

Adobe Forms in SAP

Save the forests, use interactive print



Get rid of the files of paper requests, orders and other forms and switch to interactive, user-friendly forms accessible to all employees of your company. Using Adobe Forms offers numerous benefits, however, the key advantage is direct import of data from the form to the SAP system.

In addition to SAPscript and Smart Forms, SAP Adobe Forms – a result of cooperation between SAP and Adobe – represent state-of-the-art print technology in the SAP system available in SAP NetWeaver '04. Thanks to the successful cooperation, SAP users can use forms in a commonly known and accepted PDF format.

Instead of paper

The key advantage of Adobe Forms is the possibility of creating forms in which data entered by the user can be saved. In business processes, such forms can replace hardcopy documents which can easily get lost or damaged. The costs associated with paper documents (print, storage and distribution) and the time needed to process them are also worth considering.

The data from completed forms do not need to be manually entered into the system, as is the case with hardcopy forms, but can be directly imported into SAP or used in any SAP operation, such as, for instance, creation of a material, generation of a requisition or placement of an order.

Adobe forms use XML format to store the entered data and layout information. Thanks to this standard, the process of exchanging information between the SAP system and final users has been made uniform. The PDF format makes it possible to support any type of a form which will look almost identical as its printed version. For this reason, the users accustomed to the layout of hardcopy forms will find it very easy to switch to the electronic version.

Interactive forms and more

The SAP application extracts data from the system and uses them to generate a PDF file. The resulting form can be static or dynamic. Static forms always look the same.

The layout of fields, tables and text is fixed (e.g. as in the case of the PIT return). A dynamic form is a form whose layout depends on the content generated from the system. For instance, the number of pages in an invoice will depend on the number of invoiced items.

The form can be interactive, but can also be a standard printout without editable components. Interactive forms can be completed in an online mode (with interface to SAP) or in an offline mode. The form can be emailed, saved on the hard drive, completed in an offline mode and returned at any point in time. The technology also makes it possible to publish the form on the corporate website based on SAP NetWeaver Portal, using Web Dynpro technology.

The form can include predefined values in a dropdown list format, ensure validation of the data entered and support the use of electronic signatures to associate the document with a particular user. The PDF can incorporate a code thanks to which a selection made in one of the fields (e.g. a country) will restrict the number of options available in another field (e.g. cities).

Developers designing interactive forms in the SAP environment can make use of different technologies. The forms can be created in Java using SAP NetWeaver Developer Studio or in ABAP Workbench using transaction SE80 or a new transaction called SFP (SAP Forms Processing). Adobe LiveCycle Designer, a tool used to create the forms, has been integrated with both environments.

The forms are stored as objects on the server which means they can be transferred between mandants or even systems.

Key features of interactive Adobe Forms

- unrestricted (in terms of time and place) exchange of data between the users and the systems
- use of XML to create forms storing the business data and the form logic
- online (i.e. with interface to SAP system) and offline access
- possibility of integration with SAP NetWeaver Portal
- exact mapping of the paper version of the document
- electronic signatures
- integration of internal users (with access to the system) and external users (without access to the system) in the business process

Designing printouts and interactive forms using Adobe Forms technology requires good knowledge of the technology and extensive experience.

Adobe Reader is the only thing you need

On the server side, the printing and processing of interactive forms is supported by Adobe Document Services running as a module on J2EE server. This service, in order to operate effectively, needs to be appropriately configured through BASIS at the server level. Additionally, in order to create the forms, the following software must be installed:

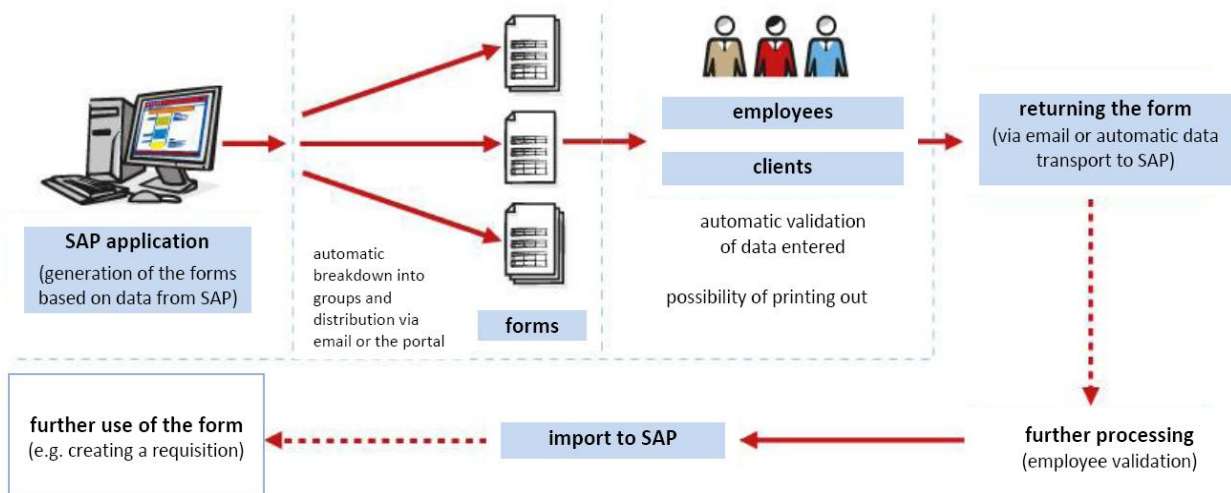
- on the server side: SAP Web AS 6.40 Java, SAP Web AS 6.40 ABAP, Adobe Document Services (a run-time component) and Adobe Credential (to support creation of interactive forms);
- on the workstation side: SAP NetWeaver Developer Studio with Adobe LiveCycle Designer (development in Web Dynpro using Java) and/ or SAP GUI 6.40 with Adobe LiveCycle Designer (development in SAP Web AS 6.40 ABAP), Active Component Framework (to populate the forms with data in Web Dynpro applications) and Adobe Reader 6.0.2 or later.

The users who want to work with interactive forms in web browsers, SAP GUI or locally on their hard drives need only Adobe Reader 6.0.2 or later (available for free-of-charge downloading on Adobe website at www.adobe.com). Adobe Forms are available as a component of SAP Web AS 6.40, but can also be used for exchange of data with lower-numbered releases of the system (e.g. SAP R/3 4.6C) by making the connection through RFC.

It is also worth emphasizing that the older print technologies – SAPscript and Smart Forms – will be supplied with the next releases of the SAP system but will not be upgraded any more. Hence, SAP AG recommends a switch to SAP Adobe Forms already now. A conversion of Smart Forms to Adobe PDF format is also possible using the tools made available by SAP.

Together with Adobe Forms, a range of ready-made forms have been supplied which can be used without purchasing a separate license. No additional license is also required when Adobe Forms are used exclusively for creating non-interactive printouts.

The license is necessary when new, interactive forms are created or when standard forms are extensively modified (more than a few cosmetic changes), however, it will be needed only at the time when the forms are made available to the users for completion on a production system.



An example of the use of interactive SAP Adobe Forms

Interactive forms in SAP operations

A large number of business operations are still associated with paper documents. In many companies, when a warehouse staff having no direct access to the system requests for modification of a material master or creation of a new one, he/she writes the request on paper.

Subsequently, another staff member who is an SAP user enters the request in the system. The request is then reviewed by a technology manager and finally approved by the line manager.

Such a process can be substituted by a workflow built on the basis of interactive Adobe Forms. The warehouse staff who is not an SAP user completes the form on his/her PC and, after the request passes through all the necessary steps and approvals, the material is automatically created in the system without a need for involvement of the person who manually types the request into the system.

Replacement of a paper document with an electronic form eliminates potential errors, the process becomes more transparent and can be tracked in the system (the form is linked with SAP, although the staff member who has issued it has no direct access to the system).

Another example of a possible use of Adobe Forms is serial mailings addressed to employees. An SAP application generates a series of documents, automatically feeding the data specific to each individual employee (e.g. bonus calculation or settlement of travel expenses).

Subsequently, the documents are circulated via email in the PDF format. The employee reads the document, fills out the required fields and uses a button on the form to send the data to the SAP application. As a result, the data become automatically available in the system.

Another example is the use of interactive Adobe Forms integrated with SAP NetWeaver portal based on Web Dynpro. A production operator logs on to the portal and fills out the time sheet which already contains all the values related with the location and the workstation (e.g. site, employee's name and ID number).

The document looks familiar to the employee because it is identical as the paper version. After completion, the data are dispatched directly to SAP. The document may also be printed off at any point in time if a paper version must be maintained for any reason.

The forms can also be used in the offline mode. For instance, a sales representative can carry partially pre-filled forms (data from SAP, such as customer's name, address, etc.). The remaining data are entered together with the customer (e.g. quantity of goods, ordered, delivery date, etc.). The saved data can be automatically dispatched to SAP as soon as the representative has access to the Internet.

Adobe Forms are a convenient and easily accessible solution which not only eliminates the circulation of tons of paper documents in companies and helps save the forests, but also improves the flow of information and reduces errors occurring at the time of manual data entry into SAP.

In addition to savings generated on printing and distribution costs, we can also eliminate the problems associated with data archiving and security.

The Adobe Forms tool will also be appreciated by employees working in the field who need to enter lots of data into SAP but have no access to the Internet and corporate SAP most of the time (e.g. sales representatives, customer advisors, agents or technical service staff, etc.).



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