



Business Assurance is your First Proof Point to Cloud-Enable Apps in Azure Stack

Before embarking on a new or unfamiliar journey, we prepare by deciding how, when, and where to start and what supplies we need to take. Some key questions for cloud-based migrations include:

- What is the deployment model?
- How long will deployment take?
- What are the hardware requirements?
- What service capabilities do I need?
- What workloads will I move and which will I leave behind?
- How can I ensure scalability and availability for workloads that are moving to the new platform?
- How will I maintain services and mitigate my risks when disruptions or outages happen?

On the customer’s cloud journey, the complexity of shifting operations to a new IT infrastructure often gets bogged down in inconclusive answers or protracted planning. But it doesn’t have to be that way. By describing the use case of a deployment to Microsoft Azure Stack (an on-premises hybrid cloud platform with self-service IaaS, PaaS, and Azure-based services), this paper shows that there is an easy way to pin up applications and deliver a safe and rapid pathway to cloud adoption. Under this model, ZeroDown Software’s solution can be used as a starting point to help anchor, simplify, and accelerate the shift to the new environment. The biggest advantage of this approach is that you do not need to plan for failure if, at the outset, you deploy an effective safety net for app migration. We sum it up with the following visual:

<p>Typical Solution (6 to 9 months delay)</p> <p>Obstacles to Cloud Adoption (Discover → Re-modernize → Cloud-Ready Ops)</p> <ul style="list-style-type: none"> • Organizational and IT disruption • Taking systems and customers offline • Loss of business continuity (no failback) 	<p>ZeroDown Solution (Start today)</p> <p>Bridge to Rapid Cloud Adoption (Pin up site → Migrate → Fail-safe Transactions)</p> <ul style="list-style-type: none"> • No transaction are lost • No cutover or synch up problems • Full business assurance with failback

What is Business Assurance and How Does it Work?

ZeroDown Software’s business assurance solution ensures application availability and data integrity no matter the target or source. The core function of ZeroDown’s Always Available™ multi-synchronization technology is to enable all transactions, data exchanges, and other network activities to occur equally and simultaneously in real time across multiple sites or locations. All servers are “hot” and all are “active.” There is no server hierarchy, and consequently no single point of failure. If one instance goes down, the others continue to function with no visible customer impacts. This makes migration to Azure Stack a far safer proposition because one or more Azure Stack Stamps can be rapidly brought online while legacy systems continue to process transactions as usual. Any site can act as ‘primary’ with automatic VM failover capabilities in case of node failure (and/or automatic fall back to the legacy environment) available throughout. Downtime risks due to systems failures or unplanned outages that would typically disrupt applications and lead to data loss are virtually eliminated.

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Side step Lift and Shift Shortcomings

When using a lift and shift approach to migrating workloads, the cloud journey starts with a replication of existing servers. The problem with this ‘kitchen sink’ approach is that it enforces decisions about what to deploy before you can truly assess the new environment. In a “pay for what you use” consumption model, this runs the risk of deploying equipment that you do not strictly need because of guesswork on how to achieve the desired level of performance and services. Yes, in theory you can go back and right size everything later but how easy, in practice, is that to schedule and do? Compounding inefficiencies, many are shoe-horning Disaster Recovery (block-copy-move re-branded as DRaaS) as a cloud migration service. This is, in effect a ‘lift without the shift’ entailing organizational and IT disruption, taking systems and customers offline, resulting in loss of business continuity (with no fallback to the legacy system).

By way of contrast, ZeroDown Software’s patented Multi-Synch technology adds business assurance to cloud migration, meaning you can start with a lightweight deployment to get up and running quickly. This can be accomplished without taking customers offline and with no disruption in business. Transactions, data exchanges, and network activities are all supported across multiple sites or Stamps, including both source and target environments. Zero downtime means that metrics such as RTO and RPO are no longer functional requirements for getting started in the cloud. Using this solution, you can pin up applications and watch how they perform even while you are doing discovery! To underline a key differentiator from a block-copy-move approach, we ask: why spend cycles on DR, a plan for failure, when you can implement an Always Available solution with built-in fallback and failover capabilities?

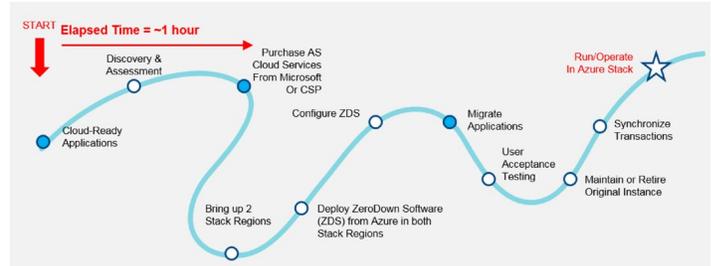
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The Cloud Journey Re-Imagined

Returning to the customers cloud journey, we can see how ZeroDown Software’s unique capabilities open up a safe and rapid pathway to Azure Stack adoption and consumption. For Systems Integrators (SIs) and Cloud Service Providers (Telcos/CSPs/MSPs), the ability to pin up applications quickly offers a fast route to market using a repeatable methodology that ensures their (and their customers’) success:

1. Implement a ZeroDown high availability (HA) PoC to establish customer confidence in the resiliency of their applications and data in less than an hour.
2. Use this solution as a starting point to offer customers true cloud-enabled capabilities for their workloads right out of the gate.

3. Run/operate and test customers’ apps in Azure Stack as a preliminary to discovery and assessment to determine the right size of VMs and calculate costs ahead of full deployment.
4. Rinse and repeat the PoC process for ongoing migration projects, enabling more and more customer workloads in the cloud.
5. Offer a complete set of Azure Stack Managed Services and Service Level Agreements (SLAs) tailored to your customers’ needs.



Start with a Proof of Concept

As a first decision point on the customer’s cloud journey, the PoC provides a powerful demonstration of the target platform’s resilience and builds client confidence for the long run. When a customer application is migrated to Azure Stack, ZeroDown® Software allows you to run and then synchronize both the source and target environments. The entire process is transparent to any online customers. This can be essential for end customers who are running mission-critical applications, or who may want to allay the risks of system/application patches and upgrade processes when running on the new platform. Other advantages of this deployment model are that it:

- Provides a strong demonstration of a two x Cloud Regions, implementation and offers a powerful alternative for addressing a customers’ initial backup and recovery concerns.
- Makes migration to Azure Stack a far safer proposition because one or more Stamps can be rapidly brought online while legacy systems continue to process transactions as usual.
- Virtually eliminates downtime risks due to systems failures, outdated system state snapshots, loss of in-flight transactions, human errors, inadequate planning, or other unplanned outages that might lead to data loss.
- Allows you to embrace and extend any DR/BC or backup requirements for governance and compliance purposes.
- Enables more resilient cross-cloud solutions that use CI/CD (continuous integration and delivery)

In summary, ZeroDown® Software’s solution provides value to customers by ensuring that high availability of data and applications will be an integral part of their cloud journey throughout.

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“We installed the ZeroDown software in three sites and it was very straightforward, the software worked as advertised.” Sherif Shehata, Director, Video Technology at Verizon

Compare ZeroDown® with other Disaster Recovery Services

The big difference between ZeroDown Software and other DR services and migration solutions is that ZeroDown supports active live-live transactions in multiple locations, eliminating the downtime risks associated with a typical move to the cloud. To help you compare, here are some of the leading migration solutions compared with ZeroDown.

Product Features Compare ZeroDown to the Competition	ZeroDown Software High-Availability for Web Apps/Services	Storage Based Migration AWS, Azure	Hypervisor Migration ASR, Cloud Endure, Racemi, VMware SRM
Eliminates downtime during migration	✓	X	X
App. based High Availability →99.999%	✓	X	X
Guaranteed rapid disaster recovery	Does Not Apply	X	X
Eliminates single points of failure	✓	X	X
Hardware agnostic	✓	?	✓
Protects transactions/data in flight	✓	?	?
Continuous truly synchronous replication	✓	X	?
Eliminates time-sensitive “snapshots”	✓	X	?
Scalability: Zones, Servers, VMs	✓	X	X
Active-Active at any distance	✓	X	X
Software-only solution	✓	X	✓
Transaction-level replication	✓	X	?
Prevents cascading failures	✓	?	?
Low, controlled costs	✓	?	?
Supports Open Source Community	✓	?	X
Agentless	✓	X	X
Supports Containers	✓	?	X
Mixed environment (Multi-Cloud)	✓	X	X

FOR MORE INFORMATION

Visit www.zerodownsoftware.com for a short tour and documents that describe how ZeroDown technology delivers cloud capabilities in a flash with zero disruption, no data loss, and full business assurance.

Ready to get started now? Please contact us directly at sales@zerodownsoftware.com to ask about our self-service Quick Start package with instructions on how to deploy, configure, and demo the HA for Azure Stack solution

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ZeroDown® Software provides businesses with continuous access to their company data via their Business Continuity as a Service™ solutions and Always Available™ architecture, protecting applications and transactions from network interruptions that would generally cripple the enterprise. For more information, please visit www.zerodownsoftware.com. 041518