

SORMAS® Document Template Guide

This guide describes the creation and usage of document templates. Document templates are used to generate documents based on data available in SORMAS, e.g., to issue a quarantine order for a case.

A document template can be any .docx file, where placeholders are filled in with actual data when generating the document. Besides data from SORMAS as described in the **SORMAS Data Dictionary**, templates can have placeholders for additional information to be filled in by the user generating the document, such as remarks.

1) Creating placeholders in a.docx template file

To create a document template, start with the .docx document normally issued in the workflow at hand. In this document, create placeholders for data you want to be filled when the document is generated.

Using Microsoft Word:

To create a placeholder or **MergeField**, press Ctrl + F9. This inserts a pair of curly brackets "{}". Right-click these and choose **Edit Field** from the context menu. Choose **MergeField** from the list at the left side of the window that opens now. Enter the name of your placeholder prefixed by a dollar sign "\$" in the **Field Name** input, e.g., **"\$case.person.firstName"** for the first name of a case's person. Finally click **Ok**.

Using LibreOffice:

To create a placeholder, insert the placeholder's name surrounded by curly brackets "{}" and prefixed by a dollar sign "\$" in the text. E.g., to create a place holder for the case person's first name, insert **"\${case.person.firstName}"** in the place you want the name to appear.

2) Placeholders for data from SORMAS

A template workflow, such as the issuing of a quarantine order, has a **root entity** which is the starting point for all placeholders that are filled using case data. E.g., for quarantine orders for cases, this root entity is **"\$case"**. The available information for a **"\$case"** is described in the **SORMAS Data Dictionary** in the **"Case"** tab, so examples for available placeholders are **"\$case.epidNumber"** or **"\$case.reportDate"**.

For further SORMAS entities referenced from the root entity **"\$case"** – such as, e.g., the case person – available placeholders are listed in the respective tab (here: **"Person"**). Thus, valid placeholders are **"\$case.person.firstName"** or **"\$case.hospitalization.admissionDate"**.

Please refer to the **SORMAS Data Dictionary** to learn which data is available in SORMAS and how the respective placeholders or merge fields are named.

To see which data is available for a workflow, have a look at the example templates, available for download in the template upload dialog.

Caution: Before using a document template in production, test thoroughly if all placeholders are filled in correctly and documents are generated properly.

3) Custom placeholders

A document template can use further custom placeholders to be filled by the user. Every placeholder that cannot be derived from the root entity is a custom placeholder. When generating a document from a template containing custom placeholders, the user is prompted to supply the respective information. E.g., if the template contains placeholders such as “\$remarks” or “\$supervisor.roomNumber”, the user is presented a form to fill in this information.

4) Empty values

Whenever the data for a placeholder is not available – i.e., the data is not recorded in the SORMAS database or a custom placeholder is left empty when prompted – an indicator “./.” is inserted in the generated document.

In cases where an empty variable should not be shown at all, prefix the variable with an exclamation mark. For example “\$!case.person.phone” is only displayed, if the value of the variable is not empty.

5) .html document templates

For event handouts, document templates are in .html format. Data from SORMAS can be integrated like in .docx templates, the separator character however is “_”. This means, for example “\$case.hospitalization.admissionDate” in a .docx template is addressed in an .html template as “\$case_hospitalization_admissionDate”. (see example templates).

Beyond the functionality of .docx templates, .html templates can use all of the features of the underlying Apache Velocity template engine (see <https://velocity.apache.org/engine/2.0/user-guide.html>). This allows to iterate over lists, e.g., of event participants. Again, have a look at the example templates. Notice that raw access without any preformatting or database reference resolution to template variables is obtained by using a dot instead of an underscore. This is necessary inside loops, where preformatting is not available:

```
<table>
  <tr>
    <th>First Name</th>
    <th>Last Name</th>
    <th>Phone</th>
    <th>Contacted</th></tr>
  #foreach($participant in $eventParticipants)
  <tr>
    <td>$participant.person.firstName</td>
    <td>$participant.person.lastName</td>
    <td>$participant.person.phone</td>
    <td>[ ]</td>
  </tr>
  #end
</table>
```

However, dates and other data from SORMAS can be formatted using the utility “F.fmt(<object>)”:
\$F.format(\$event.startDate)

6) Uploading document templates

Templates can be uploaded under [Configuration > Document Templates](#). The template file will be saved under the name of the upload file which is also used later to present a list of available documents when generating documents. Thus template file names should be meaningful.

7) Generating documents

In workflows where document generation is implemented, the user can choose a template from a list of available templates. If the chosen template contains custom placeholders, the user is asked to fill in this information (e.g., if the templates provides the possibility to add remarks or the like).

The document is then generated for download as a .docx respectively .html document.

Caution: Placeholders are filled only if the user generating the document has the user rights to see the respective information. If the information for a placeholder is not available, this is indicated by “./.” in the generated document. If you see this indicator for missing data in places where you would expect data to be filled in, check if you have sufficient user rights to see this information.

8) Document Workflows

The following document template workflows are available in SORMAS:

- **Templates for Cases (.docx):**

Available root entities:

- **case:** case data
- **person:** the case's person
- **user:** the current user
- **sample:** a sample for the case (selectable)
- **pathogenTest:** a pathogenTest for the chosen sample (selectable)

- **Templates for Contacts (.docx):**

Available root entities:

- **contact:** contact data
- **person:** the contact person
- **user:** the current user
- **sample:** a sample for the contact (selectable)
- **pathogenTest:** a pathogenTest for the chosen sample (selectable)

- **Templates for Event Participants (.docx):**

Available root entities:

- **eventParticipant:** eventParticipant data
- **person:** the eventParticipant person
- **user:** the current user
- **sample:** a sample for the eventParticipant (selectable)
- **pathogenTest:** a pathogenTest for the chosen sample (selectable)

- **Templates for Travel Entries (.docx):**

Available root entities:

- **travelEntry:** travelEntry data
- **person:** the travelEntry person
- **user:** the current user

- **Templates for Event Handouts (.html):**

Available root entities:

- **event:** event data
- **eventActions:** the list of eventActions
- **eventParticipants:** the list of event participants
- **user:** the current user

- **Templates for Surveys (.docx):**

Available root entities:

- **case:** case data
- **person:** the case's person
- **surveyToken:** mandatory custom placeholder