Hybrid Infrastructure Presents The Opportunity:

Cut IT Spend and Improve Time to Value

UNITEDLAYER

Hybrid Hosting Experts

What Hybrid Hosting Can Mean To Your Organization

Hybrid cloud and hybrid hosting have moved to the forefront of conversations in IT infrastructure.

But what exactly does hybrid mean? In the marketplace hybrid is often used to describe a provider's ability to offer more than one variant of infrastructure - whether that be dedicated on-premise or colocation, virtual or cloud server, or a private cloud. But true hybrid hosting requires taking things a step further. It is about real integration:

Running different types of infrastructure simultaneously that talk to each other over the same private network.

Hybrid hosting at its core is about finding the optimal infrastructure type for each part of a specific application (database, web server, application server, firewall, load balancer, storage, front-end) and combining them seamlessly in a single unified environment. The choice of infrastructure is driven by performance, cost and compliance considerations.

? How do I get the most performance out of my infrastructure? How do I scale without over-buying capacity?

? How do I maximize and balance performance and cost considerations? How do I do all this while staying in compliance?

? How do I take advantage of the cloud without having to re-write my application and undertake a risky wholesale migration to the cloud?

These questions and others ultimately drive the choice of infrastructure types that end up being the building blocks of a given hybrid infrastructure environment.

More than 50 percent of organizations are currently using hybrid cloud or in the process of moving workloads to hybrid cloud, and another 15 percent are in the planning stages.

- IDG Research Services

Hybrid: Finding the Right Fit

The fact that there are advantages and disadvantages to using different types of infrastructure is the underlying rationale for setting up a hybrid infrastructure environment. It is about mixing, matching and creating a purpose-built infrastructure to run workloads in the best way possible.

Dedicated servers are a great fit for many workloads. It is great for running i/o-intensive applications with predictable workloads like databases or mission-critical business applications. Similarly, many websites and applications run perfectly fine in a virtual infrastructure. But a promotional website or mobile application might be better off using a cloud environment because of the ability to rapidly provision and scale in the face of traffic variability and surges.

A good example of a hybrid scenario is the e-commerce application. For instance, an e-commerce site could have the following setup: the customer-facing web pages and media hosted on the public cloud; client data kept securely within a private cloud; and the payment processing done on dedicated servers using a dedicated firewall for PCI compliance. The public cloud allows the store to scale up its website as the holiday season approaches so that it's highly available for customers during major shopping events such as Cyber Monday.

Three primary factors are driving the growth of hybrid clouds a speed of delivery of IT resources (62 percent), disaster recovery (56 percent) and improved resource utilization (53 percent).

-IDG Research Services, 2014

Other Hybrid Advantages

Overcome Barriers to Cloud Adoption

Hybrid hosting is breaking down barriers to cloud adoption.

By incorporating deployment models that include their existing infrastructure (including on-premise and colocation), hybrid hosting allows organizations to carefully move certain applications to the cloud instead of making a one-time shift.

New applications can also be quickly launched in the cloud, allowing them to respond to new business needs without the added worry of enterprise resource planning.

## Quicker Implementation and Testing with Cloud Resources

The cloud has made it much easier for companies to provision applications and scale them quickly. Even if a company has a majority of its infrastructure in-house, many companies are finding advantages to developing new applications in the cloud; even taking it one step further and sharing workloads and providing a unified view to all their infrastructure.

The cloud allows these applications to be rolled out quickly. Those that are popular get the resources they need to remain available. Workloads no longer needed are shut down. Different types of infrastructure support each of these different use cases.
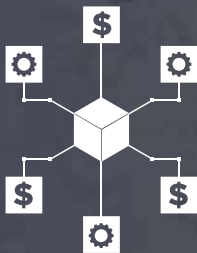
Efficient Use of IT Resources and Spending

A lot is made about the ability of cloud computing to quickly scale, but it also has the ability to scale down and optimize costs. In the pre-cloud era it was important to build server infrastructure capacity for peak application usage. This meant organizations would have to buy physical infrastructure for the highest usage levels. The problem was this capacity would lie dormant at all other times. Creating a hybrid environment with more cloud in the mix means that there will be less purchasing of infrastructure for peak usage and greater spending when applications are being used. Utility-based billing enables consumption and billing to be closely aligned. Hybrid enables more choices for the right infrastructure venue.
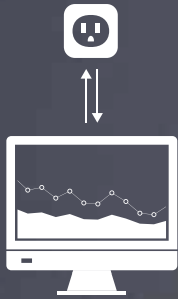
Lower Energy, Infrastructure and Facility Costs

Businesses should also factor in the cost of maintaining and supporting their physical infrastructure, which is included in the price of cloud services.

Using cloud in a hybrid environment allows organizations to offload some of that expense.

Using public or private cloud services can also help an individual organization use its resources more efficiently by allowing separate applications to run on a single server when resources permit.
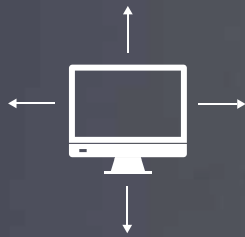
Scalability and Re-Allocation

Applications running in cloud environments are able to scale rapidly. Internal applications can "cloudburst" or scale in the cloud when additional resources are needed.

Similarly, because of cloud's multi-tenancy, the resource use of other cloud customers can affect service levels if they happen to be located on the same server. In these instances, it can make sense to move an application from the cloud to dedicated infrastructure or even a private cloud.

The flexibility of cloud enables better utilization and performance.

"Hybrid cloud is where public cloud was five years ago—on the verge of significant growth. Many organizations realize that they can get the infrastructure automation benefits of public cloud without sacrificing their existing investments in applications, operations and management. They are getting started by targeting specific projects, such as development and testing and running them in hybrid cloud"

- Mathew Lodge, vice president, Cloud Services Product Management and Marketing, VMware
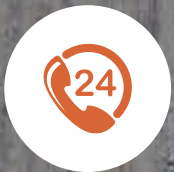
One Partner, Endless Capabilities.
WE'VE HELPED CUSTOMERS WITH THEIR HYBRID HOSTING PROBLEMS

Specialty / Custom Hardware

The customer has a server or a piece of hardware that can't be put in the cloud. For example, a large database that needs dedicated resources but can be connected to web front-ends and application servers that sit in the cloud.

High Availability / Disaster Recovery Needs

The customer needs a solid, high availability and disaster recovery solution. They can keep their production environment on-premise, while keeping a recovery environment in a UnitedLayer private cloud. If disaster strikes, the business is protected.

Fixed Resources for Regular Workloads with the Ability to Deal With Unexpected Spikes in Traffic

A large portion of the customer's infrastructure is committed for the long-term in a Private Cloud, but they have periods where they need to scale up fast, leveraging a highly secured enterprise Public Cloud.

Security and Compliance Regulated Industries Such as eCommerce

The customer is an e-commerce site and maintains strict privacy and security standards. They have encryption "black boxes" that only come as hardware. These black boxes could sit in on-premise or in colocation while everything else is placed strategically in a Public Cloud for supporting highly elastic workloads.

Application Optimization by Tiers

Customer wants to benefit from the advantages of virtualization on certain tiers of their application stack, but need the horsepower for their database that only high-powered physical servers are practical to deliver.

Disaster Recovery

Extending the data center for backup, hosting seasonal workloads or accessing additional geographical locations. The ability to leverage a hybrid cloud for disaster recovery avoids the need for a secondary data center site that often sits idle as well as the associated capital and operational expenses.

Why You Should Consider Hybrid Cloud

As more businesses have embraced cloud, it's become apparent there are instances where cloud doesn't meet all their various requirements or the move doesn't make technical or financial sense. The cloud is often perceived as a one-size-fits-all solution but that is actually very far from reality.

The decision to embrace the hybrid cloud isn't really a matter of do or don't. *It is about finding a balance.* A business that uses just one infrastructure platform - whether it is on-premise, colocation, public or private clouds, or dedicated hosting - is limited in its ability to deliver the right levels of speed and performance. It is unable to optimize consumption and usage. Hybrid solves both these problems by finding the right fit and maximizing the flexibility afforded by virtualized resources. In short, hybrid is an excellent option when organizations go down the checklist and consider all the factors involved in deploying their infrastructure. To get it done right the best of all worlds need to be considered.

> "While hybrid cloud can also save money, that's typically not the main driver among successful hybrid cloud deployments. It's about going faster: getting into new markets or launching new products or campaigns sooner. Look for projects where you can score quick wins to demonstrate credibility."
>
> *- Mathew Lodge, vice president, Cloud Services Product Management and Marketing, VMware*

Find a Hybrid Hosting Expert You Can Trust

Hybrid hosting is not simple and straightforward as you might think. It requires a service provider partner that has the experience, resources and technical capabilities to build and manage a full-featured and properly functioning hybrid infrastructure environment. A service provider that understands all the technical requirements and with the benefit of experience through repeated trials, can do things better and more efficiently.

Hybrid hosting solutions from UnitedLayer - providing a combination of infrastructure platforms that could include public cloud, private cloud, and dedicated infrastructure ranging from your on-premise cloud and colocation – are built to optimize application delivery at a fraction of the cost of doing this internally.

Hybrid Hosting allows you to create a solution that meets your specific business needs and takes into account your budgetary and technical constraints.

Wide Range of Expertise is Needed

It's very difficult to create a true hybrid cloud because you're required to do a lot of things covering a lot of disparate IT solutions. You need to be experts at networking, at storage and compute solutions, at security, at virtualization, operating systems, different application levels and different software solutions.

It requires skill sets among people with a wide and deep skill set. It requires 24/7 support with highly qualified engineers who can solve issues that can happen at a moment's notice. It requires data center expertise, and infrastructure with high-class Tier 3 data centers. It requires knowledge of High Availability systems. It's the ability to bring all of these sets of expertise, the people, the technology, and security solutions together that makes UnitedLayer stand out.

It requires One Partner with Endless Capabilities.

Plan for Today, But Grow For Tomorrow

Choosing a hosting provider that has years of expertise in Hybrid Hosting could be the single most important decision you'll make. It means that you'll never be locked into one type of IT infrastructure. It means that as your business changes, you'll have the support of a team that can change with you.

Organizations have a load of legacy investments and core systems that work. They also have to adapt to new business changes. It's important to make your legacy systems work with your new business opportunities and have an IT business infrastructure that supports these opportunities.
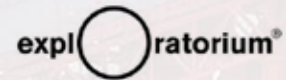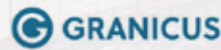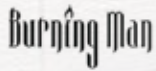
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