

ConSol Software GmbH

Release Notes ConSol CM 6.13.0

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Contents

Contents	2
1. General update and installation instructions	7
2. Breaking changes and mandatory actions	8
3. Version 6.13.0.0 (09.07.2020)	12
3.1 Update and installation instructions	13
3.1.1 System upgrade from 6.12.1 and earlier versions	13
3.1.2 Script modification requirements	13
3.1.3 Configuration modification requirements	13
3.1.4 Support for Oracle 11g dropped (#641966, #641967)	13
3.1.5 Support for Oracle 19c added (#642158)	14
3.1.6 Support for JBoss EAP 6.4 dropped (#642630)	14
3.1.7 Support for JBoss EAP 7 changed (#642631, #643350)	14
3.1.8 Support for Wildfly changed (#642632)	14
3.2 New features	15
3.2.1 Machine learning (#641957)	15
3.2.2 Integrated reporting with CM/EBIA (#642353)	18
3.2.3 Tickets without customers (#642551)	21
3.3 Changes	23
3.3.1 Usability improvements	23
3.3.2 Event trigger for ticket relations (#621146)	24
3.3.3 Mailbox handling changed (#632461)	24
3.3.4 Behavior of readonly annotation changed (#632772)	24
3.3.5 commons-fileupload library removed (#633754)	25
3.3.6 Custom error page removed (#634359)	25
3.3.7 Log file rotation changed (#634557)	25
3.3.8 Methods to create links added (#635013)	25
3.3.9 New layout for data fields (#641891)	26
3.3.10 Jersey updated for the REST API (#641932)	27
3.3.11 MailQueuePoller adjusted (#642285)	27
3.3.12 Spring library updated (#642331)	27
3.3.13 Refresh behavior of the ticket list modified (#642337)	27
3.3.14 AJP connector added to the configuration files (#642457)	27
3.3.15 Ticket ID added to the search index (#642759)	28
3.3.16 Additional engineers selector improved (#643025)	28
3.3.17 Microsoft SQL Server configuration files changed (#643092)	28
3.3.18 JBoss settings for cluster installations changed (#643235, #643237)	28
3.3.19 Page to set new password changed (#643352)	28
3.3.20 CSV export feature adapted (#643579)	29
3.3.21 JBoss configuration changed (#643782)	29

3.4 Bugs fixed	31
4. Version 6.13.0.1 (07.09.2020)	32
4.1 Update and installation instructions	33
4.1.1 System upgrade from 6.12.1 and earlier versions	33
4.1.2 Script modification requirements	33
4.1.3 Configuration modification requirements	33
4.2 Changes	34
4.2.1 Usability improvements	34
4.2.2 Transferring tickets between different queue types in script (#643454)	34
4.2.3 API enhancer methods added to JavaDoc (#644023)	34
4.2.4 Ticket relations renamed in the Web Client and CM/Archive (#644070, #644402)	35
4.2.5 Apache commons libraries updated (#644223)	35
4.2.6 Machine learning improvements (#644231, #644243)	36
4.2.7 Link to the Web Admin Suite added to the start page (#644362)	36
4.2.8 Configuration files changed (#644386)	36
4.2.9 ACF layout improved (#644387)	37
4.2.10 AJP listener configuration extended (#644440)	37
4.3 Bugs fixed	38
5. Version 6.13.0.2 (22.10.2020)	41
5.1 Update and installation instructions	42
5.1.1 System upgrade from 6.12.1 and earlier versions	42
5.1.2 Data Warehouse update	42
5.1.3 Script modification requirements	42
5.1.4 Configuration modification requirements	42
5.2 Changes	43
5.2.1 Usability improvements	43
5.2.2 Performance improvements	43
5.2.3 Handling of custom REST API extensions changed (#642925)	44
5.2.4 Notification when an email cannot be handled due to its size (#642967)	44
5.2.5 API for generating DWH cubes (#643922)	44
5.2.6 Track password reset template updated (#644172)	46
5.2.7 Method for rendering templates with images added (#644507)	46
5.2.8 Audit logging improved (#644562)	46
5.2.9 Operation times logging for REST requests (#644711)	47
5.2.10 Validation of script templates removed (#644726)	47
5.2.11 Link API available in script templates (#644732)	47
5.2.12 Headlines for data fields (#644783)	48
5.2.13 Development mode for script editing in the Process Designer (#644798)	48
5.2.14 Default value of the field-indexed annotation changed (#644823)	49
5.2.15 LinkService method adapted (#644952)	49
5.2.16 CM/Phone updated (#644974)	49

5.3 Bugs fixed	50
6. Version 6.13.0.3 (27.10.2020)	53
6.1 Update and installation instructions	54
6.1.1 System upgrade from 6.12.1 and earlier versions	54
6.2 Bugs fixed	55
7. Version 6.13.0.4 (20.11.2020)	56
7.1 Update and installation instructions	57
7.1.1 System upgrade from 6.12.1 and earlier versions	57
7.1.2 Bouncycastle removed from distribution package (#645459)	57
7.1.3 Support for Tomcat for CM/Track changed (#645504)	57
7.1.4 Script modification requirements	57
7.2 Changes	58
7.2.1 Managing suggested email addresses (#643898, #644034)	58
7.2.2 Cube administration added to the Web Admin Suite (#645124)	58
7.2.3 API for creating text entries adapted (#645362)	59
7.2.4 Log files section added to the Web Admin Suite (#645431)	59
7.3 Bugs fixed	61
8. Version 6.13.0.5 (21.12.2020)	62
8.1 Update and installation instructions	63
8.1.1 System upgrade from 6.12.1 and earlier versions	63
8.1.2 Configuration modification requirements	63
8.2 Changes	64
8.2.1 Usability improvements	64
8.2.2 Elytron framework removed (#644935)	67
8.2.3 Logging configuration in cluster adapted (#645125)	67
8.2.4 Limits for text fields in the Web Admin Suite adapted (#645273)	67
8.2.5 Absolute positioning of field visualizations (#645303)	67
8.2.6 Title annotation support for all string fields added (#645357)	67
8.2.7 Activity forms added to the Web Admin Suite (#645422)	67
8.2.8 Display of required fields improved (#645469)	68
8.2.9 Warning about unsaved changes extended (#645603)	68
8.2.10 Layout of CM/Track improved (#645677, #645705)	68
8.2.11 Operation times logging improved (#645760)	69
8.2.12 Jscli library added (#645779)	69
8.2.13 Keyword for empty cells in client configuration introduced (#645807)	69
8.3 Bugs fixed	71
9. Version 6.13.0.6 (22.02.2021)	73
9.1 Update and installation instructions	74
9.1.1 System upgrade from 6.12.1 and earlier versions	74
9.1.2 Support for Microsoft SQL Server 2019 added (#634622)	74
9.1.3 Microsoft Office 2019 support added for CM/Doc (#646412)	74
9.1.4 Script modification requirements	74
9.2 New features	75
9.2.1 Rich text field support for CM/Track (#634790)	75

9.3 Changes	77
9.3.1 Usability improvements	77
9.3.2 Froala editor updated in CM/Track (#642430)	78
9.3.3 New API methods to get object counts (#645110)	78
9.3.4 Display of empty fields in CM/Doc changed (#645572)	79
9.3.5 Support for headline fields in CM/Track (#645622)	79
9.3.6 supportEmail property removed from setup (#645902)	79
9.3.7 Third party libraries updated for CM/Track (#645888, #646006)	79
9.3.8 Deprecated HTML4 tags added to Froala configuration (#646234)	79
9.3.9 Limit for exporting CSV files modified (#646304)	80
9.3.10 Whitelist for links added via CM/Track (#646503)	80
9.4 Bugs fixed	81
10. Version 6.13.0.7 (31.03.2021)	83
10.1 Update and installation instructions	84
10.1.1 System upgrade from 6.12.1 and earlier versions	84
10.1.2 Configuration modification requirements	84
10.2 Changes	85
10.2.1 Usability improvements	85
10.2.2 From address of email notifications modified (646303)	85
10.2.3 Number of used licenses shown in log file (#646824)	85
10.2.4 Third-party libraries updated in CM/Doc (#646853)	85
10.3 Bugs fixed	86
11. Version 6.13.0.8 (21.07.2021)	88
11.1 Update and installation instructions	89
11.1.1 System upgrade from 6.12.1 and earlier versions	89
11.1.2 Script modification requirements	89
11.1.3 Configuration modification requirements	89
11.2 Changes	90
11.2.1 Usability improvements	90
11.2.2 Performance improvements	91
11.2.3 Tooltips for activities in CM/Track (#635173)	91
11.2.4 Cluster configuration adapted for CM/Track (#641893)	92
11.2.5 Configurable sort order for queues in CM/Track (#646448)	92
11.2.6 XML configuration files updated (#646753)	93
11.2.7 Audit logging for the Web Admin Suite (#647032)	93
11.2.8 New variables added to context of autocomplete scripts (#647326)	93
11.2.9 Third-party library updated in CM/Doc (#647557)	93
11.2.10 Scope filter for ticket list in CM/Track (#647633)	93
11.2.11 Mapping of deleted list values added (#647654)	94
11.2.12 Property to define allowed attachment types modified (#648115)	94
11.2.13 File extensions for CM/Doc always allowed (#648116)	95
11.2.14 Security improvements (#648099, #648120, #648122, #648235)	95
11.2.15 Autocorrection of dates improved (#648215)	95
11.2.16 Property to indicate technical scopes added (#648456)	95

11.3 Bugs fixed	97
12. Version 6.13.0.9 (08.09.2021)	102
12.1 Update and installation instructions	103
12.1.1 System upgrade from 6.12.1 and earlier versions	103
12.1.2 Configuration modification requirements	103
12.2 Changes	104
12.2.1 Handling of incoming emails with disallowed attachments improved (#649455, #649457)	104
13. Version 6.13.0.10 (29.09.2021)	105
13.1 Update and installation instructions	106
13.1.1 System upgrade from 6.12.1 and earlier versions	106
13.1.2 Configuration modification requirements	106
13.1.3 Support for JBoss EAP 7.3.9 added (#649622)	106
13.2 Changes	107
13.2.1 Performance improvements	107
13.2.2 Property to define allowed attachment types modified (#649734, #649836) ..	107
14. Version 6.13.0.11 (15.10.2021)	108
14.1 Update and installation instructions	109
14.1.1 System upgrade from 6.12.1 and earlier versions	109
14.1.2 Support for Tomcat changed (#649926)	109
14.2 Bugs fixed	110
15. Version 6.13.0.12 (17.12.2021)	111
15.1 Update and installation instructions	112
15.1.1 System upgrade from 6.12.1 and earlier versions	112
15.2 Changes	113
15.2.1 Third-party library log4j updated (#650617, #650628)	113
16. Version 6.13.0.13 (20.12.2021)	114
16.1 Update and installation instructions	115
16.1.1 System upgrade from 6.12.1 and earlier versions	115
16.2 Changes	116
16.2.1 Third-party library log4j updated (#650710, #650711)	116
17. Web applications expiry	117

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 actions
6.13.0.11	Support for Tomcat changed (#649926)	CM/Track	Update Tomcat
6.13.0.9	Handling of incoming emails with disallowed attachments improved (#649455, #649457)	Web Client	Check system property
6.13.0.8	Property to define allowed attachment types modified (#648115)	Web Client, CM/Track	Check system property
6.13.0.8	Third-party library updated in CM/Doc (#647557)	CM/Doc	Update CM/Doc
6.13.0.7	Third-party libraries updated in CM/Doc (#646853)	CM/Doc	Update CM/Doc
6.13.0.6	Display of empty fields in CM/Doc changed (#645572)	CM/Doc	Update CM/Doc
6.13.0.4	Support for Tomcat for CM/Track changed (#645504)	Update	Update Tomcat
6.13.0.4	Bouncycastle removed from distribution package (#645459)	Update	Update JBoss configuration
6.13.0.2	DWH performance improved (#644165), API for generating DWH cubes (#643922)	DWH	Execute update script
6.13.0.1	Machine learning improvements (#644231, #644243)	Scripting	Adapt scripts
6.13.0.0	JBoss configuration changed (#643782)	Setup	Update JBoss configuration
6.13.0.0	CSV export feature adapted (#643579)	Web Client	n/a
6.13.0.0	Support for Wildfly changed (#642632)	System requirements	Update Wildfly
6.13.0.0	Support for JBoss EAP 7 changed (#642631, #643350)	System requirements	Update JBoss
6.13.0.0	Support for JBoss EAP 6.4 dropped (#642630)	System requirements	Update JBoss
6.13.0.0	Support for Oracle 11g dropped (#641966, #641967)	System requirements	Update Oracle

Version	Change	Affected area	Required actions
6.13.0.0	New layout for data fields (#641891)	Web Client	Check layout
6.13.0.0	commons-fileupload library removed (#633754)	Scripting	Check scripts
6.13.0.0	Behavior of readonly annotation changed (#632772)	CM/Track	n/a
6.12.1.3	No automatic line break when using includes in templates (#644151)	Templates	
6.12.1.3	Behavior when deleting list items via REST API changed (#644033)	REST API	
6.12.1.3	Export of page customization attributes modified (#643199)	Import/Export	
6.12.1.2	Third party libraries for CM/Track V2 updated (#642673)	CM/Track	
6.12.1.2	Ticket URL changed (#642572)	Import/Export	
6.12.1.1	Support for CM/Track with embedded Tomcat dropped (#642875)	System requirements	
6.12.1.1	Supported Tomcat version changed (#642778)	System requirements	
6.12.1.1	Notifications API changed (#642692)	Scripting	
6.12.1.1	PDFBox updated (#632554)	Scripting	
6.12.1.1	Third party libraries for CM/Track V2 updated (#642504)	CM/Track	
6.12.1.1	jackson-databind library updated (#642462)	Scripting	
6.12.1.0	Support for WebLogic phased out (#642451)	System requirements	
6.12.1.0	Support for Windows Server 2008 phased out (#642299)	System requirements	
6.12.1.0	Support for Firefox changed (#642228)	System requirements	
6.12.1.0	jQuery updated (#642077)	Scripting	
6.12.1.0	New text editor in the Web Client (#634544)	Page customization	
6.12.1.0	Trigger behavior changed when several attachments are added (#632885)	Scripting	

Version	Change	Affected area	Required actions
6.12.0.0	Support for Oracle 10g dropped (#641334)	System requirements	
6.12.0.0	Guava library updated (#634494)	Scripting	
6.12.0.0	Support for multicast dropped (#634234)	Cluster	
6.12.0.0	Deprecated methods removed from TicketPayload (#633196)	Scripting	
6.12.0.0	Unused methods removed from UnitCriteria (#631800)	Scripting	
6.12.0.0	JMS removed (#631352)	Update	
6.12.0.0	Support for Internet Explorer 9 and 10 dropped (#630877, #641333)	System requirements	
6.12.0.0	Support for Microsoft SQL Server 2008 dropped (#630861)	System requirements	
6.11.2.8	Update events streamlined (#641603, #641631)	Scripting	
6.11.2.8	Third party libraries updated (#642058, #642191)	Scripting	
6.11.2.5	Apache POI library updated (#641435)	Scripting	
6.11.2.3	Default value of csrf.domain.allow.none changed (#634912)	REST API, CM/Track	
6.11.2.2	Firefox support changed (#634493)	System requirements	
6.11.2.2	Support for Java 7 dropped (#634157)	System requirements	
6.11.2.2	Support for CM/Track V1 phased out (#634144)	CM/Track	
6.11.2.2	Line breaks in messages added (#633969)	Templates	
6.11.2.2	Unique constraint for permissions added (#633968)	Update	
6.11.2.2	Changes to the responses returned by the REST API (#633959)	REST API, CM/Track	
6.11.2.2	WebLogic support changed (#633958, #634363)	System requirements	
6.11.2.2	Cross-Site Request Forgery prevention mechanism introduced for the ConSol CM REST API (#633811)	REST API, CM/Track	

Version	Change	Affected area	Required actions
6.11.2.2	DWH task creation optimized (#631804)	DWH	
6.11.2.2	Support for JBoss EAP 6.2 dropped (#630861)	System requirements	
6.11.2.0	Support of JDK 6 dropped (#633096)	System requirements	
6.11.1.16	DWH adapted to support dates until 01.01.2100 (#641871)	DWH	
6.11.1.7	Contact anonymization for GDPR (#633502)	DWH	
6.11.1.7	Content of pContext variable after queue change (#633441)	Scripting	
6.11.1.7	Content of pContext variable in actions changed (#633475)	Scripting	
6.11.1.6	Contact deletion for GDPR (#633392)	DWH	
6.11.1.6	Support for secure SMTP introduced (#633298)	DWH	
6.11.1.1	Support for HTTP status / error codes for the Webhook (#632695)	Scripting	
6.11.1.0	REST API returning FAQ tickets streamlined (#630997)	REST API	

3. Version 6.13.0.0 (09.07.2020)

Version 6.13.0.0 includes all **ConSol CM** changes and additions of

- 6.12 versions up to 6.12.1.2
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0
- 6.9 versions up to 6.9.4.7
- 6.8 versions up to 6.8.5.8

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



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 6.13.0.0 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.0.

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

- The external module `CustomErrorReportValve.jar` is not required anymore. See [Custom error page removed \(#634359\)](#).

3.1.2 Script modification requirements

This release features some interface changes in API methods. Some methods were added or changed. **Please be aware that scripts using the respective methods may need adjustments!** The affected methods are listed in the following sections of this document:

- [commons-fileupload library removed \(#633754\)](#)



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!

3.1.3 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:

- [Behavior of readonly annotation changed \(#632772\)](#)
- [Log file rotation changed \(#634557\)](#)
- [New layout for data fields \(#641891\)](#)
- [Refresh behavior of the ticket list modified \(#642337\)](#)
- [AJP connector added to the configuration files \(#642457\)](#)
- [Microsoft SQL Server configuration files changed \(#643092\)](#)
- [JBoss configuration changed \(#643782\)](#)

3.1.4 Support for Oracle 11g dropped (#641966, #641967)

The support for Oracle 11g as a relational database system has been phased out starting with **ConSol CM** version 6.13.0.0. The database has to be updated to one of the supported Oracle versions (12c, 19).



You can find detailed information about the supported database management systems in the *System Requirements*.


The Oracle hibernate dialect has been updated to a version compatible with 12c and 19.

3.1.5 Support for Oracle 19c added (#642158)

The support for Oracle 19c (version 12.2.0.3) as a relational database system has been added in **ConSol CM** version 6.13.0.0.

3.1.6 Support for JBoss EAP 6.4 dropped (#642630)

The support for JBoss EAP 6.4 as an application server has been phased out starting with **ConSol CM** version 6.13.0.0. The application server has to be updated to the supported JBoss EAP version (7.3).


 You can find detailed information about the supported database management systems in the *System Requirements*.

3.1.7 Support for JBoss EAP 7 changed (#642631, #643350)

The support for JBoss EAP 7 as an application server has been changed starting with **ConSol CM** version 6.13.0.0. The support for version 7.1.4 has been dropped and support for version 7.3 has been added. The application server has to be updated to the supported JBoss EAP version (7.3).

In addition, there were multiple changes to the configuration files:

- [JBoss configuration changed \(#643782\)](#) (breaking changes)
- [Log file rotation changed \(#634557\)](#)
- [Microsoft SQL Server configuration files changed \(#643092\)](#) (only Microsoft SQL Server)
- [JBoss settings for cluster installations changed \(#643235, #643237\)](#) (only cluster)


 You can find detailed information about the supported application server in the *System Requirements*.

3.1.8 Support for Wildfly changed (#642632)

The support for Wildfly as an application server has been changed starting with **ConSol CM** version 6.13.0.0. The support for version 11 has been dropped and support for version 18.0.1 has been added. The application server has to be updated to the supported Wildfly version (18.0.1).

In addition, there were multiple changes to the configuration files:

- [JBoss configuration changed \(#643782\)](#) (breaking changes)
- [Log file rotation changed \(#634557\)](#)
- [Microsoft SQL Server configuration files changed \(#643092\)](#) (only Microsoft SQL Server)
- [JBoss settings for cluster installations changed \(#643235, #643237\)](#) (only cluster)

 You can find detailed information about the supported application servers in the *System Requirements*.

No further instructions available.

3.2 New features

The features newly introduced in this **ConSol CM** version 6.13.0.0 are described in detail in this section.

3.2.1 Machine learning (#641957)

ConSol CM now includes a machine learning extension. Currently, three modules are available:

- **Language detection:**

Find out the language in which texts are written.

Example: When you receive an email, detect the language and open the ticket in the queue of the team which works with this language.

- **Sentiment detection:**

Find out the sentiment (positive, neutral or negative) of texts.

Example: When you receive an email with negative sentiment of an important customer, you can set a higher priority for the ticket. Only available for German.

- **Ticket classification:**

Train the machine learning engine with your existing tickets and automatically classify new tickets.

Example: Set a ticket field with a category based on the initial comment. Determine the queue in which the ticket should be created.

The following properties have been added to the module `cmas-core-server` to configure machine learning:

- **ml.evict.unused.after.hours**

The number of hours after which a machine learning model is evicted from cache if it is not used. The **ConSol CM** server checks every hour for machine learning models to evict. The default value is 24.

- **ml.learn.worker.threads**

The number of threads that a machine learning algorithm can use while training its machine learning model. The default value is 1.

The **ConSol CM** API has been extended for the machine learning features. The following sections list the most important methods for each feature.

3.2.1.1 Language detection

The most important class for working with language detection is `createLanguageDetector()` in the class `nlpService`. It can be used to obtain the language of a text (string). The language is returned as ISO 639-3 code.

The following example shows a script which uses language detection:

```
LanguageDetector languageDetector = nlpService.createLanguageDetector();
DetectedLanguage detectedLanguage = languageDetector.detectLanguage("hello
world");
String language = detectedLanguage.getLanguage();
switch (language) {
    case "eng":
        // do something
        break;
    case "deu":
        // do something
        break;
}
double confidence = detectedLanguage.getConfidence();
```

3.2.1.2 Sentiment detection

The most important class for working with sentiment detection is `createSentimentDetector()` of the class `nlpService`. It can be used to obtain the sentiment of a text (string). The returned sentiment is NEGATIVE, NEUTRAL or POSITIVE.

The following example shows a script which uses sentiment detection:

```
boolean html = true;
NormalizeLanguage normalizeLanguage = NormalizeLanguage.GERMAN; // only GERMAN
language is supported
SentimentDetector sentimentDetector = nlpService.createSentimentDetector
(normalizeLanguage, html);
DetectedSentiment detectedSentiment = sentimentDetector.detectSentiment
("<p>text</p>");
Sentiment sentiment = detectedSentiment.getSentiment();
switch (sentiment) {
    case NEGATIVE:
        // do something
        break;
    case NEUTRAL:
        // do something
        break;
    case POSITIVE:
        // do something
        break;
}
double confidence = detectedSentiment.getConfidence();
```

If you want to track the execution steps of the algorithm, you can call the `detectSentiment` method with an additional boolean parameter:

```
boolean recordDetails = true;
DetectedSentiment detectedSentiment = sentimentDetector.detectSentiment
("<p>text</p>", recordDetails);
String details = detectedSentiment.getDetails();
```


3.2.1.3 Ticket classification

The most important classes for working with ticket classification are

`MLTicketTextClassifierService` and `MLTicketTextClassifierTrainingSpec`. You need to perform the following steps:

1. Create the training specification (class `MLTicketTextClassifierTrainingSpec`). You can train the model either to determine the queue of a ticket or the value of a ticket field of the type ENUM.
 - a. Use the method `classifyToQueueName` to train the model to determine the ticket queue, or use the method `classifyToEnumFieldValueName` to decide which ticket field of the type ENUM is the category for which the model should be trained.
 - b. Decide which tickets should be used for training the model, e.g. tickets in a certain queue, tickets which have a certain value set in a given enum field, or tickets for which a certain activity was not yet executed.
 - c. Decide which kind of content entries should be used for training the model, e.g. only comments, only incoming or outgoing emails.
 - d. Limit the number of processed tickets and content entries.
2. Train the model (class `MLTicketTextClassifierService`). Use the method `train` to create a `bin` file containing the training results. You need to provide the created training specification.
3. Query the model to classify new tickets (class `MLTicketTextClassifierService`). Use the method `predict` to obtain the predicted classification. You need to provide the model and the ticket text.



Please see the **ConSol CM** API documentation for details about the available methods and settings.

The following example shows how to train a model for the field `helpdesk_standard.priority`.

```
// this method will replace old ticket_priority.bin MLFile with new one
MLTicketTextClassifierTrainingSummary summary =
mlTicketTextClassifierService.train("ticket_priority.bin",
MLTicketTextClassifierTrainingSpec
.classifyToEnumFieldValueName("helpdesk_standard", "priority")
.limitNumberOfTicketsPerEnumFieldValue(10000)
.limitNumberOfContentEntriesPerTicket(1)
.trainUsingTexts()
.trainUsingOnlyClosedTickets()
.trainUsingOnlyTicketsFromQueues("ml_test")
);

log.info("Training summary :" + summary)
```

The following example shows how to query the created model:

```
mlTicketTextClassifierService.predict("ticket_priority.bin", "This is the
initial email sent by the customer to create a ticket.")
```

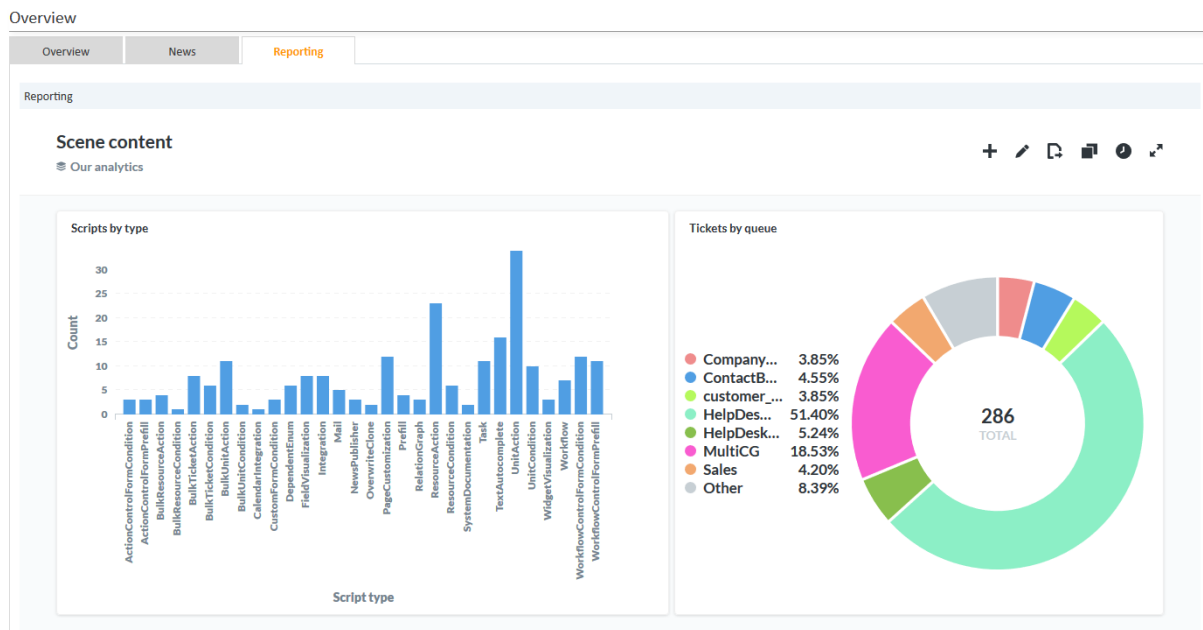
3.2.2 Integrated reporting with **CM/EBIA** (#642353)

ConSol CM has been enhanced with a new add-on called **CM/EBIA**. This add-on provides extensive reporting functionalities within **ConSol CM**. It allows to create widgets containing reports. The reports can use data from the **ConSol CM** database, the **CMRF** database, or any other database.

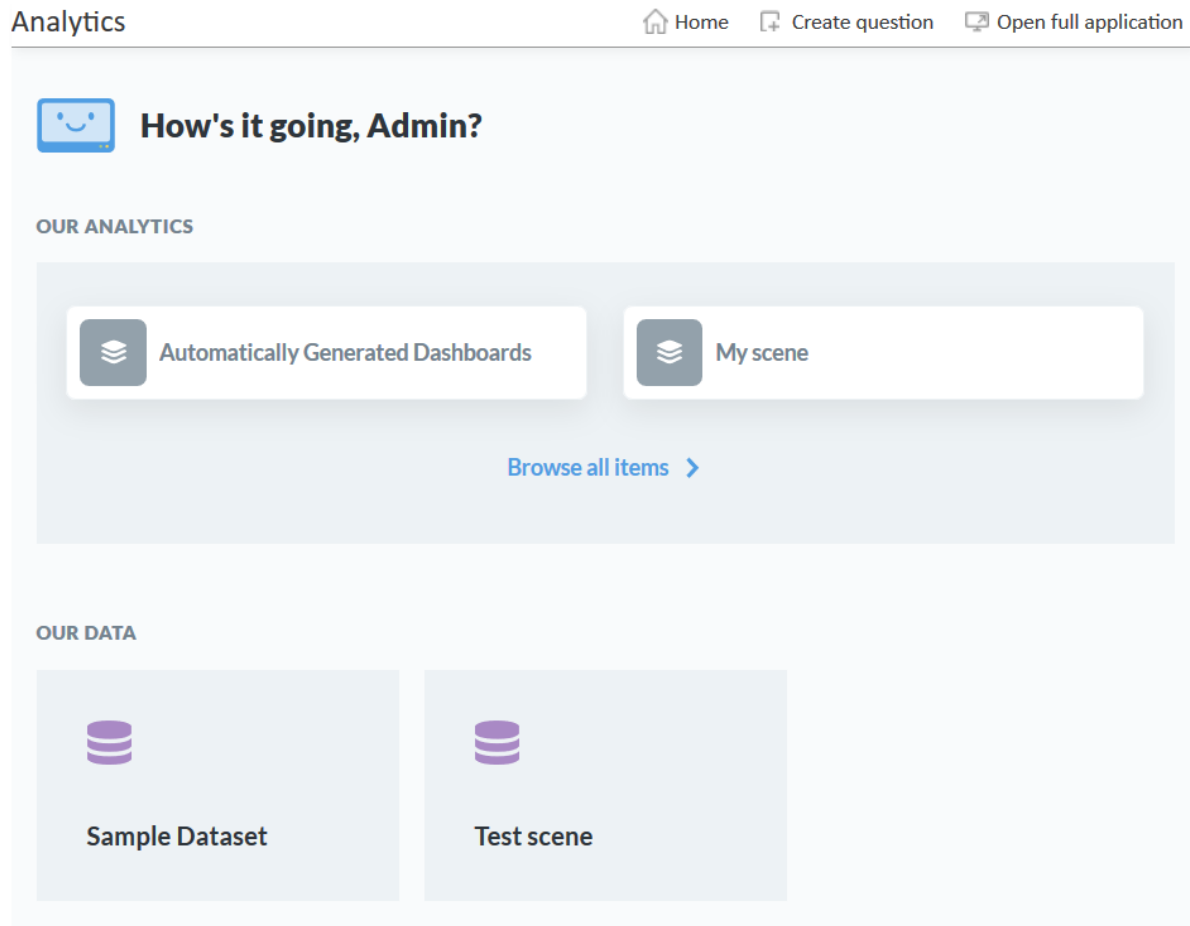


CM/EBIA uses the third-party application **Metabase** and needs to be licensed separately.

The following figure shows an example dashboard created with **CM/EBIA**:



The link *Analytics* has been added to the menu bar of the **Web Client**. It opens the new page *Analytics*, which allows to browse the configured reports and the available data. The user can create a new question using the button in the header. In addition, he can open the complete **CM/EBIA** application in a new tab. This allows access to all features of **CM/EBIA**, including the administration. The *Analytics* is only displayed if **CM/EBIA** has been licensed and the user has either global administrator permissions or EBIA full access permissions.



There are two kinds of users in **CM/EBIA**:

- **Administrators** see the menu item *Analytics*. They are allowed to ask questions, create dashboards and explore data. Administrations either need general administrator permissions or Metabase administrator permissions. Metabase administrator permissions are granted using the new checkboxes:
 - **Admin Tool**: checkbox *EBIA full access* in the section *Analytics Permissions* of the *Global Permissions*
 - **Web Admin Suite**: checkbox *EBIA full access* in the section *Analytics permissions* of the tab *Global*
- **Regular users** can view the created reports in widgets on the *Overview* page. Depending on the permissions defined in the **CM/EBIA** administration, the user might also be able to explore the data in the tables which are used for the reports which they have access to, create their own questions and save them to their collections.



In order to avoid potential unwanted side effects of the regular users editing dashboards, it is recommended to give them only view access to the collections in the **CM/EBIA** administration (section *Permissions* -> *Collection permissions*).

CM/EBIA allows to define the following items for the use in generic widgets:

- **Questions** are single graphs which visualize certain data.
- **Dashboards** consist of several questions.

- **Collections** can include both questions and dashboards. Depending on their permissions, the users can define their own collections.

The **ConSol CM** API has been extended with the class `metabaseService`. It contains several methods to retrieve data from Metabase, which can be used by the widget visualization script:

- **getDashboard(String pId, String pAttributes)**
Returns an `iframe` tag with the dashboard by ID
- **getQuestion(String pId, String pAttributes)**
Returns an `iframe` tag with the question by ID
- **getCollection(String pId, String pAttributes)**
Returns an `iframe` tag with the collection by ID
- **getMetabaseIframe(String pReturnToURI, String pAttributes)**
Returns an `iframe` tag with the Metabase application according to certain parameters (can be used to access the full Metabase application)
- **getMetabaseURL(String pReturnToURI)**
Returns the URL with the authentication token, which is used as the value of the `src` parameter in the `iframe` tag

The following parameters are used in the above methods:

- **pId**
Dashboard, question, or collection identifier
- **pAttributes**
`iframe` tag attributes, see <https://developer.mozilla.org/en-US/docs/Web/HTML/Element/iframe#Attributes>
- **pReturnToURI**
The part of the URL that is used for `iframe src` (e.g., `"/dashboard/ 5"`, `"/question/7"`)

The following example shows how to use the method `getDashboard()` to render a Metabase dashboard in the widget.

```
def render(String pParams) {
  return """
    ${metabaseService.getDashboard("3", 'height="700px"')}
    """ as String
}
```

The section *analyticsPage* has been added to the page customization. It has three attributes:

- **adminLinkVisible:**
Determines whether the *Admin* link is displayed. Default: true.
- **iframeHeight:**
Determines the height of the iFrame with the Metabase application. Default: 1000
- **navigationLinksVisible:**
Determines whether the links *Home*, *Create question* and *Open full application* are displayed. Default: true

Two system properties were added to the new module `cmas-analytics` to integrate **CM/EBIA**:

- **metabase.url:**
Determines the URL where the Metabase application runs. Default: `http://localhost:3000`. Needs to match the setting SITE URL in the Metabase configuration.
- **metabase.secret.key:**
Determines the string used by the JWT signing key. Needs to match the setting STRING USED BY THE JWT SIGNING KEY in the Metabase configuration.

3.2.3 Tickets without customers (#642551)

ConSol CM now supports queues with tickets without customers. This is useful for scenarios where customers are not needed, for example, FAQ or news queues, or use cases which do not require customers from a business perspective.

The queue configuration of the **Admin Tool** has been extended by the field *Customer assignment* with two possible values:

- **Mandatory:** Tickets in this queue always have a customer.
- **None:** Tickets in this queue never have a customer.

The screenshot shows the 'Create new queue' dialog box. The 'Details' section contains the following fields:

- Queue: (text input)
- Prefix: (text input)
- FAQ: ☐ (checkbox)
- Ticket display name: (text input)
- Customer assignment: **Mandatory** (dropdown menu, highlighted by an arrow)
- Workflow: ActivityConditions (dropdown menu)
- Calendar: (dropdown menu)
- Enabled: ☒ (checkbox)
- Ticket assignment templates:
 - Assign: (dropdown menu)
 - Unassign: (dropdown menu)
- Scripts:
 - Email script: (dropdown menu)
 - Default values script: (dropdown menu)
 - Clone script: (dropdown menu)
- Other:
 - Description: (text area)

The default value is *Mandatory*. When you update an existing **ConSol CM** system, *Mandatory* is automatically set for all the queues.

The customer setting needs to be made when creating the queue. It cannot be changed afterwards.

The following applies to queues without customers (setting *None*):

- In the **Admin Tool**, the customer groups are disabled, so that you cannot assign customer groups to the queue.
- In the **Web Client**, the tickets do not have a *Customers* section. The ticket list does not show the customer.
- In **CM/Track**, you cannot create tickets in queues without customers. Tickets without customers are only supported for the FAQ and news functionalities in **CM/Track**.
- The REST API has been adapted to allow creating tickets in queues without customers. PUT and POST request to the `tickets` endpoint must not contain a customer.

Tickets cannot be transferred between queues which do not have the same customer setting, i.e. it is not possible to change a ticket from a queue with customer to a queue without customer and viceversa. This applies also when using scripts to change the ticket's queue.

You can use text templates for tickets without customers. In this case, the content of customer field variables is empty. If the text templates contain scripts which access customer fields, you need to adapt the scripts with conditions and/or null safe operations to avoid exceptions in the log files.

3.3 Changes

This section illustrates all relevant software product changes for version 6.13.0.0 of **ConSol CM**.

3.3.1 Usability improvements

Save and *Cancel* buttons added to ticket, customer and resource creation screens (#631968)

The screens to create a ticket, customer or resource in the **Web Client** have been enhanced with a *Save* button and a *Cancel* button, which are displayed next to the *Create* button. The *Save* button saves the ticket, customer or resource to the workspace. The *Cancel* button aborts the creation and returns the user to the main page.

Improved REST error message (#641361, #642809)

The error messages returned by the REST API have been improved for better readability and consistency.

Horizontal scrollbar at the top of the search results table (#632526)

When a detailed search returns more than 10 results and a scrollbar is present because not all columns fit on the screen, the scrollbar is displayed both at the bottom of the table and at the top of the table. This makes it easier to use the scrollbar to see information about results which are displayed first in the table.

Messages for password reset improved (#641362)

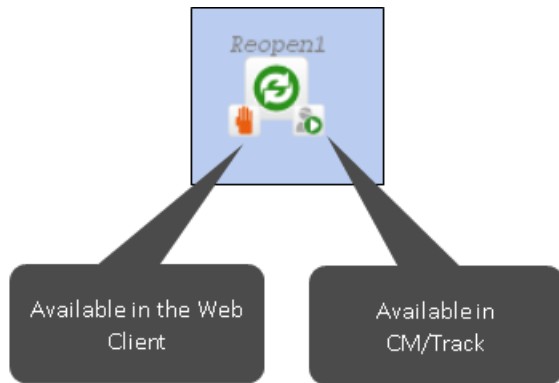
The messages which are displayed after requesting a password reset in the **Web Client** using the *Forgot your password?* link on the login page have been improved. In general, a message that the email with instructions has been sent is displayed, regardless of whether the user exists or not, or is deactivated. If the user exists and the email could not be sent due to problems with the mail server, an error message is displayed.

Layout of radio buttons in web forms improved (#641642)

The layout of radio buttons in web forms has been improved. The button label is now properly aligned with the radio button both in the published web form and in the web form editor in the **Web Client**.

Icon for user-exposed reopen activity changed (#642090)

The icon which indicates that a reopen activity in the **Process Designer** is available for **Web Client** users has been changed. Now, the hand icon, which is also used for manual activities, is displayed in order to distinguish between the settings *expose to users* and *expose to customers*.



Ticket ID with 7 digits (#643883)

Ticket IDs consisting of 7 digits are now displayed correctly below the ticket icon in the **Web Client**.

3.3.2 Event trigger for ticket relations (#621146)

Business event triggers in the **Process Designer** can now react on changes to ticket relations. The new option *related ticket* has been added to the trigger properties for this purpose.

If the option *related ticket* is enabled, the trigger fires when a ticket relation is created or removed. It fires separately for the source and the target ticket.

3.3.3 Mailbox handling changed (#632461)

It is now possible to edit the mailbox configuration in the **Admin Tool** without having to stop the NIMH service first. The NIMH service is now restarted automatically and the changes are applied in one transaction.

3.3.4 Behavior of readonly annotation changed (#632772)

The effect of the annotation **readonly** has been changed to achieve a consistent behavior in the **Web Client** and in **CM/Track**. In addition, it is now possible to make all kinds of fields editable in forms only.

The annotation **readonly** can have four values:

- **all**
The field is always read-only.
- **edit**
The field is read-only when creating or editing a ticket, customer or resource. It can be edited in forms.
- **form**
The field is read-only in forms. It can be edited when creating or editing a ticket, customer or resource.
- **unset**
The field is always editable. This is the default behavior if the annotation is not assigned.

The behavior is identical in both the **Web Client** and **CM/Track**. It applies to regular fields and fields which belong to lists and structs.

When updating a **ConSol CM** system, the values of existing **readonly** annotations which had another value than "false" are changed as follows:

- **Regular fields:** The value is set to “edit”.
- **Fields which belong to lists or structs:** The value is set to “all”.



The behavior of existing installations changes if a regular field which is used in ACFs had the annotation `readonly` assigned.

Previously, the field could be edited in ACFs in the **Web Client** but was read-only in ACFs in **CM/Track**.

After the update, the field can be edited in ACFs in both the **Web Client** and **CM/Track**. It is not possible anymore to configure a field which can be edited only in ACFs in the **Web Client**.

3.3.5 commons-fileupload library removed (#633754)

The library `commons-fileupload` has been removed from **ConSol CM** because it was not used anymore.



If you use this library in scripts, you need to adapt the scripts by removing all references to this library.

3.3.6 Custom error page removed (#634359)

The custom error page which was displayed when the requested URL was not found on the **ConSol CM** server has been removed. A generic error page provided by the JBoss application server is now displayed.

The external JBoss module `CustomErrorReportValve.jar` is not required anymore.

3.3.7 Log file rotation changed (#634557)

The rotation settings for the log files have been changed. Previously, a size-rotating-file-handler was used by default. Now, a periodic-size-rotating-file-handler is used. This means that the rotation now depends both on the date and the file size. By default, a new log file is created every day and the maximum file size is 50MB. If the maximum size is exceeded, a new file is created for this day. 10 files are kept as backup.

The XML configuration files `cm6-<DB>.xml`, `cm6-cmr-f-<DB>.xml`, `cmr-f-<DB>.xml` and the new file `cm6-dwh-<DB>.xml` have been modified accordingly.

3.3.8 Methods to create links added (#635013)

The **ConSol CM** API has been enhanced with methods to create links to tickets, customers and resources.

Two system properties have been added to the module `cmas-core-server` to store the system URLs:

- `url.track` - URL of **CM/Track**
- `url.webclient` - URL of the **Web Client**

The system properties are added automatically during setup or update. Their value is empty initially. You need to enter the correct values for your system before using the methods.

The class `LinkService` with the method `linkTo` for `webclient` and `track` has been added to generate the links. The ticket, customer or resource object which should be linked needs to be passed as a parameter.

The following example shows how to generate links:

```
def ticket = ticketService.getByName("SUP-11");
def contact = ticket.getMainContact();
def company = contact.get("company()");
def resource = resourceService.getId(348);

url = linkTo.webclient(ticket);
url = linkTo.webclient(unit);
url = linkTo.webclient(resource);
url = linkTo.track(ticket);
```

3.3.9 New layout for data fields (#641891)

The layout of the data fields displayed on ticket, customer and resource pages has been updated. The labels of the fields are now displayed above the fields instead of left to the fields. The validations, e.g. if a field is required, are displayed below the fields. The new layout is used for both viewing and editing tickets, customers and resources.

The new layout is responsive and space-efficient, so that you can improve the presentation of the data in your **ConSol CM** system.

3.3.9.1 Notes on migrating the layout

The **position** and **colspan** annotations of your data models are applied automatically to the new layout. In general, no further actions are required for migrating the layout.

If you do **not** use **position** and **colspan** annotations for tables (data fields of the type *list* with a nested *struct*), you need to set these annotations for the table to span the whole width. Assign the following annotations:

- **position** = 0;0
- **colspan** = 3



The **colspan** annotation only takes effect if the **position** annotation is used as well!




If you use field visualizations which display content with **position: absolute**, you need to assign the annotation **label-in-view = false** to the data fields.

You might want to optimize the data field layout for the new grid. Check the following aspects (optional):

- Use three columns to display the data fields (two columns are also possible, but do not use the available space as efficiently). This is set in the system property `defaultNumberOfCustomFieldsColumns` of the module `cmweb-server-adaper`. In ACFs, you can determine the number of columns using the *Column limit* setting of the ACF.
- Display data fields which most likely have a value on the left in order to avoid gaps.
- Remove the annotation `colspan` = 2 from data fields except for tables as it is usually not needed anymore.
- Show the labels for all data fields (annotation `show-label-in-view` should be `true`).

3.3.10 Jersey updated for the REST API (#641932)

The third party library **Jersey** used for the REST API has been updated from version 2.25 to version 2.26.

 This change does not affect custom REST clients.

3.3.11 MailQueuePoller adjusted (#642285)

The MailQueuePoller which is used to process emails in **ConSol CM** has been adjusted. ERROR messages which were logged if multiple threads were running have been removed because they do not constitute a problem.

3.3.12 Spring library updated (#642331)

The following third-party library used in **ConSol CM** has been updated:

- spring: update from version 4.3.21 to version 5.5.2.
- easymock: update from version 2.5.1 to version 4.1
- spring ldap: update from version 1.3.0 to version 2.3.1

3.3.13 Refresh behavior of the ticket list modified (#642337)

The refresh behavior of the ticket list in the **Web Client** has been modified. By default, the ticket list is refreshed every 180 seconds if the tab is active. If the user switches quickly between tabs, the ticket list is only refreshed if half of the refresh interval has already passed. Otherwise, the counter for the refresh interval starts again.

The attribute `pauseRefreshWhileTabInBackground` in the scope `accordionTicketList` has been added to the page customization to configure the refresh behavior. If it is set to “true” (default value), the ticket list is only refreshed if the tab is active. If it is set to “false”, the ticket list is also refreshed if the tab is in the background, the browser is minimized or the computer is locked / in screensaver mode. To restore the previous behavior of the ticket list, set the attribute to “false”.

3.3.14 AJP connector added to the configuration files (#642457)

The AJP connector, which is needed to use **ConSol CM** behind a proxy, has been added to the configuration files `cm6-<DB>.xml` and `cm6-cmr-f-<DB>.xml`.

3.3.15 Ticket ID added to the search index (#642759)

The ticket ID has been added to the search index, so that it is possible to search by ticket ID in the quick search.



This change only applies to newly created or updated tickets. If you want to search for existing tickets by their IDs, you need to manually start a re-indexing operation in the **Admin Tool**.

3.3.16 Additional engineers selector improved (#643025)

The engineer selector in the *Add engineers* section of the **Web Client** has been improved. If no engineers with engineer functions are available, the selector is empty. Previously, all the engineers were displayed in the selector although it was not possible to add them as additional engineer.

3.3.17 Microsoft SQL Server configuration files changed (#643092)

The XML configuration files for Microsoft SQL Server `cm6-mssql.xml`, `cm6-cmrf-mssql.xml` and `cmrf-mssql.xml` have been changed. The setting `exception-sorter` has been added.

3.3.18 JBoss settings for cluster installations changed (#643235, #643237)

Several JBoss settings were changed for cluster installations (domain mode). The files `master-host.xml` and `slave-host.xml` have been adapted by adding the following settings:

- `-XX:+UseG1GC`
- `-XX:HeapDumpPath=${jboss.home.dir}/domain/servers/cm6-server/heapdumps`
- `-XX:HeapDumpPath=${jboss.home.dir}/domain/servers/cmrf-server/heapdumps`
- `-Xloggc:${jboss.home.dir}/domain/servers/cm6-server/log/garbage_collector.log`
- `-Xloggc:${jboss.home.dir}/domain/servers/cmrf-server/log/garbage_collector.log`
- `-XX:+PrintGCDetails`
- `-XX:+PrintGCDateStamps`
- `-XX:+UseGCLogFileRotation`
- `-XX:NumberOfGCLogFiles=10`
- `-XX:GCLogFileSize=2M`
- `-XX:+HeapDumpOnOutOfMemoryError`

3.3.19 Page to set new password changed (#643352)

When a user tries to log in to the **Web Client** with an expired password, he is redirected to the password reset page. The user name is already prefilled and the user needs to click the *OK* button to request an email with a link to reset his password. The password change page, which could be used to change an expired password has been removed.

3.3.20 CSV export feature adapted (#643579)

The CSV export feature which allows to create a CSV file containing the results of a Detailed Search in the **Web Client** has been adapted. The feature is now active by default and the user can export up to 500 rows. This prevents timeouts which could occur when a user tried to export large result sets.

The following page customization attributes (type *table* on the Detailed Search page) are modified during the setup or update of **ConSol CM**:

- **enabled**
Set to "true".
- **exportRowsLimit**
Set to "500".



The value "0", which could be used to allow the export of an unlimited number of rows, is not supported anymore.

3.3.21 JBoss configuration changed (#643782)

The way of configuring **ConSol CM** has been changed. The settings are not made in the configuration files anymore. Instead, new properties files which include the mandatory settings have been introduced:

- **cm6-config.properties**: standalone **ConSol CM** installation, and **ConSol CM** installation with **CMRF** in standalone mode (uncomment the respective lines if **CMRF** is used)
- **cm6-domain-config.properties**: cluster **ConSol CM** installation with **CMRF** (comment the respective lines if no **CMRF** is used)
- **cm6-cmrf.properties**: standalone **ConSol CM** installation with overlay **CMRF** installation
- **cmrf-config.properties**: standalone **CMRF** installation

They are located in the **bin** directory.

The configuration files have been adapted by introducing variables which can be referenced from the properties files. In addition, there is one configuration file for each database now:

- **cm6.xml** has been replaced by **cm6-mysql.xml**, **cm6-oracle.xml** and **cm6-mssql.xml**
- **cm6-cmrf.xml** has been replaced by **cm6-cmrf-mysql.xml**, **cm6-cmrf-oracle.xml** and **cm6-cmrf-mssql.xml** (used for **CMRF** overlay mode)
- **cmrf.xml** has been replaced by **cmrf-mysql.xml**, **cmrf-oracle.xml** and **cmrf-mssql.xml** (used for **CMRF** standalone mode)
- **domain.xml** has been replaced by **cm6-mysql.xml**, **cm6-oracle.xml** and **cm6-mssql.xml**
- **host.xml** has been replaced by **master-host.xml** and **slave-host.xml**
- The new files **cm6-dwh-mysql.xml**, **cm6-dwh-oracle.xml** and **cm6-dwh-mssql.xml** have been added. They are used for **ConSol CM** when **CMRF** is configured in standalone mode.

You need to edit the properties file for your setup and make the mandatory settings:

- Database user and password
- URL of the transactional and non-transactional datasource
- Host and jgroups settings (cluster only)

In addition, you can use the properties files to override the default settings from the XML configuration file, for example logging settings. You can override all the settings which contain variables with default values in the configuration file.

Example:

You want to change the log level of the `index.log` file to DEBUG.

1. Locate the respective handler in the configuration file (example from `cm6-mysql.xml`).

```
<periodic-size-rotating-file-handler name="INDEX_FILE" autoflush="true">
  <level name="${handler.indexfile.level:INFO}"/>
  <formatter>
    <pattern-formatter pattern="%d %-5.5p [%30.-30c] [%X{username}-%X
      {context}-%X{sessionId}] %m%n"/>
    </formatter>
  <file relative-to="jboss.server.log.dir" path="index.log"/>
  <suffix value=".yyyy.MM.dd"/>
  <max-backup-index value="${handler.indexfile.max.backup.index:1}"/>
  <append value="true"/>
</periodic-size-rotating-file-handler>
```

2. Locate the variable for the log level.

This is `${handler.indexfile.level:INFO}`.

3. Add an entry for this variable to the properties files, e.g. `cm6-config.properties`.

```
# logging overrides
handler.indexfile.level=DEBUG
```

These settings also affect the command to start **ConSol CM**. The properties file needs to be provided as `-P` parameter and the configuration file as `-c` parameter in the start command.

Example:

```
<JBOSS_HOME>/bin/standalone.sh -P <JBOSS_HOME>/bin/cm6-config.properties -c
cm6-<DB>.xml
```

3.4 Bugs fixed

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

Number	Description
633434	Missing contact history entry When removing a Track user profile from a contact using the method <code>unitEngineerRelationServiceImpl.deleteByUnit(contact)</code> or the ETL interface, no entry about this change was written to the contact history. This problem has been solved and an entry is now written to the contact history.
634885	MLA values not overwritten by default values script MLA values which are set in a default values script are not overwritten when another default values script is executed because the user changes the queue of the ticket in the Web Client . This problem has been solved and MLA values are correctly overwritten by default values scripts now.
641511	Missing history entry when changing customer data field via task When updating a customer field in a task which is triggered by a customer action, no history entry was written. This problem has been solved and the corresponding history entry is now added correctly.
642106	Attachments with long names could not be removed from email When writing an email in the Web Client , attachments with very long names could not be removed because the X icon was not displayed. This problem has been solved and the X icon to remove an attachment is correctly displayed now.

4. Version 6.13.0.1 (07.09.2020)

Version 6.13.0.1 includes all **ConSol CM** changes and additions of

- 6.12 versions up to 6.12.1.4
- 6.11 versions up to 6.11.2.10
- 6.10 versions up to 6.10.8.0
- 6.9 versions up to 6.9.4.7
- 6.8 versions up to 6.8.5.8

Changes with respect to the previous minor release (6.13.0.0):

- Merged version 6.12.1.3 and 6.12.1.4

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 6.13.0.1 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.1.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)).

4.1.2 Script modification requirements

This release features some interface changes in API methods. **Please be aware that scripts using the respective methods may need adjustments!** The affected methods are listed in the following sections of this document:

- [Machine learning improvements \(#644231, #644243\)](#)



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!

4.1.3 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:

- [Configuration files changed \(#644386\)](#)
- [AJP listener configuration extended \(#644440\)](#)

No further instructions available.

4.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.1 of **ConSol CM**.

4.2.1 Usability improvements

Editor for rich text fields updated (#642431)

The editor used in rich text fields in the **Web Client** has been updated to Froala version 3.2.1. The functionality of the editor remains unchanged but its visual appearance has been improved.

Margins on contact and resource pages unified (#644183)

The margins of the different sections of contact and resource pages in the **Web Client** have been unified to improve the layout.

Layout of user profile improved (#644214)

The layout of the *Password change*, *Representation* and *General settings* sections of the user profile in the **Web Client** has been improved by adding margins to the bottoms of the sections.

Improved message when accessing **CM/EBIA** without permission (#644234)

The message which is displayed when a user without **CM/EBIA** administrator permissions tries to access the *Analytics* page by entering the page URL in the browser has been improved. It now states that the page cannot be shown due to missing permissions.

4.2.2 Transferring tickets between different queue types in script (#643454)

It is now possible to transfer tickets between queues with different customer assignment settings by script.

To pass a ticket from a queue without customers to a queue with customers, you need to provide the customer using the method `addNewPrimaryContact` from the class `WorkflowContextService`:

```
// set a queue with customers
ticket.setQueue(queueService.getByName("WithCustomer"));
// add contact as main customer
workflowApi.addNewPrimaryContact(unit.id, "supporter");
// save the ticket
ticketService.update(ticket);
```

When you pass a ticket from a queue with customers to a queue without customers, the customers are removed automatically.

4.2.3 API enhancer methods added to JavaDoc (#644023)

The API enhancer methods which provide convenience features for scripting in **ConSol CM** have been added to the JavaDoc. They can be found in the documentation of the following classes:

- `ActivityControlFormExecutionContextGroovyExtension`
- `EngineerGroovyExtension`
- `MailGroovyExtension`

- ResourceGroovyExtension
- TicketGroovyExtension
- UnitGroovyExtension

The way of using the methods has not changed. The following example shows how to use the method `getDisplayName()` from `UnitGroovyExtension`:

```
unit.getDisplayName();
```

4.2.4 Ticket relations renamed in the **Web Client** and **CM/Archive** (#644070, #644402)

The names which are shown in the **Web Client** for the different kinds of ticket relations have been changed for better clarity. In addition, the wording is now configurable. The corresponding labels are added to the **Admin Tool / Web Admin Suite** during update.

The previously called *master / slave* relation, which can be set in the **Web Client**, has been renamed to *parent / child*. The previous *parent / child* relation is now called *parent / child (fixed)*, because it can only be set in the workflow.

The following table shows the newly introduced labels and their default values in English and German:

Label	English	German
cmweb.main.ticket.relations.lax.parent	Parent	Übergeordneter Vorgang
cmweb.main.ticket.relations.lax.child	Child	Subvorgang
cmweb.main.ticket.relations.fixed.parent	Parent (fixed)	Übergeordneter Vorgang (fest)
cmweb.main.ticket.relations.fixed.child	Child (fixed)	Subvorgang (fest)
cmweb.main.ticket.relations.reference.plural	References	Referenzen
cmweb.main.ticket.relations.reference.singular	Reference	Referenz

In **CM/Archive**, the new default wording is used.

4.2.5 Apache commons libraries updated (#644223)

Two libraries from the Apache commons collection have been updated:

- `commons-lang` has been updated to `commons-lang3`
- `commons-collections` has been updated to `commons-collections4`



The old libraries are still available in the core project and the `cmas-common-model` has not been updated.

4.2.6 Machine learning improvements (#644231, #644243)

The machine learning API has been improved. It is now possible to export the data which is used for training to a CSV file. The exported CSV file contains the category and the text according to the training specification. The user can inspect and edit the file before using it to create a model. The model can be created on any system. Therefore, it is possible, for example, to extract data from a production system and use a development system for training the model.

The class `MLTicketTextClassifierTrainingSpec` of the machine learning API was replaced by `MLTicketTextClassifierSpec`.



If you use `MLTicketTextClassifierTrainingSpec` in your scripts, you need to adapt the scripts accordingly.

When using the API to train a model based on a CSV file, the language of the string fields is detected automatically to improve the training results. Alternatively, the user can set the language manually by adding the following line to the script:

```
mlFileField.action.language = NormalizeLanguage.GERMAN;
```

If the language could not be detected, a warning message is written to the log files.

4.2.6.1 Coding example

The following example shows how to generate a CSV file containing the data used for training:

```
// export file from source system / production system
mlFileService.exportWithMetaData(dataset.getId(), new FileOutputStream
("/tmp/ticket_priority.csv.jar"));
mlFileService.delete(dataset.getId());

// use created file on training system (note that the data set may change name
if file ticket_priority.csv already exists)
MLFile dataset = mlFileService.importWithMetaData(new FileInputStream
("/tmp/ticket_priority.csv.jar"));
```

4.2.7 Link to the *Web Admin Suite* added to the start page (#644362)

The link to open the *Web Admin Suite* has been added to the internal start page of *ConSol CM*. In addition, the text of the start page has been slightly modified for better clarity.

4.2.8 Configuration files changed (#644386)

The configuration files for *ConSol CM* have been changed. The default port offset `jboss.socket.binding.port-offset=200` has been added to the `cmrf-config.properties` file. In addition, the comments indicating which datasources are transactional and non-transactional have been adapted in the `cm6-config.properties`, `cm6-domain-config.properties`, `cm6-cmrf-config.properties` and `cmrf-config.properties` files.

4.2.9 ACF layout improved (#644387)

The layout of ACFs with the new data field grid (see [New layout for data fields \(#641891\)](#)) has been improved. In the **Admin Tool**, the option *New table* has been renamed to *New row (full width)*. If this option is selected for a field, the field is placed in a new row and spans all the columns of the ACF in the **Web Client**. This setting is convenient for tables (structs) used in ACFs.

4.2.10 AJP listener configuration extended (#644440)

The AJP listener configuration in the configuration files `cm6-<DB>.xml` has been extended by the `max-post-size` parameter. It is set to the same value as for the HTTP listener.

4.3 Bugs fixed

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

Number	Description
631174	Prefill script in ACFs could lead to duplicate list values When using a prefill script to add list values in an ACF in CM/Track , the existing list values in the affected field were duplicated. This problem has been solved and prefill scripts do not cause duplicate list values anymore.
643302	Indexer did not restart after restoring database connection When the database connection was lost, it could happen that the indexer service was not restarted correctly after the database connection was restored. This problem has been solved and the indexer service is now restarted correctly.
643876	Not possible to enter text before an image In Froala, the new editor in the Web Client , it was not possible to enter text in the space just before an image. This problem has been solved and typing before an image works as expected now.
644012	Queue selector in ACF did not work for tickets without customers The queue selector which can be displayed in ACFs in the Web Client did not work correctly for tickets without customers. The queue was not displayed and it was not possible to submit the ACF. This problem has been solved and the queue selector now works correctly for tickets without customers.
644184	Layout problem when using TinyMCE for comments When TinyMCE is used as an editor for comments in the Web Client , the red asterisk indicating that the comment is mandatory was misplaced. This problem has been solved and the red asterisk is now placed correctly.
644230	Error when reading CSV file on Mac When using a Mac computer to read a CSV file for training a machine learning model, an error could occur. This problem has been solved and reading CSV files on Mac computers now works as expected.
644245	Error when training machine learning model on large dataset When training a machine learning model on a large number of tickets, exceptions could occur when the size of the data file increased. This problem has been solved and training a model with a large number of tickets is now possible.
644271	Layout problems with recent changes and recently visited widgets The recent changes and recently visited widgets in the Web Client had some layout problems. If the user clicked the <i>Show all</i> button, it could happen that the button to close the popup window was hidden behind the navigation bar making it impossible to close the window. In addition, the popup window of the recent changes widget could span the whole screen width. These problems have been solved and the windows are correctly sized and placed now.

Number	Description
644304	Text classification did not work on Microsoft SQL Server When running ConSol CM with Microsoft SQL Server as a database, it was not possible to use the methods of the class MLTicketTextClassifierService for text classification. This problem has been solved and this class now works as expected.
644315	Layout problem in suggestions window The layout of the suggestion details window, which is displayed during the creation of customers or resources when clicking a suggestion to display its details in the Web Client , was incorrect so that fields could overlap. This problem has been solved and the suggestion details are correctly displayed now.
644335	Button to select a contact cut off on small screens When opening the page to create a contact in the Web Client in a small browser window, the button to select a suggested contact was cut off. This problem has been solved and the complete button is displayed now.
644401	Missing label in dependent enum Data fields which belong to lower levels of dependent enums did not have a label in the Web Client . This problem has been solved and all the labels are displayed correctly now.
644521	Property to disable mailboxes did not work correctly The ConSol CM system property mailbox.<id>.task.enabled did not work correctly and mailboxes were fetched even if the property was set to "false". This problem has been solved and this property now works correctly.
644643	Multipart requests via webhook did not work Multipart requests via webhook did not work correctly. This problem has been solved and the ConSol CM webhook can now handle multipart requests correctly.
644649	Sending emails with Internet Explorer 11 not possible It was not possible to send emails using the email editor of the Web Client when using Internet Explorer 11 as a browser. This problem has been solved and emails can now be sent with Internet Explorer 11.
644661	Long labels of Boolean fields were overlapped by other fields The labels of Boolean fields in the edit mode in the Web Client were not displayed correctly. Long labels were overlapped by the fields positioned to their right. This problem has been solved and the labels are now displayed in several lines if they exceed the available space.
644685	Misplaced date picker on the user profile page under Chrome The date picker which is used in the <i>Time bookings</i> section of the user profile in the Web Client was misplaced when using Chrome as a browser. This problem has been solved and the date picker is now displayed in the correct position under Chrome.

Number	Description
644807	<p>Broken validation message when trying to submit ACF with empty required rich text field</p> <p>When the user tries to submit an ACF which contains a required rich text field which has not been filled out, an empty text box was displayed below the field instead of the corresponding validation message. This problem has been solved and the validation message is correctly displayed now.</p>

5. Version 6.13.0.2 (22.10.2020)

Version 6.13.0.2 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.1):

- 6.12.1.5

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 6.13.0.2 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.2.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)).

5.1.2 Data Warehouse update

When updating the ConSol CM system to version 6.13.0.2, you must update the DWH to use cubes, see [API for generating DWH cubes \(#643922\)](#). In addition, a DWH update improves the performance, see [DWH performance improved \(#644165\)](#). Please execute the update scripts for ConSol CM version 6.13.0.2. The update scripts for each database are available from your ConSol representative.

5.1.3 Script modification requirements

This release features some interface changes in API methods. **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 for rendering templates with images added \(#644507\)](#)
- [LinkService method adapted \(#644952\)](#)

5.1.4 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:

- [Audit logging improved \(#644562\)](#)
- [Operation times logging for REST requests \(#644711\)](#)

No further instructions available.

5.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.2 of **ConSol CM**.

5.2.1 Usability improvements

Improved wording of detailed search option (#644269)

The wording of the search criterion *Keyword (Pattern)* on the *Search* page of the **Web Client** has been improved to better reflect the meaning of this criterion. It is now *Free text (all fields, emails and comments)* when searching for tickets and *Free text (all fields)* when searching for resources or contacts.

Hour display in session list improved (#644338)

The time displayed for *Start date* and *Last action date* in the *Active sessions* section of the user profile in the **Web Client** is now shown in 24 hour format for better clarity.

Easier selection of ticket list items (#644695)

Previously, it was necessary to click the link which states the ticket subject to open a ticket from the ticket list. Now, the user can click anywhere in the area of the ticket list entry except for the customer link, which opens the customer page.

Unnecessary scrollbars removed (#644776)

Unnecessary scrollbars which were displayed in the edit mode in the *Details, Comments and Attachments* and *Relations* sections of contact pages were removed.

Custom label key editable (#645093)

The key of a custom label, i.e. a label which was created manually by the user, can now be edited in the **Web Admin Suite**.

Tooltip alignment improved (#645100)

The tooltips which are displayed on ticket, contact and resource pages in the **Web Client** when hovering over data fields are now left aligned. This improves the visual presentation for wide data fields on large screens.

Notifications window improved (#645190)

The notifications window in the **Web Client** has been improved. The text area is not resizable anymore and the icon in the *New notification* button is now aligned with the button label.

5.2.2 Performance improvements

DWH performance improved (#644165)

The performance of the DWH has been improved by dropping an unneeded index on the database.



Please contact the ConSol CM support if you want to apply this improvement to an existing DWH database. They will provide you with an update script for your database system, which you need to execute on the DWH database.

5.2.3 Handling of custom REST API extensions changed (#642925)

All packages are now scanned for custom REST API extensions which are made in the scope of custom projects. This facilitates the upgrade of custom projects from versions below 6.12.0

5.2.4 Notification when an email cannot be handled due to its size (#642967)

The maximum size of incoming emails which can be processed by **ConSol CM** is determined by the system property `mailbox.default.task.max.message.size` from the module `cmas-nimh`. When a user sends an email to **ConSol CM** which cannot be processed because it exceeds this size, in addition to storing the email in the *Email backups* section, a notification email is now sent to the user.

The notification is based on the newly added template `mail-receive-too-large`. The template shows the size of the email which the user tried to send and the maximum allowed size.

In addition, it can be used to set the from address of the notification. Add the parameter `From:` with the desired email address to the template, e.g.:

```
Subject: ConSol CM auto-reply to your email with subject "${ORIGINAL_SUBJECT}"
From: noreply@consol.de
```

```
This is an automated notification from ConSol CM. Your recent email with
subject "${ORIGINAL_SUBJECT}" exceeded our maximum message size for email
processing.
```

```
Maximum size: ${MAX_SIZE_IN_MB} MegaBytes
Your message's size: ${MSG_SIZE_IN_MB} MegaBytes
```

```
Your message was not processed but stored in a location accessible for admins.
Please shrink down the message size by reducing the attachment size and try to
send your message again.
```

If the `From` parameter is not used, the value of the system property `mail.from` in the module `cmweb-server-adapter` is used as a from address.

5.2.5 API for generating DWH cubes (#643922)

The **ConSol CM** API has been extended by methods which allow to create, update and delete cubes on the DWH database using task scripts. The created cube contains the following information:

- Basic ticket data (ID, name, subject, queue, scope, creation date, close date)
- Assignee (first name, last name, login)
- Ticket fields which are annotated as `reportable`, except for lists and structs
- Main contact, this can be either a person or a company (ID and customer group)
- Company of the main contact (ID)

Optionally, the cube can be configured to contain:

- Contact fields of the main contact which are annotated as `reportable`, except for lists and structs
- Contact fields of the main contact's company which are annotated as `reportable`, except for lists and structs



The IDs used in the cube are the IDs from **CMRF**, not the IDs which the objects have in **ConSol CM**.

The following settings can be made for the cube:

- **Name:**
The name of the cube, i.e. the name of the view in the DWH database.
- **Queues:**
One or several queues whose tickets should be included in the cube.
- **Language:**
Language which should be used for the data fields and the enum values.
- **Contact fields:**
Whether the contact data fields should be included in the cube.
- **Company fields:**
Whether the data fields of the contact's company should be included in the cube.

Several new labels have been added to the *Labels* section of the **Web Admin Suite / Admin Tool** to manage the terms used for column names:

Label	Default English	Default German	Usage
cmrf.cube.ticket.main	Case	Vorgang	Columns for basic ticket data and ticket fields
cmrf.cube.queue.main	Process	Prozess	Columns for the technical and localized queue name
cmrf.cube.scope.main	Scope	Bereich	Columns for the technical and localized scope name
cmrf.cube.engineer.main	Assignee	Bearbeiter	Columns for the data of the assigned user
cmrf.cube.maincontact.main	Contact	Kontakt	Columns for the contact ID and contact fields
cmrf.cube.company.main	Company	Firma	Columns for the company ID and company fields
cmrf.cube.customergroup.main	Customer group	Kundengruppe	Columns for the technical and localized customer group name

The classes **DwhCubeService** and **DwhCube** have been added to manage the cubes. The following example shows a task script to create a cube.

```
def onInitialize(taskDescriptor) {}

def onExecute(taskDescriptor) {
    DwhCube cube = new DwhCube()
    cube.setViewName("cube_all")
    cube.setQueues(queueService.getAll())
    cube.setContactCustomFields(true)
    cube.setCompanyCustomFields(true)
    cube.setLocale(Locale.GERMAN)
    dwhCubeService.create(cube)
}

def onError(taskDescriptor) {}
def onCancel(taskDescriptor) {}
```

The cube must be updated using the `dwhCubeService.update(cube)` method if there are changes to `reportable` annotations or localized labels of data fields / enum values. Otherwise, these changes are not reflected in the cube.



It is necessary to prepare the DWH database to use cubes. Please contact the ConSol CM support who will provide you with an update script for your database system, which you need to execute on the DWH database.

5.2.6 Track password reset template updated (#644172)

The template which is used for the email which is sent to CM/Track users who request a password reset, *track-reset-password-template*, has been modified. The value of the system property `url.track` from the module `cmas-core-server` is now used in the URL in the parameter `${urlTrack}`, so that it is not required anymore to provide a hard-coded URL in the template.

The template now contains the following URL, which does not need to be edited as long as the system property is set correctly:

```
${urlTrack}#/password-reset/resetCode-${resetCode}
```

5.2.7 Method for rendering templates with images added (#644507)

The method `mergeAndInlineImages()` has been added to the class `TemplateService`. It can be used for rendering templates which contain images, for example to create a PDF file from a template. If the previously available method `merge()` was used in such a case, the images were not rendered correctly.

5.2.8 Audit logging improved (#644562)

The `audit.log` file was used by two different loggers which could cause problems in clustered environments. To avoid such problems, the new log file `elytron-audit.log` has been introduced for the log messages from the Elytron framework.

5.2.9 Operation times logging for REST requests (#644711)

The new log file `operationtimes-rest.log` has been introduced to log the operation times for REST requests. The request URL and the time needed to process the request are logged on DEBUG level.

Two system properties have been added to the module `cmas-restapi-core` to configure this logging:

- **request.log.username**
Name of the user whose requests are logged. Only one name is supported. If the property is empty (default value), the requests of all users are logged.
- **request.log.threshold.milliseconds**
Time threshold that needs to be exceeded to generate an entry in the log file. The default value is 5000 milliseconds.

5.2.10 Validation of script templates removed (#644726)

The validation which checked the syntax of script templates when the option *HTML enabled* is selected has been removed. It is now possible to save any content to such a script.

In addition, the preview of a script template on the *Templates* page of the **Web Client** now shows the escaped script content, so that the user can see the template content as he typed it.



As only administrators are allowed to edit script templates, it is their responsibility to ensure that no harmful content is added to the template.

5.2.11 Link API available in script templates (#644732)

The methods added in [Methods to create links added \(#635013\)](#) can now be used in script templates. The following syntax is used:

- Link to a ticket in the **Web Client**: `${linkInWebClientTo(ticket)}`
- Link to a contact in the **Web Client**: `${linkInWebClientTo(unit)}`
- Link to a resource in the **Web Client**: `${linkInWebClientTo(resource)}`
- Link to a ticket in **CM/Track**: `${linkInTrackTo(ticket)}`

The following example shows an example template which uses these methods:

```
[#assign ticketUrl = "${linkInWebClientTo(ticket)}"]
[#assign unitUrl = "${linkInWebClientTo(ticket.mainContact)}"]
[#assign trackTicketUrl = "${linkInTrackTo(ticket)}"]

<div>This is link to ticket: </div>
<a href="${ticketUrl?no_esc}">ticket</a></br>
<div>This is link to contact: </div>
<a href="${unitUrl?no_esc}"> contact</a></br>
<div>This is link to ticket in track: </div>
<a href="${trackTicketUrl?no_esc}">ticket in track: </a></br>

[#if resource??]
  [#assign resourceUrl = "${linkInWebClientTo(resource)}"]
  <div>This is link to resource: </div>
  <a href="${resourceUrl?no_esc}"> resource</a></br>
[#else]
  <div>No resource in context</div></br>
[/#if]
```

5.2.12 Headlines for data fields (#644783)

The new annotation `text-type = title` has been introduced to allow adding headlines within the data field grid. Fields which carry this annotation work similarly to label fields, i.e. they cannot have a value, but they are styled as headlines. This allows to clearly structure the data fields in several sections.

The following figure shows such a field in the edit mode:

Office locations

Locations

Country	City
Germany	Munich

Add row

Office address

Street
Franziskanerstraße 38

Add row

5.2.13 Development mode for script editing in the *Process Designer* (#644798)

The **Process Designer** has been enhanced with a development mode which allows modifying scripts in the **Process Designer** without having to deploy the workflow. This saves time because it is not required to deploy the workflow to test changes to scripts during the customization of **ConSol CM**. In addition, fewer workflow versions are created.

The development mode is disabled by default. It can be enabled in the **Process Designer** by selecting the option *Enable development mode* in the local configuration.



This option works for scripts only. The element which the script belongs to needs to be available in the last deployed version of the workflow.

5.2.14 Default value of the field-indexed annotation changed (#644823)

The default value which is set when assigning the annotation `field-indexed` to a data field has been changed. Previously, the value “transitive” was used for all data fields. Now, the default value depends on the object (ticket, contact or resource).

For ticket and resource fields, the value “local” is set because it reflects the indexer behavior: The ticket or resource is found in the search but no related objects are found. This is the only available behavior. If “transitive” or “unit” is used, the behavior is the same.

For contact fields, the value “unit” is set. This changes the default behavior because the tickets of the contact are not found anymore when searching for a contact field with this annotation. The persons of a company are still found. You can use the value “transitive” to include tickets in the search, or the value “local” to find only the contact itself.



Do not use the value “transitive” for contacts unless it is a business requirement to search for tickets by a contact field. If this value is set, all tickets are reindexed when changes to the contact field are made, which can have a negative impact on the indexer performance.

5.2.15 LinkService method adapted (#644952)

The method `linkTo.webclient(ticket)` has been adapted. The generated link now contains the ticket ID instead of the ticket name. The method to create a link to a ticket in **CM/Track** has been left unchanged.

5.2.16 CM/Phone updated (#644974)

CM/Phone has been updated from version 1.0.8.7 to version 1.0.9.0. The new version is available in the *Downloads* section of the user profile in the **Web Client**.

The installer for **CM/Phone** is now available as `.msi` package in English. In addition this version fixes a problem with synchronous calls which were ended by the **CM/Phone** application.



You need to manually uninstall the previous version of **CM/Phone** before installing the new version.

5.3 Bugs fixed

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

Number	Description
641645	Error when changing company When changing the company of a contact whose field for the CM/Track user name is empty, an error occurred in the Web Client . This problem has been solved and changing the company of a contact without CM/Track user name is now possible.
643752	CMRF error when removing field-indexed annotation When using the CMRF on a Microsoft SQL Server database, an error occurred when updating the DWH after setting a <i>field-indexed</i> annotation from “true” to “false”. This problem has been solved and removing a field from the DWH does not cause errors on Microsoft SQL Server databases anymore.
644492	Unneeded white space next to X icon in a list or table In some cases, unneeded white space was displayed next to the X icon, which can be used to remove a row from a list or table, in the Web Client . This caused the corresponding column to be wider than necessary. The unneeded white space has been removed, so that the column of the X icon now has the optimal size.
644598	Error when adding a relation in a collapsed resource section When clicking the <i>Add</i> button of a collapsed <i>Related cases</i> or <i>Related persons and companies</i> section on a resource page in the Web Client , an error occurred. This problem has been solved and it is now possible to add relations if the corresponding sections of the resource page are set to “collapsed” in the page customization.
644604	Entry about removed attachment not displayed in the ticket history If an attachment was removed from a ticket in the Web Client , the history entry which referred to the addition of the attachment was removed as well. This problem has been solved and all the history entries related to the attachment are displayed now.
644747	Scene export included unused scripts When exporting a scene with the option <i>Only latest/installed version</i> for workflows, the exported scene contained control form prefill and condition scripts which belonged to old workflow versions which were not part of the export. This problem has been solved and these scripts are not exported anymore when exporting only the latest version of the workflows.
644817	Previously entered values restored in ACF When a user enters some values in required fields in an ACF in the Web Client and removes them before clicking the <i>Save and continue</i> button, the validation messages about empty required values were displayed and the previously entered values were restored. This problem has been solved and removed values are not restored anymore when trying to submit an ACF with required fields.

Number	Description
644893	<p>Ticket not saved to workspace when adding a comment</p> <p>When the user opens the comment editor using the <i>Add comment, email or attachment</i> field and starts writing a comment, the ticket was not saved to the workspace when the user switched to another page. This problem has been solved and the ticket is saved to the workspace in this situation now.</p>
644865	<p>Documentation generator does not work when user has EBIA permissions</p> <p>An exception occurred when a user who has a role with the <i>EBIA full access</i> permission tried to create a system documentation in the <i>Documentation generator</i> section of the Admin Tool. This problem has been solved and generating a system documentation is now possible for users which <i>EBIA full access</i> permissions.</p>
644947	<p>Entry about removed attachment not displayed in the ticket history</p> <p>If an attachment was removed from a ticket in the Web Client, the history entry which referred to the addition of the attachment was not displayed until another history entry was added. This problem has been solved and the history entries related to the attachment are always displayed now.</p>
644950	<p>Position of the ticket list scrollbar reset</p> <p>When switching to another tab, the position of the scrollbar of the ticket list was reset in the previous tab. This problem has been solved and the position of the scrollbar is now remembered while working in other tabs.</p>
644953	<p>Update failed when duplicate readonly annotation was present</p> <p>The update to ConSol CM version 6.13.0.0 failed if the installation contained a duplicate readonly annotation which was added on the <i>Annotations</i> screen using the expert mode and assigned to data fields. This problem has been solved and custom annotations do not affect the update anymore.</p>
645036	<p>Web Admin Suite unusable if the health report was broken</p> <p>If the health report was broken, it was not possible to use the Web Admin Suite suite because the dashboard page could not be loaded. This problem has been solved and a broken health report does not affect the usability of the Web Admin Suite anymore.</p>
645053	<p>Indexer did not restart after restoring database connection</p> <p>When the database connection was lost, it could happen that the indexer service was not restarted correctly after the database connection was restored. This problem has been solved and the indexer service is now restarted correctly.</p>
645213	<p>Redirection loop after session timeout</p> <p>It could happen that a logout due to a session timeout in the Web Client caused a redirection loop which rendered the browser tab unusable. This problem has been solved and such a loop does not occur anymore.</p>

Number	Description
645228	<p>Mouseover did not consider browser language in Froala</p> <p>Mouseovers in rich text fields and the comment and email editor in the Web Client did not take into account the browser language. They were always displayed in English. This problem has been solved and the mouseovers are now displayed in the language set in the browser.</p>
645234	<p>Not possible to assign / unassign customer annotations in a cluster</p> <p>When running ConSol CM in a cluster, it was not possible to add or remove annotations from customer fields on Linux. This problem has been solved and assigning and removing customer annotations is now possible.</p>

6. Version 6.13.0.3 (27.10.2020)

Version 6.13.0.3 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.2):

- None

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 6.13.0.3 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.3.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)).

No further instructions available.

6.2 Bugs fixed

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

Number	Description
645331	Mouseover did not consider browser language in Froala Mouseovers in rich text fields and the comment and email editor in the Web Client and CM/Track did not always take into account the browser language. They were sometimes displayed in English. This problem has been solved and the mouseovers are now displayed in the language set in the browser.
645345	Loop after logging out from the Web Client An infinite loop of page redirects could occur when logging out from the Web Client using Internet Explorer or Chrome as a browser. This problem has been solved and such loops do not happen anymore. In addition, any related errors are now logged on DEBUG level.

7. Version 6.13.0.4 (20.11.2020)

Version 6.13.0.4 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.3):

- 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 6.13.0.4 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.4.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)).

7.1.2 Bouncycastle removed from distribution package (#645459)

The **ConSol CM** distribution package does not contain bouncycastle anymore. Instead, the bouncycastle version provided by JBoss EAP or Wildfly is used.



After an update to **ConSol CM** version 6.13.0.4, the directory **bouncycle** in **<JBOSS_HOME>\modules\system\layers\base\org** must be removed. In addition, please make sure that the file **module.xml** in **<JBOSS_HOME>\modules\system\layers\base\org\bouncycastle\main** lists bouncycastle with the required version 1.60.

7.1.3 Support for Tomcat for **CM/Track** changed (#645504)

The support for Tomcat as an application server for **CM/Track** has been changed starting with ConSol CM version 6.13.0.4. The support for version 8.5.51 has been dropped and support for version 9.0.39 has been added. The application server has to be updated to the supported Tomcat version (9.0.39).

7.1.4 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:

- [API for creating text entries adapted \(#645362\)](#)

No further instructions available.

7.2 Changes

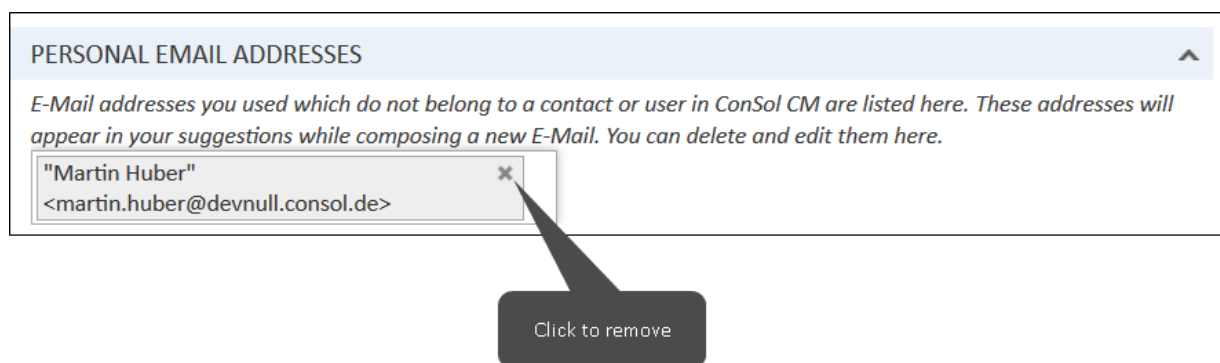
This section illustrates all relevant software product changes for version 6.13.0.4 of **ConSol CM**.

7.2.1 Managing suggested email addresses (#643898, #644034)

The user profile of the **Web Client** has been enhanced with the new section *Personal email addresses*. It allows to manage the email addresses which the user introduced manually in the email editor of the **Web Client**, i.e. the email addresses which do not belong to contacts or engineers but to other people who receive emails from **ConSol CM**. These email addresses are stored and suggested when the user selects the recipients of an email in the **Web Client**.

This feature allows the user to remove entries which are not relevant anymore from the suggestions.

The section is collapsed by default and can be expanded by clicking the arrow on the right side of the section header. The user can remove an entry by clicking the X icon.



If the email address is too long to be displayed in the field, it is cut off and a tooltip with the complete address is shown.

i During the update, the database table where the personal email addresses are stored is cleaned up in order to remove email addresses which belong to contacts or engineers and duplicated email addresses.

7.2.2 Cube administration added to the **Web Admin Suite** (#645124)

The **Web Admin Suite** has been extended with the *Cubes* page in the menu item *DWH*. It allows to manage cubes on the DWH database. This feature provides a graphical user interface for [API for generating DWH cubes \(#643922\)](#).

The following actions are available:

- Create a new cube
- View existing cubes
- View the creation parameters of a cube
- Update the creation parameters of an existing cube
- Regenerate a cube after changes to **reportable** annotations or localized labels of data fields and localized list values
- Delete a cube

The following figure shows the cube administration:

ID	Cube name	Status	Created at	Updated at
1	Test cube	CREATING	17.11.2020, 09:37:43	n/a

1 cubes

NEW CUBE

Cube name *
Test cube

☒ Include person data fields in the cube

☐ Include company data fields in the cube

Select queues *
HelpDesk_1st_Level HelpDesk_2nd_Level

Select locale *
English

UPDATE CUBE

7.2.3 API for creating text entries adapted (#645362)

The **ConSol CM** API for creating text entries which are added to the ticket history using scripts has been adapted. The correct mime type, `text/plain`, is now set automatically when using the constructor of `TextEntry()` with parameters. Therefore, the created text entry is indexed.

7.2.4 Log files section added to the **Web Admin Suite** (#645431)

The **Web Admin Suite** has been extended by the section *Log files* in the *Operation* menu. This section allows to display and download the log files which are saved in the default directory (`<JBoss_HOME>/standalone/log`). By default, the latest lines of the file `server.log` are displayed.

The user can reverse the display order by deselecting the checkbox *Display newest lines first*. In addition, the checkbox *Refresh log file automatically* can be deselected to stop the automatic refresh of the log file. The *Download log files* button allows to download one or several log files. The currently displayed file is preselected. If the user selects several files for download, a zip package is created.

The following example shows the log files page with the `server.log` file:

server.log ▾
☒ Refresh log file automatically
☒ Display newest lines first

```

2020-11-17 10:04:12,366 WARN [.thread.FileSystemPollerThread] [cmas-nimh--] Polling folder doesn't exists!
2020-11-17 10:04:12,358 ERROR [ stderr] [--] Tue Nov 17 10:04:12 CET 2020 WARN: Establishing SSL connection without
server's identity verification is not recommended. According to MySQL 5.5.45+, 5.6.26+ and 5.7.6+ requirements SSL
connection must be established by default if explicit option isn't set. For compliance with existing applications not
using SSL the verifyServerCertificate property is set to 'false'. You need either to explicitly disable SSL by setting
useSSL=false, or set useSSL=true and provide truststore for server certificate verification.
2020-11-17 10:04:12,287 ERROR [ stderr] [--] Tue Nov 17 10:04:12 CET 2020 WARN: Establishing SSL connection without
server's identity verification is not recommended. According to MySQL 5.5.45+, 5.6.26+ and 5.7.6+ requirements SSL
connection must be established by default if explicit option isn't set. For compliance with existing applications not
using SSL the verifyServerCertificate property is set to 'false'. You need either to explicitly disable SSL by setting
useSSL=false, or set useSSL=true and provide truststore for server certificate verification.
2020-11-17 10:04:12,191 ERROR [ stderr] [--] Tue Nov 17 10:04:12 CET 2020 WARN: Establishing SSL connection without
server's identity verification is not recommended. According to MySQL 5.5.45+, 5.6.26+ and 5.7.6+ requirements SSL
connection must be established by default if explicit option isn't set. For compliance with existing applications not
using SSL the verifyServerCertificate property is set to 'false'. You need either to explicitly disable SSL by setting
useSSL=false, or set useSSL=true and provide truststore for server certificate verification.
2020-11-17 10:03:13,747 INFO [me.endpoint.BroadcasterManager] [--] Atmosphere resource added, broadcaster: f42291d1-
e3ff-4e82-a291-d1e3fffe8244 uid: 8d43bc45-00be-4b49-9f09-f34577f813ad
2020-11-17 10:03:13,195 WARN [.hql.internal.ast.HqlSqlWalker] [admin--f42291d1-e3ff-4e82-a291-d1e3fffe8244] [DEPRECATION]
Encountered positional parameter near line 1, column 90 in HQL: [update com.consol.cmas.common.model.UserSession set
lastActionDate = ? where sessionId = ?]. Positional parameter are considered deprecated; use named parameters or JPA-style
positional parameters instead.
2020-11-17 10:03:13,195 WARN [.hql.internal.ast.HqlSqlWalker] [admin--f42291d1-e3ff-4e82-a291-d1e3fffe8244] [DEPRECATION]
Encountered positional parameter near line 1, column 70 in HQL: [update com.consol.cmas.common.model.UserSession set
lastActionDate = ? where sessionId = ?]. Positional parameter are considered deprecated; use named parameters or JPA-style
positional parameters instead.
2020-11-17 10:03:13,003 INFO [ sessionTimeoutEngineerLogger] [--] New session for engineer: admin has started. Session id:
f42291d1-e3ff-4e82-a291-d1e3fffe8244.
2020-11-17 10:03:13,002 INFO [ sessionTimeoutEngineerLogger] [--] New session for engineer: admin has started. Session id:
31a614f6-7a97-41ce-a614-f67a9751ce15.
2020-11-17 10:03:13,003 INFO [me.endpoint.BroadcasterManager] [--] Created broadcaster with id: f42291d1-e3ff-4e82-a291-
d1e3fffe8244 for session: f42291d1-e3ff-4e82-a291-d1e3fffe8244
2020-11-17 10:03:13,002 INFO [me.endpoint.BroadcasterManager] [--] Created broadcaster with id: 31a614f6-7a97-41ce-a614-
f67a9751ce15 for session: 31a614f6-7a97-41ce-a614-f67a9751ce15
2020-11-17 10:03:12,997 INFO [gration.DefaultChannelsManager] [--] Creating client broadcasting channel for session:

```

[DOWNLOAD LOG FILES](#)

7.3 Bugs fixed

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

Number	Description
644642	Incorrect order of history entries Some situations, i.e. creating a ticket from an incoming email, updating a ticket with a business event trigger which reacts on comments or sending an email in a workflow activity, could result in an incorrect order of the ticket history entries in the Web Client . This problem has been solved and the order of the ticket history entries is correct now.
645214	Processing of encrypted emails not possible It was not possible to send or receive encrypted emails with ConSol CM . If an encrypted email was received, it blocked the email processing queue. When trying to send an encrypted email, an exception occurred. This problem has been solved and encrypted incoming and outgoing emails are correctly processed now.
645223	Wrong position of popup dialogs on Firefox When using Firefox to work with the Web Client , popup dialogs, as for example the dialog to set the follow-up date, were displayed at the bottom of the screen if the user scrolled to the end of the ticket before opening the dialog. This problem has been solved and all popup dialogs are now displayed in the middle of the screen.
645359	Development mode did not work in <i>Process Designer</i> with German locale The development mode for script editing did not work when the Process Designer was started in German. This problem has been solved and the development mode now works when running the application in both English and German.
645386	Problem with template parameters String and enum parameters in text templates in the Web Client did not work correctly. If the same parameter was used several times in a template, only the first occurrence was replaced by the entry / selection made by the user. In addition, it was not possible to delete a parameter using the backspace key. These problems have been solved and string and enum parameters now work as expected.
645392	Scripts missing from scene exports When creating a scene export, it could happen that not all prefill and condition scripts were included in the export. This problem has been solved and all scripts are included in the export now.

8. Version 6.13.0.5 (21.12.2020)

Version 6.13.0.5 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.4):

- 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 6.13.0.5 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.5.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)).

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:

- [Elytron framework removed \(#644935\)](#)
- [Logging configuration in cluster adapted \(#645125\)](#)
- [Operation times logging improved \(#645760\)](#)

No further instructions available.

8.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.5 of **ConSol CM**.

8.2.1 Usability improvements

Deactivated contacts and users removed from email suggestions (#641293)

Email addresses which belong to deactivated contacts or users are not shown in the suggestions anymore when writing an email in the email editor of the **Web Client**.

Focus when adding a detailed search to the favorites added (#641387)

When adding a detailed search to the favorites in the **Web Client**, the field to enter a name for the search in the popup window *Name Your Search* now receives the focus automatically. Therefore, the user can directly type the name without having to click in the field first.

Arrow display improved (#641426)

The up and down arrows used to sort items in the **Web Admin Suite** have been improved. If the item has the first position in the list, only the down arrow is displayed or active. If the item has the last position in the list, only the up arrow is displayed or active.

Display of passwords in the *Users* section improved (#642468)

The passwords in the *Users* section of the **Web Admin Suite** are now styled as placeholders, so that it is clear that the asterisk symbols are placeholders and not the content of the passwords.

Information about no results adapted in the *System properties* section (#644670)

The information that there are no results for the given search in the *System properties* section of the **Web Admin Suite** has been adapted. It now says "No results" as in the other **Web Admin Suite** sections.

Default sorting indicator added to all **Web Admin Suite** tables (#644671)

The default sort order, which is automatically applied to a table when opening the respective section in the **Web Admin Suite**, is now indicated for all tables.

Number of deleted properties displayed (#644674)

When deleting system properties in a bulk action in the **Web Admin Suite**, the number of deleted properties is now shown in the success message.

Styling of the contact pages improved (#644846)

The styling of the contact pages of the **Web Client** has been improved. The upper margin of the contact icon has been increased and the *Cancel* button next to the company search field is now properly aligned.

Error message for failed exports added (#644905, #645871)

If the user tries to export data using the *Export* section of the **Web Admin Suite** and the export fails, an error message is now displayed. This is the case, for example, if the user tries to export a single ticket which does not exist.

Description of Froala options in the page customization enhanced (#645210)

The description of the page customization attribute `configuration` in the types `cmRichTextEditor` and `froala` has been enhanced. It now includes an example value and the link to the latest Froala documentation.

Email addresses in the user profile sorted (#645287)

The email addresses which are displayed in the *Personal email addresses* section of the user profile of the **Web Client** are now sorted alphabetically.

Line height in Froala adjusted (#645308)

The line height in the text editor and the rich text fields in the **Web Client** has been adjusted to 1.4. This affects the edit mode when writing a comment or email and filling out a rich text field. In addition, the created comments are displayed with this line height in the view mode. The setting does not affect outgoing emails or the display of incoming emails in the ticket history.

Time added to backup date (#645451)

The time when an email was backed up because it could not be processed has been added to the *Backup date* column of the *Email backups* section of the **Web Admin Suite**.

Tooltip displayed for script names (#645496)

The names of the scripts in the *Scripts* section of the **Web Admin Suite** now feature a tooltip which is displayed on hover. This makes it easier to find the correct script if there is not enough space to display the complete script name in the table.

Ticket creation time displayed in CM/Track (#645528)

The time when a ticket was created is now shown in **CM/Track**. Previously, **CM/Track** only displayed the creation date.

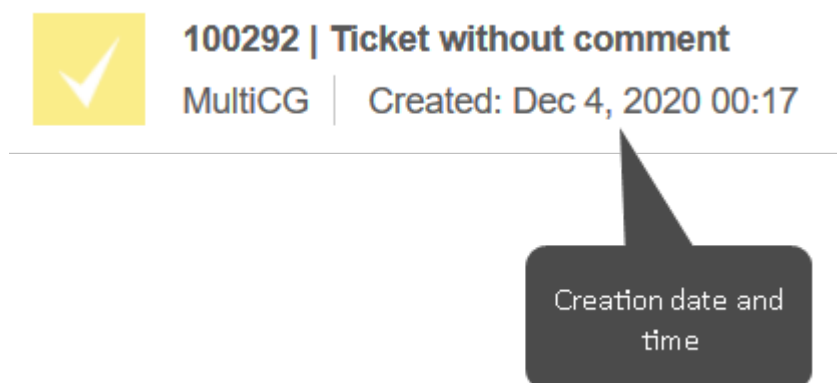


Table handling improved (#645579)

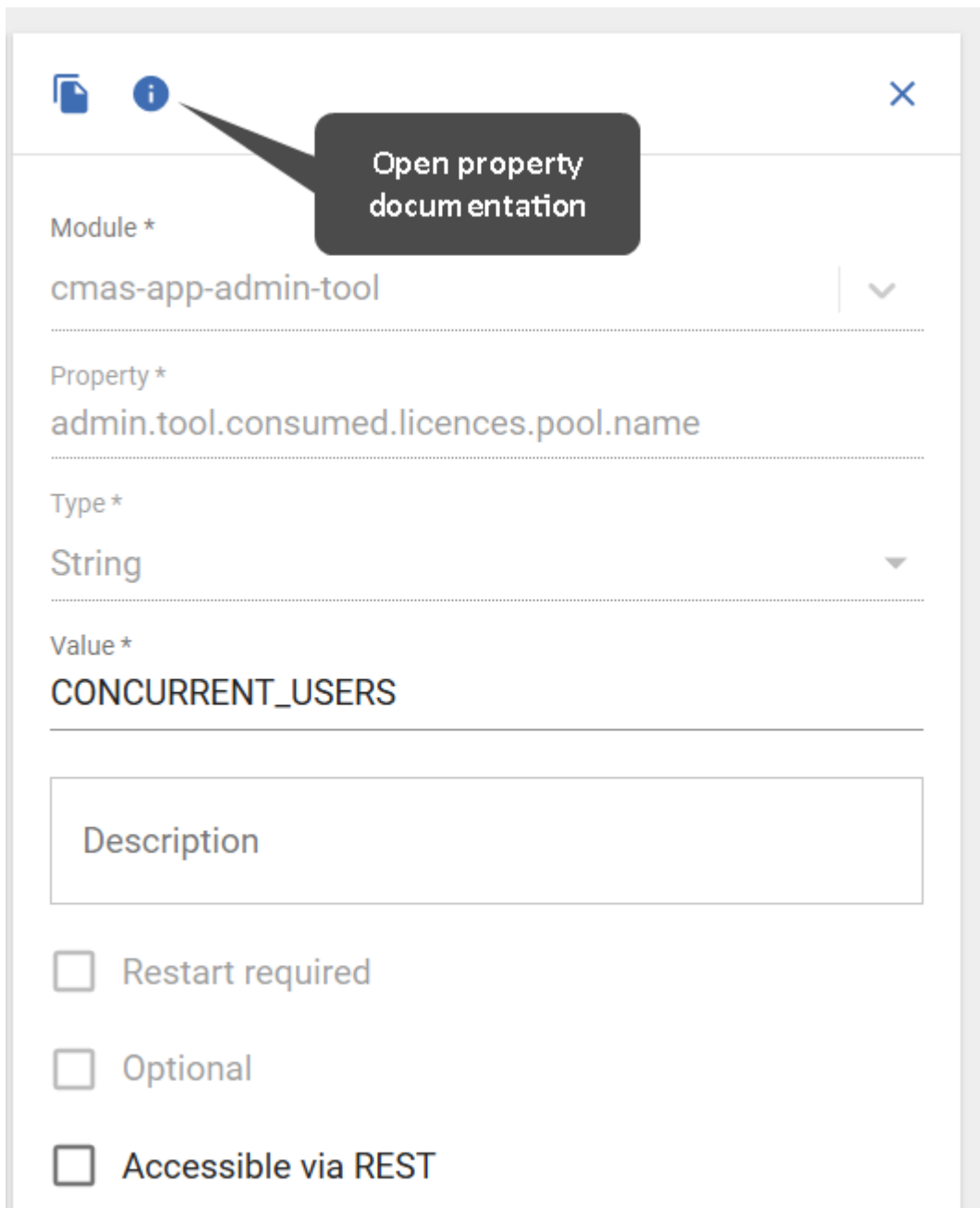
The display of tables in the **Web Admin Suite** has been improved. If the edit panel is opened with the details of an element, some table columns are hidden and the column selector is not displayed. This way, there is enough space to display the content of the important table columns. In addition, the filters which are displayed above the table can now use more than one row, so that all applied filters are visible.

[Ticket name selectable in the ticket list \(#645594\)](#)

The ticket name, which is displayed below the ticket icon in the ticket list of the **Web Client**, can now be selected without the respective ticket being opened automatically. This is useful if the user wants to copy the ticket name.

[Integrated documentation for system properties \(#645891\)](#)

The details panel of the *System properties* section of the **Web Admin Suite** now includes a button to display a modal window with the documentation of the respective property:



The screenshot shows a modal window titled "Open property documentation" with a close button (X) in the top right corner. The modal contains the following fields:

- Module ***: cmas-app-admin-tool
- Property ***: admin.tool.consumed.licences.pool.name
- Type ***: String
- Value ***: CONCURRENT_USERS
- Description**: (empty text box)
- ☐ Restart required
- ☐ Optional
- ☐ Accessible via REST

[Time added to *Last modified* column of scripts and templates \(#645921\)](#)

The *Last modified* columns of the *Scripts* and *Templates* sections in the **Web Admin Suite** now contain the date and the time of the last modification.

Styling of the *Contacts* section of the ticket improved (#645931)

The styling of the *Contacts* section in the ticket page of the **Web Client** has been improved. The *Cancel* button next to the company search field, which is displayed when adding a new contact to the ticket, is now properly aligned.

8.2.2 Elytron framework removed (#644935)

The Elytron framework has been removed because it is not needed by **ConSol CM**. The cluster configuration files `domain-<DB>.xml`, `master-host.xml` and `slave-host.xml` have been adapted accordingly. The log file `elytron-audit.log` is not needed anymore and can be removed from the `logs` directory of the application server.

8.2.3 Logging configuration in cluster adapted (#645125)

The logging configuration in the cluster configuration files `master-host.xml` and `slave-host.xml` have 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 with the settings for Java 8.

8.2.4 Limits for text fields in the **Web Admin Suite** adapted (#645273)

The maximum number of characters which can be entered in text fields in the **Web Admin Suite** has been adapted to match the length limitations from the database. In addition, the validation message which is displayed when the user tries to enter a too long value now shows the maximum number of allowed characters.

8.2.5 Absolute positioning of field visualizations (#645303)

Fields which are used to render field visualizations, i.e. fields which are annotated with `visualization`, can now be positioned outside the data field grid of the ticket, contact or resource which they belong to. The new annotation `visualize-allow-absolute-position` has been introduced for this purpose. If this property is set to "true", the label of the field is hidden automatically and the field visualization can be displayed anywhere within the current object by adding the required position to the visualization script, or to the CSS file saved in the `resources` folder.

8.2.6 Title annotation support for all string fields added (#645357)

The value `title` for the annotation `text-type` is now supported for all types of string fields, i.e. *short string*, *string* and *long string*. Previously, only *string* fields were supported.

8.2.7 Activity forms added to the **Web Admin Suite** (#645422)

The **Web Admin Suite** has been enhanced by adding the section *Activity forms* located in the new menu item *Cases*. It provides the same functionality as the *Tickets -> Activity Form data* section in the **Admin Tool**.

The activity form details are managed in three tabs: *Basic data*, *Case fields* and *Required fields*.

Several usability improvements have been made:

- A filter with the workflows has been added, so that it is possible to filter the list of activity forms by workflow.
- The workflows where an activity form is used are now indicated in the basic data of the activity form.

- When assigning fields to the activity form, it is now possible to search by both the technical and the localized field names.
- In the *Required fields* tab, the mandatory fields can be set for each workflow activity where the activity form is used. It is not required to deploy the workflow for the change to become effective.
- The fields with the localized activity form names have been removed because this name is not used.

8.2.8 Display of required fields improved (#645469)

The positioning of the asterisk which is displayed in the edit mode to indicate a required field in the **Web Client** has been improved:

- If the field has a label, the asterisk is now displayed after the label. This behavior also applies to required fields in lists and tables.

QA List

Date	Enum	Price	Number*	Text	Department
<input type="text"/>	<input type="text" value="Choose One"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Choose one"/>

Add row

Country*

- If the field does not have a label, the asterisk is displayed after the field as in previous versions.

i For some types of fields, the asterisk might be displayed at the end of the column instead of next to the field if there is no label. The easiest solution is to display the field label in such cases.

8.2.9 Warning about unsaved changes extended (#645603)

The warning about unsaved changes, which is displayed if the user makes changes to an entity in the **Web Admin Suite**, is now displayed also if the user tries to execute an action in the same section, e.g. create a new entity. Previously, it was displayed only if the user tried to access another section of the **Web Admin Suite**.

The user needs to discard the changes to the current entity to proceed. Alternatively, he can cancel the warning dialog to save his changes in the edit panel.

8.2.10 Layout of **CM/Track** improved (#645677, #645705)

The layout of **CM/Track** has been enhanced. The width of the main panel and the modal window for activity forms has been increased to better use the available screen space.

The main panel now uses 100% of the screen up to 1600px. In addition, the display of tables has been improved by applying a minimum width to each column depending on the type of data field, e.g. boolean columns have a smaller limit than date columns, which need more space.

The activity form modal window now uses 90% of the screen. The maximum width depends on the number of columns:

- 1 column: 600px
- 2 columns: 900px
- 3 columns: 1570px



Use 3 columns in your activity form if you have tables which require lots of space.

The following figure shows the page to create a ticket with a large table:

Date	Department	Enum	Price	Number*	Text	Component
15.12.2020	Cracow	Web Client	50.25	235	Please buy me a new lapt	Web Client

8.2.11 Operation times logging improved (#645760)

Operation times logging in **ConSol CM** has been improved. The missing logger for the handler **OPERATION_TIMES** has been added to the **ConSol CM** configuration files. In addition, the default log level for operation times logging has been changed from "DEBUG" to "INFO".

The operation times logging is now enabled by default, and all operations above 2000ms are logged on INFO level and written to the file **operationtimes.log**.

8.2.12 Jsch library added (#645779)

The third-party library Jsch in version 0.1.55 has been added to the **ConSol CM** ear file. It can be used to use SFTP with **ConSol CM**

8.2.13 Keyword for empty cells in client configuration introduced (#645807)

The client configuration for **CM/Track**, which can be managed in the **Admin Tool** or **Web Admin Suite**, now supports the keyword EMPTY. This keyword can be used to indicate an empty cell in the ticket view or edit mode and in activity forms. The following example shows the syntax:

```
"helpdesk_standard": [
  ["qa_list", "qa_list", "qa_list"],
  ["feedback", "EMPTY", "EMPTY"],
  ["country", "country", "EMPTY"]
]
```



Empty cells can only be added at the end of a row.

8.3 Bugs fixed

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

Number	Description
642316	Empty filter on <i>System properties</i> page When filtering the list of system properties in the Web Admin Suite by module and deleting the last property of the module chosen as a filter, an empty filter was displayed. This problem has been solved and the filter is reset to <i>All modules</i> in this case.
644419	Typo in notification about backed up email There was a typo (<i>backuped</i>) in the notification which is sent when an email is moved to the email backups because it could not be processed and in the corresponding log messages. The typo has been corrected and the notification and log messages now use the correct wording (<i>backed up</i>).
644784	Wrong message when deactivating a user When deactivating a user, who is assigned as main user to cases, in the Web Admin Suite , the displayed warning message referred to the user being an additional user instead of the main user. This problem has been solved and the message has been corrected.
645065	Missing information about concurrent changes in the <i>Client configuration</i> section Editing the name of a file in the <i>Client configurations</i> section of the Web Admin Suite did not trigger the notification about concurrent changes. This problem has been solved and the notification about concurrent changes is now displayed.
645174	Not possible to manage imported admin user After importing a scene which contains users with global administrator permissions, it was not possible to delete, disable or enable such imported administrator users in the Web Admin Suite . This problem has been solved and an administrator can now delete, disable or enable other administrator users which were imported into the system.
645242	Not possible to hide ticket sections in the <i>Web Client</i> It was not possible to hide the <i>Contacts</i> or <i>Related resources</i> sections of a ticket in the Web Client using the page customization. The section header was still displayed and an exception occurred when clicking the <i>Add</i> button. This problem has been solved and these sections can now be hidden by setting the page customization attribute <i>state</i> to "hidden".
645525	CSS files loaded in the wrong order The custom theme.css file, which contains custom styling for the Web Client , 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 theme.css file is now loaded at the end.

Number	Description
645558	<p>Client configuration in <i>CM/Track</i> not used on Internet Explorer 11</p> <p>When using <i>CM/Track</i> on Internet Explorer, the client configuration was not retrieved correctly, so that the default configuration was used instead. This problem has been solved and client configurations are handled correctly on Internet Explorer 11 as well.</p>
645633	<p>Assigned roles not copied when duplicating portal profile</p> <p>When duplicating a portal profile in the <i>Users</i> section of the <i>Web Admin Suite</i>, the assigned roles were not copied. This problem has been solved and the assigned roles are now present on the <i>Clone user</i> screen.</p>
645652	<p>Status of a customer action not imported</p> <p>The status (activated vs. deactivated) of a customer action was not imported correctly using the scene import feature of <i>ConSol CM</i>. This problem has been solved and importing a scene, where the customer action has another status than in the target system, now overwrites the status from the target system with the status from the import file.</p>
645703	<p>Unnecessary scrollbar in the comment editor of <i>CM/Track</i></p> <p>An unnecessary horizontal scrollbar was displayed below the comment editor of <i>CM/Track</i>. This problem has been solved by removing the scrollbar.</p>
645787	<p>Error in health report could block the <i>Web Admin Suite</i></p> <p>An error which occurred during the creation of the health report, which is displayed on the start page (dashboard) of the <i>Web Admin Suite</i>, could result in an endless busy indicator which prevented the use of the <i>Web Admin Suite</i>. This problem has been solved. In such a case, the dashboard is now empty but the <i>Web Admin Suite</i> is usable.</p>
645789	<p>Exception when submitting an ACF via REST if the ticket has no customer</p> <p>Submitting an ACF for a ticket which belongs to a queue without customers using the REST API caused an exception. This problem has been solved and ACFs can now be submitted via REST for tickets without customers.</p>
645853	<p>Error when transferring tickets on Oracle</p> <p>When trying to use the ticket transfer option in the <i>Import</i> section of the <i>Web Admin Suite</i> on a <i>ConSol CM</i> system using an Oracle database, an error occurred. This problem has been solved and the ticket transfer feature can now be used with Oracle databases.</p>

9. Version 6.13.0.6 (22.02.2021)

Version 6.13.0.6 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.5):

- 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 6.13.0.6 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.6.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)).

9.1.1.1 Update **CM/Doc** (#646145)

It is required to update **CM/Doc** on the client computers to receive improvements made in **ConSol CM** versions 6.13.0.2 and 6.13.0.5, as well as in [Display of empty fields in CM/Doc changed \(#645572\)](#). A notification that an update is required is displayed when opening **CM/Doc**.

9.1.2 Support for Microsoft SQL Server 2019 added (#634622)

Support for Microsoft SQL Server 2019 as a relational database system has been added in **ConSol CM** version 6.13.0.6.

9.1.3 Microsoft Office 2019 support added for **CM/Doc** (#646412)

Support for Microsoft Office 2019 for use with **CM/Doc** has been added in **ConSol CM** version 6.13.0.6.

9.1.4 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 API methods to get object counts \(#645110\)](#)

No further instructions available.

9.2 New features

The features newly introduced in this **ConSol CM** version 6.13.0.6 are described in detail in this section.

9.2.1 Rich text field support for **CM/Track** (#634790)

Rich text fields are now supported in **CM/Track**. They work in the same way as in the **Web Client**. In the edit mode, the field content can be modified using the rich text editor Froala. In the view mode, the display depends on the value of the annotation `string-content-type`. The content is either displayed directly (value `html-inline`) or there is a link to open a popup window with the content (value `html-link`).

In the edit mode, the size of the field is determined by the number of columns it spans. The default height is the same as for other fields, so the field fits in the grid. Once you add content to a field, the height of the field and the whole row is increased accordingly, so that you can see the complete content.

Rich text fields which are annotated as `readonly` are shown without the editor, i.e. only the formatted field content is displayed with a gray background. This is useful for example for fields which contain instructions.

9.2.1.1 Client configuration changes

The JSON client configuration has been extended with the attribute `richTextEditorSettings` to allow providing settings for the Froala editor.

You can use `customfieldContentFileMaxSize` to indicate the maximum size of one image in the Froala editor in megabytes. This applies to both the content of a rich text field and the content of the comment field. If the whole ticket exceeds the size limit for the request, e.g. because it contains several rich text fields filled with images, an error message is displayed prompting the user to shrink the image size.

The attributes under `froalaConfig` allow to provide the editor options in JSON format:

- `mainCommentEditor`: options for the comment field
- `commonRichTextFieldsEditor`: options for all rich text fields
- `group.field`: options for the specific field indicated by its group and field name

By default, the editor includes the following options: bold, italics, underline, font, font size, and image. The available settings can be found on <https://froala.com/wysiwyg-editor/docs/options>.

The JSON configuration template has been updated with a section containing the Froala settings. The following example shows the respective template section:

```

"richTextEditorSettings": {
  "customfieldContentFileMaxSize": 10,
  "froalaConfig": {
    "mainCommentEditor": {
      "heightMin": 200,
      "toolbarButtons": [[
        "bold", "italic", "underline", "strikeThrough", "|",
        "align", "|", "paragraphFormat", "fontFamily", "fontSize",
        "textColor", "backgroundColor", "-",
        "subscript", "superscript", "|",
        "formatOL", "formatUL", "indent", "outdent", "|",
        "insertTable", "|", "specialCharacters", "insertLink",
        "insertImage"]]
    },
    "commonRichTextFieldsEditor": {
      "height": "auto",
      "toolbarButtons": [
        "bold", "italic", "underline", "fontFamily", "fontSize",
        "insertImage"
      ]
    }
  }
}

```

If the field is annotated with `html-link`, the text used in the link and the title of the popup window can be configured in the localization files of the JSON client configuration, e.g. `localization_en.json`. The following keys can be added for this purpose:

```

'preview_show_link': '[Show content]',
'preview_dialog_title': 'Content view'

```

9.3 Changes

This section illustrates all relevant software product changes for version 6.13.0.6 of **ConSol CM**.

9.3.1 Usability improvements

Queue required for export of all data (#644449)

When the *Queue-based data* option is selected to export data on the *Export* page of the **Web Admin Suite**, it is mandatory to select at least one queue.

Display of chip icons improved (#645771)

The display of chip icons, which represent the selected values of drop-down lists in the **Web Admin Suite** has been improved. If the name of the value is too long to fit into the reserved screen space, the value is shortened.

Label for ticket term used in notifications (#645887)

The notifications feature in the **Web Client** now uses the term defined in the label `cmweb.main.ticket.base.initcap` in links to tickets.

Translation of property documentation completed (#645898)

The property documentation available in the *System properties* section of the **Web Admin Suite** is now available in German for all properties.

Confirmation messages for bulk operations unified (#645924)

The green confirmation messages displayed after deleting, enabling or disabling several elements at once in the **Web Admin Suite** have been unified, so that the same wording is used on all pages.

Layout of the activity form details improved (#645941)

The layout of the field *Number of columns* in the *Case fields* tab of activity forms in the **Web Admin Suite** has been improved. The field label is now displayed in front of the field instead of above the field.

Color of the checkbox on the index page improved (#646138)

The checkbox *Administrative changes are applied to the index automatically* on the *Index* page of the **Web Admin Suite** now has the same pink styling as the other checkboxes in the **Web Admin Suite**.

Length validation enhanced (#646144)

The usability of the length validation in the **Web Admin Suite** has been enhanced. The validation is triggered for the first time when the user clicks outside a field with a length limitation after entering a value. Afterwards, the validation is done on the fly while the user types in the field, so that the user does not need to click outside the field to check if the new value is valid.

Initial focus added to all creation forms (#646157)

In all creation forms in the **Web Admin Suite**, the initial focus is now automatically set to the first field.

Wording to create new entities within autocomplete selects unified (#646162)

When creating a new entity within an autocomplete select in the **Web Admin Suite**, the wording of the suggestion is now the same on all pages (*Create new value:*).

Mechanism to ensure one works on the latest template version improved (#646165)

An additional safeguard to ensure that one works on the latest version of a template in the *Templates* section of the **Web Admin Suite** has been added. Now, it is not possible to save a template if the same user made changes to the template in another tab. An error message which indicates that the user needs to save his changes outside the application, e.g. in a text editor, and reload the template, is displayed.

Custom color selector hidden (#646219)

The feature to enter a custom color for a list value on the *Lists* page of the **Web Admin Suite** has been hidden because custom colors are not supported.

Wording improvements in activity form (#646220, #646221)

The label for the localized descriptions of an activity form in the **Web Admin Suite** has been modified to provide further details about the usage of the descriptions. In addition, the selector in the *Required fields* tab now has a label which indicates that you select the workflow activity where the activity form is used.

Line height of lists adapted (#646398)

The line height of list items which are included in comments in the ticket history of the **Web Client** has been adapted. It now matches the line height used in paragraphs.

Icon of *New cube* button changed (#646670)

The icon of the *New cube* button on the *Cubes* page of the **Web Admin Suite** has been modified. The button now shows the plus symbol, which is used for creating new entities on the other **Web Admin Suite** pages as well.

9.3.2 Froala editor updated in **CM/Track** (#642430)

The Froala editor used to write comments and fill rich text fields in **CM/Track** has been updated to version 3.2.1, the same version used in the **Web Client**.

9.3.3 New API methods to get object counts (#645110)

The **ConSol CM** API has been extended by new methods to retrieve the number of objects which a search with certain criteria returns. The following methods are now available:

- Search for resources:

```
resourceService.getCountByCriteria(ResourceCriteria pResourceCriteria)
```

- Search for tickets:

```
ticketService.getCountByCriteria(TicketCriteria pTicketCriteria)
```

- Search for contacts:

```
unitService.getCountByCriteria(UnitCriteria pUnitCriteria)
```

These methods can be useful when only the number of found objects is required, e.g. in field visualizations or widgets.

9.3.4 Display of empty fields in **CM/Doc** changed (#645572)

The display of empty fields in **CM/Doc** has been changed. Previously, it could happen that *n/a* was displayed for an empty field. Now, empty fields are omitted and nothing is displayed.



It is required to update **CM/Doc** on the client computers for this change to become effective.

9.3.5 Support for headline fields in **CM/Track** (#645622)

The annotation `text-type = "title"`, introduced in [Headlines for data fields \(#644783\)](#), is now supported for **CM/Track**. Fields which are annotated as titles are displayed in a blue font with a larger font size. Fields which are annotated with `text-type = "label"` are now styled in the same way as regular labels.



Three conditions must be met for headlines to be displayed when viewing a ticket in **CM/Track**:

- The field must be annotated as title.
- The field must be configured explicitly in the client configuration.
- The group which the field belongs to must include at least one field which has a value.

9.3.6 `supportEmail` property removed from setup (#645902)

The system property `supportEmail` from the module `cmweb-server-adapter` has been removed from the setup as it is not in use anymore.

9.3.7 Third party libraries updated for **CM/Track** (#645888, #646006)

Several third party libraries used in **CM/Track** have been updated. The following libraries might be relevant for custom **CM/Track** projects:

- **lodash**: updated from version 3 to version 4.
- **grails**: updated from version 4.0.5 to version 4.0.7

9.3.8 Deprecated HTML4 tags added to Froala configuration (#646234)

The HTML4 tags which are deprecated in HTML5 have been added to the Froala configuration. This prevents the editor from removing such tags when the user responds to an email containing deprecated tags using the email editor of the **Web Client**.

9.3.9 Limit for exporting CSV files modified (#646304)

The page customization attribute `exportRowsLimit` determines the maximum number of rows which can be exported to a CSV file from a result table in the **Web Client**, e.g. in the detail search. The maximum value which is officially supported by ConSol CM is 500. If a value higher than 500 is entered in the attribute, this value is part of the scene export as well. Nevertheless, there is no guarantee that such a CSV export will not run into a transaction timeout. Therefore, customers are able to set higher values under their own responsibility.

9.3.10 Whitelist for links added via **CM/Track** (#646503)

The property `ticket.from.incoming.message.accepted.links` in the module `cmas-core-server` now also applies to links added in **CM/Track**, i.e. links entered in comments and rich text fields. All the links which do not match the defined regex pattern will be removed and saved as normal text. Thus, only links which match the defined pattern are clickable in the **Web Client** and **CM/Track**.

9.4 Bugs fixed

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

Number	Description
645843	Date picker did not work correctly The date picker which is opened when clicking the calendar icon when creating a ticket in CM/Track did not work correctly. Clicking the buttons <i>Today</i> , <i>Clear</i> and <i>Done</i> had no effect. This problem has been solved and the buttons work correctly now.
645923	Exception when saving ACF with list field An exception occurred when trying to submit an ACF which contains a field of the type <i>list</i> . This problem has been solved and ACFs with list fields work correctly now.
645949	Missing information about concurrent changes for hierarchical lists There was no notification about concurrent changes in the <i>Hierarchical lists</i> section of the Web Admin Suite . This problem has been solved and the user is now notified about concurrent changes in this section.
646102	Misaligned icon in contacts section of a ticket There was a small gap between the company icon, which is displayed next to the company name in the <i>Contacts</i> section of a ticket in the Web Client , and the company description. This problem has been solved and the icon and description are now properly aligned.
646123	Column limit of forms not imported The column limit which can be set for activity and action forms was not updated when an import scene contained another column limit than the target system. This problem has been solved and the column limit is correctly imported now.
646140	Concurrent modification affecting action availability not handled correctly It was possible to execute a contact or resource action which should not have been available anymore because a concurrent modification changed the condition which controls its availability. This problem has been solved and it is not possible anymore to execute an action whose availability has been modified after opening the contact or resource page. Instead, a message that the action is not available anymore is displayed.
646143	Lists section could not be loaded It could happen that it was not possible to open the <i>Lists</i> section of the Web Admin Suite . The performance of loading lists has been improved and this problem does not occur anymore.
646209	Blank page when opening an activity form When the user tried to open an activity form quickly after loading the <i>Activity forms</i> section of the Web Admin Suite , it could happen that a blank page was displayed instead of the form. This problem has been solved and activity forms are now opened correctly.

Number	Description
646249	Wrong validation message for user first names <p>The validation message that the entry exceeds the maximum allowed length for the <i>First name</i> field of a user in the Web Admin Suite was displayed after entering more than 50 characters instead of 255. This problem has been solved and the message is displayed after 255 characters now.</p>
646269	Resource relation filter preferences reset when accessing a ticket without resource relations <p>The user preferences regarding the filter which decides whether all resource relations or only assigned resource relations should be displayed in the <i>Related resources</i> section of a ticket in the Web Client was reset to <i>All relations</i> after the user accessed a ticket without assigned resource relations. This problem has been solved and accessing a ticket without assigned resource relations does not affect the user preferences regarding this filter anymore.</p>
646313	Not possible to change resource category icon <p>It was not possible to change the icon of some resource categories in the Admin Tool. This problem has been solved and changing the icon is possible for all categories now.</p>
646372	Blank page when opening an user <p>When trying to open a user quickly after loading the <i>Users</i> section of the Web Admin Suite, it could happen that a blank page was displayed instead of the user because the roles were still being loaded in the background. This problem has been solved and users are now opened correctly.</p>
646473	Annotations missing after fresh setup <p>Some annotations were missing after setting up a new ConSol CM system without importing a scene. This problem has been solved and now all the annotations are present after setup.</p>
646493	Missing line breaks in text templates <p>When using a text template in the Froala editor of the Web Client, 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.</p>

10. Version 6.13.0.7 (31.03.2021)

Version 6.13.0.7 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.6):

- 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 6.13.0.7 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.7.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.6 ([System upgrade from 6.12.1 and earlier versions](#)).

10.1.1.1 Update **CM/Doc** (#646853)

It is required to update **CM/Doc** on the client computers to receive improvements made in [Third-party libraries updated in CM/Doc \(#646853\)](#). A notification that an update is required is displayed when opening **CM/Doc**.

10.1.2 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:

- [Cluster configuration adapted for CM/Track \(#641893\)](#)
- [XML configuration files updated \(#646753\)](#)
- [Property to define allowed attachment types modified \(#648115\)](#)
- [File extensions for CM/Doc always allowed\(#648116\)](#)

No further instructions available.

10.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.7 of **ConSol CM**.


10.2.1 Usability improvements

JSON configuration template updated (#632794)

The key `password_reset_hint` in the `public.json` file of the JSON configuration template in the **Admin Tool** and **Web Admin Suite** has been updated. The German and English translations now match the text used in the actual configuration.

10.2.2 From address of email notifications modified (646303)

Email notifications which are sent to the administrator and the affected user when an attempt to send an email from the **Web Client** fails, now use the address configured in the system property `mail.error.from` from the module `cm-as-nimh-extension` as a From address. In addition, the email sent to the administrator uses the email address of the affected user as a Reply-to address so that the administrator can easily write to this user.

 If the `mail.error.from` property is not set, the administrator email address is used instead.


10.2.3 Number of used licenses shown in log file (#646824)

The number of currently used licenses is now displayed at the end of the lines containing information about new and ended user sessions in the `server.log` and `session.log` files.

10.2.4 Third-party libraries updated in **CM/Doc** (#646853)

The following third party libraries have been updated in **CM/Doc**:

- **guava**: updated from version 27.0.1 to version 30.0
- **netty**: updated from version 4.1.46 to version 4.1.60

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

10.3 Bugs fixed

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

Number	Description
634210	Layout of numbered lists broken in rich text fields Numbered lists were not displayed correctly in rich text fields in the Web Client . Both in the edit mode and the view modes, the indent was incorrect causing the number to be cut off. This problem has been solved and the correct indent is now used so that the numbers are displayed.
645618	Unwanted ticket creation when pressing the Enter key Pressing the Enter key while the cursor is positioned in the subject field of the ticket creation form in CM/Track could cause a ticket to be created. This problem has been solved and tickets cannot be created by accidentally pressing the Enter key anymore.
646560	Error when deleting a text class When deleting a text class, which had been just created, in the Admin Tool , an error occurred. This problem has been solved and it is now possible to delete a text class which has been created shortly before.
646691	Track user could not be changed in script It was not possible to change the Track user profile assigned to a contact in a script. This problem has been solved and changes to Track user profiles are correctly handled in scripts now.
646790	Window informing about unsaved changes displayed in a loop When a session timeout occurred while the modal window to discard unsaved changes was displayed in the Web Admin Suite , clicking the <i>Cancel</i> button caused a loop, so that the same window was displayed again and again. This problem has been solved and this window is not displayed anymore when a session timeout occurred.
647023	Incorrect order of table rows When filling a list with structs in CM/Track using a default values script or an activity form prefill script, the order of the rows was incorrect. Therefore, when accessing rows by their index in the list, the wrong values were returned. This problem has been solved and the structs are inserted in the correct order now.
647109	Search pattern for list value not cleared When viewing the list values of a list, which had been filtered previously, on the <i>Sorted lists</i> page of the Web Admin Suite , the list values were still filtered but the applied search pattern was not displayed. Therefore, it seemed that some values were missing. This problem has been solved and search filters are now cleared when opening another element.

Number	Description
647118	Impossible to import scene from 6.12.1.6 It was not possible to import a scene which was exported from a ConSol CM system with version 6.12.1.6. This problem has been solved and it is now possible to import such a scene.
647152	Close date not set correctly when closing a ticket in a workflow activity When closing a ticket in a workflow using a workflow activity, the ticket was displayed as closed in the Web Client , but neither the close date nor the close flag were correctly set. This problem has been solved and the ticket is properly closed in such a situation now.
647170	Property url.track not handled correctly The value of the property <code>url.track</code> from the module <code>cmas-core-server</code> was not read by the ConSol CM server at start up. Therefore, its value was only considered when it was changed after the server had been started. This could lead to errors when using this property in scripts or templates. This problem has been solved and the property is read on start up now.
647190	Template content in other locales not shown if templates are filtered If the list of templates on the <i>Templates</i> page of the Web Client was filtered, the content of the template was only displayed for the default language. If another language was selected, the template was displayed as empty. This problem has been solved and all language versions are now displayed when the template table is filtered.
647218	Not possible to log in after user name modification If the user name (<i>Login</i> field) of a user was modified in the Web Admin Suite , the affected user was not able to log in anymore. This problem has been solved, and the user can now log in with his new user name.
647233	Customer group selector not immediately applied to contact creation When opening the page to create a new contact and selecting a specific customer group in the global customer group selector in the menu bar of the Web Client , the change was not applied immediately and the tabs for all customer groups were still displayed. A page reload was needed to display only the tab of the selected customer group. This problem has been solved and the page is refreshed after selecting a customer group now.
647267	Duplicate entries in ticket search The ticket search on the welcome page of CM/Track contained duplicate entries if the user had the permission to view the tickets of his company. In this case, the tickets which belonged to the user himself were displayed twice. This problem has been solved and there are no duplicate entries in the ticket search anymore.

11. Version 6.13.0.8 (21.07.2021)

Version 6.13.0.8 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.7):

- 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 6.13.0.8 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.8.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.6 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.7 ([System upgrade from 6.12.1 and earlier versions](#)).

11.1.1.1 Update **CM/Doc** (#647557)

It is required to update **CM/Doc** on the client computers to receive improvements made in [Third-party library updated in CM/Doc \(#647557\)](#). A notification that an update is required is displayed when opening **CM/Doc**.

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:

- [New variables added to context of autocomplete scripts \(#647326\)](#)

11.1.3 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:

- [Cluster configuration adapted for CM/Track \(#641893\)](#)
- [XML configuration files updated \(#646753\)](#)
- [Property to define allowed attachment types modified \(#648115\)](#)
- [File extensions for CM/Doc always allowed \(#648116\)](#)

No further instructions available.

11.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.8 of **ConSol CM**.

11.2.1 Usability improvements

New wording for opening a ticket in a ticket table (#634094)

The tooltip of the action to open a ticket from a ticket table in the **Web Client**, e.g. in the ticket list of a contact page or in the detail search, has been improved to better convey the meaning of the action. It is now *Open ticket in a new tab*, where “ticket” is the term configured in the label

`cmweb.main.ticket.base.initcap`.

Wording for company selector unified (#645784)

The placeholder in the company selector which is displayed in the *Contacts* section when creating a new ticket in the **Web Client** has been unified. It is now *Please enter keywords such as name or e-mail* for all two-level customer data models, independently on whether the company is optional or not. In addition, the layout of the selector has been slightly improved.

All email suggestions displayed after typing one character (#645834)

When writing an email in the **Web Client**, the suggested email addresses are now displayed after typing the first character. Previously, suggestions from the personal email addresses were displayed after entering one character and suggested contact or user email addresses were displayed after typing two characters.

Required fields in client configuration (#646258)

The required fields on the *Client configuration* page of the **Web Admin Suite** are now marked with an asterisk. This applies to the name of the client configuration and the name of a file belonging to the configuration.

Validation message when no queue is chosen (#646263)

When selecting the option *Queue-based data* on the *Export* page of the **Web Admin Suite** to export a scene with data of certain queues, without choosing at least one queue, a validation message is displayed next to the queue selector.

Headline size in activity forms unified (#647168)

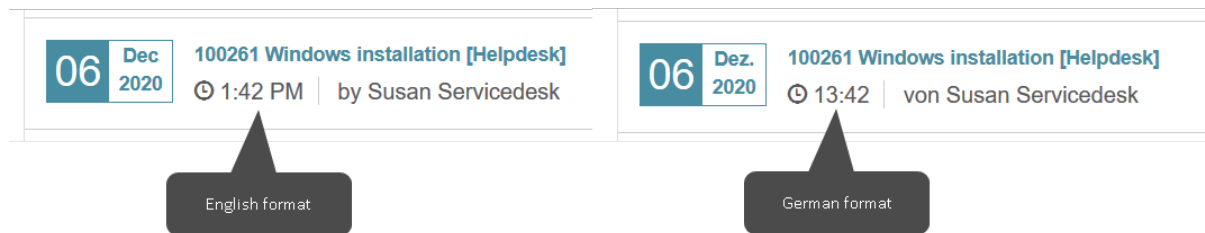
The font size used for titles inside activity forms in the **Web Client** (data fields annotated with `text-type = "title"`) now matches the size of the headline of the activity form.

Validation of number fields improved (#647619)

The autocorrection of number fields in **CM/Track** has been removed. If the user enters a wrong value, e.g. because he uses a decimal separator which is not valid for the browser locale or because he places a separator at the wrong position, a validation hint with the allowed formats is displayed instead.

Date format of news widgets (#647819, #647852)

The date which is displayed for each news entry in news widgets in the **Web Client** and **CM/Track** is now formatted according to the browser locale of the user.



Order of email headers modified (#648036)

The email headers which are displayed in email entries in the ticket history of the **Web Client** are now displayed in the following order:

- Subject
- To
- Cc
- Bcc
- Reply-to
- Date

Location of error message improved (#648268)

The error messages which are displayed on the *Import* page of the **Web Admin Suite** when trying to start an import while the DWH is running in live mode or when trying to import a scene from a newer version of **ConSol CM** are now displayed directly in the modal window which is opened when the import starts. Therefore, the user does not have to switch to the log files to see the reason of the import failure.

Selector closed after selecting a value (#648334)

When trying to delete a user who is assigned to tickets on the *Users* page of the **Web Admin Suite**, the selector to choose the user who will replace the deleted user in the affected tickets is now closed automatically after selecting a value. The same applies to the selector displayed when trying to delete a list value which is in use on the *Enumerated lists* page of the **Web Admin Suite**.

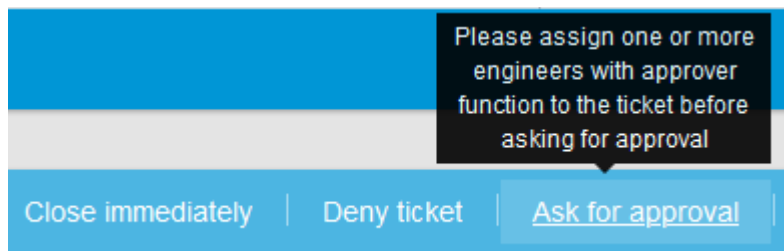
11.2.2 Performance improvements

View creation optimized (#648125)

The creation of a new view in the **Web Admin Suite** has been optimized by avoiding unnecessary updates of other views.

11.2.3 Tooltips for activities in **CM/Track** (#635173)

The tooltip, which is displayed for workflow activities in the **Web Client** if the activity has a description in the **Process Designer**, is now also displayed in **CM/Track**.



11.2.4 Cluster configuration adapted for **CM/Track** (#641893)

The **ConSol CM** cluster configuration files `cm6-mssql.xml`, `cm6-mysql.xml` and `cm6-oracle.xml` have been adapted to support **CM/Track** in a cluster. **CM/Track** can now be deployed in the `clustered-cm6-server-group`.

There are three ways to set the REST URL for **CM/Track**:

- Property in the properties file `cm6-domain-config.properties`. Example:

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

- Property in the `<system-properties>` section of the configuration file `cm6-<DB>.xml`. Example:

```
<property name="jersey.cm6.url" value="http://localhost:8080/restapi"
  boot-time="true"/>
```

- Option in the configuration files `host-master.xml` and `host-slave.xml`, in the `<jvm-options>` section of `cm6-server`. Example:

```
<option value="-Djersey.cm6.url=http://localhost:8080/restapi"/>
```

11.2.5 Configurable sort order for queues in **CM/Track** (#646448)

The order of the queues in the queue selector when creating a new ticket in **CM/Track** can now be configured in the client configuration of the **Web Admin Suite / Admin Tool**. The new attribute `createTicketQueuesSortOrder` has been added for this purpose. You can specify the technical names of the queues separated by comma to display the queues in this order. The queues which are not configured in this attribute are displayed in alphabetical order by their localized names after the ones which are configured. The first queue is preselected on the ticket creation page.

Example configuration:

```
"createTicketQueuesSortOrder": ["HelpDesk_1st_Level", "HelpDesk_2nd_Level"]
```

The template for the client configuration in the **Web Admin Suite** and **Admin Tool** has been updated accordingly.

11.2.6 XML configuration files updated (#646753)

The **ConSol CM** configuration files `cm6-<DB>.xml`, `cm6-dwh-<DB>`, `cm6-cmr-f-<DB>.xml` and `cmr-f-<DB>.xml` have been updated for compatibility with JBoss 7.3.5.

11.2.7 Audit logging for the **Web Admin Suite** (#647032)

Audit logging, which is used to log operations performed in the **Admin Tool** and **Process Designer** to the `audit.log` file, has been extended to cover all operations performed in the **Web Admin Suite**.

Operations which are logged include the login to these applications, configuration changes, creation of new objects, deletion of objects, reopening of tickets and workflow deployments.

11.2.8 New variables added to context of autocomplete scripts (#647326)

The parameter `pContext` in scripts of the type *Text autocomplete* now contains the variables `controlForm` and `formFields` which are available when the script is executed in an activity or action form. These variables have the same content as in the context of action scripts:

- **controlForm**: Action or activity form
- **formFields**: Map with the data fields and their values in the form

11.2.9 Third-party library updated in **CM/Doc** (#647557)

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

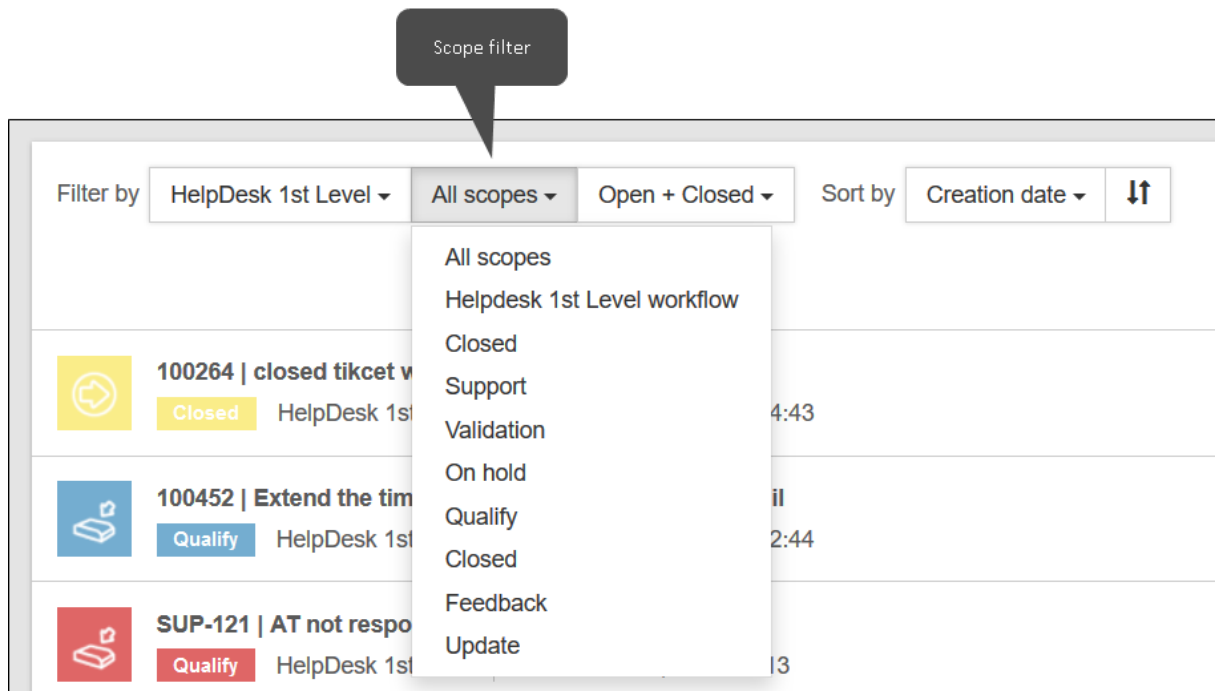
- **netty**: updated from version 4.1.60 to version 4.1.61



The users must update **CM/Doc** for this change to become effective.

11.2.10 Scope filter for ticket list in **CM/Track** (#647633)

The ticket list in **CM/Track** can now be filtered by scope using the new filter *All scopes* located next to the queue filter above the ticket list. This makes it easier for the user to locate tickets which are in a certain scope.



If the user has permissions to various queues with different workflows, he needs to select a queue first. Afterwards, he can select a scope from the workflow assigned to this queue.

i Technical scopes are not shown in the list of scopes, see [Property to indicate technical scopes added \(#648456\)](#).

11.2.11 Mapping of deleted list values added (#647654)

When deleting a list value which is used in tickets, on the *Enumerated lists* page of the **Web Admin Suite**, the user is now able to select another value from the same list to map the values. A modal window with a short explanation and a selector to choose the list value which will replace the deleted value in the affected tickets is shown after confirming the deletion. This is required in order to be able to delete a value which is in use.

11.2.12 Property to define allowed attachment types modified (#648115)

The system property `attachment.allowed.types` of the module `cmas-core-server`, which is used to define which file types are allowed for attachments, has been modified. It is now mandatory to set this property. Therefore, this property is added when setting up a new system or updating an existing system. The following values are set:

- **New systems:** The value “jpg,jpeg,gif,bmp,png,pdf,txt” is set.
- **Updated systems without this property:** The new value “jpg,jpeg,-gif,bmp,png,pdf,txt,tiff,log,xml,zip,docx,pptx,xslx” is set during the update.
- **Updated system with this property:** The value is not modified during the update.



If your **ConSol CM** system should accept attachments with other file types, you might need to modify the value of the property. Please consider that allowing some file types might expose the system to security risks.



You do not need to add “docx” anymore in order to be able to use **CM/Doc**, see [File extensions for CM/Doc always allowed\(#648116\)](#)

11.2.13 File extensions for **CM/Doc** always allowed(#648116)

The usage of **CM/Doc** is now independent from the system property `attachment.allowed.types` from the module `cmas-core-server`. It is not required anymore to add `.docx`, `.doc`, `.odt` and `.ott` to the list of allowed file extensions in order to use **CM/Doc**.



Please remove these file extensions from the property if they should be allowed only for **CM/Doc**.

11.2.14 Security improvements (#648099, #648120, #648122, #648235)

Several XSS vulnerabilities in the **Web Client** were closed.

11.2.15 Autocorrection of dates improved (#648215)

The autocorrection of manually entered dates in the **Web Client** has been improved. If a date format with four digits for the year is used, but the user only enters the last two digits, the date will be corrected automatically by adding either 19 or 20.

There are two different situations:

- The entered year is more than the current year + 10.
-> 19 is added before the year.
- The entered year is less or equal to the current year + 10.
-> 20 is added before the year.


Examples:

- 05 -> 2005
- 99 -> 1999

Previously, 00 was prepended in both cases.

11.2.16 Property to indicate technical scopes added (#648456)

The properties of scopes in the **Process Designer** have been extended with the setting *Technical/internal*. You can set this property to “true” to indicate that this scope is an internal or technical scope. Internal scopes are not included in the REST response to retrieve queues with scopes (get `/queues`, with `X-Template` set to `rest_response_queue_with_workflow`). Therefore, they are not shown in the scope filter in **CM/Track**, see [Scope filter for ticket list in CM/Track \(#647633\)](#).

 The default scope is always set to *Technical/internal* and this setting cannot be changed. When opening an existing workflow, the property is first set to “false”, but automatically set to “true” when deploying the workflow.

You can retrieve the value of the *Technical/internal* by using the new method `WorkflowUtil.isTechnicalScope(scope)`.

11.3 Bugs fixed

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

Number	Description
630842	Error when entering only one character in email field When entering only one character in the autocomplete search to select an email address as a recipient in the email editor of the Web Client , an error occurred because the search criterion was too generic. It was necessary to reload the page to use the autocomplete search again. This problem has been solved and such an error does not occur anymore.
632451	ACF settings missing from scene The settings <i>Show queue</i> and <i>Show engineer</i> of an ACF were not handled correctly during the export and import of a scene. If these options were selected in the exported scene, they remained unselected after importing the scene to another system. This problem has been solved and both settings are handled correctly now.
633955	Broken layout of detail search due to fieldsize annotation If a field which has the fieldsize annotation assigned was chosen as a search criterion in the detail search of the Web Client , the layout was broken because the field was displayed in the configured dimensions. This problem has been solved and the value of the annotation is now ignored in the detail search.
644436	Error when deleting value from time field When entering a value in a time field in CM/Track and deleting this value afterwards, an unneeded validation was shown when saving the ticket and an exception occurred. This problem has been solved and values of time fields can be removed now.
644814	Error when pasting email addresses in brackets When pasting an email address in angle brackets (< >) to the editor of the Web Client , the part of the email address inside the brackets disappeared. This problem has been solved and such an email address is now converted to a link.
645222	Entity not saved in workspace When opening an entity by double-clicking it in the graph view in a section of the Web Client , the current ticket, contact or resource was not saved to the workspace if it had unsaved changes. This problem has been solved and opening entities from the graph view also causes the current entity to be saved in the workspace if needed.
645587	Ticket not refreshed when clicking it in ticket list A ticket which was opened in the main panel of the Web Client was not refreshed if the user clicked the same ticket in the ticket list. This problem has been solved and clicking the same ticket in the ticket list now refreshes the currently open ticket.

Number	Description
645868	Client configuration not loaded when opening another tab It could happen that the client configuration was not loaded when opening CM/Track in a second tab. This problem has been solved and the client configuration is now loaded for all tabs.
645997	Wrong scroll position after accessing ticket from the ticket list When opening a ticket from the ticket list in CM/Track , the scroll position from the ticket list page was remembered. Therefore, when opening a ticket from the end of the ticket list, the ticket page was also scrolled to the bottom. This problem has been solved and the ticket page is now always opened scrolled to the top.
646237	Chip icons too small The chip icons, which are displayed in several places of the Web Admin Suite , 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.
646253	Not possible to delete enum values used in disabled struct It was not possible to delete an enum value which was used in a disabled struct list. After mapping the value to another one, an exception occurred. This problem has been solved and deleting such values is possible now.
646311	Not possible to display more than 1000 tickets in the grid An error occurred when trying to display more than 1000 tickets in the grid view in the Web Client . This problem has been solved and the grid view can display more than 1000 tickets if this is enabled in the page customization.
646322	Validation message did not disappear when creating a cube When creating a cube on the <i>Cubes</i> page of the Web Admin Suite , the validation messages which were displayed for required fields which were not filled when the user clicked the <i>Create cube</i> button, did not disappear after filling the fields. This problem has been solved and these messages now disappear for all the required fields which have been filled after clicking the <i>Create cube</i> button for the first time.
646352	Variables disabled when changing template type When changing the type of a text template in the Web Client which included some variables from the library of markers, the variables were disabled. They were displayed as plain text and did not work anymore. This problem has been solved and variables are not disabled anymore when changing the template type.
646359	Error when assigning ticket while the page is being loaded When trying to assign a ticket using a workflow activity when the ticket page was not fully loaded yet, an error occurred. This problem has been solved and such an error does not occur anymore.

Number	Description
646416	Broken layout in ticket preview <p>The layout of the ticket preview in the Web Client was broken for tickets whose last entry was an email consisting of several replies with images. In this case, the email content overlapped. This problem has been solved and emails including several replies with images are correctly displayed in the preview now.</p>
646676	Cursor placed automatically in the details panel <p>When navigating a table in the Web Admin Suite, the cursor was moved automatically to the first field of the details panel if this field was editable. Therefore, it was not possible to navigate the table using the arrow keys. In some cases, unneeded warnings about unsaved changes were displayed. This problem has been solved and the cursor now remains in the table, so that these problems do not occur anymore.</p>
647117	Exception when deleting the last attachment of a ticket creation history entry without comment <p>In a ticket which was created without providing a comment but with two attachments, an exception occurred when deleting the second attachment, provided that the ticket history entries were sorted with <i>Newest first</i>. This problem has been solved and both attachments can be removed now.</p>
647163	Text in selector does not use the complete selector width <p>The text in the selector of scripted autocomplete fields in the Web Client did not use the complete selector width but was displayed in two lines if it exceeded a certain length. This problem has been solved and the text now uses all the available width.</p>
647169	Validation message not displayed next to provided field <p>Validation messages for activity forms in the Web Client were not displayed next to the field provided in the method to create the message, but above the ticket. This problem has been solved and validation messages can be displayed next to fields in activity forms now.</p>
647328	Unnecessary scrollbars in Internet Explorer <p>Lists used in activity forms in the Web Client had unneeded horizontal scrollbars in Internet Explorer, which overlapped the last row. This problem has been solved and these scrollbars do not appear anymore.</p>
647442	Notification bell icon not displayed in Internet Explorer <p>The bell icon which allows to open the notification feature in the Web Client was not shown when using Internet Explorer 11 as a browser. This problem has been solved and the bell icon is displayed now.</p>
647483	Logout not possible after updating view <p>After updating a view in the Web Admin Suite, the user could not log out using the <i>Log out</i> button. He needed to refresh the page first. This problem has been solved and it is now possible to log out after updating a view.</p>

Number	Description
647491	Name of boolean fields empty in validation messages <p>The validation messages, which are displayed next to required fields in activity forms in the Web Client if the field is left empty, did not include the name of the field in the case of boolean fields. This problem has been solved and the name of the field is now displayed for all types of fields.</p>
647532	Exception during transfer when a manually created function-based index was present <p>When a function-based index was created manually on the CMRF database, an exception occurred during transfer. This problem has been solved and the transfer now works correctly with function-based indexes.</p>
647553	Password written to audit log <p>When a system property containing a password, e.g. for an email account, was modified in the Admin Tool or Web Admin Suite, the new password was written to the audit.log file. This problem has been solved and the passwords managed in system properties are not written to the log file anymore.</p>
647573	Paragraph formatting did not work in Internet Explorer <p>It was not possible to apply a style to a paragraph in the rich text editor in the Web Client when using Internet Explorer. This problem has been solved and paragraphs can be formatted now.</p>
647649	Missing warning about unsaved changes <p>When modifying the value of a boolean property in the Web Admin Suite, no warning about unsaved changes was displayed if the user tried to switch to another page without saving the changes. This problem has been solved and a warning about unsaved changes is now displayed.</p>
647827	Reload needed after modifying elements in a cluster <p>When running ConSol CM in a cluster, sometimes a reload was needed after modifying elements, e.g. scripts or system properties, in the Web Admin Suite. The red message to reload the data was displayed although there were no concurrent changes done by other users. This problem has been solved and a reload is now needed only when required due to changes done by other users in the same area.</p>
647857	Import failed when labels in non-configured locale existed <p>When trying to import a scene which contained labels in a language which was not configured in the target system, the import failed. This problem has been solved and such a scene can be imported now. The labels in non-configured locales are ignored during the import.</p>
647871	Scripted autocomplete fields did not work with CSRF enabled <p>When the CSRF filter was enabled for CM/Track, scripted autocomplete fields did not work. This problem has been solved and scripted autocomplete fields now work in CM/Track if the CSRF filter is enabled.</p>

Number	Description
647910	Unneeded warnings about unsaved changes On the <i>Users, Enumerated lists, Labels</i> and <i>Views</i> pages of the Web Admin Suite , the warning about unsaved changes was displayed when leaving the page after performing some keyboard actions in the details panel without changing the object. This problem has been solved and the warning about unsaved changes is now displayed only when the object was modified.
648490	Blank page when working in two tabs When accessing a page in the Web Admin Suite after having updated data from this page in another tab, a blank page could be displayed. This problem has been solved and the page is now displayed; the user is prompted to reload the page if data was changed.
648596	Template attachments not added The attachments of a text template were not added to the ticket when using this template in the Web Client if the template had a very long ID in the database. This problem has been solved and the attachments are correctly added in all situations now.
648616	Missing shortcut in keyboard shortcut information The shortcut ctrl +f for searching was missing in the keyboard shortcut selector on the <i>Scripts</i> page of the Web Admin Suite . Instead, the shortcut ctrl + g was mentioned twice. This problem has been solved and the all shortcuts are listed correctly now.

12. Version 6.13.0.9 (08.09.2021)

Version 6.13.0.9 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.8):

- 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 6.13.0.9 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.9.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.6 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.7 ([System upgrade from 6.12.1 and earlier versions](#)).

12.1.2 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:

- [Handling of incoming emails with disallowed attachments improved \(#649455, #649457\)](#)

12.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.9 of **ConSol CM**.

12.2.1 Handling of incoming emails with disallowed attachments improved (#649455, #649457)

It is now possible to configure the behavior of **ConSol CM** when an email with a disallowed attachment type is received. The allowed attachments are determined in the system property `attachment.allowed.types` of the module `cmas-core-server`, whose default value was modified in [Property to define allowed attachment types modified \(#648115\)](#).

The behavior of the system if an email with an disallowed attachment is received can now be configured using the new property `mail.attachments.validation.handling` from the module `cmas-nimh-extension`. The property can have three values:

- **pass_rename**: The file extensions of attachments of disallowed types are renamed to disarm the attachment, i.e. the email is imported to the system, but `_renamed` is appended to all disallowed file extensions. In addition, a description indicating that the attachment has been renamed is added. This is the default value.
- **pass_ignore**: The list of allowed attachment types is ignored for attachments in incoming emails, i.e. the email is imported to **ConSol CM** even if it contains attachments with disallowed file types.
- **reject_email**: The email is rejected if it contains attachments of disallowed file types and a notification is sent to the sender. This is the previous behavior.

13. Version 6.13.0.10 (29.09.2021)

Version 6.13.0.10 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.9):

- 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 6.13.0.10 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.10.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.6 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.7 ([System upgrade from 6.12.1 and earlier versions](#)).

13.1.2 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:

- [Property to define allowed attachment types modified \(#649734, #649836\)](#)

13.1.3 Support for JBoss EAP 7.3.9 added (#649622)

The support for JBoss EAP 7.3.9 as an application server has been added starting with **ConSol CM** version 6.13.0.10.

No further instructions available.

13.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.10 of **ConSol CM**.

13.2.1 Performance improvements

Resource page optimized (#648736)

The *Related contacts* section of the resource page of the **Web Client** has been optimized with regard to the index searches needed to display the section. This improves the performance of opening the resource page.

13.2.2 Property to define allowed attachment types modified (#649734, #649836)

The system property `attachment.allowed.types` of the module `cmas-core-server`, which is used to define which file types are allowed for attachments, has been modified in [Property to define allowed attachment types modified \(#648115\)](#). The value which was set when updating a system without this property to **ConSol CM** version 6.13.0.8 had a typo (“xlsx” instead of “xlsx”). This typo has been corrected and the correct value is set when updating to version 6.13.0.10.

In addition, this property has been set to *Optional*, so that its value can be removed in the **Web Admin Suite**.

14. Version 6.13.0.11 (15.10.2021)

Version 6.13.0.11 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.10):

- 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 6.13.0.11 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 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.11.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.6 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.7 ([System upgrade from 6.12.1 and earlier versions](#)).

14.1.2 Support for Tomcat changed (#649926)

The support for Tomcat as an application server for **CM/Track** has been changed starting with ConSol CM version 6.13.0.11. The support for version 9.0.39 has been dropped and support for version 9.0.54 has been added. The application server has to be updated to the supported Tomcat version (9.0.54).

No further instructions available.

14.2 Bugs fixed

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

Number	Description
649988	Error when exporting text templates The scene export could fail if there was a larger number of technical templates and text templates, some of which contained attachments and inline images. This problem has been solved and a large number of templates does not cause errors in the scene export anymore.
649998	Missing message about not allowed file type When creating a ticket in CM/Track , there was no error message when the user tried to attach a file with a file type which was not allowed. This problem has been solved and an error message informing about the unsupported file type is now displayed.
650013	Double session expired message The message which is displayed in CM/Track when the session expired was shown twice. This problem has been solved and only one session expired message is now displayed.

15. Version 6.13.0.12 (17.12.2021)

Version 6.13.0.12 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.11):

- None

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



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

15.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.13.0.12 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.

15.1.1 System upgrade from 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.12.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.6 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.7 ([System upgrade from 6.12.1 and earlier versions](#)).

No further instructions available.


15.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.12 of **ConSol CM**.

15.2.1 Third-party library log4j updated (#650617, #650628)

The third-party library log4j used in two places of **ConSol CM** has been updated:

- **Admin Tool:** Update from version 1.2.15 to version 2.16.0
- **CM/Doc:** Update from version 1.7.30 to version 2.16.0

 These older log4j versions were not affected by the recently published CVE-2021-44228 vulnerability.

16. Version 6.13.0.13 (20.12.2021)

Version 6.13.0.13 includes all **ConSol CM** changes and additions of

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

Changes with respect to the previous minor release (6.13.0.12):

- None

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



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

16.1 Update and installation instructions

Please read all information on update and installation of **ConSol CM** specific for version 6.13.0.13 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.

16.1.1 System upgrade from 6.12.1 and earlier versions

This section informs about specific steps when upgrading **ConSol CM** from 6.12.1 or earlier versions to version 6.13.0.13.

This ConSol CM release needs specific planning for an update from earlier releases. Please check the instructions for release 6.13.0.0 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.2 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.4 ([System upgrade from 6.12.1 and earlier versions](#)), release 6.13.0.6 ([System upgrade from 6.12.1 and earlier versions](#)) and release 6.13.0.7 ([System upgrade from 6.12.1 and earlier versions](#)).

No further instructions available.

16.2 Changes

This section illustrates all relevant software product changes for version 6.13.0.13 of **ConSol CM**.

16.2.1 Third-party library log4j updated (#650710, #650711)

The third-party library log4j used in two places of **ConSol CM** has been updated:

- **Admin Tool:** Update from version 2.16.0 to version 2.17.0
- **CM/Doc:** Update from version 2.16.0 to version 2.17.0

17. 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
6.13.0.0 - 6.13.0.11	08.03.2022
6.13.0.12 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**!