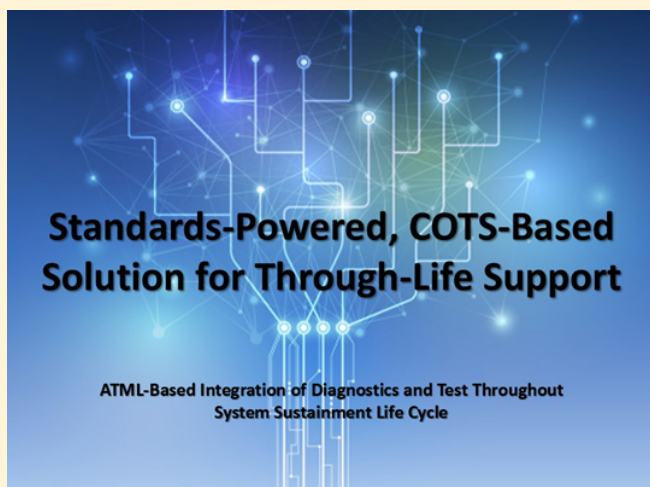


Leading DFT into the Future



At AUTOTESTCON 2015 in Baltimore, Design for Test (DFT) was seamlessly transferred into the Diagnostic Implementation! Using IEEE Standards (ATML), we demonstrated how simple it is to institute a high-powered COTS integration of “Diagnostics” AND “Test” tools for full Design Development and Design Sustainment Solutions.



Demonstration of the ATML-enabled, Standards-Powered, COTS-Based Solution (November 2015)

Inside this Issue...

Past EUG Attendees and Customers	2
Diagnostic Validation for Complex Designs	3
“Action Log in DSI Workbench	4
Current Versions of DSI Software	4
Training Course Schedule	4
World Wide Representatives	4

The eXpress Users Group “EUG 2016” In Orange County, California, USA!

Mark Your Calendar!
Friday, September 16th

DSI will be holding this year’s *eXpress* User’s Group in Anaheim, CA, Friday, September 16, 2016! DSI would like to invite our “users and interested colleagues” to share in this great opportunity to hear from industry leaders in diagnostic design, development and implementation.



Who Should Attend: The EUG 2016 is a forum for Diagnostic, Reliability, Maintainability, Testability, Prognostics and Health Management, Systems Engineers and Scientists, Governing Agencies and *eXpress* stakeholders to share methodologies, ideas, lessons learned and success stories encountered along the road to developing affordable and sustainable complex designs.

The 4.5-hour “EUG 2016” on Friday morning is followed by an optional BBQ in the afternoon at a venue overlooking Orange County’s famous Newport Beach shoreline!

More Exciting Details of the EUG 2016 Coming Soon!

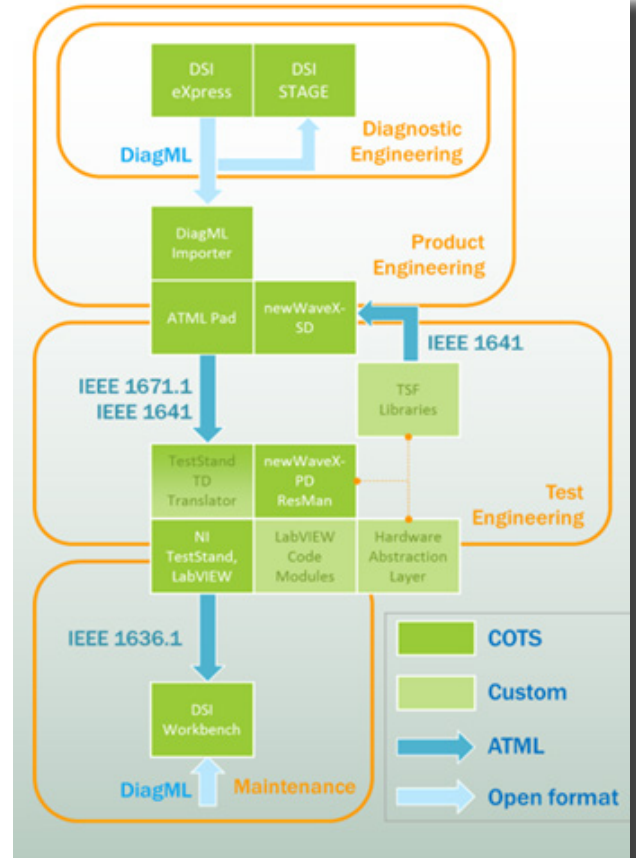
Companion Event: IEEE “Autotestcon 2016” (Exhibit Sept. 13-15). Visit DSI and other industry leaders at the popular Autotestcon (Only 3 miles West of DSI) prior to an enlightening experience at our EUG 2016!



Leading DFT into the Future (cont.)

This solution is built using a cohesive suite of loosely-coupled commercially available software tools adhering to IEEE open interface standards. Each tool targets a different area of the product's life cycle: Diagnostic Engineering, Product Engineering, Test Engineering, and Maintenance. When interfaced through open data formats such as DiagML and ATML, these tools offer a complete end-to-end support solution.

The objective was simply to assemble an "Out-of-the-Box" capability that augments DFT with Diagnostic acumen for reuse throughout the Sustainment lifecycle.



Join Past eXpress User's Group Attendees and Customers at EUG 2016!



Diagnostic Validation for Complex Designs



Traditionally, designs have been developed with little attention to discovering the design's diagnostic integrity. Engineers are overwhelmed with many tasks while Program Management hasn't really understood the widespread value of diagnostic engineering.

Designing for DFT, Health Management (PHM, ISHM, etc.) or multiple sustainment levels, is a more complex task today. It embodies a different level of "Test Coverage" sophistication when considering the incorporation of many designs across a complex hierarchical design architecture.

Traditional DFT or any Test Coverage analysis fails to provide Diagnostic conclusions. In implementation, any test results obtained will be dependent on the diagnostics integrity of the design – regardless of the “test coverage” specs described in the static DFT analysis.

This is where we experience and rely on the “Diagnostic Integrity” of our design(s). The diagnostic integrity is dependent on the design domain mix involved, its complexity and the ability to evolve as the operational environment or implementation changes.

The *eXpress* DFI Diagnostic Validation facilitates the following during “Design Development” and before the design is frozen:

- Diagnostic Sanity Checks
- Diagnostic Sequencing Deliverables
- In-House Design Reviews
- Guided Troubleshooting Integrity
- Customer or Maintenance Demos
- BIT or/to Fault Code Validation
- Validation of Diagnostic Procedures
- Multiple Design Domain Applicable

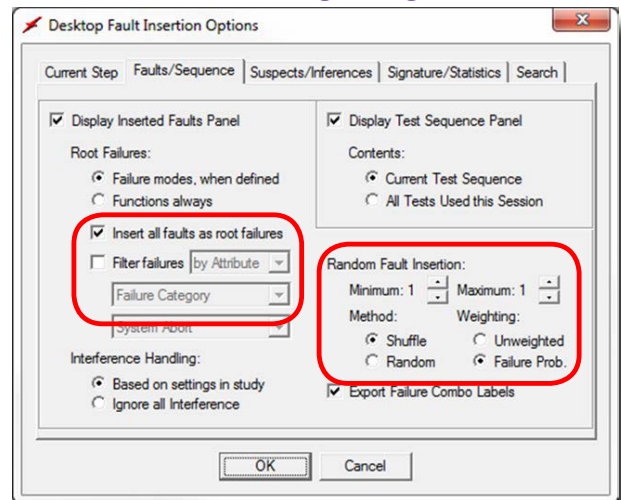
This can all be achieved today – with DSI’s *eXpress* and its new robust Desktop Fault Insertion (DFI) capability!

What is the real Diagnostic Integrity of your design?

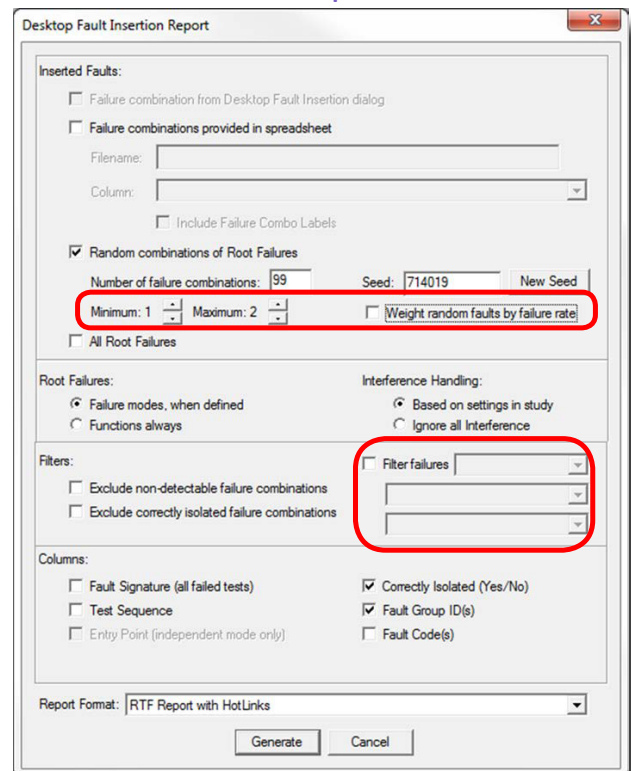


This *eXpress* DFI Diagnostic Validation capability allows the filtering of inserted faults by severity (so that only failure modes that propagate to an end effect of a certain minimum severity are inserted) or by attribute (so that only failure modes with a given attribute value are inserted). This feature—which impacts both explicit faults selection and randomly-generated faults—allows you to focus diagnostic validation efforts on more critical failures, or failures of a certain type.

DFI Settings Dialog



DFI Report



By default, random fault insertion works in “shuffle” mode, which prevents faults from being inserted more than once until all other faults have been inserted.

New “Action Log” in DSI Workbench

As the technician performs a test, the result of each test is automatically recorded in the background throughout the diagnostic session. Through this automated tracking of interactions, much more thorough data is available for RCA (Root Cause Analysis) or available to consider for optimizing future diagnostic procedures.

Current supported actions included:

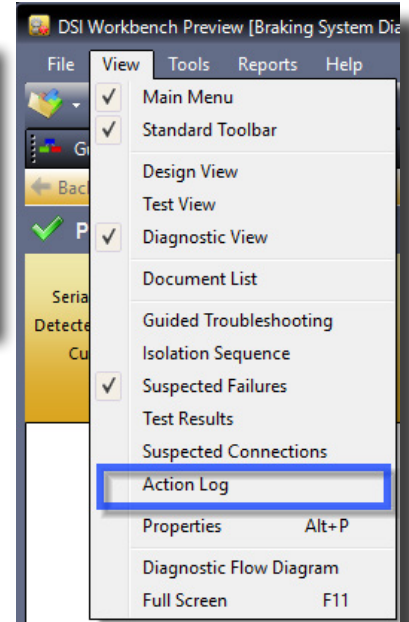
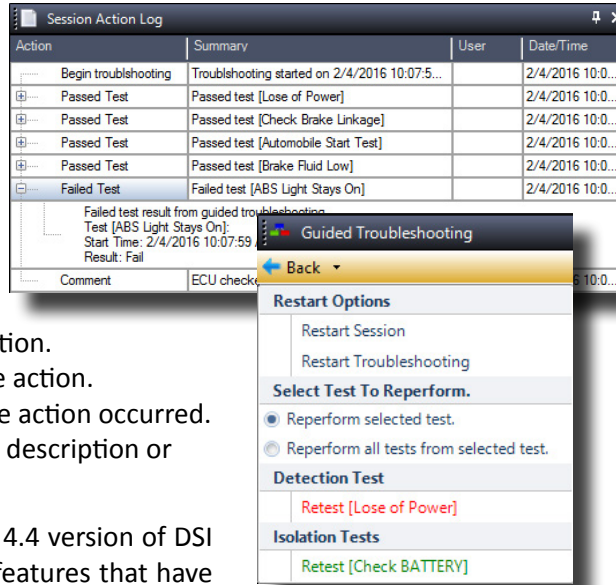
- Guided troubleshooting test results.
- Manual test result entry.
- Import of test results from file.
- Session start times.
- Comments.

The action log contains:

- The action – The action type.
- The summary – brief description of action.
- The user – the user that generated the action.
- The Date/Time – the date and time the action occurred.
- The Description/Comments – detailed description or comments about the action.

This new Action Log feature added in the 4.4 version of DSI Workbench is just one of the *many* new features that have been recently added to keep to our commitment of producing the most capable and comprehensive diagnostic run-time tool for the technician!

Please visit the DSI YouTube Channel or the DSI Website for recently added videos showing demonstrations of DSI Workbench or many other of DSI’s highly regarded advanced Diagnostics Engineering tools!



Current Versions of DSI Software

Product	Version	Release Date
eXpress	6.5.2	March 17, 2016
eXpress Design Viewer (free)	1.5.1	May 10, 2016
STAGE	Act II, Scene 2	May 26, 2015
Run-Time Authoring Tool (RTAT)	4.8.4	May 17, 2016
DSI Workbench	4.5.3	May 17, 2016
DSI Workbench Reports	1.7.2	October 30, 2015
DSI Workbench API	1.2.1	September, 23, 2014

“Be on the look for the launching of the new DSI Website in late June 2016!”

Training Course Schedule

Course Number	Pre-requisite	Course Description	Dates	Location	POC
T-100		System Diagnostics Concepts and Applications	June 20, 2016	Orange, CA	Denise Aguinaga, DSI
T-110	T-100	Basic Modeling & Introduction to Testing	June 20 - 22, 2016	Orange, CA	Denise Aguinaga, DSI
T-120	T-110	Introduction to Testing & Analysis	June 22 - 24, 2016	Orange, CA	Denise Aguinaga, DSI
ADVANCED TRAINING COURSES					
T-200	T-120	Advanced Model Development and Analysis	July 18 - 20, 2016	Orange, CA	Denise Aguinaga, DSI
T-205	T-200	Advanced Test Development and Importing	July 20 - 22, 2016	Orange, CA	Denise Aguinaga, DSI

World Wide Representatives

<p>United States</p> <p>DSI International, Inc. (714) 637-9325 info@dsintl.com www.dsintl.com</p>	<p>United Kingdom</p> <p>Sphera Test Engineering Services +44 (0)1202 868585 chris.gorringe@sphera.co.uk www.sphera.com</p>	<p>France</p> <p>Sphera Test & Services +33 (0)6 88 61 33 91 michel.schieber@sphera.com www.sphera.com</p>	<p>Japan</p> <p>Y-MAX, Inc. +81-45-789-0701 massayo@y-max.com.jp www.y-max.com</p>	<p>South Korea</p> <p>Realtimewave Co, Ltd +82-2-572-9471/2 sales@realtimewave.com www.realtimewave.com</p>	<p>China</p> <p>MTCS Systems Engineering Co. Ltd +86-10-5881-6565 sales@mtcs.com.cn www.mtcs.com.cn</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------

