



## QUICK FACTS

**Industry:** Telecommunications

**Worldwide Revenue:** USD \$trillions

**Subscribers:** Billions

**Website:** [www.tditechnologies.com](http://www.tditechnologies.com)

**Product:** IT Foundation Management

One of the largest telecommunications companies in the world maintains and manages nearly 8,000 servers and consoles across its dispersed locations. Keeping track of all of these separate servers – even just knowing their names – was a daunting task for the telecom’s systems engineers. They needed a standardized and centralized solution enabling a single point of entry and the same look-and-feel across all of their servers – and they found it with TDi IT Foundation Management.

## Challenges

**Protect security and ensure efficient access to thousands of internal servers and consoles by:**

- Enabling a universal console access management solution across multiple vendors and operating systems
- Replacing multiple legacy console access management solutions with a single solution implementation
- Providing a standard and familiar management configuration and a common access methodology across all servers and consoles
- Managing thousands of devices with a smaller staff

## Solutions

**This customer uses TDi IT Foundation Management because these solutions can:**

- Monitor, authorize, and limit access to one or more servers
- Monitor and log every keystroke of each server session and follow every action – from the moment the session begins until it ends
- Centralize console management under one standard configuration
- Assign a console name and description to every device on the network

## Benefits

**With TDi IT Foundation Management solutions, this customer is:**

- Using a continuous tool to find innovative ways to reduce IT complexity and its associated costs
- Improving its ability to access and manipulate any console on the network via command line interface (CLI)
- Improving compliance with all network hardware tied together and all console logs from each device stored on a single server for backup or tape transfer
- Avoiding the training expense, unnecessary downtime, and unacceptable security risks of a non-standardized console access methodology



**“TDi has a proven set of solutions that address the issues we currently face and will face in the future. They are constantly anticipating our IT challenges and developing solutions in advance.”**  
(Quote extracted from TDi interview with telecommunications customer)

### **Reducing the Hidden Cost of IT Complexity with TDi Foundation Solutions**

The level of IT complexity at one of the largest telecommunications companies in the world had grown exponentially as its business had evolved. After years of mergers and acquisitions, the company was left with a legacy of multiple systems and a monumental number of network devices it had either purchased or inherited. Real-time expertise was required to manage an expanding network with an impossible array of configurations and access points. The cost associated with a traditional approach to systems management at this stage of complexity had become prohibitive and was growing constantly.

### **Finding a Standard Solution to Accessing and Managing a Network of 8,000 Consoles**

By this time, the company had installed over 50 separate and nonintegrated console management solutions, including its own proprietary software solution, which was now outdated and unsupported. The telecom customer began a search for a standardized solution that could tie its network consoles together by enabling common access and providing a familiar configuration on every server. After a careful solution evaluation, the customer selected TDi IT Foundation Management solutions, at first for basic maintenance. However, the more time the company’s senior systems engineers began to spend with the new solution, the more innovative ways they discovered to secure their servers and consoles while also uncovering the hidden costs of IT complexity. Here are a few key examples:

#### **#1: Chasing the Rabbit Down the Wrong Hole**

A couple of months after building a new server to take the place of a failing server, a problem was detected. One of the systems engineers identified the server where the problem existed, or thought he did. He ended up chasing the rabbit down the wrong hole for two days before he realized he was working in the wrong server. It had been misnamed. Not only that, but it was an old server — part of the system that had failed. “Since we’ve been adding our servers to the new solution, we no longer have that issue,” says a senior systems engineer for the company. “Now we can name and rename all of our servers following a set standard and avoid the rabbit holes.”

#### **#2: Limiting and Restricting Outsourcing Access on Internal Servers**

When the telecom customer allowed outsourced programmers from India to build some new servers for the company, it did not want to allow them access to the general network. “We did not want them jumping from one server to another,” says a company systems engineer. Many options were discussed, including creating separate filters and firewalls for each server, and that would have been a daunting task. Instead, they used the TDi Foundation solution to use only one filter and set the programmers up on just one tightly monitored and controlled server. “We used that server to lock them down,” says the engineer. “We gave them read and write access only on that one console, and we limited what they can do on it. For example, they are not allowed to change the console configuration.”

#### **#3: Meeting Compliance with Console Logs**

One of the Telecom’s acquired companies had gone through a bankruptcy. As a result, stringent rules and security protocols were put in place, including the requirement for retained console logs. “The existing terminal switch is an open-ended device,” says a systems engineer. “It cannot log any output from the console.” The solution was to use the TDi Foundation solution to tie all that hardware together, collect the output from each console, and store and retain the collected console logs on one server — an audit requirement. “Without the TDi console access management solution in place,” says the engineer, “we could very well fail some of those audits.”

#### **Key Benefits: Systems Engineers**

TDi asked the systems engineers for this telecom customer to comment on the benefits of the most powerful features of the TDi IT Foundation Management solution. In order, first they are, “The unlimited potential to solve problems and run any parameter through any variable to any script.” Second, the ability to, “Access and manipulate any console on the network via the command line interface (CLI) client.” And third, the improved ability to, “Meet compliance with all console logs stored on a single server.” Standardizing access to thousands of servers has given virtually unlimited potential to this telecommunications giant.