

# CASE STUDY

## GLENCORE

[www.glencore.com](http://www.glencore.com)

**Glencore AG** – top commodity trader with offices and mines all over the world, founded in the 1970s. One of the world’s largest globally diversified natural resource companies. Listed in London Stock exchange.

## THE CHALLENGE

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### The context

Project for **S/4HANA upgrade** from 1610 to the new 1809 version. Leading SAP module: FI

### Problems to solve

- 1 How to prove that every integration scenario in the new 1809 S/4HANA system works in **exactly the same way** as it used to in the previous version?
- 2 How to build a comprehensive test case base that covers **all business scenarios**?
- 3 How to test a permutation of over **300** inbound interface posting scenarios from over **20 different** source systems from sites all over the world in a **limited time** frame of 4 weeks?

# THE SOLUTION

After the market valuation, the interface testing strategy was introduced. Glencore AG selected the **Int4 SUITE** tool to support the **integration testing**. This choice made solving the above-mentioned problems possible.

## FAST SECURE AUTOMATION

### Test automation

**Automate, virtualize** and provide a complete and comprehensive result report that can support each of the test script executions. Int4 SUITE result report provides sufficient information for a support organization to help solve any issues when a test case execution fails. Int4 SUITE test case execution comes down to a click of the **“Execute”** button over a selected list of test cases. Everything else is automated.

“ *After the upgrade project go-live, we had **0 (zero)** integration production issues, which proves that Int4 SUITE interface regression testing was complete.* ”

**Urs Boomhuis**  
Integration Lead by SAP Center of Excellence team in Glencore AG

### Business process flow

Test runs consisted of many test cases that were bound with each other to form a **business process flow** by using the Int4 SUITE tool. For example, when two invoices and a payment were posted, a clearing document was posted afterwards that matched all the previous postings. Each unique FI posting reference was passed from one posting to another and each posting was compared with its productive sibling **automatically**.

### Confidence in the system and the changes

In order to build a complete test case base, a productive system was used as a source. The test cases could be picked up **automatically** or chosen manually by field offices. In this case, the latter option was favored. The test cases were cataloged per a field office where an accountable person was assigned. Field offices used their productive scenarios and, with the use of the **Int4 SUITE** message selector, picked messages as reference documents for test case creation. The effort put in the creation of the test case base **pays off with each project to follow**, as the base is a litmus test for every change before its promotion to the production environment.

“ *The ability to create a test case in **5 seconds** without scripting makes a big difference when it comes to building a complete coverage of your test case base.* ”

**Urs Boomhuis**

Integration Lead by SAP Center of Excellence team in Glencore AG

# PAINS

- The requirement to create a **complete testing scope coverage** for permutation of over 300 FI document posting templates from over 20 different non-SAP source systems worldwide
- **No means for fast verification** of over 4500 test cases
- Need for a straight forward / unified procedure for integration-related defect creation in HP ALM
- Need to **perform the integration testing** with the least possible or no involvement from the 20 non-SAP connected systems

“ *Using Int4 SUITE we can introduce **continuous testing** with a complete test case base executed on a weekly or daily basis.* ”

**Urs Boomhuis**

Integration Lead by SAP Center of Excellence team in Glencore AG

# GAINS

- + With a report that scans the production and lists over **4500** production iDoc numbers used directly to create test cases the **complete testing scope coverage was guaranteed**
- + **The Int4 SUITE automatically** posts a productive reference document copy into an upgraded S/4HANA test environment and compares the two documents down to a database field level **in the background**
- + A procedure was introduced to create a defect in HP ALM that holds an http link for the Int4 SUITE result report, which stores **all the information required** for a developer or consultant to investigate the issue further
- + No non-SAP resources required as **all the connected systems are virtualized** by the Int4 SUITE and hence an SAP-specific upgrade is transparent for other integrated business system owners

## Int4 SUITE means...

### ...Codeless Test Automation for SAP systems integration

Enterprise Integration of SAP systems is often based on reusing the existing components and that requires a careful regression testing. It's even more of a challenge now, as concepts such as continuous integration and continuous delivery are becoming a common practice. Faster development pace sets a high bar for testing tools, as it demands continuous testing.

# CONCLUSION IN NUMBERS

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**4500**

Over 4500 **test cases** created and executed

**5S**

5 seconds for a **test case creation**

**100**

Over 100 **defects** registered based on the Int4 SUITE result reports

**10**

Around 10 differences between S/4HANA versions identified that caused discrepancies in postings.  
**Shift left strategy implementation**

**0**

**Zero** integration production issues after the upgrade project go-live which proves that **Int4 SUITE** interface regression testing was complete



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**For more information,**  
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