

Lizard Safeguard Secure PDF Writer

Product Manual for Windows

Version 2.6 - Revision 1.67 www.LockLizard.com





Table of Contents

CHAPTER 1: INTRODUCTION	7
1.1 ENCRYPTING PDF FILES	8
1.2 CUSTOMER AND DOCUMENT EXPIRY	10
1.2.1 Instant revocation for distributed documents and persistent version control	10
1.3 COMPLETE OFF-LINE PROTECTION	11
1.4 CUSTOMIZABLE MESSAGE TEXT & SPLASH SCREEN	11
1.5 WATERMARKING	12
1.6 LIZARD SAFEGUARD FEATURES	13
1.7 LIZARD SAFEGUARD AND SUPPORT OF APPLE MACINTOSH CLIENTS	15
1.8 LIZARD SAFEGUARD FOR INTERNAL COMPANY USE	16
CHAPTER 2: INSTALLATION	17
2.1 PRE-REQUISITES	17
2.2 INSTALLING THE WRITER	17
2.2.1 Disabling Automatic Updates	20
2.3 PROXY SETTINGS	21
2.3.1 Automatic configuration script	22
2.3.2 Proxy server manual entry settings	23
2.4 REGISTERING THE WRITER	24
2.4.1 Web based email systems and registration	26
2.4.2 Firewall messages displayed during registration.....	26
CHAPTER 3: PROTECTING PDF FILES	27
3.1 PRE-REQUISITES	27
3.2 MAXIMUM FILE SIZE SIZES SUPPORTED	27
3.3 PROTECTING PDF FILES	28
3.3.1 To protect a PDF file(s):	28
3.4 CUSTOMIZATION TAB	30
3.4.1 File being processed:	31
3.4.2 Message displayed on unauthorized use:	31
3.4.3 Splash screen branding image:	32
3.5 DOCUMENT ACCESS TAB	33
3.5.1 All customers	34
3.5.2 Selected customers (must be individually allocated)	34
3.5.3 Customers belonging to the selected publication	34
3.6 EXPIRY AND VALIDITY TAB	38
3.6.1 Document Expires	39



3.6.2	Check License Validity	40
3.7	ENVIRONMENT CONTROLS TAB	41
3.7.1	Screen Capture	42
3.7.2	Allowed environments	43
3.8	PRINTING AND VIEWING TAB	44
3.8.1	Printing	45
3.8.2	Viewing	46
3.9	WATERMARK TABS	48
3.9.1	View Watermarks Tab	50
3.9.2	Print Watermarks Tab	50
3.9.3	Text Watermark	51
3.9.4	Image Watermark	55
3.10	DISPLAY SETTINGS TAB	57
3.10.1	Full screen mode	58
3.10.2	Viewer window size	58
3.10.3	Page view	58
3.10.4	Page size	58
3.10.5	Open document at page <i>n</i>	59
3.10.6	Hide bookmark panel	59
3.10.7	Enforce display settings	59
3.11	PUBLISHING YOUR PDF DOCUMENT(S) SECURELY	60
3.12	PROTECTING MULTIPLE PDF FILES	60
3.13	PROTECTING MULTIPLE PDF FILES FROM THE COMMAND LINE WITHOUT USER INTERVENTION	61
3.14	CHANGING DOCUMENT EXPIRY	62
CHAPTER 4: THE ADMINISTRATION SYSTEM		63
4.1	ADMINISTERING CUSTOMER ACCOUNTS	65
4.2	CREATING CUSTOMER ACCOUNTS	67
4.2.1	Name	67
4.2.2	Company	69
4.2.3	Email	69
4.2.4	Licenses	69
4.2.5	Start Date	70
4.2.6	Valid until	71
4.2.7	Can Access Publications	73
4.3	IMPORTING CUSTOMER DETAILS	74
4.4	SHOWING & ADMINISTERING CUSTOMER ACCOUNTS	76
4.4.1	Name, Email, Company	77
4.4.2	Username and Password	77
4.4.3	Status	77
4.4.4	Suspend Account	78
4.4.5	Licenses	78
4.4.6	Start Date	79



4.4.7	End Date	79
4.4.8	Can Access Publications.....	80
4.4.9	Direct Access to Documents	81
4.4.10	Changing the number of views	83
4.4.11	Changing the number of prints	84
4.4.12	Event Log	85
4.4.13	Delete Customer Account.....	86
4.5	SEARCHING CUSTOMER ACCOUNTS.....	88
4.6	MANAGING PUBLICATIONS.....	89
4.6.1	Adding publications.....	90
4.6.2	Deleting publications.....	90
4.7	MANAGING DOCUMENTS	91
4.7.1	Deleting document records	93
4.8	SEARCHING DOCUMENT RECORDS	94
4.8.1	Searching for expired documents	94
4.8.2	Searching for documents that expire on a certain date.....	95
4.8.3	Searching for documents that belong to publications	95
4.9	EXPORTING DATA.....	96
4.10	SETTING THE SUPPORT EMAIL ADDRESS	97
4.10.1	Updating the document properties with the new email address	98
4.11	SETTING THE MONITOR EMAIL ADDRESS.....	99
4.12	SETTING THE CUSTOMER LICENSE DELIVERY.....	100
CHAPTER 5:	HOW CUSTOMERS USE YOUR DOCUMENTS	101
5.1	DOCUMENT ISSUES	102
CHAPTER 6:	DISTRIBUTING DOCUMENTS	103
6.1	SENDING DOCUMENTS TO CUSTOMERS.....	103
6.2	CUSTOMERS DOWNLOADING DOCUMENTS	104
6.3	SUMMARY	105
6.4	CUSTOMERS DOWNLOADING THE FREE VIEWER SOFTWARE.....	105
CHAPTER 7:	TROUBLESHOOTING AND GENERAL FAQS	106
7.1	TROUBLESHOOTING.....	106
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?	106
7.1.2	When protecting a PDF file I get the error message “failed to compute document id: error 32”	107
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.”	107
7.1.4	When I am asked to register my license file it tells me “the server is unavailable”	108
7.1.5	When trying to register I get the error message “license check failed - server returned 407 response code”	108
7.1.6	Failed to set document rights. Error code : 2	108



7.1.7	Failed to compute id. Error code : 5	109
7.1.8	I changed the date when a customer account expired by increasing the expiry date but they still cannot access the documents I have sent them.	109
7.1.9	Links in my original document do not seem to be active in the Viewer	109
7.2	FAQs	110
7.2.1	How does Lizard Safeguard differ from file encryption products?	110
7.2.2	How secure is Lizard Safeguard?	110
7.2.3	Is your application open to password attacks like Adobe & similar password based products?	111
7.2.4	Do I have to upload my documents to your web server to protect them?	111
7.2.5	Do you host my secure PDF documents on your server?	111
7.2.6	Where can I publish my secured PDF documents?	112
7.2.7	Can users change my document security settings?	112
7.2.8	Is there a limit to the number of documents I can protect or customers that can receive protected documents?	112
7.2.9	Can I tell people where to buy a license from?	112
7.2.10	Can my customers distribute protected documents to others?	113
7.2.11	How can I control document expiration & revocation once a document has been published?	113
7.2.12	Why would I want to set customers to expire rather than documents?	114
7.2.13	We want to give prospects / customers free 30 day trials of our documents. Is this possible?	114
7.2.14	Do my customers have to be connected to the Internet in order to view my secure PDF documents?	115
7.2.15	Can I add existing customers to future secured PDF documents or publications?	115
7.2.16	What software do my customers need on their computers in order to view my secured PDF documents?	115
7.2.17	What happens when my customers change or update their computers?	116
7.2.18	The PDF source document has permissions already set. Does this affect Lizard Safeguard?	117
7.2.19	How do I stop access to old versions of documents?	117
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?	117
7.2.21	If a customer purchases multiple documents 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 documents they have purchased from the same computer?	118
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 documents?	118
7.2.23	How can I get users to open PDC files in the browser without having to save them to disk first?	119
7.2.24	My customer tells me they have not received their license file. How do I resend it?	120
7.2.25	How can I tell what access controls have been applied to a document after it has been published?	121
7.2.26	When securing a pdf file if I have selected 'Disallow use on Macintosh operating system' do I, when setting print settings, still have to select 'Only Windows' when I want printing allowed?	122
7.2.27	Can a customer who has purchased a protected document change the file name with saving on his/her disk? If yes, does that make the file unusable?	123
7.2.28	Is there a way of having unique (trackable) watermarking for a customer with multiple licenses?	123



7.2.29	If a .pdc 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?	123
APPENDIX 1. HOW TO USE GUIDE - SMALL PUBLISHER		124
1.1	SETTING DOCUMENT CONTROLS.....	124
1.2	CONTROLLING CUSTOMER RECORDS	125
1.3	CUSTOMER MANAGEMENT	125
APPENDIX 2. HOW TO USE GUIDE - LARGE PUBLISHER.....		126
2.1	ORGANIZING PUBLICATIONS.....	126
2.2	SETTING DOCUMENT CONTROLS.....	126
2.3	CONTROLLING CUSTOMER RECORDS	127
2.4	CONTROLLING INDIVIDUAL DOCUMENTS	128
2.5	CUSTOMER MANAGEMENT	128
2.6	COPYRIGHT LAW	129
APPENDIX 3. HOW TO USE GUIDE – INTERNAL ADMINISTRATION.....		130
3.1	ORGANIZING PUBLICATIONS AS INTERNAL STRUCTURES.....	131
3.2	SETTING DOCUMENT CONTROLS.....	131
3.3	CONTROLLING STAFF (CUSTOMER) RECORDS	132
3.4	CONTROLLING INDIVIDUAL DOCUMENTS	133
3.5	PROVIDING LEGAL ACCESS	133
APPENDIX 4. PICKING A GOOD STRUCTURE FOR FILENAMES.....		135
APPENDIX 5. DATE AND TIME CONTROLS.....		137
APPENDIX 6. SAFEGUARD WRITER UTILITIES.....		138
6.1	REMOVE KEYSTORE.....	138
6.2	CHANGE ACCOUNT PASSWORD	139
6.3	CHECKING FOR PROGRAM UPDATES.....	140
6.4	COMMAND LINE AND BATCH PROCESSING.....	141
6.5	ECommerce INTEGRATION AND AUTOMATION OF THE ADMINISTRATION SYSTEM INTERFACE.....	141
6.6	BATCH DOCUMENT UPGRADE.....	142
6.7	PUBLISHER OWN BRANDING.....	143
7.2.30	Viewer branding image	144



Chapter 1: Introduction

Lizard Safeguard PDF Writer is a simple-to-use, yet extremely secure application, enabling you to protect, publish and license your PDF documents directly from Windows Explorer. You can control precisely who can view your protected PDF documents, 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 documents cannot be copied, altered or even printed (or you can allow printing n number of times) by others.

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 documents are protected using the best security available. All communications between the client software and our servers are made using HTTPS.

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

So that your customers can view your protected documents, they must first download the Safeguard Viewer (free) and get their license key from you. They can then read the document(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 Viewer software, register it, and then try to give the license key to others, it will not work for them.



1.1 Encrypting PDF Files

LockLizard uses powerful US Government strength encryption (AES 256 bit) in order to protect your documents from being stolen or pirated.

Documents are encrypted with a unique, random key generated at the time the document is protected.

If you publish all your PDF's as individual documents, then each time a customer purchases a document you will need to add it manually to their list of authorized documents before they can view it.

NOTE: eCommerce integration

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

If you publish PDF's to a publication, the document(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 documents 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 documents in a publication.

If you publish a PDF document for all customers, then when the document 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 document. Please note that all valid customers will be able to view any document 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 document level. This means you can decide just how important each individual document is. This more closely matches the value of the information rather than assuming that the customer always has the same rights for every document you make available to them. This means that you can allocate documents with different rights to the same publication and each document will be handled separately.

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

LockLizard provides a secure 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. While 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 customers' 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 Safeguard'](#)

NOTE: Document encryption

Documents are always encrypted locally on your computer so that the non-secure versions (the original source PDF documents) are never exposed to potential compromise on a web server or in transfer to one of our servers. Protected documents 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 Document expiry

1.2.1 Instant revocation for distributed documents and persistent version control

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

In addition you can control document expiry. Regardless of your customer's subscription to your publications, you may have certain documents 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 documents are used after publication because the obsolete versions can no longer be accessed. You can also specify how many times a document 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 PDF documents. This can be every time they want to view your documents, 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 documents as the decryption key required to view your protected PDF documents is instantly expired.



1.3 Complete off-line Protection

Document control properties are retained with each document so there is no need for your customers to connect to the Internet in order to view your protected PDF 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 in order to use your documents is a decision you make when protecting your PDF documents. If they do not have to connect to the Internet to verify their license details it is not possible to revoke 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 1) a download link to the Viewer software, and 2) an attached license file. This email is automatically customized with your name and email address in it so your customers know who to contact if they have any problems accessing your documents. If you are using the ecommerce interface (optional purchasable item) then you can also display this information on a web page so it is readily available to your customers after purchase.

You can specify the text that will be displayed if a customer does not have authorization to view your protected documents - e.g. who they must contact in order to be authorized to view the document.

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



1.5 Watermarking

Watermarks can be applied to documents when they are printed and/or when they are viewed. Both images and custom text are supported along with dynamic system data - user name, email address, date and time stamps. You do not have to protect documents for individual customers - customer identification is carried out dynamically for you and user/system specific information is dynamically inserted when the document is viewed/printed.

On the viewing side, the advantage of applying a watermark at the protection stage is that you don't have to apply a fixed text (non-dynamic) watermark to the original document for each specific user. You can also choose for the watermark to be displayed only when viewing, so prints can be made without watermarks being applied to them.

On the printing side, you can choose for the watermark to be displayed only when the document is printed. Your customers can therefore view documents clearly, but the documents are protected against simple photocopying when printed.



1.6 Lizard Safeguard Features

- Complete and secure control over PDF document usage – viewing and printing (including the number of times), copying, saving, etc.
- Copying, saving and modifying documents is always prevented;
- Customer and document expiry - you control how long your customers can view your PDF documents;
- Instant user revocation – you can terminate your customer’s access to a document instantly;
- Watermarking on printing and/or viewing. Have specific user information, custom text and/or images displayed on documents when printed and/or viewed;
- Print screen automatically disabled to prevent users taking screenshots of your documents;
- Prevents use of third party screen grabbers;
- Print-to-file drivers are automatically disabled to prevent re-distilling PDF documents;
- Bullet-proof protection - public key technology and US Government strength encryption (AES 256 bit);
- No passwords to send, manage, enter, forget, or pass on to others;
- Complete offline protection - no need to connect to the Internet to view existing documents;
- Offline / online access management - control how long a customer can access your documents offline before their license must be checked;
- Real-time web based licensing control - issue and manage customers and documents online;
- Transparent real-time web-based customer authorization;
- Persistent end-to-end protection throughout a document’s life-cycle;



- Full control over PDF document security inside or outside of the firewall, online and offline;
- Customizable message text and document splash screen;
- Quick set up - existing customer information can be imported and no configuring of servers is required;
- Simple-to-protect, simple-to-use, simple-to-administer PDF documents;
- Complete integration with your e-commerce system (optional extra). For more information see <http://www.LockLizard.com/product-add-ons.htm>;
- Batch automation with command line processing (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 documents that you can protect or the number of customers that can subscribe to your publications;
- FREE Viewer software (nothing extra for users to purchase);
- Silent installation for Viewer – Viewer software can be installed silently across a network for quick installation in a corporate environment.



1.7 Lizard Safeguard and support of Apple Macintosh Clients

Lizard Safeguard Viewer is designed for the Windows operating system. A separate Viewer is available for the Macintosh operating system (OSX 10.4 and above) but it has the following limitations:

1. Preventing print screen or third-party screen grabber utilities is not supported;
2. Only view watermarks are supported (images and text) and they are always displayed on top of the PDF content. Document watermarking is not supported on printouts;
3. Display settings (set in the display settings tab of the Writer program) are ignored;
4. External file links - links to local files - are not supported (URL links are supported);
5. The Viewer cannot be prevented from running in thin client and virtual environments. See [Thin Client](#) for further information;
6. Custom branding (optional extra) is not supported.

You should bear these in mind if your customer base includes Mac clients and especially when authorizing printing since watermarks will not be displayed. If your customer base does not include Mac clients then you may want to consider using the option in the Writer software 'Disallow use on Macintosh operating systems'.



1.8 Lizard Safeguard 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 documents, ebooks, subscription services and so on to customers (either as individuals or as corporate bodies).

This does not mean that Lizard Safeguard can only be used in that context. Many of our customers use Lizard Safeguard to protect internal documents 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 document manager or document administrator, and they (and their staff) have the responsibility for allocating users (rather than customers) and for protecting documents 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 regular reports, such as monthly accounts, management reports, departmental reports, or documents that must be circulated in a controlled manner to defined groups – sales support manuals, repair manuals, departmental briefing documents. 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 Safeguard features), for instance, to cease access to internal networks immediately if an employee leaves. Lizard Safeguard 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 Safeguard can be used for internal company use.



Chapter 2: Installation

2.1 Pre-requisites

Safeguard Writer is compatible with the following platforms:

- Windows 2000
- Windows 2003
- Windows XP
- Windows Vista
- Windows 2007

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

2.2 Installing the Writer

Double-click on the SafeguardPDFWriter.exe file in Windows 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: Safeguard Writer Setup Wizard



Diagram 2: Safeguard Writer License agreement

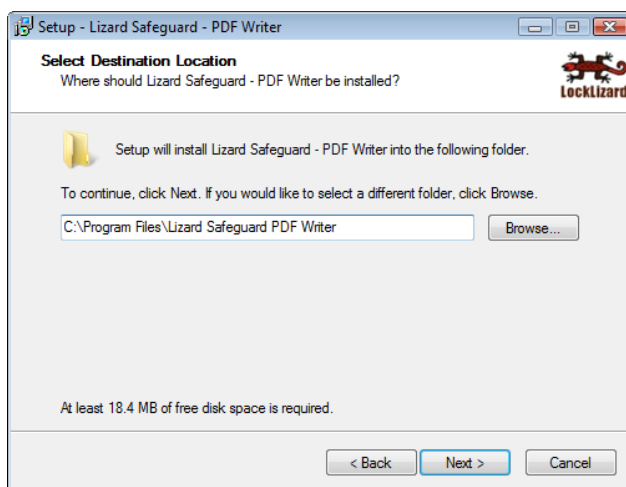


Diagram 3: Safeguard Writer Installation folder

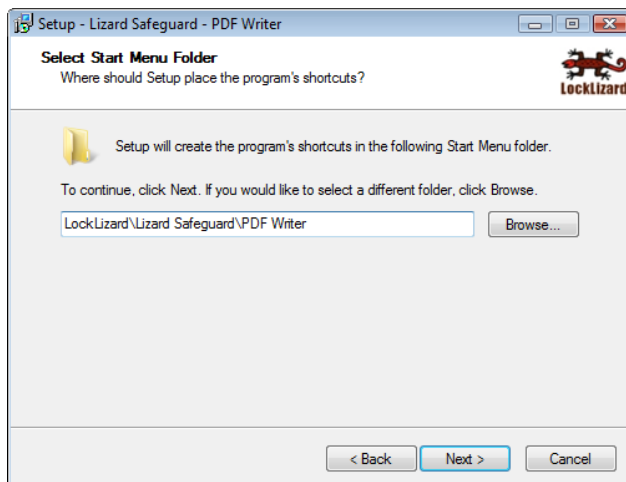


Diagram 4: Safeguard Writer Start Menu folder

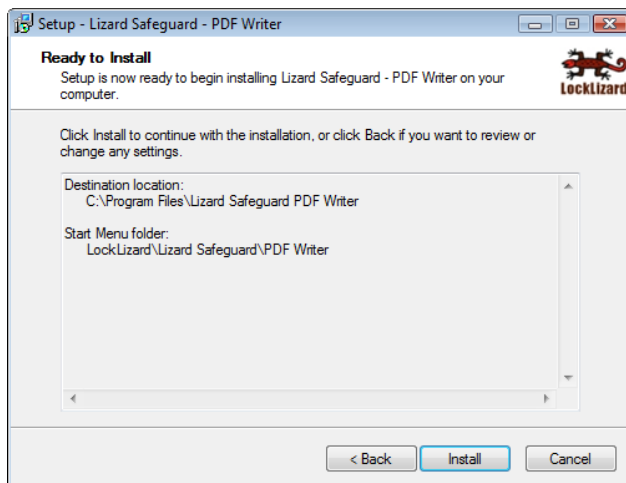


Diagram 5: Safeguard Writer Installation settings



Diagram 6: Safeguard 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 Viewers 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 Viewers if you used new functionality in a later Writer release that was not supported by the earlier Viewer 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:

`SafeguardPDFWriter_v26.exe /UPDATE="0"`

Example of use - enable automatic update checks:

`SafeguardPDFWriter_v26.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 PDCWriter.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 Safeguard allows you to configure your proxy settings into both the Writer and Viewer programs.

Safeguard 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 left click on the Windows Start menu and select Programs > Lizard Safeguard PDF Writer > Proxy Settings.

The following dialog is then displayed.

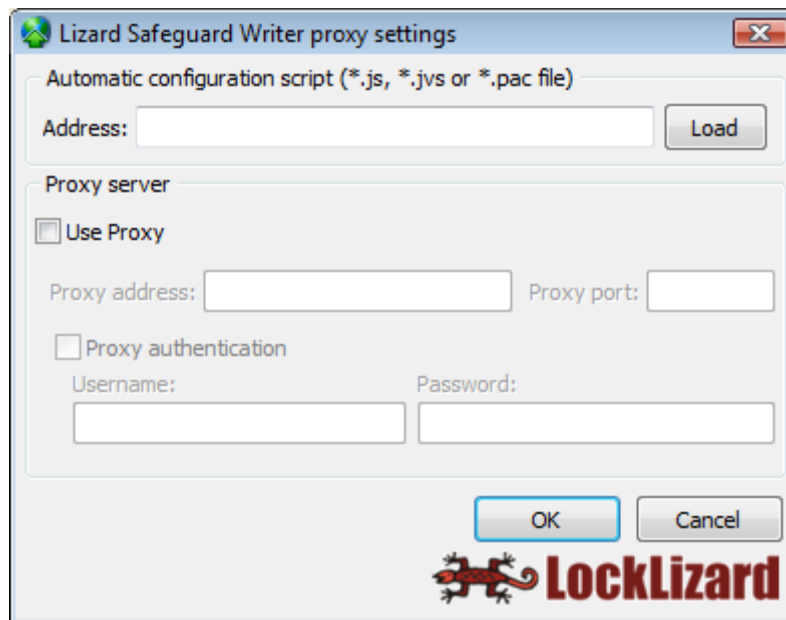



Diagram 8: Safeguard Writer proxy settings

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 javascript 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 Viewer (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 Safeguard uses either port 8444 or 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.

Please note that if you purchased Lizard Safeguard before the 20th December 2006 then the LockLizard admin server uses port 8444 for secure traffic and port 8080 for non-secure traffic.

If you have purchased or are evaluating Lizard Safeguard after the 20th December 2006 then the LockLizard admin server uses port 443 for secure traffic and port 80 for non-secure traffic.

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 Safeguard 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 Viewer 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 Viewer applications at the same time.

Once you have registered the Writer and Viewer 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/Viewer software.

NOTE: Lizard Safeguard evaluation

If you are evaluating Lizard Safeguard (free 15 day trial) then Safeguard Writer uses port 443 (using HTTPS) to securely address the LockLizard Administration server. The server URL is <https://www.LockLizard-license2.co.uk/LockLizardLicensing> and the IP address is 87.106.7.187

2.4 Registering the Writer

Before you can start using Safeguard 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 your registration information.

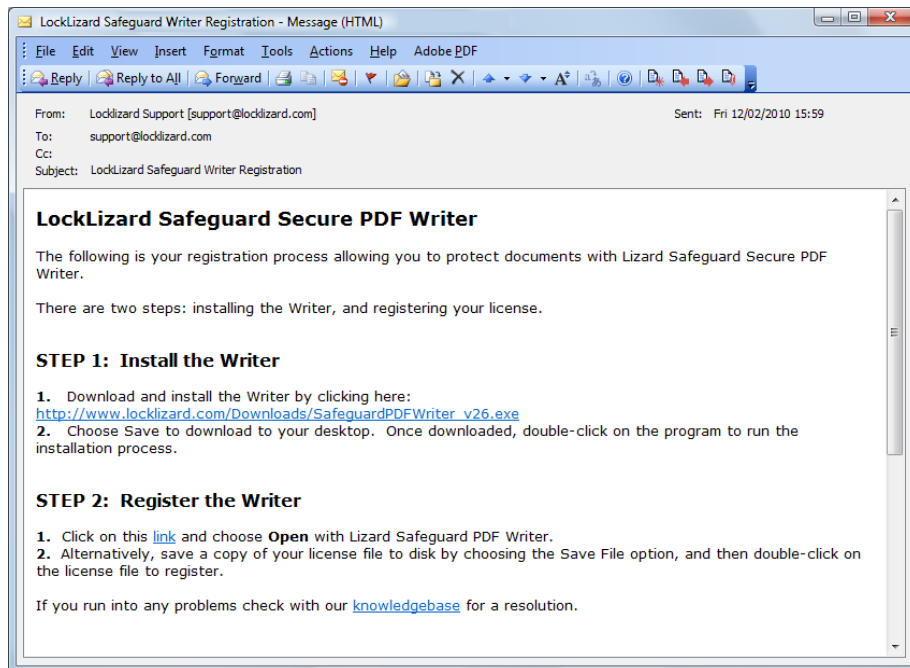


Diagram 9: Safeguard Writer Registration Email and License file

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

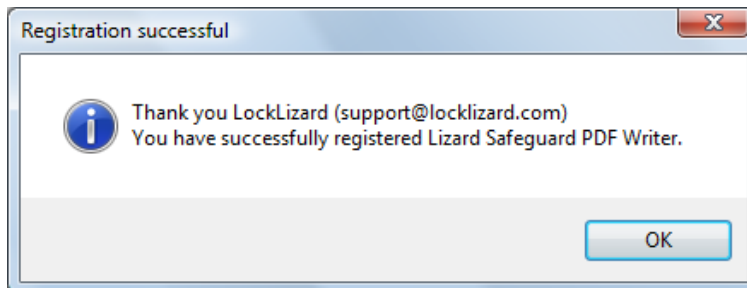


Diagram 10: Successful registration message

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 your registration email 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 Web based email systems and registration

With web based email systems (where you view your emails through a web browser) you will need to save the license file to disk before registering. To do this, click on the license link (in the Register the Writer section) and choose the option 'Save File'. You can then double-click on the license file (.llv file), so that the license process can be executed locally.

2.4.2 Firewall messages displayed during registration

Some firewalls may display the following message windows (or similar) during registration. This notifies you that Safeguard Writer is trying to access the Internet.

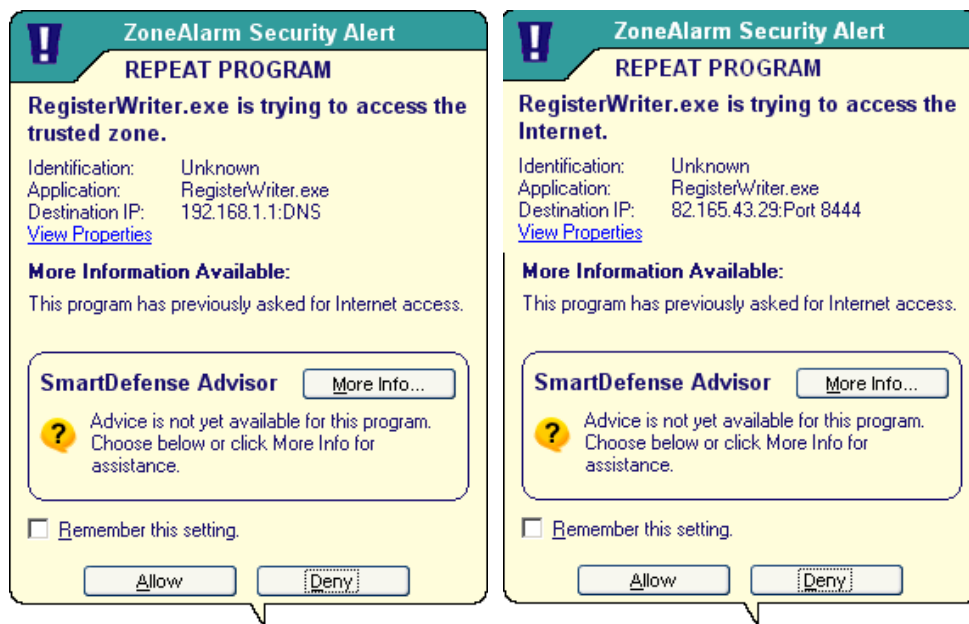


Diagram 11: Firewall message windows during registration

Click on the Allow option to allow registration to take place.



Chapter 3: Protecting PDF Files

3.1 Pre-requisites

Before you can protect your documents you must first convert them to PDF format.

You can use a product such as Adobe Acrobat Standard or Professional, see www.adobe.com, or any other software that converts existing documents (Word, Excel, etc.) into PDF files in compliance with PDF standard 1.6.

3.2 Maximum file size sizes supported

Lizard Safeguard Viewer, 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 200MB in size for reliable use across a wide range of Windows and Apple Macintosh clients.



3.3 Protecting PDF Files

Once Lizard Safeguard Writer has been installed and registered you can start protecting your PDF files.

Please bear in mind the following points before protecting PDF documents:

1. Copying, saving, and modifying documents is prevented at all times;
2. Form filling, annotations, and screen readers are not supported;
3. Windows print screen is disabled by default, and it cannot be used by any programs while the Viewer remains active;
4. Print-to-file drivers (for example Acrobat distiller or One-Note) cannot be used when printing through the Viewer application.

3.3.1 To protect a PDF file(s):

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

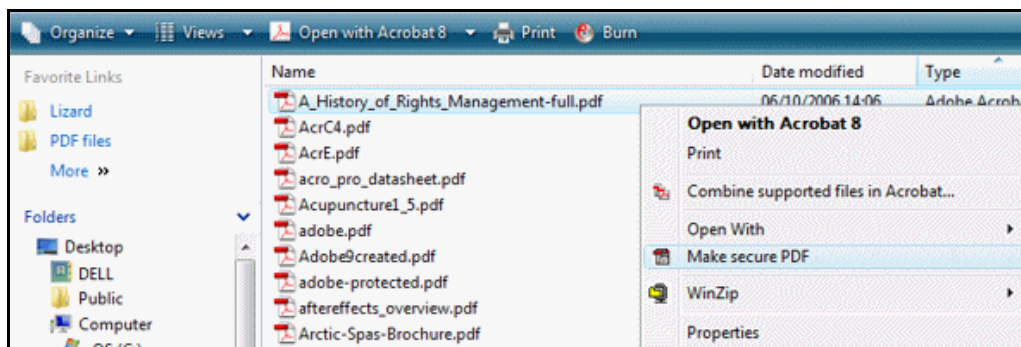


Diagram 12: Protecting PDF Files – Make secure PDF context menu in Windows File Explorer



You can also protect PDF documents by choosing the 'Protect Documents' option from the Windows Start menu > LockLizard > Programs > Lizard Safeguard > PDF Writer menu. This will bring up a browse dialog where you can select the PDF documents you want to protect. The maximum number of files you can protect at a time using this method is 25. If you want to protect a larger number of files in one operation then please see [Lizard Safeguard command Line Utility](#).

Regardless of the option you choose, the Safeguard GUI is then displayed.

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



3.4 Customization Tab

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

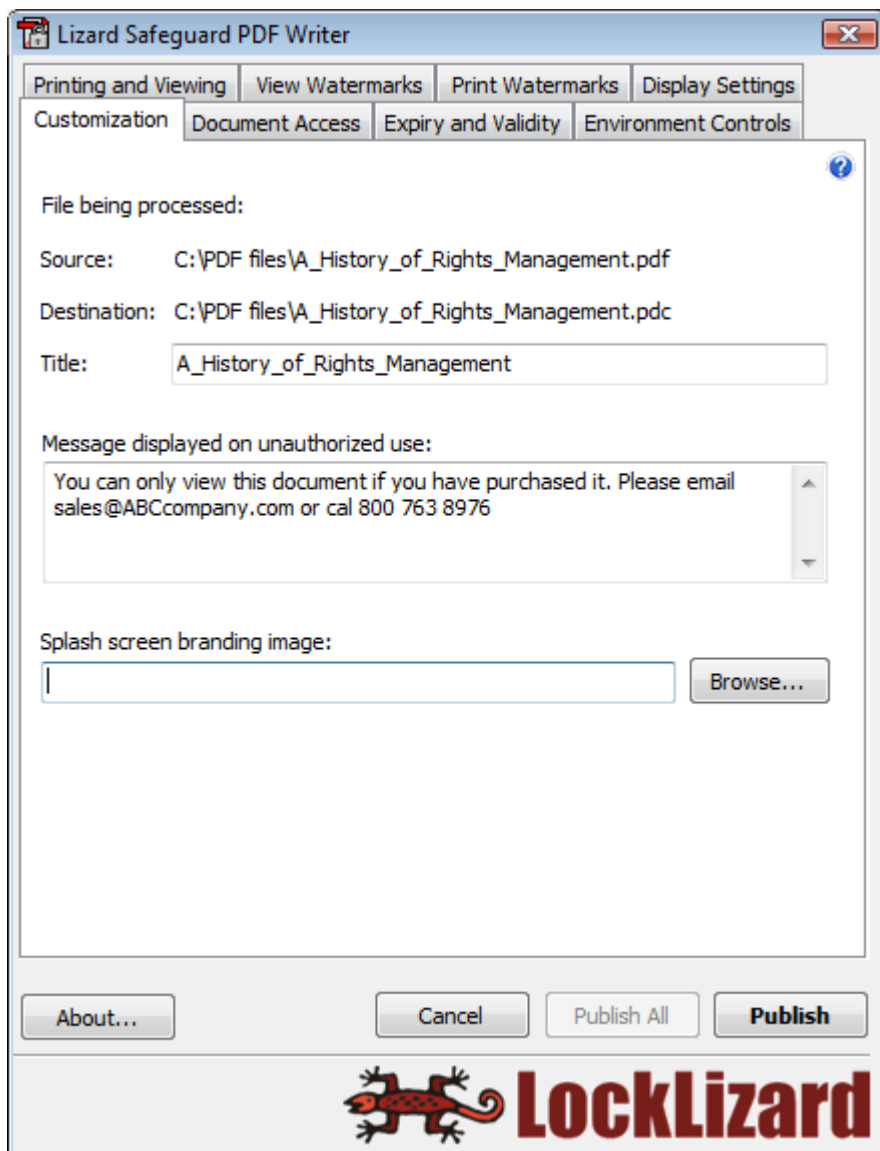


Diagram 13: Customization tab



3.4.1 File being processed:

3.4.1.1 Source

Displayed here is the PDF document you are currently protecting.

3.4.1.2 Destination

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

3.4.1.3 Title

Here you **MUST** enter a title for the PDF document you are protecting.

The title you enter here is displayed on the Administration system and is used to identify the document. 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.

3.4.2 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 the document (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 document you create, so no matter where a user downloads the Safeguard Viewer from, if they double-click on one of your protected PDF files and they do not have the correct key for your document, then they will see this message.

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



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 documents. To do this, double-click on the license file that was sent to you.”

If a customer opens a protected document 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 Safeguard Viewer installed, provided you have entered appropriate text they will know whom they should contact for a license.

3.4.3 Splash screen branding image:

Here you can choose whether a splash screen is displayed whenever your protected PDF documents are loaded in the Safeguard Viewer.

For example, you might want to display your company logo or an image that tells your customers they are about to view a protected document, 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.



3.5 Document Access Tab

Here you specify whether all your customers have access to your document, or whether only those that have purchased specific documents or publications can access them.

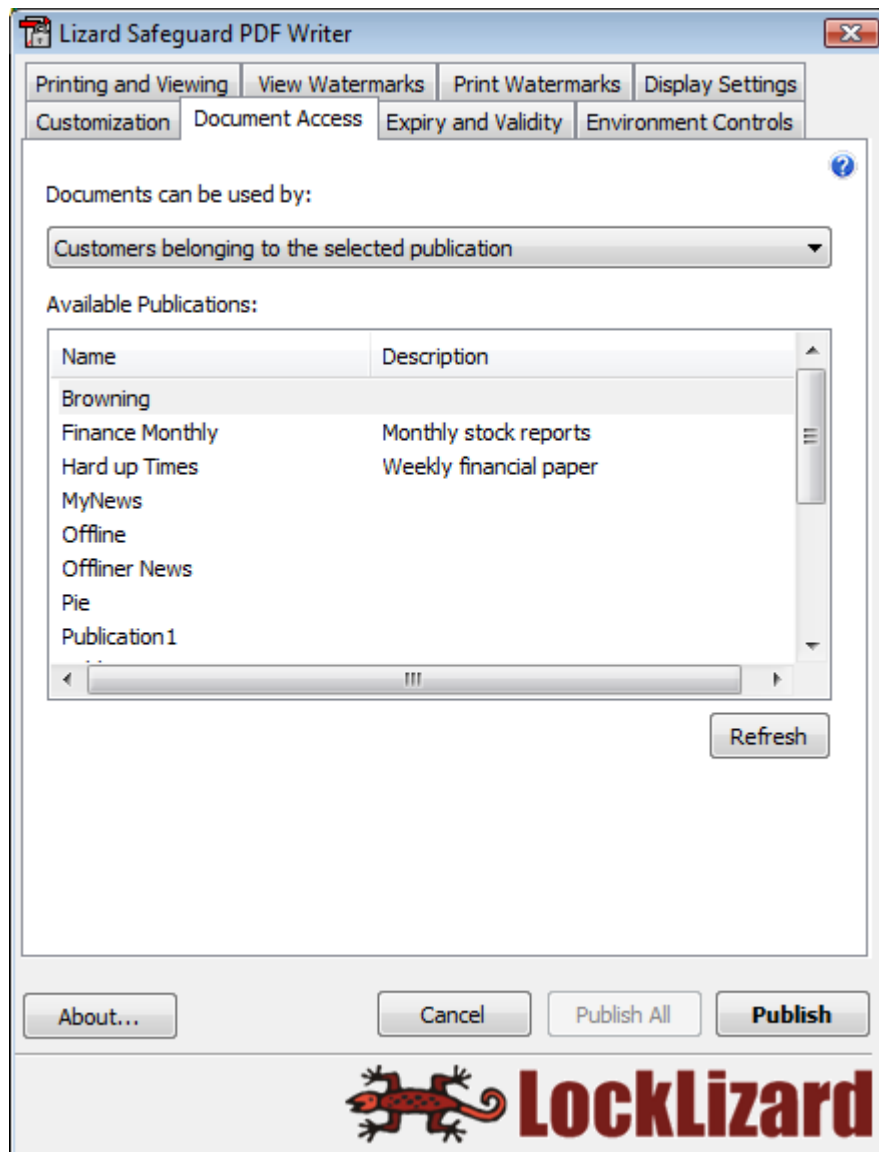


Diagram 14: Document Access tab



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

3.5.1 All customers

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

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

3.5.2 Selected customers (must be individually allocated)

If you select this option, only customers you specifically allocate access to this document will be able to view it. Documents 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 documents such as books, single copies of a magazine, pictures and similar works. It has a particular advantage over publications in that you can change the document expiry controls that were set when the document was first published (see [Changing Document Expiry](#)).

3.5.3 Customers belonging to the selected publication

If you select this option, rather than having to allocate individual documents 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 view this document.



With this option, customers only have to obtain the decryption key for the first use of any document in the publication. Normally, when you protect documents for selected customers, the Viewer software will automatically download each document decryption key from the server (provided that the user is entitled to view the document) when the document is first used. It does, therefore, require the user to be online at least once in order to retrieve the document key for each and every document published to that publication.

If you select the publication mode, then documents 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 documents published to that publication without the need for the Viewer software to download additional keys.

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

If you have not yet created any publications, you can do this now using the Administration system. Left-click on the Windows Start menu and select Programs > Lizard Safeguard PDF Writer > Admin Page. 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 Safeguard Publisher Account Administration

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

Documents
[Manage](#)
[Search](#)

Publications
[Manage](#)

Export Data
[Export](#)

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

Publisher account: LockLizard

Manage publications

Name:

Description:

obey customer start date

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 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).

Documents can be used by:

Customers belonging to the selected publication

Available Publications:

Name	Description
Finance Monthly	Monthly stock reports
Hard up Times	Weekly financial paper
Sailing Weekly	Weekly sailing publication

Diagram 16: Available Publications – updated list box



3.5.3.1 *Why use publications?*

Publishing documents to a publication is the most efficient choice when you are selling several customers a subscription to the same publication, say a daily newspaper, or a monthly magazine. Once they have registered, a subscriber will be able to use all the documents 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 documents in a publication once they have registered to use any one document. Examples of this would be where you have provided a CD or DVD with many protected documents on it which are part of the same logical publication, and you want your customers to be able to use all the documents seamlessly, offline, once they have registered use of the first document. 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 document controls that enforce a connection to the Administration server (number of prints, views, or validity checks).

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

- You may want to send individual customers a sample document from one of your other publications without having to give them a license for an entire publication.
- You may want to sell individual documents 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 magazine or financial report, but also sell individual copies.

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



3.6 Expiry and Validity Tab

Here you set the date from which your document 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.

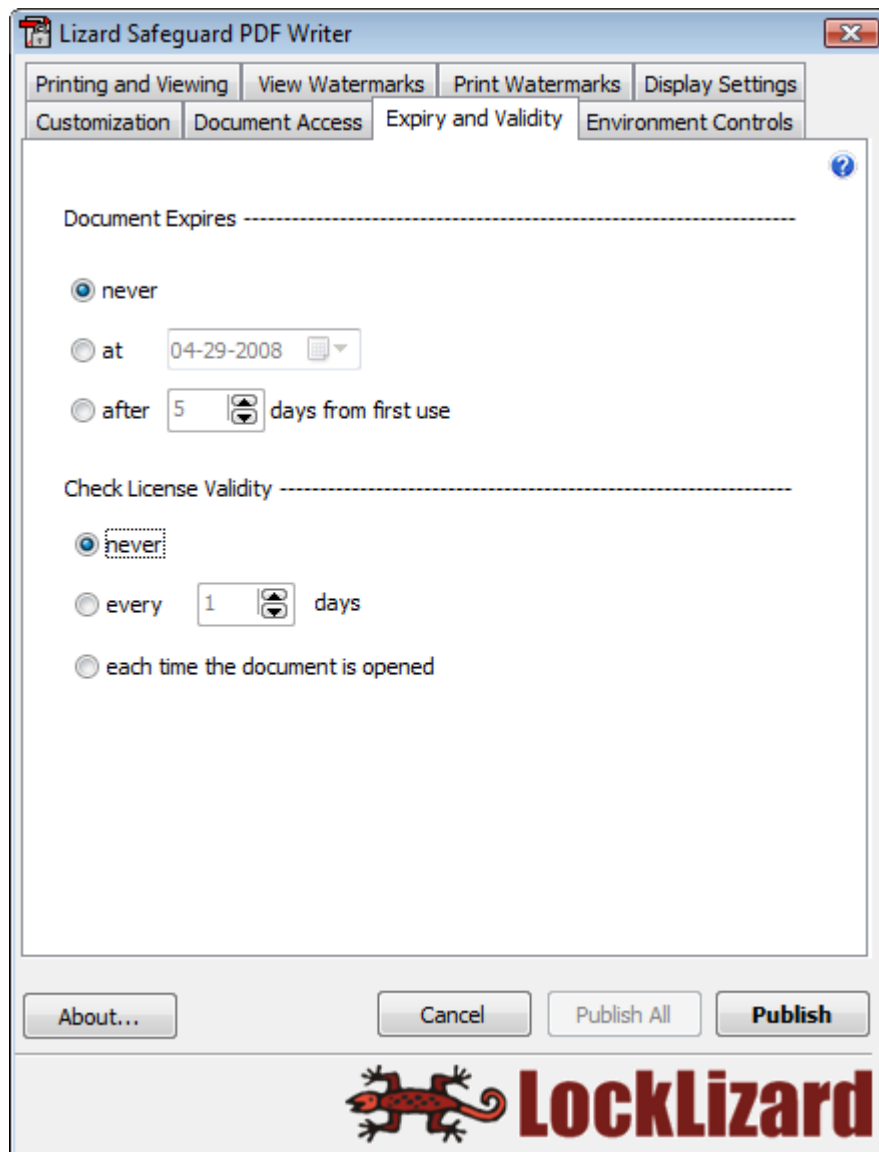


Diagram 17: Expiry and Validity tab



3.6.1 Document Expires

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

3.6.1.1 *Never*

Select this option if you do not want the document to expire. The document continues to be viewable even after the customer account expires.

3.6.1.2 *At (Date)*

Select this option if you want the document 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 document 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 document expiry is calculated with respect to UCT time.

3.6.1.3 *After n days from first use*

Select this option if you want the document to expire after a number of days since it was first viewed. This option is useful for giving away time-limited trials of your documents.

Select the number of days you require or enter a value in the box. As soon as this value is reached the document can no longer be viewed, regardless of how long the customer account is valid for. The time the document is first opened is also taken into account, so if you set expiry to be 1 day and the document is opened at 3.30pm then it will not expire until 3.30pm the next day.

NOTE: Internet connection required

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



3.6.2 Check License Validity

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

3.6.2.1 *Never*

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

NOTE: Viewing a document for the first time

The first time your customers view a document (or the first document in a publication), the Viewer 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.

3.6.2.2 *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 document again.

Once this time period has elapsed they will not be able to use the document again until they let the Viewer 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.

3.6.2.3 *Each time the document is opened*

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

Before they can view the document they will need to let the Viewer 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 document revocation. If you selected every *n* days you can only perform revocation after *n* days have elapsed.



3.7 Environment Controls Tab

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

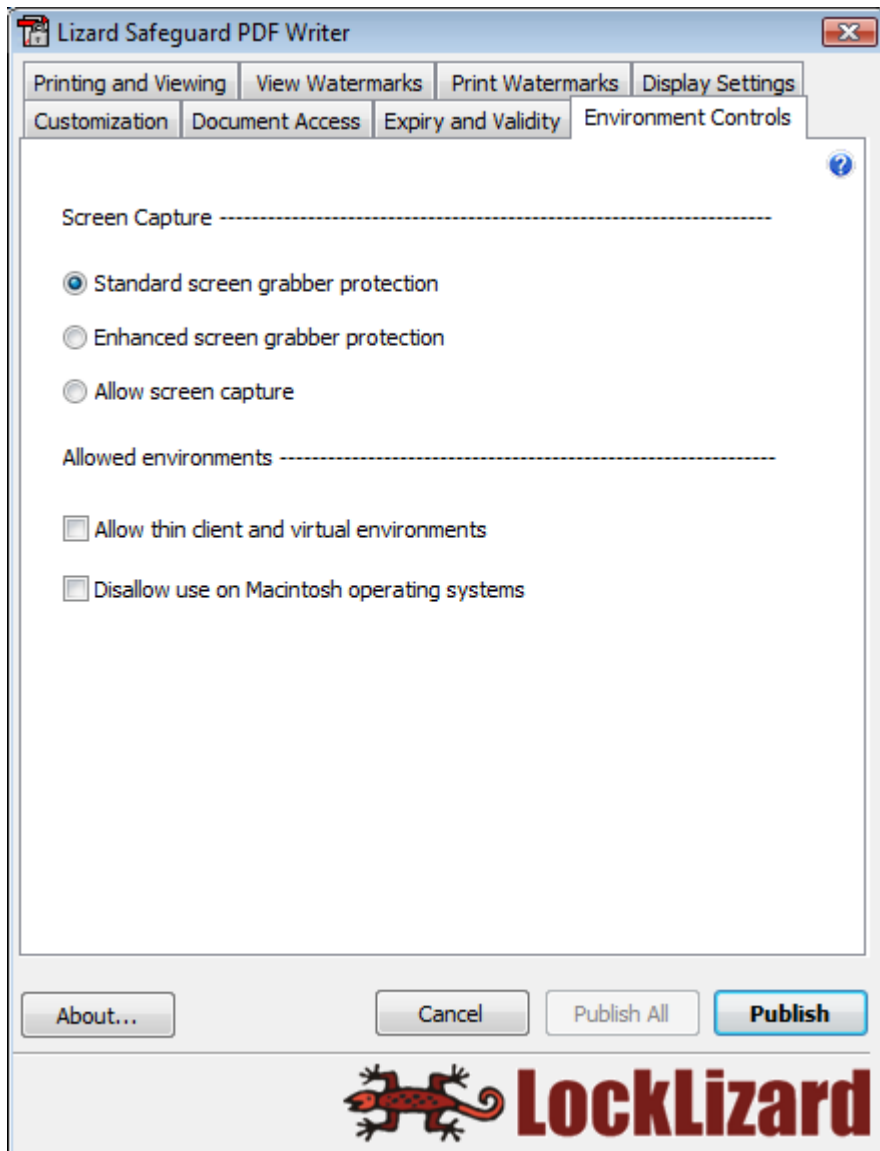


Diagram 18: Environment Controls tab



3.7.1 Screen Capture

3.7.1.1 *Standard screen grabber protection*

This is invoked by default, and a wide range of third party screen grabber applications are prevented from taking screenshots of your documents. This option works against a list of known screen grabber applications, and also prevents the use of copy and paste. Whilst the Viewer is running, Print Screen cannot be used with any application.

3.7.1.2 *Enhanced screen grabber protection*

If you select this option then further third party screen grabber applications are prevented from taking screenshots of your documents.

This option works against a list of known screen grabber applications, stops Windows Print Screen, prevents the use of copy and paste, and writes additional data to the display to confuse certain screen grabber applications. It adds another layer of security to Safeguard's normal screen grabbing protection.



IMPORTANT NOTE: Slow screen refresh rates

If this option is selected then the Viewer window will load slower and mouse scrolling will be noticeably slower. This may be an issue if you have customers using slow computers, or those that make significant use of mouse scrolling rather than the page up/down keys for document navigation.

3.7.1.3 *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 print out individual pages of critical documents for internal use, or where you want to facilitate the ability to make use of the document for private study.



3.7.2 Allowed environments

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

3.7.2.1 *Allow Thin Client and Virtual Environments*

If you select this option then your customers will be allowed to run the Viewer 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 documents within their organization.

3.7.2.2 *Disallow use on Macintosh Operating Systems*

If you select this option then your customers will NOT be allowed to run the Viewer on Macintosh Operating Systems.

Preventing screen grabbing and controlling the printing environment are problematic in the Macintosh environment because it was designed to be more open. Unfortunately this can makes it difficult to achieve the same level of control as is available under Windows. You may wish to select this option to protect sensitive information or where you feel there is a high likelihood that skilled users will make use of Operating System facilities to obtain additional copies of documents.

For security features not supported on the Mac please see Mac Viewer Limitations.



3.8 Printing and Viewing Tab

Here you control whether your product can be printed, and if so, how many times. You can also specify the operating systems that can print and whether access is no longer available once the allocated number of prints has been used. The number of views can also be controlled from here.

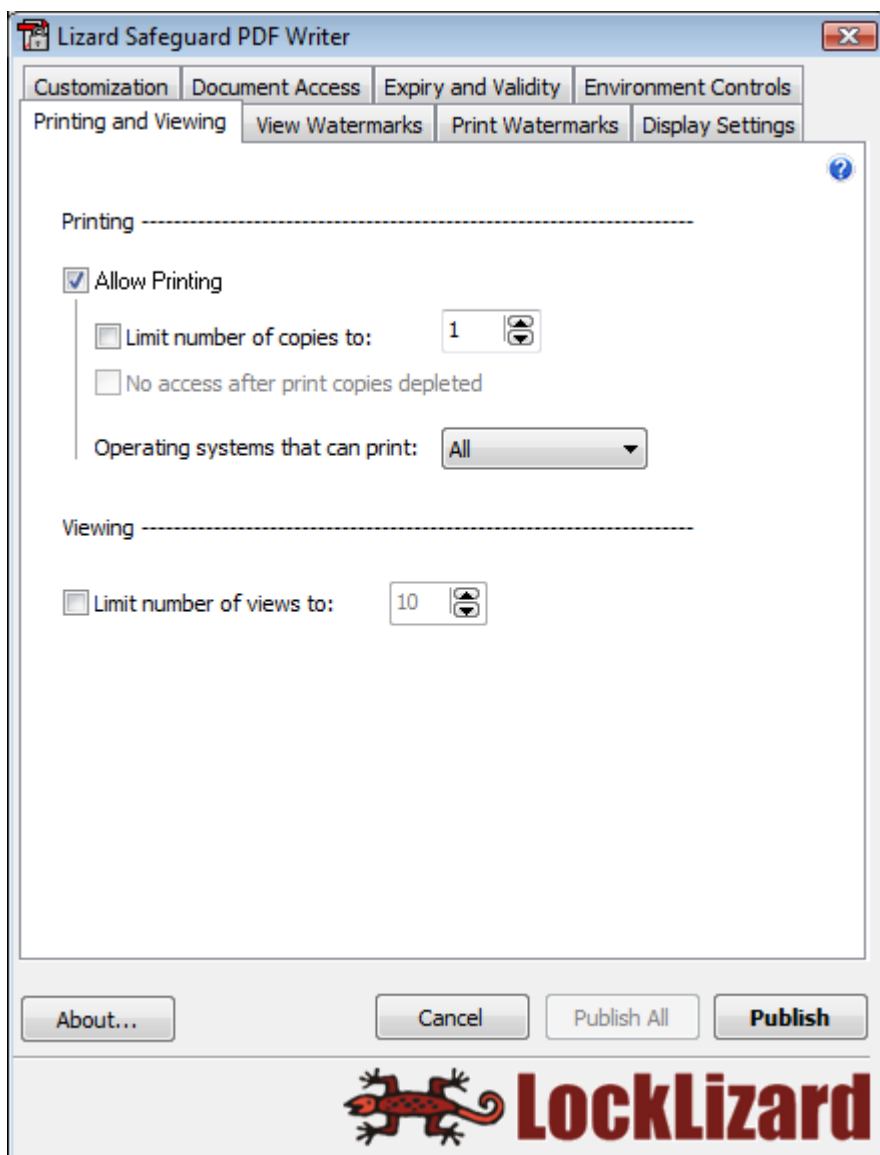


Diagram 19: Printing and Viewing tab



3.8.1 Printing

3.8.1.1 *Allow Printing*

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

Users are automatically prevented from printing to Adobe distiller and other print-to-file drivers.

Be aware that if you do enable printing, your customer is able to print a high quality copy which they can scan and read back in using OCR technology to produce a PDF version of your document. It is therefore advisable that you also apply a watermark on printouts – see watermark settings for additional information.

3.8.1.2 *Limit number of copies to:*

If you want to limit the number of copies customers can print then check this box and enter the number of copies allowed in the scroll box.

NOTE: Internet connection required

If you choose this option then your customers must be online to the Internet when they print the document in order to have the number of copies printed checked and reduced accordingly.

If the customer requests more print copies than are available, then the number requested is reduced to the maximum number still available. If the customer cancels a print after authorization then the print count is still reduced as if they had actually printed all the copies in that print command (print cancellation is a system action and therefore cannot be monitored by LockLizard).

The number of copies is related to the number of times the user presses the print button and not the number of pages a user prints. If a user therefore only prints three pages of a fifty page document the print count is still decremented by one.

NOTE: Changing the number of prints allowed

The print count can be changed on the admin system on a per customer / per document basis if a customer later requires additional print copies.

See [change number of prints](#) for additional information.



3.8.1.3 *No access after print copies depleted:*

This feature is used when you wish to stop all access to a document once it has been printed a specific number of times.

If you check this box, then after the allocated number of print copies has been used, the user will no longer be able to open the document for future viewing.

Note that this option is only available if the number of print copies has been limited.

3.8.1.4 *Operating systems that can print:*

From this pull-down box you can select whether printing is allowed based on the operating system the Viewer software is installed on.

You may for example, want to allow printing on Windows OS but not on the Mac OS, due to the fact that the Mac Viewer does not prevent printing to file drivers - hence your documents could be made into PDF files using Acrobat distiller. See Mac Viewer limitations.

If you select the 'All' option then printing will be allowed on both Windows and Macintosh operating systems. We do not recommend the use of the All option.

3.8.2 Viewing

3.8.2.1 *Limit number of views to:*

You may limit the number of times customers can view your documents 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 document 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 corporate environment, you may wish to make sure that individuals can only see documents on a very limited basis, for instance, may be once or twice simply to verify the content.

NOTE: Changing the number of views allowed

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

IMPORTANT NOTE: PRINT & VIEW ALLOWANCES

The number of prints / views allowed is applied at the Customer account level, and not at the license level. Each time a customer prints / views a document restricted in this manner, the count on the Customer account on the Administration server is decremented by 1 (or the number of print copies requested).

So if for example, you have only allowed 3 prints for a specific document, once the customer has printed that document 3 times, they will be unable to print any more copies. This is true even if you have given that customer more than one license for their account, enabling them to print the document on more than one computer. If they have already printed the document three times on the first computer, then there are no print allowances left for use on the second computer. The same is true for views of a document.



3.9 Watermark Tabs

Here you specify if you want image and text watermarks displayed and/or printed on protected documents.

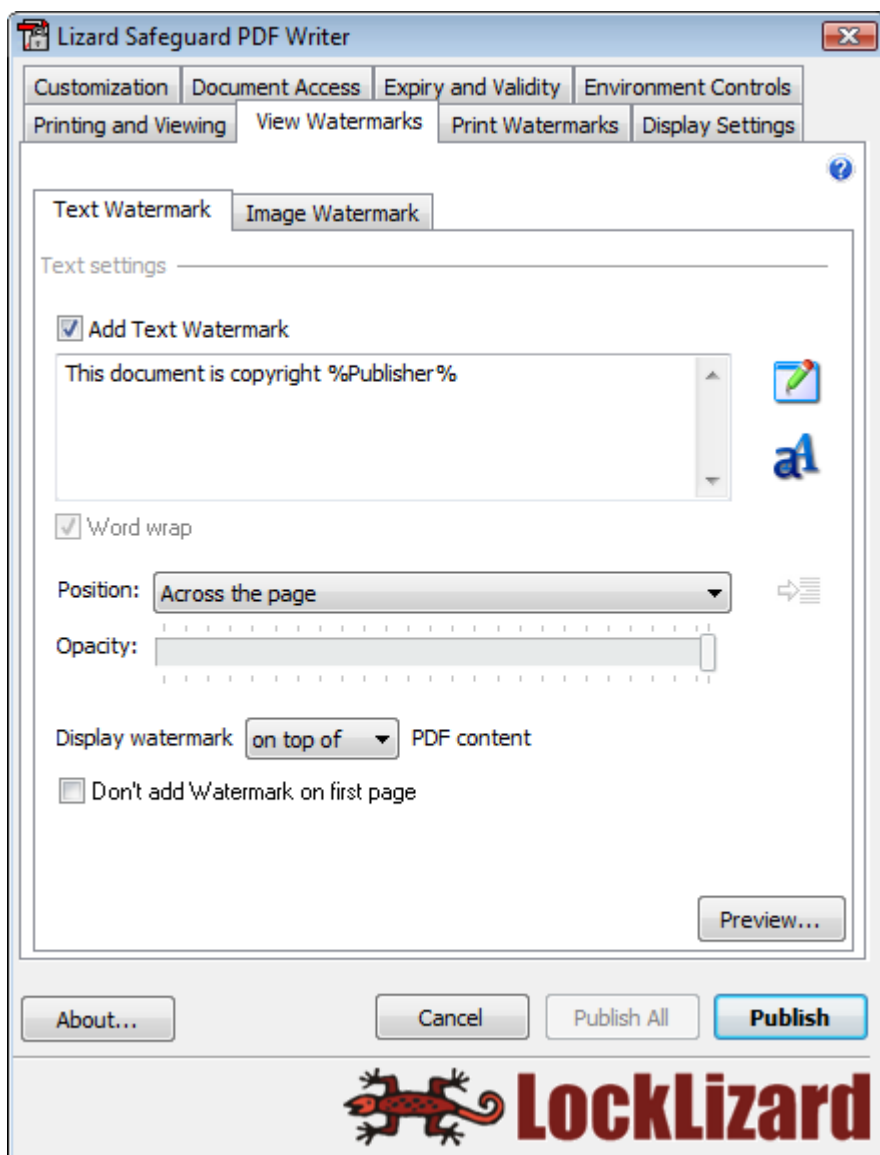


Diagram 20: View Watermarks Settings tab



Watermarks can be displayed on viewed and/or printed documents. Both text and image watermarks are supported. These are displayed when a document is printed and/or viewed in the Viewer software.

You might want to use Lizard Safeguard watermarks rather than applying a watermark to the original PDF document since you can display user and system data dynamically (username, company name, date/time stamp) on the protected content.

Watermarking can be a complex subject. There are two general types of watermark.

First are the 'obvious' watermarks, such as the identity of both the user of the document and that of the publisher (and, perhaps the time and date of viewing/printing). These correspond to the visual watermarks on banknotes. Seen in daylight they are obvious. Equally since they are obvious it might be possible to exclude them from a scanned image. But on electronic documents it may also be that visible watermarks detract from the visual appearance of the work being sold. This can be a matter of artistic judgment that is up to you as the publisher.

The second type are 'subtle' watermarks that put an underlying pattern on a printed document which does not disturb the human eye seeing the image, but does upset Optical Character Recognition (OCR) products.

We support both kinds of approach, so that you can choose which approach is going to be most appropriate (or both, if you wish). Whilst we do not have any opinion as to the most suitable background image you might wish to implement if you propose to use the second type of watermark, depending upon the specific type of document you are publishing.

According to Wikipedia, "In graphic arts and prepress, the usual technology for printing full-color images involves the superimposition of halftone screens. These are regular rectangular dot patterns—often four of them, printed in cyan, yellow, magenta, and black. Some kind of moiré pattern is inevitable, but in favorable circumstances the pattern is "tight;" i.e. the spatial frequency of the moiré is so high that it is not noticeable. In the graphic arts, the term moiré means an excessively visible moiré pattern. Part of the prepress art consists of



selecting screen angles and halftone frequencies which minimize moiré. The visibility of moiré is not entirely predictable. The same set of screens may produce good results with some images, but visible moiré with others.”

You can download variants of Moire fringe patterns from our web site – www.LockLizard.com/Images/moire-images.zip. Some of them have been selected from inkjet and laser printer patterns, as patterns revealed through analysis of the technique they have used to create print images. We cannot guarantee that these patterns will prove universally successful at preventing pirates from printing an image and then scanning it with a high rate of success. However, watermarks of this type are, in our view, much more likely to cause problems with scanning systems than are normal pictorial images. We recommend that publishers evaluate the patterns and methods that are most suitable, artistically, for their own products.

Watermarking options available in the GUI are described below:

3.9.1 View Watermarks Tab

Select options in this tab if you want a watermark displayed when the document is viewed. The watermark is applied to each page that is viewed.

3.9.2 Print Watermarks Tab

Select options in this tab if you want a watermark displayed when the document is printed. The watermark is applied to each page that is printed.

This is a recommended option to use if you allow your customers to print your documents. It provides them with a usable copy to work from, but does not create a situation where they can readily print and then copy or scan your documents to PDF format without the watermark being present.

The following options are available for viewed and/or printed watermarks:




3.9.3 Text Watermark

Select options in this tab if you want a text watermark to be shown on the document.

Check the Add Text Watermark box and then in the field below type in the text you want displayed. In addition to adding custom text, you can also add system variables (user name, company name, publisher name, and date/time), and these are described below.

3.9.3.1 *System Variables*

System variables can be inserted anywhere in your custom text by selecting the  icon at the point where you want the system variable inserted and then choosing the variable you want to insert.

User name: Displays the registered user name and their email address (this is the name of the user authorized to view the document).


User company: Displays the company name (if available) of the registered user (this is the company name displayed on the administration system for this user).

Date and time: Displays the current date/time taken from the customer's computer (this will be the date/time when the document is viewed and/or printed).

Publisher: Displays your company name and email address (this is the publisher name displayed at the top of the administration system).



3.9.3.2 *Font Settings*

Select the  icon to specify the font size and type, color, background color and background transparency that you want to use.

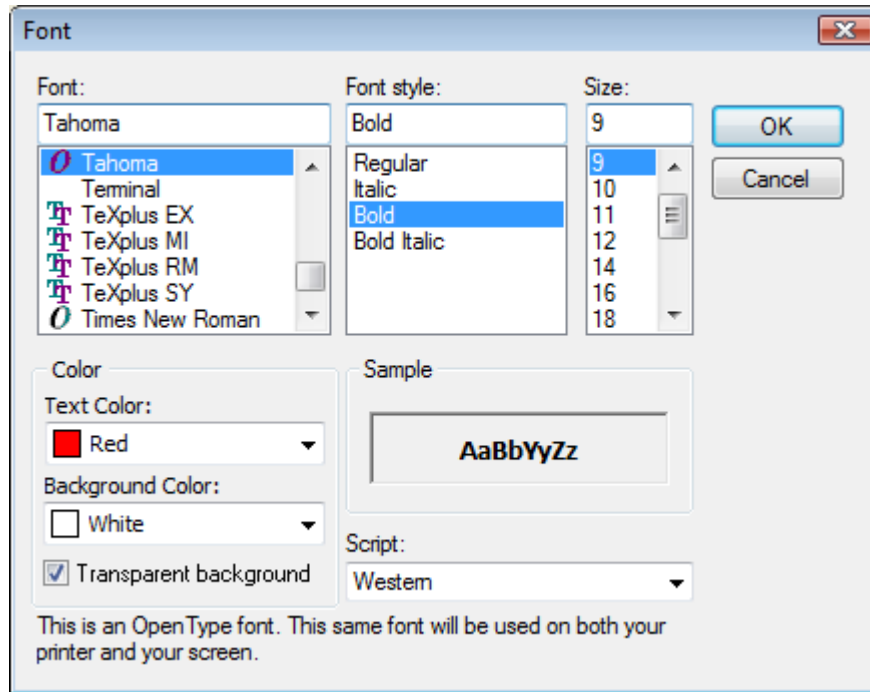


Diagram 21: Watermark font settings

Note: Selection of Transparent background
Most likely you will want to select the 'Transparent background' checkbox because visually you may not wish to have a background as well as the visible text masking the PDF Content.

3.9.3.3 *Word wrap*

Check this box if you want text to be displayed without any hard carriage returns. If you do not check this box then each field will be displayed on a separate line.


Note: Word Wrap and Across the page text
Word wrap is not available if you select the text position "across the page".



3.9.3.4 *Position*

Select from the pull-down box where on the page you would like the text displayed.

3.9.3.5 *Custom Positioning of Text*

Select this button  to position the watermark text at a custom vertical location. Text can only be positioned vertically using this feature. This option is NOT available if you have selected the position option “across the page”.

3.9.3.6 *Opacity*

Select the opacity of the text (from completely visible to almost invisible) by sliding the control to the right or left. By default the text is completely visible.

Text opacity is not supported for text positioned across the page - the opacity slider will therefore be disabled if the watermark text position is set across the page.

IMPORTANT NOTE: TEXT OPACITY IS NOT RECOMMENDED

- 1) In order for printers to print transparent watermark text they must support Alpha Blending. Most printers support this but some do not. For this reason we recommend that you DO NOT use transparency in text watermarks unless you are using Lizard Safeguard in a controlled internal environment where you are sure that all printers support Alpha Blending. The simplest solution is to use a different colored font (say a silver color) for the watermark text to ensure that it is always printed.
- 2) If opacity is selected, then the more watermark text you use the slower the page rendering will be in the Safeguard Viewer, and the slower printing will be. For this reason it is recommended that you use as a maximum one line of text. Reduce the font size if necessary to minimize the amount of text used.
- 3) If a background text color is selected it is only displayed at full opacity and not otherwise.



3.9.3.7 *Display Watermark 'on top of / behind' PDF Content*

Select from the pull-down box whether you would like the watermark text displayed on top of the PDF content or behind it.

If you select the 'on top of' option then the text will obscure the PDF content. If you select the 'behind' option then the PDF content will obscure the text of the watermark.

3.9.3.8 *Don't add Watermark on first page*

Check this box if you don't want a watermark to be displayed on the first page of your document.

You may wish to select this option when the first page is the cover page and for presentational purposes you don't want it watermarked.

Press the button to see what the text watermark will look like when the document is viewed and/or printed.



3.9.4 Image Watermark

Select options in this tab if you want an image watermark to be shown on the document.

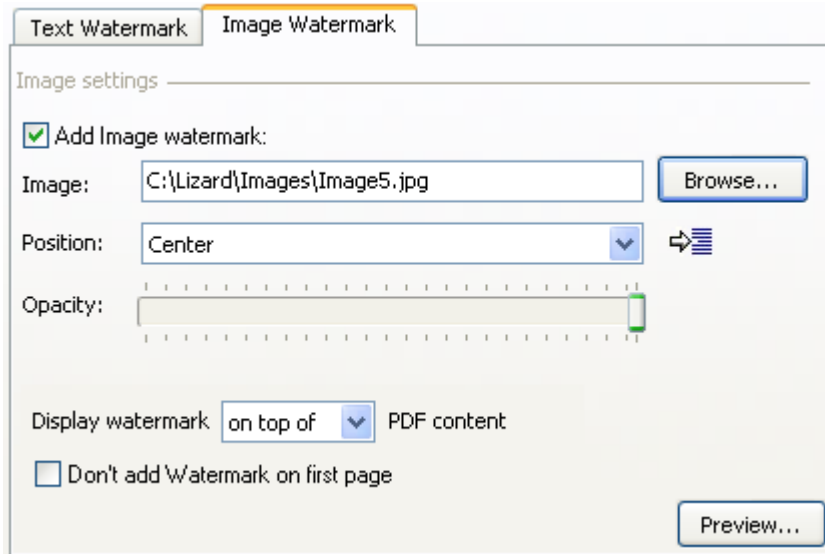
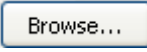



Diagram 22: Watermark image settings

Check the Add Image Watermark box and then select the  button to select a JPG or PNG image.

3.9.4.1 *Position*

Select from the pull-down box where on the page you would like the image displayed.

3.9.4.2 *Custom Positioning of Image*

Select this button  to position the watermark image at a custom location (this can be at any position on the page).

3.9.4.3 *Opacity*

Select the opacity of the image (from completely visible to almost invisible) by sliding the control to the right or left. By default the image is completely visible.



3.9.4.4 *Display Watermark 'on top of / behind' PDF Content*

Select from the pull-down box whether you would like the watermark image displayed on top of the PDF content or behind it.

If you select the 'on top of' option then the image will obscure the PDF content. If you select the 'behind' option then the PDF content will obscure the image.

3.9.4.5 *Don't add Watermark on first page*

Check this box if you don't want a watermark to be displayed on the first page of your document.

You may wish to select this option when the first page is the cover page and for presentational purposes you don't want it watermarked.

Press the button if you want to see what the image watermark will look like when the document is viewed/printed. Please note that image and text opacity settings will always be shown at full opacity on the preview screen.

You may wish to publish your documents and then view/print them in order to change the Opacity parameter to reflect a suitable image for viewing or for printing. You may need to experiment with the combination of these parameters to arrive at a combination that is artistically suited to your own requirements.



3.10 Display Settings Tab

The options you set in this tab determine how the protected document is first displayed to your customer when it is opened using the Safeguard Viewer. These initial settings can also be enforced so users cannot change how documents are displayed on-screen. Publishers may find this useful if there is a particular house style or branding that must be preserved.

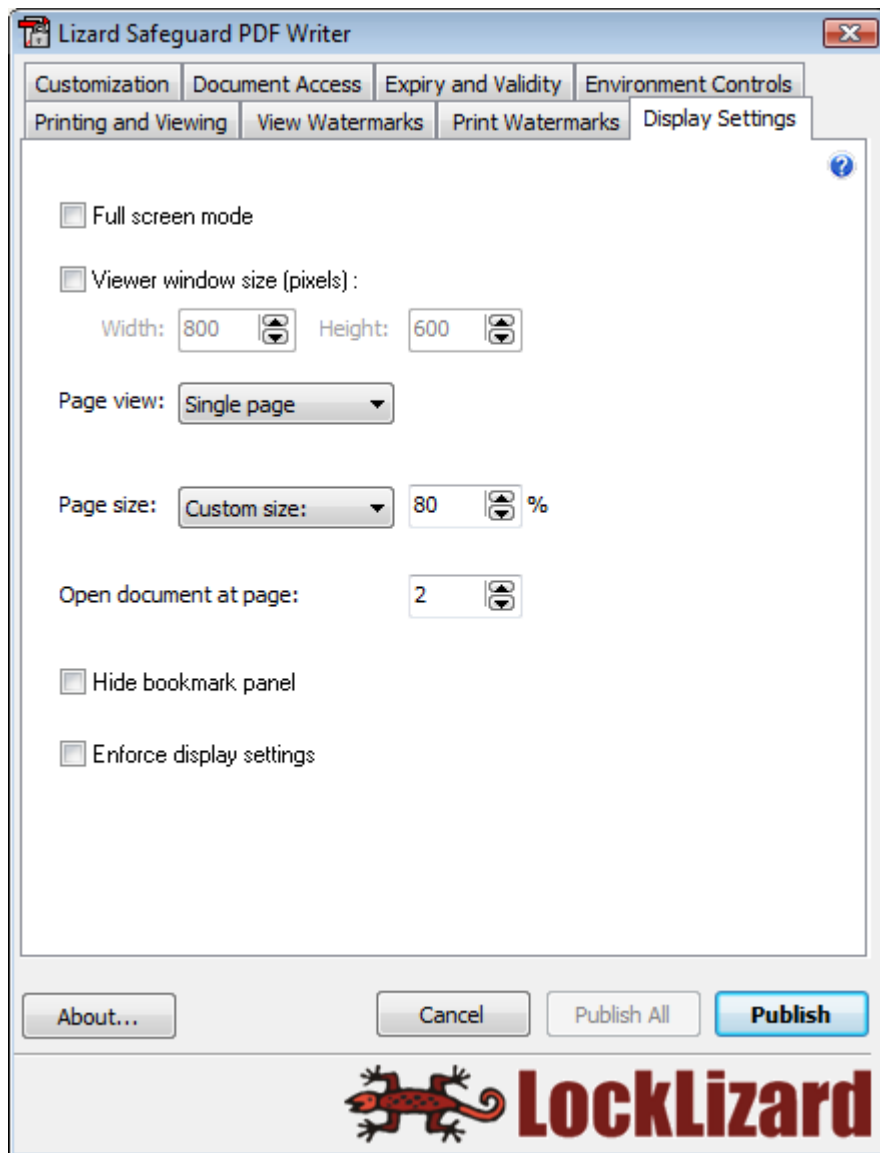


Diagram 23: Display Settings tab



3.10.1 Full screen mode

If you select this option, the standard Viewer window is replaced by a black background. Full pages are shown on a black background.

Users can use the mouse to scroll up and down the document and the page up/down keys. If a user hits the ESC button then the Viewer menu is displayed.

3.10.2 Viewer window size

If you select this option, then you must specify the width and height of the Viewer window.

By default the Viewer window is maximized for the screen resolution the user is running. If you specify a value that is larger than the user's screen resolution, then the Viewer application will resize the Viewer window to fit the maximum screen resolution being used.

NOTE: You cannot use this option with full screen mode.

3.10.3 Page view

Select from the pull-down list box how your pages are displayed.

- Single page – use of the page/up down keys scrolls one page at a time.
- Continuous – use of the page/up down keys provides a continuous scroll (this is the default).
- Facing – two pages are displayed at a time and scrolling works with two pages visible.

3.10.4 Page size

Select from the pull-down list box the display page size that you want to be used when displaying your pages. The default is actual size.

NOTE: The maximum custom value size supported is 250 (zoom at 250%)



3.10.5 Open document at page *n*

Enter a value in the field provided, or use the up/down arrows to locate the page at which you want your document to open at (if not the first page).

3.10.6 Hide bookmark panel

Check this box if you do not want bookmarks to be displayed on opening.

3.10.7 Enforce display settings

Check this box if you want to enforce the display settings you have set in this tab. If you select this option then users will not be able to change the document view settings.

If you don't select this option, then your document will load in the Viewer using the settings you have selected, but users can then change them if they find some other setting more convenient to them.




3.11 Publishing your PDF document(s) securely

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

 button.

A secure copy of your PDF file is created with a new file extension, .PDC. For example, License.pdf becomes License.pdc.


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

3.12 Protecting multiple PDF files

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

Document controls (print, copy content, etc) are applied to all the selected documents from the one screen in one of two ways.


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

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



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 document, the tabbed dialog is displayed again for each subsequent document, so you can choose a new set of document controls for subsequent documents. This process continues until all of your documents you selected are protected.

3.13 Protecting multiple PDF files from the Command Line without user intervention

You can protect multiple PDF files without user intervention by using the Lizard Safeguard Command Line utility. This is available for separate purchase from LockLizard.

Using the command line utility you can incorporate protection of PDF files into your batch files, and call these from other applications, either by issuing DOS commands or through SHELL, without needing to use an API.

A separate user manual is provided, setting out in detail the commands, how to format them, and giving examples of usage. This can be downloaded from <http://www.LockLizard.com/Safeguard-CommandLine.pdf>



3.14 Changing Document Expiry

Once a document 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 document 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 document.

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

NOTE: User access revocation and server checking

User access revocation to a publication or document will ONLY work if the user is required to check with the Administration server before they can use the document (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 document.



Chapter 4: The Administration System

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

Once you have secured your PDF 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 documents. Your documents 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, documents and publication records;
- Automatically enter customer data using the Lizard Safeguard eCommerce module.

The eCommerce module enables you to integrate Lizard Safeguard with your eCommerce system for a totally automated secure document distribution service. Once your customers pay for a document or publication then their details can be automatically set up on the Administration server and assigned the appropriate publication / document 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, left click on the Windows Start menu and select All Programs > LockLizard > Lizard Safeguard > PDF Writer > Administration System.

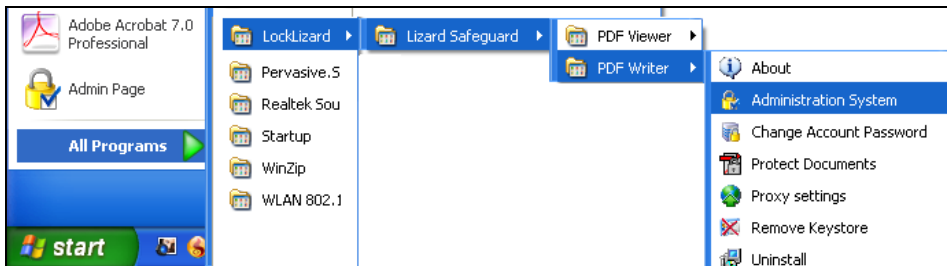


Diagram 24: Administration Page Context Menu

When you click on this it automatically opens up the web administration page (as shown in diagram 25).

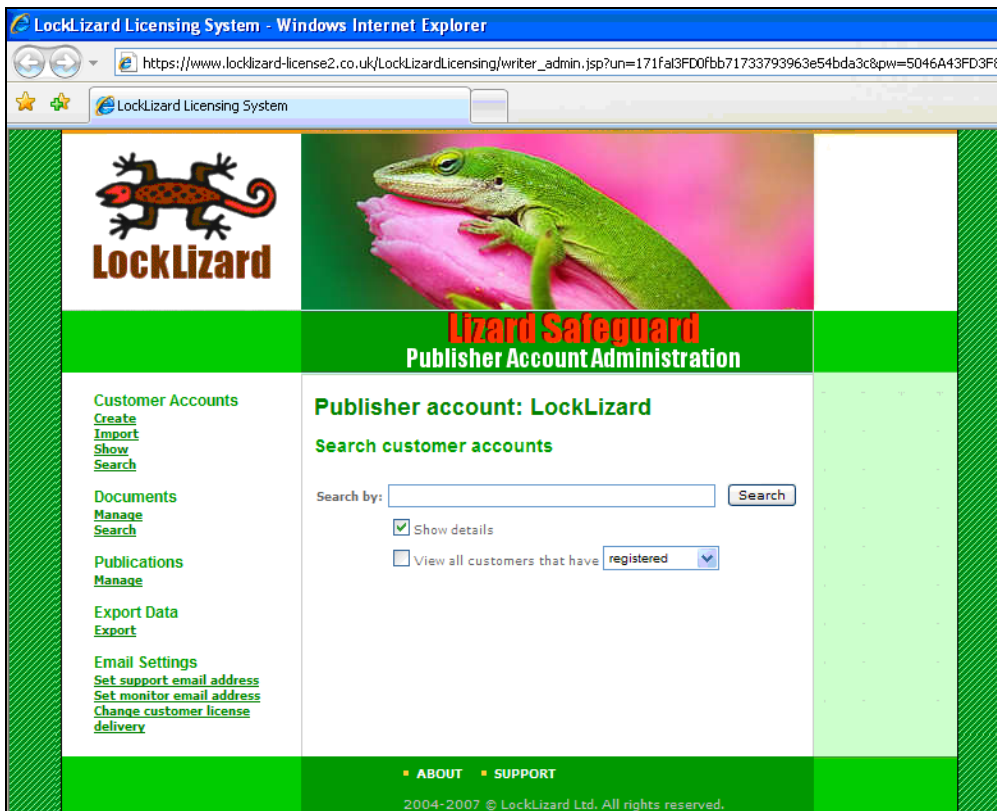


Diagram 25: The Administration / Licensing System

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.



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 name, email address, and company name;
- Change customer account validity dates;
- Change the documents your customers have access to;
- Change the document expiry date for individual customers;
- Change the number of prints allowed on a customer/document basis;
- Change the number of views allowed on a customer/document basis;
- Delete documents;
- Create and delete publications;
- Change the publications your customers have access to;
- Re-issue license files;
- Export customer data;
- Export document 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 documents they are authorized to use
 - the publications they are authorized to use
 - whether they have tried to register Safeguard Viewer 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 documents, 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 document(s) and/or publication(s) that you have licensed them to use.

Create customer account

Name

Company

E-mail

Licenses:

Start date (mm-dd-yyyy)

Valid until (mm-dd-yyyy)

unlimited

Can access publications

Finance Monthly

Hard up Times

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".llv), 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 .llv 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 Viewer product download details) will be sent.

4.2.4 Licenses

Enter the number of licenses to be provided.

Licenses:

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 documents, and their accounts will ALL expire at the same time, since they share a single customer account.

A customer may need to install the Viewer 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 of course enter a new value in this field so that they can register their license again.

NOTE: Re-using licenses

Lizard Safeguard 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 Viewer 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 Safeguard 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 Viewer software until that date is reached.

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



Selecting this feature prevents customers from viewing documents that have been published to publications before their subscription period began. Some publishers however want their customers to be able to view all documents 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.

Valid until (mm-dd-yyyy)
 unlimited

When the expiry date is reached, the following will occur:

- For documents that were published with 'check license validity' set to 'each time the document is opened' they will no longer be accessible
- For documents that were published with 'check license validity' set to 'every *n* days' they will no longer be accessible once the validity check has taken place
- For documents that were published with 'check license validity' set to 'never' they will continue to be accessible
- If a customer re-registers their Viewer license after their account has expired then documents will no longer be accessible
- Any new documents you publish will no longer be accessible even if the customer has been granted access to the document or publication



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 document 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 documents.

	Document does not expire	Document expires
Customer Account expires	Document can be accessed until the customer account expires	Document can be accessed until it expires or the customer account expires (whichever comes first)
Customer account does not expire	Document can always be accessed	Document can be accessed until it expires

Table 1: Document 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 document. 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	
<input checked="" type="checkbox"/>	Finance Monthly
<input type="checkbox"/>	Hard up Times

Any documents 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 documents 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 Safeguard Viewer software if they have not already installed it. See Customer Registration.

Now you are ready to send your protected PDF (PDC) 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 documents. A list of documents accessible to the customer. For each document the following must be provided: document ID, document 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 PDF 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 **Delete all customers**

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

Name: John Adams
Email: john.adams@barnacles.com
Company: Barnacles, Inc.
Save changes

Username: 110a0a4c48cb15866a99bc0c104bb644
Password: 8c643ad5e8c1f85d76258ee4440c0aba
[Save user license file to disk](#)

Status: **not registered; enabled**
valid from 06-17-2010
Confirm **Disable**

Licenses: 1 confirm **Change**

Start date: 06-17-2010 (mm-dd-yyyy)
End date: (mm-dd-yyyy)
 unlimited
Save changes

Can access publications
 Finance Monthly
 Hard Up Times
Save changes

Direct access to documents
There are no documents that can be accessed directly.
Change
[Change number of views](#)
[Change number of prints](#)

Event log
06-17-2010 14:59:02 - account created

Confirm deletion **Delete**

Diagram 28: Show Customer Accounts screen



4.4.1 Name, Email, Company

The Name, Email, and Company fields are editable. To save any changes you make to these fields, press the button.

Name	John Adams
Email	john.adams@barnacles.com
Company	Barnacles, Inc.

The email address is where the license information has been sent.

4.4.2 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	8c643ad5e8c1f85d76258ee4440c0aba

[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.

4.4.3 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 12-04-2009 19:54:55; enabled valid from 12-03-2009 Confirm <input type="checkbox"/> <input type="button" value="Disable"/>	Status not registered; enabled valid from 06-17-2010 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 documents that require a connection to the server will no longer be viewable if a customer's account has been suspended. Also, new documents 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 documents 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 Safeguard Viewer 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 Viewer 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 Viewer 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 and number of prints 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.

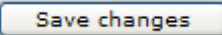
Start date (mm-dd-yyyy)

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



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 document. If customers have been granted offline use, changes at the Administration server will have no effect, because the customer's Viewer will never check with the server to update their authorities.

NOTE: Customer and document expiry

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

4.4.8 Can Access Publications

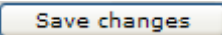
Whenever you add a new publication to your publications list it automatically becomes available for allocating to all current customers.



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 documents (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 documents in that publication that were created inside the customer validity period. You can continue to add existing documents to new publications at any stage.

4.4.9 Direct Access to Documents

Even though you may have previously set document expiry when you published a document, you can change document 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 documents.

Direct access to documents	
Title	Limitation
expiry-1day - standalone-changedate	05-17-2011 - 04-13-2013
expiry-28092014 - standalone-changedate	05-17-2011 - 05-17-2012

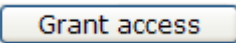
Press the button to view the documents that have been published outside of a publication.

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

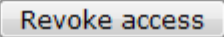

Title	A_History_of_Rights_Management
Document ID	15425
Published	06-15-2007 16:33:36
Expires	never
Status	valid
Access	no
<input checked="" type="radio"/> Limited Access	
From:	<input type="text" value="10-26-2010"/> (mm-dd-yyyy)
Until:	<input type="text"/> (mm-dd-yyyy)
<input type="radio"/> Use original settings	
<input type="button" value="Grant access"/>	

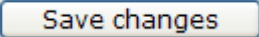
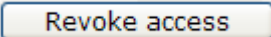


Select the 'Limited Access' radio button if you want to set specific start and end dates, or the 'Use original settings' radio button if you want to use the original expiry settings you chose when you protected the document. Do remember that if you chose the 'Limited Access' option then the dates you enter will override your original settings.

Once you have made your changes press the  button.

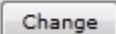
The Access field entry will change from "No" (see diagram above) to "Yes" (see diagram below).

Title	A_History_of_Rights_Management		
Document ID	15425		
Published	06-15-2007 16:33:36		
Expires	never		
Status	valid		
Access	yes		
<input type="radio"/> Limited Access			
	From:	<input type="text" value="10-26-2010"/>	(mm-dd-yyyy)
	Until:	<input type="text"/>	(mm-dd-yyyy)
<input checked="" type="radio"/> Use original settings			
			

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

When you view the customer account it will show the document you have just granted access to in the 'Direct access to documents' section.

Direct access to documents	
Title	Limitation
expiry-1day - standalone-changedate	05-09-2011 - 05-09-2012
expiry-28092014 - standalone-changedate	05-02-2011 - 05-09-2014
expiry-2days - standalone	original document settings
expiry-2days - standalone - checkalways	original document settings





In the Limitation column, this will either show an access date range or the text 'original document settings'. If the text 'original document settings' is displayed then it is applying the expiry settings you originally chose (if any) when you protected the document.

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 document 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 DOCUMENTS THAT ARE PART OF A PUBLICATION

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

If you decide to give non-publication users direct access to documents that have been published to a publication, then they will also be able to view all of the other documents in that publication (assuming they can get hold of them). We strongly advise publishers not to grant direct access to a document that has been published to a publication. If you wish to do this, then you should protect it again as a standalone document. You can then give users access to that document 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 document can be viewed (opened) by the selected customer.

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



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

Change number of document views for "LockLizard Support"

Title	Introduction_to_Digital_Rights_Management
Views left	<input type="text" value="1"/>
	<input type="button" value="Update"/>

Title	license-1view
Views left	<input type="text" value="0"/>
	<input type="button" value="Update"/>

Change the “views left” count by typing in the number of document views you now want to allow and then press the button.

NOTE: Changing the number of views

This change can only be applied to documents that you have originally published with a limited number of views. It is not a control that can be introduced after a document has been protected. Document entries are ONLY displayed on this screen if the customer has already opened the document at least once in the Viewer software.

4.4.11 Changing the number of prints

Select the [Change number of prints](#) link to change the number of times a document can be printed by the selected customer. This feature also enables you to see how many prints are left for a given document for the selected customer.

This feature is useful if, say, you only assigned a single print to a document and the customer claims they have not been able to actually print the document, and you agree to reset the capability.

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



Change number of document prints for "LockLizard Support"

Title	8391-wm-p2-ps
Prints left	<input type="text" value="1"/>
<input type="button" value="Update"/>	

Title	A_History_of_Rights_Management-printmac
Prints left	<input type="text" value="1"/>
<input type="button" value="Update"/>	

Change the "Prints left" count by typing in the number of document prints you now want to allow and then press the button.

NOTE: Changing the number of prints

This change can only be applied to documents that you have originally published with a limited number of prints. It is not a control that can be introduced after a document has been protected. Document entries are ONLY displayed on this screen if the customer has already printed the document at least once.

4.4.12 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.

4.4.13 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 the product 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 documents 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 `Delete` button.

IMPORTANT NOTE: Deletion of customer accounts

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

By allocating documents to a publication you are simplifying the administration of the delivery of the document to your customers. This is because any customer associated with a publication can automatically use all the documents 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 documents to each customer entitled to make use of them.

To add or delete publications, 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 documents 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 document 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 documents 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 Documents

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

Click on the 'Manage Documents' link.

Manage protected documents

Confirm

Sort by: Show details

Title	Maths
Published	06-22-2007 22:43:51
Expires	never
Status	valid
Document ID	15762
Validity check	never
Print	disabled
Open limitation	10 times
Publications	every customer has access

Confirm deletion

Title	Encryption_is_not_enough_for_DRM2
Published	06-22-2007 20:25:27
Expires	never
Status	valid
Document ID	15756
Validity check	never
Print	disabled
Open limitation	unlimited
Publications	
Name	Description
Browning	

Confirm deletion

Diagram 31: Manage Protected Documents 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 document and protect it again using new settings.

The following information is displayed:

- Document 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 documents 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 (and if so how many copies);

This field may show one of three options:

- Disabled - printing is not allowed;
 - Enabled and unlimited – unlimited printing is allowed;
 - Enabled; n copies allowed – printing is allowed by restricted to the number of copies specified.
- What publications they have been assigned to (if any);

This field may show one of three options:

- One – the document has been published as a standalone document;
- Every customer has access - the document has been published for all customers to view;
- A publication name – the document has been published to a publication.



4.7.1 Deleting document records

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

IMPORTANT NOTE: Deleting records

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

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

If you want to delete ALL your document records (for example you want to remove a test environment) then check the `Confirm` check box and press the `Delete all documents` button.

IMPORTANT NOTE: Record recovery

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



4.8 Searching Document Records

To quickly find a document, click on the 'Search Documents' link.

Search documents

Search by:

Show details

View all documents that are

View all documents that expire on
(mm-dd-yyyy)

View all documents that belong to the publication

Diagram 32: Search Documents screen

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

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

4.8.1 Searching for expired documents

You can view all documents that have expired or all documents that are valid (not expired) by checking the **View all documents 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 documents that expire on a certain date

You can view all documents that expire on a certain date by checking the View all documents 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 documents that belong to publications

You can view all documents that belong to specific publications by checking the View all documents 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, documents 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

Documents

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 Viewer software. This email displays the following text:

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

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

The screenshot shows a dialog box titled "Support email address". It contains a label "E-mail" followed by a text input field. A "Save" button is positioned at the bottom right of the dialog.

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 PDF Writer publisher account and is where your PDF 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 document properties with the new email address

When you hover over a protected document in Windows File Explorer, information about that protected document will be displayed, including the support email address.

Once you have changed the support email address you will need to re-register your Viewer license for the email address to be updated on the document properties. This is because the document properties obtain the support email address from the Viewer license file. Any users that register the Viewer 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.

You can add more than one email address in this field by using a semi-colon and a space as a separator. For example, xyz@abc.com; xyz@hotmail.com



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.

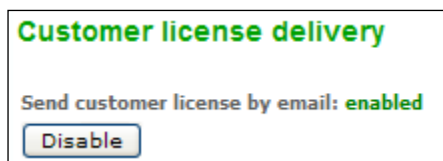
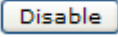
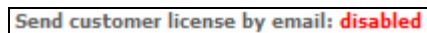


Diagram 36: Set Customer License Delivery screen

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 documents

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

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

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

When a customer views one of your secure PDF documents for the first time, the Viewer software will check if it has the correct key to view it. If it does not, the Viewer will check with the Administration server to see if the customer has been granted access to the document (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 in the encrypted Safeguard Viewer keystore. If no key is available, your custom message for refused access (set when you protected this specific document) will be displayed telling the recipient how to contact you and purchase your documents, or warning them that the document is not for their licensed use. You will need to determine the most relevant message.



Protected PDF files are decrypted in memory and displayed in the secure Safeguard Viewer. Details of when the user's account expires (if ever) and when the document they are viewing expires (if ever) are displayed at the bottom of the Viewer window.

5.1 Document Issues

Should your customers need to contact you with an issue viewing protected documents then you should advise them to select the option "Contact Service Support" from the Help menu in the Safeguard Viewer. 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 Documents

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

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

6.1 Sending documents 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 documents (newsletters, invoices, contracts) it may be efficient to send the document 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 document 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 documents to different customers this model works well. It is NOT suitable where you have large documents, 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 documents you should consider the next option.



6.2 Customers downloading documents

In this model you are providing a service to customers. They are free to download any documents from your web site. Your model may be that potential customers are able to download and read a sample of the document you have for sale, and can then download any documents 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 documents 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 documents that will be over 3Mb in size, or where you are offering a service where customers select the publications or documents 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 PDF 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 .pdf extension under the IIS Manager. For the MIME type select application/octet-stream. Then restart the IIS server.



6.3 Summary

Some business processes, such as invoicing, purchasing, dealing with patient medical information, providing short newsletters, are best served with a 'push' process where you send the required document to the customer or authorized recipient.

Other models, allowing the customer (rather than a business partner, associate or similar) to select a book or a subscription, and then download those items that are of immediate interest to them, purchase them and use them, are best characterized by the 'pull' model.

This does not mean that you do not advise your customers, by email, that a new version, update, or edition is available for them. That is perfectly sensible, and, indeed, perhaps necessary as part of your marketing approach. But it is a pull model because the customer decides to download the document, rather than you sending it to them.

6.4 Customers downloading the free Viewer software

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

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

The Safeguard Viewer 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 Viewer will invite the customer to update to this version. Updated versions of the Writer may compel customers to update their version of the Viewer.



Chapter 7: Troubleshooting and General FAQs

This chapter covers error messages that may be encountered when you are using Safeguard Writer. Please also refer to the troubleshooting section in the Safeguard Viewer manual for Viewer 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 PDF file I get the error message “failed to compute document id: error 32”

This error message is displayed for one of two reasons:

- 1) either Adobe Acrobat, Adobe Acrobat Reader or another application is holding the PDF 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 Safeguard software from getting to the Internet.

If you are trying to register the Writer application, then the programs registerwriter.exe and adminpage.exe must have access to the Internet.

If you are trying to register the Viewer application then the program pdcViewer.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 Viewer software. Off the Windows Start menu > Programs > Lizard Safeguard PDF Writer (or Viewer) > Proxy Settings is where you enter this information. See [proxy settings](#).

Please note that if you purchased Lizard Safeguard before the 20th December 2006 then the LockLizard admin server IP address is 82.165.43.29 or <https://www.LockLizard-license1.co.uk:8444/LockLizardLicensing>. This server uses port 8444 for secure traffic and port 8080 for non-secure traffic.



If you purchased or are evaluating Lizard Safeguard after the 20th December 2006 then the LockLizard admin server IP address is 87.106.7.187 or <https://www.LockLizard-license2.co.uk/LockLizardLicensing>. This server uses port 443 for secure traffic and port 80 for non-secure traffic.

Once you have registered the Writer / Viewer 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 document rights. Error code : 2

There are two reasons why this error message may occur:

1. A document open password has been set on the document. This must be removed before you can protect a PDF document.
2. The source file you are trying to protect is not an Adobe compliant PDF 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 documents 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 Safeguard Viewer next connects to the LockLizard Licensing server. This may be:

- 1) If the document controls state that the user must connect to the Internet every n days or every time before they can view the document.
- 2) If the user re-registers by double-clicking on their license file again. When the Viewer downloads a new document decryption key.
- 3) Any of the above will cause the keystore to be updated with the new user account details.

7.1.9 Links in my original document do not seem to be active in the Viewer

You need to use the Acrobat icon in your application to convert your documents to PDF format. Do not use print to file drivers (for example, Acrobat Distiller) as they do not process the links correctly.



7.2 FAQs

This chapter covers frequently asked questions on Lizard Safeguard.

7.2.1 How does Lizard Safeguard differ from file encryption products?

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

Lizard Safeguard dynamically protects PDF documents both inside and outside the network, online and offline, using strong encryption, document expiry and access rights, in order to provide persistent end-to-end protection throughout a PDF document's lifecycle.

7.2.2 How secure is Lizard Safeguard?

Lizard Safeguard uses US Government strength encryption - the AES algorithm at it's strongest setting, 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 anticipated future advances in technology, AES has the potential to remain secure well beyond twenty years.

For more information on AES see the NIST [AES fact sheet](#).

In addition, we don't use third party plug-ins to control your secure document access. This ensures we are not open to well known weaknesses in the published APIs or security holes in the third party application. One of our competitors that use this approach, has been compromised and found the only



way to try and prevent hacking of their systems was via the legal system and a court writ!

Documents are only decrypted for viewing in a secure, controlled environment, and are never made accessible unprotected. If an existing customer does not have a license for a specific document they cannot view it.

7.2.3 Is your application open to password attacks like Adobe & similar password based products?

No. The keys required to decrypt protected files are safely stored encrypted on the customer's computer. There are no passwords to enter, and therefore the system is not open to simple compromise or standard password attacks.

7.2.4 Do I have to upload my documents to your web server to protect them?

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

7.2.5 Do you host my secure PDF documents on your server?

No. For both security and legal liability reasons we never have access to either your unprotected or protected documents. 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 PDF documents and publications.

7.2.6 Where can I publish my secured PDF documents?

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

7.2.7 Can users change my document security settings?

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

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

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

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

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

Yes. When you protect a PDF 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



documents or give details on contacting your administrator if the system is used for internal document control.

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

Of course, if you are using Safeguard for an internal system you would ensure that the message made it clear that any use of (or indeed attempted access to) the document would result in litigation.

7.2.10 Can my customers distribute protected documents to others?

Your customers can send protected documents to other users, but those users will not be able to view the documents unless they have purchased them from you. For this reason, secured PDF documents (PDC documents) 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 documents. You decide which customers have access to what documents and what publications, and when, and how.

7.2.11 How can I control document expiration & revocation once a document has been published?

Post publication document control is maintained through the use of expiry dates and the ability to revoke access to a document or for a customer. For example, you can publish a document 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 documents that you license.



7.2.12 Why would I want to set customers to expire rather than documents?

The system is flexible so that you can actually do both. You may want customers to expire rather than documents because if a customer has subscribed to your service for a year then they are entitled to carry on viewing those documents after their subscription has expired. The system prevents them from viewing documents 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 documents, because you do not want them to carry on viewing a document that has passed it's expiration date. In this case once the expiry date has been reached the document is no longer viewable.

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

Yes. When you create a document you can specify the date at which it expires. When a customer registers they can then view your documents until that date is reached. Once this date is reached the document will expire (if the document expires, it can no longer be viewed) and they will need to come back to you for a license to continue viewing the document.

You can also set customer accounts to expire on a certain date. The difference here is that any documents 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 documents published before or after their subscription period unless they come back to you for a license.

So to summarize you can either expire documents (and they are no longer viewable once they expire) or you can expire customers (and they can continue to view the documents 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 documents



then you can instantly suspend their account and this prevents them from viewing your documents.

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

7.2.14 Do my customers have to be connected to the Internet in order to view my secure PDF documents?

No. You can allow secure PDF documents to be viewed off-line. All document controls (preventing copying, printing, etc.) are retained within the document 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 PDF documents for the first time.

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

7.2.15 Can I add existing customers to future secured PDF documents or publications?

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

7.2.16 What software do my customers need on their computers in order to view my secured PDF documents?

They need to download and install our free Viewer software - Safeguard Viewer. The Viewer 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 document(s) you have licensed them to use.

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

7.2.17.1 Upgrading Computers

Safeguard Viewer 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 Viewer 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 Viewer software, re-register, and continue using the product as before.

7.2.17.2 Changing Computers

If your customers change computers then you will need to allocate them an additional license so they can install the Viewer software and register with you again. The number of times a customer can install and register the Viewer 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](#).



7.2.18 The PDF source document has permissions already set. Does this affect Lizard Safeguard?

No. If a permissions password has been set then Safeguard Viewer ignores any existing permissions.

Please note however that you must not have a document open password set. If this is the case you will not be able to protect the PDF file.

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

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

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 PDC files in the browser without having to save them to disk first?

This setting can be set manually or by running a file that changes the Windows registry settings.

7.2.23.1 *Changing settings in the Windows registry*

If you are using the Safeguard system internally then most likely you will want to use this option. Two files are provided for this purpose.

PDCFile_no_confirm_after_download.reg - running this file causes IE to always open the file from the browser, without asking to save it.

PDCFile_default_confirm_after_download.reg - running this file causes IE to ask the user to open/save the PDC file. This is the default setting.

Download the ZIP file containing both files from

<http://www.LockLizard.com/Downloads/PDCFileOpenDownloadConfirm.zip>

7.2.23.2 *Manually changing settings*

If the user is not allowed to run REG files (limited user account), he/she can manually change this setting from the Windows File Explorer Folder Options window.

Select the Tools menu > Folder Options > File Types. Select the PDC 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 Safeguard Viewer license file email text which can be copied from <http://www.LockLizard.com/safeguard-Viewer-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.

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

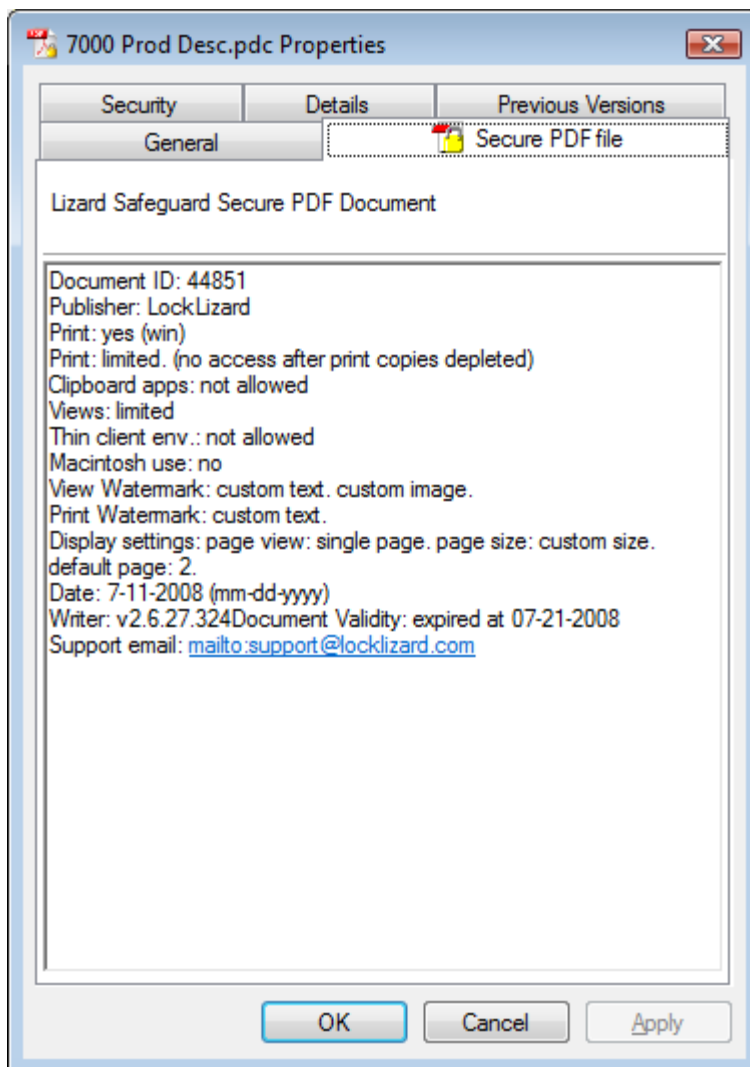
This information is displayed on the administration server under the Manage Documents section.

The screenshot shows a window titled "Manage protected documents" with a dark red header. Below the header, there are controls for "Sort by: date" (with a dropdown arrow), "Show details" (with a checked checkbox), and an "OK" button. The main content area is a table with the following details:

Title	LockLizard_Secure_PDF_Writer_v26
Published	07-05-2007 14:56:30
Expires	never
Status	valid
Document ID	16134
Validity check	never
Print	disabled
Open limitation	10 times
Publications	every customer has access

At the bottom of the window, there is a "Confirm deletion" checkbox (unchecked) and a "Delete" button.

You can also right-click on a protected PDF file (PDC file) in Windows File Explorer, select Properties and then the Secure PDF file tab.



7.2.26 When securing a pdf file if I have selected 'Disallow use on Macintosh operating system' do I, when setting print settings, still have to select 'Only Windows' when I want printing allowed?

No. If you select this option then users will not be able to open documents on Macintosh operating systems so they will not be able to print them.



7.2.27 Can a customer who has purchased a protected document change the file name with saving on 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.

7.2.28 Is there a way of having unique (trackable) watermarking for a customer with multiple licenses?

Yes, dynamic variables can be inserted into watermark text (user name, email address, company name, date/time stamp) and displayed at view/print time. The user name and email address combination is unique to each user so even if a customer has multiple licenses you can track which license was used when a document is viewed and/or printed.

7.2.29 If a .pdc 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 PDF documents 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, magazine articles, expert analyses, or similar.

The essential point is that the products are not sold as subscriptions where your customers are buying into regular deliveries of a report, a newspaper or magazine. 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 documents. Don't create a publication and start assigning documents to that publication. It will only add to your Administration without giving any benefits.

1.1 Setting document controls

There are two keys to retaining good document control.

The first key to maintaining control of documents 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 document references.)

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

The second key is to set the controls to be applied to the document 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.



You can then vary the document controls if you want to give individual customers something different – a short document access period (one day) if you want to give them a ‘taster’ before they buy, perhaps. You can later sell them the document 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 document 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 document to read, so maybe you give them two licenses so they can load the document 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 read the documents 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. 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 financial reports, weekly or monthly magazines, product documentation and updates and documentation. It also provides some suggestions over how to provide customers with 'one-off' copies of publication documents, 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 documents that belong to that publication while their customer status is valid.

2.2 Setting document controls

There are two keys to retaining good document control.

The first key to maintaining control of documents 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. Market Analysis June 04 or MrktAnal0604 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 document references.)

Before you secure the document 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 document 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 document to read, so maybe you give them two licenses so they can load the document onto two PCs in order to use it.



2.4 Controlling individual documents

The fact that you have allocated a document 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 documents 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 document 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 documents presented to us. If you do not change the title when protecting a document that is already protected you may find it difficult to know which document title has which controls.

2.5 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 read the documents 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 magazines, reports and regular publications, customers expect to be able to read any document that they were entitled to during their subscription period. Like books, you probably need to set the document expiry date to never so that people who have paid for a particular document 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 documents.

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 magazine 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, while they may have some copyright elements, are more usually trade secrets.

Trade secrets are much more important, for the enterprise, than copyright documents. 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 document 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 documents. These may be based around a research project or around a litigation or around the accounting function.

So as an administrator you will need to be able to allocate specific documents to internal groups who have a need to be able to use the document. 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 document controls

There are two keys to retaining good document control.

The first key to maintaining control of documents 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 document management system it will likely have a reference for the document that you should use to maintain consistency between environments.

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

A document 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 documents may be created for an ad-hoc group, and the individual members of that group can be allocated the document on a case by case basis if that happens. (If you do allocate the document to an internal group do remember that all the members of that group will be able to use the document wherever they get a copy from.)



The second key is to set the controls to be applied to the document to be those it is most commonly restricted to. For instance, if you are providing minutes of meetings or summaries of current 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 document to them individually, or if the group is big enough, protect the document 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 documents 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 documents, 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 documents at any time and with immediate effect.



3.4 Controlling individual documents

The fact that you have allocated a document 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 documents 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 document 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 documents presented to us. However, remember that if you do not change the title when protecting a document that is already protected you may find it difficult to know which protected document is which.

3.5 Providing legal access

In any organization there are occasions when you will be required to provide access to some of your internal documents to external bodies (government officials, accountants, lawyers, court officials and so on). Often these documents are electronic rather than paper, and you want to be sure that only those who have been authorized to use them can do so. This may include being sure that after a certain time or date the documents will no longer be accessible.

LockLizard controls are an ideal way of ensuring that while you are complying with granting lawful access to specific information, people other than those authorized cannot read or use that information. It also means that you have a record of all the documents that have been provided, know who has actually registered to use them and when. You can later add to the documents in that



publication and send the protected files to them by email since your information is not going to be compromised because it can only be used by the authorized recipients.



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 documents (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 – document 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 document 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 document because it will all be encrypted. So the filename you pick must have some relationship with the title of the document 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 Safeguard in Universal Coordinated Time (UTC time), which is very similar to Greenwich Mean Time unless you study physics.

The UCT Time when a document is first opened is recorded in the admin system. Where a document has a fixed end date it will cease at the same time as it was first opened (UCT Time) on the end date 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 Safeguard Viewer is opened and the document is opened;
- If the document is not closed and the expiration date and time are passed, that is not detected by the Viewer. It will only be detected when the Viewer opens a new document;
- Lizard Safeguard 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 document was opened by Lizard Safeguard. If this is attempted Lizard Safeguard will refuse to open documents 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 document 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. Safeguard Writer Utilities

Lizard Safeguard 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 Safeguard > PDF 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 Safeguard > PDF Writer menu, 'Change Account Password'.

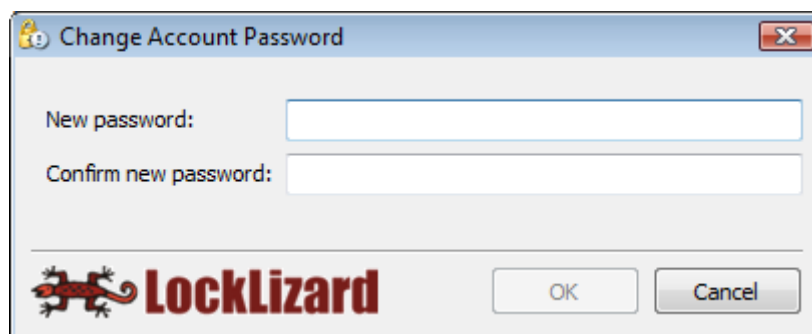


Diagram 34: Change Account Password dialog

There are a number of operational reasons why it may be necessary to change the access password to your Safeguard Admin 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 Admin 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 Safeguard Writer license email is sent to the email address that was entered when your Safeguard 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 Safeguard > PDF Writer > About menu > 'Check for Updates' button. Automatically, once a week, the Writer software will check to see if a new update for the Writer 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 Command Line and batch processing

Lizard Safeguard Command Line Utility is a paid option that allows you to automate all the actions that would otherwise have been carried out manually while protecting documents using the Writer GUI interface. Commands can be run from the DOS prompt or from a batch file without the need for manual intervention. All the options available through the Lizard Safeguard Writer GUI can be accessed through the command line utility.

This utility is available for separate purchase. A separate user manual is provided setting out in detail the commands, how to format them, and giving examples of usage. For more details see <http://www.LockLizard.com/product-add-ons.htm>.

If you would like to evaluate Lizard Safeguard Command Line then please email sales@LockLizard.com.

6.5 eCommerce integration and automation of the Administration system interface

Whilst the Lizard Safeguard 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 document management) and the LockLizard Administration service.

To support automation and 'loose' integration, Lizard Safeguard 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 documents 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 documents or publications.



You may want to use this utility in conjunction with the command line utility for a totally automated system where no administrator input is required. The overall protection process can be automated from initially protecting information through setting up users on the Administration system to specifying the publications and/or documents they can use.


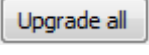
This utility is available for separate purchase. A separate user manual is provided setting out in detail the commands, and giving examples of usage, along with a sample PHP integration script for shopping cart integration. For more details see <http://www.LockLizard.com/product-add-ons.htm>.

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

6.6 Batch Document Upgrade

There are occasions when publishers will find it helpful to be able to require users to use the latest Viewer. These may be as a result of the additional new functionality, or for the purpose of improving the overall system security. Forcing users to upgrade to the latest version of the Viewer is good practice for resisting attempts by hackers and others to break earlier releases. Publishers should consider this a matter of good practice and should implement update programs on a regular basis for all their protected documents.

To facilitate this process a batch update feature is available from the Lizard Safeguard program group – Windows Start menu > LockLizard > Lizard Safeguard > PDF Writer > Batch Document Upgrade, that upgrades **PDC** files to the latest document version.

Select the  button to select the PDC files you want to upgrade and then the  button. Once you have upgraded your PDC files you can then distribute them to your customers.



6.7 Publisher Own Branding

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



Diagram 35: Safeguard Secure Viewer toolbar

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

Publisher own branding uses a web link to an image containing whatever image the publisher wishes to have displayed. That branding is transferred when the publisher's customer registers their license, and is also updated (if necessary) whenever that 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. However, it only changes on the customer's Viewer when the license for that publisher is checked for any reason.

NOTES:

- 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.
- The logo branding image must be a valid URL path to a JPG image.
Example: <http://www.locklizard.com/Test/160x22.jpg>
- 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.
- Closing the current document or opening another document with no custom logo will reset the toolbar logo to the default LockLizard one.



- If you want to add a hyperlink to your custom logo, so that when a user clicks on your logo they are taken to your web site, then enter the URL on the JPG comments field (on Vista, right click on the jpg file -> properties -> details -> comments field).

7.2.30 Viewer branding image

If publisher own branding is enabled on your account then the customization tab will make an additional field available called 'Viewer branding image'.

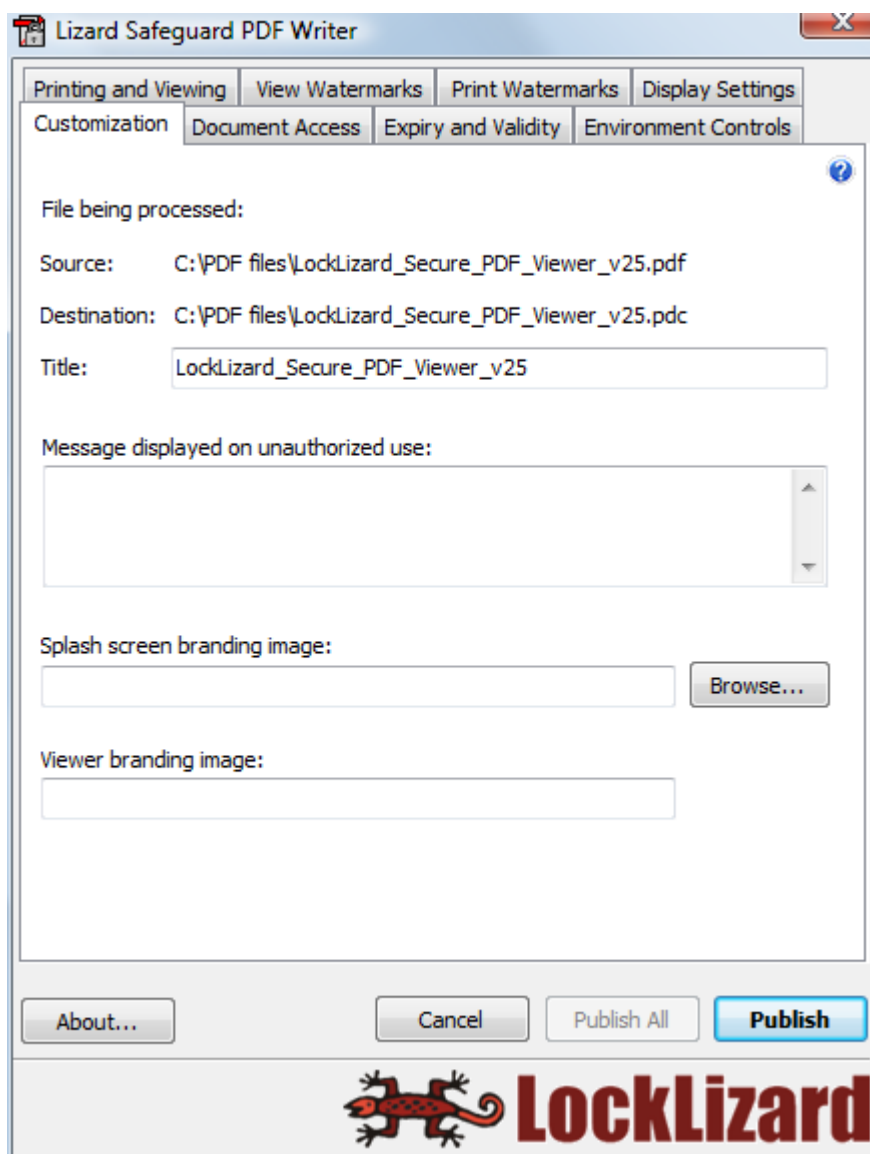


Diagram 36: Customization tab with Viewer branding image field



In the 'Viewer branding image' field enter the URL of a JPG image you want to use to replace the locklizard logo.