Embedded Software Architecture technology highlights Ricoh values in the next-generation MFP market

Embedded Software Architecture, a core technology of the Ricoh Group's next-generation MFP vision, was awarded the Duke Choice Award 2005, an award which is presented to the best Java™ technology every year. The award demonstrated the reliability and capability of our IT solutions to customers around the world.

Boosting development of next-generation MFP that can be linked to various systems

From the late 1980's to 1990's, the global office equipment market experienced a dramatic revolution as it saw the transition to digital and color technologies and the implementation of sophisticated functions in facsimile machines and scanners. The rapid spread of networks and IT after 2000 has made system integration another desirable feature in copiers. As a result, MFP (multifunctional printer) development has expanded into yet another new field.

In past years, the Ricoh Group has met the need for linkage between MFPs and office mainframe systems by providing software and applications customized for each customer. As such need increased around the world, however, we felt that we should establish such system integration as a business model, and provide customers with a valuable service. Therefore, in April 2005, we formed an organization to promote the development of a next-generation MFP that can be integrated into various systems.

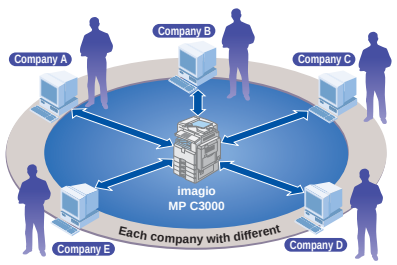
Ricoh's ESA technology wins the Duke Choice Award 2005

Embedded Software Architecture (ESA) is the core technology that the Ricoh Group invented for the next-generation MFP. The technology serves as the foundation for running various applications on MFPs. By running applications provided by Ricoh or those independently developed by the customer on an MFP, the customer can tailor the MFP to its operational needs.

For example, the primary function of conventional scanning software installed on an MFP is to save imported images as PDF files on a PC. The Embedded Software Architecture, on the other hand, can identify the scanned image type to store the image in an appropriate area of the database, or convert and save the image as text data when it recognizes a barcode.

For an order filled for a major global German manufacturer in November 2005, we used Embedded Software Architecture to create a system that allows employee IDs to be used to manage such office equipment as MFPs and printers to achieve both a highly efficient information environment and security. This system features Java™ operation environment on Ricoh FG500 and custom application to realize the functions. This application was awarded the Duke Choice Award 2005, which is given to the best Java™ technology of the year. Ricoh Europe (REBV) and Genius Bytes, which developed the application, received the award from Sun Micro Systems at Java One Conference Pavilion in San Francisco on May 16.

Conceptual Diagram of Embedded Software Architecture



*Java™ VM absorbs the OS difference and allows customization for customers' operations

European university student programming contest.

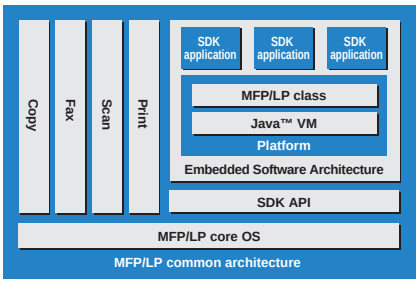
The Ricoh Group and Sun Micro Systems are holding "Programming Contest Powered by U" catering to university students in Europe. This contest invites entrants to program Java applications for installation on Ricoh's ESA. In 2006, the second year of the competition, 154 students from Germany, Italy, Norway, Spain, and UK took part. The judges first chose the winning team in each country, and then the winning teams from the five countries competed in the finals held in Amsterdam on May 4 and 5, 2006. The winning entry was Aficio Nados developed by the team from University La Sapienza of Rome from Italy.

La Sapienza of Rome, the winning college team

Aiming for a global standard in office equipment platform

The Embedded Software Architecture technology, which has been proven as a superior platform for the next-generation MFPs, can be supplied to the market as a valuable solution only if it accurately addresses the needs of users. In the future, we plan to work closely with sales companies around the world to determine market needs and office environment characteristics, focus on developing superior applications with system development companies around the world, and further reinforce the development system.

Embedded Software Architecture



Architecture: Designed to maintain compatibility between multiple copier/laser printer models into the future.

U.S. Application development contest catering to business

The Ricoh Group and Sun Micro Systems are holding Ricoh Sun Java Solutions Developer Challenge for system developers and companies in the United States. This contest invites entrants to program Java™ applications for installation on Ricoh's Embedded Software Architecture. In 2006, eighteen corporate teams took part in the competition. The results were announced at the Ricoh Developer Conference held on Marco Island, Florida on April 25, 2006. The winning entry was AccuRoute developed by Omtool.

Award ceremony held on April 25