

WHITE PAPER

Winning the High-Stakes Game of Enterprise Network Outsourcing

Reducing Risk and Building Confidence with
Network Asset Management Solutions

I. Network Outsourcing: IT's Billion-Dollar Poker Game

Sports analogies and commerce share a storied history—the concepts of “teamwork,” “playing field,” “game,” “winner” and “loser” are sprinkled liberally throughout modern business lore. However, in business few working relationships are as intensely adversarial as those around a poker table, as each player quietly seeks to bluff and intuit his way to a victory. Yet in the high-stakes game of network outsourcing, where the value of multi-year service contracts can run into millions or billions of dollars, outsourcers are often hard-pressed to maintain a façade of “business as usual” while scrambling to meet stringent service level agreements (SLAs) that guarantee to keep the infrastructure performing at a certain level. Meanwhile, IT staff at the client organization—which often realizes, or at least assumes, job termination as a result of the outsourcing relationship—can be equally poker-faced, and even intransigent, in providing knowledge transfer to the outsource team that will take over network management duties.

At no time is the pressure on outsourcers more intense than in the initial stages of an engagement, when they assume responsibility for managing a customer’s network, yet essentially have no control over it. Until the provider can conduct an in-depth inventory of network assets, no service levels can be promised with certainty. Still, steep penalties may result if SLAs, which are typically developed and agreed-upon during the bidding process with little real knowledge of the network environment, are not met.

Compounding the challenge are the additional penalties providers can be assessed if they don’t meet promised service delivery deadlines. These can amount to tens or hundreds of thousands of dollars per day, and can quickly erode the contract’s profit margins. This type of harsh incentive is increasingly common in the network outsourcing arena, such as the self-imposed penalty of \$20,000 per day Nortel Networks had committed to pay the City of San Jose, Calif., if it missed the June 9, 2005 deadline for unveiling a cutting-edge network built in the new City Hall.¹

Perfect knowledge is essential to network outsourcers—and their customers

When an enterprise enters into any kind of outsourcing agreement, both parties are at risk; the outsourcer may not be able to quickly and effectively transition network operations at a level that meets SLAs. If this is the case, the enterprise and users also suffer. To best protect both parties’ interests and reduce mutual risk, perfect knowledge of network resources is highly desirable. Granular, up-to-the-minute information about the location and condition of network resources is critical in reducing the risk inherent in the outsourcing process. It also enables higher levels of service to be delivered faster, and at a lower cost.

This whitepaper examines the business issues driving growth of the network outsourcing market, the associated risks for outsourcers and their clients, and the pivotal role played by network asset management solutions such as Visionael® Network Resource Manager (NRM) in enabling both parties to mitigate the risks and maximize the benefits of outsourced network operations.

II. Network Outsourcing: An Explosive Segment of a Fast-Growing Market

As the complexity of enterprise networks rises—today driven largely by the blending of data and voice networks—and the cost of external services falls, many organizations are choosing to outsource a greater part of their network operations. The quantity and types of applications that enterprise networks are being required to deliver at very high service levels, coupled with the speed of technologic change, simply push past the limit of the burden already borne by IT network management professionals.

Network outsourcing affords enterprise IT organizations a convenient and cost-effective way to streamline operations and focus on core competencies. This agreement is becoming particularly prevalent in smaller organizations that cannot support

¹ BusinessWeek, “Poetic justice for Cisco in San Jose City Hall deal,” March 16, 2005.

large network management teams. They are particularly eager to outsource the management of mission-critical switches, routers and servers. The popularity of voice over IP (VoIP) telephony is accelerating network outsourcing. By outsourcing an enterprise's VoIP network, companies can acquire a flexible telephone system free of management concerns and at greatly reduced rates, along with other services such as unified messaging and video.

The attractiveness of these benefits is illustrated by this sector's growth figures. Overall, the IT outsourcing market is expected to grow at a 6.9 percent compound annual growth rate (CAGR) through 2009. The combined infrastructure outsourcing segments (data center, desktop and network outsourcing) equal more than 80 percent of total IT outsourcing spending. Network outsourcing remains the fastest-growing segment, with an 8.5 percent CAGR between 2004 and 2009.² Dollar-wise, the network outsourcing market has been projected to reach a value of \$77 billion by 2008, according to Gartner analysts.³

Critical success factors for network outsourcing

Whether an enterprise is outsourcing its entire network operations, or selected portions of it—such as data back-up—certain conditions are required to help ensure the success of any outsourcing endeavor.

- **For the enterprise**, a clear understanding of the service levels required to support the business. This requires an in-depth knowledge of business processes, and their corresponding network resources. Going into the outsourcing relationship, the enterprise must focus on defining the type of service delivery it needs, not the systems that support it. In this context, the definition of "enterprise" can extend from a traditional corporation or government agency to a service provider looking to expand its capacity in specific areas.
- **For the outsourcer**, the challenge is to determine how to agree to a service level for infrastructure it did not build, with systems it did not specify and a network it did not design. As part of the outsourcing agreement, the provider will assume ownership and responsibility of these resources. When they are largely unknown—due to prior in-house management via manual processes and antiquated asset tracking tools—

providers are more likely to charge risk premiums in order to commit to SLAs, driving up the cost of the outsourcing arrangement. Similarly, the customer also assumes significant risk because, despite promises of certain service levels, without comprehensive knowledge of network resources it is impossible for the outsourcer to fully evaluate associated risk—which increases the likelihood of a network failure after transition.

Network knowledge benefits all parties involved

Clearly, having granular knowledge of dynamic network resources is invaluable for both the outsourcer and the enterprise client. This capability becomes a competitive differentiator for the outsourcer, which can use it to realistically determine network status and the firm's ability to provide clients with the desired level of service. As a result, the risk premium charged to the customer will be lower, and the likelihood greater that the outsourcer will be able to measure and deliver the resources needed to support the business.

Perfect knowledge of network resources also reduces dependence on customers' staff who, despite "stay" bonuses and other incentives, may not be willing or able to provide all the necessary information. Tensions that bubble beneath the surface at the outset of a transition can burst forth when there is a problem.

Additionally, after an outsourcer has assumed operational responsibility for the customer's network, parts of it are often migrated onto the outsourcer's network, to gain economies of scale and reduce costs. When changes are required, a high-performance change management facility is mandatory. Having an alternative means to quickly gain network resource information, and manage its dynamic nature on an ongoing basis, is therefore essential.

Network resource management solutions—known in their advanced form as network asset management—allow both

² "Gartner on Outsourcing, 2005," Gartner, by Lorrie Scardino, et. al., December 14, 2005.
³ As cited in "Networks move out," Infoconomy, January 20, 2005.

enterprises and service providers to inventory and manage their network-wide resources at an extremely detailed level. They offer at once a high-level, strategic perspective of network resources and an exhaustive view into their smallest components.

III. Visionael Network Resource Manager: A Catalyst for Effective Transition and Ongoing Management

Visionael Corporation provides a solution set of network asset management products and services that can help network outsourcers and enterprises quickly gain an understanding of transitioned network assets. Particularly for outsourcers, Visionael solutions can reduce the risk of assuming management responsibilities by:

- Providing a granular, visually presented inventory of all network assets, which can be updated as dynamically as change occurs on the network.
- Delivering a framework for managing network change that helps ensure success as key applications such as VoIP are piloted and rolled out across the client enterprise. Visionael solutions allow network professionals to make sure the as-built state of the network reflects the planned state of the network.
- Offering ongoing lifecycle management by continuously auditing the state of the network. This capability is critical as networks are increasingly affected by regulations such as Sarbanes-Oxley, Basel II and HIPAA.

The company's flagship offering, Visionael Network Resource Manager, ensures the successful planning, roll-out and ongoing maintenance of essential business processes:

- **Discover** – network assets, including devices, cards, ports and port-to-port connections.
- **Design** – scalable and collaborative graphic design, using logical diagrams and physical schematics depicting equipment layout and connectivity.
- **Deploy** – automate the production of project installation and implementation documents.
- **Provision** – carrier-grade circuit design and assign.

- **Operate** – current, accurate and detailed information needed to effectively maintain business-critical networks and meet SLAs.

Visionael NRM product highlights

Visionael's Network Resource Manager helps take the risk out of network outsourcing and infrastructure lifecycle management. It offers a host of critical capabilities and benefits including:

- **Automated infrastructure data collection:** Asset-oriented discovery provides detailed device information, reducing the need for physical audits, while regularly scheduled discoveries and reconciliation maintain up-to-date, accurate information.
- **Physical and logical network modeling:** NRM provides a comprehensive central repository of network devices and connections that contains data for all stages of the infrastructure lifecycle, as well as detailed representations of the network in historical, current/as-built, and future views. Its complete physical network design and documentation capabilities include floor plans, rack locations and cabling views for accurate project details.
- **Open, scalable and reliable:** NRM provides the ability to support networks with thousands of objects, readily handling changes to the entire network as it evolves and grows. Auto-discovery and reconciliation maintains the accuracy of network data over time, and over 20,000 pre-defined objects provide easy access to all major vendors' equipment.
- **Flexible and customizable:** Open APIs and XML data export facilitate the creation of custom menus, property pages and objects; data import from and export to existing applications assures smooth integration with existing management systems.

Visionael Professional Services provides a strong complement to the value outsourcers and customers receive by deploying NRM. This team of highly experienced professionals provides technical consulting services that help customers capitalize on the full power of Visionael software and reduce the time to realize return on investment (ROI). Varying in scope and purpose, these services are conducted by Visionael consultants or the

company's certified partners. Visionael consultants and partners have extensive experience installing and configuring Visionael products to meet organizations' specific needs.

IV. Success Snapshot: Financial Services Network Outsourcing

When a leading IT outsourcer assumed responsibility for a major US bank's North American IT and network operations, it inherited a complex patchwork of networks and operations centers that was being managed by antiquated tools. It also promised to meet stringent SLAs on an aggressive timetable. As a result, the IT outsourcer was under significant pressure to provide network services "better, faster and cheaper" than the bank could with in-house resources; it chose Visionael Network Resource Manager to help achieve all these goals.

The challenge: Streamlining systemic inefficiency

When the provider won a contract for outsourcing the bank's IT organization in 2003, it assumed full responsibility for the company's IT and networking infrastructure. The bank had grown by acquisition over many years and, although it had a culture of managing the network infrastructure and documenting change processes, the tools used to perform these tasks were either developed in-house, or were applications such as Visio and Microsoft Excel that did not have the functionality to support a large, dynamic network.

As the network infrastructure grew, both organically and by acquisition, it ballooned with excess capacity, which included circuits and services from multiple major telecommunications providers, and redundant data centers and equipment. In attempting to manage the growing network, the existing tools were increasingly inadequate. The internally developed tools required excessive development resources for maintenance, upgrades and enhancements, and the packaged applications could not scale to meet the needs of what had become one of the world's largest financial institutions.

Clearly, new tools were needed. Compounding the sense of urgency was the fact that although the outsourcer had

committed to quickly improving service levels, it had inherited an environment in which a multitude of divisions and regions used various tools and procedures, creating inconsistent management quality.

Visionael NRM presents a proven solution

The outsourcer recognized that it already had deep experience with a solution meeting all of its requirements to deliver improved service levels: Visionael NRM, a comprehensive software solution that allowed the outsourcer to automate the discovery, documentation, design, deployment and provisioning of critical network resources. The outsourcer had been using NRM for several years to manage the network of another of its largest clients, a U.S. automobile manufacturer.

Of particular value was Visionael NRM's ability to produce an accurate, open, scalable database of network infrastructure information—the key to implementing IT management best practices. Without this information, it would be impossible to manage the bank's infrastructure effectively. With it, the outsourcer could receive significant benefits, including the ability to:

- make better business decisions and reduce infrastructure costs.
- create more efficient, accurate processes to use and access the infrastructure.
- simplify network management and problem/outage resolution.

Visionael NRM delivers rapid results and control

The outsourcer implemented Visionael NRM in 2004, starting with the audit and discovery of the bank's entire North American IT network, thereby creating a baseline of the current network. The outsourcer has since extended the system with project management user interfaces and associated capabilities that model and automate new standard network design and change processes. If a network change occurs, it is planned and documented in Visionael NRM. Once the change is tested and certified, NRM automatically updates the documentation and then validates the changes. Visionael NRM provides a single toolset and a single set of processes; it is at the heart of the bank's IT support environment.

Visionael NRM is also the platform used to rationalize the network and, going forward, implement new services. The bank is now well-positioned to operate with greater agility and at lower cost based on the strength of its North American network. The outsourcer has streamlined the network itself and the processes used to manage it. Thanks to the increased efficiencies NRM helped effect, the bank has been able to reduce its number of network operations centers from five to two.

Because the outsourcer has a firm command over the network's capabilities and growth, the bank can now explore launching major technology initiatives such as enterprise-wide VoIP communications on its data network. Working closely with the IT outsourcer, the bank is in the early stages of planning this significant transition—with help from Visionael NRM.

V. Summary: Effective Outsourcing Demands Network Asset Management

Driven by applications like VoIP and the increased scope and complexity of today's networks, enterprise network outsourcing is poised to grow explosively over the next several years. As opportunities for outsourcers increase, so does their need to have in place a fast, proven means by which to inventory network assets at an engagement's onset, and manage them closely going forward. No service level agreements can be realistically promised nor kept, nor can any efficiencies be gained, without first knowing the exact state of a customer's network.

Visionael Corporation provides a suite of network change management products and services that can help outsourcers and their customers be successful at each step of the network outsourcing lifecycle. Visionael Network Resource Manager provides a fact-based boost to providers' confidence in establishing and meeting SLAs by:

- Providing an extremely granular, visually presented inventory of all network assets, which can be updated as dynamically as change occurs on the network.
- Delivering a framework for managing network change that helps ensure success as key applications such as VoIP are piloted and rolled out.

- Offering ongoing lifecycle management by continuously auditing the state of the network.

Visionael NRM ensures the successful planning, roll-out and ongoing maintenance of essential business processes. Across the network lifecycle, it addresses five key phases—Discover, Design, Deploy, Provision and Operate—and, in doing so, helps both providers and customers win in today's high-stakes, billion-dollar IT poker game: network outsourcing.

About Visionael

Visionael Corporation is a software and services company that enables customers to effectively plan for and respond to the ever-changing complexity associated with large computer networks. Enterprises, government organizations, network outsourcers, and telecommunications services providers rely on Visionael tools and insights to know and manage the risks associated with deploying new network technologies and services. The company has an extensive worldwide customer base, including Alpheus Communications, Comcast, EDS, Kaiser Permanente, IBM Global Services, Sprint and Vodafone. Channel, system integrators and partners include Dimension Data, EDS, Logica and Pride. Visionael Corporation is a privately held company, headquartered in Austin, Texas, with major development facilities in Tulsa, Okla., and Bangalore, India. Sales offices are located throughout North America and Europe. For more information, please visit <http://www.visionael.com/>, or call +1-650-963-0960.

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