



## Reaping the Full Benefits of a Hybrid Network

Singtel Managed Hybrid Network is an innovative offering that extends the enterprise's network coverage by combining its private network with the global Internet and intelligently routing applications and traffic types through the most cost-effective connection based on business and performance requirements. This enables businesses to reduce connectivity costs without compromising performance or security.

# Managed Hybrid Network

## Enterprise Business Challenges

Today, enterprises' communication needs can no longer be met by private networks alone as the Internet becomes an integral part of doing business. Businesses will see more applications moving beyond the boundaries of their private networks/clouds to public networks/clouds.

Employees are using their mobile devices to access business applications on the public cloud via the public Internet

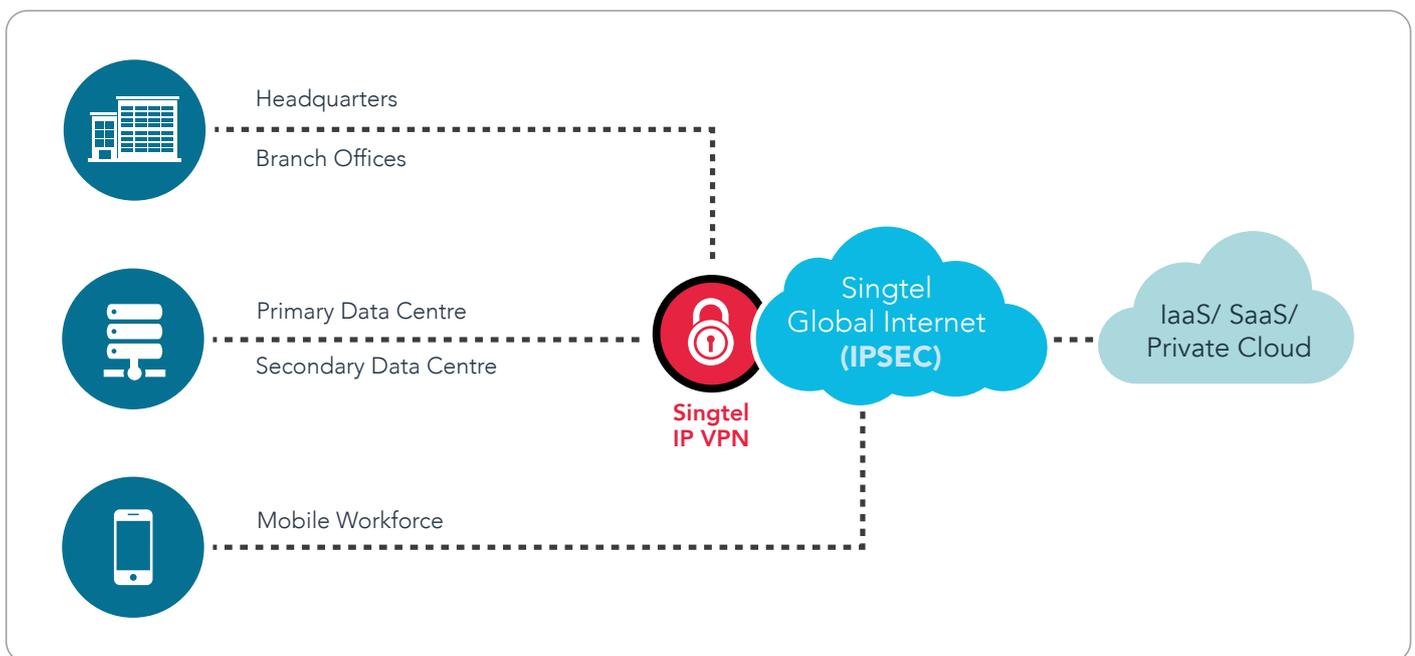
anytime, anywhere. CIOs are also increasingly leveraging the public Internet to lower their network costs. These developments make the network more complex and present challenges to IT managers who are concerned about the performance of their applications, security of their networks and ability to manage cost.

## What is Managed Hybrid Network?

Managed Hybrid Network is a suite of Singtel services that addresses the above concerns. It seamlessly links the MPLS-based Singtel IP VPN service with the global Internet and provides fast and secure connections to major public clouds. It also incorporates security capabilities to ensure that the enterprise network is protected when users access the public Internet.

Our Managed Hybrid Network is underpinned by smart routing capabilities that enable business applications and data to be routed automatically across networks based on application performance objectives.

## Diagram illustrates a Singtel Managed Hybrid Network



## Features



### Extensive coverage

Singtel Managed Hybrid Network provides enterprises with wide international IP VPN coverage as well as global Internet access in more than 200 countries. This gives enterprises the convenience of a one-stop offering that combines VPN with the Internet, and provides them with greater flexibility in their networking options.

The Singtel global Internet service rides on our Tier 1 (APAC) Internet backbone and provides business-class connectivity backed by service level agreements and an Internet ecosystem of over 30 direct peering partners.



### Smart routing

Smart routing adds intelligence to the hybrid network and ensures that applications and data are routed across the most efficient connections based on business and performance requirements. It provides users with application visibility, so that they have a clear understanding of the application traffic on the network.

It offers application assurance, which prioritises critical applications and dynamically adjusts network behaviour and resources to fit application traffic demand. Its dynamic path selection feature automatically selects the best network path in real time, based on actual traffic performance and the characteristics of the application. And it ensures that data, voice and video are transmitted securely with site-to-site IPSec VPN tunnels.



### Security

Singtel Managed Hybrid Network comes with a robust set of security capabilities to ensure that the enterprise network is protected when users access the Internet.

Unified Threat Management services that are offered with the Managed Hybrid Network include a commercial grade firewall, antivirus filtering, intrusion protection/detection, web content filtering, email filtering, protection against denial of service attacks and data leak prevention.

Other security offerings include remote access which provides users in remote or branch offices with secure access to the private enterprise network using the IPSec protocol and Secure Mobile SSL for mobile workers and telecommuters.



### Cloud access gateway

Through the Cloud Access Gateway, Managed Hybrid Network provides enterprises with a seamless and secure connection between their private network and public clouds.

For example, it offers organisations a private, dedicated high-throughput network between the enterprise's on-premise IT environment and public cloud providers, delivering greater security and low latency without the need for any additional infrastructure investment.

## Benefits



### **Helps businesses reduce connectivity costs without compromising performance**

- Enables enterprises to reduce networking expenditure by routing application traffic through the most cost-effective connection based on performance and SLA requirements
- Less critical traffic can be offloaded to the public Internet while MPLS is used for business-critical applications



### **Delivers enhanced and highly-scalable network coverage**

- Provides a one-stop shop for extensive Internet services and IP VPN coverage
- Allows enterprises to increase the size of their network dynamically without having to add new components or to disturb their existing architecture
- Enables secure access to customer's VPN over the global Internet using IPSec tunnels



### **Ensures applications perform to service level agreements**

- Prioritises critical applications in complex and changing network situations
- Ensures optimal performance for applications by dynamically allocating bandwidth amongst different application across a hybrid network
- Delivers predictable performance over wide area networks (WAN), facilitating the rollout of global applications with service level agreements



### **Improves WAN governance**

- Delivers the ability to monitor application traffic patterns and spikes in the network and report on network health and usage
- Enables enterprises to better plan for and manage network capacity. Facilitates business continuity planning
- Enables the Internet to be used as a backup for MPLS
- Provides the redundancy needed to support business continuity planning and data centre consolidation



### **Provides peace of mind**

- Protects the enterprise network when users access the public Internet
- Ensures secure access to public cloud applications via the Cloud Access Gateway
- Delivers secure access for remote/branch offices and mobile workers

## Why Singtel



### **Strong pool of ICT expertise**

Singtel's connectivity and hybrid network offerings are backed by a large pool of over 4,000 ICT professionals who can help you design, deploy and manage a cost effective and reliable networking solution.



### **End-to-end coverage**

Our managed hybrid network service fit in with a wider portfolio of managed end-to-end network solutions, giving enterprises a wider range of connectivity options aligned with your business needs.



### **Extensive reach**

We operate Asia's leading MPLS network and with more than 428 points of presence and offers Internet access in more than 200 countries, providing enterprises with global reach and seamless connections.



### **One-stop support**

As a one-stop service provider, we deliver convenient and comprehensive support through a single helpdesk which covers the MPLS network and the Internet, network optimisation, management and troubleshooting.

# About Singtel

Singtel is Asia's leading communications group providing a portfolio of services including voice and data solutions over fixed, wireless and Internet platforms as well as infocomm technology and pay TV. The Group has presence in Asia, Australia and Africa with over 500 million mobile customers in 25 countries, including Bangladesh, India, Indonesia, the Philippines and Thailand. It also has a vast network of offices throughout Asia Pacific, Europe and the United States.

## Awards

### Asia Communications Awards

Best Enterprise Service - Connectivity as a Service 2014  
Best Cloud Service (2011 & 2012)  
Project of the Year – G-Cloud (2014)

### Carrier Ethernet Service Provider Awards 2013

Best Global Carrier Ethernet Business App  
Best Asia Pacific Wholesale Ethernet Service

### Computerworld SG Readers' Choice Awards

Best Data Centre and Hosting Services Provider (2007 & 2009 -2013)  
Best Managed Connectivity Services Provider (2005 -2013)

### Frost & Sullivan Asia Pacific ICT Awards

Data Communications Service Provider of the Year (2013)  
Service Provider CEO of the Year (2013)  
Telecom Cloud Service Provider of the Year (2012)

### Frost & Sullivan SG Excellence Awards 2013

Carrier Ethernet Service Provider Of The Year  
Beyond Connectivity Service Provider of the Year  
Telecom Service Provider of the Year

### IDC Topline Report

Market Leadership for International MPLS IP VPN Services  
APEJ and International Dedicated P2P Services IPLC+E-Line  
(APEJ for 1H2010 to 1H2013)\*

\*Source: IDC APEJ Fixed Line Telecom Services Tracker, 1H2013