

# South Africa CHPC's OpenStack Production Cloud Enables COVID- 19 Research

The South Africa Center for High Performance Computing (CHPC) has provided large-scale research computing and data storage for over a decade. The increasing need for computational resources led CHPC architects to develop a private cloud built on OpenStack using 2nd Gen Intel® Xeon® Scalable processor-based Supermicro TwinPro servers. Within three days of the CHPC OpenStack Production Cloud going live, the country went into lockdown due to COVID-19, and the cloud was overwhelmed by many government agencies' needs to provide research and support for their activities. CHPC turned to Intel and Dell to upgrade their new cloud system. Using servers built on 2nd Gen Intel Xeon Scalable Processors, CHPC fulfilled the growing need for resources.

#### Products and Solutions

[2nd Gen Intel® Xeon® Scalable processors](#)  
[Intel® SSD Data Center Family](#)

#### Industry

Research

#### Organization Size

11–50

#### Country

South Africa

#### Partners

[Dell Technologies](#)  
[Supermicro](#)

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[Case Study](#)

“This implementation is a step in the right direction to revolutionize our data center as a converged environment. We see this as a continuum between compute-intensive and data-intensive computing. It allows us to easily support both HPC research and general-purpose cloud computing in the same infrastructure.”

**Dr. Happy Sithole, CHPC  
Director**