

Network redundancy, resilience, availability & diversity.

What's the difference?

Network availability, redundancy, resilience and diversity are all standard terms used by network providers and carriers around the world. They all refer to the tolerance of a network system, and its ability to keep working despite the event of outage issues, such as those caused by power outages, cyber-attacks and system overloads.

There is often a lot of confusion surrounding these terms, which in turn causes confusion as to how a service has actually been designed. This infographic helps you to understand the differences between them.

Redundancy

is the umbrella classification for the process of minimising service unavailability.

We measure redundancy in 2 ways:

1. Resilience
2. Diversity

Resilience

is a measure of network redundancy for a single Circuit.

Diversity

is the measure of network redundancy across multiple Circuits.

Having resilient Circuits that are diverse from one another provides the maximum level of redundancy. However, the higher the level of resilience per Circuit the more complex the diversity planning becomes.

At 01T we have standardised our use of these terms to support clarity of design.

A Circuit is defined as one of the following 01T products:

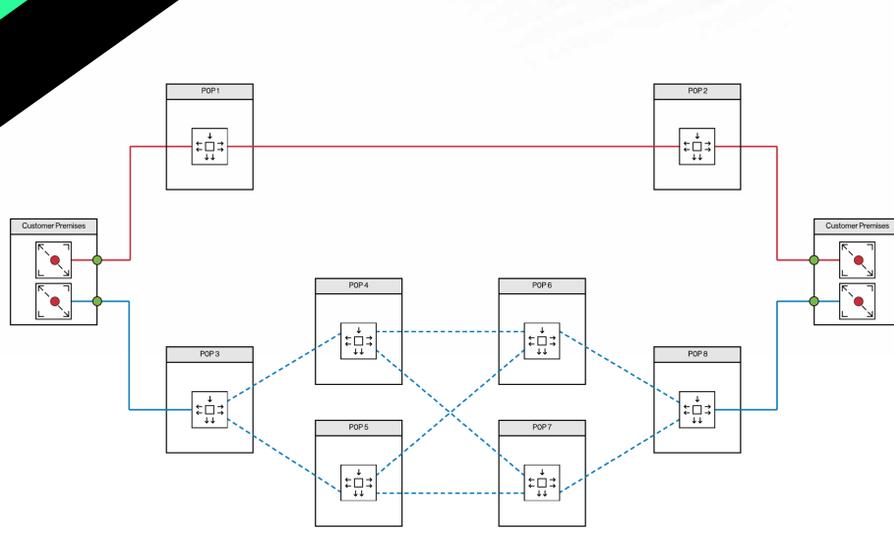
- Internet Access:** Direct Internet Access, IP Transit
- Point to Point:** Ethernet Line, Wavelength, Dark Fibre

Availability

is the calculation of uptime performance stated as a percentage.

The greater the level of redundancy the higher the Service Availability percentage is.

Example Network Diagram - a Diverse Solution



Service Availability is guaranteed by the 01T globally standardised SLA and can be provided against either individual Circuits or across multiple Circuits (a Solution).

01T are a specialist network provider. Our tailored approach to network services allows us to design individual Circuits or multiple Circuits (a Solution) with the highest level of redundancy, guaranteed by a globally standardised SLA.