SAP with Model-Based Testing

Ensure SAP releases work for your Business, by connecting testing priorities to business relevance. Utilize Business Process Models to accelerate and focus test automation design and creation. The result is highly relevant and robust end-to-end automation, with reduced time and effort.

Product Highlights

The SAP Quality Conundrum

Enterprises modernizing SAP or adopting from new have the same questions they need to answer before having the confidence to go-live with their SAP system. Such as; will it work? Will, from the outset the business be able to do their jobs in the new system? From Quote to Cash through Procure to Pay and the hundreds of other processes in SAP, will users be complete their day-to-day activities successfully? Put simply, will the SAP release be of the required quality? The answer to these conundrums comes from testing. However, for a for a large and multifaceted deployment project such as with SAP, this can also seem overly complex. What tests are to be designed, automated, and ran, how to ensure my testing priorities are connected to the expected business use and of course, how to do all that testing whist not slowing down release velocity?

OpenText Model-Based Testing answers these questions by offering a structured way to accelerate the automation of your SAP testing moving quickly in the right direction ensuring you test the most pressing business concerns first.

What are Business Process Models in SAP

Enterprises with SAP define and control the 'way they work' through its business processes covering everything from onboarding employees, order fulfillment, and shipping; it's how the business organizes itself, its personnel, and its software to support those tasks. Business Process Management is how you capture, control and improve activity flows and the Business Processes Model Notation (BPMN) is the graphical representation that documents the process.

More recently, with the growth of Business Process Mining solutions, such as SAP Signavio or Celonis, enterprises are automatically discovering what process are really being followed, with what frequency and producing Business Process Models to show that. SAP even publishes BPMN files which correspond to their Best Practice, as part of the SAP Activate deployment methodology for customers to use.

MBT Impact on SAP Testing

These Business Process Models accurately and comprehensively define what activity streams the business needs to complete and hence what functionality the supporting SAP software needs to have. As an SAP tester, you need to ensure that when the system is deployed users will be able to complete all the expected process from start to finish. With MBT, you simply import the pre-defined models, use a coverage strategy to automatically divide it into Paths and then automatically create associated Model Based Test containers.

These can be run manually right away, or form the basis for creating intelligent based automated tests using either the embedded AI Codeless tool or with the industry leading UFT One Functional Testing solution. UFT One combines a breadth of technology support, with AI-driven capabilities for SAP, meaning it delivers ease of use and the script resiliency

Quick View

- **Intelligently Convert your BPMN**—Using MBT's prebuilt path to test conversion strategies, select the coverage and MBT does the work to create paths and add tests to the Model.

- **Comprehensive technology stack**—With UFT One integration access to automated testing of 200+ GUI and API technologies across mobile, web and desktop, including of course all SAP technologies and interfaces.

- **Import exiting BPMN diagrams**—Simply import models on-mass to provide your test automation effort with a kick start. Alternatively, use the native modeler to create and edit right inside of MBT.

- **Integration to UFT One**—Automate your tests utilizing the full power of UFT One or run as manual tests until the automation is completed.

- **Integrated DevOps ecosystem**—DevOps enabled toolchain for Continuous Testing CI/CD integration

required to achieve automation at scale which enables customers to test earlier, faster and for longer.

The MBT approach results in a reduction of test creation time and ensures you are creating modular structured tests, focusing on what really matters first and aligns to what the business activities are, in the system under test.

Key Benefits

Accelerate End-to-End Testing of Enterprise-Grade Apps

Working in collaboration with your business analysts you can clearly see what activities and steps that users of your Application Under Test need to complete and hence that you need to test. You can ensure by covering these paths (or variances) that what needs to work, is really working, before go-live in any application you have modelled.

This includes automated testing in combination with all the supported technologies of UFT One with more than 200+ GUI and API technologies across mobile, web, desktop and mainframe, including SAP, Salesforce, Java, Citrix and more.

Cloud Based

Get up and running quickly with this Cloud-based multi-tenanted solution meaning you have minimal installation requirements inside your firewall. We take care of all the backend infrastructure, servicing, and maintenance efforts, as part of OpenText's well established suite of SaaS solutions.

Automated Creation of Manual Tests

Each test created from a Business Process Model path describes an essential end to end flow through your application. Whilst the effort to automate those is underway, without any extra efforts you can manually test those processes right away using the automatically generated manual tests.

Extensive SAP Support

With the integration into UFT One you get all the extensive support SAP including AI-based and native object recognition for SAPGUI, SAP Fiori/UI5, S/4 HANA, SAP Web Dynpro, SAP WebGUI, SAP NetWeaver Business Client for Desktop/HTML and SAP Cloud Applications such as Ariba, Concur, SuccessFactors, etc. This extensive support means you can be assured whatever your SAP product undergoing testing your efforts will be reduced and you will be able to create robust automation including the use of advanced AI based intelligent automation.

AI-Powered Intelligent Test Automation

Utilizing UFT One automation capabilities with MBT means you can simplify and improve test creation, execution, and maintenance through AI-powered intelligent automation. AI-based machine learning and advanced OCR provide for advanced object recognition, AI-based mockup identification, AI-based recording, AI-based text matching and image-based automation; all of this means that teams can reduce test creation time as script creation sis intuitive and graphical, reduce maintenance efforts as scripts break less often but if they do are easier to fix and boost test coverage as you can 'shift-right' to increase the number of people creating tests plus as you using just

the GUI interface technical support with the Application Under Test is not required.
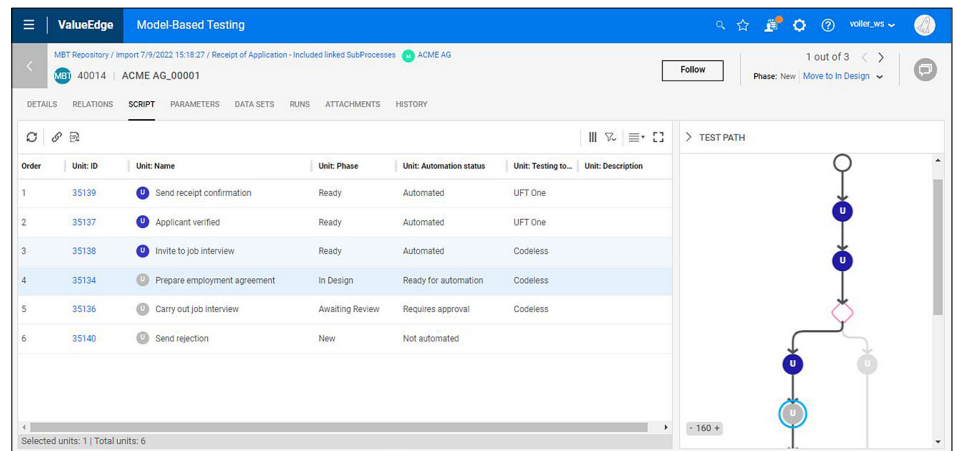
Parameterization and Data Sets

Inbuilt into MBT is the ability to store and connect multiple data sets connected to script-based input or output parameters, in this way you can pass information between units of a scripts enhancing and increasing flexibility of what you are automating. MBT has the ability hold multiple data sets which can be copied or imported from an external file so you can be sure you will always have the right data for the execution you are performing.

Part of an Enterprise Agile Platform

Model Based Testing is built into the OpenText ValueEdge™ which means it is fully integrated into your lifecycle platform for Agile and Test Management. Through this platform approach you can understand the wider context of your test creation and execution efforts, with easy connection to requirements, backlogs, results, application modules and manage the defects you find. It also means you can see the results of your SAP testing across the enterprise.
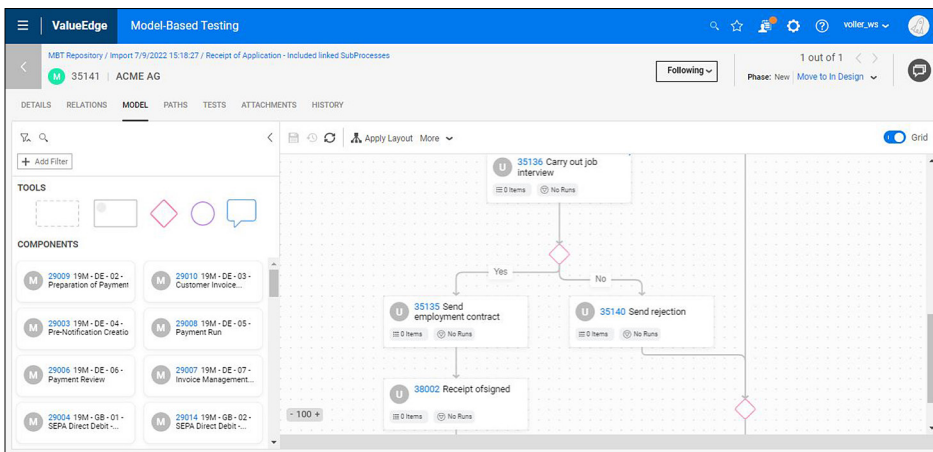
AI Codeless Testing Integration

MBT enjoys native integration with OpenText AI Codeless. This automated testing solution

OpenText Model-Based Testing (MBT) is a Shift-Right, Governance & Management platform for functional test automation. MBT brings together Business Analysts and QA professionals by aligning tests with critical business processes. Model-based testing means optimized test coverage, reduced risks, improved collaboration and increased accuracy of functional test.

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OpenText CEO Mark Barrenechea's blog

All Layer Automation of Applications
Create end-to-end Tests covering both the front-end GUI functionality and if required API service orientated parts of a solution. With MBT and its UFT One integration you can test solutions which use REST, SOAP, WSDL, WADL, Swagger, OData, MQTT, CoAP and iDocs.

Part of DevOps Deployment Pipeline
Built inside of OpenText ValueEdge, you will be able to reuse UFT One scripts held in your GIT based repository and manage the distribution and execution as part of your DevOps pipeline understanding status along with your other testing results.

Learn more at
**www.microfocus.com/en-us/industry/
solutions-for-sap-modernization**
www.microfocus.com/opentext

gives you the power to create totally robust and reliable tests using the power of AI-based objects without any of the complexity you would expect of a code-based tool. Described as 'Shift Right', the solution is perfect for less technical colleagues who are more comfortable with a drag-and-drop, click based interface. To make things as simple and visual as possible, the AI Codeless Tests are saved inside of MBT, in the cloud and can see through its own interface.

Import Existing BPMN Diagrams
Whatever the source or creation mechanism of your models you can simply import single or multiple models in one zip file, to kick start your test automation effort. MBT will import the models and present them for easy browsing and conversion into Paths and Scripts. Alternatively, you can use the native modeler to create and edit BPMN models inside of MBT.

Intelligently Convert Business Process Models into Paths and Tests
Using MBT prebuilt Model to path to test conversion strategies you can easily select the coverage you want to achieve for your created paths and then tests. MBT will do all the work for you, converting a single model into multiple paths against establishing the coverage you required. You then tell MBT what to convert to tests and it will create and associate those tests. Of course, you still have the option to create process paths manually if you want.

Native Creation and Update of Business Process Diagrams
If you don't have your Business Process Models defined or captured already OpenText MBT lets you create your own Business Flows directly inside of the tool. You can then use the models to define Test Paths and Data but with the advantage of doing so from the business perspective.

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