Qvalent data facilities and disaster recovery

Key Features

Data Centres

- A2 class facilities operated by HP who are world leaders in data centre management.
- 24x7 security guards.
- Battery Backup.
- Diesel generators.
- Fire suppression systems.
- Caged environment.

Wide Area Network

- Optus IP MPLS Based.
- Customer network traffic can be switched between main data centre and DR facility.
- Internet access via dual service providers with automatic failover.

High Availability

- All hardware and networking set up in redundant mode with automatic failover
- Network access via dual service providers with automatic failover.

Disaster Recovery

- Alternative facility to production
- All production applications are replicated on servers in the disaster recovery facility.
- All critical production data is replicated to the disaster recovery facility.
- Network can be switched to DR site without hardware reconfiguration.

Overview

Qvalent is a 100% owned subsidiary of Westpac and operates an A2 class data centre and associated disaster recovery (DR) facilities for Westpac's Quickstream product suite. This facilities and infrastructure has been designed to ensure the minimum failover time to the disaster recovery facility in the event that the primary facility becomes incapacitated.

Network Infrastructure

To achieve a successful transition to Qvalent's DR facility Qvalent utilises a 'hub and spoke' network design that allows network traffic to be redirected to the Qvalent DR site without any hardware or address changes. In addition to this, the network is designed with redundancy in mind. This ensures that no single point of failure will prevent the network from functioning. Qvalent utilises Optus's MPLS IP based network technology and dual paths with different internet service providers (Optus and Telstra) to ensure that all network path are redundant with automatic failover.
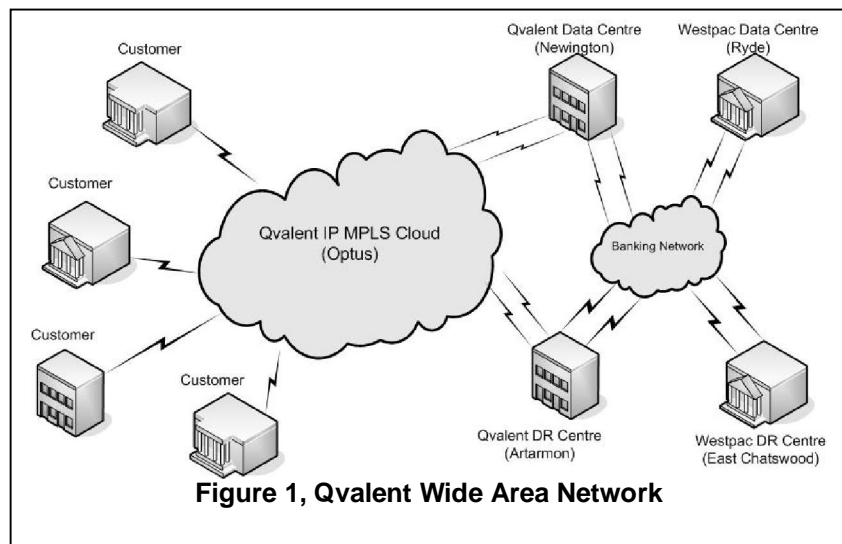

Figure 1, Qvalent Wide Area Network

Qvalent customer IP addressing

Qvalent utilises border gateway protocol (BGP) across both its internet and private MPLS links. This means that in the event that Qvalent switches over to it DR site no network address changes need to be made by customers. BGP will automatically route the traffic to the correct data centre.

Key Features

Planning

- Qvalent maintains a comprehensive DR plan
- Plans are reviewed and practised.

Industry Standards

Qvalent's facilities are measured against:

- AS2805
- PCI-DSS Level 1 compliant
- Tri-monthly network security scans
- External audits

Reliance

The Qvalent facilities are relied upon by many of Westpac's top corporate customers

Uptime

Qvalent operates on an SLA uptime of 99.95%

Support

Qvalent operates a 24x7 help desk facility

Is the Qvalent infrastructure secure?

The Qvalent infrastructure has been reviewed by Westpac and external auditors against the AS2805 standard and the Visa / MasterCard PCI standard. As part of these standards Qvalent submits to yearly security audits and tri-monthly network vulnerability scans.

Qvalent's data centre facilities

Qvalent operates two A2 class data centre facilities that are managed by Hewlett Packard (HP) on Qvalent's behalf. HP is a world leader in data centre management and brings world's best practices to the daily running of this centre. This data centre has all the features you would expect in a state of the art facility including 24x7 security, battery back up, diesel generators and fire suppression systems. Once again, like Qvalent's WAN all paths are redundant with automatic failover.
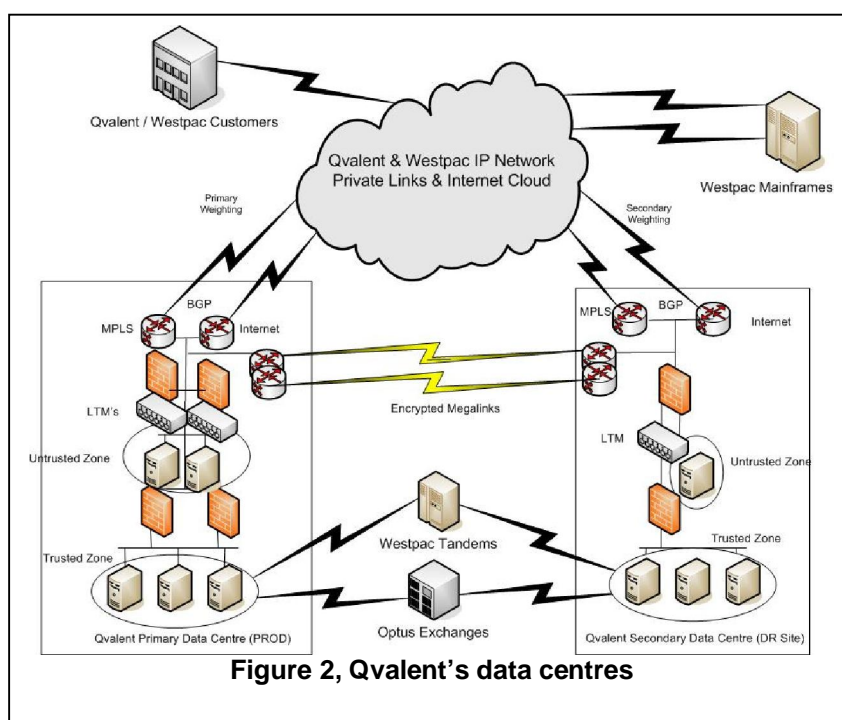

Figure 2, Qvalent's data centres

What are Qvalent's disaster recovery facilities?

Qvalent operates a warm standby site for its primary facility. This facility is also managed by Hewlett Packard. This facility runs a replication of all applications that are currently operating in the production environment. Also, all transactions executed in the production facility are replicated in real time to the DR site. This ensures that DR databases are always up to date. With the latest production data. This facility contains all necessary systems and network links to operate as a production facility.

What are Qvalent's disaster recovery plans?

Qvalent has a comprehensive set of disaster recovery plans that it tests regularly.