

# Scalability in Infrastructure Development



## PROBLEM

Mapping infrastructure buildouts for new facilities is a daunting task. Many different steps need to occur, from buying IT hardware such as servers, laptops, network devices to creating a cost-effective scalability strategy as the facility matures. It is key to build scalability into the solution because the cost of doing business can increase rather quickly.

For example, our client was working on the development, testing, and evaluation of 40+ applications. As applications went through the development lifecycle, many of the efforts occurred on multiple unscalable pieces of hardware, causing application development activities to stall according to infrastructure availability. This bottleneck was created due to infrastructure age, hardware limitations, hardware failures, and a shift in technology during development. This not only tested the processes put in place during facility buildouts but also made the client take a hard look at their IT strategy.





## SOLUTION

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The client tasked our engineering team to help them create a facility that met today's standards and was scalable for the future. In auditing the facility, much of the hardware used was antiquated primarily due to the hardware refresh processes and timeline.

We put together a team of system engineers and collaborated with government representatives to build a facility that not only met today's standards but would stay relevant in tomorrow's technology wave. Our experts for on-prem and cloud infrastructure solutions evaluated multiple strategies and eventually decided on a hyperconverged infrastructure (HCI).

This would allow our government partners to bring up a private cloud that provided scalability. Our engineering team partnered with Nutanix to bring next-generation hardware technology to the facility. In working with our government and Nutanix partners, we not only solved the scalability issue but also created an IT strategy that would survive the elongated technology refresh process. We provided a solution that could operate next-gen technology without having to run on antiquated hardware.



## RESULTS

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Due to the infrastructure engineering expertise Nolij provided, the client benefited in the following ways:

- 1. Client facility was able to offload 50+ servers**
- 2. Our solution provided cost savings of over 25% on standalone refreshes**
- 3. Increased scalability for application development, testing, and evaluation efforts by more than 50%**
- 4. Provided an environment that was able to house application efforts without conflicts**
- 5. Introduced private cloud technology expanding program capabilities**
- 6. Canceled extended warranties on infrastructure that was at both end-of-life and end-of-support**