WHY INFRASTRUCTURE AS A SERVICE IS A DREAM COME TRUE FOR DEVOPS?

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Introduction

Where DevOps is concerned, business agility is basically the Holy Grail. The faster your development team works - the faster they can build, test, and deploy their applications - the better. And you can bet the efficiency gains felt by your development team will be felt throughout your organization.

As you're probably aware, the best way to make your development team more efficient and effective is by tackling their pain points. And the best way to do that? By providing them with better infrastructure.

Today, we're going to take a look at how Infrastructure-As-A-Service makes life better for your IT department - and for everyone else in your business by association.

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

Few things are more unpleasant for a developer than to see an app collapse under its own weight after launch. The only way to avoid this situation is through extensive load testing. Unfortunately, such a thing is traditionally a luxury most businesses cannot afford - instead, developers are forced to test their apps in simulated environments that are by no means an accurate mirror of real-world situations.

It isn't the fault of the developers here, mind you. Writing a software test that accurately simulates a real-world environment is extremely difficult. It's all too easy to miss a scenario that will cause a crash - and nearly impossible to be one hundred percent comprehensive.

Infrastructure-as-a-service changes this. Thanks to the cloud, companies need no longer compromise on load testing. Particularly for a business that's running its applications in the cloud, it's incredibly simple to replicate a significant segment of their production environment to be used for testing - and it's no longer financially onerous to spin up servers to carry out the required measurements.

This is because infrastructure-as-a-service provides on-demand hardware. This means that load-testing servers can be ephemeral. Code changes can be pushed to testing or staging servers, and load-tested using temporary networks built in the same environment. Once the testing is complete, these servers can be spun down; the company only pays for the resources they use.

In other words, with IaaS load testing, the cost of a production failure is significantly more expensive than the cost of preventative testing.

Enhanced load testing is only one of the ways that cloud computing's making things easier for both developers and the organizations they serve - and it has uses far beyond testing and deployment.

Infrastructure-As-A-Service Is Ideal For Small Businesses

AAs any beleaguered small business IT professional will tell you, smaller organizations tend to take a very lax approach to critical infrastructure. I doubt there's a single small business out there that doesn't have at least a few PCs stuffed in a closet somewhere.
These computers, responsible for running back-office software such as payroll processing, customer databases, and business-specific software, are ticking time bombs.

The datacenter-in-a-closet model is barely functional and inherently risky. Infrastructure-as-a-service offers an ideal alternative, one which removes most of the risks and offers both greater ease of use and lower cost of ownership. When measured against the alternative - expensive server management, data loss due to hardware failure, and little room for expansion - it's almost a no-brainer.

It also makes things significantly easier for developers, particularly those in organizations that don't have an IT expert on-hand. Since IaaS can be managed entirely remotely, a contractor need not set foot in the business's offices for maintenance and configuration. Not only does this save money, it also saves time - there's no need for a development team to wait around while a server is reconfigured.

IaaS also provides greatly-enhanced data integrity. If a small business suffers an incident that wipes out their data closet, they're looking at several weeks without that data - even with adequate offsite backups. With an IaaS deployment, the chance of anything catastrophic is vanishingly small, and even in the event of hardware failure, it takes only a few hours to spin up replacements.

Finally, there's the matter of scalability. Most small businesses may not be concerned with it, but the ability to quickly deploy additional servers is nevertheless an advantage that cannot be ignored. After all, what organization doesn't need a bit of extra computing power from time to time?

As you've seen, infrastructure-as-a-service presents a number of very real, very significant benefits from a DevOps perspective. And these are benefits that can be enjoyed by anyone, not just Silicon Valley start-ups and Internet giants.

A real billing-on-demand for the perfect dream

Existing billing process for corporate Cloud services are generally billed by hours, which means that companies usually end up paying more than what they use and as a result, lose thousands of dollars every year. With a per-second billing, however, customers are completely in control of how much they're paying, because they will only pay for the services they actually use.

"Let's take the example of a virtual machine working for 11 minutes and 42 seconds; Outscale will bill the customer for 702 seconds of usage, whereas Amazon Web Services bills 1 hour and Microsoft bills 12 minutes." Laurent Seror, CEO Outscale.

Up to now, Cloud computing service providers have typically charged their customers by hours (i.e. AWS), or minutes (i.e. Microsoft Azure). Here are several key factors that we should keep in mind:

- The type of functions (applications) required by the customer
- Processing capacity and computing power (memory, vCore...)
- The number of users
- Network infrastructure (public IP addresses, VPN, and IP traffic)
- The storage solutions provided (volume of data storage and outgoing data transfer)
- Service levels and security

This transformation in billing for Cloud computing services is inevitable. 21st century consumers see computing as a commodity, just like telephones or electricity. For them, it has become unthinkable to pay for something they do not use.

Any Cloud computing services provider that aims for customers satisfaction and royalty needs to be in line with the pragmatic approach of modern users. Fair pricing, transparency, and flexibility must be the keywords for any provider trying to serve the Cloud computing needs of its customers.

Conclusion

For DevOps, business agility is hands-down the most important concern. Anything that makes your organization more efficient, effective, and productive is absolutely vital. Cloud computing - IaaS in particular - does just that. And Outscale allows you to use a Cloud that is smarter, more efficient and, easier to deploy.