Disaster Recovery to the Cloud

UKCloud has designed and deployed a highly resilient, highly available and secure cloud architecture. However, when building in the cloud it is key to adopt good Infrastructure as a Service (IaaS) design principles and, in particular, to design for application availability. It is important to consider what plans you have in place if storage or compute resources become unavailable, connectivity is lost or if the application become unresponsive.

One of the options is to arrange a Disaster Recovery (DR) solution, which many organisations view as insurance against most scenarios which may result in service loss. Although the DR solution may never be needed, it provides peace of mind that if an issue occurs, it will enable applications to remain available.

Disaster Recovery to the Cloud provides a secure, scalable disaster recovery (DR) platform where you can replicate data and virtual machines (VMs) and instantiate them when a DR scenario is invoked.

Information assurance and connectivity

The UKCloud assured cloud platform is designed and optimised to meet the unique information assurance needs of UK public sector organisations.

- Deploy on an established, trusted Assured or Elevated OFFICIAL cloud platform
- Connect via the internet, or via PSN, RLI, N3 or JANET networks
- UK-based telephone service desk and NOC function, with 24/7 support for high-priority incidents, including access to UKCloud’s technical subject matter experts
- Platform optimised for OFFICIAL and fully aligned with the 14 CESG Cloud Security Principles
- Multiple secure tier 3 UK data centres separated by more than 100km and securely connected by high-bandwidth, low-latency dedicated connectivity
- Extensive independent validation by recognised UK public sector authorities enhances the platform’s suitability for especially sensitive workloads for organisations such as health, police and defence
- UK sovereignty — assured cloud platform delivered across two UK sites by a UK-based company with UK government security-cleared staff
- Platform that hosts workloads exclusively for the UK public sector, creating a known and trusted community of neighbours
- A mature and expansive partner ecosystem, including system integrators, managed service providers, software development houses and consultants specialising in transformation projects
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Features and benefits

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<th>Feature</th>
<th>Benefit</th>
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<td>Replicate data to a secure and resilient platform</td>
<td>Meet your own security and resilience requirements, without having to maintain a second site</td>
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<td>Choose the replication technology that meets the requirements</td>
<td>Design a solution that compliments your in house deployments</td>
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<td>Pay for what you use</td>
<td>Reduce costs by only paying for what you need</td>
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<td>Easily simulate what would happen in a DR scenario to build confidence</td>
<td>Be prepared for disaster scenario by understanding exactly how everything will work</td>
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Key differentiators

- A secure and scalable UK-based platform to which your data can be replicated and applications can be recovered
- The capability to rapidly spin up your replicated data and VMs when a DR scenario is invoked
- Allows you to invoke test scenarios to ensure you can meet your business continuity requirements
- Provides a simple OPEX-based utility-style billing model for your DR platform
- Provides a range of service levels to meet the needs of your data and applications
- Integrate with UKCloud’s on-platform Zerto-based replication and backup technology

What the service can help you achieve

- A technology platform that supports your business continuity plans (BCP)
- Compliance with policy, regulation or legislation (for example, Civil Contingencies Act) without the cost and complexity of traditional DR solutions
- Reduction of your CAPEX and IT estate by removing the legacy infrastructure required to provide a DR solution
- Reduction of your Recovery Point Objective (RPO) and Recovery Time Objective (RTO)
- Alignment of the consumption and costs of your DR infrastructure with an OPEX model
- Reduction of your carbon footprint via a much more efficient platform
- Adoption of multi-site solutions by supplementing your existing primary site, whether on-premises or externally hosted, with a cloud-based disaster failover site
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Technical features
Our solution is entirely flexible to help you meet your own specific design requirements. Whether you are concerned more about RTO or RPO, we have a portfolio of technical solutions to support you including:

• Compute Storage: Suitable for solutions requiring a very short RTO. The storage is local to the compute environment.

• Cloud Storage: Suitable for solutions that can tolerate a longer RTO. The storage used is our Cloud Storage solution which is priced lower but requires data to be moved to the compute environment when DR is invoked. VMs may be required to act as the end point to which data is replicated.

We can also support solutions interacting with our own technology stack — including the likes of VMware and Zerto.