Why use SAP Workflow?

SAP Workflow ensures "the right work is brought in the right sequence at the right time to the right people". It is a tool designed to facilitate and automate business processes that require tasks to be performed by people. Ideal for casual or non-SAP users, since all the work items can be performed outside of SAP by simply responding to an email. SAP workflow can be linked to Microsoft Outlook or Lotus Notes. Each step of a business transaction can be easily monitored and processes are completed from the beginning to the end. Workflow allows process owners to keep an eye on deadlines, provides statistics on the length of time to complete work processes, determine the workload with regard to individual employees and save processing time.

Since Workflow delivers work items to employees automatically via email, they do not have to wait or inquire about the status of a particular transaction. SAP Business Workflow can also be used to respond to errors and exceptions - it can start when predefined events occur. For example, an event can be triggered if particular errors are found during an automatic check of the data. SAP workflow is particularly useful when there is a business process involving more than one person, when an automatic notification can replace a manual communication and when there is a defined set of individuals and/or documents implicated. It organizes one’s work, alerts users and directs traffic by sending work items - once the user executes the work item, then another one can be sent to another user. For example, a Manager could use workflow to approve a vacation request from an employee. The workflow application would ensure that each person involved uses the correct online form and successfully completes their step before the planned leave was entered into SAP - either by an Administrator or automatically. By the same token, if someone registers for a training class, Workflow can act as an alert tool by notifying the supervisor in question or reminding the individual of an upcoming class.

Before implementing SAP Business Workflow, organizations should start by asking a series of questions, such as: - Which HR processes do we want to automate? - To what extent can we change current procedures and pass them over to electronic control? - What steps are these procedures made up of? - Who are the individuals involved and what are their roles? - How do we get the Workflow Item to go to the right people?

Even though Workflow can be implemented via user-defined tables without the Organizational Management component in place, having a pre-defined organizational structure adds tremendous value and saves time. A clear reporting structure made up of positions and position holders that is maintained by the HR department, ensures the ongoing ease-of-maintenance effort. The ability of HR personnel to add and delete users from positions as people come and go, without affecting your core workflows, is a tremendous long-term benefit. If you have Personnel Administration in place, employee's email addresses can also be maintained by the HR department in addition to employee's respective Time/HR and Payroll administrators who might be involved in the Workflow.

There are basically three options for connecting workflow to external email: Microsoft Outlook/Exchange, Lotus Notes or SAP Connect and Internet Mail. A key factor in SAP R/3 4.6 implementations and upgrades will be the use of a Web browser as the main workflow interface.

Benefits of SAP Workflow

Although the advantages gained by using workflow are not of financial nature, the time saved by optimizing processes could easily be translated into money. - The quality of your processes will be assured by sending relevant information directly to the user. Managers don't have the time to search for information. For example if an employee obtains a qualification as a result of hard work or training, their Managers can be notified immediately. - Cycle time is reduced by providing all the necessary information needed: people can check their list of pending tasks and determine which tasks can be completed the next day without any negative impact. I.e. A Payroll Administrator might be notified immediately of an employee address change via ESS that might implicate taxes. - Workflow allows to monitor deadlines.

It could be used to remind employees of upcoming performance reviews or training or to send payroll year-end tasks items to the relevant Payroll Administrators. Deadline handling ensures that users perform the tasks within the time planned. Estimation ensures that the failure to meet a deadline can be corrected by other means. - Users can see at a glance how the process works and who will be selected to perform the different tasks, which creates a transparent work environment. - SAP contains Workflow templates, which can be used as a reference providing more than 200 Workflow samples. - Implementing Workflow will save costs. Ask yourself how much time is spent gathering information, getting hold of people, logging into different systems and trying to understand who to give a task to? How often does this current process fail and how labor intensive is it to fix it? Workflow reduces time and effort spent and the savings in days can be considerable.

How does it work?

There are several components of a workflow: Workflow Definition, Work Items, Triggering Events and at the Receiving end the Organizational Structure. The workflow definition is created in the Workflow builder and is made up of the various steps. Each step of the workflow definition can be a task pointing to a SAP transaction or a decision. A decision might contain specifications about agents and deadline monitoring for a step. The workflow is started either manually or by the system at runtime. For the system to start a workflow, the workflow definition must contain a triggering event (for example the event “Address update by the employee”). When the event occurs, the relevant workflow is started automatically. Tasks or Work Items describe the activities involved and can refer to automatically executable methods (i.e. send an email to a supervisor) or they might need a user to execute them (i.e. supervisor has to go and click on a button in his workplace to approve something). Tasks refer to business objects, which are ABAP coding. Events are activities that trigger the workflow - one or several workflows at the time. Once the workflow is triggered, the definition flowchart determines which and in what order work happens. Work items are then received and executed in MS Outlook, Lotus Notes, mySAP Workflow MiniApp or the SAP integrated inbox. Alternatively, the workflow system can transmit e-mail notifications directly to any mail system, informing the user of the need to log in to the SAP system to execute the task. A work item is always assigned to one or more users. Once the task is executed, the work item vanishes from the other users' inboxes.

Integration to Email systems

Usually executable work items are received in the Workflow inbox. But casual SAP users, especially Managers might forget to check their inbox at a regular basis and so it makes sense to set up reminder emails, informing people via a batch job that they have work items in their inbox. Alternatively, an email can be sent directly to their Lotus Notes / Outlook account with a hotlink to the Workflow inbox. All emails, whether they
exists in the form of Workflow notifications, Workflow Workitems, or just a standard SAP Office memo, are sent out of SAP through SAPConnect. This provides the all in one gateway between SAP and the mail server. The transport of workflow items between SAPConnect and the mail server (whether that's Lotus Notes or Microsoft Outlook) has been facilitated by SAP provided add-ons that are fully optimized for the different protocols required for each server. Lotus Notes, for example, uses a 'pipe' called the MTA, or Message Transfer Agent. This was designed jointly between SAP and Lotus to provide full integration between the two systems.

It should be noted that the type of transport medium used is dependent on the mail server and not the mail client. In other words, if the employee uses Outlook on their computer but the mail server is a Lotus Domino server, the MTA would be the mail gateway used. Each workflow background user must have an email address stored in their user profile. It is noteworthy that no approval or reply notification will be allowed from an external mail system - in other words external email systems cannot respond back to SAP for security reasons.