



C A S E S T U D Y

T-GRID™ AQ



A U T O M A T E D Q U A L I T Y

AUTOMATED REGRESSION TESTS TAX SOFTWARE SWISS TAX AUTHORITY

Overview

Continually changing conditions lead to constant adjustments with regard to the calculation of taxes, and consequently also to the software used to process taxes. These changes make it necessary to carry out numerous additional software tests, to ensure that the software continues to work flawlessly after the changes have been introduced.

Until now, it has been necessary for tax authority IT personnel to take the valuable time of their tax experts to carry out comprehensive and time-consuming manual tests. Today, thanks to the use of the test automation tool, T-GRID, tax authority IT personnel can test a large proportion of this tax processing software with a high level of automation before it goes into productive use again after a change. This means that the tax experts regain valuable time which can be better spent on their core tasks. In addition, it means that the tax authority IT personnel, for their part, can achieve improved quality in the software.

Because of T-GRID the tax authority was able to:

- › dispense entirely with manual tests.
- › automate without programming, with a direct connection to the interfaces of the tax processing software.
- › increase the quality of their applications to such an extent that they continue to prefer T-GRID.

We are pleased to provide details of this case study, and explain how this customer was able to achieve sustained added value thanks to **T-GRID**.

Contact us today!

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S O L I D A U T O M A T I O N P A Y S



CASE STUDY

AUTOMATED REGRESSION TESTS TAX SOFTWARE SWISS TAX AUTHORITY

The Problem

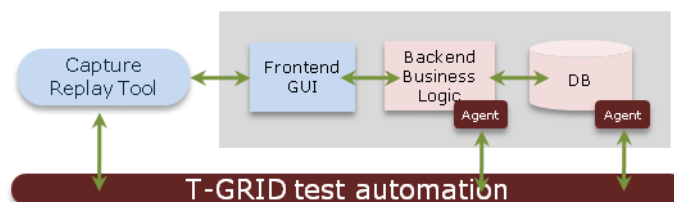
Regardless of the manufacturer and the technology, all tax processing software is subject to demanding change cycles. On the one hand, a steady stream of political changes demands ongoing adjustments to the core of the software. On the other hand, the specific requirements vary from one local authority to the next to such an extent that it is difficult for the software developer to make the specific changes required available to the various local authorities, exactly as expected and without errors. This means that tax processing software must be constantly subjected to testing. Only through these essential tests can it be assured that the functions provided meet the defined expectations.

Before tax processing software goes into productive use it undergoes intensive alpha and beta tests (manufacturer and acceptance tests). The latter must be carried out by the tax experts of the local authorities themselves, in order to guarantee the expected quality. This means that the time spent on testing by these tax experts is no available for their actual work: An unsatisfactory situation which the tax authority sought to change.

The T-GRID decision

The IT department of the tax authority was assigned the task of finding suitable test tools which would make it possible to automate tests that had to be repeated over and over again. After intensive evaluation, the decision was made to go with the test automation solution, T-GRID.

Instead of only the standard method of software testing, through the GUI with capture-replay, the tax authority also decided to do automated tests of the business processes in the backend. With T-GRID, it is easy to achieve tests that test the functionality ranging from the input to the result in the database and backends, through all levels by configuration. T-GRID also makes it easy to automate regression tests, risk-based tests as well as integration tests. With T-GRID, the tax authority also achieved the desired added value in the testing of business processes. Moreover, it was possible to offer the tax authority a very attractive price-performance model, which made the criteria for choosing T-GRID even more appealing.



Customer benefit

In less than a week, the customer had a scalable test automation solution in operation. Thanks to the use of T-GRID, the tax authority can automate a large number of repeating test procedures, directly at the business logic, without having to involve the GUI. The IT personnel can thus assure improvement in quality and regain valuable time for tax experts to perform their core tasks.

A capture-replay tool was used for the individual additional GUI-based tests. In this way T-GRID can also be used as an integration element for GUI and backend tests. Thus, using T-GRID, it was possible to steer and control all the automated tests.

