

RIGHTSCALE 2014 STATE OF THE CLOUD REPORT

Get data and analysis on cloud adoption by enterprises and SMBs in a dozen industries.

▶ DOWNLOAD FULL REPORT

Cloud Management Blog

[Cloud Management Best Practices](#)
[Cloud Industry Insights](#)
[Enterprise Cloud Strategies](#)
[Cloud Cost Analysis](#)
[RightScale News](#)
[Home](#) » [Cloud Industry Insights](#)

Cloud Computing Trends: 2014 State of the Cloud Survey

 POSTED BY [KIM WEINS](#) | APRIL 02, 2014

In February 2014, RightScale conducted its third annual State of the Cloud Survey, asking 1,068 technical professionals across a broad cross-section of organizations about their adoption of cloud computing. Twenty-four percent of respondents came from larger enterprises, representing organizations with more than 1,000 employees. This year's survey on cloud computing trends found that public cloud adoption is nearing 90 percent on the journey to hybrid cloud as enterprises seek to expand their [portfolio of cloud services](#).

Executive Summary

In compiling the State of the Cloud Survey results, we use our RightScale Cloud Maturity Model to segment and analyze organizations based on their levels of cloud adoption:

- **Cloud Watchers** are developing cloud strategies and plans.
- **Cloud Beginners** are working on proof-of-concepts or initial cloud projects.
- **Cloud Explorers** have multiple projects and applications deployed in the cloud.
- **Cloud Focused** businesses are heavily using cloud infrastructure.

In this blog, we highlight several key survey findings. For the complete survey results, [download the RightScale 2014 State of the Cloud Report](#).

The RightScale 2014 State of the Cloud Survey identified these key findings:

[Cloud Adoption Reaches Ubiquity](#)

- 94 percent of organizations surveyed are running applications or experimenting with infrastructure-as-a-service.
- 87 percent of organizations are using public cloud.

[Hybrid Cloud Is the Strategy of Choice](#)

- 74 percent of enterprises have a hybrid cloud strategy and more than half of those are already using both public and private cloud.

[Enterprise Cloud Governance Lags Adoption](#)

- Less than a third of organizations have defined such critical aspects of governance as which clouds can be used; disaster recovery approaches; and cost management.

[Cloud Benefits Grow in 2014](#)

- Respondents reported more benefits from cloud computing in 2014 over the previous year in a variety of categories, including higher availability, geographic reach, cost savings, and business continuity.

SUBSCRIBE

MOST POPULAR POSTS

[AWS Responds with Price Cuts: Google AWS Pricing Round 2](#)
[Google Slashes Cloud Prices: Google v. AWS Price Comparison](#)
[Now Available: RightScale Cloud Analyt in Public Beta](#)
[Cloud Price Reductions: A Definitive Analysis of 2013 Trends](#)
[Google Compute Engine Live Migration Passes the Test](#)
[Introducing RightScale Cloud Appliance for vSphere](#)

RIGHTSCALE 2014 STATE OF THE CLOUD REPORT

Get data and analysis on cloud adoption by enterprises and SMBs in a dozen industries.

▶ DOWNLOAD FULL REPORT

TAGS

[AWS](#) [Cloud Computing](#)
[Cloud Computing Best Practices](#)
[cloud cost management](#) [Cloud Co](#)
[EC2](#) [MySQL](#) [Private Cloud](#)

[Cloud Security Concerns Abate](#)

- The number of respondents who regard cloud security as a significant challenge has decreased among both Cloud Beginners and Cloud Focused pros.

[Next-Generation IT Shapes Up: Cloud + DevOps + Self-Service IT](#)

- Cloud maturity is aligned with DevOps and Self-Service to create next-generation IT. Cloud Focused companies embrace DevOps (76 percent) and Self-Service IT (68 percent) with over 71 percent able to provision cloud resources in under an hour.

[Public Cloud Wars Heat Up](#)

- Amazon Web Services (AWS) continues to dominate public cloud adoption with 54 percent of the market (4x the nearest competitor), while other vendors battle for second place.
- IaaS offerings from Google and Microsoft are gaining the interest of cloud users, with Azure leading among enterprises and Google Cloud Platform among small and midsize organizations.

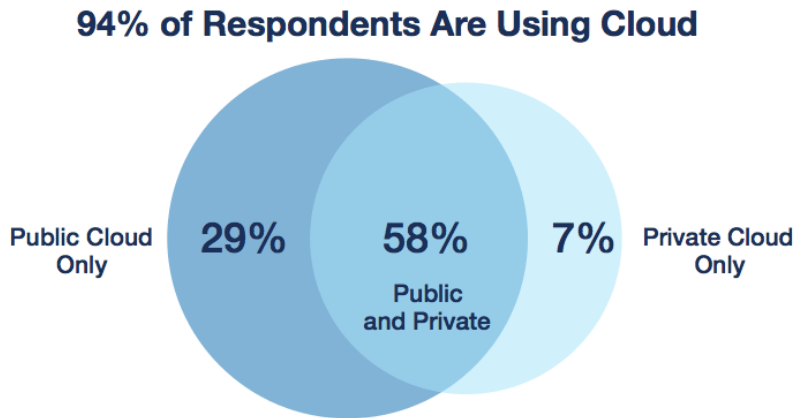
[VMware and OpenStack Battle for Lead in Private Cloud](#)

- The battle among private cloud technologies is shaping up as a clash of cultures between the open-source OpenStack and proprietary solutions from VMware.

Key Findings

Cloud Adoption Reaches Ubiquity

94 percent of organizations surveyed are running applications or experimenting with infrastructure-as-a-service and 87 percent of organizations are using public cloud.



Source: RightScale 2014 State of the Cloud Report

Although cloud adoption is significant, it is interesting to note that enterprise respondents are more heavily clustered in the middle stages of Cloud Beginners and Cloud Explorers. However, over the last year, many enterprises have moved beyond the Cloud Watcher stage – now representing only 16 percent of respondents vs 32 percent in 2013.

Enterprises are enthusiastically moving forward in their journey to cloud. While their transformation may take longer than that of smaller organizations, it is clear that very few enterprises will remain on the sidelines.

TOP AUTHORS

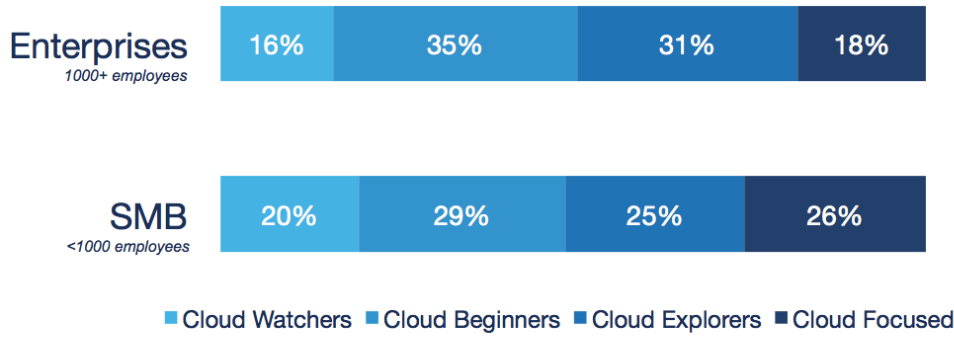
Thorsten von Eicken

Hassan Hosseini

Brian Adler

[View All Authors](#)

Cloud Maturity Model by Company Size



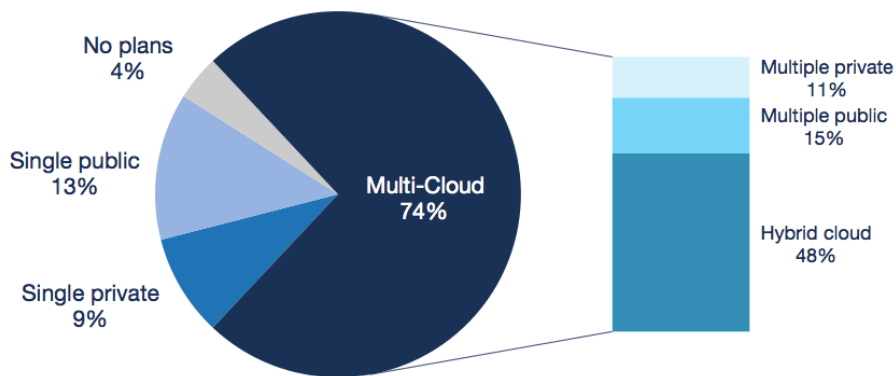
Source: RightScale 2014 State of the Cloud Report

Hybrid Cloud Is the Strategy of Choice

The 2014 State of the Cloud Survey shows that hybrid and multi-cloud implementations continue to be the end goal for the enterprise: 74 percent of enterprise respondents have a multi-cloud strategy, and 48 percent are planning for hybrid clouds.

Enterprise Cloud Strategy

1000+ employees

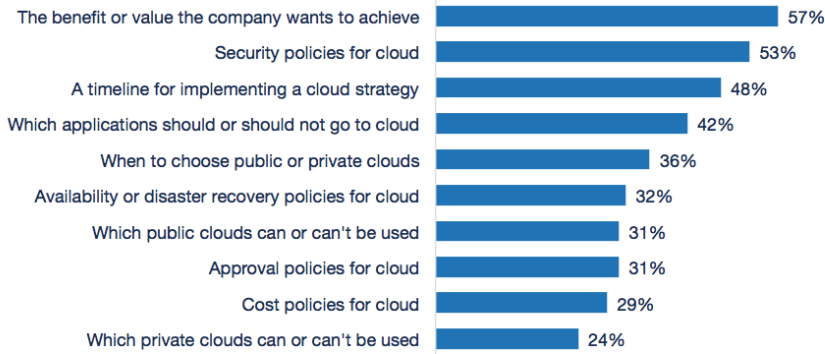


Source: RightScale 2014 State of the Cloud Report

Enterprise Cloud Governance Lags Adoption

While enterprises are progressing in cloud adoption, they often have yet to define key elements of their cloud strategy and governance. Just over half of enterprises have defined the business value they want to get from cloud initiatives and security policies for cloud. Only a minority has defined policies for choosing public or private clouds (36 percent), implementing availability or disaster recovery (32 percent), and managing costs (29 percent).

Enterprises with Key Elements of Cloud Strategy Defined



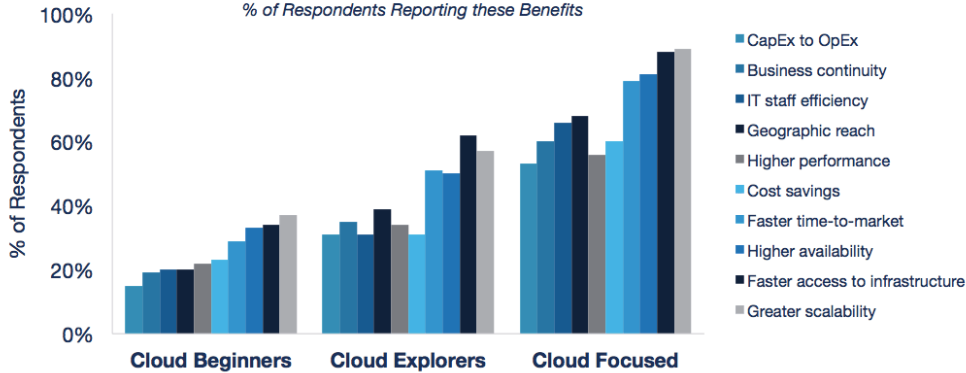
Source: RightScale 2014 State of the Cloud Report

Cloud Benefits Grow in 2014

The 2014 survey echoes a key finding of the 2013 State of the Cloud Report: Cloud maturity matters. As organizations adopt cloud more broadly, they realize increasingly more value, and the challenges of adopting cloud decline. Organizations indicate that the top benefits that they have already realized are greater scalability, faster access to infrastructure, higher availability, and faster time to market for applications.

Benefits Grow with Cloud Maturity

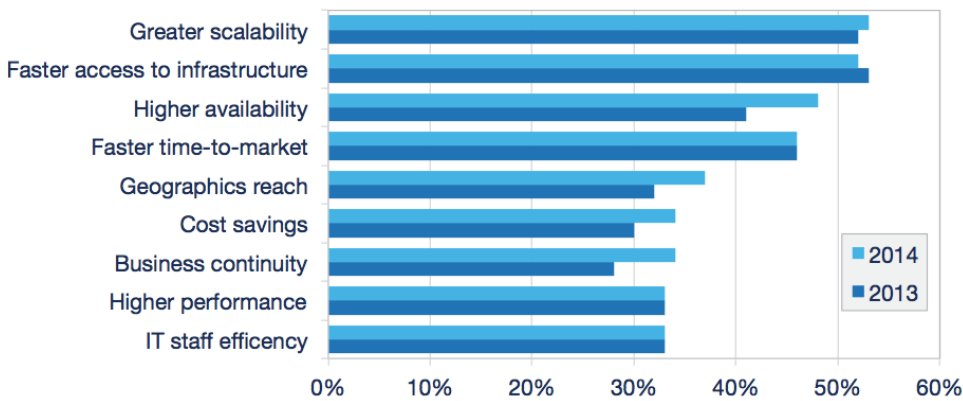
% of Respondents Reporting these Benefits



Source: RightScale 2014 State of the Cloud Report

Cloud Benefits 2014 vs. 2013

% of Respondents Reporting these Benefits



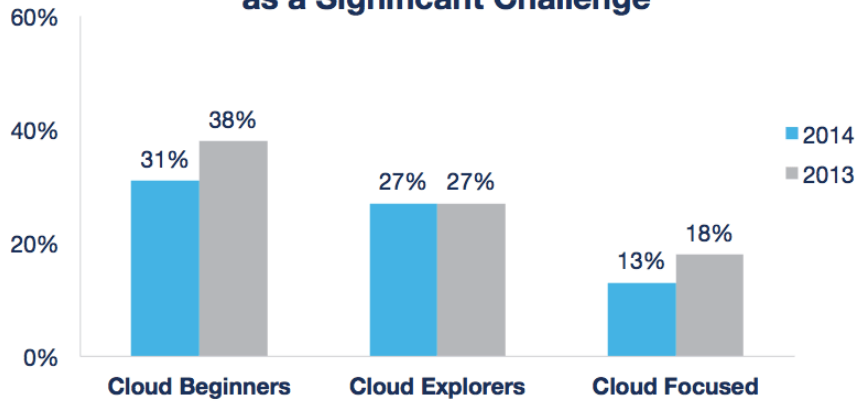
Source: RightScale 2014 State of the Cloud Report

Cloud Security Concerns Abate

While the benefits of the cloud increase with experience, the challenges of cloud show a sharp decrease as organizations gain expertise with cloud. Security remains the most-often cited challenge among Cloud Beginners (31 percent) but decreases to the fifth most cited (13 percent) among Cloud Focused organizations. As organizations become more

experienced in cloud security options and best practices, the less of a concern cloud security becomes. Concerns about cloud security declined in 2014 among both Cloud Beginners and Cloud Focused respondents.

Respondents that See Cloud Security as a Significant Challenge



Source: RightScale 2014 State of the Cloud Report

While the challenge of cloud security declines with cloud maturity, other challenges demand attention in Cloud Focused organizations. Compliance continues to be an issue for 18 percent of Cloud Focused users, representing the largest challenge. In addition, cost and performance occupy the second and third slots as organizations need to focus ongoing attention on these issues.

Top 5 Challenges Change with Cloud Maturity

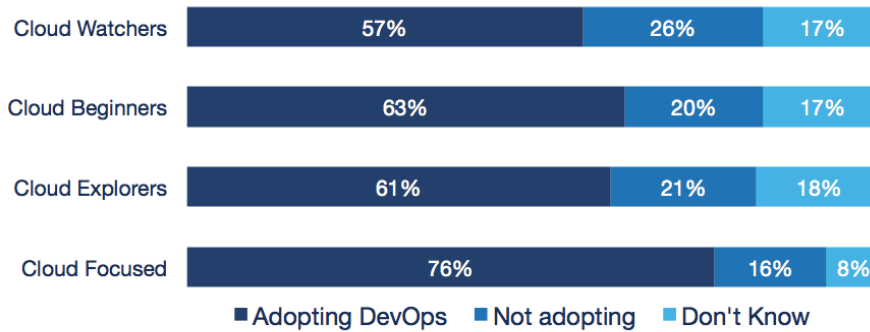
Place	Cloud Beginners	Cloud Focused
#1	Security (31%)	Compliance (18%)
#2	Compliance (30%)	Cost (17%)
#3	Managing multiple cloud services (28%)	Performance (15%)
#4	Integration to internal systems (28%)	Managing multiple cloud services (13%)
#5	Governance/Control (26%)	Security (13%)

Source: RightScale 2014 State of the Cloud Report

Next-Generation IT Shapes Up: Cloud + DevOps + Self-Service IT

At the same time that cloud adoption is growing, two other significant trends are taking hold in corporate technology offices: DevOps and Self-Service. Together, these three initiatives — Cloud, DevOps, and Self-Service IT — are shaping up as the critical pillars of next-generation IT. Penetration of DevOps practices grows as companies increase their cloud maturity. Seventy-six percent of respondents at Cloud Focused companies are adopting DevOps as opposed to 57 percent of Cloud Watchers.

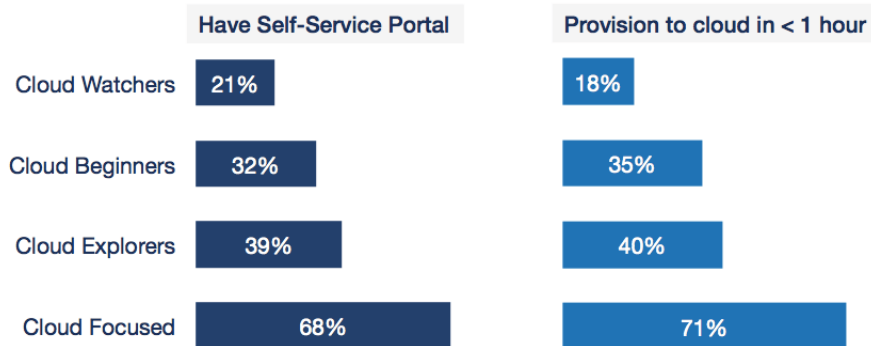
DevOps Adoption Grows with Cloud Maturity



Source: RightScale 2014 State of the Cloud Report

Self-Service IT also follows a parallel adoption path. Enterprises with higher level of cloud maturity are more likely to have a self-service portal for cloud services and enable fast provisioning of cloud resources. Sixty-eight percent of Cloud Focused organizations provide self-service access to cloud services, and 71 percent of those can provision cloud instances in under an hour.

Enterprise Self-Service Capabilities Increase with Cloud Maturity



Source: RightScale 2014 State of the Cloud Report

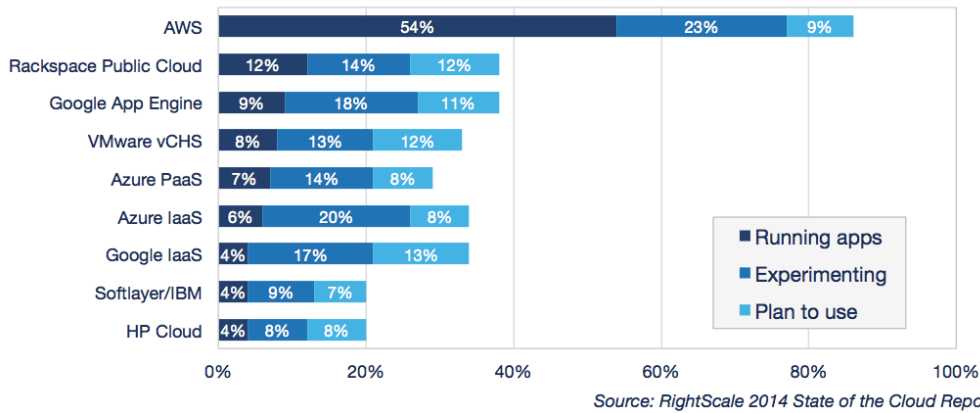
Public Cloud Wars Heat Up

Over the last twelve months, the cloud landscape has continued to evolve at a rapid rate. We asked respondents to tell us which clouds they were using and whether they were running applications in the cloud, experimenting with the cloud, planning to use the cloud, or had no plans to use the cloud. Most respondents are using more than one cloud, so totals will add up to more than 100 percent. These results indicate whether a respondent is using any cloud, but do not specify the number of applications that are running in each cloud.

AWS continues to lead in public cloud adoption, with 54 percent of respondents currently running applications in this cloud. This is more than 4x the adoption rate of the second most used cloud, Rackspace Public Cloud. Google App Engine rounded out the top 3 in current adoption.

Public Cloud Usage

% of Respondents Running Applications



[Download the RightScale 2014 State of the Cloud Report for the complete survey results](#), including enterprise and SMB adoption of public clouds.

We can also gauge interest and potential for future adoption by measuring respondents that are experimenting or planning to use particular clouds. AWS also commands a lead in mindshare, with Google IaaS and Azure IaaS close behind. This could indicate potential for those vendors to move up in future years as these experiments and plans come to fruition.

Special note: One result that seemed unusual was that VMware vCloud Hybrid Service (vCHS) was ranked fourth. Because vCHS is a relatively new service, and many VMware users are often unclear about which VMware products are in use, we conducted follow-up interviews on a small sampling of respondents who had stated that they were running applications in vCHS. In most of the follow-up interviews, we found that there was some testing of vCHS somewhere in the organization. However, in some cases, there was no use of vCHS. We believe it is likely that the vCHS responses reporting running applications represents early tests of vCHS and may actually be lower than survey results show.

Public cloud adoption patterns are very different between larger enterprises and smaller organizations. AWS remains in first place across both segments, but the remaining rankings have significant differences.

Top Public Clouds Used

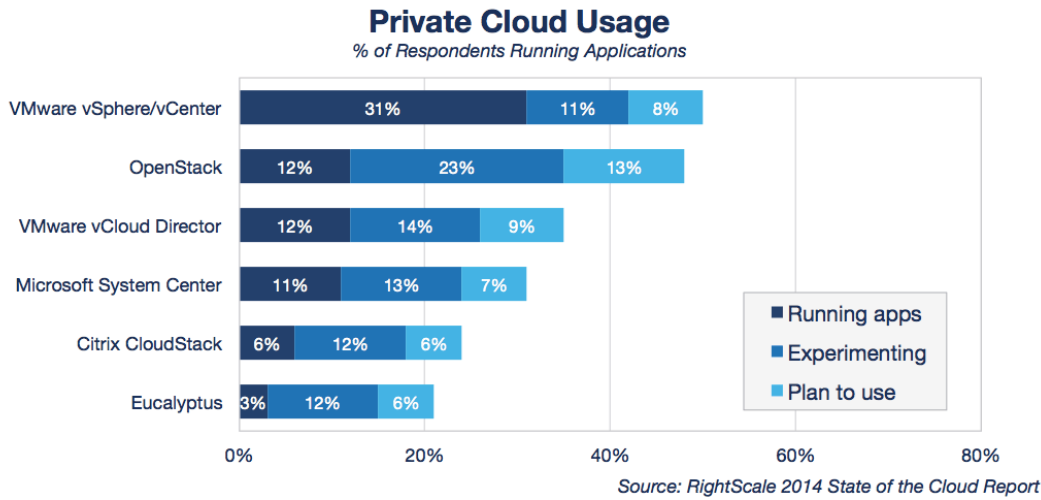
Place	Enterprise (1000+ employees)	SMB (Under 1000 employees)
#1	AWS	AWS
#2	VMware vCHS	Rackspace Public Cloud
#3	Azure PaaS	Google App Engine
#4	Azure IaaS	VMware vCHS
#5	Rackspace Public Cloud	Azure PaaS
#6	Google App Engine	Google IaaS
#7	SoftLayer/IBM	Azure IaaS
#8	Google IaaS	SoftLayer/IBM
#9	HP Cloud	HP Cloud

Source: RightScale 2014 State of the Cloud Report

VMware and OpenStack Battle for Lead in Private Cloud

The battle among private cloud technologies is shaping up as a clash of cultures between the open-source OpenStack and proprietary solutions from VMware. Although virtualized environments from VMware or Microsoft don't meet all of the requirements of cloud computing, many survey respondents currently view these environments as a private cloud, and so we gave respondents an option to identify them as private cloud technologies.

Across all organizations, 31 percent view their vSphere environments as private clouds. OpenStack ranked second, followed by vCloud Director (which was deprecated by VMware in 2013). Thirty-six percent of respondents were experimenting with or planning to use OpenStack — far ahead of any other private cloud option.



[Download the RightScale 2014 State of the Cloud Report for the complete survey results](#), including enterprise and SMB adoption of private clouds.

Among enterprises, current private cloud usage was skewed toward traditional virtualization vendors. As mentioned before, this includes respondents who view their vSphere environment as a private cloud — whether or not it meets the accepted definition of cloud computing.

Top Private Clouds Used

Place	Enterprise (1000+ employees)	SMB (Under 1000 employees)
#1	VMware vSphere/vCenter	VMware vSphere/vCenter
#2	VMware vCloud Director	OpenStack
#3	Microsoft System Center	Microsoft System Center
#4	OpenStack	VMware vCloud Director
#5	Citrix CloudStack	Citrix CloudStack
#6	Eucalyptus	Eucalyptus

Source: RightScale 2014 State of the Cloud Report

Summary: Now Is the Time for Cloud

The 2014 State of the Cloud Survey shows that the time for cloud adoption has arrived. The vast majority of organizations have already embarked on a cloud journey that will make IT a critical component of corporate growth and profits.

IT organizations are rapidly moving toward a world where they can offer a portfolio of cloud services, both public and private, to meet the diverse requirements of their applications. Organizations are already seeing significant benefits from their use of cloud, and the barriers to adoption are rapidly disappearing. As a result, each step companies take in their cloud journey delivers increasing value.

[Download the RightScale 2014 State of the Cloud Report for the complete survey results](#).

All charts and data from this blog and the RightScale 2014 State of the Cloud Report can be used under a [Creative](#)

RIGHTSCALE 2014 STATE OF THE CLOUD REPORT

Get data and analysis on cloud adoption by enterprises and SMBs in a dozen industries.

[▶ DOWNLOAD FULL REPORT](#)

Read more articles on Cloud Computing:

[Automating Cloud Security](#)

[Cloud Strategists See Enterprises Gaining Confidence with Security](#)

[Why Use Cloud Management?: The Business Case](#)

POST A COMMENT

YOUR NAME *

E-MAIL *

WEBSITE

COMMENT *

POST COMMENT

[Cloud Management Best Practices](#)

[Cloud Industry Insights](#)

[Enterprise Cloud Strategies](#)

[Cloud Cost Analysis](#)

[RightScale News](#)

[ABOUT RIGHTSCALE](#)

[CONTACT US](#)

QUESTIONS? CALL US

1.866.720.0208

FOLLOW US ONLINE

