

Worldwide Research, Worldwide Participation: Web-Based Test Logger

Thanks to the World Wide Web, a new paradigm has been born. ESCORT (steady state data system) facilities can now be configured to use a Web-based test logger, enabling worldwide participation in tests.

NASA Lewis Research Center's new Web-based test logger for ESCORT automatically writes selected test and facility parameters to a browser and allows researchers to insert comments. All data can be viewed in real time via Internet connections, so anyone with a Web browser and the correct URL (universal resource locator, or Web address) can interactively participate. As the test proceeds and ESCORT data are taken, Web browsers connected to the logger are updated automatically.

The use of this logger has demonstrated several benefits. First, researchers are free from manual data entry and are able to focus more on the tests. Second, research logs can be printed in report format immediately after (or during) a test. And finally, all test information is readily available to an international public.

This test logging system was recently demonstrated in Lewis' 10- by 10-Foot Supersonic Wind Tunnel. Wind tunnel data for a High Speed Research project inlet was automatically logged during a test, allowing researchers to concentrate on research activities instead of data entry.

Because the test was in a secure facility, only computers within the facility's secure intranet were able to connect during the test. Nevertheless, after testing was completed, the data were moved to a secure Internet server. Select users could log in by user ID and password, and view encrypted logs and comments of the previous night's data. This test logger is being generalized into an updated (Java-based) Lewis-wide product that will be available to all Lewis test facilities.

A split screen is available:

Upper section

- Viewing data
- Printing data
- Sorting, etc.

Lower section

- Entering notes
- Making addendums

- Changing text

Extreme right

- Speed bar (quick reference for specific data points)



Lewis contact: David A. Clark, (216) 433-5914, David.A.Clark@grc.nasa.gov

Author: David A. Clark

Headquarters program office: OASTT

Programs/Projects: HSR, broad Government applications