

Service Component – RFID

WebOTX RFID Manager

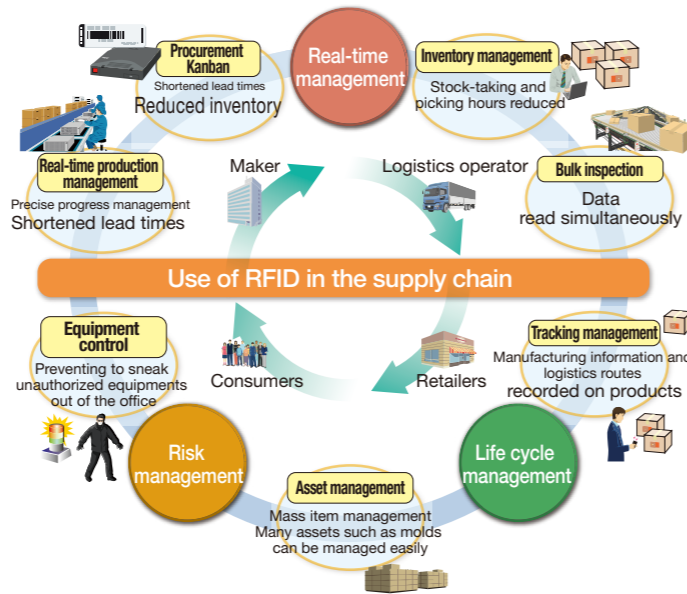
Supporting the efficient development of expanding RFID systems

Gaining attention as an alternative to barcodes, RFID is an automatic identification technology used to read and record data from tags attached to products by using magnetic induction and radio waves.

A major obstacle to the spread of RFID, however, is the fact that RFID tags and reader/writers are manufactured by many different vendors based on different specifications, causing a problem for system developers who have to take these differences into account.

NEC has used its considerable experience and knowhow gained from researching and testing RFID technologies to deliver integrated RFID solutions that include consulting services, middleware products, applications, and devices.

The WebOTX lineup provides two products that allow you to set up and operate RFID systems with ease: WebOTX RFID Manager Enterprise and WebOTX RFID Manager Information Service.



Product Lineup

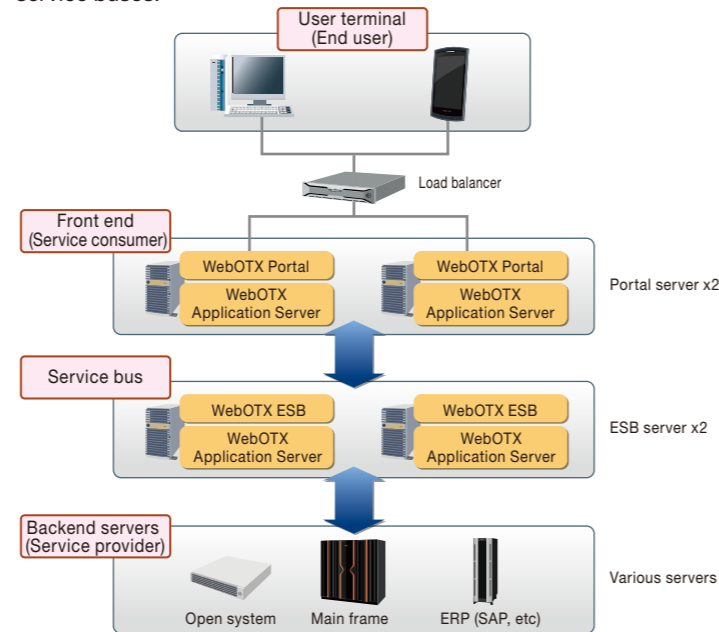
Product Name	Description
Application Server	
WebOTX Application Server Express*	Execution platform supporting high-performance Java EE. Operating management tools for monitoring system run statuses provided as standard
WebOTX Application Server Standard*	Execution platform providing robust reliability. Multi-process multi-thread processing enables load distribution and failure isolation.
WebOTX Batch Server Standard*	Execution platform providing a highly reliable Java batch system. Offers a range of functionality including job execution control and operation monitoring.
WebOTX Administrator	Single-pane management of all tasks from system setup to maintenance and operation.
WebOTX Developer	Full process coverage from application development and testing to performance tuning.
Service Integration	
WebOTX Enterprise Service Bus*	Enables seamless integration of heterogeneous business systems.
WebOTX Portal*	Integrates various information and multiple systems on single window, and improves operability.
Service Component	
WebOTX RFID Manager	Enables efficient setup and operation of RFID systems.

*Operation is guaranteed on Amazon Web Services (AWS).

WebOTX has passed the Java EE compatibility test and is recorded in the Java EE Compatibility list as WebOTX Application Server V9.

Configuration Example

The following is an example of system integration using portals and service buses.



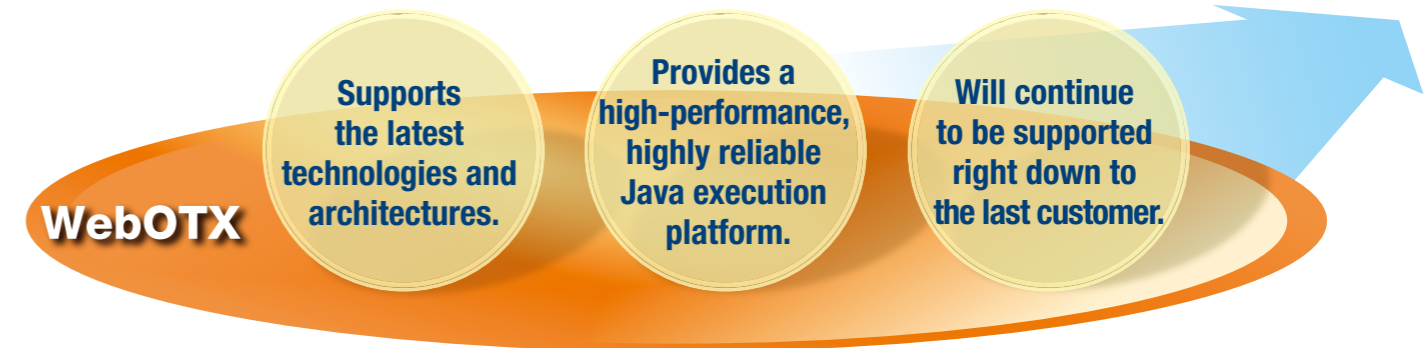
Used products: WebOTX Application Server Standard x4, WebOTX Portal x2, WebOTX Enterprise Service Bus x2

Service Execution Platform **WebOTX**



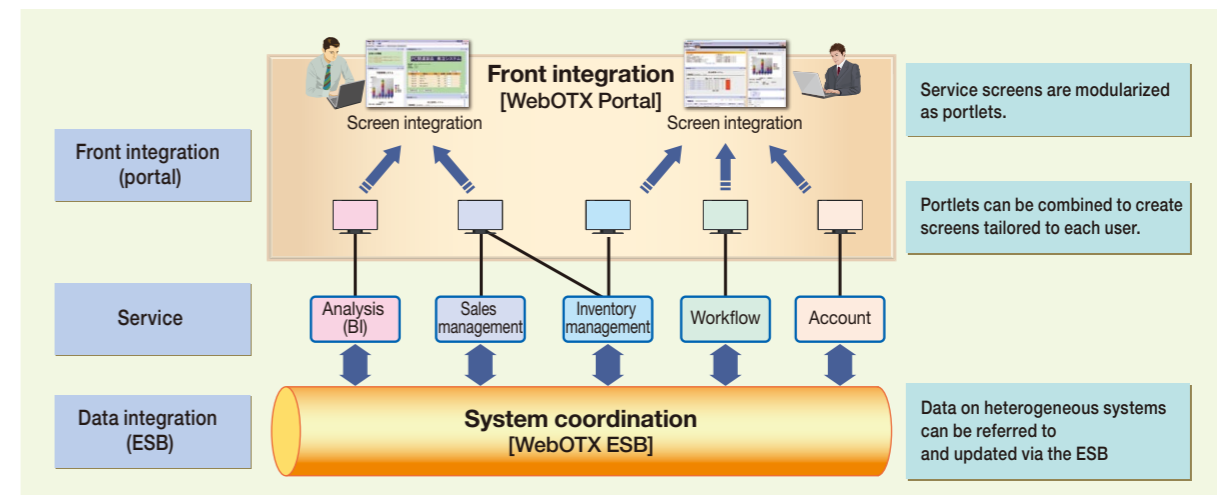
WebOTX provides the platform you need to build system infrastructures designed for the age of cloud computing and big data.

Features



Functional Overview

- A standard platform that integrates services in both the front and data layers
- Combines services to enable flexible adaptation to business changes



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Application Server Platform for the Age of Cloud-Computing

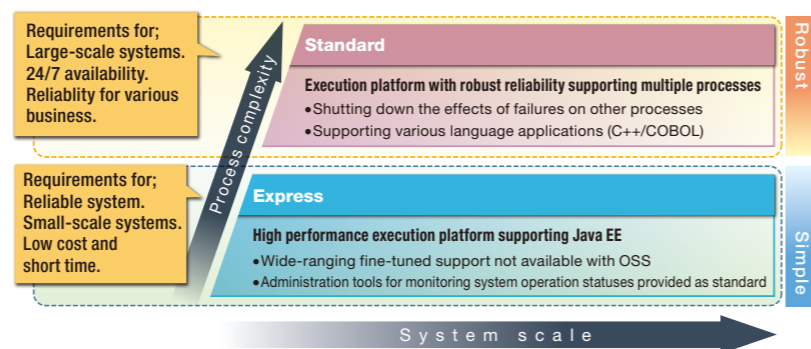
Application Server

Supporting the latest open technologies to deliver reliable, always available systems

WebOTX Application Server

WebOTX Application Server provides high-reliability, high-availability technologies to implement systems that are always available.

WebOTX Application Server is available in two editions: Express and Standard. The Express edition is suitable for small-scale systems and allows you to build a system at low cost and in a short time. The Standard edition is suitable for large-scale systems, enabling the construction of a system that is available 24/7 and that can satisfy many different reliability needs. The Express edition can be easily upgraded to the Standard edition if it becomes necessary to increase the functionality and scale of your system.

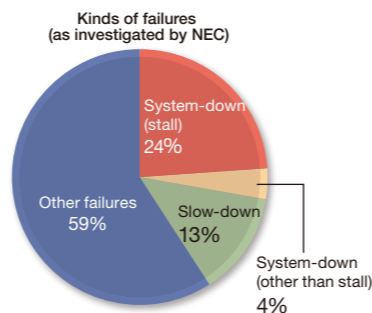


Improve system fault tolerance and reliability

Upon independent investigation into the kinds of system failures that actually occur, NEC found that system-down and slow-down failures, which seriously interfere with business, account for about 40% of all failures. NEC also found that rapid system recovery from these failures was difficult because in at least half of all cases, the information required to ascertain the cause had not been collected necessitating failure reproduction.

WebOTX Application Server provides a diagnostic service developed by NEC based on 10 years of technical support experience and expertise. This service detects early signs of failure and collects the information required to ascertain the cause before a failure occurs, enabling the construction of a highly reliable system with significantly lower operating costs.

WebOTX Application Server provides a profile that is fully compliant with the Java EE6 Full Platform and Web Profile, as well as a profile enabling a minimum configuration consisting of a web server and operation management platform. The minimum configuration profile reduces the system startup time to less than 4 seconds—an industry record—and reduces the workload of operations managers when application updates require a system restart or when changing the system configuration.



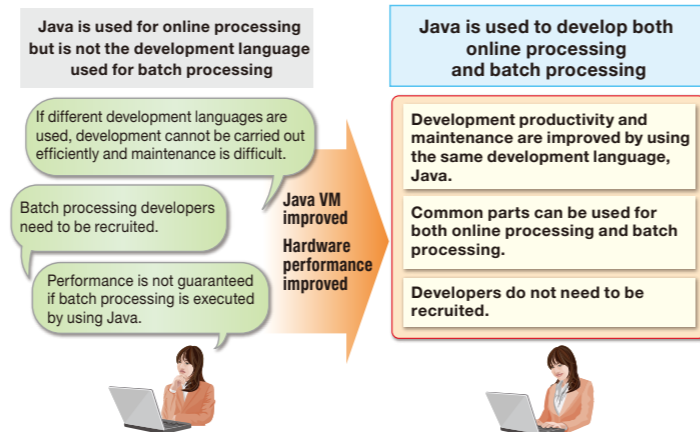
WebOTX Batch Server

Realizing stable operation of Java batch systems

WebOTX Batch Server is a Java batch application execution platform that is based on Spring Batch^{*1}, a globally popular OSS. WebOTX Batch Server allows you to build a high-performance, highly reliable batch processing system by using Java.

Main Features

- Executes batch processing on resident Java VM which is managed by WebOTX Batch Server.
- Spring Batch improves development productivity by handling batch processing specific functions.



^{*1} Spring Batch: Spring Batch is a batch framework that is based on Spring Framework. Spring Batch is developed by the collaborative team of SpringSource and Accenture

Service Integration

Providing an advanced SOA platform for building highly adaptable systems

WebOTX Enterprise Service Bus (ESB)

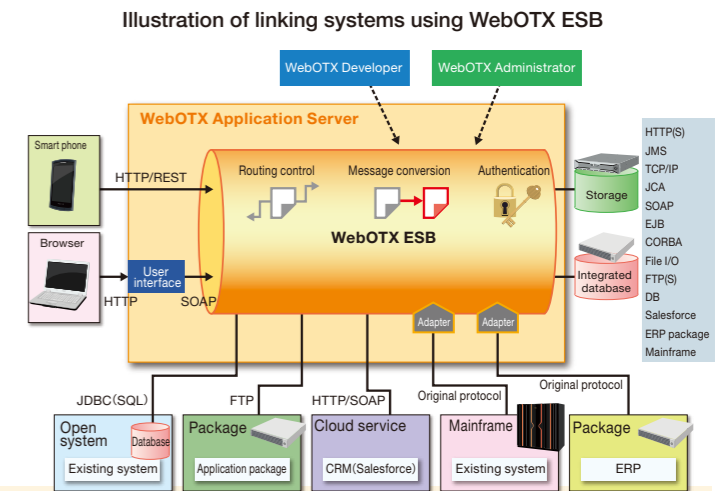
Seamlessly integrating different services

WebOTX ESB is a middleware product that integrates multiple services (systems, data resources, etc.) by using message exchange protocols based on SOA.

Integration between systems can be complicated because differences among the platforms and interfaces configuring each business application process have to be absorbed, which raises the number of integrations and leads to an increase in development and maintenance costs.

WebOTX ESB performs all inter-service data path control and data conversion (format, character code, EUDC, etc.), allowing services to be connected freely and enabling flexible adaptation to changes in business environments.

WebOTX ESB is highly reliable and open system integration platform with superior performance. WebOTX ESB allows you to integrate all resources securely, whether they be existing assets such as mainframes or ERP systems, or the latest cloud services.



Supports the HL7 international standard for exchanging medical data. Can be linked with medical systems such as electronic medical record systems. Settings for connecting with external systems can be configured automatically from data structure information, facilitating the development of external system integrations.

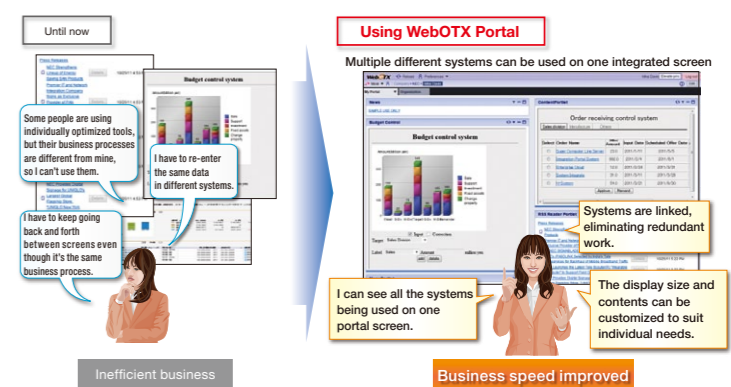
WebOTX Portal

User interface integration that improves business system usability

WebOTX Portal is a business portal platform product that integrates the user interfaces of business systems. WebOTX Portal combines multiple web system views and client screens to provide users with the optimal screen integration for their business operations and improve business speed.

Access permissions can be configured and the integrated screen will be optimized according to the permission assigned to the user or their department, and information can be shared between systems so that users only have to sign on once, improving usability.

WebOTX Portal can be used together with a development environment provided by NEC (WebOTX Developer, SystemDirector Enterprise) to support portal development and installation, as well as the migration of existing systems.



Can even be used as multi-tenant SaaS platforms

Service platform providers have traditionally found it difficult to implement individualized screen control and access management for each employee in their customer's enterprise.

Administrators in each company and department, and even the end user, were required to implement screen control with partial access permissions.

The portal screens to be provided differ depending on the requirements and contract conditions specified by each company.

Also, the screen parts have to be configured for each enterprise or each user according to the user information and contract data on SaaS platform.

