Data Centre and Virtualization

Moving Applications to the Cloud – Lessons Learned from Successful DRaaS Deployments

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Biography

Scott Sparvero is Chief Executive Officer and Co-Founder of iland (https://www.iland.com). In 1994, Scott and business partner Brian Ussher took a big risk, leaving behind their already successful careers to satisfy their entrepreneurial ambitions with the founding of iland. Since then, Scott and Brian have successfully navigated iland through many changes in both the technology and business landscape. Initially founded to develop websites, Scott and Brian have continuously re-tooled and re-architected the company to stay ahead of ever-changing industry requirements. Today, iland is an award-winning cloud infrastructure provider with ten datacentres across the globe and the industry's top disaster recovery solutions.

Prior to iland, Scott pursued a medical degree and interned as a Research Technician at the Dana Farber Cancer Institute in Boston where he authored two research papers published in the Journal of Molecular Biology and in Regulatory Molecular Biology.

Scott holds a Bachelor of Science degree in Psychology from Boston University.

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Abstract

Often the first step for organizations on the path to cloud adoption is Disaster Recovery-as-a-Service (DRaaS) as it offers a flexible, cost-effective way to deliver essential DR capability without all the CAPEX costs and pains of managing a physical DR site. In this article the author discusses a few lessons organizations can learn from DRaaS before taking the full cloud plunge with the rest of their applications.
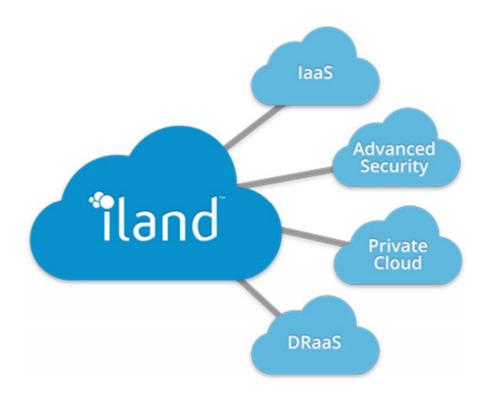
Introduction

Disaster Recovery-as-a-Service (DRaaS) is often the first step organizations take on the path to cloud adoption. It is a flexible, cost-effective way to deliver essential DR capability without all the CAPEX costs and pains of managing a physical DR site. With DRaaS, businesses quickly realize the benefits of cloud services, so it's no surprise that many will consider a more permanent move to the cloud through Infrastructure as a Service (IaaS).

But, before you go from toe-in-the-water to taking the full cloud plunge for the rest of your applications, here are a few lessons you can learn from DRaaS.

Lesson One: Determine what you need, before it's too late

Setting up DRaaS focuses the mind on two questions. "What do I need to run my business?" and "how much power and capacity do my applications need?" On a day-to-day basis, we don't ask these questions. Instead, we add incremental compute power and capacity when needed.

But before moving production applications to the cloud – whether for DRaaS or IaaS, you must calculate your existing resource demands. This requires an assessment or environment analysis tool, such as the iland Catalyst tool, to help predict your current and future needs over several months. In many cases, these tools enable you to test your environment before deploying.

This assessment and testing in a DRaaS model is duplicated easily in an IaaS environment. The beauty of a cloud assessment is its ability to uncover your deficiencies before making the migration in a safe, controlled environment, long before a crisis occurs.

Lesson Two: DRaaS is not just for disasters

Once your DRaaS environment is in place, it is there when you need it with an isolated, production-ready copy of your environment in the event of unplanned downtime or data loss. DraaS also provides a sandbox where you can test security implementations, new hardware and software upgrades and new applications before you unleash them to a production environment. The result is, you can run doomsday scenarios to predict outcomes from events that can produce infrastructure outages, or simply gain reassurance that an upgrade or system change won't produce unforeseen consequences.

Lesson Three: Try before you buy – cost, performance, resilience

After deploying cloud-based DR, you can begin recording real-world performance and capacity metrics that will help give you an idea of what it will take to move the rest of your infrastructure to the cloud. You can predict how your environment will perform in the cloud, what it will cost, and identify efficiencies and potential risks. Your DRaaS experience offers insights and analysis of performance and costs of doing business in the cloud, which you can use to justify additional cloud strategies.

You can also take this opportunity to test the resiliency and connectivity of your future cloud infrastructure. For example, if your DR site is in another part of the country that produces a latency problem – you will know that your infrastructure needs to be hosted in a closer data centre.

Lesson Four: Eliminate the "fear" of cloud migration with DR as a stepping-stone

Starting a cloud migration from scratch can be daunting. It is a lot of work to evaluate and plan around your workloads, applications, network and security and compliance at once. But, if you start with a cloud-based DR, you have time to work out those critical interdependencies incrementally. As you explore what you are planning to recover and how you will orchestrate the process, you can ease into conducting business in the cloud and become familiar with cloud management tools.

You will also learn how to work with data centres and your cloud service provider. Issues such as data sovereignty and security standards need to be dealt with on a timely basis. Working with your provider before you deploy, in terms of management and establishing SLAs, will accelerate your time to deployment with other cloud services.

These testing and management experience with DRaaS will go a long way to building confidence in the cloud, and with working with your cloud service provider. It will also give you the flexibility to deploy mission-critical applications at the best time for your business. For example, comfort and familiarity with the provider will enable you to plan ahead for a cloud migration during an optimal timeframe, such as when your on-premise hardware and licenses are about to expire.

Challenges

Of course, there are challenges when adopting any new operational and financial strategy, including cloud services. Time, in particular, is always a limited resource. But, as disaster recovery is pretty much non-negotiable, at least you can kill two birds with one stone if you leverage your work with DRaaS to expedite your move to IaaS.

Security concerns can be another impediment as you weigh the potential risks of entrusting sensitive data that has previously been retained on-premises and moving it to the cloud. Seek reassurance from your CSP over standards, certifications and the level of consultancy they can offer to ensure you have the right security and compliance in place to make the move painless and risk-free.

Ultimately, moving to the cloud allows you to refocus your IT initiatives to deliver value, rather than merely keeping the lights on. It also helps reduce costs by diverting resources away from hardware maintenance and support. By starting with DRaaS and learning these key lessons, you can lay the groundwork for a future in the cloud with an investment that pays long-term dividends.