

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Setup Guide

Non Operated Joint Venture Cash Call Approval using SAP Workflow Management or SAP Build Process Automation

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Overview

This document provides information about setting up the SAP Business Technology Platform account to consume the workflow content package **Non Operated Joint Venture Cash Call Approval**. The main audience of this document are technical IT/system administrators.

In joint venture accounting module, non-operator receives cash call/Billing invoice requests and invoice billings from operator of the venture. Non-operator logs these requests into the system and make the payment against it.

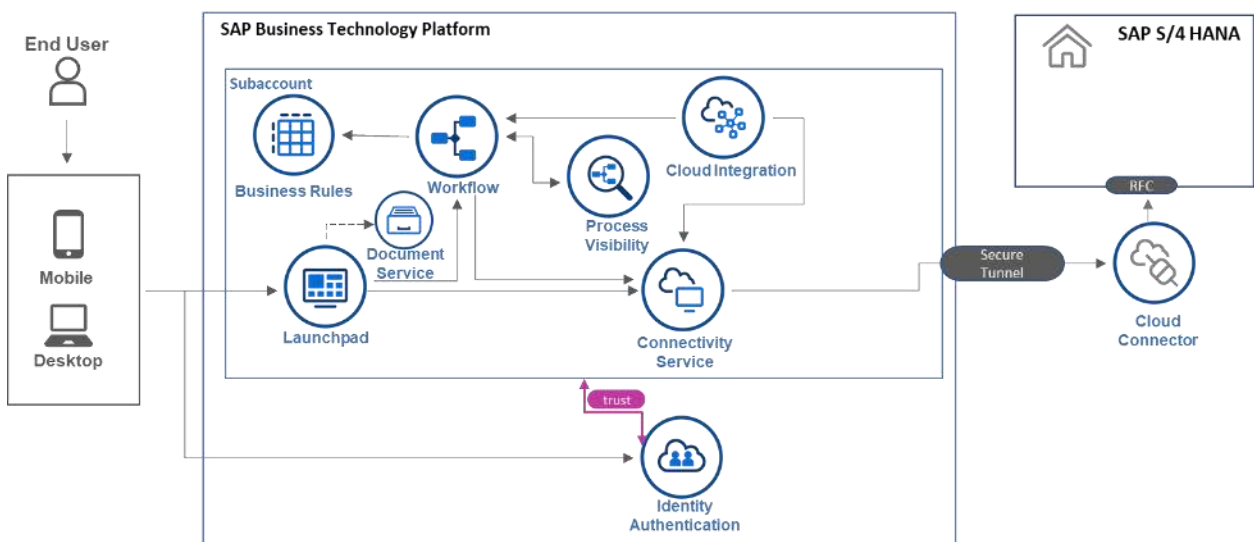
The standard Non-operator cash call/Billing invoice and invoice processes do not allow to route such requests to different internal approver(s) before requests are posted to the system.

This extension fills that void and allow to send cash call/Billing invoice and invoice requests to different approver(s).

Features

- Plug and Play with SAP S/4HANA without additional development.
- New Process variants can be configured in a no-code approach.
- Agent/approver determination using Business Rules or external service.
- Pre-built integration content to call SAP S/4HANA from SAP Workflow Management or SAP Build Process Automation.
- Out-of-the-box visibility into key process performance indicators.

Solution Diagram



Required SAP BTP Services

The workflow content package **Non Operated Joint Venture Cash Call Approval** is intended to be used for SAP S/4HANA and requires the following services in SAP BTP:

- SAP Build Process Automation or SAP Workflow Management to orchestrate the process.
- SAP Integration Suite for data activities with SAP S/4HANA
- SAP Connectivity service (cloud connector) to establish access to SAP S/4HANA.
- SAP Launchpad service to access the apps that are involved in the process.
- SAP Business Application Studio to modify/deploy the SAPUI5 applications.
- SAP BTP, Cloud Foundry runtime.
- SAP Cloud Identity Services (Optional)

Setup and Configuration

Non Operated Joint Venture Cash Call Approval content package requires SAP Build Process Automation or SAP Workflow Management subscription or a CPEA contract. Based on which service you plan to use, follow the appropriate section to configure either SAP Build Process Automation or SAP Workflow Management.

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](#)
 - a. Import Package Destination
 - b. Business Rules Destination to support start and step conditions
3. [Optional] [Configure SAP Launchpad Service for SAP Build Process Automation](#)

Configure Process Automation Destination

A HTTP destination is required in the BTP subaccount where SAP Build Process Automation is subscribed. Create a destination with name "sap_process_automation_service" with the following configuration if it doesn't exist already. Please refer how to [create a HTTP destination](#) OAuth 2.0 Authentication (client credentials).

Name	sap_process_automation_service
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentias
URL	<"endpoints"."api">
Client ID	<"uaa":"clientid">
Client Secret	<"uaa":"clientsecret">
Token Service URL	<"uaa":"url"/>/oauth/token

Note: While creating the service instance for SAP Build Process Automation service, make sure that at least the required scopes are assigned (help documentation to enable technical authentication to [access the SAP Build Process Automation APIs](#)). If the scopes are not assigned, you can also [update the service instance](#) with the required scopes.

Configure SMTP Mail Destination

Configure email destination to automatically send email notification to the involved parties. For more information on configuring the destination, see [configure SMTP mail destination](#).

Configure OAuth2ClientCredentias 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:

<https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/685f383cebb54c009b2fac633b32c90f.html>.

The image displays two screenshots of the SAP Destination Configuration wizard. The top screenshot shows the 'Service Instance' tab, where the 'Service Instance' dropdown is set to 'sap_processautomation', the 'Name' is 'process_atuomation_service_destination', and the 'Description' is 'Call SAP Process Automation APIs using a service route'. The bottom screenshot shows the 'Additional Properties' tab, where the 'Name' is 'process_automation_service_destination', the 'Type' is 'HTTP', the 'URL' is 'https://sap.com/DUMMY_URL', the 'Authentication' is 'OAuth2ClientCredentials', the 'Client ID' is 'sb-...', the 'Client Secret' is masked with '*****', the 'Token Service URL Type' is 'Dedicated', and the 'Token Service URL' is 'https://...'. The 'Additional Properties' table on the right includes entries for 'endpoints', 'html5-apps...', 'saasregistry...', 'sap.cloud.s...', and 'sap.cloud.s...', with values like '{\"api\":\"https://...', '{\"app_host_id\":\"...', 'true', 'com.sap.spa.process...', and 'spa'. A checkbox for 'Use default JDK truststore' is checked.

Configure SAP Workflow Management

Non Operated Joint Venture Cash Call Approval content package requires SAP Workflow Management subscription or a CPEA contract. Follow the setup and configuration section of SAP Workflow Management.

<https://help.sap.com/viewer/6f55baaf330443bd8132d071581bbae6/Cloud/en-US/d7910e2bf7f64afc9d0eb21b0cc9e84d.html>

Note: While creating the service instance for Workflow service, make sure that at least the following scopes are assigned (help documentation to [enable technical authentication](#) to access the workflow APIs). If the scopes are not assigned, you can also [update the service](#)

[instance](#) with the following scopes.

- WORKFLOW_INSTANCE_GET
- WORKFLOW_INSTANCE_START
- WORKFLOW_INSTANCE_CANCEL

Configure Workflow Email Destination

Configure workflow email destination to automatically send email notification to the involved parties. For more information on configuring the destination, see [configure workflow email destination](#).

Configure OAuth2ClientCredentials Workflow Destination

A HTTP destination is required in the BTP subaccount where SAP Workflow Management is subscribed. Create a destination with name "Workflow" with the following configuration if it doesn't exist already. Please refer how to [create a HTTP destination](#) OAuth 2.0 Authentication (client credentials).

Name	Workflow
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<rest_api_url>
Client ID	<client ID>
Client Secret	<client secret>
Token Service URL	<uaa.url>/oauth/token

Note: While creating the service instance for Workflow service, make sure that at least the following scopes are assigned (help documentation to [enable technical authentication](#) to access the workflow APIs). If the scopes are not assigned, you can also [update the service instance](#) with the following scopes.

- WORKFLOW_INSTANCE_START
- WORKFLOW_INSTANCE_UPDATE_CONTEXT
- WORKFLOW_INSTANCE_GET
- MESSAGE_SEND

Please refer help documentation how to get [URL, Client ID, Client Secret and Token Service URL](#). For more information refer to [how to create a HTTP destination](#) and [how to use Workflow APIs](#).

Configure OAuth2ClientCredentials Business Rules Destination

A HTTP destination is required in the Cloud Foundry account where SAP Workflow

Management is subscribed. Create a destination with name “BUSINESS_RULES” with the following configuration if it doesn't exist already. Please refer how to [create a HTTP destination](#) and [how to access business rules APIs](#) using OAuth 2.0 Authentication (client credentials)

Name	BUSINESS_RULES
Type	HTTP
Proxy Type	Internet
Authentication	OAuth2ClientCredentials
URL	<rule_runtime_url>/rules-service
Client ID	<client ID>
Client Secret	<client secret>
Token Service URL	<uaa.url>/oauth/token

Configure Destination to Enable Start & Step Conditions

To enable the usage of start conditions and step conditions on a process variant, create a destination for business rules with the configuration as mentioned in the following help document:

https://help.sap.com/viewer/6f55baaf330443bd8132d071581bbae6/Cloud/en-US/543b5dbd77d940b4b1f972298b559911.html?q=WM_BUSINESSRULES

Configure OAuth2 Client Credentials Workflow Destination (Service Instance)

Similarly, create new Destination to call Workflow Service APIs using a Service route from SAP UI5 Component. For more details, follow the official help document:

<https://help.sap.com/viewer/cca91383641e40ffbe03bdc78f00f681/Cloud/en-US/685f383cebb54c009b2fac633b32c90f.html>

Configure Cloud Integration Destination

To call an integration flow, a HTTP destination is required in the SAP BTP tenant where the SAP Workflow Management is subscribed. Create a destination called CPI with either Basic Authentication or OAuth2ClientCredentials.

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>

Additional Properties to Destination

Additionally, add the following properties in the destination for cloud integration.

WebIDEEEnabled	true
WebIDESystem	CPI
WebIDEUsage	odata_gen

Configure RFC Destination

Configure a RFC destination to connect with SAP S/4HANA on-premise. Below is a destination configuration for *SAP S/4HANA on-premise*.

Note: This destination is required by Cloud Integration (Suite).

Name	<RFC_DESTINATION_NAME>
Type	RFC
Proxy Type	OnPremise
User	<ONPREMISE_USER>
Password	<ONPREMISE_PASSWORD>
Repository User	<ONPREMISE_USER>
Repository Password	<ONPREMISE_PASSWORD>

Additional Properties	jco.client.ashost: <host>
Additional Properties	jco.client.client:<client number>
Additional Properties	jco.client.lang: <language>
Additional Properties	jco.client.sysnr:<system number >

Configure APIs in SAP S/4HANA

List of RFCs which need to be available in SAP S/4 HANA

ZWF_FM_HR_MASTER_GET_APPROVER – To Get Approver Details

ZWF_FM_JVCASHCALL_NON_OPER – To Post Joint Venture Invoice Related Documents

ZWF_FM_NON_JV_POST – To Post Joint Venture Cash Call Related Documents

Additionally, the below mentioned Function Modules need to be implemented in SAP S/4HANA

ZWF_FM_DELETE_BILL – Delete Billing number for GJOAA

ZWF_FM_TRIGGER_WF - Triggering BTP Workflow For JV process (Cash call)

ZWF_FM_TRI_NON_JV_WF - Triggering BTP Workflow For JV process (Invoice)

ZWF_FM_CHECK_ACTIVE_WF - To check Active Workflow

Note: Steps to implement custom ABAP objects is mentioned in the Appendix.

Configure Cloud Connector

For SAP S/4HANA on-premise landscape, configure cloud connector to enable secure tunnel to SAP BTP tenant. Please refer the help documentation to [configure Cloud Connector](#).

Services/Resources that need to be exposed from SAP S/4HANA on-premise using Cloud Connector

Resources	Protocol	Backend-Type
ZWF_FM_HR_MASTER_GET_APPROVER	RFC	ABAP System
ZWF_FM_JVCASHCALL_NON_OPER	RFC	ABAP System
ZWF_FM_NON_JV_POST	RFC	ABAP System

Import, configure and deploy cloud integration content

This package utilizes Cloud Integration capability within SAP Integration Suite to provide integration between SAP ERP (or SAP S/4HANA) and SAP Build Process Automation or SAP Workflow Management. Further details can be found in dedicated integration guide of the integration package “SAP Build Process Automation Integration with SAP S/4HANA for Non

Operated Joint Venture Cash Call Approval”.

Appendix

Perform the below mentioned steps for implementation of custom ABAP objects

Creating Function Group

Steps:

1. Go to t-code “SE37”
2. In Menu, select Goto -> Function Groups -> Create Group
3. Enter Function Group name as “ZWF_FG_NON_JV” and enter a meaningful Short Text (Select the required package name to save this object)
4. Go to t-code “SE80”
5. Select “Function Group” from dropdown
6. Enter “ZWF_FG_NON_JV” as the name of function group and click on Display button
7. Right click on “Includes” folder and select “Create” option
8. Enter “ZWF_FG_NON_JV_FORMS” as the name of Include. (Select the required package and click on ok in the successive dialog boxes)
9. Copy and paste the attached code for “ZWF_FG_NON_JV_FORMS” from SAP NOTE 3140556 inside the code editor.
10. Click on “Save”
11. On the left side panel, expand “Includes” folder and double click on “LZWF_FG_NON_JVTOP”
12. Go to edit mode and paste the attached code for “LZWF_FG_NON_JVTOP” from SAP NOTE 3140556 inside the code editor
13. Click on Save
14. Right click on the Function Group “ZWF_FG_NON_JV” on the left side panel and “Click on Activate” (Click OK button on the pop-up which shows list of inactive objects)

Creating Function Modules

1) ZWF_FM_DELETE_BILL

Steps:

1. Go to t-code “SE37”
2. Click on “Create” button
3. Enter “ZWF_FM_DELETE_BILL” as name of Function Module
4. Enter “ZWF_FG_NON_JV” as Function Group
5. Enter a meaningful short text
6. Click on “Save” (Click on OK in successive pop-ups)
7. Go to “Import” tab and enter the below mentioned entries



The screenshot shows the 'Import' tab in the SAP SE37 transaction. The 'Parameter Name' field contains 'IS_NON_OP_HEADER', the 'Typing' is 'TYPE', and the 'Associated Type' is 'T8J4G'. The 'Short text' field contains 'Non-Op saved bills - Header Info (for holding bil.'. The 'Opti...' and 'Pass...' checkboxes are both checked. The 'Long...' field is empty. A 'Create' button is visible at the end of the row.

Parameter Name	Typing	Associated Type	Default value	Opti...	Pass...	Short text	Long...
IS_NON_OP_HEADER	TYPE	T8J4G		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Non-Op saved bills - Header Info (for holding bil.	

8. Go to "Source Code" tab and paste the attached code for "ZWF_FM_DELETE_BILL" from SAP NOTE 3140556
9. Go to "Attributes" tab and select radio button for "Remote-Enabled"
10. Click on "Save"
11. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

2) ZWF_FM_JVCASHCALL_NON_OPER

Steps:

1. Go to t-code "SE37"
2. Click on "Create" button
3. Enter "ZWF_FM_JVCASHCALL_NON_OPER" as name of Function Module
4. Enter "ZWF_FG_NON_JV" as Function Group
5. Enter a meaningful short text
6. Click on "Save" (Click on OK in successive pop-ups)
7. Go to "Import" tab and enter the below mentioned entries

Attributes Import Export Changing Tables Exceptions Source code							
Parameter Name	Typing	Associated Type	Default value	Opti...	Pass...	Short text	Long...
COMPANY	TYPE	T8J_F-BUKRS		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Company Code	Create
EFF_DATE	TYPE	BSID-BLDAT		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Document Date in Document	Create
POSTDATE	TYPE	BKPF-BUDAT		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Posting Date in the Document	Create
PERIOD	TYPE	BKPF-MONAT		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fiscal period	Create
BAT_NUM	TYPE	T8J4B-BATCH		<input type="checkbox"/>	<input checked="" type="checkbox"/>	JV Cash Call Batch Number	Create
GR_FLG	TYPE	CHAR1	'X'	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Single-Character Flag	Create
DEL_FLG	TYPE	CHAR1	'X'	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Single-Character Flag	Create

8. Go to "Export" tab and create the below entries

Attributes Import Export Changing Tables Exceptions Source code					
Parameter Name	Typing	Associated Type	Pass by Val...	Short text	Long Text
ES_RETURN	TYPE	BAPIRET2	<input checked="" type="checkbox"/>	Message Text	Create

9. Go to "Tables" tab and create the below entries

Attributes Import Export Changing Tables Exceptions Source code					
Parameter Name	Typing	Associated Type	Optional	Short text	Long Text
ET_TRAN	LIKE	SAPUGJ1_TRAN_ALV	<input type="checkbox"/>	SAPUGJ1 : ALV for Transaction Details	Create
IT_T8J4B	TYPE	ZTTY_T8J4B	<input type="checkbox"/>	Table type for T8J4B along with approval reject.	Create

10. Go to "Source Code" tab and paste the attached code for "ZWF_FM_JVCASHCALL_NON_OPER" from SAP NOTE 3140556
11. Go to "Attributes" tab and select radio button for "Remote-Enabled"
12. Click on "Save"
13. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

Note: The details of required "Associated Type" (Table Type) used in the Tables tab are mentioned

below:

Table Type: **ZTTY_T8J4B** Active
 Short text: Table type for T8J4B along with approval reject field

Attributes | **Line Type** | Initialization and Access | Primary Key | Secondary Key

Line Type: **ZLTY_T8J4B**

Built-in type

Data Type:
 No. of Characters: Decimal Places:

Structure: **ZLTY_T8J4B** Active
 Short Description: Structure for T8J4B along with approve or reject check box

Attributes | **Components** | Input Help/Check | Currency/quantity fields

Component	Typing Method	Component Type	Data Type	Length	Decimal...	Coordinate	Short Description
<input type="checkbox"/> BUKRS	Types	BUKRS	CHAR	4	0	0	0 Company Code
<input type="checkbox"/> BATCH	Types	JV_BATCHN	CHAR	10	0	0	0 JV Cash Call Batch Number
<input type="checkbox"/> JVFUNC	Types	JV_FUNC	CHAR	4	0	0	0 JV Function
<input type="checkbox"/> PARTN	Types	JV_PART	CHAR	10	0	0	0 Partner account number
<input type="checkbox"/> VNAME	Types	JV_NAME	CHAR	6	0	0	0 Joint venture
<input type="checkbox"/> EGRUP	Types	JV_EGROUP	CHAR	3	0	0	0 Equity group
<input type="checkbox"/> FCURR	Types	JV_FUNDCUR	CUKY	5	0	0	0 Funding currency
<input type="checkbox"/> POS_POM	Types	JV_CCPOM	CHAR	6	0	0	0 Proc. operational month for Cash Call Transaction(online
<input type="checkbox"/> STATUS	Types	/ACCGO/E_CS_SEQ_S	CHAR	1	0	0	0 Status

3) ZWF_FM_TRIGGER_WF

Steps:

1. Go to t-code "SE37"
2. Click on "Create" button
3. Enter "ZWF_FM_TRIGGER_WF" as name of Function Module
4. Enter "ZWF_FG_NONJV" as Function Group
5. Enter a meaningful short text
6. Click on "Save" (Click on OK in successive pop-ups)
7. Go to "Import" tab and enter the below mentioned entries

Attributes | **Import** | Export | Changing | Tables | Exceptions | Source code

Parameter Name	Typing	Associated Type	Default value	Opti...	Pass...	Short text	Long...
IS_BATCH	TYPE	T8JVC01		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Batch Header	Create
IT_BATCHTAB	TYPE	ZTTFI_T8J4B		<input type="checkbox"/>	<input checked="" type="checkbox"/>	JV Cash Call Batch table	Create
IP_TCODE	TYPE	SY-TCODE		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Current Transaction Code	Create

8. Go to "Export" tab and create the below entries

Parameter Name	Typing	Associated Type	Pass by Val...	Short text	Long Text
ES_RETURN	TYPE	BAPIRET2	<input checked="" type="checkbox"/>	Return Parameter	Create

9. Go to "Source Code" tab and paste the attached code for "ZWF_FM_TRIGGER_WF" from SAP NOTE 3140556
10. Go to "Attributes" tab and select radio button for "Remote-Enabled"
11. Click on "Save"
12. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

4) ZWF_FM_TRI_NON_JV_WF

Steps:

1. Go to t-code "SE37"
2. Click on "Create" button
3. Enter "ZWF_FM_TRI_NON_JV_WF" as name of Function Module
4. Enter "ZWF_FG_NON_JV" as Function Group
5. Enter a meaningful short text
6. Click on "Save" (Click on OK in successive pop-ups)
7. Go to "Import" tab and enter the below mentioned entries

Parameter Name	Typing	Associated Type	Default value	Opti...	Pass...	Short text	Long...
IS_BATCH	TYPE	T8JVB60		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Batch Header	Create
IT_BATCHTAB	TYPE	ZTTFI_T8J4H		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Item Data	Create
IP_TCODE	TYPE	SY-TCODE		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Current Transaction Code	Create
IP_FYEAR	TYPE	GJAHR		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fiscal Year	Create
IP_INTYPE	TYPE	SYCHAR12		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Invoice Type	Create
IP_TAXCODE	TYPE	MWSKZ_NSTV		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Input Tax Code for Non-Taxable Transactions	Create
IP_VENDOR	TYPE	LIFNR		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Account Number of Vendor or Creditor	Create

8. Go to "Export" tab and create the below entries

Parameter Name	Typing	Associated Type	Pass by Val...	Short text	Long Text
ES_RETURN	TYPE	BAPIRET2	<input checked="" type="checkbox"/>	Return Parameter	Create

9. Go to "Source Code" tab and paste the attached code for "ZWF_FM_TRI_NON_JV_WF" from SAP NOTE 3140556
10. Go to "Attributes" tab and select radio button for "Remote-Enabled"
11. Click on "Save"
12. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

5) ZWF_FM_CHECK_ACTIVE_WF

Steps:

1. Go to t-code "SE37"

2. Click on "Create" button
3. Enter "ZWF_FM_CHECK_ACTIVE_WF" as name of Function Module
4. Enter "ZWF_FG_NON_JV" as Function Group
5. Enter a meaningful short text
6. Click on "Save" (Click on OK in successive pop-ups)
7. Go to "Import" tab and enter the below mentioned entries

Attributes Import Export Changing Tables Exceptions Source code								
Parameter Name	Typing	Associated Type	Default value	Opti...	Pass...	Short text	Long...	
IP_KEY	TYPE	CHAR100		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Key for Workflow	Create	

8. Go to "Export" tab and create the below entries

Attributes Import Export Changing Tables Exceptions Source code						
Parameter Name	Typing	Associated Type	Pass by Val...	Short text	Long Text	
ES_RETURN	TYPE	BAPIRET2	<input checked="" type="checkbox"/>	Return Parameter	Create	

9. Go to "Source Code" tab and paste the attached code for "ZWF_FM_CHECK_ACTIVE_WF" from SAP NOTE 3140556
10. Go to "Attributes" tab and select radio button for "Remote-Enabled"
11. Click on "Save"
12. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

6) ZWF_FM_NON_JV_POST

Steps:

1. Go to t-code "SE37"
2. Click on "Create" button
3. Enter "ZWF_FM_NON_JV_POST" as name of Function Module
4. Enter "ZWF_FG_NON_JV" as Function Group
5. Enter a meaningful short text
6. Click on "Save" (Click on OK in successive pop-ups)
7. Go to "Import" tab and enter the below mentioned entries

Attributes Import Export Changing Tables Exceptions Source code								
Parameter Name	Typing	Associated Type	Default value	Opti...	Pass...	Short text	Long...	
IS_BILL_DATA	TYPE	T8JVB60		<input type="checkbox"/>	<input checked="" type="checkbox"/>	JV Non-op Billing Screen Structure	Create	
IP_INTYPE	TYPE	SYCHAR12		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Input type	Create	
IP_TAXCODE	TYPE	MWSKZ_NSTV		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Input Tax Code for Non-Taxable Transactions	Create	
IP_GJAHR	TYPE	GJAHR		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fiscal Year	Create	
IP_VENDOR	TYPE	LIFNR		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Account Number of Vendor or Creditor	Create	
IP_STATUS	TYPE	CHAR1		<input type="checkbox"/>	<input checked="" type="checkbox"/>	A-Approve/R-Reject	Create	

8. Go to "Export" tab and create the below entries

Parameter Name	Typing	Associated Type	Pass by Val...	Short text	Long Text
ES_RETURN	TYPE	BAPIRET2	<input checked="" type="checkbox"/>	Return Parameter	Create

9. Go to "Tables" tab and create the below entries

Parameter Name	Typing	Associated Type	Optional	Short text	Long Text
ET_BELNR	LIKE	RF048_D	<input checked="" type="checkbox"/>	Internal/External FI Document Numbers	Create
ET_TRAN	LIKE	SAPUGJ1_TRAN_ALV	<input checked="" type="checkbox"/>	FI Document Numbers	Create

10. Go to "Source Code" tab and paste the attached code for "ZWF_FM_NON_JV_POST" from SAP NOTE 3140556

11. Go to "Attributes" tab and select radio button for "Remote-Enabled"

12. Click on "Save"

13. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

7) ZWF_FM_HR_MASTER_GET_APPROVER

Steps:

1. Go to t-code "SE37"

2. Click on "Create" button

3. Enter "ZWF_FM_HR_MASTER_GET_APPROVER" as name of Function Module

4. Enter "ZWF_FG_NON_JV" as Function Group

5. Enter a meaningful short text

6. Click on "Save" (Click on OK in successive pop-ups)

7. Go to "Import" tab and enter the below mentioned entries

Parameter Name	Typing	Associated Type	Default value	Opti...	Pass...	Short text	Long...
I_BUKRS	TYPE	BUKRS		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Company Code	Create
I_PLANS	TYPE	PLANS		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Position	Create

8. Go to "Export" tab and create the below entries

Parameter Name	Typing	Associated Type	Pass by Val...	Short text	Long Text
E_OUTPUT	TYPE	ZWF_APPR_DET_T	<input checked="" type="checkbox"/>	Table type for Approver Details	Create
E_STATUS	TYPE	BAPI_MTYPE	<input checked="" type="checkbox"/>	Message type: S Success, E Error, W Warning, I.	Create

9. Go to "Source Code" tab and paste the attached code for

"ZWF_FM_HR_MASTER_GET_APPROVER" from SAP NOTE 3140556

10. Go to "Attributes" tab and select radio button for "Remote-Enabled"

11. Click on "Save"

12. Click on "Activate" (Click OK button on the pop-up which shows list of inactive objects)

Implicit Enhancements

The details of implicit enhancements that need to be implemented in SAP S/4HANA are mentioned below:

Program Name	Position	Type	Code
MGJC1F10	To be added at the beginning of FORM "UPDATE_BATCH_TABLE"	Code	Copy and paste the attached code for "Enhancement 1" from SAP NOTE 3140556
MGJC1F10	To be added at the end of FORM "UPDATE_BATCH_TABLE"	Code	Copy and paste the attached code for "Enhancement 2" from SAP NOTE 3140556
MGJC1F10	To be added at the beginning of the FORM "POST_CASH_CALL"	Code	Copy and paste the attached code for "Enhancement 3" from SAP NOTE 3140556
MGJB2F10_ACD	To be added at the beginning of the FORM "post_non_op_billing_entries"	Code	Copy and paste the attached code for "Enhancement 4" from SAP NOTE 3140556
MGJB2TOP_ACD	To be added at the beginning of the Method "lif_invoice~update_task"	Code	Copy and paste the attached code for "Enhancement 5" from SAP NOTE 3140556
MGJB2TOP_ACD	To be added at the end of the Method "lif_invoice~update_task"	Code	Copy and paste the attached code for "Enhancement 6" from SAP NOTE 3140556

Note: The above-mentioned enhancement code requires RFC Connection, OAuth2.0 client and profile to be created in SAP S/4 HANA. The steps for this configuration are mentioned below:

Configuration of RFC Connections:

1. Go T-Code SM59.
2. Create New RFC destination as "WF_DEST" and Connection Type as "G"
3. Under Technical Settings enter the host name of the BTP Workflow API and Path Prefix as "/workflow-service/rest/v1/workflow-instances"

RFC Destination:

Connection Type: Description

Description

Description 1:

Description 2:

Description 3:

Administration **Technical Settings** Logon & Security Special Options

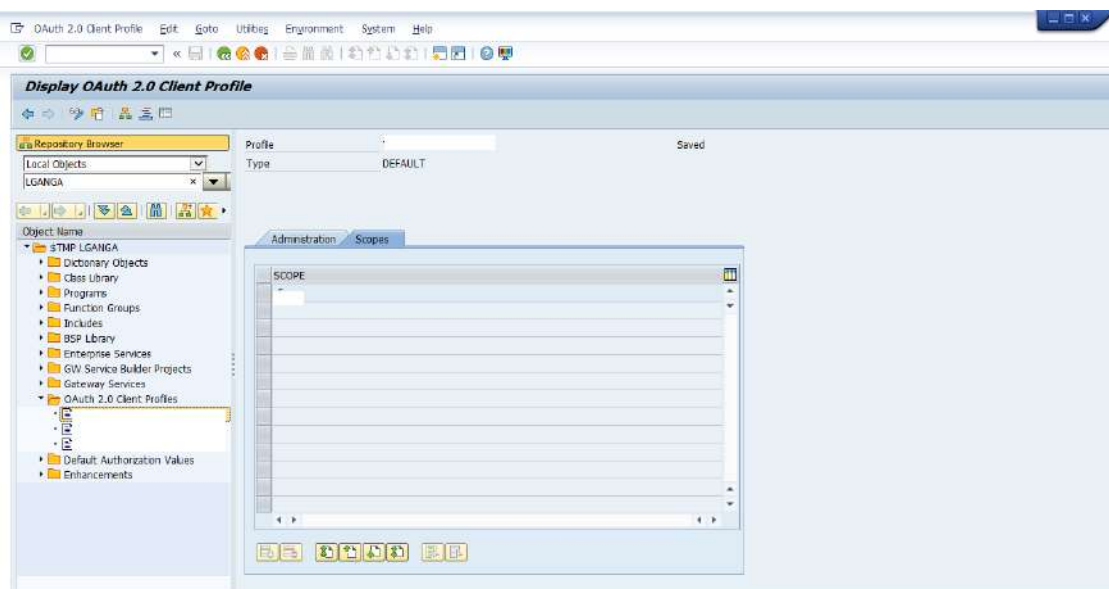
Target System Settings

Host: Port:

Path Prefix:

Creating OAuth2.0 client profile:

1. Start the object navigator (transaction SE80).
2. Choose Development Object in the dropdown list.
3. To create a development object in the SAP namespace, choose Create OAuth 2.0 Client Profile in the context menu of the object name.
4. Enter the object name in the Client Profile field of the popup as 'ZOAUTH_CLIENT_PROFILE'.
5. choose the type of service provider as 'DEFAULT'
6. Also provide the scope as configured in the service provider configuration and activate the client profile.



Configure the OAuth2.0 Client

1. Go to transaction OA2C_CONFIG to configure the OAuth2.0
2. Click on 'Create'.
3. Select the OAuth2.0 Client Profile as 'ZOAUTH_CLIENT_PROFILE' and provide the Client ID.
4. Maintain the Client Secret
5. Also provide the Token Endpoint.
6. Enter the Client Authentication as 'Basic', Resource Access Authentication as 'Header Field' and select grant type as 'Client Credentials'.
7. Click on save. The OAuth2.0 configuration name is 'ZOAUTH_CLIENT_PROFILE'

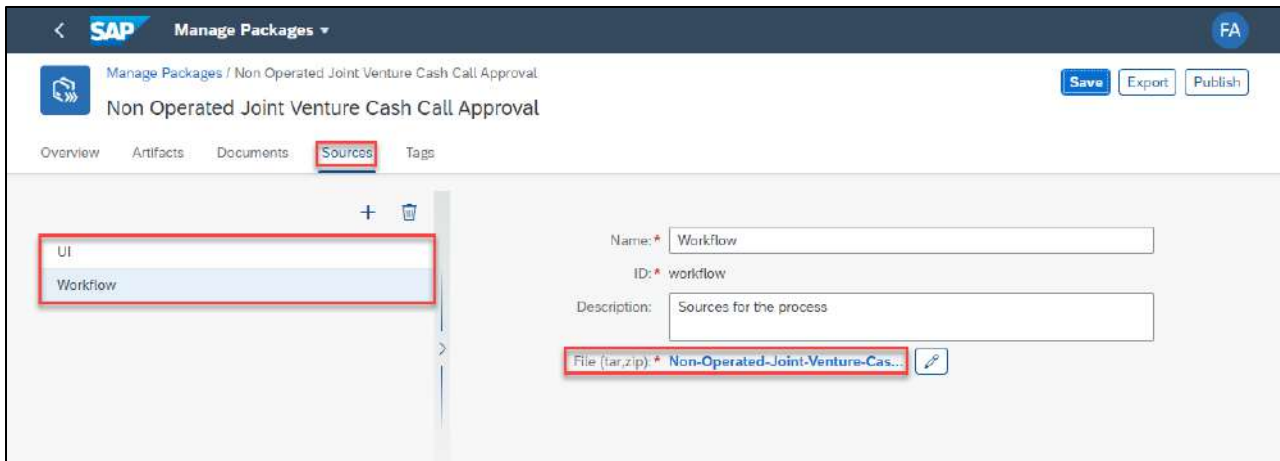
The screenshot displays the configuration page for an OAuth2.0 client profile. At the top, there are tabs for 'Administration', 'Scopes', and 'Enhancement Settings'. Below the tabs, a metadata bar shows 'Created By', 'Created On: 12/14/2020', 'Created At: 11:52:27 AM', 'Changed By', 'Changed On: 12/14/2020', and 'Changed At: 11:52:27 AM'. The main content is divided into three sections: 'General Settings', 'Authorization Server Settings', and 'Access Settings'.
General Settings: Includes 'Service Provider Type: DEFAULT', 'Profile:' (with a dropdown arrow), 'Configuration Name:', 'OAuth 2.0 Client ID:', 'OAuth 2.0 Client ID (Internal):', and 'Client Secret:' (with a masked input field containing 10 dots).
Authorization Server Settings: Includes 'Authorization Endpoint: https://', 'Token Endpoint: https://', and 'Revocation Endpoint: https://', each followed by an input field.
Access Settings: This section is currently empty.

Now the OAuth2.0 configuration is completed.

Optional: Making Custom changes in SAP Workflow Management

Prerequisite: an account with access to SAP Business Application Studio as well as space developer permissions in BTP.

The source code for both the process and the SAPUI5-based user interfaces are available as part of the content package. With this, custom modifications can be implemented to adapt the content for specific needs.



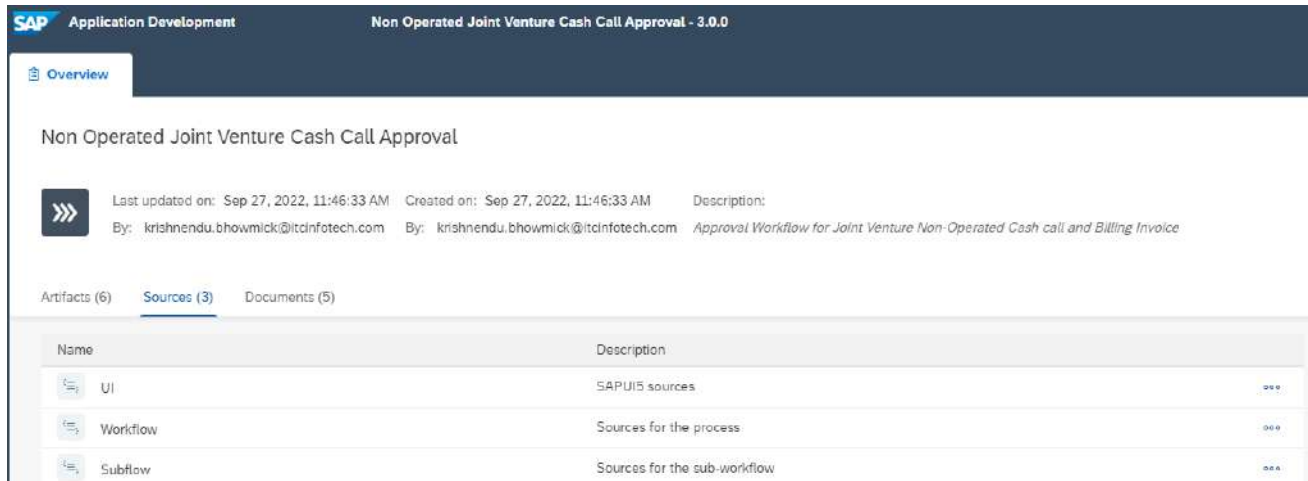
- in **Manage Package** app, select **Sources** tab
- select the archive you want to download in the list on the left side
- click on the blue filename behind **File (tar, zip)** to download the attached source archive
- Import the archive into SAP Business Application Studio
- make any necessary modifications
- Build and deploy the MTA archive, using the space developer credentials

Please refer to the documentation for [SAP Business Application Studio](#), the documentation for [Modeling a Workflow](#) and the documentation for [Creating User Interfaces](#) for details.

Optional: Making Custom changes in SAP Build Process Automation

Prerequisite: an account with access to SAP Business Application Studio as well as space developer permissions in BTP.

The source code for both the process and the SAPUI5-based user interfaces are available as part of the content package. With this, custom modifications can be implemented to adapt the content for specific needs.



SAP Application Development Non Operated Joint Venture Cash Call Approval - 3.0.0

Overview

Non Operated Joint Venture Cash Call Approval

Last updated on: Sep 27, 2022, 11:46:33 AM Created on: Sep 27, 2022, 11:46:33 AM Description:
By: krishnendu.bhowmick@itcinfotech.com By: krishnendu.bhowmick@itcinfotech.com Approval Workflow for Joint Venture Non-Operated Cash call and Billing Invoice

Artifacts (6) Sources (3) Documents (5)

Name	Description
UI	SAPUI5 sources
Workflow	Sources for the process
Subflow	Sources for the sub-workflow

- in **Application Lobby**, search the package name and select **Sources** tab
- select the archive you want to download in the list on the left side
- click on the blue filename behind **File (tar, zip)** to download the attached source archive
- Import the archive into SAP Business Application Studio
- make any necessary modifications
- Build and deploy the MTA archive, using the space developer credentials

Please refer to the documentation for [SAP Business Application Studio](#), the documentation for [Modeling a Workflow](#) and the documentation for [Creating User Interfaces](#) for details.