WHY INFRASTRUCTURE-AS-A-SERVICE IS IDEAL FOR YOUR BUSINESS?

OUTSCALE

Introduction

Few technological developments have had quite so far-reaching an impact as cloud computing. One need only look at the cloud's influence in enterprise to see evidence of that. Though adoption was understandably slow at first, today's cloud has a place in virtually every organization, large or small.

And really, why shouldn't it? Utilized properly, cloud computing has the potential to completely change how you do business. Of course, how it does so depends entirely on what cloud model you opt to use.

Today, we're going to discuss infrastructure-as-a-service;the provisioning of a cloud platform to replace or replicated real-world hardware. Let's dive right in. You might be surprised how much it can do.

Infrastructure-As-A-Service Is The Perfect Load Testing Platform

No developer wants to put their heart and soul into an application, only to have a successful launch bring everything crashing to a halt. No enterprise wants to deploy a mission-critical software platform, only to see it crumple under the strain of the workplace. Avoidance of both situations requires extensive load testing - but unfortunately, such a task is traditionally impossible.

At best, most applications are measured against a small portion of real-world load; tested is in a simulated environment that doesn't accurately mirror real situations. The blame doesn't lie with developers in this case, mind you - it's all too easy to overlook a scenario that will trigger an unoptimized code path, and as such is nigh impossible to code accurate, comprehensive tests. At the same time, this is no excuse to ignore load testing entirely.

This is particularly true in the era of the cloud. Rather than being forced to expend substantial capital and resources on more servers and bandwidth, companies can simply tap into a cloud platform. Ephemeral cloud infrastructure can be used in lieu of concrete physical servers; utilized when load testing is required then shut down completely when testing is complete.

In other words, businesses no longer need to keep redundant infrastructure on hand for testing purposes.

Because of this, it's neither overly complex nor financially onerous for companies to replicate a significant segment of their production environment for load testing - especially if they are deploying their applications in the cloud. Code changes can be pushed to testing or staging servers, then load tested using temporary networks built in the same environment.

Thanks to the efficiency of cloud testing, it makes more financial sense to comprehensively test applications before release; the cost of a production failure under heavy load is now much more expensive than the testing process. Of course, enhanced load testing is only one of the ways that cloud infrastructure can improve your business. As it turns out, cloud infrastructure in general is ideal for an organization of any size - no matter what they require that infrastructure for.

Infrastructure-As-A-Service Fits Businesses Of Every Size

One of the most common notions about infrastructure-as-a-service is that it is somehow married to the size of one's organization. It is, laymen say, either for startups that require networks and servers without capital investment or for large enterprises that require massive, scalable, redundant, and programmable deployments. To hear them say it, there exists no middle ground - all other businesses should simply turn to PaaS.

This is a gross misconception.

Small and mid-sized businesses may not have large infrastructure requirements, but that doesn't mean they can't benefit from an IaaS deployment. On the contrary, one could argue that businesses between the startup and enteprise stage actually stand to gain the most from IaaS. Ask yourself: what systems do you currently use to run your back-office setup?

Where are the servers responsible for payroll processing, customer databases, backups, and other mission-critical software?

If you're like many businesses, you've probably got some dusty old server sitting in a data closet in one of your offices. Perhaps it even works, for the most part. And at least it's relatively inexpensive, right?

Wrong. How inexpensive would you say the datacenter-in-a-closet model really is if it were responsible for data loss or productivity loss? How inexpensive is it to bring in an outsourced technician and pay them for simple maintenance?

IaaS deployments suffer from none of these shortcomings. For one, they can be managed remotely - if your business employs an IT contractor, you needn't bring them in for the majority of maintenance and configuration tasks. Not only that, they're both redundant and easily backed-up - if a data closet fails, you could be dealing with weeks of downtime as you activate your offsite backups or restore lost data.

If an IaaS server fails(something which is extremely unlikely), you can simply spin up another, and restore your data in a matter of hours.

Finally, there's the matter of scale. Although scalability on the level enabld by cloud platforms likely isn't something your organization's concerned with, the capacity to quickly and easily deploy additional servers is an advantage you cannot ignore. After all, who doesn't need a bit of extra computing power from time to time?

Who doesn't need staging environments, faster payroll processing, or extra bandwidth during periods of heavy load?

With its easy scaling, flexible payment model, remote accessibility and full redudancy, cloud infrastructure is a powerful tool for any organization. It's not, as the dominant narrative would have you believe, just for Silicon Valley startups and enterprise giants.

Conclusion

By deploying cloud infrastructure within your organization, you stand to gain a great deal. You equip your developers with the capacity to quickly and easily test application load. You equip your administrators with the ability to manage your computing backend from their desks.

And you equip your business with the agility to readily scale to meet any challenge, great or small.