NTT EUROPE CASE STUDY

Integrated infrastructure effortlessly links Honda and global suppliers smooth transfer of large CAD data

Background

Established in 1948, Honda Motor Co., Ltd. (Honda) produces and sells automobiles, motorcycles, agricultural equipment, snow throwers, outboard engines and other products globally. They excel at making “products that exceed customers’ expectations” and to do so, it is essential to develop products that foresee customer needs and to build a global supply chain that provides them quickly.

Objectives

“We develop our products globally with the aim of meeting varying local needs,” says Mr. Mikiya Fujita of Honda.

However, Honda was having issues establishing smooth collaboration with suppliers spread around the globe. When developing a new product, Honda’s product development team would first draw up a new mechanism, for example, and then the design would be passed on to suppliers. The suppliers would produce a prototype for mass production in 3D CAD and return it to Honda. Throughout parts testing and production, these large data files had to be sent back and forth.

There are supposedly between 20,000 to 30,000 parts in a car. Each part requires this kind of back and forth of data, and conventional exchange methods vary from region to region. A data transfer service was used in Japan and Thailand, but other regions used other media, mailing paper copies, and other methods.

“Mail could take up to a few weeks to be delivered, and it was affecting the speed of product development,” says Mr. Fujita.

Mikiya Fujita, Manager, System Service Division, Global Master Management Department, Honda
At the time of the earthquake and tsunami in northeast Japan and the flood in Thailand, both in 2011, many suppliers were unable to operate, which had a huge impact on our production. We not only need to procure parts at optimum cost and speed during normal business operations, but in times of natural disasters as well, we need a global network of suppliers we can work closely with,” says Mr. Fujita.

Solution

To solve this issue, Honda began developing an integrated infrastructure to facilitate supplier cooperation called the Global Supplier Network (GSN) with NTT Communications (NTT Com) as a partner. It was absolutely categorical that GSN have highly reliable data centers and a fast and stable global network to ensure smooth cross-regional transfers of gigabytes of data.

NTT Com also provided an integrated portal to manage the data transfer service and supplier information. Instead of creating a completely new system, GSN was put in place quickly and efficiently by using NTT Com’s global platforms, such as the Biz Storage File Transfer service and Enterprise Cloud.

Measures to reduce data transfer time across regions were also taken, says Mr. Fujita. “Let’s say a design engineer in Southeast Asia sends data to a supplier in North America. If the supplier has to access a data center in Singapore via the internet to obtain the data, it takes a relatively long time. To counter this problem, we connected the data centers to a backbone network which takes advantage of NTT Com services to swiftly transfer files between them. Anyone accessing the data will automatically be connected to the nearest data center as indicated by their registered ID.”
We expect that 5,000 suppliers will be using this system within a couple of years, a number than will eventually double."

Overall operational costs for data transfer, including the costs incurred on the supplier side, have been reduced by about 30%.

Mikiya Fujita, Manager, System Service Division, Global Master Management Department, Honda

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**Benefit**

GSN was completed in just 10 months, with data centers in Japan and Singapore connected to the system, and it has been so successful that Honda plans to expand it by linking data centers in Thailand, the UK, North America and other areas for even more global convenience, says Mr. Fujita

“We expect that 5,000 suppliers will be using this system within a couple of years, a number that will eventually double.” Biz Storage File Transfer has a convenient function that automatically restarts downloads in progress when connected, as well as security features such as one of the most effective data and communication encryptions available.

“Design data is a very important proprietary asset that supports Honda's competitiveness. Security is an absolute imperative. However, when dealing with Chinese companies, we have to unencrypt data for legal reasons. This flexible service enables users to easily encrypt and unencrypt data for efficient data transfers,” says Mr. Fujita.

The system has also been effective in reducing costs. With the previous system, a fee was charged for each ID registered, so suppliers had to take on an additional cost burden, but GSN solved this issue with a flat fee.

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As GSN keeps detailed records about each supplier, including cost estimates, it allows unified management and for designers to choose appropriate suppliers through the portal. Honda intends to optimize its supply chain with the evolution of GSN and NTT Com will continue to support their efforts to create new products and technologies.