

Development of Device Manager and Collector for Transition Networks

www.transition.com

GTI's expertise in network management enables Transition Network to meet the technical and time-to-market goals.

Company

Transition Networks is a leading provider of networking connectivity solutions that make networks perform better, faster and more reliably while helping companies leverage their existing networking infrastructure. The company's Transition Networks brand of media converters makes conversion between disparate media types possible; providing conversion technology solutions that offer the necessary adaptations without affecting the performance, nature or appearance of the network. These media conversion technologies are offered across a broad spectrum of networking protocols including Ethernet, Fast Ethernet, Gigabit, T1/E1, DS3, ATM, V.35 and many more.

Challenge

Transition Networks is in a fast-moving market. Being a leading vendor, they needed a management framework to be developed faster and better than all the competitors. The management application had to provide an intuitive and user-friendly GUI that is easy to navigate. It had to be flexible to add support for new cabinets and converters.

A key marketing requirement was always-on remote management capability of the device. The device had to provide both SNMP based and command line based management capabilities.

The GUI interface needed to support the management of all the media converters. It needed to

- * Discover agents
- * Show a summary of cabinets managed by an agent
- * Display a graphical cabinet view with all powered-on media converters
- * Show close to real time power, link, activity and alert status for both
 - * the cabinet and media converters
- * Show cabinet and converter summary information
- * Monitor and configure cabinet power supplies
- * Allow powering on/off of media converters
- * Allow detailed view of media converters with user-friendly features to
 - * change the configuration

Solutions

GTI was invited by Transition Networks under these conditions. A team consisting of an architect, a SNMP expert and two designers started the work. A Java based framework was architected and a subset of required screens were developed using Java Swing. SNMP support for the standard MIBs and Transition's private MIB was developed with joeSNMP.

The framework and the first few converters were ready within first 3-months.

Buoyed by the progress, the client came with additional requirements. Over the next few months, GTI team developed

- * Additional managers for other cabinets and media converters
- * SNMP Trap Receiver with ability to send emails
- * SNMP Trap Viewer
- * SNMP Data Collector, Reporter and Grapher
- * Successfully demonstrated the integration with OpenView Network Node Manager and Cisco Works
- * Supported Windows, Solaris and HP-UX.

Benefits

GTI's expertise in network management, element management and agent development offers many advantages to equipment vendors

- * State-of-the-art management functionality on the device.
- * Ability to meet time-to-market requirements.
- * Lower cost of development.
- * Guaranteed support.
- * Flexible architecture for a future support for additional converters.

Testimonial from Stephen Anderson, VP Engineering –

"GTI has proven to be a very good development partner for Transition Networks. Because our project load goes in cycles depending on customer demand, we needed to partner with network management application experts who could develop new converter support on short notice. With GTI we have always received quick response to new project requests. Not only was the lead-time short to begin projects, they consistently demonstrated good adherence to committed schedules. Last, when we needed support for adding features or debugging our Focal Point application on a specific new version of an operating system, GTI was always quick to respond and easy to work with. GTI maintains the hardware and software to simulate customer environments that would be too expensive for us to acquire, and relieves us from having to dedicate resources to understand all the operating systems and software versions."