



## 2degrees gets efficient cloud backups with Cohesity



### INDUSTRY

Telecommunications

### USE CASE

Backup and Recovery, Long-Term Retention and Archival, File and Object

### COHESITY SOLUTIONS

DataProtect, CloudArchive, SmartFiles

### SOLUTION PARTNERS

AWS, Dell EMC, IBM, VMware

### CHANNEL PARTNER

BEarena

### Key Benefits

- Time for data backup processes reduced by over 80 percent
- Multiple use cases solved including cloud-native archival, NFS storage, and data security and risk reduction
- OpEx savings through efficient deduplication and compression of backup data stored in the public cloud

Two Degrees Mobile Limited (2degrees) has over 23 years' experience connecting NZ businesses, government organisations, and consumers with telecommunications and IT services. It offers leading solutions across data centre, cloud, networking, security, and web.

### Challenge

2degrees owns and runs three data centres that house its core infrastructure as well as customer equipment hosted under co-location arrangements. The company is a carrier-grade telecommunication provider across Australia and New Zealand with hundreds of data centres and network points of presence throughout the region.

2degrees has grown through several mergers and acquisitions creating challenges in legacy platforms as well as aggressively investing in telemetry data from the network and platforms, creating an explosion of data collected.

"We have distributed our core infrastructure over multiple data centres investing heavily in IaaS and container orchestration platforms," says Daniel Siva, Systems Team Lead. "For a lot of fundamental systems we are there now, and continuing to modernise other legacy platforms. We needed a scalable and flexible disaster recovery solution that aligned with this investment and explosion of data."

The company's primary storage is a mix of IBM fibre-attached disk, and a new vSAN software-defined storage solution powered by Dell EMC hardware. Vocus has been backing up data and virtual machines (VMs) to the public cloud using another vendor's product, but this was not providing the level of cloud-native functionality that the organisation desires, and the cost of the solution also continues to rise.

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– Daniel Siva, Systems Team Lead

2degrees wanted the following capabilities from a modern backup and recovery solution:

- A way to move certain types of big data such as CCTV video to less-performant, lower-cost storage
- The ability to restore VMs from backups much faster
- Smart deduplication and compression for longer-term backups stored in AWS S3, meaning fewer requirements for cloud storage and operating expenditure (OpEx) savings
- Optimise rebuilding of automated dev and test workloads to match production datasets

## Solution

2degrees had been exploring options for a major storage refresh with its long-term IT solutions provider BEarena, and Cohesity's name came up as part of those conversations. BEarena arranged a run-through of the Cohesity software and allowed 2degrees to perform some tests using a virtual Cohesity appliance.

"The technology looked interesting so BEarena got in touch with Cohesity and we organised a physical Proof-of-Concept," Siva says. "We put Cohesity into our data centre and went through various test cases that we wanted to explore, and Cohesity software was great."

Siva was particularly impressed with the speed and product adaptiveness from the team at Cohesity. "We actually had a lot of direct collaboration from Cohesity in terms of figuring out what aspects could be improved on the Cohesity platform. We were really impressed with how engaged they were all the way through to their development teams and out again in order to meet our expectations and what we were looking for."

2degrees ran a Proof-of-Concept over three months before moving ahead with a production deployment.

The Cohesity deployment occurred in two stages. "We were backing up into AWS S3 in both the older platform and the Cohesity platform," explains Siva. 2degrees has since extended the Cohesity deployment significantly to match growth requirements.

## Results

The efficiencies provided by the Cohesity setup were immediately apparent. While both its backup systems use the public cloud, "...the operational expense savings using Cohesity are significant because

the software actually natively understands that it's backing up into the public cloud and can dedupe data across all the backup sets that are within the public cloud. Whereas with our prior implementation, we are storing a full copy of the data each time we were doing a backup, which obviously uses more space," Siva says.

The deduplication and compression benefits also extend to all data currently held on VMs. 2degrees is using Cohesity both for backups and as a network file system (NFS). "As a result, we are seeing good dedupe and compression across all file sets accessed via Cohesity. The prior implementation, by comparison, can only dedupe and compress over a single backup job itself," adds Siva.

On the backup side, 2degrees is seeing significantly improved performance results. Where a backup job using the prior implementation would take 10 to 12 hours, or sometimes longer, and apply sustained load to production systems, Cohesity runs backup jobs in the region of two hours for the same dataset, with much less impact on performance.

Cohesity also brings a host of security and operational improvements. Cohesity technology can be accessed via an existing single sign-on, and "...backup administrators just get pushed over to our Office 365 login portal and then back, whereas previously, login and authentication were a much longer process," says Siva.

In addition, backups benefit from data encryption at rest through Cohesity. Cohesity also provides data analysis functions that, while not presently used in production by 2degrees, are seen to offer strong potential.

"Now that we've got data on Cohesity, we can analyse the data for trends or strings," adds Siva. "For example, you can find people that might be storing passwords in a file called 'passwords.txt' and take appropriate steps. Our security team is interested in that capability."

Benefits gained by 2degrees from Cohesity include:

- OpEx savings through efficient deduplication and compression of backup data stored in the public cloud
- Time for data backup processes reduced by over 80 percent
- Multiple use cases solved including cloud-native archival, NFS storage, and data security and risk reduction

Learn more at [Cohesity.com](https://www.cohesity.com)

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