Digital Content Delivery
Using WindowsMedia DRM: Benefit from it

- A High-Quality Consumer Experience
- Strong Security to Protect Digitally Distributed Content
- Flexible Business Rules for Management and Sale of Digital Content
- Robust Software Tools and Infrastructure
- Minimized Costs Needed to Get Content Online
- The Best Business Value for Protecting and Distributing Digital Media
Introduction

Content owners who sell premium content on CDs and DVDs through traditional retail outlets now have the opportunity to generate additional sales and revenue by means of digital distribution over the Internet. Along with this opportunity, however, comes the risk of Internet piracy and illegal global distribution. In order to reduce this risk and gain the benefit of a huge market of potential Internet customers, content must be protected throughout the distribution and consumption process.

Digital Rights Management (DRM) is a technology that provides this protection. DRM was specifically designed to enable content owners to protect and manage the distribution and sale of their digital content over the Internet.

DRM not only protects content, but enables content owners to create new and innovative business models that can help generate digital content sales. For example, consumers who purchase a CD on the Internet can have immediate access to the purchased songs by streaming or downloading them to their PC. This business model can increase sales by providing consumers with “instant gratification” while they wait for CDs to arrive in the mail. For companies interested only in expanding their traditional CD sales, secure digital distribution with DRM can be used to supplement sales through online promotions, pre-sales, and selected online releases.

When choosing a DRM technology, several issues should be considered. These issues are addressed in the following topics, which describe why Windows Media DRM provides the best business value for content owners who are considering selling their digital content on the Internet:

- **A High-Quality Consumer Experience.** DRM has the potential to be intrusive and to interfere with the digital media experience. Windows Media DRM minimizes this interference by providing automation and flexibility so that consumers get a quality experience while acquiring and playing protected digital content.

- **Strong Security to Protect Digitally Distributed Content.** Simple encryption is not enough to protect digital content from piracy. Windows Media DRM provides multiple levels of security to protect content owners’ digital assets from illegal distribution.

- **Flexible Business Rules for Management and Sale of Digital Content.** The digital marketplace is still evolving ways to compensate artists and content owners for their intellectual labor. Windows Media DRM allows content owners to manage the sale and use of their content in a variety of ways in order to find the business models that work best for them and their customers.

Summary

In order to make Internet distribution of premium digital content safe from piracy, Digital Rights Management (DRM) technology must provide multiple levels of security while maintaining a high level of convenience and quality for the consumer. Microsoft® Windows Media™ DRM provides this quality and security while allowing content owners to decide exactly how their content is to be used. Content owners have the flexibility to create new and innovative business models as well as to build upon traditional business models and existing technology solutions. Windows Media DRM minimizes the cost of getting digital content online and provides the best business value for protecting it from illegal distribution.
A High-Quality Consumer Experience

In order to maintain a high-quality user experience, DRM must be unobtrusive. When a consumer decides to acquire a song or video from a retail Web site, the experience must be free of any obstacles or problems and occur in the shortest time possible. Consumers must also have access to premium digital content—the best content that the labels and studios have to offer. Additionally, DRM must provide an acceptable level of flexibility so consumers can enjoy their premium digital content in ways to which they are accustomed.

Windows Media DRM provides the highest-quality experience by giving the consumer:

**DRM transparency**

Windows Media Player and third-party player applications using Windows Media Rights Manager and Windows Media Format SDK provide DRM transparency by automatically requesting any licenses or security upgrades that are required by protected content. Also, because over 400 million secure Windows Media Players have been distributed, most consumers do not have to download the player or DRM plug-ins, eliminating a time-consuming process for consumers with slower modem connections.

**Access to premium content**

By providing DRM protection, Windows Media DRM encourages content owners to release their premium digital content for Internet distribution.

**Flexible use of content**

Windows Media DRM provides consumers with the maximum flexibility for playing their digital content. For example, content owners can specify usage rules with their digital content that enable consumers to make copies that can be played on more than one PC and on portable players.
**Flexible Business Rules for Management and Sale of Digital Content**

Windows Media DRM not only protects digitally distributed content from Internet piracy, but also enables content owners to manage and control how their content is used and, most importantly, how they get compensated. There are four primary ways to directly generate revenues with Windows Media DRM: through promotions and pre-sales, online advertising, consumer sales, and syndication. The following sections briefly describe each of these business models:

**Promotions and Pre-Sales**
Content owners can set an expiration date for their protected promotional and pre-sales content with Windows Media DRM. This way, content owners can be assured that promotional material won’t be available once their digital media is officially released. When the digital media is released, consumers will be directed to sales Web sites where they can acquire the digital content or a CD or DVD.

**Advertising**
Digital media is emerging as a popular method for delivering creative content on the Internet. More and more companies and content owners are recognizing the vast potential of digital media for delivering not just content, but also advertising. Windows Media DRM supports five different advertising solutions, helping advertisers to reach target audiences who subscribe or pay for premium protected content.

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**Strong Security to Protect Digitally Distributed Content**

Content owners, whether independent musicians, filmmakers, music labels, TV and film studios, or music, film, and TV distributors, have been skeptical about distributing their content over the Internet for fear of widespread, illegal Internet distribution. Windows Media DRM uses multiple, sophisticated encryption technologies to provide an extremely high level of security that discourages illegal distribution of protected digital content. Although no DRM system is invincible to hackers, Windows Media DRM has features that limit the potential damage that can be done. Features that make up Windows Media Technologies DRM security include:

**Encryption**
Windows Media DRM uses a combination of industry-standard encryption technologies that include keys, licenses, digital signatures, and digital certificates to provide the highest level of protection.

**Individualization**
Individualization is a process that makes one instance of Windows Media Player unique from all other instances. Content owners can require users to individualize their players in order to play protected content. Individualization prevents global hacks to the software, and eliminates the potential need to revoke all instances of the player instead of revoking only compromised ones.

**Renewability**
Windows Media Player DRM software components or third-party DRM applications that have been compromised are disabled from receiving licenses. Only after the software has been upgraded to a newer and more secure version will licenses be issued.

**Secure Audio Path**
Decrypted digital audio can be prevented from being captured at the sound card driver, or any other PC driver, by requiring certification of all drivers that process the digital audio signal.

With the combination of these and other security features, Windows Media DRM provides content owners with the highest level of protection for their digital content distributed over the Internet.
**Minimized Costs Needed to Get Content Online**

Windows Media DRM software-development components and tools enable content owners to quickly develop and deploy retail e-commerce Web sites for the distribution and sale of their protected digital content. Development and deployment costs are minimized because Windows Media DRM components and tools are features of the Windows operating system.

Another component that significantly reduces the cost of deployment and time-to-market is the MediaStore application discussed in the preceding section. MediaStore was developed using Windows Media Technologies DRM and the Windows 2000 platform, and provides a baseline, turnkey e-commerce Web site for pay-per-stream and pay-per-download purchase options for digital content. Content owners can use MediaStore to quickly get online at minimal cost, and because all of the source code is available, they can modify the e-commerce system's features and functionality as required.

**Syndication**

To give the widest possible exposure and the highest potential revenues, content can be syndicated to multiple retailer Web sites. The content can be distributed with any of the purchase options described in the previous paragraph.

Windows Media Technologies DRM enables content owners to easily manage their digital content and provides very flexible business models for Internet revenue generation.

**Robust Software Tools and Infrastructure**

Any e-commerce Web site for the retail distribution of digital content must be based on a stable and scaleable hardware and software infrastructure, with software tools and service providers available to enable business solutions to be built and deployed quickly.

Windows Media DRM includes a complete suite of software tools and operating system components to build e-commerce applications for the secure distribution of digital content over the Internet. Components and tools are also available to integrate Windows Media DRM applications into existing retailer e-commerce systems. Also, Windows Media DRM runs on the Windows® 2000 platform, which is easily scaled by adding servers according to the volume of transactions.

Content owners who wish to get online with their content in the shortest amount of time can use Microsoft’s MediaStore solution, which is a turnkey DRM e-commerce application developed specifically for fast deployment of retailer Web sites. Microsoft Consulting Services and integration partners are also available to assist companies interested in outsourcing the development and deployment of their digital distribution e-commerce system. These service providers can provide support in all facets of design, development, and deployment of digital media systems.

**Consumer Sales**

For retail sales of digital content, Windows Media DRM supports a variety of consumer purchase options which enable content owners to manage the sale and use of their content. These include purchase, pay-per-stream, pay-per-download, and subscription. These purchase options can be provided individually or in any combination, and can be changed by the content owner at any time.

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The Best Business Value for Protecting and Distributing Digital Media

Windows Media DRM provides business value directly through the distribution and sale of protected digital content and indirectly through pre-sales and promotions. Windows Media DRM can also indirectly provide business value to corporations by reducing expenses and increasing productivity through secure communications and knowledge sharing with employees, customers, partners and suppliers.

In conclusion, Microsoft Windows Media DRM allows for:

- A superior consumer experience.
- Flexible use of content.
- Strong content security.
- Protection of content owners’ rights.
- Flexible business rules for management and sale of content.
- A complete suite of software development tools.
- Availability of third-party service providers.
- A stable infrastructure and highly scalable architecture.
- Minimal cost of deployment.

These qualities, features and products, along with the 400 million secure Windows Media Players that have already been distributed, provide the best business value for content owners who want to sell their digital content on the Internet. Windows Media DRM also provides the best business value for corporations that are interested in Web-based corporate training or those that want to increase productivity and reduce expenses associated with the distribution of their proprietary information.

For More Information

There are many existing Internet Web sites where digital content protected with Windows Media DRM can be found. Specific examples include:

- WindowsMedia (http://www.windowsmedia.com) for music and video, streaming and downloads
- CinemaNow (http://www.cinemanow.com) for video downloads and streaming
- SightSound (http://www.sightsound.com) for video downloads

To learn more about Windows Media DRM, see the Windows Media Rights Manager Software Development Kit (SDK), which can be downloaded from the Windows Media Technologies page at the Microsoft Web site (http://www.microsoft.com/windows/windowsmedia/drm.asp).

To learn more about how Microsoft Consulting Services (MCS) can help you deploy MediaStore and other digital media systems, see the MCS Media and Entertainment Group Web site (http://www.microsoft.com/usa/socal/meg/).

Note: Web addresses can change, so you might be unable to connect to the Web sites mentioned here.