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# Choosing A Network Services Provider: Why Sify Is Your Best Bet.



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*Selecting an IP VPN service provider is not an easy task. Although the most important criterion is experience in managing complex networks and network security, not all IP VPN providers possess the complete range of skills required to implement and manage truly secure enterprise networks over an IP infrastructure. It is important to find a company that combines leading-edge security capabilities with proven performance, reliability, network management and global reach.*

*This white paper examines the key criteria to consider when making an IP VPN buying decision among the choices you have in today's environment.*

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**I**P VPNs offer enormous opportunities for any company seeking to realize the economies of scale and global reach of a shared IP infrastructure, while retaining the security of a private network. An Internet Protocol based Virtual Private Network (IP VPN) allows companies to send and receive sensitive, business-critical data across private IP Networks as well as the Internet, with confidence that it will travel securely, unseen, unchanged and intact.

IP VPNs are accessible from nearly anywhere in the world and provide a very cost efficient means for enterprises to extend their networks to connect employees who may be traveling or in remote locations, and business partners. For more on IP VPNs, their business benefits and Sify's **SecureConnect**<sup>™</sup> series of IP VPN solutions, please refer our white paper on this topic.

#### **OUTSOURCING: NOT JUST ABOUT COST SAVINGS, BUT ABOUT PARTNERING WITH A TRUSTED SERVICE PROVIDER**

Enterprises are focusing sharply on the core competencies of their business and outsourcing operations and management of the IT infrastructure to service providers. Should you outsource your virtual private network? Unless you happen to have a company so huge that you can afford your own 24x7 staff to continually monitor and maintain the network, it rarely makes sense to set it up internally. Even if you have an in-house IT department with the know-how (and access to good equipment), a good VPN requires graveyard shift-work to ensure its functionality. And the monthly cost of a managed VPN service is often less than the monthly in-house IT labor expenses, not to mention the hardware investment.

Key benefits of outsourcing are:

- Significant reduction in capital investment on network equipment
- Eliminates costs associated with technology obsolescence
- Cost savings made possible by the economies of scale enjoyed by service providers
- Lower training costs

To decide in favor of outsourcing network services may be an easy decision for most enterprise customers today. However, selecting the right service provider is not. The good news is that customers have more choices today than they did in the past. The difficulty arises in selecting the right provider with the focus, expertise and value proposition to meet your unique networking requirements. It is not about mere outsourcing, but rather about a partnership with a reliable provider who will help in the achievement of your short and long term business goals.

## WHAT TO LOOK FOR IN AN IP VPN SERVICE PROVIDER

Ideally, a service provider should be an able partner in helping customers eliminate technology risk, bringing networking and security expertise to the table as well as ensuring implementation success through its market experience and consulting/systems integration expertise. All service providers are not equal. Some are generalists (like the big telcos) who focus on a broad range of services ranging from voice and data, and there are those like Sify who are specialists in IP-based data services.

So, what separates the contenders from the pretenders when it comes to choosing the most reliable partner to take of your mission critical data? What qualities do you look for to build a trusted partnership rather than a mere outsourcing alternative? A lot can be gauged of your IP VPN provider's real capabilities by focusing your rigorous evaluation on five key categories :

- Security
- Reliability & Performance
- Management and monitoring
- Consulting and Integration Services
- Provider's expertise and reach

## SECURITY

For most enterprises looking to deploy business applications on IP-based networks, security is the fundamental concern and represents the single biggest barrier in connecting with customers and partners over a shared network infrastructure like the Internet. The best IP VPN networks are built from the ground up with security in mind. You can reduce a long list of potential partners to a short one by evaluating the security of the VPN service based on three questions :

- Which types of security standards does the service provider support ?
- What kind of authentication does the service provider use ?
- What kind of encryption technology is employed ?

## WHAT TO LOOK FOR:

- End-to-end security scheme that will provide true protection for sensitive data, all the way from the desktop through the SP cloud to the destination LAN
- An IPSec compliant SP network that will allow full interoperability with other SP networks
- Full service offering complete with digital certification technologies. Selecting a VPN provider who is also a Certification Authority (CA) or closely tied to a CA is the best choice

- Support for encryption in the network. An SP who can work with you in terms of selecting the right level of encryption for each site and one who offers 'strong encryption' (Triple DES) would be the best choice.

#### WHAT DOES SIFY OFFER ?

Sify's **SecureConnect**™ series of IP VPN solutions deliver a fully secure solution on an end-to-end basis. Customers have the option to choose between Layer 2 Tunneling Protocol and IPSec as the tunneling mechanism, as well as opt for any strength of data encryption up to Triple DES.

In conjunction with Safescrypt, a fully owned subsidiary of Sify, a Verisign partner and India's only Certification Authority, we offer a fully integrated IP VPN offering which incorporates sophisticated digital certification technologies designed to allow you to perform electronic transactions over your network.

#### PERFORMANCE AND RELIABILITY

Business quality performance means guaranteed performance and reliability. It means your data will get where it's supposed to go, no matter where or when it is sent. How can you tell if your IP VPN provider is one of the high performance contenders ? Ask tough questions.

- What service level agreements (SLAs) are offered ?
- What if the service provider does not meet the commitments ?
- Does the service provider have a proven network infrastructure ?
- Is the VPN service using high-performance, dedicated hardware devices ?
- What is the underlying structure and fabric of the provider's network infrastructure ?
- Can the service provider monitor and measure performance delivered against their commitment ?

Today, any credible IP VPN service provider will commit to service level agreements. If this is not a component of the service offered, you can stop your evaluation of that provider right there. A Service Level Agreement needs to be evaluated on three criteria, before signing up.

- The effectiveness and granularity of the SLA to meet your critical business requirements
- The ability of the service provider to monitor and measure itself on the committed SLA
- Compensation offered, if the SLA is not met.

An IP VPN is only as reliable as the infrastructure that supports it. When reviewing providers, evaluate their network infrastructure on aspects such as network architecture, redundancy, nature of equipment deployed as well as signs that indicate the provider's commitment to continuous improvement and upgrade of the network. A good way to assess the reliability of your provider is look for certifications such as ISO9001, which indicate a high level of process orientation within an organization.

Most VPN service providers will provide some flavor of 24x7 remote monitoring and management. Few providers offer what is required to provide truly managed IP services, and are especially weak when it comes to reporting on their own performance and ability to meet service level agreements. Many industry experts believe management and monitoring capabilities will differentiate IP VPN service providers going forward.

#### WHAT TO LOOK FOR

Select only a service provider with a Tier 1, private IP backbone. The IP VPN service provider should be able to provide you with access both nationally and internationally to allow your enterprise network keep up with your corporate growth.

The service provider should be in a position to offer granular levels of SLAs, which guarantee Quality of Service by application, or time of day or any other criteria that might apply to your business. Moreover, you might look for an SLA with built in guarantees for minimum bandwidth for your mission critical applications, in addition to the usual guarantees on availability, latency and packet loss. If you are running voice over IP traffic on your WAN links, jitter is an important consideration. For remote dial-up connections, you should look for call success rate and initial modem connect speed agreements that meet or beat the industry average as measured by an independent third-party organization. When it comes to service level agreements, providers should back up their guarantees with a refund policy. This will indicate the provider's confidence in its service level commitments. As well, providers should constantly monitor and gather data on service levels and provide you with online access to that information.

A provider that has a dedicated IP VPN network operations center with trained professionals who are using the state-of-the-art IP VPN management tools. You need a provider that can offer real-time and historical reports in order to see how your IP VPN is being used and how it is performing. You need a provider that will analyze this



*Sify has several million manhours of experience in managing mission-critical data networks for its clients. Sify's managed IP network is monitored on a 24x7x365 basis using highly sophisticated network management tools and processes thereby ensuring industry leading reliability, performance and uptimes.*

data and actively work with you to calibrate your IP VPN for the best possible performance.

#### WHAT DOES SIFY OFFER?

Sify operates India's largest Tier 1 private IP backbone today, with Points of Presence in 54 locations. The Sify backbone is built using Cisco Gigabit Switch Routers (GSRs), which deliver the fastest routing performance of any network in the country. Hot Standby Router Protocol (HSRP) is a proven technique used by Sify to connect core routers in a manner as to ensure fail-safe redundancy.

From our state-of-the-art Network Operations Center in Chennai, we manage and monitor the entire Sify network 24 hours a day to ensure maximum uptimes. Sify has exploited regional and local strengths of telcos such as Bharti and BSNL in building a "best-of-breed" network, which eliminates the risk of physical infrastructure failure.

Rather than invest in laying fiber in the ground, Sify has chosen to invest in high performance technology, processes and people to deliver intelligent network services to enterprise customers.

Sify offers an extremely granular Quality of Service within its SLAs, which customers can use to prioritize their mission critical applications. Our SLAs deliver the lowest latency, packet loss and jitter guarantees in the Indian SP market today. We bring our expertise in managing our own large national network to you and help you design SLAs and QoS policies in tune with your most demanding and often changing business requirements.

Sify offers support.sify.net services to customers, where you can log in and view reports related to network performance such as utilization, peak traffic patterns as well as measure actual performance against guarantees.

#### CONSULTING AND INTEGRATION SERVICES

Here is another area where the IP VPN service providers differ widely. Companies embarking on an IP VPN need to reduce networking costs, minimize risks, accelerate the time it takes to get their VPN up and running, and have readily available assistance and proven expertise. Often, the first step is determining an overall game plan for the IP VPN: what performance levels are needed; which applications are best suited; what security is required; whether staging and integration services are needed. Most IP VPN providers do not offer these types of services. This is an area where a specialist in IP

services such as Sify can deliver better results over general service providers such as telcos, who typically focus on voice services.

**WHAT TO LOOK FOR**

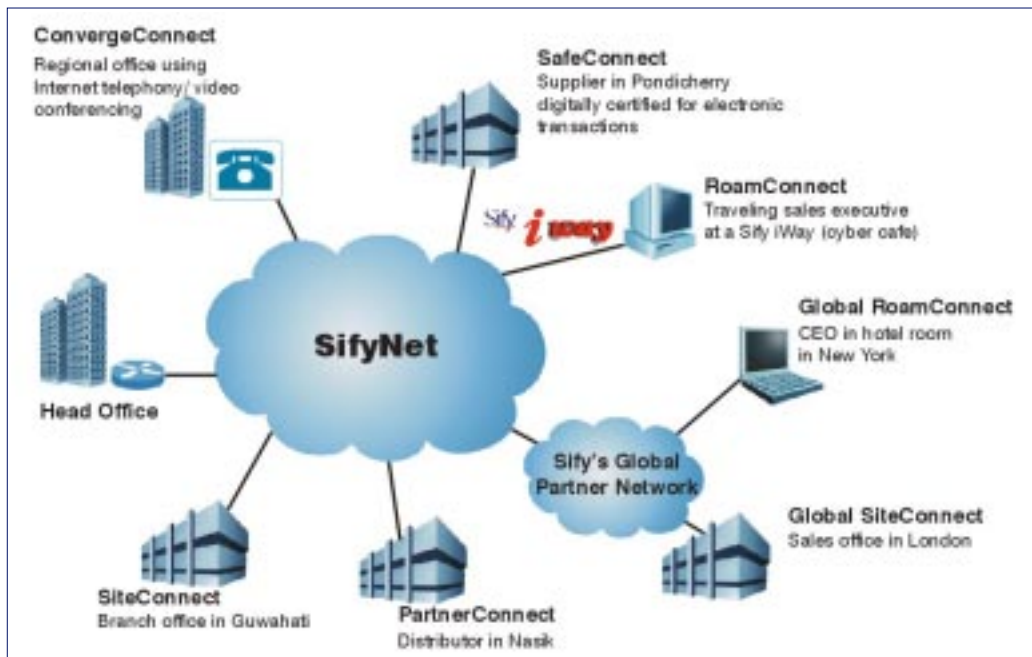
An IP VPN provider with a full range of network security, consulting, and integration services, including experience in network and security assessment, design, policies and procedures, audits, penetration testing, and staging and integration.

**WHAT DOES SIFY OFFER?**

**Sify Guardian™** is a full suite of security, consulting and integration services in network security from Sify. As part of our consulting services, we offer IT Security Audits, IT Security Policy Design, Vulnerability and Risk assessment services. Under implementation services, we select, procure and deploy security equipment such as Firewalls, Intrusion detection systems, anti-virus software among others. SifyGuardian also provides onsite and remote management of security infrastructure.

**SERVICE PROVIDER’S REACH AND EXPERIENCE**

It is important to determine provider’s experience in order to separate those with in-market expertise from the relative newcomers to managed services. Begin by checking the industry reports on what



*SecureConnect IP VPN solutions from Sify leverage Sify's global network reach to offer anytime, anywhere connectivity between offices, employees and business partners*

“SIFY SEEMS TO BE THE CLEAR LEADER IN THE IP VPN SPACE. THE ONLY ISP WHICH HAS BOTH THE EXPERIENCE AND EXPERTISE TO HANDLE THE VPN NEEDS OF CORPORATES. IT HAS THE LARGEST MARKET SHARE AND COMMANDS THE HIGHEST RESPECT OF ITS SERVICES FROM ITS CLIENTS”

International Data Corporation, 2001

makes a good ISP. This will help you determine which providers have the best service offerings, track records, and expertise. The extent of national as well as international reach is an extremely important consideration. If the service provider cannot connect your remote offices today because of limited reach, then he does not merit any more consideration. More importantly, ensure that the service provider's (lack of) reach does not get in the way of your future business expansion plans.

There may be several second-tier service providers that will not be able to meet the needs of most VPN customers. For example, many may not provide global access or seamless service across key countries or continents to support global customers. Many may not be able to provide the necessary flexibility and guarantees because they do not own or manage their own IP backbone networks. Others will not be able to show scalability for very large scale, secure implementations.

#### WHAT TO LOOK FOR

Proven engineering experience building and managing complex networks, hosting mission-critical sites, and deploying applications; 24x7 monitoring with end-to-end systems management; high industry ratings for performance, reliability, and bandwidth; significant future investments in global network infrastructure.

#### WHAT DOES SIFY OFFER?

Sify's private IP network provides 100 percent coverage in India, the largest of any provider in India. The network is fully meshed and contains 54 major points-of-presence. A number of downstream mini-PoPs extend the reach of Sify's network to practically every location within India. Sify's private IP network has been operational for several years and is managed out of our main NOC in Chennai. Sify has accumulated over 1.5 million man hours of experience in managing this complex network as well as customers' mission critical data transfer through our networks. Given the bigger scale on which we operate today, Sify accumulates at the rate of over a million man hours each year today.

In their 2001 report, International Data Corporation (IDC), a leading, independent market research firm ranked Sify as the number one IP VPN service provider in India. Sify has a pioneering track record in India in IP network services. India's first ever national IP-based network was implemented by Sify. Sify is also India's first and only service provider to certified ISO9001:2000 compliant ■