

## PROJECT PROFILE

# Automating Quality Assurance Testing of Telecom Equipment

For a Fortune 500 Broadband Access Solutions Provider

### The Client – ADC

ADC is a Fortune 500 provider of broadband infrastructure equipment and data access solutions. Its products and services enable communications service providers to deliver high-speed Internet, data, video and voice services to consumers and businesses. ADC's customers include local, long-distance, and wireless telephone and cable TV providers, such as BellSouth and Time Warner Cable, as well as distributors and other equipment makers.

### The Challenge – Automating Complex Quality Testing

ADC was bringing to market a new leading-edge cable services delivery system. This routing and access platform aggregated high volumes of cable modem and other IP traffic for transport over backbone data networks and the Internet.

Because this switch and router was designed to support the intensive quality of service needs of next-generation IP services based on the DOCSIS 1.1 specification, ADC's testing procedures to ensure quality prior to customer shipping were rigorous and highly complex. As part of an ongoing effort to ensure the highest possible product quality, ADC wanted to automate these testing procedures.

### The Solution – An Experienced Virtual Team

ADC turned to Trigent to automate quality assurance testing for the new IP cable system. Trigent provided ADC with technical expertise in Java application

development and the Unix environment, as well as experience in telecommunications arena to address ADC's very specialized testing needs. Trigent provided a virtual extension of the ADC team with local and offshore development staff working together to streamline testing processes.

Trigent developed a software application for system testing that is easy for hardware engineers to navigate and use, and which automates many administrative procedures to further enhance usability and simplify training needs. Trigent worked closely with ADC to make refinements to the testing system and to conduct on-site tests at ADC facilities, while the team in Trigent's Bangalore, India development center continued to develop further levels of testing and automation for use by ADC test engineers.

### The Results – Reduced Test Time and Improved Analysis

Hardware engineers at ADC can now automate tests of varying complexity and select different levels of quality assurance reporting before shipping equipment to broadband service providers. Multiple tests can run simultaneously in under 30 minutes, cutting the testing process by as much as a day from when these tests were carried out manually. Real-time reports can confirm systems are fully functional more quickly than ever before.

Ultimately, ADC achieved tighter turn-around in its testing and better ability to analyze its results, yielding significant savings in the potential cost of system repair and replacement for both ADC and its customers.

*Trigent helped ADC reduce the time required for complex quality testing for a new IP cable system by as much as a day, while improving its ability to analyze test results, yielding significant savings in the potential cost of system repair and replacement for both ADC and its customers.*

*Contact your local Trigent office to find out more about the quality software services and solutions Trigent provides.*