HiTech, Ltd.
Software Division
Our mission at Hitachi, Ltd. Software Division is to contribute to IT society by creating valuable software and services for our customers.

The era of ubiquitous computing, in which anyone can use information anywhere at anytime, has arrived. As our contribution, Hitachi, Ltd. Software Division provides one-stop services for various products and platform systems related to the information that has become an essential lifeline in our society. As we further expand our global operations, we will continue to provide value to our customers and contribute to our community.
Since starting our computer business in 1962, Hitachi has been developing advanced technology and products in the software field. Hitachi’s customers and society in general have appreciated our products.

Evolution of Business

Main Software Developed

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Topics

1996: Received the international product quality assurance certification ISO9001. Hitachi receives the Nikkei Information Technology Systems Prize (OpenTP1).
1995: Hitachi receives the Nikkei Technology Grand Prize (HiRDB). First company outside Great Britain to obtain the 1995 TickiT Prize. Hitachi wins the 35th annual Ichimura Award.
1994: Software Product of the Year ’96 Prize (Medachi).
1997: OMG™ Excellence Prize (application developed on Object12).
1999: Science and Technology Agency 5th Remarkable Developmental Selection Prize (GATE/FRONT patent).
1999: Received the environmental ISO14001 certification and implemented an environmental management system according to international standard regulations.
2001: Hitachi wins the Good Design Award.
2002: Nipco BP ad award (Job Management Partner 1 and COBOL).
2006: Integrated software system for small machines starts.
Software is strengthened and software development for small machines starts.

** Remarkable development for small machines starts.** Network Objectplaza

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**Main Software Developed**

Yokohama, Home of Software Division

**Hitachi develops their original specifications for DOS and EDOS/MSD operating systems. Business increases with the development of M series software.** Mainframe centered systems penetrate all companies. The VOS series lineup is strengthened and database and data communication products are sequentially shipped out.

In addition to the increase in communications among companies brought on by the development and expansion of digital communication networks, the online demand of normal companies increases. The M series software is strengthened and software development for small machines starts.

To maximize the efficiency of office activities, OA-related system software is developed. Development environments such as development assistance systems for end users and application software are strengthened.

In addition to the system software for Hitachi’s hardware with high performance and high reliability, the Hitachi Open Middleware series for open environments is developed.

Business alliances with our partner companies are actively promoted to expand the market for Hitachi Open Middleware.

Development of foundation middleware and storage-related software in collaboration with hardware divisions is started.

Business development for the embedded software product Enter is started in Japan and North America.

**Yokohama, home of Software Division.**
Providing products based on cutting-edge IT technology to promptly realize systems required by customers and society

Overview

We have a wide lineup of powerful middleware products to support a new IT infrastructure that implements your business innovations and improvement of service quality. Our middleware products cover integrated systems management, Web services, database management, and transaction control.

Open and de facto environment for developing and executing business systems

We provide an environment that enables you to use common skills to construct a business system without concern about complex system configurations and differences in platforms from the hardware and operating systems point of view.

High-performance and highly reliable business system platforms

With our mission-critical and high-reliability technologies fostered through many years of experience in developing system software, we support the construction of mission-critical business systems in an open environment.

We provide system software (development environments, DB/DC, and network/communication software) and platform software (open platforms and enterprise server platforms). The system software is highly reliable and high-performance for supporting enterprise mission-critical systems, such as production management, inventory management, and customer management systems, and social-infrastructure systems, such as bank account transaction and seat reservation systems. The platform software, including business packages for ERP* and CRM*, support open and standard enterprise business systems.

We provide a wide lineup of products to flexibly meet customers’ various needs. We have a wide array of products that enable us to meet our customers’ evolving needs with flexibility. These include the VOS3 system, for large-scale enterprise mission-critical systems, the VOS1 and VOS K systems, for medium-scale enterprise mission-critical systems, and open-platform software for UNIX®, Linux, and Windows®, enabling you to create enterprise information systems such as Web-based business applications.

*ERP: Enterprise Resource Planning *CRM: Customer Relationship Management

Open Middleware

System Management
- Automation
- IT Compliance
- Monitoring
- Storage Management

Job Management
- Partner 1

Hitachi Storage Command Suite

SOA Platform
- Front-end integration infrastructure
- Process integration infrastructure
- Information integration infrastructure
- Application infrastructure

Cosminexus

Application Development
- Business Application Development Environment

COBOL2002

DBMS & Business Intelligence
- DB Management System
- Embedded Data Management
- OLAP Tools

HIRDB
- Enter

HITSENSERS

Collaboration
- Groupware, Collaboration

Groupmax Collaboration

High Performance Computing
- FORTRAN Compiler
- Numerical Calculation Libraries

Optimizing FORTRAN
- MSL2, MATRIX/X, Skyline/Solver

System and Platform Software

Software Support Service System Construction Solutions Program Product Technical Service

System Software
- Network & Telecommunication
- Database & Data Communication
- Development Environment
- Integrated Storage Management System

Platform Software

Open Platform
- HP-UX
- AIX
- Solaris
- Windows®
- Linux

Mainframe Software
- VOS3/US
- VOS1/LS
- VOSK/LS
Our line-up ranges from mission-critical operating systems to multi-platform open middleware. With a wide line-up of products using advanced IT, we meet the various needs of the age and businesses.

### System Management

**Integrated System Management Software - the market leader in Japan**

**Job Management**

Hitachi Job Management Partner 1 is an integrated system management software product that supports businesses by providing a scalable, quality system. Hitachi Job Management Partner 1 operates when the system is automated in an SOA-based open business environment or in a common system of mainframe computers. By eliminating human errors and automating processes, Hitachi Job Management Partner 1 ensures operational quality and stability across a wide range of applications. In addition, Job Management Partner 1 enables businesses to monitor operation for continuity and strengthen internal administrative controls.

- Integrated system-wide management (total solutions)
  - System-wide operation information can be centrally managed from an integrated console in a client-server operation environment. Because systems can be visualized through the virtualization of IT resources in accordance with management, failure, and other problems that arise can be handled automatically, ensuring the reliability of service performance.
  - Ability to perform installation where needed (point solutions)
  - Products such as those in areas requiring specific problem-solutions and those in high-priority areas can be chosen from an extensive menu of management options. Accordingly, when security urgently needs to be improved, administrators can install just a product for preventing information leakage. Since products can be installed where installation gradually expanded as necessary, initial investment is optimized for current system requirements.
  - Optimal investment according to system scale
    - Investment can be reduced by system scale because extensibility that enables integrated management all the way from small-segment systems to large-scale systems employing thousands of servers is provided. Moreover, recovery costs can be fully applied, ensuring smooth and efficient extensibility.
- Best solutions
  - Job Management Partner 1 provides the best solution possible across the full range of system operation needs, from consultation on planning, setup, and the operation of systems to incorporating J2EE, to product training and support.

### SOA Platform

**Cosminexus**

Cosminexus is a platform for building and operating SOA-based systems. Cosminexus provides a group of products that flexibly integrate people, processes, and information that can be used to build and operate systems in mission-critical environments. Cosminexus also provides a comprehensive set of software tools that help people build business operations at expected stability and performance of quality and productivity even if they are not familiar with those tools. These mechanisms also achieve value creation and business innovation by combining accumulated know-how from various business fields and applying them to other fields.

- Infrastructures enabling the step-by-step construction of flexible systems quickly adaptable to changes
  - Hitachi Storage Command Suite optimizes storage operations in SAN/NAS environments and reduces the total cost of ownership.
  - Storage consolidation
    - Hitachi Storage Command Suite simplifies storage management and supports stable storage operation by consolidating the management of storage systems through a unified configuration.
  - Business continuity
    - Hitachi Storage Command Suite supports assured data protection for backups and disaster recovery system solutions.
  - Optimizing storage utilization
    - Hitachi Storage Command Suite supports optimized storage utilization based on the value of data.

### Business portal

**uCosminexus Navigation Platform**

uCosminexus Navigation Platform is a new product whose Encoche and guidance functions allow it to visualize business procedures and operational flow. uCosminexus Navigation Platform provides mechanisms that enable the knowledge and know-how accumulated by individual users throughout an organization to be shared. In addition, it makes it possible for an organization to systematize and share business and operation processes.

### Application server

**uCosminexus Application Server**

uCosminexus Application Server is a Web application server execution and operation environment compliant with J2EE (Java 2 Enterprise Edition). Besides its core functionality, which can run J2EE-compatible Java applications, uCosminexus Application Server provides a set of functions related to the execution and operation of Java applications that includes database connection management, Web service support, and operation management.

### Stream data processing

**uCosminexus Stream Data Platform**

uCosminexus Stream Data Platform provides real-time collection and analysis of business data generated by such businesses as manufacturing, retail, and transportation industries. The status of a business field and any on-site problems can be obtained instantly for immediate decision-making.

### Business process management, enterprise service bus

**uCosminexus Service Platform**

uCosminexus Service Platform supports functionality for J2EE-compliant business process control and flexible service integration. With this platform, businesses can create and operate Web application services in a one-stop service platform that automatically calls services in accordance with a business flow.

### Document management

**uCosminexus EUR**

As a document management software that supports internal controls, uCosminexus EUR ensures that businesses can prevent unauthorized activities and functionally such as electronic signatures and time stamps for ensuring legitimacy. In the event of such actions as compliance, security, functionality, and scalability, uCosminexus EUR ensures the manageability of report output.

### Database management system - secure and robust

**HiRDB**

HiRDB is a secure, robust database management system playing the core role of an information integration infrastructure that makes SOA flexibility work. HiRDB can be used in systems of all sizes and for various purposes, from query processing small and mid-scale systems at a lower cost, to large-scale mission-critical systems.

- HiRDB ensures non-stop operation for keeping up with business demand.
- Provides high-level security supporting enterprise compliance objectives.
- HiRDB ensures non-stop operation for keeping up with business demand.

### Embedded data management

**Enter**

Enter is a high performance, small footprint HDBMS with advanced search capabilities.

- It is designed to solve the data management needs of applications running in devices with a relatively slow CPU and constrained memory footprint.
- Enter offers standard relational data access plus the ability to efficiently search text and spatial data.
- Developers choose Enter to reduce time to market, reduce development costs, and to provide a reliable data framework for device-level applications.

### Global availability

Information in this paragraph may contain references or cross-references to Hitachi products and services that are not announced or available in your country. Such references do not imply that Hitachi intends to announce products or services in your country. Please consult your local Hitachi business contact listed in Regional/Country Site on the Software Division's website (http://www.hitachi.co.jp/global/) for information regarding the availability of the products and services in your country. If your country or region is not listed, please contact us.
From the planning phase to design, construction, operation, and maintenance phases: We provide one-stop services throughout the system life cycle. In addition, we provide a wide variety of solutions to support our customers to create new value.

We provide various services throughout the life cycles of our customers’ information systems. Making it clear how to use and set up software and maintaining software availability, are essential elements for the design, construction, operation, and maintenance phases of an information system’s life cycle. Our software support services are the vehicle for providing these elements to our customers.

By taking advantage of our accumulated experience, know-how, and advanced technologies that underlie our software support services, and bringing all of Hitachi’s technologies together, we can ensure the stable operation of our customers’ systems. At the same time, we have been striving to develop new services that meet a wide range of customer needs and are now providing services such as 24 x 7 service. All of our services are designed with customer satisfaction in mind.

For customers to comfortably use our software

- On Web pages for our customers and in magazines, we provide security and patch information for our software that is essential in building and operating a system.
- Our software engineers and professional support engineers provide support in solving problems whenever a failure occurs in a customer’s system.
- We answer questions from customers including questions about how to use software and how to set parameters.

Providing the latest software

- When the latest version of a software product is released, we immediately provide information including descriptions of detailed functions.
- Whenever new functions are added, we provide the latest version of the software that includes the new functions.

Because our top priority is creating true value for our customers, we provide solutions that enable the optimal use of our middleware platform software. We solve customer problems immediately to minimize impact on customer profits.

- Business construction solutions
  These solutions solve customer problems by using to advantage our experience with the middleware platform software. For example, our solutions have been adopted for the branch system of a major bank and by "Humanimate21," which is a human resource management service for the employees of Hitachi and all Hitachi group companies.

- Hitachi’s data warehouse solutions
  We apply the various types of middleware products that solve issues inherent to deploying data warehouses (such as the effective integration of data, quick support of system expansion, and provision of data analysis functionality suitable for business requirements) and the know-how accomplishing the products to support construction of systems that meet specific needs of our customers.

- Knowledge management and document management system construction solutions
  Using its document management middleware, DocumentBroker, Hitachi provides solutions for the construction of document management systems. In these solutions, Hitachi proposes that information can be collected and shared across organizations and individuals so that information is available for anyone’s business process.
Background

To provide high-quality, highly reliable products and services, we reinforce QA and environmental awareness.

Building customer trust through quality assurance

Thorough quality management, from development to shipment
As high reliability is Hitachi’s core competence, we continually challenge ourselves to provide the most reliable products and services in the world. Our quality management efforts to maintain high reliability start from development and continue throughout all processes, until final shipment.

Testing from the customer’s point of view
Standing out from other companies, we have specialists, separate from our development specialists, who evaluate and assure the quality of our software. For this purpose, we prepare computer systems exclusively for quality testing and software evaluation, and simulate our customers’ systems, such as large-scale systems and open systems, to perform quality assurance testing from the customer’s point of view under all conceivable conditions.

QA backbone
We created a quality management system that conforms to the International Quality Management System Standard ISO 9001 certified in 1994, and are continually working to increase customer satisfaction.

Promoting environmentally sensitive business

Fully engaged in environmental activities
Under the environmental slogan of “A fertile planet tomorrow starts with individual insight today,” Hitachi constantly strives to reduce global-warming, recycle resources, and conserve our environment.

Creating new environmentally compatible products
We are adopting our own standard for product assessment to reduce environmental loads in all processes from design to shipment. Furthermore, we aim to provide environmentally conscious products and services to reduce the environmental loads in the environments of our customers.

Environmental activities backbone
We created an environment management system that conforms to the international standard for environmental activities ISO14001 certified in 1999, and are engaged in ongoing environmental activities.

Activities beyond our company
Every year, we publish environmental site reports, which summarize the environmental activities of the Software Division over the past year, based on our environmental management system.

We are promoting contribution of Green IT to the environment. Green IT contributing to the environment: Green IT products reduce global warming and help create a sustainable society.

Public relations efforts are being taken to promote the environmental activities that Hitachi engages in with the IT industry outside of Hitachi and the environmental activities engaged in by all of Hitachi’s information and telecommunications businesses.

We are also taking the high reliability technology we have cultivated in the mainframe field over many years, and applying it to various IT fields, including open servers, networks, and related solutions.

Relationship

From regional communities to the world as a whole, our field of activities is full of possibilities.

Software business offices
As the core of Hitachi’s computer business, software business and development is centered in Yokohama and takes place in Tokyo, Osaka, and other locations. With overseas offices in various locations such as in the U.S., Europe, and Asia we are growing to become a major international software development group.
Involvement with regional communities

As a member of regional communities, the Software Division takes advantage of every opportunity to deepen exchanges with residents, by opening sports facilities and through athletic and cultural activities.

Our official women’s softball team competes in the 1st league of Japan. The team receives warm encouragement from community residents.

**Fire Brigade** (established in 1969 with the establishment of Software Division)

The brigade participates in annual competitions to work towards fire and accident prevention, as well as to improve technical skill.

- In 1999 and 2000, the brigade won awards for the fire truck and small pump at the Totsuka Firefighting Meet.
- In 2005, the brigade won awards for the small pump at the Yokohama Firefighting Meet.
- In 2000 and 2005, the brigade was the champion of the Kanagawa First Aid Meet.
- In 2004 and 2006, the brigade was overall champion of the Kanagawa prefectural Red Cross Fire Axe Competition (1st place). The brigade is also the provincial event champion in 2006.

**Women’s Softball Team** (established in 1985)

The team is playing in the 1st Division of Japan Women’s Softball League.

The team won the first championship of the League in 2000. Also, the team got the championship of the National Athletic Meet six times totally. Many Hitachi members have played for All Japan and participated in a lot of international matches. In the Beijing Olympics in 2008, they contributed significantly to the winning of the gold medal.

**Wind Ensemble** (established in 1979)

In addition to both in-house events and regular concerts, the ensemble has performed in volunteer concerts at several local events. In the All Japan Band Competition 2006, the ensemble represented Kanagawa prefecture and the south Kanto district.

**Involvement with regional communities**

As a member of regional communities, the Software Division takes advantage of every opportunity to deepen exchanges with residents, by opening sports facilities and through athletic and cultural activities.

**Genki Club**

The Genki Club day care center for children of Hitachi Group employees opened in April, 2003. The labor unions of our neighboring Hitachi Group companies work together to support the operation of Genki Club.

**Hitachi Yokohama Hospital**

The Hitachi Yokohama Hospital is a Hitachi corporate hospital open to the public.

The two companies of our neighboring Hitachi Group companies work together to support the operation of Genki Club.
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http://www.hitachi.co.jp/soft-e/