

Japan Asian Historical Data Center

National Archives of Japan

Customer Story

PRIMEPOWER 800 providing internet access and new search capability to 27 million pages of historical documents covering 18 million events.



This is the electronic data center of the Japan Center for Asian Historical Records (JACAR), which was established in November 1999 as an Institution of the National Archives of Japan. Its role is the collection, maintenance and sharing of Asian historical data. In order to make available such data in a user friendly and familiar way, important official documents, and other historical records related to Japan and neighboring Asian countries have been converted to a database and made available via the Internet. This allows the widest range of people in the region and beyond to acquire mutual understanding of this vast historical resource.

This Asian historical database system was constructed using Fujitsu PRIMEPOWER servers.

The Goal

To create an image database of some 27 million pages covering around 18 Million historical items. Including registration, management, security, availability and search capability.

Data from the National Archives, Ministry of Foreign Affairs diplomacy archive and Defense Agency is being reorganized and offered as a major part of this public access project ("Asian Historical data" proposal). In particular special attention is being paid to data that relates to the historical relationship between Japan and Asian neighboring countries. This includes important official documents and other records that serve as historical records between Japan and other Asian countries in modern times. The system is constructed to make use of the Internet enabling wide use of such data.

But as this Asian historical data extends to millions of pages and cases it was impossible to gather and summarize all at one time. Initially 2 million pages covering 120,000 cases were offered followed by a further 600,000 pages. The decision was made to keep adding 35,000 cases per quarter. These being registered, managed, then released and made searchable using the secure system constructed for this purpose.

A Fujitsu PRIMEPOWER800 was designated as the nucleus of the system, which in combination with various other systems necessary for service delivery enabled the "historical data system."

Industry: Government Agency

Solution: Provision of Historical Database

Products: Database server 1 x PRIMEPOWER800
Web servers 10 x PRIMEPOWER200

Background

- Requirement to make "Asian" historical documents widely available using the Internet.
- Huge volume of data, some 27 million pages covering over 18 million separate events.
- Need to construct a system which can register, secure and manage the data while making it searchable and available for public access.

Effect

- It became possible to pull together and manage large volumes of previously dispersed data.
- The search function enabled required data to be retrieved more quickly than ever before.
- The high level of security and data accuracy made it possible to release the data to a wider audience with confidence.

THE POSSIBILITIES ARE INFINITE

Japan Asian Historical Data Center

National Archives of Japan

Customer Story

Requirements

Handling such large volumes of high educational value data dictates high reliability and high availability. In addition, as new cases are added, expandability is of major importance.

The most important items for system construction were high levels reliability and availability. By its very nature the handling of such valuable historically significant data requires the utmost in reliability, while system access is expected 24 x 7. It must also be capable of ensuring the security necessary for many and unspecified end users to access and utilize this resource. PRIMEPOWER was the platform that could provide the answers to such important matters.

In addition, efficiency in expandability and the ability to extend the system both in terms of historical data growth and increased numbers of the users were also important.

With the data being so large it required a phased approach with the information being input and registered over time. It was therefore essential that the system could expand smoothly as data input volumes required. Further, with potential users from all over Asia, as user number grew it was essential that service response did not degrade and response times remained acceptable.

Here again in expandability and power growth PRIMEPOWER was able to offer peace of mind.

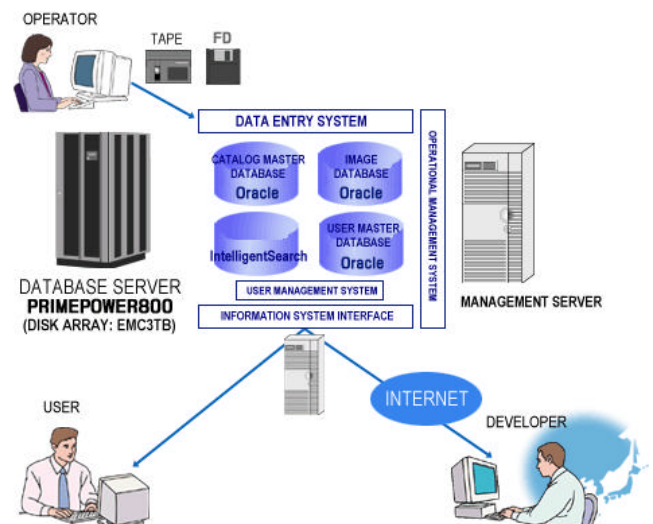
System Summary

The ability to partition the 16 CPUs to match requirements enabled an optimum implementation. Furthermore the introduction of a shared file server was a usability consideration.

Image information and catalog information, after first being registered by an operator, become information able to be released by the center and made available to users. In summary the system consists of the following subsystems.



- “Image Database”
Using Oracle, large capacity image and catalog information are managed in a master database.
- “Data entry system”
Input to the image management database is supplied on CD-R and registered using this system.
- “User management system”
Here users attributes are registered and managed. User access functions are controlled based on these attributes and an access log is maintained
- “Full text search system”
IntelligentSearch is employed to ensure that user access is as simple as possible.
- “Operational management system”
This provides service level maintenance and reliability ensuring users have functional availability on a 24 x7 basis.
- “Security System”
This protects the important the historical data from attack, illegal access and unauthorized modification.



Hardware	Database server 1 x PRIMEPOWER800 www Servers etc. 10 x PRIMEPOWER200
Storage	EMC Symmetrix8730 Enterprise storage system
Backup	StorageTek L180tape library
OS	Solaris™ 8 Operating Environment Solaris™ 7 Operating Environment

Japan Asian Historical Data Center

National Archives of Japan

Customer Story

Benefits

- Enormous volumes of dispersed data can now be managed as a single entity.
- Data access and analysis is vastly improved through use of the search facility
- The high levels of data security possible plus accurate access control and logging have enabled release of data to a much wider audience.



The Asian historical data center.

Address: 4th Floor, Sumitomo Hanzomom Building Annex,
2-1-2 Hirakawacho Chiyoda-ku, Tokyo

The Asian historical database can be used by anyone over the Internet.

Access is also possible at the center using terminals in the perusal rooms. Space is however limited. School students must be accompanied by an adult. All must present some form of official photographic ID. such as student's card, license or passport. Hours of center access are 10:00 -17:00 (last entrance 16:30), closed Saturday, Sunday, Holidays and New year.

URL: <http://www.iacar.go.jp/>

Published by

Fujitsu Limited

Global Marketing
Business Development &
Marketing Division
Computer Systems Group
Tel. (+81) 44-754 3210
Fax. (+81) 44-754-3321
World Wide Web:
<http://www.fujitsu.com>

Specifications are subject to change without notice. For the latest detailed information, contact your local representative.
All brand names and product names are trademarks and registered trademarks of their respective holders.
Copyright © Fujitsu Limited 09/2002;

Company stamp

Order no.