



CopperTen® the i2 Challenge

CASE STUDY

CHALLENGE

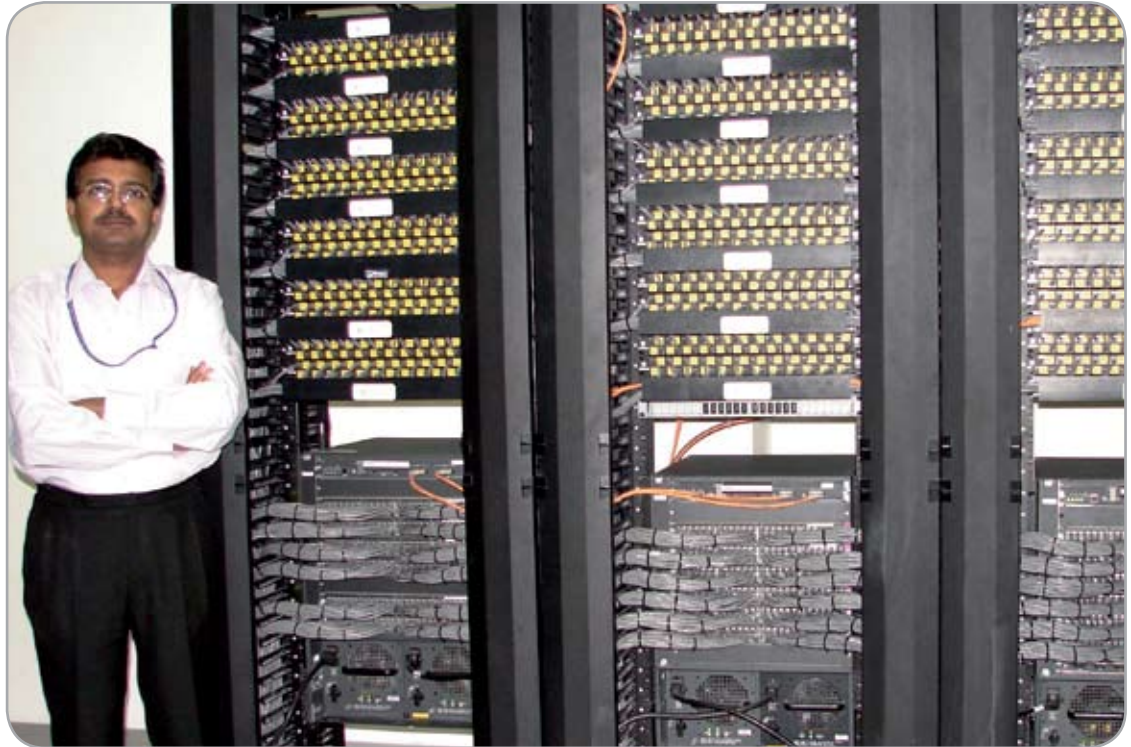
i2 needed to consolidate and standardize its network infrastructure, spread across different locations in Bangalore. The distributed infrastructure gave rise to several issues such as manageability, availability of high network infrastructure for the company's end-users, dependence on a third party to host its network infrastructure, and subsequently questions on standard compliances and security risks.

STRATEGY

i2 standardized on ADC KRONE's products beginning with the CopperTen® solution along with passive components from the KM8-RJ45 product family that included CopperTen jacks, patch panels and patch cords. The installation of the CopperTen solution, which offers 10 Gigabit/s Ethernet transmission capability over copper cable, made i2 the first company in India to implement this solution.

RESULTS

CopperTen's immediate benefit was improved quality, performance and reliability. The elimination of a third party dependence assured the company against security risks. The installation of a 10G solution also did away with the need to re-cable in the future.



Mr Gurumurthy is satisfied with the CopperTen Network solution

CASE STUDY

“The CopperTen solution has addressed the growth and expansion plans of the company. Due to its superior technology, our product development teams are now able to get better response times, better availability, and better performance. Most importantly, since it eliminates the need for re-cabling in the future, we are able to get a better return on investment on the network infrastructure.”

i2 is a leader in Supply Chain Management solutions. i2 solutions integrate with data, processes, and systems belonging to suppliers, customers, distributors, carriers, partners, and contract manufacturers.

i2's solutions are implemented across a wide-range of industries such as automotive, consumer industries, retail, metals, and transportation and logistics. It has more than 1500 customers today and most are world - leaders in their respective fields.

The Challenge

In order to ensure smooth functioning of the organization, i2 decided to consolidate its data center operations.

The data center operations of the company spanned across four different locations in Bangalore. The network infrastructure was distributed across server rooms and collocations. Managing the various server rooms and data centers had become complicated. Subsequently, easy network infrastructure availability for the company's product developers too became an issue.

“We could not provide that kind of five-9s that a developer today looks for in terms of infrastructure availability. Furthermore, some parts of the infrastructure, which was situated in server rooms for instance, were yet to be on par with the data center standards,” said Mr. Gurumurthy Iyer, i2's Senior Director for IS&T Facilities, India Operations, referring to the desired percentage of uptime of a network infrastructure.

Reliance on a third party collocation service provider to host its network infrastructure was the other challenge for i2 . This posed a security risk to the company.

The Solution

i2 turned to ADC KRONE, a world leader for global network infrastructure products and services, to help establish a robust, high-performance and future proof network infrastructure at its consolidated center.

Through ADC KRONE, i2 aimed:

- To provide high availability of infrastructure for its developers
- To have a high-performance network that was both future proof and adhered to data center standards
- To be independent of collocation service providers to host its network infrastructure

The company opted for ADC KRONE's CopperTen solution, a cabling solution based on Ethernet standard IEEE 802.3an for 10 Gigabit/s over copper cable. With this decision, i2 became the first company in India to implement the CopperTen solution and make a secure investment in its network infrastructure. The CopperTen solution proved to be a better choice over optical fiber connectivity as it allowed a larger bandwidth at an economical cost.

pair separation within itself, and can eliminate all possible installations errors like excess untwist of pairs, separation between conductors etc. It also offers consistent performance across the network. With the unique design of CopperTen cables coupled with CopperTen jacks, patch panels and patch cords, this solution offers excellent results even at high frequency 10G transmission where alien cross talk is a major concern.

i2 implemented the CopperTen solution from end to end in the entire data center complex. i2's in-house installation team and ADC KRONE's implementation partners commenced the installation at the end of 2005.

Ease of installation and flexibility were key factors in deployment of the solution. ADC KRONE's angular patch panels allowed i2 to maximize the number of ports per frame during installation. This helped save on both rack space and floor space in the data center. Cables were laid such that the company has the option to add more racks to the infrastructure in the future. The ease of installation and the additional flexibility allowed i2 to make optimal use of both resources and infrastructure. Optimal use of infrastructure, Mr. Gurumurthy cited, is a number one priority for an IT organization, as floor space in a data center is the most expensive piece of real estate.

"...better response times, better availability, better performance..."

"We evaluated the other technologies in the marketplace before we zeroed in on ADC KRONE's CopperTen solution. ADC KRONE provided us at a cost, a technology that is much superior, high performance and future proof. We are glad that we were the first to be able to get this kind of a high technology, high bandwidth solution," said Mr. Gurumurthy.

i2 also decided on ADC KRONE's passive components, i.e. KM8-RJ45 product family that provides an excellent platform for the realization of a 10-Gig channel. The transfer parameters of all the products were optimized during production using laser trimming. These optimized products offered the largest capacity reserve of all the RJ45 components in the market.

The KM8-RJ45 product family includes the CopperTen patch panels, patch cords and jacks. A CopperTen jack maintains the pair twists and

The cables were color-coded and all components labeled. The color-coding helped the company distinguish one cable from another. This easy identification of the various cables allowed i2 to manage its network infrastructure efficiently.

The installed CopperTen solution offered high availability of the network to the company's developers. High network availability is a priority because i2 operates with a variety of supply chain development solutions, requiring the transfer of multi megabyte files across the infrastructure. Moreover, i2 relies on distributed computing that consumes large amounts of bandwidth. The network thus has to be operational at peak efficiency at all times. "It is because of the way we designed, planned and executed the network cabling infrastructure that the consolidated entity became easy to manage," explained Mr Gurumurthy.

CASE STUDY



ADC KRONE, which was actively involved with i2 in the design and planning of the proposed consolidated data center, provided i2 with the option of different cabling solutions and technologies for future proofing the data center. ADC KRONE's suggestions helped build redundancy into the infrastructure. Consequently, the built-in redundancy guaranteed high infrastructure availability to i2's product developers at all the time.

With availability no longer an issue, and a robust network in place, i2 is capable of providing the five-9s availability a developer looks for today.

Mr. Gurumurthy added, "ADC KRONE's active participation and easy-to-install products allowed the company to complete the installation within one and half months in a single phase. ADC KRONE's turn around time and their ability to respond quickly in case of issues was also an important factor. The deployment of the CopperTen solution ensured the company against downtime."



The Result

A year after the implementation, i2 continues to reap benefits from its data center complex.

The robust network infrastructure at the consolidated center assured the company against any security risks while conforming to the required standards, namely Level 3 of global data standards.

i2 upgraded some of its other infrastructure (such as servers) at the backend and brought it up to the optimal speed in order to leverage the advantages of the CopperTen solution. They were able to accommodate active ports of higher capacity since the infrastructure was able to handle large bandwidth. The installation of the CopperTen Solution has eliminated the need to re-cable in the future. Therefore, when servers with 10 gigabit capacity do hit the market in the future, Mr. Gurumurthy cited that i2 is "ready to plug and play".



www.adckrone.com/in

Corporate Office & Factory: 10© II Phase Peenya Industrial Area, Bangalore - 560 058.

BANGALORE

Ph: 0091 80 2839 6101, Fax number- 0091 80 2372 2753

KOLKATA

Ph: 0091 33 2283 6234, Fax: 0091 33 2283 6240

MUMBAI

Ph: 0091 22 2659 1302, Fax: 0091 22 2659 0921

DELHI

Ph: 0091 11 2433 3705, Fax: 0091 11 2433 3705

CHENNAI

Ph: 0091 44 2498 3881 Fax: 0091 44 2498 2858

HYDERABAD

Ph: 0091 40 6620 4568, Fax: 0091 40 6620 4568

ADC Telecommunications, Inc., P.O. Box 1101, Minneapolis, Minnesota USA 55440-1101

Specifications published here are current as of the date of publication of this document. Because we are continuously improving our products, ADC reserves the right to change specifications without prior notice. At any time, you may verify product specifications by contacting our headquarters office in Minneapolis. ADC Telecommunications, Inc. views its patent portfolio as an important corporate asset and vigorously enforces its patents. Products or features contained herein may be covered by one or more U.S. or foreign patents. An Equal Opportunity Employer

400060_IN 04/07 © 2007 ADC Telecommunications, Inc. All Rights Reserved