Configuring the Copado-JIRA One way Integration

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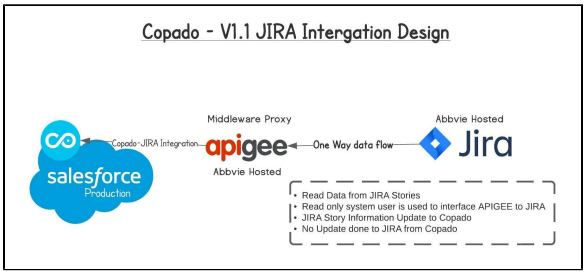
Architecture Design



APIGEE Proxy URL

APIGEE team has created a proxy URL that Copado could leverage, to establish connection with Enterprise JIRA server. This proxy helps to avoid the requirement of making network changes which is not authorized by AbbVie security guidelines.

URL Created against JIRA Prod Server
https://api.abbvie.com/EnterpriseJira/read-only

Enterprise DevOps team provided a generic user Read-Only credentials to APIGEE for interfacing with JIRA

Setup

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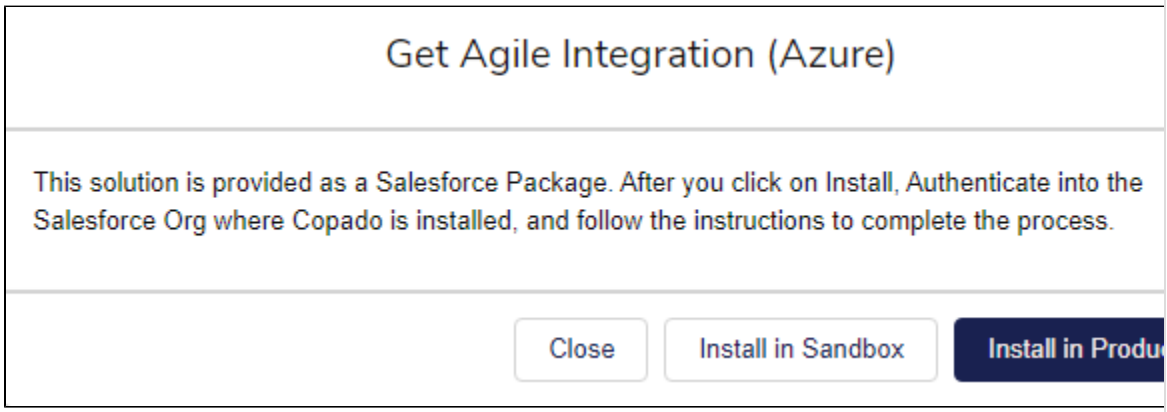
Installing the *Agile Integration* Package - [Standard Process]

v1.13 of the Agile Integration package is installed on the org where Copado is installed to configure the Integration to JIRA. The following steps should be followed to install and validate the Agile Integration package.

1. Click on this hyperlink->app link to directly navigate to Agile Integration app in DevOps Exchange section on Copado Success Community website.
   a. Scroll down to the description section to validate that the version of the app is v1.13
   b. Click on the **Get it now** button

   c. On the popup box click on **Install in Sandbox** or **Install in Production** according to the destination org. Install for ***Admins only***.
   d. After authentication the app will begin installation.



2. After installation is complete, navigate to Setup Installed Packages

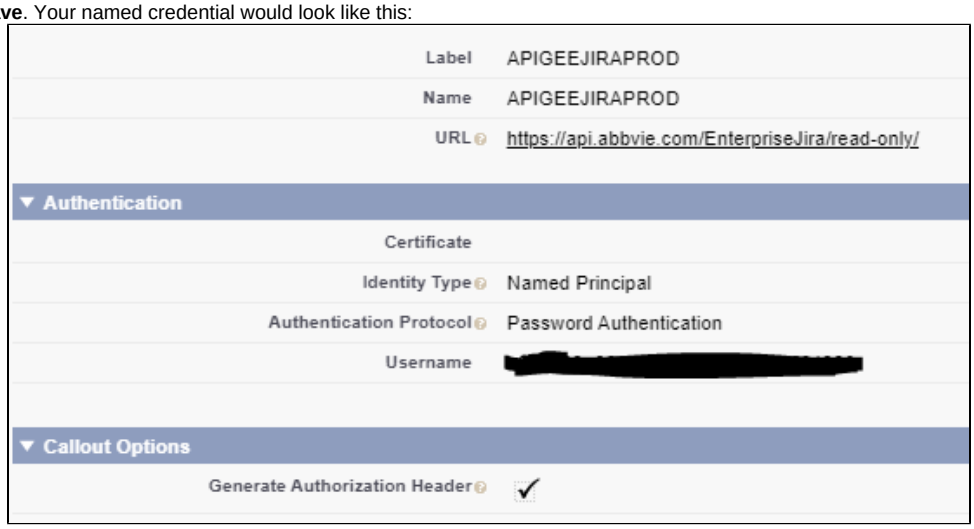
   a. Find the installed app named *Copado CCM Integrations v2,* click on it

   b. Validate that the installed version is v1.13

Create Named Credential - [Customized Process]

Once the package has been successfully installed, you need to configure a named credential. According to Salesforce, a named credential specifies the URL of a callout endpoint and its required authentication parameters. To configure a named credential, follow the steps below:

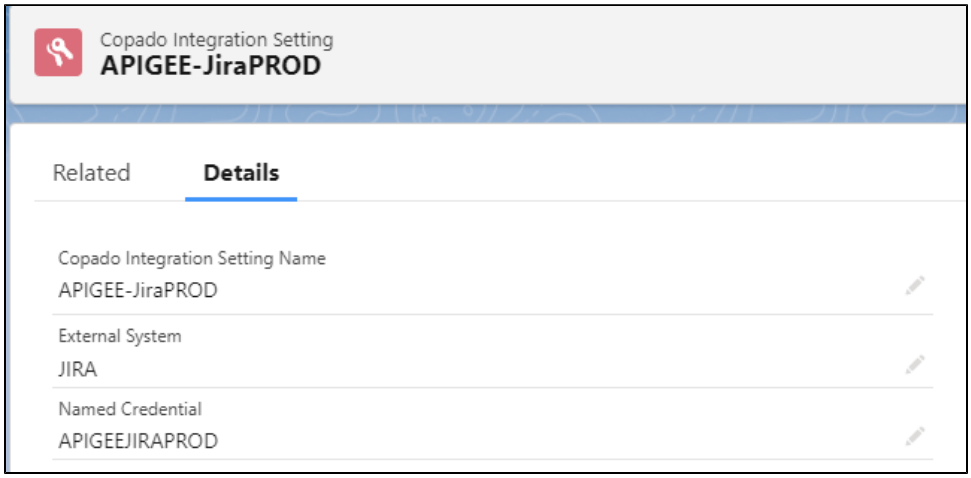
1. Go to **Setup** > **Named Credentials** and click **New Named Credential**:
2. Give your named credential a name, e.g., Jira Integration.
3. Update the **APIGEE Proxy URL** created in the previous step and add '**/**' as suffix as shown below
4. In the **Identify Type** field, select **Named Principal**. This means that one user will provide the authentication for all callouts from Salesforce to the external application.
5. Select **Password Authentication** from the **Authentication Protocol** drop-down menu.
    a. Update the API Key in Username
    b. Update the secret in Password
6. Set the **Generate Authentication Header** checkbox to **True**.
7. Click **Save**. Your named credential would look like this:



Creating the Copado Integration Setting Record - [Standard Process]

The next step is creating a new Copado integration setting to link your named credential with the project you will use to import your user stories. To do this, follow the steps below:

1. Navigate to the **Copado Integration Settings** tab and click **New**.
2. Give your integration a name, e.g. Copado <> Jira.
3. Select **JIRA** from the **External System** drop-down menu.
4. In the **Name Credential** field, provide the same name of the named credential you created in the previous step (API name).
5. Click **Save**. Your record should look like this:



Update the Project Layout - [Standard Process]

Once you have configured the name credential and the Copado integration setting, you must adjust the **P roject** layout and reference the Copado integration settings.

To update the layout, follow these steps:

1. Go to **Setup** > **Object Manager** > **Project**.
2. Click **Project Layout** to adjust the layout.
3. Add a new section named **Jira Integration** with the following fields to the layout:
    a. **JQL Extended Filter**
    b. **Project External Id**
    c. **Copado Integration Setting**
    d. **Enable Logs**
    e. **Team Info**
    f. **Enable Community Users**
4. Add the following buttons to the layout:
    a. **Sync External User Stories**
    b. **Sync User Stories with Sprints**
5. Add the **Field Mappings** related list and include the following fields in it:
    a. **Field Mapping Name**
    b. **Salesforce Field Name**
    c. **Exclude from Salesforce update**
    d. **Third Party Field Name**
    e. **Exclude from Third Party update**
    f. **Created by**
    g. **Last Modified by**
6. Add the **Record Type Mappings** related list and include the following fields:
    a. **Salesforce Record Type Name**
    b. **Third Party Record Type Name**
7. Add the **Callout Logs** related list.

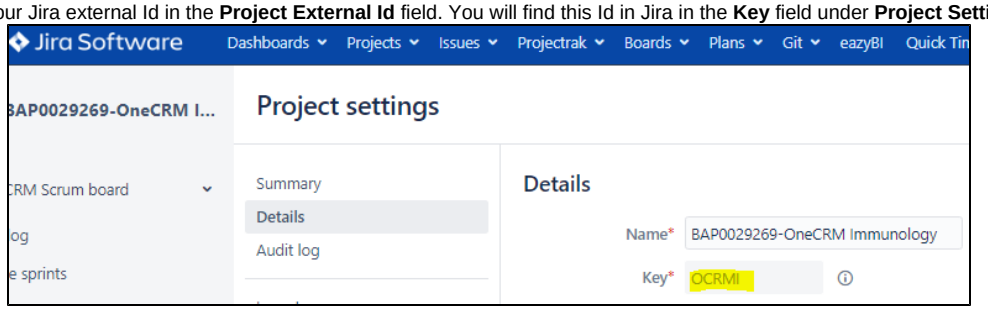
Add JIRA Key to User Story Layout.

1. Go to **Setup** > **Object Manager** > **Copado__User_Story__c**.
2. Click **User Story** and **Bug Layout** to adjust the layout.
3. Add JIRA Key field to the layout next to User Story Reference field

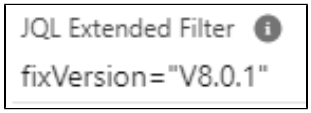
Make sure the relevant profiles or permission sets have the right field-level and object-level security settings

Setting up your Project - [Standard Process]

It is time now to set up your project or, if you already have one, to update it.

1. Navigate to the **Projects** tab and create a new project or edit your existing project.
2. Update the **Copado Integration Setting** field and select the **Copado Integration Setting** record you created in a previous step.
3. Set the **Enable Logs** checkbox to True.
4. If you want to include any active community users for user field mapping in the sync, you need to flag the **Enable Community Users** field.
    a. This allows you to include or exclude community users in the Jira sync with Copado. The default value is unchecked, so if you want to include any active community users for user field mapping, such as **Assignee** to **Developer**, you can check this field to enable them.
5. Paste your Jira external Id in the **Project External Id** field. You will find this Id in Jira in the **Key** field under **Project Settings**:
    - 

As per request from OneCRM team, a filter needs to be configured to ensure only stories related to specified Release is synced. Below step

1. On the Project record find the **JQL Extended Filter** field
2. Update the field value as **fixVersion="<ReleaseName>"** as per the below example
    a. 

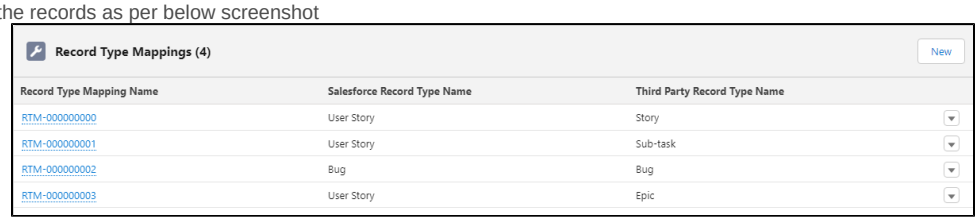
> *The Release Manager should ensure the Release name in the JQL Extended Filter is updated to the latest Release to sync stories related to the same.*

Configure Field Type Mapping - [Standard Process]

- Configure the **Field Mapping** object by doing an insert to the **copadoccmint__Field_Mapping__c** object.
- Download the csv file from this link copadoccmint__Field_Mapping__c insert.csv
- Open the file and update the copadoccmint__Project__c column with the ID of the current Project record from Copado destination org.
- Perform insert operation using the file to **copadoccmint__Field_Mapping__c object.**
- Navigate to the Project Record, go to Field Mappings in the related list and validate all inserts are showing up.

Configure Record Type Mapping - [Standard Process]

Mapping issue types with record types in the **Field Mapping** object is supported in the JIRA integration. You need to manually configure the **Record Type Mapping** records for the following record types:

1. Navigate to the **Projects** tab.
2. Select the project you want to map.
3. On the **Record Type Mapping** related list click **New**:
    - blocked URL
4. Create the records as per below screenshot
    - 

Executing User Story Sync Process - [Standard Process]

There are 2 ways to trigger the User Story retrieval process

1. Manual Invocation
    - Navigate to the Project Record
    - Expand the Button ribbon and click on
        a. ***Sync External User Stories With Sprint*** (This will create the Sprint record along with the Stories and Releases)
        b. ***Sync External User Stories*** (This will create only the User Stories and Release records)
2. Scheduled Jobs
    - Schedule an Apex job to retrieve the user stories from Jira based on your preferred frequency.
    - The class **ScheduleUserStoryFetch** has been created to perform a bulk import of **User Story** records from the external provider to Salesforce.
    - Depending on the configuration of its cron expression, it will carry out the bulk operation periodically. It will retrieve all the mapped fields and will update the Salesforce fields with the external data.

      Find below a sample script on how to schedule the fetch process:

```
//Parameters to use on schedule job
String myProRecId = 'a0w5p00000BtlRSAAZ';
Boolean withSprint = true;

//Now let's schedule the project sync
copadoccmint.ScheduleUserStoryFetch handler = new copadoccmint.Sched
uleUserStoryFetch (myProRecId, withSprint);
String scheduleJobId = system.schedule('ScheduleUserStoryFetch - ' +
DateTime.Now() + '.' + math.mod(DateTime.now().getTime(), 1000), '0
0 12 1/1 * ? *', handler);
```

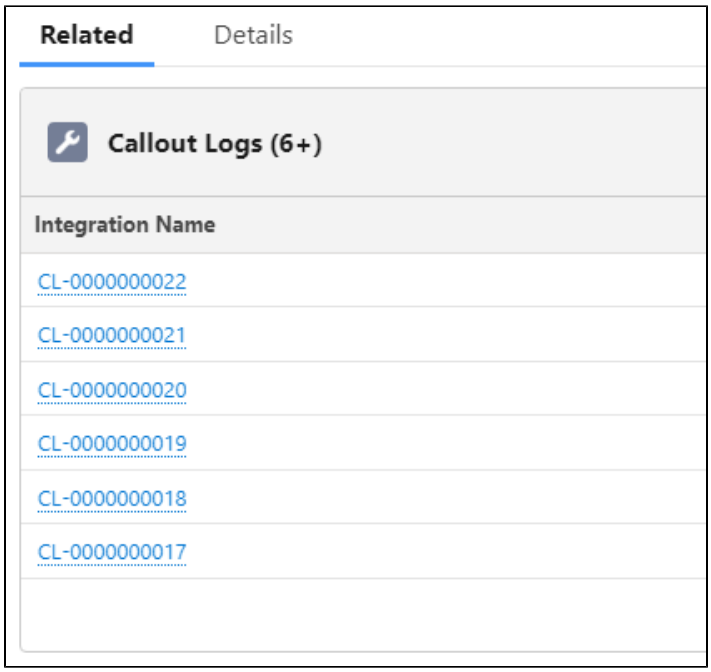
Troubleshooting

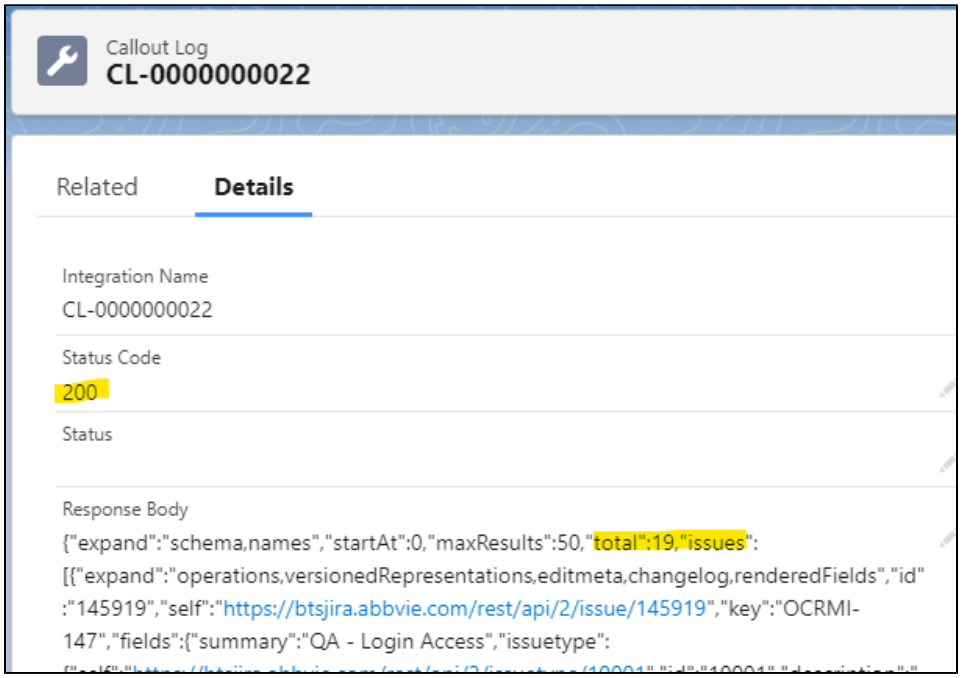
You can check for errors in Salesforce **Setup** > **Apex Jobs** and the Callout Logs.

- As soon as the sync is initiated, navigate to SetupApex Jobs and ensure a job is triggered and executed successfully.
    - If the Job is not triggered, then we need to check the Named credential and validate the credentials are working fine.
    - If Job is failed, click on the details and verify the error.
    - If Job is passed but no stories, Navigate to Project record Related list Callout Logs and open the recent log.
- `First error: The URI is invalid:`

  It is most likely that the name in the Named Credential field in the Copado Integration Settings record is not an exact match of the name in the Named Credential record that you set up. Make sure that the API name and the name of the named credential in the settings are the same
- `First error: Unexpected character ('<' (code 60)): expected a valid value (number, String, array, object, 'true', 'false' or 'null') at input location [10,2]:`

  It's likely that the user is incorrect in the Named Credential. Check your username. Depending on your organization's configuration, your username should have an email format such as sachin.ks@abbvie.onecrm





> *If there is any issue with the User Story sync, please do basic checks and reach out to ous-devops@abbvie.com via email or connect with sachin.ks@abbvie.com directly on teams*

Workaround for Creating Stories If Sync is Not Working

If the JIRA sync is not working and in case there is an emergency requirement to create a Story, please follow the below steps

1. Stories can be created manually or by using the Export and Import Process outlined in this confluence page https://btsconfluence.abbvie.com/x/cYDIBQ
2. Release Manager should validate a few checklist points before performing the manual update
    a. Issue needs to be reported to ous-devops team(ous-devops@abbvie.com via email or connect with sachin.ks@abbvie.com directly on teams) and the details of the Stories in the manual insert has to be communicated on the email.
    b. Perform a search and verify no other Copado User Story exists for the corresponding JIRA Stories for which new Copado stories to be created.
    c. Ensure the appropriate Record type is selected as *User Story* or *Bug* as per the JIRA story Issue type
    d. Ensure JIRA Key field is populated with the JIRA Story number.
    e. Ensure the Title is populated with the Summary of the JIRA Story accurately.

> *Failing to follow these steps will result in duplication of Copado User Stories against their respective JIRA stories which will impact the deliverable reports and Value Streams.*