



ConSol Software GmbH

ConSol CM User Manual

Version 6.12.0.0

Contents

Contents	2
A - Introduction	7
A.1 ConSol CM for business process management	9
A.2 List of manuals	10
A.3 TecDoc server	11
A.4 Content of this manual	12
A.5 Layout explanations	13
A.6 Legal notice	14
A.7 Gender disclaimer	14
A.8 Copyright	14
A.9 System components of ConSol CM	15
A.10 Technical principles of ConSol CM	17
A.10.1 Introduction	18
A.10.2 Engineers	18
A.10.3 Customers	19
A.10.4 Tickets	19
A.10.5 Resources	20
A.10.6 Queues	20
A.10.7 Workflows	21
A.10.8 Accessing objects in ConSol CM	21
B - Basics	24
B.1 Login and logout	26
B.1.1 Terms and concepts	27
B.1.2 Logging in with user name and password	28
B.1.3 Logging in using LDAP	28
B.1.4 Logging in using Single Sign-On	28
B.1.5 Logging out	28
B.2 User interface	30
B.2.1 Customization	31
B.2.2 Layout of the Web Client	32

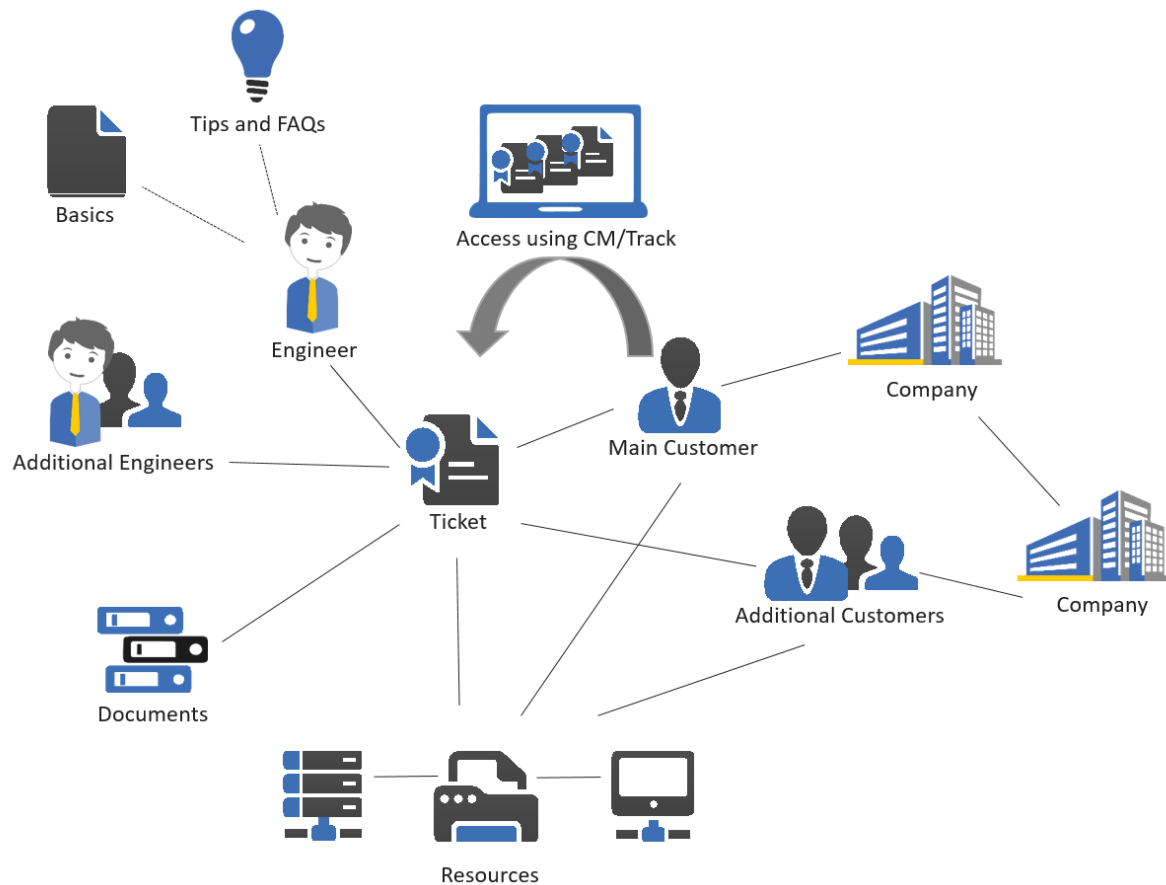
B.2.3 Main features	34
B.2.4 Data fields	40
B.2.5 Relation graphs	46
B.3 Search features	48
B.3.1 Quick Search	49
B.3.2 Detailed Search	52
B.3.3 Autocomplete Search	66
B.4 Notifications	69
B.4.1 Viewing notifications	69
B.4.2 Sending notifications	70
B.5 Activities	72
B.5.1 Forms for activities	73
B.5.2 Workflow activities	74
B.5.3 Customer activities	75
B.5.4 Resource activities	76
B.5.5 Search activities	77
B.6 Permissions	78
B.6.1 Visibility of tickets	79
B.6.2 Tickets in the ticket list	82
B.6.3 Visibility of customers	83
B.6.4 Visibility of resources	84
B.7 User profile	85
B.7.1 Accessing the user profile	86
B.7.2 Structure of the user profile	86
B.7.3 Password change	87
B.7.4 Representation	88
B.7.5 General settings	91
B.7.6 Time booking	93
B.7.7 Downloads	97

C - Tickets	98
C.1 Basic knowledge about tickets	99
C.1.1 Structure of a ticket	100
C.1.2 Display settings	105
C.1.3 Editing ticket data and working with tickets	108
C.1.4 Engineers and additional engineers	110
C.1.5 Ticket states	112
C.2 Ticket list	113
C.2.1 About the ticket list	114
C.2.2 Features of the ticket list	115
C.2.3 Views	116
C.2.4 Filters	118
C.2.5 Grouping	119
C.2.6 Sorting	121
C.2.7 Displaying the ticket list as a grid	121
C.3 Working with tickets	123
C.3.1 Creating a ticket	124
C.3.2 Updating tickets	128
C.3.3 Working with customers within tickets	133
C.3.4 Communication	139
C.3.5 Additional engineers and approval processes	158
C.3.6 Relations to tickets and resources	161
D - Customers	168
D.1 Basic knowledge about customers	169
D.1.1 Terms and definitions	169
D.2 Structure of a customer	171
D.2.1 Example	172
D.2.2 Sections	173
D.3 Display settings	178
D.3.1 Expanding and collapsing sections	178
D.3.2 Visibility level	179

D.3.3 Adjusting tables	180
D.3.4 Background color of the customer page sections	180
D.4 Working with customers	181
D.4.1 Creating a customer	182
D.4.2 Managing customers	186
D.4.3 Relations to customers and resources	199
E - Optional ConSol CM add-ons	207
E.1 CM/Resource Pool	209
E.1.1 Basic knowledge about resources	210
E.1.2 Display of resources	211
E.1.3 Display settings	217
E.1.4 Working with resources	220
E.2 CM/Track	238
E.2.1 About CM/Track	239
E.2.2 CM/Track from the customers' point of view	239
E.2.3 CM/Track from the engineers' point of view	239
E.2.4 Configuring CM/Track for customers	240
E.2.5 Considering CM/Track when working with tickets	243
E.2.6 CM/Track from the customers' point of view	246
E.3 CM/Archive	258
F - Tips, troubleshooting, and FAQs	260
F.1 Tips and tricks	261
F.1.1 Viewing tooltips	262
F.1.2 Using keyboard shortcuts	263
F.1.3 Using the favorites	264
F.1.4 Using the workspace	266
F.1.5 Adding ticket relations via drag-and-drop	268
F.1.6 Opening the main customer of a ticket	269
F.2 Troubleshooting	271
F.2.1 User name and password	272
F.2.2 Tickets	274

F.2.3 Customers	275
F.2.4 Resources	276
F.2.5 Views	277
F.2.6 CM/Doc	278
F.3 FAQs	279
F.3.1 General	280
F.3.2 Engineers	281
F.3.3 Tickets	282
F.3.4 Customers	283
F.3.5 Resources	284
G - Appendix	285
G.1 Trademarks	286
G.2 Glossary	288
G.3 Index	292

A - Introduction



This section provides general information about the content and structure of this manual as well as an introduction to ConSol CM.

This chapter discusses the following:

A.1 ConSol CM for business process management	9
A.2 List of manuals	10
A.3 TecDoc server	11
A.4 Content of this manual	12
A.5 Layout explanations	13
A.6 Legal notice	14
A.7 Gender disclaimer	14
A.8 Copyright	14
A.9 System components of ConSol CM	15
A.10 Technical principles of ConSol CM	17
A.10.1 Introduction	18

A.10.2 Engineers	18
A.10.3 Customers	19
A.10.4 Tickets	19
A.10.5 Resources	20
A.10.6 Queues	20
A.10.7 Workflows	21
A.10.8 Accessing objects in ConSol CM	21

A.1 ConSol CM for business process management

ConSol CM is a process management platform, especially suited for use as customer service software.

Using ConSol CM you can control and steer business processes with a strong focus on human communication and interaction as required in all fields of customer service management. Well-known examples of huge ConSol CM systems comprise customer service desks, RMA processes, after sales services, call centers and support centers as well as claim and complaint management environments. You can also set up customer portals, including FAQ areas, using ConSol CM. Basically, every business process that is in operation in a company can be modeled and brought to life with ConSol CM.

ConSol CM also provides the functionality to cover adaptive case management. In this way, you can decide, if you would like to design and live a strictly controlled business process or if a rather high level of flexibility is required. You might also combine both concepts, depending on the team or department who work with the process.



Figure 1: Overview of potential fields of use of the BPM software ConSol CM

Using ConSol CM, you can handle all components which are relevant in business processes to represent and control your company's processes in an optimal way. ConSol CM is used in various different industries and branches ranging from insurances and banks over fashion designing companies to producers of ticket vending machines or car washes. The flexible process designing mechanism and workflow engine provide a perfect basis for the modeling and controlling of business processes, especially customer service processes, of different kinds.

A.2 List of manuals

ConSol CM provides documentation for several groups of users. The following documents are available:

- **Administrator Manual**
A detailed manual for CM administrators about the ConSol CM configuration using the Admin Tool.
- **DWH Manual**
A detailed explanation of the ConSol CM data warehouse (DWH) concept, the database schema and a list of all table structures.
- **Operations Manual**
A description of the ConSol CM infrastructure, the server integration into IT environments and the operation of the CM system, for IT administrators and operators.
- **Process Designer Manual**
A guideline for workflow developers about the graphical user interface of the Process Designer and how to program workflow scripts.
- **Setup Manual**
A technical description for ConSol CM setup in different IT environments. For expert CM administrators.
- **System Requirements**
List of all requirements that have to be met to install ConSol CM, for IT administrators and CM administrators. Published for each ConSol CM version.
- **Technical Release Notes**
Technical information about the new ConSol CM features. For CM administrators and key users. Published for each ConSol CM version.
- **User Manual**
An introduction to the ConSol CM Web Client for end users.

A.3 TecDoc server

For detailed information about all aspects of ConSol CM, please see also our **tecdoc server**, available at <https://tecdoc.consol.de>. You find there:

- All **ConSol CM manuals**
The ConSol CM manuals for several target groups in English and in German
- The **release notes** for each ConSol CM version
Detailed Release Notes documents which explain every new feature of every ConSol CM version
- The **system requirements**
An overview of the required hardware, middleware, and software prerequisites which are required to install ConSol CM
- The **feature presentations**
Not too technical presentations which provide an overview of the features of new ConSol CM versions


A.4 Content of this manual


The book contains the following sections:


- [Basics](#)
Here you can find an explanation of the most important terms, principles and basic features of ConSol CM. Read this section to get started working with the Web Client.
- [Tickets](#)
Here you can find everything you need to know for working with tickets.
- [Customers](#)
Here you can find everything you need to know for working with customers.
- [Optional ConSol CM add-ons](#)
Here you can find everything you need to know for working with CM/Resource Pool, CM/Track and CM/Archive, optional modules of ConSol CM.
- [Tips, troubleshooting, and FAQs](#)
Here you can find tips and answers to common questions.
- [Appendix](#)
Here you can find a glossary and the trademarks section.


A.5 Layout explanations

The following icons and colors are used to emphasize and highlight information:

 This is an additional information.

 This is an important note. Be careful here!

 This is a warning!

 This is a recommendation from our in-the-field consultants.

A.6 Legal notice

Since we would like to provide a manual for you which helps you manage your CM system, but which also provides additional information about connected topics, we have inserted external links into the manual. In this way, you can get some background information about a topic if you like. This can help you better understand the required CM configuration. Despite careful review, we assume no liability for the content of those external links. The operators of sites linked to are exclusively responsible for their content.

A.7 Gender disclaimer

As far as possible, ConSol CM manuals are written gender-neutral and often address the user with "you". When the phrasing "The user he ..." is used, this is always to be considered to refer to both, the feminine as well as the masculine form.

A.8 Copyright

© 2019 ConSol Consulting & Solutions Software GmbH - All rights are reserved.

A.9 System components of ConSol CM

ConSol CM comprises different client applications. Depending on your roles and tasks in your company you will use one or more of those applications.

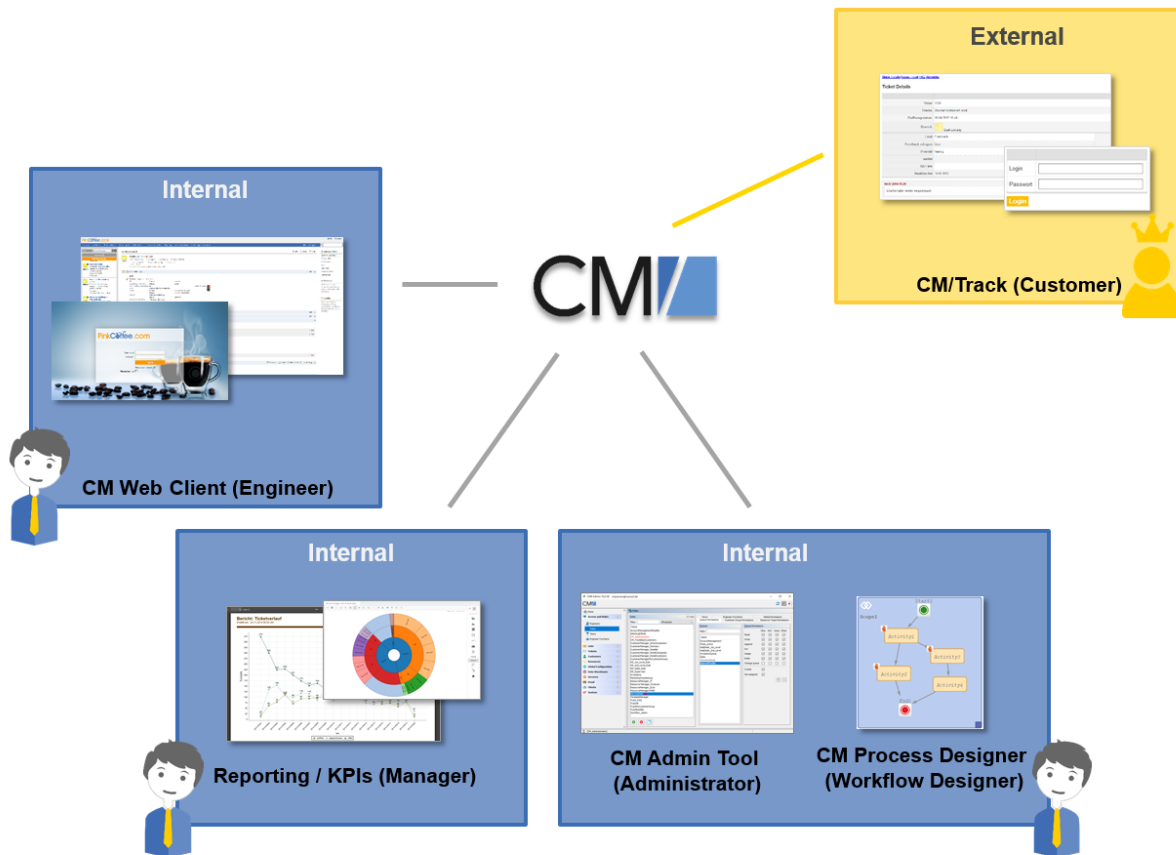


Figure 2: ConSol CM system components

- Web Client**
 The primary access point to the system for engineers, an engineer being the standard user of the system. Engineers work with tickets, customer data and resources.
- Portal**
 CM/Track, the primary access to the system for (internal or external) customers. CM/Track is a distinct CM module which requires a separate license. With this module, you can offer portal access to the tickets for your customers. Moreover, your FAQs can be made available via the web.
- Admin Tool**
 For all system configuration tasks. As an administrator, you will primarily work with this tool. This tool is used to define the system setup. All settings (apart from workflows) are configured using the Admin Tool, and access to it is restricted to admin users.
- Process Designer**
 For the workflow design and implementation. As a workflow developer you will primarily work with the Process Designer. In this tool, all workflows are designed graphically as well as in Groovy code.

The default scope of delivery also includes a data warehouse (DWH) that allows reporting about the data of your tickets.

Furthermore, ConSol CM is not an isolated application but can be easily integrated into your company's IT infrastructure, e.g. using Web Services and/or an Enterprise Service Bus (ESB) or the ConSol CM Webhook interface.

A.10 Technical principles of ConSol CM

This chapter discusses the following:

A.10.1 Introduction	18
A.10.2 Engineers	18
A.10.3 Customers	19
A.10.4 Tickets	19
A.10.5 Resources	20
A.10.6 Queues	20
A.10.7 Workflows	21
A.10.8 Accessing objects in ConSol CM	21

A.10.1 Introduction

As a user, you only work with the Web Client. You do not have to know too much about the other components of ConSol CM.

However, knowing some basic facts about your new BPM software will help you gain a good understanding of the system to enable efficient work. Thus, the following sections provide an overview of the main CM components.

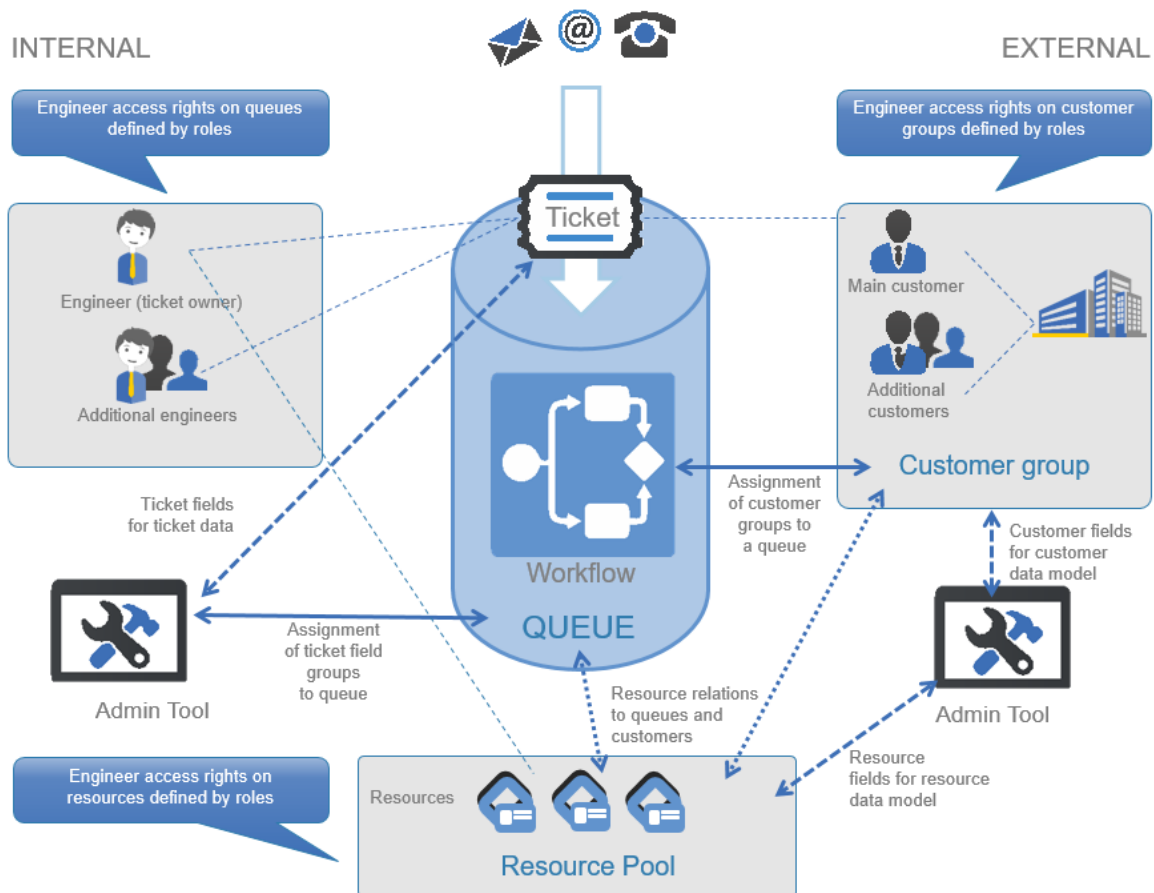


Figure 3: ConSol CM - Basic principles (with CM/Resource Pool)


In ConSol CM, the following rule applies regarding tickets:

- ❗ **External side:** A ticket always has a **main customer**. This can be a contact or a company.
- Internal side:** A ticket can have no or one main **engineer** who works on the ticket.

A.10.2 Engineers

The engineers represent the **internal** side of the CM system. All users of the Web Client are called engineers, regardless of their function within the company. The engineers work on the tickets to carry out the tasks defined in the business process. Every ticket can only be assigned to **one engineer**, who is currently responsible for the ticket. But a ticket may have any number of **additional engineers**, who all have an **engineer function** representing a specific task within the process. Please see [Engineers and additional engineers](#) for further information about engineers and additional engineers.


All engineers have a user account consisting of a user name and password, which they use to log in to the Web Client. The engineers' access permissions are managed using roles. The roles, which contain access permissions for queues, customers, and resources, are defined in the Admin Tool and assigned to the engineers.


 It depends on the configuration of your ConSol CM system if an engineer is called *engineer* within your system. Engineers might be called *agents*, *employees*, or similar in your Web Client. In this manual, engineers will always be called engineers for your convenience.

A.10.3 Customers

The customers represent the **external** side of the CM system. The term *customer* has a broader meaning in ConSol CM than in everyday speech. It refers to the person or object that is the **reason for opening the ticket**. This can be a person or a company, but also a machine, a product, or another entity. The customers can be internal, i.e., belong to the same company as the engineers. A ticket is always assigned to **one main customer**. It can, but does not have to, have **any number of additional customers**. Please see [Basic knowledge about customers](#) for details about the usage of the terms *customer*, *company* and *contact* in this manual.

Every customer belongs to one **customer group**, which is associated with a customer data model. The work with customers is explained in detail in the section [Working with customers](#).

 Each CM system uses customized customer groups and data models. Therefore, the available customer groups, hierarchical levels for customer objects, data fields, relations, and activities depend on the individual configuration of your CM system.

 It depends on the configuration of your ConSol CM system if a customer is called *customer* within your system. Customers might be called *contacts* or similar in your Web Client. In this manual, the terms *customer*, *company* and *contact* will be used for your convenience.

A.10.4 Tickets


The ticket is the request of the customer which the engineers work on. This can be an incident, a service case, or any other request. For each request, a ticket is created. The engineers work on the ticket, which means that they carry out the necessary steps as defined in the business process. The progress, including internal and external communication, is documented in the ticket. The business process can involve several engineers and different teams. When the request is solved, the ticket is closed. Closed tickets are not lost, but they represent a powerful archive and knowledge base.

In ConSol CM there are the following rules for tickets:

- A ticket must have one main customer. Every ticket can have only one main customer. It does not need to have additional customers, but it can have any number of additional customers. The customer represents the **external** side of a ticket.
- A ticket does not have to be assigned to an engineer, but if it is, it can only be assigned to one engineer at a time. A ticket does not have to have additional engineers, but it can have any number of additional engineers. Assigning a ticket to an engineer can be done manually or automatically. The engineers represent the **internal** side of a ticket.

- A ticket always has a name, often called *ticket number*, a subject, and a ticket icon. The ticket icon shows the current scope of the ticket and can have a color indicating the value of a given data field.
- The ticket header always shows the current queue and scope, assigned engineer, and creation date of a ticket.
- The ticket icon in the Web Client can have (and in most cases does have) a color that represents a certain value of a list. Often the priority is used, e.g., high priority tickets are displayed in red, medium tickets in orange, and low priority tickets in yellow.

Please see [Basic knowledge about tickets](#) for a detailed explanation of the ticket structure. The work with tickets is explained in detail in the section [Working with tickets](#).

 It depends on the configuration of your ConSol CM system if a ticket is called *ticket* within your system. Tickets might be called *ticket*, *case*, *call*, *task*, or similar in your Web Client. Each queue can have its own term to refer to tickets. In this manual, tickets will always be called tickets for your convenience.

Each CM system uses customized ticket data. Therefore, the available fields, relations, and activities depend on the individual configuration of your CM system.

A.10.5 Resources

Resources can be used to manage objects which are related to the business process. Possible use cases are IT assets, SLAs, products or newsletters. All resources are saved in **CM/Resource Pool**, a separate CM module. The administrator defines the resource model, i.e., the resource types, resource data fields, the hierarchy of the resources, and the possible relations to tickets, customers, and other resources. Please see [Basic knowledge about resources](#) for a detailed explanation of the concepts and the structure of a resource page.

An engineer with the required permissions can create resources and link them to existing tickets, customers, and other resources. For example, you can link a computer to an incident ticket concerning this computer or to the customer who uses it. The work with resources is explained in detail in the section [Working with resources](#).

A.10.6 Queues

The queue is the **core component** of ConSol CM administration. It contains thematically related tickets which should be handled in the same way and follow the same business process. Every queue has exactly one **workflow**, which implements the desired process. The ticket data fields needed for the process are assigned to the queue. In addition, the access permissions, which are granted to the engineers via roles, are based on queues.


For example, there is one queue for the user help desk with the *User Help Desk* workflow and data fields like *Customer Service Level*, *Device that does not work*, or *Priority*. Every incident ticket passes through this *User Help Desk* process. Another queue is the *Marketing and Sales* queue where fields like *probability of contract conclusion*, *next appointment*, or *budget [\$]* are defined.

Therefore, the queue determines:

- which data fields (ticket data fields) are available, e.g., *order volume* in a sales queue or *cause of the incident* in a support queue
- which customers can have tickets in the queue (customer groups)

- how its tickets are processed (workflow)
- who can work on the tickets (permissions)

Queues often reflect the organizational structure of the company. For example, there can be one queue for each department, as each department has its own processes. A ticket can be passed from one queue to another. In this case it adapts to the new queue, i.e., it receives the data fields of the new queue and only engineers with permissions for the new queue can work on it.

 It depends on the configuration of your ConSol CM system if a queue is called *queue* within your system. Queues might be called *processes*, *teams*, or similar in your Web Client. In this manual, queues will always be called *queue* for your convenience.

A.10.7 Workflows

A workflow is designed and created by a CM workflow developer using the ConSol CM Process Designer. It implements the business process which is executed in the Web Client. The workflow consists of several steps, which are called *activities*. There are manual activities, which are performed by the engineers, and automatic activities, which are performed by the system. The activities are arranged in **scopes** to illustrate the status of a ticket. The intelligence of the process, like conditions, decisions, escalations, reminders, automatically sent emails, or other actions, is also defined in the workflow. You can implement process chains or a hierarchical process structure by linking several workflows.

As an engineer, you will not work with the workflow itself, but you will see the current queue and scope of the ticket. The scope is indicated by the symbol of the ticket icon and scope name in the basic ticket data. Furthermore, you see the workflow activities which are available for the ticket at its current position. In this way, you always have a good overview of the current status of the ticket.

A.10.8 Accessing objects in ConSol CM

In ConSol CM, the different objects (tickets, customers and resources) form a network. The objects are connected, e.g. a ticket is always linked to one or more customers. The connections which exist between the current object and other objects in ConSol CM are displayed on the object's page, where you can directly access the linked objects.

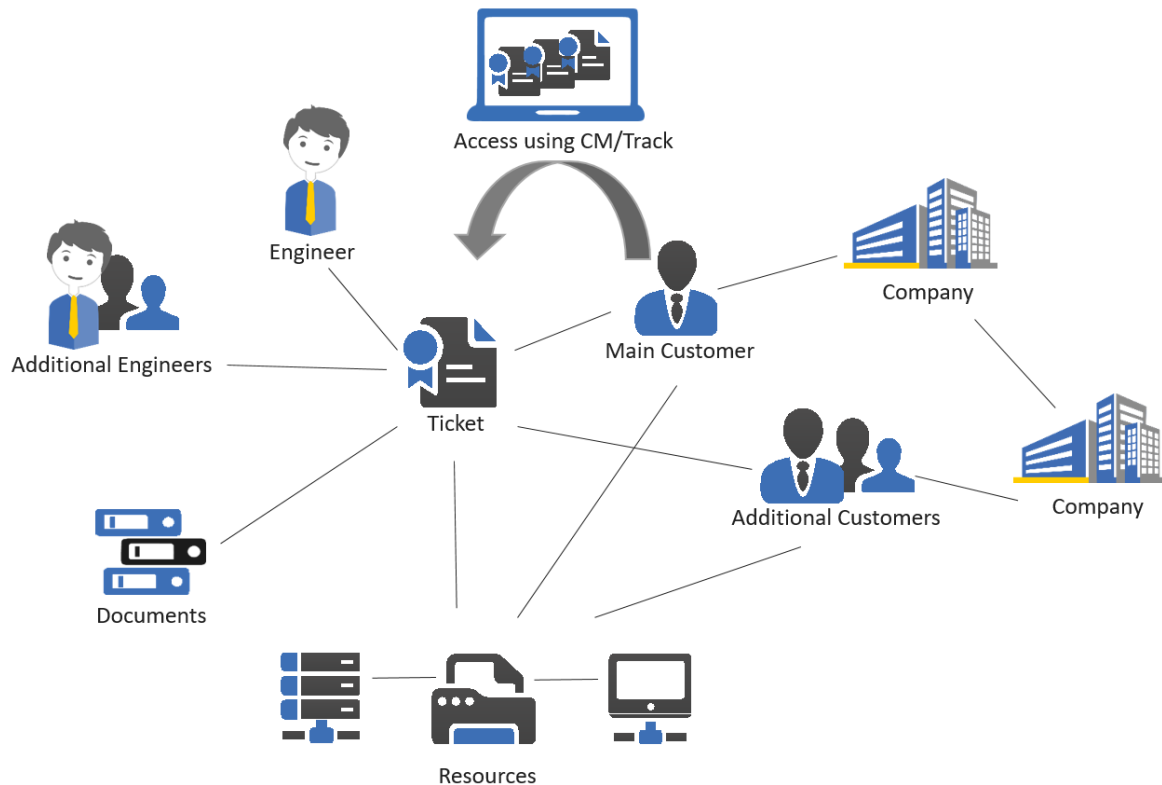


Figure 4: *Network of ConSol CM objects*

Since the ConSol CM Web Client always provides menus or links to open the objects which are related to another object, you, as a CM engineer, can move within the network easily, thus working efficiently with customer, ticket, and resource data. Once you have opened an object (e.g. a ticket), you can move from one related object (e.g. the main customer of the ticket) to other related objects (e.g. the company of the main customer or a resource which is related to the ticket or the customer). No further search is required.

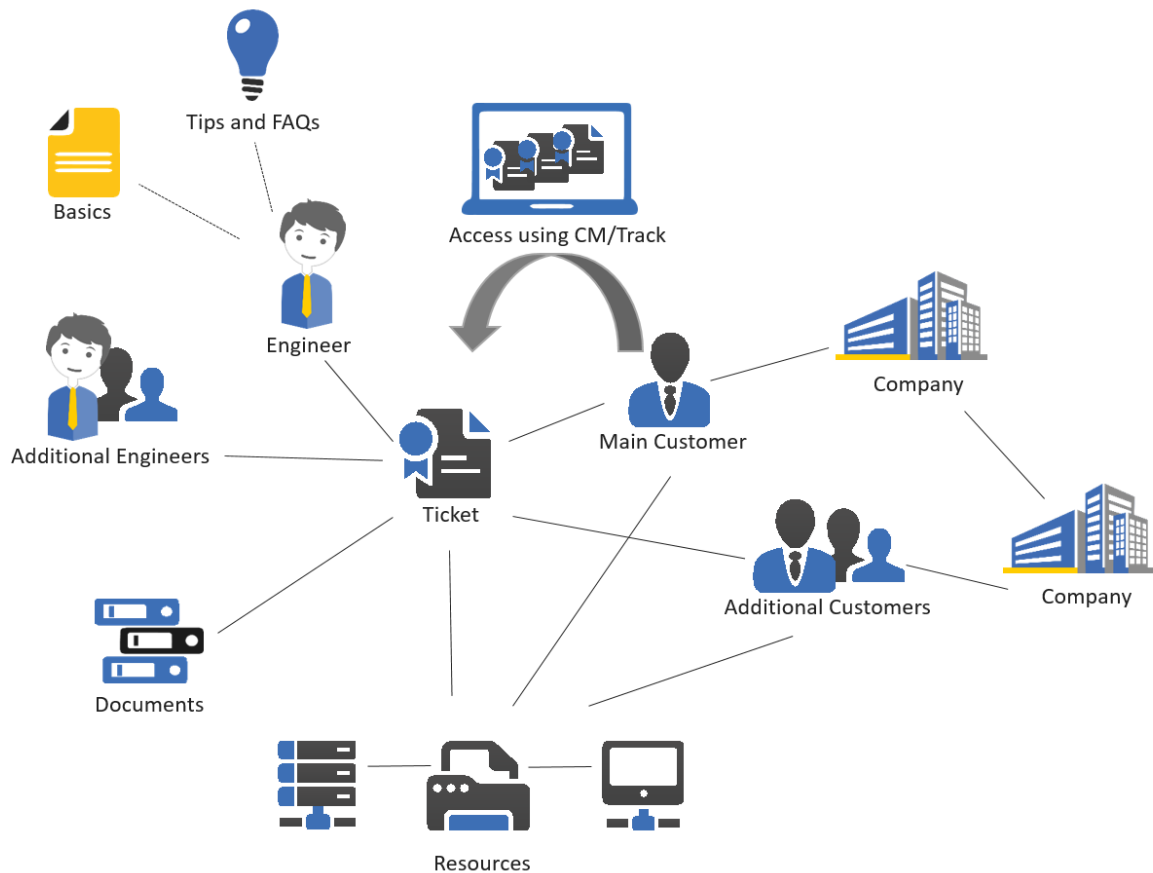
An example use case could be:

1. A customer calls you and asks for a certain case, but he cannot remember the ticket number. He wants to know which SLA is used for the printer which caused the problems treated in the ticket. Is it possible to change the contract?
2. You start the quick search and look for the customer's name and the term 'printer', you find ticket #0815 and open it.
3. You check the related resources at the ticket and find printer #4711.
4. You check the SLA, a resource, related to the printer and open it. The comment in the SLA says "can be changed within two weeks". Now you have to know all other possible SLAs for this company.
5. You check the company relation of the resource (the printer #4711) and open the company page.
6. The company has three more SLA resources (i.e., resource relations on the company page) for printers. You discuss with the customer which one would be the best for this case. The customer wants to have a new SLA for the printer.

7. Since this change has to be approved by both sides, an SLA-change-ticket is required: you create a new ticket directly from the company page ...

This short example shows how easy an engineer can access all components for a certain case or service request. If customer-customer relations are managed using CM, the CRM (customer relationship management) component is even stronger.

B - Basics



This section provides information about the general features of ConSol CM:

Using the Web Client

- [Login and logout](#)
- [User interface](#)
- [Main features](#)
- [Data fields](#)
- [Relation graphs](#)

Using the search functionalities

- [Quick Search](#)
- [Detailed Search](#)
- [Autocomplete Search](#)

Communicating with other engineers

- [Notifications](#)

Using activities

- [Activities](#)

Understanding permissions and the availability of objects

- [Permissions](#)

Managing your user profile

- [User profile](#)



B.1 Login and logout

This chapter discusses the following:

B.1.1 Terms and concepts	27
B.1.2 Logging in with user name and password	28
B.1.3 Logging in using LDAP	28
B.1.4 Logging in using Single Sign-On	28
B.1.5 Logging out	28

B.1.1 Terms and concepts


B.1.1.1 User account

To log in to the Web Client you need a user account. It includes a **user name** and a **password**. You receive your user name and password from your CM administrator. If you log in to the Web Client for the first time, you should [change the password](#) that was given to you to a password that you created yourself.

Exception: If you are logged in automatically via Single Sign-On or log in using LDAP, you cannot change your password in the Web Client.

B.1.1.2 Session

The time period between your Web Client login and logout is called a *session*. A *session timeout* occurs when you stay inactive for a certain period of time, whose length is configured by your administrator. You will be logged out automatically and your Workspace will be deleted.

 Depending on the system configuration, a warning message might be displayed before you are logged out due to a session timeout. In this case, you can click *Yes, extend my session* to avoid being logged out.

If you want to be re-logged in automatically after a session timeout, you have to select the *Remember me* checkbox. In this case you do not have to enter your user name and password again after an automatic logout until you manually log out using the *Logout* button in the Web Client. An automatic logout happens due to a session timeout, after you closed your browser, or when you restart your computer.

Since the automatic re-login is controlled via cookie, it only works

- on the computer you used for your initial login to the Web Client.
- with the browser you used for your initial login to the Web Client.
- as long as you do not delete the cookies for this browser.
- until you [manually log out via the Logout button](#) (this deletes the *Remember me* cookie).


Please bear in mind that although you are automatically logged in again, your [Workspace](#) will still be empty, as it is deleted when a session timeout occurs.

If you log in in two different browsers at once, two sessions are opened and you use two licenses. In this case, a message is displayed in the Web Client.

B.1.1.3 Login methods

Depending on the individual configuration of your Web Client, you can use one of the following login methods:


- Login with your **user name** and **password**, see [Logging in with user name and password](#)
- Login with **LDAP**, see [Logging in using LDAP](#)
- Login with **SSO**, see [Logging in using Single Sign-On](#)

 Your CM administrator can tell you which login method to use.

B.1.2 Logging in with user name and password

Please proceed as follows to log in to the Web Client using your user name and password:


1. Enter the URL of the Web Client into your browser. If you do not know the URL, please ask your CM administrator.
2. Enter your user name and password.
3. Optional: Select the *Remember me* checkbox if you want to be logged in automatically after a session timeout.
4. Click the *Sign in* button.

 The password is case-sensitive, so please make sure you enter upper and lower case letters correctly.

 If you forgot your password, you can [reset](#) it using the *Forgot your password?* link.


B.1.3 Logging in using LDAP

The login via LDAP is performed the same way as the [login with user name and password](#). The only difference is that in this case the password is stored in an external directory and the Web Client accesses this directory. This enables you to use the same user name and password for the Web Client as you use for, e.g., the company's intranet. Since the password is stored in an external directory, you cannot change it on your user profile page in the Web Client.

 Login via LDAP requires a special configuration and the interaction of multiple IT systems. Therefore, LDAP login is only possible when your system was explicitly configured to support this option.

B.1.4 Logging in using Single Sign-On

To log in to the Web Client using Single Sign-On, enter the URL of the Web Client into your browser. You will be logged in automatically using your Windows user account. Please refer to section [Troubleshooting](#), if you want to log in with a different user name than the automatically used one.

 Single Sign-On uses your Windows user account data to log you in to the Web Client. This requires a special configuration and the interaction of multiple IT systems. Therefore, Single Sign-On is only possible if your system was explicitly configured to support this option.

B.1.5 Logging out

You should log out when you stop using the Web Client. This is because you block one of the available concurrent licenses while you are logged in. To do so, click the *Logout* button located above the main menu, next to your name. Please bear in mind that your [Workspace](#) is deleted when you log out of the Web Client. You are logged out automatically when a [session timeout](#) occurs.

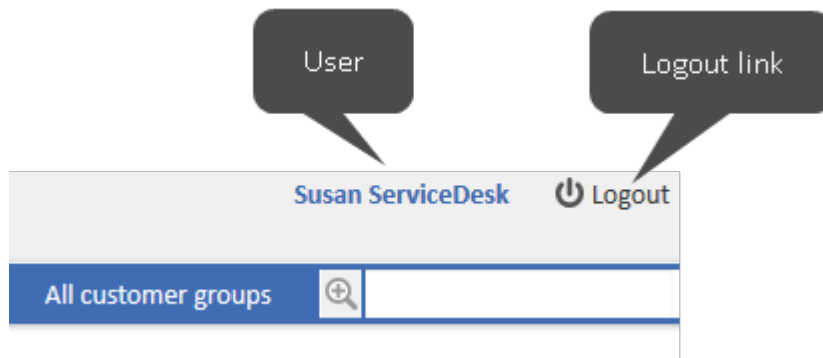


Figure 5: *Logout link*

Depending on the configuration of your CM system, a logout page might be displayed after logging out. Otherwise, you are forwarded to the login page.

B.2 User interface

This chapter discusses the following:

B.2.1 Customization	31
B.2.2 Layout of the Web Client	32
B.2.3 Main features	34
B.2.4 Data fields	40
B.2.5 Relation graphs	46

B.2.1 Customization

Your company can adapt ConSol CM to its individual requirements. This process is usually called customization and it affects the user interface of the Web Client, the data models for tickets, customers and resources, and the workflows and activities.

The following aspects of the user interface can be customized:

- **Layout**
Colors, fonts and images
- **Menus**
The main menu, the links, and the context menus (available clicking on the small grey triangle). The entries might appear or not and the names can differ.
- **Dashboard**
Content and layout of the dashboard
- **Main working area**
Structure of tickets, customer pages, and resource pages
- **Labels**
Naming of objects in the Web Client
- **Icons**
Ticket, customer, and resource icons
- **Activities**
The workflow activities for tickets, the customer activities for contacts and companies, and the resource activities

B.2.2 Layout of the Web Client

The layout of the ConSol CM Web Client depends on the **skinning**, i.e., the graphical design which has been developed for your specific CM system. The skinning usually includes colors, fonts, and images matching the corporate design of your company.

Here are two examples of the overall layout. The first one is the standard layout. You will see this layout if your company does not use a customized layout for the Web Client. The second example is from an installation of PinkCoffee, a fictional company used in demo environments.

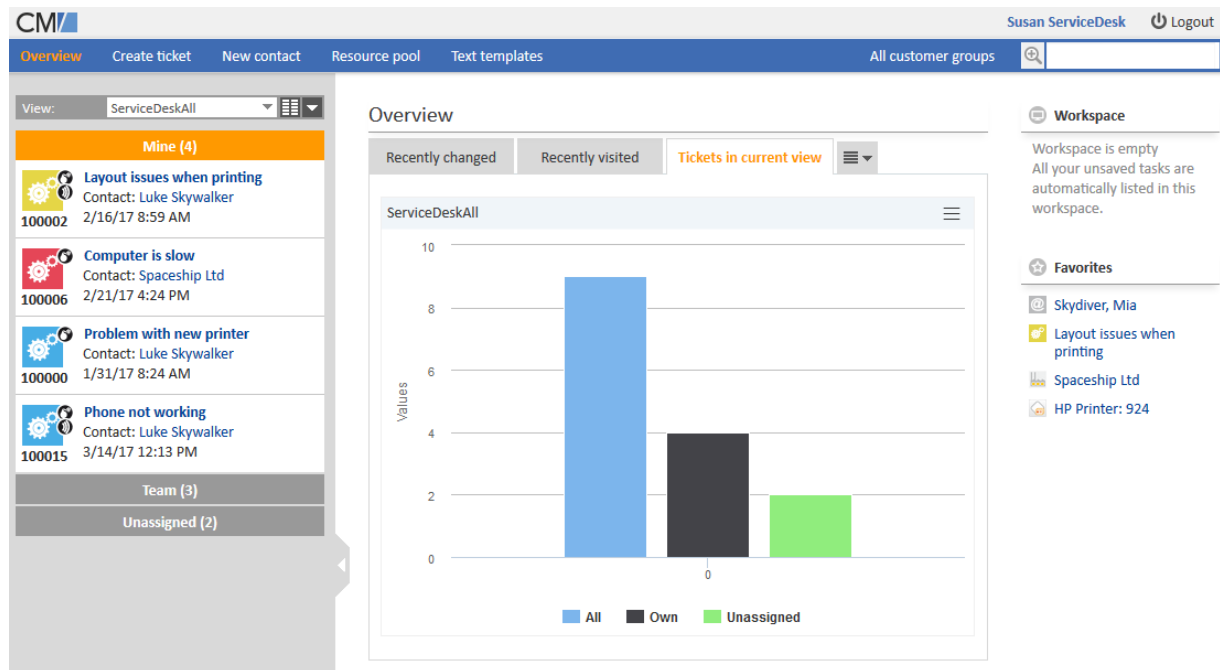


Figure 6: Standard layout

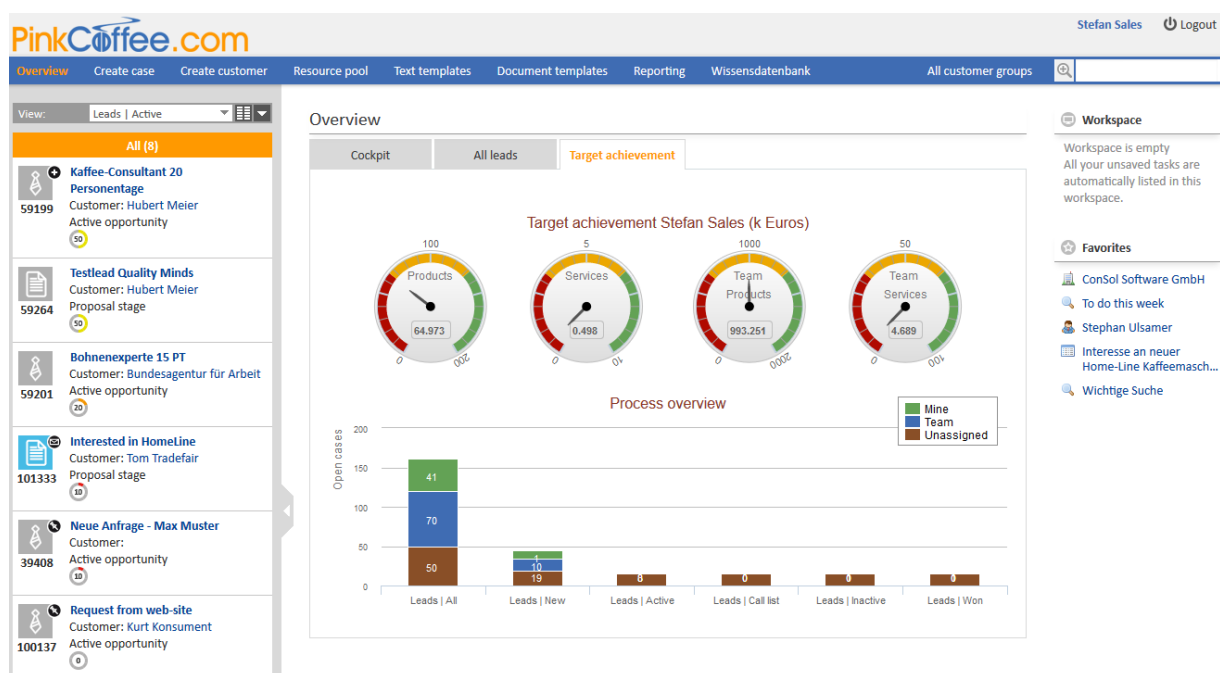


Figure 7: Layout of PinkCoffee

As you see in the above screenshots, PinkCoffee uses an installation where several aspects are customized:

- The PinkCoffee **logo** is shown in the upper left corner of the screen.
- The **dashboard** features a customized graphic.
- The additional **links** *Reporting* and *FAQ* were added to the main menu.
- The Web Client uses a different **wording** as tickets are called *cases*.



The screenshots in this manual were taken from an installation with the standard layout. You might find a completely different layout in your Web Client, depending on your company's corporate design.

B.2.3 Main features

This chapter discusses the following:

- [Areas and functions](#)
- [Main menu](#)
- [Overview page](#)
- [Customer group filter](#)

B.2.3.1 Areas and functions

You will find the following areas and functions on the standard user interface of the ConSol CM Web Client:

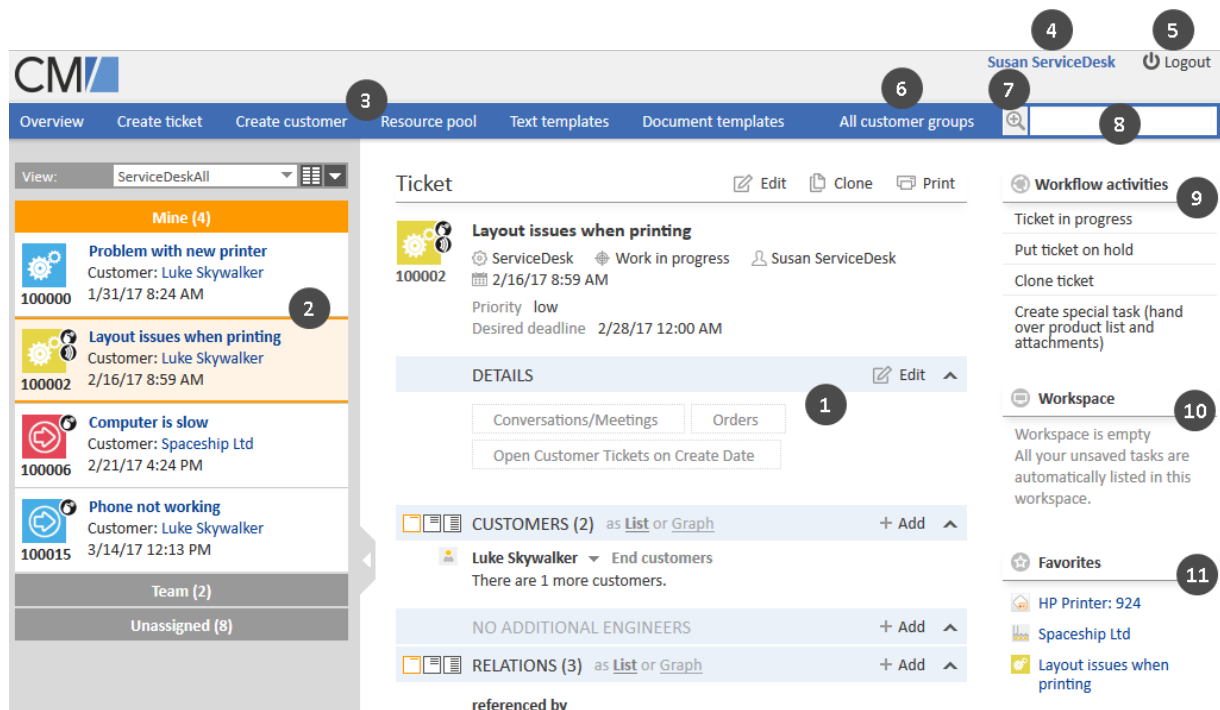


Figure 8: The user interface of the ConSol CM Web Client

- **Main working area (1)**
The main working area displays the item which you are currently working on. This can be a ticket, a customer page, a resource page, a search results page, or a dashboard. The above example shows a ticket in the main working area.
- **Ticket list (2)**
The ticket list provides you with a quick and convenient way to find tickets ("to do list"). You can select a view above the ticket list.
Please see [Ticket list](#) for further information.
- **Main menu (3)**
The main menu contains links to the different Web Client screens. Depending on the individual configuration of your CM system and your roles as an engineer, you can see different menu items.
Please see [Main menu](#) for further information.

- **Link to the user profile (4)**

The link to the user profile shows the name of the currently logged in user (here: *Susan ServiceDesk*). Click the name to open the user profile page, where you can adjust personal settings and set up representations.

Please see [User profile](#) for further information.

- **Logout button (5)**

Click the *Logout* button to log out of the Web Client.

Please see [Login and logout](#) for further information about logging in to Web Client and logging out of the Web Client.

- **Customer group filter (6)**

The customer group filter allows you to limit your work to a specific customer group, so you see only the customers who belong to this customer group.

Please see [Customer group filter](#) for further information about this item.

- **Link to the Detailed Search (magnifying glass) (7)**

Click the magnifying glass to open the Detailed Search page, where you can search for tickets, customers, and resources using multiple search criteria.

Please see [Detailed Search](#) for further information about the Detailed Search.

- **Quick Search (8)**

The Quick Search allows you to search for tickets, customers, and resources without leaving the page you are currently working on.

Please see [Quick Search](#) for further information about the Quick Search.

- **Activities (9)**

This section shows the available activities/actions for the item displayed in the main working area. These can be workflow activities for tickets, customer activities for customers, resource activities for resources, or search activities for Detailed Searches.

Please see [Activities](#) for further information.

- **Workspace (10)**

The Workspace allows you to access temporarily saved data. If you create or edit ticket, customer, or resource data, and switch to another screen without saving, your latest draft is saved in the workspace. You can retrieve it later to continue working.

Please see [Using the workspace](#) for further information.

- **Favorites (11)**

Favorites allow you to quickly access frequently used items. You can drag-and-drop tickets, customers, resources, or searches to the favorites, and open them with a single click afterwards.

Please see [Using the favorites](#) for further information.

B.2.3.2 Main menu

The main menu is displayed in the upper part of the screen, above the main working area.



The available menu items and their names depend on the individual configuration of your CM system.

The following items can be available:

- **Overview**

This menu item provides access to the dashboard. Please see [Overview page](#) for further information.

- **Create ticket**

This menu item provides access to the *Create ticket* page, where you can create a new ticket. This menu item is displayed if you have permissions to create tickets in at least one queue. Please see [Creating a ticket](#) for further information.

- **Create customer**

This menu item provides access to the *Create customer* page, where you can create a new company or contact. This menu item is displayed if you have permissions to create customers for at least one customer group. Please see [Creating a customer](#) for further information.

- **Resources**

This menu item provides access to CM/Resource Pool. This menu item is displayed if CM/Resource Pool is active in your system and you have permissions to access resources. Please see [Basic knowledge about resources](#) for further information.

- **Additional links** (here: *Reporting*)

Your CM administrator can add additional links to the main menu. These are external links which depend on the individual configuration of your CM system.

B.2.3.3 Overview page

After logging in to the Web Client, you see the *Overview* page. It usually contains a **dashboard** showing a summary of the current tickets. The dashboard consists of different widgets, which can be grouped in one or more tabs. The actual content and layout of the dashboard depend on the individual configuration of your CM system.

There are six types of standard widgets:

- Charts, e.g., column charts, pie charts, or funnel charts. A chart might contain interactive elements as shown in the following figure.
- Tables
- KPIs
- Recently visited: shows a list of items which the current user has recently visited
- Recent changes: shows a list of items which have been changed recently
- Calendar
- News

The following example shows a dashboard consisting of one chart widget which displays a summary of the tickets in the currently selected view. You can print the widget using the print button in the upper right corner of the widget. Hover over a column to display details about this column. You can hide columns by clicking the column name in the legend. To display it again, click the column name, which is grayed out.

Depending on the configuration of your CM system, other functionalities and types of widgets might be available.

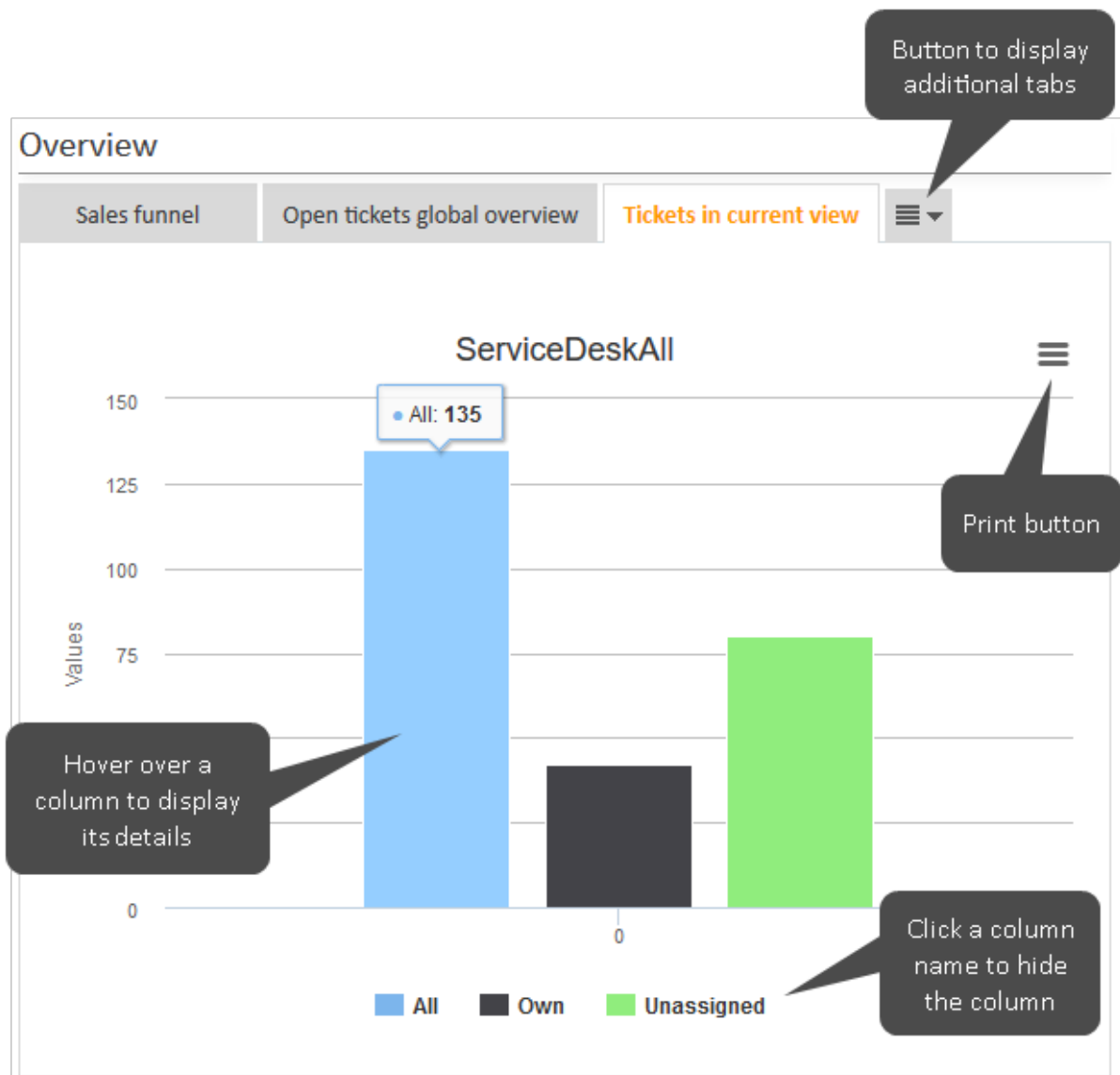


Figure 9: Example of a dashboard on the Overview screen

The following example shows a news widget. Your CM system can provide news from different sources. Click the header of a news entry to display the news text.

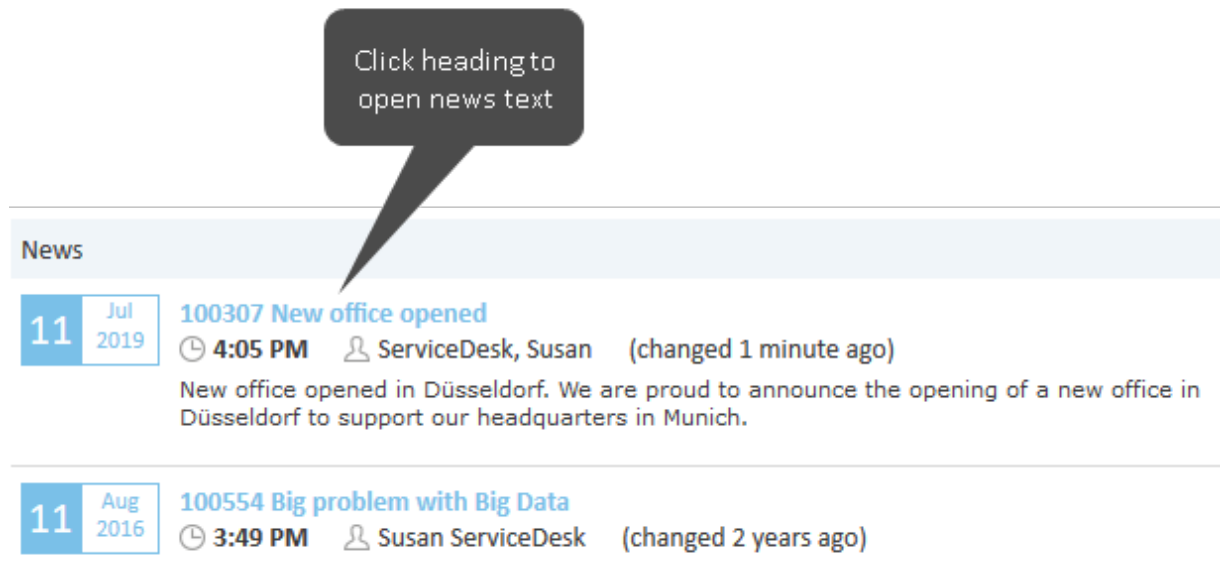


Figure 10: Example of a news widget

The following example shows a *Recent changes* widget. The list can be filtered using the tool icon in the widget header. Click *All actions* to display all kind of changes, or *User actions only* to display only changes made by an engineer. You can click a link to open the page of the respective item. Click the *show all* link to open a pop-up window listing more items. The widget lists only changes to objects which the current user is allowed to see due to his permissions.

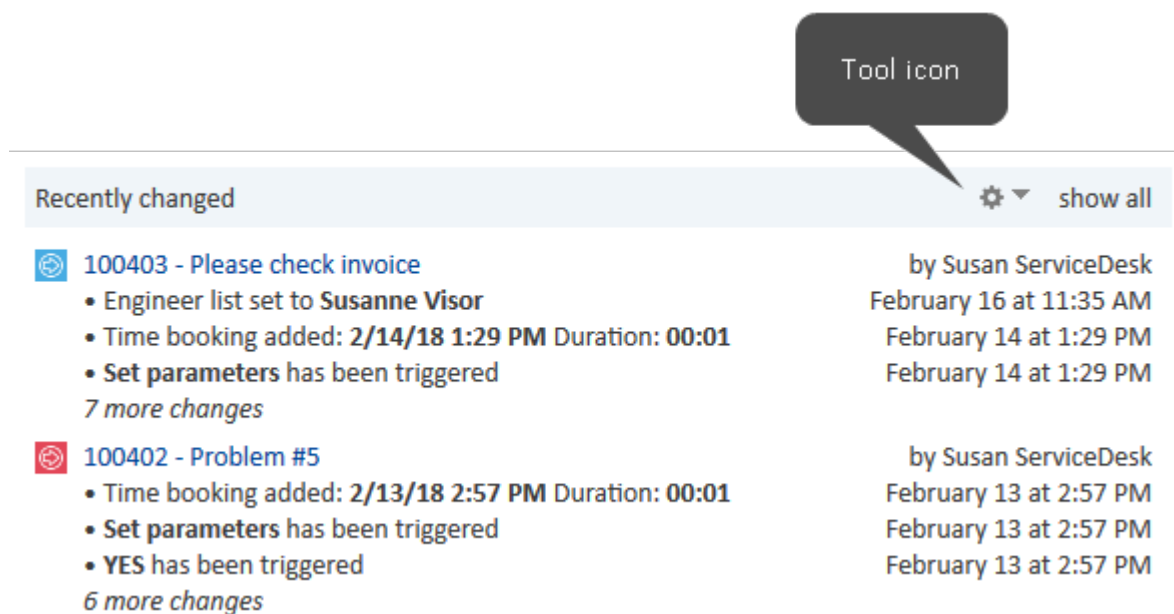


Figure 11: Example of a Recent changes widget

B.2.3.4 Customer group filter

Customer groups are used to manage different kinds of customers within the same CM system. The customer group determines which customer data model is used for its customers, i.e., which data fields are available and which relations and activities are possible for the customers.

If you have access to more than one [customer group](#), you can choose one of these customer groups in the **customer group filter**.

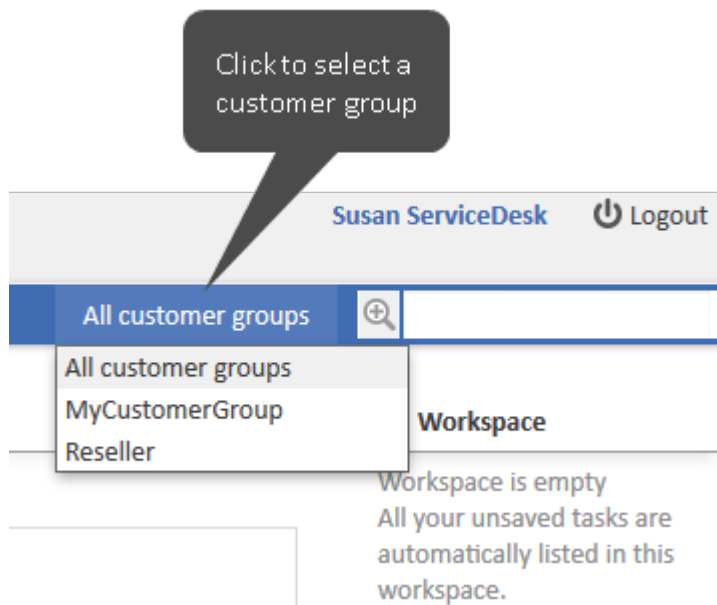


Figure 12: The customer group filter

Only the selected customer group will be shown on the user interface. This setting takes effect in the following areas:

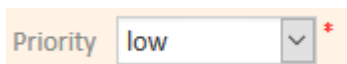
- You can only **create customers** in this customer group.
- You can only **select customers** from this customer group in tickets.
- The **Quick Search** is limited to the selected customer group, i.e., it shows only the results from the selected customer group.
- The **Detailed Search** is limited to the selected customer group, i.e., it does not offer the customer group as a search criterion anymore.

B.2.4 Data fields

This section describes the different kinds of data fields which are used in the Web Client.

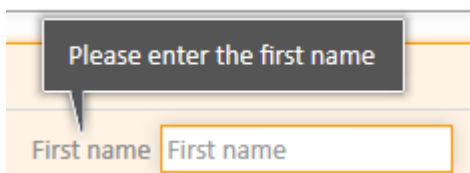
- [Red asterisks](#)
- [Data entry fields](#)
- [Date fields](#)
- [Text boxes](#)
- [Links](#)
- [Checkboxes](#)
- [Radio buttons](#)
- [Drop-down lists](#)
- [Autocomplete lists](#)
- [Hierarchical lists](#)
- [Tables](#)
- [Rich text fields](#)
- [Special fields](#)

B.2.4.1 Red asterisks



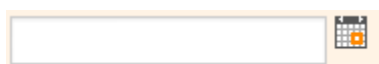
A red asterisk indicates that a field is mandatory. It has to be filled out before you can save your changes to the current page. This applies to all types of data fields.

B.2.4.2 Data entry fields

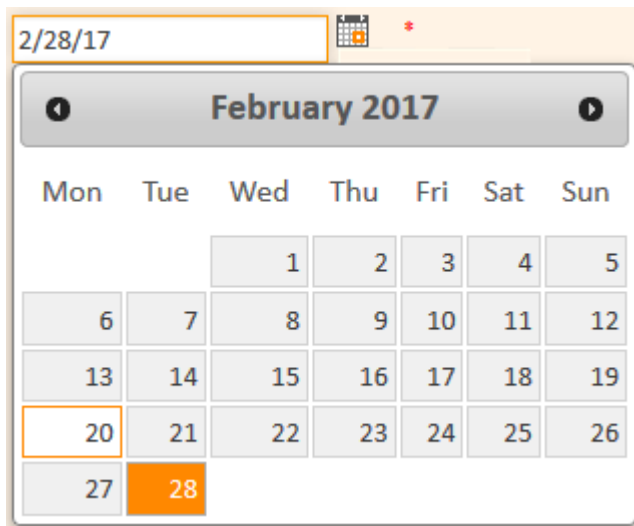


You can enter text or numbers in data entry fields. Some fields have restrictions, e.g., it might be possible that a certain field only accepts numbers. The meaning of a data field, i.e., the kind of data you should enter there, can be indicated by a label, and/or an inline text. A tooltip can provide additional information about a data field.

B.2.4.3 Date fields



Date fields are indicated by a little calendar icon. If you click the calendar icon, a calendar opens and you can pick the desired date. You can also enter the date manually.



B.2.4.4 Text boxes

You can enter text into text boxes. Compared with data entry fields, text boxes are provided for longer text entries which can also contain line breaks, e.g., longer comments.

i If you click the lower right corner of a text box, you can drag it to enlarge the size of the box.

B.2.4.5 Links

Some text fields can be configured to contain a link to open a website or file, or write an email. These text fields look like normal text fields but you can only enter a valid path. Otherwise the Web Client shows an error message. In view mode you can click the link to open the website or file, or to write an email using your email client.

The following formats are allowed:

- URLs have to start with **http://** or **https://**, e.g. *http://www.consol.de*
- File links have to start with **ftp://** or **https://** if the file is saved on an FTP server, or **file://** if the file is saved on a file server, e.g. *ftp://ftp.consol.de/myfile.doc* or *file://fileserverserver/myfile.doc*
- Email addresses have to start with **mailto:**, e.g. *mailto:luke@consol.de*

i If you do not use any of the above mentioned protocol identifiers, the system assumes the your link starts with **http://**.

You can enter a display name for the link by typing a space and entering the text to be displayed instead of the link. For example, “<http://www.consol.de> ConSol Website” is displayed as follows:

ConSol GmbH
 DU: <http://www.consol.de>
 Karlsruhe
 40472 Düsseldorf
[ConSol Website](#)

B.2.4.6 Checkboxes

☐ Ask for feedback

Checkboxes can be activated (checkmark is set) or deactivated (checkmark is not set). An activated checkbox means **yes**, a deactivated one means **no**.

B.2.4.7 Radio buttons

VIP ☐ Yes ☐ No

Radio buttons let you choose between different values. Click the radio button with the desired value to select it. You can only choose one value from a group of radio buttons, i.e., multiple values are not possible here.

B.2.4.8 Drop-down lists

Priority high ▼ *

- low
- normal
- high

Drop-down lists contain a list of predefined values. When a drop-down list is displayed grayed out, you cannot choose data, because you do not have the necessary permissions or data entry is not intended at this point. You can only choose one value from the list.

B.2.4.9 Autocomplete lists

Engineer on duty

Choose one

NOTE: Please type at least 3 characters!

Engineer on duty

Choose one

Sus

Susanne Visor

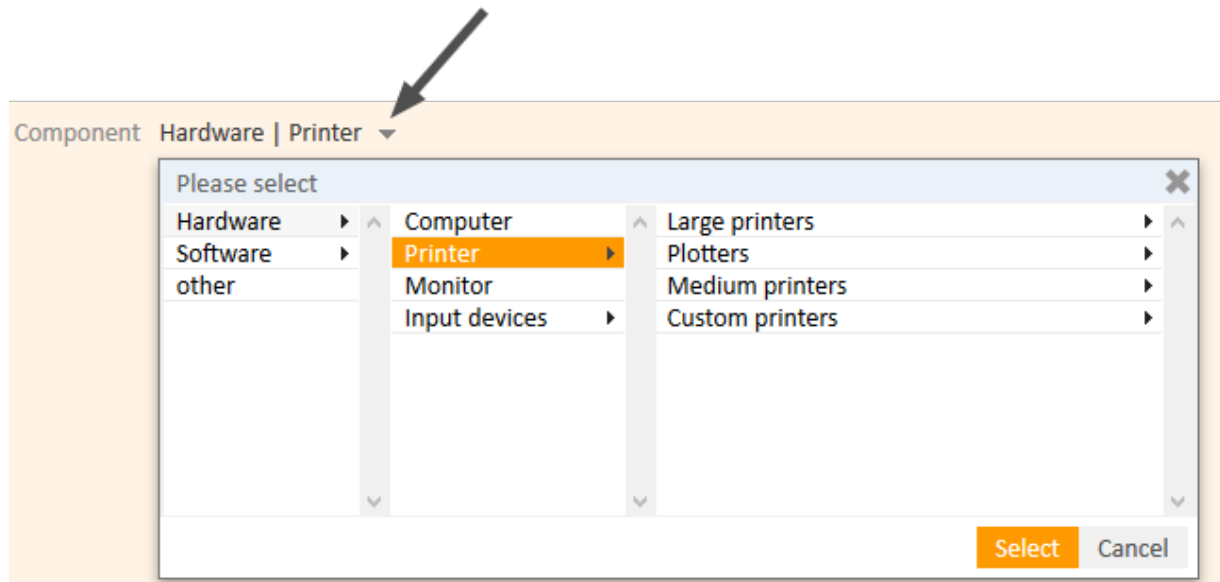
Susan ServiceDesk

Autocomplete lists are dynamic lists. You can enter a keyword to display the corresponding objects (engineers, tickets, customers or resources) in the list. Then you select the desired object. The above figure shows an autocomplete list which displays a message to enter at least three characters to start the search. The results are displayed upon entering the required characters.

B.2.4.10 Hierarchical lists

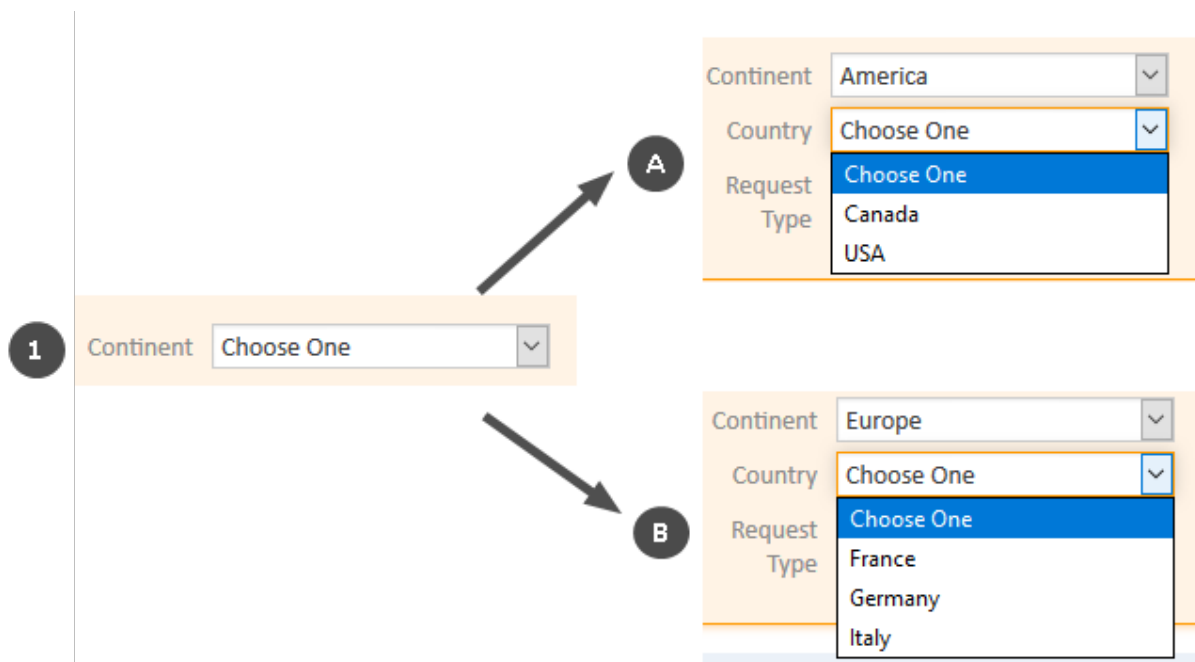
Hierarchical lists can be displayed as MLA (Multi Level Attribute, displayed in a box) or as individual drop-down lists. They provide tree-like data structures, which allow you to select the desired value by navigating through a hierarchy.

MLAs



To select a value within an MLA, click the little arrow to open the box (see above figure). Select an entry from the first list on the left. If the selected entry has a little arrow next to the value, a new list is opened to its right. The values available in the new list depend on the chosen entry. This way you can navigate through several hierarchical levels. You can click *Select* to select the current entry at any time.

Dependent drop-down lists



To select a value, choose an entry from the first drop-down list. Depending on your selection, additional drop-down lists are displayed and/or the values available in the other drop-down lists change. The above example shows that the entries available in *Country* vary depending on the selected continent.

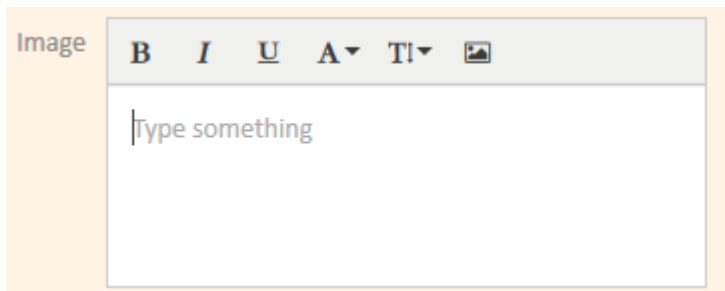
B.2.4.11 Tables

Orders	Hardware	Contact person	Number	2
	Large printers ▾	John	123	
	Custom printers ▾	Luise	654	
	<u>Add row</u>			

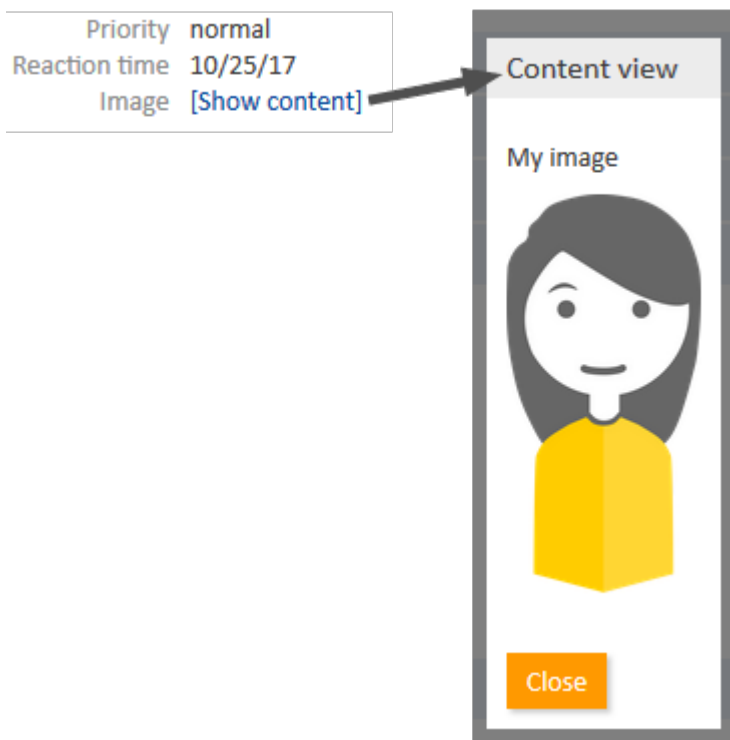
Tables can contain data entry fields, drop-down lists, MLAs, or checkboxes. For some tables it is possible to add rows by clicking *Add row* (1) and/or to delete rows by clicking the cross icon at the end of a row (2).

B.2.4.12 Rich text fields

Rich text data fields can contain images and text with some formatting. They have a basic editor for adding and editing the field content.



In the view mode, the content is either displayed directly, or there is a *Show content* link to display the field content in a pop-up window called *Content view*:



B.2.4.13 Special fields

Some fields can have special visualization features. In the view mode, they can show for example images, charts or maps. It depends on the individual configuration of your CM system, if such fields are available, which values they have in the edit mode and how they are displayed in the view mode.

Please note that, depending on the configuration of your CM system, pictures, charts, maps or other graphical elements might be displayed in the display mode only if the corresponding field (e.g., a string field) has content.

B.2.5 Relation graphs

Ticket, customer page, and resource page sections which show linked objects (all kinds of relations, customers of a ticket, contacts of a company, tickets of a customer) can be displayed in two modes:

- **List:** standard display from previous versions of ConSol CM
- **Graph:** new graph display

You can switch between the list view and the graph view using the *List* and *Graph* links next to the section heading. The *Graph* link is only displayed if the section includes at least one relation.

The objects in the graph are represented by their icons. Two icons representing linked objects are connected with an arrow. When the graph view is selected, there is no counter stating the number of relations in the section header. The lower right corner of the graph includes buttons to zoom in and out and restore the default zoom. A tooltip is displayed when the user hovers over an icon or clicks an icon. Double-clicking an icon opens the page of the respective object. You can use drag-and-drop to move the objects within the graph.

The level of detail displayed in the graph depends on the number of objects and the zoom factor. The graph always shows the icons of the objects and the arrows between related objects. If there is enough space on the canvas, it also includes the description of each object and the type of relation between two objects.



The main purpose of the graph view is providing a better visualization of the relations. Depending on the section, you might have to switch to the list view for managing the relations.

The following figure shows the relation graph for the *Customers* section of a ticket which has a main customer and an additional customer. Note that the description of the root object (the object of the current page, in this case the ticket), is displayed in bold.

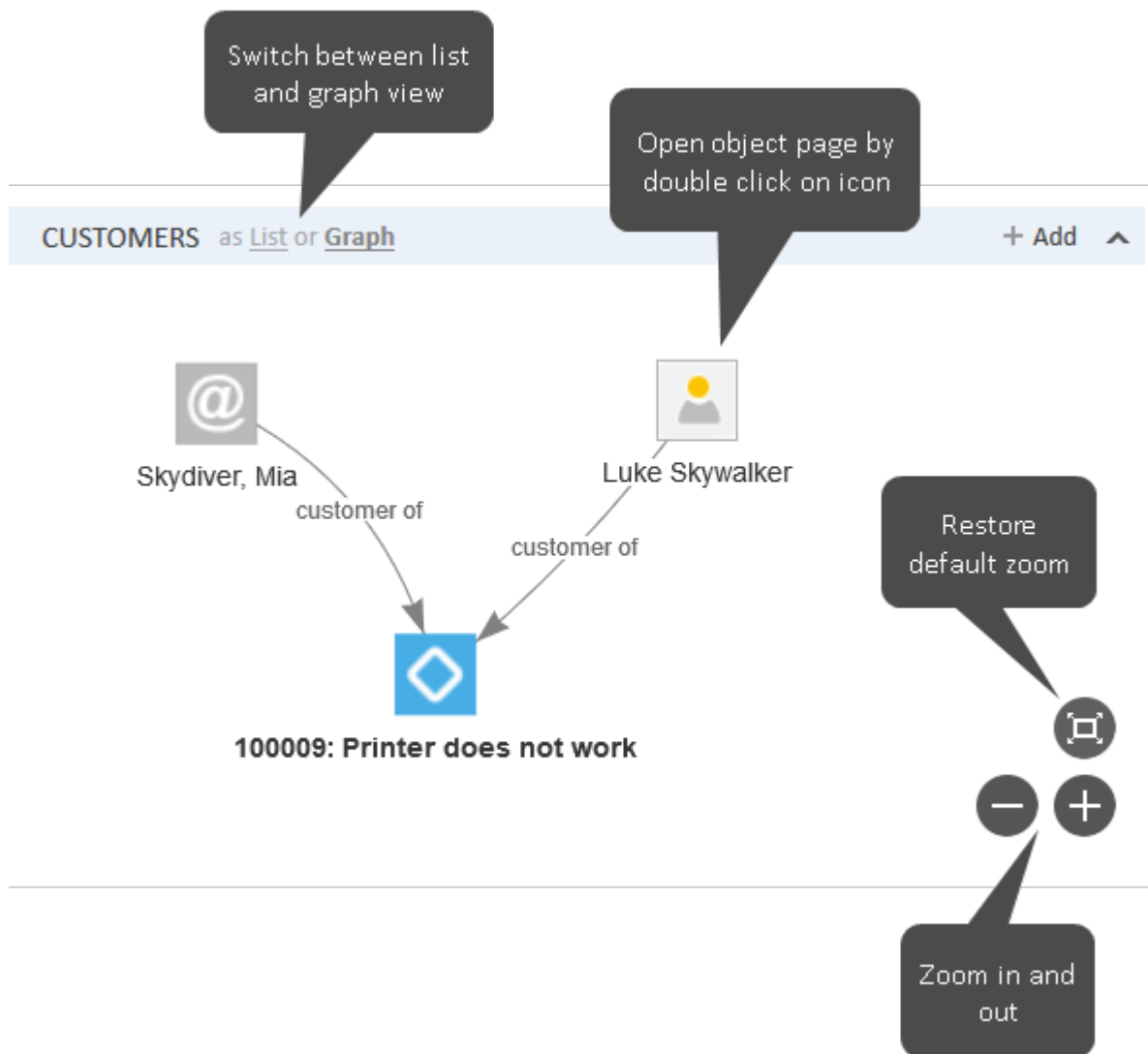


Figure 13: Relation graph in the Customers section of a ticket

By default, both the list and the graph show the same relations. Nevertheless, your CM system can be configured to display other relations in the graph view. For example, the list view of the *Related Resources* section of a ticket displays the resources which are directly related to the ticket, while the graph view also displays the customers which are related to these resources. It is also possible that the layout of the graph is customized.

i Depending on the individual configuration of your CM system, tickets, customers, and resources can have an additional section for a customized relation graph. The content of this graph depends on the individual configuration of your CM system.

B.3 Search features

You can find specific tickets, customers, and resources in the Web Client by using one of the search features. The following search features are available:

- [Quick Search](#)
- [Detailed Search](#)
- [Autocomplete Search](#)

B.3.1 Quick Search

This chapter explains the features of the Quick Search.

- [Introduction](#)
- [Features of the Quick Search](#)
- [Search results](#)
- [FAQs](#)

B.3.1.1 Introduction

The Quick Search provides a quick and easy way to find tickets, customers, and resources. It is located in the upper right corner of the Web Client. When you enter something in the Quick Search field, the matching search results are shown immediately below the Quick Search field.

The Quick Search is your first point of access when you need to locate something in the Web Client. Example use cases are:

- You receive a call from a customer and want to open his customer page.
- You receive a call regarding a ticket and want to open it quickly.

The following information is important to know about the Quick Search:

- You can enter multiple search words, they have to be divided by a space character.
- By entering more search words you narrow down the search, because the search terms are connected via AND relation. For example, when you search for “consol coffee”, you only get results which contain both “consol” **and** “coffee”.
- Search words consisting of more than one character or number have implicitly an asterisk search operator (*) at their end. This placeholder stands for any number of any characters at the end of the search word. For example, the search results for the search word *coffee* will also contain words like “coffees” or “coffee-colored”. You can also manually add a “?” as a placeholder for a single character within a search word, e.g., if you search for “Joan” or “John” you can enter *Jo?n*.
- Depending on the item you search for, phonetic search might be available. In this case the Quick Search also returns results which have a similar pronunciation but a different spelling, e.g., a search for the name *Claire* returns “Claire”, “Clare” and “Clair”. This option might be available for text fields.



The exact behavior of the search depends on the individual configuration of your CM system.

B.3.1.2 Features of the Quick Search

The following figure shows an example to illustrate the features of the Quick Search.

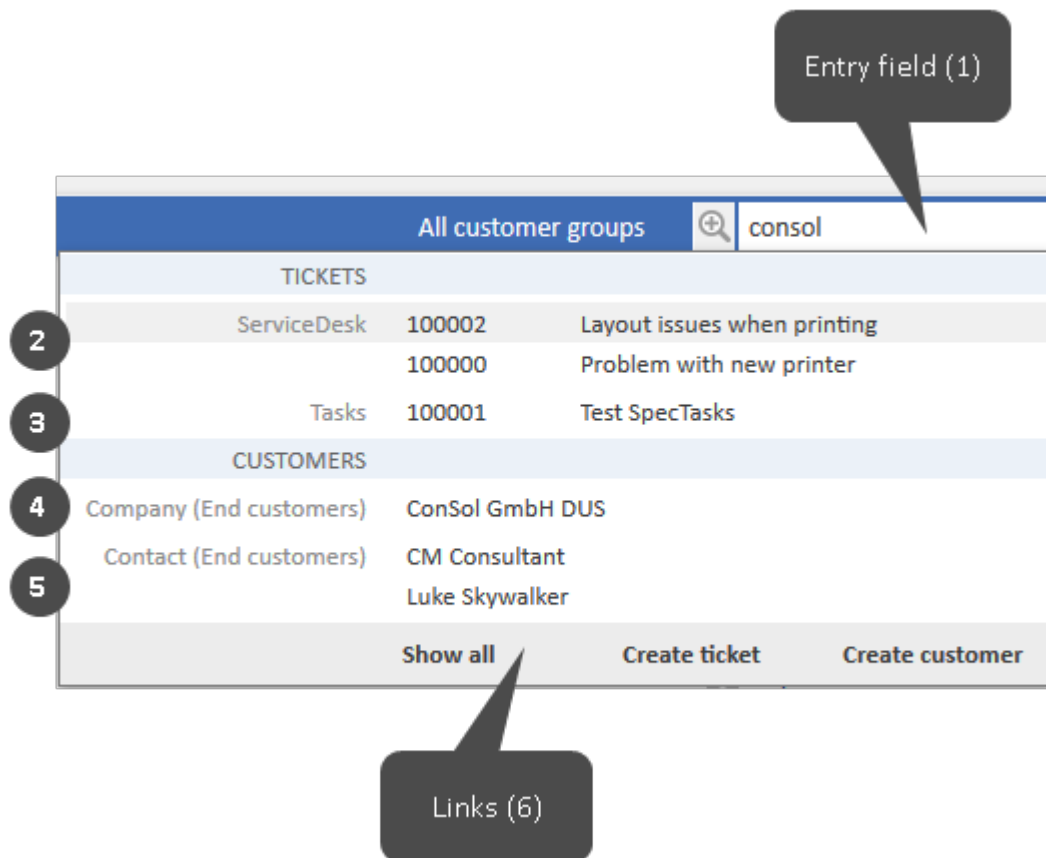



Figure 14: Quick Search

- (1) Entry field of the Quick Search: *consol* entered as a search string
- (2) Results for tickets in queue *ServiceDesk*: the ticket's customer has *consol* in his name
- (3) Results for tickets in queue *Tasks*: the ticket's customer has *consol* in his name
- (4) Results for companies from customer group *End customers*: companies who have *consol* in their name
- (5) Results for contacts from customer group *End customers*: contacts who belong to companies with *consol* in their name
- (6) Direct links within the Quick Search for jumping to the [Detailed Search](#) (*Show all* link), [creating a new ticket](#) (*Create ticket* link), and [creating a new customer](#) (*Create customer* link).

B.3.1.3 Search results

You can use the Quick Search to find tickets, customers, and resources. The following table shows which objects are found.

Object	Search string contained in
Ticket	<ul style="list-style-type: none"> • Ticket number • Ticket subject • Ticket fields which are configured to be searched • Name of the ticket customer • Name of the assigned engineer • Name of an additional engineer
Customer	<ul style="list-style-type: none"> • Customer fields which are configured to be searched, usually the customer name • Company which the contact belongs to
Resource	<ul style="list-style-type: none"> • Resource fields which are configured to be searched • Resource type which the resource belongs to

 The Quick Search may not show all results for the entered search string. The number of search results and the way they are displayed depends on the individual configuration of your CM system. Use the [Detailed Search](#) (by clicking the *Show all* link or the magnifying glass) if you want to display a complete list.


B.3.1.4 FAQs


Which tickets do I find via Quick Search?

Via Quick Search you can find all tickets which match the search criteria and are currently in queues for which you at least have read permission and which have a main customer from a customer group for which you at least have read permission (see [Visibility of tickets](#)). The Quick Search results show open tickets as well as already closed tickets.

Which customers do I find via Quick Search?

Via Quick Search you can find all customers which match the search criteria and which are in customer groups for which you at least have read permission (see [Visibility of customers](#)).

 The search results are limited to the customer group selected in the customer group filter in the main menu. If it is set to *All customer groups* the search will return results for all customer groups. Otherwise, only customers belonging to the selected group will be found.

 If you search for a customer, you also find tickets and resources related to this customer.

Which resources do I find via Quick Search?

Via Quick Search you can find all resources which match the search criteria and for whose resource type you have at least read permission (see [Visibility of resources](#)).

B.3.2 Detailed Search

This chapter explains the features of the Detailed Search.

- [Introduction](#)
- [Features of the Detailed Search](#)
- [Working with the search results](#)
- [FAQs](#)
- [Relations between the search criteria](#)

B.3.2.1 Introduction

The Detailed Search provides extensive search functionalities. You can use several search criteria. All the results are displayed in a table, where you can carry out additional actions.

You can access the Detailed Search by clicking the magnifying glass icon within the Quick Search or by clicking the *Show all* link below the Quick Search results. In the latter case, the search words from the Quick Search (including the implicitly present asterisk at the end of each word) are populated to the *Keyword (Pattern)* field.

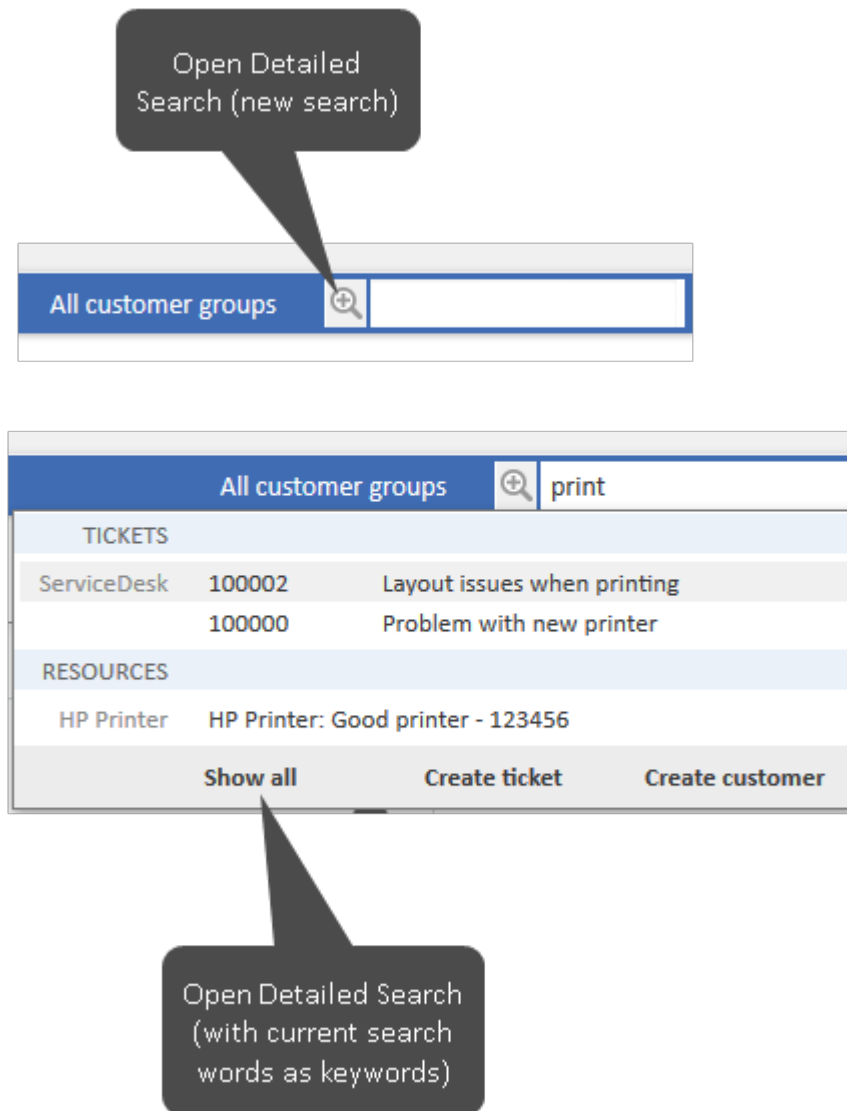


Figure 15: *Opening the Detailed Search*

The Detailed Search enables you to search for tickets, customers, and resources using multiple search criteria. The Detailed Search simultaneously searches for tickets and customers. The tabs in the lower area of the Detailed Search allow you to choose if you want to show tickets, customers (grouped by customer groups unless you limit the results to specific customer groups using search criteria or the [customer group filter](#)), or resources.

A Detailed Search could be, for example, “Show only results with priority *high*”. In this case, the result list would contain:

- **Tickets** with priority *high*
- **Customers** who are the main customer or an additional customer for a ticket with the priority *high*

If you want to search for resources, you have to go to the *Resources* tab first and select the desired *Resource type*.

Every search criterion narrows down the search. Each search criterion is shown in a single row.

The screenshot displays the search interface of the ConSol CM system. At the top, there is a search bar with a magnifying glass icon and the word "Search". Below this, the "Search criteria" section is visible. It contains three criteria, each with a trash icon for removal:

- Keyword (Pattern):** The input field contains the text "printer".
- Engineer:** The input field contains the text "ServiceDesk, Susan" followed by a close icon (X).
- Creation date:** This criterion is a date range. It includes a dropdown menu set to "after", a date input field containing "2/1/17", and a calendar icon.

To the right of the third criterion is a plus sign (+) and an orange "Search" button. Two callout boxes are present: one labeled "Search icon" pointing to the magnifying glass in the search bar, and another labeled "Search criteria" pointing to the "Creation date" criterion.

Figure 16: Detailed Search with three search criteria

B.3.2.2 Features of the Detailed Search

The following figure shows an example to illustrate the features of the Detailed Search.

Search

Search criteria

1 Status **Open tickets** 2

Engineer **Susan ServiceDesk x** 3 + 4 **Search**

5 ☐ Deactivated incl.

6 ☐ Use phonetic search

7 **Direct customers (Company)** **End customers (Contact)** 8

Search results (27)

9 1 2 3 > >> 1 to 10 of 27

Contact	First name	Lastname
Mr Werner Workflowuser	Werner	Workflowuser
Mr Dieter Macher	Dieter	Macher
Mrs Minnie Mouse	Minnie	Mouse
Mrs Wilma Flintstone	Wilma	Flintstone
Mr Dagobert Duck	Dagobert	Duck
Mr Max Mustermann	Max	Mustermann
Mrs Mia Skydiver	Mia	Skydiver
Mrs Maria Miller	Maria	Miller
Mr Dietrich Habermann	Dietrich	Habermann
Susanne Stuller	Susanne	Stuller

10

11 Number per page 10 > 1 to 10 of 27

Figure 17: Detailed Search

- **Search criteria (1)**

The results of the Detailed Search will match these criteria.

i Some search criteria allow you to choose one or several values from a drop-down list. Depending on your system configuration, a drop-down list can contain values displayed in italics. This means that the value is deactivated, i.e. it can be set in existing objects but you cannot set it anymore. It is still possible to search for objects with this value though.

In the field *Keyword (Pattern)* you can enter search terms (text, numbers) and use different search operators. Please take the following into account when using operators in the *Keyword (Pattern)* field.

- Do not use the search operators AND or OR. A space character already implies an AND relation between the search terms. An OR relation can only be established for certain search criteria when multiple selection is possible (see [Relations between the search criteria](#) below).
- You can use the asterisks search operator (*) as a placeholder for any number of characters.
- You can use the question mark search operator (?) as a placeholder for a single character.

- **Recycle bin (2)**

Click this button to delete a search criterion.

- **Plus icon (3)**

Click this button to add a new search criterion. The new button *Please select* is displayed. You can choose the desired criterion from the list. Depending on the criterion, you can choose one or several values.

- **Search (4)**

Click this button to perform the search with the current search criteria.

- **Deactivated incl. (5)**

Select this checkbox if you want to show deactivated customers or resources in the search results.

i The checkbox *Deactivated incl.* is only displayed if you clicked on a tab of a customer group or the *Resources* tab (see 6). If the tab for tickets is chosen, the checkbox is not displayed.


- **Use phonetic search (6)**

Select this checkbox if you want to display search results which have a similar pronunciation but a different spelling, e.g. a search for the name *Claire* returns results for “Claire”, “Clare”, and “Clair”.

i The checkbox *Use phonetic search* is only displayed if the phonetic search is enabled for at least one field which belongs to the objects of the selected tab.

- **Search result tabs (7)**

Click the desired tab to switch between the results for tickets, the results for the different customer groups, and the results for resources.

 When you switch to the *Resources* tab, any previously entered search criteria which do not apply to resources (e.g., *Engineer*, *Queue*, or *Status*) are removed and you can only select relevant search criteria.

- **Display hidden tabs (8)**

This button is displayed if there are additional tabs which are not shown due to lack of space on the screen. Click this button to select the tab you want to display.

- **Column selection (9)**


Click this button to choose which columns are displayed in the search results.

- **Search results (10)**

In this section you see the results found in the search.

- **Number per page (11)**

Click here to set the number of search results which should be displayed on each page. This option is only displayed if there are more than 10 search results.


 You can add a Detailed Search to your [Favorites](#) to quickly access the Detailed Search itself or the tickets matching its criteria.

Search criteria

The Detailed Search offers several search criteria. You can find a detailed description in the table below.

Search criteria	Description
Keyword (Pattern)	Searches for free text in tickets and customers.
Archived	Searches for archived or non-archived tickets.
Close date	Searches for tickets which have been closed in a specified date range.
Creation date	Searches for tickets which have been created in a specified date range.
Engineer	Searches for tickets which are assigned to one or several selected engineers, unassigned tickets, or assigned tickets.
Queue	Searches for tickets which are in one or several selected queues.
Referenced engineers	Searches for tickets which have one or several selected additional engineers. You can narrow down the search to find only tickets where the selected engineer has a specific engineer function, or tickets which have a certain approval status.
Status	Searches for open tickets or for closed tickets.
Subject	Searches for a keyword from the ticket subject.

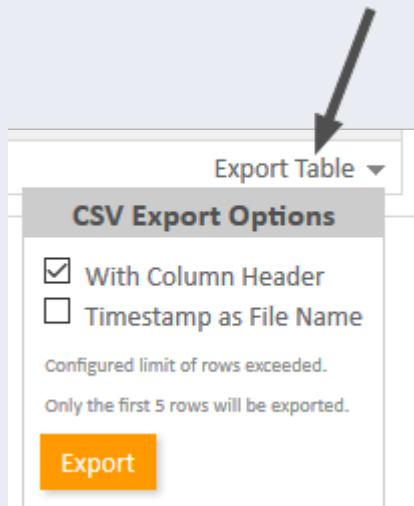
Search criteria	Description
View	Searches for tickets which are shown in one or several views from the ticket list.
Ticket fields	The searchable ticket fields are listed by ticket field group. Depending on the field type, you can select a value from a list, select a date, or enter a keyword. The available ticket fields depend on the individual configuration of your CM system.
Company	Opens an autocomplete field where you can select a company.
Contact	Opens an autocomplete field where you can select a contact.
Customer group	Searches for customers belonging to one or several selected customer groups.
Customer fields	The searchable customer fields are listed by customer data model. Depending on the field type, you can select a value from a list, select a date, or enter a keyword. The available customer fields depend on the individual configuration of your CM system.
Resource type	This search criteria is only available if you clicked the <i>Resources</i> tab. Select a resource type to limit the display of the available resource fields.
Resource fields	The searchable resource fields are determined by the selected resource type. Depending on the field type, you can select a value from a list, select a date, or enter a keyword. The available resource fields depend on the individual configuration of your CM system.

 When you search for tickets, you can switch to a customer tab to see the customers which belong to the tickets you found. In the same way, you can switch to the *Tickets* tab to see the tickets of the customers you have found.

B.3.2.3 Working with the search results

You can perform several actions with the results of a Detailed Search. It is possible to change the display of the results table by [adjusting the table columns](#) or [displaying the results as a grid](#). In addition you can [open a search result](#) or [carry out a search activity](#).

- i** Depending on your system configuration, you might be able to export the search results to a CSV file. In this case, there is a link *Export Table* below the *Search results* table. There you can choose whether you want the file to have a header row and a timestamp and start the export.



Adjusting the table columns

You can determine the columns which the result table should contain. To do so, click the little arrow next to the wheel icon. You can remove existing columns by clicking the cross next to the column name. To add new columns, click in the white space next to the names of the displayed columns to see a list of all available columns, or start typing the column name and click one of the suggested columns. Select the desired columns which should be additionally displayed. You can rearrange the columns within the *Search results* table by dragging-and-dropping each column to the desired position.

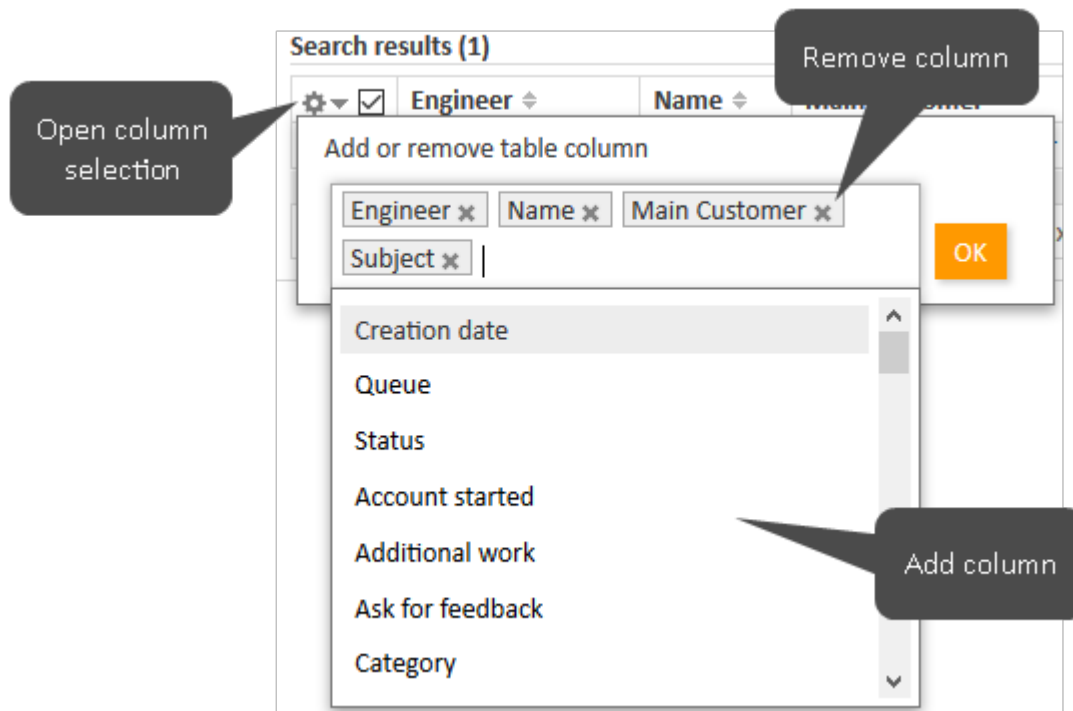


Figure 18: Selecting the columns in a Detailed Search

i Your column configuration is saved when you [add the Detailed Search to the Favorites](#).

Opening a ticket, customer, or resource

The search results on the *Customers* tabs lead you directly to the respective customer pages. If you click a search result, the respective customer page (company or contact) is opened automatically. The same applies to resources in the *Resources* tab.

The *Tickets* tab allows you to open either the ticket or the customer page. If there is a column containing the ticket's main customer, you can click the name of the customer, which is a link, to open the respective customer page. In the same way, there can also be a column containing a link to the ticket. If you click another column, the ticket preview is opened within the *Search results* table. You can then open the ticket or switch to the preview of the next ticket in the list.

i It depends on the individual configuration of your CM system if the ticket preview is available.

The ticket preview always shows the ticket's last comment or email. The following features are available:

Tickets End customers (Contact) End customers (Company) ▾

View as: ☒ List ☐ Grid

Search results (2)

⚙️ <input checked="" type="checkbox"/>	Engineer ▾	Name ▾	Main Customer	Subject ▾
<input checked="" type="checkbox"/>	ServiceDesk, Susan	100000	Mr Luke Skywalker	Problem with new printer
<input checked="" type="checkbox"/>	ServiceDesk, Susan	100002	Mr Luke Skywalker	Layout issues when printing

3 Latest email from Luke Skywalker <Luke.Skywalker@consol.de> 2/20/17 5:05 PM ... ^

4 | Attachments (2)

5 Please check the attached images

6 Am 20.02.2017 um 17:03 schrieb cmdoku5@consol.de:

7 Viele Grüße
--
Susan ServiceDesk
-Service Agent-
ConSol Software GmbH
Franziskanerstraße 38
81669 München

Export Table ▾

Figure 19: The ticket preview

- (1) Link to open the ticket
- (2) Link to open the ticket's main customer
- (3) Button to show more details in the preview
- (4) Button to open the ticket in a new browser tab
- (5) Button to switch to the preview of the next result
- (6) Button to open a preview of the previous attachment (only attachments included in the last comment or email)
- (7) Button to open a preview of the next attachment (only attachments included in the last comment or email)

Viewing the search results as a grid

On the *Tickets* tab, you can also display the search results as a grid. To do so, click the *Grid* button next to *View as*. In the grid view you can select a criterion to group the results (1). Initially, there will be one column for each active value of the grouping criterion. You can configure the displayed columns by selecting the desired columns in the *Add/Remove table column* field (2) (for grouping by engineer: *Add/Remove engineer*). Deactivated values are not shown by default, but you can still select them from the drop-down list, where they are displayed in italics. You can drag-and-drop tickets from one column to another to update this value in the ticket (3). You cannot drag-and-drop a ticket into a column with a deactivated value though.

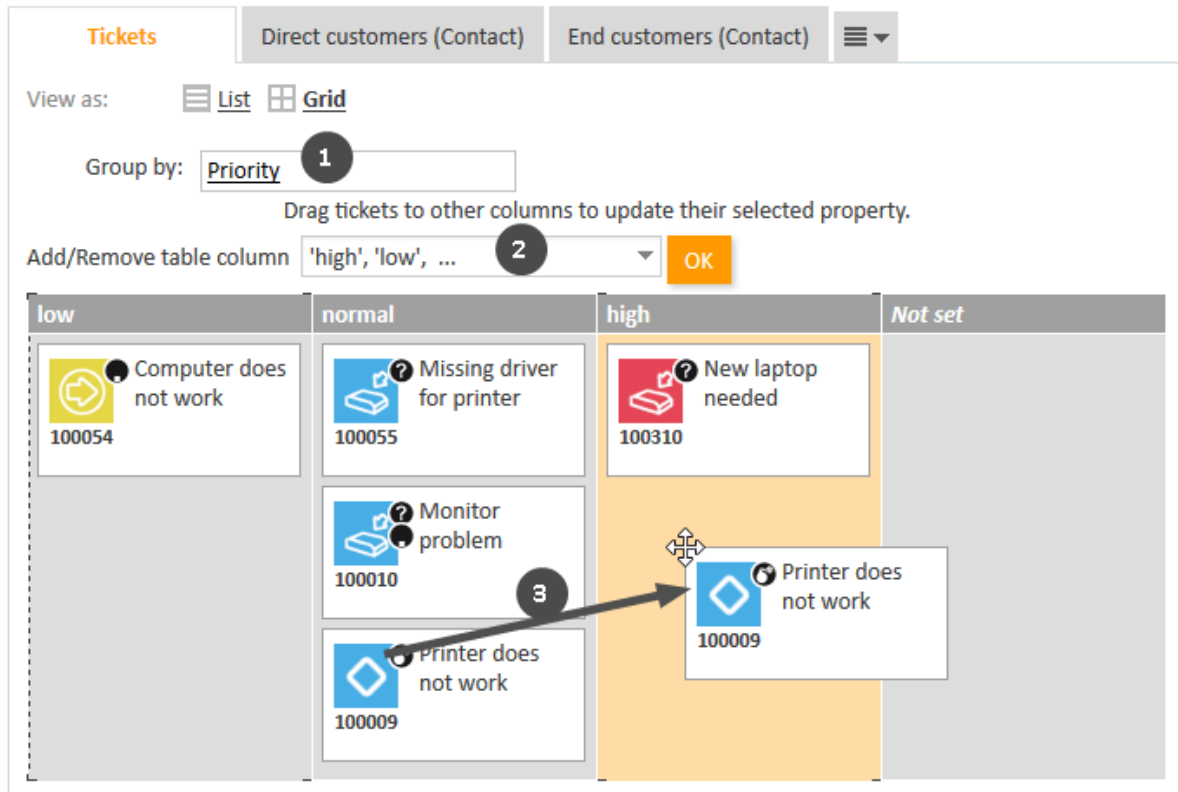


Figure 20: Viewing the results of a Detailed Search as a grid

Performing search activities

Depending on the tab, one or several search activities might be available under *Activities* (1). Search activities are defined for each result type, i.e., when you view the *Tickets* tab, you see other search activities than when you view the tab of a customer group. Click the desired activity to execute it. Please bear in mind that search activities are usually executed on all the results which are displayed in the *Search results* table at the moment and which have been selected using the respective checkbox (2). If there are several pages of search results, only the current page is considered.

i The specific behavior of each search activity depends on the individual configuration of your CM system. Your CM administrator might, for example, determine that all the results from all table pages are considered for the search activity, or that certain results are excluded because they do not meet a given condition.

The screenshot displays the 'Detailed Search' interface. At the top, there is a 'Search' bar. Below it, the 'Search criteria' section shows a form with 'Engineer' set to 'ServiceDesk, Susan' and a 'Please select' dropdown. A 'Search' button is visible. The 'Activities' sidebar on the right shows 'Assign all those tickets to me' and 'Workspace' (empty). The 'Search results (2)' table is shown below the criteria form.

Engineer	Name	Main Customer	Subject
ServiceDesk, Susan	100000	Mr Luke Skywalker	Problem with new printer
ServiceDesk, Susan	100002	Mr Luke Skywalker	Layout issues when printing

Export Table

Figure 21: Available activities for the Detailed Search

Search activities can have a form which needs to be filled out before proceeding. See [Forms for activities](#) for further information. The data entered in the form is usually applied to all selected search results.

B.3.2.4 Relations between the search criteria

AND relation

All search criteria of the Detailed Search are connected with each other via an AND relation. For example, the search criteria “Engineer: *ServiceDesk, Susan*” and “Customer group: *MyCustomerGroup*” provide search results which match **both** search criteria:

- Tickets which are assigned to Susan ServiceDesk **and** have the main customer or at least one additional customer from the customer group *MyCustomerGroup*.
- Customers who belong to the customer group *MyCustomerGroup* **and** are a main customer or additional customer of at least one ticket assigned to Susan ServiceDesk.

The screenshot shows the 'Search criteria' section with two criteria: 'Engineer' set to 'ServiceDesk, Susan' and 'Queue' set to 'ServiceDesk'. Both criteria have a trash icon next to them. A 'Please select' dropdown and a 'Search' button are also visible.

Figure 22: AND relation with different search criteria

i In contrast to previous ConSol CM versions, two search criteria which are columns of the same table are also connected with AND. If you search a table containing the names of contact persons for “Martin” in the *First name* column and “Smith” in the *Last name* column, you only find objects where the table contains a row with the values “Martin” and “Smith”.

OR relation

Within a single search criterion there can be OR relations. When an OR relation is possible, the search criterion allows for multiple selections, i.e., you can choose any number of checkboxes from the drop-down menu. The choices for this criterion are displayed as a comma-separated list. For example, when the search criterion “View: *ServiceDeskAll*, *1st Level Open tickets*” is chosen, the results will contain tickets and customers from the view *ServiceDeskAll* as well as tickets and customers from the view *1st Level Open tickets*.

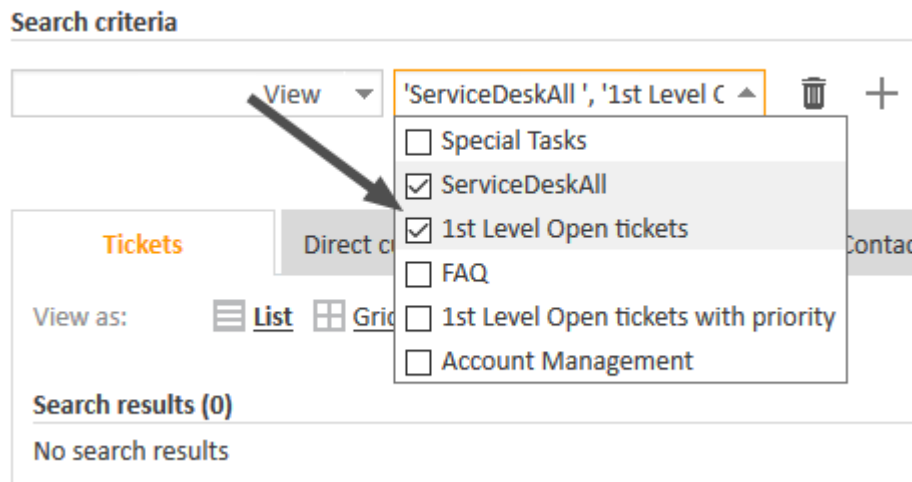


Figure 23: OR relation within one search criterion

Another possibility for OR relations are search fields, where you can select one item from the list and click again to select another item.

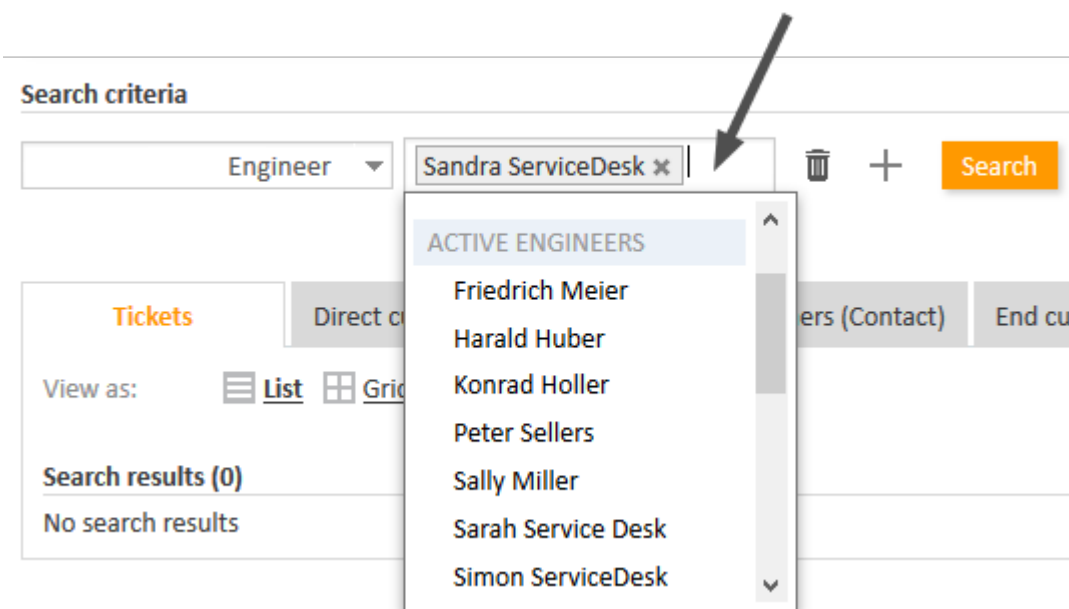


Figure 24: OR relation within one search criterion

If an OR relation is not possible, there is only one possible choice from a list in the drop-down menu:

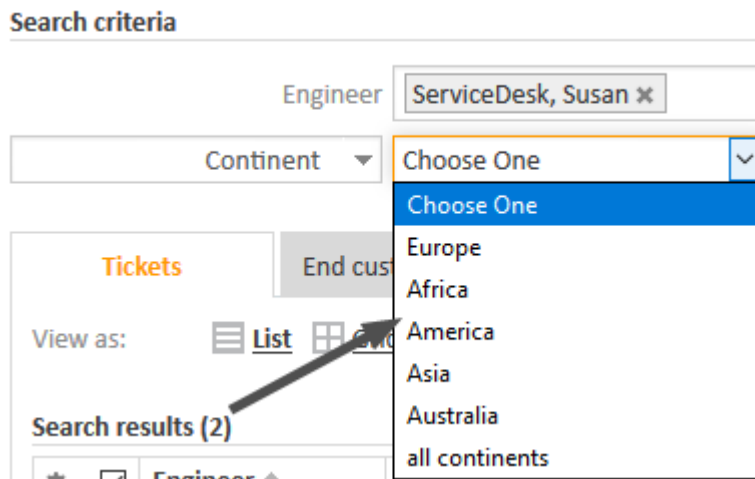


Figure 25: No OR relation within one search criterion possible

B.3.2.5 FAQs

Which tickets do I find via Detailed Search?

You can find via Detailed Search all tickets which are currently in queues for which you at least have read permission and which have a main customer from a customer group for which you at least have read permission (see [Visibility of tickets](#)). The Detailed Search shows open tickets as well as already closed tickets (unless you excluded one of them using the search criterion *Status*).

Which customers do I find via Detailed Search?

You can find via Detailed Search all customers which are in customer groups for which you at least have read permission (see [Visibility of customers](#)).

i The search results are limited to the customer group selected in the customer group filter in the main menu. If it is set to *All customer groups* the search will return results for all customer groups. Otherwise, only customers belonging to the selected group will be found.

The checkbox *Deactivated incl.* allows you to search for deactivated customers. It is only displayed if you are on a tab which shows search results for a customer group.

Which resources do I find via Detailed Search?

You can find via Detailed Search all resources for whose resource type you have at least read permission (see [Visibility of resources](#)).

The checkbox *Deactivated incl.* allows you to search for deactivated resources. It is only displayed if you are on the *Resources* tab.

B.3.3 Autocomplete Search


This chapter explains the features of the Autocomplete Search.


- [Introduction](#)
- [Examples](#)
- [FAQs](#)

B.3.3.1 Introduction

The Autocomplete Search allows you to search for objects (tickets, customers, or resources) and select one of the search results. You can use the Autocomplete Search in the data fields which are configured for this purpose. As soon as you start typing in one of these fields, the Autocomplete Search is activated and shows suggestions which match your entry. If you choose one of the suggestions, the data of the corresponding object is used to fill out one or multiple data fields.

The exact fields which can be used for the Autocomplete Search depend on the individual configuration of your CM system.

 When a lot of suggestions match your entry, only a certain number of them are shown for reasons of clarity. If the desired data is not part of the currently shown suggestions, narrow the search by typing in more characters until the desired data is among the suggestions.


 You can use the asterisk to see possible entries.

B.3.3.2 Examples

You can use the Autocomplete Search to search and select tickets, customers, resources, and engineers. The exact layout of the Autocomplete Search depends on the context where it is used. In addition, it depends on the individual configuration of your CM system how the results are displayed. The following two sections show examples of the Autocomplete Search.

Selecting a customer during ticket creation

When you create a new ticket, you have to provide a customer. Usually, you can use the Autocomplete Search to see suggestions on existing customers. Choose one of the suggestions to select the corresponding customer.

 The number of results depends on the individual configuration of your CM system. If the desired customer is not among the suggested entries, type in more characters to narrow down the search.

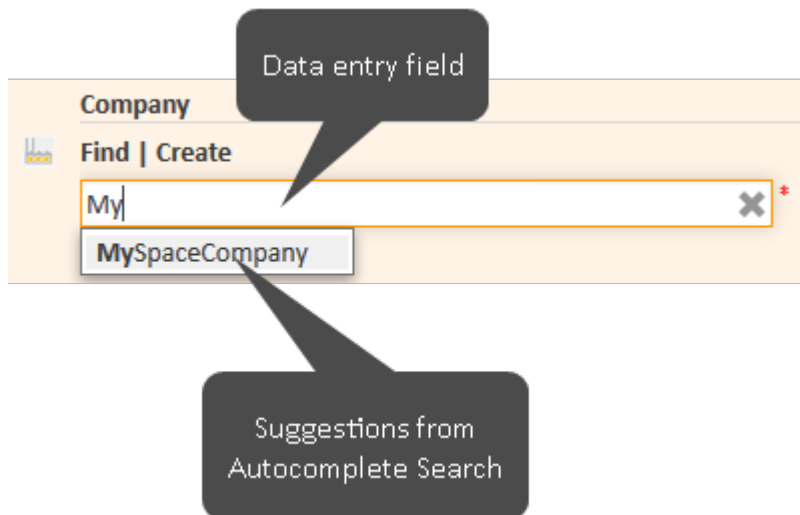


Figure 26: Autocomplete Search to select the company

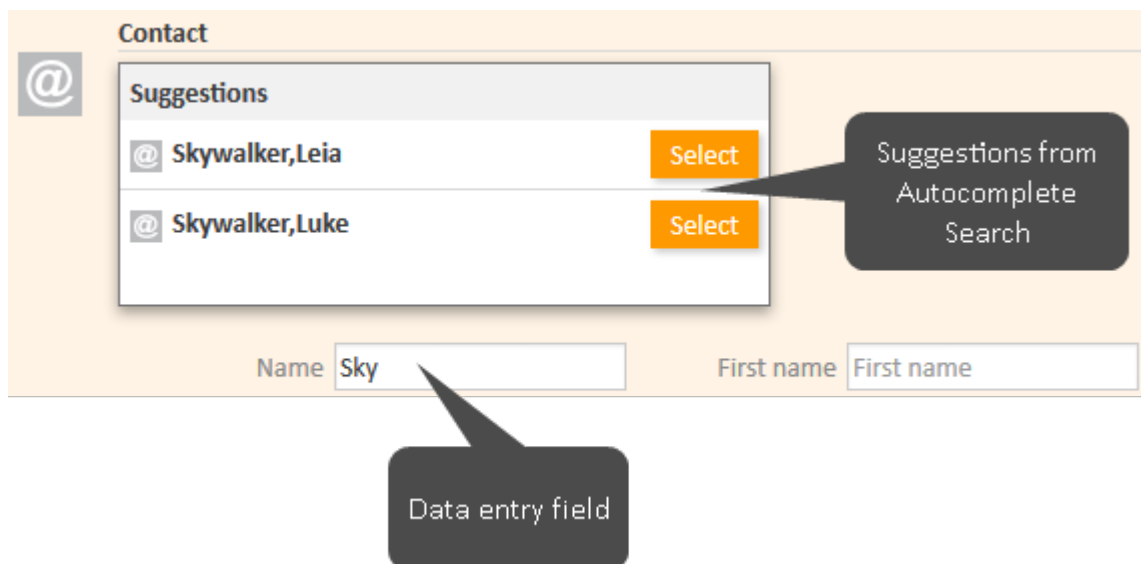


Figure 27: Autocomplete Search to select the contact

Creating a relation

When you create a relation to a ticket, customer, or resource, you can use the Autocomplete Search to see suggestions. Choose one of the suggestions to select the corresponding object as a target object of the relation.

i The number of results depends on the individual configuration of your CM system. If the desired object, a ticket in the below example, is not among the suggested entries, type in more characters to narrow down the search.

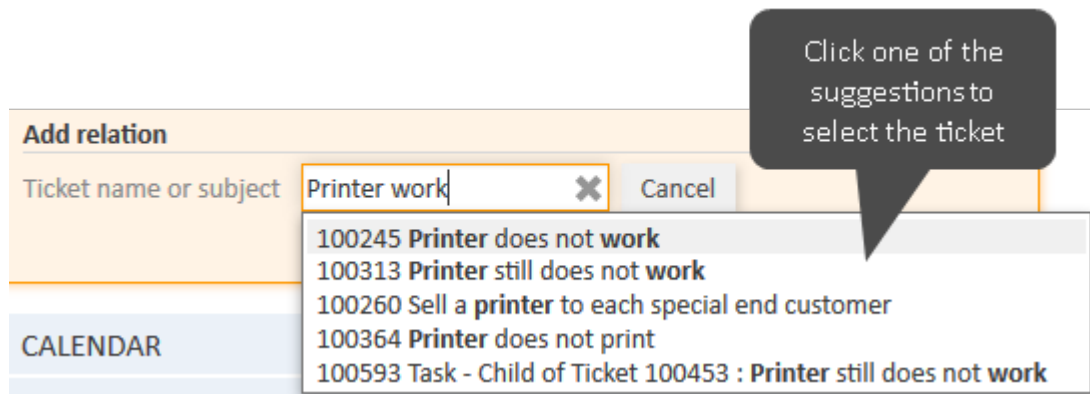


Figure 28: Autocomplete Search to select a ticket for a relation

B.3.3.3 FAQs

Which tickets do I find via Autocomplete Search?

Which tickets you are able to find depends on the context. For example, if you are looking for tickets within a time booking context, only tickets where you can book time might be shown to you. Additionally, you will only see tickets which are currently in queues for which you at least have read permission and which have a main customer from a customer group for which you at least have read permission (see [Visibility of tickets](#)).

Which customers do I find via Autocomplete Search?

Which customers you are able to find depends on the context. For example, if you want to add a contact to a ticket and already chose a company, the Autocomplete Search will only show contacts which belong to the chosen company. Additionally, you will only see customers which are in customer groups for which you at least have read permission (see [Visibility of customers](#)).

i The search results are limited to the customer group selected in the customer group filter in the main menu. If it is set to *All customer groups* the search will return results for all customer groups. Otherwise, only customers belonging to the selected group will be found.

Which resources do I find via Autocomplete Search?

Which resources you are able to find depends on the context. For example, when you want to create a relation to a resource, the Autocomplete Search will only show resources of the required resource type.

B.4 Notifications

Notifications are short messages. They are used in two ways:

- The system sends a notification to an engineer. For example, to inform the engineer when a ticket is assigned to him or when an email is received in one of his tickets.
- An engineer sends a notification to another engineer. For example, to ask for help regarding a ticket.

The notifications can be accessed from the bell icon next to the engineer's name (link to the user profile).

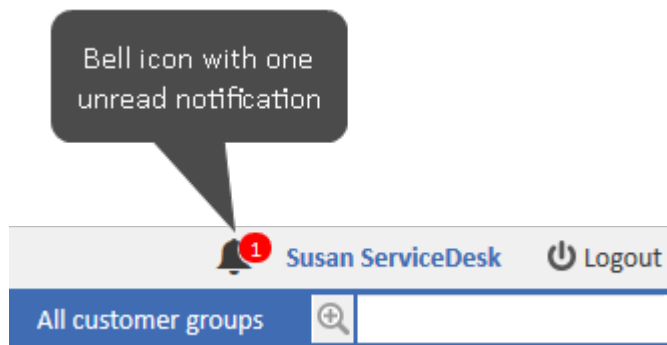


Figure 29: Bell icon with one unread notification

B.4.1 Viewing notifications

The number of unread notifications is displayed in a red circle on the bell icon. Click the bell icon to view the notifications. You can pin a notification by clicking the pin icon on the right. Pinned notifications are displayed with a green background and the number of pinned notifications is displayed in a green circle on the bell icon. To remove the notifications you have read, click the *Clear all* button. Pinned notifications are not removed from the list.

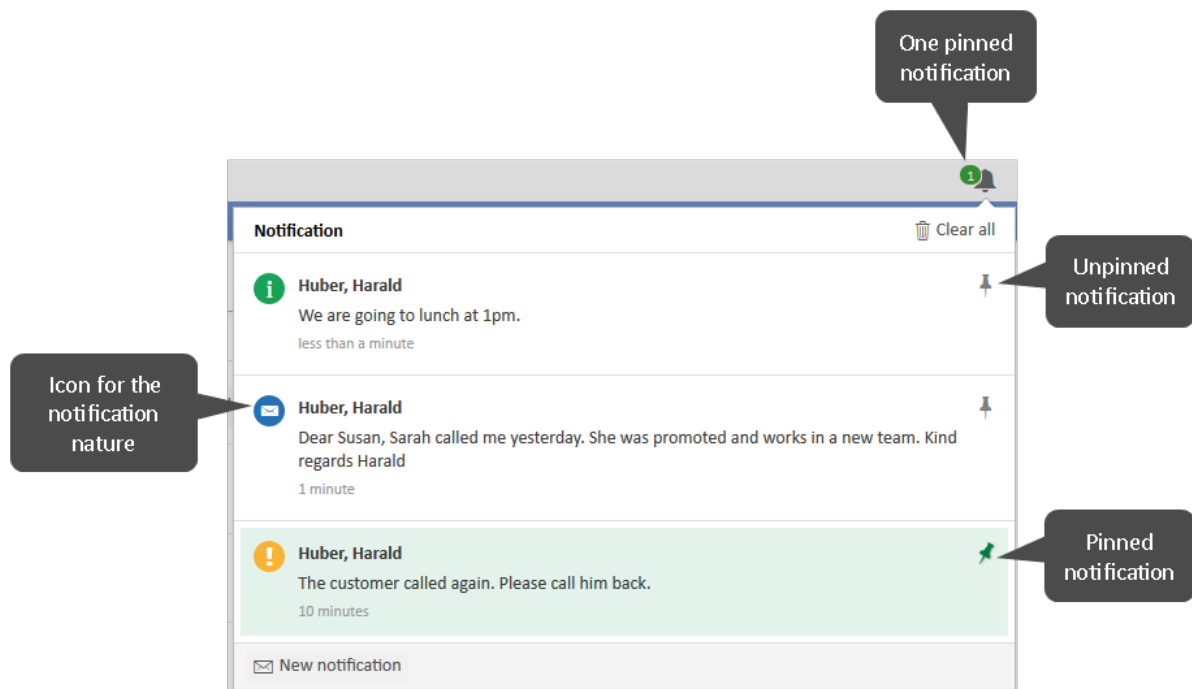


Figure 30: Viewing received notifications

Notifications which are sent by the system can include links to tickets, customers and resources.

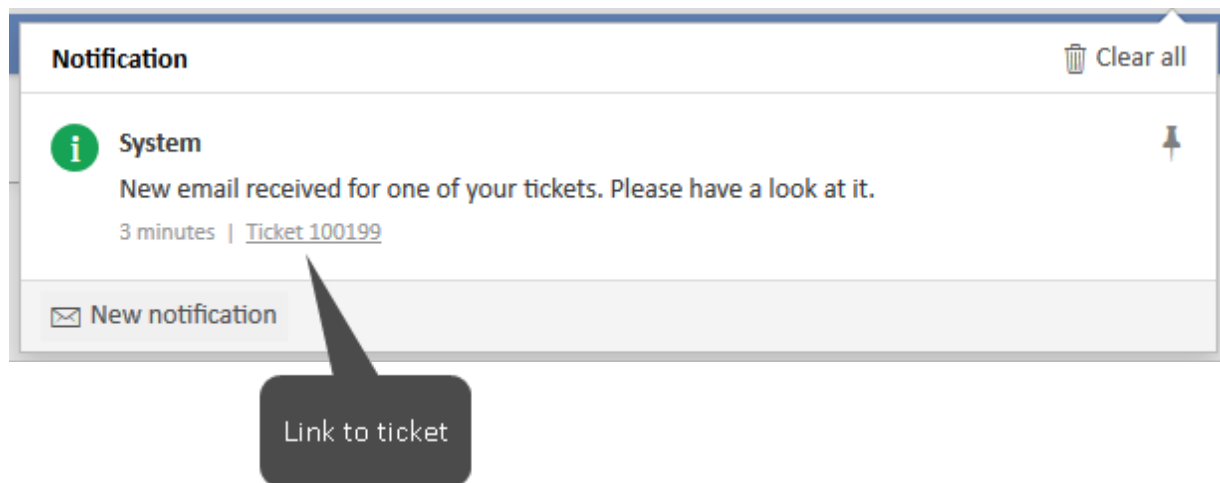


Figure 31: Notification with a ticket link

B.4.2 Sending notifications

You can send notifications to any other engineer. Please proceed as follows to send a notification:

1. Click the bell icon next to the link to your user profile.
2. Click the *New notification* button at the bottom of the notification window.
3. Enter the recipients in the *Select recipients* drop-down list. As soon as you start typing the name of an engineer, the matching engineers are shown. You can select one or several engineers as recipients. To remove an engineer, click the x next to the engineer's name.

4. Select the type of notification from the *Select nature* drop-down list. The nature of the notification determines the icon which is shown in the delivered notification. There are four natures:
 - **Message:** blue icon with an envelope
 - **Info:** green icon with an *i*
 - **Alert:** yellow icon with an exclamation mark
 - **Alarm:** red icon with an exclamation mark
5. Enter the notification text in the text field below.
6. Click the *Send notification* button. A success message is displayed at the bottom of the window if the notification has been sent.


B.5 Activities

Activities are operations which can be carried out for the objects in ConSol CM. These can be:

- **Tickets:**
[Workflow activities](#)
- **Contacts or companies:**
[Customer activities](#)
- **Resources:**
[Resource activities](#)
- **Result sets of a Detailed Search:**
[Search activities](#)

The workflow activities are part of the process definition. The customer, resource, and search activities (actions) are part of the ConSol CM Action Framework. All the activities are defined by the CM administrator. As an engineer, you can perform activities provided that you have the required permissions.

The available activities are displayed in the upper right corner of the Web Client. They always refer to the object displayed in the [main working area](#).

 All activities are customized and depend on the individual configuration of your CM system.

B.5.1 Forms for activities

Activities can have forms, which are called **Activity Control Forms** for tickets and **activity forms** for customers, resources, and results of ticket, customer, and resource searches. When you click such an activity, the respective form is opened and you have to fill it in before proceeding.

A common use case of forms is to enter certain data for the object on the page, i.e., the current customer or resource, or the results of the current search.

The example below shows an activity form for a company. Upon clicking the activity (1), a form is opened on the top of the page. You fill out the form and click *Save and continue*. The company is then updated with the data you provided (2).

The figure illustrates the process of updating a company's service contract data through an activity form. The top part shows the form being filled out, and the bottom part shows the successful update and the resulting data in the company details.

Figure 32: Activity form on a company page

Forms can be prefilled either with default values or with values from the current object. It is also possible that the fields are empty when opening the form. Required fields have an asterisk.

i Depending on the individual configuration of your CM system, forms can also be used to manipulate other objects. For example, you can fill out a form on a resource page to create a ticket based on your input.

B.5.2 Workflow activities

Workflow activities allow you to move the current ticket through the business process. They depend on the current queue of the ticket and on the ticket's position in the business process.

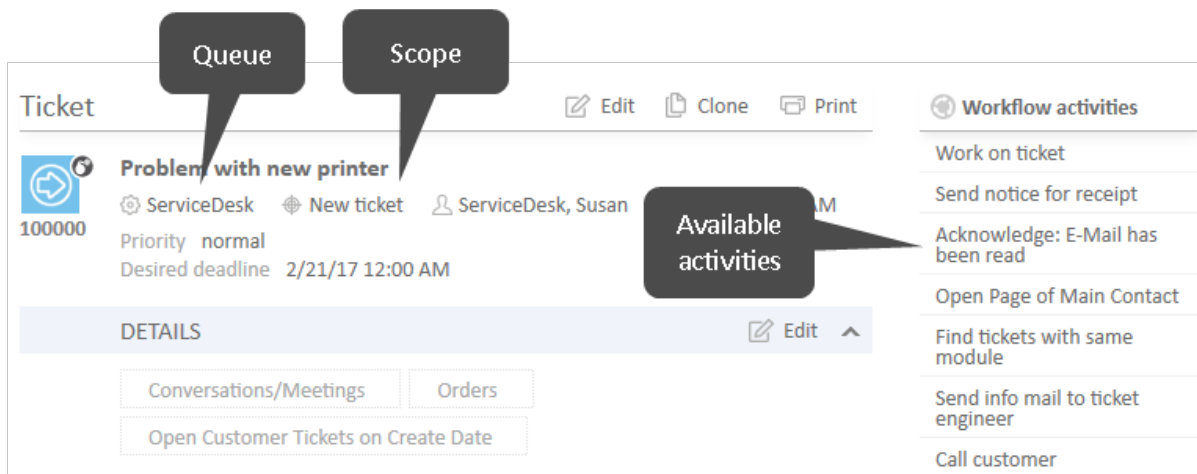


Figure 33: *Workflow activities*

Examples for workflow activities are:

- Work on ticket
- Put ticket on hold
- Pass ticket to another team
- Close ticket

Please see [Performing workflow activities](#) for further information.

B.5.3 Customer activities

Customer activities allow you to perform certain actions for the current customer. They depend on the customer group which the current customer (company or contact) belongs to. Customer activities are displayed in the Web Client if the conditions for their execution are met. You can perform a customer activity at any time.

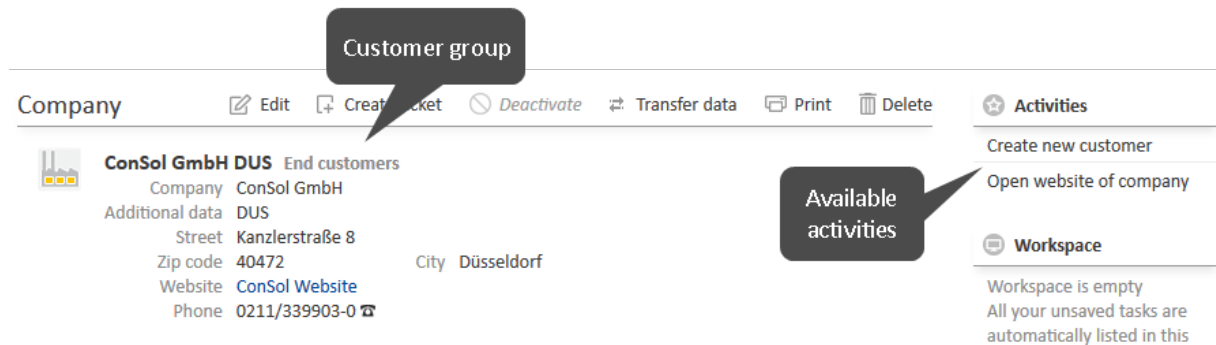


Figure 34: Customer activities (here for a company)

Examples for customer activities are:

- Create new ticket for the contact
- Open the company's website
- Load customer data from an external source

Please see [Performing customer activities](#) for further information.

B.5.4 Resource activities

Resource activities allow you to perform certain actions for the current resource. They depend on the resource type which the current resource belongs to. Resource activities are displayed in the Web Client if the conditions for their execution are met. You can perform a resource activity at any time.

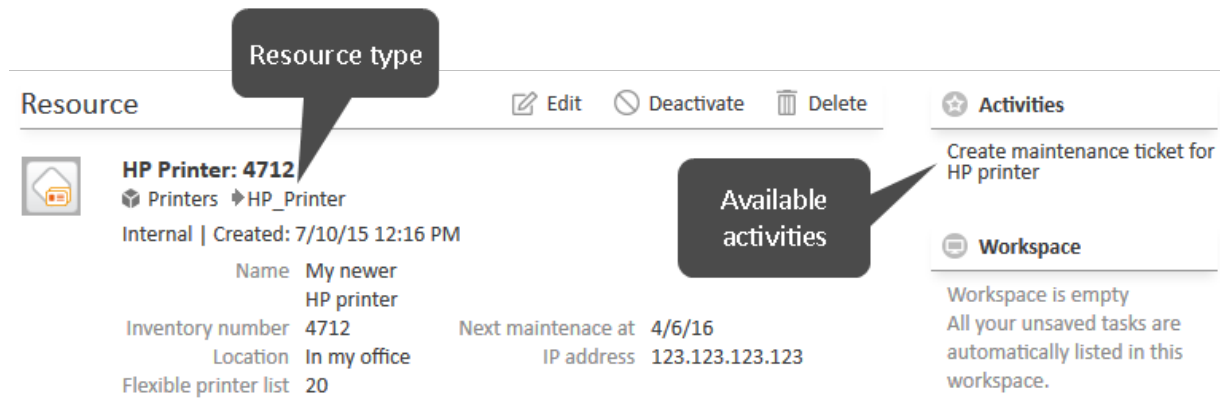


Figure 35: Resource activities

Examples for resource activities are:

- Create new ticket for the resource
- Create a new customer who is related to the resource
- Update some resource data

Please see [Performing resource activities](#) for further information.

B.5.5 Search activities

Search activities allow you to perform certain actions for the current set of search results. The set of search results includes either tickets, or customers of a specific customer group, or resources of a specific resource type. Search activities become available when you carried out a [Detailed Search](#) and clicked the tab with the desired objects.

When you carry out a search activity, it usually affects several objects at once, e.g., all the results displayed on the current page of the result table and whose checkboxes have been selected. This is the main difference between search activities and workflow, customer, and resource activities, which - in most cases - affect only one object.

The screenshot shows the 'Search' interface. At the top, there's a 'Search criteria' section with a date filter set to '1/10/17' and a 'Search' button. Below this, there are tabs for 'Tickets' (selected), 'End customers (Contact)', and a menu icon. The 'Tickets' tab shows 'Search results (3)' in a table. To the right, there's a sidebar with sections: 'Activities' (containing 'Assign all those tickets to me'), 'Workspace' (containing 'Workspace is empty'), and 'Favorites' (containing 'Layout issues when printing').

Search criteria

Filter: 1/10/17

Please select

Search

Tickets | End customers (Contact) | [Menu]

View as: [List] [Grid]

Search results (3)

<input checked="" type="checkbox"/>	Name	Subject	Main Customer
<input checked="" type="checkbox"/>	100001	Test SpecTasks	Mr Luke Skywalker
<input checked="" type="checkbox"/>	100000	Problem with new printer	Mr Luke Skywalker
<input checked="" type="checkbox"/>	100002	Layout issues when printing	Mr Luke Skywalker

Export Table

Activities

- Assign all those tickets to me

Workspace

Workspace is empty
All your unsaved tasks are automatically listed in this workspace.

Favorites

- Layout issues when printing

Figure 36: Search activities (here for a set of tickets)

Examples for search activities are:

- **Tickets:**
Assign all the displayed tickets to a certain engineer.
- **Customers:**
Update the data of all the displayed customers by loading data from an external source.
- **Resources:**
Set a maintenance date of all the displayed resources.

Please see [Performing search activities](#) for further information.

B.6 Permissions

This chapter discusses the following:

B.6.1 Visibility of tickets	79
B.6.2 Tickets in the ticket list	82
B.6.3 Visibility of customers	83
B.6.4 Visibility of resources	84

B.6.1 Visibility of tickets

Your permissions determine if you can see a certain ticket in your ConSol CM system. These permissions are given to you by your CM administrator via roles. You, as an engineer, cannot change your roles or permissions.

Two permissions affect if tickets are visible to you in your CM system:

- You need at least read permission for the **queue** in which the ticket is currently in.
- You need at least read permission for the **customer group** to which the main customer of the ticket belongs.

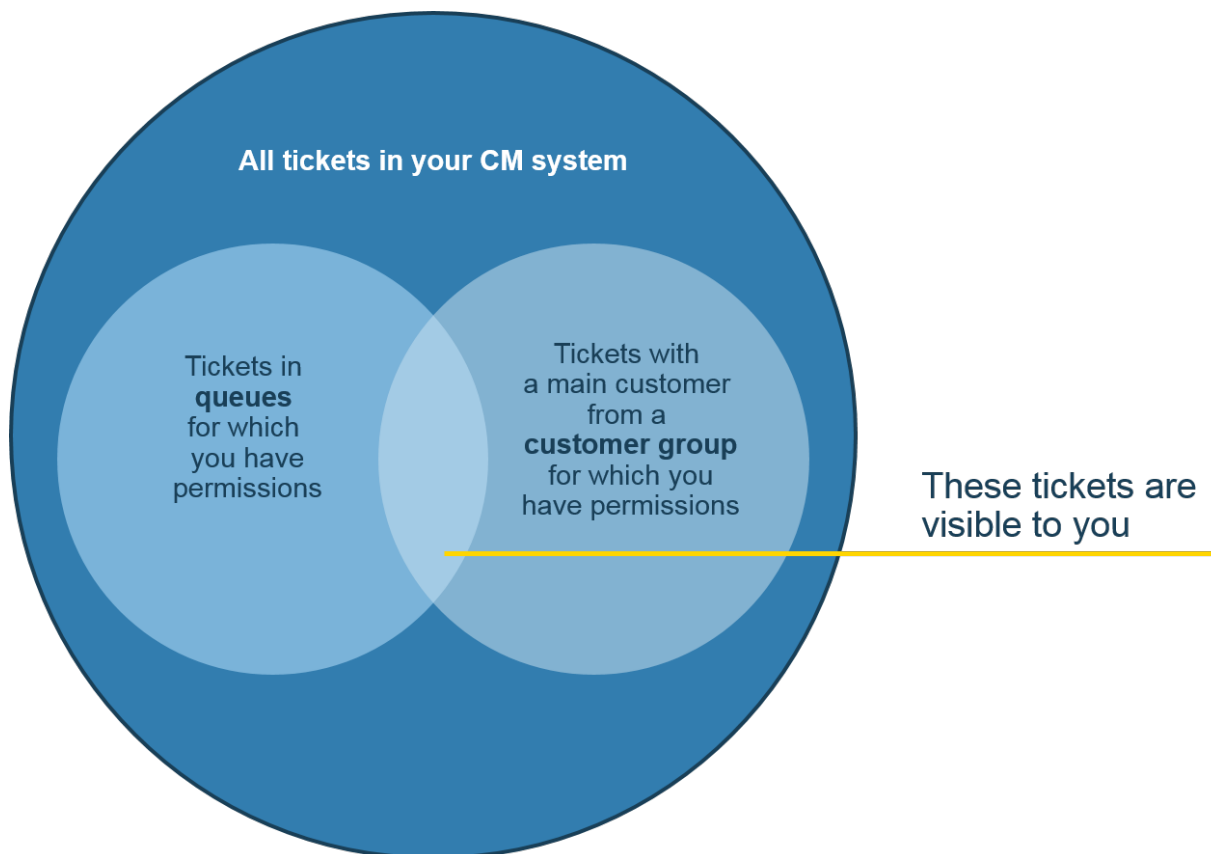


Figure 37: Which tickets are visible to you?

If you have these two necessary permissions, you can access the ticket in several ways:

- Using the different kinds of the [search functions](#):
 - Quick Search
 - Detailed Search
- Selecting the ticket in the Tickets section of a customer page
- Selecting the ticket in the Related tickets section of another ticket, a customer page, or resource page.
- Selecting the ticket from the [ticket list](#) within one of the available views, but only if the ticket matches the criteria of the currently chosen view (see [Technical background](#)). The different kinds of views that exist within your CM system are available to you according to your roles. A view needs to be assigned to at least one of your roles in order for you to be able to choose it. The assignment of views to roles is done by your CM administrator.

**Visibility of ticket relations**

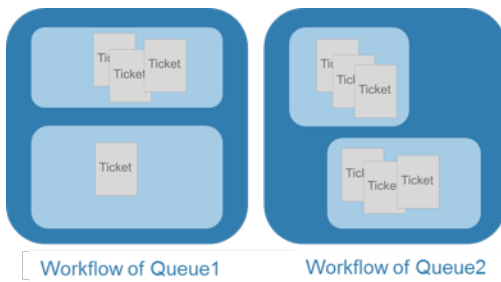
If ticket A has got relations to other tickets B and C, which you cannot see due to lack of permissions for the queue or the customer group of ticket B and ticket C, the related tickets are not shown to you in ticket A.

B.6.1.1 Technical background

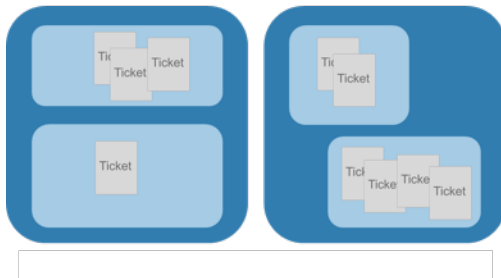
Your permissions determine if you can see a certain ticket in your ConSol CM system. Two permissions affect if tickets are visible to you in your CM system:

- You need at least read permission for the **queue** in which the ticket is currently in.
- You need at least read permission for the **customer group** to which the main customer of the ticket belongs.

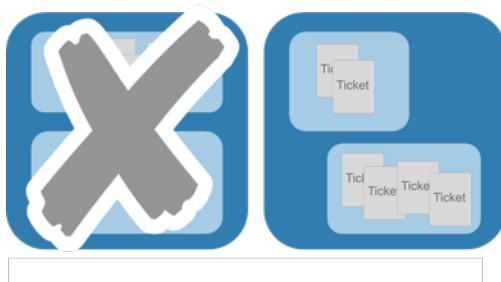
Example



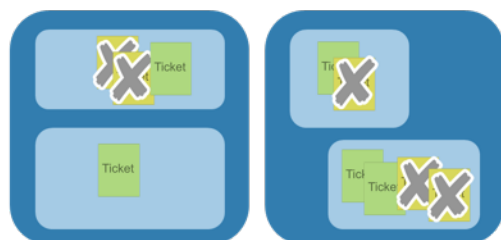
There are **ten** tickets in the CM system: **four** in Queue1, **six** in Queue2.



Engineer Mr. Smith has got *permissions* for Queue1 and Queue2. Due to his queue permissions, ten tickets would be visible to him.

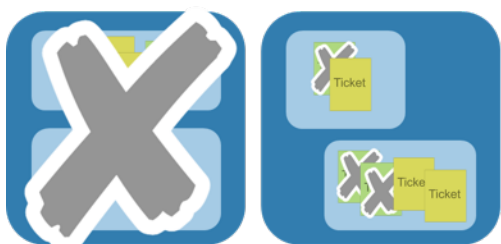


Engineer Mr. Doe has got permissions only for Queue2. Due to his queue permissions, six tickets would be visible to him.



The main customers of the tickets belong to two different customer groups (green and yellow).

Engineer Smith has got permissions only for customer group **Green**. Due to this limitation, there are **four** tickets visible to him in the CM system.



Engineer Mr. Doe has got permissions only for customer group **Yellow**. Due to this limitation, there are **three** tickets visible to him in the CM system.

B.6.2 Tickets in the ticket list

The ticket list shows you tickets which correspond with the current [view](#). The view limits the tickets which are shown in the ticket list to those tickets matching specific criteria. This is why tickets in the ticket list only represent a **subset** of all tickets which are currently present in your CM system (and also of the tickets which are accessible to you due to your permissions).

- **Precondition for seeing tickets in the ticket list: View**

The [view](#) selected in the ticket list determines which tickets (which are accessible to you due to your permissions) are displayed in the ticket list. You, as an engineer, can decide which view you want to choose, i.e., which tickets shall be shown in the ticket list in this moment. Which kinds of views are available is determined by your CM administrator.

- **Precondition for seeing tickets within a view: Filter**

The ticket list [filter](#) enables you to reduce the number of tickets in the ticket list. You can choose criteria a ticket needs to match in order to be shown in the **currently chosen view**.

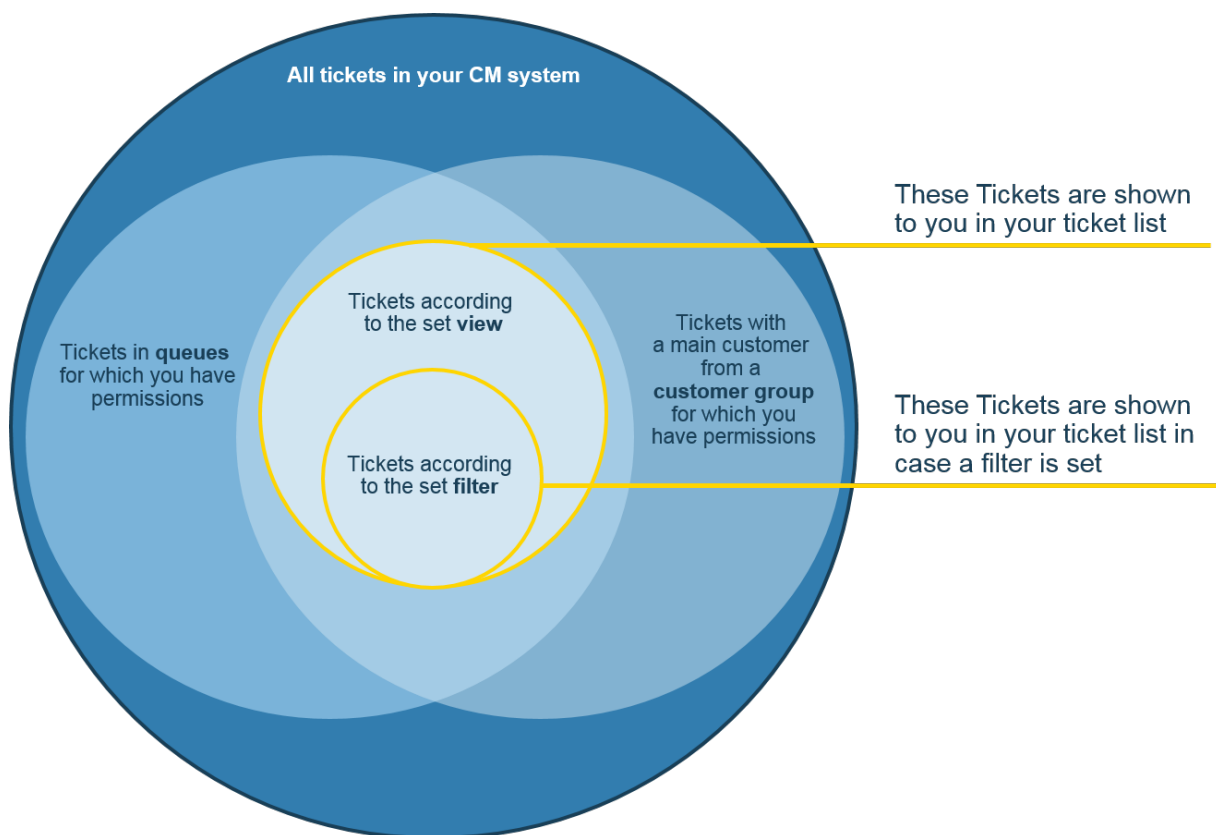


Figure 38: Tickets shown in the ticket list

B.6.2.1 Technical background

Which tickets are shown to you in the ticket list depends on your permissions and the currently chosen view. From a technical point of view, the following factors are crucial:

- **Your permissions:**

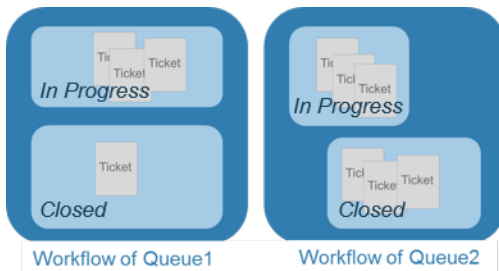
You need at least read permission for the **queue** in which the ticket is currently in, and you need at least read permission for the **customer group** to which the main customer of the ticket belongs.

- **The view:**

The view defines the **queues** and **scopes** the tickets in this view are from. A view can also contain tickets from multiple queues and scopes. If this is the case, you need read permissions for all queues which are important for this view. If you do not have the necessary permissions, you are not able to see all tickets in this view.

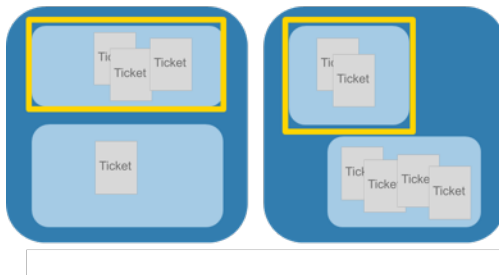
Example:

In order to keep this example simple, it contains only one customer group (*Gray*), which means that all main customers of all tickets belong to customer group *Gray* and the engineers Mr. Smith and Mr. Doe both have got at least read permission for this customer group.



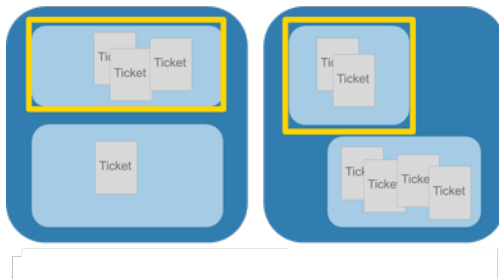
There are **ten** tickets in the CM system: **four** in Queue1, **six** in Queue2.

The queues' workflows contain two scopes. Each workflow contains one scope named *In Progress* and one named *Closed*.

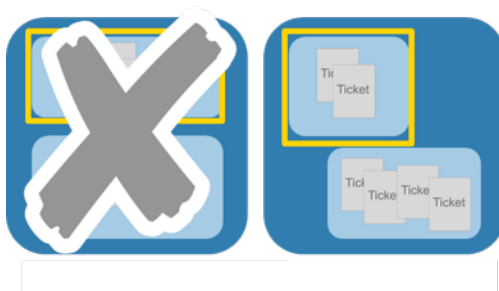


View:	Active Tickets
Filter:	All tickets
Group by:	Engineer
Sort by:	Desired deadline

The view *Active Tickets* contains tickets from the scope *In Progress* from Queue1 as well as from the scope *In Progress* from Queue2.



Engineer Mr. Smith has got permissions for both Queue1 and Queue2. He sees in the view *Active Tickets* **five** tickets.



Engineer Mr. Doe only has got permissions for Queue2. Therefore, he sees in the view *Active Tickets* **two** tickets.

B.6.3 Visibility of customers

You need at least read permissions for the customer group a customer belongs to in order to be able to see him, e.g., find the customer via the search functions or see the customer in tickets as an additional customer. The permissions are given to you by your CM administrator via your roles. You, as an engineer, have no influence on your roles.

When a main customer of a ticket belongs to a customer group for which you have read permission, but there are also additional customers from customer groups that you do not have read permissions for, you will be able to see the ticket, but its additional customers are not shown to you.

B.6.4 Visibility of resources

You need at least read permissions for the resource type which a resource belongs to in order to be able to see it, e.g., find the resource via the search functions or see relations to the resource in tickets and on customer pages. The permissions are given to you by your CM administrator via your roles. You, as an engineer, have no influence on your roles.

B.7 User profile

This chapter describes the features of the user profile and the related actions.

B.7.1 Accessing the user profile	86
B.7.2 Structure of the user profile	86
B.7.3 Password change	87
B.7.4 Representation	88
B.7.5 General settings	91
B.7.6 Time booking	93
B.7.7 Downloads	97

B.7.1 Accessing the user profile

The user profile contains your personal settings, representations, and time bookings. You access the user profile by clicking the name of the currently logged in user (above the main menu, next to *Logged in*):

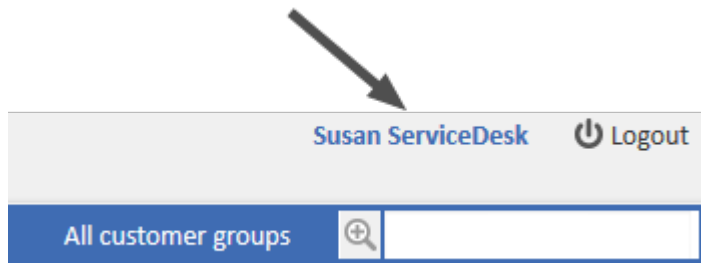


Figure 39: Link to the user profile

B.7.2 Structure of the user profile

The user profile can have up to five sections:

- [Password change](#)
Change the password of your user account (not visible in case you log in via LDAP or Single Sign-On).
- [Representation](#)
Set up representations.
- [General settings](#)
Set the view criteria, default customer group, default queue, and enable or disable CM/Doc.
- [Time booking](#)
Add time bookings and view your time booking report.
- [Downloads](#)
Download the installers for CM/Phone and CM/Doc.

B.7.3 Password change

The *Password change* section allows you to change your password. For security reasons the password is displayed as dots.

B.7.3.1 Changing the password

Please proceed as follows to change your password:

1. Enter your current password in the field *Old Password*.
2. Enter your new password in the two fields below.
3. Click *Change password*.



If you log in to the Web Client via LDAP or Single Sign-On, you cannot change your password in the Web Client. In this case, the *Password change* section is not displayed.

B.7.4 Representation

B.7.4.1 About representations

Representations are temporary replacements. You can choose a colleague who should represent you, and, in some cases, you can also define yourself as a representation for a colleague. This can be useful for example during the time of your vacation. Representations have the following effects:

- The representing engineer can receive a **copy of the emails** which are sent from the CM system to the represented engineer's email address.



Please note that there are two different scenarios for sending emails and that the CM system behavior concerning sending representation mails might differ for the two scenarios. In both scenarios, it depends on the specific configuration of the CM system which engineers receive a copy of the email.

- **An engineer writes an email using the rich text editor**

The default behavior is that the representing engineer does **not** receive a copy of the email.

If the system is configured to forward this kind of emails, the representation functionality checks if a representation rule is active for the respective email address. If a representation rule is active for a certain email address, an email sent from the rich text editor is sent to this email address as well as to the representing engineer of the person with this email address. Please consider this if persons are registered both as contacts and engineers in your system!

- **An email is sent automatically from the CM system**


It might be implemented that the representing engineer of the engineer with the respective email address gets a copy, but this is not mandatory.

Please ask your ConSol CM administrator about the specific behavior of your CM system!

- **Another option is added to the ticket list** enabling the representing engineer to view the tickets of the represented engineer in the ticket list as if they were his tickets. But the representing engineer can still only see the tickets which are accessible to him due to his permissions. If the representing engineer has no read permissions for a certain queue, he still cannot see those tickets, even if he is representing an engineer with read permissions for this queue (see [Permissions](#)). This is why only engineers with similar roles (i.e., similar permissions) should be representing each other.

Representations **do not have** the following effects:

- When you are representing someone, you do not get his views in addition to your own views. This means that you still have the same number of views, but you can **change** these views in order to look at them through the eyes of the engineer you are representing (e.g., seeing the tickets of the represented engineer in the ticket list group *Own Tickets*).
- When you are representing someone, you do not get the permissions of the engineer you are representing in addition to your own permissions.
- When you edit tickets, customers, or resources, your changes are always saved in the history under your own name. Even when you are representing someone, you are still acting under your own name, you do not take on the name of the represented engineer.

-  When a new representation is set up or removed, both affected engineers receive an email notification informing them about the representation.


B.7.4.2 Preconditions for setting up a representation

- In order to **set yourself up as a representation** for a colleague, you need the permission *Configure representation*. Your roles, assigned to you by your CM administrator, determine if you have got this permission.
- Every engineer can **set up a colleague as a representation for himself**. You can only choose engineers with whom you have **at least one role in common** for this purpose.

B.7.4.3 Representing a colleague

If someone else set you as his representation, you will see a message informing you about this fact after logging in to the Web Client. The message contains a link to your user profile page where you can end the representation.

If you have the permission *Configure representation*, you can set up yourself as a representation for a colleague. Choose the engineer who you want to represent from the drop-down list *Colleagues represented by me*. To end the representation, click the little arrow next to the name of the engineer you are representing and click *Cancel the representation*. In case you represent multiple engineers, you can end all representations by clicking *Cancel all*.

-  Your name is displayed under *Colleagues representing me* on the user profile page of the engineer you chose. This engineer can end the representation any time in his user profile.

When you are representing a colleague, your [ticket list](#) shows the additional drop-down menu *Engineer*. If you choose the engineer who you are representing from this menu, the representation icon appears next to the drop-down menu *View*. The icon indicates that you are currently looking at this view from the other engineer's perspective.

Example:

If Susan ServiceDesk represents Sarah ServiceDesk and chooses Sarah ServiceDesk from the drop-down menu *Engineer* (after clicking the Advanced settings button), Susan ServiceDesk sees the currently chosen view as if she were Sarah ServiceDesk. For example, in the ticket list group *Own tickets* she now sees the tickets that are assigned to Sarah ServiceDesk. When Susan ServiceDesk chooses herself from the drop-down menu *Engineer*, she sees her own tickets (tickets which are assigned to her) in the ticket list group *Own tickets*.

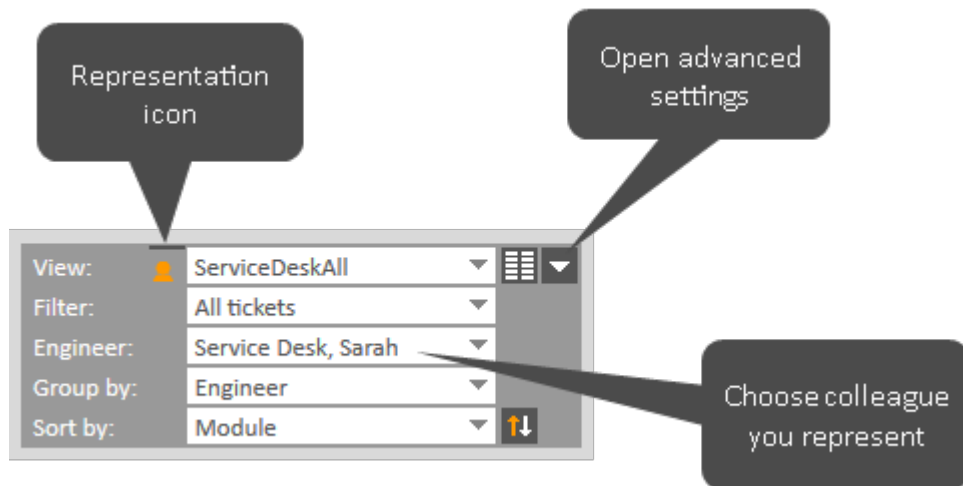


Figure 40: Susan ServiceDesk - Viewing the tickets of Sarah ServiceDesk

B.7.4.4 Being represented by a colleague

Every engineer can set up a representation for himself. You do not need special permissions in order to set up a representation for yourself. Just choose the engineer who should represent you from the drop-down list *Colleagues representing me*. To end the representation, click the little arrow next to the name of the engineer representing you and click *Cancel the representation*. In case there are multiple engineers representing you, you can end all representations by clicking *Cancel all*.

i Your name is displayed under *Colleagues represented by me* on the user profile page of the engineer you chose for representing you. The representing engineer can end the representation any time in his user profile.

If another engineer represents you, you see a message informing you about the representation after logging in to the Web Client. The message contains a link to your user profile page where you can end the representation.

There is a representation configured for your account. Click [here](#) to configure this.



Figure 41: Sarah ServiceDesk - Notification that she is currently represented by a colleague

B.7.5 General settings

The *General settings* section includes settings regarding [View criteria](#), [Default customer group](#), [Default queue](#), and [Document generation via CM/Doc](#).

B.7.5.1 View criteria

The view criteria allow you to configure whether one or more views should be limited by certain criteria. This means that the ticket list will show only tickets that match the defined view criteria in these views, please see [Changing view criteria](#) for further information.

B.7.5.2 Default customer group

The default customer group determines which customer group tab is initially shown when creating or choosing a customer. You can still select the other customer groups though. This is the main difference between setting the default customer group and choosing a customer group from the [customer group filter](#), which hides the other customer groups.

To set a default customer group, choose the desired customer group from the drop-down list *Default Customer Group*. If you do not want to set a default customer group, select *Choose One*.

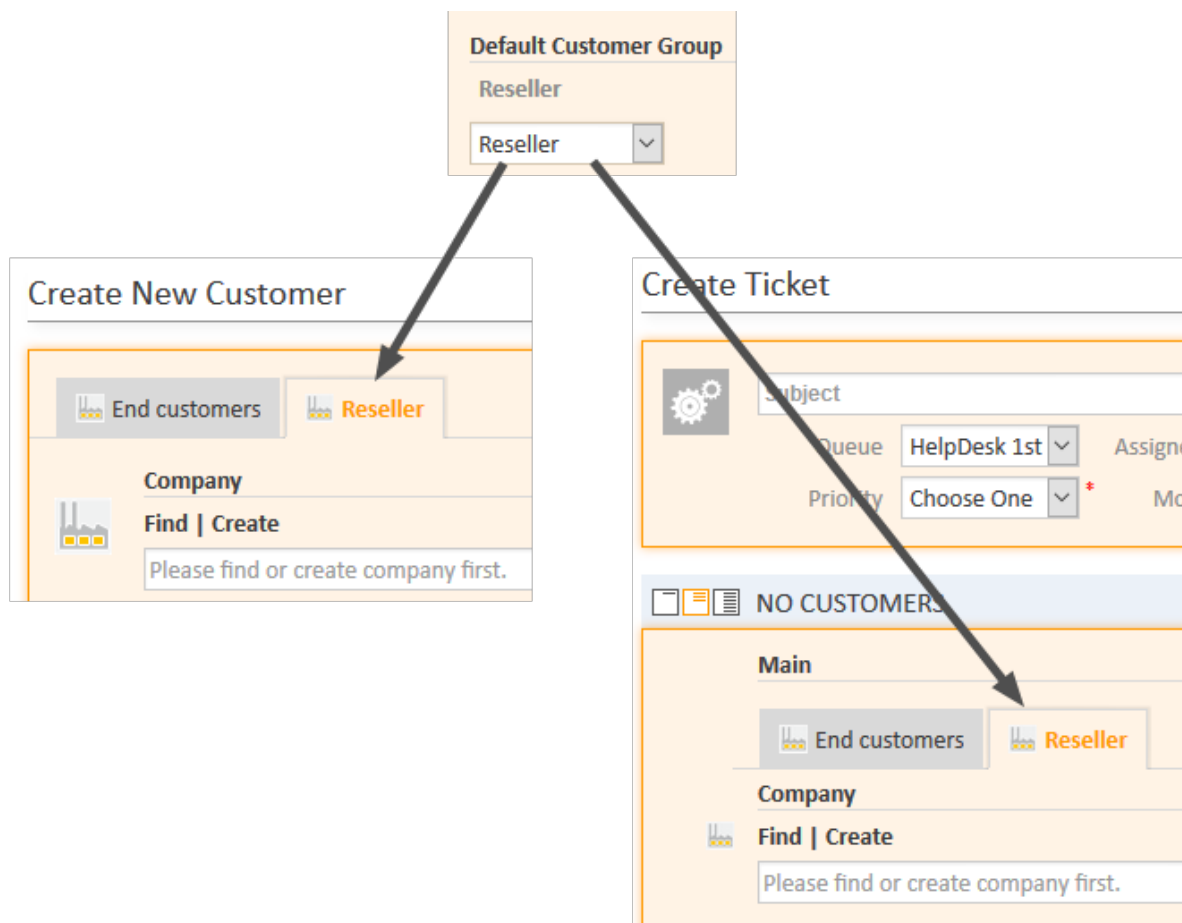


Figure 42: Effects of the default customer group

B.7.5.3 Default queue

The default queue determines which queue is preselected when you create a new ticket. You need to have *Create Ticket* permissions for more than one queue to be able to choose a default queue. If you do not have this permission for multiple queues, there will be no drop-down menu for you to choose from, but rather the queue for which you have *Create Ticket* permissions will be displayed in this section. You can choose the desired queue from the drop-down list *Default Queue*. If you do not want to set a default queue, select *Choose One*.

B.7.5.4 Document generation via CM/Doc

If CM/Doc is enabled in your CM system, you can enable or disable CM/Doc in your user profile. If you select *Enabled* in this section, the *Document* tab is displayed in the ticket history section. If you select *Disabled*, the *Document* tab is hidden and you cannot use CM/Doc.

B.7.6 Time booking

i Whether the *Time booking* section is shown in your Web Client depends on the individual configuration of your CM system.

The Time booking section consists of two parts:

- **Add Time Booking (1)**
Enables you to add time bookings.
- **Time booking report (2)**
Shows your time bookings.

TIME BOOKING

Add Time Booking

Today's time bookings 00:00

Ticket name or subject

Display All tickets 2/21/17 Day Week Month

1 Available ticket

- 100392 : How to add a printer
- 100368 : Printer does not print properly
- 100312 : Complaint #42 - please take care asap!!!
- 100269 : Kundenservice Anfrage
- 100554 : Big problem with Big Data
- 100245 : Printer does not work

Starting from 2/20/17 hh:mm Duration

or Choose One

Project Choose One Comment

Save time booking **Cancel** **New ticket search**

Day 2/20/17

Time period Day Week Month

2

Feb 20, 2017				◀ Today ▶
Time	Duration	Project	Ticket	Comment
3:50 PM - 3:51 PM	00:01		#100269 Kundenservice Anfrage	
Total bookings on this day: 00:01				

Figure 43: Time booking and time booking report in the user profile

B.7.6.1 About time bookings

With time booking, working hours can be booked and reports of those working hours help gain an overview of time spent on certain tasks, e.g. on a certain project.

There are two types of time bookings:

- **Manual time bookings**
You, as an engineer, can perform manual time bookings. With manual time bookings, working hours are always booked on projects, i.e. for each time you book on a ticket you have to select the project the time should be booked on.
The bookings are listed in the report on the user profile page.

- i** To be able to book time on projects, the following preconditions have to be met:
- Your CM administrator created the project in your CM system and assigned it to at least one queue.
 - The ticket you want to book time to is currently in a queue to which the project is assigned.

There are two locations where you can add a time booking manually:

- The *Time booking* section in the user profile: [Adding a time booking](#)
- The *Time booking* tab in the *History* section of the ticket: [Adding a time booking within a ticket](#)

- i** Time booking in the user profile and time booking within tickets can be disabled separately by your CM administrator. Therefore, it is possible that time booking in your Web Client is not possible in one or both of the locations.

- **Automatic time bookings**

Automatic time booking can be activated in a CM system by the CM administrator. If it is activated, times are booked automatically on tickets (not on projects!) when you work on them. You do not have to book the working hours yourself.

The bookings are listed in the report on the user profile page.

B.7.6.2 Adding a time booking

To enter a new time booking click the *Add* button in the *Time booking* section. Now, you have to select the ticket which you want to book the time on. There are two ways to do so:

- Select a ticket in the *Ticket name or subject* field. Start typing the ticket number or subject and choose one of the suggestions provided by the Autocomplete Search.

- i** Only tickets on which you can book time due to your permissions are displayed. If a ticket changed to another queue after you worked on it and you lack permissions for this new queue, the ticket is not displayed.

If you want to select another ticket, you have to click the *New ticket search* button first in order to empty the field.

- Select a ticket from the *Available tickets* list below. In the *Display* field, you can choose to see:
 - **All tickets**
Tickets you worked on and tickets assigned to you.
 - **Tickets worked on**
Tickets you worked on during the time frame defined by the date you pick in the date picker and the period you choose (*Day*, *Week*, or *Month* containing the date). In this case "worked on" means that you have carried out one of the following actions for the ticket: added a comment, entered or changed data, executed a workflow activity, added a time booking, added or removed an additional engineer, sent an email to or from the ticket.
 - **Currently assigned tickets**
Tickets to which you are assigned as the ticket engineer or an additional engineer.

i The ticket selection might show you tickets which you cannot book time on, e.g., because the ticket you worked on has been moved to another queue for which you lack permissions. If you do not have permissions to book time on this ticket, you will get a message in the Web Client and your time booking will not be saved.

The ticket is displayed in the *Ticket name or subject* field.

Now you have to fill out the duration of the time booking. There are two ways to do so:

- **Enter the duration manually:**

Select the date from the *Starting from* field, enter the starting time (optional), and enter the duration.

i **Data entry formats for the field *Duration***

Proper data entry formats for the field *Duration*:

- Plain numbers are automatically interpreted as minutes (e.g., 20 is interpreted as 20 minutes and 120 as 2 hours).
- Minutes can also be indicated by “m” or “min” (e.g., 20 m or 20 min).
- Hours are indicated by “h” (e.g., 2 h).
- The format 01:05 (one hour and five minutes) or 00:25 (25 minutes) is also possible.

Improper data entry formats for the field *Duration*:

- Combinations of hours and minutes (e.g., 2 h 25 min is not possible).
- Decimal numbers or fractions are not possible (e.g., 1,5 h or 1.5 h is not possible).

- **Choose an action:**

Select the action from the *or* field (below the *Starting from* field). The menu might show you, for example, the duration since you logged in (action *Login*) or since you added the last time booking (action *Last booking*). The date, time, and duration fields are filled out automatically with the respective time period.


i If you cannot see the drop-down menu for action selection, it has been deactivated by your CM administrator. In this case, you need to enter the starting time and duration manually.

- Now, you have to choose a project from the drop-down list *Project*. You can enter a comment (optional).

i It is not possible to change or delete a submitted time booking, but you can correct an incorrect time booking by a correction booking. To do so, you create a normal time booking and add a “-” (minus) in front of the duration of the booking. The correction booking subtracts the booked amount of time from the overall time booked on the regarding day.

B.7.6.3 About the time booking report

The time booking report shows you all time bookings you added on your user profile or within tickets. You can select the day using the date picker and the time period (*Day*, *Week*, or *Month*). If you display the day, you see the details of each booking (time, duration, project, ticket, comment) and the sum of the bookings. In the week and month view, you see the sum of the bookings of the week or month containing the day picked with the date picker.

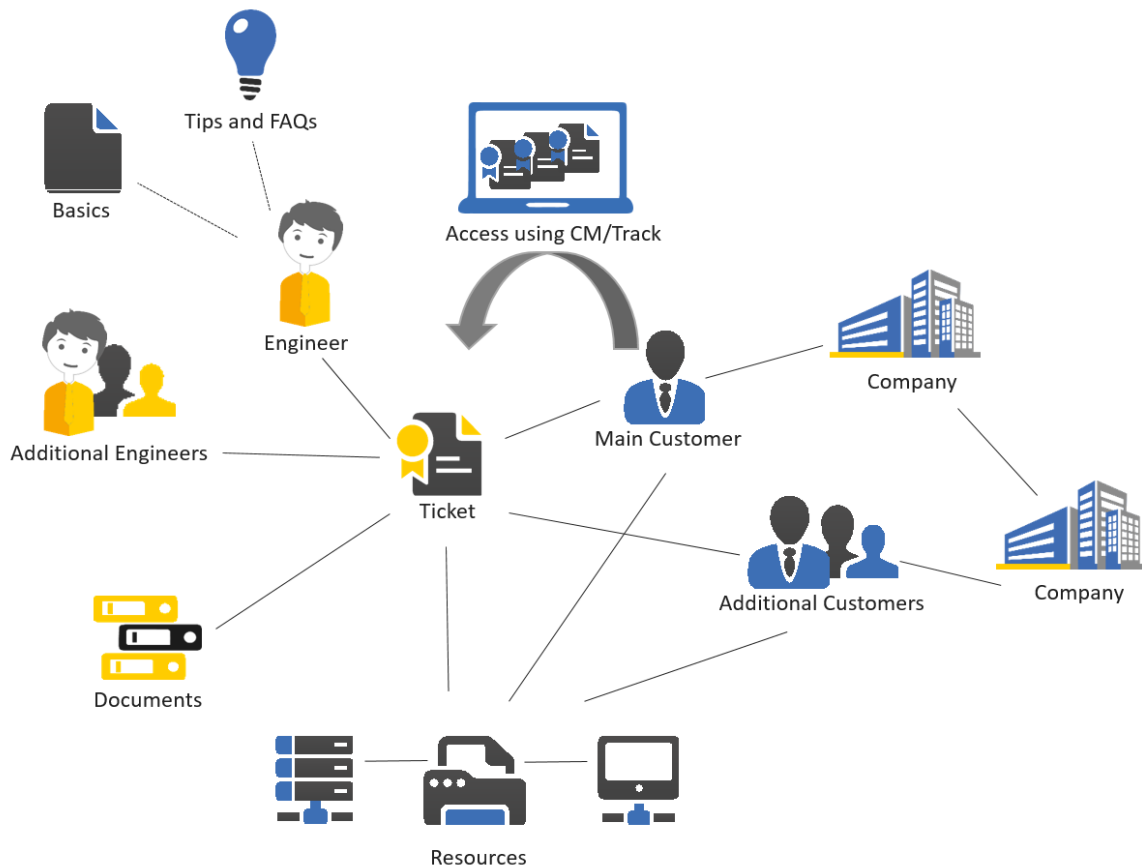
 When you click on a date in the month or week view, you immediately jump to the *Day* mode for this day and see all the details of this date's bookings.

B.7.7 Downloads

The *Downloads* section includes the installers for the ConSol CM add-ons CM/Doc (see [Document templates \(CM/Doc\)](#)) and CM/Phone. You can download the desired installer by clicking the name of the add-on in the *Download* column. The *Description* column shows a short description of the add-on.

The installers are available for Windows operating systems.

C - Tickets



This section provides you with all the information you need for working with tickets:

Basic knowledge about the structure of a ticket, view settings for tickets, and the meaning of the most important terms:

- [Basic knowledge about tickets](#)

All information about the structure and usage of the ticket list:

- [Ticket list](#)

All information about working with tickets, from creating tickets to using ticket relations, communication features, and performing workflow activities:

- [Working with tickets](#)

C.1 Basic knowledge about tickets

This chapter discusses the following:

C.1.1 Structure of a ticket	100
C.1.2 Display settings	105
C.1.3 Editing ticket data and working with tickets	108
C.1.4 Engineers and additional engineers	110
C.1.5 Ticket states	112

C.1.1 Structure of a ticket

The ticket is the request of the customer which the engineer works on. This can be an incident, a service case, or any other request. For each request, a ticket is created. The engineers work on the ticket, which means that they carry out the necessary steps as defined in the business process. The progress, including internal and external communication, is documented in the ticket. The business process can involve several engineers and different teams. When the request is solved, the ticket is closed. Closed tickets are not lost, but they represent a powerful archive and knowledge base.

A ticket is divided into sections. There can be up to nine different sections:


- [Header \(1\)](#)
- [Details \(2\)](#)
- [Customers \(3\)](#)
- [Additional engineers \(4\)](#)
- [Related tickets \(5\)](#)
- [Calendar \(6\)](#)
- [Related resources \(7\)](#)
- [History \(8\)](#)
- [Attachments \(9\)](#)



The availability of the sections, their order, their headlines and whether they are collapsed or expanded by default depend on the individual configuration of your CM system.


C.1.1.1 Example


Ticket Edit Clone Print

1  **Phone not working**
 100015 ServiceDesk Work in progress Susan ServiceDesk 3/14/17 12:13 PM
 Priority normal Module CM.Phone
 Desired deadline 3/22/17 12:00 AM



2 **DETAILS** Edit ^


Conversations/Meetings Orders Open Customer Tickets on Create Date


3  **CONTACTS (1)** as [List](#) or [Graph](#) + Add ^

 **Luke Skywalker** End customers


4 **ADDITIONAL ENGINEERS (1)** + Add ^

 **Susan ServiceDesk assigned**
Supervisor
 **Sarah Service Desk** ^


5  **RELATIONS (1)** as [List](#) or [Graph](#) + Add ^

referenced by
 **100083 Problem with my monitor** ^


6 **CALENDAR** + Add appointment Refresh ^

 **RELATED RESOURCES (1)** as [List](#) or [Graph](#) ^


Show: **All relations** ^

7  **PCs** + Add ^

Affected PC (1)

 **Printers** + Add ^


Used printer (0)

8  **HISTORY** Comment E-Mail Attachment Time booking ^

Show: **Communication only** ^ Sort by: **Newest entries first** ^

Add comment, e-mail or attachment


5 minutes ago #1 created by Susan ServiceDesk | Action ^

 Phone not working

9 **NO ATTACHMENTS** ^

Figure 44: Ticket sections


C.1.1.2 Ticket sections

 Please note that the different sections are always used for the purpose stated below, but the section **headline** might differ. The number in brackets next to the section headline indicates how many data entries this section contains.

Depending on your system configuration, some of the sections might be hidden and you cannot use them.

Header (1)

The section headline may be *Ticket*, *Case*, or similar. The ticket header is always the first of the ticket sections. The ticket icon is displayed in the left corner (see [Ticket icon](#)). Next to the ticket icon you see the ticket subject. Below the ticket subject, the basic ticket data is displayed, e.g., the current queue, scope, assigned engineer, and creation date. Further ticket data is configured by your CM administrator using ticket fields. The right corner contains links for editing, cloning, and printing the ticket (see [Updating tickets](#)).

 If the ticket was archived, the section headline includes *(ARCHIVED)*.

Details (2)

The section headline is usually *Details*. This section contains additional ticket fields with ticket data. Each group has its own tab allowing you to access the ticket data. Click the plus icon (displayed when you hover over the group name) to expand the group. Click the minus icon to collapse it. To edit the group data, click the *Edit* link on the right (see [Editing ticket data](#)).

Customers (3)

The section headline may be *Customer*, *Contact*, or similar. This section contains [customer data](#) for the main customer and additional customers of this ticket. The available fields are configured by your CM administrator using customer fields. A ticket always has to have exactly one main customer, who gave the reason for creating the ticket. It can have any number of additional customers, but they are not mandatory. Additional customers often have roles indicating the reason why a customer is added as an additional customer.

Both main and additional customers show a customer icon (chosen by your CM administrator) in front of the name of the contact or company. The customer group which the customer belongs to is indicated next to the customer's name. You can set the [visibility level](#) to determine how much information you want to see about each customer. Please see [Working with customers within tickets](#) for further information about customers.

 You can also show a [relation graph](#) in this section.


Additional engineers (4)

The section headline is usually *Additional Engineers*. This section shows the additional engineers that are attached to the ticket. If there are additional engineers as well as an engineer who is **assigned** to the ticket, the assigned engineer is also shown here. The engineers' icons can feature additional elements, e.g., a little soccer ball indicating that this engineer is assigned to the ticket. There are further possible icons that can be attached to the engineer icon, see [Approval processes](#). The additional engin-

engineers are grouped by their engineer function, e.g., *Supervisor*. The engineer function indicates the role/task of the engineer in the process. The available engineer functions depend on the configuration of your individual CM system. Please see [Additional engineers](#) for further information.

Related tickets (5)

The section headline is usually *Relations*. This section shows tickets which are related to the current ticket. It shows the ticket icon, name, and subject of each related ticket. The related tickets are grouped by the kind of relation they have with the current ticket, e.g., *referenced by*. Please see [Ticket-ticket relations](#) for further information about the available relations. You can set the [visibility level](#) to determine how much information you want to see about each related ticket.

 You can also show a [relation graph](#) in this section.

Calendar (6)

The section headline is usually *Calendar*. This section shows the integrated calendar. It depends on the configuration of your individual CM system if the calendar feature is available. You can add an appointment or refresh the calendar using the links provided on the right. The calendar can be useful when you communicate with a customer regarding the ticket: You see your own availability at a glance, so you can quickly schedule a phone call with the customer. Furthermore, you can directly add it as an appointment to your own calendar.

Related resources (7)

The section headline is usually *Related Resources*. This section shows the resources linked to the ticket. Resources are objects which are managed in CM/Resource Pool. These can be IT assets, products, or any kind of object related to the business process. It depends on the configuration of your individual CM system if resources are available. You can set the [visibility level](#) to determine how much information you want to see about each related resource. Please see [Ticket-resource relations](#) for further information about working with resource relations.

 You can also show a [relation graph](#) in this section.

History (8)

The section headline is usually *History*. This section contains the ticket history which shows all entries and actions for this ticket. This can be communication like emails and comments, changes to the ticket data (e.g., an entry stating that a specific engineer changed the priority of a ticket including date and time of this change), or executed workflow activities. You can set the [visibility level](#) to determine how much information you want to see about each entry. In addition, you can choose which [entries should be displayed](#) and you can [sort the entries](#). The history section also contains editors for comments and emails, which you can quickly access by clicking the entry field above the history entries. On the right, you find several links which allow you to add a *Comment*, *Email*, *Attachment*, *Document* or *Time booking*. Please see [Communication](#) for further information.

Attachments (9)

The section headline is usually *Attachments*. This section contains all files (documents or images) which were added to the ticket. You can filter the attachments according to the chosen filter criteria. Please see [Attachments](#) for further information about working with attachments.

C.1.1.3 Ticket icon

The ticket icon can have different colors, symbols, and overlays. Their usage and meaning depend on the individual configuration of your CM system. The following example illustrates this feature:

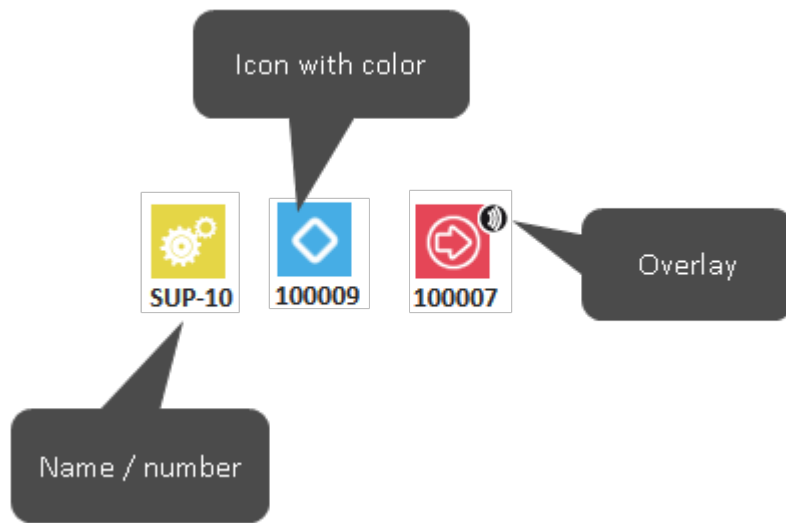


Figure 45: Ticket icons with different colors and symbols and an overlay

Colors

Usually, ticket icons follow a color scheme. Each color represents the value of a certain parameter in the current queue. For example, in a Customer Service process the colors could represent the priority of a ticket (red = high priority, yellow = medium priority, green = normal priority) and in a Sales process they could represent the probability of closure (red = low, yellow = medium, green = high).

Symbols

The ticket icon always shows a symbol indicating the scope of the business process (i.e., the workflow) the ticket currently is in. For example, an in-box might indicate the scope *New ticket* and a wheel might indicate the scope *In Progress*.

Overlays

Overlays are little symbols which are added to the ticket icon after specific events happened. For example, the email overlay might indicate that a new email has been received for a ticket. The overlay usually disappears once you have carried out an action on the ticket.

C.1.2 Display settings

This chapter discusses the following:

- [Expanding and collapsing ticket sections](#)
- [Visibility level](#)
- [Display options for the history section](#)

C.1.2.1 Expanding and collapsing ticket sections

The ticket sections, except for the header, can be hidden, collapsed, or expanded. Your CM administrator can hide sections which are not relevant for your business process. You cannot use hidden sections. If a section is collapsed you only see the section heading but not the content of the section. You can expand the section by clicking the down arrow on the right. To collapse a section and hide its content, click the up arrow. Your CM administrator determines whether ticket sections are hidden, collapsed, or expanded by default. You can collapse and expand sections while you are working with a ticket but the default setting will be restored when you switch to another ticket.

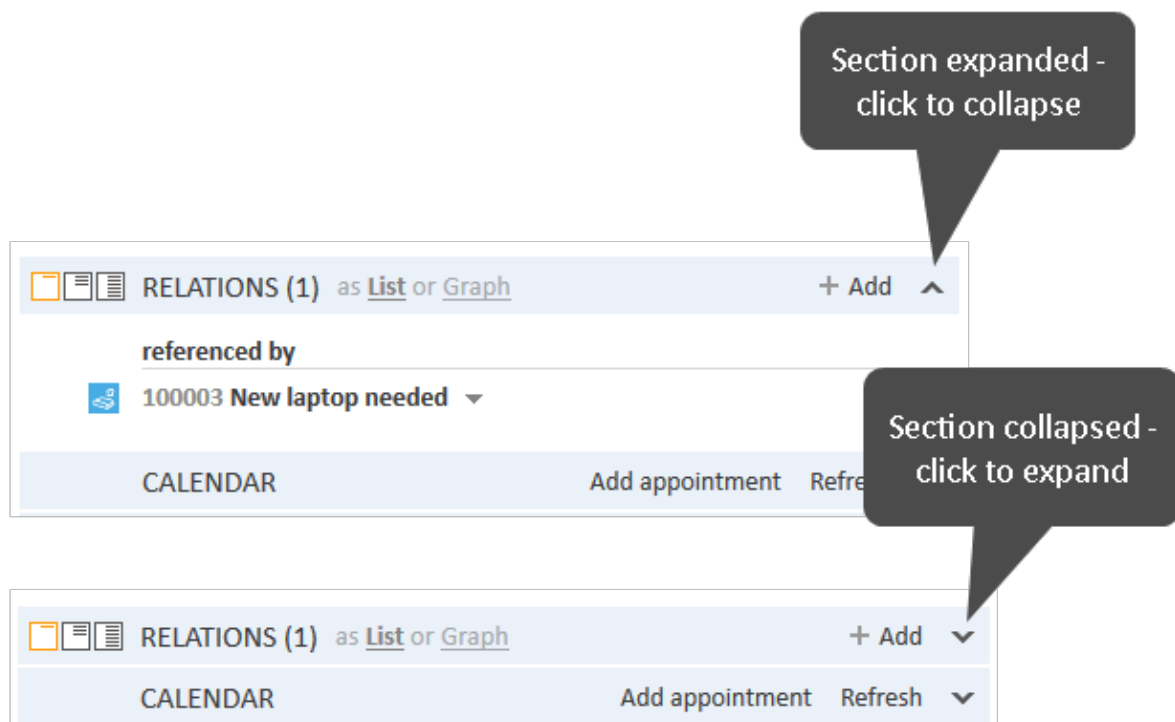


Figure 46: Expanding and collapsing ticket sections

C.1.2.2 Visibility level

The visibility level determines the degree of detail of the information displayed in a ticket section. It can be set for several sections, e.g., the customers section, the relations section, the related resources section and the history section.

There are three visibility levels:

- **Basic**
Basic degree of detail

- **Extended**
Extended degree of detail
- **Detail**
Maximum degree of detail

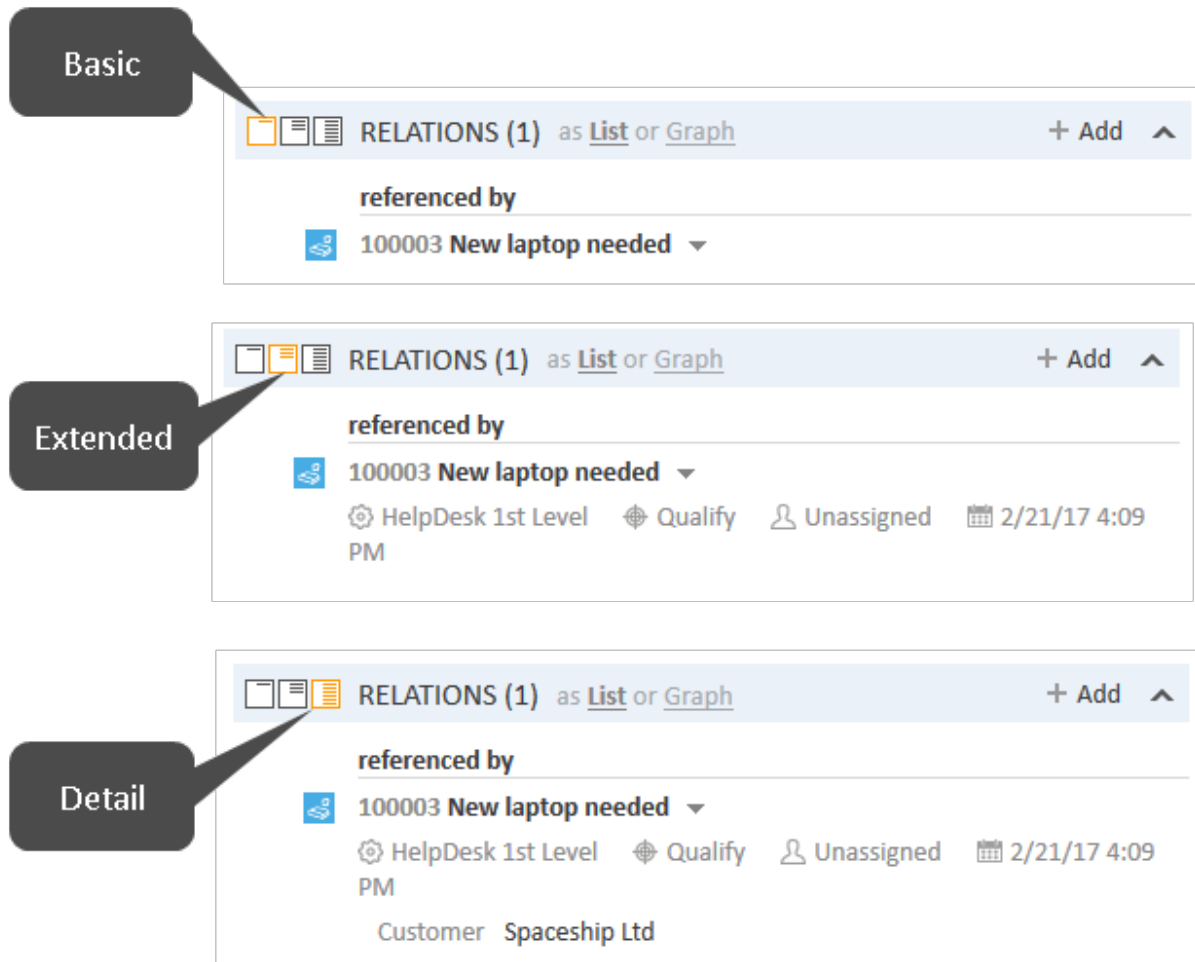


Figure 47: Buttons for visibility levels in tickets

In some systems, entries of the ticket history might be cut off after a certain number of characters in basic and/or extended view. You can display the whole entry by clicking the little down arrow symbol or by clicking on the header of the entry. Clicking on the header again or clicking on the little up arrow below the text will minimize the entry again.

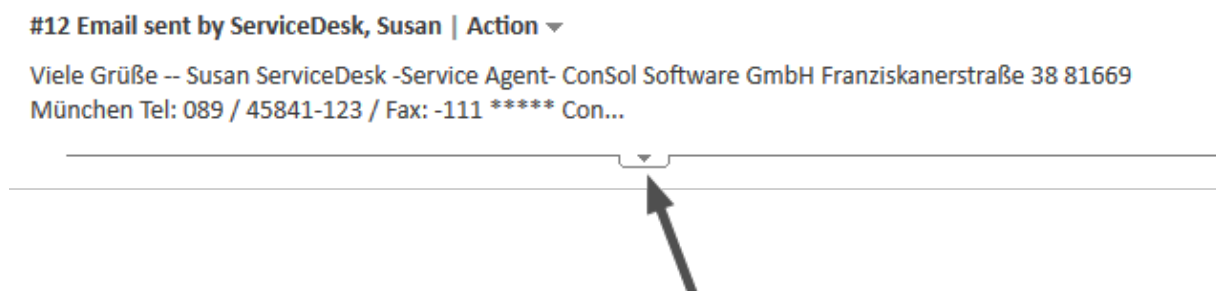


Figure 48: Expanding a history entry

C.1.2.3 Display options for the history section

For the history section, you can adjust the displayed entries as follows:

Kind of entries to be displayed:

- **Communication only**
Emails, comments, and attachments
- **All entries**
Communication and all the other entries, e.g., changes to the ticket data, execution of work-flow activities

 If you select the option *Communication only* the ticket is loaded faster.

Sorting of the entries:

- **Latest first**
The latest entries are displayed first.
- **Latest last**
The latest entries are displayed at the end.
- **Engineer**
The entries are sorted alphabetically by engineer.

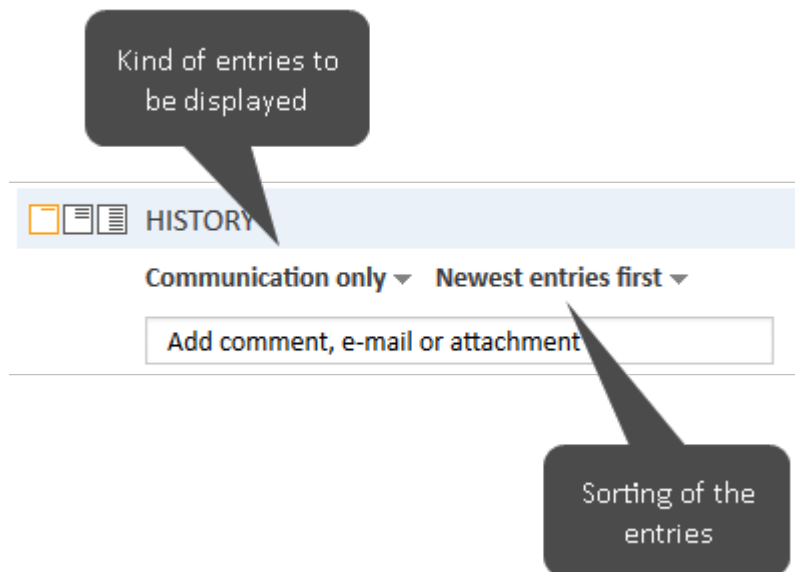



Figure 49: Display options for the history section

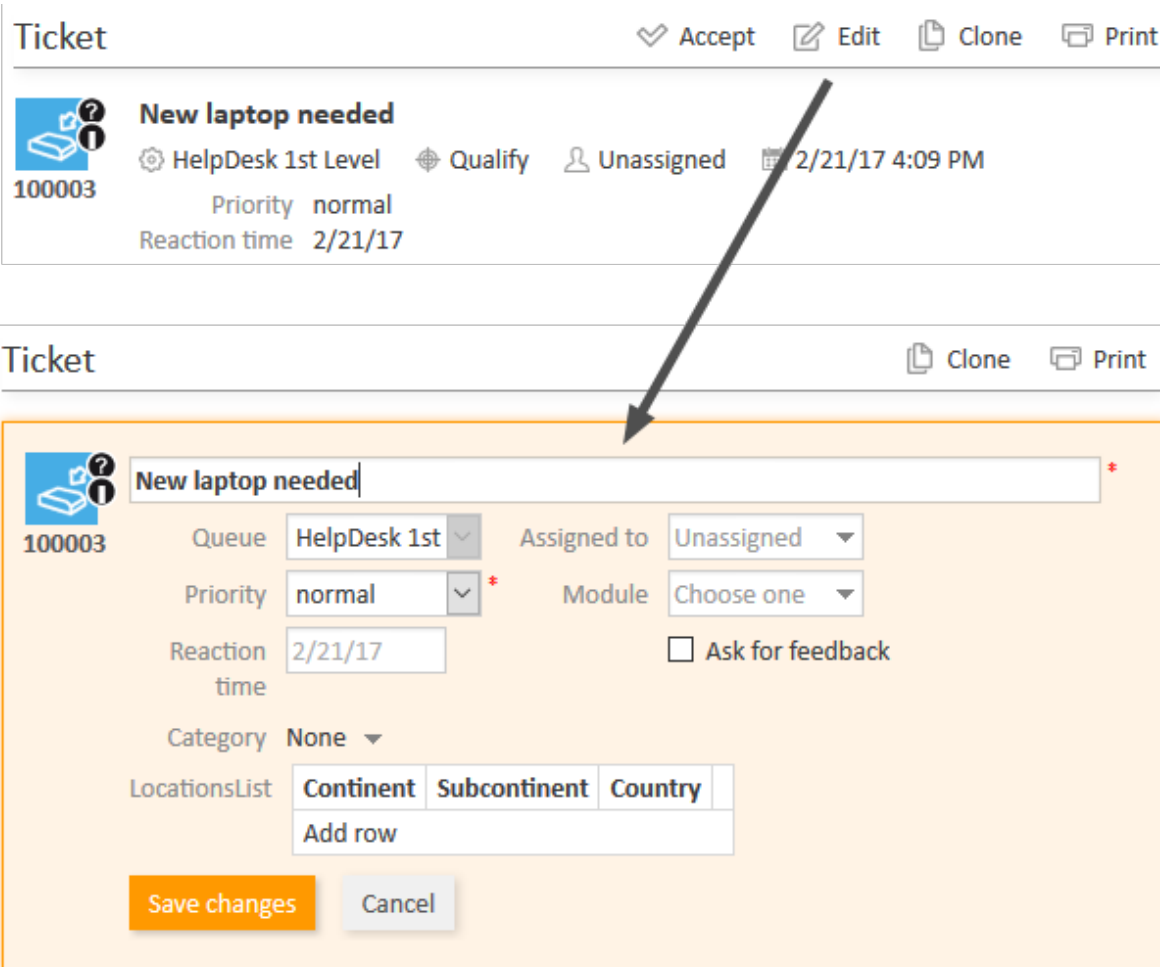
C.1.3 Editing ticket data and working with tickets

C.1.3.1 Editing ticket data


Editing ticket data means editing data in the ticket header and the Details section of a ticket. Ticket data can be edited by every engineer who has **write** permission for the current queue of the ticket. It is **not** mandatory to be the assigned engineer of a ticket to be able to edit the ticket data.

 Even if you are not the assigned engineer of a ticket, all your actions regarding the ticket are recorded in the ticket history.


When you start editing ticket data, the corresponding section gets a yellow background (edit mode). You cannot edit data in view mode (gray background).



Ticket Accept Edit Clone Print

 **New laptop needed**
 100003 HelpDesk 1st Level Qualify Unassigned 2/21/17 4:09 PM
 Priority normal
 Reaction time 2/21/17

Ticket Clone Print



100003 Queue HelpDesk 1st Assigned to Unassigned
 Priority normal * Module Choose one
 Reaction time 2/21/17 ☐ Ask for feedback
 Category None
 LocationsList

Continent	Subcontinent	Country
Add row		

Save changes Cancel

Figure 50: Editing ticket data

C.1.3.2 Working with a ticket

Working with a ticket means performing actions which are relevant for completing your tasks within the business process, e.g., moving the ticket through the process (workflow), registering a comment after a customer call, or adding an attachment with service documents. Every engineer with the necessary permissions (e.g., for adding comments) can work with a ticket. It is **not** mandatory to be the assigned engineer of a ticket to be able to work with a ticket.




Even if you are not the assigned engineer of a ticket, all your actions regarding the ticket are recorded in the ticket history.

C.1.4 Engineers and additional engineers

C.1.4.1 Engineers

Usually every ticket has an engineer assigned to it who is responsible for this ticket. This particular engineer is called the *ticket engineer*. Each ticket can only have **one** assigned engineer.

- CM systems are often configured to automatically send emails to engineers who just got assigned to or unassigned from a ticket.
- Emails with notifications regarding the ticket are often sent automatically to the assigned engineer of a ticket, e.g., when the resubmission date is reached or a new email for the ticket was received.

 The tickets assigned to you are shown in your ticket list in the [group](#) *Own tickets* or if you activated the [filter](#) *Own tickets*.

The engineer of a ticket is stated in the ticket header:

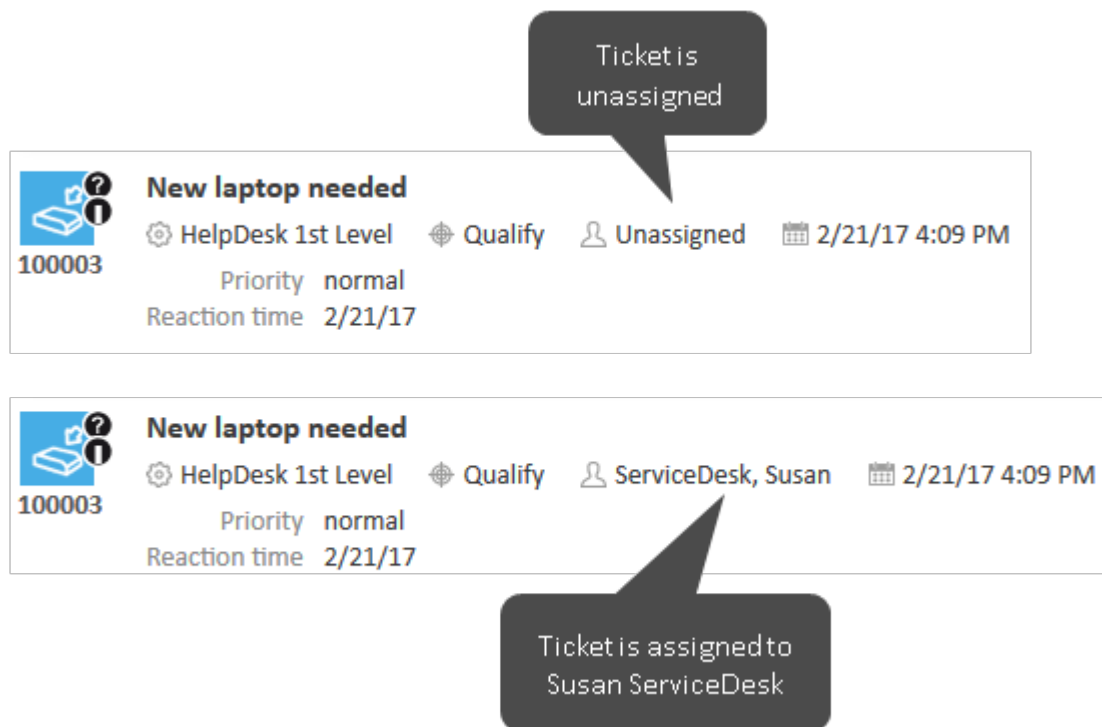



Figure 51: *Unassigned and assigned tickets*

C.1.4.2 Additional engineers

A ticket can have **any number** of additional engineers in addition to its assigned engineer. Additional engineers are engineers who have a specific purpose, which depends on your business process. Usually, an additional engineer has to carry out a certain task within the process or he has to be informed about the progress of the ticket. For example, additional engineers can be used in [approval processes](#) to assign the ticket to an approver. Additional engineers have an engineer function which indicates their role/task in the process.

The additional engineers of a ticket are displayed in the [additional engineers section](#). If there is at least one additional engineer, the assigned engineer (if present) is displayed in this section as well. The assigned engineer's icon has a little soccer ball and a red label *assigned* after his name. The additional engineers are sorted by their engineer function and displayed below the heading corresponding to their function. If there is an [approval process](#) for this ticket, there can be various other symbols added to their icons.

Further effects of being the additional engineer depend on the individual configuration of your CM system. For example, additional engineers might get certain notifications regarding the ticket.

 The engineer of a ticket can also be added as an **additional engineer** for the same ticket. This can be the case if an engineer is responsible for a ticket and at the same time has to serve a specific **engineer function**.

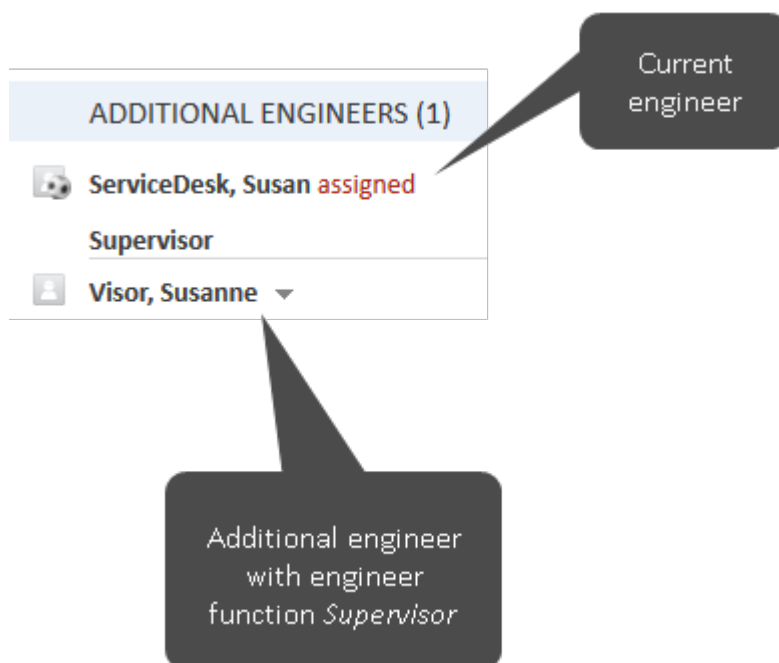


Figure 52: Additional engineers of a ticket

C.1.5 Ticket states

A ticket in ConSol CM can have one of the three possible states:

- open
- closed
- archived

As soon as a ticket is created it is an **open** ticket. After a ticket went through the whole business process and there are no workflow activities for the ticket anymore, the ticket is a **closed** ticket. Closing a ticket can be done manually by an engineer or automatically by the system, e.g., after a defined waiting time after the last step of the business process.

The actions you can carry out for **open tickets** are described in [Updating tickets](#).

For **closed tickets**, the following applies:

- They can still be found via the Quick Search, Detailed Search, and Autocomplete Search.
- They can still be duplicated and printed.
- They can no longer be edited, which means that ticket data cannot be changed anymore.
- They can no longer be worked with, which means that there are no workflow activities and you cannot add comments or send emails.
- They can only be reopened by performing a reopen activity or by the CM administrator.

Tickets can be **archived** by the CM administrator. This means that they either disappear completely from the Web Client, or the basic ticket data remains but the ticket history, or part of the ticket history, is removed. In the latter case, the ticket header includes (*ARCHIVED*) and the history contains an entry that the ticket has been archived. The only possible action for an archived ticket is opening it in CM/Archive using the link *Open in archive application* displayed in the ticket header. No other actions are allowed. Archived tickets only serve as a reference. It is possible to search for archived tickets in the [Detailed Search](#) using the search criterion *Archived*.

The archived state is independent from the workflow. It is possible that both open and closed tickets are archived.

Archived tickets can be viewed in the [CM/Archive](#) application.

C.2 Ticket list

This chapter discusses the following:

C.2.1 About the ticket list	114
C.2.2 Features of the ticket list	115
C.2.3 Views	116
C.2.4 Filters	118
C.2.5 Grouping	119
C.2.6 Sorting	121
C.2.7 Displaying the ticket list as a grid	121

C.2.1 About the ticket list

The ticket list shows you certain tickets at a glance. It serves as a to-do list for you and your team. You can select a view to determine which tickets should be included in the ticket list. In addition to the list form you can also display the tickets from the ticket list as a [grid](#) in the main working area.

The ticket list is located at the left side of the screen (1). It can be collapsed using the little arrow (2).

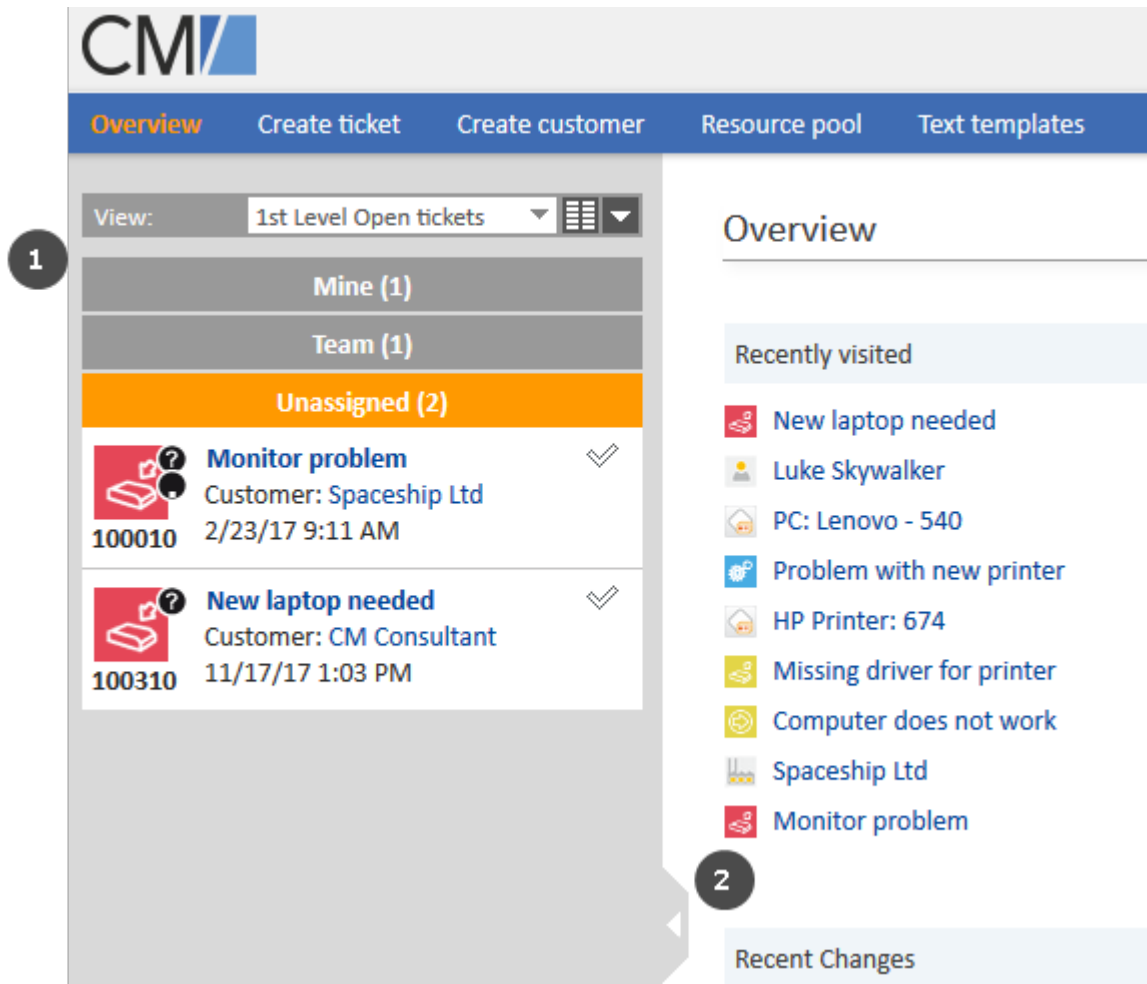


Figure 53: Position of the ticket list in the Web Client



The ticket list does not contain all the tickets but a subset including only tickets which are part of the selected view and for which the current engineer has at least read permissions. These permissions are granted for queues, not for individual tickets. Therefore it can happen that an engineer cannot see a ticket anymore when it is moved to another queue. Please see [Visibility of tickets](#) for further information.

C.2.2 Features of the ticket list

The following figure shows an example to illustrate the features of the ticket list.

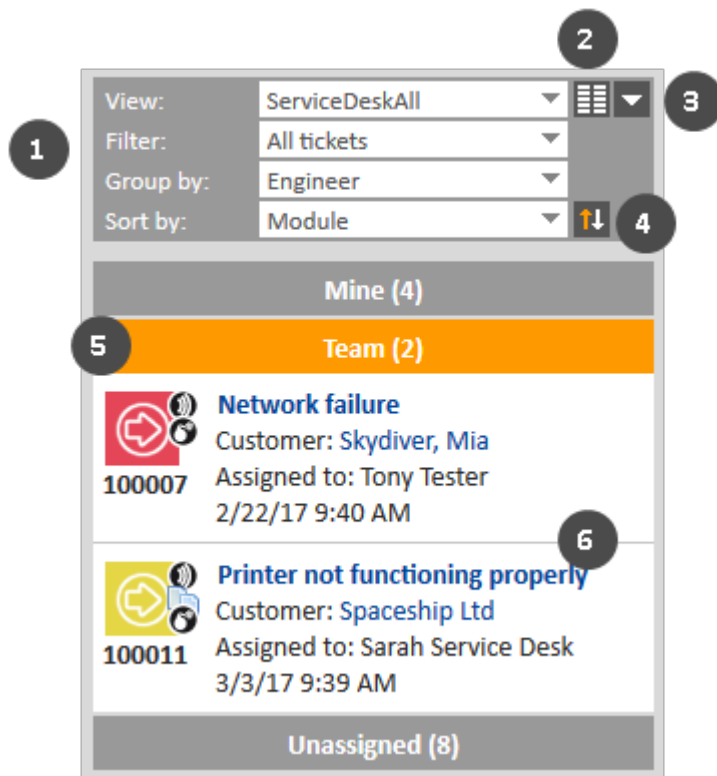


Figure 54: The ticket list

i If you cannot see all drop-down menus (1), click the *Advanced settings* button (3). The drop-down menus *Filter*, *Grouping*, and *Sorting* will then be visible.

- (1) **Drop-down menus** to choose [view](#), [filter](#), [grouping](#) and [sorting](#)
- (2) **Show as grid** button
Shows the tickets matching the criteria chosen in the drop-down menus as a [grid](#) in the main working area.
- (3) **Advanced settings** button
Expands (and collapses) the view settings panel in order to display the drop-down menus *Filter*, *Group by*, *Sort by*, and the *Sorting order* button.
- (4) **Sorting order** button
Switches the sorting between ascending and descending.
- (5) **Groups** for the displayed tickets, see [Grouping](#).
- (6) **Tickets** matching the currently chosen view and filter. The information displayed for each ticket depends on the selected view and grouping. You usually see the ticket customer and its creation date.

C.2.3 Views

Views limit the tickets which are shown in the ticket list to those tickets matching specific view criteria. Most of the criteria are defined by your administrator during the creation of the view.


The following is always configured for a view:

- **Queue**
The view contains tickets from one or several queues.
- **Scope**
The view contains tickets from one or several scopes.

In addition, a view can limit the tickets to those tickets which contain certain values in a **specific drop-down field**. The administrator has two options to define the values of the drop-down field for the view:

- **Static criterion**
The value or values are preset. You cannot change them. For example, your CM administrator might configure a view which shows only tickets with the priority *high*.
- **Dynamic criterion**
You can change the values in your user profile (see [Changing view criteria](#)). For example, your CM administrator can configure a view which allows you to choose the priority (high, normal, low) yourself.


Examples for views might be *Active tickets*, *Active tickets with high priority*, *Inactive tickets*, *All tickets in the Sales queue*.

 Please bear in mind that your ticket list only contains the tickets which you are allowed to see according to your **permissions**.

C.2.3.1 Changing view criteria

Please proceed as follows to change the dynamic view criteria:

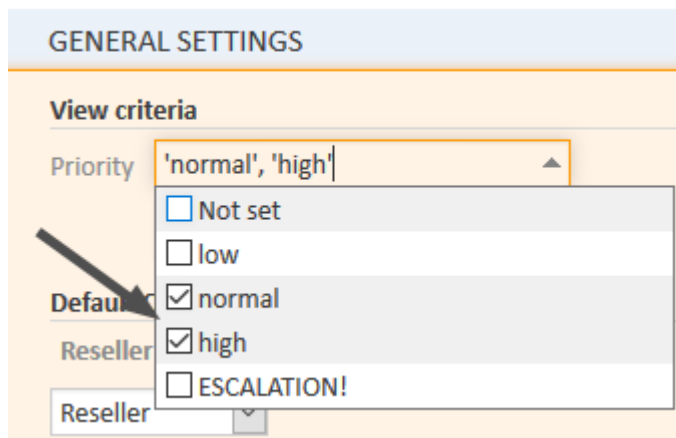
1. Open your [user profile](#) and locate the section *View criteria* under *General Settings*.
2. Select the desired values by ticking the respective checkboxes in the drop-down list under *View criteria*. You can choose one or several values for each criterion. Depending on the individual configuration of your CM system, there might be several drop-down lists containing values for different fields.

 If there are view criteria available in your user profile and you do not want to limit the display of tickets for certain views, you need to activate all available checkboxes for the view criteria. If you deactivate all checkboxes, no tickets are shown in the views that are affected by the view criteria.

The following rules always apply:

- deactivated checkbox = tickets matching this criterion **are not** displayed
- activated checkbox = tickets with the criterion **are** displayed

For example, you can determine that you want to see only tickets with normal or high priority.



The screenshot shows the 'GENERAL SETTINGS' window. Under the 'View criteria' section, the 'Priority' dropdown menu is open, displaying a list of criteria: 'normal', 'high', 'Not set', 'low', 'normal', 'high', and 'ESCALATION!'. The 'Default' checkbox is checked for 'normal' and 'high'. The 'Reseller' dropdown is also visible below the 'Priority' dropdown.

Figure 55: View criteria in user profile

- i** Each view can only be affected by **one** view criterion. This means that the different view criteria do not interfere with each other. Also, the view criterion only affects the views which your CM administrator configured to be affected by this criterion. Therefore, it is possible that some views still include tickets which do not match the value selected for a view criterion.

A criterion in italics means that the value is deactivated.

C.2.4 Filters

Filters limit the tickets which are displayed in the ticket list according to the selected view. Select the desired filter from the *Filter* drop-down list. This way you can determine **which** tickets should be displayed in the ticket list.

The following filter criteria are available:

- **All tickets** (no filter)
Tickets are not filtered.
- **Own tickets**
The ticket list contains only tickets assigned to you.
- **Own and unassigned tickets**
The ticket list contains only tickets assigned to you and tickets without an assigned engineer.
- **Own and referenced tickets**
The ticket list contains only tickets assigned to you and tickets for which you have been added as an additional engineer.
- **Unassigned tickets**
The ticket list contains only tickets without an assigned engineer.

C.2.5 Grouping

The ticket list can be divided into several groups. You can choose which groups you want to display using the grouping features. In this case, you do not change **which** tickets are displayed in the ticket list, but rather **how** tickets are displayed in the ticket list. The number of groups depends on the chosen grouping option. For example, the grouping by *Engineer* leads to three groups (*Mine*, *Team*, *Unassigned*). Only one group can be opened at a time (by clicking on the group name), the other groups are collapsed automatically. The number in brackets next to the group's name states the number of tickets contained in this group.

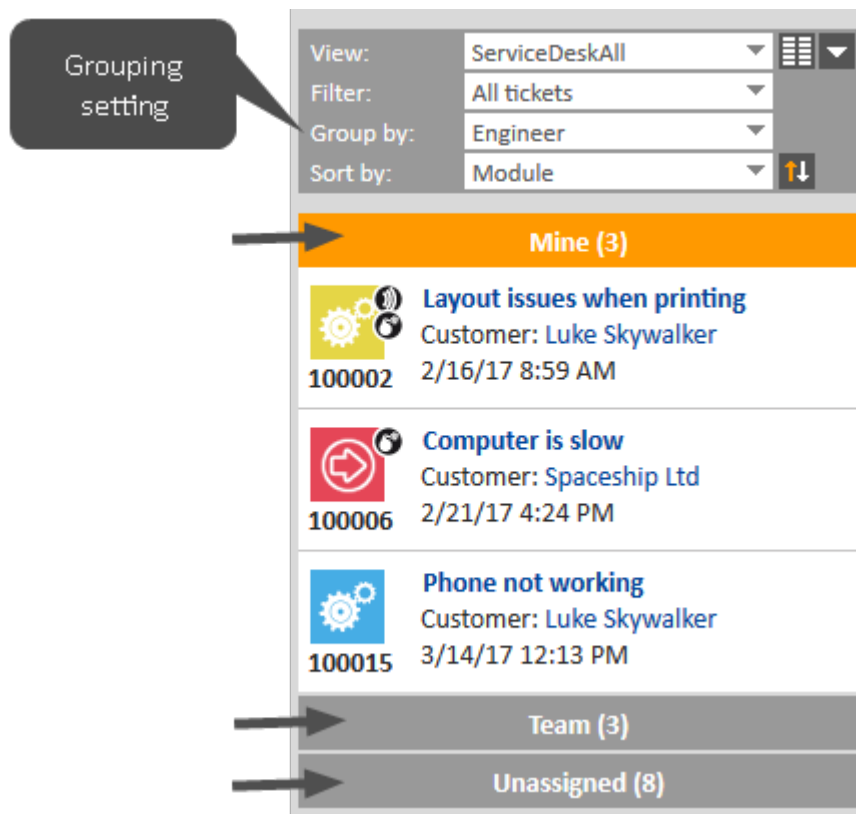



Figure 56: Selector for the grouping

i The chosen grouping applies only to the currently chosen view. This means that you can choose a grouping for each view. The Web Client saves this setting.

The following grouping options are available in every CM system:


- **No grouping**
All tickets are shown in one group named *All*.
- **Engineer**
Tickets are divided into three groups. The names of the groups depend on your individual CM configuration, but the groups always serve the same purpose:
 - Tickets assigned to the currently logged in engineer (e.g., *Mine*)
 - Tickets assigned to any other engineer but the currently logged in engineer (e.g., *Team*)
 - Tickets not assigned to any engineer (e.g., *Unassigned*)

 If you use a filter, the drop-down menu *Group by* no longer shows the grouping option *Engineer*, since this would lead to empty groups. If you are missing this grouping option, please check if you have chosen a filter. You will see the grouping option *Engineer* again after you have chosen *All tickets* from the drop-down menu *Filter*.

- **Queue**

Tickets are divided into as many groups as there are queues in your CM system, but you can only see the groups for queues for which you have at least read permission.

Whether there are further grouping options depends on the individual configuration of your CM system.

 It depends on the individual configuration of your CM system if empty groups, i.e., groups which do not contain any tickets, are displayed. If you do not see a group in the ticket list, it might be empty.

C.2.6 Sorting

The *Sort by* drop-down menu allows you to select the sorting criterion and the order of the tickets **within each group** of the ticket list. Therefore, you do not change **which** tickets are displayed in the ticket list, but rather **how** tickets are displayed in the ticket list.

You can adjust the sorting as follows:

- Select a value from the *Sort by* drop-down list to determine the sorting criterion. The following sorting options are available in every CM system:
 - **Scope**
Sorts the tickets within the groups by the logical order of the scopes they are currently in. The logical order of the scopes is the order of the process steps in your business processes, e.g., *Open Ticket - Ticket in progress - Query the technical department - Give solution to customer - Close Ticket*.
 - **Creation date**
Sorts the tickets within the groups by their creation date.
 - **Modification date**
Sorts the tickets within the groups by the date of their last modification.

Whether there are further sorting options depends on the individual configuration of your CM system.

- Click the *Sorting order* button to determine the order of the chosen sorting (ascending or descending).

C.2.7 Displaying the ticket list as a grid

You can display the ticket list as a grid by clicking the *Show as grid* button. The selected view is used as a search criterion, and the selected grouping criterion is used in the *Group by* field to determine the columns of the grid. By default, there are no columns for deactivated values (in the example below “ESCALATION” is deactivated). You can add a column for a deactivated value by selecting the value in the *Add/Remove table column* drop-down (1).

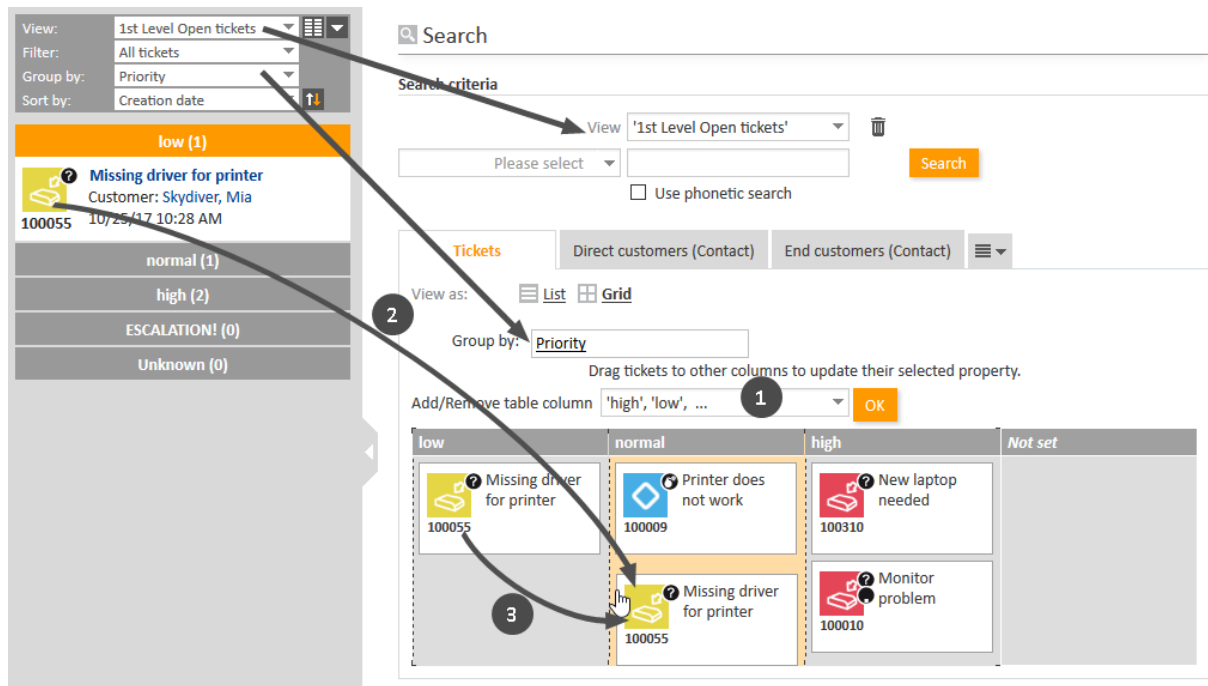


Figure 57: Displaying the ticket list as a grid

You can change the value of the ticket's grouping criterion (here *Priority*) in two ways using drag-and-drop:

- (2) Drag-and-drop the ticket from the ticket list to the column with the desired target value on the grid.
- (3) Drag-and drop the ticket from one column of the grid to the column with the desired target value.

In the above example, the ticket's priority is about to be changed from *low* to *normal*.

 You can only drag-and-drop tickets if you have the required permissions.

Additionally, you can open a ticket from the display in the grid.

C.3 Working with tickets

As an engineer, you will probably work with tickets. Here are some examples of tasks you might perform with ConSol CM:

- You create a new ticket, e.g., a customer calls and you create a support ticket. Please see [Creating a ticket](#) for further information.
- You accept an automatically created ticket to start working on it. Please see [Becoming the assigned engineer](#) for further information.
- You edit the ticket data to enter all the information. Please see [Editing ticket data](#) for further information.
- You add a comment to the ticket, e.g., to record your work. Please see [Adding a comment](#) for further information.
- You add an attachment to the ticket, e.g., a screenshot provided by the customer. Please see [Adding an attachment](#) for further information.
- You read an email that was received by the ticket and answer it. Please see [Emails](#) for further information.
- You close the ticket after adding a comment with the solution. Please see [Performing workflow activities](#) for further information.


The following sections provide detailed information about the different tasks related to working with tickets:

- [Creating a ticket](#)
- [Updating tickets](#)
- [Working with customers within tickets](#)
- [Communication](#)
- [Additional engineers and approval processes](#)
- [Relations to tickets and resources](#)

C.3.1 Creating a ticket

C.3.1.1 Starting the ticket creation

Depending on the business process implemented in your ConSol CM system, you might work on existing tickets or create new tickets yourself. Your business process can be configured for example to automatically create a ticket when a customer sends an email to the help desk. Alternatively, you might have the option to create a new ticket, for example when you receive a call from a customer who has a support request.

 You need the permission to create tickets for at least one queue in order to create new tickets. If you do not have this permission or your business process requires you to work on existing tickets only, you can skip this section as it does not apply to you.

There are several ways to create a new ticket:

- Click the *Create ticket* link in the main menu (1).
- Click the *Clone* link in the ticket that you want to copy. In this case, the new ticket will be filled automatically with the ticket and customer data of the original ticket. Also see [Cloning a ticket](#) (2).
- Click the *Create ticket* link on the customer page. In this case, the new ticket will be filled automatically with the data of this customer. Also see [Creating a ticket for the customer](#) (3).

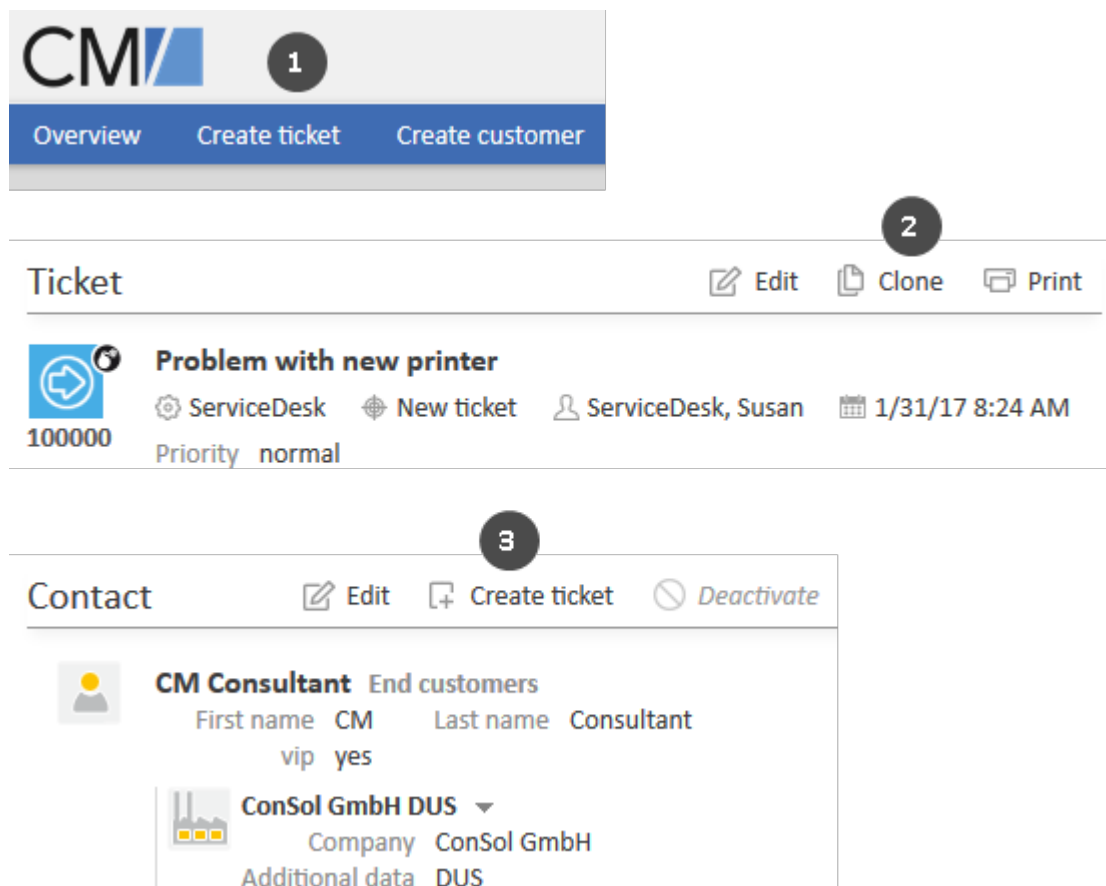



Figure 58: Creating a ticket

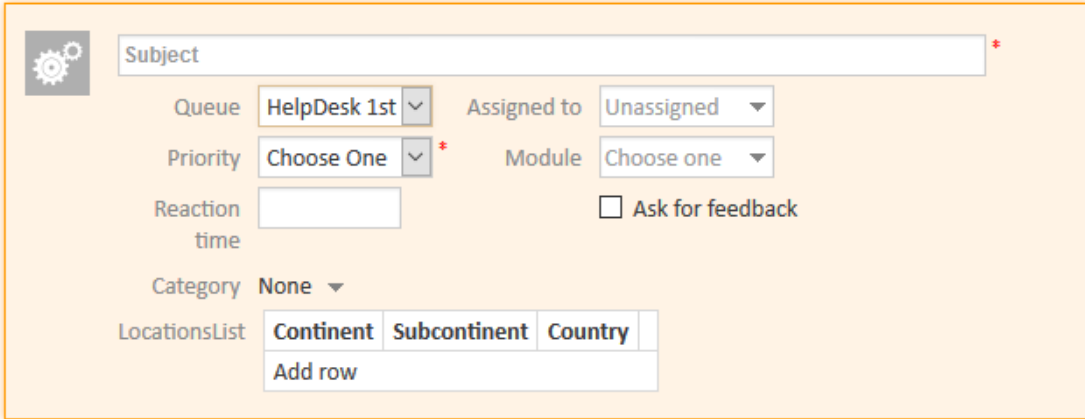
 Depending on your system configuration, there might be additional ways to create a new ticket, e.g., using customer actions or resource activities.

C.3.1.2 Providing data


The *Create Ticket* page is displayed after you chose to create a new ticket as described in the previous section. Depending on the selected way, some of the data may already be filled out. The following example shows the different sections of the *Create Ticket* screen.

Fill out the data in the following sections:

Header section (1)



Create Ticket

 Subject *

Queue **HelpDesk 1st** ▼ Assigned to **Unassigned** ▼


Priority **Choose One** ▼ * Module **Choose one** ▼

Reaction time ☐ Ask for feedback

Category **None** ▼

LocationsList	Continent	Subcontinent	Country
Add row			

Enter the basic ticket data. The available fields depend on the selected queue. Mandatory fields are marked with an asterisk.

 If you have permissions to create tickets in more than one queue, you can change the queue in the *Queue* field. The ticket will automatically adapt to the new queue. Depending on the individual configuration of your CM system, a tooltip with a description is displayed when you hover over the queue name.

Customers section (2)

2

Select the desired customer group by clicking the respective tab first. Afterwards you have to specify the customer. Depending on the customer data model of the selected customer group, you might have to select or create both a company and a contact. Please see [Basic knowledge about customers](#) for further information. You can specify the customer by either:

- **Selecting an existing customer**

Start the [Autocomplete Search](#) by typing some customer data. In case of a two-level customer data model, you have to search for the company first. Use the field *Please find or create company first.* for this purpose. In case of a one-level model, you can directly search for the company or contact. Select the desired customer from the suggestions.

- **Creating a new customer**

In case of a one-level customer data model, enter the data of the new customer in the appropriate data fields. Click *Create and select* to save the new customer. If you want to create a new company in a two-level model, you have to click the *Create* link above the *Please find or create company first.* field first in order to display the data fields for the company.

You can only create a new customer if you have the permission to create customers in the selected customer group.

Content section (3)

CONTENT

Add comment

+ Add template ▼
B I U S | [List Icons] | DIV (default) Font Family Font Size A
x² x₂ | [Table Icon] [Link Icon] [Image Icon] [Video Icon] [GIF Icon] [Embed Icon] [Quote Icon] [Code Icon] [Help Icon]

Add attachment

Drop files or click to select files

Create

You have to add a comment to create the ticket. If you want, you can also add an attachment.

Once you have entered all the required data, click the *Create* button to save the ticket (4). The background color will change from yellow (edit mode) to gray (view mode).

C.3.2 Updating tickets

This chapter discusses the following:

- [Accessing existing tickets](#)
- [Becoming the assigned engineer](#)
- [Editing ticket data](#)
- [Performing basic actions](#)
- [Performing workflow activities](#)

C.3.2.1 Accessing existing tickets

In order to work on a ticket, you need to open it first. There are several ways to open an existing ticket:

- Opening a ticket from the [ticket list](#) or [grid](#).
- Opening a ticket from the [Quick Search](#) results.
- Opening a ticket from a result table containing tickets (e.g., on a [customer page](#), in the section for related tickets of a [resource page](#), or in the [Detailed Search](#)).
- Opening a ticket using the *Jump to ticket* link in the [section for related tickets](#) of another ticket.

C.3.2.2 Becoming the assigned engineer

Being the assigned engineer means that you are in charge of the ticket at this moment. Tickets can be assigned to an engineer manually and automatically.

Automatic assignments are configured by your CM administrator. Therefore, they depend on the configuration of your individual CM system, e.g., you might get assigned as the ticket's engineer when you execute a certain workflow activity or when you create a ticket.

Manual assignments can be performed in several ways:

- **(1) Accepting a ticket in the ticket header** (only unassigned tickets, only assignment to yourself)
Click *Accept* in the ticket header.
- **(2) Accepting a ticket in the ticket list** (only unassigned tickets, only assignment to yourself)
Click the arrow icon in the upper right corner of the ticket in the ticket list.
- **(3) Changing the engineer of a ticket** (any ticket, assignment to yourself or another engineer)
Click *Edit* to make the ticket data editable. Then, select an engineer from the *Assigned to* drop-down list. If the ticket is already assigned to an engineer, you have to remove the engineer's name first by clicking the red cross next to the name.



You can only change the engineer if you have the required permission.

Ticket Accept Edit Clone Print

Computer is slow

ServiceDesk New ticket Unassigned 2/21/17 4:24 PM

Priority high

Desired deadline 2/28/17 12:00 AM

View: ServiceDeskAll

Mine (3)

Team (3)

Unassigned (8)

Computer is slow ✓

Customer: Spaceship Ltd

2/21/17 4:24 PM

Network failure ✓

Customer: Skydiver, Mia

2/22/17 9:40 AM

Ticket Clone Print

Computer is slow

Queue ServiceDesk Assigned to Unassigned

Priority high

Reaction time

Service Desk, Sarah

ServiceDesk, Susan

Tester, Tony

Figure 59: Accepting a ticket

i The CM system might send you an email when you are assigned or removed as an engineer. The exact behavior depends on the configuration of your system.

C.3.2.3 Editing ticket data

You can edit ticket data in the ticket header and in the details section. Click the *Edit* link in the upper right corner of the desired section to edit its data. The section's background turns yellow to indicate that it is in edit mode. Edit the ticket data as required (see [Data fields](#) for details about the different types of data fields). Click *Save changes* to save the new data. The section background turns gray again (view mode).

Ticket Accept Edit Clone Print

New laptop needed
 100003
 HelpDesk 1st Level Qualify Unassigned 2/21/17 4:09 PM
 Priority normal
 Reaction time 2/21/17

Ticket Clone Print

New laptop needed *

100003 Queue **HelpDesk 1st** Assigned to **Unassigned**
 Priority **normal** * Module **Choose one**
 Reaction time **2/21/17** ☐ Ask for feedback
 Category **None**
 LocationsList

Continent	Subcontinent	Country
Add row		

Save changes Cancel

Figure 60: Editing ticket data

You can only edit ticket data if you have the required permission.

C.3.2.4 Performing basic actions

Cloning a ticket

You can clone a ticket to quickly create a new ticket which is very similar to an existing ticket. Usually, the ticket data (ticket header and details section) and the customer data (main customer and additional customers) are copied from the original ticket to the cloned ticket. Other content such as attachments, comments, emails, and time bookings are not copied to the new ticket. There is no ticket relation or other technical connection between the two tickets. Click the *Clone* link in the upper right corner of the ticket to duplicate it. The cloned ticket is opened in edit mode. Change its data as required and add a comment. Click *Create* to save the new ticket.

The exact behavior of the cloning feature, i.e., which content is copied to the new ticket, depends on the individual configuration of your CM system.

Printing a ticket

You can print a ticket by clicking the *Print* link in the upper right corner of the ticket. A pop-up window is displayed where you can select the desired printer.

C.3.2.5 Performing workflow activities


Workflow activities are used to move tickets through the business process. The available workflow activities depend on the business process (workflow) implemented in your CM system.

The displayed workflow activities depend on:

- the **ticket** opened in the main working area
- the current **queue** of the ticket
- the current **position** of the ticket within the **workflow**
- your **permissions**
- if you are added as an **additional engineer** to the ticket
- the **ticket status**

Open the ticket in the main working area to display the workflow activities which you can carry out for this particular ticket in this moment. The available workflow activities are displayed on the left, in the *Workflow activities* box **(1)**. Click a workflow activity to execute it. This will have one of the following effects:

- The workflow activity is executed immediately. You see the next workflow activities according to the new position of the ticket in the business process.
- An **ACF** (Activity Control Form) opens **(2)**. You have to [fill out the ACF](#) before the workflow activity can be executed.
- You see an info message that certain criteria are not fulfilled yet, e.g., you might have to fill out certain data fields or perform certain actions before you can execute a workflow activity.

 In the following cases, no workflow activities are displayed:

- The business process for this ticket is already completed, i.e., the ticket is closed, and there is no reopen activity.
- The workflow activities at this point in the process depend on conditions which are not yet fulfilled.
- You do not have the permissions needed to see the workflow activities at this point.

The screenshot displays the 'Ticket' header with the title 'Printer does not work' and ID '100009'. It includes metadata such as 'HelpDesk 1st Level', 'Support', 'Unassigned', and a timestamp of '2/23/17 9:10 AM'. The priority is 'high' and the reaction time is '2/23/17'. A 'DETAILS' button and an 'Edit' icon are visible.

On the right, the 'Workflow activities' list includes: 'Transfer to 2nd level', 'Close immediately', 'Close after quick response', 'Wait after query', and 'Qualify workaround ...'. A circled '1' highlights the 'Qualify workaround ...' activity.

The 'Qualify workaround ...' ACF is shown below the ticket header. It has a yellow background and contains the following fields:

- Additional work:** A dropdown menu with 'Choose One' selected.
- Coverage:** A dropdown menu with 'Choose One' selected.
- Delay:** A dropdown menu with 'Choose One' selected.
- Expected duration:** A text input field with a red asterisk indicating it is required.

 At the bottom of the ACF are two buttons: 'Save and continue' (highlighted in orange) and 'Cancel'. A circled '2' is placed above the ACF, and an arrow points from the 'Qualify workaround ...' activity in the workflow list to the ACF.

Below the ACF, the 'Workspace' section shows the message: 'Workspace is empty. All your unsaved tasks are...'.

Figure 61: Workflow activities and ACF

Filling in an ACF

Workflow activities can be configured to open an ACF (Activity Control Form). ACFs are used to update ticket data. They allow you to easily locate the fields which you need to fill out in order to perform this workflow activity. It depends on the individual configuration of your CM system which ACFs are available. Examples for the usage of ACFs are workflow activities where you qualify a workaround, enter the feedback received by a customer, or prepare a quote.

The ACF is displayed above the Ticket Header. It has a yellow background to indicate that it is editable. You have to fill in the data in the ACF before you can continue. Click *Save and continue* to save your changes and execute the workflow activity. If you click *Cancel*, the ticket will remain in its previous position, i.e., the workflow activity is not executed.

C.3.3 Working with customers within tickets

This chapter explains the concept of customers in ConSol CM and provides information about the customer-related tasks which you can perform within tickets.

- [Customers in ConSol CM](#)
- [Specifying the main customer](#)
- [Changing the main customer](#)
- [Viewing the additional customers](#)
- [Adding an additional customer](#)
- [Working with additional customers](#)
- [Editing customer data](#)
- [Viewing the customer page](#)

C.3.3.1 Customers in ConSol CM

Customers represent the **external** side of the CM system. The customer is the person or object that is the **reason for creating the ticket** and is usually informed once work on the ticket has been completed. This can be, for example, clients who purchased your company's products or colleagues who receive IT support from your team.

There are two kinds of customers in ConSol CM:

- **Main customer**
The customer who gives the reason for creating a ticket. A ticket must have exactly one main customer. The main customer is mandatory; you cannot create a ticket without a main customer.
- **Additional customers**
Any customer who is interested in the ticket. An additional customer can have a customer role which describes why the customer was added to the ticket. Additional customers are optional. A ticket can have any number of additional customers.

Both the main customer and the additional customers can be *contacts* and/or *companies*. It depends on your system configuration which kinds of customers are available. Please see [Basic knowledge about customers](#) for a detailed explanation of the usage of contacts and companies in ConSol CM.

There are two main actions related to customers which can be carried out in tickets:

- **Adding customers to the ticket**
You have to specify one main customer for the ticket. This is done when the ticket is created. You can then add any number of additional customers. This action can only be done within the ticket.
- **Working with customer data**
You can edit the data of the main customer and additional customers assigned to the ticket and you can deactivate customers within the ticket. These actions can either be done within the ticket or on the respective customer page. Please see [Managing customers](#) for detailed information about these actions.



Please bear in mind that all changes done to customer data are **global changes**, i.e., the new data will be automatically used in all places within ConSol CM (customer pages, other tickets).

All actions involving customers are carried out in the [customers section](#) of the ticket.


C.3.3.2 Main customer

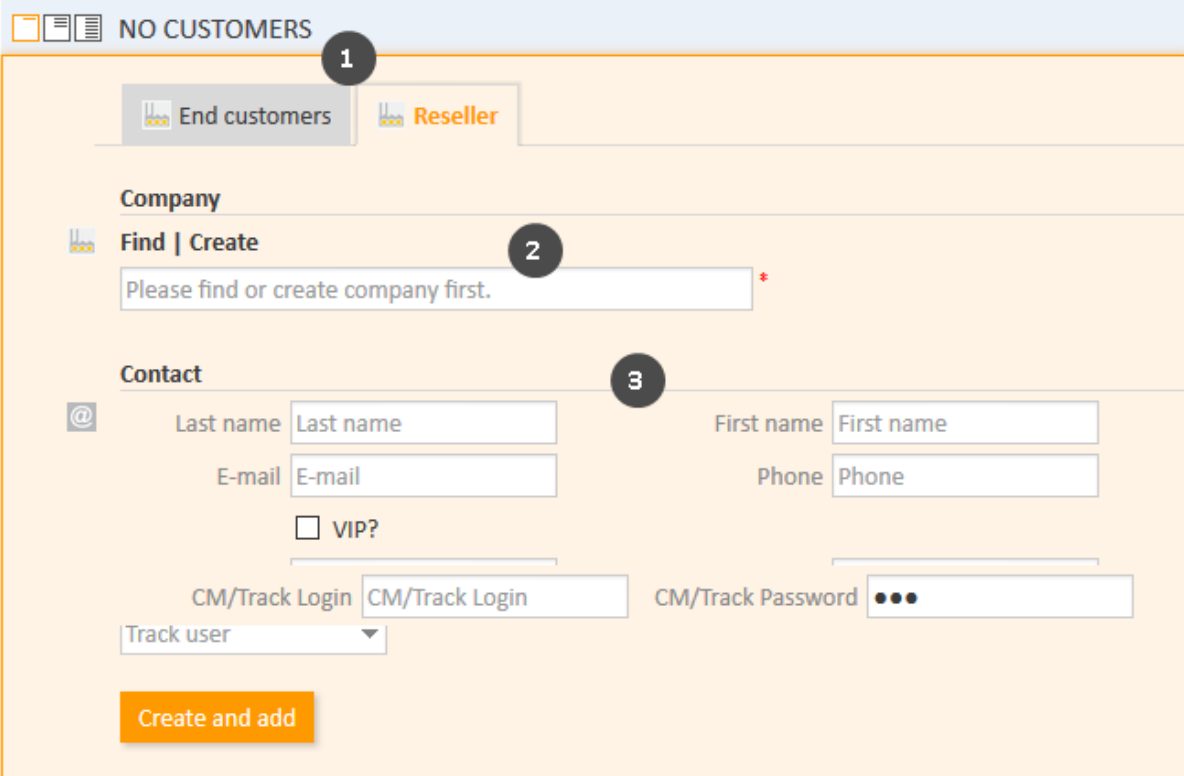
The main customer is the customer who gave the reason for creating the ticket. A ticket always has to have exactly **one** main customer. It depends on the customer group if you can add a contact, a company, or a contact or company as the main customer.

- **One-level customer data models**
The data model contains either only contacts or only companies. Therefore, you can either add a contact or a company as the main customer.
- **Two-level customer data models**
The data model contains both contacts and companies. Depending on your system configuration, you can either add only a contact, a company, or a contact or a company as the main customer.

Specifying the main customer

When you create a new ticket, you can select an existing customer as the ticket's main customer or create a new customer for this purpose.

 You can only create a new customer if you have the required permissions.



The screenshot shows a user interface for adding a customer. At the top, there's a header "NO CUSTOMERS" with a plus icon. Below it, there are two tabs: "End customers" (selected) and "Reseller". A red circle with the number "1" is next to the "End customers" tab. Under the "End customers" tab, there's a section titled "Company" with a "Find | Create" button. A red circle with the number "2" is next to the "Find | Create" button. Below this, there's a text input field with the placeholder "Please find or create company first." and a red asterisk. Under the "Company" section, there's a section titled "Contact" with a red circle with the number "3" next to it. This section contains several input fields: "Last name", "First name", "E-mail", "Phone", "CM/Track Login", and "CM/Track Password". There's also a checkbox for "VIP?" and a "Track user" dropdown menu. At the bottom, there's an orange button labeled "Create and add".

Figure 62: Customer section in a new ticket: Adding an existing customer during ticket creation


Please proceed as follows to create a new customer:

1. If more than one customer group is available, select the tab with the desired **customer group**.

2. **Specify the company**

You can either select an existing company or create a new one:


- a. To **select an existing company**, start typing the company name and select the desired company from the suggestions provided by the [Autocomplete Search](#).
- b. To **create a new company**, click the *Create* link above the entry field and fill in the provided data fields. Click *Create and select* to confirm your entry.

 If you work with a two-level customer model which allows adding a company as a customer, you can click the *Select* button to add this company as the main customer. In this case, you don't have to specify a contact.

3. **Specify the contact**

You can either select an existing contact or create a new one:

- a. To **select an existing contact**, start typing into one of the data fields to see the suggestions provided by the [Autocomplete Search](#). Please note that it depends on your system configuration which fields can be used for the Autocomplete Search. Click *Select* to confirm your entry and to add this contact as the main customer.
- b. To **create a new contact**, fill in the provided data fields. Click *Create and select* to confirm your entry and to add this contact as the main customer.

 If you work with a one-level customer model, you skip the second step.

Changing the main customer

You can change the main customer of an existing ticket by clicking the *Change* link in the context menu (little arrow icon next to the customer's name). The main customer is removed from the ticket and you can select a new one as described in [Specifying the main customer](#).

C.3.3.3 Additional customers

Additional customers are customers who are interested in the ticket. They are optional and usually have a role indicating the reason why they were added. You can add as many additional customers as you want. It depends on the customer group if you can add a contact, a company, or a contact or company as an additional customer. The effects of adding an additional customer depend on the individual configuration of your CM system, e.g., additional customers could for example receive a copy of the emails sent to the main customer.

Viewing the additional customers

Click the *There are more customers* link to display the additional customers of a ticket.

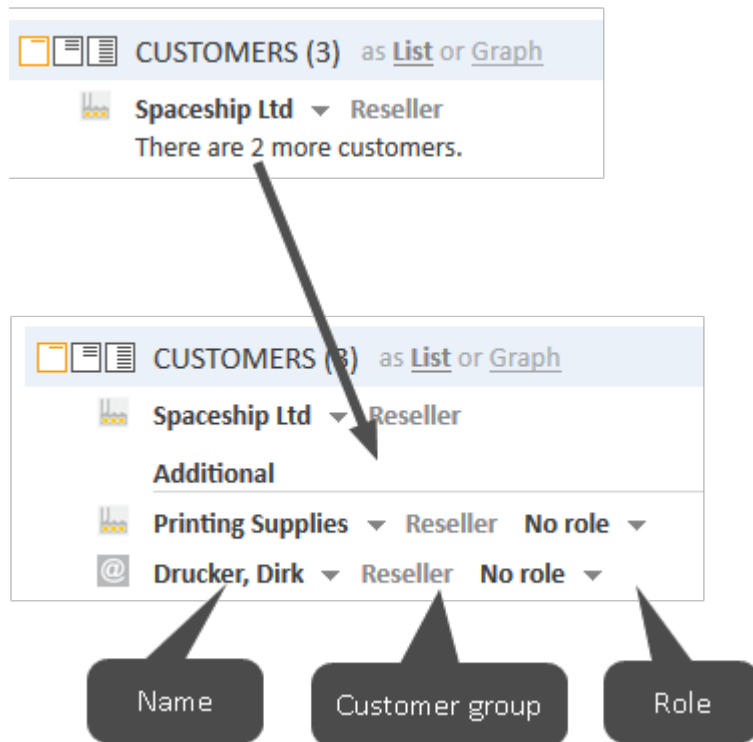


Figure 63: Viewing additional customers

Adding an additional customer

To add a new additional customer, click the *Add* link in the upper right corner of the customers section. You can either select an existing customer or create a new one. Selecting and creating additional customers works in the same way as selecting and creating main customers, see [Specifying the main customer](#).

Working with additional customers

There are several actions which you can carry out for an additional customer. Depending on the type of action, they are either located in the context menu of the additional customer or in the context menu of the role.

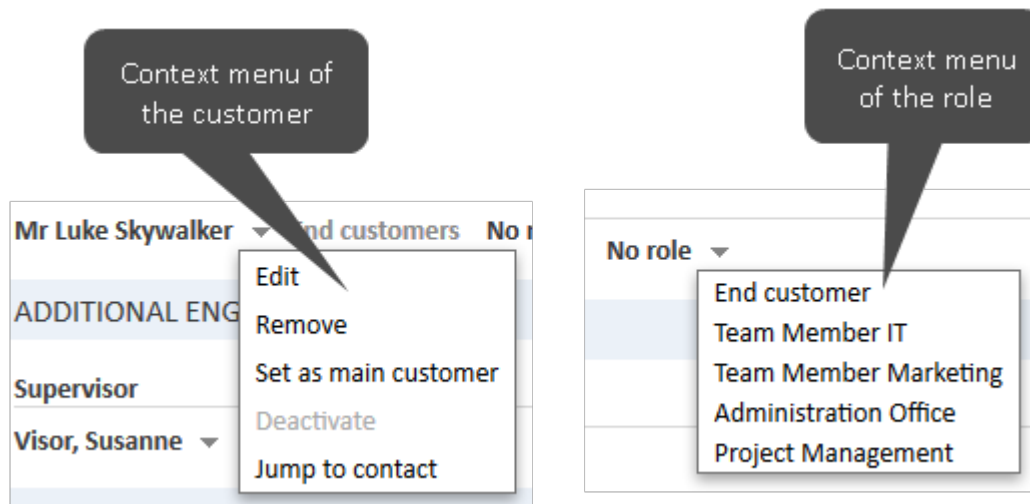


Figure 64: Context menus of additional customers

Removing an additional customer

To remove an additional customer, open the context menu by clicking the little arrow next to the customer's name and click *Remove*. Then, click *Yes* to confirm the removal of the additional customer. You cannot undo the removal once you confirmed it.

Setting an additional customer as main customer

To set an additional customer as main customer of the ticket, open the context menu by clicking the little arrow next to the customer's name and click *Set as main customer*. The additional customer becomes the new main customer and the previous main customer becomes an additional customer.

Indicating a role for an additional customer

The **customer role** states the purpose or reason for adding an additional customer to this particular ticket. This way, you can, for example, add the customer's project manager as an additional customer to the ticket and give him the corresponding role. Assigning a customer role to an additional customer is optional. The available customer roles and their effects depend on the individual configuration of your CM system.

To indicate a customer role, open the context menu of the role by clicking the little arrow next to the role and select the desired role. If the additional customer already has a role and you want to remove it, select *No role*.

C.3.3.4 Working with main and additional customers

The following actions are available for both the main customer and additional customers:

- [Editing customer data](#)
- [Viewing the customer page](#)

Editing customer data

You can edit the customer data of both the main customer and any additional customers from within the ticket.



Editing customer data is a **global change**. It does not matter where you change the customer data (on the customer page, in the ticket), the data is always changed in the **whole CM system**, i.e., the changes are visible in every ticket the customer is added to and on the customer page.

To edit the data of the main customer or an additional customer, click the *Edit* link in the respective context menu. The background of the Customers section turns yellow to indicate that it is in edit mode. Make the required changes and click *Save changes*. You can find detailed information about editing customer data in [Editing customer data](#).



You can only edit customer data within tickets if you have the permission to edit customers of the respective customer group, and if your system is configured to allow editing customer data within tickets.

Viewing the customer page

You can open the [customer page](#) of the main customer or an additional customer by opening the context menu of the customer and clicking the *Jump to* link. Depending on whether the customer is a contact or a company, the link is either called *Jump to contact* or *Jump to company*.

C.3.4 Communication

C.3.4.1 History section

The [history section](#) of the ticket contains the record of all changes made to the ticket. The section header provides links to the following communication-related features:

- [Comments](#)
- [Emails](#)
- [Attachments](#)
- Documents (optional add-on, see [CM/Doc](#))
- [Time booking](#)

The ConSol CM Web Client includes several features which facilitate efficient work:

- [Classes of text](#) for highlighting certain entries of the ticket history
- [The rich text editor](#) for drafting comments and emails
- [Templates](#) for drafting comments and emails

C.3.4.2 Classes of text

Classes of text are used to emphasize entries of the ticket history. You can mark emails, comments, and attachments in the ticket history with a certain class of text. Usually, the class of text highlights the entry with a certain color and adds an icon to the entry. The available classes of text, including colors and icons, depend on the individual configuration of your CM system.

A class of text has several functions:

- Highlighting the entry, thus helping the engineer to find a certain type of entry.
- Controlling the visibility of an entry in the customer portal CM/Track, i.e., only entries with a certain class of text are visible to customers in CM/Track. (Please see [Visibility of comments in CM/Track](#) for further information.)
- Controlling the business process, e.g., the ticket can only be closed if at least one entry is marked as the solution.

The following figure shows a history entry with the class of text *Feedback* (purple background and arrows icon). Click the icon to select another class of text for the entry.

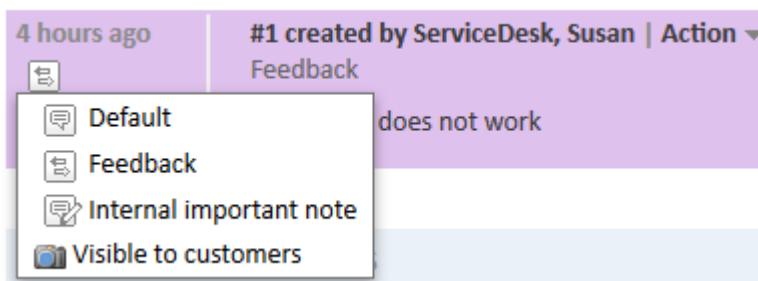


Figure 65: *Classes of text in the ticket history*

C.3.4.3 Rich text editor

You use the rich text editor to write emails and comments. It consists of a text field, where you enter your text, and a menu bar with several buttons, which allow you to format the text and insert tables, images and special characters.

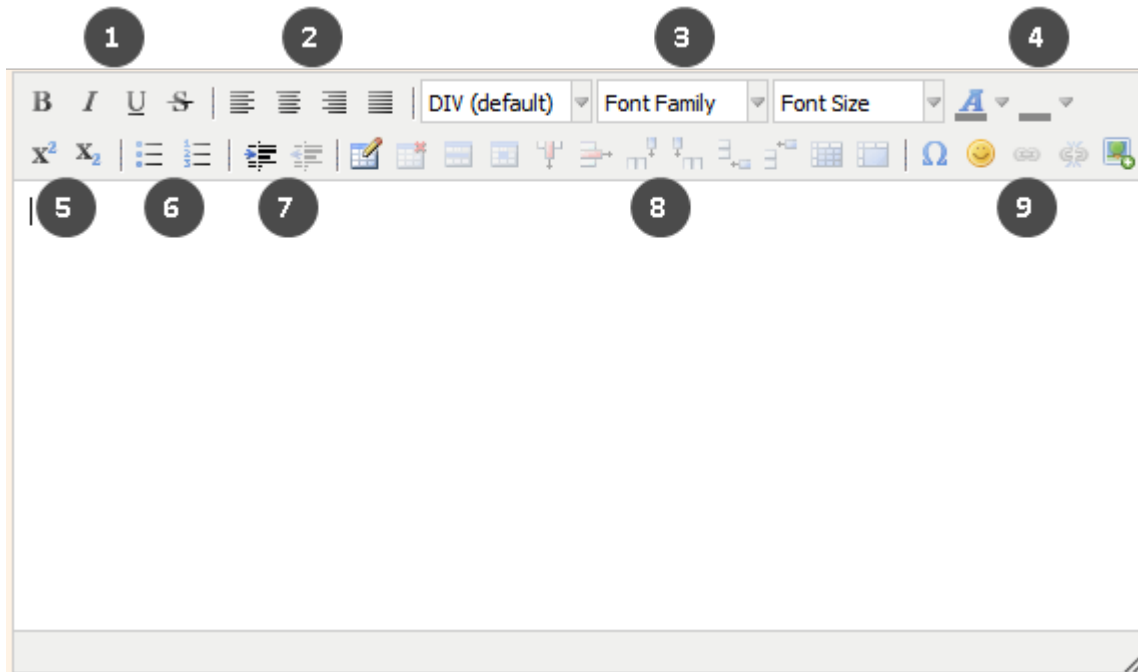


Figure 66: *The rich text editor*

- (1) Font style (bold, italics, underlined, strikethrough)
- (2) Alignment (left-aligned, centered, right-aligned, justified)
- (3) Font (format, font family, font size)
- (4) Color (text color, background color)
- (5) Superscript and subscript
- (6) Lists (bullet points, numbering)
- (7) Indention (increase, decrease)
- (8) Create and edit table
- (9) Insert (special character, emoticon, link, image)




It depends on the individual configuration of your CM system if all formatting features are available.

C.3.4.4 Comments

Comments are used to document work on the ticket. All comments are registered in the ticket history, where you can see both your own comments, the comments added by other engineers, and, depending on your system configuration, the comments added by the customer (via email and/or via the portal **CM/Track**).

Adding a comment

To add a comment (e.g., a note about your last call with the customer), click the *Comment* link in the header of the history section. The background of the history section turns yellow to indicate that it is in edit mode. If the section is already in edit mode, you can also add a comment by clicking the *Comment* tab. Depending on your system configuration, the rich text editor might already contain a certain template, e.g., your signature. You can select a template for your comment by clicking the *Change* link in the *Template* context menu. To remove a template, click the *Remove* link in the context menu. Templates can include attachments which can be deselected as needed. Please see [Templates](#) for a detailed description of templates. Write your comment using the rich text editor and click *Add Comment* to save it.


 You can also add a new comment by clicking *Clone* in the *Action* menu of an existing comment or email. This opens the rich text editor with the text of the existing comment or email. This way you do not need to type the text again.

Editing a comment

You can edit a comment which you added by clicking *Edit* in the *Action* menu of the comment. The rich text editor with the original comment is opened and you can edit the text. Click *Update Comment* to save your changes.

The ticket history always shows the last version of the comment. The previous versions can be opened by clicking the *changed ago* link in the ticket history (see [Viewing the history of a comment](#)).

Editing is only allowed during a certain time after the comment was added. The time depends on your CM system.

 It is not possible to edit comments of other users.

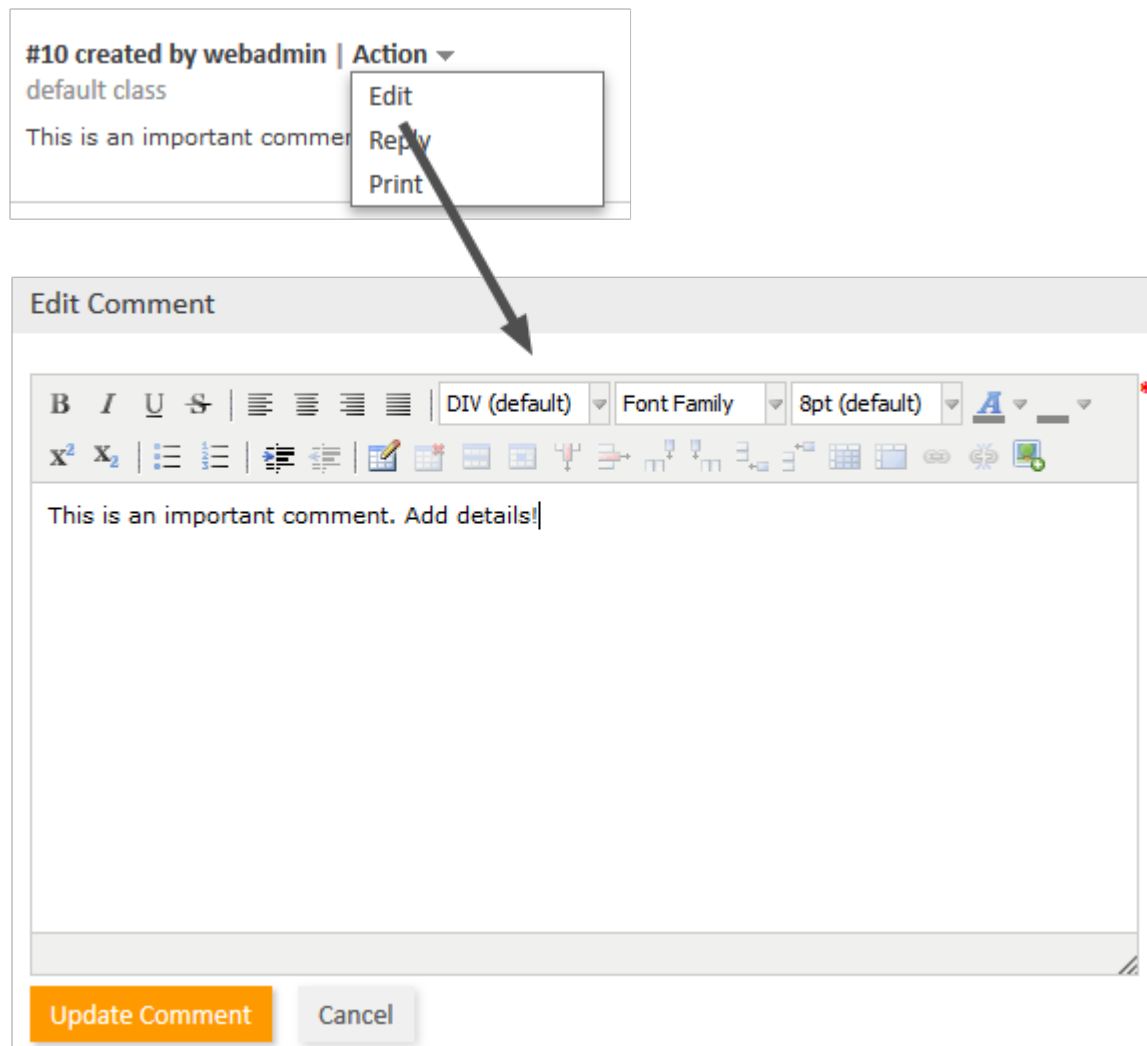



Figure 67: Editing a comment

 It depends on the individual configuration of your CM system if comment editing is available.

Viewing the history of a comment

If a comment was edited by any user, its heading shows a *changed ago* link. You can click the link to view the history of the comment, i.e., the different versions of the comment.

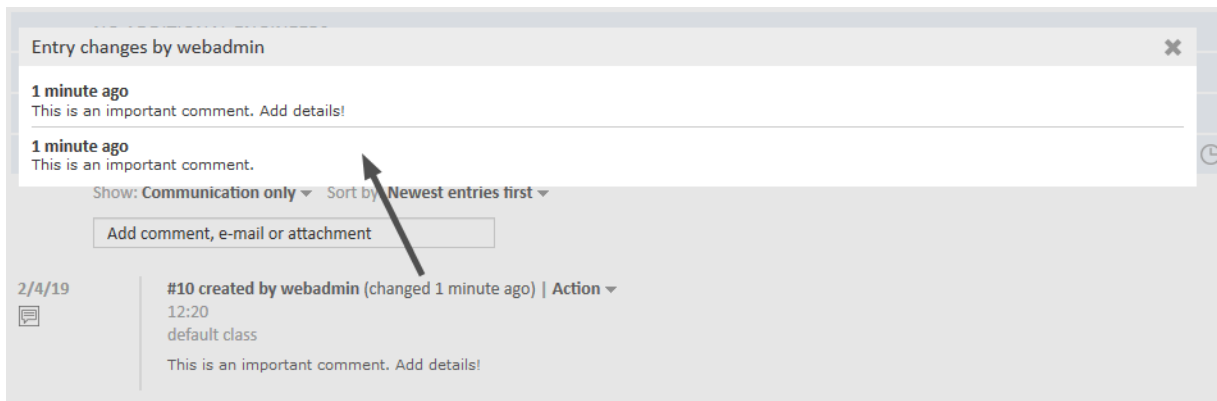


Figure 68: Viewing the history of a comment

i A comment can only be changed by its original author.

Replying to a comment

You can reply to a comment to quote an existing comment in your comment. To do so, open the *Action* menu of the desired comment and click *Reply*. The original comment is quoted in the rich text editor. Enter your comment and click *Add Comment*. The new comment is displayed in a separate entry, i.e., it is not shown below the initial comment but in its usual position according to the defined sorting order.

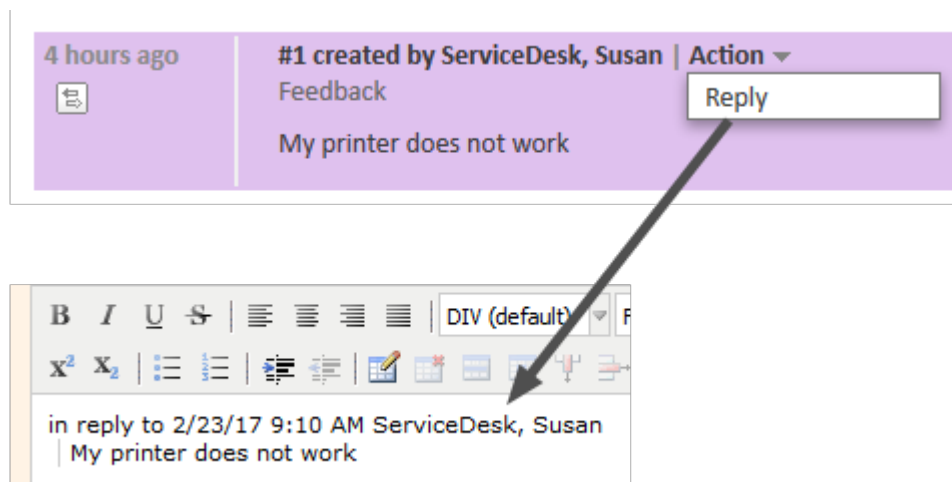


Figure 69: Replying to a comment

Printing a comment

You can print a comment by clicking *Print* in the *Action* menu of a comment. This opens the print dialogue of your operating system. If you have a PDF utility installed, you can choose to print the comment to a PDF file. The printed output contains the comment and some additional information about the comment entry, i.e., the date and time of the entry, the ticket number and subject, and the author of the entry.

Figure 70: *Printing a comment*

C.3.4.5 Emails

The Web Client can send and receive emails related to tickets. Emails are always sent from within the ticket they concern. You can send emails to the customer and to any recipient with a valid email address. All emails sent from the Web Client are displayed in the ticket history. If the recipient replies to the email, the reply is also added to the ticket history. The ticket history therefore provides an overview of all email communication, including attachments.

Sending emails

To draft the email click the *Email* link in the header of the history section. The background of the history section turns yellow to indicate that it is in edit mode. If the section is already in edit mode, you can also write an email by clicking the *Email* tab. Depending on your system configuration, the rich text editor might already contain a certain template, e.g., your signature. You can edit the text before sending the email.

The screenshot shows the 'New E-mail' form with the following elements:

- Tabs:** Comment, **E-Mail** (selected), Attachment, Time booking.
- Buttons:** show Cc | show Bcc, + Add attachments, + Add template, Send E-Mail, Cancel.
- Fields:**
 - To:** Peter Diermau <diermau@devnull.consol.de> ✕
 - Reply-To:** cmdoku@consol.de
 - Subject:** Ticket (101267) Email Attachments
 - Attachments:** + Add attachments
- Rich Text Editor:**
 - Toolbar:** Bold (B), Italic (I), Underline (U), Link, Unlink, Bulleted List, Numbered List, Indent, Outdent, Font Color, Background Color, Text Color, Text Background Color, Font Size, Font Family, Font Style, Font Weight, Font Color, Font Background Color, Font Style, Font Weight, Font Color, Font Background Color, Font Style, Font Weight.
 - Text Area:**

Viele Grüße
--
--
ConSol* Software GmbH
Franziskanerstraße 38
81669 München
Tel: 089 / 45841- / Fax: -111

ConSol* zählt zu Deutschlands besten Arbeitgebern 2006-2011

Figure 71: Sending an email

- **Standard email fields (1)**

- **To**

This field contains the recipient of the email. In most CM systems, it is initially filled with the email address of the ticket's main customer (if provided). Depending on the system configuration, you see the email address and/or the name of the recipient. You can remove the recipient by clicking the little cross next to the name and you can add multiple recipients separated by a comma. As soon as you start typing the recipient's email address or name, the CM system suggests matching recipients.

- **Cc/show Cc**

This field contains the recipients which should receive a copy of the email. If the Cc field is not displayed, click the *show Cc* link.

- **Bcc/show Bcc**

This field contains the recipients which should receive a blind copy of the email. If the Bcc field is not displayed, click the *show Bcc* link.

- **Reply-To**

This field contains the reply-to address used in the email. This is usually a system address. Do **not** change it!

- **Subject**

This field contains the email subject. The subject is set automatically by the system. Do **not** change it! Otherwise the replies might not be correctly attached to the ticket.

- **Attachments (2)**

Here you can select attachments to be sent with the email. You can only select attachments which are already added to the ticket or included in a selected template, i.e., it is not possible to upload a new attachment here. This field is hidden if the ticket does not have any attachments.

- **Quote (3)**

Here you can quote communication entries (comments and emails) from the ticket history. You can either click *Entries visible to the customer* to select all communication entries which are marked with a class of text which is visible to customers, or click *Select entries* to manually choose the communication entries which you want to quote. In the latter case, you have to click the entry in the ticket history (outside the pop-up window). The selectable entries are indicated by a scissors icon.

- **Add template (4)**

Here you can select one or several templates for the email text. Depending on your system configuration, a standard template might be initially selected. You can select another template or edit the template text before sending the email. Please see [Templates](#) for a detailed description of templates.

- **Rich text editor (5)**

This field contains the email body, i.e., the text which is sent. You can format the email text using the features of the rich text editor.

Draft your email and click *Send Email* to send it to the indicated recipients.

Replying to emails and forwarding emails

You can reply to and forward an email from the ticket history.

To **reply to an email**, open the *Action* menu of the desired email and click *Reply / Reply all*. The rich text editor is opened. The sender of the original email is automatically selected as a recipient in *To:* and the original email is quoted under *in reply to*. You can edit and send your email as described in [Sending emails](#).

To **forward an email**, open the *Action* menu of the desired email and click *Forward*. The rich text editor is opened. The original email is quoted under *Original Message* and you have to specify the recipient in the *To:* field. You can edit and send your email as described in [Sending emails](#).

Printing an email

You can print an email by clicking *Print* in the *Action* menu of an email. This opens the print dialogue of your operating system. If you have a PDF utility installed, you can choose to print the email to a PDF file. The printed output contains the email and some additional information about the email entry, i.e., the date and time of the entry, the ticket number and subject, and the author of the entry.

C.3.4.6 Templates

Templates contain predefined text, e.g., a signature or a list of standard questions, which can be used in the rich text editor for comments and emails. The available templates depend on the individual configuration of your CM system, as templates are created and managed by your CM administrator or template manager.

To select a template while drafting a comment or email, click the *Add template* button. The available templates are displayed in a list **(1)**, which is grouped by the templates' groups and subgroups **(3)**. You can filter **(2)** the list by searching for a template. To do so, enter one or several keywords in the filter field above the template list. Only templates which contain the keywords in the template text, name or group/subgroup are displayed. Hover over a template name **(4)** to display the preview of the template **(5)**. You can select a template by clicking the template name in the list or by clicking the *Add template* button in the preview window.

The *Show templates suitable for this context* is selected by default. You can deselect it to display additional templates.

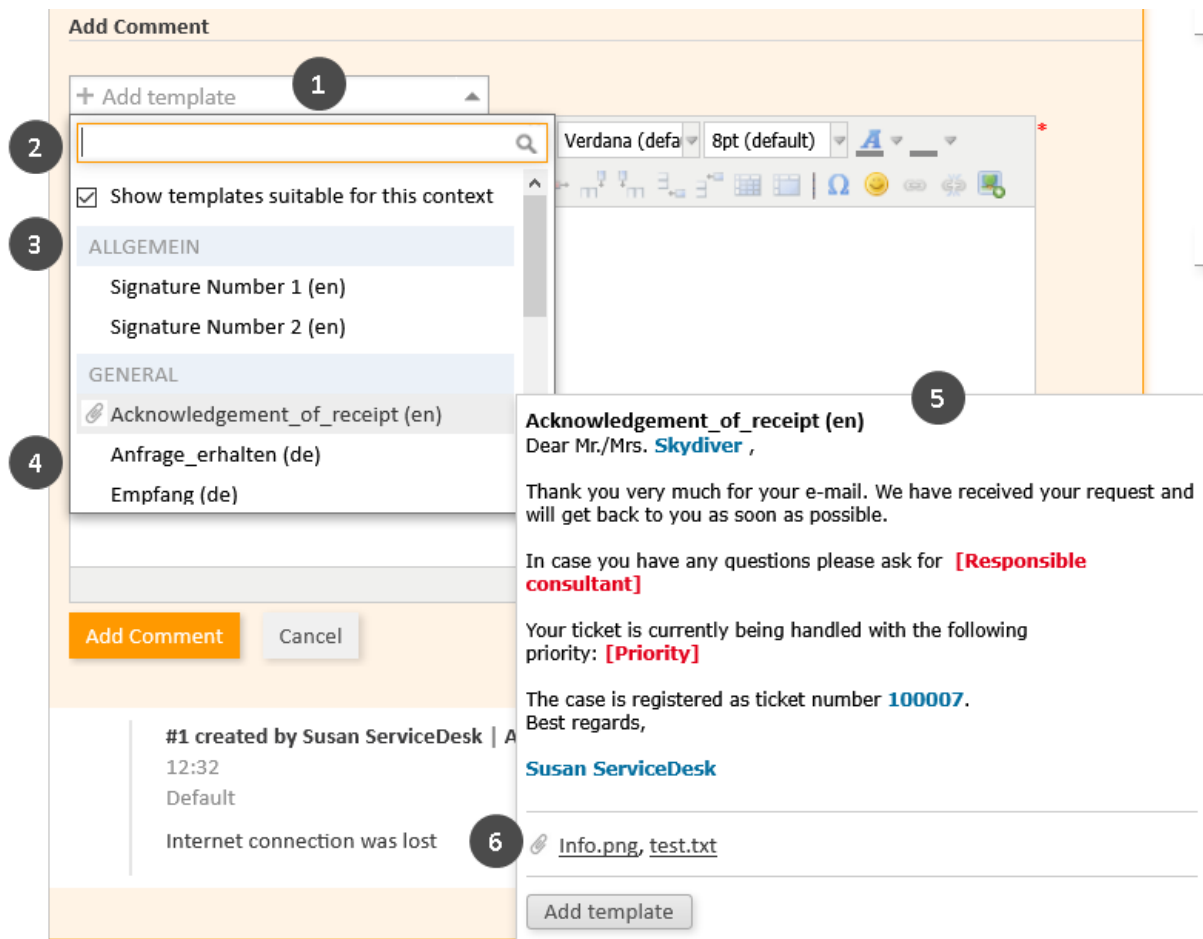


Figure 72: Selecting a template

Templates can include attachments. In this case a paper clip icon is displayed in front of the template name and the attachments are listed in the preview **(6)**. If you select such a template, the included attachments are automatically added to the ticket and selected for the comment or email. You can deselect them by clicking the X icon next to the attachment. If you accidentally deselected an attachment you can select it again in the *Add attachments* drop-down list.

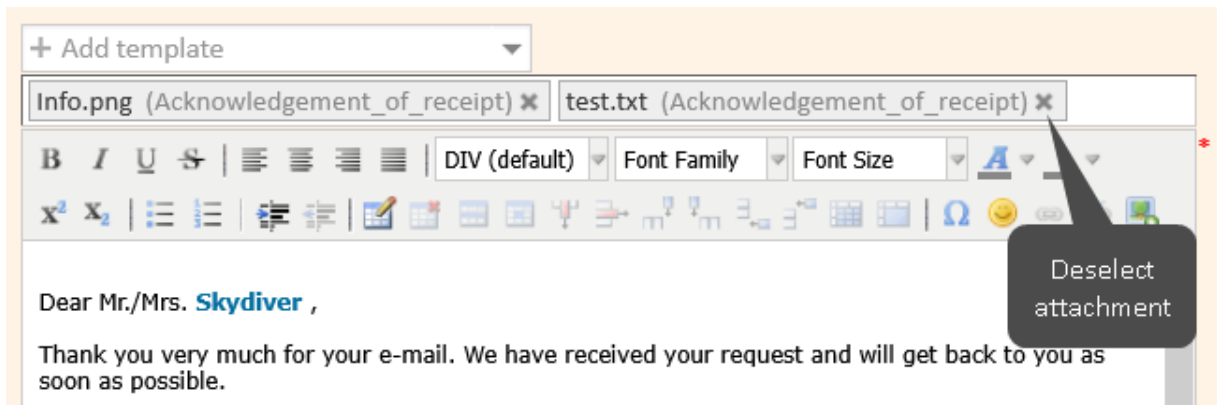


Figure 73: Template with attachments

The template is inserted into the rich text editor. Templates usually contain text, but they might also include variables, parameters, and text blocks. The following figure shows a template with these features. You can enter data in the section above the text, and you can edit the text using the rich text editor.

Figure 74: Template (not yet edited)

- **Variable (1)**

Variables have a blue font in the text area. In the above example, the template contains a variable to indicate the name of the main customer. The corresponding value, here “Skydiver”, is automatically retrieved and inserted into the text.

- **Parameters (2)**

Parameters have a red font in the text area. They are used as placeholders. The engineer has to specify the value for each field in the *Additional parameters* section. There are two types of parameters:

- **String parameters:** The engineer has to fill out the text field next to the parameter name. In the above example, *Consultant* is a string parameter.
- **Enum parameters:** The engineer has to select one of the values from the drop-down list next to the parameter name. In the above example, *Priority* is an enum parameter.

- **Text blocks (3)**

Text blocks have a green font in the text area. The engineer can select the text blocks he wants to include in the *Selected text blocks* section. In the above example, only one of the two available text blocks has been selected.



The email or comment you create does not include the colors. Therefore the variables, parameters, and text blocks cannot be distinguished from the rest of the text in the email or comment once it is finished.

The following figure shows the same template after the engineer has filled out the parameters.

Add Comment

Request_received

Additional parameters

Consultant

Priority

Selected text blocks

☐ Question Browser

☒ Question Operating System

+ Add template

B I U S | **Text alignment** | **Font** | **Background color** | **Table** | **Insert** | **Link** | **Image** | **More**

Dear Mr./Mrs. **Skydiver** ,

Thank you for your email. We received your request and will come back to you as soon as possible.

Please contact Mr. Smith if you have any questions.

The incident is registered as ticket number **100007** with priority normal.

Can you already tell us more about your computer?

Operating system:

Version:

Add Comment **Cancel**

Figure 75: Template (parameters filled out)

C.3.4.7 Attachments

Attachments are files that are attached to a ticket. You can find a list of all attachments in the [attachment section](#) below the history section.

ATTACHMENTS (1)						
Class	File type	Name	Description	Date	Added by	Action
Choose One	Choose One				Choose One	Apply filters Clear filters
Normal attachment	docx	Order.docx		2/23/17 2:10 PM	Susan ServiceDesk	Show in history

1 2

Figure 76: Attachment list in a ticket

The list of attachments provides the following information. You can filter the list using the drop-down boxes and text fields in the header.

- **Class**
Indicates the class of text applied to the attachment. You can click the icon of the current class of text to select a new one **(1)**.
- **File type**
Indicates the file type of the attachment.
- **Name**
Indicates the file name of the attachment. Click the file name to download the corresponding attachment **(2)**.
- **Description**
Indicates the description provided when the attachment was added, if any.
- **Date**
Indicates the date when the attachment was added.
- **Added by**
Indicates who added the attachment. This can be either an engineer (who uploaded the file) or a technical user (in case the file was attached to an incoming email).
- **Action**
Provides links to the available actions. These are:
 - **Apply filters**
Filters the list according to your selections in the header.
 - **Clear filters**
Removes the filter, i.e., displays all entries.
 - **Show in history**
Jumps to the history entry of the attachment, where you can perform additional actions. This option is only visible if the respective history entry is displayed based on the selected visibility setting.

Adding an attachment

To add an attachment, click the *Attachment* link in the header of the history section. The background of the history section turns yellow to indicate that it is in edit mode. If the section is already in edit mode, you can also add an attachment by clicking the *Attachment* tab.

Figure 77: Adding an attachment

Please proceed as follows to add an attachment:

1. Specify the files to be uploaded by either:
 - Dragging and dropping them into the white area.
 - Clicking into the white area to open a file browser dialogue and selecting the files.
2. The selected files are displayed in a list below the white area. Optionally, you can add a description in the *Description* field. Click the *Delete* link to remove a file from the list.
3. Click the *Add Attachment* button to upload the files to the ticket.

i Depending on the configuration of your CM system, only specific file types might be allowed as attachments. If you try to upload a non-allowed file type, a corresponding message will be displayed next to the upload field.

The attachments are then displayed in the attachment section and in the corresponding history entry (only shown when *Extended* or *Detail* is selected as [visibility level](#)).

Once an attachment has been added to a ticket, you can use it in an email.

Working with attachments

The history section contains both manually added attachments and attachments from incoming emails. You can perform additional actions for these attachments.

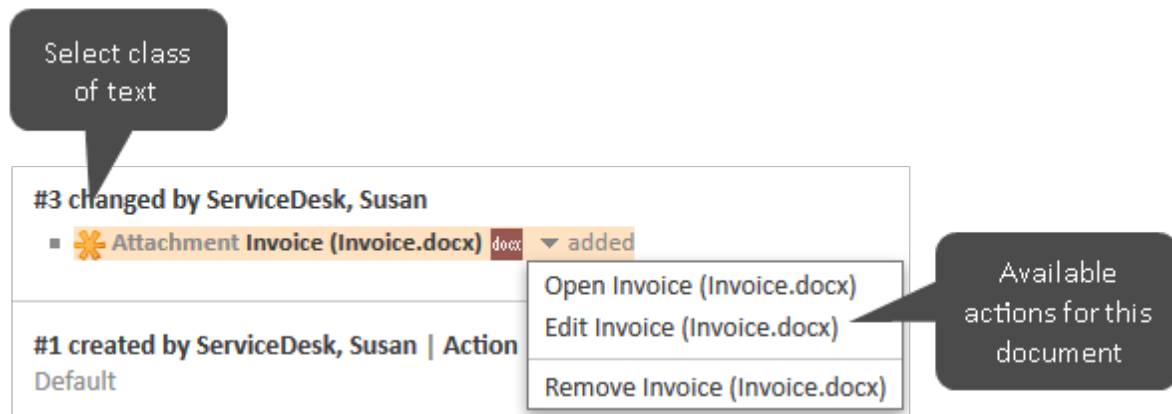


Figure 78: Actions for attachments

- **Select class of text**
Click the class of text icon to select another class of text.
- **Open**
Downloads the attachment.
- **Remove**
Removes the attachment (may be deactivated for attachments from incoming emails).
- **Edit** (only [CM/Doc](#))
Downloads the attachment and opens it. You can edit the file. The edited file is uploaded automatically once you click *Save* in Microsoft Word or OpenOffice.

i You need the necessary applications installed on your computer to be able to open attachments, e.g., Adobe Reader for PDF documents or Microsoft Word for DOCX documents. It depends on the individual configuration of your CM system if CM/Doc is available.

C.3.4.8 Document templates (CM/Doc)

About document templates

Document templates are managed using CM/Doc, an optional add-on that allows you to quickly create Microsoft Word or Open Office documents for the tickets you work on. The new documents are created based on document templates in Microsoft Word or OpenOffice formats.

i The available document templates depend on the individual configuration of your CM system, as templates are created and managed by your CM administrator or template manager.

You can use CM/Doc to create Microsoft Word or Open Office documents which you can attach to the ticket and/or send to the customer. The documents usually contain some predefined text and are pre-filled with data from the ticket (ticket data, customer data or engineer data).

Example


You want to create an invoice for a ticket concerning the purchase of a computer. To do so, you select the appropriate template. The document opened contains the standard invoice text and has a proper layout according to your company's corporate design. In addition, some data from the ticket are already filled in: The letterhead states the name and address of the main customer (who received the

computer), and the details of the purchase (purchased item and price) are mentioned in the text body. This way, you don't need to type everything but you can directly proceed to reviewing the document.

Requirements for using document templates

Your computer has to meet the following requirements to use document templates:

- Microsoft Windows operating system
- CM/Doc application installed
- Microsoft Word / OpenOffice application installed

 Ask your CM administrator for the supported Microsoft Windows, Microsoft Word and OpenOffice versions.


Installing CM/Doc

You need to install the CM/Doc application on your computer before starting to use document templates. To do so, please perform the following steps:

1. Go to the *Downloads* section of your [User profile](#).
2. Download the *CM/Doc Installer*.
3. Follow the instructions of the installation wizard to install CM/Doc on your computer.

If you use CM/Doc with OpenOffice, you need to configure the path to your OpenOffice installation:

1. If CM/Doc is not running yet, i.e., there is no CM/Doc icon in the system tray, start the CM/Doc application by selecting a document attachment.
2. Right-click the CM/Doc icon in the system tray and go to *Preferences -> Open Office*.
3. Select the location of your OpenOffice installation.

 If you use CM/Doc with Microsoft Internet Explorer or Microsoft Edge, some additional installation steps are required. Please contact your administrator for assistance.

Adding an attachment using CM/Doc

If CM/Doc is active in your system, you see the additional tab *Document*. The following figure shows the steps which you need to perform in the Web Client.

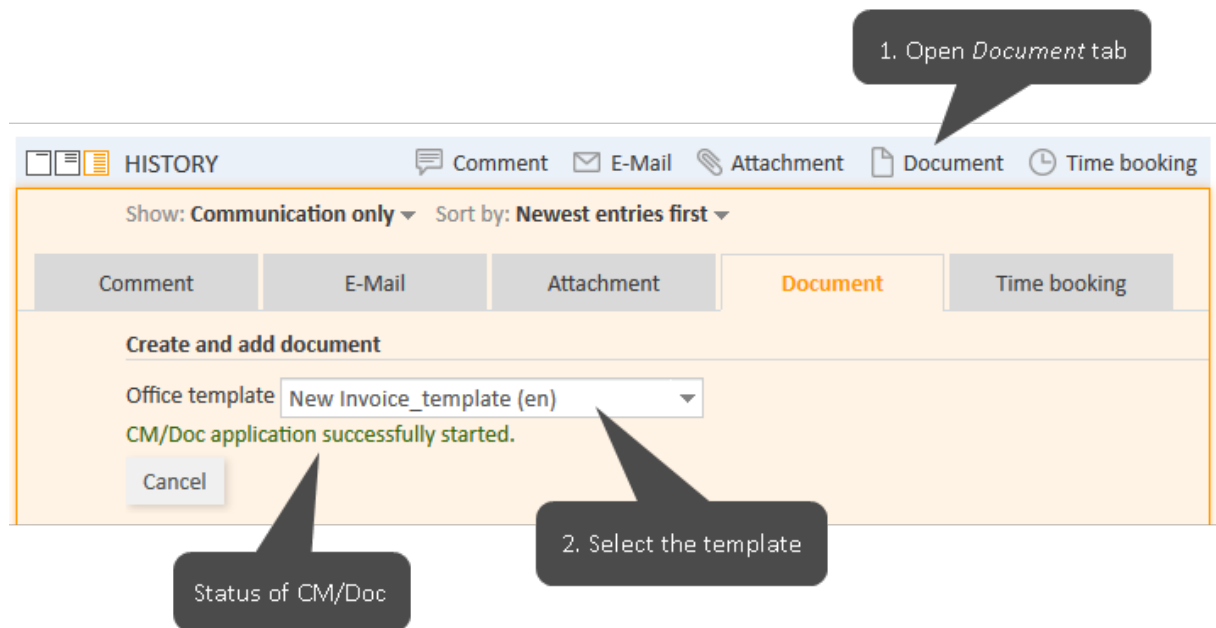


Figure 79: Adding an attachment using a document template

Please proceed as follows to upload an attachment using CM/Doc:

1. Open the *Document* tab.
2. Select the desired template from the *Office template* selector. If CM/Doc has not been running yet, it is started in the background. Below the selector, there is a message stating the status of CM/Doc.
3. The file is automatically opened in Microsoft Word or OpenOffice. Depending on the template, the file might already contain certain ticket or customer data, e.g., the name and address of the main customer or the ticket subject.
4. Edit the file and click *Save* in Microsoft Word or OpenOffice. The updated file is automatically added as an attachment to the ticket. You can find it both in the attachment section and in the history section.

Editing an attachment created using CM/Doc

You can edit an attachment using CM/Doc. To do so, please proceed as follows:

1. Go to the history section of the ticket and locate the entry with the attachment.
2. Open the context menu of the attachment and click *Edit*. The document is opened in Microsoft Word or OpenOffice.

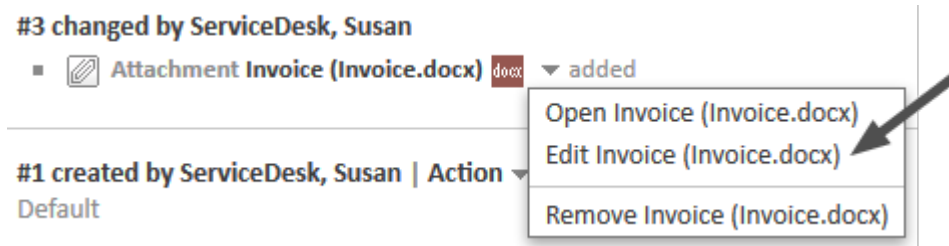


Figure 80: Link to edit an attachment using CM/Doc

3. Edit the document and click the *Save* button. The document is automatically uploaded to ConSol CM.

Notes on saving documents

Please bear in mind the following when you create or edit a document using CM/Doc:

- Please make sure to **only** use the *Save* command. Do not save the document using *Save as...* under a new name or to a new location. If you change name or location of the document, it cannot be added to the ticket as an attachment.
- There are two possible configurations for your CM system:
 - A new attachment is created every time you click the *Save* button.
 - A new attachment is created the first time you click the *Save* button. Every subsequent click on the *Save* button updates this attachment. This applies only if you do not close Microsoft Word or Open Office in between.

C.3.4.9 Time booking

You can book the time you spent working on a ticket to the ticket and assign those working hours to a project. To do so, click the *Time booking* link in the header of the history section. The background of the history section turns yellow to indicate that it is in edit mode. If the section is already in edit mode, you can also add a time booking by clicking the *Time booking* tab.

Figure 81: Adding a time booking

Fill out the duration of the time booking. There are two ways to do so:

- **Enter the duration manually (1)**
Select the date from the *Starting from* field, enter the starting time (optional) and enter the

Duration.

i Data entry formats for the field *Duration*

Proper data entry formats for the field *Duration*:

- Plain numbers are automatically interpreted as minutes (e.g., 20 is interpreted as 20 minutes and 120 as 2 hours).
- Minutes can also be indicated by “m” or “min” (e.g., 20 m or 20 min).
- Hours are indicated by “h” (e.g., 2 h).
- The format 01:05 (one hour and five minutes) or 00:25 (25 minutes) is also possible.

Improper data entry formats for the field *Duration*:

- Combinations of hours and minutes (e.g., 2 h 25 min is not possible).
- Decimal numbers or fractions are not possible (e.g., 1,5 h or 1.5 h is not possible).

• **Choose an action (2)**

Select the action from the *or* field (below the *Starting from* field). The menu might show you for example the duration since you logged in (action *Login*) or since you started editing the ticket (action *Ticket edited*). The date, time and duration fields will be filled out automatically with the respective time period.

i If you cannot see the drop-down menu for action selection, it has been deactivated by your CM administrator. In this case, you need to enter the starting time and duration manually.

Now, you have to **choose a project (3)** from the drop-down list *Project*. You can enter a comment (optional).

i It is not possible to change or delete a submitted time booking, but you can correct an incorrect time booking by a correction booking. To do so, you create a normal time booking and add a “-” (minus) in front of the duration of the booking. The correction booking will subtract the booked amount of time from the **overall time** booked on the regarding day.

The new time booking is displayed in the [time booking report](#) in your user profile

i Depending on the individual configuration of your CM system, automatic time booking might be enabled in your Web Client. This means that the time you spend creating a ticket or working with a ticket (using the rich text editor to add comments or write emails) is automatically booked to the ticket.

C.3.5 Additional engineers and approval processes

This chapter discusses the following:

- [Additional engineers](#)
- [Approval processes](#)

C.3.5.1 Additional engineers

Additional engineers are engineers who have a specific purpose, which is defined in your business process. Usually, an additional engineer has to carry out a certain task within the process or he has to be informed about the progress of the ticket. For example, additional engineers can be used in approval processes to assign the ticket to an approver if a customer refund exceeds a certain amount. Additional engineers have an engineer function which indicates their role/task in the process.

The additional engineers of a ticket are displayed in the [additional engineers section](#). If there is at least one additional engineer, the assigned engineer (if present) is displayed in this section as well. The assigned engineer's icon has a little soccer ball and a red label *assigned* after his name. The additional engineers are sorted by their engineer function and displayed below the heading corresponding to their function. If there is an [approval process](#) for this ticket, there can be various other symbols added to their icons.

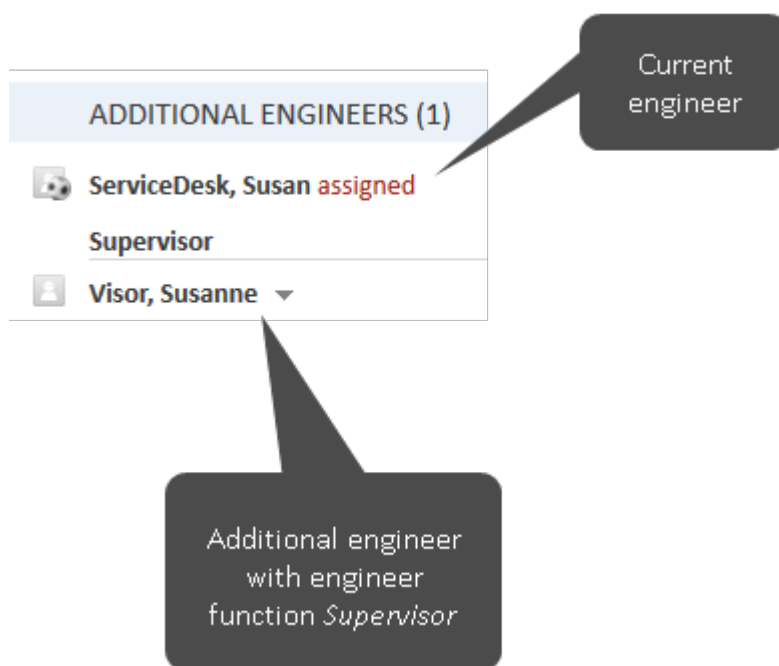



Figure 82: Additional engineers

Adding an additional engineer

You can manually add an additional engineer if you have the required permissions. Depending on the individual configuration of your CM system, additional engineers can also be added automatically during the business process.

To add an additional engineer, click the *Add* link in the upper right corner of the Additional Engineers section and proceed as follows:

1. Select the engineer. You can either open the drop-down list or use the [Autocomplete Search](#) to limit the suggestions.
2. Select the engineer function. Only the engineer functions which are available for the selected engineer are displayed.

 You can also choose the engineer function first to see only the engineers who have the selected engineer function.

3. Add a note (optional).
4. Click *Add engineer*.

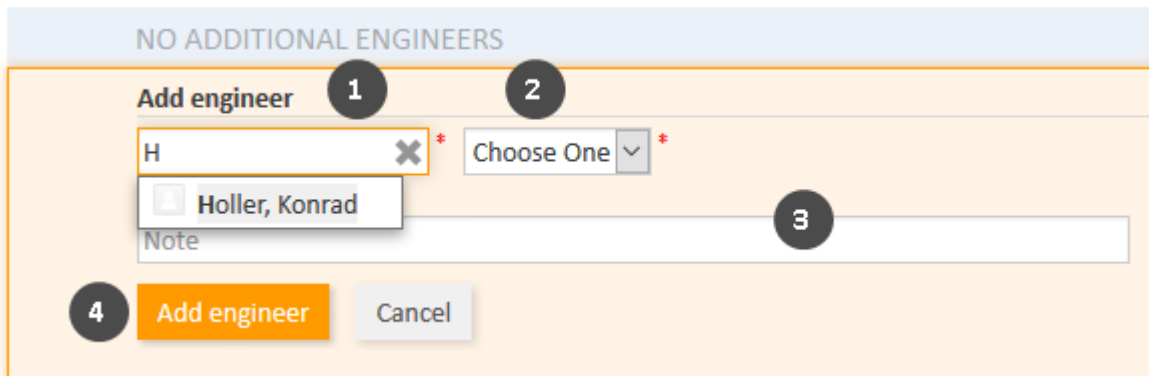



Figure 83: Adding an additional engineer

 The assigned engineer can also be added as an additional engineer provided he has the required engineer function.

Adding and editing the note of an additional engineer

You can add a note to the additional engineer by clicking the little arrow next to the engineer's name and clicking *Add note* in the context menu. If a note has already been added, the context menu entry is called *Edit note* and you can edit the existing note.

Assigning a ticket to an additional engineer

You can assign the ticket to the additional engineer by clicking the little arrow next to the engineer's name and clicking *Assign* in the context menu. The ticket is now assigned to the additional engineer, i.e., the additional engineer is now both the assigned engineer of the ticket and the additional engineer with the given engineer function. His icon is displayed with the little soccer ball.

Removing an additional engineer

To remove an additional engineer, click the little arrow next to the engineer's name and select *Remove* from the context menu. Click *Yes* to confirm the removal of the additional engineer. You cannot undo the removal once you confirmed it.



Removing an additional engineer might interrupt the business process, e.g., if the ticket is waiting for an approval and you remove the approver. Please only remove an additional engineer if you are sure that it is not needed anymore.

C.3.5.2 Approval processes

Some business processes include approval processes where an authorized person, i.e., the **approver**, takes a decision regarding the further processing of a ticket. For example, compensations to customers above a certain amount might need the approver's authorization.

The approver needs to be added as an additional engineer. This can either happen automatically, e.g., the engineer selects the workflow activity *Request approval* and the system automatically adds the approver as an additional engineer, or manually, e.g., the engineer adds an additional engineer with the engineer function *Approver*. The approver takes a decision, i.e., he either approves the request or declines it, and the engineer continues working on the ticket according to this decision.



The approver can take the decision either directly in the Web Client by clicking on the corresponding workflow activity or via email. It depends on the individual configuration of your CM system which options are available.

Depending on the status of the approval process, the approver's icon can have one of the following symbols:

	Decision is still pending
	Approved
	Declined

C.3.6 Relations to tickets and resources

You can create relations between tickets ([ticket relations](#)) and between tickets and resources ([resource relations](#)).

Ticket relations allow you to link several tickets concerning a similar problem. For example, you can link two tickets about the same problem with a printer.

Resource relations allow you to link your tickets to the resources which they concern. For example, you can link an incident ticket to the printer which caused the problem or a service ticket to the customer's SLA.

C.3.6.1 Ticket-ticket relations

This chapter discusses the following:

- [Introduction](#)
- [Types of ticket relations](#)
- [Adding a ticket relation](#)
- [Deleting a ticket relation](#)
- [Jumping to a related ticket](#)

Introduction

Ticket-ticket relations (for greater readability called *ticket relations* in this section) are used to create links between tickets. They are displayed in the [section for related tickets](#) (headline *Relations*). Ticket relations can be used to link similar tickets as a reference or to create dependencies. For example, you can link a ticket about a problem with a printer to another ticket concerning a similar problem or to several slave tickets representing tasks to fix the problem. The available ticket relations depend on the individual configuration of your CM system.

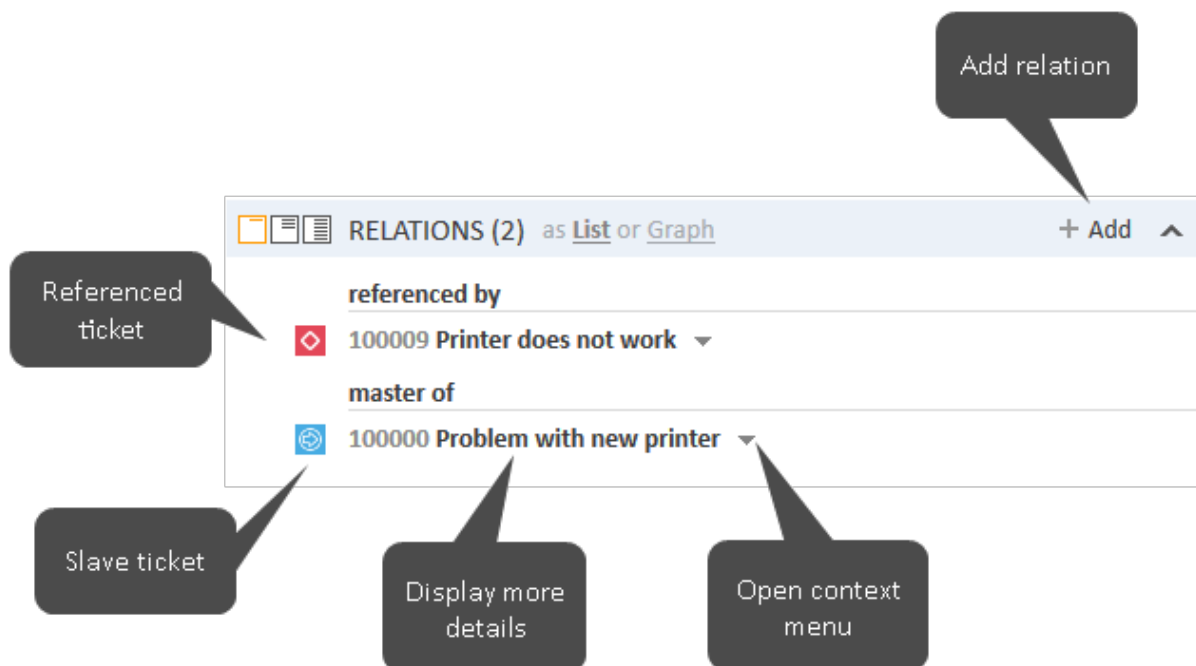



Figure 84: Examples of ticket relations

 You can also show a [relation graph](#) in this section.

Types of ticket relations

There are two kinds of ticket relations in the Web Client:

- **Reference relations**

These are non-hierarchical relations. A ticket can have any number of *reference* relations.

Example: You can create a reference relation between two support requests concerning a similar problem.

- **Hierarchical relations**

These relations have two hierarchical levels. Within one hierarchical relation, the ticket can be either the upper level or the lower level.

Example: Several child tickets are automatically created for a ticket which involves several tasks to be completed by different teams simultaneously.

There are two types of hierarchical relations:

- **master-slave relations**

The upper level of this relation is called *master ticket*, the lower level of this relation is called *slave ticket*. This relation is created manually. A ticket can have only one master ticket but any number of slave tickets.

- **parent-child relations**

The upper level of this relation is called *parent ticket*, the lower level of this relation is called *child ticket*. This relation is created automatically. As an engineer, you cannot add or remove this kind of relation. A ticket can have only one parent ticket but any number of child tickets.

The type of relation established between the current ticket with respect to the linked ticket is indicated by a red headline:

- **referenced by**

There is a reference relation between the two tickets.

- **master of**

There is a master-slave relation where the current ticket is the master of the linked ticket.

- **slave of**

There is a master-slave relation where the current ticket is the slave of the linked ticket.

- **parent of**

There is a parent-child relation where the current ticket is the parent of the linked ticket.

- **child of**

There is a parent-child relation where the current ticket is the child of the linked ticket.

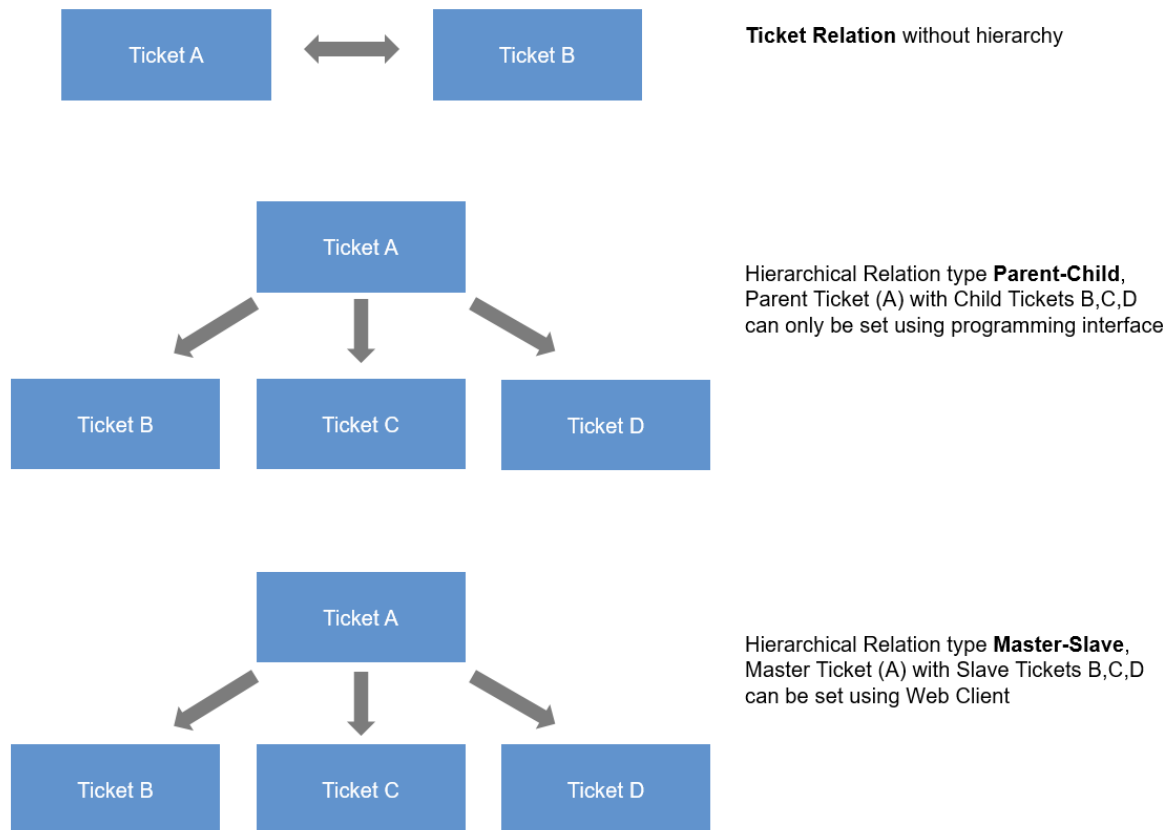


Figure 85: Ticket relations in ConSol CM

Adding a ticket relation

Please proceed as follows to add a new ticket relation.

1. Click the *Add* link in the upper right corner of the section for related tickets to add a new ticket relation. The background of the section turns yellow to indicate that it is in edit mode.
2. Use the [Autocomplete Search](#) to find the ticket which you want to link. Click the desired ticket to select it.
3. Choose the type of relation. You can click the *Back to search* button to return to the Autocomplete Search and select another ticket. Optionally you can add a note. Click *Add relation* to save the relation.



Note on selecting the type of relation

The type of relation always refers to the ticket that you select from the Autocomplete Search. Therefore, if you want the current ticket to be the master of the other ticket, you have to select *Slave*.

1 NO RELATIONS + Add ^

2 Add relation
Ticket name or subject Printer X Cancel
100009 Printer does not work
100000 Problem with new printer

3 Add relation
Add 100009 Printer does not work to this tickets
as Reference v
Note Reference
Master
Slave
Add relation Cancel Back to search

Figure 86: Adding a ticket relation

i You can also [add a ticket relation via drag-and-drop](#). Drag the icon of the desired target ticket from the ticket list, workspace, or favorites for this purpose. Once you have dropped the ticket icon into the section for related tickets, this section is opened in edit mode. The target ticket is already selected and you can directly select the type of relation.

Deleting a ticket relation

To remove a ticket relation, click the little arrow next to the name of the related ticket and select *Remove* from the context menu. Then, click *Yes* to confirm the removal of the relation. Note that the relation is also removed from the page of the related ticket. You cannot undo the removal once you confirmed it.

Jumping to a related ticket

To open the related ticket in your main working area, click the little arrow next to the name of the related ticket and select *Jump to ticket*.

C.3.6.2 Ticket-resource relations

This chapter discusses the following:

- [Introduction](#)
- [Adding a resource relation](#)

- [Editing the note of a resource relation](#)
- [Switching to the related resource](#)
- [Deleting a resource relation](#)

Introduction

Ticket-resource relations (for greater readability called *resource relations* in this section) can be used to link tickets to resources. For example, you can link an incident ticket to the printer which caused the problem or a service ticket to the customer's SLA. Resource relations are displayed in the [section for related resources](#) of the ticket. If no resource relations are set for the ticket, the section is collapsed. You can expand it to add a relation by clicking the arrow icon in the section header. If there is at least one relation, the *Show* filter is displayed, where you can choose to see all possible relations (*All relations*) or only the relations which are set for the ticket (*Only assigned relations*).

The layout depends on the selected visibility setting. The following figure shows the section for related resources with the visibility setting *Extended*. Each resource category is displayed in a box which contains the relations configured for this resource category. The resources are arranged below the name of the relation. Click the relation name to display the related resources. You can display further details about the resource by clicking the resource name. Click the small arrow button next to the resource name to open the context menu of the resource which allows you to delete the relation and jump to the resource page.

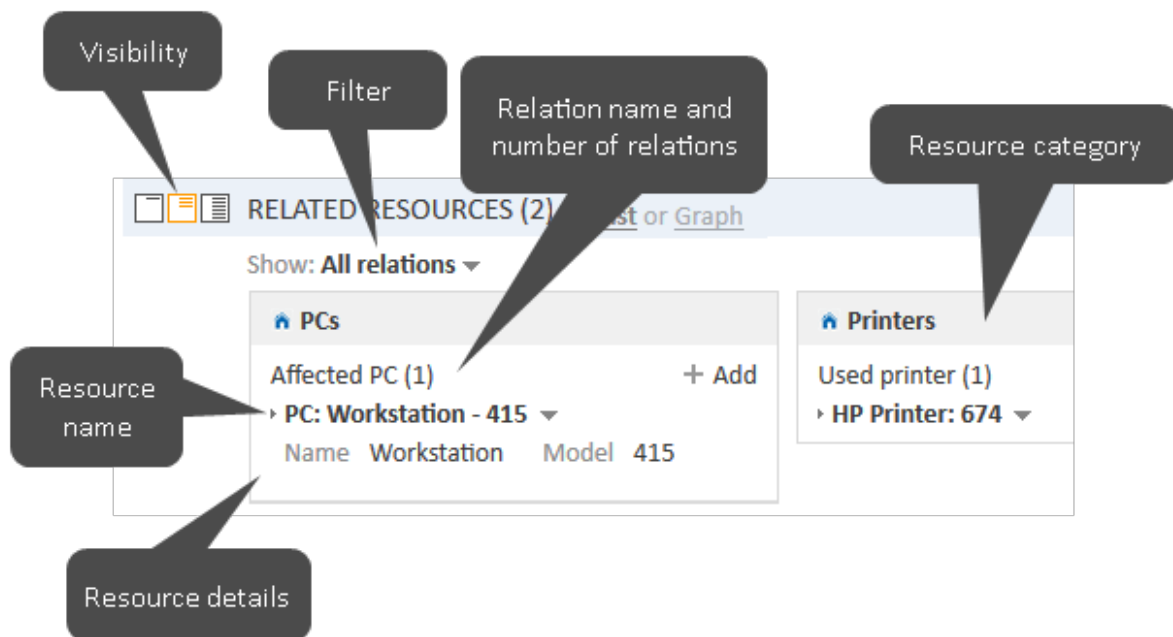



Figure 87: Resource relations

i You can also show a [relation graph](#) in this section.

You can create relations based on the relation models which are configured in your CM system. The following is defined for each relation model:

- The **resource type**, i.e., which kind of resources can be linked to the ticket.
- The **queue** which the tickets have to be in.

- The **cardinality** of the relation, i.e., if you can link several resources of the same resource type to the ticket, and if the same resource can be linked to several tickets.
- The availability of the *Note* field.

 Resource relations are only available if your CM system uses CM/Resource Pool. The available relations and their configuration depend on the individual configuration of your CM system.

Adding a resource relation

Please proceed as follows to add a new resource relation.

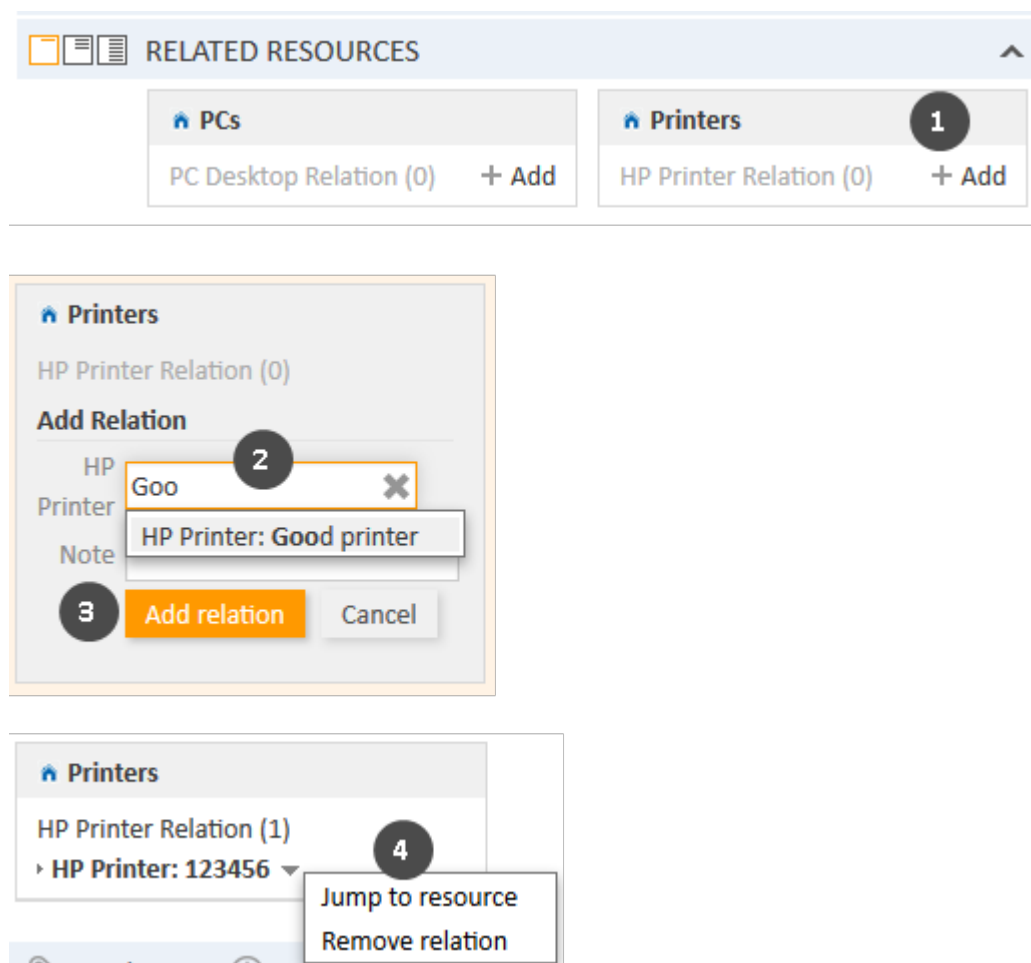


Figure 88: Adding a resource relation

1. Click the *Add* link next to the required relation name.
2. Start typing the name of the resource and select the desired resource from the suggestions of the [Autocomplete Search](#). Optionally, you can enter a note.
3. Click *Add relation*.
4. The resource is now linked to the ticket. You can click the link with the resource name to display further details about the resource. The amount of detail varies depending on the selected visibility level.

Editing the note of a resource relation

Click *Edit* next to *Note* to edit the relation's note. The *Edit* link is only displayed if you have selected the visibility level *Detail* (see [visibility level](#)).

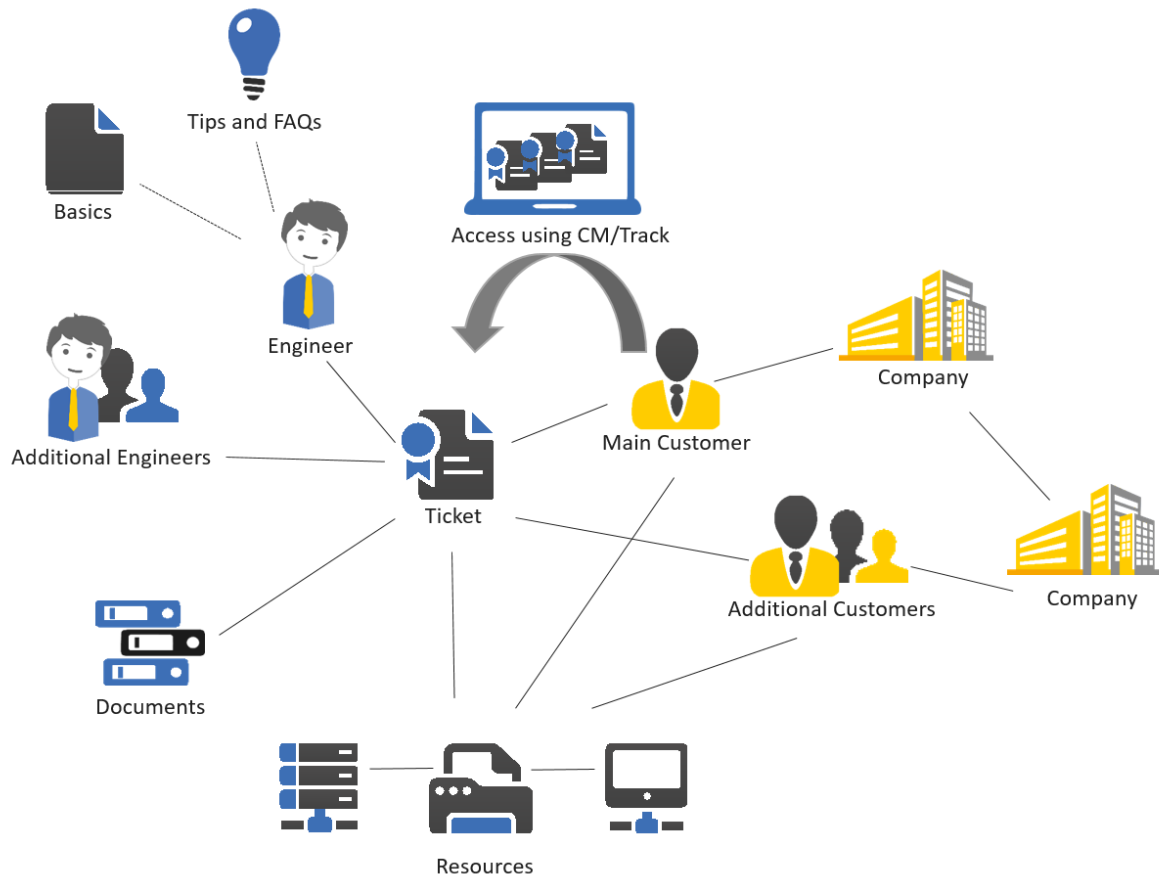
Switching to the related resource

You can view the corresponding [resource page](#) by clicking *Jump to resource* in the context menu.

Deleting a resource relation

Click *Remove relation* in the context menu to delete the relation. Then, click *Yes* to confirm the removal of the relation. Note that the relation is also removed from the page of the related resource. You cannot undo the removal once you confirmed it.

D - Customers



This section provides you with all the information you need to work with customers.

The meaning of the terms **customer**, **company**, **contact**, **customer group**, and **customer data model** within ConSol CM, the structure of a customer page and the display settings for them:

- [Basic knowledge about customers](#)
- [Structure of a customer](#)
- [Display settings](#)

All information about working with customer data, from creating new customers and customer relations to deactivating and deleting customers:

- [Working with customers](#)


D.1 Basic knowledge about customers


D.1.1 Terms and definitions

D.1.1.1 Customer

Customer is the generic term which designates the person or object that gave the reason for creating a ticket. The customer represents the external side of a ticket. A ticket always needs to have a customer as **main customer** (also called **main contact**). A customer always belongs to a [customer group](#). Depending on the [customer data model](#), a customer can either be:

- a **company**
The upper hierarchical level of a two-level customer model. A company can have several contacts.
- a **contact** (also called **person**)
The lower hierarchical level of a two-level customer model. A contact can only belong to one company.

 The terms **company** and **contact** have the sole purpose of illustrating the hierarchical model. A company does not have to be a real company, and a contact does not have to be a real person. They could be machines, products, or any other entity managed in ConSol CM. It depends on the individual configuration of your CM system which entities are managed as companies and contacts.

 It depends on the configuration of your ConSol CM system if a customer is called *customer* within your system. Customers might be called *contacts*, or similar in your Web Client. In this manual, the terms *customer*, *company* and *contact* will be used for your convenience.

D.1.1.2 Customer data model

The customer data model is the definition of the customer. There are two types of customer data models:

- **One-level customer data model**
Contains either companies or contacts, but not both of them.
- **Two-level customer data model**
Contains companies on the upper hierarchical level and contacts on the lower hierarchical level.

The customer data model also determines the available data fields and possible relations. There can be several customer data models within one CM system.

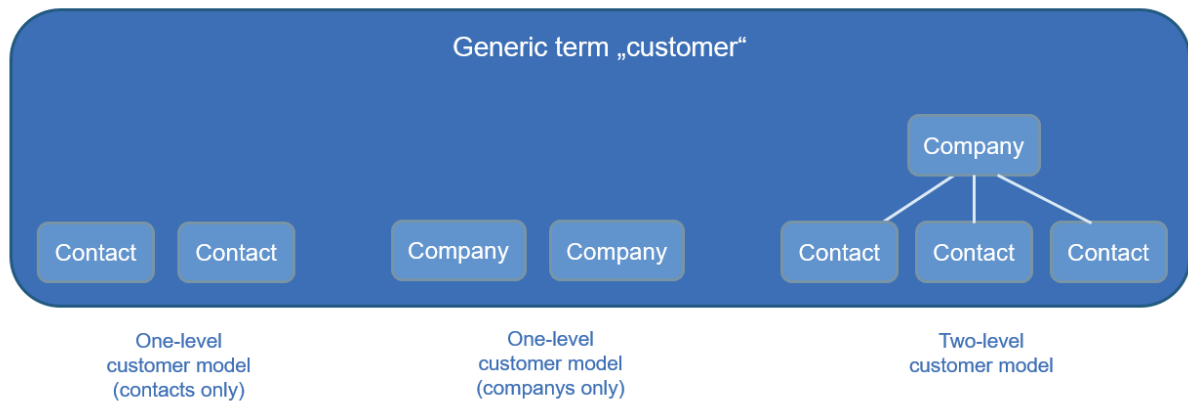


Figure 89: *Explanation of the terms: customer, company, and contact*

D.1.1.3 Customer group

The real customers, which are created using the Web Client, always belong to a customer group. The customer group determines which customer data model is used for its customers, i.e., which data fields are available and which relations and activities are possible for the customers. One CM system can have several customer groups to manage different kinds of customers within the same CM system. Engineers get access to customer data by customer group. They need at least read permissions for the customer group in order to see tickets whose main customer belongs to this customer group.



Each CM system uses customized customer groups and data models. Therefore, the available customer groups, hierarchical levels for customer objects, data fields, relations, and activities depend on the individual configuration of your CM system.

D.2 Structure of a customer

A customer page contains the customer data and additional information about this customer. Depending on the type of customer, there are *contact pages* and *company pages*. They can have up to nine sections:

- [Header \(1\)](#)
- [Details \(2\)](#)
- [Calendar \(3\)](#)
- [Tickets \(4\)](#)
- [Contacts \(5\)](#)
- [Comments and attachments \(6\)](#)
- [Related customers \(7\)](#)
- [Related resources \(8\)](#)
- [History \(9\)](#)



The availability of the sections, their order, their headlines and whether they are collapsed or expanded by default depend on the individual configuration of your CM system.

D.2.1 Example

1 Company Edit Create ticket Deactivate Transfer data Print Delete

2 **Spaceship Ltd** Reseller
Company name Spaceship Ltd

3 DETAILS Edit ^

4 **Service Contract Data** Internal responsibilities
Service level Gold
Contract start 9/10/18

5 CALENDAR + Add appointment Refresh ^

6 TICKETS (2) as [List](#) or [Graph](#) ^

Show: **Tickets of this company** ^ Status: **Open tickets** ^

Engineer	Main contact	Name	Subject
Sarah Service Desk	Spaceship Ltd	100011	Printer not functioning properly
	Spaceship Ltd	100010	Monitor problem

7 PERSONS (2) as [List](#) or [Graph](#) + Add ^

8 **Person**

- @ Skydiver, Mike
- @ Skydiver, Mia

9 NO COMMENTS AND ATTACHMENTS Comment Attachments ^

Comments Attachments

New
Click here to add a comment

List of comments
No comments added yet

7 NO RELATIONS + Add ^

8 RELATED RESOURCES (2) as [List](#) or [Graph](#) ^

Show: **Only assigned relations** ^

Printers	PCs
Reseller sells this printer (1) + Add	Desktops (1) + Add

9 HISTORY ^

9/3/18 10:00 changed by Susan ServiceDesk
Contract start changed from 3/29/17 to 9/10/18

Figure 90: Sections of a company page

D.2.2 Sections

i Please note that the different sections always are used for the purpose stated below, but the section headline might differ. The number in brackets next to the section headline indicates how many data entries this section contains.

D.2.2.1 Header (1)

The section headline, per default, is *Company* for company pages and *Contact* for contact pages. It contains the basic customer data. The customer name is displayed in bold font. On its left, the customer icon is displayed. Depending on the individual configuration of your CM system, there can be several icons for different types of customers and customer groups. The buttons provide access to several functions, see [Managing customers](#). Next to the customer name you see the name of the customer group which the customer belongs to.

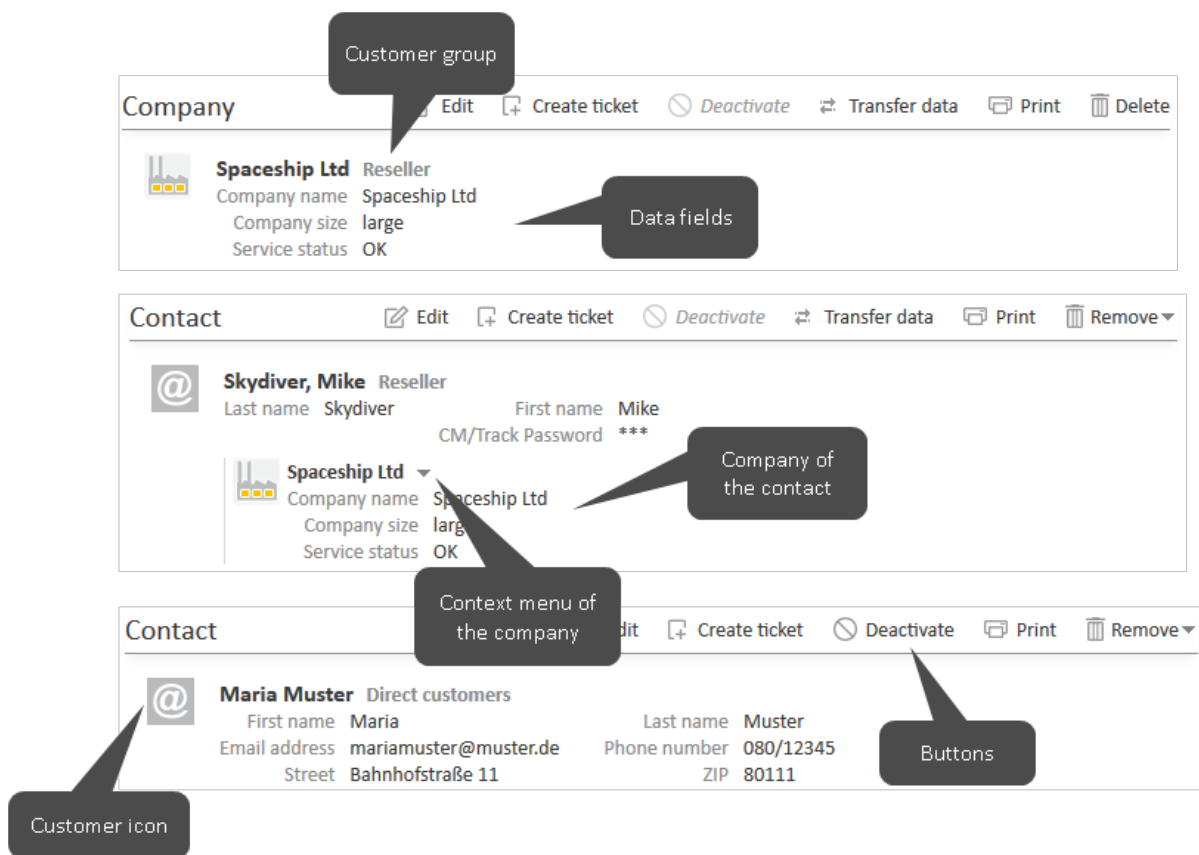


Figure 91: Header sections of customer pages

D.2.2.2 Details (2)

The section headline is usually *Details*. This section contains additional data fields with customer data. Each group has its own tab allowing you to access the data. Click the tab heading to switch to the group. To edit the group data, click the *Edit* link on the right (see [Editing customer data](#)).

D.2.2.3 Calendar (3)

The section headline is usually *Calendar*. This section shows the integrated calendar. It depends on the configuration of your individual CM system if the calendar feature is available. You can add an appointment or refresh the calendar using the links provided on the right. The calendar can be useful when you communicate with a customer: You see your own availability at a glance, so you can quickly schedule a phone call with the customer. Furthermore, you can directly add it as an appointment to your own calendar.

D.2.2.4 Tickets (4)

The section headline may be *Tickets*, *Cases*, *Calls*, or whatever tickets are called in your CM system. The number of tickets found with the current filter is stated in parenthesis. It contains a table listing all the tickets linked to the customer. If there is a column containing the ticket's main customer, you can click the name of the customer, which is a link, to open the respective customer page. In the same way, there can also be a column containing a link to the ticket. If you click another column, the ticket preview is opened within the tickets table. You can then open the ticket or switch to the preview of the next ticket in the list, see the following figure.

Depending on your system configuration, there might be two filters below the column headers. You can use the *Engineer* filter to display only the tickets which are assigned to a certain engineer, only the assigned tickets, or only the unassigned tickets. The *Queue* filter allows you to select the queue to display only tickets which are in a certain queue.



The filters are only displayed if the table has more than a defined number of entries. This number is a system-specific configuration. Please ask your CM administrator for exact information.

You can change the table columns and navigate between the pages. Please see [Adjusting tables](#) for further information. You can sort the ticket table by clicking a column header. This setting is saved. By default, i.e. if you have not defined a sorting, the tickets are sorted in descending order by creation date. In addition, you can open the ticket preview which always shows the ticket's last comment or email.

The following features are available:

The screenshot shows the 'TICKETS (4)' section on a customer page. The interface includes a header bar with 'TICKETS (4) as Luke Skywalker' (1), a 'Graph' button (2), and a collapse icon (3). Below the header, there are filters for 'Show: Tickets of Contact' (4) and 'Status: Open tickets' (5). A table lists tickets with columns for 'Main Customer', 'Name', and 'Subject'. The first ticket is for 'Skydiver, Mia' (ID 100009) with the subject 'Printer does not work'. The second ticket is for 'Mr Luke Skywalker' (ID 100002) with the subject 'Layout issues when printing'. A detailed view of the second ticket is shown, including a preview of the latest email from Luke Skywalker (6/7/8/9) and a list of attachments. Below the detailed view, there are two more tickets for 'Mr Luke Skywalker' (IDs 100001 and 100000) with subjects 'Test SpecTasks' and 'Problem with new printer' (10/11/12).

Main Customer	Name	Subject
@ Skydiver, Mia	100009	Printer does not work
Mr Luke Skywalker	100002	Layout issues when printing
Mr Luke Skywalker	100001	Test SpecTasks
Mr Luke Skywalker	100000	Problem with new printer

Figure 92: Tickets section on a customer page

- Choose the customer of the tickets to be displayed (1)
- Choose the status of the tickets to be displayed (2)
- Collapse the section (3)
- Open the column configuration (4)
- Show more details in the preview (5)
- Open the ticket in a new browser tab (6)
- Switch to the preview of the next result (7)
- Open a preview of the previous attachment (only attachments included in the last comment or email) (8)
- Open a preview of the next attachment (only attachments included in the last comment or email) (9)
- Open the ticket's main customer (10)
- Open the ticket (11)
- Open the preview for the ticket (12)

 You can also show a [relation graph](#) in this section.

Displayed tickets on a company page

The displayed tickets depend on your selection in the two filters:

- **Show**
 - **Tickets of Company:** Tickets where the company is either the main or an additional customer.
 - **Tickets of Company (main customer only):** Tickets where the company is the main customer.
 - **Tickets of Contacts:** Tickets where a contact of the company is the main customer or an additional customer.
 - **Tickets of Company and Contacts:** Tickets where the company or a contact of the company is the main customer or an additional customer.
- **Status**
 - Open tickets
 - Closed tickets
 - Open and closed tickets

Displayed tickets on a contact page


The displayed tickets depend on your selection in the two filters:

- **Show**
 - **Tickets of Contact:** Tickets where the contact is either the main or an additional customer.
 - **Tickets of Contact (main customer only):** Tickets where the contact is the main customer.
 - **All Tickets of Company:** Tickets where the company of the contact, the contact itself or another contact of the company is the main or additional customer.
- **Status**
 - Open tickets
 - Closed tickets
 - Open and closed tickets

D.2.2.5 Contacts (5)

This section only exists on company pages. The headline usually is *Contacts*. It contains the contacts which belong to the company. The number of contacts is stated in parenthesis. If you click a contact the respective contact page is opened automatically. Click the *Add* button to create a new contact for this company, please see [Creating a contact on the company page](#) for further information.

You can change the table columns and navigate between the pages. Please see [Adjusting tables](#) for further information.

 You can also show a [relation graph](#) in this section.

D.2.2.6 Comments and attachments (6)

The section heading is *Comments and Attachments*. This section has two tabs showing the comments and attachments added to the customer. The number in the headline refers to the sum of both comments and attachments. You can only see this section if you have the required permissions. Please see [Editing comments and attachments](#) for further information about working with comments and attachments.

D.2.2.7 Related customers (7)

The section heading can be *Relations*, *Related companies* or something similar. It contains the customer relations existing between this customer and other customers (both companies and contacts). Customer relations can be used to indicate for example that a company sells products to another company. The customer relations are arranged below the different types of relation (red font). After the name of the customer relation, the customer group and the type of customer (company or contact) is displayed. The available relations depend on the individual configuration of your CM system.

Please see [Customer-customer relations](#) for further information about working with customer relations. You can change the table columns and navigate between the pages. Please see [Adjusting tables](#) for further information.

 You can also show a [relation graph](#) in this section.

D.2.2.8 Related resources (8)

The section headline is usually *Related Resources*. This section shows the resources linked to the customer. It depends on the configuration of your individual CM system if resources are available. You can set the [visibility level](#) to determine how much information you want to see about each related resource. Please see [Customer-resource relations](#) for further information about working with resource relations.

 You can also show a [relation graph](#) in this section.

D.2.2.9 History (9)

The section headline is usually *History*. This section contains the customer history which shows all changes which were carried out for this customer. This includes changes to data fields, and the addition and removal of comments, attachments, relations and resources. The history section contains the date and time of the change, and the name of the engineer who carried out the change. The latter can also be a technical name in case of automatic changes.

D.3 Display settings

This chapter discusses the following:

D.3.1 Expanding and collapsing sections	178
D.3.2 Visibility level	179
D.3.3 Adjusting tables	180
D.3.4 Background color of the customer page sections	180

D.3.1 Expanding and collapsing sections

The customer page sections, except for the header, can be hidden, collapsed or expanded. If a section is collapsed you only see the section heading but not the content of the section. You can expand the section by clicking the down arrow on the right. To collapse a section and hide its content, click the up arrow. Your CM administrator determines whether customer page sections are hidden, collapsed, or expanded by default. You can collapse and expand sections while you are working with a customer but the default setting will be restored when you switch to another customer.

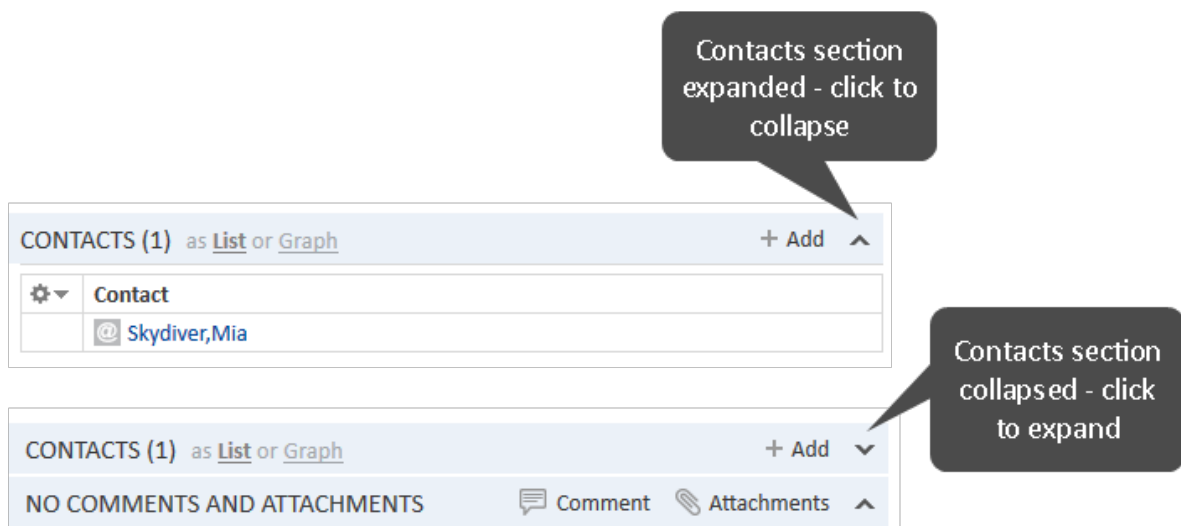


Figure 93: Expanding and collapsing customer page sections

D.3.2 Visibility level

The visibility level determines the degree of detail of the information displayed in a customer page section. It can be set only for the section for related resources.

There are three visibility levels:

- **Basic**
Basic degree of detail
- **Extended**
Extended degree of detail
- **Detail**
Maximum degree of detail

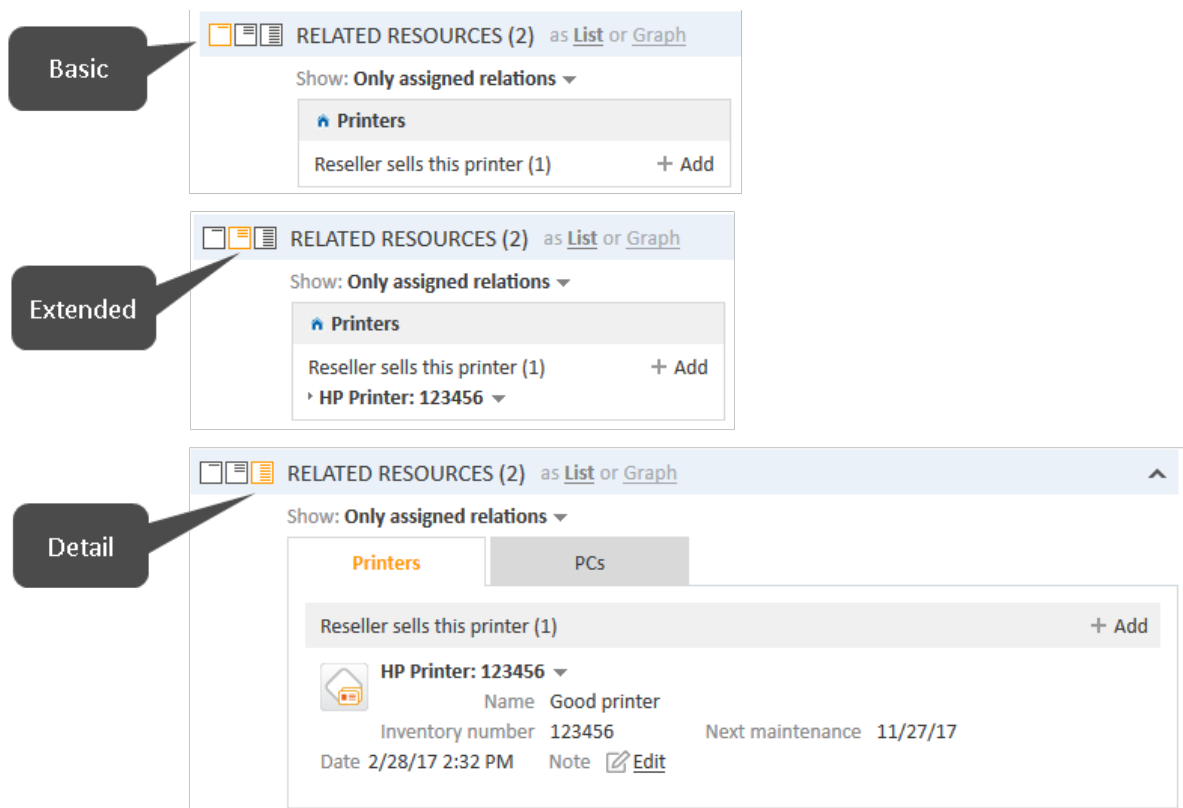


Figure 94: Setting the visibility level

D.3.3 Adjusting tables

Some customer page sections contain tables. You can adjust the table columns by clicking the little arrow next to the wheel icon. To remove a column, click the cross next to the column name. To add new columns, click in the white space next to the names of the displayed columns to see a list of all available columns, or start typing the column name, and click one of the suggested columns. Click *OK* to apply your changes. You can rearrange the columns within the table by dragging-and-dropping the column to the desired position.

If the list exceeds a predefined number of entries, it is split among several pages. You can select the number of entries per page at the bottom of the table and click the arrow buttons and page numbers to navigate the table.

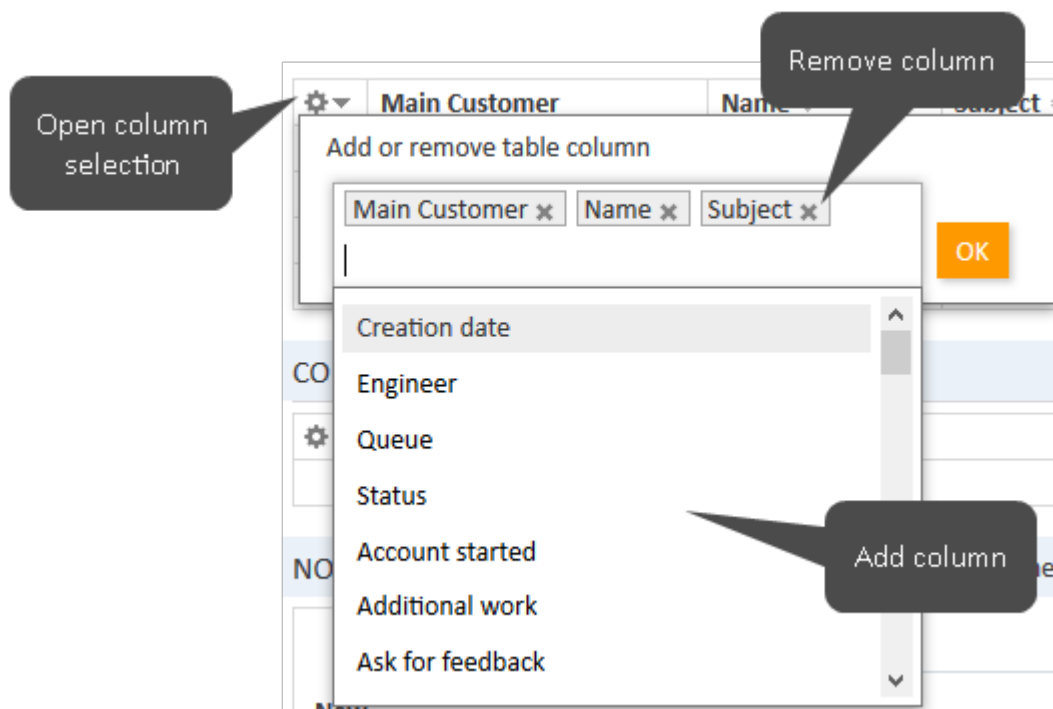


Figure 95: Selecting the table columns on a customer page

i ConSol CM saves your column selection. Even if you leave the customer page or log out of the system, the columns will be displayed as defined when you open the customer page again.

D.3.4 Background color of the customer page sections

As soon as you start editing customer data, e.g., changing data in the details section, adding a comment, adding a relation, the section background turns yellow to indicate that the section is in edit mode. Once you saved your changes, or canceled the operation, the background turns gray again to indicate that the section is in view mode.

D.4 Working with customers

Some engineers have roles which allow them to carry out certain activities on customers. Here are some examples of tasks you might perform:

- You create a new customer, see [Creating a customer](#).
- You edit the data of an existing customer, see [Editing customer data](#).
- You deactivate, delete or anonymize a customer, see [Making customers unavailable](#).
- You add a comment or attachment to a customer, see [Editing comments and attachments](#).
- You perform an action for the customer, see [Performing customer activities](#).
- You add a relation to another customer or to a resource, see [Relations to customers and resources](#).

It depends on your permissions whether you are allowed to perform one or several of these tasks. If you do not have the required permissions you can skip this chapter as it does not apply to you.

There are several places where you can work with customers:

- All actions are possible on the customer page.
- Within a ticket, you can edit customer data and activate/deactivate a customer.



Changes to customers are **global changes**. It does not matter whether they are done on the customer page or in a ticket, they always apply to the **whole CM system**. This means that the changes are visible in every ticket the customer is added to and on the customer page.

If you have access to more than one customer group, you can limit your work to a specific customer group, see [Customer group filter](#).

D.4.1 Creating a customer

If you have the required permissions, you can create a new customer in several places:

- In the main menu, see [Creating a customer from the main menu](#).
- In a ticket, see [Creating a customer within a ticket](#).
- On the company page, see [Creating a contact on the company page](#).

In addition to these standard locations, it might be possible to create customers using activities, e.g., on a resource or customer page. This depends entirely on the individual configuration of your CM system.


D.4.1.1 Creating a customer from the main menu

Figure 96: Creating a customer using the main menu (two-level customer model)

Please proceed as follows to create a new customer using the main menu:

1. Click *Create customer* in the main menu.
2. Select the customer group:
 - a. Limit the customer group globally throughout the system by selecting the desired customer group in the customer groups filter.
 - b. Click the tab of the desired customer group.


3. Provide the company (only two-level customer models):
 - a. Find an existing company by entering the company name. The Autocomplete Search will display matching companies as soon as you start typing the company name, see [Auto-complete Search](#).
 - b. Click the *Create* link to start creating a new company. Fill out the data fields and click *Create*.
4. Create the new contact by filling out data fields and clicking *Create*. The contact will be linked automatically to the company you selected or created above.

 If you work with a customer group with a one-level customer model, you skip step 3 as you only see one section, which corresponds either to the contact or company.


D.4.1.2 Creating a customer within a ticket

You can create a new customer within a ticket. In this case you can only create customers in customer groups which are assigned to the current queue of the ticket. Therefore the available customer groups depend on the ticket's queue and on your selection in the customer groups filter. Please proceed as follows to create a new customer within a ticket:

1. Remove the existing ticket customer by clicking the *Change* link in the customer's context menu (only existing tickets, see [Changing the main customer](#)).

 If you are creating a new ticket, the [customers section](#) of the ticket is empty and you can directly start the creation of a new customer.

2. Select the customer group:
 - a. Limit the customer group globally throughout the system by selecting the desired customer group in the customer groups filter.
 - b. Click the tab of the desired customer group.
3. Provide the company (only two-level customer models):
 - a. Find an existing company by entering the company name. The Autocomplete Search will display matching companies as soon as you start typing the company name, see [Auto-complete Search](#).
 - b. Click the *Create* link to start creating a new company. Fill out the data fields and click *Create*.
4. Create the new contact by filling out data fields and clicking *Create and select*. The contact will be linked automatically to the company you selected or created above.

 If you work with a customer group with a one-level customer model, you skip step 3 as you only see one section, which corresponds either to the contact or the company.

D.4.1.3 Creating a contact on the company page

In a [two-level customer model](#) you can create a new contact for an existing company on the company page. Please proceed as follows:

1. Open the company page.
2. Click the *Add* link in the [contacts section](#).
3. Fill out the data fields and click *Save changes*. The new contact will be linked automatically to the company.

The screenshot shows the 'Company' page for 'Spaceship Ltd' (Reseller). The page includes a 'DETAILS' section, 'TICKETS (4)', and 'CONTACTS (1)'. An arrow points from the '+ Add' link in the 'CONTACTS (1)' section to a modal form for creating a new contact.

Company Details:

- Spaceship Ltd** (Reseller)
- Company name: Spaceship Ltd
- Company size: large
- Service status: ok

CONTACTS (1) as List or Graph

Contact Form:

- ☐ VIP?
- Last name:
- First name:
- E-mail:
- Phone:
- CM/Track Login:
- CM/Track Password:
-
-

Figure 97: Creating a contact on the customer page

D.4.1.4 Filling in the data fields

Please see [Data fields](#) to learn how to fill in the standard data fields.

i Some of the fields might activate the [Autocomplete Search](#) to check if there is already a matching customer. In this case, you can select one of the suggestions to open the respective customer page. Alternatively, you can ignore the suggestions and create the customer with the desired data

Nevertheless, if [CM/Track](#) is active in your system, there are some special data fields:

- **CM/Track login data (1)**

The names of these data fields depend on the individual configuration of your CM system, but there is usually one field for the user name and one field for the password. Fill out these fields with the values which the customer should use to access CM/Track.



The user name has to be unique. Every customer in your CM system needs to have a different user name. For security reasons, the password is displayed as dots and its value is not written to the ticket history.

- **CM/Track user profile (2)**

This drop-down list is called *Track user*. Select the user profile which should be used to grant access to CM/Track. If you don't make a selection here, the customer cannot use CM/Track.



The *Track user* field is only available if your system is configured for manual selection of the CM/Track user profile. If the field is not available, the user profile is assigned automatically or CM/Track is not used.



Your CM system can be configured to allow CM/Track access only for specific customer groups. In this case, the CM/Track login data fields may only be available in some of the customer groups.

Contact

@

Last name First name

E-mail Phone

☐ VIP?

1 CM/Track Login CM/Track Password

2 Track user

Create

Figure 98: Data fields for CM/Track



The *Track user* field might be visible, although CM/Track is not active in your system or not configured for the current customer group. In this case, you can simply ignore the field.

D.4.2 Managing customers

This chapter discusses the following tasks related to customers:

- [Accessing existing customers](#)
- [Editing customer data](#)
- [Associating a contact with another company](#)
- [Adding attachments](#)
- [Adding comments](#)
- [Printing a customer page](#)
- [Performing customer activities](#)
- [Creating a ticket for the customer](#)
- [Transferring data to another customer](#)
- [Deactivating a customer](#)
- [Deleting a customer with Delete \(keep related data\) / Delete](#)
- [Anonymizing a contact](#)
- [Deleting a contact with Delete \(with all related data\)](#)
- [Making customers available again](#)



Changes to customer data are always **global** changes, i.e., it does not matter where you carry out a change, it will always affect all places where this customer is used (customer page and tickets). This is because ConSol CM keeps the customer data in a central customer database.

D.4.2.1 Accessing existing customers

If you want to see all details about a customer, you have to open its customer page. There are several ways to access the customer page of an existing customer:

- Opening a customer page from the [customers section](#) of a ticket.
- Opening a customer page using the link in the [ticket list](#).
- Searching for a customer using the [Quick Search](#) or the [Detailed Search](#).
- Opening a contact page using the link in the [contacts section](#) of a company page.
- Opening a company page using the *Jump to company* link in the context menu of a company in the header section of a contact page.
- Opening a customer page via a relation (e.g., in the section for related customers of a [resource page](#), or in the [section for related customers](#) of another customer page).

D.4.2.2 Updating customers

Editing customer data

You can edit customer data using the *Edit* button in the [header section](#) or the *Edit* button in the [details section](#) provided that you have the required permissions.

Figure 99: Editing customer data

- (1) Click the *Edit* button in the header section of the customer.
- (2) Click the *Edit* button in the upper right corner of the details section.

The section's background turns yellow to indicate that it is in edit mode. Edit the customer data as required (see [Data fields](#) for details about the different types of data fields). Click *Save changes* to save the new data. The section background turns gray again (view mode).

i You can also edit customer data within a ticket where the customer is added as the main customer or as additional customer (see [Editing customer data](#)).

Associating a contact with another company

If a contact is linked to the wrong company, you can fix this on the contact page. There you can change the company which a contact belongs to.

To do so, please proceed as follows:

1. Open the contact page and click the *Change* link in the context menu of the associated **company**.
2. Provide the desired company:
 - a. Start typing the company name and select one of the suggestions from the [Auto-complete Search](#).
 - b. Click the *Create* link to create a new company (see [Creating a customer](#)).

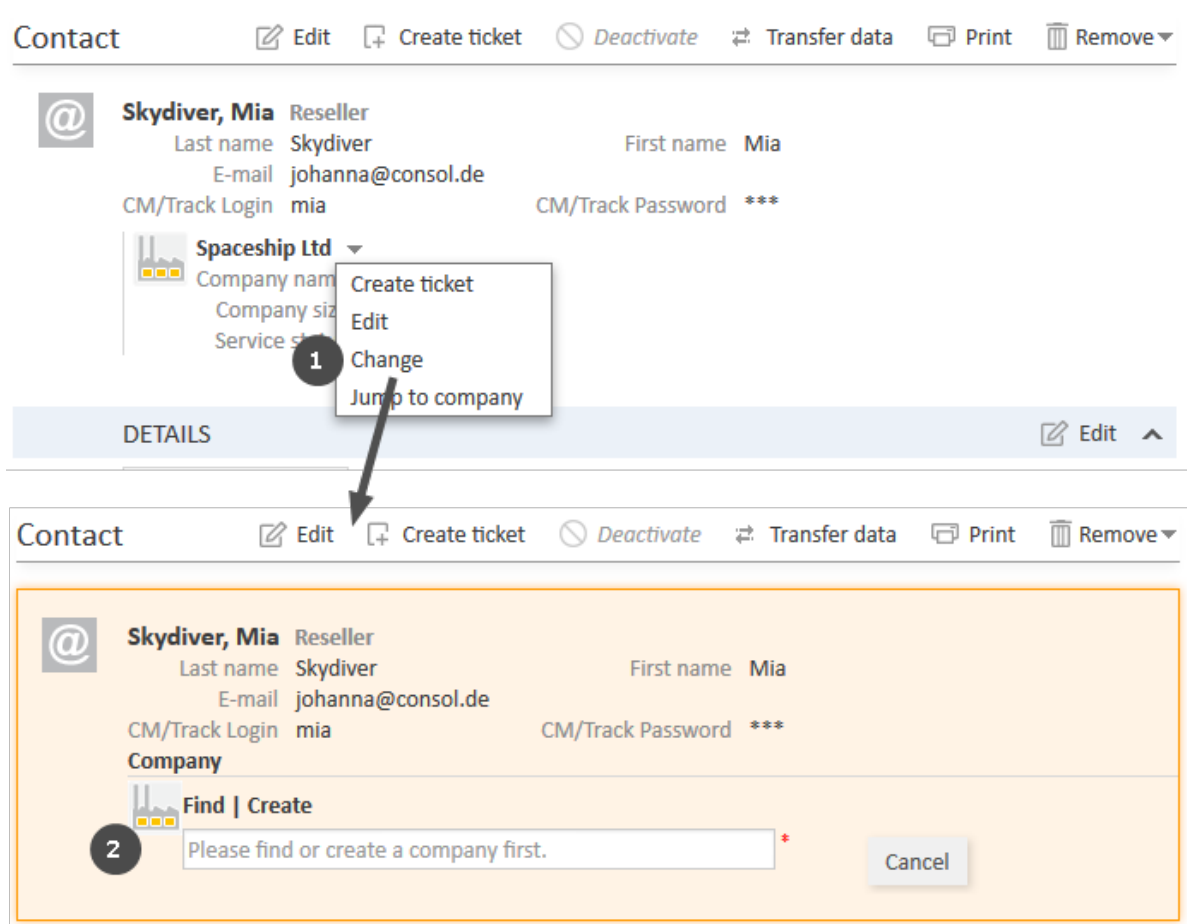


Figure 100: Changing the company of a contact

Editing comments and attachments

The [comments and attachments section](#) of the customer page allows you to add comments and attachments to the customer. The respective permissions are granted independently from the permissions to read and write customer data, so it is possible that you cannot view or edit this section.

You can use the comments and attachments section to collect information about the customer which is not related to a specific ticket, e.g., adding the customer's service contract as an attachment, or writing a comment about the best way to contact the customer.

Adding attachments

To add an attachment, click the *Attachment* link in the header of the section. The section background turns yellow to indicate that it is in edit mode. If the section is already in edit mode, you can also add an attachment by clicking the *Attachment* tab.

NO COMMENTS AND ATTACHMENTS

Comments Attachments

New

1 Drop files or click to select files

2

File Order.docx Delete

Description

File CM6-Release-Notes-6.10.5.pdf Delete

Description

3

List of attachments

This contact does not have any attachments.

Figure 101: Adding an attachment

Please proceed as follows to add an attachment:

1. Specify the files to be uploaded by either:
 - Dragging and dropping them into the white area.
 - Clicking into the white area to open a file browser dialogue and selecting the files.
2. The selected files are displayed in a list below the white area. Optionally, you can add a description in the *Description* field. Click the *Delete* link to remove a file from the list.
3. Click the *Add* button to upload the files to the customer page.

The attachments are then displayed in the list of attachments below (still empty in the above figure).

The list of attachments provides the following information. You can filter the list using the drop-down boxes and text fields in the header:

- **File type**
Indicates the file type of the attachment.
- **Name**
Indicates the file name of the attachment. Click the file name to download and open the attachment.
- **Description**
Indicates the description provided when the attachment was added, if any.
- **Date**
Indicates the date when the attachment was added.

- **Added by**

Indicates who added the attachment. This can be either an engineer (who uploaded the file) or a technical user (in case the file was automatically uploaded by the system).

- **Action**

Provides links to the available actions. These are:

- **Apply filters**

Filters the list according to your selections in the header.

- **Clear filters**

Removes the filter, i.e., displays all entries.

You can delete an attachment by clicking the cross on the right. Click *OK* in the red field to confirm the removal of the attachment. You cannot undo the removal once you confirmed it.



The possible file formats, maximum file size, and whether attachments are searchable depend on the individual configuration of your CM system.

Adding comments

To add a comment, click the *Comment* link in the header of the section. The section background turns yellow to indicate that it is in edit mode. If the section is already in edit mode, you can also add a comment by clicking the *Comment* tab. Enter the comment and click *Add*. The comment is then displayed in the list of comment below.

The list of comments provides the following information. You can filter the list using the drop-down boxes and text fields in the header:

- **Date**

Indicates the date when the comment was added.

- **Added by**

Indicates who added the comment. This can be either an engineer (who entered the comment) or a technical user (in case the comment was automatically created by the system).

- **Comment**

Shows the comment.

- **Action**

Provides links to the available actions. These are:

- **Apply filters**

Filters the list according to your selections in the header.

- **Clear filters**

Removes the filter, i.e., displays all entries.

You can delete a comment by clicking the cross on the right. Click *OK* in the red field to confirm the removal of the comment. You cannot undo the removal once you confirmed it.

Printing a customer page

You can print a customer page by clicking the *Print* link in the upper right corner of the customer page. A pop-up window is displayed where you can select the desired printer.

D.4.2.3 Performing customer activities

Customer activities allow you to perform certain actions for the current customer. You can find them in the *Activities* box next to the open customer page. Depending on the availability for a company or a contact, the activity is called *company activity* (company action) or *contact activity* (contact action). Click the desired activity to perform the corresponding action.

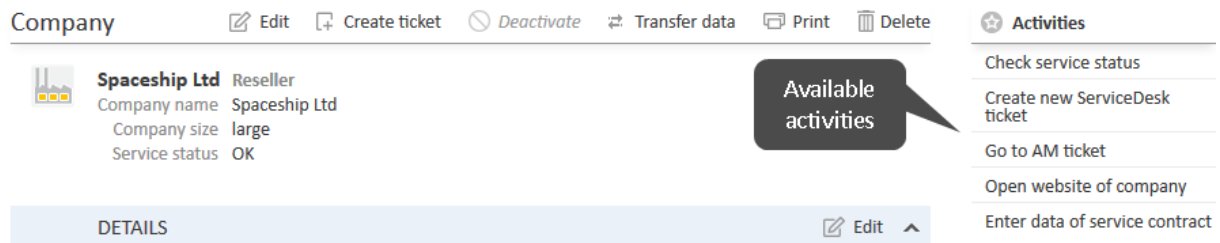



Figure 102: *Company activities*

Examples for customer activities are:

- Create a new ticket for the contact.
- Open the company's website.
- Load customer data from an external source.

Customer activities can have a form which needs to be filled out before proceeding. See [Forms for activities](#) for further information.

 The available customer activities depend on the type of customer (company or contact), his customer group, and the individual configuration of your CM system. You can only perform customer activities if you have the required permissions to perform activities for this customer group.


D.4.2.4 Managing the customer's tickets

Creating a ticket for the customer

The customer page provides a convenient way to create a new ticket for this customer. Please proceed as follows:

1. Open the customer page.
2. Click the *Create ticket* button in the header section.
3. Fill out the required data on the *Create ticket* page and click *Create*.
 - a. The current customer is already selected as the main customer of the new ticket.
 - b. You can only select queues to which the customer group of the current customer is assigned.

Please see [Creating a ticket](#) for further information about ticket creation.

 The *Create ticket* option is not available for companies in two-level customer models where tickets can only be created for contacts.


Transferring data to another customer

You can transfer the data of one customer to another customer. This is necessary for example if you want to deactivate or delete the customer. It depends on the type of customer which data is transferred:

- **Contacts:** Only tickets (if you reach this screen after clicking the *Delete* button, resources are transferred as well)
- **Companies:** Tickets, contacts, and resources

Please proceed as follows:

1. Open the customer page.
2. Click the *Transfer data* button in the header section.
3. Select the customer who should receive the data using the [Autocomplete Search](#).

 The checkbox *Transfer only open tickets* determines if you transfer only open tickets (checkbox selected) or both open and closed tickets (checkbox not selected). Select the checkbox if you want to **deactivate** the customer afterwards. Leave it unchecked if you want to **delete** the customer, as you have to move **all** tickets in this case.

4. Click *Transfer data and continue*. The new customer will replace the previous customer in the tickets of the selected state (open / open and closed). This applies both to tickets where the customer is the main customer and to tickets where the customer is an additional customer. In case of a company, the new company also receives the contacts and the resources of the previous company. In case of a contact which should be deleted, resources are transferred as well as tickets.

Contact Edit Create ticket Deactivate Transfer data Print Remove

Skydiver, Mia Reseller
 Last name Skydiver First name Mia
 E-mail johanna@consol.de
 CM/Track Login mia CM/Track Password ***

Spaceship Ltd
 Company name Spaceship Ltd
 Company size large
 Service status OK

Contact Edit Create ticket Deactivate Transfer data Print Remove

Transfer data
 Please select another person as target to transfer the tickets (7) and resources (1).

@ Mike x
 Skydiver, Mike

Transfer only open tickets ☐

Transfer data and continue Cancel

Figure 103: Transferring tickets to another customer



If you use the *Transfer data* option, only data for which the current user has access permissions is transferred. If you transfer data because you are deleting the customer, all customer data is transferred.

D.4.2.5 Making customers unavailable

There are several ways to make customers unavailable and/or remove customer data. The appropriate option depends on your use case.

Option	Use case
Deactivate	The customer is inactive. He has no open tickets and should not be used for new tickets. Nevertheless, you want to keep his data and you might want to reactivate him later.
Delete (keep related data)	You do not need the customer anymore. He has no tickets and is not going to be used anymore.
Anonymize	The contact has requested that all his data should be removed according to GDPR (General Data Protection Regulation). You still need the contact for reports though.
Delete (with all related data)	The contact has requested that all his data should be removed according to GDPR (General Data Protection Regulation). He is not needed for reports anymore.



These actions cannot be undone except for deactivating the customer.

Deactivating a customer

The following table provides a summary of the preconditions and implications of deactivating a customer:

	Deactivating a customer
Type of customer	Company or contact
Preconditions	<ul style="list-style-type: none"> • The customer must not be the main customer of any open ticket. • Company in a two-level model: The contacts of the company must not be the main customer of any open ticket.
Reversal	Can be undone by reactivating the customer.
Implications	<p>The following actions are not possible anymore:</p> <ul style="list-style-type: none"> • Creating tickets for the customer • Assigning tickets to the customer • Assigning a deactivated contact to another company • Assigning contacts to a deactivated company • Searching for the customer using the Quick Search, Autocomplete Search, and Detailed Search without the option <i>Deactivated incl.</i> <p>The following actions are still possible:</p> <ul style="list-style-type: none"> • Finding the customer using the option <i>Deactivated incl.</i> in the Detailed Search • Finding the closed tickets of the customer in the Quick Search, Detailed Search, and Autocomplete Search by entering the customer name • Editing customer data • Reactivating the customer • Transferring the closed tickets of the customer • Performing activities for the customer • Deleting the customer

You can deactivate a customer on his customer page. The preconditions for deactivating the customer (see table) have to be met and you need the corresponding permission.

Please proceed as follows:

1. Open the customer page of the customer.
2. Click the *Deactivate* button in the header section.
3. The customer is deactivated. If you deactivate a company, all the contacts of the company are also deactivated.

Deleting a customer with *Delete (keep related data)* / *Delete*

The following table provides a summary of the preconditions and implications of deleting a customer. For contacts, this option is called *Delete (keep related data)* and for companies it is called *Delete*.

	Deleting a customer (keep related data)
Type of customer	Company or contact
Preconditions	The customer must not be the main customer or an additional customer of any ticket (both open and closed).
Reversal	Cannot be undone.
Implications	<ul style="list-style-type: none"> • No actions are possible. • Neither the customer himself nor his tickets can be found by entering the customer name. • Some references to the customer can remain in the history of other objects, e.g., the tickets which were transferred to another customer, related customers or resources.

You can delete a customer on his customer page, provided that you have the required permissions.

Please proceed as follows:

1. Open the customer page, i.e., the company or the contact page.
2. For contacts: Click the *Remove* button in the header section and select *Delete (keep related data)*.
For companies: Click the *Delete* button in the header section.
3. If the customer still has (open or closed) tickets or related resources, you need to transfer this data to another customer (see [Transferring data to another customer](#)). In case of a company, the contacts belonging to the company have to be transferred as well.
4. The customer is removed from the system. A reference regarding the data transfer remains in the ticket history (see following figure).

4/26/16 10:32

#1 created by Susan ServiceDesk | Action ▾
default class

Keyboard does not work

- Main customer changed from Skywalker,Mara to **Skywalker,Luke**
- Time booking added: 4/26/16 10:30 AM Duration: 00:01
- Mark without SLA has been triggered
- Reaction time set to 4/26/16
- Main customer set to Skywalker,Mara
- Ticket created
- Priority set to low
- Queue set to HelpDesk 1st Level

Reference to ticket transfer from Mara Skywalker (now deleted) to Luke Skywalker

Figure 104: History entry after data transfer


i We recommend not to delete customers because this has a huge impact on the data history. You won't be able to find the tickets which belonged to this customer anymore. The ticket history entries relating to the customer will remain in the ticket though.

Deactivate the customers instead!

Anonymizing a contact

The following table provides a summary of the preconditions and implications of anonymizing a contact:

	Anonymizing a contact
Type of customer	Contact
Preconditions	None
Reversal	Cannot be undone.

	Anonymizing a contact
Implications	<ul style="list-style-type: none"> The fields containing personal data of the contact are removed. The history, comments and attachments of the contact are removed. Afterwards, an entry that the contact has been anonymized is added to the contact history. The fields containing personal data in the tickets where the contact is the main customer are removed. The history of these tickets is removed, and afterwards an entry that the contact has been anonymized is added to the ticket history. Relations to other objects are removed, and the contact is anonymized in the respective history entries of these objects. The contact and his tickets can still be used in reports. <div>  It depends on the individual configuration of the CM system, which contact and ticket fields are marked to contain personal data. </div>

You can anonymize a contact on his contact page if you have the corresponding permission.

Please proceed as follows:

1. Open the contact page of the contact.
2. Click the *Remove* button in the header section and select *Anonymize*.
3. The contact is anonymized (see implications in the table above).

Deleting a contact with *Delete (with all related data)*

The following table provides a summary of the preconditions and implications of deleting a contact using the option *Delete (with all related data)*:

	Deleting a contact (with all related data)
Type of customer	Contact
Preconditions	None
Reversal	Cannot be undone.
Implications	<ul style="list-style-type: none"> The contact is completely removed from the CM system. The tickets of the contact are removed from the CM system. The relations of the contact to other objects are removed, and the contact is anonymized in the respective history entries of these objects. The contact and his tickets cannot be used in reports anymore.

You can delete a contact with his related data on the contact page if you have the corresponding permission.

Please proceed as follows:

1. Open the contact page of the contact.
2. Click the *Remove* button in the header section and select *Delete (with all related data)*.

3. The contact is deleted (see implications in the table above).

D.4.2.6 Making customers available again

You can make a deactivated customer, which is displayed in italics, available again by reactivating him. To do so, please proceed as follows:

1. Open the customer page of the customer.
2. Click the *Reactivate* button in the header section.
3. The customer is reactivated but he does not get his tickets back (in case his tickets were transferred to another customer before deactivating him). If the customer is a company, its contacts remain deactivated. You have to reactivate them one by one.

D.4.3 Relations to customers and resources

You can create relations between customer ([customer relations](#)) and between customers and resources ([resource relations](#)).

Customer relations allow you to take advantage of the CRM functionalities of ConSol CM and structure your customer base. For example, you can link a reseller to his end customers.

Resource relations allow you to link your customers to the resources which they use. For example, you can link a customer to the printer he owns.

D.4.3.1 Customer-customer relations

This chapter discusses the following:

- [Introduction](#)
- [Display of customer relations](#)
- [Configuring the displayed columns](#)
- [Adding a customer relation](#)
- [Editing the note of a customer relation](#)
- [Switching to the related customer](#)
- [Deleting a customer relation](#)

Introduction

ConSol CM provides comprehensive CRM (Customer Relationship Management) functionalities which allow you to create links between your customers. These links are called relations and they can be established between customers of the same customer group and between customers of different customer groups. This way you can structure your customer base in ConSol CM to better reflect your real customers.

Examples for customer-customer relations (for greater readability called *customer relations* in this section) are:

- You want to map your customer's organizational chart, so you introduce directional relations (*supervisor of* and *supervised by*) between his contacts.
- You have two customer groups (resellers and end customers) and you want to reflect which reseller sells products to which end customers. To achieve this, you create directional relations (*sells products to* and *buys products from*) between customers from the customer group *Reseller* and customers from the customer group *End customers*.

The relations provide additional information about the customer and enable you to quickly access the pages of the related customers. You can create relations based on the relation models which are configured in your CM system. The following is defined for each relation model:

- The relation **type** determines whether the relation is hierarchical (**directional relation**) or on the same level (**reference relation**).
- The **customer group** which the customer has to belong to.
- The **level** determines the type of customer used in the relation. This can be:
 - **Company**
 - **Contact**
 - **Any** (either a contact or a company)

- Whether the relation is editable, i.e., whether it can be added, edited, and deleted in the Web Client.

Display of customer relations

The customer relations are displayed in the [section for related customers](#) of the customer page. There is a table for each relation model. The heading states the name of the relation model, the target customer group, and the type of customer, which can be either company, or contact, or any (1). If no name has been configured for the relation, *Related* is displayed instead of the relation name.

The table contains the relations which were created for this relation model. You can configure the displayed column using the tool icon (2). The table usually contains a link to open the customer page (3), a link to edit the note of the relation (4) and an icon to delete the relation (5).

You can add a relation by clicking the *Add* link (6).

The screenshot shows a table titled "RELATIONS (1) as List or Graph" with a "+ Add" button and an upward arrow. Below the title is the heading "Buyer (Reseller) (Contact)". The table has five columns: a settings column with a gear icon (2), "Contact", "Date" (with a dropdown arrow), "Note" (with a dropdown arrow), and "Actions". The first row contains an email icon (3), "Skydiver, Mia", "2/28/17 15:42", "Edit" (4), and a delete icon (5). A "+ Add" button with an upward arrow (6) is in the top right corner.

	Contact	Date	Note	Actions
@ Skydiver, Mia	2/28/17 15:42	Edit	✕	

Figure 105: Display of available customer relations

You can also show a [relation graph](#) in this section.

If the type of customer is *any*, i.e., either a company or a contact, there are two tabs: one for relations to contacts and one for relations to companies.

Sells products to (Reseller) (Any)

The screenshot shows two tabs: "Contact" (active) and "Company". Below the tabs is a table with five columns: a settings column with a gear icon, "Contact", "Date" (with a dropdown arrow), "Note" (with a dropdown arrow), and "Actions". The first row contains an email icon, "Skydiver, Mike", "3/1/17 10:23", "Edit", and a delete icon.

	Contact	Date	Note	Actions
@ Skydiver, Mike	3/1/17 10:23	Edit	✕	

Figure 106: Tabs for customer relations

The relations are displayed on the customer pages of both affected customers. Depending on the relation type, the name may be different on each side:

- **Reference relations**

The tables on both customer pages have the same name.

Example: A reference relation between two customers could be *Partner*. Both customers are on the same level and the relations table has the same heading on both customer pages (see example above).

- **Directional relations**

The tables have different names on each customer page.

Example: A directional relation between two contacts could be *Buyer* and *SalesRep*. One customer represents the purchaser of goods and the other customer is the sales representative. The headings of the relations tables reflect this, so you can see the role of each customer (see example below).

Configuring the displayed columns

Open the context menu next to the wheel icon to configure the table columns. The default columns (Contact/Company, Date, Note, Actions) cannot be removed, but you can add additional columns by entering the column name and selecting one of the suggestions from the [Autocomplete Search](#). You can remove additional columns by clicking the cross next to their name.

Adding a customer relation

Please proceed as follows to add a new customer relation.

The figure illustrates the process of adding a customer relation in three steps:

- Step 1:** The initial state shows a header bar with "NO RELATIONS" and a "+ Add" button with a wheel icon.
- Step 2:** The "Add relation" dialog is open. The first contact is "Mr Luke Skywalker". A dropdown menu is open, showing options: "Choose One", "Supervisor", "Subordinate", and "Buyer". The "Buyer" option is highlighted.
- Step 3:** The "Buyer" role is selected. The second contact is "Mia". A search suggestion "Skydiver, Mia" is shown. At the bottom, there is an "Add relation" button and a "Cancel" button.

Figure 107: Adding a customer relation

1. Click *Add* in the header of the section for related customers of the desired customer page (in this example, *Luke Skywalker*).
2. Select the type of relation from the drop-down list.
3. Select the target customer using the [Autocomplete Search](#) in the field *Unassigned*. Optionally, you can enter a note in the field below.
4. Click *Add relation* to create the relation to the selected customer. The relation is automatically created for both affected customers, i.e., the current customer and the selected target customer.

The following figures show the resulting relation:

- On the customer page of *Luke Skywalker*, you can see the relation of type *Buyer* to the contact *Mia Skydiver* from the customer group *Reseller* (1).
- On the customer page of *Mia Skydiver*, you can see the relation of type *Sales Representative* to the contact *Luke Skywalker* from the customer group *End customers* (2).

RELATIONS (1) as [List](#) or [Graph](#)
+ Add ^

Buyer (Reseller) (Contact)

	Contact	Date	Note	Actions
	Skydiver, Mia	2/28/17 15:42	Edit	

RELATIONS (1) as [List](#) or [Graph](#)
+ Add ^

Sales Representative (End customers) (Contact)

	Contact	Date	Note	First name	Last name	Actions
	Mr Luke Skywalker	2/28/17 15:42	Edit	Luke	Skywalker	

Figure 108: Customer relation added

The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

Editing the note of a customer relation


Click *Edit* in the *Note* column of the relation to add or edit its note. The note is optional.

Switching to the related customer

You can switch to the customer page of the related customer by clicking his name in the column named *Contact* or *Company*. If you click another column, a preview window is opened where you can choose to open the customer page.

Deleting a customer relation

Click the cross in the *Actions* column to delete the relation. Then, click *OK* in the red field to confirm the removal. Note that the relation is also removed from the page of the related customer. You cannot undo the removal once you confirmed it.

 The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

D.4.3.2 Customer-resource relations

This chapter discusses the following:

- [Introduction](#)
- [Display of resource relations](#)
- [Adding a resource relation](#)
- [Editing the note of a resource relation](#)
- [Switching to the related resource](#)
- [Deleting a resource relation](#)

Introduction

Customer-resource relations (for greater readability called *resource relations* in this section) can be used to link resources to the customers. This allows you to quickly access the relevant assets of the customers from their customer pages. In a Service Desk process, these assets can be for example the computer and printer used by the customer. You can also use resource relations to support the CRM functionalities of ConSol CM: For example you create an asset for a trade fair you attended and link this trade fair to all the customers you met there.

Display of resource relations

Resource relations are displayed in the [section for related resources](#) of the customer page. If no resource relations are set for the customer, the section is collapsed. You can expand it to add a relation by clicking the arrow icon in the section header. If there is at least one relation, the *Show* filter is displayed, where you can choose to see all possible relations (*All relations*) or only the relations which are set for the customer (*Only assigned relations*).

The layout depends on the selected visibility setting. The following figure shows the section for related resources with the visibility setting *Extended*. Each resource category is displayed in a box which contains the relations configured for this resource category. The resources are arranged below the name of the relation. If no name has been configured for the relation, *Related* is displayed instead.

Click the relation name to display the related resources. You can display further details about the resource by clicking the resource name. Click the small arrow button next to the resource name to open the context menu of the resource which allows you to delete the relation and jump to the resource page.

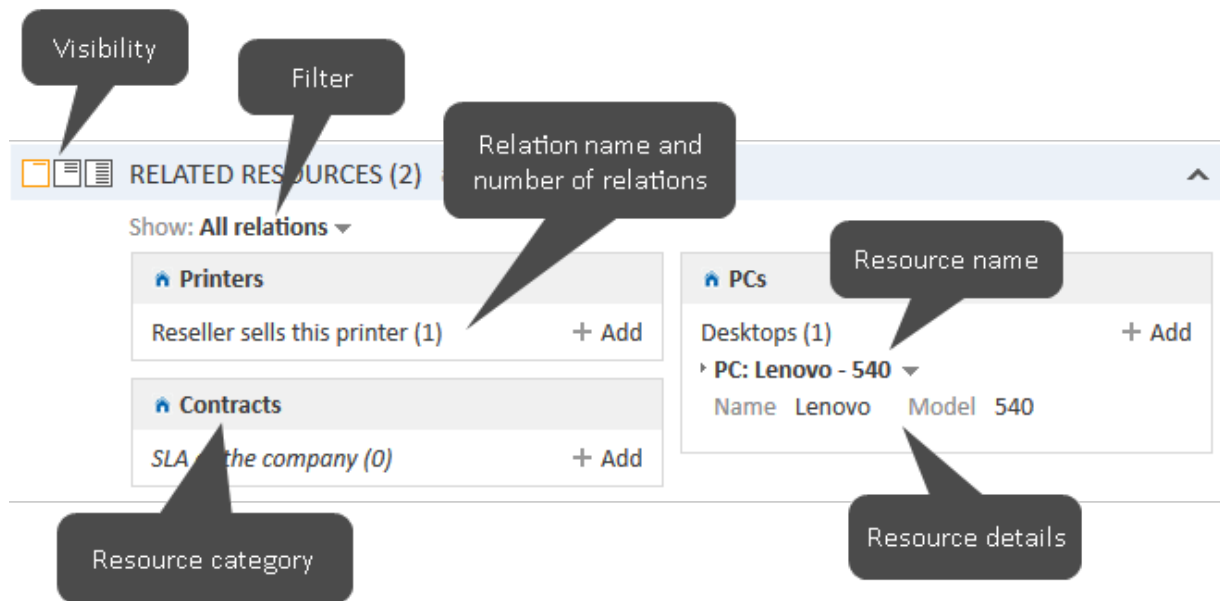



Figure 109: Resource relations

 You can also show a [relation graph](#) in this section.

You can create relations based on the relation models which are configured in your CM system. The following is defined for each relation model:

- The **resource type**, i.e., which kind of resources can be linked to the customer.
- The **customer group** and **type** (company, contact, or both) which can be used for the relation.
- The **cardinality** of the relation, i.e., if you can link several resources of the same resource type to the customer, and if the same resource can be linked to several customers.
- The availability of the *Note* field.
- Whether the relation is editable, i.e., whether it can be added, edited and deleted in the Web Client.

 Resource relations are only available if your CM system uses CM/Resource Pool. The available relations and their configuration depends on the individual configuration of your CM system.

Adding a resource relation

Please proceed as follows to add a new resource relation.

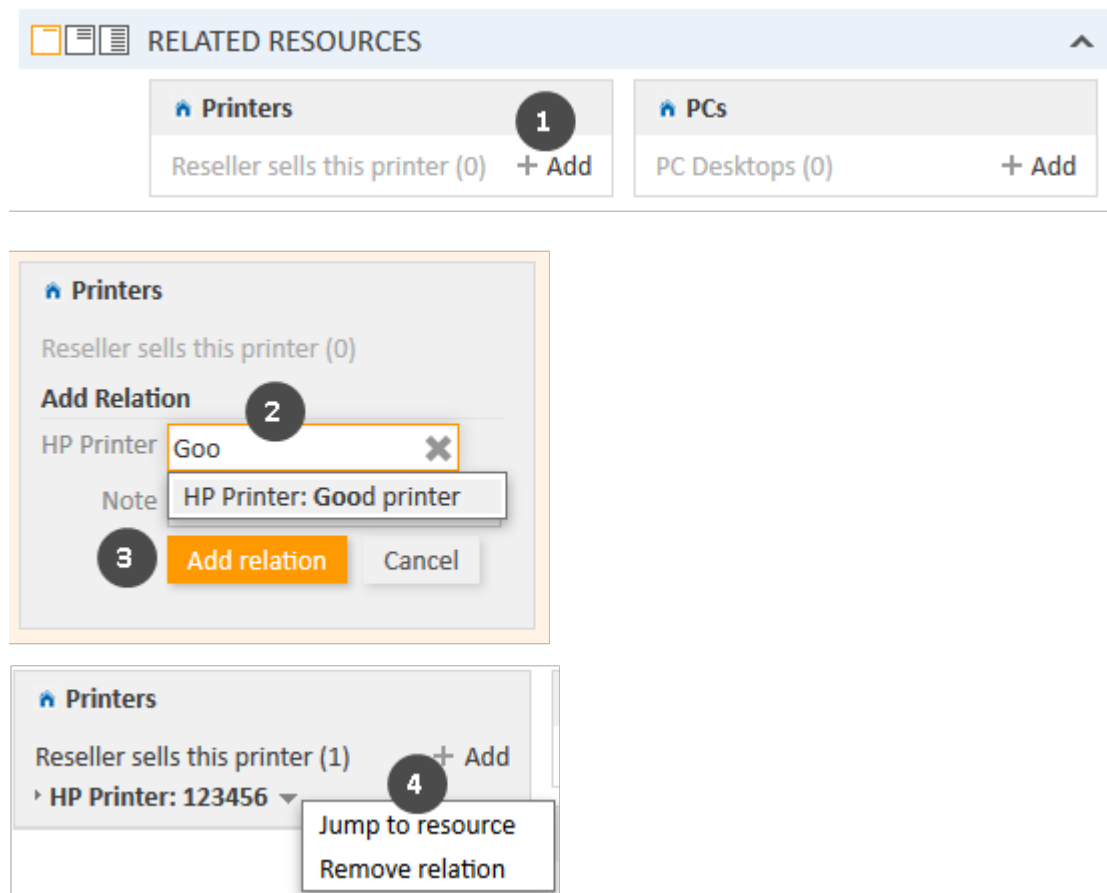


Figure 110: Adding a resource relation

1. Click the *Add* link next to the required relation name.
2. Start typing the name of the resource and select the desired resources from the suggestions of the [Autocomplete Search](#). Optionally, you can enter a note.
3. Click *Add relation*.
4. The resource is now linked to the customer. You can click the link with the resource name to display further details about the resource. The amount of detail varies depending on the selected visibility level.

i The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

Editing the note of a resource relation

Click *Edit* next to *Note* to edit the relation's note. The *Edit* link is only displayed if you have the selected the visibility level *Detail* (see [Visibility level](#)).

Switching to the related resource

You can view the corresponding resource by clicking *Jump to resource* in the context menu.

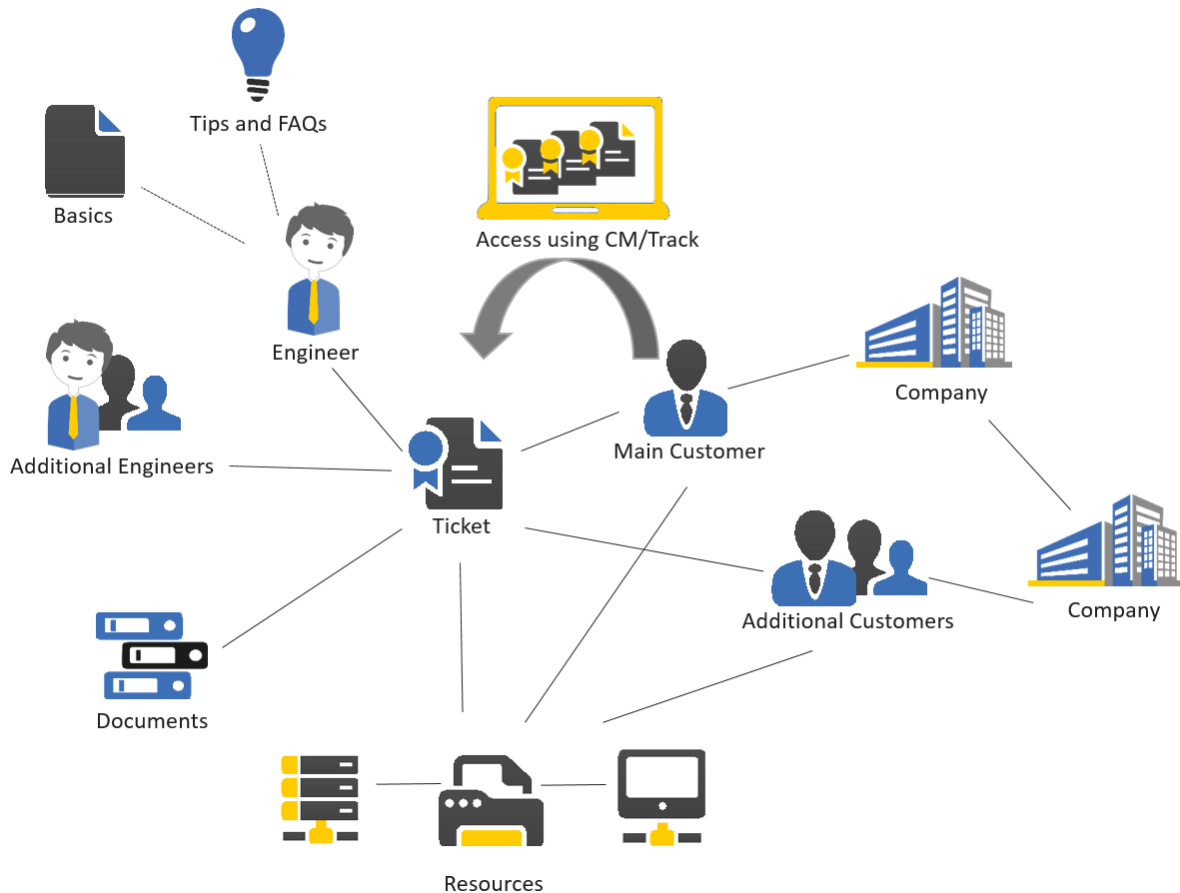
Deleting a resource relation

Click *Remove relation* in the context menu to delete the relation. Then, click *Yes* to confirm the removal of the relation. Note that the relation is also removed from the page of the related resource. You cannot undo the removal once you confirmed it.



The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

E - Optional ConSol CM add-ons



ConSol CM offers several optional add-ons for improved business process management. Whether those add-ons are available depends on the configuration of your CM system.

This section provides you with all information about working with those add-ons.

CM/Resource Pool

CM/Resource Pool is an optional module which extends the CM database to manage additional data object called *resources*. Resources can be used to store assets which are relevant for the business process.

- [CM/Resource Pool](#)

CM/Doc

CM/Doc enables you to import ticket and customer data automatically into Microsoft Word and OpenOffice templates. This functionality allows you to quickly create a new document and directly attach it to the ticket.

- [CM/Doc](#)

CM/Track

CM/Track is an online portal that provides external access to tickets in your CM system for your (internal and external) customers. Your customers can track the status of their tickets and create new tickets using CM/Track.

As an engineer, you do not work directly in CM/Track, but you should take CM/Track into account when working with tickets in the Web Client because some of your actions have an impact on what your customers see in CM/Track. Also, you might need to grant your customers access to CM/Track, which is done in the Web Client.

The current version of CM/Track is CM/Track V2.

- [CM/Track](#)

CM/Archive

CM/Archive is an independent application which allows archiving tickets. As an engineer, you can use CM/Archive to view archived tickets which have been removed from the Web Client.

- [CM/Archive](#)

CM/Phone

CM/Phone integrates the telephone system of your company with the ConSol CM system (CTI, Computer Telephony Integration). This enables you to call customers with just one click in the Web Client or to create a new ticket for the customer of an incoming call.

- CM/Phone will be treated in a later version of this manual.

E.1 CM/Resource Pool

Starting with version 6.10, ConSol CM offers the add-on **CM/Resource Pool**. CM/Resource Pool is an optional module which extends the CM database to manage additional data object called *resources*. Resources can be used to store assets which are relevant for the business process. In a help desk process, this can be for example the computers and printers, for which the customers create tickets. A reseller can use the resource pool to reflect their product portfolio. The sales department might create resources for trade fairs they attend and link them to the customers they met there.

This section provides you with all the information you need to work with resources.

Explanation of the concept and structure of the resource page:

- [Basic knowledge about resources](#)
- [Display of resources](#)
- [Display settings](#)

All you need to know for working with resources:

- [Working with resources](#)


E.1.1 Basic knowledge about resources

E.1.1.1 Terms and definitions

Resources are objects managed in CM/Resource Pool. CM/Resource Pool is an optional add-on, so it may not be present in your system. If your system does not use CM/Resource Pool, you can skip this section.

The kind of resources available in your Web Client depends on the individual implementation of CM/Resource Pool in your company. Examples for resource pool implementations are:

- A help desk manages IT assets, e.g., computers, printers, monitors, and other technical devices as resources. This allows them to link the assets to the customers who use them, and to the tickets concerning the asset.
- A manufacturing company manages their products, e.g., coffee machines, as resources. This allows them to gather all information about the products in one place.

 The objects in CM/Resource Pool are called *resources* in this manual. They can have a different name in your CM system, e.g., *products* or *assets*. The term used depends on the individual configuration of your CM system.

E.1.2 Display of resources

Resources are displayed on several pages. The [resource dashboard](#) provides an overview of all resources, the [resource type page](#) shows all resources of a given type, e.g., all printers of type *HP 4711*, and the [resource page](#) contains the details of a specific resource, e.g., of one specific printer of the type *HP 4711*.

E.1.2.1 Resource dashboard

The resource dashboard is displayed when you click the menu item *Resource pool* (1). In the upper part of the screen, it shows a graphical summary of the resources which are present in the system (2). The lower part of the screens contains links to access existing resources (3) and create new ones (4). The resource types (6) are listed below their resource category (5).




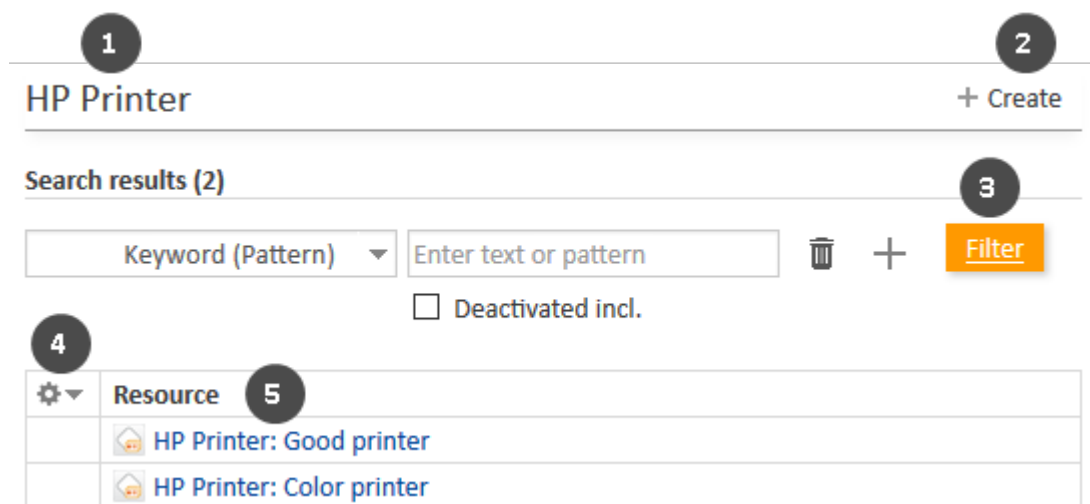
Figure 111: The resource dashboard

E.1.2.2 Resource type page

The resource type page is opened when you click a resource type on the resource dashboard. It contains a table listing all the resources of the resource type (1). The following actions are possible on this page:

- **Create a new resource (2)**
Click the *Create* button in the upper right corner of the screen to create a new resource of this resource type.
- **Filter the list (3)**
Enter search criteria in the *Search results* section to filter the list, see [Detailed Search](#).
- **Configure the table columns (4)**
Open the context menu next to the wheel icon to configure the table columns. The default column *Resource* cannot be removed but you can add additional columns by entering the column name and selecting one of the suggestions from the [Autocomplete Search](#). You can remove additional columns by clicking the cross next to their name.
- **Open a resource page (5)**
Click the desired resource to open its resource page.

 You can display deactivated resources by checking the option *Deactivated incl.*



1 HP Printer 2 + Create

Search results (2) 3

Keyword (Pattern) Enter text or pattern Filter

☐ Deactivated incl.

4 5

	Resource
	HP Printer: Good printer
	HP Printer: Color printer

Figure 112: Resource type page

E.1.2.3 Resource page

The resource page contains resource data and additional information about the resource. It can have up to eight sections. Next to resource page, the available resource activities are displayed.

Resource Edit Deactivate Delete

1 **PC: Lenovo - 540**
 PCs ▶ Desktops
 Internal | Created: 2/23/17 3:28 PM
 Name **Lenovo** Model **540**

2 **DETAILS** Edit ^

Additional information
 Operating system **Windows 7**

3 **NO COMMENTS AND ATTACHMENTS** Comment Attachments ^

Comments **Attachments**

New
 Click here to add a comment

List of comments
 No comments added yet

4 **CALENDAR** + Add appointment Refresh ^

5 **RELATED RESOURCES (1)** as List or Graph ^

Show: **Only assigned relations** ^

Printers
 Computer uses this printer (1) + Add

6 **RELATED COMPANIES AND PERSONS (1)** as List or Graph + Add ^

Related (Reseller)(Any)

Person **Company**

Company	Date	Company name	Actions
Spaceship Ltd	2/28/17 2:34 PM	Spaceship Ltd	×

7 **RELATED TICKETS (1)** as List or Graph + Add ^

Show: **All** ^

Date	Name	Relation	Subject	Actions
2/23/17 3:29 PM	100000	Tickets concerning this PC	Problem with new printer	×

8 **HISTORY** ^

8/31/18 | 14:26 changed by Susan ServiceDesk

Figure 113: Resource page

Header (1)

The default headline of the section is *Resource*, but it may vary depending on how resources are called in your CM system. It contains the basic resource data. The resource name is displayed in bold font (1). On its left, the resource icon (2) is displayed. Depending on the individual configuration of your CM

system, there can be several icons for different resource types. Below the resource name, you see its resource category and resource type (3), followed by the resource mode and the creation data (4). The resource fields are displayed below (5).

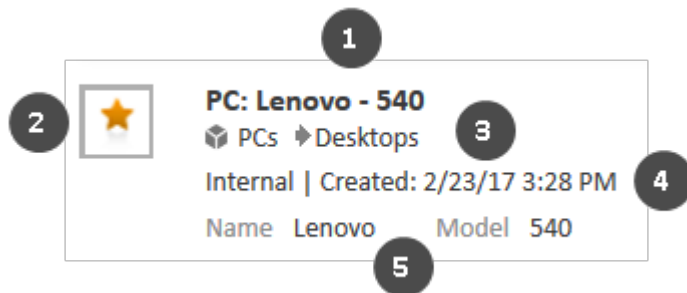


Figure 114: Resource data

In the upper right corner, you find several links which allow you to edit, deactivate, and delete the resource, see [Accessing resources](#).

Note on the resource modes

This manual describes how to work with **internal resources**. There are three other resource modes:

- **on-the-fly**
The resources are not saved in ConSol CM but dynamically retrieved from an external location. You cannot create or edit them in the Web Client. They are only visible in resource relations, where you can add them using their external ID.
- **cached**
The resources are not saved in ConSol CM initially. Instead, single resources are imported when they are used in resource relations (by providing their external ID). You cannot create or edit these resources in the Web Client, and you can only view the resources which have been imported already.
- **imported**
The resources are imported from an external system. You can use them in the same way as internal resources but you cannot create new ones. Also, your edits to these resources may get lost when a new resource import takes place.

Details (2)

The section headline is usually *Details*. This section contains additional data fields with resource data. Each group has its own tab allowing you to access the data. Click the tab heading to switch to the group. To edit the group data, click the *Edit* link on the right (see [Editing resource data](#)).

Comments and attachments (3)

The section headline is *Comments and Attachments*. This section has two tabs showing the comments and attachments added to the resource. The number in the headline refers to the sum of both comments and attachments. You can only see this section if you have the required permissions. Please see [Editing comments and attachments](#) for further information about working with comments and attachments.


Calendar (4)

The section headline is usually *Calendar*. This section shows the integrated calendar. It depends on the configuration of your individual CM system if the calendar feature is available. You can add an appointment or refresh the calendar using the links provided on the right. The calendar can be useful when you communicate with a customer: You see your own availability at a glance, so you can quickly schedule a phone call with the customer. Furthermore, you can directly add it as an appointment to your own calendar.

Related resources (5)

The default headline of the section is *Related Resources*, but it may vary depending on how resources are called in your CM system. This section shows the resources linked to the resource. You can set the [visibility level](#) to determine how much information you want to see about each related resource.

Please see [Resource-resource relations](#) for further information about working with resource relations.

 You can also show a [relation graph](#) in this section.

Related customers (6)

The section heading is usually *Related Companies and Contacts* or something similar. It contains the relations existing between this resource and customers (companies and contacts). This kind of relations can be used for example to indicate that a contact uses a resource. The relations are arranged below the different relation types (red font). Next to the name of the relation, the customer group and the type of customer (company or contact) are displayed. The available relations depend on the individual configuration of your CM system.


Please see [Resource-customer Relations](#) for further information about working with related customers. You can change the table columns and navigate between the pages. Please see [Adjusting tables](#) for further information.

 You can also show a [relation graph](#) in this section.

Related tickets (7)

The section heading is usually *Related Tickets*. It contains the relations existing between this resource and tickets. This kind of relations can be used for example to link a ticket to the resource it concerns. The relations are arranged below the different relation types (red font). You can select whether all tickets, only open tickets or only closed tickets should be displayed by selecting the desired option from the context menu. The available relations depend on the individual configuration of your CM system.

Please see [Resource-ticket relations](#) for further information about working with relations to tickets. You can change the table columns and navigate between the pages. Please see [Adjusting tables](#) for further information. In addition, you can set the [visibility level](#) to determine how much information you want to see about each related ticket.

 You can also show a [relation graph](#) in this section.

History (8)

The section headline is *History*. This section contains the resource history which shows all changes which were carried out for this resource. This includes changes to data fields, and the addition or removal of comments, attachments and relations. The history section contains the date and time of

the change, and the name of the engineer who carried out the change. The latter can also be a technical name in case of automatic changes.



E.1.3 Display settings

This chapter discusses the following:

- [Expanding and collapsing sections](#)
- [Visibility level](#)
- [Adjusting tables](#)

E.1.3.1 Expanding and collapsing sections

The resource page sections, except for the header, can be hidden, collapsed or expanded. If a section is collapsed you only see the section heading but not the content of the section. You can expand the section by clicking the down arrow on the right. To collapse a section and hide its content, click the up arrow. Your CM administrator determines whether resource page sections are displayed collapsed or expanded by default. You can collapse and expand sections while you are working with a resource but the default setting will be restored when you switch to another resource.

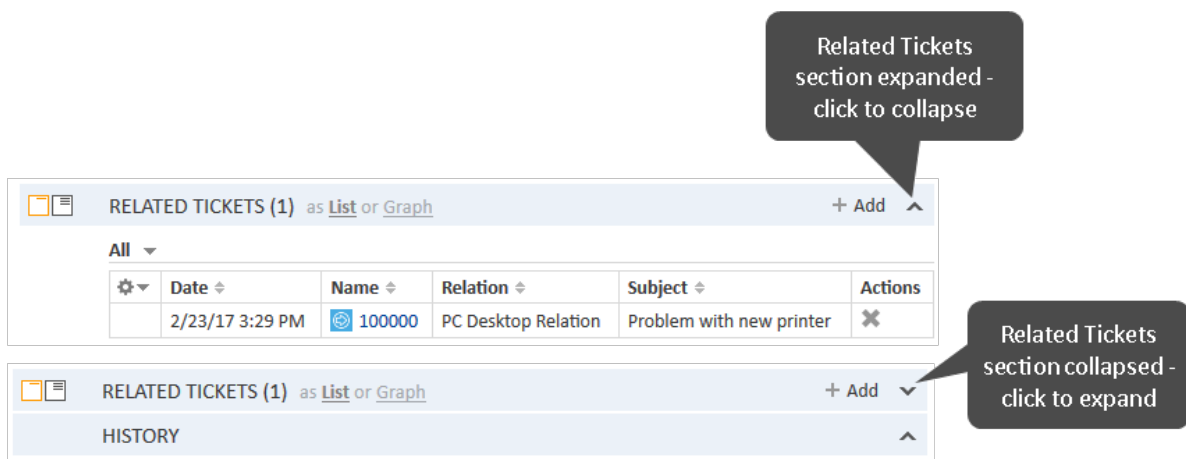


Figure 115: Expanding and collapsing sections

E.1.3.2 Visibility level

The visibility level determines the degree of detail of the information displayed in a resource page section. It can be set for the Related Resources section and Related Tickets section.

There are three visibility levels:

- **Basic**
Basic degree of detail
- **Extended**
Extended degree of detail
- **Detail**
Maximum degree of detail

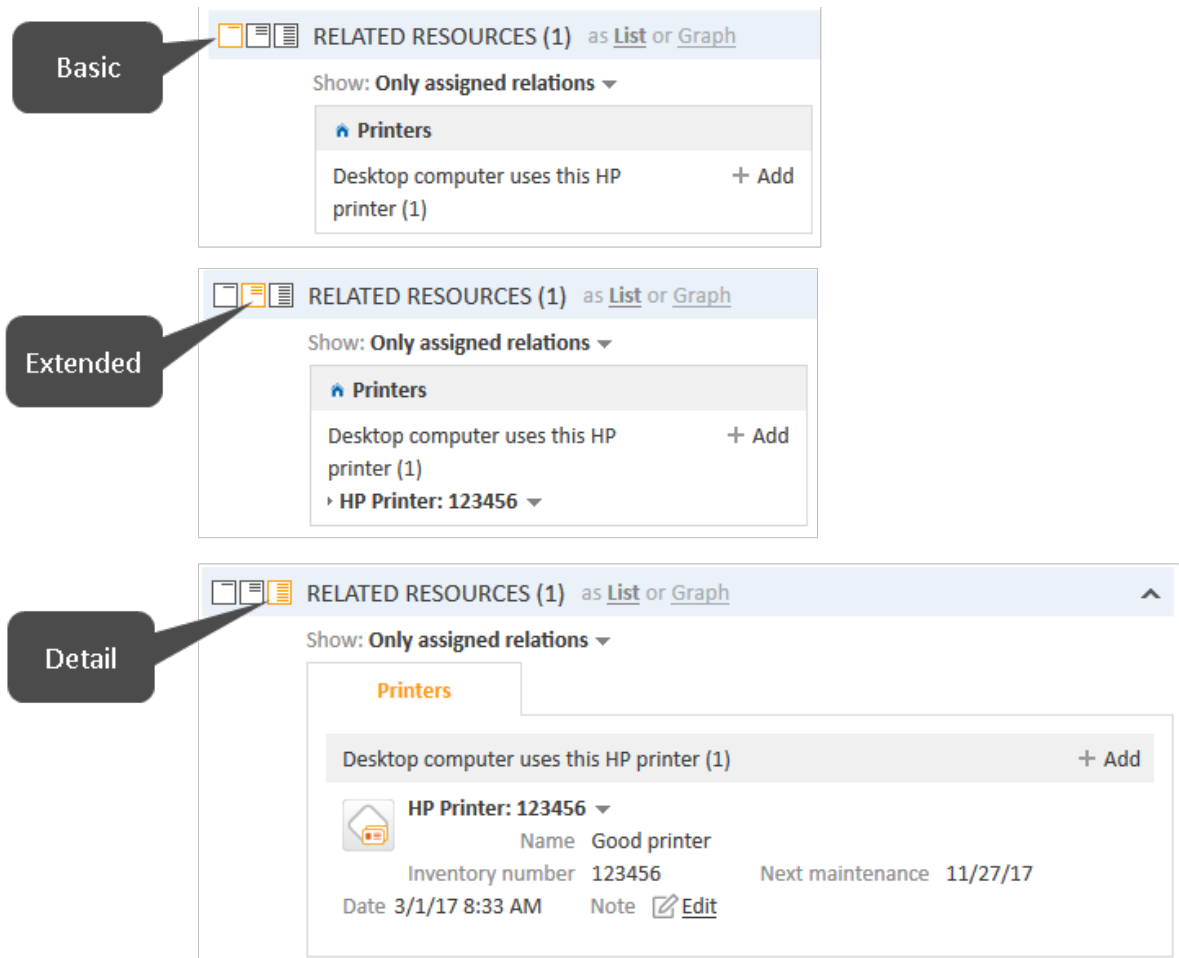


Figure 116: Visibility levels

E.1.3.3 Adjusting tables

Some resource page sections contain tables. You can adjust the table columns by clicking the little arrow next to the wheel icon. To remove a column, click the cross next to the column name. To add new columns, click in the white space next to the names of the displayed columns to see a list of all available columns, or start typing the column name, and click one of the suggested columns. Click *OK* to apply your changes. You can rearrange the columns within the table by dragging-and-dropping the column to the desired position.

If the list exceeds a predefined number of entries, it is split among several pages. You can select the number of entries per page at the bottom of the table and click the arrow buttons and page numbers to navigate the table.

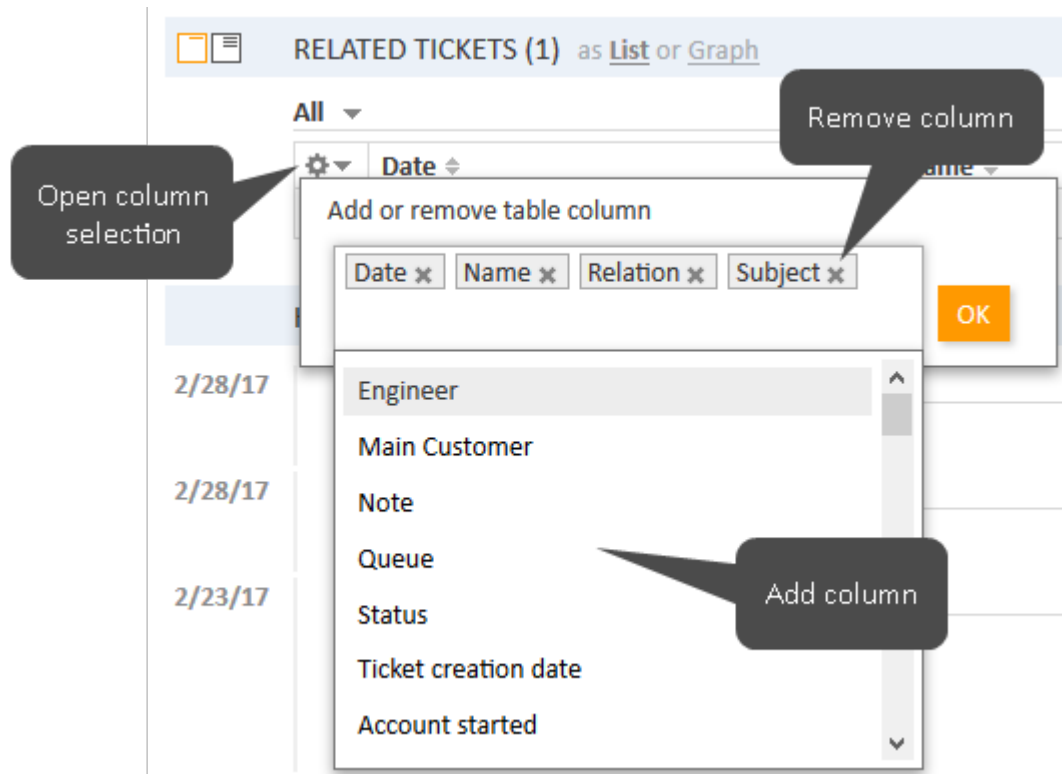


Figure 117: Adjusting the table columns

i ConSol CM saves your column selection. Even if you leave the resource page or log out of the system, the columns will be displayed as defined when you open the resource page again.

E.1.4 Working with resources

Some engineers have roles which allow them to carry out certain activities on resources. Here are some examples of tasks you might perform:

- You create a new resource, see [Creating a resource](#).
- You edit the data of an existing resource, see [Editing resource data](#).
- You deactivate a resource, see [Deactivating resources](#).
- You delete a resource, see [Deleting resources](#).
- You perform an action for the resource, see [Performing resource activities](#).
- You add a comment or attachment to a resource, see [Editing comments and attachments](#).
- You add a relation to a ticket, customer, or another resource, see [Relations to tickets, customers, and resources](#).

It depends on your permissions whether you are allowed to perform one or several of those tasks. If you do not have the required permissions or resources are not used in your CM system you can skip this chapter as it does not apply to you.

E.1.4.1 Creating a resource

You can create a new resource from two locations provided that you have the required permissions.

- The [resource dashboard](#):

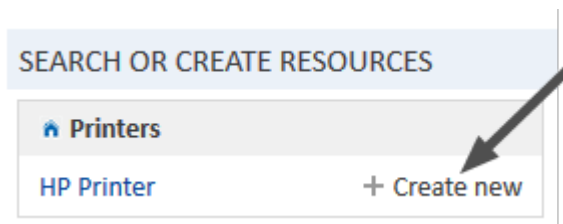


Figure 118: *Creating a resource on the resource dashboard*

- The [resource type page](#):

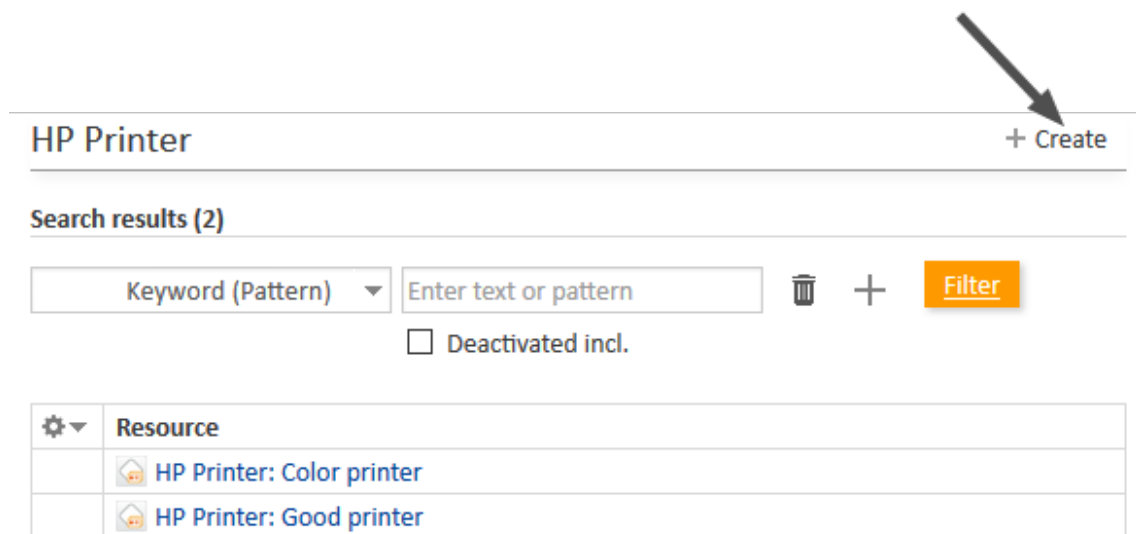



Figure 119: Creating a resource on the resource type page

In addition to these standard locations, it might be possible to create resources using activities, e.g., on a customer page. This depends entirely on the individual configuration of your CM system.

Please proceed as follows to create a new resource:

1. Locate the desired resource type.
2. Click the *Create new* link on the resource dashboard or click the *Create* link on the resource type page (see figures above).
3. Fill out the data on the *Create new resource* page. See [Data fields](#) for further information about how to fill out the fields.
4. Click *Create* to save the resource.

 When you create a new resource, some of the fields might activate the [Autocomplete Search](#) to check if there is already a matching resource. In this case, you can select one of the suggestions to open the respective resource page. Alternatively, you can ignore the suggestions and create the resource with the desired data.

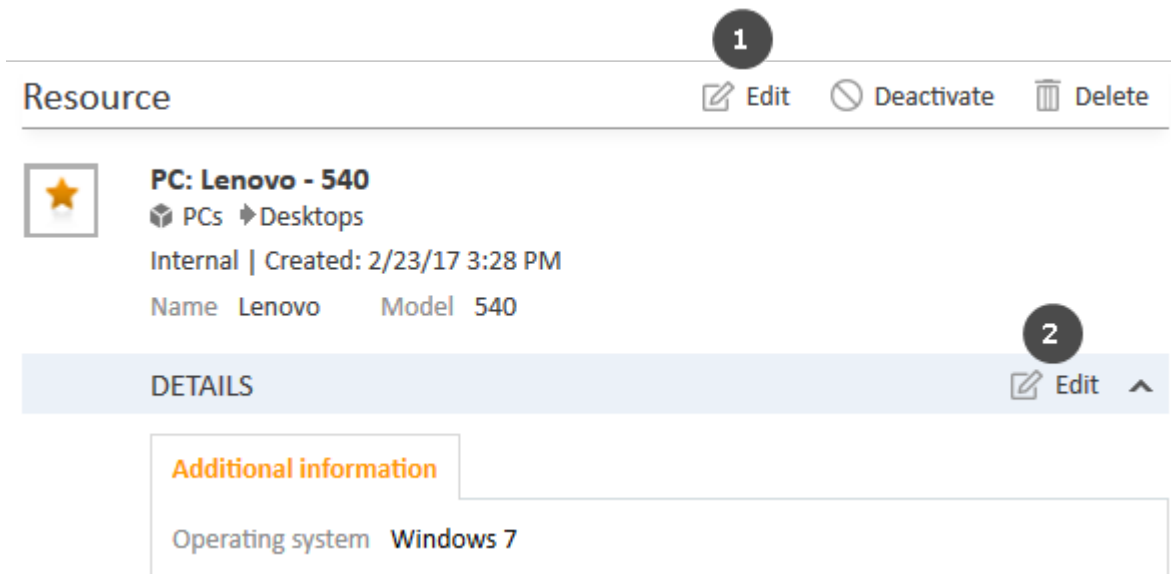
E.1.4.2 Accessing resources

In order to update a resource, you need to open its resource page. There are several ways to access the resource page of an existing resource:

- Opening a resource on the [resource type page](#).
- Searching for a resource using the [Quick Search](#) or the [Detailed Search](#).
- Opening a resource using the *Jump to resource* link in the context menu of a resource in the section for related resources of a customer page or a ticket.

E.1.4.3 Editing resource data

If you have the required permissions, you can edit resource data in the [header section](#) and in the [details section](#).



Resource

PC: Lenovo - 540
 PCs ▶ Desktops
 Internal | Created: 2/23/17 3:28 PM
 Name Lenovo Model 540

DETAILS

Additional information

Operating system Windows 7

Figure 120: Editing resource data

- (1) Click the *Edit* link in the upper right corner of the header section
- (2) Click the *Edit* link in the upper right corner of the details section.

The section's background turns yellow to indicate that it is in edit mode. Edit the customer data as required (see [Data fields](#) for details about the different types of data fields). Click *Save changes* to save the new data. The section background turns gray again (view mode).

E.1.4.4 Editing comments and attachments

The [comments and attachments section](#) of the resource page allows you to add comments and attachments to the resource. The respective permissions are granted independently from the permissions to read and write resource data, so it is possible that you cannot view or edit this section.

You can use the comments and attachments section to collect information about the resource, e.g., adding the release notes to a resource representing a software product, or writing a comment about how to change the ink cartridges of a certain printer.

Adding attachments

To add an attachment, click the *Attachment* link in the header of the section. The section background turns yellow to indicate that it is in edit mode. If the section is already in edit mode, you can also add an attachment by clicking the *Attachment* tab.

NO COMMENTS AND ATTACHMENTS

Comments Attachments

New

1 Drop files or click to select files

File CM6-Release-Notes-6.10.5.pdf Delete

Description

2

File Order.docx Delete

Description

3

List of attachments

Resource does not have any attachments.

Figure 121: Adding an attachment

Please proceed as follows to add an attachment:

1. Specify the files to be uploaded by either:
 - Dragging and dropping them into the white area.
 - Clicking into the white area to open a file browser dialogue and selecting the files.
2. The selected files are displayed in a list below the white area. Optionally, you can add a description in the *Description* field. Click the *Delete* link to remove a file from the list.
3. Click the *Add* button to upload the files to the resource page.

The attachments are then displayed in the list of attachments below (still empty in the above figure).

The list of attachments provides the following information. You can filter the list using the drop-down boxes and text fields in the header:


- **File type**
Indicates the file type of the attachment.
- **Name**
Indicates the file name of the attachment. Click the file name to download the attachment.
- **Description**
Indicates the description provided when the attachment was added, if any.
- **Date**
Indicates the date when the attachment was added.
- **Added by**
Indicates who added the attachment. This can be either an engineer (who uploaded the file) or a technical user (in case the file was automatically uploaded by the system).

- **Action**

Provides links to the available actions. These are:

- **Apply filters**
Filters the list according to your selections in the header.
- **Clear filters**
Removes the filter, i.e., displays all entries.

You can delete an attachment by clicking the cross on the right. Click *OK* in the red field to confirm the removal of the attachment. You cannot undo the removal once you confirmed it.

 The possible file formats, maximum file size, and whether attachments are searchable depend on the individual configuration of your CM system.

Adding comments

To add a comment, click the *Comment* link in the header of the section. The section background turns yellow to indicate that it is in edit mode. If the section is already in edit mode, you can also add a comment by clicking the *Comment* tab. Enter the comment and click *Add*. The comment is then displayed in the list of comment below.

The list of comments provides the following information. You can filter the list using the drop-down boxes and text fields in the header:

- **Date**
Indicates the date when the comment was added.
- **Added by**
Indicates who added the comment. This can be either an engineer (who entered the comment) or a technical user (in case the comment was automatically created by the system).
- **Comment**
Shows the comment.
- **Action**
Provides links to the available actions. These are:
 - **Apply filters**
Filters the list according to your selections in the header.
 - **Clear filters**
Removes the filter, i.e., displays all entries.

You can delete a comment by clicking the cross on the right. Click *OK* in the red field to confirm the removal of the comment. You cannot undo the removal once you confirmed it.

E.1.4.5 Performing resource activities

Resource activities allow you to perform certain actions for the current resource. You can find them in the *Activities* box next to the open resource page. Click the desired activity to perform the corresponding action.

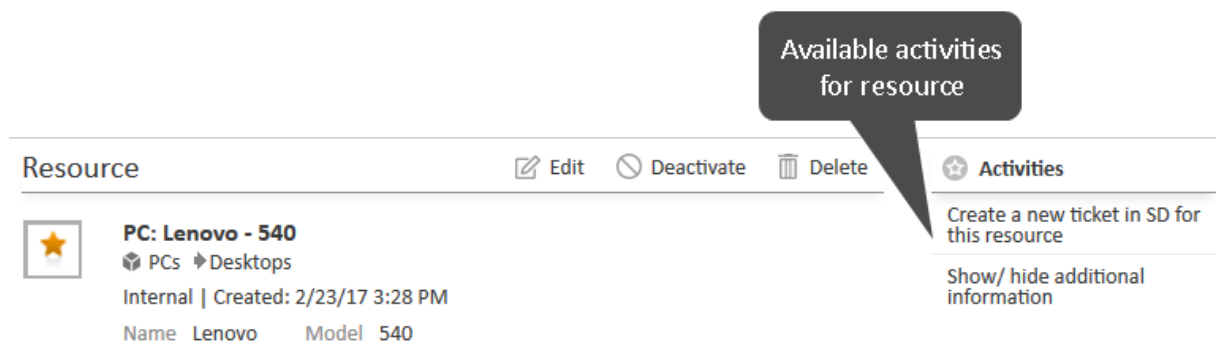


Figure 122: Resource activities

Examples for resource activities are:

- Create a new ticket for the resource.
- Create a new customer who is related to the resource.
- Update some resource data.

Resource activities can have a form which needs to be filled out before proceeding. See [Forms for activities](#) for further information.

i The available resource activities depend on the resource type and the individual configuration of your CM system. You can only perform resource activities if you have the required permissions to perform activities for this resource type.

E.1.4.6 Making resources unavailable

If a resource should not be used in the CM system anymore, you have two options to handle this situation:

- [Deactivating resources](#)
- [Deleting resources](#)

Deactivating resources

To deactivate a resource, click the *Deactivate* link in the upper right corner of the resource page. The resource is then displayed in italics both on its resource page and on the pages of related objects (customers, tickets, other resources). The deactivation of a resource has the following effects:

Actions still possible	Actions not possible anymore
<ul style="list-style-type: none"> • Editing resource data • Adding comments and attachments • Displaying the resource on the resource type page (check the option <i>Deactivated incl.</i>) • Finding the resource in the Detailed Search using the option <i>Deactivated incl.</i> • Reactivating the resource • Deleting the resource 	<ul style="list-style-type: none"> • Finding the resource in the Quick Search, Detailed Search without the option <i>Deactivated incl.</i>, and Auto-complete Search. • Using the resource in relations

Deleting resources

To delete a resource, click the *Delete* link in the upper right corner of the resource page. If the resource has relations, you have to decide what should happen to the relations before you can delete the resource. There are two options:

- **Transfer the relations (1)**

You can select another resource of the same resource type to transfer the relations of the current resource to the selected resource. To do so, perform the following steps:

- Select the target resource using the [Autocomplete Search](#) in the field *Resource detail replacement lookup*.
- Click the *Transfer relations and delete* button. The selected resource replaces the current resource in all relations and the current resource is deleted.

- **Delete the relations (2)**

You can simply delete the relations of the resource together with the resource itself. To do so, click the *Delete with relations* button.

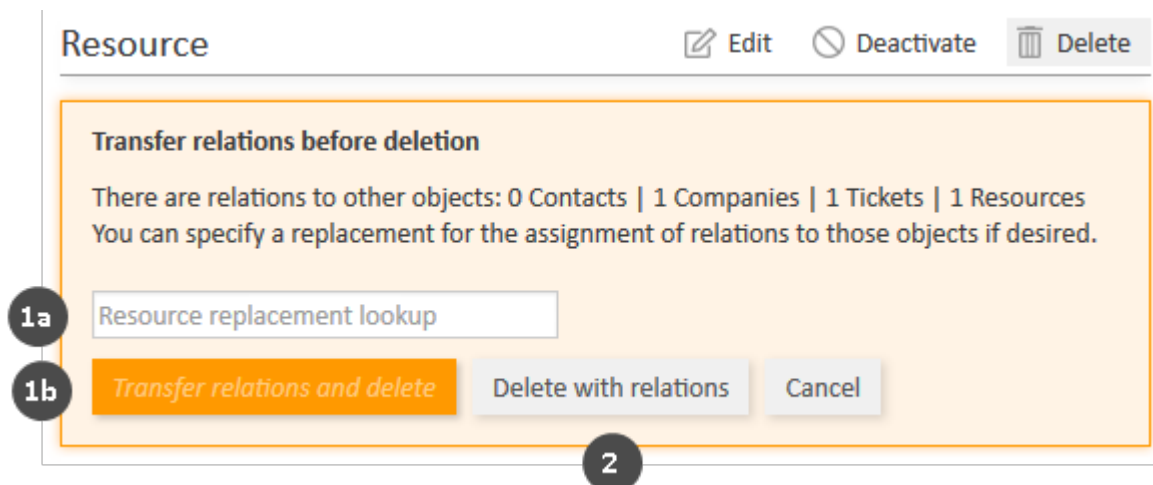



Figure 123: Deleting a resource

 A transfer of relations is only possible if it does not generate any conflicts, e.g., you cannot transfer relations to a resource which is already related to the same customer. In this case, an error message will be displayed and you have to delete the relations.

E.1.4.7 Making deactivated resources available again

You can make a deactivated resource, which is displayed in italics, available again by reactivating it. To do so, click the *Activate* link in the upper right corner of the resource page.

The following figure shows a deactivated resource (in italics) and the link to reactivate it.

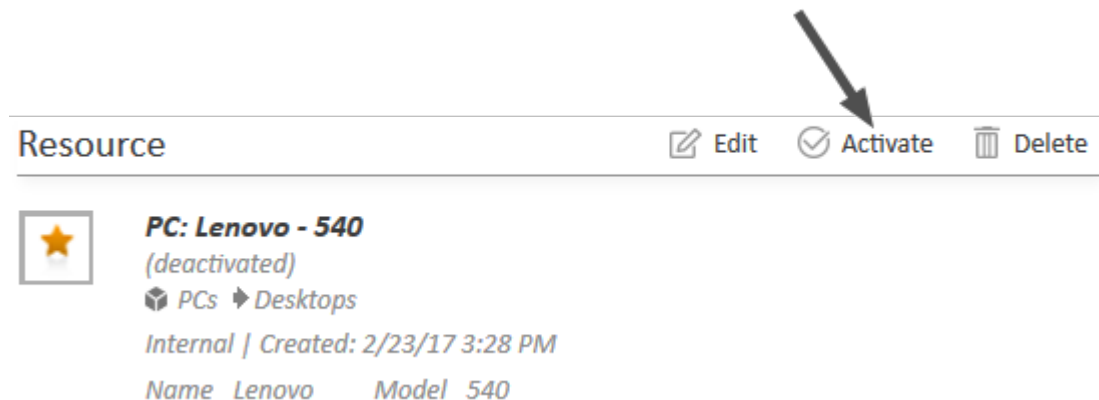


Figure 124: Reactivating a resource

E.1.4.8 Relations to tickets, customers, and resources

Three types of relations are possible for resources:

- Relations to other **resources** are displayed in the [section for related resources](#). They can be used to structure the resource pool. For example, you can link a computer to its installed software.
- Relations to **customers** (companies and contacts) are displayed in the [section for related customers](#). They can be used to link customers to their resources. For example, you can link a computer to the customer who uses it.
- Relations to **tickets** are displayed in the [section for related tickets](#). They can be used to link resources to the tickets which refer to them. For example, you can link a printer to a ticket concerning a problem with this printer.

Resource-resource relations

This chapter discusses the following:

- [Introduction](#)
- [Display of resource relations](#)
- [Adding a resource relation](#)
- [Editing the note of a resource relation](#)
- [Switching to the related resource](#)
- [Deleting a resource relation](#)

Introduction

Resource-resource relations (for greater readability called *resource relations* in this section) can be used to establish links between resources. They allow you to structure your resource pool, e.g., by linking software to the computer where it is installed.

You can create relations based on the relation models which are configured in your CM system. The following is defined for each relation model:

- The **resource type**, i.e., which kind of resources can be linked to the resource.
- The **cardinality** of the relation, i.e., if you can link several resources of the same resource type to the resource.
- The availability of the *Note* field.
- Whether the relation name is displayed.
- Whether the relation is editable, i.e., whether it can be added, edited, and deleted in the Web Client.

Display of resource relations

Resource relations are displayed in the [section for related resources](#) of the resource page. If no resource relations are set for the resource, the section is collapsed. You can expand it to add a relation by clicking the arrow icon in the section header. If there is at least one relation, the *Show* filter is displayed, where you can choose to see all possible relations (*All relations*) or only the relations which are set for the resource (*Only assigned relations*).

The layout depends on the selected [visibility level](#). The following figure shows the section for related resources with the visibility setting *Extended*. Each resource category is displayed in a box which contains the relations configured for this resource category. The resources are arranged below the name of the relation model. If no name has been configured for the relation, *Related* is displayed instead.

Click the relation name to display the related resources. You can display further details about the resource by clicking the resource name. Click the small arrow button next to the resource name to open the context menu of the resource which allows you to delete the relation and jump to the resource page.

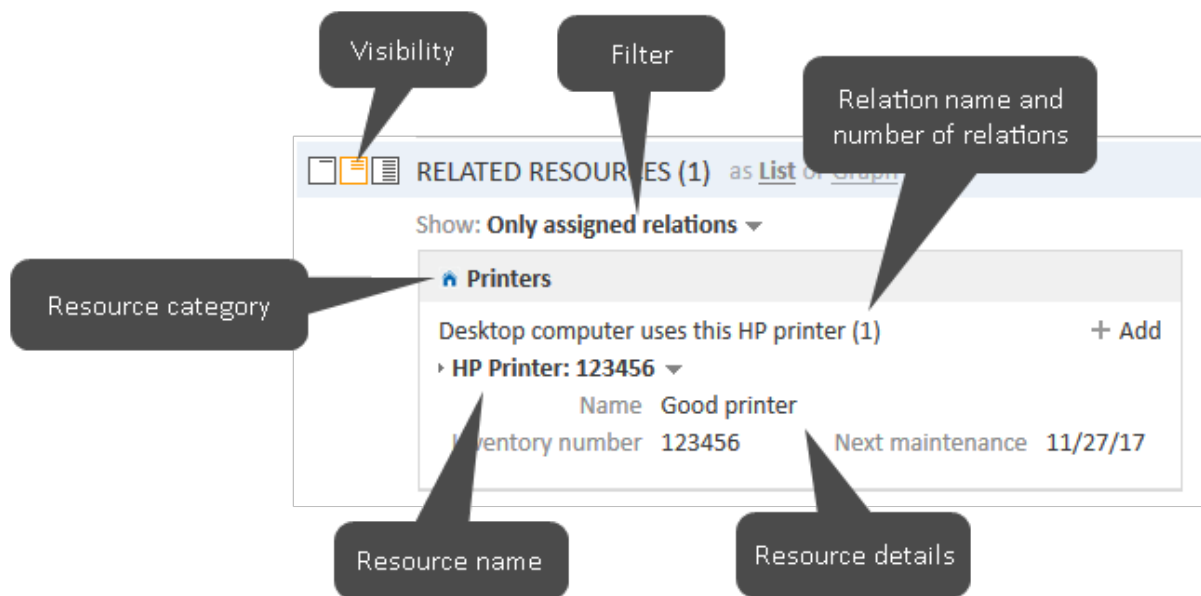


Figure 125: Resource relations

i You can also show a [relation graph](#) in this section.

Adding a resource relation

Please proceed as follows to add a new resource relation.

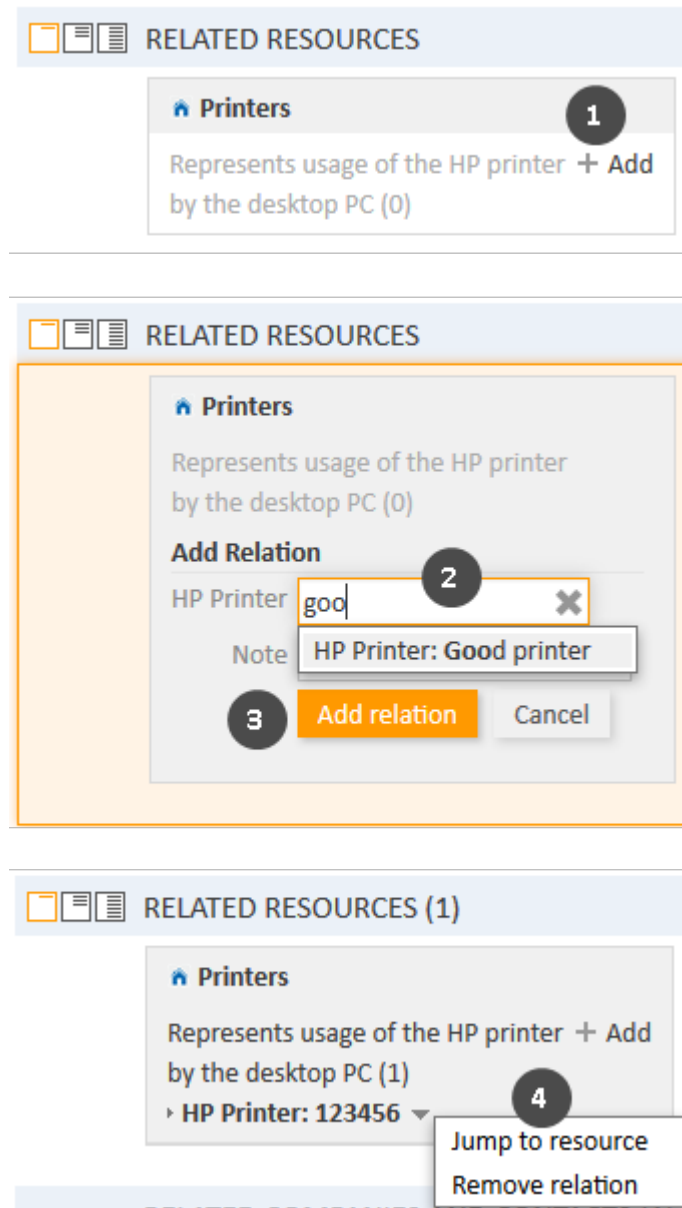



Figure 126: Adding a resource relation

1. Click the *Add* link next to the required relation name.
2. Start typing the name of the resource and select the desired resources from the suggestions of the [Autocomplete Search](#). Optionally, you can enter a note.
3. Click *Add relation*.
4. The resource is now linked to the current resource. You can click the link with the resource name to display further details about the resource. The amount of detail varies depending on the selected visibility level. Click the little arrow next to the resource to open its context menu.

 The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

Editing the note of a resource relation


Click *Edit* next to *Note* to edit the relation's note. The *Edit* link is only displayed if you have selected the visibility level *Detail* (see [visibility level](#)).

Switching to the related resource

You can view the corresponding resource page by clicking *Jump to resource* in the context menu.

Deleting a resource relation

Click *Remove relation* in the context menu to delete the relation. Then, click *Yes* to confirm the removal of the relation. Note that the relation is also removed from the page of the related resource. You cannot undo the removal once you confirmed it.

 The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

Resource-customer Relations

This chapter discusses the following:

- [Introduction](#)
- [Display of customer relations](#)
- [Configuring the displayed columns](#)
- [Adding a customer relation](#)
- [Editing the note of a customer relation](#)
- [Switching to the related customer](#)
- [Deleting a customer relation](#)

Introduction

A resource-customer relation (for greater readability called *customer relation* in this section) defines the relation between this resource and a customer. Customer relations allow you, for example, to link your assets to the customers (contacts and companies) who use them. In an Help Desk process, these assets could be the computer and printer used by the customer or their contracts. You can also use customer relations to support the CRM functionalities of ConSol CM: For example you create a resource for a trade fair you attended and link this trade fair to all the customers you met there. You can quickly access the pages of the related customers from the resource page.

You can create relations based on the relation models which are configured in your CM system. The following is defined for each relation model:

- The **customer group** which the customer has to belong to.
- The level determines the type of customer used in the relation. This can be:
 - **Company**
 - **Contact**
 - **Any** (either a contact or a company)

- The **cardinality** of the relation, i.e., if you can link several resources to the customer, or several customers to the same resource.
- Whether the relation name is displayed. If no relation name is displayed, the table heading states *Related*.
- Whether the relation is editable, i.e., whether it can be added, edited and deleted in the Web Client.

Display of customer relations

The customer relations are displayed in the [section for related customers](#) of the resource page. There is a table for each relation model. The heading states the name of the relation model, the target customer group, and the type of customer, which can be either company, or contact, or any (1). If the type of customer is *any*, i.e., either a company or a contact, there are two tabs: one for relations to contacts and one for relations to companies (2).

The table contains the relations which were created for this relation model. You can configure the displayed column using the tool icon (3). The table usually contains a link to open the customer page (4), a link to edit the note of the relation (5) and an icon to delete the relation (6).

You can add a relation by clicking the *Add* link (7).

RELATED COMPANIES AND CONTACTS (2) as [List](#) or [Graph](#) + Add ^

Related (Reseller)(Any)

Contact **Company**

Contact	Date	Note	Actions
@ Skydiver, Mia	3/1/17 9:13 AM	Edit	✕

Responsible Contact for the PC Desktop (End customers)(Contact)

Contact	Date	Note	Actions
Mr Luke Skywalker	3/1/17 9:09 AM	Edit	✕

Figure 127: Customer relations of resources

The relations are displayed on the resource page and the related customer pages. Please note that the same relation can have a different name on the customer pages.

You can also show a [relation graph](#) in this section.

Configuring the displayed columns

Open the context menu next to the wheel icon to configure the table columns. To add columns, enter the column name and select a suggestion from the [Autocomplete Search](#). You can remove columns by clicking the cross next to their name.

Adding a customer relation

Please proceed as follows to add a new customer relation.

The figure illustrates the process of adding a customer relation in four steps:

- Step 1:** Click the **+ Add** button in the header of the **RELATED COMPANIES AND CONTACTS** section.
- Step 2:** Select the relation model from the drop-down list. The options shown are **Choose One**, **Related**, and **Responsible Contact for the PC Desktop**.
- Step 3:** Select the target customer using the [Autocomplete Search](#) in the field *Unassigned*. Optionally, you can enter a note in the field below. In the image, 'Mr Luke Skywalker' is entered in the search field.
- Step 4:** Click **Add relation** to create the relation to the selected customer.

Figure 128: Adding a customer relation

1. Click *Add* in the header of the section for related customers.
2. Select the relation model from the drop-down list.
3. Select the target customer using the [Autocomplete Search](#) in the field *Unassigned*. Optionally, you can enter a note in the field below.
4. Click *Add relation* to create the relation to the selected customer.

The following figures show the resulting relation:

- On the resource page of *PC Dell X390*, you can see the relation of type *Responsible Contact for the PC Desktop* to the contact *Luke Skywalker* from the customer group *End customers* (1).
- On the customer page of *Luke Skywalker*, you can see the relation of type *This person is responsible for the PC* to the resource *PC Dell X390* from the resource category *PCs* (2).

1 **RELATED COMPANIES AND CONTACTS (1)** as [List](#) or [Graph](#) + Add ^

Responsible Contact for the PC Desktop (End customers)(Contact)

⚙	Contact	Date	First name	Last name	Actions
	Mr Luke Skywalker	3/1/17 9:09 AM	Luke	Skywalker	

2 **RELATED RESOURCES (1)** as [List](#) or [Graph](#)

PCs
 This person is responsible for the
 PC (1)
 ▶ PC: Dell - X390 ▼

Figure 129: Resulting relations

The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

Editing the note of a customer relation

Click *Edit* in the *Note* column of the relation to add or edit its note. The note is optional. If the *Note* column is not displayed, you have to add it first (see [Configuring the displayed columns](#)).

Switching to the related customer

You can switch to the customer page of the related customer by clicking his name in the column named *Contact* or *Company*. If you click another column, a preview window is opened where you can choose to open the customer page.

Deleting a customer relation

Click the cross in the *Actions* column to delete the relation. Then, click *OK* in the red field to confirm the removal. Note that the relation is also removed from the page of the related customer. You cannot undo the removal once you confirmed it.

The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

Resource-ticket relations

This chapter discusses the following:

- [Introduction](#)
- [Display of ticket relations](#)
- [Configuring the displayed columns](#)
- [Adding a ticket relation](#)

- [Editing the note of a ticket relation](#)
- [Opening the ticket](#)
- [Deleting a ticket relation](#)

Introduction

A resource-ticket relation (for greater readability called *ticket relation* in this section) defines the relation between this resource and a ticket. Ticket relations allow you to link your assets to the tickets concerning them. For example, you can link an incident ticket to the printer which caused the problem or a service ticket to the customer's SLA. You can quickly access the tickets from the resource page.

You can create relations based on the relation models which are configured in your CM system. The following is defined for each relation model:

- The **queue** which the ticket has to be in.
- The **cardinality** of the relation, i.e., if you can link several resources to the same ticket, or several tickets to the same resource.
- Whether the relation name is displayed.
- Whether the relation is editable, i.e., whether it can be added, edited and deleted in the Web Client.

Display of ticket relations

Ticket relations are displayed in the [section for related tickets](#) of the resource page. The table contains the relations which were created for this resource. You can choose to display all tickets, open tickets or closed tickets by selecting the corresponding value in the filter (1). To configure the table columns, click the tool icon (2) and select the desired columns. You can order the columns by dragging the column header to the required position.

The table usually contains a link to open the ticket (3), the name of the relation (4) and an icon to delete the relation (5). Click a table row to open the ticket preview. The ticket preview contains buttons to display more ticket data (6), open the ticket (7) and display the preview of the next ticket (8).

RELATED TICKETS (1) as [List](#) or [Graph](#) + Add ^

All ▼

	Date	Name	Relation	Subject	Actions
	3/1/17 9:35 AM	100006	Tickets concerning this PC	Computer is slow	

Latest comment 2/21 3:24 PM

My computer is very slow

Figure 130: Ticket relations

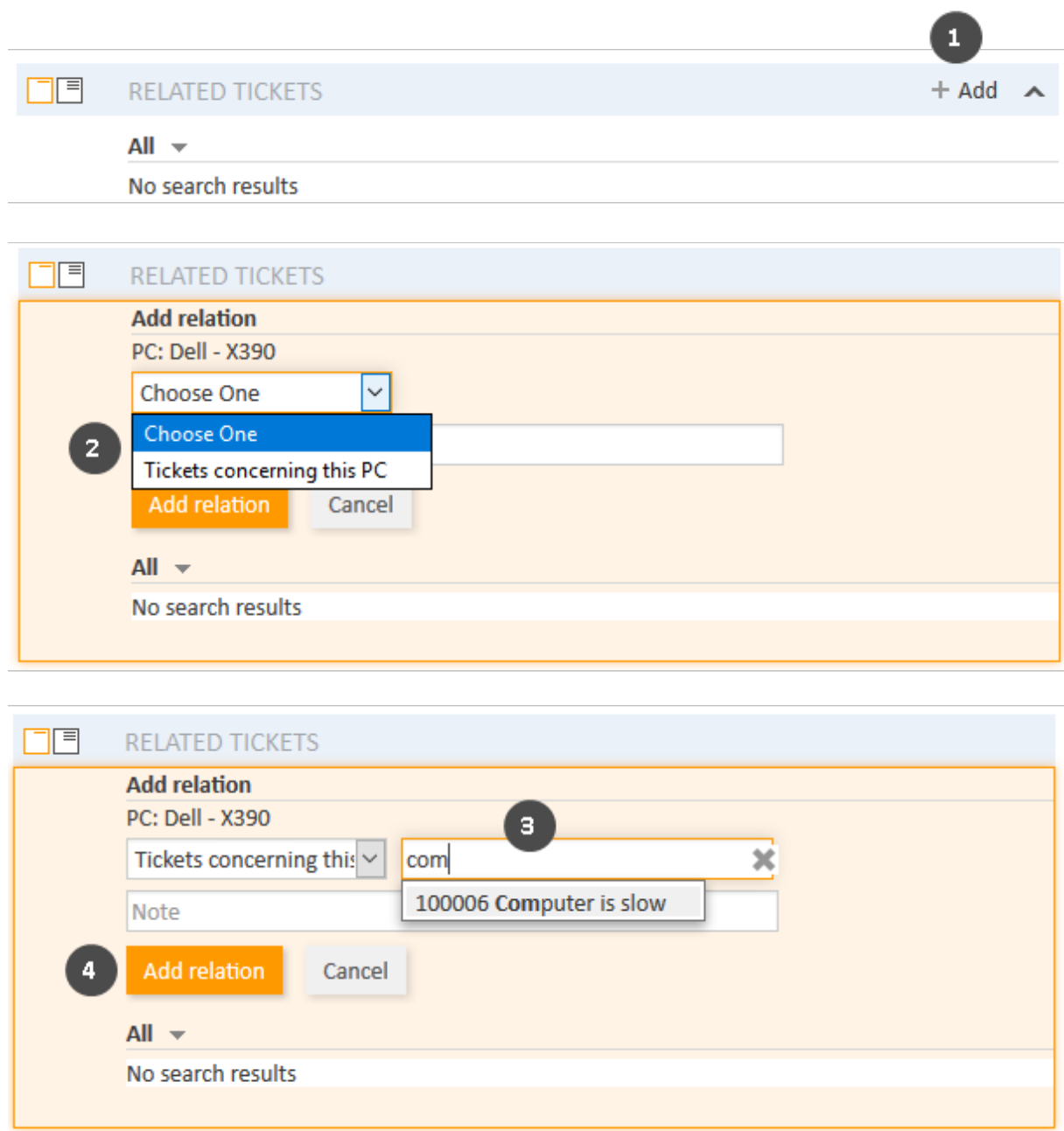
 You can also show a [relation graph](#) in this section.

Configuring the displayed columns

Open the context menu next to the wheel icon to configure the table columns. To add columns, enter the column name and select a suggestion from the [Autocomplete Search](#). You can remove columns by clicking the cross next to their name.

Adding a ticket relation

Please proceed as follows to add a new ticket relation.



The figure illustrates the process of adding a ticket relation in three steps:

- Step 1:** The user is on the 'RELATED TICKETS' page. A '+ Add' button is visible in the top right corner.
- Step 2:** The user clicks the '+ Add' button, opening the 'Add relation' dialog. The dialog shows 'PC: Dell - X390' and a dropdown menu with 'Choose One' selected. The 'Add relation' button is highlighted.
- Step 3:** The user selects 'Tickets concerning this PC' from the dropdown menu. The dialog now shows 'Tickets concerning this:' and a text input field containing 'com'. A suggestion '100006 Computer is slow' is visible below the input field. The 'Add relation' button is highlighted.
- Step 4:** The user clicks the 'Add relation' button, which is highlighted.

Figure 131: Adding a ticket relation

1. Click the *Add* link in the section header.
2. Select the desired relation model from the drop-down list.
3. Start typing the name of the ticket and select the desired ticket from the suggestions of the [Autocomplete Search](#) in the *Unassigned* field. Optionally, you can enter a note.
4. Click *Add relation*.



The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

Editing the note of a ticket relation

Click *Edit* in the *Note* column of the relation to add or edit its note. The note is optional. If the *Note* column is not displayed, you have to add it first (see [Configuring the displayed columns](#)).

Opening the ticket

You can open the related ticket by clicking its number in the column *Name*. If you click another column, a preview window is opened where you can choose to open the ticket (see figure in section [Display of ticket relations](#)).

Deleting a ticket relation

Click the cross in the *Actions* column to delete the relation. Then, click *OK* in the red field to confirm the removal. Note that the relation is also removed from the page of the related ticket. You cannot undo the removal once you confirmed it.



The action of adding or deleting a relation can trigger additional changes, e.g., the value of a data field can be updated. This depends on the individual configuration of your CM system.

E.2 CM/Track

This chapter discusses the following:

E.2.1 About CM/Track	239
E.2.2 CM/Track from the customers' point of view	239
E.2.3 CM/Track from the engineers' point of view	239
E.2.4 Configuring CM/Track for customers	240
E.2.5 Considering CM/Track when working with tickets	243
E.2.6 CM/Track from the customers' point of view	246

E.2.1 About CM/Track

CM/Track provides your (internal and external) customers access to their tickets in your company's ConSol CM system. The customers receive a [CM/Track login](#), i.e., a user name and a password, which they can use to log in to CM/Track. In CM/Track they have access to their tickets and can create new tickets. Their access permissions are defined in a [CM/Track profile](#) which is assigned to the customer in the Web Client.

The following screenshot shows the standard layout of CM/Track. Depending on the individual configuration of your CM system, CM/Track may have a different layout and/or include additional features.

E.2.2 CM/Track from the customers' point of view

Your customers can log in to CM/Track to access their tickets. The following actions are possible in a standard installation of CM/Track, provided that the customers have the required permissions:

- viewing the ticket list
- viewing the details of tickets
- adding comments to tickets
- adding attachments to tickets
- creating new tickets
- searching the FAQs



Additional features may be available through a customization of your CM system.

Please see [CM/Track from the customers' point of view](#) for a detailed explanation of how your customers work in CM/Track.

E.2.3 CM/Track from the engineers' point of view

As an engineer, you might deal with CM/Track in the following contexts:

- You manage CM/Track accounts for your customers, see [Configuring CM/Track for customers](#).
- You work on tickets which your customers access using CM/Track, see [Considering CM/Track when working with tickets](#).

E.2.4 Configuring CM/Track for customers

This chapter discusses the following:


- [Creating a CM/Track account](#)
- [Resetting the password](#)

E.2.4.1 Creating a CM/Track account

Your customers need CM/Track accounts in order to be able to log in to CM/Track. CM/Track accounts can only be created for **contacts**, not for companies. You can create a CM/Track account for all contacts who belong to a customer group which has CM/Track enabled. In this case the customer data contains fields for the user name and password.

A CM/Track account consists of two elements:

- **CM/Track login (1)**
The CM/Track login consists of a **user name** and a **password**, which you, as an engineer, have to define in the contact data. The customer uses his CM/Track login to access CM/Track.
- **CM/Track profile (2)**
The CM/Track profile is created by the CM administrator. It contains the **permissions** for the contact. These permissions determine which tickets the contact can see (only his own tickets or all the tickets of contacts who belong to his company) and what actions he is allowed to carry out. One CM/Track profile can be assigned to several contacts. There can be several CM/Track profiles in your CM system, but a contact can only have one CM/Track profile.

 Your CM system can be configured either for automatic or for manual assignment of the CM/Track profile. If the automatic assignment has been configured, the field for selecting the profile is not displayed.

The following figure illustrates the different elements of the CM/Track account.

Web Client (internal side)

@ Last name Skydiver First name Luke
 Email luke@consol.de Phone 0211/1235678
☐ VIP?
 1 CM/Track login luke CM/Track password
 2 Reseller, Track X
 Save changes Cancel

CM/Track (external side)

Please sign in

Username
 Password
[Forgot your password?](#)
 Sign in

Figure 132: CM/Track account

- **CM/Track user**

Enter the user name in the field for the CM/Track user. In the above example the field is called *CM/Track Login*. It probably has another name in your CM system.



The user name has to be unique. Every customer in your CM system needs to have a different user name.

- **CM/Track password**

Enter the password in the field for the CM/Track password. In the above example the field is called *CM/Track Password*. It probably has another name in your CM system. For security reasons, the password is displayed as dots and its value is not written to the ticket history.


- **CM/Track profile**

Select the CM/Track profile from the *Track user* field. The contact cannot log in without a CM/Track profile.



The *Track user* field is only available if your system is configured for manual selection of the CM/Track user profile. If the field is not available, the user profile is assigned automatically.

Once you have created the CM/Track account, you need to communicate the CM/Track login to your customer, so he can use it to access CM/Track.

-  Depending on the individual configuration of your CM system, CM/Track accounts may be created automatically. This can happen in two cases:
- The CM/Track accounts are imported automatically into the system.
 - The customers create their own CM/Track accounts (requires an extension of the CM system).

Using LDAP for authentication

The CM system can be configured to use LDAP for the authentication of customers in CM/Track. This option is used mostly for internal customers who belong to the same company. When LDAP authentication is enabled, the CM/Track user name and password are probably the same as the ones the contact uses for his general system login.

E.2.4.2 Resetting the password

It can happen that a customer forgets his password. For security reasons the password is displayed as dots in the Web Client, so you, as an engineer, cannot know an existing password. Depending on the individual configuration of your CM system, there are two ways to handle this situation:

- The **engineer resets the password** using the Web Client. To do so, proceed as follows:
 1. Open the contact page of the respective customer.
 2. Delete the current password in the *CM/Track password* field and enter a new one.
 3. Click *Save changes* and communicate the new password to the customer.
- The **customer resets his password** (only if your CM system supports this option). Tell the customer to proceed as follows:
 1. The customer opens the login screen of CM/Track.
 2. The customer clicks the *Forgot your password?* link.
 3. The customer will receive an email with a link to reset the password.
- The **password is managed in LDAP** (only if the customer logs in to CM/Track using LDAP). In this case, neither the engineer nor the customer can reset the password. Tell the customer to contact his administrator.

E.2.5 Considering CM/Track when working with tickets

This chapter discusses the following:

- [Visibility of comments in CM/Track](#)
- [Actions of customers in CM/Track](#)

As an engineer working with the Web Client, you do not interact directly with CM/Track. Nevertheless, you should take CM/Track into account when working with tickets because some of your actions have an impact on what your customers see in CM/Track.

E.2.5.1 Visibility of comments in CM/Track

Usually, your customers can see the ticket data in the header and Details section. The visibility of the ticket history entries, i.e., comments, attachments, and emails, is controlled by [classes of text](#). The customers can see the entries which are highlighted with a specific class of text. The name, icon and, color of this class of text depend on the individual configuration of your CM system.

The following screenshot shows an example of such a class of text.

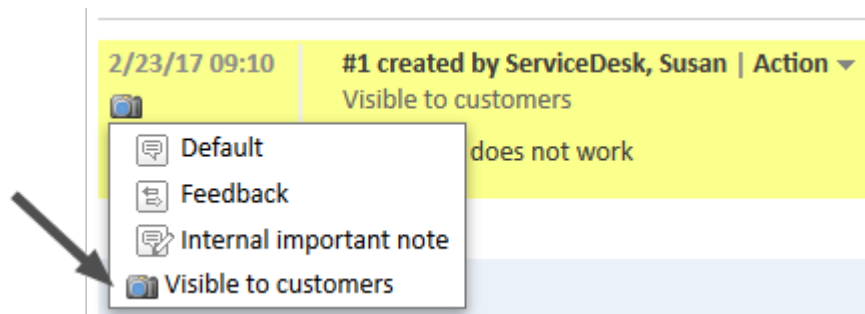


Figure 133: Class of text assigned to a comment

In your own CM system, the class of text probably has another name, icon, and color. There can also be several different classes of text which can be used to make an entry visible to the customers. Depending on the business process, classes of text can be applied automatically by the system. Usually, the comments and attachments which the customer adds using CM/Track are automatically highlighted with such a class of text, so the customer is able to see his own entries.



Only assign such a class of text to an entry that should be visible to your customer. Do not use it for internal notes!

E.2.5.2 Actions of customers in CM/Track


Customers can carry out two actions in CM/Track which can influence your work in the Web Client:

- [Customers create new tickets](#)
- [Customers add content to tickets](#)

Customers create new tickets

Customers can create new tickets using CM/Track provided that their CM/Track profile contains the required permissions. You can view and handle the tickets created by the customers in the same way as any other ticket. The only difference is that the customer who created the ticket is already added as the ticket's main customer and the ticket contains the data provided by the customer.

Ticket ✓ Accept ✎ Edit 📄 Clone 🖨 Print



Please install Office 2013 on my computer

100393

HelpDesk 1st Level Qualify Unassigned 5/13/16 12:10 PM

HD Priority normal

Reaction time 5/13/16

Category Software | Office

Ticket data from customer

CUSTOMERS (1) + Add ^

Main

@ Skywalker,Luke (0211/1231666) ▼ Reseller

Customer added as main customer

NO ADDITIONAL ENGINEERS + Add ^

NO RELATIONS + Add ^

CALENDAR Add appointment Refresh ▼

HISTORY 💬 Comment ✉ E-Mail 📎 Attachment 🕒 Time booking ^

Communication only ▼ Newest entries first ▼

Add comment, e-mail or attachment

5/13/16 12:10

#1 created by luke | Action ▼

Visible to customer

Dear support team,

Please install the new version of Microsoft Office on my computer.

Luke Skywalker

Comment from customer

NO ATTACHMENTS ^

Figure 134: Ticket created in CM/Track

Customers add content to tickets

Customers can add comments and attachments using CM/Track. You can see the comments and attachments in the Web Client as soon as the customers save them. Usually, they are already highlighted with a class of text, so the customers can see their own comments and attachments in CM/Track.

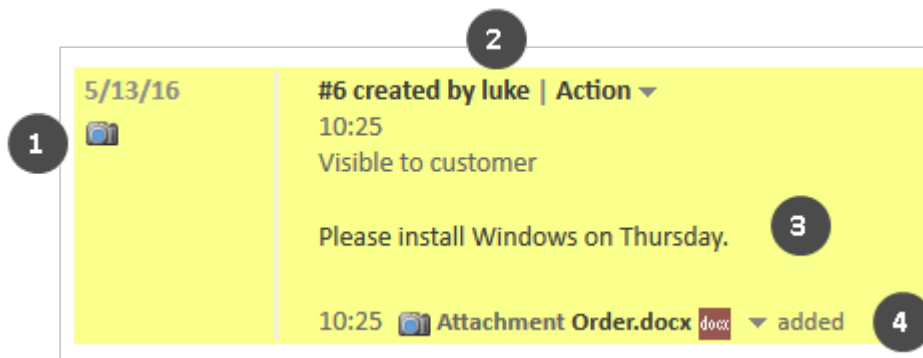



Figure 135: Comment and attachment from CM/Track

- Icon for class of text (1)
- User name of the customer who added content (2)
- Comment entered by the customer (3)
- Attachment uploaded by the customer (4)

E.2.6 CM/Track from the customers' point of view

This chapter discusses the following:


- [Logging in to CM/Track](#)
- [Viewing the welcome page](#)
- [Viewing the ticket list](#)
- [Filtering the ticket list](#)
- [Viewing a ticket](#)
- [Adding content to a ticket](#)
- [Performing workflow activities for a ticket](#)
- [Creating a new ticket](#)
- [Searching the FAQs](#)
- [Changing the password](#)

 This section deals exclusively with the external side of CM/Track, i.e., how your customers work with CM/Track. Please see [Configuring CM/Track for customers](#) and [Considering CM/Track when working with tickets](#) for your tasks concerning CM/Track. As an engineer, you do not need to log in to CM/Track, you always work with the Web Client.

E.2.6.1 Logging in to CM/Track

The CM/Track login page can be embedded into your company's website or can be a website on its own. Your CM administrator can tell you the URL.

Customers can log in to CM/Track by providing their user name and password. These login data are part of their [CM/Track account](#).

 It depends on the configuration of your CM system, if the *Forgot your password?* link is available.

E.2.6.2 Viewing the welcome page

After logging in, the welcome page with the following elements is displayed:

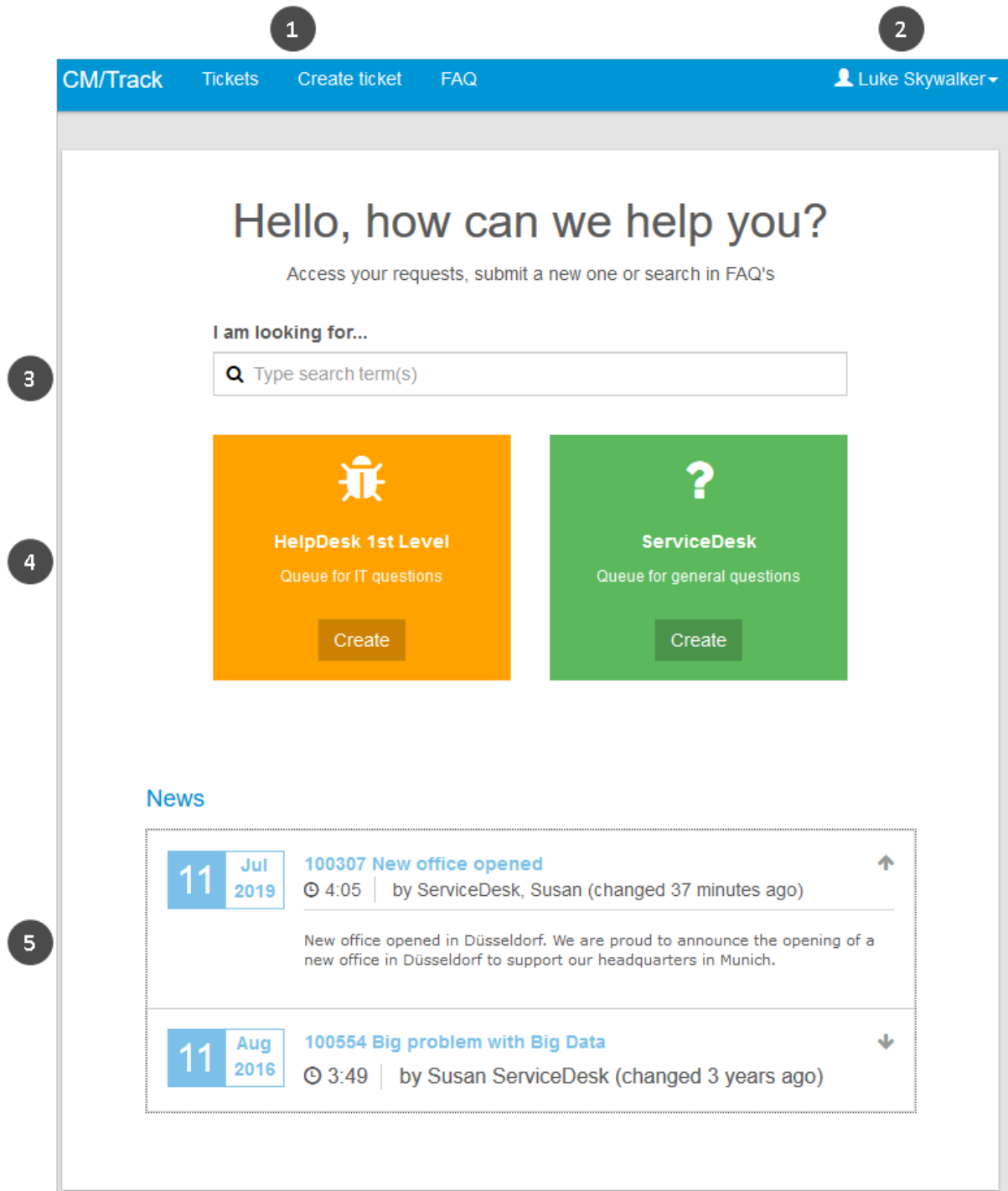


Figure 136: Welcome page in CM/Track

The menu bar (1) contains links to different features. The available links depend on the individual configuration of your CM system. The following links are available in a standard setup:

- **Tickets**
Opens the overview with the ticket list.

- **Create ticket**
Opens the screen where the customer can create a new ticket.
- **FAQ**
Opens the FAQ search screen.

The name of the current user is displayed next to the menu bar on the right side (2). The customer can click his name to open a drop-down menu containing a logout link. Depending on the configuration of the CM system, a link to change the password might be available as well.

The main panel contains a search bar (3) and tiles (4). There is one tile for each queue in which the customer can create tickets. The *Create* button in the tile redirects the customer to the *Create ticket* page where the respective queue is preselected. The search bar allows the customer to search his tickets.

Optionally, CM/Track can be configured to display news (5). If the news feature is configured, the customers can view the news text by clicking the header of the respective entry.

E.2.6.3 Viewing the ticket list

The ticket list is opened by clicking the *Tickets* link in the menu bar. It shows the tickets which the customer has access to and includes several options for filtering, sorting, and navigating the ticket list.

The screenshot displays the 'Ticket list' in CM/Track. The interface includes a top navigation bar with 'CM.Track', 'Tickets' (active), 'Create ticket', and 'FAQ'. The user 'Luke Skywalker' is logged in. Below the navigation bar, there are filters: 'Show Tickets of company', 'Filter by All queues', 'Open', and 'Sort by Creation date'. A search bar is labeled 'Search...'. The ticket list shows six entries, each with an icon, a title, a status, a queue, a creation date, and a contact. The entries are: 100047 | Printer problems (Qualify, HelpDesk 1st Level Germany, May 8, 2017, Leia Skywalker), 100045 | New Ticket for Resource: Workstation (New ticket, ServiceDesk, May 5, 2017, CM Consultant), 100026 | Questions about invoice (New ticket, ServiceDesk Germany, Apr 13, 2017, ConSol GmbH DUS), 100021 | Online help (New ticket, ServiceDesk Germany, Apr 6, 2017), 100020 | Printer malfunctioning (2nd Level, HelpDesk 2nd Level, Apr 5, 2017, Luke Skywalker), and 100019 | Layout issue when printing (Work in progress, ServiceDesk Germany, Mar 27, 2017, Luke Skywalker).

Figure 137: Ticket list in CM/Track

Above the ticket list (3), a section with several filtering, sorting, and navigation options is displayed (1). The customer can set the following options:

- **Show**

Determines whose tickets are displayed in the ticket list. The available options are:

- **My tickets**

Only tickets of the current customer.

- **Tickets of company**

Tickets of the current customer, another customer of his company, or his company. (The availability of this option depends on the CM/Track profile assigned to the customer.)



This option is only displayed if the customer is allowed to see the tickets of his company.

- **Filter by**

Determines which tickets are to be displayed in the ticket list. The available options are:

- **All queues**

The ticket list shows tickets from all queues which the customer has access to. Alternatively, the customer can select one queue.

- **Open + Closed**

The ticket list shows open and closed tickets.

- **Open**

The ticket list shows only open tickets.

- **Closed**

The ticket list shows only closed tickets.

- **Sort by**

Determines how the tickets are sorted in the ticket list. The customer selects the element to be considered for sorting from the drop-down list. The sorting order can be changed by clicking the sorting order button (two arrows). The available options are:

- **Queue**

Sorts the tickets by queue name.

- **Creation date**

Sorts the tickets by creation date.

- **Subject**

Sorts the tickets by subject.

- **ID**


Sorts the tickets by ticket number.

- **Scope**

Sorts the tickets by queue and scope. (The scopes are usually sorted according to their position in the workflow.)

- **Search (2)**

Searches the ticket subject, comments, attachments (if configured), and indexed ticket fields. The search results are combined with the selected filters, i.e. only ticket matching both the search and the filters are displayed.

 The availability of the ticket fields for customers in CM/Track is not considered during the search. This means that the customer can find tickets due to values of ticket fields which are then not displayed in CM/Track.

For each ticket the following information is provided:

- Ticket icon (1)
- Ticket number (2)
- Subject (3)
- Scope (4)
- Queue (5)
- Creation data (6)
- Main customer (7) - only displayed if the filter *Tickets of company* is selected

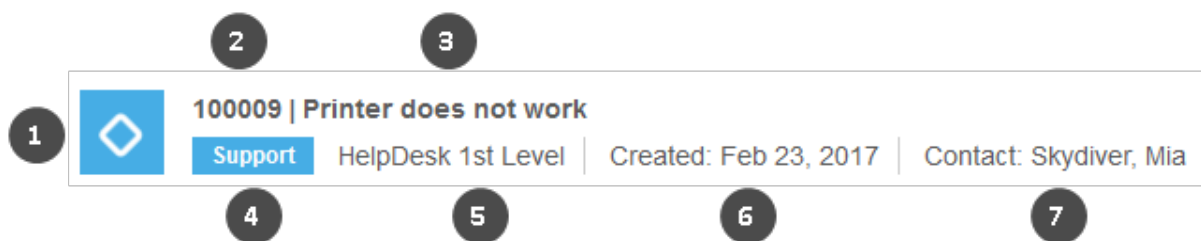


Figure 138: Details of an entry in the ticket list

Filtering the ticket list

The customers can filter the ticket list by entering a search term into the search bar located above the tickets. The ticket list is filtered automatically to display only those tickets which contain the search term in the ticket number, subject, comments, attachments or ticket fields. It depends on the individual configuration of your CM system which ticket fields are searched and if attachments are searched.

Scope of the ticket list

The tickets displayed in the ticket list depend on the [CM/Track profile](#) which you assigned to the CM/Track account. Depending on the permissions included in the profile, the customer can see either:

- **Own tickets**
All tickets where the customer is the main customer or an additional customer (filtering option *My tickets*).
- **Company tickets**
All tickets where the customer, another contact of the company which the customer belongs to, or the company itself is the main customer or an additional customer (filtering option *Tickets of company*).

E.2.6.4 Working with tickets

Viewing a ticket

Customers can view the details of a ticket by opening the ticket. They just have to click the row of the ticket in the ticket list. The ticket details contain the basic ticket data at the top (1) and the additional ticket data in the *Additional information* section (2). The *Add a comment / attachment* button (3) is located below the ticket data. The customers can click this button to add comments and attachments. The comment and attachment history (4) is displayed at the bottom of the page. It also includes emails (not shown in the figure below).

The screenshot shows a ticket details page. At the top, a header bar contains a ticket icon, the ticket ID '100393', the title 'Please install Office 2013 on my computer', and a 'Qualify' button. Below this, the 'Additional information' section is displayed as a table. Below the table is a button labeled '+ Add a comment / attachment'. At the bottom, a vertical timeline shows a history of comments and attachments. Callout 1 points to the header bar, callout 2 points to the 'Additional information' table, callout 3 points to the '+ Add a comment / attachment' button, and callout 4 points to the comment history timeline.

Category	Priority	Reaction time
Software/Office	normal	May 13, 2016

Comment History:

- 16-05-13 12:10
Dear support team,
Please install the new version of Microsoft Office on my computer.
Luke Skywalker
- 16-06-21 11:31
Bitte Office am Donnerstag installieren
- 16-06-21 11:31
Order.docx

Figure 139: Ticket details

The customer can return to the overview containing the ticket list by clicking *Tickets* in the menu bar.

Adding content to a ticket

Customers can add comments and attachments to their tickets using CM/Track. To do so, they have to open the respective ticket and click the *Add comment / attachment* button. This opens the editor shown in the following figure.

Add a comment / attachment

1 Please install Windows on Thursday.

2 Drop files or click to select files

3 Order.docx
Description

Save Cancel

Figure 140: Editor to add content to a ticket

The customer can perform the following actions:

- **Write a comment (1)**
The customer can use the rich text editor to enter his comment.
- **Add an attachment (2)**
The customer can click the *Drop files or click to select files* area to select a file from the file system. Alternatively, he can drag-and-drop files into this area. The uploaded file (3) is displayed below (here *Order.docx*). Optionally, a description can be entered. The customer can remove the file by clicking the X icon. It is possible to add several files at once.

The customer has to click *Save* to save his changes. Usually, the comments and attachments are directly visible in CM/Track.

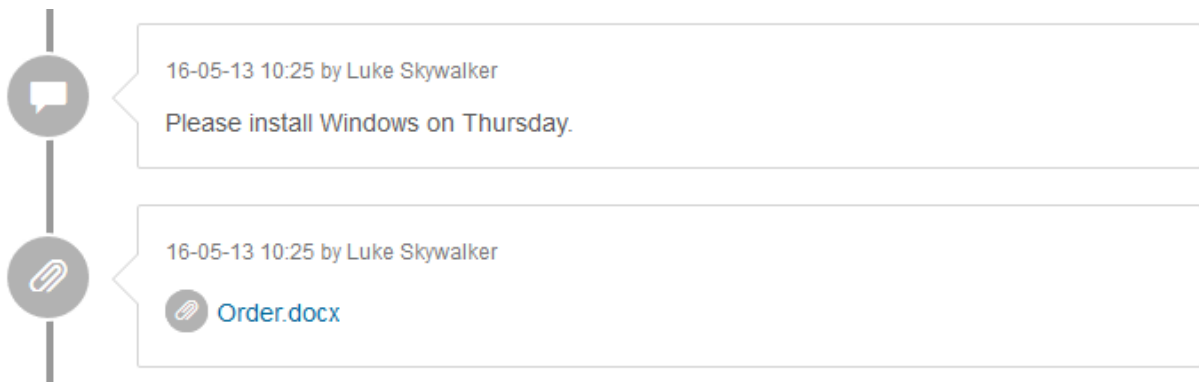


Figure 141: Added content visible in CM/Track

As an engineer, you can see your customers' comments and attachments in the Web Client, see [Customers add content to tickets](#).

Performing workflow activities for a ticket

Customers can perform workflow activities to move tickets to the next step in the process. Usually, the ConSol CM system is configured in a way that only some specific workflow activities are available to the customers. For example, the customers might be able to close their tickets or to provide feedback, but they do not see any activity related to the internal processing of their request, e.g. requests for approval or questions to other teams.

The customers have to carry out the following steps to perform a workflow activity:

1. The customer clicks the workflow activity located in the upper right corner of the ticket details. Depending on the number of available activities, a drop-down list is displayed.
2. If the workflow activity has an ACF, the customer fills out the ACF and clicks *Save*.

A green success message is displayed after the activity has been executed successfully.

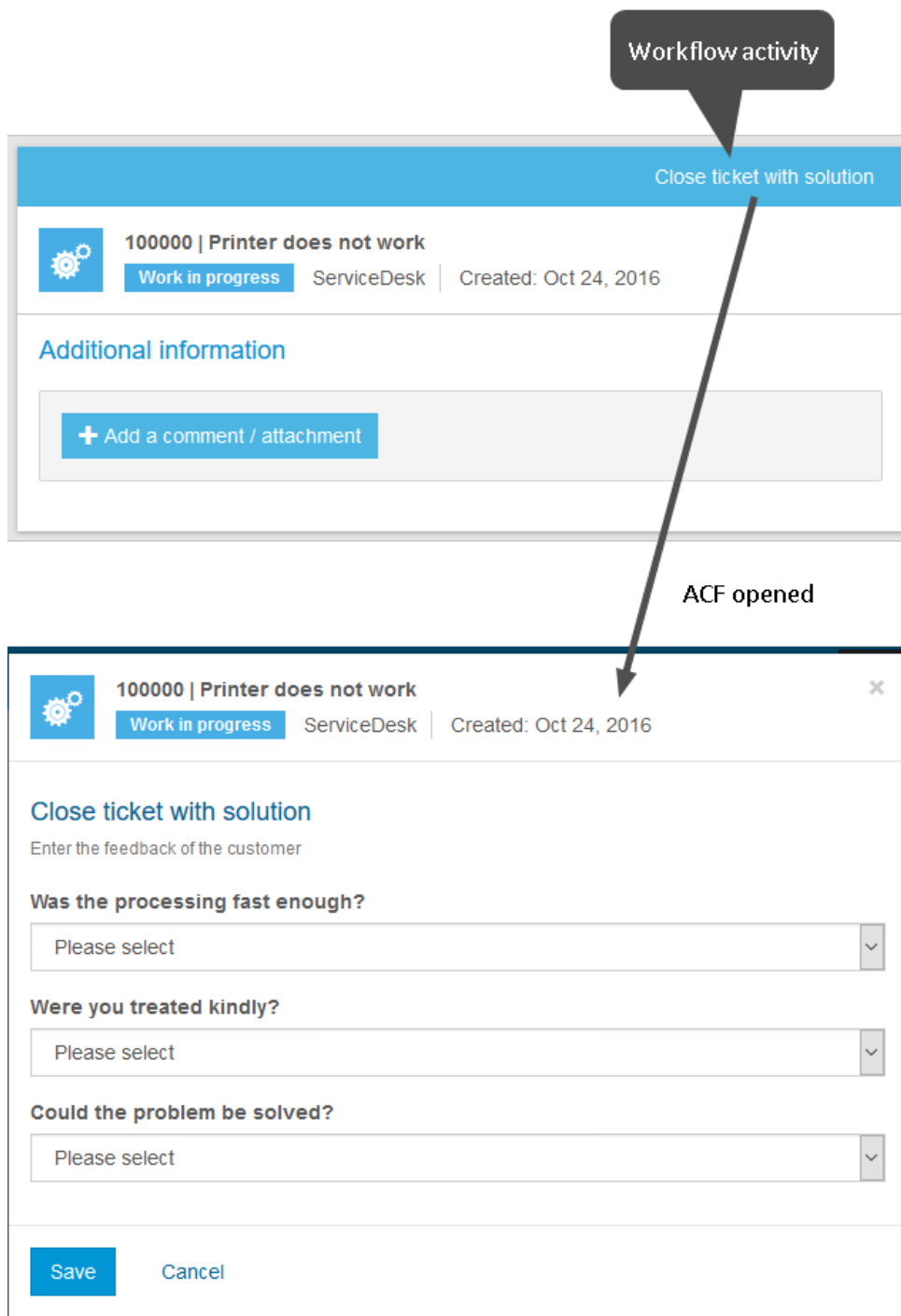


Figure 142: Performing a workflow activity with ACF in CM/Track

Creating a new ticket

Customers can create new tickets using CM/Track provided that their CM/Track profile contains the required permissions. They have to carry out the following steps:

1. The customer clicks *Create ticket* in the main menu.
2. The customer fills out the *Create ticket* screen.
 - Subject (1) (mandatory)
 - Queue (2) (mandatory)
 - Data fields (3)
 - Comment (4)
 - Attachment (5) (optional)
3. The customer clicks the *Create Ticket* button to save the ticket.

The screenshot shows the 'Create ticket' form with the following elements:

- Subject** (1): A text input field with a red icon and a '1' in a circle.
- Queue** (2): A dropdown menu with 'HelpDesk 1s' selected and a '2' in a circle.
- Category**: A dropdown menu with 'Please select'.
- Priority***: A dropdown menu with 'high'.
- Module** (3): A dropdown menu with 'Please select' and a '3' in a circle.
- Reaction time**: A text input field.
- Comment** (4): A large text area with a rich text editor toolbar and a '4' in a circle.
- Attachment** (5): A dashed box with the text 'Drop files or click to select files' and a '5' in a circle.
- Buttons**: 'Create Ticket' and 'Cancel' at the bottom.

Figure 143: *Creating a new ticket in CM/Track*


As an engineer, you can see the new ticket in the Web Client, see [Customers create new tickets](#).



In the standard configuration, the customer sees the same fields in CM/Track as you, as an engineer, see in the Web Client.

E.2.6.5 Searching the FAQs

FAQs (Frequently Asked Questions) help your customers to find answers to common questions by themselves. FAQs are managed as tickets within your CM system, where FAQ tickets are located in a special FAQ queue. In contrast to normal tickets, which are visible to their customers only, FAQ tickets are visible to **all** customers in CM/Track. FAQ tickets can contain solutions to known problems or instructions on common tasks.

 It depends on the individual configuration of your CM system whether the FAQ functionality is available.

Your customers can search the FAQ by proceeding as follows:

- The customer clicks *FAQ* in the menu bar.
- On the FAQ screen, the customer selects a queue, enters a search pattern, and clicks the *Search* button (1). If the customer does not enter a search pattern, all tickets in the selected queue are displayed.
- The matching FAQ tickets are displayed in the ticket list (2) and the customer can click a ticket to open its details.

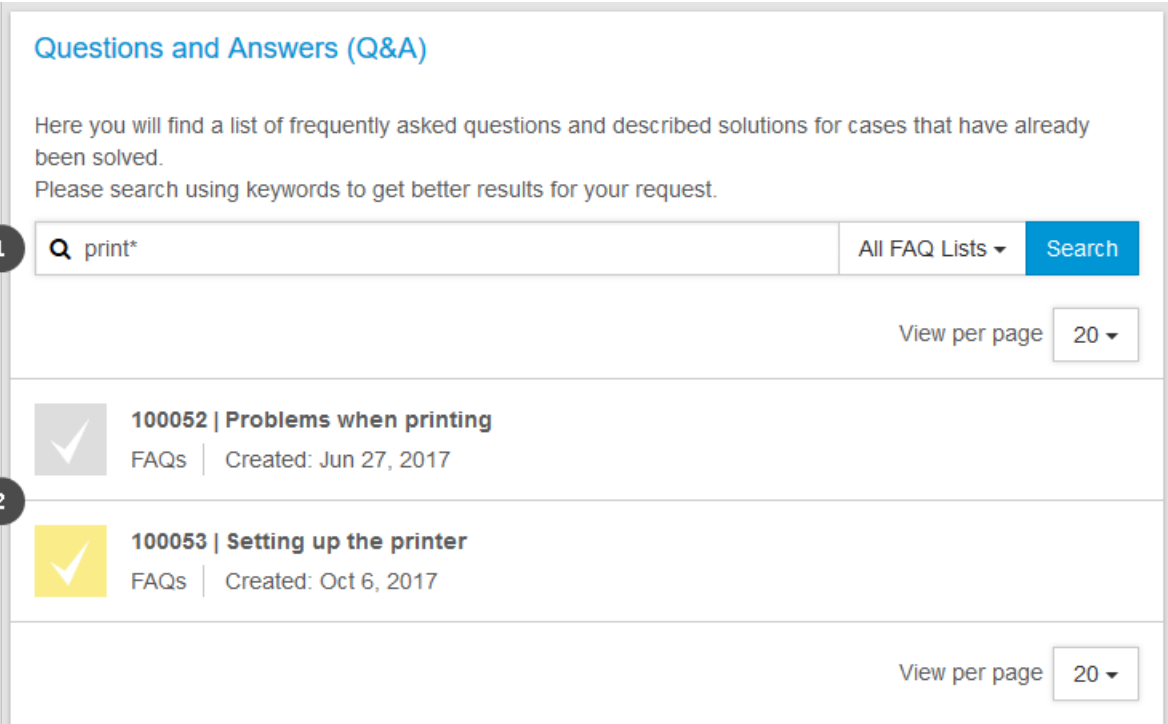



Figure 144: Searching the FAQ

 It is possible to use an asterisk (*) as a wildcard in the search pattern.

E.2.6.6 Changing the password

Your CM system can be configured to allow your customers to change their CM/Track password within CM/Track. In this case, the menu bar includes a link for password change.

The customers can change their password by clicking the *Change password* link, and entering the old and new passwords into the respective fields. Afterwards, they have to click the *Change password* button to save their changes.

E.3 CM/Archive

CM/Archive is a ConSol CM add-on which allows you to view archived tickets. These are tickets which have been removed from the Web Client but are still needed for reference or regulatory reasons.

The initial screen which is displayed after logging in to CM/Archive is the search screen:

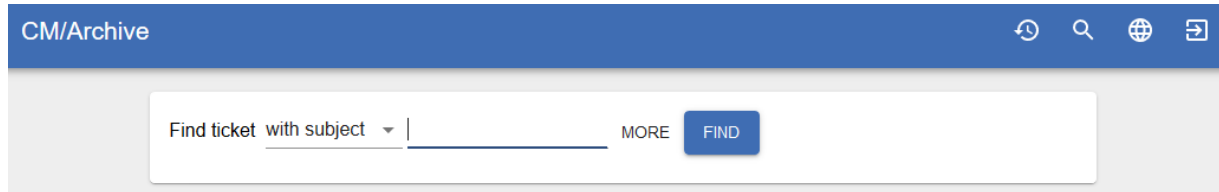


Figure 145: Search for tickets in CM/Archive

You can search for a ticket by name, subject, main customer, and creation, closing or archiving date. Wildcards can be used for the main customer and the subject. It is possible to combine two search criteria: You can search by name, subject or main customer, and provide a date range (creation or closing date of the ticket) in addition.

The user interface of CM/Archive enables the following actions:

- View statistics (1) - special permissions are required
- Search for a ticket (2)
- Change the GUI language (3) - the available languages are English, German and Polish
- Log out (4)



Figure 146: Icons for actions in CM/Archive

The following actions are only possible on the ticket details page:

- Delete the ticket (5) - special permissions are required
- Create a PDF with the ticket content (6)



Figure 147: Icons for actions in CM/Archive (ticket details page)

The archived ticket consists of several sections which contain the following information:

- **Header**
Ticket number, subject, queue, scope, workflow, assigned engineer

- **Ticket fields**

Ticket fields (only fields containing values). The fields from the *Details* section of the ticket are displayed in tabs.

- **Contacts**

Ticket customers (main and additional customers). You can click the customer to open a pop-up window with the customer data fields. The fields from the *Details* section are displayed in tabs.

- **Referenced tickets**

Related tickets. If the referenced ticket was also archived, you can click the ticket relation to open it.

- **Referenced resources**

Related resources

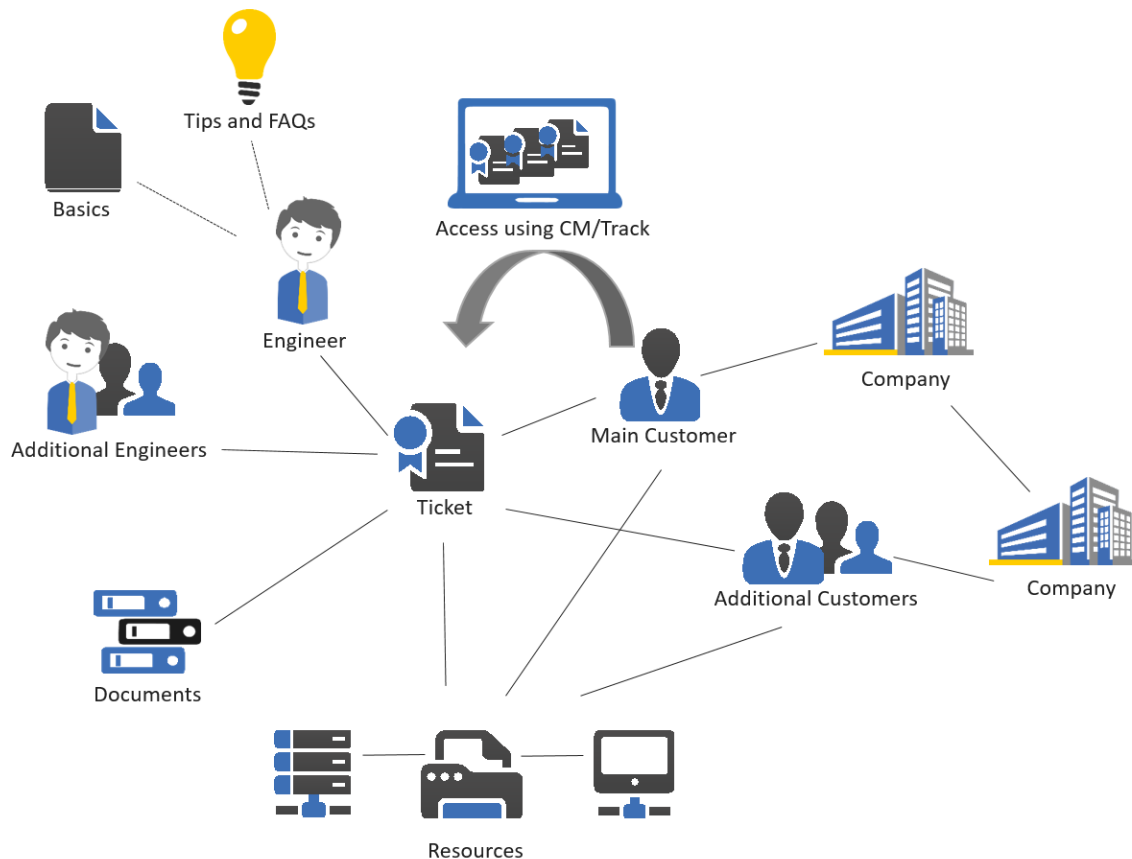
- **Attachments**

Attachments of the ticket. You can click an attachment to open it.

- **History**

Ticket history, including comments and emails

F - Tips, troubleshooting, and FAQs



This section provides additional hints which make working with the ConSol CM Web Client easier and quicker.

Tips and tricks for efficient work with ConSol CM:

- [Tips and tricks](#)

Description of common problems and their solutions:

- [Troubleshooting](#)

Frequently asked questions and their answers:

- [FAQs](#)

F.1 Tips and tricks

This chapter discusses the following:

F.1.1 Viewing tooltips	262
F.1.2 Using keyboard shortcuts	263
F.1.3 Using the favorites	264
F.1.4 Using the workspace	266
F.1.5 Adding ticket relations via drag-and-drop	268
F.1.6 Opening the main customer of a ticket	269

F.1.1 Viewing tooltips

There are many locations where you can get additional information, so called *tooltips*, when you hover over an element in the Web Client. The tooltip usually provides a description of the element. Tooltips are used for example in:

- **Ticket icon**
Name of the scope and description of the overlays
- **Activities**
Description of the activity
- **Links and buttons**
Description of the action which can be performed by clicking the link or button

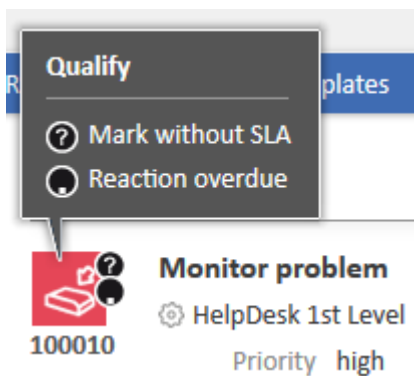


Figure 148: *Tooltip for a ticket icon*

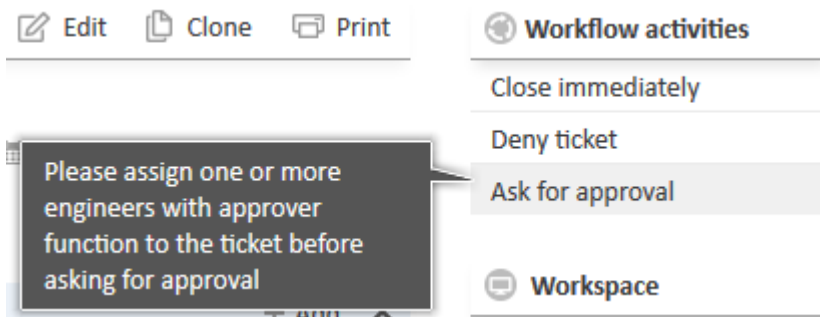


Figure 149: *Tooltip for a workflow activity*

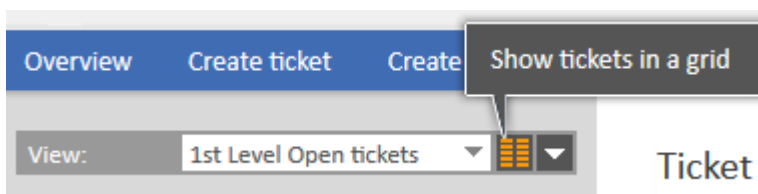



Figure 150: *Tooltip for a button*

F.1.2 Using keyboard shortcuts

ConSol CM provides keyboard shortcuts for the following actions:

- [execute activities](#)
- [jump to the Quick Search](#)

In addition, you might want to use the keyboard shortcuts provided by your browser. For example, you can use the TAB key to navigate the page and the ENTER key to press a button.

 The availability of the CM-specific keyboard shortcuts depends on your system configuration.

F.1.2.1 Keyboard shortcuts for executing activities

These shortcuts apply to workflow activities, customer activities, resource activities and search activities. There are up to nine shortcuts available: Alt+1 for the first activity in the list, Alt+2 for the second activity, and so on.



Figure 151: Keyboard shortcuts for workflow activities

F.1.2.2 Keyboard shortcut for jumping to the Quick Search

You can press the "F" key to jump to the Quick Search. This allows you to enter your search term without having to click in the Quick Search field.

F.1.3 Using the favorites

The favorites are a box displayed to the right of the main working area. They serve as a quick access to certain items in ConSol CM. The items you add to the favorites are saved in the favorites independently of your session: you can still access them after logging out and logging in again.

The screenshot displays the ConSol CM interface. The main area shows a ticket titled "Problem with new printer" with details like "ServiceDesk", "Work in progress", and "Susan ServiceDesk". The right sidebar contains three sections: "Workflow activities" (with options like "Ticket in progress" and "Put ticket on hold"), "Workspace" (stating it is empty), and "Favorites". The "Favorites" section lists three items: "Spaceship Ltd", "Layout issues when printing", and "HP Printer 924". A callout box points to the "Favorites" section with the text "The favorites".

Figure 152: Favorites

The favorites provide quick access to:

- Tickets
- Customers
- Resources
- Detailed Searches

You can save up to 10 items in the Favorites.

F.1.3.1 Adding items to the favorites

You can add a ticket, customer, resource, or Detailed Search to the favorites using the drag-and-drop features. Please proceed as follows to add the item to the favorites:

1. Click the icon of the respective item. This can be the [ticket icon](#), [customer icon](#), [resource icon](#), or [search icon](#).
2. Drag the icon to the favorites box and drop it there. In case of a Detailed Search, you have to enter a name for the search before you can save it to the favorites. Tickets, customers, and resources are automatically displayed with their names according to the individual configuration of your CM system.

The following figure illustrates how to add a contact to the favorites:

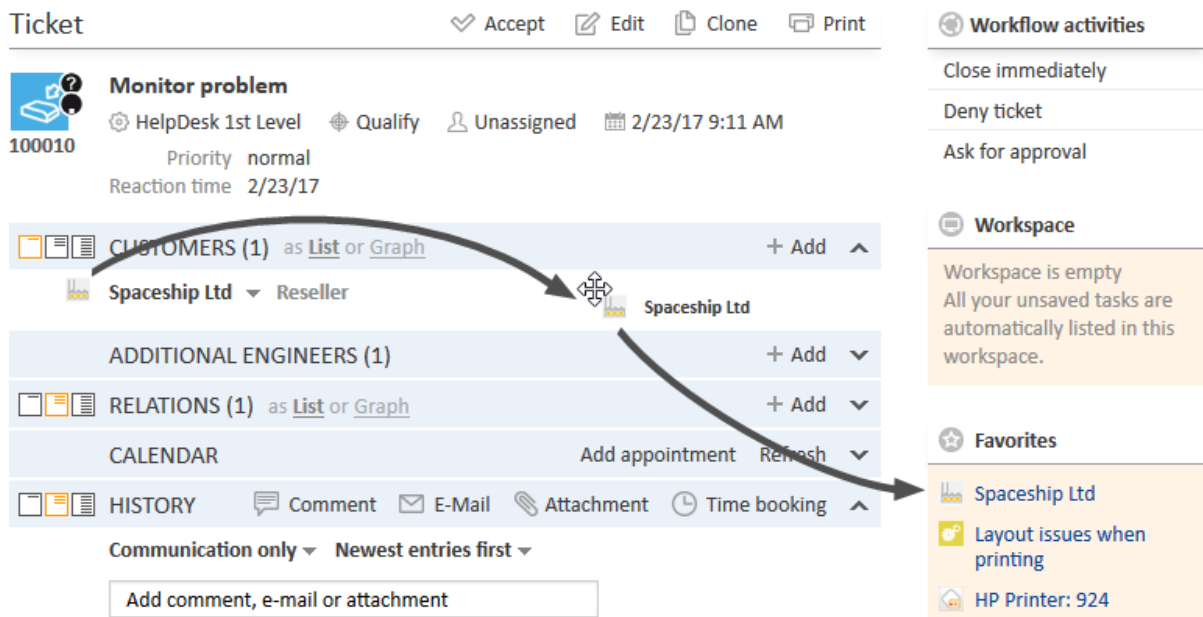


Figure 153: Adding a contact to the favorites

i Depending on the type of item, you can drag-and-drop it from several locations. For example, you can drag the ticket icon from the ticket list, the ticket header, a ticket relation, or a result table containing the ticket name and icon.

F.1.3.2 Working with the favorites

You can carry out different actions with the favorites:

- [Opening an item from the favorites](#)
- [Rearranging the items in the favorites](#)
- [Removing an item from the favorites](#)

Opening an item from the favorites

You can use the favorites to open the items saved there. This can be a ticket, customer page, resource page, or Detailed Search. To do so, just click the name of the item, which is a link.

Rearranging the items in the favorites

You can change the order of the items in the favorites by dragging-and-dropping each item to the desired position.

Removing an item from the favorites

You can delete an item from the favorites by clicking the red cross next to the item's name. The red cross is displayed as soon as you hover the mouse over the item.

F.1.4 Using the workspace

The workspace is a box displayed to the right of the main working area. It serves as a temporary storage for changed tickets, customers, and resources, in case you switch to another object without having saved the changes to the previous object before. The content of the workspace is deleted when your session ends, i.e., you log out of the Web Client or you are logged out automatically.

The screenshot shows the 'Ticket' details page for a ticket titled 'Problem with new printer'. The ticket is in 'Work in progress' status, assigned to 'Susan ServiceDesk', and has a 'Desired deadline' of '2/21/17 12:00 AM'. The 'CUSTOMERS (1)' section shows 'Luke Skywalker' as the customer. The 'RELATIONS (1)' and 'RELATED RESOURCES (2)' sections are also visible. On the right, the 'Workflow activities' sidebar lists actions like 'Ticket in progress', 'Put ticket on hold', and 'Create special task'. Below this is the 'Workspace' section, which contains a list of items: 'Monitor problem' and 'Spaceship Ltd'. A callout box labeled 'The workspace' points to this sidebar.

Figure 154: *Workspace*

The workspace saves your changes both for new objects, i.e., when you create a new ticket, customer, or resource, and for existing objects, i.e., when you edit a ticket, customer, or resource. If you switch to another screen while editing data, your changes will not be lost, but you can resume work later on.

F.1.4.1 Working with the workspace

You can carry out different actions with the workspace:


- [Resuming work on an item in the workspace](#)
- [Removing an item from the workspace](#)

Resuming work on an item in the workspace

You can resume work on an item from the workspace by clicking its name. It will be opened in edit mode in the main working area and your unsaved changes will be present.

Removing an item from the workspace

You can delete an item from the workspace by clicking the red cross next to the item's name. The red cross is displayed as soon as you hover the mouse over the item.

 When you log out of the Web Client or a session timeout occurs, the workspace will be emptied automatically. You will be prompted for the decision to postpone the logout (to finish work on the objects in the workspace) or to continue the logout process and discard all changes to the objects in the workspace.

F.1.5 Adding ticket relations via drag-and-drop

You can add ticket relations to a ticket by dragging-and-dropping the ticket icon into the [section for related tickets](#) of the ticket. You can use a ticket icon from the ticket list (see figure below), from the workspace, or from the favorites for this purpose. Once you have dropped the ticket icon, the section for related tickets is opened in edit mode. The target ticket is already selected and you can directly select the type of relation. Please see [Adding a ticket relation](#) for further information.

The screenshot illustrates the process of adding a ticket relation. On the left, a 'ServiceDeskAll' view shows a list of tickets. Two tickets are visible under the 'Team (2)' filter:

- Network failure** (Ticket ID: 100007): Customer: Skydiver, Mia, Assigned to: Tony Tester, 2/22/17 9:40 AM.
- Printer not functioning properly** (Ticket ID: 100011): Customer: Spaceship Ltd, Assigned to: Sarah Service Desk, 3/3/17 9:39 AM.

The 'Printer not functioning properly' ticket (100011) is being dragged from the list. On the right, the 'Ticket' details view for 'Layout issues when printing' (Ticket ID: 100002) is shown. The ticket is assigned to Susan ServiceDesk, with a date of 2/16/17 8:59 AM, priority 'low', and a desired deadline of 2/28/17 12:00 AM. The 'DETAILS' section includes buttons for 'Conversations/Meetings', 'Orders', and 'Open Customer Tickets on Create Date'. Below this, the 'CUSTOMERS (2)' section shows 'Luke Skywalker' as an end customer. The 'RELATIONS (1)' section is currently empty, and the 'referenced by' section shows a link to the 'Printer not functioning properly' ticket (100011). The 'CALENDAR' section at the bottom has buttons for 'Add appointment' and 'Refresh'.

Figure 155: Adding a ticket relation using drag-and-drop

F.1.6 Opening the main customer of a ticket

There are two ways to quickly open the main customer of a ticket:

- (1) Click the customer link in the ticket list.
- (2) Click the *Jump to contact / company* link in the [customers section](#) of the ticket.

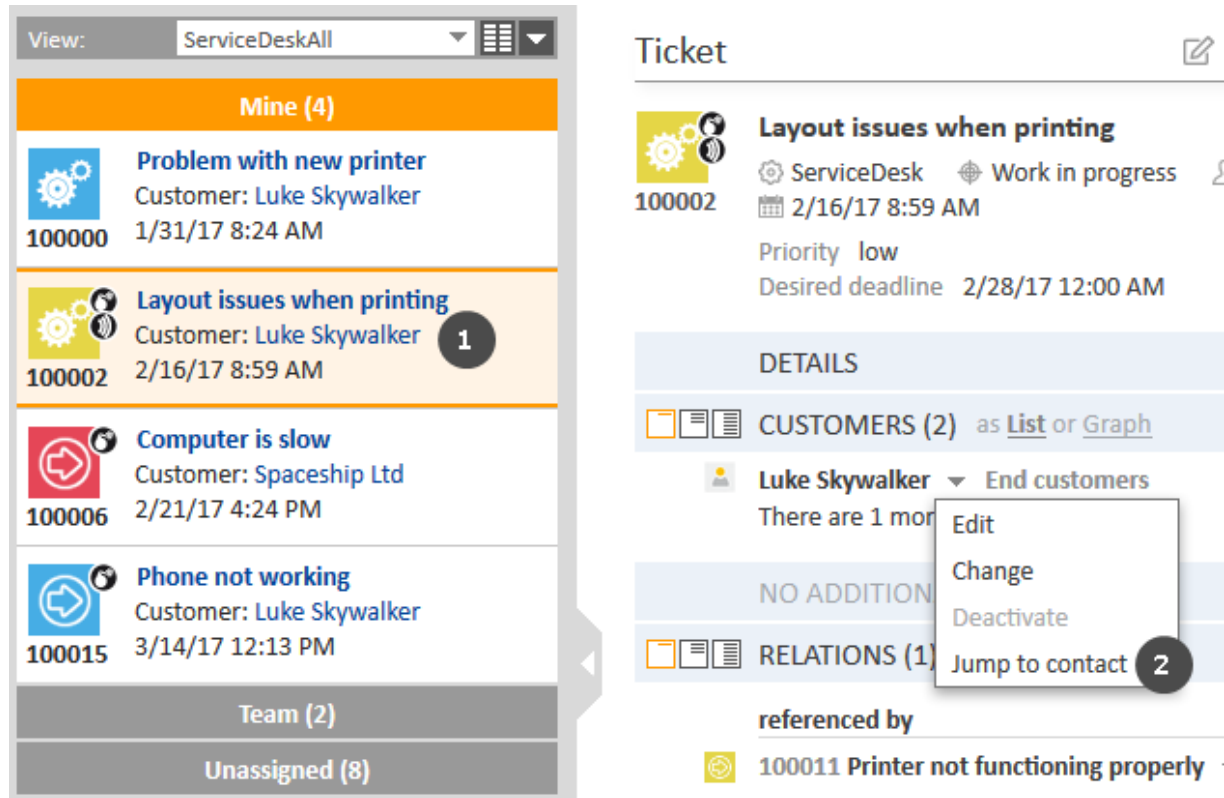


Figure 156: Opening the main customer of a ticket

If the customer is a contact within a two-level customer model, you can also jump directly to the company which the contact belongs to. To do so, please proceed as follows:

1. Select the [visibility level](#) *Detail*.
2. Click the *Jump to company* link in the context menu of the company.

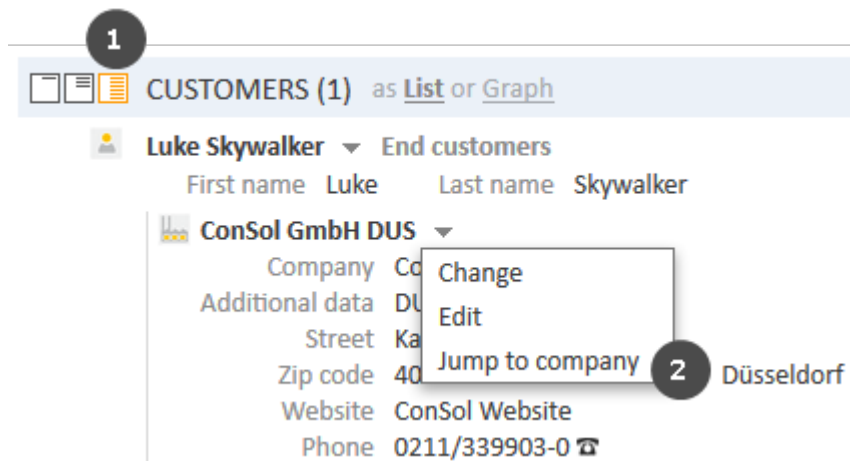


Figure 157: Opening the company



If you want to open the page of an additional customer, you can use the *Jump to contact / company* links in the context menu of the additional customer.

F.2 Troubleshooting

This chapter discusses the following:

F.2.1 User name and password	272
F.2.2 Tickets	274
F.2.3 Customers	275
F.2.4 Resources	276
F.2.5 Views	277
F.2.6 CM/Doc	278

F.2.1 User name and password

F.2.1.1 You forgot your password

If you forgot your password, you have to reset it, i.e., you have to choose a new password.

You can reset your password using the login page of the Web Client. To do so, please proceed as follows:

1. Open the login page of the Web Client.
2. Click the *Forgot your password?* link (see figure below).
3. Enter your user name in the field provided on the next screen and click *OK*.
4. You will receive an email with instructions on how to reset your password. Usually the email contains a link which leads you to a Web Client screen where you can enter a new password. Follow the instructions in the email.

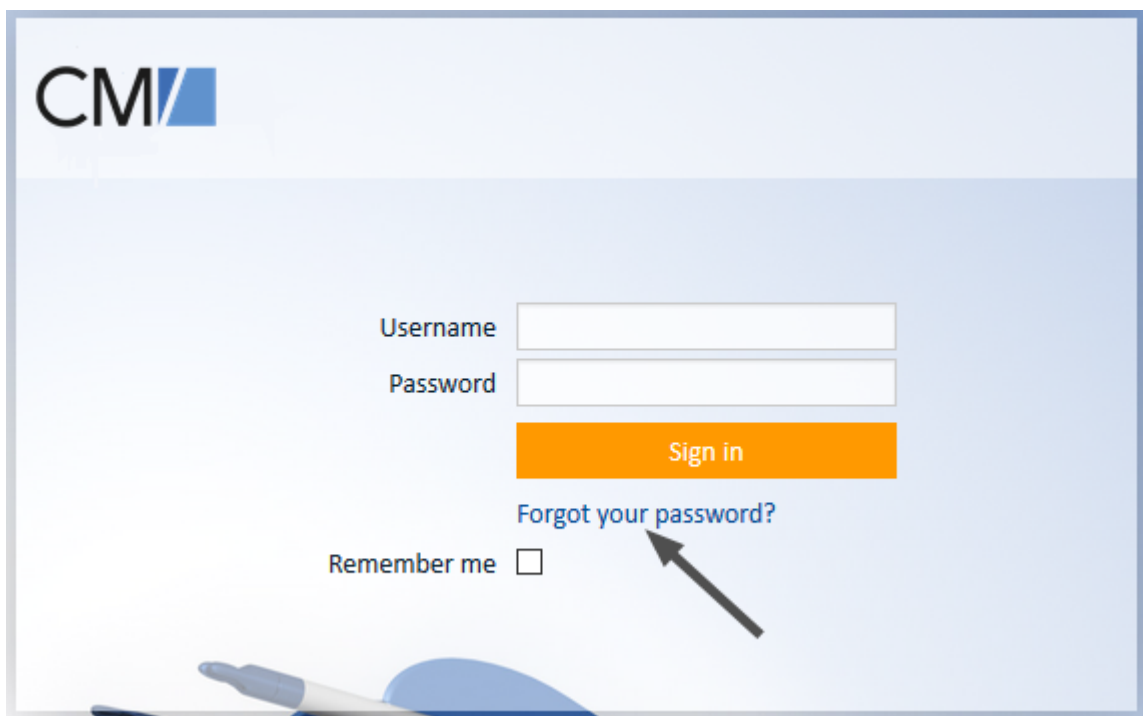


Figure 158: *Resetting your password*



If you log in via [LDAP](#) or [Single Sign-On](#), you cannot reset your password via the login page of the Web Client. Please contact your CM administrator in this case.

F.2.1.2 You forgot your user name

If you forgot your user name, please contact your CM administrator. The user name of your user account is determined by your CM administrator; you cannot change it yourself.

F.2.1.3 You want to change the user name when logged in automatically

There can be two reasons why you are being logged in automatically:

- You activated the check box *Remember me* on the Web Client login page.
- You are logged in via [Single Sign-On](#). In this case, the user account you are logged in with depends on the user account you are currently using on your Windows computer.

In both cases you have two options for logging in with another user name:

- Wait until you are logged in automatically and click the *Logout* button. You will be directed to the login page of the Web Client and can log in with another user name.
- Enter the URL for the Web Client login page directly into your browser. This URL usually ends with `....cm-client/login`

F.2.2 Tickets

F.2.2.1 You cannot find a ticket using the search

There can be several reasons why you cannot find a ticket using the Quick Search or Detailed Search:

- The ticket subject was changed, so you cannot find it when searching for its old subject.
→ Try searching for the ticket number instead.
- The Quick Search returns too many results, so your ticket is not included in the result list. This may happen because the number of results in the Quick Search is limited.
→ Narrow down the search by entering more characters or use the Detailed Search.
- You do not have the necessary permissions to view the ticket. This may happen when a ticket was moved to another queue for which you lack read permissions or if the main customer was changed to a customer from a customer group for which you lack read permissions.
→ Contact your CM administrator who can grant you the required permissions (if this is allowed).
- You applied a [customer group filter](#) in the main menu to display only the selected customer group. If the ticket's main customer belongs to another customer group, you do not find it using the search functions.
→ Select *All customer groups* in the customer group filter.
- The ticket has been deleted from the CM system.

F.2.2.2 You do not see a ticket in the ticket list

1. Search for the ticket using the Quick Search or Detailed Search to check if you can see the ticket at all. If you cannot find the ticket, see [You cannot find a ticket using the search](#).
2. If you can find the ticket via the search functions, check if you chose an appropriate view in the ticket list, i.e., a view that should contain the desired ticket.
3. Check if you activated a [filter](#) for the ticket list, which prevents the display of this particular ticket.
4. Check if you opened the correct [group](#) within the ticket list. The ticket might belong to a group other than the currently opened one.
5. Check your [user profile](#) if you set [view criteria](#) that prevent the display of the ticket.

F.2.2.3 You cannot see a particular ticket section

Your CM administrator defines which ticket sections you are able to see and in which order they are displayed. You can [expand and collapse](#) ticket sections, but you cannot see a ticket section that has been disabled by your administrator.

F.2.2.4 You cannot work on a ticket

There can be two reasons why you cannot work on a ticket:

- You do not have the necessary permissions to work on the ticket. As permissions are granted for different actions separately, it may happen that you can perform some but not all actions, e.g., you may be able to add a comment but not to assign the ticket to another engineer.
→ Contact your CM administrator who can grant you the required permissions (if this is allowed).
- The ticket is closed or archived. Therefore, no workflow activities are displayed, you cannot edit the ticket data and you cannot write comments or emails. Please see [Ticket states](#).

F.2.3 Customers

F.2.3.1 You cannot find a customer using the search

There can be several reasons why you cannot find a customer using the Quick Search or the Detailed Search:

- The Quick Search returns too many results, so your customer is not included in the result list. This may happen because the number of results in the Quick Search is limited.
→ Narrow down the search by entering more characters or use the Detailed Search.
- You do not have the necessary permissions to view the customer. This may happen if the customer belongs to a customer group for which you lack read permissions.
→ Contact your CM administrator who can grant you the required permissions (if this is allowed).
- You applied a [customer group filter](#) in the main menu to display only the selected customer group. If the customer belongs to another customer group, you do not find him using the search functions.
→ Select *All customer groups* in the customer group filter.
- The customer has been deactivated.
→ Use the Detailed Search with the option *Deactivated incl.*
- The customer has been deleted from the CM system.

F.2.3.2 You cannot see the tabs for the different customer groups

When creating a ticket, editing a ticket or creating a customer, the different customer groups are displayed in tabs. There can be several reasons for the tabs not being displayed:

- You applied a [customer group filter](#) in the main menu to display only the selected customer group. In this case, the tabs of the other customer groups are not displayed.
→ Set the filter to *All customer groups* to display the tabs for all customer groups which you have access to.
- You do not have the necessary permissions to create or view customers of other customer groups.
→ Contact your CM administrator who can grant you the required permissions.
- The ticket's queue does not allow customers from other customer groups.

F.2.3.3 You cannot see a particular customer page section

Your CM administrator defines which customer page sections you are able to see and in which order they are displayed. You can [expand and collapse](#) customer page sections, but you cannot see a section that has been disabled by your administrator.

F.2.4 Resources

F.2.4.1 You cannot find a resource using the search

There can be several reasons why you cannot find a resource using the Quick Search or the Detailed Search:

- The Quick Search returns too many results, so your resource is not included in the result list. This may happen because the number of results in the Quick Search is limited.
→ Narrow down the search by entering more characters or use the Detailed Search.
- You do not have the necessary permissions to view the resource. This may happen when the resource belongs to a resource type for which you lack read permissions.
→ Contact your CM administrator who can grant you the required permissions.
- The resource has been deactivated.
→ Use the Detailed Search with the option *Deactivated incl.*
- The resource has been deleted from the CM system.

F.2.4.2 You cannot see a particular resource page section

Your CM administrator defines which resource page sections you are able to see and in which order they are displayed. You can [expand and collapse](#) resource page sections, but you cannot see a section that has been disabled by your administrator.

F.2.5 Views

F.2.5.1 The grouping by engineer is not shown in the ticket list

The grouping option *Engineer* is not shown in the drop-down menu *Group by* if you selected a filter since all groups but *Own tickets* would be empty. Select the option *All tickets* from the drop-down menu *Filter* to display this grouping option again.

F.2.6 CM/Doc

F.2.6.1 You cannot add attachments using CM/Doc

There can be several reasons why CM/Doc is not available:

- CM/Doc is disabled for your CM system.
- You have disabled CM/Doc in your user profile.
→ Open the user profile and select *Enabled* in the *Document generation via CM/Doc* section (see [Document generation via CM/Doc](#)).
- CM/Doc is not installed on your computer.
→ Install CM/Doc (see [Installing CM/Doc](#)).
- Microsoft Word or OpenOffice is not installed on your computer, or not used as a default program for opening doc., docx., or .odt. files.
→ Ask your CM administrator which office software you need to use CM/Doc and set this office software as default for opening the files.

F.3 FAQs

This chapter discusses the following:

F.3.1 General	280
F.3.2 Engineers	281
F.3.3 Tickets	282
F.3.4 Customers	283
F.3.5 Resources	284

F.3.1 General

F.3.1.1 Why can't I change my password in my user profile?

You cannot change your password if you log in using [LDAP](#) or [Single Sign-On](#).

F.3.1.2 An error message is displayed. What should I do?

If you see a red error message below the main menu, you should either take a screenshot of the message or copy the message text. Then you contact your administrator providing as much details as possible about what you did before the error occurred.

F.3.2 Engineers

F.3.2.1 What does it mean to be an additional engineer?

As an additional engineer (also called *referenced engineer*), you usually have to carry out some special tasks for the ticket. As an additional engineer, you always have an engineer function. For example, you might be in charge of approving a compensation or reviewing a solution. You can also have different engineer functions for a ticket. Please see [Engineers and additional engineers](#) and [Additional engineers and approval processes](#) for further information.

F.3.2.2 How can I search for the tickets where I am an additional engineer?

You can search for the tickets where you are added as an additional engineer using the [Detailed Search](#). Select *Referenced engineers* as a search criterion and select yourself in the list of engineers.

In addition, you can filter the ticket list to display only the tickets where you are the assigned engineer or an additional engineer. Please see [Views](#) for further information.

F.3.2.3 Do I get notified when someone adds me as an additional engineer?

It depends on the individual configuration of your CM system if you receive a notification when someone adds you as an additional engineer. Please contact your CM administrator if you have any doubts.

F.3.3 Tickets

F.3.3.1 What is the difference between open and closed tickets?

As soon as a ticket is created it is an **open** ticket. After a ticket went through the whole business process and there are no workflow activities for the ticket anymore, the ticket is a **closed** ticket. Closing a ticket can be done manually by an engineer or automatically by the system, e.g., after a defined waiting time after the last step of the business process.

The actions you can carry out for **open tickets** are described in [Updating tickets](#).

For **closed tickets**, the following applies:

- They can still be found via the Quick Search, Detailed Search, and Autocomplete Search.
- They can still be duplicated and printed.
- They can no longer be edited, which means that ticket data cannot be changed anymore.
- They can no longer be worked with, which means that there are no workflow activities and you cannot add comments or send emails.
- They can only be reopened by performing a reopen activity or by the CM administrator.

F.3.3.2 The ticket history has become quite long. How can I reduce it?

There are two settings which allow you to reduce the number of entries in the ticket history:

- You can change the [display mode](#) from *All entries* to *Communication*. This way, only emails, comments, and attachments are displayed.
- You can change the [visibility level](#) of the ticket history from *Detail* or *Extended* to *Basic*. This way, less entries are shown and the information in each entry is reduced.

F.3.4 Customers

F.3.4.1 How can I see all the contacts who belong to a company?

You can see the contacts who belong to a company on the company page, in the [contacts section](#). The number of contacts is usually indicated in parentheses in the section's headline.

F.3.4.2 How can I see all the tickets of a customer?

You can see the tickets of the customer (i.e., a company or a contact) on the customer page, in the [tickets section](#). There you can choose which tickets should be displayed. The number of tickets is usually indicated in parentheses in the section's headline. Note that you only see the tickets which you are allowed to view according to your permissions. Therefore, a customer might have more tickets, which you cannot view.

F.3.4.3 What purpose does the field *Track User* serve?

This is a data field in the header section of a contact page. It is used to assign a CM/Track profile to a contact. If your company does not use CM/Track, you can ignore this field. Please see [Configuring CM/Track for customers](#) for further information.

F.3.4.4 I accidentally deactivated a customer. How can I find and reactivate him?

You can find a deactivated customer using the Detailed Search. Tick the checkbox *Deactivated incl.* to display deactivated customers. Then you can open the customer page of the desired customer and reactivate him (see [Making customers available again](#)).

F.3.5 Resources

F.3.5.1 I accidentally deactivated a resource. How can I find and reactivate it?

You can find a deactivated resource on the resource type page or using the Detailed Search. In both places, you just need to tick the checkbox *Deactivated incl.* to display deactivated resources. Then you can open the resource page of the desired resource and reactivate it (see [Making deactivated resources available again](#)).

G - Appendix

This section contains several appendices:

- [Trademarks](#)
- [Glossary](#)
- [Index](#)

G.1 Trademarks

- The Apache Commons Codec™ library is a trademark of the Apache Software Foundation. See [Apache Commons Codec web page](#).
- Apache OpenOffice™ – Apache and the Apache feather logos are trademarks of The Apache Software Foundation. [OpenOffice.org](#) and the seagull logo are registered trademarks of The Apache Software Foundation. See [Apache OpenOffice Trademarks web page](#).
- Google Maps™ – Google Maps is a trademark of Google Inc. See [Google trademark web page](#) for details.
- HAProxy – HAProxy is copyright of Willy Tarreau. See [HAProxy website](#).
- Microsoft® – Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. See [Microsoft trademark web page](#).
- Microsoft® Active Directory® – Microsoft and Microsoft Active Directory are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. See [Microsoft trademark web page](#).
- Microsoft® Exchange Server – Microsoft and Microsoft Exchange Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. See [Microsoft trademark web page](#).
- Microsoft® Office – Microsoft and Microsoft Office are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. See [Microsoft trademark web page](#).
- Microsoft® SQL Server® – Microsoft and Microsoft SQL Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. See [Microsoft trademark web page](#).
- Microsoft® Windows® operating system – Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. See [Microsoft trademark web page](#).
- Microsoft® Word® – Microsoft and Microsoft Word are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. See [Microsoft trademark web page](#).
- MongoDB® – Mongo, MongoDB, and the MongoDB leaf logo are registered trademarks of MongoDB, Inc.
- NGiNX – NGiNX is copyright of Igor Sysoev and Nginx, Inc. See [NGiNX license page](#).
- OpenStreetMap - OpenStreetMap® is open data, licensed under the Open Data Commons Open Database License (ODbL) by the OpenStreetMap Foundation (OSMF). See [OpenStreetMap Copyright and License page](#).
- Oracle® – Oracle is a registered trademark of Oracle Corporation and/or its affiliates. See [Oracle trademarks web page](#).
- Oracle® WebLogic – Oracle is a registered trademark of Oracle Corporation and/or its affiliates. See [Oracle trademarks web page](#).
- Pentaho® – Pentaho and the Pentaho logo are registered trademarks of Pentaho Inc. See [Pentaho trademark web page](#).
- Vis.js – Vis.js is copyright of Almende B.V. See [Vis.js license page](#).

- Wicket™ - Apache Wicket and Wicket, Apache, the Apache feather logo, and the Apache Wicket project logo are trademarks of The Apache Software Foundation. See, for example, the [hint at the bottom of the Wicket home page](#)

G.2 Glossary

A

ACF

ACF is the abbreviation of Activity Control Form. ACFs can be used in workflow activities to force the engineer to fill out certain fields before proceeding.

activity

Activities, also called actions, are operations which can be performed for tickets, customers, resources, and search results.

additional customer

Additional customers are customers (companies or contacts) who are interested in the ticket. They are optional and usually have a role indicating the reason why they were added.

additional engineer

Additional engineers are engineers who have a specific purpose, which depends on your business process. Usually, they have to carry out certain tasks within the process.

B

business process

The business process determines how tickets are handled. It models the way your team works.

C

CM/Doc

A standard module of ConSol CM which enables the engineer via ConSol CM

Web Client to work with Microsoft Word or OpenOffice documents pre-filled with ConSol CM ticket or customer parameters.

CM/Resource Pool

CM/Resource Pool is an optional add-on which allows to store different kinds of objects as resources in ConSol CM.

CM/Track

CM/Track is the portal of ConSol CM. Customers can access their tickets through CM/Track.

company

The company is the upper hierarchical level of a two-level customer model. A company can have several contacts.

contact

The contact is the lower hierarchical level of a two-level customer model. A contact can only belong to one company.

customer

The customer represents the external side of a ticket. It designates the person or object that gave the reason for creating a ticket. A customer can either be a company or a contact.

customer data model

The customer data model is the definition of the customers. It determines the available data fields and possible relations.

customer group

The customer group determines which customer data model is used for its customers and which actions are available.

E**engineer**

Engineers are the users who work on the tickets in the Web Client

F**favorites**

The favorites are a box displayed to the right of the main working area. The engineers can add tickets, customers, resources, or searches to the favorites to quickly access them afterwards.

G**GUI**

Graphical User Interface

H**history**

The history contains all changes which were carried out for the ticket, customer, or resource.

L**LDAP**

LDAP is the abbreviation of Lightweight Directory Access Protocol. It is a protocol used to manage login information for several applications.

M**main customer**

The main customer is the customer who gave the reason for creating the ticket. The main customer is mandatory for a ticket.

main menu

The main menu is displayed in the upper part of the screen. It contains links to the different Web Client screens.

main working area

The main working area displays the item which the engineer currently works on. This can be a ticket, a customer page, a search results page, a dashboard, or a resource page.

O**overlay**

Overlays are little symbols which are added to the ticket icon after specific events happened.

P**permission**

Permissions determine which tickets an engineer can see in the Web Client and which actions he is allowed to perform. Permissions are always granted via roles, i.e., they are not assigned to a single user but to a group of users sharing a common role. Usually these users belong to the same team and/or have similar functions in the company.

Q

queue

The queue contains thematically related tickets which should be handled in the same way and follow the same business process (workflow). Permissions and other parameters are also defined based on queues.

R

relation

Relations are connections between different data objects in ConSol CM. This can be a relation between two objects of the same type, e.g., between tickets, customers, and resources, or a relation between objects of different types, e.g., between a ticket and a resource or a customer and a resource.

representation

Representations are temporary replacements. The representing engineer receives a copy of all emails which are sent from the CM system to the represented engineer's email address. In addition, his ticket list has an option to display the tickets of the represented engineer.

resource

Resources are objects managed in CM/Resource Pool.

resource type

The resource type is the definition of the resources. It determines the available data fields and possible relations and actions.

role

Roles are assigned to engineers. They define the engineers' access permissions and views.

S

scope

The workflow is divided into different scopes which indicate the status of a ticket.

session

The session is the time period between your Web Client login and logout.

T

template

Templates contain predefined and preformatted text. They can be used for comments, emails, and documents.

ticket

The ticket is the request of the customer which the engineer works on. It is the object which runs through the business process defined by the workflow.

ticket icon

The ticket icon is displayed in the upper left corner of a ticket and in the ticket list. It usually has a color, which represents the value of a certain parameter, and a symbol, which represents the current scope. The ticket icon can have overlays.

ticket list

The ticket list is located to the left of the main working area. It shows you certain tickets at a glance.

time booking

Time bookings allow the engineers to register the time they worked on a ticket or project.

U

user profile

The user profile contains the personal settings, representations, and time bookings of each user.

V

view

Views limit the tickets which are shown in the ticket list in the ConSol CM Web Client to those tickets matching specific criteria (scopes from one or more workflows). Views are assigned to roles.

visibility level

The visibility level determines the degree of detail of the information displayed in certain sections of tickets, customers, and resources.

W

Web Client

The Web Client is the primary access to the system for the engineers.

workflow

The workflow is the implementation of the business process managed in ConSol CM. It contains a series of steps which are carried out by the engineers.

workflow activity

Workflow activities are used to move tickets through the business process.

workspace

The workspace is a box displayed to the right of the main working area. It serves as a temporary storage for tickets, customers, and resources which have been changed but the changes have not been saved yet.

G.3 Index

A

- ACF 132
- Activity Control Form 132
- additional customer 133, 135
 - add 136
 - remove 137
 - role 136
 - set as main customer 137
- additional engineer 110, 158
- approval process 160
- attachment 150
 - add 151
 - CM/Doc 154
- autocomplete list 42
- Autocomplete Search 66

C

- calendar 40
- checkbox 42
- class of text 139
- CM/Doc 153
- CM/Track 239
 - add attachment 251
 - add comment 251
 - change password 256
 - contact data 185
 - create ticket 255
 - FAQ 256
 - login 246
 - ticket details 251
 - ticket list 248
 - visibility 243

- comment 140
 - add 141
 - CM/Track 243
 - edit 141
 - print 143
 - reply 143
- company 169
 - create 182
 - create in ticket 183
- contact 169
 - anonymize 196
 - change company 187
 - CM/Track fields 185
 - create 182, 184
 - create in ticket 183
 - create on company page 184
 - delete (with all related data) 197
- customer 169
 - activities 191
 - add attachment 188
 - add comment 190
 - additional customer 133, 135
 - create 182
 - create in ticket 183
 - create ticket 191
 - deactivate 194
 - delete (keep related data) 195
 - edit 137, 186
 - main customer 133-134
 - open 186, 269
 - print 190
 - reactivate 198
 - role 137

- tickets 191
- transfer tickets 192
- update 186
- visibility 83
- customer activities 191
- customer data model 169
 - one-level 169
 - two-level 169
- customer group 170
- customer group filter 38
- customer history 177
- customer page 171
 - Calendar Section 174
 - Contacts Section 176
 - Details Section 173
 - Header Section 173
 - History Section 177
 - Section for Comments and Attachments 177
 - Section for Related Customers 177
 - Section for Related Resources 177
 - Section for Related Tickets 174
- sections 173
- customer relation 199, 231
 - add 201, 233
 - delete 202, 234
 - directional relation 201
 - edit note 202, 234
 - open customer 234
 - open related customer 202
 - reference relation 200
- customer role 137

D

- dashboard 36
- data entry field 40
- date field 40

- date picker 40
- default customer group 91
- default queue 92
- Detailed Search 52
- document template 153
- drop-down list 42

E

- emails 144
 - forward 146
 - print 146
 - reply 146
 - send 144

F

- favorites 264
 - add 264
- filter 118

G

- grid 121

H

- hierarchical list 43

I

- installation
 - CM/Doc 154

J

- jump to resource 167
- jump to ticket 164

L

- link 41
- login 28
 - LDAP 28

- SSO 28
- logout 28
- M**
- main customer 133-134
 - add 134
 - change 135
- main menu 35
- main working area 34
- mandatory field 40
- P**
- password 27
 - change 87, 256
- portal 239
- Q**
- Quick Search 49
- R**
- radio button 42
- representation 88
- resource
 - activity 224
 - add attachment 222
 - add comment 224
 - create 220
 - deactivate 225
 - delete 226
 - edit 221
 - open 221
 - reactivate 227
 - visibility 84
- resource activity 224
- resource dashboard 211
- resource history 215
- resource page 212
 - adjust table 218
 - Calendar Section 215
 - collapse section 217
 - Details Section 214
 - expand section 217
 - Header 213
 - History Section 215
 - Section for Comments and Attachments 214
 - Section for Related Customers 215
 - Section for Related Resources 215
 - Section for Related Tickets 215
 - visibility level 217
- resource relation 164, 203, 227
 - add 166, 205, 230
 - delete 167, 206, 231
 - edit 167
 - edit note 205, 231
 - open resource 167, 205, 231
- resource type page 212
- rich text editor 140
- S**
- search
 - Autocomplete Search 66
 - Detailed Search 52
 - Quick Search 49
- session 27
- session timeout 27
- Single Sign-On 28
- T**
- table 44
- template
 - comment 146
 - document 153

- email 146
 - text 146
 - text box 41
 - text template 146
 - ticket
 - assign 128
 - clone 130
 - create 124
 - edit 129
 - engineer 128
 - print 131
 - sections 102
 - structure 100
 - visibility 79
 - workflow activity 131
 - Ticket Header 102
 - ticket history 103
 - ticket icon 104
 - color 104
 - overlay 104
 - symbol 104
 - ticket list 113
 - filter 118
 - grid 121
 - group 119
 - sort 121
 - view 116
 - view criteria 116
 - ticket relation 161, 234
 - add 163, 236, 268
 - delete 164, 237
 - edit note 237
 - open related ticket 164
 - open ticket 237
 - ticket sections
 - Additional Engineers Section 102
 - Attachment Section 103
 - Calendar Section 103
 - collapse 105
 - Customers Section 102
 - Details Section 102
 - expand 105
 - History Section 103
 - Section for Related Resources 103
 - Section for Related Tickets 103
 - Ticket Header 102
 - visibility level 105
 - time booking 93, 156
 - manual 94
 - report 96
 - user profile 93
 - time booking report 96
- ## U
- user account 27
 - password 27
 - user name 27
 - user name 27
 - user profile 85
 - default customer group 91
 - default queue 92
 - time booking 93
 - view criteria 91, 116
- ## V
- view 116
 - view criteria 91, 116
 - visibility level 105
- ## W
- workflow activities 131
 - workspace 266