

ConSol Software GmbH

# Release Notes ConSol CM 6.14.0

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# 1. 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 6.12.1 to 6.13.0.

- **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 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 CM version and the new CM version, e.g. for an update from 6.13.0.3 to 6.13.0.7 the instructions of the versions 6.13.0.4, 6.13.0.5 and 6.13.0.6 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.



## 2. Breaking changes and mandatory actions

The following table lists the breaking changes which need to be checked before performing an update.

Version	Change	Affected area	Required action
6.14.0.11	<a href="#">Fixed several security vulnerabilities (#654051)</a>	CM/Doc	Update CM/Doc
6.14.0.8	<a href="#">Third-party libraries updated in CM/Doc (#652086)</a>	CM/Doc	Update CM/Doc
6.14.0.5	<a href="#">Automatic expiry of CM/EBIA tokens added (#651094)</a>	CM/EBIA	Update JWT key
6.14.0.4	<a href="#">API method for retrieve engineers removed (#650971)</a>	Scripts	Check scripts
6.14.0.4	<a href="#">Ticket link in notifications adapted (#650422)</a>	Scripts	Check notification scripts
6.14.0.3	<a href="#">Third party library updated in CM/Doc and CM/Archive (#650183, #650186)</a>	CM/Doc	Update CM/Doc
6.14.0.3	<a href="#">Support for CM/Doc changed (#649135)</a>	CM/Doc	Update Microsoft Office
6.14.0.3	<a href="#">SSO support for CM/Track added (#648118)</a>	CM/Track	Check custom projects
6.14.0.2	<a href="#">Property added to XML configuration files (#649965)</a>	Update	Update XML configuration files
6.14.0.2	<a href="#">Contact and resource IDs added to the DWH (#649261, #649262, #649931)</a>	DWH	Execute task script
6.14.0.1	<a href="#">New columns added to data warehouse (#649055)</a>	DWH	Perform DWH update
6.14.0.1	<a href="#">Information of failed email notifications enhanced (#648335)</a>	Emailing	Update template
6.14.0.1	<a href="#">Stricter password policy (#648272)</a>	Security	Check password policy
6.14.0.0	<a href="#">Third-party library updated in CM/Doc and CM/Archive (#647557)</a>	CM/Doc	Update CM/Doc
6.14.0.0	<a href="#">Fixed-point number support modified (#647060, #647656)</a>	Data models, DWH	Execute update script

Version	Change	Affected area	Required action
6.14.0.0	<a href="#">Method of embedding CM/Track in an iFrame changed (#645520)</a>	CM/Track	Update JBoss / Tomcat configuration
6.14.0.0	<a href="#">Scope of condition scripts changed (#645473)</a>	Workflow	Check workflow
6.14.0.0	<a href="#">Handling of update events for password changes via REST API adapted (#645279, #646194)</a>	CM/Track	Check scripts
6.14.0.0	<a href="#">Wicket upgraded (#630774)</a>	Monitoring	Check monitoring
6.14.0.0	<a href="#">Support for MySQL 8 added (#642079)</a>	Update	Update JBoss configuration, JDBC connector and MySQL
6.13.0.11	<a href="#">Support for Tomcat changed (#649926)</a>	CM/Track	Update Tomcat
6.13.0.9	<a href="#">Handling of incoming emails with disallowed attachments improved (#649455, #649457)</a>	Web Client	Check system property
6.13.0.8	<a href="#">Property to define allowed attachment types modified (#648115)</a>	Web Client, CM/Track	Check system property
6.13.0.8	<a href="#">Third-party library updated in CM/Doc (#647557)</a>	CM/Doc	Update CM/Doc
6.13.0.7	<a href="#">Third-party libraries updated in CM/Doc (#646853)</a>	CM/Doc	Update CM/Doc
6.13.0.6	<a href="#">Display of empty fields in CM/Doc changed (#645572)</a>	CM/Doc	Update CM/Doc
6.13.0.4	<a href="#">Support for Tomcat for CM/Track changed (#645504)</a>	Update	Update Tomcat
6.13.0.4	<a href="#">Bouncycastle removed from distribution package (#645459)</a>	Update	Update JBoss configuration
6.13.0.2	<a href="#">DWH performance improved (#644165), API for generating DWH cubes (#643922)</a>	DWH	Execute update script
6.13.0.1	<a href="#">Machine learning improvements (#644231, #644243)</a>	Scripting	Adapt scripts
6.13.0.0	<a href="#">JBoss configuration changed (#643782)</a>	Setup	Update JBoss configuration
6.13.0.0	<a href="#">CSV export feature adapted (#643579)</a>	Web Client	n/a

Version	Change	Affected area	Required action
6.13.0.0	<a href="#">Support for Wildfly changed (#642632)</a>	System requirements	Update Wildfly
6.13.0.0	<a href="#">Support for JBoss EAP 7 changed (#642631, #643350)</a>	System requirements	Update JBoss
6.13.0.0	<a href="#">Support for JBoss EAP 6.4 dropped (#642630)</a>	System requirements	Update JBoss
6.13.0.0	<a href="#">Support for Oracle 11g dropped (#641966, #641967)</a>	System requirements	Update Oracle
6.13.0.0	<a href="#">New layout for data fields (#641891)</a>	Web Client	Check layout
6.13.0.0	<a href="#">commons-fileupload library removed (#633754)</a>	Scripting	Check scripts
6.13.0.0	<a href="#">Behavior of readonly annotation changed (#632772)</a>	CM/Track	n/a
6.12.1.3	<a href="#">No automatic line break when using includes in templates (#644151)</a>	Templates	
6.12.1.3	<a href="#">Behavior when deleting list items via REST API changed (#644033)</a>	REST API	
6.12.1.3	<a href="#">Export of page customization attributes modified (#643199)</a>	Import/Export	
6.12.1.2	<a href="#">Third party libraries for CM/Track V2 updated (#642673)</a>	CM/Track	
6.12.1.2	<a href="#">Ticket URL changed (#642572)</a>	Import/Export	
6.12.1.1	<a href="#">Support for CM/Track with embedded Tomcat dropped (#642875)</a>	System requirements	
6.12.1.1	<a href="#">Supported Tomcat version changed (#642778)</a>	System requirements	
6.12.1.1	<a href="#">Notifications API changed (#642692)</a>	Scripting	
6.12.1.1	<a href="#">PDFBox updated (#632554)</a>	Scripting	
6.12.1.1	<a href="#">Third party libraries for CM/Track V2 updated (#642504)</a>	CM/Track	
6.12.1.1	<a href="#">jackson-databind library updated (#642462)</a>	Scripting	
6.12.1.0	<a href="#">Support for WebLogic phased out (#642451)</a>	System requirements	

Version	Change	Affected area	Required action
6.12.1.0	<a href="#">Support for Windows Server 2008 phased out (#642299)</a>	System requirements	
6.12.1.0	<a href="#">Support for Firefox changed (#642228)</a>	System requirements	
6.12.1.0	<a href="#">jQuery updated (#642077)</a>	Scripting	
6.12.1.0	<a href="#">New text editor in the Web Client (#634544)</a>	Page customization	
6.12.1.0	<a href="#">Trigger behavior changed when several attachments are added (#632885)</a>	Scripting	
6.12.0.0	<a href="#">Support for Oracle 10g dropped (#641334)</a>	System requirements	
6.12.0.0	<a href="#">Guava library updated (#634494)</a>	Scripting	
6.12.0.0	<a href="#">Support for multicast dropped (#634234)</a>	Cluster	
6.12.0.0	<a href="#">Deprecated methods removed from TicketPayload (#633196)</a>	Scripting	
6.12.0.0	<a href="#">Unused methods removed from UnitCriteria (#631800)</a>	Scripting	
6.12.0.0	<a href="#">JMS removed (#631352)</a>	Update	
6.12.0.0	<a href="#">Support for Internet Explorer 9 and 10 dropped (#630877, #641333)</a>	System requirements	
6.12.0.0	<a href="#">Support for Microsoft SQL Server 2008 dropped (#630861)</a>	System requirements	
6.11.2.8	<a href="#">Update events streamlined (#641603, #641631)</a>	Scripting	
6.11.2.8	<a href="#">Third party libraries updated (#642058, #642191)</a>	Scripting	
6.11.2.5	<a href="#">Apache POI library updated (#641435)</a>	Scripting	
6.11.2.3	<a href="#">Default value of csrf.domain.allow.none changed (#634912)</a>	REST API, CM/Track	
6.11.2.2	<a href="#">Firefox support changed (#634493)</a>	System requirements	
6.11.2.2	<a href="#">Support for Java 7 dropped (#634157)</a>	System requirements	
6.11.2.2	<a href="#">Support for CM/Track V1 phased out (#634144)</a>	CM/Track	

Version	Change	Affected area	Required action
6.11.2.2	<a href="#">Line breaks in messages added (#633969)</a>	Templates	
6.11.2.2	<a href="#">Unique constraint for permissions added (#633968)</a>	Update	
6.11.2.2	<a href="#">Changes to the responses returned by the REST API (#633959)</a>	REST API, CM/Track	
6.11.2.2	<a href="#">WebLogic support changed (#633958, #634363)</a>	System requirements	
6.11.2.2	<a href="#">Cross-Site Request Forgery prevention mechanism introduced for the ConSol CM REST API (#633811)</a>	REST API, CM/Track	
6.11.2.2	<a href="#">DWH task creation optimized (#631804)</a>	DWH	
6.11.2.2	<a href="#">Support for JBoss EAP 6.2 dropped (#630861)</a>	System requirements	
6.11.2.0	<a href="#">Support of JDK 6 dropped (#633096)</a>	System requirements	
6.11.1.16	<a href="#">DWH adapted to support dates until 01.01.2100 (#641871)</a>	DWH	
6.11.1.7	<a href="#">Contact anonymization for GDPR (#633502)</a>	DWH	
6.11.1.7	<a href="#">Content of pContext variable after queue change (#633441)</a>	Scripting	
6.11.1.7	<a href="#">Content of pContext variable in actions changed (#633475)</a>	Scripting	
6.11.1.6	<a href="#">Contact deletion for GDPR (#633392)</a>	DWH	
6.11.1.6	<a href="#">Support for secure SMTP introduced (#633298)</a>	DWH	
6.11.1.1	<a href="#">Support for HTTP status / error codes for the Webhook (#632695)</a>	Scripting	
6.11.1.0	<a href="#">REST API returning FAQ tickets streamlined (#630997)</a>	REST API	

### 3. Version 6.14.0.0 (16.06.2021)

Version 6.14.0.0 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.7
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

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



Please check the [Breaking changes and mandatory actions](#).

## 3.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.0 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.

### 3.1.1 System upgrade from 6.13.0 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.13.0 or earlier versions to version 6.14.0.0.

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

#### 3.1.1.1 Index rebuild

You need to rebuild (synchronize) the index to use [Anonymization added to unit criteria \(#644060\)](#).

#### 3.1.1.2 JDBC connector and timezone settings for MySQL

The JDBC connector for MySQL needs to be updated, see [Support for MySQL 8 added \(#642079\)](#). Additionally, it is required to set the timezone on Windows.

### 3.1.2 Data Warehouse update

When updating the **ConSol CM** system to version 6.14.0.0, you must update the **CMRF** database to match the new precision and scale settings for fixed-point numbers, see [Fixed-point number support modified \(#647060, #647656\)](#). Please execute the update scripts for ConSol CM version 6.14.0.0. The update scripts for each database are available from your ConSol representative.

### 3.1.3 Support for MySQL 8 added (#642079)

Support for MySQL 8 as a relational database for **ConSol CM** has been added with version 6.14.0.0.



This change also affects installations using MySQL versions 5.6 and 5.7.

#### 3.1.3.1 XML configuration files (all MySQL versions)

The configuration files `cm6-mysql.xml`, `cm6-dwh-mysql.xml`, `cm6-cmrf-mysql.xml` and `cmrf-mysql.xml` have been replaced by version-specific files:

**For MySQL 5.6 and 5.7:**

- `cm6-mysql-5.xml`, `cm6-dwh-mysql-5.xml`, `cm6-cmrf-mysql-5.xml` and `cmrf-mysql-5.xml`

**For MySQL 8:**

- `cm6-mysql-8.xml`, `cm6-dwh-mysql-8.xml`, `cm6-cmrf-mysql-8.xml` and `cmrf-mysql-8.xml`

You need to reference the correct file in the **ConSol CM** start command for executing `standalone.bat` / `standalone.sh`:

**For MySQL 5.6 and 5.7:**

```
-P <JBOSS_HOME>/bin/cm6-config.properties -c cm6-mysql-5.xml
```

**For MySQL 8:**

```
-P <JBOSSE_HOME>/bin/cm6-config.properties -c cm6-mysql-8.xml
```

### 3.1.3.2 JDBC connector (all MySQL versions)

The supported MySQL JDBC connector has been updated to version 8.0.22 for all versions of MySQL. When updating to **ConSol CM** version 6.14.0.0, you need to perform the following steps:

1. Download the connector version 8.0.22 from <https://dev.mysql.com/downloads/connector/j/>.
2. Copy the connector to `<JBOSSE>/modules/system/layers/base/com/mysql/jdbc/main`.
3. Edit the `module.xml` file to reference the new connector.

### 3.1.3.3 Time zone (all MySQL versions)

The timezone setting has been added to the JDBC URL for MySQL in the `cm6-config.properties`, `cm6-domain-config.properties`, `cmrf-config.properties` and `cm6-cmrf-config.properties` files.

The default JDBC URL is now:

```
jdbc:mysql://localhost/cmdatabase?serverTimezone=Europe/Berlin
```

#### Required steps on Windows

When executing MySQL on Windows, you need to manually set the time zone (see <https://dev.mysql.com/doc/refman/8.0/en/time-zone-support.html#time-zone-installation> for further reference).

1. Go to <https://dev.mysql.com/downloads/timezones.html> and download the latest timezone posix file, e.g. `timezone_2021f_posix_sql.zip`, for your MySQL version.
2. Unpack the file and open a terminal at the location where the `timezone_posix.sql` file is located.
3. Run the following command:

```
mysql -u root -p mysql < timezone_posix.sql
```

`mysql` has to be added to the path as an environmental variable.

4. Enter the administrator password and press the enter key.
5. Restart the MySQL server (go to *services* -> *MySQL* -> *restart*).
6. Open the installation directory of the MySQL server and add the timezone setting to the `my.ini` file, `[mysqld]` section.

```
default_time_zone='Europe/Berlin'
```

The timezone must match the timezone of the local machine.

7. Restart the MySQL server again.

### 3.1.3.4 UTF-8 settings (only MySQL 8)

MySQL 8 needs to be configured for UTF-8 on both Linux and Windows:



1. Open the installation directory of the MySQL server.
2. Add the following settings to the `my.ini` / `my.cnf` file, `[mysqld]` section:

```
collation-server=utf8mb4_0900_as_ci  
character-set-server=utf8mb4
```

3. Restart the MySQL server.
4. Set UTF-8 encoding in the JDBC URL in the configuration properties files (`cm6-config.properties`, `cm6-domain-config.properties`, `cm6-cmrf-config.properties` and `cmrf-config.properties`):

```
jdbc:mysql://localhost/cmdatabase?characterEncoding=UTF-8
```

### 3.1.4 Support for OpenJDK 11 added (#644089)

Support for OpenJDK 11 as a runtime environment for the **ConSol CM** server, the **Admin Tool** and **Process Designer** has been added. The officially supported OpenJDK version is AdoptOpenJDK, HotSpot version, see <https://adoptopenjdk.net/>.

### 3.1.5 Logging configuration in cluster adapted (#644295)

The logging configuration in the cluster configuration file `cm6-host.xml` has been adapted. The garbage collector logging is now disabled by default. The corresponding sections are commented out. If garbage collection logging is required, it can be enabled by commenting in the section which contains the settings for the respective Java version, either Java 8 or Java 11.

### 3.1.6 REST API client modification requirements

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

- [Protection of brute-force attacks \(#643031\)](#)

### 3.1.7 Script modification requirements

This release features some interface changes in API methods. These changes can either be improvements which offer the potential of simplifying your scripts or breaking changes. **Please be aware that scripts using the respective methods may need adjustments!** The affected methods are listed in the following sections of this document:

- [Anonymization added to unit criteria \(#644060\)](#)
- [Handling of update events for password changes via REST API adapted \(#645279, #646194\)](#)
- [Method to restart a ticket \(#648059\)](#)

### 3.1.8 Configuration modification requirements

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

- [DWH transfer refactored \(#625006\)](#)
- [Default values for system properties related to locking adapted \(#634987\)](#)

- [Support for MySQL 8 added \(#642079\)](#)
- [Protection of brute-force attacks \(#643031\)](#)
- [Authentication chains for users \(#631513\)](#)
- [Default values for system properties related to locking adapted \(#634987\)](#)
- [Support for URL fields in CM/Track added \(#641377\)](#)
- [Logging configuration in cluster adapted \(#644295\)](#)
- [Property for displaying the Help link in the Web Client removed \(#645040\)](#)
- [TinyMCE editor removed \(#645055\)](#)
- [Method of embedding CM/Track in an iFrame changed \(#645520\)](#)
- [JBoss security improvements \(#645317, #645319, #645322, #645424, #646491\)](#)
- [Cluster properties extended \(#647650\)](#)
- [Scene import in one transaction \(#647672\)](#)

No further instructions available.

## 3.2 New features

The features newly introduced in this **ConSol CM** version 6.14.0.0 are described in detail in this section.

### 3.2.1 Authentication chains for users (#631513)

The authentication capabilities for users in the **Web Client** have been extended. It is now possible to define authentication chains by enabling several LDAP servers or combining LDAP and database authentication. This increases the flexibility when integrating **ConSol CM** into an existing infrastructure.

Authentication chains provide support for different use cases:

- Allow authentication with a second LDAP server for redundancy purposes.
- Use LDAP authentication for regular users and database authentication for technical users.
- Support users whose credentials are managed on different LDAP servers.

The authentication mode is configured in the property `engineer.authentication.method` (module `cmas-core-security`). The following values are supported:

- **DATABASE:**  
Database authentication is used. On update, this value is set automatically if the property `authentication.method` was set to "DATABASE".
- **LDAP:**  
LDAP authentication is used. On update, this value is set automatically if the property `authentication.method` was set to "LDAP".
- **DATABASE,LDAP:**  
The system tries to authenticate the user with his database credentials. If database authentication fails, LDAP authentication is attempted.
- **LDAP,DATABASE:**  
The system tries to authenticate the user with his LDAP credentials. If LDAP authentication fails, database authentication is attempted.

The LDAP connections for authenticating users are now managed in dedicated system properties starting with `ldap.engineer.{name}.*`, where `{name}` is the name of the LDAP connection. You can create several LDAP connections. On update, a connection named "ldap1" is created automatically and filled with the values from the previous properties starting with `ldap.*`.

The LDAP connection used for importing certificates for the email encryption feature is now managed separately from the LDAP connection used for authenticating users. Therefore, it is mandatory to use the respective system properties starting with `ldap.certificate.*`.

The following properties have been removed and replaced by new ones:

- **authentication.method**  
This property has been replaced by `engineer.authentication.method`.
- **ldap.authentication**  
This property is not used anymore.

- **ldap.basedn**  
This property has been replaced by `ldap.engineer.{name}.basedn`. On update, the value is automatically inserted into `ldap.engineer.ldap1.basedn`, and `ldap.certificate.basedn` (if this property was empty).
- **ldap.password**  
This property has been replaced by `ldap.engineer.{name}.password`. On update, the value is automatically inserted into `ldap.engineer.ldap1.password`, and `ldap.certificate.password` (if this property was empty).
- **ldap.providerurl**  
This property has been replaced by `ldap.engineer.{name}.providerurl`. On update, the value is automatically inserted into `ldap.engineer.ldap1.providerurl`, and `ldap.certificate.providerurl` (if this property was empty).
- **ldap.searchattr**  
This property has been replaced by `ldap.engineer.{name}.searchattr`. On update, the value is automatically inserted into `ldap.engineer.ldap1.searchattr`, and `ldap.certificate.searchattr` (if this property was empty).
- **ldap.userdn**  
This property has been replaced by `ldap.engineer.{name}.userdn`. On update, the value is automatically inserted into `ldap.engineer.ldap1.userdn`, and `ldap.certificate.userdn` (if this property was empty).

### 3.2.2 Protection of brute-force attacks (#643031)

**ConSol CM** now provides protection against so called dictionary attacks where someone tries to guess user names and passwords by using brute force, credential stuffing or password spraying. The protection covers all authentication endpoints:

- User authentication in the **Web Client**, **Web Admin Suite**, **Admin Tool** and **Process Designer** (database and LDAP authentication)
- Contact authentication in **CM/Track** using the REST API (database and LDAP authentication)
- Authentication of webhooks (secret token security)

All failed login attempts are logged in the database and the account is blocked after a defined number of failed attempts for a certain time period. A notification email is sent to the administrator and to the affected user.

There are several ways to unblock an account:

- The account is unblocked automatically after the defined time period expired.
- The account is unblocked by an administrator in the **Web Admin Suite**.
- The account is unblocked by the affected user or an administrator by clicking an unblock link in the notification email. This opens a **Web Client** or **CM/Track** page with indications.



In case of a webhook, the administrator receives the email with the unblock link.



The unblock links sent by email only work if the system properties `url.track` and `url.webclient` from the module `cmas-core-server` are set correctly.

### 3.2.2.1 *Web Admin Suite* changes

The new page *Authentication protection* has been added to the *Operation* menu of the **Web Admin Suite**. It contains three tabs:

- **Blocked accounts:**  
List of all accounts which are currently blocked with information about the account and the number of failed login attempts. The administrator can unblock one or several accounts.
- **Last failed authentication attempts:**  
List of the last 100 failed authentication attempts with the reason why the attempt failed. There are six different reasons: unknown user name, wrong password, user account blocked / inactive / wrongly configured (CM/Track user without profile) and LDAP error
- **History of blocked accounts:**  
List of all accounts which were blocked in the last 100 days and have been unblocked in the meantime.

The dashboard of the **Web Admin Suite** has been extended with the widget *Authentication protection* which shows the number of endpoints for which the protection is enabled. In addition, the new section *Metrics* has been added. It contains a widget which shows the number of failed authentication attempts in the last hour.



If the login of an existing user is changed after a failed attempt occurred, the new login is shown in all tabs.

### 3.2.2.2 Monitoring changes

The monitoring endpoints `health/check` and `health/report` have been enhanced with information about authentication. The new attribute `cmas-core-server-brute-force-protection` returns information about the status of the protection, i.e. how many endpoints are protected, and the current settings, i.e. the values of the system properties which configure the feature.

The status of the authentication protection is as follows:

- **SUCCESS:** the protection is active for all three endpoints
- **WARNING:** the protection is active for one or two endpoints
- **FAILURE:** the protection is not active for any endpoint

### 3.2.2.3 System property changes

The following system properties have been added to configure the authentication protection in the module `cmas-core-security`:

- **brute.force.engineer.blocking.active**  
Determines if the authentication protection feature is enabled for users (engineers). The default value is "true".
- **brute.force.unit.blocking.active**  
Determines if the authentication protection feature is enabled for contacts / REST users. The default value is "true".
- **brute.force.endpoint.blocking.active**  
Determines if the authentication protection feature is enabled for webhooks. The default value is "true".

- **brute.force.attempts.to.block**  
Defines the number of unsuccessful authentication attempts after which an account will be blocked. The default value is "7".
- **brute.force.period.between.attempts.to.block**  
Defines the period in minutes for checking for failed authentication attempts. If more failed authentication attempts than defined in the property `brute.force.attempts.to.block` occur in this timeframe, the user or endpoint is blocked. The default value is "1".
- **brute.force.auto.unblock.active**  
Determines if the mechanism to automatically unblock an account after a certain time period is enabled. The default value is "true".
- **brute.force.auto.unblock.period**  
Defines the period in minutes after which an account is automatically unblocked. The default value is "30".
- **brute.force.unblock.code.expiration.period**  
Defines the period in hours after which the unblock link will expire. The default value is "24".
- **brute.force.mail.notification.active**  
Determines if users and contacts who were blocked receive an email with a link to unblock their account. The administrator receives emails with information about blocked accounts and the unblock links for these accounts. In addition, the administrator receives alerts if the number of failed attempts exceeds to value set in `brute.force.admin.auth.failures.notify.amount`. The default value is "false".
- **brute.force.admin.auth.failures.notify.amount**  
Defines the number of unsuccessful authentication attempts after which the administrator will be notified. The default value is "100".
- **brute.force.admin.auth.failures.notify.period**  
Defines the period in minutes for checking for failed authentication attempts to inform the administrator. If more failed authentication attempts than defined in the property `brute.force.admin.auth.failures.notify.amount` occur in this timeframe, the administrator is notified about this via email. The default value is "60".

### 3.2.2.4 REST API changes

The endpoint `/unlock` has been added to the REST API. This endpoint is used to unblock accounts for contacts and webhooks.

### 3.2.3 *Web Client* user interface improved (#644788)

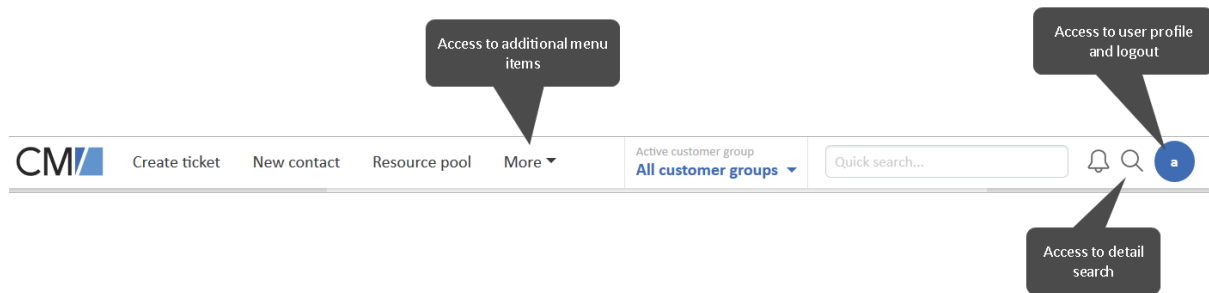
The graphical user interface of the *Web Client* has been changed to improve usability and accessibility. The following changes have been made:

#### Navigation bar (#647266)

The following changes affect the navigation bar:

- The menu bar was merged with the header row to save space. It is now styled in white with a gray separator.
- The menu bar is responsive. If there is not enough screen space available, it is displayed in several rows. Menu items which do not fit on the screen, can be accessed using the *More* button.

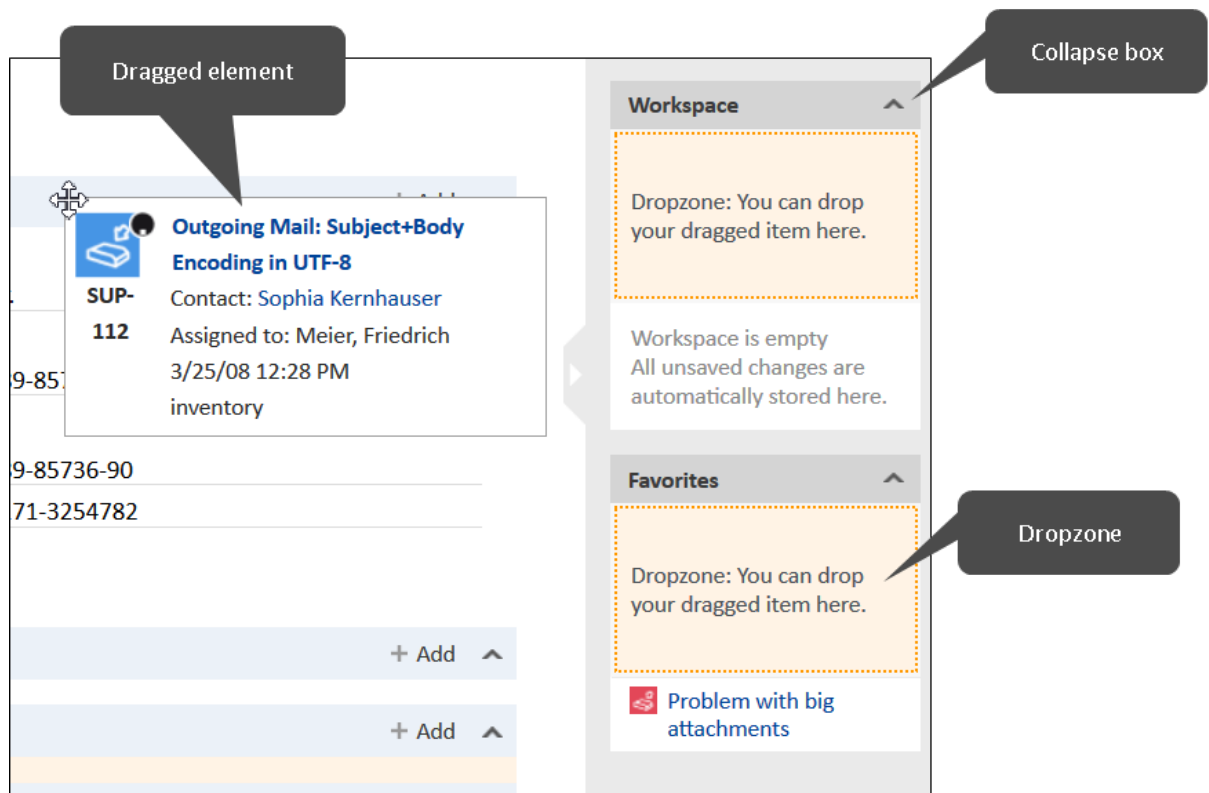
- The ConSol CM logo is now clickable. It leads to the main page. By default, the *Overview* link is not displayed anymore. The corresponding page customization `overviewLinkVisible` is now set to “false” by default. You can set it to “true” to display the link again.
- The customer group selector now features a label to indicate its purpose.
- The detail search can be accessed directly by clicking the magnifying glass icon.
- The account actions can be accessed by clicking the blue circle on the left. It includes the user name and email address, a link to the user profile and a link to log out.



### Right panel (#645951)

The following changes affect the right panel:

- The right panel which contains the activities, workspace and favorites can now be collapsed in the same way as the panel containing the ticket list.
- The boxes within the right panel can be collapsed.
- When dragging an element, the *Workspace* and *Favorites* boxes feature a dropzone.



### Main panel

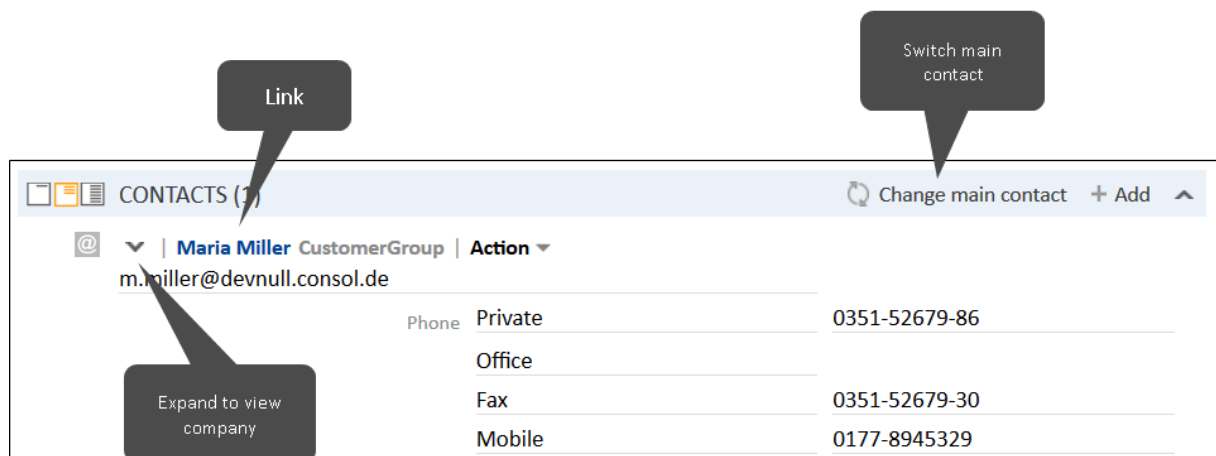
The following changes affect the main panel:

- The main panel has its own scrollbar.
- The tabs to select the customer group when creating a new contact are now accessible via keyboard.
- The styling of several UI elements, as for example selects, has been improved.

#### Ticket (#646731, #646858)

The following changes affect the *Contacts* section of tickets:

- The name of the contact is a link which can be opened in another tab. Therefore, the *Jump to person / company* option has been removed from the context menus of persons and companies for both the main contact and additional contacts.
- The functionality to switch the main contact of the ticket is now located in the *Change main contact* button in the section header. Therefore, the *Change* option has been removed from the context menu of the main contact.
- The context menu now has the label *Action*. The edit option is now called *Edit person / company*.
- The company of a person can be displayed by clicking the arrow icon between the contact icon and name. If the company is already displayed because the visibility level *Detail* is selected, the arrow icon is not shown.



The following changes affect the *Related tickets* section of tickets:

- The subject the ticket is a link which can be opened in another tab. Therefore, the *Jump to ticket* option has been removed from the context menu.
- The context menu now has the label *Action*. The delete option is now called *Remove relation*.
- The ticket details can be displayed by clicking the arrow icon between the ticket icon and subject. If the details are already displayed because the visibility level *Detail* is selected, the arrow icon is not shown.

#### Whole application

The following change affects the application as a whole:

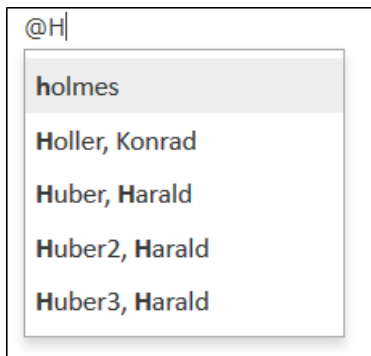
- You can use the tab key to navigate the screen. The current element is highlighted with an orange border.



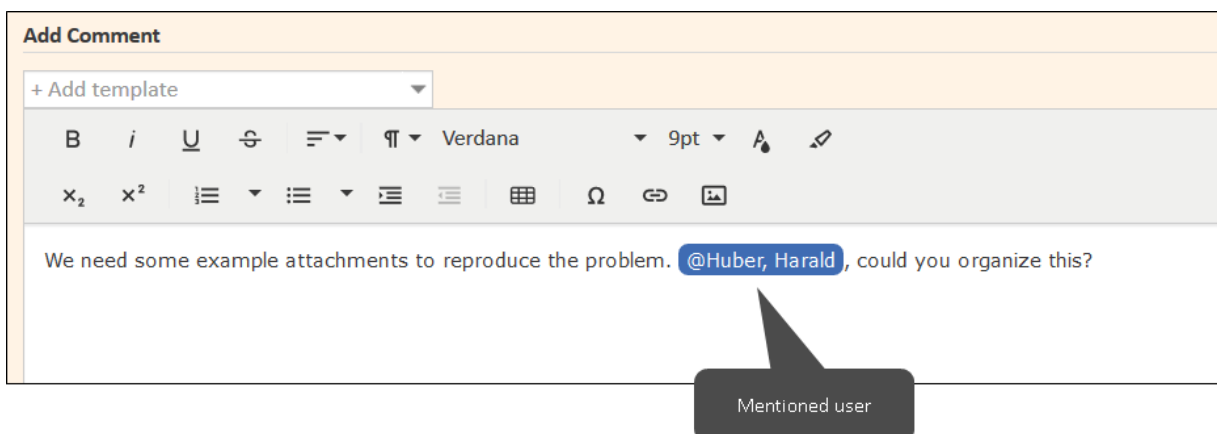
### 3.2.4 Mentioning users in comments (#644884)

This feature allows to mention users in comments written in the **Web Client**. The mentioned users receive a notification with the comment and a link to the ticket where they were mentioned. This eases communication and allows the users to collaborate on tickets without leaving the **Web Client**.

The users can mention other users when creating comments. A hint which is displayed when creating a new comment informs the users about this feature and the syntax. The users need to type the @ symbol and start typing the name of the user who they want to mention. The matching users are displayed in a list of suggestions, where the desired user can be selected.

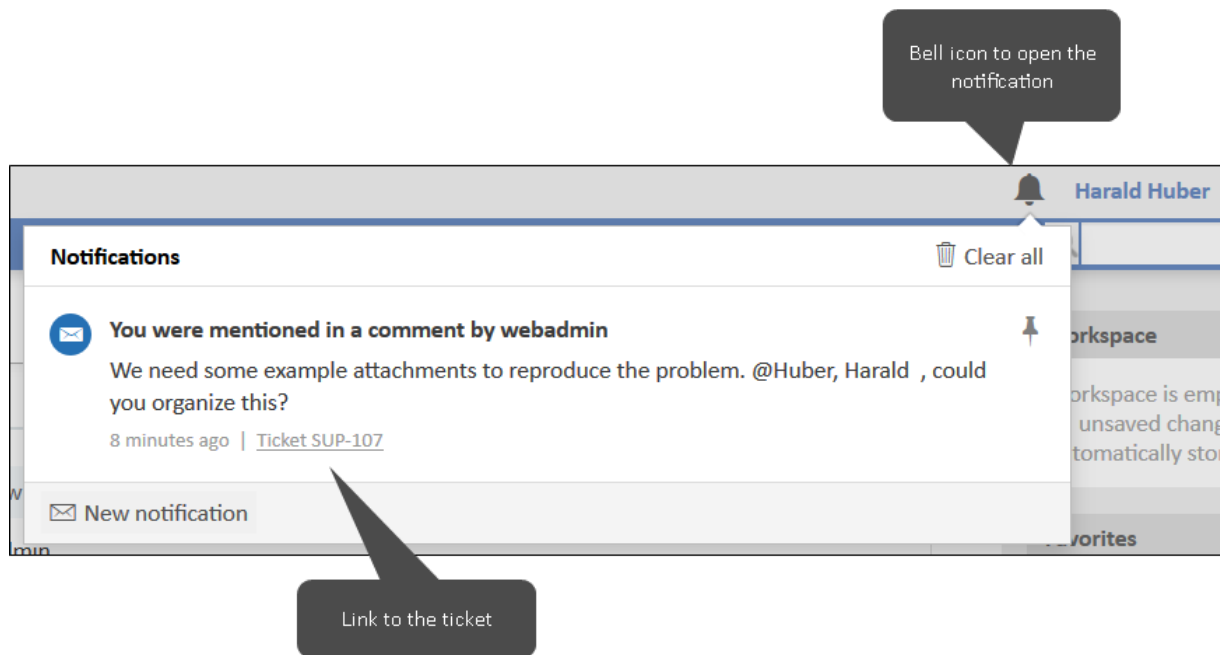


Mentioned users are highlighted in blue while writing the comment.




In the view mode, the mentioned user is highlighted in gray. Once the comment has been saved, a green information message that the user has been notified is displayed.

The mentioned user can see the notification by clicking the bell icon above the menu bar. The notification contains the comment and a link to the ticket.



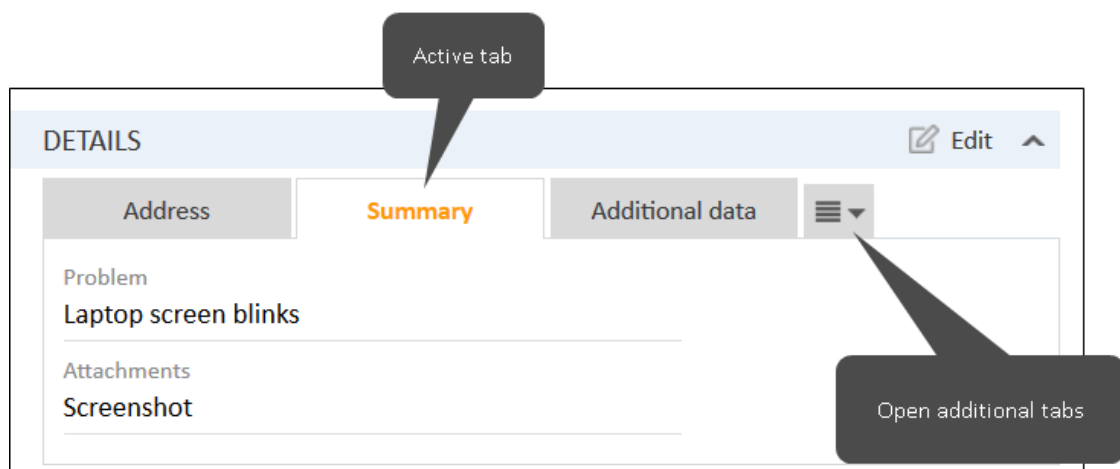
It is possible to mention several users in one comment. Each user is only notified once about a comment, i.e. when you reply to a comment, the user mentioned in the original comment is not notified again. The mentioned user is highlighted in gray in situations where no notification will be sent, e.g. when the user has already been notified about the comment and when the editor is switched from *Comment* to *Email*.

 Mentioning users is not supported when editing a comment.

### 3.2.5 Tab mode for the *Details* section of tickets (#644836, #645329)

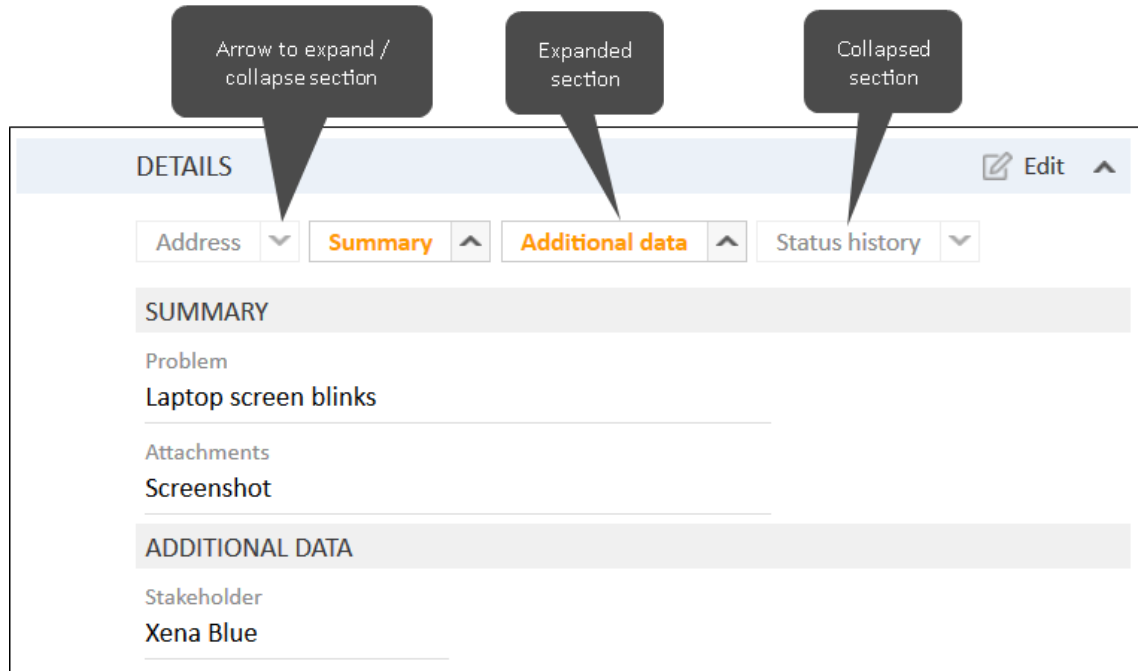
The *Details* section of tickets now has two display modes:

- **Tab mode:**  
There is one tab for each ticket field group. The name of the field group is the name of the tab. Only one tab can be opened at once. This is the default display mode.



- **Pill mode:**

There is one section for each ticket field group. The section header is the name of the field group. In the view mode each section can be expanded or collapsed by clicking the arrow button next to the name of the field group. In the edit mode, sections can only be expanded. Several sections can be displayed at once.



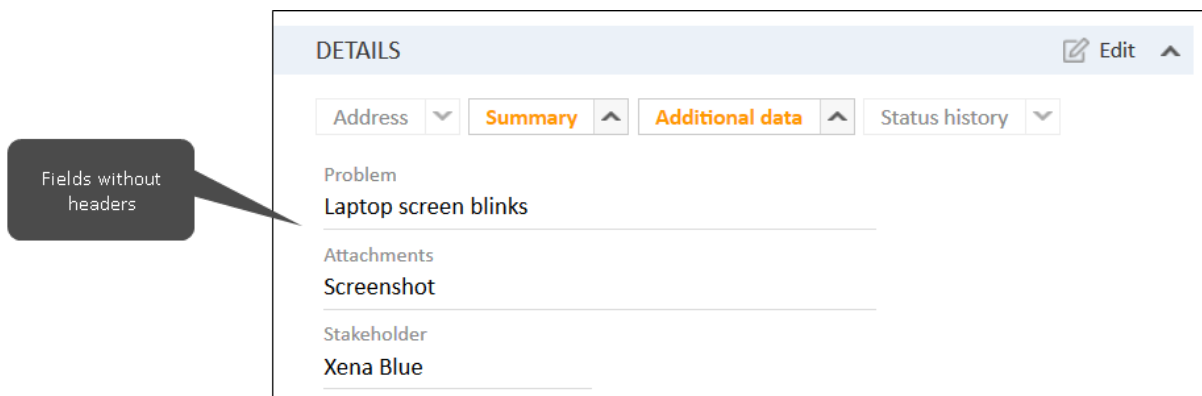
The display mode applies to both the view and the edit mode of the ticket. It is determined in the page customization. The type `customFieldGroupsSection` with the attribute `customFieldGroupsDisplayType` has been added for this purpose. Possible values:

- **tabs:** Displays the section in tab mode (default).
- **pills:** Displays the section in pill mode (previous behavior).

The new annotation `hide-group-headline` has been introduced for the pill mode. It determines if the section header is displayed for expanded sections. Possible values:

- **true:** The ticket fields are displayed without a header. There is no separation between fields belonging to different groups.
- **false:** The name of the ticket field group is displayed as a header for the fields of this group (default).

The following figure shows the pill mode without headers:





The annotation **auto-open-group**, which is available for tickets, is only used in the pill mode. In the tab mode, the first tab is always opened by default.

## 3.3 Changes

This section illustrates all relevant software product changes for version 6.14.0.0 of **ConSol CM**.

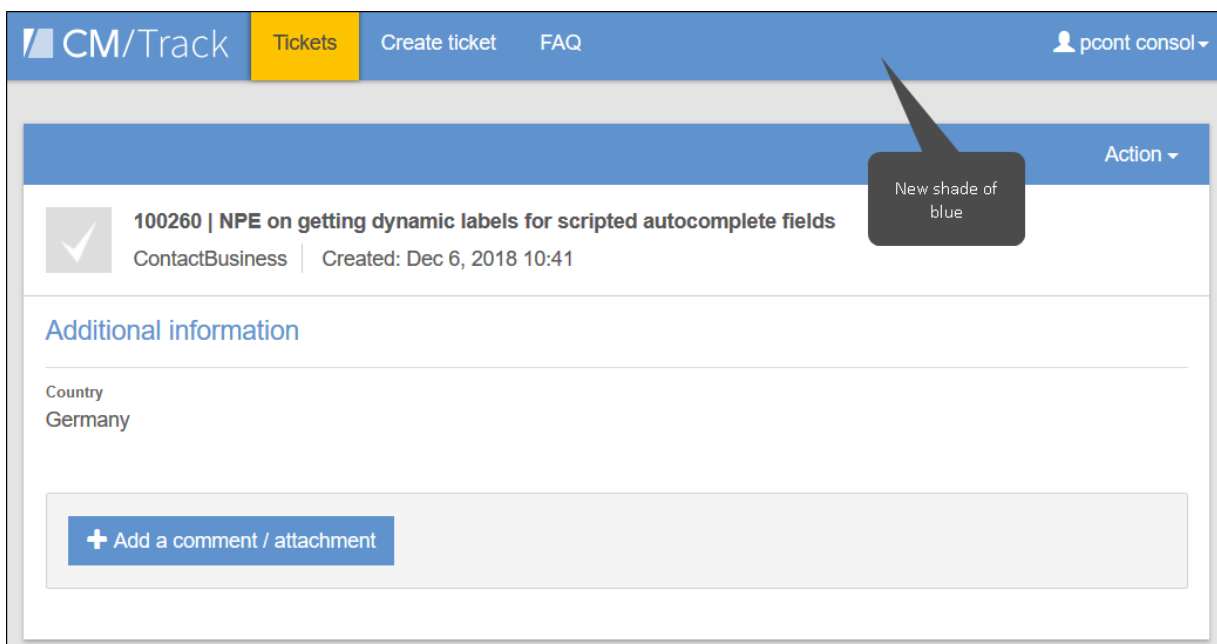
### 3.3.1 Usability improvements

#### Busy indicator when exporting detail search (#643580)

When exporting the results of a detail search in the **Web Client**, a busy indicator is now displayed to show that an operation is in progress.

#### New blue color in **CM/Track** (#644054)

The blue color used in **CM/Track** has been changed. The navigation bar and buttons are now displayed in the shade of blue used in the **ConSol CM** corporate identity.

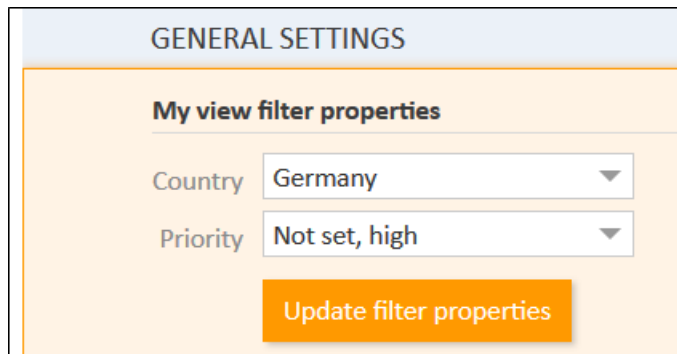


#### Misleading *Cancel* button removed (#645168)

The *Cancel* button which was displayed next to the company selector when adding an additional contact to a ticket in the **Web Client** has been removed. Clicking the button hid the company selector which made it impossible to choose a company.

#### Wording of view criteria in the user profile improved (#645192)

The wording of the view criteria section in the user profile of the **Web Client** has been improved. View criteria are now called “view filter properties” to better convey their meaning.



### Unneeded busy indicators removed (#645610)

The busy indicator which was displayed when opening or leaving the page to create a ticket in the **Web Client** has been removed because it was not needed.

### Display of more than three overlays (#646297)

The ticket icon in the **Web Client** can now have more than three overlays. If there are more overlays than fit on the right border of the ticket icons, the overlays are attached to the bottom, left and upper border as well. Therefore, up to 10 overlays can be shown at the same time.

### Message for failed authentication improved (#646478)

The message which is displayed on the login page of the **Web Client** when an authentication attempt fails has been enhanced. Instead of "Authentication failed" it now says "Your authentication failed. Please double-check the user name and password provided and try again."

### Exclamation mark added to *Operation* menu item (#646955)

If there are open index tasks, an exclamation mark is now displayed on the *Operation* menu item in the **Web Admin Suite**.

### Filtering by localized list value (#646971)

The list values on the *Sorted lists* page of the **Web Admin Suite** can now be filtered by the localized value in all configured languages. Previously, the filter only considered the localized value in the display language.

### Text of the workspace box improved (#647021)

The text used to describe the workspace in the **Web Client** has been improved. It now says "All unsaved changes are automatically stored here." to better convey the functionality of the workspace.

### Tooltips added to collapsed menu (#647231)

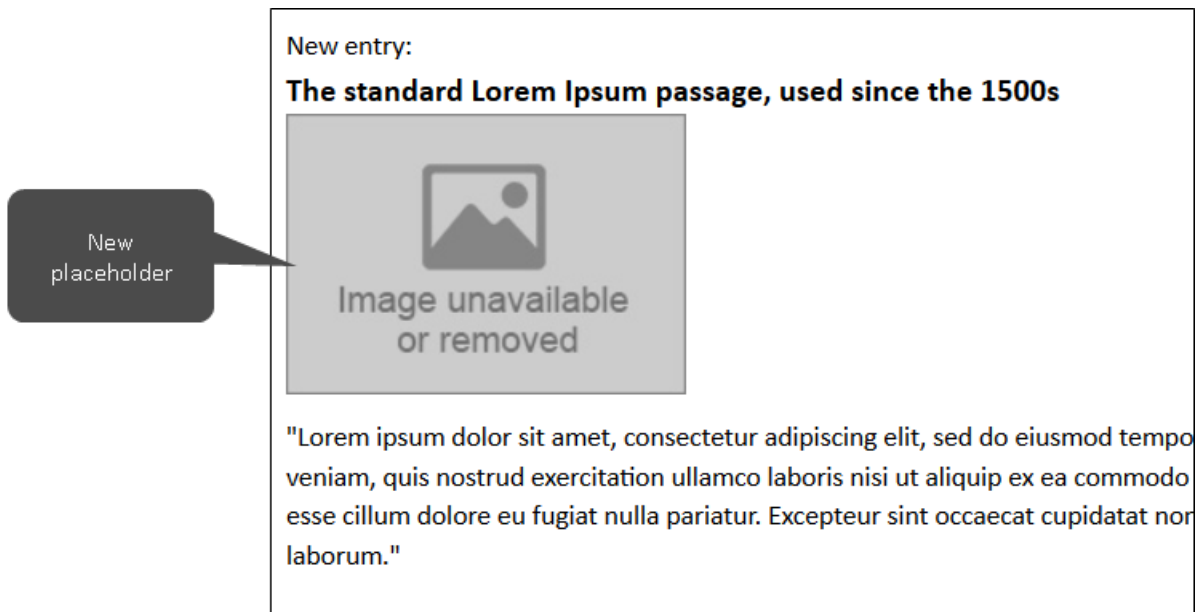
When the menu bar in the **Web Admin Suite** is collapsed so that only icons are displayed, the names of the groups are displayed as tooltips. In addition, if a menu icon has an exclamation mark, the number of open index tasks, emails in the backup or blocked accounts is displayed in parenthesis after the menu item once an icon has been clicked.

### Button text to discard changes adapted (#647409)

The button to confirm the dialog to discard changes in the **Web Admin Suite** has been modified. It is now *Discard changes* to better convey the meaning of the action.

### Visualization of unavailable images improved (#647495)

The display of unavailable images in the **Web Client** has been improved. An new placeholder with a fixed size is now used.

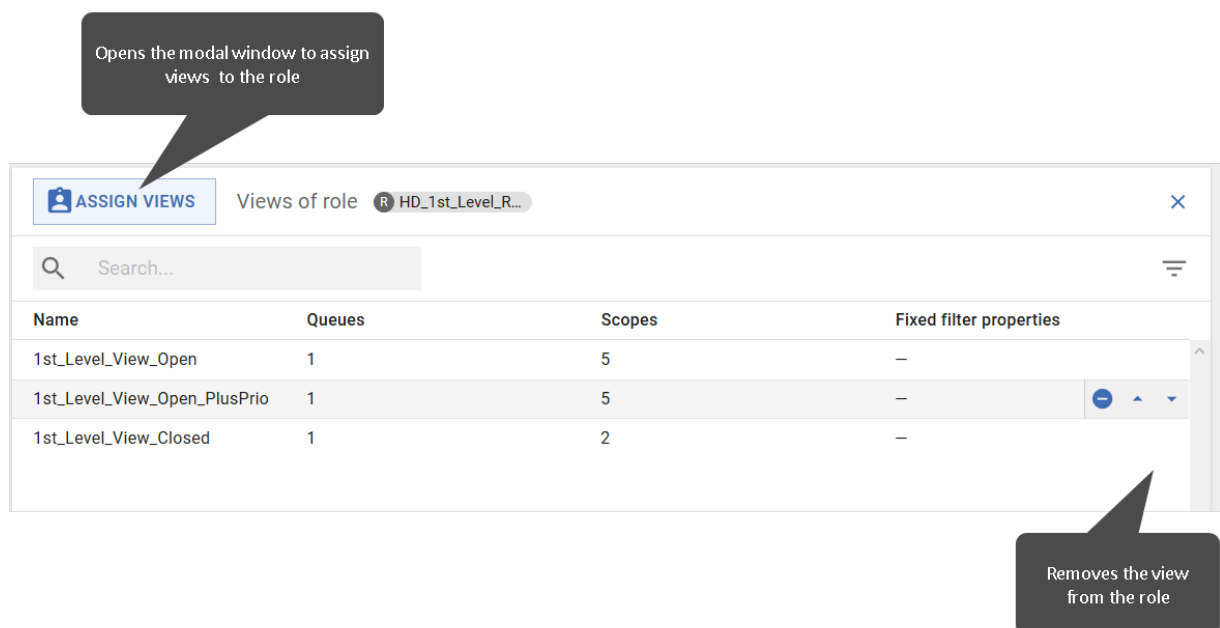


### Matching brackets highlighted (#647659)

When placing the mouse cursor next to a bracket in a script on the *Scripts* page of the **Web Admin Suite**, the matching bracket is highlighted in a green color.

### Assign views button improved (#648075)

The button to assign a view to a role in the *Roles* section of the Web Admin Suite has been improved. Instead of a small icon next to the search field, a standard button is now displayed in the header. In addition, a *Minus* is now used for the *Unassign* action in the table to better convey the icon's meaning.



### 3.3.2 DWH transfer refactored (#625006)

The transfer to the DWH has been refactored. Some misleading log messages have been removed, and the system property `is.cmr.f.alive` from the module `cmas-dwh-server` has been removed because it is not needed anymore.

### 3.3.3 Wicket upgraded (#630774)

The third-party library Wicket, which is used in the **Web Client**, has been updated from version 6.17.0 to version 8.10.0.



This change might affect automated tests and monitoring because the path for login requests of the **Web Client** has changed.

**Previous value:** `<CM URL>/cm-client/login?1-1.IFormSubmitListener-signInBox-r-2-w-i-signInForm`

**New value:** `<CM URL>/cm-client/login?-1.-signInBox-r-2-w-i-signInForm`

### 3.3.4 URL parameter for the ticket queue added (#632665)

The queue is now available as an URL parameter. It can be used to create links which open the page to create a ticket in a certain queue, so the user does not have to select the queue manually. The following example shows the syntax of the parameter:

```
<server URL>/cm-client/createTicket?queue=nameOfMyQueue
```

If the queue parameter is invalid or the user does not have create permissions for tickets in the given queue, the default behavior applies, e.g. the preselected queue is the user's default queue. If the user has not set a default queue, the first queue tab is preselected.

### 3.3.5 Executor of re-imported emails modified (#633280)

The executor of emails which are imported using the *Email backups* sections of the **Admin Tool** or **Web Admin Suite** is now a technical user instead of the administrator who performs the import operation. The new behavior is consistent with the behavior of emails which are processed directly, without being stored in the email backups due to an error.

### 3.3.6 Default values for system properties related to locking adapted (#634987)

The default values of the following properties in the module `cmas-core-server` have been adapted for newly set up **ConSol CM** systems:

- `server.instance.task.period.seconds`: 5
- `server.instance.task.crash.period.seconds`: 60

These values prevent locking issues from appearing in clustered environments.

This change does not affect existing systems. If needed, the property values can be modified manually in such systems.

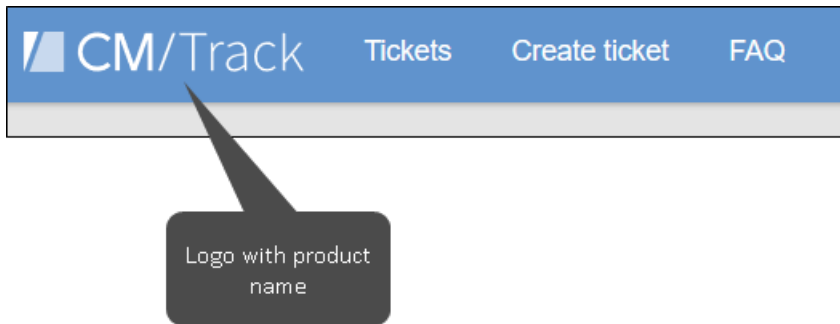


### 3.3.7 Support for URL fields in **CM/Track** added (#641377)

The annotation `text-type = "url"` is now supported for **CM/Track**. This means that fields which have this annotation assigned are displayed as hyperlinks in the view mode in both the **Web Client** and **CM/Track**.

### 3.3.8 Logo added to **CM/Track** (#642959)

The **CM/Track** application now features a logo in the upper left corner. The logo is shown both on the login page and after logging in.



The product name is part of the logo, so it is not possible anymore to adapt it. Therefore, the attribute `nav_track_brand` has been removed from the `public.json` file in the client configuration template.

### 3.3.9 Anonymization added to unit criteria (#644060)

The **ConSol CM** API has been enhanced by adding the method `setAnonymized()` to the class **UnitCriteria**. This method allows to search for contacts depending on their anonymization status:

- anonymized contacts: `unitCriteria.setAnonymized(true)`
- not anonymized contacts: `unitCriteria.setAnonymized(false)`



It is required to rebuild / synchronize the index after updating to 6.14.0.0 for this feature to work correctly.

### 3.3.10 Ticket transfer behavior adapted (#644079)

The behavior of the ticket transfer which is performed after deploying a new workflow version has been adapted. Only the tickets which have not yet been transferred are now blocked while the ticket transfer runs. The user can work normally with newly created tickets and tickets which have already been transferred. If an error occurs while transferring some tickets, these tickets remain blocked until the problem is solved and they are transferred correctly.

### 3.3.11 Export of CM/Track user profiles enhanced (#644270)

CM/Track user profiles are now exported when using one of the following export options in the **Admin Tool / Web Admin Suite**:

- All
- Engineers / Users
- Customer model / Customer data model

- Queue-related and other data / Queue-based data
- Single ticket / Single case

Previously, the CM/Track user profiles were treated as regular users and only exported if regular users were exported as well.

### 3.3.12 Hibernate and Infinispan updated (#644396, #644506)

The Hibernate and Infinispan libraries used internally by **ConSol CM** have been updated:

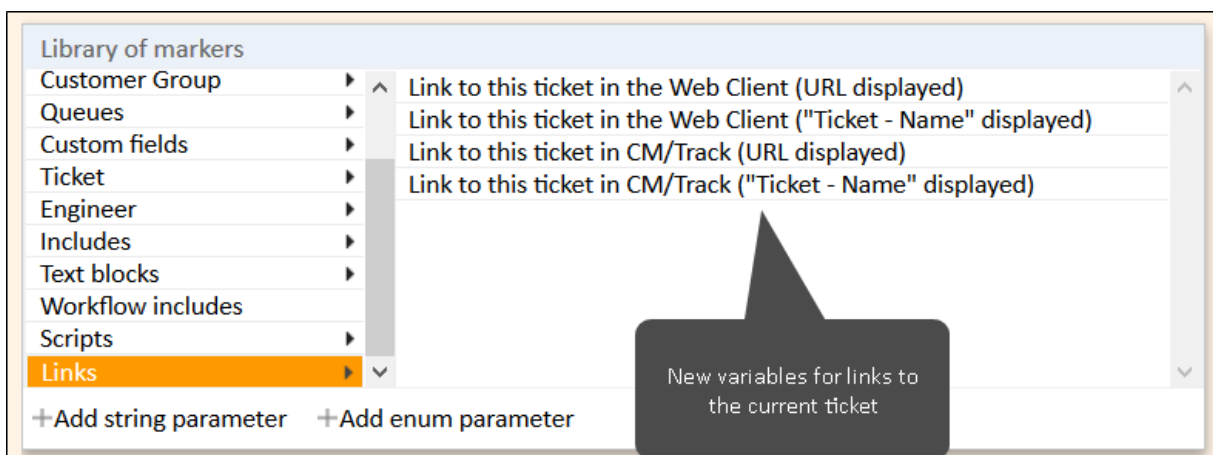
- Hibernate: from version 5.2.12 to version 5.3.17
- Infinispan: from version 8.2.5 to version 11.0.0

### 3.3.13 Link variables for text templates added (#644731)

The text template administration in the **Web Client** has been enhanced with variables which can be used to add links to the current ticket to the template. Four variables are available:

- **Link to this ticket in the Web Client (URL displayed)**  
Creates a hyperlink to the current ticket in the **Web Client**. The link text is the complete URL.
- **Link to this ticket in the Web Client ("Ticket - Name" displayed)**  
Creates a hyperlink to the current ticket in the **Web Client**. The link text is "Ticket - <ticket name>", e.g *Ticket - 102397*.
- **Link to this ticket in CM/Track (URL displayed)**  
Creates a hyperlink to the current ticket in **CM/Track**. The link text is the complete URL.
- **Link to this ticket in CM/Track ("Ticket - Name" displayed)**  
Creates a hyperlink to the current ticket in **CM/Track**. The link text is "Ticket - <ticket name>", e.g *Ticket - 102397*.

The variables can be added using the new *Links* options in the library of markers of the text template editor:



The system properties `url.track` and `url.webclient` of the module `cmas-core-server` must be set because they determine the system URL used in the hyperlinks. If they are not set, an error message is displayed when trying to use such a template.



Text templates which contain link variables do not work on the ticket creation page. Therefore, the option *Ticket create* must not be selected in the *Available in* drop-down list for the template.

### 3.3.14 Property for displaying the *Help* link in the **Web Client** removed (#645040)

The system property `helpFilePath` from the module `cmweb-server-adapter` has been removed. If a help link should be displayed in the menu bar of the **Web Client**, it needs to be added using the page customization attribute `externalLinks` in the scope `navigationLinks`.

### 3.3.15 TinyMCE editor removed (#645055)

The old text editor TinyMCE has been removed. Froala is now used as a text editor in all locations. For this purpose, Froala has been introduced in the following locations which used TinyMCE previously:

- **Calendar:** *New appointment* and *Edit appointment* dialog

The system property `tinymce.enabled` from the module `cmweb-server-adapter`, which allowed to switch the editor to TinyMCE, has been removed.

### 3.3.16 jQuery updated (#645067)

The third-party library jQuery has been updated from version 3.4.1 to version 3.6.0.

### 3.3.17 Handling of update events for password changes via REST API adapted (#645279, #646194)

The handling of password changes of contacts via REST API, e.g. using the **CM/Track** password change feature, has been adapted. Previously, such a password change did not trigger an update event of the contact. Therefore, contact update scripts were not executed. This behavior has been changed and an update event is now triggered, so that update scripts are executed.

The class `UnitChange` has been extended by the methods `getPasswordChangeInfo()` and `getUsernameChangeInfo()` which allow retrieving information about password and user name changes. These two methods can be used for changes done via REST API and via **Web Client**. The previously available method `getCustomFieldChangeInfo()` only contains information about user name and password modifications done via **Web Client**.

### 3.3.18 JBoss security improvements (#645317, #645319, #645322, #645424, #646491)

The JBoss security has been improved by performing the following adaptations to the internal configuration:

- The `X-PoweredBy` and `Server` headers have been removed from the HTTP response.
- All operations performed using the JBoss management interfaces are now included in audit logging.
- The HTTP management interface for the web console is disabled by default. It can be enabled in the property file.

- The `audit.log` file has been moved to the `log/adminlogs` directory. For clusters there are two files: `audit-server-security.log` in `domain/servers/${server_name}/adminlogs`, and `audit-host.log` in `domain/log`. The XML configuration files have been updated accordingly.

### 3.3.19 Disabled templates hidden from library of markers (#645458)

The library or markers on the *Text templates* page in the **Web Client** has been modified. It does not show disabled templates of the types *Text block*, *Include* and *Script* anymore, so that they cannot be added to letters.

### 3.3.20 Scope of condition scripts changed (#645473)

The scope of condition scripts at activities has been modified. Their only purpose now is to determine whether the respective activity is visible in the **Web Client** or **CM/Track**. This applies to condition scripts at the following elements:

- Workflow activities
- Contact actions, except for automatic actions
- Resource actions, except for automatic actions
- Search actions
- Activity forms
- Actions forms

This avoids unnecessary executions of the condition scripts and unexpected behavior in edge cases.



If you used condition scripts for other purposes than determining the visibility of activities and actions, you need to modify the workflow or the action scripts to achieve the same behavior as previously.

### 3.3.21 Method of embedding **CM/Track** in an iFrame changed (#645520)

Embedding **CM/Track** in an iFrame located in another domain is now blocked by default. It is required to explicitly allow embedding in other domains. This must be done in the Java options of the application server where **CM/Track** runs. There are two possibilities:

- Allow embedding **CM/Track** as an iFrame in all domains (previous behavior).

```
-Dhttp.headers.iframe=ALL
```

- Allow embedding **CM/Track** as an iFrame in a specific domain with a given host name and port.

```
-Dhttp.headers.iframe=http://HOST:PORT
```


### 3.3.22 Ticket list loading modes streamlined (#645685)

The loading modes for the ticket list in the **Web Client** have been unified. The ticket list is now always loaded after the main page for better performance (previous mode LAZY). The attribute `loadingTicketListMode` has been removed from the type `accordionTicketList` of the page customization as it is not needed anymore.

### 3.3.23 Link variables available in templates (#645712)

The parameters `${urlTrack}` and `${urlWebclient}` are now available in all templates. They use the values of the system properties `url.track` and `url.webclient` from the module `cmas-core-server`. This way it is not required anymore to provide hard-coded URLs in the templates.

Internal templates which are newly created during the setup of a new **ConSol CM** system, e.g. the template for resetting the **Web Client** password, now use these parameters. Existing templates are not modified during the update of **ConSol CM**.

 Make sure to set the system properties correctly, so the correct URL is used in the templates.

### 3.3.24 Removed unused page customization attributes (#646496)


The page customization attributes `unitPreviewLayout` and `numberOfRelations` in the types `UnitRelation` and `UnitResourceRelation` have been removed because they are not needed anymore.


### 3.3.25 Fixed-point number support modified (#647060, #647656)


The available scale of fixed-point numbers has been modified. This affects all the data fields of the type *fixed-point number*. The overall length (precision) of fixed-point numbers remains 38, but the maximum number of digits after the decimal point (scale) has been modified. It is now 8 instead of 30. This allows using higher numbers with more digits before the decimal point.

The following maximum sizes are supported now:

- Digits after the decimal point: 8 (previously 30)
- Digits before the decimal point: 30 (previously 8)

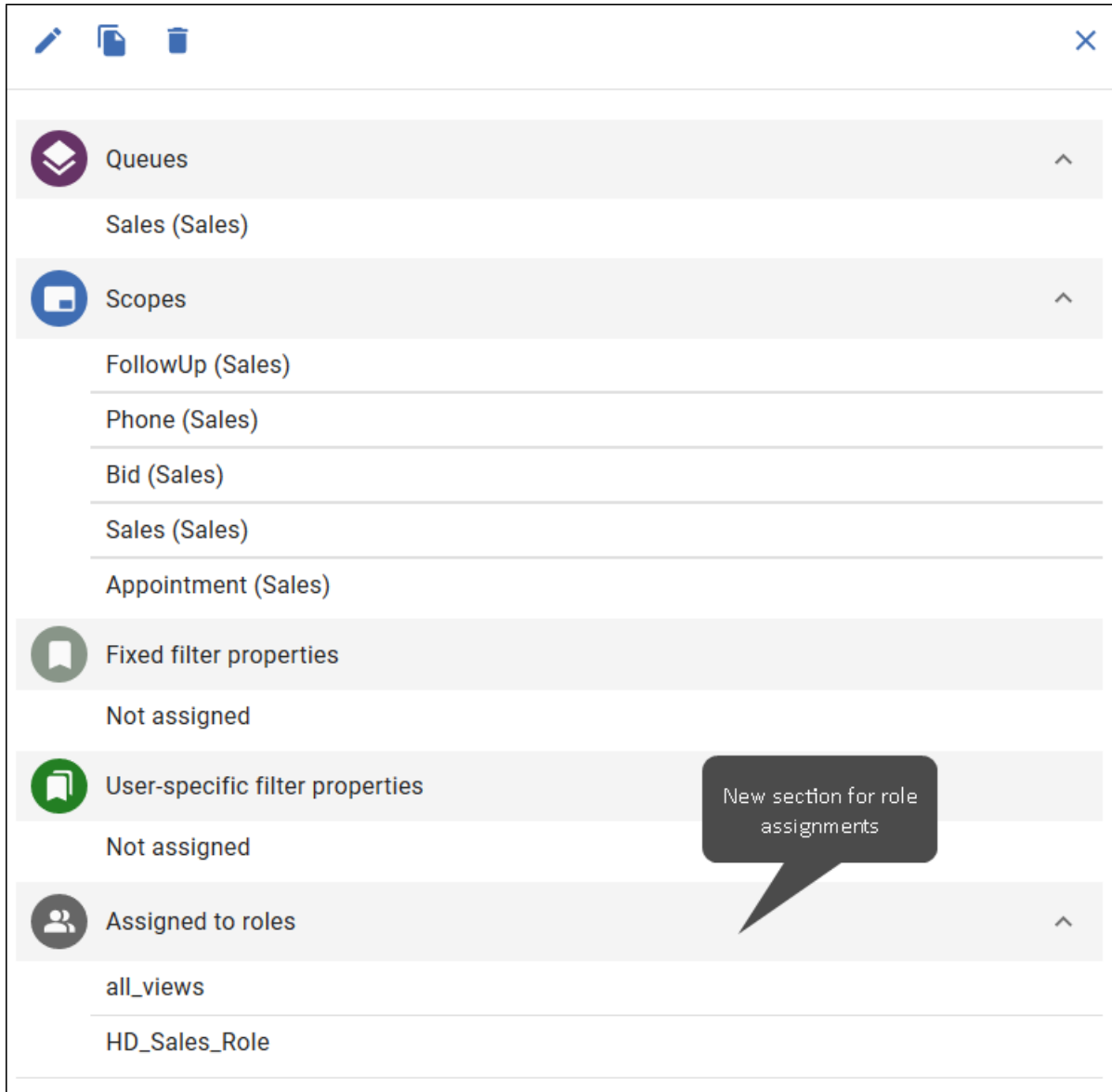
 During the update to **ConSol CM** version 6.14.0.0, the database columns holding fixed-point numbers must be modified. This affects both the **ConSol CM** database and the **CMRF** database. The **ConSol CM** database is updated automatically during the update to version 6.14.0.0. If you use a DWH, you must update the **CMRF** database by executing the update scripts provided by ConSol.

 If an installation contains data fields with a scale > 8, which is not supported anymore, the affected values are rounded.

 On large installations with many fixed-point fields, the update might take some time.

### 3.3.26 Roles added to view configuration (#647074)

The view configuration in the **Web Admin Suite** has been enhanced with the section *Assigned to roles*. In the view mode, it shows the roles which have the view assigned. In the edit mode, it allows to modify the assignment, i.e. the user can assign the view to one or several roles or remove the view from roles.



### 3.3.27 Sandbox for Groovy scripts (#647193)

Groovy scripts written on the *Scripts* page of the **Web Admin Suite / Admin Tool** and in the **Process Designer** are now executed in a sandbox for security reasons. The sandbox can be configured using Java system properties which can be set in the start scripts of the application server.

The following Java system properties are available:

- **cm6.groovy.sandbox.enabled**  
Determines if the sandbox is enabled ("true", default value) or disabled ("false").

```
-Dcm6.groovy.sandbox.enabled=false
```

- **cm6.groovy.sandbox.blacklists**

Determines which predefined list of patterns is used for blocking methods:

- **command**: blocks the execution of shell commands
- **filesystem**: blocks access to the file system

The default value is “command”. Both lists of patterns block bypassing the sandbox. You can configure both lists of patterns as a comma-separated list.

```
-Dcm6.groovy.sandbox.blacklists=command,filesystem
```

- **cm6.groovy.sandbox.whitelist.regex**

Optional. Regular expression for whitelisted API calls. Takes precedence over the predefined blacklist.

- **cm6.groovy.sandbox.blacklist.regex**

Optional. Regular expression for blacklisted API calls. Takes precedence over the custom whitelist and the predefined blacklist.

- **cm6.groovy.sandbox.cache.size**

Determines the number of results of pattern matching which are cached (only for predefined backlists). The default value is 10000.

```
-Dcm6.groovy.sandbox.cache.size=1000
```

- **cm6.groovy.sandbox.statistics.invocations.threshold**

Determines the number of method invocations which needs to be exceeded for a warning to be written to the log files. The default value is 100000.

```
-Dcm6.groovy.sandbox.statistics.invocations.threshold=1000
```

- **cm6.groovy.sandbox.statistics.details.enabled**

Determines if the logging of additional details about method execution is enabled (“true”) or disabled (“false”, default value). The statistics shows the most frequently invoked and most time-consuming methods. By default, this feature is disabled as it might impact performance.

```
-Dcm6.groovy.sandbox.statistics.details.enabled=true
```

### 3.3.28 Client configuration template adapted (#647275)

The client configuration template *TrackV2* which is used in the **Web Admin Suite** and **Admin Tool** has been adapted. Several attributes have been added to the files `localization_de.json`, `localization_en.json` and `public.json` and the text of some attributes has been modified. The template now matches the internal default values used in **CM/Track** if no client configuration is present.

### 3.3.29 Cluster properties extended (#647650)

Three new settings have been added to the properties file `cm6-domain-config.properties` for clusters:

- **CM\_REST\_URL**: Allows to set the REST URL for **CM/Track**. Example:

```
CM_REST_URL=http://10.10.1.1:8080/restapi
```

- **jboss.bind.address.management**: Allows to set the IP address. Replaces the `-bmanagement` startup parameter. Only needed on the master node. Example:

```
jboss.bind.address.management=10.10.1.1
```

- **jboss.bind.address**: Allows to set the IP address. Replaces the `-b` startup parameter. Example:

```
jboss.bind.address=10.10.1.1
```

### 3.3.30 Scene import in one transaction (#647672)

There are two ways of handling database transactions when importing a scene. The mode which encapsulates all configuration items in one large database transaction is now enabled by default. Therefore, the system property `config.import.global.transaction.enabled` from the module `cmas-core-server` is now set to “true” by default on both new systems and updated systems. You can disable this behavior by setting the system property to “false”.

### 3.3.31 Third-party library updated in **CM/Doc** and **CM/Archive** (#647557)

The following third-party library has been updated in **CM/Doc** and **CM/Archive**:

- **netty**: updated from version 4.1.60 to version 4.1.61



The users must update **CM/Doc** for these changes to become effective.

### 3.3.32 jQuery DataTables updated (#648043)

The third-party library jQuery DataTables, used for table widgets in the **Web Client**, has been updated from version 1.10.0 to the version 1.10.24.

### 3.3.33 Method to restart a ticket (#648059)

The method `restart()` has been added to the class `TicketService`. It allows to move open and closed tickets to the start node of the workflow in order to restart the process.



## 3.4 Bugs fixed

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

Number	Description
<b>625738</b>	<b>Error displaying emails with certain CSS styles</b> Emails which contained certain CSS styles were not displayed correctly in the ticket history of the <b>Web Client</b> . It could happen that the styles contained in such an email broke the <b>Web Client</b> layout so that the email content was displayed outside of the ticket history. This problem has been solved and email content is not displayed outside the respective ticket history entry anymore, regardless of the CSS styles contained in the email.
<b>633486</b>	<b>Not possible to confirm the deletion of attachments with long names</b> It was not possible to delete ticket attachments with long names in the <b>Web Client</b> because the Yes button to confirm the deletion was cut off. This problem has been solved by placing the confirmation dialog in a way that the button is always displayed.
<b>634983</b>	<b>Invalid XML characters blocked email editor</b> It was not possible to send emails from tickets which have history entries containing invalid XML characters because the email editor could not be opened. This problem has been solved and any invalid XML characters present in the ticket history of the <b>Web Client</b> are now escaped automatically.
<b>635297</b>	<b>Exception when logging in with role created in script</b> When logging in with a role which was created by a script without explicitly creating engineer role permissions, an exception occurred. This problem has been solved and logging in with such a role is now possible.
<b>635348</b>	<b>Wrong log level for contact not found in index</b> The log level of the messages which are written to the log file when a contact is not found in the index during internal processing has been changed from INFO to DEBUG and ERROR.
<b>641374</b>	<b>Corrupt export when deployed workflows are deleted</b> When exporting a scene from a system which contains deployed workflows which were deleted, the scene could not be imported because the deleted workflows were not present. This problem has been solved and deleted workflows are now exported if they are deployed.
<b>643731</b>	<b>DWH live mode did not resume after database stop</b> If the <b>ConSol CM</b> database was shut down while the DWH live mode was running, the live mode did not resume after the database was restarted. This problem has been solved and the DWH now recovers automatically after a database outage.

Number	Description
644690	<p><b>New line could not be added within a template</b></p> <p>When using a template in a comment or email in the <b>Web Client</b>, it was not possible to add a new line within the template content by pressing the Enter key only once. The first time the Enter key was pressed, was ignored, and the new line was only added on the second try. This problem has been solved and a new line can now be added by pressing the Enter key once.</p>
644994	<p><b>Missing space between dynamic filter properties</b></p> <p>If the <i>My view filter properties</i> section in the user profile of the <b>Web Client</b> contained more than one property, there was no space between the selectors for the property values. This problem has been solved by adding the missing space.</p>
645000	<p><b>Template styling lost when comment content is not edited</b></p> <p>When using a template for a comment in the <b>Web Client</b>, the styles used in the template were lost if the user did not edit the content of the comment. This problem has been solved and the styles are now saved even if the comment only consists of the template without any edits.</p>
645198	<p><b>Select all checkbox disappears after click</b></p> <p>After clicking the checkbox to select all results of a detail search in the <b>Web Client</b>, the checkbox disappeared and three dots were displayed instead. This problem has been solved and the checkbox does not disappear anymore.</p>
645248	<p><b>Error when creating a company for a ticket after having selected an existing one</b></p> <p>When creating a new ticket, an error occurred if the user first selected an existing company for the ticket and then canceled the action and created a new company. This problem has been solved and it is now possible to create a new company within a ticket after having selected an existing company.</p>
645455	<p><b>Misalignments in the template management</b></p> <p>There were two misalignments on the page to create or edit a text template in the <b>Web Client</b>. The numbers in the <i>context</i> column of the <i>Binding</i> table lacked padding on the left, and the entry fields and buttons when adding a new enum parameter in the <i>Library of markers</i> were not aligned correctly. These problems have been solved by improving the respective alignments.</p>
645456	<p><b>Misaligned button when configuring table columns</b></p> <p>The <i>OK</i> button displayed when configuring the columns of a result table in the <b>Web Client</b> was misaligned. This problem has been solved and the button is now aligned with the field where the columns can be selected.</p>
645917	<p><b>Ticket transfer was aborted when closing the <i>Process Designer</i></b></p> <p>When the user who initiated a ticket transfer by deploying a workflow closed his <b>Process Designer</b> instance, the ticket transfer was aborted. This problem has been solved and the ticket transfer now continues after closing the <b>Process Designer</b>.</p>

Number	Description
<b>645932</b>	<b>Restart needed for changes to white list to become effective</b> Changes to the system property <code>csrf.domain.white.list</code> of the module <code>cmweb-server-adapter</code> only became effective after the <b>ConSol CM</b> server was restarted. This problem has been solved and changes to the white list are now applied without a server restart.
<b>645962</b>	<b>Not possible to create contact with certain permission combination</b> An exception occurred when a user who has permissions to create a contact but has only read permissions for his own contacts tried to create a contact. This problem has been solved and the contact is created correctly now. According to the set permissions, the user cannot see the created contact because the contact does not have tickets assigned to him yet.
<b>646360</b>	<b>Missing line breaks in text templates</b> When using a text template in the text editor of the <b>Web Client</b> , it could happen that not all line breaks from the template were taken over to the text editor. This problem has been solved and all the line breaks are present now.
<b>646495</b>	<b>Broken formatting when copying an incoming email</b> When copying an incoming email with a certain formatting from the ticket history of the <b>Web Client</b> and inserting it in the editor, some line breaks were removed and non-breaking spaces were inserted. This problem has been solved by removing the problematic formatting causing this behavior when saving an incoming email.
<b>647444</b>	<b>Paragraph formatting did not work in Internet Explorer</b> It was not possible to apply a style to a paragraph in the rich text editor in the <b>Web Client</b> when using Internet Explorer. This problem has been solved and paragraphs can be formatted now.
<b>647986</b>	<b>Wrong locale returned in CM/Track on JBoss</b> When running <b>CM/Track</b> on a JBoss application server, the method <code>RequestLocale.get()</code> returned the default locale instead of the current browser locale. This problem has been solved and the correct locale can be retrieved now.
<b>648008</b>	<b>Dragging images from the view mode did not work</b> Images which were dragged from ticket history entries and rich fields in the view mode to the editor were not inserted correctly. This problem has been solved by disabling image dragging from places which are in the view mode.

## 4. Version 6.14.0.1 (13.09.2021)

Version 6.14.0.1 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.9
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.0):

- Merged versions 6.13.0.8 and 6.13.0.9

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



Please check the [Breaking changes and mandatory actions](#).

## 4.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.1 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.

### 4.1.1 System upgrade from 6.14.0.0 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.0 or earlier versions to version 6.14.0.1.

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

#### 4.1.1.1 Changes to password policy

The default values for both the password policy, see [Stricter password policy \(#648272\)](#), and the password rotation, see [New default value for password rotation \(#648283\)](#), have been modified. A stricter password policy is now required by default.



Please check the affected properties and adapt them to your needs. If you use values different from the default, you also need to modify the labels with the corresponding validation messages accordingly.

#### 4.1.1.2 Extension of failed email template

The template `mail-send-failure-template` can be adapted to provide additional information about failed emails, see [Information of failed email notifications enhanced \(#648335\)](#).

### 4.1.2 Data warehouse update

When updating the **ConSol CM** system to version 6.14.0.1, you must perform a DWH update task using the **Admin Tool**, see [New columns added to data warehouse \(#649055\)](#).

In version 6.14.0.1, the general update mechanism for the data warehouse was changed. Starting from 6.14.0.1, it will not be necessary to manually execute any update scripts, see [Automatic update of the DWH database schema \(#647839\)](#).

### 4.1.3 Script modification requirements

This release features some interface changes in API methods. These changes can either be improvements which offer the potential of simplifying your scripts or breaking changes. **Please be aware that scripts using the respective methods may need adjustments!** The affected methods are listed in the following sections of this document:

- [New way of providing descriptions for activity forms \(#634919\)](#)
- [Page added to field visualization context \(#647520\)](#)
- [Mechanism to treat trigger flow as exception \(#647601\)](#)
- [New methods for using templates \(#649242\)](#)

#### 4.1.4 Configuration modification requirements

The changes in this release require several system properties, configuration files or templates to be reviewed and possibly adjusted. Please see the following sections for details:

- [Stricter password policy \(#648272\)](#)
- [New default value for password rotation \(#648283\)](#)
- [Information of failed email notifications enhanced \(#648335\)](#)
- [Configurable From address for representation emails \(#648666\)](#)

No further instructions available.


## 4.2 New features

The features newly introduced in this **ConSol CM** version 6.14.0.1 are described in detail in this section.

### 4.2.1 Task scheduling (#646940)

The *Tasks* page of the **Web Admin Suite** has been extended with options to schedule the task during its creation. The following options are available in new *Scheduling options* section of the *Start new task* when creating a new task:

- **Now:**  
The task is started immediately (previous behavior).
- **Once:**  
The user can select a date and time when the task should start.
- **Periodic:**  
The user can schedule the task for repeated execution. There are several options for periodic execution:
  - **Daily:** The task runs every day at one or more defined times.
  - **Weekly:** The task runs on one or more days of the week at one or more defined times.
  - **Monthly:** The task runs on one or more days of the month, or the last day of the month, at one defined time.

 If more than one execution time, day of week or day of month is selected, a separate task will be created for each scheduling option.

In addition, it is now possible to name the task during its creation by entering the desired name in the new *Task name* field.

The following figure shows the *Start new task* window with the new options:

Start new task

aSimpleTask

Task name \*

aSimpleTask - Mondays

SCHEDULING OPTIONS

*If more than one execution time, day of week or day of month is selected, a separate task will be created for each scheduling option.*

Scheduled execution

☐ Now

☐ Once

☒ Periodic

Interval

☐ Daily

☒ Weekly

☐ Monthly

Days of week

W Monday

Execution time \*

06:00 PM

W 06:00 PM

START TASK

CANCEL

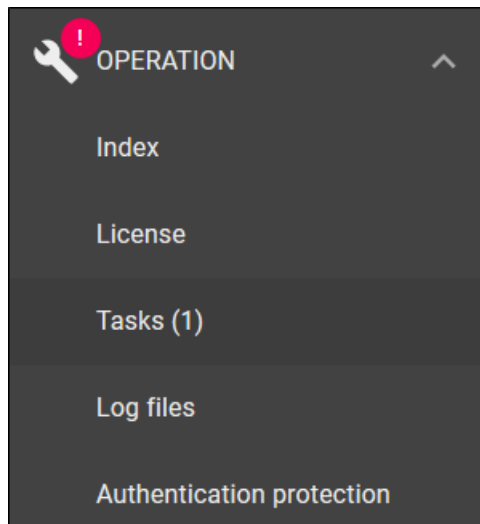
The task table has been modified to reflect these changes. The column *Name*, which displayed the name of the task script or the name set within the task script, has been removed. It has been replaced by the columns *Script name*, which displays the name of the task script, and *Task name*, which displays the name of the task entered during task creation or set within the task script.

Two columns to show the defined scheduling have been added. The column *Scheduling interval* displays the selected periodicity (*Once*, *Daily*, *Weekly* or *Monthly*) and the column *Scheduling option* displays the selected day and / or time.

The task table now features the filter *All scheduling intervals* with the options *Daily*, *Weekly*, *Monthly* and *Once* to filter for certain tasks. The standard column selector has been added as well.

The number of scheduled tasks is shown in parenthesis in the menu entry of the *Tasks* page and an exclamation mark is displayed next to the parent menu entry *Operation* if there are scheduled tasks.





Scheduling tasks within the task script and setting the task name there is still possible using the previous mechanism. The methods `scheduleOneTimeTask`, `scheduleNowTask`, `scheduleDailyTask`, `scheduleWeeklyTask`, `scheduleMonthlyTask` and `scheduleLastDayOfMonthTask` have been added to the `TaskExecutionService` for this purpose. All methods have a string parameter `pGroup` which is used to indicate the task name. The previously available method `schedule` is now deprecated.

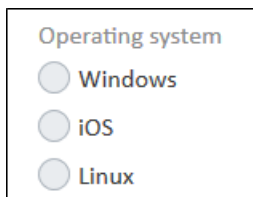
## 4.3 Changes

This section illustrates all relevant software product changes for version 6.14.0.1 of **ConSol CM**.

### 4.3.1 Usability improvements

#### Display of radio button improved (#634628)

The different options of data fields of the type *boolean* annotated as `boolean-type = "radio"` are now displayed underneath each other.



A screenshot of a web form titled "Operating system". It contains three radio button options: "Windows", "iOS", and "Linux". The "Windows" option is selected, indicated by a filled circle next to the text.

#### Margins in *Relations* sections improved (#647120)

The upper and lower margins in the *Relations* sections of contact and resource pages in the **Web Client** have been improved for the edit mode.

#### Margins in the *Contacts* section improved (#648144)

The margin below the contacts in the *Contacts* section of a ticket in the **Web Client** has been decreased for the visibility level *Standard*.

#### Margins of data transfer panel on contact pages improved (#645457)

The margins of the search field in the data transfer panel, which is displayed on contact pages in the **Web Client** when the contact's data has to be transferred to another contact, have been increased, so that there is enough space between the search field and the icon on the left, and the search field and the checkbox below.

#### Alignment of company icon improved (#646101)

The company icon is now properly aligned with the company selector when changing the company of a contact on the contact page in the **Web Client**.

#### Suggestions for notification recipients improved (#646422)

When clicking in the *Select recipients* field during the creation of a new notification in the **Web Client**, a list with suggested users is now displayed automatically. The list can contain up to 20 users. The user can type in the field to narrow down the suggestions.

#### Margins and alignment in *Contacts* section of tickets improved (#648054)

The upper margin of the first contact field in the section to create a new contact within a ticket in the **Web Client** has been increased, so that there is some space between the field and the separator line. In addition, the contact icons are now properly aligned with the first field.

#### Shrinking animation of ticket list improved (#648074)

The shrinking animation of the ticket list in the **Web Client** has been improved by adding a minimum width which avoids overlaps during the animation.

### Bold layout of table headers (#648131)

The headers of table fields in the **Web Client** are now displayed in a bold font.

### Date picker localized (#648572)

The date picker used to select the time range for an index rebuild by period on the *Index* page of the **Web Admin Suite** now uses the browser locale.

### Display of URLs improved (#649077)

The display of URLs in data fields in the **Web Client** has been improved. The URLs are not cut off anymore if there is enough space on the screen, so that the user can see the complete URL in the view mode.

## 4.3.2 Performance improvements

### Table virtualization introduced (#647512)

The tables displayed in the **Web Admin Suite** now use virtualization, so they are loaded more quickly.

### Code snippets window refactored (#647574)

The code snippets window which can be used on the *Scripts* page of the **Web Admin Suite** has been refactored to improve performance and decrease memory usage. In addition, the keyboard navigation capabilities have been extended. It is now possible to navigate to the snippets of a given element by using the right arrow or space key. The sections can be expanded and collapsed using the right and left arrow, and the tab key can be used to navigate the results, in addition to the up and down arrows.

## 4.3.3 Handling of monitoring user logins improved (#626864)

The monitoring user can only log in once to the **Web Client** and **CM/Track**. If he tries to log in more than once, an error message informing about the reason why the login failed is now displayed.

## 4.3.4 Last modification date as search criterion (#631346)

The last modification date of tickets is now available as a search criterion for the detail search in the **Web Client**. The user can select the new search criterion *Last modification date* and provide a date or date range, similar to the options available for the creation date of tickets.

## 4.3.5 Option to export client configurations (#631585)

The *Export* page of the **Web Admin Suite** has been extended by adding the option *Client configurations*. When selected, the scene export contains only the client configurations.

## 4.3.6 New way of providing descriptions for activity forms (#634919)

The description, which is displayed below the title of an activity or action form in the **Web Client**, can now be modified in the prefill script. The script overwrites the static description of the activity form, which is entered in the **Web Admin Suite** or **Admin Tool**. The description provided in the prefill script can contain formatting, such as lists or tables, and images.

The method `setCustomDescription(String pCustomDescription)` has been added to the class `GenericControlForm` for this purpose. The string passed to the method is displayed as a description in the activity form. You can use the methods added in [New methods for using templates \(#649242\)](#) to use a template for the description.


Example:

```
controlForm.setCustomDescription(templateService.mergeAndInlineImages("template name", engineerService.getCurrentLocale(), ticket.name))
```

### 4.3.7 Possibility to use images in templates referenced by scripts (#635548)


It is now possible to use images in text templates of the type *Letter* or *Include* which are referenced by text templates of the type *Script*. This works only if the following conditions are met:

- The included template is referenced by the script template using its name without locale, i.e. the syntax is `<#include "template name">`. The use of variables for the template name is not supported.
- The included template has the default language of the **ConSol CM** system. This is because the general behavior of **ConSol CM** is to include only templates in the default locale.
- The included template is created before it is referenced by a script template. An error message is displayed when the user tries to save a script which includes a non-existing template.
- If the template is used in an automatic email, and the email content should be written to the ticket history, use the method `workflowApi.addTicketTemplateText(String pTemplateName)`.

 If the script template existed prior to the update, please open it and save it to make this feature work.

### 4.3.8 Support for rowspan annotation restored (#645343)

The support for the annotation `rowspan`, which can be used to define the number of rows which a data field should occupy in the **Web Client**, has been restored. The annotation can now be used in the same way as in **ConSol CM** versions prior to 6.13.0.0, i.e. you can assign the annotation to a data field and enter the number of rows which the field should occupy. This allows for example to create a large text fields spanning several rows in one column and have several regular fields spanning one row each in the adjacent column.


 The `rowspan` annotation only works if you also assign the `position` annotation.

### 4.3.9 Close date column added to ticket results tables (#645785)

The new column *Close date* can now be added to result tables containing tickets in the **Web Client**, i.e. to the detail search results and the tickets table on contact pages. The column displays the close date of the tickets.

#### 4.3.10 Handling of deactivated fields in detail search improved (#646774)

Deactivated fields are not available as search criteria in the details search of the **Web Client** anymore. Furthermore, they cannot be selected as table columns. This means that deactivated fields are not shown in any place of the GUI. In addition, this allows to use deactivated fields for storing internal data which should be searchable via script but never be visible to the end users.

 This behavior only applies if the field itself is deactivated. If an active field belongs to a deactivated list or struct, the field is still available in the detail search even though it is not displayed in the object.

#### 4.3.11 Display of the CM/Track user profile field improved (#646779)

The layout of the field to select the user profile for a contact on the contact page in the **Web Client** has been improved. The field now has a label, similar to regular data fields. The default label for the field is *Portal user profile*. It can be changed in the **Web Admin Suite** or **Admin Tool** by editing the newly added label `cmweb.main.unit.portal.user.initcap`.

#### 4.3.12 Configurable validation messages for fields with regular expressions (#647071)

Data fields can have the annotation `matches` which defines a regular expression to validate the field content when the user tries to save. The validation message which is displayed in the **Web Client** or **CM/Track** when the field content does not match the regular expression can now be customized. The new annotation `matches-validation-message-key` has been added for this purpose. The value of the annotation is the key which defines the validation message. For the **Web Client**, a label with the corresponding key must be created in the *Labels* section in the **Web Admin Suite** or **Admin Tool**. For **CM/Track**, an attribute with the corresponding key must be created in the `localization_de.json` and `localization_en.json` files of the client configuration in the **Web Admin Suite** or **Admin Tool**.

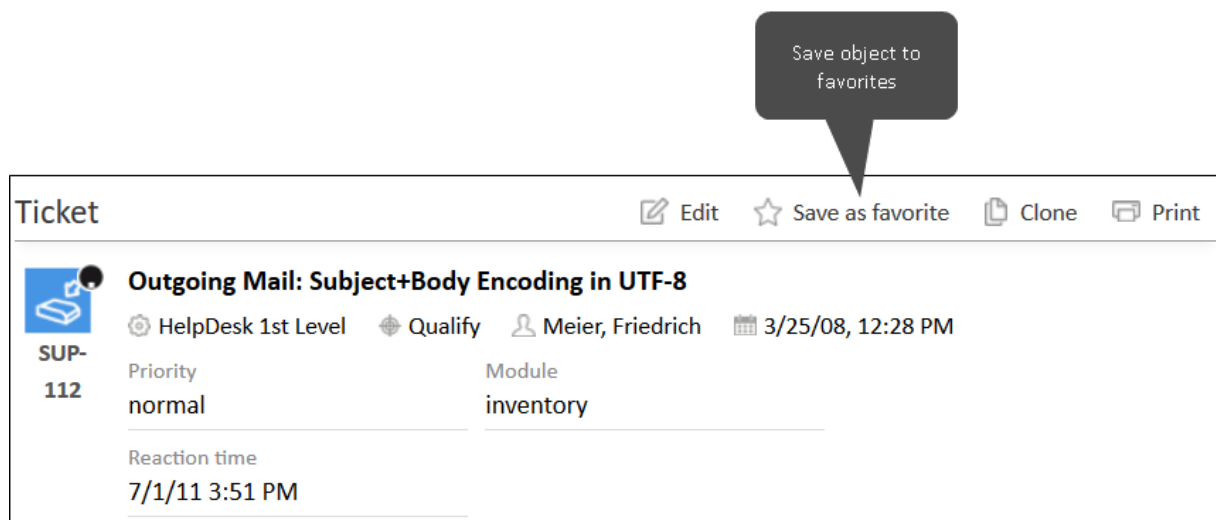
#### 4.3.13 Page added to field visualization context (#647520)

The context of field visualizations has been extended by information about the current **Web Client** page where the field visualization is displayed. For this purpose, the method `getPageContext()` was added to the class `FieldVisualizationContext`. It returns the type of page where the visualization is displayed (TICKET, UNIT or RESOURCE).

This allows the user to implement a specific behavior depending on the page. For example, a field visualization for a contact can be displayed only on contact pages but not on ticket pages where the contact is shown in the *Contacts* section.

#### 4.3.14 Responsive menu with new button to save in favorites (#647530)

It is now possible to save tickets, contacts, resources and detail searches in the favorites of the **Web Client** by clicking the new *Save as favorite* button. The button is located in the object header. If the object is already saved in the favorites, the button is deactivated, except for the detail search, where the button is always available.



**Ticket** Edit Save as favorite Clone Print


**Outgoing Mail: Subject+Body Encoding in UTF-8**

**SUP-112** HelpDesk 1st Level Qualify Meier, Friedrich 3/25/08, 12:28 PM

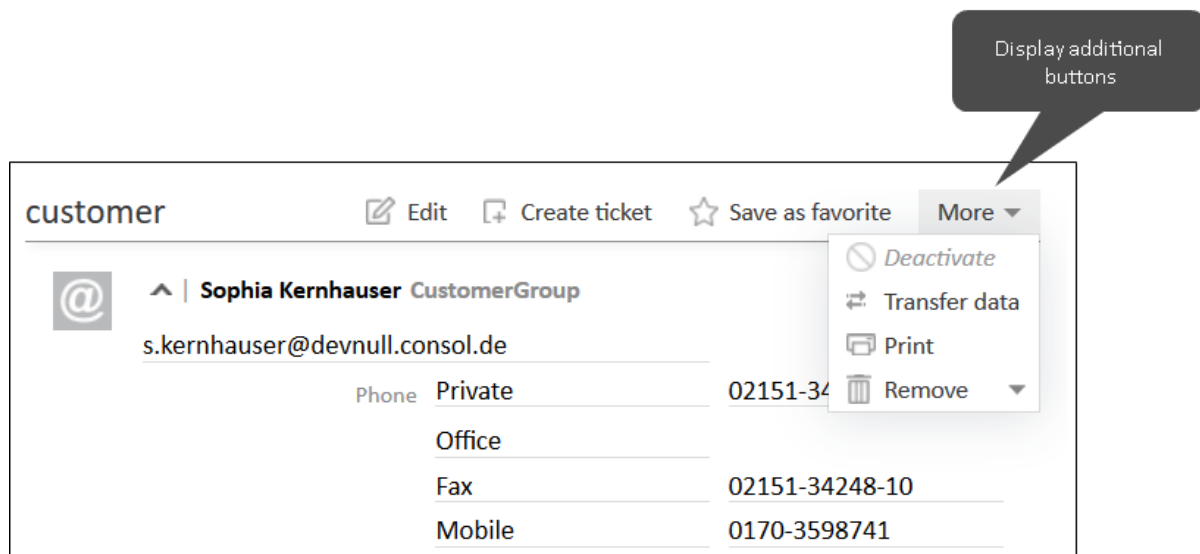
Priority: normal      Module: inventory

Reaction time: 7/1/11 3:51 PM


Save object to favorites

 The previous way of adding objects to the favorites by using drag-and-drop still works.

In addition, the buttons in the object header are now responsive. If there is not enough space on the screen to display all buttons, a *More* button which allows access to the rest of the buttons is shown.



**customer** Edit Create ticket Save as favorite More

 **Sophia Kernhauser** CustomerGroup  
s.kernhauser@devnull.consol.de

Phone	Private	02151-34
	Office	
Fax		02151-34248-10
Mobile		0170-3598741

Deactivate  
Transfer data  
Print  
Remove

Display additional buttons

#### 4.3.15 Mechanism to treat trigger flow as exception (#647601)

It is now possible to treat a trigger execution as an exception instead of an interrupt. The method `skipInterruptRestore()` has been added to the class `ScopeInfo` for this purpose. This method can be used only in automatic activities connected to triggers. If you add it to the script of such an activity, the ticket does not return to the original activity where it was located before the trigger fired, but stays in the flow of the activity where this method is called.

This allows for example to implement workflows where the ticket is moved to a waiting scope by a trigger and remains there until another trigger fires.

### 4.3.16 Automatic update of the DWH database schema (#647839)

The DWH database schema is now updated automatically when updating **ConSol CM**. Schema changes starting from 6.14.0.0 are automatically applied during the update, as they are already for the **ConSol CM** database.

The following update procedure applies depending on the base version (currently installed versions):

- **ConSol CM version 6.14.0.0 or higher:** No further actions required. All required schema changes are applied automatically during the update.
- **ConSol CM version below 6.14.0.0:** Prior to the update, the update scripts for all versions between the current version and 6.14.0.0 must be executed. During the update, all required schema changes for versions 6.14.0.0 and higher are applied automatically.

Example: Update from 6.12.1.5 to version 6.14.0.1

1. Stop **ConSol CM** and the **CMRF**.
2. Execute the update scripts for all versions between 6.12.1.5 and 6.14.0.0. In this case, one script (6.13.0.2).
3. Update **ConSol CM** and the **CMRF**. The update script for version 6.14.0.0 is executed automatically.

Starting from 6.14.0.1, no manual steps will be required.

### 4.3.17 Availability of cluster information enhanced (#647855)

Some cluster information is now retrieved from the health check endpoints `<CM_URL>/health/check` and `<CM_URL>/health/report`. The attribute `cluster_enabled` shows the value of the system property `cluster.mode` from the module `cmas-core-shared`. If the cluster is enabled, the health check contains the additional attribute `cluster_node_id` with the value of the JBoss start property - `Dcmas.clusternode.id`. If the cluster is enabled, but the cluster node ID has not been provided during startup, the health check returns a warning with a corresponding message.

If **ConSol CM** is running in a cluster, the cluster node ID is also displayed on the dashboard of the **Web Admin Suite**, in the *Overall system information* section.

### 4.3.18 Default limit for tickets in grid view increased (#647868)

The default limit for the maximum number of tickets in the grid view in the **Web Client** has been increased from 120 to 300. Therefore, the default value for the page customization attribute `maxGridTicketsNumber` in the type `detailSearch` is now 300 for new installations. The value set for existing installations is not changed during the update to 6.14.0.1.

### 4.3.19 Documentation scripts improved (#648042)

The default scripts to generate system documentation with the **Admin Tool** have been improved by adding internal links to the output. This makes it easier to navigate the generated output. In addition, the versioning of the script has been modified. It is not related to the **ConSol CM** version anymore because the script does not need to be updated for every **ConSol CM** version.

The current version of the script is called `Documentation_Generator_script_DE_V2.groovy` / `Documentation_Generator_script_EN_V2.groovy`. Older script versions can be removed as they are not required anymore and might contain corrupted characters in the German version and unneeded spaces between in the heading numbers.

### 4.3.20 Improved log output for failed password reset emails (#648089)

When the user resets his password, he receives an email with the reset code. If this email cannot be sent, an error message is displayed in the **Web Client**. The log output in the `server.log` file has been improved to provide some details about the reason of the failure.

### 4.3.21 Option to pause index tasks added (#648135)

The *Index* page of the **Web Admin Suite** has been extended with the option to pause a running index task. The user can pause a task with the status *Running* by clicking the *Pause* icon in the row of the task. Paused tasks can be resumed by clicking the *Resume* icon. The status *Paused* has been added to indicate index tasks which have been stopped and can be resumed. In addition, the status *Open*, which is used for tasks which have not been started yet, has been renamed to *Pending*.

### 4.3.22 Stricter password policy (#648272)

The default password policy which applies to passwords to log in to the **Web Client** and **CM/Track** is stricter now. By default, passwords must contain the following:


- at least 7 characters
- at least one capital and one lower case letter
- at least one number


The regular expression in the system property `policy.password.pattern` from the module `cmas-core-security` has been updated accordingly. It is now `^(?=.*[0-9])(?=.*[A-Z])(?=.*[a-z]).{7,}$`.

This value is set automatically for new systems and for updated system which did not have this property or had this property with the previous default value (`^. {3,}$`). The property is not modified for systems which already had a custom password policy.

The message which is displayed when a user tries to set a password which does not match the defined pattern in the **Web Client** can now be customized. The new label `cmweb.auth.password.validation.failed` has been added for this purpose. If the password policy has been adapted to the new default value, the value of the label is "Please choose a password with a higher complexity. By default passwords should have a minimum length of 7 and use at least one capital letter, one small letter and one number". If the password policy has not been updated, the label is "Please choose a password with a higher complexity."

For **CM/Track**, the message is defined in the client configuration, in the attribute `password.pattern.violated` of the `public.json` file.

 The validation messages are displayed only when users change their own passwords in the **Web Client** and **CM/Track**. If you update the password of a user in the **Web Admin Suite** or **Admin Tool**, you must consider the password policy by yourself.

 The password policy is not applied to passwords for **CM/Track** which are set on the contact page in the **Web Client**.



**Update procedure**

After updating **ConSol CM**, please check the property. If desired, adapt it to your needs and modify the label accordingly.

The existing passwords of the users remain valid even if they do not comply with the new password policy. The policy is only checked when the users change their passwords, e.g. because the passwords expire after a certain time period.

### 4.3.23 New default value for password rotation (#648283)

The default value of the system property `policy.rotation.ratio` from the module `cmas-core-security` has been changed from 1 to 5. Therefore, the users must enter a password which does not match one of the last five passwords they used for the **Web Client**.



When updating an existing **ConSol CM** system, the property is only modified if the previous default value, 1, was set.

### 4.3.24 Information of failed email notifications enhanced (#648335)

The notification email which is sent when an automatic email could not be sent has been enhanced to provide additional information about the failed email. The template used for the email, `mail-send-failure-template`, can be extended by adding the variable `${failedEmailInfos}`. This will show additional information, as the sender, recipient and subject of the email.

When setting up a new **ConSol CM** system, the template is automatically added and contains this variable.



When updating an existing **ConSol CM** system, you must edit the template and add the variable with a suitable text. Example:

```
E-Mail Details: ${failedEmailInfos}
```

### 4.3.25 Technical scopes removed from detail search (#648461)

Technical scopes, i.e. scopes which have the checkbox *Technical/internal* selected in the **Process Designer**, are not shown in the *Scope* selector in the detail search of the **Web Client** anymore.

### 4.3.26 New default value for success message duration (#648580)

The duration of the display of the green success message which is displayed in the **Web Client** after a successful action is determined in the page customization attribute `successMessageTimeout` of the type `generalFeedback`. The default value of the attribute is now 3, so that success messages are automatically hidden after 3 seconds. Previously, the default value was 0, so that the message was not hidden automatically but needed to be removed by the user manually.



The new value is automatically set when setting up a new **ConSol CM** system. Updated systems only use the new default value if the page customization attribute was not set prior to the update.

### 4.3.27 Configurable From address for representation emails (#648666)

The From address used for automatic emails which are sent to the users when a representation has been created or removed can now be configured in the corresponding template. The From address can be set within the templates `representation-create-email` and `representation-delete-email` using the following syntax:

```
From:myaddress@example.com
```

If no From address is set in the template, the value of the system property `mail.from` from the module `cmweb-server-adapter` is used as a From address.

### 4.3.28 Logs for missing templates improved (#648688)

If one of the ticket assignment templates, which can be selected in the queue configuration of the **Admin Tool**, is not provided, the corresponding email notification is not sent. The entry which is written to the log files in this case has been improved. It now says which template is missing in the queue configuration.

### 4.3.29 New columns added to data warehouse (#649055)

The data warehouse database has been extended with five columns for engineer data: `phone`, `mobile`, `fax`, `company`, and `eng_position`. They contain the data saved in the engineer administration (**Web Admin Suite** fields: *Phone*, *Mobile*, *Fax*, *Company* and *Position*).

The database columns are added automatically during the update of **ConSol CM** and the **CMRF**, but they will be empty. Please proceed as follows to fill them:

1. Switch the DWH to ADMIN mode using the **Admin Tool**.
2. Update **ConSol CM** and the **CMRF**.
3. Switch the DWH to LIVE mode to trigger an update task. This will fill the new columns.

### 4.3.30 New methods for using templates (#649242)

Four new methods to facilitate the usage of templates in scripts have been added to the class `TemplateService`:

- `merge(String pTemplateName, Locale pLocale, String pTicketName)`
- `merge(String pTemplateName, Locale pLocale)`
- `mergeAndInlinelImages (String pTemplateName, Locale pLocale, String pTicketName)`
- `mergeAndInlinelImages (String pTemplateName, Locale pLocale)`

These methods allows to use a template in a script without providing a Map with dynamic data. Use the `merge()` methods for templates without images and the `mergeAndInlineImages()` methods for templates which contain images. These methods are useful for templates which do not contain any variables, e.g. the templates used in [New way of providing descriptions for activity forms \(#634919\)](#).

## 4.4 Bugs fixed

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

Number	Description
<b>631277</b>	<p><b>Login fails because of password policy for database passwords although LDAP is used</b></p> <p>If LDAP was configured as a primary authentication method, but the user had a database password which does not match the password policy for database passwords, the login failed once the database password expired. This problem has been solved and the password policy and age is not considered anymore when LDAP is used.</p>
<b>635295</b>	<p><b>Current ticket displayed in suggestions for ticket relations</b></p> <p>The current ticket was displayed in the suggestions for creating a ticket relation in the <b>Web Client</b> if its number or name was mentioned and indexed in another ticket. This problem has been solved and the current ticket is never displayed in the suggestions for creating a ticket relation.</p>
<b>647142</b>	<p><b>Missing padding in table content</b></p> <p>After removing a row from a table in the <b>Web Client</b>, the remaining rows of this table and other tables on the page lacked padding on the left and their content stuck to the border of the cell. This problem has been solved and the content does not stick to the cell border anymore.</p>
<b>647914</b>	<p><b>Wrong number display in CM/Archive</b></p> <p>The last digits after the decimal point were trimmed in long decimal numbers in <b>CM/Archive</b>. Therefore, such numbers looked differently in the ticket history in <b>CM/Archive</b> and the <b>Web Client</b>. This problem has been solved and the numbers are not trimmed anymore.</p>
<b>647934</b>	<p><b>Unnecessary white space in ticket list</b></p> <p>If the ticket displayed at the bottom of a ticket list group in the <b>Web Client</b> did not have additional data, there was some white space between below the ticket card. This problem has been solved by removing the unnecessary white space.</p>
<b>647944</b>	<p><b>Not possible to export fixed point number fields using ETL</b></p> <p>Data fields of the type fixed point number could not be exported from <b>ConSol CM</b> using ETL. This problem has been solved and these fields are correctly exported now.</p>
<b>648020</b>	<p><b>Error when retrying an email from a deleted ticket</b></p> <p>When sending an email from a ticket fails, the system retries the delivery automatically. In case the ticket from which the email was sent, was deleted in the meantime, the retry failed in an infinite loop. This problem has been solved, and in such a case, the email is now removed after some delivery attempts.</p>

Number	Description
648051	<p><b>Mentioning does not work due to engineer template</b></p> <p>The syntax of the engineer template could prevent the mentioning feature in comments in the <b>Web Client</b> from working correctly. It could happen that a mentioned user did not receive the notification if other users were mentioned in the same comment, or that a notification was sent to the currently logged in user when he replied to a comment where he was mentioned. These problems have been solved and the syntax of the engineer template does not affect the mentioning feature anymore.</p>
648058	<p><b>Pressing the Enter key redirects to a wrong URL</b></p> <p>When pressing the Enter key in a filter of a search table or in the <i>Description</i> field of an attachment in the <b>Web Client</b>, the user was redirected to a wrong URL. This problem has been solved and pressing the Enter key does not change the URL anymore.</p>
648145	<p><b>Customer group button not clickable</b></p> <p>On very small screens, the <i>Customer group</i> button of the menu bar in the <b>Web Client</b> could not be clicked. If this button was not displayed, the bell icon, the search icon and the account circle were displayed in the middle, instead of at the right. These problems have been solved and all menu bar components now work as expected on small screens.</p>
648190	<p><b>Small layout problems on menu bar</b></p> <p>When the menu bar of the <b>Web Client</b> did not include the <i>Customer group</i> button, the upper and lower margins of the menu bar were too small and the busy indicator of the search field was wrongly aligned. This problem has been solved and the menu bar now has the correct layout when there is no selector for the customer group.</p>
648191	<p><b>Wrong position of More button</b></p> <p>The <i>More</i> button, which is displayed in the menu bar of the <b>Web Client</b> if not all menu elements fit on the screen, was displayed below the menu bar in some cases. This problem has been solved and the <i>More</i> button is now always displayed within the menu bar.</p>
648193	<p><b>Broken layout of notifications</b></p> <p>The layout of notifications which are sent to users in the <b>Web Client</b> was broken in some cases. The preview of the comment, which the notification refers to, could overlap the date of the notification. This problem has been solved and such overlaps do not occur anymore.</p>
648250	<p><b>Error when opening the same ticket in a new tab</b></p> <p>When opening the same ticket, which is currently displayed in the main panel of the <b>Web Client</b>, in a new tab by right-clicking the ticket link in the ticket list, errors occurred in both tabs. This problem has been solved and it is now possible to open the currently displayed ticket in a new tab from the ticket list.</p>

Number	Description
648264	<p><b>Exception when opening displaying a view in the grid</b></p> <p>When displaying a view grouped by engineer in the grid in the <b>Web Client</b>, an exception occurred if there were no engineers who could get assigned to the tickets in the view (i.e. engineers with <i>Write</i> or <i>Get assigned</i> permissions to the tickets' queue). This problem has been solved and the view can be displayed in the grid now, although no engineers are available as table columns.</p>
648292	<p><b>Timeout when creating system documentation</b></p> <p>The creation of the system documentation using the <i>Documentation Generator</i> screen of the <b>Admin Tool</b> could take more than one hour so that a transaction timeout occurred. This problem has been solved by improving the performance of the documentation generation.</p>
648325	<p><b>Page customization attribute not displayed on page</b></p> <p>The blue indication of the page customization attribute <code>cmApplicationCustomization</code> was not displayed in the <b>Web Client</b> after clicking the <i>Enable page customization</i> button. This problem has been solved and the blue indication for this attribute is now displayed when hovering the <b>ConSol CM</b> logo.</p>
648354	<p><b>Error after queue change on ticket creation page</b></p> <p>If the queue which is preselected on the ticket creation page of the <b>Web Client</b> had no customers and the user changed to the tab of a queue with customers, an error occurred when performing such a queue change for the first time. This problem has been solved and queue changes do not cause errors anymore.</p>
648359	<p><b>Ticket creation not possible when a contact role was deleted</b></p> <p>An error occurred when trying to create a ticket on a system which had a contact role which was deleted. This problem has been solved and creating tickets now works correctly for systems with deleted contact roles.</p>
648362	<p><b>Keyboard shortcuts for executing activities did not work</b></p> <p>The keyboard shortcuts which could be used to execute activities in the <b>Web Client</b> did not work. This problem has been solved and activities can now be executed using the alt + number combination.</p>
648611	<p><b>CSS files loaded in the wrong order</b></p> <p>The custom <code>theme.css</code> file, which contains custom styling for the <b>Web Client</b>, was loaded before other CSS files so that custom styles could be overwritten by styles from the default files. This problem has been solved and the <code>theme.css</code> file is now loaded at the end.</p>
648639	<p><b>Wrong template for contact on ticket page</b></p> <p>Instead of the template of the type <i>Ticket page</i>, the default template was used to display the contact name on ticket pages in the <b>Web Client</b>. This problem has been solved and the correct template is used now.</p>

Number	Description
648755	<b>Warning log when opening detail search</b> When opening the detail search of the <b>Web Client</b> , a warning message about missing localizations was written to the log files. This problem has been solved and this warning does not occur anymore.
648810	<b>Link to reset the CM/Track password did not work</b> The link to reset the <b>CM/Track</b> password did not work if it was opened in a tab where <b>CM/Track</b> was not yet loaded. In such a case, a session expired error was displayed. This problem has been solved and the password reset page of <b>CM/Track</b> is correctly loaded if opening it in a new tab.
648879	<b>Tooltip for date fields in tables not shown</b> Tooltips for date fields which belong to tables were not displayed in the <b>Web Client</b> . The tooltip of the containing STRUCT was shown instead. This problem has been solved and the tooltip of the date field is now displayed if the field has a description. If the date field has no description, the tooltip of the table field is shown.
648894	<b>Password expired message displayed in wrong language</b> The password expired message which is displayed in the <b>Web Client</b> when the user tries to log in with an expired password was displayed in the locale of the <b>ConSol CM</b> server instead of the user's browser. This problem has been solved and the message is now displayed in the browser locale.
648912	<b>Error when deleting user with lots of tickets</b> It was not possible to delete a user, who had many tickets assigned, using the <b>Web Admin Suite</b> . An exception occurred in such a case. This problem has been solved and it is now possible to delete users with many tickets.
648935	<b>Flickering when a session times out in another tab</b> Some browser addons could cause the tab where the <b>Web Client</b> was opened to flicker if the session timed out while the user was working in another browser tab. This problem has been solved and such a flickering does not occur anymore.
649133	<b>Logout when changing visibility level in ticket history</b> The user was logged out with an error when he changed the visibility level of the ticket history in the <b>Web Client</b> , if the ticket history contained the combination of an empty comment and a comment with a text class which shortened the comment. This problem has been solved and this combination of history entries does not cause a logout anymore when the visibility level is changed.
649242	<b>Failed requests to REST endpoints</b> After starting the <b>ConSol CM</b> server for the first time, requests from <b>CM/Track</b> to some REST endpoints failed. This problem has been solved and all requests are handled correctly now.
649343	<b>Ticket printing feature not working as expected</b> The <i>Print</i> button, which can be used to print a ticket from the <b>Web Client</b> , did not work as expected. The whole <b>Web Client</b> page was printed instead of the ticket. This problem has been solved and now the printed output only includes the ticket.

Number	Description
649395	<p><b><i>Deactivated incl. checkbox deselected on tab change</i></b></p> <p>When changing the tab of the results table in the detail search of the <b>Web Client</b>, the <i>Deactivated incl.</i> checkbox was automatically deselected. This problem has been solved and the checkbox now remains selected when the user switches to another result tab.</p>

## 5. Version 6.14.0.2 (28.10.2021)

Version 6.14.0.2 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.11
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.1):

- Merged versions 6.13.0.10 and 6.13.0.11

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



Please check the [Breaking changes and mandatory actions](#).



## 5.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.2 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.

### 5.1.1 System upgrade from 6.14.0.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.1 or earlier versions to version 6.14.0.2.

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

### 5.1.2 Data warehouse update

If you want to use the newly added contact and resource IDs in reports based on the data warehouse, you need to execute the provided task script to fill the values, see [Contact and resource IDs added to the DWH \(#649261, #649262, #649931\)](#).

### 5.1.3 Configuration modification requirements

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

- [Property added to XML configuration files \(#649965\)](#)
- [Email properties handling improved \(#650036\)](#)

No further instructions available.

## 5.2 New features

The features newly introduced in this **ConSol CM** version 6.14.0.2 are described in detail in this section.

### 5.2.1 Workflow management added to the **Web Admin Suite** (#646446)

The **Web Admin Suite** has been extended with the page *Workflows* in the *Business logic* section. The *Workflows* page allows to create and manage workflows. It replaces the **Process Designer** application.

The new workflow editor provides the same functionality as the **Process Designer** and brings a lot of usability improvements.

#### 5.2.1.1 User interface

Workflows are managed in tabs. The first tab is always the list of available workflows where the user can open an existing workflow or create a new one. Each workflow is displayed in its own tab. The tab which shows a workflow consists of the following elements:

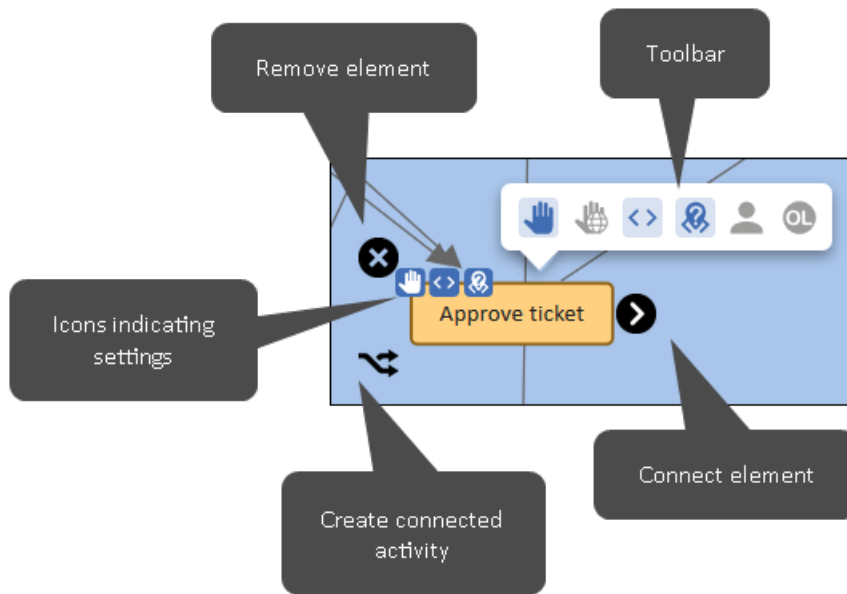
- Menu bar with icons for zooming, exporting and full screen
- Details panel which displays the properties of the selected element
- Palette from which the elements can be dragged to the canvas

When an element is selected, its properties are shown in the details panel. In addition, a toolbar, which allows to perform the most important actions directly at the element, is shown. The following actions can be available in the toolbar:

- Change activity type
- Edit script
- Edit visibility script
- Change customer exposure
- Edit overlay

In addition to the toolbar, a halo with black icons is displayed around the element. The following actions can be available in the halo:

- Remove element
- Connect the element by drawing an arrow
- Create a connected activity



The icons displayed at the element indicate the selections in the toolbar, so the user can easily see which activities have scripts, etc.

### 5.2.1.2 Added features

The following feature, which were not included in the **Process Designer**, were added in the **Web Admin Suite**:

- **Direct editing of activity forms**  
The user can open the window to create a new activity form or open the window to edit an existing activity form.
- **Download of overlays and scope icons**  
Overlays and scope icons can be downloaded from the window where they can be selected.
- **Full screen mode**  
The user can click the *Full screen* icon above the opened workflow to display it in the whole browser window.
- **Removing old workflow versions**  
The workflow page includes a button *Remove old versions* which deletes all workflow versions except for the deployed versions and the newest versions.
- **Deactivating workflows**  
Workflows, which cannot be deleted because they are assigned to queues, can now be deactivated if the queue, which they are assigned to, is also deactivated. Deactivation is also possible for all workflows which are not assigned to any active queue. The *Deactivate* icon is displayed for all workflows for which this action is possible. Deactivated workflows can be reactivated by clicking the *Activate* icon.

**i** Deactivating a workflow does not have any effects other than indicating that a certain workflow is not needed at the moment. It does not prevent a workflow from being assigned to a queue.

- **Searching in embedded scripts**

Embedded scripts, i.e. scripts which are attached to workflow elements, can now be viewed and modified on the *Scripts* page of the **Web Admin Suite**, see [Embedded scripts shown on Scripts page \(#646961\)](#). This allows searching in their content.

- **Resuming a failed case transfer**

If the case transfer, initiated after deploying a new workflow version, failed, it can be resumed on the main workflow page by using the inline / details panel action *Resume transfer* of the affected workflow.

- **Automatic scope activities**

Scope activities can now be automatic, i.e. they are not displayed in the **Web Client** or **CM/Track** and can be executed by script only.



Automatic scope activities are not supported in the **Process Designer**. If automatic scope activities are added using the **Web Admin Suite**, the workflow should not be deployed using the **Process Designer** anymore.

### 5.2.1.3 Modified features

The following features were modified in the **Web Admin Suite** with respect to the **Process Designer**:

- **Development mode extended**

The development mode now covers the changes to the following settings, which do not require a ticket transfer:

- Scripts
- Labels (new)
- Descriptions (new)
- Exposed to customer, except for scope activities (new)
- Skip update event (new)
- Adding activity forms (new)



The development mode works only if the workflow is deployed. No snapshots are created for the changes, i.e. the deployed version of the workflow is updated directly.

- **Sort index for manual elements only**

Automatic elements (activities, jump-out nodes, reopens, end nodes) are not displayed in the sort index configuration as the sort index is not used for them. The user can modify the sort index by using drag-and-drop.

- **Precondition scripts renamed**

Precondition scripts are now called “visibility scripts” for consistency with [Scope of condition scripts changed \(#645473\)](#). They can be added only to manual elements. In addition, they are now also available for manual jump-out nodes and manual end nodes.

- **Validations**

The user can validate the workflow at any time by clicking the *Validate workflow* button. Workflow elements with validation errors have a red name. The validation message is displayed when hovering the affected element.

- **Copy and paste**

When copying and pasting elements, the technical names are copied as well. The suffix *\_copy* is added. Elements are now pasted next to their source element instead of at the bottom of the workflow. Use the keyboard shortcuts CTRL+C and CTRL+V for copying and pasting.



After pasting an element, it is needed to slightly move it in order to attach it to the right place in the scope hierarchy.

- **Case transfer information**

The progress of a case transfer and the information about the finished transfer are now displayed on the workflow overview page. In addition, a message that a transfer is in progress is displayed in the footer of the workflow editor.

- **Duplicating workflows**

There is a dedicated *Clone* button on the *All workflows* tab to duplicate a workflow. The possibility to copy a workflow by modifying its name has been removed.

- **Deleted status**

The workflow status *Deleted* has been replaced by *Deactivated* because it was misleading, as workflows which are assigned to queues could not be deleted. The delete action is only available for saved workflows, or deployed workflows which are not assigned to any queue.

- **Copying the element path**

The action to copy the path of an element is now located in the details panel. Next to the path field, a copy button is displayed.



Copying the path using this button only works for https or on localhost.

- **Creating connected activities and decision nodes**

The action to create a connected activity is now located in the halo. In addition, it is possible to create connected activities by selecting the previous element and pressing shift + a. Decision nodes can be created by selecting the previous element and pressing shift + d.

- **Technical scopes**

The *Technical scope* setting can be modified for the default scope as well as for regular scopes. When opening an existing workflow after the update, this property is set to “false” for all scopes and must be changed manually to “true” for all scopes where this is desired. When creating a new workflow, the property is set to “true” for the default scope and to “false” for all other scopes.

- **Export as par file**

The option to export a workflow as a par file is available as an inline action in the workflow table, as a header action in the workflow details and in the action bar above the workflow editor. It is only possible to export saved or deployed workflows. Importing a workflow as a par file automatically saves it.

#### 5.2.1.4 Removed features

The following feature, which were included in the *Process Designer*, were removed in the *Web Admin Suite*:

- **Email trigger at activities**

Email triggers at automatic activities are not supported anymore. They were rarely used and lead to unintuitive workflows. Workflows using email triggers at activities must be redesigned before saving them in the **Web Admin Suite**.

- **Scope toggling**


It is not possible anymore to collapse scopes to hide their content.


- **Mandatory end node**

It is not mandatory anymore that a workflow contains an end node because there are valid use cases for workflows without end node, e.g. because a certain workflow always passes the tickets to another workflow which contains the end node.

- **Restart the process for transferred cases**

During the case transfer, the cases stay as close as possible their the previous position. If the activity where a case is located has been removed, the case is moved backwards to the last existing activity which it has passed. The previously available option to restart the process for all cases has been removed.

 You can use the method `ticketService.restart()`, see [Method to restart a ticket \(#648059\)](#), in any script if an open or closed case should start the process again.

 This change also affects the *Transfer cases* option on the *Import* page.

- **Possibility to save workflow with activities without incoming connections**

It is not possible anymore to save or deploy a workflow which contains newly added manual activities without incoming connections. Only scope activities can be used in this context now. Existing workflows which already had this kind of activities can still be deployed, but not saved.

### 5.2.1.5 Transition and backward compatibility

All workflows created in the **Process Designer** can be opened and deployed in the **Web Admin Suite**. When saving or deploying a workflow for the first time in the **Web Admin Suite**, some internal conversions affecting the layout are performed. Nonetheless, there can be small layout differences, which can usually be solved by double-clicking or moving the affected element. Due to these conversions, layout issues might occur when opening a workflow which was modified in the **Web Admin Suite** in the **Process Designer**.

The **Web Admin Suite** provides some new features, which are not supported in the **Process Designer**. In this release, this affects the automatic scope activities, but more of such features might be added in future releases. Workflows containing such features should not be deployed using the **Process Designer**.

There is some basic backward compatibility, i.e. it is possible to open and deploy a workflow modified in the **Web Admin Suite** in the **Process Designer**. This is intended for emergency situations where a serious bug in the **Web Admin Suite** is found. Using both applications in parallel for working on a workflow is not supported.



Please consider the following best practices for the transition phase:

- Do not remove the snapshot which is created after saving or deploying a workflow in the **Web Admin Suite** for the first time. Please keep it as a backup in case you need to switch back to the **Process Designer**.
- Do not deploy a workflow which includes new features in the **Process Designer**, as this might lead to unexpected behavior.
- Do not use the **Web Admin Suite** and the **Process Designer** for working in parallel on a workflow.

## 5.3 Changes

This section illustrates all relevant software product changes for version 6.14.0.2 of **ConSol CM**.

### 5.3.1 Usability improvements

#### *No matches found* message localized (#649279)

The message *No matches found* used in the autocomplete search in the **Web Client**, e.g. when selecting the recipient for an email, is now localized into German. In addition, it is not displayed anymore if the user already selected a recipient and did not start a new search.

#### Sorting added to the *Cubes* page (#649302)

The *Cubes* page of the **Web Admin Suite** has been improved by adding the possibility to sort by any table column. By default, the cubes are sorted by their ID.

#### Transfer list behavior improved (#649617)

The behavior of the transfer list in the *Activity forms* section of the **Web Admin Suite** has been improved. If an element is not clickable, the regular mouse cursor is displayed instead of the hand cursor. In addition, the left and the right side of the list now show the same effects on click and hover.

#### Unified height of data fields (#649653)

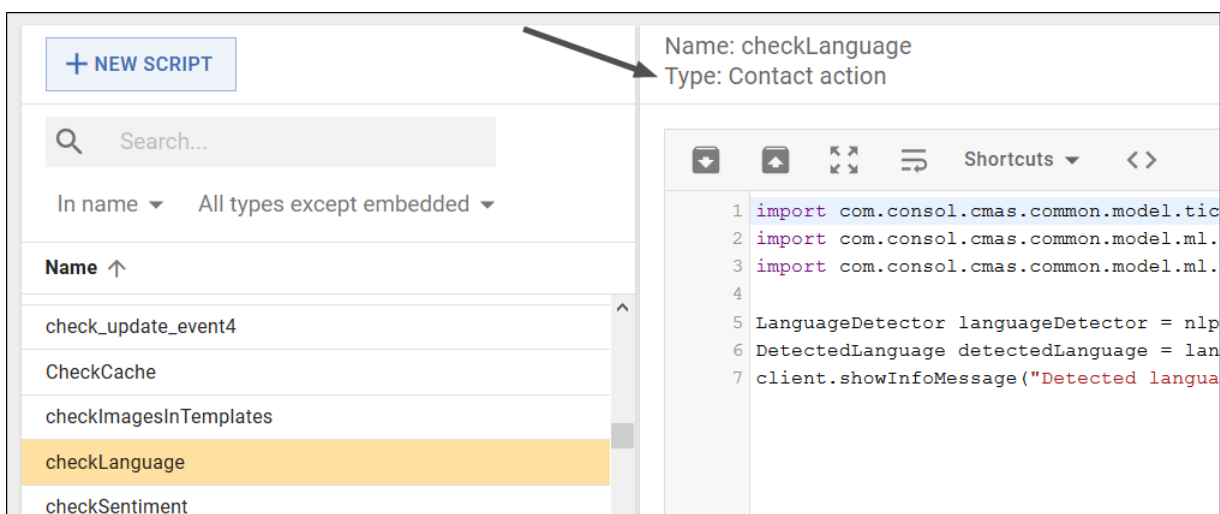
The height of ticket and customer data fields displayed in tickets in the **Web Client** has been unified.

#### Layout of settings in recent changes widget improved (#649743)

The layout of the selector *All actions / User actions only*, which is displayed when clicking the tool icon in the recent changes widget of the **Web Client** has been improved. The options are now displayed one below the other.

#### Script type added to script editor header (#649874)

The header above the script editor on the *Scripts* page of the **Web Admin Suite** now shows the script type below the script name.





### 5.3.2 Fields used in activity forms not required anymore (#645080)

Fields which are used in activity forms are not required anymore in the queues which use the workflow where the activity forms are present. This enables use cases where activity forms are used to set data belonging to the target queue before changing the queue of a ticket or creating a child ticket. Therefore, there is no automatic assignment anymore of the respective field groups in the following places of the **Web Admin Suite**:

- *Queues* page when selecting a workflow for the queue.
- *Workflows* page when adding an activity form to a workflow which is assigned to a queue already.
- *Activity forms* page when adding new fields to an activity form which is already used in a workflow which is assigned to a queue.

On the *Queues* page, the respective field groups are suggested instead, see [Queues added to the Web Admin Suite \(#648417, #628590\)](#). On the *Workflows* and *Activity forms* pages, a dialog where the user can decide whether he wants to automatically assign the field groups to the affected queues is displayed after clicking the update button. This dialogue is only displayed once, directly after performing the change.

In the **Web Client**, the activity form is displayed with all its fields. The values are saved to the ticket if the field group is assigned to the queue.

### 5.3.3 Embedded scripts shown on *Scripts* page (#646961)

Embedded scripts, i.e. scripts which are attached to workflow elements, can now be viewed and modified on the *Scripts* page of the **Web Admin Suite**. By default they are hidden; the user can display them by selecting the option *Embedded in workflow* in the script type filter above the script table. The default filter option has been renamed to *All types except embedded* to indicate that the embedded scripts are not displayed directly.

The table shows the following information for these scripts:

- **Name:** Path to the workflow element which the script belongs to
- **Type:** Usage of the script. This can be activity script, activity visibility script, activity form initialization script, activity form visibility script, trigger script, trigger initialization script.



Only the deployed version of the embedded script is displayed, i.e. if the script has been modified in a workflow version which is saved, but not yet deployed, the script content belonging to the last deployed version of the workflow is displayed.



Changes to embedded scripts become effective immediately. They work in the same way as other scripts, so there is no versioning and no workflow deployment is required. Therefore, you can only modify embedded scripts if the development mode is active for the workflow editor, see [Workflow management added to the Web Admin Suite \(#646446\)](#). If the default deployment setting *Strict versioning* is selected, an information message is displayed in the footer of the script details and the script cannot be modified.

### 5.3.4 Third party library OSHI updated (#647272)

The third-party library OSHI has been updated from version 3.9 to version 5.8.1. This solves issues with blank **Web Admin Suite** dashboards which could occur when running **ConSol CM** on specific Linux distributions.

### 5.3.5 Title fields removed from available search columns (#647810)

Data fields which are annotated as `text-type = "title"` are not shown in the column selector of the detailed search in the **Web Client** anymore. Therefore, these fields cannot be added as columns of the detail search. They now are handled in the same way as label fields.

### 5.3.6 Password fields removed from available search columns (#647980)

Data fields which are annotated as `text-type = "password"` and `contact authentication` are not shown in the column selector of the detailed search in the **Web Client** anymore. Therefore, these fields cannot be added as columns of the detail search.

### 5.3.7 Web Admin Suite operations optimized (#648184)

Several **Web Admin Suite** operations have been optimized to improve the performance and avoid unnecessary log entries related to events.

### 5.3.8 Queues added to the Web Admin Suite (#648417, #628590)

The **Web Admin Suite** has been enhanced by adding the section *Queues* located in the menu item *Cases*. It provides the same functionality as the *Global configuration -> Queues* section in the **Admin Tool**.

The queue details are managed in six tabs: *Basic data*, *Scripts and templates*, *Case fields*, *Customers*, *Text classes* and *Projects*. If a setting made in one tab causes fields in another tab to be required, the respective tabs are displayed in red and have an asterisk.

Several improvements have been made:

- It is possible to change the workflow and the customer assignment as long as there are no tickets in the queue.
- It is not required anymore to assign all the ticket field groups which are used in activity forms in the queue's workflow. These fields are now highlighted in orange, marked with asterisk, and a message explaining that their assignment is optional is displayed. You can select them easily by entering \* in the search field and selecting the checkbox directly below the search field. Also see [Fields used in activity forms not required anymore \(#645080\)](#).
- It is possible to unassign ticket field groups from the queue even they contain tickets which have values set for fields from the field group. If such a field group is unassigned, its fields are not displayed in tickets anymore, but the field values are not deleted.
- The checkbox to enable the queue has been removed. Instead, queues are enabled / disabled using inline actions as other objects in the **Web Admin Suite**.
- The queue description and ticket label do not have a "technical name" anymore. Instead, only localizations are used. Therefore, these fields work in the same way as other objects of the **Web Admin Suite**. It is now possible to completely remove the description and label.

### 5.3.9 Support for activity form descriptions in prefill script added for **CM/Track** (#649241)

The feature to set the descriptions of activity forms in the prefill script, which was added for the **Web Client** in [New way of providing descriptions for activity forms \(#634919\)](#), has been extended to **CM/Track**. The procedure is the same as for the **Web Client**. Nevertheless, the method in the prefill script needs to be adapted to use the request locale.

Example:

```
controlForm.setCustomDescription(templateService.mergeAndInlineImages("template name", RequestLocale.get(), ticket.name))
```

### 5.3.10 Log message about notification email failure improved (#649255)

The message which is written to the log files, if a notification about an email which exceeds the maximum allowed size is received cannot be sent due to a missing From address, has been modified. It now refers to the From address set in the template `mail-receive-too-large`, and the system property `mail.from` from the module `cmweb-server-adapter` which is used as a fallback.

### 5.3.11 Contact and resource IDs added to the DWH (#649261, #649262, #649931)

The DWH has been extended by the new column `core_id` in the resource and contact table. This column holds the same IDs as are used in the **Web Client**. Therefore, it is now possible to create direct links to contacts and resources in the **Web Client** from reports, e.g. using **CM/EBIA**.



After updating to **ConSol CM** version 6.14.0.2, the new columns need to be filled. A task script for this purpose is created automatically during the update. The script is called `6.14.0.2_postUpdate_fillUnitAndResourceCoreIdsToDWH` and can be executed manually after the update.

### 5.3.12 From address for notifications about assignee changes modified (#649274)

The From address which is used for email notifications about changes to the assignee of a ticket has been modified. The From address is retrieved from the system property `mail.notification.sender` from the module `cmas-core-server`. If this property is not set, the address defined in the `From` tag of the corresponding email template (`engineer-assigned-default-mail` or `engineer-removed-default-mail`) is used. If this is not set either, the values of the system property `mail.from` from the module `cmweb-server-adapter` is used.

### 5.3.13 Property added to XML configuration files (#649965)

The entry `<property name="javax.xml.bind.JAXBContextFactory" value="com.sun.xml.bind.v2.ContextFactory"/>` has been added to all XML configuration files to avoid JAXB errors when generating DOCX documents after updating to JBoss version 7.3.9.

### 5.3.14 Email properties handling improved (#650036)

In the **Admin Tool**, it is possible to provide the user name and password for the outgoing email connection directly in the *Outgoing email connector* field (system property `mail.smtp.email`), instead of the *Outgoing email user (optional)* field (property `mail.smtp.email.user`) and the *Outgoing email password (optional)* field (property `mail.smtp.email.password`). This configuration will not be supported in the **Web Admin Suite**, where the user name and password will need to be written to the corresponding fields.

During the update to **ConSol CM** version 6.14.0.2, this change is prepared. If the connection string contains a user name, it is removed from `mail.smtp.email`, and written to `mail.smtp.email.user`, if this property was empty before. If it contains a password, it is removed from `mail.smtp.email`, and written to `mail.smtp.email.password`, if this property was empty before.

The user name and password from `mail.smtp.email` are now ignored, i.e. of the email server requires a user name and password, they need to be set in the corresponding properties.

### 5.3.15 Track user profiles filtered out from notifications (#650126)

User which are created as Track user profiles are not shown in the list of recipients of notifications in the **Web Client** anymore. Therefore, it is not possible anymore to send manual notifications to Track users.

## 5.4 Bugs fixed

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

Number	Description
<b>632843</b>	<b>Exception after transferring contact data</b> If the user clicks the <i>Edit</i> button to modify a contact in the <b>Web Client</b> and then clicks the <i>Transfer data</i> button and performs a data transfer, an exception occurred when the user tried to save the changes to the contact data. This problem has been solved and the exception does not occur anymore.
<b>647813</b>	<b>Missing <i>Cancel</i> button on contact change</b> When changing the main contact of a ticket in the <b>Web Client</b> , the <i>Cancel</i> button was not displayed if the user selected the tab of another customer group and then selected the first tab again. This problem has been solved and the <i>Cancel</i> button is now always displayed.
<b>647963</b>	<b>Incorrect position of busy indicator</b> The busy indicator of the ticket list of the <b>Web Client</b> had an incorrect position or was not displayed at all in some occasions. This problem has been solved and the busy indicator is now always displayed in the center of the opened ticket list group.
<b>649605</b>	<b>Blank page when using recently changed widget on the dashboard</b> If the dashboard of the <b>Web Client</b> contained a recently changed widget which showed an entry about a ticket where the last action was editing an empty comment, an exception occurred and a blank page was displayed. This problem has been solved and the recently changed widget is not affected by edits of empty comments anymore.
<b>649078</b>	<b>Error in DWH live mode with certain date format is used</b> Deserialization errors occurred when the DWH was running in live mode if date fields were filled by script using the class <code>java.sql.Date</code> . This problem has been solved and using this class to set date fields does not cause DWH problems anymore.
<b>649410</b>	<b>Area next to the customer name not clickable in ticket list</b> The area next to the customer name of a ticket in the ticket list in the <b>Web Client</b> was not clickable. This problem has been solved and clicking the blank space next to the customer name now opens the ticket.
<b>649472</b>	<b>List of customer roles cut off</b> The list with the customer roles which can be selected for additional customers in the <b>Web Client</b> was cut off if it contained more entries than space available. This problem has been solved and the list now has a scrollbar if there is not enough space.
<b>649480</b>	<b>Localized labels with special characters blocked transfer to the DWH</b> The transfer to the DWH failed if localized labels contained special characters. This problem has been solved and localized labels do not cause any problems anymore.

Number	Description
649603	<b>Error when receiving email with attached email with colon</b> An error occurred when <b>ConSol CM</b> received an email which included another email as an attachment, which had a colon in the file name (subject of the attached email). This problem has been solved and such an email is now handled correctly.
649639	<b>Problem with camel case in search pattern</b> If a search pattern in camel case was entered in the <i>Available fields</i> section of the <i>Case fields</i> tab of the <i>Activity forms</i> page in the <b>Web Admin Suite</b> , the matching fields were not found even if they contained the same combination of upper and lower case letters. This problem has been solved and using camel case is possible for searching for case fields now.
649714	<b>Typo in German confirmation message</b> The confirmation message which is displayed after starting a task from on the Scripts page of the <b>Web Admin Suite</b> had a small typo which has been corrected.
649859	<b>Deleted attachments added to CM/Archive</b> Deleted attachments which were not yet removed from the database (time configured in the <code>unused.content.remover.*</code> properties) were transferred to <b>CM/Archive</b> . This problem has been solved any deleted attachments are not archived anymore.
649881	<b>Log files not handled correctly by attachment.allowed.types</b> The system property <code>attachment.allowed.types</code> did not handle log files correctly. Attachments with mime type <code>text/x-log</code> were blocked or renamed even if the <code>.log</code> extension was allowed in the system property. This problem has been solved and log files are correctly handled by the property now.
649981	<b>Line breaks lost in notifications</b> Line breaks added to the notification text were not displayed in the notification in the <b>Web Client</b> . This problem has been solved and line breaks are shown now.
650071	<b>CSV export fails if table contains engineer columns</b> The CSV export of tables containing tickets in the <i>Related tickets</i> section of a resource in the <b>Web Client</b> failed if there was a table column with the assigned engineer. This problem has been solved and the export is possible now.
650160	<b>Error when using a template containing ticket link variable</b> When using a template which contains the variable <i>Link to this ticket in the Web Client</i> (" <i>Ticket - Name</i> " displayed) or <i>Link to this ticket in CM/Track</i> (" <i>Ticket - Name</i> " displayed) as a user without administrator permissions in the <b>Web Client</b> , an error occurred. This problem has been solved and these templates can be used by all users now.
650167	<b>Flickering table on Last authentication attempts tab</b> Depending on the screen resolution and browser window size, it could happen that the <i>Last authentication attempts</i> tab of the <i>Authentication protection</i> page of the <b>Web Admin Suite</b> flickered. This problem has been solved and such a flickering does not occur anymore.

## 6. Version 6.14.0.3 (22.12.2021)

Version 6.14.0.3 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.2):

- Merged versions 6.13.0.12 and 6.13.0.13

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



Please check the [Breaking changes and mandatory actions](#).

## 6.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.3 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.

### 6.1.1 System upgrade from 6.14.0.2 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.2 or earlier versions to version 6.14.0.3.

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

### 6.1.2 Support for **CM/Doc** changed (#649135)

**CM/Doc** now supports Microsoft Word 365. Support for Microsoft Word 2003 and 2007 was removed.

### 6.1.3 Java SE 11 support added for **CM/Archive** (#650196)

Java SE 11 is now supported as a runtime environment for **CM/Archive**.

### 6.1.4 Support for MongoDB 5.0.4 added (#650231)

MongoDB 5.0.4 is now supported as a database for **CM/Archive**. Support for the previous version 3.6 is maintained but deprecated.

No further instructions available.



## 6.2 New features

The features newly introduced in this **ConSol CM** version 6.14.0.3 are described in detail in this section.

### 6.2.1 SSO support for **CM/Track** added (#648118)

SSO is now supported for **CM/Track** users. Authentication is based on OpenID Connect and can be set up using Microsoft Active Directory Federation Services or Azure AD.

The user name for authentication is the **CM/Track** login entered in a contact field which is annotated with **username**.

The SSO configuration on the **ConSol CM** side is done using system properties. If there are several instances of **CM/Track**, for example, one for internal customers and one for external customers, it is possible to provide separate configurations for each instance.

The following system properties are used as a default configuration. You can copy them and replace “default” by the name of the instance to create a separate configuration for the instance.

- **oidc.track.enabled.default**: Indicates whether user authentication using SSO via OIDC is enabled.
- **oidc.track.authority.default**: Indicates the URL of the authenticating authority, e.g. ADFS. Example: `https://localhost/adfs`
- **oidc.track.clientId.default**: Indicates the client ID (application ID) of the application, as registered in ADFS or Azure AD.
- **oidc.track.clientSecret.default**: Indicates the secret of the client, generated using ADFS or Azure AD.
- **oidc.track.redirectUri.default**: Indicates the redirect URI where authentication responses can be received. This is either the OIDC endpoint on the CM server running CM/Track or on the load balancer. Example: `http://localhost/track/oidc/`
- **oidc.track.usernameClaim.default**: Indicates the name of the claim in the ID token which is used to map the user to a customer in CM. The value depends on the ADFS settings; the default values are “upn” and “unique\_name”.
- **oidc.track.usernameRegex.default**: Defines the regular expression used for mapping the user name claim values to CM user names.
  - **“upn” as claim**: `(.*)@.*` will transform the claim value “user1@sso.yourdomain.com” to “user1” and look up “user1” in the CM database.
  - **“unique\_name” as claim**: `.*\\(.*)` will transform the claim value “SSO\\user1” to “user1” and look up “user1” in the CM database.

The mapping of the **CM/Track** instance to a configuration is done using the following property:

- **domain.map.for.oidc.config.CONFIGURATION\_NAME**: Enables mapping multiple instances of CM/Track to a specific domain. Replace “CONFIGURATION\_NAME” with the name of the configuration (example: if your CM/Track configuration is called “trackV2customized”, the name of the property is “domain.map.for.oidc.config.trackV2customized”). You can provide several URLs separated by a comma.

The default values are used whenever no configuration-specific property is set.



Check existing **CM/Track** customizations thoroughly before updating. Especially custom variants of the `signin.js` file are potentially affected of a breaking change.

## 6.3 Changes

This section illustrates all relevant software product changes for version 6.14.0.3 of **ConSol CM**.

### 6.3.1 Usability improvements

#### Search field and column selector added to *Cubes* page (#646154)

The *Cubes* page of the **Web Admin Suite** has been extended by adding a search field and a column selector. The search field allows to filter the table by name or status.

#### View creation and editing in tabs (#646156)

The modal window to create and edit a view on the *Views* page of the **Web Admin Suite** is now structured in tabs. The *Basic* tab contains the view name and description, and the *Details* tab the view configuration.

If some mandatory settings are missing in one tab, the tab name is displayed in red with an asterisk.

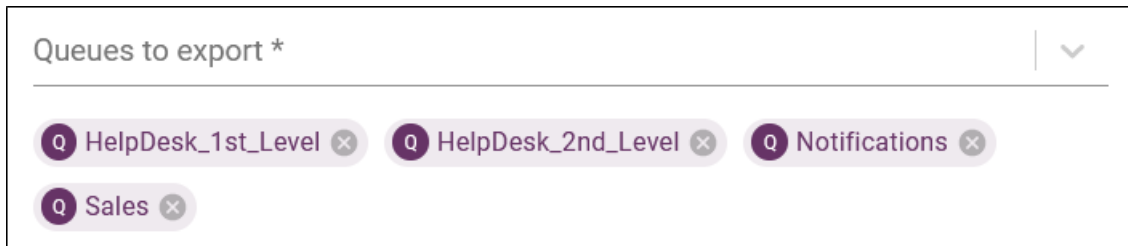
The screenshot shows a 'Create view' modal window with two tabs: 'Basic (\*)' and 'Details'. The 'Basic (\*)' tab is active and contains the following sections:

- Queues**: A section with a 'Select queues \*' dropdown menu. Below it, two selected items are shown: 'HelpDesk\_1st\_Level (helpdesk1)' and 'HelpDesk\_2nd\_Level (helpdesk2)'.
- Scopes**: A section with a 'Select scopes' dropdown menu.
- Fixed filter properties**: A section with two dropdown menus: 'Select list field' and 'Select list value'.
- User specific filter properties**: A section with a dropdown menu.

At the bottom of the modal, there are two buttons: 'CREATE VIEW' and 'CANCEL'.

### Chip icons sorted (#646159)

Chip icons which are displayed in several places of the **Web Admin Suite** to indicate the selected options for a field are now sorted alphabetically.



### View details sections expandable (#647482)

All sections of the view details on the *Views* page of the **Web Admin Suite** can now be expanded and collapsed by clicking anywhere in the section header. Previously, expanding and collapsing was only possible for the first two sections.

### Ability to close dialogs by pressing esc (#647589)


It is now possible to close dialogs in the **Web Admin Suite** by pressing the escape key. Pressing the escape key has the same effect as clicking the *Cancel* button, i.e. the dialog is closed and the changes are not saved.

### Tooltips added to *Export* page (#649303)

The options *Templates*, *Text templates* and *Document templates* on the *Export* page of the **Web Admin Suite** now feature tooltips to illustrate their meaning.

### Maintain selected entry (#649353)

The entry selected in a table on a page of the **Web Admin Suite** is now maintained when the user switches to another page and then goes back to the previous page. The details panel is opened and the page is scrolled to the position of the selected entry.

 This behavior does not apply when switching between the *Case fields*, *Contact fields* and *Resource fields* pages.

### Shortcut for search (#649578)

It is now possible to jump to the search fields of the **Web Admin Suite** by pressing the “f” key. The cursor is placed in the search field, so that the user can directly type the search term without having to click in the field. If there is more than one search field on a page, the field of the table where the mouse cursor is located is focused.

### Filter by task status added (#649962)

The *Tasks* page of the **Web Admin Suite** has been extended by the filter *All tasks* with the options *Running tasks* and *Scheduled tasks*. It allows to display only the tasks which are being executed right now or the tasks which are planned for the future.

### Colors in the **Web Admin Suite** changed (#650094)

Some colors used in the **Web Admin Suite** have been changed after upgrading to the latest version of the third-party library MUI:

- Selected checkboxes now have a blue color instead of pink.
- The button to close an information window, usually called *OK* or *Close*, now has a blue color instead of black. The black color is used only for *Cancel* buttons.

### Styling of the search field improved (#650197)

The search field of the **Web Admin Suite**, which is displayed for example above the tables, now has a white background as the other fields where the user can make an entry.



### Tooltips added to scopes of a view (#650300)

The *Views* page of the **Web Admin Suite** has been enhanced by adding tooltips to the scopes. The tooltips show the path to the scope in the view details, and in the scope selector and scope chips of the view configuration.

### Possibility to submit by pressing the Enter key (#650318)

The **Web Admin Suite** GUI has been extended by the possibility to press the Enter key to submit dialogs and changes done in details panels. The Enter key can be used whenever the focus is either on the primary button or on a select or input field, with exception of text area fields.



The Enter key does not work if the user clicked somewhere else in the dialog or application which causes the focus to be lost.

### Time format for recent changes widgets changed (#650459)

The recent changes widget, which can be displayed on the dashboard of the **Web Client**, has been improved for the German language. The times are now shown in 24h format following the German conventions.

### Default filter for workflows table changed (#650671)

The default filter of the table on the *Workflows* page in the **Web Admin Suite** has been changed. It is now *Newest* instead of *Deployed*, so that the latest version of the workflows is displayed by default in the table. This way, the users can directly see if there is a saved version of a workflow which has not yet been deployed.

## 6.3.2 Distinction of different system types (#645795)

A feature to distinguish different system types has been introduced. Two optional system properties have been added to the module `cmas-core-shared` for this purpose:

- **system.name**: Allows to give the system a name.
- **system.flavour**: Allows to define the system type. Possible values are: “dev”, “test”, “stage” and “prod”.

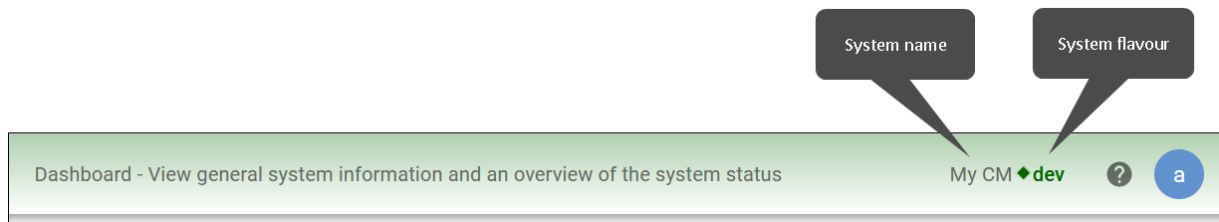
This system properties have different effects.

### 6.3.2.1 Changes to the **Web Admin Suite** (#650195, #650448)

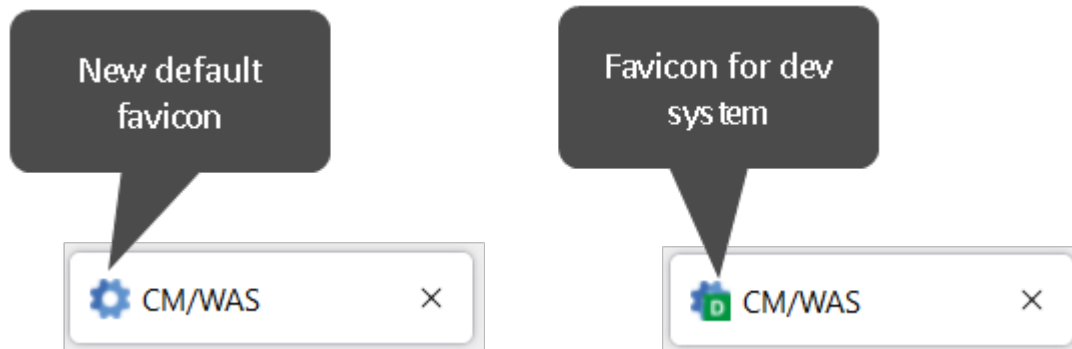
The header of the **Web Admin Suite** pages is colored according to the defined system flavor:

- **dev**: green background
- **test**: lilac background
- **stage**: yellow background
- **prod**: red background

The system name and type are shown next to the help icon.



In addition, the favicon has been changed to a wheel icon which also indicates the system type.



If the properties are not set or have incorrect value, they are ignored.

### 6.3.2.2 Changes to the import feature (#650176)

If the property `system.flavour` is set to “prod”, it is not possible import a scene with the option to delete all existing data selected. If the user tries to perform such an import, the import fails with an error.

## 6.3.3 Sorting within filtered tables improved (#648289)

Sorting within a filtered table in the **Web Admin Suite** has been improved. If the user changes the position of an element on the *Views*, *Lists* or *Roles* page using drag-and-drop or the arrow buttons, the elements which are hidden due to the filter are now ignored.


In addition, drag-and-drop has been added to the table which contains the views of a role which is used as a main role.

## 6.3.4 Email management added to **Web Admin Suite** (#648418, #650036)

The **Web Admin Suite** has been extended with the page *Email configuration* in the *Email* section. The *Email configuration* page allows to manage the accounts and settings for sending and receiving emails with **ConSol CM**. It provides the same functionality as the *Email* section in the **Admin Tool**.

The *Email configuration* page consists of the tabs *Accounts*, *Settings* and *Addresses*. Several improvements have been made:

- Accounts can be deactivated. This sets the property `mailbox.default.task.enabled` to "false". Newly added email accounts are deactivated by default.
- The connection to incoming and outgoing accounts can be tested by clicking the *Test connection* button or icon. If there is an error, the technical error message from the email subsystem is shown. The account can be saved even if the test fails.
- The system properties `mailbox.default.task.delete.read.messages` and `mailbox.default.session.mail.debug` from the module `cmas-nimh` can now be set in the account details (account-specific property) or the *Settings* tab (default property). The settings are called *Delete read message* and *Debug account*. If the default property should be used, you can select *Use global configuration* in the account details.
- STMP with STARTTLS is now enabled on the *Settings* tab by selecting this option in the *Protocol* selector for the outgoing email connection.
- The *Addresses* tab lists all system properties which contain email addresses used as a sender or recipient in notifications from **ConSol CM**. A short description is available and the addresses can be modified.


 If the SMTP connection was provided using a connection string which included the user name and password, the user name and password are written to the correct properties during the update.

### 6.3.5 Extended information about views of a scope (#648458)

The details panel of scopes in workflows in the **Web Admin Suite** has been extended. It now contains a section *Used in views* which indicates the views which a scope belongs to. If a scope does not belong to any view, an information box informing about this fact is shown.

In addition, the workflow validation has been enhanced. The *Validate workflow* button now contains the option *Find scopes without view*. When the user clicks the button, a validation is performed and scopes which are not used in any view are displayed with a red name and a validation message is shown when hovering the scope.

When deploying a workflow with new scopes, a reminder to add the new scopes to a view has been added to the text of the confirmation window. This reminder is only displayed once for each new scope, i.e. the scope will not be mentioned in subsequent deploys of the workflow.

 The purpose of this feature is to provide information about the usage of scopes in views. It is **not** mandatory to use the scope in a view, and it might even not be recommended, as for scopes containing closed tickets.

### 6.3.6 Improved error message in REST API (#648687)

When trying to update a closed ticket using the **ConSol CM** REST API, the error status code 403 with the message "Updates are not allowed because the ticket is in a closed state" is now returned to inform the user about the reason of the failure. Previously, this situation lead to an internal server error with code 500.

### 6.3.7 Method to launch **CM/Doc** added (#649196)

The **ConSol CM** API has been extended with a method to launch **CM/Doc** on the client computer. The method `client.launchCMDocEdit` has been added to `OperationResponseBuilder` for this purpose. This method can be used, for example, in activity scripts which create a document and attach it to the ticket automatically. It opens **CM/Doc** with the document provided as a parameter.

Example script:

```
String attachmentContent = "I am a very long text file attachment for sales ticket";
byte[] bytes = attachmentContent.getBytes();
AttachmentEntry att = new AttachmentEntry();
ContentFile file = new ContentFile("Sales attachment.odt",
    "application/vnd.oasis.opendocument.text", new ByteArrayInputStream(bytes),
    bytes.length);
att.setFile(file);
att.setMimeType("application/vnd.oasis.opendocument.text");
att.setDescription("Description to Sales attachment");
AttachmentEntry newAttr = workflowApi.addAttachment(att);

client.launchCMDocEdit(newAttr.getFile().getId());
```

### 6.3.8 Scene import improved (#649356)

The scene import using the *Import* page of the **Web Admin Suite** has been improved. It is now possible to import large scenes without modifying the `max-post-size` property in the JBoss application server.

### 6.3.9 Basic undo functionality and workflow drafts added (#649986)

The *Workflows* page of the **Web Admin Suite** has been improved by adding a basic undo functionality and workflow drafts.

The user can now undo the deletion of elements (scopes, activities, triggers, activity forms, etc.) in the workflow editor by pressing `ctrl + z`. This keyboard shortcut has been added to the list of shortcuts.

If the checkbox *Automatically create draft version* in the *Settings* dialog is selected, a workflow draft is created automatically with the first important change to a deployed workflow, e.g. adding an element, editing a script or modifying a label, and updated with subsequent changes. When the user leaves the application because the session times out or he closes the browser tab, and logs in again, the information about the draft is displayed when he opens the workflow. The user can choose to open the draft version or to discard it.



For the drafts feature, the workflow must be deployed. This feature does not work for newly created workflows or for workflows which are saved but not deployed.



### 6.3.10 Handling when removing objects referenced in view improved (#650158)

When using the **Web Admin Suite** to remove an object which is referenced in a view, a warning message is now displayed, so that the user is aware that the view will be modified automatically by removing the reference. This applies to the following places:

- **Workflows page:** Deployment of a workflow where a scope, which is used as a scope filter, was removed
- **Queues page:** Removal of a queue, which is used as a queue filter
- **Enumerated lists page:** Removal of a list value, or list category or list which contains a list value, which is used as a fixed or user-specific filter property
- **Hierarchical lists page:** Removal of a list value which is used as a fixed or user-specific filter property
- **Case fields page:** Removal of a case field, or case field group which contains a case field, which holds an enum used as a fixed or user-specific filter property

A hint that the view contains an invalid reference is displayed in the details of the affected view until the data is reloaded.

### 6.3.11 Third party library updated in **CM/Doc** and **CM/Archive** (#650183, #650186)

The following third-party library has been updated in **CM/Doc** and **CM/Archive**:

- **netty:** updated from version 4.1.61 to version 4.1.69



The users must update **CM/Doc** for these changes to become effective.

### 6.3.12 Search for scopes in view configuration improved (#650299)

The scope selector displayed when configuring the scopes of a view on the *Views* page of the **Web Admin Suite** has been improved. The autocomplete search in the selector now covers both the workflow and the scope name.

### 6.3.13 Email script adapted for one-level customer data models (#650327)

The email script `NimhCreateTicket.groovy` which is included in the default scene *Quickstart scene (1-lvl customer model)* has been adapted to the customer data model of this scene. Email handling now works without having to modify the script first.

## 6.4 Bugs fixed

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

Number	Description
<b>642186</b>	<b>Library of markers not shown</b> The library of markers was not shown for some text templates in the <b>Web Client</b> . This affected text templates of the type <i>Include</i> , and text template of the type <i>Letter</i> when the type was changed from <i>Include</i> to <i>Letter</i> . This problem has been solved and the library of markers is now always shown for text templates of the type <i>Include</i> and <i>Letter</i> .
<b>647960</b>	<b>Tooltips cut off</b> The tooltip with the meaning of the overlays, which is displayed in the <b>Web Client</b> when hovering the case icon, and the tooltip which explains the use of the company selector on the <i>Contact</i> page of the <b>Web Client</b> were cut off, so that the beginning of the tooltip text was not shown. This problem has been solved and the whole tooltips are now displayed.
<b>649053</b>	<b>Update button remained active after changing password</b> The <i>Update user</i> button in the details panels of a user on the <i>Users</i> page of the <b>Web Admin Suite</b> remained active when editing the user's password and saving the changes by clicking this button. This problem has been solved and the <i>Update user</i> button is now shown grayed out after clicking it to save changes to the password.
<b>649073</b>	<b>Create case button displayed despite missing permissions</b> The <i>Create case</i> button was displayed on the <i>Contact</i> page of the <b>Web Client</b> , although the user only had permissions to create tickets in a queue without customers. An error occurred when clicking the button. This problem has been solved by not showing the <i>Create case</i> button in such scenarios.
<b>649336</b>	<b>Chip icons too small</b> The chip icons, which are displayed in the <i>Transfer cases</i> window on the <i>Import</i> page of the <b>Web Admin Suite</b> , were too small in some cases. The text was cut off although there was screen space available. This problem has been solved and now the full text of the chip is displayed if there is enough space.
<b>649342</b>	<b>Exception when retrying an email from a deleted case</b> An exception occurred if email sending was retried when the ticket from which the email was sent has been deleted in the meantime. This problem has been solved and instead of an exception a more meaningful message is now written to the log files.
<b>649993</b>	<b>Assigned users and views removed</b> When filtering the table with the assigned users or views on the <i>Roles</i> page of the <b>Web Admin Suite</b> and clicking the <i>Assign users</i> or <i>Assign views</i> button, the assigned users or views, which were filtered out from the table, were not shown as selected in the modal window and removed after saving changes. This problem has been solved and the assigned user or views are now correctly handled in the modal window.

Number	Description
<b>650037</b>	<b>Error when removing relation to contact opened in another tab</b> An error occurred when trying to remove a contact relation on the <i>Contact</i> page of the <b>Web Client</b> for the first time if the related contact was opened in another tab. Removal was possible in the second try. This problem has been solved and such a relation can be removed directly now.
<b>650172</b>	<b>Image from template not visible directly</b> After adding an image to a text template which is used in the description of an activity form in the <b>Web Client</b> , the image was not displayed directly. It was necessary to save the template again to make the image visible. This problem has been solved and images from templates are now available in descriptions of activity forms after saving the template once.
<b>650174</b>	<b>Wrong number of failed attempts</b> The number of failed attempts which is displayed for blocked accounts on the <i>Authentication protection</i> page of the <b>Web Admin Suite</b> could be wrong if many failed attempts occurred, because it was calculated based on the last 100 failed attempts only. This problem has been solved and the <i>Failed attempts</i> column now shows the number of failed attempts after the last unblocking of the account.
<b>650179</b>	<b>Line breaks lost when inserting images</b> When writing an email in the <b>Web Client</b> and inserting an image above a template which starts with one or more empty lines, the line breaks were lost and the image was displayed directly above of the template text following the empty lines. This problem has been solved and empty lines are now preserved when inserting an image above them.
<b>650227</b>	<b>Error when using machine learning on Microsoft SQL Server</b> When using Microsoft SQL Server as a database for <b>ConSol CM</b> , an error could occur when writing data to the machine learning file. This problem has been solved and machine learning now works correctly with Microsoft SQL Server.
<b>650262</b>	<b>Subgroup of text template not imported</b> A subgroup, which was added to an existing text template in the <b>Web Client</b> , was not visible for the text template after importing the scene on another system without deleting the existing data. This problem has been solved and subgroups of text templates are correctly exported and imported now.
<b>650271</b>	<b>Duplicate image in rich text editor on Firefox</b> When using Firefox as a browser, pressing the Enter key after adding an image to the rich text editor of the <b>Web Client</b> resulted in a duplicated image. This problem has been solved and images are not duplicated anymore when pressing the Enter key with the cursor places after the image.

Number	Description
650305	<p><b>Wrong technical name when copying activity</b></p> <p>When copying an activity which has not yet been saved on the <i>Workflows</i> page of the <b>Web Admin Suite</b>, the pasted activity had the wrong technical name. Instead of the name of the copied activity with the suffix <i>_copy</i>, the activity had the default technical name. This problem has been solved and the activity name is now copied correctly even if the workflow has not yet been saved or deployed.</p>
650321	<p><b>Outgoing connections of decision node lost</b></p> <p>After moving a workflow element connected to a decision node on the <i>Workflows</i> page of the <b>Web Admin Suite</b>, it could happen that the outgoing connections of a decision node were misplaced, so that it was not possible to deploy the workflow. This problem has been solved and moving elements connected to the decision node does not affect connections anymore.</p>
650324	<p><b>Button bar on <i>Contact</i> page not responsive</b></p> <p>The button bar on the <i>Contact</i> page of the <b>Web Client</b> was not responsive after clicking the <i>Edit</i> button and canceling the edit to return to the view mode. This problem has been solved and the button bar is now responsive in both the view and the edit mode.</p>
650420	<p><b>Client configuration automatically scrolled to the last file</b></p> <p>On the <i>Client configurations</i> page of the <b>Web Admin Suite</b>, the focus was automatically placed within the last file editor, which resulted in the page being scrolled to the end if the configuration contained more than one file. This problem has been solved and the page is now opened at the beginning.</p>
650479	<p><b>Error when selecting all customer groups</b></p> <p>When selecting the option <i>All customer groups</i> in the customer group filter of the <b>Web Client</b> an error was written to the log files. This problem has been solved and this error does not occur anymore.</p>
650482	<p><b>Broken special characters in ticket selector</b></p> <p>When selecting a ticket to create a ticket relation in the <b>Web Client</b>, special characters from the ticket subject were displayed in HTML encoding. This problem has been solved and special characters are correctly displayed now.</p>
650177	<p><b>Images in activity form description not displayed</b></p> <p>When using a text template for setting the description of an activity form in the <b>Web Client</b>, images included in the text template were not displayed if the text template was not present in the requested locale. This problem has been solved and the image of another locale is now used in this situation, so that the images behave in the same way as the templates.</p>

Number	Description
650519	<b>Incorrect handling of ACFs in workflows during import</b> After importing a scene with a workflow which contained an activity with an ACF to a system where the same ACF was present, the ACF was present in the latest workflow version, but not in the snapshot version which contained the state of the workflow before the import. In addition, when importing a scene, which was exported from a system where an ACF was removed from a workflow activity, the ACF was removed in all versions of the workflow on the target system. Both problems have been solved and ACFs are not removed from old workflow versions anymore.
650555	<b>Palette undocked after saving</b> If the user pinned the palette in the workflow editor of the <b>Web Admin Suite</b> , it was automatically unpinned after deploying the workflow for the first time or saving the workflow. This problem has been solved and save operations do not affect the position of the palette anymore.
650561	<b>Wrong ticket opened after assignment using the ticket list</b> When a user clicked the <i>Assign to me</i> checkmark of a ticket in the ticket list, which was sorted by date in a descending order, instead of the assigned ticket, the ticket below was opened in the main panel of the <b>Web Client</b> . This problem has been solved and the correct ticket is now opened.
650608	<b>Control points in arrows lost after deploy</b> After updating a workflow on the <i>Workflows</i> page of the <b>Web Admin Suite</b> , control points in arrows which connect two workflow elements in the same scope were lost. This problem has been solved and all control points are correctly saved now.

## 7. Version 6.14.0.4 (09.02.2022)

Version 6.14.0.4 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.3):

- None

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



Please check the [Breaking changes and mandatory actions](#).

## 7.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.4 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.

### 7.1.1 System upgrade from 6.14.0.3 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.3 or earlier versions to version 6.14.0.4.

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

### 7.1.2 Script modification requirements

This release features some interface changes in API methods. These changes can either be improvements which offer the potential of simplifying your scripts or breaking changes. **Please be aware that scripts using the respective methods may need adjustments!** The affected methods are listed in the following sections of this document:

- [Ticket link in notifications adapted \(#650422\)](#)
- [API method for retrieve engineers removed \(#650971\)](#)



Please be aware that a few classes were removed completely and from multiple other classes methods were removed. Please ensure before an update that the scripts in your installation are not affected by these removals!

### 7.1.3 Configuration modification requirements

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

- [Deletion of property postActivityExecutionScriptName enabled \(#634737\)](#)

No further instructions available.

## 7.2 New features

The features newly introduced in this **ConSol CM** version 6.14.0.4 are described in detail in this section.

### 7.2.1 Case fields added to the **Web Admin Suite** (#649394)

The **Web Admin Suite** has been extended with the *Case fields* page, which allows to manage case field groups and case field. It provides the same functionality as the *Ticket fields* section in the **Admin Tool**.

The *Case fields* page shows a list of the case field groups on the left. When a group is selected, four tabs are displayed *Fields*, *Basic data*, *Settings* and *Field positioning*. When selecting a field, two tabs are shown for the field: *Basic data* and *Settings*.

The *Contact fields* and *Resource fields* pages, added in [Shared contact and resource field groups](#) (#650236, #650237), have the same structure and features as the *Case fields* page.

Several improvements have been made to improve the usability of the data field administration.

#### 7.2.1.1 General improvements

- **Searching by localized names**  
It is now possible to search for technical and localized names of data fields. The search on group level also works for fields, i.e. you can enter the name of a field in the search bar above the field groups to display only the field groups which contain a field with the provided name.
- **Copying field groups**  
There is an inline button to copy a field group with all its settings, fields and field settings.
- **Positioning GUI**  
The fields of a field group can be positioned using drag-and-drop in the *Field positioning* tab. This GUI allows to order the fields (annotation **position**) and to determine the number of columns (annotation **colspan**) and rows (annotation **rowspan**) which they should span. Upon saving the layout in the *Field positioning* tab, the annotation values are updated accordingly.



You can only use the *Field positioning* tab for standard layouts, i.e. layouts where each position is assigned to one data field only and there are no empty rows. If your layout contains special cases, e.g. two fields with the same position, one shown in edit mode and one shown in view mode, you need to set the position in the *Settings* tab.

#### 7.2.1.2 Changes regarding annotations

Annotations are managed in the *Settings* tab of the respective field group or field. The following improvements have been made in this area:

- The annotation is displayed with a speaking name. The technical annotation name is displayed as a tooltip.
- The annotation values are displayed with speaking names. If there is a set of predefined values, a select is used instead of a text field.
- There is a search field which allows to filter the annotations by technical name (old annotation) and translation.
- There is a filter to display only the assigned annotations. It is activated by default.



- The annotations are grouped in several sections according to their purpose.
- The annotations are filtered, so that only annotations which are relevant for the type of data field are shown.
- If an annotation depends on another annotation being set, it is shown once this annotation is set.
- If a custom value was set for an annotation, it is displayed. Custom values can be created by typing the value and clicking the *Create* option in the selector.



Custom annotations are shown in the **Web Admin Suite** but they cannot be created there.

## 7.2.2 Shared contact and resource field groups (#650236, #650237)

The **Web Admin Suite** has been extended by the pages *Contact fields* in the *Contacts* section and *Resource fields* in the *Resources* section. They have the same structure as the page to manage case field groups, see [Case fields added to the Web Admin Suite \(#649394\)](#) and allow to create and manage contact and resource field groups. These field groups are assigned to the respective data models in a similar way as case field groups to queues.



The pages *Contact model* and *Resource model* will be added to the **Web Admin Suite** for this purpose in a future release.

This enables the following improvements:

- A contact field group can be used in several company and / or person objects.
- A resource field group can be used in several resource types.
- Scripts and DWH reports can be used for several contact objects or resource types.



If you want to use a field from a shared contact field group in **CM/Doc**, you need to reference the field using its complete path, which includes the name of the contact object and the field group.

- **Correct reference:** ticket\_queue\_fields\_contacts\_member\_MyContactObject\_MySharedGroup\_MySharedField
- **Incorrect reference:** ticket\_queue\_fields\_contacts\_member\_MySharedField

## 7.3 Changes

This section illustrates all relevant software product changes for version 6.14.0.4 of **ConSol CM**.

### 7.3.1 Usability improvements

#### Improved search for lists (#649491)

The search on the *Lists* page of the **Web Admin Suite** has been improved. The search on the category and list level now also works for technical and localized list values, i.e. you can enter the name of a value in the search bar above the list categories or lists to display only the list categories or lists which contain a value with the provided name. In addition, you can search by list name using the search field above the list categories.

This makes it easier to locate the list which a certain value belongs to, and to find a list if the list category is not known.

#### User-friendly names for technical originators of attachments (#649633)

The *Attachments* table in the **Web Client** has been improved for attachments which are added by a task or email. Instead of the technical names of the originator, it now shows the user-friendly names "system task" and "incoming email."

### 7.3.2 Performance improvements

#### Better performance when adding content to a ticket (#650904)

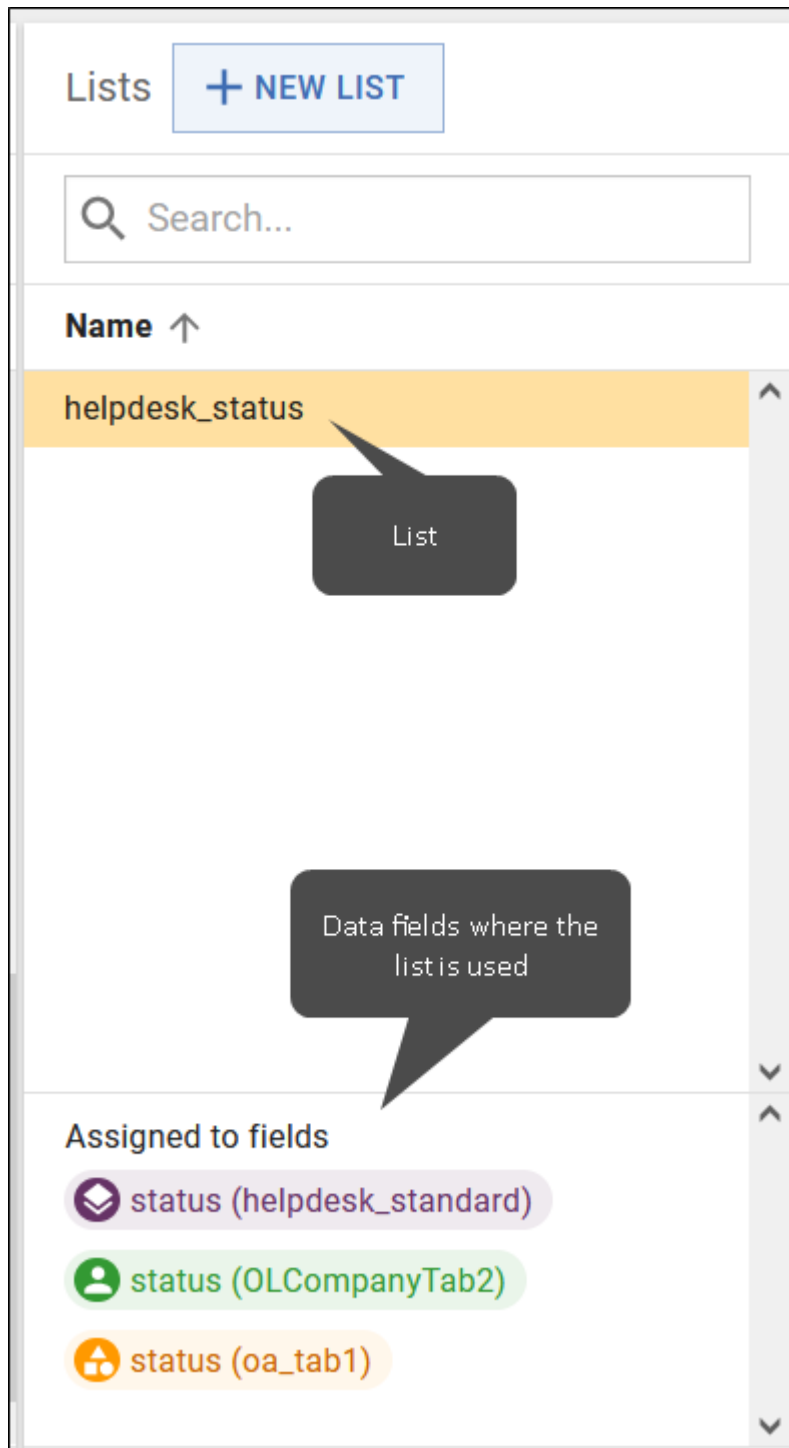
When clicking the *Email*, *Comment*, *Attachment* or *Time booking* button in the header of the *History* section of a ticket in the **Web Client** or switching between the tabs once the editor is opened, the ticket history is not reloaded anymore, so that the editor is opened more quickly.

### 7.3.3 Deletion of property `postActivityExecutionScriptName` enabled (#634737)

The system property `postActivityExecutionScriptName` from the module `cmweb-server-adapter` can now be deleted from the **Web Admin Suite** and the **Admin Tool**.

### 7.3.4 Showing the usage of lists (#647611)

The *Sorted lists* page of the **Web Admin Suite** has been enhanced by an option to show the usage of a list for data fields of the type *Enumerated list* and *Hierarchical list*. The lists panel has been extended by the *Assigned to fields* section, which is displayed when clicking a list. This section shows all the fields which use the list. Case fields are shown in lilac, contact fields in green and resource fields in orange. The user can click a field to open the respective page (*Case fields*, *Contact fields* or *Resource fields*), where the affected field is already preselected. Clicking the browser's back button brings the user back to the *Sorted lists* page.

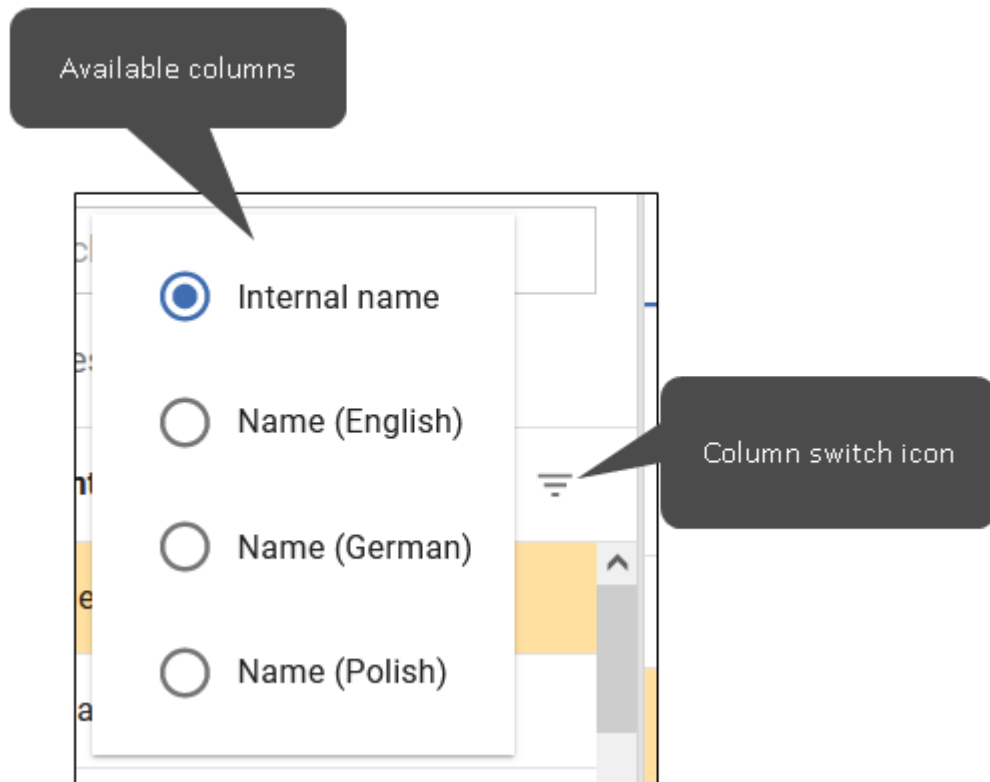


### 7.3.5 Bulk download for email backups (#649352)

The *Email backups* page of the **Web Admin Suite** has been enhanced with a feature to download several email backups at once. The user can select several table rows and click the *Download* icon in the bulk operations area displayed at the beginning of the table. This creates a zip file which contains the email backups.

### 7.3.6 Language switch for tables (#650322)

The data tables in the **Web Admin Suite** have been enhanced by a language switch, which is available when there is not enough space to display columns for the different languages, i.e. when the details panel of a table is opened and all columns except for the internal name are hidden, and on the data fields pages. The switch allows to show a column with localized names instead of the one with the internal names.



The switch icon is shown when hovering the respective column or column header.

If the localized name is empty for a table entry, the following syntax is used instead: (empty) (internal name)

This change affects the following tables:

- Views
- Sorted lists (*List values* panel)
- Hierarchical lists
- Case fields
- Queues
- Contact fields
- Resource fields

### 7.3.7 Ticket link in notifications adapted (#650422)

The link to a ticket which can be displayed in notifications in the **Web Client** has been adapted. The link text still uses the ticket name, but the link itself uses the ticket ID. This is due to the fact that the ticket ID is now used in the **Web Client** URLs.



If you use a script to create notifications, you need to replace `.withOrigin(ticket.name)` by `.withOrigin(Long.toString(ticket.id))`, when setting the source ticket in `broadcasterService.notificationBuilder`.

### 7.3.8 Deletion of used activity forms blocked (#650581)

It is not possible anymore to delete an activity form which is used in any workflow version. When trying to delete an activity form which is in use in the **Web Admin Suite**, a modal window with the affected workflows and the type of workflow version (deployed, saved, snapshot or draft) is shown. The user needs to remove the activity form from the deployed, saved or draft version and delete all affected snapshots.

### 7.3.9 Handling of activity forms streamlined (#650603)

The handling of activity forms has been streamlined. Modifying required fields on the *Activity forms* page of the **Web Admin Suite** is now only possible if *Development mode* is selected as *Deployment mode* in the *Settings* dialog of the *Workflows* page. If *Strict versioning* is selected, the *Required fields* tab of the *Activity forms* page is read-only and serves information purposes only. An information message is displayed above the activity selector in this case.

Therefore, changes done to the required fields of activity forms are now always bound to a workflow version in strict versioning mode. This is similar to the handling of embedded scripts, which can be edited on the *Scripts* page only if the development mode is active.

Changes done to other data of activity forms (name, description, assigned fields) are handled as previously, i.e. these changes can be made regardless of the deployment mode on both the *Activity forms* and the *Workflows* page.

### 7.3.10 Search in the **Web Admin Suite** improved (#650649, #650415)

The search features in the **Web Admin Suite** have been improved to make it easier to locate elements in tables and transfer lists.

The search now works as follows:

- If the user enters one search term, which might include punctuation marks, all occurrences which contain the exact string are found.  
Example: A search for `cm_customer` will find `cm_customer_new` but not `cmcustomer`.
- If the user enters several search terms separated by spaces, all occurrences which contain all search terms are found. It does not matter if the terms are present in this order or separated by spaces or punctuation marks in the result.  
Example: A search for `cm customer` will find `cm_customer`, `cmcustomer` and `customerCm`.

Search is always case insensitive.

### 7.3.11 Draft feature extended to saved workflows (#650651)

The workflow drafts feature, which was introduced for deployed workflows in [Basic undo functionality and workflow drafts added \(#649986\)](#), has been extended to saved workflows. If the checkbox *Automatically create draft version* in the *Settings* dialog is selected, a workflow draft is created automatically with the first important change to a deployed or saved workflow, e.g. adding an element, editing a script or modifying a label, and updated with subsequent changes. When the user

leaves the application because the session times out or he closes the browser tab, and logs in again, the information about the draft is displayed when he opens the workflow. The user can choose to open the draft version or to discard it.



For the drafts feature, the workflow must be deployed or saved. It does not work for newly created workflows.

### 7.3.12 Third-party library log4j updated (#650721)

The third-party library log4j has been updated from version 2.17.0 to version 2.17.1 in all **ConSol CM** components which use this library.

### 7.3.13 API method for retrieve engineers removed (#650971)

The method `EngineerService.getByCriteriaWithoutIndex` has been removed from the **ConSol CM** API because it is not needed anymore.

## 7.4 Bugs fixed

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

Number	Description
<b>642455</b>	<b>Error after changing visibility level</b> When adding a comment to a ticket in the <b>Web Client</b> , changing the history display options (visibility level, type of entries to be shown and sorting) from the default ones to other ones, adding another comment and changing the visibility level back to <i>Extended</i> , an error occurred. This problem has been solved and changing the display options does not cause problems anymore.
<b>648735</b>	<b>Error when entering wrong user name during password reset</b> An error occurred when entering the wrong user name on the <b>Web Client</b> page to provide a new password, which is displayed after opening the password reset link. This problem has been solved and now the correct error message is displayed in this case.
<b>649411</b>	<b>Missing border in template selector</b> When the template selector, which is shown when clicking <i>Add template</i> above the comment and email editor of the <b>Web Client</b> , opened to the top, the bottom border of the selector was missing. This problem has been solved and the selector is now displayed correctly when opening to the top of the <i>Add template</i> field.
<b>650438</b>	<b>Login to CM/Archive failed with special characters</b> If the password to log in to <b>CM/Archive</b> contained special characters and the default charset of the database was not UTF-8, or if the password contained a colon, the login failed. This problem has been solved and login is now possible if the password contains special characters.
<b>650581</b>	<b>ACF used in workflow snapshot could be deleted</b> It was possible to delete an ACF which was used in an old workflow version. This problem has been solved and deleting an ACF which is in use in any workflow version is not possible anymore.
<b>650637</b>	<b>Missing toast message about validation errors</b> When clicking the <i>Save</i> or <i>Save as new</i> button to save a workflow with validation errors on the <i>Workflows</i> page of the <b>Web Admin Suite</b> , the validations errors were highlighted in red but there was no toast message. This problem has been solved and the toast message about workflow validation errors is now displayed when clicking any of the save buttons.
<b>650647</b>	<b>Overlap in hierarchical list panel</b> The arrow icon which is displayed on the right side of list values which have a sublevel on the <i>Hierarchical lists</i> page of the <b>Web Admin Suite</b> overlapped the name of long list values if there was not enough space. This problem has been solved and the name of the list value is now cut off with three dots if it does not fit.

Number	Description
650786	<p><b>Misplaced column list</b></p> <p>The column list, which is shown for tables in the <b>Web Admin Suite</b> after clicking the column selector icon, was placed at the top left corner of the screen instead of next to the column selector icon when the edit panel was opened and closed while the column list was shown. This problem has been solved and the column list is displayed next to the column selector icon now.</p>
650826	<p><b>Misplaced cursor in long scripts</b></p> <p>In long scripts on the <i>Scripts</i> page of the <b>Web Admin Suite</b>, the cursor was misplaced, so it was displayed above the line where it should be located. This problem has been solved and the cursor is properly placed now.</p>
650870	<p><b>Tooltip cut off</b></p> <p>The tooltip which shows the description of an activity in <b>CM/Track</b> was cut off at the top for long descriptions. This problem has been solved and the complete description is visible now.</p>
650888	<p><b>Focus lost when entering a password containing f</b></p> <p>When entering the f character in a password field in the <b>Web Admin Suite</b>, e.g. on the <i>Users, Email configuration</i> or <i>System properties</i> page, the focus was lost and it was not possible to continue typing the password. This problem has been solved and passwords containing the character f can now be entered correctly.</p>
650896	<p><b>Incorrect layout when rowspan is set</b></p> <p>When one field in a row of fields has the annotation <b>rowspan</b>, the field layout in the <b>Web Client</b> is incorrect because the columns with the fields are too small and there is empty space between the columns. This problem has been solved and setting <b>rowspan</b> does not cause layout issues anymore.</p>
650909	<p><b>Name of the field group not shown in confirmation dialog</b></p> <p>When adding new fields, which belong to a field group which is not yet assigned to the affected queues, to an activity form on the <i>Activity forms</i> or <i>Workflows</i> page of the <b>Web Admin Suite</b>, a confirmation window to assign the field groups to the affected queues is displayed. This window showed the variable <code>{name}</code> instead of the name of the field group. This problem has been solved and the name of the field group is now displayed in the dialog.</p>
650992	<p><b>Broken layout when closing MLA selector</b></p> <p>When clicking the x icon to close an MLA selector without selecting a value in a ticket, contact or resource in the <b>Web Client</b>, the selector was not closed but shown with a broken layout. This problem has been solved and clicking the x icon now closes the selector correctly.</p>



Number	Description
651030	<p><b>Missing toast message for email subject pattern mismatch</b></p> <p>When the user tried to save the email subject pattern in the <i>Settings</i> tab of the <i>Email configuration</i> page in the <b>Web Admin Suite</b>, and the pattern for incoming email subjects did not match the template for outgoing email subjects, a red toast message which contained a technical property instead of the text of the warning was displayed. This problem has been solved and the correct warning text is now shown.</p>
651052	<p><b>Error when using a jump-out node defined in the Web Admin Suite</b></p> <p>When selecting a target jump-in node for a jump-out node in the <b>Web Admin Suite</b> and deploying the workflow, an error occurred when executing the activity of the jump-out node in the <b>Web Client</b>. This problem has been solved and the target jump-in nodes defined in the <b>Web Admin Suite</b> now work as expected. The asterisk indicating a required field has been removed from the <i>Target jump-in node</i> field because it is not required, and the selected value can now be removed from the field.</p>
651075	<p><b>Error when replying to an email with &amp; or &lt; character in styles</b></p> <p>When replying to an email, which contains styles where the &amp; or &lt; character is present inside a comment, in the <b>Web Client</b>, an error occurred. This problem has been solved and these characters are now escaped inside style comments, so that email sending works correctly.</p>
651111	<p><b>Visibility script of jump-out node not exported</b></p> <p>The visibility script which can be added to jump-out nodes on the <i>Workflows</i> page of the <b>Web Admin Suite</b> was not included in the PAR file when exporting the workflow. Therefore, the visibility script was not present after importing the PAR file with the workflow. This problem has been solved and visibility scripts of jump-out nodes are now exported correctly.</p>
651185	<p><b>Email processing failed due to decoding problem</b></p> <p>It could happen that incoming emails could not be processed in <b>ConSol CM</b> due to a problem when decoding Base64 images included in the email. This problem has been solved by updating the underlying Commons Codec library, so that such emails are imported correctly into <b>ConSol CM</b>.</p>
651215	<p><b>Ticket reload after clicking the assignment link in the ticket list</b></p> <p>When clicking the <i>Assign to me</i> checkmark in the ticket list of the <b>Web Client</b>, the ticket was reloaded, which could cause scripts to be executed twice. This problem has been solved and clicking the checkmark does not cause ticket reloads anymore.</p>

## 8. Version 6.14.0.5 (18.03.2022)

Version 6.14.0.5 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.4):

- None

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



Please check the [Breaking changes and mandatory actions](#).

## 8.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.5 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.

### 8.1.1 System upgrade from 6.14.0.4 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.4 or earlier versions to version 6.14.0.5.

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

### 8.1.2 Configuration modification requirements

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

- [Automatic expiry of CM/EBIA tokens added \(#651094\)](#)

No further instructions available.

## 8.2 New features

The features newly introduced in this **ConSol CM** version 6.14.0.5 are described in detail in this section.

### 8.2.1 Contact data models added to the **Web Admin Suite** (#650624)

The **Web Admin Suite** has been extended by the page *Contact models* which allows to manage data models for contacts. The details of the contact models are structured in tabs. The *Basic* tab contains the basic settings of the data model and the *Person* and / or *Company* tab contain the settings of the respective contact object. These settings are distributed in three sections: *Basic*, *Field groups* and *Templates*.

The most important innovations are:

- A contact field group can now be used in several data models, see also [Shared contact and resource field groups \(#650236, #650237\)](#). Nevertheless, it is not possible to use the same field group twice in the same model, i.e. both for the company object and for the person object.
- Contact objects (person or company) are enabled and disabled in the *Basic* tab of the contact model. If *Contact model contains persons* is checked, the *Person* tab is shown, and if *Contact model contains companies* is checked, the *Company* tab is shown. For one-level models, unneeded settings are not displayed.
- It is possible to unassign field groups even if the fields are in use in objects. Unassigning a field group has the same effect as deactivating it, i.e. the fields are not shown in the **Web Client** anymore.

The following usability improvements have been made:

- There are *Edit* icons next to assigned field groups and templates which allow to jump to the corresponding item on the *Contact fields* or *Templates* page to modify it.
- There are *Create* buttons in the *Field groups* and *Templates* sections which allow to jump to the corresponding creation window on the *Contact fields* or *Templates* page.
- The *Basic* tab of the contact model contains links to the customer groups which use the model.
- The *Default* template in the *Templates* section of a contact object is highlighted in orange to indicate that it should be provided in order to display the contacts correctly in the **Web Client**. This is also explained in an info box shown when no default template has been selected.

### 8.2.2 Resource data models added to the **Web Admin Suite** (#650731)


The **Web Admin Suite** has been extended by the page *Resource models* which allows to manage data models for resources. The page contains a table with the resource categories. The details of a resource category are structured in tabs. The *Types* tab contains a table with the resource types which belong to the category and the *Basic* tab contains the settings of the resource category. Each resource type contains four tabs: *Basic*, *Field groups*, *Templates* and *Actions*.

The most important innovations are:

- A resource field group can now be used in several resource types, see also [Shared contact and resource field groups \(#650236, #650237\)](#).
- It is possible to unassign field groups even if the fields are in use in objects. Unassigning a field group has the same effect as deactivating it, i.e. the fields are not shown in the **Web Client** anymore.

The following usability improvements have been made:

- There are *Edit* icons next to assigned field groups and templates which allow to jump to the corresponding item on the *Resource fields* or *Templates* page to modify it.
- There are *Create* buttons in the *Field groups* and *Templates* tabs which allow to jump to the corresponding creation window on the *Resource fields* or *Templates* page.
- The *Default* template in the *Templates* section of a resource type is highlighted in orange to indicate that it should be provided in order to display the resources correctly in the **Web Client**. This is also explained in an info box shown when no default template has been selected.

 Resource relations cannot be created on the *Resource models* page. The page *Resource relations* will be added for this purpose to a future **ConSol CM** version.

## 8.3 Changes

This section illustrates all relevant software product changes for version 6.14.0.5 of **ConSol CM**.

### 8.3.1 Usability improvements

#### Unneeded headers removed (#646155)

The headers which stated the name of the entity in details panels in the **Web Admin Suite** have been removed because they were not needed. This change affects the following pages:

- Users
- Queues
- Activity forms

#### User duplication improved (#650552)

The modal window which is opened when duplicating a user on the *Users* page of the **Web Admin Suite** has been improved. The tab which does not correspond to the user type (*User profile* or *Portal profile*) of the duplicated user is now grayed out, so that the user type cannot be switched accidentally during duplication. In addition, the save button now has the label *Create user* if a regular user is created, and *Create portal profile* if a portal profile is created.

#### Styling of *Close* button improved (#650650)

The *Close* button of the modal window which contains the documentation of a system property on the *System properties* page of the **Web Admin Suite** is now styled in blue with a white background to be consistent with similar buttons.

#### Search improvement applied to the *Authentication protection* page (#650970)

The search improvements introduced in [Search in the Web Admin Suite improved \(#650649, #650415\)](#) have been applied to the *Authentication protection* page of the **Web Admin Suite**.

#### Explanations for the values of *Indexed for search* setting added (#651224)

The values of the *Indexed for search* setting on the *Case fields*, *Contact fields* and *Resource fields* pages of the **Web Admin Suite** now have a short explanation which is displayed in an info box below the setting after selecting a value.

#### Integration of queues and case fields improved (#651277)

The *Case fields* tab of the *Queues* page of the **Web Admin Suite** has been enhanced by improving the integration with the *Case fields* page:

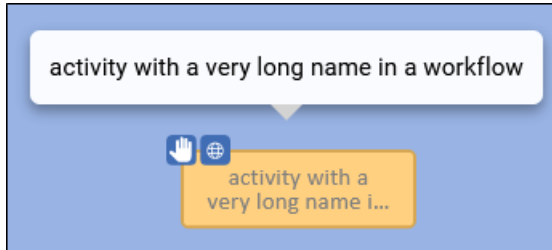
- The *Edit group* icon in the list of assigned field groups allows to jump to the *Case fields* page with the group selected.
- The *New field group* button above the lists allows to create a new case field group on the *Case fields* page.

#### Sorting of view settings (#651303)

The view settings (queues, scopes, filter criteria) in the details panel of the *Views* page in the **Web Admin Suite** are now sorted alphabetically for better readability.

### Tooltip for long activity names in workflows (#651373)

Long activity names now have a tooltip in the workflow editor of the *Workflows* page of the **Web Admin Suite**, so that the complete name can be viewed without additional clicks. The tooltip is only displayed when hovering the activity; it disappears once the user starts dragging it or clicks the activity.



### Validation message when duplicating field group (#651411)

When duplicating a field group on the *Case fields*, *Contact fields* or *Resource fields* page of the **Web Admin Suite** and providing the name of an already existing field group, a validation message is now shown below the *Internal name* field, and the *Create field group* button is grayed out until a valid name is entered. Previously, an error toast message was shown after trying to save the field group.

### Duplicated view created directly below (#651421)

When duplicating a view on the *Views* page of the **Web Admin Suite**, the new view is now created directly below the duplicated view even if the row of the duplicated view was not selected.

### Improved validation message for incorrect parent field (#651443)

When selecting a parent field, which is already referenced by another field, for a data field of the type *Columns* (struct) on the *Case fields*, *Contact fields* or *Resource fields* page of the **Web Admin Suite**, instead of a generic error message, an explanatory validation message is now shown below the *Parent field* selector. The validation message applies to both the case when the user does not select a parent field and the case when the user selects an incorrect parent field.

### Annotation group shown in tooltip (#651662)

The tooltip which is displayed when hovering the name of a setting in the *Settings* tab of the *Case fields*, *Contact fields* and *Resource fields* pages of the **Web Admin Suite** now includes both the technical name of the annotation and the name of the annotation group.

### Default value for new data fields changed (#651706)

When creating a new data field on the *Case fields*, *Contact fields* and *Resource fields* pages of the **Web Admin Suite**, the type *Text (short)* is now preselected instead of the type *Text*, because it is used more frequently.

### Created field opened directly (#651716)


When creating a new data field on the *Case fields*, *Contact fields* or *Resource fields* pages of the **Web Admin Suite** by either using the create function or the duplicate function, the details panel of the newly created field is now opened directly, so the user does not need to click the field again to make further changes.

### 8.3.2 Log level for incorrect attachment types changed (#650476)

The entry, which is written to the log files when there is an attempt to add an attachment with a file extension which is not allowed by the system property `attachment.allowed.types` of the module `cmas-core-server`, now has the log level WARN instead of ERROR because the **ConSol CM** works as expected.

### 8.3.3 Message before logging in to **CM/Track** with SSO configurable (#650642)

When SSO is used for authentication in **CM/Track** and the user logs in or is logged out due to a session timeout, the login screen with the message “No active session found. Please log in.” is briefly shown. The message can be configured in the `public.json` file of the client configuration. The keys `signin_info_unauthorized_header` and `signin_info_unauthorized_text` were added for this purpose.

 You need to add the new keys manually to your client configuration to overwrite the default values.

### 8.3.4 Customer groups added to the **Web Admin Suite** (#651070)


The **Web Admin Suite** has been extended by the page *Customer groups* which allows to manage customer groups. The details of the customer groups are structured in tabs. The *Basic* tab contains the basic settings of the customer group, the *Actions* tab allows to assign manual, automatic and search actions to the contact objects, and *CM/Phone* tab contains the CM/Phone settings.

The following usability improvements have been made:

- There is an *Edit* icon next to assigned contact model in the *Basic* tab which allows to jump to the corresponding model on the *Contact models* page to modify it.
- The *Basic* tab contains links to the queues to which the customer group is assigned.
- The options for the *CM/Track user assignment* field now include explanations which are shown below the selector.
- In the *Actions* tab, only the actions for the contact objects which are present in the contact model are shown, i.e. if a one-level model is used, only person or company actions are displayed.
- The settings in the *CM/Phone* tab now have labels with example values.

### 8.3.5 Automatic expiry of **CM/EBIA** tokens added (#651094)

The JWT tokens which are generated by **ConSol CM** for user authentication in **CM/EBIA** now expire after one hour to avoid unauthorized access using old tokens and sessions.

 To harden existing setups and increase security, you need to manually change the JWT secret by entering a new value in the *String used by the JWT signing key* field in the **CM/EBIA** administration for this change to take effect. Also remember to update the corresponding system property `metabase.secret.key` from the module `cmas-analytics`.



## 8.4 Bugs fixed

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

Number	Description
<b>650200</b>	<b>Database method blocked by sandbox</b> The execution of the method <code>getMetaData()</code> on rows retrieved by a database query was blocked by the sandbox feature. This problem has been solved and this method can be executed now.
<b>650358</b>	<b>Error when filtering by enum value</b> When trying to filter the table with the related tickets on a resource page of the <b>Web Client</b> by the value of an enum field, an error occurred. This problem has been solved and filtering the ticket table by enum is now possible on resource pages.
<b>650777</b>	<b>Wrong German translation for deselect all</b> The German translation for the “Deselect all” action in the quick search and detail search in the <b>Web Client</b> was “Alles wiederrufen” which did not convey the desired meaning. This problem has been solved by changing the translation to “Alle abwählen”.
<b>651041</b>	<b>Unneeded NIMH restart after changing SMTP properties</b> After changing SMTP properties, the NIMH service was restarted although it was not needed, which resulted in unnecessary log messages. This problem has been solved and the NIMH service is not restarted after changing SMTP properties anymore.
<b>651183</b>	<b>Not possible to stop task due to page refresh</b> When trying to stop running tasks whose progress indicator refreshed frequently on the <i>Tasks</i> page of the <b>Web Admin Suite</b> , it was sometimes not possible to click the <i>Stop</i> icon in the task’s row because the page refreshed. In addition, the page refresh cleared the selections for the bulk action execution, so it was not possible to use bulk actions either. This problem has been solved by configuring the refresh to happen at the most every 5 seconds. In addition, the refresh does not clear the selection for bulk actions anymore.
<b>651207</b>	<b>Not possible to send email to many recipients if emails are forwarded to representatives</b> If the system property <code>forward.mails.to.representatives</code> from the module <code>cmweb-server-adapter</code> is set to “true”, so that emails are automatically forwarded to representatives, it was not possible to send an email to many recipients due to length limitations. This problem has been solved and sending emails to many recipients is also possible if emails are forwarded to representatives now.
<b>651237</b>	<b>Missing red color in Customers tab of a queue</b> The red color which indicates missing settings in the <i>Customers</i> tab of a queue on the <i>Queues</i> page of the <b>Web Admin Suite</b> was only shown if the user had visited the tab. This problem has been solved and the heading of the <i>Customers</i> tab now always has a red color if the user opens another tab and a mandatory setting is missing in the <i>Customers</i> tab.

Number	Description
651242	<p><b>Error when using SSO for CM/Track if the ConSol CM start page is open</b></p> <p>When opening the <b>ConSol CM</b> start page and trying to log in to <b>CM/Track</b> using SSO in another browser tab, an endless loop occurred and it was not possible to log in to <b>CM/Track</b>. This problem has been solved and SSO can be used for <b>CM/Track</b> even if the <b>ConSol CM</b> start page is open.</p>
651249	<p><b>View created in the wrong position</b></p> <p>When selecting a view in the <b>Web Admin Suite</b> and clicking the <i>New view</i> button to create another view, the newly created view was placed 2-3 positions below the selected view instead of directly below it. This problem has been solved and new views are now created directly below the selected view.</p>
651255	<p><b>Erroneous page scrolling when mentioning a user</b></p> <p>The <b>Web Client</b> page was scrolled to the beginning when mentioning a user in the comment editor of a ticket after having opened an attachment in another tab. This problem has been solved and the page is not scrolled anymore when mentioning a user after viewing an attachment in the browser.</p>
651300	<p><b>Selected scopes disappear when adding a new queue</b></p> <p>When modifying a view with defined scopes on the <i>Views</i> page of the <b>Web Admin Suite</b> by adding a new queue to the view, the already selected scopes disappeared. This problem has been solved and the selected scopes now remain selected when adding a new queue to the view.</p>
651309	<p><b>Error when opening the detail search with shared contact groups</b></p> <p>When the <b>ConSol CM</b> configuration contained a shared contact field group, it was not possible to open the detail search of the <b>Web Client</b>. This problem has been solved by adapting the details search to work with this feature.</p>
651318	<p><b>Wrong wording in German tooltip</b></p> <p>The German tooltip for the visibility script icon in the element toolbar of a workflow on the <i>Workflows</i> page of the <b>Web Admin Suite</b> was <i>Visualisierungsskript</i> instead of <i>Sichtbarkeitsskript</i>. This problem has been solved and the tooltip is now <i>Sichtbarkeitsskript</i> to be consistent with the English wording and the German wording in the details panel.</p>
651337	<p><b>Error when generating document from text template</b></p> <p>When generating a DOCX or PDF document based on a text template using the methods from <b>ContentFileTemplateService</b>, an error could occur depending on the template content. This problem has been solved and these methods now work correctly for all templates.</p>
651340	<p><b>Warning about scope to view assignment shown after renaming a scope</b></p> <p>When renaming a scope on the <i>Workflows</i> page of the <b>Web Admin Suite</b>, the warning about the scope not being assigned to any view was shown after deploying the workflow. This problem has been solved and the warning is now shown only once when deploying a workflow with a newly added scope.</p>

Number	Description
651350	<p><b>Second update of field or field group failed with concurrent users</b></p> <p>If two users were logged in to the <b>Web Admin Suite</b> and one of the users updated a data field or a data field group twice, the second update failed. This problem has been solved and data fields and field groups can now be updated regardless of concurrent users being logged in to the <b>Web Admin Suite</b>.</p>
651358	<p><b>Deactivating and activating list values did not work correctly</b></p> <p>When deactivating or activating a list value on the <i>Sorted lists</i> page of the <b>Web Admin Suite</b>, the change was not visible in the <b>Web Client</b>. This problem has been solved, and deactivating and activating list values in the <b>Web Admin Suite</b> now works properly.</p>
651376	<p><b>Wrong navigation item opened after page reload</b></p> <p>For some <b>Web Admin Suite</b> pages, the wrong navigation group was expanded after reloading the page. This problem has been solved and the correct navigation item is now open in the left panel after reloading the page.</p>
651381	<p><b>Not possible to execute reopen activity for closed tickets after workflow deployment with ticket transfer</b></p> <p>Closed tickets were blocked after deploying a workflow with ticket transfer. Therefore, it was not possible to execute a reopen activity in the <b>Web Client</b> for such tickets. This problem has been solved and closed tickets, which are never transferred, are not marked as waiting for transfer anymore, so that reopen activities can be executed for them.</p>
651417	<p><b>Scope disappeared from view after name change</b></p> <p>When the technical name of a scope was changed on the <i>Workflows</i> page of the <b>Web Admin Suite</b>, the scope disappeared from the views where it was used until the page was reloaded. This problem has been solved and changes to the view name are now reflected directly. In addition, the views where a scope is used are now cleared after cloning a workflow. Previously, a wrong assignment was displayed until the cloned workflow was deployed.</p>
651453	<p><b>System documentation export failed when CM/EBIA permission was used</b></p> <p>If a role in the <b>ConSol CM</b> system had the permission to access <b>CM/EBIA</b> assigned, it was not possible to export a scene which contained the system documentation. This problem has been solved and exporting the system documentation is possible now.</p>
651611	<p><b>Localized label of autocomplete field not saved</b></p> <p>When using the <b>Web Admin Suite</b> to modify the localized label of a data field of the type <i>Autocomplete</i>, the label was not saved and disappeared after reloading the page. This problem has been solved and localized labels for autocomplete fields can be set in the <b>Web Admin Suite</b> now. In addition, localizations cannot be set for fields of the type <i>Contact reference</i> anymore, because they are never displayed.</p>

Number	Description
651634	<p><b>Activity sort order lost in development mode</b></p> <p>When the development mode was enabled for workflows on the <i>Workflows</i> page of the <b>Web Admin Suite</b> and the user modified the sort order of the activities, the changes to the sort order were lost when an activity form was updated. This problem has been solved and updates to activity forms do not affect the activity sort order anymore.</p>
651636	<p><b>Execution by script of hidden activity is not possible</b></p> <p>If an activity was hidden to the <b>Web Client</b> users by its visibility script, it could not be executed by calling the method <code>client.openActivityForm</code> from the context of another activity. This problem has been solved and this method does not consider the visibility script anymore.</p>
651715	<p><b>Error when trying to create case field group after contact field group</b></p> <p>When trying to create or duplicate a case field group on the <i>Case fields</i> page of the <b>Web Admin Suite</b> after creating or duplicating a contact field group on the <i>Contact fields</i> page of the <b>Web Admin Suite</b>, an error occurred and it was not possible to save the group. This problem has been solved and creating case field groups after having created a contact field group is possible now.</p>
651718	<p><b>Incorrect validation for duplicated field name</b></p> <p>When duplicating a data field, which had been duplicated directly before, on the <i>Case fields</i>, <i>Contact fields</i> or <i>Resource fields</i> page of the <b>Web Admin Suite</b>, a validation about an already existing technical name was displayed in the <i>Internal name</i> field of the second duplicated field even if the technical name was modified. The user had to leave the field and click somewhere else to remove the validation message to be able to save the field. This problem has been solved and it is now possible to duplicate the same field twice without such a validation message to be displayed.</p>
651720	<p><b>Save confirmation appeared during typing</b></p> <p>When working in the development mode and modifying the localized label or description of a workflow activity on the <i>Workflows</i> page of the <b>Web Admin Suite</b>, the toast message which indicates that the workflow activity has been saved successfully could be displayed several times. This problem has been solved and the label and description are now updated once the user clicks outside the corresponding field.</p>
651723	<p><b>Problem with dependent enum in struct</b></p> <p>When using a dependent enum in a struct in the <b>Web Client</b>, it could happen that it was not possible to select a value on a certain level, if the corresponding row had been saved before without selecting a value. This problem has been solved and saving a row without selecting values does not block subsequent edits of the same row anymore.</p>
651736	<p><b>Incorrect target scope when executing a jump-out node after a scope activity</b></p> <p>When a jump-out node was placed directly after a scope activity in a workflow, the tickets which passed the jump-out node were transferred to the correct queue but they did not reach the target jump-in node. Therefore, the tickets ended up in the wrong scope. This problem has been solved and jump-out nodes after scope activities now work correctly.</p>

Number	Description
651756	<p><b>Pressing the escape key to close code autocompletion closed the window</b></p> <p>When pressing the escape key to close the code autocompletion in a script on the <i>Workflows</i> page of the <b>Web Admin Suite</b>, the modal window with the script was closed and unsaved changes were lost. This problem has been solved and pressing the escape key once now closes the code autocompletion. If the escape key is pressed again, the window is closed.</p>
651763	<p><b>Required field and tab not highlighted</b></p> <p>When creating a new field group on the <i>Case fields</i>, <i>Contact fields</i> or <i>Resource fields</i> pages of the <b>Web Admin Suite</b> and switching to the <i>Settings</i> tab without providing an internal name, the <i>Group data</i> tab and the <i>Internal name</i> field were not highlighted in red to indicate that a required field was missing. This problem has been solved and the tab and field are correctly highlighted now.</p>

## 9. Version 6.14.0.6 (28.03.2022)

Version 6.14.0.6 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.5):

- None

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



Please check the [Breaking changes and mandatory actions](#).

## 9.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.6 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.

### 9.1.1 System upgrade from 6.14.0.5 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.5 or earlier versions to version 6.14.0.6.

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

No further instructions available.

## 9.2 Changes

This section illustrates all relevant software product changes for version 6.14.0.6 of **ConSol CM**.

### 9.2.1 Usability improvements

#### Exclamation mark for active tasks removed (#651933)

The exclamation mark, which was displayed next to the menu item *Operation* in the **Web Admin Suite** when there are running or scheduled tasks on the *Tasks* page, has been removed because active tasks do not require administrator actions. The number of tasks is still displayed next to the menu item *Tasks* though.

### 9.2.2 Data warehouse administration added to **Web Admin Suite** (#648419, #650477, #650478)

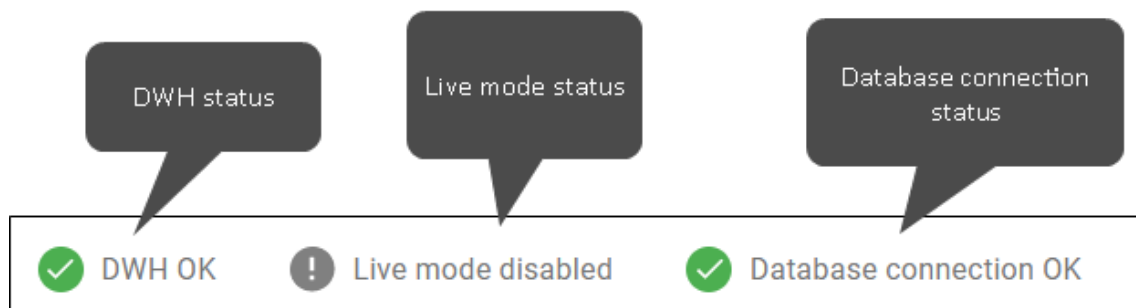
The **Web Admin Suite** has been extended with three pages to manage the DWH:

- Administration
- Monitor
- Tasks

These pages provide the same functionality as the respective sections in the **Admin Tool**.

Several improvements have been made to enhance the usability of the DWH administration:

- Visual indicators of the DWH status in the page header on the *Administration* and *Monitor* pages:



- Button to test the connection to the database on the *Administration* and *Monitor* pages.
- Information boxes about the meaning of the action when starting an initialization, transfer or update on the *Administration* page.
- Warning messages on the *Administration* page when the user tries to start an operation which is not recommended at this stage, e.g. a new initialization or transfer if the database already contains data or another operation is in progress.
- The menu items *Monitor*, *Tasks* and *Cubes* are only displayed if the DWH is enabled.
- The wording on the three pages has been adapted to the current **ConSol CM** terminology.
- The email configuration on the *Administration* page only has two parts, *Error* and *Successful transfer*, because the Unsuccessful transfer configuration was not used.



### 9.2.3 Default Apache proxy configuration adapted (#651440)

The default configuration for Apache proxies has been adapted by introducing a log rotation. The following limits have been introduced:

- **Size:** 20MB
- **Number of log files:** 5

## 9.3 Bugs fixed

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

Number	Description
651835	<p><b>Not possible to duplicate role with engineer function</b></p> <p>When using the <b>Web Admin Suite</b> to duplicate a role which has an engineer function assigned in the <b>Admin Tool</b>, an error occurred. This problem has been solved and roles with engineer functions can be copied in the <b>Web Admin Suite</b> now.</p>
651935	<p><b>Error when editing contact with old contact model</b></p> <p>When an old contact model, which contained a “companyRef” field because it was created prior to <b>ConSol CM</b> version 6.9.2, was edited on the <i>Contact models</i> page of the <b>Web Admin Suite</b>, a hidden “companyReferenceField” field, used in contact models of newer <b>ConSol CM</b> versions, was created automatically, causing errors in the <b>Web Client</b> due to a duplicate company reference. This problem has been solved and the “companyReferenceField” field is not added to old models anymore.</p>
651982	<p><b>Error when generating PDF from HTML</b></p> <p>When using the method <code>contentFileTemplateService.generatePDFDocumentFromXHTML</code> to generate a PDF file in a script, an error occurred. This problem has been solved and generating PDF files from HTML code is now possible.</p>
652012	<p><b>Unneeded warning about unsaved changes</b></p> <p>When editing a contact model on the <i>Contact models</i> page of the <b>Web Admin Suite</b> or a resource category or resource type on the <i>Resource models</i> page of the <b>Web Admin Suite</b>, and deleting the object before saving the changes, a warning about unsaved changes was shown even though the object was already deleted. This problem has been solved and warnings about unsaved changes are not shown anymore for objects deleted in the meantime.</p>

## 10. Version 6.14.0.7 (05.04.2022)

Version 6.14.0.7 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.6):

- None

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



Please check the [Breaking changes and mandatory actions](#).

## 10.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.7 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.

### 10.1.1 System upgrade from 6.14.0.6 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.6 or earlier versions to version 6.14.0.7.

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

No further instructions available.

## 10.2 Changes

This section illustrates all relevant software product changes for version 6.14.0.7 of **ConSol CM**.

### 10.2.1 Usability improvements

#### Warning when deleting a used template (#651184)

When deleting a used contact or resource template on the *Templates* page of the **Web Admin Suite**, the displayed confirmation message now includes the names of the contact models or resource types where the template is referenced.

#### Template name updated in references (#651422)

When changing the name of a contact or resource template on the *Templates* page of the **Web Admin Suite**, the name is now automatically updated in the contact or resource models which reference the template.

#### Wording on *Tasks* page improved (#651884)

Several wordings on the *Tasks* page of the **Web Admin Suite** have been improved:

- The button to execute a task is now called *Schedule task* (previously *New task*).
- The action to remove a task is now called *Cancel* (previously *Stop*). The inline icon for removing a task has been changed to a cross to better convey the meaning of the icon.

#### Links from activity form to workflows added (#651967)

The chip icons which are shown in the *Used in workflows* field of the *Activity forms* page of the **Web Admin Suite** to indicate the workflows where the activity form is used, are now links to the workflow. The user can now click the chip to open the respective workflow.

#### Sorting of authentication protection tables improved (#651973)

When sorting the tables on the *Authentication protection* page of the **Web Admin Suite** by date, the tables entries are now sorted according to the date only. Previously, they were grouped by name and sorted by date within the groups.

#### Setting *Visibility in case history* removed from contacts and resources (#652018)

The setting *Visibility in case history* is not available for contact and resource fields in the **Web Admin Suite** anymore because it only has effect on tickets. In addition, the group headline has been changed from *Case history* to *History*, so it uses a correct wording also for contacts and resources.

#### Field positioning improved for fields with specific visibility settings (#652076)

Fields which have the setting *Visibility* set to any value except for "Never" are now shown in the *Field positioning* tab of the *Case fields*, *Contact fields* and *Resource fields* pages of the **Web Admin Suite**. If a group contains fields which have the same setting for *Position*, a warning message is shown to clarify that saving the changes in the *Field positioning* tab will overwrite the previous position settings because it is not possible to define a layout where several fields share a position using the *Field positioning* tab.

### 10.2.2 Third-party library Spring updated (#652135)

The third-party library Spring has been updated from version 5.2.19 to version 5.2.20 in the **ConSol CM** server, the **Web Admin Suite** and the **CMRF**.

In **CM/Archive**, the third-party library Spring Boot has been updated from version 2.6.4 to 2.6.6.

In addition, CM/Track was hardened against a potential Spring vulnerability.

## 10.3 Bugs fixed

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

Number	Description
652097	<b>Creation dialog canceled after confirming warning message</b> When creating a new data field on the <i>Case fields</i> page of the <b>Web Admin Suite</b> and setting the <i>Visibility in case history</i> annotation, the creation dialog was closed without saving the field when the user confirmed the warning message about the performance impact of the annotation. This problem has been solved and closing the warning message does not close the creation window anymore.

## 11. Version 6.14.0.8 (31.05.2022)

Version 6.14.0.8 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.7):

- None

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



Please check the [Breaking changes and mandatory actions](#).



## 11.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.8 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.

### 11.1.1 System upgrade from 6.14.0.7 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.7 or earlier versions to version 6.14.0.8.

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

### 11.1.2 Script modification requirements

This release features some interface changes in API methods. These changes can either be improvements which offer the potential of simplifying your scripts or breaking changes. **Please be aware that scripts using the respective methods may need adjustments!** The affected methods are listed in the following sections of this document:

- [Queue as a parameter for default values scripts \(#652436\)](#)

No further instructions available.

## 11.2 Changes

This section illustrates all relevant software product changes for version 6.14.0.8 of **ConSol CM**.

### 11.2.1 Usability improvements

#### Full screen display of scripts and templates improved (#650315)

The full screen mode of the *Scripts* and *Templates* pages of the **Web Admin Suite** has been improved. The full screen display now contains the script or template name and the same buttons as the details panel view.

#### Wording of task scheduling options improved (#650622)

The descriptions in the *Scheduling option* column of the *Tasks* page of the **Web Admin Suite** have been improved to comply with the German and English grammar. The weekly scheduling options now include the word “at” in English and “um” in German, e.g. Friday at 10:00. The monthly scheduling options now use the correct day notation, e.g. 1st at 10:00.

#### System documentation moved to its own section (#651290)

The option to export the system documentation on the *Export* page of the **Web Admin Suite** has been moved to its own section because it does not belong to the configuration data. The new section *System documentation* is located below the *Workflows* section.

#### Shortcut for jumping to a line added (#651852)

The script and template editors of the **Web Admin Suite** have been improved by adding the keyboard shortcut CTRL + L which allows to enter a line number to jump to the given line in the script or template.

#### Validation messages for incorrect cube names (#651854)

When creating a new cube on the *Cubes* page of the **Web Admin Suite**, a validation message is now displayed when entering an incorrect name, e.g. a name which contains special characters or blanks, or which starts with a prefix reserved for **CMRF** tables (**dim\_**, **hlp\_**, **fact\_**, **int\_**).

#### Keyboard shortcuts for saving client configurations (#652075)

The following keyboard shortcuts can now be used on the *Client configurations* page of the **Web Admin Suite** to save changes:

- ctrl + s: Save the current file
- ctrl + shift + s: Save all files

#### Validation of internal element names improved (#652100)


When entering the internal name for a workflow element on the *Workflows* page of the **Web Admin Suite**, forbidden characters, such as special characters and whitespaces, are now ignored. In addition, the validation message displayed when an internal name contains unsupported characters has been improved. It now states which characters are allowed and which not.

#### Tooltips for task and script name (#652410)

The columns *Task name* and *Script name* on the *Tasks* page of the **Web Admin Suite** now have tooltips to display the complete names.

### Straight links in the workflow editor (#652455)

The workflow editor on the *Workflows* page of the **Web Admin Suite** now features a grid which makes it easier to draw straight lines for links.

 Straightening existing links might require moving all involved components (workflow elements and magnet points) to snap them to the grid.

### Number of elements to be deleted shown in confirmation window (#652464)

When using a bulk action to delete elements in the **Web Admin Suite**, the number of elements to be deleted is now shown in the confirmation dialog for all pages.

### Success message after bulk deletion unified (#652694)

The message of the success toast which is displayed after a bulk deletion where only one of the selected elements could be deleted has been unified. It now states the number of deleted and not deleted elements on all **Web Admin Suite** pages.

### Highlighting on *Roles* page changed (#652728)

The highlighting on the *Roles* page of the **Web Admin Suite** has been modified. It is not possible anymore to highlight a whole row in the overview table to avoid confusion as no details panel opens when clicking the name of the role.

## 11.2.2 DWH live mode stopped during import (#645647)

If the DWH runs in Live mode, the related service (*DWH live service*) is now stopped automatically when performing an import on the *Import* page of the **Web Admin Suite**. When the import has finished, the service is restarted automatically. Therefore, the DWH live service is now treated in the same way as other services, such as *Nimh*, *JobExecutor* or *TaskExecutorService*.

## 11.2.3 Contact, resource and search actions added to the **Web Admin Suite** (#651288, #651822, #651289)

Actions and action forms can now be managed in the **Web Admin Suite**. They are managed on separate pages, i.e. one page for the actions and one page for the action forms. The following pages have been added for this purpose:

Cases:

- Search actions
- Search forms

Contacts:

- Contact actions
- Contact forms

Resources:

- Resource actions
- Resource forms

Several usability improvements have been made:

- The scripts used in the action (action script, condition script, form condition script and form prefill script) can be edited directly by clicking the *Edit* icon next to the script name.
- The *Basic* tab of contact and resource actions includes a field *Used in customer groups / Used in resource types* which allows to open the customer groups or resource types which have this action assigned by clicking the chip icon.
- The *Basic* tab of the forms pages includes a field *Used in actions* which allows to open the actions which have this form assigned by clicking the chip icon.
- The forms pages do not have a field for the localized name because it is not displayed in the **Web Client**. Therefore, these pages are consistent with the *Activity forms* page of the **Web Admin Suite**.

#### 11.2.4 Default text pasting behavior changed (#651997)

The default behavior when pasting text to a text editor in the **Web Client** has been changed. By default, text is pasted with formatting now. This behavior can be modified in the page customization by adding `{"pastePlain": "true"}` to the attribute *configuration* in the type *cmRichTextEditor* (for the email and comment editor) or *froala* (for rich text fields).

#### 11.2.5 Third-party libraries updated in **CM/Doc** (#652086)

Several third-party libraries used in **CM/Doc** have been updated:

- **jackson-core**: updated from version 2.11.2 to version 2.13.2
- **jackson-databind**: updated from version 2.11.2 to version 2.13.2.2
- **jackson-annotations**: updated from version 2.11.2 to version 2.13.2
- **jackson-module-afterburner**: updated from version 2.11.2 to version 2.13.2

The **CM/Doc** application has been updated from version 2.6 to version 2.7.



The users must update **CM/Doc** for these changes to become effective.

#### 11.2.6 Task scheduling by number of minutes added (#652229)

The option *Minutely* has been added to the periodic scheduling options displayed when starting a new task on the *Tasks* page of the **Web Admin Suite**. It allows to execute the task every given number of minutes. The number of minutes can be entered in the field *Minutes interval*.

#### 11.2.7 Third-party libraries updated in **CM/Track** (#652238)

The following third-party libraries have been updated in **CM/Track**:

- **Spring**: from version 5.2.20 to 5.2.22
- **Spring Security**: from version 5.1.13 to 5.3.10
- **Grails**: from version 4.0.7 to 4.1.0
- **yaml**: from version 1.26 to 1.30
- **Tomcat embedded**: from version 9.0.58 to 9.0.63

## 11.2.8 Email certificates page added to the *Web Admin Suite* (#652254)

The *Web Admin Suite* has been extended by the page *Email certificates*, which allows to manage server and client certificates for handling encrypted emails.

## 11.2.9 Task management enhancements (#649875, #652262, #652879)

Several improvements have been made to the *Tasks* page of the *Web Admin Suite*.

### 11.2.9.1 Task grouping

Periodic tasks with daily, weekly or monthly scheduling can now be displayed in groups to provide a better overview. All scheduled executions are grouped in one table row, which shows the data of the next execution. The *Next execution at* and *Scheduling option* columns have a clock icon to indicate that there are more executions. You can see the date and time of the other scheduled executions by hovering the *Next execution at* column. The *Scheduling option* column shows the number of scheduled executions. You can see the details by hovering the column.

The checkbox *Only next executions* has been added to the table header. It is selected by default. You can deselect this checkbox to see one row for each execution. If *Only next executions* is checked, the row actions apply to all scheduled executions of the task. Therefore, the actions' tooltips are *Cancel all*, *Deactivate all* and *Activate all*.



If you want to perform an action for one of the scheduled executions only, you need to deselect *Only next executions* first. Then you can perform the action for the desired row.

<input type="checkbox"/>	Task name	Script name	Progress	Next execution at ↑	Status	Scheduling interval	Scheduling option	Last duration (sec)
<input type="checkbox"/>	aSimpleTask	aSimpleTask	0%	05/20/2022 12:00 PM	Waiting for execution	Weekly	3 x	

### 11.2.9.2 Email notifications after error

It is now possible to automatically send an email to the administrator if the execution of a task fails. This is useful to avoid situations where a task fails but nobody notices because the log files were not monitored.

The option *Notify administrator after error* has been added to the new *Error handling* section in the *Start new task* window for this purpose. If this checkbox is selected, a notification email is sent to the address configured in the system property `admin.email` from the module `cmas-core-security`. As a from address, the newly added system property `task.execution.notification.mail.from` from the module `cmas-core-server` is used. If it is not set, the value from `admin.email` is used instead.



You need to add the property `task.execution.notification.mail.from` manually to your *ConSol CM* system.

The notification emails contains the exception and the name of the affected task is mentioned in the subject.

The new system property `task.execution.notification.mail.from` has been added to the *Addresses* tab of the *Email configuration* page of the **Web Admin Suite**.

### 11.2.9.3 Deactivating tasks

Tasks can now be deactivated, so that they are not executed but remain in the task list. This is useful for tasks which should be executed for the proper functioning of the system, but cause errors or cannot run for some reason. By deactivating such a task, the user still has the overview and is reminded to reinstate the task once the problem has been solved.

Tasks with the status “Waiting for execution” can be deactivated by clicking the new *Deactivate* icon in the row of the task. Deactivated tasks remain in the list, but they are not executed. You can activate a task again by clicking the *Activate* icon. The filter *All tasks* has been extended by the option *Deactivated tasks* which allows to display deactivated tasks only.

When planning a periodic task, the user can select the option *Deactivate task after error* in the new *Error handling* section to deactivate the task if an error occurs during task execution.



Only the scheduled execution for which the error occurs is deactivated, e.g. if a task runs on Mondays and Thursdays and an error occurs on Monday, the scheduled execution for Mondays will be deactivated, but the one for Thursdays will still run.

### 11.2.9.4 Last duration of periodic tasks

It is now possible to see how long the last execution of a periodic task took. This is helpful to identify problems and needs for script optimization.

The column *Last duration (sec.)* has been added to the tasks table for this purpose. It contains the time (in seconds) of the last execution of this task.

## 11.2.10 General availability of workflows in the **Web Admin Suite** (#652318)

The *Workflows* page of the **Web Admin Suite**, introduced in [Workflow management added to the Web Admin Suite \(#646446\)](#), is now generally available. The page is displayed in the *Business logic* menu and does not have a Beta tag anymore.



The functionality of the **Process Designer** application is now covered by the **Web Admin Suite**. Therefore, the **Process Designer** is not needed anymore and will be removed in a future version of **ConSol CM**.

## 11.2.11 Third-party library Spring updated (#652239, #652385, #652412)

The third-party library Spring has been updated from version 5.2.20 to version 5.3.19 in **ConSol CM** and **CMRF**.

The third-party library Spring Boot has been updated in **CM/Archive** from version 2.6.6 to 2.6.8.

## 11.2.12 Queue as a parameter for default values scripts (#652436)

The selected queue is now available as a parameter in scripts of the type *Default values*. It is therefore possible to use the same default values script for several queues and implement queue-specific values in the script. The parameter is called `queue` and contains the currently selected queue to

which the default values are applied. The script template which is used when creating a new default values script has been extended by this parameter.

#### 11.2.13 *Contact roles* page added to the **Web Admin Suite** (#652714)

The **Web Admin Suite** has been extended by the *Contact roles* page. It has the same functionality as the *Customer roles* section of the **Admin Tool**.

#### 11.2.14 *Projects* page added to the **Web Admin Suite** (#652716)

The **Web Admin Suite** has been extended by the *Projects* page. It has the same functionality as the *Projects* section of the **Admin Tool**.

## 11.3 Bugs fixed

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

Number	Description
<b>648892</b>	<b>Only first line with validation error highlighted</b> When several validation errors occurred in a script in the <b>Web Admin Suite</b> , only the line with the first error was highlighted in red. This problem has been solved and all lines with errors are now highlighted.
<b>649477</b>	<b>Ticket history not displayed due to non-printable character</b> Some non-printable characters caused errors in the ticket history of the <b>Web Client</b> if they were present in data fields of the type <i>String</i> . The ticket history could not be displayed if the field values needed to be shown in the selected visibility level. This problem has been solved and such non-printable characters are now removed before saving the value.
<b>649736</b>	<b>Missing warning about unsaved changes</b> When using the <b>Web Admin Suite</b> to make changes to an activity form or queue which cannot be deleted because it is in use, and trying to delete the activity form or queue afterwards, there is no warning about unsaved changes and the changes are lost if the user switches to another page. This problem has been solved and the warning about unsaved changes is now displayed after trying to delete a modified activity form or queue.
<b>651245</b>	<b>Log entries still displayed for new import</b> When importing a scene on the <i>Import</i> page of the <b>Web Admin Suite</b> , it could happen that the import progress window still contained the last log entries of the previous import. This problem has been solved and all the entries are now cleared after the import finishes.
<b>651738</b>	<b>Incorrect permission handling in mentioning feature</b> Queue permissions were not handled correctly in the mentioning feature of the <b>Web Client</b> . It was possible to mention users who did not have read permissions to the ticket, because they were only allowed to view tickets assigned to themselves and the current ticket was assigned to another user. In contrast, it was not possible to mention users who only had permissions to view tickets where they are additional users, even though they were assigned to the current ticket as additional users. This problem has been solved and queue permissions are handled correctly now, so that it is possible to mention all user who have permissions to view the ticket, and only users who have permissions to view the ticket can be mentioned.
<b>651761</b>	<b>Incorrect MLA sorting in Web Client</b> MLAs, which contained lists sorted by localized value, were sorted by the technical names of the list values instead of their localized names in the <b>Web Client</b> . This problem has been solved and such MLAs are correctly sorted by localized list values now.



Number	Description
651843	<p><b>Validation of email addresses did not work in <i>CM/Track</i></b></p> <p>The validation of the field values of data fields with the setting <i>Contains email address</i> did not work in <i>CM/Track</i>. Therefore, it was possible to enter a text which did not match the syntax of an email address in such a field. This problem has been solved and fields with this setting are now correctly validated in <i>CM/Track</i>.</p>
651995	<p><b>Links removed from notification text</b></p> <p>When creating a notification with a link in the notification text using a script, the link was not shown in the notification in the <i>Web Client</i>. This problem has been solved and it is now possible to include links in notifications created by script.</p>
652078	<p><b>ACF prefill script not imported</b></p> <p>When importing a scene with a prefill script defined for an existing ACF in a workflow, the prefill script was not added. This problem has been solved and new prefill scripts are now correctly added to existing ACFs when importing a scene.</p>
652199	<p><b>Wrong German translation for annotation value</b></p> <p>The German translation of the value "Always" of the <i>Read-only</i> setting on the <i>Case fields</i>, <i>Contact fields</i> or <i>Resource fields</i> page of the <i>Web Admin Suite</i> was "Nie" instead of "Immer". This problem has been solved and the value is correctly translated now.</p>
652308	<p><b>Error when adding many field groups</b></p> <p>When adding many field groups on the <i>Case fields</i> page of the <i>Web Admin Suite</i>, a database error could occur because the sort indexes increased exponentially. This problem has been solved and the sort index is now set correctly for newly created field groups.</p>
652324	<p><b>Not possible to change positioning of field groups on Oracle</b></p> <p>When using an Oracle database, it was not possible to change the position or width of contact or resource fields using the <i>Field positioning</i> tab of the <i>Contact fields</i> or <i>Resource fields</i> page of the <i>Web Admin Suite</i>. An error occurred when clicking the <i>Update field group</i> button. This problem has been solved and the field positioning now works correctly also on Oracle.</p>
652328	<p><b>Problem when duplicating field and changing parent field</b></p> <p>When duplicating a field on the <i>Case fields</i>, <i>Contact fields</i> or <i>Resource fields</i> page of the <i>Web Admin Suite</i> and searching for a field group in the <i>Group</i> selector, the selector did not contain all the matching field groups. When changing the parent field of a data field from one field of the type <i>Columns</i> to another field of this type, the data field was displayed twice in the <i>Web Client</i> because the original reference was not removed. These problems have been solved and both the search in the <i>Group</i> field and the change of the parent field work correctly now.</p>
652453	<p><b>Script validation not rechecked after changing validation type</b></p> <p>If the validation type of a script is changed from <i>Simple validation</i> to <i>Strict validation</i> in the <i>Web Admin Suite</i> and another script is opened, the validation type <i>Strict validation</i> was selected but not applied, so that the present errors were not shown. This problem has been solved and the validation type is applied correctly now.</p>

Number	Description
652492	<p><b>Redirect to main page of <i>CM/Track</i> after login with SSO</b></p> <p>When clicking a link to a ticket in <i>CM/Track</i> without having a <i>CM/Track</i> session, the user was redirected to the main page of <i>CM/Track</i> after logging in with SSO. This problem has been solved and the ticket to which the link points is now opened after login.</p>
652612	<p><b>Activity form cannot be saved with the Enter key</b></p> <p>When using the Enter key to select a value for an autocomplete field (enum field with autocomplete behavior or string field with autocomplete script) in an activity or action form in the <i>Web Client</i>, it was not possible to save the form using the Enter key afterwards. The user had to click the <i>Save and continue</i> button or use the tab key to navigate to this button before pressing Enter. This problem has been solved and forms can now be saved by pressing the Enter key also when the user selected an autocomplete value with the Enter key before.</p>
652695	<p><b>Internal resource field name editable after assignment to resource form</b></p> <p>When creating a new resource field in the <i>Web Admin Suite</i>, assigning the field to a resource form, and going back to the field on the <i>Resource fields</i> page without opening the details of another resource field first, it was still possible to edit the internal field name. This problem has been solved and the resource field name cannot be edited when the field is in use now.</p>
652731	<p><b>Unneeded warning about concurrent modification</b></p> <p>When opening the <i>Queues</i> page of the <i>Web Admin Suite</i> and then changing a page customization in the <i>Web Client</i>, a warning about a concurrent modification was displayed on the <i>Queues</i> page and the user had to reload the page. This problem has been solved and changes to the page customization do not cause concurrent modification warnings in the <i>Web Admin Suite</i> anymore.</p>
652824	<p><b>References to activity forms lost after exporting and importing workflow as par file</b></p> <p>When exporting a workflow as a <i>par</i> file using the <i>Web Admin Suite</i> or the <i>Process Designer</i> and importing it again, references to activity forms attached to reopen activities, jump-out nodes and end nodes were lost. This problem has been solved in the <i>Web Admin Suite</i>, so that the references to activity forms attached to these workflow elements are handled correctly during the export and import of <i>par</i> files.</p>
652858	<p><b>Incorrect filtering in selectors in the view details</b></p> <p>The selectors <i>Select roles</i> and <i>Select list values</i> in the window to configure the details of a view on the <i>Views</i> page of the <i>Web Admin Suite</i> did not work correctly. When typing a search term, the results in the selectors were not filtered accordingly. This problem has been solved and filtering in the selectors now works correctly.</p>
652963	<p><b>Attachment names with curly brackets did not work in <i>CM/Track</i></b></p> <p>When uploading an attachment whose name contains curly brackets to a ticket in <i>CM/Track</i>, the ticket could not be opened anymore. This problem has been solved and curly brackets are now escaped during the upload.</p>

## 12. Version 6.14.0.9 (09.06.2022)

Version 6.14.0.9 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.8):

- None

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



Please check the [Breaking changes and mandatory actions](#).

## 12.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.9 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.

### 12.1.1 System upgrade from 6.14.0.8 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.8 or earlier versions to version 6.14.0.9.

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

No further instructions available.

## 12.2 Changes

This section illustrates all relevant software product changes for version 6.14.0.9 of **ConSol CM**.

### 12.2.1 Usability improvements

#### Localized name marked as required (#653151)

The localized name in the default language is now marked as required on the *Customer groups* and *Customer data models* pages of the **Web Admin Suite**. Previously, the field was optional, but filled automatically with the internal name if the localized name was missing.

#### 12.2.2 Services page added to the **Web Admin Suite** (#652330)

The **Web Admin Suite** has been extended by the page *Services* in the *Operations* menu. It provides the same functionality as the *Services* section of the **Admin Tool**.

One usability improvement has been made:

- The column *Description* with a brief explanation of the purpose of the service has been added.

#### 12.2.3 Possibility to add user functions to roles in the **Web Admin Suite** (#653212)

The *Roles* page of the **Web Admin Suite** has been extended by the column *User functions* which shows the number of user functions which are assigned to the role. Clicking the number opens a detail panel which allows to change the assigned user functions.

## 12.3 Bugs fixed

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

Number	Description
<b>653125</b>	<b>Error when assigning field group to company object</b> An error occurred when assigning a second field group to the company object of a contact model in the <b>Web Admin Suite</b> if the contact model was created with a person object only, a company object was added later, and a first field group was already assigned to the company object. This problem has been solved and assigning field groups to later added objects now works correctly.
<b>653191</b>	<b>Assigned roles lost when configuring a view</b> When configuring a view on the <i>Views</i> page of the <b>Web Admin Suite</b> , the assigned roles were not shown and therefore removed upon saving the changes. In addition, it was necessary to reload the page in order to display the roles to which the view was assigned during the creation of the view. These problems have been solved and the assigned roles are handled correctly now.
<b>653205</b>	<b>Not possible to use ETL</b> It was not possible to use the <b>ConSol CM</b> ETL plugins due to a duplicate library. This problem has been solved and ETL works correctly now.

## 13. Version 6.14.0.10 (25.07.2022)

Version 6.14.0.10 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.9):

- None

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



Please check the [Breaking changes and mandatory actions](#).

## 13.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.10 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.

### 13.1.1 System upgrade from 6.14.0.9 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.9 or earlier versions to version 6.14.0.10.

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

### 13.1.2 Script modification requirements

This release features some interface changes in API methods. These changes can either be improvements which offer the potential of simplifying your scripts or breaking changes. **Please be aware that scripts using the respective methods may need adjustments!** The affected methods are listed in the following sections of this document:

- [Method to retrieve inline images from comments \(#653295\)](#)



## 13.2 Changes

This section illustrates all relevant software product changes for version 6.14.0.10 of **ConSol CM**.

### 13.2.1 Usability improvements

#### Error message for script failures improved (#650017)

The error message which is displayed in the **Web Client** when there is a failure in a page customization or widget script has been improved. It now mentions both script types. Previously, the message referred to widget scripts only.

#### Sorting of view criteria improved (#650272)

The sorting of the view criteria on the *Views* page of the **Web Admin Suite** has been improved. The queues are now sorted alphabetically in both the details panel and the modal window to configure the view. The list values are sorted according to the sorting mode selected for the list on the *Sorted lists* page, i.e. either alphabetically or by list position.

#### Search inside selectors improved (#651250)

The improvements introduced in [Search in the Web Admin Suite improved \(#650649, #650415\)](#) have been extended to the search inside autocomplete selects in the **Web Admin Suite**. Therefore, you can now enter several search terms separated by spaces to find occurrences which contain all search terms, regardless of whether the terms are present in this order or separated by spaces or punctuation marks in the result.

#### Order of the columns of the contact relations table changed (#652357)

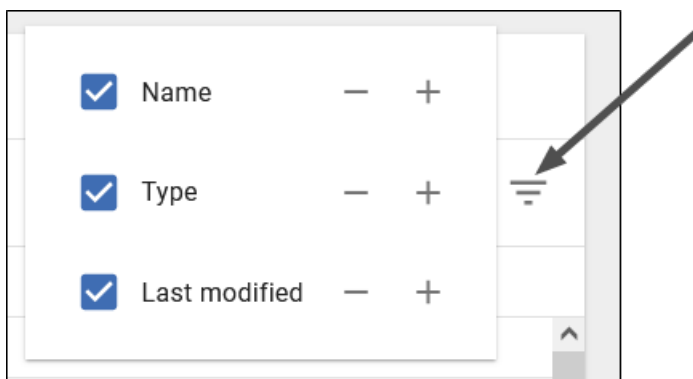
The order of the columns in the table in the *Persons* tab of the *Relations* section of a contact page in the **Web Client** has been changed. It is now *Name*, *Date*, *Note*, so that it matches the order of the table in the *Companies* tab.

#### Selector for queue assignment added to *Projects* page (#652981)

The details panel of a project on the *Projects* page of the **Web Admin Suite** has been extended by the selector *Used in queues* which allows assigning and removing the project to / from queues.

#### Configurable column width (#652983)

The width of the columns of the tables in the **Web Admin Suite** can now be configured in the column selector. You can change the column size using the plus and minus icons next to the column name. This allows to make certain columns larger to see their complete values.



### Shortcut to save a script (#653101)

The keyboard shortcut CTRL + S can now be used to save a script in the **Web Admin Suite**. It has been added to the list of shortcuts of the script editor.

### Search in field selector of business triggers improved (#653166)

The search within the selectors which are displayed when adding case fields to a business trigger on the *Workflows* page of the **Web Admin Suite** has been improved. The search for case field groups and case fields is now case-insensitive, so that it does not matter if the user enters the name with upper case or lower case letters.

### Information icon for localized names and descriptions (#653240)

The headlines *Localized name* and *Localized description* which are present for several entities in the **Web Admin Suite** now have a small information icon. When hovering the icon, a short description of the usage of the field value is displayed.



In addition, information icons are displayed for the headline *Localized label for cases* on the *Queues* page and for the *Email subject pattern* on the *Email configuration* page.

### Filter by queue state added (#653244)

The *Queues* page of the **Web Admin Suite** has been extended by the filter *All queues* with the options *Active queues* and *Deactivated queues* to display only the queues which are currently enabled or disabled.

### Wording of export option adjusted (#653375)

The name of the option to export only the latest workflow version on the *Export* page of the **Web Admin Suite** has been changed from *Only the newest version* to *Only the newest deployed version* to better reflect the meaning of the option, which exports only deployed workflow versions.

### Workflow filter adjusted (#653397)

The *All queues* filter on the *Workflows* page of the **Web Admin Suite** has been adjusted. When a queue is selected, the workflow table now includes both the workflow version which is currently used by the queue and the workflow versions which were used by the queue in the past.

## 13.2.2 Contact relations added to **Web Admin Suite** (#651874)

The **Web Admin Suite** has been extended by the page *Contact relations* which allows to manage the definitions of contact relations. The settings in the details panel are grouped in three sections: *Basic data*, *Relation source* and *Relation target*.

The following usability improvements have been made:

- Improved wording of the settings. To better convey their meaning, the setting *Reportable* is now called *Transferred to the DWH*, and the setting *Only configurable via workflow* is now called *Can only be set via script*.
- When creating a relation to or from a customer group which has a one-level contact model, the available contact object (person or company) is preselected in the *Level* field. Therefore, relations can only be created to the levels which exist in the target customer group.
- There are info icons next to the *Localized name* and *Localized description* fields which show a tooltip explaining where the field value is used.

### 13.2.3 Resource relations added to the **Web Admin Suite** (#651875)

The **Web Admin Suite** has been extended by the page *Resource relations* which allows to manage the definitions of resource relations. This page allows to view and create definitions of relations between resources and cases, contacts or resources. The settings in the details panel are grouped in three sections: *Basic data*, *Relation source* and *Relation target*.

The following usability improvements have been made:

- Improved wording of the settings. To better convey their meaning, the setting *Anonymous* is now called *Relation without its own name*, the setting *Reportable* is now called *Transferred to the DWH*, and the setting *Only configurable via workflow* is now called *Can only be set via script*.
- There are info icons next to the *Localized name* and *Localized description* fields which show a tooltip explaining where the field value is used. These fields are only shown if *Relation without its own name* is not selected.

### 13.2.4 Languages page added to the **Web Admin Suite** (#652715)

The **Web Admin Suite** has been extended by the page *Languages* in the *System settings* menu. It provides the same functionality as the *Languages* section of the **Admin Tool**.

One performance improvement has been added: When changing the default language, it is now possible to choose whether the system should automatically generate localizations for the new default language. The confirmation window now includes the option *Set internal name for missing default translations (may be a long-running operation for large systems)*. If it is selected, the internal name of an element is automatically written to the localized name in the default language, if no localized name is set. This operation may take significant time on larger systems with lots of missing translations. The user can deselect the checkbox to proceed without generating localizations in order to speed up the language change.



If no default localizations are generated, it must be ensured that all required default localizations are present, and missing localizations must be entered manually for the system to work correctly.



It is required to reload the page to see the generated localizations.

### 13.2.5 User functions added to the **Web Admin Suite** (#652941)

The **Web Admin Suite** has been extended by the page *User functions* in the *Access & Roles* menu. It provides the same functionalities as the *Engineer functions* section of the **Admin Tool**.

Two usability improvements have been made:

- The *Select roles to which the user function is assigned* selector in the details of a user function allows to assign it to roles and to remove it from roles. You can switch to the assigned roles by clicking the chip icons below the selector.
- The wording of the checkbox which enables the user function for approval processes has been changed from *checkable* to *For approval processes* to better convey its meaning.

### 13.2.6 Case history added to **Web Admin Suite** (#652942)

The **Web Admin Suite** has been extended by the page *Case history* in the menu item *Cases* which allows to define the visibility of the different actions in the case history. It provides the same functionality as the **Admin Tool** section *Ticket history*.

### 13.2.7 Business calendars added to **Web Admin Suite** (#652943)


The **Web Admin Suite** has been extended by the page *Calendars* in the menu item *System settings* which allows to manage the calendars which define the working days and hours. It provides the same functionality as the **Admin Tool** section *Business calendars*. The calendar details are grouped in three tabs: *Basic*, *Business hours* and *Holidays*.

The following usability improvements have been made:

- You can directly assign the calendar to queues in the *Basic* tab.
- The business hours are shown in a table in the *Business hours* tab, so that you can see them at a glance.
- When creating a new business hour entry, the next day of the week is chosen automatically with the same start and end time as the previous entry.

### 13.2.8 Method to retrieve inline images from comments (#653295)

The **ConSol CM** API has been extended by the method `cleanAndInlineImages(TextEntry pTextEntry)` from the class `TicketContentService`. It returns the history entry with its inline images encoded in base64. This allows you to use the history entry together with its images in other contexts, e.g. an external system.

 You can also call this method using: `textEntry.getTextWithInlinedImages()`

### 13.2.9 Support for OAuth 2.0 added (#653578, #653676)

Customers who use Exchange Online or Office 365 mailboxes from Microsoft need to switch from basic authentication to OAuth 2.0 authentication because Microsoft ends the support for basic authentication.

**ConSol CM** now provides support for OAuth 2.0 authentication for fetching incoming emails. The *Email configuration* page of the **Web Admin Suite** has been extended for this purpose. The new *Authentication* section of an email connection contains a selector to choose *Basic* or *OAuth 2.0* authentication. If *OAuth 2.0* is selected, the following fields must be filled:

- **User name:** Enter the name of the principal.
- **Client ID:** Enter the application ID from the registration of the **ConSol CM** application.
- **Client secret:** Enter the secret value from the registration of the **ConSol CM** application.

- **Client authority:** Enter the login URL with the tenant ID from the registration of the **ConSol CM** application, e.g. `https://login.microsoftonline.com/1234567890`
- **Scope:** Enter the scope, e.g. `https://outlook.office365.com/.default`



OAuth 2.0 authentication only support the IMAPS protocol for email fetching. If you want to use OAuth 2.0, you need to switch to IMAPS.

If debug logging is enabled for the mailbox, you can additionally log protocol authentication commands (including user names and passwords) by creating the system property `mailbox.default.session.mail.debug.auth`, or a mailbox-specific property replacing “default” with the mailbox ID, with the value “true” in the module `cmas-nimh`. This overwrites the default property from `javax.mail`, which is set to “false” by default, so that no user names and passwords are written to the log files.

### 13.2.10 Possibility to edit values from template variables added (#653723)

When using a text template for a comment or email in the **Web Client**, the values retrieved from the case for variables in text templates can now be edited. This allows the user to modify the values before sending the email or saving the comment, e.g. in order to correct typos or improve descriptions.

## 13.3 Bugs fixed

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

Number	Description
<b>646136</b>	<b>Duplicate headline in template selector</b> When selecting a template in the <i>Add template</i> selector in a case in the <b>Web Client</b> , the headline with the template group was duplicated if more templates of the same group were loaded when scrolling the selector options. This problem has been solved and each group has one headline now.
<b>646750</b>	<b>Incorrect columns displayed on <i>Templates</i> page</b> When opening another template after creating a template in a certain group on the <i>Templates</i> page of the <b>Web Admin Suite</b> , and filtering the list of templates by group, the table contained all three columns although the details panel was open. This problem has been solved and only the <i>Name</i> column is now displayed in this case.
<b>653165</b>	<b>Available entities in code snippets window not refreshed</b> When creating or deleting a data field, data field group or queue in the <b>Web Admin Suite</b> , the change was not reflected immediately in the code snippets window in the script editor. This problem has been solved and newly created entities are directly visible in the code snippets window now, and deleted entities are not available anymore.
<b>653192</b>	<b>Assigned views page not refreshed</b> When assigning a new view to a role on the <i>Roles</i> page of the <b>Web Admin Suite</b> , the <i>Views of this role</i> panel was not refreshed and the newly assigned view was not shown. If an assigned view was unassigned by clicking the <i>Unassign</i> icon in the respective row, the panel was not refreshed and the removed view was still displayed. In both cases, the user had to refresh the page to see the currently assigned views. This problem has been solved and the page is correctly refreshed now.
<b>653201</b>	<b>Not possible to remove localized description</b> It was not possible to remove the localized description of a queue on the <i>Queues</i> page of the <b>Web Admin Suite</b> . The value was restored automatically after saving the changes. This problem has been solved and the localized description can be removed now.
<b>653210</b>	<b>Incorrect columns displayed on <i>Templates</i> page</b> When switching the language of a template on the <i>Templates</i> page of the <b>Web Admin Suite</b> , the table which lists the templates showed all three columns although the details panel was open. This problem has been solved and only the <i>Name</i> column is now displayed in this case.
<b>653230</b>	<b>Deactivated object activated automatically after saving changes</b> When saving changes to a deactivated contact model, customer group or contact relation in the <b>Web Admin Suite</b> , it was activated automatically after clicking the update button. This problem has been solved and objects are not activated automatically anymore when saving changes.

Number	Description
653695	<p><b>Follow-up time lost when executing a scope activity</b></p> <p>When the user executed a scope activity for a ticket for which a time trigger was running, the follow-up date set by the time trigger was removed, even though the scope activity was an interrupt. This problem has been solved and the follow-up date is not removed anymore, so that scope activities do not interfere with time triggers.</p>
653761	<p><b>Problems with permission administrator</b></p> <p>When a user with the permission <i>Administrate users and roles</i> logged in to the <b>Web Admin Suite</b> and the data warehouse was enabled, it could happen that the <i>Users</i> or <i>Roles</i> page was not loaded correctly and an endless spinning indicator was shown. In addition, it was not possible to log out properly. This problem has been solved and the permission administrator can now use the <b>Web Admin Suite</b> correctly.</p>
653871	<p><b>White screen when deleting a workflow with open details panel</b></p> <p>When deleting a workflow on the <i>Workflows</i> page of the <b>Web Admin Suite</b> while the details panel of this workflow is open, a white screen was shown and the user had to reload the page to see the workflow table. This problem has been solved and the workflow can now be deleted without causing a white screen.</p>
653873	<p><b>Not possible to export workflow with scope activity with incoming connections</b></p> <p>Workflows which contain scope activities with incoming connections could not be exported as part of a scene or as a par file. This problem has been solved and such workflows can be exported now, even though scope activities do not need any incoming connection.</p>
653876	<p><b>Wrong workflow content shown after deploying changes based on a snapshot</b></p> <p>When modifying a snapshot version of a workflow on the <i>Workflows</i> page of the <b>Web Admin Suite</b> and deploying the changes to overwrite the currently deployed workflow, the content from the previously deployed workflow was shown for the new deployed workflow, if the previously deployed workflow was also opened. The user had to reload the workflow to see its correct content. This problem has been solved and the correct content is now shown for the new deployed workflow.</p>
653894	<p><b>Activity and scope index influenced each other</b></p> <p>Changing the sort index of the scopes of a workflow on the <i>Workflows</i> page of the <b>Web Admin Suite</b> also modified the sort index of the activities and vice-versa. This problem has been solved and the sort index of the scopes is now independent from the sort index of the activities.</p>

## 14. Version 6.14.0.11 (24.10.2022)

Version 6.14.0.11 includes all **ConSol CM** changes and additions of

- 6.13 versions up to 6.13.0.13
- 6.12 versions up to 6.12.1.5
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0

Changes with respect to the previous minor release (6.14.0.10):

- None

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



Please check the [Breaking changes and mandatory actions](#).



## 14.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.14.0.11 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.

### 14.1.1 System upgrade from 6.14.0.10 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.14.0.10 or earlier versions to version 6.14.0.11.

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

No further instructions available.

## 14.2 Changes

This section illustrates all relevant software product changes for version 6.14.0.11 of **ConSol CM**.

### 14.2.1 Fixed several security vulnerabilities (#654051)

Several security vulnerabilities have been fixed in **ConSol CM** and its components:

- Apache Commons Text: updated from version 1.9 to version 1.10.0
- batik: updated from version 1.14 to version 1.15
- infinispn.protostream: updated to version 4.4.4.Final
- ini4j: updated from version 0.5.2 to version 0.5.4
- jackson-databind, jackson-core, jackson-annotations: updated from version 2.13.2 to version 2.13.4.2
- jquery-ui: updated from version 1.13.0 to version 1.13.2
- Moment.js: updated from version 2.24.0 to version 2.29.4 (except for **CM/Forms**)
- snakeyaml: updated from version 1.30 to 1.33
- Spring Boot: updated from version 2.6.9 to version 2.6.13
- tomcat-dbcp: updated from version 9.0.48 to version 9.0.65



The **CM/Doc** application has been updated from version 2.7 to version 2.8. The users must update **CM/Doc** for these changes to become effective.

## 15. 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
6.14.0.0 - 6.14.0.2	08.03.2022
6.14.0.3 and higher	05.11.2024

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

- **Admin Tool**
- **Process Designer**



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**!