

ArtistScope Copy Protection & DRM Technologies

Since 1997 when nothing was available for the copy protection of media viewed on the Internet, it was ArtistScope, an artist-orientated company, that recognized the need for protective solutions to safeguard the livelihood of artists, and it was ArtistScope who paved the way to set the standards for copy protection of today.

From the very first solutions for image protection and the creation of threat awareness through to the most robust and secure solutions that ArtistScope provide today, it has been ArtistScope's driving force that has been responsible for almost every major innovation in the copy protection industry since it began.

ArtistScope's first contribution was image encryption that could be used on a web page, and even today more than a decade later, there is no other solution capable of displaying encrypted images on the web. Along the way solutions for protecting hyperlinks from unauthorized access, domain lock for images and java applets, secret folders in web link, remote server checks for user and site authentication, server-side encryption of uploaded media and many of the simpler techniques such as using a clear GIF overlay to protect an image were par for the course in the development of the solutions that ArtistScope provides today.

ArtistScope's CopySafe technology was developed in 1998 and released as the first solution to prevent Printscreen and screen capture. Today CopySafe remains as the most secure protection from all copying including screen capture and recorders. Designed to run as a Windows service and shared by a variety of applications, CopySafe Web provides the ultimate copy protection for anything that can be displayed on a web page, while CopySafe PDF provides the most secure document protection that is so portable, that it can be used offline and distributed by download or on CD.

When ArtistScope developed their DRM technology they introduced new meaning to Document Rights Management by replacing insecure tokens with remote document and user identification that cannot be manipulated but can be adjusted on the fly; enabling total control over all aspects with immediate effect, even over documents that may have already been downloaded.

CopySafe PDF

Copy protect eBooks and PDF documents from all copying and unauthorized distribution. Publish documents using the most secure copy protection with options for DRM with total control for immediate effect over already published documents.

<u>CopySafe PDF</u> can be distributed in copy protected form with options for password control and document expiration governed by local time or checked by independent time servers to prevent users from thwarting expiration by altering their computer clock. Or CopySafe PDF can be distributed in similar copy protected format but with the extra protection provided by DRM, making it the most secure document format available to today.

The <u>CopySafe PDF Protector</u> software can be run using command-line and also installed on a server where it can be interfaced with web pages, thus creating solutions for site members to upload and convert PDF server-side for distribution within their portal or network. ArtistScope can provide ready-made DLL interfaces and also pre-written portals that include everything from document upload to member management and newsletter distribution.

CopySafe PDF with DRM

For the distribution of eBooks where one's livelihood depends on media not being forwarded to other persons and redistributed without your approval, CopySafe PDF includes options for Document Rights Management (DRM) were you can restrict use to individual users and/or groups such as departments within a company or classes within a school.

<u>ArtistScope's DRM</u> strategies can be managed from any computer in the world, providing total control over your documents, audience and access rights with any changes having immediate effect, even over documents that may have already been published.

Almost any document can be converted to PDF format, which means that almost any document can be protected and distributed securely. And when combined with ArtistScope DRM technology, even if your document falls into the hands of an unauthorized user, one who has not paid for the privilege, then they will not be able to open it.

CopySafe PDF Reader

The <u>CopySafe PDF Reader</u> is available in eleven (11) popular languages that can be selected independent of a computer's default language, enabling use of a preferred language when working in foreign offices. The reader supports all of the features commonly found in Adobe Acrobat including page resizing, image zoom, auto scrolling, bookmarks, hyperlinks, keyword search and more

Converting Documents to PDF

For consistency when converting PDF from various other file types, a <u>Universal Document Converter</u> (UDC) is bundled with the CopySafe PDF Protector software. UDC runs as a printer-driver making document conversion as simple as send to print, and then selecting UDC as the printer, for the newly created PDF document to be saved with a nominated file name and to a nominated location.

CopySafe Web Protection

<u>CopySafe Web Protection</u> can be used on any web site and on any web page, even pages that are delivered on the fly using any one of the web scripting languages. It is so simple to use and simple to incorporate on any web page. All one has to do is add a few lines of html to invoke the most secure copy protection imaginable.

With some CopySafe Web html added to a page everything on that page is fully protected from Printscreen and screen capture, and not just some screen capture programs like the copycats, because with CopySafe Web your pages are safe from ALL screen capture software, and it's supported in ALL web browsers. Different levels of protection can be applied to different pages to allow users to interact with page objects and participate in interactive surveys, etc.

The range of media that can be protected includes ALL media that can be displayed from a web page. This means that regardless of whether you display images, movies or Flash SWF, they will be protected from Printscreen and screen capture. In fact CopySafe Web will also protect your movies and animations from screen recorders.

CopySafe Web can be incorporated into any web project, regardless of whether it's based on .NET, PHP or Cold Fusion technology. It can be used on any type of web page and on any type of web server. CopySafe Web software can run in command-line and also run from a web server, enabling sites to be developed for encrypting images uploaded by site visitors. ArtistScope provide full support for the development of such sites and can also provide ready-made DLLs to provide the software-web interface.

The CopySafe Web software can create the html to add to your pages and also encrypt images using ArtistScope's renown "domain lock" technology. Images encrypted for use with CopySafe Web are the most secure method of protecting images because <u>encrypted images</u> cannot be used from any other web site and cannot be retrieved from cache. In fact the image stored on any server are also safe from the Webmaster himself.

Plugin installers are available for all modern web browsers supported on Windows 2000, WindowsXP, Windows Vista and Windows 7, which is all Windows platforms since 2000 including 64-bit. The web browsers supported include Internet Explorer and Firefox and their derivatives including Avast, Chrome, Flock, Green, K-meleon, Maxthon, Navigator, Opera, Safari, Slim and Sleipnir to name the more popular.

Plugin downloads can be provided from your own web site or one of ArtistScope's download servers. By hosting your own download pages you have full control over their look and feel, and can customize the messages for your special audience.

To keep abreast changes in Internet environment such as new Windows or browser releases the ArtistScope plugin service is regularly revised and upgraded. The provision of these upgrades is a free and ongoing service (no fees). When an upgrade is available the only change required on your web pages is to the version number in the JavaScript.

Document Rights Management (DRM)

<u>ArtistScope DRM</u> (Document Rights Management) is a total control solution for the access rights management of documents, images and web pages where an author can assign different permissions per user or group of users. When DRM rights are assigned the document becomes "for their eyes only "and any copies of that document forwarded on cannot be viewed by others unless they also have rights of view.

Protect financial data and portfolios. Provide financial data and statistics to valued clients. ArtistScope DRM is the most secure DRM solution imaginable. Tokens cannot be forged and certificates cannot be copied and redistributed. When a document or web page is tagged for DRM the back end is checked for their rights of access.

Protect photographs, plans and drawings. Upload and protect various file types including Word, Html, PowerPoint, Excel and images for distribution as documents or for web pages that cannot be copied or printed unless you allow the privilege. Publish using any combination of DRM or copy protection rules or none at all.

Protect from anywhere. Administrate and distribute from anywhere. The creation of user accounts, document conversion and distribution can be managed online from any computer in the world. Create new users, assign administrators and other special users permitted to submit publications, update document permissions or suspend document availability at any time. Documents can be emailed to your group of users or provided as a download.

- Restrict which users or groups can view a document or web page
- Set expiration on a document or web page validated by time server
- Allow or limit the number of views of documents and web pages per user or group
- Allow or limit the number of prints of documents and web pages per user or group
- Allow or limit access to documents and web pages by IP number or network
- Allow or limit a user to add/edit documents for shared distribution
- Create member accounts for authoring documents and web pages
- Upload, convert and protect almost any type of document or web page

<u>ArtistScope DRM Enterprise</u> manages both documents and web pages from an online control panel that includes a extensive suite of server side tools for document conversion, image and web page encryption, member administration and distribution by email in zip format. <u>ArtistScope DRM</u> <u>Anywhere</u> will protect unauthorized access to web pages hosted anywhere.

The <u>Hosted DRM Service</u> is an already installed version of ArtistScope DRM Anywhere which you can rent by the month or according to usage. The solution is hosted on ArtistScope servers and no software is required as everything is provided server side. New accounts can be publishing within 24 hours to meet an urgent deadline.

The <u>DRM Validation Service</u> is specially designed to provide DRM support for documents created by the CopySafe PDF Protector. The cost of using validation is half that of the Hosted DRM Service but requires that you use the CopySafe PDF Protector locally to encrypt your documents and then upload them to the server to register them in the database. The Protector can be used without a license but most will want to remove the watermark that appears on documents created by the demo version.

Image Encryption For The Internet

ArtistScope provides two different solutions for using encrypted images on the Internet.

Images encrypted for use with <u>CopySafe Web</u> can be displayed in web browsers on Windows computers using either an ActiveX viewer or a Java security applet, while images encrypted for use with <u>Secure Image</u> can be displayed in all web browsers using a java security applet that is supported on all platforms including Windows, Mac and Linux computers.

Both *CopySafe Web* and *Secure Image* are provided with image converters to process image encryptions, and both applications are available as a Windows desktop GUI and also for command-line use, enabling both converters to be installed on a server for server-side conversions, encrypting images as they are uploaded to a web site.

ArtistScope can also provide DLLs to integrate the software with web pages, and can also provide a web portal to manage user access, uploads and web page creation and access rights to web pages

Domain Lock

<u>Domain Lock</u> is the technique developed by ArtistScope to ensure that encrypted images can only be displayed from a designated web site. When using CopySafe Web or Secure Image the client can nominate a site for which they have a license key, and the images will be encrypted according to an algorithm based on the web site address. The encrypted key is embedded into the image and when ArtistScope's security applet or Activex tries to display the image it will use the embedded key to decrypt the image. However it also checks that the web site address being used to display the image and if they don't match, then the image is not decrypted and not displayed.

Image Security

The use of <u>encrypted images</u> that employ <u>domain lock</u> provides the most secure solution for the storage of images on a web site and on the web server, because those images cannot be used or displayed anywhere else except from the web site that they have been encrypted for and then only from an ArtistScope image viewer that verifies that they belong to that site and thus is able to decrypt them.

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