Adoption Profile: Hosted Private Cloud, North America And Europe, Q3 2014

by Lauren E. Nelson
with Michael Caputo and Glenn O'Donnell

WHY READ THIS BRIEF

A common business technology (BT) agenda request that we receive from our infrastructure and operations (I&O) clients is baseline adoption data for hosted private cloud to inform their cloud strategies and compare their progress with that of their peers. In 2014, adoption seemed to level off for hosted private cloud, but factors such as “cloudwashing” and increased market awareness of what a true hosted private cloud is paint a more accurate picture of adoption than in past years. This report showcases the following North American and European hosted private cloud data: 1) adoption relative to other deployment types; 2) adoption by country; 3) adoption relative to previous years; 4) top concerns; 5) top drivers; and 6) the most popular vendors for hosted private cloud. The data in this report is powered by Forrester's Business Technographics® Global Infrastructure Survey, 2014, which was fielded to 2,255 business and technology decision-makers in North America and Europe. I&O executives should use this data — along with Forrester's cloud computing playbook — to discover, plan, act, and optimize their hosted private cloud initiatives.

NORTH AMERICAN AND EUROPEAN HOSTED PRIVATE CLOUD OVERVIEW

We began tracking hosted private adoption through our Business Technographics hardware surveys in 2010, and in 2013 we observed the first spike in actual hosted private cloud adoption in North America and Europe from 10% to 21%. Our 2014 survey data showed no significant increase in hosted private cloud adoption; however, given the influx of new vendors in the market and higher reported customer numbers, actual adoption likely increased. In late 2014, Forrester published a Forrester Wave™ evaluation on hosted private cloud where the total market consisted of approximately 3,316 customers, up from 2,100 customers in 2013. Forrester's current North American and European Business Technographics data indicates the following noteworthy trends:

- **Hosted private cloud adoption held steady in 2014.** Hosted private cloud adoption rose from 21% in 2013 to 22% in 2014 — a difference that's not statistically significant (see Figure 1). While that 1% difference seems to point to a lull in hosted private cloud, the hosted private cloud vendor landscape continues to grow, as does its customer numbers and environment size. This discrepancy is likely a result of greater market maturity, where vendors falsely labelling their offering as a “cloud” are slowly thinning out. Customers are also honing their own cloudwashing detectors across their own hosting scenarios. Today’s reported hosted private cloud adoption rates are likely closer to the truth, whereas the 2013 data likely carried a notable percentage of false-positives.
Adoption grew in the US, Canada, and Germany and declined in the UK and France. Forrester's Business Technographics data showed increased reported adoption of hosted private cloud for the US (5%), Canada (2%), and Germany (3%). Conversely, adoption decreased in the UK and France by 7% and 6%, respectively. Given the decrease in cloudwashing and better understanding by vendors and clients of what constitutes true cloud, we believe those increases were even higher than the numbers report (and that much of the “decrease” in hosted private cloud adoption can be attributed to greater awareness of required cloud capabilities).

Top reported drivers reflect that enterprises focused on benefits not specific to cloud. The top reported drivers for hosted private cloud included improved infrastructure manageability and flexibility, lower total cost of ownership for servers, on-demand capacity, and improved disaster recovery (see Figure 2). This isn't shocking news. Although hosted private cloud delivers self-service access and automated provisioning, many enterprises aren't using those capabilities today. Some use this model as an enhanced hosting option since there is a list of perks that come with the solution that are not specific to cloud (e.g., cost reduction through multitenant storage, simplified incremental physical capacity increases, efficient capacity planning or procurement, and an easy path for a secondary disaster recovery site). This is reflected in the top drivers of hosted private cloud.

Security, privacy, and compliance continue to be top concerns. Specifically, data security was the No. 1 concern (30%) for hosted private cloud adopters and planned adopters, followed by data thefts or breaches (26%). This should come as no surprise given the very public cyberattacks on both government and corporate targets. “The Forrester Wave™: Hosted Private Cloud Solutions, Q4 2014” Forrester report has detailed information on each vendor's security certifications and compliance standards.

Concern for vendor lock-in is reflected in the adoption of OpenStack-based vendor solutions. Vendor lock-in is a persistent worry of hosted private cloud adopters — in Q3 2014, 16% of adopters and planned adopters considered it a concern, the root of which is the ability to switch providers. Portability and interoperability issues aren't new challenges or specific to cloud. Today, enterprises can avoid lock-in to some degree. However, standards like OASIS's TOSCA and open source projects like OpenStack provide enterprises the future hope of less lock-in and greater adherence to standards. This issue certainly hasn't been resolved. Looking at the Q3 2014 data, vendor preferences may reflect this concern for lock-in with three of the top four highest vendor adoption rates belonging to OpenStack-based solutions (IBM, HP, and Rackspace) (see Figure 3). However, we would be remiss not to highlight that all of the top vendors also represent long-term hosting providers with dedicated existing customer bases.
Figure 1 Hosted Private Cloud Global Adoption Holds Steady

Cloud adoption:

- Private: 31%
- Hosted private: 22%
- Public: 18%

32% identify hosted private as their current or planned primary cloud environment.

By country:

- **US**: 24% (N = 304)
- **Canada**: 14% (N = 35)
- **UK**: 22% (N = 68)
- **France**: 17% (N = 93)
- **Germany**: 25% (N = 87)

Adoption holds steady from 2013:

<table>
<thead>
<tr>
<th>Country</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td>Canada</td>
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<tr>
<td>UK</td>
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<td>France</td>
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<td>Germany</td>
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Base: North American and European technology decision-makers whose firms are likely to make servers, storage, or the data center a high/critical priority (1,000+ employees);

*575 North American and European hardware decision-makers who work with servers, storage, or the data center (1,000+ employees)

Note: adoption excludes “piloting”

Source: Forrester’s Business Technographics® Global Infrastructure Survey, 2014 and
*Forrester’s Forrsights Hardware Survey, Q3 2013

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Figure 2 Top Drivers And Top Concerns Of Hosted Private Cloud Adopters And Planners

“How important were the following in your firm’s decision to adopt hosted private cloud? What are your firm’s concerns, if any, with hosted private cloud?”

<table>
<thead>
<tr>
<th>Top drivers</th>
<th>Top concerns*</th>
</tr>
</thead>
<tbody>
<tr>
<td>81% Improved IT infrastructure manageability and flexibility</td>
<td>30% Security concerns regarding application/data protection</td>
</tr>
<tr>
<td>79% Lower total cost of ownership for servers</td>
<td>26% Privacy concerns regarding data breaches or theft</td>
</tr>
<tr>
<td>78% On-demand capacity and scalability</td>
<td>23% Meeting specific compliance requirements</td>
</tr>
<tr>
<td>78% Improved disaster recovery and business continuity</td>
<td>18% Software licensing issues</td>
</tr>
</tbody>
</table>

Base: 157, *313 North American and European technology decision-makers whose firms are likely to make servers, storage, or the data center a high/critical priority and are planning to or have implemented hosted private cloud deployment models (1,000+ employees)

Source: Forrester's Business Technographics® Global Infrastructure Survey, 2014
Figure 3 IBM, HP, And AT&T Lead The Hosted Private Cloud Market In NA And EU

3-1 Firms prefer IBM, HP, AT&T, and Rackspace when utilizing **multiple** vendor cloud solutions

“Which vendor(s) does your firm currently use/plan to use for their hosted private cloud platform?”
(multiple responses accepted)

- IBM: 36%
- HP: 20%
- AT&T: 15%
- Rackspace: 11%

*Source: Forrester Research, Inc. Unauthorized reproduction or distribution prohibited.*

3-2 Firms prefer IBM, HP, AT&T, and Rackspace for their **primary** hosted private cloud platform

“Which vendor products does your firm currently use/plan to use as their primary provider for their hosted private cloud platform?”
(only top 4 responses shown)

- IBM: 28%
- HP: 13%
- AT&T: 11%
- Rackspace: 8%

*Source: Forrester’s Business Technographics® Global Infrastructure Survey, 2014*

*Base: 313 North American and European technology decision-makers whose firms are likely to make servers, storage, or the data center a high/critical priority and are planning to or have implemented hosted private cloud deployment models (1,000+ employees)*
RECOMMENDATIONS

GUIDE YOUR HOSTED PRIVATE CLOUD STRATEGY WITH PLAYBOOKS AND DATA

Forrester offers a wealth of additional reports and data to assist the I&O professional on hosted private cloud strategy and development. For those prioritizing cloud strategy development in 2015, start off with Forrester’s cloud computing playbook, which is designed to guide your critical decisions with integrated reports, tools, and objective insight.12

From there, I&O professionals can leverage Forrester’s Business Technographics surveys to dig deeper into the adoption data. Every year, Forrester completes its hardware/infrastructure survey, which dedicates an entire section to private, hosted private, and public infrastructure-as-a-service (IaaS) cloud adoption. While this report profiles only the high-level results, infrastructure and operations executives can access more in-depth data insights from the Business Technographics service to better guide their private cloud strategies. Here are some of the questions that deeper Business Technographics data analysis can help you answer:

■ Is hosted private cloud the only deployment type in use? I&O professionals are no longer making a simple choice between public or private cloud, but rather optimizing an assortment of different cloud and non-cloud environments to deliver the best possible experience for their firm’s customers. This is the so-called hybrid cloud that is now popular terminology across the market. To explore which enterprises already leverage multiple cloud deployment types, look to our Business Technographics data.

■ Are top concerns fear or fact? Business Technographics asks both those who have already adopted cloud and those planning to adopt cloud about their top concerns. You can compare those concerns to see which ones persist as firms implement cloud and which prove to be unsubstantiated fears.

■ Is hosted private cloud used for a significant percentage of x86 instances? Digging further into how enterprises use hybrid cloud today and plan to use it within the next two years, our Business Technographics data also looks at the percentage of x86 instances existing in various deployment types, including hosted private cloud, public cloud, private cloud, and more traditional non-cloud environments.
SUPPLEMENTAL MATERIAL

Survey Methodology

For Forrester’s Business Technographics® Global Infrastructure Survey, 2014, Forrester conducted a mixed methodology phone and online survey fielded in June and July 2014 of 3,190 business and technology decision-makers located in Australia, Brazil, Canada, China, France, Germany, India, New Zealand, UK, and US from companies with two or more employees.

Forrester’s Forrsights Hardware Survey, Q3 2013, was fielded to 2,306 technology management executives and technology decision-makers located in Canada, France, Germany, the UK, and the US from SMB and enterprise companies with two or more employees. This survey is part of Forrester’s Forrsights for Business Technology and was fielded from June 2013 to August 2013. Research Now fielded this survey online on behalf of Forrester. Survey respondent incentives include points redeemable for gift certificates. We have provided exact sample sizes in this report on a question-by-question basis. Each calendar year, Forrester’s Business Technographics fields business-to-business technology studies in more than 17 countries spanning North America, Latin America, Europe, and developed and emerging Asia. For quality control, we carefully screen respondents according to job title and function.

Forrester’s Business Technographics provides demand-side insight into the priorities, investments, and customer journeys of business and technology decision-makers and the workforce across the globe. Forrester collects data insights from qualified respondents in 10 countries spanning the Americas, Europe, and Asia. Business Technographics uses only superior data sources and advanced data-cleaning techniques to ensure the highest data quality.

We have illustrated only a portion of the survey results in this document. To inquire about receiving full data results for an additional fee, please contact data@forrester.com or your Forrester account manager.

ENDNOTES

1 As reported by North American and European technology decision-makers who work with servers, storage, or the data center (1,000+ employees). Source: Forrester’s Forrsights Hardware Survey, Q3 2012 and Forrester’s Forrsights Hardware Survey, Q3 2013.

2 Due to the inconsistency in the market and the prevalence of cloudwashing in the market, Forrester has found that reported cloud adoption numbers can be misleading. As enterprises start to gain greater perspective to whether a solution is a true cloud offering or a more traditional hosting model, we see more clarity. Source: Forrester’s Business Technographics® Global Infrastructure Survey, 2014 and Forrester’s Forrsights Hardware Survey, Q3 2013.
3 An increasing number of enterprises prioritized investments in private clouds in 2013. In the following Forrester Wave, we evaluated the eight most significant hosted private cloud vendors currently in the market. See the “The Forrester Wave™: Hosted Private Cloud, Q1 2013” Forrester report.

4 Today, the National Institute of Standards and Technology (NIST) defines private cloud as: “cloud infrastructure provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units). It may be owned, managed, and operated by the organization, a third party, or some combination of them, and it may exist on- or off-premises.” Source: National Institute of Standards and Technology (http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf).

Hosted private cloud refers to a variation of this, where the solution lives off-premises in a hosted environment and assumes some level of dedication to a single organization. In our emerging market Forrester Wave, we identified the 16 most significant providers — AT&T, Blue Box, Canopy, CenturyLink, Computer Sciences Corp. (CSC), Datapipe, Dell, Fujitsu, HP, Joyent, Orange Business Services, Rackspace, Verizon, Virtustream, VMware, and VooServers — in the category and researched, analyzed, and scored them. For more details, please see the “The Forrester Wave™: Hosted Private Cloud Solutions, Q4 2014” Forrester report.


6 These were the same top drivers in 2013 as well. Source: Forrester’s Forrsights Hardware Survey, Q3 2013.

7 The following Forrester Wave identified 12 service providers that offered solutions for business continuity and disaster recovery. For more information, see the “The Forrester Wave™: Disaster-Recovery-As-A-Service Providers, Q1 2014” Forrester report.


9 In our 25-criteria evaluation, we identified the 16 most significant providers — AT&T, Blue Box, Canopy, CenturyLink, Computer Sciences Corp. (CSC), Datapipe, Dell, Fujitsu, HP, Joyent, Orange Business Services, Rackspace, Verizon, Virtustream, VMware, and VooServers — in the category and researched, analyzed, and scored them. The following report details our findings on how well each vendor fulfills enterprise customer requirements to help infrastructure and operations (I&O) pros select the right partner for their hosted private cloud solution. For more information, please see the “The Forrester Wave™: Hosted Private Cloud Solutions, Q4 2014” Forrester report.


11 More enterprises than ever are interested in utilizing cloud computing services, but vendor lock-in persists as a major concern of potential adopters. Standards development organizations (SDOs), research groups, customer councils, telecom/network groups, and government organizations are all working to establish cloud computing standards that will mitigate this concern. For more information on the state of cloud standards, please see the “State Of Cloud Platform Standards: Q1 2014” Forrester report.
Proponents of cloud use must compare cloud’s benefits against realistic cost expectations — both hard and soft costs. Cloud can indeed yield significant cost savings, but ascribing value to speed and agility is critical to the cloud business case. For more information, please see the “Justify Your Hybrid Cloud Future With A Solid Business Case” Forrester report.