

Retesting Failed DUTs Later

Situation

Use this procedure if:

- You wish to perform a bidirectional test on a series of connector ends, continuing past any failures.
- After the full test, you wish to retest any fibers that failed (after, for example, polishing the failed leads).

Configuration: DUT

Create a new DUT (Click 'Add'). Fill out the Connectors and other fields, making sure to set the Assembly Type to 'Multifiber-to-Multifiber' with Number of Fibers set to 1. This will allow you to later redo individual fibers later.

Example:

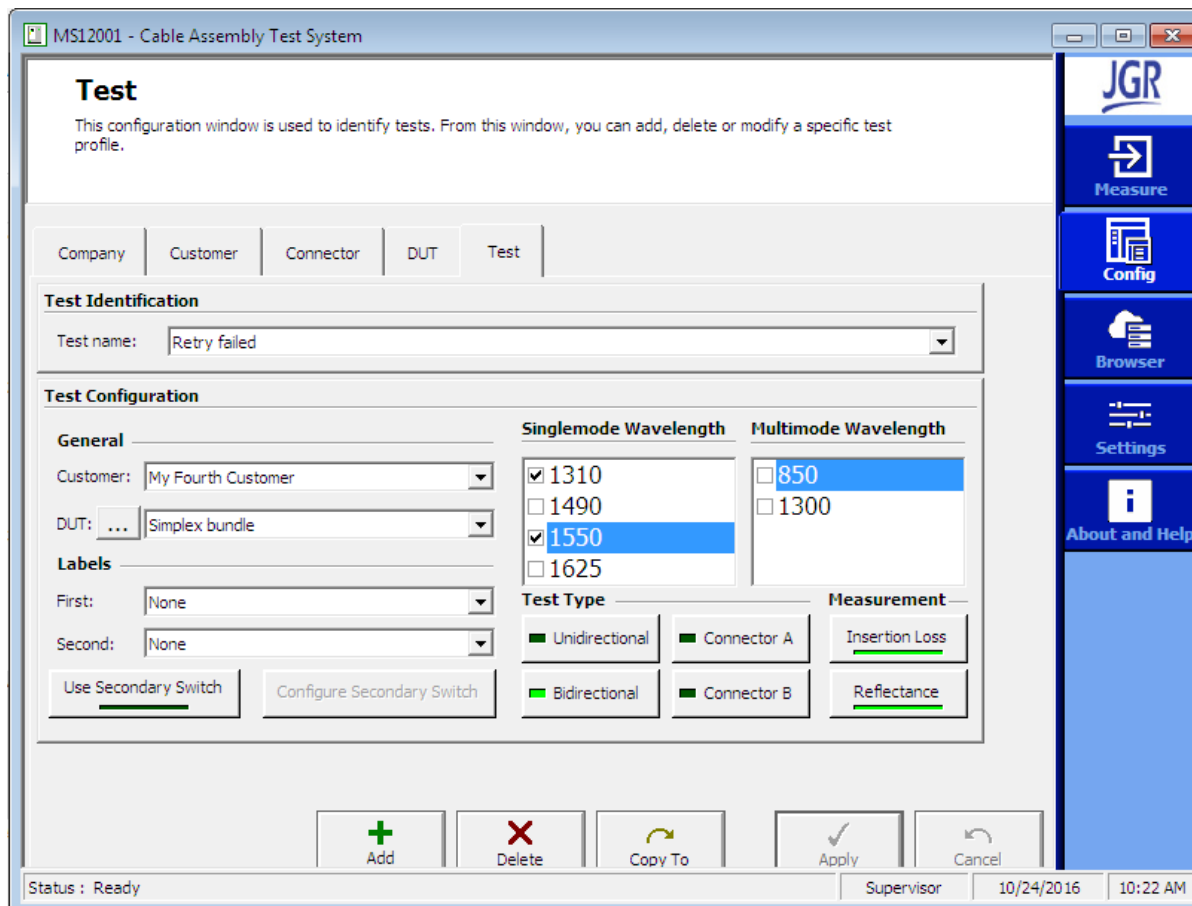
The screenshot shows the 'DUT' configuration window in the MSI2001 - Cable Assembly Test System. The window title is 'MSI2001 - Cable Assembly Test System'. The main heading is 'DUT' with a sub-heading: 'This configuration window is used to identify devices under test (DUT). From this window, you can add, delete or modify a specific DUT.' Below this is a navigation bar with tabs for 'Company', 'Customer', 'Connector', 'DUT', and 'Test'. The 'DUT Identification' section contains the following fields: 'Part number' (Simplex bundle), 'Description' (empty), 'Manufacturer' (empty), 'Maximum fiber length (m)' (500), 'Fiber type' (Singlemode - 9um), 'Assembly type' (Multifiber-to-Multifiber), and 'Number of fibers' (1). There is a 'Mandrel Free' checkbox which is checked. The 'DUT Configuration' section contains 'End A' (FC/APC) and 'End B' (FC/UPC) dropdowns, with associated 'IL limits' and 'Ref. limits' for each. At the bottom, there are buttons for '+ Add', 'X Delete', 'Copy To', 'Apply', and 'Cancel'. The status bar at the bottom shows 'Status: Ready', 'Supervisor', '10/24/2016', and '10:15 AM'. On the right side of the window, there is a vertical toolbar with icons for 'Measure', 'Config', 'Browser', 'Settings', and 'About and Help'.

When finished,
click 'Apply'

Configuration: Test

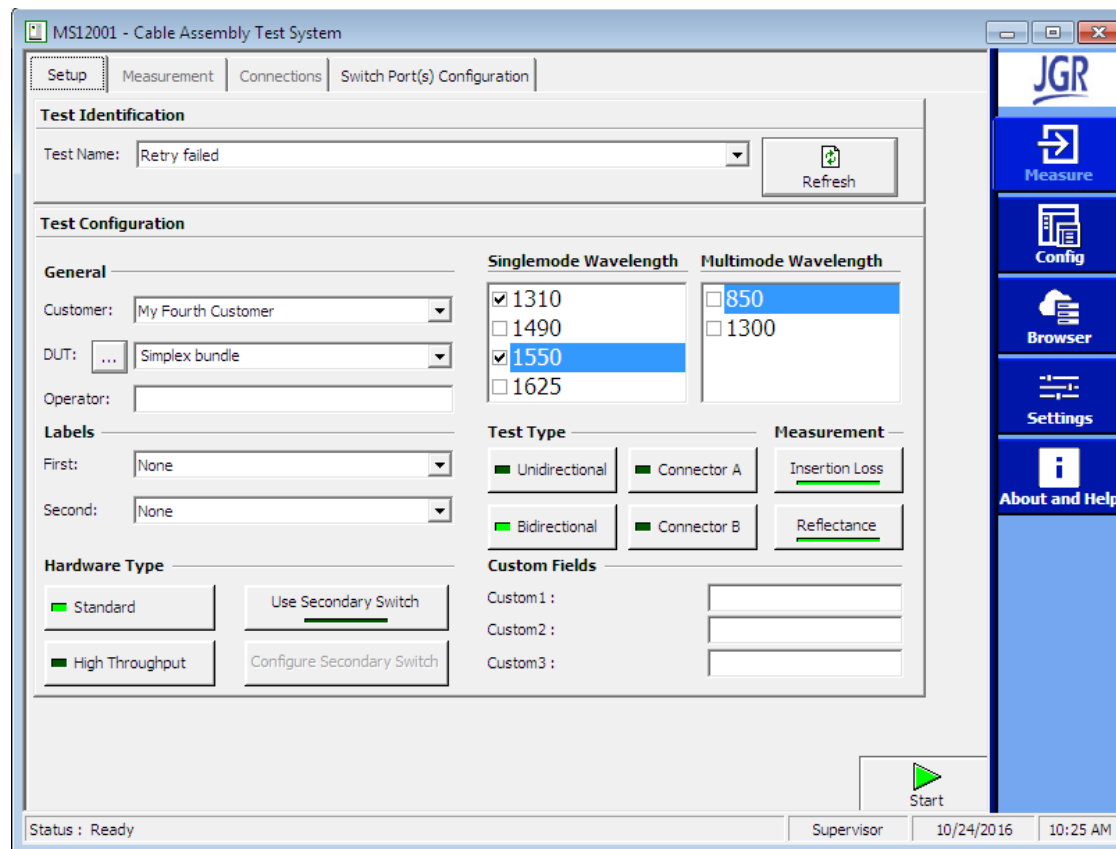
Create a Test (again, click 'Add') using your new DUT. In the example, we named our DUT "Simplex Bundle".

Example:



Measure

Go to the Measure tab and select your created test. In this example we called it “Retry Failed”. Then click ‘Start’.



Settings

If some of the fibers fail later, you may receive a pop-up dialog box asking if you want to retry those tests. This box can be turned off in the 'Repeat Tests' section of the settings.

F#	IL (dB)	1550	1310	1550	1310	1550	1310	1550	Len. (m)
1	0.00	0.03	-75.97	-77.32	1310	1550	1310	1550	1.61
2	0.00	0.04	-74.89	-77.59					1.61
3	51.08	50.41	-74.87	-78.18					1.61
4									

Device Status : Fail
IL
1310 0.00
A 0.03
1550 0.03
RL

Measurement End A
Instructions:
To retest fiber(s), please select corresponding item(s) from the list and click on Retry. Otherwise, click on Next DUT to cancel the current test and perform measurements on the next DUT, or click on Continue to keep these values.

Fiber 3

Buttons: Skip DUT, Retry, Continue, Next DUT

Buttons: Stop Monitoring, Start Monitoring, Second Direction, Reference, Stop, Acquisition, Measurement, Start Single, Start Continuous

Status: Current dual wavelength IL and Reflectance monitoring Supervisor 10/19/2016 01:15 PM

Measurement Settings

From this window, you can customize reference and measurement options.

Access Level: Operator Supervisor

System | Measurement Options | Acquisition | Database | User Access | Display | Switch Config | Power-Level

Require New Reference

- Yes: Perform a new reference before each series of tests.
- No: Use existing (saved) reference when available.

Save All DUT Results

- Yes: Save all results.
- No: Save Pass results only.

Unidirectional IL Reference Method

- MTJ1: IL reference on MTJ1 only (DUT IL will include the MTJ2 IL).
- MTJ2: IL reference on MTJ1 and MTJ2.

Repeat Tests

- Yes: Retry measurements for failed results. Max. number of repetitions: 10
- No: Continue measurements regardless of result status (Pass, Warning or Fail).

Unidirectional RL Method

- RL total: The Reflectance value given will represent the RL of connectors A and B combined (total RL).
- RLa, RLb: Two separate Reflectance values will be given; they represent the individual RL of each connector (RLa and RLb).

MTJ1 Length Mode

- Manual: MTJ1 length entered manually.
- Automatic: MTJ1 length detected automatically.

Multiple RM Configuration

- One RM: Tests made with one RM module (up to two wavelengths).
- Two RMs: Tests made with two RM modules (up to four wavelengths).

Negative IL Limit Configuration

- Yes: Warning for IL values lower than: -0.03 dB
- No

Buttons: Apply, Cancel

Status: Ready Supervisor 10/19/2016 01:19 PM

Measure

Perform your reference measurement for connector A.

The screenshot displays the MS12001 - Cable Assembly Test System software interface. The main window is titled "MS12001 - Cable Assembly Test System" and has tabs for "Setup", "Measurement", "Connections", and "Switch Port(s) Configuration". The "Measurement" tab is active, showing a table with the following data:

P#	1310nm	1550nm	Len. (m)
1	-0.02	-0.01	2.9

Below the table, the "Device Status" section shows "Power indication" with values for 1310nm (-26.79 dB) and 1550nm. The "MTJ1 Reference End A" section provides instructions: "1- Connect the MS12 OUT slot (1-1) to the switch common port slot (1-3). 2- Connect the switch OUT ports slot (1-3) to the power meter IN slot (1-0) using a fanout master test jumper (MTJ). 3- Press Start." and connector information: "Connectors: C1=FC/APC; C2=compatible FC/APC."

The interface also includes a "Monitoring" section with "Fiber" set to 1 and "Wavelength" set to 1310/1550. It features "Stop Monitoring" and "Start Monitoring" buttons. The "Serial Number" field is empty. The "Hybrid Direction" section has "First Direction" and "Second Direction" options, with "First Direction" selected. The "Print Label/Next DUT" section has "Print Label" and "Next DUT" buttons. The "Acquisition" section has "Reference" and "Measurement" options, with "Reference" selected, and "Start Single" and "Start Continuous" buttons. The status bar at the bottom shows "Status: Current power monitoring", "Supervisor", "10/24/2016", and "10:28 AM".

Measure

After reference, make sure your Acquisition is set to 'Measure'. Type in your bundle serial number or name into the first 'Serial Number' text box, and type '1' into the second. This second text box will be your fiber number.

The screenshot displays the MS12001 - Cable Assembly Test System software. The main window has tabs for Setup, Measurement, Connections, and Switch Port(s) Configuration. The Measurement tab is active, showing a table with the following data:

F#	First Measurement				Second Measurement				Len. (m)
	IL (dB)		RefI (dB)		IL (dB)		RefI (dB)		
1	0.00	0.00	-71.04	-69.24					0.00

Below the table, the Device Status is **Pass**. The Measurement End A instructions are: 1- Insert the Device Under Test (DUT) between the master test jumper (MTJ) and the power meter detector IN slot (1-0). 2- Press Start. Connectors: End A=FC/APC; End B=FC/JPC.

The Monitoring section shows Fiber: 1 and Wavelength: 1310/1550. The Acquisition section shows Reference and Measurement options. The Serial Number section shows Bundle 1 and 1. The status bar at the bottom indicates: Status : Current dual wavelength IL and Reflectance monitoring, Supervisor, 10/24/2016, 10:33 AM.

Measure

Connect each fiber, click 'Start Single', then click 'Next DUT'. This will auto-increment the text box we are using as fiber number. Continue through all the connector A ends of the whole bundle, whether the fiber passes or not.

MS12001 - Cable Assembly Test System

Setup | Measurement | Connections | Switch Port(s) Configuration

F#	First Measurement				Second Measurement				Len. (m)
	IL (dB)		Ref. (dB)		IL (dB)		Ref. (dB)		
1	1310	1550	1310	1550	1310	1550	1310	1550	

Device Status :

	IL	RL
1310	-0.01	-70.25 dB
Δ	0.01	
1550	0.00	-69.56 dB

Measurement End A

Instructions:
1- Insert the Device Under Test (DUT) between the master test jumper (MTJ) and the power meter detector IN slot (I-0).
2- Press Start.

Connectors:
End A=FC/APC; End B=FC/APC.

Module Connections

Measurement History

Monitoring

Fiber: 1

Wavelength: 1310/1550

Serial Number

Bundle1: Auto Increment

Hybrid Direction

First Direction

Second Direction

Print Label/Next DUT

Acquisition

Reference

Measurement

Status : Current dual wavelength IL and Reflectance monitoring

Supervisor 10/24/2016 10:36 AM

JGR

Measure

When you get to the end of the bundle, you'll want to test the other side connectors of the bundle (the connector B sides).

- Make sure you've clicked 'Next DUT' after the final fiber, because this button also saves the results.
- You may now click 'Second Direction', which will discard your Connector A reference and ask you to perform a new reference for connector B.
- Do the new reference, then run through the same testing procedure as before, testing the fibers in the same order as last time. This will assign the new Connector B results to the correct Connector A.
- Clicking 'Next DUT' after the last fiber will pop up a box saying there is no more connector A data to match to. This means you're done for this bundle.

Notes

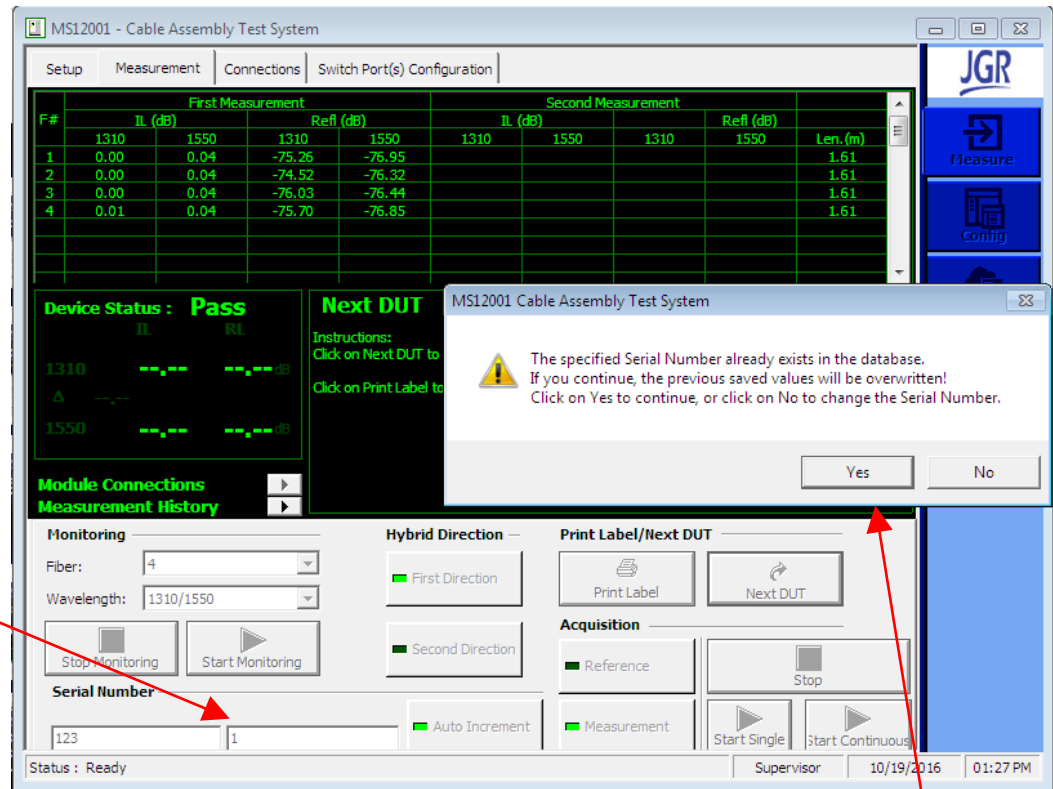
You may prefer to do many bundles' connector A sides in a row, then run through all the B sides, or do all of each bundle before switching to another. Both are possible. Just type in the appropriate serial numbers when switching bundles. For example:

- type Serial Number “Bundle1” and “1”
- test through all connector A sides of Bundle1: Bundle1-1, Bundle1-2, ...
- type Serial Number “Bundle2” and “1”, repeat.
- When you wish to test the side B, simply click ‘Second Direction’ (and perform reference), and it should automatically rerun through the same bundle serial numbers in the same order.

Notes

You may continue through failures for connector A, clicking 'Next DUT' and measuring other DUTs as much as you wish.

At any time you may reconnect a previously-tested DUT to retest them. Just manually enter the serial number (both parts) of the test you wish you to redo.



When you click 'Next DUT' your new values will replace the old ones.

Report

Use the Filter Builder in the Browser tab to find the results from all your tests.

In this example, we filter on date, but you may wish select by other fields as well: DUT type, Operator Name, etc.

The screenshot displays the 'MS12001 - Cable Assembly Test System' interface. At the top, a 'Filter:' dropdown menu contains the text 'retrytest report'. To its right are buttons for 'Refresh', 'Add', 'Delete', and 'Copy To'. Below this is the 'Condition Builder' section, which includes a 'Selection Criteria' area with fields for 'Field Name', 'Operator', and 'Value'. The 'Field Name' is set to 'Custom Field 1', the 'Operator' is '=', and the 'Value' is '10-24-2016'. A 'Number of Records to Retrieve' section is also present, with a 'Value' field and a 'Percent (%)' checkbox. A 'Note on Selection Criteria' explains that an expression is a combination of field name, operator, and value, and can be combined using AND or OR operators. Below the condition builder is the 'Field Selection & Sorting Criteria' section, which has a 'Display These Fields' list with checkboxes for various fields like 'Measurement Date', 'Fixed Serial Number', etc. The 'Sort Criteria' section includes a 'Field name' dropdown set to 'Custom Field 1', with 'Ascending' and 'Descending' options. An 'Important' note states that fields in the sorting criteria must first be selected from the Field Selection list. The interface also features a vertical sidebar on the right with icons for 'Measure', 'Config', 'Browser', 'Settings', and 'About and Help'. At the bottom, there are 'Clear', 'Apply', 'Cancel', and 'Close' buttons, along with a status bar showing 'Status : Current power monitoring', 'Supervisor', '10/24/2016', and '11:06 AM'.

Report

Here we see the results from our tests. This can be exported to excel or printed out into a report using the buttons along the bottom.

Filter Selection
retrytest report
Current filter created on: 10/24/2016 11:04:53 AM
In a multi-user environment, you may have to click on the Refresh button to retrieve the most recent data. Use the filter to define or modify a filter you may use the Filter Builder.

DUT/Test Information

Measurement Date	Fixed Serial Number	Incremental Serial Number	Global Test Status
10/24/2016 10:36:28 A	Bundle 1	1	Passed
10/24/2016 11:03:30 A	Bundle 1	2	Passed
10/24/2016 11:03:36 A	Bundle 1	3	Passed
10/24/2016 11:03:43 A	Bundle 1	4	Passed
10/24/2016 10:52:04 A	Bundle 2	1	Passed
10/24/2016 10:52:14 A	Bundle 2	2	Passed
10/24/2016 10:52:23 A	Bundle 2	3	Failed
10/24/2016 10:52:31 A	Bundle 2	4	Passed

Fiber Measurements

Fiber Number	IL		IL End A		IL End B		Refl.		Refl. End A		Refl. End B	
	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm
1			0.00	0.00	-0.01	-0.01			-71.04	-69.24	-70.94	-70.2

Filter Builder... Statistics... Refresh Export Labels... Reports...

Status: Current power monitoring Supervisor 10/24/2016 11:05 AM

Retesting

You may now retest any that you wish by connecting the appropriate fibers, going back into the Measure tab, and typing in both parts of the Serial Number for the fiber.

F#	First Measurement				Second Measurement				Len. (m)
	IL (dB)		Refl (dB)		IL (dB)		Refl (dB)		
1	1310	1550	1310	1550	1310	1550	1310	1550	0.00
	-0.01	-0.01	-71.92	-70.14					

When you click 'Next DUT' you'll get a warning box that you are overwriting data. Click Yes!

Report

Once you've retested the fibers you wish to, return to the Browser tab to see the updated values in the report.

Filter Selection
retrytest report
Current filter created on: 10/24/2016 11:04:53 AM
In a multi-user environment, you may have to click on the Refresh button to retrieve the most recent data. Use the filter to define or modify a filter you may use the Filter Builder.

DUT/Test Information

Measurement Date	Fixed Serial Number	Incremental Serial Number	Global Test Status
10/24/2016 10:36:28 A	Bundle1	1	Passed
10/24/2016 11:03:30 A	Bundle1	2	Passed
10/24/2016 11:03:36 A	Bundle1	3	Passed
10/24/2016 11:03:43 A	Bundle1	4	Passed
10/24/2016 10:52:04 A	Bundle2	1	Passed
10/24/2016 10:52:14 A	Bundle2	2	Passed
10/24/2016 11:19:19 A	Bundle2	3	Passed
10/24/2016 10:52:31 A	Bundle2	4	Passed

Fiber Measurements

Fiber Number	IL		IL End A		IL End B		Refi.		Refi. End A		Refi. End B	
	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm
1			0.00	0.00	-0.01	-0.01			-71.04	-69.24	-70.94	-70.2

Filter Builder... Statistics... Refresh Export Labels... Reports...

Status : Current power monitoring Supervisor 10/24/2016 11:19 AM

Tips for Using the Browser

Useful tips: Retrieving Only Failed Tests

To only return fibers that failed (so you don't have to scan through a huge list of passes to find the fibers to retest), set up the filter selection criteria to select fails.

The screenshot displays the MS12001 - Cable Assembly Test System software interface. The main window is titled "MS12001 - Cable Assembly Test System". At the top, there is a "Filter:" dropdown menu set to "retry failed". To the right of the filter are buttons for "Refresh", "Add", "Delete", and "Copy To".

The "Condition Builder" section is active. It features a "Selection Criteria" area with a table for defining conditions:

Field Name:	Operator:	Value:
Test Name	=	Retry Failed

Below this table, a list of conditions is shown: "Tst_Name = 'Retry Failed'", "And (Fim_IEndAStatus = 3", "Or Fim_IEndBStatus = 3", "Or Fim_ReflectanceEndAStatus = 3", and "Or Fim_ReflectanceEndBStatus = 3)". Buttons for "<- AND" and "<- OR" are available to combine conditions.

To the right of the condition builder is a "Number of Records to Retrieve" section with a "Value:" input field and a "Percent (%)" checkbox. A "Note on Selection Criteria:" explains that an expression is a combination of <Field Name> <Operator> <Value>, and that expressions may be combined using AND or OR operators.

The "Field Selection & Sorting Criteria" section is also visible. It has a "Display These Fields" list with checkboxes for "Measurement Date", "Fixed Serial Number", "Incremental Serial Number", "Global Test Status", "Test Name", "Fiber Number", "Custom Field 3", "Custom Title 1", "Custom Title 2", and "Custom Title 3". The "Fiber Number" checkbox is selected. To the right, the "Sort Criteria" section shows a "Field name:" dropdown set to "Custom Field 1", with "Ascending" and "Descending" radio buttons. Below this is a list of fields for sorting, including "Dum_MeasurementDate", and an "<- Insert" button. An "Important:" note states: "The fields in the sorting criteria must first be selected from in the Field Selection list."

At the bottom of the window, there are buttons for "Clear", "Apply", "Cancel", and "Close". The status bar at the very bottom shows "Status : Ready", "Supervisor", "10/19/2016", and "01:46 PM".

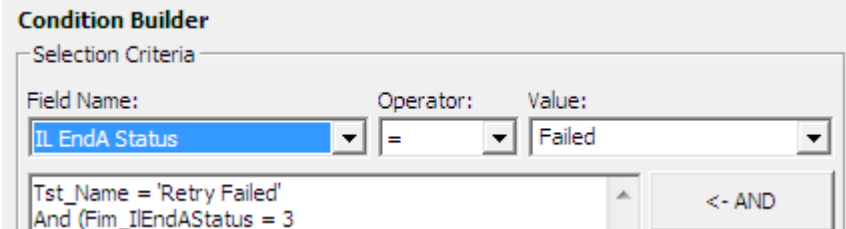
Useful tips: Retrieving Only Failed Tests

Set your filter to return tests with the correct name and the failure conditions. In this example we are looking for all failures: IL for connector A or B, Reflectance for connector A or B.

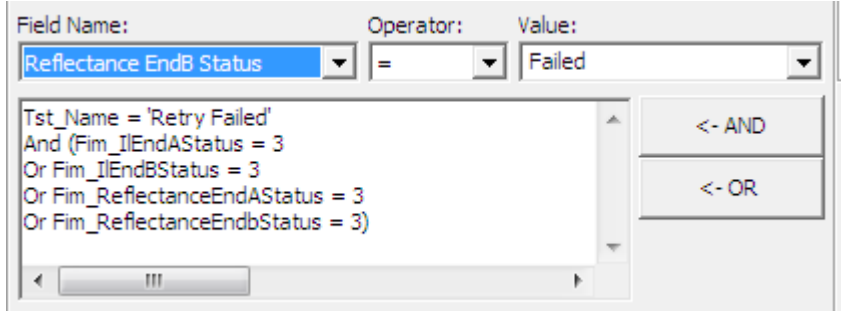
Add conditions one at a time with 'AND' and 'OR', as appropriate.

When done, use the keyboard to add brackets as shown so that the conditions are correctly implemented. (must have correct name, and any type of failure)

You should now click 'Apply' then 'Close'



The screenshot shows the 'Condition Builder' window. At the top, it says 'Selection Criteria'. Below that, there are three input fields: 'Field Name:', 'Operator:', and 'Value:'. The 'Field Name' dropdown is set to 'IL EndA Status', the 'Operator' dropdown is set to '=', and the 'Value' dropdown is set to 'Failed'. Below these fields, a text box contains the condition: 'Tst_Name = 'Retry Failed' And (Fim_ILEndAStatus = 3'. To the right of the text box is a button labeled '<- AND'.



The screenshot shows the 'Condition Builder' window with the second condition added. The 'Field Name' dropdown is set to 'Reflectance EndB Status', the 'Operator' dropdown is set to '=', and the 'Value' dropdown is set to 'Failed'. The text box now contains: 'Tst_Name = 'Retry Failed' And (Fim_ILEndAStatus = 3 Or Fim_ILEndBStatus = 3 Or Fim_ReflectanceEndAStatus = 3 Or Fim_ReflectanceEndBStatus = 3)'. To the right of the text box are two buttons: '<- AND' and '<- OR'.

Useful tips: Only Failure Results

Choosing the filter you just built should bring up a list of failures. You may leave this list open in the 'Browser' while going back through the 'Measure' screen, so you can flip back and forth using it as a reference.

Filter Selection
Current filter created on: 10/19/2016 11:47:01 AM
In a multi-user environment, you may have to click on the Refresh button to retrieve the most recent data. Use the filter to define or modify a filter you may use the Filter Builder.

DUT/Test Information

Measurement Date	Fixed Serial Number	Incremental Serial Number	Global Test Status	Test Name	Fiber Number
10/19/2016 10:58:50 A	2329	1	Skipped	Retry failed	1
10/19/2016 10:58:50 A	2329	1	Skipped	Retry failed	2
10/19/2016 10:58:50 A	2329	1	Skipped	Retry failed	3
10/19/2016 10:58:50 A	2329	1	Skipped	Retry failed	4
10/19/2016 11:00:15 A	2329	3	Not Completed	Retry failed	2
10/19/2016 1:30:15 PM	123	1	Failed	Retry failed	1
10/19/2016 1:30:15 PM	123	1	Failed	Retry failed	2
10/19/2016 1:30:15 PM	123	1	Failed	Retry failed	3
10/19/2016 1:30:15 PM	123	1	Failed	Retry failed	4
10/19/2016 1:35:49 PM	123	2	Not Completed	Retry failed	4

Fiber Measurements

Fiber Number	IL		IL End A		IL End B		Refl.		Refl. End A		Refl. End B	
	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm	1310 nm	1550 nm
1			0.01	0.03	0.00	0.02			-75.47	-76.75	-20.35	-19.7
2			0.01	53.21	0.00	0.02			-76.66	-76.09	-20.24	-19.7
3			0.05	0.03	0.01	0.02			-74.44	-76.21	-20.50	-19.7
4			53.44	0.03	0.00	0.02			-76.00	-76.52	-20.32	-19.7

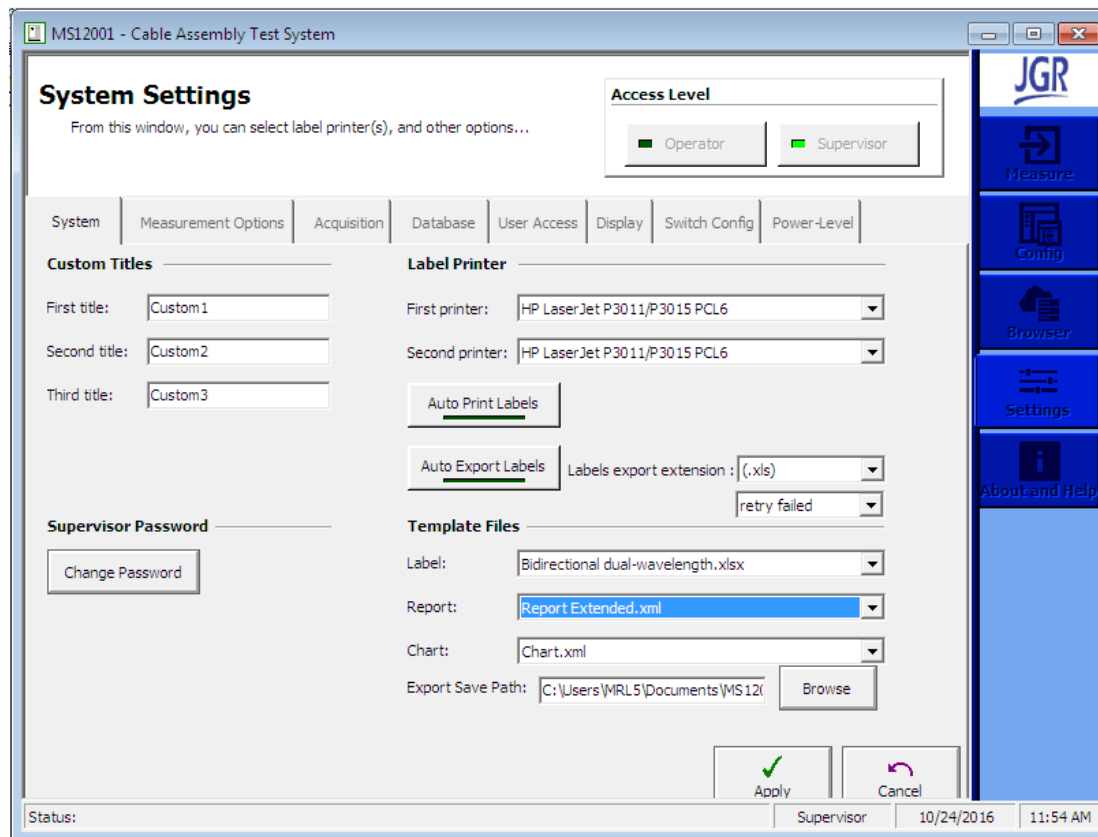
Filter Builder... Statistics... Refresh Export Labels... Reports...
Status: Current power monitoring Supervisor 10/19/2016 02:05 PM

Adjusting Report Templates

Report Templates

When you have finished all your tests and export the results in a report, the default report templates will order your results by measurement time. This means the fibers that were retested and overwritten later will appear out of order in the report unless we alter the template.

Check the template filenames you are using in the Settings tab.



Report Templates

Open up the template file in C:\Program Data\JGR\MS12001\Templates\
In our example it was ..\Report Extended.xml

The screenshot shows the VSReport Designer interface for a report template named 'Report Extended2.xml'. The window title is 'VSReport Designer - [Report Extended2.xml]'. The menu bar includes 'File', 'Edit', 'Format', 'View', and 'Help'. The toolbar contains various icons for file operations, editing, and report design. The left sidebar lists several report types: 'Grouped by Customer', 'Grouped by Part number', 'Grouped by Test', 'Grouped by Workstation', 'Tabular report Bidirectional', 'Tabular report Standard', 'Tabular report Unidirectional RL...', and 'Tabular report Unidirectional RL...'. The main workspace displays a report layout with a header section containing the title 'Test report' and the subtitle '- Tabular detailed -'. Below the header is a table with columns for 'Date', 'Part number', 'Serial number', and 'Status'. The table is followed by a 'Detail' section with a single row containing fields for '[Measurement Date]', 'Trim([DUT Part Number])', 'If([Fixed Serial Number] = "", [Incremental Serial Number])', and '[Global Test]'. The status bar at the bottom left shows 'Ready'.

Report Templates

If using VSReport designer, got to View > Grouping Window.
You may now drag and drop values to order by so Measurement Date is not the first one. You may want to 'Save As' a newly named file, then select your new report file in the MS12001 Settings tab.

VSReport Designer - [Report Extended2.xml]

File Edit Format View Help

Grouped by Customer
Grouped by Part number
Grouped by Test
Grouped by Workstation
Tabular report Bidirectional
Tabular report Standard
Tabular report Unidirectional RL...
Tabular report Unidirectional RL...

Sorting and Grouping

Group On	Sort	Header	Footer	Keep Together
[Fix Serial Number] & [Measurement Date]	Ascending	<input type="checkbox"/>	<input type="checkbox"/>	No
[DUT Part Number]	Ascending	<input type="checkbox"/>	<input type="checkbox"/>	No
[Measurement Date]	Ascending	<input type="checkbox"/>	<input type="checkbox"/>	No
[Wavelength]	Ascending	<input type="checkbox"/>	<input type="checkbox"/>	No
[Fiber Number]	Ascending	<input type="checkbox"/>	<input type="checkbox"/>	No

OK Cancel Select the grouping condition for this group. Drag row header to move, press DEL to delete group.

Group 3 Footer [Measurement Date]
Group 0 Footer [DUT Part Number]

Report Templates

If you don't have VSReport, open the xml in Notepad or a similar text editor and find the section for the report you use. Then cut-and-paste reorder the <Group> ... </Group> chunks of text to get the same result. Again, Save As when done.

```
<!-- Report *** Tabular report standard *** -->
<Report>
  <Name>Tabular report standard</Name>
  <DataSource>
    <ConnectionString>Provider=MSDASQL.1;Persist Security Info=False;User ID=sa;Data
  </DataSource>
  <Layout>
    <width>40000</width>
    <MarginLeft>150</MarginLeft>
    <MarginRight>0</MarginRight>
    <Orientation>2</Orientation>
    <PaperSize>1</PaperSize>
  </Layout>
  <Groups>
    <Group>
      <Name>Group 3</Name>
      <GroupBy>[Fix Serial Number] & [Incremental Serial Number]</GroupBy>
      <Sort>1</Sort>
    </Group>
    <Group>
      <Name>Group 1</Name>
      <GroupBy>[DUT Part Number]</GroupBy>
      <Sort>1</Sort>
    </Group>
    <Group>
      <Name>Group 4</Name>
      <GroupBy>[Measurement Date]</GroupBy>
      <Sort>1</Sort>
    </Group>
    <Group>
      <Name>Group 2</Name>
      <GroupBy>[wavelength]</GroupBy>
      <Sort>1</Sort>
    </Group>
    <Group>
      <Name>Group 5</Name>
      <GroupBy>[Fiber Number]</GroupBy>
      <Sort>1</Sort>
    </Group>
  </Groups>
  <Sections>
    <Section>
      <Name>Detail</Name>
```