



Cloud Migration Assessment Guide



In order to make decisions effectively, enterprises need to conduct assessments of their assets, budgets and individual needs when considering cloud migration.

What is Cloud Migration Assessment?

Migrating applications and data services to the cloud leaves room for many potential risks when not performed effectively. Cloud migration provides businesses with great options for control, flexibility and lowered costs. However, unless all risks are addressed, businesses can encounter application performance issues. These challenges often arise due to infrastructure changes.

Cloud migration assessment enables those responsible for the business's migration to make informed decisions. A proper assessment helps to minimize risk while guaranteeing that service agreements are sustained after cloud migration. Cloud migration assessment is often based on application discovery, dependency mapping, and risk assessments drawn from current cloud usage. It can also involve predicting analytics and assumed costs pre-migration.

This guide will provide you with helpful tips to ensure you are taking a thorough approach in your cloud migration assessment.

Why is Cloud Migration Assessment important?

It's important to understand why an enterprise should take cloud migration assessment seriously, as well as look to engage a trusted partner in doing so.

These reasons include the abilities to:

- Help migration planners to make decisions based on facts, rather than mere assumptions, in order to minimize business disruption
- Mitigate risk by providing critical information for planning and immediate next steps
- Identify application dependencies based on live traffic data
- Receive a baseline for pre vs. post migration performance in order to offer timely identification and solutions for deficiencies
- Pinpoint the risk of migrating applications
- Receive migration recommendations from research and/or working with a trusted partner
- Maintain SLAs by conducting predictive analysis of post-migration performance

What are the general steps to run Cloud Migration Assessment on your own?

There's no one-fits-all cloud solution that is beneficial for all enterprises. In order to help business leaders conduct a successful cloud migration assessment, we have created a quick checklist for you and your organization to follow:

1. First identify how migrating core data systems to the cloud will impact the company's security and compliance requirements
2. Review GDPR and other local data privacy regulations and ensure that your migration goals conform
3. Assess your on-premises by considering your on-premises data and applications and ranking them in terms of how critical they are to your business
4. Analyze them further to decide the order to migrate your applications, as well as if each application really needs to be moved to the cloud
5. Understand the type of tech support needed, including whether you have an expert on staff to assist or may need constant support around the clock
6. Aim to create synergies with the cloud by considering your on-premises environment and whether you need tools and templates designed for transitioning and building out new cloud systems
7. Validate that all of the operating systems used in your VMs are supported by the cloud
8. Consider whether physical workloads need to be moved to the cloud, and what can be made virtual via software options
9. Assess your approach and dataset when transferring information to the cloud, and if for example seeding is needed to import this data
10. Test your bandwidth ahead of time to ensure it works well enough to accommodate needs such as live streaming without delays
11. Take into consideration the support you'll require post-migration in your purchasing decisions, such as managing everything post-migration to guarantee security, lowered costs and adequate performance
12. When selecting a cloud service provider, dig deep to understand how much support they'll provide and in tandem gain an understanding of your internal team's bandwidth and expertise in managing and handling migration projects

13. Validate your financial model. Migrating from a private to a public cloud usually requires a switch from a CAPEX to an OPEX model

14. Consider hidden cloud costs like network traffic and storage cost. Two of the most common mistakes are not taking into consideration cloud cross-region network traffic and not removing unused volumes

How can you utilize Hystax for these needs?

Hystax Acura can fully support enterprises with these assessments. Below we have laid out the simple process for utilizing Hystax Acura's unique offerings and capabilities:

- Users install Acura on a target site and deploy replication agents on the source site
- Agents then check the source machines and if all is fine and the machines can be replicated, they will appear in Acura for customers to then manage their replication
- Customers should list all the operating systems on the source site and find matching operating systems on a target site
- Customers should validate that all of these systems are supported by a target cloud
- The same process should then be conducted with network resources

- Customers can utilize Hystax Acura to replicate to the target site and run test migration, as well as failover to complete the assessment
- If the outcomes result in all positives, the workloads can be migrated and protected
- If there are any negatives, these negatives need to be fixed first and then re-assessed before migrating

Hystax OptScale as an MLOps and FinOps open source solution, recognized by Forrester as a leading cloud cost management solution. It provides the following **key capabilities**:

- ▶ ML metrics and full transparency across ML/AI teams
- ▶ Performance optimization by integrating with ML/AI models by highlighting bottlenecks and providing clear performance and cost recommendations
- ▶ ML/AI task profiling
- ▶ Cloud cost optimization with dozens of scenarios like rightsizing, Reserved/Spot instances, Saving Plans, etc.
- ▶ MLFlow compatible, Spark integration

Now that there are options, there is no need for businesses to spend unnecessarily on running onsite data centers. It will also provide peace of mind to your company's leadership when these tasks are fully handled by an expert.

Selecting your cloud partner

Finalizing how to allocate workloads to the cloud is complex. Uncovering how to effectively reap the benefits that an OpEx solution presents can be trickier at first. It's important to select a partner such as Hystax with significant experience in helping companies make the transition. It's also critical for companies to ensure they're not sacrificing financial control or accountability by passing responsibilities on to an inexperienced partner.

Hystax works hand-in-hand with companies to identify their unique needs and budget constraints to keep cloud budgets transparent and under control. Customers benefit from budget breakdown and transparency across all business units, users, projects and cloud services. Hard and soft limits are set so that no money sneaks past uncontrolled.

Such experts are trained with the knowledge and insights to focus solely on this task, rather than have to manage additional areas of the business.

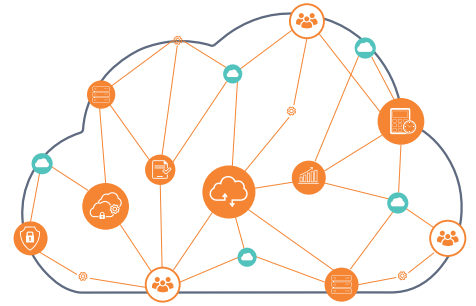
It's also important to select a provider with key integrations with platforms you're already using or leaning on cloud solutions which can be fully trusted, such as Microsoft Azure, for security.

Hystax OptScale offers integrations with Azure, as well as the cloud-based offerings of Microsoft, VMware, Oracle, IBM and many more.

Additionally, OptScale provides business continuity with fully-automated disaster recovery (DR), including best-in-class RPO/RTO values, storage-agnostic snapshots, orchestration functionality and continuous data protection. These include automatically generated DR plans based on redundancy and options to restore all changes from the DR site back to production workloads within mere minutes.

Hystax OptScale is also built with seamless hybrid cloud migration in mind. From the execution of various migration scenarios to flexible migration plans and test migrations, our team of experts can help your enterprise make the switch as smoothly as possible.

About Hystax



Hystax, the leading MLOps and FinOps solution provider, develops its flagship product, OptScale, which allows running ML/AI or any type of workload with optimal performance and infrastructure cost by profiling ML jobs, running automated experiments, and analyzing cloud usage. Access to the OptScale open source solution is granted to users by the Apache 2.0 license. This enables Hystax to deliver the OptScale platform to a wider range of ML & Data engineers, cloud capacity managers, and FinOps enthusiasts.

The mission of Hystax is to help businesses optimize the performance and cost of ML model training jobs and increase the number of experiments an ML engineer can run.

The solutions of Hystax are currently the choice for such iconic brands as PwC, Ives Rocher, Nokia, DHL, and Airbus for its FinOps/MLOps adoption, offering them a platform that offers countless optimization recommendations and complete cloud cost visibility/control over Kubernetes, AWS, Microsoft Azure, Google Cloud Platform and Alibaba Cloud costs. The company was founded in 2016 and has customers in 48 countries.

Moreover, Hystax offers live cloud migration, cross-cloud disaster recovery, and cloud backup from an any-to-any cloud platform.

Our customers include:



For additional information, you can consult [Hystax Resources](#) here, or reach out to us directly at support@hystax.com. We're happy to guide you when conducting your cloud migration assessments.

Contact us for more information at info@hystax.com

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