

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Setup Guide

Create Social Security Certificate using SAP Build Process Automation

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Required SAP Business Technology Platform Services

The Workflow content package **Create Social Security Certificate** is intended to be used for SAP S/4HANA and SAP S/4HANA Cloud and requires the following Services in SAP Business Technology Platform.

- SAP Build Process Automation
- SAP Integration Suite
- SAP Connectivity Service
- SAP Business Application Studio
- SAP Application Runtime Service
- SAP Work Zone, standard or advanced
- SAP Document Management Service, Integration Option
- SAP Cloud Identity Services - Identity Authentication (optional)
- SAP SuccessFactors

Setup and Configuration

The **Create Social Security Certificate** content package requires SAP Build Process Automation. Based on which service you plan to use, follow the appropriate section to configure SAP Build Process Automation.

SAP Business Technology Platform Cockpit

Configure SAP Build Process Automation

Follow the setup and configuration section of SAP Build Process Automation:

1. [Subscribe to SAP Build Process Automation \(Standard Plan\)](#)
2. [Configure Destinations for Live Process Projects](#)
 - Import Package Destination
 - Decisions Destination to support start and step conditions.
3. [Configure SAP Work Zone Service for SAP Build Process Automation](#)

Setup SAP Build Process Automation Destination

A destination is required in the Business Technology Platform subaccount where SAP Build Process Automation is subscribed.

- Create a destination with the name "sap_process_automation_service" with the following configuration if it doesn't exist already.

Please refer to [create a HTTP destination OAuth 2.0 Authentication \(client credentials\)](#).

Name	sap_process_automation_service
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<" endpoints"."api">
Client ID	<"uaa":"clientis">
Client Secret	<"uaa":"clientsecret">
Token Service URL	<"uaa":"url">/oauth/token

Configure OAuth2ClientCredentials SAP Build Process Automation Destination (Service Instance)

Ignore this step if there is already a destination using SAP Build Process Automation service instance created.

Create new destination to call SAP Build Process Automation APIs using a service route from SAP UI5 component. For more details, follow the [help document](#):

Destination Configuration

Service Instance: * sap_processautomation

Name: * process_atuomation_service_destination

Description: Call SAP Process Automation APIs using a service route

Additional Properties

Destination Configuration

Name: *

Type:

Description:

URL: *

Proxy Type:

Authentication:

Use mTLS for token retrieval:

Client ID: *

Client Secret:

Token Service URL Type: *

Token Service URL: *

Token Service User:

Token Service Password:

Additional Properties

endpoints	{"api":"https://k...	🗑
html5-apps-...	{"app_host_id":"...	🗑
saasregistry...	true	🗑
sap.cloud.s...	com.sap.spa.process...	🗑
sap.cloud.s...	spa	🗑

Use default JDK truststore

Configure SAP Document Management Service

Configure Document Management Service Repository

SAP Document Management service, in short Document Management, is the content management solution on the Cloud Foundry environment of SAP Business Technology Platform.

For the Cancel Customer Invoice, you need to subscribe to 'Document Management, Integration Option' to upload the Cancel Customer Invoice related documents and other supporting documents for the approval process.

Create and configure root Document Management Service repository by following the steps described in [Initial Setup for Document Management, Integration Option](#) and [Connect to Document Management, Repository Option Using API \(incl. Prerequisites\)](#). Save generated Repository ID from the response to be used the destination configuration as described in the next section.

Configure Document Management Destination

Configure a Document Management Service destination with the following parameters.

Name	bpmworkflowruntime_attachments
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2UserTokenExchange
URL	<"endpoints":"ecmservice":"url">/browser/ <Repository_ID>/root/
Token Service URL	<"uaa":"url">/oauth/token
Token Service URL Type	Dedicated

Populate Client ID and Client Secret with the values from the Service Key created on the previous step (see [Create Service Keys Using the Cockpit](#)). For more information refer to [Create HTTP Destinations](#) and [OAuth User Token Exchange Authentication](#). Make sure that the users which are going to use the application have “SDM_Admin” or “SDM_User” roles assigned to them.

Configure Integration Suite Destination

To call an integration flow, a HTTP destination is required in the SAP Business Technology Platform tenant where the SAP Build Process Automation is subscribed. Create a destination called CPI with either Basic Authentication or OAuth2ClientCredentials.

Destination with Basic Authentication

Name	CPI
Type	HTTP
Proxy Type	Internet
Authentication	Basic Authentication
URL	https://<customerhost>/http/Wfm/CancelCustomerInvoice
Username	<user>
Password	<password>

Destination with OAuth2ClientCredentials Authentication

Name	CPI
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<runtime.url>
Client ID	<client ID>
Client secret	<client secret>
Token Service URL	< oauth.url.for.clientCredentials >

Setup Content Package

Import and deploy Integration Suite content

This workflow content requires the Integration Suite to process the –Create Social Security Certificate in SAP S/4HANA. The integration content package SAP Build Process Automation Integration with SAP S/4HANA for Create Social Security Certificate is available in SAP API Business hub to integrate SAP Build Process Automation with SAP S/4HANA. Integration models use RFC and OData to integrate with SAP S/4HANA. The following integration models are available in this package.

1. Company Data Query
2. Employee Address Query
3. Employee Email ID Query
4. Employee First Last Name Query

Further details can be found in dedicated integration guide of the integration package “SAP Build Process Automation Integration with SAP S/4HANA for Create Social Security Certificate” that is accessible in this [link](#).

Import pre-packaged Integration content in SAP Integration Suite

- Access your SAP Integration Suite tenant management node (<https://<integrationtenant>/itspaces>).
- View all pre-packaged integration flow under Discover->Integration. (<https://<integrationtenant>/itspaces/shell/discover>)
- Search content package "[SAP Build Process Automation Integration with SAP S/4HANA for Create Social Security Certificate](#)".
- Click on the package "SAP Build Process Automation Integration with SAP S/4HANA for Create Social Security Certificate".
- Click Copy to import the Integration content package to your workspace.
- Navigate to the Monitor view (<https://<integrationtenant>/itspaces/shell/monitoring>) to setup the security materials required for the package.
- Deploy the following credentials using the Security Material app. Detailed information on the credentials is available on the integration guide.
- In Integration Suite, open Operations view, then click on Security Material to create and deploy security materials.
 - **S4HANA** – (User Credentials) To call the OData APIs.
 - **WF_CREDENTIAL** – (OAuth2 Client Credentials) To start the approval workflows in SAP Build Process Automation ([help documentation to determine the service configuration parameters](#))

Note: The credential names can be different from what is mentioned above. Make sure that you configure the appropriate credential names in the integration flow's OData/HTTP adapter configuration.

For more information refer the Integration Guide.

Setup Custom User Interfaces

The content package requires two SAPUI5 user interfaces, and both are automatically deployed in the SAP Business Technology Platform tenant when the content package is imported. If the standard behavior needs to be altered to meet custom requirements, then the sources for the user interface and workflows are available in the Sources tab (Manage Package app). The source files can be imported into the SAP Business Application Studio to make further enhancements & deploy into the SAP Business Technology Platform tenant.

Import and deploy SAP UI5 Application content

In the [SAP Build Process Automation Store](#) , search for live process package Create Social Security Certificate and import the same. After this the project will be available in the SAP Build Process Automation lobby for usage.

Following steps can be followed to utilize the SAP UI5 application provided with this process package:

- Download the SAPUI5 application file from the imported store project, it will available under the sources section in the package.
- Open Business Application Studio and import the previously downloaded SAPUI5 project.
- Ensure that you have already created the SAP Build Process Automation instance and the same instance details need to be updated in the mta.yaml file available in the SAP UI5 application project.

```

83 | | service-plan: application
84 | | service: xsuaa
85 | | type: org.cloudfoundry.managed-service
86 | - name: Destination
87 | type: org.cloudfoundry.existing-service
88 | - name: SBPA-instance
89 | type: org.cloudfoundry.existing-service
90 |

```

- Build SAPUI5 project using mta.yaml file & the generated project (generated mtar file will be available in the mta_archives folder) file can be deployed.
- SAP Work Zone site needs to be configured to access the application. Please go to Configuration Guide for further process.

Optional Setup

Configure OData API in SAP ERP

The below configuration is needed only for those customers who need to pull the Business partner data from the SAP ERP Central Component (SAP ECC). If you are already using the SAP S/4HANA then these configuration steps are not needed.

Following custom OData service needed to be configured in SAP ERP to use the content package. Please follow this step to create the SEGW OData service.

Create OData Service

Create Dictionary elements for Service Data Model Entity Type BusinessPartner

- Go to transaction SE11 and create new structure ZTY_BP add short description "Structure for Business Partner".
- Add includes BUT000 and BAPIBUS1006_ADDR_SEARCH and the component COMPANYNAME.

Component	Typing Method	Component Type	Data Type	Length	Decim...	Short Description
.INCLUDE	Types	BUT000	□□□	0		0 BP: General data I
.INCLUDE	Types	BAPIBUS1006_ADDR_SEARCH	□□□	0		0 BAPI Structure for Searching for Address Attributes
COMPANYNAME	Types	CHAR80	CHAR	80		0 Char 80

Component	Type	Component Type
. INCLUDE	Types	BUT000
. INCLUDE	Types	BAPIBUS1006_ADDR_SEARCH
COMPANYNAME	Types	CHAR80

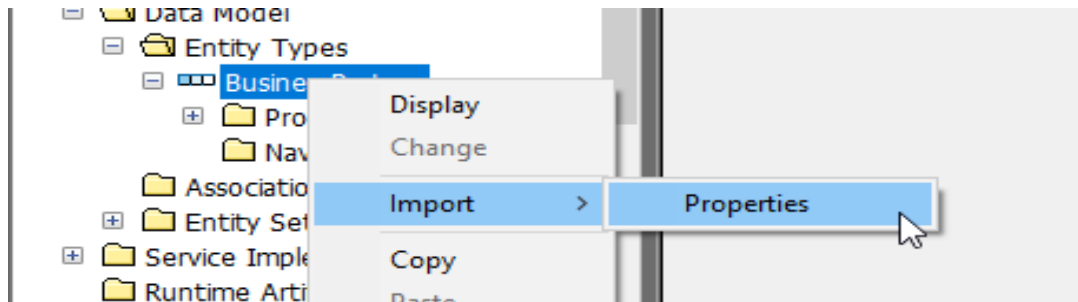
- Create a Table Type ZTYT_BP for the Structure ZTY_BP created before.

Create Service

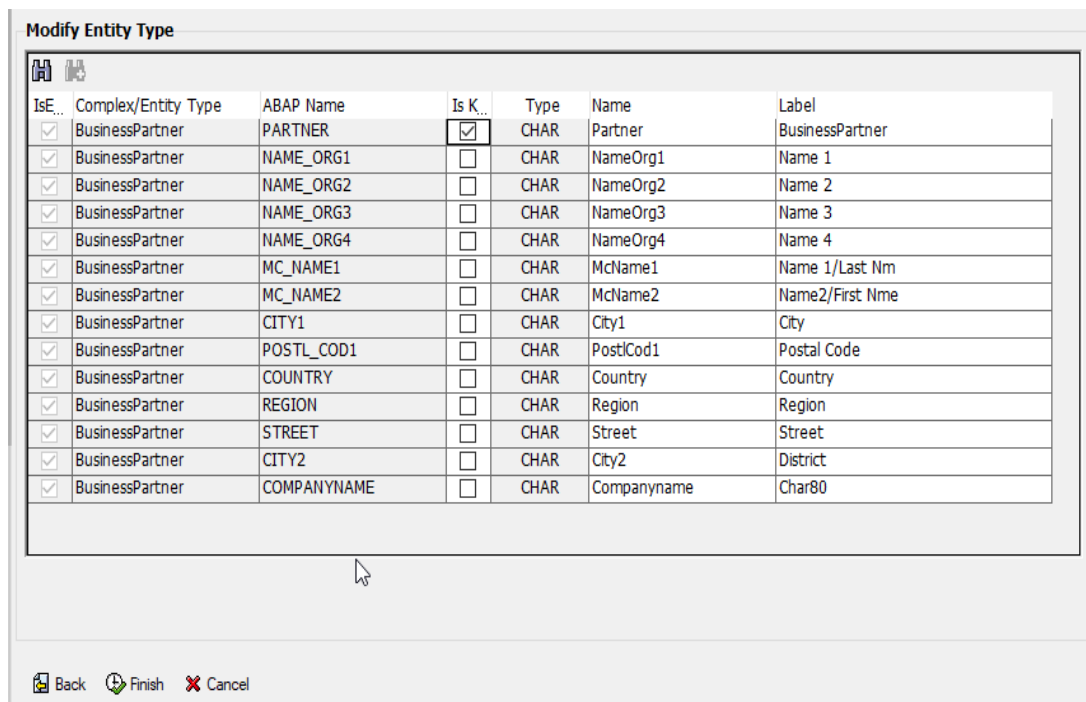
- Go to transaction SEGW.
- Create new project ZSOV_BP with attributes. (Follow this [link](#) on how to create a Project).
Project type: "Service SAP Annotations"
Generation Strategy: "Standard"

- Add your Package.
- Add New Entity Type "BusinessPartner" with reference to the structure created before "ZTY_BP".

- Right-Click in Entity Type "BusinessPartner" and click in Import->Properties



- Add the fields below and click as KEY the Partner field.



- Save and click in Generate 

Create Service Handler Class

- Go to transaction SE24.
- Enter object type name as ZCL_ZSOV_BP_APP_BL & Click on create button.
- Click Source Code-Based button to toggle to the source code-based class builder.
- Copy the code for the class from SAP NOTE 3164551.
- The class should now have the types, and one method as shown in the screenshot below.
- Save and activate the class.

Class/Interface: ZCL_ZSOV_BP_APP_BL Implemented / Active

Properties Interfaces Friends Attributes Methods Events **Types** Aliases

Properties

Type	Visibility	Typing	Associated...	Description
TY_COMPANYNAME_RANGE	Public			
TY_COUNTRY_RANGE	Public			
TY_CITY1_RANGE	Public			
TY_PARTNER_RANGE	Public			

Class/Interface: ZCL_ZSOV_BP_APP_BL Implemented / Active

Properties Interfaces Friends Attributes **Methods** Events Types Aliases

Parameters Exceptions Sourcecode

Method	Level	Visibility	M...	Description
GET_BPS_LIST	Instance Method	Public		Get BPs

Redefine method in Service Class ZCL_ZSOV_BP_DPC_EXT

- After generating the OData Service and the Service Handler Class created, go to transaction SE24 and open class ZCL_ZSOV_BP_DPC_EXT.
- Click Source Code-Based button to toggle to the source code-based class builder.
- Redefine Method BUSINESSPARTNERS_GET_ENTITYSET.
- Copy the Source Code from SAP Note 3164551.

Parameters of Method: BUSINESSPARTNERS_GET_ENTITYSET

← Methods Exceptions Sourcecode Properties

Parameter	Type	P...	Optional	Typing Method	Associated Type	D
IV_ENTITY_NAME	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	STRING	
IV_ENTITY_SET_NAME	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	STRING	
IV_SOURCE_NAME	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	STRING	
IT_FILTER_SELECT_OPTIONS	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	/IWBEP/T_MGW_SELECT_OPTION	
IS_PAGING	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	/IWBEP/S_MGW_PAGING	
IT_KEY_TAB	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	/IWBEP/T_MGW_NAME_VALUE_PAIR	
IT_NAVIGATION_PATH	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	/IWBEP/T_MGW_NAVIGATION_PATH	
IT_ORDER	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	/IWBEP/T_MGW_SORTING_ORDER	
IV_FILTER_STRING	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	STRING	
IV_SEARCH_STRING	Importing	<input type="checkbox"/>	<input type="checkbox"/>	Type	STRING	
IO_TECH_REQUEST_CONTEXT	Importing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Type Ref To	/IWBEP/IF_MGW_REQ_ENTITYSET	
ET_ENTITYSET	Exporting	<input type="checkbox"/>	<input type="checkbox"/>	Type	ZCL_ZSOV_BP_MPC=>TT_BUSINESSSP...	
ES_RESPONSE_CONTEXT	Exporting	<input type="checkbox"/>	<input type="checkbox"/>	Type	/IWBEP/IF_MGW_APPL_SRV_RUNTIM...	

Configure Communication Scenarios in SAP S/4HANA

If you are using SAP S/4HANA public cloud to get the business partner information, then the following communication scenario is needed to be configured in SAP S/4HANA to use the Business Partner API.

SAP_COM_0008

Inbound Services consumed:

/sap/opu/odata/SAP/API_BUSINESS_PARTNER

Follow the documentation on how to [Create Communication Arrangement](#) for communication scenario SAP_COM_0008.

Configure Cloud Connector

If you are using SAP S/4HANA (private cloud or on-premise) or SAP ERP Central Component (ECC) to get the business partner information, configure cloud connector to enable secure tunnel to access the resources from an SAP Business Technology Platform tenant. Please refer the help documentation [to configure Cloud Connector](#).

When using SAP S/4HANA

If you are using SAP S/4HANA to get the business partner information, then configure cloud connection to define a new ABAP system with HTTPS protocol and whitelist the following resource.

OData Resource

Backend Type	Protocol	Endpoint URL
ABAP System	HTTPS	/sap/opu/odata/sap/API_BUSINESS_PARTNER

When using SAP ERP Central Component (ECC)


When using SAP ERP Central Component to get the business partner information, then configure cloud connection to define a new ABAP system with HTTPS protocol and whitelist the following resource.

Backend Type	Protocol	Endpoint URL
ABAP System	HTTPS	/sap/opu/odata/sap/ ZSOV_BP_SRV

Register OData Service

1. Go to t-code "SICF".
2. Go to path: default_host/sap/opu/odata/sap/zsov_bp_srv.
3. Activate the service.

Follow this [link](#) on how to activate the SICF related service for the OData.

Path	/default_host/sap/opu/odata/sap/		
Service Name	zsov_bp_srv		Service (Active) Altern. Name: zsov_bp_srv
Lang.	English	→ Other Languages	
Description			
Description 1	ZSOV_BP_SRV		
Description 2			
Description 3			

Register OData Services in SAP Gateway

1. Go to t-code "/IWFND/MAINT_SERVICE".
2. Click on "Add Service"
3. Select the required System Alias (Select LOCAL as system alias in case of Embedded Deployment of Gateway)
4. Enter Technical Service Name as "ZSOV_BP_SRV" and click on "Get Services"
5. Select "ZSOV_BP_SRV" and click on "Add Selected Services"
6. Enter the required package and click on OK.