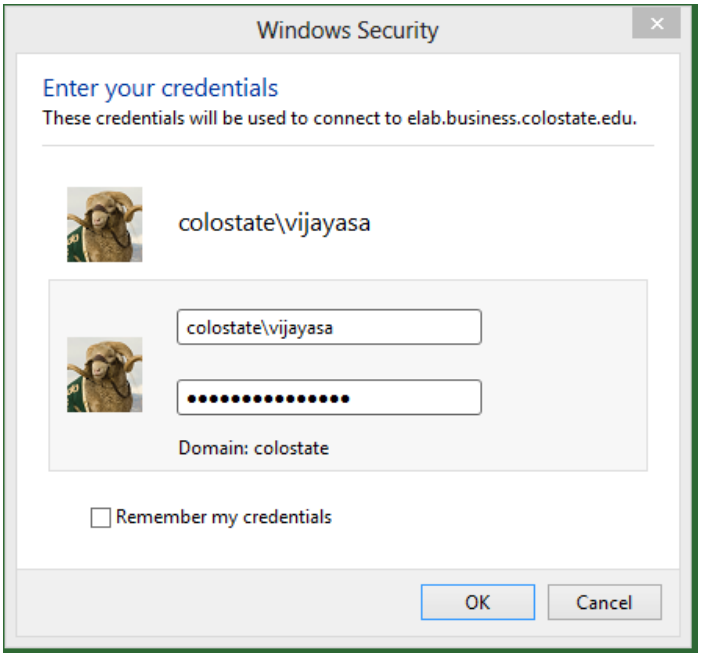
Hands on Exercise for Data Cubing – Part 1

Log on to elab using <u>your eID credentials</u> (see sample login dialog box below)



Learn by Doing – Building a Multidimensional BI Semantic Model for the Manufacturing Data Mart

Session I - (Larson – Chapter 11; Pages 448-453)

Steps to Create the Project and Data Source

- For step 1, start Visual Studio 2017.
- Instead of steps 2-5, do the following:
  - Click File→Open→Analysis Services Database.
  - In the Connect To Database dialog box, enter **buscissql\cisbi** in the Server textbox and select **your analysis services database (e.g., if your last name is Smith, your analysis services database will be called SmithASD)** from the Database drop-down list. Click on the Browse button and select the location where you would like the solution file to be stored (this location can be your class folder for CIS 570 (i.e., "S: drive")).
  - Click OK to connect to the database.
- Complete steps 6-7.
- For step 8 – Click New. The Connection Manager dialog box appears. Enter **buscissql\cisbi** for Server name. Select **MaxMinManufacturingDM2016** (**Note:** this is not **your ManufacturingDM** that you created and populated in HOEs 1 and 2) from the Select or enter a database name drop-down list. Click OK. Click Next in the Select how to define a connection dialog box.
- For step 9 – **enter your eID (e.g., if your eID is janesmith, enter colostate\janesmith) in the User name text box and your eID password in the Password text box.** Click Next. The Completing the Wizard page appears.
- Complete step 10.

Steps to Create the Data Source View

- Complete steps 1-15

Steps to Create the Cube

- Complete steps 1-11

Session II – Working with Measures and Measure Groups (Larson – Chapter 11; Pages 462-465)

Steps to Finalize the Measures

If you closed Visual Studio 2017 after Session I, complete steps 1 and 2, otherwise, go to step 3.

- For step 1, start Visual Studio 2017
- For step 2 - Click File→Open→Analysis Services Database. Select your analysis services database (it should be displayed in the box below the Database drop-down list) in the Connect to Database dialog box. Click OK.
- Complete steps 3 to 10.
- **Skip steps 11-21. You will complete these steps in Session IV.**

Steps to Add Calculations to the Cube

- Complete steps 1-10

Session III – Cleaning Up the Dimensions in the Max Min Manufacturing DM Cube (Larson – Chapter 11, Pages 466-471)

Steps to Create a Time Dimension

If you closed Visual Studio 2017 after Session II, complete steps 1 and 2, otherwise, go to step 3.

- For step 1, start Visual Studio 2017
- For step 2 - Click File→Open→Analysis Services Database. Select your analysis services database (it should be displayed in the box below the Database drop-down list) in the Connect to Database dialog box. Click OK.
- Complete steps 3-28.

Steps to Create Dimension Hierarchies

- Complete steps 1-39

Session IV – Relating Dimensions in the Max Min Manufacturing DM Cube (Larson – Chapter 11; Pages 472-473)

Steps to Relate Dimensions to Measure Groups

If you closed Visual Studio 2017 after Session III, complete the following before going to step 1.

Start Visual Studio 2017. Click File→Open→Analysis Services Database. Select your analysis services database (it should be displayed in the box below the Database drop-down list) in the Connect to Database dialog box. Click OK.

- Complete step 1

- **Go to page 463 and complete steps 11-21 (Page 463). Ignore the notes about skipping steps.**
- Go back to page 472 and complete steps 2-12.

Processing the cube

- Right click the Max Min Manufacturing DM cube (it will be listed within the Cubes folder) in the Solution Explorer window and select Process from the context menu.
- In the Process Cube dialog box, click the Run button (bottom right). The Process Progress dialog box will open. If your cube is constructed correctly, the processing will complete successfully and you will see the Process Succeeded message in the status bar. (If the cube does not process successfully, make a note of the errors, redo any steps that were done incorrectly, and try processing again). Close the Process Progress dialog box and then the Process Cube dialog box.
- Exit VS 2017.