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

IMSI 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
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 Icandle
01. April 2004
OMEGAMON XE for IMS v4.1.0
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.


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
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)
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 storage
  - 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
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 SYSpelix 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
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)
  o Use ATF and IMS Performance Analyzer instead to produce charge-back or performance reports (requires APAR PI44855)
  o 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
• KOIGBLxx 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
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
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 only 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)
## Application Trace Facility (ATF)

### IMS ATF Trace Definitions

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### Specify Trace Filters

- **Start Date** (YYYYMMDD): Last nn minutes (1-99)
- **Start Time** (HHMMSS): Last nn hours (1-99)
- **End Date** (YYYYMMDD): Today (Y/N)
- **End Time** (HHMMSS): Yesterday (Y/N)
- **Tran Name**
- **Class**
- **User ID**
- **DBD Name**
- **LTTERM**
- **Exclude (Y/N)**
- **BMP N**
- **MPP N**
- **IFP N**
- **JMP N**
- **JBP N**
- **CIGS N**
- **ODBA N**
- **Elapsed Time Total** (nn.nnnnnn seconds)
- **DLI**
- **CPU Time Total** (nn.nnnnnn seconds)
- **DEP**

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**Tuesday March 24 2015**

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2016 IMS Technical Symposium
## Application Trace Facility (ATF)

### ATM Trace Exceptions

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</tr>
<tr>
<td>15/03/11 09:54:23</td>
<td>PART</td>
<td>DFSSAM02</td>
<td>IMSBU0MS1</td>
<td>C01CK</td>
<td></td>
</tr>
<tr>
<td>15/03/11 09:54:21</td>
<td>PART</td>
<td>DFSSAM02</td>
<td>IMSBU0MS1</td>
<td>C01CK</td>
<td></td>
</tr>
<tr>
<td>15/03/11 09:54:20</td>
<td>PART</td>
<td>DFSSAM02</td>
<td>IMSBU0MS1</td>
<td>C01CK</td>
<td></td>
</tr>
<tr>
<td>15/03/11 09:54:19</td>
<td>PART</td>
<td>DFSSAM02</td>
<td>IMSBU0MS1</td>
<td>C01CK</td>
<td></td>
</tr>
<tr>
<td>15/03/11 09:54:18</td>
<td>PART</td>
<td>DFSSAM02</td>
<td>IMSBU0MS1</td>
<td>C01CK</td>
<td></td>
</tr>
<tr>
<td>15/03/11 09:54:17</td>
<td>PART</td>
<td>DFSSAM02</td>
<td>IMSBU0MS1</td>
<td>C01CK</td>
<td></td>
</tr>
<tr>
<td>15/03/11 09:54:16</td>
<td>PART</td>
<td>DFSSAM02</td>
<td>IMSBU0MS1</td>
<td>C01CK</td>
<td></td>
</tr>
</tbody>
</table>

---

**Tuesday March 24 2015**

---

2016 IMS Technical Symposium
## Application Trace Facility (ATF)

### Transaction Details

<table>
<thead>
<tr>
<th>Tran Name</th>
<th>PART</th>
<th>PSB Name</th>
<th>DFSSAM02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td></td>
<td>Message Source</td>
<td>TERM</td>
</tr>
<tr>
<td>Region Type</td>
<td>MPP(WFI)</td>
<td>Primed Message</td>
<td>Yes</td>
</tr>
<tr>
<td>Region Number</td>
<td>5</td>
<td>Quick Reschedule</td>
<td>No</td>
</tr>
<tr>
<td>Job Name</td>
<td>IMSBUMS1</td>
<td>SPA Size</td>
<td>0B</td>
</tr>
<tr>
<td>Step Name</td>
<td>REGION</td>
<td>Abend Code</td>
<td></td>
</tr>
</tbody>
</table>

### Time Details

<table>
<thead>
<tr>
<th>Start Date</th>
<th>15/03/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start Time</td>
<td>09:54:37</td>
</tr>
<tr>
<td>Elapsed DLI Time</td>
<td>0.000930</td>
</tr>
<tr>
<td>Elapsed DB2 Time</td>
<td>0.000000</td>
</tr>
<tr>
<td>Elapsed MQ Time</td>
<td>0.000000</td>
</tr>
<tr>
<td>Elapsed Time</td>
<td>0.004713</td>
</tr>
<tr>
<td>WFI Time</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

### CPU Time Details

| CPU CTL Time | 0.000000 |
| CPU DLI Time | 0.000036 |
| CPU DB2 Time | 0.000000 |
| CPU MQ Time | 0.000000 |
| CPU DLS Time | 0.000000 |

### Event Summary

<table>
<thead>
<tr>
<th>Event Description</th>
<th>Event Type</th>
<th>ΔCount</th>
<th>ΔTotal ΔDuration</th>
<th>ΔAvg ΔDuration</th>
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</thead>
<tbody>
<tr>
<td>DLI TM</td>
<td>INQY</td>
<td>1</td>
<td>0.000002</td>
<td>0.000002</td>
</tr>
<tr>
<td>DLI TM</td>
<td>GU</td>
<td>1</td>
<td>0.000049</td>
<td>0.000049</td>
</tr>
<tr>
<td>DLI DB</td>
<td>GN</td>
<td>1</td>
<td>0.000005</td>
<td>0.000005</td>
</tr>
<tr>
<td>DLI TM</td>
<td>ISRT</td>
<td>4</td>
<td>0.000010</td>
<td>0.000002</td>
</tr>
<tr>
<td>DLI DB</td>
<td>STAI</td>
<td>3</td>
<td>0.000006</td>
<td>0.000002</td>
</tr>
<tr>
<td>DLI TM</td>
<td>ASRT</td>
<td>1</td>
<td>0.000000</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

---

2016 IMS Technical Symposium
Near Term History (NTF)
### Near Term History (NTH)

**Command: KOBHISTB**

**Hub Name:** CJD536:CMS

**Application:** OMEGAMON XE for IMS on z/OS

**Historical tables**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Collection Name</th>
<th>Interval</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMS Health</td>
<td>HealthP</td>
<td>1 Min</td>
<td>Active</td>
</tr>
<tr>
<td>IMS Health</td>
<td>HealthI</td>
<td>1 Min</td>
<td>Active</td>
</tr>
</tbody>
</table>

- IMS Lock Conflicts
- IMS Local Lock Conflicts
- SharedQueues Transaction Summary
- SharedQueues LTERM Summary
- SharedQueues FP Program Summary
- SharedQueues APPC LUname Summary
- SharedQueues APPC TPname Summary
- SharedQueues OTMA Tmember Summary
- 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 Status
- OTMA Status
### Near Term History (NTH)

#### Historical Summary

**Selected item ICIC**

<table>
<thead>
<tr>
<th>Recording Time</th>
<th>IMS ID</th>
<th>MVS ID</th>
<th>Tran Queue</th>
<th>Affinity Count</th>
<th>Highest RO Time</th>
<th>Lock Waiters</th>
<th>Longest Lock</th>
<th>Dep Regions</th>
<th>CPU Percent</th>
<th>I/O Rate</th>
<th>Paging Rate</th>
<th>ENQ Rate</th>
<th>DEQ Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:10:00</td>
<td>ICIC</td>
<td>SYS</td>
<td>0</td>
<td>0</td>
<td>0.000000</td>
<td>0</td>
<td>0.000000</td>
<td>6</td>
<td>0.05%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>15:15:00</td>
<td>ICIC</td>
<td>SYS</td>
<td>0</td>
<td>0</td>
<td>0.000000</td>
<td>0</td>
<td>0.000000</td>
<td>6</td>
<td>0.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>15:20:00</td>
<td>ICIC</td>
<td>SYS</td>
<td>0</td>
<td>0</td>
<td>0.000000</td>
<td>0</td>
<td>0.000000</td>
<td>6</td>
<td>0.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>15:25:00</td>
<td>ICIC</td>
<td>SYS</td>
<td>0</td>
<td>0</td>
<td>0.000000</td>
<td>0</td>
<td>0.000000</td>
<td>6</td>
<td>0.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

---

2016 IMS Technical Symposium
Near Term History (NTH)

IMS System Information

<table>
<thead>
<tr>
<th>IMS ID</th>
<th>ICIC</th>
<th>Dependent Region</th>
<th>Sysplex Name</th>
<th>Sysplex Identifier</th>
</tr>
</thead>
</table>

IMS Lock Status

<table>
<thead>
<tr>
<th>Lock Waiters</th>
<th>Locks Held</th>
<th>Longest Lock</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0.000s</td>
</tr>
</tbody>
</table>

IMS Resource Usage

<table>
<thead>
<tr>
<th>Control CPU Percent</th>
<th>Total CPU Time</th>
<th>Dependent I/O Rate</th>
<th>Control I/O Rate</th>
<th>Dependent CPU Percent</th>
<th>Total I/O Rate</th>
<th>Dependent Paging Rate</th>
<th>Total Paging Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

IMS Transaction Queue Rates/Depth and Response Time

<table>
<thead>
<tr>
<th>FF ENQ Rate</th>
<th>FF DEQ Rate</th>
<th>BALO ENQ Rate</th>
<th>BALO DEQ Rate</th>
<th>FF Transaction Queue Depth</th>
<th>Total Transaction Queue Depth</th>
<th>Highest RB Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Display: 15:15  +  15:20
Bottleck Analysis
## Bottleneck Analysis

### IMS Time vs. Application Time
- Using CPU in IMS: 12.7%
- Using CPU in Appl: 46.9%
- All Using CPU: 59.6%

### Scheduling Wait Time
- Wait for QU: 14.7%
- Wait for Resched: 16.4%
- Wait for MPP: 0.1%

### Waiting for I/O
- Application I/O: 1.2%
- BDL I/O: 1.8%
- Program Fetch I/O: 0.6%
- CPU Wait (DEP): 4.8%

See where your transactions are having the largest percentage wait times.
DBCTL Thread Details and Wait Statistics
# DBCTL Threads Details and Wait Statistics

**DBCTL Thread Summary for IMS IA1P**

<table>
<thead>
<tr>
<th>Column</th>
<th>ACCTL</th>
<th>ACICS</th>
<th>AUOW</th>
<th>AUOW</th>
<th>Active Threads</th>
<th>Avail Threads</th>
<th>+Unava Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>VID</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Jobname</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>CICS22RS</td>
<td>CICS22RS</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td>1</td>
<td>19</td>
<td>0</td>
</tr>
</tbody>
</table>

**DBCTL Thread Activity for CCTL ID CICS22RS**

<table>
<thead>
<tr>
<th>Region ID</th>
<th>PSB Name</th>
<th>Active, Available, and Unavailable Threads</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DFHSAM05</td>
<td>Idle</td>
</tr>
<tr>
<td>130</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>141</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>143</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>137</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>127</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>8</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>129</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>134</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>140</td>
<td>N/A</td>
<td>Idle</td>
</tr>
<tr>
<td>195</td>
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<td>Idle</td>
</tr>
<tr>
<td>138</td>
<td>N/A</td>
<td>Idle</td>
</tr>
</tbody>
</table>

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

---

2016 IMS Technical Symposium
Response Time Analysis (RTA)
## Response Time Analysis (RTA)

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

Identify high queue counts

2016 IMS Technical Symposium
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
Global Lock Details and Embedded CICS Details
IMS Global Locks Details with Embedded CICS Details
Status for OTMA, TMember and TPipe
### Status for OTMA, TMember and TPipe

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

**Group Status**
- **Group Name:** IBUGRP
- **TMember Count:** 1
- **TPipe Count:** 0
- **Enqueue Rate:** 0.00
- **Dequeue Rate:** 0.00
- **Queue Count:** 0
- **+Queue Rate:** 0.00

**TMember Status**
- **TMember Name:** IMSB10U
- **XCF Status:** Active
- **User Status:** Server
- **ATIB Used VPercent:** 0.00%
- **ATIB VRate:** 0.00

**TPipe Status**
- **TPipe Name:** RSAPP0L01
- **Stopped VStatus:** No
- **WAITA Status:** No
- **Flood Status:** No
- **Queue Rates:** 0.00
- **Queue Count:** 0
- **Input Count:** 0

---

2016 IMS Technical Symposium
IMS Commands
IMS Command Type-1 and Type-2

Options Menu
Select an option and then press ENTER

1. IMS System Tools
   1. IMS Commands (ICMD)
   2. Application History

Command ==> KIPHTLI

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

IMS
  ID : IB1F

Columns

1 of 1

Aapplication History

Command ==> KIPHTLI

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

directory : IMSBY

Command ==> KIPHTLI

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

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

Command ==> KIPHTLI
**IMS Command Type-1 (Output)**

**IMS Command Response**

<table>
<thead>
<tr>
<th>IMS Command Response</th>
<th>Rows 1 to 23 of 26</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A70</strong> REGID JODNAME TYPE TRAN/STEP PROGRAM STATUS CLASS.</td>
<td></td>
</tr>
<tr>
<td>A55 12 IMSBUMS7 TP MPX00050 MPP00050 WAIT-MESSAGE 1.</td>
<td></td>
</tr>
<tr>
<td>A52 10 IMSBUMS6 TP MPX00050 MPP00050 WAITING 1.</td>
<td></td>
</tr>
<tr>
<td>A56 8 IMSBUMS5 TP MPX00060 MPP00060 WAIT-MESSAGE 1.</td>
<td></td>
</tr>
<tr>
<td>A52 7 IMSBUMS4 TP MPX00060 MPP00060 WAITING 1.</td>
<td></td>
</tr>
<tr>
<td>A52 2 IMSBUMS3 TP MPX00110 MPP00110 WAIT-MESSAGE 1.</td>
<td></td>
</tr>
<tr>
<td>A52 1 IMSBUMS1 TP MPX00110 MPP00110 WAITING 1.</td>
<td></td>
</tr>
<tr>
<td>A53 JMIRON JMP NONE.</td>
<td></td>
</tr>
<tr>
<td>A54 JBPGRN JBP NONE.</td>
<td></td>
</tr>
<tr>
<td>A54 BATCHREG BMP NONE.</td>
<td></td>
</tr>
<tr>
<td>A00 4 IMSBUFFP1 FPM NO MSG. DFSIVP2</td>
<td></td>
</tr>
<tr>
<td>A00 3 IMSBUFFP2 FPM NO MSG. DFSIVP5</td>
<td></td>
</tr>
<tr>
<td>A00 5 IMSBUFFP3 FPM NO MSG. DBFSAMP3</td>
<td></td>
</tr>
<tr>
<td>A62 DBTRON DBT NONE.</td>
<td></td>
</tr>
<tr>
<td>A00 IMSBI0UB DBRC</td>
<td></td>
</tr>
<tr>
<td>A00 IMSBI0UD DLS -LOGCONS ENABLED</td>
<td></td>
</tr>
<tr>
<td>A65 IMSLU=N/A.N/A APPC STATUS=FAILED TIMEOUT=0</td>
<td></td>
</tr>
<tr>
<td>A65 OTMA GROUP=ISUGRP STATUS=ACTIVE</td>
<td></td>
</tr>
<tr>
<td>A78 APPC/OTMA SHARED QUEUE STATUS LOCAL=UNSUPPORTED GLOBAL=INACTIVE</td>
<td></td>
</tr>
<tr>
<td>A79 APPC/OTMA RRS MAX TCBS 40 ATTACHED TCBS 2 QUEUED RRSWKS-</td>
<td></td>
</tr>
<tr>
<td>A65 APPLID=IMSBI0U GRNAME= STATUS=DISABLED</td>
<td></td>
</tr>
</tbody>
</table>

**Command ==>|**

Enter IMS Command: **/DIS &**
IMS Command Type-2 (Output)

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)
```
Thank You !!!

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