Meitetsucom Co., Ltd.

JP1 for Data Center's High System Availability Requirements
Handling Diverse Needs through Integrated Management

The Meicom Data Center at Meitetsucom Co., Ltd. is using Hitachi's integrated systems management software Job Management Partner 1 (JP1) to ensure the availability of a large-scale system. At the trunk system of Meitetsu Transport Co. Group, for example, JP1 manages approximately 350 PC servers throughout Japan, as well as the stable exchange of complex data with the mainframe system. JP1 is also providing build-to-suit support to maintain different service levels for individual customers' collocation needs, and centrally manages a wide variety of operation management information using a single management console. In other words, JP1 is ensuring stable operation of a large-scale system.

USER PROFILE

Company name:	Meitetsucom Co., Ltd.
Headquarters:	Meitetsu Bus Terminal Building 10F,
	1-2-4 Meieki, Nakamura-ku, Nagoya-shi, Aichi,Japan
Established:	September 27, 1976
Capital:	400 million yen
Revenue:	7,700 million yen (FY2002)
Number of Employees:	370
URL:	http://www.meitetsucom.co.jp/
Business overview:	As the information system provider for the Meitetsu Group, Meitetsucom provides a comprehensive range of services, from system planning and development to operation management support and the outsourcing of information processing. The company is involved in a wide variety of system development/integration businesses, including VAN operation, network building, developing industry-specific packages, building Internet commerce/e-commerce systems, and multimedia content planning and production.

Data Center Meets Wide Variety of User Needs While Providing High System Availability Level

The Meitetsu Group consists of approximately 250 affiliated companies – in transportation, real estate, leisure industry, and distribution – with Nagoya Railroad Co., Ltd., a major private company, at its center. Meitetsucom serves as the Group's IT provider, and has been accumulating expertise in this capacity for close to 30 years.

Meitetsucom provides a wide range of services, from system planning and development, to operation management support and the outsourcing of information processing. Meitetsucom is also active in providing companies outside the Group with the know-how it has accumulated within the Group; sales to these outside clients now account for as much as 30% of Meitetsucom's revenue.

As a rule, Meitetsucom focuses on addressing the unique requirements of industries and individual customers. The activities at the Meicom Data Center, on the other hand, cut across different industry types. Meitetsucom's customers include Group companies –Nagoya Railroad, Meitetsu Transport, Meitetsu Department Stores, and Meitetsu World Travel – as well as many important firms and municipalities in the Chubu District of Japan.

According to Mr. Masahito Yokoi, General Manager of the Meicom Data Center at Meitetsucom Business Headquarters, the Data Center "diligently pursues" three key objectives: confidentiality, completeness, and availability. The success of this effort is evident in the fact that Meicom Data Center won ISMS (Information Security Management System) certification from the Japan Information Processing Development Corporation in 2002.

Of these objectives, the Data Center is particularly concerned with availability because of the large number of customers it serves. Naturally, service must be available 24 hours a day, 365 days a year. To meet this objective, the Data Center established a solid emergency preparedness program, installing CVCF (Constant-Voltage Constant-Frequency) equipment in addition to its own power-generation facilities, and using an earthquake-resistant overall building design with earthquake-immune structures on each floor.

Instead of simply using the Data Center to achieve economies of scale, customers are shifting to detailed, individual solutions. Against this background, another requirement has been receiving increased attention recently: "integrated management," where all types of operation management information can be centrally monitored.

"To satisfy a wide variety of needs without increasing the costs of operation management, it is important for us to have integrated management," says Mr. Yokoi.   "Meitetsucom wants to further expand its business outside the Group. To meet this goal, we at the Data Center must pursue integrated management."

JP1 for Integrated Management of Large-Scale, Distributed System

Given the mission-critical nature of its businesses, the Meitetsu Group has been building and operating a robust system centered around a Hitachi mainframe for many years. The first large-scale open system emerged within the Group in 2001. Meitetsu Transport downsized its trunk online system and at the same time began a large-scale, Internet-based cargo-tracking service.
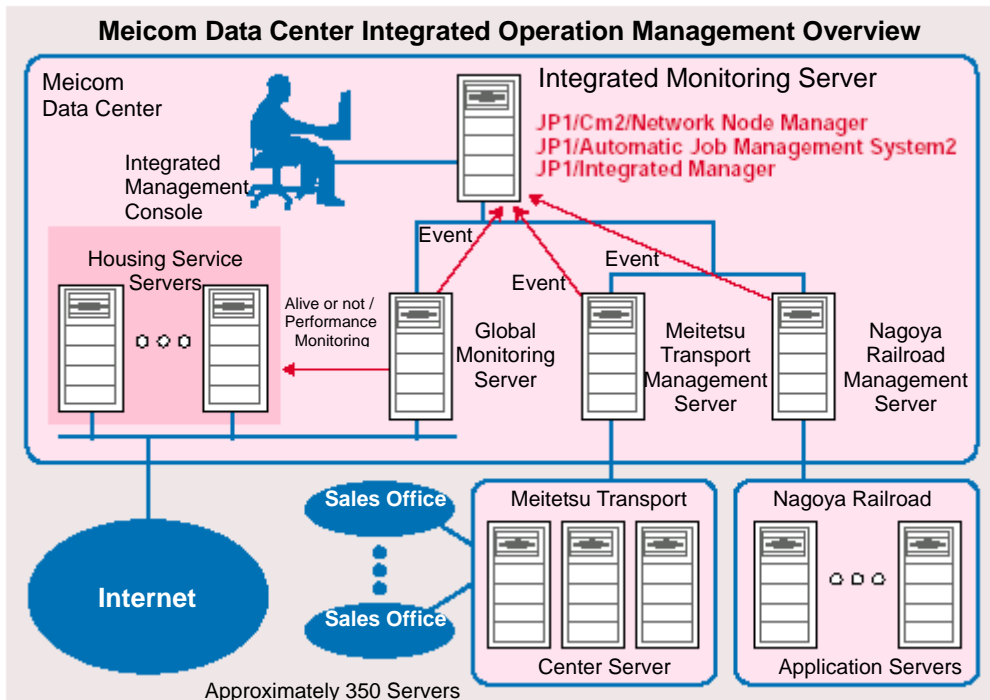
Meitetsu Transport's system uses the main server installed at the Data Center to process data from a total of approximately 350 individual servers installed at around 300 sales offices nationwide.   The processed data is then routed to a Hitachi MP5600 Series enterprise server. Meicom Data Center had to develop a system capable of managing both the main server and the individual servers without increasing the number of administrators. Because it was a client/server-type system, they also had to provide a means of reliably distributing programs to the individual servers.

Meicom Data Center chose Hitachi's integrated systems management software, Job Management Partner 1 (JP1), because it could achieve the high level of "integrated management" that Meitetsucom required.

Mr. Yokoi likes the fact that JP1 provides balanced integration of a wide variety of functions, such as network monitoring, server monitoring, database monitoring, and job management. Because JP1 implements a rich mix of functions in just the right proportions, it will also be able to integrate the latest operation management technologies in the future. This fact was very attractive to Meicom Data Center.

The fact that it has superior job management functions was another the reason for choosing JP1.

Because the Meitetsu Transport system processes large volumes of transaction data, it needed a reliable and efficient framework that could manage jobs on a large scale.

Meicom Data Center Integrated Operation Management Overview

Meicom Data Center

Integrated Management Console

Integrated Monitoring Server
JP1/Cm2/Network Node Manager
JP1/Automatic Job Management System2
JP1/Integrated Manager

Housing Service Servers

Event

Alive or not / Performance Monitoring

Global Monitoring Server

Meitetsu Transport Management Server

Nagoya Railroad Management Server

Internet

Sales Office

Sales Office

Meitetsu Transport

Center Server

Nagoya Railroad

Application Servers

Approximately 350 Servers

In 2001, Meicom Data Center installed JP1 to operate and manage Meitetsu Transport's trunk system. Once the Center began working with JP1, it quickly recognized JP1's high performance and ease of use, and decided to use JP1 for managing Meicom Data Center's open systems as well.

Operation Forecast, Preventive Maintenance and Other Enhanced Operation Management Functions

Meicom Data Center currently manages servers in three systems: for Meitetsu Transport, Nagoya Railway, and the collocation services for companies outside the Meitetsu Group.

For the servers in the Meitetsu Transport system, Meicom Data Center handles job management, server monitoring, and network monitoring. JP1 is also used for log management and program distribution for the center server and individual servers.

For the servers in the Nagoya Railroad system, Meicom Data Center also provides basic services such as job management, server monitoring, and network monitoring.

Service level needs for collocation customers vary widely. Some customers demand high security levels, are concerned about data tampering and require that file access history be recorded. Other customers want response maintenance and thus require performance management. In other words, each customer has different requirements as to which messages are to be collected and how they should be handled.

Thanks to JP1's integrated management functions, it is possible to reliably operate systems with wide-ranging management requirements 24 hours a day without increasing the number of operators at the Data Center. The Data Center can centrally manage everything from network and server operation status to automatic job operation status from a single screen at the "JP1/Integrated Manager" integrated console. System administrators have developed proprietary tools in some cases, and even the information from these tools can be displayed in batches on the integrated console. Furthermore, when the threshold value set for each customer is exceeded, a tower light flashes to alert the operators, which frees them from the need for constant surveillance of the system.

This is good news to Mr. Saburo Ninagawa, Meicom Data Center Business Manager at Meitetsucom Business Headquarters. "Thanks to JP1's integrated operation management functions, we have been able to stably operate a large-scale distributed system and improve the availability of the entire Data Center."

The Data Center's services are set to become even more diversified. Server resource monitoring and process monitoring services began in March 2004. To further enhance security levels, the Data Center plans to implement asset management and configuration management as well. The Data Center also hopes to utilize such information for preventive maintenance by developing operation forecasts and retaining operator action records in a special database. Efforts have also begun to build an IT infrastructure library as a framework for covering the entire operation management life cycle.

Mr. Koichi Yokomaku from Meicom Data Center at Meitetsucom Business Headquarters sees the number of functions required for operation management increasing in the future. But even when 100 kinds of software are being used to execute a wide variety of jobs, he says, they can be easily tracked on one screen thanks to JP1.

Mr. Yokoi embraces Hitachi's "Harmonious Computing" service platform concept. Operation management should ultimately be autonomic, says Mr. Yokoi, who has high expectations for Hitachi in this area. There are also high expectations for future technological developments that should significantly reduce the number of operation management steps.

*Company names and product names are the registered trademarks or trademarks of the respective companies.