Hyperconverged Infrastructure in the Modern Enterprise

Executive Summary

ActualTech Media

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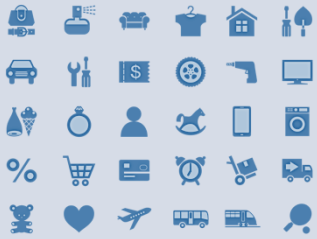
Hewlett Packard Enterprise

Respondent Overview

543 Respondents

22 Verticals



17 Countries

49 U.S. States

Executive Summary

Hyperconverged infrastructure – the melding together of servers and storage into a single appliance with streamlined management – is a technology growing in popularity even as people struggle to figure out exactly what it can do, what it can't do, and just how it impacts the IT organization.

In order to understand these items, ActualTech Media partnered with Hewlett Packard Enterprise and surveyed almost 550 information technology professionals. Respondents hailed from more than 40 different industries and represented companies of all sizes. People from across the spectrum – from CEOs to VPs of Infrastructure to IT Generalists – responded to our survey.

Our goal was multifaceted. We sought to learn about people's existing datacenter challenges, how they feel about emerging technologies, such as hyperconverged infrastructure and software defined storage, and then to discover perceptions around hyperconvergence, particularly as it pertains to two key use cases: virtual desktop infrastructure (VDI) and remote office/branch office (ROBO) deployments.

In order to gain an understanding for why people answered questions the way they did, we established a baseline understanding around people's existing challenges. To do that, we asked respondents to tell us their stories around how well their IT function truly serves users. There are many ways to measure IT agility and responsiveness, with one method being to see how well users can service their own needs without having to involve IT staff. Our survey data indicates that only 29% of survey respondents disagree with the statement "The IT environment in our company enables users to service their own needs without having to regularly engage directly with IT."

In other words, there is a long way to go toward establishing full automation, orchestration, agility, and flexibility in the IT function.

Hyperconverged infrastructure is about simplicity. As time goes on and as the data center becomes more complex, it is becoming increasingly difficult for IT pros to keep up with the changes. In fact, 45% of respondents said that they have difficulty maintaining staff breadth and depth of skills. Cost and simplicity are key drivers for hyperconverged infrastructure. We believe that these two data points are related, and you will learn much more about this intersection as you review the full report.

On the hypervisor front, while multi-hypervisor support is often lauded as a critical feature in hyperconverged infrastructure, our findings indicate that multi-hypervisor support is not a key driver for hyperconverged infrastructure. This is partially due to the fact that 64% of respondents run a single hypervisor. As long as the solution supports their chosen hypervisor, there is no need to support others.

When we asked respondents which technology—software defined storage or hyperconverged infrastructure—they were considering, we found that software defined storage and hyperconverged infrastructure are equally compelling to respondents, with each technology garnering just over 50% of respondent votes when they were asked which trends they would consider for adoption.

With that said, 33% of respondents have deployed hyperconverged infrastructure in some form while 46% are considering it. This bodes very well for vendors in the space as there will be ample opportunity for growth. Our survey also revealed that smaller companies are more likely to deploy hyperconverged infrastructure to replace their entire datacenter environment. Larger companies are the likeliest to adopt hyperconvergence as just a part of their datacenter strategy.

The question is this: why are people deploying hyperconverged infrastructure? Reducing cost is the key benefit that companies look for in a hyperconverged infrastructure adoption. Almost 60% of respondents identify this as their primary driver. 51% want easier deployment and 46% want it to be easier to scale the datacenter environment. These results align with the common wisdom that businesses are looking for datacenter environments that are less expensive to operate and that are more flexible.

Any new technology generally starts with a use case. VDI has been a natural fit for hyperconvergence for quite some time, but is recently enjoying a resurgence as hyperconverged infrastructure vendors focus on the VDI offerings. For VDI deployments, on a percentage basis, more people are having trouble on hyperconverged infrastructure than on traditional infrastructure. Given that VDI has been discussed as one of the primary use cases around hyperconverged, these results were unexpected. It seems to indicate that hyperconverged infrastructure adopters are not realizing as much success with VDI as those that are building VDI environments on traditional hardware and software. Given the fact that many hyperconverged platforms started life as VDI solutions, this is an incredibly surprising discovery. However, there is an important caveat here. We do not believe that these results reflect on hyperconverged infrastructure, but are rather the result of other challenges, including the need to support graphics intensive applications to ensure end user satisfaction. VDI remains a complex use case with a lot of moving parts.

ROBO is more recently coming into the market as a compelling use case for hyperconvergence because of the fact that hyperconverged infrastructure can solve many of the most pressing challenges—capacity, performance, scalability, and supportability—inherent in ROBO scenarios. Even as hyperconverged infrastructure rises in popularity, traditional ROBO deployment methods remain the choice for the vast majority of respondents (44%). However, 26% of respondents say that they are having trouble protecting data at ROBO sites. This is a critical problem and is serious. Data protection can make or break a business. We see opportunity for hyperconverged solutions that include data protection capabilities to fill this gap.

The full reports provide you with far more detail around people's perceptions regarding hyperconverged infrastructure and includes their overall IT challenges, sentiment around the technology and an in-depth look at key uses cases that are supported by the technology.

About

About HPE

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About ActualTech Media

ActualTech Media delivers authoritative content services and assets for top IT companies across the globe. Leading IT industry influencers Scott D. Lowe, David M. Davis and partners develop trusted, 3rd-party content designed to educate, convince and convert IT buyers. ActualTech Media helps its clients reaching the right technical and business audiences with content that resonates and leads to results.

About The Author

Scott Lowe is a partner in and co-founder of ActualTech Media. Scott has been in the IT field for close to twenty years and spent ten of those years in filling the CIO role for various organizations. Scott has written thousands of articles and blog postings over the years and regularly creates compelling new content for clients.