



CASE STUDY

ENHANCED DATA PROTECTION APPLIANCE WITH FEATURE DEVELOPMENT AND TEST AUTOMATION FOR A MARKET LEADER

Designed and developed 5 product features for next release. Automated 360+ test cases to increase test coverage for data protection appliance.

Client Background

Our client is a market leader in software-defined storage, data protection and archiving. They provide a highly available and scalable solution using a Data Protection Appliance to deliver enterprise-wide data backup and recovery services on-demand. The client wanted to develop enhanced product features to achieve business benefits and utilize regression automation for increased test coverage.

The key objectives included:

- Bring in parity for the appliance with respect to those offered by the existing backup and recovery appliance.
- Implement custom route feature to configure network (routing) for application containers and implementation of persistent routes.
- Enhance Active Directory support for TLS and SSL.
- Increase test coverage for backend API and frontend UI.
- Update the existing appliance regression suite to include more test scenarios with test automation.

Xoriant Solution | Key Contributions

As part of this engagement, we delivered 5 new features for the client's product which included maintaining existing feature parity along with regression automation.

KEY BENEFITS

- Developed and delivered 5 new features as part of this engagement which included existing product parity, custom route and enhanced Active Directory support.
- Contributed for the next product release with enhancements to strengthen the product.
- Achieved 100% automation of the functionalities developed within the same release.
- Automated 360+ test cases (UI+API) through Regression Automation using Python and Robot framework which strengthened the product automation suites with more test scenarios and coverage.

Our key contributions included:

- **Delivered Design and Architecture Solution:** Xoriant experts worked closely with client SMEs to design the solutions for given features which included decision on suitable technologies, architecture of the product related to features, and implementation at various layers and servers.
- **Custom Network Route Feature Development:** Product was enhanced with the feature to configure custom routes for application containers and also to make network routes persistent without restarting the container.
- **Productized the Features for Appliance Product Release:** We productized a few features for the appliance, while also fixing existing defects in the code base to make it functional and make the product ready for the release.
- **Improved Active Directory (AD) Support for TLS and SSL:** We configured the AD Server based on 3 connection types – Plain Text, TLS and SSL via Product UI. The user can define the AD configuration by choosing their preferred connection type.
- **Completed Regression Automation:** Xoriant's expert automation engineers successfully completed the regression automation of approx. 360+ test cases.
- **Performed Functional Test and Automation:** Our SMEs performed end-to-end functional testing using Shell scripts for developed features and automated the same using Python and Robot framework.

KEY BENEFITS

- Achieved a cost advantage through offshore model of project execution. Generally, projects follow a 70/30 offshore and onshore ratio for team allocation. In this project, Xoriant team members and SMEs from client side ensured smooth execution in offshore capacity which led to cost benefits.

Client Testimonial



The 5 new features developed by the Xoriant team has enhanced the product capabilities. The regression test automation for 360+ test cases helped us to improve test automation coverage.



Technology Stack

Golang | Ansible | RHEL | Lua | Docker Container | Angular 8 | Python | Robot | Selenium



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