



S U C C E S S S T O R Y

T-GRID™ AQ



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



AUTOMATED TESTING OF THE EAI DEVELOPMENT PLATFORM OF POSTFINANCE

«THANKS TO THE USE OF T-GRID WE CAN REGRESSIVELY TEST OUR EAI PLATFORM WITH APPROXIMATELY 300 TEST CASES »

Ulrich Sutter, Team leader Development EAI, PostFinance

Automated testing in payment transactions

The **EAI platform** of PostFinance, e*Gate (SRE), integrates applications in the **payment transactions** sector, and in doing so routes and modifies a wide range of **payment formats** such as PAYMUL, EZAG, ESR etc., ensuring that a higher volume of payments and transactions is processed.

Challenge: the **EAI platform must be continually re-tested** after amendments have been made to data formats, new additions of payment formats have been incorporated (e.g. SEPA) or release amendments from upstream or downstream applications carried out, as well as for updates or patches for SRE software.

It is **inefficient error-prone** and requires a large number of resources for every change to undertake these **tests manually**.

PostFinance requires a **test infrastructure** for EAI, which:

- › can test cases regressively
- › is fully automated and scalable
- › supports data formats in payment transactions
- › can compare targets against performance
- › can show where the problem is located if there is an error
- › can run ad-hoc (manually) or in batches
- › permits simple serviceability of existing test cases



S U C C E S S S T O R Y

«DUE TO THE SIGNIFICANT REDUCTION OF DEFECTS AND TESTS FOR THE DEVELOPMENT, THE GAINED TIME OF OUR ENGINEERS CAN NOW BE USED FOR FURTHER CENTRAL ACTIVITIES »

Ulrich Sutter, Team leader, Development EAI, PostFinance

Implementation using T-GRID™ AQ

T-GRID is used in PostFinance EAI for tests on development before the software is handed over to the test department. Existing and new test cases are configured centrally in the T-GRID GUI as test trees, stored in a test case database (T-GRID repository) and released automatically or manually.

The incoming and outgoing interfaces to PostFinance EAI are connected by means of adapters.

Every test, or every bundle of test cases, is prepared in such a way that databases are either "cleaned" in advance and loaded with test data, input files are placed correctly, or messages are written in message queues. In a second stage individual test cases or interconnecting test trees are triggered.

The results arising from the test cases are then retrieved from the file system or from a JMS queue. Lastly the results (performance data) are divided up or saved and automatically compared with the expected results (pre-defined TARGET data). In doing so the flexible T-GRID Compare Adapters have an effect as follows:

- > compare on a field basis
(eGate comparator; certain fields such as date etc. can be explicitly omitted)
- > compare on a binary basis
(simple comparator)
- > compare on an XML-basis
(XML-comparator, certain days and attributes can be explicitly ignored or compared via a sample)
- > Division of results with the extractor
(for example from an archive such as ZIP)

Customer benefit

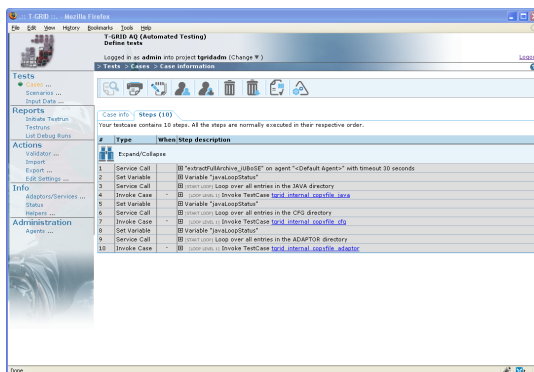
PostFinance can carry out the complete tests automatically using T-GRID each time eGate schedules are amended and can therefore be confident that

THE COMPREHENSIVE, FULLY AUTOMATED TEST SOLUTION MAKES FAST LOCALIZATION AND RAPID ACTION EASIER IN THE EVENT OF AN ERROR

- > the changed collaborations do not have negative effects on the entire system.
- > the errors are already found at the end of the development stage, which keeps the costs for error correction very low (the later an error is

found in a development cycle, the more expensive it is).

> the laborious tests, which are often carried out manually are automated using T-GRID and enable employees to concentrate on their core competences and devote more time to development.



Test cases are mapped as test trees. The definitions of these test trees can be easily done on the T-GRID GUI

Technical data

Application: EAI Platform e*Gate (SRE)
 System: Solaris 10
 Test cases: Routing/Modification payment formats
 T-GRID AQ (GUI and Agent) is directly installed on the central EAI development server (Solaris 10, multiprocessor machine).

The T-GRID repository is installed on a central development database.

The repository data is stored on an oracle database.

Used T-GRID Adaptors:

- > T-GRID File Adaptor
- > T-GRID JMS Adaptor
- > T-GRID Native Adaptor
- > T-GRID Database Adaptor
- > T-GRID Internal Adaptor
- > T-GRID eGate Adaptor
- > T-GRID Compare Adaptor