



# Hybrid Cloud Architecture: How to Streamline Hybrid Cloud Migration

## ABSTRACT

Cloud computing is a widespread phenomenon that promises economic advantages, speed, agility, flexibility, scalability and innovation. By 2018, IT organizations in 60% of Global 1000 companies will integrate and customize two or more cloud services for internal and external users. The solution adopted by many companies is a hybrid cloud model. Despite the many advantages provided by the cloud computing technology, the rate of adoption among companies is slow. The main reason for this is the fact that moving server workloads running on-premise into and between clouds is not easy unless of course you're using the right solution. This white paper examines the hybrid cloud environment and identifies solutions that make migrating into and between cloud environments an automated process.

## INTRODUCTION

According to a Nucleus Research report, cloud applications deliver 2.1 times more return on investment on average over on-premise applications. Unlike small companies that typically have a smaller set of physical infrastructure assets, large enterprises are burdened with a large pool hardware and software infrastructure assets that digest enormous portions of a capex budget. The solution adopted by many large enterprises and even SMBs is to deploy a hybrid cloud model, which allows them to use some assets of their infrastructure in parallel with public or private cloud services. Not only does this reduce the amount of dollars spent on IT, it shifts large portions to a more desirable and business efficient opex budget. Many organizations consider a hybrid

cloud solution, which allows strategic access to both the private and public cloud resource pools. Hybrid solutions are often declared to be “the best of both worlds.” Moving server workloads between a public and private cloud seems to be difficult but some cloud technology providers work to simplify the migration to hybrid cloud computing.

To gain access to applications that drive ROI and maximum flexibility, companies have to move to cloud environments. The migration of resources to a hybrid cloud can increase the complexity of configuration and management while introducing a whole new set of security issues during the migration process from on-premise to cloud.

## WHAT IS THE HYBRID CLOUD COMPUTING ENVIRONMENT

A hybrid cloud is a combination of public and private cloud environments. In the case of private clouds, they can exist on-premise or offsite in a datacenter. Most existing examples of hybrid cloud computing involve integrating an application in the public cloud with an application running in the private cloud. The hybrid cloud environment allows companies to push some of their non-critical server workloads to the public cloud while also using private clouds for their mission-critical needs.

A hybrid cloud allows a company to:

- Use the assets of their infrastructure in which they invested considerable amounts of money in parallel with public cloud services;
- Benefit from the scalability and cost-effectiveness of the public cloud environment without exposing mission-critical applications and data to third-party vulnerabilities.

According to the definition from the National Institute of Standards and Technology (NIST), “a hybrid cloud is a combination of public and private clouds bound together by either standardized or proprietary technology that enables data and application portability.” The hybrid cloud environment offers the cost and scale benefits of public clouds while also offering the security and control of the private environment.

## MIGRATING TO HYBRID CLOUDS

In 2012, an IDC worldwide survey reported that more than 40% of enterprises were adopting hybrid cloud platforms. Many of the companies surveyed pointed to the need for a reliable external service provider to help them navigate the complexities involved in moving to the cloud. In 2017, [IDC's CloudView Survey](#) finds that 79.7% of large organizations (with 1,000 or more employees) report that they already have a hybrid cloud strategy in place. 51.4% report using both public cloud and private cloud infrastructure, and an additional 29.2% expect to do so in the next year.

The study conducted by IDC, “Adoption of Cloud: Private Cloud is Current Flavor but Hybrid Cloud is Fast Becoming a Reality,” surveyed senior IT decision-makers from



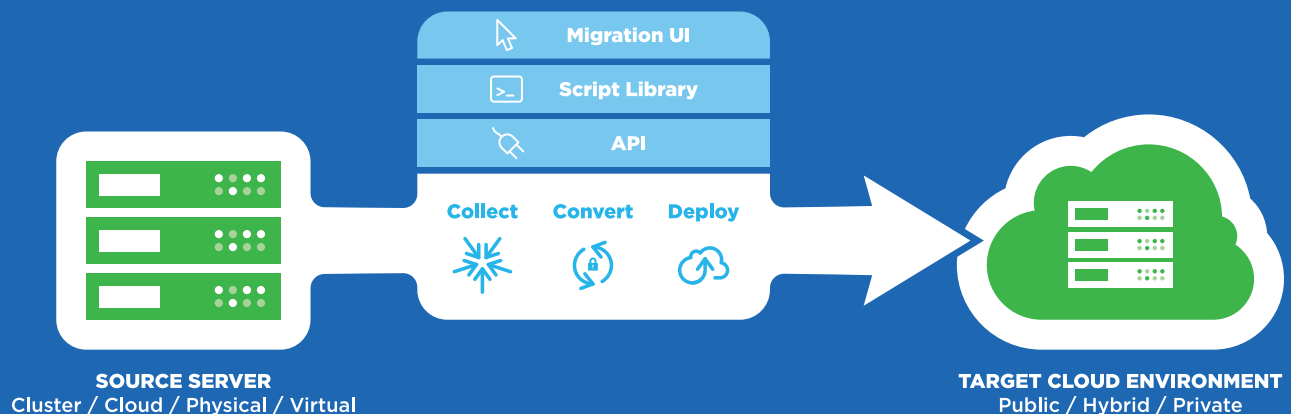
326 large companies across the United States, United Kingdom, France, and Germany. According to the survey:

- Productivity gains and cost savings are the top-ranking reasons for companies to adopt cloud.
- The cloud ecosystem is becoming more complex because of a mix of public, private, and on-premises IT.
- Monitoring these complex environments and managing them holistically have become significant challenges for them.
- 56% of respondents are engaging or considering engaging an external service provider to help them with their cloud strategy, adoption roadmap, and implementation.

Vendors are constantly trying to improve the ways IT managers can effectively migrate and manage these mixed environments. As more servers start moving over to the cloud, enterprises and IT decision-makers need easier ways to migrate them.

## REDUCING THE COMPLEXITY OF HYBRID CLOUD MIGRATION

Moving an application or a server between different clouds may be complex and time-consuming without the right solution. C-MaaS solutions (Cloud-Migration-as-a-Service) help companies migrate servers workloads into and between dissimilar cloud environments e.g. AWS to VMware vCloud. A solution like RiverMeadow's cloud migration SaaS easily migrates physical, virtual and cloud-based server workloads into-and-between these differing cloud environments, as-is.



## CONCLUSION

For many enterprises hybrid can be the best cloud option. Many business leaders have already adopted hybrid clouds as a way to optimize the most beneficial parts of both solutions in a way that will prove positive for their companies. A hybrid cloud works by linking both public and private clouds that remain uniquely separate yet bound to each other. A hybrid cloud often contains varied parts of internal and external management to meet the desires of decision makers.

Enterprises and SMBs that implement a hybrid cloud model stand to realize the incredible benefits of scalability and cost efficiency that cloud computing offers without exposing critical applications and data to security risks. RiverMeadow's Cloud Migration SaaS is a perfect example of an all-in-one cloud migration platform that simplifies and automates the migration of server workloads into and between clouds.

## ABOUT RIVER MEADOW

RiverMeadow Software Inc. develops industry-leading SaaS that automates the migration of physical, virtual and cloud based servers (live and as-is) into and between public, private and hybrid clouds. Our RiverMeadow cloud migration SaaS is a rapid cloud migration solution developed specifically for Carrier and Service Provider Cloud IaaS platforms. Without having to install agents or quiesce servers, the RiverMeadow SaaS dramatically reduces the cost and complexity of cloud migration, enabling Carriers and Service Providers to quickly, easily and cost-efficiently deliver the benefits of cloud elasticity to enterprise and SMB customers.

If you have any questions regarding your potential use of this solution, contact:

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