



### KEY CHALLENGES

- To ensure data centre availability during natural disasters
- To fully leverage benefits of latest virtualization technologies
- To improve recovery processes and streamline operations

### SOLUTION

Joining partner data centres in different regions via VMware-based virtual infrastructure and using vCenter Site Recovery Manager and vCenter Operations Management Suite to fully automate complex disaster recovery processes.

### BUSINESS BENEFITS

- Fully automated disaster recovery
- Recovery process clearly documented at every step
- Highly optimised operational procedures
- Greatly enhanced testing facilities

### VMWARE FOOTPRINT

- VMware vSphere
- VMware vCenter Site Recovery Manager
- VMware vCenter Operations Management Suite



## BSN INET Builds Decentralised, Earthquake-Proof IT Services Cloud

Headquartered in Niigata prefecture, BSN INET Co., Ltd. provides high value-added ASP/SaaS services for the Japanese market, based on the latest technologies. Thanks to VMware cloud management solutions including VMware vCenter Site Recovery Manager and the VMware vCenter Operations Management Suite, the company has substantially improved the efficiency of its operations, and by partnering with other cloud service providers it has created a shared infrastructure that is highly resilient to natural disasters.

### Learning the Lessons of Three Previous Earthquakes

BSN INET Co., Ltd. aims to be its customers' partner of choice for application services and SaaS, offering solutions built on state-of-the-art technology. The company has three offices and two data centres in its historic home of Niigata, plus further offices in Tokyo, Sendai and Nagano. From these locations, it is able to serve customers Japan-wide, via a virtual infrastructure based on VMware solutions.

The company's decision to adopt VMware cloud management solutions arose from experiences during the Chuetsu earthquake of 2004, the Chuetsu offshore earthquake of 2007, and the Tohoku earthquake and tsunami of 2011. The widespread devastation caused by the Tohoku quake in particular pushed the issue of business continuity planning (BCP) up the agenda, and prompted BSN INET to construct a new infrastructure together with its cloud partner, Hokuriku Computer Service Co., Ltd. The combined experience of the two companies enabled them to set up a new environment in just two weeks, giving businesses a suite of disaster recovery solutions that they can access in the event of a natural catastrophe.

### Using VMware Technology to Build an Advanced Decentralised Environment

BSN INET's solution relies heavily on VMware cloud management technology. VMware vCenter Site Recovery Manager and the VMware vCenter Operations Management Suite not only automate the disaster recovery process, but

also allow system performance to be visualised in granular detail, for more efficient systems management. By sharing virtual infrastructure with partners in geographically disparate regions, the company has also been able greatly reduce the vulnerability of data to natural disasters.

"VMware technology gave us an important edge over our competitors in terms of virtualization technologies and operational management," says Motohiko Sakata, Senior Chief in BSN INET's Advanced Service Development Department. "In particular, we wanted to lessen the impact of natural disasters on data security and visualise data centre operations in much greater detail than had previously been possible. The switch to a decentralised infrastructure, based on VMware cloud solutions and shared between a network of partner cloud service providers, was crucial in achieving this. Customers are now users of infrastructure rather than owners of it – whereas previously they were helpless if a quake hit the regions where their particular data centre was located, with the new decentralised model, service can now be restored very quickly."

In addition to its partnership with Hokuriku Computer Service Co., Ltd., BSN INET has recently signed agreements with other cloud infrastructure operators: Okigin SPO



**Motohiko Sakata**  
Senior Chief,  
Advanced Service  
Development Department,  
BSN INET Co., Ltd.

## DATA CENTRE SERVICES

"vCenter Site Recovery Manager and the vCenter Operations Management Suite automate the disaster recovery process and enable us to visualise it in its entirety. They also make it much easier to monitor data centre operations, and strengthen data security."

**Motohiko Sakata**  
BSN INET Co., Ltd.

### CUSTOMER PROFILE

Founded in Niigata city in 1966 as BSN Denshi Keisan Center, BSN INET Co., Ltd. commenced data centre operations in 2003. Its current offering includes systems integration (for customers in the government, healthcare and private sectors), data management and storage, software development, and systems implementation and consulting.

Co., Ltd. at Okinawa in the south, and another company located in Hokkaido in the north. Since November 2012, it has therefore been able to offer a virtual infrastructure hosted at four different locations spread throughout Japan.

### Automated Disaster Recovery, Better Monitoring of Operations

The implementation of vCenter Site Recovery Manager and the vCenter Operations Management Suite exceeded expectations. "The biggest benefit of vCenter Site Recovery Manager is the way that it automates and visualises the recovery process," says Sakata. "Although we still have to inform the system that a disaster has occurred, once the process is initiated it runs automatically, meaning progress can be predicted with much greater accuracy. Moreover, it is now possible to carry out disaster drills much more often. And finally, because VMware technology is a *de facto* industry standard in virtualization, it makes collaboration with partner companies much more seamless."

Similarly, vCenter Operations Management Suite has also delivered all the expected benefits and more in terms of more efficient data centre operations. "In a virtualized environment, you cannot tell there is a problem by looking at the hardware," Sakata explains. "Previously, managing virtualized environments required a lot of experience and even intuition, but

being dependent on the expertise of individuals in this way made it harder to plan for growth or restructuring. However, by providing a detailed visual representation of how the virtualized infrastructure is performing, the vCenter Operations Management Suite makes it much easier for our system managers to do their jobs."

Adopting VMware solutions has also brought commercial benefits: because many corporations are already using VMware virtualization technology, it is easy for them to move the hosting of their development and production environments over to BSN INET.

BSN INET is always looking for new technologies that it can deploy to the benefit of its customers, and VMware's cloud management solution have quickly become an essential part of the company's infrastructure. Looking ahead, the company plans to further improve its operational efficiency by implementing the VMware vCloud Director, which will enable it to orchestrate cloud resources from various providers into seamless virtualized solutions.

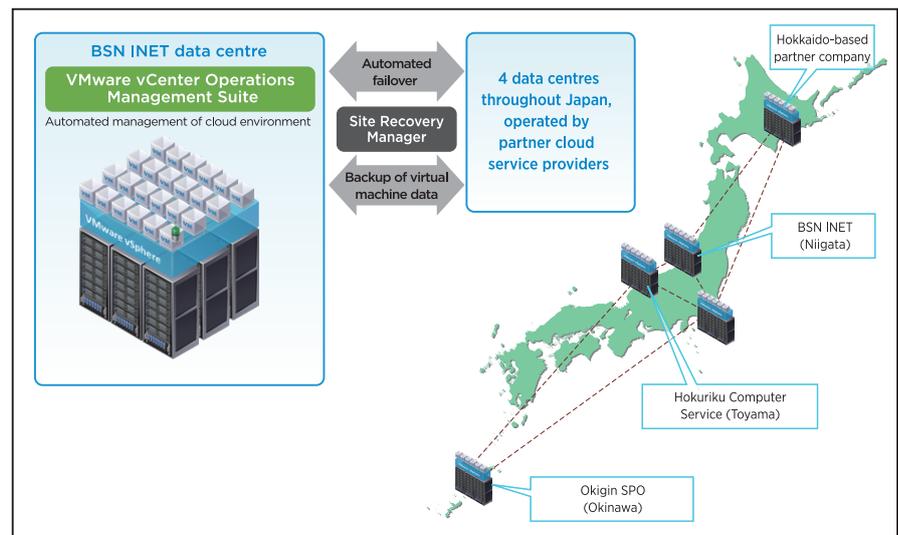


Figure 1: Data centre services offered by BSN INET in collaboration with its regional partners

