

SUCCESS STORY

HD Plus GmbH

QA-Assessment and Implementation of the UiPath Test Suite

Customer

HD PLUS GmbH is a subsidiary of SES, one of the world's leading satellite operators with a fleet of over 70 satellites. Since 2009, they have been working with great passion on their vision of making an additional range of programs in high definition quality available to more and more satellite TV households - both in HD and in Ultra HD. The range of programs can be received in Germany via the Astra satellite system.

Challenge

HD PLUS GmbH is currently redefining its company philosophy to "Cloudification" and is thus moving their whole On Premise applications to the Azure Cloud. At the same time the development processes are adapted to have a better overview of the software builds and code insights of external developers. One major role of this change is also the improvement of Quality Assurance and testing capabilities by the implementation of a new test automation solution. The vision of a test solution should allow to create whole End-To-End Tests on different DEV and INT environments. The test tool should support several technologies such as REST calls, databases, and Web UI. Furthermore, the test architecture should fit to the cloudification approach and should be able to be hosted in Microsoft Azure.

Solution

As a first step we started with a QA-Assessment which includes the creation of a rough concept for the further procedure of quality assurance. This concept was developed in workshops with the client and was covering the following topics:

Products & Services

- Implementation of UiPath Test Architecture
- Test Data Management
- Integration Testing
- E2E Testing
- Test Management

Technologies

- UiPath Test Suite
- Microsoft Azure
- Azure DevOps
- Terraform

♥ Goal definition

- What is the goal to be achieved?
- What is the time schedule?

♥ As-is analysis

- Consideration of the existing processes (software development, release & QA)
- Analysis of existing technologies and architectures in relation to the objective (which applications are in focus)
- Available resources and current planning

♥ **Draft of a first rough concept** - After the as-is analysis, a rough concept was drafted that considers all the recorded requirements in order to achieve the defined goal. This includes individual work packages and their time sequence in order to obtain an initial overview of the topics and the time schedule.

♥ **Proof of concept with UiPath Test Suite** - As part of the concept potential Test Automation Solutions have been presented and decided to perform a Proof of Concept with the UiPath Test Suite. During this PoC some of the application's use cases on UI and API have been automated and presented.

♥ **Feedback gathering** - The rough concept is presented to all stakeholders and feedback is gathered and then incorporated to ensure that all topics are presented as envisioned, and the concept meets the requirements.

♥ **Final Presentation & Acceptance** - The final concept is presented and discussed. All implementation steps are presented and mapped on a timeline. This concept should serve as an implementation plan, which implementation steps are necessary to achieve the defined goals.

After the successful QA-Assessment and Proof of Concept the final decision has been made by HD PLUS GmbH to introduce the UiPath Test Suite as the new Test Automation Solution. For the implementation of the UiPath Test Architecture we have performed the following tasks to enable the customer and rollout the solution and new QA processes.

♥ Deployment of the UiPath test infrastructure

- Deployment of the UiPath Suite in Azure via Terraform Scripts
- Creation of a common repository (Git repository)
- Deployment of needed Client machines and Test Robots

♥ Automation of E2E backend and frontend processes with UiPath

- Analysis of the E2E processes
- Creation of test cases with UiPath according to best practices
- (Scheduled) execution of the test cases and analysis of the test results
- Reporting of the test results to relevant stakeholders
- Maintenance and further development of the test case

♥ Customer Enablement

- Communicate general best practices in the use of UiPath
- Communicate best practices in handling API test cases
- Communicate best practices in handling frontend test cases

Teaching the functionalities of UiPath Test Manager and Orchestrator

Result

As a result, we could prove to be a perfect partner to accelerate our customers' QA journey.

During the assessment phase we were developing a tailored solution for HD PLUS GmbH to improve the overall quality during software development. The provided high-available Cloud Test Architecture does not only fulfil all security requirements but is also fast and easily scalable and supports all technologies for complete automated End-to-End Test Cases.

Summarized, we have developed the foundation for continuous quality improvements in the future at HD PLUS GmbH.

- ✔ **Continuous QA-process integrated in SW-development**
- ✔ **Multiple velocity of acknowledgment for incidents**
- ✔ **Faster development progress**
- ✔ **Less test resources through high efficient automation**

Why Qnit?

Agile & Flexible

Customer-Focused

Innovative

Specialised Expertise

In-depth Technical
Knowledge

About Qnit

Qnit is a team of experts specialised in the development of quality assurance solutions throughout the whole software development life cycle. We bring quality to the products and services of well-known customers in diverse industries in Europe by implementing tailored Quality Assurance solutions.

We add value by maximising the speed of digitalization, while optimising costs and risk coverage. Our partnerships with the market leading test tool providers allow us to provide unique solutions and transform testing to a catalyst for innovation.

