

TOP 10 FREQUENTLY ASKED QUESTIONS ABOUT SETTING A CLOUD STRATEGY



1) What are the benefits of a hybrid cloud strategy?

A hybrid cloud strategy provides all the control and visibility benefits of an on-premises private cloud with the flexibility and scalability benefits of a public cloud, while enabling all the agility and efficiency you expect from cloud infrastructures.

Hybrid clouds:

- Simplify application deployment through self-service portals.
- Provide greater agility to innovate faster, deliver new revenue-generating opportunities and improve workflow processes.
- Reduce capital expenses for on-premises infrastructure while also providing a pay-as-you-go/grow option for scaling or deploying workloads on the public cloud.

2) Can't I just place all my workloads on a public cloud?

Private clouds give you greater visibility and control of your applications and infrastructure. As a result, many businesses use their private clouds for business-driving applications that provide competitive advantage or access to sensitive data residing in their on-premises data center. Often these businesses use public cloud for business support applications like email, CRM, web servers, etc., or to provide additional scalability for applications during demand spikes.

A hybrid cloud strategy enables you to optimally place applications on the infrastructure that they are best suited.

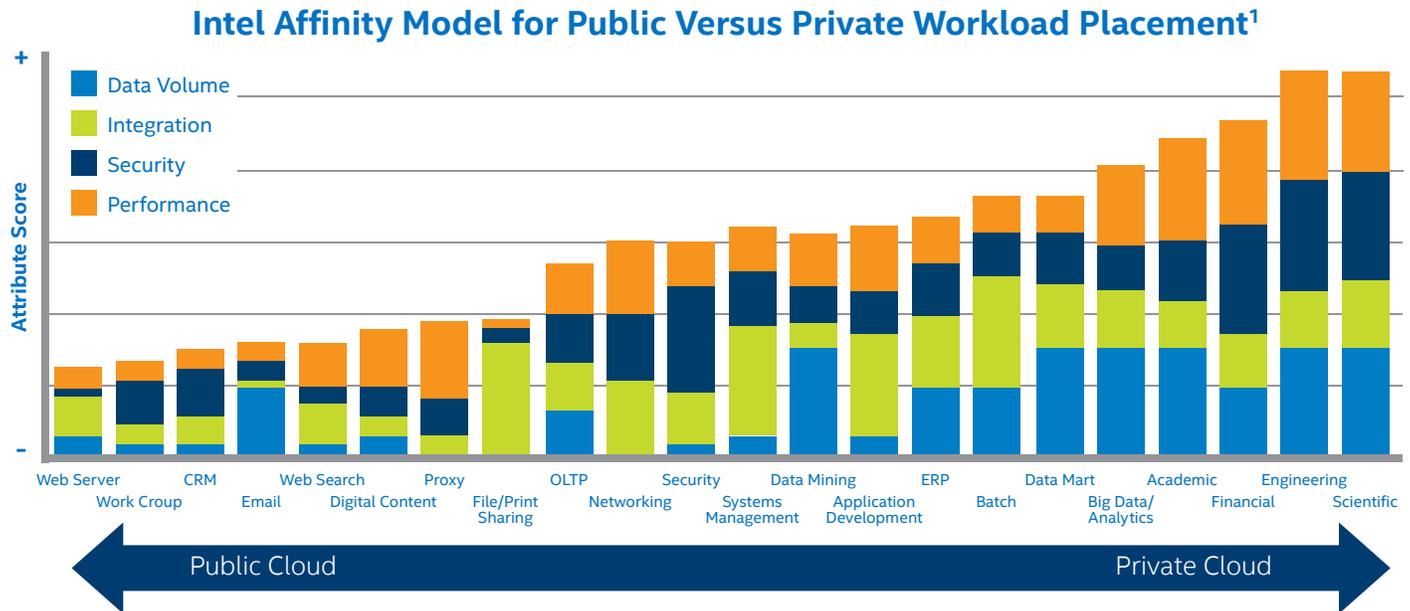
3) Which cloud should I use for which workloads and data?

A proven best practice to determine which cloud is best—public, private, or hybrid—to assess workloads based on some key defining characteristics. The graphic below can help:



The Intel Affinity Model is another way to consider optimal application placement. The chart below lists common applications along the x-axis and applies an Attribute Score based on the typical data volume, integration, security, and performance requirements for each application. The Attribute Score is used to place each application on a continuum to determine whether it tends to favor a public cloud deployment or private cloud deployment.

Many applications, including those in the middle of the continuum, are good candidates for a hybrid strategy where applications may be initially deployed on your private cloud but burst to the public cloud when demand rises.



4) What's my path to the hybrid cloud?

Here are key steps you should take when moving to a hybrid cloud:

1. Assess the business objectives you want to achieve (e.g., agility, data center efficiency, etc.).
2. Assess whether your current on-premises infrastructure is cloud ready.
3. Determine what cost reductions you want to prioritize.
4. Determine new, cloud services-based business opportunities you want to pursue.
5. Identify the on-premises infrastructure you need based on the expertise and effort required of your IT department (e.g., build your own, hyperconverged infrastructure, etc.).
6. Determine how you plan to use the public cloud based on your application placement strategy.
7. Deploy a hybrid cloud solution from a trusted vendor that helps you achieve your objectives above.
8. Start by migrating proof-of-concept applications to your hybrid cloud to optimize the deployment and ongoing operational process.

5) What are the cost parameters for migrating to a hybrid cloud?

As with many IT decisions, your requirements and choices can result in greatly varying costs.

One driving factor is scale. How will you use the public cloud? How much on-premises, private cloud infrastructures do you need? Many vendors and manufacturers provide tools and methods to help you "size" your resource needs. We can help with that effort.

Another factor is the path you take to build out the private cloud portion of your hybrid cloud strategy. This will impact the effort required (or not required) of your IT staff. While many large companies choose to custom engineer their cloud infrastructure, medium and smaller businesses often choose assemble-to-order options, or converged and hyperconverged infrastructure solutions to reduce IT effort and costs.

One way to control costs is to start small with a single application or proof-of-concept pilot. Purchase just enough infrastructure to meet that need and to get IT more comfortable with cloud migration. Then you can add more workloads and infrastructure at your own pace.

6) What is a Software-Defined Infrastructure (SDI) and how is it relevant to hybrid clouds?

A Software-Defined Infrastructure (SDI) automates the ability to deploy new applications and infrastructure resources while also orchestrating those resources to dynamically adapt to ever-changing conditions based on policies you set.

This enables self-service, policy-based application deployment with an infrastructure that can automatically monitor, scale and heal itself without manual intervention.

Policies can include security and performance requirements, where applications should reside, whether applications are permitted to scale outside your on-premises private cloud.

7) How long does it take to migrate to a hybrid cloud?

It's important to remember that migrating to a hybrid cloud strategy doesn't mean hitting the ON switch and instantly moving from your current data center to a policy-based, hybrid cloud-based infrastructure.

Many companies move to hybrid cloud in small increments, often one application at a time.

Start by choosing an application that is suitable for being deployed on a hybrid cloud—one that is cloud-aware and able to run in a fully virtualized environment.

8) How much expertise does hybrid cloud migration require from my IT staff?

Your IT staff will need to become aware of cloud operations, but the level of knowledge required can vary greatly depending on the type of on-premises cloud infrastructure you deploy and how you plan to use the public cloud.

For your on-premises private cloud, a custom-engineered solution can require a great deal of time. But a hyperconverged infrastructure—where each resource has compute, storage, networking, virtualization, orchestration and manageability built-in—can be deployed quickly and requires only high-level knowledge about scaling and application deployment. Hyperconverged systems are also designed to make infrastructure scaling easy, with minimal effort required to add new resources to the infrastructure pool.

Choosing the right public cloud for a hybrid cloud strategy will depend on how you are using the public cloud and whether it can support seamless, secure, on demand migration of the applications deployed on your private cloud.

9) Who can help me move to a hybrid cloud strategy?

We can. As an Intel® Technology Provider, we are able to help you identify and design a full on-premises infrastructure for the private cloud portion of your strategy, with all of the necessary components. We can also help you access a wealth of information about cloud strategy, best practices and more. Hardware manufacturers and software vendors (like VMware* and Microsoft*) are also great resources for assisting in hybrid cloud deployment efforts.

10) What makes Intel® technology best for a hybrid cloud strategy?

Intel innovations are already powering the majority of cloud servers, and for good reasons:

- The latest, Intel® Xeon® Scalable processors delivers outstanding performance across a wide variety of modern data center applications.
- These processors include advanced, built-in security features to help protect applications, data and infrastructure.
- They also include advanced virtualization technology to get the most out of virtualized, cloud workloads.
- They include key SDI enhancements, such as rich telemetry and advanced orchestration and resource utilization features.
- They're also optimized to take advantage of other leading Intel platform solutions, such as Intel® Omni-Path Architecture, Intel® Ethernet products, and Intel® Solid State Drives for Data Center.

These and other Intel® technologies help provide the performance, security, and resiliency you need to grow your business through digital innovation.

1 "Optimal Workload Placement for Public, Hybrid, and Private Clouds" White Paper 335054-001. Intel Corporation internal analysis, December 2016.
Note: Different businesses will have different workload deployments. These deployment differences may influence the attribute score.

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