



**MEDIAKEY**™

Increase Revenue on Digital Media and Prevent Piracy

**White Paper:  
The MediaKey Potential**



## Increase Revenue on Digital Media and Prevent Piracy

Digital media has delivered new ways for consumers to experience video and audio content as part of the overall Internet experience. With more than 500 million online consumers and broadband becoming a reality in The United States, The European Union and Asia, the market for digital media is enormous.

But as digital media gains ground among consumers, so does the sharing and illegal copying. This challenges the entertainment industry with finding ways to deliver content on the Internet that is secure and supports their business models.

MediaKey brings great improvements to the challenges of delivering content on the Internet with Digital Rights Management (DRM) technology supported by Microsoft.

- Get new opportunities for increasing revenue from your digital media
- Prevent piracy and protect your digital rights with encryption and license-issuing
- Provide real time statistics on the usage of your digital media
- No need for investments in new IT infrastructure
- No need for costly education of your employees

### Reaching a Wide Audience

By choosing the Digital Rights Management (DRM) technology supported by Microsoft, content owners can ensure the broadest consumer reach. Over 450 million consumers have a PC with a DRM-enabled Windows Media Player

### New Business Models and Total Security

Our DRM technology provides a way to securely deliver digital video and audio over the Internet in an encrypted file-format. Consumers are only allowed to play the file if they are provided with a valid license from MediaKey. The license-issuing technology gives total control to content owners and support for many new business models and opportunities. These new opportunities include ways to monetize media by requiring consumers to pay before they are issued a license. The files can be delivered either by streaming or downloading over the Internet or by CD-ROM / DVD-ROM in the mail. It only requires a DRM-compatible player with Internet access to play it. Streaming can deliver real-time encoding of live events by encoding and encrypting the file simultaneously such that the content is never vulnerable prior to delivery.

### Monetize Media

Media is monetized with our secure billing solution which supports credit cards, online checks, 900-numbers and more. One media file can have multiple business models and licensing terms applied to it. For instance a content owner can offer the same media as a preview file or rent it for 30 days at one price and buy it at another price. In this paper we will show this new potential of your digital media.

### Prevent Piracy

Today more than 60% of all Internet traffic is Peer-To-Peer (P2P) related where consumers swap illegal copies of audio and video. Piracy is a growing problem and illegal copying of digital media is doing severe damage to artists and corporations alike. MediaKey provides an effective way to prevent piracy by using strong encryption to secure audio and video files. Only consumers with a valid license that is not expired can play the media. The strong encryption and application security also ensures that consumers with license to play the media cannot copy it into an unprotected file-format.



## The New Opportunities

All media files are protected by strong encryption so no one will make illegal copies of them. With the many ways for controlling the process of license-issuing, content owners are given full control of exactly which consumers that are allowed to play their media files.

This new technology brings a secure working ground for content owners to develop their media business in a safe environment. In this section we have collected some of the most exciting opportunities for generating new revenue.

### **Enable DRM on all media files**

We recommend that content owners encode all media files with DRM to gain full control without troubling the playing process for the consumers. If you have not yet decided which business model to apply for your media, you can always set it to silent delivery. Consumers will be issued a license of your choice silently, so they will never know that it is protected. This way you can always change the licensing terms and business model for any of your media files in the future when you want to and you will get all the detailed demographic statistics on media usage.

### **Change Business Model Instantly – Even for already distributed media files**

When a media file is encoded with MediaKey DRM, content owners can change the entire business model for the file when they want to and the changes are reflected immediately – even for media files that have already been distributed via the Internet or mail. These changes can be made from a normal web browser that will give you full control of each media file and the exact pricing, licensing and usage terms in real time.

### **One Media File – Multiple Business Models**

With MediaKey DRM content owners can apply multiple business models to the same media file at the same time. For instance a media file can be sold as pay-per-view, for subscribers and be previewed with coupon codes at the same time.

### **Distribute on the Internet and on CD-ROM's**

The media file protection brings full security to all your media files and this enables you to choose the distribution model you want to. Media files can be offered as downloads, streaming media or put on a CD-ROM or DVD-ROM and sent in a letter or along with a magazine.

### **Real Time Demographics, Statistics and Reports**

All usage of media files is tracked each time a consumer tries to play it – whether he succeeds in acquiring a license or he is declined. These statistics is quite extensive and MediaKey sums and groups it all for you in real time, enabling you to view demographics, geographical distribution, conversions, sales and a lot more.

### **Use Super Distribution**

P2P Networks and sharing over email is the largest source to media piracy, but this is now changing. You can distribute your media files on P2P Networks and let people share it over email. When you think that a critical mass has been reached, you can change the business model of the media file and all consumers will be required to follow your new business model.

### **Show Ads and URL's**

When a consumer tries to play a protected media file, MediaKey can instruct the consumers' media player to open a window with an URL of the content owners' choice. This URL – an internet address – can for instance have an ad, a questionnaire or detailed product information.



### **Use Coupon Codes**

With coupon, codes called MediaTickets; a content owner can issue MediaTickets and apply a chosen business model to it. For instance, issue 10.000 MediaTickets to distribute with an individual email newsletter that gives consumers the right to play a media once and then requires them to buy. Or a single MediaTicket can support a single play from each consumer and then requires him to pay.

### **Silent Delivery of Licenses**

Licenses can be delivered silently if interactivity is not required in the issuing process. For instance a content owner might protect his content and wants to follow the distribution and usage without the consumers' knowledge. This can be done by using silent delivery and a free license for one play.

### **Regional Control: Different regions - Different Business Models**

With regional control a content owner can define a number of countries which are allowed to play the media while all others will be blacked out. Regional control may also be used to apply different business models to different regions.

### **Define a Start and End Date with Time Control**

Time control gives content owners the possibility of defining a global start and end date-time for a media file. For instance a public announcement or a promotional offer might not be played until after a release date to achieve maximum effect.

### **Offer a New Subscription when Expired Subscribers try to play a Downloaded File**

Subscribers download a lot of media files and store them on their computer. Normally content owners would have no way of enforcing a valid subscription to play the downloaded content, so consumers have no incentive to sign up for a new subscription, but with MediaKey the game changes. Expired subscribers that try to play a downloaded file are offered an instant way of signing up for a new subscription – improving retention a lot.

### **Improve Sale Conversions with Instant Offers**

Content owners can communicate to consumers inside the media player itself. This instant communication process gives an new opportunity for converting playing attempts to sales - consumers' attention is not disturbed with any external windows or processes to purchase a product.

### **Instant Playback for Low Bandwidth Consumers**

With our experience we have seen that a large amount of consumers will choose to stream the media if it is offered along with downloads. This gives consumers with low bandwidth an instant playback option, where it normally takes hours to download the large files.

### **Pay-per-view Up Sale in Subscription Services**

Subscription services might offer ordinary quality media with a subscription in order to reserve the high quality versions for pay-per-view sale. Previously consumers needed to register at a new website, pay and download to get the pay-per-view media. Content owners can now offer the high quality media at the same spot as consumers download the ordinary qualities. When the consumer tries to play, he is given an instant way of paying that little extra – maximizing the conversion.

### **Tease Consumers with Previews**

Content owners can create previews from their media to convert more playing attempts to sales. For instance a content owner allows consumers to preview the movie once and then a purchase is required or the consumer is allowed to play 30 seconds from a media before he needs to purchase.



## Whatever your Business Model

With MediaKey content owners can apply multiple license models to the same media file at the same time. Along with all the different business models supported by MediaKey, content owners can reach any segment of their market and maximize the revenue from their media.

### **Pay-Per-View and Rental**

With Pay-Per-View you can deliver media on demand and encourage impulse buying. Pay-Per-View is ideal for live events, rental or consumers who do not want to create a subscription. Rental is achieved by issuing the consumer a time-limited license of for instance 1 week and it is often seen that consumers re-rent an already downloaded media.

### **Subscriptions**

Content owners can choose between multiple billing cycles. For instance weekly, monthly or annually and with different models you can target different market segments. Consumers can be offered a gold subscription, and more skeptical consumers can be offered a 1 week introductory offer which becomes a gold subscription hereafter.

### **Member Areas**

To ease protection and integration toward such an existing member area, MediaKey have invented a member area authorization system which requires consumers to provide a valid subscription for the member area. If they fail to provide a valid subscription, they are redirected to the signup page where they can create a new subscription instantly.

### **Marketing and Promotion with Coupon Codes, Ads and Email Collecting**

Content owners can create promotional offers with their media. MediaTickets, which is a coupon code, can be issued to consumers when they for instance register their email at your website, fill in a questionnaire or meet another requirement you might have. A promotional URL can also be set, which will be opened in a window whenever the media is played - this could be an ad.

### **Superdistribution via P2P Networks and Sharing via Email**

With the ability to change business model, even for downloaded media, content owners can turn the natural desire of consumers to share music and video on P2P services and email into a powerful engine for marketing and revenue generation. This can be achieved by applying a license with free playing in a 3 month introduction period and after consumers have distributed it widely for you, they are required to pay and the free media is turned into a pay-per-view media.

### **Release Windows and Time Control**

Release windows increases marketing flexibility and help you control availability. For instance a content owner can restrict the viewing of a public announcement to a specific date and time.

### **Prepaid Minutes and Micro Payments**

Prepaid minutes and micro payments let consumers skip the payment process each time they play a media by either purchasing minutes in advance or aggregating purchase into monthly charges.

### **Regional Control**

The regional control let you distribute media with different pricing and license terms to different regions. Content owners can also limit viewing of a media file to a specific region. For instance a media might need to be restricted to a specific country to comply with regulations and licenses.



## Flexible Billing

MediaKey provides content owners with one of the most flexible billing solutions on the market. To provide an international solution, consumers can be charged in multiple currencies and languages.

### **Credit Cards, Online Checks, 900-numbers and more**

Consumers do not have a single method of payment, so to reach the maximum number of consumers; MediaKey supports multiple major payment methods: Credit Cards, Online Checks and 900-numbers. If more payment methods are needed, we will gladly integrate it into MediaKey to give you the best potential for billing your customers.

### **Save transaction fees with aggregation of charges**

When using pay-per-view and micro payments, small charges is typically used - this is expensive due to transactions fees. MediaKey has support for charge-aggregation that combines multiple small charges into one large and thereby minimizes the transaction fees.

### **Consumer security and fraud protection**

All communication between the consumers and MediaKey is secured by strong HTTPS encryption. Content owners are protected from fraud by the built-in anti-fraud system, which runs a large number of tests to check for fraud e.g. purchase records, blacklists and address verification.

### **Flexible transaction processing**

MediaKey offers two ways of processing transactions. Content owners can either use their existing transaction processing setup or choose to use the built-in processing.

For content owners with their own transactions processing setup (merchant account), MediaKey offers to integrate into the existing solution. For content owners without a merchant account, MediaKey offers its built-in processing solution with support for credit cards, online checks and 900-numbers. Processing fees is a bit more expensive than with your own merchant account, but you save the expensive process of acquiring a new merchant account.

## Reach over 450 million consumers

To achieve maximum market penetration, a technology with wide consumer adoption is required and MediaKey is just that. MediaKey is compatible with Windows Media Player 9.0 and above from Microsoft and runs on a standard PC with Microsoft Windows and an Internet Connection.

It is estimated that over 500 million consumers in the United States and the European Union have a PC with Internet Connection (approx. 50%). More than 450 million copies of the DRM-capable Windows Media Player have been distributed to date. Each of these players provides support for the MediaKey DRM technology and provides a secure path for content delivery to the consumers.

### **Numbers are rising**

Every day the number of DRM-capable consumers is rising and experts estimate that every year 5-10% more becomes DRM-capable in US, EU and Asia. With DRM version 10 and the support of over 120 leading device manufacturers, DRM will come to DVD-players, Set-Top Boxes and TV's. This will furthermore increase the consumer reach of MediaKey and introduce true Video-On-Demand (VOD).



## How MediaKey DRM works

Here is a brief introduction to the MediaKey DRM process that includes both the content owner and the consumer.

### Preparing Media Files for Distribution

To enable the strong encryption facilities in MediaKey, media files need to be in the Windows Media Video and Audio format also known as WMV and WMA. A good tool for creating these files is Windows Media Encoder which can also convert from other formats. With this tool, content owners can also apply the security layer that encrypts the file and for each media file a key is generated. While it is encoding you can open the MediaKey Admin from a standard web browser to register the media file in MediaKey. This process can also be performed with the MediaKey Bulk Encoder, but all files need to be in WMV or WMA files. From the MediaKey Admin, you can now assign your chosen Business Model to the media file. This can be changed dynamically and will be reflected on all distributed media files immediately – even the downloaded ones.

### Distributing Media Files

Your media files can now be distributed online and offline. The online distribution channels include downloadable files, streaming media, attachments to emails and P2P networks – it is up to you. With offline distribution you can for instance create a CD-ROM or DVD-ROM and sent in a letter or along with a magazine – a PC with Windows Media Player and an internet connection is just required for playing.

### Playing Media Files

When a consumer attempts to play your protected media file, MediaKeys' License Servers is contacted by the media player to acquire a license which will enable the consumer to decode and play the media file. MediaKey will now apply you chosen Business Model to the consumer with either a silent or interactive delivery. Silent delivery can be utilized if the MediaKey determines that this user meets the requirements for a silent delivery according to the Business Model. For instance when an employee is allowed to play a media file and the employee is situated on company networks. The interactive delivery is used to deliver licenses where the customer needs to interact. For instance when a consumer needs to enter valid billing information in order to pay for a pay-per-view license to a media file or an ad needs to be shown before a media can be played.

If the consumer is issued a license to play the media file, media player will start playing the file, but if the consumer is denied a license, MediaKey will show the consumer the reason why he was denied and the business model can decide what to do with such a consumer.



## Getting Started

The MediaKey DRM system has many capabilities and this brings along many new opportunities for your company. In order to get the most out of these new opportunities, please contact us and together we will find the best way for your company to utilize the MediaKey Technology. After agreeing upon prices and terms you will get a MediaKey Account that gives you access to our software and administration interface. Now you can start creating more revenue from your media.

## A Tailored Solution

Our staff has a long history of developing digital media strategies and we can help your company too. This is done with a jointly developed strategy and a tailored solution that will suit your need. In this way, your company will unlock the true potential of their digital media.

## Pricing

MediaKey has a set of standard prices for the protection and license-issuing process, but these do not include the media strategy, integration and billing. These prices are something that we agree upon when we form your media strategy.

## MediaKey Admin

When you become a client of MediaKey you will get a MediaKey Account. With this account you can use our MediaKey Bulk Encoder and access the MediaKey Admin. In the MediaKey Admin you can manage all your digital media and create new Business Models. The Business Models can be applied to any of your media files and can be changed dynamically. The MediaKey Admin can be used with a standard web browser.

## Further information, Demos and Downloads

Please visit our website <http://www.mediakey.com/> for demonstration media files that will show you a few select business models and how the DRM playing process is for the consumer. On our website you will also find further information and downloads.

Please do not hesitate to contact us with any question or inquiry you might have. Contact information can be found under About MediaKey.



## Case Study: Securing and streaming an International soccer match for a TV channel

Leading Danish streaming provider Xstream contacted MediaKey to help it secure, protect and monetize a live Internet broadcast of an international soccer match. Xstream had found an external billing provider, but they needed MediaKey to tie it all together.

After 4 days a solution was ready and Xstream found that not only did MediaKey prevent any unauthorized viewing of the match, it also proved to be a very profitable concept for billing the consumers.

### Situation

Xstream wanted to broadcast an international soccer match for TV3 / Viasat. While they had the infrastructure to make the actual internet broadcast and a payment solution, they were missing both protection of rights and a way to bill the viewers of the match.

With the amount of broadband users the bandwidth expenses would be impossible to cover with advertising alone and without protection it would be impossible to charge the consumers to watch the match. A Pay-Per-View solution was needed.

### Solution

Xstream contacted MediaKey as they needed a partner with a long experience. To accommodate Xstream's requirements, integration with the new payment solution was needed. After only 4 days MediaKey had a tailored solution ready for Xstream that would help them encrypt the internet broadcast and enable them to charge the consumers for watching the match.

"Our client wanted three solutions in one package - Streaming, billing and protect in their content. It was important to protect the rights of the specific soccer match. With the help from MediaKey technology we had the Digital Rights Management solution implemented and up and running within 4 days", explains Claus Thomsen, CTO of Xstream.

With the MediaKey solution, Xstream could apply the DRM protection to their existing Windows Streaming servers so no new infrastructure investments were needed. The live stream was protected with the strong encryption and only consumers who paid to watch, was issued a license to the match. Billing was applied in the beginning of the actual viewing process so the consumer experience was a very smooth.

### Benefits

Xstream presented one single solution to their customer which met all their requirements after just 4 days. With the new Pay-Per-View solution, the TV channel was able to offer their product to a brand new market and make good profit from it. Xstream was quickly able to provide a flexible and secure solution for their customer and with this success they expect many more events of this kind in the future.



## About MediaKey

MediaKey is a company that protects and monetizes digital media with an advance encryption and license-issuing called DRM (Digital Rights Management). We have made tailored DRM solutions since 2002 and have helped many large clients increase revenue from their digital media. Our customers are always treated with the outmost discretion and we have a long experience in developing digital media strategies that helps companies get the most from their digital media.

MediaKey is a division of NetGroup in Denmark which has a long history of Internet transaction processing and fraud prevention. NetGroup also owns one of the best datacenters in Scandinavia with redundant internet connectivity and power supplies along with fire protection and excellent service.

## Contact Us

You are always welcome to contact us for ideas on how to increase revenue from your digital media or how to protect your digital rights.

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