FIVE REASONS YOU SHOULD DEFINE EVERYTHING AS SOFTWARE

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One of the great things about adopting multi-cloud platforms today is there's a common thread that joins them together. That thread is a key to managing them at scale: software defines everything.

What that means is you define infrastructure, networking rules, resource allocation, behaviour, and components as software. This of course also requires you accept the truth that – as Marc Andreessen once famously said – 'software is eating the world', and demands a different way of thinking about processes, tools, and the people involved in those activities.

Here are five reasons it's worth making the effort:

1. Collaboration and responsibility

Describe environments as code and you make sharing, reviewing and change visible. Documentation is no longer an afterthought, and you always know what you have running – and that things won't grind to a halt should one person win the lottery and not show up on Monday morning.

In a multi-cloud world of everything as software, changes are tracked, managed and governed. You see who changed something last – and why – so you can trace events. And there's the potential for activities to become a code review activity – and be automated with a button press.

2. Consistency

Describing infrastructure as code means you can create a set of standards that applies regardless of the cloud platform they're being deployed into. Change management systems can then be consistent between teams and projects.

Once you've built this knowledge, it's possible to save costs by identifying inefficiencies and applying software to solve them. Human steps can be removed, making things predictable and freeing up time for other tasks.

The goal throughout is to ensure you have a high confidence changes are going to be as predicted. Without consistent systems, you'll just be hoping for the best.

3. Reduced friction

Software development over the past 15 years has embraced the idea of continuous delivery. Changes as they are made to source code flow through the pipeline, being tested and validated all the way to a production environment.

This makes for faster development and iteration, and it means making changes becomes an automated process that needs less human intervention. It also means you have extremely high confidence when that software reaches the end of the pipeline, it'll do what you expect it to.

4. You can fail faster

The 'shift left' concept in software development moves problems leftwards (towards development) and away from the right (production). In other words, find problems earlier and they cost less time and money to fix.

To do this, you need consistency across the timeline. In staging environments, you can then have confidence things will be fixed before you hit production. There's huge value in this for security, compliance and governance – and it's a great way to frame the ROI discussion. After all, if you have unexpected downtime or a GDPR-related security breach, you could stand to lose millions. Shift left, invest a little, and you'll save a lot more.

5. It unlocks innovation

Defining everything as software highlights proper business risk decision-making. You mitigate risks and are ready for them earlier. You can move faster with less risk and more confidence. This stops people being afraid of something failing, meaning smart people don't limit themselves to only doing really safe things. It opens up space for innovation.

As Rackspace Specialist Architect Iskandar Najmuddin says: "The more science you put into systems, the better results can be. With today's technology, you shouldn't make decisions on gut feel. That's where businesses will succeed or fail."

He believes adopting software engineering principles means teams "can focus less on firefighting and troubleshooting and more on experimenting, bringing new features, and innovation". And as new cloud platforms evolve and new systems are introduced, you can be sure there will always be a way to manage them all using software.

You can learn more by watching our on-demand webinar: Innovate and maintain governance in a multi-cloud world.

Or contact us using the following:

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ABOUT RACKSPACE

Rackspace is modernising IT in today's multi-cloud world. By delivering IT as a service, we help customers of all industries, sizes and locations, across private and public sectors, realise the power of digital transformation without the complexity and expense of managing it on their own. Our comprehensive portfolio of managed services across applications, data, security and infrastructure on the world's leading public and private cloud platforms enables us to provide unbiased expertise. Rackspace has been honoured within the top 100 Great Places to Work for the past 12 years.

Learn more at www.rackspace.com or call us on **0208 734 2600**.

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