

Tony Palmer:

What was different about this, there were some pretty big claims that were brought into this project that we were asked to validate specifically. It had to do with running Nutanix clusters on AWS and things like improving IT agility and simplifying IT operations.

Jason Lopez:

Tony Palmer is a senior engineer at ESG, where he does validation and analysis of IT products. On this edition of the Tech Barometer podcast, a chat with Tony Palmer with the editor of The Forecast Ken Kaplan. What do you think it takes to do testing and analysis? When we recorded this conversation with Tony, Ken wanted to do something a little different.

Ken Kaplan:

We'll get into some of the details in the highlights, but I just kind of want to get into this almost backwards, because I want to make sure that we don't get stuck in the numbers.

Jason Lopez:

Instead of focusing on the metrics, we wanted to tease out the fact that what Palmer is testing - - in this case, ESG did a test of Nutanix Clusters on AWS – he's testing what's at the heart of one of the biggest things IT is grappling with, and that is taking your data center, your private cloud if you will, and running it in a public cloud. Let's start with Tony Palmer talking about what stood out to him the most.

Tony Palmer:

You could in your data center and not be able to tell the difference running your workloads. And not just from a performance point of view, but again, getting back to all those other aspects, right? It's exactly the same tooling that you're from familiar with. It's exactly the same tools and methodologies and so it keeps your life simpler and that's really important. It's really important when you're planning and you're dealing with security and you're dealing with everything that goes with running a successful IT operation.

Ken Kaplan:

I wonder if you had some surprises that are kind of sticking with you, some afterthoughts.

Tony Palmer:

Well, one of the things that we did with this project and I love when we get a chance to do that was actually to explore some actual customer experiences. And the one that stuck out to me was a comparison by one organization. The claim was that it was like a 96 percent reduction in time to deployment on the cloud. But we actually took a look at some of the numbers that they had recorded and it went from an average of about 38 person hours -- so nearly a full work week to deploy a cluster -- to about an hour. You do the math, that's about 96, 97 percent. That's really spectacular. And it's not just the racking and stacking, but it's the automation that's built in. That was one of the eye opening data points that we uncovered. It's one thing to actually sit down in a demo system and practice a deployment and then say, okay, well let me

compare this to what I think it would be in the real world based on my experience and to talk to a customer that's actually done it and kept records and was really very thorough and critical of the process while they were doing it.

Ken Kaplan:

So that's where you came in. They have been testing it out for a while. It sounds like some customers from Nutanix have been trying it out and they were reporting back to Nutanix their findings and you were brought in to do what.

Tony Palmer:

So we were brought in to perform what we call a technical validation, which has elements of both testing to see whether a product or solution works as advertised, but also tying it back to real business value to kind of figure out why does this matter? Why should I care about this at all? And when it comes down to it that why this matters piece kept coming back to efficiency and agility. And we did some very high level economic evaluations as well. Just looking at administrative hours over the course of a year for a business that's deploying hundreds of applications. Just the automation pieces and the efficiencies that Nutanix brings to the table really did again, just kind of shrink that time to deployment and that time to value so that a business that needs to deploy a new application gets to it and gets it into production faster. And that's really what the bottom line is. I need my product out there so that my customers can use them.

Ken Kaplan:

And, and now, I mean, there's the big picture going on? And you had mentioned that you are a former CIO, so what's happening now out in the world, that's making your findings useful if somebody reads it.

Tony Palmer:

So ESG also does a lot of demand side market research. And in our last technology spending attention survey, almost 9 in 10 organizations said they were in the middle of digital transformation initiatives. 80 percent said they have applications and workloads that are potential or strong candidates to move to the public cloud over the next five years or so. And then about half of those are actually employing a cloud first policy. One of the biggest challenges they reported was all the multiple tools that they had to use to manage the infrastructure and the applications and being able to consolidate all those and to use, as I said before, familiar tools, techniques, methodologies, using tools they're already used to in their data center to manage their hybrid cloud solution. That's a huge win. Huge.

Ken Kaplan:

You know, you hear digital transformation. You mentioned that it's been going on. I wonder now, as we talk about wanting to have the same efficiencies or performance, like what we're used to having in house, having it run in the cloud, is this some kind of new challenge that people are facing?

Tony Palmer:

I would say yes, because it's different. You have to manage your network differently. You have to deal with security differently. You have to deal with quality of service and with noisy neighbors differently. You're no longer in control of your hardware. You're leasing that hardware by the minute from one of the hyperscalers. So being able to have that control and have that confidence that, yes, I'm going to be able to expect the same thing out of my cluster no matter where it's running. That also gives me as an organization the ability to do seamless DR without having to maintain a second data center, because you know what, I've got my full production environment running. I can have it running here in the cloud and it doesn't matter.

Ken Kaplan:

Let's talk about some of the top findings, the things that people, when they come to the report, what they'll find.

Tony Palmer:

Like I said, we've been watching Nutanix streamline how they manage infrastructure and applications for years. Automation has become a necessity from a nice to have. The need to reduce cost, so increasing productivity is an evergreen theme that we see popping up in our surveys. And essentially what we validated was that there's significant cost in productivity savings for any size organization through orchestration and automation of IT, resources and operational tasks. So some of those included up to 97 percent faster time to day one infrastructure deployment in the cloud rather than on premises, up to 96 percent reduction in IT administrator costs for, uh, deployments with clusters on AWS when it was compared to traditional infrastructure in a data center. Transactional storage performance was equivalent to on as cluster node for end of, workloads. In fact, it exceeded the performance of certain commonly deployed clusters that people might have in their data centers today. So if you're a generation or two back, you can actually leapfrog and get better performance in the cloud. Finally, we looked at operations costs and we saw that you could lower IT operations costs up to 94 percent over time, based on time to deploy, management of updates, monitoring, reporting, troubleshooting issues that happen every year. All of that came to about a 94 percent reduction in those costs that it takes to run the organization.

Ken Kaplan:

I mean, those are huge numbers. I mean, anything like 10 percent is big, you've said several times 90 something percent. So let's get in that realm of what does that mean for people who are not enjoying that 94 percent?

Tony Palmer:

Well, what it means? So if I task one admin with deploying a cluster and getting it ready for an app, it's going to take that person about a week. You've got a team working on it. Maybe the real time that it takes is be only a day or two, but it's a week of person hours. It's a lot of manual tasks. If you can have one person working on that for about an hour and have your system ready to deploy applications, that's 97 percent. And that's where we get that from. It's

pretty simple. And that's based on the data that we reviewed and audited from actual customers in the field. IT operations costs were calculated in a very, very similar way, was a matter of doing all these deployments and upgrades and all the maintenance and all the managing and all the things that you'd need to do with all those different tools, calculating out all those hours and then looking at what it would really take in the real world to do it with clusters on AWS, which is clusters globally in a hybrid cloud. Yeah. That came out to about 20 to one as far as just the number of administrative hours it would take. And so that's where we got into that 94 percent. Each of the numbers that we reported here were based on either hands on testing -- that's the performance data that we got out of running clusters on AWS -- or our calculations based on discussions with customers running this in the field. So we tried to be as conservative as we could and only use data that we got directly from those customers. And so that's why we can stand behind those numbers.

Jason Lopez:

Tony Palmer is a senior engineer at ESG, where he does validation and analysis of IT products. Ken Kaplan is the Editor-in Chief of The Forecast. If you want more detail about the validation tests Tony ran, you can find them in The Forecast article, "Evaluating Clusters for Hybrid Multicloud Environments." And there's a podcast focusing on Tony and some of his thoughts about cloud and where he sees enterprise computing today. That's on The Forecast podcast page. This is the Tech Barometer Podcast, I'm Jason Lopez, thanks for listening.