WHAT TO KNOW BEFORE MOVING TO THE CLOUD

Make the Most Out of Cloud Migrations: Considerations for Before & After the Big Move

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INTELLIGENCE

MAKE THE MOST OF YOUR MOVE TO THE CLOUD

If you're on your way to the cloud, you're not alone. Most estimates expect 85% of organizations to have at least some of their data in the cloud by 2025.

It's not longer a question of "should I move to the cloud?" Now, what matters is understanding **how to gain the most value** out of cloud migration.

In the pages ahead, we'll explore how to prepare for migration to gain value, how to adjust data reporting in the cloud to maintain good value, and how to keep cloud capacities at a size that maximizes value.

SETTING THE STAGE FOR SUCCESS

Adopting any new technology for your infrastructure requires a solid strategy, and cloud migration is no exception to that rule. While there can be many benefits to cloud migration, it can also be expensive - especially if you don't plan and predict the costs beforehand.

Not every application is right for the cloud. As organizations realize the benefits of cloud computing, many are rushing to migrate every application or workload to the cloud. In the process, they risk making a mistake that could cost them.

When evaluating whether a particular application or workload is suitable for a cloud, two of the biggest factors to consider are performance and cost. If your organization is planning a cloud migration, maximize your chances of success by following these keys to data management prep for cloud migration.

What to Think About

BEFORE MIGRATING

OPTIMIZE PERFORMANCE

As more applications migrate to the cloud, effective performance management is a top concern. Reliability is key for businesses, and slower-than-expected operations for a business can quickly lead to angry employees and customers. Plus, poor cloud application performance can lead to reduced productivity and lost opportunities.

Poor cloud application performance can have a variety of causes, including:

- **Network latency** – latency affects everyone, from the enterprise to the end-user.
- **Poor database performance** – most cloud-based database performance issues come from a poorly designed database rather than a slow one.
- **Poorly designed application** – if an application wasn't purpose-built for a cloud-computing platform, it is likely the application will not perform up to expectations.

In order to see the best performance, it's essential for IT leaders to identify the best applications for cloud migration.

Most enterprises will find that lightly used and straight-forward workloads are ideal for cloud migration. For example, an archive or backup is often a good choice to move to the cloud. However, if you do a lot of restores, then that workload may not be a good fit for cloud migration.

Ultimately, IT leaders need to think about the applications and the cloud resource within which they're running and find the right balance to ensure the best performance.

CONTROL COSTS

The cloud has a reputation for offering outstanding performance at a low cost, but that isn't always the case. It all depends on the applications being stored in the cloud and how they are used.

In fact, surprises over cloud computing costs and a struggle to accurately budget for usage are a huge factor for many businesses. Cloud storage pricing is rarely all-inclusive and is based on several components, including:

- data storage,
- network storage,
- operations usage,
- retrieval,
- early deletion fees.

Additionally, cloud costs for both data storage and storage activity will vary depending on the storage tier.

> *If you pick the wrong workload, or match it with the wrong tier, your cloud costs could be higher than you anticipate.*

Many companies find themselves wasting money on cloud storage because they either have too many idle resources or they are racking up extra charges. Look at your data activity type and usage and identify which workloads will work best in the cloud. Then, match the workload to the cloud tier.

Even slight changes in your cloud usage can quickly add up. Companies don't want to be surprised when the bill arrives, so it's essential to find the right balance, matching workload with storage solutions.

REPORTING LOOKS DIFFERENT IN THE CLOUD

How Cloud Impacts

STORAGE REPORTING

On-premises and public cloud storage are radically different from each other, especially when it comes to storage reporting and monitoring. For storage and infrastructure professionals, there are trade-offs to both. Each presents different capabilities and configurations, with different reporting emphases.

On the other hand, mixing storage environments can provide the best of both worlds. But it can also come with the unintended complexities of managing these two contrasting infrastructure models, such as relying on multiple tools to access reporting – hampering visibility and leaving you vulnerable to costly mistakes.

There are significant observability differences between public cloud and on-premises storage models. What are these differences, and how do they impact data collection and monitoring?

WHERE WE'RE COMING FROM: ON-PREM REPORTING

An on-premises (on-prem) storage environment provides your organization with total control but also total responsibility. Enterprises that choose to deploy on-prem storage are wholly responsible for procuring, configuring, and maintaining server hardware. For that reason, IT leaders at these organizations are primarily interested in reporting that highlights *performance* or *utilization* challenges.

Additionally, *forecasting* becomes substantially more important in order to negotiate new storage purchases while avoiding any unnecessary, reactive purchases. Once the storage is purchased, there aren't additional usage costs.

However, the high cost of purchasing hardware means that IT leaders need to pay particular attention to both capacity planning and performance within on-prem storage environments.

Unlike in the public cloud, *over-provisioning* is common in on-prem environments. This is because it is expensive to suddenly run short of resources and need new storage hardware without warning. Over-provisioning provides an insurance policy of sorts without incurring new costs. As a result, it is not always a priority for monitoring in on-prem environments.

Visual Storage Intelligence excels in these focus areas, making sure that on-premises storage environments are configured properly. By bringing enterprise and array-level performance and utilization data onto a single pane of glass, we simplify on-prem storage reporting no matter how many vendors your environment is comprised of.

WHERE WE'RE GOING TO: CLOUD REPORTING

One of the biggest advantages of the flexible nature of cloud technology is that companies only pay for what they use. To maximize this advantage, cloud users will want to avoid overprovisioning - a different emphasis from on-prem.

While overprovisioning has no extra costs associated with it when done on-prem, it can become very expensive when it happens in the cloud. Companies are responsible for paying for all the data allocated to them, and that puts a higher emphasis on finding unused or underused resources.

No one wants to waste storage they pay for.

On the other hand, some of the data that is important in on-prem environments is less important in the cloud. Public cloud providers such as Azure and AWS guarantee storage performance.

Instead of focusing on performance, IT leaders with data in the cloud should look for reporting and analysis that will help with right-sizing, capacity planning, and proactive decision-making.

Visual Storage Intelligence helps IT leaders simplify cloud [capacity monitoring.](#) In just three clicks or less, Visual Storage Intelligence displays storage allocations, available usable storage, and fragmented / hidden storage.

CONSOLIDATED REPORTING ACROSS STORAGE ENVIRONMENTS

Although there are many differences between on-premises and cloud storage environments, one constant will always be a need for consistent reporting and data-driven insights to uncover opportunities for operational efficiencies, cost savings, and infrastructure planning.

Doing that, however, often requires separate storage resource management tools to handle different monitoring needs.

Visual Storage Intelligence is different. With quick and easy reporting that addresses both on-prem priorities (like performance and utilization) and cloud priorities (like storage allocations), we offer IT leaders complete visibility into what's going on across hybrid storage environments.

Best of all, this is done without the need for multiple tools or burdening teams with learning new systems or protocols! Everything is immediately available on a 24/7 client dashboard and delivered once weekly in a personalized email.

SCHEDULE A DEMO

Right-Size Your

CLOUD
CAPACITY

ARE YOU SEEING THE RESULTS YOU EXPECTED?

Improperly sized cloud storage, such as over-provisioning, can decrease performance and devastate your budget. Don't let poorly-sized storage negatively impact user experience.

Organizations often make it a top goal to optimize their cloud environments for cost and performance. But without the right monitoring and analysis, they may not get the results they expect.

Right-sizing is a key for optimizing cloud infrastructure, performance, and cost-efficiency, but also one that involves continually analyzing storage performance and usage needs and patterns. You can simplify cloud capacity monitoring and analysis, making sure IT leaders can quickly and easily get to the data that they need.

And you can do it in three clicks or less.

RIGHT-SIZING YOUR CLOUD CAPACITY REQUIRES A NEW WAY OF THINKING

Imagine your storage as a restaurant with 100 seats available, and you've divided those seats into 10 tables. Now, if your storage is on-premise, you tell each table head that they can invite 15 people to their table. That's 150 seats - more than you have - but you do this because you know they won't fill that many seats.

This kind of overprovisioning takes place in data centers around the world, and IT leaders who are used to working on-premise are accustomed to overprovisioning their storage for the simple fact that it can be expensive to suddenly run short of resources and have to quickly buy and deploy more.

However, this same kind of overprovisioning doesn't work in the cloud environment. Cloud storage dynamically expands to meet needs, which means that IT leaders have to realize that the old way of monitoring storage performance won't work.

In order to make cloud storage work for your organization economically, Visual Storage Intelligence helps IT leaders [monitor their storage environment](#) more accurately, giving IT teams [advanced warning](#) of any problems through consistent reporting - including alerts about potential overprovisioning problems in hybrid and cloud environments.

THE DATA YOU NEED IS ONLY THREE CLICKS AWAY

Wrongly-sized storage environments are a major contributor to wasted spending, so why is right-sizing frequently ignored?

Primarily for the fact that right-sizing is often a more complex operation than it initially assumed. For example, VMWare offers vRealize Operations (vROps), an application that monitors cloud environments and incorporates predictive analytics. However, using this product, it might take 10 to 15 clicks just to get to the data that you need.

With Visual Storage Intelligence, the data you need is just three clicks away. This new functionality can also help IT leaders to right-size their VMWare by taking into account compute and memory utilization. By tracking trends over time and comparing cloud versus on-premise versus multiple clouds, our analytic tools will help you think of cloud storage in a new way.

Right-sizing is an ongoing effort, one that requires you to consistently keep track of your storage environment to ensure that resources are utilized efficiently. We help you monitor your storage environment and measure cloud storage metrics, allowing you to effectively right-size your cloud infrastructure.

"I have found Visual Storage Intelligence to be adaptable to most every environment and customizable for the information gathered. It's nice to not have to buy an additional licensed module in order to generate a critical one-off report."

- Verified Gartner Peer Review
Infrastructure & Operations Senior Team Leader

We're Here to Help

Lets make migrations easier.

Are you one of the 85% of organizations expected to be cloud-first by 2025? Whether you're already there or planning to move soon, cloud migration can prove costly if it's not done strategically.

We provide organizations the data and monitoring they need to plan successful cloud migrations and make the most of their hybrid or cloud infrastructures.

Start a Conversation
Let's talk enterprise storage management.

Watch a Live Demo
No awkward sales pitch...just you and recorded demonstration.

Schedule a Free Trial
Just one month has saved some clients over $1M.