03/24/2015 15:33:07					
Auto Update : Off					
IMSpIex :					
IMSid : IB1U					
Command ==> KIPATFT					
IMS ATF Exceptions					
Exceptions					
Columns 2 to 6 of 17 Rows 1 to 29 of 300					
Start Date/Time	Tran Name	PSB Name	Job Name	LTerm Name	Abend Code
15/03/11 09:54:47	DLETPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:46	DLETPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:45	DSPALLI	DFSSAM07	IMSBUMS1	CDICK	
15/03/11 09:54:44	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:43	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:42	ADDINV	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:40	ADDPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:39	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:38	DSPALLI	DFSSAM07	IMSBUMS1	CDICK	
15/03/11 09:54:37	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:54:36	DLETPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:35	DLETPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:34	DSPALLI	DFSSAM07	IMSBUMS1	CDICK	
15/03/11 09:54:33	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:32	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:31	ADDINV	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:29	ADDPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:28	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:27	DSPALLI	DFSSAM07	IMSBUMS1	CDICK	
15/03/11 09:54:26	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:54:25	DLETPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:24	DLETPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:23	DSPALLI	DFSSAM07	IMSBUMS1	CDICK	
15/03/11 09:54:22	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:21	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:19	ADDINV	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:18	ADDPART	DFSSAM04	IMSBUMS1	CDICK	
15/03/11 09:54:17	DSPINV	DFSSAM03	IMSBUMS1	CDICK	
15/03/11 09:54:16	DSPALLI	DFSSAM07	IMSBUMS1	CDICK	
Tuesday March 24 2015					
01/002					

File Edit View Tools Navigate Help					
03/24/2015 15					
Auto Update					
IMSpIex :					
IMSid : IB					
Command ==> KIPATFT					
IMS ATF Trace Summary					
Trace Instances for PART TRAN					
Columns 2 to 6 of 17 Rows 1 to 29 of					
Start Date/Time	Tran Name	PSB Name	Job Name	LTerm Name	Abend Code
15/03/11 09:54:37	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:54:26	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:54:15	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:54:04	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:53:53	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:53:42	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:53:30	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:53:17	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:53:06	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:52:54	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:52:43	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:52:31	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:52:19	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:52:08	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:51:56	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:51:45	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:51:33	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:51:22	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:51:10	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:50:59	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:50:47	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:50:36	PART	DFSSAM02	IMSBUMS1	CDICK	
15/03/11 09:50:24	PART	DFSSAM02	IMSBUMS1	CDICK	

File Edit View Tools Navigate Help 03/25/2015 11:19:38
 Auto Update : Off
 IMSplex :
 IMSid : IB1U

Command ==> KIPATFTD

IMS ATF Transaction Details

Details Events

Transaction Details

Tran Name.....	PART	PSB Name.....	DFSSAM02
Lterm Name.....	CDICK	Class.....	1
Region Type.....	MPP(WFI)	Message Source.....	TERM
Region Number.....	5	Primed Message.....	Yes
Job Name.....	IMSBUMS1	Quick Reschedule.....	No
Step Name.....	REGION	SPA Size.....	0B
User ID.....		Abend Code.....	

Time Details

Start Date.....	15/03/11	CPU CTL Time.....	0.000000
Start Time.....	09:54:37	CPU DEP Time.....	0.000657
Elapsed DLI Time.....	0.000980	CPU DLI Time.....	0.000086
Elapsed DB2 Time.....	0.000000	CPU DB2 Time.....	0.000000
Elapsed MQ Time.....	0.000000	CPU MQ Time.....	0.000000
Elapsed Time.....	0.004713	CPU DLS Time.....	0.000000
WFI Time.....	0.000000	CPU Time.....	0.000657

Event Summary

Columns 1 to 5 of 5 Rows 1 to 7 of 7

Event Description	Event Type	ΔCount ▽	ΔTotal ▽Duration	ΔAvg ▽Duration
DLI TM	INQY	1	0.000002	0.000002
DLI TM	GU	1	0.000003	0.000003
DLI DB	GU	1	0.000049	0.000049
DLI DB	GN	1	0.000005	0.000005
DLI TM	ISRT	4	0.000010	0.000002
DLI DB	STAT	3	0.000006	0.000002
DLI TM	ASRT	1	0.000908	0.000908

Wednesday March 25 2015

MA B 01/002

File Edit View Tools Navigate Help

06/15/2015 09:54:26

Command ==>

KIPATFTE

Auto Update : Off

IMSplex :

IMSid : IB1U

IMS ATF Transaction Events

Details

Events

Tran: PART PSB: DFSSAM02, LTERM: AL00002, Region: IMSBUMS2

Columns 2 to 6 of 9

Rows 1 to 14 of 14

Start Time	Lvl	Elapsed Time	Accum. CPU Time	Status	+Event Description
15:38:41.513859	0	0.00000s	.000048s		MPP SCHEDULING
15:38:41.514269	0	.000003s	.000164s	<blank>	DL/I CALL (TM)
15:38:41.517204	0	.000006s	.000367s	<blank>	DL/I CALL (TM)
15:38:41.517279	0	.000080s	.000456s	<blank>	DL/I CALL (DB)
15:38:41.517389	0	.000005s	.000490s	<blank>	DL/I CALL (DB)
15:38:41.517432	0	.000006s	.000533s	<blank>	DL/I CALL (TM)
15:38:41.517464	0	.000007s	.000562s	<blank>	DL/I CALL (TM)
15:38:41.517491	0				
15:38:41.517518	0				
15:38:41.517594	0				
15:38:41.517661	0				
15:38:41.517685	0				
15:38:41.517695	0				
15:38:41.521158	0				

Total Elapsed Time: 00.0

File Edit View Tools Navigate Help

07/14/2015 12:12:42

Command ==>

KIPATFED

Auto Update : Off

IMSplex :

IMSid : IB1U

IMS ATF Event Details

Event details

Start Date= 07/13/15

Elapsed Time= 00.001147

CPU Time= 00.000029

Transaction= MPX00110

Region= IMSBUMS2

PSB Name= MPP00110

LTERM=

DL/I Event Details for DL/I CALL (DB), GHU

Start Time..... 03:56:24

SSA..... BA#ASEG

IOAREA..... 0000

Key Feedback Area..... 00003078

Status..... <blank>

SSA Hex..... C2C17BC1

IOAREA Hex..... 0080ED02

Key Feedback Area Hex..... F0F0F0F0

Near Term History (NTF)

File Edit View Tools Navigate Help07/14/2015 09:38:53Auto Update : OffPlex ID : Sys ID : IB1U

Command ==> KOBHISTB

Hub Name: CJD530:CMS Application: OMEGAMON XE for IMS on z/OS

☒ Historical tables

Columns 2 to 4 of 4Rows 1 to 27 of 33

Attribute Group	Collection Name	Interval	STATUS
IMSPLEX Health	HealthP	1 Min	Active
IMS Health	HealthI	1 Min	Active
Address Spaces			
Dependent Regions			
Internal Resource Lock Manager			
IMS STATUS			
IMS System			
CF Group Name			
IMS Lock Conflicts			
IMS Local Lock Conflicts			
SharedQueues Transaction Summar			
SharedQueues LTERM Summary			
SharedQueues FP Program Summary			
SharedQueues APPC LUname Summar			
SharedQueues APPC TPname Summar			
SharedQueues OTMA Tmember Summa			
SharedQueues OTMA Tpipe Summary			
SharedQueues Cold QueueType Sum			
SharedQueues Cold QueueName Sum			
IMSPLEX DBCTL Thread Summary			
DBCTL Thread Summaries			
DBCTL Thread Details			
DBCTL Thread Indoubts			
Local MSC Physical Links			
Local MSC Logical Links			
IMS Local MSC Performance Stati			
OTMA Status			

----- File Edit View Tools Navigate Help 09/01/2015 16:24:39

Command ==> _____

KIPHLTI _____

Display : HISTORY

IMSplex : IC1C

IMSId : IC1C

Historical Summary

Selected item IC1C

Columns 3 to 14 of 14

Rows 1 to 4 of 4

Recording Time	IMS ID	MVS ID	Tran Queue	Affinity Count	Highest RO Time	Lock Waiters	Longest Lock	Dep Regions	CPU Percent	I/O Rate	Paging Rate	ENQ Rate	DEQ Rate
16:20:00	IC1C	SYS	0	0	0.000000	0	0.000s	6	0.05%	0.00	0.00	0.00	0.00
16:15:00	IC1C	SYS	0	0	0.000000	0	0.000s	6	0.00%	0.00	0.00	0.00	0.00
16:10:00	IC1C	SYS	0	0	0.000000	0	0.000s	6	0.00%	0.00	0.00	0.00	0.00
16:05:00	IC1C	SYS	0	0	0.000000	0	0.000s	6	0.00%	0.00	0.00	0.00	0.00

----- File Edit View Tools Navigate Help 09/01/2015 16:26:52

Command ==> KIPHLTD

Display : IC1C
IMSplex : IC1C
IMSid : IC1C

HISTORY

IMS Health Detail (History)

IMS System Information

IMS ID.....	IC1C	IMSplex Name.....	IC1C
DSGroup Name.....	IRLMCC	SQGroup Name.....	DFSICCG
MVS ID.....	SYS	Sysplex Identifier.....	LPAR400J
Dependent Regions.....	6		

IMS Lock Status

Lock Waiters.....	0	Longest Lock.....	0.000s
Locks Held.....	0		

IMS Resource Usage

Control CPU Percent.....	0.00%	Dependent CPU Percent.....	0.00%
Total CPU Percent.....	0.00%	Control I/O Rate.....	0.00
Dependent I/O Rate.....	0.00	Total I/O Rate.....	0.00
Control Paging Rate.....	0.00	Dependent Paging Rate.....	0.00
Total Paging Rate.....	0.00		

IMS Transaction Queue Rates/Depth and Response Time

FF ENQ Rate.....	0.00	FF DEQ Rate.....	0.00
BALG ENQ Rate.....	0.00	BALG DEQ Rate.....	0.00
Total ENQ Rate.....	0.00	Total DEQ Rate.....	0.00
FF Transaction Queue.....	0	BALG Message Queue.....	0
Total Transaction Queue.....	0	Affinity Count.....	0
Highest RO Time.....	0.000000		

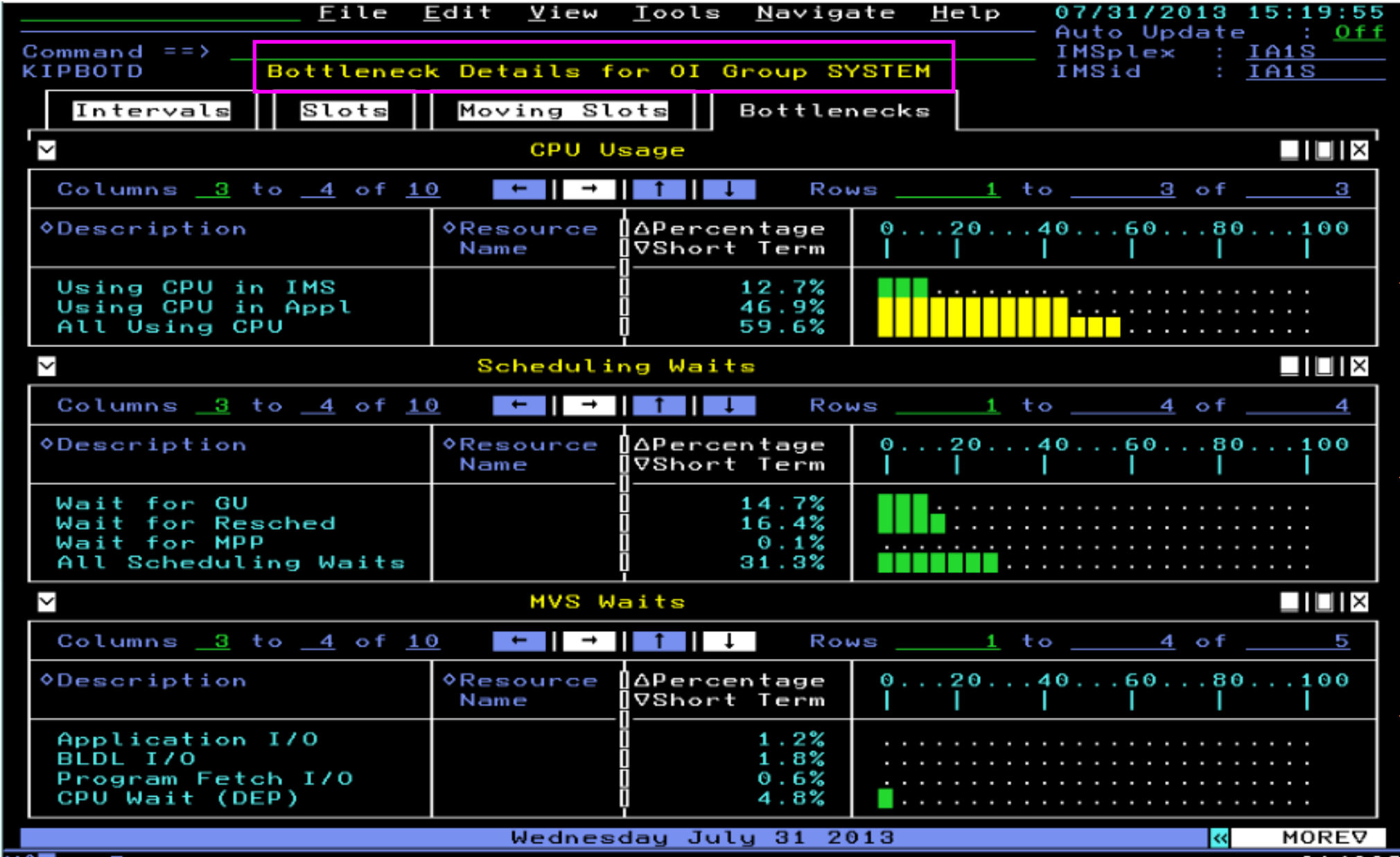
BACK

16:10 16:15 16:20

HISTORY

Bottleneck Analysis

Bottleneck Analysis



See where your transactions are having the largest percentage wait times

IMS Time vs. Application Time

Scheduling Wait Time

Waiting for I/O

DBCTL Thread Details and Wait Statistics

DBCTL Threads Details and Wait Statistics

File Edit View Tools Navigate Help

06/11/2015 10:04:49
Auto Update : Off
IMSplex :
IMSid : IA1P

Command ==>
KIPDBCTS

DBCTL Thread Summary for IMS IA1P

DBCTL Thread Summary

Columns 2 to 7 of 12

Rows 1 to 1 of 1

ΔCCTL VID	ΔCICS VJobname	ΔUOW VInput Rate	ΔUOW VProc Rate	Active Threads	Avail Threads	+Unava Threa
CICS22RS	CICS22RS	N/A	N/A	1	19	0

Drill in to view
Thread Details and
Wait Statistics plus
System Services call
details

File Edit View Tools Navigate Help

06/11/2015 10:05:26
Auto Update : Off
IMSplex :
IMSid : IA1P

Command ==>
KIPDBCTA

DBCTL Thread Activity for CCTL ID CICS22RS

Active, Available, and Unavailable Threads

Columns 2 to 6 of 18

Rows 1 to 20 of 20

◇Region ID	PSB Name	ΔThread VState	Thread Status	ΔElapsed VTime	+Threa Occup
14	DFHSAM05	Active	Exec-DepReg	00:00:51	Init
130	N/A	Available	Idle	00:00:00	Init
141	N/A	Available	Idle	00:00:00	Init
143	N/A	Available	Idle	00:00:00	Init
137	N/A	Available	Idle	00:00:00	Init
127	N/A	Available	Idle	00:00:00	Init
8	N/A	Available	Idle	00:00:00	Init
129	N/A	Available	Idle	00:00:00	Init
134	N/A	Available	Idle	00:00:00	Init
140	N/A	Available	Idle	00:00:00	Init
135	N/A	Available	Idle	00:00:00	Init
138	N/A	Available	Idle	00:00:00	Init

Response Time Analysis (RTA)

Response Time Analysis (RTA)

File Edit View Tools Navigate Help 06/10/2015 13:59:14
Auto Update : Off
IMSpIex :
IMSIId : IB1U

Command ==> RTA Group Summary for IMS IB1U

System Summary for Interval 1 (0:15:00)

Columns 3 to 6 of 16 Rows 1 to 1 of 1

Group Number	Group Name	Input Queue Time	Pgm Input Queue Time	Processing Time	R0 Time
0	SYSTEM	0.004642	0.000000	0.032675	0.037512

Group Summary for Interval 1 (0:15:00)

Columns 3 to 6 of 16 Rows 1 to 2 of 2

Group Number	ΔGroup Name	ΔInput Queue Time	ΔPgm Input Queue Time	ΔProcessing Time	ΔR0 Time
1	CLASS 1	0.003576	0.000000	0.028238	0.032083
2	CLASS2	0.006029	0.000000	0.037999	0.044027

See when your Service Level Exceptions are not being met and drill in to understand where the time is being spent

File Edit View Tools Navigate Help 06/10/2015 14:00:02
Auto Update : Off
IMSpIex :
IMSIId : IB1U

Command == KIPRTMSL RTA Moving Slot Summary for Group SYSTEM (0)

Intervals Slots Moving Slots Bottlenecks

Moving Time Slots - Last 10 Minutes

Columns 2 to 6 of 13 Rows 1 to 7 of 7

Response Time Component	ΔThreshold Exceeded	Threshold	ΔCurrent Minute	ΔCurrent Minute - 1	ΔCurrent Minute
Input Time	Yes	0.0	0.000435	0.003661	0.00
Program Input Time	No	0.0	0.000000	0.000000	0.00
Processing Time	Yes	0.0	0.000000	0.018882	0.08
Output Time	No	0.0	0.000000	0.000000	0.00
R0 Response Time	Yes	0.0	0.000000	0.022544	0.08
R1 Response Time	Yes	0.0	0.000000	0.022544	0.08
Local Output Time	No	0.0	0.000000	0.000000	0.00

IMS Shared Queues

IMS Shared Queues

File Edit View Tools Navigate Help07/13/2015 15:13:22
Auto Update : Off
IMSplex :
IMSid : IB1U

Command ==>
KIPSQTS

TransactionLTERMP ProgramOTMAAPPCCOLDO

Transaction Queue Summaries

Columns 3 to 5 of 9Rows 1 to 2 of 2

ΔTransaction ▽Name	ΔIMS ▽Affinity	ΔQueue ▽Count	ΔOldest ▽Timestamp	ΔNewest ▽Timestamp
DSN8CS		1	15/07/13 01:46:14	15/07/13 01:46:14
MPX00100		10366	15/07/13 01:56:45	15/07/13 03:15:23

Identify high queue counts

File Edit View Tools Navigate Help07/14/2015 10:45:13
Auto Update : Off
IMSplex :
IMSid : IB1U

Command ==>
KIPSQLS

TransactionLTERMP ProgramOTMAAPPCCOLDO

LTERM Queue Summaries

Columns 2 to 5 of 8Rows 1 to 7 of 7

ΔLTERM ▽Name	ΔQueue ▽Count	ΔOldest ▽Timestamp	ΔNewest ▽Timestamp	ΔQueue ▽Name
GKBU4A	8	15/07/06 23:06:06	15/07/06 23:06:17	GKBU4A
GKBU4B	99	15/07/05 07:21:28	15/07/05 07:21:31	GKBU4B
GKBV69	1	15/07/08 15:10:58	15/07/08 15:10:58	GKBV69
LOGON	4	15/07/01 14:14:38	15/07/01 14:14:49	LOGON
VMINT	6	15/07/10 18:55:55	15/07/10 18:56:19	VMINT
VMINT1	6	15/07/13 01:19:01	15/07/13 01:19:05	VMINT1
VMINT3	8	15/07/13 01:38:05	15/07/13 01:38:22	VMINT3

IMS Storage Pool and Subpool Utilization and Exceptions

IMS Storage Pools and Subpool Utilization and Exceptions

Track the Utilization of your IMS Storage Pools and Hit Ratios of your Subpools for maximum Performance

File Edit View Tools Navigate Help 06/11/2015 10:10:50
Auto Update : Off
IMSplex : IA1C
IMSid :
Command ==> KIPPOOLC

IMS Pools

Communication Database Program ISAM/OSAM VSAM

Communication Pools for IMSPLEX IA1C

Columns 3 to 5 of 9 Rows 1 to 22 of 22

IMS ID	ΔPool Type	Pool Name	ΔUtilization Percentage	Pool Size
IA1C	CIOP	Communications I/O Pool	2.93%	17976
IA1C	HIOP	High I/O Pool	5.17%	183904
IA1C	LUMP	LU 6.2 Manager Private Area Pool	31.00%	66224
IA1C	EMHB	Expedited Message Handler Buffer	9.29%	66360
IA1C	CESS	Comm External Subsystem Pool	0.00%	0
IA1C	LUMC	LU 6.2 Manager Common Area Pool	0.00%	0
IA1C	CMDP	Command_Pool	0.00%	0
IA1C	QBUF	Message Queue Buffer Pool	100.00%	1344000
IA1C	WKAP	Work Area Pool	0.30%	73728
IA1C	RECA	VTAM Receive Any Pool	0.00%	20475
IA1C	SAPP	Save Area Prefix Pool	1.05%	N/A
IA1A	CIOP	Communications I/O Pool	2.93%	17976
IA1A	HIOP	High I/O Pool	5.17%	183904
IA1A	LUMP	LU 6.2 Manager Private Area Pool	31.00%	66224
IA1A	EMHB	Expedited Message Handler Buffer	9.29%	66360
IA1A	CESS	Comm External Subsystem Pool	0.00%	0
IA1A	LUMC	LU 6.2 Manager Common Area Pool	0.00%	37112
IA1A	CMDP	Command_Pool	0.00%	0
IA1A	QBUF	Message Queue Buffer Pool	80.00%	33600
IA1A	WKAP	Work Area Pool	0.00%	73728
IA1A	RECA	VTAM Receive Any Pool	0.00%	20475
IA1A	SAPP	Save Area Prefix Pool	1.05%	N/A

BACK Thursday June 11 2

Communication Database Program ISAM/OSAM **VSAM**

Subpools

Columns 3 to 8 of 10 Rows 1 to 12 of 12

IMS ID	Subpool Number	Pool Name	Pool Type	Subpool Hit Ratio	Buffer Count	Buffer Size	+Buffers PgFixed
IA1C	1	PA1C	Data	0.00%	5	512	Yes
IA1C	2	PA1C	Data	0.00%	5	1024	Yes
IA1C	3	PA1C	Data	0.00%	5	2048	Yes
IA1C	4	PA1C	Data	0.00%	10	4096	Yes
IA1C	5	PA1C	Data	0.00%	5	8192	Yes
IA1C	6	PA1C	Data	0.00%	5	16384	Yes
IA1A	1	PA1A	Data	0.00%	5	512	Yes
IA1A	2	PA1A	Data	0.00%	5	1024	Yes
IA1A	3	PA1A	Data	0.00%	5	2048	Yes
IA1A	4	PA1A	Data	84.84%	10	4096	Yes
IA1A	5	PA1A	Data	0.00%	5	8192	Yes
IA1A	6	PA1A	Data	0.00%	5	16384	Yes

Global Lock Details and Embedded CICS Details

IMS Global Locks Details with Embedded CICS Details

```

File Edit View Tools Navigate Help
08/26/2014 10:23:24
Auto Update : Off
IMSplex : IC1C
IMSid : IC1C

Command ==>
KIPGLKD
IMS Global Lock Details for CICSCB01

Lock Information and Status
Jobname..... CICSCB01
Transaction Name..... WD83....
PSBNAME..... DFHSAM04
Elapsed Lock Time..... 1h 06m
Lock Status..... LockOwne
Lock Intent..... Update
Top Blocker..... Yes
Long Token..... DI21PART
Recovery Token..... CDA9866C
Locks Held..... 1
Database Updates..... 0
Owner Jobname..... N/A
Owner Transaction Name..... N/A
Owner PSBNAME..... N/A
CICS Jobname..... CICSCB01
CICS Terminal ID..... 0230
Region ID..... 4
Region Type..... DBC
Region Status..... N A
DB/Area Name..... DI21PART
DCB Number..... 01
Waiter Count..... 1
Waiting Count..... 0
HALDB Partition Name..... N/A
HALDB Partition ID..... 0
IMS ID..... IC1C
MVS ID..... SYS
SYSplex Identifier..... LPAR400J
Owner Region ID..... 0
Owner IMS ID..... N/A
Owner MVS ID..... N/A
CICS Task Number..... 00099

CICS Transaction Details
CICS Region Name..... CICSCB01
Transaction ID..... WD83
Terminal ID..... n/a
Elapsed Time..... 9m 08s
Duration of Suspend..... 1h 06m
CPU Time..... 0.000s
Current Program ID..... DFHEDFX
User ID..... CICSCB01
Task Number..... 00099
Task State..... Suspend
Wait Type..... Systasks
Resource Type..... EDF
Resource Name..... DEBUGUSER

CICS Region Summary for CICSCB01
CICS Region Name..... CICSCB01
Transaction Rate..... 0 / m
Maximum Tasks Percent..... 10%
Region's Worst Perf. Index..... 0.00%
Worst Region Service Class..... n/a
Current VSAM String Waits..... 0
CICS SYSIDNT..... CB01
SOS..... No
Stg. Violations Last Hour..... 0
Any Current WS Faults..... No
Any Current WS Timeouts..... No
Enqueue Waits..... 0

Tuesday August 26 2014
MOREV

```

Status for OTMA, TMember and TPipe

Status for OTMA, TMember and TPipe

File Edit View Tools Navigate Help 06/10/2015 14:43:11
Auto Update : Off
IMSplex :
IMSid : IB1U

Command ==> KIPOTMS

OTMA and Group Status for IMS IB1U

☒ **OTMA Status** ☐ ☐ ☐ ☐

XCF Group Name.....	IBUGRP	Asynchronous Conversations	0
Member Name.....	IMSB10U	Synchronous Conversations.	0
Status.....	Enabled	Messages Enqueued.....	0
Desired Status.....	Unknown	Base NETID.....	N/A
OTMA MVS/XCF Status.....	Active	Base LName.....	N/A
Shutdown Status.....	N/A	Input Trace.....	Inactive
Input Status.....	Normal	Output Trace.....	Inactive
Output Status.....	Normal	RACF Option.....	None
OTMA Valid.....	Valid	MVSID.....	SP12

☒ **Group Status** ☐ ☐ ☐ ☐

Columns 2 to 7 of 13 Rows 1 to 1 of 1

Group Name	TMember Count	TPipe Count	Enqueue Rate	Dequeue Rate	Queue Count	+Queue Rate
IBUGRP	1	0	0.00	0.00	0	0.00

File Edit View Tools Navigate Help 06/10/2015 14:44:45
Auto Update : Off
IMSplex :
IMSid : IB1U

Command ==> KIPOTMS

OTMA TMember Status for Group IBUGRP

☒ **TMember Status** ☐ ☐ ☐ ☐

Columns 2 to 5 of 13 Rows 1 to 1 of 1

ΔTMember VName	XCF Status	User Status	ΔTIB Used VPercent	ΔTIB VRate
IMSB10U	Active	Server	0.00%	0.00

File Edit View Tools Options Help 06/10/2015 14:44:45
Auto Update : Off
IMSplex : I91C
IMSid : I91C

Command ==> KIPOTMS

TPipe Status for TMember I91C

☒ **TPipe Summary** ☐ ☐ ☐ ☐

Columns 2 to 7 of 14 Rows 1 to 1 of 1

ΔTPipe VName	ΔStopped VStatus	WAITA Status	Flood Status	Queue Rates	Queue Count	Input Count
RSAPPL01	No	No	No	0.00	0	0

IMS Commands

File Edit View Tools Navigate Help 07/13/2015 14:38:52
Auto Update : Off

Command ==> KIPHLTI

Options Menu

Select an option and then press ENTER

1. ! IMS System Tools
2. A Address Spaces
3. B Bottleneck Analysis
4. C Coupling Facility
5. D Dependent Regions
6. I System Information and Resources
7. L Lock Conflicts
8. M Multiple Systems Coupling Facility
9. P All Pools
10. Q Shared Queues
11. R Response Time Analysis
12. S Health Details
13. T DBCTL Thread Summary
14. Z All Monitored Systems (IMON)
15. H History

Columns

IMS ID
IB1F

SBY 1F

_ | 0 | X

1

+Dep Reg

4

File Edit View Tools Navigate Help 07/13/2015 14:39:20
Auto Update : Off

Command ==> KIPHLTI

KIPTOLPU System Tools

Select an option and then press ENTER

1. ! IMS Commands (ICMD)
2. A Application History

Columns

IMS ID	ID	Queue	Count	R0 Time	Waiters	Longest Lock	+Dep Reg
IB1F	SP12	0	0	0.000000	0	0.000s	4

plex : IMSBY
id : IB1F

_ | 0 | X

1 of 1

File
Edit
View
Tools
Navigate
Help

07/14/2015 09:34:14
Auto Update : Off
IMSplex :
IMSid : **IB1U**

Command ==>
KIPCMD **Issue IMS Command**

☒
Enter IMS Command:
==> **/DIS A**

☒
IMS Command Response

←
→
↑
↓

Rows 1 to 23 of 26

+IMS Command Response							Position	1 to 74 of 255
A70	REGID	JOBNAME	TYPE	TRAN/STEP	PROGRAM	STATUS	CLASS.	
A56	12	IMSBUMS7	TP	MPX00050	MPP00050	WAIT-MESSAGE	1.	
A52	10	IMSBUMS6	TP			WAITING	1.	
A56	8	IMSBUMS5	TP	MPX00060	MPP00060	WAIT-MESSAGE	1.	
A52	7	IMSBUMS4	TP			WAITING	1.	
A52	2	IMSBUMS3	TP			WAITING	1.	
A56	6	IMSBUMS2	TP	MPX00110	MPP00110	WAIT-MESSAGE	1.	
A52	1	IMSBUMS1	TP			WAITING	1.	
A53		JMPRGN	JMP	NONE.				
A54		JBPRGN	JBP	NONE.				
A54		BATCHREG	BMP	NONE.				
A00	4	IMSBUEP1	FPM	NO MSG.	DFSIVP4		.	
A00	3	IMSBUEP2	FPM	NO MSG.	DFSIVP5		.	
A00	5	IMSBUEP3	FPM	NO MSG.	DBFSAMP3		.	
A62		DBTRGN	DBT	NONE.				
A00		IMSB10UB	DBRC					
A00		IMSB10UD	DLS					
A50	VTAM	ACB	OPEN	- LOGONS	ENABLED		.	
A66	IMSLU=N/A	N/A		APPC	STATUS=FAILED	TIMEOUT=	0.	
A68	OTMA	GROUP=IBUGRP		STATUS=ACTIVE			.	
A78	APPC/OTMA	SHARED	QUEUE	STATUS	- LOCAL=UNSUPPORTED	GLOBAL=INACTIVE	.	
A79	APPC/OTMA	RRS	MAX TCBS	-	40 ATTACHED TCBS	-	2 QUEUED RRSWKS-	
A65	APPLID=IMSB10U	GRSNAME=			STATUS=DISABLED		.	

BACK
HOME

Tuesday July 14 2015


```

File Edit View Tools Options Help 07/17/2012 02:33:01
Auto Update : Off
Command ==> KIPCMD Issue IMS Command IMSplex : IC1C
IMSid : IC1D

Enter IMS Command:
==> UPDATE TRAN NAME(RJST0006) START(Q,SCHD)

IMS Command Response

+IMS Command Response Position 1 to 74 of 255

UPDATE TRAN NAME(RJST0006) START(Q,SCHD)
IMSID=IC1D
RC=00000000
RSN=00000000
START TIME=2012.199 06:33:00.855879
STOP TIME=2012.199 06:33:01.133603
TRAN(RJST0006) MBR(IC1D ) CC( 0)
    
```

Tuesday July 17 2012



Thank You !!!

<https://www.youtube.com/watch?v=u1z4vkPWkLQ>