

ConSol Software GmbH

Release Notes ConSol CM 6.10.8

Author: Technical documentation team

Phone: Phone: +49 (0)89-458-41-100

Mail: tecdoc-l@consol.de

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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 6.10.5 to 6.11.1.
- **EAR / WAR update:**
For this type of update of **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 change 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 version and the new **ConSol CM** version, e.g., for an update from 6.10.2 to 6.10.5 the instructions of the versions 6.10.3, 6.10.4, and 6.10.5 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 installation instructions* chapter has to be checked for further important notes.

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

1. Version 6.10.8.0 (10.11.2017)

Version 6.10.8.0 includes all **ConSol CM** changes and additions of

- 6.10 versions up to 6.10.7.2
- 6.9 versions up to 6.9.4.7
- 6.8 versions up to 6.8.5.8

Newer versions and the respective changes are not included in this **ConSol CM** version.




1.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.10.8.0 in this section before performing a system update or installation. Please consult the general product documentation on update and installation procedures as well as earlier version Release Notes, if applicable.

1.1.1 System upgrade from 6.10.7 and earlier versions

This **ConSol CM** release needs specific planning for an update from earlier releases.

 Please be aware that the supported version of the Firefox browser as client platform changes with this release: [Supported Firefox version changed to ESR 52 \(#632529, #631716\)](#)

1.1.2 Recommendation to increase maximum POST size (#632332)

It has proven that in some individual installations the default maximum POST size limit on **JBoss** application servers was not sufficiently large enough. This could cause trouble when creating comments and emails with large inline images. If a large inline image caused this limit to be exceeded the comment or email was not created and the content crafted in the editor was lost.

Therefore it is recommended to increase the value of the **JBoss** application server property `max-post-size/maxPostSize` from 2 MB to 10 MB. This increase should be sufficient to address most real world uses. If necessary this could still be increased. **Weblogic** application servers are unaffected since the default for these is an unlimited POST size.

Please use the respective procedure as follows to increase the `max-post-size/maxPostSize` value for the different **JBoss** versions.

For **JBoss EAP 6** change the respective configuration file, e.g., `cm6.xml` in the application server deployment's `configuration` folder. Add the XML attribute `max-post-size="10000000"` to the web subsystem connector configuration as it can be observed in the example:

```
<subsystem xmlns="urn:jboss:domain:web:1.5" default-virtual-server="default-host"
native="false">
  <connector name="http" protocol="HTTP/1.1" scheme="http" socket-binding="http"
max-post-size="10000000" />
  <virtual-server name="default-host" enable-welcome-root="false">
    <alias name="localhost"/>
  </virtual-server>
</subsystem>
```

Users of a **JBoss 5** server can adapt the configuration file `jboss/server/cms/deploy/jbossweb.sar/server.xml` and provide the attribute `maxPostSize="10000000"` in the connector configuration as specified here:

```
<!-- A HTTP/1.1 Connector on port 8080 -->
<Connector protocol="HTTP/1.1" port="8888" address="0.0.0.0"
connectionTimeout="20000" redirectPort="8443" URIEncoding="UTF-8"
maxPostSize="10000000" />
```

1.1.3 REST API client modification requirements

Change description. The following REST API enhancements may require to adjust clients accessing **ConSol CM** by using the REST API. The changes might even offer a potential for client optimization.

- [REST API ticket relation endpoint information enhancement \(#632089\)](#)
- [REST API customer access to object restriction enforcement \(#632109\)](#)
- [REST API customer access to engineers restricted \(#632247\)](#)

1.1.4 Configuration modification requirements

The changes in this release require several configuration items to be reviewed and possibly adjusted. Please see the following sections for details:

- [REST API customer access to object restriction enforcement \(#632109\)](#)
- [HTTP header configuration \(#632121\)](#)

No further instructions available.

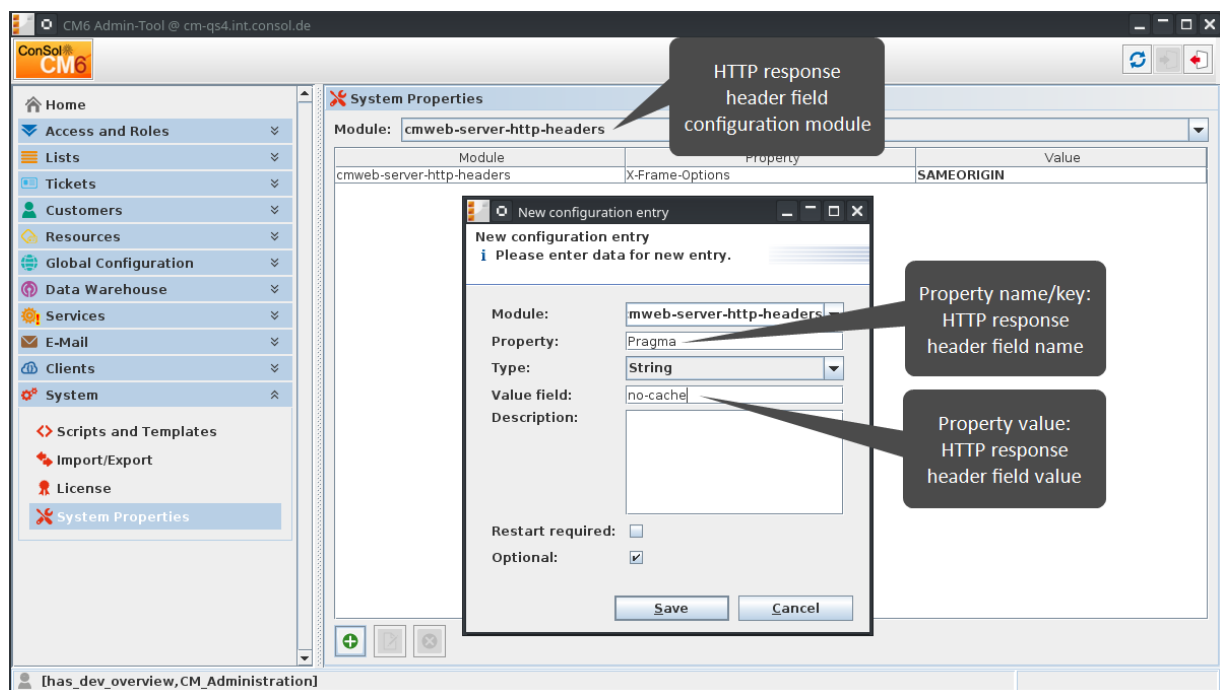
1.2 New Features

The features newly introduced in this **ConSol CM** version 6.10.8.0 are described in detail in this section.

1.2.1 HTTP header configuration (#632121)

This **ConSol CM** version features new functionality to configure HTTP response headers returned with the web page of the **Web Client**. This allows, for example, to define security related response headers according to the requirements dictated by policy or environment. A detail example would be to set the X-Frame Options response header to "SAMEORIGIN". This HTTP header will then be sent with the response to each page request with the specified value set. It is up to the client browser to interpret these header fields accordingly.

Such a configuration is achieved by system properties in the **Admin Tool**. A new module named **cmweb-server-http-headers** has been added to the system configuration. Each property in this module corresponds to one header field. The property name/key identifies the response header field and the value of the property is the field value sent in this header. Both key and value must be the exact spelling from the HTTP specification for the desired response header field. The example above is the single property added by default during the update to this **ConSol CM** version with the key **X-Frame-Options** and the value "SAMEORIGIN". This new property can serve as an example for more header properties to be added manually as desired.



Please be aware that additional HTTP response headers must be correctly defined with the exact spelling as officially specified! Please note also that the correct interpretation and application of these headers is fully in the realm and responsibility of the client browser which requested the page!

1.3 Changes

This section illustrates all relevant software product changes for version 6.10.8.0 of **ConSol CM**.

1.3.1 Layout improvements

Busy indicator added to related tickets section (#631910)

The ticket page section for related tickets did not show a busy indicator previously when changing its content, for example removing a relation. Such a busy indicator has been added to the section so that it shows the same behavior like other sections as well.

1.3.2 Performance improvements

Engineer representation optimized (#631755)

The internal representation of engineers for the **Web Client** has been optimized. Unused information has been removed from this internal display object so that all locations where a list of engineers is shown are performing better now. This includes result tables with engineer columns, engineer select lists and more.

Customer page ticket loading streamlined (#631775)

The list of tickets for the customer shown on the customer page could slow down page display for high ticket counts. Customers with extremely high ticket numbers (more than half a million) could even cause the server to freeze or crash, depending on the hardware capabilities. The process to retrieve the tickets for a customer has been massively streamlined so that such a scenario cannot realize any more. Now the client only retrieves the first page of tickets on the customer page to avoid overload. As a side effect of this change it can happen in rare cases that a ticket is removed from the list so that there is one ticket less than expected on the page, for example 19 tickets when the list is configured to show 20. This happens only when a ticket has been changed in the meantime so that it does not have this customer association anymore.

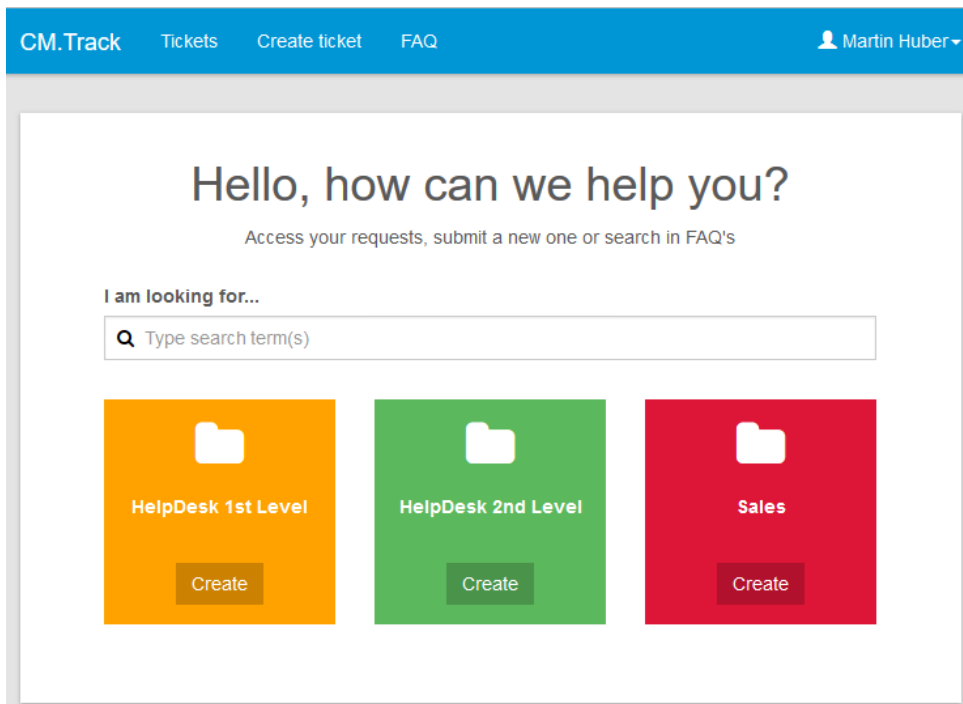
No data loaded into collapsed sections (#631794)

Sections in the **Web Client** pages which were collapsed are expected not to load data. This did not happen consequently for all pages, for example on the customer page data were loaded for a collapsed history section. This inconsistency has been dealt with and for all cases no data are loaded into a collapsed section now including the example mentioned.

1.3.3 CM/Track V2 improvements

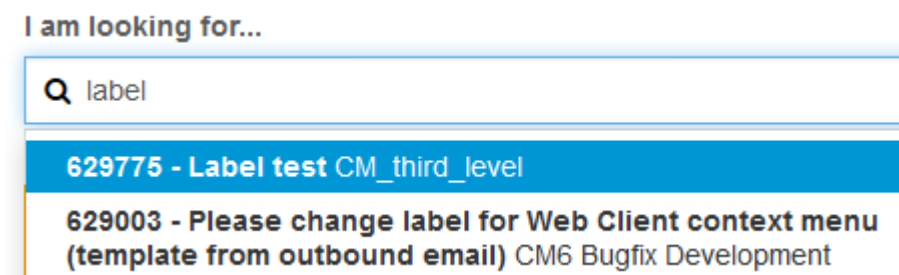
New welcome page after login (#631589)

The end user is presented with a new welcome page after successful login. This page is intended to provide some better orientation regarding the possible actions to be performed at this point.



It offers a customizable welcome message, a special search field, and large colored boxes representing each queue for which the CM/Track user profile associated with this customer end user may create tickets. Should the number of queues be greater than four, then the fourth box is a placeholder offering a list with all remaining queues. Each of the standard boxes shows a button *Create* which directly leads to the ticket create page form for this particular queue.

Using the search field the user can search both queues for his own and his company's tickets normally accessible as well as FAQ queues. It provides a maximum of ten results for each of these three types resulting in a maximum of thirty search results for all queues combined. The ticket origin can be determined by the queue name shown for the result. All results are listed in a drop-down list and can be clicked.



The configuration options for this new welcome page extend to the display of queues shown in the colored boxes and to the localization of the labels on the page. All these configuration items must be added manually to an existing configuration, but they are provided in new configurations based on the template *TrackV2*. The keys of this template can serve as an example. Therefore they are shown below.

The queue configuration is done on the top level of the configuration file `config.json` with sub-structures in the `welcomePage` element. If no configuration is present all queues available are shown according to the granted privileges.

```

"welcomePage": {
  "queuePanels": [
    {
      "@name": "HelpDesk_1st_Level",
      "description": "custom_HD1L_description",
      "icon": "fa-user"
    },
    {
      "@name": "HelpDesk_2nd_Level",
      "description": "not localized description",
      "icon": "fa-user"
    }
  ]
}

```

The queue subelements are used as follows:

- **@name** is the technical name of the queue as specified in the **Admin Tool**.
- **description** is a non-localized label string or the key of a localization element as present in **localization_en.json** and other localization files. The example value above can be **custom_HD1L_description** considered as localized label key, provided this exact key is present in the localization files.
- **icon** is the key of an icon from the **FontAwesome** icon set which can be researched online at <http://fontawesome.io/icons/>.

The localization of the welcome page beyond the queue configuration is done by a small set of keys in the localization files for each language configured. These have to be added to existing configurations. Only new configurations based on the template will include the following keys, compare the (reformatted) example section for the English language which also includes the queue label localization example for the queue configuration above:

- **welcome_header**: Main headline of the welcome page
- **welcome_subheader**: Subtitle headline
- **welcome_search_label**: Hint displayed in the search field before entering a search term
- **searchbar_lbl**: Label above the search field
- **queue_action**: Button label for the queue boxes button to create a ticket in the respective queue
- **jump_to_queues**: Label for the box referencing more queues, if more than four queues are available

```

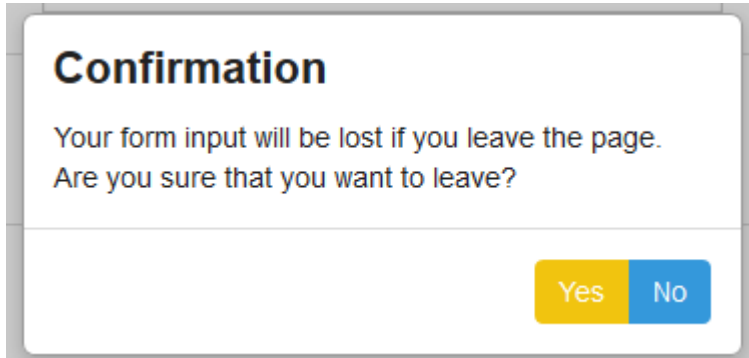
"welcome_header"      : "Hello, how can we help you?" ,
"welcome_subheader"   : "Access your requests, submit a new one or search in
FAQ's" ,
"welcome_search_label" : "Type search term(s)" ,
"searchbar_lbl"       : "I am looking for..." ,
"queue_action"        : "Create" ,
"jump_to_queues"      : "More" ,
"custom_HD1L_description": "custom HelpDesk 1 description EN" ,

```

There are further possibilities to modify the layout of this new welcome page in a custom **CM/Track V2** project.

Confirmation dialog when leaving a page with unsaved entries (#632149)

It was earlier possible to lose data entries in a form unintentionally when just visiting another page by clicking on a menu entry for example. The new page then was shown and the information supplied before was discarded without notice. This loss of input data can now be avoided, because in these cases a new confirmation dialog will appear asking the end user, if this course of action really is desired.



This dialog will be shown before switching to another page for any clickable element leading to another page on the ticket edit page like *Log out*, other menu entries, or the *Cancel* button. The same applies when a comment or attachment entry has been started with one notable exception: for comment or attachment addition the confirmation dialog **will not be shown** when clicking the *Cancel* button. It is expected that in this case it is clearly intentional while on the ticket page this is safeguard not to lose potentially extensive data entries.

The buttons in the confirmation dialog can also be selected by keyboard shortcuts:

- **ESC** will close the dialog and not leave the page like clicking *No*.
- **Enter** will close the dialog, discard the input, and switch to the desired page like clicking *Yes*.

General URL link access to tickets (#631537)

Previously it was only possible to access a ticket in **CM/Track V2** by the URL address as displayed in the browser URL field, if the end user was already logged in. When not logged in, accessing such a URL, for example from an email, did not lead to the ticket page. This functionality has been implemented, so that the user, when clicking on such a link and not being logged in, is redirected to the login page and after successful login will be directed to the ticket specified by the link URL. In case the user does not have sufficient privilege to access the specified ticket his ticket list will be shown together with the message that the privileges are not sufficient for viewing this ticket.

Layout improvements for mobile handsets (#631860)

In the latest releases several elements have been added to the different pages in **CM/Track V2** which were not optimally adjusted for display on a mobile handset like a smartphone. These could cause visual quirks when showing on such a narrow display. This affected the ticket detail header when scrolling or the page navigation bar, for example, which did not optimally adjust to the narrow screen. All known quirks like these have been addressed and the pages are now presented visually appealing with all their elements even on narrow mobile handset displays.

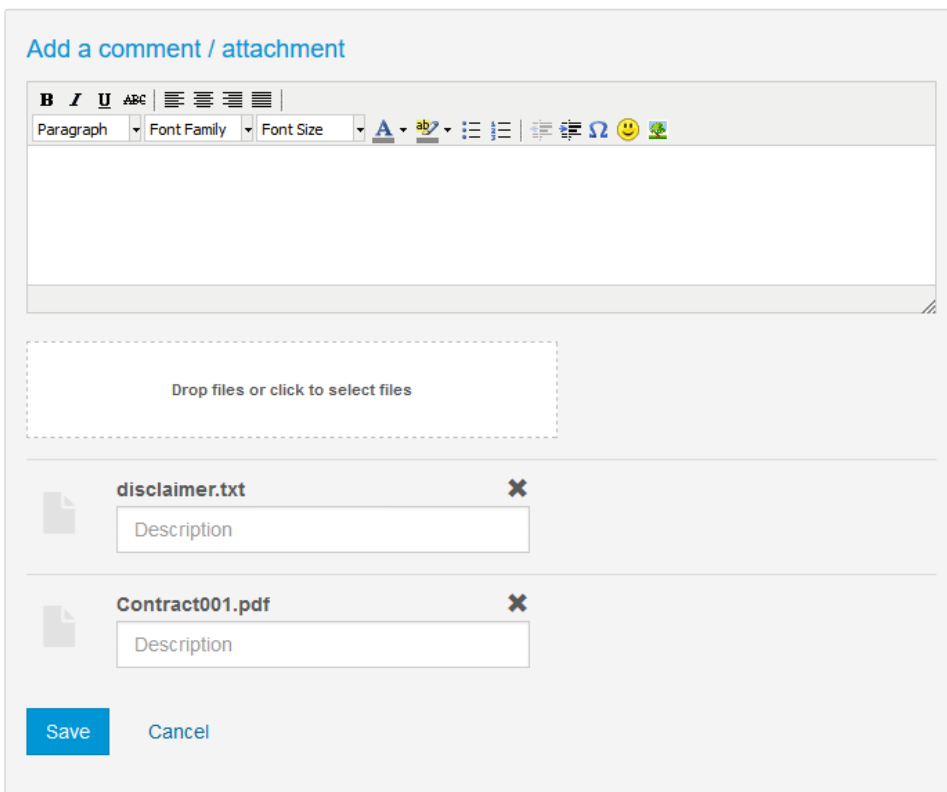
Display of tickets without fields enabled (#631028)

The display of tickets with no fields to show in **CM/Track V2** was not possible in earlier versions. The tickets just were not accessible. This could happen, if none of the filled fields had the annotation **customer exposure** (type **restapi**) set or really no fields contained any data. The display of this kind

of tickets without fields having actual data has been enabled in this release to make **CM/Track V2** more consistent and be able to show the ticket meta-information.

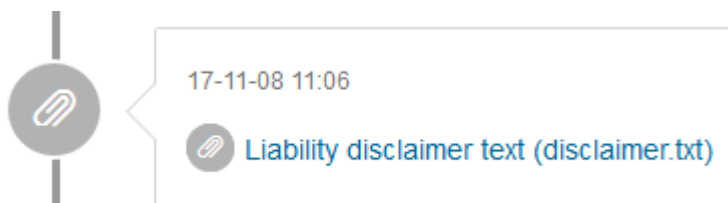
Support for adding multiple attachments with descriptions simultaneously (#631837, 631865)

In earlier releases of **CM/Track V2** each attachment had to be added separately. This is inconvenient, if the user needs to upload several files at the same time. Therefore, the attachment upload functionality has been extended to deal with multiple attachments. When adding attachments, it is possible now to add several files before submitting the change. Each file can be added individually by drag-and-drop on the attachment area or by selecting it in a file selection dialog when clicking on this area. In both cases multiple files can be added in one go, either by dropping a multi-selection from a file manager or by a multi-selection in the file selection dialog.



Each file is represented below the attachment selection area with an entry field to add a description. Every file can be removed individually before attaching it to the ticket by clicking the cross symbol above the right end of the description entry field. All files listed will be attached to the ticket when clicking the **Save** button.

The full support for attachment descriptions has been introduced newly as well. Such a description will then be displayed in the history showing the file name in parentheses:



Textarea field type support (#631687)

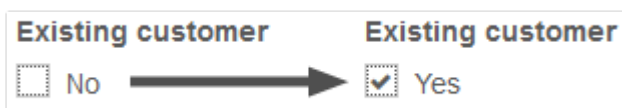
A string field having the value “textarea” for the field annotation `text-type` previously was not displayed in **CM/Track V2** in a different way than a field without this annotation value. This configuration setting is now respected and multi-line “textarea” entry fields are displayed for such an annotation value. The same length limit of 4000 characters for the field content applies as for other string field types and parallel to the **Web Client**.

The screenshot shows a 'Create ticket' form. At the top left is a red tag icon. Below it is the 'Subject' label and a text input field containing 'Subject'. To the right of the 'Subject' field is a callout bubble with the text 'Textarea field type'. Below the 'Subject' field are two columns of fields. The left column has the label 'Business case description' and a multi-line text area containing 'Business case description'. The right column has the label 'Category' and a dropdown menu with 'Please select'. Below these are two more columns. The left column has the label 'Complexity' and a dropdown menu with 'Please select'. The right column has the label 'Estimation' and a dropdown menu with 'Please select'.

Please note that the “textarea” fields do not support the configuration defined in the `fieldsize` annotation. The width on the page is determined by the layout grid for field arrangement in **CM/Track V2** and the height is initially fixed to three rows. Modern browsers may allow to resize the height for editing, but the next time the form is opened such a field will have the standard height again.

Boolean field dynamic value display (#632120)

The presentation of BOOLEAN fields earlier showed the field label twice. It was shown as the label like for any other field and again on the line of the checkbox as placeholder for its value. This unpleasant redundancy has been replaced by a new dynamic value display: the displayed value represents the current state of the checkbox. It shows *No* for the unchecked state (“false”) and *Yes* for the checked state (“true”). This display value changes when checking/unchecking the checkbox, compare the illustration:



Label field duplication in Activity Control Forms settled (#632200)

In case the ticket data model includes label fields as configured by setting the annotation `text-type` to the value “label” these fields showed their label text twice in Activity Control Forms. Like other fields

the value was displayed as label, but additionally below this as the value. This clearly undesired behavior has been changed so that from now on such a label is displayed only once. Now the only displayed part is the label of this label field as expected.

To product management

Pass the ticket to product management for planning.

Product management input

Label field

Business case description

Business case description

Readonly field behavior made more consistent (#632164, #632215)

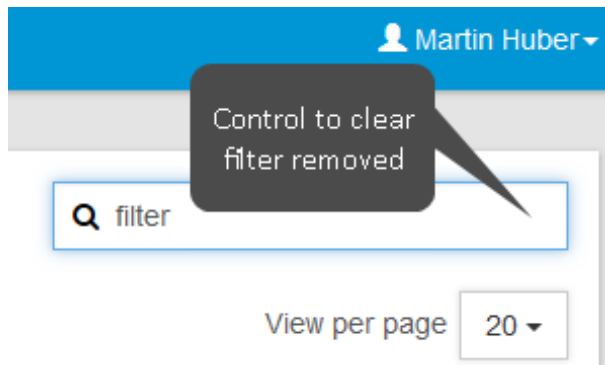
Fields with the value “true” for the annotation `readonly` were treated in undesired ways previously in **CM/Track V2** depending on the context. In edit forms they were omitted which is undesired, because the non-editable information in these fields may be helpful when entering data in other fields. Inside a STRUCT list the fields were displayed, but the annotation was not applied as desired and the read-only fields were editable. Both inconsistencies have been addressed and read-only fields are displayed deactivated in forms both as standard fields as well as inside STRUCT lists. This means the values cannot be edited while being displayed as desired.

Inconsistent ticket field groups order straightened (#632057)

The order of the ticket field groups (not the fields themselves) in the page display was not constant in all cases. Additionally, a misconception could be observed that the **CM/Track V2** field layout definition extended to the order of field groups. The layout definition only applies to the field order within a group and its order of groups is not relevant. The field group order is defined by the order provided by the **Admin Tool** configuration. The inconsistencies mentioned with regard to field group order above have been dealt with and should not show anymore which was also straightened for Activity Control Forms, customers, and resources provided by the REST API.

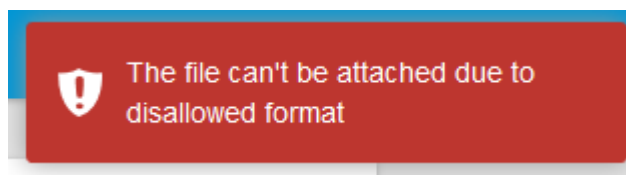
Control to clear ticket list filter removed (#632191)

The control to remove the entry in the ticket list filter and reset the filtering has been removed. The cross symbol for this functionality previously could be found on the right end inside the filter string entry field. However, for technical incompatibilities it was inoperable when using **Microsoft Internet Explorer** browsers. In this browser clicking it did not reset the filtering. Therefore this control has been removed to not present functionality which is dysfunctional on a commonly used platform.



Qualified error message when attempting to attach improper file type (#632196)

CM/Track V2 previously only displayed a general unspecific error message when the end user attempted to upload an attachment which was of a file type disallowed by the server configuration. The allowed file types are defined in the server system property `attachment.allowed.types` in the module `cmas-core-server` as a comma-separated list. If this optional property, which has to be added manually, is set, all file types not mentioned in its value are forbidden. For files with a type not mentioned in this value the error message below is displayed now when trying to upload them as an attachment.



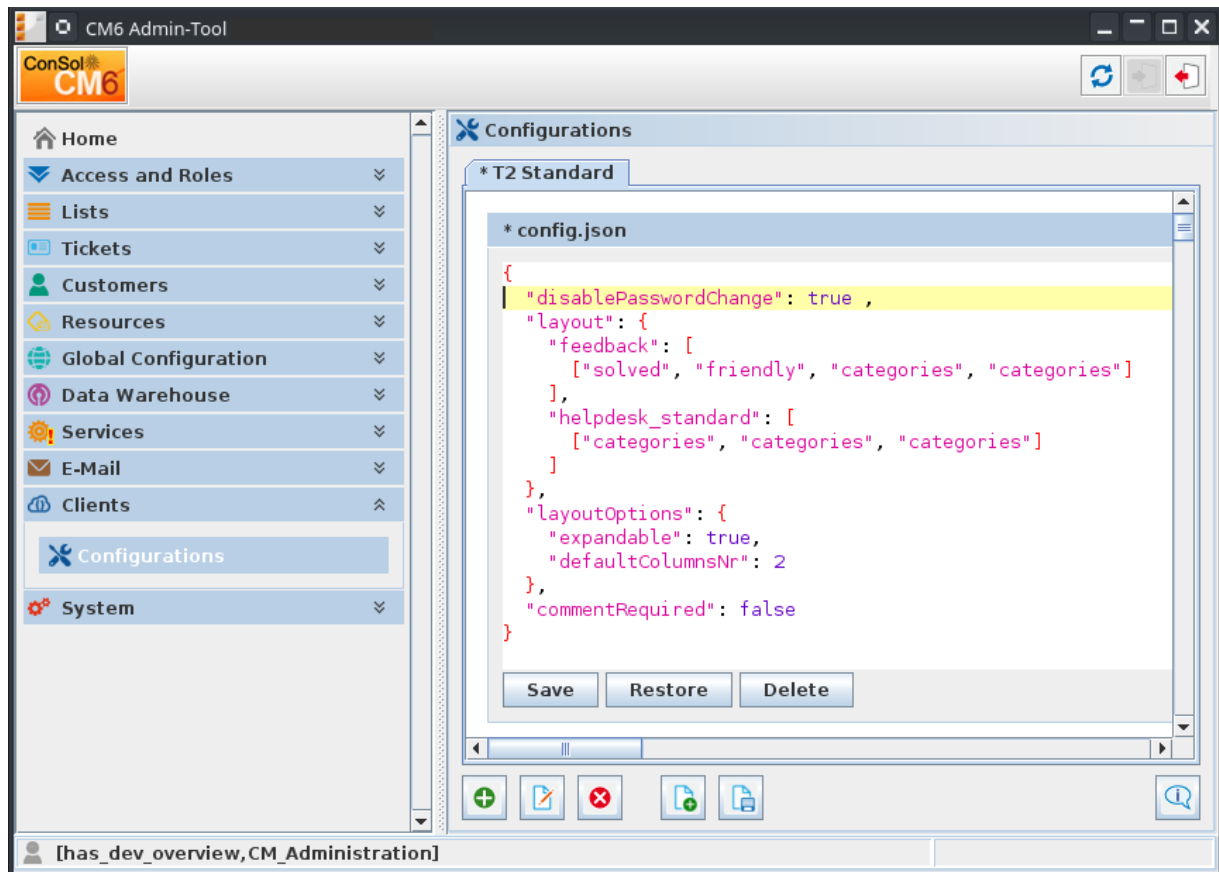
Non-localized error messages corrected (#631156)

Some error messages which originated from the server and were passed to **CM/Track V2** via REST API were displayed without localization to the end user no matter what his browser language was. So these messages were displayed in English even though the application page otherwise was German, for example. This missing message translation functionality has been supplied and now the server messages will be displayed in the correct language.

Configuration options for password change and reset (#631689)

The functions to reset the password from the login page and to change it after login from the menu previously were always present. However, these options are useless in a setting with central account management via LDAP, for example. To accommodate such a context new configuration items have been introduced in this **CM/Track V2** version to enable/disable both options separately.

The options have to be set in the configuration JSON files for the desired **CM/Track V2** instance in the **Admin Tool**. The tab name in the navigation item *Configurations* in the navigation group *Clients* corresponds to the client instance configuration.



On the desired configuration tab the *Change password* menu option for end users logged in can be disabled by adding a line with the key `disablePasswordChange` and its value “true” on the top level of the JSON structure in the file `config.json`. The screenshot above illustrates this with this change yet unsaved. The value “false” activates the standard behavior showing the menu option. Please compare the code snippet below from this configuration file:

```
{
  "disablePasswordChange": true ,
  "layout": {
    ...
  }
}
```

The deactivation for the password reset option usually labeled *Forgot your password?* on the **CM/Track V2** login page can be achieved in a comparable way in the configuration file `public.json` lower on the same tab. In this file the key to add on the top level is called `disablePasswordReset` and in the same way the value “true” will disable the password reset functionality and the corresponding link will not show anymore. The value “false” will also restore the default behavior. Usage of the configuration option can also be observed in the following code snippet.

```
{
  "disablePasswordReset": true ,
  "signin": {
    "i18n": {
      "en": {
        ...
      }
    }
  }
}
```


Handling interaction between REST API field configuration and *CM/Track V2* field visibility (#631863)

The **Admin Tool** configuration for fields with the annotation `customer exposure` set to “read” alone does not prohibit attempts to edit the field content in *CM/Track V2*. It will deliver the value as expected, but does not control any *CM/Track V2* behavior. Therefore it is admissible to try and edit the value with a customer login which in turn will lead to an error returned from the server REST API. This error is expected behavior since changing the value is prohibited for customer access by the server. Encountering this error in such a case can only be avoided by hiding the field using the visibility configuration. An error which prohibited ticket creation under these circumstances together with the property `cmas-restapi-core, security.fields.customer.exposure.check.enabled` set to “true” has been corrected and will not impair ticket creation anymore.

Server-side logging configuration (#631846)

The standard distribution packages of *CM/Track V2* earlier came with a configuration that provided no logging on the server side. This logging behavior, however, can be changed by adequate application server / web container configuration now.

When using *CM/Track V2* deployed to a **JBoss EAP 6** application server logging to the log file `server.log` is by default activated without further configuration. However, adjusting the log level or muting this logging can be achieved by adding a section like below to the server configuration file `cm6.xml` (or corresponding) in the logging subsystem section:

```
<logger category="org.glassfish.jersey.filter.LoggingFilter">
  <level name="ERROR"/>
</logger>
```

The logging will be muted when setting the log level `SEVERE`. It will be muted mostly at `ERROR` level, too.

In case *CM/Track V2* is deployed to an **Apache Tomcat** web container, a corresponding configuration has to be made in the configuration file `logging.properties` usually found in the `conf` subfolder of the installation directory.

The file must be extended with a specific handler configuration for *CM/Track V2* which then also must be referenced in the handler property along with the other logging handlers. In the example below the new specific handler is called `2catalina.org.apache.juli.AsyncFileHandler` and referenced as first entry in the comma-separated list value for the property `handlers` in the first line. The log file is configured by the three lines starting with the handler key `2catalina.org.apache.juli.AsyncFileHandler` defining log level, log file directory, and the first part of the file name. The log file name will be appended with the current date and the extension `.log` resulting in `track-server.2017-11-13.log` for example. The last example line with the key `org.glassfish.jersey.filter.LoggingFilter.handlers` connects the *CM/Track V2* logging facility with the log file handling.

```

handlers = 2catalina.org.apache.juli.AsyncFileHandler,
1catalina.org.apache.juli.FileHandler, [...]

...

#####
# CM/Track V2 logging to file section
#####
2catalina.org.apache.juli.AsyncFileHandler.level = FINE
2catalina.org.apache.juli.AsyncFileHandler.directory = ${catalina.base}/logs
2catalina.org.apache.juli.AsyncFileHandler.prefix = track-server.

org.glassfish.jersey.filter.LoggingFilter.handlers =
2catalina.org.apache.juli.AsyncFileHandler

...

```

Setting the log level to **FINE** is equivalent to **INFO** and both can be used interchangeably.

When setting a log level as value of the key `org.glassfish.jersey.filter.LoggingFilter.level` alone without any other property addition or modification the desired logging will be written to the console only by the **Apache Tomcat** web container.

There are no means to change the logging configuration for the **CM/Track V2** distribution packages with the embedded **Apache Tomcat** web container. This setup will generally log to the console only with a log level **INFO (FINE)**.


Client version information in deployable web archive (#632309)

The information about the specific version of the client module included in the deployable web archive (war) file was not easy to obtain earlier. In principle this version can differ from the server components so this is relevant information. Such a difference may even be intended in customized **CM/Track V2** projects. This release features a canonical location from which to obtain this information.

The file `grails.build.info` in the directory `META-INF` shows a line starting with `client.version` with the client version configured at build time. Depending on the deployment method this file may only be accessible inside the web archive file.

Assisted custom **CM/Track V2** project upgrade procedure (#631855)

The upgrade of a project for a customized **CM/Track V2** version from an older release version to a newer one was a fully manual process before. A new build system task has been introduced which eases this procedure and automates most of it. This will speed up the base version upgrade for custom **CM/Track V2** projects.

 Please contact your **ConSol CM** representative, if you need detail information on how to upgrade a custom **CM/Track V2** project!

1.3.4 Supported Firefox version changed to ESR 52 (#632529, #631716)

Starting with this **ConSol CM** release 6.10.8.0 version 52 of the Firefox browser Extended Support Release (ESR) is supported by the system. The support for the previous ESR version 45 of Firefox is no longer actively maintained.

1.3.5 Mouse buttons in view selection (#631764)

The use of the mouse buttons in the ticket list view selection in the **Web Client** has been extended. Clicking an entry in the view selection list could cause errors previously. A right click could lead to a message *No ticket found with name choice.html*. Right after login it could even cause a server error screen saying this resource is not available when using **Internet Explorer 11** and using a regular left click. This misbehavior has been resolved and clicks with all mouse buttons will now open the selected view.

1.3.6 Attachment with inadmissible file types discarded without information (#632051)

Upload of an attachment previously seemed to work without error when selecting a file with a file type not admitted by the configuration. However, in the background the file was discarded without any user feedback that it had not been added. This unwanted silent rejection of the attachment has been changed so that now there will be a validation error message next to the file name field. This message informs the engineer about the fact the he tried to upload an invalid file type and lists the allowed file types for upload.

1.3.7 Archive file MIME type detection improvement (#632328)

The MIME type of archive files of ***.rar** and ***.7z** files was not recognized earlier. The detection for these types has been added and now they are recognized parallel to ***.zip** files. The detection for these was broken for a short time which has also been fixed in this release.

1.3.8 Assignment email templates extended with *From:* address (#631773)

The email templates for engineer assignment changes assigned to queues generally used the system administrator email address previously. This led to undesired effects since ticket related emails were sent with the administrator address and replies to these could cause problems. In order to be able to easily avoid these effects the email sender address can be integrated into the template body for this case like it works for the subject already.

The sender address can be supplied in the template by adding a preceding line starting with "From:" followed by the desired email address. This address will then be used as the email *From:* address when sending engineer assignment change emails only. The supplied address will not be validated against any data in the system so it is fully in the responsibility of the template author to provide a working address in this kind of usage.

1.3.9 Code escaping in search result tables improved (#631886)

In data fields the text content is usually escaped in a way so that executable code sequences in a value cannot be executed. The implementation providing this security for the table cells in the search result tables on the Detailed Search page was not working as desired. Therefore, it was not fully excluded that such a code section could be executed when the data field was listed as a match in a search result. The gap in the escaping implementation of search result data cells has been closed and code execution is now consequently prohibited in this context.

1.3.10 REST API customer access to object restriction enforcement (#632274)

The REST API when used with valid customer credentials did allow accessing the data of other unrelated objects, if a REST request with a manipulated structure and a valid ID was crafted manually and issued. This access is undesired for most use cases. Usage of REST calls with engineer credentials will generally apply the desired access restrictions.

A new system property has been added which controls REST customer data access with customer credentials. It can be found in the module `cmas-restapi-core` and is called `security.restrict.unit.access.to.own.data`. It will be introduced automatically by the update with its default value set to “true”.

The new restricted unit object data access policy applied by the property value “true” will activate an additional check for requested customer data. The requested information will then only be returned, if either

- the requested item is the company for the customer logged in or
- the requested item is another contact of the company for the customer logged in.

Requests for other unit object data will get a response status `403 FORBIDDEN` in return. This policy is enforced for all requests for customer data, no matter if they are requested by ID or by search criteria.

Setting the property value to “false” will allow the less restricted data access as previously for backwards compatibility.

1.3.11 REST API customer access to engineers restricted (#632247)

Accessing the system via REST API with valid customer login data previously put the customer in power to query random engineers in the system. While it may be desirable to get some basic engineer information like the name in ticket lists or history entries, the capability to actively query for engineers should not be available to customers. The useful information in the REST API response includes an URI to query details and sending a request to this URI was not prohibited before. This behavior has been changed so that the responses to a customer’s request still contain basic engineer data including the URIs, but queries to engineer data other than the CM/Track user profile used for back-end access will not be carried out anymore. This means that queries for a list of engineers or some specific engineer’s detail data will be blocked and a response status `403 Unauthorized` will be returned along with an adequate message, for the latter example “Logged in customer is not authorized to see requested engineer”.

1.3.12 REST API ticket relation endpoint information enhancement (#632089)

The REST API in previous **ConSol CM** versions did not return the role information for asymmetric relations, for example, for a master-slave relation there was no information, if the ticket in question was master or slave. In this release the enhancement was made that this information is now included in the response. The new response element `endpoint` communicates this detail for each ticket relation returned.

Possible values for `endpoint` are:

- “MASTER” (master-slave relations)
- “SLAVE” (master-slave relations)
- “PARENT” (parent-child relations)

- "CHILD" (parent-child relations)
- "REFERENCE" (reference relations)

i Please be aware that this enhancement changes the response format for ticket relation requests and your client may need to be adapted to this modification!

An example request remains unchanged:

```
curl -u engineer:password http://cm-server:8080/restapi/tickets/626939/relations
```

The response, however, has a new element for each relation returned and clients may be adapted to this change. Please note the lines with the element **endpoint** which were not present in the responses from earlier releases!

```
{
  "ticketrelation": [
    { "endpoint": "REFERENCE" ,
      "ticket" : { "@uri" : "http://cm-server:8080/restapi/tickets/625925" } ,
      "type"   : "REFERENCE" } ,
    { "endpoint": "PARENT" ,
      "note"   : "Bug2Patch",
      "ticket" : { "@uri" : "http://cm-server:8080/restapi/tickets/626494" } ,
      "type"   : "PARENT_CHILD" } ,
  ]
}
```

1.3.13 Copy and paste for system properties in *Admin Tool* (#630420)

Using copy and paste was previously not available when editing system properties in the *Admin Tool*. This was error-prone for some usages, therefore this functionality has been enabled now in this *ConSol CM* release. Now it is possible to use copy and paste consistently in all fields of the system properties dialog.

1.3.14 Stack trace not logged for a validation error (#631875)

In case a workflow activity was executed by a REST API request and a validation error was caused by this, the error was logged with the full stack trace in the latest releases. This generally is unwanted since validation errors are standard system behavior in such a case if the request has insufficient data. Therefore, the logging of such a common event has been changed so that a validation error caused by a REST API request to execute an activity will result in just a single line for information in the log files.

1.4 Bugs fixed

The following defects have been corrected in this **ConSol CM** version.

Number	Description
624842	<p>REST API ticket response without related tickets for relation targets</p> <p>The response data for a REST API request querying a ticket did not contain the information about related tickets even though these existed, if the queried ticket was the target of the relation. This omission has been corrected and now for all tickets the response lists related tickets.</p>
628078	<p>Useless entry cached after canceling resource relation creation</p> <p>When attempting to create a ticket relation on the resource page and only entering invalid ticket information, this useless information was cached and pre-entered after canceling the initial creation for the error and reattempting the relation creation. Caching this useless information is now skipped and the previous entry is not shown in the following attempt anymore.</p>
629764	<p>Doubled notification pop-up window from CM/Phone</p> <p>When receiving an incoming call with CM/Phone installed for some TAPI telephone system it could happen that CM/Phone opened two pop-up notification windows to inform the user about the caller. This has been fixed and in normal settings only one pop-up will show.</p>
630694	<p>License not released after session timeout in SSO environment</p> <p>In a Single Sign-On environment (SSO) the license was not released after a user session timeout. An automatic re-login was performed since the redirection to the URL configured in the system property <code>urlLogoutPath</code> from the module <code>cmweb-server-adapter</code> was not done as formerly. The redirection to the configured URL is performed as expected now and, thus, the license is released in a proper configuration.</p>
631005	<p>Exception when trying to add a new queue to a view with an invalid scope</p> <p>Trying to add a new queue to a view in the Admin Tool resulted in a failure with a <code>NullPointerException</code>, if the view contained an invalid scope. A scope becomes invalid, if it is deleted in the Process Designer but not removed from the view in the Admin Tool. This problem was resolved and adding a new queue is possible now, even if the view contains an invalid scope.</p>
631431	<p>Resource group fields hidden or duplicated for special cases</p> <p>For a resource data model with several field groups where one group has a label field followed by data fields and another group has a textarea as its last field, the last field row could disappear or be duplicated. This undesired way of displaying fields has been changed so that for all groups the fields are shown as expected.</p>

Number	Description
631569	<p>Data warehouse log queue processing blocked because of ambiguous task send date</p> <p>The log queue processing was blocked when using data warehouse LIVE mode when two users initiated a task in the same millisecond. This caused non-unique task send date entries blocking each other and the whole queue. This very rare problem has been resolved by using the transfer key for disambiguation from now on.</p>
631586	<p>CM/Doc data export lacking main contact information</p> <p>The data exported by CM/Doc into a document were lacking the main contact information, if the ticket also contained a company as only additional customer. This issue has been fixed and for this case the main contact data is available in the export.</p>
631740	<p>Text template queue binding only saved for availability in workflow</p> <p>When editing a text template and binding it to a queue this binding was only saved, if the selected template availability was <i>Email</i> only. The binding was not saved, if <i>Workflow</i> was selected as well. This deficit was eliminated and now the queue binding is saved for the template in such a case as well.</p>
631791	<p>Scrolling through the engineer list by mouse wheel dysfunctional</p> <p>In the latest releases the functionality to scroll through the engineer list using the mouse wheel was broken and this way to move to the desired engineer name was not working anymore. This functionality has been fixed so that using the mouse wheel now yields the desired behavior again.</p>
631799	<p>Internal error when searching tickets via REST API by ENUM criteria with customer login</p> <p>Searching for tickets using the REST API with ENUM value criteria while logged in as a customer could return an internal error in the response. The case selector in this search had to be "company" (not "my" or "own" or no case selector) for this to happen. This problem has been solved and such a search returns the tickets as desired again.</p>
631868	<p>Changing a script name suffix not immediately recognized</p> <p>When changing the suffix of a script name the old script was not immediately replaced internally by the new renamed one. This could cause undesired script results and has been corrected now.</p>
631960	<p>Email address identification error for commas and semicolons</p> <p>When entering an email address in the Ticket Email Editor which contained a comma or semicolon in the display part of the address, the email address was not correctly recognized even though these characters were correctly escaped in quotes. Instead, the parts before and after such a character were considered separate email addresses which then are mostly deficient. This address identification problem has been corrected so that such an email address can be used as intended.</p>

Number	Description
631972	<p>Exception adding more than 4000 characters to short string field</p> <p>It causes an exception and an empty browser screen when trying to add a value with a length of more than 4000 characters. This problem has been solved and such entries will show a validation error message. An error will still occur for longer customer names and will be addressed separately. This case is listed in the Known issues section under the issue ID 632373.</p>
632052	<p>Exception when grouping the ticket list by queue for special conditions</p> <p>An empty browser screen after an exception was the result of grouping the ticket list by queue under special conditions. For this to happen the customer group selector had to be set to a specific customer group and the engineer had to have access to a queue which is limited to another customer group only. This highly undesired behavior has been changed and no logout with a blank browser will occur anymore.</p>
632055	<p>Octet-stream REST API response type could not handle errors</p> <p>When requesting an object of the type “application/octet-stream” via REST API the system was not able to handle the case of an error occurring. It caused an exception in the log file and returned a response status 500 - Internal Server Error. Now the response will inform the client with an adequate message about the real problem with the request, if an error should occur.</p>
632132	<p>Modification date not updated for imported scripts</p> <p>Scripts which were changed by a scene import did not get their last modification date updated to the import time. This confused the fact that these scripts were in fact changed. This deficit has been addressed and the scripts now have the import time as their last modification date as expected.</p>
632163	<p>Adding a new mailbox fails in a clustered environment</p> <p>Trying to add a new mailbox in the Admin Tool for a clustered environment failed, if already a high number (>50) of mailboxes was configured. This issue has been resolved and it is possible again to add more mailboxes in such an environment.</p>
632190	<p>Resource groups could not be added after deletion</p> <p>It was not possible to add new resource groups in the Admin Tool after creating several resource groups and then deleting one of these, for example the first one created. The problem was solved and resource group addition now succeeds as expected.</p>
632216	<p>Login failures for ticket list entries containing large container fields</p> <p>In case the ticket list had ticket entries for which the tickets had very large container fields, for example STRUCT lists with several thousand rows, login attempts failed after a timeout. In the meantime the ticket list only showed a busy indicator before the engineer was presented with the login page again. This problematic behavior was corrected and now the login works and should even show a noticeable performance boost.</p>

Number	Description
632254	<p>DEBUG level log entry wrongly categorized as ERROR level</p> <p>The log entry when creating an attachment and logging its internal ID was wrongly categorized as an ERROR level log entry instead of the DEBUG log level. Therefore it showed in the logs in cases this was not desired. This wrong categorization has been corrected and the entry now only shows when the log level is set to DEBUG.</p>
632362	<p>Ticket got stuck in workflow if no manual activity followed an escalation trigger</p> <p>A ticket was stuck in the workflow with an incorrect state, if in this workflow an escalation time trigger was activated, but this trigger was not followed by a manual activity but rather created a new time trigger to wait in a different state. This specific workflow issue has been fixed so that the ticket now reaches its new waiting state as desired.</p>
632397	<p>Multiple exclamation marks removed from log messages</p> <p>Several log messages issued by ConSol CM unnecessarily contained multiple exclamation marks in a row. These useless elements have been removed from the log messages.</p>
632459	<p>Document template names not correctly shown in the <i>Web Client</i> template library</p> <p>The name given to a document template when adding it was not shown in the list of existing templates in the latest release. Instead some internal reference was displayed in the template library which could not be interpreted. This display error was corrected and the template name is shown again correctly.</p>
632525	<p>Links in incoming emails not removed when using New Incoming Mail Handler</p> <p>Links which were embedded in incoming HTML emails should be removed as link and may not be clickable anymore. This was dysfunctional in the latest release when using the New Incoming Mail Handler. This functionality for enhanced security has been restored fully so that links from incoming HTML mails are not clickable anymore in the Web Client now.</p>

2. Version 6.10.8.1 (30.07.2019)

Version 6.10.8.1 includes all **ConSol CM** changes and additions of


- 6.10 versions up to 6.10.7.2
- 6.9 versions up to 6.9.4.7
- 6.8 versions up to 6.8.5.8

Newer versions and the respective changes are not included in this **ConSol CM** version.



2.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.10.8.1 in this section before performing a system update or installation. Please consult the general product documentation on update and installation procedures as well as earlier version Release Notes, if applicable.

 The only change in this version with respect to the previous version 6.10.8.0 is that the certificate of the Java Web Start applications and Java applets has been renewed, please see [Web applications expiry](#).

2.1.1 System upgrade from 6.10.7 and earlier versions

This **ConSol CM** release does not need specific planning for an update from earlier releases.

3. Version 6.10.8.2 (13.01.2020)

Version 6.10.8.2 includes all **ConSol CM** changes and additions of

- 6.10 versions up to 6.10.7.2
- 6.9 versions up to 6.9.4.7
- 6.8 versions up to 6.8.5.8

Newer versions and the respective changes are not included in this **ConSol CM** version.

3.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.10.8.2 in this section before performing a system update or installation. Please consult the general product documentation on update and installation procedures as well as earlier version Release Notes, if applicable.

3.1.1 System upgrade from 6.10.7 and earlier versions

This **ConSol CM** release needs specific planning for an update from earlier releases.

3.1.2 Data Warehouse update

When updating the ConSol CM system to version 6.10.8.2, the DWH needs to be updated due to the extension of the supported dates. The update scripts for each database are available from your ConSol representative. Please follow the instructions in [DWH adapted to support dates until 01.01.2100 \(#642421\)](#).

No further instructions available.

3.2 Changes


This section illustrates all relevant software product changes for version 6.10.8.2 of **ConSol CM**.

3.2.1 DWH adapted to support dates until 01.01.2100 (#642421)

The DWH table `dim_date` has been adapted to support dates until 01.01.2100. Previously, only dates until 01.01.2020 were supported.

The DWH database needs to be updated for this change. Please perform the following steps:

1. Before starting the **CMRF**, manually execute the database update script for your database engine. Please ask the ConSol CM support or your ConSol CM consultant for the update script.
2. Start the **ConSol CM** server. If the DWH is in LIVE or ADMIN mode and the **ConSol CM** system contains data fields with dates between 01.01.2020 and 01.01.2100, DWH tasks are created automatically to update these fields in the DWH.
3. Run the created DWH tasks in the section *Data Warehouse -> Tasks* of the **Admin Tool**.

 DWH tasks are also created for data fields which are not annotated as “reportable”. During the execution of the DWH tasks, these tasks are handled automatically.

4. Web applications expiry

ConSol CM includes several **Java Web Start** tools and **Java applets**. These technologies validate the downloaded programs by validating a certificate. This applies to all recent and supported versions of the Java platform at the time of writing. Any certificate for this purpose includes an expiry date after which it will not validate anymore. After this date a program containing this certificate will not be considered valid anymore as well and an update to a version with a newer certificate is required to have the tool operational.

The **ConSol CM** releases covered in this document include Java Web Start tools and Java applets with the following certificate expiry dates:

Release version(s)	Certificate expiry date
6.10.8.0	28.10.2019
6.10.8.1 and higher	08.03.2022

The **Java Web Start** tools and **Java applets** of **ConSol CM** affected by this expiry date are these:

- **Admin Tool**
- **Process Designer**
- **CM/Doc**



Please make sure you always have a **ConSol CM** version with a valid certificate installed to guarantee uninterrupted usage of the **Java Web Start** tools and **Java applets**!