



**SAP SuccessFactors** 

INTERNAL – Authorized for SAP Customers and Partners  
Document Version: 2H 2022 – 2023-04-28

# Implementing Document Generation

# Content

<b>1</b>	<b>What Is Document Generation?</b> . . . . .	<b>4</b>
<b>2</b>	<b>Change History.</b> . . . . .	<b>5</b>
<b>3</b>	<b>Prerequisites.</b> . . . . .	<b>6</b>
3.1	Enabling Document Generation. . . . .	6
3.2	Setting Business Rule Permissions. . . . .	6
3.3	Setting Manage Document Generation Templates Permission. . . . .	7
<b>4</b>	<b>Creating a Configuration User Interface.</b> . . . . .	<b>8</b>
4.1	Importing a Pre-Delivered Configuration UI Using SAP Software Download Center. . . . .	8
4.2	Associating a Pre-Delivered Configuration UI to the Screen Look Up Object. . . . .	8
4.3	Creating a New Configuration UI. . . . .	9
	Associating Configuration UI to Document Generation Screen Look Up. . . . .	10
<b>5</b>	<b>Working with Document Templates.</b> . . . . .	<b>11</b>
5.1	Managing the Document Template. . . . .	11
	Creating the Template. . . . .	11
	Configuring Email Settings for Document Generation Template. . . . .	15
	Creating a Group for Document Generation Templates. . . . .	16
5.2	Managing Document Template Mapping. . . . .	16
	Mapping Types. . . . .	17
	MDF Objects. . . . .	20
	Custom Objects. . . . .	21
	GDPR Log Read Access (RAL) Purge. . . . .	21
	Troubleshooting Tips. . . . .	22
5.3	Field Details for Document Template Screens. . . . .	26
<b>6</b>	<b>Generating a Document.</b> . . . . .	<b>29</b>
6.1	Generating a Document as an Administrator. . . . .	29
6.2	Generating a Document Using Self-Service. . . . .	30
	Generating a Document Using Employee Self-Service . . . . .	30
	Generating a Document Using Manager Self-Service. . . . .	31
6.3	Mass Generating Documents. . . . .	31
	Downloading Job Details. . . . .	33
	Creating a Scenario Using a Business Rule. . . . .	33
6.4	Troubleshooting Tips. . . . .	34
<b>7</b>	<b>Implementing Print Forms Generation.</b> . . . . .	<b>36</b>

- 7.1 Prerequisites. . . . . 36
  - Enabling Print Forms Generation . . . . . 36
  - Activating Role Based Permissions. . . . . 40
- 7.2 Creating New Forms. . . . . 41
  - Creating New Forms and Uploading to SAP BTP. . . . . 41
- 7.3 Configuring Form in Employee Central Document Generation for Mapping. . . . . 43
  - Create a New Template. . . . . 44
  - Create a Reference Template. . . . . 45
  - Mapping Template Placeholders. . . . . 47
- 7.4 Generating the Form. . . . . 47

# 1 What Is Document Generation?

From time to time, employees need official documents from work for their personal or professional use. Examples of these documents include Proof of Employment, Compensation, Proof of Address and so on. The Document Generation feature enables you to produce these documents in a timely and efficient way.

With the Document Generation feature, a HR administrator can perform the following tasks:

- Create new or edit existing document templates according to company needs.
- Maintain necessary mapping of dynamic content in the template with the master data.
- Generate these documents in a format such as PDF, for an employee upon request and then send it using email or download.

Employees and managers can also download and email documents using the ESS and MSS self-service scenarios. This guide will help you to complete the document generation process, with step-by-step instructions for each task. You'll also find some screenshots to illustrate some of the tasks we are talking about, as well as troubleshooting tips for problems you may encounter.

## 2 Change History

Learn about changes to the documentation for Employee Central Document Generation in recent releases.

### 2H 2022

Type of Change	Description	More Info
New	The Implementing Print Forms Generation guide is now found in the Implementing Document Generation guide.	<a href="#">Implementing Print Forms Generation [page 36]</a>

### 1H 2022

Type of Change	Description	More Info
Added	You can now import the pre-delivered configuration UI using SAP Software Download Center.	<a href="#">Importing a Pre-Delivered Configuration UI Using SAP Software Download Center [page 8]</a>

### 2H 2021

Type of Change	Description	More Info
Added	There is a new field, <Remove Page Numbers in PDF>, available on the <i>Document Generation Template</i> screen.	<a href="#">Field Details for Document Template Screens [page 26]</a>

### 1H 2021

Type of Change	Description	More Info
Added	You can now email mass generated documents to the job owner, the relevant employees or both.	<a href="#">Mass Generating Documents [page 31]</a>

# 3 Prerequisites

## 3.1 Enabling Document Generation

Find out how to enable Document Generation to start using this feature in Employee Central.

### Procedure

1. Go to ► [Admin Center](#) ► [Manage Employee Central Settings](#) ►.
2. In the *Basic Settings* activate *Document Generation*.
3. Choose *Save*.

## 3.2 Setting Business Rule Permissions

You need to activate the necessary role based permissions to start using this feature.

### Prerequisites

Activate the permission to configure business rules, which you use to access the Document Generation Template Mapping screen.

### Procedure

1. Go to ► [Manage Permission Roles](#) ► [Metadata Framework](#) ►.
2. Select the *Configure Business Rules* and *Access to non-secured objects* checkboxes.
3. Choose the relevant permission role, for example HR Administrator.
4. Choose *Manage Document Generation*.

This will take you to the *Permission Role Detail* screen.

5. You can now choose the permissions you want to enable for the relevant role.
  - If you choose the *Manage Document Template* checkbox, you can create or edit the content in existing document template. This permission should be given to HR administrators who can update the document templates and email settings.

- If you choose the *Manage Document Template Mapping* checkbox, you can perform the necessary mapping of dynamic content in the template with the master data. This permission should be given to HR administrators who can update the document template mappings.
  - If you choose *Generate All Documents as Admin*, you can generate all documents for all users as an administrator.
  - If you choose *Mass generate all documents as an admin*, you can generate one document for many users as an administrator.
6. Choose *Done* and *Save Changes*.

### 3.3 Setting Manage Document Generation Templates Permission

You need to activate the necessary role based permissions to start using this feature.

#### Procedure

1. Go to ► *Admin Center* ► *Manage Permission Roles* ►.
2. Choose the relevant permission role.
3. In the *Permission Settings*, choose the *Permission* button.
4. Under *User Permissions*, choose *Manage Document Generation Templates*.

You can choose all the document generation templates by selecting the *All* button, or you can select *Others* and choose the specific templates you'd like.

Only Document Generation templates will appear in the list.

5. Choose *Done* and *Save Changes*.

#### i Note

The Document Generation Template Permissions given for Permission Roles for Employees and Managers are based on the Permission Groups and Target Population provided for the respective Permission Roles. You can find more information regarding the configuration of Permission Roles, Permission Groups and Target Population here: [https://help.sap.com/doc/2e2b9bb483b4450e8fcb70e984808e8/2005/en-US/SF\\_RBP\\_Adm.pdf](https://help.sap.com/doc/2e2b9bb483b4450e8fcb70e984808e8/2005/en-US/SF_RBP_Adm.pdf)

# 4 Creating a Configuration User Interface

Configuration User Interfaces (UI) are used to customize UIs based on the user's requirements. You can only manage document templates using Configuration UIs, so it's a vital part of the process.

There are following possibilities for creating a configuration UI:

- Importing a Pre-Delivered Configuration UI using SuccessStore
- Associating a Pre-Delivered Configuration UI to the Screen Look Up Object
- Creating a New Configuration UI

## 4.1 Importing a Pre-Delivered Configuration UI Using SAP Software Download Center

A pre-delivered configuration UI with the ID [DocumentGenerationOverviewConfigUIMeta](#) is available. You can use this pre-delivered content by associating it with the [Screen Look Up](#) object.

### Procedure

1. Go to the [SAP Software Download Center](#).
2. Select [Installation and Upgrade](#).
3. Select [EC Configuration Files - Document Generation](#).
4. Choose [Download Basket](#).

## 4.2 Associating a Pre-Delivered Configuration UI to the Screen Look Up Object

Once you have imported your configuration UI, you associate it to the Document Generation Screen Look Up.

### Prerequisites

In order to get the pre-delivered configuration UI in the Screen Look Up, you must search for

[DocumentGenerationOverviewConfigUIMeta](#) under [Admin Center](#) > [Employee Files](#) > [Manage Configuration UI](#) and choose [Save](#) when you are done.



## Context

A pre-delivered configuration UI with the ID *DocumentGenerationOverviewConfigUIMeta* is available. You can associate this configuration UI to the *Document Generation Screen Look Up* object. To do this, you choose the pre-delivered configuration UI as the screen ID while creating the *Document Generation Screen Look Up*.

## Procedure

1. Go to ► *Admin Center* ► *Manage Data* ►.
2. Under *Create New*, choose *Document Generation Screen Look Up*.
3. Under *Object Type*, choose *Document Generation Template*.
4. Under *Screen ID*, choose the pre-delivered UI.
5. Choose *Save*.

## 4.3 Creating a New Configuration UI

This option allows you to create a new configuration UI.

## Procedure

1. Go to ► *Admin Center* ► *Manage Configuration UI* ►.
2. Choose *Create New*.
3. Enter a unique ID.
4. Under *Select Base Object*, choose *Document Generation Template*.
5. Delete unwanted fields, such as *Template ID*, *Effective Start Date*, *Tokens*, *Workflow ID* and *Mapping Documents*.
6. To get the rich text editor, go to ► *Template Content* ► *Edit Properties* ► and set the *Display As* field property to *Large Input Field (Multi-Line)* and set RTE field property as *Yes*.
7. Choose *Save*.

## 4.3.1 Associating Configuration UI to Document Generation Screen Look Up

Once you have created your configuration UI, you associate it to the Document Generation Screen Look Up.

### Procedure

1. Go to [Admin Center](#) > [Manage Data](#).
2. Under *Create New*, choose *Document Generation Screen Look Up*.
3. Under *Object Type*, choose *Document Generation Template*.
4. Under *Screen ID*, choose the unique ID you created earlier in the option.
5. Choose *Save*.

# 5 Working with Document Templates

The document templates provides you with a framework for the entire document's content for a given employee. You can choose to create new templates, or customize existing ones. You can also configure the email setting for you template. Once that's done, you can map your placeholders to your chosen template, and you're almost ready to generate your document.

## 5.1 Managing the Document Template

### 5.1.1 Creating the Template

Find out how to create a template.

#### Procedure

1. Go to ► [Admin Center](#) ► [Document Generation - Manage Document Template](#) ►.
2. Under *Create New*, choose the MDF *DocumentGenerationTemplate*.

#### i Note

If you need to modify an existing template, use the "Make Correction" option, not "Insert New Record", as having multiple records for the same template in your system isn't recommended.

3. Enter the relevant details in the fields and choose *Save*.

You can find a short description regarding each field, as well as the use of tables, in [Field Details for Document Template Screens \[page 26\]](#).

4. In the *Search* field, choose *Document Generation Template*, and choose your preferred template in the adjacent field.
5. Choose *Save*.

## 5.1.1.1 Creating a Template Using Tables and Direct Mappings

If you want to include ALL of the Pay Components/Amounts that are defined for an employee, you can use a table and Direct Mappings.

### Procedure

1. Go to your document template, and choose the table icon.
2. Insert 2 rows and 4 columns.
3. Add the columns label in the first row, and a "Placeholder" in the second row.
4. Save the template and go to the mapping for the template. For each of your placeholders, make a Direct Mapping to the *Compensation* fields.

#### i Note

You can enter any number of tables into the template, with different placeholders in each table.

#### i Note

You can find warning and error messages related to using tables in [Troubleshooting Tips \[page 13\]](#).

## 5.1.1.2 Uploading an Image to a Template

If you need to add an image to your template, you can upload it to your system's server.

### Procedure

1. Select the Image button.
2. Choose *Upload*, then choose *Browse*.
3. Choose your image.
4. Choose *Send it to the Server*.
5. Choose *OK*.

#### i Note

Currently there's a size limitation for images and logos in the RTE when the template needs to be generated in Microsoft Word format. To render images or logos correctly in this case, they must be inserted with an original size of maximum 100 height and 200 width.

## i Note

When you update a template that includes an image uploaded to the server, make sure that the image is manually uploaded to every other system where this template is imported. To ensure the image appears in the downloaded PDFs, you must reupload it from the RTE to that system's specific server.

### 5.1.1.3 Troubleshooting Tips

Here you find information when having issues with document templates.

#### Troubleshooting for Creating the Templates

- If you enter an invalid template ID, the following error message is displayed when you save the template:  
*The Template ID you enter should be unique and can contain only digits (0-9) and uppercase letters (A-Z). It can include an underscore (\_) but not as a first character.*

#### Troubleshooting for Tables

- If you enter an empty table without placeholders, the following warning message is displayed when you save the template:  
*No placeholders found in one or more tables. Do you wish to proceed?*
- If you leave a cell in the table empty, the following warning message is displayed when you save the template:  
*No content found in one or more cells. Do you wish to proceed?*
- If you try to embed a table within another table, an error message is displayed when you save the template:  
*Embedding a table within a table in the template isn't possible.*
- If you create a table with tokens in multiple rows, then a warning message is displayed when you create the template.  
*There are one or more placeholders found in multiple rows in the tables. If you're expecting multiple values for those placeholders, the document may not be generated as expected. Do you wish to continue?*

#### Troubleshooting for Local Image Upload

- The local image uploaded to the template is only supported in PDF format. A validation message is displayed when you create the template:  
*The document template contains a locally stored image, which will only be visible in PDF format. Do you wish to continue?*

## Troubleshooting for Copies of Templates

- All the fields in the Create Copy Template section are mandatory. If any of the fields are empty, the system displays the following error message:  
*Please fill all copy-related fields.*
- If all the fields have entries, the system displays a message to confirm you that are trying to create a copy:  
*The system will create a copy of this template. Do you wish to continue with saving?*
- If a template with the same name and language is already available in the system, the system displays a warning message:  
*The document template with this New Template Name and Language is already available. The system will create a copy of this template. Do you wish to continue with saving?*
- If the new template name and language are same as the original one, the system displays the following message:  
*You're trying to create a copy with the same name and language. The system will create a copy of this template. Do you wish to continue with saving?*
- If a template with the same ID exists, the system displays the following message:  
*The value in the field "New Template ID" must contain only digits (0-9) and uppercase letters (A-Z). It can include an underscore, but not as a first character.*
- If you try to create a copy while editing an existing template, the system saves the changes in the original template and create a copy. The system will then display the following warning message:  
*The system will save the changes you made to the original document, as well as create a copy of the template. Do you wish to continue with saving?*
- If a duplicate template already exists, the system displays the following warning message when you try to create a copy:  
*The document template with this Name and Language is already available. Do you wish to continue with saving?*

## Troubleshooting for Importing a Document Generation Template

The following error message is displayed when you import the Document Generate Template with a category other than Document Generation and the field Remove Page Numbers in PDF is set to True:

Removing the page numbers in a PDF is only possible for templates with the Document Generation category.

## 5.1.2 Configuring Email Settings for Document Generation Template

The email settings for Document Generation Template are the same for all users.

### Procedure

1. Go to ► [Admin Center](#) ► [Document Generation - Manage Document Template](#) ►.
2. Under ► [Create New](#) ► [Email Settings for Document Generation Template](#) ►.
3. Choose a unique ID, your country, template and either make an entry in the [Distribution and Other Stakeholders](#) field or [Job Relationship Email Settings](#) section.
  - You use the [Distribution List and Other Stakeholders](#) field to enter distribution lists or individual e-mail addresses to which you send your document. The e-mail address will also be automatically added to the CC field of the e-mail.
  - The [Job Relationship Email Settings](#) function enables the employee to send emails to people with work relationships, such as the HR manager. They can also choose whether to include the individual in the [To or CC](#) field of the email. If you choose an option in the [Relationship Type](#) field in the [Job Relationship Email Settings](#) section, the [To or CC](#) field will default to [CC](#).
4. Choose [Save](#).

### 5.1.2.1 Troubleshooting Tips

Here you find information when having issues with email settings for Document Generation Template.

- If the country specified during the creation of a country specific template isn't the same as the country specified here, an error message like this appears:  
*The template Experience Letter is only applicable for the country United States.*
- If the administrator attempts to create a new record that is identical to one that already exists, the following error message appears:  
*The email setting already exists for this country and template combination.*
- If the administrator tries to create a record without entries in either [Distribution List and Other Stakeholders](#) or [Job Relationship Email Settings](#) the following error message appears:  
*Please make an entry in either the Job Relationship Email Setting section or Distribution List and Other Stakeholders field.*
- If the administrator attempts to create a new record with the ID that that already exists, the following error message appears:  
*Code already exists*
- If you enter an invalid ID, the system will display the following error message:  
*The value in the field "ID" must contain only digits (0-9) and uppercase letters (A-Z). It can include an underscore, but not as a first character.*

## 5.1.3 Creating a Group for Document Generation Templates

When the same document generation template is required for multiple languages, or of the same category, it can be useful to group them together.

### Context

You can create a group in the system, and you can assign any template to that group. You can only assign a template to one group.

### Procedure

1. Go to ► [Admin Center](#) ► [Document Generation - Manage Document Template](#) ►.
2. Choose [Create New](#).
3. Enter [Document Generation Group](#) in the [Search](#) field.

Enter the following details:

- [Group ID](#): a unique ID for the group.
- [Group Name](#)
- [Short Description](#)
- [Category](#): This is like the Category field in Templates. Only the templates of this category can be assigned to the group.

#### i Note

While creating a group, if a group with same name and category already exists, the system will display an error message.

## 5.2 Managing Document Template Mapping

Document Template Mapping allows you to map the placeholders that you added to the template in the Document Template to the relevant HRIS or MDF fields, or map them using rules which you have created.

### Procedure

1. Go to ► [Admin Center](#) ► [Document Generation - Manage Document Template Mapping](#) ►.
2. On the [Manage Document Template Mapping](#) screen, choose the relevant details in each field.



### i Note

If there are any mandatory fields without an entry, the system will show an error or warning message. You can see an example of both an error message and warning message in [Troubleshooting Tips \[page 22\]](#).

3. Choose *Save*.

## 5.2.1 Mapping Types

### 5.2.1.1 Direct Mapping

Direct Mapping allows you to map an employee's data based on the Effective Date you specify when generating the document. This directly maps the placeholder in the template with the relevant field in Employee Central.

### i Note

Direct Mapping can be done for past, present and future dates.

### Example

Choose *Direct Mapping* in the *Mapping Type* column for the placeholder *firstName*. Choose *Personal Information* object in the *Base Object* column and *First Name* as the relevant field in the *Target Field* column.

### 5.2.1.2 Past Direct Mapping

Past Direct Mapping allows you to map an employee's data for a date earlier than the Effective Date. Using past direct mapping means the system will retrieve the data that was in use before the current data based on the As of Date, if applicable.

For example, if you enter an *As of Date* of 10/12/2014, and you choose *Past Direct Mapping* for the *lastName* field, the system will retrieve the data from the last time you changed and saved the employee's master data before 10/12/2014. For a more detailed explanation of the *As of Date*, see [Generating a Document as an Administrator \[page 29\]](#).

### 5.2.1.3 Future Direct Mapping

Future Direct Mapping allows you to map an employee's data for a date later than the Effective Date. Using future direct mapping means the system will retrieve the data that is used after the current data based on As of Date, if applicable.

For example, if you enter an *As of Date* of 10/12/2014, and you choose *Future Direct Mapping* for AddressLine1, the system will retrieve the data from the next time you changed the employee's information for AddressLine1 after

10/12/2014. For a more detailed explanation of the *As of Date*, see [Generating a Document as an Administrator \[page 29\]](#).

## 5.2.1.4 Rule Mapping

Rule mapping is done using rules, which have a specific logic, for calculating the age or years of experience. To use rule mapping, you must first create a rule.

### i Note

Rule mapping can only be done for present dates.

Once you've created your rule, you choose this rule in Column 5. In the example screen, for *todayDate*, you first choose *Rule Mapping* in Column 2 and then choose the relevant rule in Column 5.

### i Note

Model objects are currently not supported in the rule mapping. Document Generation doesn't currently support using context user in rules, so if the placeholder is mapped to a rule using context user then it isn't resolved with data.

## 5.2.1.4.1 Creating a Business Rule

Before including a pay component amount in a document, you need to create a business rule.

### Procedure

1. Go to [Admin Center](#) > [Configure Business Rules](#).
2. Choose [Create New Rule](#).
3. Enter details in the relevant fields, in the *Base Object* field, choose [Document Mapping Rule Result](#), and the *Rule type* as [DocumentGeneration](#)
4. Choose [Create](#).
5. Enter the logic for the rule. While implementing the logic in the THEN part you must always set a field from [Document Mapping Rule Result MDF](#) only. There are two fields, *Age* and *yearsOfExperience*, already available in [Document Mapping Rule Result MDF](#) for this purpose. If the rule is for some other use case, you are required to add a custom field in the object definition of [Document Mapping Rule Result MDF](#). You must always set fields only from this MDF in the THEN part of the rule. You can find more information on MDF objects in [MDF Objects \[page 20\]](#).

While creating the rule, [DocumentGeneration](#) rule type will not be available in the drop down list. You must add [DocumentGeneration](#) value in the *RuleType* picklist from the [Configure Object Definitions](#) screen.

6. Choose [Save](#).

For the placeholders related to compensation details, please use the base object *Compensation*, as there are two base objects available for compensation during mapping: *Compensation Information* and *Compensation*.

## 5.2.1.4.2 Including a Pay Component Amount in a Document

If you want to include a specific Pay Component Amount in a document, you need to use a Business Rule.

### Procedure

1. Use *Document Mapping Rule Result* as the base object.
2. Add a parameter as follows:
  - Name: **Compensation**
  - Code: **Compensation**
  - Object: **Compensation**  
The object is referring to hris-element *payComponentRecurring*, NOT *complInfo*.
3. Define an IF condition - it can't be set to "Always True". Therefore in the example where we have one "Base Salary" pay component for each country, we had to add multiple "Else IF" conditions to ensure the Salary field is populated correctly.
  - In the "THEN" condition, the field "Salary" on the MDF Object *Document Mapping Rule Result* is infact "genericNumber1" field. You could also add a custom field to this object if required - but make sure the field type is the same as the source.
  - In the "THEN" condition, we have to drill down through **► Compensation ► Employment Details ► Compensation** to get the extra option to *Select Compensation.Employment Details.Compensation where...* so we can tell the rule WHICH row to pull "Amount" from. Here we use the same Pay Component that is used in the IF part of the rule.
  - Because we want this rule to work no matter which of the Base Salary pay components applies, we use multiple "Else IF" statements to ensure all possibilities are considered.

## 5.2.1.4.3 Gender Rule

While generating the document, this rule checks the gender of the employee entered in the system and uses the relevant pronoun, he or she, in the document.

## 5.2.1.4.4 Today's Date Rule

While generating the document, this rule returns the current date that needs to be displayed in the document.

If the object is effective dated, the placeholder is resolved with the date you entered in the 'As of Date' field in the Generate Document screen. If the object is non-effective dated, then the administrator must create a rule to retrieve the relevant data.

If the base object you select is non-effective dated, you can't map the object to Past and Future Direct binding, and an error message will display.

## 5.2.2 MDF Objects

Employees and administrators may need documents that are based on MDF objects such as Benefits and Advances.

### **i** Note

Please ensure that the feature for which you require MDF objects for mapping is enabled for Document Generation.

MDF objects for the following Benefits and Advances features are available for mapping placeholders:

### *Benefits*

- Benefit Enrollment
- Benefit Program Enrollment
- Benefit Exception
- Benefit Employee Claim
- Benefit Claim Accumulation
- Eligible Employees Data for Benefit

### *Advances*

- Accumulation for Advances
- Non-recurring Payment

In the Advances feature, certain fields are updated based on other fields. For example the 'Total Repayment Amount' field is updated in the database based on the 'Advances Installment' field. The 'Total Repayment Amount' field is displayed on the UI, but is not saved in the database due to the dependency. If the data for fields such as this is not visible in your generated document, please go to Manage Data and verify if the data for your field is present in the MDF object.

### *Payment Information*

The MDF object 'Payment Information' is enabled for document generation. This appears in the Base Object column. All related fields appear in the Target Field column.

### i Note

During the rule creation process, you add objects as parameters. When adding the objects, enter the code provided by the module team in the code field. If a different code is entered, the rule execution will fail and the system cannot retrieve the data using the rule in the generated document.

### i Note

Parent MDF objects are available in the mapping screen; mapping the placeholder to child MDF objects is done using the parent objects.

### i Note

The system only retrieves active records and the records which are not pending while fetching the data for the placeholder.

### i Note

If you need to replace a placeholder with data from supported MDF objects using Rule Mapping, please ensure that, in addition to the MDF Object 'Document Mapping Rule Result', there is only one parameter that is an MDF object. If you assign multiple MDF objects in parameters for a placeholder using Rule Mapping, the system may not produce the expected output.

## 5.2.3 Custom Objects

If you enter a value in either the *Business Key* or *RBP (Role Based Permission) Subject User* field, with a field of the datatype *User*, the relevant custom objects will be available in the mapping screen drop down menu.

## 5.2.4 GDPR Log Read Access (RAL) Purge

Next to each placeholder, there is an additional field with a dropdown menu: "Log Read Access". This field is by default set to "No". The dropdown is visible on this Mapping screen only if RAL is enabled in your system.

### i Note

If the category of the template is Workflow, this field is not visible.

Change the field to Yes against the sensitive placeholders for which the Read Access Log must be enabled and save the mapping.

Whenever the document is generated or emailed, the system generates the read access logs.

### i Note

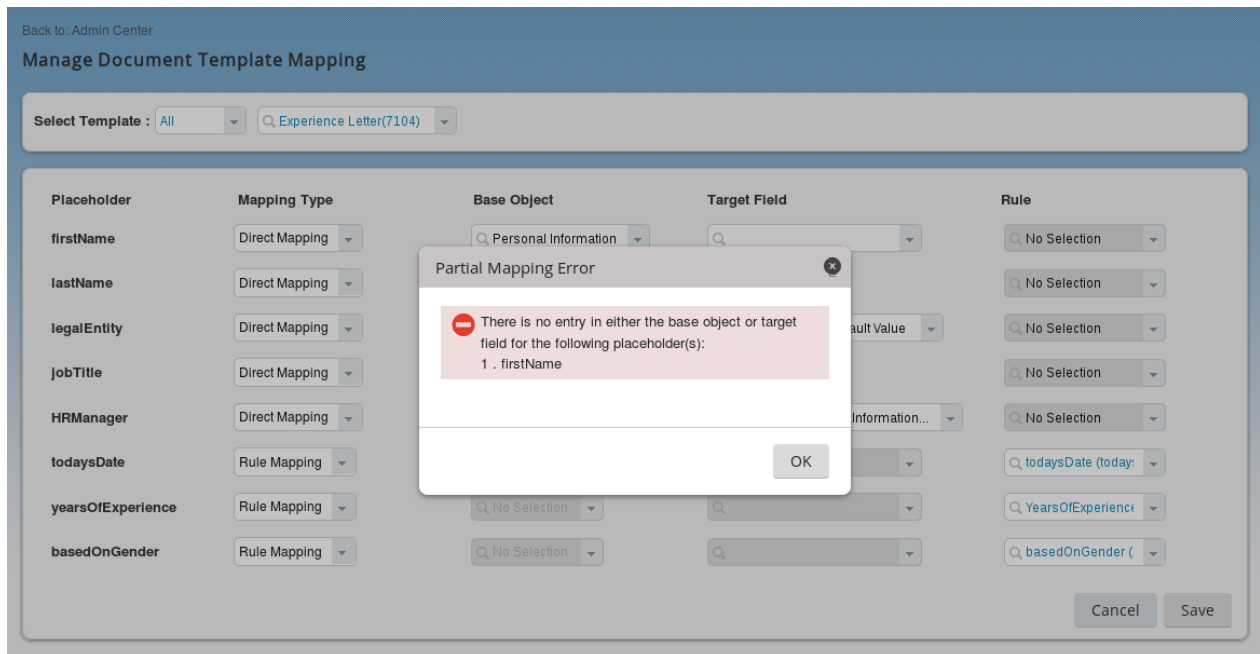
The central Read Log Access switch must be enabled for this function to work. For more details, see [Read Audit](#)

## 5.2.5 Troubleshooting Tips

Here you find information when having issues with document template mapping.

### Partial Mapping Error

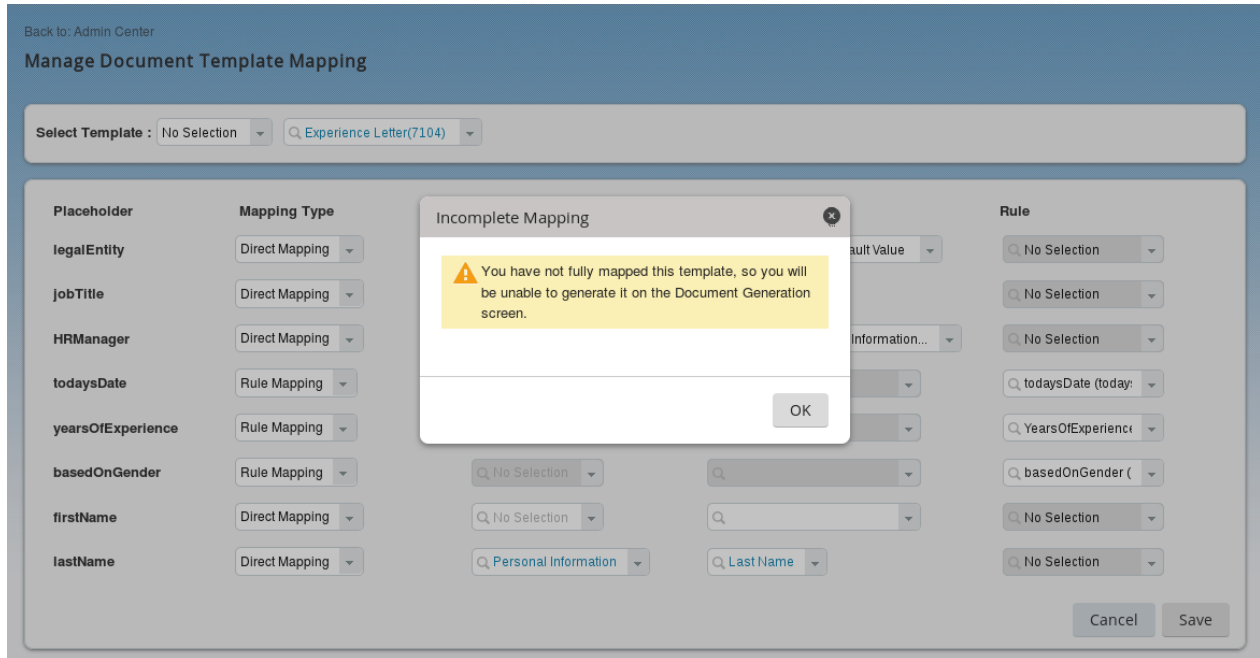
If you do not completely map a placeholder, the system generates an error message when you try to save it. For example, in the image below, the target field for mapping of the placeholder `firstName` has no entry. In this case the system generates the following error message:



### Incomplete Mapping

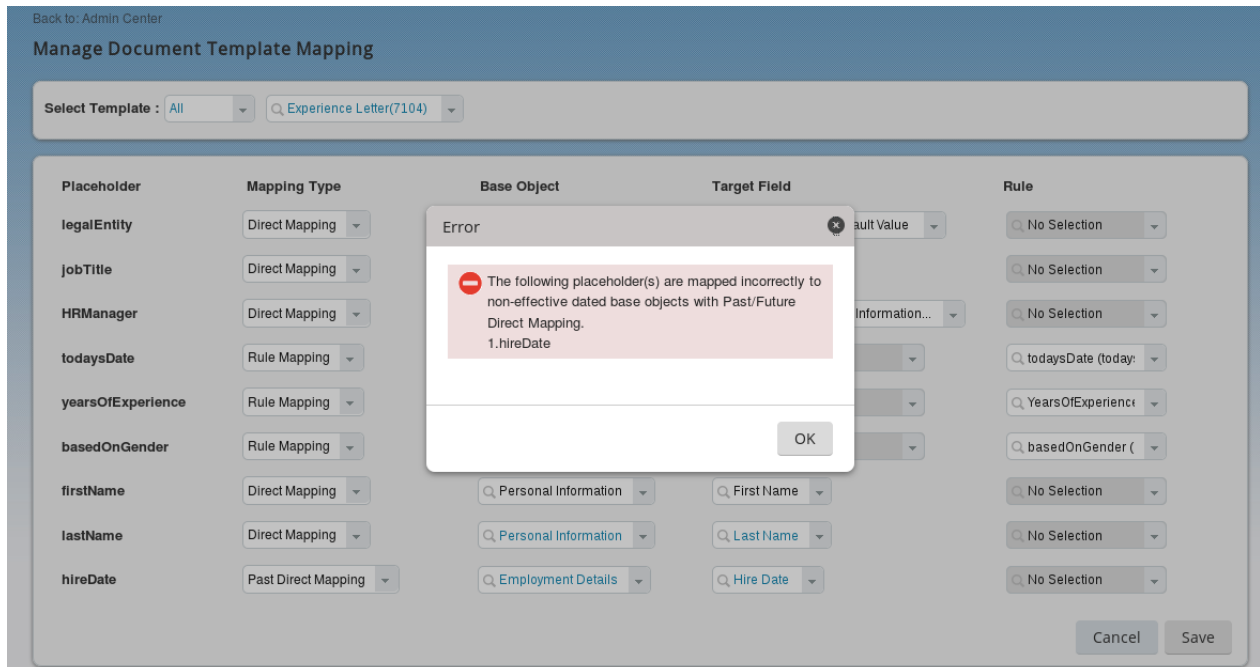
If you do not completely map a placeholder, the system generates a warning message when you try to save it. The system will not generate the document until the mapping is complete.

For example, in the image below there is no mapping of the placeholder *firstName* with base object and target field. In this case the system generates the following warning message:



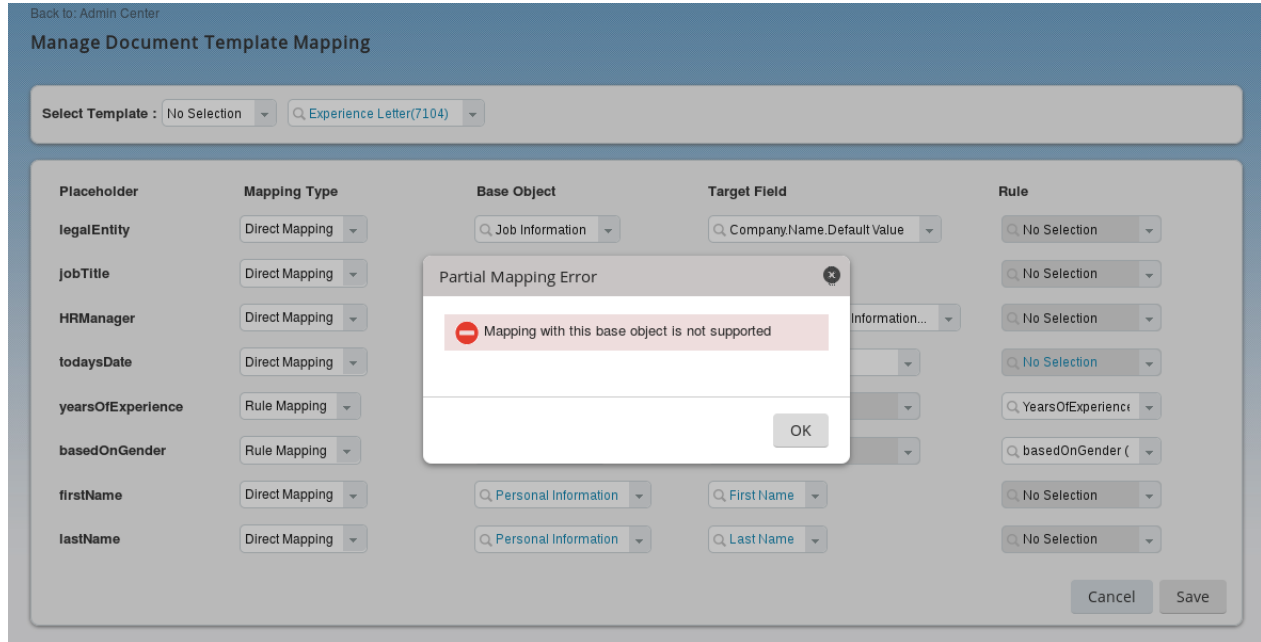
## Incorrect Mapping Type

When you choose Past or Future Direct Mapping for fields that are non-effective dated, for example hireDate, you will see an error message like this:

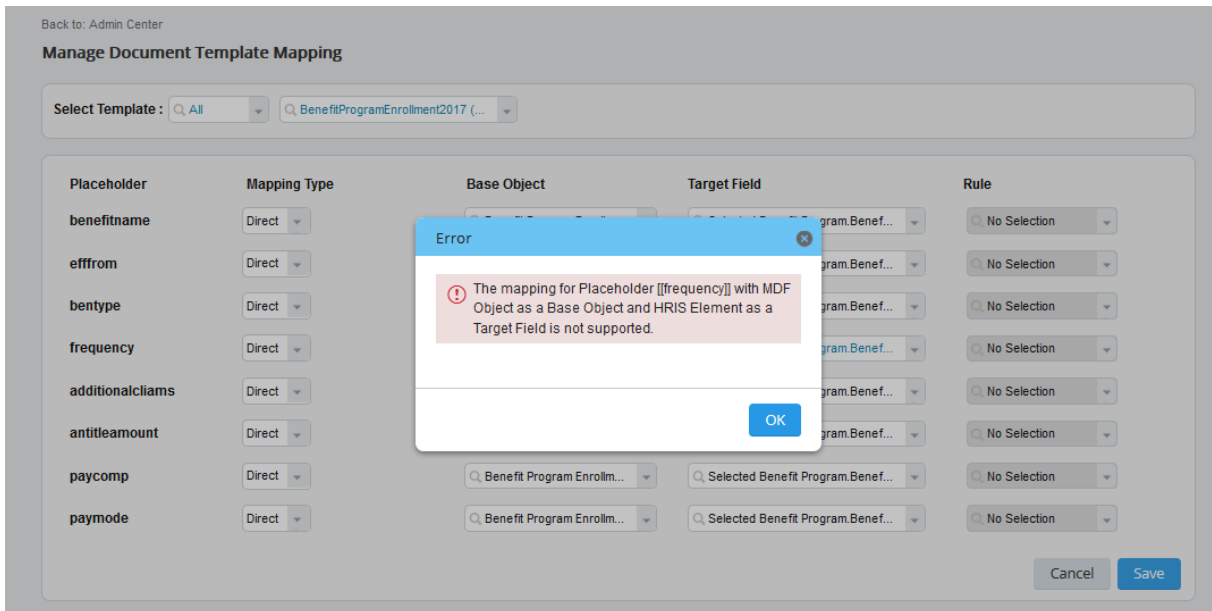


## Mapping Restrictions

Mapping placeholders to base objects such as Boolean, Date, Decimal, Integer and String is not possible. If you try this mapping, you will see an error message like this:



- If placeholders in the same row of a table do not belong to the same base object, a warning message like the following is displayed during the mapping process:  
*The following placeholder(s) in the same row are mapped to different base objects. If you are expecting multiple values for those placeholders, the document may not generate as expected. Do you wish to proceed?*
- If you try to map a placeholder with base object as MDF object and HRIS field as the target field the following error message pops up:





In addition, we recommended you do not map base objects as MDF objects and Foundation Object as the target field because the content for these mapping types will not appear in the generated document.

## MDF Object Mapping

While mapping the placeholders with Base Objects as MDF objects, you cannot map the Target Field directly to a Child Object Name. Map it to a field in the Child Object.

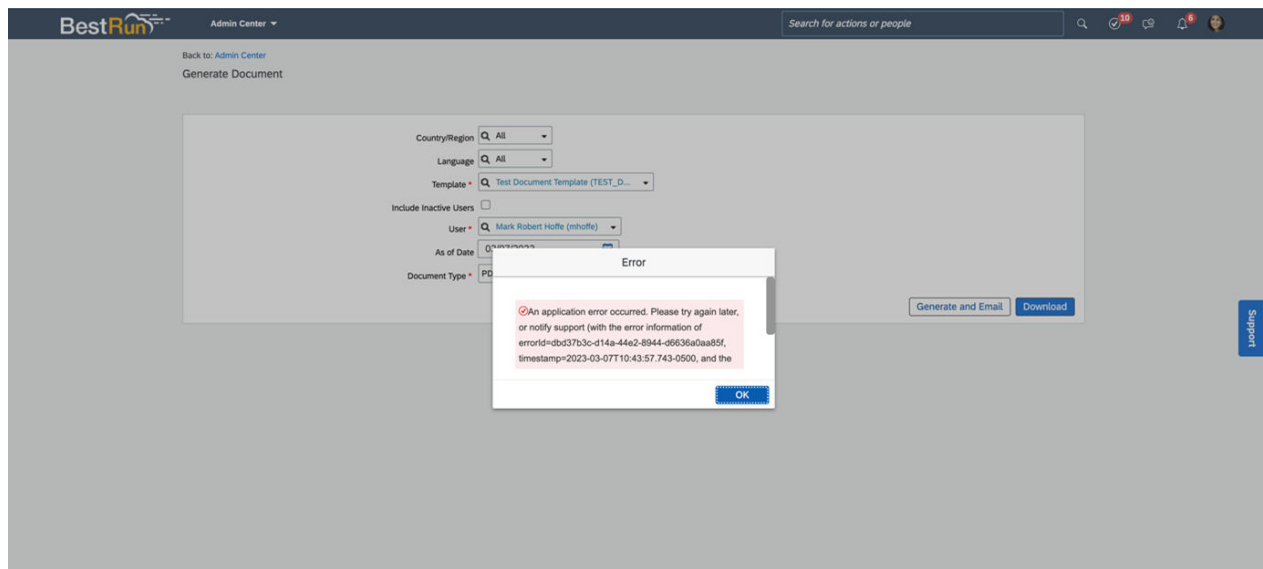
For example: Base Object = Payment Information, Target Field cannot be mapped only to Payment Information Details. The Target Field can be *Payment Information Details > Account Type* or any other field under the Payment Information Details object.

This also applies to MDF object and Custom MDF objects. The Target field should be a field of the object, not an object itself.

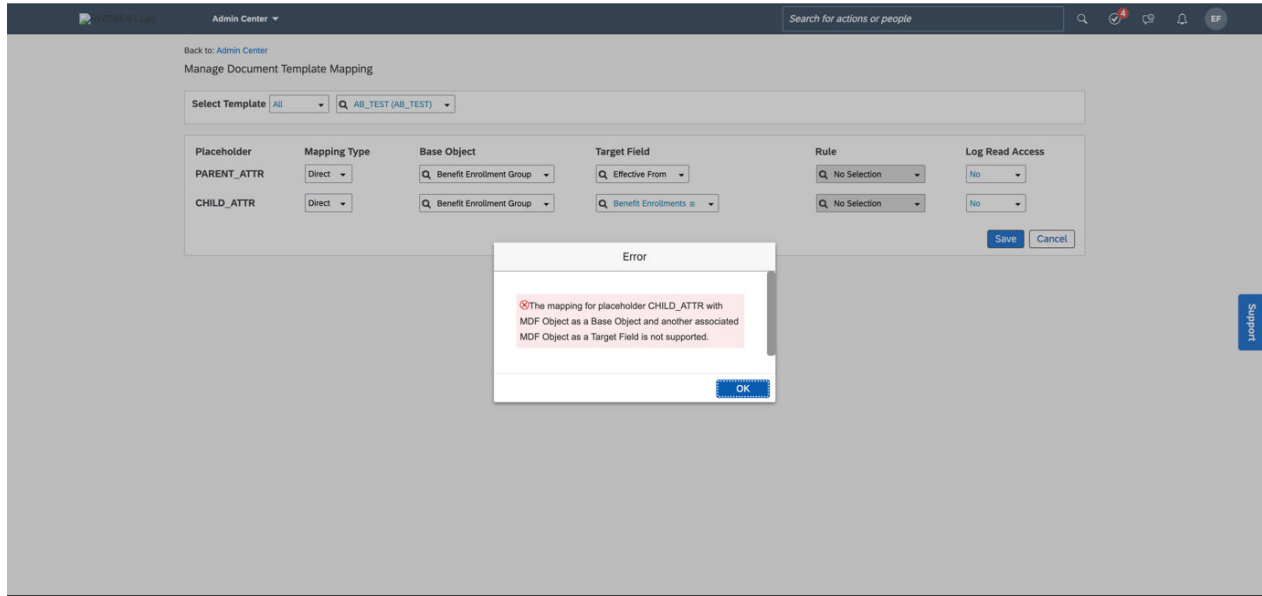
(The underlined Base Object and Target Field is the column name in the Document Generation Mapping screen)

## Mapping Restriction to MDF Object

While placeholders are mapped to the MDF object that has a relationship as an association, you will see an application error on the Generate Document screen.



While placeholders are mapped to the MDF object that has a relationship as an association, on click of save you will see an application error on the Manage Document Template screen.



## 5.3 Field Details for Document Template Screens

Here you find information about the field details of the document template screens.

The columns on the Document Template Mapping screen have the following functions:

Field Detail	Description
Placeholders	List of the placeholders you entered while creating your template, for example <b>todaysDate</b> .
Mapping Type	The mapping options for the individual placeholders. There are four options: <a href="#">Direct Mapping [page 17]</a> , <a href="#">Past Direct Mapping [page 17]</a> , <a href="#">Future Direct Mapping [page 17]</a> and <a href="#">Rule Mapping [page 18]</a> .
Base Object	List of Employee Central HRIS and MDF base objects. You can find more information on MDF objects available in <a href="#">MDF Objects [page 20]</a> .
Target Field	Target fields related to the respective Employee Central base objects.
Rule	List of rules related to Rule Mapping (relevant for Rule Mapping only).
Log Read Access	To enable read access log for the sensitive placeholder's data. For more information, see <a href="#">GDPR Log Read Access (RAL) Purge [page 21]</a>

Here you find details for the fields mentioned in Creating the Template.

Field Detail	Description
Template ID	A unique ID for the template you're creating.
Template Name	Name of the document you're creating.

Field Detail	Description
Short Description	Short description of the document.
Country	Dropdown menu from which you choose a country. If you don't choose a country, the template will be available for all countries
Language	Please ensure the language you choose matches the language used in the template.
Group	A dropdown, which shows the list of available groups. Please select the group that has the same category as template. You can find more information on this in <a href="#">Creating a Group for Document Generation Templates [page 16]</a> .
Status	The default selection is Active. If you choose Inactive, you won't be able to generate the document.
Email Subject	The text entered here will be used as the subject line for the email that is triggered from the 'Generate Document' screen. This field can contain both static text as well as placeholders. This field can have a maximum of 70 characters. If this field is left blank the following default subject line is used: "<templateName> for <userName>"
Template Content	<p>Here you can add all content relevant for your document. Rich Text Editor (RTE) is embedded in this field. Place Holder [P] is an important feature in RTE. To add the placeholders in the content, choose the <b>P</b> button and give a name to place holder such as <b>firstName</b> as highlighted in yellow in the image.</p> <p>These place holders are used in the document to support dynamic content so that the relevant employee's master data can be added to the document during the generation process. For example, <b>First Name</b> and <b>Last Name</b> are different for each employee and when you generate the document, these placeholders are replaced by the relevant employee's details.</p> <div style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> <p><b>i Note</b></p> <p>The placeholder <code>[[asOfDate]]</code> is reserved and can't be used to map to other fields in the system. If this placeholder is used in the document, it will be replaced with the As of Date chosen during the generation of the document.</p> <p>The As of Date field refers to the date the system uses to retrieve an employee's data. You can see an example in <a href="#">Generating a Document as an Administrator [page 29]</a>.</p> </div>
Remove Page Numbers in PDF	The default selection is <b>No</b> . If the field is set to <b>Yes</b> the generated PDF document won't have page numbers.
New Template Name	Name of the copied template
New Template Language	Language of the copied template
New Template ID	Unique ID of the copied template

Then, you enter the following details:

Field Detail	Description
Rows	You can have 1 or 2 rows. One row must contain the relevant placeholder names. If you choose two rows, you can use the first row for Headers, for example Pay Component, Amount and so on.
Columns	Your columns can contain placeholders, placeholders with static text, or static text in the table.
Border Size, Width, Height, Cell Spacing and Padding	These are all optional fields.
Caption	The caption appears just above the table. Caption will be visible in word format only.
Summary	You can choose to enter a description of the table.

### **i**Note

If you want to add styling to any placeholders in the RTE, make sure to apply any styling to both the brackets and the text inside the brackets. For example, if you want to apply styling to the text `[[FirstName]]`, you must apply the styling to both the brackets and the text.

If you want to include ALL of the Pay Components/Amounts that are defined for an employee, you can use a table and Direct Mappings. See the Example [Creating a Template Using Tables and Direct Mappings \[page 12\]](#)

# 6 Generating a Document

## 6.1 Generating a Document as an Administrator

On the *Generate Document* screen, you can choose your preferred template, and also the user for whom you are generating the document. You can filter the list of templates based on the country and language used to create the template on the *Manage Document Template* screen.

### Procedure

1. Go to ► *Admin Center* ► *Document Generation - Generate Document* ►
2. Choose the relevant options in the on-screen fields, then choose either *Generate and Email* or *Download*.
  - When you choose *Download*, the system generates a PDF document.
  - When you choose *Generate and Email*, the system triggers an email with the attached document. The document is sent to the business email address provided in the Employee's contact information. A system message will inform you if the email was successfully sent. The text entered in the Email Subject while creating the template will be used as the Subject line for the email.
    - You choose the type of document in the *Type* field. You can choose either PDF or Word Document.

#### i Note

The system does not display content in the right-to-left format for PDF documents. This function is only available for Word documents.

- The *As of Date* field refers to the date the system uses to retrieve an employee's data. In the screen below we can see the As of Date is 11/05/2015. This means that the system uses the employee's master data on that date when generating the document.

#### i Note

If you select the Inactive User checkbox, all employees with the employment status Suspended (S), Dormant (D), Furlough/Temporary Layoff (F), Retired(R), Terminated (T), Obsolete/Discarded (O) and any other employment status in their Job Information on that date will be available to select in the Users dropdown menu. The admin is the only person who can download the document for these users. The Generate and Email option is permanently disabled for these users regardless of the 'As of Date' selected.

#### i Note

If you have mapped a field which can have multiple entries, the system does not display all the entries when generating the document. Only the first entry available for the field according to the creation date of the data will be displayed. For example, when mapping to the pay component field, which can have multiple

entries, the system displays only the first entry available for the pay component according to the creation date of the data.

#### i Note

Documents generated in PDF Format only support the default font.

## 6.2 Generating a Document Using Self-Service

Employees and managers can use the self-service feature to generate, download, and email documents.

#### i Note

To enable the self-service scenarios for employees and managers (ESS and MSS), you must enable the People Profile feature in your system. You can do this either in Provisioning or the Upgrade Center.

#### → Remember

As a customer, you don't have access to Provisioning. To complete tasks in Provisioning, contact your implementation partner or Account Executive. For any non-implementation tasks, contact Product Support.

#### i Note

If you cannot see the [Generate Document](#) option under [Take Action](#) in the ESS and MSS scenarios, please check that you have the relevant permissions.

### 6.2.1 Generating a Document Using Employee Self-Service

Employees can use the self-service feature to download and generate a document, as well as send the document to themselves.

#### Procedure

1. On the employee's home page, the employees choose [Take Action](#).

The [Generate Document](#) option appears.

2. The employees choose [Generate Document](#), and the relevant templates appear.

The templates listed are based on the language they choose. They can also, if they wish, specify an [As of Date](#). The [As of Date](#) field uses the current date as a default value. They can then either send the document directly by email or download it.

### i Note

The default format of the document is PDF.

## 6.2.2 Generating a Document Using Manager Self-Service

The employee's manager can also download the document for the employee, and generate an email with the attached document for the employee.

### Procedure

1. The manager navigates to the profile of the employee for whom they want to generate the document.
2. The managers choose *Generate Document*, and the relevant template options appear.

The templates listed are based on the language they choose. They can also, if they wish, specify an *As of Date*. The *As of Date* field uses the current date as a default value. They can then either send the document directly by email or download it.

### i Note

The default format of the document is PDF.

## 6.3 Mass Generating Documents

With the mass document generation function, you can now generate a document for up to 500 employees at the same time.

### Context

On the Mass Generate Document screen, you can now choose your preferred template, and the legal entity under which the list of users is available for whom you are generating the document. You can filter the list of templates based on the country and language used to create the template on the Manage Document Template screen. You can also choose the email recipient option which specifies to whom the generated documents should be sent.

## Procedure

1. Go to ► [Admin Center](#) ► [Document Generation – Mass Generate Document](#) ►.
2. Give a proper Job Name in the Execution Manager – Job Name option.
3. Choose your preferred template, by filtering the list of templates based on country and language used to create the template on the Manage Document Template screen.
4. Choose the relevant legal entity for which the template needs to be generated in the User Selection by Legal Entity drop down.

### i Note

Legal Entity is the company for which the employee works for. This mandatory field helps in filtering the users. Only the users under this chosen legal entity will be eligible for mass generating the documents. All the users for whom the document was generated or failed can be checked in execution manager after generation.

5. Choose the business rule from the list of drop down available.

For more information on creating these scenarios through business rules, see [Creating a Scenario Using a Business Rule \[page 33\]](#).

6. Choose the recipient option from the drop down menu.
  - If you select *Email Selected Users* the documents will be sent to email address of the employees in the Legal Entity.
  - If you select *Email Job Owner* all the emails will be sent to Job Owner's email address.
  - If you select *Email Selected Users and Job Owner* the generated documents will be sent to both the Job Owner and employees.
7. Select *Start Mass Generation* to start a background job.

### i Note

The system can generate a document for a maximum of 500 employees. If the number of employees in the job exceeds 500, the system will display an error message.

### i Note

The system will send the document to the business email address provided in the Employee's contact information for the users who satisfy the condition (legal entity and business rule) provided. The text entered in the Email Subject while creating the template will be used as the Subject line for the email.

### i Note

The "As of Date" field refers to the date the system uses to retrieve an employee's data. In the screen below we can see the As of Date is 11/05/2015. This means that the system uses the employee's master data on that date when generating the document.



## 6.3.1 Downloading Job Details

Once the admin triggers the background job, you can view and download the job details on the Execution Manager Dashboard.

### Procedure

1. Go to ► [Admin Center](#) ► [Execution Manager Dashboard](#) ►.
2. Select the respective Job Name/Process Name given while triggering the job in the Mass Generate screen to view the details of each job.

To view attribute details, select an individual attribute on the event list.

- The startJob and endJob event give the start and end time of the job triggered
- The Job Parameter gives a summary of the template selected, As of Date specified, the details of the admin who has triggered the job and the details of the email recipient options
- The User Selection event reason gives all the detail regarding the total number of users and the number of users for whom the job was completed with errors or warnings. This report can be downloaded as an excel report. The excel report gives complete details for each user, including any errors that occurred while triggering a job for that user.

## 6.3.2 Creating a Scenario Using a Business Rule

You can create different scenarios using business rules to filter the users for whom the document must be generated. Only users who satisfy the condition specified under these rules will be eligible for mass generation of documents.

### Procedure

1. Go to ► [Admin Center](#) ► [Configure Business Rules](#) ►.
2. Under *Document Generation*, choose *Mass Document Generation – User Selection*.
3. Create a new rule by giving the required details such as Rule Name, Rule ID, Start Date and Description.

Once you have created the rule, write an "If" condition as required to filter or specify the users for whom the document should be generated (You cannot edit the "Then" condition).

#### i Note

If the user limit of 500 employees is exceeded, the job will fail and the system displays an error message.

If this error occurs, the admin should refine the business rule scenario so that the number of users is equal to or fewer than 500.

## 6.4 Troubleshooting Tips

Here you find information when having issues with generating a document.

### i Note

All troubleshooting tips relevant for an administrator while generating a document are also applicable to employees and managers.

- If you have multiple values for a placeholder, but these are not entered in the table, a warning like the following is displayed when you generate the template:  
*Only one value will be visible in the document for the following placeholder(s) as it is not part of the table. Do you wish to proceed?*
  1. Placeholder
  2. Placeholder
- If you have multiple values for a placeholder, but they are not entered in the same row of the table, a warning message like the following is displayed before generating the document:  
*Only one value will be visible in the document for the following placeholder(s), as they are not part of same row in tables. Do you wish to proceed?*
  1. Placeholder
  2. Placeholder
- If placeholders in the same row of a table do not belong to the same object, an error message like the following is displayed during the generation process:  
*The document cannot be generated as the following placeholders with multiple values in the same row are mapped to different base objects.*
  1. Placeholder
  2. Placeholder
- If the employee's master data is not available for the mapped placeholder, you will see a warning message like the following:  
*The following placeholder(s) could not be processed:*
  1. *legalEntity*
  2. *HrManager*
    - To leave the field(s) empty and proceed, select Yes.*
    - To remain on this screen, select No.*
- If you do not have the proper role based permission to access the relevant master data of an employee, you will see an error message. Here is an example:  
*You do not have permission to access the following placeholders: jobTitle*  
To access the employee's data, you must have block level RBP as well as field level RBP. For example, to access the Hire Date field you must have access to Employment Details Section, that is: ► [Manage Permission Role](#) ► [Employee Data](#) ► [Employment Details](#) ► [Employment Details MSS](#) ►
- If a placeholder is mapped to Dependents-> Global Information-> Country Code, and if Global Information has entries for multiple countries, you will see a warning message mentioning that only the first value will be displayed in the generated document.
- In the Document Type field, if you choose Word, the local image will not be downloaded. A warning message is displayed.

## i Note

If you do not complete the mapping for the placeholders in a template, the relevant template will not be available in the *Document Generation* screen. If a placeholder is mapped to a field which is a picklist, please ensure that the picklist values are available in the system for the locale specified in the template, otherwise the placeholder will not be resolved.

- In the case of Pay Component, permission can be given for individual pay components. If a rule is associated to this pay component field and individual permissions are given at the component level, then Document Generation does not adhere to these permissions given.  
To prevent unauthorized users from viewing the sensitive data, the admin must restrict the permissions given at the template level for these users.
- Previously, if the user does not have job information permission for the selected users as of the given date, a warning like the following is displayed on Generate Document screen.
- *The selected employee, [[employee name]], is not in active employment on the given 'As of Date': [[as Of Date]]. If you need to generate the document during the employee's active employment, please choose a date on or after: [[as Of Date]].*
- Currently, if the user has job information permission for the selected users as of the given date, a warning like the following is displayed on Generate Document screen.
- *For the selected employee [[employee name]], the system could not determine whether the employment is active or inactive on the given 'As of Date':[[as Of Date]]. If you need to generate the document during the employee's active employment, please choose a date during the employee's active employment period*

# 7 Implementing Print Forms Generation

Print Forms Generation is a solution you can use to generate forms such as Employee Self Service forms and Manager Self Service forms.

This guide will help you to implement the solution and provides you with some information on important fields and screens.

## i Note

Currently, Print Forms Generation is only available for simple master data forms.

## 7.1 Prerequisites

Before implementing the function, you need to make some settings in Provisioning and in the Role Based Permissions (RBP) in your system.

[Enabling Print Forms Generation \[page 36\]](#)

First, you activate the *Enable Print Forms Generation* setting to use the forms generation function in the system.

[Activating Role Based Permissions \[page 40\]](#)

You need to activate the necessary role-based permissions (RBPs) to start using this feature.

### 7.1.1 Enabling Print Forms Generation

First, you activate the *Enable Print Forms Generation* setting to use the forms generation function in the system.

## Context

You must also enter your SAP BTP URL credentials to download the forms from the SAP Business Technology Platform (SAP BTP).

## → Recommendation

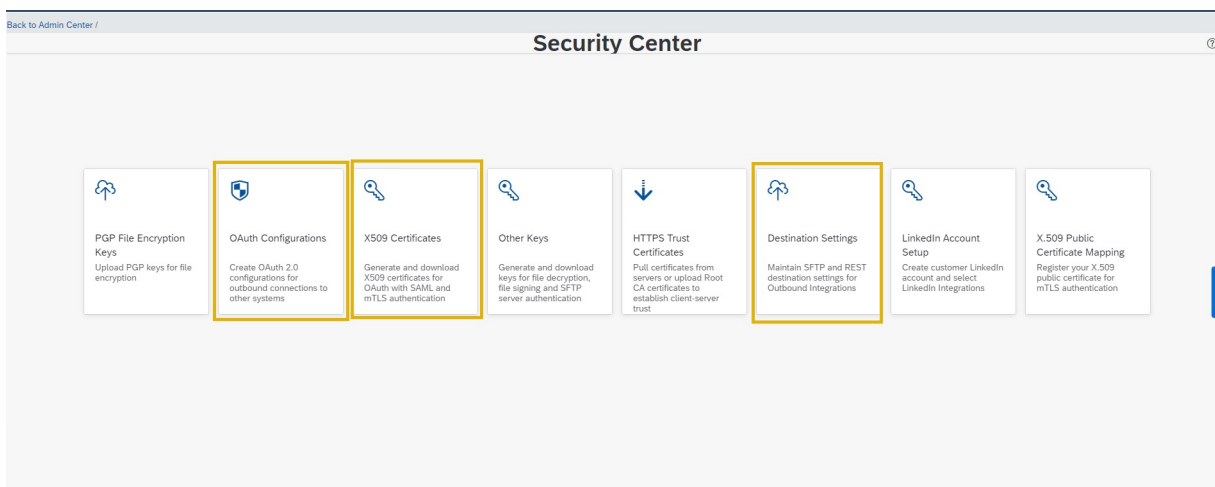
Since the Forms Generation function depends on both Document Generation and People Profile, we recommend activating the relevant Provisioning switch.

## → Remember

As a customer, you don't have access to Provisioning. To complete tasks in Provisioning, contact your implementation partner or Account Executive. For any non-implementation tasks, contact Product Support.

## Procedure

1. Go to the Employee Central Admin Center
2. In the *Tool Search* field, select *Security Center*
3. In the *Security Center*, select *X509 Certificates*.

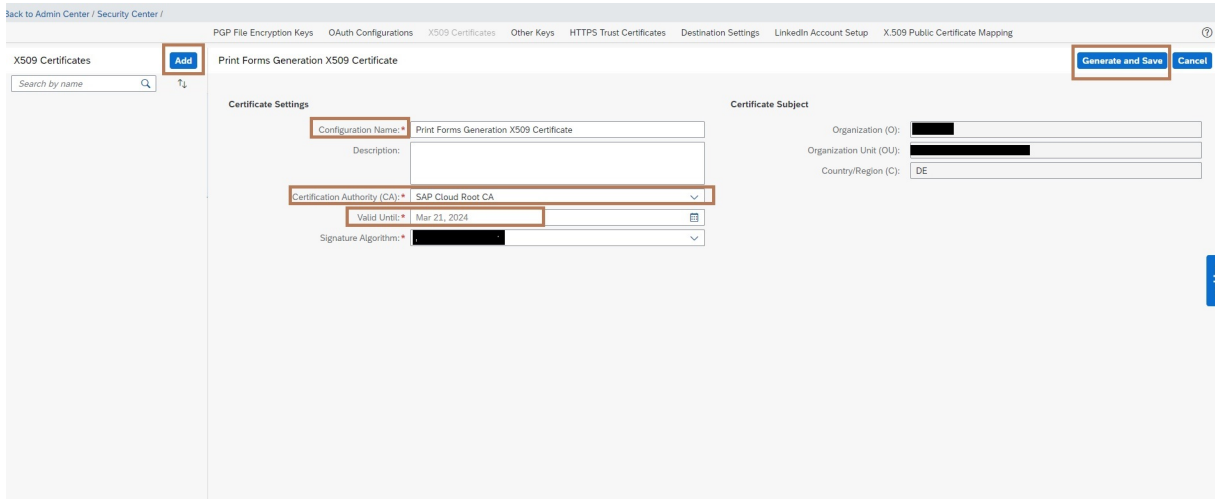


4. Select Add and provide the requested information to generate the corresponding certificate.
  - Configuration Name
  - Certification Authority (CA): SAP Cloud Root CA.
  - Valid Unit: Select the period for your validity.

### i Note

The Valid Until date of the X509 certificate must be at least one month long when you regenerate an X509 certificate upon expiration of the current certificate.

- Choose *Generate* and *Save*



After generating the certificate, download the *X509 Certificate* and save it locally.

For creation of the Service Key in BTP Print Forms, you must provide the parameters in JSON format.

### i Note

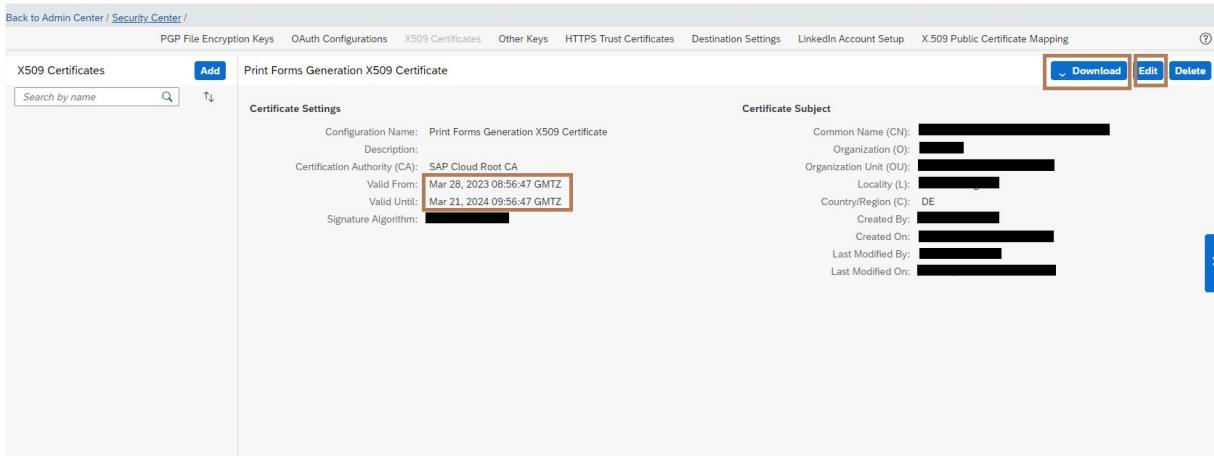
Use the format below. The certificate value in the "" ("-----BEGIN CERTIFICATE-----MIIFXXXXXXXXXXXXXXxx-----END CERTIFICATE-----") needs to be replaced with the certificate information from the crt file that you have to generate in the SAP SuccessFactors Security Center. How to generate the file is provided in step 4.

```
{
  "xsuaa": {
    "credential-type": "x509",
    "x509": {
      "certificate": "-----BEGIN CERTIFICATE-----MIIFXXXXXXXXXXXXXXxx-----END CERTIFICATE-----",
      "certificate-pinning": false
    }
  }
}
```

### i Note

When your key expires soon, all you have to do is go to the X509 Certificate and edit the corresponding certificate. Enter the new valid until date, then *Regenerate* and *Save*.

No additional steps are required to extend the validity of the certificate.

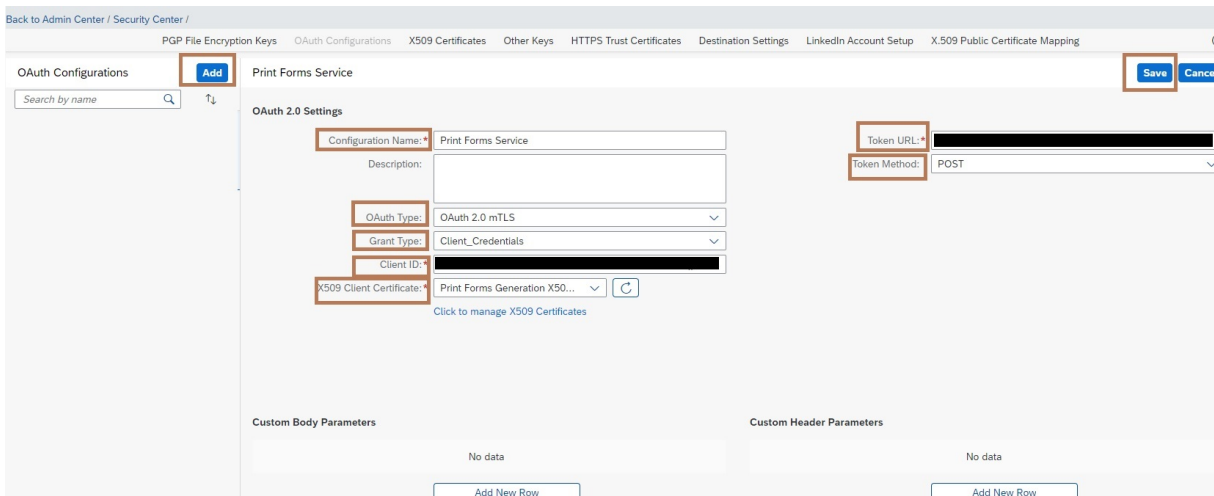


- In the Security Center, select OAuth Configurations and add the required information for the OAuth Configuration.
  - Configuration Name
  - OAuth Type: OAuth 2.0 mTLS
  - Grant Type: Client\_Credentials
  - Client ID: Available in the *BTP Instance* under *Service Keys* by the horizontal ellipsis under *View*
  - X509 Client Certificate: Choose, created entry under "X509 Certificate"
  - For the Token URL copy the information available in the certurl (https://...com) and append */oauth/token*

#### Example

https://...com/oauth/token?grant\_type=client\_credentials

- Token Method: Choose *POST*
- Choose *Save*



- In the *Security Center*, select *Destination Settings* and add all the required information.
  - Name: *Print Forms Service Configuration*  
(The name should always be Address Validation Service Configuration so that the address validation is triggered from Employee Central)
  - Type: Choose *REST*

- For the Endpoint URL, copy the information available in the uri.

### ❁ Example

https://api.dqmmicro.cfappa,,,,,hana.ondemand.com/dq/addressCleanse

- Authentication Type: Choose OAuth
- OAuth Configurations: Choose the entry created from the above step under “OAuth Configurations”
- Choose *Save*

**Task overview:** [Prerequisites \[page 36\]](#)

## Related Information

[Activating Role Based Permissions \[page 40\]](#)

## 7.1.2 Activating Role Based Permissions

You need to activate the necessary role-based permissions (RBPs) to start using this feature.

### Procedure

1. Go to **Admin Center** > **Manage Permission Roles**.
2. Choose **Permission**, then choose **Manage Forms**.

#### i Note

Ensure that the permissions for Document Generation **Manage Templates** and **Manage Template Mapping** are selected before going to **Manage Forms**



3. Under *Manage Forms*, choose *All* or *Others*.

If you select *Others*, select the individual forms from the list provided. This permission is necessary to generate the chosen forms for users.

**Task overview:** [Prerequisites \[page 36\]](#)

## Related Information

[Enabling Print Forms Generation \[page 36\]](#)

## 7.2 Creating New Forms

Users can create forms manually using the Document Generation template, then entering the details of the tokens they've created in Manage Document Template Mapping. Finally, they can generate the forms using the Take Action menu.

### i Note

Pre-delivered templates are deprecated and no longer available for download in the Success Store.

## Related Information

[Creating New Forms and Uploading to SAP BTP \[page 41\]](#)

[Verifying a Template in SAP BTP \[page 42\]](#)

[Convert from XDP to XML \[page 43\]](#)

### 7.2.1 Creating New Forms and Uploading to SAP BTP

Find out how to create new forms and upload them to SAP BTP.

## Procedure

1. You can use Adobe LifeCycle Designer™ to create a new form.
2. Once the form is created, export the form in both XDP and XSD formats from Adobe LifeCycle Designer™.

3. Once the XSD and XDP forms are ready, upload the XDP by accessing the Print Form service in SAP BTP.

#### i Note

The customer should have access to print forms SAP BTP URL to perform the above step.

▶ [URL](#) ▶ [Home Page](#) ▶ [Upload Form Template](#) ▶

4. Upload the XDP by selecting [Browse](#), then select the Locale of the template from the drop-down menu, and set the status to [Active](#).

#### i Note

Only select the status [Inactive](#) if you no longer need to access the form

Once you select [Upload](#), the form will be available in SAP BTP under [My Templates](#)

## 7.2.1.1 Verifying a Template in SAP BTP

Find out how to verify a template in SAP BTP.

### Procedure

1. On the SAP BTP url, go to ▶ [Home Page](#) ▶ [Maintain Form Templates](#) ▶.
2. Search for the template based on the Form Template ID and, if the record shows up in the results, it means the form is successfully uploaded to the service.

If the template does not appear, you can create a new template by following the steps in the [Creating a New Template](#) section.

### Related Information

[Create a New Template \[page 44\]](#)

## 7.2.1.2 Convert from XDP to XML

Find out how to convert your XDP output to XML. You can generate the XML output using Acrobat Reader or Online Service.

### Acrobat Reader

Use Acrobat Reader™ to open the PDF, then choose **Edit > Form Options > Export Data**.

### Online Service

Go to [xmlgrid.net](http://xmlgrid.net) and follow the instructions.

Once you have completed the process, you will have 3 file types:

- XDP
- XSD
- XML

## 7.3 Configuring Form in Employee Central Document Generation for Mapping

Once you have created the forms and uploaded them to SAP BTP, Employee Central Document Generation must consume the form to create the template to support relevant mapping of the placeholders with the corresponding fields. You can do this following the steps listed in the sections below.

### i Note

XML data that is entered in the Employee Central template and field names created in XDP should be in sync to generate the form. To do this, make sure the field names in XDP are correct before generating the HTML.

### Related Information

[Create a New Template \[page 44\]](#)

[Create a Reference Template \[page 45\]](#)

[Mapping Template Placeholders \[page 47\]](#)

## 7.3.1 Create a New Template

Here are the steps to create a new template, as well as information about the entries in the fields.

1. Go to [Admin Center](#) > [Manage Document Generation Template](#) > [Create a New Template](#).

Field Descriptions

Fields	Description
Template Name	Enter a template name.
Category	Select <i>Print Form</i> .
Language	Select the Locale that you selected during the upload of the form template.
Status	Select <i>Active</i>
Form ID	Enter the Form ID. This should be the same ID as the Form Template ID, that is, the name with which the XDP is uploaded in SAP BTP in the customer instance.
Form Template	Form template must only be filled in for the parent template. It should contain only the XML tags; the tags should not contain any data. See the Form Template Example section below.
Template Content	The field should hold the Placeholder only. See the Template Content Example section below.
Reference Template	If the reference template is <i>not</i> the parent template it should be set to <i>YES</i> ; otherwise it should be set to <i>NO</i> .

### Form Template Example

#### ❖ Example

```
<?xml version="1.0" encoding="utf-8"?>
<data>
  <P_FUYOU>
    <D_BD1></D_BD1>
    <D_BM1></D_BM1>
    <D_BY1></D_BY1>
  </P_FUYOU>
</data>
```

#### i Note

The XML should start with the <data> tag.

### Template Content Example

The *Template Content* field must be filled following the logic shown in the example below:

## ❁ Example

```
<?xml version="1.0" encoding="utf-8"?>
<data>
  <D_BD1></D_BD1>
  <D_BM1></D_BM1>
  <PERSON>
    <DATA>
      <TOKEN1>str1234</TOKEN1>
      <TOKEN2>str12345</TOKEN2>
      <TESTREF2>
        <DATA>
          <TOKEN3>str1234</TOKEN3>
          <TOKEN4>str1234</TOKEN4>
        </DATA>
      </TESTREF2>
    </DATA>
  </PERSON>
</data>
```

## Rules

When the token has a <DATA> tag next to a custom tag, for example <PERSON>, then the <PERSON> tag should be referred to the mapping type *Reference*. So, the parent tag <PERSON> should be added as a token in the current template, its mapping type should be *Reference* and all its associated tags should be created inside the new reference template.

So, the template content that must be filled in the above case would be:

[[D\_BD1]]

[[D\_BM1]]

[[PERSON]]

For all the other placeholders under person, they should be included in the reference template.

## 7.3.2 Create a Reference Template

Here are the steps to create a reference template, as well as information about the entries in the fields.

1. Go to [Admin Center](#) > [Manage Document Generation Template](#) > [Create a New Template](#) .

Field Descriptions

Fields	Description
Template Name	Enter a template name
Category	Select <i>Print Form</i>
Language	Select the Locale that you selected during the upload of the form template.
Status	Select <i>Active</i>

Fields	Description
Form ID	Enter the Form ID (Should be the same ID as the template ID uploaded on to SAP BTP)
	<p><b>i Note</b></p> <p>The name on which the XDP is uploaded from the customer instance will be the ID of the template</p>
Reference Template	Select <b>YES</b>
Form Template	Leave this field blank
Template Content	This field should hold the Tokens or Placeholder only.

## Template Content Example

The field must be filled following the logic in this example:

### ❖ Example

```
<?xml version="1.0" encoding="utf-8"?>
<data>
  <D_BD1></D_BD1>
  <D_BM1></D_BM1>
  <PERSON>
    <DATA>
      <TOKEN1>str1234</TOKEN1>
      <TOKEN2>str12345</TOKEN2>
      <TESTREF2>
        <DATA>
          <TOKEN3>str1234</TOKEN3>
          <TOKEN4>str1234</TOKEN4>
        </DATA>
      </TESTREF2>
    </DATA>
  </PERSON>
</data>
```

### Rules

It should contain placeholders that are nested inside the <DATA> tag. Taking the above XML as an example, you should have:

[[TOKEN1]]

[[TOKEN2]]

[[TESTREF2]]

All other placeholders under Person should be included in the reference template.

### i Note

A reference template is necessary if you create a nested structure in XML format based on the way the XDP is created. This applies regardless of the number of lines of data you created.

## 7.3.3 Mapping Template Placeholders

You can map the master data values to the token of the forms. Based on the mapping, the framework will pick the data from corresponding field and enter it in the form.

### Context

For example, if it is necessary to enter a value in the *Name of Employee* field, then the corresponding placeholder can be mapped to the *Name Information* field. This can be done in *Document Generation Manage Template Mapping*.

### Procedure

1. Go to [Admin Center](#) > [Document Generation Manage Template Mapping](#).
2. Choose *Save*.

## 7.4 Generating the Form

Find out how to generate the forms.

### Procedure

1. At the top of the *People Profile* screen, choose the *Take Action* menu, then choose *Generate Forms*. This will take you to a pop-up screen.

Field	Description
Country	This defaults to the legal entity to which the employee belongs.
Language	The language used on the form.
Form	This will appear automatically based on the entries in Country and Language.
Form Description	This contains a detailed description of the form selected, and appears automatically when the relevant form is selected.

2. Once all fields are filled, the user has two options:

- Send the form as a PDF attachment directly to the employee's business email address by choosing *Send Directly by Email*
- Download the form by choosing *Download*. The employee's email address should be entered for the employee in Employee Central to complete the download successfully.





# Important Disclaimers and Legal Information

## Hyperlinks

Some links are classified by an icon and/or a mouseover text. These links provide additional information.

About the icons:

- Links with the icon : You are entering a Web site that is not hosted by SAP. By using such links, you agree (unless expressly stated otherwise in your agreements with SAP) to this:
  - The content of the linked-to site is not SAP documentation. You may not infer any product claims against SAP based on this information.
  - SAP does not agree or disagree with the content on the linked-to site, nor does SAP warrant the availability and correctness. SAP shall not be liable for any damages caused by the use of such content unless damages have been caused by SAP's gross negligence or willful misconduct.
- Links with the icon : You are leaving the documentation for that particular SAP product or service and are entering an SAP-hosted Web site. By using such links, you agree that (unless expressly stated otherwise in your agreements with SAP) you may not infer any product claims against SAP based on this information.

## Videos Hosted on External Platforms

Some videos may point to third-party video hosting platforms. SAP cannot guarantee the future availability of videos stored on these platforms. Furthermore, any advertisements or other content hosted on these platforms (for example, suggested videos or by navigating to other videos hosted on the same site), are not within the control or responsibility of SAP.

## Beta and Other Experimental Features

Experimental features are not part of the officially delivered scope that SAP guarantees for future releases. This means that experimental features may be changed by SAP at any time for any reason without notice. Experimental features are not for productive use. You may not demonstrate, test, examine, evaluate or otherwise use the experimental features in a live operating environment or with data that has not been sufficiently backed up.

The purpose of experimental features is to get feedback early on, allowing customers and partners to influence the future product accordingly. By providing your feedback (e.g. in the SAP Community), you accept that intellectual property rights of the contributions or derivative works shall remain the exclusive property of SAP.

## Example Code

Any software coding and/or code snippets are examples. They are not for productive use. The example code is only intended to better explain and visualize the syntax and phrasing rules. SAP does not warrant the correctness and completeness of the example code. SAP shall not be liable for errors or damages caused by the use of example code unless damages have been caused by SAP's gross negligence or willful misconduct.

## Bias-Free Language

SAP supports a culture of diversity and inclusion. Whenever possible, we use unbiased language in our documentation to refer to people of all cultures, ethnicities, genders, and abilities.

© 2023 SAP SE or an SAP affiliate company. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or for any purpose without the express permission of SAP SE or an SAP affiliate company. The information contained herein may be changed without prior notice.

Some software products marketed by SAP SE and its distributors contain proprietary software components of other software vendors. National product specifications may vary.

These materials are provided by SAP SE or an SAP affiliate company for informational purposes only, without representation or warranty of any kind, and SAP or its affiliated companies shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP or SAP affiliate company products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies.

Please see <https://www.sap.com/about/legal/trademark.html> for additional trademark information and notices.