

## Int4 IFTT: a platform for SAP integration testing automation

### Challenges related to SAP integration testing

Test automation is a next step in improving work of any IT department. It minimizes the risk related to carrying the changes over into production systems, while reducing the costs and increasing the effectiveness of IT processes at the same time. It supports both *Agile* and *Continuous Testing* methodologies. All tests, including the regression testing, are as frequent as possible, starting at the initial phases of a project so any potential defects are corrected immediately.

Testing automation is particularly significant in SAP systems integration. SAP systems are often implemented centrally and play a key role in companies. That's why they are regularly integrated with multiple shared and local systems used by the company and its partners (EDI). Component sharing (a canonical data model) is used for the effective interface management. Any change made to the central component may have bigger impact than anticipated. Testing automation provides unlimited control and change validation.

### Int4 IFTT—the first platform for complex SAP integration testing

Int4 IFTT is an innovative platform for automatic SAP integration testing, featuring the following:

- All components, where SAP application interfaces are implemented in, are tested: from middleware SAP PI / PO platform or SAP Cloud Platform Integration to backend S4/HANA or ECC systems logic.
- Quick and easy creation of test cases, based on the existing interface-created documents like sales orders, invoices etc. No programming is required for creating test cases, which are based on linking messages from/to external systems with associated SAP documents. It takes only few seconds to create a single test case by providing the ID of a system message or document.
- The results are generated on the basis of final documents posted in SAP backend system or of outside messages from the SAP environment.
- The tests are not limited to single interfaces; whole business processes (including any manual steps automated by eCATT recording) may be tested.
- Tests are run without physical access to the external systems (service virtualization)
- Int4 IFTT is an SAP-certified Add-on.

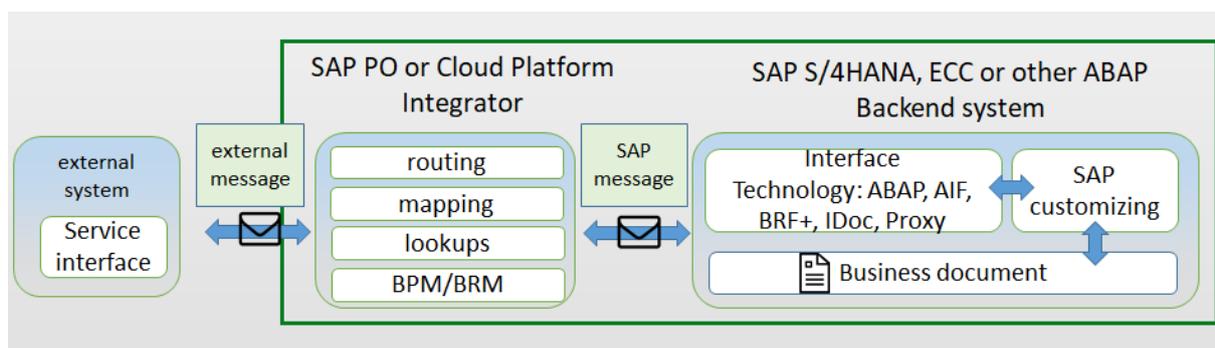


Fig 1. Int4 IFTT testing scope

## Practical Use

Int4 IFTT is an inter-module and inter-department tool that proves useful wherever SAP integration and interfaces are of great importance. Tests may be created and run by both non-technical users and developers with no functional knowledge. The central test repository not only provides the basic value of test automation but it is also an additional source of knowledge on integration scenarios. It is particularly valuable for knowledge sharing between project teams and system maintenance teams.

Standard use examples:

- **Rollout projects**—changing the existing and adding new interfaces during subsequent implementations impact the existing environment. Automated regression testing assures the client of the correct and stable system performance for any earlier implementations.
- **EDI projects**—shortening the project duration due to reduced need for contacting external resources. 100% internal validation before sending out the messages to clients. Int4 IFTT supports both XML messages as well as flat formats (e.g. EDIFACT). In extreme cases, it may reduce the costs of fines for incorrect messages (e.g. in automotive industry).
- **Upgrades and migrations from SAP PO/PI, ECC to S4/HANA**—the software allows continuous comparing of interfaces in parallel environments (the old and the new one). Wherever technical solutions change and the business requirements remain the same, the testing process may be 100% automated, provided the same data is transferred in both environments.
- **Day-to-day maintenance**—automation allows deep and thorough testing of all application interfaces before every import of transports into the production systems. It assures the user that any potential errors will not disrupt the process.

## Benefits



By implementing the int4 IFTT, customers reduce the total expenses related to the systems integration, due to reducing the risk, time saving and increased transparency in the integration layer. Testing automation allows testing any change at a precise time without mandatory detailed planning of the testing. Application interface specialization means that in the int4 IFTT test cases are created and **run immediately**. Hence, thousands of test cases may be run simultaneously with no issues. It usually takes less than twenty minutes, and no longer than one hour.

Thanks to Int4 IFTT, SAP integration testing does not require access to external systems which means **no need of external specialists' involvement** (saving time and money). A complex business process may be tested in no time by a single person. In case of a similar test run manually, it could require several people and could last for many hours.

An undeniable benefit provided by the int4 IFTT is the **simplification of the interface layer**. Something that earlier was too complicated for business users or incomprehensible for technical users now becomes accessible. This makes testing the changes at the initial phase of implementation possible. Research proves that cost of correcting error at an early stage is significantly lower than of doing that later.

If you want to get to know the int4 product in more detail, please use the demo which has all the features of the full version. Shall you have any queries, please contact us: [testing@int4.com](mailto:testing@int4.com).

Additional resources are available at [www.int4.com/testing](http://www.int4.com/testing)