

Lizard Flashguard Secure Flash Writer

Product Manual for Windows

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Table of Contents

CHAPTER 1: INTRODUCTION	7
1.1 ENCRYPTING FLASH FILES	8
1.2 CUSTOMER AND FLASH FILE EXPIRY	10
1.2.1 Instant revocation for distributed files and persistent version control.....	10
1.3 COMPLETE OFF-LINE PROTECTION	11
1.4 CUSTOMIZABLE MESSAGE TEXT & SPLASH SCREEN	11
1.5 LIZARD FLASHGUARD FEATURES	12
1.6 LIZARD FLASHGUARD FOR INTERNAL COMPANY USE	14
CHAPTER 2: INSTALLATION	15
2.1 PRE-REQUISITES	15
2.2 INSTALLING THE WRITER	15
2.2.1 Disabling Automatic Updates	18
2.3 PROXY SETTINGS	19
2.3.1 Automatic configuration script.....	20
2.3.2 Proxy server manual entry settings	21
2.4 REGISTERING THE WRITER	22
2.4.1 Firewall messages displayed during registration.....	23
CHAPTER 3: PROTECTING FLASH FILES	24
3.1 PRE-REQUISITES	24
3.2 MAXIMUM FILE SIZE SIZES SUPPORTED	24
3.3 HANDLING RELATIVE LINKS TO OTHER FLASH FILES	24
3.4 PROTECTING FLASH FILES	27
3.4.1 To protect a flash file(s):.....	27
3.5 CUSTOMIZATION TAB	28
3.5.1 File being processed:.....	29
3.5.2 Message displayed on unauthorized use:	29
3.5.3 Splash screen branding image:	30
3.6 FLASH ACCESS TAB	31
3.6.1 All customers	32
3.6.2 Selected customers (must be individually allocated)	32
3.6.3 Customers belonging to the selected publication	32
3.7 EXPIRY AND VALIDITY TAB	36
3.7.1 Flash Expires	37
3.7.2 Check License Validity	38
3.8 ENVIRONMENT CONTROLS TAB	39



3.8.1	Screen Capture.....	40
3.8.2	Allowed environments.....	40
3.9	PRINTING AND VIEWING TAB	41
3.9.1	Printing.....	42
3.9.2	Viewing.....	42
3.10	PUBLISHING YOUR FLASH FILE(S) SECURELY	44
3.11	PROTECTING MULTIPLE FLASH FILES	44
3.12	CHANGING FILE EXPIRY.....	45
CHAPTER 4: THE ADMINISTRATION SYSTEM		46
4.1	ADMINISTERING CUSTOMER ACCOUNTS.....	48
4.2	CREATING CUSTOMER ACCOUNTS.....	50
4.2.1	Name.....	50
4.2.2	Company.....	52
4.2.3	Email.....	52
4.2.4	Licenses.....	52
4.2.5	Start Date.....	53
4.2.6	Valid until.....	54
4.2.7	Can Access Publications.....	56
4.3	IMPORTING CUSTOMER DETAILS	57
4.4	SHOWING & ADMINISTERING CUSTOMER ACCOUNTS.....	59
4.4.1	Username and Password.....	60
4.4.2	Company.....	60
4.4.3	Status.....	60
4.4.4	Suspend Account.....	61
4.4.5	Licenses.....	61
4.4.6	Start Date.....	62
4.4.7	End Date	62
4.4.8	Can Access Publications.....	63
4.4.9	Direct Access to Files.....	64
4.4.10	Changing the number of views	66
4.4.11	Event Log	67
4.4.12	Delete Customer Account.....	67
4.5	SEARCHING CUSTOMER ACCOUNTS.....	69
4.6	MANAGING PUBLICATIONS.....	70
4.6.1	Adding publications.....	71
4.6.2	Deleting publications	71
4.7	MANAGING FILES.....	72
4.7.1	Deleting file records	74
4.8	SEARCHING FILE RECORDS.....	75
4.8.1	Searching for expired files	75
4.8.2	Searching for files that expire on a certain date.....	76
4.8.3	Searching for files that belong to publications.....	76
4.9	EXPORTING DATA	77



4.10	SETTING THE SUPPORT EMAIL ADDRESS	78
4.10.1	Updating the file properties with the new email address	79
4.11	SETTING THE MONITOR EMAIL ADDRESS.....	80
4.12	SETTING THE CUSTOMER LICENSE DELIVERY.....	81
CHAPTER 5: HOW CUSTOMERS USE YOUR FILES.....		82
5.1	FILE ISSUES	83
CHAPTER 6: DISTRIBUTING FILES		84
6.1	SENDING FILES TO CUSTOMERS	84
6.2	CUSTOMERS DOWNLOADING FILES.....	85
6.3	CUSTOMERS DOWNLOADING THE FREE PLAYER SOFTWARE	86
CHAPTER 7: TROUBLESHOOTING AND GENERAL FAQS		87
7.1	TROUBLESHOOTING	87
7.1.1	I have created a customer account but they have not received their license email. Why has this occurred and how do I resend the license email?	87
7.1.2	When protecting a flash file I get the error message "failed to compute file id: error 32"	88
7.1.3	Error Message "We cannot connect to the license server by Internet. Please check that you are connected, or that a firewall is not stopping this connection."	88
7.1.4	When I am asked to register my license file it tells me "the server is unavailable"	89
7.1.5	When trying to register I get the error message "license check failed - server returned 407 response code"	89
7.1.6	Failed to set file rights. Error code : 2	89
7.1.7	Failed to compute id. Error code : 5.....	89
7.1.8	I changed the date when a customer account expired by increasing the expiry date but they still cannot access the files I have sent them.....	90
7.2	FAQS	91
7.2.1	How does Lizard Flashguard differ from file encryption products?.....	91
7.2.2	How does Lizard Flashguard differ from obfuscation products?.....	91
7.2.3	How secure is Lizard Flashguard?	92
7.2.4	Is your application open to password attacks?	93
7.2.5	Do I have to upload my files to your web server to protect them?.....	93
7.2.6	Do you host my secure flash files on your server?	93
7.2.7	Where can I publish my secured flash files?.....	94
7.2.8	Can users change my file security settings?	94
7.2.9	Is there a limit to the number of files I can protect or customers that can receive protected files?	94
7.2.10	Can I tell people where to buy a license from?	95
7.2.11	Can my customers distribute protected files to others?.....	95
7.2.12	How can I control file expiration & revocation once a file has been published?	95
7.2.13	Why would I want to set customers to expire rather than files?	96
7.2.14	We want to give prospects / customers free 30 day trials of our files. Is this possible?	96
7.2.15	Do my customers have to be connected to the Internet in order to view my secure flash files?.....	97
7.2.16	Can I add existing customers to future secured flash files or publications?	97



7.2.17	What software do my customers need on their computers in order to view my secured flash files?.....	97
7.2.18	What happens when my customers change or update their computers?.....	98
7.2.19	How do I stop access to old versions of files?	98
7.2.20	I sell ebooks and want customer records to be automatically created on the Administration system so that there is no delay in customers receiving their license emails after purchase. How can this be achieved?	99
7.2.21	If a customer purchases multiple files from my company using different names (e.g. J Smith and John Smith) so they now have more than one account on the Administration system, will they be able to access the files they have purchased from the same computer?	99
7.2.22	I plan to create a single customer account for each company that subscribes to my reports and assign multiple licenses to that account (depending on the number of users within the company that I want to grant access to). Since multiple licenses are now available, how can I prevent companies sharing these licenses with other companies and thus gaining access to my protected files?	100
7.2.23	How can I get users to open PFD files in the browser without having to save them to disk first?	100
7.2.24	My customer tells me they have not received their license file. How do I resend it?.....	101
7.2.25	How can I tell what access controls have been applied to a file after it has been published?.....	102
7.2.26	Can a customer who has purchased a protected file change the file name when saving to his/her disk? If yes, does that make the file unusable?	103
7.2.27	If a .PFD file is on a CD and a customer attempts to open it, does the file perform exactly as if it were on the hard drive?	103
APPENDIX 1. HOW TO USE GUIDE - SMALL PUBLISHER		104
1.1	SETTING FILE CONTROLS	104
1.2	CONTROLLING CUSTOMER RECORDS	105
1.3	CUSTOMER MANAGEMENT	105
APPENDIX 2. HOW TO USE GUIDE - LARGE PUBLISHER.....		106
2.1	ORGANIZING PUBLICATIONS.....	106
2.2	SETTING FLASH FILE CONTROLS	106
2.3	CONTROLLING CUSTOMER RECORDS	107
2.4	CONTROLLING INDIVIDUAL FILES	108
2.5	CUSTOMER MANAGEMENT	108
2.6	COPYRIGHT LAW	109
APPENDIX 3. HOW TO USE GUIDE - INTERNAL ADMINISTRATION		110
3.1	ORGANIZING PUBLICATIONS AS INTERNAL STRUCTURES.....	111
3.2	SETTING FILE CONTROLS	111
3.3	CONTROLLING STAFF (CUSTOMER) RECORDS	112
3.4	CONTROLLING INDIVIDUAL FILES	113
APPENDIX 4. PICKING A GOOD STRUCTURE FOR FILENAMES.....		114
APPENDIX 5. DATE AND TIME CONTROLS.....		116



APPENDIX 6. FLASHGUARD WRITER UTILITIES.....	117
6.1 REMOVE KEYSTORE.....	117
6.2 CHANGE ACCOUNT PASSWORD	118
6.3 CHECKING FOR PROGRAM UPDATES.....	119
6.4 ECOMMERCE INTEGRATION AND AUTOMATION OF THE ADMINISTRATION SYSTEM INTERFACE.....	120
6.5 PUBLISHER OWN BRANDING	121



Chapter 1: Introduction

LockLizard Flashguard Secure Flash Writer is a simple to use, yet extremely secure application, enabling you to protect, publish and license your flash (SWF) files directly from Windows Explorer. You can control precisely who can view your protected flash files, and what they are authorized to do with them. The system uses US Government strength encryption, digital rights management, and state-of-the-art licensing controls to ensure your flash files cannot be copied, altered or even printed by others.

Your flash files are completely encrypted so that they cannot be decompiled into FLA files or unprotected SWF files. Your source code is not altered in any way, ensuring your flash files continue working as before they were protected. We don't use insecure passwords, low strength encryption (128 bit), or plug-ins that are vulnerable to attack, so you can be sure your files are protected using the best security available. All communications between the client software and our servers are made using HTTPS.

Protecting flash files is just a simple matter of selecting them in Windows File Explorer and right-clicking to protect them. From a tabbed dialog that is presented you specify the precise controls applied to each file (this can be unique for each file you protect) that determine what a user can do with that file. Flash files can be published on their own, or assigned to publications for simple administration.

So that your customers can view your protected flash files they must first download the Flashguard Security Player (available for free) and get their license key from you. They can then view the flash file(s) protected for them. The license key you issue to them is only valid for a one-time use, so if your customers install the Player software, register it, and then try to give the license key to others, it will not work for them.



1.1 Encrypting flash Files

LockLizard uses powerful US Government strength encryption (AES 256 bit) in order to protect your files from being stolen or pirated. Files are encrypted with a unique, random key generated at the time the file is protected.

Lizard Flashguard completely encrypts the source code preventing programs decompiling your SWF files to FLA files. Content is only ever decrypted in memory and your nested scripts, objects, images, and animation are fully secured at all times. Your source code is never altered in structure or programming terms.

If you publish all your flash files as individual files, then each time a customer purchases a file you will need to add it manually to their list of authorized files before they can view it.

NOTE: eCommerce integration

If you are using the eCommerce integration module then customer access to files can be granted automatically upon successful purchase and no manual intervention is necessary.

If you publish flash files to a publication, the file(s) are associated with the publication on the Administration system. When a customer has been authorized to view a publication, provided the customer access dates are valid, the customer will be able to view all of the files that have been published as part of that publication. You do not need to make any additional changes to the Administration system for this to occur. This means that the customer is able to immediately use a new issue regardless of how you ship it to them (e-mail, flash card, CD-ROM for instance). Further, unless your controls require the user to verify their license conditions, they do not have to be online to use files in a publication.

If you publish a flash file for all customers, then when the file is opened the customer record will be checked to make sure they are a valid customer, and if so they will be allowed to view the file. Please note that all valid customers will



be able to view any file you protect in this manner and therefore it could be used by any customer (assuming they can of course get hold of a copy) and you cannot limit it to a particular group.

Controls are applied at the file level, so you decide just how important each individual file is. This more closely matches the value of the information rather than assuming that the customer always has the same rights for every file you make available to them. You can therefore allocate files with different rights to the same publication and each file will be handled separately.

You can publish the same file more than once, applying different controls to each file and expiry can be controlled at both the file and the customer level.

LockLizard provides a secure key exchange mechanism in order to move the required decryption key down to the customer's desktop at the same time as validating the customer's authorization to receive the key. Whilst we use public key technology, no PKI key management is required by you as the publisher or by your customers – it is all handled transparently by the licensing system.

Keys are seamlessly delivered to your customer's computers, bonded to individual computers (so they can't be copied and shared) and stored in encrypted form. There are no passwords to enter, manage, compromise, forget or pass on to others and the system is not open to password attack. There are no certificates to revoke when you want to terminate a customer's access or any other PKI complexity. See also ['How Secure is Lizard Flashguard'](#)

NOTE: File encryption

Files are always encrypted locally on your computer so that the non-secure versions (the original source flash files) are never exposed to potential compromise on a web server or in transfer to one of our servers. Protected files can be distributed just like any other file – by email, CD, etc., or made available for download from your web site. Since the files are encrypted, it does not matter who gets hold of them. They cannot view them without having first been authorized by you, as the publisher, to do so.



1.2 Customer and Flash File expiry

1.2.1 Instant revocation for distributed files and persistent version control

Lizard Flashguard gives you total control over when your customers and your files expire. Your customers, for example, may subscribe to one of your publications for a year, and all files in that publication are accessible to them for a year. After a year, your customers will still be able to view their existing subscription files, but not any new ones that are published after their subscription period has ended, unless of course they pay for another years subscription.

In addition you can control file expiry. Regardless of your customers' subscription to your publications, you may have certain files that are time sensitive and must not be viewable after a certain date. This feature also lets you ensure that only the authorized or current versions of files are used after publication because the obsolete versions can no longer be accessed. You can also specify how many times a file can be viewed regardless of the date when it expires (if ever).

You can force your customers to connect to an Administration server (this happens transparently) before they view your protected flash files. This can be every time they want to view your files, or after a certain number of days. If you choose a number of days, then after the length of time you set has passed your customers must go back online to gain further access. Using this option you can instantly revoke customer access to previously distributed files as the decryption key required to view your protected flash files is instantly expired.



1.3 Complete off-line Protection

File control properties are retained with each file so there is no need for your customers to connect to the Internet in order to view your protected flash files (assuming of course that they have the correct decryption key stored on their computer). Whether you want your customers to connect to the Internet or not to use your files is a decision you make when protecting your flash files. If they do not have to connect to the Internet to verify their license details it is not possible to cease their access.

1.4 Customizable Message Text & Splash Screen

When you set up customer accounts on the Administration server, your customers are automatically sent an email with a download link to the Player software and their license file. This email is automatically customized with your company name and email address in it so your customers know who to contact if they have any problems accessing your files.

You can specify the text that will be displayed if a customer does not have authorization to view your protected files - e.g. where they can purchase a license from or who to contact.

Each time a protected file is loaded a splash screen (optional) can be displayed. You can insert your own image here (say your company logo and a brief message) to customize Lizard Flashguard for your company.



1.5 Lizard Flashguard Features

Complete and secure control over flash file usage – viewing (including the number of times) and printing, copying, saving, etc. Copying, saving, decompiling, and modifying files is always prevented;

- Customer and file expiry - you control how long your customers can view your flash files;
- Instant user revocation - terminate your customer's access to a file instantly;
- Print screen automatically disabled to prevent users taking screenshots of your files;
- Preventing use of third party screen grabbers;
- Bullet proof protection - public key technology and US Government strength encryption (AES 256 bit);
- File contents are completely encrypted preventing applications from decompiling your flash files;
- Your source code is not altered in any way, ensuring your flash files continue working as before they were protected;
- No passwords to send, manage, enter, forget or pass on to others;
- Protected files are locked to authorized computers ensuring they cannot be shared;
- Prevent or allow use in thin client and virtual environments (e.g. Citrix)
- Complete off-line protection - no need to connect to the Internet to view existing files;
- Offline / online access management - control how long a customer can access your files offline before their license must be checked;
- Real-time web based licensing control - issue and manage customers and files online;
- Transparent real-time web based customer authorization;
- Persistent end-to-end protection throughout a file's life-cycle;



- Full control over flash file security inside or outside of the firewall, online and offline;
- Customizable message text and splash screen;
- Quick set up - existing customer information can be imported and no configuring of servers is required;
- Simple to protect flash files, simple to use, simple to administer;
- Complete integration with your e-commerce system (optional extra). For more information see <http://www.LockLizard.com/product-add-ons.htm>;
- Completely managed system (fully hosted by us) or hosted on your own server;
- No limit to the number of flash files you protect or the number of customers/users who can view your protected flash files
- FREE multi-lingual Player software (nothing extra for users to purchase). Supports the following languages: English, French, German, Spanish, Chinese (Mandarin), Dutch, Russian;
- Silent installation for Player – Player software can be installed silently across a network for quick installation in a corporate environment.



1.6 Lizard Flashguard for internal company use

When this manual was prepared, it was written from the point of view that you are a publisher and that you are selling flash files (ebooks, training courses, flash games) to customers (either as individuals or as corporate bodies).

This does not mean that Lizard Flashguard can only be used in that context. Many of our customers use Lizard Flashguard to protect internal files that have controlled circulations, including being able to control their use by business partners where that is appropriate.

When it is used internally, the publisher becomes the file manager or file administrator, and they (and their staff) have the responsibility for allocating users (rather than customers) and for protecting files for circulation to users.

The concept of the publication remains valuable in the corporate context. But instead of publications being used as part of a subscription service, they should be considered to be groups of files that must be circulated in a controlled manner to defined groups – i.e. a series of flash training courses for a department, or flash ebook instruction manuals. These can all be considered to be ‘publications’ and the staff or users as ‘customers’ who are given access to the relevant schedules of information.

Internal user administration is achieved through a combination of normal logon account management (which runs outside of the Flashguard features), for instance, to cease access to internal networks immediately if an employee leaves. Lizard Flashguard controls may be used to revoke access to specific ‘publications’ if an employee changes job function or location, and may also be used to stop access from roaming users or users who are part of other businesses where normal access control mechanisms have no effect.

[Appendix 3](#) explains in more detail how Lizard Flashguard can be used for internal company use.



Chapter 2: Installation

2.1 Pre-requisites

Flashguard Writer is compatible with the following platforms:

- Windows 2000
- Windows 2003
- Windows XP
- Windows Vista

You must have Windows administration privileges in order to install the writer software.

2.2 Installing the Writer

Double-click on the LL_Flashguard_Writer.exe file in Windows File Explorer to start the installation process. The installation process is straight-forward and it takes less than a minute from start to finish.

Screenshots of the installation process are shown below and are self-explanatory.



Diagram 1: Flashguard Writer Setup Wizard



Diagram 2: Flashguard Writer License agreement

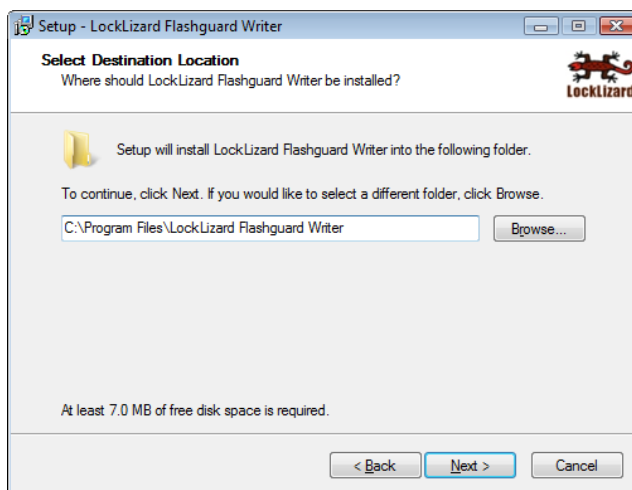


Diagram 3: Flashguard Writer Installation folder

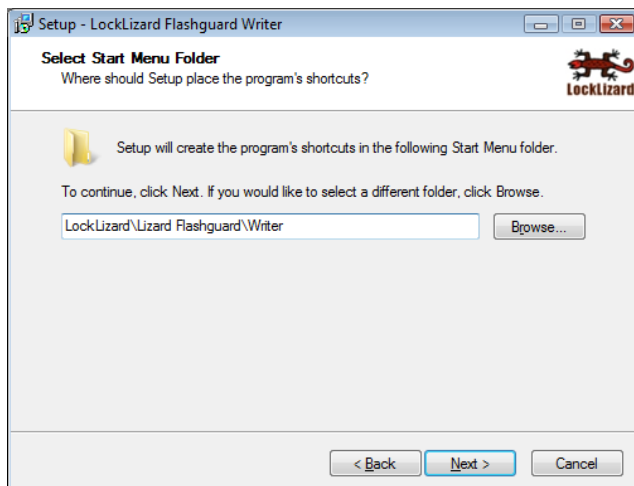


Diagram 4: Flashguard Writer Start Menu folder

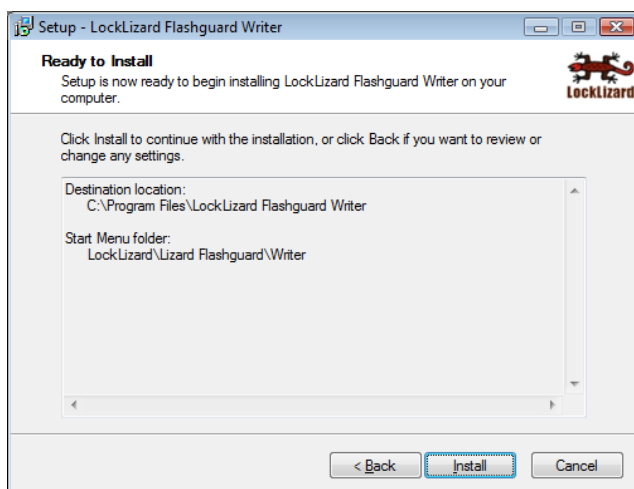


Diagram 5: Flashguard Writer Installation settings



Diagram 6: Flashguard Writer Installation complete



2.2.1 Disabling Automatic Updates

You may want to disable the auto update checker from running if you don't want to force your customers to have to upgrade their players when it may be part of their corporate IT policy to only upgrade a small number of times a year. This is because users would have to upgrade their players if you used new functionality in a later Writer release that was not supported by the earlier player software.

You may wish to implement an updated Writer for testing and acceptance purposes without converting all your Writers, so that continuity of service can be maintained until you are satisfied that the new Writer will achieve your requirements. If this is the case you will need to disable the automatic update checker.

Example of use - disable automatic update checks:

```
LL_Flashguard_Writer.exe /UPDATE="0"
```

Example of use - enable automatic update checks:

```
LL_Flashguard_Writer.exe /UPDATE="1"
```

NOTE: Program Checks

Even if automatic update checks are disabled users can still manually check for updates using the 'Check for Program Updates' option on the Help menu.

The auto check for updates option is saved as the "AutoCheck" value in the PFDWriter.ini file in the [Updater] section. If the AutoCheck value is missing or the AutoCheck value is 1 the writer will check for updates every week. You can manually set the AutoCheck value to zero (AutoCheck=0) to disable the update check.



2.3 Proxy Settings

On some systems, because of internal security requirements, firewall controls are set to prevent internal applications from connecting directly to external web addresses.

Further, to help prevent attacks from hackers, and prevent keyloggers and other programs commonly used by hackers, viruses and worms to send confidential internal data to outsiders, internal systems may use port addresses when connecting to the firewall that are not the standard ports.

Finally, the firewall may require users who wish to use external services to authenticate themselves to the firewall before they are able to use external services.

To support these higher security requirements, Lizard Flashguard allows you to configure your proxy settings into both the Writer and Player programs.

Flashguard Writer automatically picks up existing proxy information from Internet Explorer if it is available. However, if your proxy requires authentication, a dialog box will be displayed where you must enter the user name and password needed to authenticate yourself to the proxy. Your internal IT department should be able to provide you with the necessary information to complete the authorization.

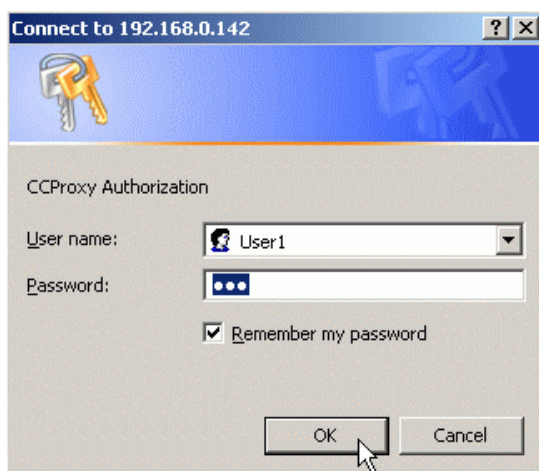


Diagram 7: Proxy authentication dialog



There may be circumstances when you need to manually override these settings before you can register and use the Writer software.

To manually configure proxy settings right click on the Windows Start menu and select Programs > LockLizard > Lizard Flashguard > Writer > Proxy Settings.

The following dialog is then displayed.

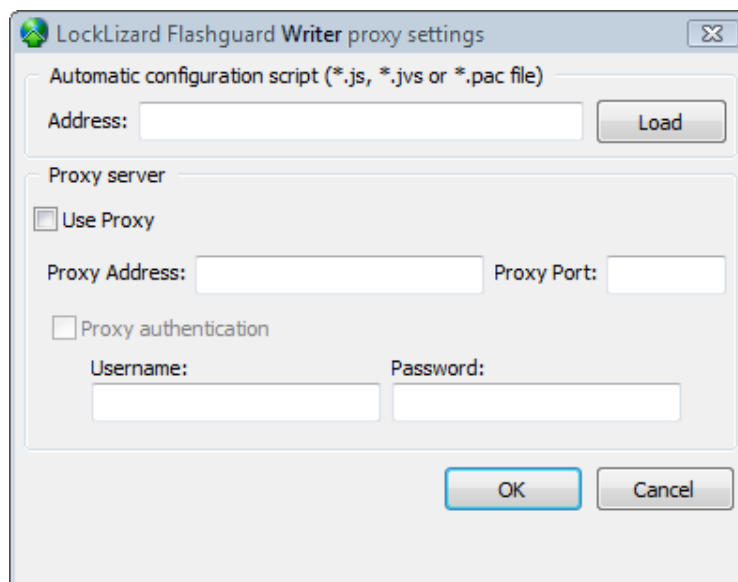



Diagram 8: Flashguard Writer proxy settings

This dialog enables you to set the proxy from a configuration script or by manual entry.

2.3.1 Automatic configuration script

The writer can also be configured using a proxy administration PROXY.PAC file (a plain text file containing a JS function that will automatically configure the proxy settings to be used). In the 'Address' field, type in the full path of the Proxy.pac file you want to use (either an http:// path or a local file) and then press the  button.

Below is an example proxy.pac configuration file that will make the Player (or Internet Explorer) go via a local proxy server if a connection is made to www.LockLizard.com:



```
function FindProxyForURL(url, host)
{
if (shExpMatch(url, "http://www.LockLizard.com*"))
    return "PROXY 192.168.1.1:8080";
else
    return "DIRECT";
}
```

2.3.2 Proxy server manual entry settings

To manually enter proxy settings, check the 'Use proxy' checkbox and then enter the address the proxy requires in the 'Proxy address' field.

Your IT support group will be able to tell you the address you should enter here. Also, ask them if you need to enter a specific port address.

Lizard Flashguard uses port 443 to securely address (using HTTPS) the LockLizard Administration server depending on the server you are connecting to. If your internal system requires the use of a different port for the connection you must enter it in the Proxy port box.

If your internal control system requires authentication at the firewall then check the 'Proxy authentication' checkbox and enter in the fields provided the username and password that your IT department have allocated to access the firewall service.

If you do not supply the Proxy authentication data (username/password) but the proxy server requires authentication, a dialog box asking for the username and password will be automatically displayed when Flashguard Writer tries to connect to the Internet.

If the "Use Proxy" check box is not checked, then the writer will use the Internet Explorer settings for the Internet connection (assuming the proxy settings are defined in IE).

This utility is used for both the Writer and Player products. If both are being used on your computer then you only need to run the utility once because it configures both the Writer and Player applications at the same time.



Once you have registered the Writer and Player software they do not need the proxy settings again unless someone decides to change your internal proxy settings and they cannot be automatically picked up by the Writer/Player software.

2.4 Registering the Writer

Before you can start using Flashguard Writer you must first register it with the online licensing control system. In order to register, your computer **must be connected to the Internet**.

Regardless of whether you are evaluating, or you have purchased the software, you will have been sent an email containing a link to your license file.

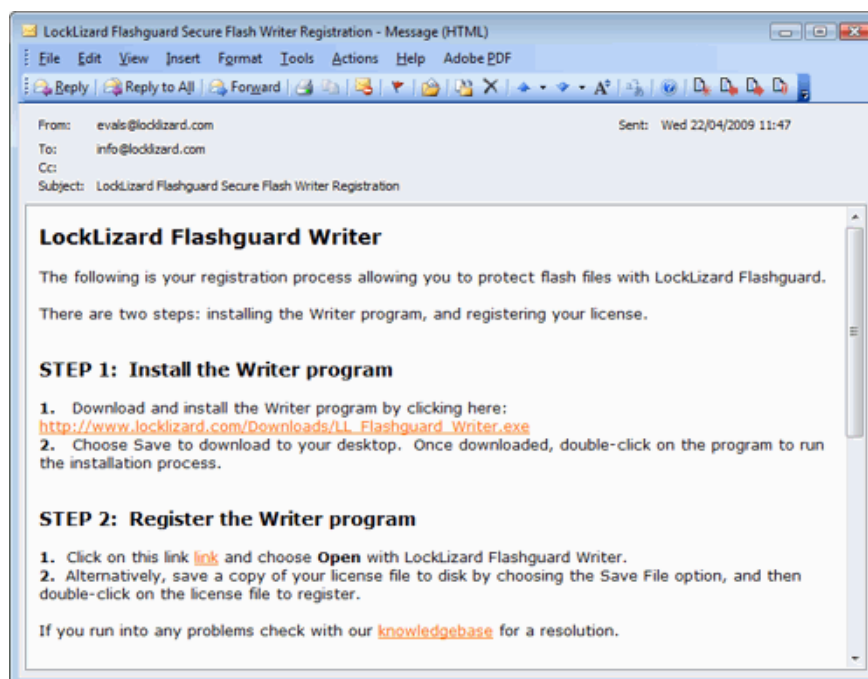


Diagram 9: Flashguard Writer Registration Email and License file

Follow the instructions in the email to register. A message dialog confirms successful registration.

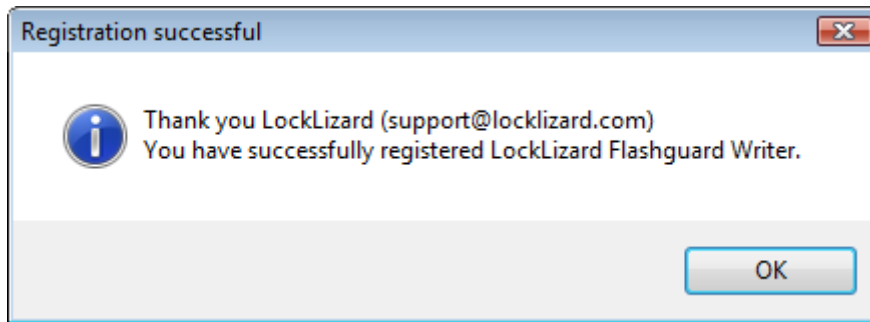


Diagram 10: Successful registration message

If you are not connected to the Internet at the point of registration then you will receive an error message and you will have to start the process again.

NOTE: Backup your license file

Please make sure you retain a copy of the license file in case you need to recover the system after a disk crash, or when updating to a new system, when you will need to register again.

2.4.1 Firewall messages displayed during registration

Some firewalls may display a message window (or similar) during registration. This notifies you that Flashguard Writer is trying to access the Internet.



Diagram 11: Firewall message windows during registration



Chapter 3: Protecting flash Files

3.1 Pre-requisites

Only flash files with a .SWF file extension can be protected.

3.2 Maximum file size sizes supported

Lizard Flashguard Player, for security reasons, handles file decryption operations in memory only. No temporary or cache files are created. Depending on machine memory size, processor speed, and operating system this restricts the maximum size of file that can be processed.

We advise that you should not protect files greater than 300MB in size for reliable use across a wide range of Windows clients.

3.3 Handling relative links to other flash files

When you want to programmatically load SWF content into an already running SWF animation or other external dependencies (images, etc.) you need to set a variable, SWF_Base, inside your flash source file (.FLA file) to load the appropriate flash file from memory. This is because protected flash content is fetched from memory and not from disk and so the flash player does not know the location to load it from.



For example, if you have a protected SWF file that is a movie and you want to load the movie subtitles from an external SWF file you need to use SWF_Base to load the external SWF file. The reason for using an external SWF file is because most likely you don't want to hardcode the subtitles in the movie - there could be various languages available and you want the user to be able to choose which subtitle language is to be displayed.

So whenever a flash file needs external dependencies (such as another SWF file, images, settings etc.) it should use SWF_Base in it's code to compute the path to the file. Note that the flash file you are calling **MUST** be located in the same folder as the loaded SWF.

The SWF_Base must have an additional slash appended. For example a protected SWF file located in "C:\folder\subfolder" will have the SWF_base value "file:///C:\folder\subfolder\" (without quotes).

The SWF_Base variable is set in the FlasVars environment before the flash content is loaded in order to be available immediately in the flash code. For more info about FlasVars see http://kb2.adobe.com/cps/164/tn_16417.html

The following example demonstrates how to load an external file from a flash file with actionscript 3.0 support:

```
function clickHandler1(eventObj:
MouseEvent):void {
    var extSwf:String=root.loaderInfo.parameters.SWF_Base;
    if (!extSwf)
        extSwf="external.swf"; //if SWF_Base is not set use relative path
    else
        extSwf=root.loaderInfo.parameters.SWF_Base + "external.swf"; //compute
full file path
    var rect:Shape = new Shape();
        rect.graphics.beginFill(0xFFFFFF);
        rect.graphics.drawRect(0, 100, 550, 400);
        rect.graphics.endFill();
        addChild(rect);
```



```
var ldr:Loader = new Loader();
ldr.mask = rect;
var url:String = extSwf ;
var urlReq:URLRequest = new URLRequest(url);
ldr.load(urlReq); //load external.swf
addChild(ldr);
txt_dinamic.text ="Extern movie: " + extSwf;
}
```

A working example, along with the *.fla source, can be found here:

http://www.locklizard.com/Downloads/swf_base_example.zip

Protect the FlashVar_example.swf file and make sure external.swf is in the same folder as the protected one. After you open the protected SWF, click on load external to load the external.swf file inside the flash animation. The SWF_Base value will also be displayed inside the example to demonstrate that it is available when the SWF code starts.

The following example demonstrates how to load an external protected SWF file (PFD file) from a protected SWF file:

---- action script code start -----

```
var extSwf:String=root.loaderInfo.parameters.SWF_Base; // SWF_Base is set by
Flashguard and contains full path to current file (ex: file:///C:\folder\subfolder\)
```

```
if (!extSwf)
```

```
    extSwf="external.pfd"; //if SWF_Base is not set use relative path
```

```
else
```

```
    extSwf=root.loaderInfo.parameters.SWF_Base + "external.pfd"; //full path to
current opened pfd
```

```
fscommand ("exec", extSwf);
```

---- action script code end -----



3.4 Protecting flash Files

Once Lizard Flashguard Writer has been installed and registered you can start protecting your flash files.

Please bear in mind the following points before protecting flash files:

1. Copying, saving, decompiling, and modifying files is prevented at all times.
2. Windows print screen is disabled by default, and it cannot be used by any programs whilst the Player remains active.

3.4.1 To protect a flash file(s):

In Windows File Explorer, right-click on the file(s) that you want to protect and then select 'Make secure flash' from the pop-up menu that is displayed.

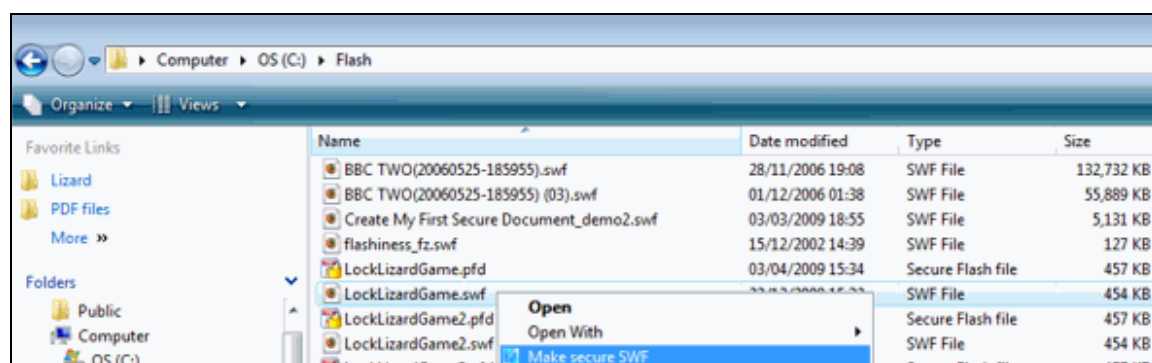


Diagram 12: Protecting flash files – Make secure SWF context menu in Windows File Explorer

You can also protect flash files by choosing the 'Protect Flash' option from the Windows Start menu > Programs > LockLizard > Lizard Flashguard > Writer menu. This will bring up a browse dialog where you can select the flash files you want to protect. The maximum number of files you can protect at a time using this method is 25.

The individual tab dialogs and their entries are now discussed in greater detail.

Regardless of the option you choose, the following dialog is then displayed:



3.5 Customization Tab

Here you enter the message that is displayed if a customer is not authorized to view your file. You can also select a splash screen to display when your file loads in the Player software.

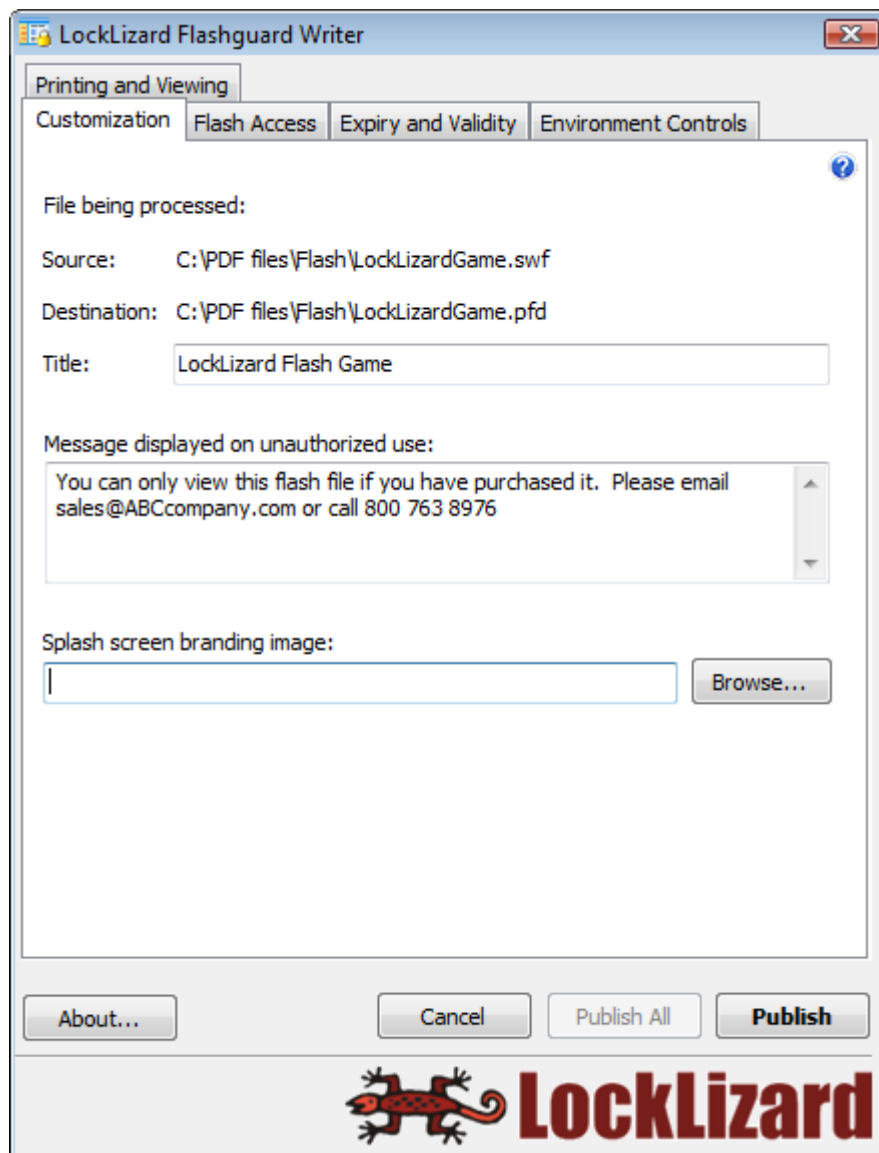


Diagram 13: Customization tab



3.5.1 File being processed:

3.5.1.1 Source

Displayed here is the flash file you are currently protecting.

3.5.1.2 Destination

Displayed here is the folder name where the protected flash file will be saved to and the file name it will be given.

3.5.1.3 Title

Here you **MUST** enter a title for the flash file you are protecting.

The title you enter here is displayed on the Administration system and is used to identify the file. By default the filename is displayed minus the file extension, but you can change this to any text you want. Please see Appendix 4 for choosing suitable titles if you do not have any internal standards or naming conventions.

3.5.2 Message displayed on unauthorized use:

In this field you can type custom text that will be displayed if a customer does not have the correct key to view your protected flash file (and therefore needs to acquire a license from you).

This facility allows you to solicit for additional business by providing your sales contact details, if that is appropriate to your business model. This information is specific to each protected file you create, so no matter where a user downloads the Flashguard Player from, if they double-click on one of your protected flash files and they do not have the correct key for your file, then they will see this message.

The text you enter here is saved and is displayed (editable) for use when you protect future files.



If you do not enter any text then a default message is displayed – “You need to register with the publisher <Publisher name> <Publisher email address> before you can view any protected files. To do this, double-click on the license file that was sent to you.”

If a customer opens a protected file using a program such as Notepad (or similar character editor) they will also see this message at the top of the file in ‘plain text’. So even if they don't have the Flashguard Player installed, provided you have entered appropriate text they will know whom they should contact for a license.

3.5.3 Splash screen branding image:

A splash screen can be briefly displayed every time your protected flash files are loaded in the Lizard Flashguard Player.

Here you can enter an image of your own, say your company logo or an image that tells your customers they are about to view a protected file, or asserting your Copyright to the information.

Supported image formats are PNG (without transparency) and JPG. There is no limit to the size of the image, but you may want to keep the final image size to a maximum of 640x480 pixels so that customers using low-resolution monitors can still view the full image correctly.

By default no splash screen is displayed.



3.6 Flash Access Tab

Here you specify whether all your customers have access to your protected flash file, or whether only those that have purchased specific files or publications can access them.

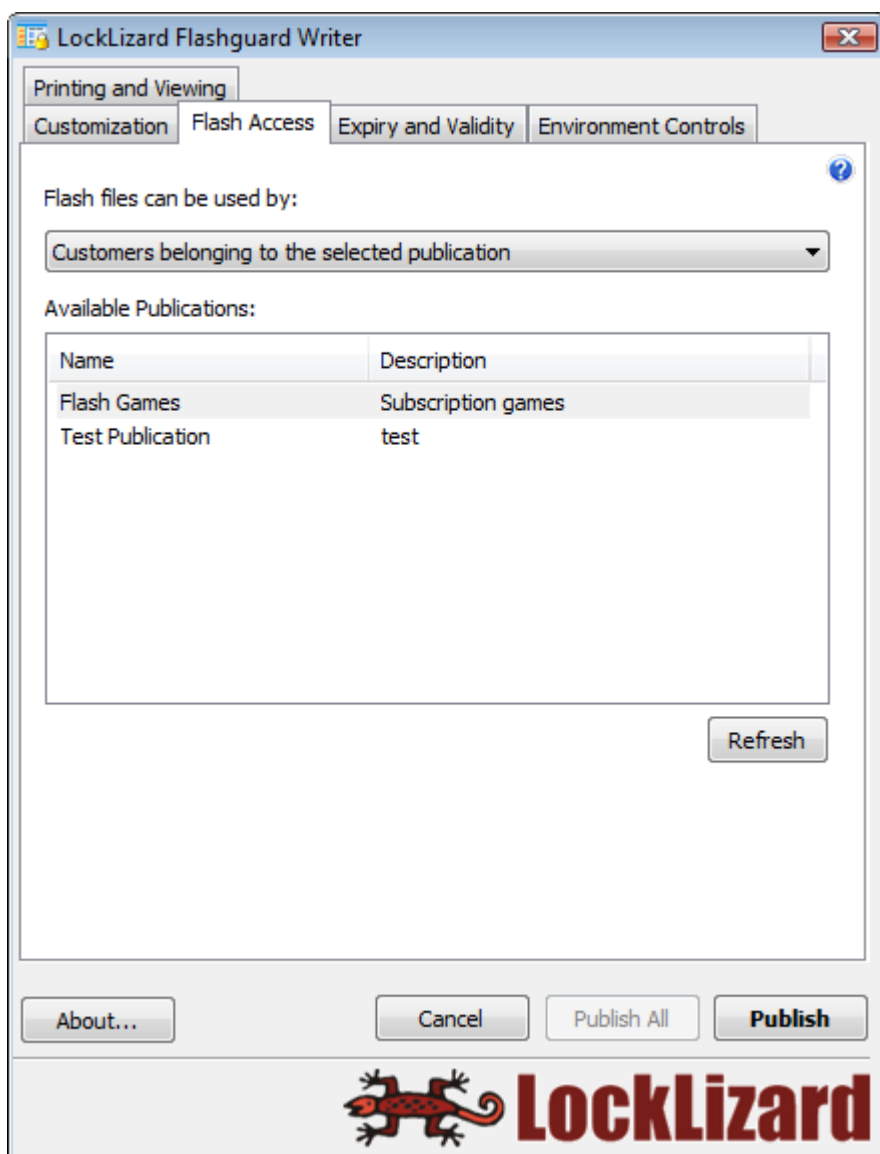


Diagram 14: Flash Access tab



Files can be used by: There are three options available for publishing files and the option you choose determines who can view your protected flash files.

3.6.1 All customers

If you select this option, then all your customers will be able to use this file without the need for you to individually allocate files or publications on the Administration system.

This is the best approach for files which you want to make available to your entire customer base. In an internal control system you may need to make files available to all of your staff rather than to certain individuals or groups of users.

3.6.2 Selected customers (must be individually allocated)

If you select this option, only customers you specifically allocate access to this file will be able to use it. Files have to be individually allocated to customers on the Administration system when you create or edit customer accounts.

This is the best approach for selling one-off files such as flash games, ebooks, and similar works. It has a particular advantage over publications in that you can change the file expiry controls that were set when the file was first published (see [Changing File Expiry](#)).

3.6.3 Customers belonging to the selected publication

If you select this option, rather than having to allocate individual files to customers, you only need to give them access to the publication. Only those customers given access to the publication you select will be able to use this file.

With this option, customers only have to obtain the decryption key for the first use of any file in the publication. Normally, when you protect files for selected customers, the Player software will automatically download each file decryption key from the server (provided that the user is entitled to view the



file) when the file is first used. It does, therefore, require the user to be online at least once in order to retrieve the file key for each and every file they open. If you select the publication mode, then files are protected using a single publication key, so that the customer only has to download one decryption key for the publication and can thereafter automatically view all the other files published to that publication without the need for the Player software to download additional keys.

If you select this option then you **MUST** choose the publication that this file is to be assigned to from the Available Publications list box. You may only allocate the file to one publication at a time.

If you have not yet created any publications, you can do this now using the Administration system. Right click on the Windows Start menu and select Programs > LockLizard > Lizard Flashguard > Writer > Administration System. Select the 'Manage Publications' link and enter a Name and a Description (optional) for your publication. Then press the button.

The Publisher panel you are filling in is shown in diagram 15.



LockLizard

Lizard Flashguard Publisher Account Administration

Publisher account: LockLizard

Manage publications

Name:

Description:

obey customer start date

Publications		
Name	Description	Obey customer start date
<input type="checkbox"/> Flash Games	Subscription games	no
<input type="checkbox"/> Test Publication	test	no

Customer Accounts
[Create](#)
[Import](#)
[Show](#)
[Search](#)

Flash files
[Manage](#)
[Search](#)

Publications
[Manage](#)

Export Data
[Export](#)

Email Settings
[Set support email address](#)
[Set monitor email address](#)
[Change customer license delivery](#)

Diagram 15: Administration System - Manage Publications screen

Back in the Writer GUI, press the button to update the Available Publications list box with your newly added publication(s).

Flash files can be used by:

Customers belonging to the selected publication

Available Publications:

Name	Description
Flash Games	Subscription games
Test Publication	test

Diagram 16: Available Publications – updated list box



3.6.3.1 *Why use publications?*

Publishing files to a publication is the most efficient choice when you are selling several customers a subscription to a service, say a training course or series of courses, or where you producing multiple flash files for a specific customer, for example a web design company producing flash files for proof-of-concept (in this example, the publication name would most likely be the customer name). Once they have registered, a subscriber will be able to use all the files in the publications they are entitled to as soon as they receive them.

You may also want to use this facility if you want to enable your customers to access all the files in a publication once they have registered to use any one file. Examples of this would be where you have provided a CD or DVD with many protected files on it which are part of the same logical publication, and you want your customers to be able to use all the files seamlessly, offline, once they have registered use of the first file. This may be because they need to be able to use the publication contents when an Internet connection is not available. If this is the case, then you need to make sure that you have not imposed any file controls that enforce a connection to the Administration server (number of views, or validity checks).

You can protect files that are part of a publication and are published separately in their own right (as free-standing files). There are a couple of reasons why this may be useful:

- You may want to send individual customers a sample file from one of your other publications without having to give them a license for an entire publication.
- You may want to sell individual files in their own right as well as having them as part of a publication. This would be the case when you have subscribers to a series of training courses, but also sell individual copies.

If you wish to do this, then you must protect the file twice, once as part of a publication, and once as an individual file (selected customers only).



3.7 Expiry and Validity Tab

Here you set the date from which your protected flash file is no longer available to the customer to use, and specify how often your customers must connect to the administration (licensing) server to verify license controls.

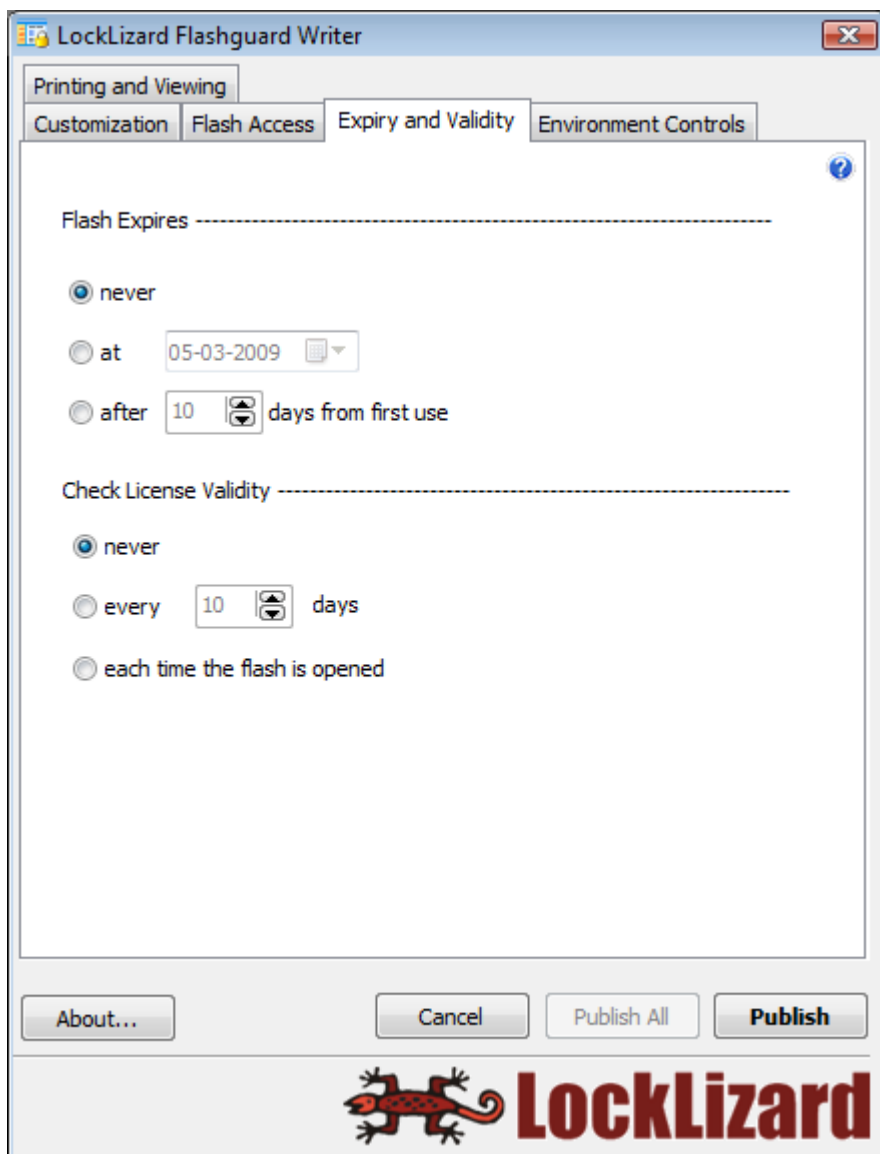


Diagram 17: Expiry and Validity tab



3.7.1 Flash Expires

The date, or number of days, from which the file is no longer available to use.

3.7.1.1 *Never*

Select this option if you do not want the file to expire.

The file continues to be viewable even after the customer account expires.

3.7.1.2 *At (Date)*

Select this option if you want the file to expire on a specific date.

Select the date you require from the pull-down calendar list box. As soon as this date is reached the file can no longer be viewed, regardless of how long the customer account is valid for.

Please see Appendix 5, Time & Date controls for further information on how file expiry is calculated with respect to UCT time.

3.7.1.3 *After n days from first use*

Select this option if you want the file to expire after a number of days since it was first viewed (useful for giving away time limited trials of your files).

Select the number of days you require or enter a value in the box. As soon as this value is reached the file can no longer be viewed, regardless of how long the customer account is valid for.

This option is only valid for files protected for All Customers or to a Publication since individually allocated files have their own expiry settings.

NOTE: Internet connection required

If you choose this option, then the **first time** your customers view the file they must be online to the Internet.



3.7.2 Check License Validity

This section controls how often your customers must check with the Administration / licensing server to verify their license.

3.7.2.1 *Never*

Your customers never have to connect to the server in order to view this file. The file can therefore always be viewed off-line and no connection to the Internet is ever required. This is an appropriate setting for a book.

NOTE: Viewing a file for the first time

The first time your customers view a file (or the first file in a publication), the Player software always connects to the server to obtain the decryption key (this operation is transparent to the user). Subsequent checks with the server however are not made if this option is selected.

3.7.2.2 *Every n days*

The value you select or enter here determines how many days your customers can stay offline before they need to connect to the Administration server in order to view your file again.

Once this time period has elapsed they will not be able to use the file again until they let the Player software connect to the Administration server to validate their license. You may select this option if you need to be able to suspend customers using publications when they have not paid their subscription.

3.7.2.3 *Each time the file is opened*

Your customers must be online in order to view and use your file.

Before they can view the file they will need to let the Player software connect to the server (this operation is transparent to the user) to verify their continuing access rights.

NOTE: Forcing server connections and revocation

By forcing your customers to connect to the server for every access you can perform instant user or file revocation. If you selected every n days you can only perform revocation after n days have elapsed.



3.8 Environment Controls Tab

Here you configure whether taking screen shots of your file is allowed, or whether you want to apply enhanced screen capture protection. You can also specify whether your file can be viewed in certain environments.

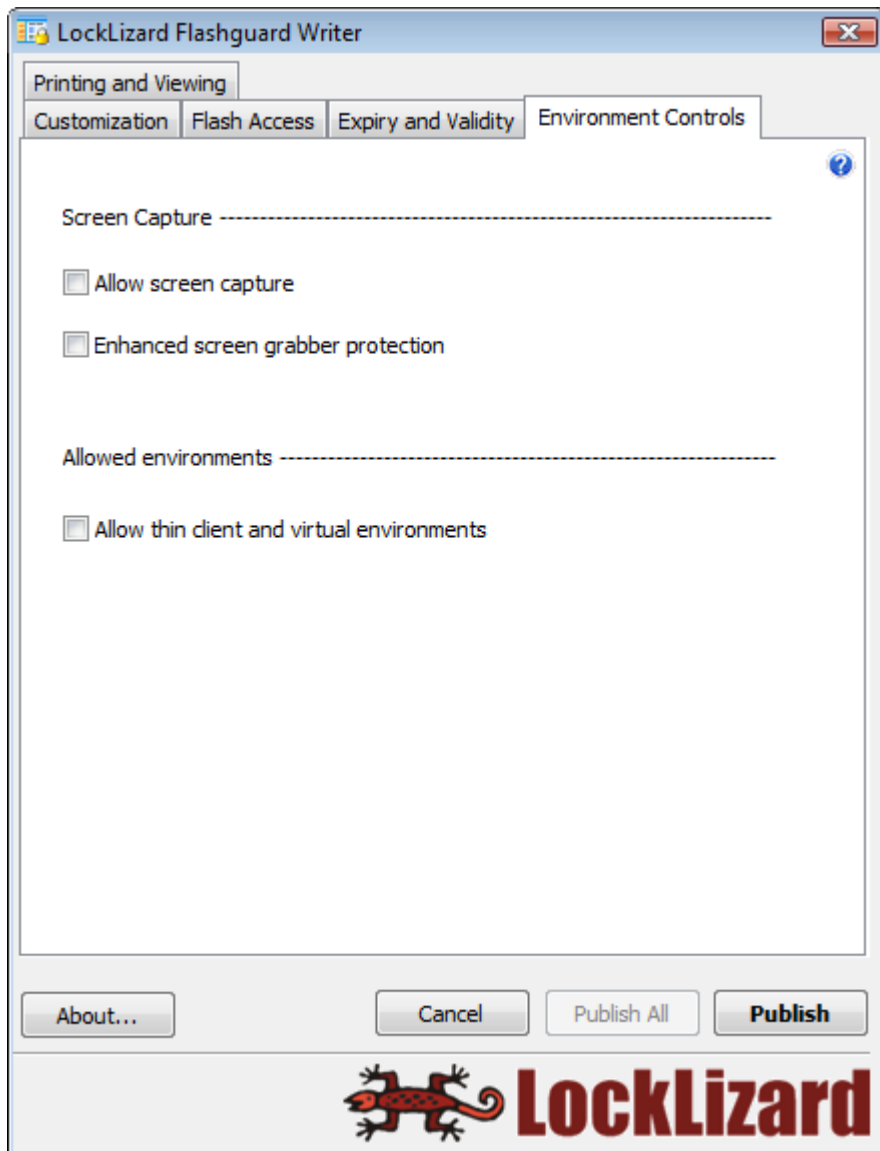


Diagram 18: Environment Controls tab



3.8.1 Screen Capture

3.8.1.1 *Allow Screen Capture*

If you select this option then your customers will be able to use Windows print screen and third party screen grabber applications to take image copies of the screen. You may want to enable this option if you want to take screenshots for marketing purposes or instructional use, or where your staff need to be able to capture individual pages for internal use.

3.8.1.2 *Enhanced screen grabber protection*

If you select this option then all third party screen grabber applications are prevented from taking screenshots of your files. This option adds another layer of security to Flashguard's normal screen grabbing protection.

IMPORTANT NOTE: Slow screen refresh rates

If this option is selected then the Player window will load slower and mouse scrolling will be slower. This may be an issue if you have customers using slow computers.

3.8.2 Allowed environments

This sets the environments that the Player software is allowed to operate in.

3.8.2.1 *Allow Thin Client and Virtual Environments*

If you select this option then your customers will be allowed to run the Player in Citrix, Windows Terminal Server, and other virtual environments.

In these environments, it is possible that the user can install one copy of the software on their server and register in centrally. This can then be used on multiple desktops without limitation. So even if you only grant a user one license, multiple users will be able to view and use your files within their organization.



3.9 Printing and Viewing Tab

Here you control whether your product can be printed and the number of times it can be viewed.

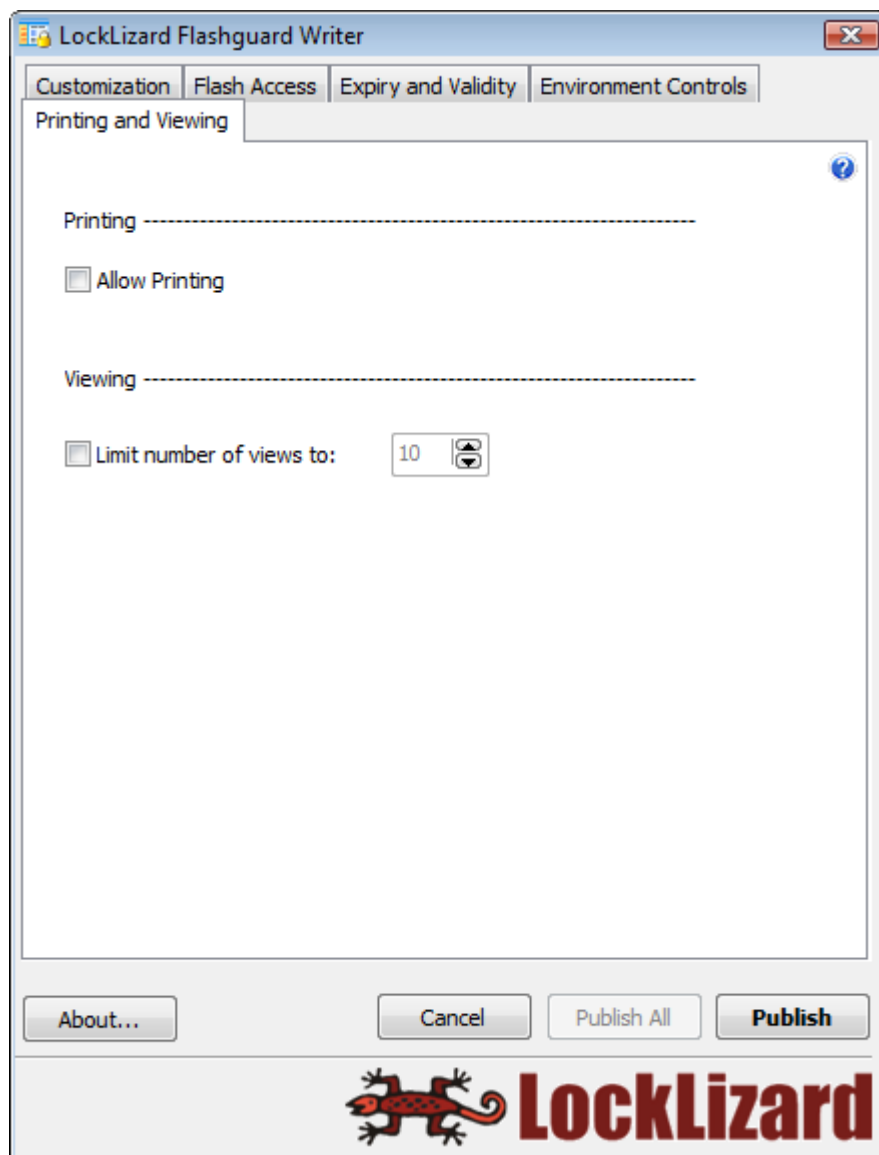


Diagram 19: Printing and Viewing tab



3.9.1 Printing

3.9.1.1 *Allow Printing*

Check this box if you want to allow the file to be printed.

Be aware that if you do enable printing, then printing to Adobe distiller and other print to file and image drivers is not prevented.

3.9.2 Viewing

3.9.2.1 *Limit number of views to:*

You may limit the number of times customers can view your files by checking this box and entering the number of views that you are allowing in the scroll box.

NOTE: Internet connection required

If you choose this option then your customers must be online to the Internet when they view the file in order to have the number checked and reduced accordingly.

Depending on your business model there are different reasons for choosing this option. Publishers may wish to offer prospective customers the opportunity to use their product enough to make them feel they want to buy it. In a web design environment, you may wish to make sure that your prospective customers can only see files on a very limited basis, for instance, may be once or twice simply to verify the content before they commit to purchase.

NOTE: Changing the number of views allowed

The view count can be changed on the admin system on a per customer / per file basis if a customer later requires additional views. See [change number of views](#) for additional information.



IMPORTANT NOTE: VIEW ALLOWANCES

The number of views allowed is applied at the Customer account level, and not at the license level. Each time a customer views a file restricted in this manner, the count on the Customer account on the Administration server is decremented by 1.

So if for example, you have only allowed 3 views for a specific file, once the customer has viewed that file 3 times, they will be unable to view it again. This is true even if you have given that customer more than one license for their account, enabling them to view the file on more than one computer. If they have already viewed the file three times on the first computer, then there are no view allowances left for use on the second computer.




3.10 Publishing your flash file(s) securely

Once you have chosen all the settings you require on each tab, you can complete the secure publication of your flash file(s), by clicking on the

 button.

A secure copy of your flash file is created with a new file extension, .PFD. For example, flashgame.swf becomes flashgame.pfd.


The file icon for the .PFD file changes to the following one  to let you know it is now a protected file.

3.11 Protecting multiple flash files

To protect and publish more than one file, highlight all the flash files you want to protect in Windows File Explorer, right-click and select 'Make secure SWF' from the context menu.

File controls (print, expiry, etc) are applied to all the selected files from the one screen in one of two ways.


You can either choose to publish only one file at a time ('Publish' button), or to publish all the files with the same settings ('Publish All' button).

If you select the  button, then exactly the same file controls you select for the first file will then be applied to all the other files you have selected. The file title will always default to the name of the flash file, so for example if you protect a flash file with the filename mygame.swf then the file title will default to mygame. It is NOT possible to change this once you have protected the files.



NOTE: Publish All button

The 'Publish All' button is grayed-out unless multiple files have been selected for protection.

If you select the  button, then after protecting the first file, the tabbed dialog is displayed again for each subsequent file, so you can choose a new set of file controls for subsequent files. This process continues until all of your files you selected are protected.

3.12 Changing File Expiry

Once a file has been allocated to a publication its expiry date is fixed, since all recipients of the publication have the same access rights.

However, if a file has been published outside a publication, you are able to alter the access rights at the time it is allocated to a customer or even after that (on a customer basis). You can change the start and end access dates, or allow unlimited access. You can also use this feature to revoke access to a file.

For more information on using this feature please see Direct Access to Files in the 'Showing & Administering Customer Accounts' section of this manual.

NOTE: User access revocation and server checking

User access revocation to a publication or file will ONLY work if the user is required to check with the Administration server before they can use the file (this may be set to every use or every 'n' days, (if the latter then revocation may not be instantaneous) or if the user has not yet licensed the file.



Chapter 4: The Administration System

The Administration system, also referred to as the licensing system, is where you administer records for your files, publications and customers. This may be located on your own server or hosted by LockLizard.

Once you have secured your flash files it is a simple matter of setting up your customers on the Administration system (customer name or identifier, email address and company (optional)) and allowing them to use one or more of your publications or files. Your files will then be accessible to your customers that have subscribed to them.

The Administration system lets you:

- Manually enter customer data;
- Import existing customer data (perhaps from your accounting system);
- Export customer data, files and publication records;
- Automatically enter customer data using the LockLizard eCommerce module.

The LockLizard eCommerce module enables you to integrate Lizard Flashguard with your eCommerce system for a totally automated secure file distribution service. Once your customers pay for a file or publication then their details can be automatically set up on the Administration server and assigned the appropriate publication / file access rights, ensuring a 24x7 service. This saves you from manually having to create customer accounts. For more information please see <http://www.LockLizard.com/product-add-ons.htm>.

To go to the Administration system, right click on the Windows Start menu and select All Programs > LockLizard > Lizard Flashguard > Writer > Administration System.

NOTE: Internet connection is required

You must have an active Internet connection if you are connecting either to the LockLizard Administration servers or to one of your own web servers. If the Administration server is located on your internal network then you will need access to it.

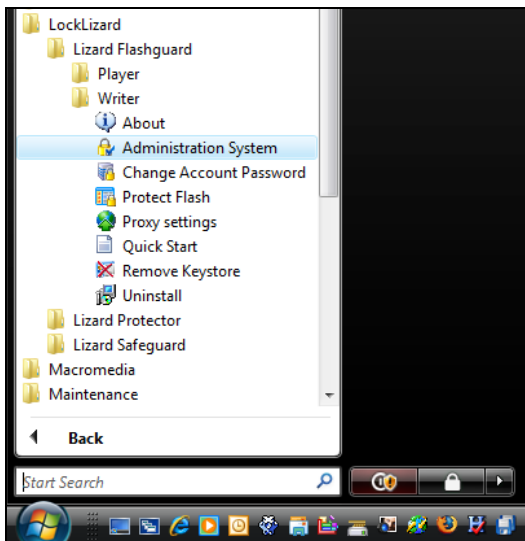


Diagram 24: Administration Page Context Menu

When you click on this it opens up the web administration page (shown below)

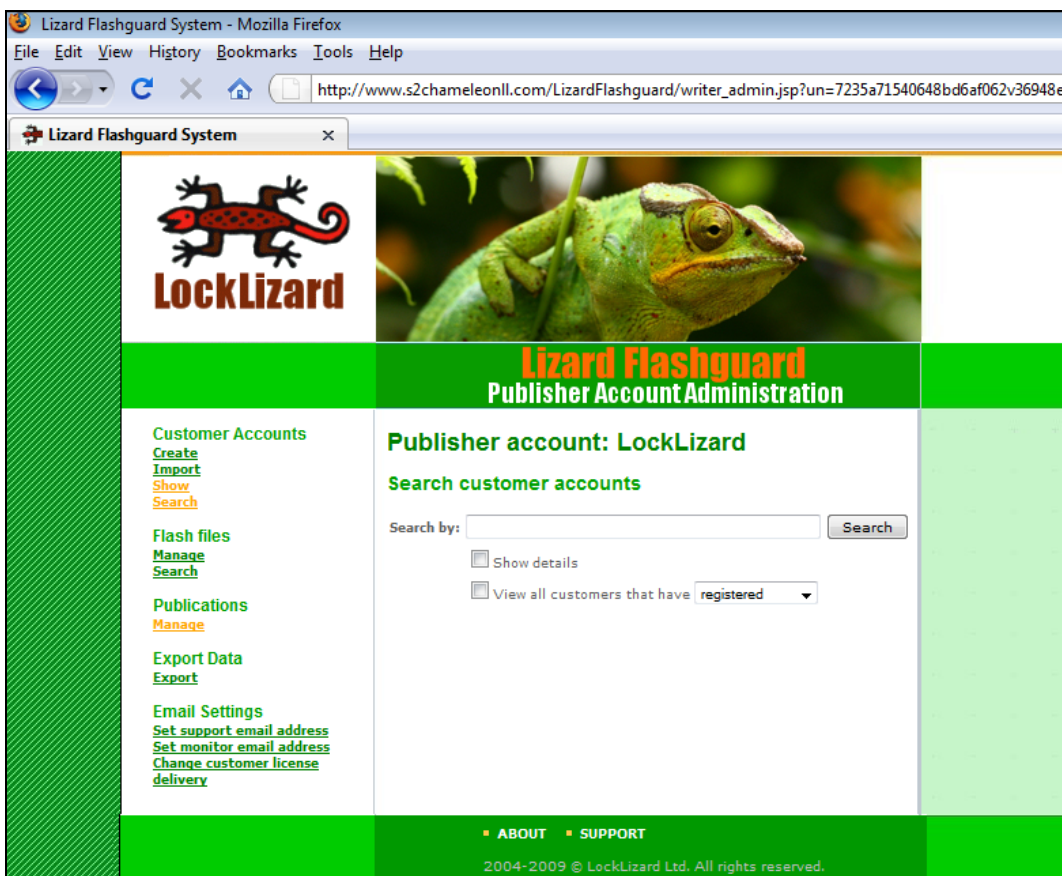


Diagram 25: The Administration / Licensing System



4.1 Administering Customer Accounts

The administration functions currently provided are:

- Create customer accounts;
- Import customers;
- View all customers you have created accounts for;
- Add extra customer licenses;
- Search for customers;
- Delete customers;
- Delete ALL customers;
- Suspend customers;
- Change customer account validity dates;
- Change the files your customers have access to;
- Change the file expiry date for individual customers;
- Change the number of views allowed on a customer/file basis;
- Delete files;
- Create and delete publications;
- Change the publications your customers have access to;
- Re-issue license files;
- Export customer data;
- Export file records;
- Export publication records;
- Change the support email address;
- Set a BCC email address (so you receive a copy of all license emails that are sent by the system);
- Prevent license emails being sent out (useful if you use the eCommerce integration module and display license information on a web page);



- See a detailed account view;
 - when the account was created
 - when it expires
 - when a customer registered (and with what IP and MAC address)
 - what their username and password is
 - the files they are authorized to use
 - the publications they are authorized to use
 - whether they have tried to register Flashguard Player more than once (including attempts for unauthorized registration)
 - whether you allocated them additional licenses
 - whether an account is enabled or has been disabled
 - the time/date on which each of those activities occurred.

NOTE: Number of records displayed per page

To ensure records are displayed quickly, only 15 records are displayed at a time on each admin page. You can alter the number of records displayed using the pull-down box labeled 'page size' at the top of the page. Next and Previous navigation options are displayed at the bottom of each page if you have more than 15 records available.



4.2 Creating Customer Accounts

The first thing you should do in the Administration system after creating publications and files, is to create customer accounts (or import them).

Click on the 'Create Customer Accounts' link.

When you create a customer account the customer is immediately emailed with the information needed to register their license for the file(s) and/or publication(s) that you have licensed them to use.

Publisher account: LockLizard
Create customer account

Name

Company

E-mail

Licenses:

Start date (mm-dd-yyyy)

Valid until (mm-dd-yyyy)
 unlimited

Can access publications

Flash Games

Test Publication

Diagram 26: Create Customer Account screen

Enter the appropriate details in the fields provided.

4.2.1 Name

The Name may be an internal reference number that you use if that is convenient. The name you enter here is also used as the filename for the license file ("Customer name".fvl), so that you and your users/customers are able to readily identify who the license is intended for.



Please note that you should avoid using any of the following characters as part of Name because they may be rejected by the file system of the operating system receiving the filename:

- " (double quotes)
- / (forward slash)
- \ (back slash)
- [(open square bracket)
-] (close square bracket)
- : (colon)
- ; (semi-colon)
- = (equals sign)
- , (comma)
- % (percentage sign)
- ? (question mark)
- < (less than)
- > (greater than)
- \$ (dollar sign)
- ' (single quote)
- (bullet)

If these characters are found to be part of the Name field they may be removed when the filename is created.

Please also note that embedded space characters are not removed (although they are removed from the filename for the associated zip file they remain on the underlying .fvl file).

Whilst conventions regarding acceptable filename lengths suggest that the field Name could be 255 characters long, Microsoft advise that, "Even though long filenames can include up to 255 characters, network administrators will want to encourage concise filenames among users who post files to network locations. Because a file's full path length can't be longer than 260 characters, administrators should discourage filenames over 75 characters."



Further, the standard ISO9660 and the Joliet CD or Hybrid CD partition standards restrict filenames to a maximum of 64 characters, and may truncate and/or reject duplicate shortened names.

We therefore advise publishers to avoid entering more than 64 actual character positions in the Name field, in order to minimize potential problems with the administrative systems of their customers or internal IT departments.

4.2.2 Company

The Company field is optional, but you can enter a company name if it is required for your own business purposes.

4.2.3 Email

The Email address that you enter here is where the registration information (license file and Player product download details) will be sent.

4.2.4 Licenses

Enter the number of licenses to be provided.

Licenses:	<input type="text" value="1"/>
-----------	--------------------------------

If you are licensing a company, they may have purchased more than one license and will want to be able to issue those licenses internally.

Entering additional licenses here, therefore, saves you from having to create a separate customer account for each authorized individual in that company.

However, be aware that they will ALL have access to exactly the same files, and their accounts will ALL expire at the same time, since they share a single customer account.

A customer may need to install the Player on both their home and their work computers, in which case you would need to issue them with two licenses.



Each time a customer registers a license, the number of available licenses for their account is decremented by 1. If you originally set this field to 1 when you set up the customer account, when the customer registers, the licenses field reduces to 0. As a result, the customer will not be able to register using that license again. This stops customers from sharing their license code information with others, because they can only register the number of times that they have been licensed.

If a customer requires another license at any stage (purchasing an additional use perhaps) then you can enter a new value in this field so that they can register their license again.

NOTE: Re-using licenses

Lizard Flashguard can be re-installed on the same computer without you having to issue your customers with an additional license.

When your customers re-register with the old license details, the Player software checks with the Administration server certain details and lets the license be re-used. So if your customers have to re-install their operating system they can then re-install Lizard Flashguard and continue using the product as before. However, if they rebuild a machine it may be necessary to issue them with an additional license.

4.2.5 Start Date

This is the day on which a customer account becomes available to use.

Start date (mm-dd-yyyy)

If you set this date to some time in the future then the customer will not be able to register the Player software until that date is reached.

The customer start date is also relevant to files that are published to a publication. If files that are part of a publication have a start date before the customer start date, then customers will still be able to view those files **unless** you check the 'obey customer start date' for that publication.



Selecting this feature prevents customers viewing files that have been published to publications before their subscription period began. Some publishers however want their customers to be able to view all files published to a publication (regardless of the customer start dates), and this is the default setting.

4.2.6 Valid until

Enter either a date when the customer account expires or select 'unlimited' if you do not want the customer account to expire.

4.2.6.1 *Date*

Enter here the date when the customer account expires. This may be the end of a subscription period, for instance.

The screenshot shows a form with the label "Valid until" and a radio button that is currently selected. To the right of the radio button is an empty text input field with a placeholder "(mm-dd-yyyy)". Below the input field is another radio button labeled "unlimited", which is currently unselected.

When the expiry date is reached, files that were published between the start and end dates for which your customers have the correct licenses will still be viewable, unless you have specifically made individual files expire on a given date that is earlier than the customer end date.

Once a customer account has expired, the customer will be able to continue to view any files they had access to during their validity period, but not any new ones. So even if your customer is able to access files in one or more publications, any new files published in those publications after their account has expired will not be useable.

If you provide subscription services, you should set a customer account to expire at the end of their subscription period. After that time (say a year) has passed they will still be able to access existing files published in those publications, but new ones will be inaccessible (unless they renew their subscription).



4.2.6.2 *Unlimited*

If you choose the 'unlimited' option then the account will never expire.

The settings interact with the validity dates that are set on customer records. As a result, the rules have different implications depending upon the settings of both customer and file start and end dates, including 'never expire', which are summarized below.

Please be aware of the relationship of these settings when choosing start and end dates for both customers and files.

	File does not expire	File does expire
Customer Account expires	File can always be used if it was published between the customer validity dates	File can be used until it expires provided it was published on or after the customer start date
Customer account does not expire	File can always be accessed	File can be accessed until it expires

Table 1: File and Customer Expiry

NOTE: Start and valid until dates

Start and Valid until dates can be changed whenever you want. However, the result of making changes on the Administration system will only have any effect if the customer has to check, at least periodically, with the server for authorization to use the file. If customers have been granted offline use, changes at the Administration server will have no effect because users / customers will never check with the server to update their authorities.



4.2.7 Can Access Publications

Check the boxes corresponding to the publications this customer has purchased.

Can access publications

Flash Games

Test Publication

Any files that are assigned to that publication will be viewable by this customer within the customer validity dates as mentioned above. The customer will still have to be sent or made available for download the actual files before they can use them.

On pressing the [Add customer](#) button, registration codes are automatically emailed to the customer using the email address you entered. The email also contains the download link for the free Flashguard Player software if they have not already installed it. See Customer Registration.

Now you are ready to send your protected flash (PFD) files to users by email, or publish them on CD-ROM, removable media, etc. or from your web site.



4.3 Importing Customer Details

You may already have an established customer base, and need to import existing customer records into the LockLizard Administration system. This information can be imported in a .csv format file (a spreadsheet format) containing the minimum details needed to satisfy the LockLizard system.

Click on the 'Import Customer Accounts' link.

Import customer accounts

CSV file:

Each line must contain the customer account definition as follows:

- Name. (required)
- Email address. (required)
- Licenses. (required)
- Start date. (required in format mm-dd-yyyy)
- End date in format mm-dd-yyyy or un for unlimited validity. (required)
- Company. (optional)
- Publications. A list of publications accessible to the customer. The publication names must be separated by a colon (':'). (optional)
- Direct access for flash files. A list of flash files accessible to the customer. For each flash file the following must be provided: flash file ID, flash file access period specified as "un" for unlimited period or as start date and end date in mm-dd-yyyy format for limited periods. These values must be separated by a colon (':'). (optional)

An example CSV file can be viewed from the following link
www.locklizard.com/downloads/sample_data.csv

Note: If a field value contains a comma it must be quoted. If a quote is contained too then use a double quote.

Diagram 27: Import Customer Accounts screen

The CSV file must contain on each line a customer account definition as set out in the screen above. Each row of the spreadsheet is a distinct customer record.

A sample CSV file showing you how the fields are laid out can be downloaded from www.LockLizard.com/downloads/sample_data.csv



A sample flash file showing you what each data field represents can be downloaded from www.LockLizard.com/downloads/sample_data.pdf

Once you have browsed for the CSV file containing your customer detailed information, press the button to complete the process.

When the import has taken place a message will be displayed telling you how many customer records were imported. For each customer record that is imported a customer account will be created and license files will be automatically emailed to each customer's email address.

Where errors have prevented the import of a customer record you will be notified of the record number that failed and the reason for rejection.

If a customer record already exists with the same name and email address on the administration system, then the addition of that record is rejected.



4.4 Showing & Administering Customer Accounts

Here you can view and administer the customer accounts that you have already created or imported.

Click on the 'Show Customer Accounts' link.

Customer accounts

Confirm

Page size: Sort by: Show details

Name John Adams
Email john.adams@barnacles.com
Username 110a0a4c48cb15866a99bc0c104bb644
Password 7aa2c9c38d8e8dc66ee7465c95f8cec9
[Save user license file to disk](#)
Company Barnacles, Inc.
Status **not registered; enabled**
valid from **04-29-2009**
Confirm

Licenses confirm

Start date (mm-dd-yyyy)
End date (mm-dd-yyyy)
 unlimited

Can access publications
 Flash Games

Direct access to flash files
There are no flash files that can be accessed directly.

[Change number of views](#)

Event log
04-29-2009 17:39:02 - account created
Confirm deletion

Diagram 28: Show Customer Accounts screen



The Name and Email fields are used to identify who the customer is and the email address is where the license information has been sent.

Name	John Adams
Email	john.adams@barnacles.com

4.4.1 Username and Password

The license file that your customers receive is a file containing data fields corresponding to a username, a password, additional check code information and the URL of the licensing server. If you are hosting your own Administration server this will be the URL that you have chosen.

Username	110a0a4c48cb15866a99bc0c104bb644
Password	64e03a2999b3a57d4762c665b41a88eb
Save user license file to disk	

Since the email is sent by an automated server, some SPAM filtering systems may block this and prevent the email from getting through. If this happens you will have to re-issue the customer license manually. Click on the 'Save user license file to disk' link (shown above) in order to save their license file to disk and then manually email the file to your customer.

4.4.2 Company

If you have entered a company name then it is displayed here.

Company	Barnacles, Inc.
---------	-----------------

4.4.3 Status

This field shows when a customer actually registered their license, and whether their account is enabled or suspended. It also displays the validity period of the account – when it was valid from, and whether it expires, and if so, the date of expiry. The text on the status field is displayed in red for unregistered accounts and green for registered accounts.



Status registered at 10-30-2006 18:29:28; enabled valid from 10-30-2006 Confirm <input type="checkbox"/> <input type="button" value="Disable"/>	Status not registered; enabled valid from 05-29-2007 Confirm <input type="checkbox"/> <input type="button" value="Disable"/>
--	---

4.4.4 Suspend Account

There may be times when you need to suspend a customer's account. This may be because they have subscribed to your service but have not actually paid. Any files that require a connection to the server will no longer be viewable if a customer's account has been suspended. Also, new files that are published will not be usable.

4.4.4.1 *Suspending an account*

To suspend a customer's account, check the **Confirm** check box and then press the button. If you then check the customer's account you will see that it has been suspended. The text on the status field is shown as 'suspended' in red font.

Status **registered at 04-30-2007 19:39:04; suspended**

4.4.4.2 *Re-enabling an account*

To re-enable a customer's account check the **Confirm** check box and then press the button (note: this button is only shown next to suspended accounts). The text on the status field is then shown as 'enabled' in green font.

registered at 10-30-2006 18:29:28; enabled

4.4.5 Licenses

Here you can change the number of licenses that have been allocated to a customer (you can add or remove licenses).

Licenses confirm



Enter the number of licenses that you want to make available in the licenses field, check the **Confirm** check box and then press the **Change** button.

You may want to allocate customers extra licenses if you decide to let them view your files on more than one computer. Also, you will have to allocate your customers additional licenses if they change computers, as they will have to re-install the Flashguard Player software on their new computer and re-register with you. See Changing Computers.

Regardless of the number of licenses you have given your customers, they will always register the Player using the same license file (so they are not sent additional license files even if they have been allocated additional licenses). The license count is decremented by one on the server each time your customers register on a new computer. Re-registering the Player software on a computer that was previously registered does not decrement the license count – see also Upgrading Computers. Please recall that global controls such as number of views apply at the customer level and not at the license level.

4.4.6 Start Date

You may want to change the start date of a customer account in order to give the customer access to back issues of publications.

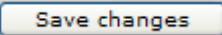
Start date (mm-dd-yyyy)

4.4.7 End Date

You may want to change the end date of a customer account in order to grant them continuing access to publications. This may be because they have purchased another year's subscription.

End date (mm-dd-yyyy)
 unlimited
Save changes



If you have changed either the start or end dates make sure you press the  button to cause them to take effect. Make sure that the change you are requesting will actually affect customers in the way that you anticipate.

NOTE: Start and valid until dates

Start and Valid until dates can be changed whenever you want. However, the result of making changes on the Administration system will only have any effect if the customer has to check, at least periodically, with the server for authorization to use the file. If customers have been granted offline use, changes at the Administration server will have no effect, because Flashguard Player will never check with the server to update their authorities.

NOTE: Customer and file expiry

Customer account expiry is totally different from file expiry.
For a more detailed description of the interaction between customer account and file expiry please see [Table 1](#).

4.4.8 Can Access Publications

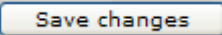
Whenever you add a new publication to your publications list it automatically becomes available for allocating to all current customers.



Can access publications

- Money Times
- Hard Up
- Big News



If you want a current customer to be able to receive the new publication simply enable the publication checkbox in the customer record and then press the  button.

It doesn't matter when publications are created, because as soon as they are you can allocate them to existing customers. The customer will still have to be sent the actual files (or have them available for download) before they can use them.



Do remember that when you add a publication to an existing customer they will only be able to use files in that publication that were created inside the customer validity period. You can continue to add existing files to new publications at any stage.

4.4.9 Direct Access to Files

Press the button to view the files that have been published outside of a publication.

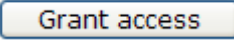
Direct access to flash files	
Title	Limitation
LockLizard-Flash-Game	unlimited
stuntrider	04-29-2009 - 06-29-2009

You will then be able to assign a specific customer access to individual files.

Title	LockLizardGame
Flash file ID	g
Published	04-14-2009 15:59:26
Expires	never
Status	valid
Access	no
<input checked="" type="radio"/> Limited Access	
From:	<input type="text" value="04-29-2009"/> (mm-dd-yyyy)
Until:	<input type="text"/> (mm-dd-yyyy)
<input type="radio"/> Unlimited Access	
<input type="button" value="Grant access"/>	

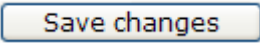
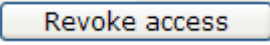
Even though you may have previously set file expiry when you published a file, you can change file expiry here on a per customer basis. You may want to do this, for example, to give certain customers time limited viewings to some of your files. Select the 'Limited Access' radio button if you want to set specific start and end dates, or the 'Unlimited Access' radio button if you don't want the file to expire. Do remember that this overrides your original settings.



Once you have made your changes press the  button.

The Access field entry will change from “No” (see diagram above) to “Yes” (see diagram below).

Title	LockLizard-Flash-Game
Flash file ID	11
Published	04-17-2009 11:21:51
Expires	never
Status	valid
Access	yes
<input type="radio"/> Limited Access	
From:	<input type="text" value="04-29-2009"/> (mm-dd-yyyy)
Until:	<input type="text"/> (mm-dd-yyyy)
<input checked="" type="radio"/> Unlimited Access	
<input type="button" value="Revoke access"/> <input type="button" value="Save changes"/>	

You can later either change file access by selecting new file expiry dates and pressing the  button or revoke customer access to a file by pressing the  button.

NOTE: Offline access

Do remember that if you have given a customer offline access (i.e. there is no control requiring connection to the server) to a file that does not expire, there is no point trying to change access restrictions later, because the changes will have no effect.

CRITICAL NOTE: EFFECTS OF GRANTING DIRECT ACCESS TO FILES THAT ARE PART OF A PUBLICATION

The key characteristic of a publication is that access to one publication file grants access to all others (within start and end date limitations and removal of files) within that publication.

If you decide to give non-publication users direct access to files that have been published to a publication, then they will also be able to view all of the other files in that publication (assuming they can get hold of them).



We strongly advise publishers not to grant direct access to a file that has been published to a publication. If you wish to do this, then you should protect it again as a standalone file. You can then give users access to that file without granting access to an entire publication.

4.4.10 Changing the number of views

Select the [Change number of views](#) link to change the number of times a file can be viewed (opened) by the selected customer.

This feature also enables you to see how many file views remain (and, therefore, how many have been used) for any file with this restriction set, by individual customer. Note that this change can only be applied to files that were originally published with a limited number of views. It is not a control that can be introduced after a file has been protected.

The screen below is displayed showing the files for which this customer has a limited number of views.

Title	Views left
LockLizardGame-View3	2

Update

Change the “views left” count by typing in the number of file views you now want to allow and then press the [Update](#) button.

NOTE: Changing the number of views

This change can only be applied to files that you have originally published with a limited number of views. It is not a control that can be introduced after a file has been protected.

File entries are ONLY displayed on this screen if the customer has already opened the file at least once in the Player software.



4.4.11 Event Log

The event log shows a history of the customer account.

```
Event log
10-30-2006 14:58:28 - account created
10-30-2006 18:29:28 - Registration successful. From: 81.153.71.201
10-30-2006 22:46:19 - No more licenses. From: 81.153.71.201
10-30-2006 22:48:42 - ADMIN: 10 available license(s). From:
81.153.71.201
10-30-2006 22:48:54 - Registration successful. From: 81.153.71.201
02-22-2007 14:17:24 - ADMIN: account suspended. From:
86.147.251.93
02-22-2007 14:18:27 - ADMIN: account enabled. From: 86.147.251.93
```

Information recorded is as follows:

- when the account was created;
- when the customer registered their license(s);
- if there have been any failed attempts to register (tried to register a license when one was not available);
- if a license has been re-used (registered again from the same computer);
- the IP and MAC address(es) involved;
- whether the account has been enabled/disabled;
- whether any extra licenses have been allocated.

4.4.12 Delete Customer Account

There may be times when you need to delete a customer account from the system. This may be because you were testing Lizard Flashguard and have accounts you no longer need, or it may be because they are no longer a customer/user and should not have continuing access to your files or publications.

If this is the case, check the Confirm deletion check box (shown at the bottom of each customer record) and then press the button.



IMPORTANT NOTE: Deletion of customer accounts

Once you have deleted an account, then if the customer in question is accessing files that required them to connect to the Administration server, those files will no longer be viewable, since there are no records to authorize against. If the customer in question is accessing files that do not require them to connect to the Administration server then those files will continue to be viewable by that customer regardless.

You may also delete ALL customer accounts by checking the **Confirm** checkbox and then the **Delete all customers** button at the top of the customer accounts page.

IMPORTANT NOTE: Deleted accounts cannot be recovered

Please be careful when using this option as customer accounts are not recoverable once they have been deleted.

This option is useful during testing situations when you may want to remove all customer test accounts. It may also be used when you wish to synchronize a membership system once a quarter/year rather than reconcile your own CRM system with the LockLizard Administration system. If you choose to do this, then please be aware that new licenses will be automatically issued to all the customer records that you then add when bringing the systems into line, and that your customers will have to register their new license files because their current ones will no longer verify.



4.5 Searching Customer Accounts

The Search Customers Accounts screen is displayed as the default screen when you enter the Administration system. This is because if you have a large number of customers it could take a while to display them all on one screen. Searching for particular customers therefore is much quicker when it comes to displaying the results.

Search customer accounts

Search by:

Show details

View all customers that have

Diagram 29: Search Customer Accounts screen

In the 'Search by' field enter the full or partial name of the customer you are searching for, and then press the button.

Check the **Show details** check box if you would like the customer account(s) to be shown with all their associated information.

You can also view all customers that have not yet registered or all customers that have registered by checking the **View all customers that have** check box, selecting the required option from the drop-down list box, and then pressing the button. If you use this option, do not enter any text in the 'Search by' field.

NOTE: Searchable fields
Searchable fields are the customer name and email address.



4.6 Managing Publications

Publications are used when your customers are purchasing a regular supply of files, daily, weekly, monthly, etc.

By allocating files to a publication you are simplifying the administration of the delivery of the file to your customers. This is because any customer associated with a publication can automatically use all the files that are associated with that publication without them having to connect to the Administration server to retrieve new license information. It avoids you having to allocate individual files to each customer entitled to make use of them.

To add or delete a publication record, click on the 'Manage Publications' link.

Manage publications

Name

Description

obey customer start date

Publications			
	Name	Description	Obey customer start date
<input type="checkbox"/>	Browning		no
<input type="checkbox"/>	Finance Monthly	Monthly stock reports	no
<input type="checkbox"/>	Hard up Times	Weekly financial paper	no
<input type="checkbox"/>	MyNews		no

Diagram 30: Manage Publications screen



4.6.1 Adding publications

To add a publication, enter a name for the publication, and optionally a description, and then press the button.

All of the publications you have previously created will be displayed in the Publications section.

4.6.1.1 *Obey Customer Start Date*

Check this box if you don't want customers to have access to files published before the customer was added. For example, if you are selling subscription services for a publication and do not wish new customers to gain access to back numbers (issues published before the customer subscribed to your publication).

If this box is not checked then the customer start date will be ignored. (Please recall that if you publish a file with a start date in the future it will not become available to the user until that date.)

4.6.2 Deleting publications

To delete existing publications, check the box next to the publication name(s) and then select the button.

Be aware that if you use this command it is not possible to recover either the publication, or any of the files that were part of it, or any of the links to customers who had access to the publication.

IMPORTANT NOTE: DELETING PUBLICATIONS

YOU SHOULD NEVER USE THIS FUNCTION WITHOUT BEING CERTAIN THAT YOU INTEND TO DELETE THIS INFORMATION FOREVER.



4.7 Managing Files

This section is where you can view file information and delete file records from the Administration system.

Click on the 'Manage Files' link.

Manage protected flash files

Confirm **Delete all flash files**

Page size: 25 Sort by: date Show details **OK**

Title	LockLizardGame-View3
Published	04-29-2009 17:59:39
Expires	never
Status	valid
Flash file ID	28
Validity check	never
Print	disabled
Open limitation	3 times
Publications	every customer has access

Confirm deletion **Delete**

Diagram 31: Manage Protected Files screen

You cannot alter any of the information in this panel. If you want to make changes you will have to go back to the original file and protect it again using new settings.

The following information is displayed:

- File titles;
- When they were published (date and time);
- When they expire (if ever);
- Their existing status (valid or expired);



- Their unique IDs (this helps you distinguish between files of the same name and is also used by the eCommerce integration system);
- Whether a check must be made with the server before they can be viewed (Validity check);
- Whether printing is allowed;
This field may show one of two options:
 - Disabled - printing is not allowed;
 - Enabled and unlimited – unlimited printing is allowed;
- What publications they have been assigned to (if any);
This field may show one of three options:
 - One – the file has been published as a standalone file;
 - Every customer has access - the file has been published for all customers to view;
 - A publication name – the file has been published to a publication.



4.7.1 Deleting file records

You may want to delete a file record if you need to withdraw a file from customers, perhaps because it has been superseded.

IMPORTANT NOTE: Deleting records

Once you have deleted a file record then if the customer in question is accessing a file that requires them to connect to the Administration server, those files will no longer be viewable, since there are no records to authorize against. If the customer in question is accessing files that do not require them to connect to the Administration server, then those files will continue to be viewable.

File records can be deleted by checking the **Confirm deletion** check box and then pressing the **Delete** button.

If you want to delete ALL file records (for example you want to remove a test environment) then check the **Confirm** check box and press the **Delete all flash files** button.

IMPORTANT NOTE: Record recovery

There is no recovery if you delete file records. They cannot be reinstated, and you will have to protect new files if you want to replace existing ones.



4.8 Searching File Records

To quickly find a file, click on the 'Search Files' link.

Search flash files

Search by:

Show details

View all flash files that are

View all flash files that expire on
(mm-dd-yyyy)

View all flash files that belong to the publication

Diagram 32: Search Files screen

In the 'Search by' field enter the full or partial name of the file you are searching for, and then press the button.

Check the **Show details** check box if you would like the file(s) to be shown with all their associated information.

4.8.1 Searching for expired files

You can view all files that have expired or all files that are valid (not expired) by checking the **View all flash files that are** check box, selecting the required option from the drop-down list box, and then pressing the button.

If you use this option DO NOT enter any text in the 'Search by' field.



4.8.2 Searching for files that expire on a certain date

You can view all files that expire on a certain date by checking the

View all flash files that expire on (mm-dd-yyyy) check box, entering the required date, and then pressing the button.

If you use this option DO NOT enter any text in the 'Search by' field.

4.8.3 Searching for files that belong to publications

You can view all files that belong to specific publications by checking the

View all flash files that belong to the publication check box, selecting the required publication from the drop-down list box, and then pressing the button.

If you use this option DO NOT enter any text in the 'Search by' field.



4.9 Exporting Data

These facilities are provided to allow you to extract information concerning customers, files and publications that are held on the administration database.

The output format is .csv. You may process the information provided in any suitable spreadsheet application.

Click on the 'Export' link.

Export data

Customers

Flash files

Publications

Diagram 33: Exporting data screen

Select the appropriate radio button corresponding to the data you want to export and then press the button.



4.10 Setting the Support Email Address

You should use this function to set up your standard support email address so that your customers will be serviced correctly.


When you create customer accounts, your customers are sent an email that contains their license file and a link that allows them to download the free Player software. This email displays the following text:

“If you have any difficulty registering the product please contact the file owner at email@address.com”

This is the email address where your customers can send email if they have problems accessing protected files that you provide. This is also the email address that is displayed in the FROM field of the email message.

The screenshot shows a web interface for setting a support email address. At the top, the text 'Support email address' is displayed in green. Below this, there is a text input field with the label 'E-mail' to its left. To the right of the input field is a button labeled 'Save'.

Diagram 34: Set Support Email Address screen

Click on the ‘Set Support Email Address’ link and enter the support email address for your company in the above dialog so that it will be displayed to your customers instead of the default one. Then press the  button.

IMPORTANT NOTE: Support email address

DO NOT set this address to support@LockLizard.com.

Customer requests for support must first go to you as the publisher before being redirected through to LockLizard support. Direct requests from your customers to our support department will be sent back to you as the publisher. You may prejudice your support agreement if you do not comply with this requirement.



The default email address is the one that was used for the creation of your Flashguard Writer publisher account and is where your Flashguard Writer registration information was sent. Please note that LockLizard Support will automatically refer any end user queries to the publisher concerned and will not respond to them directly at any time.

4.10.1 Updating the file properties with the new email address

Once you have changed the support email address you will need to re-register your player license for the email address to be updated. This is because the file properties obtain the support email address from the player license file. Any users that register the player after you have changed the support email address will automatically see the updated field.



4.11 Setting the Monitor Email Address


This function allows you to set the email address to which a copy of the customer license file will be sent.

Monitor email address

E-mail

Save

Diagram 35: Set Monitor Email Address screen

Enter an email address and then press the  button.

You may want to use this function so that you do not have to use the 'save users license file to disk' option on the Administration system in order to resend a customer their license file email. Instead, you can simply forward them a copy of their license file by email.

Further, you may wish to send your customers a default email message containing your own content, perhaps informing them of updates or new information relevant to the product(s) that they have acquired. To do this you would need to set up an auto-responder that is automatically triggered when the license email arrives in your inbox. You would need to configure your own email system in order to do this.

Please be aware that some email servers reject email coming from an automated source, because they choose to believe that it must be spam and you may need to provide a manual follow up where that happens.



4.12 Setting the Customer License Delivery

The Administration system is set, by default, to automatically send an email license file whenever a customer record is added to it. If your business model prefers to send license information directly from your web site to a customer, or, some other internal management process, then you should disable this option so the Administration system will NOT send the email license file to a customer when they are added to the system.

You should NOT use this feature unless you have purchased the eCommerce integration option.

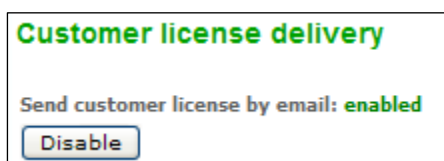
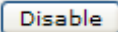
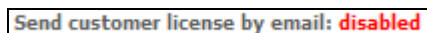
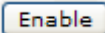


Diagram 36: Set Customer License Delivery screen

To disable license file emails being sent to your customers press the  button. The text will change to show you that this feature is now disabled:



To re-enable license file emails press the  button.

NOTE: Customer license delivery and ecommerce integration

In an automated solution we would expect you to be using the LockLizard eCommerce integration module in order to display customer license files on a web page automatically. If you are using this method of license file delivery, then most likely, you would want to disable the sending of license file emails by the Administration system.



Chapter 5: How customers use your files

Once you have created a customer account and your customer has received their registration email, they can simply install Lizard Flashguard Player by downloading the software and double-clicking on the exe file. This automatically installs and registers the linking of the .PFD file extension to the Player.

The registration email that is automatically sent to your customers is customized with the name that you used to register the Flashguard Writer account with and your publisher email address (which [can be changed](#) in the Administration system). Before your customers can start viewing your protected files they must first register with you as a publisher. This can be done before they have been authorized to use any files.

Once a customer has installed and registered the Player software you can send them a PFD file (a protected flash file). They can then double-click on the PFD file in Windows File Explorer and it will be displayed in the Player software (assuming of course you have granted them access to that particular file).

When a customer views one of your secure flash files for the first time, the Player software will check if it has the correct key to view it. If it does not, the Player will check with the Administration server to see if the customer has been granted access to the file (your customer MUST be connected to the Internet at this point).

If access is allowed then the decryption key will be transparently relayed (the customer will be unaware of this operation) to the client computer, and stored encrypted in the Flashguard Player keystore. If no key is available, your custom message for refused access (set when you protected this specific file) will be displayed telling the recipient how to contact you and purchase your files, or warning them that the file is not for their licensed use. You will need to determine the most relevant message.

Protected flash files are decrypted in memory and displayed in the secure Flashguard Player. Details of when the user's account expires (if ever) and when the file they are viewing expires (if ever) are displayed at the bottom of the Player window.



5.1 File Issues

Should your customers need to contact you with an issue viewing protected files then you should advise them to select the option “Contact Service Support” from the Help menu in the Flashguard Player. By using this option important machine and version information will be sent to you, which can then, if necessary, be passed on to the LockLizard support team for further investigation.

Please note: LockLizard will only deal with support requests from publishers, and not from publisher’s customers. Support requests arriving from people who are not direct customers of LockLizard may be deleted without any response at all.



Chapter 6: Distributing Files

Delivering files that your customers have purchased is a critical part of the business process. But there are different models that you should consider for delivering files to customers.

The two principal business process models you can use are 'push' or 'pull' which we can call 'sending files' and 'downloading files.'

6.1 Sending files to customers

This model is appropriate where you have very regular requirements to send information to a regular or specific group of contacts. These may be business partners or customers buying a regular service.

If you are sending small files it may be efficient to send the file by email to the customer immediately after it is ready. This is efficient from an operational viewpoint because there is a high chance that the file will get to its destination and that the recipient is already able to read it.

It is also efficient in terms of a business process that fits this model. If you regularly send small and different files to different customers this model works well. It is NOT suitable where you have large files, unless you plan to send them by CD-ROM or other physical media in the post. This is mainly because the majority of email servers will reject attachments over 3Mb in size. If you normally provide larger files you should consider the next option.



6.2 Customers downloading files

In this model you are providing a service to customers. They are free to download any files from your web site. Your model may be that potential customers are able to download and read a sample of the file you have for sale, and can then download any files that they have bought or might wish to buy.

LockLizard secured files are fully encrypted, so anyone can download them, but until they have purchased a license, they will not be able to make any use of any downloaded information. This means that you can publish protected files to your web site with confidence that they cannot be used by anyone except customers who have paid to receive them. It therefore does not matter if prospects or customers have access to these protected files even before they have purchased them.

This approach is more efficient when you have relatively large files for customers, and where customers are confident to visit your web site in order to collect their information. As an analogy, it is rather like the customer visiting a shop and taking away a copy of the publication they want to read. It should be chosen whenever you will have files that will be over 3Mb in size, or where you are offering a service where customers select the publications or files that they want to purchase and then wait to receive the access authorization once they have paid.

IMPORTANT NOTE: Uploading files to a Windows IIS server

If you are uploading secure flash files to a Windows 2003 server running IIS, then the file's MIME type must be registered on the server before it will allow the file to be transmitted through the web server. To do this, register the .pfd extension under the IIS Manager. For the

MIME type select application/PFD Viewer and for the extension type .PFD.

You may also want to register the player license file - For the MIME type select application/PFD License and for the extension type .FVL.

Then restart the IIS server.



6.3 Customers downloading the free Player software

The Flashguard Player software can be downloaded, free of charge, from either the LockLizard web site or your own one.

You are also free to distribute the Player software as you see fit.

The Flashguard Player contains automatic update detection. A check is made once a week with the LockLizard server to see if a new version is available. If a newer version is available then the Player will invite the customer to update to this version. Automatic updates can be disabled - please refer to the Flashguard Player manual for more information.

Note that updated versions of the Writer may compel customers to update their version of the Player.



Chapter 7: Troubleshooting and General FAQs

This chapter covers error messages that may be encountered when you are using Flashguard Writer. Please also refer to the troubleshooting section in the Flashguard Player manual for Player related issues.

The online knowledgebase contains the most up-to-date troubleshooting information and can be accessed at http://www.locklizard-license.co.uk/support/index.php?_m=knowledgebase&_a=view

7.1 Troubleshooting

7.1.1 I have created a customer account but they have not received their license email. Why has this occurred and how do I resend the license email?

Since the registration email is sent by an automated server, some SPAM filtering systems may block this and prevent the email from getting through. If this happens you will have to re-issue the customer license manually.

Click on the 'Save user license file to disk' link in order to save their license file to disk and then manually email the file to your customer. The 'Save user license file to disk' link can be found on the customer record below their username and password (see diagram below).

Name	John Adams
Email	john.adams@barnacles.com
Username	110a0a4c48cb15866a99bc0c104bb644
Password	64e03a2999b3a57d4762c665b41a88eb
	Save user license file to disk



7.1.2 When protecting a flash file I get the error message “failed to compute file id: error 32”

This error message is displayed for one of two reasons:

- 1) either another application is holding the flash file you are trying to protect open or
- 2) you do not have administrative privileges on that computer.

You will need to correct the relevant situation before proceeding.

7.1.3 Error Message “We cannot connect to the license server by Internet. Please check that you are connected, or that a firewall is not stopping this connection.”

This error message is displayed if either a firewall or proxy is stopping the Flashguard software from getting to the Internet. If you are trying to register the writer application, then the program PFDWriter.exe must have access to the Internet.

If you are trying to register the Player application then the program PFDViewer.exe must have access to the Internet.

In the case of proxy servers, proxy settings are automatically picked up from Internet Explorer but there may be occasions when this information is incorrect or unavailable and you will have to manually enter proxy settings in the Player software. Off the Windows Start menu > Programs > LockLizard > Lizard Flashguard > Writer (or Player) > Proxy Settings is where you enter this information. See [proxy settings](#).

Once you have registered the Writer / Player software, you do not need the proxy settings again unless someone decides to change them.



7.1.4 When I am asked to register my license file it tells me “the server is unavailable”

The most likely reason for this is that you are using a proxy to access the Internet. Make sure you have entered the correct proxy settings and then try again. See [proxy settings](#).

7.1.5 When trying to register I get the error message “license check failed - server returned 407 response code”

The most likely reason for this is that you are using a proxy to access the Internet. Make sure you have entered the correct proxy settings and then try again. See [proxy settings](#).

7.1.6 Failed to set file rights. Error code : 2

There are two reasons why this error message may occur:

1. A file open password has been set on the file. This must be removed before you can protect a flash file.
2. The source file you are trying to protect is not an Adobe compliant flash (swf) file.

7.1.7 Failed to compute id. Error code : 5

You do not have modify permissions set on the file you are trying to protect.

In Windows Explorer right-click on the file and select ‘Properties’. Then click on the Security tab and make sure the modify setting has been allowed.



7.1.8 I changed the date when a customer account expired by increasing the expiry date but they still cannot access the files I have sent them.

If you change when a customer account expires (for example a customer subscribes to your publication for another year and you extend their account for another year) then these options only take effect when the Flashguard Player next connects to the LockLizard Licensing server. This may be:

- 1) If the file controls state that the user must connect to the Internet every n days or every time before they can view the file.
- 2) If the user re-registers by double-clicking on their license file again.
- 3) When the Player downloads a new file decryption key.

Any of the above will cause the keystore to be updated with the new user account details.



7.2 FAQs

This chapter covers frequently asked questions on Lizard Flashguard.

7.2.1 How does Lizard Flashguard differ from file encryption products?

Whilst file encryption products information protection whilst it is in transit or when stored on disk, they do not provide protection for the entire lifecycle of the information in a file. Once a file reaches a recipient, the protection is lost (the recipient decrypts the file), and the file can be forwarded, copied and viewed by unauthorized recipients. In addition, encryption products do not provide DRM controls over file access rights - what a user can or cannot do with the file (print control, etc.) or file expiry.

LockLizard Flashguard dynamically protects flash files inside and outside the network, online and offline, with strong encryption and DRM controls (expiry and access rights), to provide persistent end-to-end protection throughout a flash file's lifecycle.

7.2.2 How does Lizard Flashguard differ from obfuscation products?

There are a lot of flash security products on the market that claim to protect your flash source code from being stolen and the displayed content from being copied.

Put simply, obfuscation products do not work. There are hundreds of programs available on the Internet that can turn a SWF file back to a FLA project - for example, [SWF Decompiler](#). Even if the code is obfuscated, they work just fine: the FLA file can be opened with Adobe flash editor and it can be edited. Additional security features that lock your flash files to a specific domain can then be easily removed.



Also, because these products alter your source code by changing how they are structured and programmed, they often introduce bugs into your flash files making them not function correctly. This is because your SWF files are NOT encrypted at all, the content and structure of them is just changed. See the Adobe Flash forum on [flash obfuscation](#) and [SWFs not working](#).

For products that claim to protect the displayed content, the unprotected SWF files can be easily recovered from your Internet files temporary cache area. This is because all browsers download content from the web into a local cache before displaying it to the user.

Lizard Flashguard completely encrypts the source code preventing programs decompiling your SWF files to FLA files. Content is only ever decrypted in memory and your nested scripts, objects, images, and animation are fully secured at all times. Your source code is never altered in structure or programming terms.

In addition, Lizard Flashguard Flash DRM controls control who can view your flash files, how long or how many times they can be viewed, and whether printing is allowed. It also stops screenshots of your flash files from being taken.

7.2.3 How secure is Lizard Flashguard?

Lizard Flashguard uses US Government strength encryption - the AES algorithm at it's strongest strength, 256 bit. It would currently take today's fastest computer approximately 149 thousand-billion (149 trillion) years to crack a 128-bit AES key. Even with expected future advances in technology, AES has the potential to remain secure well beyond twenty years. For more information on AES please see NIST's [AES fact sheet](#).

In addition, we don't use third party plug-ins to control your protected flash files. This ensures we are not open to weaknesses in the published APIs or security holes in third party applications and cannot be compromised by the inadequacies of other plugins that could be loaded.



Protected flash content is only decrypted for viewing in a secure, controlled environment, and is never made accessible unprotected so DRM controls are always enforced. If a customer does not have a license they cannot view your protected flash files.

7.2.4 Is your application open to password attacks?

No. The keys required to decrypt protected flash files are stored encrypted on the user's computer. There are no passwords to enter and therefore the system is not open to compromise or password attacks. An attacker is faced with a brute force attack of such a significant difficulty that they would need more than 20 years to gain access to a single product. It would be cheaper and quicker for them to photograph every viewable screen of your protected flash content.

There are no passwords for users to enter, manage, forget or pass on to others.

7.2.5 Do I have to upload my files to your web server to protect them?

Absolutely not. We would strongly advise against using any system that employed this approach. With Flashguard you protect your flash files on your local computer, so that they are not exposed to any potential compromise in their unprotected form on a web server or whilst being transferred.

7.2.6 Do you host my secure flash files on your server?

No. For both security and legal liability reasons we never have access to either your unprotected or protected files. In a professional environment that should not be a requirement and we recommend that you obtain legally enforceable indemnity where a supplier insists that they have access to your IPR at any time.



With LockLizard you host them on your server, web site or network, or you can send them by email just like any other file. What we host is the licensing system where you can issue your customers with licenses, and control who can access your secure flash files and publications.

7.2.7 Where can I publish my secured flash files?

You can publish your secure flash files to the web, on CD-ROM, on removable media, etc., or send them by email just like any other files.

7.2.8 Can users change my file security settings?

No. Once you have applied security settings to a file they cannot be changed by anyone. The settings become part of the file, and remain in force at all times, even when your customers are using your files off-line (i.e. they are not connected to the Internet).

If you, as the publisher, want to issue the same file with different security settings (copying, printing, etc.) then you just protect the flash file again with the new settings. You can then send this newly protected file to your customers.

7.2.9 Is there a limit to the number of files I can protect or customers that can receive protected files?

No. You can protect as many flash files as you want at no extra charge. There is no limit on the number of customers using the system and the Player software they download is totally free of charge.



7.2.10 Can I tell people where to buy a license from?

Yes. When you protect a flash file you can add a free format text message to it. You might want to enter information on how to purchase if you are selling files or give details on contacting your administrator if the system is used for internal file control.

This text is shown when a customer opens an unlicensed file. The text is also visible at the top of the file if they try to open it with a text editor or a similar application such as Notepad or MS-Word.

7.2.11 Can my customers distribute protected files to others?

Your customers can send protected files to other users, but those users will not be able to view the files unless they have purchased them from you. For this reason, secured flash files (PFD files) can be freely distributed, emailed or published on the Internet, without any unauthorized individual being able to access the content.

In addition, even existing customers cannot necessarily view your protected files. You decide which customers have access to what files and what publications, and when, and how.

7.2.12 How can I control file expiration & revocation once a file has been published?

Post publication file control is maintained through the use of expiry dates and the ability to revoke access to a file or for a customer. For example, you can publish a file that will expire in a month's time, so that your customers will not be able to view it once the expiration date has passed.

Or, you can automatically revoke a customer if they leave a project, department or company or fail to maintain payments for a subscription. So you have a sophisticated range of controls that you can enforce concerning the ability of your users to make use of the files that you license.



7.2.13 Why would I want to set customers to expire rather than files?

The system is flexible so that you can actually do both. You may want customers to expire rather than files because if a customer has subscribed to your service for a year then they are entitled to carry on viewing those files after their subscription has expired. The system prevents them from viewing files with dates outside their subscription period.

On the other hand, you may want to issue your customers, or prospects, with time sensitive trials or samples of files, because you do not want them to carry on viewing a file that has passed it's expiration date. In this case once the expiry date has been reached the file is no longer viewable.

7.2.14 We want to give prospects / customers free 30 day trials of our files. Is this possible?

Yes. When you create a file you can specify the date at which it expires. When a customer registers they can then view your files until that date is reached.

Once this date is reached the file will expire (if the file expires, it can no longer be viewed) and they will need to come back to you for a license to continue viewing the file.

You can also set customer accounts to expire on a certain date. The difference here is that any files published during their subscription period that you have authorized them to view can still be viewed after their subscription period has expired - they just won't be able to view any files published before or after their subscription period unless they come back to you for a license.

So to summarize you can either expire files (and they are no longer viewable once they expire) or you can expire customers (and they can continue to view the files that they were authorized to view during their subscription period). Of course, if you have forced your customers to connect to the Administration server before they can view your protected files then you can instantly suspend their account and this prevents them from viewing your files.



You can also limit the number of times a customer can view your files and this feature is especially useful for free samples.

7.2.15 Do my customers have to be connected to the Internet in order to view my secure flash files?

No. You can allow secure flash files to be viewed off-line. All file controls (preventing copying, printing, etc.) are retained within the file itself and therefore no Internet connection is required to enforce controls. Please bear in mind however that an initial connection to the Internet is required to validate the user license and obtain the appropriate decryption key(s) when your customers view your protected flash files for the first time.

However, you can enforce that your customers connect to the Internet to view your files if that is what you require.

7.2.16 Can I add existing customers to future secured flash files or publications?

Certainly. It is a simple matter of assigning the new publication or files to existing customers.

7.2.17 What software do my customers need on their computers in order to view my secured flash files?

They need to download and install our free Player software - Flashguard Security Player. The Player software can also be freely distributed and published on your own web site if you prefer.

In addition, you need to set your customers up with an account on the Administration / licensing server so the system can email them their license file. The registration of the license gives them access to the protected file(s) you have licensed them to use.



7.2.18 What happens when my customers change or update their computers?

7.2.18.1 *Upgrading Computers*

Flashguard Player can be re-installed on the same computer without you having to issue your customers with an additional license. When your customers re-register with the old license details, the Player software checks with the Administration server certain details and lets the license be re-used. So if your customers re-install their operating system or change their hard disk drive for whatever reason they can re-install the Player software, re-register, and continue using the product as before.

7.2.18.2 *Changing Computers*

If your customers change computers then you will need to allocate them an additional license so they can install the Player software and register with you again. The number of times a customer can install and register the Player software is determined by the number of licenses you allocate to their account. Note that increasing the license count does not generate new licenses - your customers always use the same license file to register.

Additional licenses can be added to an existing customer account using the 'Show Customer Accounts' link in the Administration system. See [allocating additional licenses](#).

7.2.19 How do I stop access to old versions of files?

If you update versions of files and you want to force customers to use the latest versions then you must set the file controls to verify the license either every time the customer views the file or every n days (depending on whether it is critical that the file expires as soon as the updated file is published or there is a few days leeway). Then add the updated file either to a publication or to the customer, and delete the old file from the Administration system.



Remember to send an email to customers affected to tell them to download the updated version (or include the update as an attachment).

Please be sure to delete the correct file record as deleted file records cannot be recovered.

7.2.20 I sell ebooks and want customer records to be automatically created on the Administration system so that there is no delay in customers receiving their license emails after purchase. How can this be achieved?

You need to purchase our eCommerce integration module to achieve this. The system integrates with your existing eCommerce or shopping cart system and works by acting on HTTP PUT commands sent to the LockLizard licensing server. This creates the customer account and specifies what publications and or files they are allowed to access.

For full details on the eCommerce integration module and commands available please see <http://www.LockLizard.com/product-add-ons.htm>.

7.2.21 If a customer purchases multiple files from my company using different names (e.g. J Smith and John Smith) so they now have more than one account on the Administration system, will they be able to access the files they have purchased from the same computer?

Yes. Your customer must register each license (by double-clicking on it) on the same computer. Once they have done this they will have access to all the authorized files for those registered accounts. Both licenses will be active simultaneously on the same computer.



7.2.22 I plan to create a single customer account for each company that subscribes to my reports and assign multiple licenses to that account (depending on the number of users within the company that I want to grant access to). Since multiple licenses are now available, how can I prevent companies sharing these licenses with other companies and thus gaining access to my protected files?

In order to achieve this you will need to restrict access to the LockLizard Licensing server based on IP address. You will need to install the LockLizard Administration system on your own server and make sure that the server only permits access from and responds only to connections from the public IP addresses you have specified.

So if a user at Company A sent his license file to a user which is located at a LAN/WAN that does not use an authorized IP address then that non-authorized user would not be able to register the license at his own workstation because he would not be able to access the LockLizard licensing server. Please make sure that the IP addresses you specify are PUBLIC so that they cannot be emulated (public IP addresses are ones that are registered with the Network Information Centre (NIC)).

7.2.23 How can I get users to open PFD files in the browser without having to save them to disk first?

In Internet Explorer, select the Tools menu > Folder Options > File Types. Select the PFD file extension on the file types list -> press the Advanced button -> uncheck the 'confirm open after download' checkbox and then press the OK button.



7.2.24 My customer tells me they have not received their license file.

How do I resend it?

Since the license email is sent by an automated server, some SPAM filtering systems may block this and prevent the email from getting through. If this happens you will have to re-issue the customer license.

7.2.24.1 *Manually sending a license email*

Click on the 'Save user license file to disk' link (below the username and password) in the customer record (see below)

Name	John Adams
Email	john.adams@barnacles.com
Username	110a0a4c48cb15866a99bc0c104bb644
Password	fe5f4e2f5d210d5d9da57b6dc6a9d4ce
	Save user license file to disk
Company	Barnacles, Inc.
Status	registered at 03-20-2007 13:16:49; enabled valid from 03-17-2007
Confirm	<input type="checkbox"/> <input type="button" value="Disable"/>

In order to save the license file to disk, and then manually email this file to your customer. You might want to include as part of the email, the Flashguard Player license file email text which can be copied from <http://www.LockLizard.com/flashguard-player-license-email.htm>.

7.2.24.2 *Forwarding a license email address*

You can enter a [monitor email address](#) on the admin system so that you will receive a copy of all license file emails that are sent to your customers. You may want to use this function if a large number of your customers are not receiving their license file emails, so that you do not have to use the 'save users license file to disk' option every time. Instead you can simply forward them a copy of their license file by email.



7.2.24.3 *By automated means*

This can be achieved using the eCommerce integration function "Get customer license file". This request enables you to display the license file that is sent to a customer on a web page, so that it can be immediately available to your customer, rather than them having to wait for an email to arrive before they can use the information. How this information is presented to your customer depends upon your own house style, but you could put a button or link to your web page, like Save File, so your customers can save the license file to disk.

Note that the eCommerce integration function is available for separate purchase - see <http://www.LockLizard.com/product-add-ons.htm>.

7.2.25 How can I tell what access controls have been applied to a file after it has been published?

This information is displayed on the administration server under the Manage Files section.

Manage protected flash files

Confirm **Delete all flash files**

Page size: 25 Sort by: date Show details OK

Title	LockLizardGame-View3
Published	04-29-2009 17:59:39
Expires	never
Status	valid
Flash file ID	28
Validity check	never
Print	disabled
Open limitation	3 times
Publications	every customer has access

Confirm deletion **Delete**



7.2.26 Can a customer who has purchased a protected file change the file name when saving to his/her disk? If yes, does that make the file unusable?

Yes your customers can change the file names to whatever they choose.

No, the file can still be used as before.

7.2.27 If a .PFD file is on a CD and a customer attempts to open it, does the file perform exactly as if it were on the hard drive?

Yes. Protected flash files can be opened from any location (CD, email attachment, etc.) just like any other file.



Appendix 1. How to use guide - Small Publisher

A small publisher is someone who is selling something as an individual item or a series of separate items. These might include books, flash games, flash files for web sites, etc.

The essential point is that the products are not sold as subscriptions where your customers are buying into regular deliveries of course material. If that better describes your business please see the guide for Large Publishers.

When managing one-off items you should always consider them to be single files. Don't create a publication and start assigning files to that publication. It will only add to your Administration without giving any benefits.

1.1 Setting file controls

There are two keys to retaining good file control.

The first key to maintaining control of files is to give them clear and recognizable titles – something that you and your customers can easily recognize. See [Appendix 4](#) for more details. (The LockLizard system will also give them unique reference identifiers but these are not human readable, and are designed to ensure uniqueness in all our internal file references.)

If you have clear titles, then even if your list of files is more than a page you will be able to go through the list very quickly when you want to allocate a specific file to a customer.

The second key is to set the controls to be applied to the file to be those it is most commonly sold with. For instance, if you are selling a flash game it is normal for people who buy it to be able to play it forever (quite a long time) so it doesn't make sense to set an end date for a year away, and then have to amend it most times you sell it.



You can then vary the file controls if you want to give individual customers something different – a short file access period (one day) if you want to give them a ‘taster’ before they buy, perhaps. You can later sell them the file with no expiry date so that they can make full use of it.

1.2 Controlling customer records

Don’t worry about adding the same customer to the database another time if you sell them another product. It doesn’t matter. You can give them access to the new file under their existing record. You can sort through customers by name or by e-mail if you need to find their customer record. And if you want to create a new customer record for the same customer rather than go hunting for them you can do that without any complications.

You can also license a customer to have more than one copy of the file to read, so maybe you give them two licenses so they can load the file onto two PCs in order to use it.

1.3 Customer Management

If you sell books, then likely you and your customer will expect that they can read it from now on. Your customer is not going to expect to suddenly not be able to view the files they have purchased. So most of the time you are just going to license a customer to read your information forever. Although there are features in LockLizard that allow you to suspend customers it’s not likely that you will need to use them.

Copyright law, as it stands today, allows you control of your work for between 50 and 120 years after your death (good for the family even if you don’t personally benefit). But people who buy a physical book expect to be able to read it at any time in the future, just the same as if you have bought a painting you expect to be able to see it when it suits you. So it’s good practice not to try setting different rules unless there are very good reasons.



Appendix 2. How to use guide - Large Publisher

A large publisher is defined here as being anyone who is publishing one or more titles that appear daily, weekly or monthly (say a series of training courses that are available as a subscription service). A large publisher is also an enterprise with a large book list. If you are publishing a book list rather than periodicals or subscriptions the guide to small publishers may be more helpful.

This guide is oriented towards those whose bread and butter business is regular publications, and where their customers purchase subscriptions to publications that last for a period of time. These can be training courses, weekly or monthly magazines, or flash games that are available as part of a subscription service (pay for the service and download and play as many as you want). It also provides some suggestions over how to provide customers with 'one-off' copies of publication files, and how to manage that situation.

2.1 Organizing publications

If you already have a regular publication then you will have established what the publication titles are so in the licensing system you can simply enter those titles. Otherwise you will have to create meaningful publication titles for both you and your customers. See [Appendix 4](#) for more details. Now you will be able to allocate customers a publication and they will be able to receive and view any files that belong to that publication whilst their customer status is valid.

2.2 Setting flash file controls

There are two keys to retaining good file control.



The first key to maintaining control of files is to give them clear and recognizable titles. In the case of publications this may be a reference to the publication and the date of publication, rather than a title using words, although you can do that if your publications are well organized. Web Games June 09 or WebGm0609 may both be fine for your internal administration. You might use the actual original filenames if that suited your internal Administration system better. (The LockLizard system will have also given them unique reference identifiers to ensure uniqueness in all our internal file references.)

Before you secure the file for publication you will allocate it to a publication in the Administration system. This is to make sure that all your customers for that publication will be able to read it when they get their copy, without having any additional registration requirements.

The second key is to set the controls to be applied to the file to be those it is most commonly sold with. For instance, if you are selling a book it is normal for people who buy it to be able to read it forever (quite a long time) so it doesn't make sense to set an end date for a year away, and then have to amend it most times you sell it. Magazine publications, like books, usually entitle the customer to read them forever after purchase, so you may find it best to follow that model.

2.3 Controlling customer records

You may want to control customer records closely. This depends mainly on the integration between your back-end accounting system and the LockLizard publications control. The item of uniqueness is the email address, because this is unique to each customer. The customer name (and company, if used) need to be references that your back-end accounting system is able to recognize. The LockLizard system will allow you to have multiple records for the same customer if you wish to operate in that way.



You can also license a customer to have more than one copy of the file to view, so maybe you give them two licenses so they can load the file onto two PCs in order to use it.

2.4 Controlling individual files

The fact that you have allocated a file to a publication doesn't mean that only customers buying the whole publication can view it. You can also allow customers to have one-off access to any files that you have protected. And you can change the access rights that they receive from those given to people who have purchased the publication. So if you want to let them just read it for a week, you can make a one-off limitation for that, or requiring them to have to be online in order to read it at all. These may be useful techniques where you are trying to cross-sell publications across your customer base.

Do be aware that you can protect the same file more than once, even giving it the same title. LockLizard creates a unique reference number with each protection, so internally we are always able to distinguish between files presented to us. If you do not change the title when protecting a file that is already protected you may find it difficult to know which file title has which controls.

2.5 Customer Management

If you sell flash games, then likely you and your customer will expect that they can use them from now on. Your customer is not going to expect to suddenly not be able to play the files they have purchased. So most of the time you are just going to license a customer to read your information forever. Although there are features in LockLizard that allow you to suspend customers it's not likely that you will need to use them.



With training courses, customers expect to be able to view any file that they were entitled to during their subscription period. Like books, you probably need to set the file expiry date to never so that people who have paid for a particular file can use it.

2.6 Copyright law

You probably know a great deal more than we do about the impact of Copyright law on publishers. But it helps to recall that LockLizard services are not configured to allow for concepts such as 'fair use' (unless you have a specific policy for allowing libraries access to your publications, perhaps) which would apply to published files.

Also, LockLizard has not been configured at this stage to allow for free access once your copyright in the work ends. Whilst we would like to be able to offer that service, it is not available at this stage and you should make appropriate arrangements to satisfy that requirement by another means.



Appendix 3. How to use guide – Internal Administration

Although the LockLizard products appear to be focused upon publishers, an enterprise is also a major publisher of information internally. In most instances internal publications are similar to those of a book or game publisher, but with one very important difference. Publishers publish their material to ‘the public’ and their work becomes subject to the international laws of copyright. Internal publications, whilst they may have some copyright elements, are more usually trade secrets.

Trade secrets are much more important, for the enterprise, than copyright files. Trade secrets are used before patents are created. Trade secrets are used before formal reports are issued to the SEC or to analysts or banks, or lawyers. Although enterprises cover many confidentiality and secrecy issues in their contracts of employment they still need to implement adequate procedures and controls to support keeping a trade secret. If you are going to prosecute for either theft of a trade secret or theft of copyright information you are going to need proof that the person had access to the information so that you can show they had access.

In many ways, internal file management is no different to running a publishing house, except perhaps that there is no accounting control for sales and customer management (unless you are using an outsourced administration model perhaps). Instead of customers you have departments or task forces or workgroups. These may align more with publication groups. The same goes for formal reporting groups, boards of management and investor relationships.



3.1 Organizing publications as internal structures

Instead of thinking about publications, think about the internal distribution requirements that you have for similar files. These may be based around a research project, or internal training for staff.

So as an administrator you will need to be able to allocate specific files to internal groups who have a need to be able to use the file. Each of these groups is either an internal organizational unit, or one that is related to operational groups that the enterprise formally communicates with on a regular basis.

3.2 Setting file controls

There are two keys to retaining good file control.

The first key to maintaining control of files is to give them clear and recognizable titles. When you are controlling internal files, the filename, version number and source (which department owns or created it) are useful references. If you have a file management system it will likely have a reference for the file that you should use to maintain consistency between environments.

LockLizard will generate a unique reference number for the file internally, but you need to use the title of the file for reference.

A file does not need to be allocated to an internal publication group, although in many instances you are likely to want to do that from the start since it will make administration easier. However, some files may be created for an ad-hoc group, and the individual members of that group can be allocated the file on a case by case basis if that happens. (If you do allocate the file to an internal group do remember that all the members of that group will be able to use the file wherever they get a copy from.)



The second key is to set the controls to be applied to the file to be those it is most commonly restricted to. For instance, if you are providing research work for internal information there may be no need to let people print out the information.

If you do need to let specific individuals have greater rights then you can either allocate the file to them individually, or if the group is big enough, protect the file a second time for the other group, giving different default access rights.

3.3 Controlling staff (customer) records

You will likely want to control staff (customer) records closely.

Whilst LockLizard calls the staff customers, some of the people you may be sending controlled files to may be outside of your organization and are more like real customers than are internal staff. You can use the 'customer' record to hold the information about the member of staff or external recipient. The name and the email address are going to be the most important fields in the record since they are unlikely to change very often, if at all.

Because you are using the system to demonstrate internal compliance you will want to have logs of who has accessed files, and when they did so.

To achieve this level of logging you will need to specify that staff must be online to the Administration server (which will be either on your internal network or be hosted by LockLizard on your behalf). This has the benefit that you can also suspend or revoke customers or files at any time and with immediate effect.



3.4 Controlling individual files

The fact that you have allocated a file to a publication doesn't mean that only staff given access to that publication can view it. You can also allow others to have one-off access to any files that you have protected. And you can change the access rights that they receive from those applied when it is part of a publication. So if you want to let someone just read it for a week you can make a one-off limitation for that, or requiring them to have to be online in order to read it at all.

Do be aware that you can protect the same file more than once, even giving it the same title. LockLizard creates a unique reference number with each protection, so internally we are always able to distinguish between files presented to us. However, remember that if you do not change the title when protecting a file that is already protected you may find it difficult to know which protected file is which.



Appendix 4. Picking a good structure for filenames

Choosing a good filename is probably one of the more challenging problems faced by any computer user. It represents the ultimate difference between man and machine. Man likes things that are easy to read and understandable. Machines like binary codes that are unique. The two things are just not the same.

The international standard ISO/IEC 15944-1 (2002) defines an identifier (in business transaction) as “an unambiguous, unique and a linguistically neutral value, resulting from the application of a rule based identification process. Identifiers must be unique within the identification scheme of the issuing authority.”

Well that looks like a bit of a mouthful from a standards body, but like most academic works it actually spells out pretty well what we have to achieve if we’re going to have names we can understand that the computer can also cope with.

But let’s look back at what the standard actually said before we get too depressed, and also think a bit about what we are trying to achieve. We are people, so we are going to use semantics because publishing is about words that means something.

If you only publish a dozen items a year, giving the filename the same name as the article makes entirely good sense, and if it’s a series just add the date (month/year?) of publication. That’s a rule based identification process! After all, author’s don’t repeat titles that often. So that solves the uniqueness.

It gets more difficult though if you are publishing hundreds of files (books, magazines, papers) because long and meaningful (and not very semantically neutral) names get too big and difficult to administer.

So a little rule based scheme might look like:

First 3 characters – identity of the publication. This would be an acronym for the title.

Next 6-10 characters – file title



Next 6-9 characters – date published (either month, day, year or day, month year with the month being either two numbers or two or three letters and year being four numbers)

Next 3 characters could be the author's initials.

By now you can figure out that you have run out of space to actually read the name. But you can search for it quickly. And you may prefer to put the date before the file title if you are more likely to search for something at a point in time rather than knowing the actual title.

So you have a couple of options to go for. Whilst hopefully the titles will mean something to you when you are searching for them, as well as meaning something to your customers when they are searching for them, which of course is the other side of the equation. Customers are the recipients of information, and they need to know how to find it. They won't be able to search for the text in a file because it will all be encrypted. So the filename you pick must have some relationship with the title of the file as the customer sees it so that it is useful. So maybe the author's initials aren't that important.

Anyway, you should now have a few working suggestions for filenames that both you and your customers will be able to find.



Appendix 5. Date and Time controls

Date and time are always handled by Lizard Flashguard in Universal Coordinated Time (UTC time), which is very similar to Greenwich Mean Time unless you study physics.

In the version 2 Administration system, when a file has an end date, access is ceased at 23.59 (UTC and NOT local time) on the day before you specified. Where global services are in use, publishers need to be aware that this time may appear to be quite different in different countries, although it is precisely the same time overall.

There are a number of additional points that publishers should keep in mind:

- Date and time are only verified when the Flashguard Player is opened and the file is opened;
- If the file is not closed and the expiration date and time are passed, that is not detected by the Player. It will only be detected when the Player opens a new file;
- Lizard Flashguard can detect any attempt by the customer to change the system date and time to a date and time that is earlier than the last occasion on which a file was opened by Lizard Flashguard. If this is attempted Lizard Flashguard will refuse to open files until the system date and time are set to later than the last access;
- If a customer alters the system date and time to a date and time that are after the last access to a file then unless there is a requirement to verify a license with the Administration system that date and time will be accepted as valid;
- Changes implemented by the publisher on the Administration server will only take effect on the customer if they must connect to the Administration server to verify their access rights, and until such time as customers are obliged to connect to the Administration server their existing rights remain unchanged.



Appendix 6. Flashguard Writer Utilities

Lizard Flashguard Writer is provided with a number of additional utilities. Below are descriptions of the utilities, including examples of when you may need to use them. Some of the utilities are supplied as part of the Writer program and others are available as separately purchasable items. When a utility is a purchase option that is mentioned in the text below, and prices may be found on the LockLizard web site <http://www.LockLizard.com>.

6.1 Remove Keystore

This utility is accessed from the Windows > Start > Programs > LockLizard > Lizard Flashguard > Writer menu, 'Remove Keystore'.

You may need to use this utility if you registered a Writer license for testing purposes, and later want to use the same Writer software on the same computer but register it with a purchased license which you intend to go live with.

Also, following a successful account password change, you may want to use this utility on those computers where you are registering the new Writer license with the changed password. Note that de-installing the Writer software does NOT remove the keystore so you must use this utility to remove the keystore files.



6.2 Change Account Password

This utility is available from the Windows > Start > Programs > LockLizard > Lizard Flashguard > Writer menu, 'Change Account Password'.

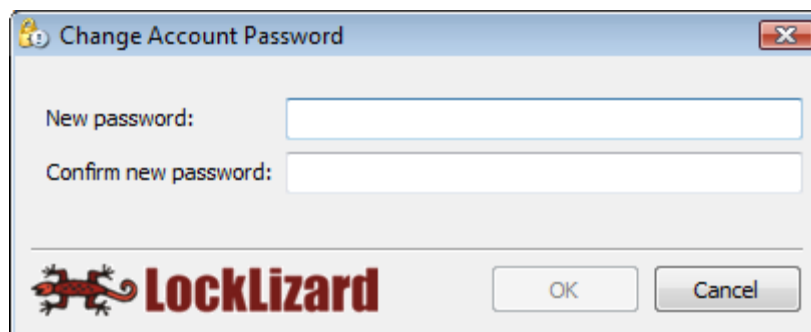


Diagram 34: Change Account Password dialog

There are a number of operational reasons why it may be necessary to change the access password to your Flashguard Administration account. If an administrator in your company leaves or is re-assigned job roles then you may want to use this utility so they can no longer access the Administration system.

It may also be necessary if you used a third party company to carry out the eCommerce integration work for you because you will need to change the password so they no longer have access to the live system and cannot either see or alter any of your information.

In the fields provided (see dialog above) you enter and then confirm a new password. If the password in the 'confirm new password' field does not match the entry in the 'new password' field then the OK button will remain grayed-out. The OK button will only be selectable if both the 'new password' field and the 'confirm new password' are an exact match.

We recommend that you use a password that is more than 16 characters long and contains letters, numbers and special characters such as * or & (and so on). You do not need to remember this password because, following a successful password change a new Flashguard Writer license email is sent to the email address that was entered when your Flashguard Writer account was created



(please note that this may be different from the support email address you have defined).

For security reasons this email address CANNOT be changed, and it is your responsibility to ensure that it is available to receive the new Writer license.

If you have more than one administrator using the system then they too will have to change the account password to match. They can either do this manually, following the procedure above (making sure they enter the same password that you entered), or they can register with the new license file that was sent by email. If they decide to register again with the new license file then please make sure they use the 'Remove Keystore' utility first to delete the keystore that was registered with the old password (see above).

6.3 Checking for Program Updates

This utility is available from the Windows > Start > Programs > LockLizard > Lizard Flashguard > Writer > About menu > 'Check for Updates' button.

Automatically, once a week, the Writer software will check to see if a new update for is available. However, you can also manually check for updates at more frequent intervals by selecting the 'Check for Updates' button. The Writer software will check if you are using the latest version and download and install the update if this is not the case.

You may want to use this facility if you are aware that a bug fix has been issued and you want to download the latest update straight away.



6.4 eCommerce integration and automation of the Administration system interface

Whilst the Lizard Flashguard Administration interface is well suited to the smaller publisher, larger organizations may require full automation between their own applications (web site customer administration, credit card processing, internal file management) and the LockLizard Administration service.

To support automation and 'loose' integration, Lizard Flashguard provides a servlet that publishers are able to call in order to transfer information automatically into the LockLizard Administration system (i.e. user name, email address, publications and or files a customer is entitled to view), or to cause the LockLizard Administration to take a specific action, such as provide information about a customer record, list all files or publications.

You may want to use this utility for a totally automated system where no administrator input is required once a successful purchase of your flash products has occurred. The setting up users on the Administration system to specifying the publications and/or files they can use is handled automatically.

This utility is available for separate purchase. A separate user manual is provided setting out in detail the commands, and giving examples of usage, along with a sample PHP integration script for shopping cart integration. For more details see <http://www.LockLizard.com/product-add-ons.htm>.

If you would like to evaluate Lizard Flashguard's eCommerce module then please email sales@LockLizard.com.



6.5 Publisher Own Branding

For an additional fee, publishers can substitute their own branding/logo in place of the LockLizard logo currently displayed in the top right hand corner of the Secure Player toolbar.



Diagram 35: Flashguard Player

Publisher own branding is a valuable and flexible approach to helping publishers present their overall electronic image in the same way as their print image.

Publisher own branding uses a web link to an image containing whatever the publisher wishes to have displayed. That branding is transferred when the publisher's customer registers their license, and is updated whenever the customer's license is checked. So publishers are able to change their house style dynamically, and can even use special branding for periods of time if they so wish.

NOTES:

1. The maximum image size is 200 (width) x 22 (height) pixels. If the image exceeds this size it will be automatically truncated by the viewer, and not stretched or resized.
2. The logo branding image must be a valid URL path to a JPG image. Example: <http://www.locklizard.com/MyImages/160x22.jpg>
3. An Internet connection is required in order to download and change the viewer toolbar logo. If no connection is available, or the logo is not found on the specified URL, the default LockLizard logo will be used.
4. Closing the current file or opening another file with no custom logo will reset the toolbar logo to the default LockLizard one.