SAP Workflow in Plain English

Applies to:

SAP Workflow. For more information, visit the [Business Process Modeling homepage](#).

Summary

This article describes the basics of SAP workflow in very simple terms along with the basic terminology used. It does not go into the technical details on how to implement workflow but describes the high level processes involved with SAP workflow.

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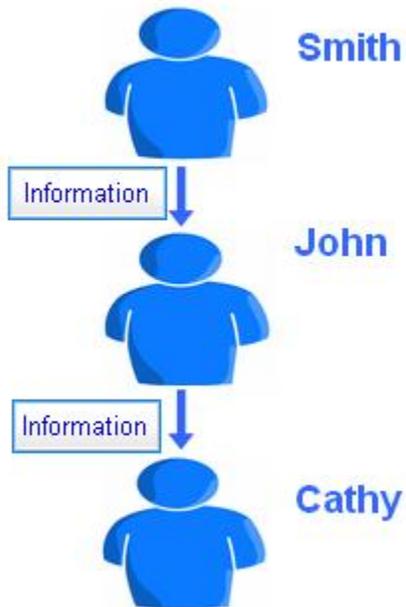
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What is SAP Workflow

Workflow, as the name suggests, means flow of work, may be from one person to another person. It is in fact a sequence of connected activities resulting in exchange of information.

Example: Let us consider a simple example - "Application of leave". It consists of the following activities.

1. Employee submits a leave application form to his manager. (He fills in details like the FROM and TO dates of leave, the reason for taking leave, his contact number etc)

2. Manager checks the details of the application

3. In case, he finds that the reason for taking leave is not specified/detailed properly, he may reject the leave application.

4. Now, the employee has to correct the leave aplication, specifying the leave reason properly and submit the application again.

5. The manager finally approves the leave application.

   Please note that there can be many variations of the business process. A simple case is discussed here to give your understanding of workflow, a good start. The procedures can be complex involving many persons, decisions and approvals.

Disadvantages of Traditional Paper Based Workflow

There are many disadvantages to the traditional paper-based flow of work in a typical office environment. Let us discuss a few of them.

1. Lack of transparency: There is no easy way to know the status of the leave application. We probably have to inquire the manager personally whether he has approved the leave application or not. There is no system recorded status that we can glance at, to track the application.

2. Long lead times: Bases on customer feedback survey, it is found that a traditional paper based approch involving three people typically takes seven days to complete.

3. Lack of deadline monitoring: Who knows? The manager might just be sitting on the task for too long. There is no mechanism in place to ensure that the persons perform tasks within planned time period.

4. High costs: Paper based workflows are very costly to support as a result of manual document processing and archival.

How SAP Workflow Helps

SAP workflow is a cross application tool that automates the business processes like the "leave application approval" procedure that we have discussed. Cross application tool means the tool can be used across various modules of SAP.

Brief Overview of SAP Business Workflow Terminology

There are 9 primary terms that you should be aware of when learning SAP Business Workflow. This **Workflow Tutorial** will describe each of these in detail. These are by no means complete, but will give you a very basic idea on what most of the key terms used. We will discuss these terms in the light of the leave application example discussed earlier. We will call the Leave Application Form as "Notification of Absence" going forward.
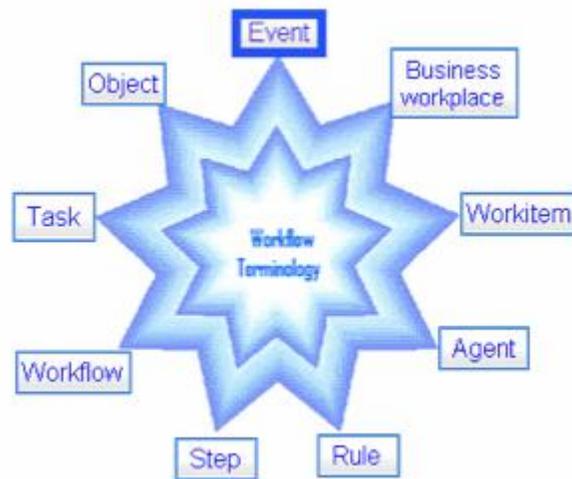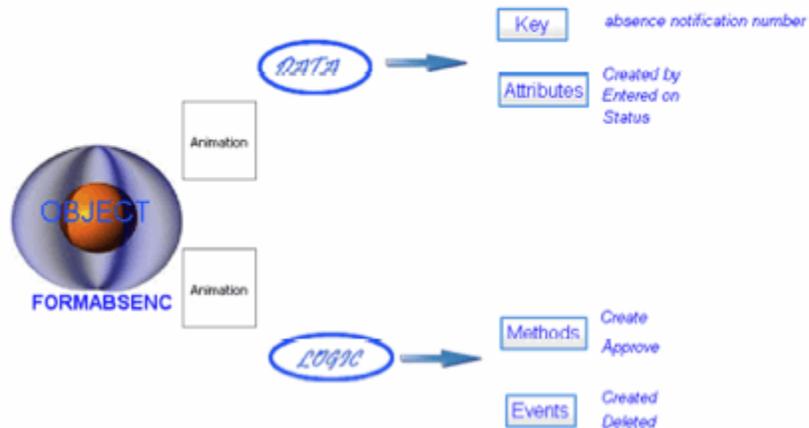

Event

An event represents an action in the system.

For example, "Creating Absence Notification" is an ACTION. For this action the SAP Application creates an event. This even in turn triggers a workflow.

Object

Workflow routes the document among different persons. Each person performs certain activities. Whatever goal the workflow is intended to achieve, can be put inside an object type. Consider an Object as a Structure (Abstract Enclosure) with certain data and some logic. For example, there is a standard object type called FORMABSENC in SAP. This is used for the notification of leave. It has certain data and some logic. If you are familiar with Object Oriented Programming then this concept will be pretty familiar and straight forward.

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Data

- KEY (Absence Notification Number)
- ATTRIBUTES (Created By , Entered on , Status etc)

Logic

- METHODS (Create, Approve etc)
- EVENTS (Created, Deleted etc)

An OBJECT is a specific instance of the OBJECT TYPE. So, if an user created a Leave Application Form Object of type FORMABSENC , an instance with a unique number (say 100001) is created.

Task

An **SAP workflow task** represents an Activity. It serves a purpose here. Some examples of tasks are Revise Absence Notification, Approve Absence Notification etc. The task Approve Absence Notification performs a business function – Submits the relevant absence notification form to the manager and on approval , it changes the status of the form to Approved and so on.
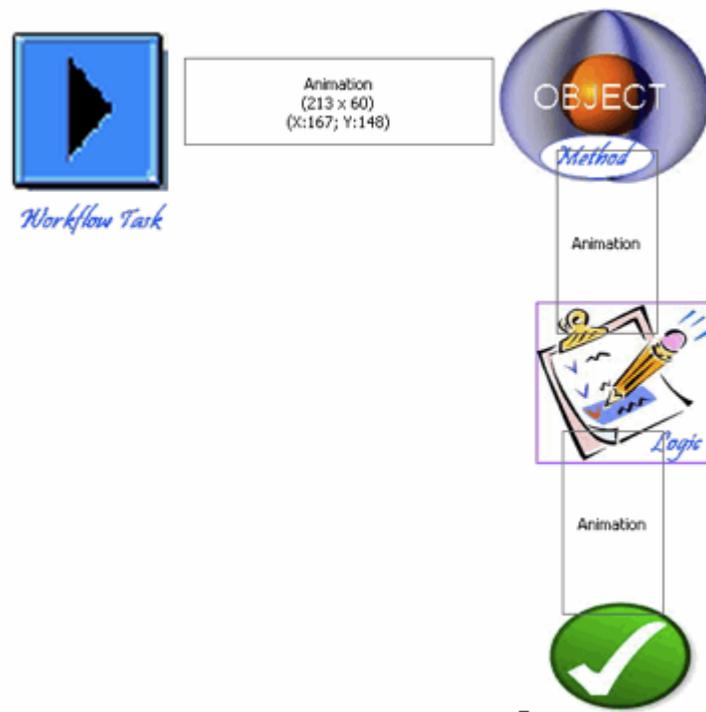
Now, how does it perform this function ? It follows the logic created inside the method of an object type. So , in simple terms, a workflow TASK refers to the method of an object type.

Business Workplace & Work Item

Business Workplace is a work area that an SAP user can use to carry out business Processes.
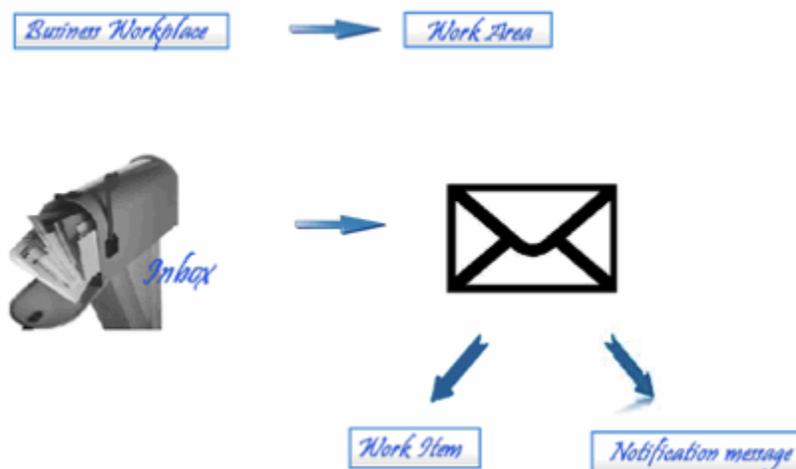
For example, the business workplace of an user could be his inbox. Let us take the example of the absence notification again. The employee submits the notification to his manager. The manager receives the request in his inbox to approve the absence notification. The manager opens it , checks the details and approves the same. The request that the manager receives in this inbox is called a WORK ITEM. In technical terms, a

work item is a run time request of a task in real time. Inbox contains not just the work items – it may as well contain simple text message. Examples include Notification messages, that need not be acted upon and are just used to inform the owner.

SAP Workflow Agent

An Agent is a person who executes a work item. In our example, manager Mr. John is the agent of the workflow task 'approve absence notification.

- Possible agent is the person who is eligible to execute the work item. The name of the possible agent is mentioned in the workflow task.
- Responsible agent is the person who should execute the work item, or who is responsible for acting on the work item.Name of the responsible agent is mentioned in the workflow step.
- Excluded agent is the person who should not execute the work item, name of the excluded agent is mentioned in the workflow step.

Let us consider an example.
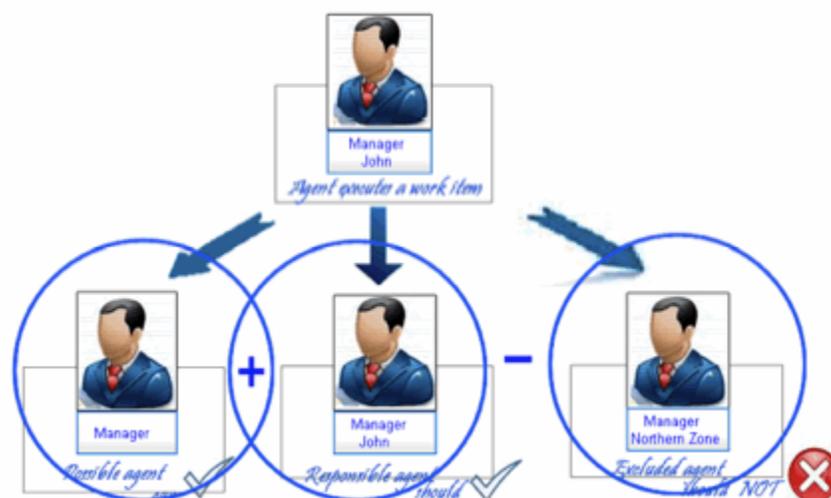
John is a manager at the Southern Zone of an organization. Any manager can execute the task 'approve absence notification' in general. Meaning all the managers have the expertise, authority and eligibility to

execute the task of approving. They are the possible agents who can execute the task. Hence, in the task, we mention the job 'manager' as the possible agent. This applies to all the managers in general.

But, it is not a good idea to send the request for approving absence notification to all the managers. We have to select one responsible person, who should act on it. So, in the workflow step, we specifically mention the name of the manager 'John'. He is called the responsible agent.

There might be a requirement that managers of Northern Zone only should not be able to check/approve the absence notification. In that case we mention the job 'Manager - Northern Zone' as the excluded agent of the workflow step.

Hence, the system sends the work item to the responsible agent who is also the possible agent and not the excluded agent. In this example, the system sends the work item to John who is also the manager and not the northern zone manager.

Please note that, for the purpose of this demo session, we are not detailing on organizational aspects like job, position.

SAP Workflow Step

Steps are the building blocks of a workflow. In other words, a workflow consists of steps arranged in a sequence. A step in general refers to a business activity. A step can therefore refer to an activity where it refers to a task.
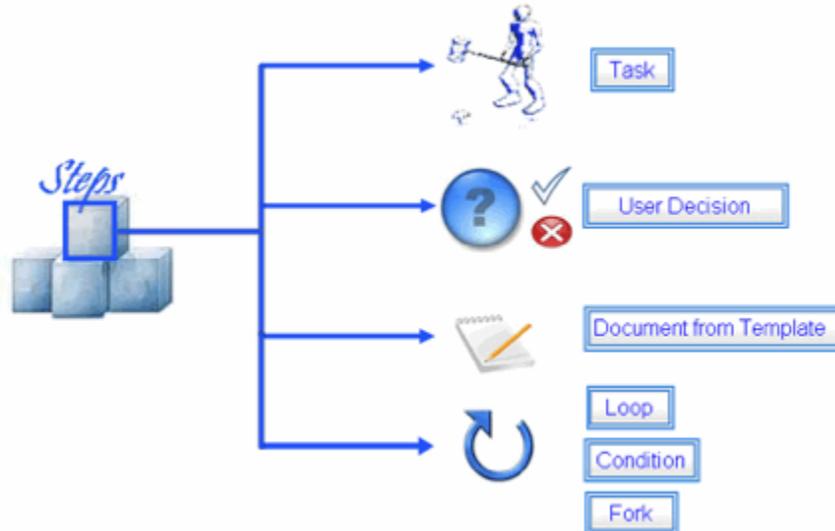
Eg., a step is created that refers to the task of approving absence notification or a user decision where the receiver of the notification has to decide on an 'Approval' or a 'Rejection' or a document from a template where a document can be edited from within a workflow. Steps can also refer to other programmatic conditions like loops, conditions, forks (creation of a child process) etc.

Rule

As discussed earlier, in the workflow task, as a responsible agent, we need to mention the name of the person who should execute the work item of approving absence notification. This method of specifying directly, the user name or job or position is called fixed agent assignment.
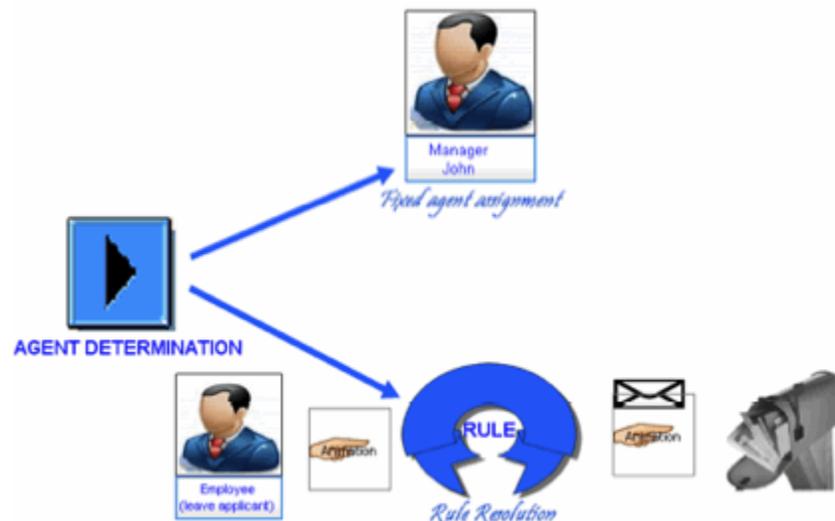
But in some cases, we may want to determine the agent at run time, i.e when the workflow task is actually executed.

Then, instead of specifying the manager's name, we specify a RULE 'superior ofworkflow initiator'. What does this rule perform?

It takes the employee as input, refers to the organizational plan,checks who the superior of the employee is, at that point in time, and sends the work item to his inbox. This method is called RULE RESOLUTION.

Please note that there are many other rule types and discussion of those is not included for this demo session.

Workflow

Now finally lets summarize the term SAP workflow and how these key terms are linked together.

1. Workflow engine automates business processes.
2. Workflow can be triggered by an event.
3. Workflow definition consists of a sequence of steps.
4. Each step can be an activity which is nothing but a task.
5. Task in turn refers to a method of a workflow to implement a specific logic.
6. Steps can also refer to user decision, and other programattic controls.
7. Runtime reprsentation of the step is called a work item.
8. This work item sits in the inbox(business workplace) of the responsible agent assigned to the step.
9. Agent determination can make use of Rule.

Related Content

A video version of the same content is available with voice over at the following locations.

[What is SAP Workflow](#)

[SAP Workflow Terminology - I](#)

[SAP Workflow Terminology - II](#)

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