



Accelerate Testing by Model Based Assets

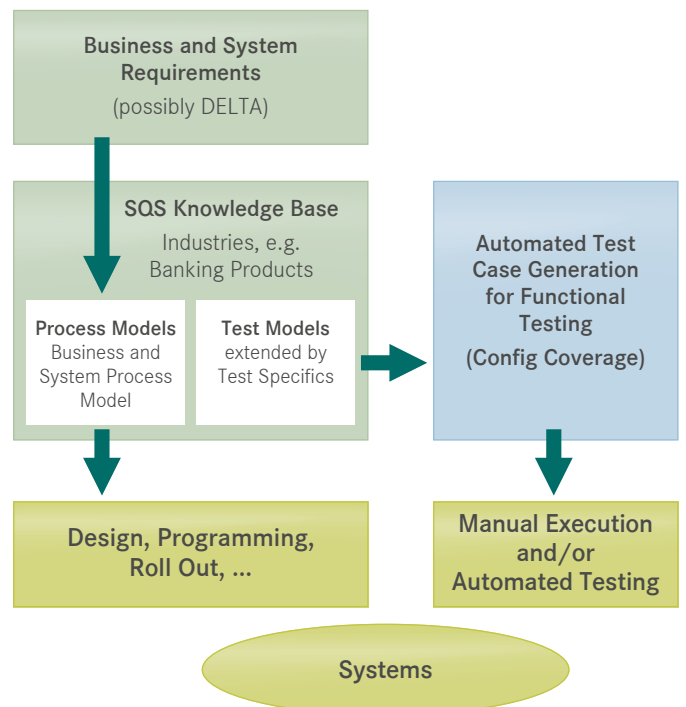
SQS Process Based Testing – E2E and Business Process Testing



Today business process descriptions and system related use cases are summarizing requirements in modern software development. Particularly, projects for implementing standard software like SAP® or Siemens PLM Teamcenter start with standard processes to be adapted to the distinct business requirements of different industries like banking. SQS Process Based Testing is moving quality assurance and testing directly towards the business processes by applying test models as source for test case generation and test automation accelerating the complete test process and reducing maintenance efforts.

Process models are a useful instrument for specifying business and technical solutions as well as identifying functional and technical components to get changed. Test models are extended process models; they are the core artefacts of SQS Process Based Testing. These models are a process oriented description building the bridge between business requirements and test needs to a unified model. They cover the business layer as well as the system layer and include test specifics to generate test cases for different test stages. Typical needs of testing is to define preconditions for test cases, test execution steps or check and waiting points for comparison of expected and actual results. Test cases are generated by walking through

the paths of a test model applying certain end criteria for test coverage. Consequently, the process and test models are the results to be maintained in case of changes. This makes maintenance more rapid and easily reducing effort.



The application of test models has two different approaches accelerating the complete test process and increasing product quality by more effective and efficient application and end-to-end or business process testing.

Early quality improvement

Process and Test Models are derived from business and system requirements by our SQS Business Process Designers and Test Analysts:

- Enhancing quality of business and system requirements e.g. completeness, correctness and consistency
- Enhancing quality of business and system solutions e.g. all requirements covered, all dependencies respected, process optimization
- Transparency about project progress and risks within specification and design phase

SQS reusable assets for industries and products

Process and Test Models are selected from our SQS standard model pools for industries like banking or products like SAP or Siemens PLM Teamcenter:

- Guided and accelerated business process modelling by adapting SQS standard test models
- Process models as base for development and implementation
- Base for automated test case generation and test automation
- Main artefacts for effort reduced maintenance

Comprehensible use

SQS process based testing is applicable on different functional test objects meaning testing systems on different depth of integration, i.e. from functions and function scenarios via system interfaces to highly integrated end-to-end business processes:

- Test cases are created on the relevant level of interest neglecting details not needed: Horizontal Integration for business process and interface testing, vertical integration for function and function integration testing
- Depending on the degree of specialization and know-how of the testers layers are connected to create stepwise test cases and instructions for test execution

SQS process based testing is adjusted to dedicated roles to guarantee our clients goals and to provide adequate SQS skill sets for rapid implementation and operation of process based testing. The SQS Academy delivers customizable training programs for training additional roles like test data manager and test environment manager.

Contact

For further information, or if you have any other questions, please do not hesitate to send us an e-mail: info@sqs.com

Horizontal Integration – E2E and Business Process Test Cases

