IBM

NTT Data creates an e-commerce system with IBM products used nationwide in Japan.

Like many other countries around the world, Japan is in the beginning stages of Internet-based commerce. The technology infrastructure exists, but obstacles — such as the market penetration of computers and an unwillingness by consumers to trust the security of online commerce — still exist. When online buying really catches on with the Japanese public, NTT Data Corporation plans to be in the forefront with a security-rich credit and finance technology system using IBM Payment Suite electronic commerce products.

NTT Data Corporation chose IBM as its major vendor for a number of reasons, including IBM's proven product performance and the fact that these IBM products implement the SET Secure Electronic Transaction™ specification, a protocol that helps protect the privacy and integrity of realtime credit card transactions over the Internet.

"When we were evaluating our choices, there were few vendors who had a complete set of electronic commerce applications that implemented SET™," says Masao Yuri, manager of Second Network Systems Sales and Marketing Group, Financial Network Division, Financial Systems Sector. NTT Data, a Nippon Telephone and Telegraph Corporation subsidiary, is the largest

Application	Online credit card authorization
Business Benefits	Expects to enter global market
Software	IBM® DB2® IBM Payment Suite™ IBM Payment Gateway™ IBM Payment Server™* IBM Consumer Wallet™
Hardware	IBM RS/6000®

"We chose IBM because we expect it to have the ability to offer a reliable environment and products that are SET compliant."

– Masao Yuri, Manager of Second Network Systems Sales and Marketing Group, Financial Network Division, Financial Systems Sector

NTT Data is using the IBM Payment Suite e-commerce products to enter the global marketplace.

e-business

systems integrator in Japan, with about 10,000 employees and revenues of more than $5 billion annually.

"We studied IBM closely," he adds, "for the performance of the IBM Payment Suite electronic commerce products, as well as its hardware, and felt it was the best choice."

CAFIS®: serving merchants throughout Japan

NTT Data is using IBM products for the backbone of CAFIS, or Credit and Finance Information System. The nationwide CAFIS network links merchants, credit card companies, banks and institutions for credit and debit cards, also known as "cashing cards" in Japan.

Currently, CAFIS connects about 600,000 Credit Authorization Terminals and 1,500 host servers for merchants, credit card companies and banks in Japan with approximately 60 million transactions a month.

IBM Payment Suite: the core of CAFIS

NTT Data's CAFIS system uses IBM Payment Gateway and is currently using IBM Payment Server and IBM Consumer Wallet for test use. All three products are part of the IBM Payment Suite of software. IBM Payment Gateway captures authorization requests and then translates the data provided via the SET protocol into information that the legacy CAFIS protocol can interpret. This, in turn, is transmitted to a credit card company, which confirms or denies the authorization. The process is then reversed, with the response translated back into the format recognized by the SET protocol and on to the requesting merchant. In addition to verifying and managing requests, IBM Payment Suite software provides encryption, decryption and digital certificates for

use within the SET hierarchy to help protect the confidentiality of transactions.

For participating merchants, IBM Payment Server, the electronic equivalent of an Internet cash register, organizes and accepts payment for goods and services that consumers select for purchase. To complete the financial transactions, the IBM Payment Server uses other components, such as IBM Payment Gateway and a payment management system.

To further facilitate the transactions, NTT Data uses IBM's DATABASE 2 (DB2) relational database, and operates the software used to process SET transactions on IBM RS/6000 hardware.

Japanese consumers using the system can employ IBM Consumer Wallet, which is software that lets you make approved payments to authenticated merchants over the Internet using digital certificates based on the SET specification.

Growing the market

Using IBM products that implement the SET specification for CAFIS, the encryption and authentication means that merchants – and consumers – will have more confidence in online commerce. This, in turn, will help evolve a traditional system that has used faxes and other manual, paper-intensive procedures to confirm the identity of credit card holders.

In the meantime, NTT Data is working in tandem with IBM Japan and other partners to build awareness of the ease and security of online commerce.

Yuri concludes, "We chose IBM because we expect it to have the ability to offer a reliable environment and products that are SET compliant."

IBM

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