Welcome to the introduction course of the Work Flow topic.
Agenda

• Concept and Key Elements
  – Concept of the Workflow in SAP Business One.
• Workflow Service
  – The engine which drives the Workflow in SAP Business One.
• Workflow Template Design
  – Design Workflow Process Template in SAP Business One Studio.
• Activating Workflow in SAP Business One
  – How to activate the Workflow in SAP Business One
• Processing Workflow in SAP Business One
  – How to process and monitor the Workflow in SAP Business One

Note!
• This is the agenda for the introduction course:
• During this course we will discuss the following topics:
  – First, we will review the concept of the Workflow in SAP Business One.
  – Then, we will focus on setting of Workflow Service in SAP Business One Service Manager, the engine, which drives the Workflow in SAP Business One.
  – We will briefly look at SAP Business One Studio and what components are used to design the Workflow Process Template.
  – Then we will review how to import and activate the Workflow Process Template in SAP Business One.
  – Finally, we will review how to process and monitor the Workflow in SAP Business One.

Note!
• This is a product training and we will focus on the solution options in SAP Business One.
At the end of this course, you will be able to:

- Explain the concept of the Workflow in SAP Business One.
- Recognize key elements used in the Workflow Template.
- Activate and process the Workflow in SAP Business One.
OEC Computers has dedicated users responsible for financial relevant data at Business Partner Master Data. Therefore, once new Business Partner Master Data is created the responsible user should get a task to check and complete the financial data at this new Business Partner Master Data.

Bryce the accountant, wants to get full control of new business partners created in the system.

You tell him about the Workflow solution in SAP Business One.

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- Therefore, once new Business Partner Master Data is created the responsible user should get a task to check and complete the financial data at this new Business Partner Master Data.
- Bryce the accountant, wants to get full control of new business partners created in the system.
- You tell him about the Workflow solution in SAP Business One.
Let us have a look on the basic concept of the Workflow in SAP Business One.
Workflow in SAP Business One is driven by Workflow Service.

Workflow Process Templates, which are describing the flow of the tasks and their assignment to the users, are designed in SAP Business One Studio.

So, in order to process specific Workflow in SAP Business One, we need to:

- configure the Workflow Service in SAP Business One Service Manager
- design the Workflow Process Template in SAP Business One Studio
  
  - import, activate and process the Workflow Process Template in SAP Business One
Next, we will focus on setting of Workflow Service in SAP Business One Service Manager.
Workflow Service Prerequisites

Prerequisites:
Before configuring the Workflow Service, the Workflow user has to be activated in SAP Business One

• Go to Administration → Setup → General → Users
• Find the user Workflow
• Set the password for this user
  – Password Never Expires
  – No need to Change Password at Next Logon
• Go to Administration → License → License Administration
• Assign the Professional License to the user Workflow

Note:
The need of Professional license for Workflow user is just a temporary solution in first release of SAP Business One 9.0. During the ramp-up it will be replaced by the solution, which will not require any commercial license to be used for Workflow user.
In Service Manager select the Workflow service.
In the Workflow Setting window activate the workflow for selected companies.
Start the Workflow service.

Note:
The Workflow Setting window is secured by B1SiteUser password.
Demo: Workflow Service

- In *Service Manager* select the **Workflow** service.
- In the *Workflow Setting* window activate the workflow for selected companies
- Start the **Workflow** service
Let us have a look at SAP Business One Studio and what components are used to design the Workflow Process Template.

- Concept and Key Elements
  - Concept of the Workflow in SAP Business One.
- Workflow Service
  - The engine which drives the Workflow in SAP Business One.
- Workflow Template Design
  - Design Workflow Process Template in SAP Business One Studio.
- Activating Workflow in SAP Business One
  - How to activate the Workflow in SAP Business One
- Processing Workflow in SAP Business One
  - How to process and monitor the Workflow in SAP Business One
Workflow templates are designed in SAP Business One Studio.

Workflow template is then used in SAP Business One as the pattern for specific workflow instances.

Start SAP Business One Studio in Windows:

- Start
- All Programs
- SAP Business One
- SAP Business One Studio
- SAP Business One Studio

In SAP Business One Studio there is a collection of predefined elements, which can be used to design the workflow process templates:

- Event Elements
- Task Elements
- Gateway Elements
- Dataobject Elements

- Event Elements are used to indicate the starting points and the endpoints in the workflow diagram.
- Task Element typically requires user action, for example to call a prospect or create a Business Partner Master Data.
- Gateway Element indicates the spot where the flow splits into multiple flow paths.
- Dataobject Element represents the object which needs to be processed in
the specific task, for example Quotation.
Let us review the predefined elements in the workflow process template.

**Event Elements:**

- **Start Event**
  - workflow process is started manually by the user of SAP Business One.

- **Timer Start Event**
  - workflow process is started by the Workflow Service, according to the timer settings in SAP Business One Studio. It is either a one time start or a recurrent start.

- **Conditional Start Event**
  - by the workflow service, according to the conditional settings in SAP Business One Studio. Use JavaScript to define condition settings.

- **End Event**
  - Indicates the end of a workflow process.

- **Terminate End Event**
  - Indicates the end of a multi-flow path workflow process. Once the flow path reaches this point, other flow paths are terminated automatically.
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Task Elements:

- **User Task**
  - Indicates the tasks that users need to process in SAP Business One, for example create Sales Quotation, update Business Partner Master Data, create Warehouse Transfer, etc.

- **Manual Task**
  - Indicates the tasks that users process outside SAP Business One, for example, making a phone call or scheduling a meeting.

- **Script Task**
  - Indicates the tasks that the workflow service processes automatically, once the conditions defined in SAP Business One Studio are met. Use JavaScript to define script tasks.

• **Task Elements:**
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    - Indicates the tasks that users need to process in SAP Business One, for example create Sales Quotation, update Business Partner Master Data, create Warehouse Transfer, etc.

  - **Manual Task**
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  - **Script Task**
    - Indicates the tasks that the workflow service processes automatically. Use JavaScript to define script tasks.
Gateway Elements:

- **Parallel Gateway**
  - Indicates the spot where the flow splits into multiple flow paths. Users must process each of the flow paths into which the flow splits.

- **Exclusive Gateway**
  - Indicates the spot where the flow splits into several flow path options. Users only process the flow path which meets the flow conditions.
Dataobject Elements:

- **BusinessOne Dataobject**
  - Indicates the dataobjects that are currently supported by the workflow function in SAP Business One.

- **Customized Dataobject**
  - Indicates that the dataobjects contain a series of variables necessary for the workflow service to execute the logics, such as calculating, comparing, deciding, and so on. They are usually quoted by the JavaScript specified in the Script Task or the Sequence Flow that follows the Exclusive Gateway.
When designing the Workflow Template, you

- Compose the workflow from different elements - Drag and Drop elements on the working pane
- Define conditions in Conditional Start Event (using JavaScript)
- Set timers at Timer Start Event
- Assign SAP Business One users to specific User Tasks and Manual Tasks
- Assign SAP Business One dataobjects and customized dataobjects to User Task and select the operation to be performed with the selected object
- Describe the task to be processed in Manual Tasks
- Define the scripts in Script Tasks (using JavaScript)
- Define conditions at Exclusive Gateway (using JavaScript)
- And, finally, export the Workflow Process Template as .xbml file.
selected object

• Describe the task to be processed in Manual Tasks

• Define the scripts in Script Tasks (using JavaScript)

• Define conditions at Exclusive Gateway (using JavaScript)

• And, finally, export the Workflow Process Template as .xbml file.
  – that follows the Exclusive Gateway.
Workflow Template Design

For details on how to design the Workflow Process Template in SAP Business One Studio, refer to the How to Configure the Workflow Service and Design the Workflow Process Templates.pdf

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- You can find this guide in How to Work with Workflow in 9.0.ZIP file on How-To Guides for SAP Business One 9.0 page on PE portal: https://service.sap.com/~form/handler?_APP=00200682500000002713&_EVENT=DISPLAY&_ARCHIVE=01100035871000577346
Demo: Workflow Template Design
Let us review how to import and activate the Workflow Process Template in SAP Business One.
At first, the Workflow Template has to be Imported and then Activated:

- Go to Administration ➔ Workflow ➔ Workflow Manager
- Import the Workflow Template
  - Push the button Import and select relevant .xbml file.
- Activate the Workflow Template
  - Push the button Activate.
Demo: Activating Workflow in SAP Business One

- Go to Administration → Workflow → Workflow Manager
- Import the Workflow Template
  - Push the button *Import* and select relevant .xbml file.
- Activate the Workflow Template
  - Push the button *Activate.*
Finally, we will review how to process and monitor the Workflow in SAP Business One.
Once the Workflow Template is activated, it can be started. Based on the type of Start Event element used in the particular Workflow Template, it can be started by:

- **Start Event**
  - Workflow must be started manually in *Administration ➔ Workflow ➔ Workflow Instance*

- **Time Start Event**
  - Workflow is started automatically by Workflow Service upon specific time.

- **Conditional Start Event**
  - Workflow is started automatically by Workflow Service when a specific condition is met.

Please refer to slide 13 describing Event Elements which can be used during the design phase.
Note!
Workflow service checks the conditions defined in the Conditional Start Events every 10 minutes to see if any instances need to be started. This interval can be adjusted in the Configuration File of the Workflow Service, for details refer to How to Configure the Workflow Service and Design the Workflow Process Templates.pdf.
The Workflow is started either automatically (Time or Conditional Start Event) or needs to be started manually (Start Event).

In Administration → Workflow → Workflow Instance you can see the details of Workflow Instances
- The blue arrow sign shows which task is currently being processed
- The green check sign shows which task has been already completed
- Double click on the specific element to see the details

The action Start generates the new Workflow Instance.

In Administration → Workflow → Workflow Instance you can see the details of Workflow Instances
- The blue arrow sign shows which task is currently being processed
- The green check sign shows which task has been already completed
- Double click on the specific element to see the details

Note!
Only one instance of the specific workflow template with Conditional Start Event can be active. Only when this instance is completed, another instance
of this workflow template can be started.
The processing of Workflow Instance is controlled by Workflow Service. Based on the definition of the tasks and their allocation to the users in the Workflow Template the Workflow Service assigns these tasks to specific users’ Workflow Worklist.

One task can be assigned to more users.

In the Workflow Worklist each user can see the list of tasks to be processed by him.

Go to Administration → Workflow → Workflow Worklist to check what tasks are to be processed by you.
When a user wants to process the particular task, he must first pick up this task.

When the specific task is picked up, the user becomes the owner of this task, so nobody else can process the same task in parallel, even if more users are assigned to the same task.

Go to Administration ➔ Workflow ➔ Workflow Worklist and pick-up the Workflow Task.
Processing Workflow in SAP Business One

- Once the task is Picked Up, it can be Processed.
- The task can be Processed by the user, who Picked Up this task, or it can be Forwarded for processing to any other SAP Business One user.

- Once the task is Picked Up, it can be Processed.
- The task can be processed by the user, who Picked Up this task, or this user can Forward it for processing to any other user.
- Go to **Administration → Workflow → Workflow Worklist**, open the **Task Details** of relevant Workflow Task, and then **Forward** it to another person or **Process** it.
Based on the task type, the Workflow requires different type of activities:

- **User Task**
  - Indicates the tasks that users need to process in SAP Business One.
  - User needs to Add or Modify the specific object in SAP Business One
  - Examples of such objects are Sales Quotation, Business Partner Master Data, Warehouse Transfer etc.
Processing Workflow in SAP Business One

- **Manual Task**
  - Indicates the tasks that users process outside SAP Business One, for example, making a phone call or scheduling a meeting.
  - In SAP Business One user just indicates, that the specific task is complete.

  ![Manual Task Diagram]

- **Manual Task**
  - Indicates the tasks that users process outside SAP Business One, for example, making a phone call or scheduling a meeting.
  - In SAP Business One user just indicates, that the specific task is complete.
Processing Workflow in SAP Business One

• **Script Task**
  – Indicates the tasks that the workflow service processes automatically. Use JavaScript to define script tasks.
  – Script Task does not require any user interaction.

  ![Image of Task Details]

  - Workflow service processes the scripts by default in 10 minutes interval.
  - This interval can be adjusted in the Configuration File of the Workflow Service, for details refer to How to Configure the Workflow Service and Design the Workflow Process Templates.pdf.

• Please refer to slide 14 describing Task Elements which can be used during the design phase.
• Once the task is completed, the Workflow Service based on the Workflow Template design continues to the next step in the flow.

• If the next step in a task element, Workflow Service generates this task as a new record in the assigned users’ worklists.
  – user can view all the tasks assigned to him in Administration ➔ Workflow ➔ Workflow Worklist

• If the next step is Gateway Element, then the Workflow Service based on the Gateway Element type:
  – splits the flow into multiple flow paths, or
  – based on the flow condition selects the path to be processed

• When the End Event is reached, the Workflow Instance is completed.
Workflow processes can be monitored in following menu options:

- Go to Administration → Workflow → Workflow Instance to check status of specific Workflow Instance.
- Go to Administration → Workflow → Workflow Worklist to check what tasks are to be processed by you.
- Go to Administration → Workflow → Workflow Tracking to get an overview of all Workflow instances.
Demo: Processing Workflow in SAP Business One
You should now be able to

- Explain the concept of the Workflow in SAP Business One.
- Recognize key elements used in the Workflow Template.
- Activate and process the Workflow in SAP Business One.