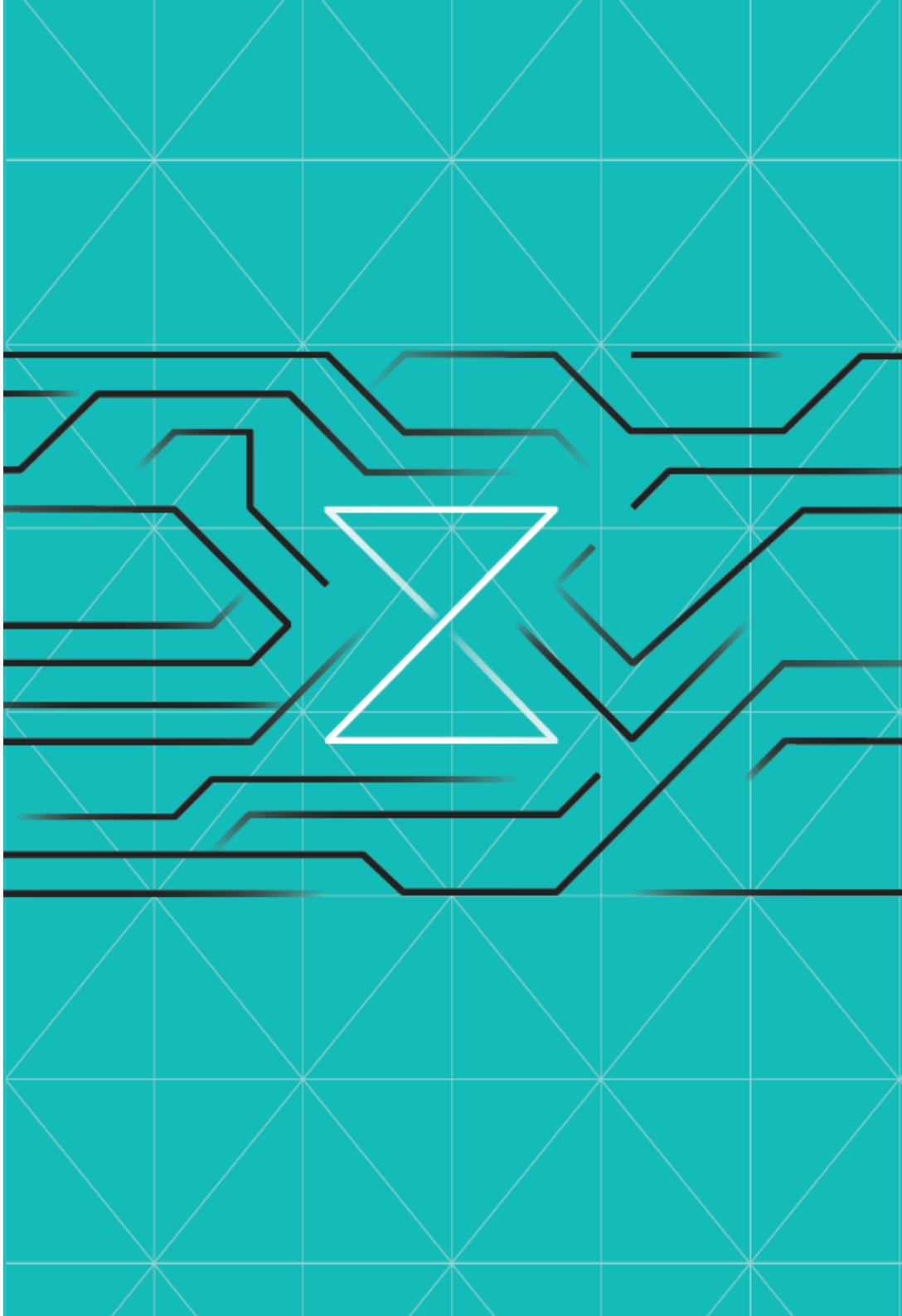
Advanced

231117-1256

PDS1

Files for Miles



Z Xplore

GET COMFY WITH DATASETS AND MEMBERS

So far, you have had some experience with partitioned datasets from the FILES1 and JCL1 challenges; this challenge will give you a deeper familiarity with handling datasets.

The Challenge

In z/OS, data is typically organized in structures called Data Sets.

The concept is similar to the way you use files and folders on your personal computer, with a few very important differences.

In this challenge, you'll perform some basic operations around Data Sets and Members, and when you're done, you'll run a job to process some of those dataset members.

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Before You Begin

Make sure your Visual Studio Code environment is all set up and connected to the z/OS system. Other than that, nothing else is required!

Investment

Steps	Duration
6	30 minutes

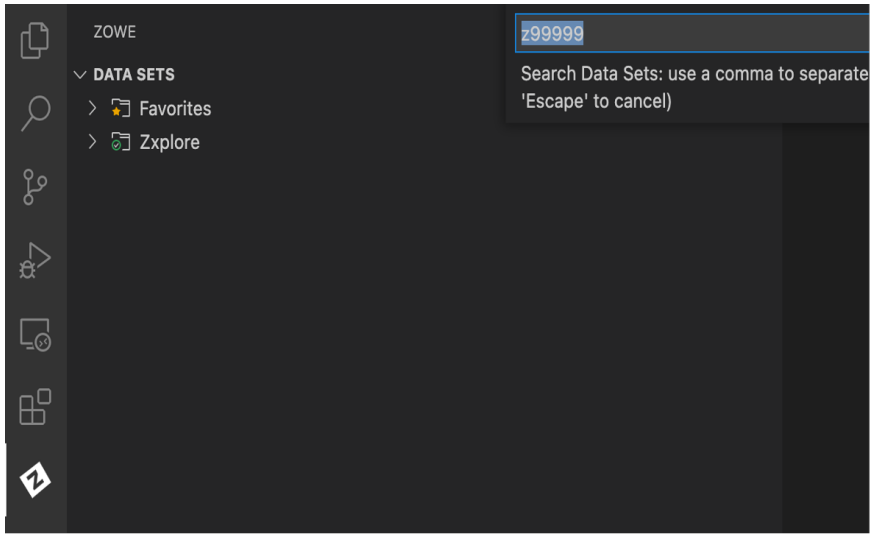
1 SET THE FILTER HLQ

Click on the magnifying glass icon next to your connection profile under DATA SETS.

This will allow you to set your High Level Qualifier (HLQ) filter.

It’s the way of telling VSCode to only show you datasets that match this filter.

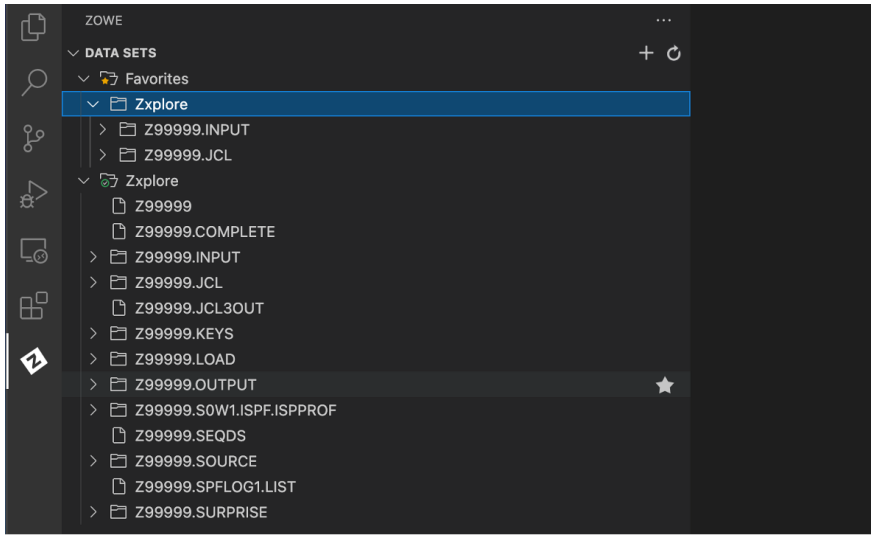
In the window that pops up, enter your userid, Zxxxxx.



2 PLAYING WITH FAVORITES

When you hold your mouse over any data set or member, a Star icon shows up to the right of its name (shown here in the red circle).

Clicking this lets you mark it as a “Favorite”, so it show up at the top of your DATA SET view.



In the screenshot above, you can see both INPUT and JCL data sets as “Favorites”, and you can click the Star to mark Z99999.OUTPUT as a favorite as well.

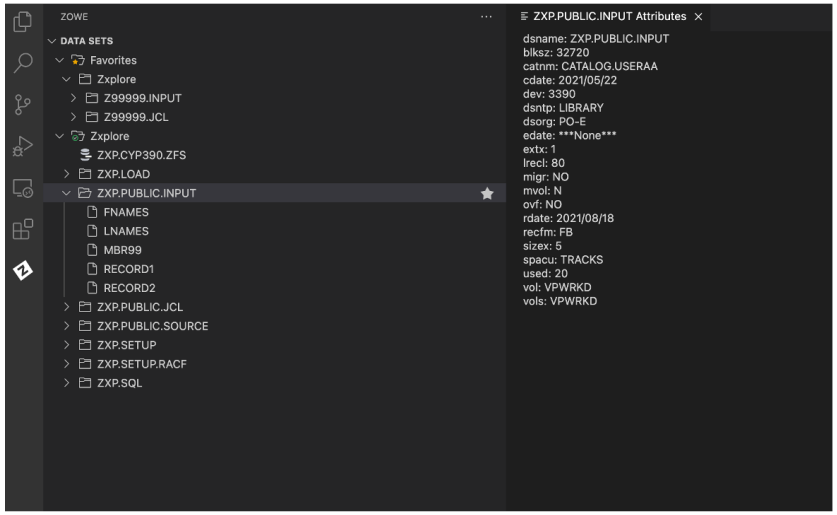
Try this with your SOURCE data set, as you’ll be using it in upcoming challenges.

3 SWITCH HLQ AND LOCATE

Update the HLQ filter and this time set it to **ZXP.PUBLIC.***

This is where most of the datasets we've pre-made for you reside. You will have been copying a lot of content from here, as well as submitting JCL jobs so you may want to mark those as favorites.

You can inspect the attributes of the set by right-clicking on any dataset.



Find one with the 'vols' attribute of **VPWRKD**. This means that the data for it is saved on a storage device, known as a "volume", with the name **VPWRKD**.

You may find other datasets on this volume, but there's only one **ZXP.PUBLIC.INPUT** dataset on it.

Within this data set, you should find a few members, some of which you will use in the upcoming steps.

“THIS SEEMS KIND OF SIMPLE. AM I MISSING SOMETHING?

This challenge is purposely starting out with the basics of datasets and members again, because it’s very easy to make inaccurate assumptions about them which can end up hurting you later on.

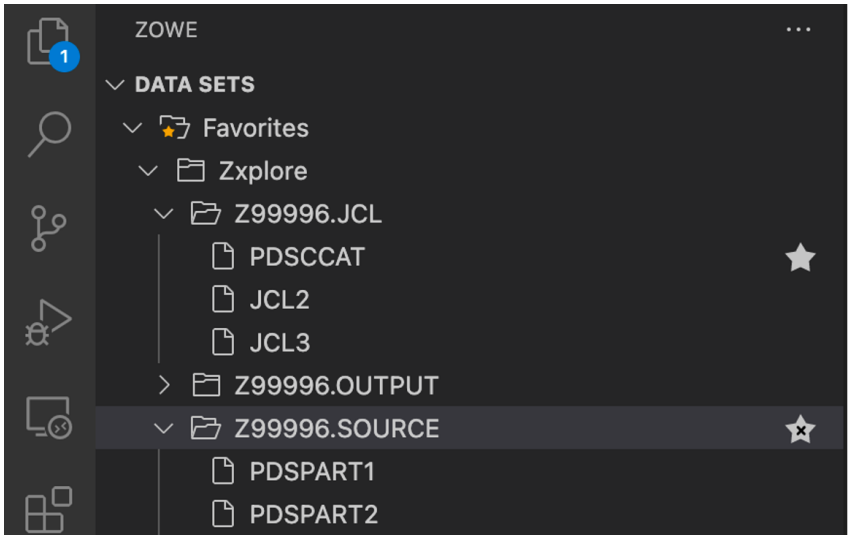
While they are represented as folders and files in VSCode, a dataset is actually a file with a record organization to it.

Some datasets contain sequential data, meaning the records in them are one right after the other, like a big list.

Others have an index of data which points to groups of individual records, which is what you are using here. These are called Partitioned Data Sets, hence the reference to “PDS”.

You have also had some exposure to application-specific data sets called VSAM. Each type is optimized to perform best for its specific purpose.

4 COPY AND PASTE



Within the **ZXP.PUBLIC.INPUT** dataset, right-click on the **PDSPART1** member and select “Copy”.

Then right-click on your **SOURCE** data set, which you added to your Favorites earlier, and select “Paste Member”.

When prompted for a name, give it the same name it had before - PDSPART1.

Do the same for **PDSPART2**.

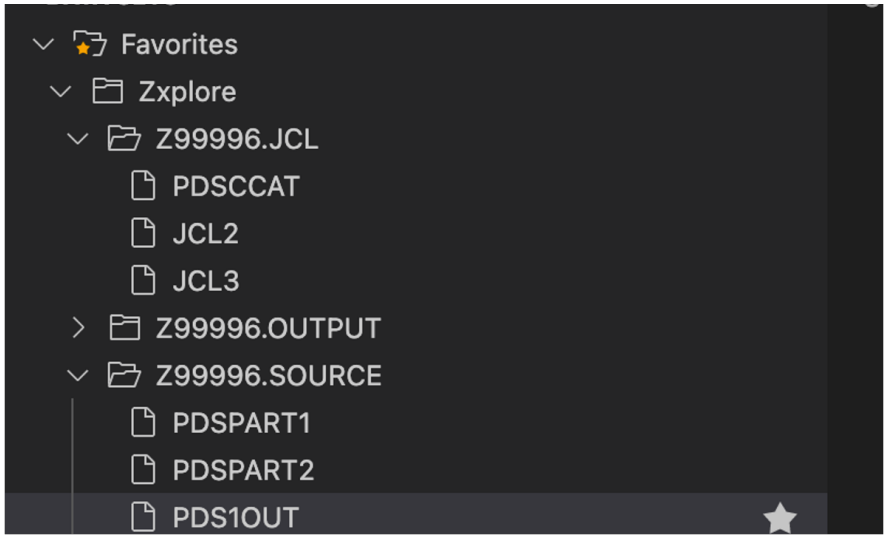
Finally, look in the **ZXP.PUBLIC.JCL** dataset for **PDS1CCAT**.

Copy that into your **JCL** dataset.

5 RUN THAT JOB

Right-click on the **PDS1CCAT** member in *your* **JCL** dataset and select “Submit Job”.

After a few moments, collapse the **SOURCE** folder view using the small arrow to the left of it (the “twisty”), and then re-expand it.



This will cause VSCode to refresh the view of contents of the PDS, where you should now see a brand new member created, called **PDS1OUT**.

6 GIVE IT A NEW NAME

Right-click on **PDS1OUT** and select “Rename”. Give it the new name of **RECIPE**.

This will make it easier to find later, and is required for the validation job to mark this challenge as complete.

That’s it! If you have a **SOURCE(RECIPE)** member with instructions in it for making some tasty vegetarian tacos, then

- go to **ZXP.PUBLIC.JCL**
- locate **CHKAPDS1**
- right-click and select “Submit Job”
- wait for CC 0000

And you are done!

Nice job - let’s recap	Next up …
You are a natural at this. We hope you now find working with dataset on z/OS easy and intuitive. For more information about Datasets on z/OS check out this reference. Datasets can be used to store just about anything on IBM Z, including lists, source code, job output, and as you saw here, even a tasty recipe!	If this challenge was a breeze, maybe you should quickly follow that up with **PDS2**. No matter what you do on IBM zOS, you will need a solid handle on working with datasets and members.