

Data API User Guide for Application Users

This user guide is to provide instructions on how to connect to JSA Data APIs from your own application. For more assistance, please contact API-Access@jobsandskills.gov.au.

Step 1: Getting access to JSA Data APIs for your application

To request for API access, download and fill the details in the [Data API Application Onboarding Form](#) for assessment and submit to: API-Access@jobsandskills.gov.au

Once the request is granted, you will receive a 'Welcome onboard' email with unique Application ID and Master Subscription Key.

Step 2: Generating a One-Time Subscription Key

1. Call the Application Subscriptions API, details below.

Base URL: <https://api.jobsandskills.gov.au/application-subscriptions/subscribe>

Parameter	Value	Description
scope	apis/{API Name}	The JSA data API scope to get the One-Time subscription key for. The API name can be acquired from JAS Data API Portal .

Header	Value	Description
Application-Id	{Application ID}	The Application ID that you received from Step 1.
Subscription-Key	{Master Subscription Key}	The Master Subscription Key you received from Step 1.

Example URL: <https://api.jobsandskills.gov.au/application-subscriptions/subscribe?scope=apis/{API Name}>

2. Take a note of the Name and One-Time-Subscription-Key generated.

Example Application Subscriptions API JSON response:

```
{
  "Name": "ExampleApplicationID-apis-example-api-name",
  "One-Time-Subscription-Key": "1a23bc4567d891e2fg3456h7i8j891",
  "Scope": "apis/example-api-name"
}
```

Step 3: Calling an API using the One Time Subscription Key

1. Get the base URL for the target API from the JSA Data API Portal. Also be sure to get the suffix from the portal.
2. Use the base URL and the suffix to call the API with the below headers.

Header	Value	Description
Application-Id	{Name}	The Name generated by the Application Subscription API
Subscription-Key	{One-Time-Subscription-Key}	One-Time-Subscription-Key generated by the Application Subscription API

Note: The One-Time-Subscription-Key is only valid for one call, regardless of the result. A failed API call will still count as the one-time use of the One-Time-Subscription-Key.

Example PowerShell script for calling data APIs

```
#Input parameters
$ApplicationId = ""           # Application ID will be issued as part of the
onboarding process
$MasterSubscriptionKey = ""   # Master Subscription Key will be issues as
part of the onboarding process
$APIName = ""                # API Name can be acquired from the JSA Data
API Portal
$TargetFolderPath = ""       # Target folder location to save the response
file

#Get one-time subscription key
$SubscriptionKeyRequestHeader = @{
    "Subscription-Key" = $MasterSubscriptionKey
    "Application-Id" = $ApplicationId
}

$SubscriptionKeyURL = "https://api.jobsandskills.gov.au/application-
subscriptions/subscribe?scope=apis/" + $APIName
```

```

$SubscriptionKeyResponse = Invoke-WebRequest -Uri $SubscriptionKeyURL -
Method "PUT" -Header $SubscriptionKeyRequestHeader -UseBasicParsing

$SubscriptionKeyResult = $SubscriptionKeyResponse.Content | ConvertFrom-Json
$SubscriptionName = $SubscriptionKeyResult."Name"
$OneTimeSubscriptionKey = $SubscriptionKeyResult."One-Time-Subscription-Key"

# Wait 10 seconds the one-time subscription key to be activated
Start-Sleep 10

# Use one-time subscription key to make API request
$APIRequestHeader = @{
    "Subscription-Key" = $OneTimeSubscriptionKey
    "Application-Id" = $SubscriptionName
}

$APIUrl = "https://api.jobsandskills.gov.au/data/" + $APIName + "/v1/latest-
release"
$Response = Invoke-WebRequest -Uri $APIUrl -Method "GET" -Header
$APIRequestHeader -UseBasicParsing
$FileName = $Response.Headers["File-Name"]

# Save API response
[IO.File]::WriteAllBytes("$TargetFolderPath\$FileName", $Response.Content)

```

Example Python script for calling data APIs

Command 1: Get One-Time Subscription Key

```

import requests

# Input parameters
application_id="" # Application ID will be issued as part of the
onboarding process
master_subscription_key = "" # Master Subscription Key will be issues as
part of the onboarding process
api_name = "" # API Name can be acquired from the Data
Sharing Portal

api_base_url = "https://api.jobsandskills.gov.au"
api_url = f"{api_base_url}/application-
subscriptions/subscribe?scope=apis/{api_name}"
headers = {
    "Subscription-Key": master_subscription_key,
    "Application-Id": application_id
}

```

```

jsonResponse = requests.request("PUT", api_url, headers=headers,
data={}).json()
one_time_key = jsonResponse["One-Time-Subscription-Key"]
application_name = jsonResponse["Name"]

print(one_time_key)

```

Command 2: Call JSA data API with generated One-Time Subscription Key

```

import requests
from datetime import datetime

# Input parameters
api_name = "" # API Name can be acquired from the Data
Sharing Portal
target_storage_location = "" # Target storage location to save the response
file

api_base_url = "https://api.jobsandskills.gov.au"
api_url = f"{api_base_url}/data/{api_name}/v1/latest-release"

headers = {
    'Subscription-Key': one_time_key,
    'Application-Id': application_name
}

response = requests.request("GET", api_url, headers=headers, data={})
if response.status_code==200 :
    current_datetime = datetime.now().strftime("%Y-%m-%d %H-%M-%S")
    file_name = f"{api_name}_{current_datetime}"

    # Save API response
    target_file_path = f'{target_storage_location}/{file_name}.zip'
    with open(target_file_path, 'wb') as f:
        f.write(response.content)
        print("Downloaded successfully!")
else:
    print("Failed to download from API.")

```