@enterprise 11.0

User Manual

11.0.39856

Overview

This manual describes the workflow management system *@enterprise*. It aims at users who want to use this system in their everyday work. It is written to assist first time users of *@enterprise* as well as to act as a reference book for everyday work with the system.

The manual consists of the following chapters:

- The first chapter presents the fundamental terms of workflow management. It also outlines the purpose of the system *@enterprise*.

- The second chapter contains a general system description. It puts emphasize on working with a WWW (World Wide Web)-browser. This chapter is a simple instruction manual for your first steps with the system and shows fundamental concepts in *@enterprise*.

- The third chapter is a detailed description of the worklist - the central component for the everyday use of *@enterprise*.

- The fourth chapter addresses the handling of documents and notes.

- The fifth chapter is about the integrated calendar.

- The sixth chapter describes the mobile client component of *@enterprise*.

To give you a better orientation in the manual, the icons that are used by *@enterprise* are shown in the margin. The following list shows the icons most frequently used within *@enterprise*:

- **Calendar:** Clicking this icon displays the *@enterprise* calendar. The calendar assists you in entering the date (see section Calendar and time selection for details).

- **Functions:** This icon represents functions to a task in *@enterprise*. It appears in the appropriate column of the worklists. Clicking this icon lists the available functions.

- **Document:** This icon signalizes that there are additional documents attached to the task. After clicking this icon, you are usually transferred to the *document management*.

- **Form:** This icon represents a form. The form can be displayed by clicking the icon.

- **Note**: *@enterprise* distinguishes between three types of notes: *global notes*, *private notes* and *system notes* (only for processes). System notes are written by the system (e.g. during aborting a process) and are not editable. The icon for global notes acts as a link to the note view in *@enterprise*.

- **Detail view:** This icon is used in the *document management*. Clicking this icon displays properties of a document.

- **Versions of documents:** This icon is also used in the *document management*. It shows that there are different versions of a document available. Clicking this icon lists the different versions of a document.

Throughout the manual an additional **hint** icon is used. If this icon appears in the margin, useful tips will be given. This icon is only used in the manual, but not in *@enterprise*.

Contents

1. Definitions

Some of the definitions may not make much sense to you at the moment, especially if you are new to workflow management systems. In this case just have a glance on the terms and go to the example at the beginning of the next chapter. You can then refer back to this definitions on the ground of an intuitive understanding.

1.1 Workflow Management System

Within a very short time workflow management systems (WFMS) have gained great importance for the design of information and communication systems in organizations.

WFMSs are software systems, which are designed to facilitate, control and monitor business processes – particularly office processes - that are based on division and flow of labor. Hence, WFMSs are systems, which support the handling of processes. The key idea is to forward processes automatically to the appropriate person in charge – (workflow) user or agent – according to predefined procedures – the workflow specification or process description.

Beside the control function, WFMSs offer a series of management functions, which facilitate in particular the monitoring of processes. Typical monitoring functions are:

- Status of a certain process

- Person handling the process at the moment

- People involved in the process so far etc.

1.2 Workflow Specification

A workflow specification is the (formal) description of a business process. In *@enterprise* it can be done graphically or as program code.

A business process consists of a series of partial stages, the tasks, which are connected by diverse control constructs, e.g. sequence, conditions, parallelism etc. Furthermore it describes who (which user) is permitted and able to handle the individual tasks and which data (forms, documents) are exchanged between the tasks.

The specification and the definition of business processes take place at the time of modeling.

At runtime the predefined process models serve as templates for concrete workflows. If there is no modeling in advance possible, for instance because the processes are unknown, this operation has to be done at runtime. In this case we call it *ad–hoc* workflow modeling.

1.3 Workflow

A workflow is a concrete operation (also called process or workflow instance or business case), which is based on a particular workflow specification (process description). Workflows are created at runtime when a workflow user selects a particular process (type) and instantiates (starts) it.

1.3.1 Ad–hoc Workflows

Ad–hoc workflows are processes, which are not predefined. They can be initiated and handled by the user at runtime depending on the situation. This is particularly the case if unforeseen situations take place, which the predefined workflow cannot deal with adequately. Ad–hoc elements can also be used to handle special circumstances in a predefined workflow in a flexible manner.

1.4 Task

A task is a step of a process, which is carried out by a certain workflow user (an agent). Each task has a name as well as other additional properties.

Three kinds of tasks can be distinguished:

- **Manual task:** A manual task is an unstructured step of a process whose handling is entirely controlled by the workflow-user, such as the handling of a telephone call or the writing of a letter.

  Standard tools (e.g. word processing programs, spread sheet programs etc.) can be used to carry out the task.

- **Interactive task:** An interactive, automatic task is realized by a specific program (a user application), which is handled by the agent after the start of the task. This program can, for instance, present a form that the user has to fill in.

- **Non–interactive task:** A non-interactive, automatic task (batch task) is a task that is executed automatically and without user interaction by the workflow management system itself.

1.5 Agent

Agents are responsible for the execution of a task. The assignment of the agents to the tasks – mostly indirect through *roles* – is a constituent feature of workflow based process handling. This assignment usually is done along with the definition of new workflow specifications (but ad–hoc workflows can undertake the allocation at runtime).

The modeling and definition of agents are usually carried out in a separate user–modeling component. In *@enterprise* it is done in the system administration component.

In general there are two different types of agents:

- The agent is a person, thus a specific workflow user.

- The agent is a machine, e.g. a computer system, a database management system (DBMS) or a specific program.

1.6 Role

A role is the logical name for a function or position within an organization (e.g. the role *clerk*, the role *sales manager* etc.).

- Roles are necessary in order to determine who are permitted to handle a certain task within a process.

  For example: The logical user for the task *to render account* can be assigned to the role *bookkeeper*.

- A role can be given to many agents and an agent may have various roles.

  For example: Mr. Huber and Ms Mitterer are assigned to the role *bookkeeper*. These two persons then are the possible agents for the task *to render account*.

- Roles are typically assigned in the context of organizational units in order to be able to use a certain role name, e.g. the role *clerk*, in multiple departments without interference.

  Beside clerks in the division *purchase* there are of course also clerks in the division *marketing* or *distribution*.

  Organizational units in *@enterprise* have a hierarchical structure (i.e. an organizational unit can have several subordinated organizational units and at most one direct superordinated organizational unit).

@enterprise offers a flexible concept of roles whereby it distinguishes between the following types of roles:

- **Global roles:** A global role is not assigned to an organizational unit and is particularly used to describe certain skills, e.g. speaks French.

- **Local roles:** A local role is a role that is assigned to one organizational unit and undertakes only jobs within this organizational unit, e.g. the role *secretary*.

- **Hierarchical roles:** A hierarchical role is assigned to a certain organizational unit like a local role but its scope of application is stretched across all subordinated organizational units.

  This is necessary e.g. for managers who should not only be able to handle processes within their organizational unit but also in its subordinated organizational units.

When a user is given a local or hierarchical role, the organizational unit where the role is applicable must be stated, too.

1.7 Form

The exchange of information between tasks or processes takes place through structured HTML–forms as well as through any other documents.

Forms are based on HTML–format (Hyper Text Markup Language) that allows to display them with any WWW–browser.

Forms are structured, i.e. they can contain basic fields for text or numbers as well as complex fields such as tables, links to other forms or program calls.

The particular workflow user can enter values into the fields. All fields within a form can be given an access right. Values of the form fields can also be used in the definition of processes (e.g. to make automated decisions about the next task).

The process definition language supports the simple integration of form fields into the process description.

Besides the HTML–based forms there can be need for any other documents (e.g. a word processing document or a spreadsheet) to handle a workflow. *@enterprise* offers simple integration mechanisms to handle such documents.

1.8 Worklist

Each workflow user who is defined in *@enterprise* gets a worklist (much like an email inbox), which contains various functions in order to handle single tasks. The worklist shows all tasks that are being handled at the moment or have to be handled by the user. Through the worklist the user can access and change attached forms and documents and finish the tasks (send them along their way).

1.9 *@enterprise*

@enterprise belongs to the most recent generation of workflow management systems and is fully integrated into the internet.

The use of the system is intuitive and clear, which makes the everyday work with the system much easier. The major advantages of using the WFMS *@enterprise* to control business processes are:

- **Specification:** The use of *@enterprise* leads to a better specification of business processes like standard processes as well as less structured or predefined processes.

- **Documentation:** The use of *@enterprise* leads to an accurate documentation of business processes and therefore contributes to the quality management and the process controlling. The analysis of process documentation generated by the workflow system is a substantial base for the improvement of business processes.

- **Turn-around:** *@enterprise* helps to reduce the cycle time within administration to a great extent. Especially transport time and wait time can be reduced substantially.

- **Flexibility:** In contrast to traditional software, *@enterprise* allows changing business processes dynamically and supports exceptional situations in particular.

- **Integration:** *@enterprise* can also serve as a base for the integration of applications into a new overall process structure.

  Specifically this system allows to integrate legacy systems into a new organization of business processes.

2. First Steps

2.1 Simple Example of Use

The following example is taken from the banking industry and illustrates a basic (and simplified) workflow for handling a credit application.

The example shows how the specification of this process can look like in *@enterprise*, how the terms *role* and *organizational units* are applied in *@enterprise*, and which functions are used in interacting with a workflow in *@enterprise*.

2.1.1 Workflow Specification

Process: Credit application

The workflow *credit application* passes through the following steps:

1. If an application is being filed, the bank clerk (role *advisor*) starts the workflow *credit application*.

   This process starts with the task *handle* and is put into the bank clerk's worklist. Attached to the task is the form *application* (a form of the type *credit application*). The data of the customer can be collected and handled electronically with this form.

2. After finishing the task, the process is passed over to the manager of the department (role *manager*). He decides in the task *approve* if a credit is granted or not.

3. An actor of the role *secretary* does the last step. He creates a rejection letter (task *refuse*) or a credit approval letter (task *grant*).

Representation in *@enterprise*

In *@enterprise* workflows are defined in the system administration. You will find a precise description of the used elements in the system administration manual. The following brief description illustrates the elements of a workflow since we refer to them in some sections (see chapter Process history).
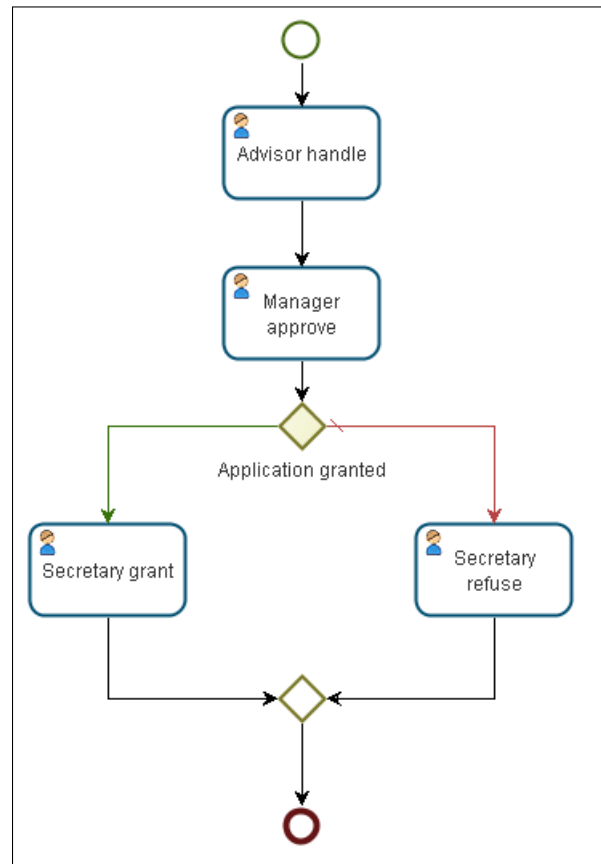
Figure 2.1: **Graphical Representation of the Workflow *Credit Application***

The following elements are used in figure 2.1:

- In *@enterprise* a workflow specification always starts with the element *begin* and finishes with the element *end*. Between these two elements an arbitrary number of tasks or system steps etc. is possible.

- The elements with the user icons represent the tasks. They contain, among others, the name of the step (e.g. *handle*) and its actor (e.g. *advisor*).

- The diamond icon element *application.granted()* represents a condition. The WFMS checks if the application is granted or not. If the application is granted the workflow will go ahead along the green (left) line, if not it will follow the red (right) line.

2.1.2 Organization Chart

The process *credit application* involves multiple organizational units. Figure 2.2 visualizes the relationship between the organization (bank) and the workflow.
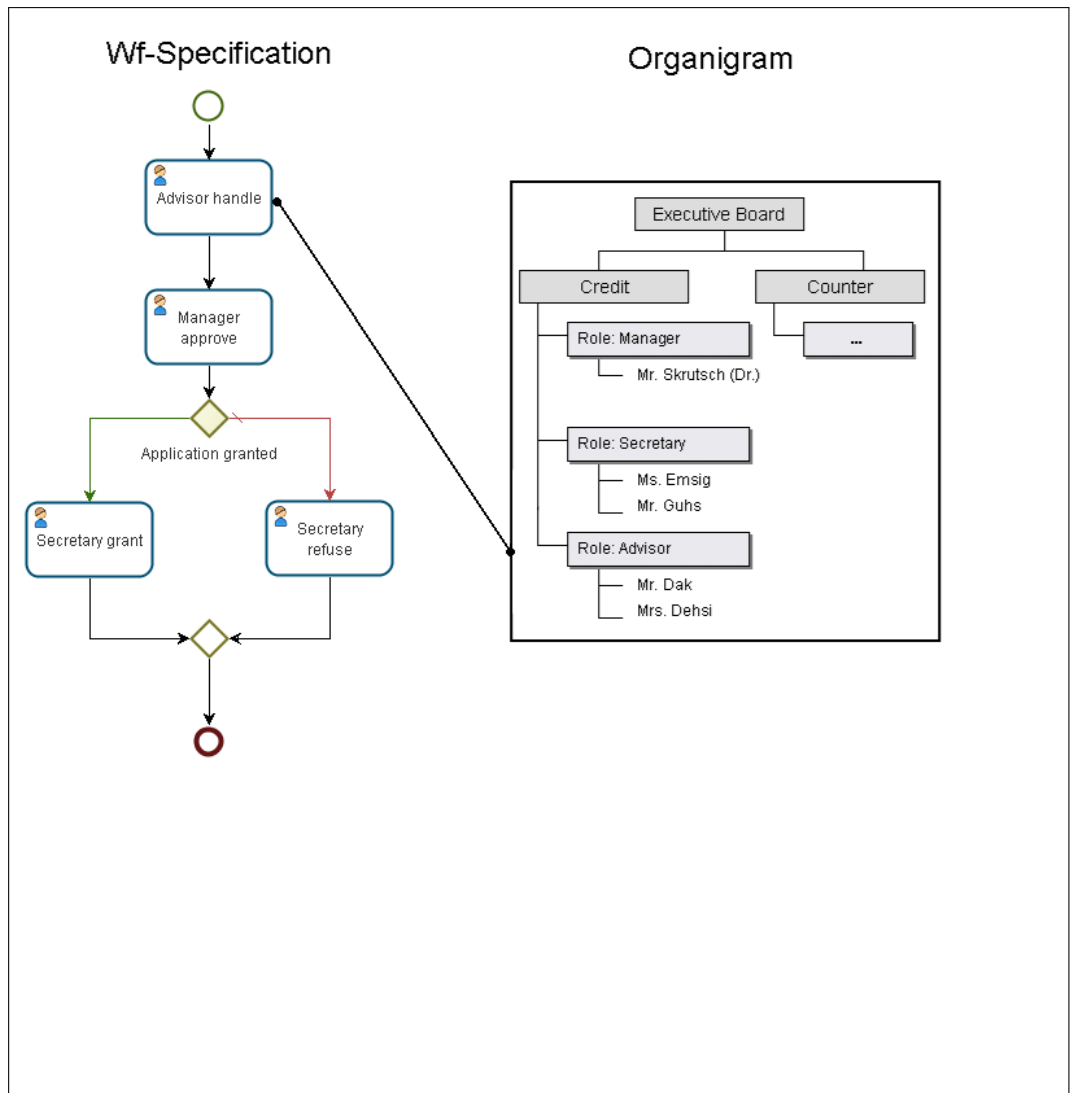
Figure 2.2: **Organizational Chart**

The left side of the figure presents the workflow specification. The right side shows the organigram of the bank. The workflow *credit application* can only be started by members of the role *advisor* of the organizational unit *credit*.

2.1.3 Workflow Execution

The example in figure 2.3 uses the process *credit application* to show the main functions of the execution of a workflow in *@enterprise*.

The workflow *credit application* takes place in the organizational unit *credit*. It involves the roles *advisor*, *manager* and *secretary*.

1. Mr. Dak (role *advisor*) initiates the workflow *credit application*. As a result the first
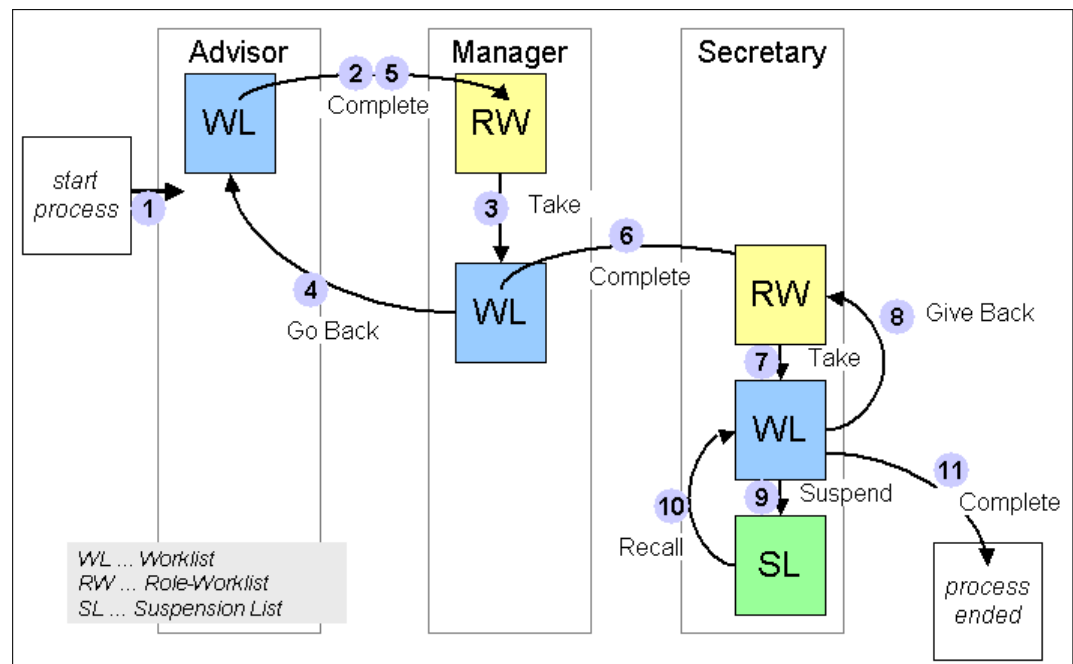
Figure 2.3: **Workflow Execution**

task *handle* of this workflow appears in his worklist.

Mr. Dak edits the credit application of his client, fills in the attached forms and might attach additional electronic documents to the process.

2. Once he is done Mr. Dak finishes this step using the function *Complete*. This passes the process on to the next user.

   The next user has been defined in the workflow specification. In this example the process is being forwarded to the role–worklist of the role *manager* in the organizational unit *credit*.

3. Mr. Skrutsch is a member of the role *manager* (see organizational chart) and wants to handle the next workflow step *approve*. Therefore he takes the process from the role–worklist by using the function *Take*. Thus the task appears in his personal worklist.

   Mr. Skrutsch can now grant or refuse the credit application. He has access to all documents, which were filled in or attached by Mr. Dak.

4. Mr. Skrutsch finds out that Mr. Dak forgot to enter important information about the client. He uses the function *Go Back* to return to the previous step in the workflow (step one: *handle*).

5. Mr. Dak once more finds the task *handle* in his worklist but now with the changes and remarks made by Mr. Skrutsch. He fills in the missing form fields and again finishes this task with the function *Complete*.

6. Mr. Skrutsch finds the task *approve* in his role–worklist and takes it. Since all necessary information has been provided, he can decide to grant or refuse the application. In this example he grants the credit application of the customer. Then he passes on the process to the next user by selecting the function *Complete*.

7. The process appears in the role–worklist of the role *secretary*. Mr. Guhs sees the application and takes the task by activating the function *Take*.

8. Mr. Guhs is being interrupted and recognizes that he doesn't have enough time to handle this task at the moment. He selects the function *Give Back* to put the task back to the role–worklist of the role *secretary*.

   Another secretary, Ms. Emsig, takes the task by using the function *Take* and starts to handle it.

9. Ms. Emsig needs additional information from Mr. Dak to finish this task. She leaves a message for Mr. Dak at his answering machine and puts the task to the suspension–list using the function *Suspend*.

10. After Mr. Dak called back Ms. Emsig takes the task back from the suspension–list by using the function *Recall* and finishes the task.

11. She passes on the process to the next user using the function *Complete*. Since it is the last step in the process *credit application* the workflow is finished (the case is closed).

2.2 User Interaction in *@enterprise*

2.2.1 Web–Browser

The standard user interface of the WFMS *@enterprise* is any World Wide Web (Web) –browser (Microsoft Edge, Mozilla Firefox, Google Chrome, etc.). The Web–browser displays complex information, which is provided by Web–servers.

The handling of your Web–browser is described in the user manual of the particular system. Some general features will be described here too.

2.2.2 Navigation Concept

The concept of hypertext is – from the user's point of view – the primary characteristic of the Web.

The Web–hypertext document can be any complex multimedia document (i.e. it can contain text, images, sound etc.). Additionally it can contain links (hyperlinks). Links are references to other documents or to other locations within the same document. If the user clicks on a link, the linked document will be loaded and displayed in the browser.

@enterprise uses links not only to display specific information but uses them also to initiate operations (function calls).

When you click the workflow specific link, a certain function (i.e. a certain program) will be executed. Usually the function call updates the display as well.

2.2.3 Browsing

The usage of hyperlinks can lead to a situation where you are getting *lost*. To go back to a previously viewed page you can use the browser function *Back* once or multiple times. The complementary browser function *Forward* brings you to pages you just left by using the *Back* function.

This function can be invoked in two ways:

- Using the *Back* function in the toolbar of your browser.

- Using the right mouse button opens a context menu window, which contains the *Back* function.

2.2.4 Date Entry

The standard date format is: DD–MM–YYYY (day–month–year), for example: 10–12–2001.

Hint: The date format can be configured at the system installation and in the system administration.

Calendar and time selection

@enterprise provides a date entry assistant. You will find the calendar icon beside every date field.

If an additional field for time input is displayed, an assistant is provided in form of a clock icon beside the field.

By activating the icon or pressing the key "Down arrow" on keyboard a new window containing a calendar will appear (see figure 2.4). Here you can select any date and it will be copied into the date field in the correct format.

The calendar window contains following areas: On top the current month is displayed. At the second area it is possible to select a day (e.g. 23). At the bottom you can set the year.

Detailed description of the calendar features:
Saturdays, Sundays and holidays are printed in *red*, the current day is printed in *orange* and all other days are displayed in *black*.
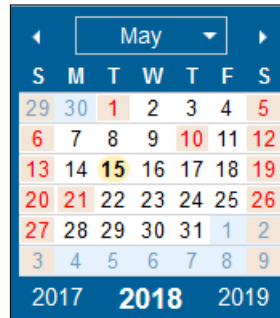
Figure 2.4: **Calendar**

Clicking on the day of the calendar closes the assistant and copies the selected date into the date field.
The calendar is being closed and the date field stays unchanged, if a singe-click is made outside the calendar window.

Analog to date fields an assistant for entering time data is provided. By activating the icon or pressing the key "Down arrow" on keyboard a list of time entries is displayed (see figure 2.4). The list contains time entries in 15 minutes steps and by selecting an entry this time will be copied into the time field. Optionally the time can be entered directly without using the assistant.
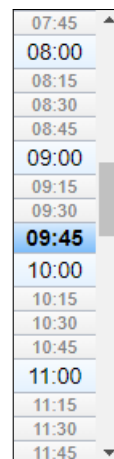
Figure 2.5: **Time selection**

2.2.5 Status Messages

The browser shows status messages in the status bar at the bottom of the window. It displays information like the address of a specific link or if the actual page is still loading.

2.2.6 Error Messages

If errors occur (e.g. invalid entries or execution errors) an error message including a *Back*–button will be displayed.

2.2.7 Common Functions

New / Add

If you click this button a dialog for creating of a new entry for this field becomes displayed. If this button is located next to a table, a table entry has to be selected at first.

Edit

If you click this button a dialog for editing the field next to this button becomes displayed. If this button is located next to a table, a table entry has to be selected at first.

Remove

If you click this button the content of the field next to it will be deleted. If this button is located next to a table, a table entry has to be selected at first.

Button *Delete*

If you click *Delete* the currently edited object will be deleted. This button is available only if you are in the detail view of an object.

View

If you click this button detail informations for the field next to it become displayed. If this button is located next to a table, a table entry has to be selected at first.

Select

If you click this button a dialog will be displayed which helps you to select an entry for the corresponding field.

Since *@enterprise* version 8.0 DOJO drop-down lists are integrated. By activating this symbol, the content of the list is displayed, where you can select the needed object or search for it. In case of a multiplicity of entries, the parameter *Items per page* set in administration is used to display entries in a paged way.

Ok* or *Save and Close

If you click this button all of your entries will be stored and the current dialog will be closed. In most cases this button is colored green and indicates that this is the default action.

Apply* or *Save

If you click this button all of your entries will be stored and the current dialog will remain opened.

Cancel / Back

If you click this button all of your entries will be ignored and the current dialog will be closed.

2.3   Logging on to *@enterprise*

In order to work with *@enterprise* at first you need to start a WWW–browser.

After starting the browser there are three ways to get to the *@enterprise* login window.

- Your browser is configured to start up with the *@enterprise* login window.

- You load the *@enterprise* login window yourself by selecting menu item *@enterprise* from your bookmarks menu (*Favorites*).

- You load the *@enterprise* login window yourself by entering the URL, which you have got from your system administrator.

2.3.1   Login Window

The login window (see figure 2.6) is used to enter your identification data which consist of two values:

Figure 2.6: **Login Window**

- **User–Id:** Here you enter your user identification (e.g. name, number etc.).

- **Password:** After entering your user identification you have to enter your personal password. This character combination is only known by you and the system. It ensures that only authorized users can access the system.

You confirm your input by activating the button *Logon*. The WFMS checks the entered data. If the data is correct the *@enterprise* main window will be opened. Otherwise you get an error message (see figure 2.7) and you have to reenter your data.
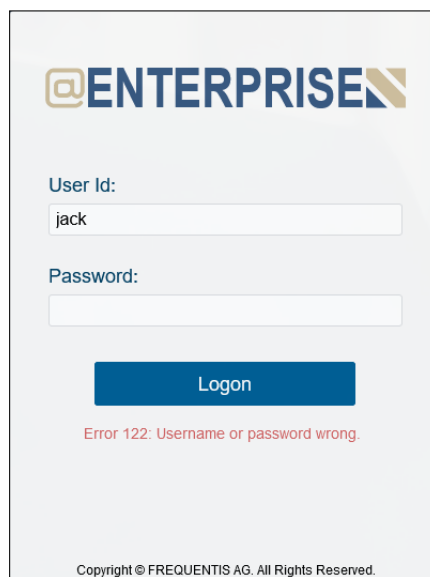
Figure 2.7: **Incorrect Login**

2.3.2 Main Window

After the successful login, the *@enterprise* main window will be loaded. This window contains among others your personal worklist with functions you need to handle the workflows (of the various processes). The different components of the main window will be described in detail in chapter *@enterprise* User Interface.

2.4 *@enterprise* User Interface

This chapter is a general introduction to the user interface of *@enterprise* and its main components.

The user interface consists of these areas: information area, toolbar, navigation area, and work area (see figure 2.8).
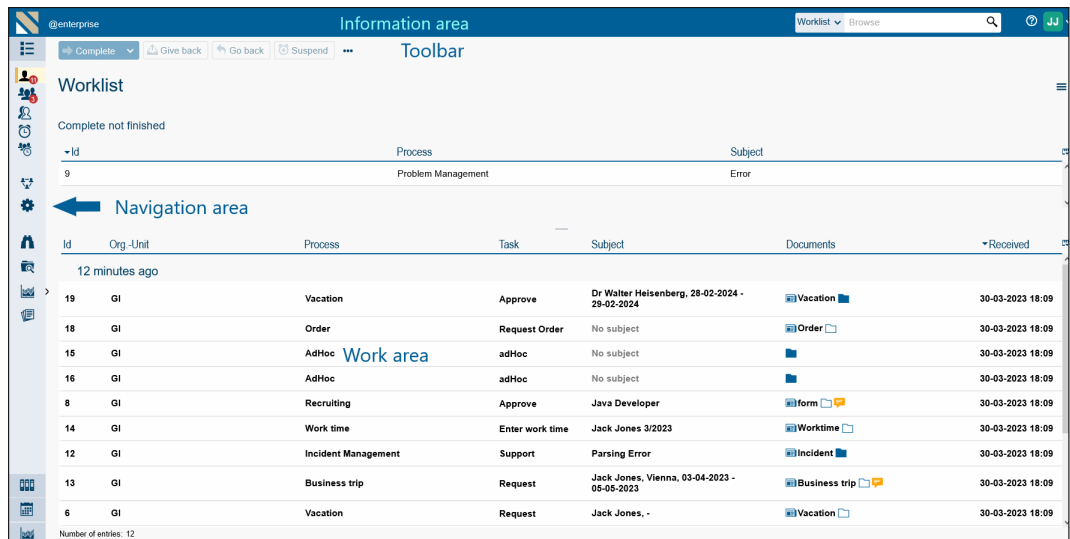
Figure 2.8: **Design of the User Interface**

- **Information area:** This area contains information about the current logged-in user incl. user profile and the search field. The search field can provide three search categories. Default category is the current table or current folder. Each table/folder allows you to search for table entries. Enter a text in the field and the table (or a folder) is filtered on the appropriate found entries. However, you can choose to search for a process or a document from any area in *@enterprise*. If you choose *Process search*, enter a value into the search field and click the search icon, the system searches for all processes which data match the entered search criteria. By default, the process ID and subject are searched for. However, the search can be extended via the *@enterprise* configuration so that process information (e.g. process name, start date, comments, etc.) and process documents are searched for. For more information see Installation and Configuration manual, chapter Configuration.

  To search for a phrase, put it in double quotes. The last 10 queries are saved in the search history. The history can be opened by double-clicking on the input field or activating the down arrow key.

  The function *Clear history* allows deleting the search history.

  The information are also contains the *@enterprise* help function, which opens a help page in a new window depending on the selected context (area). By selecting the same area and hitting the key *F1* the same help page is opened.

- **Toolbar:** The toolbar contains functions that can be applied to entries in the work area. It is also possible that there are no functions available in the toolbar.

- **Navigation area:** In the left part of the window, the navigation area is displayed. It contains the groups *Tasks, Documents* and *Calendar*. Each group comprises components which belong together logically. The Navigation area is per default collapsed and can be expanded by clicking the *Expand navigation* icon.

- **Work area:** The work area is the main area in the *@enterprise* user interface. Here the content of the actually selected entry of the navigation area is displayed. The layout of the work area can vary quite substantially with the specific content, and therefore relevant information can be found in the appropriate chapters.

2.4.1   Information area

In this area information about the current server and the logged-in user can be found. Clicking on the user opens a dialog which contains a user profile. This profile consists of following data:
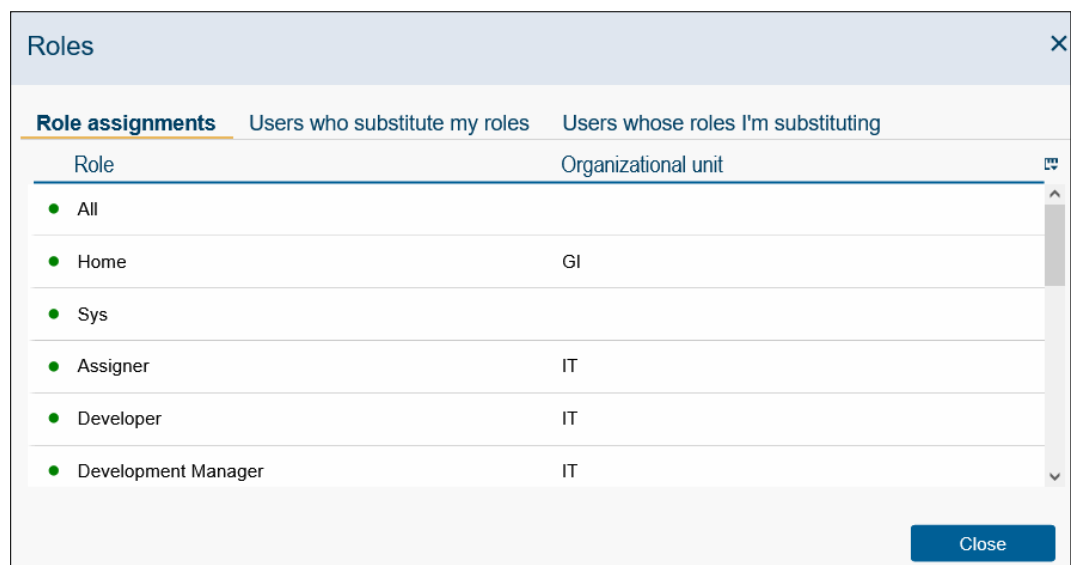
- **Surname:** The surname of current user which has been entered in administration.

- **First name:** The first name of current user which has been entered in administration.

- **Id:** The id of current user which has been entered in administration.

- **Organizational unit:** The Organizational unit which is assigned via Home-role to user object.

- **Change profile picture:** This function allows to add, edit or remove a profile picture for the current user. Only users with role *All* or right *Create* (defined by administrator) are allowed to define a profile picture.

- **Email:** The email of current user which has been entered in administration. By activating the link the installed mail tool will be opened and the recipient is already filled.

- **Tel.-Nr.:** The telephone number of current user which has been entered in administration.

- **Select GUI configuration:** This menu item is displayed if more than one GUI configuration is assigned to the user. The assigned GUI configurations can be selected in a drop-down menu.

- **Function *Roles:*** Information about the roles you are assigned to can be found here.

- **Function *Substitutions:*** This function gives you information about who acts as a substitute for you as well as whom are you substituting.

- **Function *Organization:*** This function shows the organizational structure of your company.

- ***Show optimized mobile GUI:*** This button is only displayed if an explicitly assigned mobile GUI configuration exists. More information about behavior between Mobile and Desktop GUI can be found here.

- **Function *Settings:*** User specific settings can be configured here.

- **Function *Set password:*** By activating this function the page *Set Password* will be displayed (see section Content of the page *Set Password*). There you can change your *@enterprise*–password, which you need to login to *@enterprise*. This page also displays information about the defined password policy.

- **Function *About:*** Information about used versions, server name and node id (see section Content of the page *About*).

- **Function *Logout:*** Log out of the system.

Roles

The function *Roles* provides information about your assignment to roles and about role substitutions which concern you.

Figure 2.9: **Role assignments**

This page is divided into three sections:

1. The first section, called *Role assignments*, lists all roles you are directly assigned to. Your role worklists contain all tasks that are assigned to those roles. This table also contains the organizational unit in which you have this role.

2. The second section, called *Users who substitute my roles*, lists all users, who substitute you in a certain role. If you are substituted in a certain role and a task is forwarded to this role, then this task also appears in the appropriate substitution worklist (in navigation tree) of your substitute. It is also possible to define a role substitution by opening a role entry and adding a new substitution in tab *Substitutions*.

3. The third section, called *Users whose roles I'm substituting*, lists all roles you got due to a substitution (see chapter Substitutions). Tasks that are assigned to these roles will appear in the appropriate substitution worklist which is displayed in your navigation tree.

The table *Role assignments* contains the following information:

- **Role:** A role assigned to you.

- **Organizational unit:** The role is valid in this organizational unit.

The table *Users who substitute my roles* contains the following information:

- **Active:** Indicates, if a role is active (= green point) or inactive (= red point).

- **Role:** Name of the role your substitute have got due to his substitution.

- **Organizational unit:** Name of the organizational unit in which your substitute have got the corresponding role.

- **User:** Here you find the name of the user who substitutes you in a certain role.

- **From:** This column shows the point in time when your substitute start having the role substitution for you.

- **Until:** This column shows the point in time until when your substitute stops having the role substitution for you.

The table *Users whose roles I'm substituting* contains the following information:

- **Active:** Indicates, if a role is active (= green point) or inactive (= red point).

- **Role:** Name of the role you have got due to a substitution.

- **Organizational unit:** Name of the organizational unit in which you have got the corresponding role.

- **User:** Here you find the user whose role substitution you have got.

- **From:** This column shows the point in time when you start having the role substitution for this user.

- **Until:** This column shows the point in time until when you have the role substitution for this user.
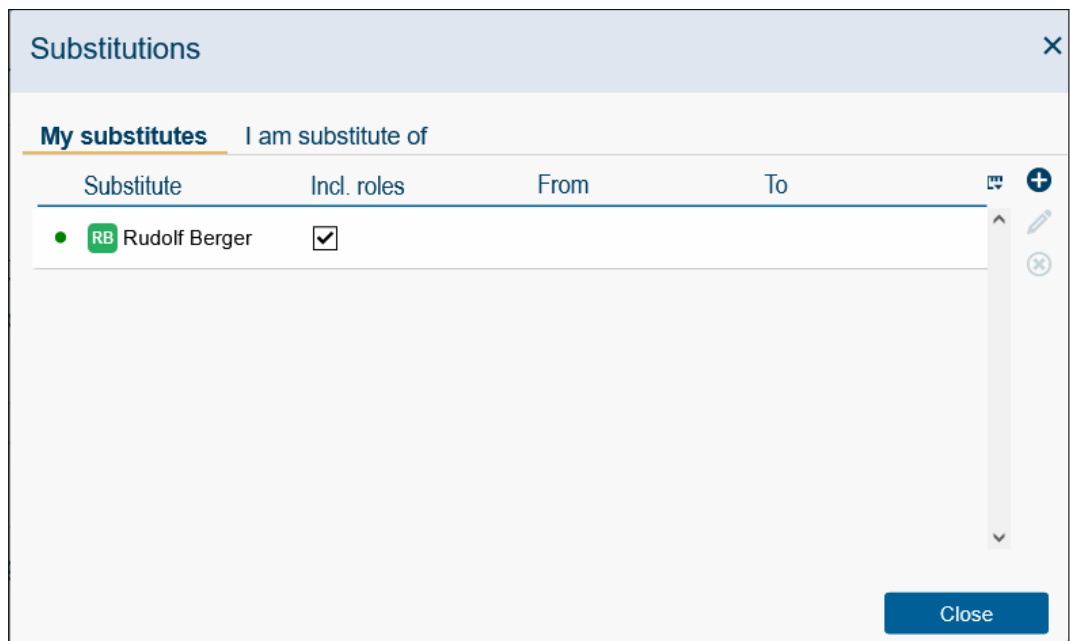
Figure 2.10: **Substitutions**

Substitutions

You can assign substitutes for yourself (in case of illness, vacation etc.) for a certain period of time, i.e. you define other users as your personal substitute.

The page in your work area is divided into two sections:

- The first section contains your personal substitutes, i.e. all users who act as a substitute for you. You can modify the entries of this table.

- The second section contains all users you are a substitute of. The entries of this table cannot be modified by you.

Each section is displayed as a table. The rows contain users; the columns show the following additional information:

- **Substitute:** This column shows the user who acts as a substitute for you (tab *My substitutes*).

- **User:** This column shows the user whom you are substituting (tab *I am substitute of*).

- **incl. roles:** If this check box is activated the specified user will be the substitute for all your roles as well. The tasks also appear in the appropriate substitution worklist (in navigation tree) of your substitute.

- **From:** This column shows the point in time (date and time) of the beginning of the substitution.

- **To:** This column shows the point in time (date and time) of the end of the substitution.

In tab *My substitutes* it is possible to defined own substitutes. For this purpose activate toolbar function *New*. In the new dialog select a user and optionally activate checkbox *incl. roles* which signalizes that the specified user will be the substitute for all your roles as well. Furthermore a period of substitution can be defined. The calendar icon can be used to load the calendar assistant, which helps you to select the date.

Organization

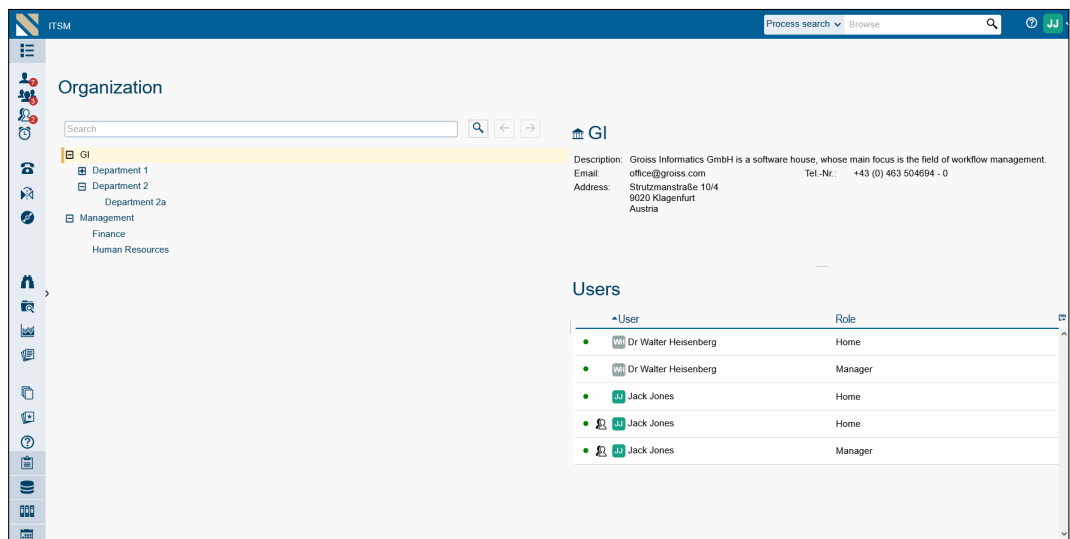The HTML–page *Organization* shows information about the organization structure in your *work area*.

Figure 2.11: **Organization**

Content of the HTML–page *Organization*:

- **Organizational hierarchy:** Select the organization hierarchy which should be displayed in the lower part of the HTML–page. Each hierarchy is shown in an own tab.

- On the left side of this page the organization hierarchy is displayed.

- On the right top side the details of the selected organizational unit is displayed.

- On the right bottom side the user and the assigned roles are displayed. By activating a user more detail information is displayed in a popup. The user table is displayed only, if VIEW right for users is assigned!

Organizational hierarchy The organization structure in *@enterprise* is displayed as a so–called *organization hierarchy*. Each application has defined its own organization hierarchy.

Within the organizational hierarchy it is possible to search for organizational units. For this purpose enter a search string an activate the search-button or press the ENTER key. The first finding is marked in the organizational hierarchy. By activating the next-/previous-buttons it is possible to navigate through the findings.

The following symbols are used to show the organization hierarchy:

⊞

- The plus sign (**+**) is displayed in front of each organizational unit, which has subordinated organizational units that are collapsed in the actual display. Clicking on this icon will unfold the next level in the hierarchy and the plus sign (**+**) will be replaced by a minus sign (**-**).

⊟

- The minus sign (**-**) is displayed in front of each organizational unit, which has subordinated organizational units that are unfolded in the actual display. To indicate the organization hierarchy, the name of subordinated organizational units are shifted to the right. Clicking on this icon will collapse all subordinated organizational units and the minus sign (**-**) will be replaced by a plus sign (**+**).

Settings

This dialog allows users to set specific settings for the current user. To save the settings, activate the button *Save* (the dialog will not close) or *Save and close*. The button *Cancel* allows closing the window and discarding any unsaved changes. Properties with an asterisk require a refresh of the main page before the changes can be applied. After saving and closing the dialog, a confirmation dialog appears that allows the user to refresh the main page.
The following attributes can be changed:

- Notification when: Choose when you want to be notified about new or removed entries:

  - *New/Removed entry in worklist:* Receive a notification as soon as a new entry arrives in your personal worklist or if the entry is aborted or removed by another user (e.g., using the "change agent" function).

  - *New entry in role worklist:* Be notified when a new entry arrives in your role worklist.

  - *New entry for selected roles:* Restrict notifications to specific roles. This type of notification can lead to a large number of emails and should only be selected in exceptional cases.

  - *New/Removed entry in worklist SUBSTITUTE NAME:* This option is available if you have been registered as a substitute for another user.

- Type of notification: Choose how you want to be informed about new entries:

Figure 2.12: **Settings**

- – Email notification: Receive notifications via email.

- – System notification: Receive notifications through your desktop's notification system (e.g., Windows notifications). Note that permission is required for this option. When activated, your browser will display a confirmation prompt. This permission can be revoked at any time through the textttPrivacy and Security section of your browser settings. If this method is unavailable (e.g., due to a lack of permission), a warning symbol will appear next to this option. Hover over the symbol for further details.

- Language: Sets the language for the HTML interface of *@enterprise*. After changing the language, a logout and login are required.

- Time zone: Defines the time zone used for date inputs and outputs. If no time zone is selected, the client's time zone (i.e., the operating system's time zone) is used. A logout and login are required after changing the time zone.

- Mail format in compose window: Defines the format used in the compose dialog for emails. Available options are:

- HTML: Emails are sent in HTML format (text/html).
- Plain: Emails are sent as plain text (text/plain).

The default format is HTML.

- Theme: The user can choose a specific theme for the interface. The selected theme will be displayed for the user.

- Restore tree view: If this option is enabled, the expansion state of the following trees will be restored upon refreshing/opening the client: worklists, user folders, reference folders, DMS.

Hint: Activating this option may lead to an increased startup time for the main page.

- Display hidden documents: This function allows users to toggle the display of files in the DMS that have a period at the beginning of the name. Options include:

  - According to configuration: Uses the setting from the option *Do not display hidden documents* (located in *Administration → Configuration → DMS*).
  - Yes: Hidden documents are shown in the DMS.
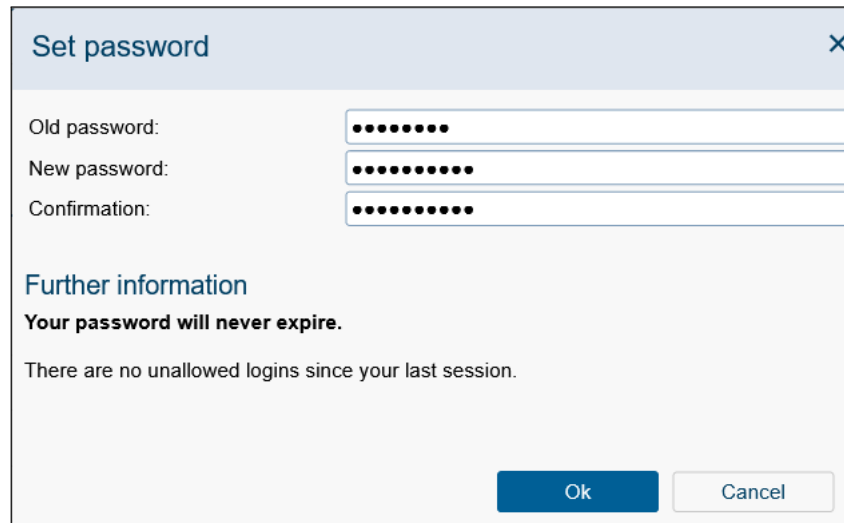 - No: Hidden documents are not shown in the DMS.

Hint: This dialog also shows all application-specified user parameters (if already defined). More information about user parameters can be found in the System Administration Guide in the chapter Workflow modeling, section Applications.

Content of the page *Set Password*

- **Old password:** Enter the old password here.

- **New password:** Enter the new password here.

- **Confirmation:** Confirm your new password here.

- **Further information:** Information about the defined password policy and in addition the unsuccessful login attempts with your user name.

- **Ok:** Clicking this button confirms your entries and therefore set your password to the value of the field *New password*.

- **Cancel:** Clicking this button ignores your entries. The page is closed and your password will not be set to the new value.

Content of the page *About*

This dialog contains the version information of *@enterprise* and the installed applications. Furthermore the server name and in case of a cluster additionally the node id.

Figure 2.13: **Set password**

2.4.2 The Toolbar

The toolbar consists of following elements:

- Functions that can be applied to entries in the work area: To apply a function, first select one or several entries in the work area and then click on the corresponding icon at the toolbar. The function will be executed immediately except if the function needs additional information. In this case an HTML–form will be displayed in the work area where you can enter the necessary data.

  The list of functions displayed in the toolbar depends on the selected entry in the navigation area, at some screens the toolbar can even be empty. You will find the relevant information in the appropriate chapters (see chapter The Group Tasks).

- Context menu: Following functions are provided:
  - Print: The default GUI configuration of *@enterprise* offers a print function for each table (worklists, DMS, tables). By activating this function a new window with the displayed table will be opened which allows to customize the columns (adding, removing, change width). The print job can be started with button *Print*.
  - Refresh: By activating the *Refresh* icon the table can be reloaded.
  - Grouping: If provided, it is possible to group the table columns in descending or ascending order.
  - Sorting: If provided, it is possible to change the sorting column and sorting direction.
  - Save filter: By selecting this menu item the current combination of column filters can be saved under a defined name. You can also enter a description for the filter.

– List of saved filters: If you select one of these entries, the table is filtered by the selected filter. The list can also contain filters which have been defined by other users. In this case these filters can only be used, they can not be deleted or edited.

2.4.3 Navigation area

The navigation area consists of different groups that determine the content of your work area. These groups are topics for the links inside. Activating an entry in the navigation area will change the content of the work area.
You will find a brief description of the entries and the links below. A more detailed description can be found in the corresponding chapters.

- **Tasks:** In this group you can find the following links:

  – *Worklist:* This link opens your personal worklist. It is the central component in your daily work with *@enterprise*.

     The worklist symbolizes the desk or the in–tray of the user respectively. All tasks that have to be done by a certain user are displayed in his worklist.

  – *Role worklist:* This link opens your role worklist. It shows all tasks, which have been assigned to one of your roles.

  – *Suspension list:* The suspension list shows all suspended tasks.

  – *Start process:* This link offers you the opportunity to start a new process.

  – *Functions:* This link opens a list of function names. These functions can be called by you directly.

  – *Process search:* This function allows you to find process instances by using simple constraints.

  – *Document search:* This function allows you to find documents of the document management by using simple constraints.

  – *Reports:* This function contains predefined reports to locate processes.

  – *Recent activities:* All process activities of the last month are listed.

- **Documents:** This group comprises links belonging to the document management system of *@enterprise* (see chapter The Group Documents).The document management of *@enterprise* supports the handling of documents that have been attached to a task and a process respectively. Of course it is also possible to handle documents that are neither attached to a task nor to a process.

  This group contains the following two links:

  – *Personal folder:* This link opens a folder containing the personal documents of the current user. In the navigation area you won't find the entry *Personal folder* but its labeled with the name of the current user e.g. *John Smith*.

  – *Common:* This link opens a folder containing those documents that are shared by all users.

- **Calendar:** This group contains a calendar for managing private and public appointments. It is also possible to manage resources (like video projectors, rooms, etc.) which can be attached to appointments.

2.4.4 The Work Area

The work area is the main area in the *@enterprise* user interface. Here the content of the actually selected entry of the navigation area is displayed. The layout of the work area can vary quite substantially with the specific content, and therefore relevant information can be found in the appropriate chapters.

2.4.5 Column picker, Sorting and Filter

You can change the number of displayed columns by using the column picker. The column picker is placed rightmost of the table header. Activate the functions and a popup-window containing the names of all actually visible and possible columns opens.

Already visible columns are displayed with a small check-mark. To add a new column to the table, activate a column name (without the check-mark). The table refreshes and the selected column is displayed. To remove a column from the table, activate a column name (with the check-mark). The table refreshes without the removed column. With menu item *Reset* changed column widths and visibilities are set back to default (according to XML definition).

A column contains following functions in column header:

- Sorting: You can change the sorting column and sorting direction by activating a column header. Which column and direction is actually used for sorting is marked by a small arrow left of the column name.

- Filter: By clicking on the filter icon a context sensitive filter menu with the following entries is shown:

  – Remove filter: If a filter for this column is set, this function removes the filter. If no filer is set, this function is not available.

  – User-defined: By selecting this menu item a small sub-window is opened where you can define rules (conditions) depending on the value type of selected column (text, numeric value, date value). You have to select a condition type and must define a value or range. With button *Apply* the filter will be used for this column.

  – Group descending/ascending: If one of these options is selected, the table will be grouped according to the values of this column, i.e. the table contains subheadings which represent grouping blocks. The terms "descending" and "ascending" define the sort order of the grouping blocks (not the items order of a grouping block).

  – Quick-Filter: All column values are listed here. Multiple values can be selected. The table is filtered according to the selected items. The number of filter matches is shown in brackets.

If you want to save the current combination of filters you have to click the *Save filter* function in the context menu (see chapter The Toolbar).

When a filter is selected only those entries of the table are displayed which match all the criteria specified by the filter (e.g. received during the last three days and either in task *grant* or *refuse*). If a stored filter is set, this one is indicated by another filter icon beside the filter menu. By activating the used filter another filter menu will be opened with following items:

- Edit filter: This menu item allows to adapt the stored filter. The dialog offers following tabs:

  - *General:* You can change the name or description, but also adding or removing rules (conditions). The option *Matches* indicates, if all rules are interpreted (logic AND) or anyone (logic OR).

  - *Access:* In this tab you can define the access rights, i.e. it is possible to share the filter with other participants. More details concerning the detail dialogs can be found in sections Permissions and Permission patterns. Filters can be shared only, if the current user has the right *share_filter* assigned by an administrator before.

- Remove filter: This menu item removes filtering for the table, but does not delete the filter.

- Delete filter: This menu item deletes the stored filter and removes filtering for the table.

2.5 Keyboard usability

In *@enterprise* smartclient shortcuts can be used for easier keyboard usability. A shortcut is a particular key combination which executes an action (e.g. finish a worklist entry). Either shortcuts are predefined in *@enterprise* or can be defined by the administrator at functions or in GUI configuration (XML). The following tables contain the predefined shortcuts only:

Shortcut	Description
CTRL+ALT+N	The navigation tab is selected (e.g. Tasks, Documents, Calendar, etc.)
CTRL+ALT+R	The work area is selected
CTRL+ALT+T	The toolbar of appropriate work area is selected
F5	The table (e.g. worklist) is refreshed
CTRL+A	All table entries are (un-)selected (if multiple selection is activated)
CTRL+F	The search field in toolbar is focused
CTRL+P	The print function of a table (e.g. worklist) is executed
CTRL+S	The save function is executed (e.g. of a process form or in dialogs)
CTRL+SHIFT+S	The save and close function is executed (e.g. in dialogs)
DEL	The selected element of a table is deleted (e.g. in DMS table)
CTRL+DEL	The delete function is executed (only in dialogs)
CTRL+C	The selected element of a table is copied, i.e. the element is inserted into clipboard
CTRL+X	The selected element of a table is cut, i.e. the element is inserted into clipboard
CTRL+V	The previous cut/copied element of a table is inserted from the clipboard
CTRL+BACKSPACE	The previous screen is displayed, if a back function is available (e.g. in process details)
CTRL+"Arrow key left"	In context of the process details the details of the previous process in worklist table are displayed
CTRL+"Arrow key right"	In context of the process details the details of the next process in worklist table are displayed

Table 2.1: **Common shortcuts**

Shortcut	Description
CTRL+SHIFT+F	The toolbar function *Finish* is executed (see section Complete)
ALT+T	The toolbar function *Take* is executed (see section Take)

Table 2.2: **Actions shortcuts**

Shortcut	*Description*
CTRL+ALT+H	The process history tab is displayed (see section Process history)

Table 2.3: **Process details shortcuts**

3. The Group Tasks

The group *Tasks* comprises your personal worklist, your role worklist, your suspension list, the role suspension list, the function list and a possibility to start new processes.

In order to handle the content of the different entries of this group you can use functions and links displayed within your work area or in the toolbar.

3.1 Links of the Group "Tasks"

3.1.1 Worklist, Role worklist, Substitution worklists, Suspension list and Role suspension list

The worklist is the central component for the *@enterprise* user. The worklist symbolizes the desk or the in–tray of the user respectively. All *tasks* that have to be carried out by you are displayed in your worklist.

@enterprise distinguishes following types of worklists: your personal worklist, your role worklist, the substitution worklists, your suspension list and your role suspension list.
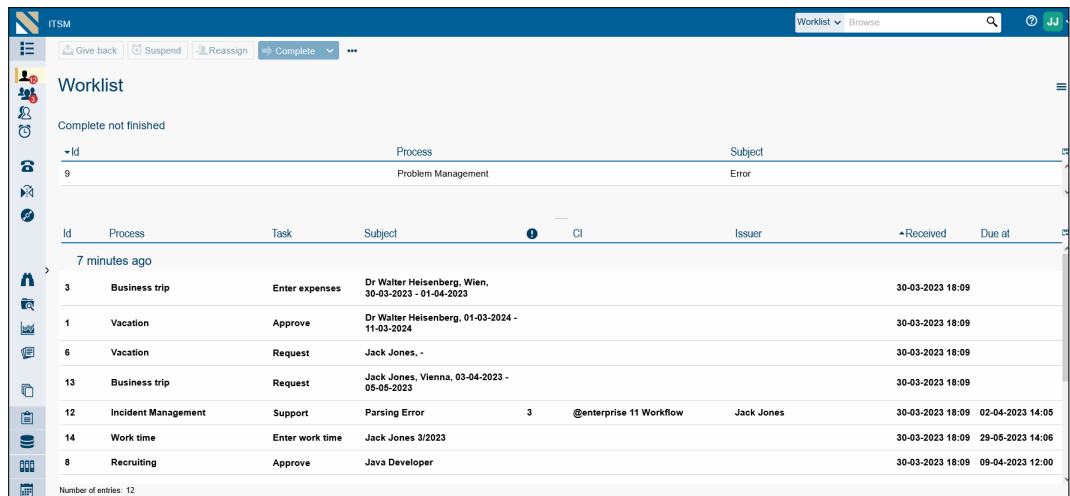
Hint: You can select the various worklists through the entries in the navigation area. A right-mouse-click on the worklist name opens the browser-context menu, that allows to open the worklist in a new browser-tab or a new -window.

Structure of the worklist

The personal worklist, the role worklist, the suspension list and the role suspension list are structured in the same way. In the personal worklist you have the possibility creating subfolders for customizing your worklist (see chapter User folder). If substitutions are defined, the personal worklists (incl. sub folders) for each substituted user are displayed as own navigation tree entry. More information concerning substitutions are available in section Roles and the following pages.

The worklists are shown as a table (see figure 3.1). The header of the table shows the type of the worklist (i.e. *Worklist*, *Role worklist* or *Suspension list*) and your name along with a link to the stored filters (see chapter Column picker, Sorting and Filter) for the worklists.

Figure 3.1: **Structure of the Worklist**

Each row in your worklist represents one entry. These entries correspond to the tasks you have to accomplish. Tasks printed in **bold** face are new entries that have not been handled so far.

Columns of the worklist:
The columns of the worklist contain various functions and information of the listed tasks. Below you will find a detailed description of these functions and information.

- **Role:** This column only exists in the role worklist and role suspension list and contains the name of the role this task has been assigned to.

- **#:** This column allows to define a manual order for the worklist by using Drag & Drop (DnD). For this purpose select the desired entry and move it to the appropriate position in the table. This kind of sorting is possible only, if the worklist is sorted by this column. In default UI this column is available for the user worklist (and its sub-folders) only.

- **Id:** The Id is the unique identifier of the process instance to which the task belongs. This identifier can be a number or a text.

- **Mark:** The worklist entries can be designated as favorites by marking them with a star icon.

- **OU (Organizational Unit):** Shows the actual organizational unit of the task.

- **Process:** Displays the name of the process to which the task belongs. The name of the process is a link to the *process history* (see chapter Process history).

- **Task:** This column contains the name of the actual task. The name of the task is a link to the *process history* (see chapter Process history).

- **Subject:** If a subject has been specified at the process definition it will appear here.

- **Priority:** This column contains the priority of a process relating to the current task.

- **Functions:** This column has no header and contains a link to additional functions that may have been associated with this task (see chapter Task functions). The function symbol is a link to these functions.

- **Documents:** Every task can have several *forms*, *documents* etc. attached to it. The documents are represented by different symbols in this column. The symbols can be used to edit these documents.

- **Received:** The date shown in this column represents the date on which the task arrived at the worklist. Please note that the time zone of the client is used in smartclient!

- **Due at:** Here you will find the due–date of this task (or process). This column can be empty. Please note that the time zone of the client is used in smartclient!

  The date is colour coded to indicate the urgency of the process.

  - *Red:* The task (or the process respectively) should have been done by now (the due–date is in the past).
  - *Orange:* The task (or the process respectively) has to be accomplished today.
  - *Black:* This task is not urgent at the moment.

- **Suspended until:** This column only exists in the suspension list and shows until which point in time a task is being suspended. Please note that the time zone of the client is used in smartclient!

3.1.2   Start process

By activating this link it is possible to start processes either with the *Quick start list* or by using the *Wizard for starting processes*. In both cases all processes you are able to start are displayed. You can start all those processes in which you are entitled to handle the first task (e.g. because you are a member of the role associated with the first task).

The *Quick start list* is available by activating the triangle symbol beside the link *Start process* in the group *Tasks* of the navigation area. The *Wizard* is available by activating the link *Start process* directly.

Quick start list

In this list all startable processes are displayed where you are allowed to start them. By selecting an entry the process will be started directly, Your personal worklist will be displayed (see chapter Worklist, Role worklist, Substitution worklists, Suspension

list and Role suspension list) and the first task of the started process will be in your worklist.

If e.g. no unique task can be determined for starting processes directly, the last step of the *Wizard for starting processes* will be displayed. In this case the *process start form* must be filled and the button *Start process* must be activated.

Wizard for starting processes

Processes in *@enterprise* are displayed in a table called process table. The entries show the name, version, the application and the description of a process (see figure 3.2). The dropdown-list contains all *@enterprise* applications. If you select a application, the processes of the selected application will be displayed only.
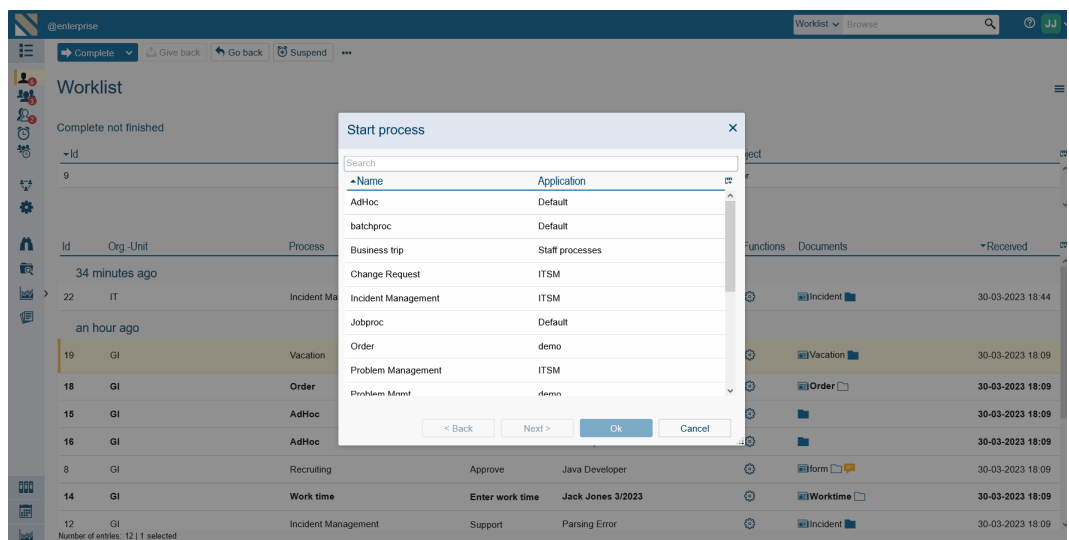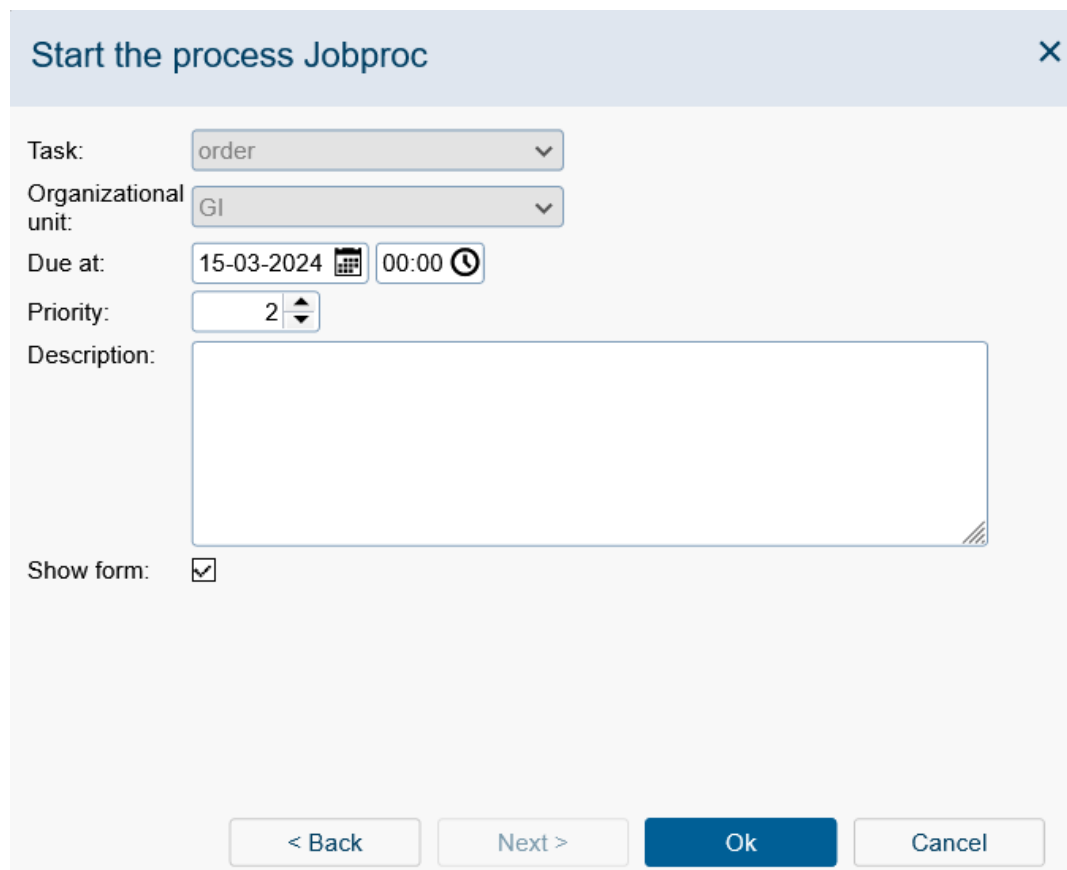

Figure 3.2: **Process table**

Content of the *process table*:

- **Search field:** The search field allows to restrict the result of table entries by entering the wished term.

- **Name**: This column lists the name of the process.

- **Version:** This column contains the version of the process.

- **Application:** This column shows the application where process is located.

- **Description:** This column shows an additional *process description* if one has been entered.

- **Back:** This button is inactive in first step of wizard.

- **Next:** This button leads to step 2 of wizard, the *process start mask*.

- **Start process:** If an entry is selected the process can be started without step 2 of wizard. Your personal worklist will be displayed (see chapter Worklist, Role worklist, Substitution worklists, Suspension list and Role suspension list) and the first task of the started process will be in your worklist. But there are also exceptions, e.g. no unique task can be determined: in this case step 2 of wizard must be performed by activating the button *Next*.

- **Cancel:** By activating this button the wizard will be closed, the changes discarded and no process started.

By selecting an entry in process table and activating the button *Next* the process start mask (step 2 of wizard) will be displayed (see figure 3.3). Another way is to double-click on a table entry.

Figure 3.3: **Process start form**

Content of the *Process Start Form*:

- **Task:** This list contains all tasks which are selectable in first step of process. If only one task is available, this selection is disabled.

- **Organizational unit:** This list contains all organizational units you are associated with. Select the organizational unit you want the process being started in. If only one organizational unit is available, this selection is disabled.

- **Due at:** Enter the date by which the process should be finished. You can click on the calendar icon to use the *@enterprise* calendar assistant (this is optional).

- **Priority:** Enter here the priority for the process. If nothing is entered, the default-value will be used.

- **Description:** Enter a description for the process. It will be displayed in several places, where it will be useful to the user.

- **Show form:** If there is a form associated with the process and you activate this checkbox the corresponding form will be opened immediately after you started the process.

- **Back:** This button leads to step 1 of wizard, the *process table*.

- **Next:** This button is inactive in second step of wizard.

- **Ok:** Use this button to confirm your entries and start a new process. Your personal worklist will be displayed (see chapter Worklist, Role worklist, Substitution worklists, Suspension list and Role suspension list) and the first task of the started process will be in your worklist.

- **Cancel:** By activating this button the wizard will be closed, the changes discarded and no process started.

3.1.3   Functions

The function list shows all functions, which you can invoke.

You reach the function list by activating the homonymous link in the group *Tasks* of the navigation area.

Structure of the *Function list*

The function list contains the name and the description (as tooltip) of every function. Furthermore it is possible to classify functions in so-called *Function groups* (see System Administration).

***@enterprise* Functions**

By default *@enterprise* offers the following functions:

- **Create User Certificate:** This function allows to create a user certificate. With this certificate it is possible to sign PDF documents. This generated certificate is valid for the current user only! Informations are collected from the form inputs and the user data and used to create the certificate.

Figure 3.4: **Function list**

Figure 3.5: **Create self signed certificate**

- **Download certificate request:** Before downloading a certificate request, a user certificate must be created! Select the created certificate, enter the defined password and download it. The request should be send to a certificate authority, which will return an official signed certificate to import.

- **Import signed certificate:** When the CA sends the requested certificate, you need to import it with this function.

- **List of tracked processes:** This table displays all processes in which a process tracking has been activated (see section Follow the process). You are able to delete or edit the entries via toolbar functions *Delete* and *Edit*. Entries are only deleted automatically, if all tracked steps and the tracked process got finished. If a process got finished without completing all tracked steps, then the entry has to be deleted manually.

- **List of tracked documents:** This table displays all document trackers that the
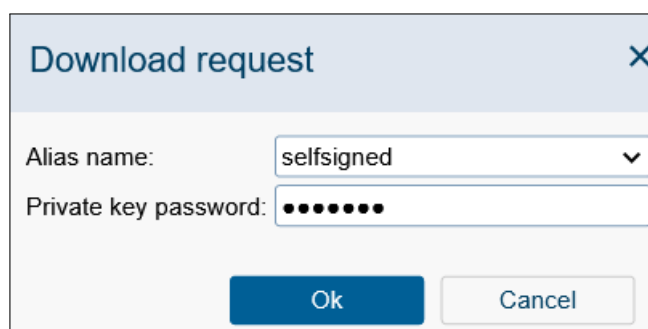
Figure 3.6: **Download certificate request**
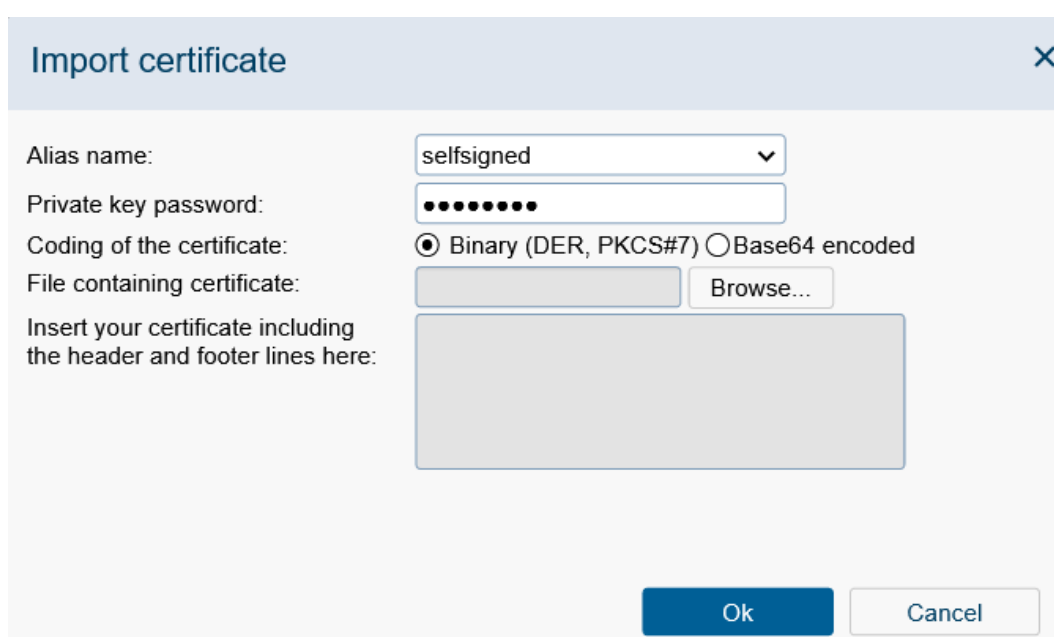
Figure 3.7: **Import signed certificate**

user has created or the user is a recipient of (see section Follow document changes). You are able to delete or edit the entries via toolbar functions *Delete* and *Edit*. The document tracker will not be shown in the list if the document which is tracked is deleted.

- **Clipboard:** A global version of DMS clipboard function. For more details see section Clipboard.

3.1.4 Process Search

The process search allows you to find process instances you have been involved in as a user.

Select the function *Process search*. The HTML–page *Process search* (see figure 3.8) that can be used to narrow the search will be displayed in your work area.

The result of the search will be shown in your work area as a table (see chapter Search result). The entries of this table contain links to the process history of the corresponding process instances (see chapter Process history).

Figure 3.8: **Process Search – Search Criteria**

Hint: For process search a stored query with id *standard_search_template* exists (= template for process search) which can be adapted by an administrator (or a user with right *Statistic*). In this template e.g. the sort order of columns can be defined, predefined

conditions can be set, other display attributes can be added, etc.

Content of the HTML–page *Process search*

- **Id:** Here you can specify the Id of the process instances you are looking for. The Id is the unique identifier of a process instance. You can select between following search options:

  - *Contains:* The entered string is available somewhere in the id to get a result.
  - *Starts with:* The entered string has to be available at the beginning of the id to get a result.
  - *Exactly:* The entered string must be equal to the id.

- **Subject:** Here you can enter the subject of the process you are searching for. You can select between following search options:

  - *Contains:* The entered string is available somewhere in the subject to get a result.
  - *Starts with:* The entered string has to be available at the beginning of the subject to get a result.
  - *Exactly:* The entered string must be equal to the subject.

- **Time–Interval:** Here you can define the time–interval in which the processes are/were active. You can choose one of the following options:

  - *Started:* Lists all process instances, which have been active within a certain period of time.
  - *Finished:* Lists all process instances, which have been finished within a certain period of time.

  The time–interval can be set using the fields *From* and *To*.

- **Due date:** Due dates of processes or due dates of tasks of processes can be defined here as time–interval. The time–interval can be set using the fields *From* and *To*.

- **Organizational unit:** Here you can narrow the search to list only processes you handled within a certain organizational unit. As a default processes of all organizational units will be listed (empty field).

- **State:** There are two ways to restrict the search on the process state:

  - *Running:* Only running process instances will be displayed.
  - *Finished:* Only terminated process instances will be displayed.

- **Marked:** Refers to the categorization of processes based on user preferences.

  - *Yes:* The processes that have been designated as favorites will be displayed.

- – *No:* The processes that have not been marked as favorites will be displayed..

- **User:** Two cases can occur:

  - – If the actual user has neither the right *View Processes* nor the right *Edit processes*, the name of the actual user will be displayed in this field and cannot be modified. Therefore the user can only search for *his own* process instances.

  - – If the actual user has one or both of those rights for one or multiple departments, he can specify a user here. The search will be restricted to process instances of this specified user. If the user field is not being used to limit the search to a particular user, the result will contain the processes of all users he has the *View Right* for.

- **Current user only:** If this checkbox is activated and a user is selected, only process instances are displayed where this user is the current agent at this moment (not where user was agent).

- **Application:** Set the application to limit the search results to process instances of this application.

- **Task:** Here you can narrow the search to list only processes with a special task being active right now (in someone's worklist). As a default all tasks are considered (empty field).

- **Current task only:** If this checkbox is activated and a task is selected, only process instances are displayed where this task is active at this moment.

- **Process type:** Here you can narrow the search to list only a particular process type. As a default all process types will be displayed (empty field).

Hint: Process types depend on the previously defined application. You can select a particular version of a process type (listed with version number) or all versions (listed without version number).

- **Form:** Here you can search for particular form entries.

  Select a form by using the select field. Then click the button *Edit form* to open the selected form in the new window. Here you can enter the values you are looking for. Then close the window by using the button *Apply*. An other way to add form conditions is to activate the additional function *New*, enter an attribute and value and select an operator. The condition will be added to the select-list by activating the button *Apply*. The additional functions *Edit* and *Delete* allows to adapt the form condition list.

  Only processes will be listed that have the specified form attached and the form fields match the defined values.

Hint   Forms can be displayed only, if the current user has right *Searchable*.

- **Process relation:** Search for processes which are in relations is possible here. Select a relation type and enter the related process id in the field beside.

- **Ignore Case:** Click this checkbox to do a case insensitive search.

- **Show Time in Date conditions:** If this checkbox is activated, the datefields *Started* and *Finished* allow to enter date and time. If this checkbox is activated by default, the global parameter *Show time in date conditions* under

  Administration → Configuration → Search

  is set.

- **Start search:** After defining the search criteria, the search can be started by clicking the button *Start Search*.

- **Reset:** Use this button to reset all search criteria to their default values.

- **Search history:** This toolbar function opens a drop-down menu with the last 10 queries that are executed and is visible only, if queries have been executed before. If an entry is selected, the appropriate values will be set in the search fields. Activating the entry *Clear history* results in deletion of the whole search history.

Search result

After defining the search criteria and activating the button *Start Search*, the search result will appear in your work area.

Figure 3.9: **Search result**

This HTML–page (see figure 3.9) shows a list of results displayed as a table. Each row of this table contains one process instance. The columns hold the following information:

- **Id:** The Id is the unique identifier of a process instance. The Id is linked to the process history of this process instance.

- **Process:** This column shows the process type (without version).

- **Subject:** This column holds the subject of this process instance.

- **Active task information:** If the process is in the state *Running*, this column contains the current tasks, the actors (first and last name) and - if available - the due dates of the tasks.

- **Started:** This column displays the point in time (date and time) when the process was started.

- **Due date:** This column displays the point in time when the process should be finished (= process due date).

- **Finished:** If the process is not running any more, this column contains the point in time (date and time) when the process was finished.

In the tool bar there are following functions:

- **Back to search mask:** This function is visible only when using the *Process search* or *Document search* and allows to go back to the corresponding mask.

- **Refresh:** If you activate this function, the search will be executed again with the already defined search criteria.

- **Result details:** This dialog shows the search criteria, which have been used and the number of matching process instances.

- **Save:** By activating this button the query will be stored. Type in an *Id* and a *Name* in the dialog and then activate the button *Ok*.

- **New report:** If you have the required right *Statistics*, this button brings you to the Report designer, where you can create a new query.

- **Details of query:** This functions allows a detail view of the query in XML- and SQL-format.

- **Edit:** If you have the required right *Statistics*, this button brings you to the Report designer, where you can edit the query.

- **Print...:** This function is available for HTML tables only and allows to print the displayed result.

- **Export Options:** Here you can define the output of the query result. By default the HTML table is displayed, but it is possible to define a graphical output or an output into a file. More details can be found in manual Reporting.

- **Copy:** The function is displayed additionally in result of short-, process- and document search. In case of short- and process search it is possible to copy entries and insert them as links into a DMS folder. In case of document search the entries are copied and inserted into the selected DMS folder.

- **View process history:** This function is available in context of short- and process search only and shows the details of a selected process in result. If an entry is double-clicked, this function is also performed.

3.1.5   Document search

This function can be activated by clicking on the link *Document search* in the navigation area.

With the function *Document search* it is possible to search for DMS–Objects within *@enterprise*. With the help of the fields of the HTML–page *Document search* (see figure 3.10) it is possible to define some search criteria for the document search.

Figure 3.10: **Document search**

Hint: For document search a stored query with id *doc_search_template* exists (= template for document search) which can be adapted by an administrator (or a user with right *Statistic*). In this template e.g. the sort order of columns can be defined, predefined conditions can be set, other display attributes can be added, etc.

Content of the HTML–page *Document search*:

- **Document name:** The name of the document.

- **Text contains:** The text which should be contained in the form and/or document of the searched entries. For this purpose the full-text search must be activated under

  Administration → Configuration → DMS

  (see Installation Guide).

- **In document:** the content of the field *Text Contains* should be contained in the document.

- **In form:** the content of the field *Text Contains* should be contained in the form.

- **Time:** Define whether the time interval, specified with the help of the fields *From* and *To*, should correspond to the point in time when the entry has been created or to the point in time when it has been changed.

- **Show time in date conditions:** If this checkbox is activated, the datefields *From* and *To* allow to enter date and time. If this checkbox is activated by default, the global parameter *Show time in date conditions* under

  Administration → Configuration → Search

- **From:** Begin of the time interval selected at *Time*.

- **To:** Begin of the time interval selected at *Time*.

- **Form type:** The entries found should be of this form type (analog to section Content of the HTML–page *Process search*).

- **Edit:** With the help of this button it is possible to define search criteria for the field of the selected form type.

- **Owner:** The owner of the entries.

- **Folder:** Search within this folder.

- **Keyword:** Keywords which have been assigned to the folder.

- **Start search:** Clicking this button starts the document search. The result is displayed in your work area. The table of the search result is explained beneath.

- **Reset:** Clicking this button resets the entries of the fields within this HTML–page to their default values or removes the entries of the fields.

- **Search history:** This toolbar function opens a drop-down menu with the last 10 queries that are executed and is visible only, if queries have been executed before. If an entry is selected, the appropriate values will be set in the search fields. Activating the entry *Clear history* results in deletion of the whole search history.

Result of the document search

The result table of the document search is displayed in figure 3.11.

Figure 3.11: **Query result**

Content of the HTML–page *Query Result*:

- **Toolbar:** The tool bar is analog to process search, but without function *View process history*. A double-click on a result entry executes the function *Copy*.

- **Name:** Corresponds to the entry *Name* of the DMS–Object–Table. If you click at an entry in this column the content of the document will be displayed.

- **Creator:** The creator of the DMS–Object.

- **Changed:** Point in time when the document has been changed the last time.

- **Folder:** The DMS–Object can be found in this folder. If you click at an entry in this column you change to the corresponding folder.

3.1.6 Example

Precondition: The document search is displayed, and you have already stored some DMS–Objects.

1. Activate the link *Document search* in the navigation area.

2. Enter the name of the DMS–Object you are looking for into the field *Document name*.

3. Activate the button *Start search*. The search result is displayed in your work area.

3.1.7 Reports

Here you can find reports which have been predefined by an administrator. By selecting an item and activating the toolbar function *Execute* (see figure 3.12) the corresponding

query is executed. The result is displayed in the work area. The 10 recently used reports are shown at the top of the report table. Via column picker and checkbox *Recently used* these special entries can be shown and hidden.

If you have the right *Statistics*, via appropriate toolbar functions, it is possible to edit reports, create a new report or to manage report subscriptions. Detailed information concerning this matter are available in the Reporting guide. By selecting a report and activating the toolbar function *Add to favorites*, a favorite for this report is created. Favorited reports are added to the Tasks group under the node *Recent Activities* or to a custom-defined node, if available. This function is only visible if the user has the execute right for it. For further information on how to display these favorited reports in the navigation tree, refer to the reporting manual in the Report Favorites section.

Hint: For reports with an explicit input mask (parameter at execution) the last 10 queries are stored in the search history. The history is accessible via the toolbar function *Search history* which is visible only, if queries have been executed before. If an entry is selected, the appropriate values will be set in the input mask. Activating the entry *Clear history* results in deletion of the whole search history.

Figure 3.12: **Reports**

3.1.8 Recent activities

By activating this link a page will be displayed where all process activities of the last month are listed (see figure 3.13). The activities are structured in *Today*, *Yesterday*, *7 Days* (= last week) and *1 Month* (= last month).

Furthermore it is possible to select pre-defined filters "All processes" and "Edited processes" in the filter menu. "All processes" means that edited processes (e.g. user

reassign, finished process step, etc.) and only viewed processes (= without changes by current user) are displayed where current user was involved. "Edited processes" means that only that processes are displayed where current user has done changes.

In column *Activities* the text *Viewed* is displayed only, if no other activities for the process could be found for the last month or the process was viewed earliest on the day after the last editing.

Figure 3.13: **Recent activities**

3.2 Functions of the Worklist Component

The worklist component offers a variety of special functions, which allows you to edit a task (or process respectively) or to get additional information about it.

Some of the functions are available via the toolbar and some of them are only available via links in the corresponding work list tables (see chapter Structure of the worklist).

Functions provided via the toolbar:

- **Worklist:**

    - Complete
    - Complete and assign
    - Give back
    - Go back
    - Suspend
    - Reassign
    - Cut
    - Paste

- **Role worklist:**

– Take

– Suspend

- **Suspension list:**

  – Recall

- **Role suspension list:**

  – Recall

  – Recall and take

These functions will be applied to the entries of the worklist, i.e. tasks. To apply one of these functions to one or more entries, you have to select them first.

Hint: Some of the functions mentioned above are covered by the *Drag & Drop*-functionality, i.e. you can select an entry and move it to another worklist (worklist or user folder, role worklist, suspension list, role suspension list).

Functions provided via links (names, icons, etc.) in the worklist tables:

- Edit form (click on the form icon)

- To document management (click on the folder icon)

- To note view (click on the note icon)

- Process history (click on the process name)

- Process definition (click on the process name)

- Task functions (click on the function icon)

- Edit filter (click on the link called Edit)

3.2.1 Complete

This function can be activated by clicking on the icon *Complete* in the toolbar. At least one task has to be selected prior to activating this function.

Once you have finished a task, you can activate the function *Complete* to send it further along its way.

The WFMS checks if the task has been handled correctly by evaluating the optionally defined post condition for this task. If the post condition is met, the task will be removed from your worklist and the following task(s) will be triggered. If the evaluation of the post condition fails, a message appears and the task remains editable in your worklist.
If the actor of the following activity is a role, the task will appear in the role worklist of the members of this role.

Hints:

- When a task is completed, a version (back up) of every form will be generated automatically. Versions of other attached documents are only created on request (see chapter Make version).

- You cannot cancel the operation once you activated the function *Complete*.

3.2.2 Complete and assign

This function can be activated by clicking on the icon *Complete and assign* in the tool-bar. At least one task has to be selected prior to activating this function.

The function can be used to forward one or more finished tasks to an actor you can specify. After the execution of this function, the task will be removed from your worklist and appears in the worklist of the selected user.

If the actor of the following step has not been defined yet or the next step is assigned to a role, a new HTML–page will appear in your *work area* after activating this function. This HTML–page can contain one of the following information:

1. *Select agent:* This is the case if the following step has not been assigned to an actor yet. You can enter any user or role of the WFMS (see figure 3.14).

2. *User selection:* This is the case if the following step is assigned to a role. The possible actors for the following step are defined by the role (see figure 3.15).

Figure 3.14: **Select agent**

Content of dialog *Select agent*:

- **Select agent:** The new agent for the task (user or role).

- **Comment:** Free text for next agent.

- **Ok:** Click this button to confirm your entries and forward the process to the selected user.

- **Cancel:** Activating this button leads in closing the dialog. The task is displayed in table *Finish not completed* (see section Incorrect forwarding)
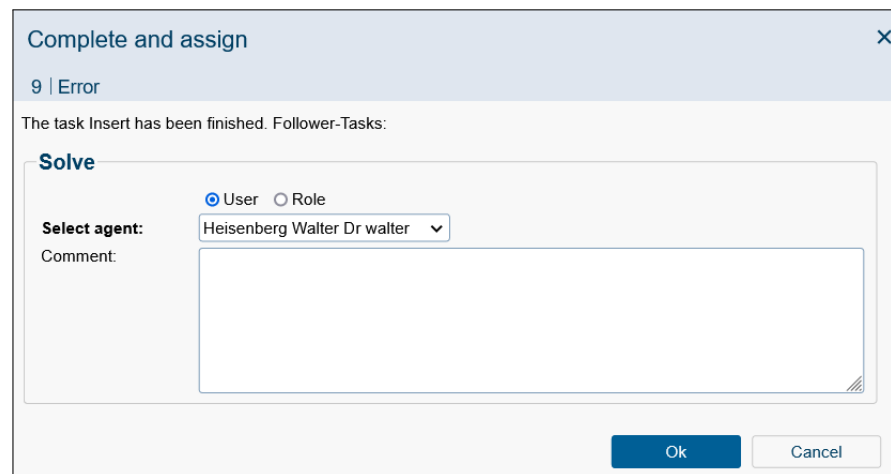
Figure 3.15: **User selection**
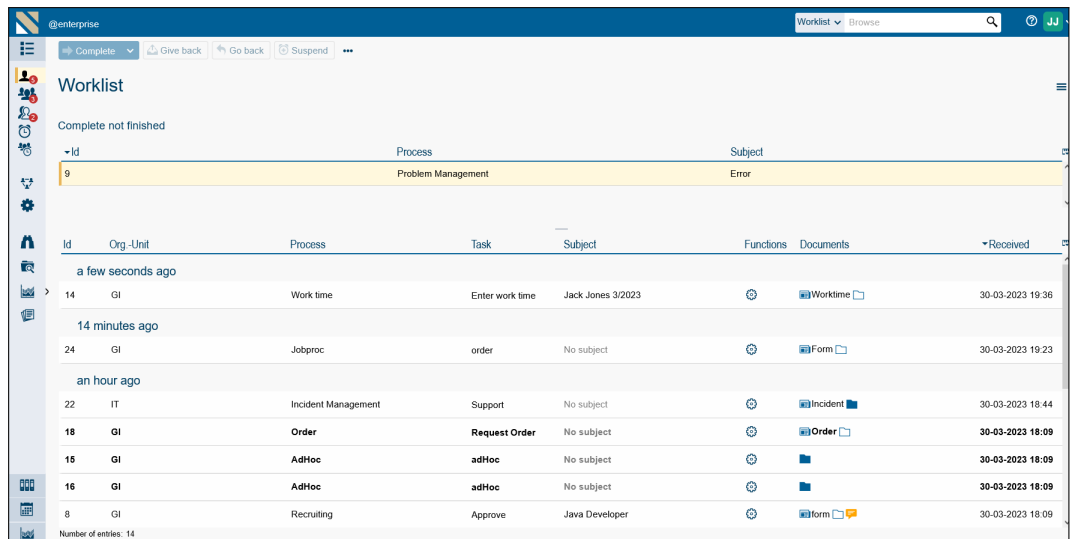
Content of dialog *User selection*:

- **Select agent:** This Combobox contains all users who are assigned to the role of the following step. Select the specific user who should handle the next step. If no user is selected and button *Ok* is pressed, the following step will be assigned to the role (and is visible in role-worklist).

- **Comment:** Free text for next agent.

- **OK:** Click this button to confirm your entries and forward the process to the selected user.

- **Cancel:** Activating this button leads in closing the dialog. The task is displayed in table *Finish not completed* (see section Incorrect forwarding).

Incorrect forwarding

If a task cannot be forwarded correctly to the next user, you will still be transferred to your worklist but a message will be displayed on top of your work area (see figure 3.16). A table contains all tasks, which cannot be forwarded correctly. Click on an entry to be transferred to the previous HTML–page to specify the actor of the following step.

Figure 3.16: **Incorrect forwarding**

Hint: After activating the function *Complete and assign* there is no possibility to abort the function (process is shown in *Finish not complete* table. Not even the function *Back* of your browser will undo the effect of the function.

3.2.3 Give back

This function can be activated by clicking on the icon *Give back* in the toolbar. At least one task has to be selected prior to activating this function.

It can be applied to every task in your worklist. It can be used to transfer a task, which has been taken from your role worklist, back to the role worklist. This can be useful when a task has been taken accidentally or when you want to give the task back to the role worklist for any other reasons.

If you are the direct actor of the task or if you handle the start task, the execution of this function will only change the status to *not handled* (**bold**).

Hints:

- The data in the forms and documents attached to this task will not be changed by this function.

- **Cancel:** You cannot cancel the operation once you activated the function *Give back* (but you can try to take it again).

3.2.4 Go back

This function can be activated by clicking on the icon *Go back* in the toolbar. Exactly

one task has to be selected prior to activating this function.

The function allows you to return to a previous task within the running process. This can be necessary when you cannot complete the task because incorrect data has been entered in a previous task.

When you activate this function, the HTML–page *Go back* (see figure 3.17) will be displayed in your *work area*. Select the task you want to return to from the list of previous tasks.

Figure 3.17: **Go back**

The WMFS removes the task from your worklist and puts the previously selected task in the personal worklist of the corresponding user. This user can now continue to handle the task.

Hint: A version of each form will be created when the function *Go Back* is executed. All documents will be kept. If compensation methods have been defined to the according tasks, they will be called.

Content of the HTML–page *Go back*:

- **Table of agents:** In this table all preceding actors of the process are listed in descending order (the first task is listed at the end). Select the entry to which you want to go back. The table contains the following information:

– *Agent:* Is the name of the actor who has handled this task of the process.

– *Task:* Contains the name of the task.

– *Started:* Displays the point of time, the actor received the task.

– *Finished:* Shows the point of time, the actor completed the task.

- **Comment:** Here you can put some information explaining why you had to go back to a previous task.

- **Ok:** If this button is activated, the task disappears from your worklist and appears in worklist of selected entry.

Hints

- **Cancel:** You can always cancel the operation by using the button *Back*. Your personal worklist will be loaded.

- **Error message:** If you forgot to mark the task you want to go back to, a message will be displayed after activating the *OK* button.

3.2.5 Suspend

This function can be activated by clicking on the icon *Suspend* in the toolbar. At least one task has to be selected prior to activating this function.

The function can be used to suspend tasks that are in your worklist right now. This can be useful when you have to wait for additional information to complete a task or when you want to defer the processing of the task until a later point in time.

After selecting the function *Suspend*, the HTML–page *Put into suspension list* will appear in your work area (see figure 3.18). Enter the date until when the actual task should be suspended. The task will not appear in your worklist until the given date but can be found in the suspension list instead.

Content of the HTML–page *Put into suspension list*:

- **Until:** Enter the date until when the task should be suspended. The calendar assists you in entering the correct date. The radio button at the beginning of the line has to be ticked to use this field.

- **Working days:** Alternatively you can enter the number of working days the task should be suspended for. The radio button at the beginning of the line has to be ticked to use this field.

- **Comment:** Free Text.

- **Ok:** Clicking this button confirms the entry and the task will be suspended until the given date.

- **Cancel:** Clicking this button closes the dialog without any action.
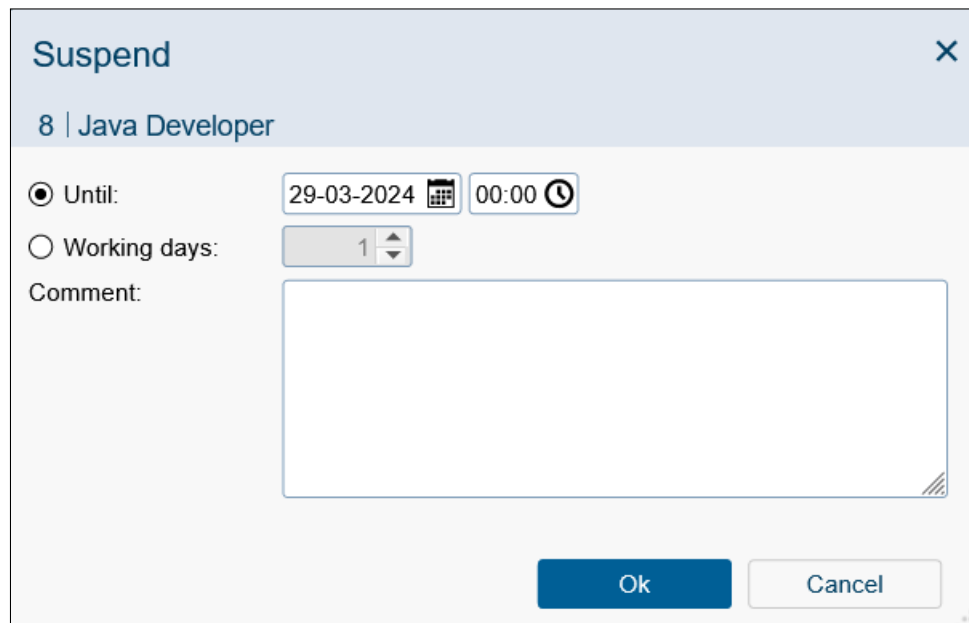
Figure 3.18: **Put into suspension list**

The task appears automatically in your worklist when the entered date is reached. If you need to continue working on a suspended task before the entered date, you can use the function *Recall* in the suspension list (see chapter Recall).

Hint: You can always cancel the operation by using the button *Cancel*. Your personal worklist will be loaded.

3.2.6 Reassign
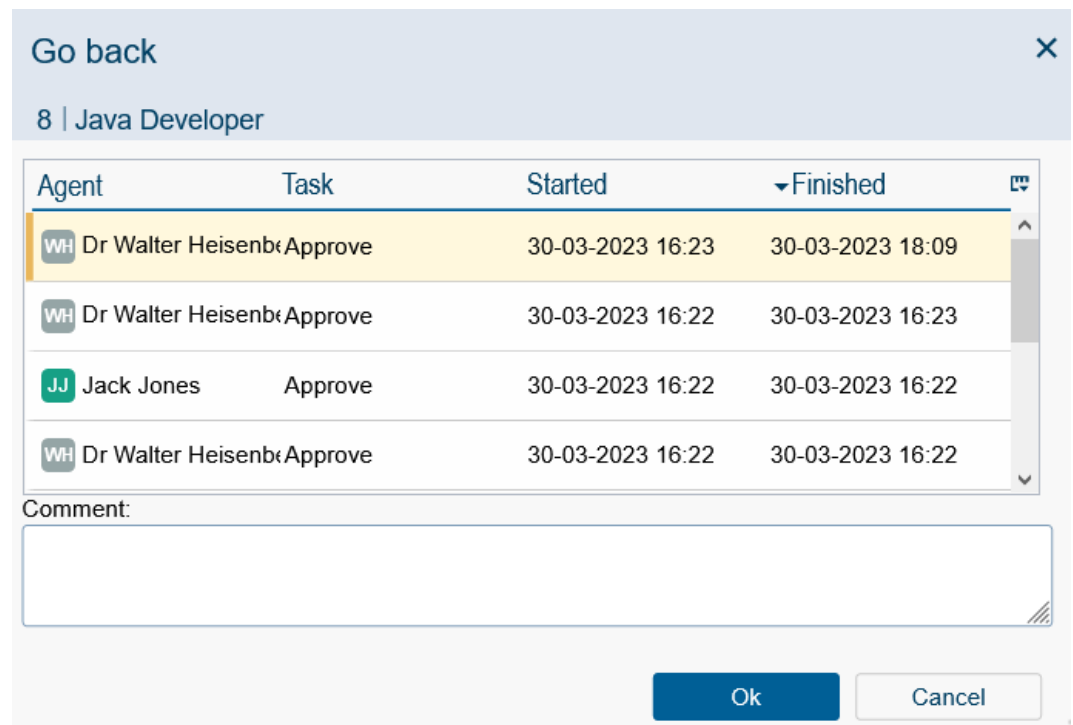
This function can be activated by clicking on the icon *Reassign* in the toolbar. Exactly one task has to be selected prior to activating this function.
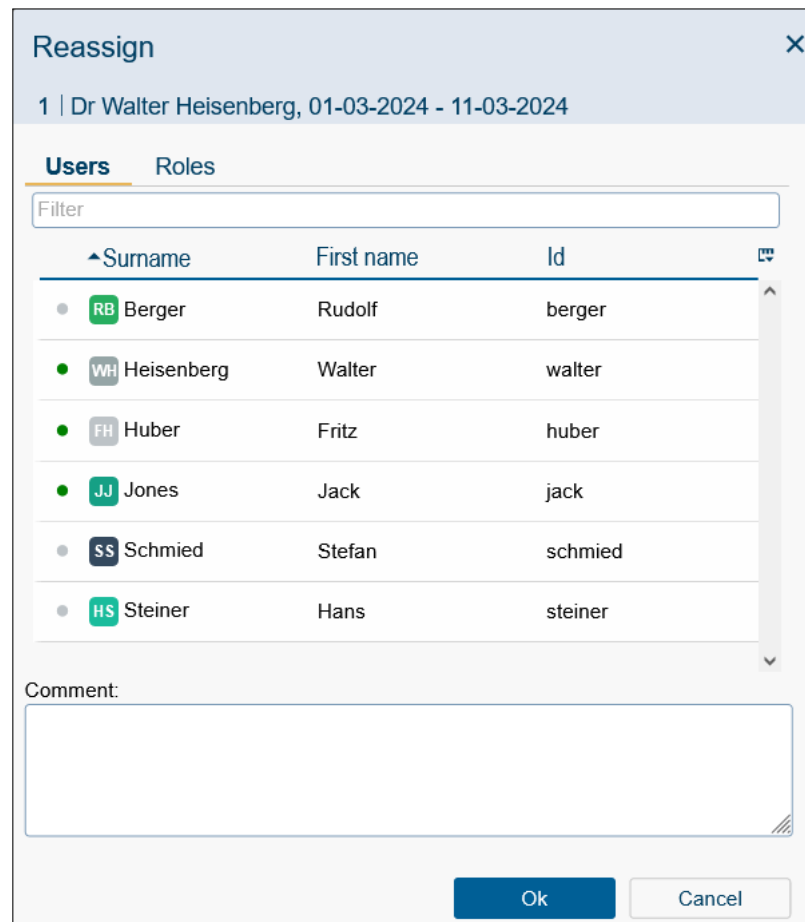
The function enables you to temporarily leave the predefined path of the workflow and to insert additional steps. It allows you to define the next actor (user) of this task at runtime.

Activating this function loads the HTML–page *Reassign* (see figure 3.19), which allows you to react flexible to new situations that are not covered by the predefined process structure.

Content of the HTML–page *Reassign*:

- **User:** List of available users. If to much users are displayed enter the surname or id or the first letters of any of these attributes into the field *Filter*. After this only users who match with your entries are displayed in the user list. For users the state is displayed, if user is online (= logged in and active), inactive (= still

Figure 3.19: **Reassign**

logged in, but not active) or offline (= logged out). Additionally this table offers the possibility to show the recently selected elements at the top of the table. For this purpose select the entry *Recently used* via column picker. The table is divided into two groups whereby the recently used elements are concentrated at the top and both groups are sorted by defined criterion. Please note that the really last used element must not be the topmost element.

- **Role:** List of available roles. It is also possible to select an organizational unit where users has the selected role.

- **Comment to this Agent:** Add a comment for the selected agent.

- **Ok:** If activated, the task disappears from your worklist and appears in (role-) worklist of selected user/role.

- **Abbrechen:** The dialog will be closed without any actions.

3.2.7 Cut

✂

With this function it is possible to cut process instances and paste it in a subfolder. This function is the same as the function *Cut* (see chapter Cut) in the DMS of *@enterprise* and will be described there.

3.2.8 Paste

📋

With this function a previous cut process instance can be pasted. This function is the same as the function *Paste* (see chapter Paste) in the DMS of *@enterprise* and will be described there.

3.2.9 Make version

By default this function is not part of standard GUI, but it can be added by a developer and therefor it is described here.

⊞

This function can be activated by clicking on the icon *Make version* in the toolbar. At least one task has to be selected prior to activating this function.

The function can be used to create a version of the documents of the selected task. A version stores the content of a task at a given point in time. Later on, the content of older versions can be accessed if required.

Activating the function *Make version* displays the HTML–page *Make version* in your work area (see figure 3.20). Here you can enter a description for this version of the task.

Figure 3.20: **Make version**

Content of the HTML–page *Make version*:

- **Comment:** Use this field to enter a comment to the version.

- **Ok:** Activating this button leads in saving your data and a version of selected task will be created. The worklist will be displayed again.

- **Cancel:** No version will be created and the worklist will be displayed again.

Hint: The various versions of the processes can be accessed through the *process history* (see chapter Process history).

3.2.10   User folder

The persronal *Worklist* (and the user folder itself) in area *Tasks* contains a dropdown-menu for creating and adapting user folders. User folders are displayed as hierarchy (tree) in the navigation area. Furthermore it is possible to insert worklist entries automatically in user folders.

Following functions are available in dropdown-menu:

- **New folder:** The dialog *User folder* is displayed where a new user folder can be created.

- **Delete:** By selecting an user folder this function leads in deleting the current user folder (and its subfolders). All entries of this user folder (and subfolders) will be listed in worklist again.

- **Properties:** The dialog *User folder* is displayed for adaption with the details of the selected user folder.

- **Move up/down:** The selected user folder can be moved 1 position up or down. Additionally this action can be triggered by using drag and drop, i.e. select an user folder and move it to the appropriate position in the user folder tree.

- **Cut** and **Insert:** The selected user folder is inserted in clipboard and can be pasted to another level of user folder tree. Additionally this action can be triggered by using drag and drop, i.e. select an user folder and move it to the appropriate position in the user folder tree.

- **Apply folder view to subfolders:** With this function the table settings (sorting/grouping/column hiding/column widths) of current table can be inherited to tables of subfolders.

Content of the HTML–page *User folder*:

- **Parent folder:** This area shows the folder where user folder should be created or is already placed.

- **Name:** The name of the user folder has to be defined here.

Figure 3.21: **New user folder**

- **Filter condition:** Optionally a filter condition can be entered which is a XPath expression (without prefix *xpath:*). More details about XPath expressions can be found in our Application Development Guide. This condition allows to move entries from the worklist (or manually from other user folders) into current user folder.

- **Automatic insert:** If this checkbox is activated (filter condition is required), all new worklist entries are inserted automatically in the current user folder. For existing worklist entries the area *Matching items* can be used.

- **Matching items:** This area displays all worklist entries in a table where filter condition matches. Furthermore following elements are available:

  - Refresh: This button refreshes the items table.
  - Insert selected items: With this button selected entries of items table can be added to current user folder.
  - Show items of user folders: If this checkbox is active, the worklist and all user folders will be parsed and those items matching the filter condition are displayed in items table. If this checkbox is inactive, worklist is parsed only.

- **Delete:** This function deletes the current user folder (and its subfolders) and closes the dialog. All entries of this user folder (and subfolders) will be listed in worklist again. This button is active only for existing user folder!

- **Save and close:** The changes are stored and the dialog is closed.

- **Save:** This functions stores the changes of this dialog and keeps dialog open.

- **Cancel:** This function closes the dialog and discards not saved changes.
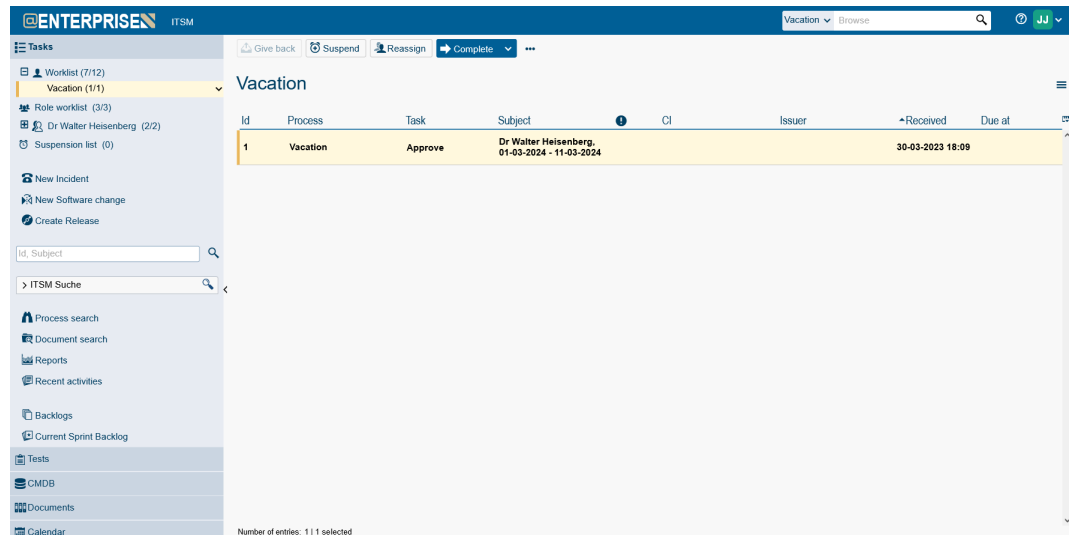
Figure 3.22: **User folder with parent folder**

3.2.11   AdHoc

This function is not activated by default. The activation procedure is described in the System Administration Guide → chapter The Process Editor → section Tasks
. This function is similar to function *Send to* in *@enterprise* DMS (see section Send to).

3.2.12   Take

This function can be activated by clicking on the icon *Take* in the toolbar. At least one task has to be selected prior to activating this function.

After the execution of the function *Take* the task disappears from all role worklists (of this role) and appears in your personal worklist.

Hint: No additional data is needed to take a task. Therefore it is not possible to abort this function.

3.2.13   Recall

This function can be activated by clicking on the icon *Recall* in the toolbar. At least one task has to be selected prior to activating this function.

In the suspension list you will find all tasks, which have been suspended until a given date. If you need to recall one or more of these tasks before reaching this date use the function *Recall*.

The selected tasks will disappear from your suspension list and show up in your personal worklist instead.

Hints

- **Cancel:** You cannot cancel the operation once you activated the function *Recall* (but you can suspend the task again).

- **Notice:** When the date in the column *Suspended until* is reached, the corresponding task will be recalled automatically.

3.2.14   Recall and take

This function can be activated by clicking on the icon *Recall and take* in the toolbar. At least one task has to be selected prior to activating this function.

In the role suspension list you will find all tasks, which have been suspended for a certain role until a given date. If you need to recall and immediately put one or more of these tasks into your worklist before reaching this date use the function *Recall and Take*.

The selected tasks will disappear from your role suspension list and show up in your personal worklist instead.

Example

Precondition: Your role suspension list is displayed and there is at least one task.

1. Mark the task by using the selection column in your role suspension list.

2. Select the function *Recall and Take* in the toolbar. The selected task will reappear in your personal worklist.

Hints

- **Cancel:** You cannot cancel the operation once you activated the function *Recall and Take* (but you can suspend the task again).

- **Notice:** When the date in the column *Suspended until* is reached, the corresponding task will be recalled automatically and therefore appear in the role worklist.

3.2.15   Edit form

The function *Edit form* can be found in the column *Documents* of your worklist, your role worklist and your suspension list. The form icon is being displayed at each task to which forms have been attached in the process specification.

If you click on the form icon, the form which has been created in the system administration will be displayed. The process–form is shown in the first tab. The tabs *Documents*, *Notes*, *History* and *Process* will be explained in the following sections. Following buttons are available in the *form* tab:

- **Save:** Use this button to save your changes. You will stay in the form view.

- **Save and complete:** Use this button to save your changes and automatically forward the task to the next actor of the process (see chapter Complete). The form view will be closed and the worklist will be loaded.

- **Suggest Values:** When there are editable fields in this form for which a classifier assignment has been defined, this button becomes visible. A click on it will fill some fields of the currently viewed form with values gotten from the configured classifiers. See chapter Suggest values for further information.

If something has been changed in the form but not saved, an asterisk appears in the form tab beside the name. By activating the button *Save* the symbol disappears.

Hint: A form can only be edited by using the personal worklist. Opening the form view through the role worklist (or the suspension list respectively) only allows you to view the form. No changes can be made here.

3.2.16   To Document Management

To change to the document management of *@enterprise* either click the *folder icon* of a task or select a link of the group *Documents* in the *navigation area*. Further you can click on a link of an entry in your worklist (*Process*, *Task* or *Documents*) and select the tab *Documents*. The document management is explained in detail in chapter The Group Documents.

3.2.17   To Note View

To change to the note view of *@enterprise* either click the *note view icon* of a task. Further you can click on a link of an entry in your worklist (*Process*, *Task* or *Documents*) and select the tab *Notes*. Here you have the possibility to attach a note to the task, edit or delete it. Edit and delete is allowed for notes only attached in same process step (excepting private notes). This kind of notes is also used for DMS objects and is described in section Attach note.

A special case of notes are the system notes which are generated automatically by *@enterprise* (e.g. at abortion or reactivation of a process). This kind of notes are indicated by an appropriate icon and cannot be modified by the user.

3.2.18 Process history

The process history provides the detail view of one process instance. It shows all process steps a process has passed through. Additionally you can get information about who handled each task and how long it took to complete it. You will also find descriptions of the process versions.

The process history can be accessed in two ways:

1. By clicking the *Id* in the search result, the detail view of the process will be loaded.

2. Each worklist contains a link to the process history in the column *process*. After activating this link, the process history will be loaded (see chapter Structure of the worklist).

3. Click on one of a link (*Process*, *Task*, *Subject* or *Documents*) of an entry in your worklist and then select the tab *History*.

Design of the process history view

The process history will be displayed in an own tab.

Figure 3.23: **Process History**

Content of the HTML–page *History*:

- **Toolbar:** Depending upon the current process state several functions are offered here. These functions are described below in detail under *Functions of the process history*.

- **Course:** This is the real process history. It is explained in detail beneath.

Functions of the process history

In addition to the detailed information about a selected process instance, the *Process history* offers the following functions:

- **View:** By activating this function a dropdown menu with following options appears:
  - System steps: If it is activated, all *System steps* (steps that were automatically handled by the WFMS) are displayed as well.
  - Form changes: If this checkbox is activated, all changes per step will be shown which were edited by an actor. The changes of the current step are compared with the direct previous step only. Changed fields are colored to highlight differences between the form fields. By activating the appropriate form link a new window will be opened where in tab *Changes* the changes of the current step can be compared with other previous steps. Changes on subforms are highlighted in different colors:
    * green row: subform entry has been added
    * no colored row: subform entry has been changed and the changes are visible for each displayed column
    * red row: subform entry has been deleted
  - Document changes: If this checkbox is activated, all added/changed/removed DMS-objects per step will be shown. The DMS-objects are listed in alphanumeric order and are displayed as link which contains following elements:
    * Icon of object decorated with a small plus icon (= object added) or a small minus icon (= object removed). If no decoration is available, the object has been changed.
    * Name of object.
    * If object contains a metadata form, a form icon is attached to the name.

    By clicking on the icon/name of the DMS-object its content at former time is displayed in an own window. By clicking the form icon the content of the metadata form at former timer is displayed. This content shows the last version which could be seen by the user before the process step has been finished, i.e. if the user has changed the objects multiple times in the same step, the last change is displayed only. If a DMS-object was added, but not changed, the content of the add-action is displayed.
    If the DMS-object is a form or a metadata form, an additional tab *Changes* is displayed in opened window. This tab allows to compare different versions (analog to *Form changes*), but for each step the last change is listed for comparison only.

    Hint: For DMS-objects with versioning strategy *Not automatically* the add/remove actions are stored only, not the change actions of a DMS-object. In this case

clicking on the DMS-object link in history opens a new window with an appropriate hint that the desired version entry is not available.

Following actions are relevant for the process history:

* DMS-object has been added, either by creating a new one or by moving/copying an existing object.
* DMS-object has been removed, either by delete operation (recycle bin or finally) or by moving it to another process or folder of the DMS tree.
* DMS-object has been changed.

Remark: If DMS-objects are moved within the folder structure of the same process, this is no relevant change for process history.

– Table: Each process step is displayed as row in chronological order.
– Structure: Process steps are displayed as tree. Such a tree can be generated by using parfor steps for example.

Hint: The settings done in dropdown menu *View* for the visibility of system steps, form changes, document changes, as well as the tables or tree display are saved for each user globally, i.e. for all processes.

- **Position in process:** By selecting a row in table and activating this function a new dialog is opened showing the position of selected step in a process image. The dialog is similar to dialog in tab *Process* (see section Process definition).

- **Abort:** Activate this link to abort the currently displayed process. You have to confirm this function. After a process has been aborted the link *Abort process* disappears. The two links *Reactivate process* and *Archive process* will be displayed instead.

- **Reactivate:** Clicking on this link reactivates a previously aborted process (i.e. the process is active again). After a process has been reactivated the link *Reactivate process* and the link *Archive Process* disappear. The link *Abort process* will reappear instead. On the reactivation mask it is possible to activate the checkbox *Take the reactivated Tasks*. If activated, the current user gets the last tasks in his worklist instead of the last editors.

- **Archive:** Clicking on this link archives a previously aborted process (it will be finally terminated). An archived process cannot be reactivated anymore. After a process has been archived, the process history window will be closed automatically.

- **Refresh:** This function allows to refresh the process history.

- **PDF:** This function allows users to generate a PDF document containing a tabular representation of the process history. The content of the history, including details and changes, is customized based on the user's settings.

- **Follow the process:** Definition for process or its tasks that a notification email should be sent, if the process or tasks are finished or aborted. More information is available in section Follow the process.

- **Supplement:** Clicking on this link starts a supplement-task for the running process. This function is available only, if a supplement–task is defined for this process and the current user has the necessary rights (see *System Administration/Workflow Modelling/Tasks/Supplement of forms*). This is useful, when a process must be processed further, but supplements will be added at a later date.

Course

The course lists all steps the process passed through so far. The current entry (from which the history has been opened) is shown in bold.

Figure 3.24: **Course**

Between the toolbar and the table following elements are available:

- **Super process:** The link *Super process* only appears in the process history of a sub process. Clicking on this link transfers you to the super process.

- **Process relation:** This area contains all created process relations with function *Add process relation* (see section Add process relation). It is also possible to remove the relation with the appropriate icon beside the link, if the current user has the permissions for both processes to perform this action (right *Edit process instances* is needed).

Each line represents one single step. The columns contain the following information:

- **Index (#):** Process history shows an unique row number for each step. The number does not change and can be used to reference certain entries.

- **Step:** This column shows the name of the process step. If a process step is not finished yet, an appropriate icon is displayed depending on the step type. For tasks the function *Reassign* is offered (see figure 3.19). In case of wait steps a function is offered which opens a dialog to change wait time or finish the step immediately. In case of batch or webservice steps a dialog can be opened where the properties of the batch step can be adapted. For sync-steps the function *Finish step* is offered which allows to finish this step with a comment.

- **Agent:** This column shows the name of the agent who handled this step.

- **Org.-Unit:** This column shows the organizational unit in which the step has been handled.

- **Forms:** Here you find all forms (if available) that have been modified in the corresponding step. The form icon is a link to the version of the form. It can only be viewed but not edited.

  Hint: The upper part of the window (see chapter Design of the process history view) always shows the current version of a form.

- **Started:** This column shows the point in time (date and time) when this step was started.

- **Taken:** This column shows the point in time (date and time) when this step was taken.

- **Finished:** Here the point in time (date and time) of the completion of the step is displayed. If this field is empty, the step has not been completed yet.

- **Additional info:** This column contains additional information about a step (e.g. aborted, suspended, comment).

Special cases:

1. **Version:** If a version of a process step has been created (see chapter Make version), the description of this version will be displayed in an additional row below the according task.

2. **Sub process:** If the displayed process contains one or more sub–processes, a link in the upper right corner of the *course* transfers you to the process history of the sub–process.

3.2.19 Process definition

The tab *Process* is the fifth tab, which can be reached by one of the link of an entry in the worklist (*Process*, *Task* or *Documents*).

This tab displays additional information about the process and position in the process (see figure 3.25):

Content of the HTML–page *Process*:

- **Name:** The name of the process definition.

- **Id:** The id of the process definition.

- **Version:** Each process instance has a version number, which can be found here.

- **Description:** The description for the process.

- **Process image:** A graphical representation of the process with the actual task being highlighted is displayed here. All relevant and active steps (= steps where user is not the current agent) will be marked by a dashed frame - the 'current' step is marked with a solid line (green=active step, grey=inactive step). By now relevant steps are: Task, Subprocess, Batch, WebService-Invoke, Webservice-Receive, Sync- and Wait-event.
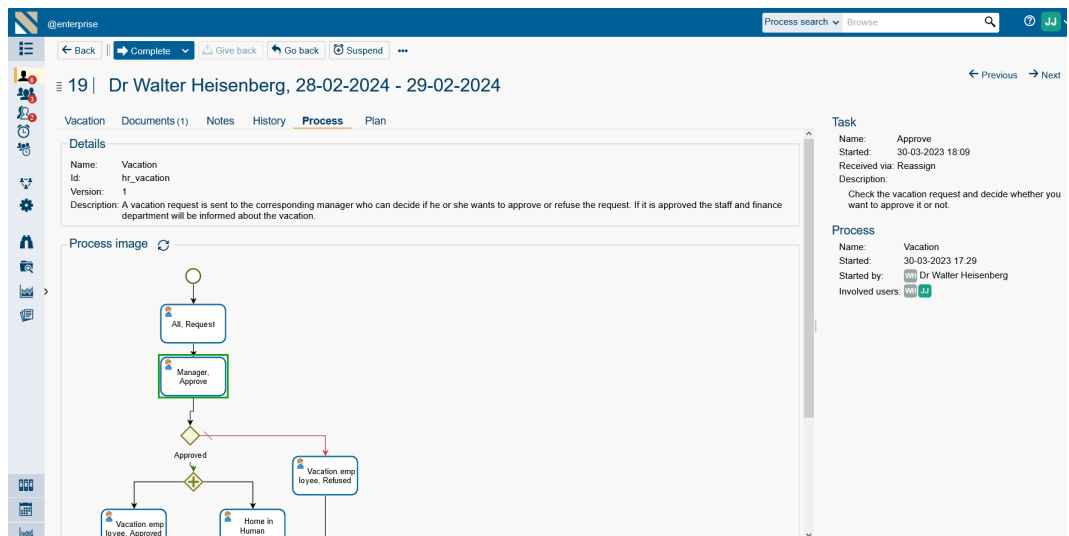
Figure 3.25: **Process definition**

3.2.20 Information area of a process

The information area is displayed at the right side beside the detail tabs (forms, documents, notes, history, etc.). This area contains information about the current task and the process in general. Above this area a navigation is available which allows to jump to the next/previous worklist entry.

3.2.21 Emails

The tab *Emails* offers the possibility to handle email conversation of the process instance. This tab is not displayed by default and must be added for each process definition (see System Administration Guide - section Processes). Incoming emails are

assigned to existing processes (identified via mailbox and process instance id) or a new process instance will be created with a new id. The email tool has the advantage to display nested multipart-messages correctly and to store transmitted attachments in DMS with help of the clipboard-function. The right *Create Objects* (for DMS objects) must be assigned to all agents who want to use the email client. Emails are stored in DMS (of appropriate process) in folder *Emails*. Emails also could be uploaded manually by using the DMS function *New* (see section New document).

The tab *Emails* contains following functionality:

- **Compose:** A compose window will be opened, where a new email can be created. The field *Subject* is already filled with the subject of the corresponding process(form).

- **Reply:** This function is available only, if an email has been selected before. The compose window will be opened and the fields *To* and *Subject* will be filled automatically with the data of the selected email. The text of the selected email is marked as replied text.

- **Reply All:** Analog to *Reply*, but all email-addresses of the selected email will be filled in the particular fields. The recipient of the email being replied to will not be added to the recipient list.

- **Forward:** This function is available only, when an email has been selected before. The compose window will be opened and the field *Subject* will be filled automatically with the data of the selected email. The text of the selected email is displayed as forwarded text.

- **Edit as new:** This function is available only, when an email has been selected before. The compose window will be opened and the fields *To* and *Subject* will be filled automatically with the data of the selected email. The text of the selected email is displayed as new text.

- **Edit draft:** This function allows to edit stored email drafts. After selecting a table entry and activating this function the Compose window will be opened and the email data of the draft are pre-filled automatically. The text "Draft" is displayed in the title.

- **Delete draft:** If a draft is selected in table and this function is executed, the selected draft will be deleted and the table will be refreshed automatically.

- **Refresh:** This function allows to refresh the table.

- **PDF:** This function allows you to create a PDF document from one or multiple emails. To create a PDF from a single email, select the desired email from the list and use this function. You can also access this function directly from the detailed view of an email. If you want to create PDFs for multiple emails, select the desired emails in the list and execute the function.

The email-list contains all incoming and outgoing emails symbolized by following icons:

- Incoming email

- Outgoing email

- Email in mail queue

- Draft

By activating a row the details of the selected email are displayed (see figure 3.26).
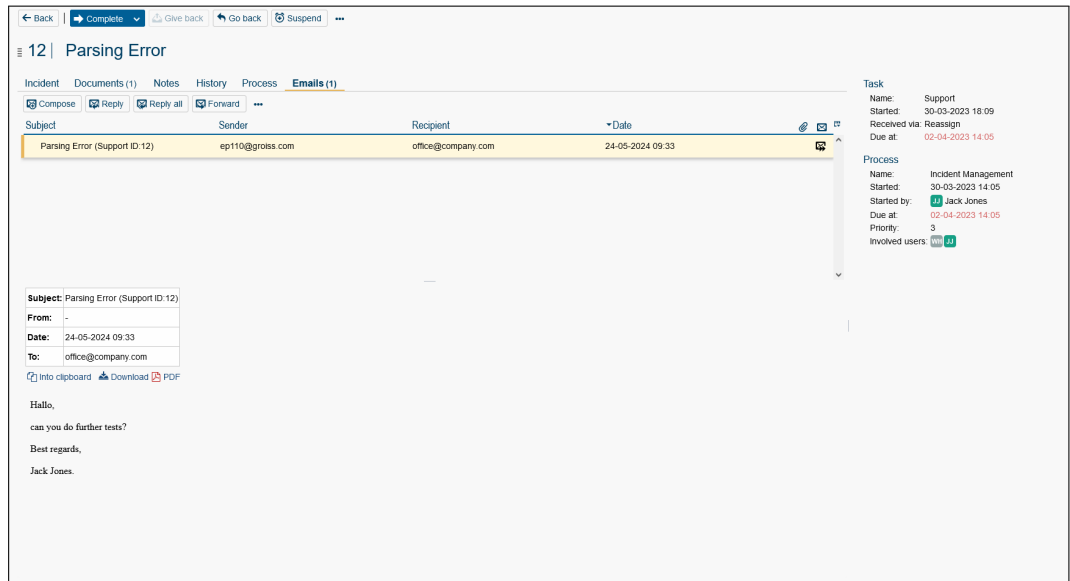
Figure 3.26: **Email list with detail view**
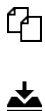
The function *Into clipboard* allows to copy the whole multipart-message into clipboard which can be pasted into DMS. This function is also available for each attachment. The function *Download* allows to save the multipart-message on file system as *eml* file which can be opened by any mail tool.

The *Send an email*

The compose dialog is called by every *Email function* and contains following elements:

- **To**, **CC** and **BCC**: Fields for email-addresses; separated by comma.

- **Subject:** Prefilled subject with subject pattern defined in mailbox (see System Administration Guide, but also free text.

- **Text:** Free text, but can be filled with text of selected email.

- **Documents:** This table contains all documents which are uploaded or inserted from clipboard. All these documents are attached to the email. An alternative way is to use drag & drop to add documents from file system.

- **Upload:** Activating this button opens a new dialog where you are able to select files on file system. These files will be attached to the *Compose* dialog when activating the button *Ok* and displayed finally in table *Documents*.

- **Insert from clipboard:** If DMS objects have been copied, you can add the objects as attachment with this function. The objects are displayed in table *Documents*.

- **Remove:** This button allows to remove documents from dialog. For this purpose select an entry and activate this button.

- **Send:** The email will be sent to the entered recipients.

- **Save as draft:** This function allows to save the unsent email as draft. After executing this button the text "Draft" will be displayed in the title.

- **Cancel:** Closes the dialog without sending an email.

Figure 3.27: *Send an email* dialog

3.2.22 Plan

The tab *Plan* is part of the time management component which is used to define process plans to have realistic deadlines for processes and process steps. For a process definition several process plans can be defined depending on the plan type. If process plans were defined for a process by the administrator, the tab *Plan* is displayed in the detail area of a process (see figure 3.28). If a default process plan has been defined, the table already contains the calculated values of this default plan and must not be triggered manually. The tab contains a *Toolbar* and *Table* which are explained in following sub-sections:

Figure 3.28: **Tab *Plan***

Toolbar

The toolbar has 2 functions to adapt process plans which is allowed for users with right *Edit plan* or *Edit process instances* only:

- **Save:** By activating this toolbar function the changed values of column *Due date* are stored for the current plan.

- **Change plan...:** This toolbar function opens a new dialog where a new plan can be created (if no one exists) or an existing one can be changed. The dialog contains following attributes:

    - Process plan: Selection of a predefined process plan. Depending on if process plan is calculated from beginning or process end (= process due date), the following fields have a different meaning for plan calculation.

    - Time: Either the start time for process plan calculation can be defined here (in case of process plan which uses the calculation model from beginning of

the process) or the time where process should end (in case of process plan which uses calculation model from the end of the process).

– Interval: Depending on the selected process plan (calculated from beginning or process end) a time will be calculated due to the given interval value. The calculated value is either the time where process should begin or end. If a process plan is selected with calculation model from process end, a process due date must be set before! If the value is an integer, the unit s for seconds will be added. It is also possible to define the unit(s) directly like in following example: 3d 4h 30m (= 3 days, 4 hours and 30 minutes). The duration is calculated due to worktime settings under *Administration/Configuration/Calendar*!

– Set as process due date: This checkbox is available only, if a process plan has been selected with calculation model from process end. If checkox is activated and the dialog is closed with button *Ok*, the selected or calculated time due to defined interval will be set as process due date.

Table

The table shows the calculated values due to the selected plan. If no plan has been generated yet (e.g. if no default process plan is defined), you have to execute function *Change plan...* first (see section Toolbar). Following information is displayed in table:

• **Position:** The position of the process step due to y-axis in process graph.

• **Step:** The name of the process step (= task name).

• **Milestone:** The name of the milestone which is used for this process step. Milestones have a fix defined due date; either a fix date or a given interval from the time where the process was started or the (calculated) end of a process.

• **Duration:** The duration which is defined in process plan for this step. If the value is red, it is not possible to stay within the calculated due date (see figure 3.28 - the difference between start date and the due date is 1 hour only, but in plan 2 hours are needed for this step).

• **Effort:** The effective effort which is defined in process plan for this step.

• **Start date:** The effective start date or the calculated one due to given process plan for this step.

• **Due date:** The calculated due date for this process step due to given process plan in consideration of worktime start/end and worktime per day definition in administration. Example: start of worktime is 08:00, end of worktime is 17:00 and worktime per day has value 8.5. The difference between start and end is 9 hours, but the worktime per day is 8.5 hours only (0.5h is the lunch break for example). The calculation in plan tab considers this situation.

The due date can be changed by users with right *Edit plan* or *Edit process instances* only. If due dates have been changed, it is necessary to activate toolbar function *Save* to persist the changes.

- **Status:** Shows the state of a process step by displaying different icons:

    - green: The process step is active at the moment.
    - gray: The process step is finished already.
    - blue: The process step is not started yet.
    - red: The process step is delayed, i.e. the due date has passed already.

- **Slack:** The difference between current due date and the due date due to possible latest plan, if process due date exists (otherwise this column remains empty), i.e. to put it simple, if the difference of worktime start/end is equal to defined worktime per day: latest endtime - due date = slack

- **Latest end time:** Due date due to possible latest plan, if process due date exists (otherwise this column remains empty).

3.2.23 Task functions

Each single task in your worklist has defined certain functions, called *task functions*. Task functions are e.g. adding a process note or setting the due date of the task.

You can view the defined task functions by clicking the *function icon* next to the column *Priority* in your worklist. A context menu will appear which lists all available task functions.

Hint: Task functions are defined in the system administration and can therefore vary in kind and number. *@enterprise* offers some task functions by default. These task functions will be shown in the appendix (see chapter Task Functions in *@enterprise*).

3.2.24 Suggest values

This function appears in a process form when there is an editable field for which a classifier assignment has been configured. A click on it will suggest values for certain fields by inserting the values and marking them. When there exists an explanation for the given value, an info button will be shown next to it.
Figure 3.29 shows the explanation component of a decision tree classifier.
A click on the *Similar processes* button opens a reporting view which shows samples of process instances which conform to the given rules.
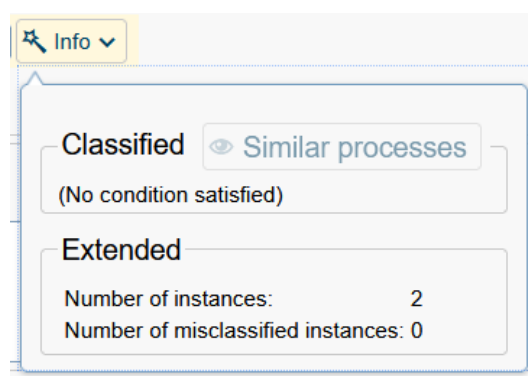
Figure 3.29: Info on why a value has been suggested

4. The Group Documents

The group *Documents* supplies you with all functions of the document management system (**DMS**) of *@enterprise*.

The *document management* of *@enterprise* supports the handling of documents that have been attached to a task and a process respectively. You can apply various functions (from the toolbar) like *Delete Document* to every single document and thus handle them easily.

The document management basically can be accessed in two ways:

1. When you successfully attach a new document to a task in your worklist (function *Add Document* - see chapter New document), you will be transferred to the document management automatically.

2. A document symbol in the column *Documents* of the worklist indicates that a document has been attached to this task. Clicking this icon will transfer you to the document management as well.

The document management can be recognized by the title of the table in the *work area*. Since documents can be added to tasks, the title of the table in the document management refers to the process (*Content of process folder XX*).

4.1   Concepts in Connection with the DMS

Document Management System (DMS)   That component of *@enterprise* which is responsible for the administration of *DMS–Objects* – also independent of processes.

DMS–Object   a umbrella term for all kind of objects which can be handled with the DMS of *@enterprise* (e.g. documents, forms, notes, etc.).

Form   stands for a HTML-Form.

Document   stands for any document (doc, xls, txt, pdf, ...) which can be described by metadata with the help of a HTML-Form.

Note stands for a special kind of form (contains only the fields *Subject, Content*) which can be used by the user to create notes.

Folder can be used to group DMS–Objects (analogous to folders of the file system).

Web link can be used to define a link onto a URL.

Process form stands for a form attached to a process.

DMS–Object–Table stands for the content of the work area in the DMS of *@enterprise*, after a Folder has been selected in the navigation area. This table contains all DMS–Objects stored within the DMS of *@enterprise*.

Recycle bin is a temporary storage location for deleted DMS–objects.

Recently used documents is a storage location for 20 recently used DMS–objects.

4.2 Components of the Document Management

The document management in *@enterprise* contains multiple elements. The main table is the *DMS–Object–Table*. It lists all documents that have been attached to a task or process respectively. The *Detail View* shows additional information about a document. Multiple versions can be created for each document. The *Version Table* lists the various versions of a document.

4.2.1 DMS–Object–Table
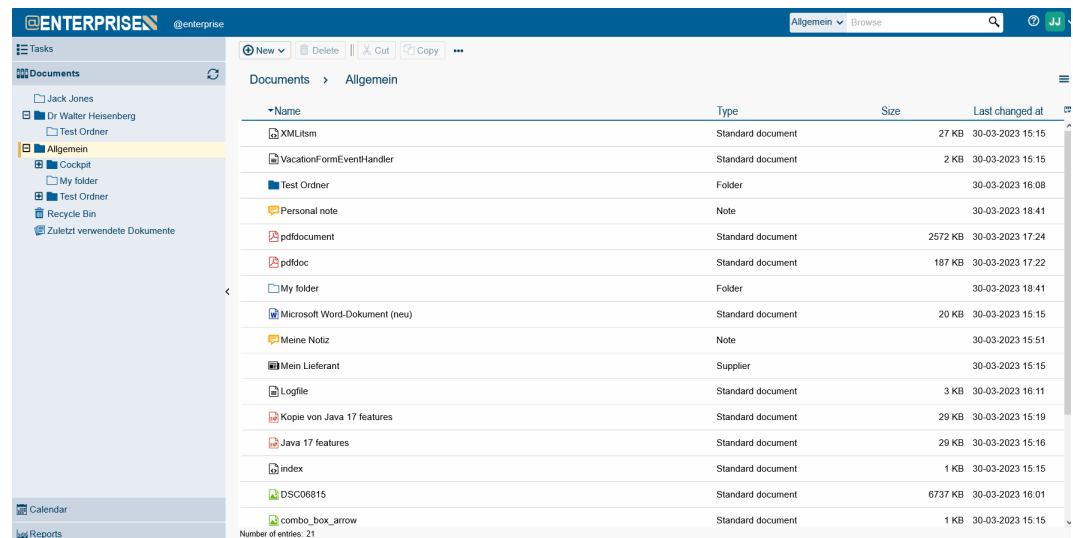
The document management of *@enterprise* appears in your work area as the DMS–Object–Table (see figure 4.1). The rows of this table represent the documents that have been attached to a process.

Columns of the DMS–Object–Table:

- **Additional data:** This icon is a link to the a form which holds additional data describing the corresponding document. It will be opened in a new browser window. Not all documents will have such a corresponding form. In this column it is also possible to show details of the current DMS object and get access to notes, permissions and versions by activating the small triangle.

- **Name:** This column contains the name of the document in *@enterprise*. The name is a link to the function *Display Document*. Click on this name to view the document in your work area or to save it (see chapter Display DMS–Object).

- **Type:** This column lists the name of the document type.

Figure 4.1: **The Group *Documents***

- **Size:** This column shows the size of the document in KB (kilo bytes).

- **Last changed at:** This column contains the point in time of the last modification of this document.

- **Created by:** This column shows the agent who created this DMS–object.

- **Last changed by:** This column displays the agent who changed this DMS–object as last.

- **Locked by:** This column shows the *lock icon* if the document is locked. The name of the user who locked the document is displayed as well.

- **Version:** This column contains the version icon, which is a link to the *Version table* of a document (function *To Version Table*). The icon is only displayed if versions of the document exist (see chapter Versions).

- **To Note View:** This column contains the *note view icon*, which is a link to the table of attached notes. The icon is displayed only if at least one note has been attached to the task or process respectively.

In addition to the known table functions (see section Column picker, Sorting and Filter) the DMS–Object–Table contains following special functions:

- **DMS history:** By navigating through the DMS folder a history is created analog to Browser history. The functions *Back to...* and *Forward to...* allows to navigate through the history or it is possible to open the dropdown menu and navigate directly to a history item. This history is cleaned, if e.g. the Browser window will be refreshed completely, i.e. the history is not stored in the database.

- **Breadcrumb trail:** This area displays the path to the current shown DMS folder. By activating an entry in the trail a superordinate folder will be displayed or by opening the dropdown menu an other folder of the same folder-level can be selected.
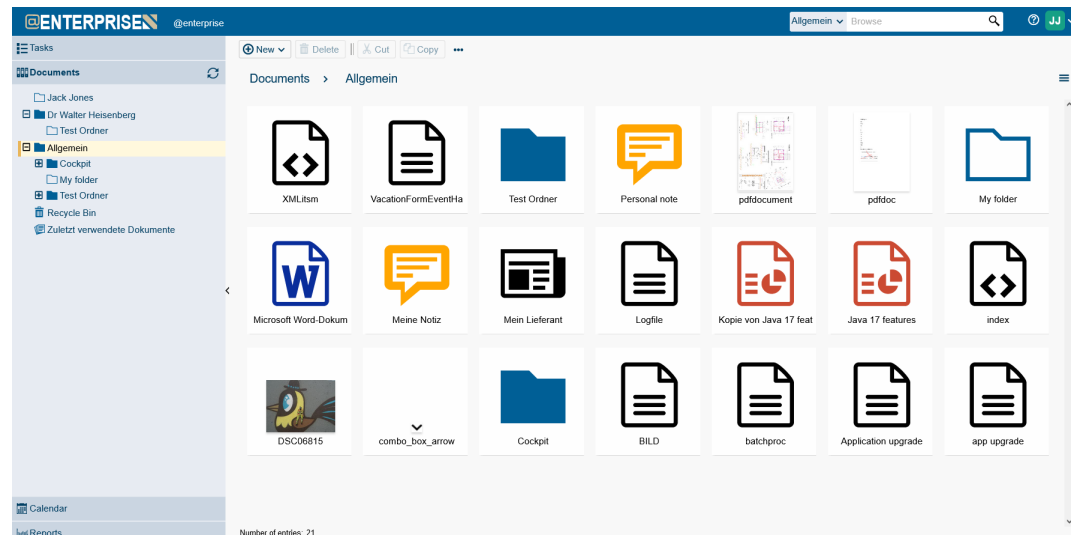
Figure 4.2: *Thumbnails*

- **Multiple views:** The DMS-Object-Table can be displayed in multiple views. These including the classic table-view, as well as a modern tile-view. You can switch the views in the menu under the subitem "View". To give a better overview, you can display the files in both views with so called "thumbnails". These are little preview pictures, which are generated for the following types of documents:

    - Open- und MS-Office Documents (.odt, odg, .odp, .ods) (.docx, .dotx, .xlsx, .pptx)
    - PDFs (.pdf)
    - Text files (.txt, .asc, .csv, .rtf, rtx)
    - Images (.png, .PNG, .jpe, .jpeg, .jpg, .JPG, .bmp, .gif)

    To display thumbnails, select a view which includes small or big symbols (see figure 4.2).

- **Grouping:** The DMS–Objects can be grouped together. To group the DMS-Object choose one of the parameters in the submenu "Grouping". The groups can be expanded or closed.

- **Sorting:** You can sort the DMS–Objects in a way to choose one of the parameters in the submenu "Sorting".

The document management can be accessed through your personal worklist as well as via the role–worklist or the suspension list. A corresponding button will be displayed

below the document list (e.g. *Back to Worklist*). Use this button to go back to the personal worklist, role–worklist or the suspension list respectively.
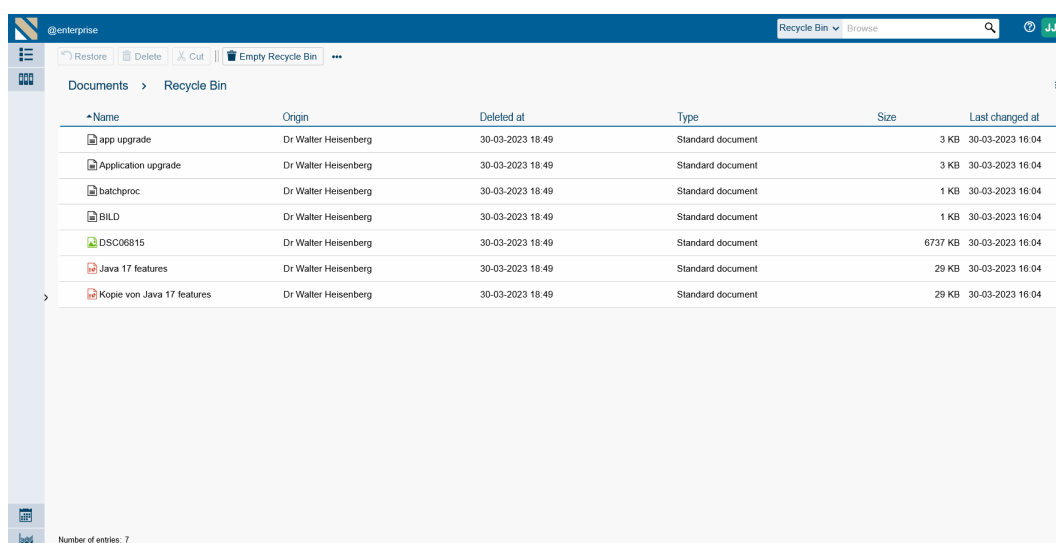
Moving of document between folders can be done using drag & drop. More than one document can be selected by using the SHIFT and CTRL keys as usual. Drag & drop with applications outside the browser window is supported in the following way:

- With dragging documents into the DMS area you can add and replace documents, see New document.

- Dragging a document, for example to the desktop, is possible by holding both SHIFT- and ALT-key while dragging. This is currently supported only in Chrome and the chromium-based Edge browser.

4.2.2 Recycle Bin

The *@enterprise* recycle bin is a temporary storage location for deleted DMS–objects which is displayed per user and is active by default (see figure 4.3). DMS–objects are moved to recycle bin by selecting them in DMS–Object–Table and activating toolbar function *Delete* or pressing *Del* on keyboard. If the DMS–object should be deleted irrevocably, hold the SHIFT-key in addition to delete function.

Figure 4.3: **Recycle Bin**

Information of recycle bin:

- **Name:** This column contains the name of the document in *@enterprise*.

- **Origin:** This column contains the information of the origin storage location of the DMS–object (DMS–folder, process instance).

- **Deleted at:** The column displays the date when DMS–object has been deleted/moved to recycle bin.

- **Type:** This column lists the name of the document type.

- **Size:** This column shows the size of the document in KB (kilo bytes).

- **Last changed at:** This column contains the point in time of the last modification of this document.

- **Created by:** This column shows the agent who created this DMS–object.

- **Last changed by:** This column displays the agent who changed this DMS–object as last.

The recycle bin offers following toolbar functions:

- **Restore:** This function allows to restore selected DMS–objects to origin storage place, i.e. the DMS–objects are moved from recycle bin to origin storage place. If the origin storage place is not available anymore, an appropriate error will be displayed. In this case you have to use the recycle bin function *Cut*.

- **Delete:** This function allows to delete DMS–objects irrevocably, i.e. the DMS–objects are not restorable.

- **Cut:** This function allows to restore the selected DMS–objects from recycle bin to an arbitrary storage place. For this purpose select the DMS–objects in recycle bin, activate toolbar function *Cut*, move to an arbitrary DMS–folder and activate the toolbar function *Insert*.

- **Empty recycle bin:** With help of this function all DMS–objects of the recycle bin are deleted, i.e. the DMS–objects are not restorable.

- **Folder properties:** This function opens a dialog where

  - the name of the recycle bin can be changed,
  - keywords can be added which are used e.g. by document search,
  - an organizational unit can be set and
  - the checkbox *Show elements of deleted folders* can be activated - if selected, the elements of a deleted folder will be displayed in recycle bin (in italic font).

  By activating the buttons *Save* or *Save and close* the changes of this dialog are stored.

4.2.3 Recently used documents
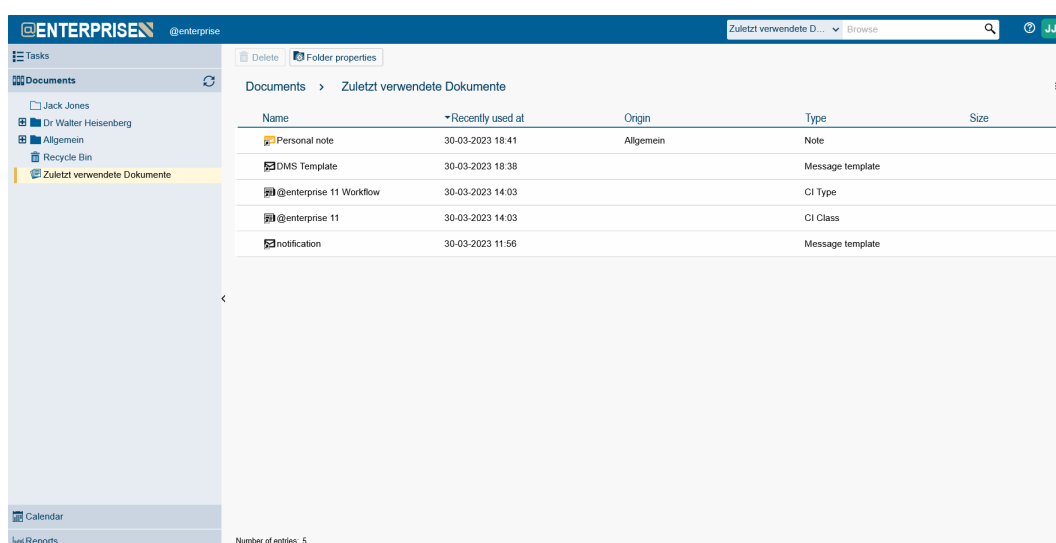
The *Recently used documents* folder is a storage location for 20 associated DMS–objects, which is displayed per user and is activated by default(see figure 4.4). If the folder already contains 20 entries, the oldest entry is deleted when a new one is inserted. Although the links of the documents are shown, the informations those links contain are from the original document.

Information of recently used documents:

- **Name:** This column contains the name of the document.

- **Recently used at:** This column contains the point in time when this document was used the last time (modified, seen etc).

- **Origin:** This column contains the information of the origin storage location of the DMS–object (DMS–folder, process instance).

- **Last changed at:** This column contains the point in time of the last modification of this document.

- **Type:** This column lists the name of the document type.

- **Size:** This column shows the size of the document in KB (kilo bytes).

- **Created by:** This column shows the agent who created this DMS–object.

- **Last changed by:** This column displays the agent who changed this DMS–object as last.

Figure 4.4: **Recently used documents**

The folder offers following toolbar functions:

- **Delete:** This function allows to delete entries from the list of recently used documents. This will NOT delete the referenced DMS–objects themselves, only the references to those DMS–objects will be removed from this list.

- **Folder properties:** This function opens a dialog where

  – the name of the folder can be changed,

    – keywords can be added which are used e.g. by document search,

    – an organizational unit can be set

By activating the buttons *Save* or *Save and close* the changes of this dialog are stored.

4.3 Functions of the Document Management

The document management offers a variety of functions to handle the documents of processes. The functions can be found in the toolbar (see chapter The Toolbar) and in the DMS–Object–Table (see chapter DMS–Object–Table).

To execute such a function, one or more documents have to be selected. Each document in the DMS–Object–Table must have different names and extensions.

The following functions can be found in the DMS–Object–Table:

- Display DMS–Object

- Display type form

- Detail view

- Version table

- Notes table

4.3.1 Defining Templates

In the DMS of *@enterprise* it is possible to define templates for folders, documents and forms. Only a system administrator can accomplish this function. So, if you need some templates contact the system administrator, please.

The system administrator has to log in as user *sysadm* and open the folder
Documents → sysadm → templates
. Every folder, document or form which has been inserted into this folder serves as a template for the corresponding objects of the DMS.

If a user adds a new folder, form or document of the same type he can tick the checkbox *Template*. Therefore his new object is based on the corresponding template which resides in the folder *Template*, i.e. if there are some fields already filled in in the template object, this fields are also filled in in his new object.

4.3.2 New

This function allows to create one of following DMS–objects:

- Folder

- Documents

- Forms

- Notes

- Web links

@enterprise offers standard types of folders, documents and forms. The administrator is able to create own types of folders, documents and forms which are displayed in the list. In following sections the creation of standard types is described in detail.

New folder

The function allows you to create new folders within the DMS.

After activating this function and selecting the DMS-element *Folder*, the dialog *Folder* will be displayed in your work area (see figure 4.5).
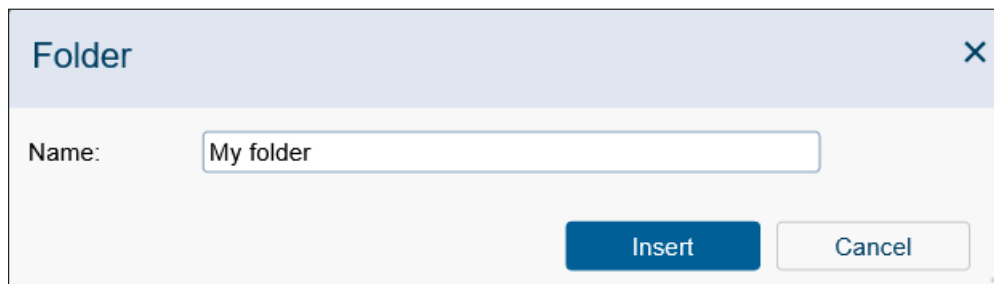
Figure 4.5: **Folder**

Content of the dialog *Add folder*:

- **Name:** Enter the name for the new folder into this field. The name must not contain one of the following special characters:

  / \ : * ? < > "

- **Show form:** If this checkbox is activated, a meta data form of the folder will be displayed after activating the button *Ok*. This checkbox is not available for standard *@enterprise* folder.

- **Insert:** Clicking this button confirms your entries and the new folder will be inserted as subfolder of the currently selected folder. If checkbox *Show form* is not activated (or not available), the DMS–Object–Table will be displayed in your work area.

- **Cancel:** Clicking this button leads in closing the dialog without creating a folder. The DMS–Object–Table will be displayed in your work area.

Example: Your personal dms folder is displayed.

1. Click the *New* icon in the toolbar and select entry *Folder*. The dialog shown in figure 4.5 will appear in your work area.

2. Enter the name for the new folder into the field *Name*.

3. Click the *Insert* button. The specified folder will be created and appear in the DMS as a subfolder of your personal folder.

Hint: If any field of the HTML–form has not been filled in, a reminder will be displayed after clicking the *OK* button.

New document

The function allows you to add new documents to the currently selected folder of your DMS.

After activating this function and selecting the DMS-element *Standard document*, the dialog *Standard document* will be displayed in your work area (see figure 4.6).

Figure 4.6: **Standard document**

@enterprise offers the possibility to add documents by using Drag & Drop. If your Browser supports this functionality, select one or more files on file system and move them to the Browser window in DMS–Object–Table. A new dialog appears where you are able to directly rename the file name. You can select the (document) type depending on folder restrictions for each file and the upload action, if the document is already available in DMS folder. After selecting the type (and action) the button *Upload* copies the files from file system to DMS folder.

During uploading in information area (see section *@enterprise* User Interface) a symbol appears which contains information about the upload progress in percent.

Hint: If a document with same name already exists, it is possible to replace the document.

Figure 4.7: **Drag & Drop action**

Content of the dialog *Standard document*:

- **File:** Enter the absolute file name of the document you want to attach in this text field. Alternatively you can use the button *Browse...* to fill it in.

- **Browse:** Use this button to display the dialog window *File Upload*, which helps you selecting the document you want to attach. The WFMS puts the absolute name of the selected file into the form field *File*.

- **Name:** Enter the name of the document, which the document should have within *@enterprise*.

- **Extension:** Enter the file extension of the attached document (e.g. *html* or *doc*).

- **Template:** If you tick this checkbox, the new document is based on the template which has been defined for the selected type of the new document by the system administrator.

- **Show form:** If this checkbox is activated, a meta data form of the document will be displayed after activating the button *Ok*. This checkbox is not available for standard documents.

- **Insert:** Clicking this button confirms your entries and the new document will be inserted in the currently selected folder. If checkbox *Show form* is not activated (or not available), the DMS–Object–Table will be displayed in your work area.

- **Cancel:** Clicking this button leads in closing the dialog without creating a folder. The DMS–Object–Table will be displayed in your work area.

Example: Your personal dms folder is displayed.

1. Click the *New* icon in the toolbar and select *Standard document*. The dialog shown in figure 4.6 will appear in your *work area*.

2. Enter the absolute name of the file to be loaded in the field *File*.

3. Fill in the fields *Name* and *Extension*. The example uses the original file name. The field *Name* contains *example* and the field *extension* contains *txt*.

4. Click the *Insert* button. The specified file will be loaded into the WFMS and appear in the DMS.

Hints:

- **Error message:** If any field of the HTML–form has not been filled in, a reminder will be displayed after clicking the *Ok* button.

Email: A special type of uploading documents is the form type *Email*. The attributes *Recipient*, *Sender* and *Subject* are extracted of the email (eml- or msg-file) and stored in email form. After successful upload the details of the email (as known of an email client) could be opened by activate the appropriate DMS entry.
@enterprise supports mails created by *Microsoft Outlook* (msg-file). During the upload the file is converted for the *@enterprise* email component (see section Emails). Outlook files contains possibly a RTF-body (Rich Text Format) which are converted by a OpenOffice converter. The path to an OpenOffice installation must be set by the administrator under *Configuration/DMS/OpenOffice home*. If no path is entered, the PLAIN-body is extracted only which is purely textual.

New form

The function allows you to create new forms within the DMS.

After activating this function and selecting the DMS-element *Form*, a dialog with the selected form type will be opened. If templates have been created for this kind of form, a dialog appears where the form template can be selected. By activating the checkbox *Show form* and the button *Insert* the form will be displayed before, otherwise the form will be created immediately.

Depending on the elements of the form fill in the fields and activate the button *Save and close* which inserts the form and shows the DMS–Object–Table again. The button *Cancel* closes the dialog and no form is created.

Example: Your personal DMS folder is displayed.

1. Click the icon *New* in the toolbar and select any form. A dialog with the selected form type will be displayed.

2. You can fill in the form fields and confirm your entries by clicking the button *Save and close*. Now the form will appear in your personal DMS folder.
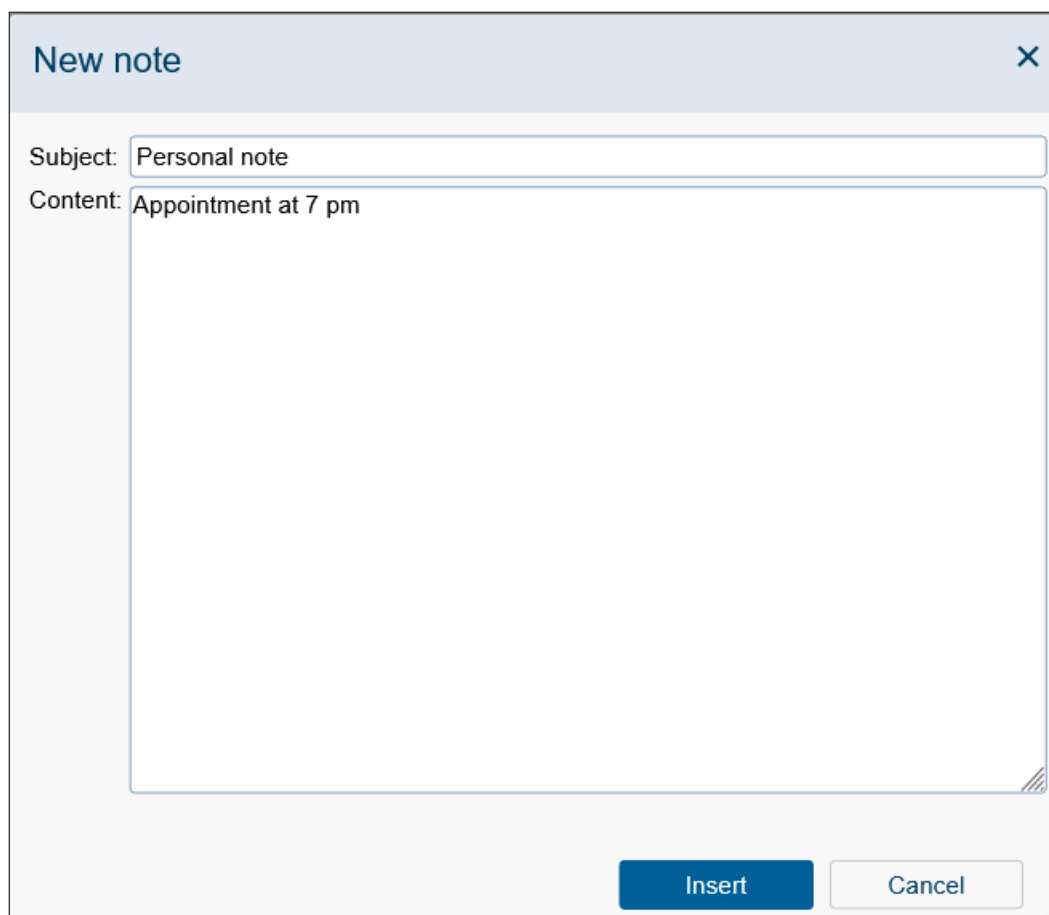
News: A special form type is *News* which allows to send information to other users (e.g. available in dashboard or displayed at login). For this purpose in folder *Common*/*News* instances of form type *News* must be created. If the checkbox *Show message on login* is activated, the content of this news object will be displayed one time for each user at login.

New note

The function allows you to create new notes within the DMS.

After activating this function and selecting the DMS-element *Note*, the dialog *Note* will be displayed in your work area (see figure 4.8).

Figure 4.8: **Note**

Content of the dialog *Note*:

- **Subject:** Enter the subject which should be assigned to the note. This subject is displayed in the column *Name* of the DMS–Object–Table.

- **Content:** Enter the content of the note.

- **Insert:** Clicking this button confirms your entries and the new note is added to the DMS–Object–Table which is displayed in your work area after the function has been executed.

- **Cancel:** Clicking this button leads in closing the dialog without creating a note. The DMS–Object–Table will be displayed in your work area.

Example: Your personal DMS folder is displayed.

1. Click the icon *New* in the toolbar and select the entry *Note*. The dialog shown in figure 4.8 will appear in your work area.

2. Enter a content for the new note.

3. Click the *Insert* button. The new note is added to the DMS–Object–Table which is displayed in your work area

New web link

The function allows you to create new web links within the DMS.

After activating this function and selecting the DMS-element *Web link*, the dialog *Web link* will be displayed in your work area (see figure 4.9).
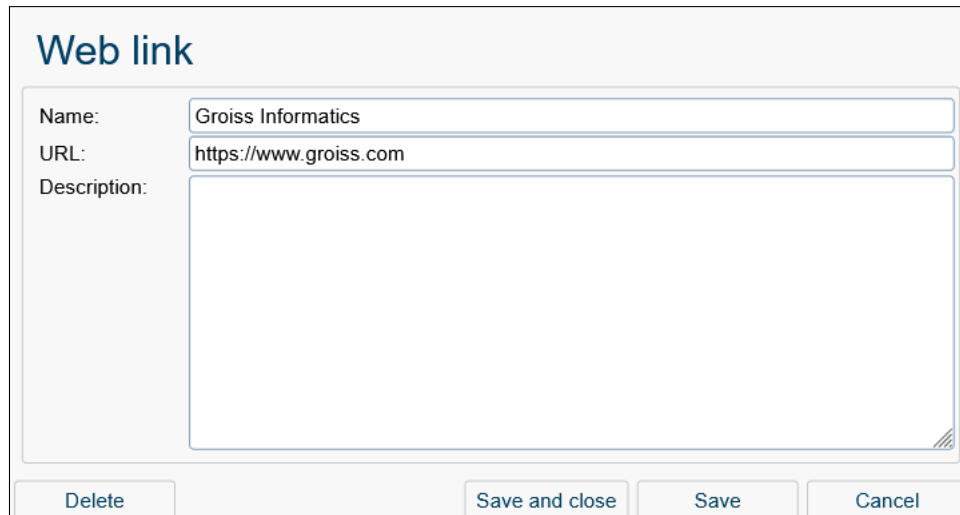
Figure 4.9: **Web link**

Content of the dialog *Web link*:

- **Name:** Enter here the name for the web link. It will be displayed in the column *Name* of the DMS–Object–Table.

- **URL:** The URL pointing to the web link.

- **Description:** Free text.

- **Delete:** This button is active for existing web link objects only and allows to delete the current object.

- **Save and close:** Clicking this button confirms your entries and the new web link is added to the DMS–Object–Table which is displayed in your work area after the function has been executed.

- **Save:** Clicking this button confirms your entries and the new web link is added to the DMS–Object–Table, but the form remains open.

- **Cancel:** Clicking this button leads in closing the dialog without creating a web link. The DMS–Object–Table will be displayed in your work area.

Example Your personal DMS folder is displayed.

1. Click the icon *New* in the toolbar and select entry *Web link*. The dialog shown in figure 4.9 will appear in your work area.

2. Enter a name for the new web link (e.g. FREQUENTIS AG).

3. Enter a URL for the new note (e.g. https://www.frequentis.com).

4. Click the *Save and close* button. The new web link is added to the DMS–Object–Table which is displayed in your work area.

4.3.3 Delete

🗑 This function can be activated by clicking on the icon *Delete* in the toolbar. At least one item of the DMS–Object–Table has to be selected prior to activating this function.

The function *Delete* can be used to delete selected items of the DMS–Object–Table. Activating the function *Delete* shows a dialog window that asks the user to confirm the request.

Confirming this dialog window by using the *OK* button moves the selected item to the recycle bin by default (see section Recycle Bin). The function can be aborted using the *Cancel* button in this dialog window.

After the execution of the function, the DMS–Object–Table will be displayed. If documents have been deleted, they do not appear in the DMS–Object–Table anymore.

Hints:

- One or more items can be deleted at once.

- If an item is not moved to recycle bin, i.e. deleted irrevocably (e.g. by pressing the SHIFT-key during deleting), the deletion of an item cannot be undone.

- Deleting an item also removes all versions of that item.

Example

Precondition: The DMS–Object–Table is displayed.

1. Mark the document you want to delete.

2. Select the function *Delete* in the toolbar. A dialog window will ask you to confirm the deletion.

3. Activate the button *OK*. The selected document will be deleted.

4.3.4   Cut

This function can be activated by clicking on the icon *Cut* in the toolbar. At least one item of the DMS has to be selected prior to activating this function.

The function *Cut* can be used to move entries of a DMS folder into the clipboard of *@enterprise*. Then you can use the function *Paste* to insert the entry of the clipboard into another DMS folder.

Hints:

- The entries inserted into the clipboard via the function *Cut* remain there until other entries are put into the clipboard via the functions *Cut, Copy* or *Link*, or until you flush the content of the clipboard with the activation of the function *Empty clipboard* which can be found in the clipboard.

- If the function *Cut* is not directly followed by the function *Paste* the entry which has been copied to the clipboard remains in the folder where the function *Cut* has been applied on it.

Example

Precondition: The DMS–Object–Table is displayed. It contains at least one document in your personal folder.

1. Mark the document you want to cut of your personal folder.

2. Activate the icon *Cut* from the toolbar. The document will be copied to the clipboard of *@enterprise*.

3. Open the folder *Common* of your DMS.

4. Activate the icon *Paste* in the toolbar. The document is removed from your personal folder and inserted into the folder *Common* of the DMS. The clipboard is empty.

4.3.5 Copy

This function can be activated by clicking on the icon *Copy* in the toolbar. At least one item of the DMS has to be selected prior to activating this function.

The function *Copy* can be used to copy entries of a DMS folder into the clipboard of *@enterprise*. Then you can use the function *Paste* to copy the entry of the clipboard into another DMS folder.

For the destination directory of the function *Copy* you have two alternatives:

- The destination directory (the directory to which you want to copy the entry) is different from the source directory (the directory where you activated the function *Copy*). In this case the name of the file in the source directory and in the destination directory are the same.

- The destination directory and the source directory are the same. In this case the name of the copied file in the destination directory is :*Copy of 'File name'* (see figure 4.10).

▼Name	▼Type	Size	Last changed at
Kopie von Java 17 features	Standard document	29 KB	30-03-2023 15:19
Java 17 features	Standard document	29 KB	30-03-2023 15:16

Figure 4.10: **Copy of ... / Link to ...**

Hint: The entries inserted into the clipboard via the function *Copy* remain there until other entries are put into the clipboard via the functions *Cut, Copy* or *Link*, or until you flush the content of the clipboard with the activation of the function *Empty Clipboard* which can be found in the clipboard.

Example

Precondition: The DMS–Object–Table is displayed. It contains at least one document in your personal folder.

1. Mark the document you want to copy.

2. Activate the icon *Copy* from the toolbar. The document will be copied to the clipboard of *@enterprise*.

3. Open the folder *Common* of your DMS.

4. Activate the icon *Paste* in the toolbar. The document is removed from the clipboard and inserted into the folder *Common* of the DMS. The clipboard is empty. The copied document also still remains in your personal folder.

4.3.6 Link

This function can be activated by clicking on the icon *Link* in the toolbar. At least one item of the DMS has to be selected prior to activating this function.

The function *Link* can be used to copy entries of a DMS folder into the clipboard of *@enterprise*. Then you can use the function *Paste* to create a link to the original entry within another DMS folder.

The inserted link gets the name *Link to 'File name'*. The icon of the document is extended by the *link icon* (see figure 4.10).

Hints:

- Through the function *Link* only a link to the original document is created. Therefore, if you edit the original document or the link, you always edit the same document.

- The entries inserted into the clipboard via the function *Link* remain there until other entries are put into the clipboard via the functions *Cut, Copy* or *Link*, or until you flush the content of the clipboard with the activation of the function *Empty Clipboard* which can be found in the clipboard.

Example

Precondition: The DMS–Object–Table is displayed. It contains at least one document in your personal folder.

1. Mark the document for which you want to create a link.

2. Activate the icon *Link* from the toolbar. The document will be copied to the clipboard of *@enterprise*.

3. Open the folder *Common* of your DMS.

4. Activate the icon *Paste* in the toolbar. The document is removed from the clipboard and a link to it is inserted into the folder *Common* of the DMS. The clipboard is empty. The linked document still remains in your personal folder.

4.3.7 Paste

This function can be activated by clicking on the icon *Paste* in the toolbar.

The function *Paste* can be used to insert entries of the clipboard into an DMS folder of *@enterprise*. As the case may be how the entries have been inserted into the clipboard

(copy, cut, link) the function *paste* therefore finishes the respective function.

Thus the functions *copy, cut* and *link* are always connected with the function *paste*.

4.3.8   Replace

This function can be activated by clicking on the icon *Replace* in the toolbar. One item of the DMS–Object–Table has to be selected prior to activating this function.

The function *Replace* can be used to replace existing documents with new ones. This function does not change the name and/or extension but the content of the document. Activating this function displays the dialog *Replace document content* (see figure 4.11).
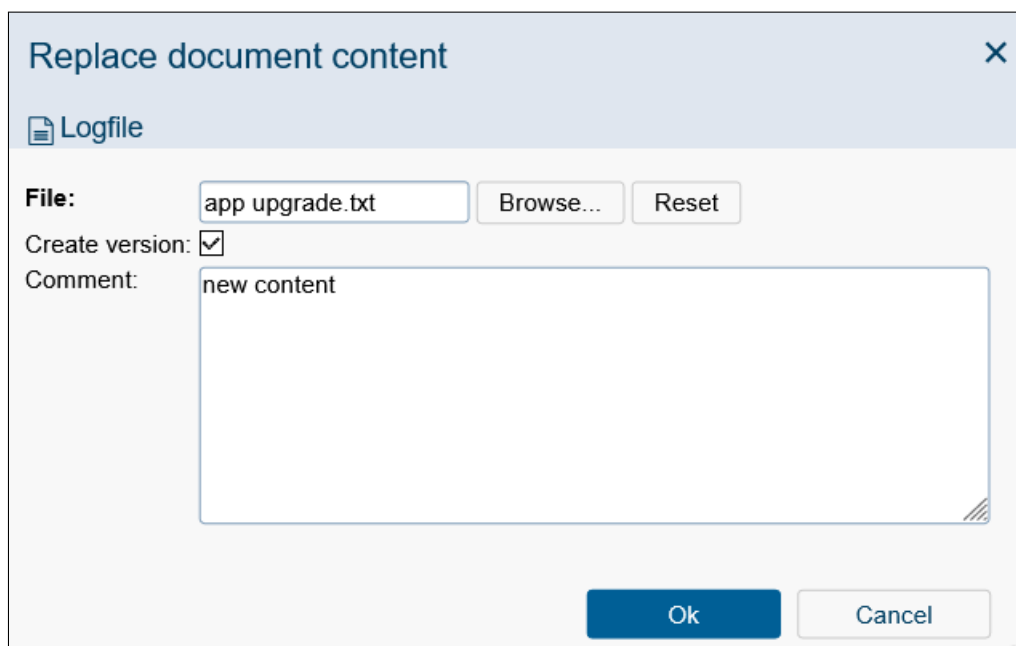
Figure 4.11: **Replace document content**

Content of the dialog *Replace document content*:

- **File:** Enter the name (including path) of the new document.

- **Browse:** Use this button to display the dialog window *File Upload* which helps you selecting the document which should replace the current content of the document. The WFMS puts its absolute file name into the form field *File*.

- **Create Version:** If this checkbox is ticked, a new version of the document will be created, i.e. the selected file is uploaded first and then a version of the replaced document is created.

- **Comment:** Free text.

- **Ok:** Activating this button leads in closing the dialog and saving the selected document content is replaced by the selected file. The DMS–Object–Table is displayed again.

- **Cancel:** This button leads in closing the dialog without changes. The DMS–Object–Table is displayed again.

Example

Precondition: The DMS–Object–Table is displayed in your work area and it contains a least one document.

1. Mark the document you want to replace.

2. Select the function *Replace* in the toolbar. The HTML–form of figure 4.11 appears in your work area.

3. Enter the absolute file name (including path) of the file whose content should replace the document.

4. Activate the button *OK*. The content of the document will be replaced by the content of the specified file. Then the DMS–Object–Table will be displayed.

Hint: If any field of the HTML–form has not been filled in, a reminder will be displayed after activating the *OK* button. In this HTML–form all fields have to be filled in.

4.3.9 Send to

This function can be activated by clicking on the icon *Send to* in the toolbar.

The function *Send to* can be used to send items of the DMS–Object–Table to any recipient (agent). For sending an item, a so called *Ad–Hoc–Process* is started. The items which should be send to the recipient are attached to this process. The function *Send to* can be used in worklist too for creating tasks for other agents.

Content of the dialog *Send to*:

- **Documents:** In this table you find all former selected documents which should be sent to some recipient(s).

- **Documents As:** Here you can choose how the items should be attached to the new process. If you select *Link* only a link to the corresponding items will be found at the process. If you select *Copy* only copies of the corresponding items will be attached to the process. If you select *Original* and send the items, then they will be removed from their original folder. Henceforth the items can be found only with the help of the Ad–Hoc–Process.

- **Due at:** Enter the date by which the process should be finished. You can click on the calendar icon to use the *@enterprise* calendar assistant (this is optional).

Figure 4.12: **Send to**

- **Subject:** Enter here a subject for the new process, please. This text will be displayed in the column *Subject* in the worklist of the recipients.

- **Description:** Enter here a description, please.

- **Course:** Displays the table of recipients. This table is processed from top to bottom.

- **New:** With the help of this button you can define recipients for the selected document(s). Clicking this button opens a new dialog which helps you to select an agent. How this can be done is explained beneath.

- **Edit:** If you selected a recipient in the table of recipients and activate this button, then the same dialog is opened as if you activated the button *New* except that the displayed properties belong to the selected recipient.

- **Delete:** Use this button to remove marked entries from the table *Course*.

- **Up:** Use this button to change the order of the entries in the table *Course*. The marked entry will be moved up one line.

- **Down:** Use this button to change the order of the entries in the table *Course*. The marked entry will be moved down one line.

- **Parallelism:** It is possible to forward a task to *n* different recipients concurrently. To do this select in the table of recipients those who should get the task concurrently and activate the button *Parallelism*. The selected recipients are then also graphically centralized, so it is easy to see that those recipients get the task in parallel.

  To break up the parallelism select the recipients once more and activate the button *Parallelism*.

- **OK:** Clicking this button confirms your entries. With the now started Ad–Hoc–Process the items are sent to the recipients, where the corresponding process appears in the worklist. The DMS–Object–Table will now be displayed in your work area.

- **Cancel:** This button closes the dialog without starting an Ad–Hoc–Process.

Adding a recipient

With the help of this function new recipients can be added to the table of recipients for the selected document(s). This function can be activated by clicking on the icon *New* next to the table *Course*.

After activating this function, the dialog *Step* will be displayed in your work area.

Content of the dialog *Step*:

- **Agent:** Selection of available *@enterprise* users.

- **Task:** Select a task for starting an Ad–Hoc–Process. The function *Send to* can be used in worklist too and in this case the tasks of the current process can be selected (task is started instead of Ad–Hoc–Process).

- **Comment:** Add a comment for the selected recipient. The recipient can read this comment by clicking on the corresponding info icon in the DMS–Object–Table.

- **OK:** By clicking this button you confirm your entries and the currently defined recipient is added to the list of recipients.

- **Cancel:** This button closes the dialog without adding an entry to table.

Example

Precondition: The DMS–Object–Table is displayed and there is at least one document in it.

1. Mark the document you want to send to another user.

2. Select the function *Send to* in the toolbar. The dialog *Send to* is displayed in your work area.

3. Activate the button *New*. The dialog *Step* will appear.

4. Add one or more recipients to the displayed table.

5. Activate the *OK* button. A link to the former selected document will be sent to all recipients in the recipients list. The DMS–Object–Table is displayed in your work area.

4.3.10   Start process

This function can be activated by clicking on the icon *Start process* in the toolbar. At least one item of the DMS–Object–Table has to be selected prior to activating this function.

Starting processes is possible by using the quick start list or the wizard (see section Wizard for starting processes for details). If a process is selected via quick start list, the 2. step of the *Start process wizard* is displayed immediately (see figure 4.13).

Content of the dialog *Start process*:

- **List of documents:** A list of documents which have been selected before activating the function *Start Process*.

- **Documents As:** Here you can choose how the items should be attached to the new process. If you select *Link* only a link to the corresponding items will be found at the process. If you select *Copy* only copies of the corresponding items will be attached to the process. If you select *Original* and send the items, then they will be removed from their original folder. Henceforth the items can be found only with the help of the Ad–Hoc–Process.

- **Task:** This list contains all tasks which are selectable in first step of process. If only one task is available, this selection is disabled.

- **Organizational unit:** This list contains all organizational units you are associated with. Select the organizational unit you want the process being started in. If only one organizational unit is available, this selection is disabled.

- **Due at:** Enter the date by which the process should be finished. You can click on the calendar icon to use the *@enterprise* calendar assistant (this is optional).

- **Priority:** Enter here the priority for the process. If nothing is entered, the default-value will be used.

- **Description:** Enter a description for the process. It will be displayed in several places, where it will be useful to the user.

Figure 4.13: **Start process**

- **Show form:** If there is a form associated with the process and you activate this checkbox the corresponding form will be opened immediately after you started the process.

- **Back:** This button leads to step 1 of wizard, the *process table*.

- **Next:** This button is inactive in second step of wizard.

- **Ok:** Use this button to confirm your entries and start a new process with the selected items. Your personal worklist will be displayed (see chapter Worklist, Role worklist, Substitution worklists, Suspension list and Role suspension list) and the first task of the started process will be in your worklist.

- **Cancel:** By activating this button the wizard will be closed, the changes discarded and no process started. The DMS–Object–Table is displayed again.

Example

Precondition: The DMS–Object–Table is displayed and there is at least one document in it.

1. Mark those items of the DMS–Object–Table which should be attached to the new process.

2. Select the function *Start process* in the toolbar and select a process. The dialog *Start process* (see figure 4.13) is displayed in your work area.

3. Activate the *Start process* button. A link to the former selected items will be attached to the started process. Your personal worklist is displayed in your work area.

4.3.11 Change type

This function can be activated by clicking on the icon *Change type* in the toolbar. One item of the DMS–Object–Table has to be selected prior to activating this function. The function *Change type* can be used to change the type of a document.

Hint: This function is not available by default and must be added as function in folder properties (action id *changeType*)!
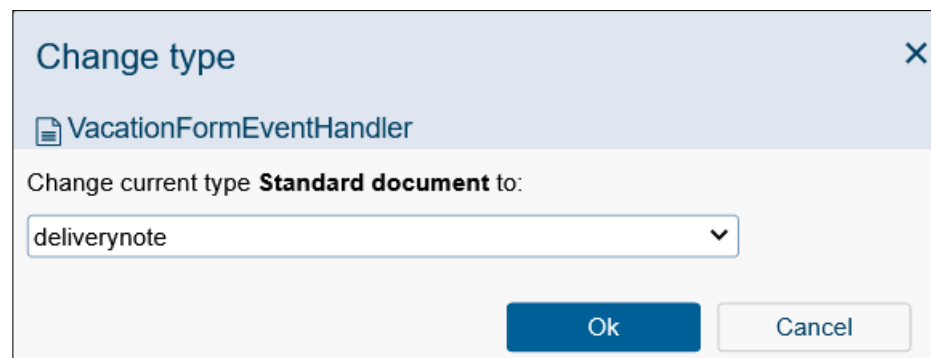
Figure 4.14: **Change type**

Content of the dialog *Change type*:

- **Change current type ... to :** Select the type from that list which should be assigned to the document.

- **Ok:** Activating this button leads in closing the dialog and replacing the current type by the selected one. The DMS–Object–Table is displayed again.

- **Cancel:** This button leads in closing the dialog without changes. The DMS–Object–Table is displayed again.

Example

Precondition: The DMS–Object–Table is displayed and there is at least one document in it. A alternative type for this document exists also.

1. Mark the document in the DMS–Object–Table which should be converted to another type.

2. Click on the icon *Change Type* in the toolbar. The dialog of figure 4.14 is displayed in your work area.

3. Click on the icon *Change Type* in the toolbar. The dialog of figure 4.14 is displayed in your work area.

4. Select the type from the list *New Type* which should be assigned to the document.

5. Activate the *Ok* button. The type of the document becomes changed and the DMS–Object–Table is displayed in your work area.

4.3.12   Create version

This function can be activated by clicking on the icon *Create version* in the toolbar. At least one item of the DMS–Object–Table has to be selected prior to activating this function.

The function *Create version* can be used to create versions of documents. A version stores the content of a document at a given point in time. Later the content of older versions can be accessed if required.

Hint: This function is not available by default and must be added as function in folder properties (action id *createVersion*)!

**Content of the dialog *Create version*:**

- **Document:** In this table you find the former selected document.

- **Comment:** This text field can be used to enter a note for a version.

- **Ok:** Activating this button leads in closing the dialog and creating a version of the selected document. The DMS–Object–Table is displayed again.

- **Cancel:** This button leads in closing the dialog without changes. The DMS–Object–Table is displayed again.

Example

Precondition: The DMS–Object–Table is displayed, and contains at least one document.

1. Mark the document you want to create the version.
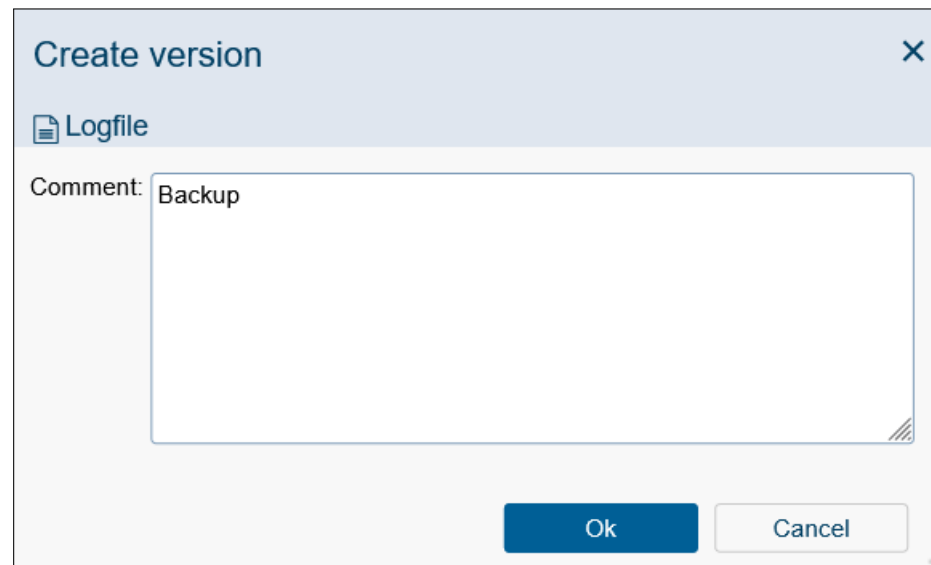
Figure 4.15: **Create version**

2. Select the function *Create version* in the toolbar. The HTML–form of figure 4.15 will appear in your work area.

3. Enter a note describing this version in the field *Comment*.

4. Activate the button *OK*. A new version will be created and the DMS–Object–Table will be displayed.

Hint: For the successful execution of the function it is not necessary to fill in the comment field. It is sufficient to click the *OK* button.

4.3.13   Attach note

This function can be activated by clicking on the icon *Attach Note* in the toolbar. At least one item of the DMS–Object–Table has to be selected prior to activating this function.
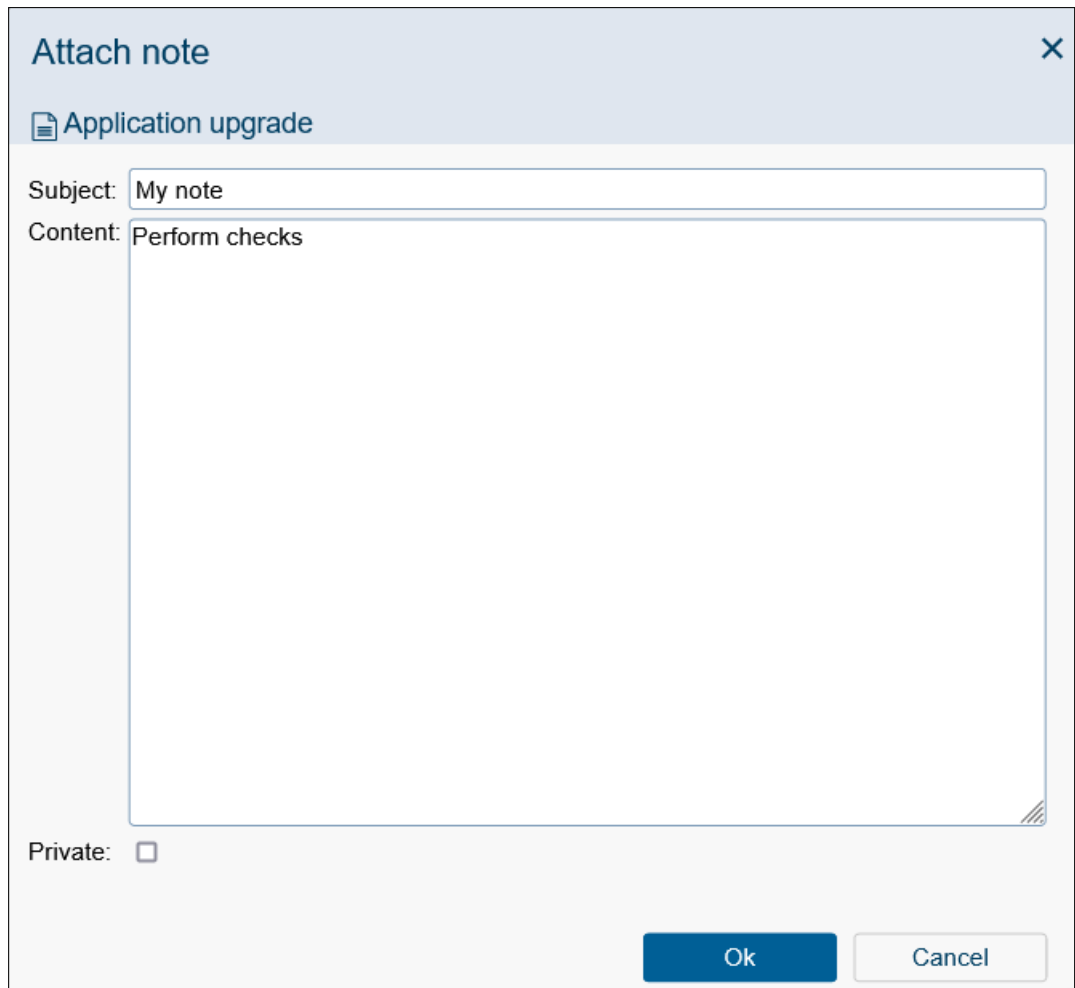
The function *Attach Note* can be used to attach notes to items of the DMS–Object–Table.

Hint: This function is not available by default and must be added as function in folder properties (action id *attachNote*)!

Content of the dialog *Note*:

- **Document:** In this table you find the former selected document.

- **Subject:** Enter here the subject of the note.

Figure 4.16: **Attach note**

- **Content:** Enter here the content of the note.

- **Private:** If this checkbox is ticked, the note can only be seen and modified by the creator of the note. This is also true, even if you send a link to the document to which you have attached a note. If you don't tick this checkbox anyone who is allowed to see the corresponding document is also allowed to see the attached note.

- **Ok:** Click on this button to confirm your entries. The new note will be attached to the document. The DMS–Object–Table will be displayed in your work area. If this was the first note you attached to the document, the icon for the function *Notes table* appears in the DMS–Object–Table for this document. The notes table is described in section Notes table.

- **Cancel:** Activating this button leads in closing the dialog without saving the changes.

Example

Precondition: The DMS–Object–Table is displayed, and there is at least one document in it.

1. Mark that document of the DMS–Object–Table you would like to attach a note to.

2. Select the function *Attach Note* in the toolbar. The dialog *Attach note* (see figure 4.16) is displayed in your work area.

3. Enter a subject and a content for the note.

4. Activate the *Ok* button. The new note is attached to the selected document and the DMS–Object–Table is displayed in your work area. The icon for the function *Notes table* appears in the DMS–Object–Table for this document.

Hint: If the note table is displayed in your work area you can attach a new note to the currently selected document by activating the function *New* in the toolbar of the note table.

4.3.14 Sign

PDF documents can be signed by the user. Therefore select the required object in the DMS–Object–Table and activate the function *Sign* in the toolbar. The dialog *Signing PDF* (see figure 4.17) is displayed in your work area.

Hint: This function is not available by default and must be added as function in folder properties (action id *signDoc*)!
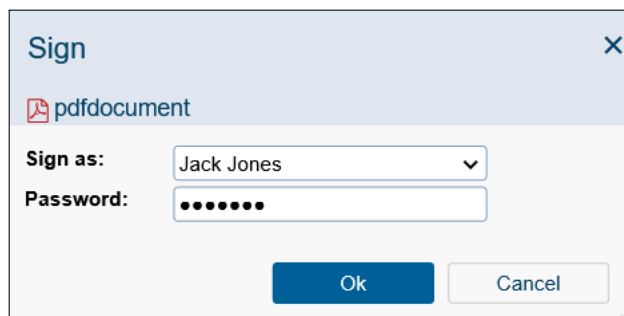

Figure 4.17: **Sign**

Content of the dialog *Sign*:

• **Sign as:** If the system administrator has already defined some possible signatures or you have defined an own signature with function *Create user certificate* in (global) functions table (see section *@enterprise* Functions), you can select the required signature in this field.

- **Password:** Enter here the password for your private key. It is the same password as the one you entered for the creation of your key pair.

- **Ok:** By clicking this button a signature for the selected PDF document is created. In the version table it is also possible to attach a signature to a version. This might be necessary if more than one person has to sign a document.

- **Cancel:** Abort the signature function.

4.3.15 ZIP download

This function allows to download documents from *@enterprise* to the file system of your operating system. Select one or more items and activate the button *ZIP download*. The download starts whereas all selected documents are wrapped in a ZIP-file.

Hint: This function is not available by default and must be added as function in folder properties (action id *download*)!

4.3.16 ZIP upload

This function allows to upload files from a zip-archive on file system of your operating system to *@enterprise* DMS. It is allowed to structure the files in sub-folders within the zip-archive. The administrator is able to define folder/files with parameter *Files ignored in zip upload* which should be ignored by this function (see Installation and Configuration Guide in section DMS).

Activate the function *ZIP upload* and select a ZIP file from file system. If checkbox *Overwrite existing files?* is activated, all existing files in DMS will be overwritten, if the files in zip-archive are newer than the existing in DMS. ZIP files use CP437 coding by default (defined in zip standard), but in some cases UTF-8 coding is used (e.g. by MAC-OS). For this purpose checkbox *Use UTF-8 encoding* is available, if zip file uses UTF-8 coding. The button *Ok* starts the upload.

Hint: This function is not available by default and must be added as function in folder properties (action id *upload*)!

4.3.17 Download

This function allows to download one document only from *@enterprise* to the file system of your operating system. Select an item and activate the button *Download* to initiate the download process.

Hint: This function is not available by default and must be added as function in folder properties (action id *downloadFile*)!

4.3.18 Folder properties

With this function the folder settings of current folder can be opened. More information can be found in section Detail View.

4.3.19 Clipboard

This function can be activated by clicking on the icon *Clipboard* in the toolbar.

The function *Clipboard* can be used to display the content of the clipboard of *@enterprise* (see figure 4.18). The clipboard is used during the execution of the functions *copy, cut, paste* and *link*. The combination of the functions *cut* and *paste* is called *move*. Thereby the selected items are put into the clipboard. Through the execution of the function *paste* the content of the clipboard is pasted into the corresponding folder and the clipboard is flushed.

The content of the clipboard changes with every execution of the functions *copy, cut, paste* and *link*. Thereby the content of the clipboard is replaced by the selected items to which the mentioned functions were applied to. Therefore it is not possible to add entries to the clipboard in multiple steps!

Hint: The system remembers by which function the item has been added to the clipboard. Through the function *paste* this function is completed. Therefore it is only possible to use items of the clipboard to create a link, if they have been added to the clipboard via the function *Link* (the same is true for the functions *copy* and *move*).

Content of the dialog *Clipboard*:

- **Table:** This table lists all items, which have been selected during the last execution of one of the functions *cut, copy, past* or *link*, and therefore been added to the clipboard. The clipboard may contain none, one or many entries. Columns of the table are:

  - **Name:** The name of the document.
  - **Type:** the type of the document.

- **Empty clipboard:** Clicking this button flushes the clipboard. The function cannot be undone.

- **Close:** Activating this button leads in closing the dialog without changes.

Example

Precondition: The DMS–Object–Table is displayed, and it contains at least one document.

1. Mark those documents which you would like to copy into another folder of your DMS.
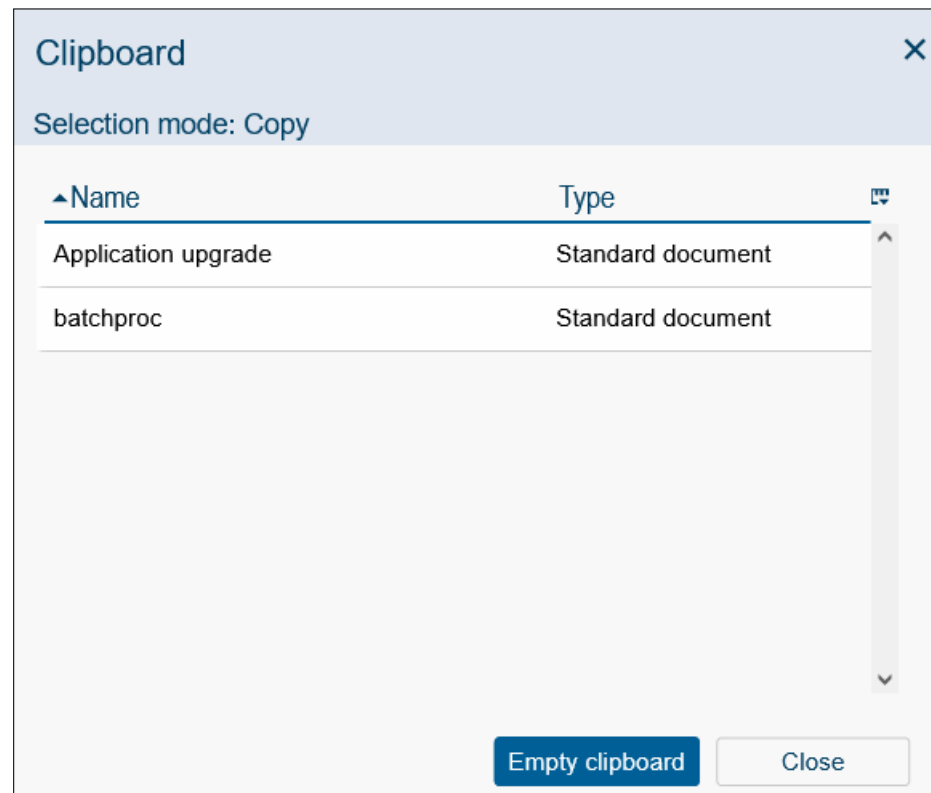
Figure 4.18: **Clipboard**

2. Select the function *Copy* in the toolbar.

3. Select the function *Clipboard* in the toolbar. The clipboard is displayed and the former selected documents build the content of the clipboard.

4. Click the button *Empty Clipboard*. The clipboard is now empty.

Content of dialog *Mark as processform-template*:

- **Attached processes:** This list contains alls processes, where the selected form should used as form template. Processes where selected formtype is used as process form can be added/removed with appropriate functions beside this field.

- **OK:** This button closes the dialog *Mark as processform-template* and saves the changes.

- **Cancel:** This button closes the dialog *Mark as processform-template* without saving the changes.

Hint Template forms can be used only, if the appropriate process form is in mode *inout* (see System Administration Guide - chapter Process Definition section Process Properties).

Hint Form templates are available for owners only by default. Add the right *Share* in dialog *Access* to the appropriate form instance in DMS to allow the usage for other users (see section Detail View). If the right *Share* is not selectable, it must be added to the formtype in administration (see System Administration Guide - chapter Forms).

4.3.20 Lock

This function allows to lock documents so that no other users can edit them. A lock can be released either manually with function *Unlock* in tab *General* of the document (see section Detail View) or by replacing the content (see section Replace). If you are not the creator (owner) of the document, you need the right *View objects* and additionally *Execute object* on function *Unlock* to unlock the document.

Hint: This function is not available by default and must be added as function in folder properties (action id *lock*)!

4.3.21 Follow document changes

There are two functions with the same name. One of them is simpler and has the action id *trackDocumentChanges*, and the other one is more complex with action id *followDocument*.

Hint: Please note that using both functions is not advisable. We recommend using the simpler function.

These functions enable tracking changes in a document. When changes occur, an email notification is sent to the appropriate recipients defined by one of these functions. Note that only changes to the document content are tracked.

Hint: Both functions are disabled by default and can be added in Folder properties over their action ids!

Content of dialog *Follow document changes*: The simpler Follow document changes function has only the Comment field and the buttons. In the simple version of the function, by default the current user will be taken as the recipient and the standard template will be used for the notification message.

- **Recipients:** The recipient list can contain multiple recipients, including To, CC, and BCC. The Following recipient types can be defined:

    - User: *@enterprise* user can be selected here. If the user has an email-address entered, a message will be sent otherwise this recipient will be ignored.

Figure 4.19: **Complex function "Follow document changes"**

Figure 4.20: **Simpler function "Follow document changes"**

– Role: *@enterprise* role and/or organizational unit can be selected here. All users of this role (in this organizational unit) will receive an email (if email-address has been entered for this user).

– Email: A valid email-address can be specified here.

– Owner: The owner (= creator) of the document will receive a message. For example userA creates a document and userB changes the document, then userA will receive an email that the document has been changed.

The recipients defined above will be added to the pre-defined recipients in the template, provided that this template is selected and recipients have been specified within it. Please note that in message template *Default template* no additional recipients are defined!

• **Message template:** A message template *Default template* can be selected here which is used for notification. If selected, the field *Subject* is inactive. If no message template has been selected and no subject/content have been entered, an empty email will be sent. In the simple version of the function the *Default template* is default and can't be changed.

- **Subject:** A subject which is used in notification mail.

- **Comment:** The comment which is used in notification mail.

- **Delete:** This button removes the tracking of the selected document, i.e. no notification will be sent anymore.

- **Save and close:** With this button the changes will be stored and the dialog will be closed.

- **Save:** Analog to *Save and close*, but the dialog will remain open.

- **Cancel:** Clicking this button discards changes and closes the dialog.

4.3.22 Navigation

In this area it is possible to navigate in folder hierarchy of DMS and search for table entries.

The navigation function can be used to navigate from the current folder upward, along the folder hierarchy, to the folder above the current folder.

4.3.23 Refresh

This function can be activated by clicking on the icon *Refresh* in the toolbar or in the group *Documents* of the *navigation area*.

The function *Refresh* can be used to refresh the content of your work area or the content of the group *Documents* of the *navigation area*, depending upon where you activated the function.

If you want to refresh the content of the *navigation area* click on the icon within the group *Documents* of the *navigation area*, otherwise click on the icon in the toolbar.

Example

Precondition: The DMS–Object–Table is displayed.

1. Click on the icon *Refresh* in the toolbar. The content of the DMS–Object–Table will be refreshed immediately.

4.3.24 Display DMS–Object

The function *Display DMS–Object* can be found in the column *Document name* of the DMS–Object–Table.

If you click on an entry in this column, the content of the according document will be displayed in your work area or a dialog window asks you to save the document. You then can select where to save the document. The images are displayed in an image

viewer.

Example

Precondition: The DMS–Object–Table is displayed, and there is at least one object in it.

1. Click at an entry in the column *Name* of the DMS–Object–Table. Relying on the type of the entry either the content of the object is displayed or you are asked to save the object on your local file system.

2. If the content of the object is displayed, activate the button *Back* of your browser. The DMS–Object–Table is displayed.

3. If you are asked to save the object, select the path and file name and activate the button *Ok*. Of course you are allowed to cancel the operation by activating the button *Cancel*. In any case the DMS–Object–Table will be displayed.

4.3.25 Detail View

The function *To Detail View* can be found in the first column of the DMS–Object–Table by activating the small grey triangle.

The *Detail view* of a DMS–object shows its properties. It contains properties already shown in the DMS–Object–Table in more detail as well as additional information.
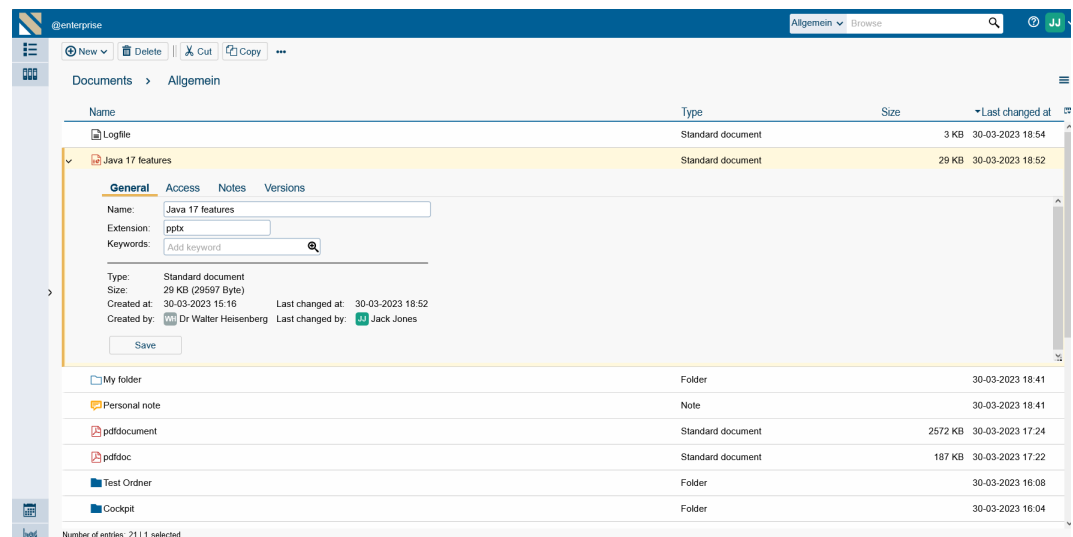

Figure 4.21: **Detail View**

Content of the are *Common*:   The representation depends on the DMS type of object.

- **Name:** The name corresponds to the one in the column *Name* of the *DMS–Object–Table*.

- **Extension:** This line contains the extension of the document (e.g. *doc* or *html*) and is visible only, if a document has been selected.

- **Keywords:** It is possible to assign keywords to a DMS–object.

- **Type:** The type of the document is displayed here. This information corresponds to the column *Type* in the *DMS–Object–Table*.

- **Organizational unit:** This field is available for folders only and allows the selection of an organizational unit which is used for permissions: Via role *home* OU-depending permissions can be defined for this folder. If a user has role *home* in the organizational unit of folder's org-unit, he has the permission *Edit objects* for this folder and the documents inside this folder, but not for the sub-folders!

- **Size:** This information shows the size of the document in KB (Kilo Bytes) and in bytes. The values can be different since this size in bytes is rounded to KB. This element is available for documents only.

- **Status:** This information is only available for locked documents and shows by whom the document is locked.

- **Created at:** This line shows the point in time when the document has been attached to the process.

- **Created by:** The name of the user who added the document at the time described above is displayed here. If the user is not available anymore in *@enterprise*, a selection-icon appears which allows to select a new creator.

- **Last changed at:** This information corresponds to the according entry in the column *Last changed at*. It is the point in time when the document has been changed the last time.

- **Last changed from:** This is the name of the last user who edited the document at the time described above.

- **Propagate permission list:** if this checkbox is ticked, the folder's permission list will be assigned to any object added to this folder. Already existing content will not be touched. Also if the permission list assignment of the folder is changed this will not have any effect for its already existing content.
  This element is available for folders only.

- **Buttons:** If the properties are displayed in context of inline-details, the button *Save* is available only which stores the settings of this mask and closes the inline-detail area. If the properties are displayed in context of a dialog, following buttons are available:

- **Save and close:** Activating this button will result in saving the changes and closing the dialog. This button is applied for changes in tabs *General* and *Settings*.

- **Save:** Activating this button will result in saving the changes, but the dialog will be kept open. This button is applied for changes in tabs *General* and *Settings*.

- **Cancel:** Activating this button will result in closing the dialog without saving the changes.

4.3.26 Permissions

In area *Access* permissions for a DMS–object can be defined. It is possible to add permissions in a particular way or via permission lists. All permissions are disabled in this table, but permissions of a permission list cannot be adapted and deleted.

Single permissions

For single permissions the functions *New*, *Edit* and *Delete* are available. With function *New* and *Edit* a new dialog is opened with following elements:

- **Right:** Select a right which should be applied for this DMS–object.

- **Access:** Definition, if the permission is a positive (allowed) or negative (not allowed, denied) permission.

- **Agent:** The permission can be applied for users or roles. Roles allows the definition of an organizational unit and a scope.

- **Period:** Definition of period when permission should be applied.

- **Ok:** By clicking this button the permission is created/edited. The dialog is closed and the table *Access* is displayed.

- **Cancel:** This button closes the dialog without saving the data. The table *Access* is displayed again.

Deleting a permission is possible only by selecting an entry in table and clicking on toolbar function *Delete*.

Hint   More information about permissions and the ACL dialog can be found in System Administration Guide in chapter The *@enterprise* permission system.

Permission list

The function *Select permissionlist* opens a dialog and allows to add/remove rights of a pre-defined or - in context of DMS - an own created permission list:

- **Permission list:** Either a pre-defined (system wide) permission list can be selected only or following options are available:

– None: This option means that no permission list should be used.

– Own permission list: If this option is selected, own permission can be created in the table beneath. This list is created temporary for this folder, but can be bequeathed to all sub-folders.

– Folder's permission list: This option is available only, if a permission list was bequeathed by a superordinate folder.

– System wide permission list: After selection this option it is possible to select a pre-defined permission list. These lists must be created by the system administrator. The permissions of a list are displayed in the table beneath and are not editable.

- **Ok:** This button adds the rights of selected permission list to table *Access*. Removing permissions from table *Access* can be done by selecting an empty permission list entry and activating this button.

- **Cancel:** This button closes the dialog without saving the changes. The table *Access* is displayed again.

Propagate access

The function *Copy access* allows to copy permissions to sub objects, if the user has the right *Edit permission* for all (sub)objects of the current folder. The dialog contains following elements:

- **Selection of permissions:** It is possible to select, if all permission or only the selected ones should be transfered. In both cases only permissions are included which are assigned directly to the current folder (not via permission list)!

- **Kind of transfer:** There are 2 ways:

  – Replace existing permissions: Original permissions of sub objects will be deleted and replaced by new ones. If the option *Incl. permission list* is activated, the permission list will be copied to the sub objects (replaces the existing permission list in sub objects) or if in current folder no permission list is defined, the permission lists of sub objects will be deleted. If no permission in current folder exists and this function with the replace option is executed, all permissions of sub objects will be deleted.

  – Add to existing permissions: Original permissions of sub objects will be kept, the new ones are added. A defined permission list in current folder is not copied to sub objects.

- **Ok:** This button leads in transferring permissions to all objects of the current folder and closing the dialog. The table *Access* is displayed again.

- **Cancel:** This button closes the dialog without any changes. The table *Access* is displayed again.

Permission patterns

For single permissions (not part of a permission list) templates (patterns) could be stored. This function is disabled by default and must be activated in administration under *Configuration*/*Other parameters*/*ep.access.show_aclpatterns*. Following toolbar functions are available in tab *Access*:

- **Save permission pattern:** A dialog is displayed with an input field where a name must be entered. If the name is not assigned, a new permission pattern object with the current permissions will be created. If the name is assigned already, a confirm dialog will appear with following buttons:

  - Yes: The existing permission pattern object will be overwritten.
  - No: The save-dialog will be displayed again where another name must be entered.
  - Cancel: The dialog will be closed and no permission pattern object will be created.

  This function is enabled, if the user has the right *Create objects* for the object *Permission patterns*.

- **Copy from permission patterns:** A dialog is displayed with the create permission pattern objects. In table *Patterns* entries could be edited (= renaming) or deleted. By selecting an entry the tab *Assigned rights* displays the permissions stored for this pattern object. In tab *Access* permissions for the permission pattern object can be created: For displaying a pattern object, the right *View objects*, for renaming (editing) the right *Edit permissions* and for deleting the right *Delete objects* are needed. Permissions of a pattern object are attached by activating the button *Apply* (right *Edit permissions* for the appropriate object is needed).
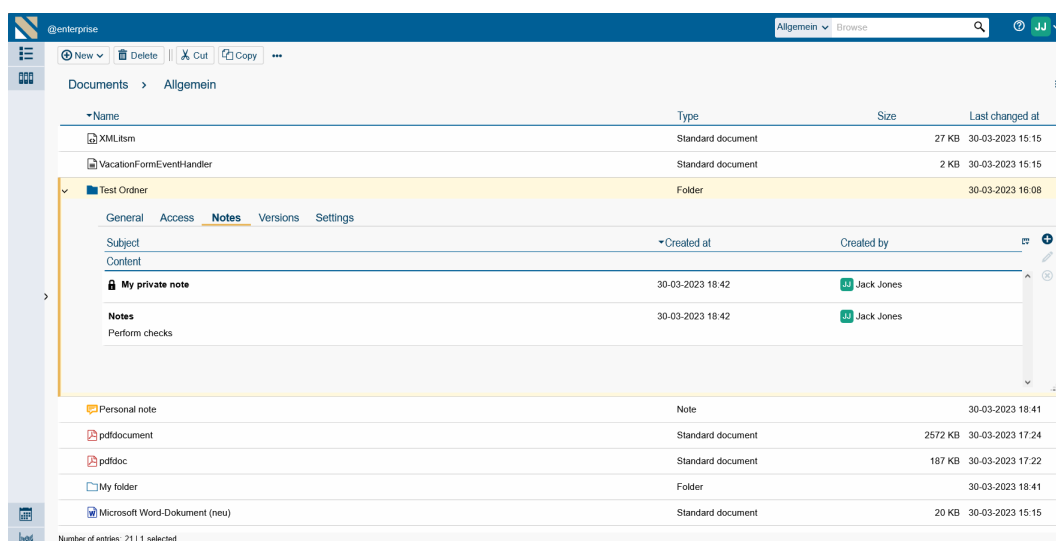
4.3.27 Notes table

This table can be displayed by clicking on the icon *To notes table* in the DMS–Object–Table or by navigating via DMS–object properties to tab *Notes*.

Content of *Notes table*:

- **Subject:** This column displays the subject of a note. This allows you to identify a note easily. In this column a icon is displayed indicating the type of the note.

  - If the note is a private note, the symbol for private notes is displayed.
  - If the note is a global (public) note, no symbol is displayed.

- **Created at:** This column lists the creation date of the note.

- **Created by:** This column displays the name of the user who created the note.

- **New:** This function allows to add additional notes.

Figure 4.22: **Notes table**

- **Edit:** Clicking on an entry and selecting this function displays the dialog *Note ...* (see figure 4.16) where you can view and edit the attached note.

- **Delete:** Deletes previous selected notes.

Example: The note table is displayed, and contains at least one note to a document.

1. Perform a double-click on an entry in the column *Subject* of the notes table. The dialog *Note ...* (see figure 4.16) is displayed in your work area.

2. Change the subject of the note.

3. Activate the button *Ok*. The note table is displayed again with the changed subject.

4.3.28   Versions

This function can be activated by clicking on the icon *Versions* in the DMS–Object–Table or by displaying the DMS–object details and navigating to tab *Versions*.

This function can be used to display the versions of a selected entry of the DMS–Object–Table. The table entry which is in italic letters is the current state that allows a comparison with older versions.

Content of table *Versions*:

- **Changed at:** This column shows the change time of the corresponding version.

- **Changed by:** This column lists the name of the user who changed this version.
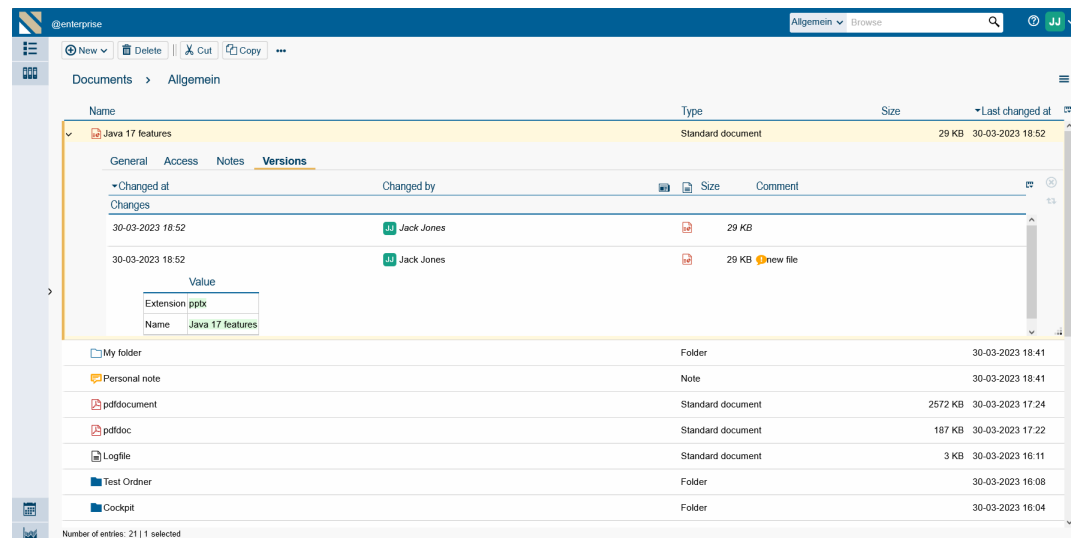
Figure 4.23: **Versions**

- **Document:** If a version has been created for a document, a link to the document at the creation time of the version is displayed.

- **Form:** Some documents have additional metadata. Clicking the *form icon* results in displaying metadata of the document. Furthermore it is possible to compare different versions analog to *Form changes* in tab *History* of a process (see section Functions of the process history for details).

- **Size:** This column is available for documents only and shows the file size of document's version.

- **Comment:** This column shows the comment of the corresponding document version, if the user who created the version entered one.

- **Form field columns:** If the administrator or developer at this form type has defined columns via form wizard that should be displayed by default in tables, these columns are selectable via the column picker.

- **Changes:** When showing this column, the changes of the form fields in comparison with the previous chronologically created version are displayed.

- **Delete:** At least one item of the version table has to be selected prior to activating this function. The function *Delete* can be used to delete selected versions from the version table. The request has to be confirmed in a pop-up dialog window. If the dialog is confirmed by clicking *Ok*, the version will be deleted and disappears from the version table. The button *Cancel* can be used to abort the function without deleting a version.

- **Backup to version:** One item of the version table has to be selected prior to activating this function. The function *Backup to version* can be used to backup the

content of the document to the content of the selected version. As a description for a version created in this way the text *Automatically created version* appears.

Example: The DMS–Object–Table is displayed, and contains at least one document with a corresponding version.

1. Click at an entry in the column *Version* of the DMS–Object–Table. The version table is displayed in your work area.

2. Select an entry in versions table and activate function *Backup to version*.

3. The content of the current document is replaced by this version.

4.3.29   Settings

The section *Settings* can be used to define

- which columns should appear in your folder in which order,

- which functions should appear in your toolbar of the folder,

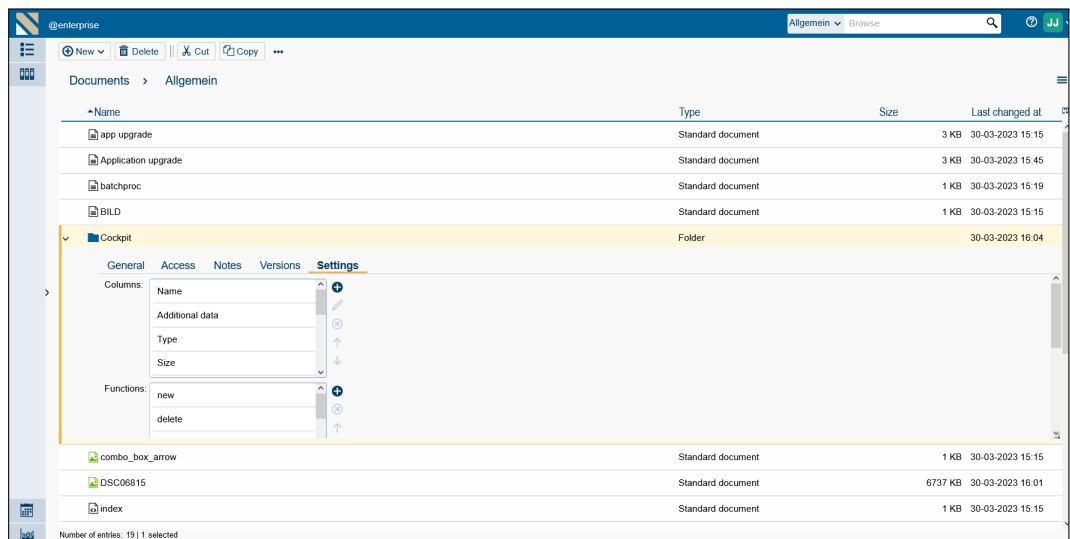- which forms are allowed or not allowed in this folder.

Figure 4.24: **Folder settings**

Content of the dialog *Settings*:

- **Columns:** Columns, which should appear in your folder

- **Functions:** Toolbar functions, which should appear in your folder

- **Forms:** Forms, which are allowed or not allowed in your folder

- **Add:** Activating this button displays a dialog, where you can add new columns to the DMS–Object–Table of the current folder. How you can do this and other operations is explained beneath.

- **Edit:** This function is available at *Columns* only and allows to edit entries of this list. Perform a double-click on an entry to get in edit mode.

- **Delete:** Activating this button deletes all entries which have been selected before.

- **Up and Down:** Each entry of a select list can be moved by Drag & Drop, i.e. select an item and move it with pressed left mouse-key to the desired position in list.

- **Restore defaults:** If this button is activated, the default settings for columns, functions and forms are loaded. Please note that changes are not stored permanently after executing this function!

- **Buttons:** If the properties are displayed in context of inline-details, the button *Save* is available only which stores the settings of this mask. If the properties are displayed in context of a dialog, following buttons are available:

  - Save and close: Activating this button will result in saving the changes and closing the dialog. This button is applied for changes in tabs *General* and *Settings*.

  - Save: Activating this button will result in saving the changes, but the dialog will be kept open. This button is applied for changes in tabs *General* and *Settings*.

  - Cancel: Activating this button will result in closing the dialog without saving the changes.

An example can be found beneath.

Add column

This function can be activated by clicking the button *Add* beside the *Column* list in the dialog *Folder Settings* (see figure 4.24).

The function *Add* can be used to add new columns to the table design for the DMS–Object– Table of the current folder.

Content of the dialog *Column*:

- **Id:** Here you can enter columns which are predetermined by the system, and correspond to properties of DMS–Objects.

- **Name:** The caption for the column.

Figure 4.25: **Column**

- **Localize:** If this checkbox is activated, the value of *Name* will be localized (if available in application resource-bundle).

- **Icon:** Here you can enter a path for displaying an icon instead of the name.

- **Colspan, Rowspan and Row:** These attributes allow to define the style of the column in table, e.g. column should be displayed in second row over two columns of first row.

- **Visible:** If this checkbox is activated, the column is displayed at the first call, otherwise you can add it by using the column picker.

- **Filterable:** If activated, the filter mechanism can be used for this column.

- **Groupable:** If activated, the column can be grouped by its matching values.

- **May not hide:** This checkbox indicates, if the column can be faded out via columnpicker.

- **Sortable:** If activated, the column can be sorted.

- **Type:** Definition of following column types is possible: string, date, dateTime, number (for numbers without comma) or decimal (for numbers with comma + appropriate representation according to decimal formatter configuration).

- **Javascript Class:** It is possible to enter a path to a js class (widget) which is responsible for the representation of a column. An example widget is *ep/widget/smartclient/dms/columns/Name*.

- **Ok:** Activating this button stores the changes and closes the dialog.

- **Cancel:** Activating this button leads in closing the dialog without saving the changes.

Add function

This function can be activated by clicking the button *Add* beside the *Function* list in dialog *Settings* (see figure 4.24).

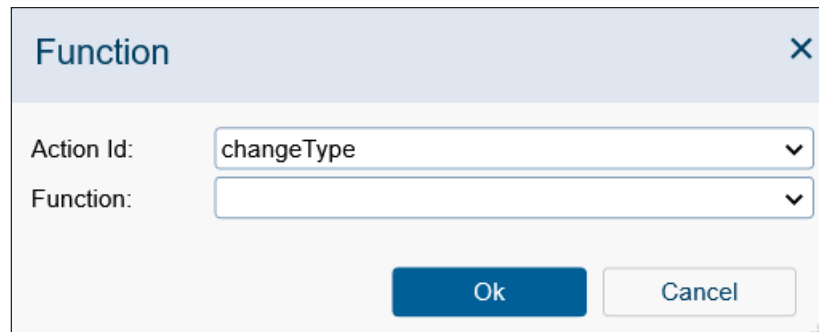The function *Add* can be used to add new toolbar functions to current folder.

Figure 4.26: **Functions**

Content of the dialog *Function*:

- **Action Id:** Enter an action key, which is defined in *@enterprise* (e.g. cut, insert, copy, link, paste, startProcess, etc.)..

- **Function:** A task–function can be selected here.

- **Ok:** Activating this button stores the changes and closes the dialog.

- **Cancel:** Activating this button leads in closing the dialog without saving the changes.

Add form

This function can be activated by clicking the button *Add* beside the *Forms* list in dialog *Settings* (see figure 4.24).

The function *Add* can be used to add forms which are allowed or not for this folder. If the radio–button *Allowed* is activated, only these forms are selectable in *New* function of DMS–Object–Table for creating a DMS form (see section New form). If the radio–button *Denied* is activated, all forms which are not added to this list are selectable in function *New* of DMS–Object–Table.

Example

Precondition: The DMS–Object–Table is displayed and you see the content of a folder. In our example we use the folder *Common* which contains a form with a field called *subject*.

1. Navigate to the folder *Common* and open the tab *Settings*.

2. Click the button *Add*.

3. Enter the value *form.subject* into the field *Id*.

4. Enter the value *subject* into the field *Name*.

5. Activate the checkbox *Localize*.

6. Activate the button *Apply*. Now the dialog *Settings* is displayed in your work area.

7. At the end of the DMS–Object–Table the column *Subject* has been added.

4.3.30   DMS access via WebDAV

@enterprise offers the possibility to get access to DMS via WebDAV connection. **Web**-based **D**istributed **A**uthoring and **V**ersioning is an extension of the Hypertext Transfer Protocol (HTTP) that allows clients to perform remote Web content authoring operations.

Before a WebDAV connection can be established, some settings mus be done on *@enterprise* server side. For the basis configuration you have to add the parameter *webdav.drive* with a drive-letter to *ep.conf* of the *@enterprise* installation and activate the checkbox *Basic-Auth in WebDAV* in *@enterprise* under
Administration → Configuration → DMS
. Further configuration parameters are described in Installation and Configuration Guide.

With help of a WebDAV client (e.g. Windows Explorer, WebDrive, GoodSync, etc.) a connection can be established. The following steps describes the behavior of Windows 10 Explorer:

1. Open Windows Explorer

2. Activate function *Map network drive*

3. Enter following URL: http://<server>:<port>/<contextpath>/webdav

4. Activate checkbox *Connect using different credentials*

5. Execute button *Finish*

6. Enter user name/password an activate button OK

After connecting with the *@enterprise* server the following content is displayed:

- Worklist

- Common

- User folder

- User folder of the substituted person

By setting the WebDAV specific configuration parameters in *ep.conf* the representation of folders can be changed (see also *Other parameters* in *@enterprise* Administration/Configuration).

Hint: If the parameter *Maximal Number of Unsuccessful Logins till Account is Deactivated* in
Administration → Configuration → Password Policy
is set, the uncorrected logins via WebDAV client will be ignored - login tries will not be counted.

WebDAV–Client *WebDrive*

This section explains the configuration and usage of *WebDrive* with *@enterprise* Web-DAV.

After WebDrive was successfully installed, a *Site* must be deployed with following parameters (see figure 4.27):

- Site Address/URL: http://<server>:<port>/<contextpath>/webdav

- Server Type: WebDav

- Drive: Drive letter, which is the root

- User: *@enterprise*-User

- Password: Password of *@enterprise*-User (Password **must** be available!)

The button *Properties* allows to define the settings for the WebDrive connection(s). After activating the button *Properties*, you have to navigate to section *Cache* and activate the option *Override global settings*. Then select the section *Options* in navigation menu and activate following parameter:

- Radio-Button *Custom - select cached options below*

- Checkbox *Cache Files*

- Checkbox *Cache Directory Listings*

- Checkbox *Flush cache files on connect*

- Checkbox *Flush directory listings on connect*

WebDrive also offers the possibility to set global Cache settings.

In section *Connections* you have to set following parameters to **1**:

- Active Connection Limit

- Active Upload Limit

Following options should be activated in section
Connections → HTTP Settings
:

- Always choose Basic Authentication

- Enable persistent connections (Keep-Alive)

- Enable 100-continue processing

- Do chunked upload for large files

- Enable byte ranges on GET (some servers may not handle this)

- Persist session information across all connections

In
Connections → DAV
the locking-mechanism can be activated (optionally):

- Enable Auto DAV locking

- Use DAV lock to check if user has Write access to file

These options should be activated in section *File*:

- Encode filenames in UTF-8 (for UNICODE support)

- Cache temporary MS Office files

- Enable NTFS file security

- Stop file downloads when the application closes the file before reading all data

- Enable Quota Processing

By the way you have to add the parameter *webdav.drive* with a drive-letter to *ep.conf* of the *@enterprise* installation and activate the checkbox *Basic-Auth in WebDAV* in *@enterprise* under
Administration → Configuration → DMS
. Finally the function *Connect* establishes a connection to the *@enterprise* server.

For further configuration parameters of WebDrive take a look in Installation and Configuration Guide.

After connecting with the *@enterprise* server the following content is displayed:

- Worklist

- Common

- User folder
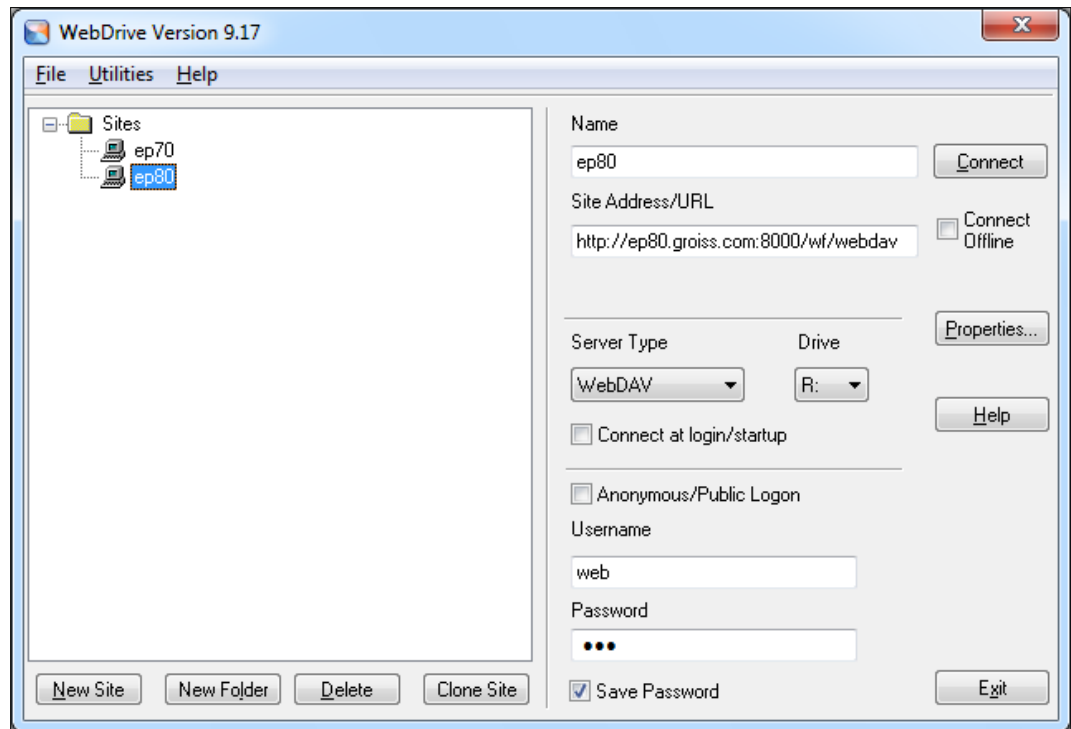
- User folder of the substituted person

Figure 4.27: **WebDrive Connection Settings**

By setting the WebDAV specific configuration parameters in *ep.conf* the representation of folders can be changed (see also *Other parameters* in *@enterprise* Administration/Configuration). The user specific parameter *WebDAV Drive* in *Settings* will be displayed, if the parameter *webdav.drive* in *ep.conf* is set. The value of GUI-parameter *WebDAV Drive* effects the currently logged in user only and overwrites the global parameter in *ep.conf*. It is also possible to enter the value *off* which deactivates the WebDrive functionality for the current user only. In this case the DMS can be used as usual and no WebDrive client is necessary.

Hint: It is possible that edited objects are not refreshed immediately, because WebDrive uses a cache. Activate the function *Flush Cache* of the connection and then refresh the window for getting the latest data.
WebDrive has following known restrictions:

- *Create and rename a process folder:* Process folders cannot be created and renamed. Furthermore it is not possible to create other objects like text-files.

- *Cut process folder P1 and paste it in another process folder P2:* A error message is displayed that the process folder P1 (=process) cannot be deleted.

- *Delete a process folder:* A error message is displayed that the access is not allowed (analog to Cut and Paste), but the content of the process folder is deleted!

- *Copy a process folder:* A new standard-folder is created, when a copy of process folder P1 was made in process folder P2, i.e. no copy of the process P1 is created.

- *Links:* Links created in WebDrive are lnk-files (see Windows). This kind of link is displayed in the DMS, but it is not a valid DMS-link. Links created in DMS (HTML-client, webdav-client) are displayed as ordinary folder in WebDrive, but linked with the respective object (see section Link).
  Because of causing problems with links created in webdrive, we don't recommend to use it!

4.3.31   Open documents with Office Online

In *@enterprise* it is possible to edit documents with Microsoft- or Libre Office Online. By clicking the filename in the *Name* column, the document will be opened in Office Online. A popup appears, which contains the editor of the configured office application. The shared advantage of both Office Online applications is simultaneous editing of documents. If activated, multiple users may edit the same file concurrently through *Co-Authoring*. Meanwhile, every user can see all changes made in the document in real-time. This enables collaboration and simplifies the exchange of information. Every participant in a session will be shown in the user interface. Before a connection can be established, some settings mus be done on *@enterprise* server side. Further configuration parameters are described in Installation and Configuration Guide.
The behavior of each office suite is described below.

Microsoft Office Online

Initially, Microsoft Office Online, or MSOO, opens documents in view mode. Besides viewing the content, the data can be translated into multiple languages and the whole file can be downloaded as office document or PDF. To edit a document, the user needs a valid Office 365 business account. This account must have an attached Office 365 subscription that includes Office applications. Switching to edit mode is achieved by clicking *Edit in Browser*. In the next step, you are asked to sign in using your Office 365 business account. After validation, the respective Office Online editor, which is a lightweight desktop version, opens. Besides changing the content, the file can be renamed, downloaded in different formats, as well as printed. Office Online saves the changes automatically. To be sure, the document may also be saved by using *CTRL+S*. Following document types can be opened and edited with MSOO:

- .doc

- .docx

- .xls

- .xlsx

- .ppt

- .pptx

The old document formats are converted to the newer ones before editing, but a version of the old one is generated, if this needs to be reverted. Beware that all changes made after the conversion are lost, if the conversion itself is reverted. Office Online cannot work with macros, although files containing macros can be opened, edited and saved. Microsoft Office online supports the creation of new files in current formats. This can be achieved by creating and opening a new Excel, Word or PowerPoint document with the respective extension (see chapter New). Afterwards, the file can be edited.

Libre Office Online

Unlike Microsoft, LibreOffice Online (LOOL) does not require a subscription for editing files. Libre Office Online supports a huge amount of different document formats that can be edited, including the different Microsoft- and OpenDocument formats, as well as text files (txt, rtf) and CSV files. It can also be used to view PDFs and pictures in all common formats (e.g. png, jpeg, jpg, gif, etc.). Apart from that, this is also a not full desktop version. Just like with Microsoft Office Online, documents can be edited, downloaded in different formats and printed. Saving must be done manually with *CTRL+S* or by a click on the *Save* button. Because Libre Office Online doesn't support the concept of locks, documents may be moved or deleted while editing. Therefore, it should always be checked, if the document is currently edited, before executing such actions.

5. The Group Calendar

In this chapter we describe the calendar integrated in *@enterprise*. It can be used to administrate appointments.
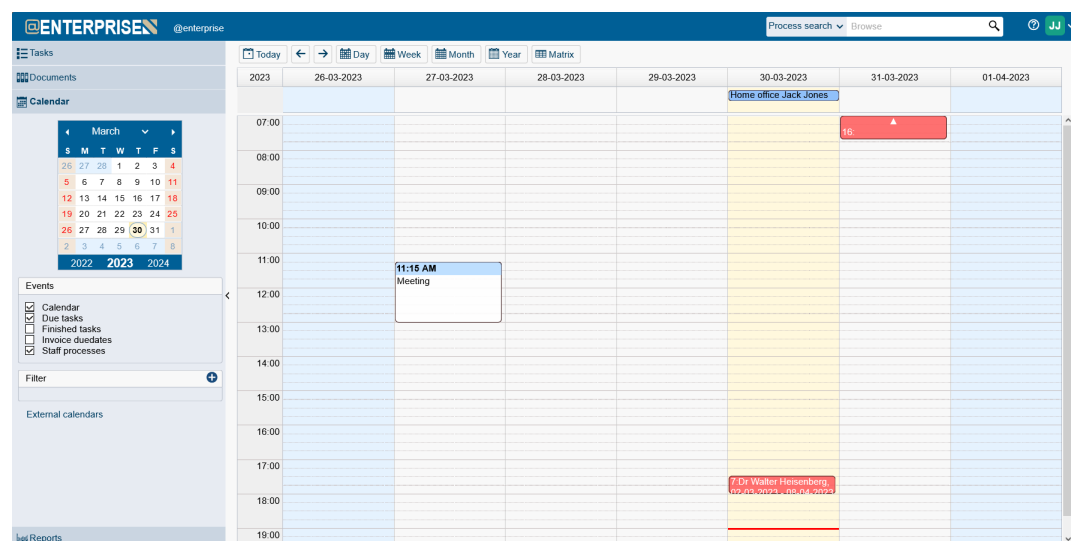

Figure 5.1: *Calendar in @enterprise*

5.1 Elements in the navigation frame

The calendar of *@enterprise* is divided into the following fundamental areas:

5.1.1 Calendar navigation

The navigation allows to navigate within the calendar. Following functions are available.

- **Calendar overview:** In navigation area a small calendar sheet is available which show the current month. This sheet allows

  - navigation between the months
  - selection of a specific month
  - the selection of a specific day which is also displayed in calendar sheet

– a specific year

- **Today:** By activating this button the current day will be displayed in calendar sheet in calendar mode *Day*.

- **Next and Back:** These two buttons allow the navigation in calendar sheet. Depending on selected calendar mode the previous or next view can be displayed.

- **Drag & Drop:** Within the calendar sheet appointments can be moved to other days. It is also possible to define other time ranges by activating the appropriate edge of an entry and move the mouse cursor. In addition appointments can be added to the calendar by dropping the mail with appointment information or the ICS-file into the calendar.

5.1.2 The calendar mode

For selecting a time span to display following buttons exist:

- **Day:** Views a day.

- **Week:** Views a week.

- **Month:** Views a month.

- **Year:** Views a whole year.

- **Matrix:** Matrix view of the chosen month.

5.1.3 The calendar sheet

In relation to the selected calendar mode the overview will be shown for this mode. Whole day appointments are shown on the top of the calendar sheet. Temporary appointments are shown at the appropriate place in the calendar sheet (see figure 5.1). Tasks with a duedate are also shown in the calendar sheet as red rectangle which contains the process-id and -subject.

5.1.4 Events

This area allows the definition which events of a selected user should be displayed in calendar sheet.
@enterprise offers following 3 pre-defined events:

- **Calendar:** Shows the appointments of selected user.

- **Due tasks:** The due date of worklist entries will be shown as appointment in the calendar.

- **Finished tasks:** The finish date of worklist entries will be shown as appointment in the calendar.

Other events can be defined with function *External calendars* (see section External calendars for more details) or must be added by application developers. For this purpose please take a look into the Application Development Guide in section Application dependent calendar-events.

5.1.5 Filter

The filter function allows you to restrict the display of calendar entries in reference to users, department's users, departments and resources.
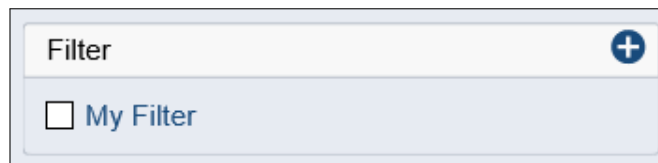

Figure 5.2: *Calendar filter*

There are two types of filter:

- **Temporary filter:** Use the button *Add*. Here you can select users as well as other resources. Click *Apply* when you made the selection. This temporary filter will be used and the asterisk at the end of the name symbolizes that this filter as a temporary filter.

- **Permanent filter:** If you use the *Save* button in the filter definition window (see figure 5.3), the filter will be saved in the database and can be found in the filter selection list.

Define filters

By activating the icon *New* a new dialog *Filter* will be opened, where you can define temporary or permanent filters.

Information of the dialog *Define filter*:

- **Name:** Name of the filter, which will be displayed in the field *Filter* in the calendar.

- **Participants:** Defines, which object should be offered for the definition of a filter. Participants can be added only, if the current user has the right *View calendar appointments*! You can select between following options after activating the *New* icon beside the field:

  - **Users:** If you select this option, you are able to select a user. By activating the button *Ok* the user will be added to the list.
  - **Department's users:** If you select this option, you are able to select a organizational unit. Only these users will be added, where users have the *home*–role in this OU. Users, who will be added at a later date, are **not** considered in this filter who has the *home*–role in this OU.

Figure 5.3: *Define filter*

– **Organizational Units:** If you select this option, you are able to select a organizational unit. The organizational unit will be added to the list (not the users (objects) of it). Users, who will be added at a later date, are considered in this filter who has the *home–*role in this OU.

– **Resource:** If you select this option, you are able to select a defined resource as participant. Resources can be created/edited, if default or own resources are defined under *Administration/Configuration/Calendar*. The link for creating resource appears in the navigation area.

– **Email:** If you select this option, you are able to enter a email address and add it to participants list. Optionally *First name* and *Surname* can be entered.

⊗ By activating the button *Delete* an object can be removed from the list.

• **Events:**

– **Calendar:** Defined appointments in the calendar only will be shown.

– **Due tasks:** The due date of worklist entries will be shown as appointment in the calendar.

– **Finished tasks:** The finish date of worklist entries will be shown as appointment in the calendar.

These events are standard *@enterprise* events. Additional events can be defined with the function *External calendars* (see section External calendars for more details). If more events than the provided ones are needed, an application developer has to create them (see Application Development Guide section Application dependent calendar-events).

- **Delete:** The current filter will be deleted and the current dialog will be closed.

- **Save and close:** A permanent filter will be created and the current dialog will be closed.

- **Apply:** A temporary filter will be created and the current dialog will be closed.

- **Cancel:** No filter will be created and the current dialog will be closed.

External calendars

This function allows to create and manage additional events by defining external calendar sources. For this purpose a new object must be created which consists of a name and the URL to the external calendar source. This URL is provided by the external calendar (e.g. Google calendar) and must be inserted here. After creating the *External calendar* object the external calendar is provided on filter mask as event.
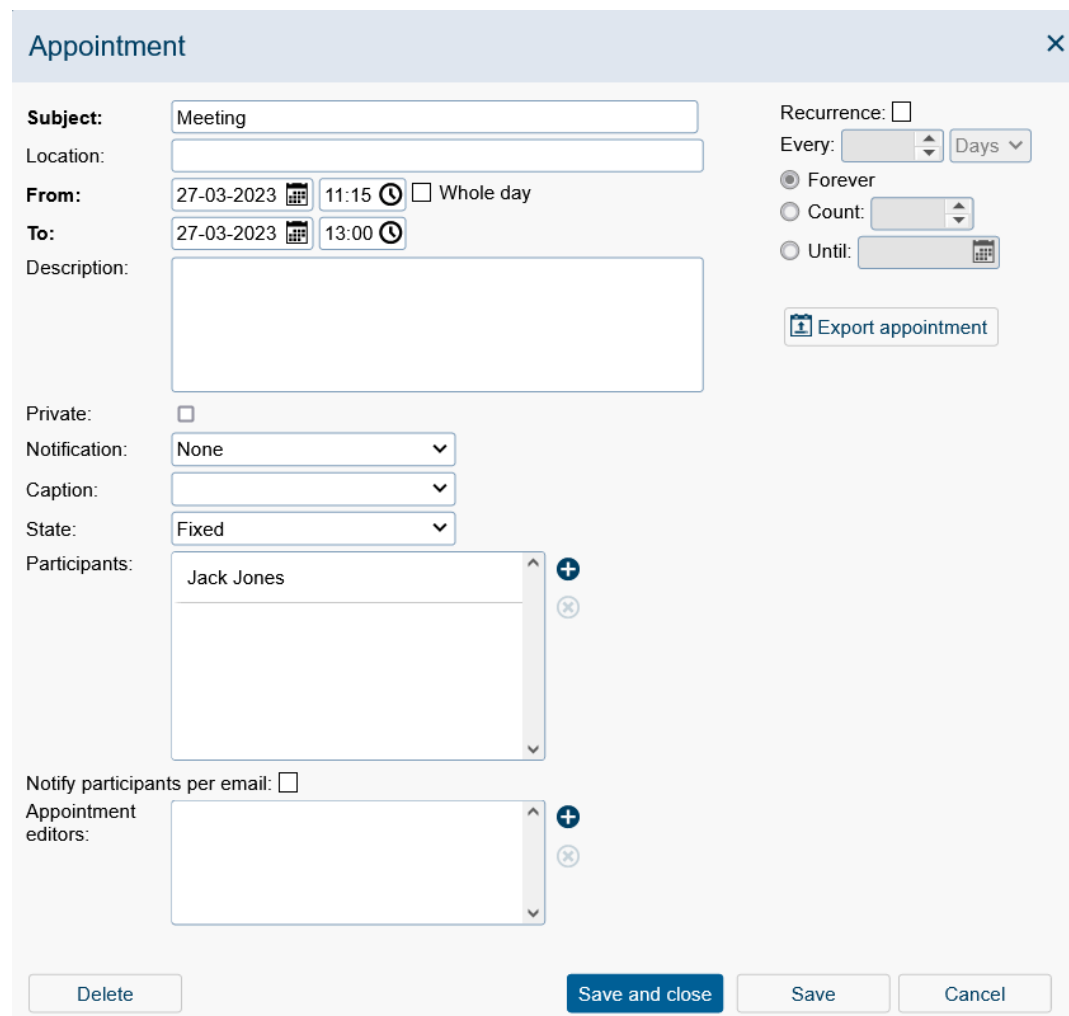
5.2 Appointments

Define appointments by clicking on the desired day.
You will see the appointment mask as in fig. 5.4.

The mask contains the following fields:

- **Subject:** Free text. This text is shown whenever the appointment is shown in the different views.

- **Location:** The location of the appointment.

- **From:** Start date (and optional time).

- **To:** End date (and optional time).

- **Whole day:** Checks, if the appointment takes the whole day.

- **Description:** Free text.

- **Private:** Indicates a private appointment.

- **Notification:** You can define whether you want a reminder email for this appointment and how long in advance.

- **Caption:** Set a color for the appointment.

- **State:** *fixed* or *preliminary*.

Figure 5.4: *Appointment*

- **Participants:** Select the participants for the appointment. Participants can be added only, if the current user has the right *Insert calendar appointments*! There are following options (description analog to filter definition):

    - **User**
    - **Users of Organizational Unit**
    - **Organizational Unit**
    - **Resource**
    - **Email**

- **Notify participants per email:** If this checkbox is active, all participants will be informed when appointment will be saved.

- **Appointment editors:** Define, who can edit the appointment (additional to the creator).

- **Recurrence:** Define a recurrence interval and end date.

- **Every:** Define the repeat interval. The first field contains the interval between two appointments in a period. The second field contains the period.

  Furthermore there are three possibilities for repeating an appointment:

  - **Forever:** Recurrences never end (default).
  - **Count:** Repeat the appointment n times as defined in this field.
  - **Until:** Repeat the appointment until this date.

- *Export appointment:* The existing appointment entry can be exported with this function (*iCalendar* format).

- *Delete:* This function is available for existing appointments only and deletes the current appointment entry.

- *Save and close:* A new appointment can be inserted or an existing updated. The dialog will be closed.

- *Save and close:* A new appointment can be inserted or an existing updated.

- *Cancel:* Displays the current calendar view without inserting or changing an appointment.

(see Installation and Configuration-Guide - chapter Configuration).

6. The Mobile Client

@enterprise offers the possibility to use a PDA, PocketPC or SmartPhone. The mobile version of *@enterprise* doesn't use frames or popups. In order to work with *@enterprise* proceed as described in chapter Logging on to *@enterprise*. Basically it is sufficient to enter the URL *http://<server>:<port>* for connecting to the server where the *@enterprise* login window will be displayed (see figure 6.1).
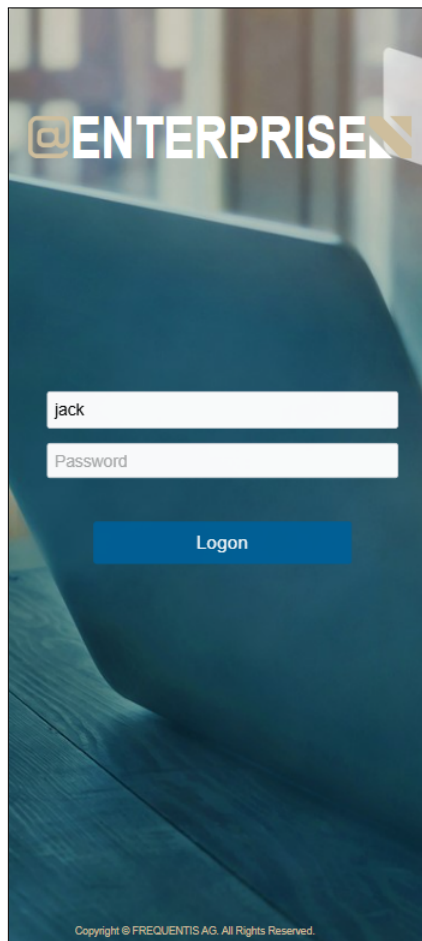

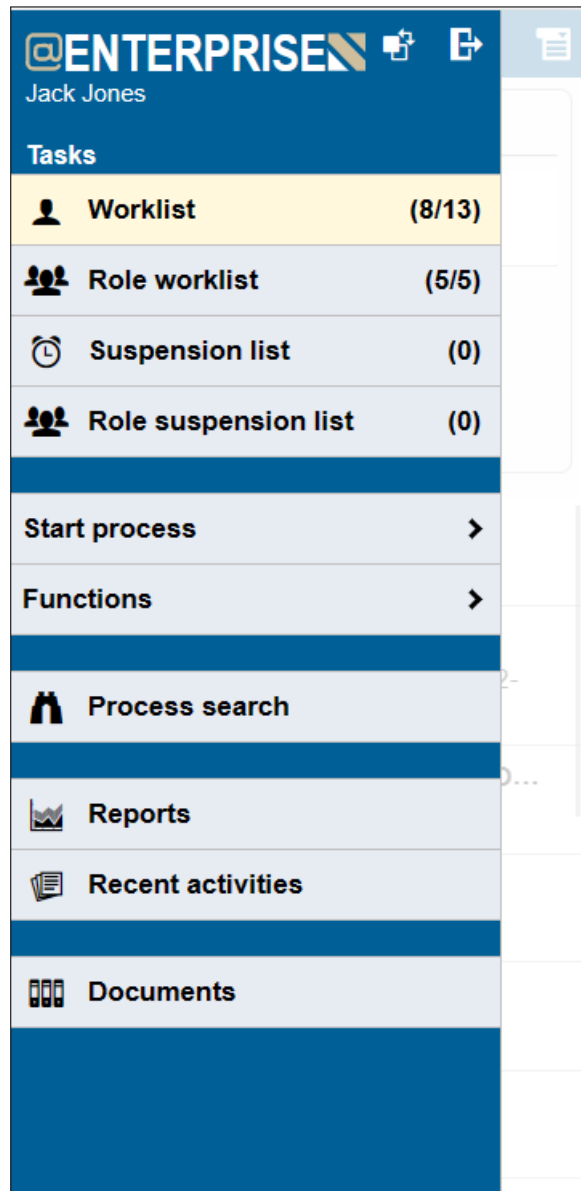Figure 6.1: ***Login window of mobile client***

Hint: If the mobile page should not be loaded, the administrator has to remove the (role/user) assignment of mobile GUI-configuration object.

After successful login the *@enterprise* mobile GUI is loaded which is based on DOJO framework. The main window is divided into following components (see figure 6.2):

- **Info bar:** This bar displays the information about the current used function and which toolbar functions are available. In the left corner a Back button exists which links to the parent menu. In main window there are also the functions *Standard GUI* and *Logout*. With the *Standard GUI* function you can switch to the standard user interface of *@enterprise*. From the standard view you can then activate the mobile view again with the *Show optimized mobile GUI* function.

- **Work area:** The work area is the main area, where the content of the actually selected function is displayed. After successful login the following components will be displayed in the work area:

  - **Worklist:** This area contains the worklist + user folder (see section Worklists). Beside the worklist link a arrow indicates that subfolder exists. Activate the arrow to display content of subfolder.
  - **Role-Worklist:** This area contains the Role-Worklist (see section Worklists).
  - **Suspension List:** This area contains the Suspension List (see section Worklists).
  - **Role Suspension List:** This area contains the Role Suspension List (see section Worklists).
  - **Start process:** This function allows to start a process (see section Start process)
  - **Functions:** All (task)functions of *@enterprise* are listed here which are defined for function list and have a mobile client action (see section Task functions)
  - **Process search:** This function can be used to find information about process instances you are or were involved in.(see section Process search).
  - **Reports:** Here you can find reports which have been predefined by an administrator. By executing an query the results will be displayed in your work area. Detailed information about this topic can be found in the user manual Reporting.
  - **Recent activities:** By activating this link all process activities of the last month will be listed. The activities are structured in *Today*, *Yesterday*, *7 Days*(= last week) and *1 Month*(= last month).
  - **Documents:** This area contains an adapted version of the *@enterprise* document management system (DMS). Detailed information about the DMS is available in chapter The Group Documents.
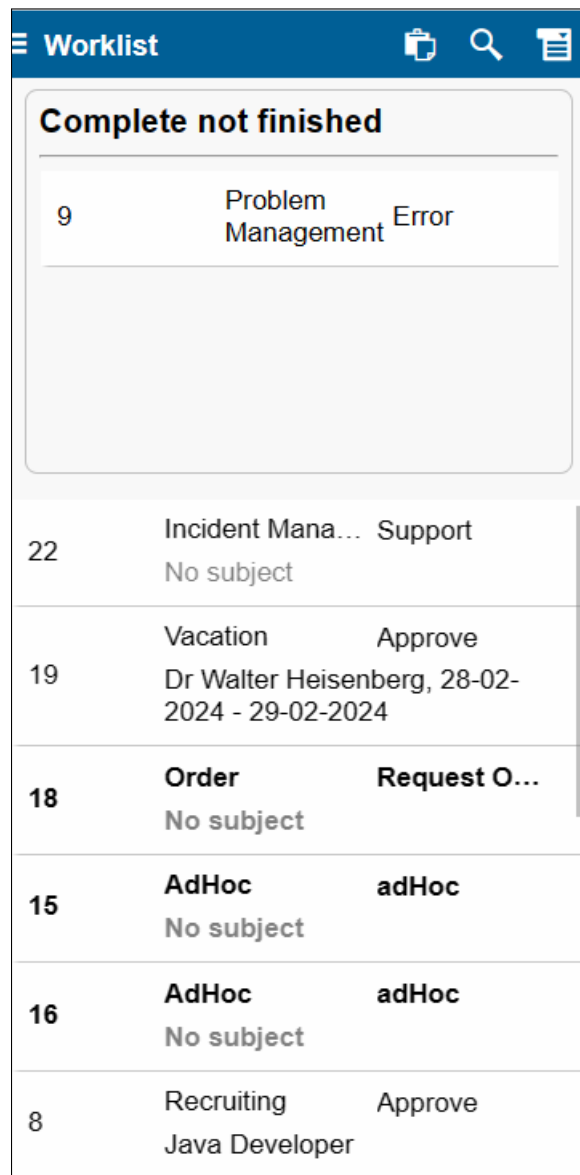
The navigation and user interaction is equal to the description of chapter User Interaction in *@enterprise*.

Figure 6.2: *Main window of mobile client*

6.1 Worklists

This group comprises your personal worklist, your role-worklist, your suspension list and role suspension list. The worklists are shown as a table (see fig. 6.3). An entry can be displayed normal or as *red* line. A **red** line symbolizes a task, which has not been edited yet.

For each worklist type a set of functions are available described in chapter Functions of the Worklist Component. For this purpose touch an entry for a longer timer to get functions in toolbar (multi selection is possible).

Figure 6.3: *Worklist of mobile client*

The magnifier-icon shows an input field which allows to search for entries within a work-list table. The function right beside allows to sort the table according to selected attribute in ascending or descending order.

For more details about the process instance a row must be activated (short touch). This page contains following information (see fig. 6.4):

- **Toolbar:** With back button the worklist table (overview) is displayed again. Furthermore the appropriate worklist functions are displayed. The worklist functions are described in chapter Functions of the Worklist Component

- **Process information:** The process id and subject are displayed. Furthermore this area contains information about the task, when was it started and available in worklist, a comment (to this process step), etc. This area contains also information about the process, the time of process start, start agent and the priority.

- **Process form(s):** If you click on the form icon, the form which has been created in the system administration will be displayed. This form can be edited and stored with button *Save*, if your are the current agent. Use the button *Save and complete* to save your changes and automatically forward the task to the next agent of the process (see chapter Complete). Furthermore the appropriate worklist functions are available in toolbar.

- **Notes:** Here you have the possibility to attach a note to the task, edit or delete it. Edit and delete is allowed for notes only attached in same process step (excepting private notes). This kind of notes is also used for DMS objects and is described in section Attach note.

- **Documents:** By activating this function a list of all attached DMS documents are shown.

- **History:** This is a simplified version of the process history described in chapter Process history.

- **Process:** A graphical overview about the process is displayed (analog to chapter Process definition).

- **Emails:** This function is not displayed by default and must be added for each process definition. It shows a full email correspondence of this process (analog to section Emails), but it is not possible to send new emails.

6.2 Start process

This link opens the process list which shows all processes you are able to start (see fig. 6.5). You can start all those processes in which you are entitled to handle the first task (e.g. because you are member of the role associated with the first task).
By activating a link of the list the process start form of the selected process will be started.

6.3 Process search

Activating this link leads in displaying the search mask for process search.
The result of the search will be shown in your work area as a table. The entries of this table contain links to the process history of the corresponding process instances (analog to chapter Process history).
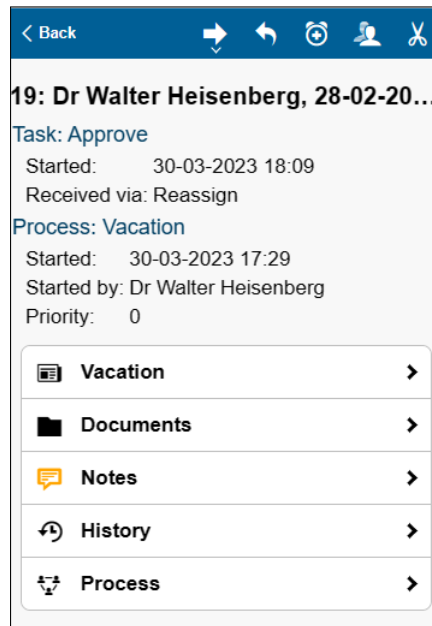
The search mask contains following information:

Figure 6.4: *Detail mask of a task*

- **Id:** Here you can specify the Id of the process instances you are looking for. The Id is the unique identifier of a process instance. You can select between following search options:

    - *Contains:* The entered string is available somewhere in the id to get a result.
    - *Starts with:* The entered string has to be available at the beginning of the id to get a result.
    - *Exactly:* The entered string must be equal to the id.

- **Subject:** Here you can enter the subject of the process you are searching for. You can select between following search options:

    - *Contains:* The entered string is available somewhere in the subject to get a result.
    - *Starts with:* The entered string has to be available at the beginning of the subject to get a result.
    - *Exactly:* The entered string must be equal to the subject.

- **Time–Interval:** Here you can define the time–interval in which the processes are/were active. You can choose one of the following options:

    - *Started:* Lists all process instances, which have been active within a certain period of time.
    - *Finished:* Lists all process instances, which have been finished within a certain period of time.
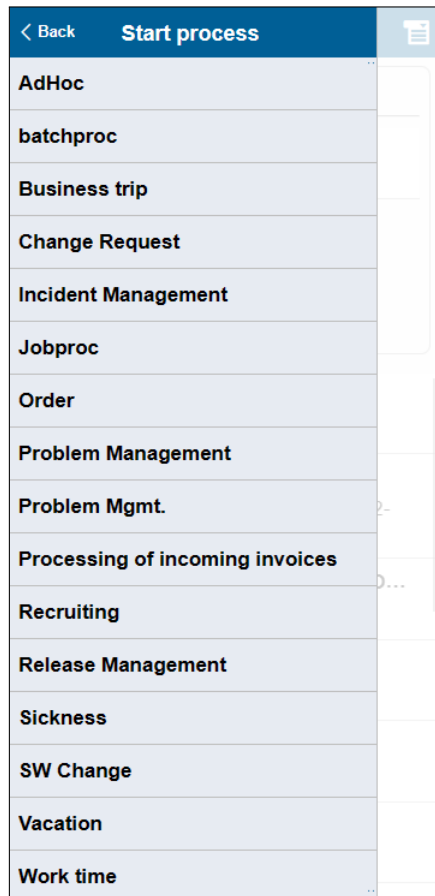
Figure 6.5: *Process start in mobile client*

The time–interval can be set using the fields *From* and *To*.

- **Organizational unit:** Here you can narrow the search to list only processes you handled within a certain organizational unit.

- **State:** There are two ways to restrict the search on the process state:

  – *Running:* Only running process instances will be displayed.
  – *Finished:* Only terminated process instances will be displayed.

- **Process type:** Here you can narrow the search to list only process instances of a particular process definition.

- **Search:** This icon starts the process search.

Figure 6.6: *Process search in mobile client*

7. Appendix

7.1 Task Functions in *@enterprise*

Clicking on the function symbol in your worklist loads a window shown in figure 7.1. It contains all task functions that can be applied to the according task.

The following task functions are offered by *@enterprise* as a default:

- Copy to ...

- Follow the process

- Set due date

- Set read/unread

- Set priority

Following standard functions are not displayed by default, but can be configured by an administrator:

- Add parfor steps

- Add process relation

- Create process copy

- Process templates

- Folder settings

- Into clipboard

- Test XPath

7.1.1 Copy to ...

This function can be used to send a copy of the current task to any user. The copy contains read–only versions of all forms, documents and processes of this task. They cannot be modified.

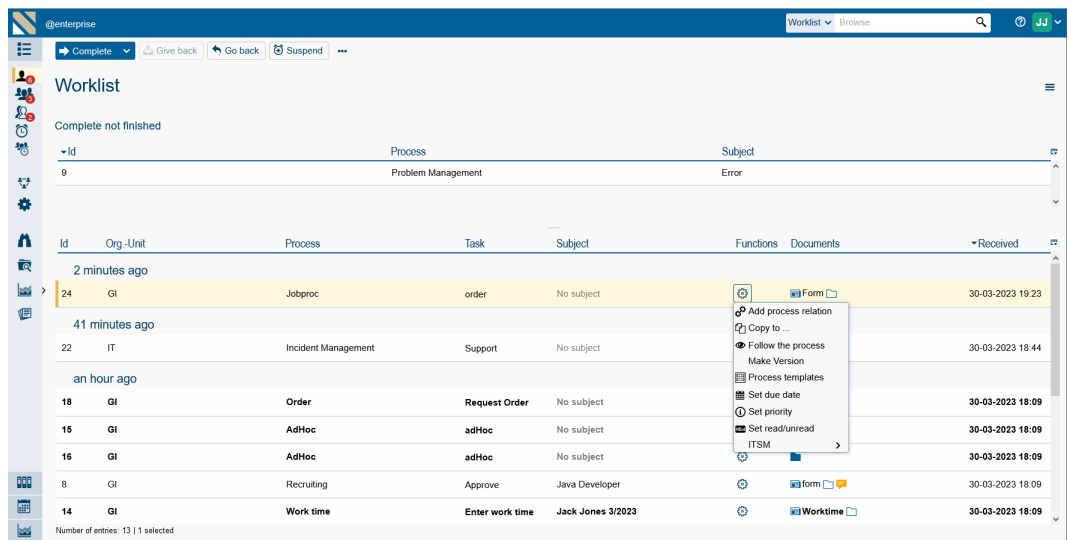Clicking the link *Copy to ...* loads a dialog (see figure 7.2) in your work area.

Figure 7.1: **Task functions**

Figure 7.2: **Copy to ...**

Content of the dialog *Copy to ...*:

- **User:** Enter the user who should get a copy of the current task.

- **Comment:** Enter a comment for the recipient.

- **OK:** Click this button to confirm your entries and send a copy to the selected user.

- **Cancel:** This button can be used to abort the execution of the function.

After the successful execution of this function a copy of the task appears in the worklist of the selected user. The task is named *copy*.

Hint: If you complete a copy (function *Complete*) it will be removed from your worklist.

Example

Precondition: Your personal worklist is displayed and there is an already started process (with forms, documents etc.).

1. Click the function icon in the column *Functions*. A new window appears containing the functions that can be applied to the actual tasks (see figure 7.1).

2. Activating the link *Copy to ...* displays the dialog shown in figure 7.2.

3. Select your name in select list *User*.

4. Confirm your entries by using the button *Ok*. A copy of the current task will be put in your worklist.

Hints

- **Error message:** If any errors occur during the execution of the function, the error messages will be displayed in the work area.

- **Copy:** A copy of a task can be recognized by its name. It is called *copy*.

7.1.2 Follow the process

This function allows to activate a notification (email) for the process or the selected tasks when they are finished. The appropriate message template with id *processTracker* is stored in *@enterprise* administration in application *default*. This message is sent only, if the process or tasks are finished by another user than yourself. The execute right for the function *Follow the process* and the create right for the object class *Process tracker* are needed to use this function. The role *all* automatically has the create right for the object class *Process tracker*.

Content of the dialog *Follow the process*:

- **Process:** If this checkbox is activated, an email will be sent after process is finished.

- **Task:** A notification email will be sent after selected tasks are finished.

- **Comment:** Free text which is inserted into notification email.

- **Delete:** Deletes the tracker for this process. This button is only active, if a tracker for this process exists.

Figure 7.3: **Follow the process**

- **Save and close:** The entered data gets stored and the window gets closed after activating this button. In *List of tracked processes* an appropriate entry is created (see section *@enterprise* Functions).

- **Save:** The entered data gets stored after activating this button.

- **Cancel:** Activating this button leads in closing the window without saving the data.

7.1.3   Into clipboard

This function enables you to copy the corresponding process to the clipboard.

Hint: This function is not visible by default!

7.1.4   Set due date

This function can be used to set the duedate for a process, a task or both.

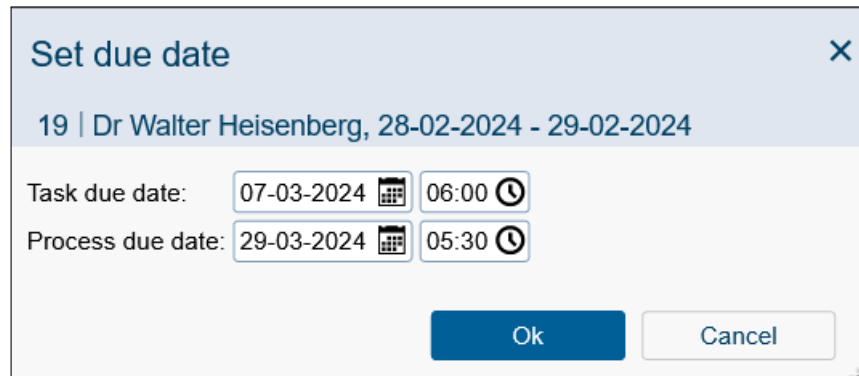Clicking on the link *Set Duedate* loads the dialog *Set due date* (see figure 7.4) in your worklist.

Figure 7.4: **Set due date**

Content of the dialog *Set Due–date*:

- **Task due date:** Enter the point of time when the actual task should be finished.

- **Process due date:** Enter the point of time when the actual process should be finished.

- **OK:** Click this button to confirm your entries and the due–date will be set.

- **Cancel:** This button can be used to abort the execution of the function and you will be transferred to your worklist.

Hint: The column *Due to* in your worklist (see chapter Structure of the worklist) shows the due–date of the corresponding task or process respectively. This function can be executed only, if right *Edit process instances* is assigned.

7.1.5 Set read/unread

Through the activation of this function the corresponding entry of your worklist is set to *Unread* (displayed in bold letters) or *Read* (displayed in normal letters).

7.1.6 Set priority

By selecting an entry of the worklist and activating this function the priority of the process can be set. A new dialog window will be opened, where you can enter the priority and store it by activating the button *Ok*.

7.1.7 Add parfor steps

This function allows to add parfor steps. One requirement is necessary: a parfor-node must be active in a parallel branch of an AND-PAR- or. OR-Par-node.

Hint: This function is not visible by default!

7.1.8 Create process copy

This function can be used to create a copy of the current process. By default all form data and all DMS objects of tab *Documents* of the origin process are copied. Furthermore a system note is created and attached to the begin step of a process which contains the information about the origin process. This standard behavior can be changed by an administrator as described in Administration Guide, section Standard functions.

7.1.9 Process templates

If this function is available in the toolbar of a process form and has been activated, a dialog will be displayed where processes of the current process type are listed (see Fig. 7.5). Only process instances, which the user is allowed to see are listed in the template table. Clicking on the process ID will open the process which is a possible template candidate. The search field allows to search for the particular process in the displayed list. The number of initial displayed processes can be defined in the *@enterprise* configuration with parameter *Items per page*. With the button *Load more templates* additional process according to the parameter value *Items per page* can be added to the list (until all processes are loaded). If a process is selected and the button "Apply and close" has been activated, the form data from the template process are transferred to the current form.

Id	Subject	Currently at	▾Started	Finished
21	Jack Jones, 02-05-2024 - 10-05-2024		30-03-2023 18:00	30-03-2023 18:00
20	Dr Walter Heisenberg, 02-02-2024 - 10-02-2024		30-03-2023 17:56	30-03-2023 17:56
17	Dr Walter Heisenberg, 02-02-2023 - 10-02-2023		30-03-2023 16:07	30-03-2023 16:07
7	Dr Walter Heisenberg, 02-03-2023 - 08-04-2023	Approve, Manager	30-03-2023 12:43	
6	Jack Jones, -	Request, Jack Jones	30-03-2023 12:33	
5	, -		30-03-2023 09:58	30-03-2023 13:57
4	Dr Walter Heisenberg, 01-01-2023 - 10-01-2023	Approve, Manager	30-03-2023 09:09	
2	Jack Jones, 25-12-2023 - 29-12-2023	Approve, Manager	29-03-2023 14:32	
1	Dr Walter Heisenberg, 01-03-2024 - 11-03-2024	Approve, Jack Jones	29-03-2023 14:30	

Figure 7.5: **Process templates**

This standard behavior of this function can be changed by an administrator as described in Administration Guide, section Standard functions.

7.1.10   Add process relation

This function allows to create relations between processes. These relations are visible in process history of appropriate processes. For using this function process relation types must be created first under *Configuration*/*Search*/*Process relations* (see Installation and configuration guide for more details).

If a relation between two processes should be created, select a process in worklist and execute this function. A new dialog will be opened with following information:

• **1. Process:** The id of current selected process is displayed here.

• **Process relation:** The type of the process relation.

• **2. Process:** The table offers all processes which can be used for a process relation. Only the processes of the current user worklist (without the entries in the subfolders) are displayed, but across all applications (i.e. all processes from all applications).

• **Ok:** If process in table *2. Process* is selected, a relation will be created by activating this button. Finally the worklist is displayed again.

• **Cancel:** This button closes the dialog. No process relation will be created and the worklist will be displayed.

Figure 7.6: **Add process relation**

Hint: This function is not available by default!

7.1.11 Test XPath

This function allows to check XPath expressions, if they are valid.

Hint: This function is not visible by default!

7.1.12 Folder settings

This function allows to define the folder settings of tab *Documents*. Normally editing those settings can also be achieved via toolbar action *Folder properties* in the *Documents* tab of that instance, but if that action is not available there (due to configuration) it can be provided by adding this function to the process instance (e.g. in the process history).

Hint: This function is not visible by default!