



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, "Adding additional IMS Test Environments with COPE". It was presented by Thomas Esser, EMEA IMS Specialist at Compuware Software Group.

Thomas Esser has specialized in IMS and IMS Tools over the past 28 years both as an IMS customer as well as within Compuware, IBM, and BMC Software. Thomas is a regular presenter at GSE and University/High school particularly focusing on new IMS and IMS Tools features and their implementation.

Thomas Esser started by explaining that COPE provides IMS virtualization for rapid deployment and

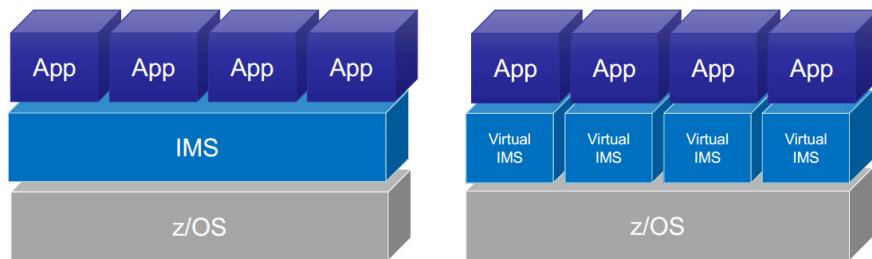


Figure 1: Multiple versions of IMS programs in a single physical IMS subsystem

system simplification. He then looked at Compuware's own DevOps story.

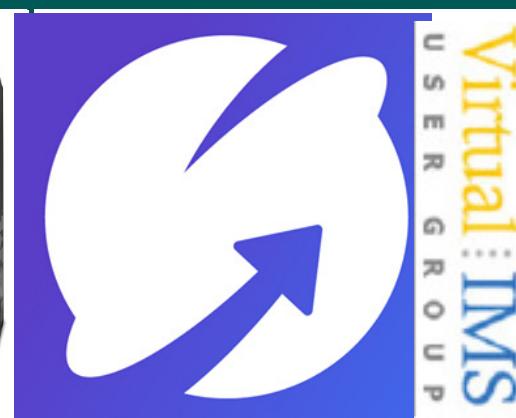
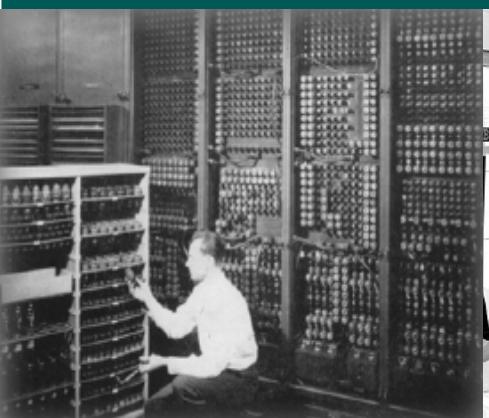
Thomas stressed how important it is for an organization to master mobility, analytics, social, and cloud.

IMS virtualization is the ability to execute multiple versions of IMS and DB2 programs within a single physical IMS subsystem (see Figure 1).

Thomas Esser then explained how COPE works, saying that COPE contains two portions:

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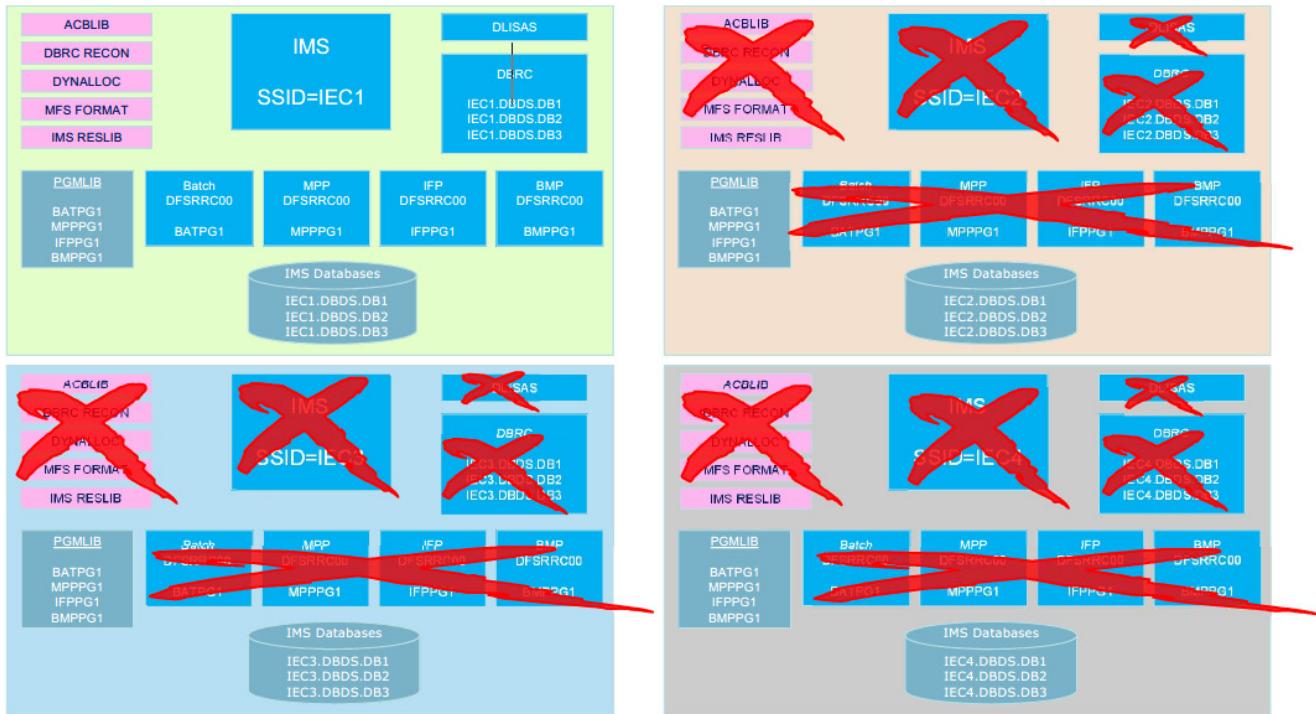


Figure 2: Four IMS environments with COPE

- A portion that operates under ISPF
- A portion that executes in an IMS MPP (Message Processing Program) region.

The ISPF portion generates the system run by the IMS portion. It assigns a unique internal name to each PSB, DBD, and MFS block, in the form Cnnnnnnn (where 'n' is a number), called a "C-number".

Each of the systems that are combined into one physical IMS system will have components with different C-numbers from the components in other systems. The ISPF-generator

portion of COPE parses information from DBD sources, PSB sources, and MFS sources into ISPF tables, and then regenerates the source with the C-numbers substituted.

The IMS portion of COPE translates the C-numbers back to real names when IMS invokes the application program, and translates the real numbers to Cnumbers when the application program calls IMS via CBLTDLI.

Thomas suggested that the benefits of IMS virtualization with COPE were:

- Reduction in the expertise and time to maintain IMS application systems.

- Creation of multiple virtual environments within one IMS physical system for different phases of application development or different versions of IMS applications and databases, allowing application developers and testers to work independently in their own IMS.
- Creation of 'disabled' virtual environments that are readily available for critical initiatives.
- Reduction in CPU resource utilization by eliminating IMS address spaces.
- Provision of full IMS

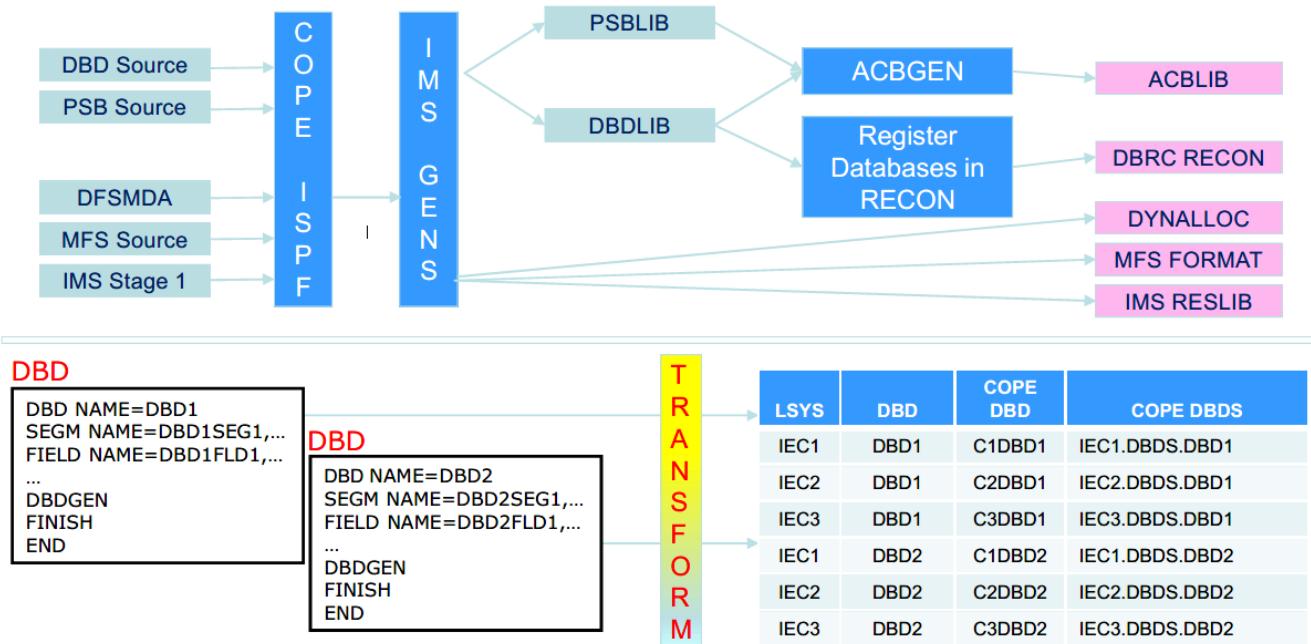


Figure 3: Transforming IMS into a COPE virtualized environment

functional capabilities because it's not a simulator, emulator, or system replicator.

Running multiple IMS environments for test requires lots of setting up, whereas with COPE this isn't the case (see Figure 2).

Thomas described how to set up the COPE environment and the creation of Cnumbers (see Figure 3).

In terms of IMS Connect, IMS supports Distributed Relational Database (DRDA) via Open Database Manager (ODBM). COPE uses CSL ODBM Input User Exit Routine to intercept ACCRDB DDM commands and translate PSBNAME to a value dependent on

the Data Store name in the same ACCRDB command. Transactions inserted to IMS Message Queue are processed normally (it does require users to be connected to a logical system).

Thomas suggested setting up a COPE environment would typically take 3-5 weeks.

Thomas went on to describe how a transaction executes in COPE.

COPE integrates with other Compuware products and appropriate IBM ones.

Thomas then discussed the benefits of using COPE and the overheads.

In summary, Thomas Esser said that COPE supports rapid deployment with virtual IMS systems. It reduces CPU usage by eliminating IMS address spaces. It supports program and database versioning, and it does not require any application changes.

A copy of Thomas Esser's presentation is available for download from the Virtual IMS user group Web site at www.fundi.com/virtualims/presentations/COPEApr18.pdf.

You can see and hear the whole user group meeting by downloading the mp4 file from www.fundi.com/virtualims/

presentations/2018-04-10meeting.mp4.

Meeting dates

- On 12 June 2018, IBM will be discussing, “Enterprise Architecture + IMS – what enterprise clients need to know about Digital Transformation, how IBM and IBM Z are addressing this important task, and what it means specifically to IMS.”
- The following meeting will be on 14 August 2018, when Fundi Software will be looking at IMS Systems configurations using the IMS Configuration Manager.

Recent IMS articles

We've updated our *Continuous Delivery* FAQS by Carol Degrace on z Systems Developer

Community (19 March 2018). You can find the article at <https://developer.ibm.com/zsystems/2018/03/19/weve-updated-continuous-delivery-faqs/>.

Sponsorship opportunity

Are you missing a great opportunity to advertise your IMS software?

The Virtual IMS user group is now offering software vendors the opportunity to advertise their products in a number of ways. You could have an advert on the home page of the Web site (at www.fundi.com/virtualims), you could advertise in the newsletter, and/or you could advertise in the monthly e-mails sent to members of the user group.

E-mail trevor@itech-ed.com for full information about marketing opportunities with the Virtual IMS user group.

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.



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