

Port Otago Limited is located on the Otago Harbour, where it operates two wharf systems - Port Chalmers and Dunedin. Port Chalmers is the birthplace of New Zealand's modern export trade as in February 1882 New Zealand's first cargo of frozen meat left from there for Great Britain. Port Otago Ltd and Port Chalmers remain at the forefront of New Zealand's export trade and are committed to delivering the highest standards of port services at all times.

Ron Jack is the IT Manager for Port Otago. It is a critical role as running a 24/7 port operation in today's environment is fully reliant on having a resilient technology backbone. Ron noted that one of their essential servers, which supported 65 users directly and a multiple of users via a web interface, had fallen out of warranty.

"Having recently engaged Ingram Micro's Jeff Maslen to run a training programme on Storage Performance and Sizing it seemed a logical step to ask him to look at what would be the best solution," says Ron Jack.

Jeff Maslen introduced Dale Cusack to assist with the solution architecture as it was not a straightforward replacement issue. "Port Otago runs a Jade software platform which is highly effective for the work they do but was not going to run as efficiently on a SAN based solution," explains Jeff Maslen. "In further exploring the situation we noted that their database was taking 87 minutes to back up. Being a 24x7 operation, this represented a considerable cost in man hours as the port's systems were halted until the backup was completed. There was also considerable Input/Output (IO) degradation and we needed to remedy this to fully support the Jade operating environment."

The solution Jeff and his team came up with is regarded as a benchmark solution by Jade itself having effectively shrunk the back-up window to 12 minutes and allowed the Database Administrator to run queries in real time.

Ron Jack reports that he was highly satisfied with the result; "The results very much spoke for themselves," he says. "While it is difficult to test IO improvements overall, the additional tests I did run showed a five-fold improvement."

It is a story that doesn't finish there. Ron Jack is continuing to work with the Ingram Micro team to virtualise most of their servers aside from those that are supporting the Jade platform. "Because of the high workload and IO requirements we need to keep these as physical servers and given the results we are now getting there would be no reason to change this."

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TECHNICAL SPECIFICATIONS:

- MSA70 Direct Attached Storage
- P600 Raid controllers
- 24x 10k SAS HDD
- DL380 Servers
- Raid 10, Raid 1, Raid 5