Hybrid Cloud Environments

THE CHALLENGE

Given today's myriad of public cloud and private cloud options, moving data and workloads to the cloud is a trend that shows no signs of slowing. According to Gartner and other sources, the move to the cloud is expected to speed up post-pandemic. For IT leaders, implementing hybrid cloud infrastructure for data platforms makes sense as they look for ways to drive down costs and remove the burden of owned hardware. But, shifting to a multi-cloud infrastructure – perhaps with a mix of on-premises systems – carries risks that can quickly erase any potential benefits.

As an IT leader, you need to ensure that you have the resources and tools in place to keep quality of service high as you strive to reduce costs and mitigate risks like data breaches and non-compliance. Constant attention must be paid to administration of the databases, the hypervisors and virtualization, etc., but also to the communication and processes that hybrid IT requires. No matter how you and your team have structured hybrid ops for your organization, a diverse set of skills across IT is a must. Challenges that can put your hybrid IT strategy at risk include:

- **Unfamiliarity with new database platforms.** This is bound to happen as new types of databases find their way into the organization for analytics or for particular applications.
- **Inexperience in performance monitoring and diagnostics.** Database professionals may not know the finer points of issue identification and performance tuning on new database platforms.
- **Lack of knowledge or awareness of workload optimization and cloud cost modeling.** While there may be an understanding of the mechanics of cloud migration, there may still be a lack of clarity as to how to accurately estimate cloud costs based on workload compute and storage requirements.
- **Inability to confidently advocate migration to cloud.** IT staff may not yet have the confidence that comes with experience for activities that include: selecting workloads and virtual machines to move; evaluating cloud offerings; analyzing cost savings; and establishing processes for maintaining high service levels.

In the past, lines of accountability for particular areas of the infrastructure were clear – network, databases, applications. Now, with a hybrid infrastructure those lines are blurred. It takes extra processes and communication to gain complete visibility into the controllable aspects of service delivery.

HOW THIS AFFECTS YOU

These challenges can affect an IT leader's ability to successfully implement a hybrid IT strategy in the following ways:

Your IT operations teams still spend more time on administration than innovation. Without optimal skillsets for a hybrid environment, people could be spinning their wheels on day-to-day system or database administration and routine maintenance.

You don't have a complete understanding of your workload resource needs. Cloud offerings come with fixed costs for different levels of compute and storage configurations. Your IT team must be able to model and benchmark the organization's cloud resource consumption or you risk potentially large upcharges for your infrastructure – especially if you move workloads among multiple cloud providers.

Application outages or data loss cause financial and reputational damage. Whether they are making a purchase or interacting another way, your customers expect a level of service that is consistently outstanding. If it isn't, you risk losing customers and revenue. When an application or website outage occurs, two things must take place to preserve the viability of a hybrid cloud infrastructure strategy:

- You must be able to diagnose the root cause of the problem quickly
- The problem must be rectified quickly and permanently

Diminish Risks to your Hybrid Cloud Strategy with Foglight® by Quest®

A BETTER WAY

A critical goal for a hybrid cloud strategy should be to decrease surprises and problems, thereby reducing operational costs. By catching problems with infrastructure and databases early, and fixing issues once they are discovered, you can proactively address infrastructure components that will ultimately require less attention and troubleshooting. Lower cost and higher levels of service are outcomes any IT leader would welcome.

Foglight® by Quest® is the broadest and deepest monitoring and optimization solution for the hybrid enterprise. With Foglight, you can reduce the complexity of your environment and unlock staff time to fully embrace digital transformation. You can reclaim underused resources – saving cloud costs and maximizing the performance of existing systems. You can forecast future costs more accurately. Further, you can predict future bottlenecks and outages before they happen and proactively effect maximum system uptime and availability.

WHAT YOU CAN DO WITH QUEST

Foglight stands alone in the market in the **breadth** of its reach and **depth** of its data collection for problem-solving.

In an ideal setting, organizations undertaking a hybrid cloud migration project would have tools in place to measure and model both the cost and performance of workloads in a broad array of on-premises and cloud infrastructures. This benchmarking and testing helps determine resource allocations and cloud services levels prior to migration so there are no surprises along the way.

Foglight performance monitoring and deep diagnostic capabilities across your servers, virtual machines, containers and cloud offerings enhance the value of the solution. Multiple operations teams, including database, virtualization/infrastructure, DevOps and hybrid ops will find compelling value in the Foglight solution as they solve issues in their own areas and collaborate with other teams.

Foglight provides the critical help that IT teams need to overcome the dual challenges of diverse technical infrastructures and limited expertise in multiple database and virtualization platforms.

Foglight diminishes hybrid risk

Foglight addresses the risks associated with hybrid cloud by providing:

- **Proactive database workload optimization.** Foglight components work together to provide deep views into the database workloads and resource usage that might be straining virtual machines, hypervisors and containers. This way they can be fixed before they affect performance.
- **Remediation of virtualization inefficiencies.** Foglight provides remediation recommendations and automated remediation actions so that resource wastage can be eliminated prior to a cloud migration.
- **Cloud cost modeling.** Before moving workloads to the cloud, determine costs proactively based on compute and storage requirements. Then you can make informed decisions about migrating the workload to a suitable target configuration.
- **A single monitoring and diagnostics platform.** Foglight gives users a broad and in-depth view into infrastructure and database performance issues and resource consumption. This enables users to detect performance deviations from established baselines, examine workload details, manage alarm notifications to effectively eliminate “noise” to focus on true problems, and solve problems quickly.

Quest
4 Polaris Way, Aliso Viejo, CA 92656 | www.quest.com
If you are located outside North America, you can find local office information on our Web site.

SolutionBrief-DiminishHybridRisk-US-LP-62800