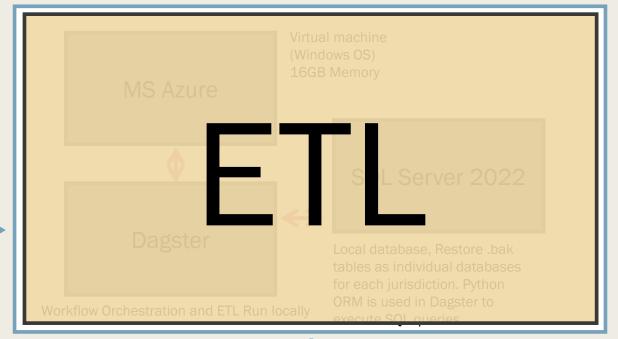
# PUBLIC AND INTERNAL DASHBOARDS DATA PREPARATION PROCESS



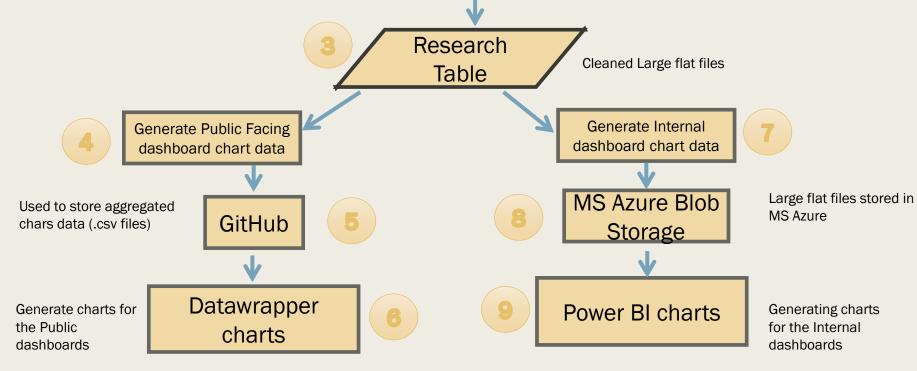
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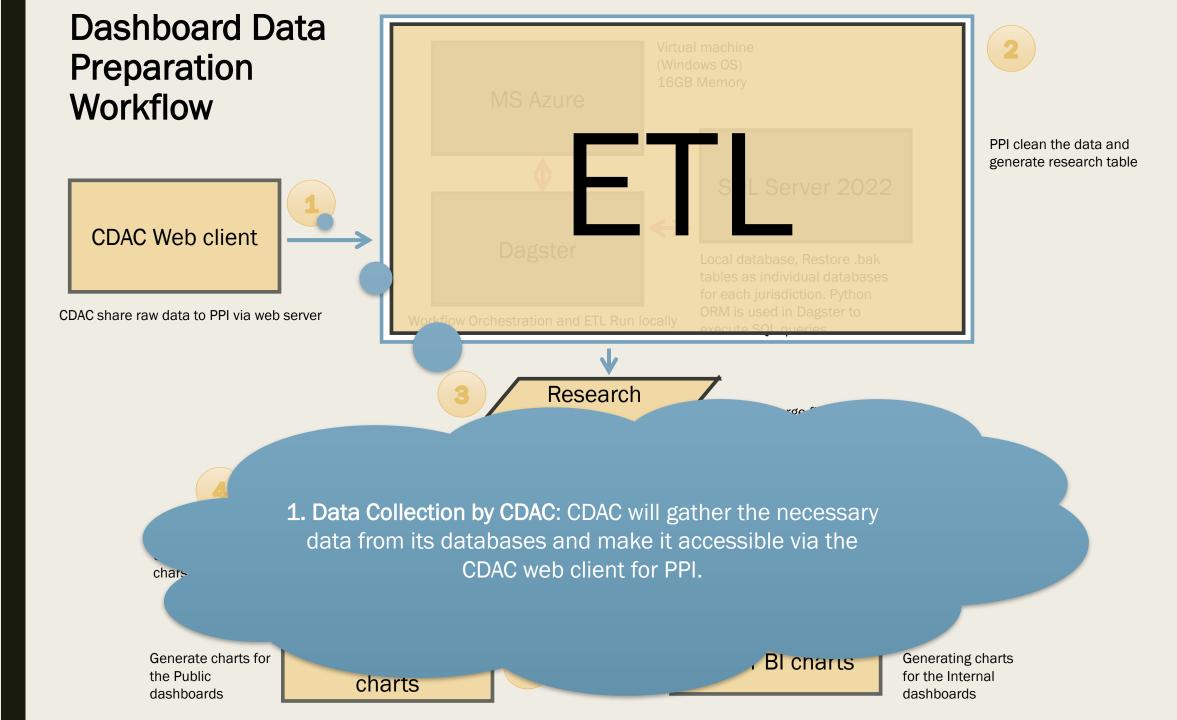
CDAC Web client

CDAC share raw data to PPI via web server



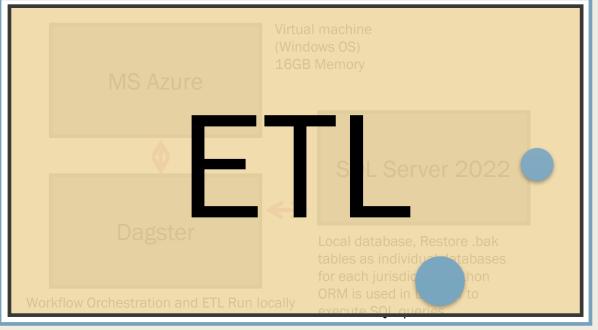
PPI clean the data and generate research table





CDAC Web client

CDAC share raw data to PPI via web server





PPI clean the data and generate research table

3 Research

chars

2. Data Extraction and Transformation by PPI: PPI will retrieve the data from the CDAC web client and perform ETL (Extract, Transform, Load) operations. This involves extracting raw data, transforming it into a usable format, and loading it into a cleaned data set.

Generate charts for the Public dashboards

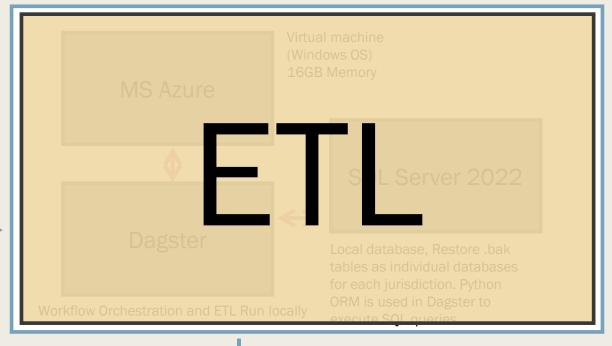
charts

Bl charts

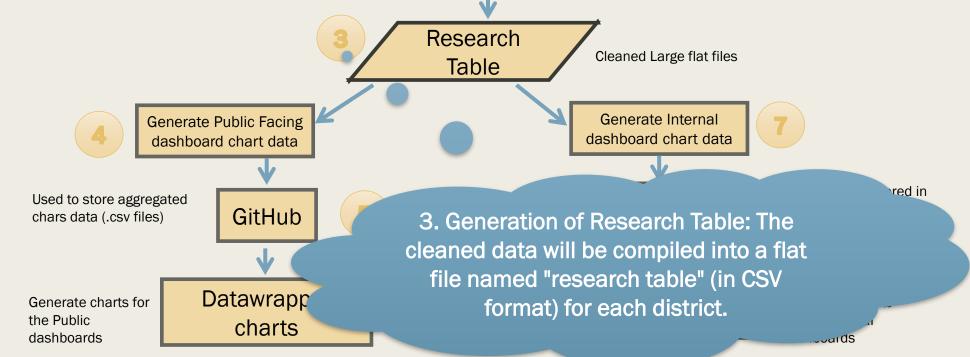
Generating charts for the Internal dashboards

**CDAC** Web client

CDAC share raw data to PPI via web server

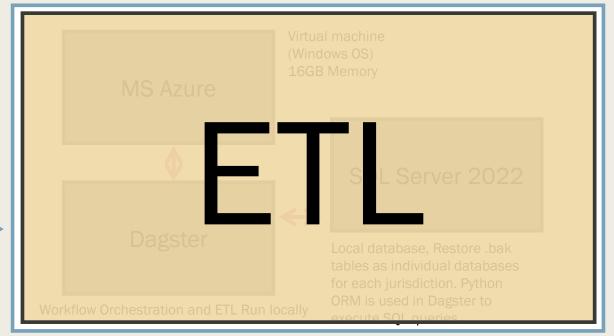


PPI clean the data and generate research table



CDAC Web client

CDAC share raw data to PPI via web server



Research

Table

red in

PPI clean the data and generate research table

Used to store aggregated chars data (.csv files)

Generate charts for the Public dashboards

Gashboards

Gashboard chart data

GitHub

Charts

Generate Public Facing

4. Aggregation for Public Dashboard: For the public dashboard charts, the research table will be aggregated, and data files will be generated for each chart.

Cleaned Large flat files

Generate Internal

dashboard chart data

CDAC Web client

Used to store aggregated

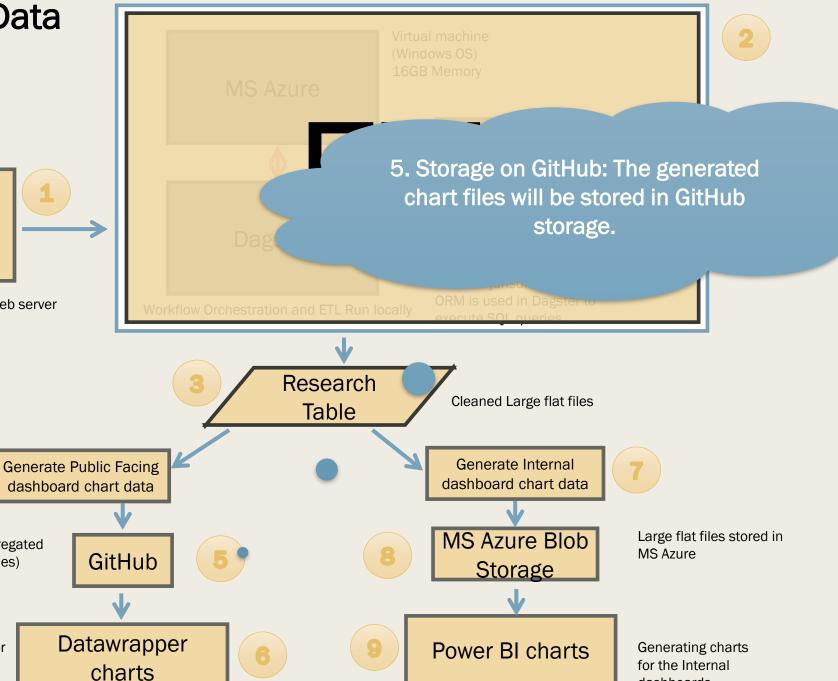
chars data (.csv files)

Generate charts for

the Public

dashboards

CDAC share raw data to PPI via web server



dashboards

CDAC Web client

Used to store aggregated

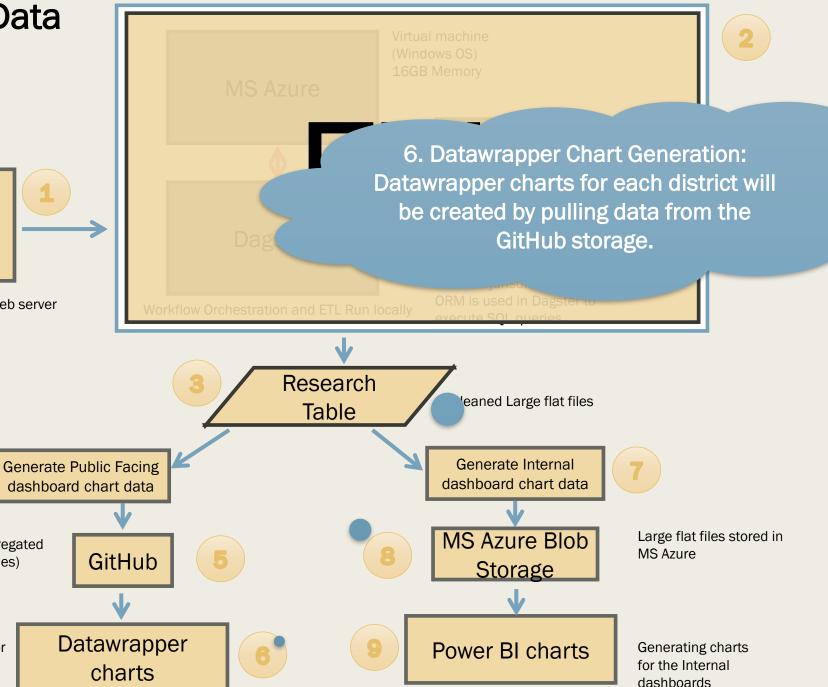
chars data (.csv files)

Generate charts for

the Public

dashboards

CDAC share raw data to PPI via web server



#### **Dashboard Data** Preparation Workflow 7. Internal Dashboard Data Preparation: Using the research table, data will be prepared for internal dashboard use. **CDAC** Web client ORM is used in Dag CDAC share raw data to PPI via web server Research Cleaned Large flat files Table Generate Internal Generate Public Facing dashboard chart data dashboard chart data MS Azure Blob Large flat files stored in Used to store aggregated MS Azure GitHub chars data (.csv files) Storage Datawrapper Generate charts for Power BI charts Generating charts the Public for the Internal charts dashboards dashboards

CDAC Web client

Used to store aggregated

chars data (.csv files)

Generate charts for

the Public

dashboards

CDAC share raw data to PPI via web server

8. Storage in Azure Cloud: The prepared data will be stored in Azure cloud storage. ORM is used in Dag Research Cleaned Large flat files Table Generate Internal Generate Public Facing dashboard chart data dashboard chart data MS Azure Blob Large flat files stored in MS Azure GitHub Storage Datawrapper Power BI charts Generating charts for the Internal charts dashboards

CDAC Web client

Used to store aggregated

chars data (.csv files)

Generate charts for

charts

the Public

dashboards

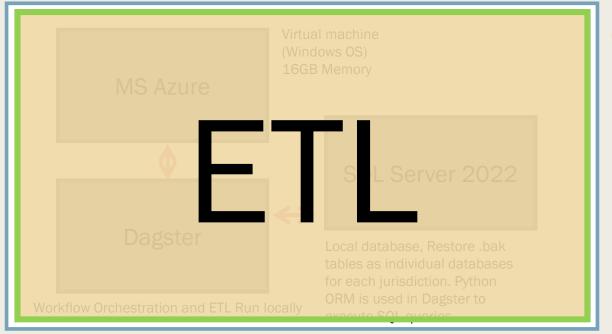
CDAC share raw data to PPI via web server

9. Power BI Reporting: Power BI reports will use the data stored in Azure cloud storage to populate its charts. ORM is used in Dag Research Clear arge flat files Table Generate Internal Generate Public Facing dashboard chart data dashboard chart data MS Azure Blob Large flat files stored in MS Azure GitHub Storage Datawrapper Power BI charts Generating charts for the Internal

dashboards

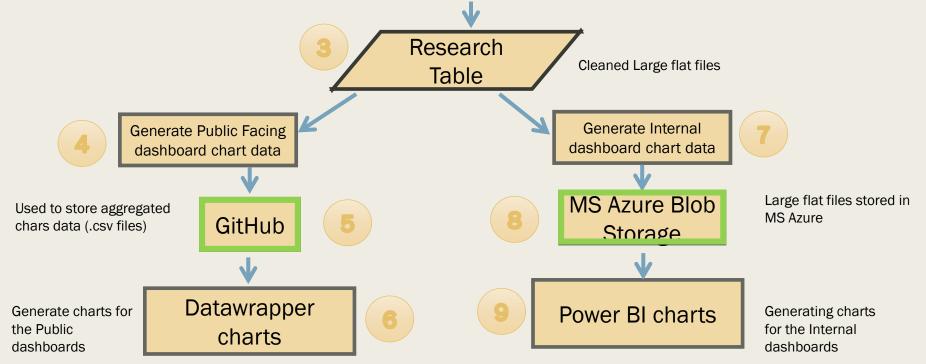
CDAC Web client

CDAC share raw data to PPI via web server



2

PPI clean the data and generate research table



CDAC Web client

Virtual machine (Windows OS)
16GB Memory

S L Server 2022

Local database, Restore .bak tables as individual databases for each jurisdiction. Python ORM is used in Dagster to execute SOL queries

PPI clean the data and generate research table

CDAC share raw data to PPI via web server Research Cleaned Large flat files Generate Internal **Generate Public Facing** dashboard chart data dashboard chart data Rlob Large flat files stored in Used to store ag MS Azure chars data (.c How to access the colorado-etl-dagster script? Genera Generating charts BI charts the Public for the Internal dashboards dashboards

#### 1. Create a GitHub Account

#### a. Sign Up

- - Go to https://github.com/.
- - Click on "Sign up" in the upper-right corner.
- - Fill in the required details: username, email address, and password.
- Complete the verification process and follow the on-screen instructions to finish creating your account.

#### ■ 2. Accept an Invitation to Be a Collaborator

#### a. Receive Invitation

The repository owner (PPI/Branden) will send you an invitation to collaborate on their repository. This will usually arrive via email or as a notification on GitHub.

#### b. Accept Invitation via Email

- Open the invitation email you received from GitHub.
- Click the "View Invitation" button in the email.
- This will take you to the GitHub website. Click "Join" to accept the invitation.

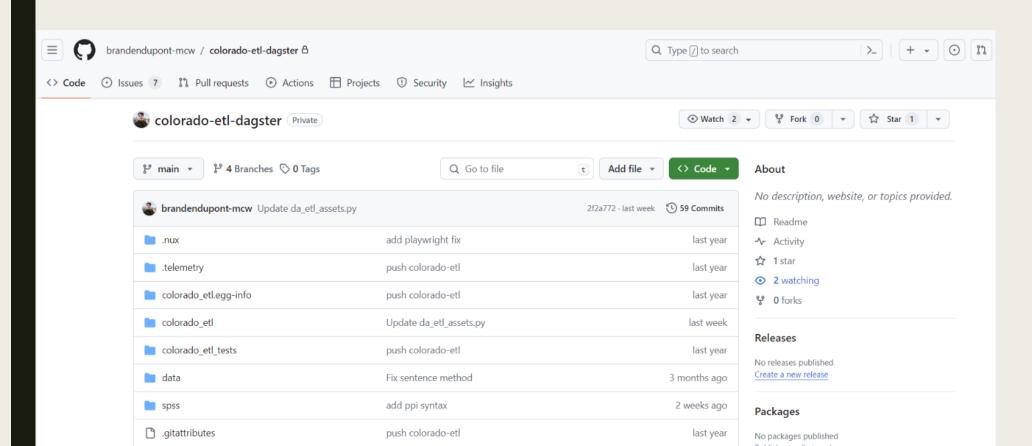
#### c. Accept Invitation via GitHub

If you didn't receive an email, you can also accept the invitation directly on GitHub:

- Log in to your GitHub account.
- Click on your profile picture in the upper-right corner to open the menu, and select "Your repositories."
- Click on the "Invitations" tab to see pending invitations.
- Click "Accept" next to the relevant invitation.

- 3. Access the Repository Online
  - a. Go to the Repository
    - After accepting the invitation, navigate to the repository by going to

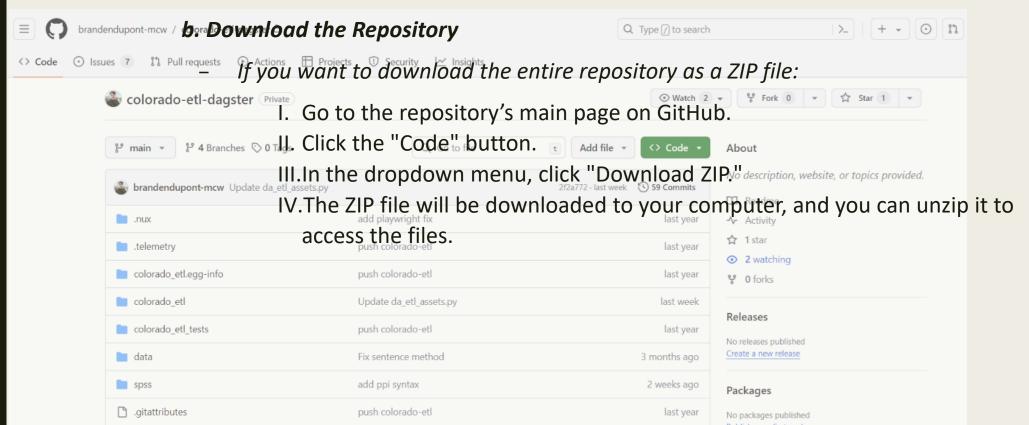
https://github.com/brandendupont-mcw/colorado-etl-dagster



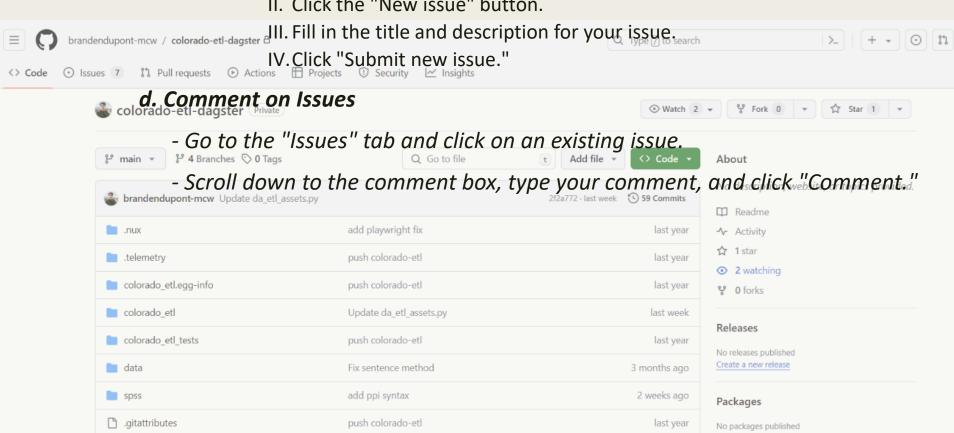
4. Interact with the Repository

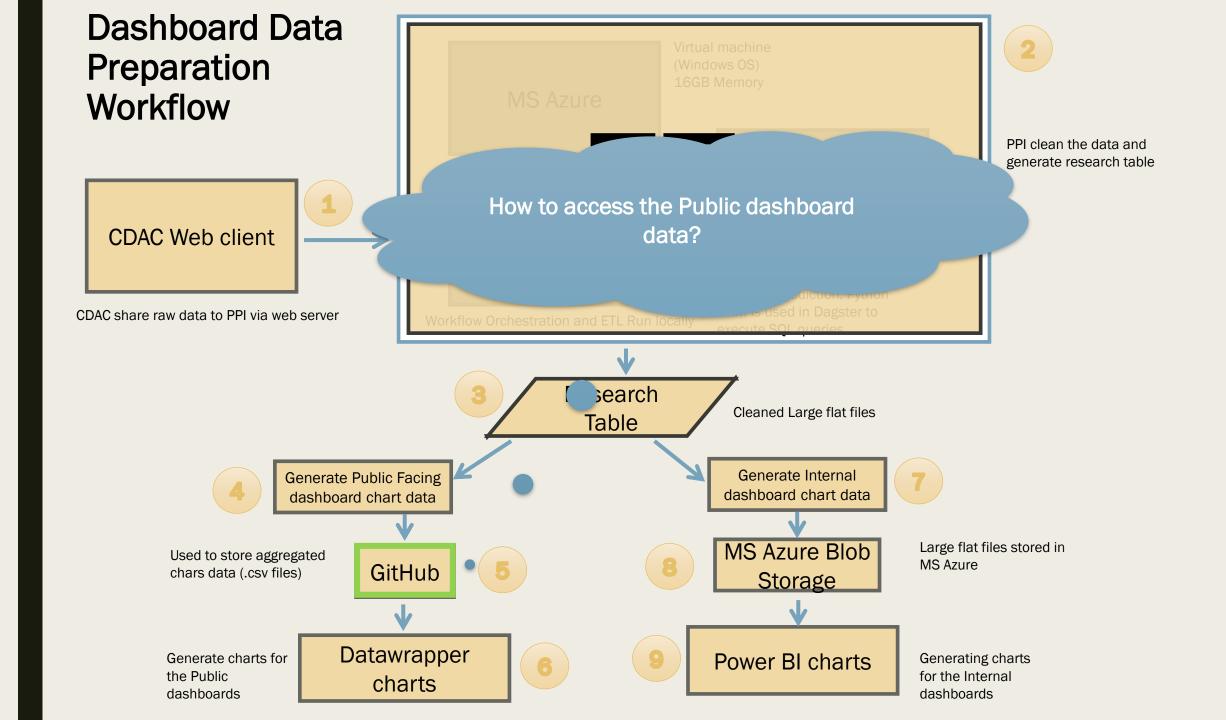
#### a. Browse Files

On the main page of the repository, you'll see a list of files and directories. Navigate to the 'spss' folder by clicking on it to explore its contents. Here, you'll discover the SPSS scripts associated with each table received from CDAC, utilized in the ETL process.



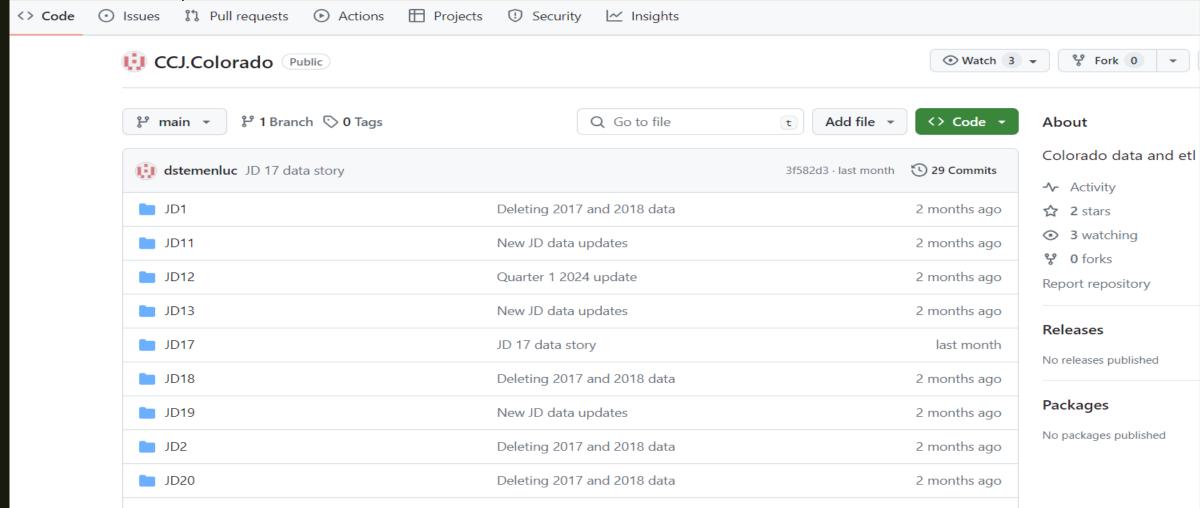
- 4. Interact with the Repository (cont...)
  - c. Create Issues
    - If you encounter a bug or have a suggestion:
      - I. Click on the "Issues" tab.
      - II. Click the "New issue" button.

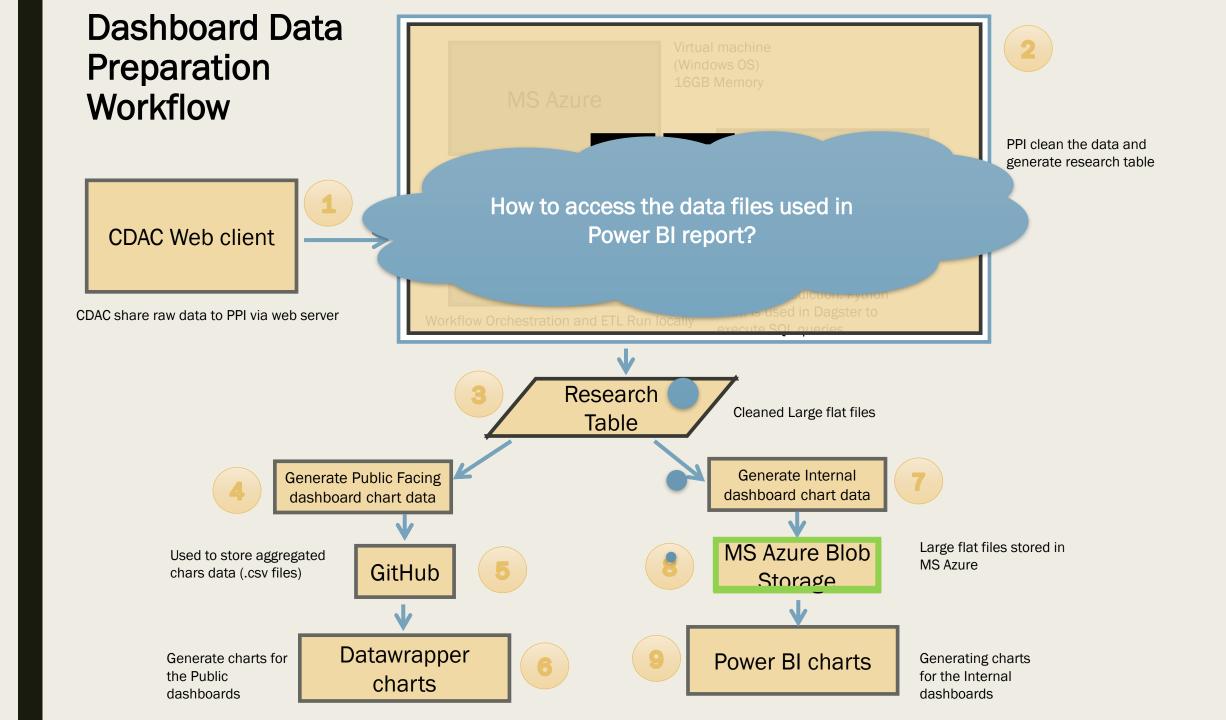




#### **Access Public dashboard data**

https://github.com/dstemenluc/CCJ.Colorado
 (We do not need to login to GitHub account to access the public dashboard charts data)





# Access Power BI report data files

■ CDAC can provide you with access to the data files used in preparing the Power BI report. Please inform us if you're interested in gaining this access. CDAC will offer necessary instructions and support.

