



## ZENRIN DataCom builds a strong foundation for hybrid cloud and accelerates its cloud journey with VMware Cloud on AWS

### ZENRIN DataCom

**Industry**  
Service provider

#### The Challenge

- Develop a consistent, simplified and flexible hybrid cloud infrastructure that enhances the speed to market and scalability of digital services
- Reduce capital expenditures and operating expenses of maintaining IT infrastructure

#### The Approach

ZENRIN DataCom was looking to deliver a hybrid cloud and wanted to embark on cloud migration. To achieve their objectives, ZENRIN DataCom adopted VMware Cloud on AWS. Powered by VMware virtual machines, it is optimized to run on dedicated, bare-metal AWS infrastructure. After conducting 2 proof of concept (PoC)s, the design and configuration of the platform started in January 2019. By July, around 700 VMs have been migrated and the company is targeting for complete migration by December 2020.

#### The Results

- Increased flexibility and scalability of IT infrastructure with VMware Cloud on AWS
- Reduction in time and hardware costs needed for deployment on premises
- Achieved cost efficiency in server migration from on-premises environment
- Enhanced storage I/O performance on AWS bare-metal servers

#### Infrastructure

- VMware Cloud™ on AWS
- VMware HCX
- VMware vRealize® Operations™
- VMware vRealize® Log Insight™

#### Professional Services

- Hybrid cloud design support for operation and implementation
- Hybrid cloud construction/testing support
- Hybrid cloud operation follow-up

ZENRIN DataCom Co., Ltd. is a leading Japanese map publisher. To develop a consistent hybrid cloud IT infrastructure, the company adopted VMware Cloud on AWS right after its launch. The migration process began in February 2019 and to date, 700 out of 1,800 virtual machines have been migrated. The firm is expecting a phased cost-reduction after the migration is complete in December 2020.

#### Deploying a hybrid cloud IT infrastructure for its flexibility and scalability

ZENRIN DataCom uses map data and provides services like net services, mobile services and ITS. These offerings are powered by AI and play a key role in our lives such as predicting traffic jams, self-driving vehicles and drones.

"The Technology Management Division looks after infrastructure, from hardware (such as web servers, application servers, database servers and engine servers for search/map generation) to Operating Systems and middleware. To keep up with rapid business changes, we are proposing solutions that are powered by new technologies to the Development Division," said Mr. Takuya Kido, Senior General Manager of the Technical Division at ZENRIN DataCom.

The IT infrastructure reconstruction started around 2012. In addition to the virtualization of physical servers using VMware vSphere, the company also migrated some of their commercial services and APIs to proprietary native cloud.

Mr. Masayoshi Oku, Director and Executive Officer of the Engineering Division, assessed the potential of the cloud as follows. "Handling increase in traffic during peak hours was one of our ongoing business challenges. We had all our physical servers aggregated on the virtual and cloud server environments by 2018. We decided to migrate to a hybrid cloud model based on our assessment of the flexibility and scalability of VMware Cloud on AWS."

#### VMware Cloud on AWS Cloud on AWS supports a safe migration

Migrating existing systems to proprietary native cloud just as they were would impose significant costs. With the release of VMware Cloud on AWS running VMware environments (including VMware vSphere, VMware vSAN™, VMware NSX®) on AWS, ZENRIN DataCom was the first company to join the Proof of Concept (PoC) program in Japan.

Mr. Daisuke Watanabe, Deputy General Manager of the Technology Planning Department, explained this decision. "For us, the ability to safely migrate our existing systems without incurring great expense was a great advantage. In addition, being able to migrate to a cloud without the need for hardware management was an important factor."

The company has already implemented VMware vRealize Operations, and the visualization of resources was helpful in estimating the costs for adopting VMware Cloud on AWS.

ZENRIN DataCom carried out two PoCs. The first was conducted in the Oregon region environment and ran from January to



ZENRIN DataCom Co., Ltd.  
Director and Executive Officer  
Engineering Division  
Mr. Masayoshi Oku

# Migrating to VMware Cloud on AWS for a consistent hybrid cloud IT infrastructure

“To have a consistent hybrid cloud IT infrastructure, the release of VMware Cloud on AWS was great news for us. Little modification was required such as developing the applications or changing their operations to achieve significant cost and labor savings.”



ZENRIN DataCom Co., Ltd.  
Senior General Manager  
Technical Division  
Mr. Takuya Kido



ZENRIN DataCom Co., Ltd.  
Deputy General Manager  
Technology Planning  
Department  
Technical Division  
Mr. Daisuke Watanabe

## Customer Profile

Leveraging the ZENRIN Group's map assets, ZENRIN DataCom has developed map navigation services for personal use, such as "Itsumo NAVI," and the "tredina" beauty salon. Tailored for businesses, the firm also provides map APIs, dynamic management support, inbound solutions, and location information analysis support.

Note: Customer Success Manager (CSM)

The CSM is a dedicated manager who provides ongoing support to maximize the return on investment in VMware Cloud. They offer advice based on the client's business needs.

March 2018. It verified whether the on-premises VM environment could operate with minimal issues. The second PoC ran from October to December 2018 and ran in the Tokyo region environment, verifying the functions required for migration.

"We confirmed the functions of VMware Hybrid Cloud Extension (HCX) for the migration. We verified the IP subnet, bulk migration involving the migration of many virtual machines, the reduction in vMotion time through the WAN optimization function, as well as verification of automatic failure recovery by vSphere HA. Hence, we decided to adopt VMware Cloud on AWS." (Mr. Watanabe)

## Access to professional support services for design and service queries

The project kicked off in January 2019 and migration began in April. Following that, cloud migration of the production environment began. As of July 2019, 700 VMs on 8 nodes of bare metal have been migrated. This was done using L2 extension and vMotion without the need to change the IP addresses. Once system development is completed, ZENRIN DataCom plans to move from their on-premises environment to VMware Cloud on AWS.

ZENRIN DataCom uses VMware Professional Services (PSO) and Customer Success Manager (CSM) \* for PoC and virtual machine migration.

"We engaged PSO for advice on service specifications and detailed design support. We also contacted VMware's US development team through the CSM for additional functions." (Mr. Watanabe)

## Simplified hybrid operations to unlock the value of cloud and expected reduced server costs

The virtual machines running on VMware Cloud on AWS performed well and the storage I/O performance scored high against the benchmark. In addition, server cost reductions are expected after December 2020 when migration is completed.

"There will be cumulative cost benefits as more services are offered on VMware Cloud on AWS. Without VMware Cloud on AWS, our development costs may have been double or triple!" (Mr. Oku)

ZENRIN DataCom will continue to use proprietary native cloud for innovative services and VMware Cloud on AWS for services that demand stability in a hybrid environment.

The company appreciates the robust support from VMware's technology stack. "We expect strong and continuous support from VMware," Mr. Kido adds.

ZENRIN DataCom recognized the value that VMware Cloud on AWS could offer and was an early adopter in Japan. Its efforts are a valuable model for other VMware users who are looking to achieve the same objectives.

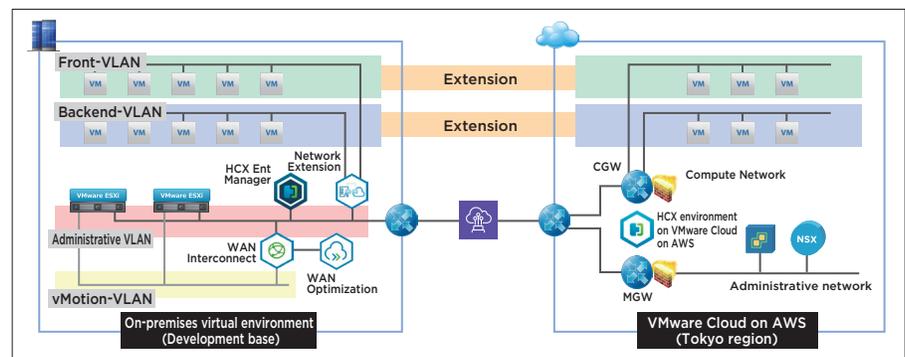


Figure: A summary of the PoC environment using the VMware Cloud on AWS Tokyo region

