

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Configuration & User Guide

Document Centric Approval Process using SAP
Workflow Management or SAP Build Process
Automation

THE BEST RUN 

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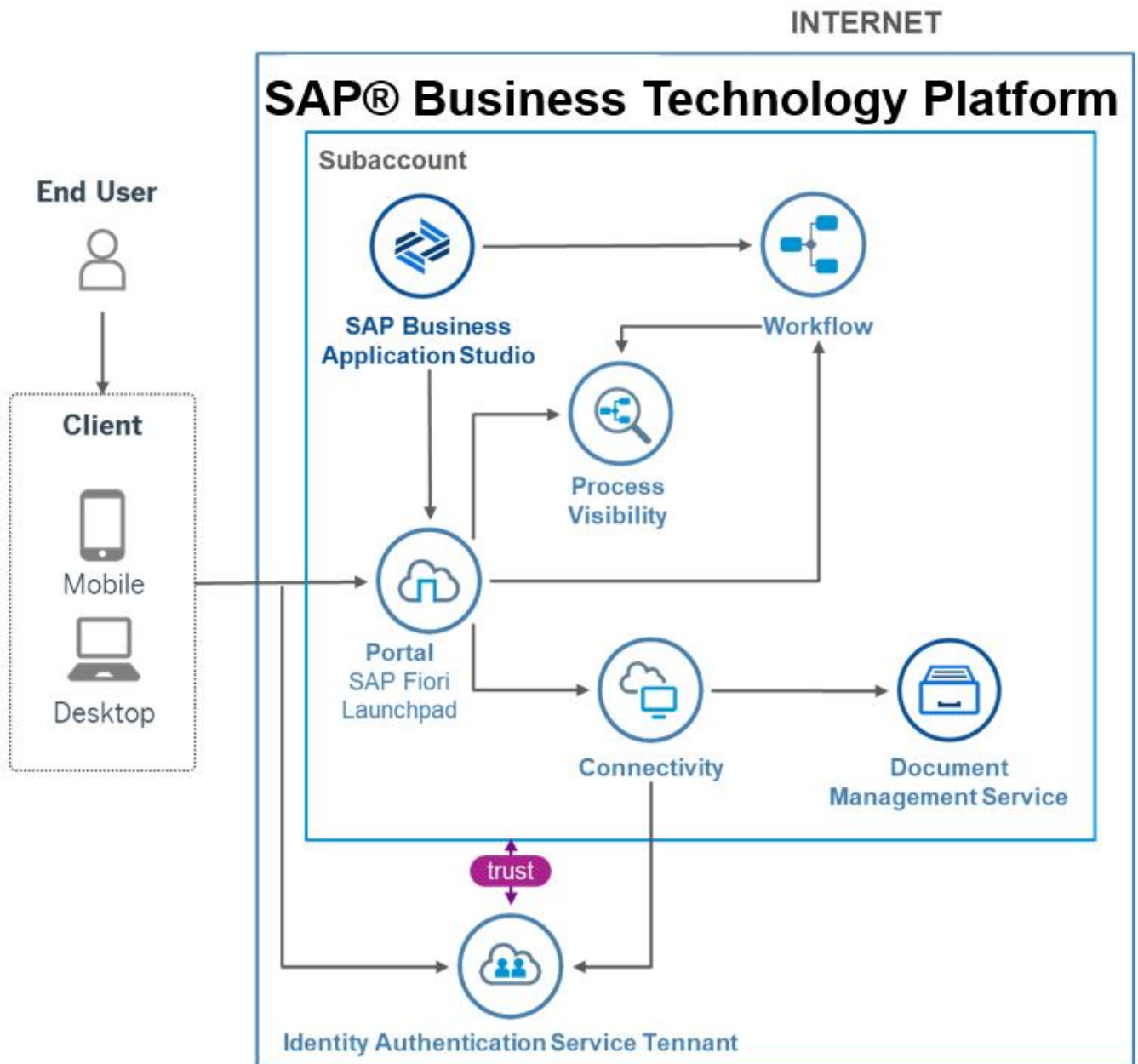
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Overview

This document provides information about what needs to be configured to make Document Centric Approval Process run. The main audience of this document are IT administrators, developers, Consultants, Line of Business Experts, and product owners.

The solution enables customers to accelerate the digitalization of their document centric approval in a transparent way and provide flexibility to meet business requirements.

Document Centric Approval Process



Document Centric Approval Process enables customers to automate approvals or review of documents involving multiple business users from different organizations. Upon creating a request, user defines multiple approvals steps and specifies step names, Approver, Watcher

(optionally), due date and comment for Approver (optionally) for each approval step. Moreover, requestor uploads one or more attachments for further review by approver(s).

The following steps are included as a part of Document Centric Approval Process:

- Business user (Requester) uploads one or more documents, invites approvers/reviewers and starts a workflow.
- Approvers are notified via email.
- Approvers access My Inbox to claim their tasks, review the document and choose one of the following decisions.

Approve

- Upon selecting “Approve” option, Requester and Watcher (if specified) are notified via email about acceptance of the request by a given Approver on a given step and the next approval step is initialized (if present).

Reject

- Upon selecting “Reject” option, Requester is notified via email about rejection of the request and the process is terminated.

Rework

- Upon selecting “Rework” option, Requester is notified via email that the request needs to be reworked. Requester then accesses the task in My Inbox app, modifies the request in accordance with Approver’s comments and sends request for reapproval by clicking on “Send for Approval” button. Alternatively, Requester can choose “Terminate” option which triggers termination of the process.

Approver can also get expert opinion by sharing the task with another business user using the “**Forward**” action. Approver then selects a user from the list, specifies the comment for that user (optionally) and forwards the request. The user to whom the request was forwarded can now access the task in My Inbox app and review the request. This user doesn’t have permissions to edit or complete the request and can only specify a comment (optionally) and send the request back to Approver by clicking on “Update” button.

- When the request is accepted by all Approvers, email notification is sent out to Requester informing about full approval and the process is completed.

The document has two sections.

1. Configure SAP Business Technology Platform Subaccount to deploy and consume the content
2. How to operate the application by Line of Business users.

SAP Build Process Automation or SAP Workflow Management shall not be used to store or process sensitive personal data. This service can be used if you have a legal ground to process personal data.

Required SAP Business Technology Platform Services

The following SAP Business Technology Platform services are required to consume the content package **Document Centric Approval Process**:

- SAP Application Runtime Service
- SAP Build Process Automation or SAP Workflow management
- SAP Cloud Portal Service / SAP Launchpad Service
- SAP Document Management Service, Integration option
- SAP Cloud Identity Services - Identity Authentication

Setup and Configuration

The **Document Centric Approval Process** 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	OAuth2ClientCredentials
URL	<"endpoints"."api">
Client ID	<"uaa":"clientis">
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 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:

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

The screenshot shows the 'Destination Configuration' dialog box with the 'Service Instance' tab selected. The 'Service Instance' dropdown is set to 'sap_processautomation'. The 'Name' field contains 'process_atuomation_service_destination' and the 'Description' field contains 'Call SAP Process Automation APIs using a service route'. There are 'Next' and 'Cancel' buttons at the bottom.

The screenshot shows the 'Destination Configuration' dialog box with the 'Additional Properties' tab selected. The 'Name' field is 'process_automation_service_destination' and the 'Type' is 'HTTP'. The 'URL' is 'https://sap.com/DUMMY_URL'. The 'Authentication' is 'OAuth2ClientCredentials'. The 'Token Service URL Type' is 'Dedicated' and the 'Token Service URL' is 'https://...'. The 'Additional Properties' table is as follows:

Property Name	Value	Action
endpoints	{"api":"https://..."}	Trash
html5-apps-...	{"app_host_id":"..."}	Trash
saasregistry...	true	Trash
sap.cloud.s...	com.sap.spa.process...	Trash
sap.cloud.s...	spa	Trash

The 'Use default JDK truststore' checkbox is checked. There are 'Save' and 'Cancel' buttons at the bottom.

Configure SAP Workflow Management

Follow the [setup and configuration section](#) of SAP Workflow Management.

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

Configure Workflow Email Destination

Configure workflow email destination. For more information on configuring destination, see [configure workflow email destination](#).

Configure Document Management Service Repository

To create and configure root Document Management Service repository please follow 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.

Configure Document Management Service 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 Identity Authentication Service Destination

Configure [Identity Authentication](#) destination with the following parameters to call [SCIM REST APIs](#).

Name	SCIM
------	------

Type	HTTP
Proxy Type	Internet
Authentication	Basic Authentication
URL	https://<IAS tenant ID>.accounts.ondemand.com
User	
Password	

To obtain User and Password values please follow [how to add system administrator](#).

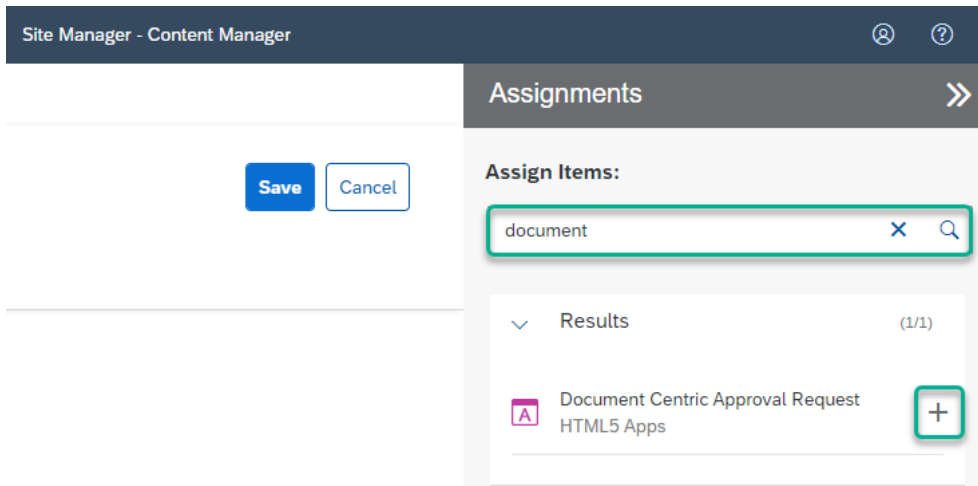
Configure SAP Central Fiori Launchpad Site for SAP Workflow Management

Configure Fiori Launch Pad site to access Workflow Monitoring applications, My Inbox, Process Visibility Workspace and Start UI application to create approval requests.

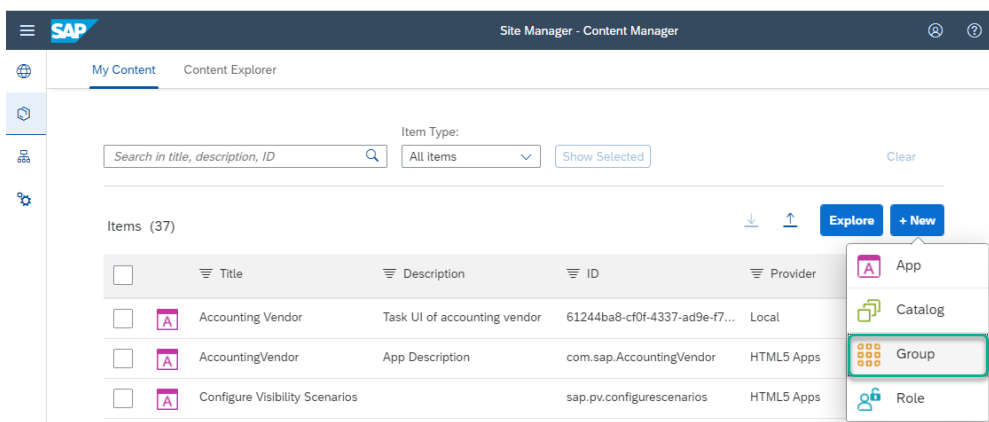
Please refer help documentation [how to configure a start ui tiles on Central Fiori Launchpad](#).

Add Workflow start UI in Fiori Launchpad Site

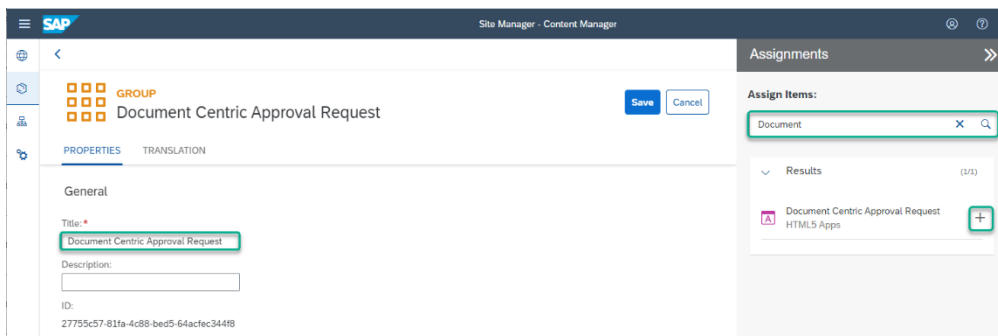
- Open SAP Launchpad site manager application.
- Select **Content Manager** and **Content Explorer**.
- Search com.sap.bpm.DocumentCentricStartUI and select SAP UI5 component.
- Click Add to My Content button to include the UI5 component.
- Select **My Content** tab and Search **Everyone**.
- Click **Everyone** from the result and navigate to the details.
- Click Edit button to enable all users to access the new Start UI tile.
- Search for Document and select Document Centric Approval Request.
- Click the + button and Save the changes.



- Click **New** button and Select **Group** to create a new group.



- Add a **Title** for eg: Document Centric Approval Request under **PROPERTIES**.
- Search Document and Select Document Centric Approval Request.
- Click **+** button and **Save** button.

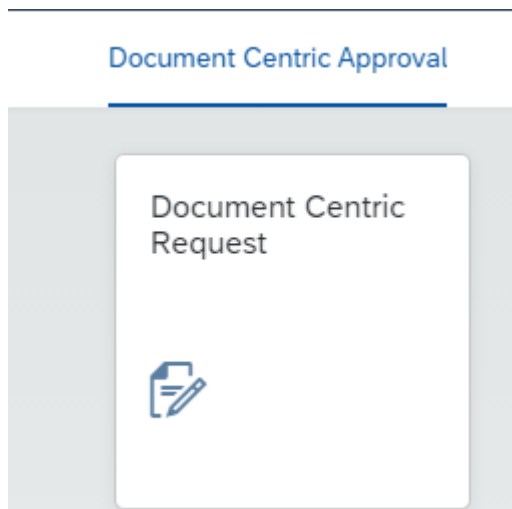


Using the Document Centric Approval workflow

The applications that are part of Document Centric Approval content package will be available in the SAP Business Technology Platform Fiori Launchpad. Check with your administrator for the link to access the same.

Creating Document Centric Request

The application for submitting a document centric request for approval can be accessed from a tile in SAP Fiori Launchpad.



Application automatically prepopulates *First Name*, *Last Name*, *Email Address* and *User ID* fields in the “*Requester*” section with the data from Identity and Authentication service (you can edit these values, if necessary).

In the “*Request Details*” section provide relevant *Title* for the request.

In the “*Approval Steps*” section define at least one approval step by specifying *Step ID*, selecting *Approver* from the list of users from Identity and Authentication service and specifying *Due Date*. Optionally you can select *Watcher* for the approval step (this user will be included in the cc of the approval notification email) and specify *Comment for Approver* of the step. To add new approval step, click on “*plus*” icon in right top corner of the table (1). To delete an approval step, click on “*delete*” icon (2).

Approval Steps

Local Manager Group Head

1 +

Step ID*	Approver*	Watcher	Due Date*	Comment for Approver	
1	Local Manager	John +	Peter +	Oct 7, 2020 📅	Some relevant comment 🗑️ 2
2	Group Head	Steve +	Peter +	Oct 30, 2020 📅	🗑️

In the *Attachments* section you can attach one or more documents.
 After all required fields are populated, submit the request by clicking on *Request Approval* button.

Document Centric Approval Request

[Requester](#) [Request Details](#) [Approval Steps](#) [Attachments](#)

First Name: *

Last Name: *

Email Address: *

User ID: *

Comment from Requester:

Request Details

Request ID: *

Title: *

Approval Steps



Step ID *	Approver *	Watcher	Due Date *	Comment for Approver	
1	<input type="text" value="Local Manager"/>	<input type="text" value=""/>	<input type="text" value="Oct 3, 2020"/>	<input type="text" value="Important comment for Local Manager"/>	
2	<input type="text" value="Group Head"/>	<input type="text" value=""/>	<input type="text" value="Oct 31, 2020"/>	<input type="text" value="Important comment for Group Head"/>	

Attachments

Attachments (3)

[Upload](#)



Picture.jpg

Uploaded By: · Uploaded On: Sep 23, 2020, 7:38:02 PM · File Size: 147.3 kB



Document1.pdf

Uploaded By: · Uploaded On: Sep 23, 2020, 7:37:25 PM · File Size: 0.1 kB



Document2.xlsx

Uploaded By: · Uploaded On: Sep 23, 2020, 7:37:42 PM · File Size: 6.0 kB



[Request Approval](#)

Approving Document Centric Request

Once Requester has submitted approval request, Approver is notified about this via email and accesses “My Inbox” app to process the request.

Approver reviews the data provided by Requester and the History of approval request, specifies a comment (optionally) and chooses one of four decision options:

- **Approve:** the approval request will continue with the next step, or complete if this was the last configured step. The decision data is stored in the History of the request. Requester and Watcher (if present) are notified about the decision via email.
- **Reject:** the approval request will immediately be stopped. No further approval steps are executed. Requester is notified about the decision via email.
- **Rework:** Requester is assigned to rework the request. For this, Requester is notified about the decision via email and a Rework Task is created. The decision data is stored in the History of the request.
- **Forward:** the approval request is forwarded to another user. For this, Approver selects the user to whom the request should be forwarded (via a popup select list), provides a comment for that user (optionally) and accepts forwarding of the request. The decision data is stored in the History of the request.

Reworking Document Centric Request

Once Approver has sent the approval request for rework, Requester is notified about this via email and accesses task in “My Inbox” app to rework the request.

Requester reviews Approver’s comment in the History section and can edit the request details: upload/delete attachments, add/edit comments, etc.

Once necessary changes are applied, requester sends reworked version of the request to Approver of the current step by selecting decision option “**Send for Approval**”. After that, Approver of the current step is once again notified about the request submission via email and can access task in “My Inbox” app to review reworked version of the request. Information that the request is reworked is stored in the History.

If Requester feels that it is not possible to apply the changes requested by Approver for the current request, Requester can stop the execution of the workflow by selecting decision option “**Terminate**”.

Forwarding Document Centric Request

In case Approver wants to get an expert’s opinion regarding the request, he/she can share the task with another business user using the “**Forward**” action.

For this, Approver selects a user from the “Select User” list.

After that Approver can add a comment and accept forwarding of the request by clicking on “OK”

button. Approver comment and information that the request is forwarded is stored in the History.

Updating Document Centric Request

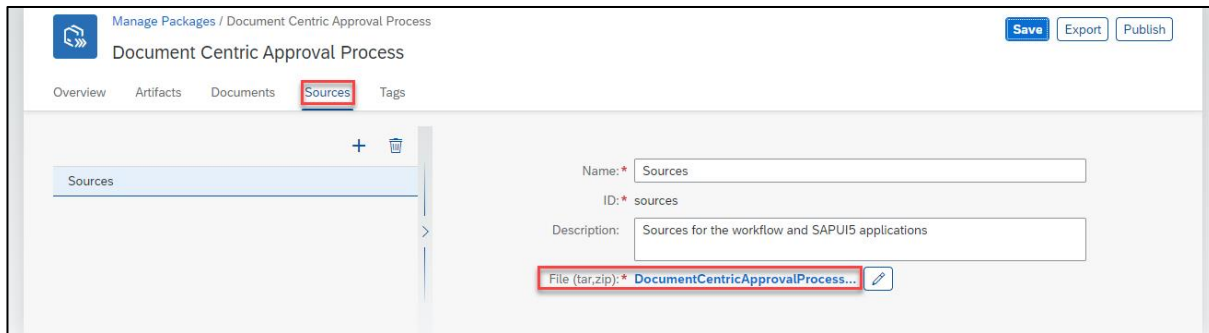
Once Approver has forwarded the request to the other user (e.g., to get expert's opinion on the matter), that user can access the task in "My Inbox" app to review the request. The user to whom the request was forwarded cannot complete the Task or edit the request, he/she can only add a comment and by selecting decision option "**Update**" return the Task back to the Approver of the current step.

Provided comment and information that the request is updated is stored in the History.

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 workflow 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.



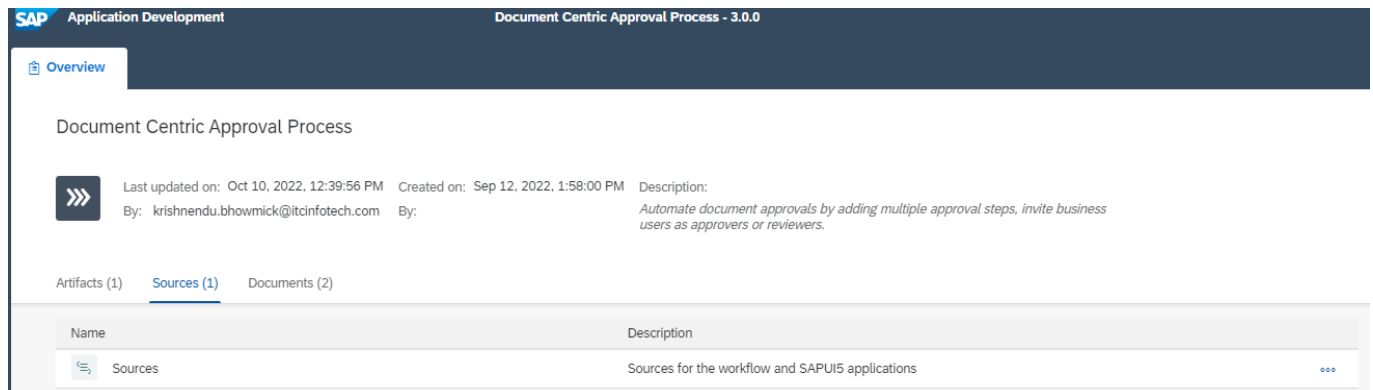
- in **Manage Package** app, select **Sources** tab
- click on the blue filename behind **File (tar, zip)** to download the attached source archive
- Import the archive into SAP Business Application Studio
- make any necessary modifications
- Build and deploy the MTA archive, using the space developer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



The screenshot displays the SAP Business Application Studio interface for the 'Document Centric Approval Process - 3.0.0' project. The 'Overview' tab is active, showing the project name, last updated and created dates, and the creator's email. A description states: 'Automate document approvals by adding multiple approval steps, invite business users as approvers or reviewers.' Below this, there are tabs for 'Artifacts (1)', 'Sources (1)', and 'Documents (2)'. The 'Sources' tab is selected, showing a table with one entry: 'Sources' with the description 'Sources for the workflow and SAPUI5 applications'.

- in **application Lobby**, select **Sources** tab
- 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

The project consists of the following:

- **DocumentCentricStartUI HTML5 module** – serves as the Workflow Start User Interface application for creation of document centric approval requests by Requester.
- **DocumentCentricTaskUI HTML5 module** – serves as the Workflow Task User Interface application for processing pending document centric approval requests by Approver.
- **DocumentCentricReworkUI HTML5 module** – serves as the Workflow Task User Interface application for processing of document centric rework requests by Requester.
- **DocumentApproval Workflow module** – To automate the document review and approval process