*Amazon Confidential*

**Jira Connector Final Requirements**

1. I should have Jira data source configuration available as a Kendra public API and in AWS Kendra console to use Jira data source.
2. I should be able to crawl a Jira instance data source for one instance of connector.
3. I should be able to configure the Jira connector with Jira URL.
4. I should be able to configure the Jira connector with below credentials for Basic Auth

And able to set oauthType “Basic”.

* jiraId : <username>
* jiraCredential : <Api Token>
* jiraAccessToken : <empty>
* jiraRefreshToken : <empty>

1. I should be able to configure the Jira connector with below credentials for OAuth2

And able to set oauthType “OAuth2”.

* jiraId : <client\_id>
* jiraCredential : <client\_secret>
* jiraAccessToken : <access\_token>
* jiraRefreshToken : <refresh\_token>

1. I should be able to configure Jira data source with following filter

Project

* + 1. I should be able to configure project key

1. I should be able to configure Issue Type and Issue Status filters
2. I should be able to configure whether to crawl Comments, Attachments and Worklogs filters in additional properties.
   1. Comments
      1. I should have an option to turn issue comments crawling on/off.
   2. Attachments
      1. I should have the option to turn issue attachments crawling on/off.
   3. Worklogs
      1. I should have option to turn issue worklogs crawling on/off.
3. I should be able to configure Jira data source with inclusion and exclusion filters. Inclusion and exclusion filters can take:
4. File Types
5. File Names
6. I should be able to run Jira connector in:
   * Full crawl mode: It will crawl entire Jira content whenever there is a data source sync
   * Change log mode: It will crawl the specified changed Jira content (added/deleted/modified/permission changes) whenever there is a data source sync
7. Default field mappings for customers.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Project** | | | | |  |
| **Jira Field** | **Kendra Index Field** | | **Field Type** | |  |
| Title (Project Name) | \_document\_title | | Default | |  |
| Key | j\_projectKey | | Custom | |  |
| Description | \_document\_body | | Default | |  |
| lead | j\_projectLead | | Custom | |  |
| URL- SOURCE\_URL | \_source\_uri | | Default | |  |
| **Issue** | | | | | |
| **Jira Field** | | **Kendra Index Field** | | **Field Type** | |
| Title (author - issue key) | | \_document\_title | | Default | |
| Description | | \_document\_body | | Default | |
| Key | | j\_issueKey | | Custom | |
| Status | | j\_issue\_status | | Custom | |
| Project Name | | j\_projectName | | Custom | |
| Project Key | | j\_projectKey | | Custom | |
| Author (Creator) | | \_authors | | Default | |
| Assignee | | j\_assignee | | Custom | |
| Created At | | \_created\_at | | Default | |
| Updated At | | \_last\_updated\_at | | Default | |
| URL- SOURCE\_URL | | \_source\_uri | | Default | |

|  |  |  |
| --- | --- | --- |
| **Comment** | | |
| **Jira Field** | **Kendra Index Field** | **Field Type** |
| Author (Creator) | \_authors | Default |
| Updated by | j\_lastUpdatedBy | Custom |
| Created At | \_created\_at | Default |
| Updated At | \_last\_updated\_at | Default |
| Project Name | j\_projectName | Custom |
| Issue Name | j\_issueName | Custom |
| URL – Source URL | \_source\_uri | Default |

|  |  |  |
| --- | --- | --- |
| **Attachment** | | |
| **Jira Field** | **Kendra Index Field** | **Field Type** |
| Title (FileName) | \_document\_title | Default |
| Author | \_authors | Default |
| Size | j\_size | Custom |
| Created At | \_created\_at | Default |
| URL – Source URL | \_source\_uri | Default |
| Project Name | j\_projectName | Custom |
| Issue Name | j\_issueName | Custom |

|  |  |  |
| --- | --- | --- |
| **Worklog** | | |
| **Jira Field** | **Kendra Index Field** | **Field Type** |
| Comment | \_document\_body | Default |
| Author | \_authors | Default |
| Created At | \_created\_at | Default |
| Updated At | \_last\_updated\_at | Default |
| URL – Source URL | \_source\_uri | Default |
| Project Name | j\_projectName | Custom |
| Issue Name | j\_issueName | Custom |
| Time spent | J\_timespent | Custom |

1. I should be able to create custom field mappings for Jira data source configuration. Custom field mappings should be based on custom metadata.
2. Jira connector should crawl ACL information from Jira instance.
3. For a user: Jira connector should set user email-id as username in principal
4. For a group: Jira connector should set Project Key as Group Name in principal
5. For updating Jira data source configuration.
6. I should be able to update access credentials (Client Id, Client Secret, Username and Password)
7. I should be able to update the filter for Project, Issue Type and Issue Status
8. I should be able to update inclusion and exclusion filters (including addition and removal)
9. I should be able to update the comments crawl on/off.
10. I should be able to update the attachment crawl on/off.
11. I should be able to update the worklog crawl on/off.
12. I Should be able to change field mapping.
13. I should be able to change Crawl Type between Full crawl and Change log whenever required.
14. Jira Principal mapping Connector will crawl project key as group and users /members of project as members of group.

**NFR Requirements**

1. I should be able to configure connector to sync 500k documents in full crawl mode (max size: 0.25 to 50 MB, extract size: 5 MB, overall size 150 GB):
2. I should be able to configure the connector to sync after updating 10k documents in incremental crawl mode.
3. Resilient to throttling failures and occasional errors from repository (retry on rate limit errors)

**OAuth2 Pre-requisites**

# Jira Connector Pre-requisites

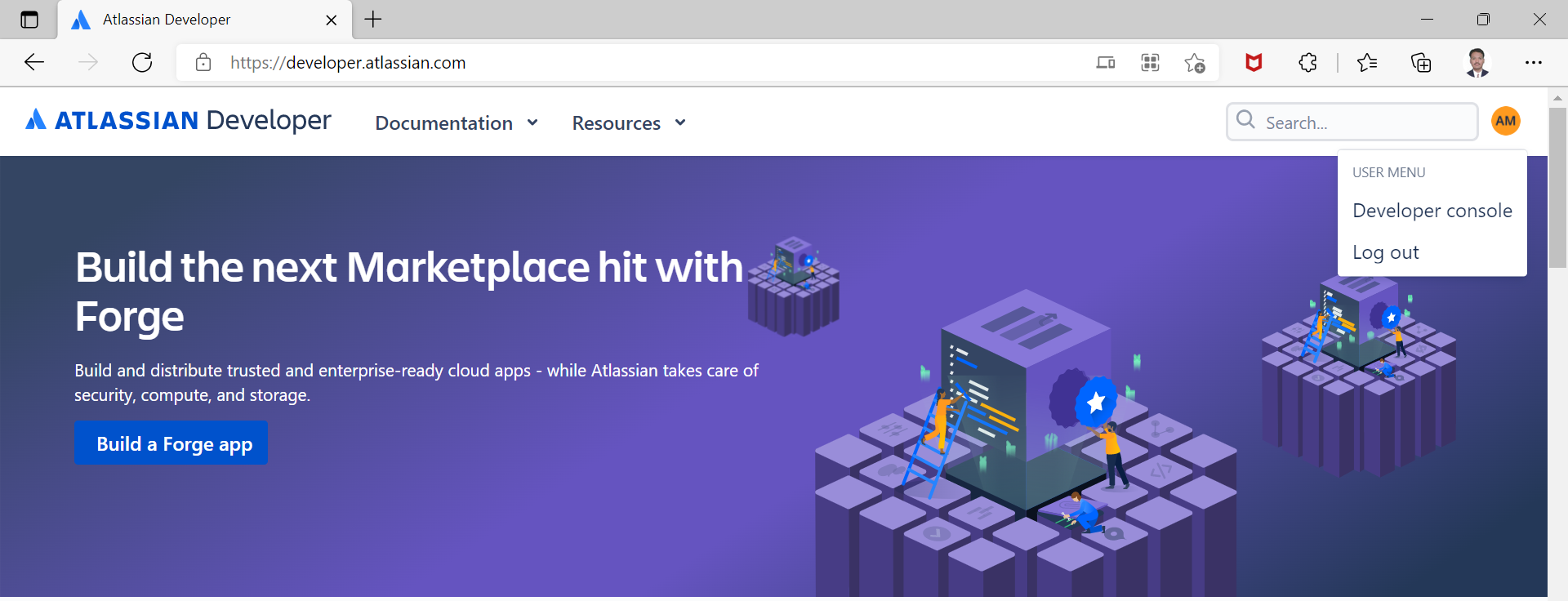
* Jira admin would have to configure Jira app
* Jira admin would have to configure and install the Jira app
* Jira admin would have to edit ‘’Authorization URL” and hit edited URL on browser and generated code needs to be use for generating access and refresh token pair.

# **Configure Jira App**

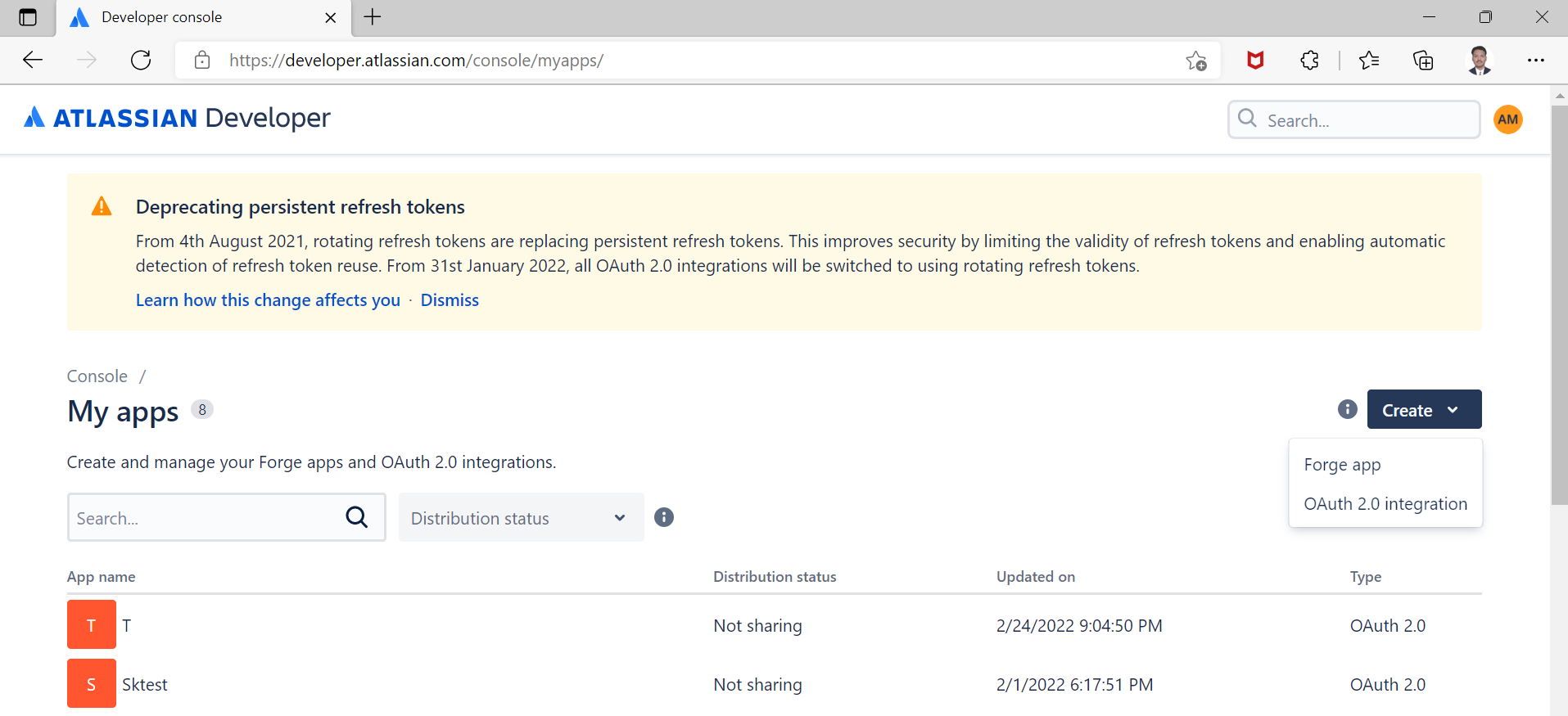
**Reference :** [OAuth 2.0 (3LO) apps (atlassian.com)](https://developer.atlassian.com/cloud/jira/platform/oauth-2-3lo-apps/)

Jira admin would have to configure the Jira app as mentioned in the steps below.

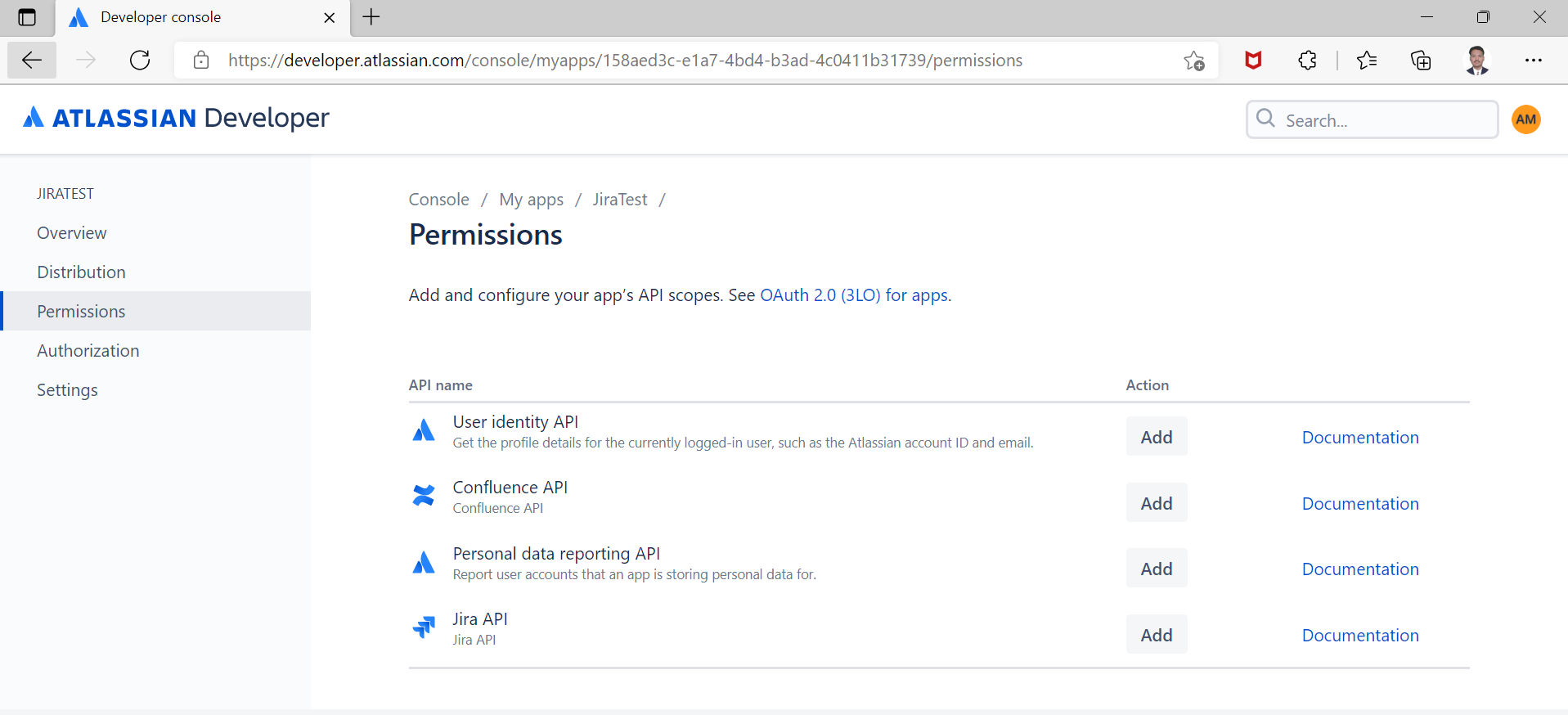
1. From any page on [Atlassian Developer](https://developer.atlassian.com/), select your profile icon in the top-right corner, and from the dropdown, select **Developer console**.



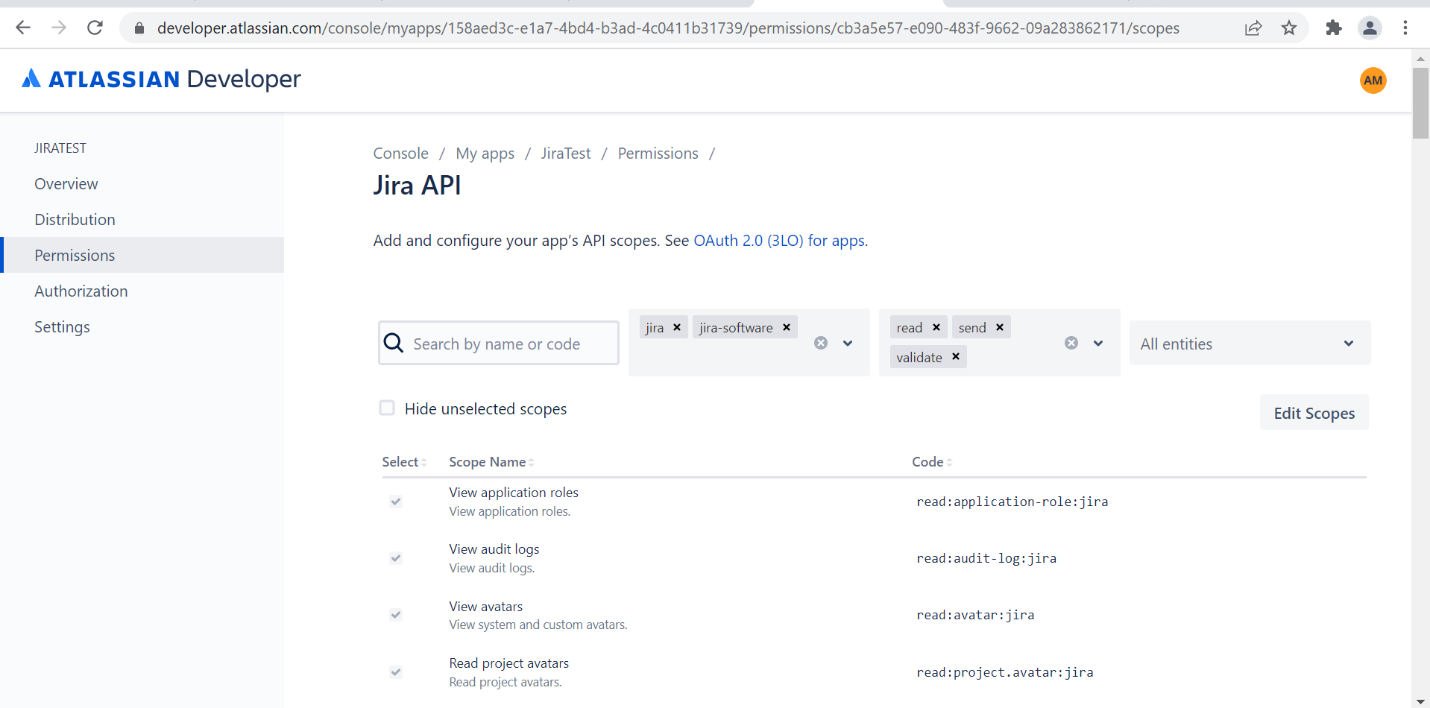
1. Select your app from the list (or create one if you do not already have one by clicking OAuth 2.0 Integration).



1. Select **Permissions** in the left menu and select **Add** for Jira API



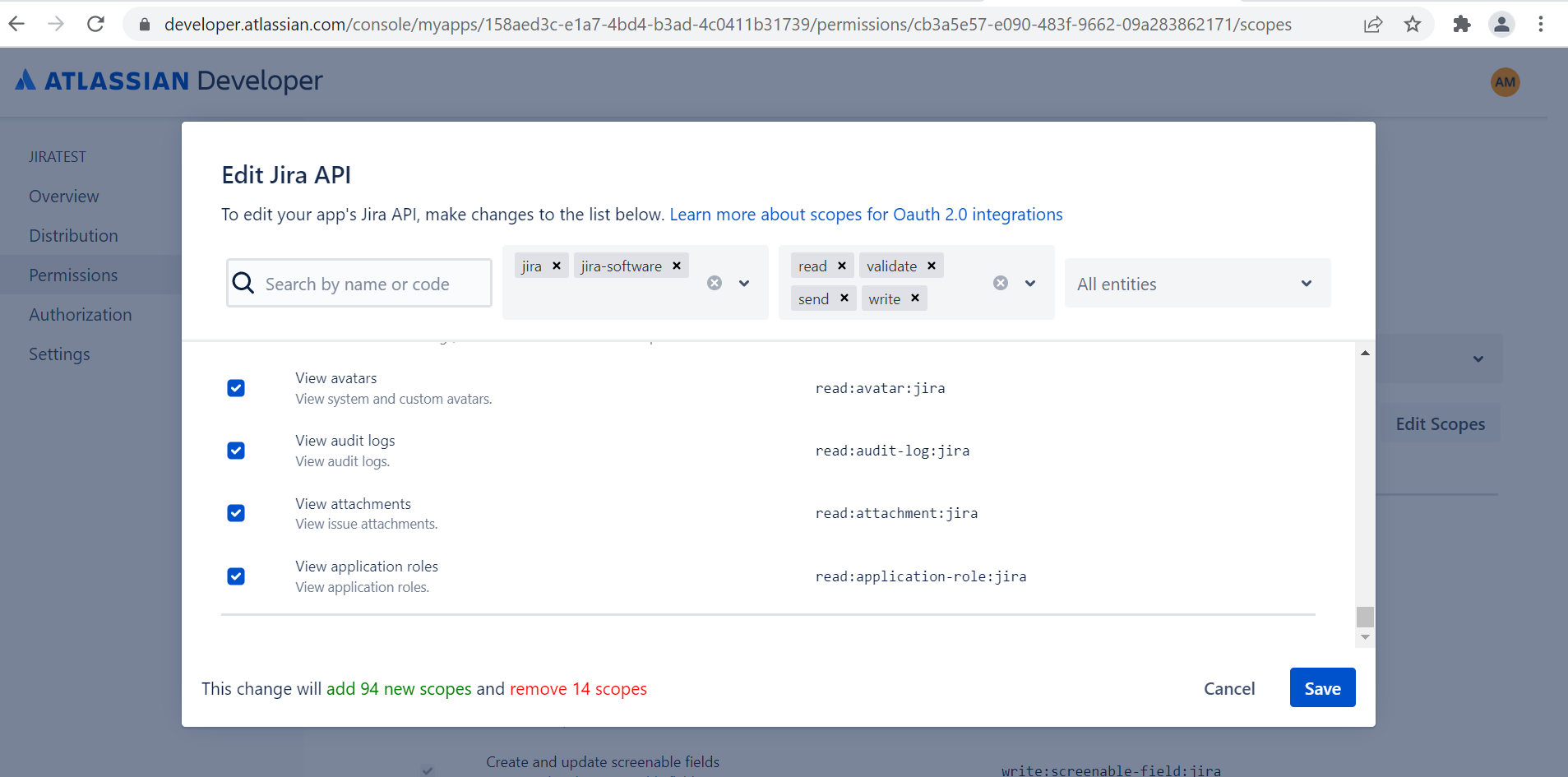
1. Click on Configure of added API and Select products & operations.



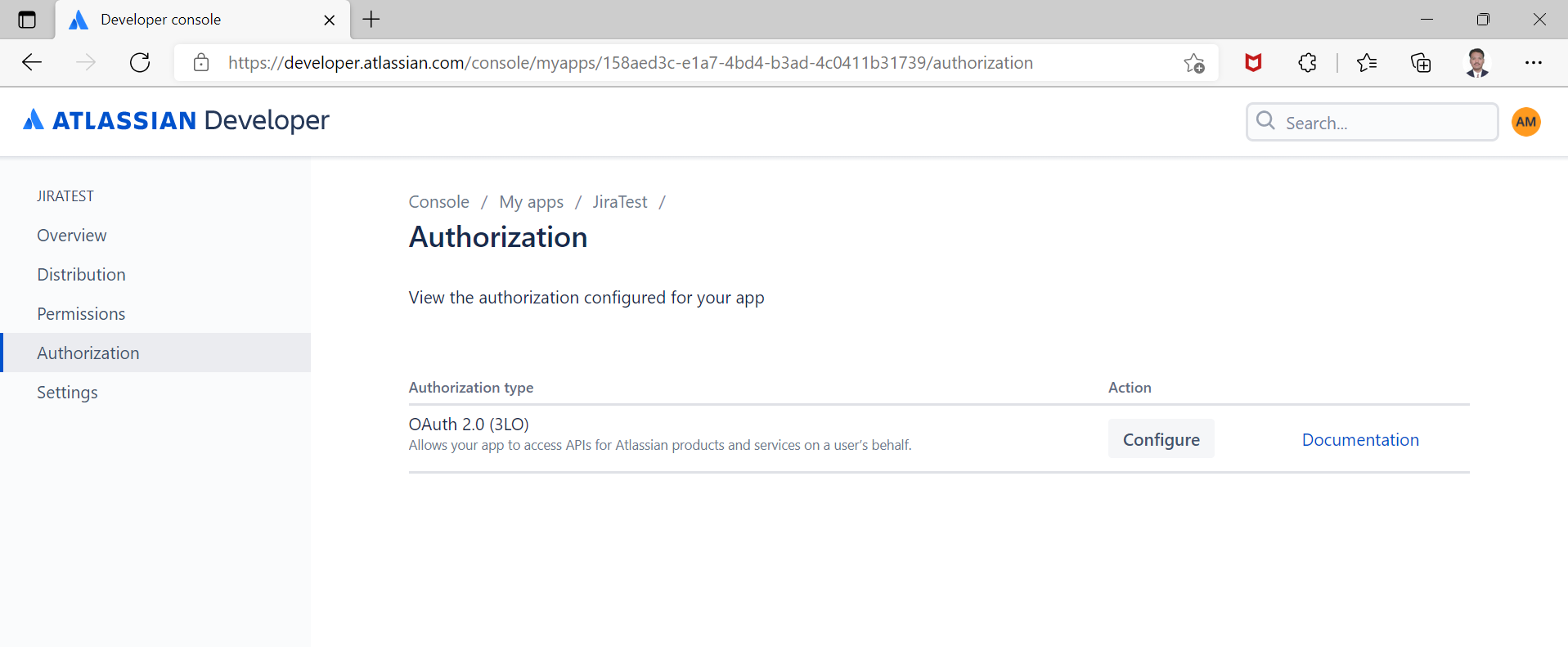
1. Click on Edit Scopes and check on checkbox for to add scopes and click on save.

Reference : [scopes-for-oauth-2-3LO-and-forge-apps](https://developer.atlassian.com/cloud/jira/platform/scopes-for-oauth-2-3LO-and-forge-apps/#list-of-scopes)

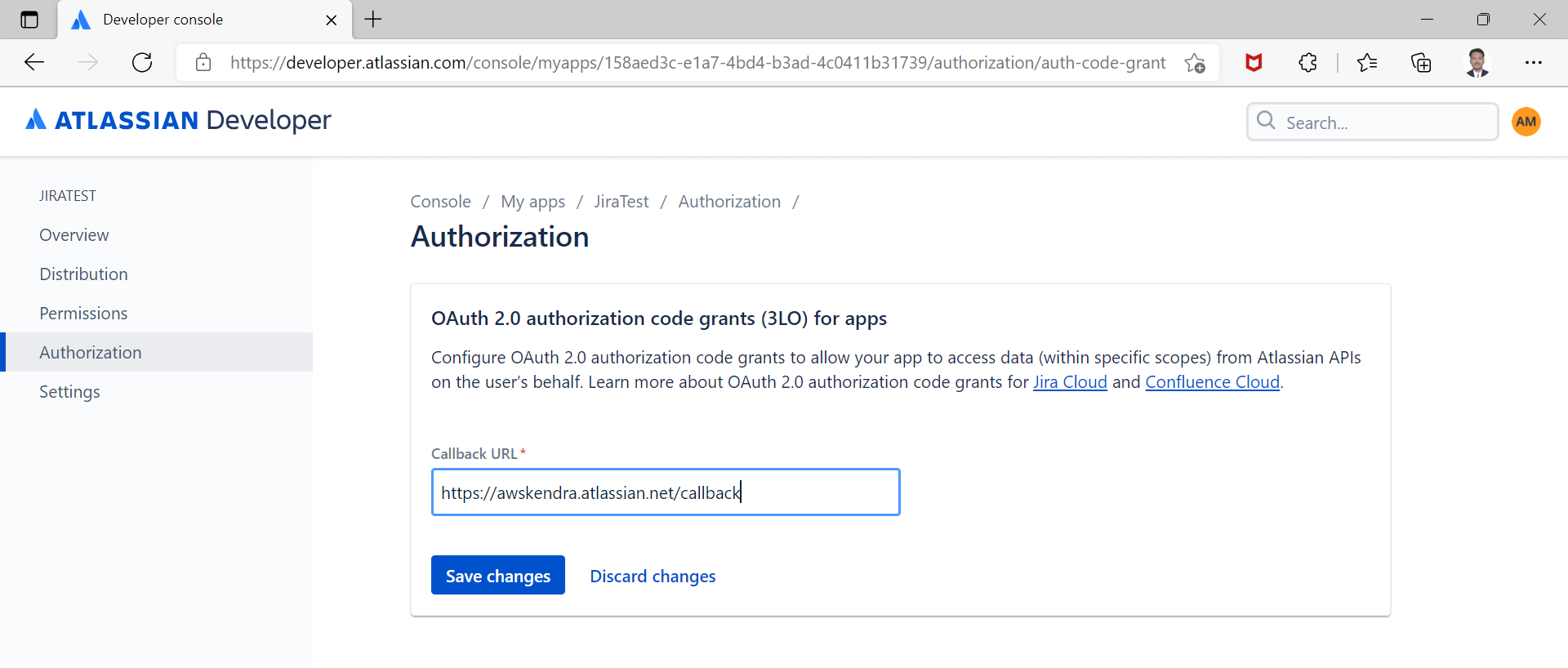
Required scopes mentioned in “**Jira Scopes**” below.



1. Select **Authorization** in the left menu.

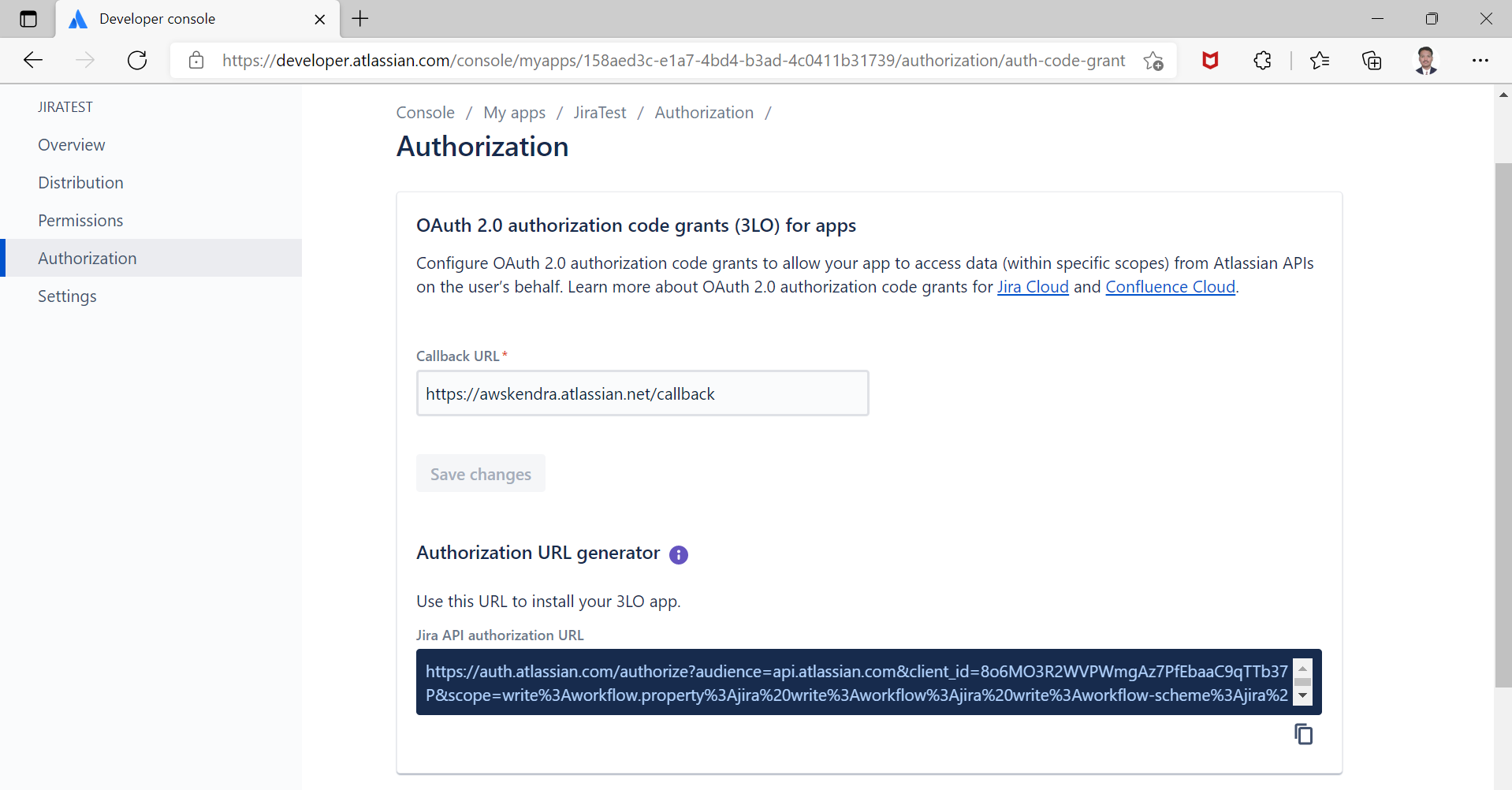


1. Next to OAuth 2.0 (3LO), select **Configure**.
2. Enter the **Callback URL**.



1. Click Save changes.
2. After clicking ‘**Save changes**’ ‘**Authorization URL**’ generated like below

Note: For each added API, the **Authorization URL** separately generated.



1. Copy generated ‘**Authorization** **URL’** for specific API and edit scope with ‘**offline\_access**’ like below

<https://auth.atlassian.com/authorize>?

audience=api.atlassian.com&

client\_id=8o6MO3R2WVPWmgAz7PfEbaaC9qTTb37P&

scope= **offline\_access**%20write%3Aservicedesk.organization%3Ajira-service-management%20write%3Aservicedesk.customer%3Ajira-service-management%20write%3Aservicedesk%3Ajira-service-management%20write%3Arequesttype.property%3Ajira-service-management%20write%3Arequesttype%3Ajira-service-management%20write%3Arequest.status%3Ajira-service-management%20write%3Arequest.participant%3Ajira-service-management%20write%3Arequest.notification%3Ajira-service-management%20write%3Aservicedesk.property%3Ajira-service-management%20read%3Aworkflow.property%3Ajira%20read%3Aworkflow%3Ajira%20read%3Aworkflow-scheme%3Ajira%20read%3Awebhook%3Ajira%20read%3Auser.property%3Ajira%20read%3Auser.columns%3Ajira%20read%3Auser%3Ajira%20read%3Auser-configuration%3Ajira%20read%3Astatus%3Ajira%20read%3Asprint%3Ajira-software%20read%3Asource-code%3Ajira-software%20read%3Aservicedesk.property%3Ajira-service-management%20read%3Aservicedesk.organization%3Ajira-service-management%20read%3Aservicedesk.customer%3Ajira-service-management%20read%3Aservicedesk%3Ajira-service-management%20read%3Ascreenable-field%3Ajira%20read%3Ascreen%3Ajira%20read%3Ascreen-tab%3Ajira%20read%3Ascreen-scheme%3Ajira%20read%3Ascreen-field%3Ajira%20read%3Arole%3Ajira%20read%3Aresolution%3Ajira%20read%3Aremote-link%3Ajira-software%20read%3Aproject.property%3Ajira%20read%3Aproject.feature%3Ajira%20read%3Aproject.email%3Ajira%20read%3Aproject.component%3Ajira%20read%3Aproject.avatar%3Ajira%20read%3Aproject%3Ajira%20read%3Aproject-version%3Ajira%20read%3Aproject-type%3Ajira%20read%3Aproject-role%3Ajira%20read%3Aproject-category%3Ajira%20read%3Apriority%3Ajira%20read%3Apermission%3Ajira%20read%3Apermission-scheme%3Ajira%20read%3Anotification-scheme%3Ajira%20read%3Alicense%3Ajira%20read%3Alabel%3Ajira%20read%3Ajql%3Ajira%20read%3Ajira-expressions%3Ajira%20read%3Aissue.watcher%3Ajira%20read%3Aissue.votes%3Ajira%20read%3Aissue.vote%3Ajira%20read%3Aissue.transition%3Ajira%20read%3Aissue.time-tracking%3Ajira%20read%3Aissue.remote-link%3Ajira%20read%3Aissue.property%3Ajira%20read%3Aissue.changelog%3Ajira%20read%3Aissue%3Ajira-software%20read%3Aissue%3Ajira%20read%3Aissue-worklog.property%3Ajira%20read%3Aissue-worklog%3Ajira%20read%3Aissue-type.property%3Ajira%20read%3Aissue-type%3Ajira%20read%3Aissue-type-transition%3Ajira%20read%3Aissue-type-screen-scheme%3Ajira%20read%3Aissue-type-scheme%3Ajira%20read%3Aissue-type-hierarchy%3Ajira%20read%3Aissue-status%3Ajira%20read%3Aissue-security-scheme%3Ajira%20read%3Aissue-security-level%3Ajira%20read%3Aissue-meta%3Ajira%20read%3Aissue-link%3Ajira%20read%3Aissue-link-type%3Ajira%20read%3Aissue-field-values%3Ajira%20read%3Aissue-event%3Ajira%20read%3Aissue-details%3Ajira%20read%3Ainstance-configuration%3Ajira%20read%3Agroup%3Ajira%20read%3Afilter.default-share-scope%3Ajira%20read%3Afilter.column%3Ajira%20read%3Afilter%3Ajira%20read%3Afield.options%3Ajira%20read%3Afield.option%3Ajira%20read%3Afield.default-value%3Ajira%20read%3Afield%3Ajira%20read%3Afield-configuration%3Ajira%20read%3Afield-configuration-scheme%3Ajira%20read%3Afeature-flag%3Ajira-software%20read%3Aepic%3Ajira-software%20read%3Adeployment%3Ajira-software%20read%3Adashboard.property%3Ajira%20read%3Adashboard%3Ajira%20read%3Acustom-field-contextual-configuration%3Ajira%20read%3Acomment.property%3Ajira%20read%3Acomment%3Ajira%20read%3Abuild%3Ajira-software%20read%3Aboard-scope.admin%3Ajira-software%20read%3Aboard-scope%3Ajira-software%20read%3Aavatar%3Ajira%20read%3Aaudit-log%3Ajira%20read%3Aattachment%3Ajira%20read%3Aapplication-role%3Ajira&

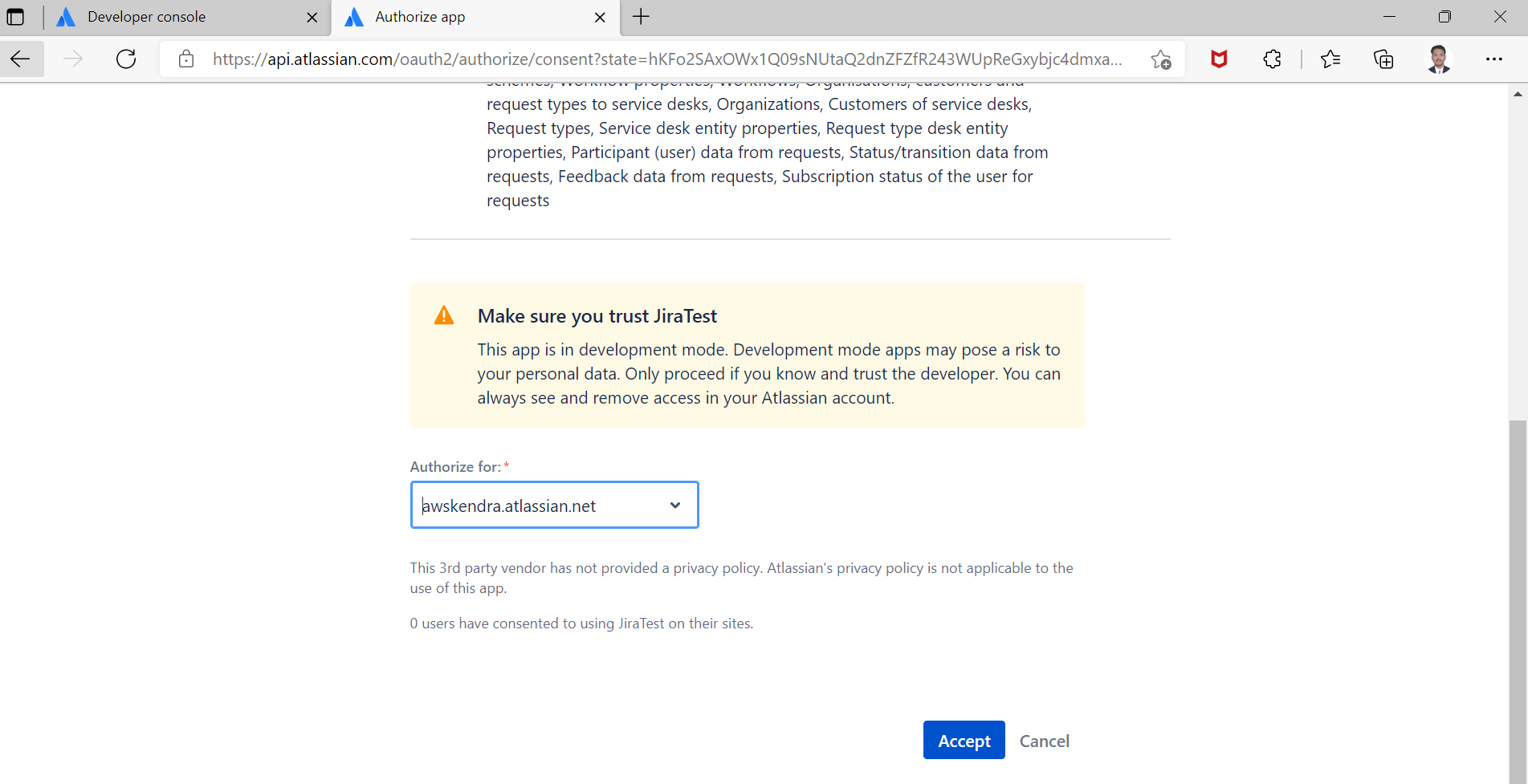
redirect\_uri=https%3A%2F%2Fawskendra.atlassian.net%2Fcallback&

state=jiratest&

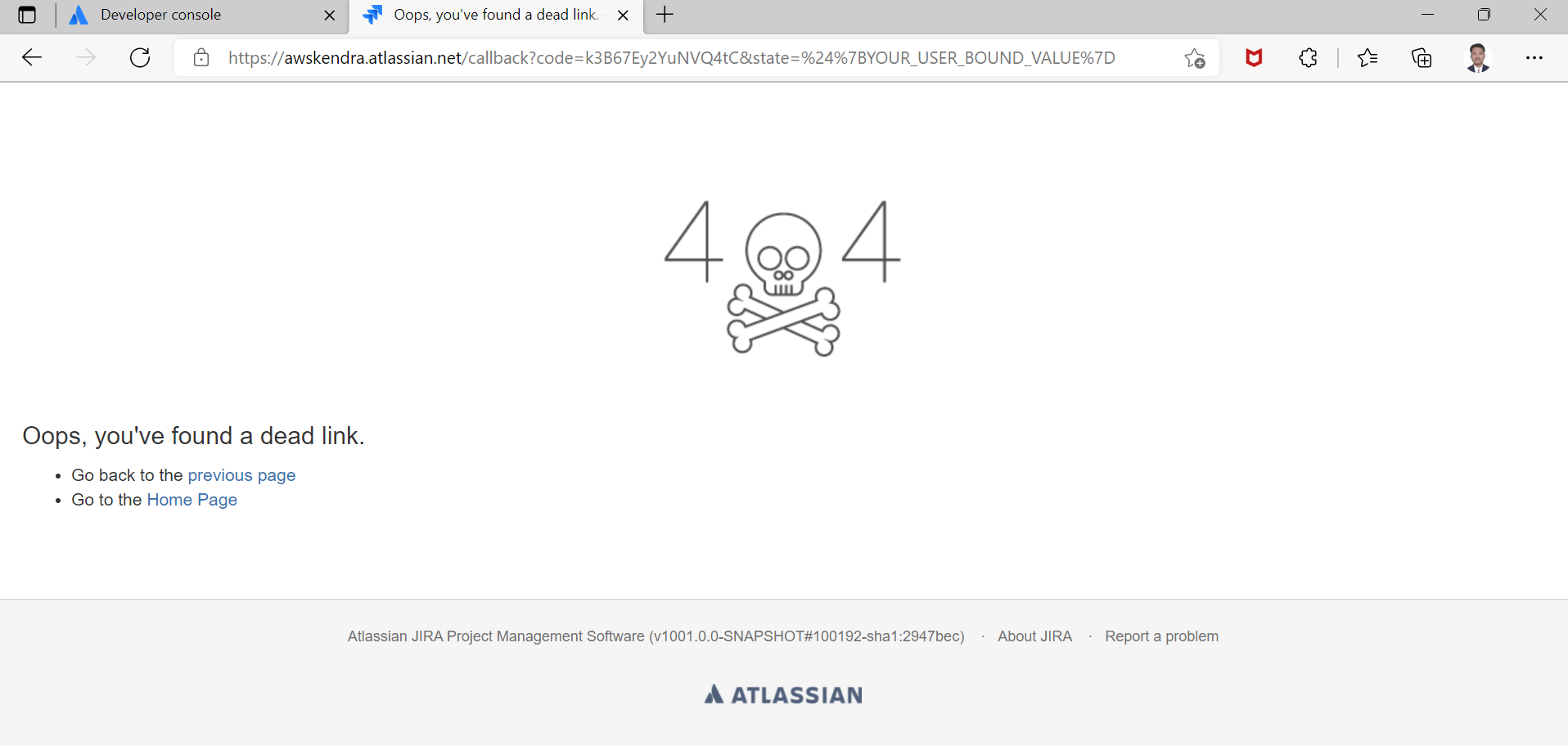
response\_type=code&

prompt=consent

1. Hit above edited ‘**Authorization** **URL’** on browser and click on **‘Accept’** button



1. After accepting, Generated c**ode** used for generating **access\_token** and **refresh\_token** pair**.**



1. Request to get access\_token and refresh\_token pair by using grant type **authorization\_code**

curl --request POST \

--url 'https://auth.atlassian.com/oauth/token' \

--header 'Content-Type: application/json' \

--data '{"grant\_type": "authorization\_code","client\_id": "YOUR\_CLIENT\_ID","client\_secret": "YOUR\_CLIENT\_SECRET","code": "YOUR\_AUTHORIZATION\_CODE","redirect\_uri": "https://YOUR\_APP\_CALLBACK\_URL"}'

Response :

HTTP/1.1 200 OK

Content-Type: application/json

{

"access\_token": <string>,

"refresh\_token": <string>,

"expires\_in": <expiry time of access\_token in second>,

"scope": <string>

"token\_type":"Bearer"

}

*User must have to set generated access\_token and refresh\_token in configuration as below with client\_id and client\_secret.*

* jiraId : <client\_id>
* jiraCredential : <client\_secret>
* jiraAccessToken : <access\_token>
* jiraRefreshToken : <refresh\_token>

**Jira Scopes**

| **Scope name** | **Title** | **Description** |
| --- | --- | --- |
| read:application-role:jira | View application roles | View application roles. |
|  |  |  |
| read:audit-log:jira | View audit logs | View audit logs. |
|  |  |  |
| read:avatar:jira | View avatars | View system and custom avatars. |
|  |  |  |
|  |  |  |
| read:project.avatar:jira | Read project avatars | Read project avatars. |
|  |  |  |
|  |  |  |
| read:dashboard:jira | View dashboards | View dashboards. |
|  |  |  |
|  |  |  |
|  |  |  |
| read:dashboard.property:jira | View dashboard properties | View dashboard properties. |
|  |  |  |
|  |  |  |
| read:filter:jira | View filters | View filters. |
|  |  |  |
|  |  |  |
| read:filter.column:jira | View filter columns | View filter columns. |
|  |  |  |
|  |  |  |
| read:filter.default-share-scope:jira | View filter default share scopes | View filter default share scopes. |
|  |  |  |
|  |  |  |
| read:group:jira | View groups | View user groups. |
|  |  |  |
|  |  |  |
| read:license:jira | View licenses | View licenses. |
|  |  |  |
| read:issue:jira | View issues | View issues. |
|  |  |  |
|  |  |  |
| read:issue-meta:jira | View issue meta | View issue meta. |
|  |  |  |
| send:notification:jira | Send notifications | Send notifications. |
|  |  |  |
| read:attachment:jira | View attachments | View issue attachments. |
|  |  |  |
|  |  |  |
| read:comment:jira | View comments | View issue comments. |
|  |  |  |
|  |  |  |
| read:comment.property:jira | View comment properties | View issue comment properties. |
|  |  |  |
|  |  |  |
|  |  |  |
| read:field:jira | View fields | View fields. |
|  |  |  |
|  |  |  |
|  |  |  |
| read:field.default-value:jira | View field default values | View field default values. |
|  |  |  |
|  |  |  |
| read:field.option:jira | View field options | View field options. |
|  |  |  |
|  |  |  |
|  |  |  |
| read:field-configuration-scheme:jira | View field configuration schemes | View field configuration schemes. |
|  |  |  |
|  |  |  |
|  |  |  |
| read:custom-field-contextual-configuration:jira | Read custom field contextual configurations | Read custom field contextual configurations. |
|  |  |  |
|  |  |  |
| read:field-configuration:jira | Read field configurations | Read field configurations. |
|  |  |  |
|  |  |  |
| read:field.options:jira | Read field options | Read field options. |
|  |  |  |
| read:issue-link:jira | View issue links | View issue links. |
|  |  |  |
|  |  |  |
| read:issue-link-type:jira | View issue link types | View issue link types. |
|  |  |  |
|  |  |  |
|  |  |  |
| read:notification-scheme:jira | View notification schemes | View notification schemes. |
|  |  |  |
| read:priority:jira | View priorities | View priorities. |
|  |  |  |
| read:issue.property:jira | View issue properties | View issue properties. |
|  |  |  |
|  |  |  |
| read:issue.remote-link:jira | View issue remote links | View issue remote links. |
|  |  |  |
|  |  |  |
| read:resolution:jira | View resolutions | View resolutions. |
|  |  |  |
| read:issue-details:jira | View issue details | View issue details. |
|  |  |  |
| read:issue-security-scheme:jira | View issue security schemes | View issue security schemes. |
|  |  |  |
| read:issue-type:jira | View issue types | View issue types. |
|  |  |  |
|  |  |  |
| read:issue-type-scheme:jira | View issue type schemes | View issue type schemes. |
|  |  |  |
|  |  |  |
| read:issue-type-screen-scheme:jira | View issue type screen schemes | View issue type screen schemes. |
|  |  |  |
|  |  |  |
| read:issue-type.property:jira | View issue type properties | View issue type properties. |
|  |  |  |
|  |  |  |
| read:issue.watcher:jira | View issue watchers | View issue watchers. |
|  |  |  |
|  |  |  |
| read:issue-worklog:jira | View issue worklogs | View issue worklogs. |
|  |  |  |
|  |  |  |
| read:issue-worklog.property:jira | View issue worklog properties | View issue worklog properties. |
|  |  |  |
|  |  |  |
| read:issue-field-values:jira | View issue field values | View issue field values. |
|  |  |  |
| read:issue-security-level:jira | View issue security levels | View issue security levels. |
|  |  |  |
| read:issue-status:jira | View issue statuses | View issue statuses. |
|  |  |  |
| read:issue-type-hierarchy:jira | Read issue type hierarchies | Read issue type hierarchies. |
|  |  |  |
| read:issue-type-transition:jira | View issue type transitions | View issue type transitions. |
|  |  |  |
| read:issue.changelog:jira | View issue changelogs | View issue changelogs. |
|  |  |  |
| read:issue.transition:jira | View issue transitions | View issue transitions. |
|  |  |  |
| read:issue.vote:jira | View issue votes | View issue votes. |
|  |  |  |
|  |  |  |
| read:issue.votes:jira | View issue votes | View issue votes. |
|  |  |  |
| read:issue-event:jira | Read issue events | Read issue events. |
|  |  |  |
| read:jira-expressions:jira | View jira expressions | View jira expressions. |
|  |  |  |
| read:user:jira | View users | View users. |
|  |  |  |
| read:user.columns:jira | View user columns | View user columns. |
|  |  |  |
| read:label:jira | View labels | View labels. |
|  |  |  |
| read:permission:jira | View permissions | View permissions. |
|  |  |  |
|  |  |  |
| read:permission-scheme:jira | View permission schemes | View permission schemes. |
|  |  |  |
|  |  |  |
| read:project:jira | View projects | View projects. |
|  |  |  |
|  |  |  |
| read:project-category:jira | View project categories | View project categories. |
|  |  |  |
|  |  |  |
| read:project.component:jira | View project components | View project components. |
|  |  |  |
|  |  |  |
| read:project.property:jira | View project properties | View project properties. |
|  |  |  |
|  |  |  |
|  |  |  |
| read:project-role:jira | View project roles | View project roles. |
|  |  |  |
|  |  |  |
| read:project-version:jira | View project versions | View project versions. |
|  |  |  |
|  |  |  |
| read:project.feature:jira | Read project features | Read project features. |
|  |  |  |
|  |  |  |
| read:screen:jira | View screens | View screens. |
|  |  |  |
|  |  |  |
| read:screen-scheme:jira | View screen schemes | View screen schemes. |
|  |  |  |
|  |  |  |
| read:screen-field:jira | View screen fields | View screen fields. |
|  |  |  |
| read:screen-tab:jira | View screen tabs | View screen tabs. |
|  |  |  |
|  |  |  |
| read:screenable-field:jira | View screenable fields | View screenable fields. |
|  |  |  |
|  |  |  |
| read:issue.time-tracking:jira | View issue time tracking | View issue time tracking. |
|  |  |  |
|  |  |  |
| read:user.property:jira | View user properties | View user properties. |
|  |  |  |
|  |  |  |
|  |  |  |
| read:webhook:jira | View webhooks | View webhooks. |
|  |  |  |
|  |  |  |
| read:workflow:jira | View workflows | View workflows. |
|  |  |  |
|  |  |  |
| read:workflow-scheme:jira | View workflow schemes | View workflow schemes. |
|  |  |  |
|  |  |  |
| read:status:jira | View statuses | View statuses. |
|  |  |  |
| read:workflow.property:jira | View workflow properties | View workflow properties. |
|  |  |  |
|  |  |  |
| read:instance-configuration:jira | View instance configurations | View instance configurations. |
|  |  |  |
|  |  |  |
| read:jql:jira | View JQL | View JQL. |
|  |  |  |
| validate:jql:jira | Validate JQL | Validate JQL. |
|  |  |  |
| read:project-type:jira | View project types | View project types. |
|  |  |  |
| read:project.email:jira | View project emails | View project emails. |
|  |  |  |
|  |  |  |
| read:role:jira | View roles | View roles. |
|  |  |  |
| read:user-configuration:jira | View user configurations | View user configurations. |
|  |  |  |

**Jira Connector Limitations**

1. Private/Empty projects will not be crawled.