

ContentGuard Competitive Analysis

Company Background

ContentGuard is a rapidly growing spin-off from Xerox Corporation with strategic alliances and investments from Microsoft Corporation and Xerox Corp. Headquartered in McLean, Virginia, the company has operations in El Segundo, California, Palo Alto, California and Bangalore, India. With operations in these technological hotbeds, ContentGuard is situated to remain at the forefront of cutting-edge technology. ContentGuard provides technology, products and services for rights management of digital content

Product and Service Offerings

ContentGuard's comprehensive end-to-end solution is based on affordable software that:

- Specifies rights, terms and conditions through "rights labels," and protects and encrypts documents.
- Establishes online storefronts for the sale and network distribution of content on a subscription, pay-per-use or pay-per-document basis.
- Manages all copyright specifications, including usage tracking, from a remote location with a Web browser, and quickly generates usage reports and sales analyses.

ContentGuard, which was developed at Xerox's PARC research facility, also differs from most rights-management products in its server-based operation. It does not require the reader to install any client-side software in order to access documents. A small rights file is sent over the Web with the content.

ContentGuard generates on-the-fly Self-Protecting Documents (SPD) that contain information on access rights. SPD files are encrypted and contain information specific to the user and the rights associated with a document. The SPD can determine the status of a user's request to upgrade his rights (print in addition to view) by checking with a master record on a secure Web server. The accompanying transaction, which does not have to be financial (the publisher may be interested in obtaining demographic information from the reader), can be automated to make the whole process fairly transparent to the reader.

There are three components in the ContentGuard suite: ContentGuard Publisher is server software that automatically converts documents (Microsoft Office, PDF, HTML) into encrypted SPD files. Publishers can set terms and conditions of use, dubbed "labels" in the ContentGuard vernacular, at this time.

ContentGuard Marketplace is a server-based storefront that can be integrated with popular e-commerce engines. Marketplace customizes SPD files for the buyer at the point of sale.

ContentGuard Rights Server is a back-office server that automates operations associated with ongoing rights management. For example, the Rights Server could handle relicensing of content passed from licensed users onto other users.

Client software.

In addition to the server software, Xerox provides a client-side, Java-based Rights Editor, which gives the publisher a graphical user interface with which to set or modify rights labels. The Rights Editor makes extensive use of pull-down menus to simplify the process.

A similar Watermark Editor specifies watermarking information, such as copyright, publisher information, consumer's name and watermarking image.

In addition to restricting access based on the publisher's specifications, ContentGuard also tracks the usage of a document after it arrives at the user site. This would enable the publisher to license content based on the how often it is used rather than on a per-seat basis.

XrML

ContentGuard provides a GUI front end for implementing a persistent security model based on the eXtensible Rights Markup Language (XrML) developed by Xerox at its PARC research facility.

XrML is an XML-based language designed as a common framework for specifying access and usage rights. XrML allows owners to specify rights in a number of categories:

- Transfer rights control the movement of content between the repository and the user and from one user to another.
- Render rights control printing and display, including export rights, to prevent creation of additional digital originals.
- Derivative rights control the reuse of content to create a new work, for example, cutting and pasting.
- File management rights restrict making and restoring backup copies.
- Configuration rights restrict the installation of content in repositories running on specific platforms, such as CD-ROMs.

Note: To accelerate market growth, ContentGuard is announcing the royalty-free licensing of its eXtensible rights Markup Language(XrML). This initiative has already received support from 20 industry leaders, including Adobe Systems, Inc., Barnes & Noble, Glassbook, Inc., Hewlett Packard Company, Lightning Printing, Inc., Microsoft, Preview Systems, Reciprocal, Inc., Softlock.com, Inc., Time Warner Trade Publishing, Thomson Publishing and Xerox.

Pricing.

Taken from a Seybold Report from Summer of 1999:

ContentGuard is undergoing beta testing. The Publisher and Marketplace modules will be available in the third quarter; ContentGuard Rights Server will not be available until the first quarter of 2000. Pricing has not been set, but sources indicate it should start in the \$10,000 range. Xerox also will sell the technology as a toolkit on an OEM basis.

Competitor Profile

ContentGuard Spin-off:

Announcement: April 27, 2000: ContentGuard, Inc., the catalyst for the revolution in e-content, marked its launch as an independent company today. Microsoft Corporation and Xerox Corporation will collaborate with ContentGuard Inc. on key digital rights management (DRM) technologies. Through this work, the three companies will improve the distribution of premium digital content, including eBooks, documents, music and video, over the Internet, while protecting against unauthorized usage or redistribution. Microsoft has also joined Xerox as a shareholder in ContentGuard, Inc.

ContentGuard has set it's initial focus on the publishing industry. Its efforts with Microsoft and Reciprocal are designed to help ContentGuard leverage its Xerox heritage in document-centric industries such as publishing. ContentGuard is also planning on entering into the Music industry in the relatively near future.

Partners:

Microsoft

ContentGuard has strong ties to Microsoft especially after the MS investment in the ContentGuard spin-off. Microsoft has placed Dick Brass and John Manferdelli on the ContentGuard board of directors. Manferdelli is the primary technical collaboration contact between ContentGuard and Microsoft Corporation. Manferdelli is a senior

researcher and software security architect at Microsoft and a principal designer of the Microsoft eBooks Digital Rights Management system that incorporates XrML and other innovations from Microsoft and ContentGuard.

Xerox

ContentGuard will continue to benefit from its association with Xerox. Xerox still maintains a significant equity position in ContentGuard

Reciprocal

ContentGuard and Reciprocal Inc. jointly provide ePCS — electronic Publishing Clearing Service — an end-to-end, outsourced service option for customers in the publishing industry.

Adobe

On August 30, 1999, Xerox and Adobe announced that Adobe Systems Incorporated and Xerox Corporation have entered into a strategic initiative to integrate Adobe PDF technology with Xerox ContentGuard™ rights management solution. This alliance will enable publishers to implement secure e-commerce of high-value PDF documents, while allowing end-users to access these documents in the native Acrobat Reader. Adobe and Xerox will also jointly support the definition and promotion of an open standard for rights specification design around the needs of the publishing industry.