

# Virtual IT Systems in a GxP Environment

## SPEAKERS:



**Bob McDowall**  
*R.D.McDowall Limited*



**Yves Samson**  
*Kereon AG*



**Jürgen Schmitz**  
*GSK*



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14-15 November 2019, Berlin, Germany

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## LEARNING OBJECTIVES:

- Advantages and disadvantages of virtual systems in a GxP environment
- Benefits of virtualisation
- Regulations apply to virtualisation
- Differences between virtual systems and real systems
- What are the critical points
  - during implementation
  - during qualification and
  - during operation of virtual systems
- Virtualisation platform
- Planning and qualification of a virtualisation project
- Case studies from virtualisation projects
- Change management / configuration management and disaster recovery
- From virtualisation to cloud computing



# Virtual IT Systems in a GxP Environment

14-15 November 2019, Berlin, Germany

## Objectives

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- Get an overview of technologies discussed currently in the pharmaceutical environment and their potential fields of application,
- Assess how to use and implement GMP requirements and provisions for virtual IT systems and, where appropriate, for cloud computing,
- Learn more about the qualification and use of virtual systems in the GMP environment, and
- Evaluate whether the use of virtual IT systems and cloud computing would be profitable for your company.

## Background

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Virtual IT systems, cloud computing, and GMP; does this fit together? What are the advantages and disadvantages of these systems in a GMP environment? Are there any limits with their use?



The increasing use of virtual IT systems and cloud computing in a GMP-regulated environment is getting more and more discussed. The virtualisation of computer systems offers a great

number of advantages, such as the simultaneous use of multiple operating systems, the simple and low-cost construction of test environments, and the improved utilisation of multi-core processors.

Can these advantages also be used in a GMP environment and which aspects have to be specifically considered from the “GMP view” for virtual systems and cloud computing?

This event considers virtual systems and cloud computing from the GMP point of view and provides practical support to determine measures regarding the use of such systems.

## Target Audience

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The event is aimed at managers in the pharmaceutical industry, suppliers and service providers that operate virtual IT systems and cloud computing in a GMP environment or intend to use them in the future.

## Programme

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### Principles of IT qualification and validation

- Regulatory requirements
- Definitions
- Validation and qualification

### What is Virtualisation?

- Definitions
- Physical platform foundation requirements
- Software for virtualisation
- Virtual platform options

### Benefits of Virtualisation

- On demand infrastructure
- Speed of implementation
- Flexibility

### Regulations apply to Virtualisation

- Annex II key points for consideration
- IT infrastructure shall be qualified
- In-house or hosted system

### Qualification of IT Infrastructure

- General Principles of IT Infrastructure Qualification
- How to do qualification in a real environment vs. what to do in a virtual environment
- Qualification Activities
- Roles and responsibilities
- Installation and Testing

### Planning of virtualisation projects

- User / Technical Requirements Specification
- Definition of the installation and deployment approach
- Definition of backup cycles and scenarios
- From a virtual server to a virtual farm
- Efficient planning
- Qualification planning

### Compliance requirements for virtual systems

- IT Infrastructure Platform
- Server Platform Qualification
- Virtual Platform considerations
- Maintaining the Qualified State during operation

### Overview of the virtualisation platform

- Platform components
- Platform operation
- Handling of SANs and VMs

### Qualification of the virtualisation platform

- Requirements gathering
- Platform design
- Qualification planning
- Supporting processes

### Making of a virtual data centre

- Specification of virtual data centre requirements
- Do I qualify or validate the hypervisor software?
- Building and qualifying a virtual data centre

### Risk management

- ASTM E 2500-07
- Good Engineering Practice (GEP)
- Q 9 – Quality risk management
- GAMP 5, M 3
- GEP, Qualification, Validation reconciliation
- NIST-SP 800-30 Risk Management for IT systems
- HA-Op

### Virtualisation of laboratory equipment / Desktop virtualisation

- Use cases for virtualisation in a laboratory environment
- Operating a virtual system

### Show and tell: Virtualisation documentation

- Technical Requirements Specification
- Configuration Specifications
- Installation Qualification

### Change & Configuration Management

- Regulatory requirements
- What is a change?
- Definitions of change management & configuration management
- An outline change management process

### Disaster recovery planning

- Regulatory requirements for Disaster Recovery
- Disaster Recovery or Business Continuity Planning?
- Mitigating physical faults
- Triggers for the plan
- Testing the plan
- Keeping the plan up to date

### From virtualisation to Cloud Computing

- What is Cloud Computing really?
- Abstraction of services and IT-infrastructure
- Virtualisation vs. Cloud Computing
- Recommendations for a GxP compliant Cloud Computing

### Speakers

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#### Dr Bob McDowall

*R.D.McDowall Limited, Bromley, Kent, UK*  
Analytical chemist with over 40 years experience including 15 years working in the pharmaceutical industry and afterwards working for the industry as a consultant. Bob is an ISO 17025 assessor and

he has been involved with the validation of computerised systems for over 25 years and is the author of a book on the validation of chromatography data systems. He was also a contributor to the GAMP GPG IT Infrastructure control & compliance.



#### Yves Samson

*Kereon AG, Basel, Switzerland*  
Yves is founder of Kereon AG, Basel. He is member of GAMP Europe Steering Committees, chairman and co-founder of GAMP Francophone and edited the French version of GAMP 4 and GAMP 5.

In 2017, Yves launched the e-Compliance Requirements Initiative (eCRI) with the aim to help the regulated pharmaceutical industry and its suppliers to address and to implement accurately, consistently, and effectively the regulatory e-Compliance requirements.



#### Dr Jürgen Schmitz

*GSK, Wavre, Belgium*  
Jürgen Schmitz was from 1994 until 2000 at RELAB AG and from 2000 - 2003 at KPMG Consulting AG responsible for computer systems validation. Between 2003 and 2015 he was in different positions at global IT Quality Management at Novartis and Novartis Vaccines and Diagnostics. Since 2016 he is Head Quality IT and Compliance at GSK Vaccines.

### Social Event

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In the evening of the first course day, you are cordially invited to a social event. This is an excellent opportunity to share your experiences with colleagues from other companies in a relaxed atmosphere.



# Easy Registration



Reservation Form:  
**CONCEPT HEIDELBERG**  
P.O. Box 10 17 64  
69007 Heidelberg, Germany



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+ 49 6221 84 44 34



e-mail:  
info@concept-heidelberg.de



Internet:  
www.gmp-compliance.org

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Reservation Form (Please complete in full)

- Virtual IT Systems in a GxP Environment, 14-15 November 2019, Berlin, Germany
- SAP - Validation and GMP Compliance, 12-13 November 2019, Berlin, Germany

- Mr
- Ms

Title, first name, surname

Company Department

**Important: Please indicate your company's VAT ID Number** P.O. Number (if applicable)

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E-Mail (please fill in)

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GERMANY

### General terms and conditions

- If you cannot attend the conference you have two options:
- 1. We are happy to welcome a substitute colleague at any time.
- 2. If you have to cancel entirely we must charge the following processing fees: Cancellation
  - until 2 weeks prior to the conference 10 %
  - until 1 week prior to the conference 50 %
  - within 1 week prior to the conference 100 %

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**Important:** This is a binding registration and above fees are due in case of cancellation or non-appearance. If you cannot take part,

you have to inform us in writing. The cancellation fee will then be calculated according to the point of time at which we receive your message. In case you do not appear at the event without having informed us, you will have to pay the full registration fee, even if you have not made the payment yet. Only after we have received your payment, you are entitled to participate in the conference (receipt of payment will not be confirmed)! (As of January 2012) German law shall apply. Court of jurisdiction is Heidelberg.

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### Date

Thursday, 14 November 2019, 09.00 h - 17.30 h  
(Registration and coffee 08.30 h - 09.00 h)  
Friday, 15 November 2019, 08.30 h - 16.30 h

### Venue

Steigenberger Hotel Berlin  
Los-Angeles-Platz 1  
10789 Berlin, Germany  
Phone 030 2127 0  
berlin@steigenberger.de

### Fees (per delegate plus VAT)

ECA Members € 1,490  
APIC Members € 1,590  
Non-ECA Members € 1,690  
EU GMP Inspectorates € 845  
The conference fee is payable in advance after receipt of invoice and includes conference documentation, dinner on the first day, lunch on both days and all refreshments. VAT is reclaimable.

### Accommodation

CONCEPT HEIDELBERG has reserved a limited number of rooms in the conference hotels. You will receive a room reservation form/POG when you have registered for the event. Reservation should be made directly with the hotel. Early reservation is recommended.

### Would you like to save money?

If you book "Virtual IT Systems in a GxP Environment" and "SAP - Validation and GMP Compliance" (12-13 November 2019) simultaneously the fee reduces as follows:

ECA Members € 2,790  
APIC Members € 2,890  
Non-ECA Members € 2,990  
EU GMP Inspectorates € 1,690

### Conference Language

The official conference language will be English.

### Organisation and Contact

ECA has entrusted Concept Heidelberg with the organisation of this event.  
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69007 Heidelberg, Germany  
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