We look after your WAN

Simplify the day-to-day management of your network and get the bonus of visibility right across your IP VPN.

Key Benefits:

- Provides end-to-end management of your Optus Evolve IP VPN, even at the smallest sites.

- Delivers true end-to-end QoS for optimal performance of your converged applications.

- Comprehensive visibility of your Optus Evolve IP VPN through network and application reporting.

- Frees up IT staff to focus on business applications, rather than running the WAN.

- Flexibility - available as an add-on module to the Optus Evolve IP VPN.

- Available with a range of Cisco® routers to suit different situations.

Optus Evolve MRS (Managed Router Service) is available to Optus Evolve IP VPN customers seeking a fully managed Wide Area Network (WAN) service by Optus.

With Optus Evolve MRS, Optus supplies and manages the Customer Edge (CE) routers that connect each of your sites to the Optus Evolve network. Optus uses the monitoring functionality in these routers to provide inputs into a comprehensive data collection and reporting solution that reveals the true performance of your WAN. The reporting capabilities provided with Optus Evolve MRS include true end-to-end Quality of Service (QoS) and Network Based Application Recognition (NBAR) reporting.

We'll handle the management

Optus Evolve MRS moves the demarcation point from the WAN interface of the Network Terminating Unit (NTU) of the Optus Evolve IP VPN to the internal Ethernet connection of the CE router. This means that Optus takes responsibility for managing the whole WAN, freeing your IT staff to focus on managing other aspects of your business. This service is also helpful if you have remote sites where skilled technology staff are not available.

Moving, Adding or Changing sites (MACs), changing application priorities and troubleshooting are managed by the Optus Business Service Desk, who specialise in understanding the complete workings of Optus Evolve IP VPNs.

Better reporting, better understanding

With Optus Evolve MRS you will have access to reporting via the Optus eCare web portal which provides reporting for both the
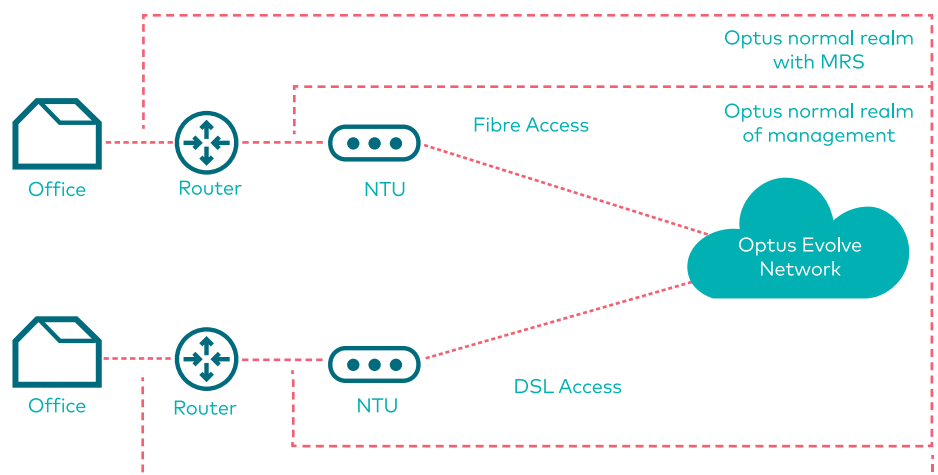
performance of the network and application usage. For example, when a bottleneck arises, it's simple to identify why it is occurring and what traffic is creating it. The reporting also delivers data used for Class of Service (CoS) rules: for example, knowing which application is using what amount of bandwidth at what times during the day provides you with the information you need to work with Optus to optimise your network settings.

Another tool available with Optus Evolve is the self diagnosis tool, which is used for network testing in the core. This tool is used to select various source and destination routers on the IP VPN and perform tests that enable you to understand exactly where a delay is occurring.

Quality of Service end-to-end

As IP networks are accepted as a platform for convergence, businesses are increasingly dependent on IP transport for different types of data, including time-sensitive data such as voice. These converged applications require differentiated and stringent performance parameters in order to operate in an acceptable manner.

The Optus eCare Portal captures data from a number of network elements, including the Optus Evolve MRS CE routers on your sites and shadow routers in the core and Provider Edge (PE). This data is used to measure true end-to-end QoS performance. It is not possible to obtain this single integrated reporting view from an external reporting solution.

Office — Router — NTU — Fibre Access
Optus normal realm with MRS
Optus normal realm of management
Optus Evolve Network
Office — Router — NTU — DSL Access

OPTUS

Optus Evolve MRS specifications

Routers supported

The Optus Evolve MRS service is offered with the following range of Cisco ISR router models selected to suit your business needs:

• Cisco 867VAE – an ADSL and Ethernet router that provides a high-speed VPN solution for small business sites

• Cisco 881G – an Ethernet router used for EoNBN access

• Cisco 819 – a WIPVPN Plus router that provides a wireless VPN solution for small business sites

• Cisco 888 – An SHDSL Ethernet router that provides a high-speed VPN solution for small business sites

• Cisco 1941 – an Ethernet router that provides a high-speed VPN solution for small to medium-sized business sites

• Cisco 2921 – a high-performance router that supports voice and advanced services for small to medium-sized business sites

• Cisco 3945E – a high-performance router that supports voice and advanced services for large business sites.

Report	Metric/Displayed Field	Description	Value
Link Report	Link	Link ID	Link name
	CE State	Whether it is managed or unmanaged	Unmanaged or managed
	Throughput (in)	Traffic from customer to PE router	kbit/s
	Throughput (out)	Traffic to customer from PE router	kbit/s
	Link availability	Availability on the interface at PE router (up/down)	Green-red bulb
QoS reports for six classes of service Each instance of QoS metric based on link at PE router, with class and direction(input or output)	Class	Link ID and the link CoS	Link name + class
	Pre policy	Volume of each CoS before application of policy	kbit/s
	Post policy	Volume of each CoS after application of policy	kbit/s
	Drop rate	Dropped traffic as a proportion of entire link speed	%
End-to-end reporting	Jitter	Jitter from CE to CE	%
	Delay	Delay from CE to CE	ms
	Round trip time (RTT)	Response time from CE to CE	ms
	Packet loss	Packet loss from CE to CE	%
CPE reports	CE/site availability	Physical ability of CE router (up/down)	Green/red bulb
	CPU utilisation	CPU utilisation	%
	Memory utilisation	Memory utilisation	%
	Link utilisation (out)	Traffic flow from CE router	kbit/s
	Link utilisation (in)	Traffic flow to CE router	kbit/s
NBAR	Utilisation (in)	Utilisation for each protocol	%
	Utilisation (out)	Utilisation for each protocol	%
	Throughput (out)	Accumulative volume traffic for each protocol	kbit/s
	Throughput (in)	Accumulative volume traffic for each protocol	kbit/s
	Inbound traffic distribution	Application traffic report for Cisco NBAR monitored protocols	Pie chart (kbit/s)
	Outbound traffic distribution	Application traffic report for Cisco NBAR monitored protocols	Pie chart (kbit/s)
	Inbound packet distribution	Application traffic report for Cisco NBAR monitored protocols	Pie chart (kbit/s)
	Outbound packet distribution	Application traffic report for Cisco NBAR monitored protocols	Pie chart (kbit/s)
	Application usage	Application traffic report for Cisco NBAR monitored protocols	Pie chart (kbit/s)
Service detail	Port speed	Interface speed at PE router	kbit/s
	% per class of service	CoS % allocated as per customer request	% against service
Device detail	Router type	Cisco router model	Router type
	Operating system	IOS version	IOS information
Other related functionalities	Graphical representation of reports, planned/unplanned outage information fault information, network trending		
	Self diagnosis RTT test tool		ms, dropped packets
	Filtering capacity	Down services to float to top	
	Backend settable thresholds	Down services to float to top	

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