

# Increasing the efficiency of the internal operations foundation using hyperconverged infrastructure



## Customer name

Energia Communications, Inc.

## Industry

Telecommunication businesses

## Location

2-11-10, Otemachi, Naka-ku, Hiroshima

## Number of employees

1,001 (as of April 1, 2018)

## Business challenges

- Reviewing the storage management load of the internal operational infrastructure

## Network solution

- Significantly reduces man-hours during the early stages of storage design and configuration
- Enables collective management using fabric interconnects (FIs) even on connections to the network
- Enables use of familiar management tools for the virtualization infrastructure

## Business results

- Plans to expand to virtual desktop infrastructure (VDI), etc., based on these results

Energia Communications is an information communication business company for the Chugoku Electric Power Group; its headquarters are in Hiroshima, Japan. With its operational foundation in Japan's Chugoku region, the company provides information services for individuals and enterprises, and uses a combination of these services to support lifestyle and business changes through total solutions. Recently, the company has focused on data storage with the aim of reducing operational by introducing Cisco HyperFlex™ to its internal network infrastructure. It has received a positive response to these improvements, and so has plans to expand even further in future.

Energia Communications, through its two businesses—“communications” and “information”—supports the information communication foundation of the Chugoku region. It provides a variety of such as its Internet service, “MEGA EGG,” for individuals and its ICT environment service, “MEGA EGG Business,” and its solution service, “EneWings,” for business enterprises, in addition to communication lines, clouds, and data security services. In December 2016, Energia opened the “EneWings Hiroshima Data Center,” its third location in the Chugoku region. It has also been actively putting effort into advanced technology, such as robotic process automation (RPA) and drones. Now it is considering introduction of a hyperconverged infrastructure with the aim of constructing an internal operational infrastructure and reducing storage load during operations.

## Business challenge

During discussions at this time, we aimed to introduce a “hyperconverged infrastructure,” which combines the server and storage from the outset. As for the reasons, Mr. Kenichi Manabe from the system infrastructure division of Energia Communication's information system headquarters, had this to say: “Our department's mission is to construct and support the general areas surrounding infrastructure used for internal business operations. Up until now, the internal operational infrastructure has been built and operated using the three-layered structure of a general network, server, and storage. Among those, I felt the storage in particular was quite burdened. I personally have many years of experience, so I was able to completely handle the network, server, and storage since I had the appropriate knowledge, but even so, the area around storage was a bit unique.

“As the data capacity increased day by day, there were many things that had to be done related to operations, such as expanding data capacity, transferring data (migration), and backing up data; not only operations pertaining to the default settings during the extension and load of the settings for storage. We needed to acquire skills. Recently, though good storage management products have made an appearance, I wanted to operate the internal operational infrastructure more simply and improve the agility regarding the speed of business, so I considered using a hyperconverged infrastructure.

“With the introduction of the Cisco HyperFlex systems, we have been freed from the distinctive storage management load and have experienced more advantages than we anticipated.”

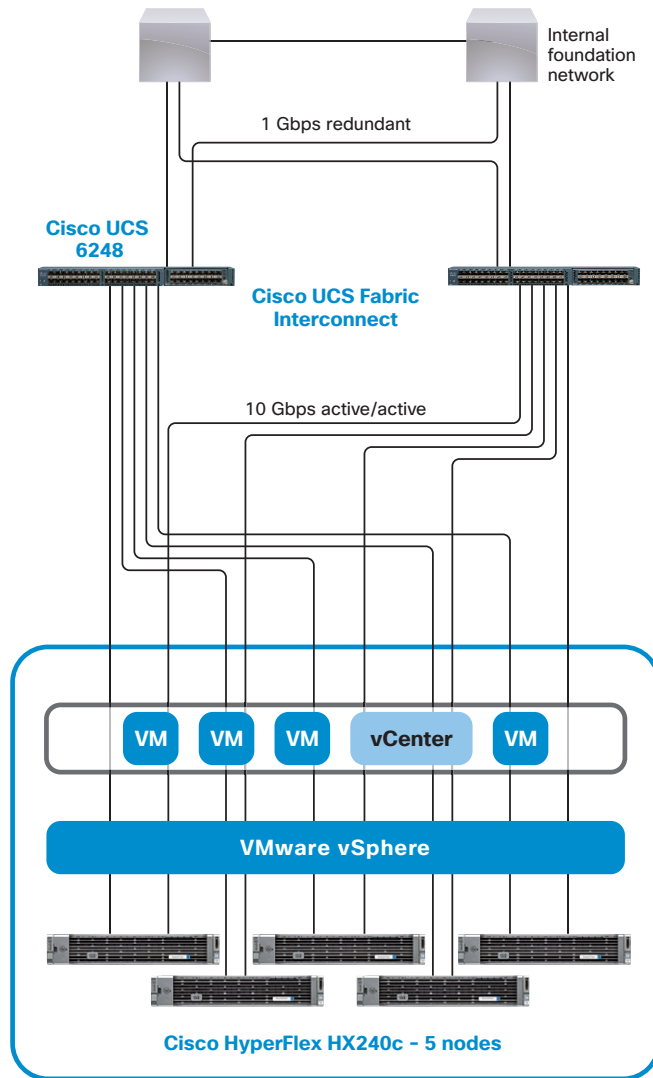
### Kenichi Manabe

Information System Headquarters,  
System Infrastructure Division  
Energia Communications, Inc.

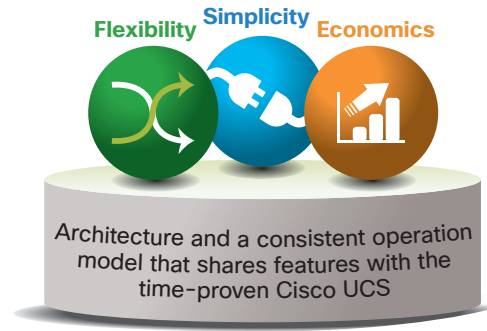


Energia Communications, Inc.  
Information System Headquarters,  
System Infrastructure Division  
Mr. Kenichi Manabe

Image of the newly constructed system platform configuration



Cisco HyperFlex system's main features



### Simplicity

- Integrates building blocks for computing, storage, and networks
- VMware ESXi has been installed in advance, so setting up the system is extremely easy
- Management tools can be integrated into the VMware vCenter and are compatible with single-point management
- Can perform the collective management of multiple sites using the cloud-type system management service, Cisco Intersight™

### Flexibility

- Computing and storage building blocks can expand independently based on usage
- Capable of nonstop rolling upgrades, node additions, and extensions
- Provides functions such as in-line deduplication and in-line compression as a standard, and can perform optimized and highly efficient resource operations for storage

### Economics

- Ensures TCO by providing data protection at the enterprise level
- Capable of rolling upgrades (data-migration cost removal)
- Provides Cisco's full support and services

“Just when the company started considering that option, it received a proposal from Cisco about the Cisco HyperFlex systems. It also observed and tested a CPOC (Customer Proof of Concept) from Cisco’s Tokyo headquarters and compared it with other companies’

products. Upon discussions, the company decided to use the Cisco HyperFlex systems and started operating it in November 2017.

“It considered using hyperconverged infrastructure with the goal of reducing various loads around storage.”

## Network solution

### Assessing a design concept that can enable optimized and highly efficient storage operations

Mr. Manabe had this to say about the reason he used the Cisco HyperFlex systems:

“After testing it out, I felt there were surprisingly few things to do. That is to say, I was under the impression that it could be handled easily. I felt its characteristic was that the design concept for data storage was simple. The fact it was a system where not only the server and storage, but also the network connections could be operated integrally with a focus on Cisco UCS Fabric Interconnect (FI), as well as the fact that in-line data duplication and in-line compression were equipped as standard features, were different from other companies. Anyway, I wanted to efficiently manage storage, so these standard features were very appealing.”

In addition, he also said that the fact there were clear support policies that included operation management of virtualized environments such as the hypervisor and virtual servers was reassuring.

“The fact that the Cisco HyperFlex systems could be managed from VMware vCenter, which our company is familiar with, was also appealing. It is standard for other companies to use their own OS. If it is all integrated, it is certainly easier at the time of introduction. However, it eventually gets ‘black boxed,’ and if some sort of trouble occurs, we would not know what was happening, which made us feel uneasy.

“Our company selected Cisco based on its cost and advantages in addition to these comparison results.”

Advantages included Cisco HyperFlex HX240c having 5 nodes. Other advantages became clear after beginning operations, according to Mr. Manabe: “A total of three data types, including redundancy, of the storage clusters are decentralized; generation management is possible via snapshots; and server nodes can still be used even when several of them are

simultaneously damaged, so we aimed to simply actualize redundancy within the Cisco HyperFlex systems.

In addition, we were able to make it more efficient than we had previously imagined by performing collective management with FI on the area around the network.”

### Experiencing more advantages than anticipated even after beginning operations

“After about half a year since beginning operations, we have not encountered any remarkable problems. There were no physical malfunctions with the storage device, so we were free from the trouble of replacing the disk. The alert and email notifications whenever failures occur were standard features, and the fact there were no fees for separate licenses was also great. Anyway, I was surprised by the startup speed, and the performance was also better than I expected. Deduplication and compression were also more effective than I previously thought, and the data capacity was kept low. Since there was FI, there were no effects on the network band during storage synchronization. The fact things were completed within the system was also another great advantage. I have personally never handled a Cisco UCS server in the past, but I have been able to simply operate

## Energia Communications, Inc.



<b>Address:</b>	2-11-10, Otemachi, Naka-ku, Hiroshima 730-0051 location
<b>Established:</b>	April 1, 1985
<b>Capital:</b>	6 billion yen
<b>Representative:</b>	President and Director Satoshi Kumagai
<b>Shareholder:</b>	Chugoku Electric Power Company
<b>Sales:</b>	40.9 billion yen (March 2018 period)
<b>Number of employees:</b>	1,001 (as of April 1, 2018)
<b>URL:</b>	<a href="http://www.enecom.co.jp">http://www.enecom.co.jp</a>

This company engages in system construction, software development, as well as the expansion of information-processing businesses such as consulting and telecommunication businesses via highly reliable fiber-optic cables (IP phones, Internet services [MEGA EGG and MEGA EGG fiber phone], Internet communication network services [V-LAN], etc.). Furthermore, it is expanding its total solution business and incidental businesses (data centers, network solutions, OA support solutions, etc.) that both parties can efficiently and organically use. Through these, it provides a wide range of services in light of customers' IT needs as the best partner company.

it, without any problems, from introduction to operation, by controlling it using VMware vCenter. I have been reminded of the fact this design concept is utilized in the Cisco HyperFlex systems.” (Mr. Manabe)

### **Business results**

The company will be considering construction using the Cisco HyperFlex systems based on these results when introducing an internal VDI (virtual desktop infrastructure), which is under consideration.

Lastly, to express his expectations of Cisco, Mr. Manabe said, “In addition to this project, Cisco also has security solutions and strong solutions like Cisco Meraki™. I am also interested in Cisco ACI™, Cisco DNA™, SD-WAN,\* etc. Cisco is the one and only brand that makes me feel at ease because it is Cisco, so I am looking forward to their unique solutions in the future as well.”

\* Cisco ACI: Application Centric Infrastructure / Cisco DNA: Digital Network Architecture / SD-WAN: Software-Defined WAN

### **For more information**

Please visit [www.cisco.com/jp/go/hyperflex](http://www.cisco.com/jp/go/hyperflex) for details regarding Cisco HyperFlex Systems.

## **Product list**

- Cisco HyperFlex Systems (Cisco HyperFlex HX240c Nodes)