Toshiba Corporation

Achieving Toshiba's Smart Community vision with NTT Com's Cloud

TOSHIBA
Leading Innovation >>>

Service: Enterprise Cloud

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"Our cloud infrastructure was realized thanks to NTT Com, which has more than 130 data centers around the world."

Mr. Seiya Takada
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Design & Engineering Group
Cloud Service Management Dept.
Platform Center
Toshiba Solutions Corporation
"NTT Com's account managers were flexible and of great assistance on strengthening our global governance."

Company Profile

Name: Toshiba Corporation
Business: Established in July 1875, Toshiba is a diversified electric/electronic manufacturer and provides a wide range of products and services on a global basis in five business domains: Energy & Infrastructure, Community Solutions, Healthcare Systems & Services, Electronic Devices & Components and Lifestyle Products & Services.
URL: www.toshiba.co.jp

Challenges	- To have an ICT infrastructure for business growth - Centralized global contract management in Japan
Solution	- Data Center coverage in more than 130 countries - Improved governance through global account management system
Benefits	- Smart Community business enhanced by Cloud - Collaborative service development leveraging Toshiba's storage

Challenges
To implement Cloud that integrates Toshiba's diverse IT and technologies

Toshiba is a leading diversified electric/electronic manufacturer in Japan. In October 2013, the company restructured its businesses to maximize each value, channeling into five business domains. Energy and Infrastructure, Community Solutions, Healthcare Systems & Services, Electronic Devices and Components, and Lifestyle Products & Services. Toshiba also established an in-house company, Industrial ICT Solutions Company to provide ICT platforms to support all its business.
"Toshiba is focused on the realization of the Smart Community, where ICT infrastructure is fully utilized. To do this, diverse technologies needed to be integrated into a unified ICT infrastructure, which is why we launched Industrial ICT Solutions Company," says Mr. Koichi Kagawa of Toshiba Corporation Industrial ICT Solutions Company.
The missions of Industrial ICT Solutions Company are optimization of ICT to promote global business, developing competitiveness through global alliances leveraging core technologies, and business incubation by utilizing knowledge and expertise in ICT. To this end, the company is building a company-wide ICT/cloud infrastructure.
"On this infrastructure, we are not just migrating on-premises IT to the cloud but also aiming to utilize it as a platform of Smart Community to connect systems of partners and customers, such as connecting energy management system and facility management system," explains Mr. Seiya Takada of Toshiba Solutions Corporation.

NTT Communications   **Global ICT Partner**
Innovative. Reliable. Seamless.

Solution
Network coverage in 196 countries and regions
Centralized contract management in Japan

NTT Communication (NTT Com) was selected as a partner to build a company-wide ICT and cloud infrastructure.

The most important criteria for Toshiba was the breadth of coverage. NTT Com has more than 130 data centers and can quickly provide ICT resources in 196 countries and regions. In addition to the rapid and easy service deployment to new offices, the network can support distributed system within Smart Community including management of system collecting scattered sensor data.
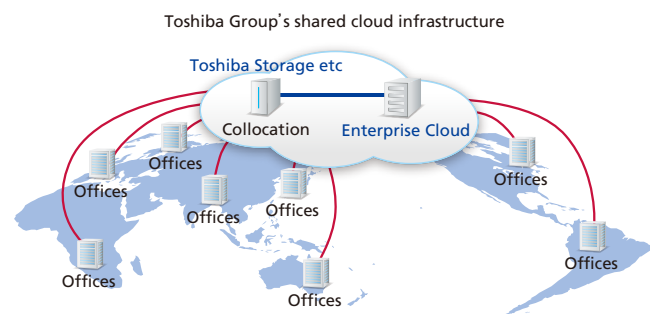
Furthermore, Toshiba highly evaluated NTT Com's IaaS Enterprise Cloud that can be used in a hybrid solution with a collocation service in the same data center. " Since Toshiba is in a transition period of infrastructure reform, there were a lot of cases where we needed co-existence of IaaS and legacy systems. Another attractive point was the fact that Enterprise Cloud is directly connected to the network, allowing easy migration of data and systems on a global level," says Mr. Takada.

NTT Com's history of supporting global business expansion of Japanese Enterprises was also a key selection factor.

Contracts and prices are negotiated and signed at a local level, even if the service is global and basic policy is determined by the head office. This sometimes slows down the speed of global service deployment as it creates different perception of contracts between local offices.

NTT Com addressed this issue with a global account management system which minimizes the time and efforts

subsidiaries needed to spend on contracts and negotiation by centralizing decision making process at Japan head office. "Not only did this make the process easier, it also made it smoother, with the head office taking the lead. Also, since developed and developing countries have different needs when it comes to Smart Community, having a multi-level Service Level Agreement (SLA) was very important. A system that allowed centralized service and cost management was perfect for us," Mr. Kagawa says.

Benefits
Infrastructure to connect diverse technologies
Collaborative development in Cloud

Currently, Toshiba is steadily promoting the integrated cloud infrastructure, using four data centers in North America, one in Singapore, and another in Europe, in aiming to aggregate all ICT including internal systems, customer serving infrastructure and services required to configure Smart Community. It is also considering how to best utilize various data for big data business, such as analyzing energy usage trend.

"This cloud infrastructure will be indispensable in realizing Toshiba's Human Smart Community. By collecting the wisdom and passion of Toshiba' s 200,000 global employees, we would like to see this infrastructure evolve into something that generates new value," says Mr. Kagawa, to which Mr. Takada adds, " We really appreciate the support of NTT Com in resolving the challenges we've faced."

With this project as a trigger, Toshiba is working with NTT Com to develop a new service combining its fast flash storage and NTT Com's Enterprise Cloud There are many more potential business moving forward.

With the support of NTT Com, Toshiba is striving to realize Smart Community though the integration of diverse technologies and abundant know-how.

Diagram: Globally accessible cloud infrastructure

Toshiba Group's shared cloud infrastructure

Realized an integrated ICT and cloud infrastructure connecting global offices with NTT Com's services. Promotes Smart Community, bringing together various technologies and businesses

NTT Communications Corporation
Website **www.ntt.com**