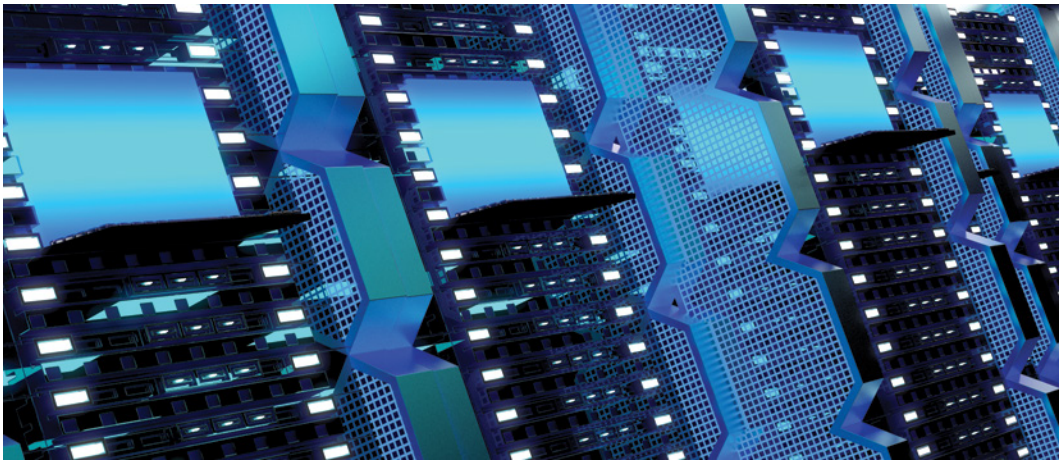
CLOUDPHYSICS

DATA-DRIVEN INSIGHTS FOR SMARTER IT

# ZettaGrid Relies on CloudPhysics Data Center Analytics to Scale their Business while Maintaining Service Quality *and* Profitability



## Key Results

- Stability of dynamic cloud platform through easy and accurate infrastructure planning
- Proactive avoidance of operational disruption through elimination of hidden hazards
- Increased customer service levels through rapid performance troubleshooting

*"As a leading Australian IaaS, ZettaGrid delivers enterprise-grade services our customers rely on to run their businesses. In turn, we rely on CloudPhysics to help protect us – and our customers – from operational issues that can disrupt operations."*

— Anthony Spiteri
Lead Architect, ZettaGrid

zettagrid

Zetta is a leading Australian technology services group providing ICT services, cloud computing, communications and other services. ZettaGrid is the company's award-winning IT infrastructure-as a service (IaaS) provider for businesses, providing data center virtualization and cloud services. One of the first VMware vCloud Air Hybrid Cloud Providers in the world, ZettaGrid is now the biggest vCloud Air Network Provider in Australia, operating more than 11 data center facilities, with Compute Resources hosted out of three Availability Zones in Sydney, Melbourne and Perth.

## Driving rapid growth while ensuring service levels

In 2010, ZettaGrid launched its flagship Virtual Data Centre offering, designed to support companies developing and implementing an enterprise cloud strategy, whether private, public or hybrid. Since then, the company has grown rapidly and today supports more than 3500 virtual machines (VMs), with hundreds of customers relying on ZettaGrid for a secure, scalable infrastructure as a service.

"The key to the success of our business is that our platform is rock solid, extremely stable. Product quality lies at the heart of the value we provide to customers and why they expect excellent performance and uninterrupted service levels from us," said Anthony Spiteri, ZettaGrid's lead architect responsible for the technical and strategic design of the platform.

Maintaining service quality can be challenging in the face of rapid growth. ZettaGrid must scale its platform – add the compute, storage and other resources needed to support new customers and their virtual workloads – while at the same time satisfying the cost factors needed to drive profitability. Effective infrastructure planning, particularly capacity planning, is crucial.

"Platform stability and great service levels are a function of having enough resources, but effective infrastructure planning will support the performance and scalability needs of our growing business without breaking the bank. CloudPhysics data center analytics are integral to achieving this. Simply put, I can't do my job without CloudPhysics' assistance," says Spiteri.

Spiteri uses CloudPhysics for week-to-week capacity and data center metrics analysis, which provides critical insights for ongoing infrastructure planning. Using CloudPhysics' pre-built analytics and building customized reports with Card Builder, he can further manipulate data for useful information for his own planning purposes, and also for reporting up the chain of command.

*"The data-driven insights are very accessible and presented in a way that is very consumable."*

"One of the major benefits and biggest selling points to my management team was the ease of getting the insights – for reporting alone, it saves me at least a half day each week," says Spiteri. "Our general manager even logs into the system and loves to look at the numbers – not the nuts and bolts operational data, but the overview and summary insights CloudPhysics also provides."

## Simplicity and insights solve performance & efficiency challenges

The simplicity of CloudPhysics made it valuable to ZettaGrid from the very start, particularly the ease of installation.

"The simplicity of the install was one of the key drivers for me," says Spiteri. "Deploying the Observer took just 10 minutes, and having it reporting back on our environment straight away was very powerful and helped us solve customer problems early on."

As ZettaGrid has scaled to support its growing business, shared storage has become a source of performance issues. ZettaGrid uses CloudPhysics' Datastore Contention and VM I/O Contention analytics almost daily to troubleshoot, quickly and accurately.

"We can look at the patterns of each VM, check out the IOPs, latency and throughput, and identify specific VMs that are causing problems – the culprits – and what other VMs they're affecting. CloudPhysics represents everything visually, which is key because it makes it easy to understand what's really going on and get to rapid resolution," he says.

For driving greater capacity efficiency, Spiteri has shifted from using PowerShell to CloudPhysics, which he now considers his trusted "go-to" tool for pinpointing wasted space.

## CloudPhysics at ZettaGrid: Key Use Cases

**Infrastructure Planning**
CloudPhysics accelerates your planning cycles, whether for on-prem infrastructure, a move to the hybrid cloud, or evaluating the value of caching solutions.

**Storage Space Management**
CloudPhysics combines operational data with analytics for intelligent capacity management, eliminating wasted space and saving money.

**Performance Troubleshooting**
CloudPhysics pinpoints storage-induced performance issues, identifying culprits and victims for fast and easy remediation.

**Health Checks**
CloudPhysics simplifies health checks, exposing hidden operational hazards and reducing the risk of downtime.

## Protecting customers from operational hazards

Hidden operational hazards in a customer's environment can not only hurt customers, but also have the potential to endanger the health of ZettaGrid's platform as a whole. Spiteri takes advantage of CloudPhysics' Card Builder to proactively ensure the safety of everyone's environment. For example, in February of 2014 there was a situation where the combination of E1000 NICs with Windows 2012 in a VMware environment created a purple screen of death for the customer's VM, or worse, a pink screen for a ZettaGrid host. Spiteri used Card Builder to identify where the combination of Windows 2012 and E1000 NICs existed on their platform.

"With Card Builder's simple drag and drop action, we were able to quickly create a report and give it to our service desk, who in turn contacted customers to advise them to replace the E1000 NICs with VMX NET3 NIC cards," says Spiteri. "Conservatively, this hazard affected 10% of our customers, so it was significant. CloudPhysics allowed us to avert a potential disaster."

Several weeks after the incident, Spiteri re-ran the report and was able to see that customers had (or had not) taken action. He was able to work with affected customers to rectify the situation. Bottom line, there was not a single customer complaint and the problem was solved without any disruption to customers or ZettaGrid's business.

## CloudPhysics as "Trusted Advisor"

CloudPhysics has become a big part of ZettaGrid's success formula, and Spiteri considers it a trusted advisor for the company.

"Before we make decisions, we see what CloudPhysics has to say about it," says Spiteri. "We rely on CloudPhysics, not just for the analytics it provides – which are invaluable – but also how it provides them. With other systems, you have to work really hard to get useful information. With CloudPhysics, the data-driven insights are very accessible and presented in a way that is very consumable."

## About CloudPhysics

CloudPhysics provides data-driven insights for smarter IT, giving IT teams more power than ever before to understand, troubleshoot and optimize their virtualized data centers and drive better operational decision making. The company, based in Santa Clara, Calif., serves thousands of users worldwide and is backed by Mayfield, Kleiner Perkins Caufield & Byers, and Jafco Ventures. http://www.cloudphysics.com.

*"Whether we're troubleshooting performance, tackling capacity problems, or addressing myriad other blips in our ever-evolving virtual infrastructure, CloudPhysics provides powerful analytics that cut through the complexity and pinpoint potential trouble spots, enabling us to proactively resolve them."*

— Anthony Spiteri