Process-driven SAP® management

ARIS helps companies to design their enterprise, including business and IT processes and their complex flow and decision logic, organizational responsibilities and structures, technical and business requirements, related data flow and architectures, systems, services and much more for the purpose of documenting, analyzing, simulating and publishing processes. But how can ARIS help during an SAP® project?

Introduction

Process models are easy to understand, related to the business and a language to translate business requirements into system requirements. Understanding the interrelations of a company and all its assets and processes in a modeled format can bring simplicity to a complex SAP project. Documentation should not only be the single point of communication at the beginning of the project but it should also stay relevant and accurate throughout and long after the project is completed. This can only be realized if the process documentation is interlinked with the application life cycle tool tool, SAP® Solution Manager. But technical integration is only one key point.

Process-Driven Management for SAP Solutions from Software AG is a combination of tools, content and methodology. The solution appeals mainly to Business Process Management (BPM)-driven companies planning:

• New, process-oriented SAP implementations (best practice and own practice processes)
• To consolidate and harmonize existing SAP implementations
• Documentation and standardization of SAP and non-SAP processes
• Process-driven testing and training
• A global roll out of processes
• To automate and orchestrate processes with SAP NetWeaver® BPM
• Orchestrate and automate overall business processes with webMethods

TABLE OF CONTENTS
1 Introduction
2 Strategy & project preparation
3 Process-driven blueprint
6 Realization
7 Testing & go-live preparation
8 Training & go-live
9 Operation & run
10 Summary
11 Proof of success
12 Recommended resources
With process-driven SAP management, you can leverage IT assets and reduce total cost of ownership as well through reducing upgrade and implementation project times drastically and simplifying customizing based on business process requirements.

The Software AG solution supports all the main SAP project types you encounter:

- SAP redocumentation
- SAP implementation
- SAP upgrade
- SAP harmonization and optimization
- SAP template and roll out

Figure 1: The Software AG solution supports all SAP project types and the complete SAP project life cycle.

**Strategy & project preparation**

In order to make the best decision about an SAP solution, companies have to do their “homework.” This includes the documentation of their enterprise strategy and business model, understanding core competencies as well as value opportunities. This is key to understanding and defining the right business requirements and to match this with the solution offerings from SAP AG.

**Strategy documentation**

Coming from the business strategy and business process analysis perspectives, ARIS supports the definition and modeling of strategic aspects of your business, e.g., with the balanced scorecard and Key Performance Indicators (KPIs) to be considered, and interlinks them with your process landscape.
**SAP content import**

In a second step, it is possible to import the SAP Business Process Repository (BPR) content via the synchronization feature and get an overview of SAP best practice and standard processes. Content that is being imported includes SAP industry scenarios (e.g., automotive, banking ...), SAP best practices, product scenarios (e.g., SAP CRM, ERP) and their respective business processes, process steps and general documentation as well as SAP standard configuration content including transactions, organizational units, roles, master data and test cases.

![Redocumentation results](image1)

![To-be process definition](image2)

**SAP redocumentation**

If SAP is already in place, but documentation is outdated, it could be valuable to create an inventory of SAP systems running and understand what SAP functionalities are currently used and how they are used.

Software AG’s redocumentation service for SAP systems provides documentation on enterprise structure, organizational units, document types, standard and customized transactions and reports as well as usage calculation of transactions, documents and reports in a Microsoft® Excel® sheet format or populated ARIS models.

The result of the redocumentation will support the next stages of the SAP project and can be re-used while doing the to-be process definition or consolidation of existing SAP clients (organizational structures). Due to the identification of redundant or unnecessary functionalities and re-use of the redocumentation results in the upcoming blueprint phase, this can significantly improve and speed up the solution to be implemented.

**Process-driven blueprint**

Using either the Industry.PerformanceREADY, SAP BPR content and redocumentation results the scoping and blueprinting are conducted in ARIS. Here, the blueprint relevant information is documented within process models describing the business requirements end-to-end.

ARIS models the documentation of the interrelations of business processes, the executing organization/role, the relevant system down to transaction level, input and output data and related documents as well as interface requirements and other RICEF relevant artifacts. It, therefore, combines business requirements with the SAP blueprint in one view both business and IT can understand.
These process models define the contract between the end-user requirement and the software functionality to ensure that expectations and realization match. Many customers are using the process documentation for process analysis and harmonization of multiple process areas or existing ERP solutions. Another important use case for this process definition exercise is the design of a global process template to be rolled out across local implementations.

**SAP process design**

Going through this documentation exercise, the user is supported by tool wizards to ensure consistent modeling and the re-use of existing objects within the ARIS database, including:

- **SAP method wizard** – user can select model, object, symbol and connection types to be used in ARIS for synchronization that complies with the project standards

- **Wizard to create SAP-functions** – guided by questions all required attributes are stored automatically to ensure synchronization conformance

- **Wizard to create SAP transactions in ARIS** – ensures correctness and re-use of existing objects

- **Wizard to create SAP documentation in ARIS** – asks all required information to upload document into SAP Solution Manager

**Synchronization between ARIS for SAP Solutions & SAP Solution Manager**

After documentation and analysis of the relevant processes in ARIS as well as internal approval, the processes can be transferred to SAP Solution Manager. The interface exchanges only the configuration-relevant information that will be stored in SAP Solution Manager and also translates the EPC models into the hierarchical structure offered in SAP Solution Manager to store the information.
Now the IT project team adds to this documentation in the blueprint and configuration phase, which can be synchronized with ARIS in order to seamlessly integrate the business and IT view.

ARIS for SAP Solutions supports the synchronization of the following information:

- Synchronization of template, implementation & maintenance projects
- Synchronization of process architecture
- Three-layer structure covering scenarios, processes, process steps
  - Flexible process sequence
  - SAP and manual steps
  - Short cut concept enabling the synchronization of occurrence copies and translation into short cuts in SAP Solution Manager
- Synchronization of all SAP transaction types
- Synchronization of SAP Solution Manager system landscape (logical and physical components)
- Synchronization of end-user roles
- Synchronization of keywords
- Synchronization of attached documents & documentation links (with SAP knowledge warehouse) for general (template projects), project, test & training documentation
- Synchronization of customer attributes defined in SAP Solution Manager and mapped with ARIS attributes
- Transfer of master data, organizational structure

**Synchronization via Web service**

Furthermore, it is advisable to define and automate the governance process for modeling, release cycle management, approval, synchronization and publishing of processes if many users are involved. The service-enabled synchronization functionality can make the synchronization process seamless and ensures documentation quality and consistency throughout and after the project. This also simplifies more complex project scenarios, including change request management, project maintenance and global template roll outs.
### Process analysis & reporting

Even in early project phases, it is advisable to use the ARIS Publisher component to communicate the status of the project or in order to get early feedback from the users and project team members.

Once the modeling is completed, the ARIS models can be re-used for various documentation and analysis requirements:

- Automatic creation of blueprint document
- Create and update RICEF specifications
- Technical design document
- RACI charts
- Authorization/security concepts

![Figure 5: Re-use process models to create required project documentation automatically](image)

Leveraging the modeled information in ARIS cannot only improve the project communication and change management process but saves valuable time and resources throughout the rest of the project.

### Realization

During the technical implementation and realization phase, the integration between ARIS and SAP Solution Manager is advantageous for both business and IT. From the process models in ARIS, the user can directly jump into the business blueprint transaction (SOLAR 01) or configuration transaction (SOLAR 02) of the selected blueprint item, access the relevant documents from the SAP Knowledge Warehouse and start the SAP transaction directly. The link to the published ARIS models can be transferred back into SAP Solution Manager, so the configuration team can directly view the published ARIS model without requiring ARIS access or knowledge.
Most of the configuration relevant information is now in SAP Solution Manager. However, if process changes are required, they must be done in ARIS. Changes on the transactional level and on technical documentation can be done in SAP Solution Manager and transferred back into ARIS to make sure that modeled business processes comply with implemented SAP reality.

**Testing & go-live preparation**

A critical phase in an SAP project is testing and go-live preparation. Time and resources are insufficient; end users require support and need to adopt the new processes and IT systems quickly. Again, the re-use of process models for testing, training and end-user communication is supported by the combination of tools and their functionalities.

**Process-based testing**

A major resource eater (up to 9 percent) and error-prone step during this late project phase is the definition of integration test scenarios. High-quality testing can only be ensured by good knowledge and documentation of all process variations, the close collaboration between the end user and the IT project team as well as testing tools to partly automate this step and document the results properly.

The re-use of existing process models can help in combination with ARIS Test Designer which is used to define integration tests based on the process models documented in ARIS. Going across the models, end-to-end processes are recorded and documented using an easy-to-use and intuitive graphical interface. This ensures, first of all, that the system actually corresponds to the designed business processes and the processes tested correspond to the processes implemented, which in turn helps to ensure quality in testing and implementation. Besides the recording of the various end-to-end scenarios, the related test-case documentation can be created including a graphical representation of the selected model path and all relevant functions, expected results (events/outcome), required roles, transactions, data input and output and additional pre-defined test-related attributes maintained in ARIS.

Depending on the selected testing tool, these test cases can be transferred into SAP Solution Manager for test plan creation in the SAP test workbench or directly transferred into HP Quality Center® or other testing environments to execute the testing.
Using ARIS Test Designer thereby saves time re-using previously modeled processes, minimizes project risks and improves process and system quality. In addition, including the end user in the validation of process models and definition of test scenarios ensures high user acceptance and motivation. This in turn increases project success and delivery in time and quality.

**Training & go-live**

Defining the right training requirements globally for the new solution is another challenge for the project team. Fortunately all required information is already documented in ARIS. Evaluating the relation between the business roles, the processes they perform and the related transactions required automatically documents the training requirements without filling out endless Microsoft Excel sheets. Using standard reports in ARIS, this information can be filtered and even published for all end users to refer to.

User acceptance and understanding is an important factor for project success. The documentation created in previous project phases and stored in ARIS for SAP Solutions, SAP Solution Manager and other documentation solutions can be transferred back into ARIS as the central communication platform for project team and end users.

For global template roll-out projects this central communication platform improves greatly the close collaboration between remote project teams working on local implementations of these template processes.

**Process publication**

Using the publishing component ARIS Publisher, this documentation can be made available globally to everyone via intranet even in early project phases for review, communication and training purposes. The process models can be explored, and all documentation stored in various tools and places (e.g., SAP knowledge warehouse and RWD) can be accessed directly from the models using easy search capabilities and role-based access. Project news, highlighting process changes and feedback via email can help ensure the models.
Not only the processes and documentation are interlinked. The ARIS online guide functionality enables the user to “jump” to the relevant SAP transaction directly from the model. This is a perfect way to re-use the process models during end-user training. This functionality is also available vice versa: Within the SAP transaction the process model describing the relevant business process can be accessed and all attached documentation as well. The user is able to understand the business process he is currently executing, can read valuable documentation on data entry and access related training material.

**Operation & run**

To profit from the holistic documentation after go-live, it is important to ensure the integration between the running solution and the documentation in ARIS. Changes can happen on the technical side coming from change requests in SAP Solution Manager or business-related changes can have impact on the supporting SAP systems.

**Change request management**

Ensuring continuous accuracy of documentation is crucial for future changes, upgrades and implementation projects. ARIS for SAP Solutions has the ability to synchronize with the running SAP solution via the use of maintenance projects. Hereby, the relations between the process models in ARIS and the processes of the maintenance project that were originally documented in an implementation project are reactivated. This gives the project team a valuable overview on the processes affected by the change, the need for process adjustments to be made, related documentation changes and training needs. The to-be process models should be designed, reviewed and updated in ARIS before implementing them in SAP. Technical changes however can be documented in SAP Solution Manager and transferred back into ARIS and published to the user community.

Depending on the amount of changes and the size of the project team and process owners involved, it makes sense to integrate the SAP Solution Manager change request management workflow with the ARIS Process Governance workflow. This is possible via Web services and adjustable to the project needs. So the right people can be notified, tasks can be allocated by the engine as well as automatic synchronization and publishing can be triggered.

This change request process can also be triggered by the viewer of the published processes—either by giving feedback on the model content or by starting a change request directly from here, thus optimizing the communication between end user, project team and IT department.
Outlook

With its latest release, ARIS offers many great new features to simplify the modeling and evaluation process significantly. ARIS for SAP Solutions will be extending the synchronization scope including interface scenarios, authorization roles, global attributes and Business Process Modeling Notation (BPMN™) 2.0 models as well as improving existing features like Test Designer, ARIS Online Guide, administration and many more.

Besides the synchronization with SAP Solution Manager, ARIS for SAP Solutions will offer the transformation of EPC models into BPMN 2.0 and the possibility to export models via a standard BPMN 2.0 export functionality. With this ability BPMN 2.0 models can be imported into SAP NetWeaver BPM for process orchestration and execution.

Summary

Profiting from the long-time partnership with SAP AG and 20+ years of SAP consulting experience, our products and solutions enable companies to reduce their total cost of ownership and increase return on investment through continuous improvement and integration between SAP and business processes while implementing SAP solutions.

Benefits of Software AG’s solution at a glance

Benefits of using Process-Driven Management for SAP Solutions range from saving time and money through multiple re-use of content, less change requests during project life cycle of faster identification of gaps and opportunities. Automated project document generation as well as faster conception and creation of tests and trainings underline the power of the solution. Delivering projects on time and budget is only one side of the coin. Quality is another. Business process-related requirement definition leads to higher accuracy of the designed solution, stable alignment of business and IT as well as a complete and integrated project information platform, which are key to the high quality of the end solution.

Positive “side effects” we encounter higher management commitment, better end-user acceptance and increased process competence.

Figure 9: Models can also be transferred via BPMN 2.0 interface into SAP NetWeaver BPM
Proof of success

Figure 10: A successful solution proven in many process-oriented SAP projects

Faster global roll out implementation time at AB Volvo
AB Volvo has created a roll-out kit for standardizing SAP processes worldwide. Using our solution, Volvo shortened implementation lead time, saving approximately 30 percent per roll out while reducing support and maintenance costs.

Helen Kylstad states: “The process-driven SAP management approach increases the business understanding and structures all documentations from solution descriptions, test scripts, training material down to configuration rules and guidelines. This together with roll out roadmaps secure that we have one common view and place where business solution owner, line operation staff, maintenance of product organization meet and collaborate in an efficient way. The roll-out track indicates savings of approximately 30 percent.”

Reduced process documentation times and lower costs at Evonik Industries
The roll out of the SAP platform in Greater China was supported by good-practice processes from Europe and the USA, which were adapted to local requirements. Benefits included substantially reduced process documentation times, resulting in lower costs.

Thomas Goebel from corporate IT explains: “Having ARIS as a support tool meant we were able to slash project documentation times, plus it gave us a highly efficient way of communicating within the project team ... At the same time, it helped us organize our workshops efficiently and train users because we’d all been talking about exactly the same processes.”
Better process control at Brenntag

World leader in international chemistry distribution, Brenntag now has a Europe-wide process framework using our solution. SAP implementation projects are 25 percent faster. SAP project costs are down 10 percent.

Ludger Kruse, project manager, corporate IT, confirms: “Business Process Management at Brenntag is a Europe-wide framework and enables permanent, fast and multiple re-usable design, management and control of processes. BPM at Brenntag is continuous process improvement by use of a common modeling standard.”

Recommended resources

Visit www.softwareag.com/resources for the latest white papers, tutorials, webinars, articles and customer successes on process-driven SAP management. Learn more about our solution at www.softwareag.com/sap. Discover the value of consulting services at www.softwareag.com/services.

About the author

After studying business administration with honors, Joséphe Blondaut has been working in the areas of BPM, SAP consulting and marketing for many years. She started in SAP implementation projects, took over responsibilities as CRM marketing senior consultant and successfully supported international customers within various industries on numerous ERP implementation and optimization projects. In her role at Software AG as a product marketing manager for ARIS for SAP Solutions, she is responsible for all SAP-related ARIS products. She works closely with the product management and supports the cooperation between Software AG and SAP globally.