Data Capture from Network Analyzer using Agilent’s ADS

Capturing the data to ADS
1. Launch ADS from the program menu or desktop icon.

2. Create a NEW Project Directory. ADS manages its design and data files in a ‘project’. It is a file folder which includes subfolders such as ‘data’, ‘networks’, and ‘synthesis’, etc. In the “Getting Started with ADS” window, create a new project.

Name it anything that uses only letters and numbers with no spaces (alpha-numeric). Click OK
3. An untitled schematic windows will open. Click on the Tools menu and select *Connection Manager Client*. The Connection manager Client is used to capture data from the device attached to the lab computer via GPIB, USB or LAN and stores it as part of your project data.

4. To capture data find the model on the device attached to the computer. For the microwave labs the devices are HP8730C/D or ENA B (E5071C). Select *Measurements* -> *S-Parameters* and the Device.
You might be prompted to Set Server. Click OK.

5. The device window for S-parameter Measurements will launch.
6. Click **Browse**...and give a name to the data set that is alpha-numeric.

7. Click **Measure** to perform the data capture. You will notice the displays on the
device change as measurement are taken and a window will pop-up to indicate a successful measurement. The captured data should now be available for display in ADS.

Data Display and Processing.

1. Click on the Schematic screen. Under WINDOW select NEW DATA DISPLAY or Click the Data Display icon

2. A Data Display window will open. Select the type of plot you want from the palette and place it in the display area to the left.
3. The Plot Traces and Attributes window will open to allow simulated or saved data to be added to the plot. The Dataset and Equations pull-down menu is used to select which dataset to use. Select a measurement from a dataset in the window below and click >>Add>> to display the measurement on the plot.

4. It is common for a dataset to be comprised of complex values so for the case of a rectangular plot the method for displaying the data must be selected before the data is displayed on the plot.
5. Use markers to display points of interest on the plots by selecting a marker type and clicking on the trace that it is to be associated with. A Marker label will be automatically generated to highlight the information.