

Test Environment Configuration and Management using ITIL principles

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About this slide pack.

This slide pack provides a brief overview of how to approach defining the configuration and management of test environments using ITIL principles.

Contact Mark Crowther to learn more about other important aspects to effective test hardware, software and environment management.

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What is ITIL?

Information Technology Infrastructure Library

- Best Practice for IT Service Management
- Infrastructure, Development and Operations
- Published in a series of books, topics include;
 - *Service Delivery and Support*
 - *ICT Infrastructure Management*
 - *Application and Software Asset Management*
- Formal certification path available

What are Test Environments?

The Hardware and Software we use to test

- Test Environments include;
 - *Each item of hardware such as RAM, Network and Video cards*
 - *ICT Infrastructure such as servers and networks*
 - *Software such as operating systems and applications*
 - *Can also be other items such as sets of data, licence keys*

Why do we need to manage these items?

*“The environment software is tested in
may affect the test results;*

therefore the test environment must be:

- *in a **known state** during testing*
- *able to be **returned** to the known state*
- ***reproducible** on the test machine and others.”*

How do we manage this?

Configuration Assemblies and Items.

- Test Environments can be thought of as:
 - **Configuration Assemblies** made up of **Configuration Items**
- Configuration Items represent
 - something that can be the subject of '*independent change*'
- **Configuration Management Database:**
 - *Where all Assemblies and Items are recorded*

Test Configuration Items and Assemblies.

- Test Environments are test's ITIL Assemblies
 - To avoid confusion we call them **Test Configuration Assemblies**
- Test Software & Hardware are test's ITIL Items
 - Refer to these as **Test Hardware Items** and **Test Software Items**
- The **Test Environment Configuration Catalogue:**
 - Is test's version of the Configuration Management Database

Test Configuration Items include;

- All **hardware** within the test environment
 - CPU, RAM, Video Card (GPU), Disk Drives, Ethernet Cards
- All **software** within the test environment
 - BIOS, OS, Browser, DirectX,
- May include any relevant **infrastructure** Items
 - Network connections, remote database, web server, test tools

Benefits of the approach;

- No more 'it works on my machine'
- environments will match, software more likely the issue
- Forecasting Hardware and Software Needs
- Unused Items can be replaced, costs anticipated
- Supports Business Continuity & Out-Sourcing
- By use of the Test Configuration Catalogue

Next Steps.

- Agree definition of Test Assemblies
- Catalogue and ID Test Assemblies and Items
- Plan how Status Accounting will be performed
- Actively use the Assemblies correctly
- Reference ID's in Test Plans & other documents

End of the Presentation

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