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Disclaimer

Please note that some modules and functions described in this manual might not be available in your client instance. This is the case if certain modules or functions are not required, applicable or requested and have been excluded on client's explicit instruction.

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Diagnostic Report Module

About DRM

Summary DRM

This manual describes the Diagnostic Report Module which is a part of the Genetic Information Management Suite provided by bio.logis Genetic Information Management GmbH. The Diagnostic Report Module (DRM) has been developed as a tool for diagnostic laboratories. It supports the process of producing diagnostic reports resulting from genetic analyses by providing a platform for managing medical content and by automating certain work steps.

The DRM contains a fully functional Content Management System (GIMS-CMS) which is used for the creation and management of diagnostic report content. It also allows the definition of rules to determine which content applies under which circumstances.

The DRM also contains a Genetic Report Engine (GIMS-GRE). When clinical data resulting from a diagnostic test is imported into the DRM, the GIMS-GRE applies the appropriate rules to allocate the appropriate content from the GIMS-CMS into a diagnostic report.

The manual at hand will familiarize you with the use of the GIMS-CMS and how to set up and manage report content, users and workflows in order to allow an efficient report production.

Version DRM

GIMS 1.12

System requirements DRM

- Firefox 45 on Windows 7 or 10JavaScript enabled
- No Ad blocking

Contact DRM

Please contact us if there are any questions or support is required.

bio.logis Genetic Information Management GmbH Olof-Palme-Straße 15 60439 Frankfurt am Main Germany

E-Mail: support@biologis.com (for registered bio.logis DRM-Users only)

User Manual DRM

General

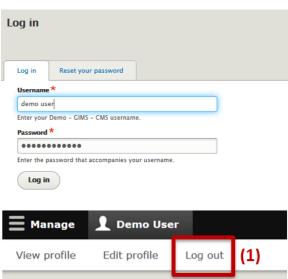
Logging in/out

Log in

- 1. Enter the username
- 2. Enter the password
- 3. Click Log in

Log out

In the toolbar, click Log out (1).



Demo User

View Edit

Demo User

Member for 1 minute 29 seconds

Using the toolbar

Depending on the selected menu item the toolbar shows different options.

If the user's name is selected, the toolbar shows user related menu options (1):

- View profile
- Edit profile
- Log out

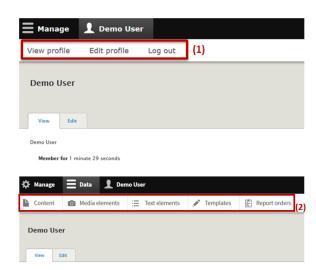
If *Data* is selected, the toolbar shows content related menu options (2):

- Content
- Media elements
- Text elements
- Templates
- Report orders

If *Manage* is selected, the toolbar shows administrative menu options (3)

- Configuration
- People
- Workflows

The toolbar can be hidden by clicking the currently selected menu item (4).







The toolbar can be moved between vertically and horizontally by clicking its toggle button (5).





Using the test drive environment

How to get here

Default way:

Change from the productive environment to the test drive environment by replacing 'prod' with 'testdrive' in the URL

Role all

To change from the productive environment to the test drive environment

- Replace 'prod' with 'testdrive' in the URL (1)
- Use the same login data as for the productive environment (2)

Please note: the test drive environment is a clone of the productive DRM environment which allows testing the user interface and new features. It reflects the content of the productive DRM environment. For a facilitated distinction the background of the test drive environment is colored gray and *Test Drive* is displayed with the DRM logo (3). Changes made in the test drive environment are not imported to the productive DRM environment. The test drive environment can be reset to the current status of the productive environment by the administrator.

- Adding new content
- Editing content
- Translating contents
- Integrating content
- Generating a parameter tree
- Adding content elements
- Removing content elements from content
- Editing a content element
- Generating a parameter tree



Users

How to get here

Default way:

Toolbar > username

Other ways:

- Toolbar > Manage > People (needs Role User Administrator)
- Toolbar > Data > Content > Author: own username
- Toolbar > Data > Text elements > First Author or Author > own username

Users log into the DRM via their personal account. The user account can be assigned different roles. These roles enable the user to perform various actions in the DRM.

Initially, users can be created by the administrator in the DRM. Later, users with the role 'User Administrator' are able to create new user accounts, too.

Per default, bio.logis Genetic Information Management GmbH has 2 user accounts in each customer instance for handling support requests: gim-admin and gim-support. If this is undesirable, the customer can deactivate it.

Possible next steps

Editing user profile

Role all

Viewing user profile

How to get here Default way: Toolbar > username > View profile Other ways: • Toolbar > Manage > People > own username (needs Role User Administrator) • Toolbar > username > Edit profile > View Toolbar > Data > Content > Author. own username Toolbar > Data > Text elements > First Author or Author > own username

Role all

Information about the user profile is shown (1):

- Username
- Time since account creation



- Editing user profileEditing password

Editing password

How to get here

Default way:

Toolbar > username > Edit

Other ways:

- Toolbar > Manage > People > Operations: Edit (needs Role User Administrator)
- Toolbar > username > View profile > Edit
- 1. Enter the current password into Current password (1)
- 2. Enter the new password into *Password*
- 3. The password strength shows the quality of the new password (2)
- 4. Repeat the new password into Confirm password (3)
- 5. Click Save

Possible next steps

- Editing user profile
- Viewing user profile

Role all

? Unknown Attachment

Editing user profile

How to get here

Default way:

Toolbar > username > Edit profile

Other ways:

- Toolbar > Manage > People > Operations: Edit (needs Role User Administrator)
- Toolbar > username > View profile > Edit

Role all

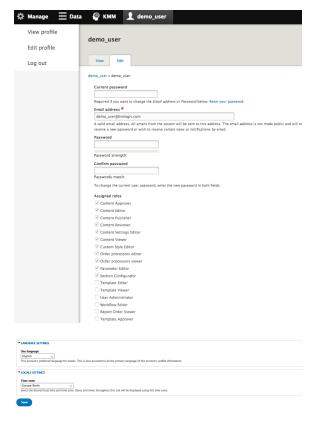
Modify the following settings

- E-mail address
- Password
- Status
- Language settings
- Local settings

Click Save.

Please note:

For the changes of roles, please contact the User Admin istrator.



- Editing password
- Viewing the own profile

Contents

How to get here

Default way:

Toolbar > Data > Content

Single contents in the form of text, images or barcodes can be managed in the DRM. In addition, they can be merged into meaningful contents for various questions e.g. report templates. Different content types can be predefined by bio. logis, which can be configurated individually e.g. with a desired number and denomination of sections. For each content type an unlimited number of contents can be created.

Content types can be for example:

Clinical Report

Predefined content type for creating reports on test results

Genetic Counseling Report

Predefined content type for creating physician's letters

Gene Card

Predefined content type for creating backup information on analyzed genes. A portal title can be assigned.

Page fragment

Predefined content type for managing content of frequently used sections e.g. sidebar, header or footer in more than one clinical report (transmitted by content integration)

Content locking

Content locking is a measure to avoid concurring editing of different users in the same content.

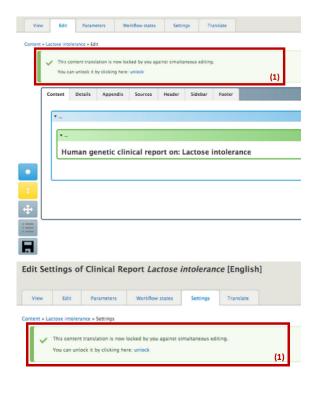
The content is locked for 30 minutes if a user opens a tab of the content where changes of the content can be made affecting the Edit, Parameter and Settings tab. On top of the content a notification to the locking status is set (1).

Another user who opens the content is informed at the same position by whom and for how long the content is already locked (2). After 30 minutes the content is released and automatically re-locked by the user who is editing it firstly. While the content is locked by another user, no one else can save changes but every tab with its content is visible.

In order to release the content for others earlier, click on the link unlock (3). A notification will confirm the unlock (4). Logout also unlocks contents locked by this user.

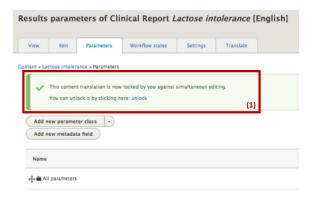
Role

Content Editor



Please note:

- Modifications of content boxes and elements can be done while the content is locked by another user, but the changes cannot be saved
- Parameters can be sorted differently while the content is locked by another user. Only new classes or parameter cannot be set.
- Other translations are not affected by the content locking.





Content overview

How to get here

Default way:

Toolbar > Data > Content

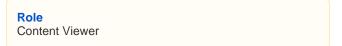
The list can be filtered by content type, title and language.

The list shows the following information for each content (1)

- type
- translation language
- last author: last user who edited the content
- updated: time point of last saving
- operations: possible actions, for example *view* or *edit*

The list can be sorted by clicking on the corresponding title (available for title, type, language, author and updated).

- Adding new content
- Viewing content
- Editing the content
- Viewing the parameters of the content
- Viewing the workflow states of the content
 Editing the settings of the content
- Translating the content





Adding new content

How to get here

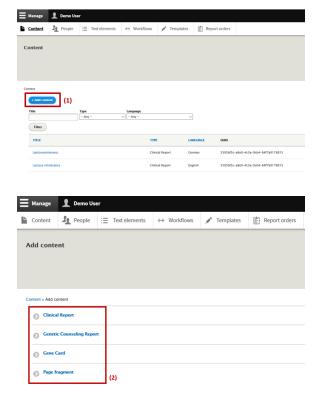
Default way:

Toolbar > Data > Content

Role Content Editor

Click on + Add content (1). Select the content type (2).

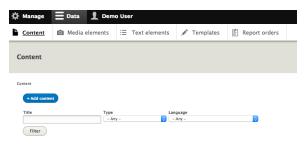
If only one content type is available, this one is used and the next page is shown directly. Content types can be created and deposited by the administrator.



Enter the title and select the language.

Click Save.

The content is shown now.



- Editing the content
- Viewing the parameters of the content
 Viewing the workflow states of the content
- Editing the settings of the content
- Translating the content
- Viewing the history of the content
- Publishing content

Viewing content

How to get here Default way: Toolbar > Data > Content > title or View Other ways: • Toolbar > Data > Content > Operations: Edit > View • Toolbar > Data > Content > Operations: Parameters > View • Toolbar > Data > Content > Operations: Workflow states > View • Toolbar > Data > Content > Operations: Settings > View • Toolbar > Data > Content > Operations: Translate > View • Toolbar > Data > Content > Operations: Translate > View • Toolbar > Data > Report orders > Requested Report (the given parameters will be selected)

Role Content Viewer

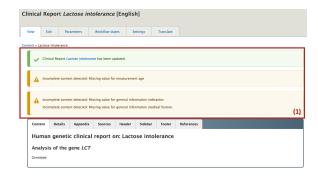
On the *View* tab, the content is displayed in several sections. Amount and type of sections are customizable to optimally reflect the structure of content type (Adding a section to content, Removing sections from existing content).

Sections can for example be used to:

- Structure the content of a clinical report (1)
- Structure the layout of a clinical report (2) (for further information see Page fragments, Content integration)
- List all citations, that are linked to content boxes (3)

Depending on whether a content is incomplete or contradictory, warnings can be displayed (1). Eliminate the cause of the warning, otherwise a report can not be publised under these conditions.

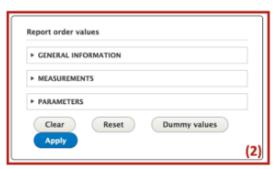




Selecting of general information, measurements and/or parameters

Select parameters, general information and/or measurements in the *Report order values* block and click *Apply* to see the content change accordingly (2).

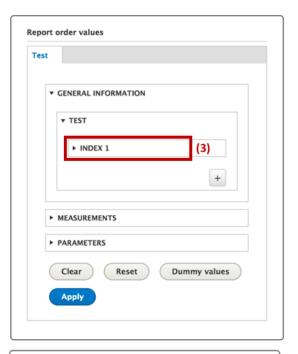
Click Clear to empty the selection of parameters and all fields
of general information and measurements filled with random or
fixed dummy values or manually entered values. Default values
are retained after clicking the Clear button.

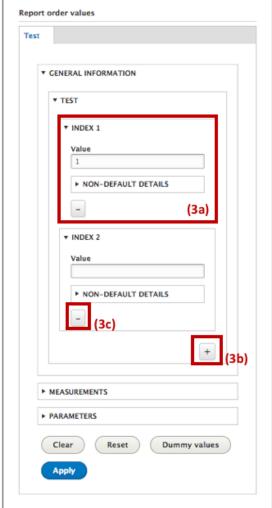


- Click Reset to go back to the last setting of general information and measurements
- Click Dummy values to fill in arbitrary values for parameters, general information and measurements
- Optional: For general information and measurements with multiple input elements, values for each index can be entered.
 Click Index 1 to open the index field for entering the value 1 (3).
 Click '+' to open a new index field (3b) and '-' to delete it (3c).
- Optional: For parameter linked general information and measurements the associated parameter must be selected in addition to the value (4). Click into the *Linked parameter* field, a modal window opens for the parameter selection (4a). Click *Apply* and the desired parameters are displayed in the *Linked* parameter field(4b).

Please note:

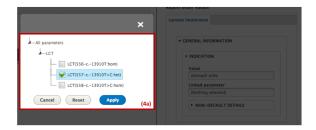
- Computed general information and measurements are not displayed (see Viewing computed content (5)).
- Values of general information and measurements obtaining the attribute Required must be filled.





Report order values

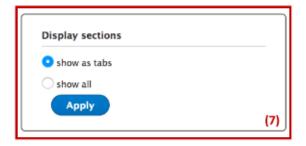




Hovering over the content reveals the responsible rule and provides an *Edit* button to this specific content box in the content form (6).

Per default, sections are shown as tabs. In order to see all sections at once, select *show all* in the *Display sections* block in the right sidebar and click *Apply* (7).



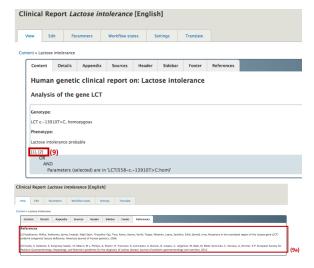


The *Translation* block in the right sidebar shows the available translation languages and allows to switch between languages (8).

The index number of the references are shown below their content box (9).

The last section of the content is automatically generated and contains the references of all shown content boxes in their order of usage, assigned by number (9a).





- Editing the content
- Viewing the parameters of the content
- Viewing the workflow states of the content
- Editing the settings of the content
- Translating the content
- Editing the content (with the content box preselected)
- Viewing the history of the content
- Publishing content

Viewing integrated content

How to get here Default way: Toolbar > Data > Content > title or View Other ways: • Toolbar > Data > Content > Operations: Edit > View • Toolbar > Data > Content > Operations: Parameters > View • Toolbar > Data > Content > Operations: Workflow states > View • Toolbar > Data > Content > Operations: Settings > View • Toolbar > Data > Content > Operations: Translate > View • Toolbar > Data > Content > Operations: Translate > View • Toolbar > Data > Report orders > Requested Report (the given parameters will be selected)

Role Content Viewer

View when using content integration:

The variables (general information, measurements, parameters) of the contents are organized in tabs named after the corresponding content. Initially only the variables of the current content can be selected. After the selection, tabs of integrated contents occur consecutively. This has to be done step by step since each integration can be influenced by the selection of variables of previous content.

- To fill the document with desired content boxes, enter values manually and click Apply or select Dummy values (5a)
- A new tab occurs named after the first content from which one
 or more sections have been integrated. Select the new tab and
 either enter values manually and click Apply or select Dummy
 values. (5b)
- Optional: select variables for all following integrated contents to complete the content values. (5c)

Please note:

- By clearing variables of one content, all following integrated content variables are cleared too and their tabs are not longer displayed.
- By submitting values of one content by entering values manually and clicking Apply or selecting Dummy values, all following integrated content variables are cleared and just the tab of the current and the next content are shown. The other tabs are not longer displayed.
- In case a report order is displayed, all desired values are transmitted. All tabs will be shown.
- In case the same variables are assigned in more than one of the combined contents, values and preset attributes are taken over in downstream contents where they can not be changed. The entered values of these variables are saved even on the View tab of another content. Thus, values might be set already in an integrated content and the belonging variables are locked until clicking the clear button.
- A warning will occur if no variables were selected for a content.
 This warning does NOT prevent the report generation.





Viewing computed content

How to get here Default way: Toolbar > Data > Content > title or View Other ways: • Toolbar > Data > Content > Operations: Edit > View • Toolbar > Data > Content > Operations: Parameters > View • Toolbar > Data > Content > Operations: Workflow states > View • Toolbar > Data > Content > Operations: Settings > View • Toolbar > Data > Content > Operations: Translate > View • Toolbar > Data > Content > Operations: Translate > View • Toolbar > Data > Content > Operations: Translate > View • Toolbar > Data > Report orders > Requested Report (the given parameters will be selected)

Role Content Viewer

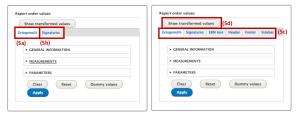
View when using processor chains:

If specific processor chains are used to output the content, computed values can be generated in addition to the simple values. All selected values are listed under the transformed values.

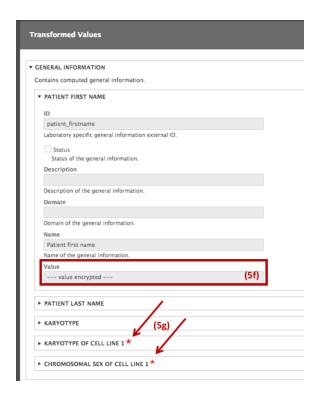
- Click the Show transformed values button (5d)
- A modal window with all variables including computed and further processed general information, measurements and/or parameters appears (5e)

Please note:

- This list is for viewing only. No value can be changed here.
- Computed general information and measurements are marked by a red star (5f).
- Protected general information are displayed without values (5g).







Editing content

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: Parameters > Edit
- Toolbar > Data > Content > Operations: Workflow states > Edit
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: Translate > Edit
- Toolbar > Data > Content > title or View: Edit next to the rule of a content box

The content is divided into sections, represented by gray boxes. Click on the tabs to switch between them (1). Changes to each section will be preserved even when switching between the sections.

Within a section, content boxes display blue color. Content boxes include content elements which display green color.

Content boxes and content elements can be

- selected by clicking on them. Selected content boxes/elements are represented by darker colors.
- added by clicking the + buttons: Adding a content box to content
- opened and closed by clicking the yellow buttons.

In the right sidebar the attributes and options of the content, content boxes and content elements are shown. They can be closed by clicking on the triangle in front of their title.

For the content following features are deposited in the Content attributes box (marked gray)(2):

- Title
- Placeholders

For the content boxes following features are deposited in the *Content box attributes* box (marked blue)(3):

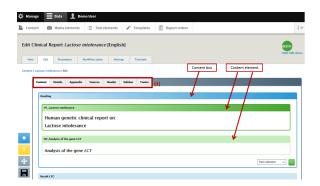
- Title
- Exclusion set (initially disabled)
- Rule
- References
- Exclusion set (initially disabled)
- Active
- Content integration
- Move

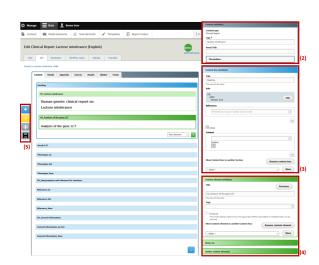
For the content elements following features are deposited in three different boxes (marked green)(4):

- 1. Content elements attributes
 - Revisions
 - Title

Role

Content Editor





- TagsOutdated
- Move

2. Notes on

3. Similar content elements

The boxes in the right sidebar do only show the information for the currently selected content element or content box.

On the left buttons for further actions are deposited (5):

- Blue * button: enabling the functionality for viewing and setting exclusion sets
- Yellow button: opening and closing all content boxes and content elements
- Gray button with drag symbol: enabling the functionality for moving content boxes and moving content elements

Gray button with floppy disk symbol: for saving the changes

- Adding a content box to content
- Adding content elements

Types of saving

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: Parameters > Edit
 Toolbar > Data > Content > Operations: Markflow states >
- Toolbar > Data > Content > Operations: Workflow states >
 Folit
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: Translate > Edit
- Toolbar > Data > Content > title or View > Edit next to the rule of a content box

Saving changes

- 1. Click the button on the left with floppy disk symbol
- 2. A box opens, where the change class has to be selected (1).
- 3. Click Save

Please note:

Depending on the change class the content for the underlying parameter combination can fall back into another workflow state. By default major changes will cause the workflow state to be reset by normally several steps while minor changes will reset the workflow state by fewer or no steps. Therefore, minor changes are recommended for simple changes such as the correction of spelling mistakes. The selection of major changes is recommended for integration of new content or bigger reorganization.

As soon as content is edited, a confirmation is required to leave or reload the *Edit* tab without saving. In the modal window (2) click:

- Stay on Page to keep the changes
- Leave Page to discard all unsaved changes

Autosaving of not yet saved changes

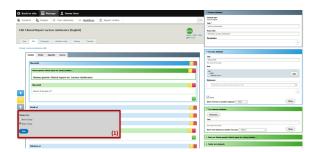
Autosave is a feature which stores changes of the content that are not yet saved by the editor. This feature prevents loss of data in case of a breakdown of the system or power outage.

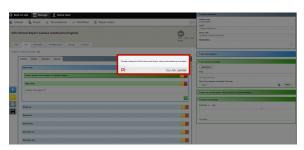
When returning to a content containing autosave states, a modal window opens. Click:

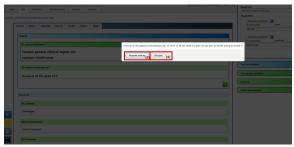
- Resume editing to continue editing from the last autosaved state (3) or
- Discard to discard all autosaved states (4)

Role

Content Editor





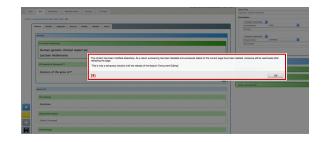


Please note:

- only own changes will be considered for autosaving
 the time of the last changes in the notice refers to the time zone preset for the user. For changing the time zone see Editing user profile

If the content is edited and saved by another user while you are editing it, you will be notified that autosave is being disabled and that all existing autosaved states are deleted. This is only a temporary measure and will be removed as soon as the feature "Concurrent Editing" is released (5).

- Adding a content box to content
- Adding content elements



Integrating content

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Translate > Edit

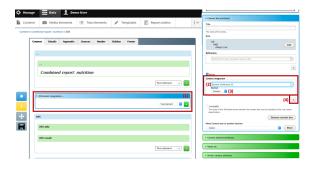
Role Content Editor

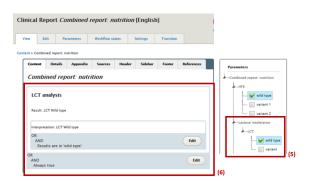
Sections of basic contents can be included by adding them into a content box. This process is called content integration.

- Select the content box where the basic content shall be embedded (1).
- Use the autocomplete field within the Content box attributes, start to type the title of the content to be included and select the desired basic content from the list (2).
- 3. Select the desired section of the basic content (3).
- 4. Optional: Click + to add a new item for integrating further content (4).
- 5. Save.
- 6. On the content view, a combined parameter tree is displayed: the parameter tree of the basic content is included in the already existing parameter tree (5).
- 7. Hovering over the text shows the interlaced content boxes (6).

Please note:

- The structure of combined contents is variable since individual sections of different contents can be integrated in the desired order
- Parameter / general information / measurement placeholders can be transferred from another content.
- Included parameters / general information / measurements are not shown in the rules and placeholder list.
- If content should only be integrated under certain parameter conditions 2 strategies can be followed:
 - Generate a separate section in the basic content, including only the information about the parameter combination for which content is to be integrated.
 - Enter this section into the combined content (no second parameter tree is needed).
- See Viewing content for the presentation of integrated content.
- Integrated content must be published before it is used in document generation. If content to be integrated is in another status than published, the most recently published version is delivered.
- Content can not be integrated circularly. For example content A
 is included in content B, content B cannot be included in
 content A at the same time.

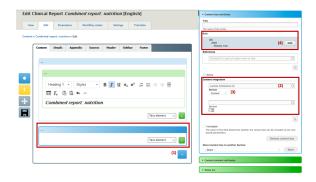




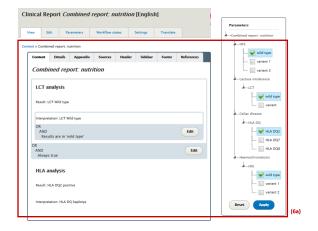
Example:

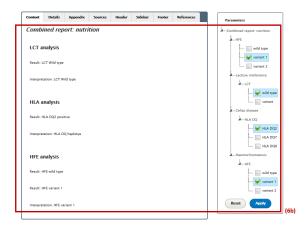
A combined clinical report *Nutrition* is generated by using the single gene reports *Lactose intolerance*, *Celiac disease and Haemochromatosis*. While all results of the LCT and HLA DQ analysis should be reported, the results of the HFE investigation should only be mentioned if variant 1 was detected.

- 1. Add a new content with content type *Clinical report* an the title *Combined report*: *nutrition*.
- 2. Fill in the parameters and all content that is individual and cannot be integrated by other contents.
- Create a content box at the position where the first section of the clinical report *Lactose intolerance* shall be integrated (1), select the content (2) and the desired section (3). Set the rule to *Always true* (4).
- 4. Optional: Click + to add a new item for integrating further sections of the same content.
- 5. Repeat step 2-4 for the linkage of the sections of the clinical report *Celiac disease*.
- 6. Repeat step 2 for the linkage of the sections of the clinical report *Haemochomatosis*. Define the rule *Results are in Variant* 1 (5a) for the content box consisting the sections of Haemochromotosis. Therefore, the existing parameter tree needs to offer this option. Otherwise include the desired parameter combination (5b).
- 7. Save.
- 8. On the content view, different parameter combinations show the corresponding content elements in the order and depending on the given rules prescribed on the Edit tab (6).









- Viewing content
 Adding content elements
 Editing a content element
 Moving a content box
 Setting an exclusion set to a content box
 Setting references to a content box
 Adding a content box to content

Generating a report preview

Usable only in combination with Report Layout Engine

How to get here

Default way:

Toolbar > Data > Content > title or View

On the view tab it is possible to generate a Preview of the content in the current state (1). In order to do this a template needs to be selected for this content. The preview is created based on the selected template.

Select a file format (2) to create the preview with and click Apply(3).

In case no template has been selected for this content, the Apply button (3) is set inactive and a message informs the user (4).

If module "DM Report Generator User Interface" is activated, the modal window appears with the message Please wait! Your report is being created.

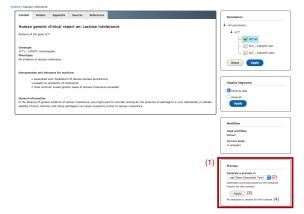
If any flexible placeholder is defined, an additional form is displayed with the input request for the defined placeholders.

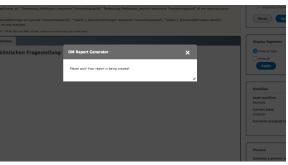
The user can fill the fields for the placeholders manually and click Apply. Fields can be left empty, whereby the corresponding placeholder is deleted in the generated document.

Depending on the configuration of the browser

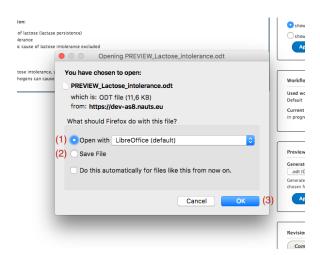
- the preview can be saved in the *Download* folder
- a new modal window opens with the possibility to either open (1) or save (2) the report preview. Click OK(3) to confirm the selection.

Content Viewer









- Editing the content
 Viewing the parameters of the content
 Viewing the workflow states of the content
 Setting the used template
 Translating the content
 Viewing the history of the content
 Publishing the content

Publishing content

How to get here

Default way:

Toolbar > Data > Content > title or View

Publishing contents

On the view tab the *Workflow* block on the right displays the used workflow, the current state, and the possible new states.

This is only for the current language and parameter selection.

In case there are warnings with respect to the content or the current user's role does not allow transferring the content into the next workflow state, the list of new states can be empty.

Corresponding to the workflow only the next defined state can be selected. Therefore, several publishing steps and possibly several users with different roles may be necessary in order to release a content for the publication.

- 1. Select the new state
- 2. Click Change state (1)

The process can be repeated until the content has reached the state 'published'.

Please note:

- The release processes can be modified for contents, single text elements and templates by the Workflow Editor, see editing a workflow.
- In case content falls back into a non-published state, the most recently published version is delivered.
- Templates must be published before they are used for document generation.
- Integrated content must be published before it is used in document generation.

Possible next steps

- Editing the content
- Viewing the parameters of the content
- Viewing the workflow states of the content
- Editing the settings of the content
- Translating the content
- Viewing the history of the content
- Publishing content

Role

Content Viewer + Content Reviewer or Content Approver or Content Publisher



Viewing content workflow states

How to get here On content view tab: • Toolbar > Data > Content > title or View On content workflow states tab: • Toolbar > Data > Content > Operations: Workflow states • Toolbar > Data > Content > Operations: Edit > Workflow states • Toolbar > Data > Content > Operations: Parameters > Workflow states • Toolbar > Data > Content > Operations: Settings > Workflow states • Toolbar > Data > Content > Operations: Translate > Workflow states

Role Content Viewer

There are two places where the workflow state of the content is shown.

On content view tab

The *Workflow* block in the right side bare displays the used workflow, the current state, and the possible new states (1).

This is only for the current translation language and parameter selection.

In case there are warnings or the current user's role does not allow transferring the content into the next workflow state, the list of new states can be empty.

On content workflow states tab

Here the workflow states for all parameter combinations are shown for the current translation language.

The list contains

- the parameters
- the workflow state
- the user who has set the workflow state
- the date when the workflow state has been set





- Viewing the workflow states of the content
 Editing the content
 Viewing the parameters of the content
 Editing the settings of the content
 Translating the content

Viewing content history

How to get here

Default way:

Toolbar > Data > Content > title or *View > Compare revisions*

Role Content Viewer

Temporary inactivated

A modal window opens with the overview of the revisions of the content. Only the revisions which are different to the previous revision are shown. For this, the current translation language and the current parameter selection are used.

For each revision the following information is shown:

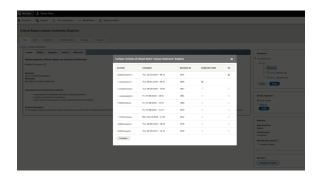
- author: the user who created the revision
- changed: the date when the revision was created
- revision ic
- compare from: needed for comparing two revisions
- compare to: needed for comparing two revisions

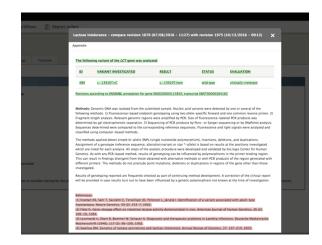
To see the difference between two revisions, select them and click *Compare*.

To close the modal window, click x.

Removed content is marked in red and crossed out, new content is marked in green and underlined.

To go back, click Back to Revision Overview. To close the modal window, click x.







- Editing the content
 Viewing the parameters of the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content
 Viewing the history of the content
 Publishing content

Translating contents

How to get here Default way: Toolbar > Data > Content > Operations: Translate Other ways: • Toolbar > Data > Content > Operations: View > Translate • Toolbar > Data > Content > Operations: Edit > Translate • Toolbar > Data > Content > Operations: Parameters > Translate • Toolbar > Data > Content > Operations: Workflow states > Translate • Toolbar > Data > Content > Operations: Workflow states > Translate • Toolbar > Data > Content > Operations: Settings > Translate

Role Content Editor

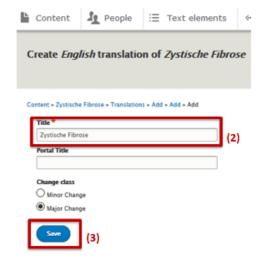
The list displays in which languages the content is already available.

If you choose to add another translation an exact copy of the content in the original language will be created. This way the content structure, parameter tree, content boxes and content elements as well as defined rules are already in place and the user only has to translate the actual text within the content elements manually. If a used content element within the content already has a translation for the target language, this one will be used. All translated content elements will be marked as outdated to indicate that changes may be needed here. The outdated label is resolved, when the content is approved (see Publishing content, Configuring workflows)

Select the language for your new translation and click *Add* (1).

- 1. Optional: Enter a new title for the content
- 2. Click Save





On the view tab the *Translations* block on the right shows the available translation languages and allows to switch between them (4).

For translating selected content elements, see Translating content elements.



- Editing the content
 Viewing the parameters of the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content
 Viewing the history of the content
 Publishing content

Variables

How to get here

Default way:

Toolbar > Data > Content > Title > Parameters

Toolbar > Data > Content > Title > Settings

Other ways:

Toolbar > Data > Content > Operations: **Parameters**

Toolbar > Data > Content > Operations: Settings

User can define three different variables to denote patientspecific data: parameter, general information or measurement. They are managed and transmitted to DRM by a requesting system (e.g. LIMS, LIS).

Variables can be used within rules or placeholders. As soon as the value of a variable is brought to DRM, a corresponding rule or placeholder can be fulfilled (note that the possible operations differ depending on the type of variable). This way, the user can customize the content accordingly with patient-specific data.

Basically, parameters might represent analysis results. General information can display patient-specific data in the form of verbal values and measurements can include numerical values.

Example variables:

- A parameter can be the genotype of a proband (e.g. "wild type", "c.890A>G", "p.Lys297Arg", "F508del:hom").
- A general information can be the name, gender, indication of a proband (e.g. "Patient Name", "Medical History", "Proband Date of Birth").
- · A measurement can be clinical testing results of a proband (e. g. "Biomarker Testing Results", "Biochemical Testing Results", "Blood Count").

Possible next steps

- · Adding and editing a class
- Adding and editing parameters Adding new general information
- Adding new measurements

Role

Content Settings Editor

Parameter Editor

Parameters

Parameter overview

How to get here Default way: Toolbar > Data > Content > Operations: Parameters Toolbar > Data > Content > View Other ways: Toolbar > Data > Content > Operations: View > Parameters Toolbar > Data > Content > Operations: Edit > Parameters Toolbar > Data > Content > Operations: Workflow states > Parameters Toolbar > Data > Content > Operations: Workflow states > Parameters Toolbar > Data > Content > Operations: Settings > Parameters Toolbar > Data > Content > Operations: Translate > Parameters

A parameter is patient-specific data which is delivered to the DRM. The delivered parameters determine the content output based on the rules set for the content boxes.

Example: Four different results of CFTR genotyping are visible as parameters. Also a new parameter, not defined, is shown (1). They are divided into three classes depending on their zygosity (2). The parameter classes are subordinated the main class *All parameters* (3).

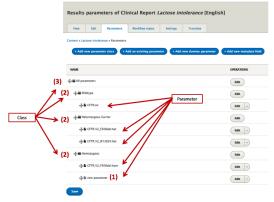
As soon as the parameter structure is edited, a confirmation is required to leave or reload the *Parameters* tab without saving. In the modal window (4) click:

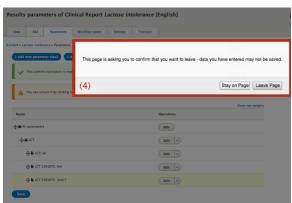
- Stay on Page to keep the changes
- Leave Page to discard all unsaved changes

On the *View* tab content linked to various parameter combinations can be made visible (5).

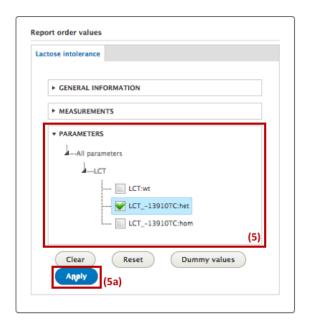
Please note:

Role Parameter Editor

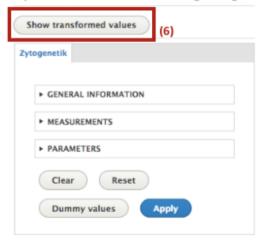


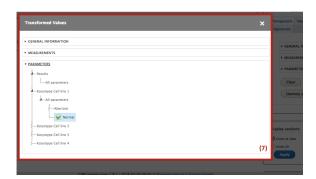


In special cases parameters e.g. for cytogenetics are computed from other transmitted information. These computed parameters are not displayed in the *View* tab in the *Report order values* block. They are made visible into a modal without changing options (6). It is available by clicking the *Show transformed values* - button (7).



Report order values from order 10055212_SENDER_0





- Adding a class
 Adding a dummy parameter
 Adding a new metadata field
 Editing a class, Editing a parameter, Editing metadata of a parameter
 Inactivating a parameter
 Reactivating a parameter
 Viewing content
 Editing the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Adding and editing a class

How to get here

Default way:

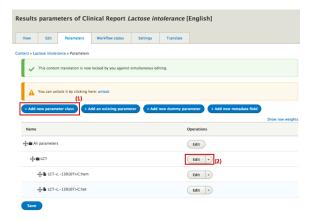
Toolbar > Data > Content > Operations: **Parameters**

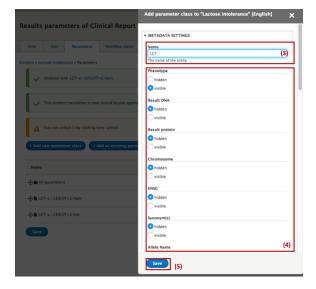
How to edit:

- to add classes: click on Add new parameter class (1) to edit classes: click the Edit operation of an existing class (2)
- Enter a name for the class (3).
- Set metadata fields visible that have to be shown on parameters of the class (4).

 • Click *Save* (5).

Role Parameter Editor





- Adding a class
 Adding a dummy parameter
 Adding a new metadata field
 Editing a class, Editing a parameter, Editing metadata of a parameter
 Inactivating a parameter
 Reactivating a parameter
 Viewing content
 Editing the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Adding and editing parameters

How to get here Default way: Toolbar > Data > Content > Operations: Parameters Other ways: Toolbar > Data > Report orders > Requested Report > Parameters

When generating a parameter tree, different kinds of parameters can be assigned. There are two options:

- 1. Adding a real parameter already existing in another content
- Adding a dummy parameter as a placeholder until the appropriated real parameter is transmitted into the DRM

Adding real parameters from another content

How to add:

- Click Add an existing parameter (1).
- Enter a name for the parameter (2) and select the right one from the list (3).
- The modal window changes (4). Click Save.
- Assign the parameter to a class by dragging it to the appropriate position within the structure using the dragging symbol (5).

How to edit:

- Click the *Edit* operation of an existing real parameter (6).
- Optional: change the selection by another real parameter from the list (7).
- Click Save.

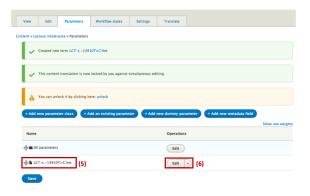
Role Parameter Editor

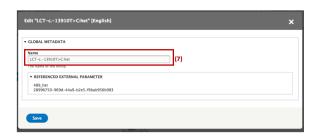












Dummy parameters

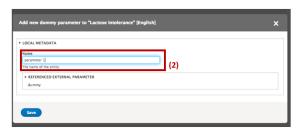
How to add:

- open the dropdown button and click Add new dummy parameter (1)
- Enter a name for the dummy parameter (2) in the modal window.
- Click Save.
- Assign the new parameter to a class by dragging it to the appropriate position within the structure using the dragging symbol(3).

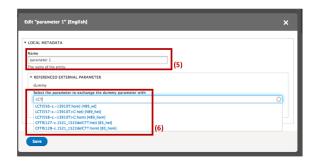
How to edit:

- Click the *Edit* operation of an existing dummy parameter (4).
- Optional: change the name for the dummy parameter (5).
- Optional: replace the dummy parameter by a real parameter (6).
 Optional: in case the dummy parameter is in a class with visible metadata fields, these fields can be filled.
- · Click Save.









- Adding a class
 Adding a dummy parameter
 Adding a new metadata field
 Editing a parameter, Editing metadata of a parameter

- parameter
 Inactivating a parameter
 Reactivating a parameter
 Viewing content
 Editing the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Generating a parameter tree

How to get here Default way: Toolbar > Data > Content > Operations: Parameters Other ways: • Toolbar > Data > Content > Operations: View > Parameters • Toolbar > Data > Content > Operations: Edit > Parameters • Toolbar > Data > Content > Operations: Workflow states > Parameters • Toolbar > Data > Content > Operations: Settings > Parameters • Toolbar > Data > Content > Operations: Translate > Parameters • Toolbar > Data > Content > Operations: Translate > Parameters

The hierarchy of classes and parameters is generated by dragging and dropping all parameters into the preset class *All parameters*. Classes and parameters are allocated by moving them below the parent class with an indent.

Note that each parameter must be at the end of a branch and that below a parameter, there can be no other parameter or class.

Click Save.

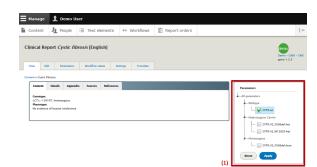
In case it is possible to replace a dummy parameter by a real parameter, another page opens (see *Replacing a dummy parameter*).

New parameters and new classes appear on the first level of the parameter tree.

The same parameter tree on the content view tab:

Role Parameter Editor





- Adding a class
 Adding a dummy parameter
 Adding a new metadata field
 Editing a class, Editing a parameter, Editing metadata of a parameter
 Inactivating a parameter
 Reactivating a parameter
 Viewing content
 Editing the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Replacing a dummy parameter

How to get here Default way: Toolbar > Data > Content > Operations: Parameters Other ways: • Toolbar > Data > Content > Operations: View > Parameters • Toolbar > Data > Content > Operations: Edit > Parameters • Toolbar > Data > Content > Operations: Workflow states > Parameters • Toolbar > Data > Content > Operations: Settings > Parameters • Toolbar > Data > Content > Operations: Translate > Parameters

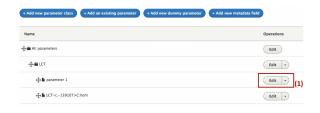
When generating a parameter tree, it may be possible to replace dummy parameters by real parameters. There are two options:

- Replace the dummy parameter with a real parameter that already exists in the DRM in another content, but is not yet present in the current content.
- Replace the dummy parameter with a real parameter transmitted by another system e.g. LIMS

Replacement by a real parameter from another content

- Click Edit. A modal window opens.
- Enter the name of a real parameter and select the right one from the list (2).
- Optional: Delete the dummy parameter name. Otherwise the parameter will be continued with this name in this content (3).
- Click Save.
- The replaced parameter is displayed in the parameter tree (4).

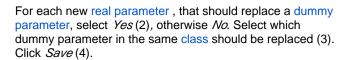
Role Parameter Editor





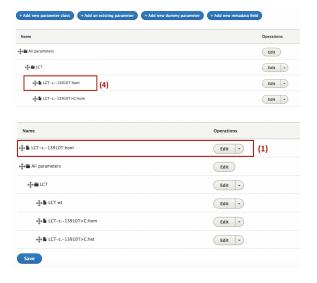
Replacement by real parameters from this content

When a new parameter is imported into the content, sort it into the same class as its corresponding dummy parameter (1). Click *Save*.



The dummy parameter is replaced by all metadata of the real parameter (6). The imported parameter is deactivated and set to the end of the parameter tree. He also gets the addition EXCHANGED (5).

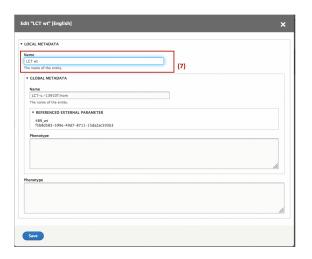
Optional: To adapt the name of the parameter, click *Edit* (6). Change the parameter name locally e.g. by using the global name (7). The new name ist displayed in the parameter tree (8).













- Adding a classAdding a dummy parameter
- Adding a dummy parameter
 Adding a new metadata field
 Editing a class, Editing a parameter, Editing metadata of a parameter
 Inactivating a parameter
 Reactivating a parameter
 Viewing content
 Editing the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Inactivating a parameter

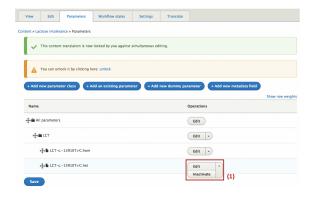
How to get here

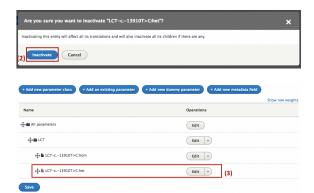
Default way:

Toolbar > Data > Content > Operations: Parameters > Operations: Inactivate

In order to make a parameter inactive, confirm by clicking *Inactivate* in the modal window (1,2).

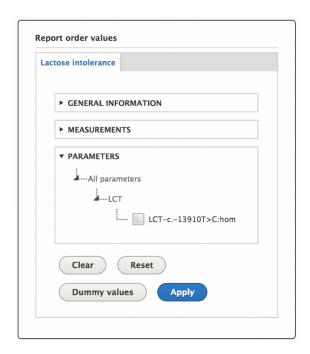
Role Parameter Editor





The inactivated parameter is marked grey (3). Click Save.

On the View tab inactivated parameters are not visible in the selection of Report order values.



- Adding a class
 Adding a dummy parameter
 Adding a new metadata field
 Editing a class, Editing a parameter, Editing metadata of a parameter
 Inactivating a parameter
 Reactivating a parameter
 Viewing content
 Editing the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Reactivating a parameter

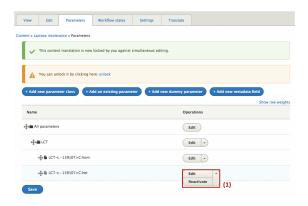
How to get here

Default way:

Toolbar > Data > Content > Operations: Parameters > Operations: Reactivate

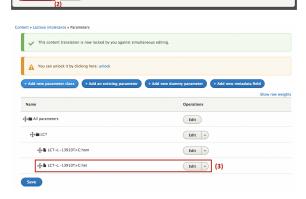
In order to reactivate a parameter, confirm by clicking *Reactivate* in the modal window (1,2).

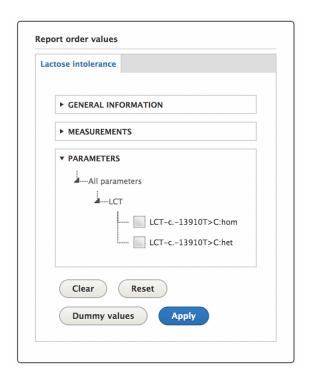
Role Parameter Editor



The reactivated parameter is marked black (3). Click Save.

On the View tab reactivated parameters are visible in the selection of Report order values again.





- Adding a class
 Adding a dummy parameter
 Adding a new metadata field
 Editing a class, Editing a parameter, Editing metadata of a parameter
- Inactivating a parameterReactivating a parameter
- Viewing content
- Viewing the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Working with metadata

Adding a new metadata field

How to get here

Default way:

Toolbar > Data > Content > Operations: Parameters

- 1. Click Add new metadata field (1)
- 2. Enter the properties of the metadata field
 - Label: Enter a name for the field (2)
 - Translatable (3):

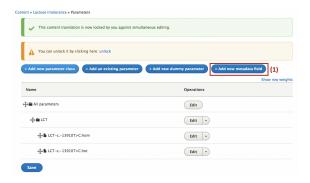
Mark the metadata field as translatable if the value is intended to be different in different translations of the content. In this case, values entered into one translation of the content are restricted to this translations. In other translations, the same metadata field has to be filled separately.

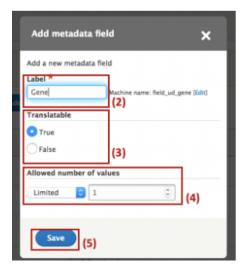
Mark a field as not translatable if identical field content is intended to be used in all translations of the content . In this case, values entered into one language version of the content will be carried over into all other translations.

- Allowed number of value: unlimited or limited to a given number (4)
- 3. Click Save (5)

Role

Parameter Editor





- Adding a class
- Adding a dummy parameter
- Adding a new metadata field
- Editing a class, Editing a parameter, Editing metadata of a parameter
- Inactivating a parameter
- Reactivating a parameter
- Viewing content
- Editing the content
- Viewing the workflow states of the content
- Editing the settings of the content
- Translating the content

Connect metadata fields to parameters

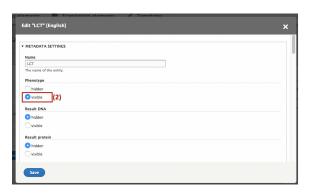
How to get here Default way: Toolbar > Data > Content > Operations: Parameters Other ways: • Toolbar > Data > Content > Operations: View > Parameters • Toolbar > Data > Content > Operations: Edit > Parameters • Toolbar > Data > Content > Operations: Workflow states > Parameters • Toolbar > Data > Content > Operations: Settings > Parameters • Toolbar > Data > Content > Operations: Settings > Parameters • Toolbar > Data > Content > Operations: Translate > Parameters

Role Parameter Editor

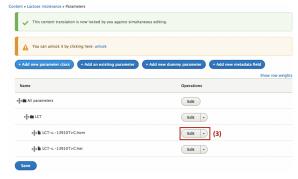
If the metadata field does not exist yet, see Adding a new metadata field.

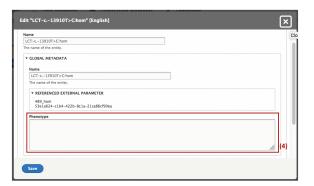
- Click the *Edit* operation of the class which contains all the parameters who need the metadata (1).
 In the modal window, select *visible* for the desired metadata fields (2).
- 2. Click Save.





Optional: Click *Edit* (3). The metadata field is now visible for all parameters of the class (4).





- Adding a class
 Adding a dummy parameter
 Adding a new metadata field
 Editing a class, Editing a parameter, Editing metadata of a parameter parameter

- parameter
 Inactivating a parameter
 Reactivating a parameter
 Viewing content
 Editing the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Editing metadata of a parameter

How to get here Default way: Toolbar > Data > Content > Operations: Parameters > Operations: Edit Other ways: Toolbar > Data > Report orders > Requested report > Parameters

In the open modal window, add or change the value of the metadata.

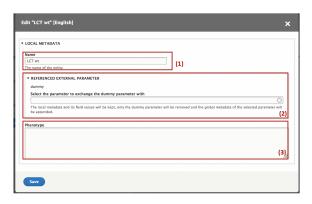
If the parameter is a dummy parameter, the entered metadata is only in the local context.

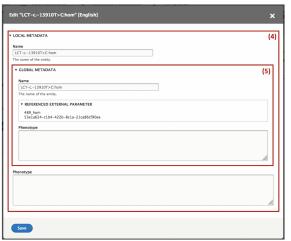
The following information can be changed:

- name of the parameter (1)
- replacement of the dummy parameter by an existing parameter (2)
- values of the visible metadata fields (3)

If the parameter is a real parameter, metadata can be changed locally (4), only in this content, or globally (5), in all contents (using this parameter).

Role Parameter Editor





- Adding a class
- Adding a dummy parameter
- Adding a new metadata field
- Editing a class, Editing a parameter, Editing metadata of a parameter
- · Inactivating a parameter
- Reactivating a parameter
- Viewing content
- Editing the content
- Viewing the workflow states of the content
- Editing the settings of the content
- Translating the content

General information

How to get here Default way: Toolbar > Data > Content > Settings Other ways: • Toolbar > Data > Content > Operations: View > Settings • Toolbar > Data > Content > Operations: Edit > Settings • Toolbar > Data > Content > Operations: Parameters > Settings • Toolbar > Data > Content > Operations: Workflow states > Settings • Toolbar > Data > Content > Operations: Translate > Settings

General information (GIs) are patient or case-related data that are managed in external systems e.g. LIMS. They can be used to create a patient-specific clinical report within an automatic process of report generation. A general information is imported encrypted or unencrypted with a report order into the DRM, the decryption is carried out in a downstream system. General information can be integrated directly into content elements or templates by placeholders or they can be used in the rule engine to decide under which conditions a content box with included content elements is presented in the delivered content.

Setting general information de fault values (1)

1) mandatory: ID

The ID is predefined by the administrator. It is the unique universal identifier for this general information, used in communication of the DRM and external systems e.g. LIMS.

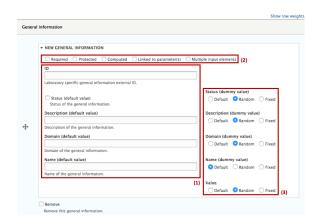
2) optional: Status, Description, Domain, Name Freely available fields for adding metadata to the general information. These additional information can be included from external systems and can be applied in placeholders. If no value is imported, the here assigned default values is inserted into placeholders.

Please note:

- A General information is displayed in the DRM with its name. In case a default name is not assigned here, the ID is shown.
- Value fields are limited in their number of characters: ID: 128

Description: 255

Role Content Settings Editor



Domain: 255 Name: 255 Value: unlimited

Setting general information attributes (optional)(2)

1) no attributes

- patient-related data without direct reference to the person such as age, sex, medical indications
- not strictly necessary: content will be delivered even if optional general information are not provided by LIMS
- · values are integrated into the content within the DRM

2) Required

- patient-related data without direct reference to the person such as age, sex, medical indications
- mandatory: content will be delivered only if all required general information are provided by LIMS
- · values are integrated into the content within the DRM

3) Protected

- patient-related data with direct reference to the person such as name, family diagnosis
- values transmitted to the DRM in encrypted form and decrypted in downstream systems
- · values are integrated into the content within the DRM
- rule engine: can only be used in the rule 'is true'
- placeholders: content is not displayed on the View tab, but is filled in the report
- can not linked to computed, Linked to parameter(s), Multiple input elements

4) Computed

- predefined by biologis GIM
- detailed information generated automatically from patientrelated data/case-specific results such as cell line specific sex for cytogenetic analysis
- is not displayed in the Report order values block on the View tab, but is listed in a modal available via the Show transformed values button
- values are generated automatically within the DRM during the preprocessing
- recommended as extension for cytogenetic report templates
- can not be linked to Protected
- can not be linked to Required
- · dummy values cannot be set

5) Linked to parameter(s)

- patient-related data in dependency of specific parameters
- values are integrated into the content within the DRM
- recommended as extension for cytogenetic report templates
- · can not linked to Protected

6) Multiple input elements

- patient-related data with values extended by detailed information assigned as indices such as different titles in an adress header
- rule engine: values or indices can be used
- placeholders: values or indices can be used
- values are integrated into the content within the DRM
- can not linked to Protected

Setting general information dummy values (optional)(3)

Dummy values can be defined here as a presetting for the review of content on the View tab (4). Click *Dummy values* and they will be used for the rule engine and filled in placeholders in the preview. For all details of a general information the random dummy value is predefined except the name, for which the default is set. The preset of dummy values can be changed.

1) Default

Assigned default values (1) will be entered. In case of the *Value* the default setting leads to an empty dummy value.

2) Random

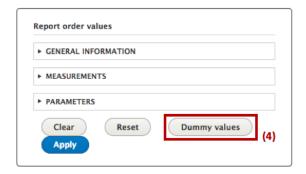
A completely arbitrary sequence of 5 words from Lorem lpsum texts will be entered.

3) Fixed

The selection of Fixed opens a new field in which a static dummy value can be entered that will be transmitted then in the preview (5).

Please note:

Manually overwritten dummy values on the View tab will remain intact, even if the *Dummy values* button is clicked again.





Adding new general information

How to get here

Default way:

Toolbar > Data > Content > Operations > Settings

- 1. Click the + (1) at the bottom of the Required or Protected General Information to open a New General Information block.
- 2. To assign the definition of the new general information see Default setting of general information.

Role Content Settings Editor

Remove Remove this general information. INDICATION Remove Remove this general information. MEDICAL HISTORY Remove Remove this general information.	Genera	Show row weight Information
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Remove this general information.		Remove this general information.

- Viewing contentDefault setting of general information
- Editing general information
- Removing general information
 Viewing the workflow states of the content
- Translating the content
- Viewing the history of the content
- Publishing content

Editing general information

How to get here

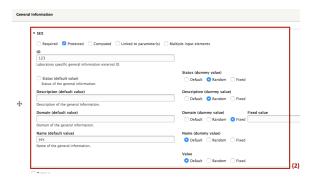
Default way:

Toolbar > Data > Content > Operations: Settings

- 1. Click the general information details to open it (1).
- 2. Change the content (2).
- 3. Save.

Content Settings Editor





- Viewing contentDefault setting of general information
- Editing general information
- Removing general information
 Viewing the workflow states of the content
- Translating the content
- Viewing the history of the content
- Publishing content

Removing general information

How to get here

Default way:

Toolbar > Data > Content > Operations: Settings

- 1. Tick the checkbox for Remove at the bottom of the General Information details (1).

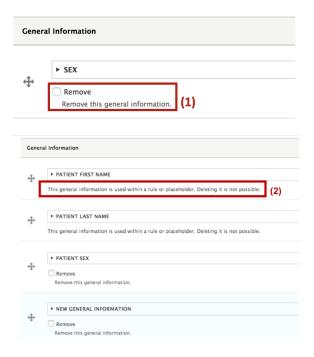
Please note:

If the general information is used as part of a rule or a placeholder, it is not possible to remove it. In such a case, a notification will displace the checkbox for Remove (1).

Possible next steps

- Viewing content
- Default setting of general information
- Editing general information
- Removing general information
- Viewing the workflow states of the content
 Translating the content
- Viewing the history of the content
- Publishing content

Role Content Settings Editor



Measurements

How to get here Default way: Toolbar > Data > Content > Settings Other ways: • Toolbar > Data > Content > Operations: View > Settings • Toolbar > Data > Content > Operations: Edit > Settings • Toolbar > Data > Content > Operations: Parameters > Settings • Toolbar > Data > Content > Operations: Workflow states > Settings • Toolbar > Data > Content > Operations: Translate > Settings

Measurements, that are managed in external systems e.g. LIMS, can be used for creating a patient-specific clinical report within an automatic process of report generation. Measurements are transmitted with a report order into the DRM. They can be integrated directly into content elements by placeholders or they can be used in the rule engine to decide under which conditions a content box with included content elements is presented in the delivered content.

Setting measurement default values (1)

1) mandatory: ID

The ID is predefined by the administrator. It is the unique universal identifier for this measurement, used in communication of the DRM and external systems e.g. LIMS.

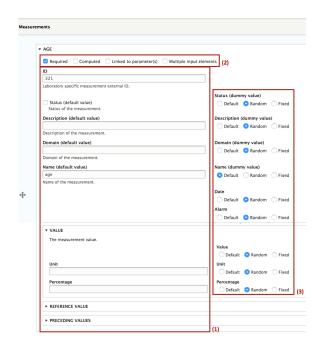
2) optional: *Status, Description, Domain, Name, Value* Freely available fields for adding metadata to the measurement. These additional information can be included from external systems and can be applied in placeholders. If no value is imported, the here assigned default values is inserted into placeholders.

Please note:

- Measurements are displayed in the DRM with its name. In case a default name is not assigned here, the ID is shown.
- Value fields are limited in their number of characters: ID: 128

Description: 255 Domain: 255 Name: 255 Value: unlimited Alarm: 255

Role Content Settings Editor



Setting measurement attributes (optional) (2)

1) no attributes

- patient-related data without direct reference to the person such as age, sex, medical indications
- not strictly necessary: content will be delivered even if optional measurements are not provided by LIMS
- values are integrated into the content within the DRM

2) Required

- mandatory: content will be delivered only if all required measurements are provided by LIMS
 - not filled required measurements create a warning and prevent publication
- · values are integrated into the content within the DRM

3) Computed

- · predefined by biologis GIM
- detailed information generated automatically from patientrelated data/case-specific results such as the number of metaphases counted per cell line for cytogenetic analysis
- the setting is created automatically
- is not displayed in the Report order values block on the View tab, but is listed in a modal available via the Show transformed values button
- values are generated automatically within the DRM during the preprocessing
- recommended as extension for cytogenetic report templates
- · can not be linked to Required
- dummy values cannot be set

4) Linked to parameter(s)

- measurements in dependency of specific parameters
- values are integrated into the content within the DRM
- recommended as extension for cytogenetic report templates

5) Multiple input elements

- measurement values extended by detailed information assigned as indices
- rule engine: values or indices can be used
- placeholders: values or indices can be used
- values are integrated into the content within the DRM

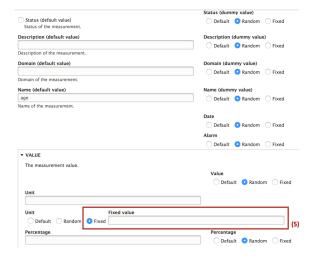
Setting measurement dummy values (optional)(3)

Dummy values can be defined here as a presetting for the review of content on the View tab (4). Click *Dummy values* and they will be used for the rule engine and filled in placeholders in the preview. For all details of a measurement the random dummy value is predefined except the name, for which the default is set. The preset of dummy values can be changed.

1) Default

Assigned default values (see above) will be entered. In case of the *Value* the default setting leads to an empty dummy value.





2) Random

A completely arbitrary sequence will be entered:

- Description, Domain, Name and Alarm: 5 words from Lorem lpsum texts
- Values, Percentage and Date: sequence of numbers
- Unit: any existing unit

3) Fixed

The selection of *Fixed* opens a new field in which a static dummy value can be entered that will be transmitted then in the preview (5).

Please note:

Manually overwritten dummy values on the *View* tab will remain intact, even if the *Dummy values* button is clicked again

Adding new measurements

How to get here

Default way:

Toolbar > Data > Content > Operations: Settings

- 1. Click the + (1) at the bottom of the *Required* or *Optional* Measurements to open a New Measurement block.
- 2. To deposit the definition of the new measurement see Default setting of measurements

Unbekannter Anhang

Content Settings Editor

Role

- Viewing content
- Default setting of measurements
- Editing measurements
- Removing measurements
- Viewing the workflow states of the content
- Translating the content
 Viewing the history of the content
- Publishing content

Editing measurements

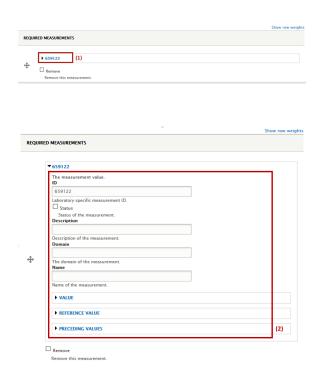
How to get here

Default way:

Toolbar > Data > Content > Operations: Settings

- 1. Click on the *Measurements* block to open it (1).
- 2. Change the content (2).
- 3. Save.

Role Content Settings Editor



- Viewing content
- Default setting of measurements
- Editing measurements
- Removing measurements
- Viewing the workflow states of the content
 Translating the content
- Viewing the history of the content
- Publishing content

Removing measurements

How to get here

Default way:

Toolbar > Data > Content > Operations: Settings

- Tick the checkbox for *Remove* at the bottom of the *Measurements* details (1).
- 2 521/0

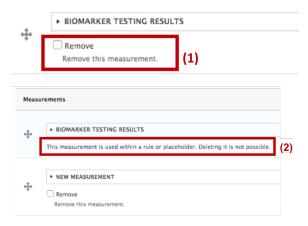
Please note:

If the measurement is used as part of a rule or a placeholder, it is not possible to remove it. In such a case, a notification will displace the checkbox for *Remove* (1).

Possible next steps

- Viewing content
- Default setting of measurements
- Editing measurements
- Removing measurements
- Viewing the workflow states of the content
- Translating the content
- Viewing the history of the content
- Publishing content

Role Content Settings Editor



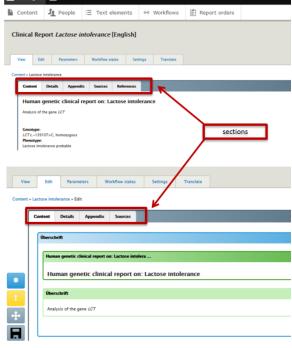
Content boxes

Adding a content box to content

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: Toolbar > Data > Content > Operations: View > Edit Toolbar > Data > Content > Operations: Parameters > Edit Toolbar > Data > Content > Operations: Workflow states > Edit Toolbar > Data > Content > Operations: Settings > Edit Toolbar > Data > Content > Operations: Translate > Edit Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

Within the content, the content boxes are allocated to different sections. In order to add a content box, first select the section for which you want to add a content box.



- 1. Click the + (1) at the bottom of the section
- 2. An empty content box opens up (2)
- 3. Optional: Enter a title for the content box under *Content box attributes* in the right sidebar (3)





- Adding content elementsMoving a content box

- Setting the rule of a content box
 Setting an exclusion set to a content box
 Setting references to a content box

Removing a content box from content

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Translate > Edit

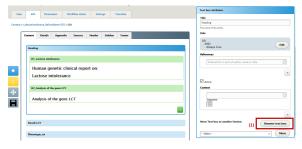
Role Content Editor

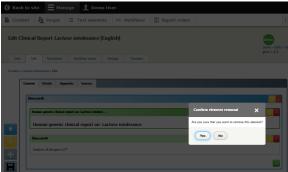
In order to remove a content box, it has to be selected.

Click the *Remove content box* button in the *Content box attributes* in the right sidebar (1).

In the modal window click Yes.

The content box is removed from the content.





- Adding a content box to content
- Moving a content box

Moving a content box

How to get here Default way: Toolbar > Data > Content > Operations > Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Translate > Edit

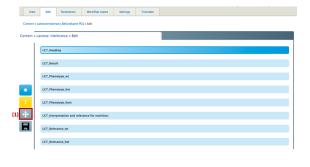
Role Content Editor

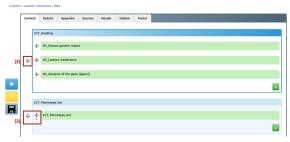
Within a section

Dragging has to be enabled by clicking on the gray button on the left with the drag symbol (1).

Change the order of the content boxes within a section by dragging them (2).

Moved content boxes are marked with an asterisk (3).

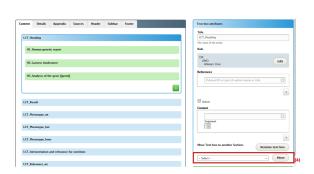




To another section

- 1. Select the content box that should be moved.
- 2. Open the Content box attributes box in the right sidebar.
- 3. Under *Move Content box to another Section*, select the target section (4).
- 4. Click Move.

Please note: Moving is possible as soon the content element has been saved.



- Adding content elements
 Editing a content element
 Setting the rule of a content box
 Setting an exclusion set to a content box
 Setting references to a content box
 Adding a content box to content

Role

Content Editor

Inactivating a content box

How to get here Default way: Toolbar > Data > Content > Operations > Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit

- Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states >
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: Translate > Edit

Content boxes are preset as active and are therefore visible in the content. If a content box should not be used in the content, it must be inacitvated by removal of the checkmark in the Content box attributes box (1).

To reactivate the content box, set the checkmark again.

- Adding content elements
- Adding a content box to content

Setting the rule of a content box

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: Parameters > Edit
 Toolbar > Data > Content > Operations. Workflow states >
- Edit
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: Translate > Edit

Rules for content boxes are set in the right sidebar, within the *Content box attributes.*

- 1. Click *Edit* in the gray field (1). The modal window for setting the rule opens.
- 2. If the content box should be displayed in any case, select *Always true* (2).
 - If the content box should be displayed only for certain combinations of parameters, select *Parameters* (selected) (3). If the content box should be displayed for certain general information or measurements, click on the corresponding selection (3).
- Select the desired operation. For details see Setting the rule for parameters, Setting the rule for general information or Setting the rule for measurements.
 - Please note: rules for parameters, general information and measurements can be combined for a content box.
- 4. Click *Apply* to close the modal window using the changes of the rule.
 - Click Reset to reverse the changes made.
 - Click *Cance*/to close the modal window without using the changes of the rule.

Role

Content Editor









Further opportunities:

- Click Add rule, if the statement shall be connected with a further statement by And (5). Set the new statement as described above.
- Click Add group, if the statement shall be connected with a further statement by Or (6). Set the new statement as described above.
- 3. Click Delete to remove the corresponding statement (7).



Please note: if the content box should never be shown, it is also possible to set it inactive, see Inactivating a content box

- Adding content elements
 Editing a content element
 Moving a content box
 Setting an exclusion set to a content box
 Setting references to a content box
 Adding a content box to content

Setting the rule for parameters

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: *Parameters* > Edit
- Toolbar > Data > Content > Operations: Workflow states > Edit
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: *Translate* > Edit
- select Parameters (selected) (3)
- select the required operation (4)
- select all classes or parameters (5) from the parameter tree, for which the rule applies
- optional: select with metadata to set the rule depending on an specific metadata (6)
 - select the metadata field (7) and the metadata field content (8)

It is recommended that the rules only contain classes and no explicit parameter. This saves time writing content for new parameters, since they only need to be sorted into the appropriate class.

Example:

If the selected rule is *Parameters (selected) are in LCT_-13910TC:het, LCT_-13910TC:hom*, the content box will be used when one of these specific parameters is given.

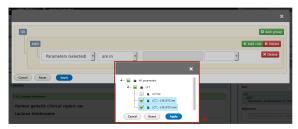
In contrast, if the rule *Parameters (selected) are in* is used for a whole class, the connected content box will be used if one or more parameters are given.

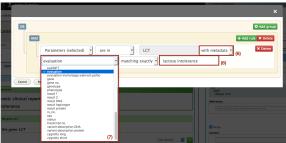
Role

Content Editor





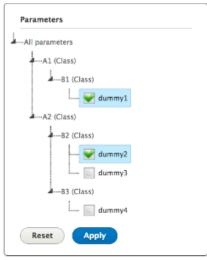


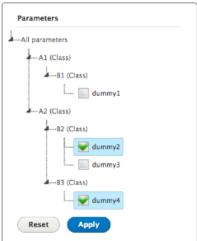


Example 2:

If the selected rule is Results match exactly 2 parameters of

 class A1 and class A2, the content box will be used when exactly 1 parameter is selected within class A1 and A2.

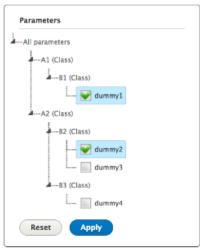


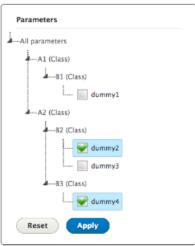


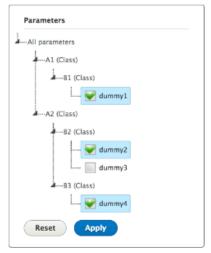
Rule is fulfilled

Rule is not fulfilled

• classes B1, B2 and B3, the content box will be used when exactly 2 parameters are selected within these classes.







Rule is fulfilled

Rule is fulfilled

Rule is not fulfilled

- Adding content elements

- Editing a content element
 Moving a content box
 Setting an exclusion set to a content box
 Setting references to a content box
- Adding a content box to content

Setting the rule for general information

How to get here

Default way:

Toolbar > Data > Content > Operations > Edit

Other ways:

- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: *Parameters* > Edit
- Toolbar > Data > Content > Operations: Workflow states >
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: Translate > Edit

select General information (3).

- select the name of the desired general information (4).
 Optional: Set the index (4a).
- select the required operation (5).
- insert a custom value (6, free-text field)

Please note:

- If no name is assigned in the settings, the ID number is displayed in the selection.
- General information are sorted in the selection according to their attributes.
 - A distinction is made between general information with single or multiple values. After selection of a multiple general information, a further field appears for selecting the index associated with the desired information (4a).
 - Protected general information are displayed separately. For protected general information only the rules 'is present and 'is not present are possible.
 Selecting another function resets the general information field to the first general information on the drop-down menu.
- General information 'Linked to parameter(s)' can not be considered yet.

Example:

If the selected rule is *General information: Sex equals* female, the content box will be used for cases where the proband was defined as female in the LIMS and transferred to the DRM.

If the selected rule is *General information: Indication contains carcinoma*, the content box will be used if any cancerous disease is explicitly deposited with the wording *carcinoma* as indication for this case in the LIMS and transferred to the DRM.

Role Content Editor







- Adding content elements
 Editing a content element
 Moving a content box
 Setting an exclusion set to a content box
 Setting references to a content box
 Adding a content box to content

Setting the rule for measurements

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: Parameters > Edit
- Toolbar > Data > Content > Operations: Workflow states >
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: *Translate* > Edit

• Select *Measurements* (3).

- Select the name of the desired measurement (4).
- Select the required operation (5).
- Select the desired value (6). If the custom value is selected (7) enter the value manually (8).
- Optional: select a percentage, which is used to offset the value (9).

Please note:

- If no name is assigned in the settings, the ID is displayed in the selection
- Measurements are sorted in the selection according to their attributes. A distinction is made between measurements with single or multiple values. After selection of a multiple measurement, a further field appears for selecting the index associated with the desired information (4a).
- Measurements Linked to parameter(s) can not be considered yet.

Example:

If the selected rule is *Measurement: leukocytes > Custom value 30000*, the content box will be used for cases where more than 30000 leukocytes are detected indicating a leukaemia.

If the selected rule is

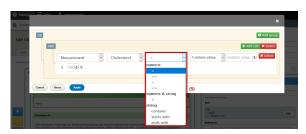
- a) Measurement: cholesterol > Reference value Minimum, associated via an 'And' connection to
- b) *Measurement: cholesterol < Reference value Maximum*, the content box can be used for cases where cholesterol values are within the reference range.

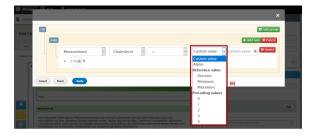
Role Content Editor













- Adding content elements
 Editing a content element
 Moving a content box
 Setting an exclusion set to a content box
 Setting references to a content box
 Adding a content box to content

Extended rules

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Rule extensions offer the possibility to display further conditions. They are optional and can be requested at bio. logis Genetic Information Management GmbH.

The following rule extensions are available:

- AND/ OR linkages can be changed at any time by clicking the button AND or OR (1). The rule of the darker coloured button is set.
- Additional single rules or rule groups can be created from the same level. By clicking Add rule a new rule is set in the same level. By clicking Add group a new rule are set in the same level selectable as AND or OR linkage to the previous rule.
- Single rules or rule groups can be resorted by dragging on the drag symbol and dropping at the desired position in the rule chain.
- 4. Additional dependencies can be defined for further variables coupled to parameters by setting the checkmark on the *Linked* tag. By adding a group to a rule for parameters, the option ' *Linked* can be selected to link the preceding to the following statements.
- 5. Further rule operations for general information can be selected to negate statements.

Role Content Editor







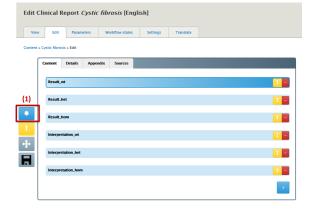
- Adding content elements
- Editing a content element
- Moving a content box
- Setting an exclusion set to a content box
- Setting references to a content box
- Adding a content box to content

Setting an exclusion set to a content box

How to get here Default way: Toolbar > Data > Content > Operations > Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

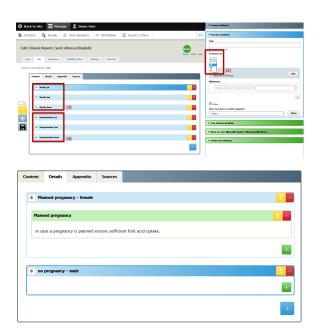
The functionality for viewing and setting exclusion sets has to be enabled by clicking the * button (1) on the left.



The exclusion set is set to content boxes in the right sidebar, within the *Content box attributes*.

- 1. Open the Exclusion set in the dropdown menu (1)
- At the bottom of the dropdown list, there is always one symbol that has not been used yet and is always free for defining a new exclusion set. Select a symbol, it appears in the empty field of the content box (2).

Example: A typical exclusion set is a set of content boxes that describe different results of genotyping (3). If interpretations of the results are in a new set of content boxes, they are another exclusion set (4).



- Setting the rule of a content box
 Setting references to a content box
 Moving a content box
 Adding content elements
 Editing a content element
 Adding a content box to content

Setting references to a content box

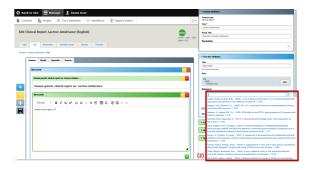
How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit

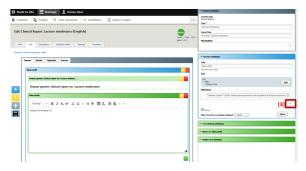
Role
Content Viewer + Content Editor

References are set to content boxes in the right sidebar, within the *Content box attributes* (1).

- 1. Type into the autocomplete field the pubmed id or part of author name or title.
- 2. Select the desired reference from the list of possible references (2).
- 3. To add more reference, click on the + button (3) and repeat the process.







On the *View* tab only the assigned number of the references is visible following the content box (4). The references are automatically presented at the *References* section (5).





To remove references clear the *References* fields (1) and click Save.

The references are no longer linked to the content box. They are not visible in the content view then.

- Viewing content
 Viewing the parameters of the content
 Viewing the workflow states of the content
 Editing the settings of the content
 Translating the content

Content elements

Viewing content elements

How to get here

Default way:

Toolbar > Data > Content > Edit > content element

Role Content Viewer

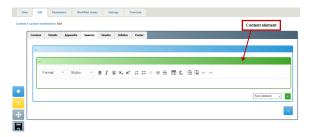
Inside the content

On the *Edit* tab text, media and barcode elements are visualized by a green frame.

Please note:

Translation elements cannot be used in the content form. They are displayed at the Translation elements overview.

- Adding content elements
- Viewing content elements
- Editing a content element
- Translating content elements



Text elements overview

How to get here

Default way:

Toolbar > Data > Text elements

The list shows every existent text element in the DRM. The following information is displayed (1)

- title
- language: if a text element exists in more than one language, each language is listed separately
- outdated: status to indicate whether a text element needs to be updated
- first author: user who created the text element
- author: user who made the last saving
- updated: time point of last saving
- text (full-text)
- operations

The list can be filtered by the *Title*, the *Language* and the *Outdated status*. The text can be searched either for keywords or phrases (2). The entries can also be filtered by their tags (3). The search results are highlighted.

The list can be sorted by clicking on the corresponding title (available for title, outdated, first author, author and updated).

Possible next steps

- Adding content elements
- Viewing content elements
- Editing a content element
- Translating content elements

Role

Content Viewer



Media elements overview

How to get here

Default way:

Toolbar > Data > Media elements

The list shows every existent media element in the DRM. The following information is displayed (1)

- title
- language: if a media element exists in more than one language, each language is listed separately
- outdated: status to indicate whether a media element needs to be updated
- first author: user who created the media element
- author: user who made the last saving
- updated: time point of last saving
- · text: caption of the media element
- operations

The list can be filtered by the *Title*, the *Language* and the *Outdated status*. The text can be searched either for keywords or phrases (2). The entries can also be filtered by their tags (3). The search results are highlighted.

The list can be sorted by clicking on the corresponding title (available for title, outdated, first author, author and updated).

Possible next steps

- Adding content elements
- Viewing content elements
- Editing a content element
- Translating content elements

Role Content Viewer



Translation elements overview

How to get here

Default way:

Toolbar > Data > Translation element

The list shows every existent Translation element in the DRM. The following information is displayed (1)

- title
- language: if a translation element exists in more than one language, each language is listed separately
- outdated: status to indicate whether a translation element needs to be updated
- first author: user who created the translation element
- Last author: user who made the last saving
- updated: time point of last saving
- text (full-text)
- operations

The list can be filtered by the *Keywords*, the *Language* and the *Outdated status (2)*. Additional filtering is possible by *Tags* or *Last author* within *More filters* (3). The search results are highlighted.

The list can be sorted by clicking on the corresponding title (available for title, language, outdated, first author, author and updated).

- Viewing content elements
- Editing a content element





Viewing a text element

How to get here

From text elements overview

Toolbar > Data > Text elements > title

Within content

Toolbar > Data > Content > Edit > text element

There are two options to view text elements

- from the text elements overview list
- on the edit tab within a specific content

From text elements overview

Select the text element and click on *View*. The content title (1) and the content is shown on the left side (2).

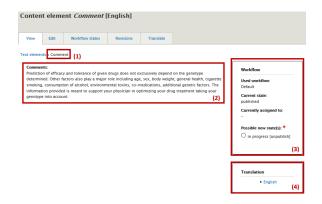
On the right side the publishing workflow is described with its current state and assignee. The current state for this text element can be changed here (3).

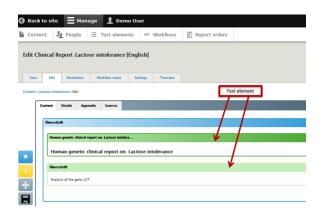
The availlable languages of this text element are displayed in the box *Translation* (4).

Within content

On the *Edit* tab text elements are visualized by a green frame.

Role Content Viewer





- Adding content elements
- Viewing content elements
- Editing a content element
- Translating content elements

Viewing a media element

How to get here

From media elements overview

Toolbar > Data > Media elements > title

Within content

Toolbar > Data > Content > Edit > media element

There are two options to view media elements

- · from the media elements overview list
- on the edit tab within a specific content

From the media elements overview

Select the media element and click on *View*. The title (1), the content (2) and the caption (3) of the media element is shown on the left side.

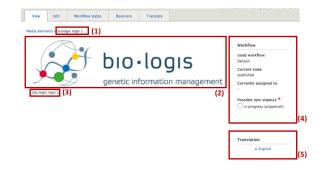
On the right side the publishing workflow is described with its current state and assignee. The current state for this content element can be changed here (4).

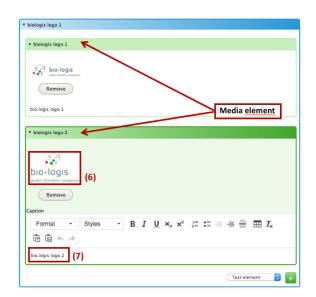
The availlable languages of this media element are deposited in the box *Translation* on the right (5).

Within content

On the *Edit* tab media elements are visualized by a green border. The image (6) and the caption (7) are displayed and can be editied here.







- Adding content elementsViewing content elementsEditing a content elementTranslating content elements

Viewing a translation element

How to get here

From translation elements overview

Toolbar > Data > Translation element > title

There is one option to view translation elements

• from the Translation elements overview list

From translation elements overview

Select the translation element and click on *View*. The content title (1) and the content is shown on the left side (2).

On the right side the publishing workflow is described with its current state and assignee. The current state for this translation element can be changed here (3).

The availlable languages of this translation element are displayed in the box *Translation* (4).

Comparing different translations is possible in box *Compare with translations* (5).

- Viewing content elements
- Editing a content element





Adding content elements

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

Within the content, the content elements are located within content boxes which combine several text, barcode or media elements with additional information.

In order to add a content element, the corresponding content box has to be opened.

Adding a new content element

- select the type of content element: text element, barcode element, media element (1a)
- click the + at the bottom of the content box (1b).
- an empty content element appears (2)
- optional: Enter a title for the content element under Content element attributes (3) and/or mark it with tags (4) in the right sidebar.

Filling a text element

- type the text into the text element
- optional: use text editor features to style the text
 Please note: these formats do not represent the final layout.
 they merely mark parts of the text for the definition of a layout.
- save





Filling a barcode element

- type the text into the barcode element, which is to be encrypted to a QR code (1)
- optional: include general placeholders (iterative and flexible placeholders are not supported)
- optional: change the size in which the QR code is displayed in the context (in percent)(2). The width of QR codes in the delivered PDF and ODT documents will be shown in percentage of the section page. Decide on a position where the



QR code should appear in the content and whether it should be flowed around by the following content element.

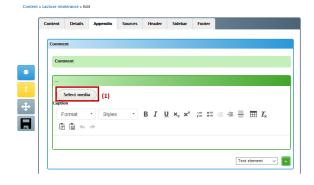
• save

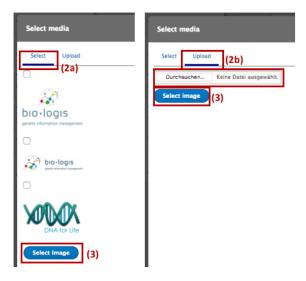
Filling a media element

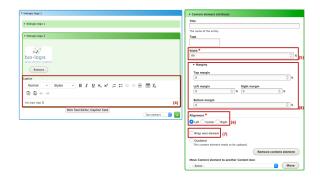
- click Select media (1). A modal window opens.
- select an existing image (2a) or upload a new image (2b).
 Assisted formats are .jpg and .png.
- click Select image (3). The modal window closes. The desired image is displayed in the media element.
- optional: enter a caption (4). Use text editor features to style the text. Placeholders (general, iterative and flexible) are not supported.
- optional: change the size in which the image is displayed in the context (in percent)(5). The width of images in the delivered PDF and ODT documents will be shown in percentage of the section page.
- optional: decide on a position where the image should appear in the content(6).
- optional: decide whether the media element should be flowed around by the following content element (7).
- optional: slect margins around the image (8).
- save.

Please note:

 Translation elements cannot be added manually. They are created automatically when queried by a report order.







- Editing a content element
- Text editor features
- Moving a content element
- Adding notes to content elements

Adding an existing content element

How to get here

Default way:

Toolbar > Data > Text/Media elements and Toolbar > Data > Content > Operations: Edit

Other ways:

- Toolbar > Data > Text/Media elements > Operations: View > Edit
- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: Parameters > Edit
- Toolbar > Data > Content > Operations: Workflow states > Edit
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

Similar content elements

Similar content elements are displayed automatically in the sidebar while a content element is edited (1). This serves as an assistence to remember already existing content elements in the DRM instance. It is recommended not to duplicate but to reuse the same elements. Similar elements can also be used as a template for further processing.

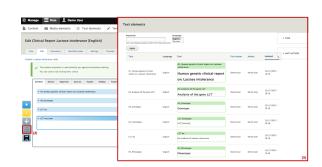
Please note:

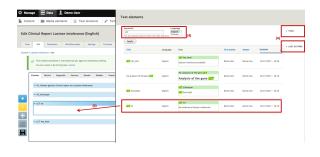
- independently of the type of the content element, all elements containing similar context are displayed in the Similar content elements box
- media elements can be found by selecting the same image
- Translation elements cannot be added or reused. They are created automatically.

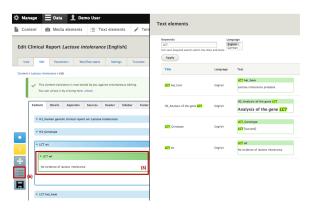
Reuse text elements

- click on the gray button on the left with the bullet point list symbol (2)
- an overlay window including all text elements opens (3)
- optional: use the filtering options to find the desired text element (4)
- click on the desired text element in the overview and drag it into the content box (5)
- click again on the gray button on the left with the bullet point list symbol to close the overlay window (6)



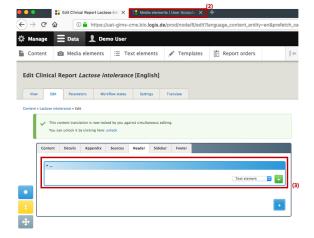


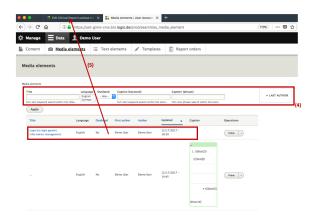


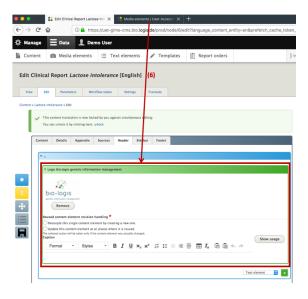


Reuse media elements

- while editing within a content, open the media elements overview in another tab of the web browser (2)
- optional: open a new content box (3)
- select to the media elements overview
- optional: use the filtering options to find the desired text element (4)
- click on the media element in the overview and drag it into the content box on the Edit tab (5,6)







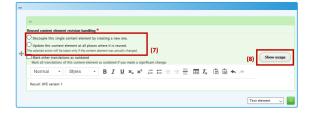
Optional: Processing of reused content elements

- if changes are necessary decide to (7)
 - decouple: the element is no longer linked to the existing element used in other contents.
 - update: changes are saved for all contents where this element is used.
- Click on *Show usage* to see in which content the content element is also used to make the decision easier (8)
- save

Please note:

- Translation elements cannot be added manually. They are created automatically when queried by a report order or a KMM placeholder is replaced.
- If the content element is already present in the content box, it cannot be added a second time. A modal window with the corresponding message opens.
- A content element can not be dragged into the text editor of another text element.

In these cases, an error message is displayed.







- Text elements overviewMedia elements overview
- Removing content elements from content
 Editing a content element
 Moving a content element
 Adding notes to content elements

Editing a content element

How to get here

Default way:

Toolbar > Data > Content > Edit > content element

Role Content Editor

Inside the content

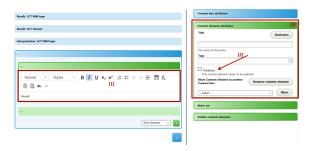
- · select the content element
- make changes in the content element (1)
- save

Please note:

- If the content element has translations into other languages, they can be marked as outdated (2).
- Translation elements cannot be edited inside the content. For editing directly in the translation element see Editing a translation element.

Changes can be processed in the *Content element attributes* box in the right sidebar (3).

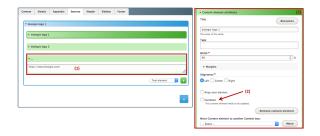
Text element



Media element



Barcode element



Content elements imported from an outside source are marked as locked and protected against editing. Translations of these content elements that are not imported but maintained inside the GIMS CMS may still be editable.



- Viewing content elements
 Translating content elements
 Moving a content box
 Adding notes to content elements

Editing a text element

How to get here

From text elements overview

Toolbar > Data > Text elements > title > Edit

Within content

Toolbar > Data > Content > Edit > text element

Role Content Editor

There are two options to edit text elements

- · from the text elements overview list
- on the edit tab within a specific content

From text elements overview

Select the text element and click Edit.

The following changes can be made (optional):

- 1. Modify the title
- 2. Set or remove tags
- 3. Modify the text
- Change the outdated state to mark this text element. In case the text element has translations, the option *Mark other* translations as outdated appears.

After modifying the content or the display of the text element it has to be defined how the changes will be applied (obligatory):

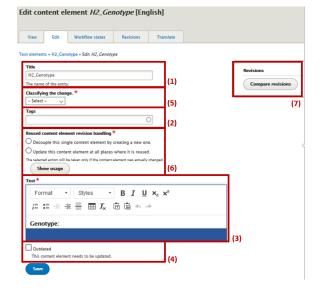
- 5. After finishing the modifications the change class has to be selected
- Decouple or update this text element in all other contents. Click Show usage to see other contents where it is used

The *Compare revisions* box in the right sidebar facilitates comparing texts (7).

Click Save.

Within content

Text modifications are possible on the *Edit* tab. For details see Editing a content element.



- Viewing content elements
 Editing a content element
 Translating content element
 Moving a content box
 Adding notes to content elements

Editing a media element

How to get here

From media elements overview

Toolbar > Data > Media elements > title > Edit

Role Content Editor

There are two options to edit media elements

- from the media elements overview list
- on the edit tab within a specific content

From media elements overview

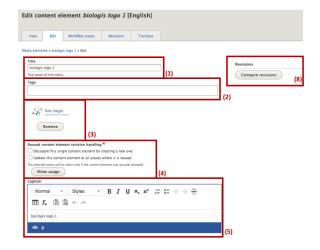
Select the media element and click on Edit.

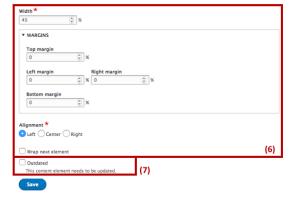
The following changes can be made (optional):

- 1. Modify the title
- 2. Set or remove tags
- 3. Remove the image of this media element. The possibility to insert a new picture is given.
- 4. Decouple or update this media element in all other contents. Click *Show usage* to see other contents where it is used
- 5. Modify the caption
- Change the size, margins or alignment of the displayed image and decide if the text should wrap the image (not selectable for the center setting). Modifications are assigned in all existing translations.
- Change the <u>outdated</u> state to mark this media element and/or its translations. In case the media element has translations, the option <u>Mark other translations as outdated</u> appears.

The *Compare revisions* box in the right sidebar facilitates comparing texts (9).

Click Save.





Within content

Text modifications are possible on *Edit* (5). For details see Editing a content element, Adding content elements

- Viewing content elements
 Editing a content element
 Translating content elements
 Adding content elements
 Moving a content box
 Adding notes to content elements

Editing a translation element

How to get here

From translation elements overview

Toolbar > Data > Translation elements > title > Edit

Role Content Editor

There is one option to edit translation elements

• from the Translation elements overview list

From translation elements overview

Select the translation elements and click Edit.

The following changes can be made (optional):

- 1. Modify the title
- 2. Set or remove tags
- 3. View original text
- 4. Modify the text
- Change the outdated state to mark this text element. In case the text element has translations, the option Mark other translations as outdated appears

The *Compare revisions* box in the right sidebar facilitates comparing texts (6).

The Compare with translations box in the right sidebar facilitates comparing content of different translations (7).

Click Save.

- · Viewing content elements
- Editing a content element



Text editor features

The following features exist for editing text

- Formats
- Styles
- Bold
- Italic
- Underlined
- Subscript
- Superscript
- Lists (numbered, bulleted, indents)
- Horizontal line
- Tables
- Remove format
- Paste options
- Undo
- Redo

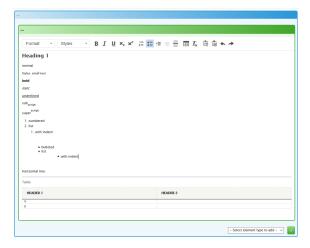
Hover over the symbols of the text editor to see their description.

Please note:

- these formats do not represent the final layout. they merely mark parts of the text for the definition of a layout

 different styles can be applied on the same text phrase





Formats

Click on the Format panel to select the format.

The following format exists for editing text

- Normal
- Heading 1 to 6

Each content element may contain one format only. A content element may not contain normal text together with a headline or several different headline types.

For the order of headings the following rules needs to be taken into account:

- 1) The content starts with heading 1.
- 2) Each section starts with heading 1 or heading 2.
- 3) The order of heading formats must not skip a hierarchy level. For example, heading 3 may not be defined if heading 2 is not used previously on the same section. Otherwise there will be a warning about *incorrect headings* on the content view (see troubleshooting for more information).





Styles

Mark the text and select styles **bold**, *italic*, <u>underline</u> in the bar.

On the Styles panel further styles exist:

- small text
- any custom style that has been configured by the administrator.

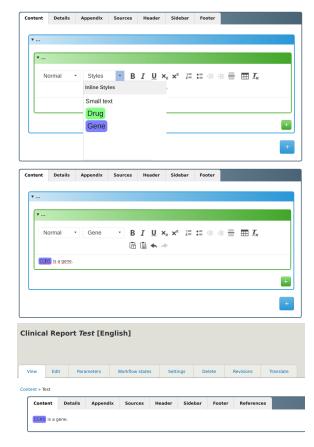
Styles can be applied to a single word or to text phrases.

- Mark the phrase in the text that should be subject to a custom style
- 2. Click on the desired custom style in the dropdown menu of Styles.
- 3. Click Save.

The custom style will now be displayed in the $\it Edit$ and $\it View$ mode.

Please note:

For changing the custom styles, the previous style must be deactivated first. For this purpose click on the custom style in the drop down menu styles once more.



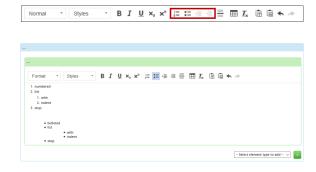
Lists

It is possible to choose between numbered and bulleted lists.

To start a list click on the list symbol and a number/bullet appears. Insert your text and press Enter - the list is continued automatically.

Both list types allow to increase and decrease indents.

To end the list press Enter two times.



Tables

To insert a table click on the table symbol.

In the first step the following table properties can be defined

- Number of rows
- · Number of columns
- Headers
- Caption

Click OK to create the table.

With a right-click on the table an extended properties menu opens, containing actions per

- Cell
- · Insert cell before or after
- Delete cell(s)
- Cell properties (width, height, word wrap, alignment, etc.)
- Row
- · Insert row before or after
- Delete row(s)
- Column
 - · Insert column before or after
 - Delete column(s)

in addition with the following options

- Paste
- Delete table
- Table properties (mentioned above)

To insert text before or after a table, a paragraph needs to be inserted first.

To insert this paragraph, select the table and hover over either the top or the bottom of it.

A white arrow on red background will appear. Click on the arrow to insert the paragraph.

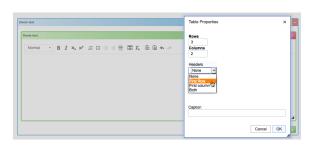
Please note:

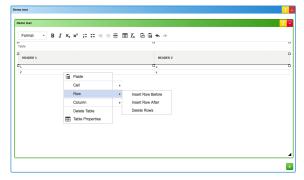
Not filled table rows are not visible on View, in the preview and the delivered document.

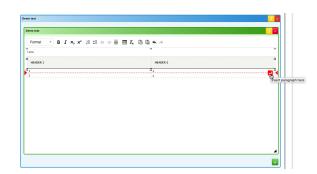
Information

At present, it is not possible to merge cells within tables, even though such actions exist for cells within the extended menu. We apologize for the inconvenience and go on working on a solution.









Remove format

Use the *Remove format* option to convert text with different formats to unformatted text with one click.



Paste options

The following paste options exist



· Paste as plain text



Paste from Word

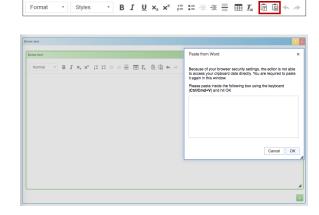


• Right-click > Paste

• Key combination (e.g. Ctrl+V for Windows, Cmd+V for Mac)

To paste formatted text as unformatted text use the *Paste as plain text* option. All other options should preserve the format of the copied text, as far as the editor is able to represent the formatting.

If a window appears, paste the text per key combination and click on \emph{OK} .



Editing an existing content element

How to get here Default way: Toolbar > Data > Text/Media elements and Toolbar > Data > Content > Operations: Edit Other ways: Toolbar > Data > Text/Media elements > Operations: View > Edit Toolbar > Data > Content > Operations: View > Edit Toolbar > Data > Content > Operations: View > Edit Toolbar > Data > Content > Operations: Parameters > Edit Toolbar > Data > Content > Operations: Workflow states > Edit Toolbar > Data > Content > Operations: Settings > Edit Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

If the content element is reused, make changes (see Editing a content element) and select how the modifications have to be applied. There are two options:

- Update this content element at all places where it is reused Should be selected if the modification needs to be updated globally in all contents, for example if a spelling mistake was corrected or an expression was updated (4). The change class of the content element modification has to be set (5).
- Decouple this single content element by creating a new one
 Should be selected if the modificated content element is used
 only at the current position, for example when the interpretation
 of a parameter is changed only for this content. The content
 element will not be changed in any other content (6).



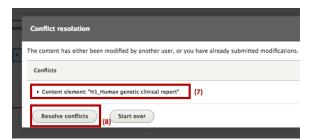


Concurrent editing

In case two users change the same content element in two different contents at the same time, saving modifications by the first user will be unproblematic. Saving changes by the second user will create conflicts if the modifications are not the same.

A modal window appears. The affected element in the affected content is shown (7). To comprehend where the element is located in the content, click on it and the Conflict path opens (7a).

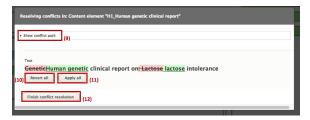
a) click $\textit{Resolve conflicts}\xspace(8)$ to see the modification of both users



- click Show conflict path to see, where the content element is used (9)
- click Revert all to switch all color codes (10). All green marked areas will be colored red and vice versa.
- click Apply all to accept the displayed modifications (11). Changes marked green will be applied, changes marked red will be removed. To switch the color for an marked area, click on it.
- optional: in case more than one content element is included in conflicts click Go to the next conflict to change to the next text for actualization.
- click Finish conflict resolution (12) to exit the conflict resolution. The final version is shown in the content element now.
- · optional: edit another content
- click Save (13)

b) click *Start over* (14) to reset all modifications of the second user. The content will be reloaded in the last saved state including the changes of the first user or others that have caused the conflicts. Click Save (15).











- Text elements overview
- Media elements overview
- Removing content elements from content
- Editing a content element
- Moving a content element
- Adding notes to content elements

Using similar content elements

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Translate > Edit

When amending a content or setting up a new content, existing content elements from other contents can be reused. This makes sense for example when elements in different contents have identical or similar wording. For the integration of existing content elements see Adding an existing content element.

Changes within reused content elements are automatically transfered into other contents where the element is used.

When text is added in a new content element, the *Similar content elements* box in the right sidebar opens automatically if other existing content elements contain similar text (1).

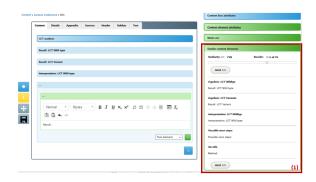
Within this box, the search results for elements with similar text are displayed. For text elements the full text is compared, for media elements similarities of the captions are considered. Barcode elements are not considered.

When the *Similar content elements* box is closed, its search results will not be updated until it is opened again. Once it has been closed manually, it will not open automatically again.

Per default the similarity threshold is set to 75%, but using the slider it can be reduced to 25% or increased to 100% (2).

A maximum of five content elements are shown at once. Click the *next* and *previous* buttons to browse through all suggested elements (3).

Role Content Editor





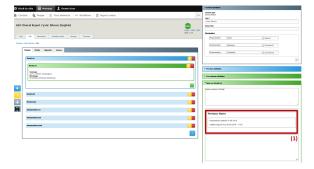
- Editing a content element
 Viewing content elements
 Moving a content element
 Adding notes to content elements

Viewing notes of content elements

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: Toolbar > Data > Content > Operations: View > Edit Toolbar > Data > Content > Operations: Parameters > Edit Toolbar > Data > Content > Operations: Workflow states > Edit Toolbar > Data > Content > Operations: Settings > Edit Toolbar > Data > Content > Operations: Translate > Edit Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

- 1. Select the content element.
- 2. Open the Notes on. box in the right sidebar (1).
- 3. All notes are displayed in the lower field.



- Editing a content element
- Adding notes to content elements

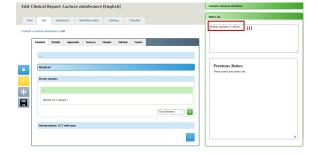
Adding notes to content elements

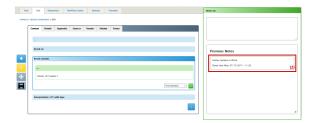
How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

- 1. Select the content element
- 2. Open the Notes on: ... box in the right sidebar
- 3. Write the note in the upper field (1)
- 4. Click Save

The note is saved under Previous Notes. The author and the date are also documented here (2).





- Viewing notes of content elements
- Editing a text element
- Moving a content element

Working with tags

How to get here Default way: Toolbar > Data > Content > Operations: Edit Toolbar > Data > Text/Media elements Other ways: Toolbar > Data > Content > Operations: View > Edit Toolbar > Data > Content > Operations: Parameters > Edit Toolbar > Data > Content > Operations: Workflow states > Edit Toolbar > Data > Content > Operations: Settings > Edit Toolbar > Data > Content > Operations: Translate > Edit Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

Tags can be used to assign content elements to specific categories to facilitate searching for thematic content. All translations are affected by tagging.

Tagging of content elements

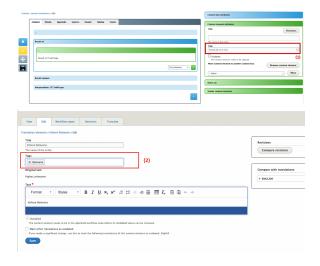
- Open the Content element attributes in the right sidebar on the Edit tab
- Enter a tag name (1)
 - If the tag has been used before, a drop down menu opens for choosing the right tag
 - New tags are created and linked to their IDs, shown in brackets, and are available for all contents after saving
- Optional: enter further tags separated by commas (1)
- Save

Please note:

 Translation elements cannot be tagged inside the content. T ranslation element can be tagged in the Translation elements overview list

Tagging of translation elements

- Select the translation elements and click Edit.
- Enter a tag name (2)
- Optional: enter further tags separated by commas
- Save





Filtering by tags

- Open the text elements overview, translation elements overview or media elements overview. Already assigned tags are shown in the right box, the number of content elements linked to this tag is displayed in brackets (2).
 Click a tag for viewing all content elements of this category
 Click more than one tag or other filtering options for a
- - combined search
- Click (-) to undo filtering

Please note:

Changing filtering options resets the selection of tags.

- Adding a content box to content
- Moving a content box
 Editing a content element
- Adding notes to content elements

Removing content elements from content

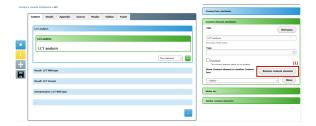
How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

- · open the content element
- click the Remove content element button in the Content element attributes in the right sidebar (1)
- click Yes in the modal window (2)

Please note:

The content element will not be displayed in the content anymore. It is however not removed from the content management system and can still be used in other contents (see Adding content elements). This also allows the removal to be reversed by reinserting the content element.





- Editing a content element
- Moving a content element
- Adding notes to content elements

Moving a content element

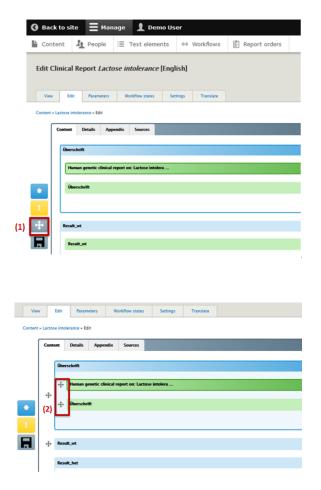


Role Content Editor

Within a content box

Dragging has to be enabled by clicking on the gray button on the left with the drag symbol (1).

Change the order of the content elements within a content box by dragging them (2). Moved content elements remain marked with an asterisk.



To another content box

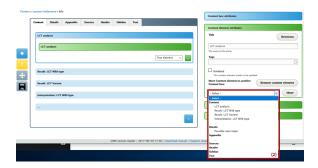
- 1. Select the content element that should be moved.
- 2. Open the Content element attributes box in the right sidebar (1).

- 3. Under Move Content element to another content box select the target content box (2).
- 4. Click Move.

If there is no content box at the final destination available yet, a new content box can be generated (Adding a content box to content) or the content box including the content element can be moved (Moving a content box).

Please note: Moving is possible as soon the content element has been saved.





- Adding a content box to content
- Moving a content boxEditing a content element
- Adding notes to content elements

Managing content element revisions

How to get here

Outside the content

- Toolbar > Data > Text elements > title > Edit > Compare revisions
- Toolbar > Data > Text elements > title > Revisions > Compare

Inside the content

Toolbar > Data > Content > Edit > Revisions > Compare

Select the *Revisions* tab or click the *Compare Revisions* button in the right sidebar in the *Edit* tab to open a modal window with the overview of revisions of the content element . Only the revisions made in the current translation of the content element are shown.

For each revision the following information is shown:

- author: the user who has created the revision
- changed: the date when the revision has been created
- revision ID
- compare from: needed for comparing two revisions
- compare to: needed for comparing two revisions

To close the modal window, click x.

To see the difference between two revisions, select them and click *Compare*.

Only the content but not the title of the content element is compared.

Removed content is marked in red and crossed out, new content is marked in green and underlined.

To revert all changes:

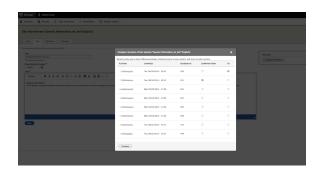
- 1. Click Revert all.
- The modal window will be closed and the reverted content is shown within the text editor.

Additionally, it is possible to accept or discard marked changes individually:

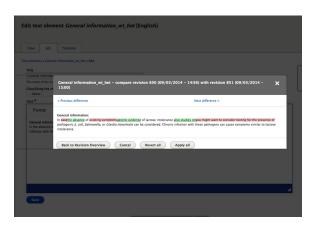
- Click on the marked content. Labelling will change from red and crossed out to green and underlined and the other way around.
- Click Apply all to delete the red marked content and keep the green marked content or click Revert all to keep the red marked content and delete the green marked content.

To go back, click *Back to Revision Overview.* To close the modal window, click *x* or *Cancel.*

Role Content Editor



Text elements



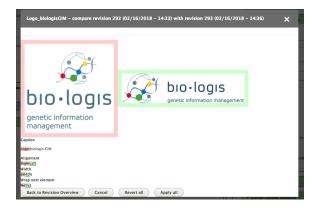
Media elements

For media elements, changes of the following characteristics are displayed:

- imagecaption
- alignmentwidth
- wrap the next element.

All, except the image, can be reverted by clicking the Revert all button.

For barcode elements, changes of the text encrypted to the QR code are displayed.



Barcode elements



Possible next steps

Outside the content

- Viewing content elementsTranslating content elements

Inside the content

- Editing content
- Moving a content element
- Adding notes to content elements

Translating content elements

How to get here

Default way:

Toolbar > Data > Text elements > title > Translate

Toolbar > Data > Media elements > title > Translate

Select the language for the new translation and click Add (1).

Role Content Editor



When creating a translation for a text element, the following actions can be applied:

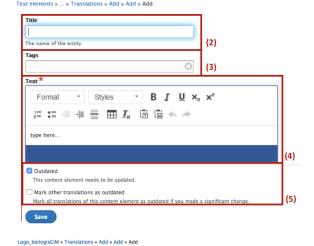
- 1. Enter the translated title for the text element (2).
- 2. Set tags for the text element (3).
- 3. Translate the text (4).
- The text element is marked as outdated. The labelling can be cancelled, if no changes are necessary. Optionally mark other translations as outdated (5).
- 5. Click Save.

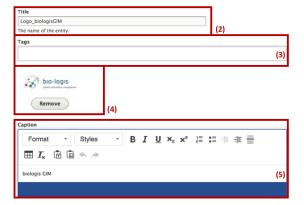
For translating the whole content see Translating contents.

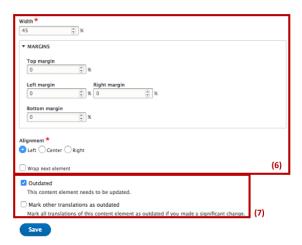
When creating a translation for a media element, the following actions can be applied:

- 1. Enter the translated title for the media element (2).
- 2. Set tags for the media element (3).
- 3. Remove the image (4). It is possible to insert a new image.
- 4. Translate the caption (5).
- 5. Determine size and alignment of the image and decide if the following text should wrap it (6).
- The media element is marked as outdated. The labelling can be cancelled, if no changes are necessary. Optionally mark other translations as outdated (7).
- 7. Click Save.

For translating the whole content see Translating contents.







- Viewing a content element
 Editing the content element
 Moving a content element
 Working with tags
 Adding notes to content elements

Publishing content element

How to get here

Default way:

Toolbar > Data > Text elements > title

Toolbar > Data > Media elements > title

Toolbar > Data > Translation elements > title

The *Workflow* block displays the used workflow, the current state, and the possible new states.

This is only for the current translation language.

Corresponding to the workflow only the next defined state can be selected. Therefore, several publishing steps and possibly several users with different roles may be necessary in order to release a content element for publication. In case the current user's role does not allow a transition, the list of new states can be empty.

- 1. Select the new state
- 2. Click Change state (1)

The process can be repeated until the content has reached the state *published*.

Please note:

- The workflow can be modified by the Workflow Editor, see editing a workflow.
- In case content falls back into a non-published state, the most recently published version is delivered.

Possible next steps

- Editing a content element
- Translating content elements

Role

Content Viewer +
Content Element Reviewer or
Content Element Approver or
Content Element Publisher



Placeholders

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: Parameters > Edit
- Toolbar > Data > Content > Operations: Workflow states >
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: Translate > Edit

The same text can often be applied for different circumstances except for some details. For example, the interpretation can be true for different laboratory testing results. Texts needed for reporting such results differ from each other only where the exact result is reported. In such cases, placeholders can be used within a content element or template to create fields where context specific information can be integrated exactly for the desired situation.

Placeholders can be used for parameters, general information, measurements and also for whole content elements. Background information for parameters can be provided as metadata. For general information and measurements all information assigned to them in the settings can be integrated as placeholders in the content element.

Rule-based placeholders represent a special case: they source their information from content elements and can be filled rule depending by various contents.

On the View tab, placeholders which are not filled because the associated parameter is not selected, show the node designation of the related content as well as the placeholder name manually assigned by the user, e.g. [[node_2:gene]]. The node can be used to trace back from which content the placeholder was transferred in case of content integration.

3 specific placeholders with different functions are available:

- 1) Placeholders in general
- 2) Iterative placeholders
- 3) Flexible placeholders

Possible next steps

- Viewing placeholders
- Adding a placeholder
- Editing a placeholder
- Working with metadata
- · Removing a placeholder
- Moving a content element

Role

Content Editor

Adding notes to content elements

Viewing placeholders

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

Viewing general and iterative placeholders

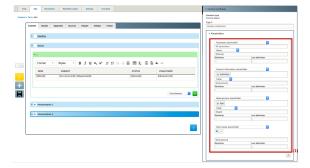
Placeholders for parameter, general information and measurements can be found in content elements of the content. They are administered in the *Content attributes* in the right sidebar (1). All of these placeholders can be converted to iterative placeholders.

Rule-based placeholders are tagged by an exclusion set in the right sidebar. All content boxes with the same exclusion set symbol can be integrated in the placeholder in case their rule applies.

Viewing flexible placeholders

Flexible placeholders can be found in the corresponding content element or template. Linkage to specific information of general information or measurements must be established by the administrator or the placeholders can be filled manually during document generation.

- · Adding a placeholder
- Editing a placeholder
- Removing a placeholder
- Moving a content element
- Adding notes to content elements



Adding a placeholder

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

Adding a placeholder

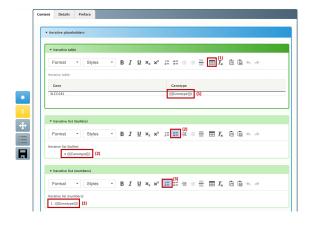
To add a general placeholder, first decide whether the information to be inserted contains details about parameters (with metadata), general information or measurements.

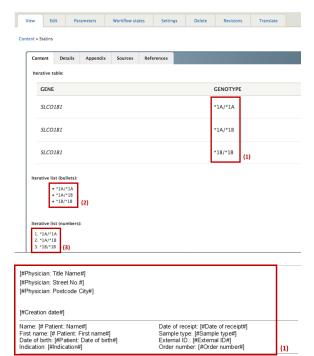
For further details see Adding a parameter placeholder, Adding a general information placeholder, Adding a measurement placeholder.

Adding an iterative placeholder

To generate a list of data in a table or as a bulleted or numbered list in a content element, parameter, general information and measurement placeholders can be converted to iterative placeholders. In case of incorrect handling look for the affected content element in the content elements overview and correct the content by adding a table or list to iterative placeholders.

First create a placeholder (Adding a metadata placeholder, Adding a general information placeholder, Adding a measurement placeholder). Transfer it into a table (1) or use one of the list features, either bulleted (2) or numbered (3). Supplement the string by {{ in the beginning and }} at the end. In the view mode the list of metadata of all selected parameters is shown. For general information and measurements a list of the settings values of all selected general information/measurements is shown.





Adding a flexible placeholder

To add a flexible placeholder, write a string starting with [# and end with #] within a content element or template. The string in between is the identifier for the placeholder replacement.

Please note: Templates are usable only in combination with the Report Layout Engine.

Example: Design of the Header of a clinical report.

- flexible placeholders are deposited in the template (1)
- after Adding a new template and Setting the used template create a new report preview on the View tab of the content. The flexible placeholders are displayed in a modal window and can be filled with report specific data (2).
- click Apply and the report preview with integrated data will be generated.



Adding a rule-based placeholder

There are three different ways to add a rule-based placeholder to the content:

Writing a content element

- Write a string within a content element starting with [[and ending with]] (1)
- 2. Click somewhere outside the content element
- 3. A modal window opens confirming the new placeholder (2)
- 4. Click OK and the placeholder will be added to the list (3)
- From the select list (Select placeholder type) select Rule-based placeholder (4)
- 6. Select an exclusion set to flag the placeholder (5)
- 7. Create a content box including content that shall be integrated under certain conditions (6a)
- 8. Select the same exclusion set for the content box as for the rule-based placeholder (7a)



- 9. Select the rule for which the content shall be added in the placeholder (8a)
- 10. Mark the content box as Includable (9a)
- 11. Repeat 7 10 for all possible contents for the rule-based placeholders (7b 9b)
- 12. Click Save

Reusing a content element

- Adding content elements which contains rule-based placeholders
- 2. A modal window opens confirming the new placeholders (2)
- Click OK and the new rule-based placeholder will be added to the list (3)
- 4. Adjust the exclusion set of the rule-based placeholder (4,5)
- Create a content box including content that shall be integrated with exclusion set, rule and *Includable* flag (7-9)
- 6. Click Save

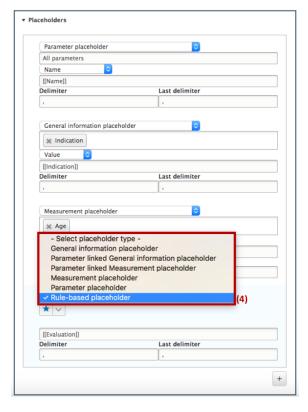
Define placeholders manually

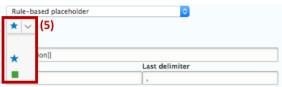
- 1. Click + below the list of the used placeholders (1)
- 2. From the select list (Select placeholder type) select Rule-based placeholder (2)
- 3. Select an exclusion set (3)
- 4. Fill in a name between [[...]] (4)
- 5. Copy the name [[...]] into the content element (5)
- 6. Create all content boxes including content that shall be integrated with exclusion set, rule and *Includable* flag (6)
- 7. Save

On the *View* tab the rule-based placeholder is replaced with the desired content if the rule of one underlying content box is fulfilled (10).

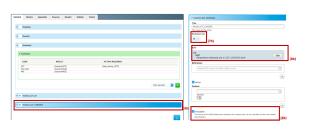
Please note:

- only the content of the first content box with fullfilled rule will be included regardless of other content boxes whose rules are fulfilled as well. The exclusion sets define exclusive content and prevents their common delivery.
- endless loops must be prevented: do not integrate the content box A into the content box B and vice versa.
- includable content box contains less text formats. Headings and tables can not be set.
- content boxes marked as Includable will not be displayed in the location they are placed on the edit form (no matter if their rule matches or not) but only as replacement for a rule-based placeholder.
- on View tab: if rules for several includable context boxes are fulfilled for the replacement, only the content of the first box is displayed instead of the placeholder, a warning is shown.
- content integration is possible if the content box with the rulebased placeholder and all includable content boxes are set on the section to be integrated

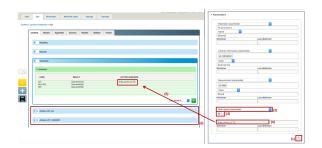












- Adding a placeholder
 Editing a placeholder
 Removing a placeholder
 Moving a content element
 Adding notes to content elements

Adding a parameter placeholder

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

- Toolbar > Data > Content > Operations: View > Edit
- Toolbar > Data > Content > Operations: *Parameters* > Edit
- Toolbar > Data > Content > Operations: Workflow states >
- Toolbar > Data > Content > Operations: Settings > Edit
- Toolbar > Data > Content > Operations: Translate > Edit

Before integrating parameter specific information into the content, the required metadata have to be assigned to the parameters (for details see Working with metadata).

There are three different ways to add a metadata placeholder to the content:

Writing a content element

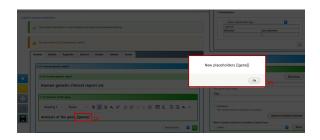
- 1. Write a string within a content element starting with [[and ending with]] (1)
- 2. Click somewhere outside the content element
- A modal window opens confirming the new placeholder (2).
 Click OK and the placeholder will be added to the list (3)
- From the select list (Select placeholder type) select Parameter placeholder (4)
- 5. Adjust the parameter(s) (5)
- Select metadata field. Choose between the name of the parameter (6) and the content of a metadata field (6a, Working with metadata)
- 7. Insert the name of the placeholder if not already done in the text (7)
- 8. Optional: configure delimiters for enumerations of included values (8)
- 9. Click Save

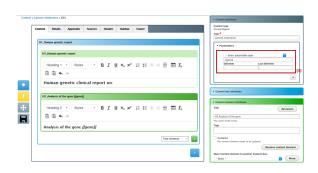
Reusing a content element

- Adding content elements which contains parameter placeholders
- A modal window opens confirming the new parameter placeholders (2).
- Click OK and the parameter placeholder will be added to the list (3).
- From the select list (Select placeholder type) select Parameter placeholder (4)
- 5. Adjust the parameter(s)(5) and metadata field (6)
- 6. Click Save

Role

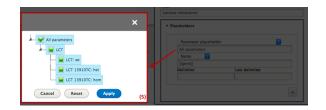
Content Editor

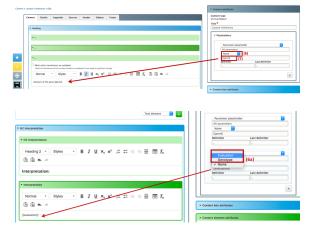


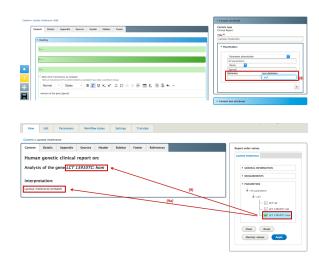




On the View tab the placeholder is replaced with the deposited metadata as soon as a specific parameter has been selected (9).

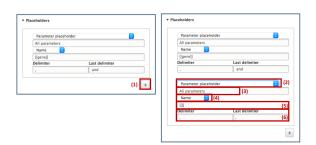






Define placeholders manually

- 1. Click + below the list of the used placeholders (1)
- 2. From the select list (Select placeholder type) select Parameter placeholder (2)
 3. Select parameter(s) from the parameter tree (3)
- 4. Select the metadata field (4)
- 5. Fill in a name between [[...]] (5)6. optional: configure delimiters for enumerations of included values (6)
- 7. Copy the name [[...]] into the content element(7)
- 8. Click Save





- Adding a placeholder
 Editing a placeholder
 Removing a placeholder
 Moving a content element
 Adding notes to content elements

Adding a general information placeholder

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

There are three different ways to add a general information placeholder to the content:

Writing a content element

- Write a string within a content element starting with [[and ending with]] (1).
- 2. Click somewhere outside the content element.
- 3. A modal window opens confirming the new placeholder (2).
- 4. Click OK and the placeholder will be added to the list (3).
- 5. From the select list (Select placeholder type) select General information placeholder (4).
- Select the general information (5) and the setting (6). Optional: in case of Multiple input elements, select the index. More than one selected general information with multiple input is currently not supported.
- Optional: configure delimiters for enumerations of included values (7).
- 8. Click Save.

Reusing a content element

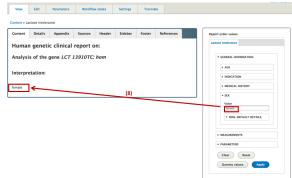
- Adding content elements which contains general information placeholders.
- 2. A modal window opens confirming the new general information placeholder (2).
- Click OK and the new general information placeholder will be added to the list (3).
- 4. Adjust the settings of the placeholder (4, 5, 6).
- Optional: configure delimiters for enumerations of included values (7).
- 6. Click Save.

On the *View* tab the placeholder is replaced with the deposited information as soon as a specific general information has been selected (8).

Please note:







- The value field must always be filled, regardless of whether it is used for rules or placeholders. Otherwise the general information cannot be detected.
- The value fields are limited in their number of characters (see General information). This affects both dummy and real transmitted values.

Define placeholders manually

- Click + below the list of the used placeholders (1).
 From the select list (Select placeholder type) select General information placeholder (2).
- 3. Select one or more general information (3).
- 4. Select the general information setting (4).
- 5. Fill in a name between [[...]] (5).
- 6. Optional: configure delimiters for enumerations of included values (6).
- 7. Copy the name [[...]] into the content element (7).
- 8. Click Save.

- Adding a placeholderEditing a placeholder
- Removing a placeholder
- Moving a content element
- Adding notes to content elements



Adding a measurement placeholder

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

There are three different ways to add a measurement placeholder to the content:

Writing a content element

- 1. Write a string within a content element starting with [[and ending with]] (1).
- 2. Click somewhere outside the content element.
- 3. A modal window opens confirming the new placeholder (2).
- 4. Click OK and the placeholder will be added to the list (3).
- From the select list (Select placeholder type) select
 Measurement placeholder (4). Optional: in case of Multiple
 input elements, select the index. More than one selected
 measurement with multiple input is currently not supported.
- 6. Select one or more measurement(s) and the setting(s) (5, 6).
- 7. Optional: configure delimiters for enumerations of included values (7).
- 8. Click Save.

New placeholders [Beukocytes] 18 Immyramia Interpretation Services Servi





Reusing a content element

- Adding content elements which contains measurement placeholders.
- 2. A modal window opens confirming the new measurement placeholders (2).
- Click OK and the new measurement placeholders will be added to the list (3).
- 4. Adjust the settings of the placeholders (4, 5, 6).
- 5. Optional: configure delimiters for enumerations of included values (7).
- 6. Click Save.

On the *View* tab the placeholder is replaced with the deposited information as soon as specific measurements have been selected (8).

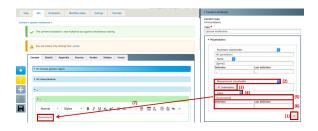
Please note:

- The value field must always be filled, regardless of whether it is used for rules or placeholders. Otherwise the general information cannot be detected.
- The value fields are limited in their number of characters (see Measurements). This affects both dummy and real transmitted

Define placeholders manually

- 1. Click + below the list of the used placeholders (1).
- 2. From the select list (Select placeholder type) select Measurement placeholder (2).
- 3. Select one or more measurements (3).
- 4. Select the measurement setting (4).
- 5. Fill in a name between [[...]] (5).
- 6. Optional: configure delimiters for enumerations of included
- 7. Copy the name [[...]] into the content element (6).
- 8. Click Save.

- Adding a placeholder
- Editing a placeholder
- Removing a placeholder
- Moving a content elementAdding notes to content elements



Adding a parameter linked general information placeholder

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

• Toolbar > Data > Content > Operations: View > Edit
• Toolbar > Data > Content > Operations: Parameters > Edit
• Toolbar > Data > Content > Operations: Workflow states > Edit
• Toolbar > Data > Content > Operations: Settings > Edit
• Toolbar > Data > Content > Operations: Translate > Edit
• Toolbar > Data > Content > Operations: Translate > Edit

Role
Content Editor

There are three different ways to add a parameter linked general information placeholder to the content:

Writing a content element

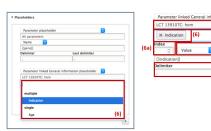
- Write a string within a content element starting with [[and ending with]] (1)
- Click somewhere outside the content element. A modal window opens confirming the new placeholder (2)
- 3. Click OK and the placeholder will be added to the list (3)
- 4. From the select list (Select placeholder type) select Parameter linked General information placeholder (4)
- 5. Adjust the parameter(s) for that the placeholder should be filled (5)
- Adjust the general information (6a), select the setting (6b).
 Optional: in case of Multiple input elements, select the index (6c). More than one selected general information with multiple input is currently not supported.
- Optional: configure delimiters for enumerations of included values.
- 8. Click Save.





Reusing a content element

- Adding content elements which contains parameter linked general information placeholders
- 2. A modal window opens confirming the new placeholders (2)
- 3. Click *OK* and the new parameter linked general information placeholders will be added to the list (3)
- From the select list (Select placeholder type) select Parameter linked General information placeholder (4)
- Adjust the parameter(s) for that the placeholder should be filled
- Adjust the general information (6). Optional: in case of *Multiple input elements*, select the index (6a). More than one selected general information with multiple input is currently not supported.
- 7. Select the setting (7).
- Optional: configure delimiters for enumerations of included values (8).
- 9. Click Save.



On the View tab:

- 8. Fill the value field and if desired the field of other settings of the general information (9a),
 - select the right parameter in the parameter tree (9b).
 - 9. Enter the external ID of the parameter (9c).
 - 10. Click Apply (10).
 - 11. The placeholder will be filled (11) in the content.

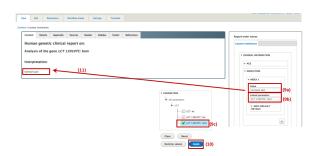
Please note:

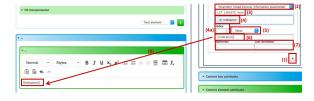
To generate a preview of the replaced placeholder, the value needs to be filled independently of the setting that is used for the content of the placeholder.

Define placeholders manually

- 1. Click + below the list of the used placeholders (1).
- 2. From the select list (Select placeholder type) select Parameter linked General information placeholder (2).
- 3. Adjust the one or more parameter(s) (3).
- 4. Select one or more general information and their setting(s) (4, 5).
- 5. Fill in a name between [[...]] (6).
- Optional: configure delimiters for enumerations of included values (7).
- 7. Copy the name [[...]] into the content element (8).
- 8. Click Save.

- Adding a placeholder
- Editing a placeholder
- Removing a placeholder
- Moving a content element
- Adding notes to content elements





Adding a parameter linked measurement placeholder

How to get here

Default way:

Toolbar > Data > Content > Operations: Edit

Other ways:

Toolbar > Data > Content > Operations: View > Edit
Toolbar > Data > Content > Operations: View > Edit
Toolbar > Data > Content > Operations: Workflow states > Edit
Toolbar > Data > Content > Operations: Settings > Edit
Toolbar > Data > Content > Operations: Settings > Edit
Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

There are three different ways to add a parameter linked measurement placeholder to the content:

Writing a content element

- Write a string within a content element starting with [[and ending with]] (1)
- Click somewhere outside the content element. A modal window opens confirming the new placeholder (2)
- 3. Click OK and the placeholder will be added to the list (3)
- 4. From the select list (Select placeholder type) select Parameter linked Measurement placeholder (4)
- 5. Adjust the parameter(s) for that the placeholder should be filled (5)
- Adjust the measurement(s) (6a), select the setting(s) (6b).
 Optional: in case of Multiple input elements, select the index (6c). More than one selected measurement with multiple input is currently not supported.
- Optional: configure delimiters for enumerations of included values.
- 8. Click Save.

Reusing a content element

- Adding content elements which contains parameter linked measurement placeholders
- 2. A modal window opens confirming the new placeholders (2)
- 3. Click *OK* and the new parameter linked measurement placeholders will be added to the list (3)
- From the select list (Select placeholder type) select Parameter linked Measurement placeholder (4)
- Adjust the parameter(s) for that the placeholder should be filled
 (5)
- Adjust the measurement(s) (6a), select the setting(s) (6b).
 Optional: in case of Multiple input elements, select the index (6c). More than one selected measurement with multiple input is currently not supported.
- Optional: configure delimiters for enumerations of included values.
- 8. Click Save.









On the View tab:

- 8. Fill the value field and if desired the field of other settings of the measurement(s) (7a), select the right parameter in the parameter tree (7b)
 - 9. Enter the external ID of the parameter (7c)
 - 10. Click Apply (8)
 - 11. The placeholder will be filled (9) in the content

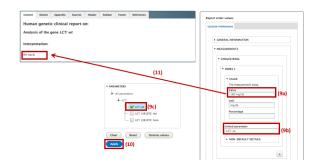
Please note:

To generate a preview of the replaced placeholder, the value needs to be filled independently of the setting that is used for the content of the placeholder.

Define placeholders manually

- 1. Click + below the list of the used placeholders (1).
- 2. From the select list (Select placeholder type) select Parameter linked Measurement placeholder (2).
- 3. Adjust the one or more parameter(s) (3).
- 4. Select one or more measurement(s) and their setting(s) (4).
- 5. Fill in a name between [[...]] (5).
- 6. Copy the name [[...]] into the content element (6).
- Optional: configure delimiters for enumerations of included values.
- 8. Click Save.

- Adding a placeholder
- Editing a placeholder
- Removing a placeholder
- Moving a content element
- Adding notes to content elements





Editing a placeholder

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: Toolbar > Data > Content > Operations: View > Edit Toolbar > Data > Content > Operations: Parameters > Edit Toolbar > Data > Content > Operations: Workflow states > Edit Toolbar > Data > Content > Operations: Settings > Edit Toolbar > Data > Content > Operations: Translate > Edit Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

Editing parameter placeholders

A parameter placeholder consists of three parts that can be modified:

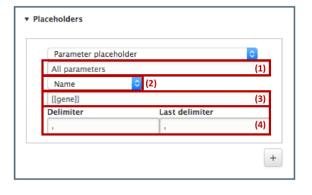
- Parameter class: by default, All parameters is selected, but if it is necessary to exclude parameters in the replacement, the parameter tree can be opened and a more specific class can be set
- 2. Metadata field: by default, *Name* is selected, but any metadata field can be selected.
- 3. String: determines how the placeholder is labeled in the content element. A string has to start with [[and end with]].
- optional: style the entire placeholder name in the content element by using text editor features. The replaced placeholder will be delivered in the desired style.
- 5. optional: configure delimiters for enumerations of included

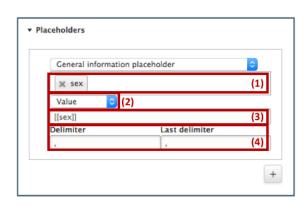
To connect placeholders with different parameter classes or metadata fields, select other options in the placeholder list of the content attributes.

Editing general information placeholders

A general information placeholder consists of three parts that can be modified:

- General information: a list of all optional and required general information either listed with name or ID if no name is set. For a multiple selection hold *Ctrl* on your keyboard and select the general information of interest (1).
- 2. General information setting: by default, *Value* is selected, but any general information setting can be selected (2).
- 3. String: determines how the placeholder is labeled in the content element. A string has to start with [[and end with]] (3).





- optional: style the entire placeholder name in the content element by using text editor features. The replaced placeholder will be delivered in the desired style.
- 5. optional: configure delimiters for enumerations of included values(4).

Editing measurement placeholders

A general information placeholder consists of three parts that can be modified:

- Measurement: a list of all measurements either listed with name or ID if no name is set. For a multiple selection hold Ctrl on your keyboard and select the measurements of interest (1).
- 2. Measurement setting: by default, //D is selected, but any measurement setting can be selected (2).
- 3. String: determines how the placeholder is labeled in the content element. A string has to start with [[and end with]] (3).
- optional: style the entire placeholder name in the content element by using text editor features. The replaced placeholder will be delivered in the desired style.
- optional: configure delimiters for enumerations of included values (4).

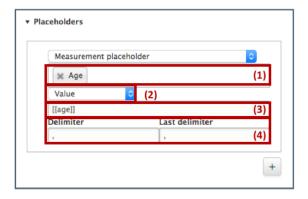


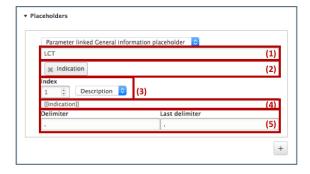
A parameter linked general information placeholder consists of four parts that can be modified:

- Parameter class or parameter: by default, All parameters is selected, but if it is necessary to exclude parameters in the replacement, the parameter tree can be opened and a more specific class can be set (1).
- General information: a list of all optional and required general information either listed with name or ID if no name is set. For a multiple selection hold Ctrl on your keyboard and select the general information of interest (2).
- 3. General information setting: by default, *Value* is selected, but any general information setting can be selected (3).
- String: determines how the placeholder is labeled in the content element. A string has to start with [[and end with]] (4).
- optional: style the entire placeholder name in the content element by using text editor features. The replaced placeholder will be delivered in the desired style.
- optional: configure delimiters for enumerations of included values (5).

Editing parameter linked measurement placeholders

A parameter linked measurement placeholder consists of four parts that can be modified:





- Parameter class or parameter: by default, All parameters is selected, but if it is necessary to exclude parameters in the replacement, the parameter tree can be opened and a more specific class can be set (1).
- Measurement: a list of all measurements either listed with name or ID if no name is set. For a multiple selection hold Ctrl on your keyboard and select the measurements of interest (2).
- 3. Measurement setting: by default, /D is selected, but any measurement setting can be selected (3).
- 4. String: determines how the placeholder is labeled in the content element. A string has to start with [[and end with]] (4).
- optional: style the entire placeholder name in the content element by using text editor features. The replaced placeholder will be delivered in the desired style.
- optional: configure delimiters for enumerations of included values (5).

Editing rule-based placeholders

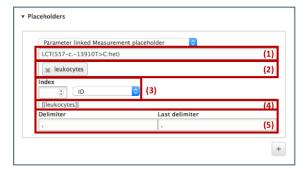
A rule-based placeholder consists of four parts that can be modified:

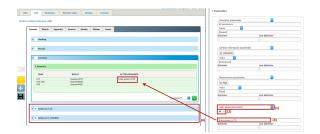
- a rule-based placeholder can be replaced by another placeholder type
- The exclusion set can be changed whereby the placeholder can be linked with other content
- 3. String: determines how the placeholder is labeled in the content element. A string has to start with [[and end with]].
- Content filled rule dependent into the placeholder can be changed or can be assigned to other rule-based placeholders by changing the exclusion set.

Please note:

- frame the placeholder with {{[[and]]}} within the text to use it as an iterative placeholder
- making rule-based placeholders iterative by adding curly braces is not supported
- flexible placeholders can be edited in the content element or template by changing the content manually

- Adding a placeholder
- Editing a placeholder
- Removing a placeholder
- Moving a content element
- Adding notes to content elements





Removing a placeholder

How to get here Default way: Toolbar > Data > Content > Operations: Edit Other ways: • Toolbar > Data > Content > Operations: View > Edit • Toolbar > Data > Content > Operations: Parameters > Edit • Toolbar > Data > Content > Operations: Workflow states > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Settings > Edit • Toolbar > Data > Content > Operations: Translate > Edit

Role Content Editor

There are three different ways to remove a general or iterative placeholder from the content.

Removing a content element

When all content elements which have contained a specific placeholder are removed, the not needed placeholder is set empty. For details see Removing content elements from content.

Removing the string

When the placeholder string is removed in the content element containing the placeholder, the not needed placeholder is set empty.

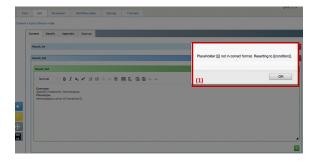
Removing from the list

If there is no content element using this placeholder, the string in the list of placeholders in the right sidebar can be set empty.

If there is still a content element using this placeholder, a modal window opens with an error message. After clicking *OK*, the placeholder will be added again to the list (1).

Removing a flexible placeholder

Flexible placeholders can be removed by deleting them in the content element or template.



- Adding a placeholder
 Editing a placeholder
 Removing a placeholder
 Moving a content element
 Adding notes to content elements

Report orders

Report orders overview

How to get here

Default way:

Toolbar > Data > Report orders

The list can be filtered by *Order ID*, *Orderer*, *Patient ID*, *Request received since*, *Response sent since* and *Processing status* (1).

The list shows the following information for each report order

- order ID. the delivered ID of the order
- orderer: the delivered name of e.g. the person or the institute that has ordered the content
- requested report. the title of the content which has the delivered uuid, linked to this content with selected parameters
- patient ID. the delivered ID of the patient for whom the content is ordered for
- request time: time point of the last request
- response time: time point of the last response
- order action
- processing status
- operations: possible actions, for example *view*

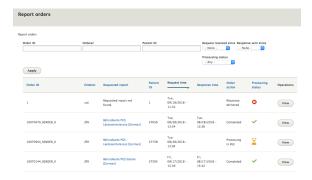
The list can be sorted by clicking the corresponding title.

Possible next steps

- Title link: Viewing content
- View operation: Viewing the report order

Role

Report Order Viewer



Viewing a report order

How to get here

Default way:

Toolbar > Data > Report orders > View

In addition to the information shown on the report orders overview (1) the following information is displayed when selecting a specific report order (2)

- General information: with their values and associated background information
- Measurements: with their values and associated background information
- Parameters: with their external ID and their internal name
- optional Results: with basically transmitted values
- optional Extracted Raw Data: with their raw values (further processed in variables)
- optional KMM endpoints: with their data from the KMM
- Processing log: gives information about the current processing status of the report order (for details see troubleshooting).
 Versions can be compared (3).

To view the content of a report order click on the *Requested* report (4). To identify the report order see the link with the *Order ID* in the sidebar (5). Click on it to go back to the overview (1,2,3).

Please note:

By changing values of general information, measurements and/or parameters the content does not reflect the ordered report anymore. (6).

Possible next steps

- Viewing content (the given parameters will be selected)
- Editing the parameter
- Editing metadata of the parameter

Role

Report Order Viewer





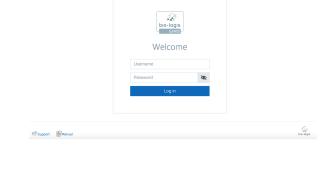


Self service upload portal

Login

Log in

- Enter the username
 Enter the password (click on the 'eye symbol' in the password box to reveal or hide password)
- 3. Click Log in



Log out

In the Menu bar of any given page, click Log out (1).

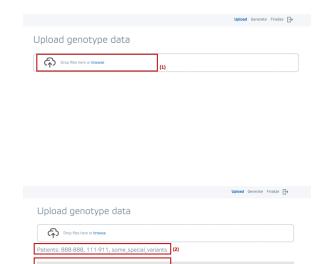
Upload

Upload data

- Drag and drop data file in the file section or click on the section (1) to browse through the data files on the computer and select one or more files to upload.
- 2. ID's of the patients selected for upload are listed (2).
- 3. The files selected for upload are listed (3).

Please note:

- Multiple data files can be uploaded as described above. Valid formats are the xml, csv and vcf.
- Once out of the upload page, the overview of the files will not be visible anymore.
- A new upload will also overlay the data.



Generate reports

Filter the file list to make your selection of patients for report generation:

- 1. Enter the Patient ID or
- 2. Enter the Request date
- 3. Click Apply (1)

Set language/s for the reports:

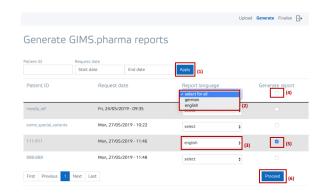
- the same for all patients from the *Report language* section above the grey line (2)
- individually for each patient (3)

Generate the report/s:

- for all patients at once by clicking the *Generate report* checkbox above the grey line(4)
- individually by clicking Generate report checkbox of each patient (5)
- click *Proceed* to generate the reports (6)

Please note:

Clicking the checkboxes is only possible after the language selection for the report.



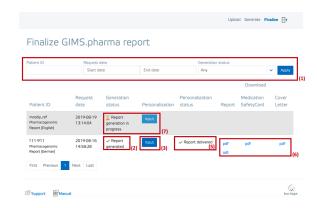
Finalize reports

The list can be filtered by *Patient ID, Request date* and *Generation status* (1).

When the Generation status is 'Report generated' (2), the report can be personalized:

- 1. Click Input in the Personalization column (3)
- 2. Optionally, fill in the form with the required information for personalization of the report and click Submit (4)

When the Processing Status is 'Report delivered" (4), the report, the template for the Medication Safety Card and the cover letter with login data for the pharma.sensor app and webportal can be downloaded by clicking on the desired format (odt and/or PDF (5).

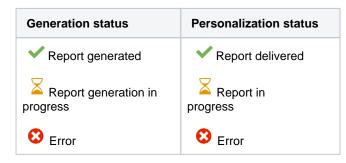


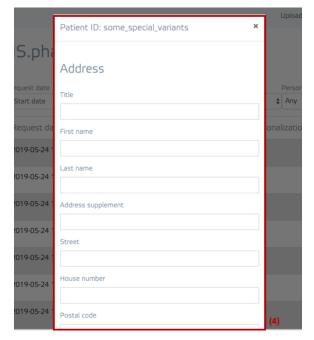
Please note:

- Only patients with previously triggered report generation can be found in this list.
- The type of generated report and the language in which it was generated are displayed under the Patient ID.
- Only for reports, whose generation are completed, the 'Input' button is enabled for personalization (7).
- The data is saved and ready to download for 30 seconds, after which it is deleted.

The Generation/Personalization Status.

- is depicted by an icon
- can have different meanings





Technical support

Request technical support

To send a support request:

- 1. click on the Support icon (1)
- 2. the Service desk with the support categories is opened
- 3. type the issue in the designated section (3) or select a category (4) and fill in the form



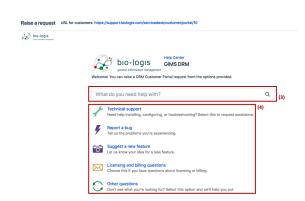
Using the manual

To find a giudance for using the Self service upload portal:

- click on the *Manual* icon (2)
 the manual ist opened (PDF)
- 3. check the detailed handling of the system to find a request answer

Please note:

The Support and Manualicons can be found on every page in the lower left corner.



Administrator Manual DRM

Configuring users

Viewing user list

How to get here

Default way:

Toolbar > Manage > People

The list can be filtered by name, email, role, permission and status (1).

The list shows the following information for each user

- Username
- Status: active or blocked
- Roles
- Member for: time since account creation
- Last access: time since last login
- Operations: possible actions, for example Edit

The list can be sorted by clicking the corresponding title (available username, status and last access).

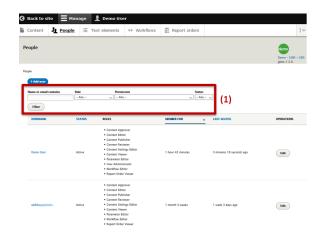
Please note:

The function is only available if you own the role 'User Administrator'.

Possible next steps

- Adding an user account
- free
- Viewing user profileEditing user profile
- Editing password
- Editing user profilesEditing user passwords

Role User Administrator



Editing user passwords

How to get here

Default way:

Toolbar > Manage > People > Operations: Edit

Other ways:

Toolbar > Manage > People > username > Edit

- 1. Enter the new password into Password
- 2. The password strength shows the quality of the new password
- 3. Repeat the new password into Confirm password
- 4. It is shown whether the passwords are equal
- 5. Click Save

Role

User Administrator



Possible next steps

• Viewtab: Viewing the profile

Editing user profiles

How to get here

Default way:

Toolbar > Manage > People > Operations: Edit

Other ways:

Toolbar > Manage > People > username > Edit

Modify the following settings

- E-mail address
- Username
- Password
- Status
- Roles
- Language settings
- Local settings

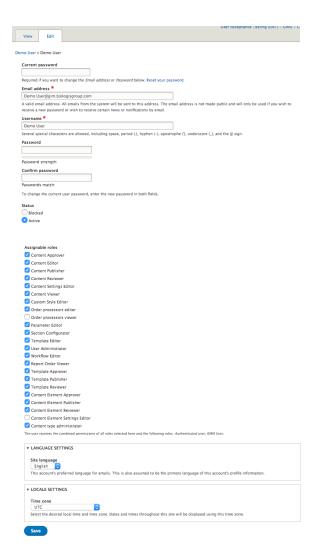
Click Save.

Please note:

The function is only available if you own the role 'User Administrator'.

Role

User Administrator



- Editing user passwords
- Viewing the profile

Adding an user account

How to get here

Default way:

Toolbar > Manage > People > Add user

Enter the required settings

- Username
- Password
- Confirm password

Optional settings are

- Email address
- Status
- Roles
- Language settings
- Locale settings

Click Create new account.

A message about the account creation is displayed.

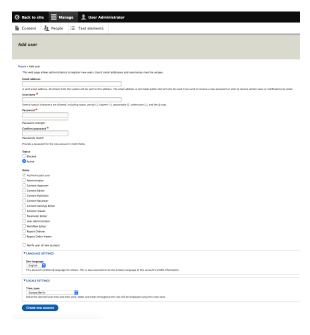
Please note:

The function is only available if you own the role 'User Administrator'.

Possible next steps

Viewing the profile

Role User Administrator



People » Add user

Created a new user account for Another user. No email has been sent.

Configuring new content types

How to get here

Default way:

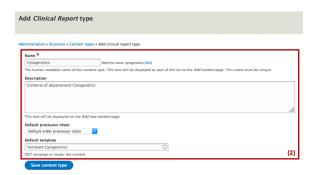
Toolbar > Manage > Structure > Content types

Role Content Type Administrator

New content types can be configured when documents with a specific setting of sections are used more frequently. The sections can also be configured specifically for this content type.

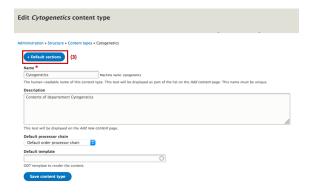
- 1. Click + Add clinical report type (1)
- 2. Enter the name of the content type. Optionally add a description, change the processor chain and link a template for this content type (2).



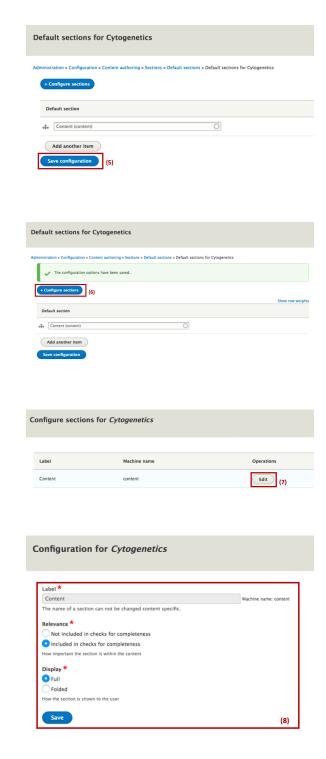


- 3. To configure the sections for the new content type, click +Default sections (3).
- 4. Click *Add another item* (4) and select the desired section. Repeat this process until all sections are in the list.
- 5. Click Save configuration (5).
- 6. Optional: to change the attributes of a section only for this content type, click *+Configure sections* (6).

Click *Edit* (7) for the desired section and make changes of the section attributes (8).







7. The new content type is now available for adding of new contents (9).



- Content overview

- Adding new contentConfiguring sectionsConfiguring workflows

Configuring content

Setting the used workflow

Setting the workflow of contents

How to get here Default way: Toolbar > Data > Content > Operations: Settings Other ways: • Toolbar > Data > Content > Operations: View > Settings • Toolbar > Data > Content > Operations: Edit > Settings • Toolbar > Data > Content > Operations: Workflow states > Settings • Toolbar > Data > Content > Operations: Parameters > Settings • Toolbar > Data > Content > Operations: Translate > Settings

Role Content Settings Editor

- 1. Select the workflow to use (1).
- 2. Click Save.



- Setting the workflow of content elements
- Editing the content
- Viewing the parameters of the content
- Viewing the workflow states of the content
- Translating the content

Setting the workflow of content elements

How to get here Default way: Toolbar > Data > Text/Media elements > Operations: Settings Other ways: Toolbar > Data > Text/Media elements > Operations: View > Settings Toolbar > Data > Text/Media elements > Operations: Edit > Settings Toolbar > Data > Text/Media elements > Operations: Workflow states > Settings Toolbar > Data > Text/Media elements > Operations: Workflow states > Settings Toolbar > Data > Text/Media elements > Operations: Parameters > Settings Toolbar > Data > Text/Media elements > Operations: Parameters > Settings Toolbar > Data > Text/Media elements > Operations: Translate > Settings

Role

Content Element Settings Editor

- 1. Select the workflow to use (1).
- 2. Click Save.



- Editing the setting of the content
- Editing the content
- Viewing the parameters of the content
- Viewing the workflow states of the content
- Translating the content

Setting the used template

How to get here Default way: Toolbar > Data > Content > Operations: Settings Other ways: • Toolbar > Data > Content > Operations: View > Settings • Toolbar > Data > Content > Operations: Edit > Settings • Toolbar > Data > Content > Operations: Workflow states > Settings • Toolbar > Data > Content > Operations: Parameters > Settings • Toolbar > Data > Content > Operations: Translate > Settings

Role Content Settings Editor

- 1. Select the template by adding the filename (1).
- 2. Click Save.



- Generating a report preview
- Editing the setting of the content
- Editing the content
- Viewing the parameters of the content
- Viewing the workflow states of the content
- Translating the content

Default setting of general information

How to get here Default way: Toolbar > Data > Content > Operations: Settings Other ways: • Toolbar > Data > Content > Operations: View > Settings • Toolbar > Data > Content > Operations: Edit > Settings • Toolbar > Data > Content > Operations: Workflow states > Settings • Toolbar > Data > Content > Operations: Parameters > Settings • Toolbar > Data > Content > Operations: Translate > Settings

Role Content Settings Editor

- 1. Choose between Required and Protected General Information.
- 2. Click on New General Information.
- 3. Obligatory: add the laboratory specific ID.
- Optional: add Status, Description, Domain, Name.
 Please note: Information are deposited here as default. If other, individual information are transmitted from the LIMS, these are used in the content.
 - If no individual information are transferred, the DRM verifies whether a default is deposited and adds it to the data of this case.
- 5. Click Save.



- · Editing the setting of the content
- Editing the content
- Viewing the parameters of the content
- Viewing the workflow states of the content
- Translating contents

Default setting of measurements

How to get here Default way: Toolbar > Data > Content > Operations: Settings Other ways: Toolbar > Data > Content > Operations: View > Settings Toolbar > Data > Content > Operations: Edit > Settings Toolbar > Data > Content > Operations: Workflow states > Settings Toolbar > Data > Content > Operations: Parameters > Settings Toolbar > Data > Content > Operations: Parameters > Settings Toolbar > Data > Content > Operations: Translate > Settings

Role Content Settings Editor

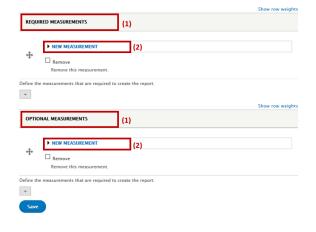
Choose between Required or Optional Measurements(1). Click on *New Measurement* (2).

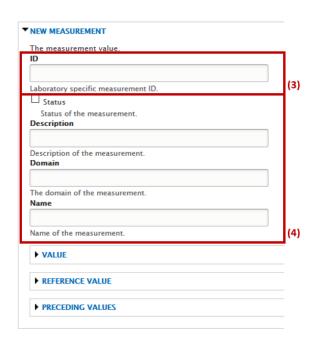
Deposit the default settings:

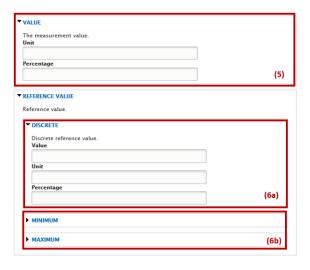
- 1. Obligatory: add the laboratory specific ID(3).
- 2. Optional: add Status, Description, Domain, Name (4).
- Optional: add *Unit* and/or *Percentage* for the expected value (5).
- Optional: add Value, Unit and/or Percentage for a single reference value (Discrete, 6a) or for a reference range (Minimum - Maximum, 6b).
- 5. Optional: add *Unit* and/or *Percentage* for *Preceding Values* (7).

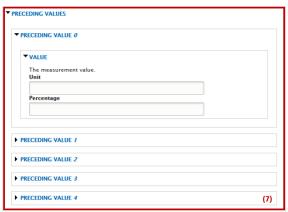
Please note: All optional information are deposited here as default. If other, individual information or values are transmitted from the LIMS, these are used in the content. If no individual information are transferred, the DRM verifies whether a default is deposited and adds it to the data of this case.

Click Save.









- Editing the setting of the content
 Editing the content
 Viewing the parameters of the content
 Viewing the workflow states of the content
 Translating the content

Role

Content Settings Editor

Setting the used processor chain

How to get here Default way: Toolbar > Data > Content > Operations: Settings Other ways: • Toolbar > Data > Content > Operations: View > Settings • Toolbar > Data > Content > Operations: Edit > Settings • Toolbar > Data > Content > Operations: Workflow states > Toolbar > Data > Content > Operations: Parameters > Settings Toolbar > Data > Content > Operations: Translate > Settings

- 1. Select the desired processor chain from the dropdown menu
- 2. Click Save.

• Editing the setting of the content

 Viewing the parameters of the content Viewing the workflow states of the content

Editing the content

Translating the content

The unique ID identifying the clinical report in an external system, for example a LIS or KIS. Workflow * Default 💠 Default order processor chain Template ODT template to render the content. Possible next steps

View Edit Parameters Workflow states Settings Content » Lactose inteolerance » Settings This content translation is now locked by you against simultaneous editing. You can unlock it by clicking here: unlock

Edit Settings of Clinical Report Lactose inteolerance [English]

Configuring workflows

Overview of workflows

How to get here

Default way:

Toolbar > Manage > Workflows

The list shows the available workflows for all components in the system.

- Content elements
- Content
- Report Template

For each workflow the following information is shown:

- label
- operations: possible actions, for example *edit*

Possible next steps

- Adding a new workflowEditing a workflow

Role

Workflow Editor



Editing a workflow

How to get here

Default way:

Toolbar > Manage > Workflows > Edit

Other ways:

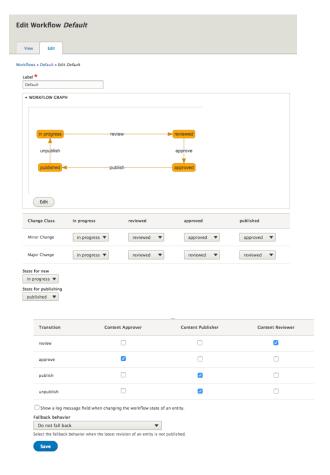
Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit > Back to workflow

The following options are available for editing workflows:

- Label: how the workflow is labeled in the overview of workflows
- Workflow graph: click the *Edit* button to edit the workflow graph
- Change class: changes of workflow states based on saving of modification in the content. Minor or major change can induce different workflow states for the parameter combinations. Define here whether and how far the affected parameter combination is reverted in the review process.
 - Minor changes are recommended for small changes such as spelling mistakes etc.
 - Major changes are recommended for adding new content or reorganization etc.
- for each combination of current state and change class the new state of the content
- State for new: the default workflow state
- State for publishing: the workflow state a content has to have in order to be delivered
- Transition: which role an user has to have in order to change the workflow state of a content
- Show a log message field when changing the workflow state of an entity: for each workflow state change it is possible to leave a message (1)
- Fallback behavior: 3 different states selectable for the publishing behavior of content elements in this document after changing
 - Do not fallback (default)
 - Fall back to the newest published revision
 - Fall back to the translation source if that is published

Click Save.

Role Workflow Editor





- View a workflow graphOverview of workflowsAdding a new workflow

Adding a new workflow

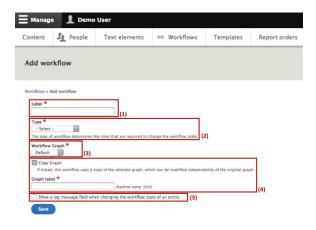
How to get here

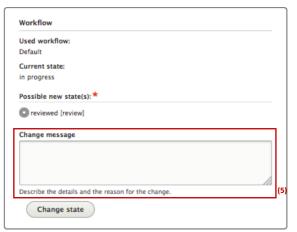
Default way:

Toolbar > Manage > Workflows > Add workflow

- 1. Enter the label (1).
- Select the type of components the workflow will be used for.
 For example *Content* should be used for clinical reports,
 recommendations, etc. (2).
- 3. Select the workflow graph to be used (3).
- 4. Decide whether the selected workflow graph should be used directly, or if a copy should be generated (4).
- Optional: In case a new copy of the selected workflow graph is generated, give it its own label (4).
- Optional: Choose to show a text area to allow tracking the rationale behind a workflow state change (5).
- 7. Click Save.

Role Workflow Editor





- View a workflow graph
- Overview of workflows
- Editing a workflow

View a workflow graph

How to get here

Default way:

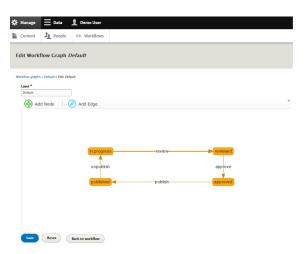
Toolbar > Manage > Workflows > Edit

The workflow graph *Default* is predefined. Therefore, four workflow states are fixed, they can be renamed but they cannot be deleted. Arrows determine the chronological procedure of the workflow states. The workflow graph can be dragged and zoomed in.

To return to workflow click Back to workflow.

To modify the workflow graph see Editing a workflow graph.

Role Workflow Editor



- Adding a new workflow state
- Renaming a workflow state
- Moving a workflow state
- Removing a workflow state
- Adding a new workflow transition
- Renaming a workflow transition
- Moving a workflow transition
- Removing a workflow transition

Editing a workflow graph

Adding a new workflow state

How to get here

Default way:

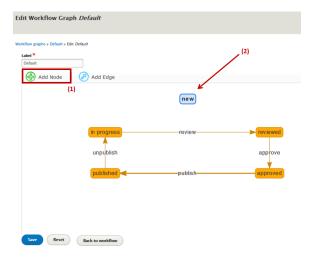
Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit

- 1. Click Add Node (1)
- Click in an empty space into the workflow graph to place the new node.
- 3. A workflow state with the label new appears (2)

Note: the default workflow states are displayed orange, the custom workflow states are displayed blue.

Click Save to keep the changes or Reset to discard them.

Role Workflow Editor



- View a workflow graph
- Renaming a workflow state
- Moving a workflow state
- Removing a workflow state
- Adding a new workflow transition
- Renaming a workflow transition
- Moving a workflow transition
- Removing a workflow transition

Renaming a workflow state

How to get here

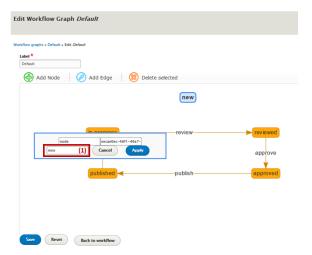
Default way:

Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit

- 1. Double click the new workflow state
- 2. In the modal window, enter the new name (1)
- 3. Click Apply

Click Save to keep the changes or Reset to discard them.

Role Workflow Editor



- View a workflow graph
- Adding a new workflow stateMoving a workflow state
- Removing a workflow state
- Adding a new workflow transition
 Renaming a workflow transition
- Moving a workflow transition
- Removing a workflow transition

Moving a workflow state

How to get here

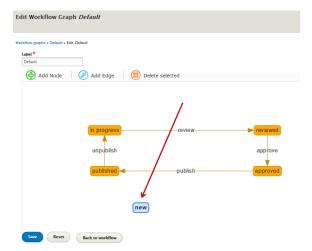
Default way:

Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit

The workflow state can be moved by dragging it.

Click Save to keep the changes or Reset to discard them.

Role Workflow Editor



- Adding a new workflow state
- Renaming a workflow state
- View a workflow graph
- Removing a workflow state
- Adding a new workflow transition
- Renaming a workflow transition
- Moving a workflow transition
- Removing a workflow transition

Removing a workflow state

How to get here

Default way:

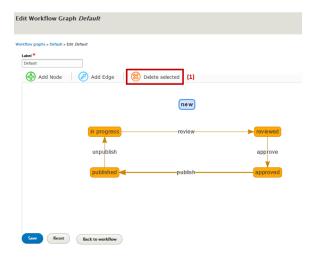
Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit

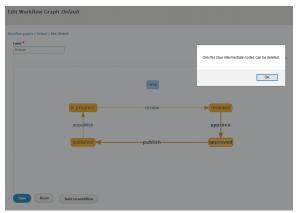
- 1. Click on the custom workflow state
- 2. Click on Delete selected (1)

Click Save to keep the changes or Reset to discard them.

Note: Only blue custom workflow states can be deleted. The orange predefined workflow states can not be deleted.

Role Workflow Editor





- Adding a new workflow state
- Renaming a workflow state
- Moving a workflow state
- View a workflow graph
- Adding a new workflow transition
- Renaming a workflow transitionMoving a workflow transition
- Removing a workflow transition

Adding a new workflow transition

How to get here

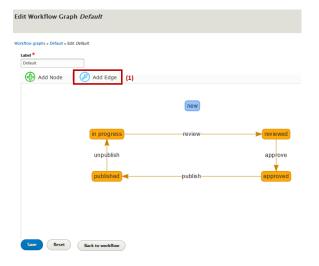
Default way:

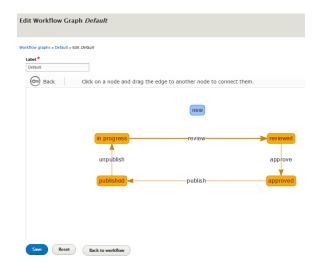
Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit

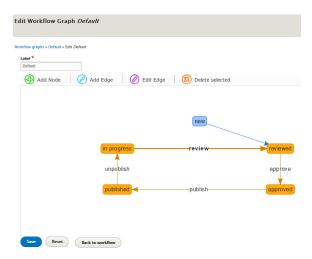
- 1. Click Add Edge (1)
- 2. Click the workflow state where the new link should start
- 3. Drag the workflow transition to another workflow state to connect them

Click Save to keep the changes or Reset to discard them.

Role Workflow Editor







- Adding a new workflow stateRenaming a workflow stateMoving a workflow state

- Removing a workflow state
 View a workflow graph
 Renaming a workflow transition
 Moving a workflow transition
- Removing a workflow transition

Moving a workflow transition

How to get here

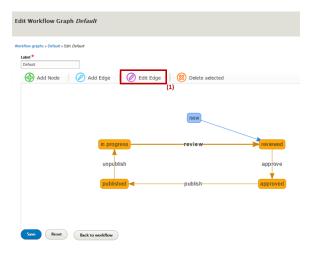
Default way:

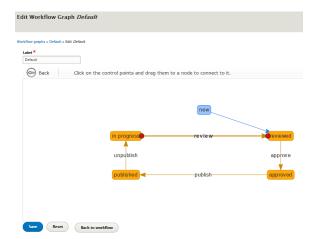
Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit

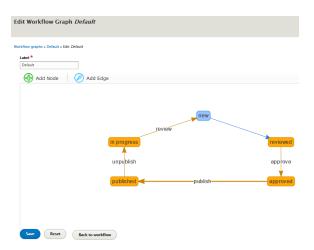
- 1. Click the workflow transition
- 2. Click Edit Edge (1)
- Click one endpoint of the workflow transition and drag it to another workflow state

Click Save to keep the changes or Reset to discard them.

Role Workflow Editor







- View a workflow graph
 Adding a new workflow state
 Renaming a workflow state
 Moving a workflow state
 Removing a workflow state
 Adding a new workflow transition
 Renaming a workflow transition
 Removing a workflow transition

Removing a workflow transition

How to get here

Default way:

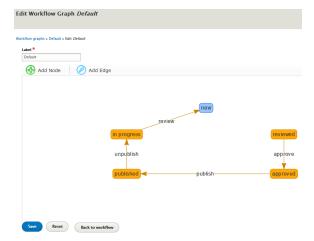
Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit

- 1. Click the workflow transition
- 2. Click Delete selected (1)

Click Save to keep the changes or Reset to discard them.

Role Workflow Editor





- View a workflow graph
- Adding a new workflow state
- Renaming a workflow state
- Moving a workflow state
- Removing a workflow state
- Adding a new workflow transitionRenaming a workflow transition
- Moving a workflow transition

Renaming a workflow transition

How to get here

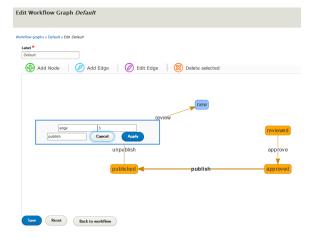
Default way:

Toolbar > Manage > Workflows > Edit > Workflow Graph > Edit

- 1. Double click the workflow transition
- 2. In the modal window, enter the new name
- 3. Click Apply

Click Save to keep the changes or Reset to discard them.

Role Workflow Editor



- View a workflow graph
- Adding a new workflow state
- Renaming a workflow state
- Moving a workflow state
- Removing a workflow state
- Adding a new workflow transition
- Moving a workflow transition
- Removing a workflow transition

Configuring custom styles

Custom styles overview

How to get here

Default way:

Toolbar > Manage > Configuration > Custom styles

The list shows the available custom styles that can be used for editing text. For each custom style the following is shown:

- Label
- ID: Used to define styling in templates.
- HTML class: Any text to which a custom style is applied will receive the respective class in the generated report.
- Color: Used to mark any text visible with a custom style in the Edit and View mode.
- Operations: Possible actions, for example Edit or Delete.

The list of custom styles can also be reordered by using drag-and-drop.

The order of the custom styles in the overview determines the order of custom styles displayed in the dropdown menu in content elements in the *Edit* mode.

Possible next steps

- Adding a new custom style
- Editing a custom style
- Deleting a custom style

Role

Custom Style Editor



Adding a new custom style

How to get here

Default way:

Toolbar > Manage > Configuration > Custom styles > Add custom style

- 1. Enter the *Label*. The custom style will be available in the user interface with this name.
- Enter the HTML Class. The HTML class is needed to identify
 the custom style when transferring it between different
 systems. It is suggested to use lowercase words connected
 with hyphens (e.g. Label: Product name, HTML class: productname)
- 3. Select the *Color.* The custom style will be delivered in the user interface with this color.
- 4. Click Save.

Possible next steps

- Custom styles overview
- Editing a custom style
- Deleting a custom style

Role Custom Style Editor



Editing a custom style

How to get here

Default way:

Toolbar > Manage > Configuration > *Custom styles* > Operations: *Edit*

Role Custom Style Editor

Following features can be edited:

- label: How the custom style is labeled in the custom styles
 overview.
- HTML class: The class that will be used for the custom style in the generated reports.
- color: The color that will be used to mark the custom style in the user interface.

Click Save.



- Deleting a custom style
- Custom styles overview



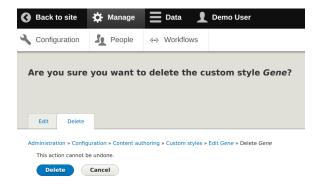
Deleting a custom style

How to get here Default way: Toolbar > Manage > Configuration > Custom styles > Operations: Delete Other ways: Toolbar > Manage > Configuration > Custom styles > Operations: Edit > Delete

Click *Delete* to remove a custom style from the list of the dropdown menu of availlable styles in the content elements in the text editor. Text marked with this style will not longer be labelled.

If you are certain you want to delete this style, click *Delete*.

Role Custom Style Editor



Possible next steps

· Adding a new custom style

Configuring sections

Sections overview

How to get here

Default way:

Toolbar > Manage > Configuration > Sections > Available sections

The list shows the available sections that can be integrated within content. For each section the following is shown:

- label: how the section is called within DRM
- machine name: how the section is identified outside DRM (e. g. in templates, in LIMS)
- operations: possible actions, for example *Edit*

Role Section Configurator

Administration » Configuration » Content authoring » Sections » Default section configuration entities

ABEL	MACHINE NAME	OPERATIONS
bstract	abstract	Edit
Anamnesis	anamnesis	Edit
Appendix	appendix	Edit
Chances	chances	Edit
Characteristic	characteristic	Edit
Content	content	Edit
Petails	details	Edit
ooter	footer	Edit
enetics	genetics	Edit
leader	header	Edit
ntro	intro	Edit
Objective	objective	Edit
ersonal result	personal_result	Edit
lanning	planning	Edit

- Adding a new section
- Editing a section

Adding a new section

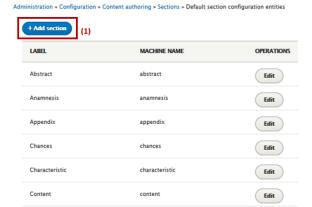
How to get here

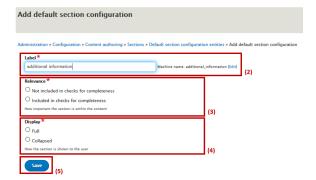
Default way:

Toolbar > Manage > Configuration > Sections > Available sections

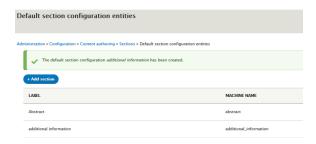
- click + Add section (1)
- enter the label of the section (2)
- the machine name will be generated automatically, optional: the machine name can be edited by clicking Edit (2a)
- select the relevance (3)
- select the display (feature not implemented yet) (4)
- click *Save* (5)

Role Section Configurator









- Set default set of sections for new contentAdding a section to content

Editing a section

How to get here

Default way:

Toolbar > Manage > Configuration > Sections > Available sections > Edit

- enter the label (1)
- select the relevance to determine whether it has to be included in checks for completeness (2)

Included in checks for completeness:

- the section contains the main information of the content
- a warning is displayed if the content of the section is integrated incompletely in the document that shall be generated

e.g. required general information are not delivered. In this case a warning is shown and therefore the report is not generated.

Not included in checks for completeness

- the section only contains additional information.
- a warning is never generated. Content is also delivered when parts of the section are missing.
- select the display (feature not implemented yet) (3)
 Choose Full if the section should always be fully shown when viewing or editing the content.
 Choose Folded if the section should only be opened when needed.
- click Save (4)

Possible next steps

- Sections overview
- Adding a new section
- Integrating content

Role

Section Configurator



Set default set of sections for new content

How to get here
Default way:

Toolbar > Manage > Configuration > Sections > Default sections

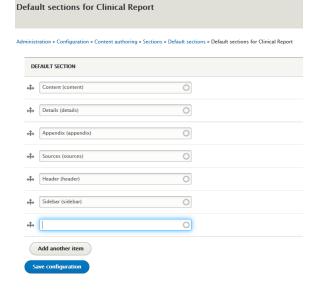
Define which set of sections shall be used for new content per default. Already existing content is not affected by changes made here.

- select the content type (1)
- optional: rearrange the sections by drag-and-drop
- optional: remove a sections by removing its label
- optional:add another section by clicking Add another item and using the autocomplete box (note: only sections listed in sections overview can be used) (2)

Click Save configuration (3).









- Adding a section to contentEditing a section

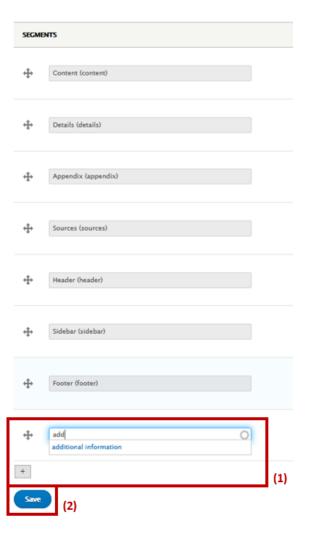
Adding a section to content

How to get here Default way: Toolbar > Data > Content > Operations: Settings Other ways: • Toolbar > Data > Content > Operations: View > Settings • Toolbar > Data > Content > Operations: Edit > Settings • Toolbar > Data > Content > Operations: Workflow states > Settings • Toolbar > Data > Content > Operations: Parameters > Settings • Toolbar > Data > Content > Operations: Translate > Settings

- Select the new section (1)
 Optional: rearrange the sections by drag and drop
- 3. Click Save (2)

Note: only sections listed in overview of sections can be used. If the section is not available yet, see Adding a new section.

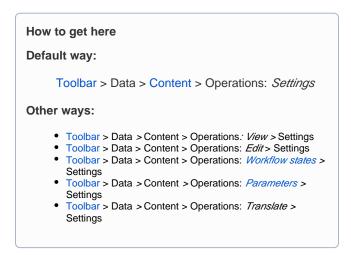
Role Content Settings Editor



- Editing the setting of the content
- Editing the content
- Viewing the parameters of the content

- Viewing the workflow states of the contentTranslating the content

Removing sections from existing content

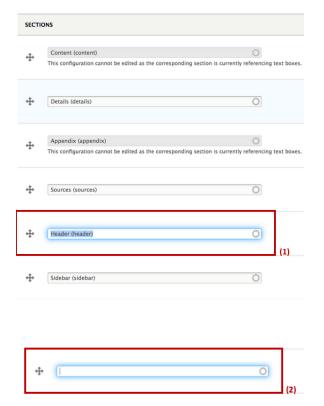


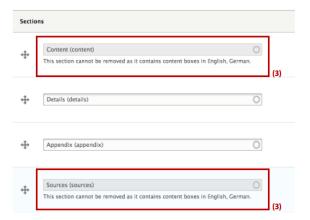
Role Content Settings Editor

- 1. Delete the name of the section to be removed (1,2)
- 2. Click Save

Please note:

To remove a section from existing content the section should not contain any content boxes in all translations, otherwise the deletion is disabled (3). A message is created describing why the section could not be reconfigured.





- Editing the setting of the content
 Editing the content
 Viewing the parameters of the content
 Viewing the workflow states of the content
 Translating the content

FAQ DRM

1) Why is it possible to select contradictory parameters simultaneously?

On a parameter tree, it is possible to select several parameters at the same time even though they might contradict with each other (e.g. selecting parameters 'homozygous' and 'heterozygous'). This feature is designed purposefully to achieve the following:

- a) the user can define rules as 'at least two' of the given parameters even though they are contradictory with each other
- b) contradictory parameters can exist in context with exclusions sets
- c) the user is able to identify any erroneous data that might have possibly landed in DRM from LIMS/LIS.

2) Can I display a final layout of my content in the view tab?

In the view tab, you can select report order values and observe how this affects the display of the corresponding content boxes. You can either walk through different sections or choose display sections as show all. Generating a preview enables you to take a look at how your content will be integrated to your template for the selected report order values. On the other hand, the final layout depends on the receiving system (e.g. LIMS) that is unknown to GIMS. bio.logis GIM provides an add-on, Report Layout Engine (RLE), which serves as a 'content to layout converter'. Together with RLE and DRM you can request a final layout at your receiving system. This way, differently than generating a preview, you can also include patient specific data (possibly encryted /decrypted) in your final layout.

3) Why should I use text editor features in content elements?

Defining various text editor features (e.g. bold, superscript, heading 3) in a given content box will mark the text for a matching format in final layout.

4) Why do I get an error message for setting my heading formats incorrectly?

Heading format can only be set following specific guidelines. Please follow the heading formating instructions described in Formats.

5) Why are the references allocated to a content box and not to a content element?

References can only be listed in a content box and not in a content element. This is to ensure that one content element with specific references is not erroneously reused in an unrelated content. References are placed in content boxes in a content-specific manner.

6) Why do only certain content boxes/elements automatically open in the Edit tab?

When switching from the View tab to the Edit tab, certain content elements/boxes automatically open. This reflects a certain selection of report order values in the View tab. Content boxes with the rule 'Always true' are always open in the edit tab.

7) How do I integrate personal information such as an indication into my report?

To integrate personal information into the delivered content a GIMS-LIMS interface is required. General information can be sent from LIMS to GIMS and can be directly included into flexible placeholders in the report.

8) How can I use DRM in a time-efficient manner, especially when there is a constant flow of new genetic variants?

You can avoid generating new rules, parameter trees, content elements every time a new variant arrives in DRM. For this, you should order the classes in your parameter tree with variants as different parameters. Next, you should use these classes to associate your content boxes with appropriate rules. The new variant can then be sorted as a new parameter in this tree. This way it is automatically involved with the corresponding rules/content boxes, which will in turn save time.

9) How can I delete rows or columns in a table?

Right-click into a table cell within the row or column, you want to delete. Select Row | Column and click Delete Row | Delete Column. Please note that this does not alter the cells of the header

10) Why is the outdated mark not set automatically for translations after editing a text element?

GIMS has been configured to handle translations independently, no synchronous processing is dictated after translation. This guarantees that not exactly the same number of content elements must be specified in all translations. In support of this

flexibility, the exact number of content elements in all the translations is not specified, but this also makes a direct outdated link impossible. An automatic outdated labelling is not wanted, since it does not distinguish between changes in content and linguistic reformulations which concern only one language.

11) Why do I have a non-replaced placeholder in the View tab?

Placeholders are replaced by their corresponding metadata (additional information like description, ID, name etc.) when their values are also applied. For example when the value (e.g. parameter value: LCT c.13910 T>C: hom) is missing the link to the metadata (e.g. phenotype: pathogenic) and hence the placeholder is also missing.

12) Why is my newly created tag/content element /translation not displayed in the search list?

It takes 5 to 10 minutes until newly created content appears in the search lists of the DRM. In case content is not displayed after 10 minutes, please check whether you have created your content correctly.

13) I would like to reuse one of my content elements by drag and drop. Why is it not displayed in the content box I have chosen?

The content element needs to be dropped exactly into the chosen content box. If it is dropped on the title or other areas of the content box, the content element might not be detected. In this case it would not be displayed.

14) Why are report order values prefilled and inactivated in the View tab?

In case identical variables are shared among contents that are integrated, values are taken over in downstream contents where they can not be changed. The entered values of these variables are saved even on the *View* tab of another content. Thus, values might be set already in an integrated content and previously set variables are locked until clicking the clear button.

15) When I am generating new computed general information or measurements, why is it not possible to set any dummy values for them?

GIMS DRM can compute general information and measurements based on other variables (e.g. sex can be computed via karyotype). For this reason it would be irrelevant to set any dummy value. Therefore dummy values are hidden when generating a computed general information or measurement.

Glossary DRM

Barcode element

Barcode element is a content element, which is converted into a QR code during report generation.

- · contains plain text
- can include placeholders (iterative and flexible placeholders are not supported)
- can be tagged
- can have notes
- · can be translated
- can be embedded in different sizes and positioning in the content
- does not support text editor features
- can wrap following content elements
- editing history can be traced at Revisions tab
- translations can be marked as outdated
- located on content within a content box
- displayed on the content view (as a barcode preview)
- read with a barcode scanner app

(i) Tip

Barcode elements can link to websites directly.

- Adding content elementsContent element

Change class

The change class describes the type of change that has been made.

- defined when saving content or content element while editing
- possible values: minor, major
 depending on the predefined workflows for minor and major class saving can lead to a change of the workflow state for the selected and all other affected parameter combinations

- Editing a content element
- Translating content elements
- Editing contentEditing a workflow

Class

A class is a set of parameters.

- created by the user
- depicted with a closed folder in the parameter tree
- in each content, a preset class All parameters with all relevant parameters
- can be translated
- does not contain newly set parameters
- can be edited to make metadata fields visible or invisible
- can be operated by rules
- placeholders can use metadata of a class



It is recommended that the rules only contain classes and no explicit parameter. This saves time writing content for new parameters, when they only need to be sorted into their class.

- Replacing a dummy parameterAdding and editing parameters
- Setting the rule of a content box
- Adding and editing a class
- Parameter overviewEditing a placeholder
- Generating a parameter tree

Content

The content is a document, where all contents for a topic is managed. It defines what is delivered for a report order.

- identified by its UUID
- has a content type
- applying report order values determines content outputs
 consists of several sections
- can be translated
- editing history can be traced at Revisions tab
- can be locked (when opened by one user Edit, Parameter, Settings tabs are blocked for other users for 30 minutes; translations are not affected)



Use a new content for each clinical question.

- Editing contentViewing content
- Report orders overview
- Inactivating a content box
- Translating contents
- Viewing content history
- Content overview
- Editing a content element
- Adding content elements
- Editing a placeholder
- Adding a new metadata field Editing a workflow
- Removing content elements from content
- Content locking

Content box

A content box is a space where you can place one or more content elements (text, media or barcode elements)

- found under a section of the content
- can have at title (if no title has been deposited, the title of the top content element of the content box is displayed)
- has a rule
- can have references
- can be set inactive and not used in report generation even though its rule is fulfilled
 - · inactive content boxes are marked by faded color in the Edit mode
- can belong to an exclusion set
- can include sections of other contents
- can be set includable and displayed as replacement for a rulebased placeholder
- can have a CSS class for further styling on report generation

- Adding a content box to content
- Viewing content
- Moving a content box
 Using similar content elements
- **Editing content**
- Translating contents
- Adding content elements
- Setting an exclusion set to a content box
- Removing a content box from content
- Setting references to a content box Setting the rule of a content box
- Inactivating a content box
- Integrating content
 Adding a placeholder

Content element

A content element is the smallest unit of the content. There are three types of content elements: text elements, media elements and barcode elements.

- is located on content within a content box
- multiple content elements can be arranged side by side
- can have notes
- editing history can be traced at Revisions tab
- can be marked as outdated
- can be moved to other content boxes
- can have tags
- in case of concurrent editing, the conflicts can be resolved individually

(i) Tip

In order to increase the reusability of content elements, it is recommended that the text contains only one statement.

- Viewing notes of content elements
- Editing content
- Moving a content element
- Editing a content element
- Using similar content elements
- Adding content elements
- Setting an exclusion set to a content box
- Editing a placeholder Translating contents
- Viewing content elements
- Removing content elements from content
- Managing content element revisions
- Adding notes to content elements
- Translating content elements
- Publishing content element
- Working with tags

Content integration

Content integration enables the insertion of sections of other contents into a defined position in the present content.

(i) Tip

Content integration allows separate management of report fragments. These independent fragments can later be assembled into a comprehensive clinical report.

- allows management of frequently modified content elements in one place (e.g. modifications on a header, footer or sidebar of a clinical report can be managed by integrating them as page fragments)
- sections can be shared between more than one content
- placeholders filled with metadata from integrated sections are transferred identically into the target content

- Integrating contentPage fragment

Content type

A content type describes the kind of content and provides configuration of default settings.

- default is Clinical report

- has its own section configuration
 has its own template configuration
 has its own configuration of processor chains
 creation and configuration can only be done by an administrator

- Adding new content
- Content overview

CSS class

A CSS class provides additional styling information for the report generation on a content box.

- special feature which can be enabled on request
 the CSS class will be added to the output after the report is generated so additional styling can be done

Mentioned in:

• CSS classes

Custom style

Custom styles allow to mark up parts of a text in text elements or captions of media elements with custom styling.



Using custom styles enables a more individual formatting of content elements.

• can be added or edited by the custom style editor

- is avialable in the text editor features > styles of content element
- has an associated color that is used to mark up the phrase in the content element.
 - Please note: Coloring is only a tool for the user to find the custom styled words more easily in the text. It does not correspond to the final format.
- marking a phrase with a custom style allows a special formatting for this text area by the Report Layout Engine or requesting system (e.g. LIMS, LIS)

- Styles
- Configuring custom styles

Exclusion set

An exclusion set is a group of mutually exclusive content boxes.

- not mandatory to use but recommended as it provides additional validation on the content

 indicates contradictory content
- if more than one content box of an exclusion set has its rule fulfilled, the report will not be processed
- each exclusion set has its own colored symbol

Mentioned in

• Setting an exclusion set to a content box

External ID

The external ID identifies a parameter.

- is given by the ordering system (e.g. LIMS, LIS)
 cannot be set manually
 arbitrary string of up to 20 characters
 if an unknown external ID is received, a corresponding parameter is created

Mentioned in

Viewing a report order

Format

In addition to sections, formats allow an improved structuring of the content in text elements which can be interpreted by the receiving system.

- available formats: Normal and Heading 1 to 6
- a text element may contain maximum one heading
 a text element may not contain normal text together with a heading



Use different formats to structure your content. For example, use Heading 1 and Heading 2 to list two text elements hierarchically.

Mentioned in

Formats

General information

General information can be provided to DRM via an interface to a requesting system (e.g. LIMS, LIS). They can be inserted into the delivered content automatically.



(i) Tip

By generating content boxes that follow a general information-dependent rule, it is possible to prepare reports with case- or patient-specific data automatically.

- General information
- Viewing content
- Default setting of general information
- Adding new general information
- Editing general information
- Removing general information
- Setting the rule for general information
- FAQ DRM
- are case-specific data, e.g. patient age, sex or previous diagnoses
- can be included in content elements or templates by placeholders
- can be adressed in the rule engine effecting the delivery of diverse content for certain conditions
- can be required, protected, computed, linked to parameter(s) and/or multiple for input elements (for details see General information)

Inactive parameter

If a parameter is not needed anymore, it can be inactivated. An inactive parameter is not shown on the parameter tree, in the Edit or View tabs.

- only possible if the parameter is not used in any rule or placeholder of the content

 • is displayed gray on overview of parameters
- can be reactivated

- Inactivating a parameter
- Reactivating a parameter

Machine name

A machine name allows the system to identify entities. It is similar to the label or title of an entity which is more readable for users, but may not be unique and contain special characters.

- how the section is identified in the receiving system (e.g. the LIMS or GIMS RLE)
- contains only lowercase letters, numbers, and underscores
- is unique

- Generating a processor chain
- Adding a new section
- Section
- Sections overview

Measurement

Measurements can be provided to DRM via an interface to a requesting system (e.g. LIMS, LIS). They can be inserted into the delivered content automatically.

(i) Tip

By generating content boxes that follow a measurement-dependent rule, it is possible to prepare reports with case- or patient-specific data automatically.

- Measurements
- Viewing content
- Default setting of measurements
- Adding new measurements
- Editing measurementsRemoving measurements
- are case-specific results, e.g. blood values, ferritin levels
 can be included in content elements or templates by placeholders
- · are inserted in a table
- can be adressed in the rule engine effecting the delivery of diverse content for certain measurement
- can be required, computed, linked to parameter(s) and/or multiple for input elements (for details see Measurements)

Media element

A media element is a specific content element which contains images with captions.

- the format of images are .jpg or .png, whereas the caption is restricted to html
- can be embedded in different sizes and positioning in the content
- following content elements can wrap it
- can be tagged
- can have notes
- reusable by integrating the same image
- is located in content within a content box
- caption can contain placeholders
- translatable
- editing history can be traced at Revisions tab
- translations can be marked as outdated

(i) Tip

Media elements can be managed in the image database, reused and edited in different contexts.

- Viewing content elementsAdding content elements
- Editing a content element
- Using similar content elements
- Adding notes to content elements
- Removing content elements from content
- Moving a content element
- Translating content elements
- Managing content element revisions

Metadata

Metadata are data that deliver additional information about a parameter.

- inserted into the content via placeholders
 is set visible/hidden for a class of parameters
 more metadata fields can be added
- has a context where it is valid

- Replacing a dummy parameterEditing metadata of a parameter

Metadata context

Metadata context defines where the metadata of a parameter is valid.

- two contexts are available: global and local
 local metadata is saved per content
 global metadata is independent of the content
 local metadata has a higher priority than global metadata
 initially, a parameter has only global metadata
 dummy parameters have only local metadata

- Replacing a dummy parameterEditing metadata of a parameter

Metadata field

A metadata field stores metadata of the parameter.

- has a label
- can be translatable
- can contain multiple values
- generated globally, i.e. across all contents
 by default, it is set *hidden*

(i) Tip

In order to be flexible with using placeholders, it is recommended to store the metadata in several small fields instead of one big one.

- Adding a new metadata fieldAdding and editing parametersAdding and editing a class

- Editing a placeholder

Note

A note contains information about the content element.

(i) Tip

Use notes on content elements to document why a specific change was made.

• notes are shown on all translations of content elements

- are deposited with date and author
- cannot be deleted

- Viewing notes of content elementsAdding notes to content elements

Order action

The order action describes the current step in the processing of a report order.

• possible values

Created: a new report order is created
Reordered: an existing report order is reordered

Processed: the delivered uuid and parameters of the order are assigned to existing content

Waiting for RLE: the report order is ready for processing in the report layout engine

Processing in RLE: the report order is processed in the report

layout engine
Finished / Response delivered: the processed report order is finished / delivered

RLE error: there was an error while creating the report in the report layout engine

has a processing status

- Viewing a report order
- Report orders overview

Outdated

A marker to indicate whether the corresponding content element needs to be updated.

- Single translated content elements are automatically marked as outdated. The label can be resolved, if no changes are necessary. Otherwise content elements in translated contents are marked as outdated, too. The labelling is only cancelled, when the element is approved.
- Mark other translations as outdated in case the content in other languages needs to be edited.
- Mark a published content element as outdated in case of literal mistakes.
- Mark a published content element and its translations as outdated in case of content-related mistakes.
- The outdated status corresponds to the workflow state of the content element:
 - · A content element that is published loses the outdated marking. Remove the mark if the mistake is corrected by publishing a content element translation.
 - An already published content element falls back into the content element workflow state 'in progress' when it is marked as outdated.

Please note: The workflow of content elements is defined independently of the workflow of contents. Therefore, publishing contents do not affect the workflow state of content elements included in the content and their marking as outdated. The workflow can be modified by the Workflow Editor, see editing a workflow.



(i) Tip

Mark content elements that need to be updated.

- · Viewing content elements
- Editing a content element
- Translating content elements
- Publishing content

Page fragment

Page fragment is a content type predefined for managing sections used in more than one content.



(i) Tip

The usage of placeholders in the section of page fragment creates dynamic elements, which can be used in more than one content. Depending on the data defined for the placeholders in the final content, a content specific report can be generated.

- content elements can be deposited into a section which is to be integrated to a target content
- sections with dynamic content e.g. sidebar, header or footer can be linked into other contents by content integration
- it is recommended to set up corresponding sections in the final content for each used page fragment, this facilitates assigning different styles to a section or the positioning of sections in the delivered content

Mentioned in

· Adding new content

Example:

The information for the sidebar of clinical reports can be set up as content elements in a page fragment and added by content integration in the provided sections of different clinical reports. Modifications of the page fragment section are directly available in all reports which use the page fragement.

Parameter

A parameter is a patient-specific data that is transmitted to DRM (e.g. from a LIMS). It can be any patient-specific data (e.g. genetic testing results) other than general information (e.g. patient name) or measurement (e.g. blood ferritin level). A parameter associated with a rule determines the content output.

- identified by its external ID
- can be used on different content
- sorted with classes into a parameter tree
- presented by a file in the parameter tree
- can have metadata
- used for evaluating the rules
- used for replacing placeholders
- only generated for a report order
- if not yet available, a dummy parameter can be used
- can be set inactive



(i) Tip

Foremost, parameters are test results from the laboratory. They can be complemented by additional case-specific data, e.g. patient age, sex or previous diagnoses.

- Publishing content
- Editing metadata of a parameter
- Adding and editing a class
- Viewing content history
- Viewing content
- Generating a parameter tree
- Editing a placeholder
- Replacing a dummy parameter Setting the rule of a content box
- Translating contents
- Viewing content workflow states
- Parameter overview
- Viewing a report order
- Overview of report orders

Dummy parameter

A dummy parameter is used in a content when the needed parameter is not yet available.

- created by the user
- displayed in the parameter tree like a real parameter
- used in rules, placeholders, etc. like a real parameter
 can carry local metadata
 can be replaced with a real parameter



(i) Tip

Use dummy parameters to write content in advance.

- Replacing a dummy parameterAdding and editing parameters
- Generating a parameter tree
- Editing metadata of a parameter

Real parameter

A real parameter is an information, usually a result, which is transmitted to the DRM as a part of a report order, e.g. from a LIMS.

- not created by the user
- displayed in the parameter tree
- used in rules and placeholders
- can carry local and global metadata
- can be included in the parameter tree of other contents

(i) Tip

Real parameters, which already exist in a given DRM instance, can be reused directly in other

- Replacing a dummy parameterAdding and editing parameters
- Generating a parameter tree
- · Editing metadata of a parameter

Parameter tree

A parameter tree represents the logical hierarhy of the parameters of the content.

(i) Tip

It is recommended to sort parameters of the same type (for example genotype, phenotype) into a shared class. Within these classes, subclasses for parameters which should lead to similar content output can be added.

determines how efficiently the content can be written is the same for all translations of the content

- · contains parameters and classes
- the root is the preset class All parameters
- new parameters are initially placed outside of the tree
- each parameter must be at the end of a branch
- below a parameter, there can be no other parameter or class.
- used for setting rules and placeholders

- Generating a parameter tree
- Editing a placeholder
- Setting the rule of a content box

Placeholder

Placeholders can be used within a content element or template to create fields where case specific information can be brought directly from external systems, e. g. a LIMS.

(i) Tip

Use placeholders to increase the reusability of content elements.

Placeholders can be filled with backup information of:

- 1. Parameters: backup information for parameters can be provided as metadata.
- 2. General Information: all information assigned to the general Information in the settings can be integrated as placeholders in the content element.
- 3. Measurements: all information assigned to the measurements in the settings can be integrated as placeholders in the content

Three types of placeholders with different functions are available:

- 1. Placeholders in general
- 2. Iterative placeholders
- 3. Flexible placeholders

Please note:

- Only letters (without umlauts), numbers and underscores are allowed for naming the placeholders. Special characters cannot
- Styling of the entire placeholder is possible, but single areas can not be styled differently.
- Default values of general information or measurements are used for placeholders if no other value is transmitted from the requesting system (e.g. LIMS, LIS).
- Placeholders within integrated content will be filled with the information of their content (content integration).
- In case of enumerations in one placeholder, delimiters between the transferred values can be freely configured.

- Viewing placeholders
- Adding a placeholder
- Editing a placeholder
- Removing a placeholder

Flexible placeholder

A flexible placeholder is a string in the content or template that will be replaced during the report generation by a value defined by the user (such as general information or measurements) manually or delivered automatically from a requesting system (e.g. LIMS, LIS).

• starts with [# and ends with #]

For generating report previews:

- can be inserted in the template and in content elements
- is replaced for each newly generated report preview
- values are defined manually by the user during the report
- is deleted in the generated document if no value has been

For automated report orders:

- · can be inserted in content elements
- is still existent within the delivered report
- can be accessed and replaced by a requesting system (e.g. LIMS, LIS)

(i) Tip

Use the placeholders for values not saved within the GIMS.

- Template
- Generating a report preview
- · Editing a placeholder
- Adding a flexible placeholder

Iterative placeholder

An iterative placeholder is an extension of placeholders to generate an automated (tabular) listing.



With one placeholder, it is possible to list multiple metadata fields of parameters or settings of general informations, measurements.

- includes {{ before and }} after an existing placeholder
 only within a table or list (bulleted or numbered) in content elements available
- iterated over all selected parameters, general information or measurements to collect and list the selected metadata/settings
- for tables including both iterative placeholders and static content, the static content is replicated for each row
- the following placeholders can be converted to iterative ones:

 - parameter placeholders
 general information placeholders
 measurement placeholders

- Adding an iterative placeholder
- Editing a placeholder

General information placeholder

A general information placeholder is a string in the content that will be automatically replaced by the assigned value of a given general information.



By using placeholders, it is possible to reduce the number of content elements.

· consists of three parts

- 1. General information: with name or ID if no name is set
- 2. General information setting: a list of all general information settings e.g. value, name, description
 3. String: how the placeholder is written in the text, has to start
- with [[and end with]]
- placeholders can be marked with text editor features for defining individual layout in the output

- Editing a placeholder
- Adding a general information placeholder

Measurement placeholder

A measurement placeholder is a string in the content that will be automatically replaced by the value of the assigned measurement setting.

(i) Tip

By using placeholders, it is possible to reduce the number of content elements.

- · consists of three parts
 - 1. Measurement: with name or ID if no name is set

 - Measurement setting: a list of all measurements settings
 String: how the placeholder is written in the text, has to start with [[and end with]]
- placeholders can be marked with text editor features for defining individual layout in the output

- Editing a placeholderAdding a measurement placeholder

Parameter placeholder

A parameter placeholder is a string in the content that will be automatically replaced by the value of the assigned metadata field of the respective parameters.

- · consists of three parts
 - 1. Parameter class: per default, All parameters is selected, but if it is necessary to exclude parameters in the replacement, the parameter tree can be opened and a more specific class can
 - 2. Metadata field: per default, Name is selected, but the value of any metadata field can be selected
 - 3. String: how the placeholder is written in the text, has to start with [[and end with]]
- placeholders can be marked with text editor features for defining individual layout in the output

(i) Tip

By using placeholders, it is possible to reduce the number of content elements.

- Editing a placeholder
- Adding a parameter placeholder

Rule-based placeholder

A rule-based placeholder is an extension of placeholders to generate a variable, rule dependent paragraph in a content element independently of metadata.

- the string has to start with [[and end with]]
- available within text, a table or list (bulleted or numbered) in content elements
- can be linked to other content boxes by exclusion sets
- the placeholder is replaced with the content of the linked includable content boxes if their rules match. Only the content of the first content box with fulfilled rules is displayed.
- headings and tables cannot be used in includable boxes to prevent invalid nesting
- media and barcode elements are not supported in includable
- the following placeholders can be incorporated into rule-based placeholders:
 - parameter placeholders
 - general information placeholders
 - measurement placeholders

(i) Tip

Rule-based placeholders can be used to generate lists or tables with rule dependent content.

- Editing a placeholder
- Adding an rule-based placeholder

Processing status

The processing status describes the current state in the processing of a report order.

- is depicted by an iconcan have different meanings depending on the corresponding

Created:



 $\overline{\mathsf{Z}}$ the order is created and pending for processing

Reordered:



the reorder is pending for processing

Processed:



the order could not be processed due to an error

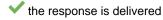


the order is processed and pending for delivery

Response delivered:



an error occurred during the response delivery



(i) Tip

Look at the log messages for further details of the current order status.

- Viewing a report orderReport orders overview

Processor chain

When a content has variables such as parameters, general information or measurements, a processor chain is used to provide their values.

- for each content, a custom processor chain can be configured by the administrator
- can make highly specific information available like the
- chromosome aberration extracted from the karyotype general information or measurements that were generated by the processor chain from other variables are called computed

(i) Tip

Please contact your support to set up the processor chains depending on your set up.

- Setting the used processor chainViewing content

Reference

A reference links to registered literature.

- is allocated to a content box and valid for all content elements in the respective content box
- can be defined in the right side bar within the *Content box* attributes on the Edit tab
- the last section of the content is automatically generated and contains all the references of all shown content boxes in their
- order of usage, assigned by number

 on the content view, the assigned number of the references are shown below their content box

- Setting references to a content box
- Editing contentViewing content

Report order

A report order represents an external request of content for a set of parameters.

- holds metadata of the request such as order ID, orderer, translation, patient ID
 is in an order action
- has an processing status

- Viewing a report orderReport orders overview

Role

A role defines a set of tasks the user is permitted to perform.

• The following roles and their permissions can be assigned to

Role	Permissions
Content Approver	approve content
Content Editor	edit and translate content and content elements
Content Publisher	publish content
Content Reviewer	review content
Content Settings Editor	edit content settings
Content Viewer	view content with revisions and workflow states, view content elements
Custom Style Editor	add and edit custom styles
Order Processor Chain Editor	add and edit processor chains
Order Processor Chain Viewer	view processor chains
Parameter Editor	administer parameters and their metadata
Report Order Viewer	view orders
Section configurator	configure sections
Template Viewer	view templates
Template Editor	add and edit templates
Template Approver	approve templates
Template Publisher	publish templates
Template	review templates



Use roles to control what each user is allowed to do.

- Viewing user listEditing user profileAdding an user account

Reviewer	
Content Element Approver	approve content element
Content Element Publisher	publish content element
Content Element Reviewer	review content element
User Administrator	administer users and their roles
Workflow Editor	view, add and edit workflows and workflow graphs

Rule

A rule is evaluated by the Genetic Report Engine and defines under which circumstances which text should be displayed on the content.

- is defined for each content box and valid for all content elements in the content box
- is shown on the content view, when hovering over a content box
- can be defined in the right side bar within the Content box attributes on the Edit tab
- consists of different statements that are logically connected by OR or AND
- a statement can be Always true
- can include parameters, general information and/or measurements

Mentioned in

- Viewing content
- Setting the rule of a content box
- Translating contents
 Editing content

• a statement can depend on the parameters:

statement	TRUE if
Results are in the parameter tree selection	at least one parameter is given which is one of the selected parameters or in one of the selected classes
with metadata y matching exactly z	at least one of the given parameters of the selected parameters or in one of the selected classes have the value z for the metadata y
Results are not in the parameter tree selection	no parameter is given which is one of the selected parameters or in one of the selected classes
with metadata y matching exactly z	no parameter of the selected parameters or in one of the selected classes have the value z for the metadata y
Results match at least x Parameter(s) in the parameter tree selection	at least x parameters are given which are of the selected parameters or in the selected classes
with metadata y matching exactly z	at least x parameters of the selected parameters or in the selected classes have the value z for the metadata y
Results match at least x Class(es) of the parameter tree selection	the given parameters belong to at least x of the selected classes
Results match up to x Parameter(s) in the parameter tree selection	up to x parameters are given which are of the selected parameters or in the selected classes
with metadata y matching exactly z	up to x parameters of the selected parameters or in the selected classes have the value z for the metadata y
Results match up to x Class(es) of the parameter tree selection	the given parameters belong to up to x of the selected classes
Results match exactly x Parameter(s) in the parameter tree selection	exactly x parameters are given which are of the selected parameters or in the selected classes
with metadata y matching exactly z	exactly x of the given parameters have the value z for the metadata y
Results match exactly x Class(es) of the parameter tree selection	the given parameters belong to exactly x of the selected classes
Results match all Parameter(s) in the parameter tree selection	all parameters of the selected parameters or in the selected classes are given
with metadata y matching exactly z	those parameters of the selected parameters or in the selected classes are given which have the value z for the metadata y
Results match allClass(es) of the parameter tree selection	the given parameters belong to all of the selected classes

• a statement can depend on measurements:

- for comparing the value of a measurement m with a reference value
- a reference value can be
 - a Custom value (defined in the input field 'custom value')
 - the Alarm value
 - a Reference value (either Discrete, Maximum or Minimum)

- one of the five *Preceding values* the *'custom value'* input field is just required if *Custom value* is selected

statement	TRUE if
Measurement m > Custom value 20	the value of measurement m is greater than the user defined value '20'
Measurement m = Discrete	the value of measurement m equals the discrete reference value
Measurement m < Minimum x 20 %	the value of measurement m is smaller than '20' % of the minimum reference value

- a statement can depend on general information:
 for comparing the value of a general information g with a user defined value

statement	TRUE if
General information g is true	a value is set for general information g
General information g equals male	the value of general information g equals 'male'
General information g contains al	the value of general information g contains 'al'
General information g starts with ma	the value of general information g starts with 'ma'
General information g ends with le	the value of general information g ends with 'le'

- a statement can depend on parameters and general information
- a statement can depend on parameters and measurements
- if the content should never be shown, it can be set inactive

Section

Content is managed per sections for a better overview. Sections of the same document can have different attributes.

(i) Tip

The receiving system can decide which sections to use and in which order. It can also add other content between the received sections.

has a label

- has a machine name (only alphabetic characters) by which it is identified in the receiving system (e.g. LIMS, GIMS RLE)
- shown as tab or consecutively when viewing content
- shown as tab when editing content
- · can get individual layout stylings
- can be integrated into another content
- can be marked as relevant, so that it will be included in checks for completeness (e.g. a given parameter might be relevant for one section and obsolete for another section at the same time)
- can be edited
- new sections can be added
- the last section is automatically generated and contains the
- number and names of sections depend on the content type
- it is possible to switch between sections without saving previous changes
- removal of a section is possible only when none of its translations contain any content

- Viewing content
- Editing content
- Moving a content box
- Adding a content box to content
- Integrating content
- **Template**
- Set default set of sections for new content
- Sections overview
- Editing a section
- Adding a section to content
- Adding a new section
- Configuring sections

Tag

Tags group different content elements with all their translations to enable filtering.

- /or other filter options



Use tags on content elements to manage content with similar topics.

- Working with tagsText elements overview
- Media elements overview

Test drive

A clone of the productive DRM environment for testing purposes.

- accessible via https://[YOUR_GIMS_URL]/testdrive
 isolated from the the productive instance
- upon request, all changes to the content are erased and replaced by the latest productive data



The test drive environment of DRM is very useful to try new features or to test the communication between a requesting system (e.g. LIMS, LIS) and GIMS.

Mentioned in

• Using the test drive environment

Text element

A text element is a specific content element which contains the actual text.



(i) Tip

In order to increase the reusability of text elements, it is recommended that the text contains only one

- the format is restricted html
- can contain placeholders
- can have notes
- reusable: can be used several times within the same content as well as in other contents
- is located on content within a content box
- translatable
- editing history can be traced at Revisions tab
- translations can be marked as outdated

- Using similar content elements
- Adding content elementsViewing a text element
- Translating content elements

Toolbar

The toolbar contains the entry points for all major tasks.

- can be hidden
- can be moved

Mentioned in

Using the toolbar

Translation element

A translation element is a specific content element which contains the actual text.

Translation elements differ from other content elements. Since their content is imported there are some exceptions for translation elements:

- they are only visible in the Translation elements overview list
- they can not be added manually to the content but are imported upon request
- translations are automatically generated if content is translated into a new language
- it is not possible to edit or reuse translation elements or to add notes to them in the content
- the format is restricted html
- editing history can be traced at Revisions tab
- translations can be marked as outdated
- translation elements that are imported and not meant to be edited in GIMS DRM, can be locked

- Translation elements overview
- Viewing a translation element
- Editing a translation element

User

A user is a person or a system that has access to GIMS.

(i) Tip

Do not share a login credentials with other users in order to have a reliable version history.

- needs name and password for logging in
- has roles
- has a status: active (is allowed to log in) or blocked (cannot log
- changes to content or workflows made by the user are traceable

- Using the toolbarContent overview
- Viewing user list

- Publishing content
 Viewing content history
 Viewing content workflow states
 Editing a workflow

UUID

The uuid is the unique universal identifier of the content.

- is automatically given to new content
 same for all content translations
 needed by the requesting system (e.g. LIMS, LIS)

- Content overviewReport orders overview

Warning

A warning informs the user that a content is incomplete or contradictory and prevents changing the workflow state.

• troubleshooting lists all possible warnings and how to react

- Viewing contentViewing content workflow statesPublishing content

Workflow

The workflow defines release processes, consisting of several states, which guarantee that content components are reviewed several times by differently authorized users before they are published and made availlable for report generation.

It describes how and when components pass the different states of the workflow graph before being published for delivery.

- can be used for different components (e.g. content, template or content element)
- consists of a workflow graph with configuration
- each content can have its own workflow
 a default workflow is provided on installation
- defines which workflow state is considered published
- defines which workflow state is used as default
- defines the workflow state to which content is reset after being edited, depending on the change class
- defines which role is allowed to do which workflow transition

- Viewing content workflow states
- Overview of workflows
- **Publishing content**
- Publishing content element
- Publishing a template
- Setting the used workflow to content

Workflow graph

A workflow graph describes the different states content can

- consists of workflow states and workflow transitions
 a default workflow graph is provided on installation

- can be used by different workflows
 has to contain at least the four preset workflow states

- Adding a new workflowEditing a workflow graph
- Editing a workflow

Workflow state

A workflow state describes where content is in process of publishing.

- content can be in different workflow states depending on the parameter selection
- the workflow defines which workflow state is considered published
- the workflow defines which workflow state is used as default
- the workflow defines into which workflow state content falls after being edited, depending on the change class
- the most recently published version is delivered, in case content is into a non-published state
- default workflow states are displayed orange
- custom workflow states are displayed blue

- Moving a workflow stateRenaming a workflow state
- Adding a new workflow transition
- Moving a workflow transition
 Viewing content workflow states
- Adding a new workflow state
- Removing a workflow state
- Editing a workflow

Workflow transition

A workflow transition defines which workflow state follows another workflow state.

- the workflow defines which role is allowed to do which workflow
- warnings prevent the transition

- Adding a new workflow transition
 Editing a workflow
 Removing a workflow transition
 Moving a workflow transition
 Renaming a workflow transition

Troubleshooting DRM

Problem	Message	Possible reason	how to react
Warning on content view.	Incomplete content detected: No influence by parameter "parameter".	The parameter does not influence the output of the content and is therefore not needed.	Inactivating the parameter.
		The parameter should influence the output of the content which has to be edited.	Editing the content, for example changing rules to consider the parameter, or adding new text.
	Contradictory content detected: "content box 1" and "content box 2" of the same exclusion set were matched.	One of the content boxes should not be displayed, as their text is contradictory.	Editing the rules of at least one of the content boxes.
		The content boxes should both be displayed, as their content is not contradictory, and must not be in the same exclusion set.	Editing the exclusion set of at least one of the content boxes.
	Incorrect headings: heading is the first heading on the section and has to be "Heading 1" or "Heading 2".	The level of the first headings is too high.	Editing the content, so that the headings do not prevent the delivery of valid HTML.
	Incorrect headings: <i>heading</i> . Just one "Heading 1" allowed per section.	More than one heading 1 per section.	
	Incorrect headings: <i>heading 1</i> is a "Heading x" and must not follow the "Heading y" <i>heading 2</i> .	The level of headings has to either remain, decrease or increase by 1: x <= (y+1)	
Cannot select a new		There are warnings.	Editing the content.
workflow state.		The user does not have the needed role.	Editing the user's profile to have the missing role.
			Editing the used workflow to allow the transition for one of the user's role.
Cannot inactivate a parameter.		The parameter is used in a rule or a placeholder of the content.	Checking all rules or a placeholders of the content and if possible, removing the parameter.
Cannot set a reference.		The desired reference is not yet available.	Contacting the administrator, providing the DOI of the desired reference.
Cannot save a form.		There are validation errors.	Editing the form values, so that the errors do not apply anymore and disappear.
Processing status of report order is "the order could not be processed due to an error"	Order "id" in revision "revision": No report mapping found for the given report "report" with language code "language".	There exists no content with the requested UUID.	Checking the available UUIDs on the overview of contents, and reconfiguring the requesting system.
	Order id'in revision revision. None published report revision found for the given report "report" in language "language".	The content is not ready to be delivered.	Editing and publishing the content.
	Order id'in revision revision. No suitable report revisions found for the given report "report" in language "language". Possible reason might be a change of the parameter tree on date.		
	Order id in revision revision. A published report	Depends on the given error	

	revision with errors found for the given report " report" in language "language" in its revision " revisior!". Error messages: messages	messages. For example, not all placeholders could be replaced due to missing metadata.	
	Order id in revision revision. Incomplete or wrong results provided for the given report " report".	Depends on the given error messages. For example, not all needed general information or measurements are provided.	Contacting the administrator responsible for linking the CMS and other systems.
	An exception has been thrown while saving a new revision with response of report order in revision revision at time time in function. Exception code: code. Exception message: message	An internal error.	Contacting the administrator.
Processing status of report order is "an error occurred during the response delivery"	An exception occurred while sending a response for an report order in <i>method</i> . Exception code: <i>code</i> . Exception message: <i>message</i> .		
	Order <i>id.</i> during processing an exception has been thrown. Exception code: <i>code</i> . Exception message: <i>message</i> .		
	Order id in revision revision: errors during the report generation have been sent back for the report "report" in language "language".	One of the above errors.	Seeing the other messages for more details.
Processing status of report order is "RLE error"		An internal error.	Contacting the administrator.
Processing status of report order is "the response is delivered"	Order id'in revision revision: has been successfully processed for the given report " report" in language "language".	The published report is delivered successfully.	-
	The newest version of the report was processed.	The latest published report is delivered, which is also the latest version of the content.	-
	An edited but unpublished version of the report exists.	The latest published report is delivered but a newer version exists.	Checking if the changes to the content are important for the report. If this is the case, publish the content and reorder the report.
Cannot see tags	Tags are not shown on the overview of text or media elements.	Filter setting include no content elements with tags.	Extend the filter selection to see the tag list for further specification by tag search.