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Customer Assistance QuikLook Data to Vision DataSet

Discussion

The best way to send data to Radiant Technologies, Inc., for analysis or to show a problem that needs resolution, is to attach a Vision DataSet file (*.dst) to an email to RTI. The DataSet should contain one or more Task executions that demonstrate the question.

For users who are unfamiliar with Vision DataSets, or for users who can quickly demonstrate the data in question in a QuikLook measurement, data taken under the Vision QuikLook menu can be easily moved into a DataSet to be sent to Radiant. Data can be saved to a new DataSet or appended to an open DataSet. Most likely, the first example will be saved to a new DataSet and then subsequent measurements appended to that DataSet.

Procedures

Once data are taken in a QuikLook execution they will be displayed in a Data Presentation dialog. Normally the data might then be exported to a target outside Vision (Microsoft Excel, text, etc.) and then the Data Presentation dialog would be closed. In this case the data are lost to Vision.

1. Configure the Task in QuikLook. It is very important to assign a unique and meaningful *Task Name*. The data will be permanently archive under this Task Name in the DataSet. Recognizing the Task in future data reviews is critical.

Unique and Meaningful Task Name is Critical

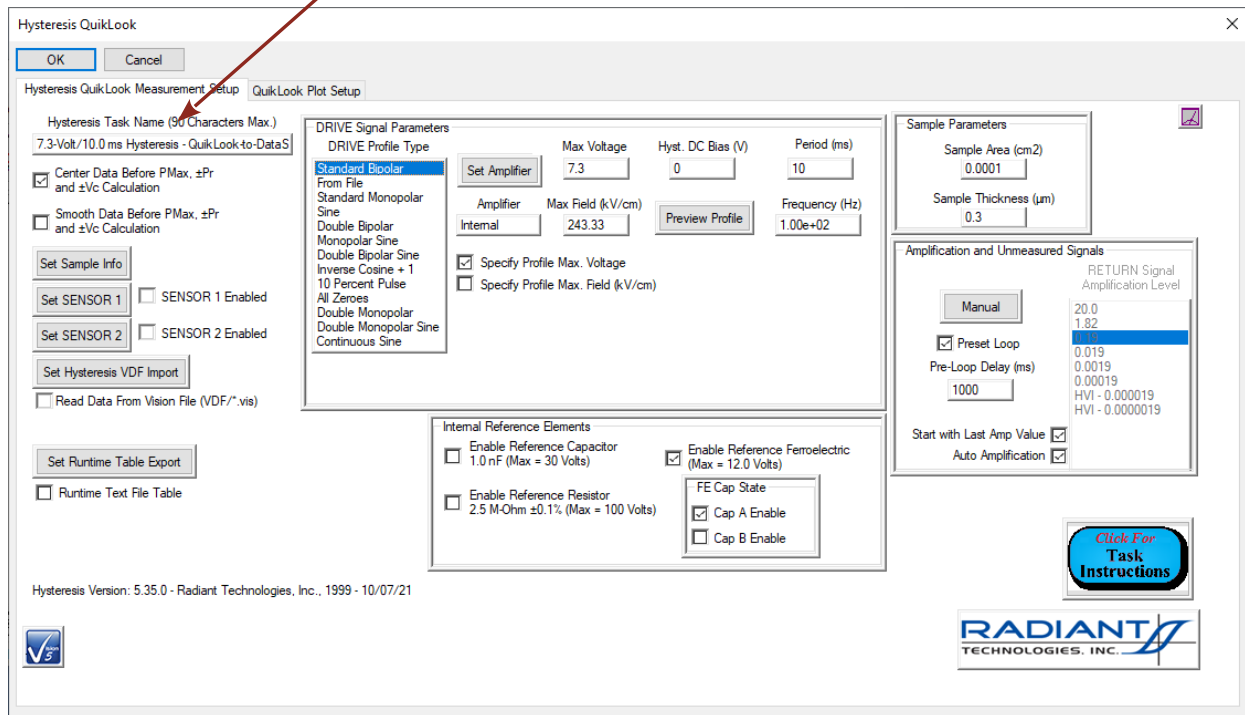


Figure 1 – Configure a QuikLook Hysteresis Task.

2. Run the Task and generate the Data Presentation dialog.
3. Before closing the Data Presentation dialog, select “Save to New DataSet” in the unlabeled list box.

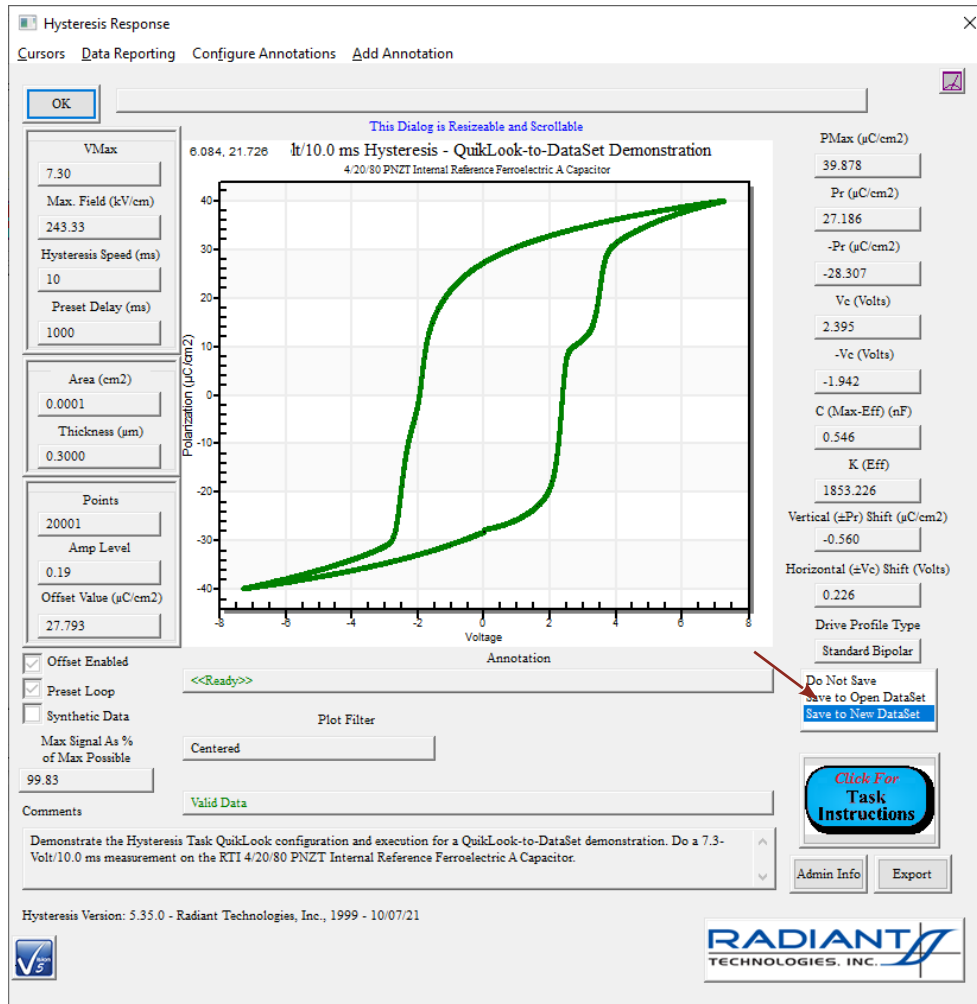


Figure 2 – Initiate Save to New DataSet.

4. Click *OK* to close the Dialog. The New DataSet dialog will appear.

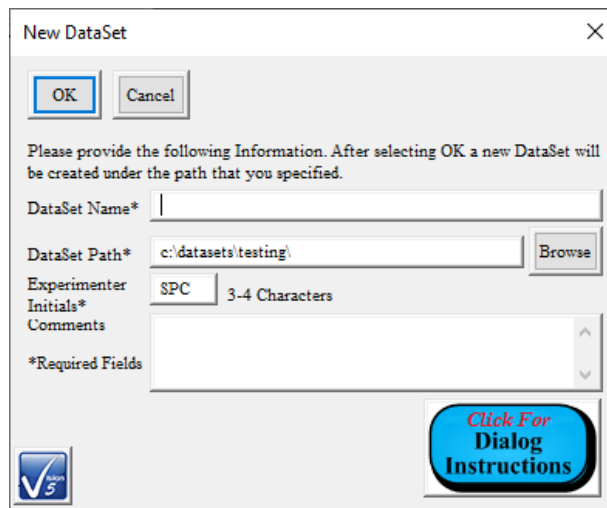


Figure 3 – New DataSet Dialog.

5. Provide a *DataSet Name*. The name must be unique and should be a meaningful descriptor. Provide a file path (C:\DataSets by default) and file name (*DataSet Name* by default). Provide your initials. Adding *Comments* for DataSets (and only for DataSets) is not recommended.

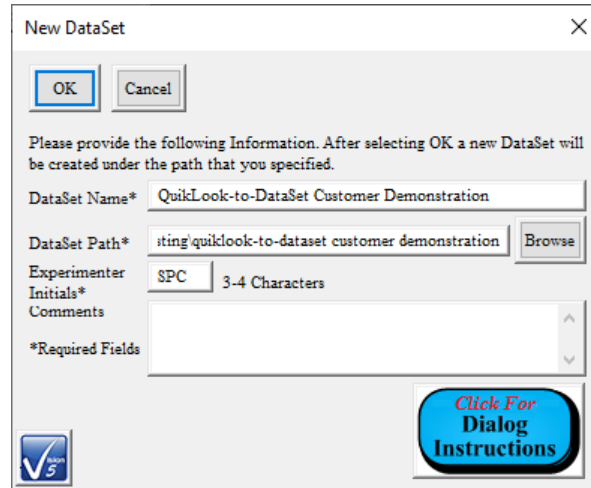


Figure 4 – DataSet Identifiers are Configured.

6. Click *OK* to close the Dialog. The DataSet will be created and opened. Before accessing the DataSet, a text dialog appears to name the archive in the DataSet. Provide a unique and meaningful name and click *OK* to close the dialog and finalize the update.

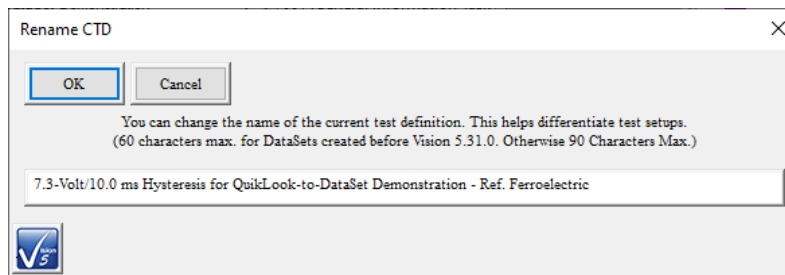


Figure 5 – Archived Data Identifier.

7. The DataSet is added to the DataSet Explorer DataSet tree at the location that it is found on the Vision host computer disk drive.

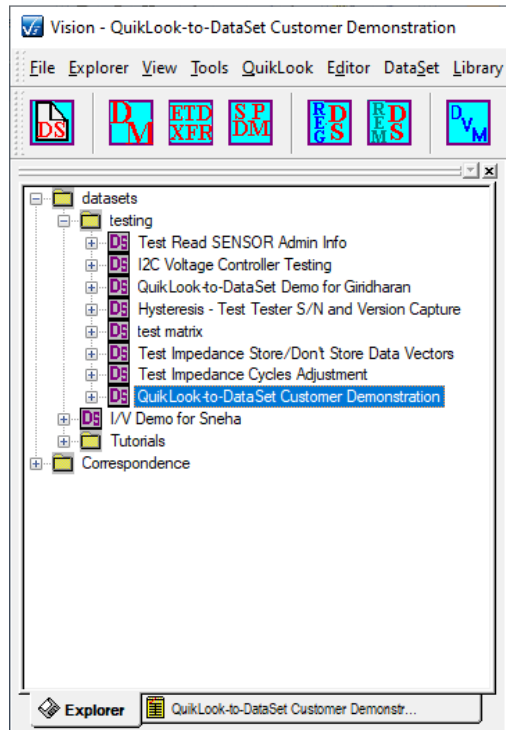


Figure 6 – New DataSet in the DataSet Archive Tree.

8. The Data are archived in the DataSet. The DataSet consists of these elements.
 - a. Log Window – A text window that records activity in the DataSet. By default the Test is cleared when the DataSet is closed.
 - b. An open tab in the DataSet Explorer window.
 - c. Current Test Definition (CTD) – This is the experiment that is ready to run in the DataSet. It consists of the Hysteresis Task as configured in QuikLook. The CTD is named as configured in **Figure 5**.
 - d. DataSet Archive – This is the permanent record of all activity in the DataSet. It consists of a series of Executed Test Definitions (ETDs). Each ETD will take on the CTD name and append a serialized index to render the name unique.

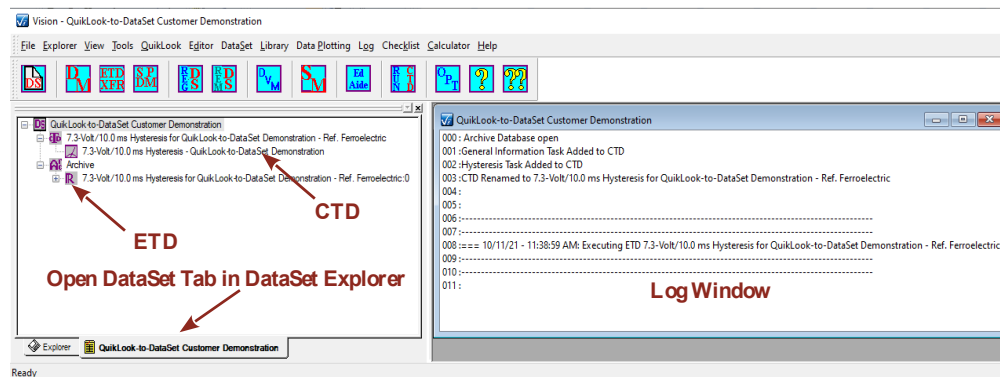



Figure 7 – Elements of the Open DataSet.

9. The single ETD under the DataSet Archive contains two folders – Experiment Design and Experiment Data. Experiment Design is for the program’s internal use. Experiment Data permanently archives the QuikLook data. To review the data, open the Experiment Data folder and double-click the Task in the folder. The Task configuration dialog will open for review. When the dialog is closed a plot configuration dialog will open to set plot labels and choose a mathematical operation to apply to the plotted data. When this dialog is close, the Data Presentation dialog appears. It is identical to the QuikLook plot configuration except that the unlabeled QuikLook-to-DataSet option list box does not appear.

The screenshot illustrates the Vision software interface for recalling archived data. The main window shows a project tree with a task selected. A 'Hysteresis Setup' dialog is open, showing parameters like Max Voltage (7.3) and Hysteresis Speed (10). A 'Regraph Plot Setup' dialog is also open. The central focus is the 'Hysteresis Response' dialog, which contains a plot of Polarization (µC/cm²) vs Voltage (V) showing a hysteresis loop. The plot is titled '7.3-Volt/10.0 ms Hysteresis - QuikLook-to-DataSet Demonstration'. The dialog also includes various parameters such as P1Max, Pr, -Pr, Vc, -Vc, C, K, Vertical Shift, and Horizontal Shift. A 'Click For Task Instructions' button is visible in the bottom right of the dialog.

Figure 8 – Recall the Archived Data.

10. The Task can be reexecuted immediately inside the DataSet by clicking <F1> or selecting the Run CTD () icon on the Vision toolbar.
11. The data are stored in a second ETD. Note that, in this case, there are two Tasks in the ETD Experiment Data folder. The first Task is a General Information Task that is appended automatically by Vision. It contains a *Comments* field that details the nature and configuration of every Task executed in the Test Definition.

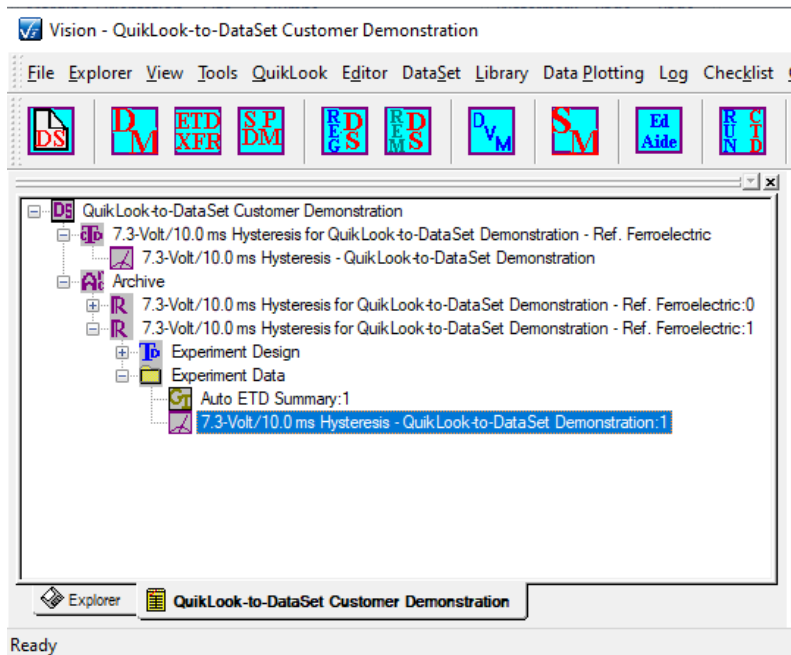


Figure 9 – Repeated Measurement.

12. With the DataSet open, subsequent QuikLook measurements may be appended to the DataSet by selecting “Save to Open DataSet” in the unlabeled QuikLook-to-DataSet options list dialog. Please note that, when providing data to RTI, the DataSet should be kept small enough to attach to an email.

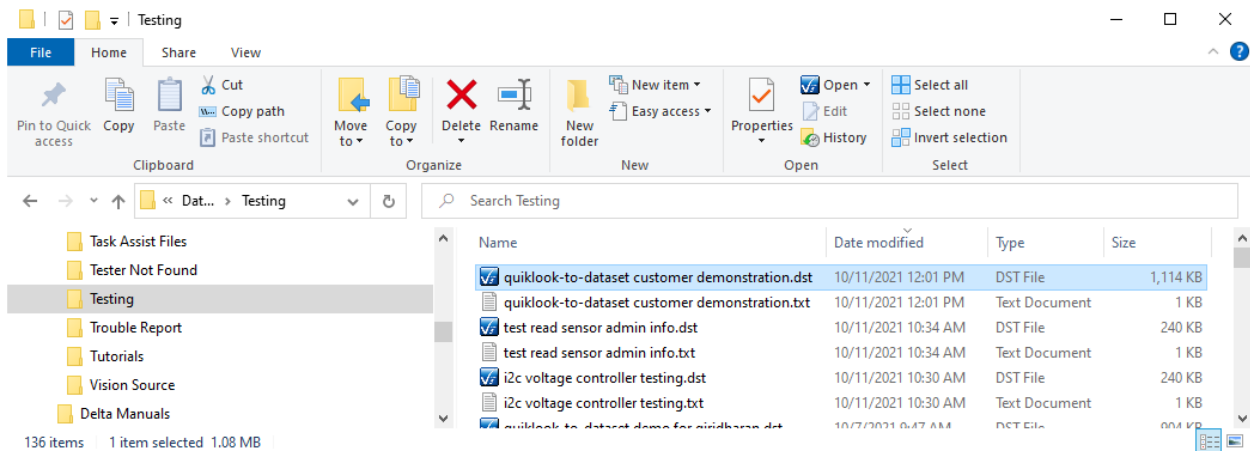


Figure 10 – DataSet File.

A Note on QuikLook Measurements

The QuikLook menu provides a handy let’s-see-what-we’ve-got tool for validating Vision and the Precision tester and for doing quick reviews of sample connection, response, etc. However, Vision is not designed to be operated solely under QuikLook. Limiting measurements to the QuikLook menu limits Vision to about 3% of its capability. Properly used, Vision can reduce the time to take volumes of data from days to minutes.

If you are not familiar with the TASK LIBRARY, the EDITOR, Test Definitions or DataSet, I strongly recommend that you spend some time reviewing the Tutorials in the Main Vision manual. A few hours learning Vision will produce large dividends in time spent collecting data from Vision.

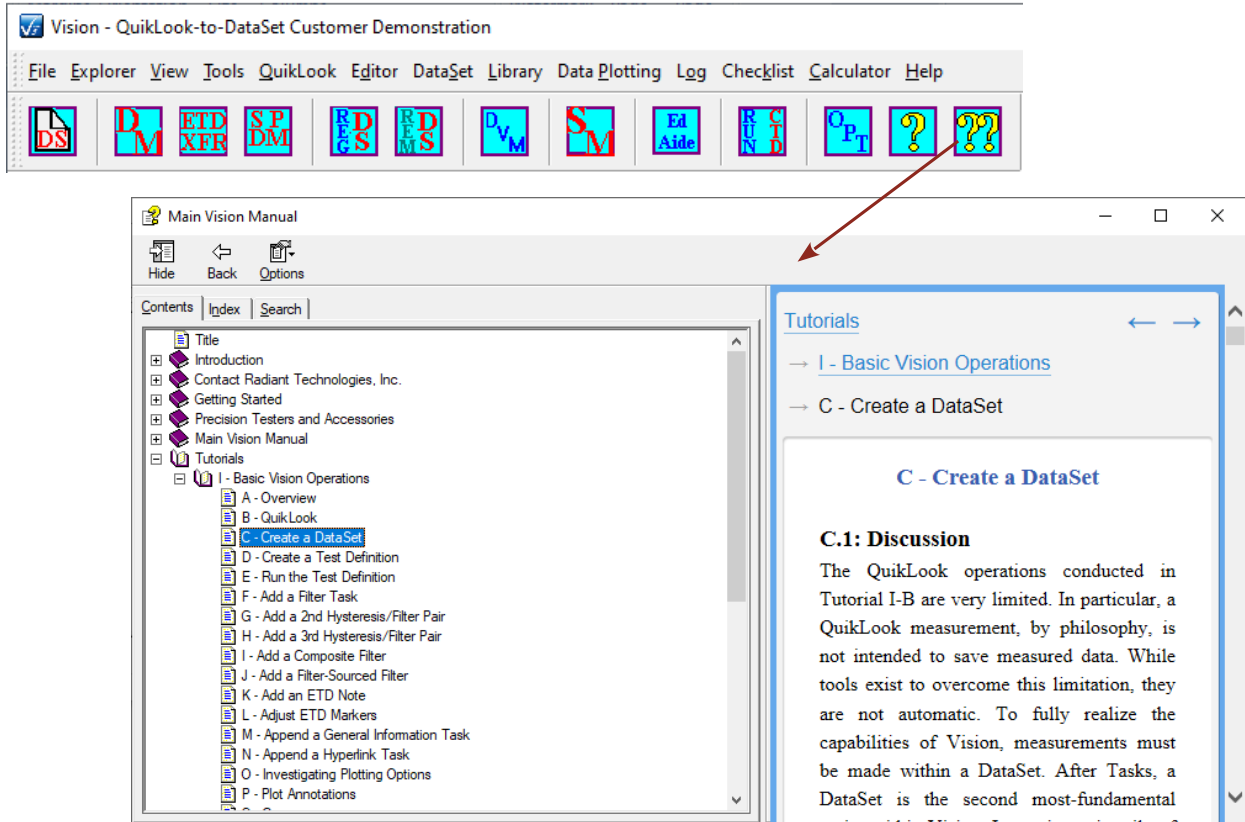


Figure 11 – Main Vision Manual.

I sincerely hope that this discussion is helpful to you. Please don't hesitate to contact me with questions, comments or difficulties.

Good luck in your research.

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