

# Cloud Adoption: Hybrid Is the Future

NEW IDG SURVEY FINDS MORE AND MORE ORGANIZATIONS ARE EMBRACING OR PLANNING TO EMBRACE HYBRID CLOUD AS PART OF THEIR IT STRATEGY.

As the cloud computing market continues to grow, enterprises are exploring different cloud models in search of the right balance of functionality, flexibility and investment protection. As many organizations are discovering, off-premises cloud vs. on-premises data center is not an either/or proposition. Hybrid cloud lets organizations provision, use, and manage IT resources across their on-site data center and a compatible public cloud. A new Market Pulse survey by IDG Research Services indicates that 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.

Over the next two years, the percentage of applications deployed via hybrid cloud is expected to increase significantly (from 16 percent to 44 percent), along with the IT spending devoted to hybrid cloud deployments, the Market Pulse survey finds.

“Hybrid cloud is where public cloud was five years ago—on the verge of significant growth,” said Mathew Lodge, vice president, Cloud Services Product Management and Marketing, VMware. “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.”

What’s behind this growing movement of workloads and applications to hybrid cloud? Three primary factors emerge from the survey: speed of delivery of IT resources (62 percent), disaster recovery (56 percent) and improved resource utilization (53 percent). A few key barriers to

adoption are still top of mind, particularly in traditional hot-button areas such as data security and compliance (63 percent and 56 percent, respectively).

The survey results are clear: Hybrid cloud is emerging as the mainstream of IT as more and more organizations are embracing or planning to embrace hybrid cloud as part of their IT strategy.

## A MOVE TOWARD HYBRID CLOUD DEPLOYMENT

Nearly 6 in 10 respondents to IDG Research Services’ Market Pulse survey have either deployed applications or workloads using hybrid cloud or are in the process of doing so. Two years from now, respondents expect their hybrid cloud application/workload deployments to triple. These results indicate that organizations are becoming more comfortable with cloud computing, likely after deploying a variety of public cloud services or a private cloud on-site.

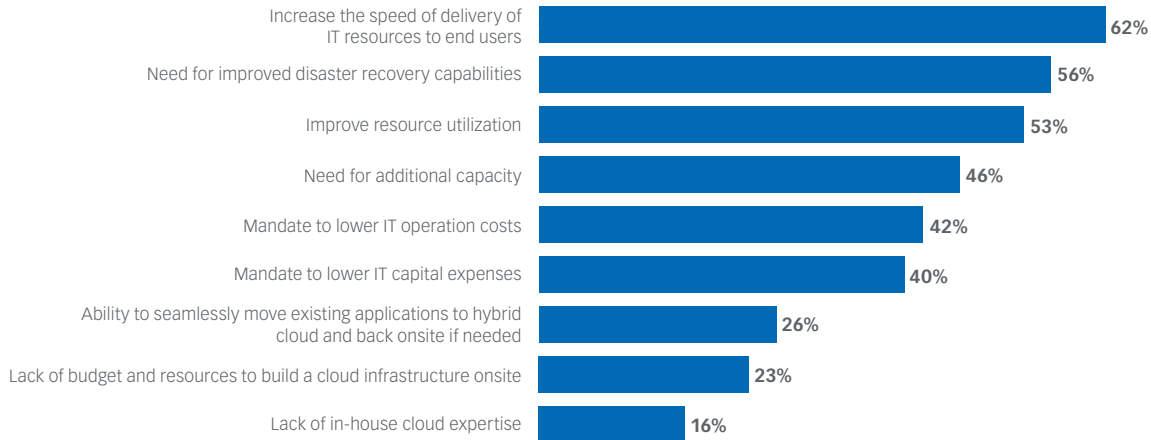
“As cloud computing matures, more companies are understanding the benefits of what hybrid cloud offers,” said Lodge. “The ability of hybrid cloud to function as an extension of an existing IT environment and processes allows IT to quickly deliver the agility benefits of cloud computing to the business. IT can use the same management tools and governance policies they have already adopted in their data centers and maintain security and visibility.”

Organizations expect spending on hybrid cloud to rise significantly over the next two years. The increased investment is not driven solely by those still in the planning stages, however. Organizations that have already deployed hybrid cloud expect their spending to increase from an average of 16 percent of their IT budgets to 36 percent—signaling a significant shift to hybrid cloud as a primary deployment model.

The main factors driving deployment of workloads to hybrid cloud include increased delivery speed of IT resources to end users, new or improved disaster recovery capabilities



## Factors That Are Driving Organizations to Move Workloads to Hybrid Cloud



SOURCE: IDG RESEARCH SERVICES, FEBRUARY 2014

and better resource utilization, with the need for additional capacity rounding out the top four drivers. Faster delivery of IT resources and better resource utilization suggest that IT leaders realize the value of hybrid cloud as part of their strategy to provide the agility needed to enable key business initiatives.

At smaller organizations, investment drivers are often more pragmatic. In the Market Pulse survey, for example, 31 percent of organizations with fewer than 1,000 employees say a lack of budget and resources to build a private cloud infrastructure on-site is causing them to look at moving workloads to hybrid cloud, vs. 22 percent of larger organizations.

“For organizations of all sizes, hybrid cloud is an attractive option for faster and more cost-efficient delivery of IT to support the business,” said Lodge.

### COMMON CONCERNS ABOUT ADOPTING HYBRID CLOUD

These opportunities are tempered by two ongoing concerns about cloud computing in general, and are not unique to hybrid cloud: ensuring that the data is secure, and ensuring that compliance requirements are followed. More than half of all respondents identify these two factors as a potential barrier to hybrid cloud adoption; among respondents who say they have no plans to move workloads to the cloud, 90 percent cite security as a concern.

Security is also at the top of most organizations’ requirements when searching for service providers: 94 percent of respondents say the provider’s security capabilities are an important factor when selecting a hybrid cloud solution.

To allay these concerns, hybrid cloud providers will need to enable compliance with regulatory and industry standards, deliver secure connectivity and leverage an organization’s existing policies and controls for secure authentication and access to company data.

“Rather than reinventing policies and protections when you move applications and workloads to hybrid cloud, you should be able to surround those applications with the same network configuration and security policies that you currently use in your own data center,” said Lodge. In a hybrid cloud environment, this capability also eliminates the need to create and manage two separate sets of policies—one for the data center and one for the cloud.

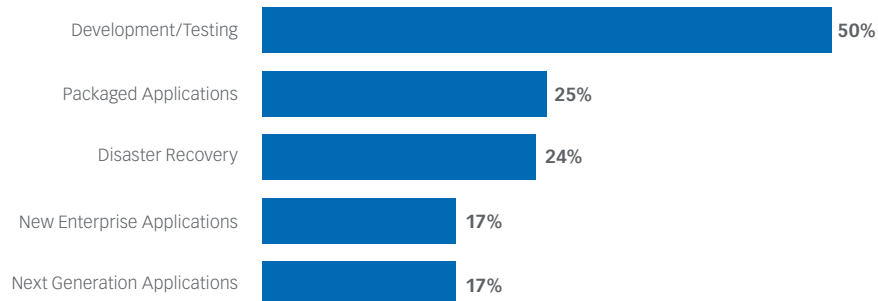
It’s worth noting that just 14 percent of respondents cite lack of executive support as a barrier to adopting a hybrid cloud model. This suggests that senior management is beginning to understand and see the business benefits of cloud deployments.

### WHICH APPLICATIONS MAKE THE MOST SENSE FOR HYBRID CLOUD?

Many companies understand the value of hybrid cloud but



## One Workload/Application Looking to Move First to an IaaS Hybrid Cloud Model



SOURCE: IDG RESEARCH SERVICES, FEBRUARY 2014

aren't sure which applications or workloads they should move first. Nearly any workload or application can be migrated to hybrid cloud; prioritizing which ones to move first depends on the organization's specific requirements and the benefits it hopes to achieve.

"Look for an area where agility is a pain point, or lack of responsiveness is a drag on the business," Lodge suggested. "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."

In a separate IDG Quick Poll survey, more than half of the respondents say they started using hybrid cloud for development/testing. This is not surprising given that setting up complete lifecycle environments for development and testing can be time-consuming and costly. Moving these workloads to hybrid cloud offers an easy, fast and cost-effective way to gain on-demand capacity for a limited time period. Once the application is ready for production, IT can choose to deploy it in hybrid cloud or seamlessly move the application into production on-site.

In the survey, 24 percent of respondents say they started using hybrid cloud for hosting of packaged applications such as Microsoft Sharepoint/Exchange that were already running on-site or in internal private clouds. With this approach, IT can free up existing on-site resources that were used for standard packaged applications that are not proprietary to

the business, and utilize those resources for more strategic IT initiatives. Also in this category is the opportunity to host virtualized desktops with desktop-as-a-service.

Rounding out the top three use cases for hybrid cloud at 24 percent is the category of disaster recovery, which includes extending the data center for backup, hosting seasonal workloads or accessing additional geographical locations. Many organizations are looking for help with their disaster recovery plans. The ability to leverage hybrid cloud for disaster recovery avoids the need for building a secondary data center site that often sits idle as well as the associated capital and operational expenses.

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## TOP USE CASES FOR HYBRID CLOUD

- **Development/Testing:** Develop, test, QA lifecycle of applications
  - **Packaged Applications:** Microsoft Sharepoint/Exchange, application upgrades, desktop-as-a-service
  - **Disaster Recovery:** Disaster recovery third-party backup, data center extension, additional geo locations
  - **New Enterprise Applications:** SaaS hosting/OSV/enterprise resource planning, 3-tier applications, new application development on existing architectures (Java)
  - **Next-Generation Applications:** New cloud-based applications, mobile applications
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Hybrid cloud for new enterprise applications that are based on traditional application stacks like Java is being used by 17 percent of survey respondents. This area provides opportunities for IT to evaluate the cost, management and operational efficiencies of using hybrid cloud as an alternative deployment option for traditional applications vs. deploying on-site.

Also coming in at 17 percent is the use of hybrid cloud for next-generation applications. This makes sense for developing, testing and deploying cloud-based and mobile applications on advanced development frameworks such as Spring and Ruby on Rails. These applications are increasingly Web-oriented and data-intensive, and require the elasticity to scale to handle sudden, unpredictable traffic spikes and fast-growing demand. Hybrid cloud is built for these requirements.

#### BENEFITS OF HYBRID CLOUD

The ability to seamlessly move existing applications between hybrid cloud and the on-site data center is a factor driving about 30 percent of organizations that have already adopted or are planning to adopt hybrid cloud.

Survey respondents whose organizations have deployed applications or workloads to hybrid cloud say they are largely realizing benefits in the areas that drove their initial investment. The top three benefits achieved are increased flexibility to deliver IT resources (62 percent), improved disaster recovery capabilities (60 percent) and lower IT capital expenses (59 percent). More than three-quarters of respondents at organizations with fewer than 5,000 employees cite improved DR capabilities as a benefit they've achieved or expect to achieve. Fifty-nine percent of smaller organizations also identify gaining additional resource capacity as an important benefit.

#### GET STARTED WITH HYBRID CLOUD

The survey data shows organizations are embracing hybrid cloud: More than 75 percent of respondent organizations are leveraging or planning to leverage hybrid cloud—and with good reason. With true hybrid cloud solutions, organizations can extend the same applications, networking, management, operations and tools across both on-premises and off-premises environments. IT managers are finding that hybrid cloud provides the best of both worlds: the agility

### 3 KEY ELEMENTS OF A HYBRID CLOUD SOLUTION

**1 Application architecture.** Once you've identified the application you want to run in hybrid cloud, determine whether you will need to redesign or rearchitect the application to use it in the cloud. Ideally, you want seamless compatibility to run an application or workload in the cloud the same way you would run it in your data center. Anything short of that seamless compatibility will increase the level of effort required to get started.

**2 Network integration.** IT is typically challenged by manual changes required when moving applications and workloads to the cloud that must be reconfigured specifically for the service provider's platform. Look for hybrid cloud solutions that enable the extension of your existing data center configurations and policies and allow you to replicate the network your applications need to operate with no changes required.

**3 Management.** Just as you want end users to have seamless access to applications in a hybrid cloud environment, IT managers should be able to administer both on-site and off-site environments from a single set of management tools. The levels of management and automation that exist in your data center should ideally extend to the hybrid cloud environment.

and flexibility to quickly deliver IT resources to support the business while maintaining visibility and control of those resources. ■

To learn more about hybrid cloud, visit  
[V.CLOUD.VMWARE.COM](http://V.CLOUD.VMWARE.COM)

