

# Wholesale Internet Transit

**nextgen**  
pure-data



Nextgen's 'Wholesale Internet Transit' is a carrier grade, bundled international and domestic Internet service for Australian Internet Service Providers.

This service is engineered on a high-availability BGP core with multiple interconnects to global Tier-1 carriers. Services can be delivered to single or multiple locations including many of the Australian data centres that are connected to Nextgen's national fibre network.

## Speed Range and Scale

Service rates are available from 10Mb/s to 1Gb/s, delivered on Fast Ethernet or Gigabit Ethernet ports, allowing service providers to scale upstream connectivity with business growth.

Internet usage is unlimited, regardless of direction or time of day for the selected link rate.

## Coverage and Access Technologies

Nextgen's 'Wholesale Internet Transit' service can be delivered directly to ISP PoPs using fibre, high capacity microwave or bonded DSL.

Nextgen's national fibre network is connected to the major data centres in Australian capital cities.

## Flexible IP Addressing Options

Nextgen's 'Wholesale Internet Transit' product accommodates the following IP addressing options:

- Nextgen provided /31 or /30 IP address range
- Customer provided IP addressing (min /24 subnet required for routing)

## Shadow Service (Backup Link)

Nextgen's 'Shadow Internet Service' provides a backup connection for service continuity in the event of failure or interruption in the primary link.

## Premium Performance

Nextgen's 'Wholesale Internet Transit' service is managed as a premium quality product and designed to deliver performance characterised by:

- Target packet loss of less than 0.3%
- Target availability exceeding 99.95% [1]
- Traffic protection at 50% for both domestic and international traffic
- Minimised latency with multiple international and local upstream provider links

## 24x7 Technical Help Desk

Nextgen's 24x7 help desk is answered promptly by a technically qualified member of our Network Operations Centre.

## BGP Routing & Core Redundancy

The service also includes:

- Static or BGP routing according to ISP's networking requirements
- Multiple connections delivered to diverse locations or redundant links to specific sites

Feature / Parameter	Nextgen Internet
Standard Service Rates (Speeds)	10Mb/s to 20Mb/s in increments of 2Mb/s, 20Mb/s to 50Mb/s in increments of 5Mb/s, 50Mb/s to 300Mb/s in increments of 10Mb/s, Above 300Mb/s on application
No Data Volume Or Usage Limits	'All you can eat' service with no volume and no time based limitations for the fixed monthly fee
Coverage	Australia wide, with last mile access via fibre, microwave or bonded DSL
Physical Interface	8P8C (RJ-45) Electrical for up to 100Mb/s or SC Optical for 80Mb/s or greater
Interface Configuration	Default: Auto-Negotiate Enabled
Local Interface	Ethernet IEEE 802.3 (100baseTX or 1000baseLX)
Rate Measurement	Ethernet Frame
Frame Size	Default IP MTU is 1500 octets Larger frame sizes may be supported depending on access technology
Internet Protocol	IPv4 unicast is supported (IPv6 and multicasts are not currently supported)
IP Address Options	/31 or /30 IP address range provided (/31 default) Customer owned IP addressing (min /24 subnet required for routing)
IP Routing	Static or BGP4 routing available according to requirements Nextgen BGP AS# is 38809
Technical Support	Direct access to Nextgen's 24x7 Service Management Centre help desk (ph: 1800 099 299)
Upstream Redundancy	Upstream redundancy is provided by redundant upstream connections and border routers running BGP in Melbourne and Sydney
Core Protection	MPLS path protection is provided with typically 50ms protection time
Availability <sup>[1]</sup>	99.95% (measured monthly) on services delivered on Nextgen fibre
Traffic Protection <sup>[2]</sup>	Target: greater than 50%
Round Trip Time - Latency <sup>[3]</sup>	Target: 95% better than 200ms for national traffic
Packet Loss	Target packet loss of less than 0.3% (measured monthly)
Commissioning Standard	RFC2544 compliant verified connectivity test depending on the access type
Shadow Service	Available as a backup to a primary service (refer to Internet Shadow Service Data Sheet)

[1] Availability may vary with other access types. Refer to Nextgen SLA tables for specific access type availability.

[2] Latency and packet loss may be adversely affected by failures in undersea cable systems.

[3] If latency is measured from the customer's router, add approximately 120-200ms to cover additional customer CPE delays.

## ABOUT NEXTGEN NETWORKS

Nextgen Networks is a national Telecommunications carrier that specialises in high performance data services. Our customers are other Corporations, Government, Service Providers and other Carriers. Nextgen products include high capacity data transmission services ranging from corporate links up to complete wavelengths, nationwide multipoint Ethernet networks (VPLS Service), Internet, satellite and carrier grade co-location offerings. Nextgen owns and operates infrastructure that includes the third largest fibre network in Australia, a latest generation national switched Ethernet data network and co-location centres throughout Australia. Nextgen is a wholly owned subsidiary of the Leighton Group.

**Check out the benefits of our award winning data solutions**

**Phone: 1300 653 351**

**www.nextgennetworks.com.au**