

TGen Leverages phoenixNAP's Hardware-as-a-Service Powered by Intel® to Empower COVID-19 Research

phoenixNAP and Intel help TGen build a platform for sharing research data on COVID-19 (SARS-CoV-2) genome

Phoenix, AZ, December 23, 2020 – phoenixNAP®, a global IT services provider offering security-focused cloud infrastructure, dedicated servers, colocation, and specialized Infrastructure-as-a-Service technology solutions, announced a case study detailing its collaboration with Intel® on building an IT platform for a COVID-19 project by Translational Genomics Research Institute (TGen), an affiliate of City of Hope.

In an effort to help the global fight against COVID-19, TGen proposed the creation of a centralized platform for knowledge and information sharing between researchers from all over the world. The platform is intended to automatically pull data related to COVID-19 sequenced genomes from multiple sources and provide an aggregated dataset to enable comparative research. This would help identify previously uncharacterized elements in the SARS-CoV-2 genome and observe important correlation between them for the purpose of improving diagnostics, vaccine constructs, and treatments for COVID-19.

Considering the volume and complexity of biomedical data, the platform needed powerful hardware to ensure seamless processing, reliable storage, and global availability. phoenixNAP and Intel collaborated to provide a customized solution to support these needs. phoenixNAP's hardware-as-a-service (HaaS) powered by Intel® Xeon® Dual Gold 6258R CPUs and Intel NVMe's (P4610) with Intel VROC, Intel NICs, and Intel Optane™ persistent memory met the needs of the project. The ultrafast network experience is enabled through a customized implementation of Intel® Tofino™ Programmable Ethernet Switch Products, which Intel® has offered since the acquisition of Barefoot Networks in June 2019.

"We needed a robust computational environment for large data volumes and sophisticated analytical tools. We have maintained compute infrastructure with phoenixNAP for years, but we needed to expand and customize it to support this project. We got a more streamlined, powerful infrastructure that will give us enough power and memory, while at the same time providing us with a great degree of flexibility as our research expands. Intel Optane PMem emerged as a logical solution to support large data sets," said Glen Otero, VP Scientific Computing, TGen.

"Healthcare is becoming more intelligent, distributed, and personalized. Intel technologies are helping to enable a new era of smart, connected, value-based patient care, remote medicine and monitoring, individually tailored treatment plans, and more-efficient clinical operations. Intel-enabled technologies help optimize workflow to lower research and development costs, improve operational efficiency, speed time to market, and improve patient health," said Rachel Mushahwar, VP and GM, Intel US Sales, Enterprise, Government and Cloud Server Providers

"TGen is doing an amazing job every day and this project is one of the examples of how they are actively working to make life-changing results. We discussed their project and knew that Intel will be open to collaborating with us on building a proper platform for it. We are excited for having the



opportunity to work with both Intel and TGen on something this relevant to the entire world," said Ian McClarty, President of phoenixNAP.

TGen has so far identified several new features in the SARS-CoV-2 genome and continues to focus on making new contributions to the cause. Its project addresses a critical need of the global biomedical community and promises to enhance further research on COVID-19. It also demonstrates the potential of using innovative technology to make a difference in the lives of millions of people.

Download full case study here: <https://phoenixnap.com/company/customer-experience/tgen>

About phoenixNAP

phoenixNAP® is a global IT services provider with a focus on cyber security and compliance-readiness, whose progressive Infrastructure-as-a-Service solutions are delivered from strategic edge locations worldwide. Its cloud, dedicated servers, hardware leasing and colocation options are built to meet always evolving IT businesses requirements. Providing comprehensive disaster recovery solutions, a DDoS-protected global network, hybrid IT deployments with software and hardware-based security, phoenixNAP fully supports its clients' business continuity planning. Offering scalable and resilient opex solutions with expert staff to assist, phoenixNAP supports growth and innovation in businesses of any size enabling their digital transformation.

phoenixNAP is a Premier Service Provider in the VMware® Cloud Provider Program and a Platinum Veeam® Cloud & Service Provider partner. phoenixNAP is also a PCI DSS Validated Service Provider and its flagship facility is SOC Type 1 and SOC Type 2 audited.

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