Virtual IMS user group: Newsletter 59

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, “General Data Protection Regulation – What it Means for IMS Recovery”. It was presented by David Schipper, lead product manager at BMC Software.

David Schipper is a lead product manager at BMC Software responsible for BMC Database Solutions for IMS. As product manager, David works with customers to understand their needs and uses that information to set product directions and prioritize new product capabilities as he interfaces with the development teams. David has over 30 years of experience with mainframe systems and has been in product management for over 20 years.

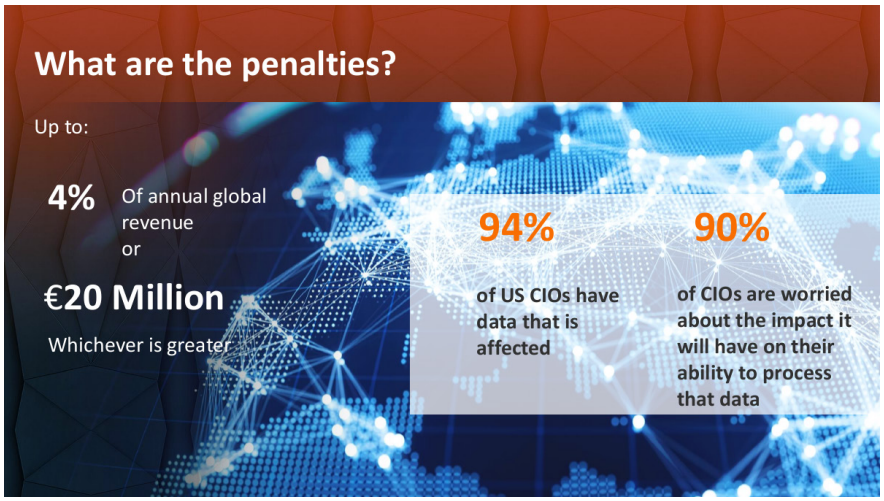

Figure 1: Penalties

David started with the big question: GDPR, are you ready? He then went on to explain what GDPR is. The General Data Protection Regulation (GDPR) affects organizations worldwide and comes into effect in May 2018. Because it’s an EU regulation, people think that it only applies in Europe. This

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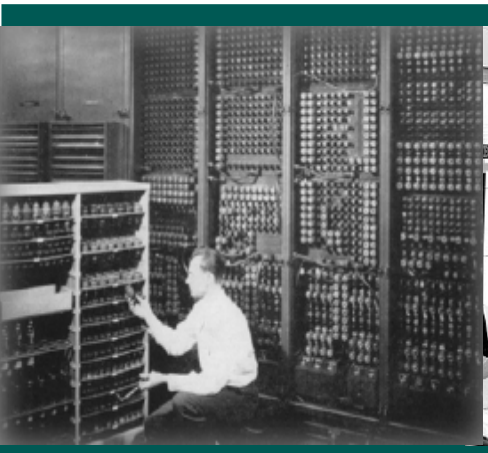

Figure 2: Recovery

isn't the case, it applies to any company that has data about a European Union (EU) citizen. So, it applies to data – and that's what IMS sites have a lot of! The bottom line is that GDPR will increase privacy and protection for individuals and give regulatory authorities greater power to take action against businesses that breach the new laws.

What are the penalties? Companies can be fined up to 4% of an organization's annual worldwide turnover or €20 Million, whichever is greater. A BMC survey found that 94 percent of US CIOs have data that is affected. And 90 percent of CIOs are worried about the impact it will have on their ability to process that data. (See Figure 1.)

The key GDPR challenges are:

- Security of data processing
- Data protection by design and by default
- Appointment of a Data Protection Officer
- EU rules for non-EU companies
- Increased end user rights
- Data breach notification is mandatory in 72 hours!

For those of you who like the details...

Article 32 of REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (of 27 April 2016) says: Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, the controller and the processor shall implement appropriate technical and organisational measures to ensure a level of security appropriate to the risk, including *inter alia* as appropriate:

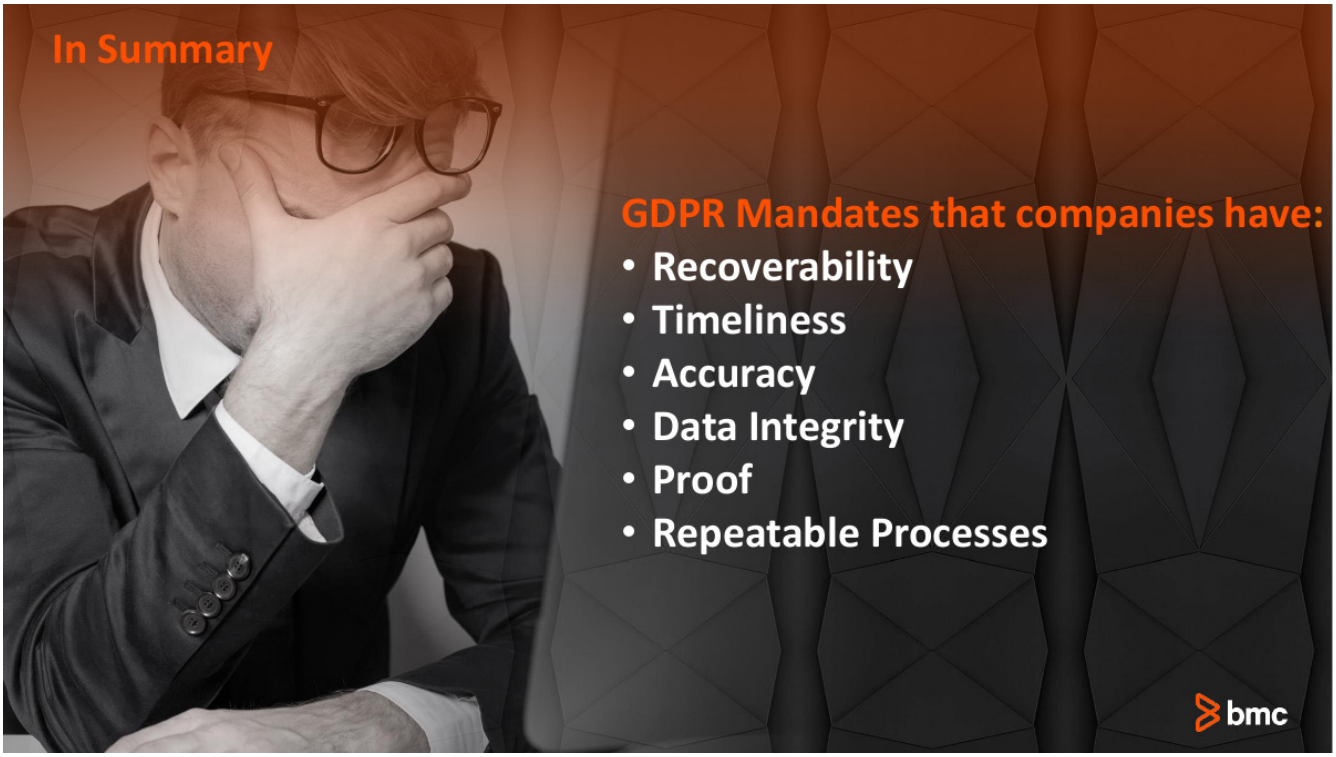

Figure 3: Summary

(a) the pseudonymisation and encryption of personal data

(b) the ability to ensure the ongoing confidentiality, integrity, availability and resilience of processing systems and services;

(c) the ability to restore the availability and access to personal data in a timely manner in the event of a physical or technical incident;

(d) a process for regularly testing, assessing and evaluating the effectiveness of technical and organisational measures for ensuring the security of the processing.

To be GDPR compliant, the recovery solutions must provide:

- "TIMELY" recovery from any data loss or corruption
- PROOF that data is recoverable and that recovery is TIMELY
- REPEATABLE process to demonstrate continued compliance
- INTEGRITY validation for data.

Respondents to BMC's 2017 mainframe survey indicated some of their most important data recovery challenges were:

- Time taken to recover: 27%
- Recovery time prediction: 15%
- Proof of recoverability: 15%
- Understanding recoverability: 12%

These are ALL required to comply with GDPR. 69% have concerns about recovery.

As Figure 2 illustrates, recovery is NOT disaster recovery. You might say "I've got it covered with my

mirror" – you don't! Mirroring is not the answer. Everything gets mirrored, even data corruptions/deletions. And that means the data can become unrecoverable. 80% of all unplanned LOCAL site outages are due to software or human errors.

Speed of recovery can be an issue. You have a choice of backup and recovery options, but how do you define "timely"? If one recovery option is faster than another, is the slow one still "timely"?

Recovery ESTIMATION provides an early guide to recovery time and can give you early indications of possible non-compliance.

Recovery SIMULATION must perform all the steps needed for a recovery. You must be certain that you can meet your recovery time objectives (RTO). You must PROVE compliance, and it must be an easily repeatable process.

Many IMS sites also have Db2. All of the preceding applies to Db2 as well as IMS. For related data, you need COORDINATED recovery of IMS and Db2 assets. You need to recover Db2 and IMS to the same point in time.

In addition, GDPR states businesses must: "Ensure ongoing confidentiality, integrity, availability and resilience of customers' personal data".

Data integrity validation, for IMS, means pointer checking. You need to validate the physical and logical pointers during image copy, and validate again during the recovery processes to ensure structural integrity.

Figure 3 summarizes what a company needs to fit in with what GDPR mandates.

A copy of David Schipper's presentation is available for download from the Virtual IMS user group Web site at www.fundi.com/virtualims/presentations/GDPRDec17.pdf.

You can see and hear the whole user group meeting by downloading the WMV file from www.fundi.com/virtualims/presentations/2017-12-05meeting.wmv.

Meeting dates

- On 6 February 2018, GT Software's Dusty Rivers will be speaking.
- The following meeting will be on 10 April 2018, when Compuware's Thomas Esser will be discussing, "Adding additional IMS Test Environment's with COPE".

Recent IMS articles

Everything you always wanted to know about certifying APARs: The Evolution of the IMS Life Cycle Test by Dean Hardwick on z Systems Developer Community (7 December 2017). You can find the article at https://developer.ibm.com/zsystems/2017/12/07/everything-always-wanted-know-certifying-apars-evolution-ims-life-cycle-test/

Build your IMS knowledge alongside those who build IMS! by Sandy Sherrill on z Systems Developer Community (27 November 2017). You can find the article at https://developer.ibm.com/zsystems/2017/11/27/build-ims-knowledge-alongside-build-ims/

An Easier Way for System Programmers to Create Runtime Resources in IMS 15 by Akash Shah on z Systems Developer Community (9 November 2017). You can find the article at https://developer.ibm.com/zsystems/2017/11/09/easier-way-system-programmers-create-runtime-resources-ims-15/

You don't have to be a wizard to create and activate IMS database and application resources online by Hiroaki

Katahira on z Systems Developer Community (8 November 2017). You can find the article at https://developer.ibm.com/zsystems/2017/11/08/dont-wizard-create-activate-ims-database-application-resources-online/

The wait is over, IMS 15 has arrived! by Betty Patterson on z Systems Developer Community (27 October 2017). You can find the article at https://developer.ibm.com/zsystems/2017/10/27/wait-ims-15-arrived/

IMS Security Enhancements Focus on Distributed Information by Rita Shih, Jack Yuan, Yee-Rong Lai in *IBM Systems Magazine* (November 2017). You can find the article at http://ibmsystemsmag.com/mainframe/administrator/ims/security-enhancements/

Sponsorship opportunity

Are you missing a great opportunity to advertise your IMS software? Ask about our New Year deals.

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.

Like us on Facebook

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.