



Welcome to the Virtual IMS user group newsletter. The Virtual IMS user group at [www.fundi.com/virtualims](http://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, "Thinking the unthinkable – how do I retire redundant IMS applications?", and was presented by John Boyle, Technical Architect at Informatica Software.

John has worked in the industry since 1976, when he graduated from Glasgow University with a degree in Computer Science. During this time he has worked in the manufacturing, banking, and insurance sectors, as an IMS and DB2 DBA, and on Performance and Storage Management. He spent fifteen years at BMC Software, providing specialist advice on their extensive range of Database Tools. For the last eleven



OR

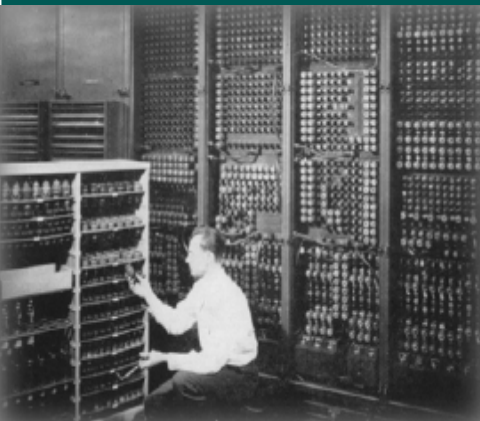


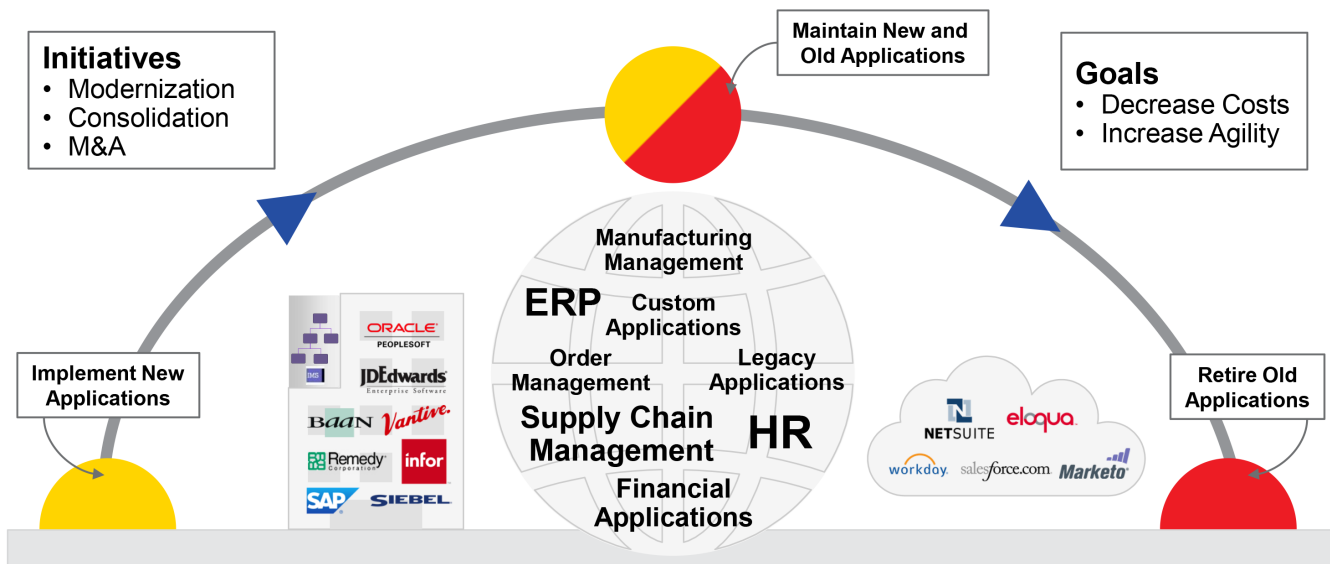
Figure 1: Something to consider

years he has worked for Informatica Software as a Technical Architect focusing on all mainframe related components of their Data Integration Solution Set. This includes Mainframe Data Connectivity for bulk access and changed data capture, Data Archiving, and Test Data Management. He has been a regular attendee at

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**Figure 2: The application life-cycle**

the UK GSE IMS and DB2 working groups for many years, and more recently the z/Linux Working Group, and has presented at UK GSE, and UK CMG conferences on a variety of Database and Performance-related topics.

John started his presentation by asking why you might want to retire IMS applications (see Figure 1). He explained that he wasn't picking on IMS applications, and the same applies to any application that has been superseded by a new application, but is still being maintained to provide read-only access to the data.

John Boyle reminded us that application landscapes are changing at a rapid pace and we need to plan for it. The life-cycle of an application is illustrated in Figure 2.

He went on to look at the

costs associated with IMS applications, saying that they included software licences, maintenance fees, hardware, subject matter expertise, and poor utilization of expensive resources. In addition, they can be expensive to maintain, and the skill set needed for maintenance can be scarce.

The key requirements before you retire your application are:

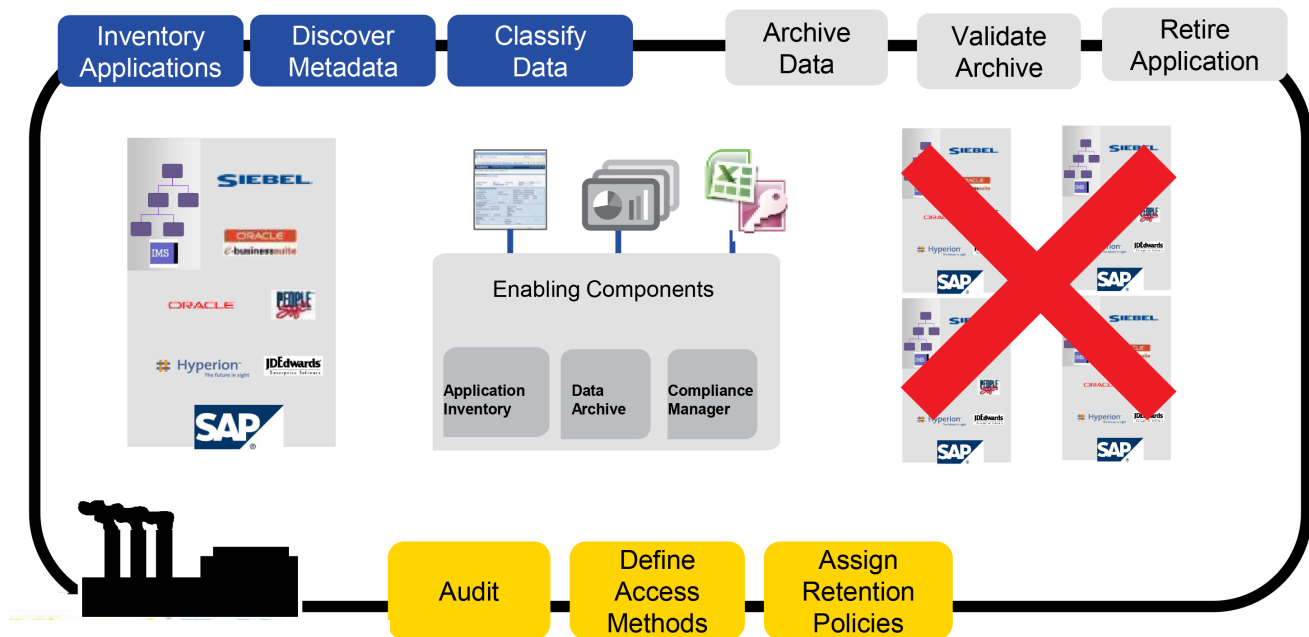
- Full data and metadata discovery
- Efficient and effective data compression
- Complete data independence from source application software and hardware
- SQL query access
- Integrated retention management

- Data validation.

John came up with the idea of an application retirement factory that could take your legacy applications and produce a modern data centre. It's function would be to inventory and classify, archive and retire, and manage access and retention. Figure 3 illustrates smart application retirement.

The benefits of comprehensive connectivity and application discovery are:

- Single solution to connect and retire a wide variety of applications, technologies, and platforms
- Packaged application metadata templates and accelerators
- Integrated metadata discovery for unknown



**Figure 3: Smart application retirement**

applications and data models.

John informed the group that after ‘retirement’ most solutions will involve accessing the retired data using SQL, and that SQL-based access is less tolerant of ‘dirty data’ than mainframe programs. He suggested that the analysis of the data quality before retirement helps to pre-empt access issues later. Good questions to ask might include:

- Does every policy have a valid start date and an end date?
- Do we have packed decimal fields containing spaces?

Profiling the data before retirement can pay dividends. Cleansing the data before

retirement is even better, even if it’s just replacing missing dates with a valid date etc.

John stressed the need for data validation, saying you must always check before you delete! If we need to keep the data, we need all of it, and it needs to be the same data, or does it? What is ‘the same data’? Do we mean bit for bit and byte for byte? No because it might be stored in a different encoding. And you don’t need to archive the pointers. There should be the same number of records and the same ‘linkages’ between records. And you must be able to access all the payments for a policy. And do all the payments for a policy add up to the same total as in IMS? And there

are a thousand similar cross checks to perform.

Automated validation is essential. You need to be able to define the validation checks that need to be performed. This will need knowledge of the data being retired, and the applications using it. Don’t wait until the people with this knowledge have retired. Build the validation processes and execute. This could take days depending on the volume of data and complexity. Then check the results. There will be ‘differences’, but do they matter?

The benefits to retaining appropriate user access levels to archived data include:



**Figure 4: providing access to retired data**

- Increased user adoption and acceptance
- Lower costs by leveraging existing technology, resources, and skills
- Simplifies ongoing maintenance through consolidation and centralized management
- Integrated security ensures appropriate levels of access to archive data.

Figure 4 illustrates different users' views on data access after an application has been retired.

The benefits to integrated retention management listed by John were:

- Minimize manual audit reporting

- Lower capex/opex costs by eliminating the need to purchase a separate tool for retention management and key-word search
- Minimizes risk of retaining data longer than necessary
- Simplifies ongoing enforcement of data retention policies, including legal holds.

IMS application retirement with Informatica has the following steps:

- Import IMS metadata – import IMS DBD source and segment layouts for IMS databases.
- Profile the data – using the IMS metadata created in Step 1, scan the IMS

databases to find out what's actually in there. Optionally, address data quality issues that could compromise the usability of the archived data

- Import IMS metadata into Workbench and create Retirement Project to read IMS data and load into Archive Store
- Execute the Retirement Project
- Validate that the data is successfully archived
- Create required reports for end user access to archived data
- Turn off the IMS applications (and see who shouts!)
- Remove the databases,

programs, and transactions from IMSGEN

- Delete the Databases and all the Image Copies

John Boyle then showed the user group how the Informatica tools worked. A copy of John's presentation is available for download from the Virtual IMS user group Web site at [www.fundi.com/virtualims/presentations/RetireappsDec15.pdf](http://www.fundi.com/virtualims/presentations/RetireappsDec15.pdf).

You can see and hear the whole user group meeting by downloading the WMV file from [www.fundi.com/virtualims/presentations/2015-12-01meeting.wmv](http://www.fundi.com/virtualims/presentations/2015-12-01meeting.wmv).

### Meeting dates

- On 9 February 2016, we have Dusty Rivers, Principle Technical Architect at GT Software, explaining "Why IMS still matters".

- The following meeting will be on 12 April 2016

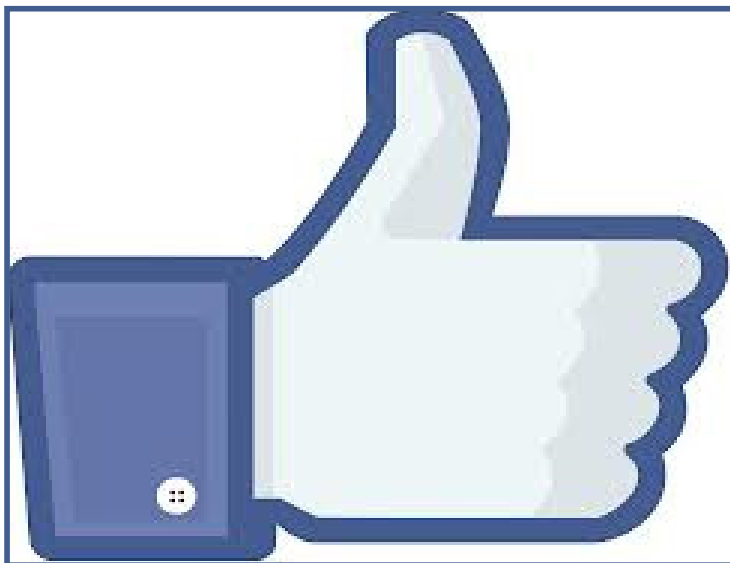
### Recent IMS articles

*Using IMS 14 Transaction Manager:* by Jack Yuan and Yee-Rong Lai in *IBM Systems Magazine* (November 2015). You can find the article at <http://www.ibmssystemsmag.com/mainframe/administrator/ims/transaction-manager-14/>

*Evolution of IMS to a complete Enterprise solution:* White Paper by Vinodh Kumar Natanasigamani. You can find this White Paper on the Virtual IMS user group Web site at <http://www.fundi.com/virtualims/doc/IMSEnterprisesolutionwp.pdf>.

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### 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](http://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](mailto:trevor@itech-ed.com).

The Virtual IMS user group is free to its members.