DOCUMENT

Release Notes ConSol CM

Version 6.10.0

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General update and installation instructions

For an update of ConSol⁕CM from one version to another two possible ways exist:

- Distribution installation
  The distribution is installed into the application server. For an update every local configuration, like the data source configuration, has to be saved before and reconfigured afterwards.
  This type of update ensures that really every change between the versions is installed. This type of update is recommended for updates of the major or minor version, e.g. for an update from 6.6.3 to 6.7.5.
- EAR / WAR Update
  For this type of update of the ConSol⁕CM, the EAR (cm6.ear, cmrf.ear) and WAR (cm-track.war) files of the new version have to be installed into the application server. Additionally every installation related changes described in the chapters 'Update and installation instructions' have to be applied manually. The changes have to be applied for every version between your original CM version and the new CM version, e.g. for an update from 6.6.3 to 6.6.7 the instructions of the versions 6.6.5, 6.6.6 and 6.6.7 have to be checked.
  This type of update is only recommended for updates within a minor version.

Additionally for every type of update, the 'Update and installations instructions' chapter has to be checked for further important notes.

If available, the solution specific Release Notes have to be checked too.

1 Version 6.10.0.0 (18.03.2015)

Version 6.10.0.0 includes 6.9.4 versions up to 6.9.4.1, 6.9.3 versions up to 6.9.3.9, 6.9.2 versions up to 6.9.2.11, 6.8 versions up to 6.8.5.8 and 6.7 versions up to 6.7.13

1.1 Update and installation instructions

1.1.1 New license necessary

In order to use the ConSol✳CM 6.10.0.0 a valid license for version 6.10 or higher is needed. Please check and upgrade the license in the Admin-Tool (*General configuration*, tab *Licence*).

1.1.2 Resource Pool usage requires specific licensing

Specific licensing is necessary when intending to use the Resource Pool feature. In case you plan to do so, please make sure you have a sufficiently extended license and add it in the Admin-Tool.

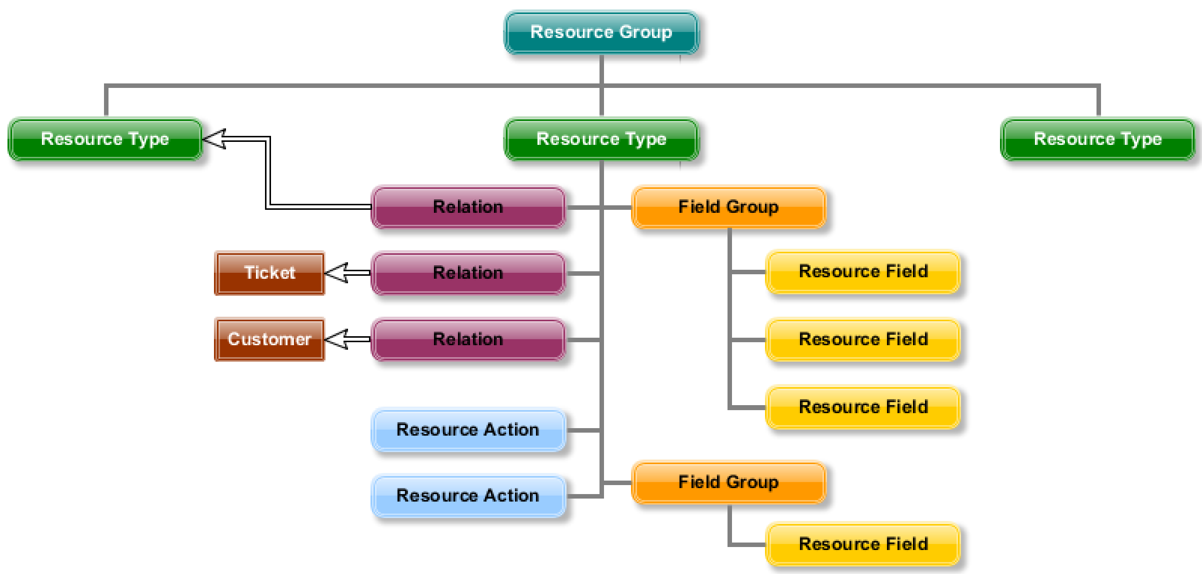
No further instructions available.

1.2 New Features

1.2.1 Resource Pool (#625029)

ConSol❋CM now features the Resource Pool, a completely new functionality for using resources as new kind of object generally available in the system. The resource pool requires additional licensing extending previously owned licenses (see section 1.1.2 also).

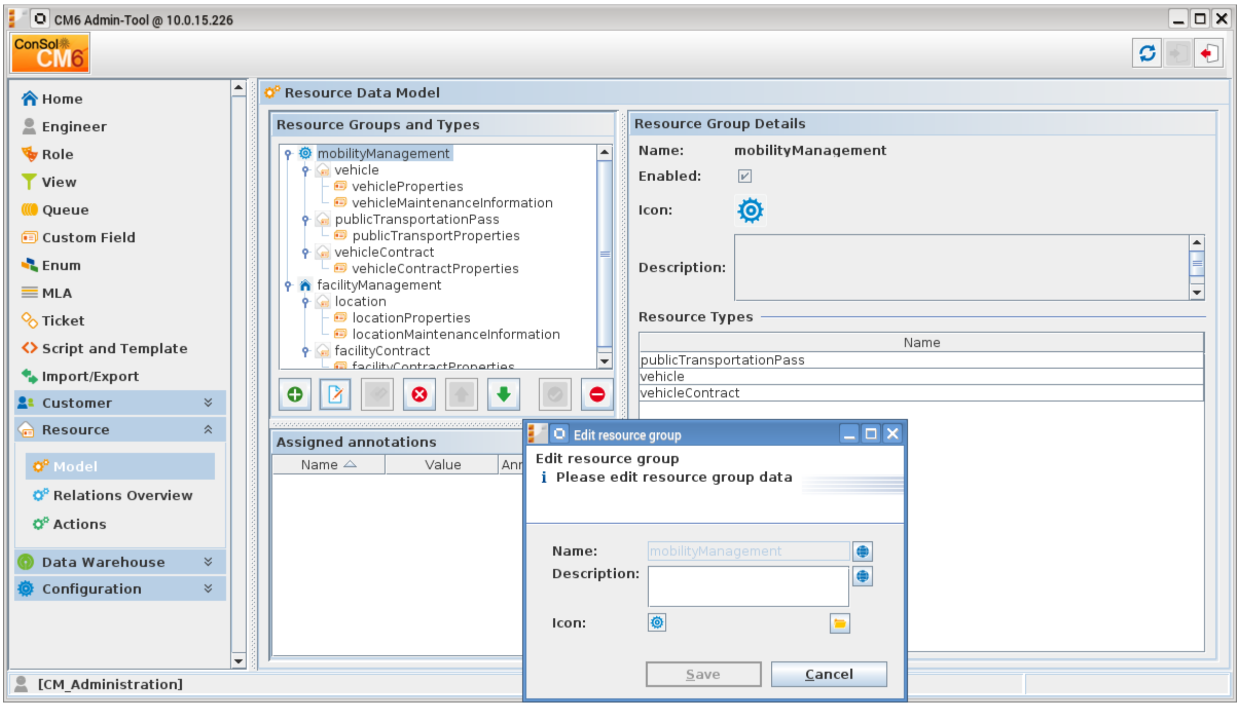
A resource in ConSol❋CM is a third basic object besides the ticket and the customer. While the ticket is a single instance of a process execution and the customer is an individual or organizational unit associated with such a ticket, a resource is some other (real-world) object possibly associated with either. The resource pool is the functionality for handling resources in ConSol❋CM.
Some examples for resources are products, facilities and rooms, vehicles, computers, parts, software packages, licenses, contracts and many more.
Similar resources are grouped together in a type and resource types belonging together form resource groups. So any specific resource is an instance of a resource type. Each resource type has its own set of resource (data) fields organized in field groups which are defined by the administrator. This allows resources to specifically hold the information which is important for handling such a resource of a certain kind. Resources can be related to each other as well as to tickets or customers. Furthermore it is possible to define actions to perform on resources which allows for complex operations programmed in scripts.



Resources are generally available in the Web Client for creation, usage and association with other objects. The specific data of actual resources can be accessed and operations can be executed for them on the respective pages. Dedicated pages for resource management have been added. The data model for the resources, their presentation, relations and actions are all defined in the Admin-Tool.

Admin-Tool: Resource Model and Administration

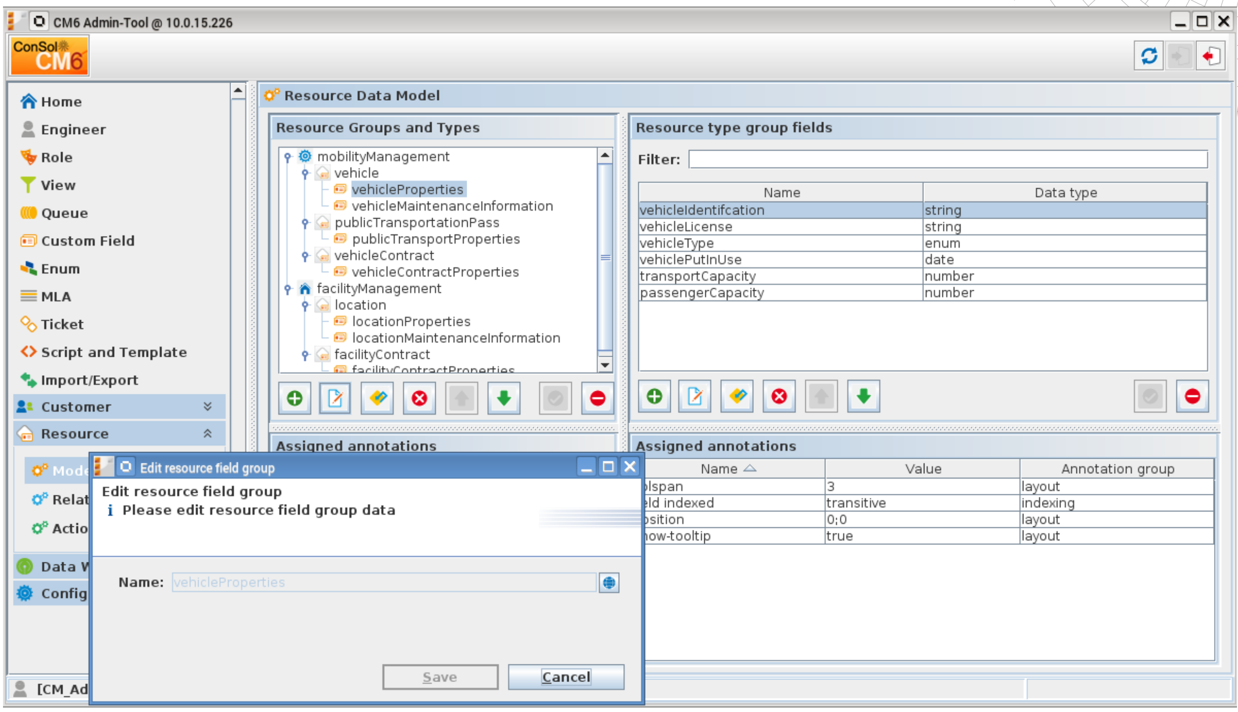
The Admin-Tool has been extended with three resource pool administration sections which form the navigation group “Resource”. The content section shown for the navigation item “Model” is used for all aspects related to defining and organizing resource types, including their resource fields and relations to other objects.



Initially at least one resource group to hold resource types must be defined. Resource groups are used to unite resource types of a common subject under a unique label. Any number of groups can be defined and each can have many resource types. The groups are used in the Web Client for the same purpose, thus, name and description can be localized. Resource types can be localized in the same way.

The detail information on the right side of this content section displays information about the object selected in the tree “Resource Groups and Types”. Below the tree are the buttons for administration of the selected object: creating, editing, annotating, deleting, ordering, and activating/deactivating. The annotations below the tree become available for a field group of a resource type when the field group is selected in the tree.

Within a field group the individual resource fields for the resource type can be managed. Definition and management of the fields parallels the field administration for custom fields and data object group fields. Generally the field and field group annotations show the same behavior as in other field definition contexts.



The initial creation of a resource type must include its name and naming its first field group. It can be edited and extended after it was created. A localized description, an icon and its mode can be set. The mode identifies the data source and handling for the resource data. Possible modes are:

- **Internal**: resource data is fully managed by CM6
- **On the fly**: resource data is retrieved from an external backend system whenever requested (available only in a later release)
- **Cached**: resource data is originating from an external backend system and cached in CM6, a refresh a an item can be triggered manually (available only in a later release)
- **Imported**: resource data is origination from an external backend system and stored in CM5, an update required a new bulk data import (available only in a later release)

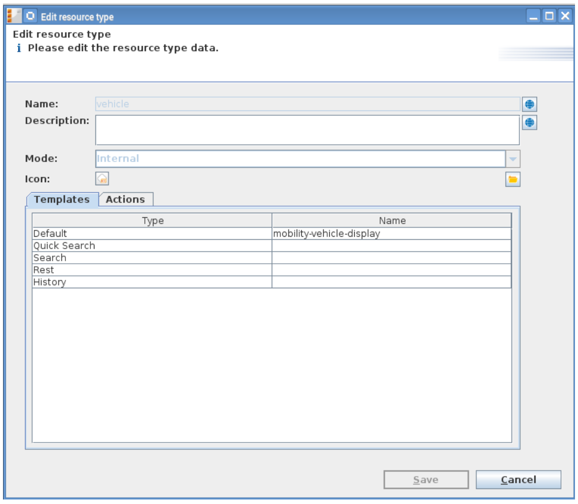
While the mode “Imported” requires a previous import by ETL (planned for release 6.10.1.0) the modes “Cached” and “On the fly” rely on a customer specific implementation of the class `ResourceExternalSource`. So only the internal mode is currently useful out of the box. Support for updating data for any resources in external systems is not planned.
Furthermore the dialog for editing a resource type allows to assign the display templates in standard contexts and the resource actions for this type. Both generally parallel the configuration of the corresponding unit templates and actions. This information is displayed on the “Details” tab when selecting a resource type in the tree.
The templates referenced for a resource type must have been created in the template administration of the Admin-Tool in advance. The following code shows two simple examples for resource templates:

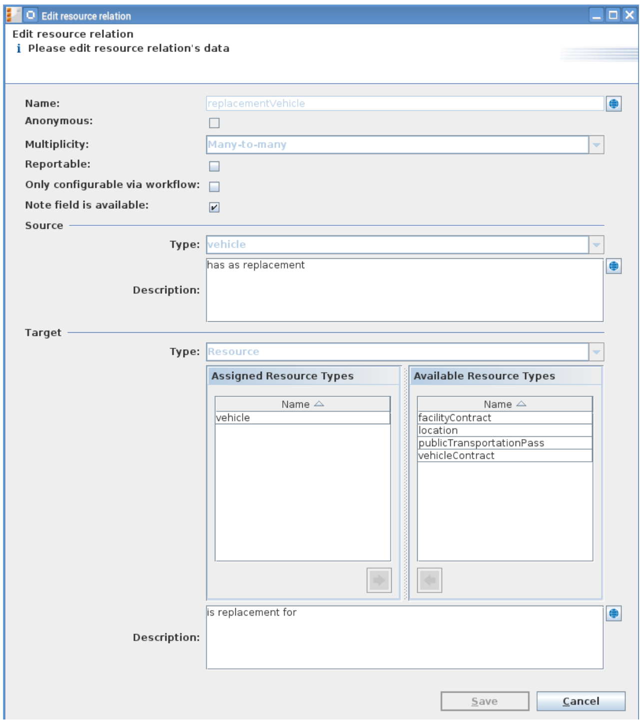
```
// Example 1
${resource.get("vehicleProperties", "vehicleIdentification") + ' (' +
resource.get("vehicleProperties", "vehicleLicense") + ')'}
```

```
// Example 2
${resource.get("publicTransportProperties", "passName")}
```

Please note that there is no inheritance for resource types and that the Admin-Tool does not provide a copy function for resource types. In case resource instance copies are repeatedly necessary a customized resource action can provide such functionality in the Web Client.

The relations of the resource type are shown when choosing the “Relations” tab. This also provides the functions to modify the relations of the selected resource type: creating, editing, deleting, activating/deactivating. This list cannot be sorted directly since all relations are sorted globally in the content section “Relations Overview”.



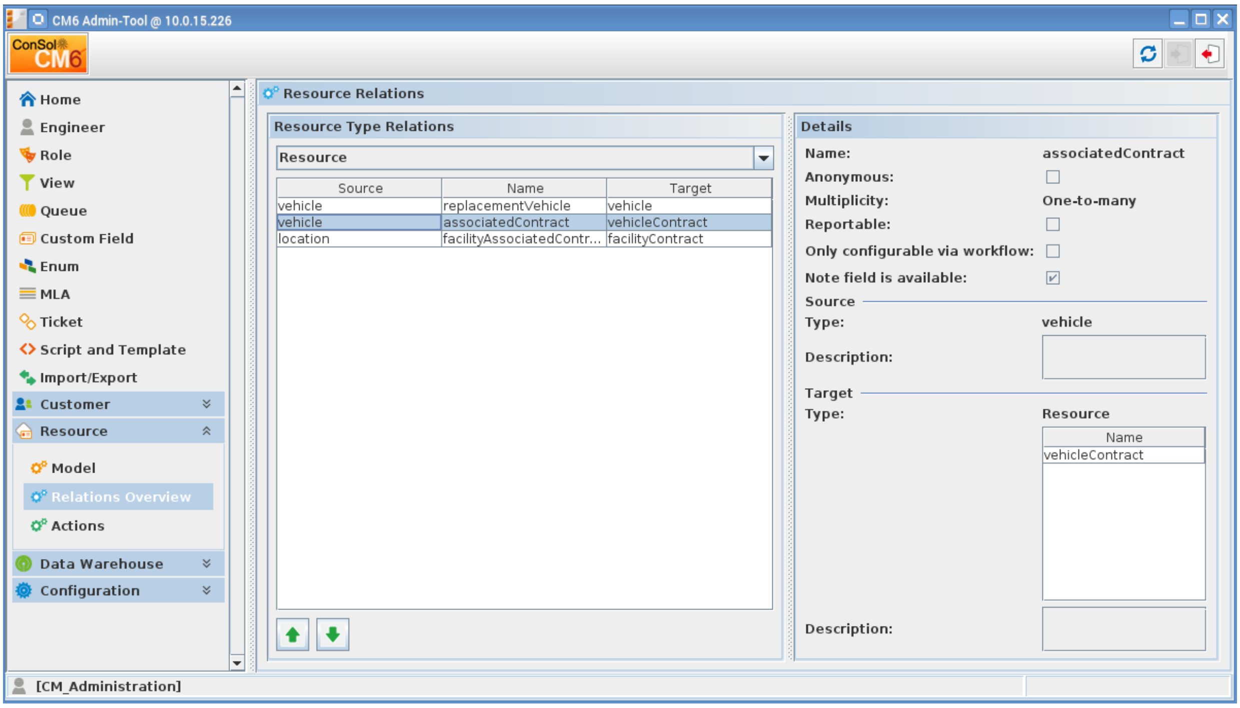


When creating a relation, it usually has to be named. The only exemption is an anonymous relation which automatically is named “related”. A multiplicity must be selected defining how many source and target elements can be related:

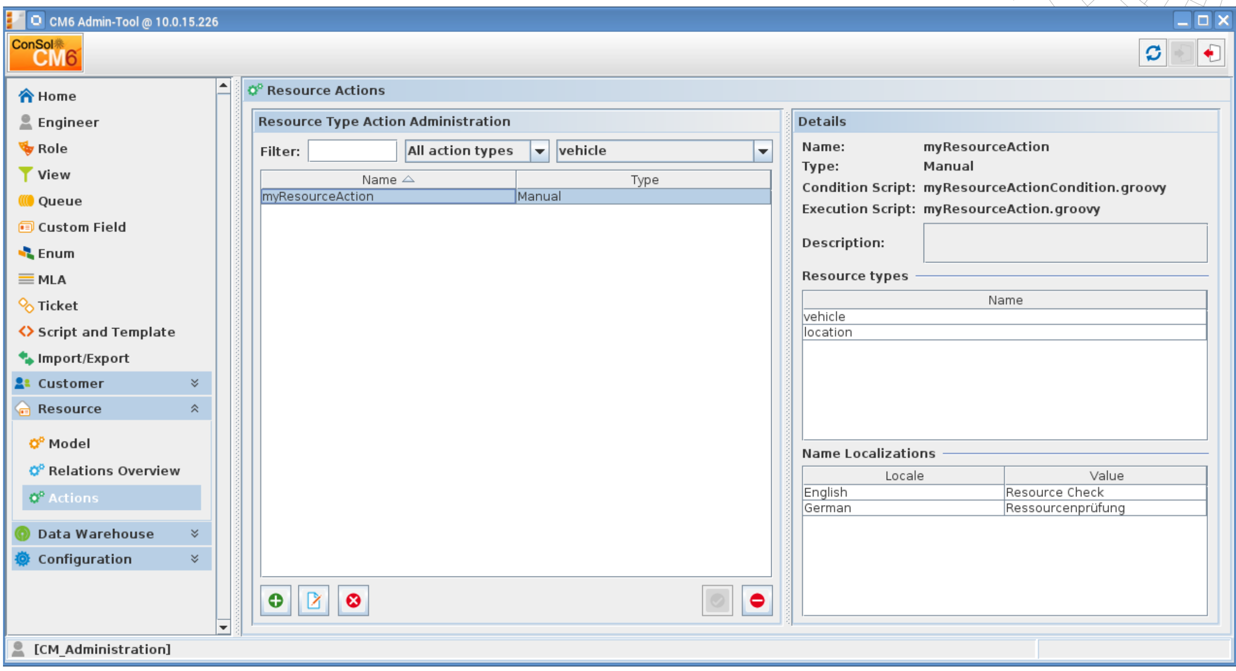
- **One-to-one**: Each resource can have only one relation with a single target object
- **One-to-many**: Each resource can have many relations with different target objects
- **Many-to-one**: Many resources can have one relation each with only one single target objects
- **Many-to-many**: Many resources can have many relations with different target objects

The checkbox “Reportable” identifies, if the relation will be transmitted to the data warehouse in the future (planned for release 6.10.1). “Only configurable via workflow” prohibits creating/managing the relation in the clients analog to customer relations. “Note field is available” defines if the note entry field will be shown when creating and editing such a relation. The source object for the relation is preselected by the selection in the resource tree, but a localized description for the source side of the relation can be entered. This will be the label showing in the Web Client. For the target objects the object type must be selected which then allows to associate the corresponding target objects with the relation. The localized description entered here will show as the target side of the relation in the Web Client. This means it is the label for the relation when the target object is the main display object on the detail page.

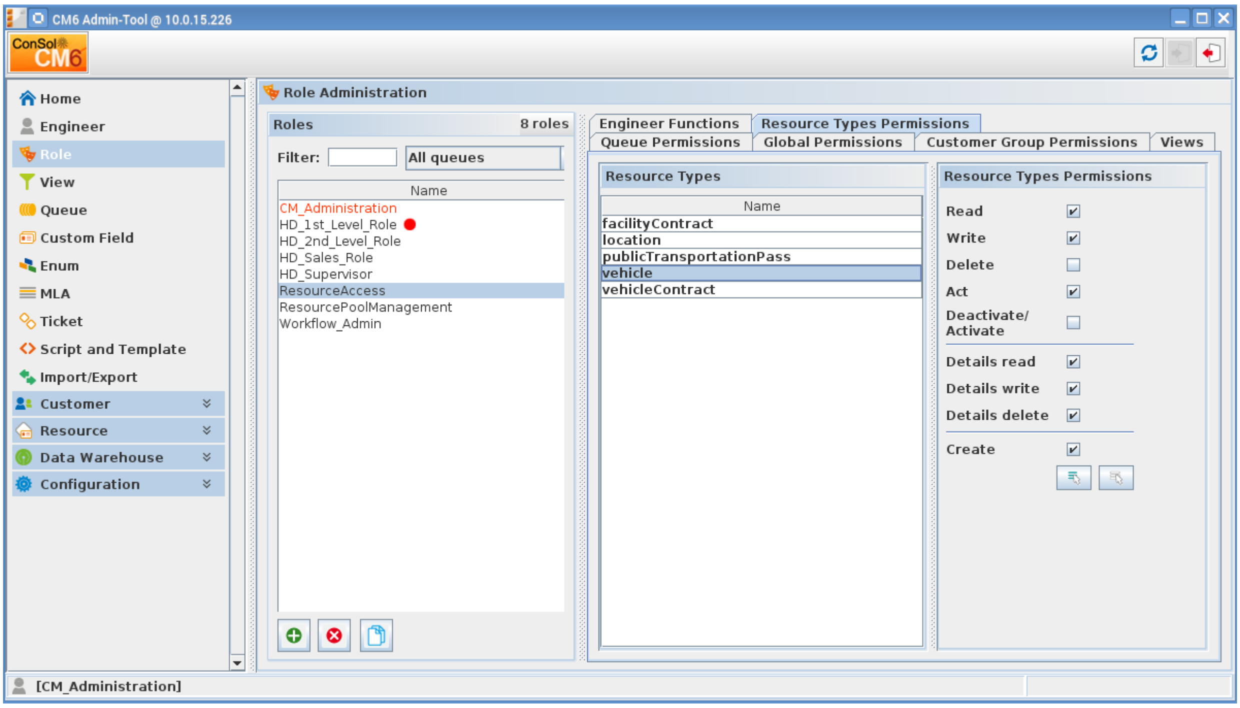
The “Relation Overview” content section provides a list based on all resource relations which is generally filtered by the target object types (since the source object always is a resource). To the right of the list the detail information for the selected relation is displayed. The arrows on the bottom can be used for ordering the relations of the list. The order defined in this list is being used in the Web Client for displaying the object type relations. Thus, this list must be manually sorted and does not provide automatic sorting mechanisms by column (which would obscure its purpose of manual sorting for the list).



It is possible to define resource actions on the content section opened via the navigation item “Actions”. The resource action definition is the same as the definition of data object actions. The referenced scripts must have been created in the script administration as type “Resource-Action” or “Resource-Condition”, respectively, to be used as either in a resource action. Only correctly typed scripts will be listed in the respective drop-down menus in the creation/editing dialog. The list can be filtered by action type and resource type or by a filter string for the name. The details for the selected action are displayed to the right of the list. The actions are associated to a resource type in the resource type definition dialog.



A user must have a role with sufficient permissions associated so that he can handle resources in the web client. These are defined on a new tab “Resource Types Permissions” in the role administration. When a role is selected the resource type can be selected on the tab in the list in the middle. The role’s permissions on the right side have to be enabled specifically for each resource type.



The privileges available for each resource type are these:

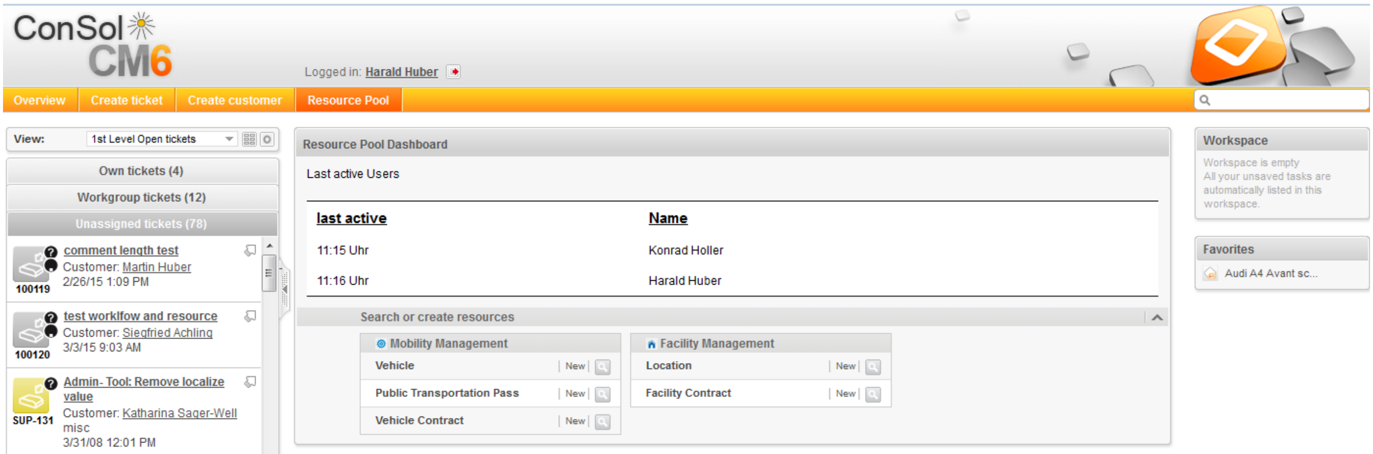
- **READ**: Load and display resources of the selected type in the Web Client
- **WRITE**: Change resource field data of this type of resources
- **DELETE**: Delete resource of the respective type from CM6
- **ACT**: Execute resource actions defined for this type of resources
- **DEACTIVATE/ACTIVATE**: (De-) Activate resources of the type in question
- **DETAILS READ**: Load and display comments/attachments for resources of this type
- **DETAILS WRITE**: Add and change comments/attachments for resources of this type
- **DETAILS DELETE**: Remove comments and attachments for resources of this type
- **CREATE**: Create new resource entries for the type of resources

The buttons below the list of permissions allow to select/deselect all privileges at once.

Web Client: Resource Usage

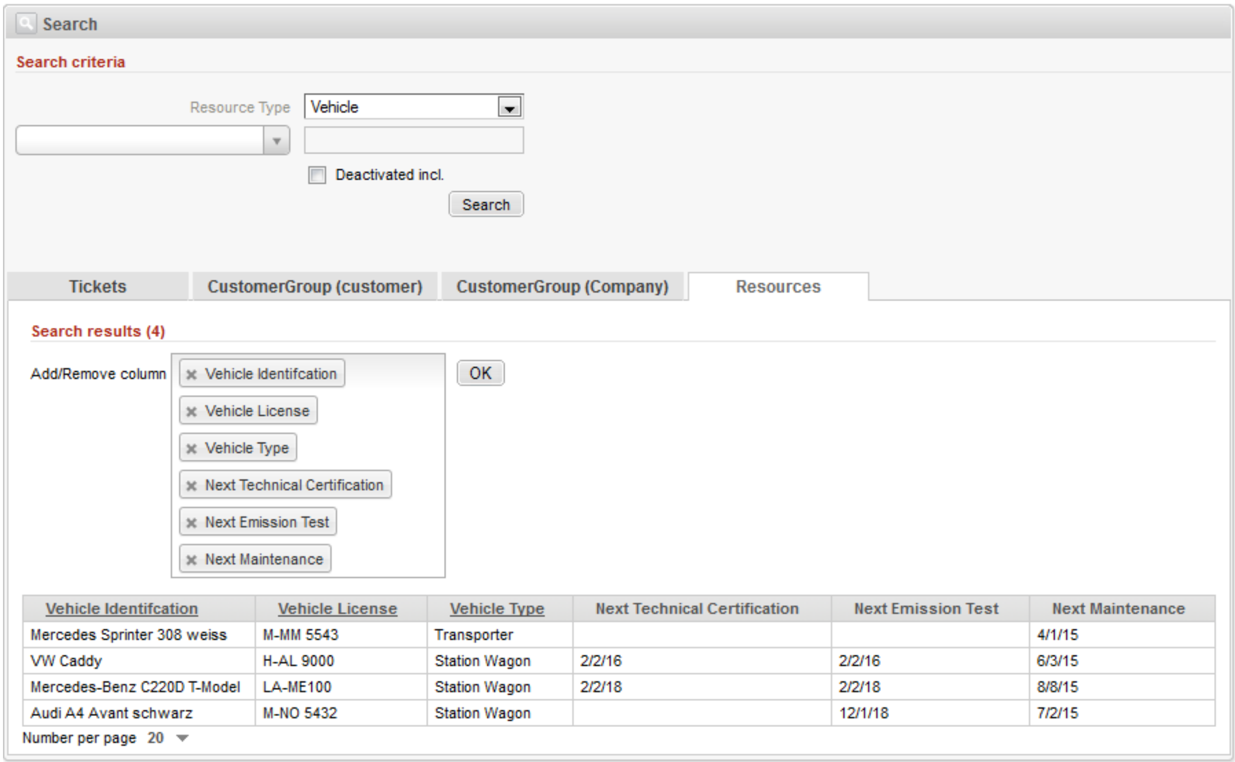
The particular resources relating to some kind of real-world object will be handled in the Web Client. The client's main menu provides a link "Resource Pool" for accessing a central page as starting point for working with resources. This page can contain a dashboard and offers a comprehensive listing of resource groups and resource types for finding existent resources or creating new ones.

The dashboard on the resource pool page can display any kind of data, not just resource related information. Its configuration parallels the main dashboard configuration on the overview page. The example below presents the last activity time of the users logged in instead of resource counts.



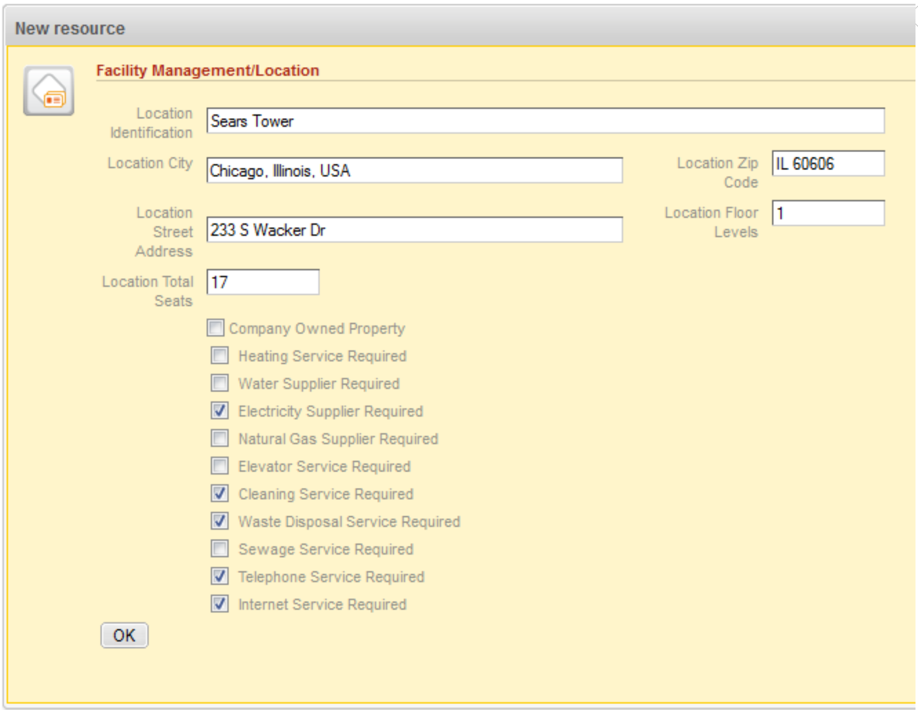
The section "Search or create resources" lists the available resource groups and the resource types subsumed under the groups. The user logged in must have a role with sufficient resource type permissions to get access to resources of a certain type. Missing privileges on a type will cause it not to be listed. If the user has no sufficient privileges on all types of a resource group, the group will not be shown either.
The search icon requires the READ privilege to be displayed and clicking it leads to the detail search page. On the search page the respective resource type is preselected as search criterion and the results for this search are immediately shown. Below is an example which has been beautified regarding column selection and order. The result lines of the search can be

clicked which will directly open the detail page of the resource identified in the result. The search can be modified by adding more criteria and selecting the checkbox “Deactivated incl.” to be able to find deactivated resources as well. Normally deactivated resources will be filtered from the search result. Please see below at the end of this section for some more details on resource search.



The resource type link labeled “New” on the resource pool main page will lead to the create page specific for the referenced resource type. This way a new resource of the selected type can easily be created. The link is only available if the user has a role with the CREATE privilege for the resource type in question.

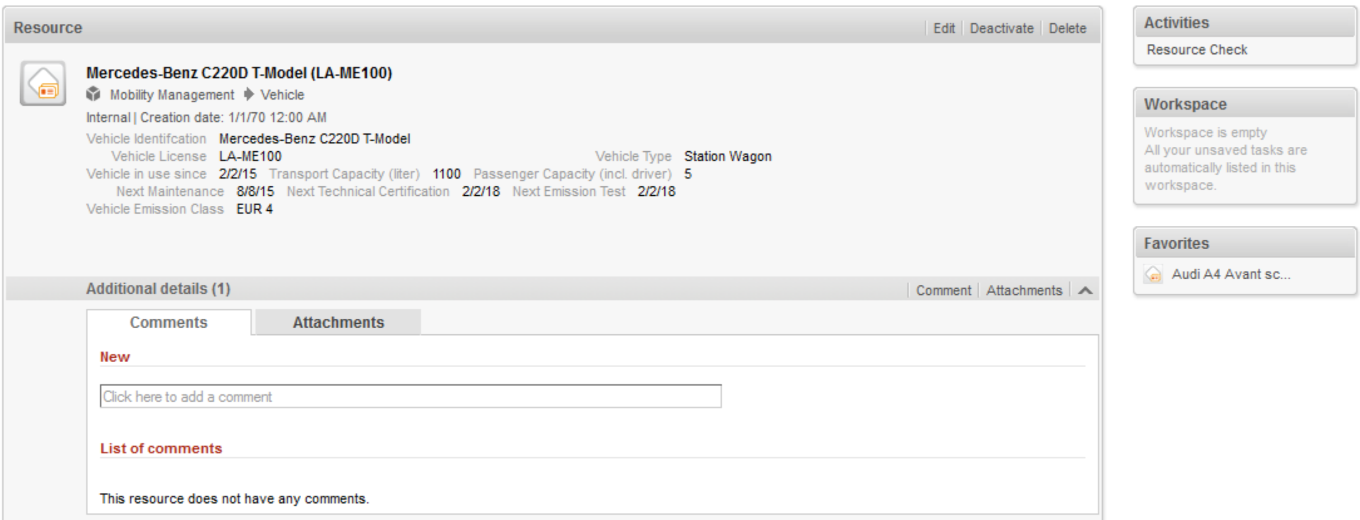
The field and layout configuration for the creation form is done in the Admin-Tool and parallels custom fields. Leaving the page before finishing the form and clicking “OK” will create an entry in the Workspace box on the right. After submitting the form the newly created resource will be displayed on the resource details page for review and addition of more information.



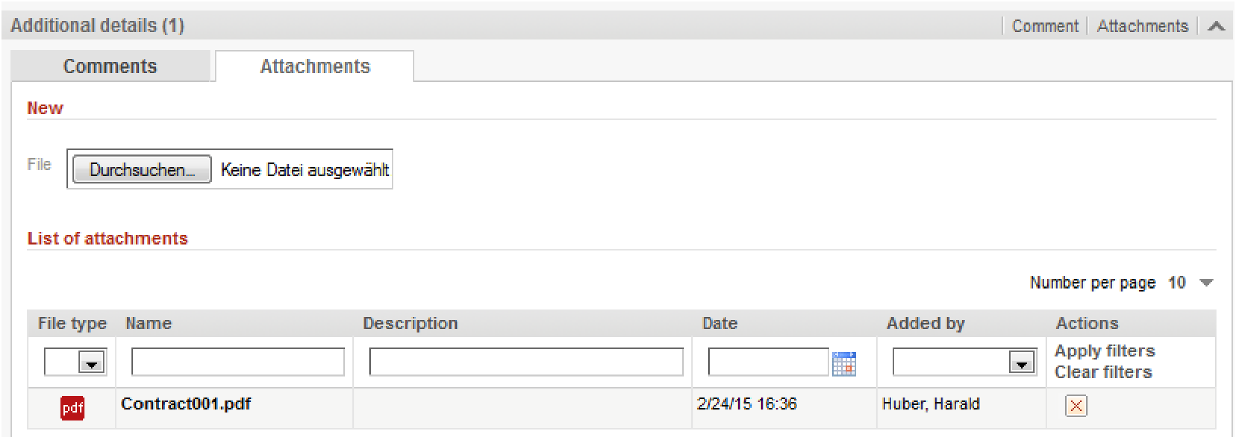
The details page comprehensively shows all information about the resource and lists the resource actions defined for the resource in box on the top right. An action will only be listed in this place for a user with a role including the ACT privilege for this resource type. Depending on the usage scenario an action which creates a new resource based on the one displayed would be shown here. Currently such a resource type action would be the only way for copying a resource.

The icon on the left of the basic resource information can be dragged to the “Favorites” box creating a favorites entry.

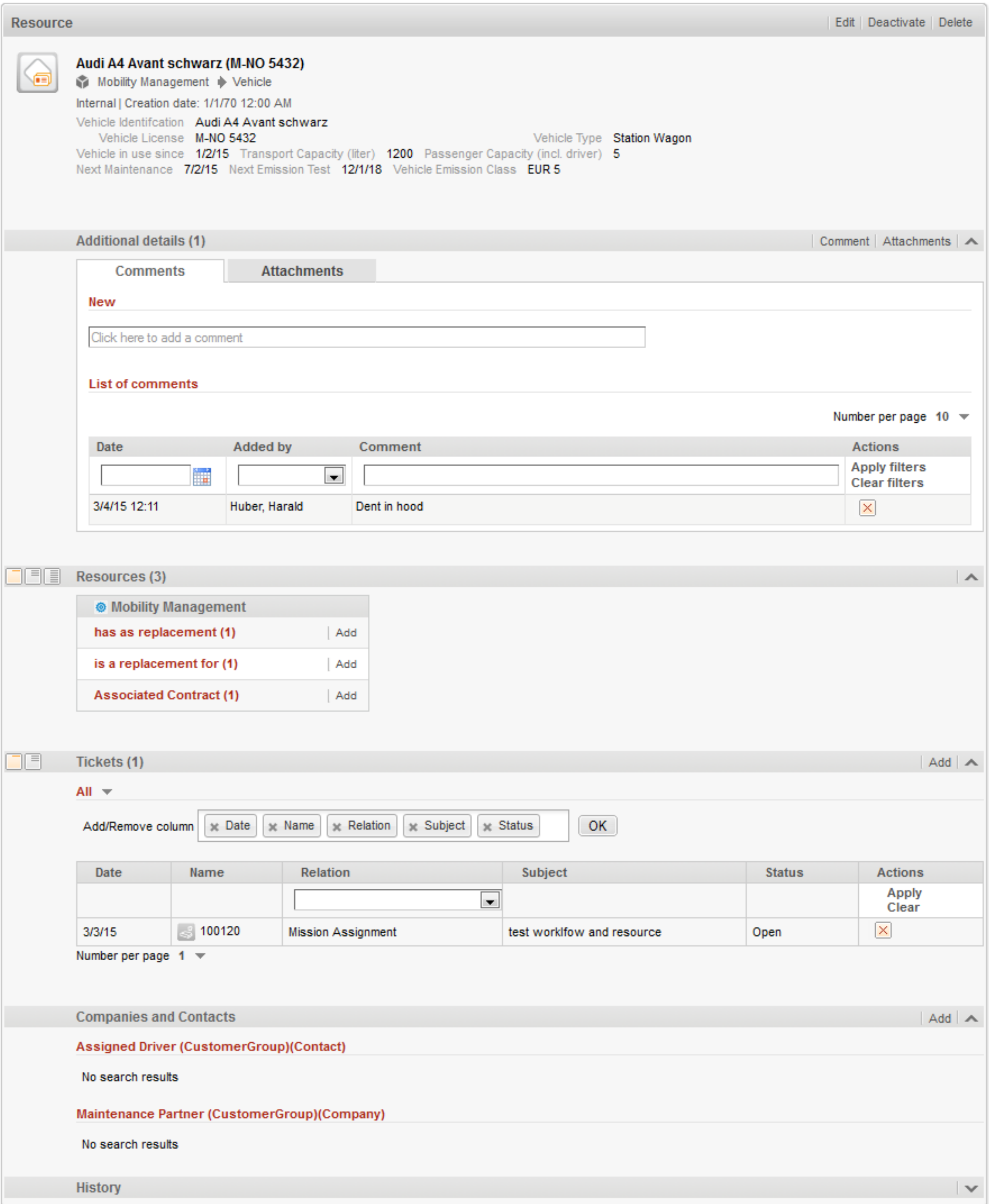
The page’s first section shows the resource field data entered in the create form. The header bar shows links to edit, deactivate and delete the resource depending on the privileges. If the resource is already deactivated it will show a link for activating instead of deactivating it.



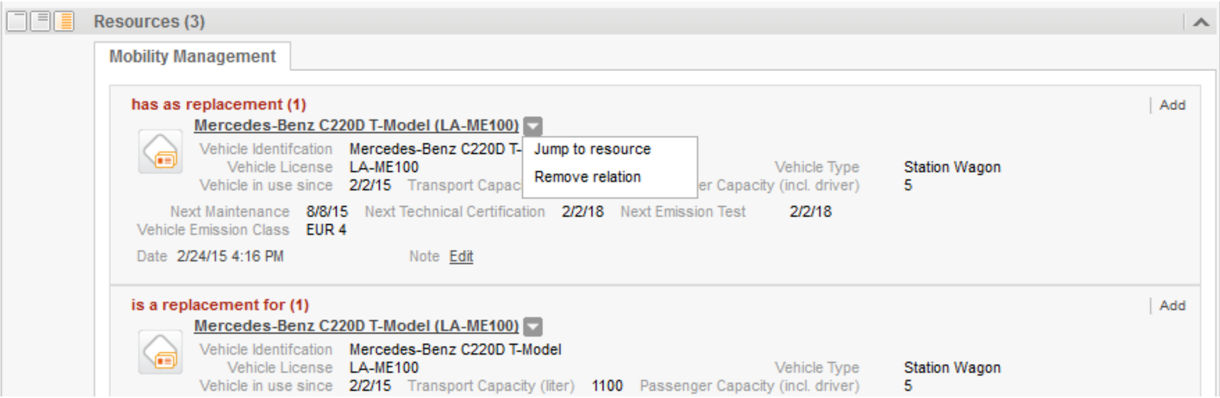
Below the basic resource information additional details like comments and attachments can be added. The header displays the total number of entries for the section in parentheses. If there are no entries for a tab a corresponding message is shown, otherwise a table which lists the entries is displayed. The usage of the tables parallels the same kind of tables for tickets or customers. They can be filtered for column entries for example.



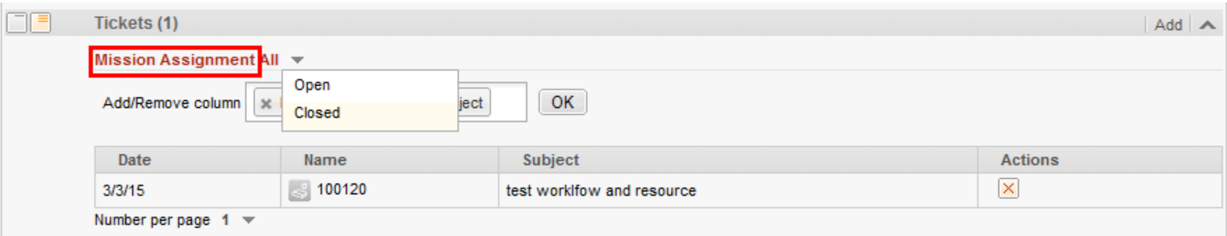
The full resource detail page can be seen below. Following the additional details it has sections for relations with other resources, tickets, and customers. Furthermore it has a history section which is collapsed in the screenshot below. Sections can be collapsed and expanded manually by clicking the arrow icon on the far right of the header just like on other pages. When loading the page the sections can be initially collapsed by configuration. This is done by a page customization comparable to other pages.
The sections for resource and ticket relations have several levels of detail to select from, the most basic one being used for both in this example.



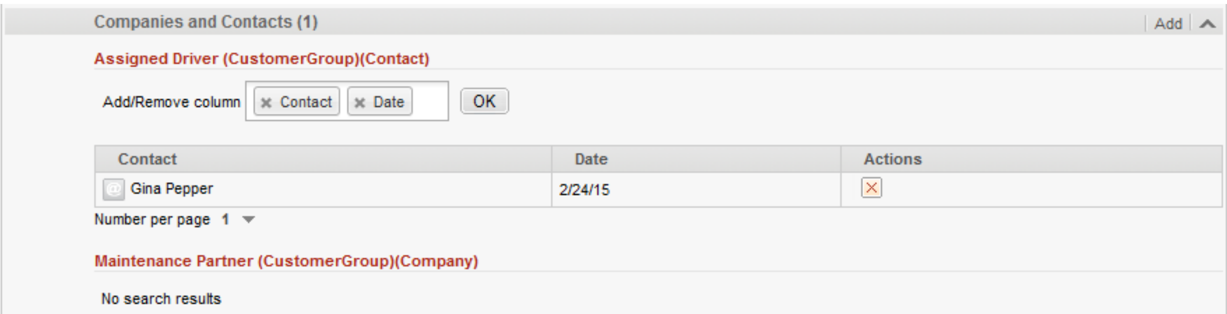
The maximum detail level for relations of the resource to other resources is shown below. The header displays the total number of resource relations. This level of detail features a tab for each resource group for which relations exist. On the tab for each type of relation a list is shown. The list label also displays the relations count next to the relation description. On the far right on this line there is the “Add” link to create a new relation of this kind with the current page's resource as its source. The resource label in the list is rendered by a template. Besides it a triangle menu can be opened to switch to the related resource or remove the relation with the resource.



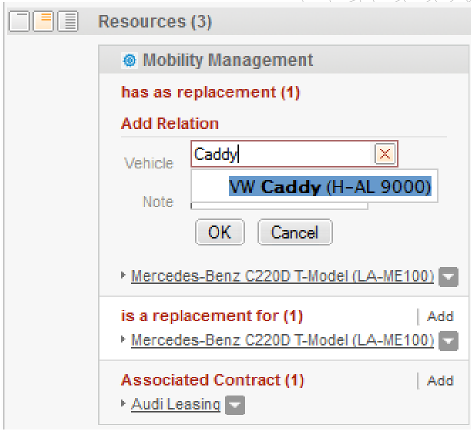
In the screenshot of the full resource page above the ticket (relation) section is set to the basic level of detail. In this view all ticket relations are listed all together in one table. The extended detail view shown below uses one table for each ticket relation type, note the highlighted relation name. In both views there is a triangle menu next to the table headline for a basic all/open/closed filter. Table usage does not differ from other tables in the Web Client. An "Add" link is on the right side of the ticket (relation) section header so that new relations can be created.



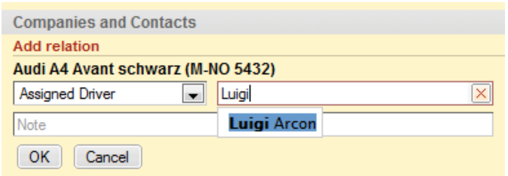
The customer section always provides separate tables for each kind of relation. Usage of these tables is just like for other tables. The section header also shows an "Add" link on the right.

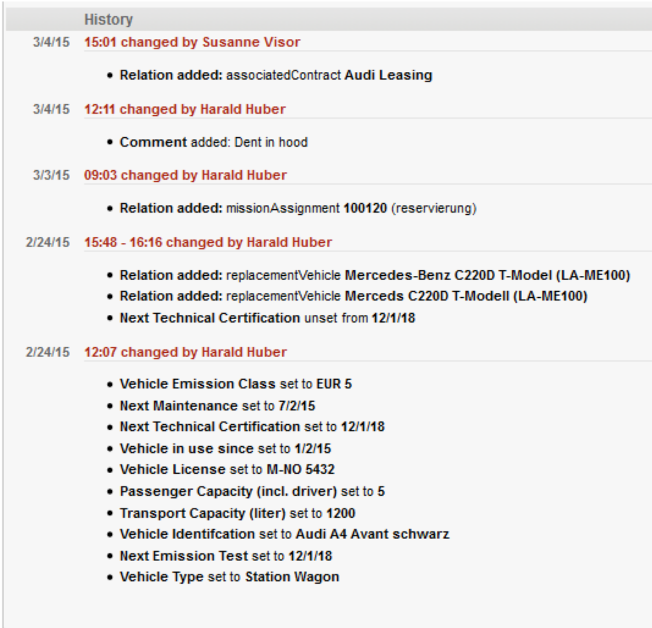


Adding a new relation is initiated by clicking an "Add" link in the corresponding header. When adding a relation to another resource the link can be found on the headline of the resource relation name so a specific relation will be created right away. In the form that opens below the header only the target resource has to be selected and a note can be added (depending on the



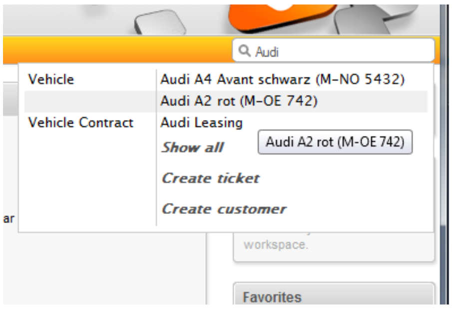
relation configuration). The resource types offered as a target are filtered by the allowed resource types for this kind of relation.
Creating a new relation with a ticket or a customer differs slightly since there is only one “Add” link in the section header, so the exact relation to create is not specified yet. Thus, first the relation type must be selected in the form before identifying the target object. This works the same for tickets and customers, the example below shows creation of a contact relation.



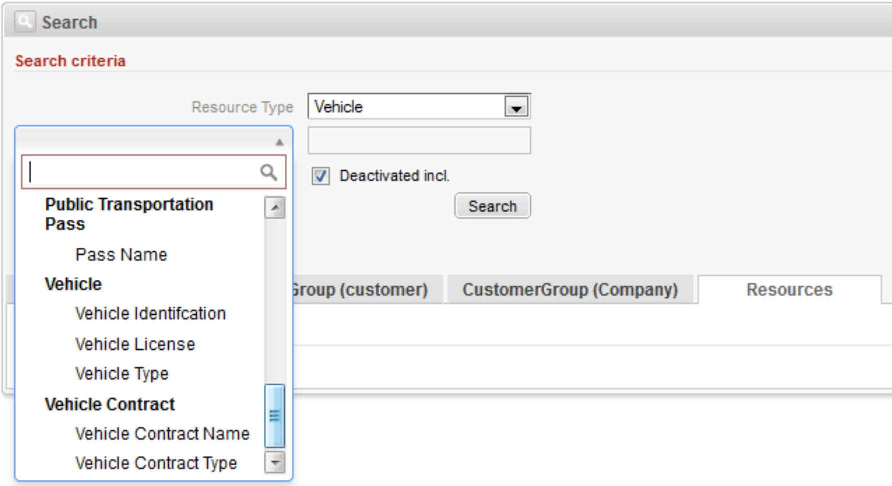


The history section at the bottom of the page lists the changes made to the resource chronologically with the latest change first. This includes changes to the resource fields, the additional data and all the relations of the resource in question.
This section can only be collapsed and its contents will be hidden. Currently there is no other possibility to interact with it since it is there for informational purposes only.

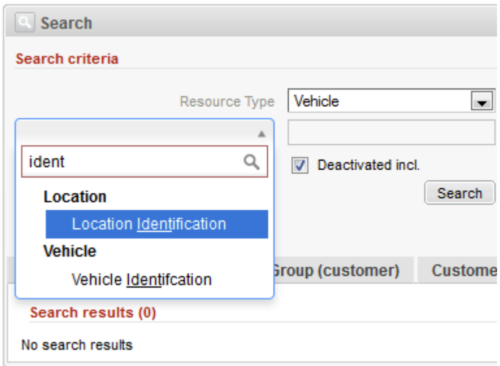
The Web Client’s search capabilities have been extended to be able to deal with resources as well. The quick and easy search now lists resources matching to the string entered grouped by their resource type. The entry shown for the resource itself is defined by an Admin-Tool template set in the resource type definition. This is also used for the tooltip, please refer to the screenshot.



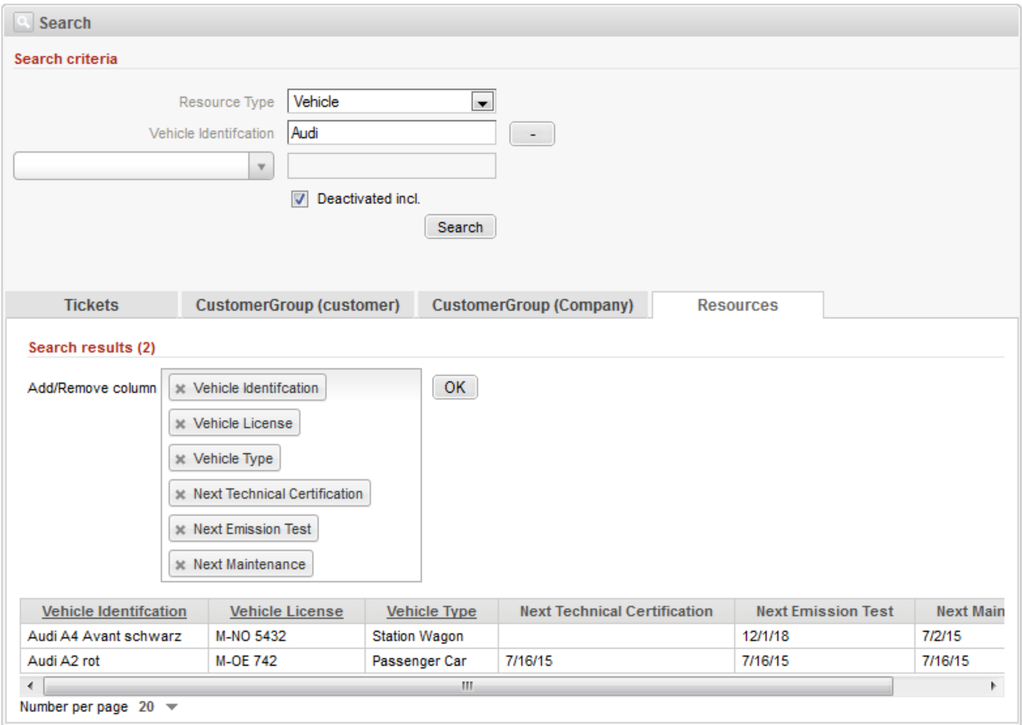
The detail search now offers a new result tab “Resources”. When accessing this tab a search field for selecting the resource type to search for is immediately shown. Additionally the search field selection provides the searchable resource fields grouped by the resource type. A field must have the annotation “field indexed” set to be shown in this search field list.



The search field list is searchable now (see section 1.3.3 below). Typing a string in the field at the top of the list filters the field name entries shown accordingly. The checkbox labeled “Deactivated incl.” allows to search for deactivated resources as well, if it is checked. Normally deactivated resources are filtered out in the search results.



The search results are shown in the table on the tab “Resources”. A search result can be accessed directly by clicking on its line in the result table. Changing the table appearance and sort order does not differ from the other tables in the Web Client.



1.2.2 Range search for numbers and dates (#610820, #625078)

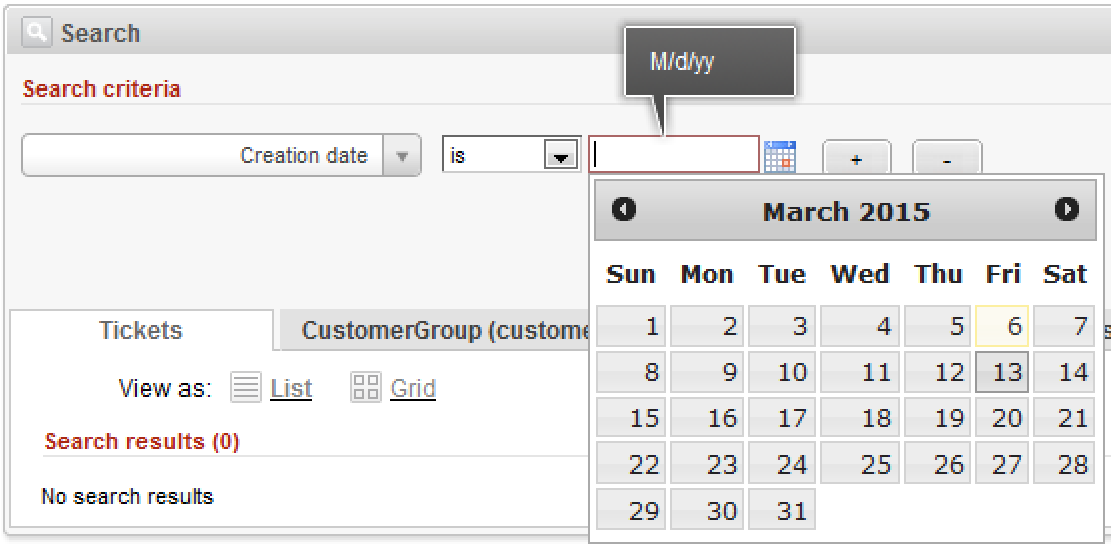
The detail search previously did not allow search for values within an interval. This functionality has been added so that now it is possible to search for values within a defined range. This kind of search is offered for the number and date field types.
The available operators for defining the search intervals and values are:

- **is** (equals, the only previously available operator, available for numbers and dates)
- **between** (specifying two inclusive values, available for numbers and dates)
- **lower** (specifying the inclusive upper limit, available for numbers)
- **greater** (specifying the inclusive lower limit, available for numbers)
- **before** (specifying the exclusive latest point in time, available for dates)
- **after** (specifying the inclusive earliest point in time, available for dates)
- **last** (specifying an interval before the current date, available for dates)

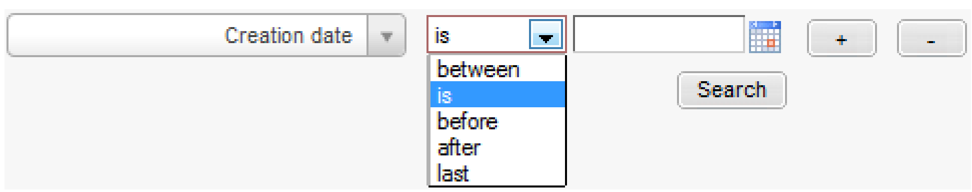
The interval search is both available in the Web Client and in the REST API.

Web Client

The search in a date field does now offer a drop-down menu to select the operator after the field has been chosen. A date entry field will be following it normally.

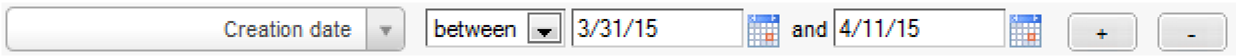


The operators offered are the range operators available for date fields.

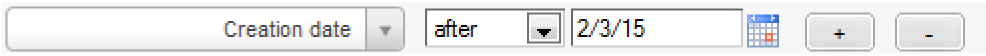


When choosing the operator “last” an entry field for a number followed by a drop-down menu for the interval is shown. This allows to define an exact time interval like “5 days” which limits the search to field entries with a value corresponding to the last 5 days before the time of the search.

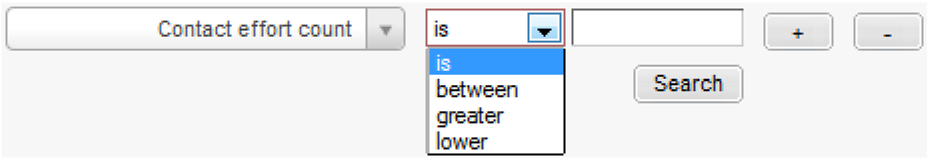
In case the operator “between” is chosen two date entry fields are displayed which allows to specify the threshold values for the interval. The field value must have a value between these two dates for a match. The threshold values are included in the search, so if the field value matches either entry this is also considered a valid result.



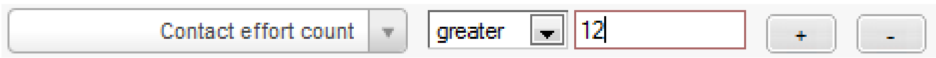
The same applies to the single search values entered for the “before” and “after” operators. The user entry is included in the search.



The search for ranges over a number field generally works the same. In this case only the valid operators for selection will be shown as well.



The operators “lower” and “greater” both include the threshold values entered so the search field entry value will be a match in the search results.



Also both values entered will be included as matches for the results.

REST API

All range search capabilities described above can be accessed by using the REST API also. The URL pattern to call for tickets by date field with a range has to look like the following command:

```
curl -u Huber:consol http://{$HOST}/restapi/tickets?{$GROUP}:{$FIELD}={$DATE/$DATE_RANGE}

with values for:

$HOST  - CM Host
$GROUP - Group of fields, eg. helpdesk_standard
$FIELD - Custom field
$DATE/$DATE_RANGE (by operator):
       - IS      - date in format dd.mm.yyyy%{timezone offset in minutes}
       - AFTER   - [dd.mm.yyyyTO]
       - BEFORE  - [TOdd.mm.yyyy] BETWEEN
       - BETWEEN - [dd.mm.yyyyTOdd.mm.yyyy]
```

A URL call pattern for tickets by a range for a number field is explained by this command:

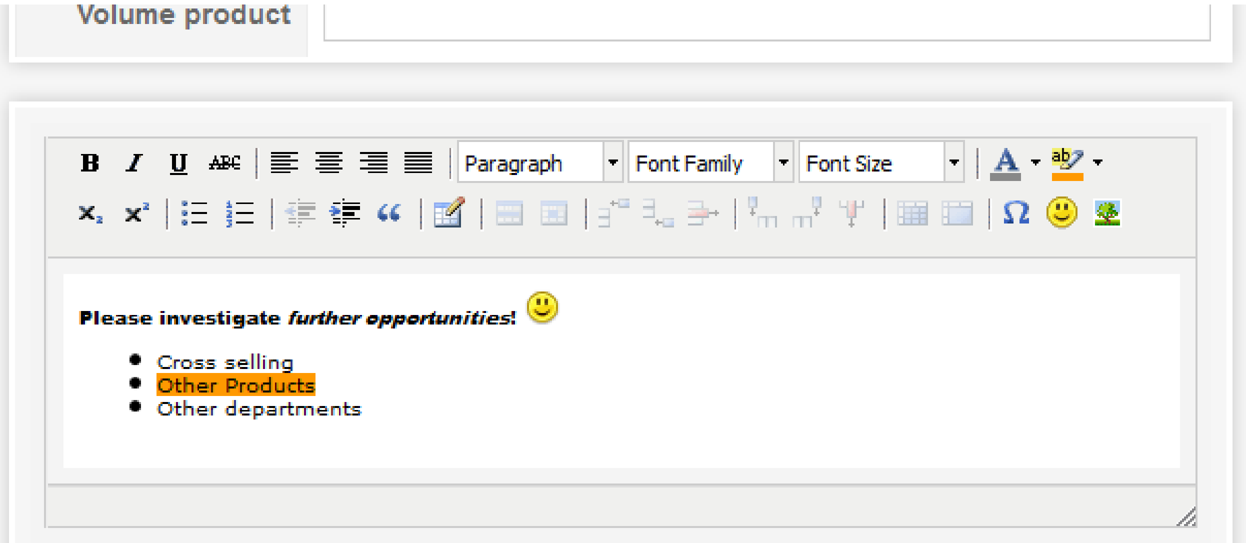
```
curl -u Huber:consol http://{$HOST}/restapi/tickets?{$GROUP}:{$FIELD}={$NUMBER_RANGE}

with values for:

$HOST  - CM Host
$GROUP - Group of fields, eg. helpdesk_standard
$FIELD - Custom field
$NUMBER_RANGE - Number range to apply for filtering tickets (has to be url encoded)
         in format [{lower} TO {greater}] separated by ','.
```

Strings used in an URL have to be URL encoded which includes the brackets, so in the URL an interval description like `[01.01.2015TO31.01.2015]` must be encoded as `%5B01.01.2015TO31.01.2015%5D`.
In case of the operator "is (equal)" no brackets are necessary and just the value is provided after the equal sign. The interval description is generally in brackets and uses the string "TO" to separate the threshold values. Each value can be omitted to get an open interval but one must be provided:

- value — is equal to value date/number
- [valueTO] — after value date or greater than value number
- [TOvalue] — before value date or lower than value number
- [value1TOvalue2] — between value 1 date/number and value 2 date/number

1.2.3 CM/Track: New Rich Text Editing (#625123)

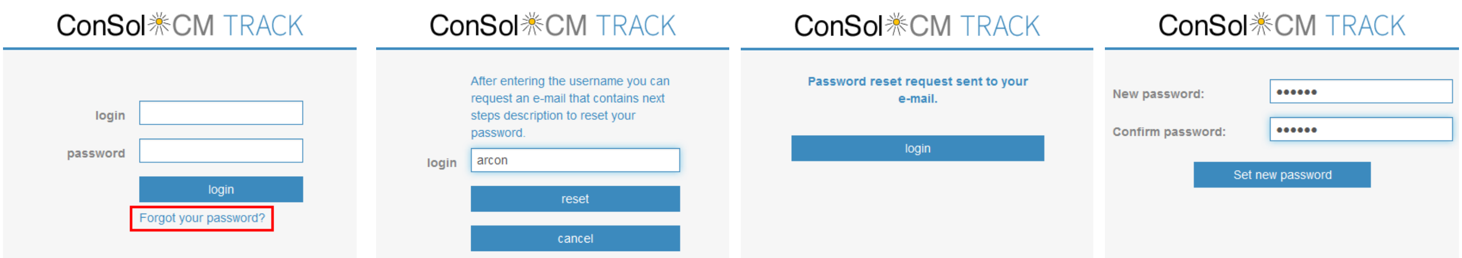
New functionality for entering formatted texts in description fields has been added to the CM/Track client. This has been achieved by adding the same editing capabilities as in the CM6 Web Client which can be seen in the screenshot below.



This functionality is currently enabled/disabled at build time. The value of `enable_tinymce` in the source file `config.js` must be set to "false" to disable these text formatting capabilities. These are enabled by default.

1.2.4 CM/Track: Password Reset/Change Functionality (#622194, #625122, #626100)

The CM/Track client has been extended so that the user accessing CM6 via CM/Track can now change the password himself.
Additionally the login page has been extended to show a link labeled "Forgot your password?". Clicking this provides an entry field for the CM/Track user name. Supplying a valid user name causes an e-mail with a reset URL to be sent to the e-mail address defined for the customer. Opening this URL in a browser shows a page to reset the CM/Track password.



This reset password functionality relies on a correct configuration. For creating the e-mail sent to the CM/Track user a template called "`track-password-reset-template`" is required. The template needs to include the reset code `${resetCode}` for the e-mail to be useful, ideally as (clickable) URL: `http://$TRACK_URL#track=set_new_password/resetCode-${resetCode}`
A very simple example template for "`track-password-reset-template`" is this:

```
Your Password Reset Link:
http://10.20.30.40:8080/cm-track/#track=set_new_password/resetCode-
${resetCode}
(Reset Code: ${resetCode})
Valid 24 hours only, please visit before expiry!
```

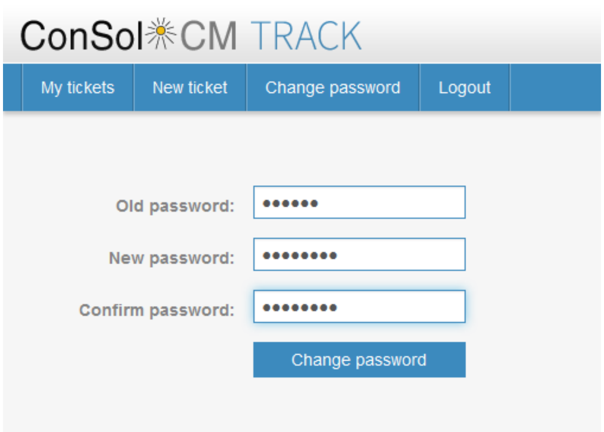
The e-mail body generated by using the template shown above looks like this:

```
Your Password Reset Link:
http://10.20.30.40:8880/cm-track/#track=set_new_password/resetCode-Tbb66ToQfI0wj0GaVjYXqfUx1y17MHAe
(Reset Code: Tbb66ToQfI0wj0GaVjYXqfUx1y17MHAe)
Valid 24 hours only, please visit before expiry!
```

There are two new REST API methods to achieve the behavior described in this section:

- `/user/resetPassword`: Generate a reset code, write it to the database, and send an e-mail with the reset code to user.
- `/user/setNewPassword`: Change user password and remove reset code from the database.

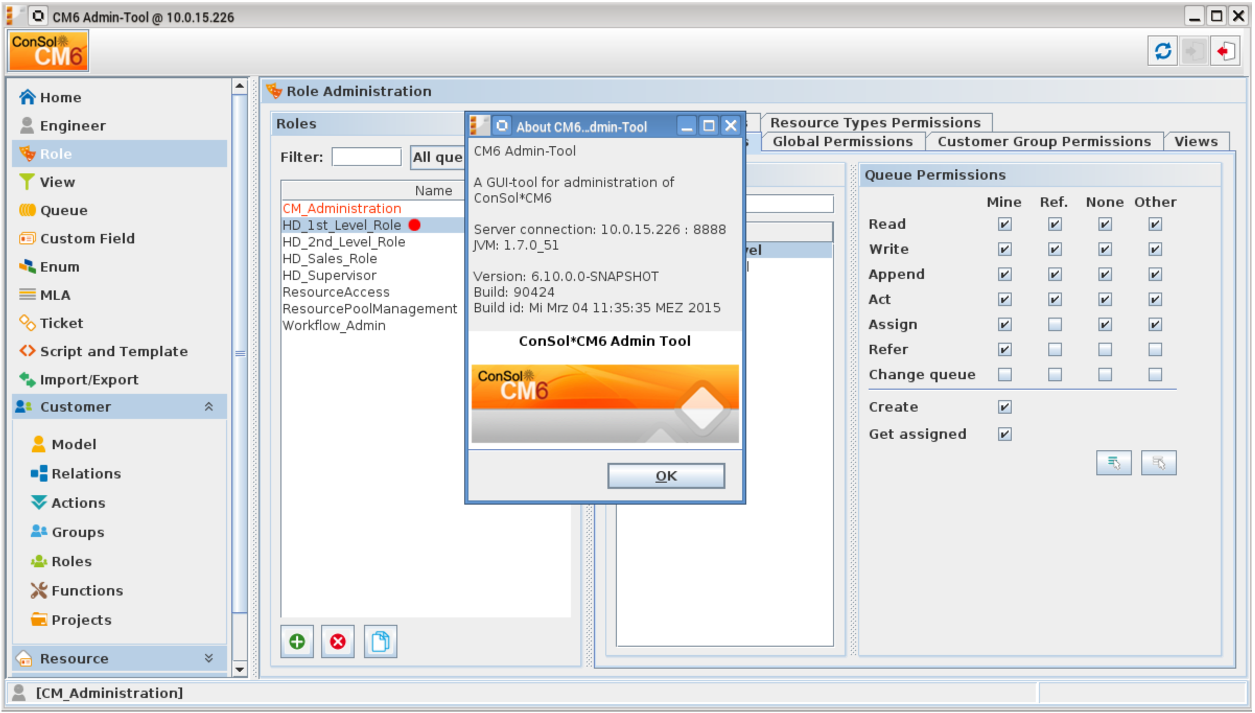
Also a new entry “Change password” has been added in CM/Track to the menu bar for changing the password when logged in normally. When clicking this link the user will be shown the password change page of CM/Track.



The page has three text fields to enter the current password as well as the new password twice for confirmation of correctness. If the old password is incorrect or the two entries for the new password do not match, a specific message gets displayed below the field with the mismatch. After successfully changing the password a corresponding message is shown on the same page above the password entry fields.

1.2.5 Admin-Tool Navigation Redesigned (#625391)

The navigation for the CM6 Admin-Tool has been redesigned for an easier and more intuitive use. The main menu and most of the items of the icon bar have been removed. All the content for administration can still be accessed, generally in a directer fashion which is better understandable.
The icon bar now only contains a button labeled “ConSol CM6” on the left which can be used to access the “About” dialog. On the far right the buttons for refreshing the data, login and logout remain unchanged.
The navigation tree left of the main content sections is now used for the navigation among the different sections for administration. The navigation items are basically representing the removed icon bar (and module menu) entries. The content sections are unchanged, however, some sections which were on tabs in the previous layout are now sections of their own with a corresponding navigation item. This allows for easier and quicker access of these sections.



The navigation tree consists of the items directly corresponding to a content section for administration which will be displayed when clicking the item. The items are partially arranged in navigation groups like “Customer” for example so that content sections for a common topic are joined under a single header. Clicking on a navigation group header will toggle its item list display. A displayed list will be hidden when clicking and a hidden list will be displayed. When opening an item list all other lists will be hidden, so that in effect only one navigation group item list can be displayed at a time.

1.3 Changes

1.3.1 Layout Improvements

- **Attachment File Type Column Display Simplified (#625972):** The attachment section of tickets and customers has a table column "File type" which previously listed a MIME type string like "application/pdf" for the file type of an attached file. This has been simplified to show the file extension like "pdf" which can be interpreted more quickly.

1.3.2 Improved API for Action Scripts (#626076)

The API for the action execution scripts for data objects has been improved to be better to handle when writing scripts. The same API handling has been implemented for resource actions. The following examples show the usage of the improved API.

Create a unit

Create unit (*PostActionType.CREATE_UNIT*) redirects the user to the create unit page. It uses the optional *PostActionParameter.CUSTOMER_GROUP_ID* parameter to decide for which customer group a new unit has to be created and optionally a custom fields map (*PostActionParameter.FIELDS_MAP*) to fill the unit's custom fields with values passed.

```
//Sample script which fills unit data
import com.consol.cmas.common.model.customfield.Unit
import com.consol.cmas.core.server.service.action.PostActionType

Unit contact = new Unit("customer", unit.getCustomerGroup());
contact.set("firstname", "Jan");
contact.set("name", "Nowak");
return actionScriptResultFactory.getPostAction(PostActionType.CREATE_UNIT, 
contact);
```

Create a ticket

Create ticket (*PostActionType.CREATE_TICKET*) redirects the user to a create ticket page. It uses the optional *PostActionParameter.UNIT_ID* with the ID of the main contact, *PostActionParameter.QUEUE_ID* with the ID of the queue and a custom fields map *PostActionParameter.FIELDS_MAP*.

```
//Script which creates a ticket with subject, queue and custom fields
import com.consol.cmas.core.server.service.action.PostActionType
import com.consol.cmas.common.model.ticket.Ticket

Ticket ticket = new Ticket();
ticket.setQueue(queueService.getByName("Helpdesk"))
ticket.setSubject("sample subject")
ticket.set("queue_fields.string", "test")
ticket.set("queue_fields", "boolean", "true")
return actionScriptResultFactory.getPostAction(PostActionType.CREATE_TICKET, 
ticket)
//to additionally set the main contact use
//return 
actionScriptResultFactory.getPostAction(PostActionType.CREATE_TICKET, ticket, 
unit)
```

Go to a unit

Go to unit (*PostActionType.GOTO_UNIT*) redirects to a unit page. It uses the obligatory *PostActionParameter.UNIT_ID* parameter with the ID of the unit.

```
//Go to company page
import com.consol.cmas.common.model.customfield.Unit
import com.consol.cmas.core.server.service.action.PostActionType

Unit contact = unitService.getByCustomerGroup(unit.getCustomerGroup()).get(0)
return actionScriptResultFactory.getPostAction(PostActionType.GOTO_UNIT,
contact)
```

Go to a ticket

Go to ticket (*PostActionType.GOTO_TICKET*) redirects to a ticket page. It uses the obligatory *PostActionParameter.TICKET_ID* parameter with the ID of the ticket.

```
//Go to ticket page
import com.consol.cmas.core.server.service.action.PostActionType
import com.consol.cmas.common.model.ticket.Ticket

Ticket ticket = ticketService.getByContact(unit).iterator().next()
return actionScriptResultFactory.getPostAction(PostActionType.GOTO_TICKET,
ticket)
```

Go to a page identified by URL

Go to page (*PostActionType.GOTO_PAGE*) redirects to a page identified by its URL. It uses obligatory *PostActionParameter.URL* with the desired URL.

```
//Go to page by URL
import com.consol.cmas.core.server.service.action.PostActionType

return actionScriptResultFactory.getPostAction(PostActionType.GOTO_PAGE,
"http://consol.de");
```

Create a resource

Create resource (PostActionType.CREATE_RESOURCE) redirects to a resource create page with fields filled with resource data prepared.

```
//Create a resource filled with some data
import com.consol.cmas.common.model.resource.Resource
import com.consol.cmas.common.model.resource.meta.ResourceType
import com.consol.cmas.core.server.service.action.PostActionType

ResourceType type = resourceTypeService.getByName("resource type 1")
Resource resource = new Resource(type)
resource.setFieldValue("group1", "stringField1", "value1")
resource.setFieldValue("group2", "numberField1", 1L)
return
actionScriptResultFactory.getPostAction(PostActionType.CREATE_RESOURCE,
resource)
```

Go to a resource

Go to resource () redirects to the resource page of the given resource.

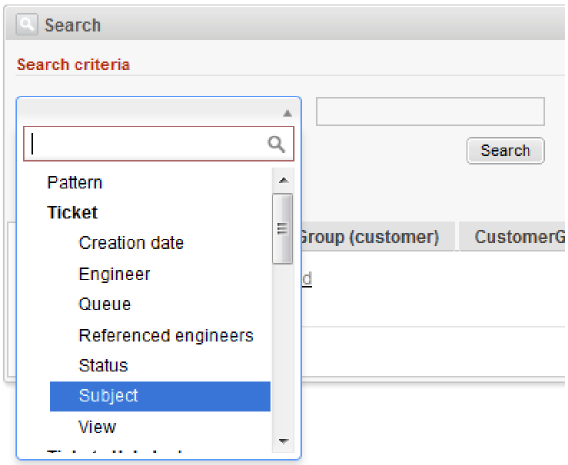
```
//Go to resource page
import com.consol.cmas.common.model.resource.Resource
import com.consol.cmas.core.server.service.action.PostActionType

Resource resource = resourceService.getAll().iterator().next()
```

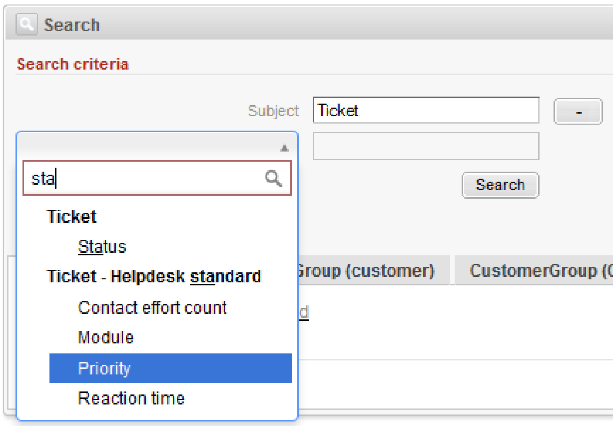
1.3.3 Detail search page criteria and column selection improvements (#626090)

The selection elements for the search criteria and the columns of the result table on the detail search page have been changed for better ease of use.

Search criteria selection

The selection element for the search criteria can now easily be identified as a drop-down menu instead of appearing like a link as before.

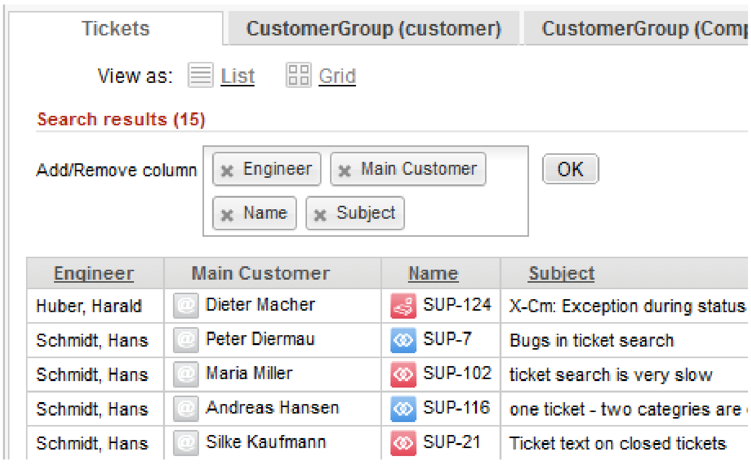




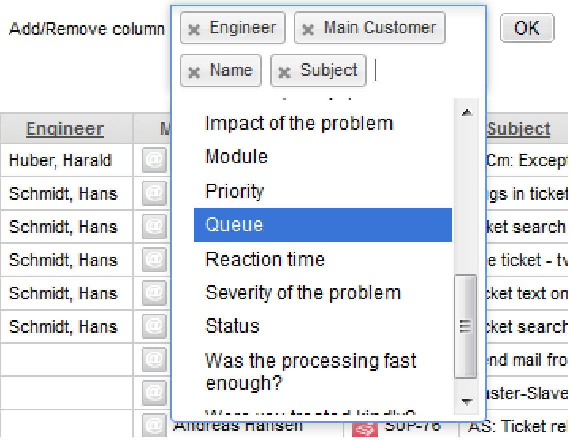
The list which shows up when clicking on the element contains all available search criteria initially. The criteria are grouped by the category/custom field group they belong to with the more general pattern search being the first list entry. Each list entry representing a search criterion can be selected by click while the headers for grouping cannot be selected. An entry field for dynamic filtering of the list is above the first entry. Strings typed in this field serve as filter for the list, displaying only these entries (and their group headers) which match. If a group header matches, the group and all its entries are listed.

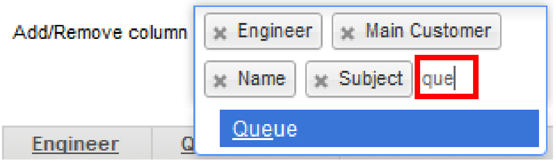
Result list column selector

A new element to define the columns for the search result table has been introduced as well. It displays each column as a button inside a box grouping these column buttons. The buttons have the same order as the columns of the table.



A click in the free area of the box lets a column list drop down. The list initially contains all available columns for the search result table which are not displayed yet. Typing in this free area uses the entered string as a dynamic filter for the list so that only these columns are displayed which match the string. This is highlighted in the right screenshot below.





A column selected by click can easily be added to the result list table by clicking on the “OK” button to the right of the box/list. A column which is used in the current table can be removed by clicking the cross symbol left of the name on its button and then clicking the “OK” button to the right.

1.3.4 Direct link to ticket in search result list (#625966)

The search result list table on the ticket detail search page has been extended with a direct link to each ticket shown in the search results. The ticket name string in the column "Name" now allows to directly access the detail page of this ticket. It will be underlined when the mouse pointer is over this link which can be seen in the first result line of the screenshot. The icon in this column did not change its behavior and is still the handle for drag and drop of the ticket. Other elements of the result rows did not change either, so a click there still displays the ticket overview tooltip usually. This new behavior also is available for other places in which such a ticket list is shown.

Engineer	Main Customer	Name	Subject
Huber, Harald	Maria Miller	SUP-63	Exception during Status Change in "IT" queue
Huber, Harald	Maria Miller	SUP-58	Exception during import data
Huber, Harald	Dieter Macher	SUP-124	X-Cm: Exception during status change which moves a ticket into a new queue
Schmidt, Hans	Karl Oppermann	SUP-25	Exception during view display
	Peter Diermau	SUP-81	AT: Exception during deleting 'customer role'
	Sophia Kernhauser	SUP-18	AT: Exception during deleting role
	Manfred Jaeger	SUP-77	Exception during deleting customer with tickets

Number per page 10

1.3.5 Default value "true" for annotations "reportable" and "reportable group" (#614556)

Previously there was no default value set when creating the annotations "reportable" and "reportable group" for a custom field (group) and each field's value had to be set manually. Now the default value is "true" (with the other values being "false" and "stop"). Please be aware that this may have influence on scripts taking advantage of this annotation.

1.3.6 Two Templates Removed from Standard Distribution (#625059)

The templates "cmas-dev-close-mail" and "index-error-mail-template" were removed from the standard shipment since they were unused and thus obsolete in this context. They will not be deleted in an update. In case these templates are present in an installation, it has to be ensured that they are obsolete before deleting them.

1.3.7 Wicket Web Framework Updated to Version 6.17.0 (#626150)

The wicket frame work for web page creation in the web client has been updated to the new version 6.17.0 for improved security.

1.4 Known Issues

Number	Description
603088	**DWH localization inconsistency** The data warehouse localization is different for static tables like queue (originally occurred in version 6.2.0).
622591	**Trigger vanishing from workflow** An event trigger could vanish when saving a workflow (originally occurred in version 6.8.4.3).
624193	**ETL contact data import IllegalArgumentException** A contact data import with the ETL contact output plugin throws an IllegalArgument Exception when using a database repository (originally occurred in version 6.8.5.0).
625642	**Admin-Tool contact data reference field not editable** A contact data reference field just added to custom fields in Admin-Tool throws an exception after editing and saving it (originally occurred in version 6.9.4.0).
625775	**WicketRunTimeException when clicking “No results”** When selecting the “No results” entry in the suggestion list for new company relations after providing a string with no matches, the message to contact the administrator is shown and a WicketRuntimeException is logged (originally occurred in version 6.9.3.3).
626094	**Undesired LDAP response handling of invalid logins** LDAP login attempts with an invalid username log an ERROR and the log only shows the misspelled username in DEBUG mode whereas a warning which always shows the attempted username would be adequate (originally occurred in version 6.9.3.3).
626154	**NIMH properties „null“ description** Most properties for the properties coming with the New Incoming Mail Handler (NIMH) have a description text “null” while an empty or useful description would be appropriate (originally occurred in version 6.9.4.0).
626156	**Web Client user session not invalidated correctly** When instead of properly logging out the login page is accessed with the back button and a different login is successful, the ticket list uses the older login and session (originally occurred in version 6.9.0.0).
626616	**REST sessions are not always correctly closed** User sessions opened via the REST API are not always correctly ended and keep consuming their licenses (originally occurred in version 6.10.0.0)
626675	**REST response missing unit count** The REST API response for unit search using a number range lacks the field “Total number of elements” with the result count (originally occurred in version 6.10.0.0).
626785	**Script execution logging missing execution time information** Logging of script execution times lacks in logging, but duration and information about long running scripts as well as timeouts should be provided by the logging (originally occurred in version 6.10.0.0).
626836	**No update of contact section after addition** Directly after adding a new contact on the company page the new addition is not displayed until a page refresh (originally occurred in version 6.10.0.0).
626903	**Deficits in manifest files** Fields for CM-Version and Build-Date are missing in the manifest files (originally occurred in version 6.10.0.0).

Number	Description
626971	**Required field validation in group section tab too late** A company with no data entry can be added even though there is a required field in the group section on a closed tab. This is not validated before saving when the tab is closed and there is no marker that there is a required field on the tab (originally occurred in version 6.10.0.0).
626982	**Localized resource type name changes are not reflected in the Web Client** When changing a resource type localized name the Web Client will not use the new name until a CM restart (originally occurred in version 6.10.0.0).
626993	**Misleading label for substituting relations** The label informing about the substitution of the unit in relations after deleting this unit only informs about tickets affected but not about resources (originally occurred in version 6.10.0.0).
627008	**Tooltip special character display issue** The tooltip for group tabs showing the name does not render special characters correctly (originally occurred in version 6.10.0.0).
627041	**Missing message when searching in invalid customer group** When a search with a specific customer group selected has been saved as a favorite and later the favorite is clicked while another customer group is selected, the message informing about the invalid customer group selection is not displayed (originally occurred in version 6.10.0.0).
627056	**Disabled resource action script type select box** Occasionally it is not possible to set the action script type in the dialog for creating a resource action (originally occurred in version 6.10.0.0).
627086	**Deactivated resource groups and types editable** Resource groups and types deactivated in the Admin-Tool can still be edited in the Web Client (originally occurred in version 6.10.0.0).
627117	**Misleading relation transfer message** Deleting a resource and trying to transfer a relation to a contact which is already related to the target resource yields a misleading error message about illegal circular relations (originally occurred in version 6.10.0.0).
627123	**Wrong behavior of selectors for number of entries in tables** The selector for the number of entries per page in tables for companies and contacts on the resource page shows the result count instead of the maximum result lines number (originally occurred in version 6.10.0.0).
627124	**Long resource type headline can overlap with “Add” link** A long headline for a resource type can overlap with the “Add” link to create a new relation with this resource type, rendering the link unusable (originally occurred in version 6.10.0.0).
627128	**Wrong history entry labels for a deleted resource** After deleting a resource the history entries for other objects relating to this deleted resource show a wrong general Wicket label instead of the resource name (originally occurred in version 6.10.0.0).
627129	**Wrong error message after trying to access an invalid resource by URL** A red error message to contact the administrator is shown when calling an URL to an invalid resource ID instead of a green qualified warning message. This also affects back button behavior after deleting a resource (originally occurred in version 6.10.0.0).
627138	**Unwanted logout after repeated attempt to delete a resource** Trying to delete a displayed resource which was already deleted previously in another browser tab leads to an exception and unwanted logout (originally occurred in version 6.10.0.0).
627152	**No warning message for ignored “Creation date” search criterion** The search criterion “Creation date” is ignored for units and resources, but no warning message informing about this is shown (originally occurred in version 6.10.0.0).

Number	Description
627153	**Resource page header section collapsible** In contradiction with the specification the header section of the resource page can be collapsed by page customization (originally occurred in version 6.10.0.0).
627154	**Resource page section order not configurable** The page customization to define the order of sections on the resource page is not available for configuration (originally occurred in version 6.10.0.0).
627162	**History entry for additional data not immediately shown** On the resource and customer detail pages, when adding a comment or attachment, the history entry for the addition is not shown immediately, but only after a page refresh (originally occurred in version 6.10.0.0).
627168	**Pressing Enter to add a customer does not work** It is not possible to add a contact to a ticket by pressing Enter with the suggestions visible (originally occurred in version 6.10.0.0, referenced ticket #624011 originally occurred in version 6.9.1.1).
627176	**No user information about inaccessible customers in resource relations** The user is not informed that he does not see all customers related to a resource due to limited customer group permissions. The total customer count includes the inaccessible customers making it appear as a wrong number (originally occurred in version 6.10.0.0).
627177	**Technical names of resource relations in history** The history section of the resource page shows the technical name for relations instead of the localized names where available (originally occurred in version 6.10.0.0).
627178	**No user information about inaccessible tickets in resource relations** The user is not informed that he does not see all tickets related to a resource due to limited queue permissions. The total ticket count includes the inaccessible tickets making it appear as a wrong number (originally occurred in version 6.10.0.0).
627182	**Wrong resource creation date shown on detail page** The creation date shown on the resource detail page is “1/1/1970” for every resource independently of the actual creation date (originally occurred in version 6.10.0.0).
627187	**Deactivated resources not displayed accordingly on detail level** Deactivated resources are not rendered grayed out in the resource relation section on the resource page when the maximum detail level is selected (originally occurred in version 6.10.0.0).
627188	**Different dialogs when saving a search** The dialogs shown when saving a detail search to favorites and to the workspace differ in title, labels and buttons even though the operation is the same (originally occurred in version 6.10.0.0).
627190	**Note label visible for relations without note field** The label for a note in a resource relation is displayed even though the note field itself is unavailable and not displayed (originally occurred in version 6.10.0.0).
627194	**Inclusion state not saved for a unit search** The setting of the checkbox “Deactivated incl.” is not saved when a unit search is dragged to the workspace (originally occurred in version 6.10.0.0).
627195	**CM/Track exception on password reset without template** Using the reset password function in CM/Track shows an exception incl. stack trace to the end user, if no corresponding e-mail template is defined (originally occurred in version 6.10.0.0).
627202	**Ticket history entries for resource relations are visible despite missing permissions** The entries for resource relations of a ticket in the history are visible to a user, even if he has no permission on resources (originally occurred in version 6.10.0.0).

Number	Description
627208	**Resource relation editable in Web Client when “only configurable via workflow” is set** A resource relation can be created and modified in the web client even though in the Admin-Tool the option “only configurable via workflow” is checked, which should prevent this (originally occurred in version 6.10.0.0).
627209	**No effect of selector for number of entries in ticket search table** Changing the number of results that should be displayed in the ticket search result table has no effect right after adding or removing a column of the table (originally occurred in version 6.10.0.0).
627210	**Page customization collapses all resource relation sections** The page customization to collapse a section only applies to all three sections for resource relations: resources, tickets and customers. It cannot be used to collapse only one relation section on loading of the page (originally occurred in version 6.10.0.0).

1.5 Bugs fixed

Number	Description
618537	**Ticket "Accept" button link displayed in unexpected contexts** The button link "Accept" was displayed against the user expectations when a ticket was opened for editing from the workspace under certain conditions. This unexpected behavior has been fixed and "Accept" does not show any more under these circumstances.
624123	**Ticket display error due to local "file://" URL in <img> tag** A ticket could not be displayed and an error message was shown instead when an incoming mail contained an <img> tag with a local "file://" URL. This problem was corrected and the ticket with such a mail can be displayed after filtering out the useless URL.
625671	**Admin-Tool message window "Invalid E-mail" cannot be closed** The message window "Invalid E-Mail" showing after removing the "Error e-mail address" could not be closed when it opened after trying to switch the Admin-Tool section. This unwanted behavior has been changed and the message window can be closed while the previous value for "Error e-mail address" will be restored.
626434	**Default localization values not created in Admin-Tool** The default localization value entries for some customer data model objects were not created when creating the object or changing the default locale. These included customer models and data objects, customer groups and custom field groups as well as unit actions and relations. This error has been fixed and now the default localization value entries will be created for all these objects.
626932	**Dysfunctional MuleSoft logo link** The link and logo to MuleSoft on the overview page were dysfunctional and have been removed.