Nutanix Provides Public Cloud Scalability and Flexibility for On-Premises Deployment

# Hamada City Selects Nutanix Enterprise Cloud Software to Power Government Office Platform



## **CHALLENGE**

As part of its upcoming infrastructure refresh project, Hamada City's IT team needed to integrate six different types of physical networks, including the City's core network; information network; and fire department command network using software-defined network (SDN) virtualization technology. They also wanted to create a separate Internet environment as required by national policy; construct a virtual desktop environment with over 400 clients; create a DR environment to improve business continuity; update the file server used by all employees; consolidate all systems into a security cloud prepared by the prefecture; and update the City's system that broadcasts digital video in real-time.

The chosen infrastructure also needed to provide flexibility and easy scalability. "There are times when policy decisions by the State or Prefecture are delayed and there are many uncertain elements, so we needed a framework that could quickly adapt to changing requirements," said Shota Tamura, Senior Staff Member, Information Policy Division, Department of General Affairs, Hamada City. "We also needed to build the new environment in a very short period of time, while not interrupting daily operations. Using conventional methods and 3-tier infrastructure, I doubted that we would be able to meet our goals on time for the new fiscal year."

Other requirements for the new solution included an integrated single management console, the ability to create snapshots for each virtual machine, efficient storage usage including deduplication and compression, and layered storage that combines SSDs and HDDs. After reviewing the project requirements, Nutanix Enterprise Cloud was selected as Hamada City's new operational platform.

"With Nutanix's invisible' IT infrastructure, we can easily undertake new projects that will provide all of our City's residents with even greater convenience."

> – Shota Tamura, Senior Staff Member, Information Policy Division, Department of General Affairs, Hamada City

## **SOLUTION**

"I wanted to create a flexible environment that worked similar to the public cloud for our on-premises infrastructure," explained Tamura. "We decided that hyperconverged infrastructure was the best approach for our environment. After reviewing the various HCI options, Nutanix's software solution immediately caught my attention. I watched the product demo and came to the conclusion that the Nutanix Enterprise Cloud OS software would enable us to build our ideal platform."

The Hamada City deployment consists of six Dell EMC XC Series hyperconverged appliances equipped with Nutanix Enterprise Cloud OS software for the main cluster, and three additional Dell appliances for the remote disaster recovery cluster. Approximately 60 virtual machines are now running on Nutanix for various applications, including the City's file server, Active Directory, groupware, virtual desktop, asset management system, video server, and income tax filing system.

"Nutanix is built using web-scale principles, starting with its distributed system and architecture capable of self-healing when there is a server or disk failure," noted Tamura. "Even the policies and documents are designed with web-scale in mind. The system is very easy to understand, with consumer-grade management. Plus, the Nutanix platform is continuously improving. This is precisely web-scale thinking."



#### **RESULTS**

## **Faster Deployments**

The Nutanix and Dell infrastructure was deployed in only three months. "The Nutanix part of the setup was actually completed in just a few days after we took delivery, and we were able to begin migrating our web applications over to the new environment in about one month," said Tamura glowingly.

## **Easier Management and Lower Costs**

Another key factor in the selection of Nutanix was its ease of management. "Our IT environment was fully outsourced prior to moving to Nutanix," Tamura reported. "Even the smallest modification or expansion resulted in large expenses from our outside vendors. With Nutanix Enterprise Cloud and Prism management software, we have obtained a solution that can be easily operated by our own internal team with minimal training. Even with a relatively small group of employees, it is now possible to complete all of our IT operations during normal working hours."

## **Lower CapEx and OpEx**

Hamada City was able to procure the Nutanix software and Dell solution at about two-thirds of the cost of conventional 3-tier configurations. "Even adding the backup system, which previously we were completely reliant on outside vendor expertise, our ongoing management costs have been reduced by approximately 20%. Snapshots are now possible for each virtual machine, and with just a click of an icon, self-service restores are possible. It's like magic that it's able to do all of these things," said Tamura with a smile.

## **Faster Performance**

New server allocations that previously took months now finish in just tens of minutes with the Nutanix Enterprise Cloud solution. Tamura also spoke glowingly of the improved performance, saying, "Once a year during the legally mandated inspections, rebooting is required. Previously, it took about 5 minutes to boot up the file server, but now our environment can be restarted in just 30 seconds."

## **NEXT STEPS**

After seeing the success of the initial deployment, Tamura has many additional plans for expanding the Nutanix footprint. "The core system that includes our resident information application still remains in a separate physical environment, but we'd like to migrate that over to Nutanix as well. With Nutanix's 'invisible' IT infrastructure, we can easily undertake new projects that will provide all of our City's residents with even greater convenience," concludes Tamura.



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#### **COMPANY**

Hamada City, located in western Shimane Prefecture overlooking the Sea of Japan, was formed in October 2005 through the merger of five cities and towns—the former Hamada City, Kanagicho, Asahicho, Yasakamura, and Misumicho.

#### **INDUSTRY**

Local Government

## **BUSINESS NEEDS**

Wanted to create an on-premise government office platform with the simplicity of the public cloud, build a virtual desktop environment, and improve disaster recovery.

#### SOLUTION

- > Nutanix Enterprise Cloud
- Acropolis Software
- > Prism management infrastructure
- Dell EMC XC Series hyperconverged appliances

#### **BENEFITS**

- Reduced system procurement costs by one-third compared to 3-tier configurations
- Cut OpEx by 20% by eliminating the need for outsourced management
- Reduced new server allocation time from months to tens of minutes
- Shortened file server reboot times from 5 minutes to 30 seconds