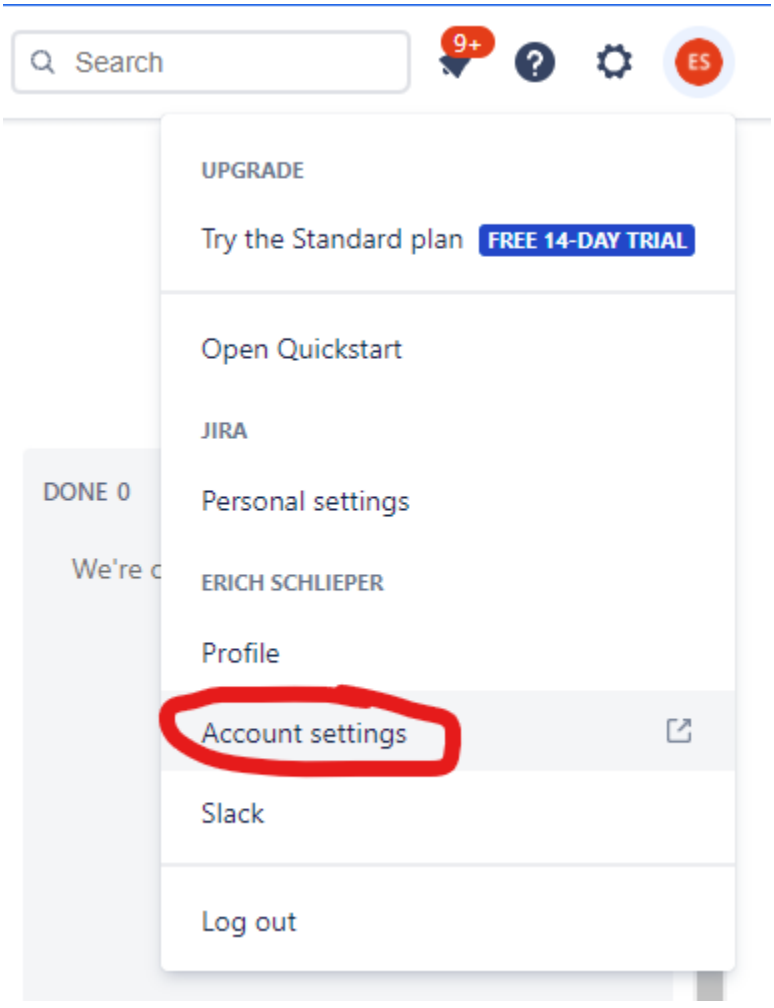
Interface with JIRA in LabVIEW

This article will discuss and provide links to the various websites that were used to figure out the initial ability to create an issue in Jira through LabVIEW. The code is written in LabVIEW 2020 64-bit and requires the JKI JSON toolkit as well as having cURL installed on your computer.

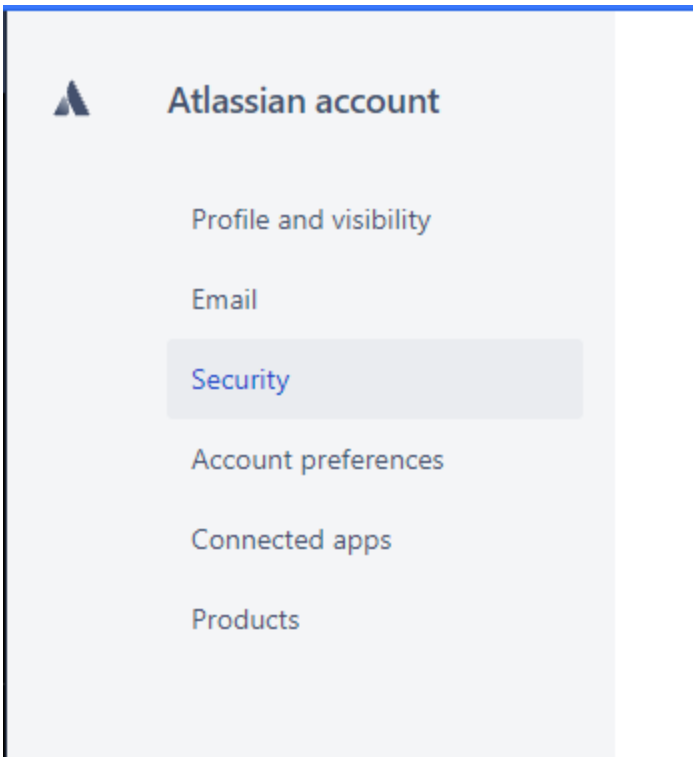
Information about the REST API calls that can be implemented can be found in the Jira API

Determine which Jira user will have an API Token created. To create the token, follow these steps:

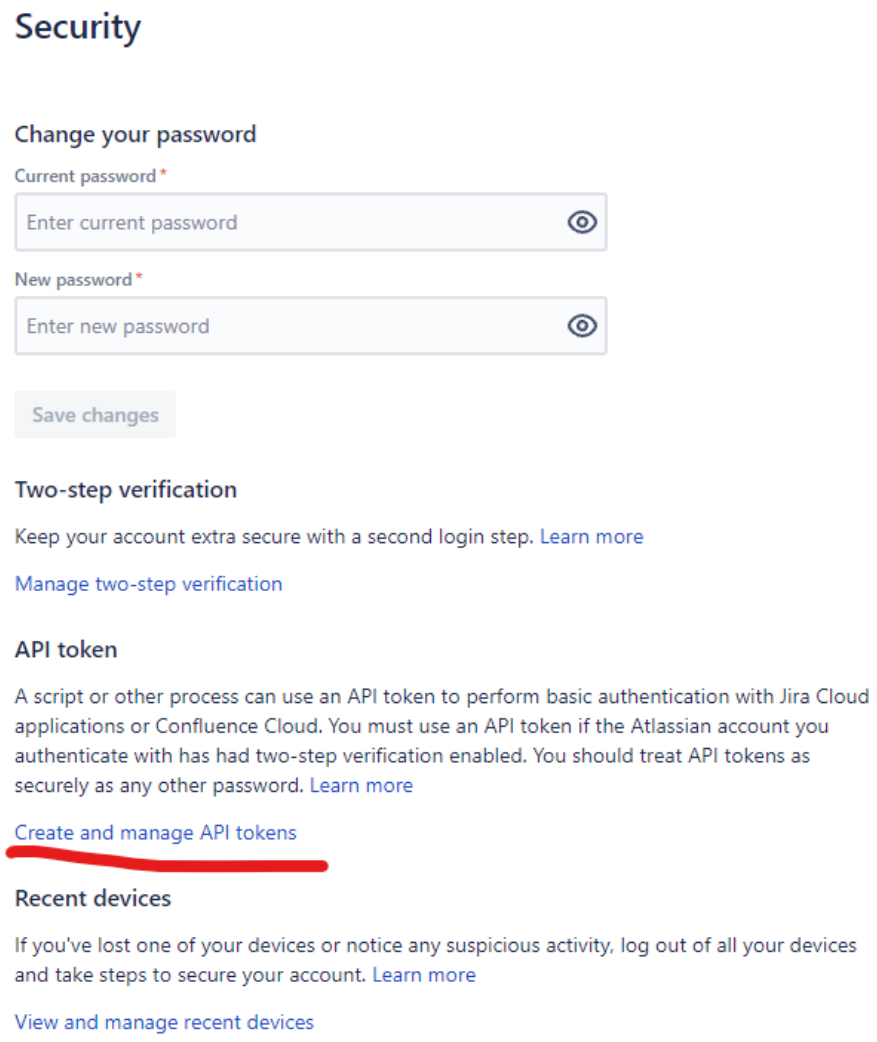
1. Open the account settings in Jira



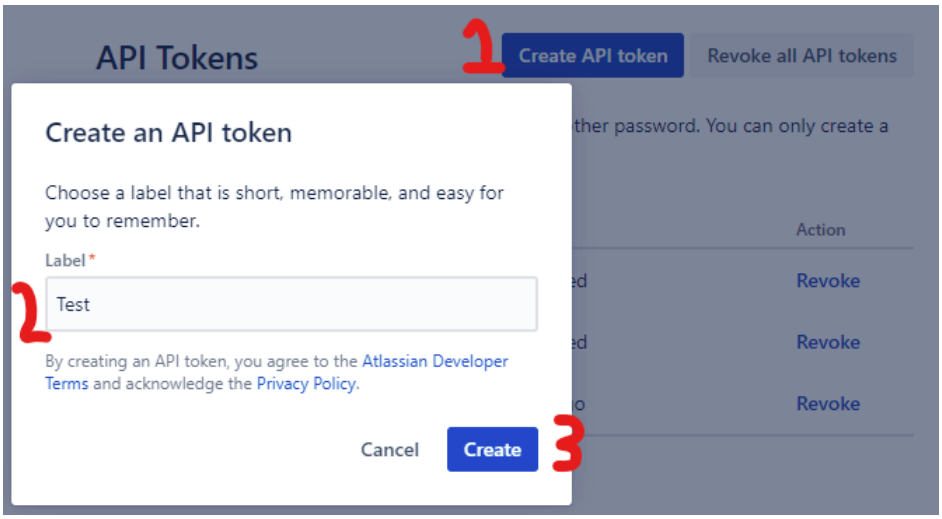
2. Select Security from the Atlassian account list to the right of the new screen



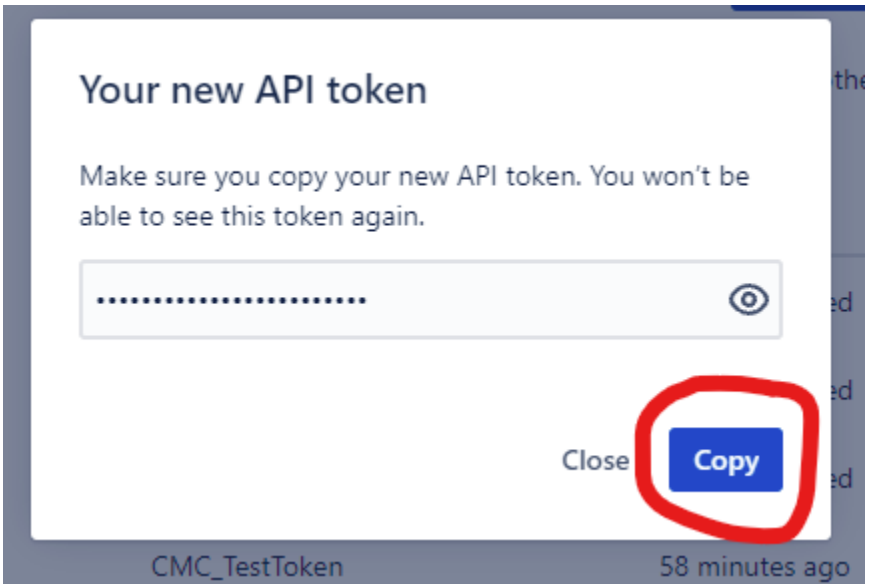
3. Click on the link to Create and manage API tokens



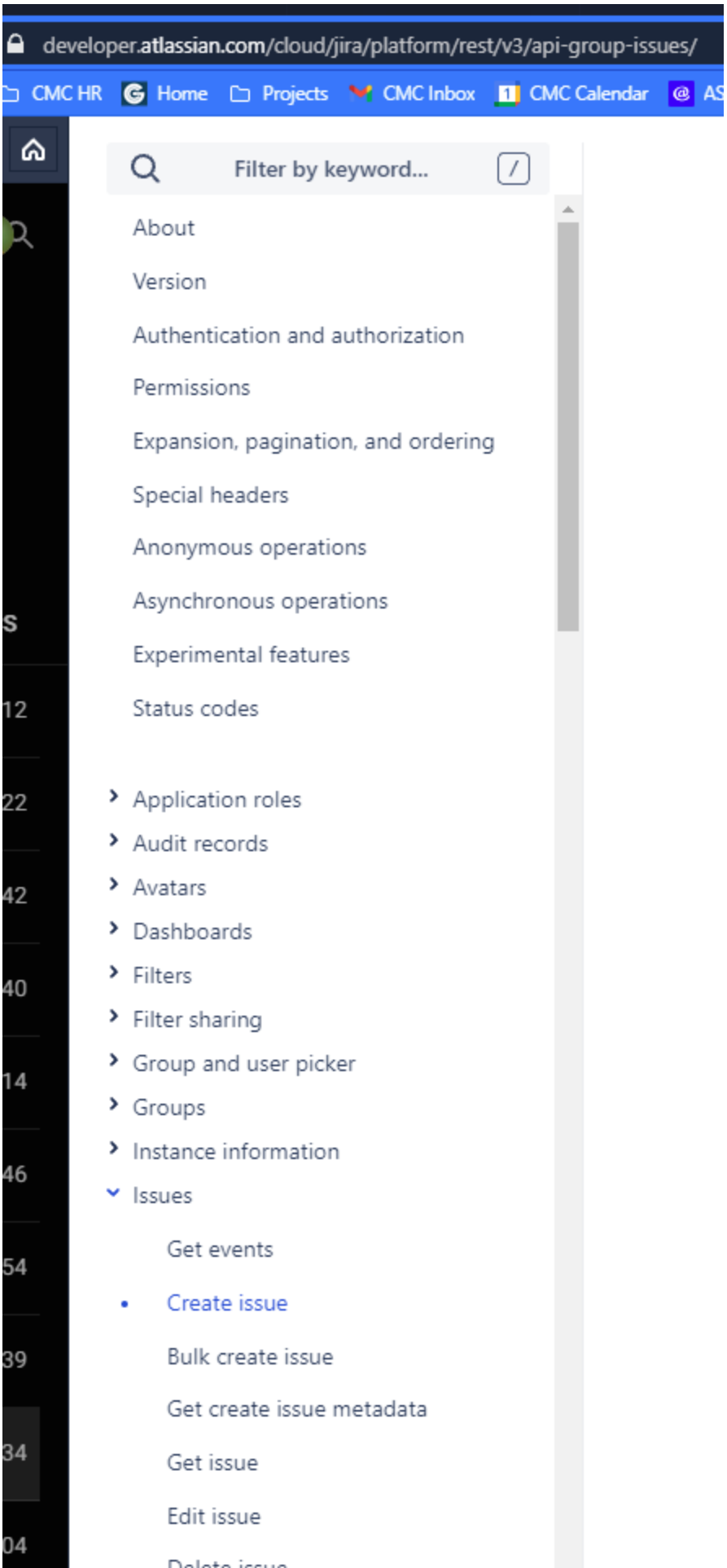
4. Click on the Create API Token button at the top of the page.
5. Give your token a Label and Click Create



6. Make sure to press the copy button to copy the generated Token to the clipboard, this is the only time that you will be able to record the token, after that you would need to revoke the token and recreate it.
7. Then click Close and go paste the new Token somewhere safe for use later on.



Go back and look at the command that you want to create/send to Jira through the REST API. In this case it is a create issue command. Locate the Issues API function calls along the left side of the API webpage referenced earlier.


developer.atlassian.com/cloud/jira/platform/rest/v3/api-group-issues/
CMC HR
Home
Projects
CMC Inbox
CMC Calendar
Filter by keyword...
/
About
Version
Authentication and authorization
Permissions
Expansion, pagination, and ordering
Special headers
Anonymous operations
Asynchronous operations
Experimental features
Status codes
Application roles
Audit records
Avatars
Dashboards
Filters
Filter sharing
Group and user picker
Groups
Instance information
Issues
Get events
Create issue
Bulk create issue
Get create issue metadata
Get issue
Edit issue

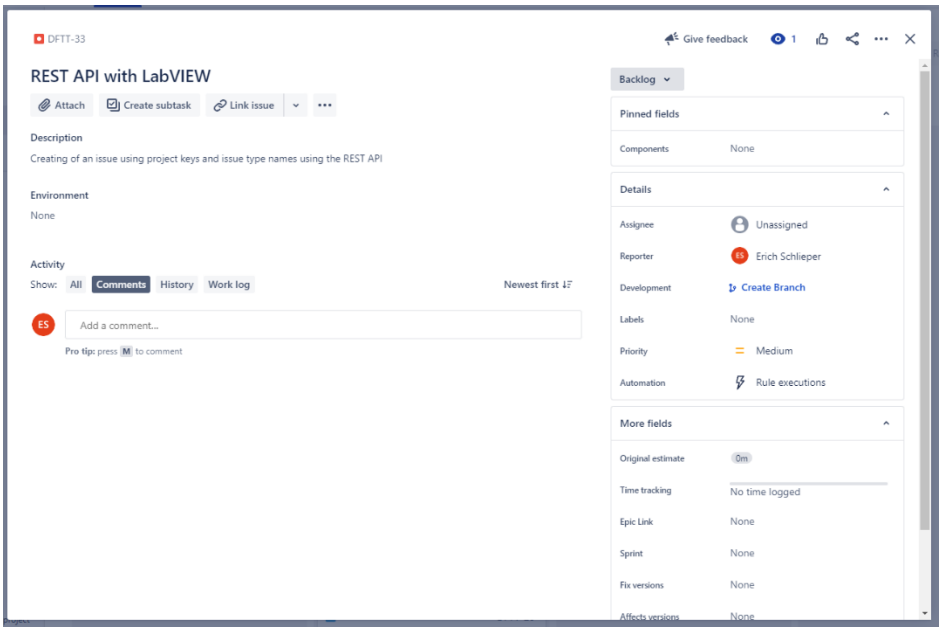
Under create issue you'll find an example in a number of languages with different syntax. Even the cURL syntax presented here is not the same syntax that you would use when using the Windows 10 CLI function that is available in LabVIEW. The following is what the simplified example wants you to send:

```
curl --request POST \
  --url 'https://your-domain.atlassian.net/rest/api/3/issue' \
  --user 'email@example.com:<api_token>' \
  --header 'Accept: application/json' \
  --header 'Content-Type: application/json' \
  --data '{
  "update": {},
  "fields": {
    "summary": "Main order flow broken",
    "issuetype": {
      "id": "10000"
    },
    "project": {
      "id": "10000"
    },
    "description": {
      "type": "doc",
      "version": 1,
      "content": [
        {
          "type": "paragraph",
          "content": [
            {
              "text": "Order entry fails when selecting supplier.",
              "type": "text"
            }
          ]
        }
      ]
    },
  }
}'
```

After looking at the help on the command line functions, a similar command that works would be as follows (and what was implemented in the VI demonstrated):

```
curl -u [User login email address]:[API Token] -X POST -H "Accept:
application/json" -H "Content-Type: application/json" -d
"{\"fields\":{\"issuetype\":{\"id\":\"[Issue Type
ID]\"},\"project\":{\"key\":\"[Project
Key]\"},\"description\":{\"version\":1,\"type\":\"doc\",\"content\":[{\"type\
":\"paragraph\",\"content\":[{\"type\":\"text\",\"text\":\"[Description Text]
API\"}]}]},\"summary\":\"[Summary Text]\"}}" "[Jira instance address (i.e.
yourcompany.atlassian.net)]"
```

The issue created looks like this in Jira:



Hopefully that is enough to get you started on figuring out how to use the Jira API.

One last thing that you will probably need is the ability to find the Issue type IDs, which is specified in the following link: [Finding the ID for Issue Types in Jira]