

Business Continuity and Disaster Recovery

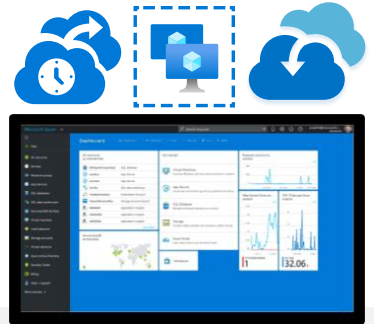
Improve business availability and services delivery

Utilize Microsoft Azure for your HADR/BCDR strategy to reduce financial and credibility damages

Are you looking for a solution that protects you from downtimes and business Impact due to unexpected disasters?

Leverage our experience, expertise around Microsoft Azure platform for building your BCDR strategy for your critical applications requiring stringent service level agreements for performance, availability and/or resiliency.

Regardless of where your source environment is hosted, we help you to assess, plan, design, build, test and maintain the disaster recovery environment on Microsoft Azure in compliant and secured fashion.



LiveRoute can help you to:

- ✓ Design and operating resilient apps and systems
- ✓ Achieve reliability, resiliency and business continuity
- ✓ Leveraging Azure native and integrated solutions for HADR and BCDR scenarios
- ✓ With Microsoft Azure, LiveRoute can help you achieve an **application level DR.**

- **A single disaster or downtime may cost average \$5,600 per minute (or more) loss to business** *(Gartner)*
- **20% of the organizations, targeted for cyber-attacks, were from ransomware** *(2017, Black Hat security conference, Las Vegas)*
- **Ransomware costs money, an average of \$133,000 for each attack** *(Unitrends' The state of cloud and data protection survey)*

A well implemented solution on Azure, may support your organization to:

- Save time during an emergency and quickly recover from the disaster.
- Understand, be prepared, organized and efficient in addressing the problem.
- Establish contingency, communication and recovery plan
- Report back the progress and continuity to business
- Keep you in compliance with any regulations

No Downtimes & Blackouts

- ✓ No- and low-impact Maintenance
- ✓ Native and continuous full-fidelity replication
- ✓ Maintain low RPO and RTO

Compliance & Business Continuity

- ✓ Achieve desired high availability, per application
- ✓ Achieve resiliency & Disaster Recovery
- ✓ Achieve compliance to local and international standards

Protect Customer Data

- ✓ Advanced network and connectivity architecture
- ✓ Designing and operating resilient apps and systems.
- ✓ Reduce or eliminate probability of data loss

Deliver value to business



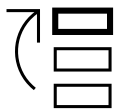
Business Strategy

- ✓ Establish comprehensive strategy for HADR and/or BCDR
- ✓ Reduce time to recover
- ✓ Be aware and prepared
- ✓ Safeguard data availability and integrity
- ✓ Protect against the loss of an entire datacenter or specific application



Backup and restore

- ✓ Replicate virtual machines and data to one or more regions using Azure Backup, and conduct self-service recoveries of Azure VMs or disks from a secondary region during an outage.



High availability

- ✓ Maintain acceptable continuous performance
- ✓ Easily tolerate temporary failure in services, hardware, or datacenters
- ✓ Distribute or load balance the periodic fluctuation in application load.



How can we facilitate you?

- Analyze your requirements and priorities
- Assess your migration readiness
- Define scope and security enhancement plan
- Recommend next steps



Microsoft Azure

Reliability with Microsoft Azure

Building reliable systems on Azure is a shared responsibility. Microsoft is responsible for the reliability of the cloud platform, including our global network and datacenters. Our customers and partners are responsible for the reliability of their cloud applications, using architectural best practices based on the requirements of each workload.

No matter what your service-level objectives are, Azure can help you achieve your organization's reliability goals. Design and operate mission-critical systems with confidence by taking advantage of built-in features for high availability, disaster recovery, and backup.

- High availability**
Maintain acceptable continuous performance despite temporary failure in services, hardware, or datacenters—no matter what fluctuation in load—using Azure Availability Zones and availability sets.
- Disaster recovery**
Protect against the loss of an entire region through asynchronous replication for backup of virtual machines and data using services like geo-redundant storage and Azure Site Recovery.
- Backup and restore**
Replicate virtual machines and data to one or more regions using Azure Backup, and conduct self-service recoveries of Azure VMs or disks from a secondary region during an outage.

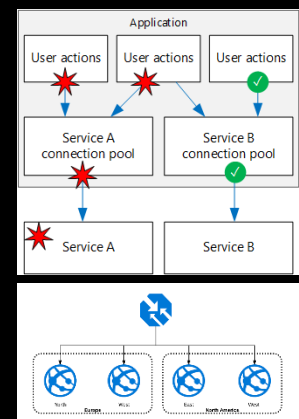
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Single VM	Local redundancies	Zonal redundancies	Regional redundancies
<p>Improve the availability of single-instance VMs by using permanently online disks to qualify for an availability SLA.</p> <p>99.9% SLA (3 9s) VM availability (monthly)</p> <p>Single VM with permanently online disks</p> <p>99.999999999% (11 9s) Storage durability (annually)</p> <p>Locally Redundant Storage (LRS)¹⁾</p>	<p>Protect against failures with redundancy within a single datacenter in the event of hardware malfunctions or software update cycles.</p> <p>99.99% SLA (3 1/2 9s) VM availability (monthly)</p> <p>Availability Set (2+ VMs)²⁾ within a datacenter</p> <p>Managed Disk in Availability Set</p> <p>99.999999999% (11 9s) Storage durability (annually)</p> <p>Locally Redundant Storage (LRS) with Azure Managed Disks³⁾</p>	<p>Protect against datacenter failures through redundancy within a single region in the event of power, cooling, or networking issues.</p> <p>99.99% SLA (4 9s) VM availability (monthly)</p> <p>Availability Zones (2+ VMs)⁴⁾ within a region</p> <p>99.999999999% (12 9s) Storage durability (annually)</p> <p>Zone-Redundant Storage (ZRS)</p>	<p>Protect against entire-region failures with redundancy beyond a single region in the event of a tornado, earthquake, or other large-scale disaster.</p> <p>Industry-Leading Azure Site Recovery RTO and RPO</p> <p>Primary region Secondary region</p> <p>99.999999999999% (16 9s) Storage durability (annually)</p> <p>Geo-Redundant Storage (GRS)⁵⁾</p>

Azure Well-Architected Framework

Build a resilient system in the cloud with apps architected for a healthy state—resulting in no significant downtime and rapid recovery from failures. Using the Azure Well-Architected Framework, you can design highly reliable and resilient application architectures with the help of industry-tested and proven guidance.

- Learn more about the Azure Well-Architected Framework.
- Assess your workloads through the lens of reliability with the Azure Well-Architected Review.
- Review the resilience checklist for reliability considerations related to individual Azure services.



Why LiveRoute?

LiveRoute is a Microsoft Gold Partner and one of the first 100% cloud-based companies in UAE and have been successfully serving our clients since 2008. LiveRoute provide end-to-end services across Microsoft Cloud and on-premises starting from new deployment, to 24/7 support and managed services. LiveRoute help customer reduce costs, increase efficiency, productivity and in effectively strengthening their workplace productivity.