EP600

SAP NetWeaver Portal Universal Work List

SAP NetWeaver People Integration

Date _____

Training Center _____

Instructors _____

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Education Website _____

Instructor Handbook

Course Version: 2006 Q2
Course Duration: 1 Day(s)
Material Number: 50080037
Owner: Sascha Tubbesing (d038680)

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About This Handbook

This handbook is intended to complement the instructor-led presentation of this course, and serve as a source of reference. It is not suitable for self-study.

Typographic Conventions

American English is the standard used in this handbook. The following typographic conventions are also used.

Type Style	Description
Example text	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths, and options. Also used for cross-references to other documentation both internal (in this documentation) and external (in other locations, such as SAPNet).
Example text	Emphasized words or phrases in body text, titles of graphics, and tables
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example SELECT and INCLUDE.
`Example text`	Screen output. This includes file and directory names and their paths, messages, names of variables and parameters, and passages of the source text of a program.
`Example text`	Exact user entry. These are words and characters that you enter in the system exactly as they appear in the documentation.
`<Example text>`	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

Icons in Body Text

The following icons are used in this handbook.

Icon	Meaning
	For more information, tips, or background
	Note or further explanation of previous point
	Exception or caution
	Procedures
	Indicates that the item is displayed in the instructor's presentation.

Contents

Course Overview

This course is designed to explain the configuration possibilities of the Universal Worklist (UWL). After introducing the IT scenario Business Task Management (Unit 1) in which the UWL plays a central role the UWL user interface is explained (Unit 2). The course shows the UWL personalization features for end users (Unit 2). Unit 3 concentrates on integrating SAP Business Workflow into UWL as it is the main use case for UWL. Further configuration possibilities are explained in Unit 4. Unit 5 gives a picture of how to configure the UWL to customer needs.

Target Audience

This course is intended for the following audiences:

- Technology Consultants
- Project team members
- Anybody interested in Universal Worklist

Course Prerequisites

Required Knowledge

- SAPEP (SAP NetWeaver Portal Fundamentals)

Recommended Knowledge

- BIT600 (SAP WorkFlow – Concepts, Inboxes, Reporting and Template Usage)

Course Duration Details

Unit 1:	
Introduction	
Business Task Management	10 Minutes
Introducing Universal Worklist	5 Minutes
Unit 2: Using Universal Worklist	
Navigating in Universal Worklist	25 Minutes
Exercise 1: Navigate in the UWL	10 Minutes
Features in Universal Worklist	40 Minutes
Exercise 2: Features of UWL	15 Minutes
Personalizing Universal Worklist	30 Minutes
Exercise 3: Personalize the UWL	10 Minutes
Unit 3: Basic Configuration	
Connecting to SAP Business Workflow Systems	60 Minutes

Course Goals

This course will prepare you to:

- Understand how to use and configure the Universal Worklist and connect the Universal Worklist to an SAP Business Workflow system.

Course Objectives

After completing this course, you will be able to:

- Use the Universal Worklist
- Connect the Universal Worklist to an SAP Business Workflow system
- Do optional and advanced configurations of the Universal Worklist

SAP Software Component Information

The information in this course pertains to the following SAP Software Components and releases: ECC 6.0 and NWP 7.0

This course, **EP600/62**, is the UWL configuration course for SAP NetWeaver Portal 7.0 (SAP NetWeaver 2004s). Note that the class **SAPEP/62** on SAP NetWeaver Portal Fundamentals is a must-requirement for EP600/62.

As an instructor for EP600 you should visit SAPEP and EP600 as preparation to this course. Also very helpful in understanding some topics of this course is to visit BIT600 and maybe EP300.

Caution: The notes to the instructor in this handbook were created in parallel with the material for the participants. You will also need additional material, to be found (at present) in SAP Service Marketplace (http://service.sap.com) with the Quick Link */curr-ep*. This includes:

- General information about the portal training system landscape and logon data
- A system setup guide including all preparatory steps
- An additional guide for the instructor (add-on IG) if something changes after this material was published
- A registration list for news flash e-mails about portal training

In this course participants will be introduced to the UWL in SAP NetWeaver Portal. The course covers end user features and the technical configuration of UWL.

A useful **internal** web page is http://uwl.pal.sap.corp:1080/uwl

Central SAP note for UWL in SAP NetWeaver 2004s is **888457** -*NW2004s: Universal Worklist Release Note*

Unit 1

1

Introduction

This unit introduces the UWL and its features. It also provides information on where the UWL is used.

Unit Overview

In this unit the Universal Worklist is introduced as the central user interface of the Business Task Management IT Scenario of SAP NetWeaver.

Unit Objectives

After completing this unit, you will be able to:

- name the features of Business Task Management
- describe the benefits of Business Task Management
- explain the reasons why to use Universal Worklist

Unit Contents

Lesson: Business Task Management

Lesson Duration: 10 Minutes

Lesson Overview

This lesson gives an overview of the SAP NetWeaver IT Scenario “Business Task Management”.

Lesson Objectives

After completing this lesson, you will be able to:

- name the features of Business Task Management
- describe the benefits of Business Task Management

This lesson tells how the UWL is the central UI of Business Task Management.

Business Example

Your company wants to coordinate and execute tasks arising from automated process flows and spontaneous events and track the progress of tasks, so that the employees can work more efficiently. Business Task Management is the automation, execution and monitoring of tasks.

Business Task Management

A company generates tasks manually through their employees and automatically through the automated processes:

Central IT needs to automate processes in a robust but flexible manner. They are prepared to invest in technical know-how (such as via training employees) so that the processes that they automate are engineered to match the requirements across the whole enterprise. There focus is on having a tool that supports all the different requirements and throughput for the complete expertise. In other words, no compromise in respect to features and software support.

A **business department** is prepared to make compromises in respect to capabilities in order to enable the modelling to be intuitive enough for a power user without intensive training to model the processes. The processes are simpler and less detailed than the enterprise-wide processes but easier to model. Typical skills required to model such a process are on a par with a user who can model a sophisticated spreadsheet. Every department will have such a technically-savy user, and he or she will model the local processes.

All **end users** will need to generate task for his or her colleagues on-the-fly, without the need to go to a power user or attend training. So the aim here is simplicity rather than sophistication.

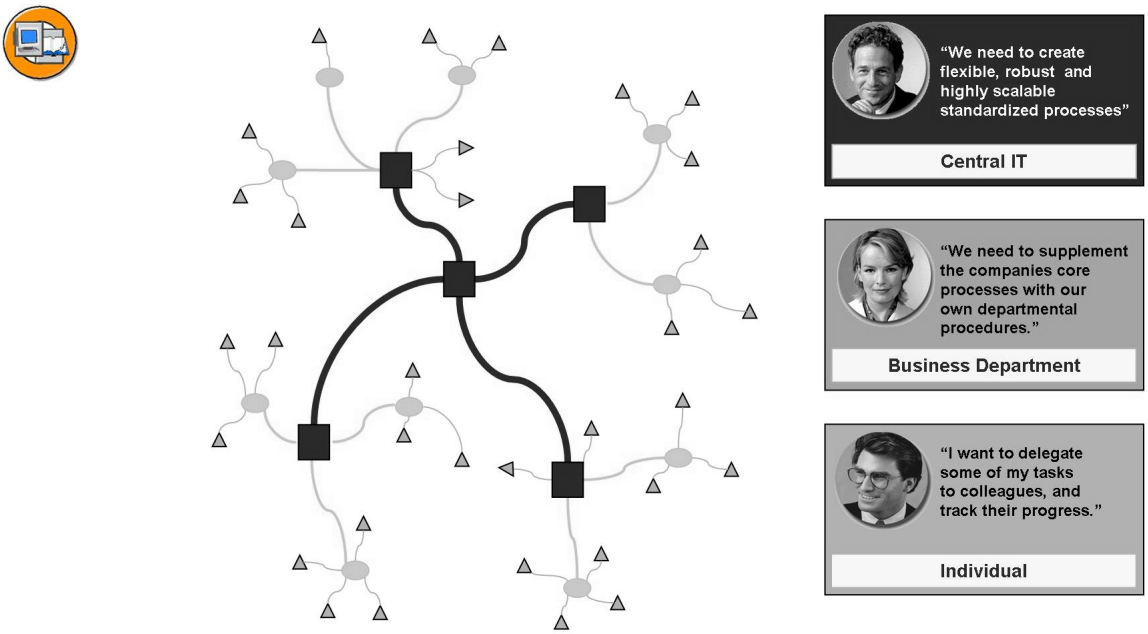

Figure 1: Centralized vs. Decentralized Process Control 1

To enable these objectives, different tools are not used, but the user interface of the modelling and the capabilities of the modelling environment are different. All the process-oriented tools use the same SAP NetWeaver engine to drive the processes (the Business Process Managing runtime) and the tasks all appear in the same worklist (the universal worklist in the SAP NetWeaver Portal).

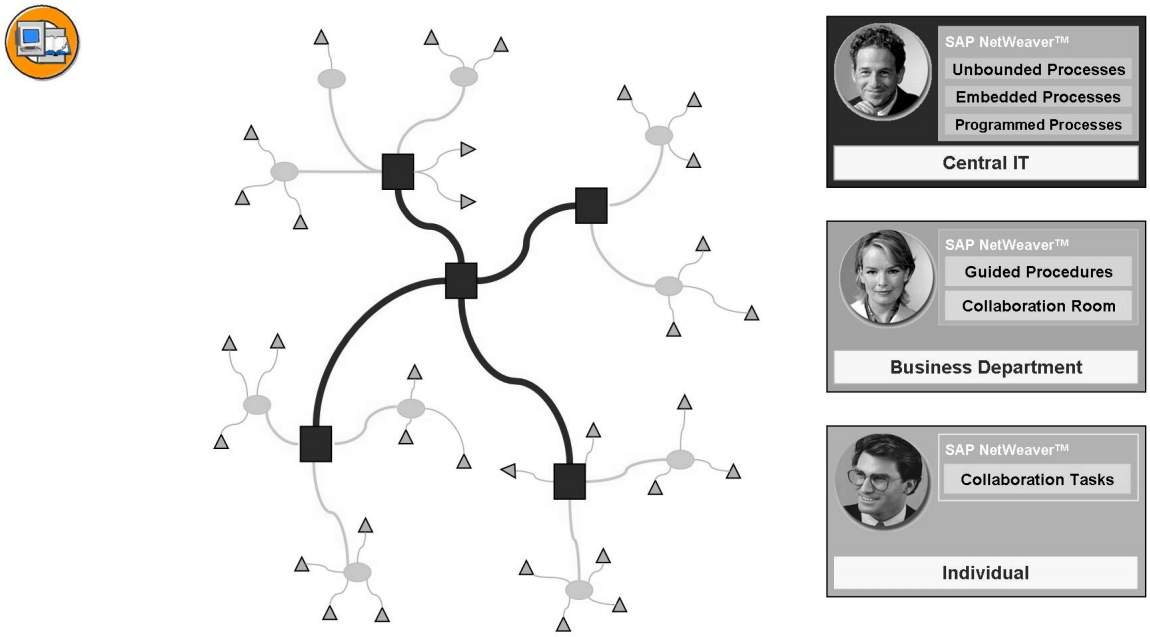

Figure 2: Centralized vs. Decentralized Process Control 2

The software that is used to automate the processes is all part of SAP NetWeaver.

Embedded processes, where the processes are integrated tightly with the mySAP Business Suite application, are modelled in the SAP NetWeaver Application Server using SAP Business Workflow.

Decentralized processes modelled by the respective department are modelled using Guided Procedures which is part of the SAP NetWeaver Application Server. For a view of the local departmental activities the collaboration room which is part of the SAP NetWeaver Portal.

Individual tasks created by the users are called collaboration tasks, which is part of the SAP NetWeaver Portal.

Business Task Management is the automation, execution and monitoring of tasks. Tasks include a wide variety of activities:

- Business Transaction
- Alert
- Form
- Desktop Document
- Impromptu Request

Business Task Management is comprised of the following components:

Universal Worklist

- Single point of access for managing your work
- Can be personalized to suit each user's working style
- Process-specific views can be customized for expert users

Collaboration Tasks

- Enables end-users to create their own ad hoc processes and drive collaboration
- Includes various types of collaboration tasks including actions, approvals, and feedback
- Users track progress of their delegated task

Guided Procedures

- Designed to implement process flows with greater ease and speed across multiple applications
- Integrates back end system transactions and interactive forms
- Includes process templates that can be easily re-used or copied and easily changed

Interactive Forms

- Generate forms that contain data extracted from core systems
- Use dynamic or static forms
- Accelerate forms-based business processes

SAP Business Workflow

- Structured, repeatable, simple to complex business process
- Manages the tasks that need to be performed and who should perform the tasks
- Ensures business process deadlines and service agreements are appropriately monitored and enforced

Alerts

- Exception-triggered notifications
- Define follow-on activities
- Inter-System alerting

At runtime business processes execute on many applications. Many times those processes need to interact with a person. That tasks that require people-interaction can be rendered in the Task Management User Interface. This is currently available via the **Universal Worklist**. The Universal Worklist is the user interface for the execution of business tasks. This can include application-focused activities

such as invoice approval, collaborative activities such as requesting feedback on a new idea, and Ad Hoc processes such as requesting an additional reviewer for a financial document.

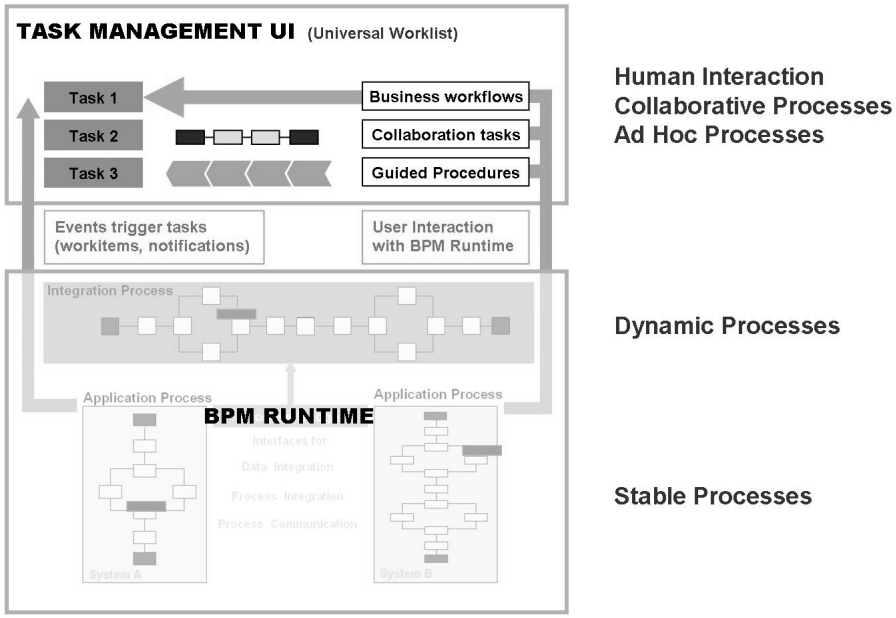

Figure 3: Execution of Business Task Management

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- name the features of Business Task Management
- describe the benefits of Business Task Management

Related Information

- SAP NetWeaver 2004s Library (http://help.sap.com) *IT Scenarios at a Glance → Business Task Management*
- SAP Service Marketplace (http://service.sap.com) Quick Link */it-scenarios*

Lesson: Introducing Universal Worklist

Lesson Duration: 5 Minutes

Lesson Overview

This lesson describes the benefits of the Universal Worklist.

Lesson Objectives

After completing this lesson, you will be able to:

- explain the reasons why to use Universal Worklist

Keep it short.

Business Example

Your company wants to coordinate and execute tasks arising from automated process flows and spontaneous events and track the progress of tasks, so that the employees can work more efficiently. That tasks that requires people-interaction can be rendered in the Business Task Management User Interface. This is currently available via the Universal Worklist.

The Universal Worklist

Traditionally users had to access a variety of inboxes to view and act on important tasks. The large number of applications and tasks make it difficult to understand and prioritize work. The Universal Worklist (UWL) simplifies the user's work by providing a **single consistent interface** for a task. The UWL is **easy to use**. And it is **easy to access** because of its integration into the SAP NetWeaver Portal.

In the presentation, there is a slide at this point.

The UWL makes it easier for the user to **prioritize their tasks** and easier to access the work they need to perform. They can **personalize** their view and **prioritize** their work. Users do not have to search for their work. The UWL **aggregates task items from multiple and different systems** into one list. In addition it provides the feature to create **custom views** for specific tasks. For example, if you need a custom view for the invoice approval task.

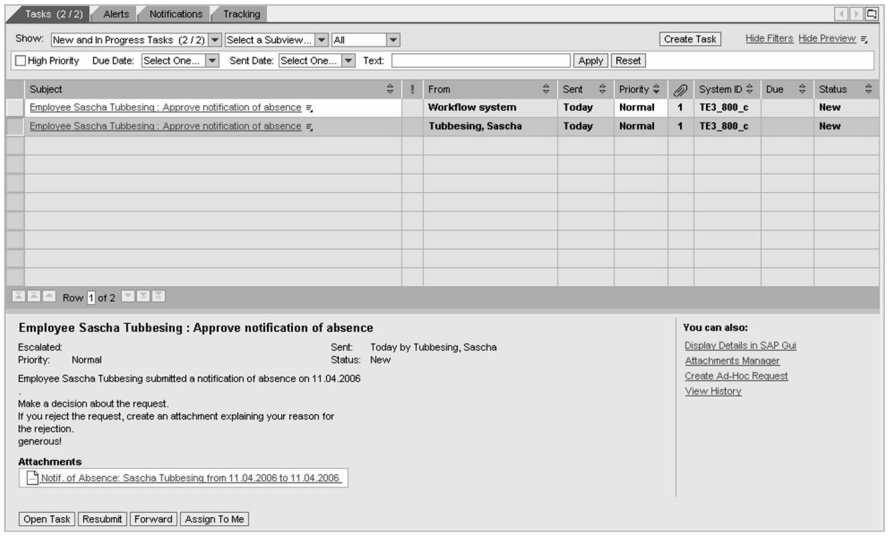

Figure 4: Universal Worklist First Look

Above is an example of how the Universal Worklist appears. The example provides an "out-of-the-box" look at UWL. There are multiple items in the list. These items could be from one or several backend systems. Also notice that the UWL supports attachments that are part of the work item. In the standard delivery of SAP NetWeaver Portal, UWL is reachable at *Home* → *Work* as part of the standard end user role, and all systems send their work items to the same UWL iView.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- explain the reasons why to use Universal Worklist

Unit Summary

You should now be able to:

- name the features of Business Task Management
- describe the benefits of Business Task Management
- explain the reasons why to use Universal Worklist

Unit 2

13

Using Universal Worklist

This Unit concentrates on the navigation and personalization of UWL. Show the students how to navigate and use the functions of UWL. Keep in mind, that this course concentrates on the configuration, so don't talk too long about this unit. Most features are quite easy to understand and should be usable intuitively.

Unit Overview

This unit provides information on how to navigate in the Universal Worklist and how to personalize the Universal Worklist to the end users needs.

Unit Objectives

After completing this unit, you will be able to:

- name the elements of the User Interface of Universal Worklist
- navigate in the Universal Worklist
- name the main features of Universal Worklist
- apply the main features of the Universal Worklist
- personalize the display of Universal Worklist

Unit Contents

Lesson: Navigating in Universal Worklist

Lesson Duration: 25 Minutes

Lesson Overview

This lesson provides the information on how to navigate in Universal Worklist and how to use its functions.

Lesson Objectives

After completing this lesson, you will be able to:

- name the elements of the User Interface of Universal Worklist
- navigate in the Universal Worklist

In this lesson the UWL UI is explained in detail. The students should learn all UI element names and how to use them.

Business Example

Your company wants to coordinate and execute tasks arising from automated process flows and spontaneous events and track the progress of tasks, so that the employees can work more efficiently. That tasks that requires people-interaction can be rendered in the Business Task Management User Interface. This is currently available via the Universal Worklist. You want to use the Universal Worklist, thus you should know the UI elements of this tool.

User Interface Elements of UWL

In the standard delivery of SAP NetWeaver Portal you can access Universal Worklist (UWL) services through the following menu navigations:

- *Home* → *Work* → *Overview* (as part of the standard end user role)
- *Collaboration* → *My Tasks* (as part of the collaboration role)

The first navigation path leads to an UWL iView with a full list of functions. The Tasks iView is a preconfigured UWL iView to display Collaboration Tasks only.

The following figures name the most important elements of the UWL user interface.

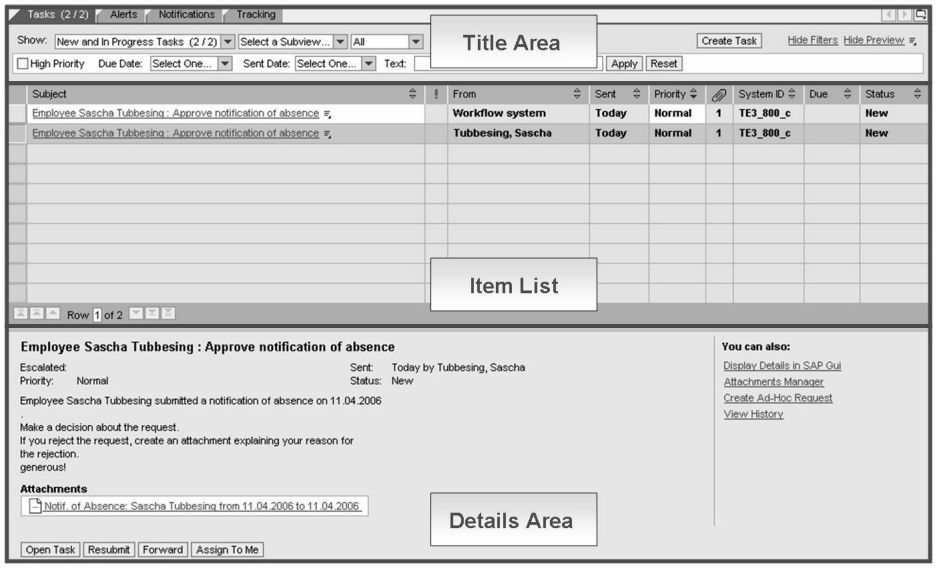

Figure 5: UWL UI Elements 1

The UWL iView contains three main areas: **Title Area**, **Item List** and **Details Area** (optional). In the title area you can select from different **tabs**. For example, if you select the *Tasks* tab you get a list of tasks you are assigned to. If you select a task from the list, the preview of the task is displayed in the details area. The numbers in brackets behind the tab titles gives information about the ratio of new items to the number of total items. For example *Tasks (4/8)* means that there are 4 new tasks from a total of 8 tasks (the sum of new tasks and tasks in progress).

Depending on the tab you select the item list contains different items and information. If you select *Tasks* you get a list of tasks to be performed by the current user. In the standard delivery these tasks can be work items from SAP Business Workflow, Collaboration Tasks and tasks from the Approval Process of Knowledge Management. Under *Alerts* you will see alerts from the SAP Alert Management. Choosing *Notifications* displays a list with notifications from Knowledge Management, for example subscription notifications and also notifications from the SAP Business Workflow. On the *Tracking* tab you will find all items where the current user is responsible for the tracking.

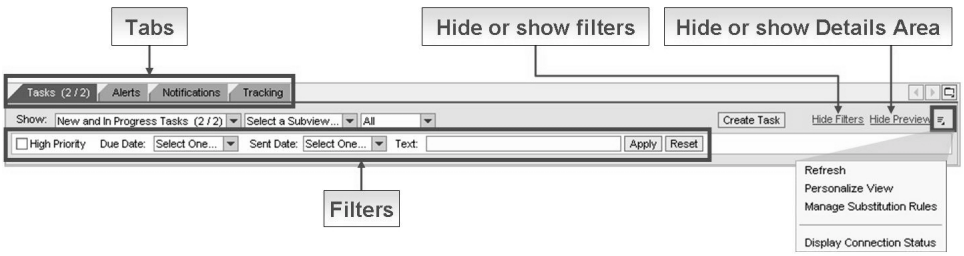

Figure 6: UWL UI Elements 2

The title area also contains some **filters**. By choosing *Show Filters* the possible filters are displayed. You can filter by *Priority*, *Due Date*, *Sent Date* or *Text* (in the subject field of the item), or a combination of two or more of these search filters. By choosing *Hide Filter* the filters are hidden again.

Some views provide preconfigured **filters**. If provided you can simply select a filter from a drop down menu. For example the *New and completed Tasks* view already provides the filters *New, In Progress, Due Today* and *Overdue*.

It is also possible to create your own filters by personalization.

You can hide or show the **details area** by choosing *Hide Preview* or *Show Preview* accordingly.

By clicking on the icon you reach the functions *Refresh* to refresh the UWL iView, *Personalize View* to open the personalization options for this UWL iView, *Manage Substitution Rules* where you can define rules for substitution in case you have a leave time and *Display Connection Status* to get information about which back end systems are connected to the UWL and for which systems there maybe a connection problem.

Viewing and Editing an Item

What information of an item is displayed in the Universal Worklist (UWL) and what options are available for an item depends on the personalization and configuration of the UWL and on the item type.

We talk about personalization and configuration later on.

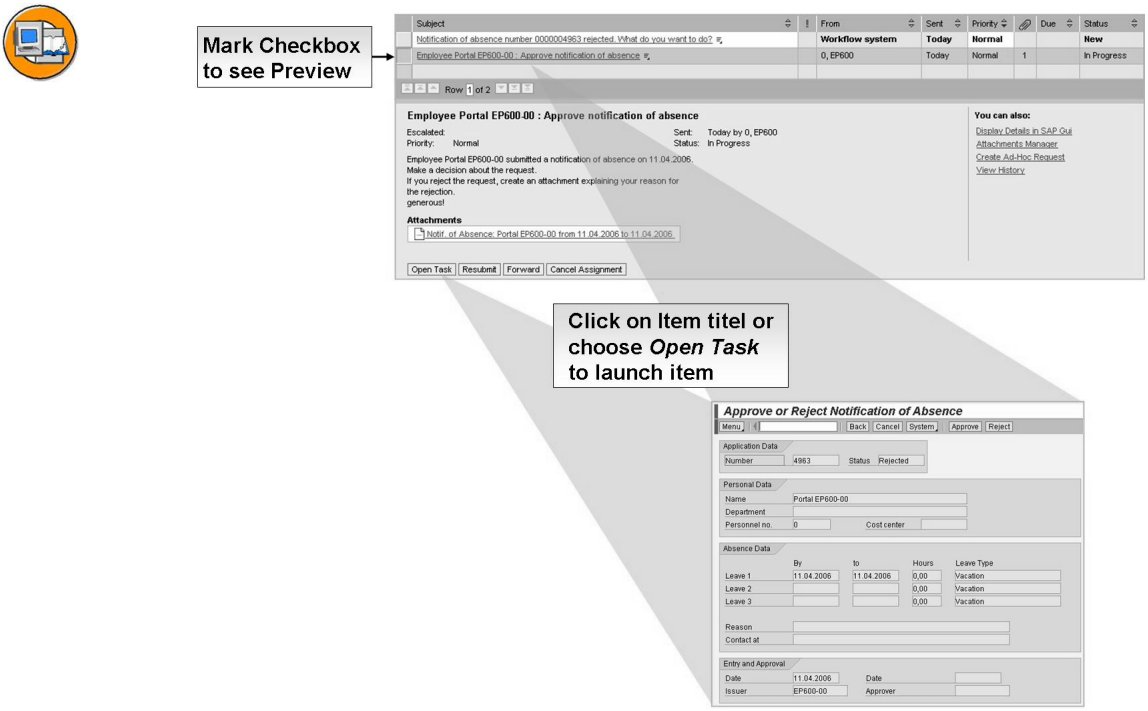

Figure 7: Item Preview and Launch

To view a preview of an item you simply mark the check box in front of the item. If the details area is available the preview is displayed. If not choose *Show Preview* to open the details area.

To launch an item just click on the item title. Depending on the type of item and on the UWL configuration the item is launched in the same window or an extra window opens. You also can launch the item by choosing *Open Task* in the item preview (only available for SAP Business Workflow work items). Depending on the item type and the configuration you can also use some more functions and features of the UWL.

Exercise 1: Navigate in the UWL

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- navigate into Universal Worklist

Business Example

To increase efficiency for your work, you want to know how to navigate in Universal Worklist.

For this exercise to work the instructor has to prepare tasks and a subscription before course. See the system setup guide for more information.

Task 1: Navigate in Universal Worklist

Log on to the portal open the Universal Worklist (UWL) and display, open and execute some items.

1. Log on to the portal with user **EP600.E-##**, where ## is your group number.
2. Open the UWL
3. Select an item from the notification tab.
4. Open some items.

Task 2: Views and Filters

By choosing from different views and filters you can select which items should be displayed and which attributes are displayed.

1. From the *Tasks* tab select the special view for Collaboration tasks.
2. Use a filter setting to filter tasks. There are two possibilities to set a filter.

Solution 1: Navigate in the UWL

Task 1: Navigate in Universal Worklist

Log on to the portal open the Universal Worklist (UWL) and display, open and execute some items.

1. Log on to the portal with user **EP600.E-##**, where ## is your group number.
   a) Open your web browser and enter the portal URL, for example **`http://twdf1234.wdf.sap.corp:50000/irj`**. The exact URL is provided by your instructor.
   b) Enter your user ID and password into the given fields and choose *Log on*.
2. Open the UWL
   a) In the portal navigate to *EP600* → *Universal Worklist* → *Universal Worklist ##*.

      In tab *Tasks* you should already see a task assigned to your user.
   b) Click on tab *Notifications*.

      You should see some notifications from the subscription service.
3. Select an item from the notification tab.
   a) In the item list from the *Notifications* tab in UWL click on the row selection button of the second entry.

      Notice, that the details area changes to display the details of this item.
4. Open some items.
   a) In the item list from the *Notifications* tab in UWL click on the item subject.

      The item opens in a new window. In case of subscription notifications the content of the item itself opens. For example if the notification is about the creation of a new document, the document content opens in the new window.
   b) In the item list from the *Tasks* tab in UWL click on the item subject.

      For collaboration tasks the item opens in the same window. To return to the UWL choose *Return*.

Continued on next page

Task 2: Views and Filters

By choosing from different views and filters you can select which items should be displayed and which attributes are displayed.

1. From the *Tasks* tab select the special view for Collaboration tasks.

   a) In the *Task* tab choose *Collaboration Tasks* from the *Select a Subview ...* drop down menu.

      Notice the change in the list view. The view *Collaboration Tasks* displays different item attributes in a different order than the default view.

2. Use a filter setting to filter tasks. There are two possibilities to set a filter.

   a) Click on the *Tasks* tab.

   b) Choose the preconfigured filter *In Progress* from the filter drop down menu (the default is *All)*.

      In the list view now only tasks with status *In Progress* are displayed.

   c) Choose *All* from the filter drop down menu.

   d) Choose *Show Filters*.

   e) Mark the *High Priority* check box and choose *Apply*.

      Now only high priority items are displayed.

Lesson Summary

You should now be able to:

- name the elements of the User Interface of Universal Worklist
- navigate in the Universal Worklist

Related Information

SAP NetWeaver 2004s Library (http://help.sap.com → *Documentation → SAP NetWeaver → SAP NetWeaver 2004s)*, section *Getting Started - Using SAP Software → Working with Tools and Features → Using Universal Worklist*.

Lesson: Features in Universal Worklist

Lesson Duration: 40 Minutes

Lesson Overview

This lesson describes the functions and features of the Universal Worklist. After a short overview you will learn how to handle tasks, define substitution rules, forward an item, manage attachments and more.

Lesson Objectives

After completing this lesson, you will be able to:

- name the main features of Universal Worklist
- apply the main features of the Universal Worklist

This lesson doesn't want to explain each and every button. Just make sure the students get a good overview of the most important things. Don't loose time here. We also want to talk about configuration in this course ;-)

At this point in course, there is no connection to the back end. This means we have no business workflow items available yet and thus cannot show all things mentioned on the system.

Business Example

To fully utilize the Universal Worklist you want to know the features of this tool.

Feature Overview

The Universal Worklist (UWL) provides a set of features to make your work more efficient and handle all occuring items in a fast and useful manner. Under each tabs of the UWL iView a special category of items is displayed:

- Tasks

  From this category you can view: New tasks, tasks in progress, tasks received on behalf of someone, tasks forwarded to someone, tasks for resubmission, today's due tasks, overdue tasks, rejected tasks and completed tasks.

- Notifications

  Notifications are missed deadline messages from SAP Business Workflow and Knowledge Management notifications. From this category you can view: New notifications, notifications in progress, notifications received on behalf of someone, notifications for resubmission and completed notifications.

- Alerts

  From this category you can view: New alerts , alerts in progress, alerts received on behalf of someone, alerts delegated to someone, alerts for resubmission and completed alerts.

- Tracking

  The category Tracking contains items from Collaboration Tasks, forwarded items, those items you have chosen to follow-up on (Follow-Up Items), items that have been sent on behalf of you (On behalf of me), and items that you have chosen to track (Tracked Items). From this category you can view: Items in progress, items received on behalf of someone, items for resubmission, approved workflow items you started, rejected workflow items you started and completed workflow items you started.

As you can see from the list above, there are some functions of the UWL you can use for many item types, like for example resubmission. The next list gives an overview of these features:

Feel free to demonstrate any or some of the following features, but remember that there has to be some time left for the following units!

Tasks

Because the handling of tasks (Collaboration Tasks as well as tasks from SAP Business Workflow) is a main usage scenario for customers this section provides some details on the handling of tasks in the UWL.

The task list is displayed in tabular form. Tasks in the list are assembled from various sources, including the SAP Business Workflow and the Collaboration Tasks. Depending on the type of task you have different functions available in UWL. Here only the options for work items from SAP Business Workflow in the standard configuration of the UWL are mentioned. For a more complete list please refer to the SAP Library (http://help.sap.com → *Documentation* → *SAP NetWeaver* → *SAP NetWeaver 2004s*, section *Getting Started - Using SAP Software* → *Working with Tools and Features* → *Using Universal Worklist* → *Features in the UWL* → *Tasks*).

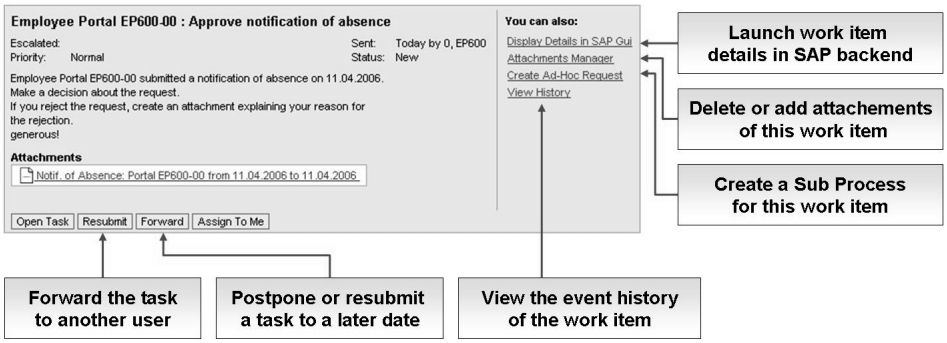

Figure 8: Functions for Tasks

The figure above shows how to invoke some functions for a task from the item preview. The following sections explain in more detail how the functions are used.

Follow-up (Resubmission)

You can postpone or resubmit a task to a later date. When that future date arrives the task will appear back in your worklist. The work item will not display on your worklist until the follow-up date has arrived:

1. From the item's detail area, choose *Resubmit*.

   As an alternative you can choose the context menu ( ) next to the item title and choose *Resubmit*.

2. A new window opens, where you can enter a date for resubmission.

   You can either enter the date manually or choose *Choose date ....* This must be a future date.

3. Choose *Submit*.

You will now see the task in the sub-view *Tasks for Resubmission*.

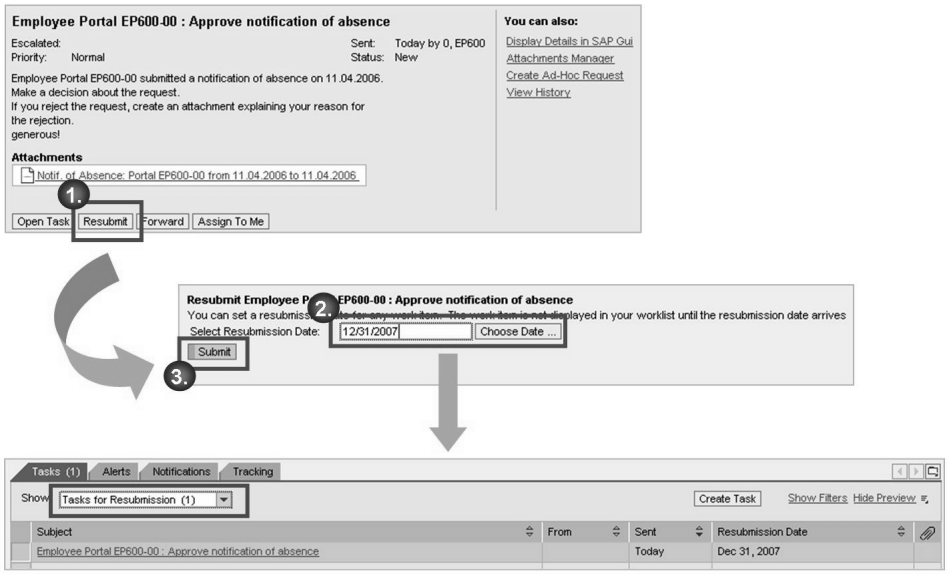

Figure 9: Resubmission

Note: For SAP Business Workflow work items, the SAP backend system must also be at the same release (SAP NetWeaver 2004s or higher). For older releases follow-up is not supported.

Substitution

With the Substitution functionality you can assign another user to manage your tasks in case of absence or unavailability. You can designate an assignee to receive your tasks or you can set an assignee to fill in for you. You can create several substitution rules to cover all cases. You can also take over other user's tasks (if assigned by the user). The assignee can then view and manage the task substitution rules.

Note: Substitution is supported with some restrictions within the Collaboration rooms. For more information refer to the SAP Library (http://help.sap.com → *Documentation* → *SAP NetWeaver* → *SAP NetWeaver 2004s*, section *Getting Started - Using SAP Software* → *Working with Tools and Features* → *Using Universal Worklist* → *Features in the UWL* → *Substitution*).

An assignee taking over as a substitute is a portal user who is allowed to manage and work on the work item of a user in his / her absence. The assignee can:

- Receive and work on your work items
- Monitor all incoming tasks (without acting on all of them)
- Work on more than one of your items

Hint: As a prerequisite the portal user mapping must be unambiguous: A back end user must have only one portal user mapped to it, not multiple.

To create substitution rules:

1. Click on the icon and choose *Manage Substitution Rules*. A new window with the substitution rules table opens.
2. On the *My Substitution Rules* table choose *Create Rule*.
3. First you define the rule. You can define which tasks you want to assign to an assignee. You can either make the assignee receive your tasks (for example, when you go on vacation), or you can allow the assignee to fill in for you (for example, in case of your absence).
   a) Choose or enter the assignee from the people picker option.
   b) Select what types of tasks you want to assign this user. Default: *All* (The assignee substitutes for all tasks).
   c) You can choose if the assignee can receive your tasks or fill in for you. To send the work items on the assignee's list, select *Receive My Tasks*. To add a user as a substitute for your tasks in your absence, select *Fill In For Me*. The last option requires one more step from the assignees to make the items visible in his / her tasks list: The assignee must choose *Take Over* (on his own substitution rules table) to display the work items in the task list.
4. Second you set the rule activation. This step provides an option of turning on or off the rule. To enable the rule select *On - The rule will be enabled*. To turn the rule on immediately (upon save) choose *At Once*. Choose *On* and enter a date (choose date from the calendar) to turn on the rule at a later time.

   If you choose *Off - The rule will not be enabled* you can turn on the rule later.
5. You can see the rule and turn the rule on or off at any time on the substitution rules management screen.

The items you have chosen in the rule definition (for example *All*) now appear in the assignee's task list.

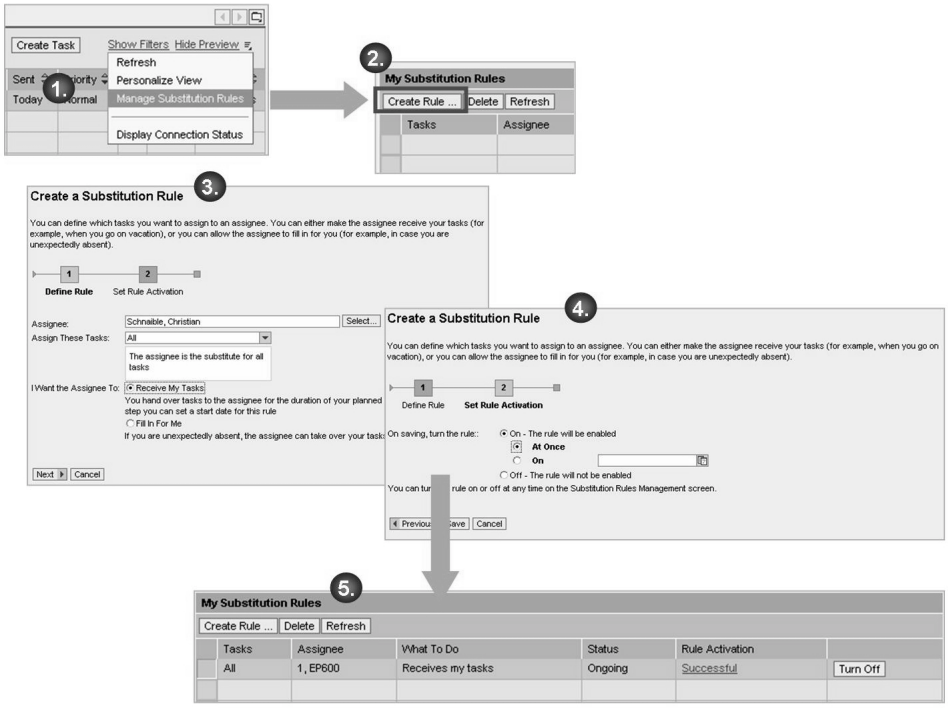

Figure 10: Substitution

Limitations and FAQs

All substitution rules created have no expiration date (end date). For the back end Workflow system multiple tasks cannot be assigned to the same assignee. For Collaboration Tasks there is no support for a future start date of a substitution and the substitution only supports *All* tasks.

Question	Answer
Is substitution transitive? (for example; if the assignee will be absent, will his/her assignees receive my task?)	No
What is the difference between substitution and forwarding a task?	In the case of substitution, both the original user and the assignee can still see the tasks and work on them; however, a forwarded item will only be visible as a task for the recipient.
Can an assignee decline a substitution assignment?	No, especially for *Receive My Tasks* type. For *Fill In For Me* type, the assignee can choose not to take over.

Question	Answer
Is the assignee notified when he / she is being assigned as a substitute. Is the original user notified when an assignee is taking over?	No (for both questions).
Can I define the same rule for the same assignee for different time periods?	No. This is not allowed.
What happens if I turn off or remove a *Fill In For Me* rule when an assignee has already taken over?	The take over will be terminated as well. When the rule is turned on or created again, the assignee will need to take over again.
Does assignee see assigned rules for the future time?	No. Only the assignment that is effective at the current time when assignee logs on will be visible (and thus can be taken over).

Forwarding an Item

You can forward an item to another user. A forwarded item will only be visible as a task for the recipient. You can only see the items you forwarded to someone, but can not work on them.

You can invoke the forwarding through the *Forward* button in the item preview. A new window opens where you can assign on or more users to forward the item to.

Managing Attachments

You can call the *Manage Attachments* UI from the *Attachments Manager* link in the *You can also* area in an item's details area. It features a table (showing all attachments to the item at hand) with upload and remove functionality. Below the table there is a group of elements for uploading new files. It features the *Browse* control and an *Upload* button.

Adding a Memo

You can submit additional information as a memo to a task. In the item's detail area choose enter a text in the memo filed and choose *Submit Memo*. In the *You can also* section of the detail area you find a link *View Memos* if you or someone else has written a memo for the item.

UWL Sub Process (Create Ad-Hoc Request)

The UWL Sub Process is a task attached to a UWL item (the parent item). The UWL Sub Process task is a multiple step task, it can be sequential or parallel. The process of approval/rejection of a UWL Sub Process is exactly the same as for

the (Collaboration) task list. The only additional step of a UWL Sub Process task is, when the Sub Process task is complete, the final step's action can be mapped back to the parent item, if the *Map Decision to Parent Task* check box has been selected when the sub process task was created, and the UWL is notified about the completion of the UWL Sub Process task.

The steps involved in creating sub processes consist of task completion steps and approval steps. If the last step of the process is an approval step and the wizard has been launched for an approval work item from SAP Business Workflow the creator of the work item can configure that the approval from the last step is automatically executed as an approval of the SAP Business Workflow work item. The UWL work item can be a SAP Business Workflow work item or a Collaboration Task work item.

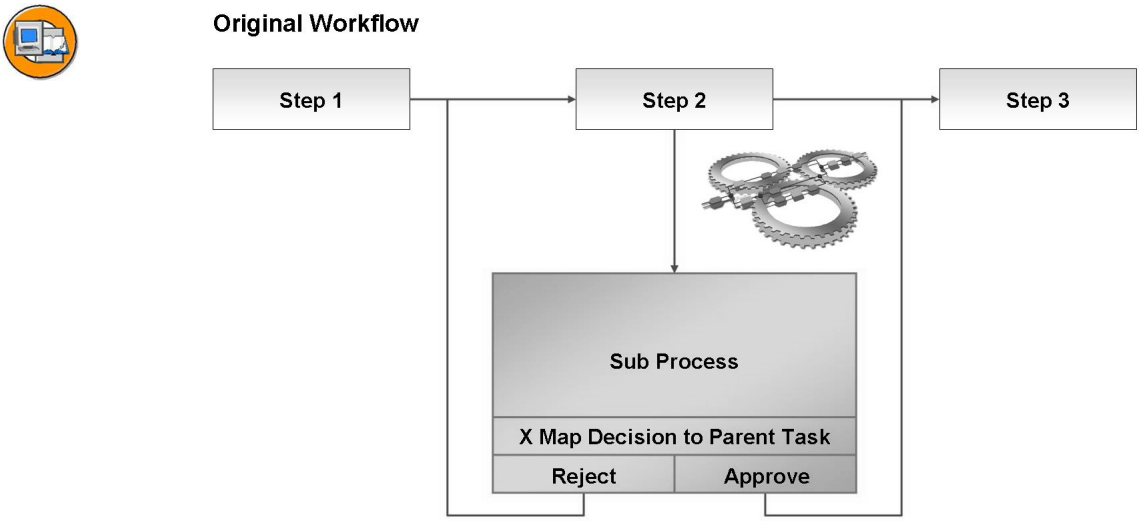

Figure 11: UWL Sub Process

You can access the sub process creation steps from the item's details area:

1. Choose the link *Create Ad-Hoc Request* in the *You can also* section. A new window opens, where you can create the sub process. It is the same functionality as the "Task List" Collaboration Task provides.
2. In the task list choose between the *Types Action Item* or *Approval*.
3. Click on the People Picker icon to select a user assigned to this step of the task.
4. Click on *Edit*.
5. Enter a Title for the task and choose *Save*.
6. Choose *Send*.

Now this sub process needs to be completed before you can complete the original work item. Of course the sub process can contain more than one step.

Caution: There is no mechanism that locks the work item in the back end. So it is possible to complete the work item in the back end without completing the UWL sub process. When using UWL sub processes you should only work from UWL.

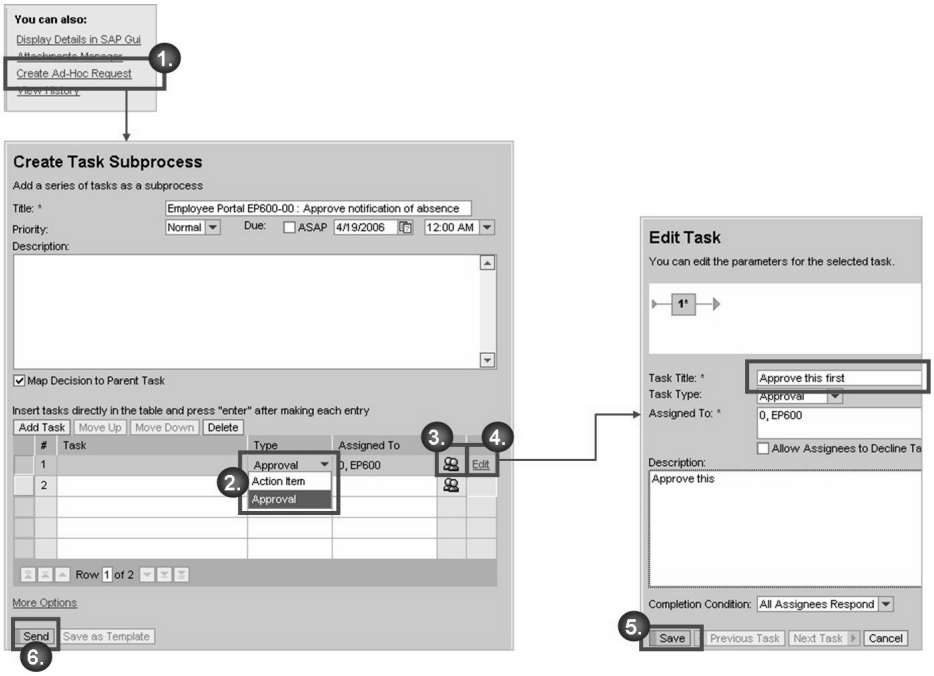

Figure 12: Create UWL Sub Process

Exercise 2: Features of UWL

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

•

Business Example

It's shortly before your holidays and you still have a lot of tasks to complete. By forwarding some tasks to your colleague you will easily complete the left tasks before your vacation.

To make sure important tasks assigned to your during your holidays are processed you can create a substitution rule.

Task 1: Forwarding

Forward a task to user **EP600.A-##**.

1. Log on to the portal with user **EP600.E-##**, where ## is your group number. Go to your UWL iView and forward a task to user **EP600.A-##**.

Result

The task is now forwarded to the user EP600.A-## and he has to process it. You can control this by logging on to the portal with this user and having a look at the UWL.

Task 2: Substitution

Create a substitution rule.

1. Log on to the portal with user **EP600.E-##** and create a substitution rule so that user **EP600.A-##** has to process your tasks starting at next Monday.

Result

You successfully created a substitution rule.

Solution 2: Features of UWL

Task 1: Forwarding

Forward a task to user **EP600.A-##**.

1. Log on to the portal with user **EP600.E-##**, where ## is your group number. Go to your UWL iView and forward a task to user **EP600.A-##**.

   a) With user **EP600.E-##** navigate to *EP600* → *Universal Worklist* → *Universal Worklist ##*.

   b) Click on the *Tasks* tab.

   c) Click on the context menu from one task and choose *Forward*. A new window opens.

   d) Enter the user id **`EP600.A-##`** into the first input field.

   e) Enter a short note in the second input field, for example **`Please take over`**.

   f) Choose *Submit*.

   g) Click on the *Tasks* tab to refresh the view. The task should not appear anymore.

      In the *Tasks* tab you can select the *Tasks Forwarded to Someone* view to display the task.

Result

The task is now forwarded to the user EP600.A-## and he has to process it. You can control this by logging on to the portal with this user and having a look at the UWL.

Continued on next page

Task 2: Substitution

Create a substitution rule.

1. Log on to the portal with user **EP600.E-##** and create a substitution rule so that user **EP600.A-##** has to process your tasks starting at next Monday.

   a) As user **EP600.E-##** navigate to *EP600* → *Universal Worklist* → *Universal Worklist ##*.

   b) From the UWL context menu choose *Manage Substitution Rules*. A new window opens.

   c) Choose *Create Rule ...*

   d) In the *Assignee* field enter **`EP600.A-##`**, where **`##`** is your group number.

   e) Choose *Next*.

   f) Check the **On** radio button.

   g) In the input field enter the date of next Monday by using the Date Navigator.

   h) Choose *Save*. Notice the rule you created in the rule list and close the window.

Result

You successfully created a substitution rule.

Lesson Summary

You should now be able to:

- name the main features of Universal Worklist
- apply the main features of the Universal Worklist

Lesson: Personalizing Universal Worklist

37

Lesson Duration: 30 Minutes

Lesson Overview

This lesson explains the personalization possibilities of the Universal Worklist (UWL).

Lesson Objectives

After completing this lesson, you will be able to:

- personalize the display of Universal Worklist

The personalization settings give some more insight in the possibilities of UWL. For example one can personalize new attributes to be displayed. These personalization settings and of course more, can also be configured to be available in general. This will be discussed later in the course.

Business Example

To enhance the efficiency of the employees using the Universal Worklist, there is the possibility that each user can personalize this tool to his needs.

Personalization Possibilities

Use personalization options to select the display options to be used for the standard Universal Worklist (UWL) display. These personalizing options allow you to create views that hold only the worklist information that is relevant to you. You can either modify the display attributes of one of the default views, or create a separate sub view for your own set of personalization options.

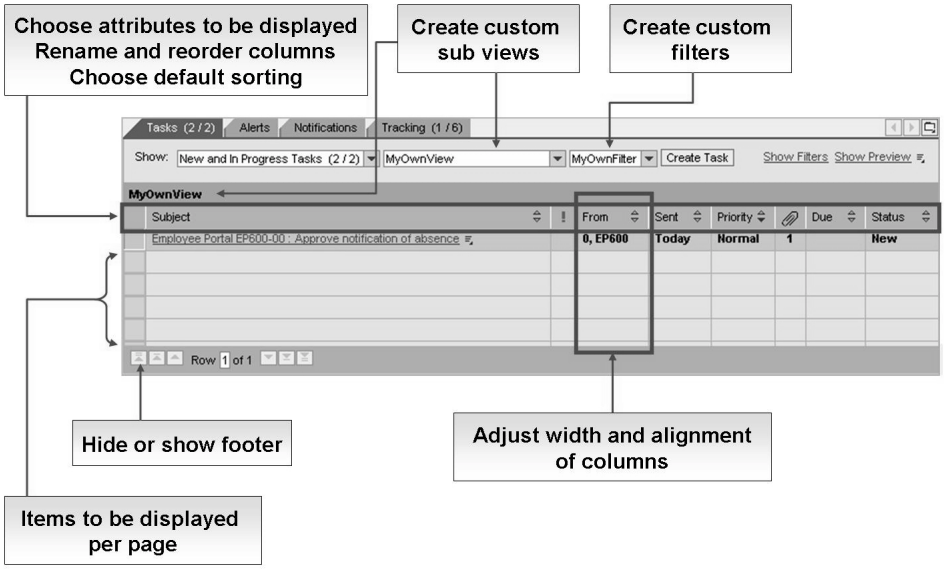

Figure 13: Personalization Options

The figure above shows the possible personalization options. To personalize a view of the UWL just go to the view of your choice, for example *Tasks* → *Collaboration Tasks*, click on the context menu ( ) and choose *Personalize View*. In the next screen you can personalize this view.

Hint: You should take into account the creation of a new sub view by choosing *Duplicate* on the personalization screen. In this way you don't change the standard view.

If you change one of the standard views you can set this view back to its default settings by choosing *Restore Defaults*.

An administrator can also reset the personalization for specific or all users. For more information see unit*Optional Configuration* lesson *Universal Worklist Parameters* section *Delete personalized view information*.

The different settings are explained in the following sections.

Demonstrate the different personalization options. Create an own sub view and an own filter.

Attributes and their order

The list of currently displayed attributes is shown on tabs. To remove an attribute tab from display, click on the one you wish to remove. It is then marked as <*selected*>. Now choose the *Remove From Current View* button.

To add an attribute tab to the display, find it in the *Available Attributes not Displayed:* pull-down menu next to the *Add* button. Choose an attribute and select *Add*.

To move the column position of an attribute tab, select the attribute tab and then move it left or right in the tab sequence using the left (<<) and right (>>) arrow buttons, until it is in the position you want.

In the *Properties of "[attribute name]"* section you have the possibility to *Rename* the attribute to name of your choice. In addition for each selected attribute you can specify the *Horizontal Alignment* and the *Width* of the column.

When you are finished with your personalization changes, select the *Save* button to return to the UWL display. Otherwise select *Cancel* to terminate the personalization activity without change.

Sorting Properties

In this personalization section, you determine the order of task items displayed. In the first group box, the column with the highest sorting priority is selected. You can specify if the sorting should be ascending or descending. Two more sorting columns can be added to sort within items of equal value in the previous sorting column.

Data Properties

In the *Data properties* section you can specify how many items are displayed per page. You also can change the refresh behavior of the UWL and how items are displayed if the due day is near.

Another possibility is to define own filters and choose which filter is the default for this view. To define a new filter:

1. Enter an own filter name, for example *My Own Filter* in the text field that contains the text “To add, name your new filter here first”.
2. Select one of the available attributes from the drop down menu below the text field, for example *attachmentCount*.
3. Choose a condition from the drop down menu next to the attribute field, for example >=.
4. Enter a value, for example *1* into the text filed directly below (it contains the text “Keywords here...”)
5. Choose *Add this filter* and you created your own filter.
6. To make your new filter the default filter choose it from the *Apply Default Filter:* drop down menu, for example *My Own Filter*.
7. *Save* your personalization.

You can remove your filter again by going into the personalization screen, marking the check box in front of the filter and choosing *Remove This Filter*.

Paging Display

With the *Paging Display* options you can specify whether or not to display the page header and the page footer.

Exercise 3: Personalize the UWL

Exercise Duration: 10 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- personalize Universal Worklist
- create a custom view in Universal Worklist

Business Example

To get a better overview of the many items in your UWL iView you want to personalize the view in a way that the system ID of the originating system is displayed.

Task 1: Personalize View

Personalize the *Tasks* view for your user **EP600.E-##** so that the additional attribute *System ID* is displayed as second column. Change the default sorting, so that the *System ID* is the next relevant sorting criterion after *Priority*.

1. Log on with user **EP600.E-##** and personalize your UWL iView.
2. Personalize the default sorting preferences.

Result

In the *Tasks* view

of the UWL iView you should see now the *System ID* column.

Task 2: Create Custom View

Create your own custom view for the *Tasks* view. Create a new filter for the view, which preselects items of a special System ID.

1. Personalize again the *Tasks* view, but this time create a new custom view by using the *Duplicate* function.
2. Create a new filter for your new view so that only items originating from a special system, for example **W15CLNT805** are displayed.

Hint: The actual name of the system to enter is provided to you by your instructor.

Continued on next page

Result

You now should be able to select your new view and your new filter in the UWL iView. Only items originating from the given system should be visible in the UWL when the filter is selected.

Solution 3: Personalize the UWL

Task 1: Personalize View

Personalize the *Tasks* view for your user **EP600.E-##** so that the additional attribute *System ID* is displayed as second column. Change the default sorting, so that the *System ID* is the next relevant sorting criterion after *Priority*.

1. Log on with user **EP600.E-##** and personalize your UWL iView.
   a) Navigate to *EP600* → *Universal Worklist* → *Universal Worklist ##*. If not yet selected, choose the *Tasks* tab.
   b) Choose *Personalize View* from the context menu ( ).
   c) In section **Attributes and their order** choose *System ID* from the drop down menu labeled *Available Attributes not Displayed:*.

      Choose *Add*.
   d) Click on the new *System ID* column. It is now marked below as **<selected>**.

      Choose >> to move the column one position further to the right.
2. Personalize the default sorting preferences.
   a) In the **Sorting properties** section choose *System ID* from the second drop down menu.
   b) Choose *Save*.

Result

In the *Tasks* view

of the UWL iView you should see now the *System ID* column.

Task 2: Create Custom View

Create your own custom view for the *Tasks* view. Create a new filter for the view, which preselects items of a special System ID.

1. Personalize again the *Tasks* view, but this time create a new custom view by using the *Duplicate* function.
   a) Choose *Personalize View* from the context menu ( ) of your UWL iView.
   b) Choose *Duplicate*.
   c) Enter the name of the new view, for example **`System ID ##`** and choose *Apply*.

Continued on next page

2. Create a new filter for your new view so that only items originating from a special system, for example **W15CLNT805** are displayed.

Hint: The actual name of the system to enter is provided to you by your instructor.

a) In the **Data properties** section of the personalize screen enter a name for your filter by replacing the string *To add, name your new filter here first*. For example name the filter **`System ID ##`**.

b) From the drop down menu below the name field select *System ID*.

c) In the text field right below replace the string *Keywords here...* with the actual name of your back end system in the training environment, for example **`W15CLNT805`**.

d) Choose the name of your new filter (for example *System ID ##*) from the drop down menu labeled *Apply Default Filter:*

e) Choose *Save*.

Result

You now should be able to select your new view and your new filter in the UWL iView. Only items originating from the given system should be visible in the UWL when the filter is selected.

Lesson Summary

You should now be able to:

- personalize the display of Universal Worklist

Unit Summary

You should now be able to:

- name the elements of the User Interface of Universal Worklist
- navigate in the Universal Worklist
- name the main features of Universal Worklist
- apply the main features of the Universal Worklist
- personalize the display of Universal Worklist

Unit 3

47

Basic Configuration

Now were are starting the configuration topics. This unit talks about the minimum necessary configuration settings, so that UWL can display SAP Business Workflow. It really is quite simple. During course setup the instructor already created the necessary system object and it's alias.

Unit Overview

This unit provides the information about how the Universal Worklist (UWL) is to be configured to display work items from an SAP Business Workflow back end system. For the use of Collaboration Tasks and Notifications from Knowledge Management the UWL is already configured in the standard delivery.

Unit Objectives

After completing this unit, you will be able to:

- connect the Universal Worklist to SAP Business Workflow systems
- register a system with the Universal Worklist
- register SAP Business Workflow Work Item types

Unit Contents

Lesson: Connecting to SAP Business Workflow Systems

48 Lesson Duration: 60 Minutes

Lesson Overview

In the standard delivery the Universal Worklist is already configured to display Collaboration Tasks and Knowledge Management Notifications. This lesson describes the necessary steps to connect an SAP Business Workflow back end system.

Lesson Objectives

After completing this lesson, you will be able to:

- connect the Universal Worklist to SAP Business Workflow systems
- register a system with the Universal Worklist
- register SAP Business Workflow Work Item types

We don't want to spend too much time on talking about SAP Business Workflow. This lesson just gives the information how to integrate a back end into UWL.

The system object has to be prepared during course setup. The alias used is *Train_ECC*.

Business Example

To fully utilize the power of the Universal Worklist (UWL) you want to integrate your SAP Business Workflow systems. In this way your employees only have one central access to all your SAP Business Workflow systems and thus can work more efficiently.

Process Overview

The necessary steps to integrate an SAP Business Workflow system into Universal Worklist (UWL) are listed in the following figure.

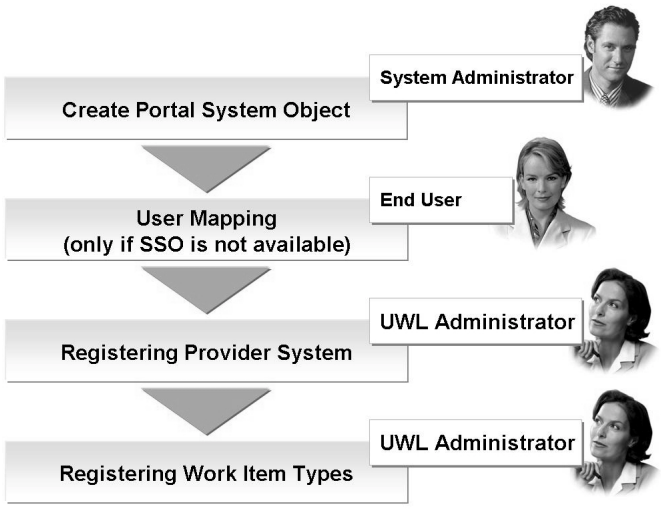

Figure 14: Process Overview

The first step would be to create a system object in the Portal System Landscape. A system object contains the technical connection data to the back end system. It is usually created by the portal's system administrator. In the UWL configuration scenario the system object contains the connection data to the SAP Business Workflow system and an system alias which is later used to register the system in the UWL.

At the system object it is defined which method is used for authenticating the portal user at the back end. The easiest way for the portal users would be to implement Single Sign-On (SSO) with Logon Ticket. This is done by the system administrators of the portal and the back end. If SSO is technically not possible each portal user which want to use the UWL has to map his portal user to it's back end user and password.

The UWL administrator has to register the back end system and register the work item types.

Now the UWL can be used by the portal users.

Creating a System in the Portal System Landscape

Creating a system object usually is done by the portal's system administrator. He has to know the technical connection data to the SAP Business Workflow back end. In the standard delivery, the SAP GUI for HTML (Web GUI) service of the Internet Transaction Server (ITS) is used to launch the work items from the

back end. Thus also connection data for the ITS (standalone or integrated) has to be maintained for the system object. To create a system object go to *System Administration → System Configuration → System Landscape*.

Hint: End User permission on the system object is needed at runtime to work with iViews which reference the system object.

More information on how to create system objects is found in the SAP Library for SAP NetWeaver 2004s (http://help.sap.com → *Documentation → SAP NetWeaver → SAP NetWeaver 2004s* in section *SAP NetWeaver by Key Capability → People Integration by Key Capability → Portal → Portal Administration Guide → System Administration → System Configuration → System Landscape*) and in the SAP Education project team training EP200 - *SAP NetWeaver Portal System Administration*.

Show the system object provided for this course. It was created during system setup. Don't go to much into detail, as the creation of system objects is not a topic here and is introduced in SAPEP (prerequisite to this course) and discussed in detail in EP200.

Enabling Single Sign-On to SAP Business Workflow systems

To enable Single Sign-On (SSO) to the SAP Business Workflow back end one of the easiest way for the portal users is to use SAP Logon Ticket. This is implemented by the system administrators of the relevant systems. There are several supported authentication mechanisms to SAP systems. SAP Logon Ticket is not the only possibility. If SSO could not be provided due to technical reasons the portal users have to map their portal users to the back end user and password using the *Personalize* link in the Masthead of the portal desktop.

For more information on SSO see SAP Library for SAP NetWeaver 2004s (http://help.sap.com → *Documentation → SAP NetWeaver → SAP NetWeaver 2004s* in section *SAP NetWeaver Security Guide → User Administration and Authentication → User Authentication and Single Sign-On*) and in the SAP Education project team training EP200 - *SAP NetWeaver Portal System Administration*.

You can show the *User Management* property category of the system object. At this point it is configured which Logon Method is used to authenticate at the back end. In the EP600 course setup Logon Ticket is used. No user mapping is necessary.

Registering Systems with the UWL

To display the work items of an SAP Business Workflow system the regarding system has to be registered with UWL. Each UWL iView can retrieve work items from multiple SAP Business Workflow back end systems. Register each back-end connection to be used with the following procedure:

1. On the portal, choose *System Administration* → *System Configuration* → *Universal Worklist & Workflow* → *Universal Worklist - Administration*.
2. In the *Universal Worklist - Configuration* iView the *Universal Worklist Systems* list appears. Here you can define connectors and systems as item providers for the Universal Worklist.
3. To add a new entry, choose *New*. You can edit an existing entry by clicking on the entry and choosing *Edit*
4. Now enter the minimum necessary parameters *System Alias* and *Connector Type*. As *System Alias* the alias of the formerly created system object has to be entered exactly as defined in the Portal System Landscape. Select *WebFlowConnector* for *Connector Type* if you want to connect to an SAP Business Workflow system.
5. Finally *Save* your changes. The system now appears in the list. It is automatically activated.

Note: The user who registers the system needs some administrative authorizations in the back end. For more information see SAP note 941589 - *UWL: administrative and end user roles*.

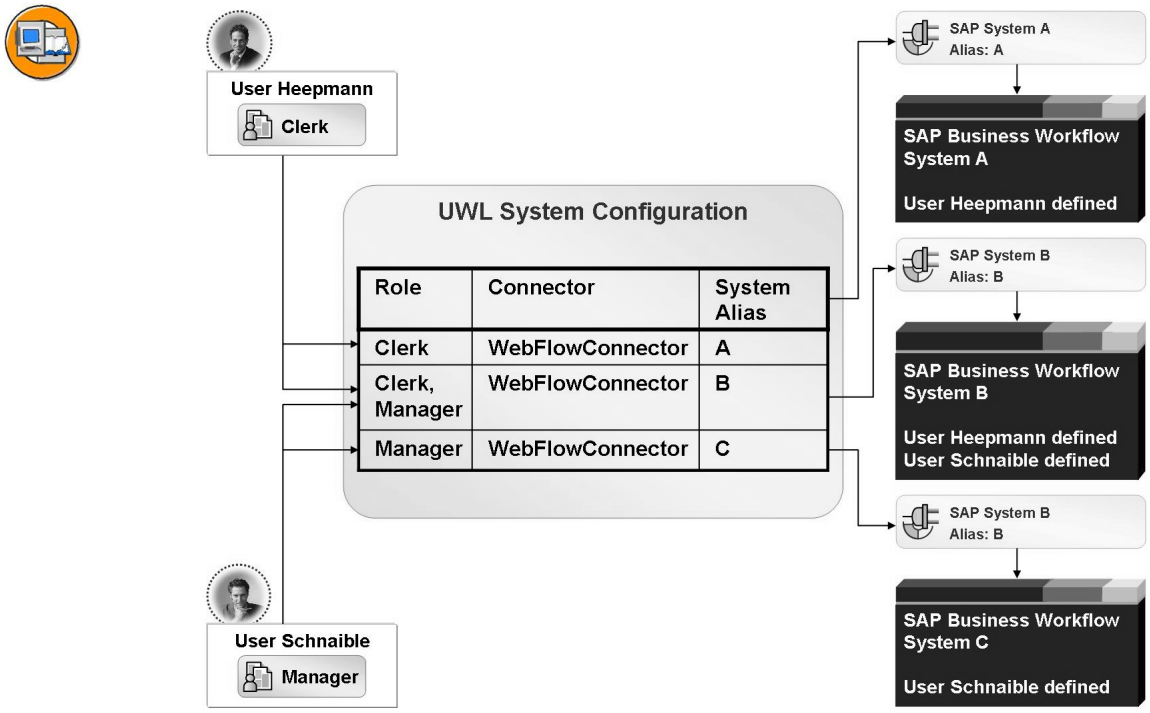

Figure 15: Registering Systems

You should now demonstrate the system registration. One back end system can only be registered once with UWL. If a system is registered the second (or more) time with another alias, the system is listed deactivated in the UWL configuration.

This was implemented by requirement of ERP. Different ERP applications have developed a number of specific filtered UWL iViews for their “work centers”. Each application area has its own system alias like SAP_R3_HumanResources, SAP_R3_Travel, SAP_R3_Cross and SAP_R3_Financials, and they code their Portal content towards those aliases. They however may (and will) point to the same back end system. They also have their own configuration guides, saying: go to UWL, configure a system connection to SAP_R3_HumanResources, etc. Since they are all independent from each other, and if we would not have the mechanism above, they would conflict.

You should demonstrate the first exercise, if you would like to let the students do the exercise. If you leave out this exercise you can simply register the system with the existing alias like created during system setup.

The figure above describes a scenario, where different users (with different portal roles) should see work items from selected back end systems only. This is realized by entering a valid portal role ID for parameter *User Roles* during system registration. Only users who are assigned to this role see work items from the respective system. You can enter several roles separated by semicolon.

Note: The UWL iView has not to be part of this role. You can simply provide one UWL iView in a standard role for all users.

Another way to create a behavior as described is to use the field *System Configuration Groups*. The same value you entered during system registration you must enter in the UWL iView property *System Configuration Group*. In this scenario you have to create several UWL iViews referencing different system configuration groups and thus displaying only work items from the systems of the given configuration group. You can use both methods to configure your work item appearance, but it is recommended to use the newer variant with portal roles. System configuration groups are mainly used for backward compatibility.

The following subsections describe the other parameter you can use, when registering a system with UWL, as there are: *Connector Type*, *Web Dynpro Launch System*, *Delta Pull Channel Refresh Period (in Seconds)*, *Delta Pull Channel Snapshot Refresh Period (in Minutes)*.

Connector Types

The UWL interacts with (task) item providers through specific connectors. The connectors perform basic mapping of attribute values and determine the work item type and execution method. Connectors also help in connection to object and attachment repositories to retrieve additional custom attributes or attachments. The UWL comes with standard provider connectors and it is possible to configure their detailed behavior based on work item types.

The following are the connectors in the standard delivery. By using the UWL API you can also develop your own connectors for your needs

- *AdHocWorkflowConnector*

  This connector relates to Collaboration Task. The Ad-Hoc Workflow connector connects Java Workflow and provides Collaboration Tasks into the UWL. Collaboration Tasks are created in the UWL using *Create Task*, or within Collaboration functions of the SAP NetWeaver Portal. By default the Ad-Hoc Workflow connector is registered and activated. If it is not, then make sure that while linking connectors to the system names, the system alias *AdHocSystem* must map to *AdHocWorkflowConnector*. You must enter the correct system alias to the corresponding connector. Errors occur if any other system (other than *AdHocSystem*) is mapped to this connector.

- *ActionInboxConnector*

  This connector relates to the Notifications from Knowledge Management (KM). The Action Inbox connector provides KM Recent Notifications into the UWL *Notifications* tab, which include document feedback, subscription items, subscription administration, and document approval notifications; in addition, checked out documents appear under *Tracking*, and documents for approval under *Tasks*. By default the Action Inbox connector for UWL is registered and activated.

- *AlertConnector*

  This connector relates to Alerts. Often there is a centralized unique system in most SAP landscapes, which generates and provides Alerts from the Alert Management (ALM). After system registration you have to register its item types.

- *GenericABAPConnector*

  UWL implements a GenericAbap connector that connects to the SAP system and invokes a pre-configured ABAP class. The provider in ABAP should implement the interface `IF_UWL_ITEM_PROVIDER`. Bypassing a workflow engine and directly creating tasks for the users is not ideally suited for items that need to be tracked, or which need workflow services like forward, substitution, and attachments. It is strongly recommended to use either SAP Business Workflow or Collaboration Task for dealing with workflow process. Usage of *GenericAbapConnector* should be the last option for the application under exceptional circumstances.

- *WebFlowConnector*

  This connector relates to SAP Business Workflow. For systems with this connector you must register its item types after registering the system.

Web Dynpro Launch System

When launching an item from UWL, you can configure how to launch the item. The default is to launch the item in SAP GUI for HTML. When you have configured items to launch in Web Dynpro and the Web Dynpro runtime system is different from the portal (UWL) system you have to enter the system in field *Web Dynpro Launch System*. Leave the field empty otherwise.

Delta Pull Mechanism

Delta Pull mechanism of UWL enables new items to be fetched from the back end SAP systems every minute (by default every 60 seconds, and every 30 seconds for alerts. However, this can be configured). The user does not need to use the refresh function to update the UWL. Once items are retrieved, timestamps are updated for the users whose items are successfully retrieved. These retrieved items are updated in the UWL cache. **Only new and changed items are retrieved.**

For this feature to work some preparations must be done in the back end. How to do this is explained in a lesson later on.

With parameter *Delta Pull Channel Refresh Period (in Seconds)* you can set the refresh time to retrieve **new and changed items**. The default is 60 seconds, for alerts it is 30 seconds. No optimized pull takes place if you leave the field empty or enter a negative number. With parameter *Delta Pull Channel Snapshot Refresh Period (in Minutes)* you can define how often **all items** are fetched from the back end. The cache is synchronized thereafter. New, modified, deleted and updated items are fetched every session (every log on) if you leave the field value empty (default) or enter a negative number. To specify a particular time frame for which the refresh occurs, enter the number of minutes.

Registering Work Item Types with the UWL

After registering a SAP Business Workflow system its necessary to register the work item types of the system. The work item registration process involves identifying each system by its alias, and then generating the XML description of how to process the work item types to be received by UWL from each system.

In the Universal Work List Administration page you see a list of system aliases for which the work item types are registered and a list for those not yet registered. For newly registered systems either choose *Register* for the system in the system list or choose *Register Item Types for New Systems Only*. Latter registers item types for all new systems.

You can choose *Re-Register* for systems where you want to do the registration of item types once again. If you want to do this for all systems in the list choose *Register Item Types for All Systems*. This is necessary for systems, where you added a new task, updated or changed the task at the back end, changed task

definition for the task types or changed configuration in transaction SWFVISU. You also must choose *Re-Register* after there have been changes (if categories have been changed, added or modified) to the Alert management framework.

Communication time can require a few minutes for each system. Reduce the amount of communication time required by registering new systems only, unless the SAP Business Workflow task definitions have changed in the back end.

Execute an SAP Business Workflow item

After successfully registering the system and registering the work item types the UWL displays work items from this back end system. User who receive work items in the back end now can work from UWL on these work items. Once you work with UWL you should not work in the back ends anymore.

To check if the configuration was successful, for example you can start a workflow with transaction SWUI_DEMO or SWXF and check if the UWL displays the work item.

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Exercise 4: (Optional) Registering the System

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- register a SAP Business Workflow System with UWL

Business Example

You want to use Universal Worklist as central access to tasks from SAP Business Workflow systems.

Task: Register System

Caution: The instructor will tell you if this exercise is to be done or not.

When registering a system that already was registered before the system is listed in the UWL configuration but is a reference to the first system only. So this exercise is technically not necessary for registering the back end system since this was done by the instructor already.

Create a Delta Link to the existing system object. Create a new alias for your newly created system object. Register the system with this new alias in UWL configuration.

1. Log on with user **EP600.A-##**. Create a delta link to the existing system object in the folder *Portal Content → Training Setup*. The name of the source object is given to you by your instructor, for example **W15-805**.
2. Create a system alias for the newly created system object, for example **EP600-##**.
3. Register the system with Universal Worklist.

Solution 4: (Optional) Registering the System

Task: Register System

Caution: The instructor will tell you if this exercise is to be done or not.

When registering a system that already was registered before the system is listed in the UWL configuration but is a reference to the first system only. So this exercise is technically not necessary for registering the back end system since this was done by the instructor already.

Create a Delta Link to the existing system object. Create a new alias for your newly created system object. Register the system with this new alias in UWL configuration.

1. Log on with user **EP600.A-##**. Create a delta link to the existing system object in the folder *Portal Content → Training Setup*. The name of the source object is given to you by your instructor, for example **W15-805**.

   a) Log on with user **EP600.A-##** and go to *System Administration → System Configuration → System Landscape*.

   b) In the System Landscape Editor go to folder *Portal Content → Training Setup*.

   c) Right click on the system object and choose *Copy*.

   d) Go to folder *Portal Content → EP600 → Systems → Group ##*, where *##* is your group number.

   e) Right click on folder *Group ##* and choose *Paste as Delta Link*. In the dialog window choose *Yes*.

2. Create a system alias for the newly created system object, for example **EP600-##**.

   a) Right click on the new system object in folder *Portal Content → EP600 → Systems → Group ##* and choose *Open → System Aliases*.

   b) Enter the name of the alias in the *Alias name* field, for example **`EP600-##`**, choose *Add* and afterwards choose *Save*.

   c) Choose *Close*.

Continued on next page

3. Register the system with Universal Worklist.

   a)

   b) Choose *New*.

   c) For *System Alias* enter the name of the newly created alias, for example **`EP600-##`**.

   d) Choose *Save*.

Exercise 5: Execute an SAP Business Workflow item

Exercise Duration: 5 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- execute a work item in Universal Worklist

Business Example

After system registration you want to test if the Universal Worklist is properly connected to the SAP Business Workflow system.

Task: Test UWL back end connection

To test the connection from UWL to the SAP Business Workflow system just start a demo workflow.

1. Log on to the portal with user **EP600.A-##**, where ## is your group number.

   Start a demo workflow in the SAP back end and execute it in Universal Worklist.

2. Go to the UWL and execute the just created workflow item.

Solution 5: Execute an SAP Business Workflow item

Task: Test UWL back end connection

To test the connection from UWL to the SAP Business Workflow system just start a demo workflow.

1. Log on to the portal with user **EP600.A-##**, where ## is your group number.

   Start a demo workflow in the SAP back end and execute it in Universal Worklist.

   a) Log on to the portal with user **EP600.A-##**.

   b) Go to *EP600 → SAP Backend → Create Notification of Absence*.

   

   Hint: When logging on to the back end for the first time, you have to set a new password for the back end user. The instructor provides you with the initial password of the back end user.

   To see the right transaction in the back end after setting the password it may be necessary to navigate in the portal once again.

   c) Choose *Save*.

2. Go to the UWL and execute the just created workflow item.

   a) Go to *EP600 → Universal Worklist → Universal Worklist ##.*

   b) From the UWL's context menu choose *Refresh*.

   c) Click on the item subject (it should be similar to *Employee Portal EP600.A-## : Approve notification of absence*). A new window opens.

   d) Choose *Approve*.

   e) Choose *Back*.

   f) Choose *Complete Work Item*.

   g) From the UWL's context menu choose *Refresh*.

Lesson Summary

You should now be able to:

- connect the Universal Worklist to SAP Business Workflow systems
- register a system with the Universal Worklist
- register SAP Business Workflow Work Item types

Unit Summary

You should now be able to:

- connect the Universal Worklist to SAP Business Workflow systems
- register a system with the Universal Worklist
- register SAP Business Workflow Work Item types

Unit 4

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Optional Configuration

In the former lesson the minimum necessary steps to implement SAP Business Workflow were described. In this Unit we want to go into some more details.

Unit Overview

This Unit introduces the configuration of the Universal Worklist (UWL) iView properties. You can change some behavior of the UWL by changing some iView properties. After that the Unit explains some configurations, which can be used to improve the performance and appearance of the UWL.

Unit Objectives

After completing this unit, you will be able to:

- explain the UWL iView properties
- configure the UWL iView properties
- delete personalized view information
- set the UWL Service Parameters
- maintain the Item Cache
- enable the Delta Pull Mechanism

Unit Contents

Lesson: Configure the UWL iView

66 Lesson Duration: 45 Minutes

Lesson Overview

This lesson gives information how to change the behavior and display of the Universal Worklist iView

Lesson Objectives

After completing this lesson, you will be able to:

- explain the UWL iView properties
- configure the UWL iView properties

The UWL iView can be used by customers in their own roles. Some UWL parameters can be changed by iView properties.

Business Example

Different Users should have a different functionality of the Universal Worklist to their service. You can implement this, by configuring the UWL iView properties.

Configuration Options

When using the Universal Worklist (UWL) in several portal roles for different target groups you can change some parameters with iView properties. The following figure shows the iView areas and sections which can be configured by iView properties. The table gives the corresponding iView properties and their explanation.

Not all iView properties which are visible in the system are listed here. There are some properties visible in the system (at least with SPS08) which are not well documented or even are obsolete. They are not listed for the participants, because they are not important. In case of questions I list these “strange” properties in this instructor note:

"Strange" UWL iView Properties

iView Property	Description
Allow Searching	It only works for NW04 / the HTMLB UI of the UWL. At some point, the HTMLB UI has been discussed as fallback for NW2004s, that's why the property is still there.
Depth of UWL Navigation Tree	Outdated.
Display Connection Status	In HTMLB UI this shows an Icon, not a menu entry like in Web Dynpro UI.
Display Substituted User Selector	In HTMLB UI the selector only appears if the user acts as a substitute for someone else.
Display Preview	Works as explained below, but: In the standard iView tray menu, there is a *Personalize* menu item. If this is available, the user can use this menu item to personalize this iView property and thus choose, if he wants to have the preview or not. In the standard delivery the UWL iView tray is not shown.
Launch Detail Page Type	Not used.
List of preview sections to hide (...)	Works as described below: Possible values are: Subject, Attributes, Description, Attachments, Notes, UserDecision, Actions. Where Notes is the Memo section. UserDecision can contain decision buttons (e.g. Approve). The *You can also* section disappears if there are no actions within it.
View application context ID / Related ID	Used for collaboration rooms.
useNavigationID	Refers to the root NavigationNode id in the configuration xml. The navigation node hierarchy defines the tab and drop down navigation in the UWL and can be customized.
Use the KM People Renderer	Currently not used

iView Property	Description
Send Row selection events	Enable the UWL to send portal events to other iViews when a row is selected. Allows to display row dependent data in a different iView. Details are documented in the UWL FAQ on http://uwl.pal.sap.corp:1080/uwl/index.html. Used by some ERP scenarios. Interesting mainly for developers.
Maximum number of dynamic views to be added	Dependent on your tasks and their types in the list, the UWL automatically adds specialized views for those types to the drop down. This is the maximum number of views that are added to the drop down.
launchUWLPath	Path to the UWL launcher iViews in the PCD. No need to change as long as those iViews are not moved. If you move the UWL launcher iViews to a different PCD location, this parameter has to be adjusted.
List of UWL Actions to exclude	Enter *personalize* to remove the *Personalize View* menu item. For the other menu entries: *refresh*, *launchSubstitutionManager,* and *connectionstatus.* Should work as of SPS09.

Note: The UWL iView can be used in the new Web Dynpro layout (default) or in the former HTMLB layout (only as fallback). The information here only is valid for the Web Dynpro layout. For the HTMLB layout it can be different.

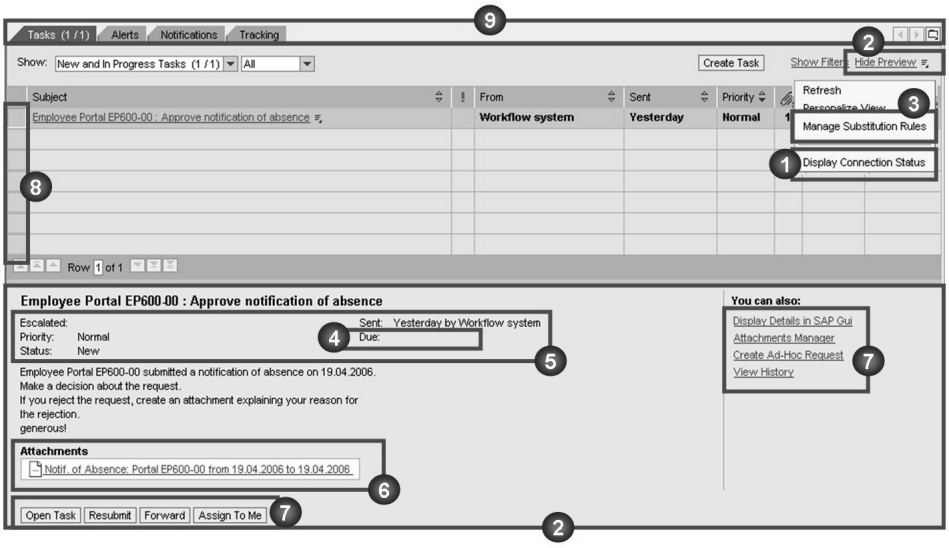

Figure 16: iView Properties

UWL iView Properties (1)

Number in figure above	iView Property	Description
1	*Display Connection Status*	Indicate if *Display Connection Status* menu item should be displayed. Values: *None* - do not display, *Show* - display.
2	*Display Preview*	Flag to indicate if the item preview is displayed or not. If you choose *No* here, the user has no link *Hide/Show Preview* any more.
3	*Display Substituted User Selector*	Indicate if the *Manage Substitution Rules* menu item is available.
4	*Indicate if the Display Attribute labels should be displayed when data is empty*	If you want to see the label for a Display attribute in the preview area even if there is no data, set this property to *Yes*.

Number in figure above	iView Property	Description
5	*List of Display Attribute to exclude from the Preview/Detail area*	Enter the names of the attributes which you want to hide from the display in the preview area. These names should be comma separated. Excluding the display attribute form the Detail section of the UWL user interface is valid only when the Detail page is from UWL. Custom detail pages, for example, coming from SAP Business Workflow or mySAP ERP systems may display these attributes.
6	*List of preview sections to hide (...)*	Enter the preview section names which you want to hide. These names should be comma separated. For example *Subject, Description, Attachments.*
7	*List of UWL Actions to exclude*	List of actions that you do not want to be displayed on the UWL page.
8	*Number of rows to display in UWL table Number of rows to display when preview is toggled of*	How many rows of items should be displayed. This is overwritten by user personalization.
9	*UWL Navigation Style*	To hide the navigation area of the UWL, the style can be set to *None* for this property

To configure the iView properties of the UWL iView delivered in the standard end user role (*eu_role*), you have to go to *Content Administration → Portal Content*. In the Portal Content Directory go to *Portal Content → Content*

Provided by SAP → End User Content → Standard Portal Users → iViews → com.sap.netweaver.bc.ui.uwl.iviews and edit the iView *Universal Worklist*. Of course you can create your own iView and put it in your own roles.

Demonstrate the exercise or change some other UWL iView properties. The following table provides some example values:

Property	Value
Display Preview	false / No
Indicate if the Display Attribute labels should be displayed when data is empty	true / Yes
Number of rows to display in UWL table *Number of rows to display when preview is toggled of*	5 5
UWL Navigation Style	None
List of preview sections to hide (...)	Description,Attachments

The UWL iView has some more properties which are relevant for the behavior of the UWL. These are listed in the table below.

UWL iView Properties (2)

iView Property	Description
Launch Web Dynpro UI	Default is *Yes*. If set to *No* the older HTMLB layout is used.
Display UWL Support Information	Displays the Support information section for this iView.

iView Property	Description
sap_uwl_viewname	*Change the default view of the UWL iView by entering a valid view name.*
Wait duration before calling provider on loading preview	Valid for Web Dynpro version only. Introduce a delay in getting all the preview information (in seconds). This feature increases performance.
Wait duration before calling providers on loading of UWL	This feature helps introduce a delay in getting item data in the UWL table. The user interface displays partial data while waiting. It promotes faster browsing of items in the UWL table with the preview area. The longer delay time is especially useful when items have large number of attachments which usually take a longer time to upload. No delay is introduced if zero seconds is indicated.

Changing the Task Execution Mode

Opening a task in the Universal Worklist, which comes from an SAP system, executes in SAP GUI for HTML (Web GUI). To change the execution mode from SAP GUI for HTML to SAP GUI for Windows you have to set the property of another iView (not the main UWL iView). The iView parameter to change the mode from SAP GUI for HTML to SAP GUI for Windows is at the iView used by UWL for launching SAP transactions. You find the iView in the Portal Content Directory (PCD). Navigate to *Content Administration → Portal Content*. In the PCD go to *Portal Content → Portal Users → Standard Portal Users → Universal Worklist* and edit the *UWL - Launch SAP Transaction* iView (*pcd:portal_content/every_user/general/uwl/com.sap.netweaver.bc.uwl.uwlSapLaunch*). Set the property *SAP GUI Type* to *SAP GUI for Windows*.

Exercise 6: Configure the UWL iView

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- configure UWL iView properties

Business Example

Some end users need the Universal Worklist for task execution only. To give these users a more efficient way to their task you don't want the additional tabs for notifications and alerts to be visible.

New tabs and views can be created by xml file configuration.

Your administrators got a lot of user requests concerning misconfigured personalization. To reduce the workload of your administrators you want to disable the personalization of Universal Worklist.

Task 1: Tasks only

Set the iView properties of the UWL iView in a way that only the views from the *Tasks* tab are visible anymore.

1. Log on to the portal with user **EP600.A-##**, where ## is your group number. For your *Universal Worklist ##* iView, set the property *useNavigationId* to value **CombinedTasks**.
2. Check if your UWL iView looks different from before.
3. Set the property *useNavigationId* to value **Main** again.

Continued on next page

Task 2: No Personalization

Caution: This exercise should work as of SPS09!

Set the iView properties of the UWL iView in a way that the menu item *Personalize View* is not visible in the UWL context menu.

1. Log on to the portal with user **EP600.A-##**, where ## is your group number. For your *Universal Worklist ##* iView, set the property *List of UWL Actions to exclude* to value **personalize**.
2. Check if your UWL iView looks different from before.

Solution 6: Configure the UWL iView

Task 1: Tasks only

Set the iView properties of the UWL iView in a way that only the views from the *Tasks* tab are visible anymore.

1. Log on to the portal with user **EP600.A-##**, where **##** is your group number. For your *Universal Worklist ##* iView, set the property *useNavigationId* to value **CombinedTasks**.

   a) Log on to the portal with user **EP600.A-##**.

   b) Go to *Content Administration → Portal Content*.

   c) In the Portal Content Studio open the folder *Portal Content → EP600 → iViews*.

   d) Double click on iView *Universal Worklist ##*, where ## is your group number.

   e) In the *Property Category* drop down select *UWL*.

   f) For property *useNaviagtionId* delete the existing value and enter **`CombinedTask`**.

   g) Choose *Save*.

   h) Choose *Close*.

2. Check if your UWL iView looks different from before.

   a) Go to *EP600 → Universal Worklist → Universal Worklist ##.* Instead of tabs *Tasks, Notification, Alters* and *Tracking* the tabs *New and In Progress Tasks, Tasks Forwarded to Someone, Tasks for Resubmission* and *Completed Tasks*.

3. Set the property *useNavigationId* to value **Main** again.

   a) In the same way as described in step 1 set the property value of *useNaviagtionId* back to **`Main`**. *Save* and *Close*.

Continued on next page

Task 2: No Personalization

Caution: This exercise should work as of SPS09!

Set the iView properties of the UWL iView in a way that the menu item *Personalize View* is not visible in the UWL context menu.

1. Log on to the portal with user **EP600.A-##**, where **##** is your group number. For your *Universal Worklist ##* iView, set the property *List of UWL Actions to exclude* to value **personalize**.
   a) Log on the the portal with user **EP600.A-##**.
   b) Go to *Content Administration → Portal Content*.
   c) In the Portal Content Studio open the folder *Portal Content → EP600 → iViews*.
   d) Double click on iView *Universal Worklist ##*, where *##* is your group number.
   e) In the *Property Category* drop down select *UWL*.
   f) For property *List of UWL Actions to exclude* delete the existing value and enter **`personalize`**.
   g) Choose *Save*.
   h) Choose *Close*.
2. Check if your UWL iView looks different from before.
   a) Go to *EP600 → Universal Worklist → Universal Worklist ##*. In the UWL context menu the entry *Personalize View* should not be visible.

Lesson Summary

You should now be able to:

- explain the UWL iView properties
- configure the UWL iView properties

Lesson: Universal Worklist Parameters

Lesson Duration: 45 Minutes

Lesson Overview

This lesson collects information from several different configuration or maintenance features. First the possibility to delete the end user's personalization settings will be explained. In some situations it can be necessary to empty the Universal Worklist's cache. Why and how to do this will be explained in this lesson. Furthermore the Universal Worklist Service parameters will be explained. The last topic of this lesson is the Delta Pull Mechanism.

Lesson Objectives

After completing this lesson, you will be able to:

- delete personalized view information
- set the UWL Service Parameters
- maintain the Item Cache
- enable the Delta Pull Mechanism

This lesson collects several UWL configurations which are independent from each other.

Business Example

You want to get information about further possibilities to enhance the usability of the UWL.

Architectual Overview

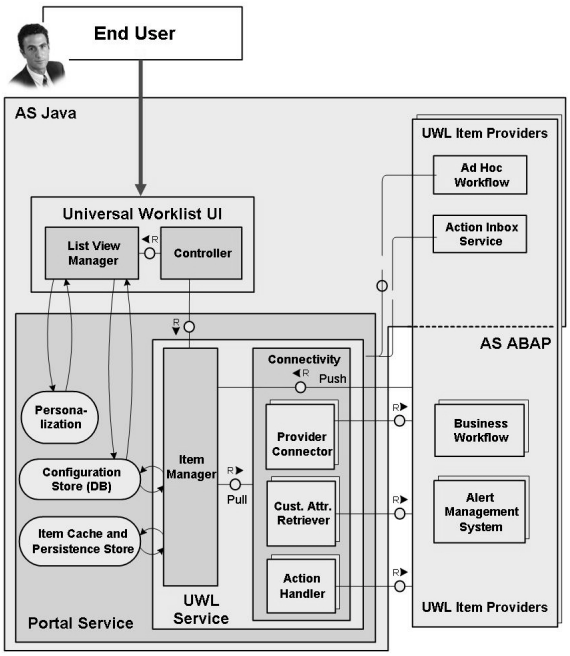

Figure 17: UWL Architecture

The figure above gives a rough overview of the Universal Worklist architecture.

The UWL displays items from different *UWL Item Providers* originating in AS Java or AS ABAP, like for example the SAP Business Workflow.

Per default the *Item Manager* of the *UWL Service* pulls the item information via the *Connectivity* layer from the item provider. For better performance the information is stored in the persistent (DB) *Item Cache*.

The *List View Manager* of the *Universal Worklist UI* displays the items regarding to the configuration persisted in the *Configuration Store* and the user's *Personalization*.

Delete personalized view information

As the end users have the possibility to personalize the Universal Worklist (UWL) to their needs, there may occur the situation when the administrator needs to reset the personalization setting of a user. For resetting the personalization go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*. In the *Universal Worklist - Configuration* iView there is a section called *Universal Worklist Content Configuration*, here you find a link *Click to Administrate Item Types and View Definitions*. Click on this link. The *Universal Worklist Configuration Content* iView opens. Choose the *Reset Personalizations* tab (see figure below).

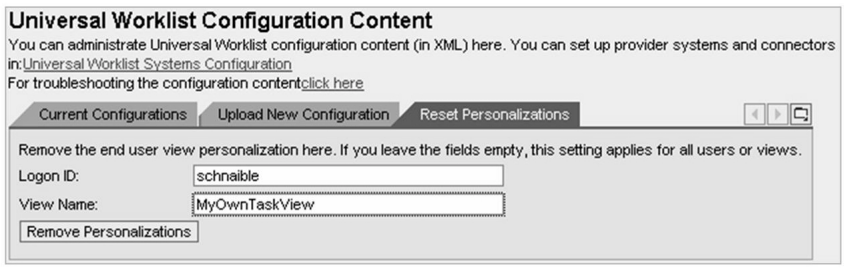

Figure 18: ResetPersonalization

To remove one personalized view of a single user, enter the user's id into the *Logon ID* field, enter the name of the view into the *View Name* field and choose *Remove Personalizations*.

Note: So far there is no possibility to search for view names, so the end user has to tell the administrator the name of the view.

To remove all personalized views of a single user, enter the user's id into the *Logon ID* field and choose *Remove Personalizations*.

To remove all personalized views of all users, enter * into the *View Name* field and choose *Remove Personalizations*.

Demonstrate the resetting like in the exercise. Make sure not to delete your own user's settings only.

Set the UWL Service Parameters

There are three different possibilities how the UWL Service can get the items from the back end. Per default (and for releases below or equal to SAP NetWeaver 2004) the UWL pulls information from the back end every 5 minutes. This so called “Snapshot Pull” also is done if a user navigates to the UWL for the first time, or if the user refreshes the UWL manually.

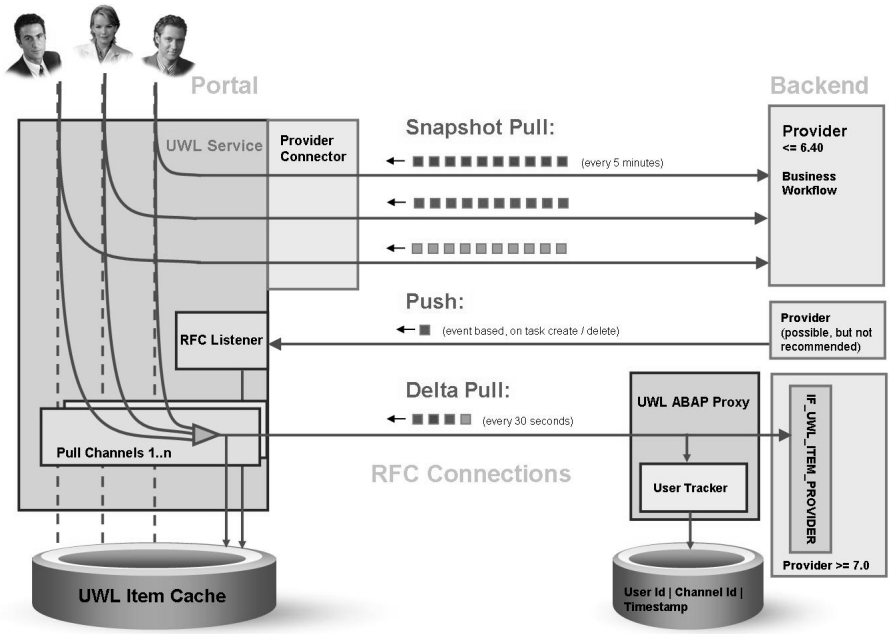

Figure 19: UWL Connectivity

For a better performance it is recommended to enable the Delta Pull Mechanism, which is available for back ends as of release SAP NetWeaver 2004s. This is described in the section *Delta Pull Mechanism* further below.

In addition the back end can push the items to UWL, but this is not recommended.

If asked about performance you can give the comparison from the table below. It's from an early phase of NW2004s so things can have changed meanwhile.

Strategy	Back end connections	Data volume (# items)	Comments
Snapshot Pull - per user	60,000 NW04	12,000,000 NW04	- Cache validity: 5 minutes = presentation delay - Response time includes back end connection - Item limit per user
Push - per user - per event	90,000	90,000	- No presentation delay, items are always up to date in cache - Snapshot sync points will be required in addition
Bundled Delta Pull	7000 NW2004s	230,000 NW2004s	- Users are bundled in channels (50 users each) - Channel pulls every minute = presentation delay - Response time does NOT include back end connection, items are taken from cache - Every 24 hours, there is a snapshot sync point

Sample data: 1 day, 3000 users, 1000 active, average online activity per user: 5 hours, average items per user in list: 200, average item events per user (crud): 30.

Connections = 5hours * 60minutes / cache validity * number of users or channels

Desktop Notifications requires bundled bull, users may be online 24/7. This is not possible with snapshot pull.

Bundled delta pull can be further optimized with channel parameters. Number of users per channel (50), delta pull interval (30s), and snapshot sync interval (24h) are configurable.

If you want to change some default behavior of the UWL, you can change the UWL service parameters. What can be changed is best explained by describing the parameters you can change. To configure the UWL service go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*. Down below on this page, you have to

expand the iView tray to see the *Universal Worklist Service Configuration* iView. Choose *Edit* and change the parameter you want to and choose *Save* if you are done. The following list describes the parameters in detail.

- *Default Execution Mode*

  Before a task is launched the UWL can check at the provider system if the item is still valid. If you choose *Pessimistic* here, this check is done.

  If you choose *Optimistic* no validity check is done. This saves time and thus improves the system performance, but the end user will get an error message if the item he launches is not valid any more.

- *Webflow User Format*

  You can map the data from an SAP Business Workflow back end user to the portal using the following identifiers: *Full Name*, *User ID* or *Not Displayed*.

- *Default Cache Validity Period, in Minutes*

  After this expiration time, the current item list is automatically updated from the provider system. This parameter applies only to provider systems that are **not enabled** for the Delta Pull Mechanism. The default value is 5 minutes.

- *Maximum Number of Threads Created in the Thread Pool*

  Here you can set the maximum number of J2EE engine threads created to contact the component systems. The value should be set to the number of connected systems.

- *Timeout Value for the Connected Systems, in Seconds*

  Value in seconds, after which the connection for a system is timed out. If the item fetching takes longer than the given value, an error in the system connection status will be shown and the items will not be retrieved. However, the UWL will try to reconnect after the next *Default Cache Validity Period*.

- *Number of Users per Pull Channel*

  Here you can give the numbers of users together for whom the new item changes will be fetched in a go during the Delta Pull.

- *Path to the UWL iViews*

  This parameter contains the PCD location of the UWL iViews called by the UWL main iView. If you want to move these iViews to a different location you have to maintain this parameter. The default value is *portal_content/every_user/general/uwl*.

- *Display Support Information*

  Setting this parameter to *True* displays the UWL support information in all UWL iViews. The default is *False*. You can activate this feature per iView by changing the iView property *Display Support Information*.

It's best to demonstrate the parameters on the system. You can set the parameter *Display Support Information* to *true* here. This is useful later on in the course, when we talk about xml configuration.

Maintain the Item Cache

The UWL caches items from different provider systems. This caching is done periodically as specified in the UWL service configuration, the system registration (Delta Pull Mechanism) and maybe in the configuration XML for a particular item type. You must clear the cache if the customizing of item types were changed, updated or newly created, if systems are removed from the portal landscape or a system configuration is changed in or removed from the UWL systems configuration page.

The cache is a persistent one and resides in the local DB. No memory caching is done. There is no monitoring or configuration available.

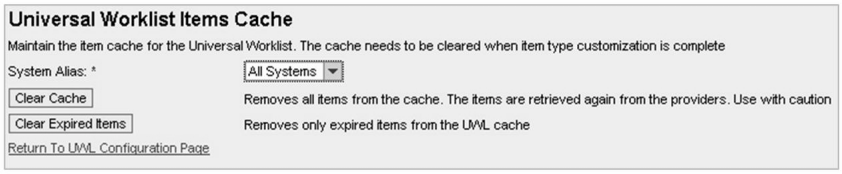

Figure 20: Cache Administration

Go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*. In the *Universal Worklist - Configuration* iView there is the section *Universal Worklist Content Configuration*, here click on the link *Cache Administration Page*. In the *Universal Worklist Items Cache* iView you first choose a system from the *System Alias* drop down menu (choose *All Systems* if you want to clear the cache for all systems).

Hint: If a system does not have any items in UWL cache it does not appear in the list.

After choosing a system, you can click on *Clear Cache* to remove all items from the cache of this system. The items are retrieved again from the providers as configured elsewhere. Click on *Clear Expired Items* to remove only expired items from the UWL cache.

Demonstrate the Cache Administration.

Delta Pull Mechanism

The Delta Pull mechanism of UWL enables new items to be fetched from the back end SAP systems every minute (by default every 60 seconds, and every 30 seconds for alerts. However, this can be configured). The user does not need to use the refresh function to update the UWL display. Once items are retrieved, timestamps are updated for the users whose items are successfully retrieved. These retrieved items are updated in the UWL cache. Only new and changed items are retrieved by this mechanism.

To enable the Delta Pull mechanism some configurations in the SAP back end system have to be done. If you don't have the necessary rights in the back end, ask the system administrator or the workflow administrator of the SAP system to do the configuration for you.

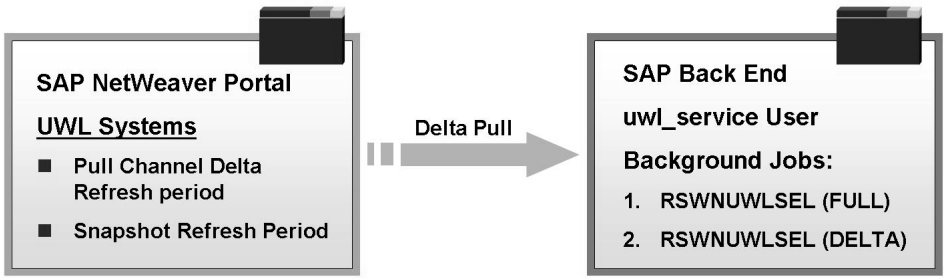

Figure 21: Delta Pull Mechanism

In the SAP Business Workflow system define the following two background jobs

Demonstrate the configuration of the Delta Pull:

1. Log on to the back end with SAP GUI for Windows as user EP600.A-##. You also can use the iViews from the *EP600* role in the portal to do this.
2. Create the variants **`FULL`** and **`DELTA`** for report **RSWNUWLSEL** in transactionSA38.

   For variant *FULL* select the radio button *FULL-Filter*, for variant *DELTA* select the radio button *DELTA-Filter*.
3. In transaction SM36 create a Job named **`UWL_DELTA_PULL_FULL`** executing report **`RSWNUWLSEL`**, variant **`FULL`** with a one day period, starting immediately.
4. In transaction SM36 create a Job named **`UWL_DELTA_PULL_DELTA`** executing report **`RSWNUWLSEL`**, variant **`DELTA`** with a three minute period, starting immediately.
5. In transaction SM37 check the output requests from the two jobs.
6. In the portal go to the UWL configuration and edit the system entry. Now enter valid delta pull parameters and save.

- A background job (for example named *UWL_DELTA_PULL_FULL*), consisting of a single step of ABAP report *RSWNUWLSEL* in *FULL* mode.. Run the job once a day.
- A background job (for example named *UWL_DELTA_PULL_DELTA*), consisting of a single step of ABAP report *RSWNUWLSEL* in *DELTA* (default) mode. Run the job every one to three minutes (depending on the performance of the back end system).

For more information on the ABAP report *RSWNUWLSEL* and on the topic “Extended Notifications for SAP Business Workflow” see the SAP Library for SAP NetWeaver 2004s section *SAP NetWeaver by Key Capability → Application Platform by Key Capability → Business Services → SAP Business Workflow → Reference Documentation → Workflow System Administration → Extended Notifications for SAP Business Workflow*. The SAP Education course DBITWF (*SAP Workflow - Delta R/3 Enterprise on SAP NetWeaver 2004s*) also talks about extended notifications.

For the Delta Pull mechanism to function properly the UWL service user in the SAP NetWeaver Portal, with user id *uwl_service*, has to be granted access to the corresponding SAP back end systems. Therefore during registration of the system with the UWL a user named *uwl_service* is created in the back end and provided with the necessary authorizations. If SSO (for example using Logon Ticket) is used to connect to the back end nothing needs to be done. If user mapping is used, you can first configure the back end system in the UWL administration page. Then access the respective back end system to set the password for the user *uwl_service*. Afterwards, do user mapping in the portal as usual for user *uwl_service*.

In case user *uwl_service* failed to be created in the back end and does not exist, you can manually create a back end user with the id *uwl_service* and assign the authorization role *SAP_BC_UWL_SERVICE* or map the portal user *uwl_service* to an existing back end user. This back end user must have the role *SAP_BC_UWL_SERVICE*. Make sure that there is no multiple user mapping (there must not be two portal users mapped to the same back end user).

Note: See SAP notes

873932 - *Additional note on authorization of uwl_service user*

942571 - *Note about uwl.service user maintenance with CUA*

for more information regarding the *uwl_service* user and it's authorizations.

When registering systems with UWL in the UWL Administration you can configure the Delta Pull behavior with the two parameters *Delta Pull Channel Refresh Period (in seconds)* and *Delta Pull Channel Snapshot Refresh Period (in minutes)*. These are explained in lesson *Connecting to SAP Business Workflow Systems*.

Hint: You should set the values of these parameters in accordance to the periodicity of the back end jobs. For example if the delta job runs every 5 minutes the parameter *Delta Pull Channel Refresh Period (in seconds)* should be set to 300 seconds at minium.

No additional back end configuration is required to enable Delta Pull Mechanism for alerts.

Exercise 7: Delete Personalization Information

Exercise Duration: 5 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- reset UWL personalization

Business Example

An end user contacts you because of display problems in UWL. He has done some personalization settings and doesn't know how to get back to default.

Task: Reset Personalization

Reset the personalization of the end user.

1. Log on the portal as **EP600.A-##** and reset the UWL personalization of user **EP600.E-##**, where ## is your group number.

Result

You successfully deleted all personalization settings for your end user.

Solution 7: Delete Personalization Information

Task: Reset Personalization

Reset the personalization of the end user.

1. Log on the portal as **EP600.A-##** and reset the UWL personalization of user **EP600.E-##**, where ## is your group number.

   a) Log on to the portal as user **EP600.A-##**.

   b) Go to *System Administration* → *System Configuration* → *Universal Worklist & Workflow* → *Universal Worklist - Administration*.

   c) Click on the link *Click to Administrate Item Types and View Definitions*.

   d) Choose the tab *Reset Personalizations*.

   e) Into the *Logon ID* field enter the ID of your end user: **`EP600.E-##`**.

   f) Choose *Remove Personalizations*.

Result

You successfully deleted all personalization settings for your end user.

Lesson Summary

You should now be able to:

- delete personalized view information
- set the UWL Service Parameters
- maintain the Item Cache
- enable the Delta Pull Mechanism

Unit Summary

You should now be able to:

- explain the UWL iView properties
- configure the UWL iView properties
- delete personalized view information
- set the UWL Service Parameters
- maintain the Item Cache
- enable the Delta Pull Mechanism

Unit 5

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Advanced Configuration

This unit introduces the XML configuration of UWL. In this course we don't want to explain every detail of the DTD, but give an introduction and an overview what can be configured in this way.

Unit Overview

This unit introduces the configuration possibilities of Universal Worklist by creating and/or editing XML configuration files.

Unit Objectives

After completing this unit, you will be able to:

- use the XML Configuration Wizard
- explain UWL content configuration possibilities
- upload a new configuration file
- integrate Alert Management with UWL
- explain that Third Party Integration for UWL is possible

Unit Contents

Lesson: UWL Configuration Wizard

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Lesson Duration: 30 Minutes

Lesson Overview

The UWL Configuration Wizard provides an easy way to change some UWL configuration without editing and creating XML files.

Lesson Objectives

After completing this lesson, you will be able to:

- use the XML Configuration Wizard

The UWL config wizard has some flaws with SPS8 which was used during course development. Test all demos and exercises before course! See the AddOn IG on up to date information.

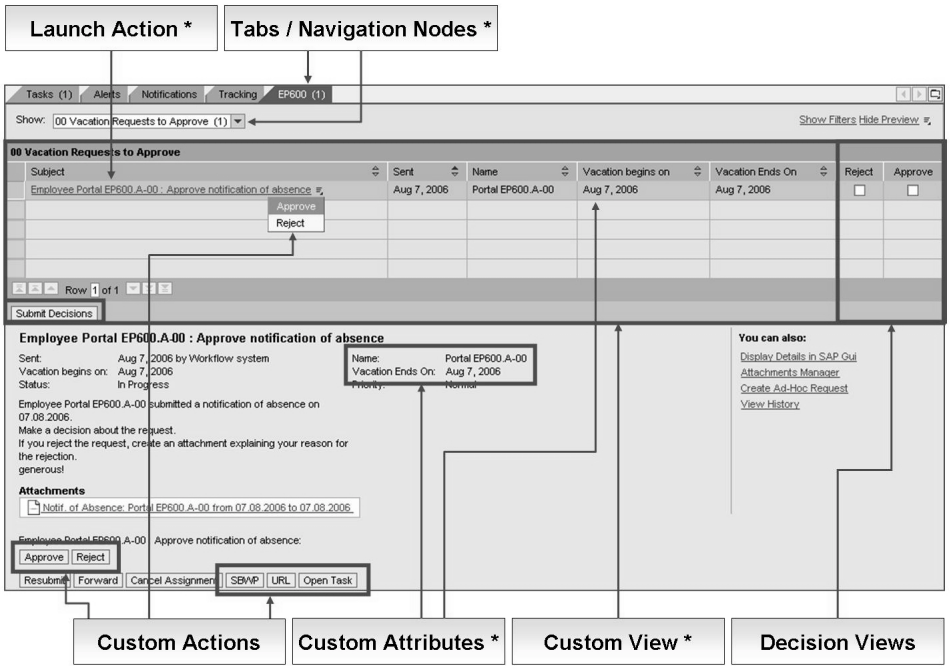
Business Example

The standard delivery of the UWL does not satisfy the needs in your company. Your users want to get displayed additional item attributes the UWL does not display in the default delivery.

Overview of UWL content configurations

Many SAP Business Workflow work items launch by default as SAP Transactions in the SAP GUI for HTML. For reasons of simplification and improved visual integration into the SAP NetWeaver Portal, application scenarios customers often prefer to re-implement work item visualization and execution using iViews. Implementations of these visualizations require knowledge of the Business Workflow API to retrieve work item information and to perform item completion.

In addition to configuring the item execution with iViews an often asked for scenario is the visualization of item specific attributes or actions in the UWL. The figure below gives an overview of the advanced configuration possibilities.



* can be done in some limits with the UWL Configuration Wizard

Figure 22: Configuration Overview

An essential configuration is the customizing of which **UWL tabs** are visible in the UWL iView. There is the possibility to configure own **custom views** with your own **custom attributes** to be displayed. And finally the **item launching** can be configured. This is important in case you want to launch your own UI, for example an own ABAP Web Dynpro for a specific task.

Some of these settings can be configured using an configuration wizard. This will be explained in the following section.

Using the UWL Configuration Wizard

The UWL Configuration Wizard allows you to change the UWL custom attributes and the user interface look and feel using a UI based wizard, as opposed to making changes to the XML file and uploading it.

The configuration wizard covers the scenarios listed below. For other configuration changes, we recommend you to use the XML file for making the changes and uploading it back.

- Define custom attributes and customize the corresponding view
- Define and configure what you want to launch when an item is clicked
- Customize the look of the UWL main page (Navigation Node configuration)

To start the UWL configuration wizard go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*. In the UWL configuration iView click on the link *Click to Configure Item Types and Customize Views Using a Wizard* to open the start page of the wizard.

Navigation Node Configuration

In the start page of the wizard choose *Customize the look of the UWL main page* and *Next*.

You can customize the look of the UWL main page regarding which tabs and views are visible. You can determine which tabs you want visible and which ones should be hidden from the user's view. You can also customize the view that is associated with each drop down entry. You even can create your own tabs here.

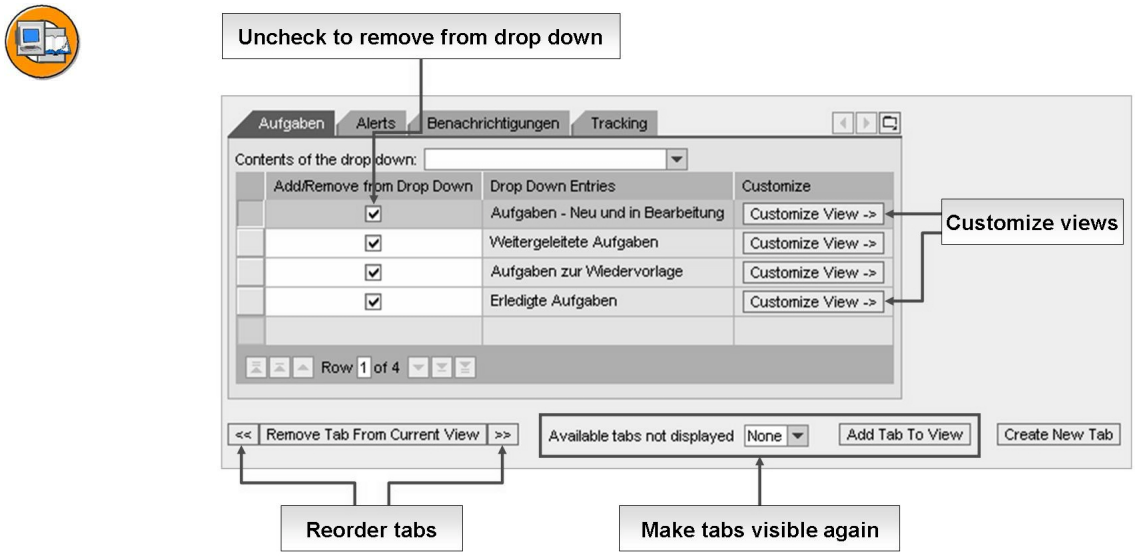


Figure 23: UWL Wizard Tabs

Demonstrate this configuration on the system. Since the settings are valid system wide this can not be exercised by the students. Simply reorder the tabs.

When saving your settings a new XML configuration is automatically created. Later in this lesson we will see how to delete this configuration again.

Attributes and views

In the start page of the wizard choose *Define custom attributes and customize the corresponding view* and *Next*.

You can add custom attributes to a specific item type. Usually a set of default attributes are defined for the item type. These default attributes are part of the view that is associated with the item type.

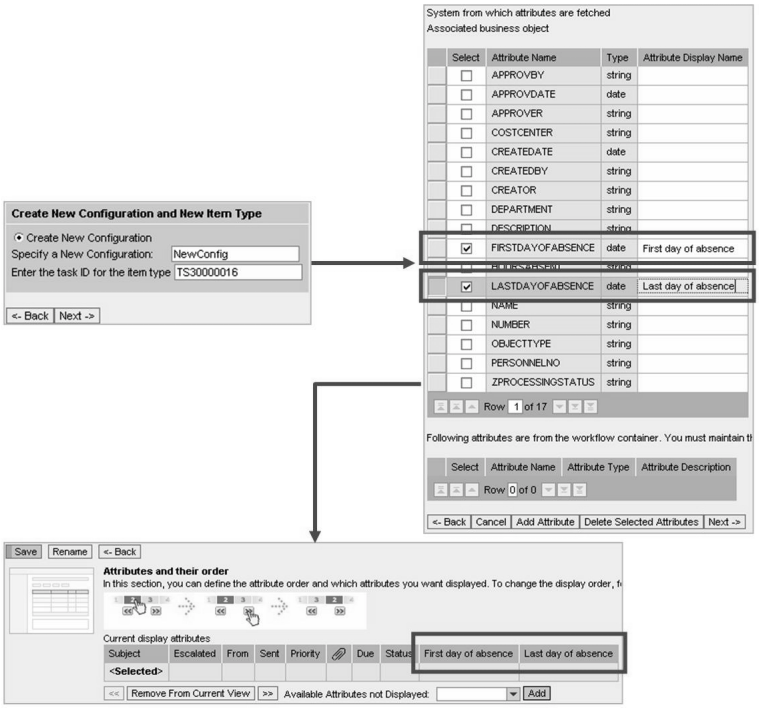


Figure 24: UWL Wizard Attributes

The wizard leads you step by step through the process. The most important steps are displayed in the figure above. First you have to give or select the “TS” number.

The wizard then looks up all the attributes of the task in the connected back end. You simply have to give a description you want to see in the list view.

Afterwards you can configure the view like in the personalization settings.

You can demonstrate this like in the exercise. The new configuration can be deleted afterwards.

Item Launching

Figure 25: UWL Wizard Launching

The wizard leads you step by step through the process. The most important steps are displayed in the figure above. First you have to give or select the “TS” number.

Afterwards you are able to choose from different applications you want to launch. For example if you want to launch an iView, you have to give the iView ID.

You can demonstrate this like in the exercise. The new configuration can be deleted afterwards.

If the task is entered in SWFVISU, the settings done with the wizard will disappear after re-registering the items. At least this was the behavior for SPS8.

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Exercise 8: (Optional) Using the UWL Configuration Wizard

Exercise Duration: 15 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- use the UWL Configuration Wizard

Business Example

The standard delivery of the UWL does not satisfy the needs in your company. Your users want to get displayed additional item attributes the UWL does not display in the default delivery.

This exercise is marked as optional due to timing reasons. The lesson about the XML configuration explains a lot. And after that the wizard should be understandable quite easy. So you can leave out this exercise first and shift it to the end of the course. With SPS8 the wizard has some flaws so the exercise will lead to strange behavior. See AddOn IG for details and updates.

Task 1: Attributes

Use the UWL Configuration Wizard to configure additional attributes for your item type.

The following table provides the information which group can use which task number for this and the next exercise task:

Group vs. TS Number

Group	Task Number
00 (Instructor)	TS99700142
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

1. Log on with user **EP600.A-##**, where ## is your group number. Start the UWL Configuration Wizard and define the two new attributes *First day of absence* and *Last day of absence* for your task from the table above.
2. Check the UWL iView if there is a new view available.

Continued on next page

Task 2: Item Launching

Use the UWL Configuration Wizard to define a new launch action for your task from the table above.

1. Log on with user **EP600.A-##**, where ## is your group number.
   Start the UWL Configuration Wizard and configure that the iView *pcd:portal_content/EP600/Roles/com.sap.training.EP600/EP600/SAPBack-end/com.sap.training.SAPBusinessWorkplace* should be launched when the user clicks on a task with your number from the table above.
2. Check the UWL iView if the right iView is launched when the item subject is clicked on.

Solution 8: (Optional) Using the UWL Configuration Wizard

Task 1: Attributes

Use the UWL Configuration Wizard to configure additional attributes for your item type.

The following table provides the information which group can use which task number for this and the next exercise task:

Group vs. TS Number

Group	Task Number
00 (Instructor)	TS99700142
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	
11	
12	
13	
14	
15	
16	
17	

Continued on next page

Group	Task Number
18	
19	
20	

1. Log on with user **EP600.A-##**, where ## is your group number. Start the UWL Configuration Wizard and define the two new attributes *First day of absence* and *Last day of absence* for your task from the table above.

   a) With user **EP600.A-##** go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*.

   b) In the UWL configuration iView click on the link *Click to Configure Item Types and Customize Views Using a Wizard* to open the start page of the wizard.

   c) Select option *Define custom attributes and customize the corresponding view* and choose *Next*.

   d) Select *Create New Configuration*.

   e) Enter a name into the field *Specify a New Configuration*, for example **`MyConfig##`**.

   f) Enter your task number from the table above into the field *Enter the task ID for the item type*.

   g) Choose *Next*.

   h) Make sure the right system alias is selected and choose *Next*.

   i) Mark the checkboxes in front of the entries *FIRSTDAYOFABSENCE* and *LASTDAYOFABSENCE*.

   j) Enter a description in the column *Attribute Display Name* for those two marked entries.

   k) Choose *Next*.

   l) Choose *Save*.

   m) Choose *Apply To Systems*.

2. Check the UWL iView if there is a new view available.

   a) Go to *EP600 → Universal Worklist → Universal Worklist ##*.

   b) Make sure a task from the type given in the table above is listed. A subview should be selectable with the two attributes as columns. Also in the item details the two new attributes should be visible.

Continued on next page

Task 2: Item Launching

Use the UWL Configuration Wizard to define a new launch action for your task from the table above.

1. Log on with user **EP600.A-##**, where ## is your group number.
   Start the UWL Configuration Wizard and configure that the iView *pcd:portal_content/EP600/Roles/com.sap.training.EP600/EP600/SAPBackend/com.sap.training.SAPBusinessWorkplace* should be launched when the user clicks on a task with your number from the table above.

   a) With user **EP600.A-##** go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*.

   b) In the UWL configuration iView click on the link *Click to Configure Item Types and Customize Views Using a Wizard* to open the start page of the wizard.

   c) Select option *Define and configure what you want to launch when an item is clicked* and choose *Next*.

   d) Select *Specify the task ID* and choose your task number from the table above.

   e) Choose *Next*.

   f) Make sure that *Launch an iView* is selected in the *Select an action launcher* drop down.

   g) Enter **`pcd:portal_content/EP600/Roles/com.sap.training.EP600/EP600/SAPBackend/com.sap.training.SAPBusinessWorkplace`** into the field in column *Property Value* for property *iview*.

   h) Choose *Finish*.

2. Check the UWL iView if the right iView is launched when the item subject is clicked on.

   a) Go to *EP600 → Universal Worklist → Universal Worklist ##*.

   b) Make sure a task from the type given in the table above is listed. If you click on the subject a new window with the SAP Business Workplace should open.

Lesson Summary

You should now be able to:

- use the XML Configuration Wizard

Lesson: Universal Worklist Content Configuration

Lesson Duration: 90 Minutes

Lesson Overview

This lesson gives an overview of Universal Worklist content configuration by editing and creating XML files.

Lesson Objectives

After completing this lesson, you will be able to:

- explain UWL content configuration possibilities
- upload a new configuration file

This lesson talks about further configuration possibilities. The UWL can be configured with XML files. So it's free of programming code, but not always simple. You have to understand basic XML concepts and of course the UWL DTD in this case. **We don't want to give a complete understanding of the UWL DTD here**, but some often asked features should be explained.

The code examples in this lesson are from the XML files on the training share. You can always show them to explain the features mentioned.

Business Example

The standard delivery of the UWL does not satisfy the needs in your company. Your users should be able to make multiple decisions for many tasks at once, they also want to get displayed additional item attributes the UWL does not display in the default delivery.

Editing Configuration XML

Universal Worklist can be configured extensively using XML (Extensible Markup Language). XML is an open standard and more easy to get used to than a programming language. In this way the configuration of UWL can be learned quite fast. The following sections will introduce the concept and clarify some much used features. For all the details you can refer to the SAP NetWeaver Library on http://help.sap.com, sections *Technology Consultant's Guide → Business Task Management → Universal Worklist Configuration → Advanced Configuration* and *Technology Consultant's Guide → Business Task Management → Universal Worklist Configuration → Configuration DTD*.

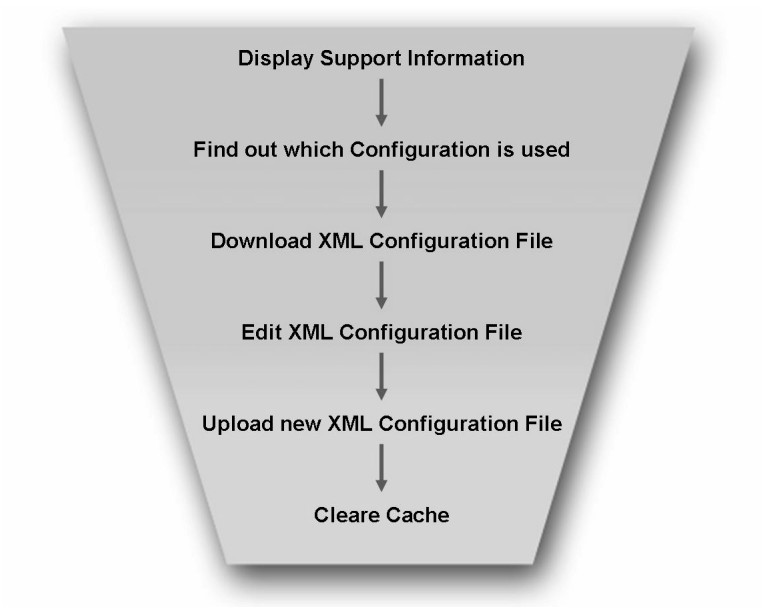

Figure 26: Change Process

The figure above gives the process overview how to change the UWL configuration. To find out which configuration XML file is used for the current displayed view or item you can turn on the support information. This is possible by setting the iView property *Display UWL Support Information* to *true* for the specific UWL iView used, or for all UWL iViews by setting the UWL Service parameter *Display Support Information* to *True*

At this point you should show how to display the support information. Make the setting at the UWL Service, so that all students will see the support information. This will be useful for the exercises.

Upload and Download Configuration

In the UWL administration you have the possibility to check the current configuration and upload new configurations. Go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*. In the administration iView click on *Click to Administrate Item Types and View Definitions*.

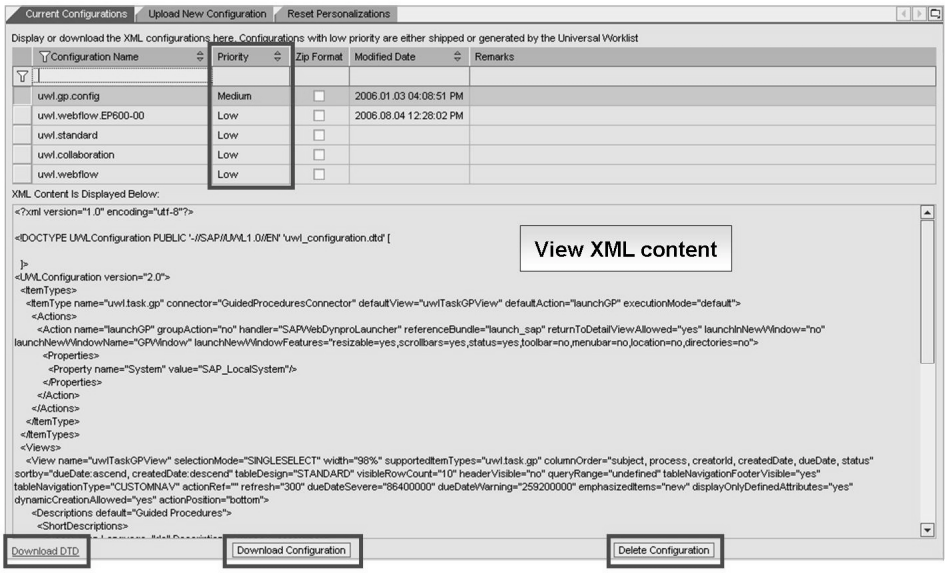

Figure 27: Download

To view a current configuration file simply check the row selector and the XML content is displayed. Choose *Download Configuration* and you can save a copy of the chosen configuration file. You should always do this to get a local backup of the file before you choose *Delete Configuration*. There is no “undo” for the deletion! But you can upload the configuration file again.

The priority of the single configuration files define in which order they will be executed in case of conflicting definitions. *High* comes for *Medium* comes for *Low* priority.

In case of conflict the last file uploaded will be the effective one. You can use the troubleshooting function by clicking on *click here* above the tabs.

By choosing *Download DTD* you can save a local copy of the UWL DTD (Document Type Definition). See the next section for more information.

When choosing *Upload New Configuration* you get to the upload dialog for new configuration files.

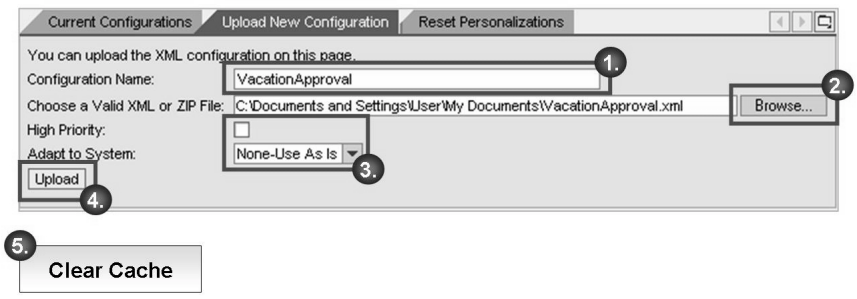

Figure 28: Upload

To upload a new configuration do the following:

1. Enter a *Configuration Name*.
2. Browse to where your XML or zip file is located and confirm the dialog.
3. Mark the *High Priority* checkbox if you are customizing item types and views. This makes sure that your configuration will be preferred over other ones. If you don't mark the checkbox the file will have *Medium* priority.

   

   Note: The configuration the UWL is delivered with has priority *Low*. Other configuration files delivered by SAP, for example for Business Packages will come with priority *Medium*.

   You can specify the system which you want to apply the configuration to in the *Adapt to System* drop down. If uploaded as *None-Use As Is*, the configuration will be applied to the system referenced in the XML file itself. If no system is referenced there, it will be applied to all systems.
4. Choose *Upload*.

   The configuration file will be validated against the DTD. If the file is not valid it will not be uploaded. In this case an error message appears which gives the validation error.
5. You must clear the cache now. See section *Maintain the Item Cache* in lesson *Universal Worklist Parameters* of unit *Optional Configuration*.

DTD

To understand which configuration settings can be made with XML files we need to have a short look at the DTD.

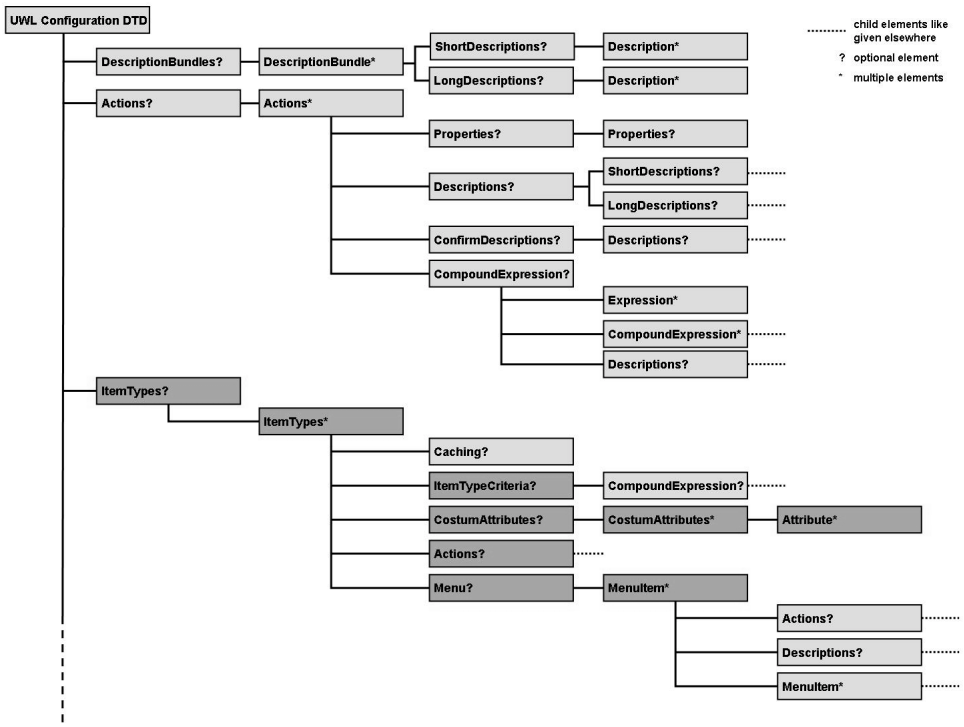

Figure 29: DTD 1

The figure above and below picture the complete Universal Worklist DTD. In the following only some elements we will use in the exercise will be explained. For a complete description of elements and their attributes consult the SAP NetWeaver Library on http://help.sap.com section *Technology Consultant's Guide → Business Task Management → Universal Worklist Configuration → Configuration DTD*. With the *ItemType* element it is possible to define new custom attributes and actions for specific items. The new attributes and actions will appear in the UWL details area (preview) for the specific item. An item can have menu items to appear in the UWL list view.

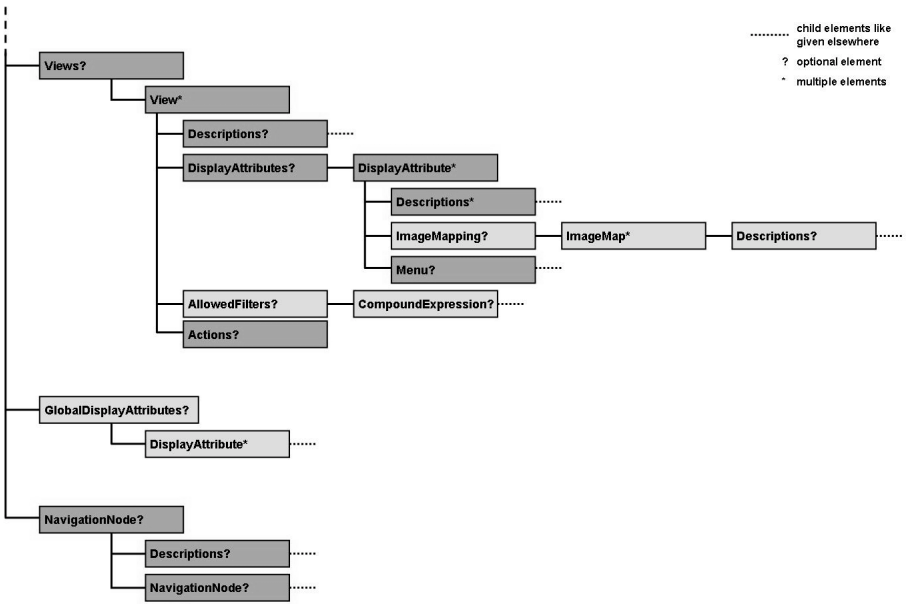

Figure 30: DTD 2

The *View* element gives the possibility to define new list views for all or selected item types. Wich attributes are displayed in the view is configured by using the *DisplayAttributes* element. A view can also have *Actions* to be executed for the item(s) marked in the list. Finally with the *NavigationNode* element you can define which tabs, views and subviews are available in the UWL iView.

The figure below shows some possible configurations.

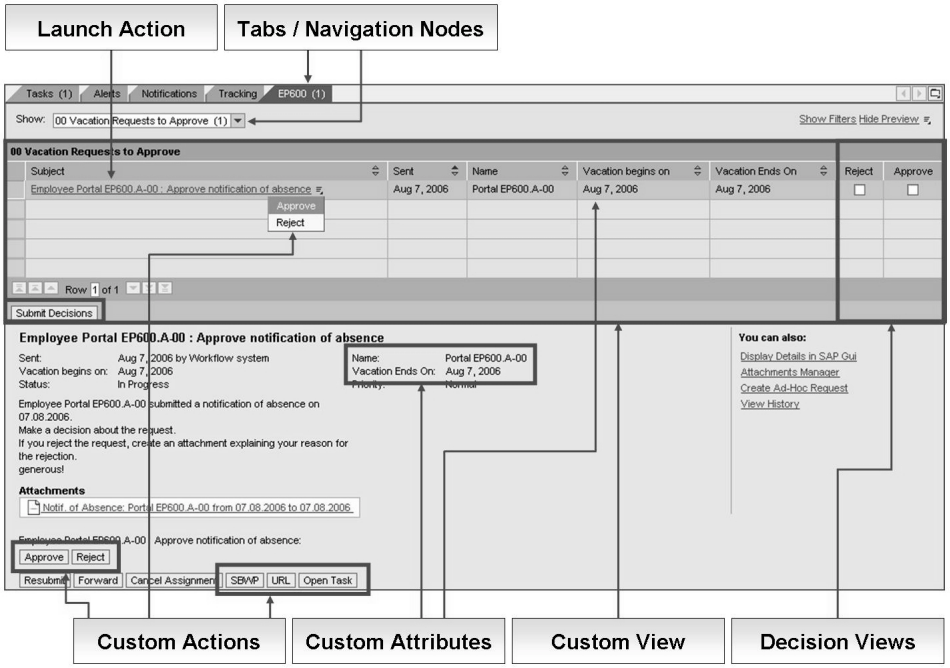

Figure 31: Configuration Overview

Navigation Nodes

The different tabs and views visible in the UWL iView are defined by using the *NavigationNode* element.

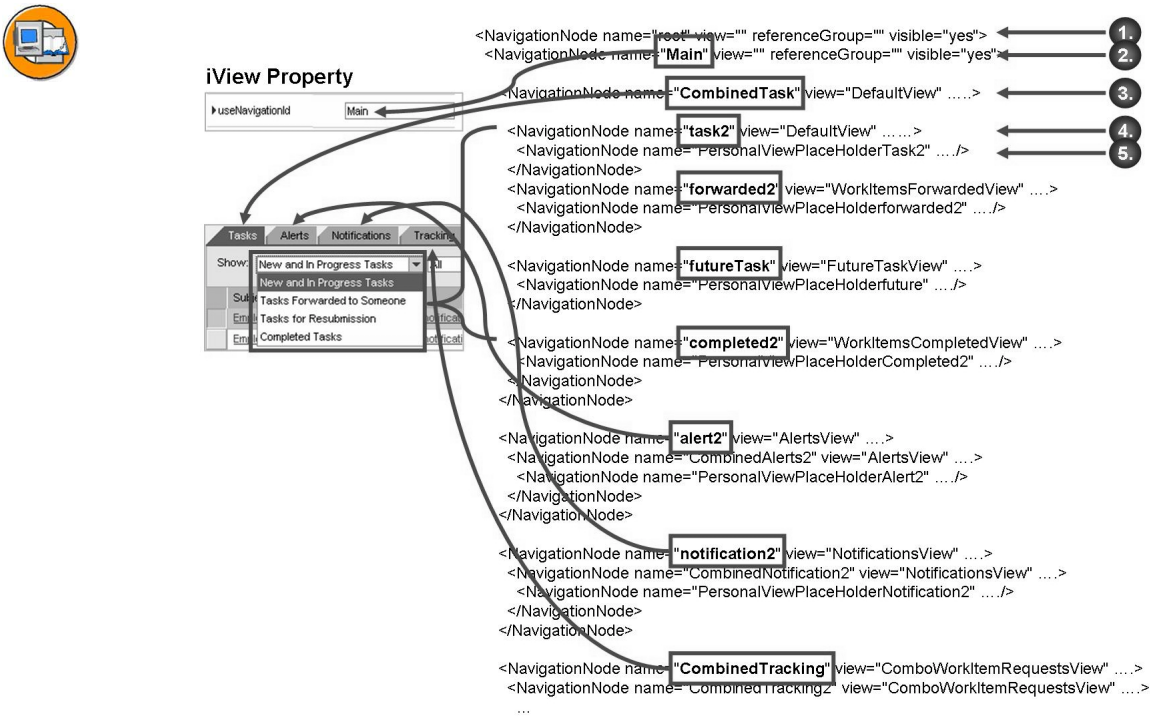

Figure 32: Navigation Node

The figure above shows some XML code from the uwl.standard.xml. The navigation model defines the navigational structure of the views presented to the end user and is mapped to tabs and view selection drop downs in the UWL UI. Each UWL iView can get its own navigation model specified through the iView property *useNavigationId*.

The hierarchy of the navigation is build through nested navigation nodes. Each node can have multiple sub nodes. The hierarchy levels should be specified as follows:

1. The first level just defines the navigation section in the configuration file, bundling all custom navigation models. Only the *name* attribute is required.
2. The second level defines the (custom) navigation model for a custom UWL iView, which is assigned to iView property *useNavigationId*.
3. The third level defines the tabs. With the attribute *view* the view which is displayed when the tab becomes active is given.
4. This level can be used (as it is in the standard UWL task tab) to separate open tasks from completed tasks (another node on the same level).

   It creates the drop down with two entries (or more, if there should be more nodes). If there is only one node on this level, the drop down will not be displayed, and this level will be ignored (as for Alerts and Notifications in the standard UWL).

   At least one node is required on this level if a navigation drop down with automatically added custom views should be shown.
5. The fifth level defines the drop down for custom views in the tab (optional). This will be the first or the second drop down in the navigation bar (dependent on how level 4 is defined). This node will add custom views as fixed entries in the drop down.

   Usually, the drop down is created and custom views are added automatically at runtime, dependent on the actual items present in the tab view (this only requires a node at level four - the custom view level five nodes are then automatically added at runtime).

   By setting the attribute *referenceGroup* to *UWL_ADD_DYNAMIC_VIEWS* views can be added dynamically as child nodes at runtime. Setting the value to *UWL_PERSONAL* allows the user to create personalized views at this level.

   

   Note: The exact algorithm is as follows: The UWL view manager will determine the set of views which explicitly support a sub item type of the item type of the active tab view - so custom views for specific item types. From this set of views, the view managers removes all views for which there are no items in the active view. From the resulting set, the view manager removes all views that are already visible in the navigation. It also removes the views which have the attribute *dynamicCreationAllowed* set to *no*. The remaining views which have the highest item count are dynamically added to the navigation (up to the value set with iView property *Maximum number of Dynamic views to be added*. Default is *7*). They become virtual navigation nodes in this place.

You can demonstrate this by downloading the uwl.standard.xml. On the training WTS a program named Cooktop is installed which is quite usable. To display the XML you can also use the Internet Explorer. For validation you have to make sure that the DTD is saved in the same folder as the XML itself.

One example for a dynamically added view can be given if you have a collaboration task and a workflow task in the Tasks tab. You should then see the "Select a Subview..." drop down with the *Collaboration Tasks* view to select. If the collaboration task is done the view is gone again.

Also the personalized views will never appear in the first drop down beneath the Tasks tab, because of the configuration explained above.

After understanding the *NavigationNode* element you can change the existing tabs, add your own or define a totally new navigation for the UWL iView. Making changes to the existing configuration requires you to download the uwl.standard.xml and copy the whole NavigationNode section to your new configuration. Delete, move or add any section you want. Then upload the new configuration. If you simply create your own NavigationNode section the standard tabs will not be visible any more.

Hint: Each *NavigationNode* element needs a *Description*. If not given as child element of the *NavigationNode* element itself the description can be given with the *referenceBundle* attribute. For translation of descriptions see the SAP NetWeaver Library on http://help.sap.com, sections *Technology Consultant's Guide → Business Task Management → Universal Worklist Configuration → Advanced Configuration → Internationalization of Configuration XML*.

You can upload the *EP600-00_Instructor.xml* now if you like. Or do it later. After uploading a new tab named EP600 with a drop down entry for each group of students should appear. To get rid of it again, simply delete it from the configuration and clear the cache afterwards.

The following example will replace the current tabs by a tab called *EP600*. Underneath the *EP600* tab two drop down entries *00 Vacation Requests to Approve* and *01 Vacation Requests to Approve* will appear.

```
<NavigationNode name="root" view="" referenceGroup="" visible="yes">
   <NavigationNode name="Main" view="" referenceGroup="" visible="yes">
      <NavigationNode name="EP600" view="ApprovalView00" referenceGroup="" visible="yes">
         <Descriptions default="EP600">
            <ShortDescriptions>
               <Description Language="en" Description="EP600" />
```

```
            </ShortDescriptions>
         </Descriptions>

         <NavigationNode name="EP600Sub00" view="ApprovalView00" referenceGroup="UWL_ADD_DYNAM
            <Descriptions default="00 Vacation Requests to Approve">
               <ShortDescriptions>
                  <Description Language="en" Description="00 Vacation Requests to Approve" />
               </ShortDescriptions>
            </Descriptions>

            <NavigationNode name="PersonalViewPlaceHoldermyApproval" view="" referenceGroup="U
         </NavigationNode>

         <NavigationNode name="EP600Sub01" view="ApprovalView01" referenceGroup="UWL_ADD_DYNAM
            <Descriptions default="01 Vacation Requests to Approve">
               <ShortDescriptions>
                  <Description Language="en" Description="01 Vacation Requests to Approve" />
               </ShortDescriptions>
            </Descriptions>

            <NavigationNode name="PersonalViewPlaceHoldermyApproval" view="" referenceGroup="U
         </NavigationNode>
      </NavigationNode>
   </NavigationNode>
</NavigationNode>
```

Item Types

With the *ItemType* element new types of items are defined in the UWL configuration. With this element it is possible to display new customs attributes in the detail area for a specific item.

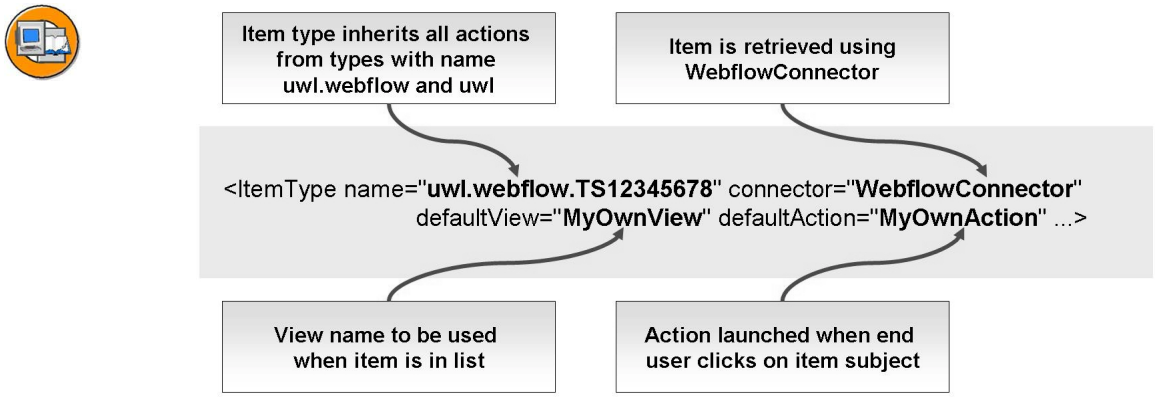

Figure 33: Item Types

Each item in the UWL has an item type that defines its behavior - most importantly the page to be launched for the user to perform the task. The item type also allows to define additional actions. The UWL list views are strongly based on item types - they determine which items are displayed in the list, and which provider systems are queried for them (by specifying the *connector* attribute).

Item types are hierarchical. Items of type *uwl.task.workcenter1.TS001234* inherit all actions defined for the parent *type uwl.task.workcenter1*. A view which references *uwl.task.workcenter1* as supported item type, list all items of that type and all its sub types.

UWL item types may not be known in the item provider system. The child element *ItemTypeCriteria* specifies how an item of external type from the item provider is mapped to a UWL type. Based on the criteria, arriving items are mapped by the UWL service to UWL types.

Item types can define actions as menu items that appear as hover menu at the subject within the standard UWL task view, by using the *Menu* element.

The table below explains the attributes of element *ItemType*:

Attributes of element ItemType

Attribute	Description
name	Specifies the item type name. Item types are hierarchical as defined by their name, using the '.' (dot) character for separating hierarchy levels: uwl.task.workcenter1.TS001234 is a sub type of uwl.task.workcenter1. An item type definition in a configuration with higher priority can override the same item type in a configuration with lower priority. The name should not contain any blanks or special characters.
connector	Specifies the connector that fetches these item types. Choose ***** for items from all connectors. The view specifies the types of the items it presents; the item types define with this attribute where the items are retrieved from.

Attribute	Description
defaultView	Specifies the UWL list view name that is tailored for display of this item type. The view with this name has to either reside in the same configuration or in the standard configuration (uwl.standard) which is shipped with the UWL.
defaultAction	Specifies the *Action* that should be invoked when the subject link of an item is clicked. This Action has to be present in the definition of the Item Type or in any of parent Item Types.
executionMode	Specifies whether item should be validated before an action is performed. **optimistic**: item is assumed to be valid and action is invoked, possibly resulting in an error message. **pessimistic**: validation is done before hand. **default**: execution mode is specified in the UWL service settings by the administrator (either optimistic or pessimistic).

By using the child element *CustomAttributes* it is possible to display additional attributes (not defined in the standard) for the item in the UWL detail area (preview).

Using the *Actions* child element additional actions specifically for this item type can be defined, for example “Approve”.

You can show the *EP600-00_Instructor.xml* or one of the other files here. In the ItemTypes section some additional actions and attributes are defined.

The following example defines a new item type with new attributes *Last day of absence* and *First day of absence*. These two attributes will be visible in the detail area. To see them in the list, you have to create a new view.

```
<ItemTypes>
   <ItemType name="uwl.task.webflow.TS90600026" connector="WebFlowConnector" defaultView="Appr
      <ItemTypeCriteria externalType="TS90600026" connector="WebFlowConnector" />

      <CustomAttributes>
```

```
            <CustomAttributeSource id="ABAP_BOR" objectIdHolder="externalObjectId" objectType
               <Attribute name="LASTDAYOFABSENCE" type="date" displayName="Last day of absenc

               <Attribute name="FIRSTDAYOFABSENCE" type="date" displayName="First day of abse
            </CustomAttributeSource>
         </CustomAttributes>
      </ItemType>
</ItemTypes>
```

In the example above the *defaultAction* attribute is set to *viewDetail* this is a UWL standard action and defined in the uwl.standard.xml.

The next section talks about the possible launch actions and how to configure them.

Task Launch Customization

We now want to have a look what is possible when launching an iView. As explained in the section before, the *defaultAction* attribute of the *ItemType* element sets what happens, when the item subject is clicked.

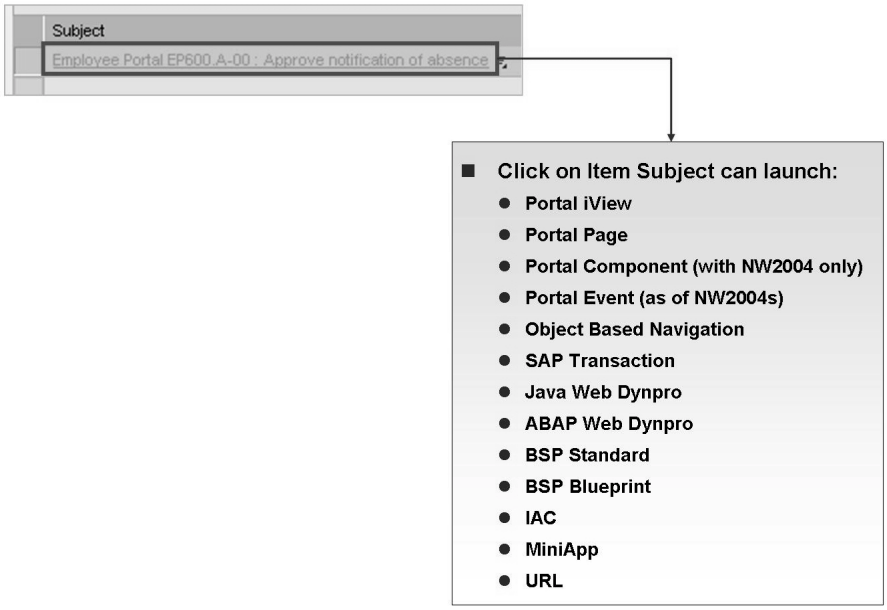

Figure 34: Item Launching

During work item registration in the UWL Administration, configuration settings for special items are automatically generated by using the information provided in the back end transaction **SWFVISU**. To specify the visualization parameters for a task:

1. call transaction SWFVISU.
2. In the *Task Visualization* view, specify the single-step task and choose the visualization type, for example *iView*.
3. Select the task and in the *Visualization Parameters* view, define the parameters for this task.

   The choice of parameters varies depending on the visualization type that you select.
4. (Re-)register the item types for the system in the UWL Administration.
5. Clear the UWL Cache.

Note: For more information on SWFVISU consult the SAP NetWeaver Library on http://help.sap.com section *SAP NetWeaver by Key Capability → Application Platform by Key Capability → Business Services → SAP Business Workflow → Reference Documentation → Workflow System Administration → Parameters for Work Item Visualization in the UWL*

You can show SWFVISU if you like. Choose your task number and enter the ID of any iView. After re-registering it may be necessary to delete the instructor's XML configuration. Depending on what task you choose the instructors XML will maybe overrule the SWFVISU-settings.

Another “code free” possibility to change the visualization settings for a task is with the help of the UWL Configuration Wizard. This is explained in lesson *UWL Configuration Wizard*.

The full set of options is available when creating your own XML configuration files. The example below creates three new actions:

```
<Action handler="SAPTransactionLauncher" name="EP600WinGui" referenceBundle="launch_sap">
   <Properties>
      <Property name="GuiType" value="WinGui"/>
   </Properties>
</Action>
<Action handler="SAPTransactionLauncher" name="EP600SBWP">
   <Properties>
      <Property name="openInNewWindow" value="no"/>
      <Property name="TransactionCode" value="SBWP"/>
   </Properties>
   <Descriptions default="SBWP"/>
</Action>
```

```
<Action handler="UrlLauncher" name="EP600URL">
   <Properties>
      <Property name="url" value="http://help.sap.com"/></Properties>
   <Descriptions default="URL"/>
</Action>
```

The first action *EP600WinGui* simply launches the standard application for the task but using the Windows GUI instead the Web GUI.

The action *EP600SBWP* launches the SAP transaction SBWP in the same window.

The last action *EP600URL* launches the URL http://help.sap.com.

If one of these actions should be used when a user clicks on the item subject the attribute *defaultAction* of the respective item type needs to have the value set to the name of the action.

List Views

Actions and custom attributes defined for an item type are displayed in the item details. If you want to display custom attributes in the UWL list view, you need to define your own view.

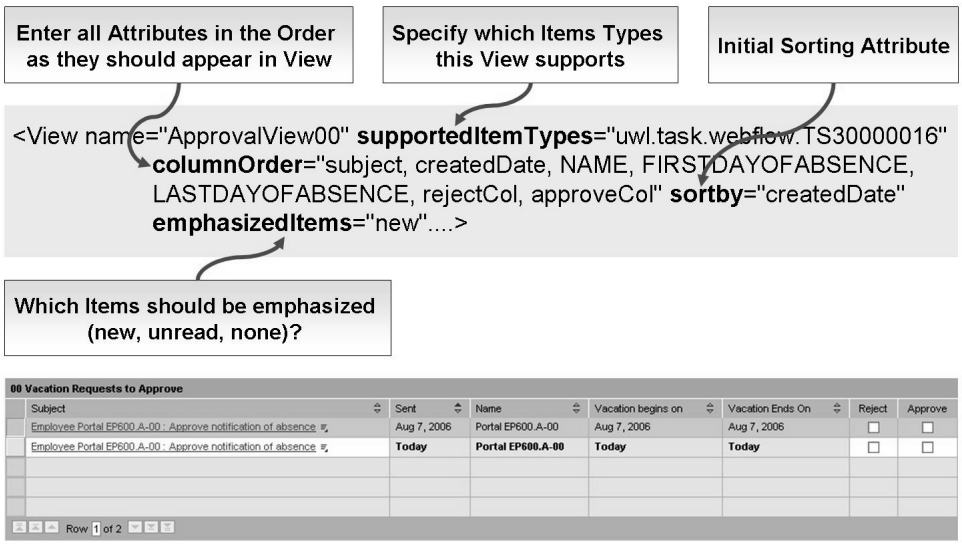

Figure 35: List Views

The figure above shows some important attributes of the *View* element. The attribute *name* defines the name of the view. This name is given as during the definition of the *NavigatioNode* (see section *Navigation Nodes* in this lesson).

The attribute *supportedItemTypes* specifies for which item types this view will be usable. The view normally will dynamically appear in the drop down of a tab, if the respective item type appears in the list. If the value is set to *uwl.webflow*, for example, the view supports all SAP Business Workflow items.

The attribute *columnOrder* lists the names of all attributes to be displayed in this view in the order they should appear in the UWL. Custom attributes (defined for an item type) have to be defined within the *DisplayAttributes* child element of the *View* element. The *name* attribute of the *DisplayAttribute* element therefore has to be identical to the *name* attribute of the *Attribute* element from the item type.

The code below is an example for a view definition.

```
<View name="ApprovalView00" width="98%" supportedItemTypes="uwl.task.webflow.TS90600026"
      columnOrder="subject, createdDate, FIRSTDAYOFABSENCE, LASTDAYOFABSENCE"
      sortby="createdDate" selectionMode="SINGLESELECT" tableDesign="STANDARD"
      tableNavigationFooterVisible="yes" emphasizedItems="new">
   <Descriptions default="00 Vacation Requests to Approve">
      <ShortDescriptions>
         <Description Language="en" Description="00 Vacation Requests to Approve" />
      </ShortDescriptions>
   </Descriptions>

   <DisplayAttributes>
      <DisplayAttribute name="FIRSTDAYOFABSENCE" type="date" width="" sortable="yes" format="m
         <Descriptions default="Vacation begins on">
            <ShortDescriptions>
               <Description Language="en" Description="Vacation begins on" />
            </ShortDescriptions>
         </Descriptions>
      </DisplayAttribute>

      <DisplayAttribute name="LASTDAYOFABSENCE" type="date" width="" sortable="yes" format="me
         <Descriptions default="Vacation Ends On">
            <ShortDescriptions>
               <Description Language="en" Description="Vacation Ends On" />
            </ShortDescriptions>
         </Descriptions>
      </DisplayAttribute>
   </DisplayAttributes>
</View>
```

Decision Views

Decisions views empower the user to make multiple decisions at once. The figure below shows an example of an decision view.

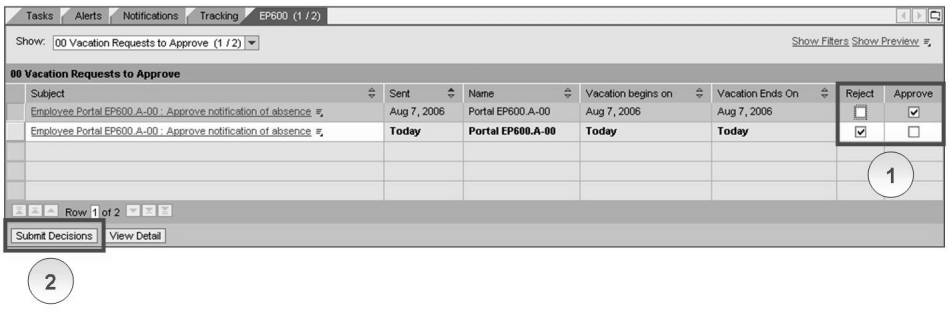

Figure 36: Decision Views

In the example above the user first marks the checkboxes for all the tasks in the list and afterwards choose *Submit Decisions*. All tasks will be executed in the back end with the respective decision the user has taken.

If this scenario is possible does not only depend on the UWL configuration, but also on how the SAP Business Workflow is build.

There are different possibilities how the UWL can “talk” to the SAP Business Workflow system:

- **Terminating Event Handler**

  Can be used to handle execution of items for which a workflow with terminating events is defined.

- **User Decision Handler**
- **Updating Container Handler**

  Can be used to handle execution of items of types *Decision*.

  Can be used to handle execution of items which updates the workflow container with the specified values.

- **Function Module Action Handler**

  Can be used to handle execution of items for which a workflow is executed through a given Function Module.

In SAP Business Workflow, a workflow developer can define a task as a **decision task** by assigning *DECISION* as the underlying business object type. The task definition allows users to create two or more decision options to complete the task. Refer to the standard generic user decision task *TS00008267*.

During runtime, UWL retrieves the available options from the workflow provider and these options are visible in the detail view of the item. It is also possible to display these decision options directly in the UWL list and execute the decisions, provided technical data of decision options is known in advance and can be configured in the configuration file, for example: Revise or Withdraw (a rejected request).

Definite **terminating events** can also be displayed for users to pick as user decision options, for example: *Approve* or *Reject*, and then complete the item. In SAP Business Workflow, there is a section in the task definition where the workflow developer can create terminating events. This can be specified in the configuration file to enable the options in the view with extra columns when the terminating event IDis known.

The following code snippets gives an example for a definition of a decision view to approve or reject a task. The prerequisite is that in the workflow the terminating events *APPROVED* and *REJECTED* are defined. In the first step the actions need to be defined:

```
<Actions>
   <Action name="approve" groupAction="yes" handler="TerminatingEventHandler">
      <Properties>
         <Property name="objectType" value="FORMABSENC" />
         <Property name="eventName" value="APPROVED" />
         <Property name="objectId" value="${item.externalObjectId}" />
      </Properties>

      <Descriptions default="Approve" />
   </Action>

   <Action name="reject" groupAction="yes" handler="TerminatingEventHandler">
      <Properties>
         <Property name="objectType" value="FORMABSENC" />
         <Property name="eventName" value="REJECTED" />
         <Property name="objectId" value="${item.externalObjectId}" />
      </Properties>
      <Descriptions default="Reject" />
   </Action>
</Actions>
```

Then the in the view the columns to display checkboxes for the decision have to be defined. See also section *List Views* in this lesson.

```
<DisplayAttribute name="rejectCol" type="checkbox" width="" actionRef="reject"
                            vAlign="TOP" hAlign="CENTER">
   <Descriptions default="Reject">
      <ShortDescriptions>
         <Description Language="en" Description="Reject" />
      </ShortDescriptions>
   </Descriptions>
</DisplayAttribute>

<DisplayAttribute name="approveCol" type="checkbox" width="" actionRef="approve"
                  vAlign="TOP" hAlign="CENTER">
   <Descriptions default="Approve">
```

```
      <ShortDescriptions>
         <Description Language="en" Description="Approve" />
      </ShortDescriptions>
   </Descriptions>
</DisplayAttribute>
```

Finally the action to submit the users decision has to be displayed in the view:

```
<Actions>
   <Action reference="submitUserDecisions" />
</Actions>
```

This action already is defined in the standard, only a reference is needed in the *View* element.

For more information please consult the SAP NetWeaver Library on http://help.sap.com, sections *Technology Consultant's Guide → Business Task Management → Universal Worklist Configuration → Advanced Configuration → Decision Views*.

Exercise 9: Edit and Upload new XML configuration

Exercise Duration: 20 Minutes

Exercise Objectives

After completing this exercise, you will be able to:

- download UWL configuration
- edit UWL configuration
- upload new UWL configuration

Business Example

The standard delivery of the UWL does not satisfy the needs in your company. Your users should be able to make multiple decisions for many tasks at once, they also want to get displayed additional item attributes the UWL does not display in the default delivery.

For this exercise to work, the instructor has to upload the EP600-00_Instructor.xml first. This XML defines all the Navigation Nodes. The files for the students only define their item types and their views.

Task 1: Download Configuration

Download the *uwl.standard* configuration and have a short look at it.

Depending from where your students have access to the portal different editors are available. You should check this out before doing the exercise and name the students which editor they can use.

If the students are logged on to the training WTS there is a folder accessible that is physically located on the students front end. When they download something it should go there by default (“My Documents”.

1. Log on with user **EP600.A-##**, where ## is your group number. Download the *uwl.standard* configuration.
2. Have a look at the *uwl.standard.xml* file you just downloaded.

Continued on next page

Task 2: Edit XML Configuration

Edit the **EP600-##.xml** file, where ## is your group number.

1. Copy the file **EP600-##.xml** from the training share to a local folder. The instructor should give you the exact location of the file on the training share.
2. Open the file **EP600-##.xml** in the editor of your choice. The file is located on the training share.

To edit the XML files notepad is sufficient. But of course there are more comfortable editors for XML. Check out the local training environment and tell the students what editor they should use best.

3. Open the file **LaunchActions.xml** in the same way you opened the file EP600-##.xml.
4. Copy one of the *Action* elements from the *LaunchActions.xml* (including the child elements) and paste it right before the end tag of the *Actions* element in file *EP600-##.xml*.
5. Save the changes to your edited file **EP600-##.xml**.

Task 3: Upload Configuration

Upload your edited file to the UWL.

1. With user **EP600.A-##** upload your edited file **EP600-##.xml** to the UWL. Use your group number in the configuration name during upload.
2. Clear the UWL Cache.
3. Check the UWL iView if your setting are visible.

Solution 9: Edit and Upload new XML configuration

Task 1: Download Configuration

Download the *uwl.standard* configuration and have a short look at it.

Depending from where your students have access to the portal different editors are available. You should check this out before doing the exercise and name the students which editor they can use.

If the students are logged on to the training WTS there is a folder accessible that is physically located on the students front end. When they download something it should go there by default ("My Documents".

1. Log on with user **EP600.A-##**, where ## is your group number. Download the *uwl.standard* configuration.
   a) With user **EP600.A-##** and go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*.
   b) In the administration iView click on *Click to Administrate Item Types and View Definitions*.
   c) Mark the row selector for the *uwl.standard* configuration.
   d) Choose *Download Configuration*.
   e) Click on the link Download Configuration uwl.standard.
   f) Choose *Save*, notice where the file is saved to, choose *Save* again and *Close*.

Continued on next page

2. Have a look at the *uwl.standard.xml* file you just downloaded.

   a) Open an explorer window an go to the location where the file was saved. Normally it can be the *My Documents* folder.

   b) Right click on the file *uwl[1][1].standard.xml*, choose *Open with* or *Send to* and select the program you like, for example *Notepad* or *Wordpad*.

   

   Hint: To open the file in Internet Explorer you also need the *uwl_configuration.dtd* in the same folder.

   c) In the editor you now can have a look for example at the action definitions.

Task 2: Edit XML Configuration

Edit the **EP600-##.xml** file, where ## is your group number.

1. Copy the file **EP600-##.xml** from the training share to a local folder. The instructor should give you the exact location of the file on the training share.

   a) See step description.

2. Open the file **EP600-##.xml** in the editor of your choice. The file is located on the training share.

To edit the XML files notepad is sufficient. But of course there are more comfortable editors for XML. Check out the local training environment and tell the students what editor they should use best.

   a) See step description.

3. Open the file **LaunchActions.xml** in the same way you opened the file EP600-##.xml.

   a) See step description.

Continued on next page

4. Copy one of the *Action* elements from the *LaunchActions.xml* (including the child elements) and paste it right before the end tag of the *Actions* element in file *EP600-##.xml*.

   a) In the editor window with the **LaunchActions.xml** file in it, mark an *Action* element of your choice and copy it to the clipboard by pressing *CTRL+C*. The selected text should include start and end tag of the *Action* element and should look for example like this:

```
<Action handler="UrlLauncher" launchInNewWindow="no" name="EP600URL">
   <Properties>
      <Property name="url" value="http://help.sap.com"/>
   </Properties>
   <Descriptions default="URL"/>
</Action>
```

   b) Now go to window with the **EP600-##.xml** file.

   c) Locate the end tag of the *Actions* element. It looks like that: `</Actions>`.

   d) Position the cursor right in front of that tag and press *Enter* to create an empty line.

   e) Position the cursor in that empty line.

   f) Now paste the text from the clipboard into the file by pressing *CTRL+V*

5. Save the changes to your edited file **EP600-##.xml**.

   a) To save the changes you have to use the *Save* function of your editor. Normally this would be located at *File* → *Save*.

Continued on next page

Task 3: Upload Configuration

Upload your edited file to the UWL.

1. With user **EP600.A-##** upload your edited file **EP600-##.xml** to the UWL. Use your group number in the configuration name during upload.

   a) In the portal go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*.

   b) In the administration iView click on *Click to Administrate Item Types and View Definitions*.

   c) Choose *Upload New Configuration*.

   d) Enter a *Configuration Name*, for example **`EP600-##`**, where **`##`** is your group number.

   e) *Browse* to where your XML file is located mark the file and choose *Open*.

   f) Choose *Upload*.

   The message *Successfully registered the configuration* should appear on top of the iView.

2. Clear the UWL Cache.

   a) Go to *System Administration → System Configuration → Universal Worklist & Workflow → Universal Worklist - Administration*.

   b) In the administration iView click on *Cache Administration Page*.

   c) Select the right *System Alias* or *All Systems*.

   d) Choose *Clear Cache*.

3. Check the UWL iView if your setting are visible.

   a) Go to *EP600 → Universal Worklist → Universal Worklist ##.*

   b) Choose the tab *EP600*.

   c) In the drop down below the tab *EP600* the view *## Vacation Requests to Approve*, where ## is your group number, should appear.

Lesson Summary

You should now be able to:

- explain UWL content configuration possibilities
- upload a new configuration file

Lesson: (Optional) Configuring Alerts in UWL

Lesson Duration: 10 Minutes

Lesson Overview

This lesson give a short introduction how to integrate Alerts from Alert Management into Universal Worklist.

Lesson Objectives

After completing this lesson, you will be able to:

- integrate Alert Management with UWL

This lesson is marked as optional for timing reasons. As Alert Management (ALM) is an own world, this lesson and the instructor should not talk about ALM , but simply demonstrate how easy it is to connect ALM to UWL and do a short test.

Business Example

Alerts provide active delivery of mission critical information and have support for E-mail, SMS/pager, fax, Web interface, and so on. You can get personalized alert delivery through your preferred channel. UWL provides the platform for compiling your alerts for easy viewing.

What is Alert Management?

Alert Management (ALM) comes into play, when business-critical problems occur. Within ALM, conditions for critical situations are predefined. When an alert is triggered in ALM that meets these conditions, responsible or interested parties are determined and informed immediately. Examples of critical situations might be an important customer terminating a contract or a budget being exceeded.

Alerts can be displayed in the *Universal Worklist*, application-specific display programs, or the *Alert Inbox*. These display programs can be personalized due to the user's needs. In addition, the users can receive alerts as e-mail, SMS, and fax, if these external methods of communication are configured in *SAPconnect*. End users can personalize their alert notifications, for example, create notification variants or determine a substitute. Alert Management helps prevent delays in the processing of critical situations, because the time between discovering and responding to such situations is reduced considerably.

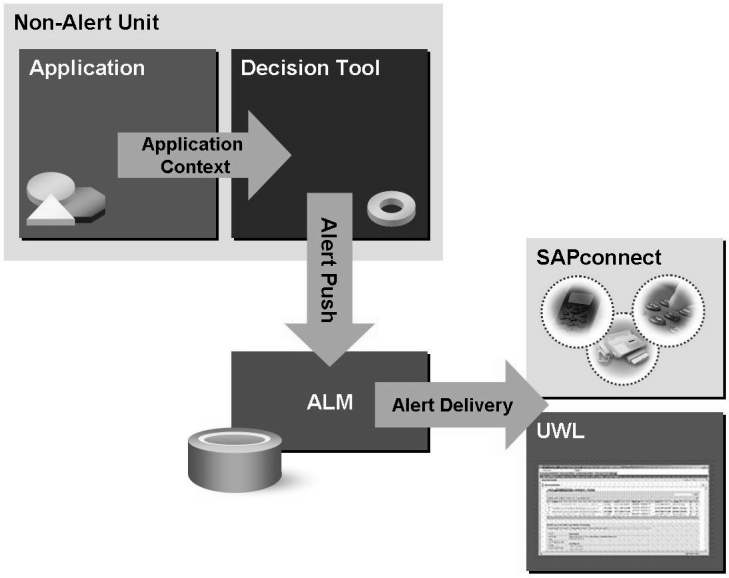

Figure 37: ALM Scenario

Already many SAP applications make use of Alert Management, for example SAP CRM, SAP PLM and SAP NetWeaver BI.

For more information on Alert Management visit SAP Service Marketplace Quick Link */alert*(http://service.sap.com/alert) and the SAP NetWeaver Library on http://help.sap.com, section *SAP NetWeaver by Key Capability → Application Platform by Key Capability → Business Services → Business Communication Services → Alert Management (BC-SRV-GBT-ALM)*

Configure Alerts in UWL

Configuring alerts from ALM to be visible in UWL is straight forward:

1. Register the System with UWL
2. Register work item types
3. Test:
   a) Create a new Alert Category (SAP Transaction ALRTCATDEF)
   b) Add yourself as recipient
   c) Raise Alert (Report *RSALERTTEST*

You should demonstrate this if there is time. It's quite easy:

1. Go to *System Administration → System Configuration → Universal Workflist & Workflow → Universal Worklist - Adminsitration*.
2. Choose *New*.
3. Enter the System Alias you used already for the Workflow, for example **`EP600-00`**.
4. Select the connector tyep *AlertConnector*.
5. Choose *Save*.
6. Choose *Register*.
7. Log on the back end and go to transaction ALRTCATDEF.
8. Create a new alert category and enter yourself in *Fixed Recipients*
9. Save everything.
10. Go to SA38 and execute report *RSALERTTEST*. Enter your category name and ecexute.
11. Look in the UWL iView if the alert appears.

Similar as for item types from the SAP Business Workflow you can configure some attributes and actions for the alerts from ALM. See he SAP NetWeaver Library on http://help.sap.com, section *Technology Consultant's Guide → Business Task Management → Universal Worklist Configuration → Advanced Configuration → Configuring Alerts in UWL*.

Facilitated Discussion

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Lesson Summary

You should now be able to:

- integrate Alert Management with UWL

Lesson: Appendix: Third Party Integration

128 Lesson Duration: 10 Minutes

Lesson Overview

This lesson introduces the possibility to integrate any third party product with UWL by using the UWL API. As an integration example the SAP Office Mail functionality is used.

Lesson Objectives

After completing this lesson, you will be able to:

- explain that Third Party Integration for UWL is possible

When writing this lesson the API was not released The date should be NW04 SP18 (Aug 22)/ NW2004s SP09 (Sep 5, but probably delayed). The supporting developer studio plug-in will only be included in the developer studio one SP later.

Business Example

You want to show SAP Business Workflow and other generic object service notifications from the SAP Back End System in the SAP NetWeaver Portal Universal Worklist.

Third-Party Intergration

By releasing the UWL API, SAP empowers customers, partners and Independant Software Vendors (ISVs) to develop their own Connectors for any third party product.

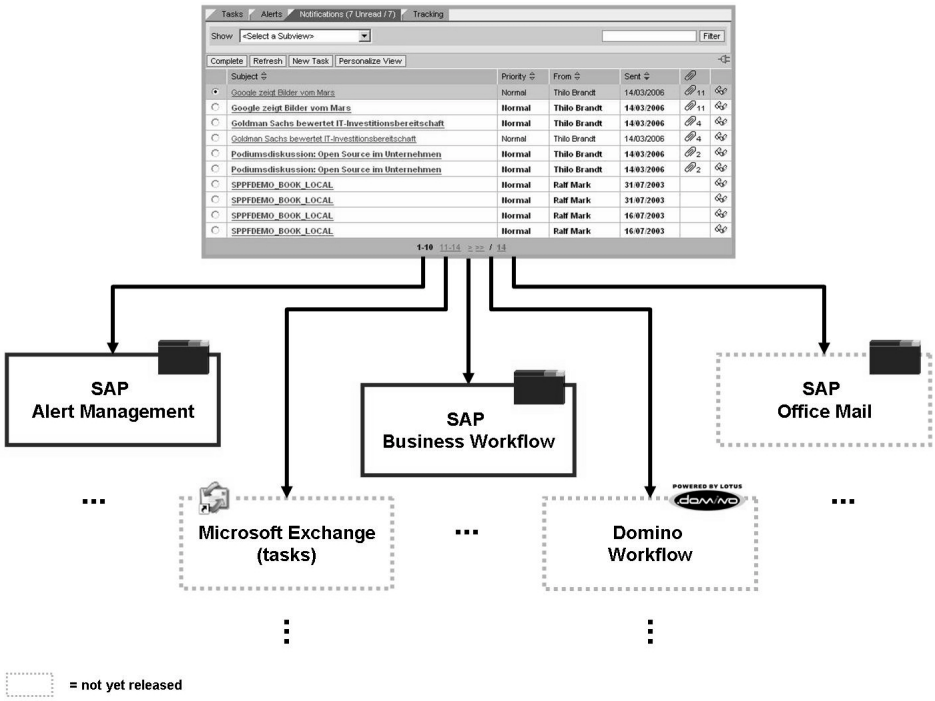

Figure 38: Third Party Integration

The Product Management told me that ISVs are developing pilots for Domino, Outlook Tasks and Peoplesoft. These connectors are not yet released. Maybe they never will! Be sure not to promise too much!

By integrating any third party software the Universal Worklist will become even more **the** central inbox for all employees.

As a pilot project SAP developed a Connector for SAP Office Mail. For information on how to apply for the pilot see SAP note 945484 - *How to receive office notifications in a universal worklist*.

For information on the API see the Developer's Guide in the SAP NetWeaver Lirbary and the SAP Developer Network (http://sdn.sap.com).

You can demonstrate the SAP Office Mail intergration if you like. On the trainingshare all necessary file are provided in folder *EP600_62\InstructorOnly*. You can use the *HowTo...* document and start at chapter 3.2, because the system object already is prepared. User Mapping is not needed as SSO is used in EP600 class.

Facilitated Discussion

Find out which third party products the customers want to integrate.

Discussion Questions

Use the following questions to engage the participants in the discussion. Feel free to use your own additional questions.

Which products should be integrated into UWL?

Lesson Summary

You should now be able to:

- explain that Third Party Integration for UWL is possible

Unit Summary

You should now be able to:

- use the XML Configuration Wizard
- explain UWL content configuration possibilities
- upload a new configuration file
- integrate Alert Management with UWL
- explain that Third Party Integration for UWL is possible

Course Summary

You should now be able to:

- Use the Universal Worklist
- Connect the Universal Worklist to an SAP Business Workflow system
- Do optional and advanced configurations of the Universal Worklist

Glossary

ALM

Short for **Al**ert **M**anagement. ALM can trigger alerts for business-critical problems that are immediately sent to the interested parties.

API

Application **P**rogramming **I**nterface.

Collaboration Tasks

Collaboration Tasks (or Ad-Hoc Workflow) is one of many Collaboration capabilities of SAP NetWeaver. With Collaboration Tasks end users can easily create simple workflows within the SAP NetWeaver Portal.

DTD

Short for **D**ocument **T**ype **D**efinition. In a DTD it is defined what elements and attributes are used and allowed to describe an XML document.

IT Scenario

SAP NetWeaver provides predefined **IT scenarios**, introduced fully with SAP NetWeaver 2004s. By implementing IT scenarios, customers can adopt core functionality of SAP NetWeaver in incremental phases. For more information see http://service.sap.com/it-scenarios

J2EE

Java 2 Enterprise Edition (J2EE). A standard developed by SUN Microsystems.

Logon Ticket

Authentication mechanism used by a user to log on to one or more SAP or non-SAP systems. Use for Single Sign-On (SSO).

RFC

Short for **R**emote **F**unction **C**all . Call of a function module that runs in a different system (destination) from the calling program. Connections are possible between different SAP systems and between an SAP system and a non-SAP system.

SAP NetWeaver

The Integration and Application Platform for Lower Total Cost of OwnershipSAP's application and integration platform is the technical foundation for mySAP Business Suite. It delivers a complete, open, and flexible infrastructure that allows you to integrate SAP and non-SAP applications easily. For more information see http://service.sap.com/netweaver

SAPconnect

The RFC interface for integrating external communications (like e-mail) with the SAP (ABAP) System. SAPconnect enables third-party vendors to connect their communication servers to the SAP System.

Single Sign-On (SSO)

Mechanism that eliminates the need for users to enter passwords for every system that they log on to. Single Sign-On allows users to authenticate themselves once, and then log on to all of those systems that operate in the Single Sign-On environment without further intervention.

UWL

Universal Worklist

XML

Short for **E**xtensible **M**arkup **L**anguage, a specification developed by the W3C (World Wide Web Consortium). XML is a version of SGML (Standard Generalized Markup Language), originally designed for web documents. It allows designers to create their own customized tags, enabling the definition, transmission, validation, and interpretation of data between applications and between organizations.

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Feedback

SAP AG has made every effort in the preparation of this course to ensure the accuracy and completeness of the materials. If you have any corrections or suggestions for improvement, please record them in the appropriate place in the course evaluation.