



## IPVPN:

Internet Protocol Virtual Private Network Solutions

# Solution Overview

An IPVPN can draw a company together – from head office to the remotest of employees.

Tiscali's IPVPN Services enable businesses to employ private business network solutions without considerable capital expense. Recognising that every IPVPN is different, Tiscali has a range of access technologies to meet your requirements – be it for high value data intensive sites or sales personnel on the road.

Our IPVPN solutions are delivered through the Tiscali MPLS network – offering a fast, secure and future proof platform.

Working with our partners, we can provide a variety of management services – providing a range of management options bespoke to the business need, backed by Tiscali Business Services.

Tiscali has a range of services to meet customers migrating from traditional wide area networking solutions or implementing networks for the first time including Traditional VPNs, DSL based VPNs and QoS over DSL based VPNs.



## 1

### Traditional VPNs

Tiscali's MPLS meshed communication model allows each site to see each other without the need for an active central hub. This provides the perfect backbone for today's data centric organisation that requires performance and reduced single points of failure.

Bundled and unbundled service offerings, project management, operations and customer service support services provided to ensure successful delivery, ongoing monitoring and maintenance.

#### Business Benefits

- Scalable, flexible and easily adapted to meet changing business needs.
- Greater functionality, budget control and ROI than alternate technologies or rival providers.
- Security and traffic segregation based on core services rather than edge devices, reducing management and maintenance costs.
- The assurity of implementing future proof technology.

## 3

### QoS over DSL based VPNs

QoS based IPVPN networks have been used by companies for a number of years. However the technology has not been cost effective for smaller sites. QoDSL can be used to deploy delay sensitive applications that were previously out of economic reach for Teleworkers, virtual Call Centres as well as delivering business applications that may have been limited to main sites or larger organisations in the past. The business benefits delivered are not necessarily new – What is, is that they are now within your budget.

#### Business Benefits

- Reduced costs for connectivity and infrastructure.
- Reducing complexity as QoDSL is a simple to deploy convergence enabler.
- Reducing risk with Tiscali's MPLS network backed by Service Level Guarantees.
- Increasing innovation by leveraging fast and flexible deployments.
- Increase capacity and network reach within limited ICT budgets.
- Increasing Employee Productivity & Security with fast and secure access.
- Aligning to the latest EU legislation and working time directives.

Tiscali offer three types of IPVPN:

## 2

### DSL based VPNs

DSL access to an IPVPN opens up new opportunities where networking was not previously financial viable. DSL provides rapid and cost effective connectivity to a VPN and can complement other 'access methods' already in place where greater bandwidth is required.

#### Business Benefits

- Short lead times for delivery and flexible contract terms
- Low cost of entry opens up new business opportunities and market segments
- MPLS benefits for security are maintained
- Flexible business contention ratios
- Service Level Guarantees provided
- Quick and flexible to rollout

### 1 NETWORK LAYER

- Provisioning
- MPLS Solutions
- Security through traffic segregation
- QoS – Priority queuing


### 2 ACCESS LAYER

<b>ADSL Products</b> <ul style="list-style-type: none"> <li>256k to 2 Meg Speeds</li> <li>50:1 to 1:1 Contention Ratios</li> </ul>	<b>SDSL Products</b> <ul style="list-style-type: none"> <li>512k to 2 Meg Speeds</li> <li>10:1 to 1:1 Contention Ratios</li> </ul>
<b>Leased Line</b> <ul style="list-style-type: none"> <li>2 Meg speeds upwards</li> </ul>	<b>LES Circuits</b> <ul style="list-style-type: none"> <li>10 Meg and 100 Meg connections</li> </ul>
<b>Fixed Dial Services</b> <ul style="list-style-type: none"> <li>E.g. ISDN or FRIACO</li> </ul>	<b>Remote Dial Solutions</b> <ul style="list-style-type: none"> <li>e.g. 0845 connectivity</li> </ul>
<b>Off-net Connections</b> (non Tiscali networks) <ul style="list-style-type: none"> <li>MPLS or IP Sec</li> </ul>	<b>QoS Services</b>

### 3 SERVICE LAYER


<b>Resilience</b> <ul style="list-style-type: none"> <li>More than one line</li> <li>Dial back up services</li> </ul>	<b>Monitoring Services</b> <ul style="list-style-type: none"> <li>Availability</li> <li>Performance</li> </ul>
<b>Service Level Guarantees</b> <ul style="list-style-type: none"> <li>Availability</li> <li>Deliverability</li> </ul>	<b>Internet Access</b>
<b>Co-Location Facilities (as part of MPLS network)</b>	
<b>Partner Delivered Services</b> <ul style="list-style-type: none"> <li>Network Assessments</li> <li>Asset Inventory Service</li> <li>Project Management &amp; Consultancy</li> <li>Consulting Solutions &amp; Integration</li> <li>Security Practice</li> <li>Remote Alarming and Monitoring</li> <li>Network Management</li> <li>Infrastructure management &amp; supply</li> </ul>	

### 4 APPLICATION LAYER ; Applications across entire network...





**Core Business application software**

- Microsoft applications (e.g. email)
- Citrix & ASP delivery
- Financial applications
- HR applications
- Sales & marketing databases and applications



**Convergence solutions (Voice and Data over IP)**

- Quality of service
- Application integration
- Presence & availability management
- Messaging services



**POS Services**

- Merchant services (e.g. Chip & PIN)
- Stock Control/Management



**Contact Centre & Teleworker applications**

- Office network & application access
- Unified Messaging
- Desktop integration
- Out-of-office connectivity



**Security Services**

- CCTV
- Alarm services
- Remote monitoring solutions

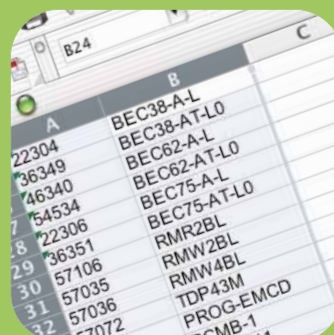
**Content/Multi-media streaming**

- Radio
- Video/Multimedia
- Training
- Advertising & marketing
- Video conferencing

**Collaboration applications**

- Video conferencing
- Data & application sharing



# Additional Information

## 5 Things to know

1. Leading DSL broadband provider & innovator – 1st to deliver to market DSL MPLS and QoS, Leader in MPLS VPN.
2. Tiscali QoS IPVPNs are a unique convergence proposition, for both contended and non contended links.
3. Tiscali has robust and tested operations to support customers – 10,000 DSL installations a week and over 600,000 DSL connected customers.
4. Latest technology and future commitment – Existing capability founded on and in collaboration with Cisco, with investments in new access mediums, including LLU.
5. Tiscali is the UK's 4th largest ISP (1.85m customers generating £250m Revenue) with a big commitment to Business Services – 35% of revenue.

## Complementary Products & Services

- Business services applications – e.g. Oracle
- Teleworker solutions and application
- Convergence solutions (Voice and Data over IP)
- EPOS and retail point of sales solutions
- Thin client services (e.g. Citrix)
- Professional services (e.g. Project Management & Consultancy)
- Infrastructure management & supply

## Individual Benefits

- Company's customers
  - *Clear communication with them*
- Employees
  - *Efficient communications management*
  - *Collaborative work environment*
  - *Always on-line access to applications, messaging and data*
  - *On-site/Off-site mobility solutions*
  - *Secure Internet access*
- Decision Makers
  - *Simple and future proofed technology*
  - *Highly visible cost management*