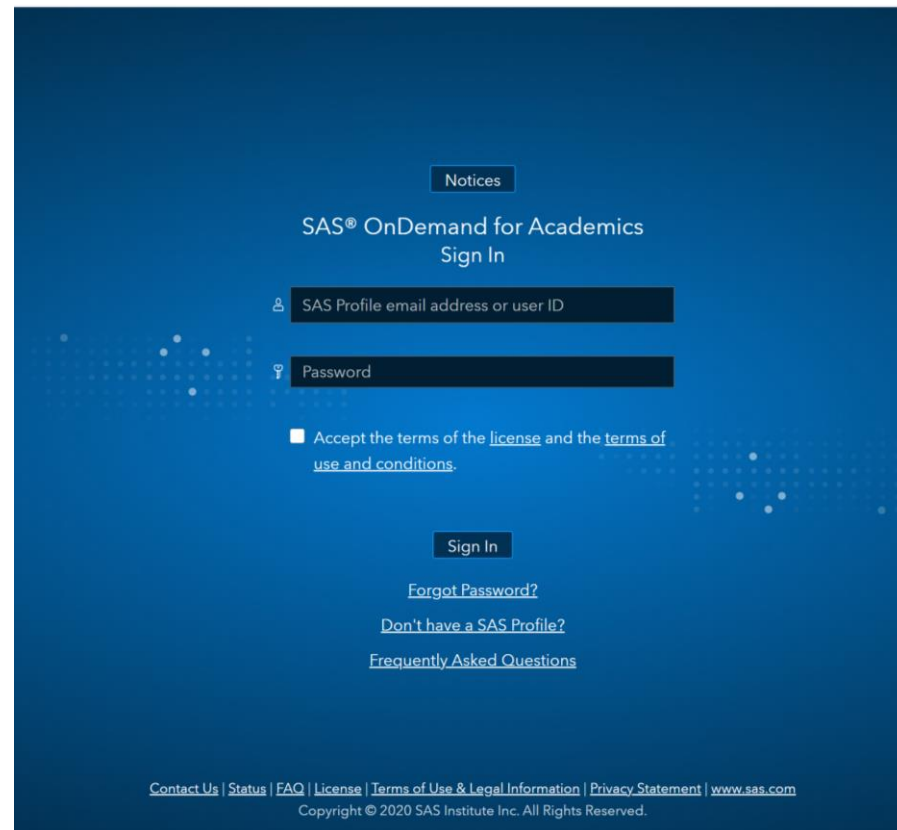


# ANLT5070

## Unit 6 Assignment 1 Tutorial

# Access the SAS OnDemand for Academics Control Center

<https://odamid.oda.sas.com/SASODAControlCenter>



The screenshot shows the SAS OnDemand for Academics Sign In page. The background is a dark blue gradient with a subtle pattern of white dots. At the top, there is a "Notices" button. Below it, the text "SAS® OnDemand for Academics" and "Sign In" are displayed. There are two input fields: "SAS Profile email address or user ID" and "Password". Below the password field, there is a checkbox labeled "Accept the terms of the [license](#) and the [terms of use and conditions](#)." Below the checkbox, there is a "Sign In" button. At the bottom, there are three links: "Forgot Password?", "Don't have a SAS Profile?", and "Frequently Asked Questions". At the very bottom, there is a footer with links: "Contact Us", "Status", "FAQ", "License", "Terms of Use & Legal Information", "Privacy Statement", and "www.sas.com". Below the footer, it says "Copyright © 2020 SAS Institute Inc. All Rights Reserved."

# SAS OnDemand for Academics (SODA) Control Center

The screenshot displays the SAS OnDemand for Academics (SODA) Control Center dashboard. At the top left is the SAS logo. At the top right, there is a home icon, the text "United States", a user icon, the name "Stefanie Reay", and a dropdown arrow. The main heading is "SAS® OnDemand for Academics Dashboard". Below this are two buttons: "Planned Events" and "Notices". A navigation bar contains three tabs: "Applications", "Enrollments", and "Courses". The "Applications" tab is active, showing a list of SAS applications with icons, titles, descriptions, and actions. The "Reference" section on the right includes links to the Support Site, Step-by-Step Reference Guides, and Frequently Asked Questions. Below this is the "Quotas" section, which shows progress bars for the Home Directory (1% of 46.5MB/5120MB) and the Course Directory (7% of 207.0MB/3072MB). At the bottom, there is a link to "Other Ways to Access SAS® OnDemand for Academics Resources".

**SAS® OnDemand for Academics Dashboard**

Planned Events Notices

Applications Enrollments Courses

**SAS® Studio**  
Write and run SAS code with a Web-based SAS development environment.  
Actions: [Clear my saved tabs.](#)

**SAS® Enterprise Guide®**  
Deliver the power of SAS from an easy-to-use, point-and-click interface. ([Download Required](#))

**SAS® Enterprise Miner™**  
Reveal valuable insights with powerful data mining software. ([Configuration Steps Required](#))  
Actions: [Clear my project locks.](#)

**SAS® Forecast Studio**  
Generate large numbers of high-quality forecasts automatically. ([Configuration Steps Required](#))  
Actions: [Manage your personal environment.](#)

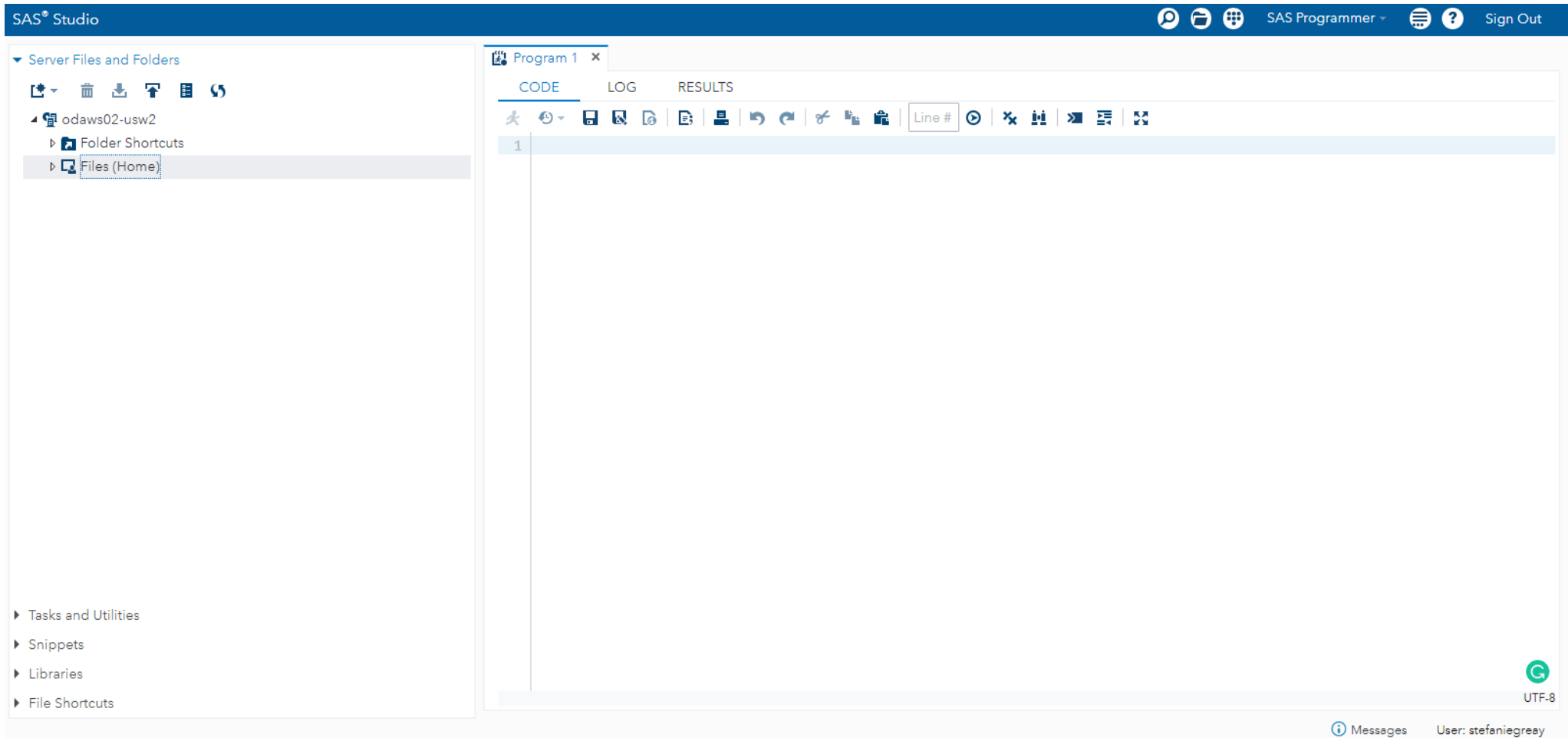
**JMP® Software access to SAS® hosted servers**  
Statistical discovery software. Users must have a copy of JMP® software. ([Configuration Steps Required](#))

**Reference**  
[Support Site](#)  
[Step-by-Step Reference Guides](#)  
[Frequently Asked Questions](#)

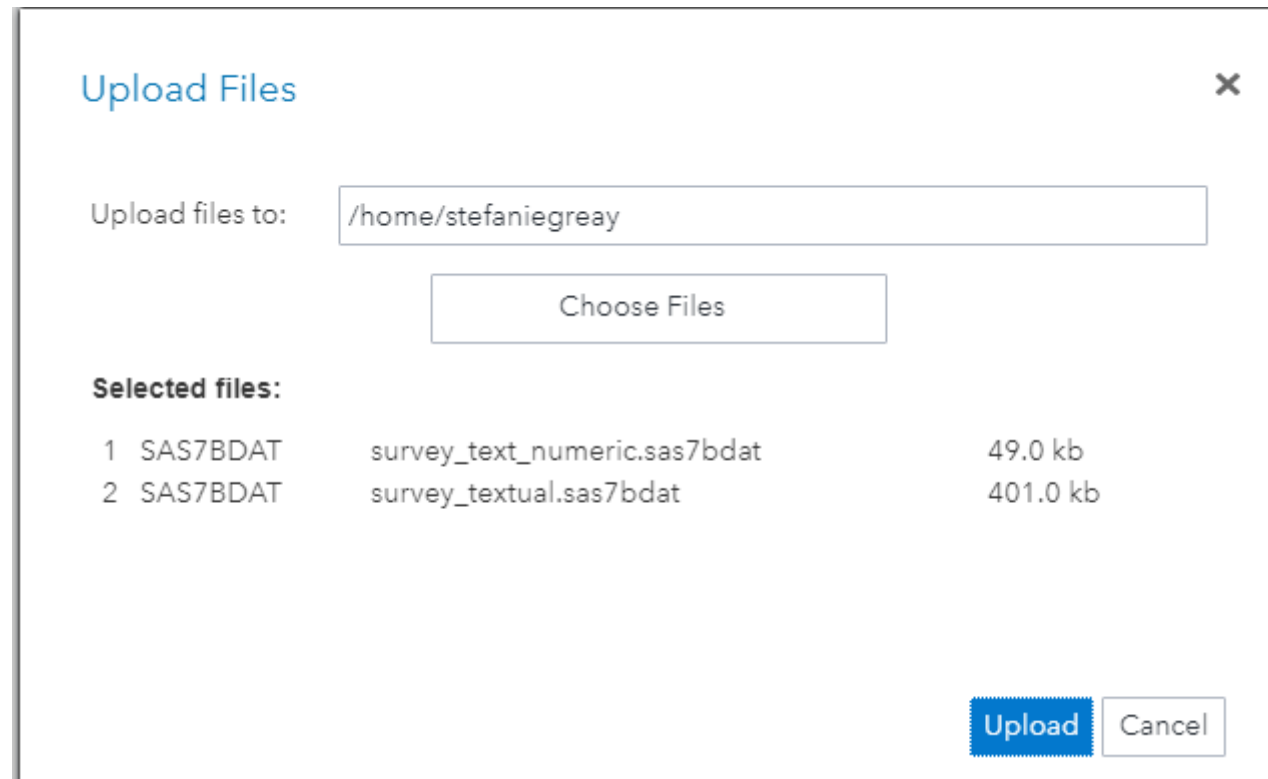
**Quotas ([learn more](#))**  
Home Directory (46.5MB/5120MB)  
1%  
Course Directory (207.0MB/3072MB)  
7%

[Other Ways to Access SAS® OnDemand for Academics Resources](#)

To upload the dataset to the SAS server, open SAS Studio, then click on “Files (Home)” and click the upload button.



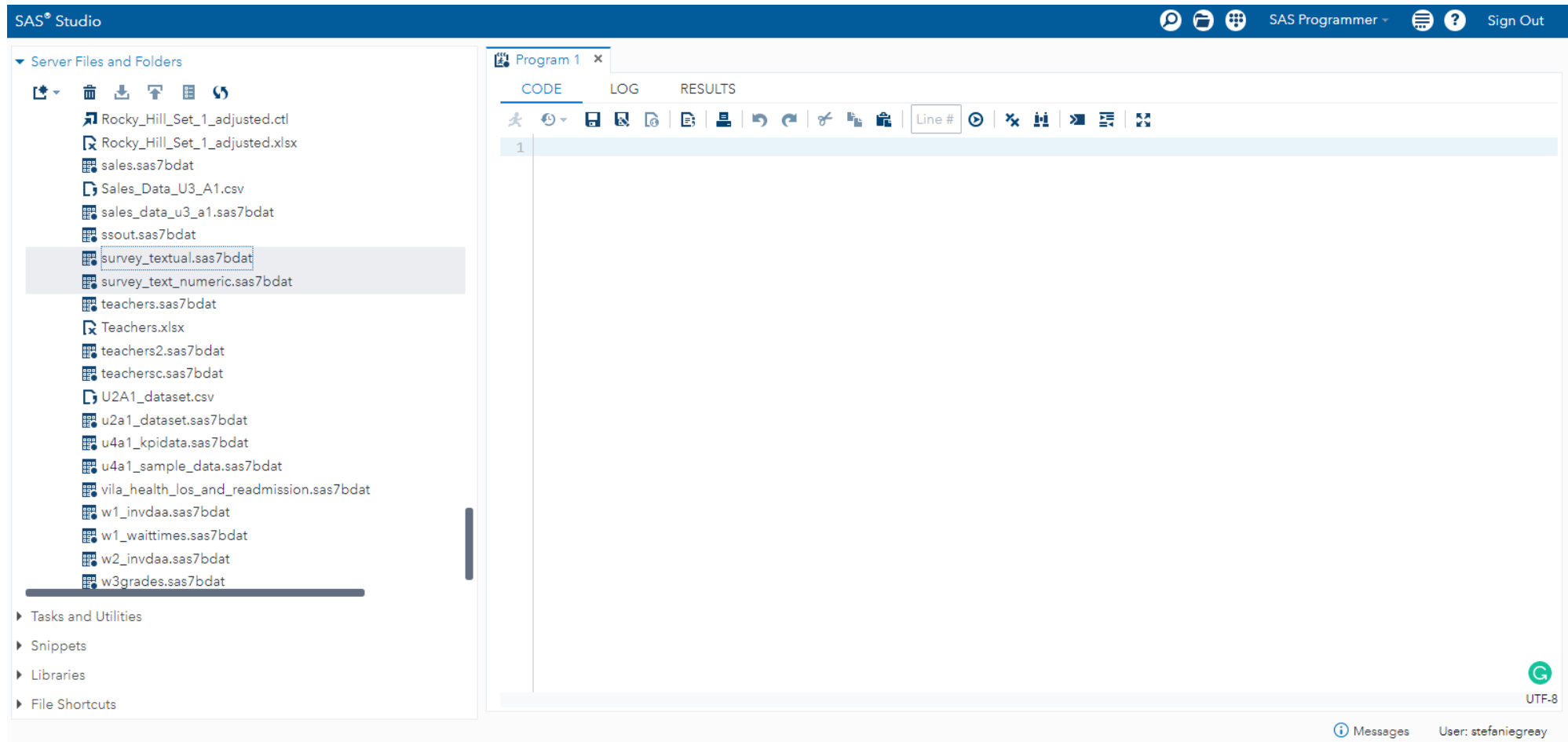
Click on “Choose Files” to browse to the file you want to upload, then click “Upload.”



The screenshot shows a web-based 'Upload Files' dialog box. At the top, the title 'Upload Files' is in blue, followed by a close button (X). Below this, the text 'Upload files to:' is followed by a text input field containing the path '/home/stefaniegreay'. Underneath the input field is a button labeled 'Choose Files'. Further down, the section 'Selected files:' is followed by a list of two files. The first file is '1 SAS7BDAT survey\_text\_numeric.sas7bdat' with a size of '49.0 kb'. The second file is '2 SAS7BDAT survey\_textual.sas7bdat' with a size of '401.0 kb'. At the bottom right of the dialog, there are two buttons: a blue 'Upload' button and a white 'Cancel' button with a grey border.

Selected files:		
1	SAS7BDAT survey_text_numeric.sas7bdat	49.0 kb
2	SAS7BDAT survey_textual.sas7bdat	401.0 kb

Verify that the upload was successful by scrolling down in your Files(Home) area.

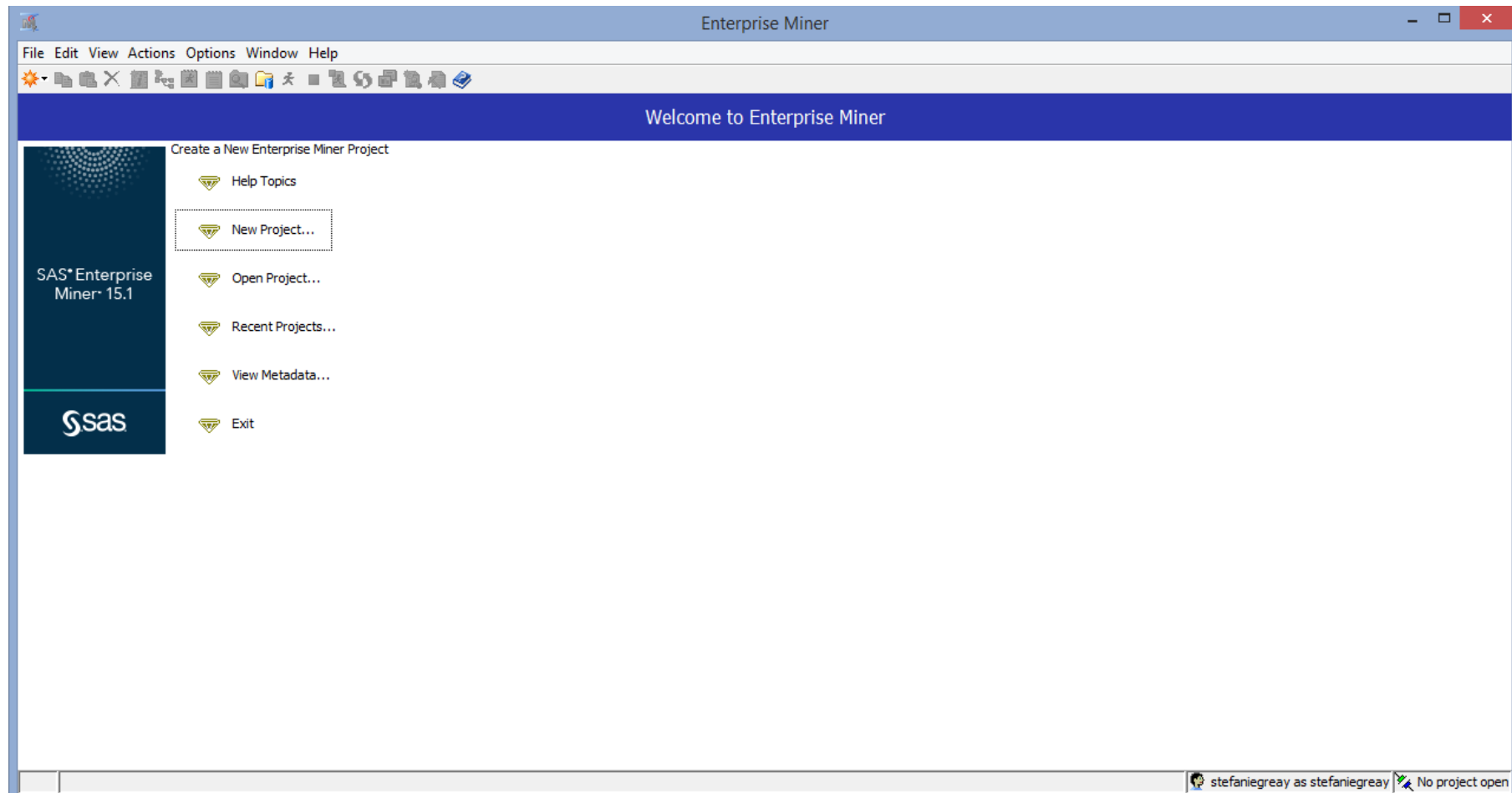


# SAS Enterprise Miner Instructions

The following slides provide instructions on how to complete this task in SAS Enterprise Miner.

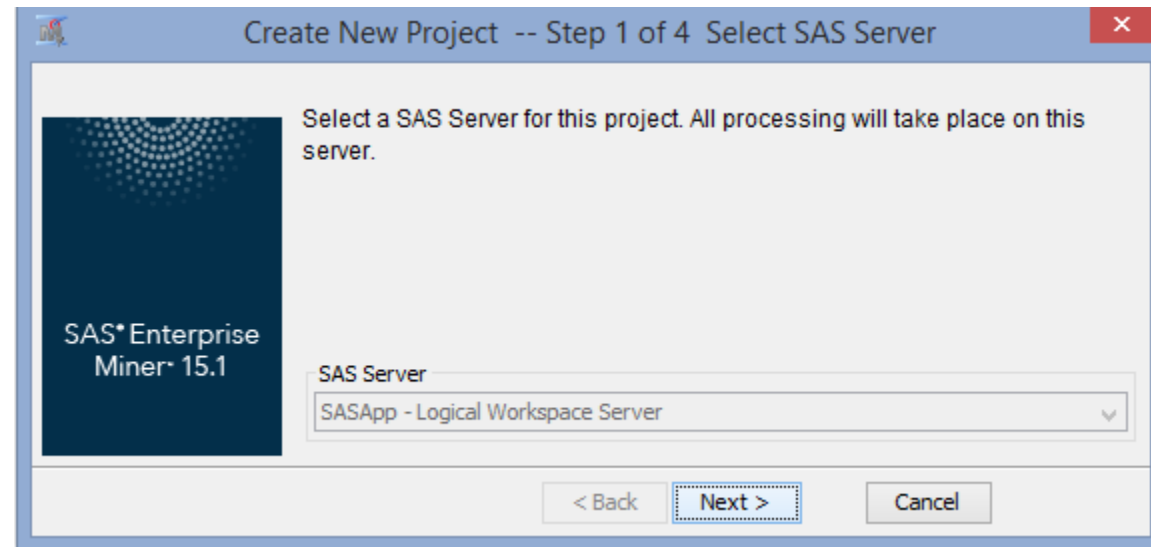
Once you have uploaded the dataset for this unit onto the SAS servers using SAS Studio, you may proceed from here using SAS Enterprise Miner.

Once you download and start SAS Enterprise Miner, open a new project by clicking on “New Project.”

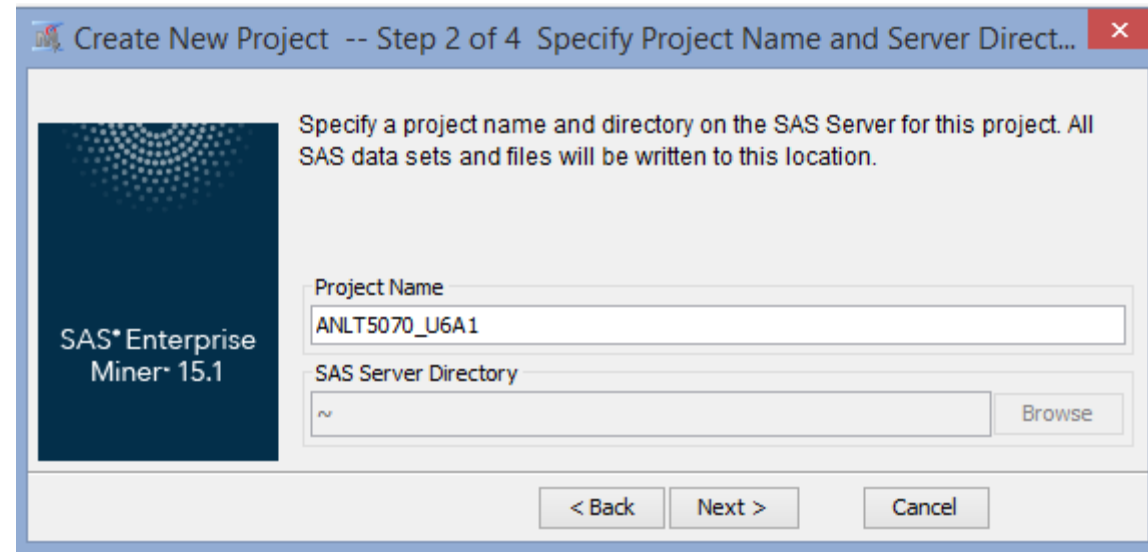




# Click “Next>” to use the default SAS Server



# Enter a project name and click “Next>”



Create New Project -- Step 2 of 4 Specify Project Name and Server Direct...

Specify a project name and directory on the SAS Server for this project. All SAS data sets and files will be written to this location.

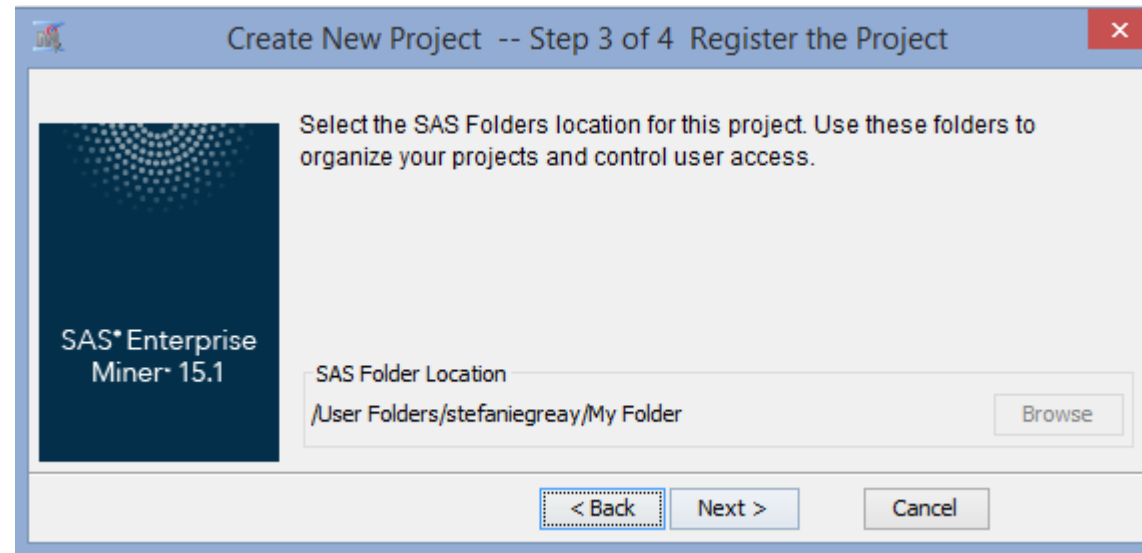
SAS\* Enterprise Miner 15.1

Project Name  
ANLT5070\_U6A1

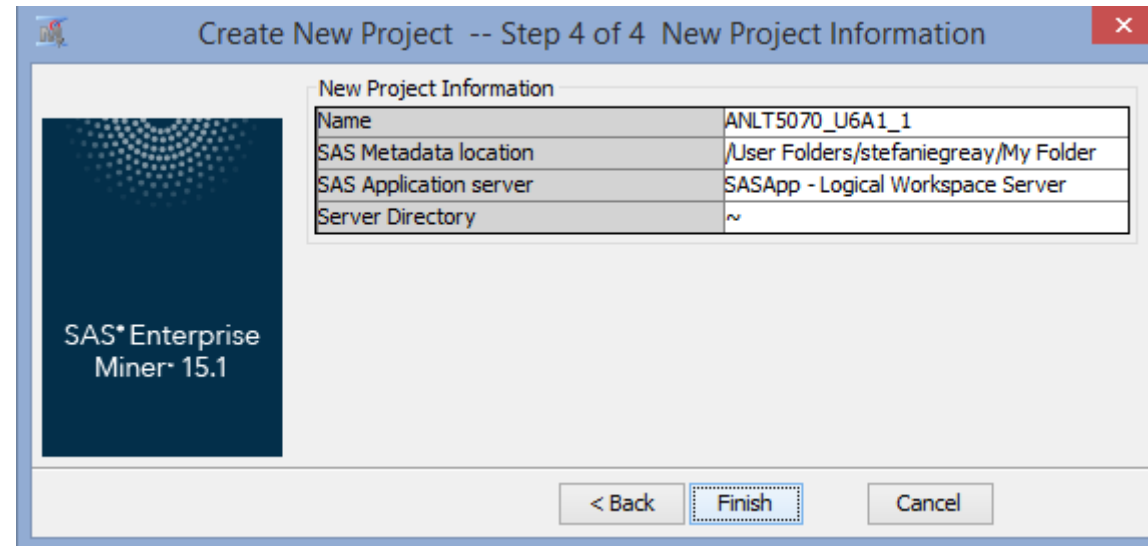
SAS Server Directory  
~ Browse

< Back Next > Cancel

# Click “Next>”



# Verify your entries and click “Finish”



Create New Project -- Step 4 of 4 New Project Information

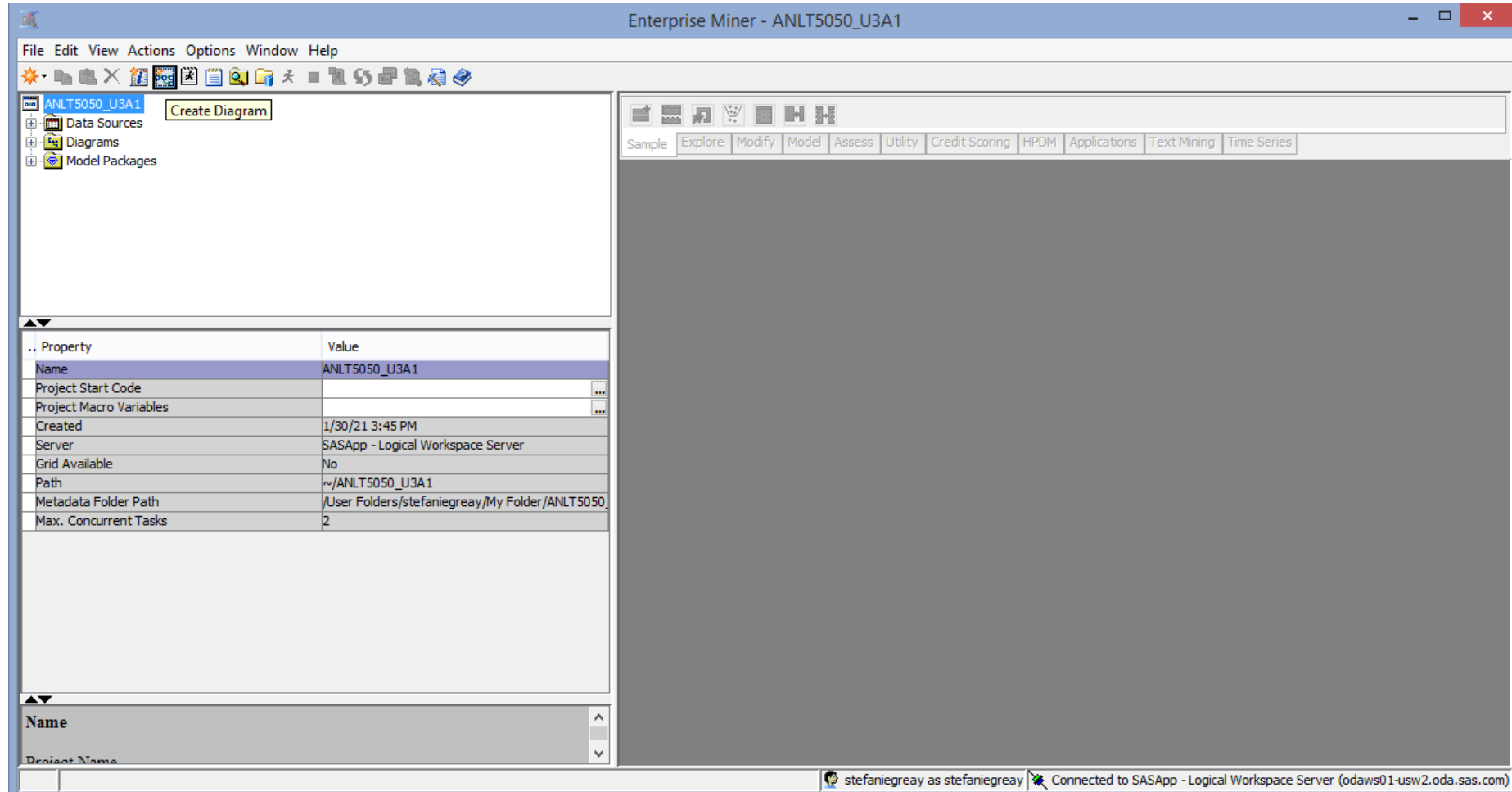
New Project Information

Name	ANLT5070_U6A1_1
SAS Metadata location	/User Folders/stefaniegreay/My Folder
SAS Application server	SASApp - Logical Workspace Server
Server Directory	~

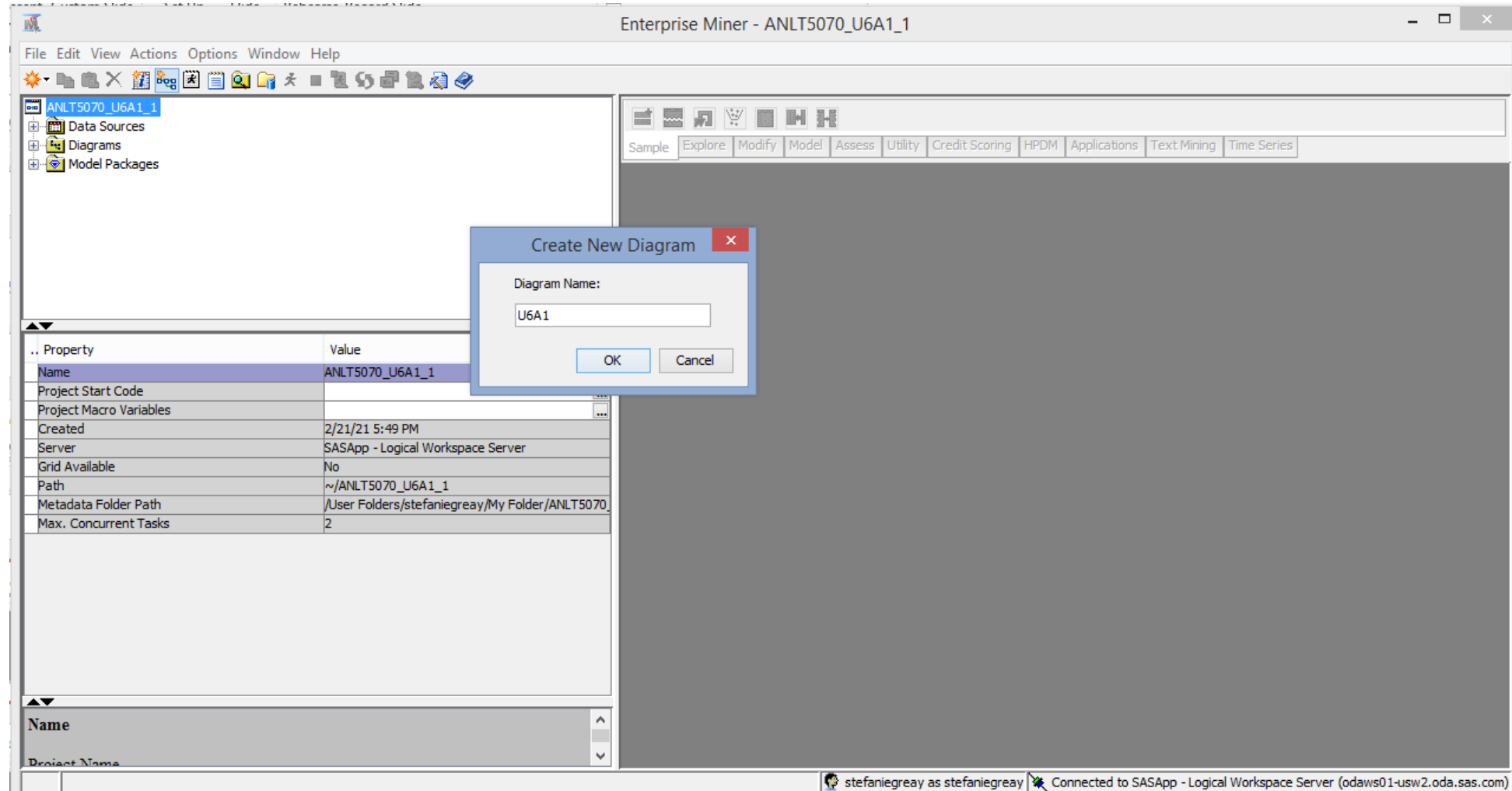
SAS® Enterprise Miner® 15.1

< Back Finish Cancel

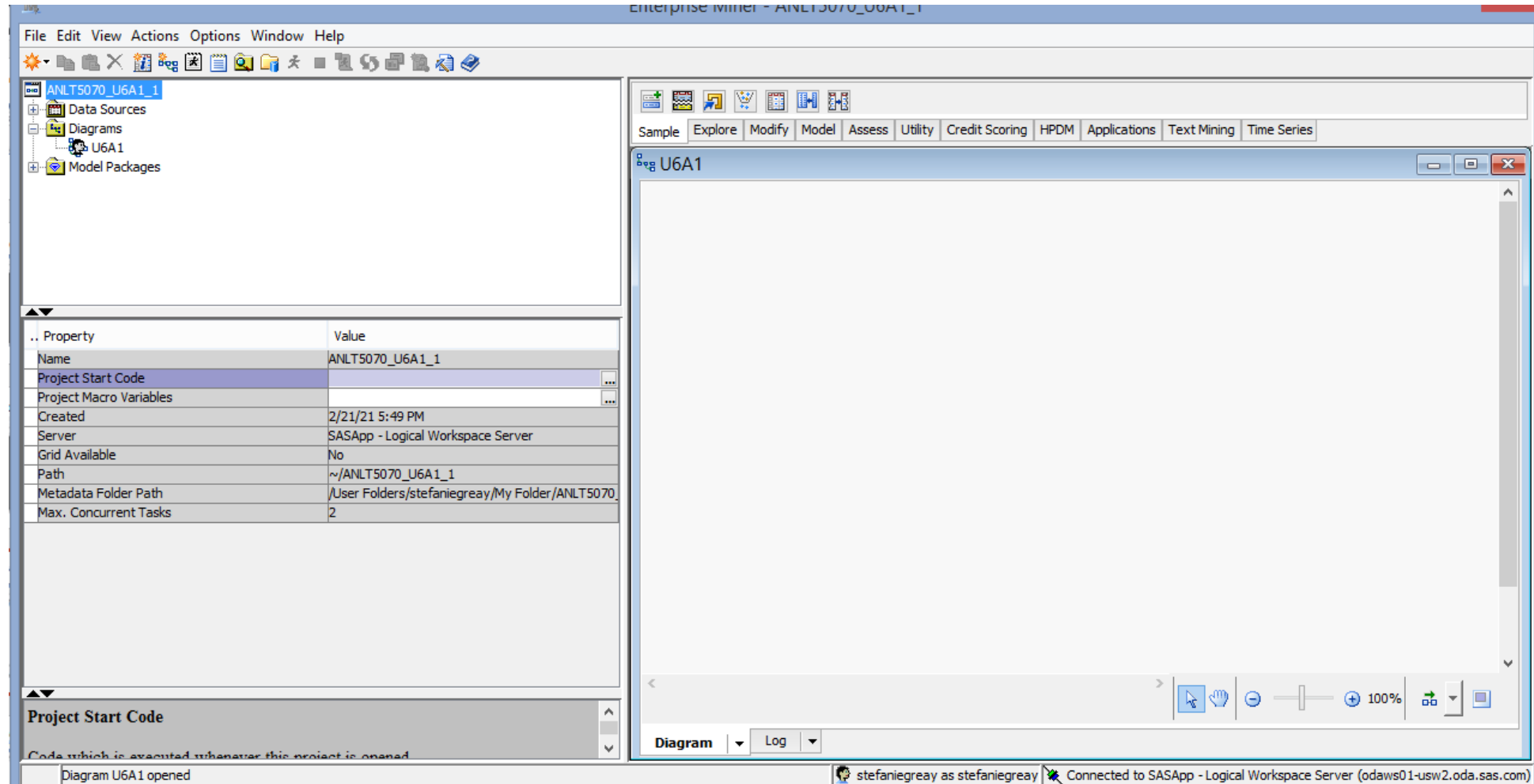
# Click on the “Create Diagram” icon.



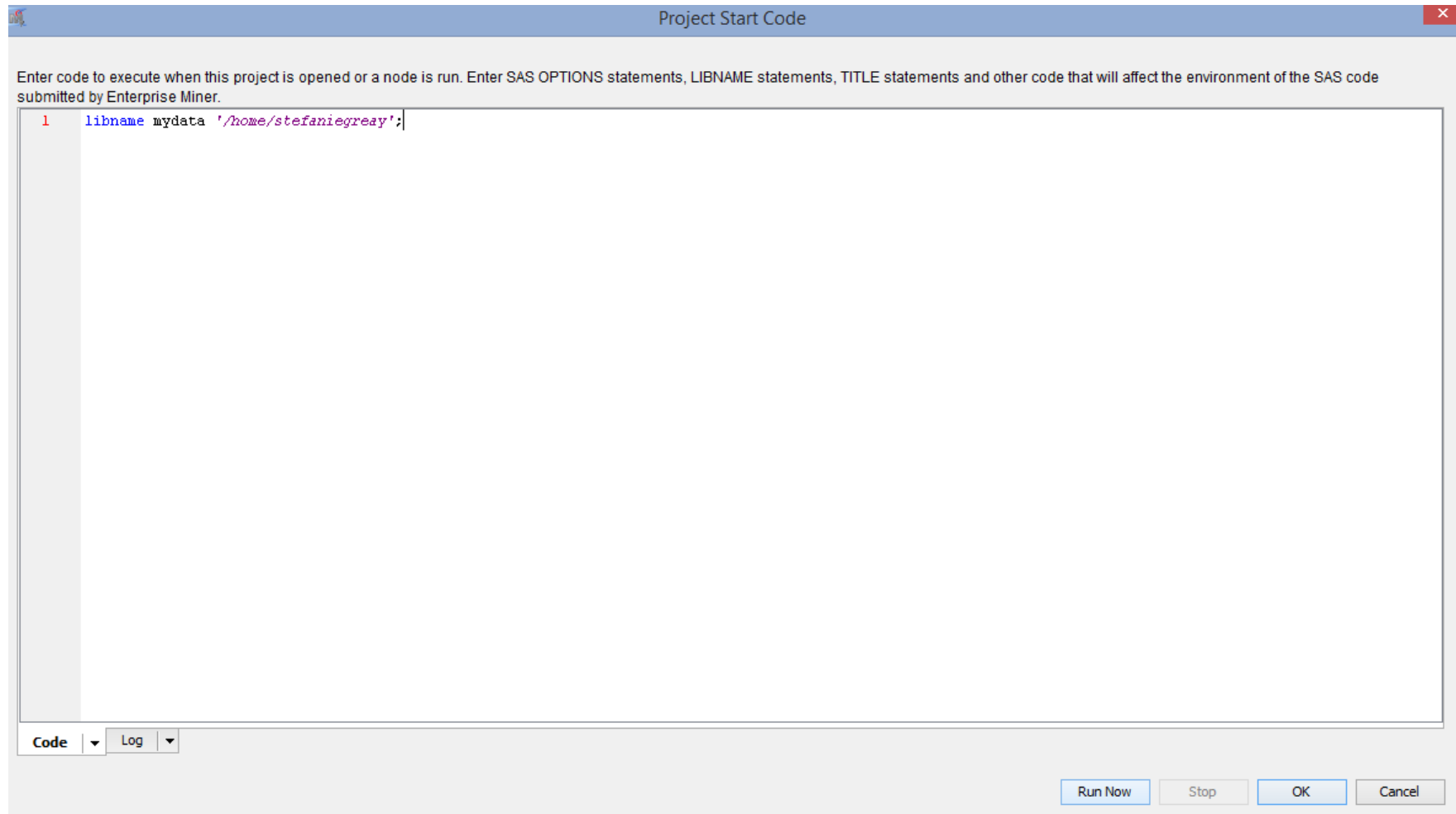
# Name your diagram and click “OK.”



Click on the project, then click on the ellipses next to “Project Start Code.”

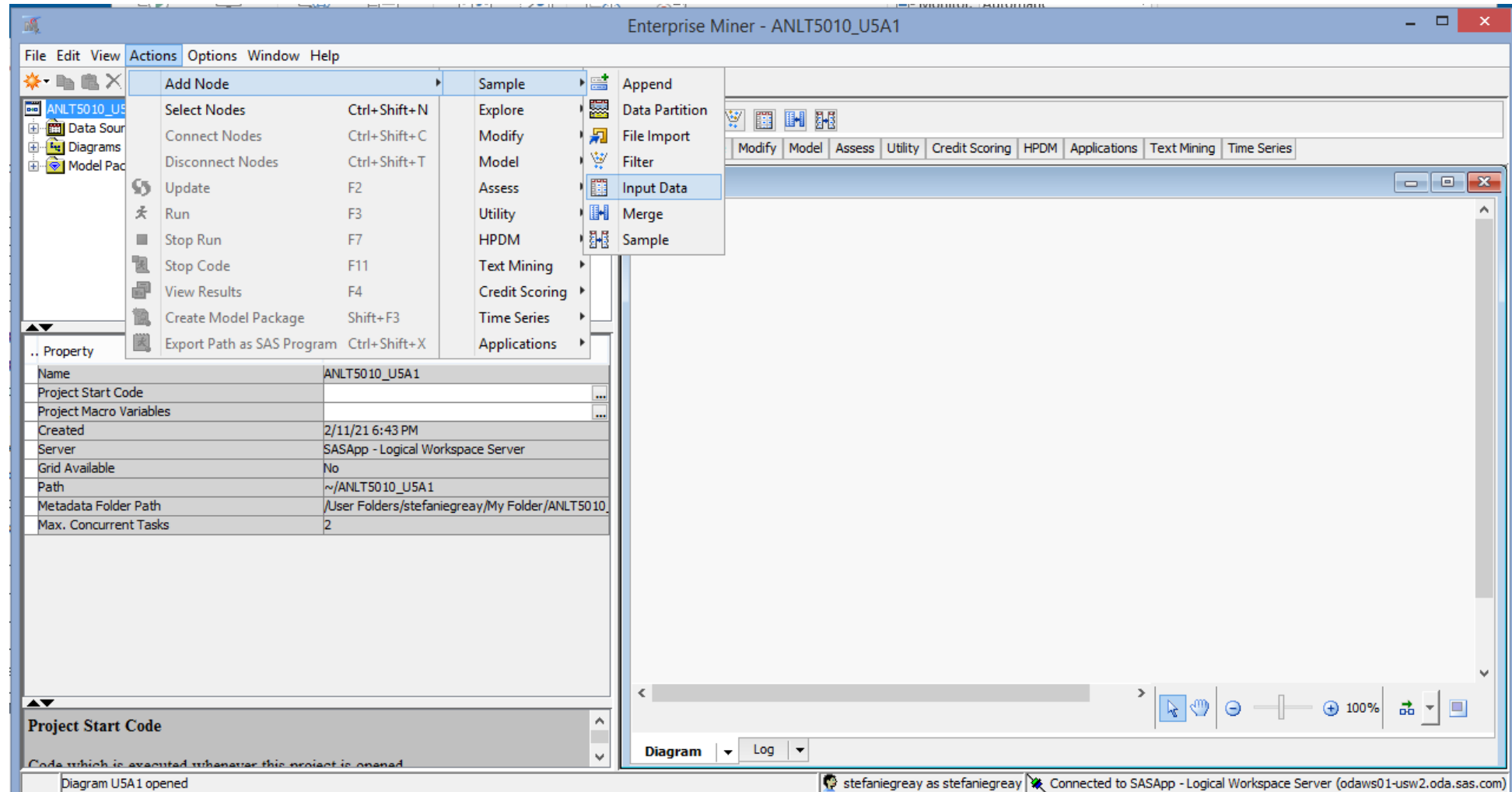


Add the library reference for where you uploaded the dataset in SAS studio, and click “Run Now.” Once it completes, click “OK.”

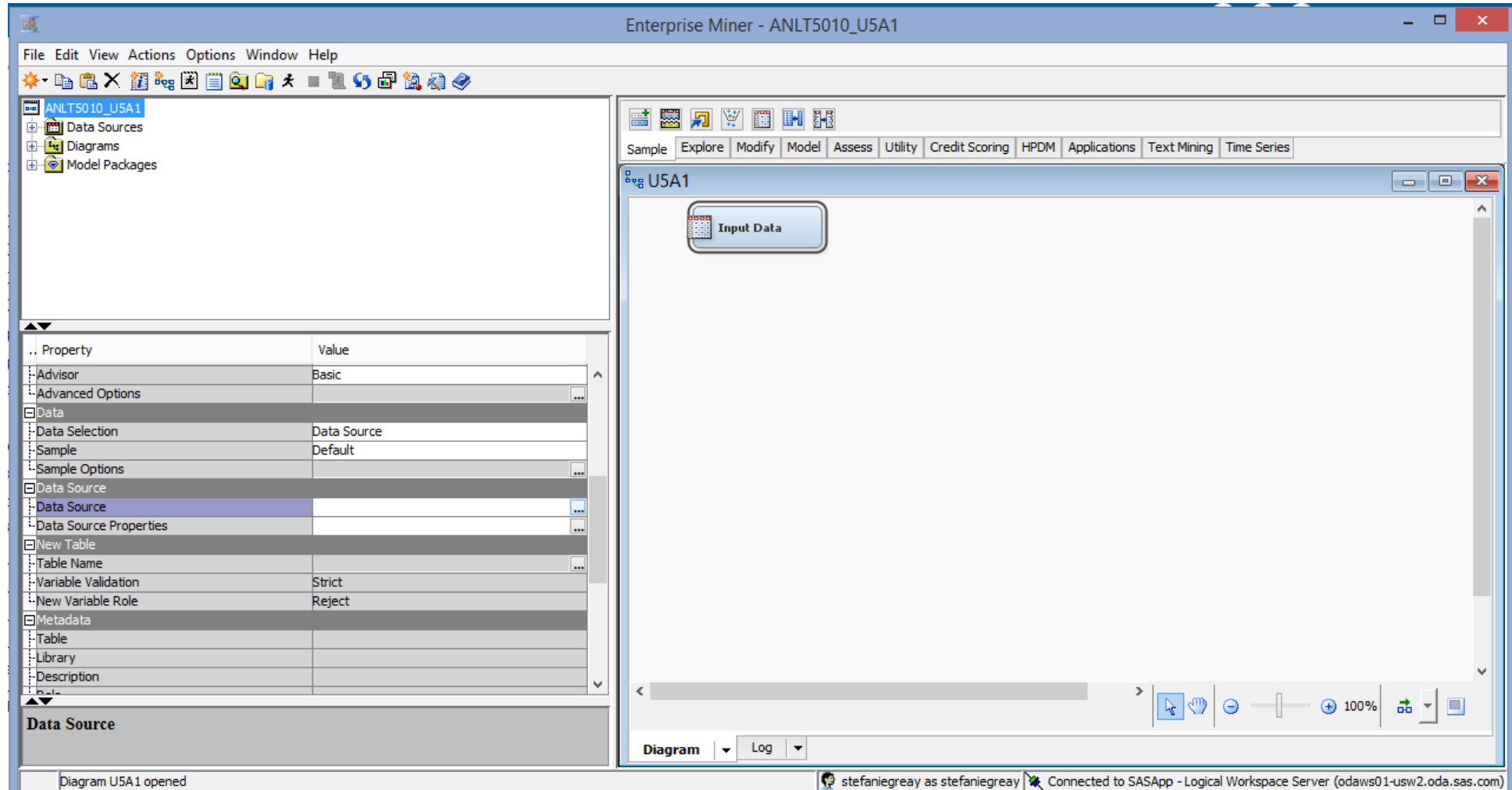




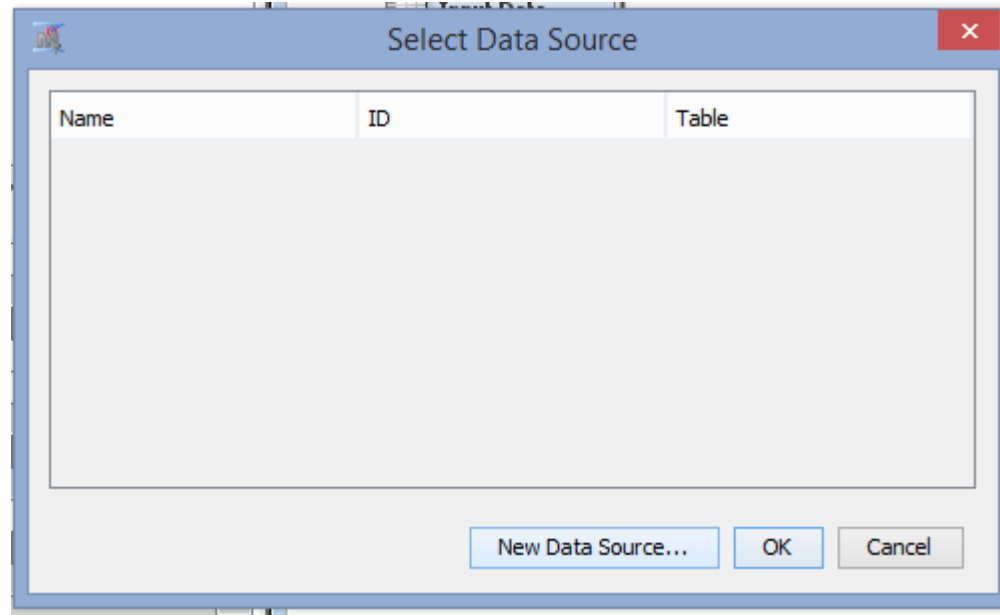
# Click on Actions>Add Node>Sample>Input Data



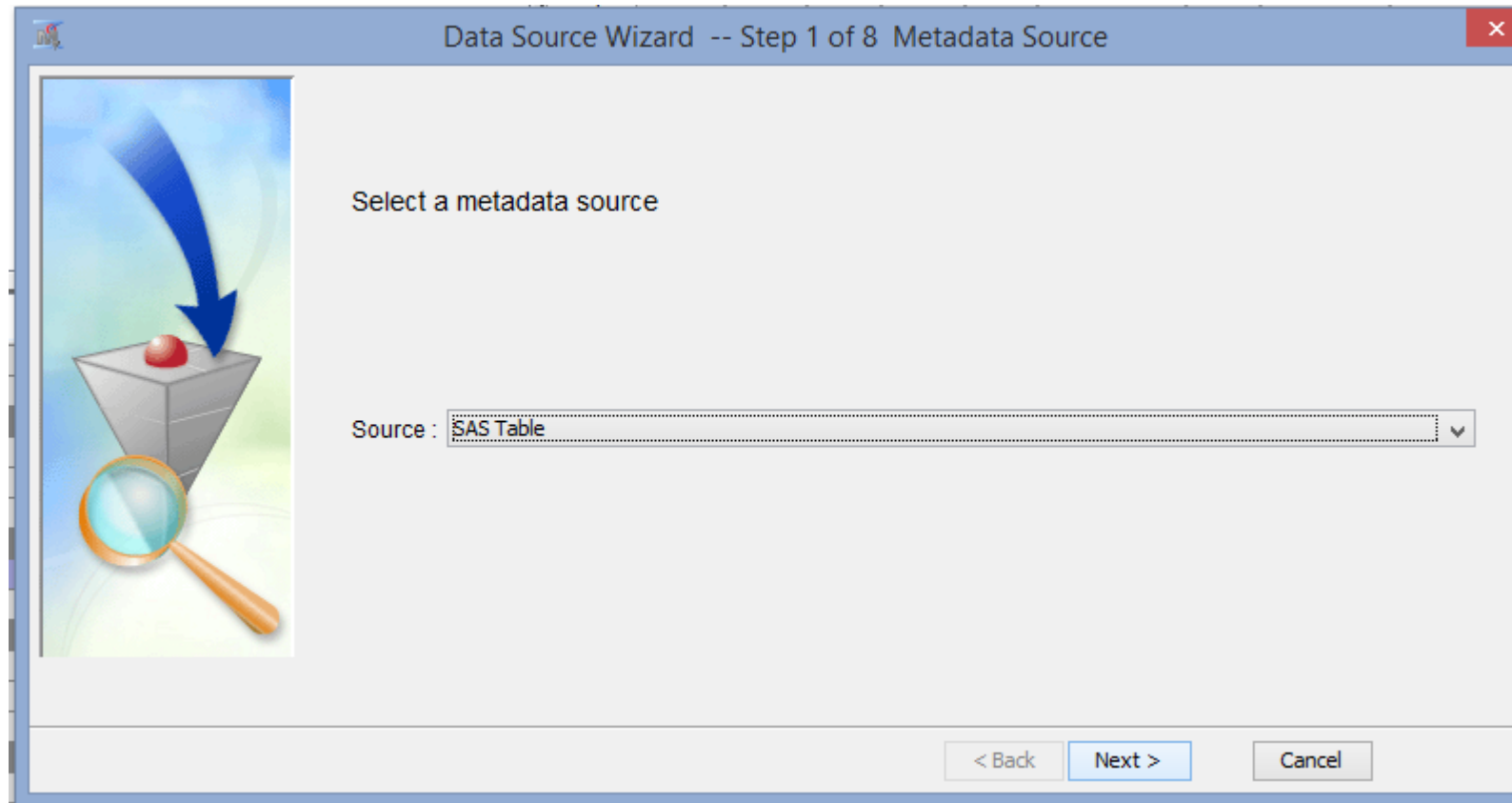
# Click the ellipses (3 dots) next to “Data Source.”



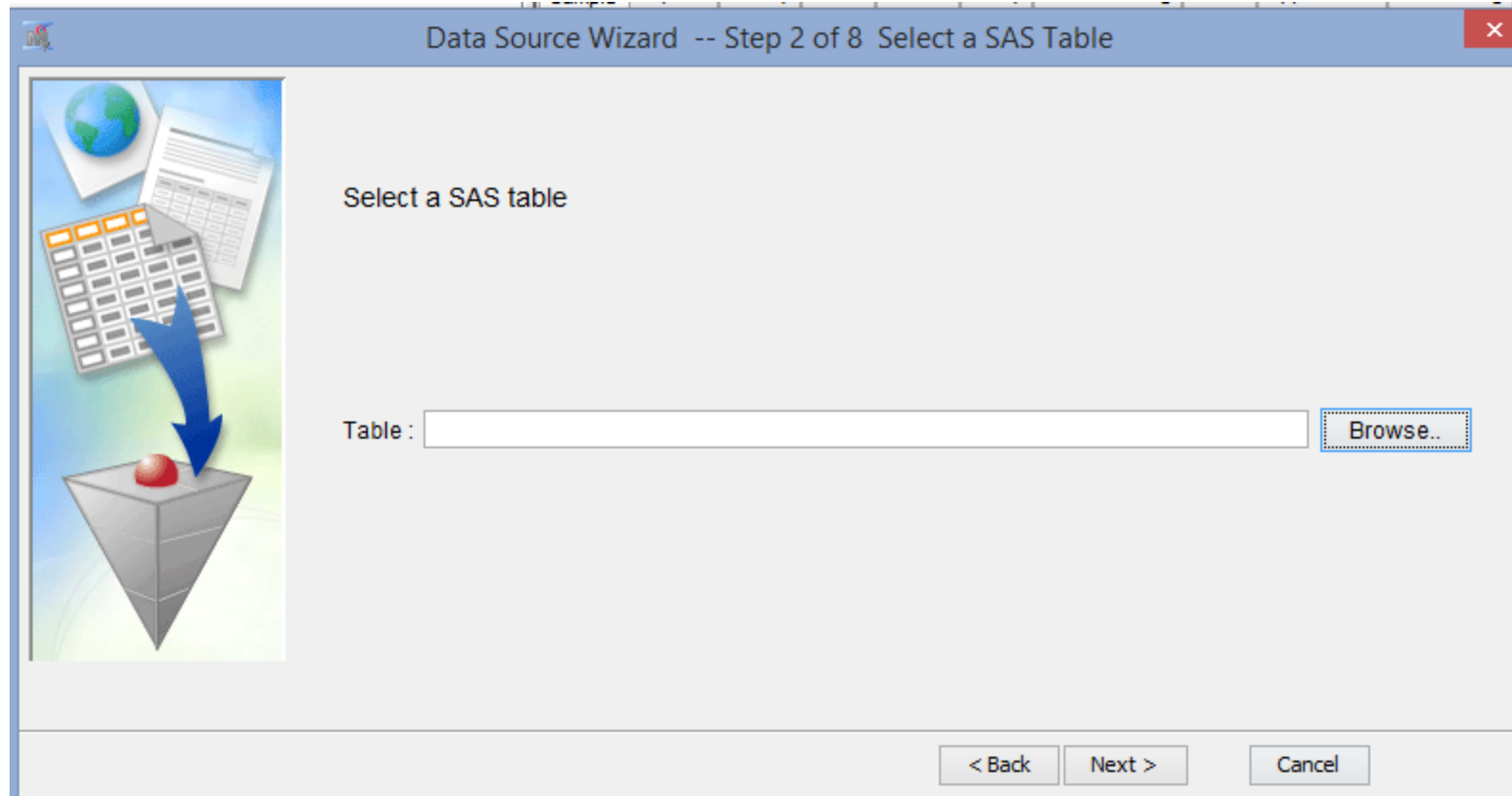
# Click on “New Data Source”



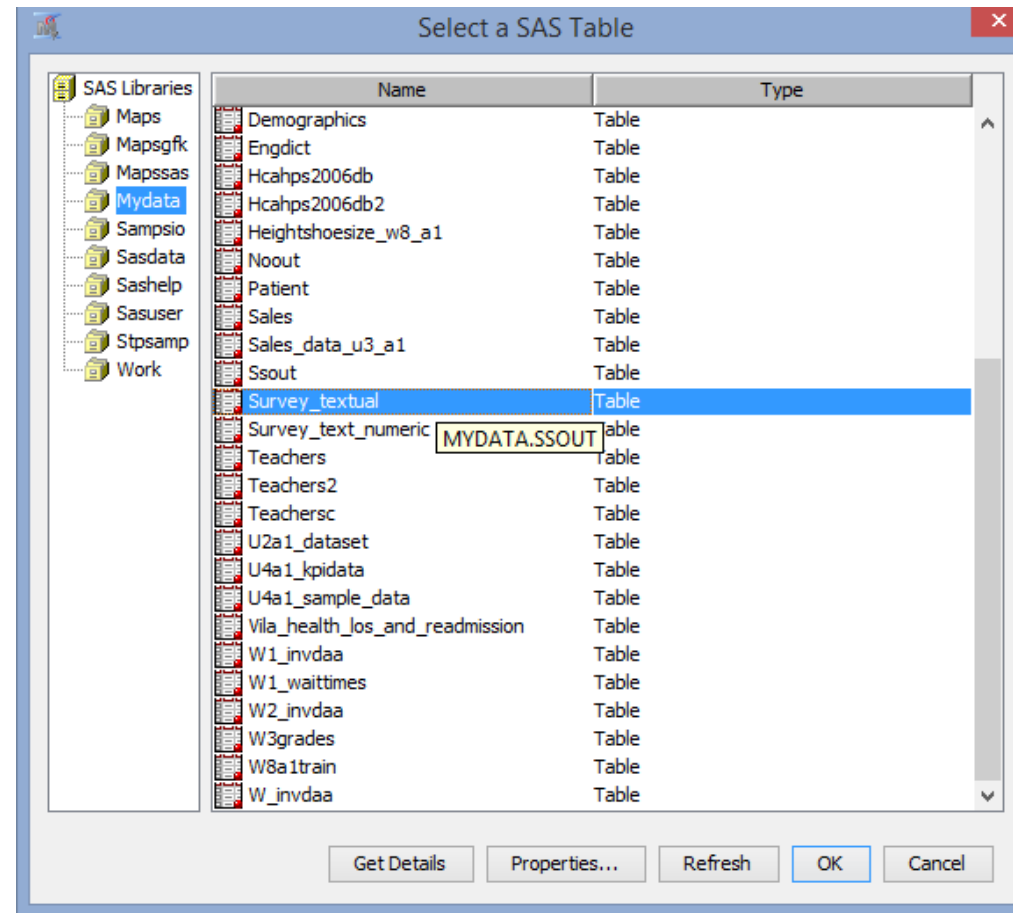
Leave it as “SAS Table” and click “Next >”



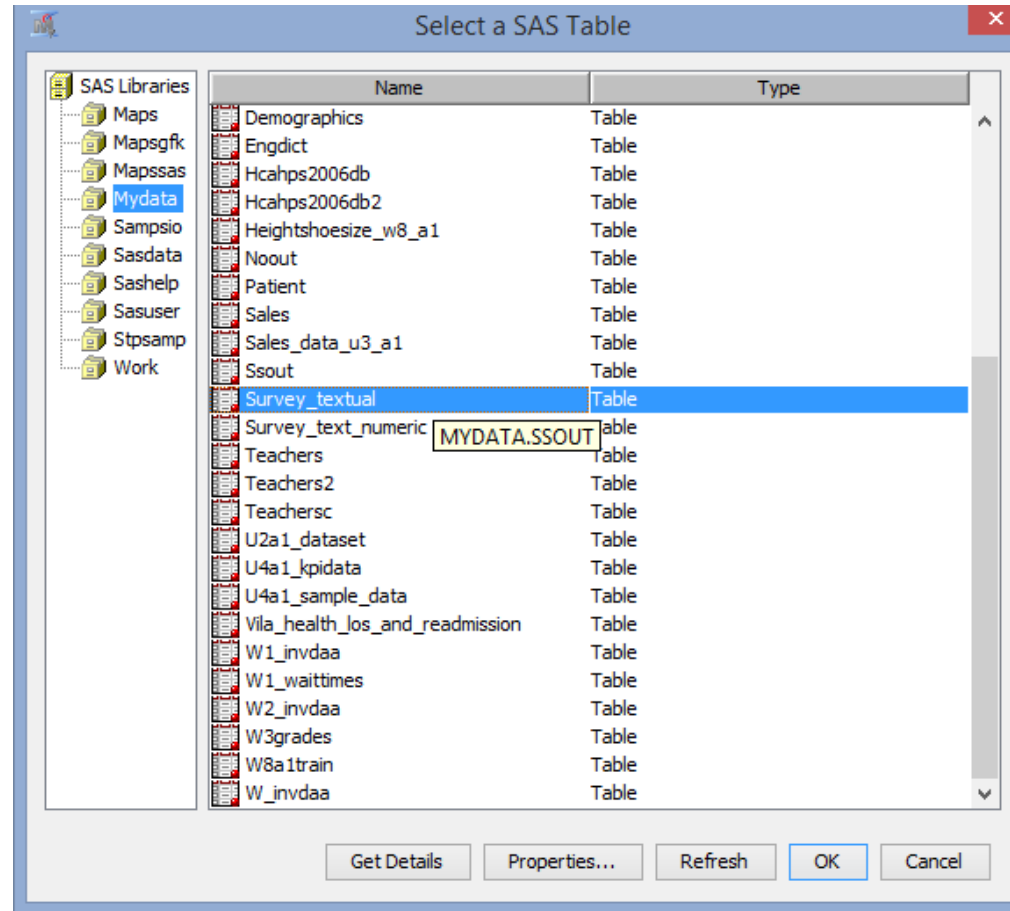
# Click on “Browse”



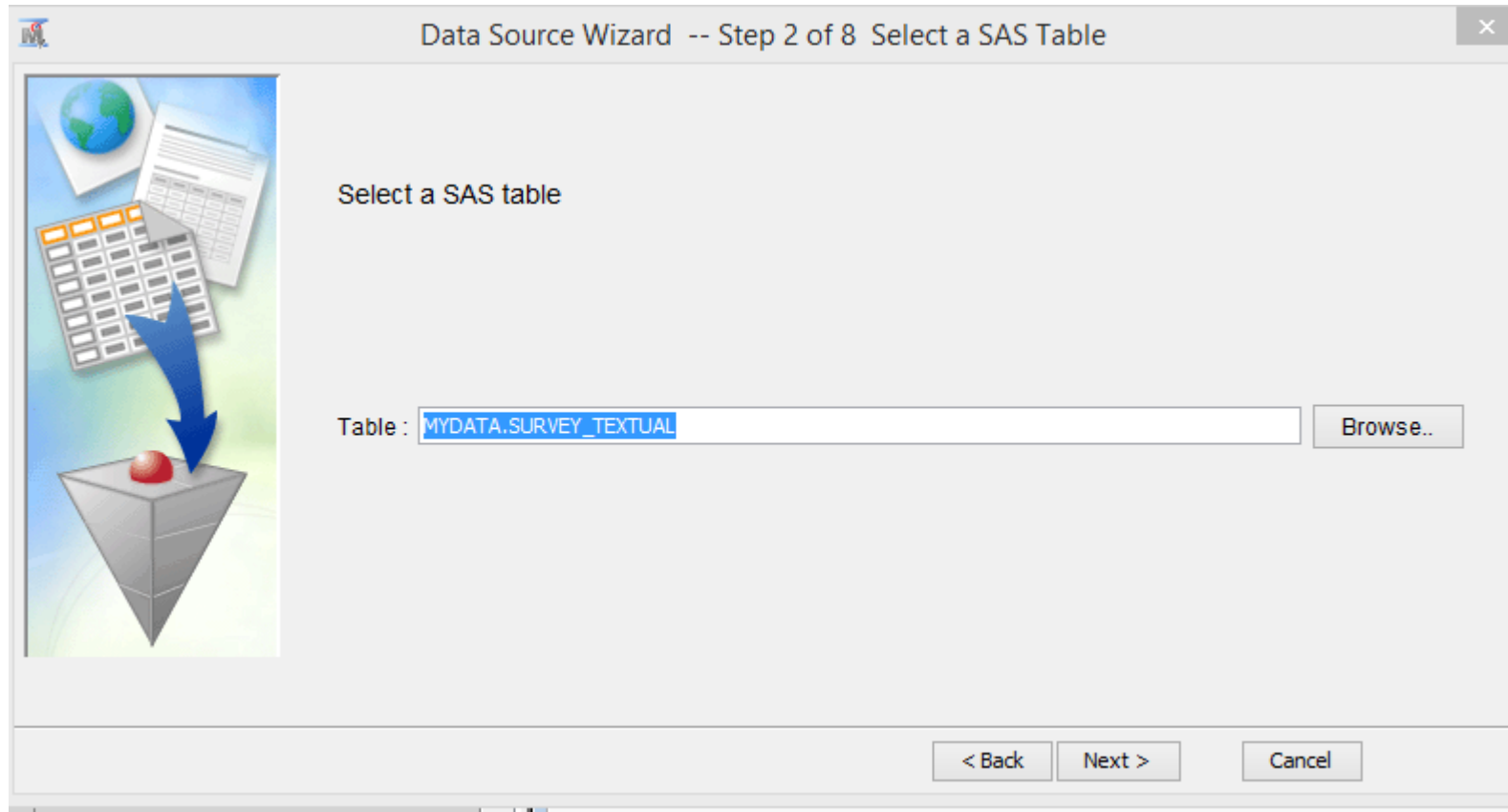
Double click on the libname you just set up in the project startup code.



Double click to select the dataset for this unit, and click “OK”



# Click “Next>”





# Verify the options and click “Next>”

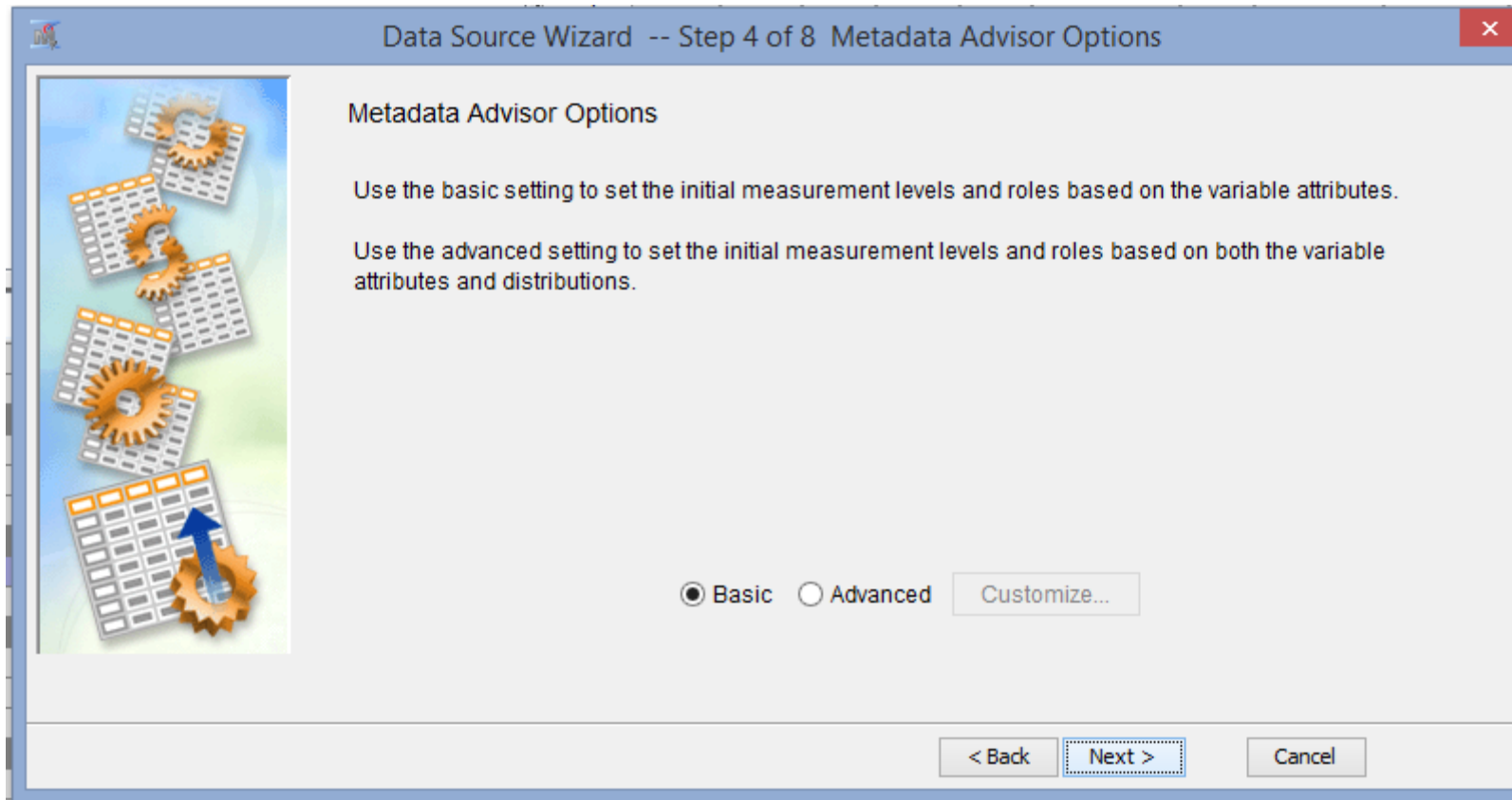
Data Source Wizard -- Step 3 of 8 Table Information

Table Properties

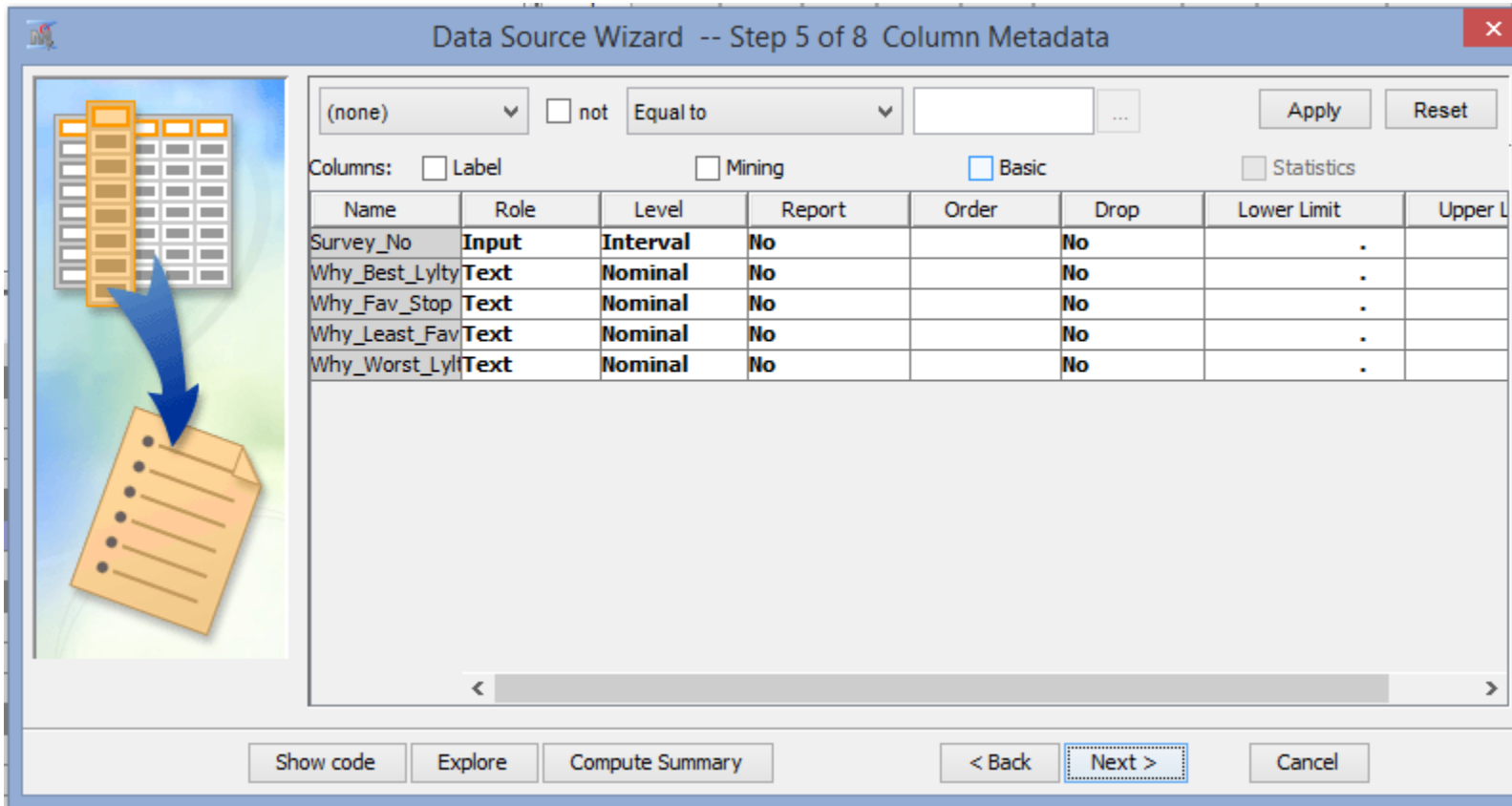
Property	Value
Table Name	MYDATA.SURVEY_TEXTUAL
Description	
Member Type	DATA
Data Set Type	DATA
Engine	V9
Number of Variables	5
Number of Observations	315
Created Date	May 10, 2011 9:04:21 PM EDT
Modified Date	May 10, 2011 9:04:21 PM EDT

< Back   **Next >**   Cancel

# Click “Next>”



Verify the variables and settings, adjust if necessary, and then click “Next>”



Data Source Wizard -- Step 5 of 8 Column Metadata

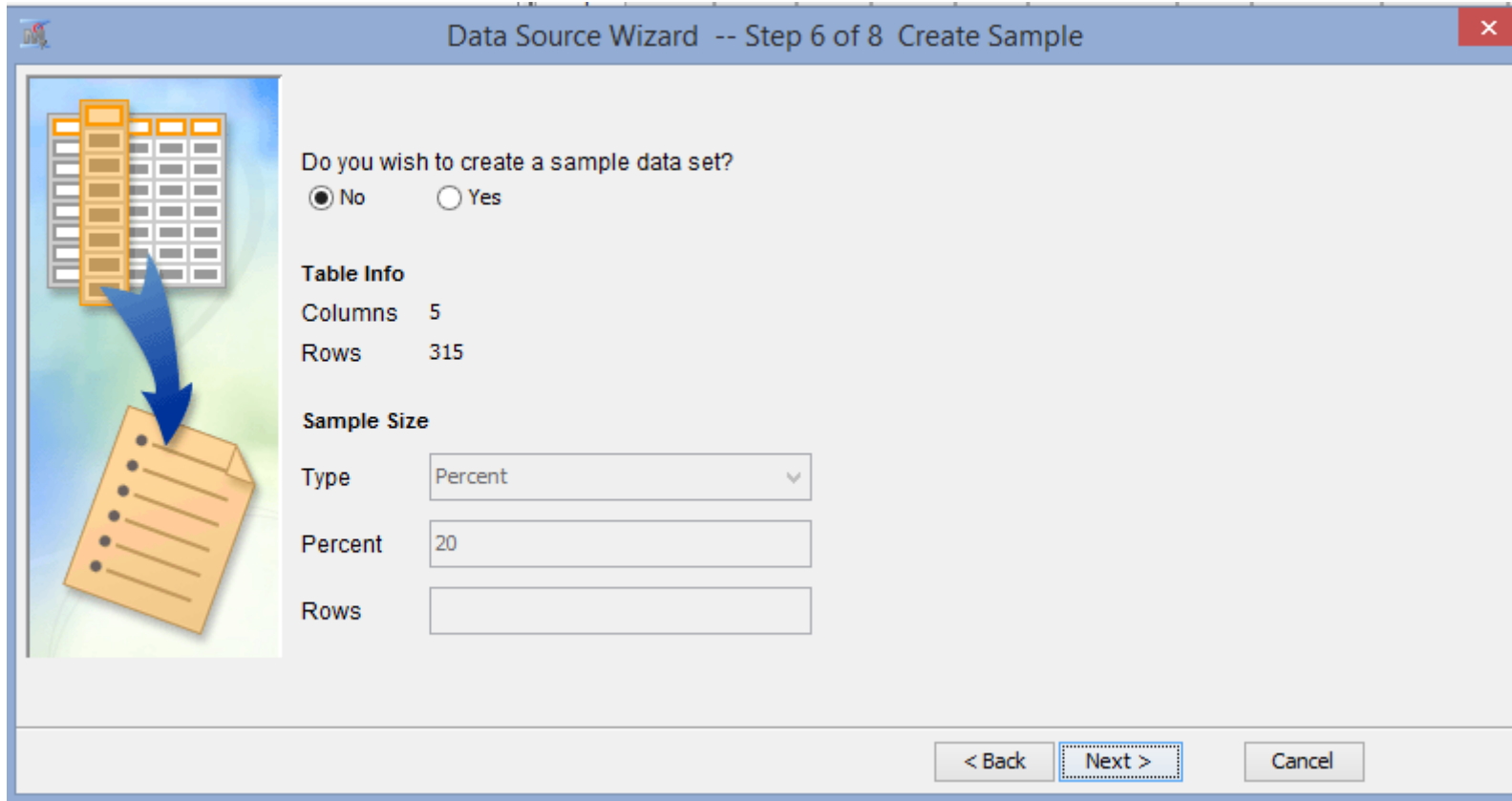
(none) ☐ not Equal to ☐ Apply ☐ Reset

Columns: ☐ Label ☐ Mining ☒ Basic ☐ Statistics

Name	Role	Level	Report	Order	Drop	Lower Limit	Upper Limit
Survey_No	Input	Interval	No		No	.	
Why_Best_Lyly	Text	Nominal	No		No	.	
Why_Fav_Stop	Text	Nominal	No		No	.	
Why_Least_Fav	Text	Nominal	No		No	.	
Why_Worst_Lyly	Text	Nominal	No		No	.	

Show code Explore Compute Summary < Back **Next >** Cancel

You may choose to sample the dataset here, or just keep the full dataset, then click “Next>”



Data Source Wizard -- Step 6 of 8 Create Sample

Do you wish to create a sample data set?

☒ No ☐ Yes

**Table Info**

Columns 5

Rows 315

**Sample Size**

Type

Percent

Percent

20

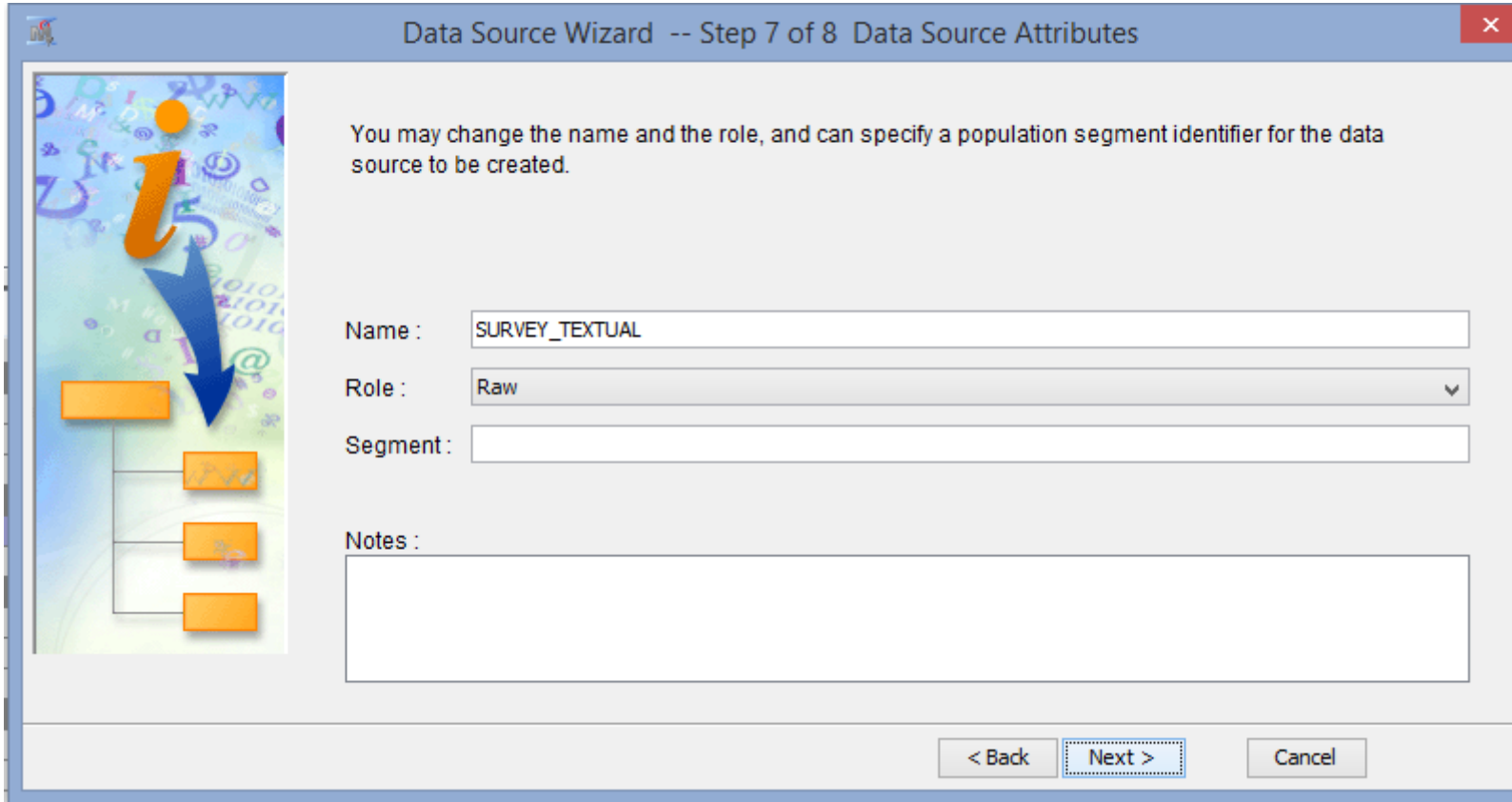
Rows

< Back

Next >

Cancel

You may choose to adjust the role of the dataset, or leave it as the default, then click “Next>”



The image shows a screenshot of the 'Data Source Wizard' window, specifically Step 7 of 8, titled 'Data Source Attributes'. The window has a blue header bar with the title and a red close button. On the left side, there is a vertical sidebar with a colorful background featuring a large orange 'i' icon, a blue arrow pointing down, and several orange rectangular boxes. The main area of the window contains the following text and fields:

You may change the name and the role, and can specify a population segment identifier for the data source to be created.

Name :

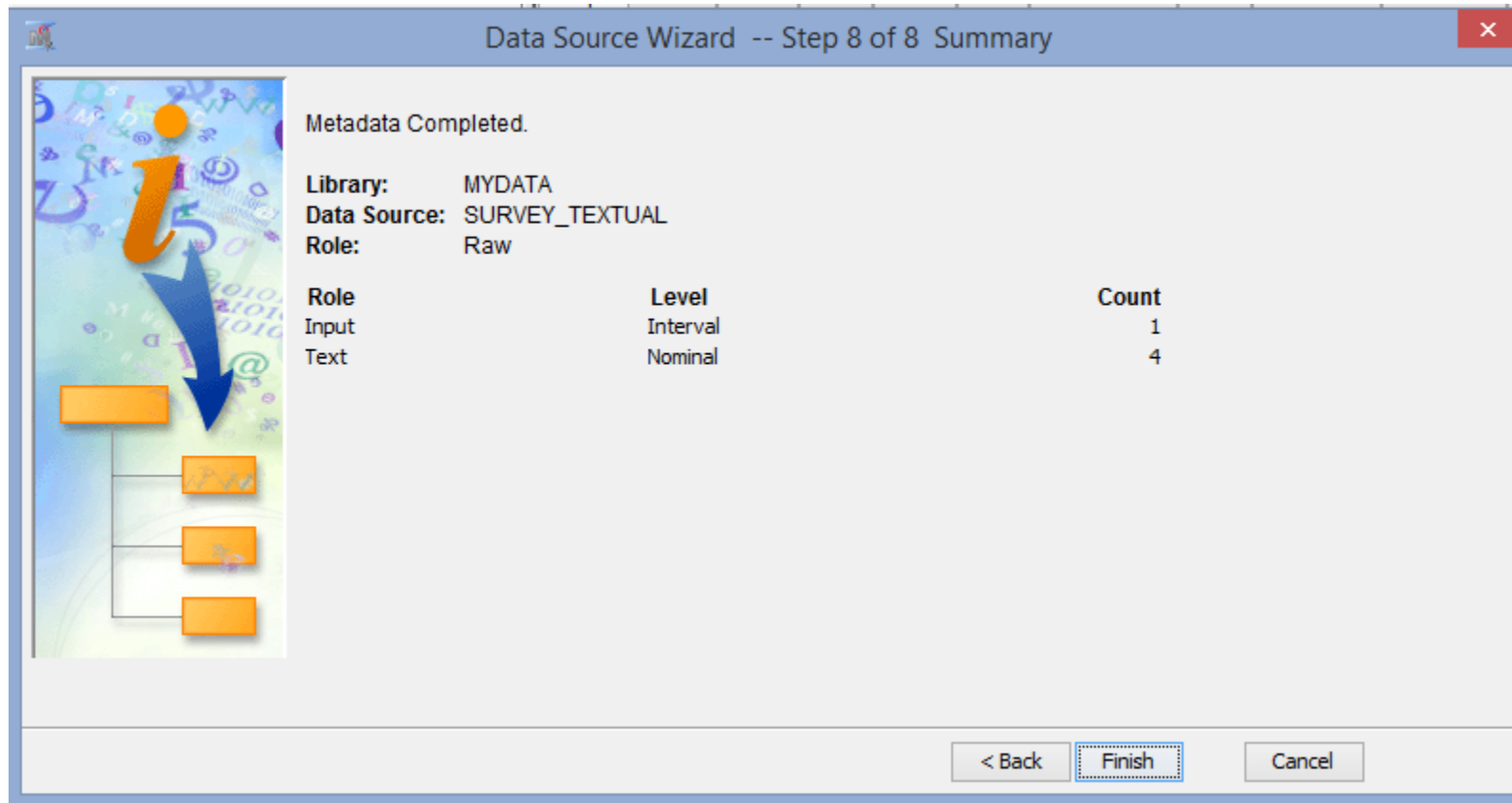
Role :

Segment :

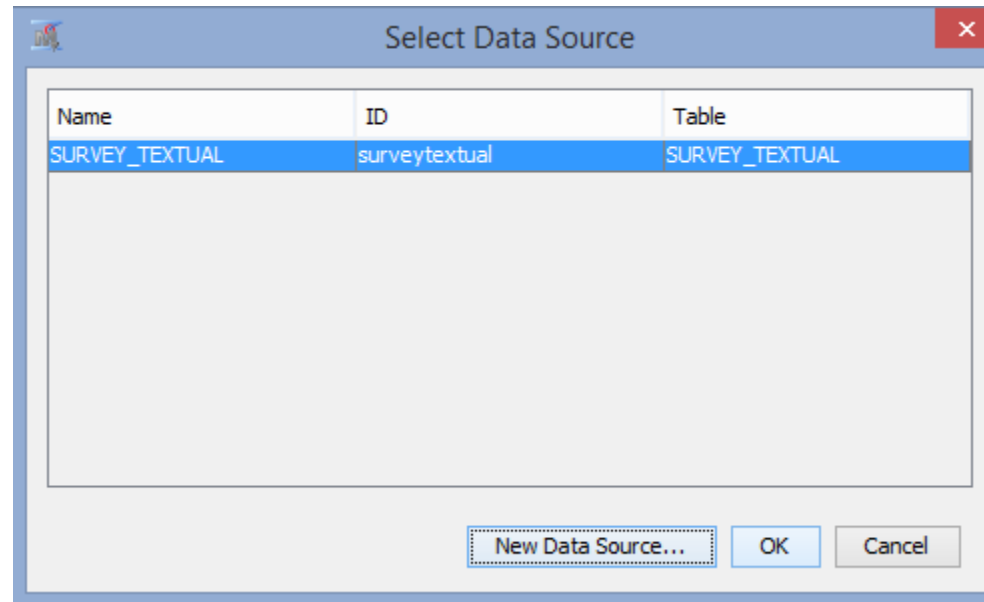
Notes :

At the bottom right, there are three buttons: '< Back', 'Next >' (which is highlighted with a dashed border), and 'Cancel'.

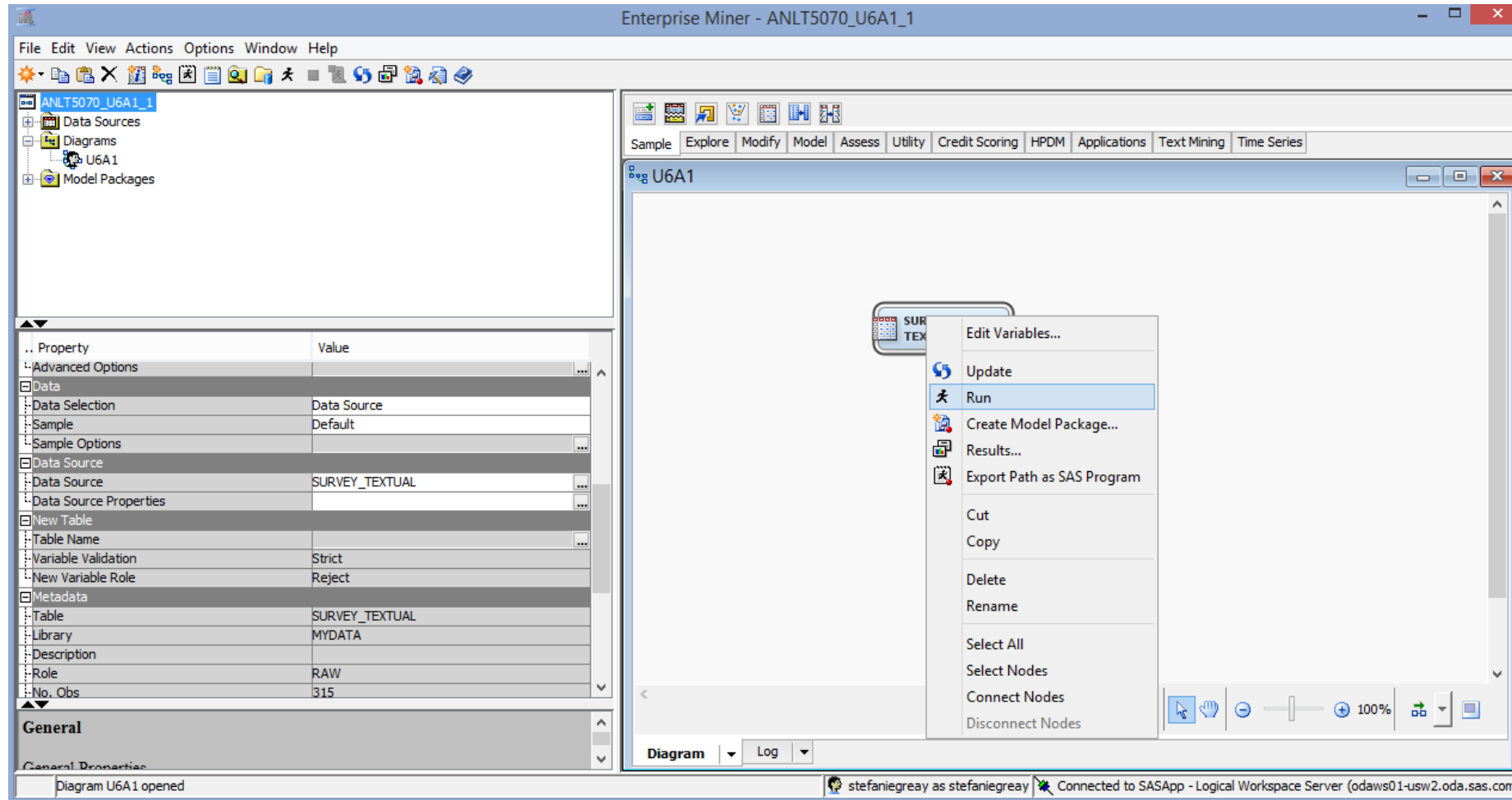
Click “Finish” to finish the data source registration within EM.



Click “OK” to complete the process. The name of the node should then change to the name of the dataset.

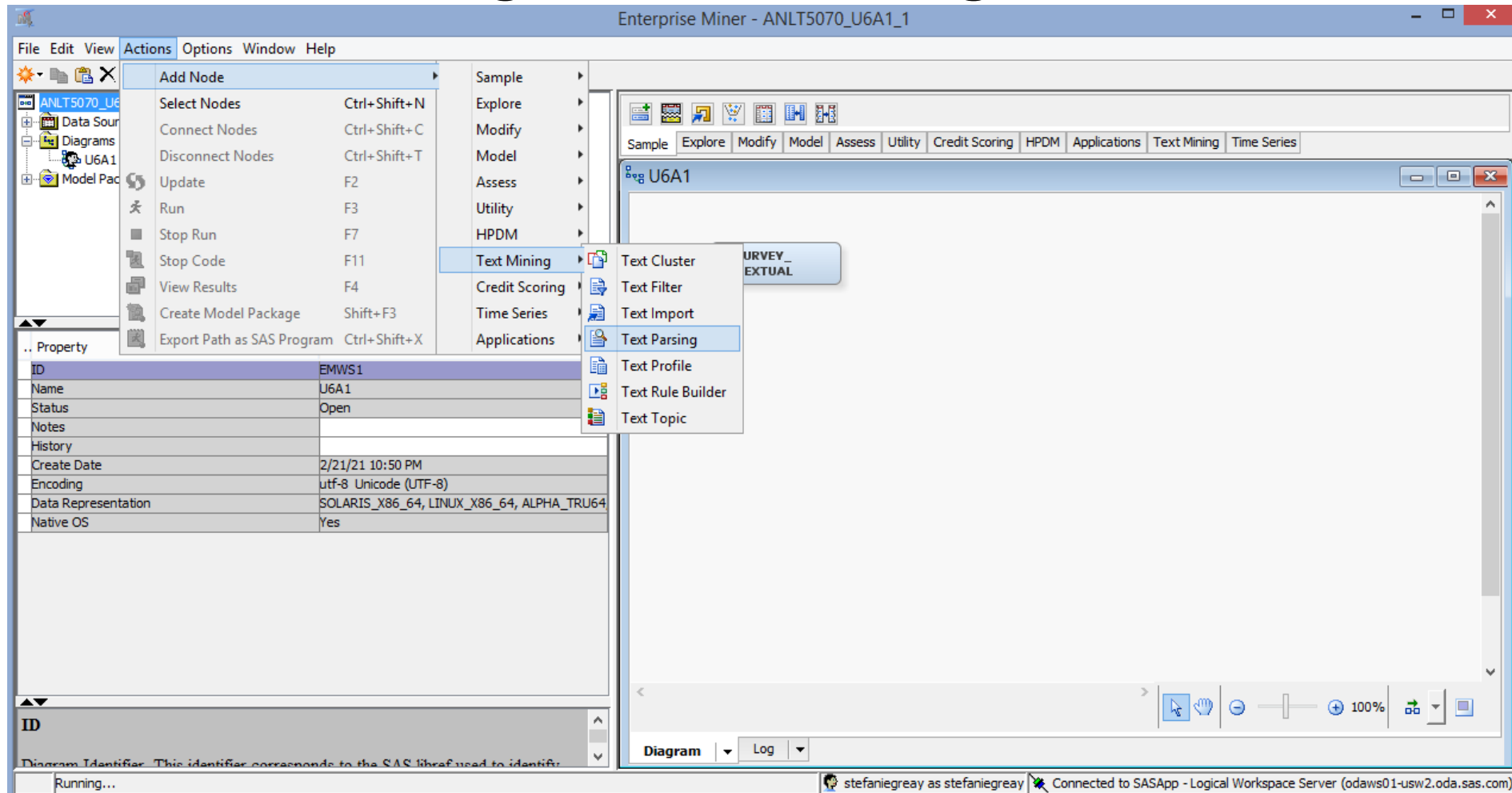


# Right click on the dataset node and click “Run.”





To add the Text Parsing node, click on “Actions”>”Add Node”>”Text Mining”>”Text Parsing”



# Connect the nodes

The screenshot displays the SAS Enterprise Miner interface. The main workspace shows a workflow diagram with two nodes: 'SURVEY\_TEXTUAL' (a data source icon) and 'Text Parsing' (a process icon). An arrow connects the output of 'SURVEY\_TEXTUAL' to the input of 'Text Parsing'.

The left sidebar contains a project tree with the following structure:

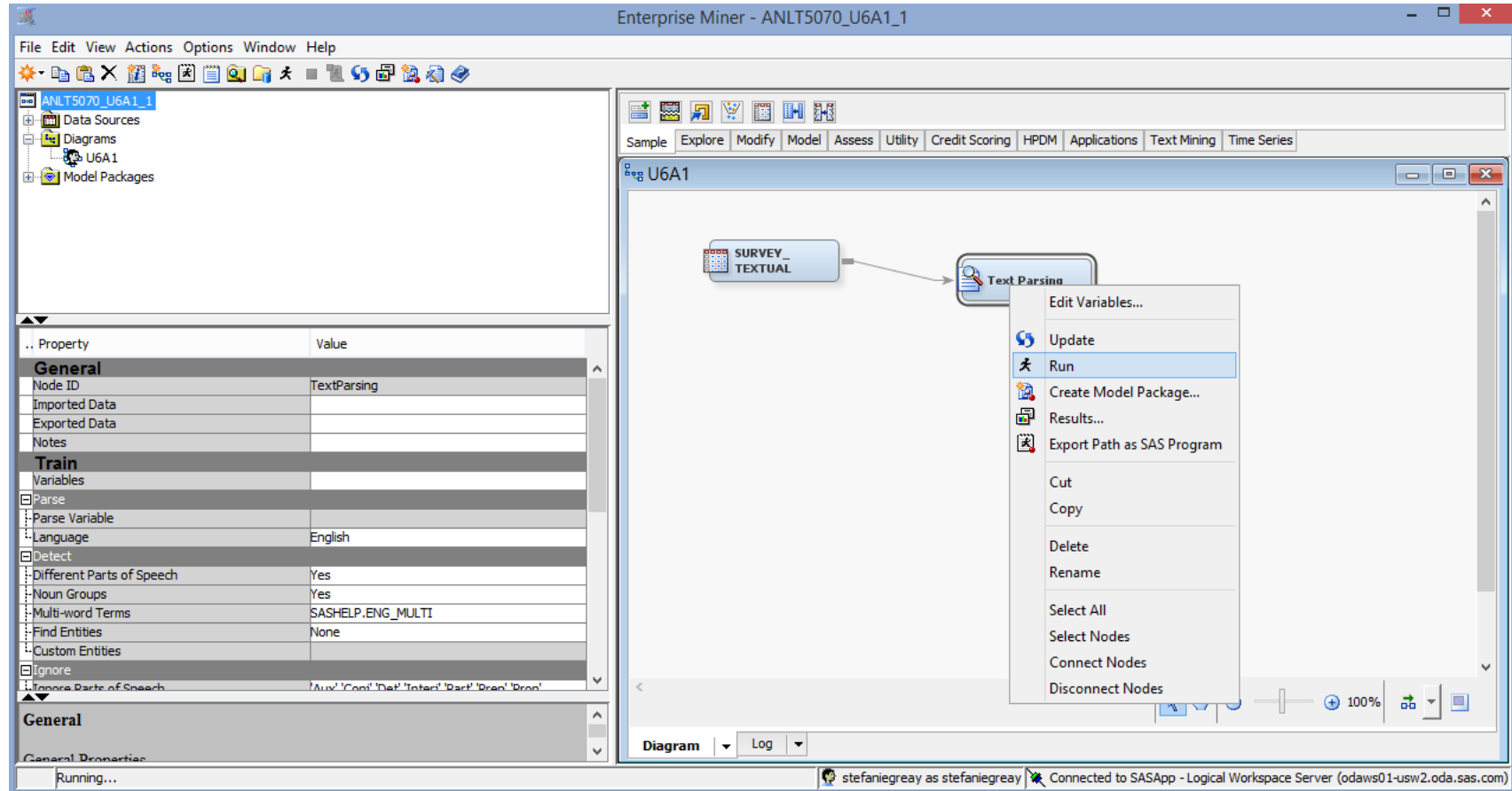
- ANLT5070\_U6A1\_1
  - Data Sources
  - Diagrams
    - U6A1
  - Model Packages

Below the project tree is a properties pane with a table of properties:

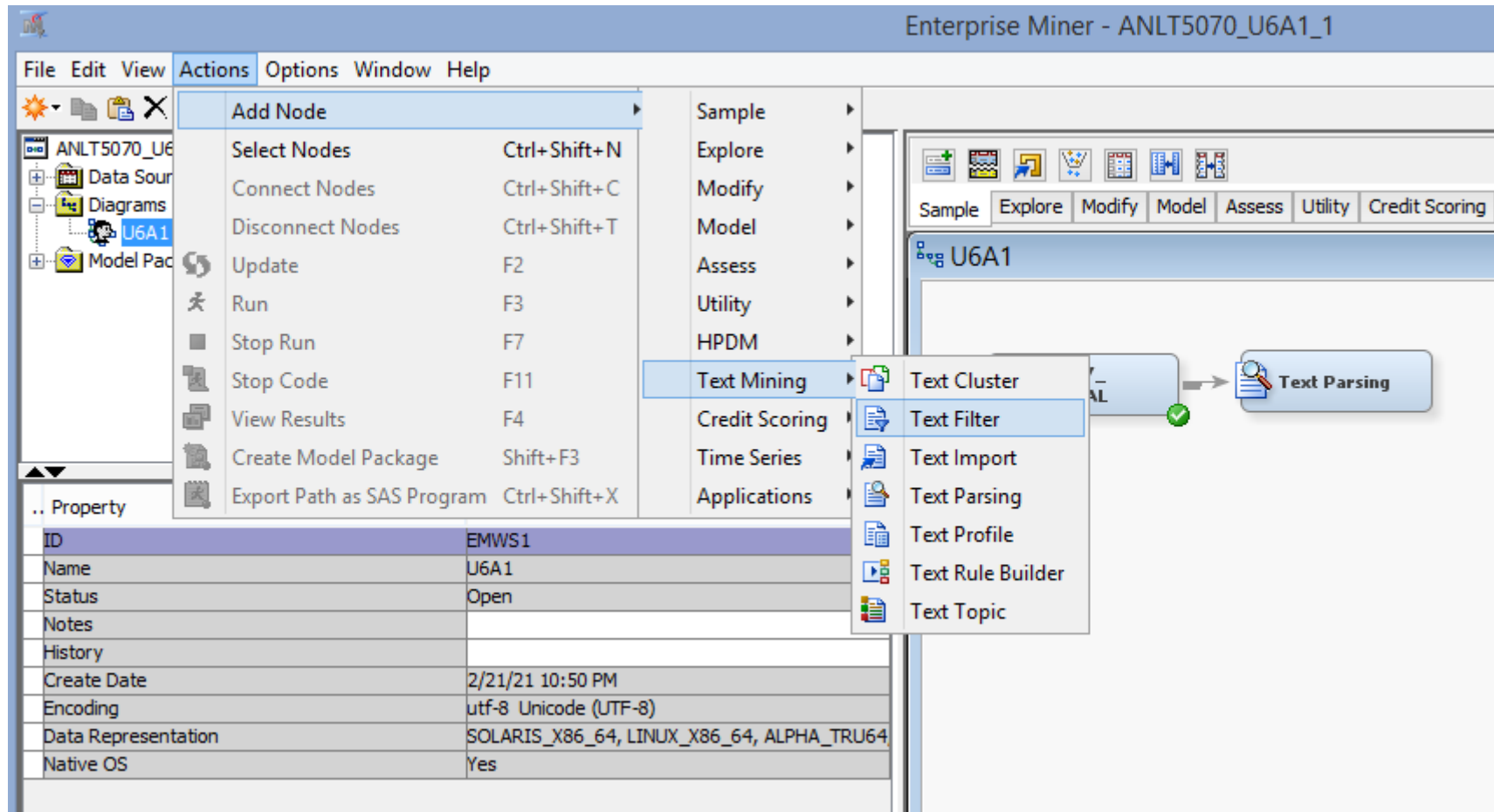
Property	Value
<b>General</b>	
Node ID	TextParsing
Imported Data	
Exported Data	
Notes	
<b>Train</b>	
Variables	
<b>Parse</b>	
Parse Variable	
Language	English
<b>Detect</b>	
Different Parts of Speech	Yes
Noun Groups	Yes
Multi-word Terms	SASHELP.ENG_MULT
Find Entities	None
Custom Entities	
<b>Ignore</b>	
Ignore Parts of Speech	Aux' 'Conj' 'Det' 'Inter' 'Part' 'Prep' 'Pron'

The bottom status bar shows the user 'stefaniegreay as stefaniegreay' and the connection 'Connected to SASApp - Logical Workspace Server (odaws01-usw2.oda.sas.com)'.

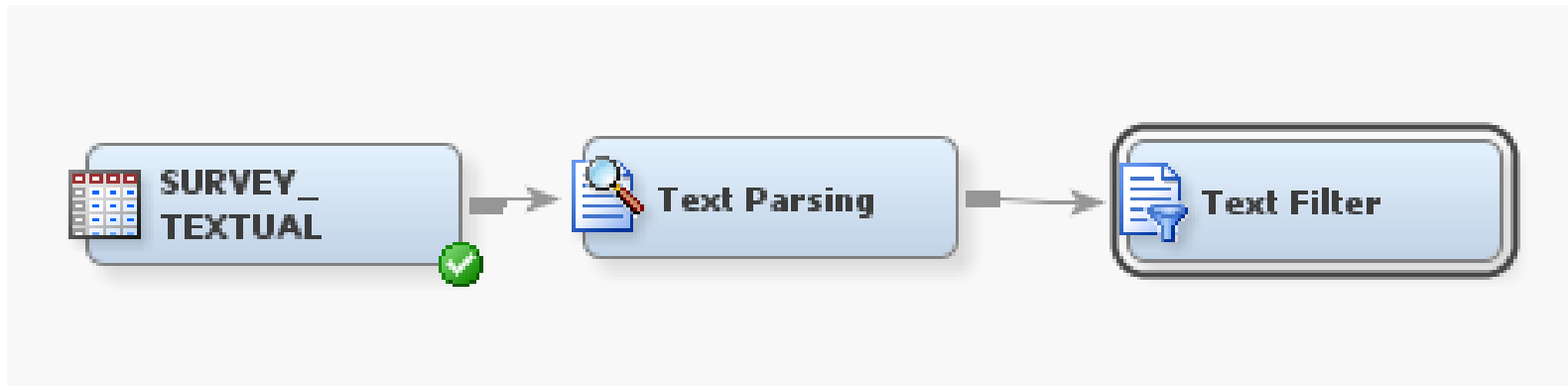
# Run the Text Parsing node using the default values by right clicking and selecting “Run.”



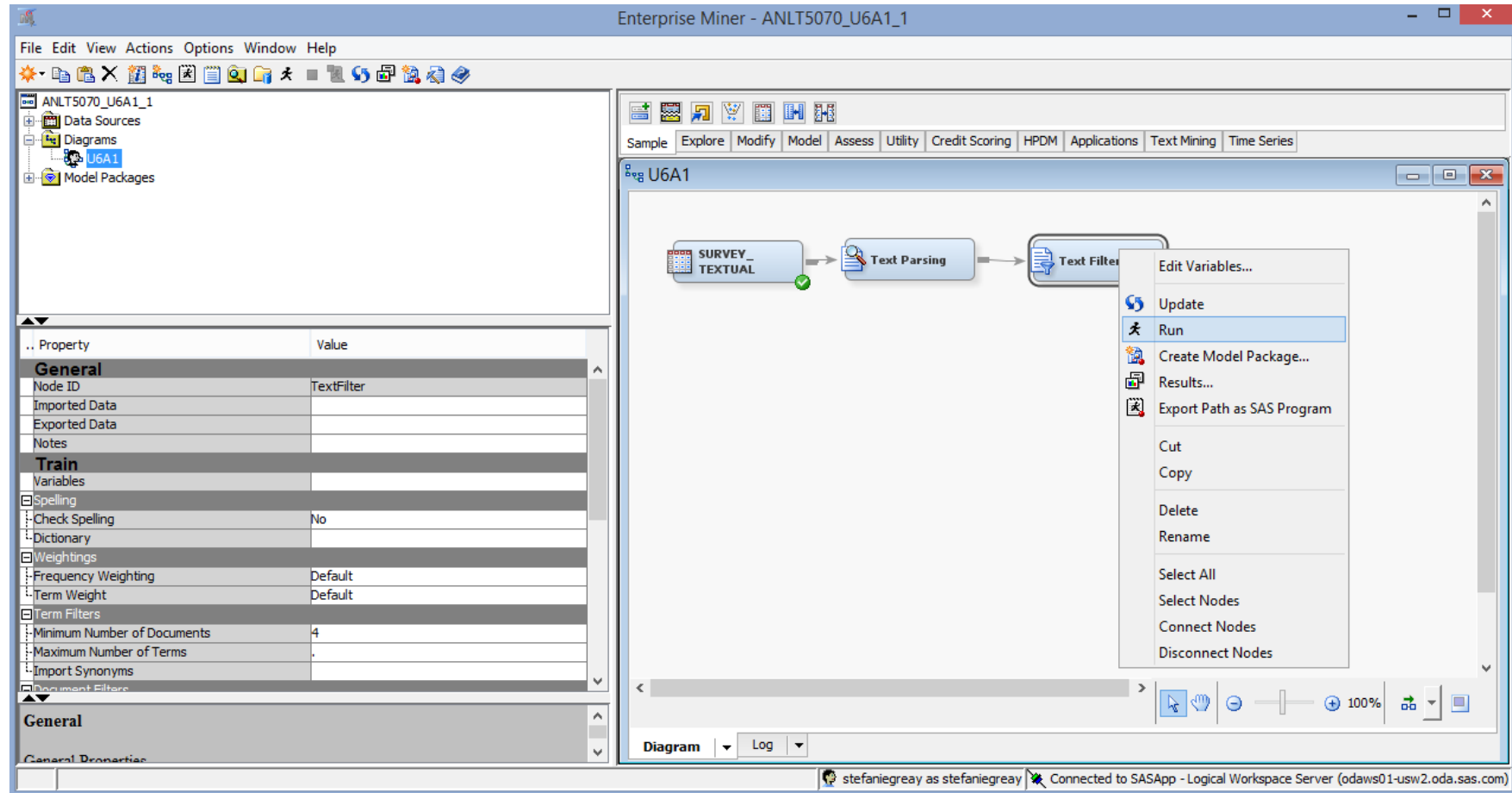
To add the Text Filter node, click on  
“Actions”>“Add Node”>“Text Mining”>“Text Filter”



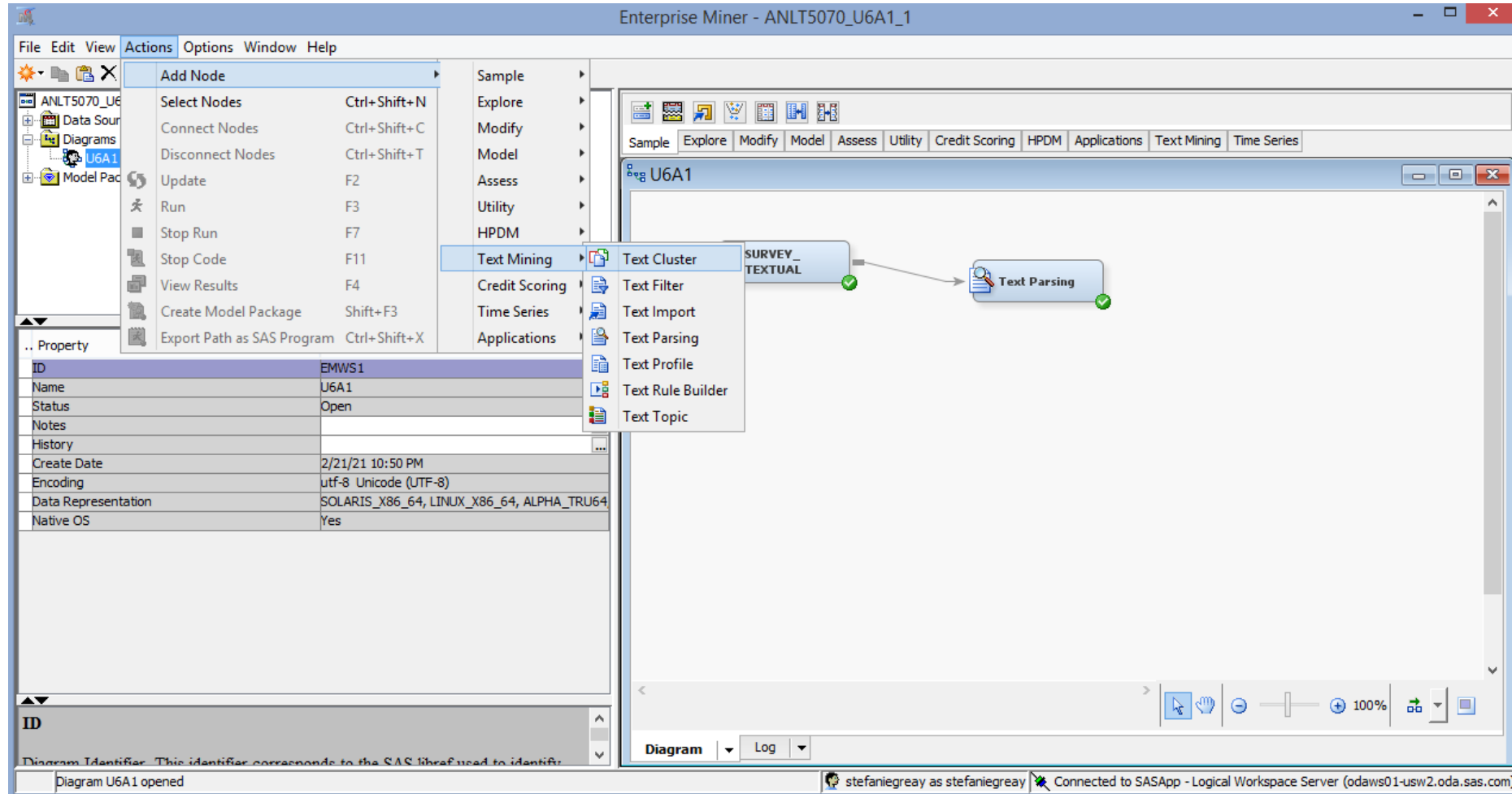
# Connect the nodes



# Run the Text Filter node using the default values by right clicking and selecting “Run.”



Add the Text Cluster node by clicking on “Actions”>”Add Node”>”Text Mining”>”Text Cluster”



# Connect the nodes

The screenshot displays the SAS Enterprise Miner interface for a project named 'ANLT5070\_U6A1\_1'. The left sidebar shows a tree view with 'Data Sources', 'Diagrams', 'U6A1', and 'Model Packages'. The 'U6A1' diagram is selected, showing a workflow with four nodes: 'SURVEY\_TEXTUAL', 'Text Parsing', 'Text Filter', and 'Text Cluster'. The 'Text Cluster' node is highlighted with a red border and a red 'X' icon, indicating an error or a step that needs attention. Below the diagram, three additional 'Text Cluster' nodes are listed: 'Text Cluster (3)', 'Text Cluster (4)', and 'Text Cluster (2)', with 'Text Cluster (2)' also having a red border and a red 'X' icon.

The bottom-left pane shows the 'General' properties for the selected 'Text Cluster' node. The table below lists the properties and their values:

Property	Value
<b>General</b>	
Node ID	TextCluster
Imported Data	
Exported Data	
Notes	
<b>Train</b>	
Variables	
<b>Transform</b>	
SVD Resolution	Low
Max SVD Dimensions	100
<b>Cluster</b>	
Exact or Maximum Number	Maximum
Number of Clusters	40
Cluster Algorithm	Expectation-Maximization
Descriptive Terms	15
<b>Status</b>	
Create Time	2/21/21 11:30 PM
Run ID	
<b>General</b>	
General Properties	
Running Text Parsing	

The bottom status bar shows the user 'stefaniegreay' is connected to the SASApp - Logical Workspace Server (odaws01-usw2.oda.sas.com).



# Edit the variables of the Text Cluster node by right clicking on the node and selecting “Edit Variables.”

The screenshot displays the Enterprise Miner - ANLT5070\_U6A1\_1 application window. The interface includes a menu bar (File, Edit, View, Actions, Options, Window, Help), a toolbar, and a left-hand tree view showing the project structure: ANLT5070\_U6A1\_1, Data Sources, Diagrams (U6A1), and Model Packages. The main workspace shows a workflow diagram with nodes: SURVEY\_TEXTUAL, Text Parsing, Text Filter, and a partially visible Text Cluster node. A right-click context menu is open over the Text Cluster node, listing options: Edit Variables..., Update, Run, Create Model Package..., Results..., Export Path as SAS Program, Cut, Copy, Delete, Rename, Select All, Select Nodes, Connect Nodes, and Disconnect Nodes. The bottom status bar indicates the user is 'stefaniegray as stefaniegray' and is 'Connected to SASApp - Logical Workspace Server (odaws01-usw2.oda.sas.com)'.

Enterprise Miner - ANLT5070\_U6A1\_1

File Edit View Actions Options Window Help

ANLT5070\_U6A1\_1

- Data Sources
- Diagrams
  - U6A1
- Model Packages

U6A1

SURVEY\_TEXTUAL → Text Parsing → Text Filter → Text Cluster

Text Cluster (3)

Text Cluster (4)

Text Cluster (2)

Edit Variables...

- Update
- Run
- Create Model Package...
- Results...
- Export Path as SAS Program
- Cut
- Copy
- Delete
- Rename
- Select All
- Select Nodes
- Connect Nodes
- Disconnect Nodes

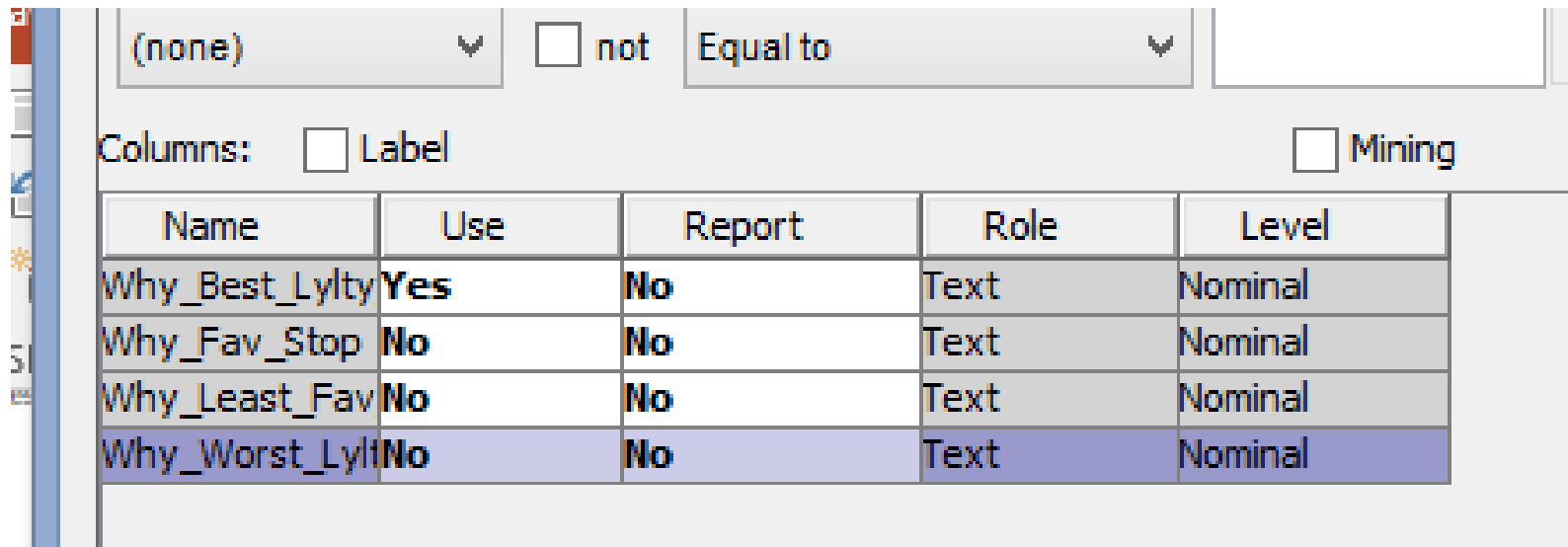
Diagram Log

Running Text Parsing

stefaniegray as stefaniegray Connected to SASApp - Logical Workspace Server (odaws01-usw2.oda.sas.com)

Change all but the first variable to “No” and change the first variable (Why\_Best\_Lyly) to “Yes” for “Use,” then click OK.

Repeat this process for each of the variables (with one cluster node for each, with only that variable listed as YES for use within each text cluster node).



(none) ☐ not Equal to

Columns: ☐ Label ☐ Mining

Name	Use	Report	Role	Level
Why_Best_Lyly	Yes	No	Text	Nominal
Why_Fav_Stop	No	No	Text	Nominal
Why_Least_Fav	No	No	Text	Nominal
Why_Worst_Lyly	No	No	Text	Nominal

Click on the Text Cluster node and edit the settings in the left property pane as shown

The screenshot displays the SAS Enterprise Miner software interface. The main window is titled "Enterprise Miner - ANLT5070\_U6A1\_1". The left pane shows a project tree with "ANLT5070\_U6A1\_1" expanded, containing "Data Sources", "Diagrams", "U6A1", and "Model Packages". The "U6A1" diagram is selected, showing a workflow: "SURVEY\_TEXTUAL" (green checkmark) → "Text Parsing" (green checkmark) → "Text Filter" (green checkmark) → "Text Cluster" (green checkmark). The "Text Cluster" node is highlighted, and its properties are shown in the left pane. The properties are organized into sections: General, Train, Transform, Cluster, Status, and Number of Clusters. The "Cluster" section is expanded, showing settings for "Exact or Maximum Number", "Number of Clusters", "Cluster Algorithm", and "Descriptive Terms".

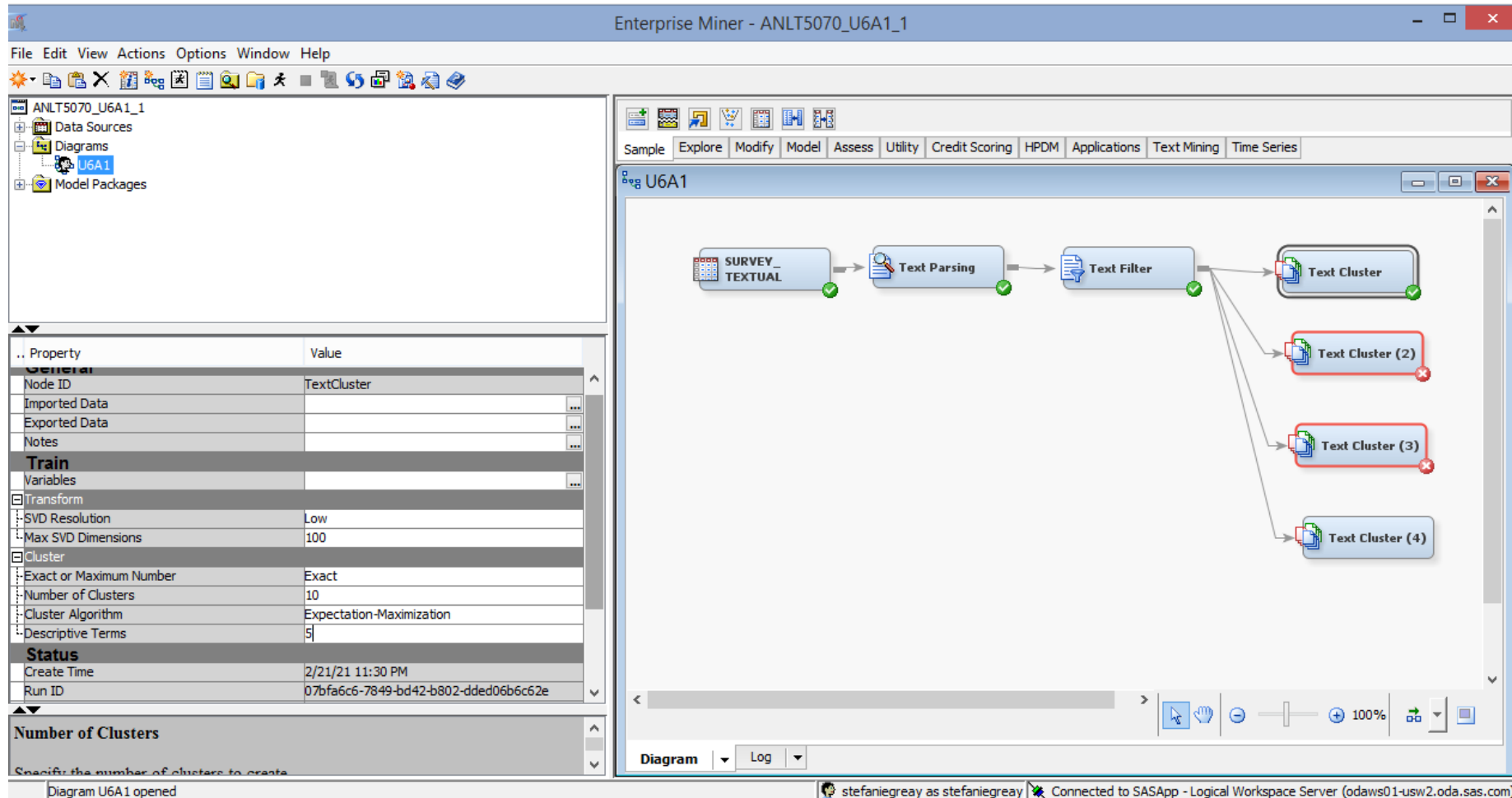
Property	Value
<b>General</b>	
Node ID	TextCluster
Imported Data	
Exported Data	
Notes	
<b>Train</b>	
Variables	
<b>Transform</b>	
SVD Resolution	Low
Max SVD Dimensions	100
<b>Cluster</b>	
Exact or Maximum Number	Exact
Number of Clusters	10
Cluster Algorithm	Expectation-Maximization
Descriptive Terms	5
<b>Status</b>	
Create Time	2/21/21 11:30 PM
Run ID	07bfa6c6-7849-bd42-b802-dded06b6c62e
<b>Number of Clusters</b>	
Specify the number of clusters to create	

The workflow diagram shows the following steps:

- SURVEY\_TEXTUAL (green checkmark)
- Text Parsing (green checkmark)
- Text Filter (green checkmark)
- Text Cluster (green checkmark)
- Text Cluster (2) (red X)
- Text Cluster (3) (red X)
- Text Cluster (4) (green checkmark)

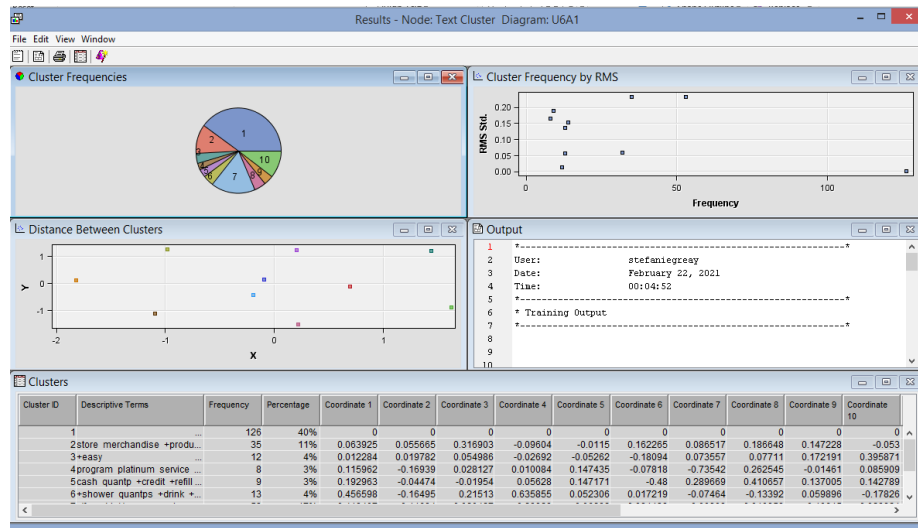
The status bar at the bottom indicates: "Diagram U6A1 opened" and "stefaniegreay as stefaniegreay Connected to SASApp - Logical Workspace Server (odaws01-usw2.oda.sas.com)".

The completed diagram should look like this.  
Right click on each Cluster Node to run them.



Remember to edit the appropriate areas within the text parsing and text filtering nodes to utilize a dictionary, change parts of speech options, etc. as we have in previous assignments.

The results can be reviewed by right clicking on each of the text cluster nodes and exploring the resulting summaries or exploring the output dataset (by clicking on the ellipses next to “export datasets” from this node that contains the original dataset as well as the cluster assignment for each observation.



Port	Table	Role	Data Exists
TRAIN	EMWS1.TextCluster_TRAIN	Train	Yes
VALIDATE	EMWS1.TextCluster_VALIDATE	Validate	No
TEST	EMWS1.TextCluster_TEST	Test	No
SCORE	EMWS1.TextCluster_SCORE	Score	No
TRANSACTION	EMWS1.TextCluster_TRANSACT...	Transaction	No

**Property Value**

**General**

Node ID: TextCluster

Imported Data:

Exported Data:

Notes:

**Train**

Variables:

Transform:

SVD Resolution: Low

Max SVD Dimensions: 100

**Cluster**

Exact or Maximum Number: Exact

Number of Clusters: 10

Browse... Explore... Properties... OK