

# Install SAS Enterprise Miner - Milestone Monitoring (Pre-Assignment)

WQD7005 - DATA MINING

Zulkanain Bin Hasan

WQD180031

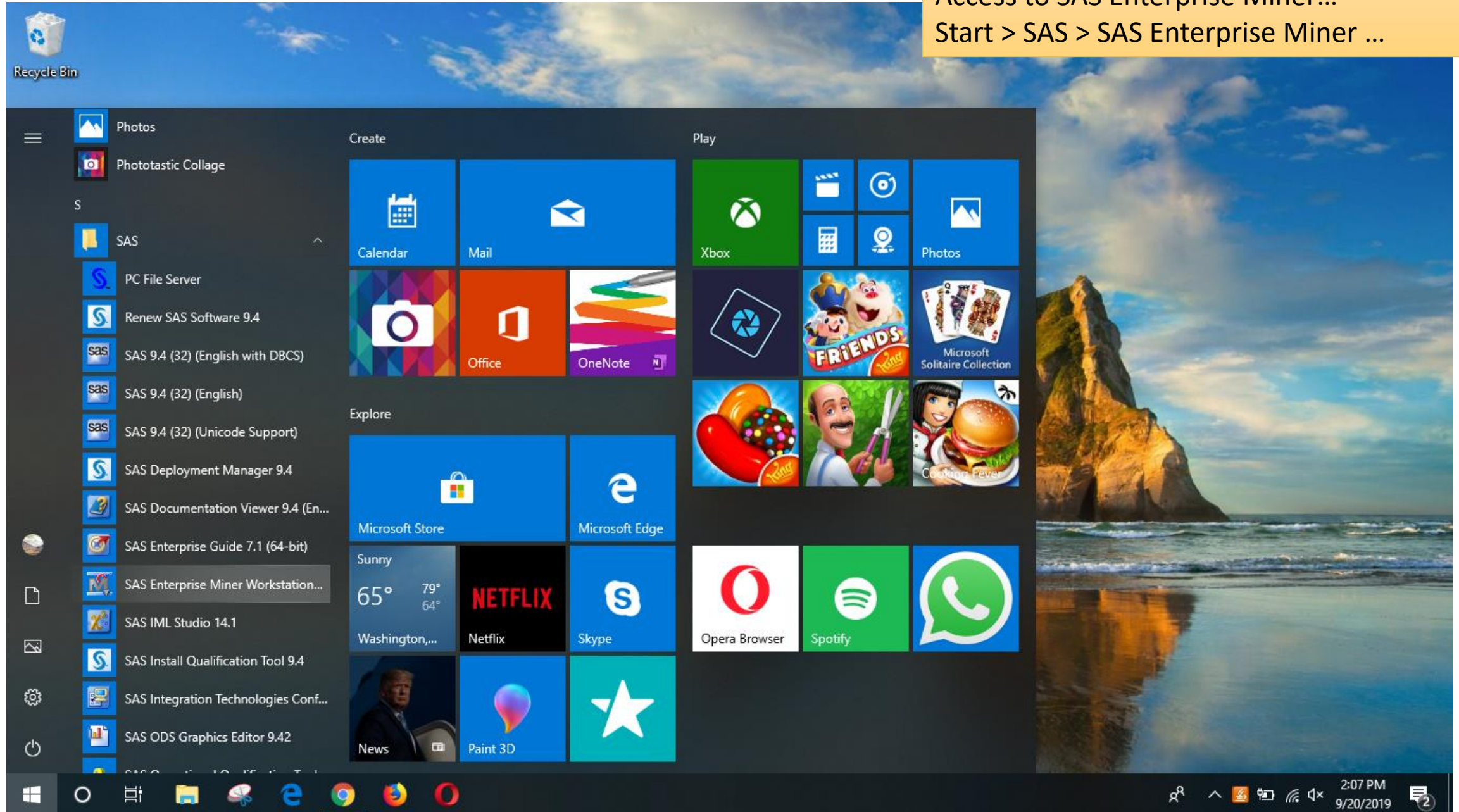
# Option 1

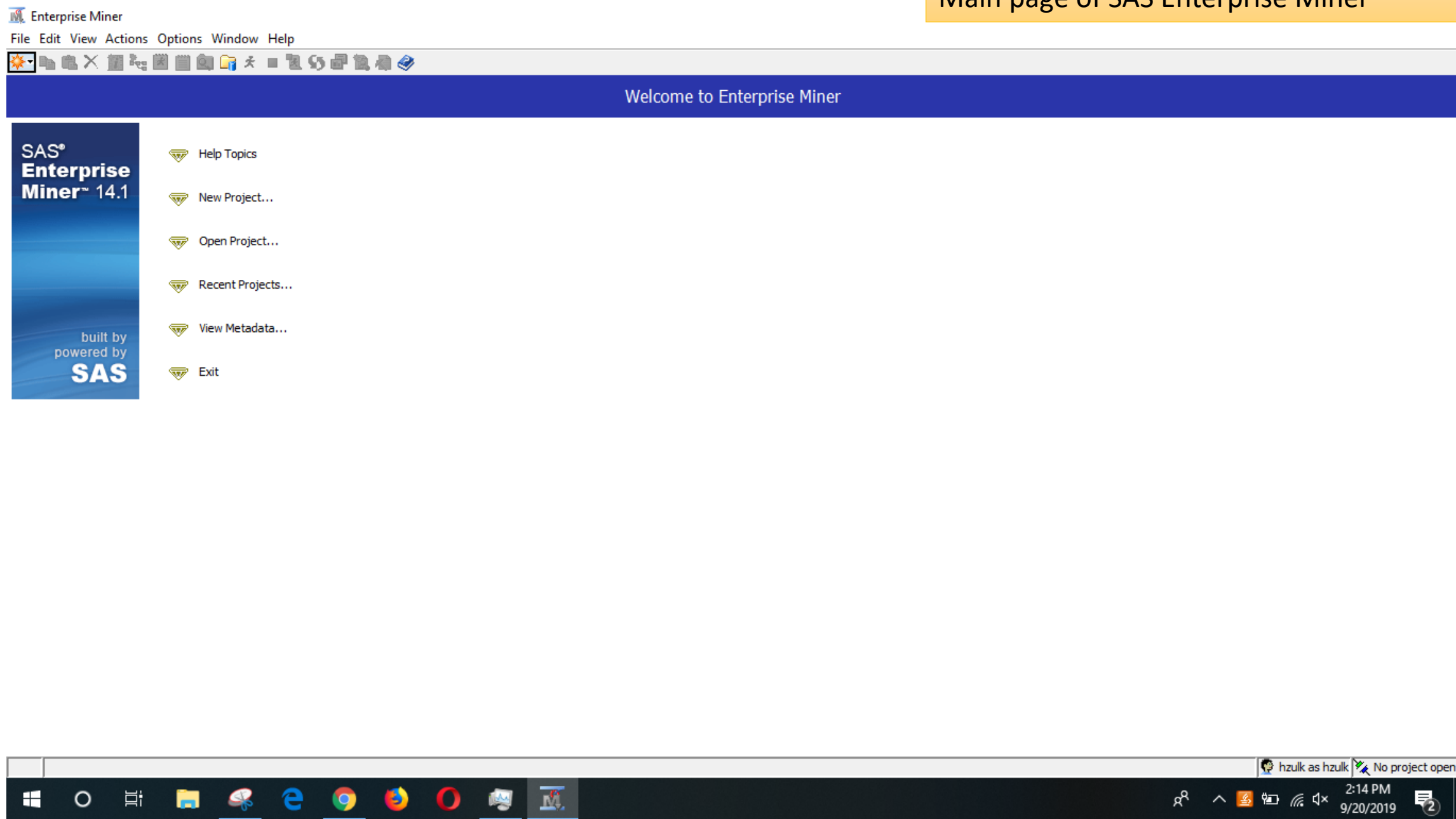
SAS Enterprise Miner on Personal Laptop

# Laptop specifications:

- Device : Dell Vostro 3300
- Processor : Intel® Core™ i3 CPU M 330 @ 2.13GHz 2.13GHz
- Installed RAM : 2.00 GB (1.87 GB usable)

Access to SAS Enterprise Miner...  
Start > SAS > SAS Enterprise Miner ...







Welcome to Enterprise Miner

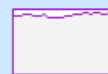
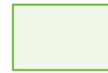
**SAS®  
Enterprise  
Miner™ 14.1**built by  
powered by  
**SAS**

- Help Topics
- New Project...
- Open Project...
- Recent Projects...
- View Metadata...
- Exit

## Task Manager

File Options View

Processes Performance App history Startup Users Details Services

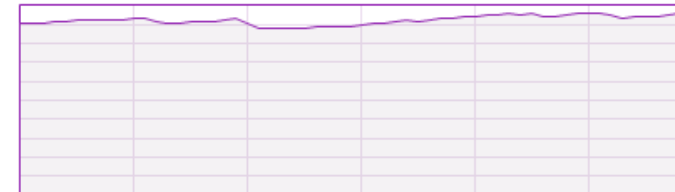
**CPU**  
13% 1.48 GHz**Memory**  
1.8/1.9 GB (95%)**Disk 0 (C: D:)**  
100%**Wi-Fi**  
S: 0 R: 40.0 Kbps

## Memory

2.0 GB DDR3

Memory usage

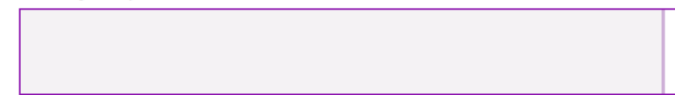
1.9 GB



60 seconds

0

Memory composition



In use (Compressed)

Available

Speed:

1066 ...

**1.8 GB (16.1 MB)****83.7 MB**

Slots used:

1 of 4

Committed

Cached

Form factor:

DIMM

**3.3/4.9 GB****87.1 MB**

Hardware reserved:

137 ...

Paged pool

Non-paged pool

**102 MB****90.8 MB**

Fewer details

Open Resource Monitor

**Hardware issue:**

1. High memory usage
2. Longer time taken by SAS Enterprise Miner to launch

# Option 2 - SUCCESS

SAS Enterprise Miner via SAS OnDemand for Academics

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User ID

Password

Sign In

Not registered or cannot sign in?

Forgot your password?

Commonly Asked Questions

Current Events

Visit

<https://odamid.oda.sas.com/SASLogon/login?service=https%3A%2F%2Fodamid.oda.sas.com%2FSASODACenter%2Fj> spring cas security check ...




Sign In by using registered ID  
# must register first in order to get the ID

SAS® Logon Manager

odamid.oda.sas.com/SASLogon/login?service=https%3A%2F%2Fodamid.oda.sas.com%2FSASODACenter%2Fspring\_cas\_security\_check

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[Sign In](#)

[Sign In](#)

[Not registered or cannot sign in?](#)

[Forgot your password?](#)

[Commonly Asked Questions](#)

[Current Events](#)

Disruption Still Leaving Difficulties? Bookings, Logins and Registration Issues

ENG US 8:00 PM 19/9/2019

SAS OnDemand for Academics - x +

odamid.oda.sas.com/SASODAControlCenter/

SAS | THE POWER TO KNOW.

SAS® OnDemand for Academics  
Control Center - Asia Pacific

Dashboard Zulkanain Hasan ▾

### ▼ Current Events (click entry for details)

🔔 Still having difficulties? - Resolving Login and Registration Issues

Last updated: Sep 13, 2019 13:54 UTC

Impacts: Registration, Login Page

### ▼ Planned Events (click entry for details)

🔧 Scheduled Maintenance Tuesday, September 24, 8:30-10:00 a.m. EDT

Last updated: Sep 17, 2019 13:26 UTC


Scheduled start time: Sep 24, 2019 12:30 UTC


Scheduled end time: Sep 24, 2019 14:00 UTC


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® Servers (U.S. users only)**  
Deliver the power of SAS from an easy-to-use, point-and-click interface. [\(Download Required\)](#)

### Reference

- [Support Site](#)
- [Step-by-Step Registration Guides](#)
- [Commonly Asked Questions](#)
- [Status Page](#)

### Quotas (learn more)

Home Directory (2356.2MB/5120MB)

46%

Course Directory (0.0MB/3072MB)

0%

### Notices

**SAS OnDemand for Academics Maintenance Upgrade to SAS 9.4M6 Completed for All Regions**

Last updated: Sep 17, 2019 12:58 UTC

Create Data Mining course in order to get access to SAS Enterprise Miner

SAS OnDemand for Academics - x +

← → ↻

odamid.oda.sas.com/SASODAControlCenter/

Scheduled Maintenance Tuesday, September 24, 8:30-10:00 a.m. EDT

Last updated: Sep 17, 2019 13:26 UTC

Scheduled start time: Sep 24, 2019 12:30 UTC

Scheduled end time: Sep 24, 2019 14:00 UTC

Applications

Enrollments

Courses

+ create a new course

Name	Description	Institution	
Data Mining	SAS	University Malaya	<div><div>Details</div><div>View and edit details</div></div>

**Course Data Directory**

The directory /courses/do7xe01gupdi0Cpu3uvn2 is used to store data for all of your courses. For more information, including details about uploading files, view [About Your Course Data Directory](#).

**Quotas [\(learn more\)](#)**

Home Directory (2356.2MB/5120MB)

46%

Course Directory (0.0MB/3072MB)

0%

**Notices**

**SAS OnDemand for Academics Maintenance Upgrade to SAS 9.4M6 Completed for All Regions**

Last updated: Sep 17, 2019 12:58 UTC

Importance: High

**Resolved: Problems with diagram locking in Enterprise Miner**

Last updated: Sep 12, 2019 14:39 UTC

Importance: Medium

Impacts: Enterprise Miner

**SAS Users Channel**

Last updated: Aug 29, 2019 20:35 UTC

Importance: Medium

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https://odamid.oda.sas.com/SASODAControlCenter/displayCourse.html?courseId=bfdac310-54f6-41df-85bc-97b39a888d83stitute Inc. All Rights Reserved.

ENG US 8:03 PM 19/9/2019

## Course Details

Zulkanain Hasan ▾

**Course name:** Data Mining**Description:** SAS**Level:** GRADUATE**Institution:** University Malaya**Registered:** Wed May 01 17:04:29 UTC 2019**Course Code:** bfdac310-54f6-41df-85bc-97b39a888d83

Students need the course code to enroll in this course. [Learn more](#) about helping students enroll.

**Applications:**

SAS® Enterprise Miner™

SAS® Enterprise Guide®

SAS® Forecast Studio

SAS® Studio






## List of Application available including SAS Enterprise Miner

SAS OnDemand for Academics - x +

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**Scheduled Maintenance Tuesday, September 24, 8:30-10:00 a.m. EDT**  
Last updated: Sep 17, 2019 13:26 UTC  
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**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)
-  **JMP® access to SAS® Servers (U.S. users only)**  
Statistical discovery software. Users must have a copy of JMP®; software. (Configuration Steps Required)
-  **SAS® Enterprise Miner™**  
Reveal valuable insights with powerful data mining software. (Configuration Steps Required)
-  **SAS® Forecast Studio**  
Generate large numbers of high-quality forecasts automatically. (Configuration Steps Required)  
**Actions:** [Manage your personal environment.](#)

**Quotas** ([learn more](#))

**Home Directory (2356.2MB/5120MB)**

46%

**Course Directory (0.0MB/3072MB)**

0%

**Notices**

**SAS OnDemand for Academics Maintenance Upgrade to SAS 9.4M6 Completed for All Regions**  
Last updated: Sep 17, 2019 12:58 UTC  
Importance: High

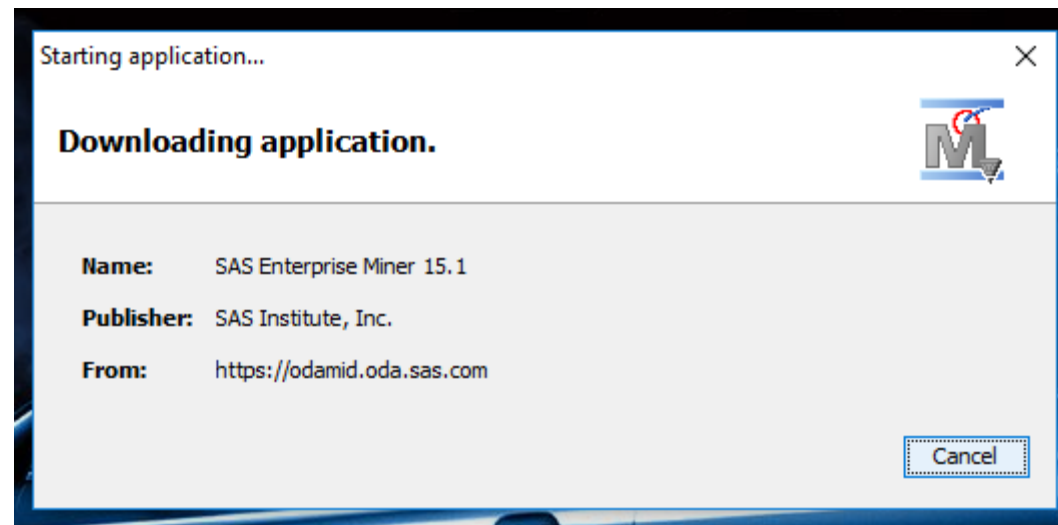
**Resolved: Problems with diagram locking in Enterprise Miner**  
Last updated: Sep 12, 2019 14:39 UTC  
Importance: Medium  
Impacts: Enterprise Miner

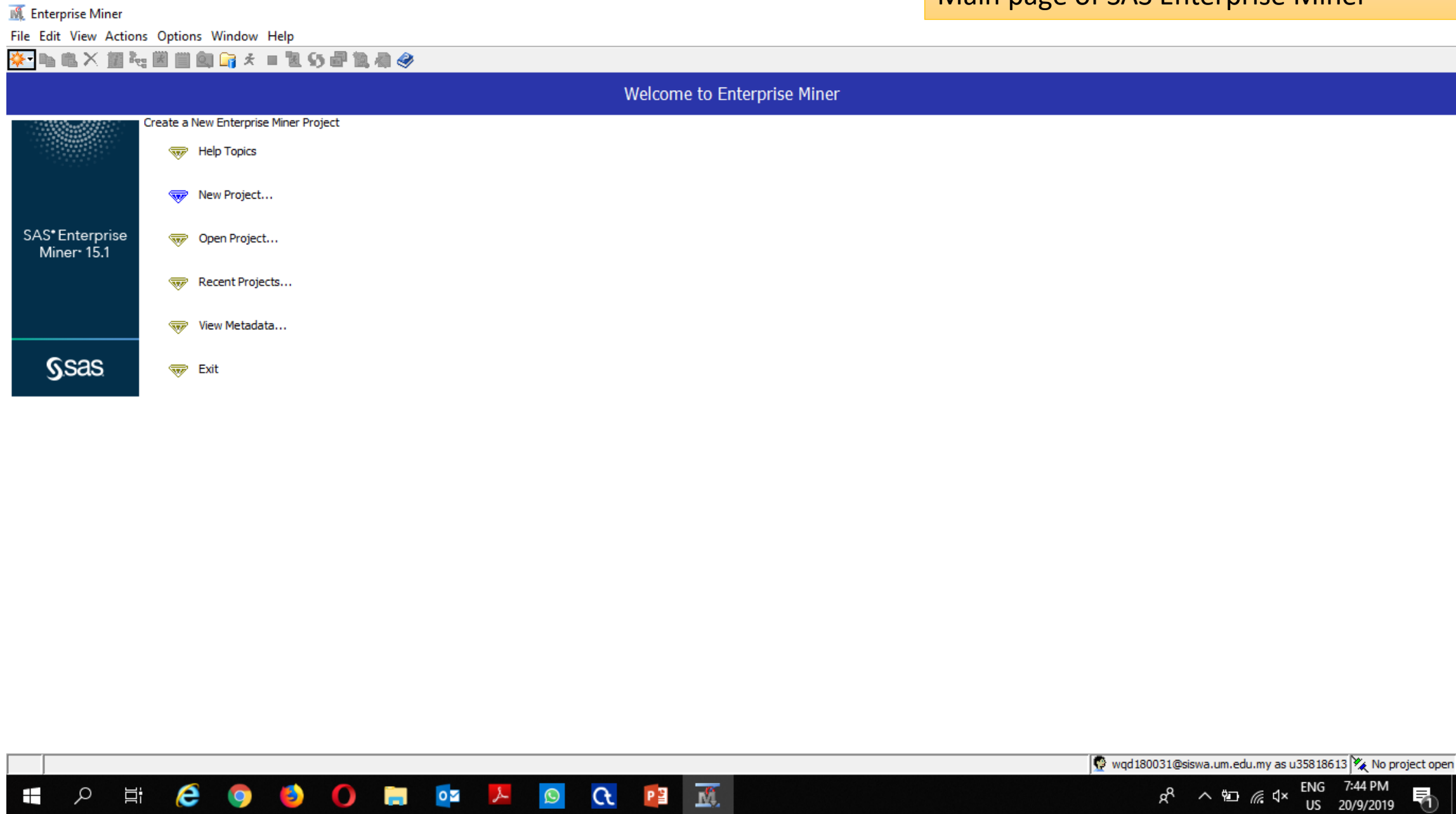
**SAS Users Channel**  
Last updated: Aug 29, 2019 20:35 UTC  
Importance: Medium

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<https://odamid.oda.sas.com/SASEnterpriseMinerJWS/main.jnlp?dminemid.launch.method=CLONE> Copyright © 2019 SAS Institute Inc. All Rights Reserved.

Windows taskbar: 8:02 PM 19/9/2019







Welcome to Enterprise Miner

SAS® Enterprise  
Miner 15.1

- Help Topics
- New Project...
- Open Project...
- Recent Projects...
- View Metadata...
- Exit

Create New Project -- Step 1 of 4 Select SAS Server

Select a SAS Server for this project. All processing will take place on this server.

SAS Server  
SASApp - Logical Workspace Server

< Back Next > Cancel

Create New Project  
New Project > Next ...



Create 'Project Name' > Next ...

Enterprise Miner

File Edit View Actions Options Window Help



Welcome to Enterprise Miner

SAS® Enterprise  
Miner 15.1

sas

- Help Topics
- New Project...
- Open Project...
- Recent Projects...
- View Metadata...
- Exit

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

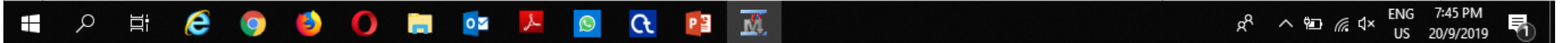
Specify a project name and directory on the SAS Server for this project. All SAS data sets and files will be written to this location.

Project Name  
Week 2

SAS Server Directory  
~ Browse

< Back Next > Cancel

wqd180031@siswa.um.edu.my as u35818613 No project open



Next ...

Enterprise Miner

File Edit View Actions Options Window Help

Welcome to Enterprise Miner

SAS® Enterprise Miner 15.1

- Help Topics
- New Project...
- Open Project...
- Recent Projects...
- View Metadata...
- Exit

Create New Project -- Step 3 of 4 Register the Project

Select the SAS Folders location for this project. Use these folders to organize your projects and control user access.

SAS® Enterprise Miner 15.1

SAS Folder Location  
/User Folders/u35818613/My Folder

Browse

< Back Next > Cancel

wqd180031@siswa.um.edu.my as u35818613 No project open

ENG 7:46 PM  
US 20/9/2019

Finish ...

Enterprise Miner

File Edit View Actions Options Window Help



Welcome to Enterprise Miner



- Help Topics
- New Project...
- Open Project...
- Recent Projects...
- View Metadata...
- Exit

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

New Project Information	
Name	Week 2
SAS Metadata location	/User Folders/u35818613/My Folder
SAS Application server	SASApp - Logical Workspace Server
Server Directory	~

SAS Enterprise Miner 15.1

< Back Finish Cancel

## New Project windows

Enterprise Miner - Week 2

File Edit View Actions Options Window Help

Week 2

- Data Sources
- Diagrams
- Model Packages

Property	Value
Name	Week 2
Project Start Code	
Project Macro Variables	
Created	9/20/19 7:47 PM
Server	SASApp - Logical Workspace
Grid Available	No
Path	~/Week 2
Metadata Folder Path	/User Folders/u35818613/My
Max. Concurrent Tasks	2

Name

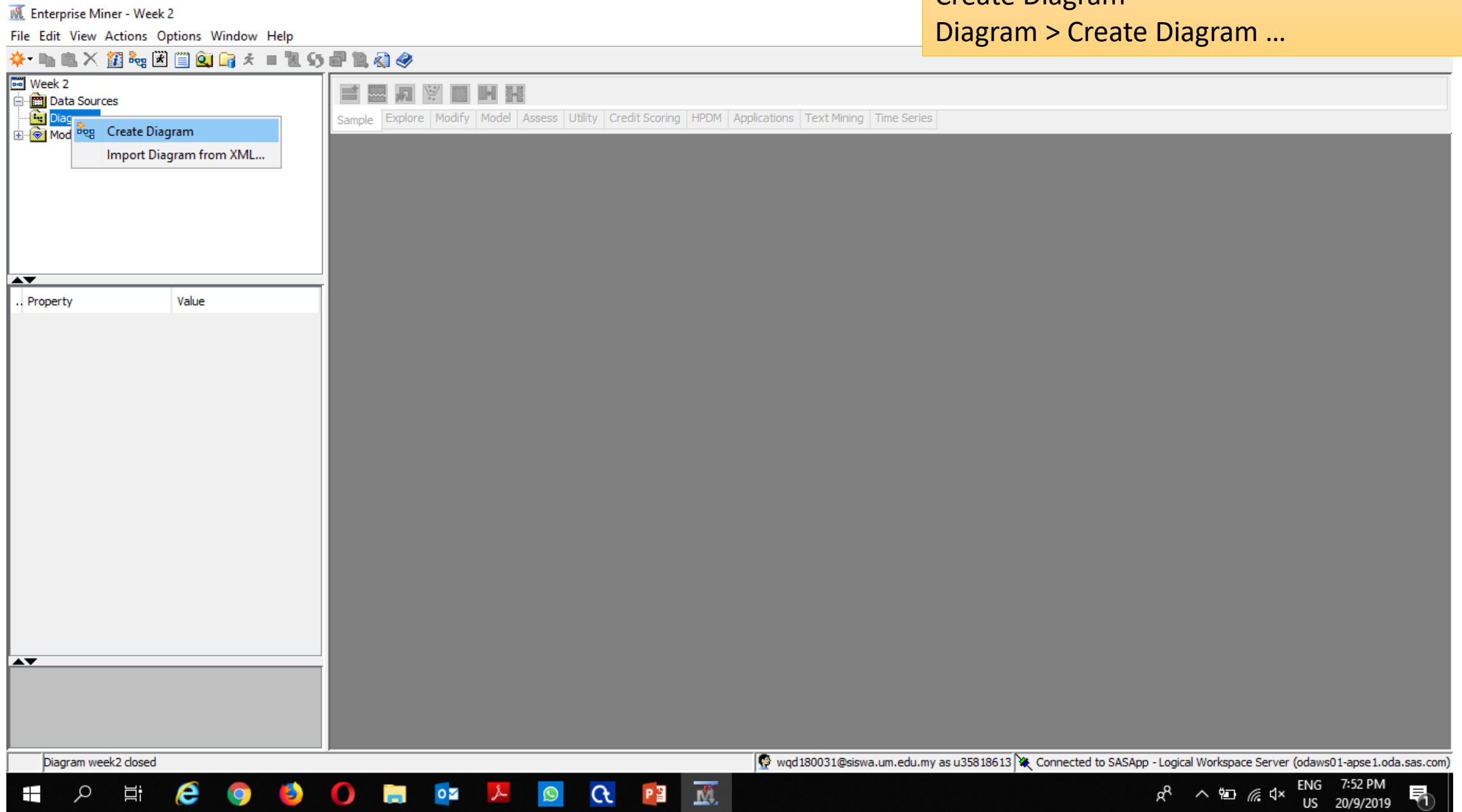
Project Name

Sample Explore Modify Model Assess Utility Credit Scoring HPDM Applications Text Mining Time Series

wqd180031@siswa.um.edu.my as u35818613 Connected to SASApp - Logical Workspace Server (odaws01-apse1.oda.sas.com)

ENG 7:47 PM  
US 20/9/2019

Create Diagram  
Diagram > Create Diagram ...



Create 'Diagram Name' > OK ...

Enterprise Miner - Week 2

File Edit View Actions Options Window Help

Week 2

- Data Sources
- Diagrams
- Model Packages

Sample Explore Modify Model Assess Utility Credit Scoring HPDM Applications Text Mining Time Series

Create New Diagram

Diagram Name:

week2

OK Cancel

Diagram week2 closed

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ENG 7:52 PM  
US 20/9/2019

## Diagram windows

Enterprise Miner - Week 2

File Edit View Actions Options Window Help

Week 2

- Data Sources
- Diagrams
  - week2
- Model Packages

Property	Value
ID	EMWS2
Name	week2
Status	Open
Notes	
History	
Create Date	9/20/19 11:52 AM
Encoding	utf-8 Unicode (UTF-8)
Data Representation	SOLARIS_X86_64, LINUX_X8
Native OS	Yes

ID

Diagram Identifier. This identifier corresponds to the SAS libref used to identify the physical

Diagram week2

Sample Explore Modify Model Assess Utility Credit Scoring HPDM Applications Text Mining Time Series

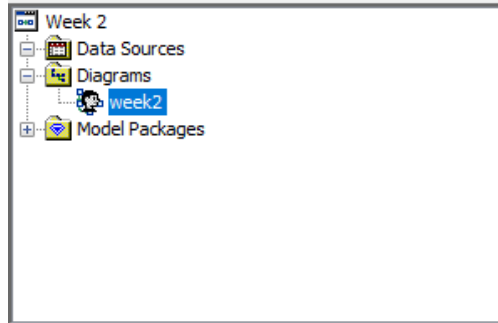
Diagram week2

Diagram Log

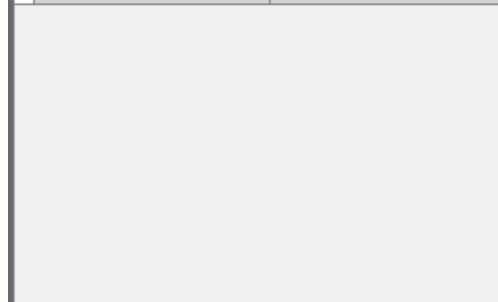
Diagram week2 opened

wqd180031@siswa.um.edu.my as u35818613 Connected to SASApp - Logical Workspace Server (odaws01-apse1.oda.sas.com)

ENG 7:53 PM 20/9/2019



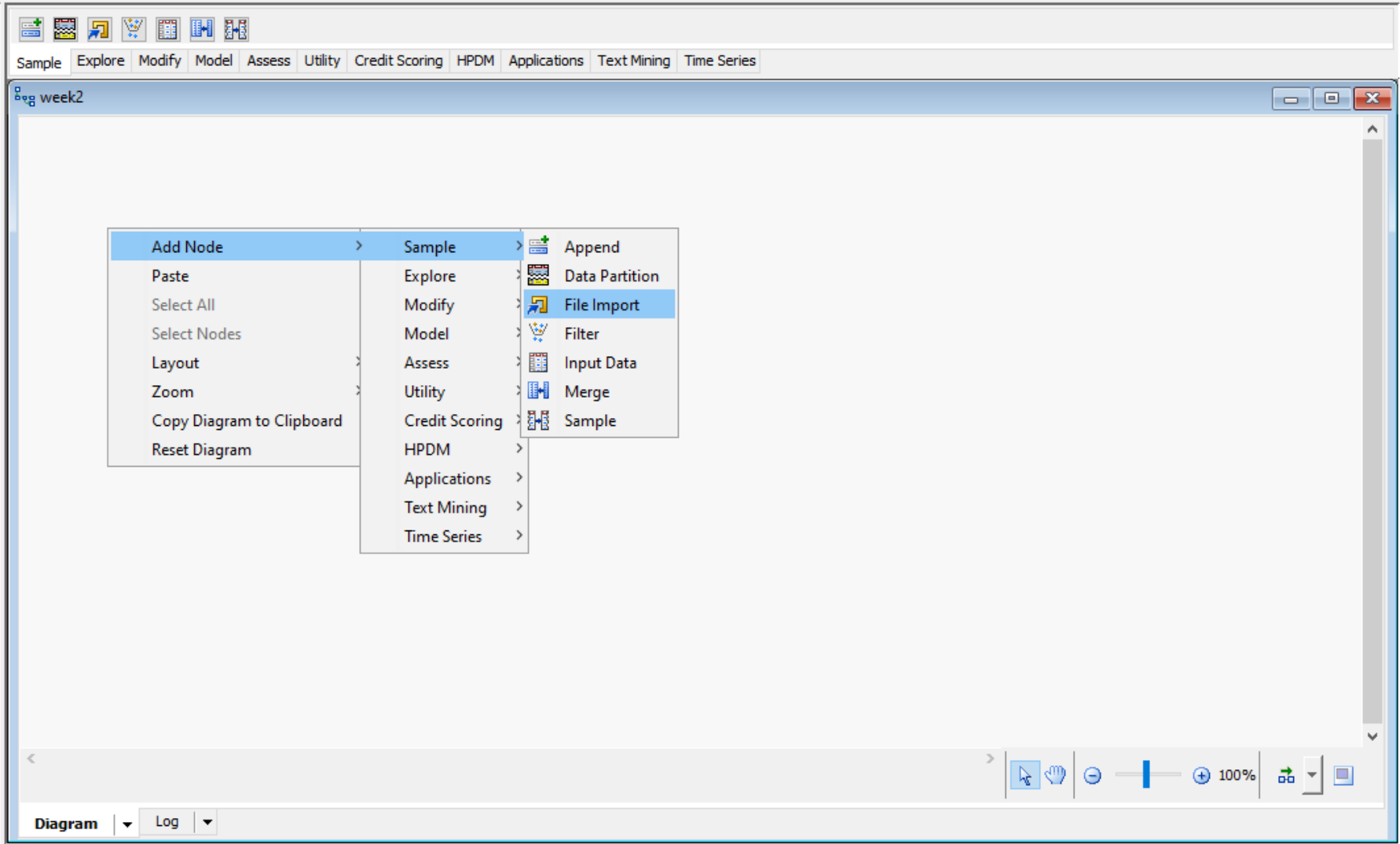
Property	Value
ID	EMWS2
Name	week2
Status	Open
Notes	
History	
Create Date	9/20/19 11:52 AM
Encoding	utf-8 Unicode (UTF-8)
Data Representation	SOLARIS_X86_64, LINUX_X8
Native OS	Yes



**ID**

Diagram Identifier. This identifier corresponds to the SAS libref used to identify the physical

Diagram week2 opened



Right click...

Add Node > Sample > File Import ...



## File Import Node

Enterprise Miner - Week 2

File Edit View Actions Options Window Help

Week 2

- Data Sources
- Diagrams
- week2
- Model Packages

Property	Value
<b>General</b>	
Node ID	FIMPORT
Imported Data	...
Exported Data	...
Notes	...
<b>Train</b>	
Variables	...
Import File	...
Maximum Rows to Import	1000000
Maximum Columns to Import	10000
Delimiter	,
Name Row	Yes
Number of Rows to Skip	0
Guessing Rows	500
File Location	Local
File Type	XLS
Advanced Advisor	No
Rerun	No
<b>Score</b>	
Role	Train

**Import File**

Specify the name of your input file

Sample Explore Modify Model Assess Utility Credit Scoring HPDM Applications Text Mining Time Series

Log week2

File Import

Diagram week2 opened

wqd180031@siswa.um.edu.my as u35818613 Connected to SASApp - Logical Workspace Server (odaws01-apse1.oda.sas.com)

ENG 7:56 PM  
US 20/9/2019

Enterprise Miner - Week 2

File Edit View Actions Options Window Help

Week 2

- Data Sources
- Diagrams
- week2
- Model Packages

Property	Value
<b>General</b>	
Node ID	FIMPORT
Imported Data	...
Exported Data	...
Notes	...
<b>Train</b>	
Variables	...
Import File	...
Maximum Rows to Import	1000000
Maximum Columns to Import	10000
Delimiter	,
Name Row	Yes
Number of Rows to Skip	0
Guessing Rows	500
File Location	Local
File Type	XLS
Advanced Advisor	No
Rerun	No
<b>Score</b>	
Role	Train

**Import File**

Specify the name of your input file

Open

Look in: Documents

- Recent Items
- Desktop
- Documents
- This PC
- Network

- 7-PDF Split & Merge
- Bluetooth Exchange Folder
- Custom Office Templates
- My Data Sources
- My Documents
- Outlook Files
- PPAP
- R
- Scanned Documents
- temp

File name:

Files of type: Data Files (\*.sav, \*.dta, \*.dbf, \*.jmp, \*.csv, \*.dln, \*.txt, \*.xls, \*.xlsx, \*.db) ▼

Open

Open selected file

Select My Computer if the data file you want to import is located on your local machine. Select SAS Server to import a data file located on your SAS workspace server.

☒ My Computer

☐ SAS Servers

Browse...

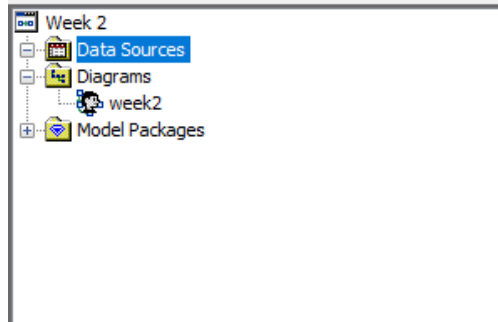
View File Import Types

Preview

OK

Cancel

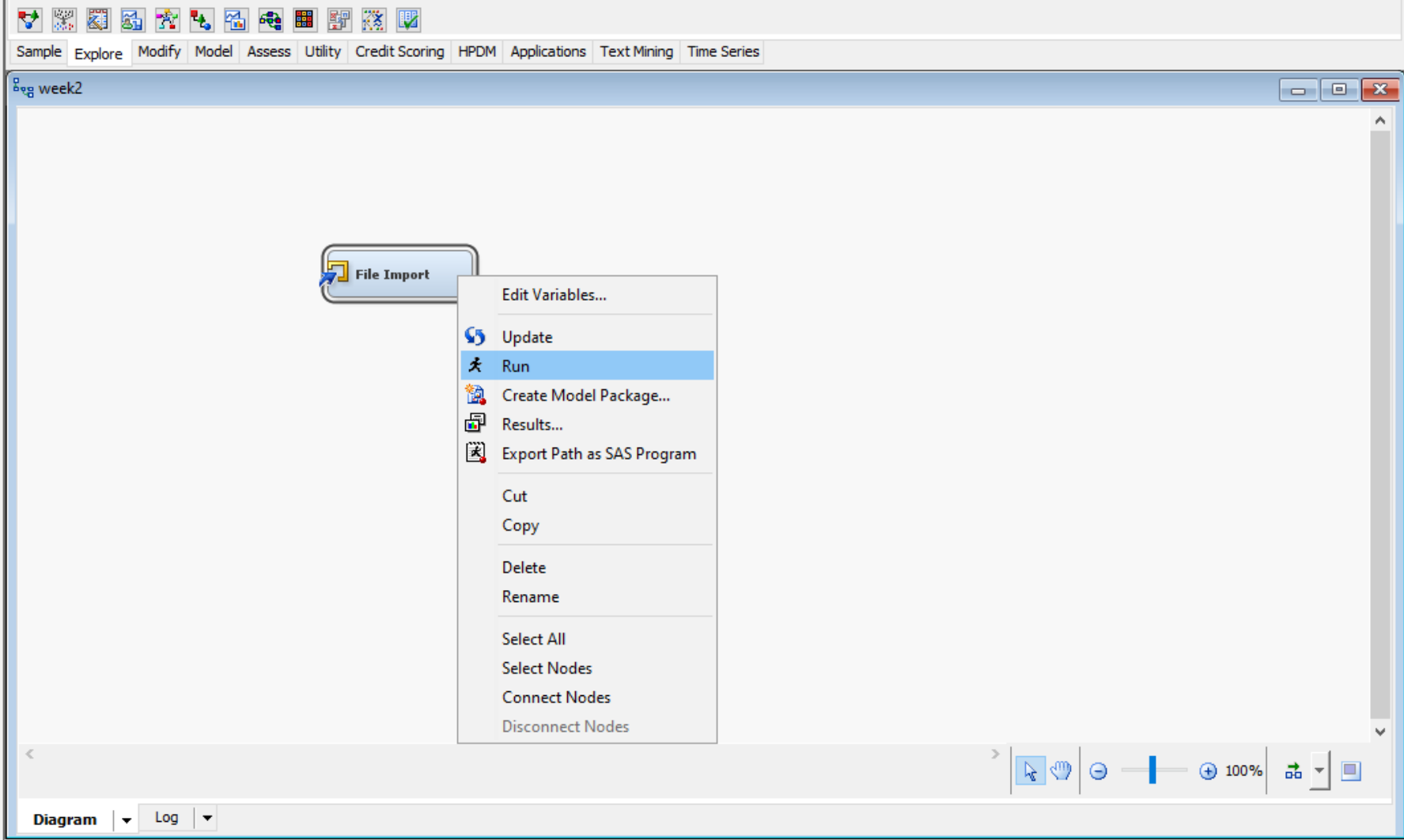
Import data to File Import Node...  
Import File > Browse > Open ...



Property	Value
<b>General</b>	
Node ID	FIMPORT
Imported Data	...
Exported Data	...
Notes	...
<b>Train</b>	
Variables	...
Import File	C:\Users\zulkanh\Downl...
Maximum Rows to Import	1000000
Maximum Columns to Import	10000
Delimiter	,
Name Row	Yes
Number of Rows to Skip	0
Guessing Rows	500
File Location	Local
File Type	csv
Advanced Advisor	No
Rerun	No
<b>Score</b>	
Role	Train

General

General Properties



Check file inside File Import Node...  
File Import > Run ...

Run completed

wqd180031@siswa.um.edu.my as u35818613 Connected to SASApp - Logical Workspace Server (odaws01-apse1.oda.sas.com)

Enterprise Miner - Week 2

File Edit View Actions Options Window Help

Week 2

- Data Sources
- Diagrams
  - week2
- Model Packages

Property	Value
<b>General</b>	
Node ID	FIMPORT
Imported Data	...
Exported Data	...
Notes	...
<b>Train</b>	
Variables	...
Import File	C:\Users\zulkanh\Downl...
Maximum Rows to Import	1000000
Maximum Columns to Import	10000
Delimiter	,
Name Row	Yes
Number of Rows to Skip	0
Guessing Rows	500
File Location	Local
File Type	csv
Advanced Advisor	No
Rerun	No
<b>Score</b>	
Role	Train

General Properties

Diagram week2

File Import

Run Status

Run completed  
Diagram: week2  
Path: File Import

OK Results...

Run completed

wqd180031@siswa.um.edu.my as u35818613 Connected to SASApp - Logical Workspace Server (odaws01-apse1.oda.sas.com)

8:03 PM 20/9/2019

**Results - Node: File Import Diagram: week2**

File Edit View Window

**Output**

55 File Size (bytes) 393216

56

57

58 Alphabetic List of Variables and Attributes

59

#	Variable	Type	Len	Format	Informat	Label
60						
61						
62	506 AASIA	Num	8	BEST12.	BEST32.	
63	354 AAX	Num	8	BEST12.	BEST32.	
64	524 ABLEGRP	Num	8	BEST12.	BEST32.	
65	92 ABMB	Num	8	BEST12.	BEST32.	
66	552 ACME	Char	10	\$10.	\$10.	
67	546 ACOSTEC	Num	8	BEST12.	BEST32.	
68	388 ADVCON	Num	8	BEST12.	BEST32.	
69	596 ADVENTA	Num	8	BEST12.	BEST32.	
70	731 ADVPKG	Num	8	BEST12.	BEST32.	
71	561 AEM	Num	8	BEST12.	BEST32.	
72	460 AEON	Num	8	BEST12.	BEST32.	
73	278 AEONCR	Num	8	BEST12.	BEST32.	
74	315 AFFIN	Num	8	BEST12.	BEST32.	
75	326 AFUJIYA	Num	8	BEST12.	BEST32.	
76	649 AHB	Num	8	BEST12.	BEST32.	
77	528 AHEALTH	Num	8	BEST12.	BEST32.	
78	186 AHP	Num	8	BEST12.	BEST32.	
79	247 AIRASIA	Num	8	BEST12.	BEST32.	
80	197 AIRPORT	Num	8	BEST12.	BEST32.	
81	100 AISB	Num	8	BEST12.	BEST32.	

**General**

Node ID FIMPC

Imported Data

Exported Data

Notes

**Train**

Variables

Import File C:\Use

Maximum Rows to Import 10000

Maximum Columns to Import 10000

Delimiter ,

Name Row Yes

Number of Rows to Skip 0

Guessing Rows 500

File Location Local

File Type csv

Advanced Advisor No

Rerun No

**Score**

Role Train

General Properties

Diagram Log

Run completed

wqd180031@siswa.um.edu.my as u35818613 Connected to SASApp - Logical Workspace Server (odaws01-apse1.oda.sas.com)

ENG 8:01 PM 20/9/2019