

User Manual

Version 4.3.1



Formcentric Analytics: User Manual

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1. Introduction

This manual describes the use and administration of the Formcentric Analytics component. This component constitutes a comprehensive analysis extension for the Formcentric forms manager.

In the course of this manual, you will be provided with a brief explanation of the analysis options, the various screens for sorting and filtering, and the export feature.

The manual also introduces and explains the user and group administration functions.

1.1. Terminology

This manual makes use of the following terms:

| Term | Description |
|---------------|---|
| Form | An HTML web form that is displayed in a browser. |
| Form elements | All of the elements used when constructing a form (input fields, drop-down lists, check boxes, captchas, etc.). |
| Form data | The data items that are entered into a form by the user. |
| Administrator | A Formcentric Analytics user account that can manage both users and groups, and which has access to all of the forms. |
| User/end user | A person that uses Formcentric Analytics. |
| CMS | Content Management System (CoreMedia or FirstSpirit) |

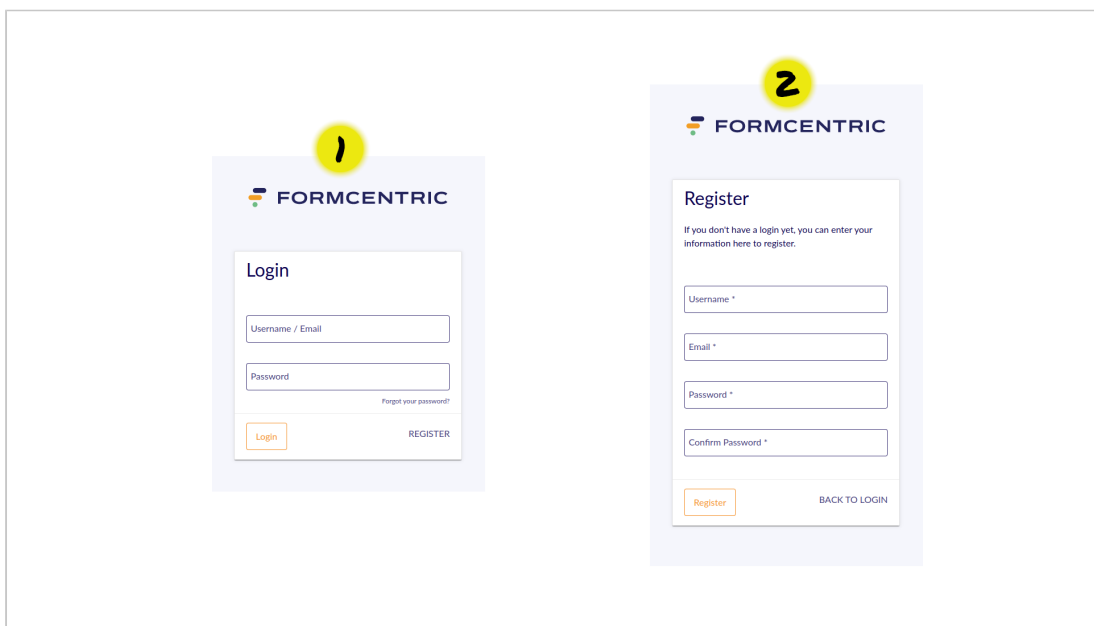
2. Login and registration

If you have already received login details from your administrator, then you can log in here by using your email address or your username.

If the feature has been activated, you can use the *Register* option to request a user account for Formcentric Analytics. Your account request will need to be approved by an administrator.

If you have forgotten your password, use the *Password forgotten* option to request a password reset email.

If an external directory service (LDAP or Active Directory) has been integrated, you can also specify the domain in order to log in with your account.

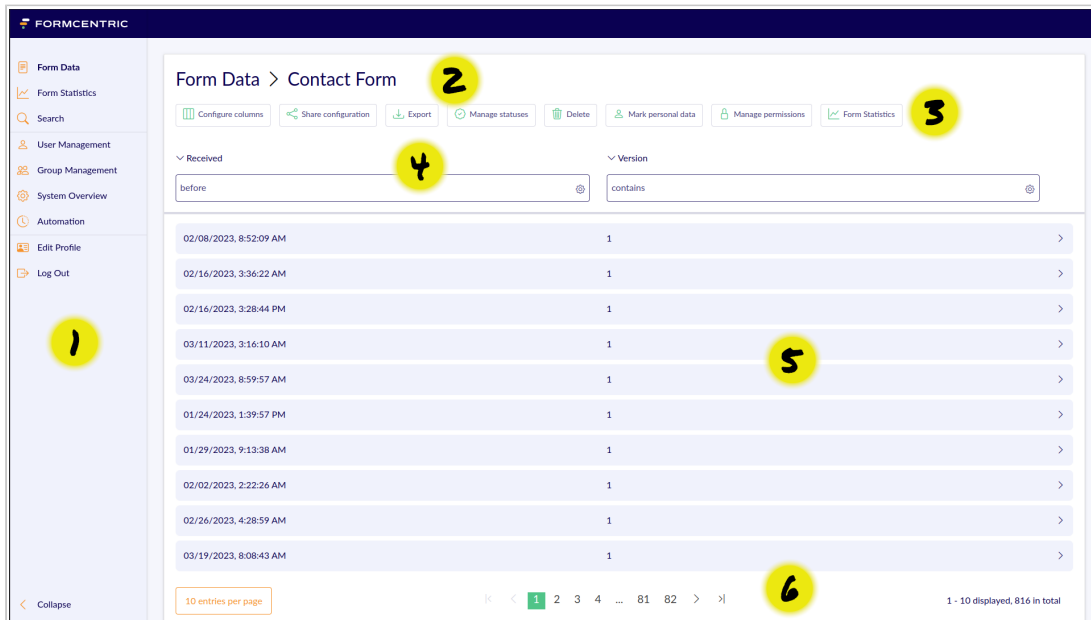


1. Login screen, 2. Registration form

Figure 2.1. Login and registration

3. Core functionality

This section focuses on the various menu options and interactive elements that will be encountered while using the Formcentric Analytics component. A brief explanation is provided, plus an overview of their usage. The separate sections provided for each function then go through the available actions again in greater detail.



1. Menu, 2. Breadcrumb trail, 3. Action bar, 4. Columns action bar, 5. Table with entries, 6. Footer

Figure 3.1. Core functionality

3.1. Menu

The menu, which you will always find on the left-hand side of the Formcentric Analytics interface, offers you the core functionality for your daily work.

Use the menu option *Form data* to go directly to the data reporting home page. This gives you a quick and easy way to analyse your various forms, as well as their associated data records.

In the same way, you can use the *Form statistics* menu option to access the home page for statistics reporting.

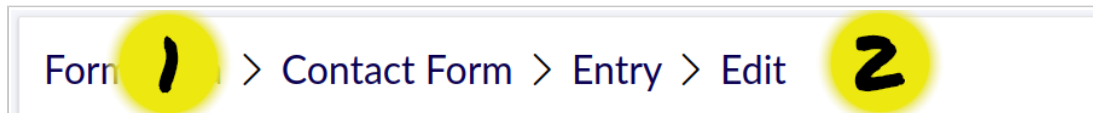
If you want to change your account password, your username or the email address stored in the system, you can use *Edit profile* to do so, unless these credentials are stored in a centralised directory service such as LDAP or Active Directory.

To log out securely from the Formcentric Analytics website, click *Log out*. You can use the *Minimise* option to minimise the menu. This enables you to make the best use of your workspace even at lower resolutions.

3.2. Breadcrumb trail

The breadcrumb trail is shown right at the top of every screen. Note that the first entries in the breadcrumb trail always correspond to the menu options from the left-hand menu. The deeper you navigate within a form, the more breadcrumbs appear in the trail. This ensures that you are always aware of the context in which you are currently working, and lets you access higher levels quickly and easily.

If the breadcrumbs in the trail can be clicked, then these breadcrumb elements are clearly marked in green.



1. Clickable element, 2. Current context

Figure 3.2. Breadcrumb trail

3.3. Action bar

The action bar is available on every page on which you can execute additional actions. The bar is always positioned directly beneath the breadcrumb entries. The functions that the bar offers depend on the current screen and the permissions granted to your user account.

Link formatting in the action bar is used to show what happens when you click the link. If the text is underlined, this means a new page will be loaded when the link is clicked – but you will not leave the current page.

If the text is not underlined, then a new area opens up underneath the action bar: this area displays the fields that are required for the selected function.

3.4. Columns action bar

Both the form data (see Chapter 4, *Form data*) and the data record overview (see Section 4.2, “Overview of all data records entered for a form”) let you reorganise the table entries shown by applying column sorts and advanced filter options (see Section 3.6, “Filtering”).

You can sort each column in ascending or descending order by clicking the down arrow next to the column name. The logic that is applied in each case depends on the specific column content: text columns are sorted alphabetically, date columns are sorted by calendar date and numeric columns are sorted by their value.



You cannot sort simultaneously by the content in two separate columns. However, you can sort entries by one column and then use another column as a filter.

If an input box is shown under the column name, then this box can be used to filter all of the entries in the table – including table entries that are not shown in the current view. Detailed instructions for using filter functionality can be found in Section 3.6, “Filtering”.

3.5. Footer

The table footer lets you change the number of entries that are displayed on one page. This setting is made separately for each table. This means you can configure 10 forms/page for the form data overview but choose 100 entries/page for the data record table.



This setting is saved locally. If you log into Formcentric Analytics from another PC or a different browser, then the values configured will be reset back to the default values.

On the right-hand side of the footer, additional items of information are shown about the result set and the entries shown on the page. If the total result set is larger than the number of entries per page, page navigation controls are also shown in the middle of the footer.

3.6. Filtering

Formcentric Analytics provides you with comprehensive filtering options for tailoring the various data displayed to your exact requirements. Filters are identifiable on the input boxes by a small gearwheel located under the column name. Filters directly affect the data records that are displayed in the table. You should also note that filters only take into account the values that have actually been entered into the associated column.

You can use the gearwheel to adjust how the filter is applied or directly apply one of the preconfigured relative filters. The filter options available depend on the column type. Four types of column are relevant here, and are briefly explained in the following sub-sections.



The column type is determined by the validators that you have assigned. If you use the *Date* or *Number* validator, then the column type is adjusted appropriately. All other validators have no effect: accordingly, the values entered are always represented by a text column.

3.6.1. Filtering text columns

A text column is the simplest type of column. It is used for all types of text entry – which can also result in columns holding longer items of text. Since filtering is not case-

sensitive, all entries are always analysed in full and the result set is always complete. You can use three types of filter for this column:

contains: The result set from this filter will display only those data records that contain the letters as entered and at any location.

starts with: The result set from this filter will display only those data records that start with the letters entered.

is equal to: The result set from this filter will display only those data records that are an exact match for the letters entered.

is not equal to: The result set from this filter will display all data records that are not an exact match for the letters entered.

3.6.2. Filtering numeric columns

Numeric columns are always used to display numeric values and can therefore be used with extended filter options.

contains: The result set from this filter will display only those data records that contain the number as entered and at any position.

starts with: The result set from this filter will display only those data records that start with the number entered.

is equal to: The result set from this filter will display only those data records that are an exact match for the number entered.

is less than: The result set from this filter will display only those data records that are less than the number entered.

is greater than: The result set from this filter will display only those data records that are greater than the number entered.

3.6.3. Filtering date columns

For date columns, relative filters are also available in addition to comparative filters. You can select the relative filters from the dropdown list or input them directly. The date pickers available for selecting a date value also offer you the option of selecting a time of day if the date format selected for the field supports time entry.



The first day of the week is determined by the language that you have configured in Formcentric Analytics. If you have selected German, the first day is Monday. If you switch to English, the first day of the week is Sunday.

before: The result set from this filter will display only those data records that are earlier in calendar terms than the date entered.

after: The result set from this filter will display only those data records that are later in calendar terms than the date entered.

today: The result set from this filter will display only those data records that were entered today.

yesterday: The result set from this filter will display only those data records that were entered yesterday.

current week: The result set from this filter will display only those data records whose date lies in the current week.

last week: The result set from this filter will display only those data records whose date lies in the previous week.

current month: The result set from this filter will display only those data records whose date lies in the current month.

last month: The result set from this filter will display only those data records whose date lies in the previous month.

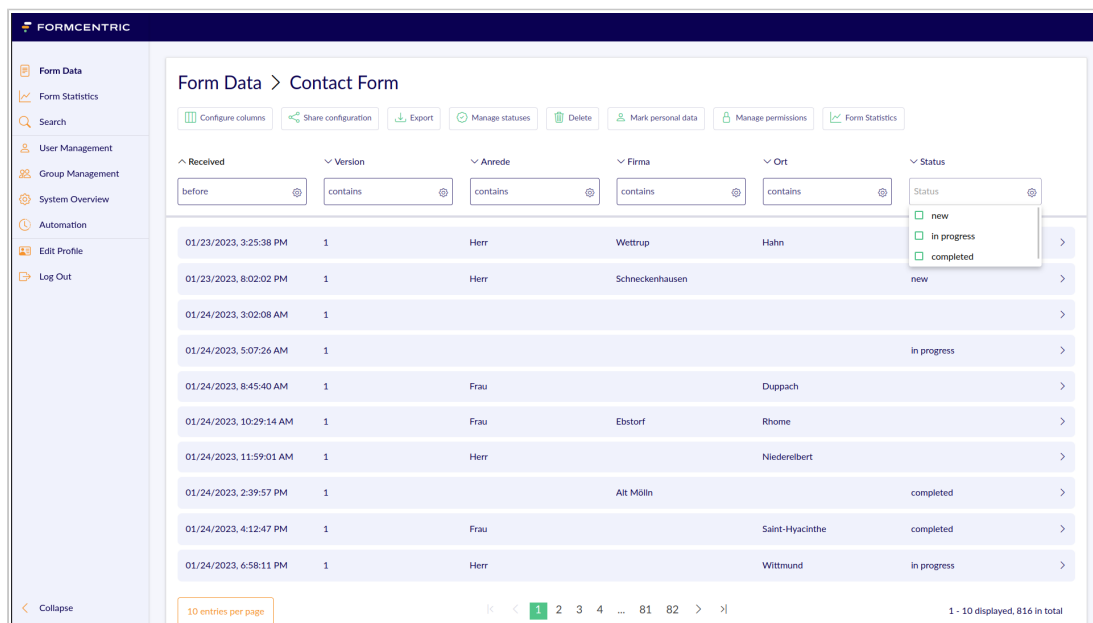
current year: The result set from this filter will display only those data records whose date lies in the current year.

3.6.4. Filtering status columns

An administrator is permitted to store a range of statuses for a form; these statuses can then be assigned to individual data records. As one example, a status can indicate whether an entry is new, is being edited or has been completed.

To give you a quick and easy way to summarise the statuses for your various data records, Formcentric Analytics offers you the option of setting a column filter.

The gearwheel gives you an overview of all of the statuses available for this form. Simply click the corresponding checkbox to filter the current view instantly. Multiple selections can also be made.



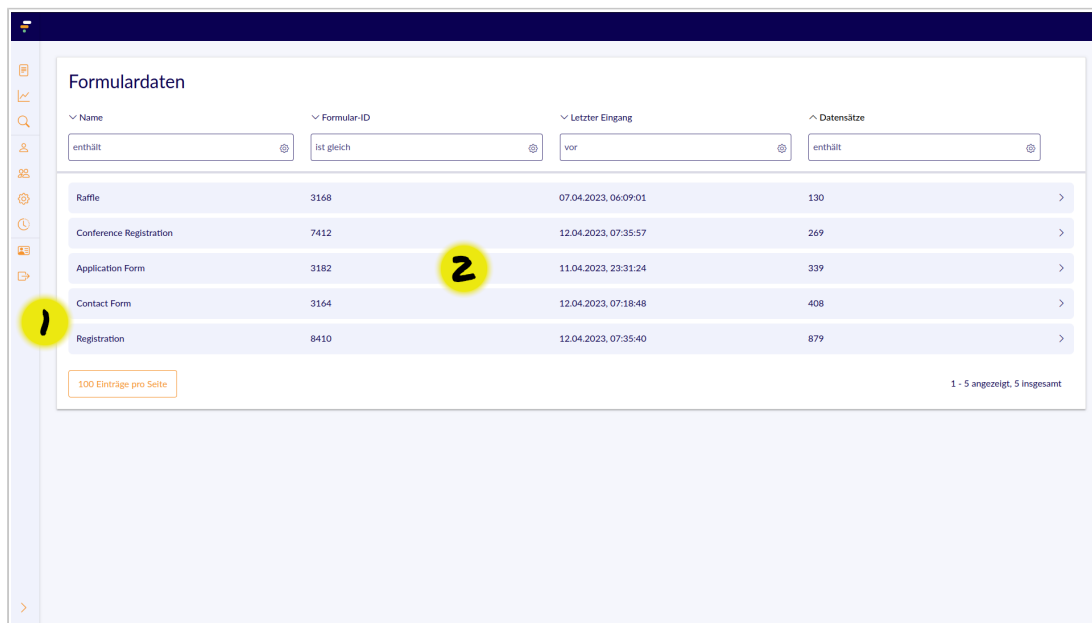
Status filter check boxes

Figure 3.3. Filtering status columns

4. Form data

The primary view used for reporting on your forms is the overview page. This page displays all of the forms that were entered by Formcentric Analytics and which contain at least one data record. The default setting for this view is to sort by the most recent data entered. Accordingly, the form last completed will be found at the top of the page.

This section shows you how to work with the form data and briefly introduces you to all of the available features.



| Name | Formular-ID | Letzter Eingang | Datensätze |
|-------------------------|-------------|----------------------|------------|
| Raffle | 3168 | 07.04.2023, 06:09:01 | 130 |
| Conference Registration | 7412 | 12.04.2023, 07:35:57 | 269 |
| Application Form | 3182 | 11.04.2023, 23:31:24 | 339 |
| Contact Form | 3164 | 12.04.2023, 07:18:48 | 408 |
| Registration | 8410 | 12.04.2023, 07:35:40 | 879 |

100 Einträge pro Seite

1 - 5 angezeigt, 5 insgesamt

1. Collapsed menu, 2. Form data

Figure 4.1. Form data

4.1. Explanation of columns

The columns displayed present you with the following items of information:

Name: This column shows you the name of the form. It helps you quickly identify the form you are looking for. In the Formcentric editing interface, you can use the field *Form name* to define the name yourself directly on the form element. This is strongly recommended, since it simplifies both the page layout and searching if each form is given an easily-memorised name.

For this column, you have the option of using filters to limit the result set returned (see Section 3.6, “Filtering”).

Form ID: This unique name is assigned automatically to a newly-created form by your CMS and cannot be changed. You can read off the ID in the editing interface from the form properties.

For this column, you have the option of using filters to limit the result set returned (see Section 3.6, “Filtering”).

Last Entry: This displays the time at which the last data record was entered. One use for this column is to quickly identify forms that have not been used for some time.

Data Records: This column shows you how many valid data records have already been entered for the form in question.



System data is always reloaded every time you perform a new action (filter, sort, move to a different page) in the form data overview. This ensures that you are always working with the latest data.

4.2. Overview of all data records entered for a form

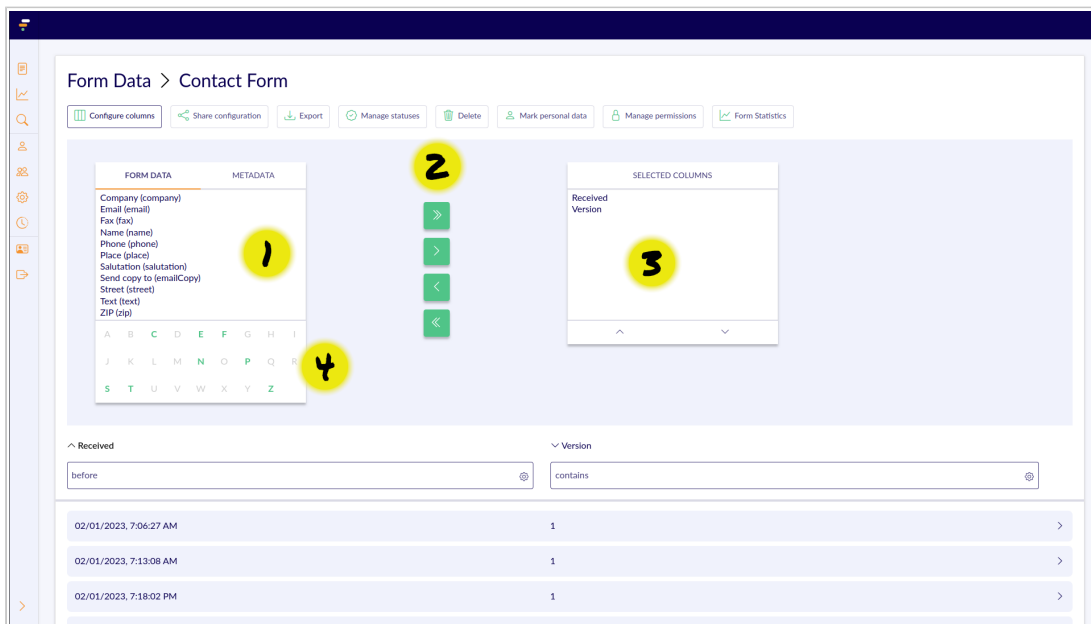
If you want to analyse a form, you click the corresponding row in the form data overview to access the individual data records. These entries have been run through all of the validators that you have defined and can always be considered as valid.

In the default set-up, you are shown two columns: *Received* and *Version* (for an explanation of these columns, see the section called “Columns for metadata”).

If you want to drill down to an entry and display all of the values entered for this entry, you can click the row in question to access the corresponding detail view (see Section 4.3, “Detail view for a data record”).

The action bar on this overview screen offers you the following functions (depending on the permissions assigned to your account):

4.2.1. Configure columns



1. Available form data and metadata, 2. Arrow operators for adding and removing,
3. Overview of all columns selected and their order, 4. Alphabetical filter on column selection

Figure 4.2. Configure columns

To ensure that you are able to analyse the data records input in accordance with all available criteria, you can configure this overview to meet your precise needs.

When you click *Configure columns*, a split-screen view appears. On the left, you can see all of the columns available. These are further split into two tabs: *Form data* and *Metadata*. On the right, you can see all of the columns that are already available to you in the data record overview.

If you want to add individual fields to the *selected columns*, then you can click with the mouse to select these on the left-hand side and then click the *single right arrow* to add them. If you want to select all fields, then you can do so by clicking the *double right arrow*. In this case, you do not need to select any fields first. To remove a column, use the *single left arrow* or, to remove all columns from the selection, use the *double left arrow*.

All fields that have already been added to the *selected columns* are shown greyed-out on the left-hand side of the screen.

The order chosen for the *selected columns* directly affects the presentation of data in the table. The first entry in the list is shown as the first column on the left and the remaining elements are then shown in order. If you want to relocate a column, you can use the *up* and *down* arrows under the list of *selected columns*.

To remove individual entries, use the *single left arrow*.

Any changes made to your column selection are saved automatically for this form in your browser, so that you will find everything as you left it when you access the

website again. If you log in from a different browser, however, then the settings will be reset back to the default selection.

Columns for form data

All entries under the *Form data* tab are taken directly from your form. This tab displays all of the data entry elements that can be utilised for the analysis. Form elements such as Page Break, Condition, Captcha and Summary are not shown, however.

The names used for the available columns are constructed from the field values for *Label* and *Name*, which can be modified by using the form editing interface, as follows:

Label (Name)

If you are looking for a specific field, you can use the alphabet under the left-hand area to quickly reduce the fields displayed. Letters are active only if they are used as initial letters in the *Label* or *Name*. To return to the full list, click the activated letter once again.



The column names in this view always relate to the version of the form currently in use.

If you change the name (not the description) of a form field in the form editing interface, a new column with the new name will be created here. The column with the old name is retained and is no longer filled. This must be remembered for later reporting.

Columns for metadata

Formcentric automatically collects additional items of information, which are termed "metadata" in a Formcentric context and which can be very helpful for analyses. Use the *Metadata* tab to view this information, which is presented to you using separate columns.

The section below provides a brief explanation of these fields and their content.

Received: Displays the date on which a data record was entered.

HTTP Referrer: The referrer describes the URL from which the form was submitted.

Language: Displays the preferred language as requested by the browser.

Status: This field contains the status stored for a form data record.

User Agent: A "user agent" can be understood as a collection of specific items of information that is provided by the browser. User agent details include the browser and operating system names, as well as version numbers.

Version: The published version of the form in the CMS.

4.2.2. Share configuration

If you have created a view for a form and want to share the view with your colleagues, you can use *Share configuration* to create a link. This link references the form for

which it was created and applies all of the changes that you have made to the column selection and sorting, as well as the specified filters. Please note: the number of entries displayed on one page is not part of this configuration, however, and may vary from user to user.

If the generated link is accessed, the form for which the link was created is displayed immediately, as well as the predefined configuration. In order to prevent existing settings being overwritten for this form, the user can choose to *Apply* or *Discard* the loaded configuration.

4.2.3. Exporting

You can use the *Export* functionality to export data records. Note that only the data records selected by your current filter settings will be included in this export. You can see the total number of rows that will be exported by looking at the table footer on the right (see Section 3.5, “Footer”).

Note that the column selection has no effect on the exported data, however, since the export always includes all available form and metadata columns. The order of the form columns in the CSV file is based on the order of the fields in the form. Form fields that were present in previous versions but have since been removed are still included in the export.

After selecting *Export*, you then have the option of selecting the export format. Available export formats include Excel and the CSV format.

CSV export

The header row of the CSV file is constructed as follows:

```
"Form ID";"Version";"Received";  
    <Current form columns>;<Deleted form columns>;  
"Status";"User Agent";"Language";"HTTP Referrer"
```

The second row of the CSV file contains the unique name of the field that has been set in the form editing interface. The names of the metadata columns depend on the language setting configured for the user creating the export. For this reason, the second row of these columns contains hard-coded technical names. This row is as follows:

```
"_WF_formId";"_WF_version";"_WF_creationTime";  
    <Current form columns>;<Deleted form columns>;  
"_WF_status";"_WF_userAgent";"_WF_language";"_WF_referrer"
```

The form ID is used as the default name for the CSV file. Your browser will either download the generated file automatically or ask you where to save the document. The first line in the CSV file contains the column names; the individual values in the rows are separated by semicolons.

Excel export

The Excel export creates a new worksheet in the Excel document for each version of the form. The structure of the columns is the same as for the CSV export, but these of multiple worksheets means that “Removed form columns” are not included.

If you use the Excel export, you also receive all of the file attachments for the exported entries. The attachments are linked in the Excel file and can be opened conveniently from within the document.

4.3. Detail view for a data record

If you click a row in the data record overview, you are shown the detail view for this entry. This view provides you with an at-a-glance view of all of the user input. On the left, all of the form data is presented in the format:

Label – Name – value entered

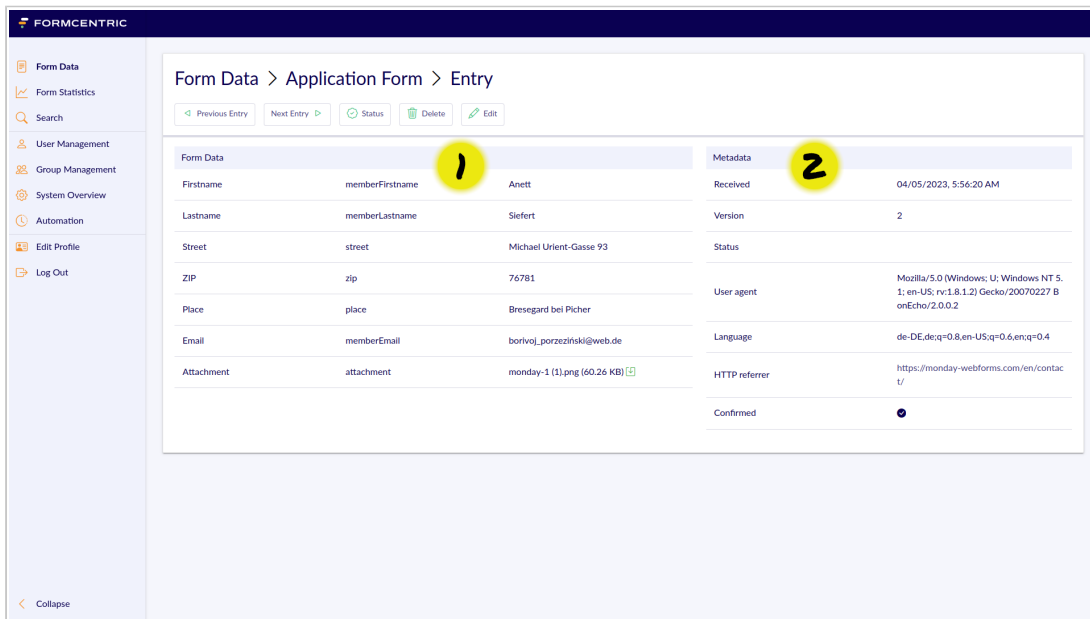


In this view, *Label* and *Name* always relate to the version of the form as filled out by the user. Accordingly, it may be the case that the names of the fields here differ from the names as given in the form data overview.

The metadata (see the section called “Columns for metadata”) is displayed on the right-hand side and can therefore also be analysed directly.

If it possible to upload attachments to your form, you can download the attachments here. A download link is shown for this purpose next to the field name in question.

As a simple means of navigating between the data records input, you can use the top action bar to jump directly to the *Previous entry* or to the *Next entry* . You can use the breadcrumb trail to go back to the detail view of the form. To add a status to the current data record or change an existing status, go to the action bar and click *Status* in order to open the corresponding selection screen. If you have the right permissions to remove data records from a form, then the action bar will display a *Delete* menu option.



1. Overview of all form data, 2. Overview of all metadata

Figure 4.3. Detail view for an entry

4.3.1. Editing form entries

If you have been assigned the relevant permissions, you can edit form data for an individual form entry after it has been submitted. To do so, select *Edit* from the action bar.

The editing view opens: this view presents all of the form data as input fields, so that you can make changes to this form data. The input elements shown depend on the field type:

Text: For simple text fields, you can add or edit the text as you want.

Date: You can edit these fields by using the familiar date picker tool. The date picker also offers you the option of selecting a time of day if the date format selected for the field supports time entry.

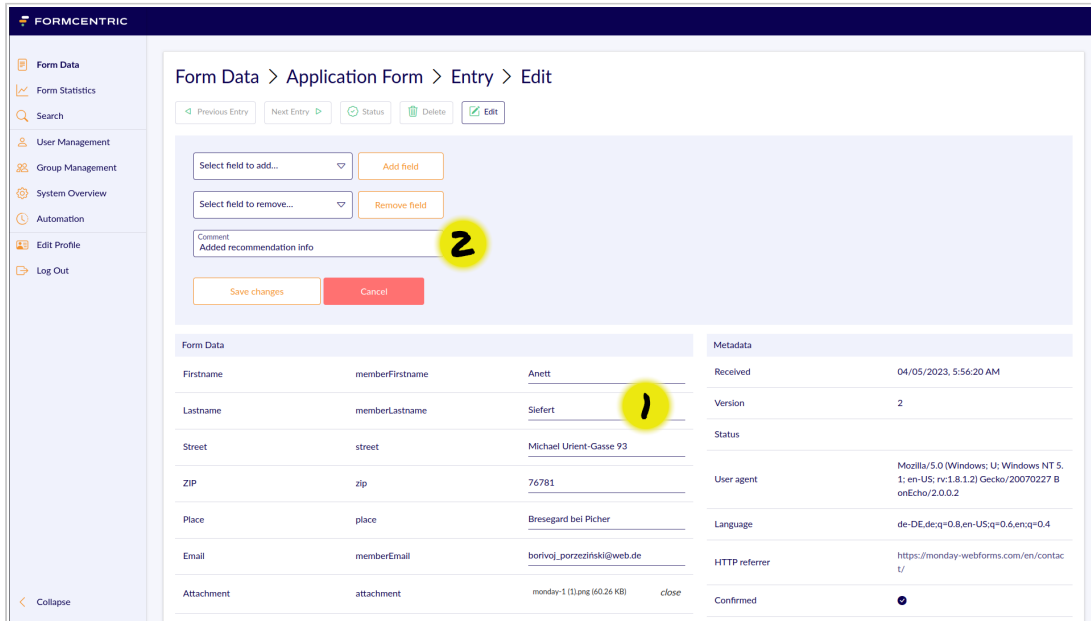
Drop-down list: For fields that accept a list as input, you can use the *Add option* input field to add the entries you want, before then confirming this input with the ENTER key. Each of these options is shown on its own line and provided with an x at the right-hand edge, which you can use if you want to remove the option.

File: Currently, file attachments can only be removed. Each attachment is shown on its own line and provided with an x at the right-hand edge, which you can use if you want to remove the attachment.



Note that some validators that are stored in the form are not triggered when editing in Formcentric Analytics. For date fields, for example, only a valid date needs to be entered: other restrictions such as *Date from*, *Date to* or *Only dates in the past* are not applied here.

The action bar is shown in the editing view. You can use this action bar to add fields that were previously hidden because of conditions. You can also remove existing fields. Before you save your changes, you can add an optional explanatory comment. This is advisable, so you can check why you made the changes later. Select *Save* to apply all of your changes and exit from editing mode. You can also select *Cancel changes* to return to the detail view without saving any of your changes.

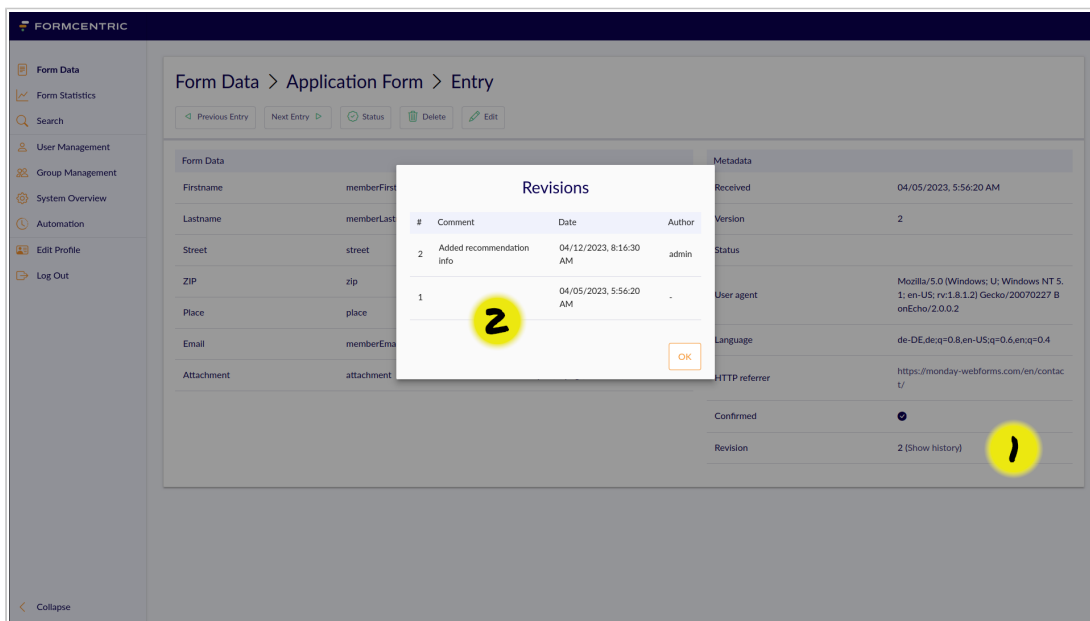


1. Input fields are now shown in the form data area, 2. You use the action bar to apply or cancel your changes

Figure 4.4. Editing view for an entry

4.3.2. Version history

Formcentric Analytics automatically creates a version history that logs all of the changes made to an entry. If an entry is subsequently edited, you can view the current *revision* by looking at the metadata. The revision number for an entry is incremented for each change. Revisions are created either by editing the entry (see Section 4.3.1, “Editing form entries”) or by setting a status. If you click the *Show history* link in the metadata, the history view opens in a modal window. For each revision shown here, you can also view the author, the change date and any comments made.



1. Click *Show history* to open the modal window, 2. Revision number, comment, date and author in the history

Figure 4.5. Version history for an entry

4.4. Delete

If you have been assigned the delete permission, you can delete form data records or all the data for a form. To do so, click *Delete* on the action bar. You can now choose what you want to delete:

Delete all filtered data records: This option applies the configured filters that you are currently using for the form data. All data records are deleted that match your configured filters.

Once the records have been successfully deleted, your filter selections are reset, so as to ensure that you can continue working seamlessly on the remaining data.

Delete all records: Select this option to delete all of the data records that have been entered for the selected form. Any filters you have configured are ignored. All of the form's data records are deleted without exception.

Once the records have been successfully deleted, all filters are then reset, so as to make it clear that the form no longer contains any data records.

Delete form: This option is selected if you want to remove an entire form, including all of its data records. This option also ignores any filters you have set.

Once the form has been successfully deleted, you are then returned to the form overview page.

Before data records or forms are permanently deleted, the system shows you how many records would be deleted by running the selected command. You can still cancel your command at this time.



Please note that the data records and forms that you delete using this interface are removed from the database only. The associated forms and input fields are not changed by this action. Your form continues to be available to users: if a new data record is entered, the form will once again be shown in the form overview.

If you also want to remove the form from your website, then you must use the form editing interface to unpublish the form.

4.5. Mark personal data

If you have been granted the permission to mark individual data records as personal data, then you can do so by selecting the *Mark personal data* option. By setting a mark, you indicate that the data for this field is personal data, and must therefore be anonymised or deleted by a specified date (see Section 8.2, “Creating a job”). To mark fields, select the fields from the table that you want to mark as personal data. It is also possible to select metadata (see the section called “Columns for metadata”), however the fields *Input* and *Version* are excluded. You then save your selection by using the *Save selection* button.

| Label | Name | Data type | Personal data |
|---|----------------|-----------|--------------------------|
| Vorname | vorname | Text | <input type="checkbox"/> |
| Nachname | nachname | Text | <input type="checkbox"/> |
| E-Mail | email | Text | <input type="checkbox"/> |
| Besitzen Sie einen Ermäßigungsnachweis? | concession | Text | <input type="checkbox"/> |
| Ermäßigung: | concessionType | Text | <input type="checkbox"/> |

Save selection

▼ E-Mail: starts with
^ Nachname: contains
▼ Vorname: contains

| | | |
|--------------------------------|-----------|---------------|
| erika-isehake@web.com | Abramski | Hanns-Michael |
| jorma_görner@gmx.de | Alexander | Girma |
| lonny_tyszkowski@t-online.org | Alexander | Grigorijs |
| Ingo-Julius_Katulscki@yahoo.de | Allison | Dorald |

1. The field label, 2. The technical name for the field, 3. The field data type, e.g. *Text* or *File*

Figure 4.6. Marking fields with personal data

5. Form statistics

A range of key figures and fine-grained metrics are available in order to provide a detailed set of reports about your forms. Formcentric Analytics gives you all of the information you need to identify potential sources of problems and errors.

5.1. Explanation of columns

| Name | Editing time | Interactions | Conversion rate |
|------------------|--------------|--------------|-----------------|
| Antragsformular | 2:38 min | 3689 | 33.96% |
| Gewinnspiel | 1:26 min | 1502 | 57.29% |
| Registrierung | 3:46 min | 3135 | 56.71% |
| Seminaranmeldung | 7:14 min | 2559 | 25.04% |

Figure 5.1. Overview of available form statistics

The columns displayed present you with the following items of information:

Name: This column shows you the name of the form. It helps you quickly identify the form you are looking for. In the Formcentric editing interface, you can use the field *Form name* to define the name yourself directly on the form element. This is strongly recommended, since it simplifies both the page layout and searching if each form is given an easily-memorised name.

For this column, you have the option of using filters to limit the result set returned (see Section 3.6, “Filtering”).

Completion time: This column displays the average time that users spend filling out the form. The timer is started when the user first starts interacting with a form element. To calculate the value, the total time recorded is divided by the number of completion sessions.

No. of sessions: This column shows you how many times users started filling out your forms. Note that no distinction is made here between sessions that did and did not result in form completion.

Success rate: This column quantifies the ratio of sessions where form completion was started to sessions where form data was successfully submitted. This metric keeps you updated on potential problems with form completion.

For a detailed report on your forms, access the statistics page by clicking the row containing the form for which you want to view a report.

5.2. Form submissions

The *Forms submissions* graph charts form submissions against time, providing you with a quick overview of the activities for a specific form. The dropdown menu at the top right is used to adjust the time frame used by the graph. All form versions are displayed that are present in the time frame selected.



1. Number of form submissions, 2. Timeline, 3. Version legend, 4. Interval selection

Figure 5.2. Visualisation of forms submitted

5.3. Comparing versions

Formcentric Analytics automatically provides you with a wide range of data-rich metrics to help you quickly assess the performance of your form by looking at the activities of your users. Selecting the versions to compare is straightforward, ensuring that you always have an overview of the data that is relevant for your work.

In the version selection, the default is for the last two versions to be compared with one another, so that you are given an immediate overview of the effects of the last changes. You can select any versions that you want to analyse with the drop-down selection box. The right-hand drop-down has an additional option, *None*, which you can use to concentrate on just one version without trends and comparisons.

5.3.1. Key figures

The following section offers a quick guide to the key figures automatically generated by Formcentric Analytics. This overview is intended to help you by providing an at-a-glance view of relevant information, enabling you to optimise your forms efficiently.

To improve clarity, changes between two versions are marked and highlighted in colour, so as to give you instant visual feedback about relevant trends.

| The most important key figures at a glance | | |
|--|---------------|--|
| Metric | Version 2 | Version 3 |
| Form visits | 2055 | 1823 - |
| Form interactions | 1180 | 1241 + |
| Conversion rate | 512 / 24.91% | 624 / 34.34% + |
| Bounce rate | 1543 / 75.09% | 1193 / 65.66% + |
| Page with most cancelations | 1 | 1 |
| Page with most errors | 1 | 1 |
| Page with longest editing time | 1 | 1 |
| Average editing time | 2:38 min | 2:36 min |
| Time till editing start | 2:02 min | 2:02 min |

Figure 5.3. Key figure overview, with trends

Form visits: This displays the number of times that the first page of a form has been visited. Note that this metric does not provide any information about how often the form was actually seen by the user, such as when the form is embedded on a longer page with other elements.

Form interactions: This row shows you how many times users started filling out your forms. Note that no distinction is made here between sessions that did and did not result in form completion.

Conversion rate: This key figure tallies the number of completed sessions where the form was successfully submitted with Formcentric.

Bounce rate: The total number of interruptions for your form. This figure includes explicit interruptions, i.e. use of the form's *Cancel* button, as well as potential interruptions where the user did not finish completing the form. In the second case, it is possible that an interruption may be changed to a form completion at a later point in time, if a user restarts their stored session, and then completes and submits the form successfully.

Page with most cancelations: This helps to identify pages within your form that may be problematic for end users. This key figure displays the page on which the greatest number of users stopped filling out the form.

Page with most errors: Like the metric showing the most interruptions, this key figure is helpful in identifying ways in which your form can be improved. The page is shown on which the most validation errors occurred when switching to the next page. You can then use troubleshooting (see Section 5.3.2, "Troubleshooting") to analyse the errors that have occurred and adjust your form accordingly.

Page with longest editing time: Like the page with the most interruptions, this metric shows the form page that takes the longest to fill out. This figure helps you identify forms that are difficult to understand, so you can make changes to improve them.

Average editing time: This metric displays the average time taken to complete the entire form. Note that this metric is already provided to you by the form statistics overview.

Time till editing start: This metric is calculated as the time that expires between the initial page access and the first interaction of the user with a form on this page.

5.3.2. Troubleshooting

To provide detailed help with troubleshooting, a total of three interrelated charts are available. As with the key figures, these are used to compare two versions with one another. Highlighting is used to display the versions in the charts, ensuring that the values for each version are easily identifiable.



Figure 5.4. Visualisation of errors that occurred

Form: The graph on the left shows the error rate per page. This lets you keep track of how many users encountered difficulties when filling out a form page. For a more detailed report, simply click the graphs for the corresponding page.

Fields: When you select a page, you are then shown all of the form fields with the corresponding absolute number of errors that occurred. On this page, you can click a form field to view the types of error that occurred.

Error types: The absolute number of errors for a field is broken down here into greater detail. For all errors triggered by this field, the exact error messages are displayed, along with their frequency. Please note: a field can trigger only one error when the form is submitted. If a required email field is left blank, for example, only the required field error is shown – not the error about incorrect email formatting.

6. Search

The *Search* function provides you with a full-text search that is run across all forms and which enables you to search for specific terms in the stored form data. The search is divided into three areas:

- Search bar [1]
- Search results [2]
- Action bar [3]

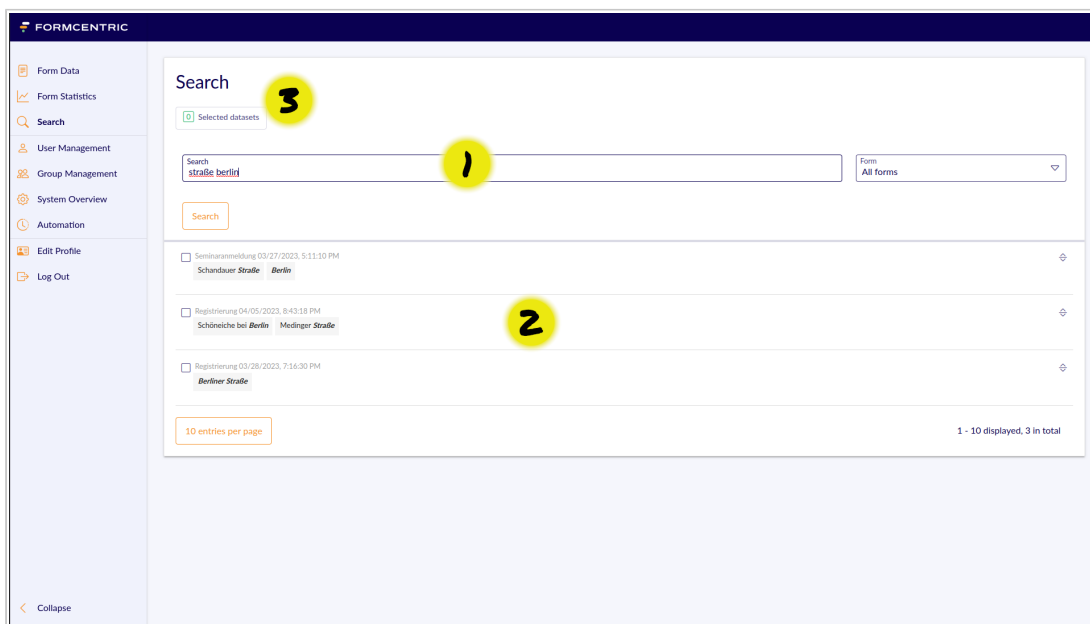


Figure 6.1. Global full-text search

6.1. Search bar

Search: Enter the term you want to search for here.

If several search terms are entered separated by spaces, these terms are linked together by using *and*. A search for *John Smith*, for example, will return all data records that contain both *John* as well as *Smith*. Note that no distinction is made between the terms appearing together in one field or spread across several fields.

The search is not case-sensitive.

When entering a search term, you can use the following search operators to refine your search.

1. Searching for a date

If you want to search for a date, add the `date:` operator in front of the date that you input. The date can be specified either using the format `date:2000-10-23` or by using the format `date:23.10.2000`.

2. Searching for specific words or groups of words

If you want to search for a specific word or group of words, place the search term you are looking for in speech marks. This kind of search is especially useful when you are searching for personal names (e.g. "John Smith") or address data (e.g. "1, Oxford Road").

You can also combine the search operators described above as appropriate, e.g. "John Smith" date:2000-01-22 .

Form: The default behaviour is to run the search across all forms saved in the system. Alternatively, you can also restrict the search to a specific form. To do so, use this list to select the form that you want to limit your search to.

6.2. Search results

The data records found, with the matches in these records, are shown to you in the list of search results.

If you click on a search result, you are shown all of the relevant information from the associated data record. Check the checkbox next to the entry in order to add the data record to your current selection.

6.3. Action bar

You use the action *Selected data records* to switch to an overview of all of your selected data records.

6.4. Selected data records

This view gives you an overview of all of the data records you have currently selected.

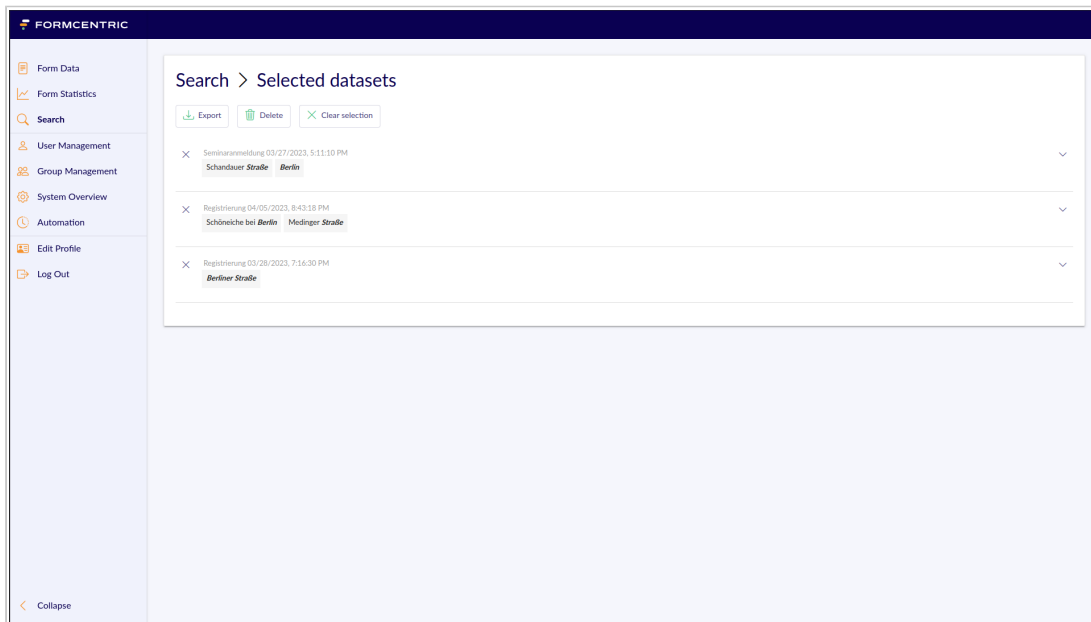


Figure 6.2. Selected data records

The action bar offers you the following functions:

Export: Exports the selected data records to an external archive file (*.zip) in the Microsoft Excel format. A separate Excel file is created for each form. The file attachments included in the data records are saved together with the Excel files in the archive file. The exported file attachments are linked to from the associated Excel files, so as to ensure that you can access them from the associated data record.

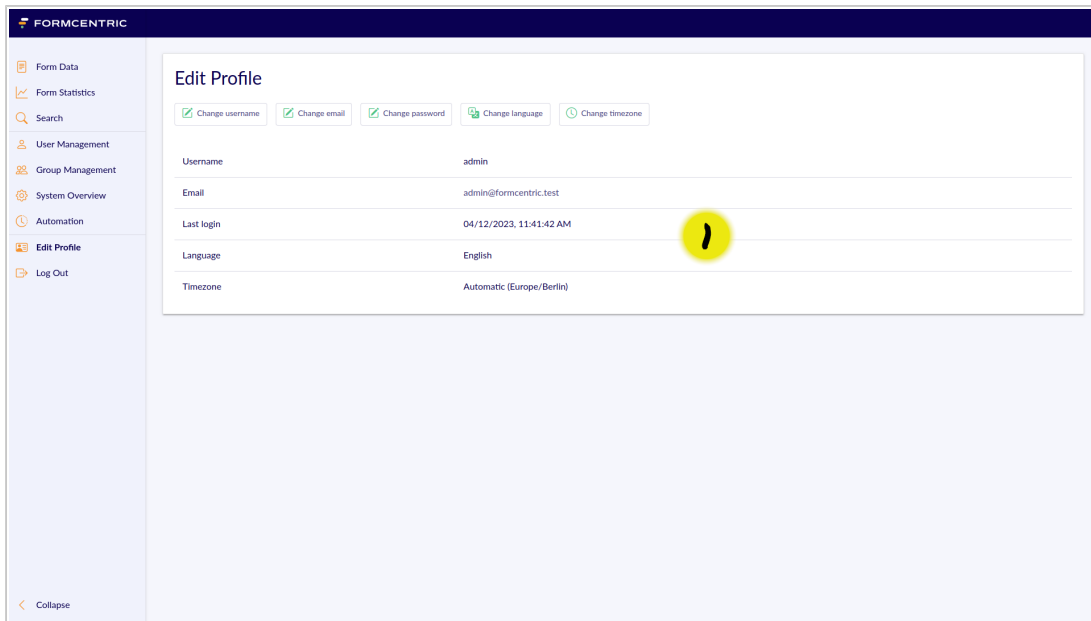
Delete: The selected data records are permanently deleted from the database.

Reset selection: Removes all data records from your selection.

7. Edit profile

Use the *Edit profile* option on the left-hand menu to access the data and settings stored for your user account.

On the initial overview screen, you can see the last time that you successfully logged in, the display language configured for Formcentric Analytics and the email address used to log into the system.



1. Overview of all profile data

Figure 7.1. Edit profile

The action bar offers you the following functions (if you have logged in by using a directory service, note that you will only be able to change your display language here):

Change username: Use this function to change the username that you use when logging into Formcentric Analytics. Click *Change username* to start using the new name.

Change email: To change your email address, enter your new email address as well as your current password. If the password is correct and the new email is in a valid format, apply your changes by clicking *Change email address*.

Change password: If you want to change your password, enter your current password and your new password (twice) in the dialog box and then click *Change password* to apply your changes.

Change language: Formcentric Analytics is available both in German and in English. In the default setup, your browser decides which display language is used. If you want to change this setting independently of your browser language, then you can do so here.

Your change is applied immediately after clicking *Change language*.

8. Automation

You can use automation jobs to complete certain tasks at regular intervals. In the default configuration, these jobs are run overnight at 1 a.m. You can configure the scheduled time of execution in the *Formcentric Analytics Backend* component.

Use the *Automation* tab from the menu to access the overview page for automation jobs. On the overview page, you can view all of your existing automation jobs and also create new jobs. You can also view the *Automation history* here (see Section 8.4, “Execution history”), which logs the jobs executed in the past and the number of data records that were affected by these jobs.

The screenshot shows the 'Automation' overview page in the Formcentric interface. The left sidebar contains navigation options: Form Data, Form Statistics, Search, User Management, Group Management, System Overview, Automation (selected), Edit Profile, and Log Out. The main content area has a title 'Automation' and two buttons: 'Create new task' and 'Execution history', with a yellow circle '2' around them. Below the buttons are filter controls for 'Type', 'Form', 'Time period', 'Enabled', 'Created', and 'Description'. The 'Form' filter is set to 'contains'. A table lists automation jobs with columns: Type, Form, Time period, Enabled, Created, and Description. A yellow circle '1' highlights the 'Form' column. The table contains 7 rows of jobs. At the bottom, there is a pagination control showing '10 entries per page' and '1 - 7 displayed, 7 in total'.

| Type | Form | Time period | Enabled | Created | Description |
|------------------------|------|---------------------|---------|------------------------|--------------|
| Delete temp form data | - | older than 30 days | Yes | 04/12/2023, 7:31:26 AM | - |
| Remove logs | - | older than 30 days | Yes | 04/12/2023, 7:31:26 AM | - |
| Delete form statistics | * | older than 30 days | Yes | 04/12/2023, 7:31:26 AM | - |
| Anonymize form data | * | older than 1 months | No | 04/12/2023, 7:31:55 AM | Beschreibung |
| Delete temp form data | - | older than 30 days | No | 04/12/2023, 7:31:55 AM | Beschreibung |
| Delete form data | * | older than 1 years | No | 04/12/2023, 7:31:55 AM | Beschreibung |
| Remove logs | - | older than 3 weeks | No | 04/12/2023, 7:31:55 AM | Beschreibung |

1. Overview of jobs, 2. Action bar with jobs to create and execution history

Figure 8.1. Overview of automation jobs

8.1. Explanation of columns

For all of the following columns, you have the option of using filters to limit the result set returned (see Section 3.6, “Filtering”).

The columns provide you with the following items of information:

Task: The task details for a job specify the functionality executed by this job.

Form: If a job relates to form data, the form affected is shown here. An "*" is used to show that all forms are affected.

Age of data records affected: This column shows the age of the data records affected. Only data records that are older than the specified time frame are affected by job execution.

Active: This column shows whether an automation job is active and whether this job will be included the next time that all active jobs are run.

Description: This column shows the optional description that can be entered when creating or editing an automation job.

Created on: This column displays the job creation timestamp.

For a detailed view of an automation job, click the row containing the job.

8.2. Creating a job

You can configure the following automation jobs:

Anonymise form data: This job is responsible for anonymising or purging form fields that have been marked previously as containing personal data (see Section 4.5, “Mark personal data”). Purging affected form fields means field data is deleted. For anonymisation, the field data is replaced by XXXXX.



Please note: During the subsequent editing of form entries, revisions of this data are created (see Section 4.3.2, “Version history”) that can contain personal data. This revisions are not currently included in anonymisation or purging tasks.

Delete form data: You can use this automation job to delete form data. All data is deleted that is older than the specified timestamp. This deletion is permanent. You can include all forms or select one specific form for inclusion.

Delete form statistics: You use this job to delete form statistics. All data is permanently deleted that is older than the specified timestamp. You can include all forms or select one specific form for inclusion.

Delete temporary form data: Here you can configure jobs that are used to delete temporary form data (see Section 9.5.1, “Temporary form data”). You can choose one or both of the data types “Extended sessions” or “Pending email confirmations”.

Purge history: You use the *Purge history* job to delete the history for the jobs that have already been executed.

Set status: This job automatically assigns a status to form entries. To do this, you must select a form and the status to be set. If you also define a previous status, the job is only applied to form entries that have this status at the time of execution.

8.3. Job detail view

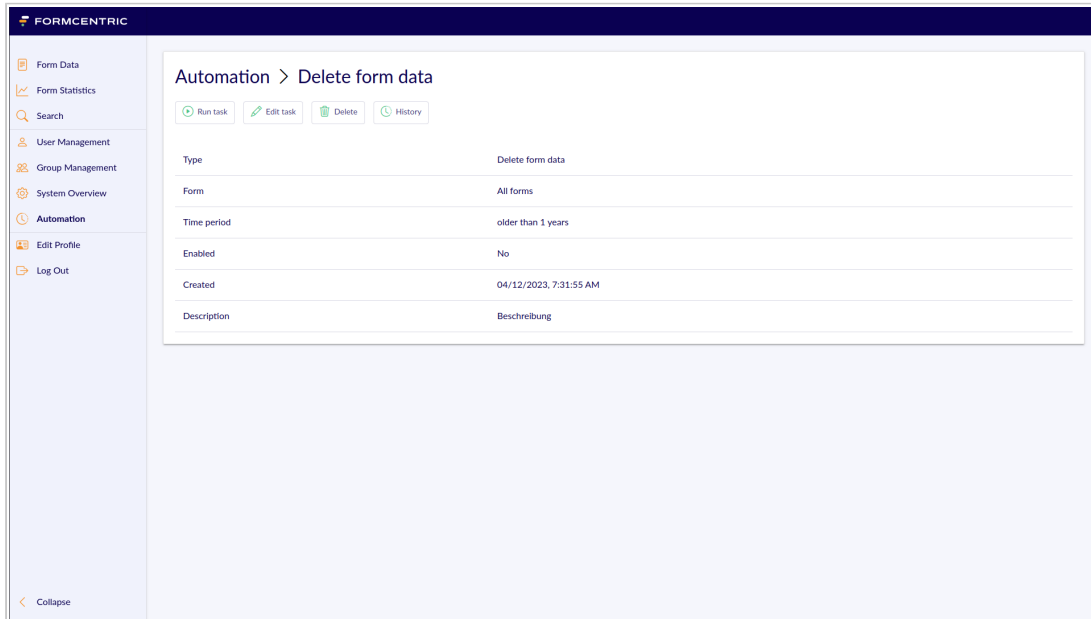


Figure 8.2. Detail view

The detail view displays all of the information about a job. You have the following options available:

Run task: To start an automation job immediately, confirm the execution here. Please note that this can take a very long time, depending on the number of records involved.

Edit task: Use this option to edit the existing automation job. You can edit the time frame for the affected data, change the job task type, enter a description and activate or deactivate the job.

Delete: Use this option to delete an automation job permanently.

History: Use the *History* link to access the execution history with the last time of execution and the number of data records affected by job execution.

8.4. Execution history

Automation > Delete form data > History

| Execution time | Message |
|------------------------|--|
| 04/12/2023, 1:20:32 PM | 0 entries have been deleted from "Registrierung (8410)" |
| 04/12/2023, 1:20:32 PM | 0 entries have been deleted from "Seminaranmeldung (7412)" |
| 04/12/2023, 1:20:32 PM | 0 entries have been deleted from "Antragsformular (3182)" |
| 04/12/2023, 1:20:32 PM | 8 entries have been deleted from "Gewinnspiel (3168)" |
| 04/12/2023, 1:20:32 PM | 0 entries have been deleted from "Kontaktformular (3164)" |

Load more entries

1. Details about the job, 2. Load more entries

Figure 8.3. History

The job execution history provides you with an overview of automation jobs that have already been executed. There are two ways to access this history. Use the *Execution history* link on the automation job overview page to access the history screen for all automation jobs. Alternatively, you can also access the history from the detail view for a job.

Click the *Load more entries* button to load the next 10 entries. If the button is greyed-out, there are no more entries available.

9. Administration

After a fresh install of Formcentric Analytics, you are provided with an administrator account with the username *admin* and the initial password *admin*. You should change the password as soon as possible (see Chapter 7, *Edit profile*). In addition, you should also store an email address for the administrator, so that you can reset your password if you should happen to forget it.

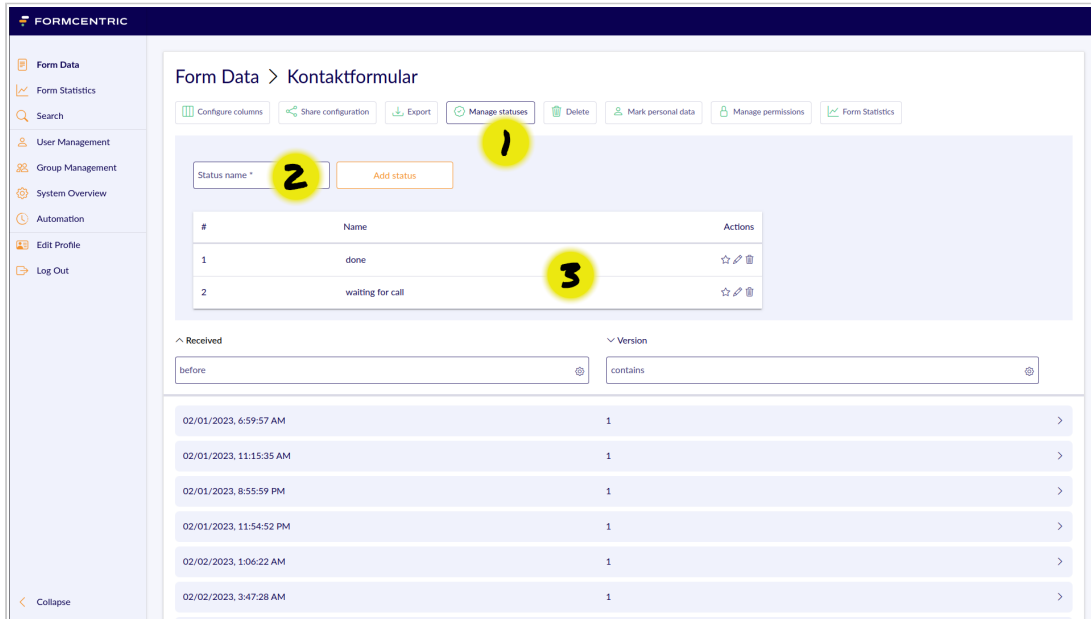
As a Formcentric Analytics administrator, you have various options available for managing users and permissions, configuring access to the various forms, and configuring the statuses that are available for forms. This section gives you an overview of all of the available options, and how you can use them to implement the permissions model appropriate for your company.

9.1. Form management

As an administrator, you not only have the elements mentioned in section Section 4.2, “Overview of all data records entered for a form”, but can also use another two elements on the action bar. You can use these to set up and change the statuses that are available to a form, and to modify the access rights for users and groups.

9.1.1. Status management

Formcentric Analytics offers you the option of setting custom statuses for data records. Initially, a form is not assigned any status information. Instead, statuses must be defined and configured for each form. To do so, go to the form's data record overview and click the option *Status management*.



1. *Status management* on the action bar, 2. Input field for adding a new status, 3. List with statuses available for this form.

Figure 9.1. Status management for a form

If you want to add a status, enter a unique name into the *Status name* input field and then click *Add status*. The new status is included in the list with the available statuses.

In the list with the available statuses, you have the following options available:

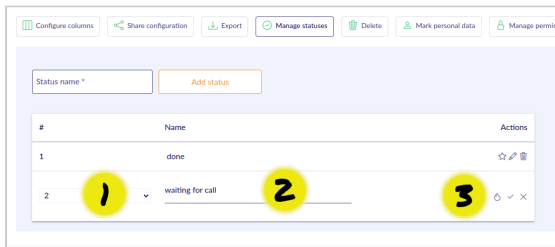
Initial status: You can specify that a certain status is automatically assigned to each new data record that is entered for this form. To do this, check the star on the corresponding status. The suffix *initial* is added in brackets to the name of the selected status and it is shown in bold type. Please note that you can only set one initial status.

Status order: The order of the statuses as displayed in the list corresponds to the order that is displayed to the user when accessing a data record. If you are using the statuses to represent a workflow, for example, then we recommend changing the status order to match the workflow. To change the position of a status, click the *pen* icon. Two arrows then appear, which you can use to move the status up or down, as necessary. Confirm the change by clicking the tick mark.

Status colours : You can assign colours to statuses. Click the *pen* icon and select the required colour. Then confirm your selection.

Renaming a status: To change the name of a status, click the *pen* icon. Enter the new name and save the change by clicking the tick mark.

Deleting a status: To remove a status, click the *wastepaper bin*.



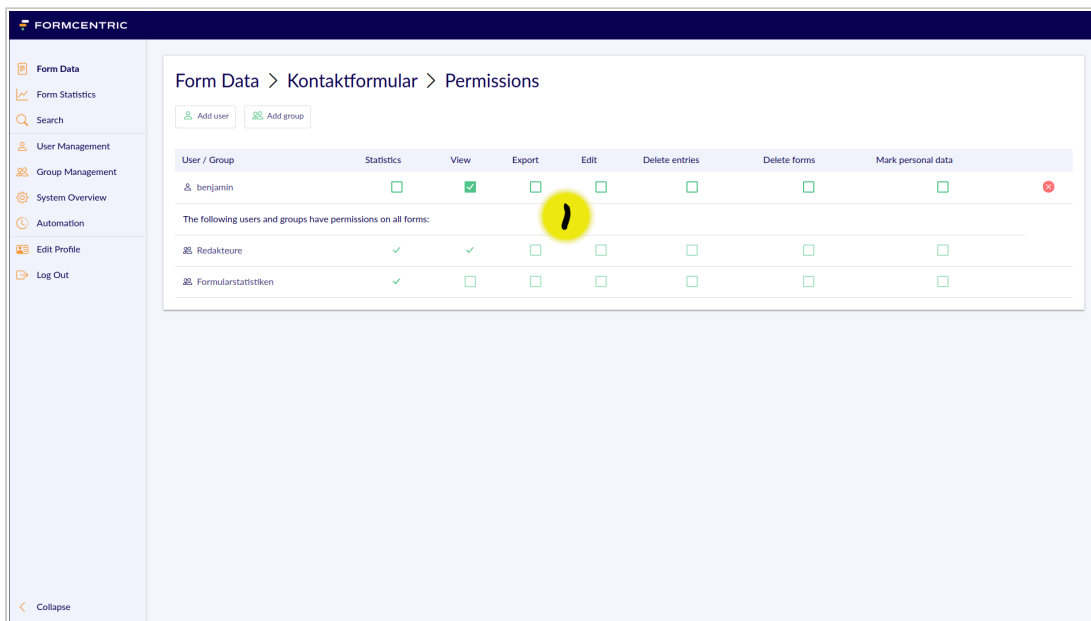
1. Change the order of the status, 2. Change the name of the status, 3. Apply or discard your changes.

Figure 9.2. Editing a status

9.1.2. Access management

As an administrator, your action bar also displays the *Access management* menu option. The underlined link title indicates that you will leave this page if you click the option and switch to the access management page for this form.

On this page, you can quickly get an overview of the permissions that have been issued and make adjustments or delete entries in the permissions table. You can also use the action bar to add new groups or user accounts.



1. Permissions table

Figure 9.3. Access permissions for a form

Permissions overview

The permissions table shows you both the groups and the user accounts that have been assigned to this form. The checkboxes are used to grant or withdraw permissions. Permissions are “logically dependent”, i.e. export permission cannot be granted if a user account or group has not also been assigned view permission for the form.

You can also remove an entry from the table directly by clicking the cross at the end of the row in question.

For details of the permissions you can grant in Formcentric Analytics, and the effects of granting these permissions, please see Section 9.4, “Permissions”.



Permissions are also “additive”. If you only issue a user account with the *View* permission for a form, for example, but the account is also a member of a group that has the *Export* permission for the same form, then the user has both permissions.

Add group

The action bar offers you the option of adding an available group with *Add group*. On the screen that then appears, you can select one or more groups in the normal way and then use *Add* to add them to the permissions table.

Add user

The action bar offers you the option of adding an available user with *Add user*. On the screen that then appears, you can select one or more users in the normal way and then use *Add* to add them to the permissions table.

9.1.3. Form statistics

If you have been granted the permission to view form statistics, you are shown a link that takes you directly to the reports for the selected form.

9.2. User management

User management provides you with a complete set of tools for managing group memberships, passwords and permissions for individual users, and for creating new user accounts.

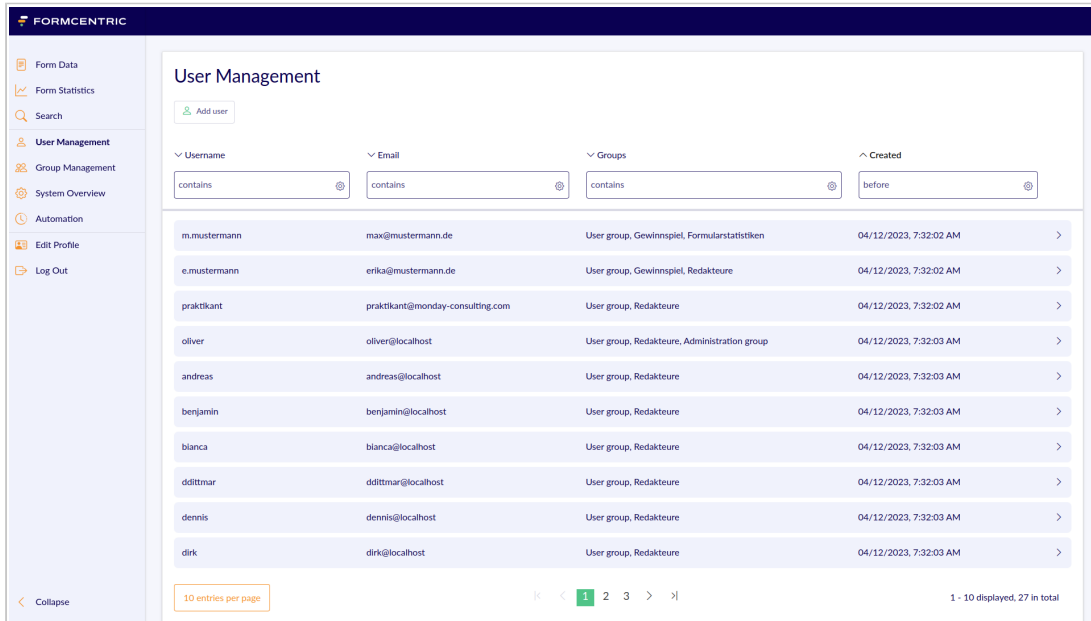


Figure 9.4. User management

The user management home screen shows you the user accounts already set up in the system, together with their assigned groups. You can filter this table by *Email* or by *Groups*. This function always uses a *contains* filter (see Section 3.6.1, “Filtering text columns”).

9.2.1. Adding a user

You can access the screen for adding a new user account from the action bar. If you have stored the user’s email address, you can decide whether to set an initial password for the account now or let the user set the password himself/herself by using a registration link.

To complete the process, click *Add user* to add the account to the overview list.

9.2.2. Detail view for a user account

You can access the detail view for a user account by clicking the corresponding row on the user management screen. The detail view tells you when the account was created and also shows the email address stored for this account.

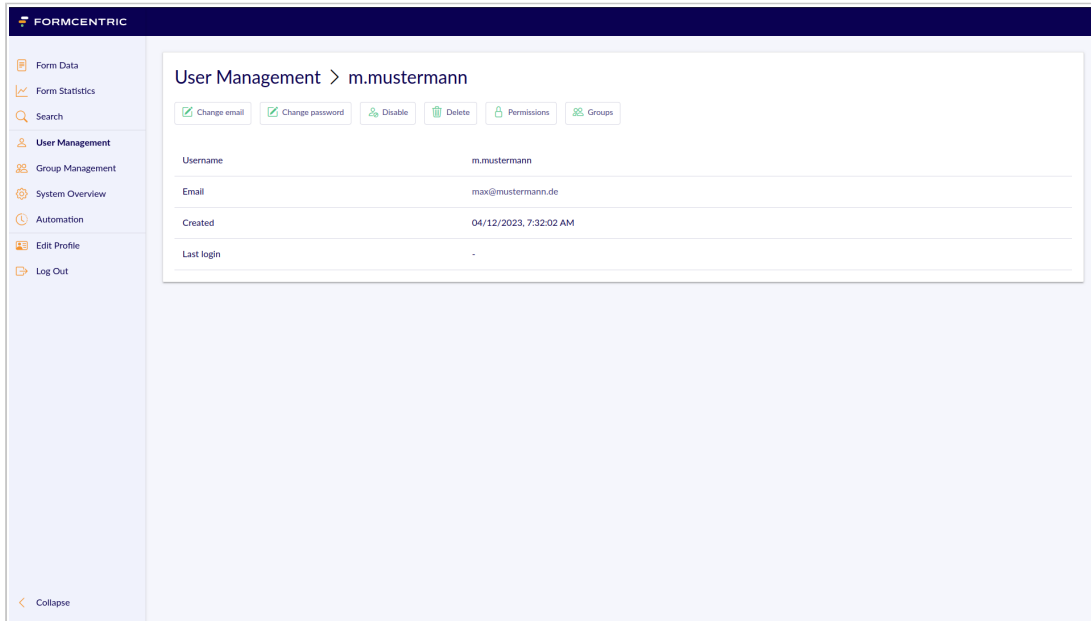


Figure 9.5. Detail view for a user account

From here, you can use the action bar to access all of the other functions that you require for user administration. The functions *Change email*, *Change password*, *Delete* and *Activate/Deactivate* are available only for internal user accounts.

Change email: Use this function to change the account's email address.

Set password: If a user has forgotten his/her password, you can revoke the password here and issue a new one.

Enable / Disable: User accounts can be activated and deactivated. If a user registers a new account via the registration page, then the account is initially disabled until you enable it personally. This is designed to prevent unauthorised persons gaining access to the system.

You can also use this function to revoke a user's login permissions without having to actually delete the user account.

Delete: Use this function to delete a user account permanently from the system.

Permissions: This link takes you to the permissions page for the selected user account. You can see all of the forms assigned to this user, even if the account has not been granted any additional permissions. The first entry in the permissions table is always the *All forms* entry. This offers a quick way of granting the same permission to all forms. The permissions granted also apply to all forms created in the future.

The checkboxes are used to grant or withdraw permissions. A greyed-out checkbox indicates that this permission has been granted via a group and therefore cannot be changed in this view. To enable changes to be made to group permissions, the individual group names are listed following the checkbox. Clicking one of these names takes you to the group detail view, where you can then make changes to the relevant group permissions.

For details of the permissions you can grant in Formcentric Analytics, and the effects of granting these permissions, please see Section 9.4, “Permissions”.



For users logging in via a directory service, permissions can only be managed for the external groups from this directory service.

User Management > m.mustermann > Permissions

Add form

| Form | Statistics | View | Export | Edit | Delete entries | Delete forms | Mark personal data |
|------------------------|---|---|---|---|--|---|-------------------------------------|
| All forms | <input checked="" type="checkbox"/> Redakteure, Formularstatistiken | <input checked="" type="checkbox"/> Redakteure | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Kontaktformular (3164) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gewinnspiel (3168) | <input checked="" type="checkbox"/> Gewinnspiel | <input checked="" type="checkbox"/> Gewinnspiel | <input checked="" type="checkbox"/> Gewinnspiel | <input checked="" type="checkbox"/> Gewinnspiel | <input checked="" type="checkbox"/> Gewinnsp | <input checked="" type="checkbox"/> Gewinnspiel | <input checked="" type="checkbox"/> |

1. The column names show which permissions can be granted.
2. The checkboxes in this row are not greyed-out and can be changed here.
3. The checkboxes in this row are greyed-out. They can be changed only on the permissions page for the group. The group names link directly to the group page.

Figure 9.6. Overview of permissions for a user

Groups: When you click *Groups*, you are taken to a new page, which offers you a tabulated overview of the groups in which the user account is a member.

You can use the *Add group* option from the action bar to assign new groups to the user account. Groups already assigned are shown greyed-out in the list.

9.3. Group management

You can use the group management area to get a quick overview of all of the groups configured. For the *Name* and *Description* columns, the usual filter options are available (see Section 3.6, “Filtering”).

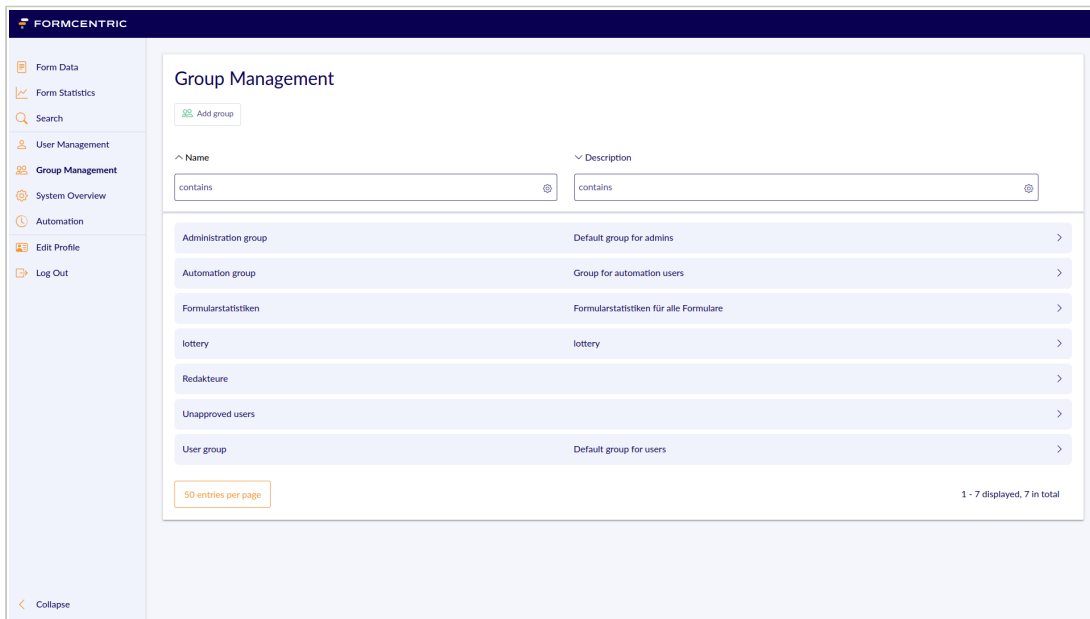


Figure 9.7. Group management

Formcentric Analytics creates a set of five default functional groups that are used for specialised tasks. These groups cannot be deleted.

Users: All user accounts created in the system are automatically members of this group. This does not apply to user account from an external directory service such as LDAP or Active Directory.

Unapproved users: All user accounts created via registration using the login form (see Chapter 2, *Login and registration*) are automatically members of this group.

Automation: Members of this group can create and manage automation jobs.

Administration: The *Administration* group contains all user accounts with administrator rights. These automatically have all permissions for every form. These accounts therefore do not need to be added to other permissions groups.



Analytics can manage a maximum of 50,000 groups. Please contact our Support Team if this is not sufficient for your requirements.

Add group: For a new group, use *Add group* from the action bar, specifying a *Name* and an optional *Description*. When you click *Add group*, the new group is automatically added to the list below and can then be further configured. To do so, call up the group detail page by clicking the row in the table.

Import external groups: If an external directory service (LDAP or Active Directory) has been integrated, you can import the *external groups* from the action bar. This imports all groups that match the configured group search (see the section 4.4 "LDAP and Active Directory integration" in the installation documentation).



Before external users can log on, the external groups must be imported once. If import is re-run later, all of the external groups without any managed permissions are deleted and re-imported.

9.3.1. Edit group

If you want to edit the information about the group, you can use *Edit group* to modify the name and the description. Use *Apply changes* to save your changes. The name of a group from an external user directory cannot be changed. Changes to external user accounts must be made in the associated user directory.

The screenshot shows the 'FORMCENTRIC' interface for 'Group Management > lottery'. The left sidebar contains navigation options: Form Data, Form Statistics, Search, User Management, Group Management (selected), System Overview, Automation, Edit Profile, and Log Out. The main content area has a header 'Group Management > lottery' and a toolbar with 'Edit group', 'Roles', 'Delete', 'Permissions', and 'Members'. Below the toolbar are two input fields: 'Name *' with the value 'lottery' and 'Description' with the value 'lottery staff'. At the bottom of the form are 'Save changes' and 'Cancel' buttons. A summary table below the form shows the current values for Name and Description.

| | |
|-------------|---------|
| Name | lottery |
| Description | lottery |

Figure 9.8. Detail view

9.3.2. Roles

You can use the *Roles* action to assign one of the three functional roles used by the system to the group. Roles can also be assigned to external groups, so as to give members of an LDAP group administrator rights, for example. The following roles are available:

User: Allows the group to log into the system.

Administrator: Gives the group administrator rights.

Automation: Enables the group to create and manage automation jobs.

9.3.3. Delete

Use this to permanently delete the group.

9.3.4. Permissions

With permissions, you can configure which forms are visible for a user group and which actions this group is authorised to perform.

To include a form in the list, click *Add form* to display a search dialog box. You can use the input field to quickly filter the list of forms offered by the system: note that both the form name and the form ID (value included in brackets after the form name) are considered here. You can use the *Add form* option to include all marked forms in the list below, and you can then assign the appropriate permissions for the selected group.

For details of the permissions you can grant in Formcentric Analytics, and the effects of granting these permissions, please see Section 9.4, “Permissions”.



You must always grant the *view* permission if you want to grant additional permissions. As an example, it is not possible for a user to export a form if s/he does not have permission to view the form.

9.3.5. Members

To assign members to a group, select *Members* from the action bar and then click *Add member* to access a search dialog box. You can use the input field to quickly and simply filter the list of user accounts. As a last step, mark all of the user accounts that you want to assign to the group and then click *Add*.



Users from external directory services (LDAP or Active Directory) cannot be added to Analytics groups and vice versa.

9.4. Permissions

The Formcentric Analytics permissions system offers you many options for specifying which users are to be granted which kinds of authorisations. This section gives you an overview of the available permissions and the actions with which they are linked.

Permissions can be granted within a number of different areas, including: within the access management section of a form (see Section 9.1.2, “Access management”), within user management (see Section 9.2.2, “Detail view for a user account”) and within group management (see Section 9.3.4, “Permissions”).

The following permissions can be granted in Formcentric Analytics:

Statistics: Users with this permission are authorised to view the statistics for a form. Information accessed by this permission includes important key figures and metrics on form usage but does not include submitted form data or personal data (see Chapter 5, *Form statistics*).

View: The *View* permission provides access to the form data submitted. This permission is also the basis for additional permissions: i.e. export permission cannot be

granted if a user account or group has not also been assigned view permission for the form.

Export: Users granted the *Export* permission can download all of a form's data records (see Section 4.2.3, "Exporting"). The exported data is then available outside the application, and can be edited or processed in any other way as required.

Delete records: This permission allows the user to delete a form's data records. Individual entries can be deleted from the detail view of an entry (see Section 4.3, "Detail view for a data record"). In addition, the deletion of all data records within a form is also possible (see Section 4.4, "Delete").

Delete forms: The *Delete forms* permission is required for the deletion of entire forms. Note that this permission also enables all of the delete operations provided by the *Delete records* permission.

Mark personal data: With the *Mark personal data* permission, a user can mark fields in a form to indicate that these fields contain personal data (see Section 4.5, "Mark personal data"). Automation jobs (see Chapter 8, *Automation*) can then be used to anonymise or purge the data in these fields.

9.5. System overview

You are provided here with detailed information about your Formcentric Analytics infrastructure. Apart from static items of information such as the version and the creation date of the two *Backend* and *Reporting* components, dynamic information is also shown here, such as the system load during the last 60 seconds or status information from the mail server and the database.

9.5.1. Temporary form data

The system overview also provides you with up-to-date information about temporary form data. This data consists of data that cannot yet be viewed by using Formcentric Analytics. The data is divided into two categories:

Extended sessions: Cached form data that has not yet been completed in full. These items of data are used to restore forms for visitors returning to complete a form, in cases where the server session has expired in the meantime.

Pending email confirmations: Submitted forms for which an email confirmation (double opt-in) has been activated. These items of data have not yet been confirmed and are therefore not yet available for viewing in Formcentric Analytics.

The system overview shows you the current number of entries and attachments in both categories.

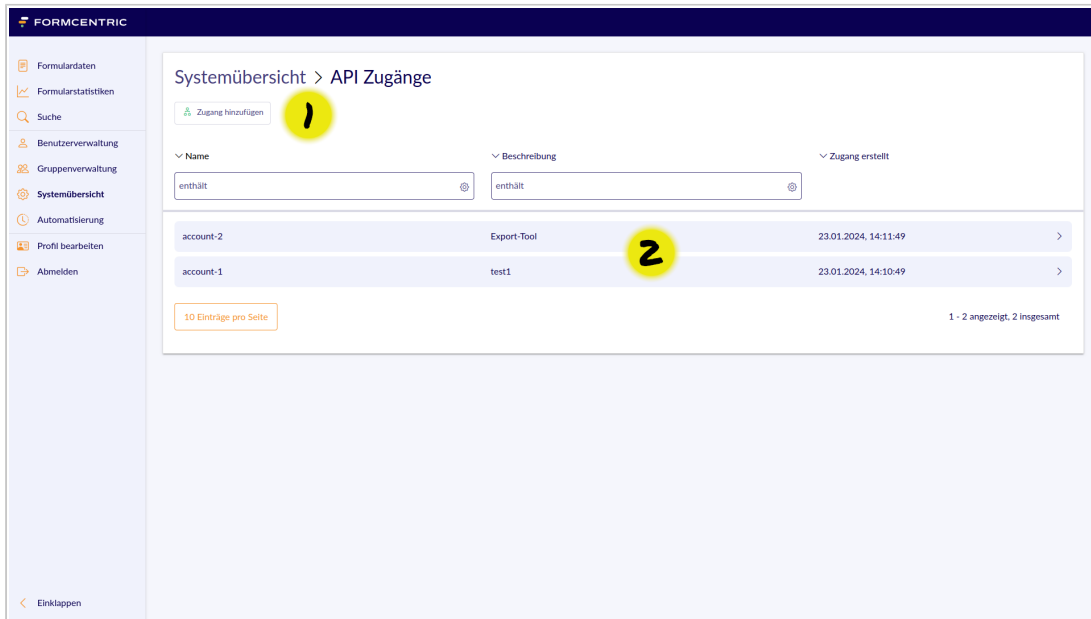


The function for deleting temporary form data has been relocated. This task is now handled by an automation job (see Chapter 8, *Automation*).

9.5.2. API accounts

Form data managed in Formcentric Analytics can be queried by third-party systems. An administrative REST API is provided for this purpose. The only accounts that can authenticate against this API are extra, specially-configured *API accounts*: login attempts from regular user accounts will be rejected. Authentication for an API account is achieved using a shared secret that the third-party system must know.

For further technical details, please consult the documentation for the administrative REST API.



1. The action *Add account* can be used to add any number of API accounts.
2. Overview of all API accounts

Figure 9.9. Overview of API accounts

An overview of all API accounts is shown on the main page. You can use the sorting and filter mechanisms to perform targeted searches for the information needed.

Add account

You can add new API accounts from the action bar. The description is optional and can be edited at any time. When an account is created, this generates a secret that is displayed at the end of the process. Please note that this secret is displayed only once: it cannot be displayed again afterwards. This secret must be communicated to the third-party system.

Detail view for an API account

The detail view displays all of the information for an individual API account. The action bar offers other actions that you can use to manage the account.

New secret: You can use the function *New client secret* to generate a new secret. As soon as you generate a new secret for an API account, the previous secret becomes invalid. Any third-party system still using the old secret immediately loses access to the Formcentric system.

Edit account: Use *Edit account* to update the description for the API account.

Delete: Use *Delete* to permanently delete the API account. As soon as you delete an API account, all third-party systems currently using this account immediately lose access to the Formcentric system.

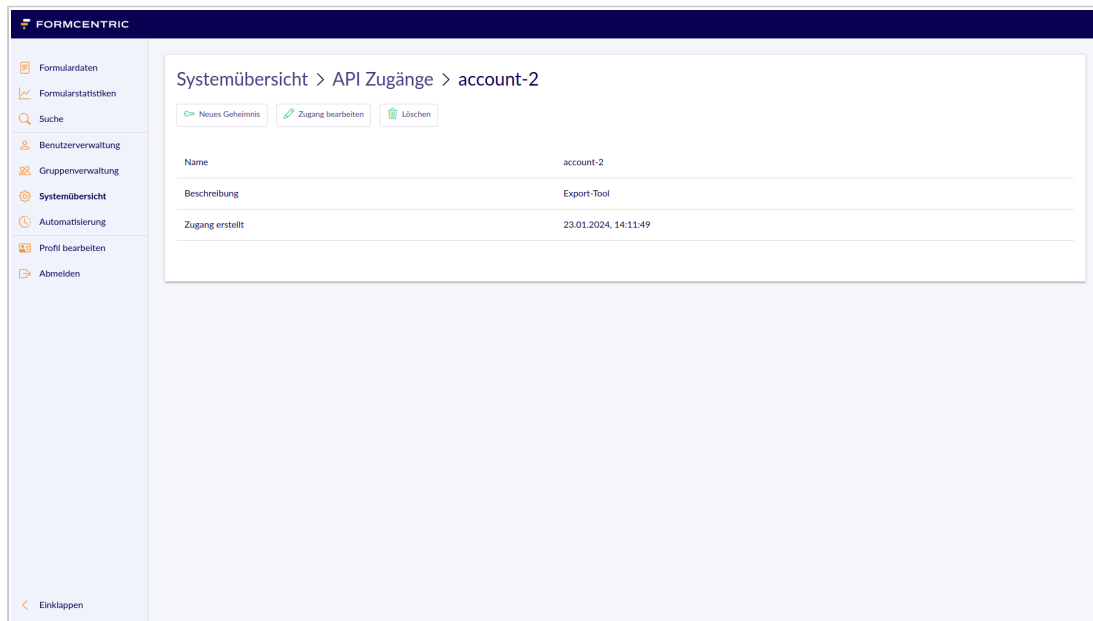


Figure 9.10. Detail view for an API account

9.5.3. Rebuild search index

You use the *Rebuild search index* action to perform a full rebuild of the Solr index. This action is useful in a number of use cases, such as when embedding a new Solr instance, for example, or when migrating an embedded Solr to a dedicated Solr server. You can also use this action if the form data in the database is not synchronised with the form data in the index.

The search (see Chapter 6, *Search*) will be unavailable while the Solr index is being rebuilt. The time required for the rebuild depends on the existing data volume.

9.5.4. Emails with errors

This view shows you emails that have not yet been successfully sent. The emails are sorted by their creation date.

For each email, the following information is provided:

- Date of creation

- Last send attempt
- Email subject
- Email recipient(s)
- The error message from the last send attempt (more details may be available from the server log).

The following actions are available for selected emails:

- If an email could not be sent for more than 24 hours, the server will no longer attempt to send this email. In this case, the email can be queued for sending again. The server will then try sending this email for another 24 hours.
- The selected emails can be deleted.