

### NETWORK RELIABILITY ASSESSMENT

#### **Those Who Do Not Learn from History are Doomed to Repeat It**

With each new wave of advancement in networking, companies may forget the lessons of the past. From the early days of the telephone, through automated switching, packet switching, gigabit optical fiber, and wireless messaging, people seem to make the same mistakes over and over again - lack of attention to cost of ownership, reliability, security and availability.

Data networks have brought a whole new way of doing business to the world. They permit the rapid transport of information, and a lot of it. More importantly, they put that information into the hands of those who can use it best. That's why so many organizations are spending large sums of money to implement faster and more reliable networks.

Even though this much effort and money is expended, many businesses find their best efforts falling short of their goals.

#### **The relationship between a thought out design and these parameters?**

- Cost of Ownership
- Reliability
- Security
- Availability

### THE MISSING INGREDIENT:

#### **“Real Life” experience designing mission critical business infrastructures**

As the rate of growth of data networking has accelerated, so has the demand for people to implement it. This demand has far outweighed supply. More often than not, the job of designing large-scale networks has fallen to individuals who have minimal design experience. It is like asking a bricklayer to design a building. You can be sure it will be built of bricks. Whether or not the plumbing will work (if it has plumbing) is another question entirely.

#### **Closing the Gap with N&ST'S Experts**

A number of our dedicated professionals have received training in the elements of network architecture and design. Vendor-sponsored certifications include premium tiers that require these skills. A small, but growing number are taking the time to achieve these levels.

Network architecture and design is not a once-every-three-year activity for Network & Security Technologies experts. It is a competency that Network & Security Technologies' technical resources demonstrate for many companies like yours. Network & Security Technologies specializes in network architecture and design. These skills are not the highest level of achievement for our consultants. They are merely the starting point. To them we add:

- A focus on security that is unique in the market,
- A business requirements driven approach to the network, which results in an architecture and design that actually aligns to your specific business needs, and
- Years of experience dating back to the beginning of modern networking.

Network & Security Technologies's consulting brain trust can help clients not simply because they have been trained to help, but because they have been helping organizations design and build their networks for years.

## The Design Process

### Identify Requirements

The Network & Security Technologies design methodology begins with the 5 Ws (Who, What, Where, When and Why). Network & Security Technologies will identify both the long-term and tactical requirements. We will seek out the details, such as: How many users? How much data? How quickly? How sensitive? The details enable Network & Security Technologies to create an actionable design, not just a strategy.

### Establish a Baseline

Few organizations have the luxury of building networks from scratch. Network & Security Technologies will determine the baseline from which the new design must grow. If a recent network assessment has been done, Network & Security Technologies will look to it for information about current problems and solutions. This kind of understanding will enable a smooth transition to the new design.

### Establish Architecture

Every good design begins with a well-defined architectural philosophy. At the highest level this may be "hub and spoke" backbone. The next level may include specifications for the interconnection of the hubs and strategies for the spokes. Of course, this is not the only philosophy or connection strategy. Network & Security Technologies consultants will apply years of experience and training to identify the optimal approach for our clients' specific business requirements.

### Build Consensus:

One of the most important and most overlooked steps in any design is the inclusion of the client in the process. Just identifying requirements and imposing a design is not enough. Network & Security Technologies will include your managers and engineers by presenting the requirements and architecture for comment and approval. By taking the time to checkpoint the process, we can guarantee success and leverage the in-house expertise of our clients.

### Produce Design:

This is the "grunt" work. Network & Security Technologies will document every detail for every facility at every city. A complete physical design includes specifications of make and model for all active network components as well as the cable infrastructure. Interfaces including port interconnection, specification of the secure configuration of each device, address planning, routing, and packet filtering are detailed in the design. In short, Network & Security Technologies will produce a "blueprint" for the network in much the same way that an architect produces a blueprint for a building.

## Delivering Value

Network & Security Technologies' staff of field proven network and security consultants has a broad base of experience with multi-vendor environments. We understand how to design and configure from elementary network principals. The final result is a fast, secure, reliable network that is a business enabler, not a burden.

## Keeping the Commitment

Network & Security Technologies does not walk away when we deliver the design. The same consultants who developed the strategy and action items can even see it built.