



Welcome to the Virtual IMS user group newsletter. The Virtual IMS user group at www.fundi.com/virtualims is an independently-operated vendor-neutral site run by and for the IMS user community.

Virtual IMS user group presentation

The latest webinar from the Virtual IMS user group was entitled, "Rethink The Way You Manage IMS". It was presented by Rosemary Galvan, IMS Tools Solution Advisor at Rocket Software.

Rosemary is an IMS Tools Solution Advisor for Rocket Software. Rosemary has worked with IMS for over 30 years. Prior to joining Rocket Software, she spent 20 years as an IMS software consultant and an additional 15 years as an IMS DBA for several Fortune 500 companies.

Rosemary Galvan started her presentation by suggesting that often processes and procedures are in place but are no longer efficient. They remain in place for fear of

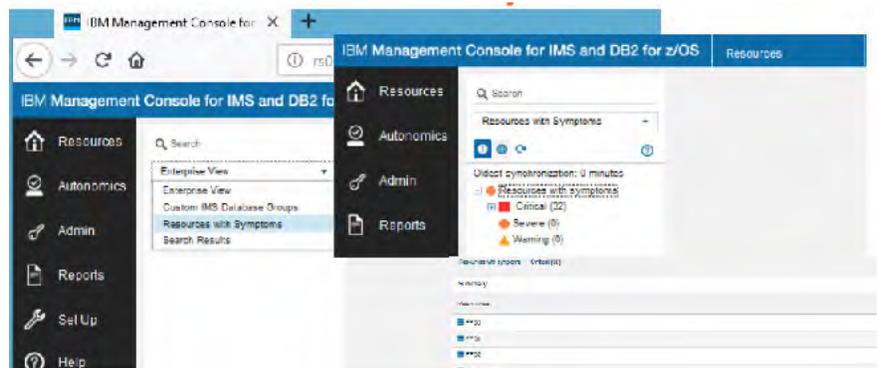


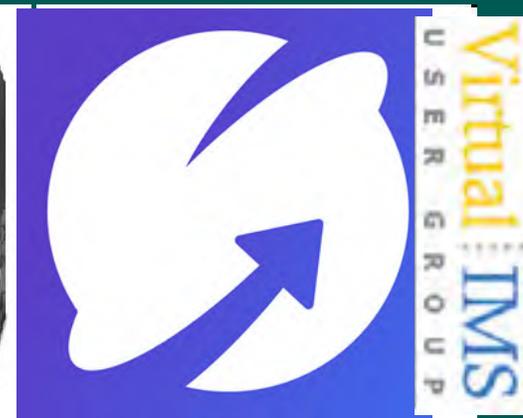
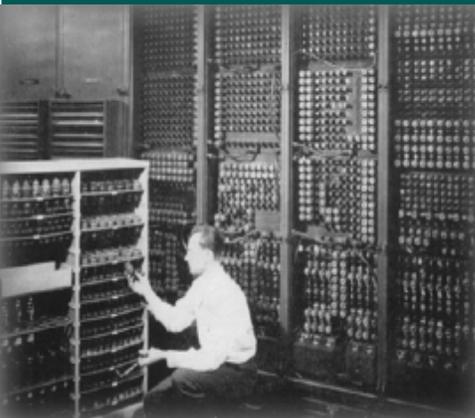
Figure 1: A quick view of an IMS database environment

disruption even when better ways exist. In today's modern world though, savings and ROI are critical, eg saving CPU, MIPs, time and effort, and money.

Figure 1 shows a quick view of what an IMS database environment might look like. When determining the health of a database, you need to collect statistical data.

Contents:

Virtual IMS user group presentation	1
Meeting dates	4
Recent IMS articles	4
Arcati Mainframe Yearbook	5
About the Virtual IMS user group	5



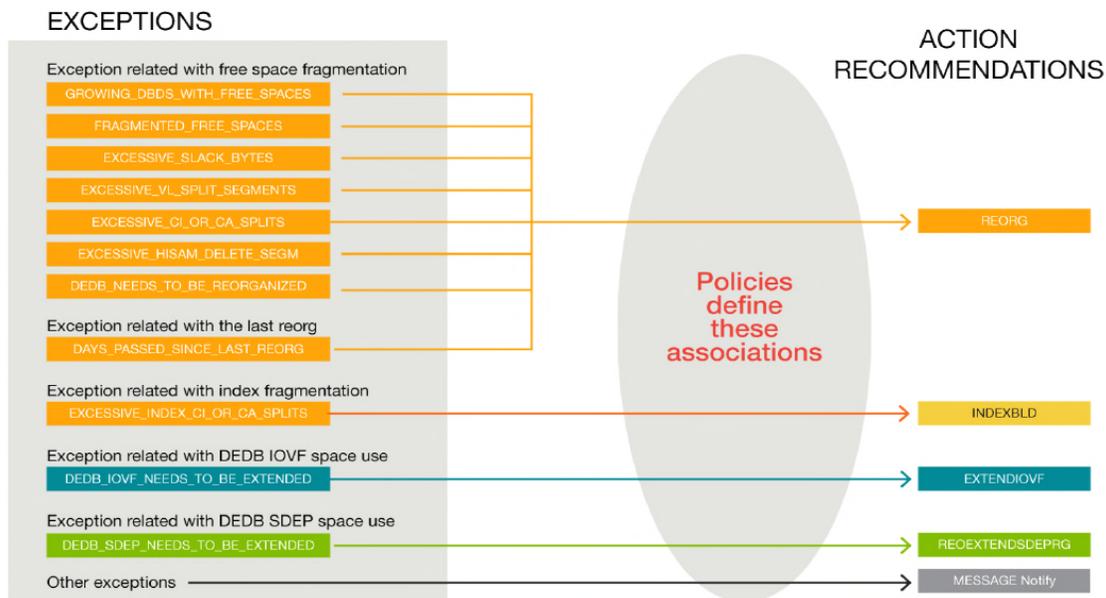


Figure 2: Exception-to-Action recommendations for REORG

There's lots of statistical data generated from utility executions. And there's a movement from manual collection and analysis of data to automation. This is because the time and effort to support internally-developed procedures is no longer cost effective; and sites can utilize that expertise elsewhere.

If you are going to automate the collection of statistical data, you need to implement automatic database sensor collection in regularly executed utilities such as IMS High Performance Image Copy, IMS High Performance Pointer Checker, IMS Database Reorganization Expert, and IMS High Performance Fast Path Utilities. You can then automatically analyze

collected data to proactively identify database exceptions.

Additional sensor data collection options include: on-demand collection/evaluation for immediate issues, eg "I have a problem and need the information now!"; and scheduled data sensor collection/evaluation, which provides a scheduling feature that allows you to control how frequently sensor data is collected and how frequently policies are evaluated. There's also flexible scheduling around peak workloads so it doesn't interfere with production throughput or response, and uses the product scheduler or an external scheduler.

Automatic analysis and evaluation of database health is based on user-defined

policies and thresholds. You can get e-mail or text notification when a database is in exception. This alerts the DBA to consider taking action. Customized notification means you can be alerted about all exceptions or just selected exceptions. There are also recommendations for reorganization that are easy to understand: simple 'yes' or 'no'. You can automate ongoing database monitoring and maintenance tasks based on a detailed understanding of the current state of your IMS databases.

There are IBM-provided default REORG policies.

Figure 2 shows an Exception-to-Action recommendation for REORG.

Job Name	Product	Request Name	Job Name	Job Number	Job Class	Job Type	Job Status	Job Date	Job Time	Job User	Job Group	Job Priority	Job Step	Job Step Name	Job Step Number	Job Step Date	Job Step Time	Job Step User	Job Step Group	Job Step Priority	Job Step Status	
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2G	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2Y	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2X	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2Z	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	HA30	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	HA3C	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2G	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2Y	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2X	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2Z	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	HA30	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	HA3C	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2G	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2Y	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2X	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	FF2Z	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	HA30	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
BAKPC	HPIC	C:\KMS\ASSTMENTS	HA3C	*	BAKPC			Tue Oct 28 10:00:00	10:00:00	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

```

SDSF JOB DATA SET DISPLAY - JOB IC00 (JOB02298) LINE 1-7 (7)
COMMAND INPUT ==>
JOB  IC00  JES2  2  TSRRG  X LOCAL  30
JES2CL  JES2  3  TSRRG  X LOCAL  271
JES2MSG JES2  4  TSRRG  X LOCAL  339
ICEPRINT HPIC  STEP1 103 TSRRG  X LOCAL  218
DFSPRINT HPIC  STEP1 114 TSRRG  X LOCAL  56
ICEPRINT HPICFP STEP1 115 TSRRG  X LOCAL  220
DFSPRINT HPICFP STEP1 126 TSRRG  X LOCAL  13
  
```

Figure 3: Different ways to view the same results

Database reorganization techniques include:

- Traditional or classic database reorganization, which is multi-step offline.
- Shift to online-reorganization, which provides increased availability and is regularly scheduled. Multi-tasking creates batch image copies and creates an external unload file for download processing.

Regularly scheduled online reorgs don't impact availability but waste resources if unneeded.

Conditional reorganization is one solution. Reorgs only run when needed. An integrated sensor collects data, which is evaluated against policies. Existing job schedules are

maintained and so a Reorg is submitted but only executes the reorganization if needed.

Online Reorg control statements allow users to still create a weekly image copy and/or an unload file for downward processing, if that's required.

When deciding whether to Reorg or not to Reorg, Active Autonomics can help. If a database exception is detected that can be resolved through reorganization, it will automatically submit the reorganization job. Passive Autonomics will tell someone if something is wrong and let the DBA resolve it. Active Autonomics will take action to resolve the problem automatically. It will submit a reorg job only during a specified maintenance window.

The IMS Administration Tool can generate task-based, error-free utility JCL for maintenance tasks. It can set up profiles, eg job profiles, object profiles, and utility profiles.

When it comes to viewing exceptions, statistical data, and utility reports, you can use the standard ISPF interface or a GUI interface. Figure 4 shows how they compare.

The IBM Management Console for IMS and DB2 provides a holistic view of your IMS databases from a single, easy-to-use Web interface (see Figure 4). All functions of the new IMS Administration Tool are available through the Management Console. Dynamic, interactive graphs

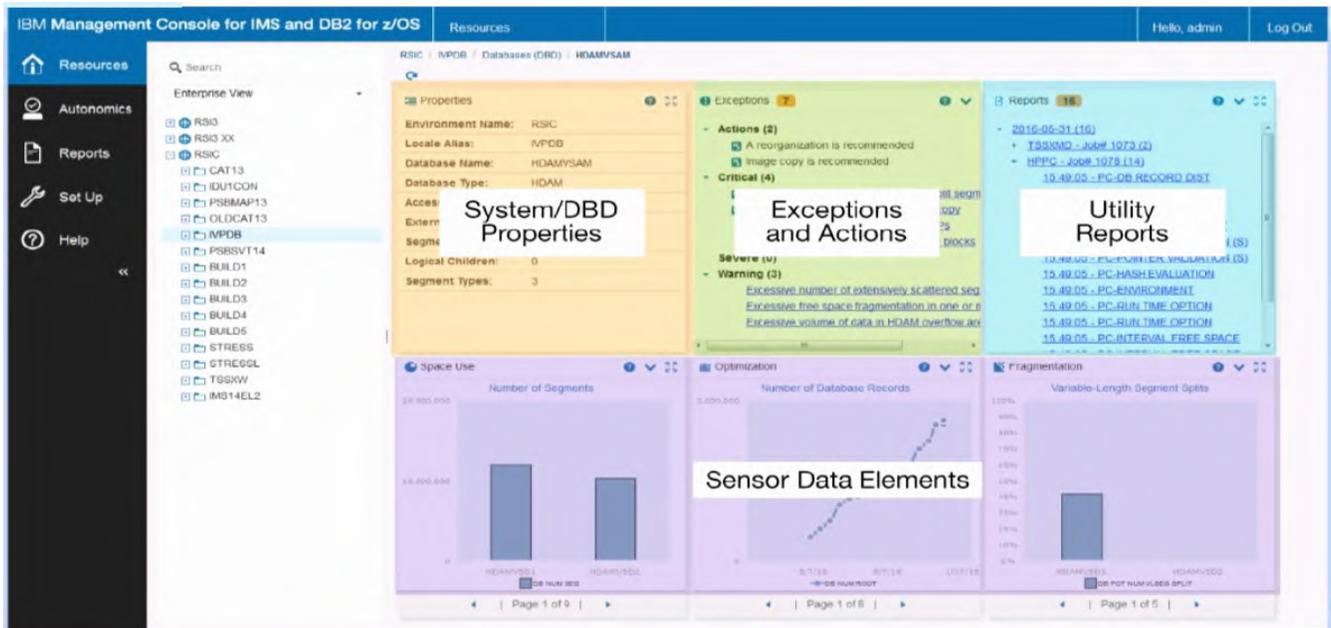


Figure 4: Resources via the Web

and charts provide a visual representation of sensor data. Integration with the Autonomics engine provides a list of policy exceptions and recommended resolutions for all of your monitored databases. All IMS Tools reports stored in the IMS Tools Knowledge Base can be searched, retrieved, and viewed. And it makes life easier for the next generation of IMS DBAs.

A copy of Rosemary Galvan's presentation is available for download from the Virtual IMS user group Web site at www.fundi.com/virtualims/presentations/IMSManageOct18.pdf.

You can see and hear the whole user group meeting

by downloading the WMV file from <https://youtu.be/hVn2ZvH8vB0>.

Meeting dates

- On 4 December 2018, Dennis Eichelberger, IT Specialist, IMS Support - Washington Systems Center, IBM, will be discussing "Pervasive Encryption and IMS".
- The following meeting will be on 5 February next year when Kevin Hite, Senior Technical Staff Member (STSM) - IMS Architect at IBM will be looking at "IMS ODB".

Recent IMS articles

Modernize in the IMS Makerspace! by Shannon Farrington on z Systems Developer Community (16 October 2018). You can find the article at <https://developer.ibm.com/zsystems/2018/10/16/modernize-ims-makerspace/>

What's New in IMS OTMA for Mobile Transactions by Rita Shih, Swetha Sridharan, and Jack Yuan in *IBM Systems Magazine* (October 2018). You can find the article at <http://ibmsystemsmag.com/mainframe/trends/whatsnew/ims-otma-for-mobile-transactions/>

What happens when you mix IMS and z/OS Connect

Enterprise Edition? by Jasdeep Singh on z Systems Developer Community (10 October 2018). You can find the article at <https://developer.ibm.com/zsystems/2018/10/10/3793/>

Machine Learning with IMS Data by Akash Shah on z Systems Developer Community (21 September 2018). You can find the article at <https://developer.ibm.com/zsystems/2018/09/25/machine-learning-ims-data/>

DevOps and IMS: The Journey Continues by Haley Fung on z Systems Developer Community (13 September 2018). You can find the article at <https://developer.ibm.com/zsystems/2018/09/13/devops-ims-journey-continues/>

Arcati Mainframe Yearbook

How do you know what's really going on at other mainframe sites?

As a member of the Virtual IMS user group, I thought you would be interested in the Arcati Mainframe Yearbook. Each year, it publishes a mainframe users' survey. And you can be part of that survey to tell us your opinion.

If you're prepared to give up 10 minutes of your time to complete a survey form, we will send you a free copy of the survey results when they are published in January. Your identity and company information will be treated in confidence and will not be divulged to third parties.

The annual mainframe user survey form can be found at <https://itech-ed.com/AMY19/usersurvey19/>. Tell us what it's like where you work.

About the Virtual IMS user group

The Virtual IMS user group was established as a way for individuals using IBM's IMS hierarchical database and transaction processing systems to exchange information, learn new techniques, and advance their skills with the product

The Web site at www.fundi.com/virtualims provides a central point for coordinating periodic meetings (which contain technically-oriented topics presented in a webinar format), and provides articles, discussions, links, and other resources of interest to IBM IMS practitioners. Anyone with an interest in IMS is welcome to join the Virtual IMS user group and share in the knowledge exchange.

To share ideas, and for further information, contact trevor@itech-ed.com.

The Virtual IMS user group is free to its members.



Like
us on
Facebook

#VirtualIMS