The tools you need to speed SAN development

As Fibre Channel fabrics grow in size and complexity, it becomes more difficult to identify the root cause of elusive, system-level problems. To test effectively, designers and system-level validation teams need state-of-the-art test equipment. This is critical to your company’s ability to deliver products to the market on time and to ensure customer satisfaction.

Pinpoint issues quickly with the Agilent 1735A multi-application protocol analyzer and traffic generator

The versatile Agilent 1735A 1/2/4-Gbps multi-application protocol analyzer and traffic generator helps you accelerate the development of Fibre Channel equipment and speed SAN deployment.

In protocol analysis mode, the 1735A helps you debug the protocol interaction between two devices or a large fabric. Make debugging and root-cause analysis faster and easier, by using the system’s hardware-based search and filtering. You’ll navigate through large traces with ease. You can capture hard-to-reproduce problems using the built-in multi-level, multi-state triggering system.

With the 1735A Fibre Channel protocol analyzer, you can stop wasting time trying to recreate errors. With extensive pattern libraries, drag-and-drop functionality and the world’s only graphic state machine visualization, the Agilent analyzer is both powerful and easy to use.

Get unprecedented insight into your captured data with SanAlytics software

Agilent is introducing the SanAlytics post processing software from Protocol Analytics to bring you tools to dramatically improve your insight into your data and the time it takes to gain that insight. In May 2006, we will start shipping a standard version of SanAlytics software with each Agilent protocol analyzer. You also can purchase premium versions of SanAlytics software from Agilent starting in May.

SanAlytics software offers you increased clarity through multiple views on your captured data:

**Exchange View** – With an exchange-based view, you no longer need to manually search through a trace to find all the frames associated with a single transaction.

- See all the frames from each transaction grouped in a summary format.
- See a graphical view of each transaction, including the time between each frame in the transaction.
- Sort by the duration of the transaction to find performance issues.

In traffic generator mode (SAN Tester application), each 1735A module can simulate multiple independent devices generating traffic. You can recreate network traffic conditions to test the behavior of your system or device under test. With the industry unique record and replay functionality, you can recreate device behavior quickly and easily.
SanAlytics Exchange view

Fault View – SanAlytics provides 100% error coverage using a state machine model to diagnose problems. The software is built with knowledge of the Fibre Channel protocol state machine, and if it detects any deviations from the protocol specifications it will alert you via the GUI. Thus, SanAlytics is built to scale, as it does not require knowledge of every possible protocol violation – it generates error alerts for any deviations from the normal. By highlighting the protocol violations found in the captured data, this gives you some good hints about where to start troubleshooting.

SanAlytics Trace summary view

Trace Summary View – The trace summary shows you all the events that occurred in a trace. See at a glance any unusual events, even if you don’t know the configuration of the SAN it came from. You can also use the trace summary as a quick check on SAN activity and problem areas.

Potential errors are highlighted in red to alert you that further investigation might be required. The trace summary also gives the details of when the trace was captured and other administrative details.

Related Literature

Publication Title               Publication Type  Publication Number
1735A 1, 2 and 4 Gb/s Fibre Channel Data Sheet  5989-1661EN
Multi-Application Protocol Analyzer Module and Traffic Generator

For copies of this literature, contact your Agilent representative or visit www.agilent.com/find/fcprotocoltester