Logging tools

Version 7.18

Table of Contents

Set up the change log

PRODUCTS: ALL CREATIO PRODUCTS

The **change log** records changes to business data. You can use it for things like tracking product price or account balance changes.

The **audit log** records system events, system settings, and system data. Learn more in a separate article: Set up the audit log.

The change log is disabled by default. Follow the steps in this article to enable this feature.

To set up logging, you can use either the [*Change log*] section or any other Creatio section, lookup or detail.

Example. Set up logging of changes in contacts' phone numbers and emails.

Emails, mobile and work phones are available in the contact profile, so logging must be enabled in the [*Contacts*] section on the column level.

Note. If you use a load balancer to ensure fault tolerance of your Creatio application, perform the setup on one Creatio instance, then transfer settings to other instances. The setup process applies to Marketplace apps, custom packages, and other settings that require compilation. Learn more in a separate article: Compile an app on a web farm.

Method 1. Set up logging in the [Change log] section

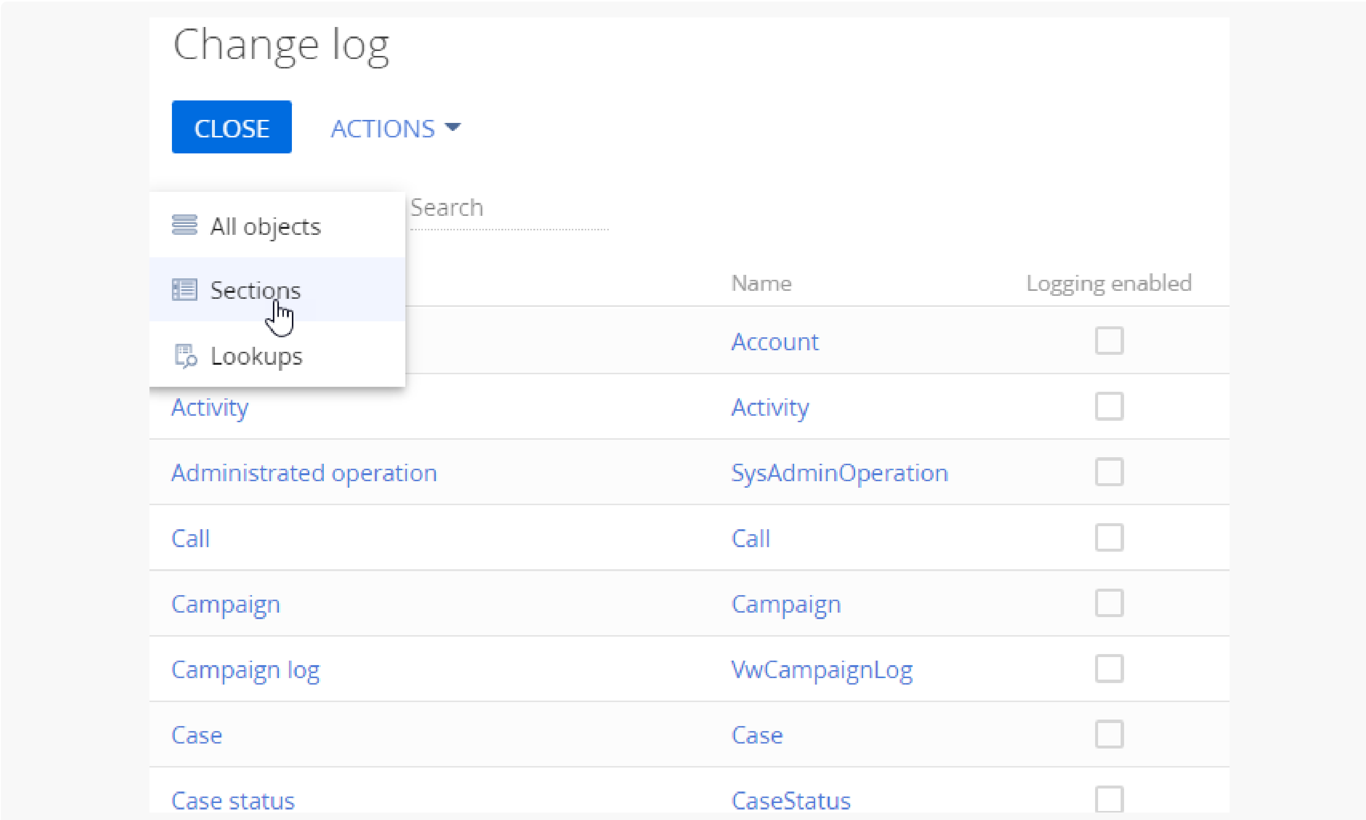
Note. We recommend setting up logging only for columns whose values you need to track. With large databases, logging a significant number of objects and columns might reduce Creatio's performance.

1. Open the system designer. For example, click the button.
2. Click "Change log" in the "Users and administration" block.

   Note. You must have permission to the "Access to "Change log" section" (the "CanManageChangeLog" code) system operation to manage the [*Change Log*] section. Learn more in a separate article: System operation permissions.

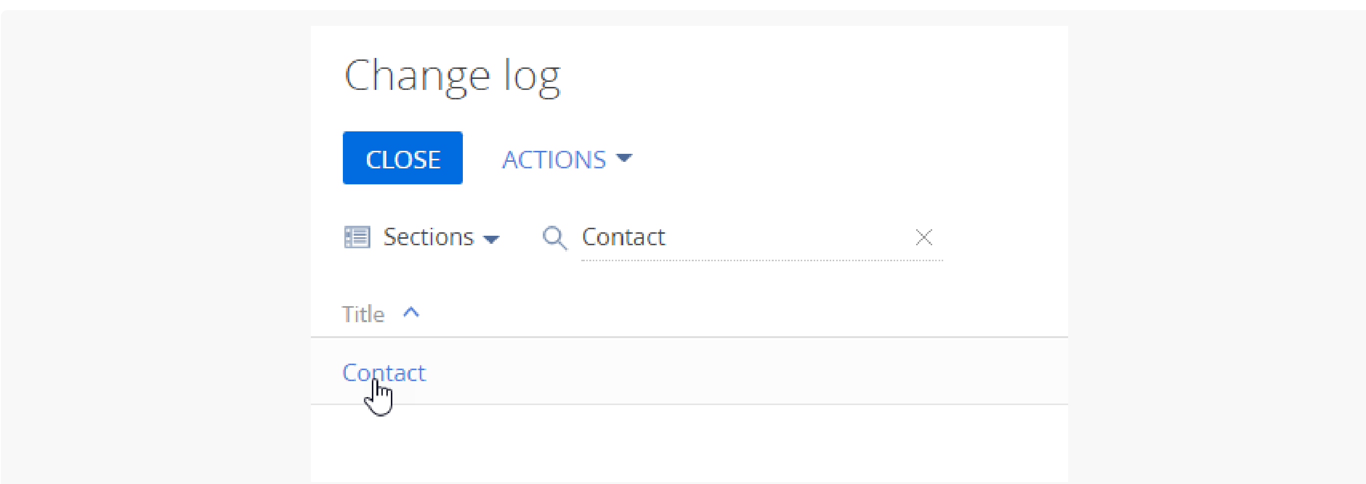
3. Find the needed section object, detail, or lookup in the object list. For example, set the "Sections" filter (Fig. 1).

Fig. 1 The object filter in the change log



4. Select the section from the list or find it using the search bar (Fig. 2). Click the title of the needed object. For example, the “Contact” object. This will open a new page.

Fig. 2 The search bar in the change log



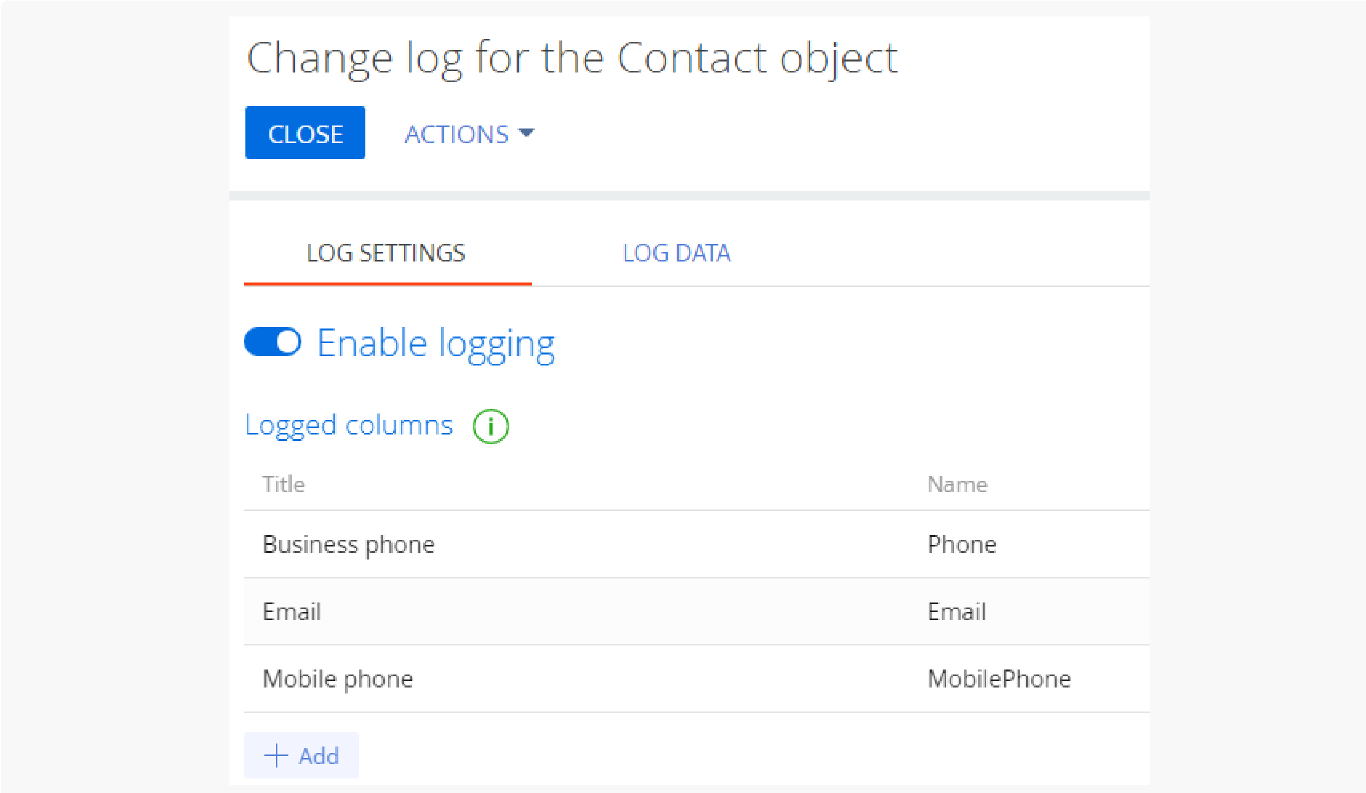
5. Enable logging on the page that opens via the corresponding switch.

> **Note.** If you save the changes on this step, Creatio will log the record create, update, and delete operations.

6. Set up the list of columns for logging when a record is changed. For example, use the [*Email*], [*Mobile phone*], and [*Business phone*] columns (Fig. 3).

   Click [*Add*] to add a new column. Hover over the column title and click to delete an added column.

Fig. 3 The column logging setup



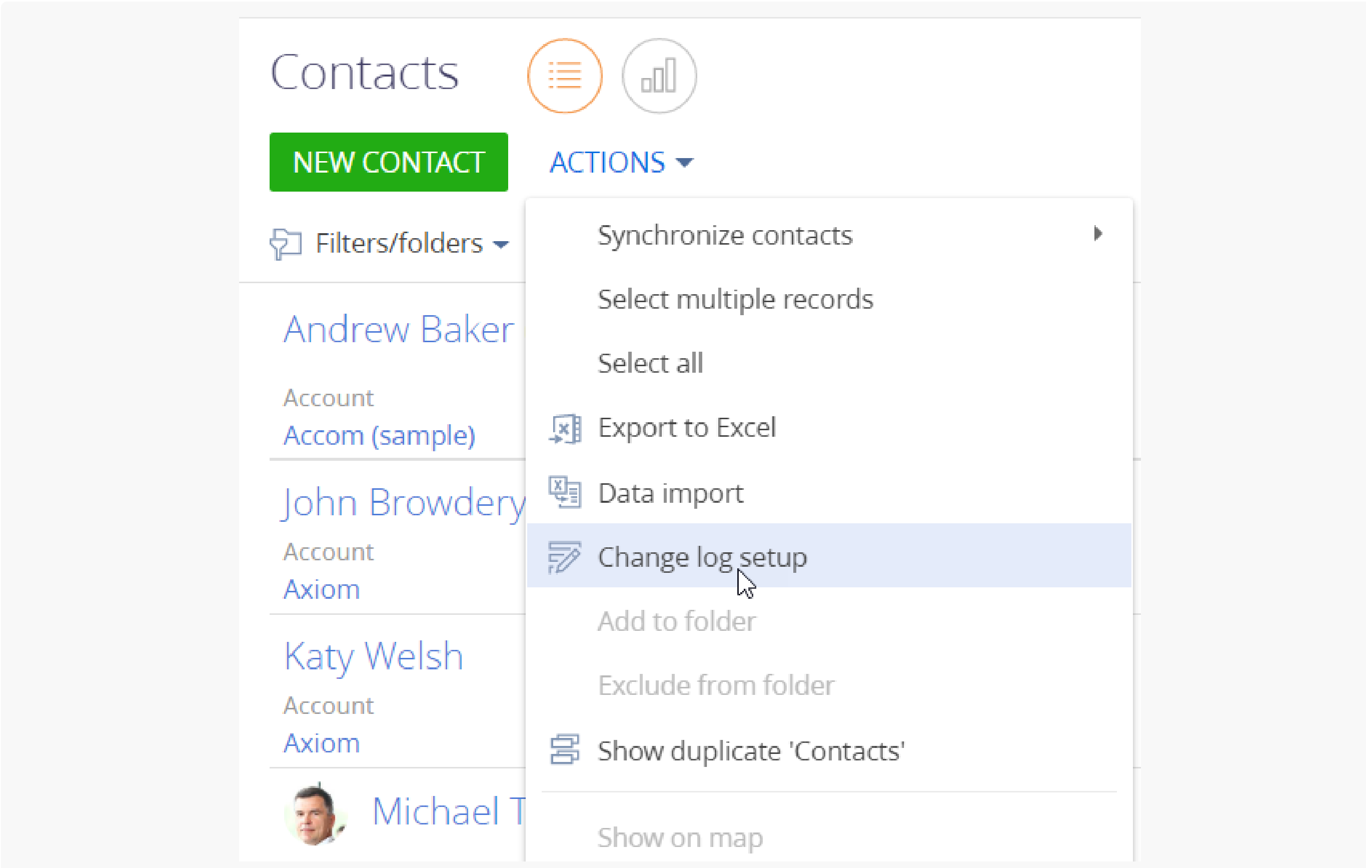
7. Click [*Apply*] to save the changes.

   After you apply the settings, Creatio will start monitoring the changes and recording them to the change log.

Method 2. Set up logging in a section, lookup or detail

1. Open the needed section, lookup, or detail. For example, the [*Contacts*] section.
2. Click [*Actions*] → [*Change log setup*] (Fig. 4).

Fig. 4 Set up the change log in the Contacts section



Note. If you cannot see [*Change log setup*] in the action list, make sure you have permission to the “Access to "Change log" section” (the “CanManageChangeLog” code) system operation. Learn more in a separate article: System operation permissions.

As a result, the change log setup page of the [*Contacts*] section will open. Follow **steps 5 through 7** from the **Method 1** to complete the setup.

Set up the audit log

PRODUCTS: ALL CREATIO PRODUCTS

The **audit log** records system settings, events, and data. It logs events related to changes in the user role structure, the distribution of access permissions, changes in the system setting values, user authorization in Creatio, etc.

The **change log** records changes to business data. You can use it to track product price or account balance changes. Learn more: Set up the change log.

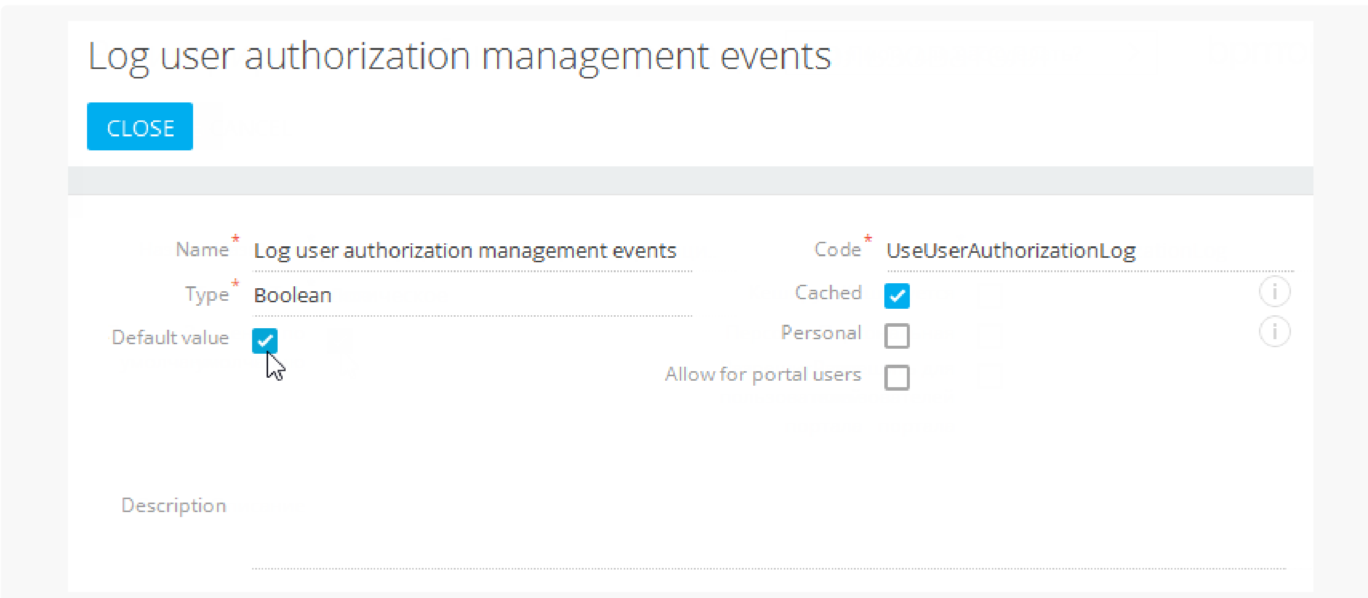
Note. Enable the “View “Audit log” section” (“CanViewSysOperationAudit” code) system operation to view the audit log. Enable the “Manage “Audit log” section” (“CanViewSysOperationAudit” code) system operation to view and archive the audit log records. Learn more: System operation permissions.

The audit log is disabled by default. Follow the steps in this article to enable this feature.

To enable the audit log using the system settings:

1. Click the button to open the System designer.
2. Click “System settings” in the “System setup” block.
3. Select the “Audit log” folder subordinate to the “Administration” folder. This folder contains all system settings that control the audit log. Each logged event type has a dedicated system setting that enables or disables it. Learn more about the audit log system settings: Description of system settings.
4. Open the setting and select the [*Default value*] checkbox to enable it. For example, select the checkbox in the [*Log user authorization management events*] system setting (Fig. 1) to record user log in and log out events.

Fig. 1 An audit log system setting



After disabling an audit log system setting, you may need to restart the Redis session server for the changes to take effect.

> **Note.** If the audit log is enabled on the configuration file level, Creatio will ignore the system setting values.

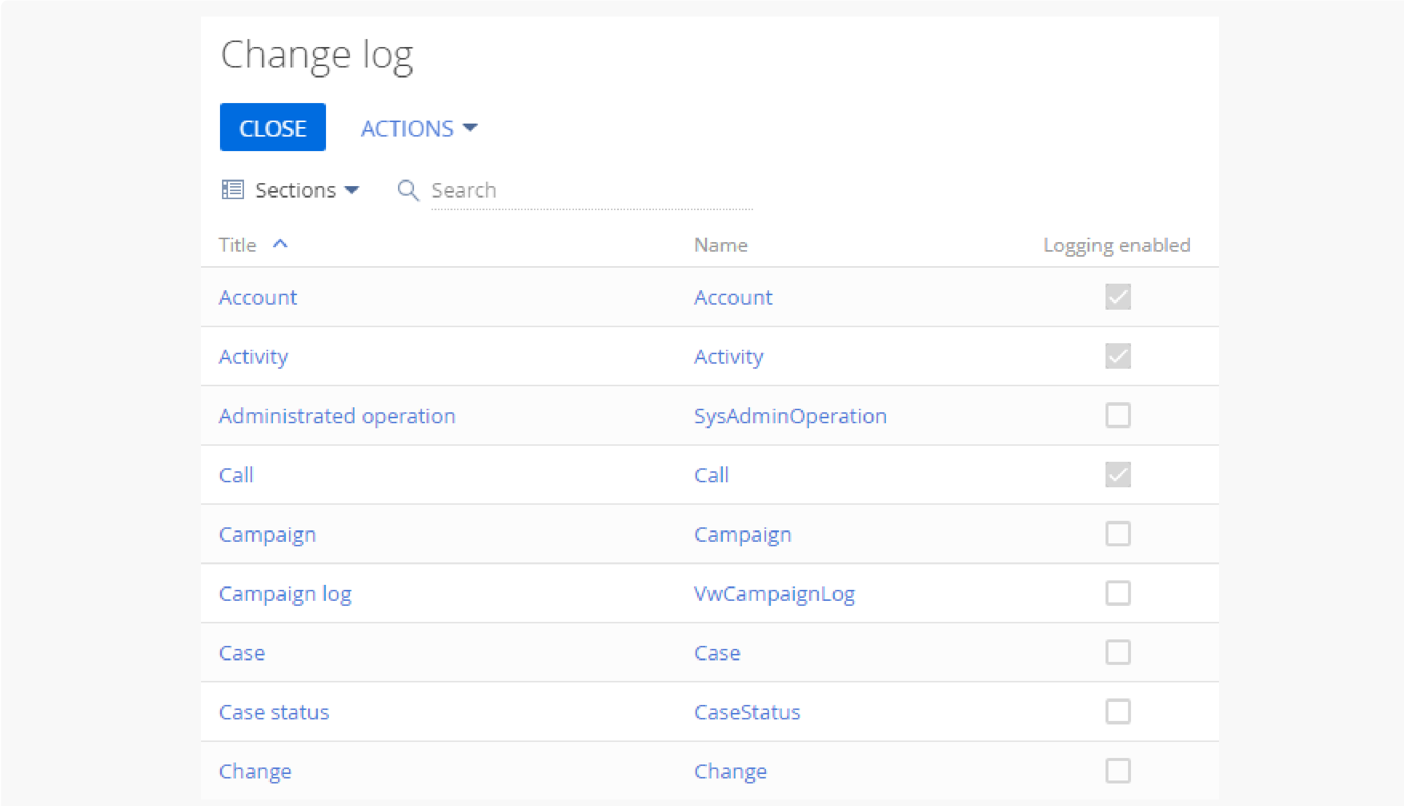
View the change log

PRODUCTS: ALL CREATIO PRODUCTS

When working with Creatio, you may need to view the changes made to your data and see who made these changes and when. For example, you can check which contact records were changed last month.

The data change history is available in the [*Change log*] section (Fig. 1).

Fig. 1 The [*Change log*] section view



The change log contains information about adding, modifying, and deleting records (entries) in the database tables for Creatio objects. This includes sections, details, lookups, as well as other objects.

There are two ways you can open a change log for viewing its records:

- Open the **Change log** section from the System Designer and select an object to view its logs
- Open the change log of a specific record directly from the **record page**.

Method 1. View the record changes from the change log

Example. View the contact records that were changed last month.

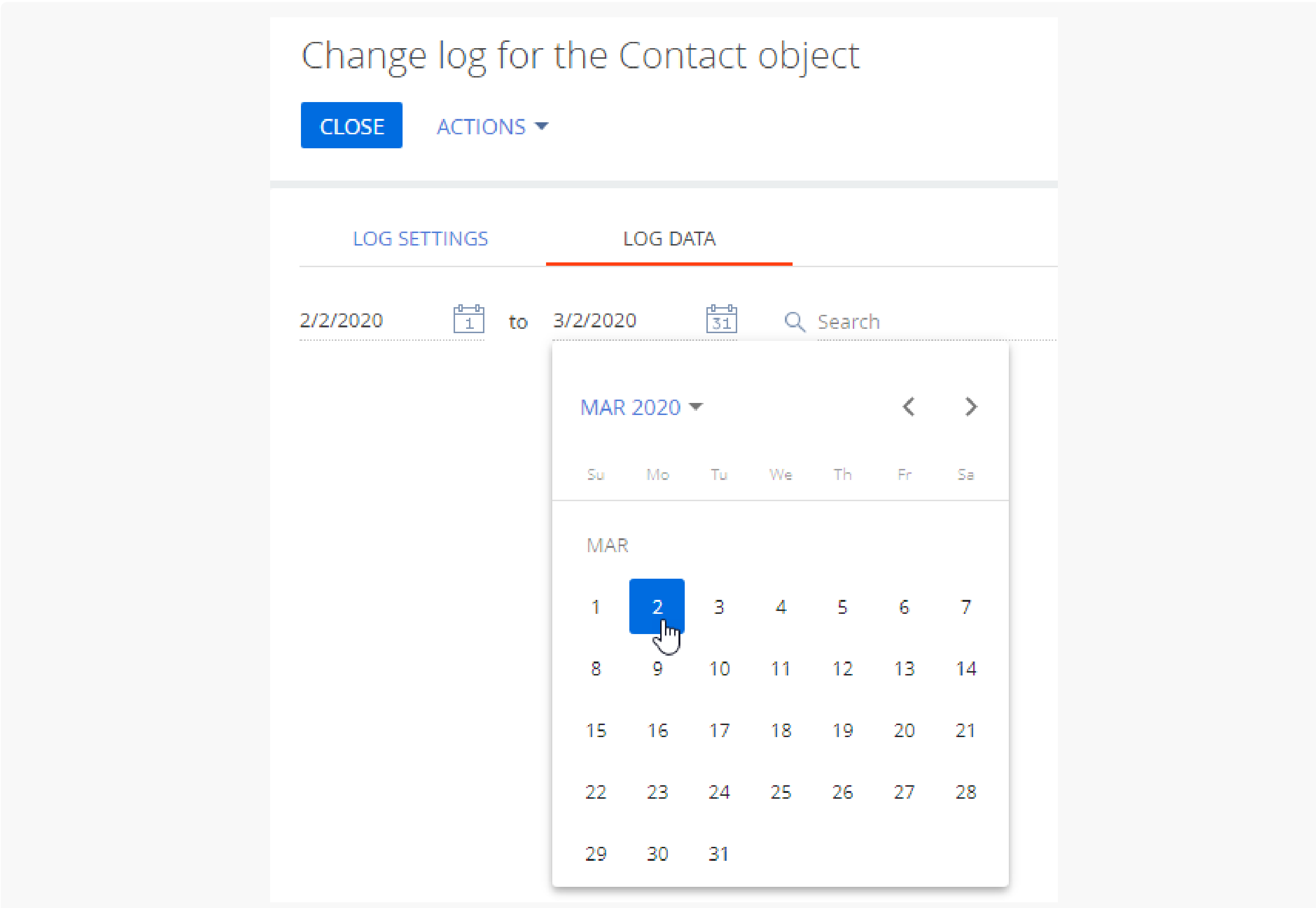
1. Open the System Designer, e.g., by clicking .
2. Under [*Users and administration*], click [*Change log*].

   Note. To view the changes, make sure you have the [*Access to* "*Change log*" *section*] (CanManageChangeLog) system operation permission.
   Learn more about using system operations in the "System operation permissions" article.

3. Set the filter - for our example, select "Sections".
4. Find the needed object using the search bar or manually. In our example, we use the "Contact" object. Click the object title to open the change log page.
5. Click the [*Log data*] tab and set the date filter (Fig. 1). In our example, it is the time period from February 2nd

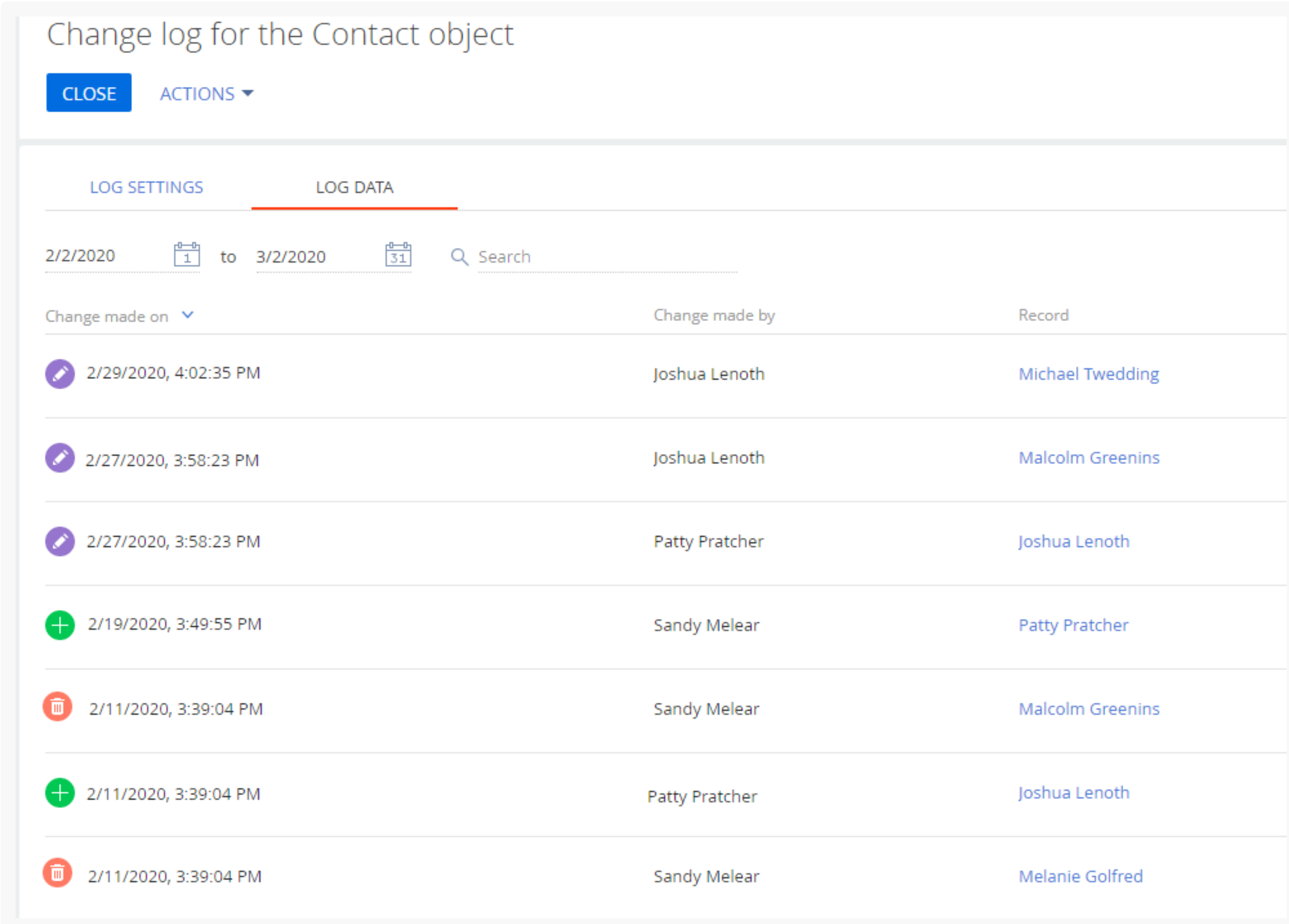
to March 2nd, 2020.

Fig. 1 Filtering changes by date for the “Contact” object



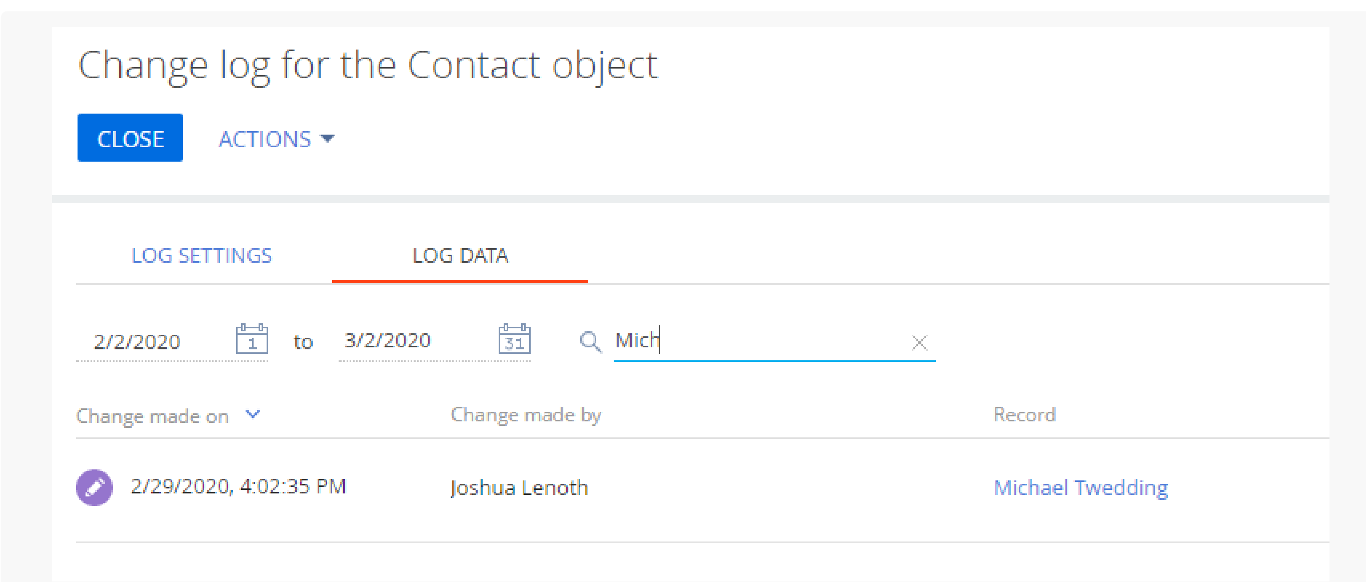
As a result, the list of records that were changed within the specified period will be displayed (Fig. 2). The icons next to dates display the type of the performed operations: deleting, adding or editing.

Fig. 2 Viewing the change log



6. Use the **search bar** to quickly find the needed record by title. In our case - by the contact's full name (Fig. 3). To learn the details of the performed changes, click the name in the [*Record*] column.

Fig. 3 Quick search by record name



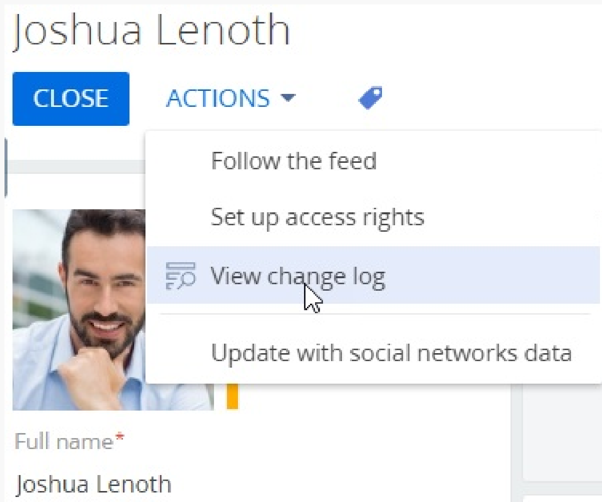
Method 2. View logs of a specific record directly from the

record page

Example. See the change log of the field values on the page of a specific contact for the last month.

1. Open the page of the needed record.
2. Click [*Actions*] → [*View change log*] (Fig. 1).

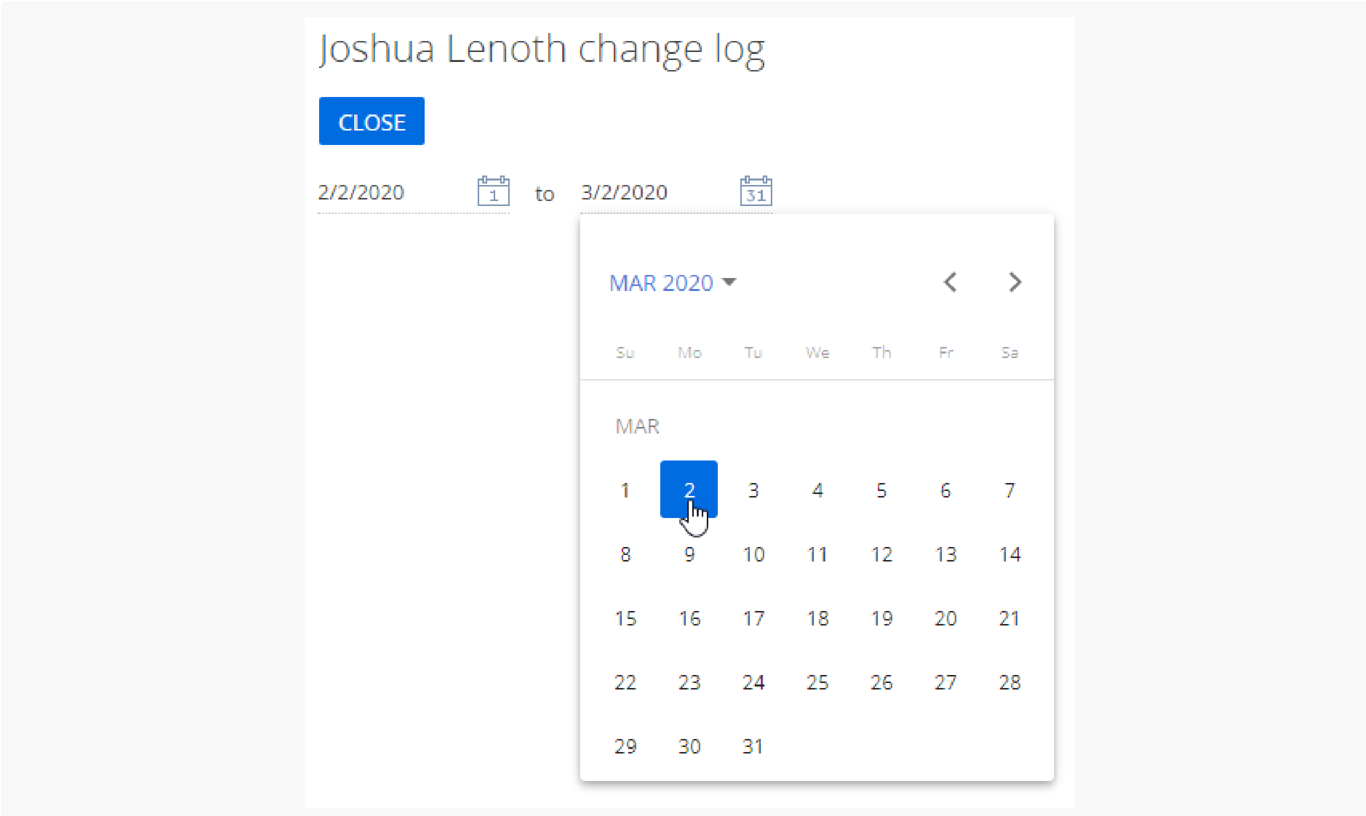
Fig. 1 The [*View change log*] action



Note. If you cannot see the [*View change log*] command in the [*Actions*] menu, make sure you have permission to the [*View change log*] (CanViewChangeLog) system operation.
Learn more about using system operations in the “System operation permissions” article.

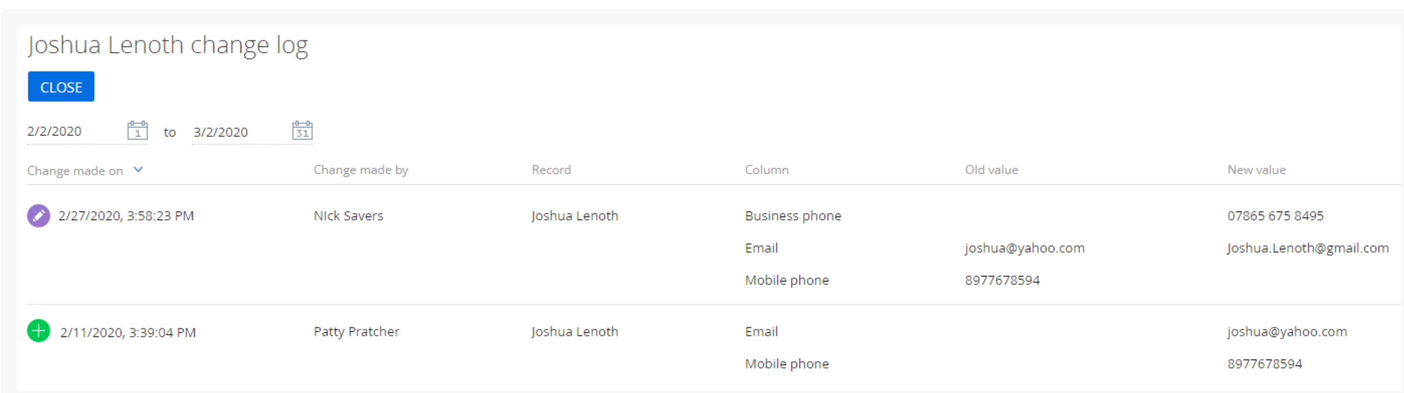
3. The page that opens will display information about the selected record:
   a. dates of the changes
   b. authors of the changes
   c. record name
   d. list of the changed columns
   e. values before the change
   f. values after the change
4. Set the date filter to display only the changes for the last month. (Fig. 2). In our example, it is the time period from February 2nd to March 2nd, 2020.

Fig. 2 Filtering changes by date for the log of a specific record



As a result, you will see the changes that were made in the logged fields within the specified period ([Fig. 3](#)).

Fig. 3 Record logs



View and archive the audit log

PRODUCTS: ALL CREATIO PRODUCTS

You can view the system operations audit log that automatically registers events related to the modification of user roles, distribution of access permissions, change of system setting values, and users' authorization in the system.

Access the audit log

Open the System designer. For example, click the button. Then, open the “System settings” section in the “System setup” block. Click “Audit log” in the “Users and administration” block.

> **Note.** Enable the “View “Audit log” section” (“CanViewSysOperationAudit” code) system operation to view the audit log. Enable the “Manage “Audit log” section” (“CanViewSysOperationAudit” code) system operation to view and archive the audit log records. Learn more: System operation permissions.

The [*Audit log*] view displays the list of the most recently logged events. The [*Log archive*] view displays the list of events archived via the [*Archive log*] action. Creatio stores the archived events in a separate table.

The [*Audit log*] section list displays the following data:

> **Note.** Configure the balancer to make the audit log display the user IP addresses in Creatio .NET Core or .NET 6 deployed on-site with horizontal scaling. Learn more: Set up the IP addresses in the audit log for .NET Core and .NET 6.

- [*Type*] – the [*Event types*] lookup contains the available event types. For example, “User authorization,” “User session,” etc.
- [*Event date*] – the event start date and time.
- [*Result*] – the [*Event results*] lookup contains the available system event results. For example, the user login attempt may finish with the “Authorization” result or the “Authorization denied” result upon failure.
- [*IP address*] – the IP address of the user who performed the operation that resulted in the event. For example, the IP address of the user who attempted to log in to Creatio.

  > **Note.** If the user connects via a VPN or the request is routed through proxy servers, the field will list the IP address of each proxy server. In that case, the rightmost IP address will belong to the last proxy server and the leftmost IP address will belong to the first traceable server.

- [*Owner*] – the user who performed the operation that resulted in the event. For example, the name of the employee who attempted to log in to Creatio.
- [*Description*] – the detailed event description. For example, “User authorization John Best. IP address: 192.168.0.7.” Creatio generates the event description automatically.

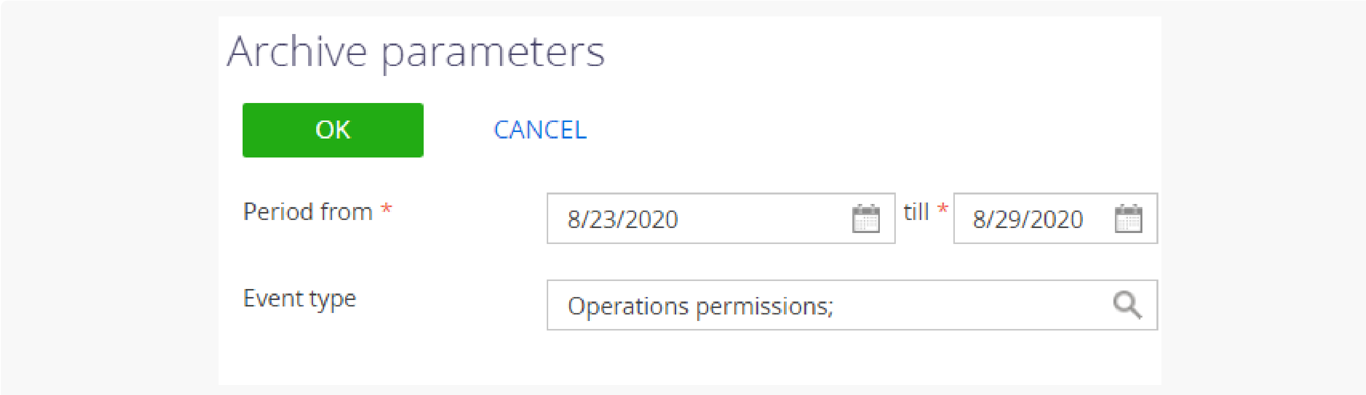
Archive the audit log

The [*Archive log*] action in the system operation audit log copies the log records to a separate archive table.

To archive the audit log:

1. Click to open the list view of the [*Audit log*] section.
2. Click [*Actions*] → [*Archive log*].
3. Set up the parameters on the newly opened [*Archive parameters*] page (Fig. 2).

Fig. 2 – The [*Archive parameters*] page



4. [*Period from*], [*till*] – specify the period of the events to archive. Creatio will only archive the events within the specified range.
5. [*Type*] – specify the type of the events to archive. Creatio will archive only the events of the specified types. You can select multiple types.

> **Note.** The archiving action is logged as “Access rights audit log.” Creatio will display a message with the number of archived records upon completion.

As a result, you will be able to see the list of archived events whose dates fall within the specified period in the “Log archive” view ( ) of the [*Audit log*] section.

Clear the change log

PRODUCTS: ALL CREATIO PRODUCTS

When working with Creatio, you may need to clear the change log history to avoid storing outdated log records in Creatio. For example, you can clear the log records of a specific contract created within the specified period of time.

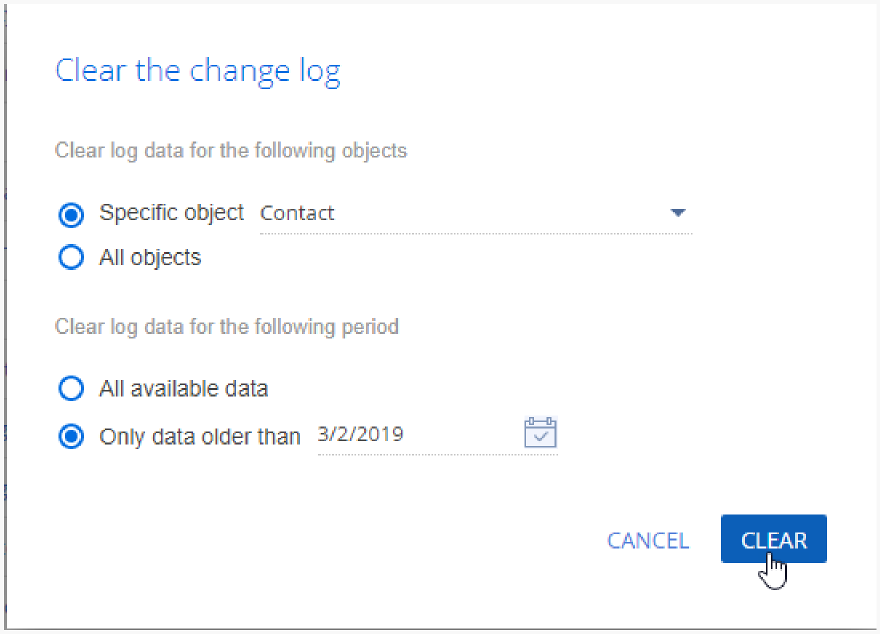
> **Note.** We recommend clearing the change log regularly to ensure that the [*Change log*] section contains only the currently valid information.

1. Open the System Designer, e.g., by clicking .
2. Under [*Users and administration*], click [*Change log*].
3. Click [*Actions*] → [*Clear log*].

> **Note.** Deleting records in the change log requires permission to the [*Can clear change log*] (CanClearChangeLog) system operation permission.
> Learn more about using system operations in the “System operation permissions” article.

4. Select the objects whose log records must be cleared and specify the period for which to clear the record. Click [*Clear*] (Fig. 1) to delete the specified log records.

Fig. 1 Clearing record in the change log



As a result, the selected records will be deleted.