



ArtistScope Secure Image Pro

Version 5.0

To learn how Secure Image works, first follow the **Tutorial** below and then check out the output in locally using your html editor and then from your web site using a web browser. When familiar with how security applets work you will be better equipped for customization.

Note: When using the image converter for the first time, or for evaluation:

- Windows 7 -10 users may need to set write permissions by everyone on the project folder.
- Viewing test pages at **localhost** only works in Internet Explorer
- Opening test pages locally only works in the Internet Explorer web browser

Using the Secure Image Pro Converter, JPG, GIF, PNG and TIF images can be processed singularly or in batches using a wizard to set options for a variety of effects such as swap image, hyperlink, slideshow and watermark. When saving your project you have the option of saving them to a single page or to individual pages ready for upload to your web site.

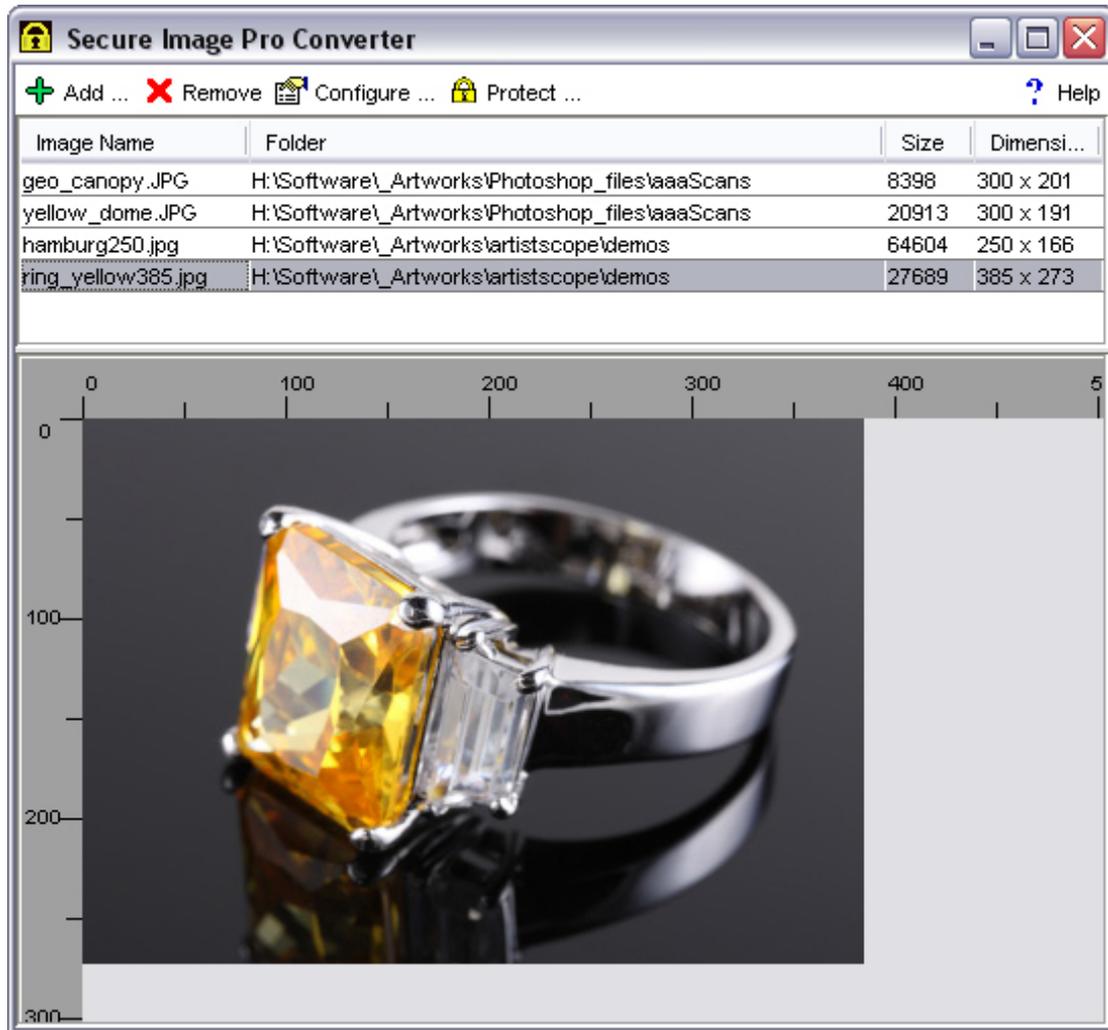
Image Encryption

Images converted by Secure Image Pro are encrypted using a key based on your site URL for Domain Lock. Unless that image is displayed from your web site it will not display. Using image encryption and Domain is the only effective solution for protecting images online because they cannot be used elsewhere even if reclaimed from the web browser's cache (Temporary Internet Files). Encrypted images are also safe from your Webmaster and web hosting staff.

If displayed from an unregistered site the images will not be visible and the applet's settings will revert to default. *The exception to this rule* is during the first 48 hours from the time that the images were encrypted. After 48 hours all images and applets will be domain locked.

Database Delivery

Images can be imported into Secure Image Pro and processed in batches of up 1,000 at a time. The only limitation is the file size of the images and the available memory on the computer running the software. Once you have your encrypted images they can also be delivered on the fly using templates to display the database results. Most of the applet parameters may apply to all images within a category or folder and can be static parameters in your templates. The important parameters that will vary between images will be image name, width and height.



Installation

Windows:

- After downloading, unzip and double-click SIPro5demo.exe
- You may need to install a Java 1.5 (or later) from Sun's Java web site

First time use

To learn how Secure Image Pro works, first import a single image and protect it. Then check out the output in your web browser. When familiar with the end product for upload to your web site, you will then have a better understanding of how you can vary your project.

Using the Image Converter

The image converter is used for importing images and batches of images into the workplace for selection of display style and encryption. As each batch is saved the new encrypted images and their support files are added to a folder of your choice.

Loading images for encryption

First select the images that you want to work with by clicking the ADD button. To select more than one image at a time hold down the ctrl/shift button on your keyboard while clicking on each image name or you can import by the folder. The program will load jpg, gif, png, tif and most animated gif images of good quality (over compressed images may fail the encryption process).

Configuration Wizard

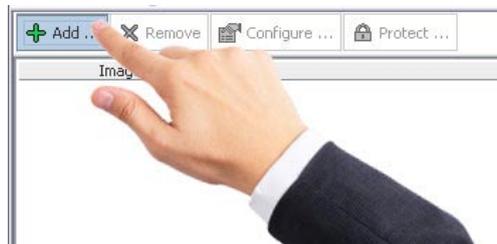
Getting started

After opening the Secure Image Pro Converter the first thing to do is check that it is registered for your domain by clicking on **Help** in the tool bar and then clicking on **Register**.

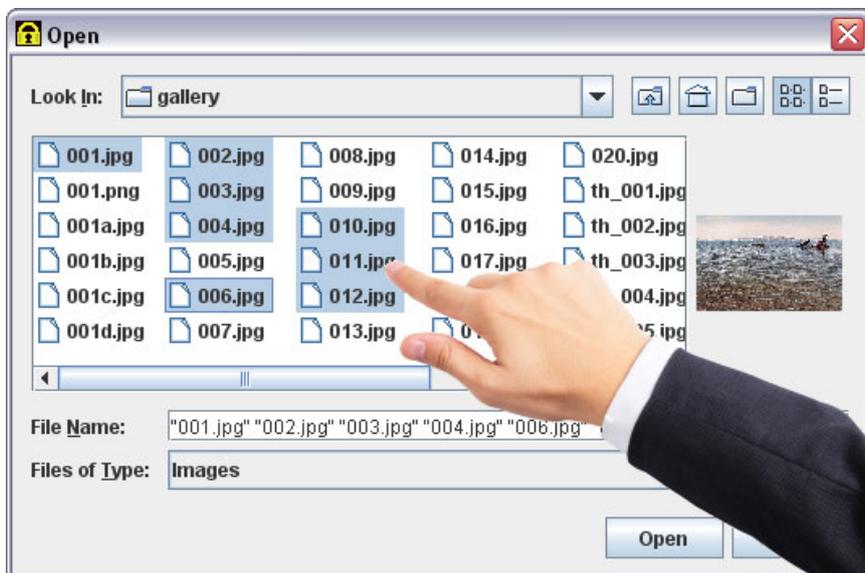


Adding images to the workspace

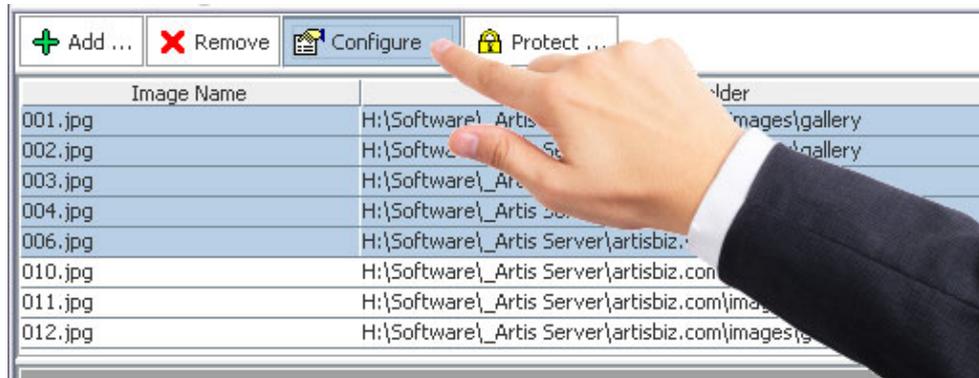
The next thing to do and what you need to do before anything else, is add some images to work with. When you click on the **Add** button a directory will open for you to select the images that you want from anywhere on your computer. Images to use as secondary images in swap and slideshow are to be selected later in the wizard.



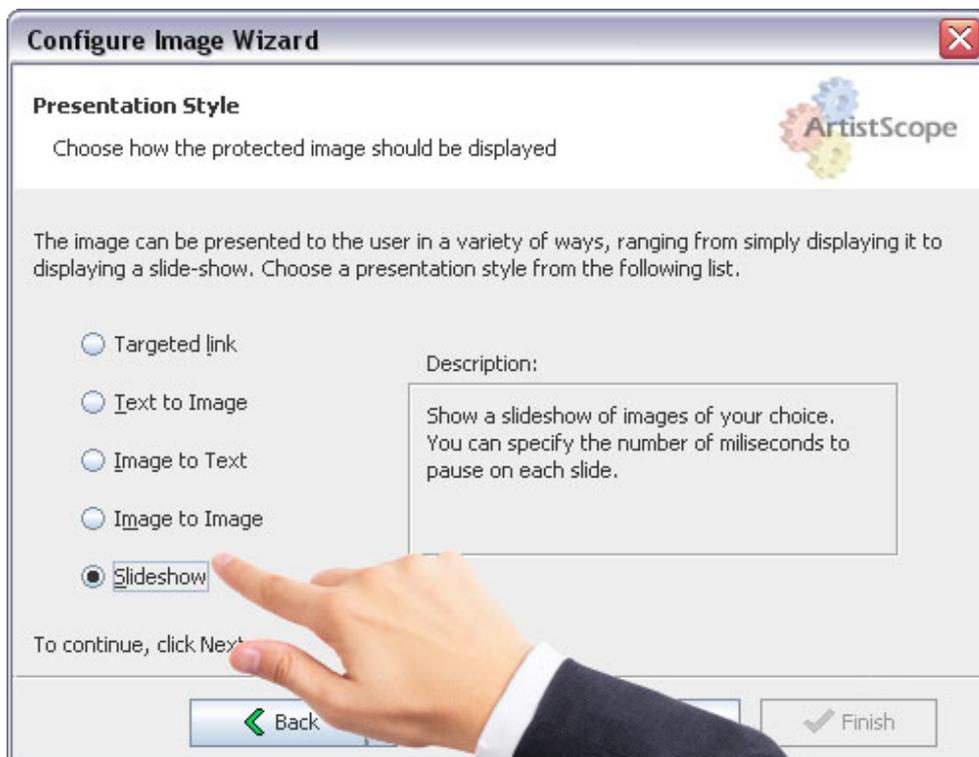
You can select images by the folder (all images of good quality will be imported) or by selecting individual images using Ctrl and Shift Select:



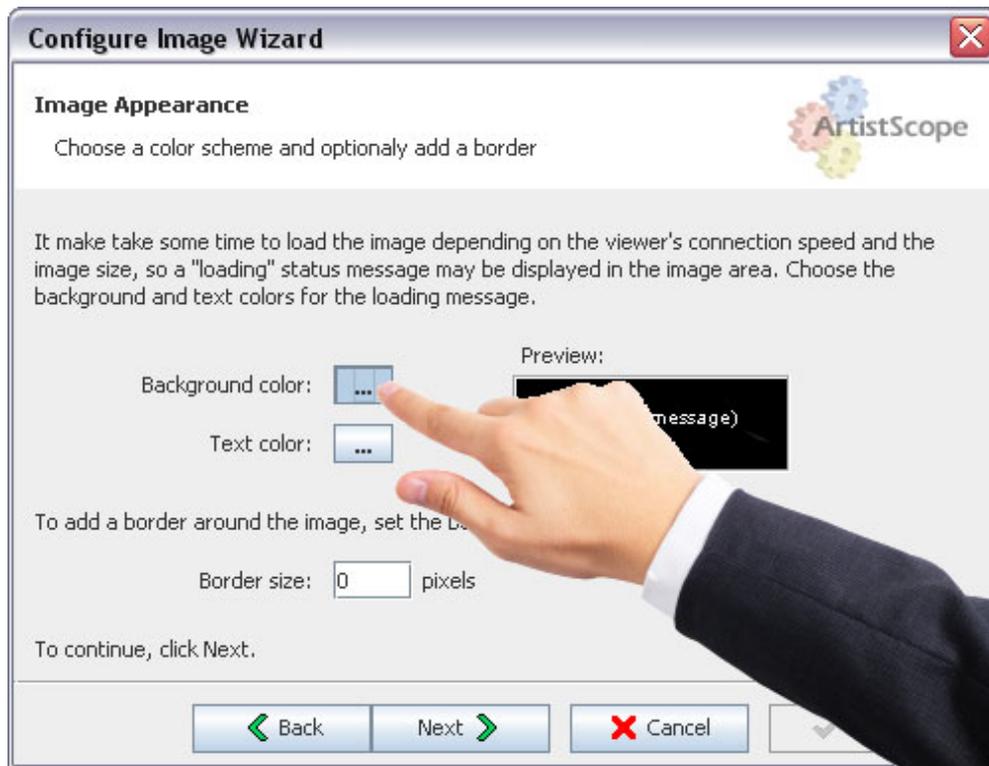
After selecting the images then click on the **Open** button. Now you should see a list of the images that you added. Then next step is to select the image display properties. So unless you want them all using the same display options, select those that you want to configure using the same settings by Ctrl or Shift Select to highlight them. Now that you have some images highlighted, click on the **Configure** button:



When the configuration wizard window opens, the next step is to select the display style. Setting a slideshow will be a more interesting tour so let's forget that we have a lot of images already selected for configuration and imagine that there is only one. Click **Slideshow** and then click on the **Next** button:



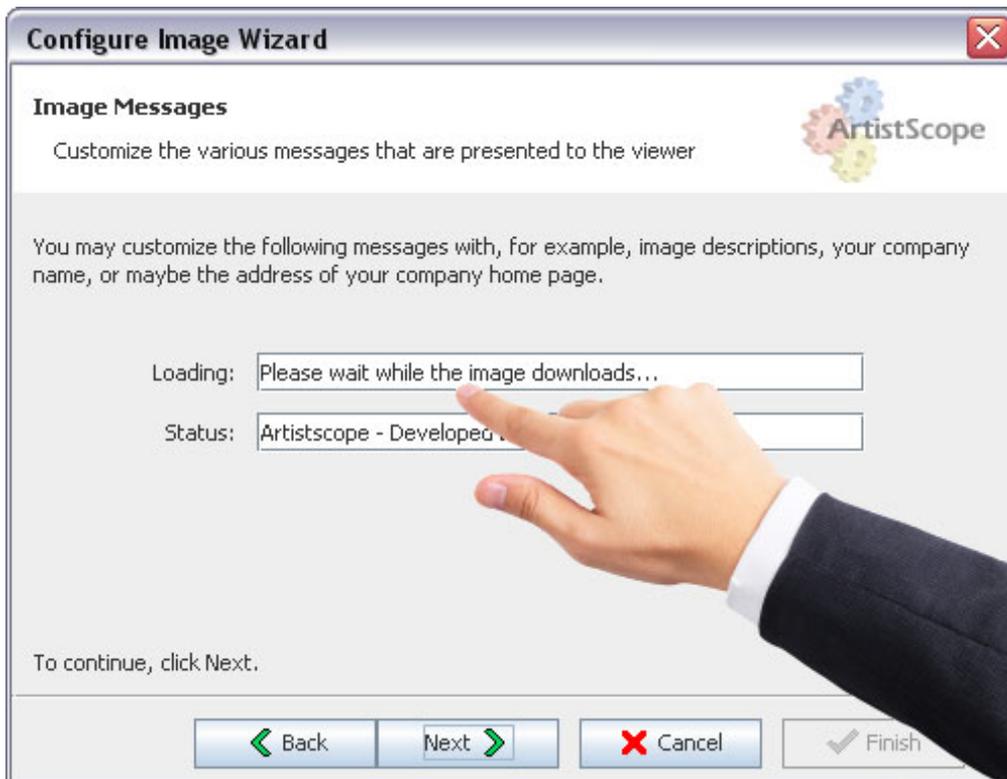
Next you can select the background color of the image area that shows while the image is loading. You can also select the color of the text that displays in the **while loading** message. When done click on the **Next** button:



Next you need to select the **image encryption** type. Encrypting an image for a set domain is most recommended as the Domain Lock key will be embedded in the image. Nominating “All registered sites” is not recommended. When done click on **Next**:

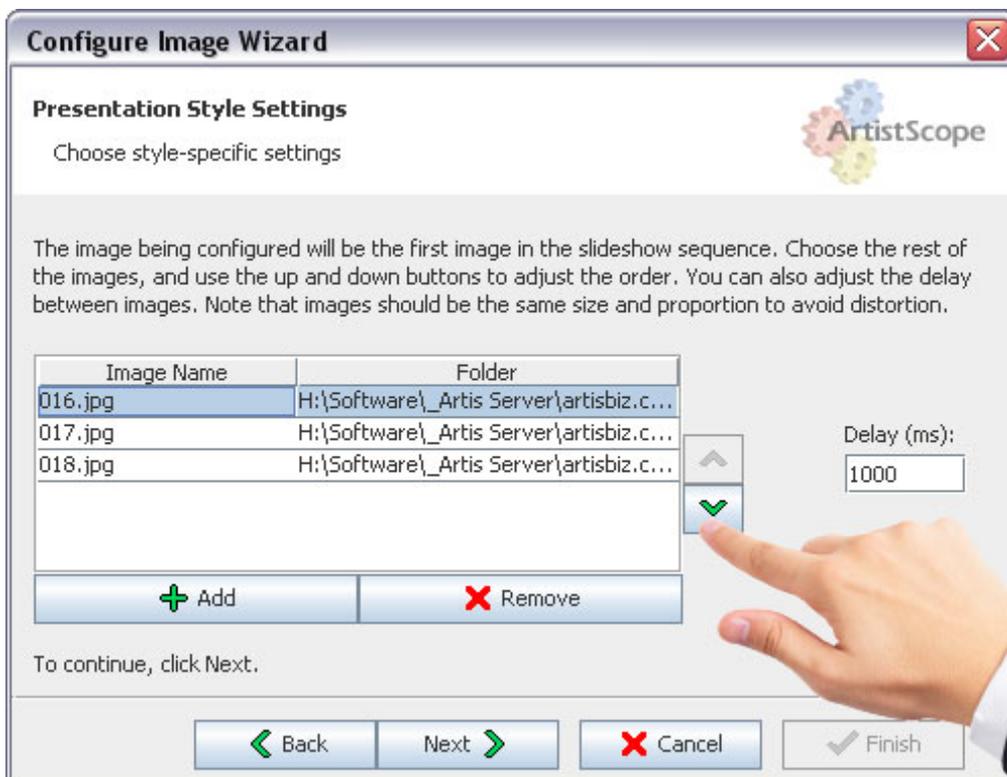


Next we can nominate what is displayed in the status bar and the image area while the image is downloading. When done click on **Next**:

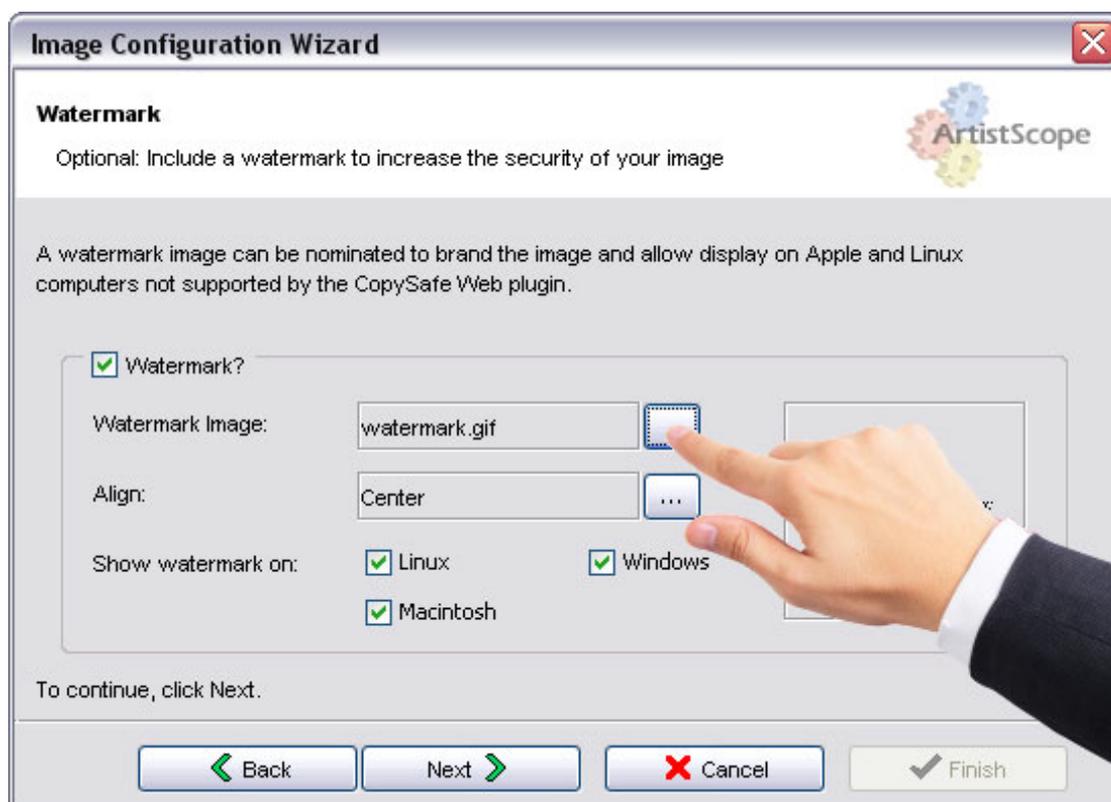


Loading is the message displayed in place of the image while it's downloading.
Status is the message shown in the status bar when placing the mouse over the image.

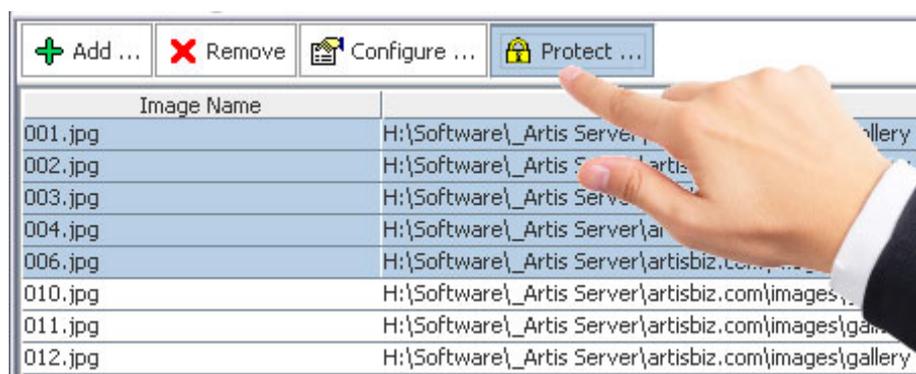
Next we select the images to include in the slideshow. Remember that we already have one image selected, so what we do here is select the other images that will appear in the same sequence. Here you can set the pause between images and move an image forward or back in the sequence. When done click on **Next**:



Then click on **Finish**. Next we set a watermark if required. The watermark image must be nominated if this feature is selected.



So now we have some settings to work with lets encrypt some images. With the same selection of image/s highlighted now click on **Protect**:



From the next window that opens select the folder to save to and then click the **Open** button.

Note: that the folder that you save your projects to may need to have write **permissions for everyone**.

Congratulations! You have now encrypted several images and created a html web page to display them. If you think that that was complicated consider this... its only the same amount of effort to encrypt 1000's of images in a single batch. Once you have default settings for the next selection of images you can click your way through by simply using the Next button.

Uploading

When your pages are finished with the extra content added, simply upload them to your web site, ensuring that all the files produced by the program are in the same folder. It is that simple. Your original images are no longer needed and should not be on your web site. Some FTP uploaders offer the choice of ASCII/Binary uploads...if the choice is available always use Binary.

Viewing encrypted images

To view your new work, you can upload the new content to your web site and visit the page/s using a web browser. Note that images encrypted more than 48 hours ago can only viewed from a licensed web site.

Editing encrypted images and their pages

An encrypted image is displayed by code inserted into the page where the image is to appear. If you are using the standard template and sii file then the code will be written in according to the requirements. However the same code can be written in using ASP or even hard coded for your own specific requirements.

Codebases

If all files are in the same folder then that folder automatically becomes the codebase for the applet. If delivering on the fly from templates or storing your html in a different folder to your image files, you need to set a codebase statement in the applet. When using a codebase ALL of the needed files are expected to be found in the codebase folder.

Customization

Template.txt can be found in the program's "viewer" folder which provides the base files for all new encryptions. This template file can be edited to include any code that appears throughout your web site for standard header and footers, etc. First make a backup.

Java

Java version detection

Scripts are provided to initially see if the browser has allowed Java to run, and then it checks for the Java version number. If no version is found, it then redirects to the Java info page.

Temporary Internet Folder

Caching is performed by your web browser to conserve downloads by storing a copy in a Temporary Internet Folder or "cache". Although your visitor may be able to see the normal view of your image in their web browser (while protected) the images stored in cache are the encrypted version and totally useless viewed in a web browser visiting your web site.

Web Site

Ensure that your visitors do not have an open view of your site's folder content. This problem can be rectified by adding an index file to the folder. The default for most web sites is index.html or default.htm

Terminology

Applet	Html code added to web pages to call Java functions for the manipulation of data and images.
Class files	The applet's function files with the extension .class
CMD	Command line interface
Default settings	Default settings of the demo cannot be altered. However this is fully editable in the registered version, which will save the latest settings on exit, etc.
Domain Lock	Developed by ArtistScope, Domain Lock matches your images to your web site by using it as the encryption key. Images encrypted for one site cannot be used on other web sites (unless they are also registered and selected at the time of encryption).
Encrypted image	Images encrypted by Secure Image and renamed as image.class files. These images need to be displayed in a security applet and decrypted before they can be viewed.
Html	The code used to display a web page. The code governs what the web browser displays and is not visible on the page without using the browser's "view source" option.
Java	Program language supported in all platforms and web browsers.
Normal image	Your original images. The ones to be encrypted.
Parameter	Nominated setting value in an applet
Site root	Lowest level of your web site... where your home is found.

Applet Effects

You have several different options for how the images are displayed. Any number of images or different styles can be displayed on the same page.

- **Watermark** displays a copyright message over the image
- **Slideshow** displays several images in perpetual rotation.
- **Swap image to text** initially loads with your text message displayed which changes to show the image when the mouse is moved over the applet.
- **Swap text to image** initially loads with your image displayed which changes to show your text message when the mouse is moved over the applet.
- **Swap two images** initially shows the first image and swaps to the second image when the mouse is moved over the applet.
- **Image hyperlink** will link to the next page using a targeted frame (or none).

Image Hyperlink

A hyperlink can be added to the image applet that will be activated on mouse click.

Removing the hyperlink

If a link is not required simply leave the field blank.

Targeted framesets

When an image hyperlink is used the frame that the next page is to open into can be targeted for control within framesets, to open into a specific frame or to open into a new browser window, etc.

Batch import and conversion

Multiple selections

File import supports multiple selections - use Control and Shift click to select multiple images in a folder.

Folder import

Select a folder to import and Pro will import all JPG, GIF, PNG and TIF files in the folder. It also includes any folders within the selected folder.

Saving batches of images

When loaded into the Pro workplace you have the option of selecting some or all listed images to encrypt on command. Then you select whether to save each image to individual pages, or save all images to a gallery page. Although each image may have different settings, their individual settings are maintained regardless of how large the batch.

Individual pages

Each new page created will be named as the image name that was imported. For example image001.jpg will produce image001_0600_0450_S.class (the encrypted image) and image001.html.

Gallery page

When saving all images to a single page, it will be named gallery.html. When using this option, care taken in pre-selecting images to display together on a page will avoid problems with editing later.

Limitations

How many images that can be processed at one time will depend on the image file sizes and the available memory on your computer. There have been reports of batch saving more than 3,000 images at a time.

Deployment

The image convert software will encrypt your image and also create the html (web page) for you to use to display that image. The easiest method of deployment is to simply upload those files, and where the image is to be displayed on other/existing web pages, simply copy'n'paste the code across for the sii.js file and JavaScript as described below.

More experienced web designers may find that by using a hard coded applet they have more control over how the applet displays, especially if delivering encrypted images on the fly.

Otherwise new-age web designers who rely on CMS for website building can download and install add-ons for popular CMS such as WordPress and Joomla. These plugins will enable upload and placement of teh encrypted images onto web pages from the CMS online editor.

Hard coding the applet html

A sample image and web page can be found in the folder named "sample". The image was encrypted for use on **localhost** and can be displayed using Internet Explorer by uploading the sample folder to the root of your personal web server (PWS) see Readme.txt for more information.

The sample page uses hard coded html for the applet code instead of assembling it using JavaScript. An example of the html to use for hard coded image templates is as follows:

```
<applet codebase='/asps-tests/' code='com.artistscope.ArtistScopeViewer.class'  
  archive='ArtistScopeViewer501.jar' id='Artistscope' width='580' height='386'>  
<param name='Style' value='ImageLink' />  
<param name='TextColor' value='FFFFFF' />  
<param name='BorderColor' value='000000' />  
<param name='Border' value='0' />  
<param name='Loading' value='Image loading...' />  
<param name='Label' value='' />  
<param name='Link' value='' />  
<param name='TargetFrame' value='_top' />  
<param name='Message' value='' />  
<param name='FrameDelay' value='2000' />  
<param name='FrameCount' value='1' />  
<param name='Frame000' value='fashion2z580_0580_0386_s.class' />  
<param name='permissions' value='sandbox' />  
</applet />
```

Take special note of the image name and how it includes the size as 0700-0397. This means that the image is 700 pixels wide by 397 pixels high, and if a border of 10 pixels is added then the overall size of the applet should be 720 x 417 pixels. When loading images on the fly you need to work with these details to be able to correctly fill the applet's size parameters for overall width and height (as seen in the top of the code).

Editing sii.js

The JavaScript insert files *deployJava.js* and *sii.js* are called by your Secure Image tag which passes the image details for it to write the applets parameters at the place where the image tag is located. It can be placed anywhere on the page as long as it loads before the encrypted image (above the image tag) but is more effective when placed in the head tags of the web page. To add the code simply copy'n'paste the following:

```
<script src="deployJava.js" type="text/javascript"></script>
<script src="sii.js" type="text/javascript"></script>
```

You may need to include the folder name if *sii.js* is not in the same folder as the pages that use it.

Setting the defaults for sii.js

You can use the one *sii.js* for all your web pages or include a *sii.js* file in each folder which enables you to set different defaults for the different sections on your web site. For example for all the pages in one folder you may want a blue background, white letters and 10 pixel wide border around the image while in another folder it could be white background with no border. If you want to use different image settings for every page you can add the insert as a JavaScript on the page itself by copy'n'pasting the code from a *sii.js* file to the page between tags like:

```
<script type="text/javascript">
    copy the sii.js code to here
</script>
```

The settings that you may have to modify for your site are:

- `m_szImageFolder` Location of the image and class files
- `m_szDefaultStyle` Usually "ImageLink"
- `m_szDefaultTextColor` Colour of the applets loading text message
- `m_szDefaultBorderColor` Colour of applet's background and image border
- `m_szDefaultBorder` Image border in pixels
- `m_szDefaultLoading` Message displayed as the image downloads
- `m_szDefaultLabel` message displayed in the status bar on MouseOver the image
- `m_szDefaultLink` Default hyperlink if the image is mouse clicked
- `m_szDefaultTargetFrame` Can be set to target within framesets
- `m_szDefaultMessage` Message to display in text to image swaps on mouse action
- `m_szDefaultWatermark` Watermark image to apply over the main image
- `m_szDefaultWatermarkAlignment` Watermark alignment within the image area
- `m_szDefaultWatermarkLinux` true/false to display watermark for Linux computers
- `m_szDefaultWatermarkMacintosh` true/false to display watermark for Mac computers
- `m_szDefaultWatermarkWindows` true/false to display watermark for Windows computers
- `m_szDefaultFrameDelay` Pause between frames in slideshow in milliseconds

Depending on which display style has been nominated not all of the settings above may be used. However they need to set because sometimes you may only provide the image name and the applet will use these defaults for the settings it needs (different display styles use different settings). If any of these settings are included in the image tag they will over-ride the default settings above. For debugging purposes setting `m_bDebugging = true` will output the code to the web page instead of displaying the image applet.

About the image tag

Instead of using the usual applet code parameters at every place an image is to be displayed, a JavaScript is inserted to hold the parameters for the sii.js script which writes in the applet code wherever an image tag is placed. The following code is for a static image with a hyperlink:

```
<script language="JavaScript" type="text/javascript">
<!-- hide JavaScript from non-JavaScript browsers
insertSecureImageProImage(580, 386, "ImageLink", "ffffff", "6699ff", 0, "Please wait while the image
downloads...", "My art gallery", "/index.html", "_self", "Fashion photograph", "",
["fashion580_0580_0386_S.class"]);
// -->
</script>
```

If displaying images on the fly you could use the following code and allow the sii.js to provide its defaults settings for parameters that are left blank:

```
<script language="JavaScript" type="text/javascript">
<!-- hide JavaScript from non-JavaScript browsers
insertSecureImageProImage(580, 386, "", "", "", , "", "", "", ["fashion580_0580_0386_S.class"]);
// -->
</script>
```

If you are an Internet Explorer user you will find that it doesn't tell you much about JavaScript errors and sometimes will display a page even though there are errors on the page. If there are errors in your JavaScript the image display may fail at the line where there is an error. So to be sure that there are no errors you need to use a good error debugger that tells you just where the error is. Firefox web browsers are good for this with the "Error Console" window open.

Uploading

Files to Upload

All of the files found in the project folder (where you saved your new work) must be uploaded for the system to work. The files required for the tutorial test are as follows:

ArtistscopeViewer.jar - Java class file.
test.class - encrypted image
test2.class - 2nd encrypted image (with swap image)
test.html - web page with the ArtistScope applet

Uploading by FTP

Never upload images or class files as ASCII. They must always be uploaded as Binary or they will be corrupted.

Uploading with FrontPage

Simply copy your files from your local directory and paste them to the destination folder on your site. Or you can use the "Publish Web" option.

Original Images

Any original images that have been encrypted can be removed from the server as they are no longer needed. The new image.class file will be used in the security applet.

Folder Security

Some servers, when a call is made and the main index page is absent, will give the visitor a directory of all files within that folder. A precaution is having a generic filename your web server considers to be the default file. If your ISP requests that your home page be named index.html, index.htm, or default.htm -- then that's the filename being used. You should always have a default index file in the project folder.

Security

Domain Lock

With Domain Lock, your images and applets can only be used on your web site. Pirates cannot use them on any other site.

Protection from right MouseClick

Protection from "right MouseClick" and MSoft Explorer page saving. Mouse clicking offers several options for saving or copying the page or image. Secure Image prevents right mouse click operations in several ways, depending on which applet style is used. If it is the Standard display the visitor will be transported to a set page or the next link.

Protection from bandwidth theft and unauthorized linking

It is impossible to directly link to your encrypted images and display them on another web site.

Images are safe from spiders and site grabbers

Spiders, grab applications and programs such as Pdf, Xenu, Site Copy and Teleport Pro that search a site and provide a report of all the linked content cannot locate the protected image folder nor the Java and data files associated with the images because they are encrypted and domain locked. They are also safe from search spiders such as Google image search.

Cached images are not retrievable

Cached images in the Temporary Internet Folder are not retrievable. These images are generally difficult to retrieve but because the image files are encrypted they can never be retrieved.

Images stored on the server are secure

Secure Image Pro images are encrypted and domain locked to your web site. The key code is based on the address of your website so that images can be encrypted for your site only. This means that even if someone gets all your files then the images will not be viewable anywhere else (even locally) except on your web site. Images stored on the server are secure from everyone including your webmaster.

Protection from all copying

Secure Image Pro will protect your images from all avenues of downloading and saving. For protection from screen capture programs we recommend CopySafe Web.

Command line operation

Secure Image Pro version 5.0 is also available as a command line tool for inclusion in other projects such as online member galleries and portals where admin or members can upload images, encrypt them and create new web pages within a web site for immediate display of a copy protected page or image. It can be operated from the Desktop as a normal Windows application or it can be used in **command line** mode.

Installation

Copy the "SecureImage" folder to your computer. If using a server environment it is recommended to install at C:\Copysafe.

The command line converter (CMD) uses ProDefaults.dat for default settings such as the watermark image to use, etc, if those options are required.

First run

Before running CMD in command line mode you need to set the ProDefaults.dat file for your default settings.

1. Run the Windows GIU by double clicking on SecureImagePro.jar
2. Add an image
3. Highlight the image and click the Configure button
4. Run through the wizard for Targeted Link
5. Set Watermark for Mac and Linux only
6. Set watermark image (watermark.gif in the same folder as SecureImagePro.jar)
7. Click Finish
8. With the image still highlighted click on the Protect button
9. Select the output folder and click Open
10. The converter will save all new files to that location
11. Close the converter GUI and select YES to "Save new settings"

The ProDefaults.dat now contains your default settings

Command line operation

Secure Image Pro CMD is designed for high end users, those encrypting images in volume for deployment on the fly. The CMD converter will encrypt single images or batches of images nominated by folder. The recommended parameters to use are:

- Targeted Link as nominated display style
- Watermark image to use
- Background and text colours
- Border size if required

The parameters to use in the command line:

- i <input folder> or -f <input file>
- o <output folder>
- s <settings file> (optional)
- v <viewer folder>

If no settings file is nominated the converter will use its inbuilt defaults. The viewer folder must be present to provide some of the resources that are delivered in the final output. For example:

For batch conversion by folder using ProDefaults.dat settings:

```
java -jar SecureImagePro.jar -i c:\SecureImage\in -o c:\SecureImage\out  
-v c:\SecureImage\Viewer -s c:\SecureImage\ProDefaults.dat
```

For single file conversion using ProDefaults.dat settings:

```
java -jar SecureImagePro.jar -f c:\ SecureImage \in\myimage.jpg -o c:\SecureImage\out  
-v c:\SecureImage\Viewer -s c:\SecureImage\ProDefaults.dat
```

Licensing

Registering sites

To use Secure Image beyond trials you need a keycode for your web site. Your web site key enables Domain Lock so that the images will be decrypted and displayed. Extra sites can be added to the program with discount.

License types

Your site key is based on the url and not just the domain name. For example:

- www.mySite.com - includes mySite.com but not gallery.mySite.com
- gallery.mySite.com - for gallery.mySite.com only
- gallery.mySite.com/artistname/ - for images within the artistname folder

Note: A license for www.mysite.com is not the same as alias.mysite.com so the domain that you register must be specific.

IP numbers can be licensed.

Multiple licenses

With every site registered you also get a keycode for use at "localhost" for testing on personal web servers. When you have several sites registered, you have the option of applying domain lock for selected sites. When ordering extra domain licenses, be sure to nominate all your other licenses for them to be included in the same program.

Register online

You can register/add domains to your program using our secure gateway at www.artistscope.com.

Troubleshooting

Unknown error occurred

If you are getting **Unknown error occurred** or **An error occurred during the encryption process** then the cause may be either:

- * insufficient write permissions on the project folder
- * a second image has not been nominated when needed

Insufficient write permissions on the project folder

Security limitations such as those introduced by Windows 7 may be preventing the program from writing the new files, in which case you need to modify the write permissions on your project folder for write by everyone.

Second image has not been nominated

In swap image and text to image displays, if the second image has not been nominated or cannot be found, you will get this conversions error.

Image not viewable

- the codebase setting for the files location is incorrect
- The encrypted image and its support files can only be viewed from your web site.
- Viewing at localhost is not supported in later versions of Firefox and Chrome
- Viewing at localhost is only supported by Internet Explorer

Cache problems for artists and designers

A common problem found when updating web content can be due to caching by either your browser or your ISP. Caching is performed by your web browser to conserve downloads by storing a copy in a temporary Internet folder or "cache". Caching is also performed by ISPs to conserve their data costs. Some hungry ISPs will enforce caching for days.

Still getting the same error even though you have made corrections?

On refresh you may be getting the latest page in your browser, but not the latest image.class file. This can be due to caching of previous errors by either your browser or your ISP. You can alter your browser settings for refresh, but some proxy connections may not update for days. When reloading the page, try holding down the "Shift" key at the same time. If this fails then to avoid cached errors you will need to use a different image file name. Renaming the image.class file and modifying the applet's image parameter will save encrypting a new image.

Hyperlinks on the image

The applet link is editable in the registered version but not in the demo. If a link is not required leave the field completely blank (works when viewed from the registered site).

Expiration

Images created by the demo version will be viewable for 48 hours only. Images created by the registered version never expire, however they are viewable on unregistered sites for a period of 48 hours (to allow final edit/testing prior to upload). After 48 hours images created by the registered version will be domain locked and only viewable from your web site.

If displayed from an unregistered site the images will not be visible and the applet's settings will revert to default.

Intranet use

The registered version is also provided with a license for "localhost" for Intranet sites such as personal web servers for pre publication review and testing.

Altered links and parameters

Some html editors automatically adjust file links dragging pages from one folder to another. To avoid this, upload/save the new work directly to the intended folder.

Batch Saving

When saving a batch of images with the one command, the applets will maintain their individual settings and messages. However if using the image to image option, neglecting to nominate the second image will cause the conversion to fail on save.

Uploading

Never upload images or class files as ASCII. They must always be uploaded as Binary or they will be corrupted. FrontPage users do not have to worry about this as it is automatically selected. The files to upload are:

ArtistScopeViewer.jar - Pro Java class file.
test.class - encrypted image
test2.class - 2nd encrypted image (with swap image)
test.html - web page with the ArtistScope applet

The original images are no longer needed. It is now the applet on the page that displays the new encrypted image.class file..

Altering Codebase

The image.class files and the java class files must be in the same folder. The default set up is for the html pages and Java files to reside in the same folder as its web page. However it is possible to relocate the images and Java files by altering the path of the codebase in the applet code. Instead of modifying the image parameter such as "images/image.class", a codebase statement will tell the applet to look for ALL of its parts in that folder.

Domain Licensing

Check that the site registered does match the web site address that you have your Secure Image Pro images. Run your mouse over the internal links in your site and check that the same name appears in the hyperlink. If registered for "gallery.mySite.com" your images must be viewed at <http://gallery.mySite.com>.

Support

Free support is available via email from the contact form at www.artistscope.com. Please do not send us your images as we need to see your code online, so please send a link to where your test can be viewed on your web site.