



# PSF CLOUD - Disaster Resilience, Contingency & Recovery

## Resilience

We have designed our CLOUD solution to cover all points of potential system failure where possible.

All servers are Virtual Machines, the host servers are all over-specified and if any single host fails, the remaining are all capable of running the load.

To this end we have:

- ▶ 4 Remote Desktop Protocol (RDP) gateways all load balancing and any two of which could maintain the average daily load.
- ▶ 2 Domain controllers each hosting AD services, as well as the internal Domain Name System (DNS).
- ▶ Any customer with more than 20 contracted RDP accounts has multiple RDS Servers allocated, designed to handle the load if any server is missing from a group of servers.
- ▶ All disks in the primary data centre are Solid State Devices, all configured with 3PAR redundancy.

## Contingency

- ▶ The primary data centre has its own Uninterrupted Power Supply (UPS), backed up with on-site diesel generators and 5 day's supply of diesel.
- ▶ The secondary data centre is serviced to the same standard and located 40 miles away. Each data centre is serviced by 6 internet providers, any two of which are active at any point in time.
- ▶ If any virtual server is detected as having failed, it is automatically restarted.
- ▶ All virtual servers are replicated to our secondary data centre on a weekly basis.
- ▶ All transient data is replicated to the secondary data centre on a nightly basis.

## Disaster Recovery

In the event of a catastrophic disaster (Explosion, Flood etc.) at the primary site, the whole infrastructure will continue to be powered at the secondary site, the latest data backups are applied and the externally facing non-geographical IP addresses are repointed.

This process may take up to 48 hours to complete from a completely cold start, but there will be no changes required from a customer perspective.