EXTENDING HYBRID CLOUD CAPACITY

Microsoft Azure Stack provides the ability to power workloads from the data center or the cloud. Yet the consistency of the services delivered from the Azure Stack is only as good as the servers supporting the solution. HPE ProLiant for Microsoft Azure Stack can provide high capacity and full performance to optimize hybrid cloud investments. Read the White Paper to learn how migration to HPE ProLiant for Microsoft Azure Stack delivers operational and financial advantages.

How to Boost Infrastructure Performance with HPE ProLiant for Microsoft Azure Stack

THE STATE OF HYBRID CLOUD

Hybrid cloud is rising in adoption, and 85 percent of enterprise companies are now pursuing this multi-cloud approach to power workloads from more locations.[1] On average, companies run 1.8 public clouds and 2.3 private clouds as companies look to scale infrastructure without scaling costs.[1] Gartner estimates that adoption of public cloud will account for $300 billion in spending by 2021.[2] Key among the new cloud trends are multi-cloud use and the demand to move workloads, applications, and data across cloud providers.

The reason for cloud investments is clear: Data centers need to run both legacy and cloud-native apps to meet current and future demand. Azure Stack is a hybrid cloud solution that can be configured with a common set of skills and delivers portability of applications and workloads to simplify hybrid cloud deployment. It's estimated that migrating Windows Server virtual machines to Azure, for instance, can save up to 40 percent of the cost.[3]

CLOUD MIGRATION TRENDS
Management and security rise to the top of cloud concerns. Only 23 percent of companies trust the public cloud to keep data secure, and the lack of cybersecurity skills is causing some companies to slow their cloud adoption.[5]

• As many as 80 percent of companies will shift 10 percent of workloads in public cloud platforms[6]

• Cloud rates third among the list of IT initiatives, making it a priority for 28 percent of CIOs[6]

• More than 32 percent of CIOs are moving to cloud for resource scalability and time to market[6]

• More than 38 percent of CIOs are moving to cloud for cost savings[6]

• As many as 49 percent of companies are delaying cloud due to a cybersecurity skills gap[5]

Azure is disrupting the cloud marketplace. It's one of the fastest-growing cloud platforms, due in part to integration with Microsoft software, along with integrated software as a service (SaaS) and platform as a service (PaaS).[1] Azure currently holds 20 percent market share, up from 16 percent in previous years.[4] It's catching up to Amazon Web Services and leading Google, which comes in third with just 12 percent of the market.[4]

HYBRID CLOUD CHALLENGES
Hybrid cloud is a solution deployed to drive workloads with scale and efficiency, yet inconstancy between different cloud and on-premises environments creates complexity that puts workloads and investments at risk. Complexity increases the time and resources needed to manage and secure the cloud, and makes it harder for users to reap the rewards of a reliable, cloud-based environment.

• **Cloud access.** Different clouds require different access controls that are difficult for users to manage—and for IT to provision and secure.

• **Cloud security.** More clouds result in a larger surface area for attack. Security needs to be achieved across on-premises and cloud resources, with alerts to prevent breaches and downtime.

• **Cloud management.** Disparate management increases the manual time and cost associated with ongoing maintenance of multi-cloud deployments.

• **Cloud optimization.** Lack of comprehensive analytics across cloud and on-premises environments makes it difficult to identify or fix problems before they impact performance.

• **Cloud compliance.** Lack of IT staff cybersecurity skills puts hybrid clouds at risk if policies aren't enforced to ensure requirements for secure data handling and access are being met.

MAXIMIZING HYBRID CLOUD CONSISTENCY
Successful hybrid cloud deployments rely on the ability of clouds and on-premises technologies to work together consistently. Success also hinges on the ability to control how the data center connects to the public cloud. Azure is configured to deliver a consistent data platform regardless of where workloads are being deployed; the same tools and skills can be used throughout the hybrid environment.

How Azure Assures Consistency
1. **Common Identity:** Provides users a single sign-on for all their on-premises and cloud applications.

2. **Integrated Management and Security:** Delivers centralized visibility and control to monitor, manage, and secure hybrid cloud environments.

3. **Consistent Data Platform:** Supports data portability for seamless access to on-premises and cloud data services.

4. **Unified Development and DevOps:** Allows movement of resources between on-premises and cloud data centers within the same development environment.

HPE ProLiant for Microsoft Azure Stack lets companies develop applications and deploy them to either Azure public cloud or Azure Stack private cloud on premises with no application changes.

PURPOSE-BUILT HYBRID CLOUD APPROACHES

HPE ProLiant for Microsoft Azure Stack is an integrated system of software and validated hardware optimized for Azure hybrid clouds. Deploying HPE ProLiant for Microsoft Azure Stack in the data center provides a consistent approach for hybrid cloud configured to meet modern on-premises and cloud workloads. It's pre-tested and factory-integrated to optimize Azure hybrid cloud services in these important ways:

1. **Gen10 Security.** Hewlett Packard Enterprise offers unique security features through the Silicon Root of Trust that protect customers against cybercrime.

2. **Consumption-based pricing.** Cloud customers value the ability to pay for what they consume, instead of taking on the expense of a large capital investment. HPE offers GreenLake Flex Capacity, which allows a customer to pay for the Azure Stack infrastructure on a consumption-based model. If their usage goes down one month, their bill goes down.

3. **Optimal flexibility.** HPE offers significantly more configuration options to improve performance and reduce cost through greater efficiency.

According to an economic study by Forrester Research, Azure delivers a 466 percent ROI from:[7]

• Reduced administration time

• Shortened application development and testing time

• Reduced headcount needed to deploy and manage the solution

• Application-enabled organizational savings

• Faster time-to-market delivery

• Value-enabled applications

HPE PROLIANT FOR MICROSOFT AZURE STACK
At-a-Glance Use Cases

Problem	Scenario	Solution	Results
Modern Application Development	Migration of legacy applications to cloud-enabled platforms is complicated and time-consuming	Azure to develop apps on premises and migrate them to the public cloud without having to change a single line of code	Save an average of 25 hours per app in testing and development[7]
Performance	It takes too long to upload and analyze large data sets in a public cloud	Azure Stack to access and analyze large data sets in your own data center with virtually no latency	Speed and accelerate data insight
Edge & Disconnected Applications	Applications and edge (IoT) devices periodically go off-line	Azure Disconnect to deploy and use Azure Stack on premises without an Internet connection	Manage IoT connectivity and keep users productive in more places
Data Confidentiality	Regulated companies are bound by compliance that limits their cloud adoption	Azure to monitor and manage security policies across on-premises and cloud workloads to ensure compliance with security standards	Achieve regulatory or policy requirements for secure cloud use

CONCLUSION

While hybrid cloud is rising in adoption, the complexity of managing many different clouds with a configuration of on-premises and cloud-native workloads is a growing data center challenge. Failure to mitigate these challenges can result in higher hybrid cloud costs and lower value to the business. Solutions like HPE ProLiant for Microsoft Azure Stack are purpose-built to simplify hybrid cloud deployments, providing centralized management and control across hybrid configurations.

For those enterprise companies seeking to leverage Microsoft Azure for cloud deployment, HPE ProLiant for Microsoft Azure Stack can maximize their financial investment by helping to automate and simplify management of the solution—while deploying more workloads to satisfy business demand. From DevOps to everyday workloads, HPE ProLiant for Microsoft Azure Stack delivers speed, consistency, and security to the Azure hybrid cloud environment, safeguarding companies from the loss and liability associated with compliance failures, security breaches, and failed cloud implementations.

ABOUT CONTINENTAL RESOURCES

As a Hewlett Packard Enterprise Platinum Partner, ConRes is uniquely equipped to help enterprises roll out hybrid cloud solutions. We combine a well-established public cloud practice with technical resources for deploying solutions like HPE ProLiant for Microsoft Azure Stack. We leverage our vast amount of technical resources to help enterprise companies develop affordable, manageable on-premises data centers. With our customer demo lab, we can showcase HPE ProLiant for Microsoft Azure Stack—demonstrating how the solution provides common processes and a common user experience when deploying workloads in the public cloud or in an on-premises data center.

Contact ConRes cloud expert Dave Thomson at **(781) 533-0356** to learn more.

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