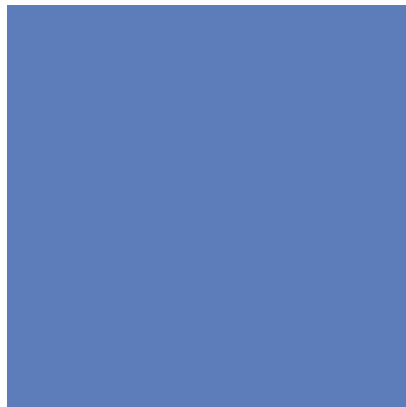




SERENUS  
CAPABILITY  
STATEMENT





# CAPABILITY

## global network services for business

Serenus provides economical and flexible Cloud network services for business.

This document details our network & backup service options and our overarching management and support capabilities:

- + Public Cloud Service
- + Private Cloud Service
- + Cloud Backup Service
- + Service Management
- + Service Coverage
- + Service Assurance

Serenus' Network-as-a-Service offering is designed for a wide range of industries and applications to give customers exceptional value, flexibility and performance.

As a carrier-neutral service provider, Serenus sources Internet and private network links and equipment in 220 countries, from an extensive range of local and international carriers.

Based on the customer's business requirements (applications, number of users, bandwidth needs, budget, etc.) we tailor the optimal hybrid solution utilizing public Internet and private network platforms.

Most importantly, Serenus provides end-to-end management to ensure business class service whilst removing the cost and complexity of self-managed infrastructure.

Serenus also backs-up service accountability with a comprehensive service level guarantee.



## + global internet services

Serenus provides a range of business class Internet access and VPN services with global coverage.

### global internet access

Internet access is a managed Internet service with uncapped data usage for a fixed monthly fee. A full range of access types and speeds are available:

- + xDSL
- + Broadband (copper/fibre)
- + Dedicated Access (Uncontended)
- + Cable (DOCSIS)
- + Mobile (3G/4G)

Where infrastructure permits, fibre-based Broadband (L3) and Ethernet (L2) services are utilized. Access is scalable from 1Mb - 100Mb and rapidly configurable to allow additional bandwidth on demand.

Serenus installs a Cisco router on the customer's premise, with an Ethernet handoff to the customer's LAN. Serenus monitors & manages the router to ensure continuous Internet connectivity and router operation.

### global internet VPN

Global Internet VPN provides secure Internet connectivity between two or more global Internet access sites.

Serenus installs and configures Cisco routers on the customer's premises, supporting the following VPN features:

- + IPSec
- + Cisco DM-VPN
- + EIGRP
- + Tunnel Protection Mode (3DES encryption)

Serenus monitors & manages the routers and VPN tunnels to ensure continuous connectivity between VPN sites.

### split tunneling support

Serenus supports split tunneling on the Internet VPN router, which allows a single Internet access to be used simultaneously for Internet and VPN connection.

The Cisco router incorporates a Firewall supporting intrusion prevention against public Internet access.

### optimized Internet routing

Optimized Internet routing is available between major global network locations:

- + Sydney, Singapore, Hong Kong, Tokyo, New Delhi
- + London, Amsterdam, Frankfurt
- + Los Angeles, New York, Washington, Toronto

Optimized IP uses multiple Tier-1 Internet backbone providers and selects the route with the best stability and lowest latency based on real-time polling statistics of long-haul routes.

# + global private network services

private  
cloud

Serenus provides a range of business class private network services with global coverage.

## global MPLS service

Global MPLS service is a managed any-to-any Layer-3 network utilizing MPLS technology deployed over a private IP backbone (non Internet). To achieve optimal network performance and 100% availability, the core network is fully meshed and deployed over diverse fibre-optic cable systems with the shortest possible physical path between PoPs.

The MPLS service has the following features:

- + PoPs in 190 countries
- + Port speeds 512k – 100Mb
- + 6 Classes of Service (COS)
- + Dedicated or Internet access
- + Managed Firewall Service
- + Application acceleration

MPLS supports the performance requirements of latency sensitive applications such as video, voice and interactive data. Multiple COS delivers optimal performance for disparate applications running simultaneously over the customer's WAN.

## global EPL service

Global Ethernet Private Line (EPL) service is a managed Layer-2 network offering VLAN transparent connections between primary international locations.

EPL is available in the following locations:

- + Sydney, Singapore, Hong Kong, Tokyo
- + London Amsterdam, Frankfurt
- + Los Angeles, New York, Washington, Toronto

Each EPL connection is a dedicated (uncontended) Ethernet connection supporting multiple access technologies, including: EoFibre, EoSDH/SONET, and EoCopper.

EPL supports 3 Classes of Service (COS):

- + High (VoIP, Video)
- + Medium (near realtime)
- + Low (best effort applications)

## service inclusions

Serenus' network services are fully inclusive of installation, configuration, customer premises equipment (CPE), equipment maintenance, and ongoing network management:

- + Site survey to confirm building access
- + Installation and configuration of CPE and network services
- + Router (MPLS), NID (EPL) with maintenance contract
- + End-to-end testing
- + Project management
- + Service monitoring tools
- + Proactive network management

# + backup & recovery services

cloud  
backup

Serenus provides comprehensive server and end-point data backup & recovery services based on the award-winning Infrascala cloud platform.

## enterprise server backup

Backup and Recovery Service is a Cloud-based service that protects and preserves enterprise data residing on central storage servers as well as end-points such as PCs, Macs and mobile devices.

Businesses have to consider protecting and recovering data from all devices, especially as the popularity of tablets and smartphones grows.

The service includes file and folder backup, file server backup, native Exchange server backup and native SQL server backup. You receive unlimited server backup and recovery, including Exchange Granular Recovery and Bare Metal backup:

- + SQL Server 2005, 2008, 2008 R2, and 2012
- + Exchange Server 2000, 2003, 2007, and 2010
- + Sharepoint Server 2007 and 2010
- + Windows Server 2003, 2008, and 2012

## enterprise end-point backup

The service also provides unlimited backup of decentralized end-points such as PCs and mobile devices, thus offering enterprise-wide protection of company data

regardless of where it resides:

- + PC backup and recovery
- + Mac and iPhone backup and recovery
- + Android backup and recovery

In addition to mobile backup and recovery, you have client access to our Android and iPhone applications available from the Google and iTunes stores. Access data from anywhere in the world using these free mobile apps.

## data security & privacy in the cloud

Being a cloud-based backup service, encrypted data is stored securely off-site in Tier-4 (military-grade) Datacentres located in strategic global locations. To meet data residency requirements and to minimize upload/download latency, data is retained in the country of origin where possible.

Datacentre locations are as follows:

- + Melbourne, Australia
- + Johannesburg, South Africa
- + London, UK
- + Los Angeles, Dallas, Houston, Louisville, USA
- + Toronto, Canada

To complement the Cloud Backup and recovery service, Serenus can optionally provide a dedicated Broadband service, with managed router, to ensure backup and recovery operations are isolated from day-to-day corporate Internet usage.

## + control and visibility

### network management

Serenus provides 24x7 proactive management across every element of the network service.

Serenus' network management system (NMS) is based on the Science Logic EM7 platform, which continuously polls the status of global network elements every 3 minutes.

Proactive management means that we detect faults, commence remedial action and advise the customer, without needing to be alerted by customers themselves.

The NMS is programmed to detect a range of faults and warning statuses, including:

- + Router failure
- + Access link failure
- + VPN link failure
- + Router overutilization
- + Excessive packet loss
- + Excessive latency

Customers are provided with a web based real-time NMS status dashboard. Additional customer-defined management views and reports can also be provided.

### service management process

Serenus provides an ITIL based service management process with all incidents and problems managed via a computerized trouble ticketing system (TTS).

Incidents can be raised automatically by the NMS, or by the Service Desk, or by

customers themselves, using the TTS web portal. Once a trouble ticket is raised, the customer can track it via the TTS web portal.

As per the ITIL model, Serenus maintains rigorous processes and controls over critical Service Support functions:

- + Service Desk
- + Incident Management
- + Problem Management
- + Change Management
- + Release Management
- + Configuration Management

All network management and service management functions carried out on behalf of customers are directly controlled by Serenus in Australia and are not outsourced to off-shore entities.

### service desk

Serenus provides standard 12x7 service desk coverage (7am-7pm Australian Eastern Standard Time AEST). Extended 24x7 coverage can be provided as required.

Service desk technicians are skilled and equipped to provide Level 3 technical troubleshooting, thereby eliminating unnecessary delays and duplication caused by transferring problems between teams in different locations.

Serenus' Service Desk has direct lines of escalation to global carriers, for speedy resolution of local support issues at international sites.

## + global coverage

service  
coverage

Serenus offers extensive international coverage and in-country reach. By leveraging multiple global aggregators and national carriers, Serenus is able to source all available access options at the most competitive rates.

### Australia and New Zealand

Serenus sources Internet and data services from a wide range of national providers:

- + Telstra, Optus, AAPT, Amcom
- + National Broadband (NBN)
- + NZ Ultra-Fast Broadband (UFB)

Extensive in-country coverage in Australia and NZ gives Serenus the ability to support local businesses wanting to outsource the operation and management of their domestic networks.

### 220 countries worldwide

Serenus' Cloud network services are available in 220 countries worldwide. In each country there are a wide range of different access types depending on the local infrastructure:

- + Broadband (xDSL, FTTx)
- + Ethernet
- + Leased Line
- + Wireless (Microwave, WiMAX)
- + Satellite

Wherever possible Serenus leverages next generation fibre-based services (FTTx) in each country.

Serenus installs and maintains Cisco routers in 220 countries. This gives customers a uniform and seamless network platform to support their business applications nationally and internationally.



# + service assurance

## service assurance

### service guarantee

Serenus offers a comprehensive Service Level Agreement (SLA) covering all network services and all global locations.

The SLA has a range of performance benchmarks and each one is linked to penalties for non-compliance:

- + Availability
- + Latency
- + Packet Loss
- + Jitter
- + Installation lead time
- + Support response time

Serenus' reporting tools allow customers to view network performance on a monthly and annual basis, and verify actual performance against SLA benchmarks.

### mission critical operation

Where the customer's business requires guaranteed non-stop service, Serenus can implement a fully diverse/redundant solution backed up with a 100% availability SLA.

This supports applications such as:

- + Contact Centres
- + Datacentre connectivity
- + Retail EFTPOS
- + eCommerce

Serenus employs a range of options such as primary/backup access services, carrier diversity, and technology diversity, to deliver a network solution that is adapted to these

critical business demands.

Serenus can also provide a complete backup network in cases where the customer has a private network as their primary platform and they need a cost effective backup strategy.

### project services

Serenus provides project management to assist customers deploy Cloud network services with minimal impact and risk to their ongoing business.

In an international environment, spanning multiple timezones, Serenus can play a vital role in assisting customers with their system deployments:

- + Installing new sites
- + Deploying new applications
- + Migrating legacy networks
- + Relocating premises
- + DR/backup testing

In addition to project management support, Serenus can also assist customers with remote location support such as liaising with Building Management Offices (BMO), and assisting with local contractors for in-house cabling fit-outs, etc.





we do  
the  
network



## Serenus Network Services

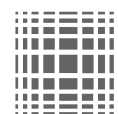
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Cloud Networking