

ROQ has developed an automated regression test pack as part of their longstanding managed test service with a leading global law firm, with a 1500% time saving on running manual tests.

ROQ's client were looking to upgrade their existing IT Service Management (ITSM) processes and wanted to introduce ServiceNow. The tool was implemented by a third party, who also managed the instance and performed some limited testing. Given the importance of the application, the client understandably wanted an additional independent layer of testing to provide confidence in new releases and so engaged with ROQ to develop an automated regression test pack to cover critical workflows.

Initially, ROQ developed an automated regression test pack for the IT Infrastructure Library (ITIL) module (Incidents, Calls, Problems, Knowledge, Change Requests, Service Portal, etc.). This was done in partnership with some of the end users of the application, to understand how they and the customers use it to ensure the most critical functionality was covered. This resulted in an automated regression test pack, built using C#, Selenium, Nunit, SpecFlow and MailKit (for testing email workflows).

During the project, ROQ identified that most existing tests for ServiceNow were covered by ServiceNow's built-in Automated Test Framework (ATF). However, this did not test from the end user perspective, nor does it test every part of ServiceNow. - several elements / versions could not interact with the Service Portal (the key customer facing part of ServiceNow). Furthermore, the ATF tool could not interact well with complex parts of the backend. The ROQ team built a Selenium-based solution that complemented the ATF tool, to provide greater test coverage and reduce risk on implementation.

The automated regression pack has now been in place for over 2 years, and during that time has been used for 25 scheduled releases, 2 major environment upgrades, and the addition of 2 custom applications added to the ServiceNow instance.

Benefits of the implementation of ROQ's automated regression pack include:

- The client now has an automated regression test pack that is executed for every single release, and tests critical functionality as part of continuous delivery
- The business now has an increased level of confidence in the updates
- A 1500% time saving when compared with running the tests manually

Following the success of the initial regression test pack (and of ServiceNow as a whole), the client looked to integrate their accounts payable functions into ServiceNow. For this, ROQ provided manual testing and a UAT phase, while also adding automated tests for this new application to the existing automated regression test pack. ROQ developed this pack in such a way that we were able to parameterise tests and execute for all the in-scope offices with a minimal amount of scripting required.

The most recent engagement relates to another custom application being developed for the client by a third-party supplier and integrated into ServiceNow. For this, ROQ worked as part of the project team and developed the automated tests as new features were developed (in an agile methodology). The output of this was over 130 tests that cover the business-critical application.