

## Advanced Managed Wide Area Networks

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## Summary

Managed WAN (Wide Area Network) services have traditionally only be available to enterprise or large business, mostly due the cost and complexity of delivering these services. Orca Communications has once again leveraged the power and flexibility of Open Source technology to deliver an industry disruptive, comprehensive suite of Managed WAN services including C.P.E (Client Premise Equipment) management, Software Defined Networking and fully automated provisioning delivered at the Layer2 network level. The nature of Open Source Technology allows Orca to deliver these services to small medium and large business with more comprehensive and flexible features, at a more competitive price point.

### Service Highlights

- Full inter-office IP access using private IP addressing without the need for VPN technology or the traversal of the open Internet.
- Fully customised QoS (Quality of Service) definitions which do not limit service or prioritisation types.
- Use any Orca IP connection type including low cost DSL services like ADSL and VDSL if limited options are available at some site locations.
- Centralised hosted Internet gateway options simplify and enhance WAN security by enforcing single gateway Internet access from a secure and redundant data centre location.
- All services delivered at ultra-competitive price points.

## Orca Managed WAN Service

Orca offers full site to site Ethernet based managed WAN services including local device management all sharing central Data Centre based, redundant and secure Internet access. These services are provided via Orca's high availability Software Defined Core Network which as a platform allows rapid provisioning and fully customised network management from Layer 2 to Layer 7 network services. Comprehensive QoS, traffic prioritisation, monitoring and reporting tools complete a powerful feature-set to deliver scalable and robust business communication services at a extremely competitive cost.

## Key Features

### Connection types

A full range of access options to best suit the connectivity requirements for each site from basic xDSL circuits to 1Gbps fibre circuits all supporting the delivery of IP network services.

	ADSL2	VDSL2	UFB100	UFB200	Business Fibre
Upload Speed	0.6Mbit/s	10 Mbit/s	50Mbit/s	200Mbit/s	5-1,000Mbit/s
Download Speed*	10-30Mbit/s	20-60Mbit/s	100Mbit/s	200Mbit/s	5-1,000Mbit/s
Guaranteed minimum speed	0.064Mbit/s	0.064Mbit/s	2.5Mbit/s	2.5Mbit/s	all
Service response	No SLA	No SLA	Optional SLA	Optional SLA	4 hours
<i>- actual download speeds depend upon business location</i>					

## **QoS**

Orca's QoS management model allows unprecedented granular level of traffic identification and uses hierarchical queuing to allow for fine control of traffic prioritisation. Application (layer7), vLan, IP, Port, Protocol, DSCP tag, source &/or destination IP plus any multiple combination of criteria can be used to precisely identify traffic which should be prioritised and queued over other traffic types.

## **Traffic prioritisation**

Traffic is prioritised by the Orca network according to your unique specifications so that higher class traffic has priority over lower class traffic. Traffic can be given any priority from 1 to 250.

## **vLAN Support**

Allows secure separation of network traffic for more flexible performance and security management options e.g. more sensitive business data and/or guest data can be separated via vLAN to ensure appropriate access to appropriate network resources.

## **Active Service Management**

24x7 network monitoring and response is available. This enables Orca to start the resolution process often before the customer is even aware.

## **Service Level Targets**

SLA's to achieve network service delivery performance, plus provisioning, moves, adds and changes, with agreed service hours and restoration times able to be chosen on a per site basis.

## **Reporting & Diagnostics**

IP based reporting is available per site. This allows a break down of typical usage (HTTP, VPN, TCP, UDP, ICMP) of each host on the local network. SNMP access can be provided to key hardware for monitoring from existing systems.

## **Reliable access to Orca Cloud Services**

Orca allows easy connection to and integration with Cloud services hosted within Orca's private cloud network.

## **Fully Automated Rapid Provisioning**

Because Orca's high availability network infrastructure is software based, new network services can be built and provisioned within seconds without the need to engage network engineers to configure expensive proprietary network equipment. This approach also significantly reduces the risk of human error when provisioning network services. Including C.P.E network devices; Orca routers are automatically provisioned and managed further eliminating the need for network engineers to configure devices before shipping to customers, significantly reducing delivery cost and time-lines.

## **Security**

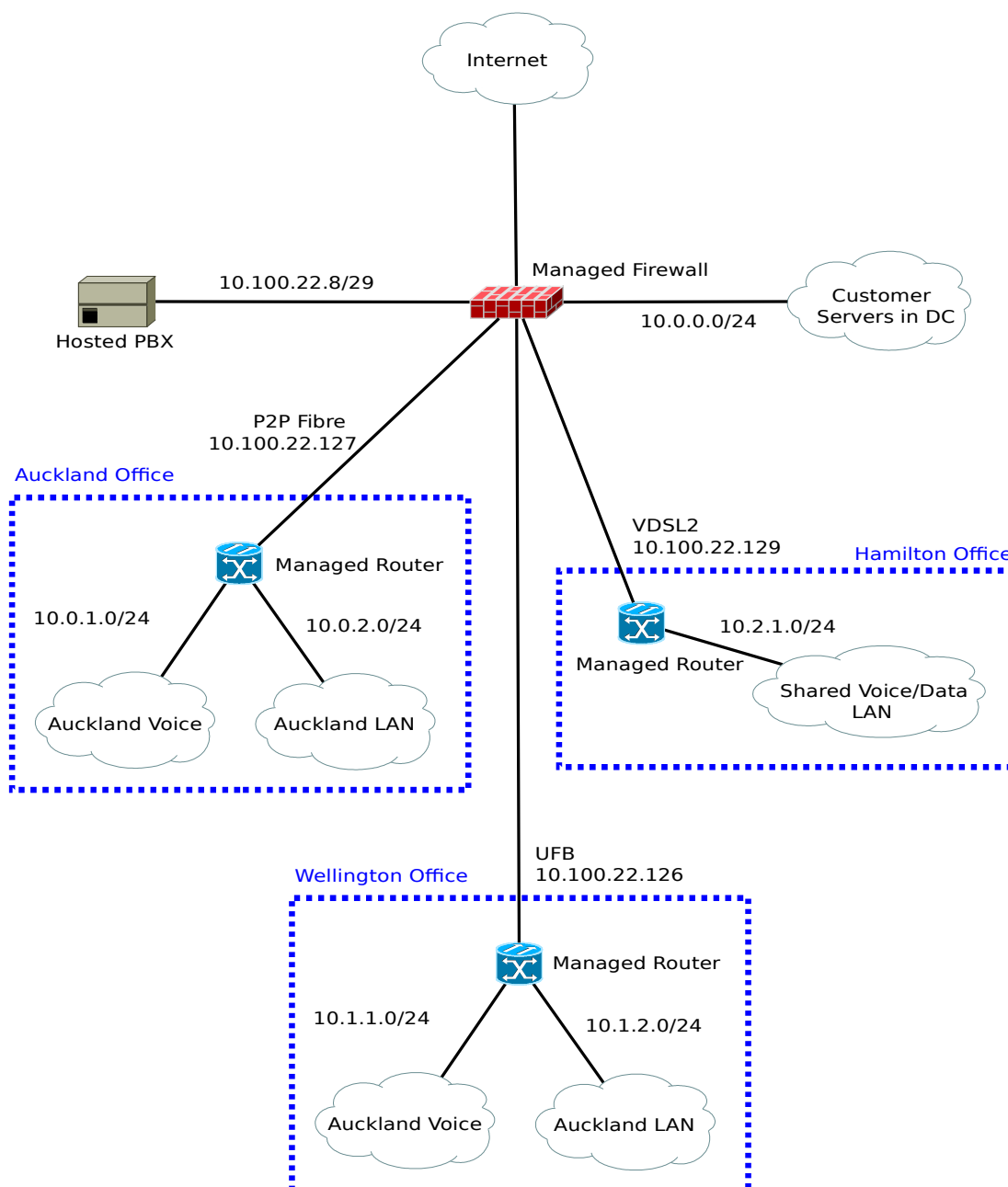
All circuits are separated at Layer 2 through Orca's network to ensure customers and links remain private. We don't utilise any publicly reachable connections to deliver WAN traffic.

## Privacy

The core Orca network establishes IP separation between clients at the IP layer, thus reserving each client's Orca network exclusively for their use, and is designed to prevent other parties from seeing, accessing or using it. This approach is not dissimilar to legacy Frame Relay services. Orca recommends that clients consider their network privacy needs carefully to confirm whether the level of privacy provided by this network-imposed separation is sufficient for their business needs. Clients can achieve additional privacy and security using encryption options if required.

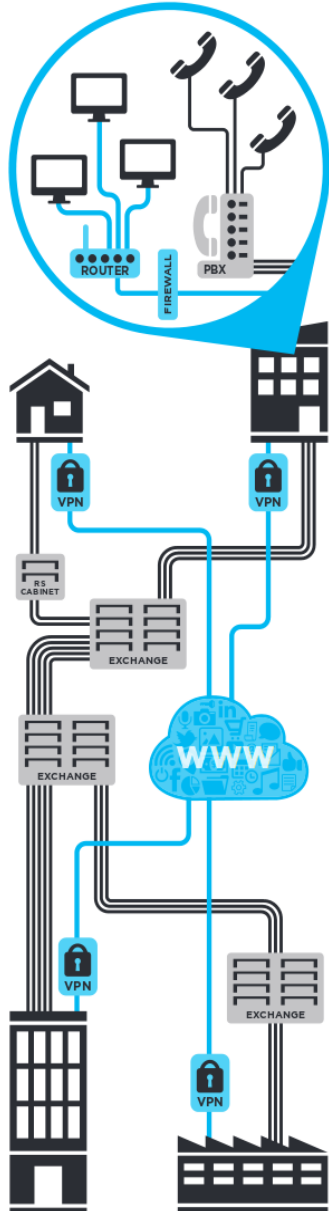
## Example WAN Layout

### Example 3 site WAN



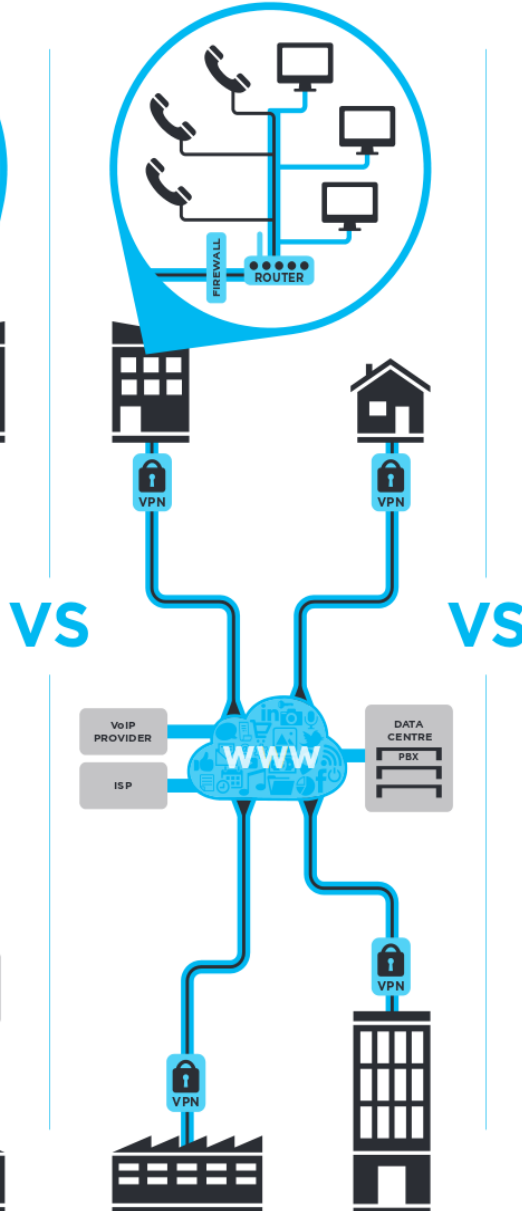
### Traditional Setup

Legacy Phone lines  
Multiple Internet Firewalls  
Internet traversal required  
No QoS



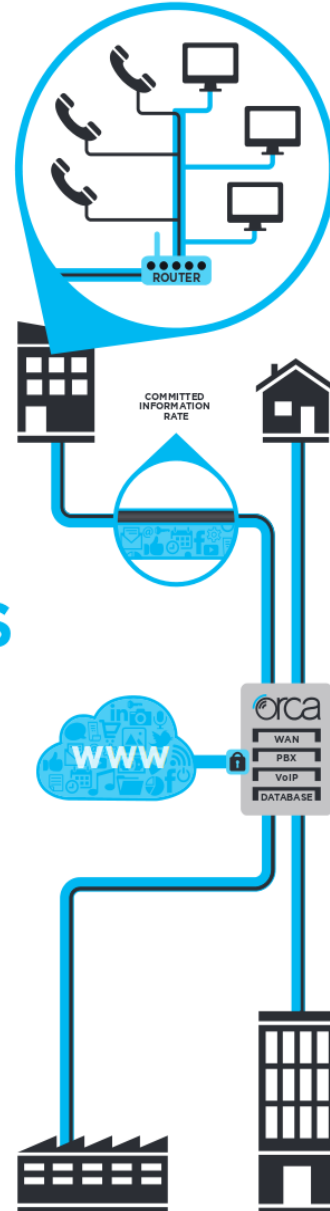
### Typical WAN Setup

Multiple Internet Firewalls  
Internet traversal required  
No QoS



### Orca WAN

Single Internet Firewall  
No Internet traversal  
Full QoS



## Redundancy

Orca's software defined Core Network is run upon fully redundant hardware and network infrastructure ensuring equipment failure does not result in downtime. Orca infrastructure is housed within enterprise grade data centres where all hardware is mirrored, multiple internet service providers are connected, power feeds, backup generators and cooling systems are all duplicated to provide total system redundancy. An additional replicated data centre can be added to ensure full geographic redundancy if required.

## Orca Contact Details

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