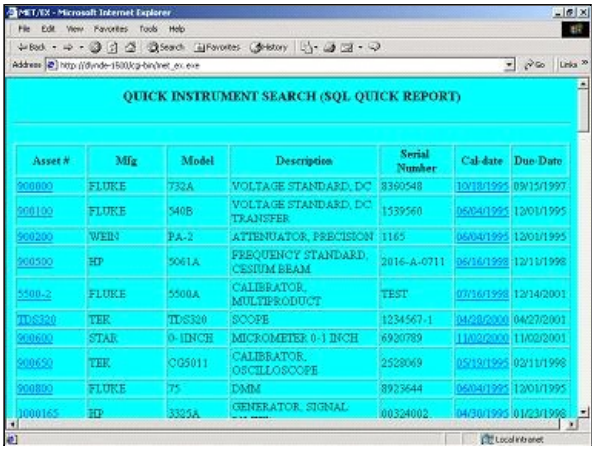
Viewing Results using SQL Quick Reports in Metrology Xplorer®

Product: Metrology Xplorer®

Version: 1.0

Wouldn't it be nice to display results data within an SQL Quick Report from your browser.... ?

Metrology Xplorer has the capability to display and print results data using SQL Quick Reports. A major feature of the Quick Reports is the ability to provide a link to "drill down" to the corresponding Inventory, Calibration, Location, and Maintenance Screens. If your company saves data from a MET/CAL procedure to the database, then this may be a great way to distribute the results data to engineers and technicians using the equipment. This is accomplished by including the proper "linked field" in the SQL statement for the Quick Report, enabling the links to become active, and is described in the operation manual for Metrology Xplorer.



QUICK INSTRUMENT SEARCH (SQL QUICK REPORT)

Asset #	Mfg	Model	Description	Serial Number	Cal-date	Due-Date
900800	FLUKE	732A	VOLTAGE STANDARD, DC	8360548	10/18/1995	09/15/1997
900100	FLUKE	540B	VOLTAGE STANDARD, DC TRANSFER	1539560	06/04/1995	12/01/1995
900200	WEIN	PA-2	ATTENUATOR, PRECISION	1165	06/04/1995	12/01/1995
900500	HP	5061A	FREQUENCY STANDARD, CESIUM BEAM	2016-A-0711	06/16/1998	12/11/1998
5500-2	FLUKE	5500A	CALIBRATOR, MULTIPRODUCT	TEST	07/16/1998	12/14/2001
TDS320	TEK	TDS320	SCOPE	1234567-1	04/28/2000	04/27/2001
900600	STAR	0-1INCH	MICROMETER 0-1 INCH	6930789	11/02/2000	11/02/2001
900650	TEK	CG5011	CALIBRATOR, OSCILLOSCOPE	2528069	05/19/1995	02/11/1998
900890	FLUKE	75	DMM	8923644	06/04/1995	12/01/1995
1000165	HP	3325A	GENERATOR, SIGNAL	00324002	04/30/1995	01/23/1998

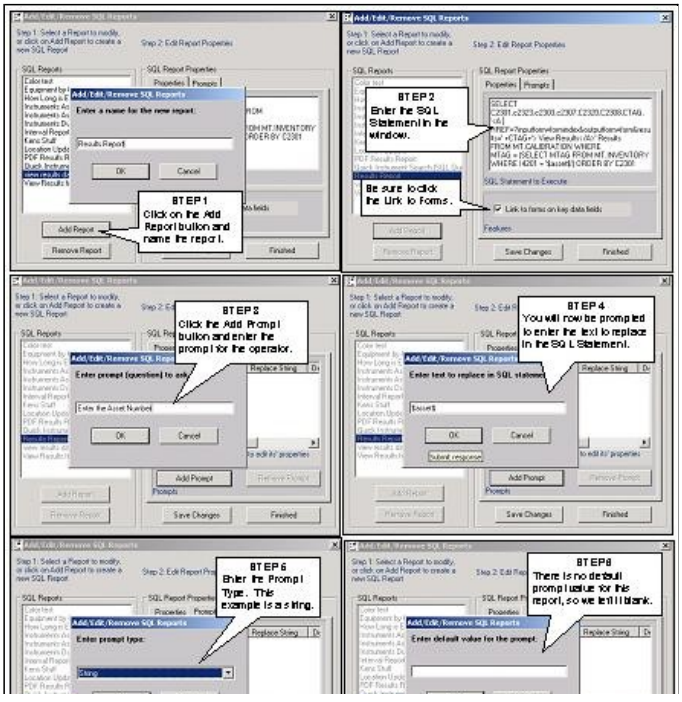
This is an example of an SQL Quick Report showing a list of instruments. Notice the links under the Asset # and Cal-Date titles. If you click on an Asset number, then the program will "Drill Down" into the MET/TRACK Inventory screen. If you click on the Cal-date link for a specific asset, the the program will "Drill Down" to the most recent MET/TRACK Calibration screen. This is a very powerful feature

So, how do we create a report showing the same information but with a link showing calibration data? We are going to create a report that will prompt the operator for an asset number and will display a report with the Cal Date, Pass/Fail, Due Date, Cal Tech, Procedure Used, AS-FOUND/AS-LEFT, a link to the results, and will show all the calibration records for that asset. We will create the report with a single SQL Statement. Because MET/TRACK links the results to the corresponding calibration record, we have to take this into account when we create our SQL query. Metrology Xplorer allows some HTML formatting to be embedded into SQL statement. Here is our statement:

SELECT C2301,c2323,c2303,c2307,C2320,C2308,CTAG,
'<A HREF=?inputform=formindex&outputform=form&results=' +CTAG+'> View Results</A>' Results
FROM MT.CALIBRATION WHERE
MTAG = (SELECT MTAG FROM MT.INVENTORY WHERE I4201 = '$asset$') ORDER BY C2301 ASC

In the first line of the statement we have our calibration fields that are displayed in the reports and CTAG. CTAG is not actually displayed, but will display the link on the Cal Date. This process is described in the manual. The second line actually embeds the HTML formatting into our SQL statement and creates a link called Results. The third and fourth line selects the MTAG for the asset number that was requested in the asset number prompt. An important note, there has to be a results record attached to the calibration record for any data to display. If there are no results, then an error screen will be displayed. You can go back to the previous screen to continue viewing data.

The following instructions show how to set up our report example and use the SQL statement displayed above in bold text.



This process assumes that the database administrator is already familiar with the operation of Metrology Xplorer.

Step 1: Click Add Report and enter a Report Title.

Step 2: Enter the SQL Statement in the Statement Window. Be sure to click the Link to forms on Key Data Fields.

Step 3: Click the Add Prompt button. Enter the text for the operator prompt.

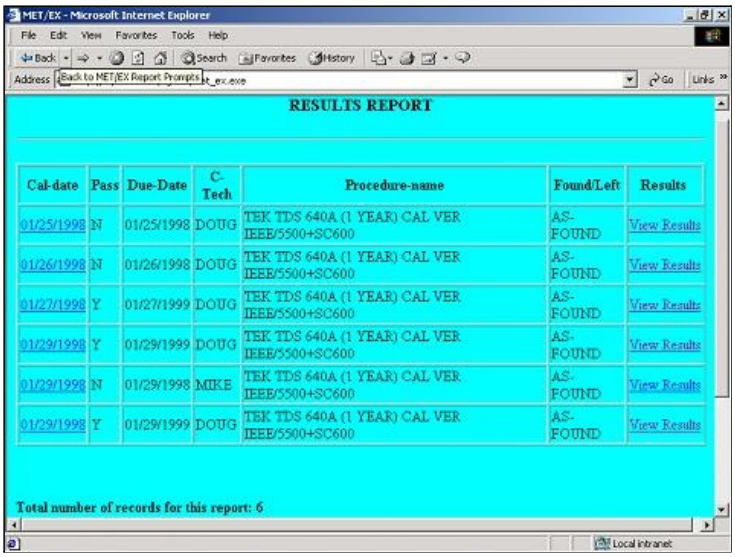
Step 4: Enter the text to replace in the SQL statement. In our example, we are replacing $asset$.

Step 5: Next you will be prompted to enter the prompt type. Choices are String, Date, Time, and Number. For our example, we are replacing $asset$ which is a string.

Step 6: You will now be prompted to enter a default value for the prompt. In this example, we will leave it blank because we are prompting for an asset number.

Be sure to click the "Save Changes" button and the report will be saved.

After setting up the report, be sure to make the reports available by clicking on Users/Groups and select Add/Edit/Remove Groups in the Metrology Xplorer Administration program. Click on the Reports tab and you should see the report you just added. At this point you need to decide which group to add the report to. After adding the report, you should be able to execute the report from your browser. Lets take a look at the report and see how it looks. We ran the report and entered 'TDS640' for our asset number.



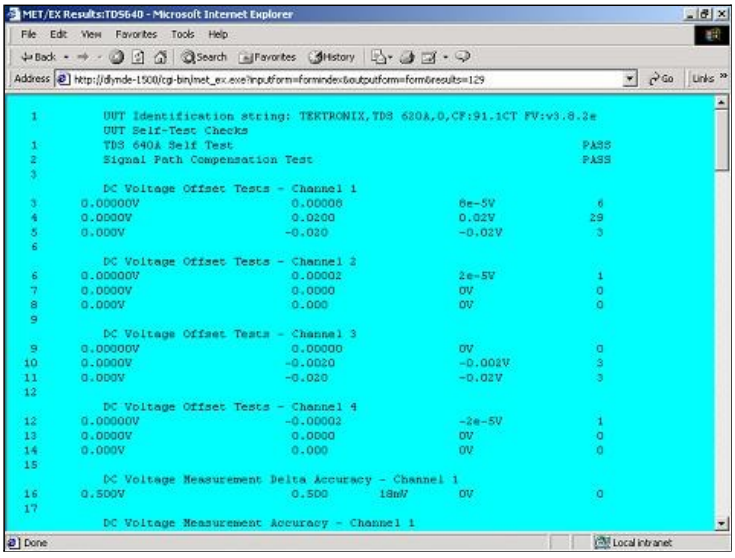
MET/EX - Microsoft Internet Explorer

RESULTS REPORT

Cal-date	Pass	Due-Date	C-Tech	Procedure-name	Found/Left	Results
01/25/1998	N	01/25/1998	DOUG	TEK TDS 640A (1 YEAR) CAL VER IEEE/5500+SC600	AS-FOUND	View Results
01/26/1998	N	01/26/1998	DOUG	TEK TDS 640A (1 YEAR) CAL VER IEEE/5500+SC600	AS-FOUND	View Results
01/27/1998	Y	01/27/1999	DOUG	TEK TDS 640A (1 YEAR) CAL VER IEEE/5500+SC600	AS-FOUND	View Results
01/29/1998	Y	01/29/1999	DOUG	TEK TDS 640A (1 YEAR) CAL VER IEEE/5500+SC600	AS-FOUND	View Results
01/29/1998	N	01/29/1998	MIKE	TEK TDS 640A (1 YEAR) CAL VER IEEE/5500+SC600	AS-FOUND	View Results
01/29/1998	Y	01/29/1999	DOUG	TEK TDS 640A (1 YEAR) CAL VER IEEE/5500+SC600	AS-FOUND	View Results

Total number of records for this report: 6

We now have our report. You can see that after entering in the asset number, we had a total of 6 calibration records. There is also a link called 'View Results' for each calibration record. If there is a calibration record, then data will be displayed, otherwise an error screen will be displayed.



MET/EX Results:TDS640 - Microsoft Internet Explorer

```
 1        UUT Identification string: TEKTRONIX,TDS 620A,0,CF:91.1CT FV:v3.8.2e
          UUT Self-Test Checks
 1        TDS 640A Self Test                                          PASS
 2        Signal Path Compensation Test                               PASS
 3
          DC Voltage Offset Tests - Channel 1
 3     0.00000V                  0.00006              6e-5V            6
 4     0.0000V                   0.0200               0.02V           29
 5     0.000V                   -0.020               -0.02V            3
 6
          DC Voltage Offset Tests - Channel 2
 6     0.00000V                  0.00002              2e-5V            1
 7     0.0000V                   0.0000               0V               0
 8     0.000V                    0.000                0V               0
 9
          DC Voltage Offset Tests - Channel 3
 9     0.00000V                  0.00000              0V               0
10     0.0000V                  -0.0020              -0.002V           3
11     0.000V                   -0.020               -0.02V            3
12
          DC Voltage Offset Tests - Channel 4
12     0.00000V                 -0.00002              -2e-5V           1
13     0.0000V                   0.0000               0V               0
14     0.000V                    0.000                0V               0
15
          DC Voltage Measurement Delta Accuracy - Channel 1
16     0.500V                    0.500       18mV     0V               0
17
          DC Voltage Measurement Accuracy - Channel 1
```

We clicked on the last record in the list and we now are displaying MET/CAL data from an automated oscilloscope calibration.

Now, you can distribute calibration results in an SQL Quick Report.

If you need on-site help, give us a call at ON TIME SUPPORT. We have a large amount of database, procedure, and networking experience and we can save you a lot of time. We are here to help. You can call us at (281) 296-6066 or visit us on the Internet at www.ontimesupport.com.

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