

Fetching Work Items Using BASH

Last updated by | Shakibe Hasan | Jul 19, 2023 at 2:56 PM GMT+6

Important Terms:

- API / REST API
- JSON
- cURL

Fetching work items of azure devops assigned to a specific user & getting work items id, state, title.

Declaring variables:

```
#!/bin/bash

orgName="fronturetech"
pat="neoeay2jc3ilktbjid6d47n24l75yssqgsjhfsqtqzcex7rmmxlq"
user="shakibe@fronturetech.com"
```

Here,

- orgName is Organization name.
- pat is Personal Access Token generated from azure devops
- user shakibe@fronturetech.com which is unique name.

Query to fetch the work item assigned to the user(In JSON):

```
query="{
  \"query\": \"Select [System.Id], [System.Title], [System.State] \
    From WorkItems \
    Where [System.AssignedTo] = '$user' \"
}"
```

Here,

- System.ID is for workitems ID
- System.Title is for workitems Title
- System.State is for workitems State

Authenticating and executing the query by curl:

```
response=$(curl -s -u :"$pat" -H "Content-Type: application/json" -H "Accept: application/json;api-version=5.1" -X POST -d "$query" "https://dev.azure.com/$orgName/_apis/wit/wiql?api-version=5.1")
```

By this line of code we are using the curl command to make a POST request to the Azure DevOps REST API endpoint for executing a WIQL query.

Extracting work item IDs:

```
ids=$(echo "$response" | jq -r '.workItems[].id' | paste -sd "," -)
```

By this we are extracting the IDs of the work items from the JSON response and stores them in the ids variable as a comma-separated string.

Getting the fields for the work items:

```
workItems=$(curl -s -u :"$pat" -H "Content-Type: application/json" -H "Accept: application/json;api-version=5.1" "https://dev.azure.com/$orgName/_apis/wit/workitems?ids=$ids&api-version=5.1")
```

By the curl command we are making a GET request to the Azure DevOps API endpoint for fetching work items.

Print the query results:

```
echo "ID Title State"
echo "$workItems" | jq -r '.value[] | [.id, .fields."System.Title", .fields."System.State"] | @tsv'
```

Printing the query results to CSV file:

```
echo "ID,Title,State" > work_items.csv
echo "$workItems" | jq -r '.value[] | [.id, .fields."System.Title", .fields."System.State"] | @csv' >
echo "work items has been exported to work_items.csv"

exit 0
```

Repo Url- https://dev.azure.com/fronturetech/Fronture ERP/_git/bash hands-on labs by shakibe hasan

REF TO API AND QUERY: <https://developercommunity.visualstudio.com/t/fetch-only-those-workitems-data-that-assigned-to-p/1272471>