

# Japan WAM supports its aging population with help from IBM.

## Overview

### ■ Application

WAM NET (Welfare and Medical Network): central Japanese Web-based communication system connecting healthcare providers, government bodies and individuals across Japan

### ■ Business Benefits

One-year reduction in development cycle; first integrated communications link for all layers of government; better management of healthcare

### ■ Software

IBM WebSphere® Application Server; IBM DB2® Universal Database™ for AIX®; Lotus® Domino™; Lotus Notes®; Lotus Enterprise Integrator; IBM Tivoli® software; IBM HTTP Server; IBM SecureWay® Firewall; IBM Homepage Reader

### ■ Servers

IBM RS/6000®

### ■ Services

IBM Mitaka Hosting Center



Through WAM NET, the Japanese government is helping its citizens make more informed health-related decisions.

The population of Japan is aging at a rate unprecedented in other nations. It is expected that by 2010, 25 percent of the Japanese population will be over 65. There has been great concern about how the nation will establish proper medical care for this aging group. Recently, the Japanese government implemented a new law—the Long Term Care Insurance System for Elderly in Japan. Under this law, seniors who need around-the-clock healthcare can be admitted to any of 300,000 private-care facilities certified by the regional governments (known as prefectures).

The new law required the restructuring of the senior healthcare system. And while the new system was designed

to be more user-friendly, fair and efficient, the Japanese Ministry of Health, Labor and Welfare (MHLW) recognized that healthcare facilities had many questions about the new process.

*“The integrated technology from IBM and Lotus was critical to moving WAM NET from vision to reality and ensuring smooth delivery of healthcare insurance.”*

—Hiroshi Tabata, IT Planning Director, Japan WAM

## ***e-business—using value networks to reach new markets***



*With the aging population rising so dramatically in Japan, making sure everyone has adequate health coverage has become an important issue.*

Until recently, there was no single communications link between the healthcare providers and the government bodies. At the same time, the MHLW feared that the law would be misinterpreted, causing confusion that could slow down implementation and leave many without insurance benefits. What the government needed was a system that could provide fast access to accurate information about the new healthcare procedures. It also wanted a central, searchable repository of healthcare provider information, such as provider location and type of services offered.

Under intense pressure to get a scalable communications system implemented quickly—and link it with 300,000 healthcare providers—the MHLW turned to the Japan Social Welfare and Medical Service Corporation (Japan WAM) for help. Although Japan WAM's main mission is to provide financing support to public healthcare and social services organizations, it is also responsible for informing the public about these services, and it retains an IT department to manage its information systems. The MHLW wanted to leverage the resources of Japan WAM's IT department to establish the technology infrastructure to support the implementation of the new law.

When Japan WAM began evaluating vendors for the new system, it found that many of the proposed solutions would take as long as 18 months to implement. Luckily, IBM proposed a complete solution that could be implemented in just five months. "Other companies proposed systems that had to be built from scratch. IBM e-business software comes packaged with most of the functionality built in—saving us up to a year in development time and enabling us to meet the MHLW's aggressive deadline. Moreover, every component in the IBM solution provided the best price-to-performance ratio compared to competing vendors," says Hiroshi Tabata, IT planning director, Japan WAM.

After surveying the requirements for connecting all parties under one system, IBM designed a dual-structured e-business platform that would provide both public Internet access to information and a secure intranet for sharing sensitive information. The systems were built using IBM WebSphere Application Server, IBM DB2 Universal Database, Lotus Domino, Lotus Notes, Lotus Enterprise Integrator, IBM HTTP Server and IBM Tivoli systems management products. At the heart of both systems is the IBM RS/6000 server. The solution is hosted at the IBM Mitaka Hosting Center, which provides Japan WAM with continuous operational and help desk support for the nationwide system.

***“Every component in the IBM solution provided the best price-to-performance ratio compared to competing vendors.”***

*—Hiroshi Tabata*

The first of its kind in Japan, WAM NET brings together all levels of Japanese government, from the Central Government down to the 3,300 local cities and towns. The system links them with 30,000 welfare offices and medical institutions, and the number of connected facilities is growing. According to Tabata, "The integrated technology from IBM and Lotus was critical to moving WAM NET from vision to reality and ensuring smooth delivery of healthcare insurance."

#### **A workflow solution for organized healthcare**

One of the first major applications on WAM NET is a claim-resolution escalation system. When local agencies are faced with claims where regulation is unclear or untested, the officials can escalate the claim to the next level of government. For example, if a healthcare provider asks for clarification about a procedure from a local city agency, the local body can escalate it to the prefecture. If the prefecture is unable to decide, it can further escalate to the Central Government, which administers the laws nationwide, for final ruling and clarification.

After submitted claims have been resolved, the various government bodies can refer to them for assistance in resolving future claims. The planning team at Japan WAM also monitors all queries and, with the permission of the MHLW, adds commonly asked questions to the FAQ online database to speed the process even more. "Without this system, Japanese local governments and the MHLW would have been bombarded with too many queries," says Tabata.

Through the intranet, private organizations have access to e-mail services and a message board where they can discuss relevant issues. Japan WAM has also provided Web access to research reports, transcripts from seminars and medical articles related to the new law and healthcare in general.

The system runs on a 25-node RS/6000 SP™ server running WebSphere Application Server as the front-end presentation layer and Lotus Domino as the workflow and messaging engine. WebSphere Application Server was chosen for its robust Web development environment and its seamless integration with DB2. All government and healthcare contact information as well as research material is stored in DB2 Universal Database.

*"This project is a strong testimonial to how well IBM can enhance government business with e-business."*

*—Hiroshi Tabata*



*With WAM NET, those who took care of us when we were young are assured good health coverage in their later years.*

### Better information means better care

Japan WAM also was dedicated to developing WAM NET as a place where individuals could get information about the new law and compare private facilities in their areas. To meet this objective, IBM developed an Internet-based system where anyone, anytime and anywhere, could get information about the law, as well as make more informed decisions when choosing a healthcare facility for an elderly family member.

This Web-based system is running on a 5-node RS/6000 SP server with Lotus Enterprise Integrator pulling data out of DB2 on the intranet layer and replicating it to another copy of DB2 on the RS/6000 server. The Internet system is separated from the intranet system by IBM SecureWay Firewall on a separate RS/6000 server designed to protect sensitive information. IBM HTTP Server, in conjunction with SecureWay Firewall, authenticates user identifications and passwords against a Lotus Notes database. Tivoli products from IBM are installed throughout the network for better administration and management of the system. Tivoli software also allows Japan WAM to quickly update software or distribute new software across the network.

### Expanding the capabilities of WAM NET

Japan WAM has also enhanced the site to accommodate users with certain disabilities. For example, IBM Homepage Reader provides audio capabilities for blind or visually impaired users. Japan WAM has also adopted font sizes and colors designed for those with visual impairment or difficulty seeing certain colors.

Japan WAM has also added a wireless layer to the application, which enables users of wireless devices to access the site.

Japan WAM and the people of Japan are pleased with both WAM NET and the implementation of the new law itself. "This project is a strong testimonial to how well IBM can enhance government business with e-business," Tabata says. "The new system has added a great deal of convenience to people's lives. It has also moved our society one step closer to being able to provide instantaneous, accurate information to anyone, anywhere, at any time."

### For more information

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