

SASEG 0 Exercise – Accessing UA Resources SAS Enterprise Guide and Enterprise Miner Fundamentals - Getting Started

Paul Cronan, Michael Gibbs, and Ron Freeze

(Fall 2017)

Sources (adapted with permission) -

T. P. Cronan, Michael Gibbs, Jeff Mullins, and David E. Douglas Course and Classroom Notes
Enterprise Systems, Sam M. Walton College of Business, University of Arkansas, Fayetteville

Microsoft Enterprise Consortium

IBM Academic Initiative

SAS® Multivariate Statistics Course Notes & Workshop, 2010

SAS® Advanced Business Analytics Course Notes & Workshop, 2010

Microsoft® Notes

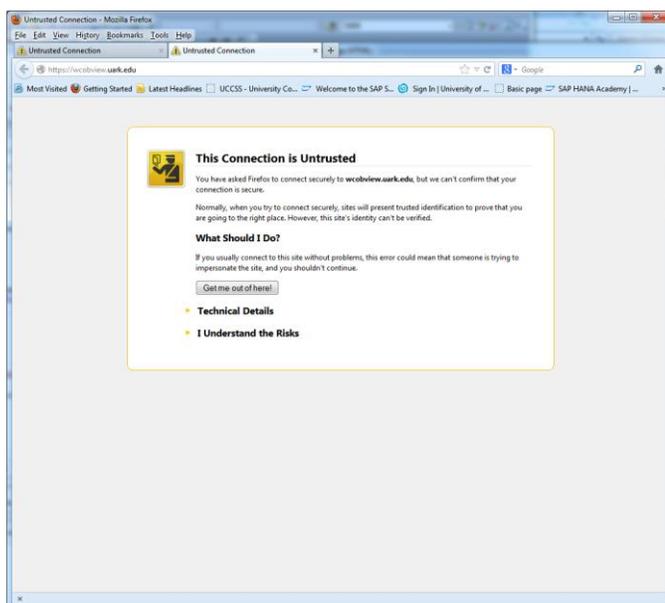
Teradata® University Network

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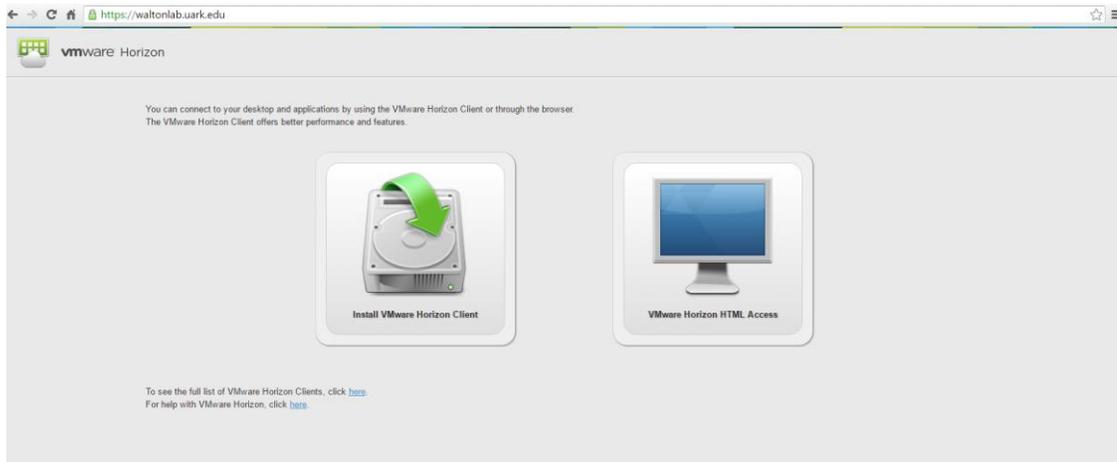
1. VMWare – Accessing UA Resources

1.1. Instructions to access virtual desktop infrastructure:

- **Open a browser and go to: <https://waltonlab.uark.edu>** (Firefox: Click “I understand the risks”, “Add Exception”, and “Confirm Security Exception”. For IE, simply “Continue”)



- **Click “Install VMWare Horizon Client for Windows”**



- Select the VM Client that corresponds to the machine you are using (Mac, Windows, iPad, etc.) by clicking on the **Product Downloads** tab (Note: For iPad users, it might be better to use the App Store, Search for VMWare)
- Click **“Go to Downloads”**

Download VMware Horizon Clients

Select Version: VMware Horizon Clients for Windows, Mac, iOS, Linux, and Android allow you to connect to your VMware Horizon virtual desktop from your device of choice giving you on-the-go access from any location.

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[VMware View Mobile Client Privacy](#)

[Horizon View Community](#)

[How to get the Horizon \(with View\) Client for Linux](#)

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Product	Release Date	
VMware Horizon Client for Mac VMware Horizon Client for Mac	2016-09-15	Go to Downloads
VMware Horizon Client for Linux VMware Horizon Client for 64-bit Linux VMware Horizon Client for 32-bit Linux	2016-09-15 2016-09-15	Go to Downloads Go to Downloads
VMware Horizon Client for iOS VMware Horizon Client for iOS	2016-09-15	Go to Downloads
VMware Horizon Client for Windows VMware Horizon Client for 32-bit Windows VMware Horizon Client for 64-bit Windows	2016-09-15 2016-09-15	Go to Downloads Go to Downloads
VMware Horizon Client for Android The VMware Horizon client for Android ARM based devices The VMware Horizon client for Android x86 based devices VMware Horizon Client for Kindle Fire in Amazon Appstore for Android The VMware Horizon client for Android ARM based devices from Google Play store	2016-09-15 2016-09-15 2016-09-15 2016-09-15	Go to Downloads Go to Downloads Go to Downloads Go to Downloads

Download VMware Horizon Client for 64-bit Windows

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Description The VMware Horizon Client for 64-bit Windows

Release Date 2016-09-15

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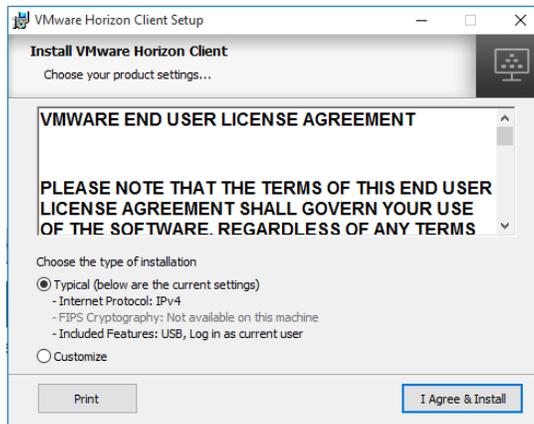
[Product Downloads](#) [Drivers & Tools](#) [Open Source](#) [Custom ISOs](#)

Product/Details

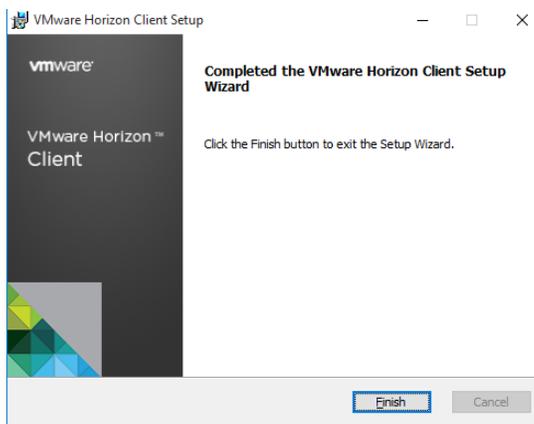
The VMware Horizon client for 64-bit Windows
 File size: 39.19 MB
 File type: .exe file
[Read More](#)

[Download](#)

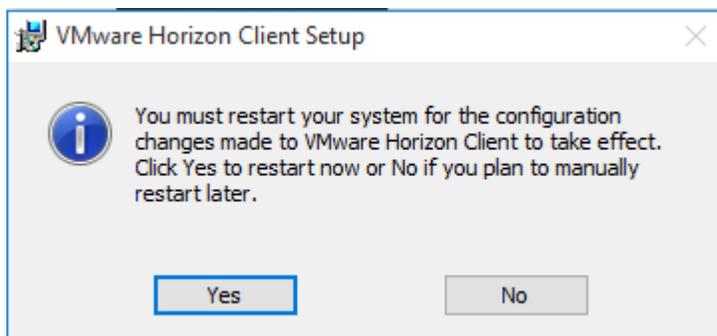
- Click **download**, and run the executable that is downloaded (In the case of Firefox, Save File, and then run)
- leave the **“Typical”** option checked and click on **“I Agree & Install”**



- Click **Finish**



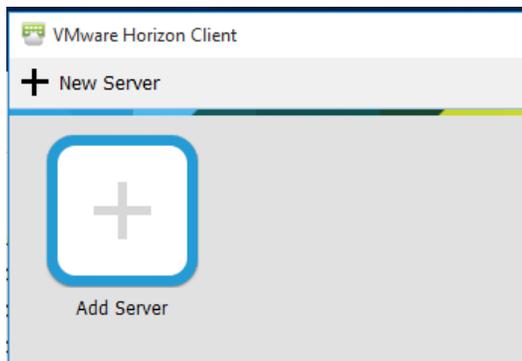
- Click **Yes** to restart the computer



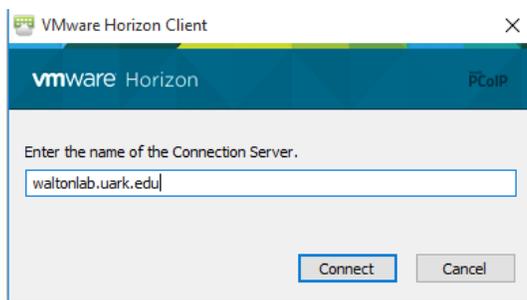
1.2 Run the VMWare Horizon Client



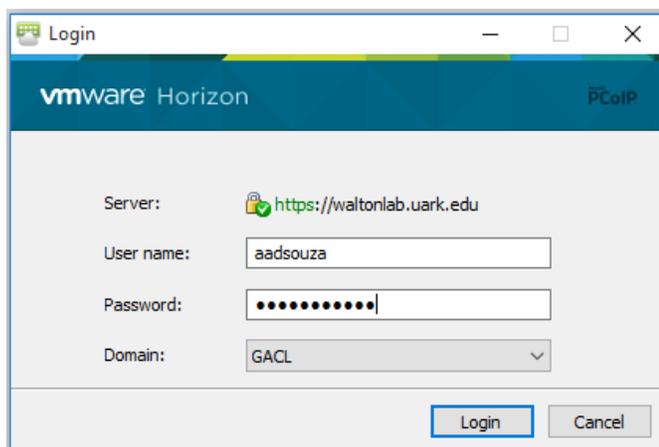
- Double-Click on Add Server



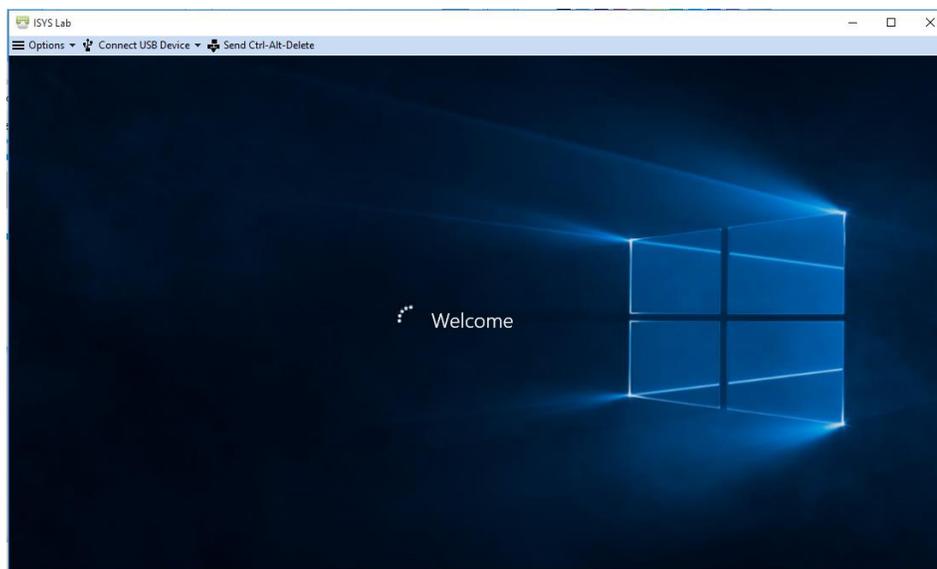
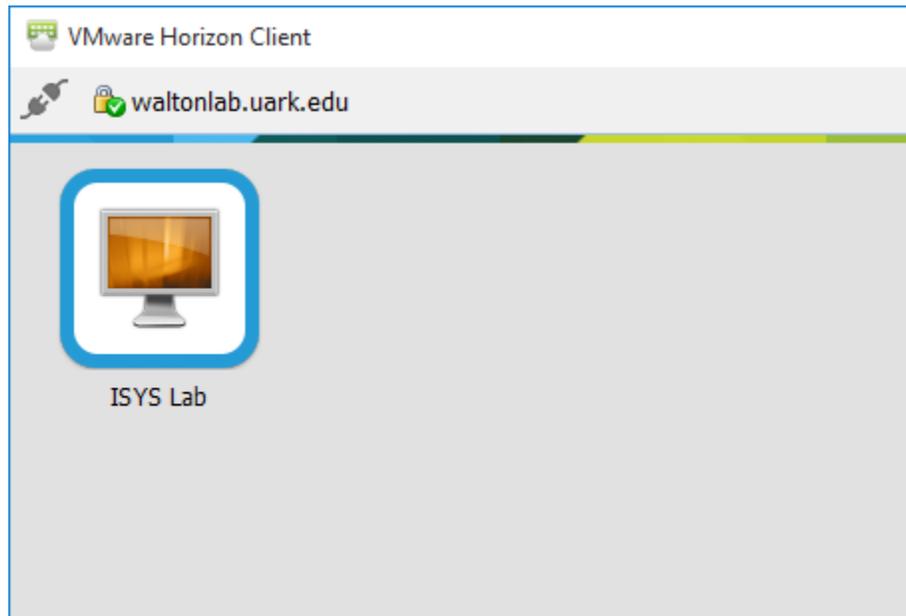
- Enter the name of the connection server as **"waltonlab.uark.edu"**



- Type in your user UARK name, password, and select Domain: GACL



- **(OPTIONAL)** Select the system you wish to connect to, and click Connect. **NOTE: For most students, you will bypass this step and will automatically be connected to the desktop image for which you have been assigned.)**



2.SAS Enterprise Guide 7.1 Basics

2.1. Logging onto the SAS platform via SAS Enterprise Guide 7.1

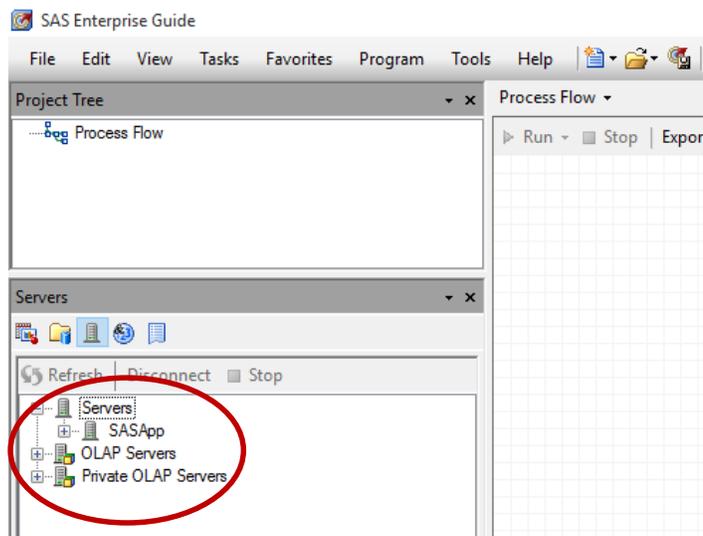
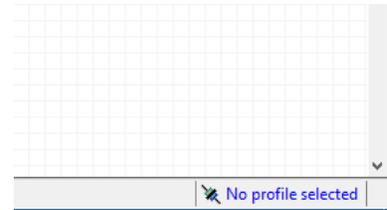
- Double-Click SAS Enterprise Guide 7.1



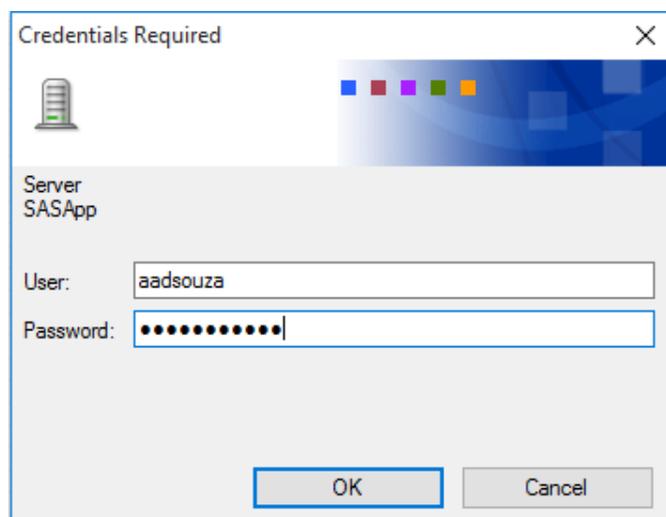
- If the icon does not exist on the desktop
- Go to Windows → All Apps → Scroll down to the **SAS** Drop down → Scroll down to **SAS Enterprise Guide 7.1 (64-bit)**
- The Application will normally pass through your credentials for authentication.
- the screen below is the standard splash screen that can be used to select a task. If closed, a New Project will be created by default. For this example, **select New Project**



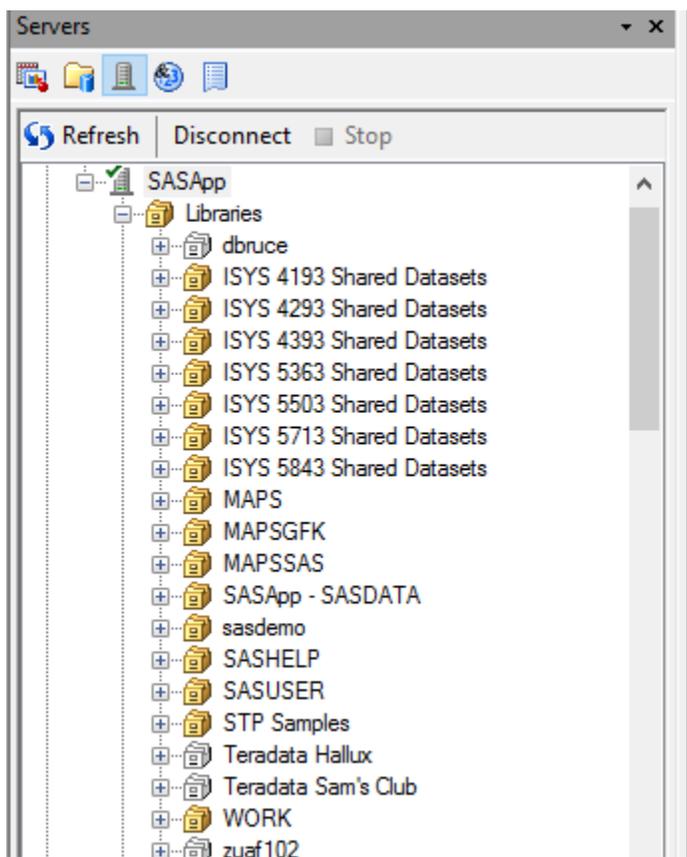
- you will need to Set Default Profile at the first login:
 - Click on the profile link (“No profile selected”) on the bottom right corner
 - Click on profiles and click on Add
 - Enter details as follows
 1. Name: <any name for your profile>
 2. Server: sasms.walton.uark.edu (remote)
 3. Port: 8561
 4. Username: <your UARK username>
 5. Domain: GACL
 - Select newly created profile and set as active.
- Once your profile loads, browse to **Servers > SASApp**



- Provide credentials when prompted for, as seen below



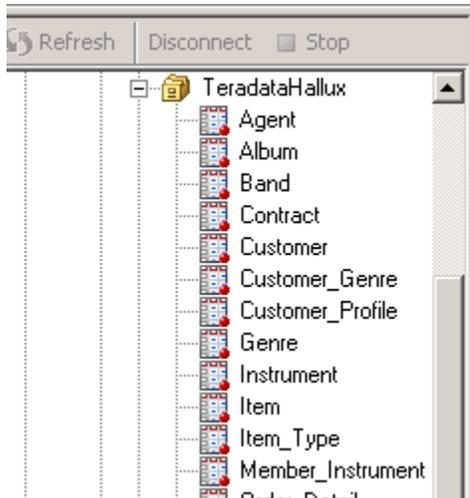
- In the Server List pane, Expand Servers→SASApp→Libraries.
- Ensure that you can expand libraries and see data as below:



Libraries are simply “pointers” in the metadata that point to a physical location on the server or another system where data can be read or written to. In the case of your library (i.e. mtg002), data can both be read from and written to this location. However, other libraries, such as TeradataHallux, point to the UA_HALLUX database on the Teradata platform, and are explicitly read only.

2.2. Creating and saving a project SAS Enterprise Guide 7.1

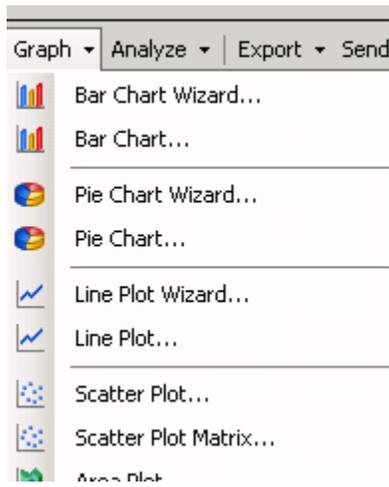
- Expand the **TeradataHallux** Library



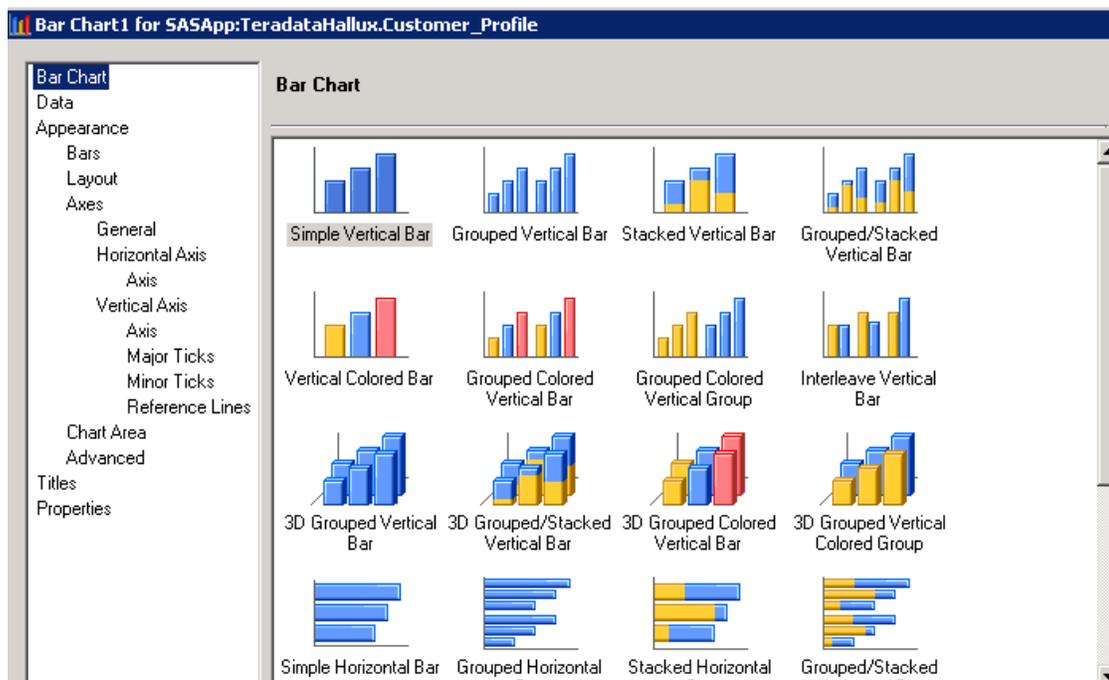
- Double click on the **“Customer_Profile”** dataset

	Profile_ID	Favorite_Band	Favorite_Album	Favorite_Song	Birthdate	Gender
1	107830	1365	20620	499306	14OCT1945	M
2	101794	1379	27581	541632	24OCT1966	F
3	105466	1204	24083	525206	23MAY1941	F
4	105262	1063	21261	467227	25SEP1953	F
5	103672	1378	27562	464431	14SEP1954	M
6	107462	1116	25863	440946	16JUL1950	M
7	107424	1311	22827	536103	24FEB1971	F
8	101266	1062	21240	504832	10FEB1942	F
9	100124	1054	21887	417204	04NOV1976	F
10	102326	1232	20824	440891	15NOV1948	F
11	100368	1232	24643	548021	18DEC1951	M
12	100694	1096	21922	436505	12MAY1953	F
13	104284	1262	26944	420008	31DEC1962	F
14	109340	1148	22960	493287	28DEC1947	M
15	102896	1383	27662	478429	02APR1968	F
16	104894	1033	20662	466861	25AUG1955	F
17	101428	1340	24470	438504	20JUN1974	M
18	105426	1025	20500	454807	12JAN1941	M
19	102000	1110	22206	413668	28JUL1938	M
20	109586	1074	21481	425728	27SEP1953	F
21	104202	1268	25360	448415	27MAR1945	M
22	108198	1193	23862	462824	01NOV1946	F
23	104730	1164	22962	552124	28FEB1960	M
24	104080	1009	20187	526809	29OCT1974	M
25	107628	1170	22921	503691	23OCT1964	M
26	100856	1225	24504	416403	16JAN1965	M
27	108566	1041	20825	531624	30MAY1972	F
28	106648	1238	21763	521213	27SEP1957	F
29	103876	1121	22421	551710	21JUL1948	F
30	108158	1183	23660	543662	30MAY1966	F
31	107382	1385	27705	466411	26FEB1950	F
32	101264	1323	26461	429648	18DEC1968	F
33	108606	1103	22065	512003	20JAN1974	M
34	104528	1172	23441	516102	29JUN1949	M
35	109382	1252	24320	546802	29JUN1949	M

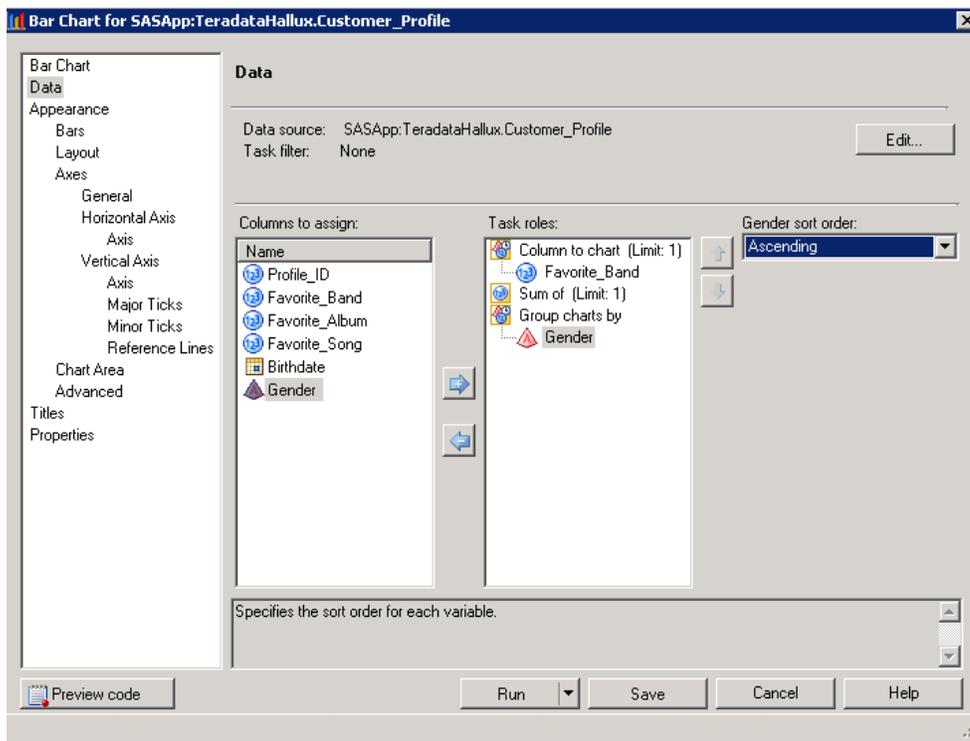
- This dataset is now part of your SAS project. Now, let's create a few graphs to show favorite bands, sorted by gender. **Select Graph→Bar Chart**



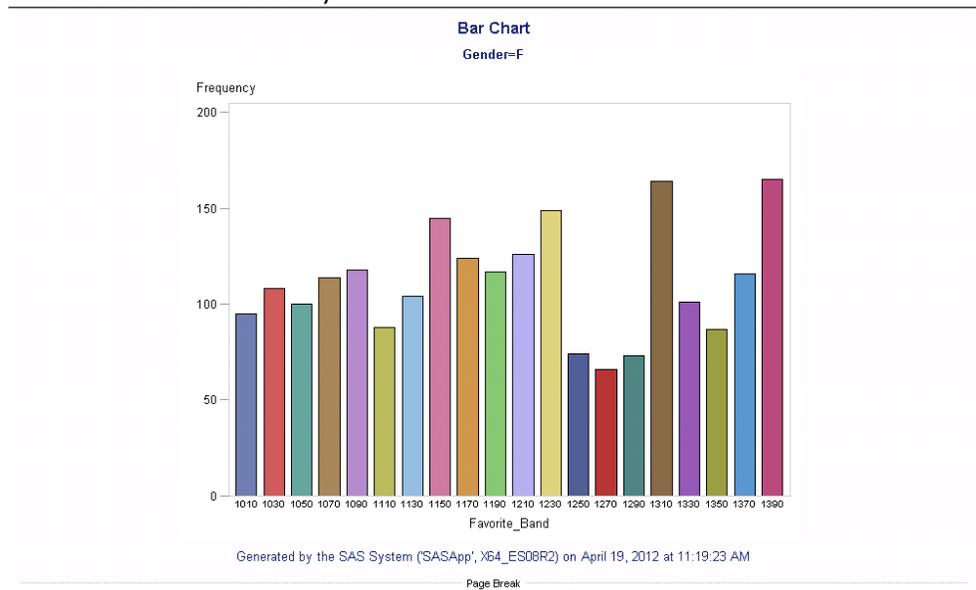
- Double-Click “Vertical Color Bar”



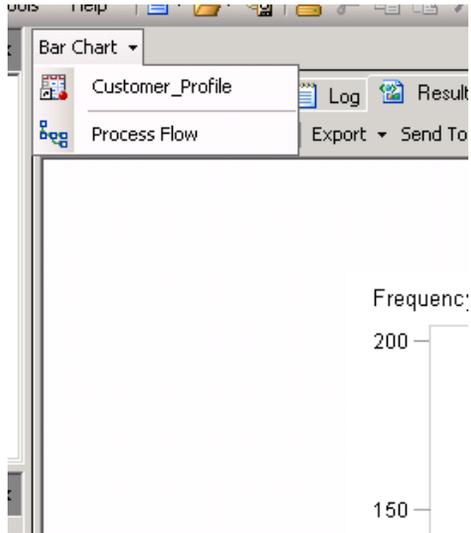
- Drag “Favorite_Band” to the empty “Column to Chart” box, and drag “Gender” onto the “Group charts by” box



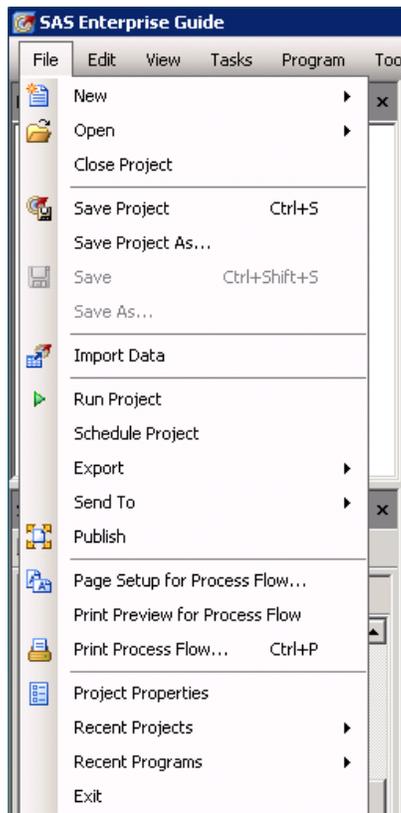
- Click **Run**. You should now see the graphs you requested (Scroll down to see the band code distribution for males)



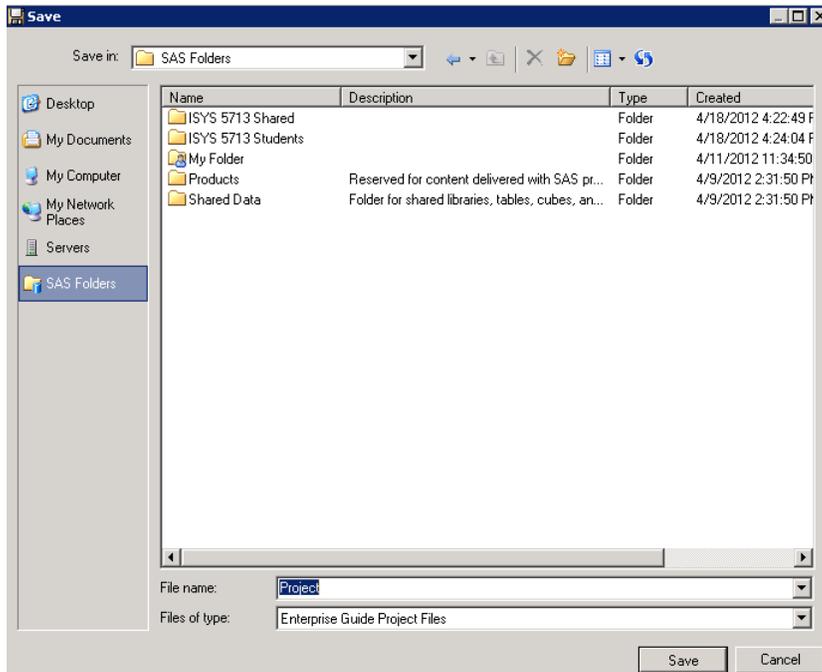
- Return to the Process Flow view



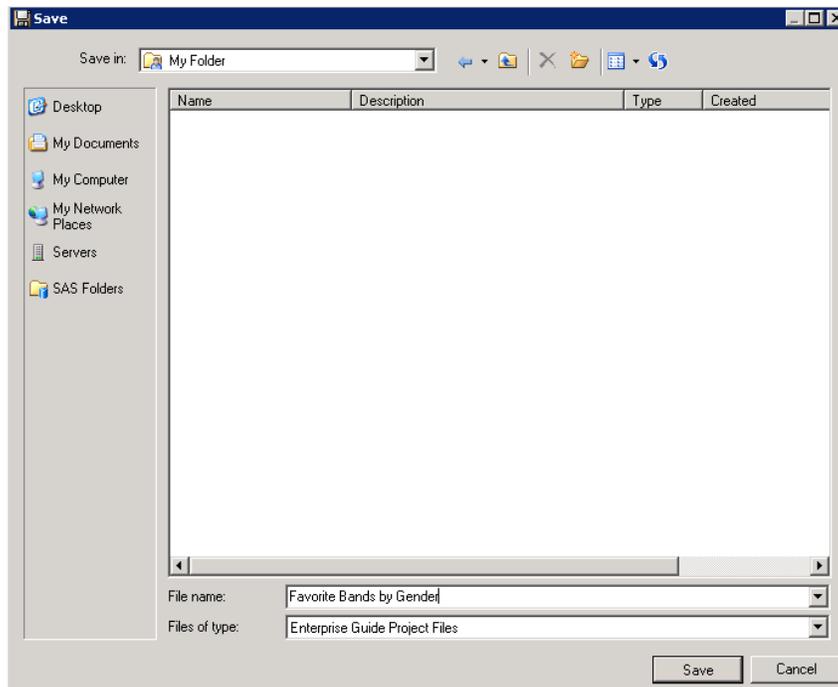
- Click on **File**→ **Save Project**



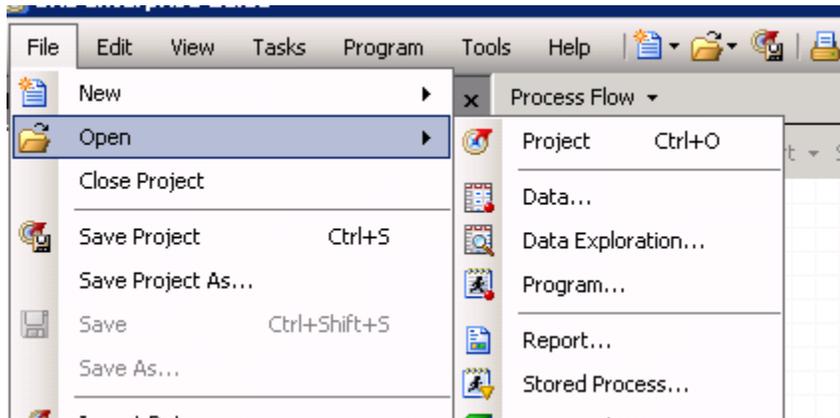
- Click on **SAS Folders**



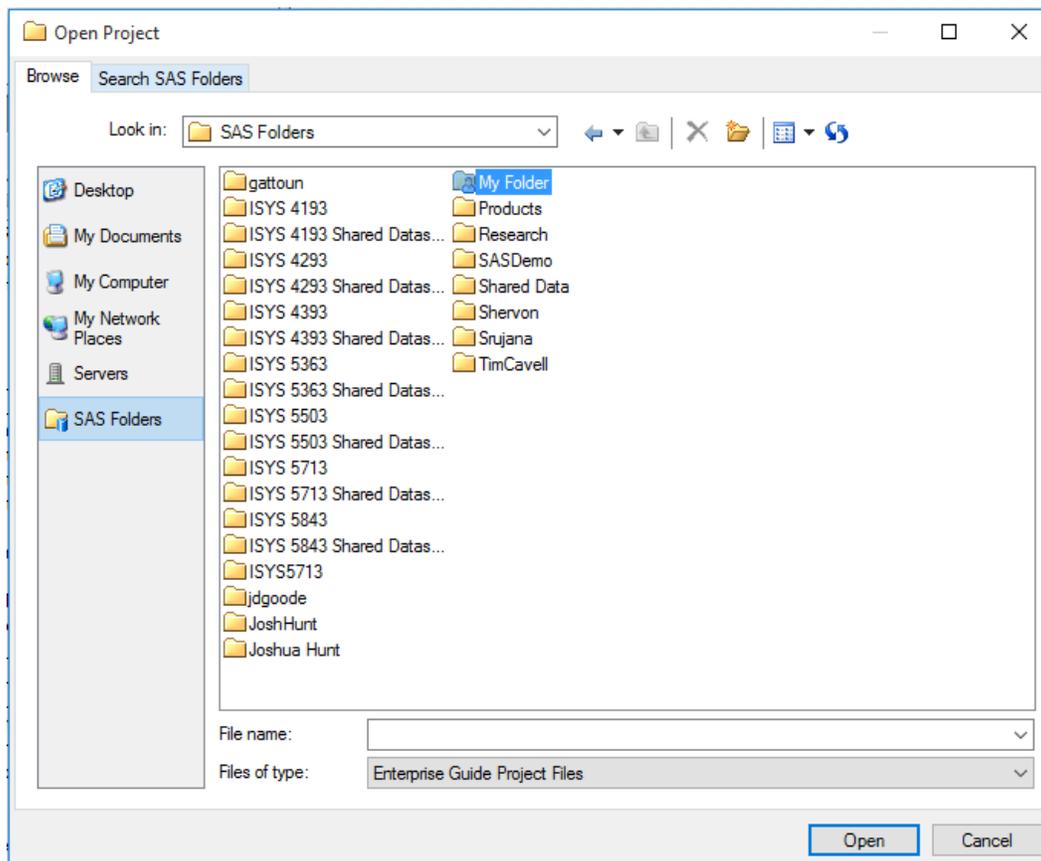
- Double Click **“My Folder”** → Give your project a name and click **Save**. Your project is now saved on the SAS platform, and can be retrieved at any time in any location where the SAS platform (SAS EG) is accessible. You can also save your project to a network share drive (i.e. S: drive) as a backup.



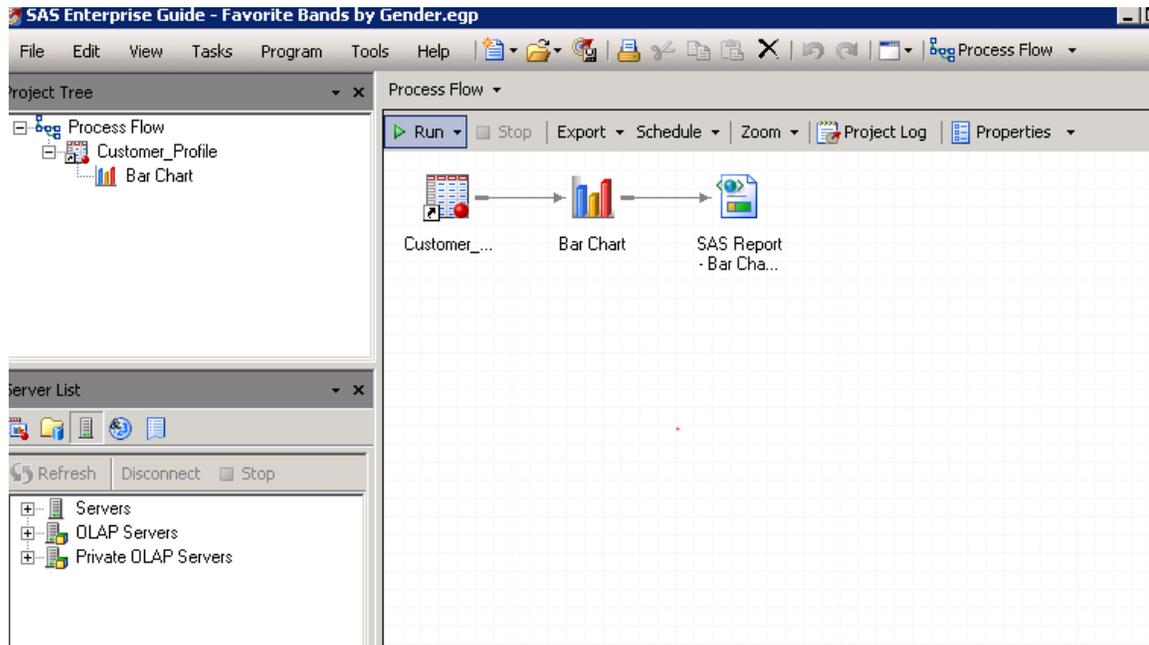
- To see your work, simply close out SAS Enterprise Guide, re-launch SAS EG (notice that you were not prompted for a login/password), and select **Open→Project**



- Select **SAS Folders**, Double-Click My Folder, and select your project



- You can now see the Process Flow view of your project, and make changes/modifications as needed

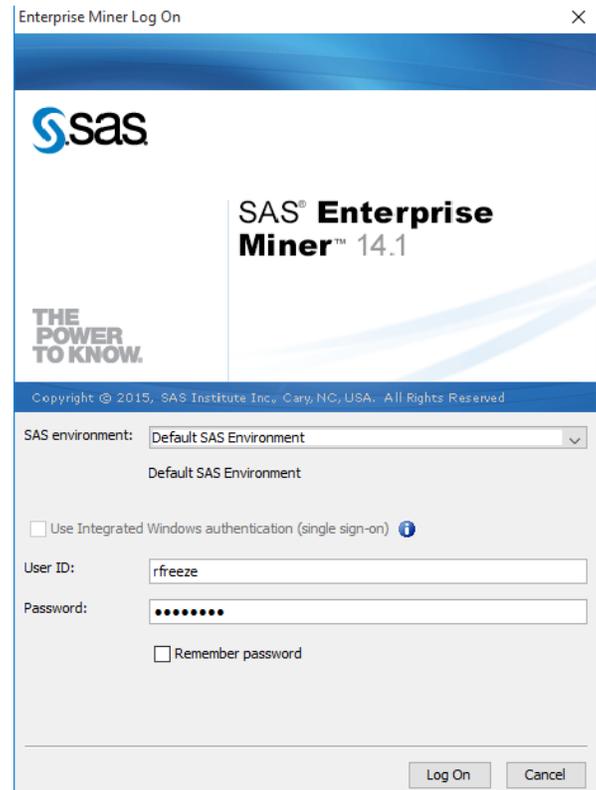
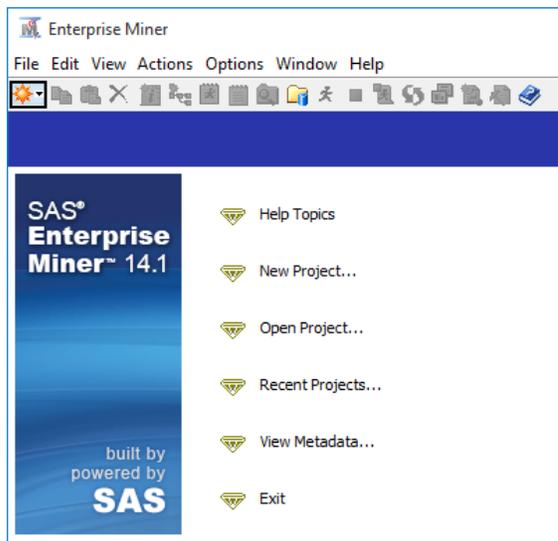


- **File > Exit** then **Start > Logoff**

3.SAS Enterprise Miner – Getting Started

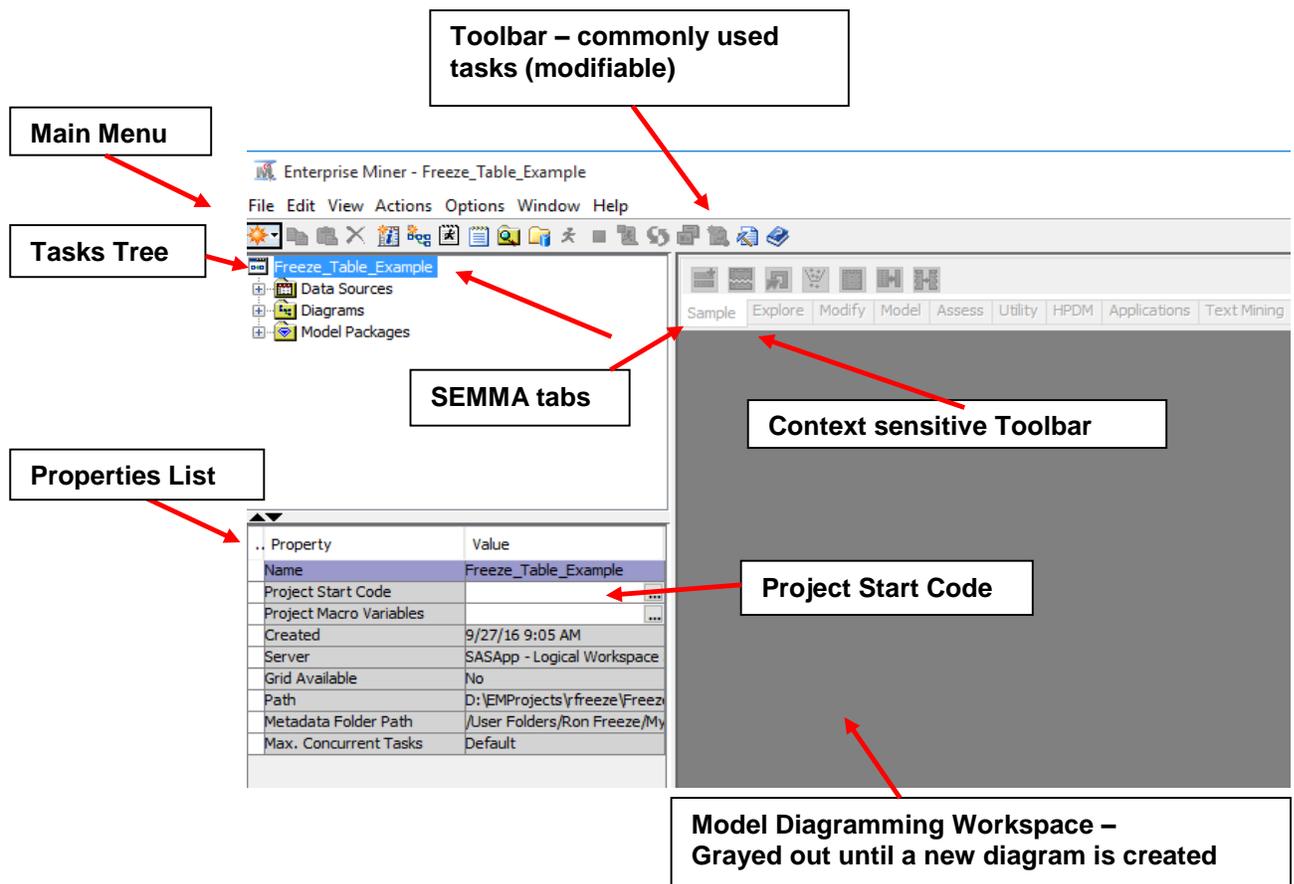
3.1.Connecting to a Data Source

1. Using SAS Enterprise Miner Client 14.1 from the Start Menu in VMware
2. Log in with your **UARK username** and **Password**
3. Select **New Project**
4. Select **Next**
5. Name your Project:
 - a. <Last Name>_Table_Example
 - b. Freeze_Table_Example
6. Select **Next**
7. Accept the default SAS Folder Location by selecting **Next**
8. Select **Finish**



Note the different sections of the Enterprise Miner Work area.

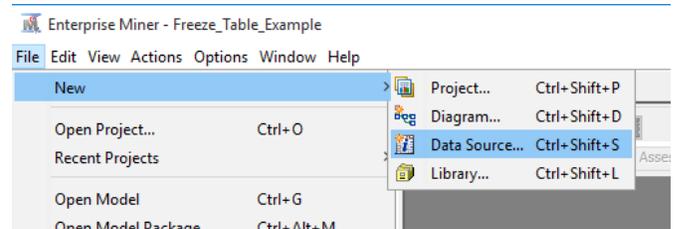
- Main Menu
- Toolbar – commonly used tasks (modifiable)
- Tasks Tree
- Context Sensitive Toolbar
- SEMMA tabs – (Sample, Explore, Modify, Model and Assess)
- Properties List
- Context Sensitive Toolbar
- Project Start Code
- Modeling Diagram Workspace – Greyed out until a new diagram is created



3.2. Linking a SAS Data Source to our project

We now need to link a data source to our project.

9. Select File->New->Data Source
10. Select Next (Step 1 of 8)
11. Select Browse (Step 2 of 8)
 - a. Navigate to your course number (SAS Libraries->ISYS xxxx)
 - b. Select Pva97nk
 - c. Select OK
12. Select Next (Step 2 of 8)
13. (Step 3 of 8) shows the Table Properties – Select Next
14. (Step 4 of 8) shows the Metadata Advisor Options – we will use the Basic options – Select Next
15. (Step 5 of 8) shows the Column Metadata – Select Next
16. (Step 6 of 8) allows you to create a Sample data set – This is useful for very large datasets – Do not create a sample data set – Make sure No is selected – Select Next
17. (Step 7 of 8) accept the defaults for the Data Source Attributes – Select Next
18. (Step 8 of 8) Review the Summary – Select Finish



You now have connected a SAS Data Source to your project. Select the plus (+) signs in the Task Tree. You will currently only show the Data Source(s) to which you are currently connected.

