Multimedia Protector

Version: 2.0

This document was updated: 09.08.2008

Multimedia Protector

by Mirage Computer Systems GmbH

Table of Contents

Part IV   Part II - Enhanced Features

Part

I

1 Using this Tutorial

This tutorial presents an easy way of learning how to use Multimedia Protector. It is designed for authors, technical writers, documentation specialists, developers, and anyone else who wants to provide copy protected multimedia files.

This tutorial is no longer updated as there is a new main release available. Update to version 2.1 - click here for details.

While completing these lessons, you will learn how to develop a project, to deploy the project and to use advanced features like Web Activation or integration into online shops.

Part I gives you a foundation for using Multimedia Protector features, including using styles and creating links. Part II provides hands-on experience of using additional features like menu creator, online shop integration or using the Web Activation Server.

The Online Tutorial will be updated even after the release. In case you do not have Internet access, use the tutorial *Help-English.chm* on your hard disk.

Updates

Install the latest Service Pack 19

recently added

- Support of Adobe Lightroom 43 and new photo album Airtight 150
- Support of Quick Menu Builder 286
- Update your content 311
- Video Tutorial 14 for all basic steps
- You can use an USB stick to deliver copy protected files 312
- Password for EXE files 168
- Split project into multiple databases 305
- Support of CDMenuPro 284
- EXE files - read configuration data 173

Copyrights and Trademarks
Copyright © 2005-2008 Mirage Computer Systems GmbH. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or non-disclosure agreement 333. The software may be used or copied only in accordance with the terms of those agreements.

This documentation and the accompanying material is for informational purpose only and is property of Mirage Computer Systems GmbH, Aulendorf. Information in this document is subject to change without notice. The names of companies, products, people, characters, and/or data mentioned herein are fictitious and are in no way intended to

represent any real individual, company, product, or event, unless otherwise noted.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Mirage Computer Systems.

All products and company names mentioned herein may be the trademarks of their respective owners.
http://www.mirage-systems.de

Multimedia Protector Version: 2.0

This document was updated: 09.08.2008

Part

II

2 Video Tutorial

Multimedia Protector also comes with a video tutorial. The tutorial covers the basic steps and is the perfect start if you don't like reading.

Tutorial - First Steps for Beginners

The video tutorial requires **audio** (headset or PC speaker). The Tutorial was made with Adobe Captivate 26 (swf files) and is protected with Multimedia Protector.

Download Tutorial (20 MB)

After the download, the files are copied to a temporary folder and the tutorial starts automatically.

Instead of downloading, you can view the Tutorial as a standard flash file in the Browser (unprotected version).

View Tutorial in the Browser

Tutorial - Product Activation

This tutorial demonstrates, how the user activates the product - using Online, E-Mail, Fax or phone activation.

[Start Video Tutorial for product Activation](#)

Part III

3   Part I - Learning the Basics

3.1   About Part I

The lessons in the first part of this tutorial introduce Multimedia Protector's essential functions. After completing them, you'll be familiar with creating and configuring a basic project. This tutorial comes with a project already created for you (there's only a minimal amount of typing required at the beginning of Part I) - the project name is ***flash-demo. mme***.

In Part I, you will learn:

- [About] 20 Multimedia Protector
- [Copy Protection, Licensing, Evaluation] 22
- [Getting started] 50
- [Screen - Settings] 58
- [Screen - Licence Information] 69
- [Screen - Image] 77
- [Screen - Data Import] 80
- [Screen - Player Options] 85
- [Screen - Save] 89
- [Screen - Administration] 98
- [Create a New Project] 122

3.2   Latest Updates

The latest main program version is version 2.0.

[Display Modification History version] **2.0**

⊟ Check for Updates / Update eligibility

If you are using a trial version, you can use the download link you got with an e-mail, to download th

Use the [automatic update check] 101 to ensure that you are always working with the latest version.

You will find your current version number in the screen *administration*, using the *About Multimedia*

Note: Updates can only be applied if your update subscription has not expired. You find your subsc administration,using the [Show License Information] 108 link. The module **Online Update** must not be not today's date to make the comparison but the inbuilt release program.

Example
- Release date 02/14/2008 (14.02.2008)
- Online Update eligibility expired 02/20/2008 (20.02.2007)
- Today: 03/16/2008 (16.03.2008)

Although today the Online Update eligibility has expired, it was not expired at the release date. The
that you can install an update at any time you like.

Subscription Expired

If your subscription has expired but you bought a subscription, check your order confirmation e-mail
Key for the update subscription. Apply this key [234] in your **currently installed** Multimedia Protector
confirmation e-mail, contact cs@cleverbridge.com.

Download Update
The latest updates can be downloaded here

Update Procedure

- Download the update from the website or through the automatic updater
- Start the file **mpupdate20.exe**
- You have to select the folder with the **old** Multimedia Protector version (default ..Multimedia Protector\1.3). This folder is needed to check the update eligibility. After this initial check you can install Multimedia Protector
- **We strongly recommend installing the version on a new directory (default is ..\2.0) and never install it on the directory with the old version**

3.2.1 Service Pack 2.0.1

The service pack installs automatically if you have Automatic Update Check enabled. You also can manually check for updates. 101

Modifications of this Service Pack.

If you don't have internet access on the PC where you are using Multimedia Protector, you can install the update as follows:

- Click here to download update
- Copy the file mpupdate201.exe into the installation folder of Multimedia Protector - default is ..\Multimedia Protector\2.0 or ..\Multimedia Protector Premium\2.0
- Start mpupdate201.exe

3.3 Installation - Windows Vista - System Requirements

The Multimedia Protector installer adds a program manager group called Multimedia Protector 2.0.

Multimedia Protector requires a read/write access to the installation folder (default .. \programs\Multimedia Protector 2.0). The Windows Vista standard user does not have this authorization. Multimedia Protector adds it during installation.

The same applies to the distribution of the Multimedia Player which runs on the user system.

If your secured application is stored on a network, the administrator has to add read/write access for all users.

If you use a CD installation 89, the Multimedia Player will add the necessary authorization automatically during program start.

Multimedia Protector runs on **Windows NT to Windows Vista** and always needs the latest service packs.

 A user does not need to have a flash or another player like PPT or PDF reader installed. All necessary components are included in the Multimedia Player, no installation

will be required and the protected application can be started even directly from CD.

3.4 Multimedia Protector - Background Information

3.4.1 About Multimedia Protector

Multimedia Protector allows to protect **Flash, Video, Music** and other file types like **PDF or Office Documents (Word, Powerpoint).** Every document that can be printed with a printer driver can be protected. Multimedia Protector offers evaluation features and software copy protection - ALL IN ONE.

All files of a project (e.g. Flash project with Video, Music and other files) are **encrypted into one single file** [160]. The files are played in the memory to prevent that the original files can be captured from a temporary folder while played. A unique Multimedia Player [21] is used to play the files.

Multimedia Protector comes with predefined workflows [316] - no programming is necessary.

All types of license and copy protection is supported:

- Time limited versions [24]
- Software Copy Protection [22]
- Network license per PC and per User [23] (only Premium Edition)
- Online Activation [324] (only Premium Edition)
- Integration in Online shops [201] (only Premium Edition)

A user does not need to have a flash or another player like PPT or PDF reader installed. All necessary components are included in the Multimedia Player, no installation will be required and the protected application can be started even directly from CD.

3.4.2 Files which can be protected

The Multimedia Protector offers a native support of **SWF** (Macromedia Flash) files, **FLV, JPEG, EXE, MP3** and other file types by converting these files to flash files.

At least one SWF, FLV or EXE file is needed. This file can start any video, music or image files that are supported by the standard flash players.

See chapter - How to convert a file [174] - for details.

Below find a list of all supported file types and the steps which are necessary to protect each file.

- AVI, MPEG, Quicktime, Windows Media Video [179]

- CHM [181]
- Executables - EXE files [165] (only Premium [56] version)
- FLV (Video) [176]
- HTML [182]
- JPG (Image) [176]
- MP3 (Music) [177]
- PDF [183]
- PPT (Powerpoint) [186]
- PPT with Hyperlink [190]
- SWF (Flash) [176]
- WAV [193]
- Word, Visio, Excel, Office Documents [194]
- Word with Hyperlink [194]

3.4.3   The Multimedia Player

The Multimedia Player is the piece of software which runs on the customer machine. It includes the in-built functionality of playing flash files in the memory (and not on the hard disk) and performs the defined licensing [23] and copy protection [22] schemes.

The Multimedia Player is a unique application which controls:

- Evaluation Options [24]
- Copy Protection [22]
- Network licensing [23]
- Content Protection [25]

The Multimedia Player and the encrypted file can be distributed on CD / DVD or via a download link. It **does not require installation or registration on a PC** - just start the Multimedia Player to display the protected files. It also does not require the installation of a flash player. Flash version 9 is supported.

Even while played a file is protected. It is not temporarily stored on the hard disk drive but played in a kind of virtual disk within the memory.

The Multimedia Player comes with a ready to go menu creator [273] which allows to select single files - e.g. make a menu for chapter I, chapter II, chapter III, and to define which files to be started.

The Premium version comes with an ready to go installer tool, which offers an automated installation and creates a program manager group.

This is the icon of the Multimedia Player

A user does not need to have a flash or another player like PPT or PDF reader installed. All necessary components are included in the Multimedia Player, no installation will be required and the protected application can be started even directly from CD.

3.4.4 Copy Protection, Licensing, Evaluation

3.4.4.1 Copy Protection - How it works

Multimedia Protector offers a media independent protection - the media itself like CD / DVD, download link or USB stick is not modified or protected. The copy protection does not prevent, that you can copy the data from CD to the hard disk but **it prevents that the application can be started on multiple machines.**

The license is bound to a **specific hardware ID of the PC** (e.g. MAC address). The Multimedia Player will start only, if the license file 160 is located on the specified hardware. This works both in a single user environment and in a network environment.

The advantage of a software copy protection is:

- media independent - distribute the application via CD / DVD, download, USB stick or other media where you can store files
- the application can run without a CD / DVD inserted
- you can produce even one single CD - no need to have 1000 CDs duplicated at once
- no problems with the CD / DVD drives or operating systems because no physical modification (like modification of the CD) is done

The additional step, which is necessary, is to transfer the hardware IDs. With Online activation 321, this step is automated. With activation by e-mail, 131 fax 132 or phone 133 this is a manual process.

The following hardware IDs are supported:

- Volume ID
- MAC Address of the network adapter
- Hostname
- Netbios Name
- Volume ID and UNC Pathname
- MAC Address and UNC Pathname

Details as well as pros and cons about each criteria can be found in Part II - Details about Copy Protection 153

Copy Protection is enabled automatically (default option), but it is possible to make a full version without Copy Protection (see: How to protect the content but do not use Copy Protection? 242) and to protect the content only.

3.4.4.2   Available License Options

Multimedia Protector supports 3 different types of license:

- Licence per User
- Licence per PC (only option in *Standard* version)
- Licence per Concurrent User

Licence per User (Person)

The Windows User name is licensed. Each user starting the Multimedia Player will need a license. The windows user name is written into the license file 24 .

This type of license requires a Licence for each User, but only one Licence per PC. If 2 users would share 1 PC this would result in 2 user licenses, but only in 1 PC license.

Licence per PC

This is often the default license type. Each PC starting the Multimedia Player needs a license. The PC name is written into the license file 24 . This type results in a smaller number of licenses than with the Licence per User type (e.g.: if 2 users share 1 PC, 2 Licences per User are needed, but only 1 PC license).

If the application runs on a Citrix / Terminal server, the hostname of the local PC and not the hostname of the server will be used.

Licence per Concurrent User

This is a typical license in a huge multi-user environment. The Multimedia Player can be installed on an unlimited number of machines, but the number of concurrent (simultaneous) users are counted and limited to the specified number. The license is assigned only as long as the Multimedia Player is running. If the Multimedia Player is terminated, the license is available again. If a user logs in with the same user name on 2 different PCs, 2 licenses will be used.

Multimedia Protector offers a sophisticated verification of concurrent user licenses. Machines that hang or have crashed are detected and the license is released. This is done automatically through the Multimedia Player.

 The network license and Licence per User as well as Licence per Concurrent User is available only in the Multimedia Protector *Premium* 56 version.

 Concurrent user is not supported when the main application is an EXE file 165 .

All license types also work in a Terminal Server and Citrix environment. The license information can be displayed within the Licence Viewer 139 .

See also

3.4.4.3 Evaluation Options

The evaluation version allows starting the Multimedia Player for a specific time without registration. During each program start the days left for evaluation are displayed.

The following evaluation options are possible

- Limit number of days after installation
- Limit until a specified expiry date
- Just display evaluation screen to register, but always allow a program start
- No evaluation version - registration is mandatory
- No evaluation version - Multimedia Player can be started without registration (content protection only)

3.4.4.4 The License File

Multimedia Protector uses a license file (extension .lic) for storing license information. This file is modified during the program start and during activation. The user needs **read and write** access for the file.

This is especially important in a network environment or if distributing the application via CD/DVD.

 Always make a backup of the license file if you start the Multimedia Player directly. The license file is modified with each start and cannot be used any longer for distribution.

3.4.4.5   Content Protection

The file content and the file itself is protected. At no time there will be an access to the original format like flash, PDF or Word.

Content Protection

All files are imported into **one single data file which is encrypted**. Only this data file is distributed and not the original files. This makes sure that only the encrypted data file is visible on the distribution media, but the data file itself is not accessible.

Access Protection

The weak point of any protection tool is the timeframe during which the file is displayed in the player. Normally, a player copies the file to a temporary folder on the hard disk drive which can be detected and the file can be captured unprotected.

Not so with Multimedia Protector. The file is directly loaded from the encrypted database into the memory. **At no point during displaying the file will be accessible on the hard disk drive.**

The Multimedia Player runs in a mode which does not allow **saving and printing** the file.

🔵 The access protection is not available for <u>EXE (executables) files</u> 165.

3.5   Favored Flash/HTML/Conversion Tools

If you use tools which produce a SWF file, the swf file should actually run with the Multimedia Player. Sometimes, special settings will be necessary. We have tested some tools and described the necessary settings.

- <u>Adobe Captivate</u> 26 (Adobe)
- <u>Authorware</u> 26 (Macromedia)
- <u>Articulate Presenter</u> 27 (Articulate)
- <u>Camtasia</u> 32 (Techsmith)
- <u>Zinc</u> 37 (MDM)
- <u>Director</u> 37 (Adobe)
- <u>Flashform</u> 37 (Rapid Intake)
- <u>Flashpaper</u> 39 (Adobe)
- <u>Flash Video</u> 39 MX (Moyea)
- <u>Mediator</u> 47 (Matchware)

- HTML Executable ⌐42⌐ (gdgsoft)
- SWF Studio ⌐48⌐ (Northcode)
- Swftools ⌐48⌐ (swftools.org)
- Toolbook ⌐48⌐ (Sum Total)
- Turbodemo ⌐50⌐ (balesio)

3.5.1 Adobe Captivate (Adobe)

For protecting files created with Adobe Captivate (www.adobe.com) you have 2 different options:

Create Flash file(s)

As Adobe Captivate can create flash files, this is the recommended option. It is the most secure solution but could have limitations if you use special functions, which are not supported by the Multimedia Player.

- Save the project as flash (swf)

- Now import ⌐83⌐ **ALL** ⌐83⌐ files ⌐83⌐ (swf, html, js..) and make **xy_skin.swf** the start file.

Live Tutorial (flash)

Create executable (EXE) file

Create one executable file and protect the executable file with Multimedia Protector. See chapter: Secure standalone exe file⌐166⌐. This supports all options of Adobe Captivate but with the limitation of the EXE protection⌐165⌐.

3.5.2 Authorware (Macromedia)

For protecting files created with Authorware you have 3 different options:

1. Generate a swf flash. If the file runs in the standard flash player, it will run with Multimedia Protector. This is the most secure solution to protect the **content of the flash file** but could have limitations if you use special functions, which are not supported by the standard flash player
2. Create one executable file and protect the executable file with Multimedia Protector. See chapter: Secure standalone exe file⌐166⌐. This supports all options of Authorware but with the limitation of the EXE protection⌐165⌐

3. Make a Source Code integration using the Licence Protector DLL. This is the most flexible solution - www.Licence-Protector.com but requires development work. It allows to protect **application features.**

3.5.3 Articulate Presenter (Articulate)

To secure applications created in Articulate Presenter (www.articulate.com) the following steps are necessary.

☐ Select Publish in Articulate

Select the option CD, check: *Create Autorun files* and press *Publish*

☐ Move Folders

Articulate creates the following folder structure.

data	22.08.2007 19:08	Dateiordner	
player	22.08.2007 19:08	Dateiordner	
articon.ico	27.07.2007 11:38	Icon	22 KB
artpresenter.exe	27.07.2007 11:38	Anwendung	36 KB
autorun.inf	22.08.2007 19:08	Setup-Informatio...	1 KB
player.html	22.08.2007 19:08	HTML-Datei	11 KB

The folder data should look like this

swf	22.08.2007 19:17	Dateiordner	
playerproperties.xml	22.08.2007 19:17	XML-Dokument	12 KB
presentation.xml	22.08.2007 19:17	XML-Dokument	15 KB

It seems that Articulate uses some special directory functions which are not working within Multimedia Protector. You have to move folders.

Move the content of the folder **player** to the folder **data**. The folder data will have this structure now.

📁 swf	22.08.2007 19:17	Dateiordner	
ast_alert.swf	27.07.2007 11:38	Flash Movie	45 KB
ast_loader.swf	27.07.2007 11:38	Flash Movie	46 KB
ast_navicons.swf	27.07.2007 11:38	Flash Movie	2 KB
ast_notes.swf	27.07.2007 11:38	Flash Movie	10 KB
ast_remote.swf	27.07.2007 11:38	Flash Movie	10 KB
ast_vidpresenter.swf	27.07.2007 11:38	Flash Movie	73 KB
attach.html	27.07.2007 11:38	HTML-Datei	1 KB
blank.html	27.07.2007 11:38	HTML-Datei	1 KB
button.gif	27.07.2007 11:38	GIF-Datei	4 KB
flashcommand.js	27.07.2007 11:38	JScript-Skriptdatei	21 KB
infopanel_standard.swf	27.07.2007 11:38	Flash Movie	44 KB
logopanel.swf	27.07.2007 11:38	Flash Movie	2 KB
mod_colorizer.swf	27.07.2007 11:38	Flash Movie	41 KB
mod_colorizer_lib.swf	27.07.2007 11:38	Flash Movie	21 KB
mod_engage.swf	27.07.2007 11:38	Flash Movie	19 KB
mod_exit.swf	27.07.2007 11:38	Flash Movie	27 KB
mod_reference.swf	27.07.2007 11:38	Flash Movie	36 KB
null.swf	27.07.2007 11:38	Flash Movie	1 KB
playerproperties.xml	22.08.2007 19:17	XML-Dokument	12 KB
playershell.swf	27.07.2007 11:38	Flash Movie	5 KB
presentation.xml	22.08.2007 19:17	XML-Dokument	15 KB
slidegroup.swf	27.07.2007 11:38	Flash Movie	2 KB
stealthray.swf	27.07.2007 11:38	Flash Movie	117 KB
zoom.html	27.07.2007 11:38	HTML-Datei	2 KB

⊟ Copy Start Application

To run with Multimedia Protector, a special start application is needed. Copy the file **startarticulate.swf** and the configuration **file config.xml** from the Multimedia Protector installation folder ...**tools\articulate** to your folder **..\data**

The folder \data contains now these files:

- All original files from the folder data and the subfolder \swf
- All files from folder \player
- Startarticulate.exe and config.xml

📁 swf	22.08.2007 19:17	Dateiordner	
ast_alert.swf	27.07.2007 11:38	Flash Movie	45 KB
ast_loader.swf	27.07.2007 11:38	Flash Movie	46 KB
ast_navicons.swf	27.07.2007 11:38	Flash Movie	2 KB
ast_notes.swf	27.07.2007 11:38	Flash Movie	10 KB
ast_remote.swf	27.07.2007 11:38	Flash Movie	10 KB
ast_vidpresenter.swf	27.07.2007 11:38	Flash Movie	73 KB
attach.html	27.07.2007 11:38	HTML-Datei	1 KB
blank.html	27.07.2007 11:38	HTML-Datei	1 KB
button.gif	27.07.2007 11:38	GIF-Datei	4 KB
config.xml	22.08.2007 18:38	XML-Dokument	1 KB
flashcommand.js	27.07.2007 11:38	JScript-Skriptdatei	21 KB
infopanel_standard.swf	27.07.2007 11:38	Flash Movie	44 KB
logopanel.swf	27.07.2007 11:38	Flash Movie	2 KB
mod_colorizer.swf	27.07.2007 11:38	Flash Movie	41 KB
mod_colorizer_lib.swf	27.07.2007 11:38	Flash Movie	21 KB
mod_engage.swf	27.07.2007 11:38	Flash Movie	19 KB
mod_exit.swf	27.07.2007 11:38	Flash Movie	27 KB
mod_reference.swf	27.07.2007 11:38	Flash Movie	36 KB
null.swf	27.07.2007 11:38	Flash Movie	1 KB
playerproperties.xml	22.08.2007 19:17	XML-Dokument	12 KB
playershell.swf	27.07.2007 11:38	Flash Movie	5 KB
presentation.xml	22.08.2007 19:17	XML-Dokument	15 KB
slidegroup.swf	27.07.2007 11:38	Flash Movie	2 KB
startarticulate.swf	24.01.2007 14:23	Flash Movie	56 KB
stealthray.swf	27.07.2007 11:38	Flash Movie	117 KB
zoom.html	27.07.2007 11:38	HTML-Datei	2 KB

⊟ Import Files

Now <u>import</u> [80] all the files from the project folder **data** and mark **startarticulate.swf as startfile** us
starting file. A red icon signals the start file.

The import screen would show the following files.

If you are using additional files from an Engage project, these files will not work because they run only in a Browser based application.

If you use .flv files inside the presentation, convert the .flv files to flash - see video converter. [179]

3.5.4 Camtasia (Techsmith)

For protecting files created with Camtasia ([http://techsmith.com)](http://techsmith.com) you have 2 different options:

Create Flash file(s)

As Camtasia can create flash files, this is the recommended option. It is the most secure solution but could have limitations if you use special functions, which are not supported by the Multimedia Player.

- Select ▭ *Custom production settings*

  Select Custom production settings

- Select ☐   Flash/FLV - Adobe Flash Output

Select Flash/FLV - Adobe Flash output

- Select ⊟ Flash Template and Options

- Use option ⊟ Flash . Select Flash Version 7 or higher

- Now import ⁸³ **ALL** ⁸³ files ⁸³ (swf, html, js..) and make **xy-controller.swf** the start file

If the result of the flash video is not satisfying, create an AVI video in Camtasia and convert it with Moyea Flash Video MX - http://www.moyea.com to the swf format.

Create executable (EXE) file

Create one executable file and protect the executable file with Multimedia Protector. See chapter: Secure standalone exe file¹⁶⁶. This supports all options of Camtasia but with the limitation of the EXE protection¹⁶⁵

As Camtasia flash files are often very large we recommend splitting the files into multiple projects (e.g. lessons).

3.5.5   Zinc (MDM)

For protecting files created with Zinc you have 3 different options:

1. Generate a swf flash. If the file runs in the standard flash player, it will run with Multimedia Protector. This is the most secure solution to protect the **content of the flash file** but could have limitations if you use special functions, which are not supported by the standard flash player
2. Create one executable file and protect the executable file with Multimedia Protector. See chapter: [Secure standalone exe file]⌐166⌐. This supports all options of Zinc but with the [limitation of the EXE protection]⌐165⌐
3. Make a Source Code integration using the Licence Protector DLL. This is the most flexible solution - www.Licence-Protector.com but requires development work. It allows to protect **application features**

3.5.6   Director (Adobe)

For protecting files created with Macromedia Director you have 3 different options:

1. Generate a swf flash. If the file runs in the standard flash player, it will run with Multimedia Protector. This is the most secure solution to protect the **content of the flash file** but could have limitations if you use special functions, which are not supported by the standard flash player
2. Create one executable file and protect the executable file with Multimedia Protector. See chapter: [Secure standalone exe file]⌐166⌐. This supports all options of Macromedia Director but with the [limitation of the EXE protection]⌐165⌐
3. Make a Source Code integration using the Licence Protector DLL. This is the most flexible solution - www.Licence-Protector.com but requires development work. It allows to protect **application features.**

3.5.7   Flashform (Rapid Intake)

For protecting files created with Flashform (http://www.rapidintake.com) you have 2 different options:

Create Flash file(s)

As Flashform can create flash files, this is the recommended option. It is the most secure solution but could have limitations if you use special functions, which are not supported by the Multimedia Player. Right now, FLV files loaded within Flashform are not supported.

☐ Select Publish Course

Select Publish Method **CD-ROM**, Check - *Use Flash Cookies* and Operating System *Windows*.

- Now import ⟦83⟧ **ALL** ⟦83⟧ files ⟦83⟧ (swf, html, js..) and make **player.swf** the start file

Create executable (EXE) file

Use the player.exe which comes with flashform and protect the executable file with Multimedia Protector. See chapter: Secure standalone exe file ⟦166⟧. This supports all options of Flashform but with the limitation of the EXE protection ⟦165⟧

☐ Select Publish Course

Select Publish Method **CD-ROM**, Check - *Use Flash Cookies* and Operating System *Windows*.

Publish Settings

Publish Course

Publish Method   CD-Rom   ▼   Publish Help

CD-Rom

Once you have published the course, burn all the files to a CD-Rom. To start the course the learner must access the player.exe file (windows) or player.hqx (mac). Use Flash Cookies for bookmarking

Use Flash Cookies   ☑

Operating System   Windows   ▼

[Publish]   [Cancel]

- Now import 83 **ALL** 83 files 83 (exe, swf, html, js..) and make **player.exe** the start file

3.5.8 Flashpaper (Adobe)

Printer driver to create a flash file from any document. Works perfect if you do not have hyperlinks inside the document.

See chapter: Office documents 194

3.5.9 Flash Video MX (Moyea)

This converter allows you to convert videos to flash (swf). During the conversion process you can add a player control (mandatory for Multimedia Protector) and you can define the video quality, screen resolution etc.

⊟ Define Video Quality

You can define the quality of the video on this page

☐ Define Output

Select Generate SWF

Then select a Player control (toolbar which allows to start, stop, pause, rewind). This is mandatory because Multimedia Protector does not provide an player toolbar. You can select a design and a lot of other player settings.

⊟ Player Settings

- Now import the files ⌐83⌐ (swf) and make the .swf file the start file. If you have multiple videos then add a menu ⌐273⌐ and make the menu the start file.

3.5.10 HTML Executable (gdgsoft)

HTML Executable from gdgsoft (www.htmlexe.com) creates from HTML files one single exe file. This exe file can now be licensed and protected by Multimedia Protector.

- Create the EXE file with HTML Executable
- Protect the executable file with Multimedia Protector. See chapter: Secure standalone exe file ⌐166⌐

3.5.11 Lightroom (Adobe)

For protecting files with Adobe Photoshop Lightroom (http://www.adobe.com/products/photoshoplightroom/) the following steps are necessary.

Select a Gallery

First select the option **Web**, and then one of the standard galleries.

Depending on the selected gallery, the steps are a little bit different.

⊟ Airtight AutoViewer

Import ⁸³**ALL** ⁸³ files ⁸³ (swf, html, js..) and make **viewer.swf** the start file

- Airtight PostcardViewer

    Import [83] **ALL** [83] files [83] (swf, html, js..) and make **viewer.swf** the start file

☐ Airtight Simple Viewer

Import ⁸³ **ALL** ⁸³ files ⁸³ (swf, html, js..) and make **viewer.swf** the start file

□ Lightroom Flash Gallery

- First copy from the folder **...\tools\lightroom** all files to your folder with the Lightroom Flash Gallery

- Import [83] **ALL** [83] files [83] (swf, html, js..) and make **flashstarter.swf** the start file

3.5.12 Mediator (Matchware)

For protecting files created with Mediator you have 2 options:

1. Generate a swf flash. If the file runs in the standard flash player, it will run with
   Multimedia Protector. This is the most secure solution but could have limitations if you
   use special functions, which are not supported by the standard flash player
2. Create one executable file and protect the executable file with Multimedia Protector.
   See chapter: Secure standalone exe file ⌷166⌷. This supports all options of Mediator but
   with the limitation of the EXE protection ⌷165⌷

3.5.13 SWF Studio (Northcode)

For protecting files created with SWF Studio you have 2 options:

1. Generate a swf flash. If the file runs in the standard flash player, it will run with Multimedia Protector
2. Create one executable file and protect the executable file with Multimedia Protector. See chapter: [Secure standalone exe file](#)₁₆₆.

3.5.14 swftools (swftools.org)

This is a freeware tool to convert PDF files into flash.

For more details see chapter: [PDF conversion to flash](#)₁₈₄

3.5.15 Toolbook (SumTotal)

To secure applications created in Toolbook (www.toolbook.com) the following steps are necessary.

Copy your .spo file (this file will be protected) to a new project folder.

▭ Copy Start Application and .SPO File

To run with Multimedia Protector, a special start application is needed. Copy the file **starttoolbook.exe** and the configuration **file configstarttoolbook.ini** from the Multimedia Protector installation folder ...**tools\\toolbook** to your folder **..\\project**

The folder \\project contains now these files:

- Your .spo file
- starttoolbook.exe and configstarttoolbook.ini

▭ **Configure INI File**

Open **configstarttoolbook.ini** with a standard editor. You have to change these item:

[Start]
File=**sample.spo** (name of your .spo file)
FilenameTaskManager=**Sample Application** (name of your toolbook application which is displayed in the title bar - normally the application name. This name is also displayed in the task manager.)

Save the configuration file.

▭ Import Files

Now [import](#)₈₀ all the files from the project folder and mark **starttoolbook.exe as startfile** using the

file. A red icon signals the start file.

The import screen would show the following files.

3.5.16 Turbodemo (balesio)

For protecting files created with Turbodemo (www.turbodemo.com) you have 2 different options:

Create Flash file(s)

As Turbodemo can create flash files, this is the recommended option. It is the most secure solution but could have limitations if you use special functions, which are not supported by the Multimedia Player.

- Save the project as flash (swf)

- Now import 83 **ALL** 83 files 83 (swf, html, js..) and make **xy.swf** the start file

Create executable (EXE) file

Create one executable file and protect the executable file with Multimedia Protector. See chapter: Secure standalone exe file 166 . This supports all options of Turbodemo but with the limitation of the EXE protection 165 .

3.6 Getting started

In this lesson, you will open the tutorial project that is installed with Multimedia Protector and familiarize yourself with the work environment. Using a sample file Flash-Demo will allow you to begin to explore Multimedia Protector .

3.6.1 Start Screen

After starting Multimedia Protector the main start screen appears. You can select a Skin and a Language to customize Multimedia Protector.

Skin
A skin changes the look & feel (design) of the application. Just try to find the one you like best.

Language
Select your language.

Skin with MacOS

3.6.2 Welcome Screen

By default, the Welcome Screen is opened in addition to the Start Screen 50 . This screen provides you with:

- Links to most popular FAQs to get started
- Link to the Online Knowledge Base
- Link to updates

The screen can be deactivated by checking *Do not display this Quick Introduction help anymore when starting* and activated again in the Administration Screen, Miscellaneous TAB, *Display Quick Introduction help*

3.6.3 Online Help / Tutorial

You can start the Online Help / Tutorial any time within Multimedia Protector by clicking on the icon ⊘.

3.6.4 Opening a Project

Within the <u>Start Screen</u> 50 , you can either

- Open the last project
- Browse the file directory to select a project

Open the last Project

On the right screen, the last used project is displayed. Just click on the project name to open the project.

Select a Project

Click on **Open existing Project.** A windows file dialog will appear. You can open all files

with the extension **.MME.** Open **Flash-Demo.MME** to work with this tutorial.

It is not possible to open the same project twice at the same time.

3.6.5 Demoversion

The demo version has the following restrictions:

- Limited by days - normally 15 days
- During the program start of the Multimedia Player a message is displayed: **This is an unregistered Version of Multimedia Protector**

All other parts of the application are fully functional.

Demo versions are available for the *Standard* and Premium version on the website www.Multimedia-Protector.com. See: Standard or Premium Version 56 ? for differences.

The Online Activation can be tested with the project *flash-demo.mme* (only with Premium version).

3.6.6 Standard or Premium ?

Multimedia Protector comes in a *Standard* and *Premium* version. The *Standard* version is designed for single user installations and activation of the software by E-Mail, Fax or Phone.

The *Premium* version includes more functionality:

- Network license 23 per User, PC and Concurrent User
- Online Activation 60 option - requires Web Activation Server 324
- Shop Integration 201

Check out the feature comparison matrix which provides you with all the details to decide, which version is right for you.

3.6.7 The work environment

Take a moment to familiarize yourself with the work environment:

In the upper pane window the configuration screen is displayed. The selected category like Settings or Licence Information is displayed in the heading section of the configuration screen.

In the lower pane window the navigation buttons can be found. They allow to select a category like Settings or Licence Information and provide access to the online help.

3.6.8   How TOs and FAQ

You find **F**requently **A**sked **Q**uestions as well as tips and tricks in Part II, chapter How TOs and FAQ 227.

3.6.9   Sample Projects

Multimedia Protector comes with samples for a wide range of applications. You find the samples in the installation directory of the folder .**\demodata.** To work with the samples, open 54 the .mme file, press the button **Save,** then **Distribute / Save** 89 and finally **Test Project Now** 92

Document Sample

Document-Demo.MME - Start Menu (created with Menu Creator 273) with different document types (PDF 183, Word 194, PPT 186, Video FLV 176).

This project allows testing the online activation with the Web Activation Server 324.

- Open 54 the project document-demo.mme in the folder ..\demodata
- Create a Serial Number 110

- Save the project |89|

Now make a live test. Copy the files from the folder ...\demodata\document-demo\deploy to a test directory and start document-demo.exe.

- Activate the product online |321| using the Serial Number you have created
- Find your activation on the Web Activation Server using the demo account of the Web Administration Interface |326|

Other samples

- Flash-Demo.MME - Flash file with animation and music
- FLV.MME - Video in FLV format |176|
- Photo-Album1-Demo.MME - Photo Album Sample 1 |147|
- Photo-Album2-Demo.MME - Photo Album Sample 2 |148|

3.6.10 Screen - Settings

Define Basic program settings like program name and activation options.

3.6.10.1 Basic Settings

The upper part of the Settings screens allow defining the basic product settings:

Product Name

This name is displayed in the registration screens and in the title bar of the Multimedia Player.

Company Name

The company name is displayed in the registration screens.

Link to Web Shop

If a link is specified, a BUY button will be displayed in the registration and activation screens. This link should move you directly to the order page.

Name of the Multimedia Player

This is the name which is assigned to all distributed files 160 (Multimedia Player and files to distribute). It can be different from the product name.

Example:

Product name: Multimedia Flash Demo
Name of the Player: Flash-Demo

Default Customer Name

Name that is displayed in the Licence Viewer, until the Serial Number and real customer name is typed in.
Default: Evaluation

Link to Help

If this hyperlink is specified, a Help Icon ⑦ will be displayed for all product activation screens. The link should direct to a website that offers help during the registration process.

Default: http://www.helpserver.biz/onlinehelp/lpmme/2.0/player/help/index.html . This offers a generic help for the registration process including a Video Tutorial. You can alternatively use your own online help.

Start Video Tutorial for product Activation

Screen - Settings

3.6.10.2 Activation Options

3.6.10.2.1 About Activation

To activate a product means turning on Copy Protection [22] and running the software with the specified license options [23].

There are 4 options to activate a product

- Online Activation [63] via Web Activation Server
- Activation by E-Mail [62]
- Activation by Fax [66]
- Activation by Phone [68]

Which activation method to choose depends on the line of business and the number of

copies sold. The activation options can be combined, e.g. use 3 out of the 4 options. You can define a default activation method with the option *Use as default option*.

Online Activation
Preferred option for medium and large sales.

+ Allow automating the delivery process
+ No administration personnel needed
+ works 24 hours - customer can activate any time
- Internet connection required
- Could be blocked by application firewalls
- Web Activation Server needed

Activation by E-Mail
Preferred option if Online Activation is not available. Should be used as an second option in combination with Online Activation

+ Almost available on any PC
+ No firewall problems
- Internet connection required
- Customer has to wait for the Unlock Key
- Administration personnel needed
- Automation of delivery process not possible

Activation by Fax
Alternative option if Online Activation is not available.

+ Good option as an alternative activation method
- Fax required
- Customer has to wait for the Unlock Key
- Administration personnel needed
- Automation of delivery process not possible

Activation by Phone
Alternative option if Online Activation is not available.

+ Almost everybody has a phone
- Only available during business hours
- Administration personnel needed
- Automation of delivery process not possible

Enables Activation by E-Mail. For Activation details see <u>About Activation.</u> 60

Select the checkbox: *Use E-Mail for Registration*
If this is to be the default activation method, select: *Use as default option*

E-Mail address

A valid E-Mail address to receive the registration data.

Subject of E-Mail
The subject line of the registration E-Mail.

Example: Registration of Multimedia Edition

Text for E-Mail and Fax

Additional text which is used in the registration E-Mail.

Sample: The Unlock Key will be sent within 1-2 business days.

Screens and Workflow for E-Mail activation

Below find the user screens and workflow during e-mail activation.

The E-Mail Activation requires the Serial Number, company name and e-mail address. After filling out the screen, an e-mail with the hardware IDs and license information will be generated. You have to send one key back to the customer to activate the copy protection (see screen <u>Enter Unlock Key</u> 134). Details of the <u>workflow.</u> 322

This activation option is defined in the screen - *<u>Settings</u>* 62

Screen - E-Mail Activation

After filling out the screen, select: ***Request Unlock Key by E-Mail - send E-Mail****. This will open your default E-Mail client. An e-mail with the hardware IDs and license information will be created. Press **send** to send the e-mail to our activation center. You will get an **Unlock Key** back within 2-3 business days.

E-Mail Activation -
Send E-Mail

Create Unlock Key

The Unlock Key is generated in the TAB Administration, <u>Create Unlock Key with Copy</u> <u>Protection</u> 116 or <u>Create Unlock Key without Copy Protection.</u> 117 If you are using the Web Activation Server, then see <u>Create Unlock Key using the Web Activation Server.</u> 118

Enter Unlock Key

After requesting the Unlock Key by E-Mail, the screen shown below will appear during each start of the program. Type in the Unlock Key you got back by e-mail or fax. Press the button *Next.* If the Activation is successful, the screen *Activation finished* 135 is displayed.

Enter Unlock Key

3.6.10.2.3 Online Activation

Enables Online Activation. For Activation details see <u>About Activation.</u> 60

Select the checkbox: *Use Online Activation for Registration.*
If this is to be the default activation method, select: *Use as default option*

URL to Web Activation Server

The http: address of the Web Activation Server. Mirage offers a hosting of the Web

---

Activation Server - see details 326.

Example: http://registerserver.net/hostingnumber/lpweb/**lpws.asmx**

The address is automatically assigned if you have configured the link to the Web Administration Interface 103 in the administration screen.

🔵 The URL has to end with lpws.asm

We provide an Activation Server for testing. Just add this link to test an online activation with your product.
http://registerserver.net/9999999/lpweb/lpws.asmx

See chapter: Activation Server for Testing 326 for all necessary configuration options*.*

Allow changing of URL

Allows changing the URL during the Web Activation process. This makes sense if you have a backup server running.

🟢 This feature is available only in Multimedia Protector *Premium* 56 version. To use Online Activation the Web Activation Server 324 is required.

Screens and Workflow for Online activation

Below find the user screens and workflow during online activation.

The Online Activation requires the Serial Number, company name and e-mail address. Then the license will be verified online and activated. No additional step will be required. Details of the workflow 321.
This activation option is defined in the screen - *Settings* 63.

The activation process is transparent for the customer.

The screen: <u>Activation Successful</u> 135 is displayed

3.6.10.2.4 Activation by Fax

Enables Activation by Fax. For Activation details see <u>About Activation.</u> 60

Select the checkbox: *Use Fax for Registration*
If this is to be the default activation method, select: *Use as default option*

Fax number to register
A valid fax number to receive the registration data. You should use an international format like +49 721/151599638.

Text for E-Mail and Fax

Additional text which is used in the registration Fax

Sample: The Unlock Key will be sent within 1-2 business days.

Screens and Workflow for Fax activation

Below find the user screens and workflow during fax activation.

The Fax Activation requires the Serial Number, company name and e-mail address. After filling out the first screen, a print page with the hardware IDs and Serial Number will be generated. You have to send one key back to the customer to activate the copy protection (see screen <u>Enter Unlock Key</u> 134). Details of the <u>workflow.</u> 322

This activation option is defined in the screen - *<u>Settings</u>* 68

Fax Activation

Request Unlock Key

After filling out the screen, select: ***Request Unlock Key by Fax - print Fax***. This will open a report with the hardware IDs and license information. Press **print** to print the report and then fax it to the number provided in the report. You will get an **Unlock Key** back within 2-3 business days.

22.04.2006
Fax-Registration for Multimedia Edition - Flash Demo
Send this fax to +49 721/151599638

Name/Company: Tom Hanks

Serial Number: 678U0-31CC9-9AF7m-AZ87n-Dd18N-0Q1FH

In block 1 at position 5 there is the digit 0
In block 6 at position 1 there is the digit 0

E-Mail-Address: Tom.Hanks@smartinc.com

Instcodes:
01: 6F7B20C8
02: 72BCAD9C
03: BB80A2BD
04: BB80A2BD
05: 9F530D83
06: 2ACAFD2C
07: 2D818C98
08: 06B05ECB
09: BAA3248A

The unlock key will be sent within 1-2 business days.
Project: flash-demo - MCR001

Fax Activation - Print Fax

Create Unlock Key

The Unlock Key is generated in the TAB Administration, Create Unlock Key with Copy Protection 116 or Create Unlock Key without Copy Protection. 117 If you are using the Web Activation Server, then see Create Unlock Key using the Web Activation Server. 118

Enter Unlock Key

After requesting the Unlock Key by E-Mail, the screen shown below will appear during each start of the program. Type in the Unlock Key you got back by e-mail or fax. Press the button *Next.* If the Activation is successful, the screen *Activation finished* 135 is displayed.

Enter Unlock Key

3.6.10.2.5 Activation by Phone

Enables Activation by Phone. For Activation details see <u>About Activation.</u> 60

Select the checkbox: *Use Phone for Registration*
If this is to be the default activation method, select: *Use as default option*

Phone number to register

A valid phone number to receive the registration data. You should use an international format like +49 700/54885342.

Screens and Workflow for activation by phone

Below find the user screens and workflow during phone activation.

The Phone Activation requires the Serial Number and company name. After filling out the first screen, a screen with the phone number and also displaying the hardware IDs and Serial Number will pop up. The Unlock Key can be entered directly in this screen. Details of the <u>workflow.</u> 322

This activation option is defined in the screen - *Settings* 132

Phone Activation - Step 1

Request Unlock Key

Now call the phone number which is displayed. First specify the **Serial Number.** You will then be asked for one Installation code. Type in the Unlock Key you get and press the button *Apply Key.*

Phone Activation - Step 2

Create Unlock Key

The Unlock Key is generated in the TAB Administration, <u>Create Unlock Key with Copy Protection</u> [116] or <u>Create Unlock Key without Copy Protection.</u> [117] If you are using the Web Activation Server, then see <u>Create Unlock Key using the Web Activation Server.</u> [118]

3.6.11   Screen - License Information

Define license type like single user or network license and evaluation options.

Tip: For testing a project check - **No Activation** - this allows testing without the need to browse through the activation dialogs.

3.6.11.1   License Type

For information about licensing see <u>available license options</u> [23].

Select one of the 3 possible license types. Licence per:

- PC
- User / Person
- Concurrent user

Non-network license
If the application is a non-network application (installation on a single PC), choose license per **PC** and number of PCs = 1. This is the only option in the Standard version. For details about the user license see <u>Licence per PC</u> |297|.

Non-network license / single user installation
If the application is a non-network application (installation on a single PC) AND you want to limit it to one user, choose license per **User** and number of users = 1. For details about the user license see <u>Licence per User / Person</u> |298|.

Network license
Select one of the 3 possible license types and the number of users/PCs you want to allow during evaluation. See also <u>How to distribute a network version.</u> |296|

🛈 The network license and license per User as well as Concurrent User is available only in the Multimedia Protector <u>Premium</u> |56| version.

🔵 The number of users or PCs for the full version can be changed with an <u>Activation Key</u> |119|.

🔵 For network installations, the <u>number of users / PCs</u> |69| has to be set to 99999 if **no** limitation is required.

Screen - Licence Information

🔵 If a user connects through a remote connection using a tool like Remote Desktop, Citrix, Terminal Server or gotomypc, it depends on the tool if the remote connection counts as a separate license. For most tools, Multimedia Protector retrieves the PC name of the remote PC and counts the connection as a new license.

🔵 Concurrent user is not supported when the main application is an <u>EXE file</u> ⌷165⌷.

3.6.11.2 Evaluation Time

Defines whether the application is available for evaluation or not. During each program start the days left for evaluation are displayed.

Number of days to evaluate

Days for evaluation, beginning with the first start of the Multimedia Player. Setting days to 0 allows using the software **without time limitation** but offers an option for registration.

End of Evaluation

This can be used as an alternative to number of days for specifying a final expiry date. The button **Clear Expiry Date** deletes an expiry date.

 You can combine both values - e.g. allow 15 days after installation but end the trial at the latest on 31.12.2006. The date occurring first is used.

No evaluation version – Serial Number needed to start

There is no evaluation period. The Multimedia Player can be started only after activation [60] of the software. The first screen the user will get (see screen No evaluation version [136]) requires to enter a Serial Number.

Check for system date modification

Enables a check, if the system date is modified back **more than 1 day**. This option will stop the application if the date was turned back.

You have to send the user a special key to turn off this lock.

⊟ Create key to turn off system date lock

If the user gets an error screen that the system date was modified, you have to send him an Unlock Key with or without copy protection

- Unlock Key with Copy Protection [116]
- Unlock Key without Copy Protection [117]

⊟ Test time limitation
To test how the time limitation is working, do **not** turn back the system date. Make a time-limited version which runs for one day (number of days to evaluate = 1) or set a final expiry date (End of Evaluation) to tomorrow. Create a CD [89], start the Multimedia Player today and start it tomorrow.

Screen - Licence Information

See also

How to make a time limited evaluation / trial license? [238]
How to prolong an evaluation / trial version? [239]

3.6.11.3 Licence Options

3.6.11.3.1 Time limited version after activation

If you need a **time-limited full version** (full version = version which is activated), check: *Time limited version after Activation.* Limitation is possible either

- by x days after the activation is done or
- by a specified expiry date

Use one of the following options.

- *Limit by number of days.* Specify the number of days the version should run after activation is done - e.g. 10 days

- *Limit by expiry date*. Specify an expiry date which will stop the application at this date after activation is done

Screen - Licence Information

This time limitation is independent of the time limitation of the evaluation version .

3.6.11.3.2 Advanced Protection

This switch enables an advanced protection of the Multimedia Player. The Multimedia Player can detect if the EXE file was modified or cracked.

This is a very good additional protection but it is bound to a specific version of the MMF file. If you always deliver the Multimedia Player together with the MMF file (see Distribute a Project), it will work. If you allow downloading the Multimedia Player in combination with multiple different MMF files, it will not work.

Always use this option if you deliver Multimedia Player and MMF file together.

Screen - Licence Information

3.6.11.3.3 Content Protection Only

If only the content [80] is to be protected and no screen with licensing [23], time limitation [24] or copy protection [22] is to appear, select the option *No activation (content protection only)*.

For network installations, the number of users / PCs [69] has to be set to 99999 if no limitation is required.

Tip: For testing a project check - **No Activation** - this allows testing without the need to browse through the activation dialogs.

If you need a version just with content protection, which runs for an unlimited time, select:

- Number of Days = **0**
- No activation (content protection only)

Screen - Licence Information

3.6.12 Screen - Image

Define the images to be used in your project.

3.6.12.1 Splash Image

You can define a splash image to be displayed during the program start of the Multimedia Player.

Click on the button *Splash Image* to display the selected image.
Click on the button *Load It* to select an image.
Click on the button *Delete* to delete the image.

⏻ Only JPG images are supported.

Screen - Image

3.6.12.2 Registration Image

You can define an image to be displayed during the registration process.

Click on the button *Registration Image* to display the selected image.
Click on the button *Load It* to select an image.
Click on the button *Delete* to delete the image.

 Only JPG images are supported. The ideal image size is 175x110 pixel.

3.6.13 Screen - Data Import

Import your data / content which is to be secured into the encrypted data file.

3.6.13.1 About Data Import

All your media files [20] are imported and stored in a single, encrypted database file (MME, MMF) - for details see chapter The Basics [20].

You can select files to import from **one folder and all its subfolders**. The start file has to be a .**SWF** [176] , .**FLV** [176] or .**EXE** [165] file. This file can address any other file types like video or audio which are supported within flash. All selected files are imported into the project file and are stored in an encrypted format.

To make a file the start file of the project, select the file and press the button Define as starting file [83].

What is a start file?

The start file is the file that is opened first from the Multimedia Player. It can be a menu [273] which offers to start other files or any flash file.

Data File

All your media files are imported in **one single data file** and stored in an encrypted format (MME). If you make changes on the original files, you have to reimport the files.

Original Files (PDF , PPT,
Word, Video, Audio…)

Converter

Files with native support
SWF
FLV
JPG

Import

Database can contain
hundreds of files

MME

Distribute

Distribute
Secure Database
Licence File
Multimedia Player

Distribution Package

MMF

3.6.13.2 Import Files

Press the button: ***Select Data Folder*** and select a folder with the files you want to use for your Multimedia Project. All files from the **folder and its subfolders** are imported automatically. It is not possible to import files in different folders.

Now select a Start file 80 press the button: ***Define as starting file***. The file is indicated with a red icon. This file is the file that is played after the start of the Multimedia Player and must be a .SWF 176 (flash) , .FLV 176 (video) or EXE 165 (executable) file.

You can delete files by selecting one ore more files and press the button: ***Delete***

 The files are only deleted in the encrypted data file. The original files on the file system are never deleted.

If you have new files on the file system, press the button: ***Read files from Folder*** to import all files again.

If the files on the files systems have been modified, **select these files** and press the button: ***Refresh Selected Files*** to synchronize the files between the folder and the data file.

 Modifying a file, adding a file or deleting a file on the file system does not affect the imported data in the encrypted data file. You have to Refresh the data, Read all files again or Delete the files manually in the data file by pressing the corresponding buttons.

Screen - Import

3.6.14   Screen - Player Options

Define runtime options and language for the [Multimedia Player](#) [21].

3.6.14.1   Display Options

Define options for the Multimedia Player during runtime.

Display Options

There are different options to start the Multimedia Player.

Run with Full Screen
This option starts the Multimedia Player in full screen mode.

Otherwise the Multimedia Player uses the screen size defined in the start .swf file.

Start with maximized size
This option is similar to *Run with full screen.* It starts with the maximum usable size, while a title bar to close the Multimedia Player stays at the top of the screen.

Start with default size

The Multimedia Player uses the screen size defined in the start .swf file.

Start with customized size
You can define the width and   height of the screen in pixel.

Enable Flash configuration (right mouse click)
This enables the user to use **right mouse click** within the Multimedia Player and then print the **current** page or modify flash settings.

Show Control Bar

Activates a control bar with a Home button. This allows the user to start the main file (Start file 80) at any time again. Use this feature if you have multiple flash files connected with hyperlinks and the flash files does not provide a home or any other navigation feature. Select *none* if no control bar should be displayed.

Home button - activates the Start file 80

The control-bar can be placed:

- left
- bottom
- right
- top

Select Language
Select one or multiple languages for the registration and activation dialogs. The user can select the language within the first registration dialog 128.

Default Language

You can define a default language which is used for the first program start.

Screen - Player Options

3.6.14.2 Converting Options

These options allow to automatically make corrections for files which would normally not run in the standard flash player.

Converting hyperlinks after SWF ending

If documents like PDF|183| or PPT|186| are converted and they have links to other PDF or PPT files, Multimedia Player can automatically convert the hyperlinks to .swf extension.

Sample

Original files: file1.pdf and file2.pdf. File1.pdf links to file2.**pdf**
Converted files: file1.swf and file2.swf. File1.swf links to file2.pdf. This link would not work and is automatically corrected to file2.**swf**

Use this option only if needed. Hyperlinks e.g. using a xml configuration file will not work because they are also converted.

Always use relative paths

If documents like Word link to other documents in subfolders with these documents linking back, it is often necessary to use a relative path to link back like ...\file1.doc (instead of .\folder1\file1.doc).

Sample

c:\program files\folder1\file1.doc ➔ links to .\subfolder1\file2.doc
c:\program files\folder1\subfolder1\file2.doc ➔ links to **...**file1.doc instead using .**\folder1 **file1.doc

Using the option *Always use relative path* will support this kind of hyperlinks.

🛈 If the application loads but the configuration text provided via an XML file is missing, try again using the Option *Always use relative path*.

Run in installation directory

This options can be used if EXE files ¹⁶⁵ are started. The Multimedia Player provides the path where the encrypted database is stored as the path where the EXE file is started. This option can be used if the EXE file has problems with configuration files.

Screen - Player Options

3.6.15   Screen - Save

Save your project and create the files for deployment.

You can either create multiple files, which are used for CD Distribution 89 or one ZIP file, which includes all the files in a compressed format. The ZIP file can be used for distribution with a download link.

3.6.15.1 Create CD / Save

After all necessary settings have been made, the files to deploy included in the encrypted data file can be created. Press the button: ***Distribute / Save for CD.*** Depending of the size of the imported files this can take seconds to minutes.

If you want to provide the files via download, press Save as ZIP file 91 to get one single file.

A new folder ...\projectname**\Deploy** with all necessary files is generated. For details see chapter The Basics about Distributing a file 160. You can just click on View Deploy Folder 94 to open this folder.

After the files have been successfully generated, a Testdrive 92 can be made.

You can add an installer 97 which allows installing the files from CD to the hard disk drive.

Note

- To save a file just press Distribute / Save for CD. Make sure that no file you want to import 80 is opened by another application.

- If you added or modified files within the Screen Import 80, all files will be imported and encrypted again, which can take some times. Changing all other settings will just update this information, which is quite fast.

- You have to import 80 at least one swf, flv or exe file and mark it as a start file before you can save the project.

Screen - Save

See also
Distribute a CD / DVD 163
Create ZIP file 91

Adding an installer 97

3.6.15.2 Create ZIP file / Save

After all necessary settings have been made, the files to deploy included in the encrypted data file can be created. Press the button: *Distribute / Save as ZIP.* Depending of the size of the imported files this can take seconds to minutes. As a result, all files are packed into one single ZIP file.

If you want to provide the files via CD, press Save for CD 89 .

A new folder ...\projectname**\Deploy** with all necessary files is generated. For details see chapter The Basics about Distributing a file 160 .

As the files are ZIP, you can not test it. If you need a test, select Save for CD 89 first.

You can add an installer 97 which allows installing the files from CD to the hard disk drive.

Note

- To save a file just press Distribute / Save as ZIP. Make sure that no file you want to import 80 is opened by another application.

- If you added or modified files within the Screen Import 80 , all files will be imported and encrypted again, which can take some times. Changing all other settings will just update this information, which is quite fast.

- You have to import 80 at least one swf, flv or exe file and mark it as a start file before you can save the project.

Screen - Save

See also
Create files for CD 89
Adding an installer 97

3.6.15.3 Cancel without Saving Project

Selecting this option will cancel the project without saving anything. To save the project data, select Distribute / Save 89.

3.6.15.4 Test Project

After creating the files for deployment you can test your project (Testdrive). The Testdrive simulates the deployment. **It is only available if you selected the option Save for CD** 89.

You cannot start the Multimedia Player on this folder, because the license file 24 is modified with each start and cannot be used any longer for distribution.

If you want to make a life test, copy the complete Deploy folder 94 to another directory.

3.6.15.5 View Deploy Folder

You can directly view all files and then copy the files to a CD 163 or for testing on your hard disk. Just click on the option *View Deploy Folder.* It opens the file explorer.

3.6.15.6 Upload files to Activation Server

If you use the Web Activation Server, the project definition files have to be uploaded to the server. This upload is needed **only once** after you generated the project or when you change Web Activation Server settings 103.

This option is only available if:

- The login data to the Activation Server is configured - see screen Administration, Web Activation Server Administration 103
- The Premium 56 version is installed
- Online Activation is selected in the screen - Settings 63

All **configuration files** are uploaded to the Web Activation Server to allow instant Online Activation of the product.

See also

Online Activation - Step by Step
Error during uploading files

3.6.15.6.1 Error during uploading files

If an error occurs during uploading of the files, check:

- Are all login data configured? Check your password - see screen Administration, Web Activation Server Administration
- Is Online Activation selected in the screen - Settings ?
- Do you have a Firewall installed? - Disable firewall and try again.
- Is the Premium installed?

If the upload still generates an error, upload the files manually - see chapter Manually Upload Files.

3.6.15.6.2 Manually upload Files

If the automatic upload [94] is not working (probably because firewall limitations) you can manually upload your files to the Web Activation Server.

You have to copy your files to the Web Activation Server with an FTP software or within the file explorer.

Open your file explorer and type in the domain of the Web Activation Server

ftp://registerserver.net

You then have to provide the your username and password, which you got with the confirmation e-mail.

To log on to a secure FTP site in Internet Explorer 5.x and 6:

1. Type ftp://registerserver.net in your Internet Explorer, click **File**, and then click **Login As**
2. In the **User Name (Hosting-Number)** box, type your user name, and then press TAB
3. Type your **password (Hosting-Password)** in the Password box, and then press **Login**

After login you will see a directory structure similar to this one:

Select the folder ..**alg** and copy to this directory:

- All files from the folder **..\projectname\config\Web Activation Server\alg**

Select the folder ..**\pconfig** and copy to this directory:

- All files from the folder **..\projectname\config\Web Activation Server\pconfig**

3.6.15.7 Adding an Installer

The [Premium] 56 version comes with a ready to go installation manager. It allows installing the files from CD or download link to the hard disk. It also offers a network installation for Client PC's. The installer files can be found on the folder \Multimedia Protector Premium \2.0**installer .**

The installation manager includes the following features:

- Copies all files to a specified directory
- Adds the necessary user rights to the specified directory
- Copies the player, database mmf file and the license file to the specified directory, including an icon file
- Adds a program manager group and an entry within the program manager group to start the Multimedia Player
- Adds uninstall information
- Installation dialogs are available in multiple languages

 You can change the icon on the desktop and in the program manager group with an own bespoke icon.

The installer consists of 2 files:

- **setup.exe** - (installer file for single user installation) or **setup-network.exe** (for network installation)
- **setup.ini** - (configuration file for installer)

Copy these 2 files from the main installation folder ..\Multimedia Protector Premium \2.0\ **installer** to the deploy folder of your project. Then modify the [setup.ini file] 262 with any editor. The name of the installer can be renamed, e.g. to setup-abc.exe. The name of the ini file must be setup.ini.

 If you want to start the installer directly after a CD is inserted, modify the file autorun. inf.

[autorun]
icon=flash-demo.exe
open=**setup.exe**
Name=Multimedia Protector - Flash Demo

 This feature is available only in the Multimedia Protector [Premium] 56 version.

See also

3.6.16 Screen - Administration

Supports administration tasks like creating keys (Serial Number, Unlock Key, Licence Keys) or access to administrations issues like checking for the latest update, Web Activation Server administration interface and version information.

3.6.16.1 About Administration

The administration screen bundles a lot of administration activities like

- Create a <u>Serial Number Key</u> 110
- Create <u>Unlock Key</u> 113
- Change Copy Protection
- Access <u>Web Administration Interface</u> 103
- <u>Repair and Compress</u> 102 project file

- Activate Error log [107]
- Display own license [108] for Multimedia Protector
- Test for available updates [101]

You can switch between the 2 main areas creating keys and miscellaneous administration functions with the TAB on the right side of the screen.

3.6.16.2 Miscellaneous Administration Functions

The Miscellaneous TAB provides access to administration tasks like license information, checking for updates, repairing the database and using the Web Activation Server Administration interface [326].

Multimedia Protector - flash-demo [C:\Program Files\...2.0\demodata\flash-demo.mme]

Administration

About Multimedia Protector   Check for Updates

[Repair and Compress Project file]

Web Activation Server Administration

[Change URL]

☐ I use an own Activation Server

Hosting Number	1381806	FTP-Server address	
Hosting Password	***********	FTP Account	
		FTP Password	****
		Path on FTP-Server	

Primary Hardware ID (Installation Code)   Netbios Name(local)(4) ▼

Alternative Hardware ID (Installation Code)   MAC Address(2) ▼

☐ Display Quick Introduction help

☑ Error Tracking Enabled

Select path for Log-files

Show License Information

Settings	Image	Player Options	Administration
License Information	Data Import	Save	

See also

3.6.16.2.1 About Multimedia Protector - Version information

Displays a screen with the version information (Version number and date) and copyright information. You need the version number to check for updates [101].

3.6.16.2.2 Check for Updates

This link opens the screen to configure the scheduler for updates. You can select one of the following options:

- Daily
- **Weekly** (recommended)
- Monthly
- Never

Configure Scheduler for Updates

The update check is done in the background and informs you if an update is available. It downloads the update and installs it automatically. This is the recommended way to install updates.

If you manually want to check for an update, the update check can also be started from your **program manager group**, *Multimedia Protector,* *Check for updates.* The check is **instantly** done.

You can also check for updates on the website - click here for a manual check. Only updates for main releases (not Service Packs) can be downloaded here.

To compare the latest update with the installed version, retrieve the version number with the *About Multimedia Edition* [101] link.

To install an update, you need a valid update subscription. Check your license information with Show Licence Information [108].

The update check is also available in the Welcome Screen [52].

3.6.16.2.3 Repair and Compress Project File

If the database is corrupted, you can repair and also compress the database with the button *Repair and Compress Project file.*

We recommend using this function from time to time to compress the database, as it will grow with every rebuilt.

3.6.16.2.4 Web Activation Server

If you are using the Web Activation Server, [324] you can access the administration interface directly with the link *Web Activation Server Administration.*

To configure the link to the server, press the button *Change URL* and type in the URL to the Webserver, e.g.
http**s**://www.registerserver.net/hostingnumber/lpweb

Activation Server - Hosting Service

Type in your **Hosting Number** and **Hosting password** as well. This is necessary before you upload the configuration files [94] to the Web Activation Server.

Configure Activation Server

Running an own Activation Server

If you run the Web Activation Server on your own machine, you can also use the automatic uploading of the configuration files [94] . This requires a special configuration of the server. If the configuration is not possible, you can always manually upload the

configuration files 96 .

⊟ Configuration for automatic upload

For an automatic upload of your Multimedia Protector configuration files to the Web Activation Server y
access. Install an FTP-Server with access on FTP-port 21. Provide a FTP-account which has **full read**
Activation Server installation including all subfolders (like ..\bin, \alg).

Now configure the FTP account in the Multimedia Protector Generator.

- FTP-Server address: name of the FTP Server like *registerserver.net*
- FTP Account: FTP account user name
- FTP Password: password - always use a password with this FTP account
- PATH on FTP Server - path to the Web Activation Server server directory, relative to the home direc

  Example: Installation is on c:\wwwroot\lpweb. The FTP user's home directory is **c:** . The *PATH on F*
  'wwwroot\lpweb'. If the FTP user's home directory is 'c:\wwwroot\lpweb' then the path can be left blar

Primary / Alternative Harware ID

The primary hardware ID ⌊154⌋ is used as the main criteria to activate copy protection. Only if this criteria is not retrievable the Alternative Hardware ID is used.

For **single user** installations or CD distribution, the hardware ID 4 (NetBIOS Name ⌊157⌋) is recommended. For network installations use installation code 5 (Volume ID + UNC Path

158) or 6 (MAC Address + UNC Path 158).

Theses values are automatically assigned to each new project.

This option is only available in the Premium version. You also need a valid hosting account. Order Hosting.

See also

3.6.16.2.5 Display quick introduction help / Welcome Screen

The option *Display quick introduction help when starting* allows to enable or disable the Welcome Screen 52 at startup.

3.6.16.2.6 Enable Error Tracking

In case there is an error within the Project Generator, Mirage support may advise you to turn on an error log. Select *Error Tracking Enabled* and select a folder to save the log files with *Select Path for Log files.*

⬙ Do not forget to deselect this option after the problem has been solved.

3.6.16.2.7 Show License Information

This opens the Licence Viewer to display your license for Multimedia Protector.

Additional details about your Licence, Demoversion and Licence Agreement can be found in the chapter Your Multimedia Protector Licence 234.

To apply an Activation Key(like key for update subscription) see Apply Activation Key 234.

3.6.17 Creating Serial Numbers and Keys

To switch to the key generation mode, select the TAB **Keys** on the right side.

3.6.17.1 Format of a Key

All keys used by Multimedia Protector are unique and have the same format.

dO8uc-G1iC9-jOGeA-BqgEX-U71lD-0V1VX

There are 6 blocks each with 5 characters. The blocks are separated by a hyphen for better readability.

The option **Use extended description** adds additional information information to clarify letters which could be misinterpreted (like I and 1 or O and 0). This is only necessary when transmitting a key by fax. The extended description is only available if you make one single key.

Example:
dO8uc-G1iC9-jOGeA-BqgEX-U71lD-0V1VX
In block 1 at position 2 there is the capital letter O
In block 3 at position 2 there is the capital letter O
In block 5 at position 4 there is the small letter l
In block 6 at position 1 there is the digit 0

 All keys are project-specific. You have to load the project before you create the keys. It is not possible to create a Serial Number for project A when project B is loaded.

3.6.17.2 Create Serial Number Key

After having bought the product, the customer is provided with a Serial Number which is the 'proof of purchase' and is unique. To get a better idea of the workflow, see Basics about Workflow 316.

The design of a key is described in Format of a Key 109.

There are different ways to create a Serial Number

- Create one single Serial Number 110
- Create a Key List 112
- Dynamically create a Serial Number within an Online Shop 207

3.6.17.2.1 Create one single Serial Number

To manually create a Serial Number switch to the Administration Screen 98.

A Serial Number can be created with different options.

Allow additional days after applying Serial Number
If activation by e-mail, fax or phone is used, there is a time difference between applying the Serial Number key and sending the Unlock Key 322. To allow the customer to use the Multimedia Player after applying the Serial Number, add a few days (typically 2-5 days) which are included in the Serial Number.

Number of users
If a network license 69 is used (more then 1 license per PC / user / concurrent user), the number of PCs / users / concurrent users can coded in the Serial Number. If the user buys later more licenses, send him and Additional Key 119.

 This value **overwrites** the existing value in the license file. If you have an evaluation version with 5 users and the Serial Number includes 1 user, this results in a license for one user after applying the Serial Number.

For a single user installation always set this value to 1.

Number of desired Serial Numbers
Either generate one key per customer or generate a complete key list with hundreds of keys. For details see Create a Key List. 112

Create and Save Key
After pressing the button *Generate Key*, the key(s) including the extended description is/ are copied into the text box. If only one key is generated, it is also copied into the **clipboard**.

The content of the text box can be saved to a file with the button *Save generated keys to file.*

Special Workflow - use ONE Serial Number on MULTIPLE PCs

The recommended workflow is to make one Serial Number for one PC, so that each PC has its own Serial Number. It is possible to hand out one single Serial Number to a company and allow, that this **Serial Number can be used on multiple PCs**. This requires the Web Activation Server.

The necessary steps are:

- Create one Serial Number (Number of PCs = 1, Number of Desired Serial Numbers = 1)
- Add this Serial Number on the 2.0 server. In the Web Administration Interface, select Tools, **Add an Activation Entry**. It is important to select *Module Activation.* In the Field *Maximum Tries* you specify, how often the Serial Number can be used

Add a Serial Number on the Activation Server

See also

[Create a Key List](112) 112

3.6.17.2.2 Create a Key List

If you have only a few installations to manage, it is sufficient to generate the Serial Number on a one-by-one basis manually. In case of a large volume delivery like hundreds of CD's, a key list is necessary. The key list file would then be sent to the CD duplication company. Online Shops that do not support an integrated generator often support the upload of a key list.

The key list file can be generated within the screen - Administration, TAB *Serial Number* 110. Enter the desired number of serials, press button *Generate Key* and then the button **Save Key output to file**. The key list is saved as a text file.

Sample:
Generating 3 Serial Number(s)...
RZ9UZ-l1CC9-9Ah7v-GZ97n-gd18N-a21Fa
6F9UA-l1CC9-9Ah7e-GZ97n-ld18N-a71FJ
S79Uf-l1CC9-9Ah7a-GZ97n-Qd18N-ak1FP
Key(s) generated.

The Key List can e.g. be sent to [e-commerce providers](201) 201 or can be printed on the

cover of the CD/DVD.

See also

[Create one single Serial Number](#)[110]

3.6.17.3 Unlock Key

Generating an Unlock Key is only necessary if the customer registers via [e-mail,](#)[131] [fax](#)[132] or [phone](#)[133]. It unlocks the version by activating the copy protection. To get a better idea of the workflow, see [Basics about Workflow](#)[316].

The Unlock Key is either generated

- [With Copy Protection](#)[116]

   or if the Web Activation Server is used

- [Within the Web Administration Interface](#)[118]

If copy protection is not necessary, select [Unlocking](#)[117] **without**[117] [Copy Protection](#)[117]

instead.

Requesting Unlock Key by E-Mail, Fax or Phone

The customer fills out the screen for <u>E-Mail activation</u> [131] or <u>Fax Activation</u> [132] and sends to you an E-Mail or Fax with the activation request or calls you to activate by phone. You use the installation codes provided to generate an Unlock Key.

E-Mail Activation Request

22.04.2006

Fax-Registration for Multimedia Edition - Flash Demo

Send this fax to +49 721/151599638

```
Name/Company:   Tom Hanks

Serial Number: 678U0-31CC9-9AF7m-AZ87n-Dd18N-0Q1FH

In block 1 at position 5 there is the digit 0
In block 6 at position 1 there is the digit 0

E-Mail-Address: Tom.Hanks@smartinc.com

Instcodes:
01: 6F7B20C8
02: 72BCAD9C
03: BB80A2BD
04: BB80A2BD
05: 9F530D83
06: 2ACAFD2C
07: 2D818C98
08: 06B05ECB
09: BAA3248A



The  unlock key will be sent within 1-2 business days.
Project: flash-demo - MCR001
```

Fax Activation Request

Phone Activation Request

For details see workflow - [Activation by E-Mail, Phone, Fax](#)³²²

3.6.17.3.1 Create Unlock Key with Copy Protection

Enter the Hardware ID which is transmitted from the customer and select the type of copy protection (Volume ID, MAC Address, Hostname etc.) you want to use. You have to enter only **one** hardware ID.

For **single user** installations or CD distribution, the hardware ID 4 ([NetBIOS Name](#)¹⁵⁷) is recommended. For network installations use installation code 5 ([Volume ID + UNC Path](#)¹⁵⁸) or 6 ([MAC Address + UNC Path](#)¹⁵⁸).

After pressing the button *Generate Key*, the key including the extended description is copied into the textbox. It is also copied into the clipboard. The content of the textbox can be saved to a file with the button *Save generated keys to file.*

Send the Unlock Key to the customer who will use the key in the screen <u>Enter Unlock Key</u> [134].

🛈 If a hardware ID can not be retrieved (e.g. there is no network adapter) then the code is empty.

See also

The design of a key is described in <u>Format of a Key</u> [109]
To better understand the Hardware ID see chapter <u>Hardware ID</u> [154].

3.6.17.3.2 Create Unlock Key without Copy Protection

The Unlock Key is only necessary, if <u>Web Activation</u> [63] is not used. It unlocks the version by deleting the time limitation. To get a better idea of the workflow, see <u>Basics about Workflow</u> [316].

If copy protection is to be used, select <u>Unlocking with Copy Protection</u> [116] instead.

After pressing the button *Generate Key*, the key including the extended description is

copied into the textbox. It is also copied into the clipboard. The content of the textbox can be saved to a file with the button *Save generated keys to file.*

If you have **un**checked - Remove time limitation after Unlock Key is applied 73 you will get **2 keys**. Both keys have to be applied.

Send the Unlock Key to the customer who will use the key in the screen Enter Unlock Key 134.

See also

The design of a key is described in Format of a Key 109
To better understand the Hardware ID see chapter Hardware ID 154.

3.6.17.3.3 Create Unlock Key using Web Activation Server

Using the Web Activation Server to create the Unlock Key ensures that the Serial Number cannot be used twice (e.g. customers sends the Serial Number key by fax and uses the key on another PC with Online activation).

Log into the Web Administration Interface and select Tools, *Manual Activation*.

Select your project and the main module ID. Use the Serial Number and installation code from the e-mail, fax or phone. After pressing the button *Send*, the data is stored and the Unlock Key is created.

Create Copy Protection und Unlock Keys   Required I

Type:	Module Activation
Customername:	Peter Hanks
Projektname:	demo-easygo
Serial Number Key / EntryKey:	E8DEv-5CP93-9E4IO-3tK8X-LQD5k-6N14f
Module ID:	QHD001
Installation Code:	6 C7DB7158
OEM-Name:	
E-Mail:	peter.hanks@smartinc.com

Send   Cancel

3.6.17.4   Additional Licenses

Increase Network Licence

If a network license 69 is used (more then 1 license per PC / user / concurrent user), the number of PCs / users / concurrent users can be increased or decreased by sending an Activation Key to the customer.

ⓘ This feature is available only in Multimedia Protector *Premium* 56 version.

❶ This key **adds** the selected number of licenses to the existing value in the license file. If you have an existing license with 5 users and the additional license includes 2 users, this results in a license for 7 users after applying the key.

Prolong Evaluation Version

The second option is to **prolong an existing trial period**. Make an Activation Key with:

- additional licenses = 0
- either select: Number of days to evaluate or End of Evaluation

The design of a key is described in Format of a Key 109.

After pressing the button *Generate Key*, the key including the extended description is copied into the textbox. It is also copied into the clipboard. The content of the textbox can be saved to a file with the button *Save generated keys to file.*

To ensure that this Activation Key is not used many times, there are 2 options

With Web Activation Server

Online Validation Required
Use this options, if you have a Web Activation Server. The Activation Key is sent to the Web Activation Server before it is applied. It is stored in the database. If the Web Activation Server detects that the key was already used, it will block the key.

Without Web Activation Server

You have to include the Hardware ID [154] in the Activation Key. This ensures that the Activation Key can only be used on the machine with the specified Hardware ID.

3.6.17.5 USB Stick

This allows using a standard USB stick to copy protect a product. For details see USB Stick as a dongle replacement [312]

☐ Click here how to add the protection on the USB stick

To deliver a USB stick with a ready to go license, there are only a few steps necessary.

Limit usage

The customer can use the license always **only on the computer, where the USB stick is attached**. The limitation by PC / user is an additional configuration setting to limit the usage.

- Use a license per Computer/PC [69] - this limits the usage to the defined number of computers (recommended option). To define an unlimited usage, just configure a license with 9999 computers
- Use a license per User [69] - this limits the usage to the defined number of users (USB stick can be used only on one PC)

⚠ A license per concurrent user is not supported with an USB stick.

Activate protection on USB stick

Select screen Administration, *Switch on Copy Protection on USB Stick* [121]. This opens a dialog, where you can select the license file on the USB stick. The copy protection is then activated.

If the USB stick does not support this option, an error message is displayed:*There is no valid instcode for file filename.lic*
You have to use another USB stick.

Typical project settings

In combination with USB stick you would have typically these settings:

- **Un**check - No evaluation version - Serial Number [72] needed to start
- **Check** - No evaluation - content protection only [75]

Automated process for large quantities

If you need large quantities of USB sticks with a license file already activated, you can use the service of the company OEM marketing - www.oem.de. They are specialized in CD and USB duplication and they have a special license from us to add the USB stick protection in a batch process. You have to send them your files from the folder Deploy.

See also

USB Stick - more details [312]
Deliver the USB stick with Copy Protection already activated [313]

3.6.18 Create a new Project

3.6.18.1 Create a new Project

Select the option **Create new Project** in the start screen to create a new project.

ℹ️ You could also copy an existing project [125] with all settings.

3.6.18.2 Project File Name

Name of new Project
Type in a project filename. It must not contain any special characters like . &%$§" ,
space or umlauts like öäü.

All the project definitions and all imported files are stored in **one single project file**. The
extension is **.MME.** The project filename is used with the extension .mme for the project
file.
Sample: Flash-Demo.MME

Select a path () to store the new project.

ⓘ If you want to protect an EXE file use the name of the EXE file you want to protect as
project filename.

3.6.18.3 The Project Folder

We recommend creating a folder per project. The project files are:

Project File .MME
This file contains all the data and definitions - see Project File Name [123]

This file should be included in a backup. All subsequent files can be created from the project file.

Project Folders
After creating the files to deploy [89], a project subfolder with the Project Filename is created. This subfolder includes additional folders.

Sample:
...\Flash-Demo **\Config**
...\Flash-Demo **Deploy**

Folder Config
Holds a configuration file with the extension .XML. This file is only for internal use and should not be changed. The Config folder has subfolders with configuration information for the Web Activation Server [324] and Shop Integration [201].

Folder Deploy
This folder holds all necessary files for distribution. For details see chapter Distribute the Project 160. 89

3.6.19 Copy a Project

You can copy an existing project with all settings. Select **Copy Project** in the start screen.

In the file dialog, select now the project you want to copy. You get now a new screen where you can type in a new project name and select a new folder.

Copy Options

The important option is: **New project uses a different encryption**.

This should be used, if you want to create a new project and the project should use different Serial Numbers.

Only if you plan to deliver multiple databases with one license, because you want to split the project, uncheck this option. For details see chapter: Split project into several databases 305

Option: **New Project uses different encryption**

Checked: The new project gets a new license file and different Serial Numbers with a different encryption.
Unchecked: The new project can use the same license file and the same Serial Numbers like the original project

Part IV

4 Part II - Enhanced Features

4.1 About Part II

4.2 Activation and Registration Screens

This chapter describes all relevant screens of the Multimedia Player during the licensing [23] and activation [60] process.

Tutorial - Product Activation

This tutorial demonstrates, how the user activates the product - using Online, E-Mail, Fax or phone activation.

Start Video Tutorial for product Activation

4.2.1 Start Screen of the Multimedia Player

This is the initial screen which pops-up as long as the software has not been activated. It depends on the selected customization options.

The following configuration settings are possible:

- Product Name [59]
- Link to Web Shop [59]
- Registration Image [78]
- Activation Options [60] and Default Activation Option
- Number of days to evaluate [71]
- Available Activation Options [60]
- Link to Help [59]

It allows either continuing unregistered or typing in the Serial Number [319]. The version can be used x days for evaluation before the activation has to be done.

4.2.2 Online Activation

The Online Activation requires the Serial Number, company name and e-mail address. Then the license will be verified online and activated. No additional step will be required. Details of the workflow 321.

This activation option is defined in the screen - *Settings* 63.

The activation process is transparent for the customer.

The screen: <u>Activation Successful</u> |135| is displayed

4.2.3   Activation by E-Mail

The E-Mail Activation requires the Serial Number, company name and e-mail address. After filling out the screen, an e-mail with the hardware IDs and license information will be generated. You have to send one key back to the customer to activate the copy protection (see screen <u>Enter Unlock Key</u> |134|). Details of the <u>workflow.</u> |322|

This activation option is defined in the screen - *<u>Settings</u>* |62|

Screen - E-Mail Activation

After filling out the screen, select: ***Request Unlock Key by E-Mail - send E-Mail****.* This will open your default E-Mail client. An e-mail with the hardware IDs and license information will be created. Press **send** to send the e-mail to our activation center. You will get an **Unlock Key** back within 2-3 business days.

*E-Mail Activation -
Send E-Mail*

Create Unlock Key

The Unlock Key is generated in the TAB Administration, <u>Create Unlock Key with Copy</u>

Protection 116 or Create Unlock Key without Copy Protection. 117 If you are using the Web Activation Server, then see Create Unlock Key using the Web Activation Server. 118

Enter Unlock Key

After requesting the Unlock Key by E-Mail, the screen shown below will appear during each start of the program. Type in the Unlock Key you got back by e-mail or fax. Press the button *Next.* If the Activation is successful, the screen *Activation finished* 135 is displayed.

Enter Unlock Key

4.2.4 Activation by Fax

The Fax Activation requires the Serial Number, company name and e-mail address. After filling out the first screen, a print page with the hardware IDs and Serial Number will be generated. You have to send one key back to the customer to activate the copy protection (see screen Enter Unlock Key 134). Details of the workflow. 322

This activation option is defined in the screen - *Settings* 68

Fax Activation

Request Unlock Key

After filling out the screen, select: ***Request Unlock Key by Fax - print Fax***. This will open a report with the hardware IDs and license information. Press **print** to print the report and then fax it to the number provided in the report. You will get an **Unlock Key** back within 2-3 business days.

```
                                        22.04.2006
         Fax-Registration for Multimedia Edition - Flash Demo
         Send this fax to +49 721/151599638

Name/Company:   Tom Hanks

Serial Number: 678U0-31CC9-9AF7m-AZ87n-Dd18N-0Q1FH

In block 1 at position 5 there is the digit 0
In block 6 at position 1 there is the digit 0

E-Mail-Address: Tom.Hanks@smartinc.com

Instcodes:
01: 6F7B20C8
02: 72BCAD9C
03: BB80A2BD
04: BB80A2BD
05: 9F530D83
06: 2ACAFD2C
07: 2D818C98
08: 06B05ECB
09: BAA3248A


The  unlock key will be sent within 1-2 business days.
Project: flash-demo - MCR001
```

Fax Activation - Print Fax

Create Unlock Key

The Unlock Key is generated in the TAB Administration, Create Unlock Key with Copy Protection [116] or Create Unlock Key without Copy Protection. [117] If you are using the Web Activation Server, then see Create Unlock Key using the Web Activation Server. [118]

Enter Unlock Key

After requesting the Unlock Key by E-Mail, the screen shown below will appear during each start of the program. Type in the Unlock Key you got back by e-mail or fax. Press the button *Next.* If the Activation is successful, the screen *Activation finished* [135] is displayed.

Enter Unlock Key

4.2.5   Activation by Phone

The Phone Activation requires the Serial Number and company name. After filling out the first screen, a screen with the phone number and also displaying the hardware IDs and Serial Number will pop up. The Unlock Key can be entered directly in this screen. Details of the workflow. [322]

This activation option is defined in the screen - *Settings* [132]

Phone Activation - Step 1

Request Unlock Key

Now call the phone number which is displayed. First specify the **Serial Number.** You will then be asked for one Installation code. Type in the Unlock Key you get and press the button *Apply Key.*

Phone Activation - Step 2

Create Unlock Key

The Unlock Key is generated in the TAB Administration, Create Unlock Key with Copy Protection 116 or Create Unlock Key without Copy Protection. 117 If you are using the Web Activation Server, then see Create Unlock Key using the Web Activation Server. 118

4.2.6 **Enter Unlock Key**

After requesting an unlock key via e-mail 131 or fax 132 this screen will appear with the next program start. Typing in the unlock key activates the software copy protection. The registration process is completed. The screen Activation Successful 135 is displayed.

4.2.7 Activation Successful

After Online Activation or successfully entering an Unlock key, this screen will appear to indicate that the activation process is finished. The next start of the Multimedia Player will display a screen only in case of an error.

4.2.8 Evaluation Period Expired / No evaluation version

If the evaluation period defined in the screen - *Licence Information* 71 - has expired or the option , *No evaluation version - Serial number needed to start* 72 was selected, this screen will appear. It is not possible to continue.

Activation of Multimedia Protector Premium 2.0

Sorry, it is not possible to continue

At start of Multimedia Protector Premium 2.0 the following problem has occurred

The license of module Multimedia Protector Premium has expired

Show license information

Troubles?!

Please make sure that the product is installed correctly. Make sure that the product is registered. If you cannot solve this problem, please contact our support.

End

4.2.9   Copy Protection Violation

If the version is installed on another PC after activation, the copy protection ⌐22⌐ will be violated. It is not possible to continue.

4.2.10   No free license available

If the Multimedia Player is used with a network license and more users / Pcs then defined in the screen - *Licence Information* ⌐69⌐ - try to start the Multimedia Player. Then this error message will appear. It is not possible to continue.

A user / PC license can be deactivated from the end user within the Licence Viewer ⌈139⌉ .

4.2.11 Licence Viewer

The License Viewer is part of the Multimedia Player and is a **complete administration interface** for the end user. It can be accessed from any screen during the activation and registration process with the link *Show License Information*. The License Viewer can also be invoked by starting the Multimedia Player with the parameter **-v** (see Start Options ⌈289⌉) or it can be added in the program manager group using the installer ⌈263⌉ (parameter *ShowLicenseInfo*).

You can also use a standard text file with the extension .BAT (e.g. viewer.bat), which has only one line with the command:

xy-player.exe **-v**

whereas xy-player.exe is the name of your Multimedia Player of your product. You can download a sample here.

Features

- Basic license information ⌈291⌉ like manufacturer, company, copy protection status and

system information

- License [information per module][293] (number of licenses, time limitation, demo version, activation status)
- List of users, PCs and concurrent users for each module. Allows to [remove / deactivate][293] a user / PC / item
- Option to apply Activation Keys
- Option to [activate log file][295]

See also

[Basic license information][291]
[Module Information][293]
[Deactivate a network license][293]

4.3   Add-Ons

Add-On tools are provided to cover specific requirements. They are provided on an 'AS IS' basis. These tools must never be used and distributed without the Multimedia Player.

[Menu Creator][273] - lets you create own flash menus
[Music Player][141] - protects mp3 files
[Photo Album][144] - 2 different albums to present photos

MIRAGE MAKES NO REPRESENTATION, WARRANTY, OR GUARANTY AS TO THE RELIABILITY, TIMELINESS, QUALITY, SUITABILITY, TRUTH, AVAILABILITY, ACCURACY OR COMPLETENESS OF THE SOFTWARE MENTIONED IN THIS TUTORIAL. MIRAGE DOES NOT REPRESENT OR WARRANT THAT (A) THE USE OF THE SOFTWARE WILL BE SECURE, TIMELY, UNINTERRUPTED OR ERROR-FREE OR OPERATE IN COMBINATION WITH ANY OTHER HARDWARE, SOFTWARE, SYSTEM OR DATA, (B) THE SOFTWARE WILL MEET YOUR REQUIREMENTS OR EXPECTATIONS, (C) ERRORS OR DEFECTS WILL BE CORRECTED, OR (D) THE SOFTWARE IS FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS.

THE SOFTWARE IS PROVIDED TO YOU STRICTLY ON AN "AS IS" BASIS. ALL CONDITIONS, REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY RIGHTS, ARE HEREBY DISCLAIMED TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW BY MIRAGE.

4.3.1   Music Player

Multimedia Protector comes with a music player for MP3 files. It can be found on the directory **...\Add-Ons\Music Player**

A sample how to protect music files with this player is provided with *mp3-demo.mme.*

The buttons, category, title and composer can be defined. The free player is limited to 10 songs. If you want an unlimited player or player with your own logo, you can buy it directly on the A4flash Website - Click here to buy

The music player can be used with Multimedia Protector, but it is not allowed to distribute the files as a standalone application without Multimedia Protector

See also

4.3.1.1   Configuration of the Player

The configuration of the music player is done with the **radio.xml.** It can be modified using any editor. If you do not have an XML Editor see .

Never use a absolute path like c:\files which points to your disk drive on the PC. Always use a relative path like **radio/01.mp3.**

Button

You can define the labels of the buttons which appear on the player. You can place a different link per button. If you do not need the button, leave text and link empty. The button will be invisible.

```
<button id="1" text="A4Flash" link="http://a4flash.com/lib/access/" />
```

Station name

To structure the presentation of the songs use different station names like Pop, Classic.

```
<station name="Classical Music" text="test">
```

Song

Define the title, composer, mp3 file, image and links for the buttons. You always have to use relative paths for the mp3 file and the image like used in the sample. You can have

any number of songs per station within the limitation of the free version (10 songs).

```
<song>      ← song tag contains one song details
   <title>Song1</title>      ← set the title of the song
   <composer>Songster1</composer>     ← set the composer of the song
  <file>Radio/01.mp3</file>            ← set the path of the sound file
    <<artistpic>Images/1.jpg</artistpic>     ← set the picture of the artist

</song>
```


4.3.1.2 Include Player in Project

To include the music placer into the project, just copy the files:

* music-player.swf
* radio.xml

as well as all used images and mp3 files to your data source directory and import the files in the .

4.3.2 Photo Album

Multimedia Protector comes with 2 different photo albums. You can use a photo album to distribute JPG files. It can be found on the directory **...\Add-Ons\PhotoAlbum** and then ...\album1 and..\album2

ℹ A sample for jpg files with these photo-albums is provided with *photo-album1-demo. mme* and *photo-album2-demo.mme*.

Album 1

This is a photo album which allows placing a lot of text and present the photos in different categories.

Album 2

This is a photo album which allows placing a lot photos on one page including thumbnail and big size photo as well as a short description per photo.

The Photo Album can be used with Multimedia Protector, but it is not allowed to distribute the files as a standalone application without Multimedia Protector .

If you need animations and a slide show, use http://albumcreator.firmtools.com/ , Adobe Lightroom or the freeware tool from Airtight 150 (Simple Viewer, PostCardViewer, AutoViewer).

See also

4.3.2.1 Album 1

To use this Album, copy all files from ...\Add-Ons\PhotoAlbum\Album1 to a new directory. You may not rename the folder names.

You can start the file **photo-portfolio.swf** to browse through the demo album.

 Never use a absolute path like c:\files which points to your disk drive on the PC. Always use a relative path like **\img\flash\gallery_01.**

Textlabels

The text that appears on the album can be modified with the file **setup.txt**.
- Go to the folder ...\Add-Ons\PhotoAlbum\Album1**Set**
- Open the file setup.txt and change the text

You will find a more detail description in one up the next updates of the online help

Images

The images have to be placed on a subfolder for each section, which was defined in the setup.txt file with **&title_section_1 or &title_section_2** (sample: &title_section_1=men)

For each section you need a subfolder ..\Add-Ons\PhotoAlbum\Album1\img\flash\ **gallery_01**

To add images for gallery 1 (title_section_1 in the setup.txt)
- Go to the .\Add-Ons\PhotoAlbum\Album1\img\flash**gallery_01**
- Delete the default images
- Each image to add must be renamed:

  pic_1_gall_**01_bg**.jpg (picture 01, big)
  pic_1_gall_**01_sm**.jpg (picture 01, small)
  pic_1_gall_**02_bg**.jpg (picture 02, big)
  pic_1_gall_**02_sm**.jpg (picture 02, small)
- Add your pictures for each gallery in the folder ..\img\flash**gallery_01-**img\flash\ **gallery_03** and for the Home Tab in img\flash**home**

After adding all files, select the main folder **Album1** to <u>import</u> 83 it. Define **photo-portfolio.swf** as starting-file.

Look & Feel of the Album

4.3.2.2   **Album 2**

To use this Album, copy all files from ...\Add-Ons\PhotoAlbum\Album2 to a new directory. You may not rename the folder names.

You can start the file **gallery.swf** to browse through the demo album.

⚠ Never use a absolute path like c:\files which points to your disk drive on the PC. Always use a relative path like **\img\flash\gallery_01.**

Textlabels

The text that appears on the album, can be modified with the files **pictures.xml** and **personal_setup.xml**
- Go to the folder ...\Add-Ons\PhotoAlbum\Album2**xml**
- Open the file **pictures.xml** with any xml Editor (notepad, Word). If you do not have an XML Editor see [How to edit an XML file](#) 258

You can define a name per section / galleryname (<gallery name="1">) and you have to define each image you want to use

<image source="pics/pic1.jpg" thumb="pics/th1.jpg" descr="description 1"/>

whare source = the subfolder and big image name, thumb = name of small image, descr = title of the image

- Your personal settings can be configured in **personal_setup.xml**

You will find a more detail description in one up the next updates of the online help

Images

The images have to be placed in a subfolder ...\Add-Ons\PhotoAlbum\Album2**pics** and added in the pictures.xml file.

After adding all files, select the main folder **Album1** to import 83 it. Define **gallery.swf** as starting-file.

Look & Feel of the Album

See also
How to edit an XML file 258

4.3.2.3   Include Photo Album in Project

To include the photo album in the project, just copy the files:

- Album 1 [147] (photo-portfolio.swf, folder ..\set)
- Album 2 [148] (gallery.swf, folder ..\xml)

as well as all used images and files to your data source directory and import the files in the screen - Data Import [83].

4.3.2.4   Airtight

There are great photo albums, which you can download from Airtight - http://www.airtightinteractive.com/simpleviewer/

- SimpleViewer
- PostcardViewer
- AutoViewer

You find there also a description, how you can create the photo album using a popular tool like PhotoShop, Picasa, Porta, iPhoto, RapidWeaver, Aperture, Adobe Lightroom [43] - details

For protecting files with Airtight, the following steps are necessary.

⊟   Airtight AutoViewer

     Import [83] **ALL** [83] files [83] (swf, html, js..) and make **viewer.swf** the start file

- Airtight PostcardViewer

  Import [83] **ALL** [83] files [83] (swf, html, js..) and make **viewer.swf** the start file

- Airtight Simple Viewer

  Import [83] **ALL** [83] files [83] (swf, html, js..) and make **viewer.swf** the start file

4.4   Details about Copy Protection

4.4.1   The Basics about Copy Protection

This feature prevents that the application can be run on different machines. It binds the license file [160] to a hardware specific item.

The user cannot move the Multimedia Player from computer A to computer B, because the hardware identifiers that are used for Copy Protection will be different on any other

machine - Copy protection does not prevent the copy process, but starting the Multimedia Player on non-licensed machines.

The place where the license file is stored is used to determine the hardware information of the machine.

- If the license file is stored on a local machine, the hardware of the local machine will be used.
- If the license file is stored on a server, then the server hardware is used (Volume ID⌐155⌐, MAC Address⌐155⌐, Hostname⌐157⌐). When starting the application on a local machine within a network, Multimedia Player retrieves the server hardware even if the application is running on the local machine
- If the license file is stored on a NAS drive (Network attached storage), then the hardware of the NAS is used (Volume ID⌐155⌐, MAC Address⌐155⌐, Hostname⌐157⌐). When starting the application on a local machine within a network, Multimedia Player retrieves the NAS hardware even if the application is running on the local machine

Copy Protection can be used as an option. You can create a license without Copy Protection by just sending out an Unlock Key without Copy Protection⌐117⌐.

4.4.2   Hardware IDs

Hardware IDs are often referenced as installation codes, because the codes are only available after the installation of the
application on a machine. The hardware IDs are referenced with installation code numbers to prevent that the user knows the criteria which are used. The installation code numbers are itemized in brackets after the name of the hardware ID. The hardware ID is always an 8 digit code.

The following hardware IDs are supported:

- Volume ID⌐155⌐ (1)
- MAC Address of the network adapter⌐155⌐ (2)
- Hostname⌐157⌐ (3)
- Volume ID and UNC Pathname⌐158⌐ (5)
- MAC Address and UNC Pathname⌐158⌐ (6)
- USB Stick⌐159⌐ (11) [1]

[1] only available in the *Premium Edition*

🛈 For a server license only use an installation code combined with the UNC pathname.

If a hardware ID can not be retrieved (e.g. there is no network adapter) then the code is empty.

4.4.3   Transferring Hardware IDs

Using the Online Activation, the hardware IDs are automatically transferred to the Web Activation server. Using activation by e-mail, fax or phone, the codes have to be sent to you and you have to send and unlock key back.

The complete process is described in the chapter: Worflow - from Distribution to Activation 316

4.4.4   Volume ID (1)

Each hard disk drive (even a USB stick) has a volume ID (like a Serial Number). To view the current Volume ID of a drive, you can just perform a **dir <drive>:** and the volume Serial Number is shown on the second line down, e.g.

Volume in drive E is system
Volume Serial Number is **BC09-8AE4**

The Serial Number can be changed using tools, and if a drive is imaged, the volume ID will be imaged as well.

Pros/Cons
+ Always available and always working
+ Works in single user and network environment
- After reinstallation of Windows, the volume ID changes
- Volume ID's are always the same whenever a image tool is used to set up a drive
- Allows several installations on the same machine

Recommendation
- Good for applications used by home users because the criteria are always available
- The only choice, if the license file is stored on a memory stick

4.4.5   MAC Address (2)

This is a good criteria for single user installations, because it is still available after a reinstallation of a machine and is independent of disk imaging. There are a few things to be considered in a server environment.

Server with 2 network adapters

If a server has more than one adapter, with some PCs accessing the server through adapter 1, some through adapter 2, a copy protection violation will occur. In this case we recommend switching to the criteria Volume ID + UNC Pathname 158.

Server with subnets

In a subnet portioned network environment the MAC address should not be used. All PCs in outer subnets cannot retrieve the MAC address. Switch to Volume ID or Hostname in combination with UNC path as means of copy protection.

Novell Server

Multimedia Protector can be used on a Novell server for licensing, but the Software Copy Protection will not work, because the hardware information like Volume ID or MAC address cannot be retrieved from the server.

W-Lan Adapter

Some W-Lan Adapters are 'invisble' for Windows, whenever the network cable is unplugged or a notebook is in battery mode. Switch to <u>hostname</u> 157.

PDA with network adapter

If a PDA with an in-built network adapter is **connected to the PC during the activation**, it could happen that this network adapter is used, because the network adapter of the PDA is added to the PCs network adapters. The PDA should be disconnected, and then the MAC address can be used for copy protection.

Windows 98 /NT

The software copy protection with installation code 2 cannot be used, whenever using Windows 98 / NT with the license file being **on the server**. A Windows 98 / NT system cannot retrieve this information from the server.

Recommendation: Use installation code 5, 1 or 3 within a network installation with Windows 98 / NT machines.

The installation code 2 works with Windows 98 / NT, whenever the license file is on the local machine.

Note:

- There will be no future support for Windows 98 and Multimedia Protector with the complete functionality.
- A MAC address can be faked with tools
- If Multimedia Protector cannot retrieve a MAC address the instcode 2 is empty

Pros/Cons
+ After reinstallation of Windows, the MAC address does not change
+ If an image tool is used, the MAC address is still different
+ Good within a network, because the MAC address must be unique

- See considerations above for multiple network cards
- Restricted use in network environment with Windows 98 / NT machines
- Allows several installations of the application on the same machine.

Recommendation
Should be used for enterprise users because disk imaging is often used to set up multiple machines and a reinstallation of Windows does not need a new licensing.

4.4.6   Hostname (3)

A Windows machine's NetBIOS name is not to be confused with the computer's host name. Each computer running TCP/IP (whether it's a Windows machine or not) has a host name (also sometimes called a machine name). You can view/change it on the DNS tab in Control Panel -> Network -> TCP/IP -> Properties Host names are used by applications such as telnet, ftp, web browsers, etc. In order to connect to a computer running the TCP/IP protocol using its HOST name, the host name must be resolved into an IP Address (the host name or FQDN (Fully Qualified Domain Name)-IP address resolution is typically done by something called DNS - Domain Name System/Service). Changing a computer's Host name DOES NOT change its NetBIOS name.

Note
If a local PC does not have a network adapter and uses a dial-up connection for registration then the hostname could change between 'localhost' and the hostname used for the dial-up connection. The only solution for this scenario is to use the NetBIOS computer name.

Pros/Cons
+ Works in single user and network environment
+ Good within a network because the hostname must be unique
- After reinstallation of Windows, the hostname changes
- See considerations above with dial-up connections
- Allows several installations on the same machine.

Recommendation
• Should be used for enterprise users who have problems using the installation code with the MAC address

4.4.7   NetBIOS Computer Name (4)

This is the recommended installation code for single user.

Each computer running Windows has a NetBIOS name; you can view/change it on the identification tab in Control Panel -> Network. Various services & client tools, including Network Neighbourhood and NET USE, use NetBIOS names. The NetBIOS name is specified when Windows networking is installed/configured. In order to connect to a computer running TCP/IP via its NetBIOS name, the name must be resolved to an IP Address (the NetBIOS name-IP address resolution is often done by WINS - NetBIOS Name Server). A computer's NetBIOS name is often the same as that computer's host name , but it doesn't have to be.

Pros/Cons

+ Works always in single user environment
+ See considerations regarding with dial-up connections
+ Works even in Notebooks with W-Lan adapter when disconnected from the local network
- After reinstallation of Windows, the NetBIOS computer name changes
- Only usable for **single user** installations
- Allows several installations on the same machine.

Recommendation

- If you do have only single user installations then use the NetBIOS name

4.4.8 Volume ID + UNC Pathname (server licence) (5)

This Installation Code combines the Volume ID with UNC pathname (details).

Pros/Cons

+ Always available and always working
+ Works in single user and network environment
+ Allows only one installation on one machine
- After reinstallation of Windows, the volume ID changes
- Volume ID's are always the same whenever a image tool is used to set up a drive

Recommendation

- Should be used for enterprise users who have problems using the installation code with the MAC address and who want to make sure that the application is only installed once

For a server license only use an installation code combined with the UNC pathname.

This code results in a copy protection error if you work on the server AND on the workstation. It only works if the server is used as a dedicated server and the Multimedia Player is not started on the server.

4.4.9 MAC Address + UNC Pathname (server licence) (6)

This Installation Code combines the MAC address with the UNC pathname (details)

Pros/Cons

+ After reinstallation of Windows, the MAC address does not change
+ If an image tool is used, the MAC address is still different
+ Good within a network, because the MAC address must be unique
+ Allows only one installation on one machine
- See considerations above for multiple network cards
- Restricted use in network environment with Windows 98 / NT machines

Recommendation

- Should be used for enterprise users because disk imaging is often used to set up

multiple machines and a reinstallation of Windows does not need a new licensing.

 For a server license only use an installation code combined with the UNC pathname.

 This code results in a copy protection error if you work on the server AND on the workstation. It only works if the server is used as a dedicated server and the Multimedia Player is not started on the server.

4.4.10 USB Stick (11)

Multimedia Protector offers a unique technology to use a standard USB stick as a 'Dongle replacement'. Now the times are over where you have to decide whether to use a software copy protection or a Dongle.

The big advantage compared with a dongle is, that nearly any standard USB stick can be used. You can send out the USB stick with your project files already loaded on the stick or the customer can use his own USB stick. If a USB stick can be used or not depends on the fact, if the manufacturer has added a special information like a kind of a Serial Number of the USB stick.

If a module with a license per PC is used, the usage of the USB stick can be limited to a specified number of PCs.

Pros/Cons
+ Works always in single user environment
+ Customer can use a single user license on different machines
+ The number of machines, where the USB stick can be used, can be limited
- Only usable for **single user** installations
- Hardware is involved
- Not all USB sticks will work

For details how to use the USB stick see chapter: <u>Using an USB stick as a Dongle replacement</u> 312.

 The USB stick protection can only be used as a **single PC / single user** license. A network license is not supported as a PC cannot retrieve the hardware information of the USB stick when it is used on a server.

 The USB protection works only with Windows XP and Windows Vista.

 This feature is available only in the Multimedia Protector <u>Premium</u> 56 version.

4.5 Distribute the Project

4.5.1 The Basics about Distributing a Project

After a project has been created successfully and Distribute / Save 89 has been
selected, a folder with all necessary files for distribution will be generated.

The folder name is **..\Deploy** and is a subfolder of the project folder 124.
Example: ..\Flash-Demo **Deploy**

 Never store other files in this folder (on the hard disk). The files in this folder are
deleted when the project is saved.

The folder contains 4 files. All files are named according the settings: Name Of Player 59
in the *Settings* screen. You can copy these files to a CD/DVD or USB stick 312. Never use
a folder name Deploy on the CD/DVD or USB stick as the product does not start then.

The Multimedia Player
The Multimedia Player has the extension .**EXE** and is the main application which includes
all the necessary functionality to display the file and monitor copy protection and
licensing.

Example: flash-demo.exe

 You cannot start the Multimedia Player in this folder, because the license file 24
is modified with each start and cannot be used any longer for distribution. If you want to
make a life test, copy the complete Deploy folder to another directory.

The Data File
The data file contains all the files selected in the Data Import section 83 in an encrypted
format. It has the extension .**MMF**.

Example: flash-demo.mmf

 Never deploy the project file with the extension .mme

The Licence File
The license file contains all licensing 23 and copy protection 22 information. It has the
extension .**LIC**

Example: flash-demo.lic

  To be 100% sure that you have a new license file, just create the deploy folder again
before you distribute the project.

To test a project use the Testdrive 92 option.

Autorun File

When distributing the files on a CD, the **autorun.inf** file would start the Multimedia Player after the CD is inserted in the drive.

Original Files (PDF , PPT, Word, Video, Audio…)

Converter

Files with native support
SWF
FLV
JPG

Import

Database can contain hundreds of files

MME

Distribute

Distribution Package

Distribute
Secure Database
Licence File
Multimedia Player

MMF

A user does not need to have a flash or another player like PPT or PDF reader installed. All necessary components are included in the Multimedia Player, no installation will be required and the protected application can be started even directly from CD.

4.5.2   Distribute a CD/DVD

To deliver a CD/DVD, just copy all files from the folder deploy 160 to the CD/DVD. If you want to install the files from the CD to a hard disk drive, use the ready to go installer. 97

Never start the Multimedia Player for testing before you make the CD/DVD, as the license file 24 is modified with each start and cannot be used any longer for distribution. **The CD/DVD must be finalized (no modification is possible after the CD/DVD is burned) and it must be a Read Only CD/DVD.** Don't use a Live File System (CD/DVD can be used like a hard disk) like Vista offers. The best option is to use a CD/DVD burning software which makes sure, that the CD cannot be modified after burning.

Using a RW CD/DVD would result in an error because the Multimedia Player would try to modify the license file. When the Multimedia Player is directly started from a CD/DVD, then the license file is automatically copied during the first program start to a folder on the hard disk, where each user has a read and a write access.

See also
Adding an Installer 97

4.5.3   Distribute via a download link

To distribute via a download link, all files from the **folder deploy** 163 have to be packed into **one ZIP file**. Use the option **Save as ZIP** in the Screen - Save 91.

Never start the Multimedia Player for testing before you make the exe or zip file, as the license file 24 is modified with each start and cannot be used any longer for distribution

See also
Adding an Installer 97

4.5.4 Using Multimedia Protector Installer

The Premium ⌐56⌐ version comes with a ready to go installation manager. It allows installing the files from CD or download link to the hard disk. It also offers a network installation for Client PC's. The installer files can be found on the folder \Multimedia Protector Premium \2.0**installer .**

The installation manager includes the following features:

- Copies all files to a specified directory
- Adds the necessary user rights to the specified directory
- Copies the player, database mmf file and the license file to the specified directory, including an icon file
- Adds a program manager group and an entry within the program manager group to start the Multimedia Player
- Adds uninstall information
- Installation dialogs are available in multiple languages

ⓘ You can change the icon on the desktop and in the program manager group with an own bespoke icon.

The installer consists of 2 files:

- **setup.exe** - (installer file for single user installation) or **setup-network.exe** (for network installation)
- **setup.ini** - (configuration file for installer)

Copy these 2 files from the main installation folder ..\Multimedia Protector Premium \2.0\ **installer** to the deploy folder of your project. Then modify the setup.ini file ⌐262⌐ with any editor. The name of the installer can be renamed, e.g. to setup-abc.exe. The name of the ini file must be setup.ini.

ⓘ If you want to start the installer directly after a CD is inserted, modify the file autorun. inf.

[autorun]
icon=flash-demo.exe
open=**setup.exe**
Name=Multimedia Protector - Flash Demo

ⓘ This feature is available only in the Multimedia Protector Premium ⌐56⌐ version.

See also

Network Installation 268

4.6 Executables (exe file)

Multimedia Protector supports a protection of .EXE files.

You can start EXE files from flash applications 167 or secure standalone EXE 166 files.

It is possible to protect standalone exe files (wrap an application) and also exe files, that need additional files like configuration files or dll - see chapter Secure standalone exe file (s) 166.

How does it work?

- The exe file is imported into the encrypted database and not visible. It is completely protected
- When the exe file is invoked, it is extracted to the hard disk to a hidden place and started

The security of exe files is different compared with swf files. Swf files are loaded directly into the memory and are never visible on a disk. The exe file has to be saved temporarily on a folder.

If Source Code is available, **the protection can be improved significantly by defining a password** 168, which is required to start the EXE file.

See also
Secure standalone exe file(s) 166
Flash application using exe file 167
Define Password for EXE file 168
Read Configuration Data 173

This feature is available only in the Multimedia Protector Premium 56 version.
Concurrent user 23 is not supported when the main application is an EXE file.

4.6.1   Secure standalone exe file(s)

Multimedia Protector supports copy protection and complete licensing for stand-alone EXE files. It wraps the EXE file and additional files into the encrypted database. This kind of protection is not as strong as the Source Code integration with Licence Protector but a good choice if you do not have any Source Code or you do not want to spend time to add copy protection and licensing.

If you have just one or more EXE file and additional files like DLL or configuration files, import 83 it and define one exe file as a start file. After the initial tests like evaluation or product activation have been done, the Multimedia Player **starts the exe file, extracts all other imported files** and terminates automatically so that only the EXE file will be active.

All files (EXE file and all additional files) are extracted to the hard disk during runtime - see main chapter Executables 165. The file of the database should have maximum 80-100 MB. Otherwise the loading time would be too long.

If the EXE file opens configuration files and the files are expected on the same folder like the EXE file, try to use the option Run in installation directory 88 or better, retrieve the correct path by reading the configuration data 173.

4.6.2   Flash application using exe files

If you have a flash application that invokes exe files, the fscommand will be supported. It works as follows:

- Extract the file from the encrypted database to the hard disk to a hidden place
- Start the file
- The file is not removed after termination

ⓘ In case you load files in your exe file, you have to be aware that these files have to be available on the new directory. You have to extract these files first from the database to the directory (see below). If your exe file creates new files, you should always create it on the same folder or subfolder - but never use a hard coded path.

If you have multiple files like configuration files, you can add special commands to your flash application. This gives you more control.

Use one of the following commands:

http://FILE:testfile.exe or http://FILE:testfile.exe$$START
This command extracts the exe file from the database to a temporary folder and starts it. The file must be an exe file. The Multimedia Player is still activated. When the Multimedia Player is closed, it tries to **delete the exe file**. This is only possible if the exe file was terminated - if it is still running it cannot be deleted.

http://FILE:testfile.exe$$STARTKEEP
Same as parameter $$START, but does **NOT delete** the exe file after termination.

http://FILE:testfile.exe$$COPY
Just extracts the file from the database, but do not start it. This command can be used with any file type like DLL or txt. If you need multiple files (e.g. not only exe files but also dlls or configuration files), you can first extract all these files and at the end start the main exe file using **http://FILE:testfile.exe$$START .** When the Multimedia Player is closed, it tries to delete all extracted files.

http://FILE:testfile.exe$$COPYKEEP
Same as parameter **$$COPY**, but does **NOT delete** the exe file after termination

ⓘ You can add a pathname where you want to extract the files, in case you do not want to use the temporary folder.

Sample: loadMovie("http://FILE:testfile.exe$$COPYKEEP$$**c:\mypath\testfile.exe"**,2)

would extract the file testfile.exe from the database to the folder c:\mypath

http://FILE:testfile.exe$$RUN
This commands starts an exe file which is already available on the CD or hard disk. It can be used to start any external application. The file is not deleted after termination. The file must be on the same folder like the **Multimedia Player**. A pathname cannot be used.

Sample: loadMovie("http://FILE:testfile.exe$$RUN",2);

ⓘ The http://FILE: command also works with HTML and BAT files.

Invoke a BATCH file

You can invoke a .BAT file to perform any type of tasks. The .bat file must be on the same folder as the player. With a batch file you could e.g. invoke a huge AVI file, which will then be played in the default player.

Command: loadMovie("http://FILE:avistart.bat$$RUN",2)

The avistart.bat needs only the name of the avi file:

sample.avi

4.6.3 Define password for EXE file

The protection can be improved significantly by providing a password as a command line parameter. This option should be used if source code is available. If you do not have a source code, you could use an [EXE packer]169 to add the password.

- The application only starts, if the password, provided in the command line, is correct
- The password should be at least 30 characters long and should contain numbers, upper and lower case characters e.g. r1nBLCV1rZLZI0YyG7J1BiGNc2cLtZg21pfxm1nv9Jl2f34fs2ajVw31ToTQL1QYt

   The password may not contain spaces and the character "

When a EXE file is specified as a start file, a new option is visible: [Command line parameter for EXE file]83

The Multimedia Player provides the password during runtime when the EXE file is invoked.

We recommend splitting the password in different parts and variables of the application to prevent, that a hacker can find out the command line by analyzing the EXE file.

Sample

A very simple method would be to hide the strings in different program parts and make calculations. You can implement more sophistic code like the one below. This is just to outline an idea.

```
x$="2"
a$=r1nBLCV1rZLZI0YyG7J1BiGNc2cLtZg+str$((val(x$)+1)*7)pfxm1nv9Jl+x$
c$=f34fs+x$+ajVw31ToTQL1QYt

commandparameter$=a$+b$+c$
```

.NET offers a **SecureString Class**. It represents text that should be kept confidential. The text is encrypted for privacy when being used, and deleted from computer memory when no longer needed. For details see:
http://msdn2.microsoft.com/en-us/library/system.security.securestring.aspx

4.6.4 No Source Code - Add Password

If you don't have a Source Code and you want to add a password|168|, then you could use the EXE packer - RLPACK - http://www.reversinglabs.com/ .

It encrypts the EXE file and allows to specify a password, which is passed from Multimedia Player to the encrypted EXE file. You need at least version 1.2.1 of RLPACK.

Step 1 - Encrypt File and add Password

Encrypt your EXE file and add a password. Find below settings, which should work for most applications but you have to test it thoroughly with your application.

Define a password as recommended in the chapter - define password for EXE file [168].
Click on the **P button** to specify password options. Select: **Do not save the password on user computer!**

Click on the **options button** an define Protection options.

Step 2 - Import the EXE File

Import the EXE file and specify a **command line parameter**. The command line parameter for RLPack needs a special format - It must begin with **/PWD** followed by the password.

4.6.5   Read Configuration Data

If the main application is an EXE file, the application should work without any modifications. Only if the EXE files writes configuration files, which should be available after the next program start, a modification could be necessary.

Test your application. If the application writes configuration files typically on the installation folder, this folder is not visible any more to the EXE file while it is running. The folder name can be retrieved reading a text or XML file.

The Multimedia Player provides a file *mp-config.xml* and *mp-config.txt*. Both files have the same content. Just read the file with the format your application can handle.

The files provide the following information.

⊟ mp-config.xml

It is an XML file.

<Install-Path-MMF> - path where the mmf file (database) can be found
<Install-Path-Player> - installation path of the application
<Player-Name> - name of the Multimedia Player, e.g. myapp.exe
<MMF-Name> - name of the mmf file, e.g. myappdata.mmf
<StartExe> - name of the start file, e.g. yoursource.exe

⊟ mp-config.txt

It is standard Windows INI file.

[**Default**] - Section Name you have to specify if you read an parameter
Install-Path-MMF - path where the mmf file (database) can be found
Install-Path-Player - installation path of the application
Player-Name - name of the Multimedia Player, e.g. myapp.exe
MMF-Name - name of the mmf file, e.g. myappdata.mmf
StartExe - name of the start file, e.g. yoursource.exe

The variable Install-Path-Player provides you with the installation path of the application. This would be the folder where your application previously stored configuration files.

It is possible that the protected EXE file (variable Player-Name) has a different name like your original EXE file (variable StartExe.)

🛈 Use the name of the EXE file you want to protect as project filename [123]. Then the name of the protected EXE file has the same filename like your original application.

4.6.6   EXE protection with extensive requirements

You can use Multimedia Protector <u>EXE Protection</u> ⌷166⌷, if you do **not** have one of the following requirements

- No modules - only one application which has to be licensed
- No floating / concurrent user license
- Maximum security and flexibility of the licensing
- Transferring a license from PC A to PC B

These additional requirements are covered with Licence Protector source code integration product - see website <u>www.Licence-Protector.com</u> for details and download the trial version.

ⓘ For protection with Licence Protector you need the Source Code and development work is necessary.

4.7   Files which can be protected

The Multimedia Player supports **SWF** (Macromedia Flash) files, **FLV, JPEG,MP3** native and other file types by converting these files to flash.

At least one SWF, FLV or EXE file is needed. This file can start any video, music or image files which are supported by the standard flash players.

Before you can <u>import</u> ⌷83⌷ the file, it has to be converted into one of the native supported formats.

Original Files (PDF , PPT, Word, Video, Audio…)

Converter

Files with native support
SWF
FLV
JPG

Import

Database can contain hundreds of files

MME

Distribute

Distribution Package

Distribute
Secure Database
Licence File
Multimedia Player

MMF

4.7.1 Native Protection

These files can be encrypted without conversion.

- SWF 176 (flash)
- FLV 176 (video)
- JPEG 176 (image) - free photo album 144 included
- MP3 177 (music) - free music player 141 included
- Executables 165 (exe file)

4.7.1.1 SWF (Flash)

The flash format (.swf) is the main format which is used by Multimedia Protector.

Flash files running in the flash player 8.0 are supported. They can be directly imported 83 .

🛈 A sample for flash file protection is provided with *flash-demo.mme*

4.7.1.2 FLV (Video)

The FLV format is a format that can be directly used by importing 83 the file. If you have an application which uses FLV and the files are not displayed, convert the FLV file to SWF using http://www.moyea.com

AVI, MPEG, Quicktime and other formats can be converted - see details 179 .

🛑 At this time only **one** FLV video can be played per MMF file. The video will play only on a PC, not on a CD / DVD recorder connected to TV. Streaming is not supported. For Trouble Shooting see also - FLV file does not load 301

🛈 If you have multiple FLV files to secure then:

- Save each FLV file in a separate database - This feature can be used if you split the project into several databases. 305
- Use one of the menus Multimedia Protector provides (Advanced Menu, Basic Menu) or any other menu like CDMenuPro 284 or Quick Menu Builder. 286

A sample for flash file protection is provided with *flv.mme*

4.7.1.3 JPG (Photo / Image)

To use JPG files, they have to be played by a flash file. A free flash Photo Album 144 is provided. Otherwise, any .swf file allowing to display JPG files can be used like the free versions from Airtight 150 .

🛈 A sample for jpg files with a photo-album is provided with *photo-album1-demo.mme* and *photo-album2-demo.mme*.

For more details see chapter Photo Album 144.

4.7.1.4   MP3 (Music)

To use MP3 files, they have to be played by a flash music player. A free flash music player 141 is provided. Otherwise, any .swf file allowing to play mp3 files can be used.

🟢 A sample for mp3 files with the player is provided - use *mp3-demo.mme*.

🔴 The audio files will play only on a PC and not not on a CD / DVD recorder or mp3 player.

4.7.1.5   EXE Files

Details see chapter - Executables (exe file) 165

4.7.1.6   PowerPoint using PPT Viewer

By default, PowerPoint Viewer is installed when you install PowerPoint, so that you can use the Viewer with the **Package a Presentation for CD** feature. Otherwise you can download the Viewer from the Microsoft Website. Just search in the Online help of PowerPoint how to download the Viewer.

There are 3 steps to protect the PowerPoint presentation.

Create a Presentation for CD

The following description refers to PowerPoint 2007 but the required steps should be similar for other PowerPoint versions.

- On the Microsoft Office Button, point to the arrow next to Publish, and then click **Package for CD**
- In the Package for CD dialog box, in the Name the CD box, type a **name** for the CD presentation
- Click **Options**. Under Package type, you must select: **Viewer Package (update file formats to run in PowerPoint Viewer**), and then select an option in *how presentations will play in the viewer list*
- To ensure that files that are linked to your presentation are included in the package, select the **Linked files check box**
- **Specify a password for modify/edit** (password to open the file should be empty)**.** This adds just additional security
- Click **OK** to close the Options dialog box
- Click **Copy to Folder**, enter a **folder name and location**, and then click OK.

🟢 Create a new folder where you only store the files for this project

Import the files

Now import 80 all the files from the project folder you created and mark **pptview.exe as startfile** using the button *Define as starting file.* A red icon signals the start file.

The import screen would show the following files if you are using PowerPoint 2007.

ℹ The project can contain multiple PPT files as long as they are linked - e.g. PPT file1 has a link to PPT file 2

If you have multiple PPT files, which are not linked, we recommend making a menu in PowerPoint (just a presentation with one slide) and link to each presentation. You can then pack all presentations in one database. If the size of all presentations exceed 100 MB, you have to split the project into several databases [305] (one project for each PPT file) and use a different menu [273]. Otherwise, the time to load the presentation would take too long.

The PowerPoint Viewer is started using the command line **/S /L "playlist.txt"**. You could specify a different command line in the field *Command line parameter for EXE file*.

See also

[PowerPoint - different protection options](#)[186]

4.7.2 Conversion necessary

The following file types need to be converted into [flash (SWF)](#)[176] first, before they can be used within Multimedia Protector.

- [AVI, MPEG, Quicktime , Windows Media Video](#)[179]
- [CHM](#)[181]
- [HTML](#)[182]
- [MDI](#)[183]
- [PDF](#)[183]
- [PPT](#)[186] (PowerPoint)
- [WORD, VISIO, Office Documents](#)[194]
- [Word with Hyperlinks](#)[194]
- [WAV](#)[193]

MIRAGE MAKES NO REPRESENTATION, WARRANTY, OR GUARANTY AS TO THE RELIABILITY, TIMELINESS, QUALITY, SUITABILITY, TRUTH, AVAILABILITY, ACCURACY OR COMPLETENESS OF THE SOFTWARE MENTIONED IN THIS TUTORIAL. MIRAGE DOES NOT REPRESENT OR WARRANT THAT (A) THE USE OF THE SOFTWARE WILL BE SECURE, TIMELY, UNINTERRUPTED OR ERROR-FREE OR OPERATE IN COMBINATION WITH ANY OTHER HARDWARE, SOFTWARE, SYSTEM OR DATA, (B) THE SOFTWARE WILL MEET YOUR REQUIREMENTS OR EXPECTATIONS, (C) ERRORS OR DEFECTS WILL BE CORRECTED, OR (D) THE SOFTWARE IS FREE OF VIRUSES OR OTHER HARMFUL COMPONENTS.

THE SOFTWARE IS PROVIDED TO YOU STRICTLY ON AN "AS IS" BASIS. ALL CONDITIONS, REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT OF THIRD PARTY RIGHTS, ARE HEREBY DISCLAIMED TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW BY MIRAGE.

4.7.2.1 AVI, MPEG, Quicktime , Windows Media Video

A lot of formats can be converted and then protected by Multimedia Protector. You will find a lot of tools by searching in Google. We describe 2 tools more in detail.

The video will play only on a PC, not on a CD / DVD recorder connected to TV.

Convert to SWF

If you have multiple, small videos, we recommend converting the video to swf. A good tool that also adds **player controls** can be found at http://www.moyea.com (Moyea Flash Video MX).

- Convert the file to swf
- Import the file ⏐83⏐ and set the swf file as start file
- If you have multiple video files to secure, use the Menu Creator ⏐273⏐.

See details for converting with Moyea ⏐39⏐.

Convert to FLV

Using the free Riva FLV encoder, AVI, MPEG, Quicktime and Windows Media Video can be converted to FLV.

Download Riva FLV encoder: http://rivavx.de/index.php?id=483&L=3

- Convert the file to FLV
- Import the file ⏐83⏐ and set the FLV file as start file
- If you have multiple video files to secure, use the Menu Creator ⏐273⏐.

Convert AVI to SWF using swftools

If you want to use the SWF format for videos, use a tool which converts the file to SWF. After converting the file, just import ⏐83⏐ it and define it as a the starting file. If you need multiple AVI files to distribute, use the menu generator ⏐273⏐.

Swftools is a collection of SWF manipulation and creation utilities - and it is free (released under GPL) - www.swftools.com .

Download the Windows Version swftools-0.7.0.exe at
http://www.swftools.org/download.html
You find a online help on the swftools web site - but here are the most useful commands.

Program to convert AVI to SWF: **avi2swf.exe** - online help: http://www.swftools.org/avi2swf.html

Standard Conversion

This converts a single AVI file.

avi2swf.exe file.avi

or if you .SWF file should get a new name

avi2swf.exe file.avi -o filenew.swf

4.7.2.2   CHM

To secure a CHM file (help file) the Windows viewer for this file - **hh.exe** is used. By default, every Windows system should have this file installed.

There are 3 steps to protect the CHM file:

Copy the hh.exe viewer

Copy the viewer for the chm file, the file **hh.exe** from c:\windows to your project folder where you saved the CHM file.

 The hh.exe from a Vista machine will not run on XP but the version from XP will run on Vista machines. If you want to support NT you have to make tests which hh.exe will run on all operating systems.

 It is not in the liability of Mirage if you may distribute this file or not.

Copy the start application

To run with Multimedia Protector, a special start application is needed. Copy the file **startchm.exe** and the configuration **file chm.ini** from the Multimedia Protector installation folder ...**tools\chm** to your project folder where you saved the CHM file.

Now add the name of your chmfile in the chm.ini file. You can use any text editor to modify this file.

[Filename]
chmfile=**test.chm**   (change the name here)

The folder contains now all files which are:

- hh.exe
- startchm.exe and chm.ini
- your chm file

Directory with chm files and other files to import

Import the files

Now import 80 all the files from the project folder you created and mark **startchm.exe as**

startfile using the button *Define as starting file.* A red icon signals the start file.

The import screen would show the following files.

4.7.2.3   HTML

Pure HTML files can not be protected directly. There are 2 options depending on the way you are using the HTML files.

Protect html files

If you have a project with HTML files only, you need a tool which compresses all HTML files in one single EXE file like HTML Executable 42 or http://www.ebookcompiler.com/, which comes with an own Viewer. Multimedia Protector now provides licensing and copy protection options. Just import the EXE file - see Secure standalone exe file 166

The HTML files are protected with the same security level like EXE files 165

Protect flash project which includes some html files

If the protection of the flash file is the main issue and HTML files should just be invoked, import all files ⌐80⌐ (including the HTML files).

In your flash code you have to add special commands:

- Extract all files from the encrypted database to a temporary folder with the command: ***http://FILE:testfile.html$$COPY*** . You have to use this command for each html file
- Start the first HTML file with the command ***http://FILE:default.html$$START***

⊕ The HTML files are loaded into the Browser and they are not protected

For all commands see - Flash application using EXE files ⌐167⌐

4.7.2.4 MDI

There are 2 options to use MDI files

- Use the Flashpaper printer driver like described for Word Documents ⌐194⌐ - protected documents can be printed
- Convert it to PDF like described in PDF conversion ⌐184⌐ - printing can be enabled or disabled
- Convert it to JPG - see JPG files ⌐176⌐

4.7.2.5 PDF

There are several ways to convert PDF files. After converting the file, just import ⌐83⌐ it and define it as a the starting file. If you need multiple PDF files to distribute, use the menu generator ⌐273⌐ to select the files within a menu.

PDF Conversion Tool

We recommend using pdf2swf which offers a lot of functionality and is free. It also offers a batch conversion of pdf files, so you can convert all files in a directory and subdirectory into a batch process. The navigation bar to browse the PDF file is provided with the Advanced Menu ⌐274⌐.

Details: PDF conversion ⌐184⌐

ⓘ Download a sample - the Multimedia Protector Tutorial with over 200 pages and links inside the PDF document - converted with **swftools** and using the Advanced Menu - Click here to download and unzip the file to a folder. Start mp-pdf.exe.

Using a Printer Driver

This option allows printing the secure file, but links within the PDF file will be lost. It adds a nice navigation bar. The user can select and copy text but the format is lost.

For details using a printer driver see converting Office Documents. 194 The printer does not support hyperlinks. If you need hyperlinks, use the PDF Conversion tool instead.

Not all options of a PDF file are supported. The converted version is like an image of the PDF file. It does not support filling out forms or any other active content including bookmarks.

Download a sample - the Multimedia Protector Tutorial with over 200 pages and links inside the PDF document - converted with **Flashpaper** - Click here to download and unzip the file to a folder. Start mp-flashpaper.exe.

See also
PDF conversion 184
Office Documents - disable printing 186

Interactive PDF files with forms can not be converted.

4.7.2.5.1   PDF Conversion to Flash

We describe one tool more in detail. It is it is free (released under GPL) - www.swftools.org and comes already installed with Multimedia Protector.

Step 1 - Batch file conversion

It is possible to convert **all PDF files on a folder and all subfolders** in a batch process.

- Copy all your PDF files to the folder ..\Multimedia Protector\2.0**converter\swftools**
- Start **convertpdf-batch.bat.** It converts all files to flash
- As a result of the conversion, a file with the extension .swf is created. It has the same name like the PDF file

The PDF file **may not be password protected** - all security settings must be set to none for the PDF file to allow a conversion.

Step 2 - Add a menu and navigation toolbar

If you have only one pdf file, then rename the file to **doc.swf (**first delete the sample file doc.swf)

Use the Advanced Menu 274 as described below, if you have multiple PDF files. This adds

a menu structure.

⊟ Create Menu

Adding a toolbar (browse, zoom, print)

The toolbar for the converted PDF file is provided by the Advanced Menu 274.

If you have just one PDF file then use the files provided in the folder ..\converter\swftools. You need 3 files for your project:

- Advanced-menu.swf
- config.xml
- doc.swf

Rename your converted PDF file to docu.swf and import 80 all files. Select the file advanced-menu.swf as start file and check the option: *Use advanced menu*. It will add browse buttons to navigate to the next page and a scroll bar to scroll through the page.

View PDF file with toolbar

It is possible to change different settings.

⊟ Add a Print Button
To add a print button edit the config.xml file (with any editor or use free XML Editor 258) and change the entry **<print>** to *True*.

⊟ Disable Zoom In / Out
To disable the zoom option, edit the config.xml file (with any editor or use free XML Editor 258) and change the entry **<zoom>** to *false*.

⊟ Start with different size
By default, the converted PDF is loaded with 100%. It is possible to start the

document with another size like 150% or 75%. Edit the config.xml file (with any editor or use free XML Editor |258|) and change the entry **<zoomin>** to eg. 150 (without % sign).

🛈 Download a sample - the Multimedia Protector Tutorial with over 200 pages and links inside the PDF document - converted with swftools and using the Advanced Menu - Click here to download and unzip the file to a folder. Start mp-pdf.exe.

Step 3 - Import Files

After converting all files to flash, copy only the **flash files (swf)** and the **menu files** (advanced-menu.swf, config.xml) to a new directory, which you would import |80|.

The file **advanced-menu.swf** must be selected as start file.

Note: As required by the license of this tool, the source code is also installed and can be found on the folder .. \converter\swftools\source

4.7.2.5.2 PDF - Disable Printing

To disable printing in a project:

- **Uncheck** *Enable Flash configuration* in the screen - Player Options |85|
- If you are using the Advanced Menu |274| (which is recommended because of the options it offers to view the document), set print to false |276| in the config.xml file.

4.7.2.6   PowerPoint (PPT)

There are two different approaches to protect Powerpoint files.

Using the PowerPoint Viewer

Using the PowerPoint Viewer is easy to handle and adds the same protection level like protecting EXE files |165|. The PowerPoint Viewer is provided for free and is included in the main PowerPoint installation.

➕

- All animations including video and audio are supported
- No conversion necessary
- PowerPoint Viewer is free
- One PPT can invoke another PPT (Link from PPT A to PPB - tested with Office 2007)

➖

- Not the same strong protection level like a converted flash file will offer
- No menu can be added to select different presentations
- As all files have to be extracted from a database, the size for the project should not

exceed 100 MB. You can protect multiple PPT files with each 100 MB in size by splitting the project into several databases 305

- Printing can not be disabled (always enabled)
- Macros inside PPT are not supported

PPT Conversion to Flash

The PPT files can be converted into flash and therefore are protected with the highest security level, which Multimedia Protector offers for flash files. 25

- Highest protection level
- A menu 273 can be used to start different presentations
- The size of the complete project does not matter as files are loaded into memory only when required
- Printing can be enabled or disabled

- Some special animation effects will not work with converters
- The file has to be converted
- The converter is not free
- Macros inside PPT are not supported

What is the difference between Multimedia Protector and the Microsoft IRM (Information Rights Management) system in Office 2007?

The IRM system in Office 2007 allows to specify security options per user. You need a server to handle the user information and each user must install the IRM Client on his PC. This is typically a possible approach to protect a document inside the own company. If the document should be distributed, the restrictions to have a connection to the IRM server and to install the IRM client should be considered. Multimedia Protector protects PPT files without the need to install an additional software or to have an Internet connection.

See also

Use PowerPoint Viewer 177
PPT Conversion to Flash 190
PPT with Hyperlink 191

[PPT - Disable Printing](#)[186]

4.7.2.6.1 Use PowerPoint Viewer

By default, PowerPoint Viewer is installed when you install PowerPoint, so that you can use the Viewer with the **Package a Presentation for CD** feature. Otherwise you can download the Viewer from the Microsoft Website. Just search in the Online help of PowerPoint how to download the Viewer.

There are 3 steps to protect the PowerPoint presentation.

Create a Presentation for CD

The following description refers to PowerPoint 2007 but the required steps should be similar for other PowerPoint versions.

- On the Microsoft Office Button, point to the arrow next to Publish, and then click **Package for CD**
- In the Package for CD dialog box, in the Name the CD box, type a **name** for the CD presentation
- Click **Options**. Under Package type, you must select: **Viewer Package (update file formats to run in PowerPoint Viewer**), and then select an option in *how presentations will play in the viewer list*
- To ensure that files that are linked to your presentation are included in the package, select the **Linked files check box**
- **Specify a password for modify/edit** (password to open the file should be empty)**.** This adds just additional security
- Click **OK** to close the Options dialog box
- Click **Copy to Folder**, enter a **folder name and location**, and then click OK.

ⓘ Create a new folder where you only store the files for this project

Import the files

Now [import](#)[80] all the files from the project folder you created and mark **pptview.exe as startfile** using the button *Define as starting file.* A red icon signals the start file.

The import screen would show the following files if you are using PowerPoint 2007.

ℹ️ The project can contain multiple PPT files as long as they are linked - e.g. PPT file1 has a link to PPT file 2

If you have multiple PPT files, which are not linked, we recommend making a menu in PowerPoint (just a presentation with one slide) and link to each presentation. You can then pack all presentations in one database. If the size of all presentations exceed 100 MB, you have to split the project into several databases [305] (one project for each PPT file) and use a different menu [273]. Otherwise, the time to load the presentation would take too long.

The PowerPoint Viewer is started using the command line **/S /L "playlist.txt"**. You could specify a different command line in the field *Command line parameter for EXE file*.

See also

PowerPoint - different protection options [186]

4.7.2.6.2 PPTConversion to Flash

There are a lot of PPT conversion tools available with different pricing and different conversion options. Find your favorite tool at http://www.masternewmedia.org/2004/04/14/powerpoint_to_flash_conversion_tools.htm .

We recommend using a tool which generates one singe SWF file and not a file per PPT slide like http://www.wondershare.com (PPT2Flash) , http://www.presentationpro.com/ or http://www.cpslabs.net

If you have PPT documents you want to convert, perform the following steps:

1. Convert PPT to flash using a PPT converter that supports hyperlinks
2. If you have multiple, large videos convert it to SWF - see video conversion 179
3. After converting all files to flash, copy only the flash files to a new directory which you would import 80
4. Use the Advanced Menu 274 as described below if the PowerPoint converter does **not** support a navigation toolbar (most of the converters will add such a navigation bar automatically)

⊟ *Using Advainced Menu to add a navigation toolbar*

Adding a toolbar (browse, zoom, print)

The toolbar for the converted PPT file is provided by the Advanced Menu 274.

If you have just **one** PPT file then use the files provided in the folder .. \converter\swftools. You need 3 files for your project:

- Advanced-menu.swf
- config.xml
- doc.swf

Rename your converted PPT file to docu.swf and import 80 all files. Select the file advanced-menu.swf as start file and check the option: *Use advanced menu*. It will add browse buttons to navigate to the next page and a scroll bar to scroll through the page.

View PPT file with toolbar

It is possible to change different settings.

☐ Add a Print Button
To add a print button edit the config.xml file (with any editor or use free XML Editor [258]) and change the entry <**print**> to *True.*

☐ Disable Zoom In / Out
To disable the zoom option, edit the config.xml file (with any editor or use free XML Editor [258]) and change the entry <**zoom**> to *false.*

☐ Start with different size
By default, the converted PPT is loaded with 100%. It is possible to start the document with another size like 150% or 75%. Edit the config.xml file (with any editor or use free XML Editor [258]) and change the entry <**zoomin**> to eg. 150 (without % sign).

4.7.2.6.2.1 PPT with Hyperlink

Hyperlinks are supported with the PowerPoint Viewer [177] without any special considerations.

Using a Flash Conversion tool

There are a lot of PPT conversion tools available with different pricing and different conversion options. Find your favorite tool at http://www.masternewmedia.org/2004/04/14/powerpoint_to_flash_conversion_tools.htm .

We recommend using a tool which generates one singe SWF file and not a file per PPT slide like http://www.wondershare.com (PPT2Flash) , http://www.presentationpro.com/ or http://www.cpslabs.net

If you have PPT documents with **Hyperlinks**, perform the following steps:

1. Convert PPT to flash using a PPT converter that supports hyperlinks
2. After converting all files to flash, copy only the flash files to a new directory which you would import [80].
3. Set the option: Converting hyperlinks after SWF ending [87]
4. If you use relative paths (links like **...**path1\file1.pdf), set the option: Always use relative path [87]
5. Use the Advanced Menu [274] as described below

A Hyperlink must not contain an umlaut (äüö) or any other special characters like %$

Adding a toolbar (browse, zoom, print)

The toolbar for the converted PPT file is provided by the Advanced Menu 274.

If you have just **one** PPT file then use the files provided in the folder ..\converter\swftools. You need 3 files for your project:

- Advanced-menu.swf
- config.xml
- doc.swf

Rename your converted PPT file to docu.swf and import 80 all files. Select the file advanced-menu.swf as start file and check the option: *Use advanced menu*. It will add browse buttons to navigate to the next page and a scroll bar to scroll through the page.

View PPT file with toolbar

It is possible to change different settings.

☐ Add a Print Button
To add a print button edit the config.xml file (with any editor or use free XML Editor 258) and change the entry <**print**> to *True*.

☐ Disable Zoom In / Out
To disable the zoom option, edit the config.xml file (with any editor or use free XML Editor 258) and change the entry <**zoom**> to *false*.

☐ Start with different size
By default, the converted PPT is loaded with 100%. It is possible to start the document

with another size like 150% or 75%. Edit the config.xml file (with any editor or use free XML Editor ²⁵⁸) and change the entry **<zoomin>** to eg. 150 (without % sign).

4.7.2.6.3 PPT - Disable Printing

To disable printing in a project:

- **Uncheck** *Enable Flash configuration* in the screen - Player Options ⁸⁵
- If you are using the Advanced Menu ²⁷⁴ (which is recommended because of the options it offers to view the document), set print to false ²⁷⁶ in the config.xml file.

4.7.2.7   WAV

After converting the file, just import ⁸³ it and define it as a the starting file. If you need multiple WAV files to distribute, use the menu generator ²⁷³.

WAV Conversion Tool

You will find a lot of tools by searching in Google. We describe one tool more in detail. It is a collection of SWF manipulation and creation utilities - and it is free (released under GPL) - www.swftools.com .

Download the Windows Version swftools-0.7.0.exe at
http://www.swftools.org/download.html
You find a online help on the swftools web site - but here are the most useful commands.

Program to convert PDF to SWF: **wav2swf.exe** - online help: http://www.swftools.org/wav2swf.html

Standard Conversion

This converts a single WAV file.

wav2swf.exe file.wav

or if you .SWF file should get a new name

wav2swf.exe -o filenew.swf file.wav

4.7.2.8 WORD, VISIO, EXCEL, Office Documents

All documents that are **printable**, like Word, Visio, Excel, can be converted into flash with a printer driver. It is called Macromedia FlashPaper2 and can be downloaded and bought at the Macromedia Website http://www.macromedia.com/software/flashpaper/ .

The printer driver creates a flash file with an own tool bar, which allows **navigating through the file and printing the file**. It is easy to use, but hyperlinks will be removed.

If you do not **want to allow printing the content**, see - Office Documents - disable printing 186

Instead of using the printer driver, **Word files or other office documents** can be saved as PDF - see PDF conversion 184 - which offers more options like the printer driver method.

After converting the file, just import 83 it and define it as a the starting file. If you need multiple office documents to distribute, use the menu generator 273.

If Excel has VB macros or formula, you need a source code integration with Licence Protector - see www.Licence-Protector.com or contact sales@mirage-systems.de for an Excel Add-in.

Download a sample - the Multimedia Protector Tutorial with over 200 pages and links inside the PDF document - converted with **Flashpaper** - Click here to download and unzip the file to a folder. Start mp-flashpaper.exe.

If you use flashpaper and need a menu, you have to use the Basic Menu 280.

See also

Word with Hyperlink 194
Office Documents - disable printing 186

4.7.2.8.1 Word with Hyperlink

Word 2007 comes with a free Add-In, which creates a PDF file and it supports hyperlinks. Just select File, Save As PDF. If this option is missing, you can download the Add-In here or search in the Word Online help for PDF.

Some PDF Converters have inbuilt support for Hyperlinks. If you use a converter, which does not support it, you can use the freeware tool PDF-T-Maker.

PDF T-Maker

Word Documents with Hyperlinks to other Word Documents need a special converter. This converter is a plug-in in Word and creates a Postscript file with hyperlinks.

Technically, there are these steps:

1. Create Postscript file with PDF-T-Maker
2. Create PDF file, using the Postscript file, with any PDF tool. This step can be done automatically after step 1
3. Convert PDF to flash using [PDF2SWF](#) |184|
4. After converting all files to flash, copy only the flash files to a new directory which you would [import](#) |80|
5. If you use relative paths (links like **...**path1\\file1doc), set the option: [Always use relative path](#) |87|

You can download the converter here: http://www.transcom.de/transcom/en/2004_pdf-t-maker.htm
After installing the plug-in in Word, you have to configure it:

- General Tab. Check: Convert Cross document links, **thereby convert .doc in filename into .swf**
- Default Postscript Printer: If you do not have a printer installed, either find one on the web page described in the pdf-t-maker documentation or install one that comes with Windows (e.g. **Brother HL-2400C BR SCRIPT2** - use LPT3 to print as a virtual device)
- Default Destiller TAB: If you have Acrobat installed, define Acrodist.exe or the distiller of your PDF tool. If you do not have any PDF tool, download PDF creator: http://www.pdfforge.org/products/pdfcreator/

If you need a batch conversion, e.g. conversion of all files on a specific subdirectory, please contact www.transcom.de and ask for the batch conversion option.

A Hyperlink may not contain an umlaut (äüö) or any other special characters like %$

4.7.2.8.2 Office Documents - disable printing

To disable printing in a project:

- **Uncheck** *Enable Flash configuration* in the screen - [Player Options](#) |85|
- If you are using the [Advanced Menu](#) |274| (which is recommended because of the options it offers to view the document), set [print to false](#) |276| in the config.xml file.

4.8　Flash Development

You can use any standard flash command in combination with Multimedia Protector. Find below some special enhancements or tips.

- [Read data from configuration files](#)[196]
- [Start EXE or BAT files](#)[167]
- [Store data](#)[197]
- [Start a specific file inside the database](#)[198]

4.8.1 Configuration Files

You can either have an XML file which you include in the flash project or you can store customer specific configuration values in an XML file, which is on the same folder like the protected database file (.mmf).

The flash command is: config_xml.load("config.xml");

4.8.2 Start EXE or BAT files

If you have a flash application that invokes exe files, the fscommand will be supported. It works as follows:

- Extract the file from the encrypted database to the hard disk to a hidden place
- Start the file
- The file is not removed after termination

🛈 In case you load files in your exe file, you have to be aware that these files have to be available on the new directory. You have to extract these files first from the database to the directory (see below). If your exe file creates new files, you should always create it on the same folder or subfolder - but never use a hard coded path.

If you have multiple files like configuration files, you can add special commands to your flash application. This gives you more control.

Use one of the following commands:

http://FILE:testfile.exe or http://FILE:testfile.exe$$START
This command extracts the exe file from the database to a temporary folder and starts it. The file must be an exe file. The Multimedia Player is still activated. When the Multimedia Player is closed, it tries to **delete the exe file**. This is only possible if the exe file was terminated - if it is still running it cannot be deleted.

http://FILE:testfile.exe$$STARTKEEP
Same as parameter $$START, but does **NOT delete** the exe file after termination.

http://FILE:testfile.exe$$COPY
Just extracts the file from the database, but do not start it. This command can be used with any file type like DLL or txt. If you need multiple files (e.g. not only exe files but also dlls or configuration files), you can first extract all these files and at the end start the main exe file using **http://FILE:testfile.exe$$START .** When the Multimedia Player is closed, it tries to delete all extracted files.

http://FILE:testfile.exe$$COPYKEEP
Same as parameter **$$COPY**, but does **NOT delete** the exe file after termination

⊕ You can add a pathname where you want to extract the files, in case you do not want to use the temporary folder.

Sample: loadMovie("http://FILE:testfile.exe$$COPYKEEP$$**c:\mypath\testfile.exe**",2)

would extract the file testfile.exe from the database to the folder c:\mypath

http://FILE:testfile.exe$$RUN

This commands starts an exe file which is already available on the CD or hard disk. It can be used to start any external application. The file is not deleted after termination. The file must be on the same folder like the **Multimedia Player**. A pathname cannot be used.

Sample: loadMovie("http://FILE:testfile.exe$$RUN",2);

⊕ The http://FILE: command also works with HTML and BAT files.

Invoke a BATCH file

You can invoke a .BAT file to perform any type of tasks. The .bat file must be on the same folder as the player. With a batch file you could e.g. invoke a huge AVI file, which will then be played in the default player.

Command: loadMovie("http://FILE:avistart.bat$$RUN",2)

The avistart.bat needs only the name of the avi file:

sample.avi

4.8.3   Store Data

If your application needs to temporarily store data (e.g. results of a test), use the local shared object functionality.

A local A local shared-object is stored on the user's machine. Depending on the operating system it is e.g.

* for Windows XP: Documents and Settings\userName\Application Data\Macromedia\Flash Player\#SharedObjects
* for Vista: \Users\userName\AppData\Roaming\Macromedia\Flash Player\#SharedObjects

Example
// Create a shared-object named "userData"
mySharedObject=SharedObject.getLocal("userData");

4.8.4 Start a specific file inside the database

If you have a menu application as an EXE file, it might be useful, to start a specific flash file inside the database. The menu.exe file would be on the CD/disk (outside the database) and start each flash file individually.

Example - Start files are in the main folder
You have 3 flash files inside the database. All start files are in the main **folder**.

Import - 3 flash files - all in one folder

You have to specify one start file. This would be the file which is loaded when you start the Multimedia Player without any command.

The menu application could invoke each flash file individually. If the menu has an option *Lesson 1, Lesson 2, Lesson 3* then selecting option *Lesson 1* one would directly load file 1.

The command to load a file would be
"mycourse.exe" -load "file1.swf"

Note: mycourse.exe is the name of the Multimedia Player. You could also specify a path "**c:\programs\myapps**\mycourse.exe" -load "file1.swf"

Example - Start file is in a sub folders
You have 3 flash files inside the database. The files are in **separate folders**.

Import - 3 flash files - files are in sub folders

If you start a flash file in a sub folder and this flash file also starts other flash files, you have to specify the option: **Always use relative Paths** in the screen - Player Options [87].

The command to load a file would be
"mycourse.exe" -load "**course1**file1.swf"

You can also specify an EXE file as the start file

See also
Multimedia Player - Start Options [289]

4.8.5 HTML Starter file

Often tools generate a *default.html* or *index.html* to start the flash application. This is not working with Multimedia Protector, as HTML files can not be used. Just edit the HTML file and search for a file with the extension .swf, which is the main starter file. The html file can then replaced with a special flash starter file.

- From **..\tools\flashstarter** copy the files **flashstarter.swf** and **configstarter.xml** to the folder, where the default.html or index.html is locacted

configstarter.xml	09.04.2008 18:51
flashstarter.swf	08.04.2008 12:32

- Edit the file configstarter.xml and add the folder\filename of the main flash file. You can also specify parameters
- Now import ⌐83⌐ **ALL** ⌐83⌐ files ⌐83⌐ (swf, html, js..) and make **flashstarter.swf** the start file.

Content of configstarter.xml
<!-- defines the folder and flash name the flashstarter.swf loads -->
<StartSwf>**resources/gallery.swf**</StartSwf>

<!-- the parameter for the flash application -->
<Parameter>flash variables - parameter

The flashstarter.swf would invoke the gallery.swf in the subfolder resources with
resources/gallery.swf?flash variables

4.9 Integration in Online Shops

Multimedia Protector offers a ready to go integration in the e-commerce shops of

- Cleverbridge ⌐201⌐ (www.cleverbridge.com)
- Element5/ShareIt ⌐215⌐ (www.element5.com , www.shareit.com)

It is possible to provide integration into other shops. Request information from support@mirage-systems.de.

🔵 The following description does not cover how to handle the setup for these e-commerce shops. It describes the necessary steps to combine Multimedia Protector with these shops.

4.9.1   About Shop Integration

Basically, you create a key list with Serial Numbers which are uploaded to the shop. After the order process, a Serial Number key from this key list is inserted in the order confirmation e-mail and the customer can download your protected multimedia file.

If you sell a network license 296 where each order can contain a different quantity of licenses, it is not possible to work with uploaded keys. You have to create a Serial Number Key which is different per order and includes the quantity of licenses ordered.

Both scenarios are described for cleverbridge 201 and Element5 / Share-it! 215.

4.9.2   Cleverbridge

The integration into the cleverbridge e-commerce system (www.cleverbridge.com) can be done without programming - just by defining the desired action.

These steps are necessary to integrate Multimedia Protector:

- Build a key list with Serial Numbers 201
- Upload Serial Numbers 202
- Define Delivery Text 204
- Upload Project Files 206
- Define Delivery Option 206

This workflow is intended for single user / PC license. The order process can allow ordering multiple single user licenses at a time. Per license, one Serial Number key is delivered.

If you sell a network license 296 where each order can contain a different number of licenses, it is not possible to work with uploaded keys. You have to create a Serial Number Key which is different per order and includes the number of licenses ordered.

See chapter - Creating order specific Serial Numbers 207.

4.9.2.1   Build a key list with Serial Numbers

First you have to build a list with Serial Numbers which are uploaded to the shop. Depending on your sales, create 100 or 1000 Serial Number keys to upload.

Within the *Screen - Administration* create a list of Serial Numbers - for details see Create Serial Number Key 110. Save the key list to a file with ***Save generated keys to file.***

4.9.2.2 Upload Serial Numbers

Start the cleverbridge *Commerce Assistant* and edit a product. In the TAB **Delivery Details** you specify which keys are delivered.

Press the button *Add* and select **Cleverbridge delivers key.** Then select **Key List** and press the button ⬛ **.**

Edit Product Licence Protector Multimedia Edition Premium (13369)

Product ID   13369

Status   list in categories and listings

| Main | Shopping Cart | Descriptions | Pictures | Delivery Texts | Prices | Delivery Details |

Running No	Delivery Type
1	cleverbridge delivers key
2	cleverbridge delivers full version by download
3	cleverbridge delivers full version by download

3 Item(s) | 1 Item(s) Selected

Options

○ Web Key Generator

○ Executable Key Generator   algshopnolic25.exe

◉ Key List

Key Result Type   Html

☐ Execute once per purchased quantity

Delivery Details - select Key List

Type in a name for the key list and press the **Add** button - select the key list with Serial Numbers you created - see <u>build a key list with Serial Numbers</u> [201]

4.9.2.3 Define Delivery Text

Start the cleverbridge *Commerce Assistant.* Edit a product and add a **delivery text.** This text will include the Activation Key which will be generated after the order process and is used in the e-mail which is send out to the customer. The delivery text can be in HTML format.

Add Delivery Text information

You can use one of the following sample texts. The Serial Number Key is inserted with the variable **<Key>**.

☐ Serial Number Key - English
Serial Number
<p>The Serial Number Key is your 'proof of purchase'. It can be used only once and requires an Internet connection.

</p>
<p>The serial number key is: **<Key>** </p>
<p>Start the application and select: I have a serial number and I want to activate (your product name).

Enter the Serial Number Key from this E-Mail (you can copy it using the clipboard), your name/company and your e-mail address. Press the button: <i> Next. </i>A dialog appears which verifies the Serial Number key online and activates the application.</p>
<p>If you don't have an Internet connection, use the option: <i>You can also request an unlock key by E-Mail.</i></p>
<p>Help, how to activate the software, can be found by selecting the icon ? </p>
<p>Backup your license file xy.lic.</p>

☐ Serial Number Key - German
Seriennummer<p>Die Seriennummer ist ihr 'Kaufnachweis'. Diese kann nur einmal verwendet werden und benötigt eine Internet Verbindung</p>
<p>Die Seriennummer lautet: **<Key>** </p>
<p>Starten Sie die Anwendung und wählen Sie: Ich habe eine Seriennummer und möchte (Ihr Produktname) aktivieren<I>.

</i>Geben Sie die Seriennummer von diesem E-Mail (diese kann über die Zwischenablage kopiert werden), Name/Firma und Ihre E-Mail Adresse ein. Drücken Sie die Schaltfläche: <i>Weiter. </i>Es erscheint ein Dialogfenster, das die Seriennummer online überprüft und die Software aktiviert.</p>

<p>Wenn keine Internet Verbindung zur Verfügung steht wählen Sie die Option: <i>
Sie können auch per E-Mail einen Freischaltschlüssel anfordern.</i></p>
<p>Hilfe, wie die Software aktiviert werden kann, ist über das Symbol ?
verfügbar.</p>
<p>Sichern Sie die Lizenzdatei XY.lic.</p>

4.9.2.4   Upload Project Files

To distribute via a download link, all files from the **folder deploy** 163 have to be packed
into **one ZIP file**. Use the option **Save as ZIP** in the Screen - Save 91 .

🔵 Never start the Multimedia Player for testing before you make the exe or zip file, as
the license file 24 is modified with each start and cannot be used any longer for
distribution

See also
Adding an Installer 97

Start the cleverbridge *Commerce Assistant*. Select **Product Files** and then press the
button **Upload Product File**. Select your zipped file from the deploy folder and upload
the file.

Products & Delivery ⌃

- Products
- Product Groups
- Key Lists
- Key Generators
- Product Files
- Shipping Configurations
- Regions

4.9.2.5   Define Delivery Details - Download Link

Start the cleverbridge *Commerce Assistant* and edit a product. In the TAB **Delivery
Details** you specify that cleverbridge delivers your uploaded project files 206 by download
link.

Press the button *Add* and select **Cleverbridge delivers full version by download.** Then
select Download File and select your uploaded project file 206 in the drop down list.

4.9.2.6 Creating order specific Serial Numbers

If you sell a network license 296 where each order can contain a different quantity of licenses, it is not possible to work with uploaded keys. You have to create a Serial Number Key which is different per order and includes the quantity of licenses ordered.

After the order process, an automated Licence Generator is invoked by the shop system. The automated Licence Generator uses the quantity from the order and a special definition file to generate a Serial Number key which includes the number of licenses for a network license.

Start of application – select Activation
Method (Online, E-Mail, Fax, Phone)
requires to type in user name and E-Mail

4.9.2.6.1 Build configuration file

You can define a product (article) you want to sell with the cleverbridge program
Commerce Assistant (CA).

First add a new product (article) in the Cleverbridge shop. You need the **ProductID** from
the cleverbridge shop in the configuration file.

Add product with Commerce Assistant

A configuration file to create a [Serial Number]³¹⁹ is generated automatically in the folder ..\projectname**\Config\shop-integration** after selecting [Distribute / Save]⁸⁹.

Projectname.xml

This file contains the internal project definitions and must not be changed.

Config-Autogenerator.xml

This file has to be adapted. You have to add the product ID (article number) which is used in the shop system.

🔴 The file uploaded to cleverbridge must always have the name **config-autogenerator.xml**. If you have multiple products, you can **add any number of product definitions** to this file. Use an [XML Editor]²⁵⁸ to copy and paste the configuration settings from all projects into one single file **config-autogenerator.xml.**

⊟ Serial Number definition
  In the config-autogenerator file you have to replace

  • ProductID with the **ProductID from cleverbridge**

  Change the other values only if you want to change default values

  • Value - should be 1 and is multiplied with the quantity of the order
  • Days - see [Allow additional days after applying Serial Number]¹¹⁰
  • LocalReuse - see [Multiple Usage of Serial Numbers]¹¹⁰

4.9.2.6.2 Send files to Cleverbridge

As it is not possible to directly upload the files, you have to e-mail the following files to cleverbridge.

- config-autogenerator.xml |208
- your project template(s) (projectname.xml): you find them in the folder ..\projectname **\Config\shop-integration**
- the Generator for cleverbridge. The name of the file is **algshopxy.exe** where xy is the version number - eg. algshop25.exe. This file can be found in the folder ..\Multimedia Protector\Shop or ..\Automatic Generator
- your license file *mp.lic* from the main directory ..\Multimedia Protector\

🛈 If you do have multiple applications which use different versions of Multimedia Protector, you could use for each product a different algshop.exe file from different Multimedia Protector versions.

4.9.2.6.3 Define Delivery Text

Start the cleverbridge *Commerce Assistant*. Edit a product and add a **delivery text.** This text will include the Activation Key which will be generated after the order process and is used in the e-mail which is send out to the customer. The delivery text can be in HTML format.

Add Delivery Text information

You can use one of the following sample texts. The Serial Number Key is inserted with the variable **<Key>**.

☐ Serial Number Key - English
Serial Number
<p>The Serial Number Key is your 'proof of purchase'. It can be used only once and requires an Internet connection.

</p>
<p>The serial number key is: **<Key>** </p>
<p>Start the application and select: I have a serial number and I want to activate (your product name).

Enter the Serial Number Key from this E-Mail (you can copy it using the clipboard), your name/company and your e-mail address. Press the button: <i> Next. </i>A dialog appears which verifies the Serial Number key online and activates the application.</p>
<p>If you don't have an Internet connection, use the option: <i>You can also request an unlock key by E-Mail.</i></p>
<p>Help, how to activate the software, can be found by selecting the icon ? </p>
<p>Backup your license file xy.lic.</p>

☐ Serial Number Key - German
Seriennummer<p>Die Seriennummer ist ihr 'Kaufnachweis'. Diese kann nur einmal verwendet werden und benötigt eine Internet Verbindung</p>
<p>Die Seriennummer lautet: **<Key>** </p>
<p>Starten Sie die Anwendung und wählen Sie: Ich habe eine Seriennummer und möchte (Ihr Produktname) aktivieren<I>.

</i>Geben Sie die Seriennummer von diesem E-Mail (diese kann über die Zwischenablage kopiert werden), Name/Firma und Ihre E-Mail Adresse ein. Drücken Sie die Schaltfläche: <i>Weiter. </i>Es erscheint ein Dialogfenster, das die Seriennummer online überprüft und die Software aktiviert.</p>

<p>Wenn keine Internet Verbindung zur Verfügung steht wählen Sie die Option: <i>
Sie können auch per E-Mail einen Freischaltschlüssel anfordern.</i></p>
<p>Hilfe, wie die Software aktiviert werden kann, ist über das Symbol ?
verfügbar.</p>
<p>Sichern Sie die Lizenzdatei XY.lic.</p>

4.9.2.6.4 Upload Project Files

To distribute via a download link, all files from the **folder deploy** 163 have to be packed
into **one ZIP file**. Use the option **Save as ZIP** in the <u>Screen - Save</u> 91 .

🔴 Never start the Multimedia Player for testing before you make the exe or zip file, as
the <u>license file</u> 24 is modified with each start and cannot be used any longer for
distribution

See also
<u>Adding an Installer</u> 97

Start the cleverbridge *Commerce Assistant*. Select **Product Files** and then press the
button **Upload Product File**. Select your zipped file from the deploy folder and upload
the file.

4.9.2.6.5 Define Delivery Details - Keygenerator

Start the cleverbridge *Commerce Assistant* and edit a product. In the TAB **Delivery
Details** you specify the Licence Generator, which the shop System invokes after the
order process. See - <u>Send files to Cleverbridge</u> 210 - how to upload the necessary files.

☐ Add Key Generator

Press the button *Add* and select **Cleverbridge delivers key.** Then select **Executable Key Genera**
Generator. By default it has the name **algshopxy.exe** where xy is the version number - e.g. algshop

Next step is to add your download package.

⊟ Add Download Package

Press the button *Add* and select **Cleverbridge delivers full version by download.** Then select Do project file [206] in the drop down list.

4.9.2.6.6 Define Delivery Details - Download Link

Start the cleverbridge *Commerce Assistant* and edit a product. In the TAB **Delivery Details** you specify that cleverbridge delivers your uploaded project files [206] by download link.

Press the button *Add* and select **Cleverbridge delivers full version by download.** Then select Download File and select your uploaded project file [206] in the drop down list.

4.9.3 Element5/ShareIt

The integration into the Element5 / Share-it! e-commerce system (www.element5.com , www.shareit.com) can be done without programming - just by defining the desired action. The Share-it! and element5 shop uses the same integration.

These steps are necessary to integrate Multimedia Protector:

- Build a key list with Serial Numbers [201]
- Upload Serial Numbers [216]
- Define Delivery Text [218]
- Upload Project Files [219]
- Define Delivery Option [220]

This workflow is intended for single user / PC license. The order process can allow ordering multiple single user licenses at a time. Per license, one Serial Number key is delivered.

If you sell a network license [296] where each order can contain a different number of licenses, it is not possible to work with uploaded keys. You have to create a Serial Number Key which is different per order and includes the number of licenses ordered.

See chapter - Creating order specific Serial Numbers. [207]

4.9.3.1 Build a key list with Serial Numbers

First you have to build a list with Serial Numbers which are uploaded to the shop. Depending on your sales, create 100 or 1000 Serial Number keys to upload.

Within the *Screen - Administration* create a list of Serial Numbers - for details see Create Serial Number Key [110]. Save the key list to a file with *Save generated keys to file*.

4.9.3.2 Upload Serial Numbers

Start the Element5 / Share-it! *Control Panel*.

Select **Key List**, and then *Create new list*.

Now open the key list with Serial Numbers you created - see <u>build a key list with Serial Numbers</u>[201] and copy all keys into the clipboard (CTRL+C). Go back to the control panel, type in a name for the key list and paste the clipboard (CTRL+V) with your Serial Number Keys.

Copy key list from clipboard

The last step is to assign the key list to a product.

Select *Product Delivery*, **Delivery Type**. On the right side, select your product and press - *Show data.*

Press the button *Add* and select **element5 delivers: License Key.** Select your key list from *Uploaded Key list* and check *Should a license key be sent to the customer for each license ordered?*

4.9.3.3 Define Delivery Text

Start the Element5 / Share-it! *Control Panel.* Edit a product and add a **delivery text.** This text will include the Activation Key which will be generated after the order process and is used in the e-mail which is send out to the customer. The delivery text can be in HTML format.

In the order process, links to element 5's Terms and Conditions and Privacy Statement are displayed in the footer of the relevant Wel of your products. In the event that local legal regulations require special notices, it is the responsibility of element 5 to fulfill these ol and to ensure the uniformity of the Terms and Conditions, please do not integrate any references to other Terms and Conditions into tl

E-mail template: ❷
This is the text that you would like to appear in the e-mail that is sent to your customers with the license key. This is only applicable text must contain a <%KEY%> tag, which is replaced by the generated license key.

```
<b><font size="4">Serial Number </font></b>
<p>The Serial Number Key is your 'proof of purchase'. It can be used only once
and requires an Internet connection.

</p>
<p>The serial number key is: <b> <%KEY%> </b></p>
<p>Start the application and select: <b> I have a serial number and I want to
activate Licence Protector <I>Multimedia Edition<I>.
```

Add Delivery Text information

You can use one of the following sample texts. The Serial Number is inserted with the variable **<%KEY%>**.

- Serial Number Key - English
  Serial Number
  <p>The Serial Number Key is your 'proof of purchase'. It can be used only once and requires an Internet connection.

  </p>
  <p>The serial number key is: **<%KEY%>** </p>
  <p>Start the application and select: I have a serial number and I want to activate (your product name).

  Enter the Serial Number Key from this E-Mail (you can copy it using the clipboard), your name/company and your e-mail address. Press the button: <i> Next. </i>A dialog appears which verifies the Serial Number key online and activates the application.</p>
  <p>If you don't have an Internet connection use the option: <i>You can also request an unlock key by E-Mail.</i></p>
  <p>Help, how to activate the software, can be found by selecting the icon ? </p>
  <p>Backup your license file xy.lic.</p>

- Serial Number Key - German
  Seriennummer<p>Die Seriennummer ist ihr 'Kaufnachweis'. Diese kann nur einmal verwendet werden und benötigt eine Internet Verbindung</p>
  <p>Die Seriennummer lautet: **<<%KEY%>** </p>
  <p>Starten Sie die Anwendung und wählen Sie: Ich habe eine Seriennummer und möchte (Ihr Produktname) aktivieren<I>.

</i>Geben Sie die Seriennummer von diesem E-Mail (diese kann über die Zwischenablage kopiert werden), Name/Firma und Ihre E-Mail Adresse ein. Drücken Sie die Schaltfläche: <i>Weiter. </i>Es erscheint ein Dialogfenster, das die Seriennummer online überprüft und die Software aktiviert.</p>
<p>Wenn keine Internet Verbindung zur Verfügung steht wählen Sie die Option: <i> Sie können auch per E-Mail einen Freischaltschlüssel anfordern.</i></p>
<p>Hilfe, wie die Software aktiviert werden kann, ist über das Symbol ? verfügbar.</p>
<p>Sichern Sie die Lizenzdatei XY.lic.</p>

4.9.3.4 Upload Project Files

To distribute via a download link, all files from the **folder deploy** |163| have to be packed into **one ZIP file**. Use the option **Save as ZIP** in the Screen - Save |91|.

🔵 Never start the Multimedia Player for testing before you make the exe or zip file, as the license file |24| is modified with each start and cannot be used any longer for distribution

See also
Adding an Installer |97|

Start the Element5 / Share-it! *Control Panel*. Select **Upload Product** and then either select **Replace an existing file** or **Upload a new file**. Select your zipped file from the deploy folder and upload the file.

4.9.3.5   Define Delivery Type

Start the Element5 / Share-it! *Control Panel*. With **Delivery Type** you specify that Element5 / Share-it! delivers your uploaded project files [219] by download link.

Select *Product Delivery*, **Delivery Type**. On the right side, select your product and press - *Show data.*

Press the button *Add* and select **element5 delivers: download link for the full version full version.** Then select *File to be shipped* and select your uploaded project file [219] in the drop down list.

4.9.3.6   Creating order specific Serial Numbers

If you sell a network license [296] where each order can contain a different quantity of licenses, it is not possible to work with uploaded keys. You have to create a Serial Number Key which is different per order and includes the quantity of licenses ordered.

After the order process, an automated Licence Generator is invoked by the shop system. The automated Licence Generator uses the quantity from the order and a special definition file to generate a Serial Number key which includes the number of licenses for a network license.

Start of application – select Activation Method (Online, E-Mail, Fax, Phone) requires to type in user name and E-Mail

4.9.3.6.1 Build configuration file

You can define a product (article) you want to sell with the Element5 / Share-it! program *Control Panel.*

First add a new product (article) in the Element5 / Share-it! shop. You need the **Product Number** from the Element5 / Share-it! shop in the configuration file.

Add product with Control Panel

Configuration file to create a [Serial Number] 319 is generated automatically in the folder .. \projectname**\Config\shop-integration** after selecting [Distribute / Save] 89.

Projectname.xml

This file contains the internal project definitions and may not be changed.

Config-Autogenerator.xml

This file has to be adapted. You have to add the product ID (article number) which is used in the shop system.

The file uploaded to Element5 / Share-it! must always have the name **config-autogenerator.xml**. If you have multiple products, you can **add any number of product definitions** to this file. Use an [XML Editor] 258 to copy and paste the configuration settings from all projects into one single file **config-autogenerator.xml.**

⊟ Serial Number definition
In the config-autogenerator file you have to replace

- ProductID with the **ProductID from** Element5 / Share-it!

Change the other values only if you want to change default values

- Value - should be 1 and is multiplied with the quantity of the order
- Days - see [Allow additional days after applying Serial Number] 110
- LocalReuse - see [Multiple Usage of Serial Numbers] 110

4.9.3.6.2 Send files to Element5 / Share-it!

As it is not possible to directly upload the files, you have to e-mail the following files to
Element5 / Share-it!:

- config-autogenerator.xml 221
- your project template(s) (projectname.xml): you find them in the folder ..\projectname
  \Config\shop-integration
- the Generator for cleverbridge. The name of the file is **algshopxy.exe** where xy is the
  version number - eg. algshop25.exe. This file can be found in the folder ..\Multimedia
  Protector\Shop or ..\Automatic Generator
- your license file *mp.lic* from the main directory ..\Multimedia Protector\

🛈 If you do have multiple applications and they use different versions of Multimedia
Protector, you could use for each product a different algshop.exe file from different
Multimedia Protector versions.

4.9.3.6.3 Define Delivery Text

Start the Element5 / Share-it! *Control Panel.* Edit a product and add a **delivery text.** This
text will include the Activation Key which will be generated after the order process and is
used in the e-mail which is send out to the customer. The delivery text can be in HTML
format.

In the order process, links to element 5's Terms and Conditions and Privacy Statement are displayed in the footer of the relevant Wel of your products. In the event that local legal regulations require special notices, it is the responsibility of element 5 to fulfill these ot and to ensure the uniformity of the Terms and Conditions, please do not integrate any references to other Terms and Conditions into tl

E-mail template: ❶
This is the text that you would like to appear in the e-mail that is sent to your customers with the license key. This is only applicable text must contain a <%KEY%> tag, which is replaced by the generated license key.

```
<b><font size="4">Serial Number </font></b>
<p>The Serial Number Key is your 'proof of purchase'. It can be used only once
and requires an Internet connection.

</p>
<p>The serial number key is: <b> <%KEY%> </b></p>
<p>Start the application and select: <b> I have a serial number and I want to
activate Licence Protector <I>Multimedia Edition<I>.
```

Add Delivery Text information

You can use one of the following sample texts. The Serial Number is inserted with the variable **<%KEY%>**.

⊟ Serial Number Key - English
Serial Number
<p>The Serial Number Key is your 'proof of purchase'. It can be used only once and requires an Internet connection.

</p>
<p>The serial number key is: **<%KEY%>** </p>
<p>Start the application and select: I have a serial number and I want to activate (your product name).

Enter the Serial Number Key from this E-Mail (you can copy it using the clipboard), your name/company and your e-mail address. Press the button: <i> Next. </i>A dialog appears which verifies the Serial Number key online and activates the application.</p>
<p>If you don't have an Internet connection use the option: <i>You can also request an unlock key by E-Mail.</i></p>
<p>Help, how to activate the software, can be found by selecting the icon ? </p>
<p>Backup your license file xy.lic.</p>

⊟ Serial Number Key - German
Seriennummer<p>Die Seriennummer ist ihr 'Kaufnachweis'. Diese kann nur einmal verwendet werden und benötigt eine Internet Verbindung</p>
<p>Die Seriennummer lautet: **<<%KEY%>** </p>
<p>Starten Sie die Anwendung und wählen Sie: Ich habe eine Seriennummer und möchte (Ihr Produktname) aktivieren<I>.

</i>Geben Sie die Seriennummer von diesem E-Mail (diese kann über die Zwischenablage kopiert werden), Name/Firma und Ihre E-Mail Adresse ein. Drücken Sie die Schaltfläche: <i>Weiter. </i>Es erscheint ein Dialogfenster, das die Seriennummer online überprüft und die Software aktiviert.</p>
<p>Wenn keine Internet Verbindung zur Verfügung steht wählen Sie die Option: <i>

Sie können auch per E-Mail einen Freischaltschlüssel anfordern.</i></p>
<p>Hilfe, wie die Software aktiviert werden kann, ist über das Symbol ?
verfügbar.</p>
<p>Sichern Sie die Lizenzdatei XY.lic.</p>

4.9.3.6.4 Upload Project Files

To distribute via a download link, all files from the **folder deploy** [163] have to be packed
into **one ZIP file**. Use the option **Save as ZIP** in the Screen - Save [91].

🔴 Never start the Multimedia Player for testing before you make the exe or zip file, as
the license file [24] is modified with each start and cannot be used any longer for
distribution

See also
Adding an Installer [97]

Start the Element5 / Share-it! *Control Panel*. Select **Upload Product** and then either
select **Replace an existing file** or **Upload a new file**. Select your zipped file from the
deploy folder and upload the file.

4.9.3.6.5 Define Delivery Type

Within the option *Delivery Type* you specify the Licence Generator which the shop
System invokes after the order process. See - <u>Send files to Element5 / Share-it!</u> 223 - how
to upload the necessary files.

⊟ Add Key Generator

Press the button *Add* and select **element 5 delivers: License key.** Then select **Installed Key Gen**
select the latest Licence Generator. By default, it has the name **algshopxy.exe** where xy is the ver
e.g. algshop25.exe.

Edit Delivery Types

Specify detailed information about the delivery type for your products here. You can indicate what will be delive
delivered (e.g. by e-mail or by postal mail), and whether it is you or element 5 who is responsible for product o
This information will be displayed for the customer on the final page of the order process and in the e-mail with

→ Regarding <u>documentation</u> on the download link and license key product delivery types.

☑ Product

Product LICENCE PROTECTOR Multimedia Edition (#300053149) ⌄

[Show data]

1. **element 5 delivers: Download link for the full version**

File to be shipped: LPInstall.EXE (18956.7 KB) ⌄ ❷
Description (optional):   ❷
Extended Download product: Do not use an Extended Download product ⌄ ❷
File size (bytes):   19411615
Date of last change: 10-APR-06

2. **element 5 delivers: License key**

Please select one of the following methods for your customers to receive license keys.

◯ Uploaded key list: ⌄ ❷
               ☐ Should a license key be sent to the customer for each license ordered?

◉ Installed key generator: AutoLicGenElement5NOLIC24.exe (File size (bytes): 3526656, Date: 02-DEC-
◯ Key generator via a URL: ❷
◯ Static key: ❷

[Save]

Next step is to add your download package.

⊟ Add Download Package

Start the Element5 / Share-it! *Control Panel*. With **Delivery Type** you specify that Element5 / Share download link.

Select *Product Delivery*, **Delivery Type**. On the right side select your product and press - *Show dat*

Press the button *Add* and select **element5 delivers: download link for the full version full versio** uploaded project file 206 in the drop down list.

4.10   How TOs and FAQ

This chapter introduces **F**requently **A**sked **Q**uestions as well as tips and tricks.

Click on the + sign on the left side to get a complete list.

4.10.1   How can I print this Tutorial?

Print this tutorial
The Online Tutorial is also available as a PDF document.

You can print this tutorial - click on the link to download PDF file

4.10.2 Application is not running as expected

If your application in the Multimedia Player is behaving different than it would be running in the original flash player or PPT / PDF Viewer, check these solutions.

4.10.2.1 Application loads - configuration text is missing

If the application loads, but the configuration text which is provided via an XML file is missing, try again, using the Option Always use relative paths 87 .

If you use an flash application with one of the provided menu application 273 , copy the flash application to the path where the menu is located. Some flash applications using an configuration file cannot handle the configuration file when they are located in a sub folder.

4.10.3 How to activate Multimedia Protector

During the trial period, the activation screen appears with each program start. You need a Serial Number to activate the product - see Buy Serial Number 230 .

To be sure to work with the latest version, **always download the version you get with the order confirmation e-mail**.
First uninstall the version on your PC - see How do I uninstall Multimedia Protector 261 ?.

What happens during activation?

The activation process will bind the license to the PC. **Use the Serial Number only on the PC you want to use Multimedia Protector. The Serial Number cannot be used twice.** After the activation is done, Multimedia Protector will run only on this PC. Your hardware data, Serial Number, name, e-mail address and some program specific data is transferred to our activation center. No other data stored on your PC is transmitted.

Select Activation Method

On the first screen, either choose

- *I have a Serial Number and I want to activate Multimedia Protector*. This will use the Online Activation 230 . This is the recommended activation method and should be used if an Internet connection is available
- *You can also request an unlock key by E-Mail*. This will use the E-Mail Activation 231

Start Video Tutorial for product Activation

See also

4.10.3.1 Buy Serial Number

The Serial Number is your **proof of purchase**. It is unique and will look like this.

dO8uc-G1iC9-jOGeA-BqgEX-U71ID-0V1VX

There are 6 blocks each with 5 characters. The blocks are separated by a hyphen for better readability.

Select your Version

Premium or Standard version? Check out the <u>feature comparison matrix</u> which version is right for you.

Buy Serial Number

If you do not have a valid serial number, you can buy it here - <u>Buy Multimedia Protector.</u>

Activate Multimedia Protector

Activate the product <u>Online</u> 230 or by <u>E-Mail</u> 231.

4.10.3.2 Online Activation

The Online Activation requires the <u>Serial Number</u> 230, company name and e-mail address. Then the license will be verified online and activated. No additional step will be required. Multimedia Protector can now be used on this PC.

Backup your Serial Number. You will need it for a <u>reinstallation.</u> 233

4.10.3.3 E-Mail Activation

The E-Mail Activation requires the Serial Number 230, company name and e-mail address.

Request Unlock Key

After filling out the screen, select: ***Request Unlock Key by E-Mail - send E-Mail***. This will open your default E-Mail client. An e-mail with the hardware IDs and license information will be created. Press **send** to send the e-mail to our activation center. You will get an Unlock Key 233 back within 2-3 business days.

 Backup your Serial Number. You will need it for a reinstallation 233.

See also

Enter Unlock Key [233]

4.10.3.3.1   Enter Unlock Key

After requesting the Unlock Key by e-mail [231], the screen shown below will appear during each program start. Type in the Unlock Key you got back by E-Mail. The activation process is then completed.

See also

E-Mail Activation [231]

4.10.3.4   Reinstall Software

You can reinstall the application **on the same PC / Server** as often as you like. First uninstall Multimedia Protector, delete the complete installation folder, then reinstall the application - see How to activate Multimedia Protector [228].

4.10.3.5 Your Multimedia Protector License

Multimedia Protector comes with an own license file - **mp.lic**. The license is a license **PER PC / COMPUTER**. Copy Protection is turned on after activation. We recommend making a backup of the license file.

- You have to activate the product before you can use it without the restrictions of the demo version 56 - see How to activate Multimedia Protector 228

- Find out more about your license in the chapter - Display your Licence 237

- See Licence Agreement 333 for details of usage.

See also

Demo version 56
Browse your License 237
Apply Activation Key 234
License Agreement 333

4.10.3.6 Apply Activation Key

An Activation Key is used to modify the license information (e.g. increase number of licenses). All Activation Keys are unique and have the same format like.

dO8uc-G1iC9-jOGeA-BqgEX-U71ID-0V1VX

There are 6 blocks each with 5 characters. The blocks are separated by a hyphen for better readability.

Where do I apply the Activation Key

If you got an Activation Key via E-Mail or Fax, you can enter the key within the screen *Administration, TAB Misc, Show License Information* 108.

Multimedia Protector - flash-demo [C:\Program Files\...2.0\demodata\flash-demo.mme]

Administration

About Multimedia Protector   Check for Updates

Repair and Compress Project file

Web Activation Server Administration   Change URL

☐ I use an own Activation Server

Hosting Number   1381806   FTP-Server address

Hosting Password   ***********   FTP Account

          FTP Password   ****

          Path on FTP-Server

Primary Hardware ID (Installation Code)   Netbios Name(local)(4)   ▼

Alternative Hardware ID (Installation Code)   MAC Address(2)   ▼

☐ Display Quick Introduction help

☑ Error Tracking Enabled

Select path for Log-files

Show License Information

Settings   Image   Player Options

License Information   Data Import   Save

Screen - Administration, TAB Misc

Online Validation

🔵 Some Activation Keys are validated online and they require an Internet connection. After pressing the OK button this screen appears.

Apply Activation Key after Evaluation Period has expired

If the evaluation period has expired, select **Show Licence Information** *(see screen below)* and then press the button Activation Key.

4.10.4 How do I find my Serial Number for Multimedia Protector?

You can access your license information and your Serial Number within the administration 108 screen.

Multimedia Protector or Multimedia Protector Premium

For differences see chapter Standard or Premium Version? 56

- Number of Computers which have a license - normally 1
- Demo version 56 - if omitted, it is a full version
- Valid until (time limitation) - if omitted, it is a non time limited version
- Web Activation 228 - either done or required

Your Serial Number
To retrieve your Serial Number:

- click on the + sign in the first line with the label Multimedia Protector
- click on the + sign with the label *Activation Keys*

The visible number is your Serial Number.

Update Subscription

The update subscription entitles you to install the latest updates as long as it has not expired. See chapter Check for Updates 101 how to download updates.

- Available / Not available
- Time limitation - the date when the update subscription expires

Release Number

- Internal release information

4.10.5 How to make a time limited evaluation / trial licence?

If you want to make a time limited trial license, you can either limit

- by x days after the first usage ➔ use *Number of days to evaluate*
- by a specified expiry date ➔ use *End of Evaluation*

Details see Screen - Licence Information 71

Normally you will want to remove the time limitation after the activation is done. Therefore check: *Remove time limitation after Copy Protection is turned on.*

See also

How to prolong an evaluation / trial version? [239]

4.10.6 How to prolong an evaluation / trial version?

To prolong an evaluation version, just create an Activation Key.

- additional licenses = 0
- either select: Number of days to evaluate or End of Evaluation

The Activation Key is generated within the Screen - Administration, TAB *Additional Licences* [119]

If you are using the Web Activation server [324], use the Switch: *Online Validation required* to ensure that a key can never used twice.

Details for all options see Screen - Administration, TAB *Additional Licences* [119]

See also

[How to make a time limited evaluation / trial license?](#) 238

4.10.7 How to make a full version with expiry date / time limitation?

It is possible to generate a time **limited full version,** e.g. to lease a version for a specific time. Limitation is possible either

- by x days after the activation is done or
- by a specified expiry date

For details see: [Time limited version after activation](#) 73

4.10.8 How to make a version without registration?

If you want to protect the content and the Multimedia Player should start unlimited times, select:

- Number of Days = **0**
- No activation (content protection only)

4.10.9 How to make a licence which is limited to one person?

It is possible to limit a license to a person / user:

In the Screen - Licence Information ⌐69⌐ select license per **user**.

If the application is a non-network application (installation is on a single PC) AND you want to limit it to one user, choose license per **User** and number of users =1. For details about the user license see Licence per User / Person ⌐298⌐.

ⓘ This feature is available only in Multimedia Protector *Premium* ⌐56⌐ version.

4.10.10 How to invoke external files?

If your application has external files outside the encrypted database but on the same directory like the database, you can invoke these files with a special command **http://FILE:testfile.exe$$RUN** - for details see

4.10.11 How to protect the content but do not use Copy Protection?

It is possible to just protect the content, but use no licensing type like time limitation or copy protection

- Set *Number of days to evaluate* to 0
- *End of Evaluation* must be empty (press button Clear Expiration Date)
- Check - *No Activation (content protection only)*

Details see Screen -

4.10.12 How to protect? - search by file type

The Multimedia Protector offers a native support of **SWF** (Macromedia Flash) files, **FLV, JPEG, MP3** and other file types by converting these files to flash.

At least one SWF file is needed. This file can start any video, music or image files which are supported by the standard flash players. See chapter - How to convert a file 174 - for details.

If you are working with flash tools like Authorware or Articulate see Favored Flash/HTML/ Conversion Tools 25 for special considerations.

Below find a list of all supported file types and the steps necessary to protect the file.

- AVI, MPEG, Quicktime, Windows Media Video 179
- CHM (help file) 181
- Executable (EXE) file 165
- FLV (Video) 176
- HTML 182
- JPG (Image) 176
- MP3 (Music) 177
- PDF 183
- PPT (Powerpoint) 186
- PPT with Hyperlink 190
- SWF (Flash) 176
- WAV 193
- Word, Visio, Excel, Office Documents 194
- Word with Hyperlink 194

4.10.12.1 AVI, MPEG, Quicktime , Windows Media Video

A lot of formats can be converted and then protected by Multimedia Protector. You will find a lot of tools by searching in Google. We describe 2 tools more in detail.

🛈 The video will play only on a PC, not on a CD / DVD recorder connected to TV.

Convert to SWF

If you have multiple, small videos, we recommend converting the video to swf. A good tool that also adds **player controls** can be found at http://www.moyea.com (Moyea Flash Video MX).

- Convert the file to swf
- Import the file 83 and set the swf file as start file
- If you have multiple video files to secure, use the Menu Creator 273.

See details for converting with Moyea 39.

Convert to FLV

Using the free Riva FLV encoder, AVI, MPEG, Quicktime and Windows Media Video can

be converted to FLV.

Download Riva FLV encoder: http://rivavx.de/index.php?id=483&L=3

- Convert the file to FLV
- Import the file ⸤83⸥ and set the FLV file as start file
- If you have multiple video files to secure, use the Menu Creator ⸤273⸥.

Convert AVI to SWF using swftools

If you want to use the SWF format for videos, use a tool which converts the file to SWF. After converting the file, just import ⸤83⸥ it and define it as a the starting file. If you need multiple AVI files to distribute, use the menu generator ⸤273⸥.

Swftools is a collection of SWF manipulation and creation utilities - and it is free (released under GPL) - www.swftools.com .

Download the Windows Version swftools-0.7.0.exe at
http://www.swftools.org/download.html
You find a online help on the swftools web site - but here are the most useful commands.

Program to convert AVI to SWF: **avi2swf.exe** - online help: http://www.swftools.org/avi2swf.html

Standard Conversion

This converts a single AVI file.

avi2swf.exe file.avi

or if you .SWF file should get a new name

avi2swf.exe file.avi -o filenew.swf

4.10.12.2 CHM (help file)

To secure a CHM file (help file) the Windows viewer for this file - **hh.exe** is used. By default, every Windows system should have this file installed.

There are 3 steps to protect the CHM file:

Copy the hh.exe viewer

Copy the viewer for the chm file, the file **hh.exe** from c:\windows to your project folder where you saved the CHM file.

🔵 The hh.exe from a Vista machine will not run on XP but the version from XP will run on Vista machines. If you want to support NT you have to make tests which hh.exe will run on all operating systems.

It is not in the liability of Mirage if you may distribute this file or not.

Copy the start application

To run with Multimedia Protector, a special start application is needed. Copy the file **startchm.exe** and the configuration **file chm.ini** from the Multimedia Protector installation folder ...**tools\chm** to your project folder where you saved the CHM file.

Now add the name of your chmfile in the chm.ini file. You can use any text editor to modify this file.

[Filename]
chmfile=**test.chm**   (change the name here)

The folder contains now all files which are:

- hh.exe
- startchm.exe and chm.ini
- your chm file

Directory with chm files and other files to import

Import the files

Now <u>import</u> 80 all the files from the project folder you created and mark **startchm.exe as startfile** using the button *Define as starting file.* A red icon signals the start file.

The import screen would show the following files.

4.10.12.3 Executables (exe file)

Multimedia Protector supports a protection of .EXE files.

You can start EXE files from flash applications 167 or secure standalone EXE 166 files.

It is possible to protect standalone exe files (wrap an application) and also exe files, that need additional files like configuration files or dll - see chapter Secure standalone exe file (s) 166.

How does it work?

- The exe file is imported into the encrypted database and not visible. It is completely protected
- When the exe file is invoked, it is extracted to the hard disk to a hidden place and started

The security of exe files is different compared with swf files. Swf files are loaded directly into the memory and are never visible on a disk. The exe file has to be saved

temporarily on a folder.

If Source Code is available, **the protection can be improved significantly by defining a password** [168], which is required to start the EXE file.

See also
Secure standalone exe file(s) [166]
Flash application using exe file [167]
Define Password for EXE file [168]
Read Configuration Data [173]

🛈 This feature is available only in the Multimedia Protector Premium [56] version.
🚫 Concurrent user [23] is not supported when the main application is an EXE file.

4.10.12.4 FLV (Video)

The FLV format is a format that can be directly used by importing [83] the file. If you have an application which uses FLV and the files are not displayed, convert the FLV file to SWF using http://www.moyea.com

AVI, MPEG, Quicktime and other formats can be converted - see details [179].

🚫 At this time only **one** FLV video can be played per MMF file. The video will play only on a PC, not on a CD / DVD recorder connected to TV. Streaming is not supported. For Trouble Shooting see also - FLV file does not load [301]

🛈 If you have multiple FLV files to secure then:

- Save each FLV file in a separate database - This feature can be used if you split the project into several databases. [305]
- Use one of the menus Multimedia Protector provides (Advanced Menu, Basic Menu) or any other menu like CDMenuPro [284] or Quick Menu Builder. [286]

A sample for flash file protection is provided with *flv.mme*

4.10.12.5 HTML

Pure HTML files can not be protected directly. There are 2 options depending on the way you are using the HTML files.

Protect html files

If you have a project with HTML files only, you need a tool which compresses all HTML files in one single EXE file like HTML Executable [42] or http://www.ebookcompiler.com/, which comes with an own Viewer. Multimedia Protector now provides licensing and copy

protection options. Just import the EXE file - see Secure standalone exe file [166]

The HTML files are protected with the same security level like EXE files [165]

Protect flash project which includes some html files

If the protection of the flash file is the main issue and HTML files should just be invoked, import all files [80] (including the HTML files).

In your flash code you have to add special commands:

- Extract all files from the encrypted database to a temporary folder with the command: ***http://FILE:testfile.html$$COPY*** . You have to use this command for each html file
- Start the first HTML file with the command ***http://FILE:default.html$$START***

The HTML files are loaded into the Browser and they are not protected

For all commands see - Flash application using EXE files [167]

4.10.12.6 JPG (Image)

To use JPG files, they have to be played by a flash file. A free flash Photo Album [144] is provided. Otherwise, any .swf file allowing to display JPG files can be used like the free versions from Airtight [150].

A sample for jpg files with a photo-album is provided with *photo-album1-demo.mme* and *photo-album2-demo.mme*.

For more details see chapter Photo Album [144].

4.10.12.7 MP3 (Music)

To use MP3 files, they have to be played by a flash music player. A free flash music player [141] is provided. Otherwise, any .swf file allowing to play mp3 files can be used.

A sample for mp3 files with the player is provided - use *mp3-demo.mme*.

The audio files will play only on a PC and not not on a CD / DVD recorder or mp3 player.

4.10.12.8 PDF

There are several ways to convert PDF files. After converting the file, just [import] [83] it and define it as a the starting file. If you need multiple PDF files to distribute, use the [menu generator] [273] to select the files within a menu.

PDF Conversion Tool

We recommend using pdf2swf which offers a lot of functionality and is free. It also offers a batch conversion of pdf files, so you can convert all files in a directory and subdirectory into a batch process. The navigation bar to browse the PDF file is provided with the [Advanced Menu] [274].

Details: [PDF conversion] [184]

ⓘ Download a sample - the Multimedia Protector Tutorial with over 200 pages and links inside the PDF document - converted with **swftools** and using the Advanced Menu - [Click here to download] and unzip the file to a folder. Start mp-pdf.exe.

Using a Printer Driver

This option allows printing the secure file, but links within the PDF file will be lost. It adds a nice navigation bar. The user can select and copy text but the format is lost.

For details using a printer driver see converting [Office Documents.] [194] The printer does not support hyperlinks. If you need hyperlinks, use the PDF Conversion tool instead.

ⓘ Not all options of a PDF file are supported. The converted version is like an image of the PDF file. It does not support filling out forms or any other active content including bookmarks.

ⓘ Download a sample - the Multimedia Protector Tutorial with over 200 pages and links inside the PDF document - converted with **Flashpaper** - [Click here to download] and unzip the file to a folder. Start mp-flashpaper.exe.

See also
[PDF conversion] [184]
[Office Documents - disable printing] [186]

🔴 Interactive PDF files with forms can not be converted.

4.10.12.9 PDF with Hyperlink

If you have PDF documents with hyperlinks to **other** PDF documents (Hyperlinks inside one document will work without special settings), perform the following steps:

1. Convert PDF to flash using PDF2SWF |184|
2. After converting all files to flash, copy only the flash files to a new directory which you would import |80|.
3. Set the option: Converting hyperlinks after SWF ending |87|
4. If you use relative paths (links like **..**path1\file1.pdf), set the option: Always use relative path |87|
5. Use the Advanced Menu |274| as described below

A Hyperlink must not contain an umlaut (äüö) or any other special characters like %$

Adding a toolbar (browse, zoom, print)

The toolbar for the converted PDF file is provided by the Advanced Menu |274|.

If you have just one PDF file then use the files provided in the folder ..\converter\swftools. You need 3 files for your project:

- Advanced-menu.swf
- config.xml
- doc.swf

Rename your converted PDF file to docu.swf and import |80| all files. Select the file advanced-menu.swf as start file and check the option: *Use advanced menu*. It will add browse buttons to navigate to the next page and a scroll bar to scroll through the page.

View PDF file with toolbar

It is possible to change different settings.

▣ Add a Print Button
To add a print button edit the config.xml file (with any editor or use free XML Editor |258|) and change the entry <**print**> to *True*.

☐ Disable Zoom In / Out
To disable the zoom option, edit the config.xml file (with any editor or use free XML Editor²⁵⁸) and change the entry **<zoom>** to *false*.

☐ Start with different size
By default, the converted PDF is loaded with 100%. It is possible to start the document with another size like 150% or 75%. Edit the config.xml file (with any editor or use free XML Editor²⁵⁸) and change the entry **<zoomin>** to eg. 150 (without % sign).

ⓘ Download a sample - the Multimedia Protector Tutorial with over 200 pages and links inside the PDF document - converted with swftools and using the Advanced Menu - Click here to download and unzip the file to a folder. Start mp-pdf.exe.

4.10.12.1 PPT (PowerPoint)

There are two different approaches to protect Powerpoint files.

Using the PowerPoint Viewer

Using the PowerPoint Viewer is easy to handle and adds the same protection level like protecting EXE files¹⁶⁵. The PowerPoint Viewer is provided for free and is included in the main PowerPoint installation.

- All animations including video and audio are supported
- No conversion necessary
- PowerPoint Viewer is free
- One PPT can invoke another PPT (Link from PPT A to PPB - tested with Office 2007)

- Not the same strong protection level like a converted flash file will offer
- No menu can be added to select different presentations
- As all files have to be extracted from a database, the size for the project should not exceed 100 MB. You can protect multiple PPT files with each 100 MB in size by splitting the project into several databases³⁰⁵
- Printing can not be disabled (always enabled)
- Macros inside PPT are not supported

PPT Conversion to Flash

The PPT files can be converted into flash and therefore are protected with the highest security level, which Multimedia Protector offers for flash files. [25]

- Highest protection level
- A menu [273] can be used to start different presentations
- The size of the complete project does not matter as files are loaded into memory only when required
- Printing can be enabled or disabled

- Some special animation effects will not work with converters
- The file has to be converted
- The converter is not free
- Macros inside PPT are not supported

What is the difference between Multimedia Protector and the Microsoft IRM (Information Rights Management) system in Office 2007?

The IRM system in Office 2007 allows to specify security options per user. You need a server to handle the user information and each user must install the IRM Client on his PC. This is typically a possible approach to protect a document inside the own company. If the document should be distributed, the restrictions to have a connection to the IRM server and to install the IRM client should be considered. Multimedia Protector protects PPT files without the need to install an additional software or to have an Internet connection.

See also

Use PowerPoint Viewer [177]
PPT Conversion to Flash [190]
PPT with Hyperlink [191]
PPT - Disable Printing [186]

4.10.12.1 PPT with Hyperlink

There are a lot of PPT conversion tools available with different pricing and different conversion options. Find your favorite tool at http://www.masternewmedia.org/2004/04/14/powerpoint_to_flash_conversion_tools.htm .

We recommend using a tool which generates one singe SWF file and not a file per PPT slide like http://www.wondershare.com (PPT2Flash) , http://www.presentationpro.com/ or http://www.cpslabs.net

If you have PPT documents you want to convert, perform the following steps:

1. Convert PPT to flash using a PPT converter that supports hyperlinks
2. If you have multiple, large videos convert it to SWF - see video conversion 179
3. After converting all files to flash, copy only the flash files to a new directory which you would import 80
4. Use the Advanced Menu 274 as described below if the PowerPoint converter does **not** support a navigation toolbar (most of the converters will add such a navigation bar automatically)

☐ *Using Advainced Menu to add a navigation toolbar*

Adding a toolbar (browse, zoom, print)

The toolbar for the converted PPT file is provided by the Advanced Menu 274.

If you have just **one** PPT file then use the files provided in the folder .. \converter\swftools. You need 3 files for your project:

- Advanced-menu.swf
- config.xml
- doc.swf

Rename your converted PPT file to docu.swf and import 80 all files. Select the file advanced-menu.swf as start file and check the option: *Use advanced menu*. It will add browse buttons to navigate to the next page and a scroll bar to scroll through the page.

View PPT file with toolbar

It is possible to change different settings.

- Add a Print Button
  To add a print button edit the config.xml file (with any editor or use free XML Editor 258) and change the entry <**print**> to *True*.

- Disable Zoom In / Out
  To disable the zoom option, edit the config.xml file (with any editor or use free XML Editor 258) and change the entry <**zoom**> to *false*.

- Start with different size
  By default, the converted PPT is loaded with 100%. It is possible to start the document with another size like 150% or 75%. Edit the config.xml file (with any editor or use free XML Editor 258) and change the entry <**zoomin**> to eg. 150 (without % sign).

4.10.12.1 SWF (Flash)

The flash format (.swf) is the main format which is used by Multimedia Protector.

Flash files running in the flash player 8.0 are supported. They can be directly imported 83 .

A sample for flash file protection is provided with *flash-demo.mme*

4.10.12.1 WAV

After converting the file, just import 83 it and define it as a the starting file. If you need multiple WAV files to distribute, use the menu generator 273 .

WAV Conversion Tool

You will find a lot of tools by searching in Google. We describe one tool more in detail. It is a collection of SWF manipulation and creation utilities - and it is free (released under GPL) - www.swftools.com .

Download the Windows Version swftools-0.7.0.exe at
http://www.swftools.org/download.html

You find a online help on the swftools web site - but here are the most useful commands.

Program to convert PDF to SWF: **wav2swf.exe** - online help: http://www.swftools.org/wav2swf.html

Standard Conversion

This converts a single WAV file.

wav2swf.exe file.wav

or if you .SWF file should get a new name

wav2swf.exe -o filenew.swf file.wav

4.10.12.1 WORD, VISIO, EXCEL, Office Documents

All documents that are **printable**, like Word, Visio, Excel, can be converted into flash with a printer driver. It is called Macromedia FlashPaper2 and can be downloaded and bought at the Macromedia Website http://www.macromedia.com/software/flashpaper/ .

The printer driver creates a flash file with an own tool bar, which allows **navigating through the file and printing the file**. It is easy to use, but hyperlinks will be removed.

If you do not **want to allow printing the content**, see - Office Documents - disable printing [186]

Instead of using the printer driver, **Word files or other office documents** can be saved as PDF - see PDF conversion [184] - which offers more options like the printer driver method.

After converting the file, just import [83] it and define it as a the starting file. If you need multiple office documents to distribute, use the menu generator [273].

If Excel has VB macros or formula, you need a source code integration with Licence Protector - see www.Licence-Protector.com or contact sales@mirage-systems.de for an Excel Add-in.

Download a sample - the Multimedia Protector Tutorial with over 200 pages and links inside the PDF document - converted with **Flashpaper** - Click here to download and unzip the file to a folder. Start mp-flashpaper.exe.

If you use flashpaper and need a menu, you have to use the Basic Menu [280].

See also

Word with Hyperlink [194]

Office Documents - disable printing [186]

4.10.12.1 Word with Hyperlink

Word 2007 comes with a free Add-In, which creates a PDF file and it supports hyperlinks. Just select File, Save As PDF. If this option is missing, you can download the Add-In here or search in the Word Online help for PDF.

Some PDF Converters have inbuilt support for Hyperlinks. If you use a converter, which does not support it, you can use the freeware tool PDF-T-Maker.

PDF T-Maker

Word Documents with Hyperlinks to other Word Documents need a special converter. This converter is a plug-in in Word and creates a Postscript file with hyperlinks.

Technically, there are these steps:

1. Create Postscript file with PDF-T-Maker
2. Create PDF file, using the Postscript file, with any PDF tool. This step can be done automatically after step 1
3. Convert PDF to flash using PDF2SWF [184]
4. After converting all files to flash, copy only the flash files to a new directory which you would import [80]
5. If you use relative paths (links like **...**path1\file1doc), set the option: Always use relative path [87]

You can download the converter here: http://www.transcom.de/transcom/en/2004_pdf-t-maker.htm
After installing the plug-in in Word, you have to configure it:

- General Tab. Check: Convert Cross document links, **thereby convert .doc in filename into .swf**
- Default Postscript Printer: If you do not have a printer installed, either find one on the web page described in the pdf-t-maker documentation or install one that comes with Windows (e.g. **Brother HL-2400C BR SCRIPT2** - use LPT3 to print as a virtual device)
- Default Destiller TAB: If you have Acrobat installed, define Acrodist.exe or the distiller of your PDF tool. If you do not have any PDF tool, download PDF creator: http://www.pdfforge.org/products/pdfcreator/

If you need a batch conversion, e.g. conversion of all files on a specific subdirectory, please contact www.transcom.de and ask for the batch conversion option.

A Hyperlink may not contain an umlaut (äüö) or any other special characters like %$

4.10.13 Which files can not be protected?

If you have applications (executables) without Source Code, see <u>How to protect an application</u> [174]. If you have the Source Code of the application see: <u>How to protect an application written . NET, VB, Delphi, C or other development languages?</u> [174]

Excel - if VB macros or formulas have to be protected, you need a source code integration with Licence Protector - see <u>www.Licence-Protector.com</u> or contact <u>sales@mirage-systems.de</u> for an Excel Add-in.

HTML files and all other file types that cannot be converted to flash cannot be protected. If the HTML file is just used as a start file to invoke a flash file then simply use this flash file as the <u>start file</u> [83] and not the HTML file.

See chapter <u>How to protect?</u> [242] to get a list of supported file types for protection.

🔵 All files will play only on a PC, **not on a CD / DVD recorder** connected to TV.

4.10.14 How to make a bootable CD / DVD

Your can generate a CD / DVD which starts the Multimedia Player directly after the CD / DVD is inserted.

- Save the project with the option <u>Save for CD</u> [89] and create the <u>files for distribution</u> [89]
- Copy all files from the <u>folder deploy</u> [160] to the CD/DVD
- You can add an <u>installer</u> [97] which allows installing the files from CD to the hard disk drive

🔵 If you use an own menu before you start the Multimedia Player then change the **autorun.inf** file.

Autorun.inf
[autorun]
icon=flash-demo.exe **⬅ Icon which is displayed in the Explorer. Default = Icon of Multimedia Player**
open=flash-demo.exe **⬅ File which is automatically started after the CD is inserted**
Name=Multimedia Edition - Flash Demo **⬅ Name which is displayed in the Explorer. Default is <u>Product Name</u>** [59]

4.10.15 Which flash version is supported?

The Multimedia Player supports Flash version 9.

4.10.16 How to make a CD menu / start menu

.Multimedia Protector offers 2 applications written in flash, where you can create your own CD or start menus. For details see <u>Menu Creator</u> 273.

4.10.17 How to start different MMF files with one Multimedia Player?

It is possible to have just one Multimedia Player installed on a network and use this Multimedia Player with different MMF (data) files.

Start the the Multimedia Player with the parameter **-f filename.mmf**

Sample: c:\programs\myapp**flash-demo.exe -f c:\programs\app2\powerpoint.mmf**

The license file can either be stored on the folder of the mmf file (recommended), but also on the folder of the Multimedia Player.

Special Considerations

If you use the option: **Advanced Protection** 74 then you can only invoke a database (mmf file) which was made for the **same Multimedia Player version**.

Sample

- A.mmf was made with version Multimedia Protector 1.3
- B.mmf was made with version Multimedia Protector 1.4

The Multimedia Player from version 1.4 could not start A.mmf and Multimedia Player version 1.3 could not start B.mmf.

If you do **not** use **Advanced Protection** 74 there is no guarantee that a Multimedia Player could invoke databases from different program versions. Always install the latest Multimedia Player to be sure that all new features from a new version are supported.

4.10.18 How to edit an XML file

A lot of configuration files (e.g. the file for the <u>menu creator)</u> 273 are in xml format. You can edit this file using any editor like Notepad or Word. As an alternative, there is a nice freeware tool for xml files which you can download here.

http://www.snapfiles.com/get/xmlnotepad.html

Start the XML notepad and select *File*, *Open*. You will see the XML file content which is structured. The content can be easily modified and saved.

4.10.19 How to secure Macromedia Director / Authorware / other flash tools

If you do not use specific functionalities of Macromedia Director / Authorware, convert the project to flash and use Multimedia Protector.

Otherwise you can make a DLL integration - use Licence Protector source code integration - www.Licence-Protector.com. Search in the FAQ area for a Director / Authorware Source code sample.

4.10.20 How to protect an application written in .NET, VB, Delphi, C or other development languages?

You can use Multimedia Protector EXE Protection [166], if you do **not** have one of the following requirements

- No modules - only one application which has to be licensed
- No floating / concurrent user license
- Maximum security and flexibility of the licensing
- Transferring a license from PC A to PC B

These additional requirements are covered with Licence Protector source code integration product - see website www.Licence-Protector.com for details and download the trial version.

ℹ️ For protection with Licence Protector you need the Source Code and development work is necessary.

4.10.21 Can I use my own Player

No, only the Multimedia Player can be used. If you have created an own player using Director, Authorware or other development tools, see How to secure Macromedia Director / Authorware / other flash tools 259.

If you have just a menu which invokes other files, use the menu creator 273.

4.10.22 How can I view a swf (flash) file?

If you want to view a flash file (extension .swf), either **drag the file into the Browser** or use a flash viewer.

View file within Browser

To drag the flash file into the Browser, open your Browser like Internet Explorer, minimize it, select the flash file with the left mouse button and drag it into the Browser.

View file with Flash Viewer

Download free flash viewer **SWF Opener**: http://www.browsertools.net/downloads1.html

4.10.23 Where can I buy Multimedia Protector?

Select your Version

Premium or Standard version? Check out the feature comparison matrix to see which version is right for you.

Buy Serial Number

You can buy Multimedia Protector online and instantly use it. Buy Multimedia Protector.

After the order process you will get a Serial Number and a download link. See How to activate Multimedia Protector 228 how to unlock the trial version.

4.10.24 How do I uninstall Multimedia Protector

To uninstall Multimedia Protector

- Select Start, Control Panel
- Add/Remove Programs

Search for Multimedia Protector 2.0 or Multimedia Protector Premium 2.0 and select Remove.

4.10.25 I found no answer for my questions

If you did not find an answer for your questions in the tutorial search in the extensive Online Knowledge Base.

Browse Online Knowledge Base

4.11   Installation Manager for Harddisk and Network

The <u>Premium</u> 56 version comes with a ready to go installation manager. It allows installing the files from CD or download link to the hard disk. It also offers a network installation for Client PC's. The installer files can be found on the folder \Multimedia Protector Premium \2.0**installer .**

The installation manager includes the following features:

- Copies all files to a specified directory
- Adds the necessary user rights to the specified directory
- Copies the player, database mmf file and the license file to the specified directory, including an icon file
- Adds a program manager group and an entry within the program manager group to start the Multimedia Player
- Adds uninstall information
- Installation dialogs are available in multiple languages

 You can change the icon on the desktop and in the program manager group with an own bespoke icon.

The installer consists of 2 files:

- **setup.exe** - (installer file for single user installation) or **setup-network.exe** (for network installation)
- **setup.ini** - (configuration file for installer)

Copy these 2 files from the main installation folder ..\Multimedia Protector Premium \2.0\ **installer** to the deploy folder of your project. Then modify the <u>setup.ini file</u> 262 with any editor. The name of the installer can be renamed, e.g. to setup-abc.exe. The name of the ini file must be setup.ini.

🛈 If you want to start the installer directly after a CD is inserted, modify the file autorun. inf.

[autorun]
icon=flash-demo.exe
open=**setup.exe**
Name=Multimedia Protector - Flash Demo

🛈 This feature is available only in the Multimedia Protector <u>Premium</u> ⌐56⌐ version.

See also

4.11.1   Configuration File - Setup.ini

The configuration file defines options which are displayed during installation and allows to customizes the names and default values.

Configuration options for setup.ini

Just overwrite the default values within the setup.ini file. The file has different sections (indicated with [SectionName])

⊟ [SETUP]
This section defines the program name displayed during installation and default values.

    ⊟ **AppName**=My Multimedia Player
      Name of your application which is displayed during installation
    ⊟ **AppVersion**=3.0
      Version number of your application which is displayed during installation.
    ⊟ **AppPublisher**=Universal Software
      Name of your company
    ⊟ **DefaultDirName**=my application
      Default name for directory. You can also define a sub folder, e.g. Universal
      Software\application1
      The real path would then be ..\programs\Universal Software\application1
    ⊟ **DefaultGroupName**=Smart Program Group
      Default name for program manager group

▣ [ProgManGroup]

This section defines addition entries in the program manager group.

▣ **ShowLicenseInfo** = true or false

Adds an entry in the program manger group to invoke the [License Viewer]289. This is an inbuilt Administration interface where the end user can add new licenses. It is highly recommended for network installations to add this option.

▣ **ShowReadmeFile** = true or false

Adds an entry in the program manger group to invoke a ReadMe file. The ReadMe file has to be defined in the section [Files], [readme]263.

▣ [Files]
This section defines the files which have to be copied
▣ **exe-Filename**=flash-demo.exe
Exe filename of the player (must match the name in the deploy folder)
▣ **mmf-Filename**=flash-demo.mmf
Filname of the database (must match the name in the deploy folder)
▣ **lic-Filename**=flash-demo.lic
Filname of the license file *(must match the name in the deploy folder)*
▣ **ico-Filename**=mpplayer.ico
Define a custom icon which should appear in the program manager group. If you

want to use the icon of the Multimedia Player , use the file mpplayer.ico as provided

▣ **readme-xxx** = readme-xxx.txt
This allows to display a readme file after the installation. The readme file must be in txt or doc format.
xxx is the language identifier. The following languages are supported.

readme-ces=Czech
readme-dan=Danish
readme-deu=German - sample: readme-deu=readme-deu.txt
readme-dut=Dutch
readme-enu=English   - sample: readme-enu=readme-enu.doc
readme-esp=Spanish
readme-fra=French
readme-ita=Italian
readme-nor=Norwegian
readme-por=Portugues

Note: As you do not know, which language the user selects during installation, you should specify for each language a readme file, even if it is always the same file.

The readme file can be added to the program manager group, so that the file can be viewed after the installation is done. See section [ProgManGroup], ShowReadmeFile [263].

- additionalx = *.bat

  This command allows to copy additional files. You can either specify one file (e.g. doc-course1.pdf) or a complete group of files (*.pdf). A maximum of 10 different files can be copied. These files are copied to the main installation folder. They are not protected.

  additional1=*.bat
  additional2=doc-course1.pdf
  additional3=course*-lesson*.avi
  additional4=
  additional5=
  additional6=
  additional7=
  additional8=
  additional9=
  additional10=

- [Uninstall]
  This section provides uninstall information using the Windows standard uninstall options (control panel, add/remove programs).

  - AppComments=(C) 2007 Universal Software, Inc.
    Uninstallation comment
  - AppContact=office@universal-soft.com
    Contact information
  - AppPublisher=Universal Software, Inc
    Name of your company
  - AppPublisherURL=http://www.universal-soft.com
    Main Homepage URL
  - AppSupportURL=http://www.universal-soft.com/support
    URL for support page. If not available use main homepage URL
  - AppUpdatesURL=http://www.universal-soft.com/downloads
    URL for Update page. If not available use main homepage URL

4.11.2 Single User Installation

If you want to offer a **single user installation** (e.g. install from CD to the hard disk) then use the file **setup.exe**.

The installer performs the following tasks:

- Asks for an installation directory
- Copies all files to a specified directory - if an file already exists, the file is replaced
- Adds the necessary user rights to the specified directory
- Copies the player, database mmf file and the license file to the specified directory,

including an icon file
- If selected, places an icon on the desktop
- Adds a program manager group and an entry within the program manager group to start the Multimedia Player
- Adds uninstall information
- Starts the application after installation

Screens of the installer

Below find the screens which appear during installation.

4.11.3 Network Installation

If you want to offer a **network installation** (e.g. install from CD to the hard disk on the server) then use the file **setup-network.exe** instead of setup.exe.

Server Installation

The installer performs the following tasks:

- Asks for an installation directory
- Copies all files to a specified directory **on the server -** if an file already exists, the file is replaced
- Adds the necessary user rights to the specified directory
- Copies the player, database mmf file and the license file to the specified directory, including an icon file
- If selected, places an icon on the desktop
- Adds a program manager group and an entry within the program manager group to start the Multimedia Player
- Adds uninstall information
- Starts the application after installation
- Creates 2 files for network Client setups - folder ...**install\setup-client.exe** and **setup-client-advanced.exe**.

The server installation can be started on any Client / Workstation PC. There is no need to start the installation on the server.

Client / Workstation setup

Each PC has to run a Client / Workstation setup, using **setup-client.exe,** which performs the following tasks:

- If selected, places an icon on the desktop
- Adds a program manager group and an entry within the program manager group to start the Multimedia Player
- Adds uninstall information
- Starts the application after installation

All files reside on the **server.**

Advanced Client / Workstation setup

It is possible to copy the mmf (file) database to the local PC. This makes sense if huge flash files are used and network connection is an issue. The disadvantage is, that no central installation is available and updates have to be done on each Client PC. Multimedia Protector just loads the file, which is played via the network. The size of the database does not matter - only the size of the files which are loaded into the Multimedia Player .

Each PC has to run a Client / Workstation setup, using **setup-client-advanced.exe,** which performs the following tasks:

- Asks for an installation directory
- Copies the **mmf file** to a specified directory **on the local PC**
- If selected, places an icon on the desktop
- Adds a program manager group and an entry within the program manager group to start the Multimedia Player
- Adds uninstall information
- Starts the application after installation

The Multimedia Player resides on the server, the **database is on each local machine**.

Screens of the installer

Below find the screens which appear during installation.

☐ Only if setup-client-advanced.exe is started

Setup - My Program 2.1

Ready to Install
Setup is now ready to begin installing My Program 2.1 on your computer.

Click Install to continue with the installation, or click Back if you want to review or change any settings.

Destination location:
    C:\Program Files\My Program

Start Menu folder:
    My Program

< Back   Install   Cancel

Setup - My Program 2.1

Completing the My Program 2.1 Setup Wizard

Setup has finished installing My Program 2.1 on your computer. The application may be launched by selecting the installed icons.

Click Finish to exit Setup.

Finish

4.12 Menu Creator

Multimedia Protector comes with a Menu Creator. The Menu Creator lets you create own flash menus which can be used as the starting point of a CD/DVD or any download.

There are 2 menus. Select one depending on your needs.

If you have an already existing menu (flash or EXE menu) or need a different design, see chapter Other Menus 284.

Advanced Menu

The advanced menu is very flexible and lets you create menus with submenus (e.g. menu English Course 1 has submenus Lesson 1 and Lesson 2). It offers a toolbar which allows zooming and navigating. It is also multilingual.
You should use the menu for PDF 183 and PPT 186 files, as well as for single MP3 177 files and you can use it for any flash files.

☐ View Advanced Menu

Basic Menu

This menu is the best choice, if you have only a few menu items and flash files or only one single flv file.

☐ View Basic Menu

4.12.1 Advanced Menu

It can be found on the directory ..\Multimedia Protector\2.0**\Add-Ons\MenuCreator\advanced.**

The advanced menu is very flexible and lets you create menus with submenus (e.g. menu English Course 1 has submenus Lesson 1 and Lesson 2). It offers a toolbar which allows zooming and navigating. It is also multilingual.
You should use the menu for PDF 183 and PPT 186 files as well as for single MP3 177 files and you can use it for any flash files.

You can define

- Intro flash file which plays at the start of the menu
- Logo file and location of the logo
- Menu and Submenu title
- Language of the menu title
- Start a flash file - different file per language
- Display toolbar to zoom in and out as well as to browse forward and backward
- Display print button
- Display scroll bar
- Size to load a file (e.g. 50%, 100% or 200%)

🛈 The menu creator can be used with Multimedia Protector, but it is not allowed to distribute the files as a standalone application without Multimedia Protector .

If you use the menu outside of the Multimedia Player or with the evaluation version of Multimedia Protector, it will be displayed in red to indicate the demo mode. You can test the menu (see how can I view a flash file 260 ?) but you can use it only with the Multimedia Player.

Menu in Demomode

4.12.1.1 Basic Settings

The structure of the menu is defined with the file **config.xml.** It can be modified using any editor. If you do not have an XML Editor see [How to edit an XML file](#)²⁵⁸. The name of the menu application is **advanced-menu.swf.**

Basic Settings

Define the basic settings which are used as default values for the complete menu including intro file and logo. Make a copy of the config.xml file and edit the file.

🔵 All items like doc or default are case sensitive.

- ☐ expandir
  Displays a submenu item on the right or left side.
  Values: *right*
- ☐ align
  Position of the menu item
  Values: *right*
- ☐ locale
  Default language of the menu
  Values: en (English), de (German), it (Italian), fr (French)
- ☐ toolbar
  Enables the toolbar for all menu items by default. The toolbar allows navigating forward and backward within a document and zooming the document. This is necessary for converted PDF and PPT files.

  Values: *true, false*
- ☐ print

Enables the print icon for all menu items by default. The first printer icon prints the page which is displayed; the second printer icon prints all pages

Values: *true, false*

☐ scrollbars

By default, horizontal or vertical scrollbars are automatically added if required. You can override the default values using
one of the following values:
none - never display a scrollbar
v - add vertical scrollbar
h - add horizontal scrollbar

☐ doc

Path and filename of the intro file. It must be a flash file (swf). Leave this field empty to have no intro file. The entry *default* must be set to true

☐ default

Loads the intro file, specified with doc. This file is started **once** when the menu loads.

☐ logo

Path and filename of the logo. It must be a flash file. It must be a jpg file. Leave this field empty to have no logo file. You have to specify the position of the logo with *logo_x* and *logo_y*.

☐ logo_x

Horizontal position of the logo in pixel. The logo has to be specified with the entry *logo*
.

☐ logo_y

Vertical position of the logo in pixel. The logo has to be specified with the entry *logo*.

4.12.1.2 Define Menu Headlines

First define the <u>basic settings</u> [276]. All values from there are used as default values for the menu headlines - that is: as long as you do not explicitly define a value in the menu headline, the value from the basic setting definition will be used.

- id

  Number of the headline. The headlines are ordered by this number.
  Values: *1 to n*. Depending on the length of the headline only 4-5 headlines might be possible

- x

  Horizontal position of the headline in pixel

- y

  Vertical position of the headline in pixel

- orient

  Defines, how the submenu is expanded - either horizontal or vertical
  Values: *h, v*

  orient = **h**

orient = **v**

☐ doc
Path and filename of the file that is started, when the user clicks on the headline. If no file should be started, leave this value empty.

☐ title
You have to specify the title (name of the headline) for **each language** you want to use. The title entry has several sub-entries.
Example: If you want to offer the menu in 2 languages, you have to add 2 title items, and for each title item you have to specify the following sub-entries.

    ☐ locale
    Language of the headline
    Values: en (English), de (German), it (Italian), fr (French)
    ☐ name
    Name of the title in the language, specified with local

4.12.1.3 Toolbars and language selection

Enter topic text here.

4.12.1.4 Include Menu in Project

To include the menu in the project, just copy the files:

• advanced-menu.swf
• config.xml

as well as all used images and swf files to your data source directory and import the files in the screen - Data Import [83].

4.12.2 Basic Menu

It can be found on the directory ...\Multimedia Protector\2.0**Add-Ons\MenuCreator\basic**. The file ...\demodata\document-demo.mme is a sample project which uses the Menu Creator.

The Logo, background image and background color, the menu header and the graphic as well as the label of the buttons can be defined. The menu is a multi-page menu. If more then 8 menu items are defined, a next button will appear to browse to the next page.

After starting a file, a button menu will appear at the right upper corner. If this button is pressed, the menu will be reloaded. It is possible to hide this button with the configuration option <menuButtonDisable 281>.

The menu creator can be used with Multimedia Protector, but it is not allowed to distribute the files as a standalone application without Multimedia Protector .

See also

Define Menu 281
Include Menu in Project 283
How to edit an XML file 258

4.12.2.1 Define Menu

The structure of the menu is defined with the file **cat.xml.** It can be modified using any editor. If you do not have an XML Editor, see [How to edit an XML file](#) 258. The name of the menu application is **advanced-menu.swf.**

Cat.xml

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<subject>
  <!--in logo tag, after image name, the first parameter indicates position (left, right,
center) -->
  <!--in header tag, after #, the first parameter indicates font size and second is color of
image  -->
  <!--in background tag, after #, the first parameter indicates color of background  -->
  <!-- ( RED, 0x00000, flowers.jpg ... )  -->
  <!--in filename tag, after #, the first parameter indicates no scale .swf  -->
  <logo>images/mirage.jpg#center</logo>
```
← **Name of Logo file. Must be from type JPG # position (left, right, center)**
```
  <header>Samples of protected files#18#0x3F4B5F</header>
```
← **Header to display # font size # color**
```
  <background>WHITE</background>
```
← **Background Color, must be in capital letter like RED, BLUE**

or hex color code or image as an background image
```
<menuButtonDisable>false</menuButtonDisable>
```
display menu button for **all** menu items, true = do **not** display menu button for all menu items

```
<methods>
    <coursetitle>PDF-Printable</coursetitle>
```
← **Caption of the first button**
```
    <filename>files/flyer-cdc-print.swf</filename>
```
← **File to start when button is pressed. Must be from type SWF or FLV**
```
    <imgname>images/1.jpg</imgname>
```
← **Image used on the button. Must be from type JPG**
```
<menuButtonDisable>false</menuButtonDisable>
```
display menu button - valid only for this item, true = do not display menu button when this item is started
```
  </methods>
```

```
  <methods>
```
← **You can define any number of additional buttons**
```
    <coursetitle>PDF-not printable</coursetitle>
    <filename>files/flyer-cdc.swf#noscale</filename>
```
← **#noscale prevents that the**

file is resized to fit in the window

```
    <imgname>images/2.jpg</imgname>
  </methods>
  <methods>
    <coursetitle>Word</coursetitle>
    <filename>files/flyer-cdc-word.swf</filename>
    <imgname>images/3.jpg</imgname>
  </methods>
  <methods>
    <coursetitle>PPT</coursetitle>
    <filename>files/cti-data-ppt-noani.swf</filename>
    <imgname>images/4.jpg</imgname>
  </methods>
  <methods>
    <coursetitle>Video (FLV Format)</coursetitle>
    <filename>http://files/movie.flv</filename> ⇐ FLV needs a http and then the
foder and filename
    <imgname>images/5.jpg</imgname>
  </methods>
</subject>
```

🔵 Never use an absolute path in the configuration file like c:\files which points to your disk drive on the PC. Always use a relative path like **files/flyer-cdc-word.swf.**

🔵 To start an flv file, you have to put **http//:** before the folder or filename

This is how the file looks like if you use a [XML Editor]258. It is very easy to change the items there.

4.12.2.2 Include Menu in Project

To include the menu in the project, just copy the files:

- menu.swf
- cat.xml

as well as all used images and swf files to your data source directory and import the files in the screen - Data Import ⁽⁸³⁾.

4.12.3 Other Menus

You can use any other menu. If you have an own flash application, which servers as a menu, nothing special has to be considered.

If you have a menu, which is an **EXE file**, you can invoke each file inside the database with a special command. See chapter <u>Start a specific file inside the database</u> 198.

Your menu would be **outside** the database (mmf file). A typical content of the CD or download would be

menu.exe (your menu file)
mycourse.exe (the Multimedia Player)
mycourse.lic (the license file)
mycourse.mmf (the database)

The menu.exe would be the program which is started first. The menu exe can then invoke single files directly inside the database.

We have tested some menu programs and described the necessary settings.

- <u>CDMenuPro</u> 284
- <u>Quick Menu Builder</u> 286 (Freeware)

This feature is available only in the Multimedia Protector <u>Premium</u> 56 version.

See also
<u>Start a specific file inside the database</u> 198
<u>Flash application using exe file</u> 167

4.12.3.1 CDMenuPro

This application can be downloaded at: <u>http://www.cdmenupro.de/</u>

This menu application creates an EXE file. You have to copy all Multimedia Protector files from the folder <u>Deploy</u> 160 into the folder **CD_ROOT** of the CDMenuPro project.

After defining buttons to invoke e.g. lesson 1, lesson 2 you specify in the **properties dialog** of a button the command, to invoke the invoke the Multimedia Player.exe file.

In the line **Application** add the path and the name of the Multimedia Player.exe file. In the line **Parameter** add the command to load a flash file. See chapter <u>Start a specific file inside the database</u> 198 to get all details for this command.

In the screenshot below, the file (Player) mycourse.exe is started and loads the file lesson1.swf.

The sample below starts the player with a different database. This feature can be used if you split the project into several databases. [305]

List of all start options for the player 289

See also
Start a specific file inside the database 198
Split project into several databases 305
All command line options 289
Other Menus 284

4.12.3.2 Quick Menu Builder

This application can be downloaded at: http://www.quickmenubuilder.com/

The menu application creates an EXE file. You have to copy all Multimedia Protector files from the folder Deploy 160 into the main folder of the menu.exe application.

After defining buttons to invoke e.g. lesson 1, lesson 2 you specify in the **Assign actions Tab** the Button action: **Execute...** to invoke the Multimedia Player.exe file.

In the line **Select a file** add the path and the name of the Multimedia Player.exe file. In the line **Parameters** add the command to load a flash file. See chapter Start a specific

file inside the database[198] to get all details for this command.

In the screenshot below, the file (Player) mycourse.exe is started and loads the file lesson1.swf.

The sample below starts the player with a different database. This feature can be used if you split the project into several databases.[305]

List of all start options for the player [289]

See also
Start a specific file inside the database [198]
Split project into several databases [305]
All command line options [289]
Other Menus [284]

4.13   Multimedia Player

The Multimedia Player which is delivered with each product, is royalty free. This means that you can distribute the Multimedia Player to end users without any additional costs.

The basic options of the Multimedia Player are configured in the screen - Player Options
85 . There are additional command line parameters (Start Options) and a build in end user interface for the license - the **License Viewer**.

- Start Options 289
- License Viewer 289

4.13.1   Multimedia Player - Start Options

The Multimedia Player supports the following start options

- Invoke the License Viewer 289   **-v**
- Start a different database (MMF file) 258   **-f "path\filename.mmf"**
- Invoke the Player with a specified file 198   **-load "path\file.swf"**   (must be .swf or .exe file**)**
- Use a different license file path   **-lf "path\file.lic"**

You would start the Multimedia Player and use one or more command line parameters:
"c:\programs\myapp\mycourse.exe" -f "c:\programs\myapp\courses\course1.mmf"

🛈 Always use **"** if you specify a path to cover spaces in the path or filename
"c:\programs\this is my application\mycourse.exe" -load "l01/lesson1.swf**"**

You can combine options, e.g. specify database/MMF file and load a specific flash
mycourse.exe -f lession.mmf -load "l01\lession1.swf"

4.13.2   License Viewer

The License Viewer is part of the Multimedia Player and is a **complete administration interface** for the end user. It can be accessed from any screen during the activation and registration process with the link *Show License Information*. The License Viewer can also be invoked by starting the Multimedia Player with the parameter **-v** (see Start Options 289) or it can be added in the program manager group using the installer 263 (parameter *ShowLicenseInfo*).

You can also use a standard text file with the extension .BAT (e.g. viewer.bat), which has only one line with the command:

xy-player.exe **-v**

whereas xy-player.exe is the name of your Multimedia Player of your product. You can download a sample here.

Features

- Basic license information [291] like manufacturer, company, copy protection status and system information
- License information per module [293] (number of licenses, time limitation, demo version, activation status)
- List of users, PCs and concurrent users for each module. Allows to remove / deactivate [293] a user / PC / item
- Option to apply Activation Keys
- Option to activate log file [295]

See also

Basic license information [291]
Module Information [293]
Deactivate a network license [293]

4.13.2.1 Basic license information

Basic license information is structured in 3 sections.

Basic license information - Copy Protection turned off

Manufacturer and License Holder

- Manufacturer. The company name, defined in the [screen - Settings](#)⌐59⌐
- Company: Before applying the Serial Number, this is the [Default Customer Name](#)⌐59⌐ (e.g. Evaluation Version). After applying the Serial Number key, the customer name, entered during the activation ([Online](#)⌐129⌐, [E-Mail](#)⌐131⌐, [Fax](#)⌐133⌐, [Phone](#)⌐133⌐) is displayed. This is the license holder

Installation Codes

All available [installation codes](#)⌐22⌐ (hardware IDs) are displayed. If copy protection is not activated, then the folder has this icon . After activation of the copy protection, the icon

switches to and the criteria, which is used for copy protection, is marked with .

Basic license information - Copy Protection turned on

If a customer has a problem with copy protection, just use another installation code and create a new Unlock Key [113], which can be applied in the License Viewer.

System information

This information is helpful for support and depends on selected options.

- License File path and name
- License File - ID: Each time you save a project the ID is increased
- License File Version: Internal file version
- License File Date: Date and time when the license file was created
- Security level - with Multimedia Protector always Advanced Security Level
- Concurrent user option (Heartbeat, Light) - with Multimedia Protector always Heartbeat

4.13.2.2 Module Information

Each module is listed with additional information (depending on the <u>license type</u> [69]).

- Demo version
- Expiry date or time limitation
- Activation Status (required, erroneous, done)
- Number of licenses (module type license per user, PC, concurrent or item counter)
- All keys, which have been used for a module
- All users 👤, Concurrent users 👤, PCs 🖥 or items 🌀 per module. If a <u>license is deactivated</u> [293], this is indicated with the icon 🚫

4.13.2.3 Deactive a network license

If an application uses a license **per PC** [297] or **per User** [298] then a single license can be deactivated within the <u>License Viewer</u> [289]. This is not necessary for <u>concurrent user</u> [298] because the license is automatically removed when the application terminates.

☐ Deactivate a license within License Viewer

A license (per PC / User / Item) can be deactivated by

- selecting the license
- press button *Deactivate*

The deactivated license is now displayed in brackets and the icon changes to ⊘. The license can be
Item

☐ Activate a deactivated license again

A license which was deactivated, is displaced in brackets. It can be activated again by

- selecting the license
- press button *Activate*

🔵 Deactivation of a concurrent user is only necessary, if the user is not automatically removed. It is not a deactivation of the license - it is a removing of the user. The user will get the license again with the next program start again.

🔵 The deactivation is done when you press the OK button. If the user has already started the application, the next start of the Multimedia Player will return an error

4.13.2.4 Activate a log file

In case of an unknown error on the end user system, the user can activate a log file and sent it to you. You could then send this file to support.

- Press the *Options* button
- Select - *Error tracking* **enabled**
- Select a path for the logfile

Restart the application until the error appears and then send all files with the extension .

log to support@mirage-systems.de . The user can then disable the error tracking.

4.14 Network License - how it works

It is possible to store all files (required files see files for distribution [160]) on a network folder. Multiple users can start the Multimedia Player at the same time. Each user needs a **read and write access** to this folder.

The advantages of a network installation are:

- Centralized installation - all files are located on one machine
- Only 1 activation is necessary, even if 100 users or PCs use the Multimedia Player
- If additional users [299] should be added, only one Activation Key has to be sent out

Just define the number of users or computers you want to allow starting the Multimedia Player.

There are 3 different kinds of network license

- Licence per PC [297]
- Licence per User [298]
- Floating license / concurrent user [298]

See also

Available Licence Options [23]

How to add Add additional users / licenses within a network[299]

4.14.1 Licence per PC

The license per PC[23] uses the **name of the PC** (hostname) and stores this name in the license file. Once the Multimedia Player is started, it checks wether the PC name is already stored in the license file and if not, it starts only in case a free license is available. After the Multimedia Player has been terminated, the license is **still in use.**

A PC can be removed from the license file in the Licence Viewer[139]. The license will then be available for another PC.

This license type can be used for a single PC installation (license = 1 = limitation to 1 PC) or network installation.

🔵 All files have to be on the server in the same directory - see files for distribution[160]

🔵 If a user connects through a remote connection using a tool like Remote Desktop, Citrix, Terminal Server or gotomypc, it depends on the tool if the remote connection counts as a separate license. For most tools, Multimedia Protector retrieves the PC name of the remote PC and counts the connection as a new license.

4.14.2 Licence Per User / Person

The license per User 23 uses the **Windows user name** and stores this name in the license file. Once the Multimedia Player is started, it checks whether the user name is already stored in the license file and if not, it starts only in case a free license is available. After the Multimedia Player has been terminated, the license is **still in use**. If a user is logged in with the same name on multiple PCs, it is counted as one license.

This license type can be used for a single user installation (license = 1 = limitation to 1 user) or network installation.

A user can be removed from the license file in the Licence Viewer 139. The license will then be available for another user.

⚠ All files have to be on the server in the same directory - see files for distribution 160

4.14.3 Network Licence Per Concurrent User

This concurrent user license 23 is also called floating license. It is checked, how many users have started the Multimedia Player at the same time.

The license per Concurrent User **combines** the **PC name + Windows user name** (e.g. *OFFICEPC-TOM*) and stores this name in the license file. The combination is necessary to count a license, even if a user is logged in with the same name on multiple PCs.

Once the Multimedia Player is started, it checks whether the name is already stored in the license file and if not, it starts only in case a free license is available. After the Multimedia Player has been terminated, the **license is given back by removing the name in the license file.** The license will be available again for another user.

This license type can be used only for a network installation.

All files have to be on the server in the same directory - see files for distribution 160

If a user connects through a remote connection using a tool like Remote Desktop, Citrix, Terminal Server or gotomypc, it depends on the tool if the remote connection counts as a separate license. For most tools, Multimedia Protector retrieves the PC name of the remote PC and counts the connection as a new license.

Concurrent user is not supported when the main application is an EXE file 165.

4.14.4 Network Licence per Server

To have a license per Server (the number of PCs are not limited), use the Licence per PC 297 option and set the number of PCs to 9999 or any number which will be sufficient.

4.14.5 How to add additional users / licences within a network?

To add additional licenses to an existing installation, just create an Activation Key.

- The license type (per user, per PC or concurrent user) from the original delivery is used - See Licence Type 69
- The Activation Key is generated within the Screen - Administration, TAB *Additional Licences* 119

If you are using the Web Activation server 324, use the Switch: *Online Validation required* to ensure, that a key can never used twice.

Details for all options see Screen - Administration, TAB *Additional Licences* 119

4.15   Problems - Trouble Shooting - Error Messages

If you have problems, check one of the solutions below. Also check How TOs and FAQ
227 - you will find a lot of information for frequently asked questions.

See also

Player Error Messages 301
Project Generator Error Messages 302
Activation Server Error Messages 302
FLV files 301
If found no answer for my questions 261

4.15.1 FLV file does not load

If you load an FLV file within your flash application and this file does not load, try to embed the FLV file instead of loading it externally. Otherwise convert the FLV file to flash. This will always work.

If you have just one SWF file that starts a FLV file, you may use a special command. This will load the FLV file in the player, but will end the SWF file
- **http://files/xy.flv** - the command must begin with http:// and then a folder name or the flv filename must follow**.**

🛈 If you have multiple FLV files to secure use the Menu Creator₂₇₃.

4.15.2 Player Error Messages

Find below error messages which are related to the Multimedia Player.

⊟ Online Activation Failed
This error occurs during Online activation of the product. It indicates that your project data is not uploaded on the Web Activation Server.

Check if your URL to the Activation Server is correct - see Online Activation₆₃. If the activation never works and you always get this error then this is in 99% due to a wrong URL.

Otherwise it is a typical message when a firewall blocks the online activation. If it is a company wide firewall the system administrator would have to open port 80.

⊟ Error 3011
This error occurs during Online activation of the product. It indicates that your project data is not uploaded on the Web Activation Server.

Solution: Upload your configuration files₉₄ to the Web Activation Server

Check if your URL to the Activation Server is correct - see Online Activation₆₃

⊟ Error 3013
This error occurs during Online activation of the product. It indicates that your project data is out of date on the Web Activation Server.

Solution: Upload your configuration files₉₄ to the Web Activation Server

• Log into Web Administration Interface using the Link in the Web Activation Server Administration₁₀₃
• Select menu Tools, select: **Restart Webservice**

⊟ Error 3014

This error occurs during Online activation of the product. Probably the user does not have the correct date/time set on his PC. You can react as follows:

- Tell the user to correct the local time setting on his PC
- He can try the Online Activation again

If the same error appears again, the user should try E-Mail activation.

⊟ Error - The installation code does not match with code...Copy Protection Violation

If this [screen] 138 appears during the start of the Multimedia Player it indicates

- The application is used on a different machines as it was licensed for
- The hardware criteria which was used for copy protection has changed (e.g. new hard disk or new network adapter)
- Installation code [5] 158 or [6] 158 was used and the Multimedia Player was started on the server AND on the workstation. It only works if the server is used as a dedicated server and the Multimedia Player is not started on the server

4.15.3 Project Generator Error Messages

Find below error messages which are related to the Project Generator.

⊟ Error 21

Error message: *Creation of..\Deploy and ..\Config files failed with error 21*

Check the folders [\Config and \Deploy] 160

- that you have full write access to these folders
- that no file inside the folder is write protected

4.15.4 Activation Server Error Messages

The Web Activation Server has 2 different types of error messages

Error codes of the Multimedia Player

If an online activation is not successful, the Multimedia Player creates an error code like error 3013 or 3014. All Multimedia Player related errors can be found in the chapter [Player Error Messages] 301. The details of an error can be found in the server log file.

Error codes of the Web Activation Server

Errors which are created on the server side are written into a log file. The details of an error can be found in the server log

▭ 2013

This error could have 2 reasons:

- The web service has not all rights which are needed to create / modify files on the folder ..\alg - see Necessary Rights for ASP Service
- Your license file expired or more projects are used then included in the license - for more details view the log file

▭ 3001

Connection to the Web Activation Server could not be established. Typical causes of this error are:

- Web Activation Server is down
- [URL to the Web Activation Server] 63 is wrong
- Client does not have Internet access or access is blocked by a firewall
- Client Proxy Server settings are wrong

▭ 3002

Configuration file licprotectorws.config or a file in the folder \pconfig could not be read

The XML format is wrong. This error can only happen if you manually change configuration files

▭ 3003

ProjectID is missing - check licprotectorws.config or the configuration file in the folder \pconfig. This error can only happen if you manually change configuration files

▭ 3004

An unknown [installation code] 103 is used - check licprotectorws.config or the configuration file in the folder \pconfig. This error can only happen if you manually change configuration files

▭ 3005

No projects could be found - check licprotectorws.config or the configuration file in the folder \pconfig.[Upload your project to the Web Activation Server] 94

⊟ 3006

Bad request

- ProjectName is empty - This error can only happen if you manually change configuration files
- A request to the Web Activation Server was made not using Multimedia Protector

⊟ 3007

Unknown request type. This situation could only occur, if the Multimedia Protector version is newer than the Web Activation Server server version and Multimedia Protector uses a command, which is unknown to the Web Activation Server

⊟ 3008

Writing to database failed. Check, if the database is running and check the database setup.

⊟ 3009

Reading from database failed. Check, if the database is running and check the database setup

⊟ 3010

The Serial Number was already used or was locked.

Increase the number, how often the key can be used or unlock the key

⊟ 3011

Unknown project name - the ProjectID used in the file licprotectorws.config or the configuration file in the folder \pconfig **must match** the project name, defined in the project template. Check the activation workflow configuration file, if the file name of the project file is correct. This error can only happen if you manually change configuration files

⊟ 3012

The output file, which is generated on the folder .\alg during product activation, is missing or has a wrong XML format - for more details view the log file

⊟   Reading projects failed with: load config failed

Configuration file licprotectorws.config or a file in the folder \pconfig could not be read

The XML format is wrong. This error can only happen if you manually change configuration files

See also
Player Error Messages |301|

4.15.5 I found no answer for my questions

If you did not find an answer for your questions in the tutorial search in the extensive Online Knowledge Base.

Browse Online Knowledge Base

4.16 Split project into several databases

Splitting a project into multiple databases (mmf files) is recommended, if the project includes **EXE files** and the database size would be more than 80 to 100 MB.

Unlike flash files, where each file is only loaded when needed, EXE files and all the other files in the database are **loaded during program start.** If the database is too big, the program start takes too much time.

The following steps are necessary to built a project, which is split in sub projects (databases).

Copy / duplicate the main project

First create a main project and define the main start file |83| of the application. Then copy the project |125|:

Copy Options - use same encryption

The important option is: **New project uses a different encryption**. **Uncheck** this option. This creates a new database which uses the same encryption like the original database.

A good idea is, to use the main project name in the copy of the database.

Example
- Main project name: english-course
- Copy project 1: english-course-lesson1
- Copy project 2: english-course-lesson2

Copy all databases in a new folder

Each project will create a deploy folder with the Multimedia Player, the license file (.lic) and the database (.mmf) - see chapter the <u>Basics about Distributing a Project</u>|160|.

Create a new folder, e.g. ..\complete project. Copy **all files from your main project** and **only the database** (.mmf) file from the sub projects into this folder. The folder content would be as follows:

- autorun.ini
- english-course.exe
- english-course.lic
- english-course.mmf

- english-course-lesson1.mmf
- english-course-lesson2.mmf

Start files from other databases

Starting a file in another database depends on the type of the main application.

Start application in main project is a flash (.swf) file

If the start application in the main project is a flash file (e.g. a [menu](#)[273]), the flash file needs to use a special command.

http://FILE:english-course.exe -f english-course-lesson1.mmf$$RUN

This commands starts an exe file which is already available on the CD or hard disk. It can be used to start any external application. The file must be on the same folder like the **Multimedia Player**. A pathname cannot be used.

The parameter **-f** provides the database name to start.

Sample flash code: loadMovie("http://FILE:english-course.exe -f english-course-lesson1.mmf$$RUN",2);

4.17   Transfer a license from PC A to PC B

There is a manual procedure, which allows to transfer / move a license from one PC to another PC. To use this feature, you need the *Premium* Edition and the Web Activation Server.

The workflow is as follows:

- Send out an Activation Key to disable the license on PC A
- The usage of the Activation Key is protocolled on the Activation Server. It is the proof, that the customer has used the key
- Lock the old Serial Number
- Send out a new Serial Number

☐ Activation Key to disable a license

Create an Activation Key where you set:

- Expiry date to a **date in the past**, e.g. 1.1.2000
- Check **Online Validation required**

You create this key in the screen Administration, [TAB Additional Licenses](#)[119].

☐ User applies the Activation Key

To apply the key, the user has to start the <u>License Viewer</u> |289|. Either it is available in the program m
the <u>Installation Manager</u> | 97 |) or you send him a text file with the extension.bat (e.g. viewer.bat), whic
command:

xy-player.exe **-v**

whereas xy-player.exe is the name of your Multimedia Player of your product. You can download a

The user can apply the key using the button Activation Key

□ Check if the Activation Key to disable the license was used

You can check on the Web Activation Server, if the Activation Key was used. This is the proof, that the button *Search*. If the Activation Key was used, you get a list with more information like date/time

☐ Lock the old Serial Number

Now enter as Entry Key on the Activation Server the old Serial Number. You get one or more hits, c

This will open a detail record where you can lock the Serial Number.

☐ Send out a new Serial Number

Create a new Serial Number [110] key so that the user can install the product on another machine.

It is possible, that the user can cheat and the manual procedure will be replaced in a future release with an automatic procedure.

4.18 Update your projects

Update content without sending out a new Serial Number

If you want to update your content without sending out a new Serial Number, then just load the new content and save the project. Only send the new created **database** (**MMF) file** to the user. If you installed an update of Multimedia Protector, then you also have to deliver the new Multimedia Player.

Sending out a new license file would destroy the product activation information and

the user would have to activate the product again.

Update content with a new Serial Number

If the new content should be usable only with a new Serial Number, then <u>copy the project</u> 125, using the option: **New project uses a different encryption.** This duplicates the complete project but uses a new encryption with new Serial Numbers.

4.19 USB stick as a Dongle replacement

Multimedia Protector offers software copy protection with all the advantages and flexibility of a software solution. However, there are some situations where a hardware protection makes sense.

- Using one single license on multiple PCs and no online connection is available. The user can move the license from PC A to PC B using the USB stick
- Deliver a complete application on a USB stick - ready to go without the need to activate the software
- Marketing reasons - instead of receiving a CD, the user gets an USB stick with additional value for him

Multimedia Protector offers a unique protection feature using a **standard USB stick**. The license is bound to an individual criterion of the USB stick (different for each stick), which cannot be copied. It supports all the license options of a single user license like

- Evaluation options
- Multiple Modules

and additionally the option to define,

- **on how many PCs the USB** stick can be used or
- **how many users can start the application**

This is a very handy feature as you can control the usage of the stick.

The USB stick solution is much better than a Dongle:

- It is favorable - the price is only a fraction of the price of an Dongle
- The customer could even use his own USB stick. You can send out a Serial Number and activate the license on the USB stick using Online, E-Mail, Fax and phone activation. This is important if you deliver in multiple countries and shipping hardware is difficult
- In case of a hardware failure you can instantly issue a temporary license, where the license is stored on the local PC

Multimedia Protector combines the advantages of software copy protection with the advantages of hardware protection!

The USB stick protection can only be used as a **single PC / single user** license. A

network license is not supported as a PC cannot retrieve the hardware information of the USB stick when it is used on a server.

🔴 The USB protection works only with Windows XP and Windows Vista.

🟢 This feature is available only in the Multimedia Protector <u>Premium</u> ⌷56⌷ version.

See also

4.19.1 Deliver the USB stick with Copy Protection already activated

To deliver a USB stick with a ready to go license, there are only a few steps necessary.

Limit usage

The customer can use the license always **only on the computer, where the USB stick is attached**. The limitation by PC / user is an additional configuration setting to limit the usage.

- Use a license per <u>Computer/PC</u> ⌷69⌷ - this limits the usage to the defined number of computers (recommended option). To define an unlimited usage, just configure a license with 9999 computers
- Use a license per <u>User</u> ⌷69⌷ - this limits the usage to the defined number of users (USB stick can be used only on one PC)

🔴 A license per concurrent user is not supported with an USB stick.

Activate protection on USB stick

Select screen Administration, *<u>Switch on Copy Protection on USB Stick</u>* ⌷121⌷*.* This opens a dialog, where you can select the license file on the USB stick. The copy protection is then activated.

If the USB stick does not support this option, an error message is displayed:*There is no valid instcode for file filename.lic*
You have to use another USB stick.

Typical project settings

In combination with USB stick you would have typically these settings:

- **Un**check - <u>No evaluation version - Serial Number</u> ⌷72⌷ needed to start

- **Check** - No evaluation - content protection only [75]

Automated process for large quantities

If you need large quantities of USB sticks with a license file already activated, you can use the service of the company OEM marketing - www.oem.de. They are specialized in CD and USB duplication and they have a special license from us to add the USB stick protection in a batch process. You have to send them your files from the folder Deploy.

4.19.2 Use USB stick of the customer

If an USB stick of the customer should be used, there is the same workflow [316] with product activation. All activation options (online, e-mail, fax, phone) are supported. The user has to copy the original files to his own USB stick.

The USB stick protection uses the **installation code 11** [159]. For activation by e-mail, fax, phone nothing specific has to be considered. See chapter: Unlock Key [113]. If the installation code 11 is empty, then the USB stick does not support copy protection.

Senden   An...   register@mirage-systems.de
           Cc...
Konto   Betreff: Activation-Request for CTI Data Connector.

Activation-Request for CTI Data Connector (27.10.2007 18:24:52)
Please do not change the following information
Name/Company: Tom Hanks
Serial Number: dNDEi-5CP93-9E4I8-3tE8X-YQD5k-6R14L
E-Mail-Address: tom.hanks@smartinc.com
Instcodes:
01: 170D9F7C
02: CB433287
03: E1266C60
04: E1266C60
05: 1A7C24AE
06: 73F423F3
07: DE278BD8
08: 98B6C22B   Installation code
09: 7706DC28   11 is empty
10: FAC1BEBC   No support of
11:                   Copy Protection
12: E1266C60

You will get an Unlock Key back within 2-3 business days.
Project:demo-easygo - QHD001
User Info:
(here you can write comments to the Activation Center)

The following block contains the information of this email in an automatically processable for
will be delayed.

--- STARTBLOCK ---
r2f3TVv1fEMp61PWmMe1R2gZc1A9GfU1tdUtm1NI3s422vIo42eSktg1fAVI6121u
Zg1utMDD1hHdiX1qRlBD0RLb1H1VFWpl1Ms0CB1drwgd1hRpnm1DwXpt1pDKm81r2
Wgi0UZ5iG295IQa1gGjau1OCbTa1WT0zk1urPrF1epMeN2eLaBr29hPaL203mTs1h
Ni2t1QUQxj1TliKN1gJRd51DxQye1UAkMh1OH6vE0V6eAt1ciQa41SkAcH10MYNn1
fvXI31utLw61z2c9629dZqh1gDfze1hNkrd25E8Cu0N9chN1dhlZK1wHfYm21nAIm
207K8U136gBx1tlW5E28b7mb1thbVz1gDg1c1Z5qLg1MIoQi1SbN341k2r790SNLj
B25Pmmv10T3gN1hQ2IN1UsCKC17x1Fn
--- ENDBLOCK ---

E-Mail Activation - No support of USB stick protection

For online activation you have to make an own project (different Name of Multimedia Player [59]) because the activation server has to use installation code 11 as the main criteria. If the USB stick does not support copy protection, then the license is

automatically bound to the PC which makes the activation.

Specify **Code 11** as the <u>Primary Hardware ID</u> [103] and code 4 as the Alternative Hardware ID.

4.19.3 Install Application on hard disk using USB stick

It is possible to install the product and/or database on the hard disk. Only the license file has to be on the USB stick.

Only Database on the hard disk

If the database (mmf file) should be on the harddisk, then copy the Multimedia Player and the license file (.lic file) to the USB drive.

The Multimedia Player has to be started with an parameter

xy.exe **-f "path\filename.mmf"**

Multimedia Player and Database on the hard disk

If the Multimedia Player and the database (mmf file) is on the harddisk, then only copy the license file (.lic file) to the USB drive.

The Multimedia Player has to be started with an parameter

XY.exe **-lf "path\licensefile.lic"**

4.20   Workflow - from Distribution to Activation

This chapter explains the workflow in detail from distribution to activation.

- Distribution
- Evaluation Version
- Activation
- Sending out keys

4.20.1 The Basics about Workflow

Depending on the kind of activation you choose, the workflow will be different.

The predefined workflow is as follows:

- Create the project and define the settings
- Create the files for distribution - [Deploy] 89
- Provide an [evaluation version] 24 (also non-evaluation version is possible)
- Customer can test within the time limited period or buy the software ([buy link available if defined] 59)
- Customer buys the software and gets the [Serial Number] 110 Key. The key is unique and is the 'proof of purchase'.
- The Serial Number sets a trigger that enables activation via [web] 63 (online), [e-mail] 62, [fax] 66 or [phone] 68 (activation methods can be defined)
- Online Activation – the Serial Number is transferred to the [Web Activation Server] 324; this process validates whether the Serial Number was already used and enables [copy protection] 22, deletes the time limitation (to get an unlimited full version). The customer can work instantly with the application. A reinstallation on the same PC that is already registered is accepted
- Activation by E-Mail, fax and phone requires manual activation by sending the [installation code] 153 (hardware ID) to you and sending back an [Unlock Key] 116
- The application is now copy protected and without time limitation (depending on the settings)

4.20.2   Create Files for Distribution - Deploy

Create the files for Distribution and Deploy it - Details see chapter Deploy the Project [160]

4.20.3   Evaluation Version

The application can be tested in an evaluation mode - details see chapter Evaluation Version [24]

4.20.4   Buy Serial Number

As a proof of purchase, the customer gets a unique Serial Number. This Serial Number is generated within the Administration [110] screen.

After receiving the Serial Number, the customer selects an activation method [60] (Online, E-Mail, Fax, Phone) and types in the Serial Number, name and E-Mail.

Start of application – select Activation
Method (Online, E-Mail, Fax, Phone)
requires to type in user name and E-Mail

If an Online Shop [201] is used, the Serial Number Key can be generated automatically after the order process.

Generate Serial Number

4.20.5 Online Activation

This method allows a complete **automation** of the process. The Web Activation server [324] is required. Mirage offers a hosting [326] of the server. The Web Activation Server also ensures that the **Serial Number can be used only once** (configurable).

The hardware IDs [154] and the Serial Number is sent to the Web Activation server, verified, stored in a data base; in case the Serial Number was not used before, copy protection [22] will be activated and time limitation will be deleted to allow a an unlimited program start.

Sample Screen - Enter Serial Number - Online Activation

4.20.6 Activation by E-Mail, Phone, Fax

With either of this method, the customer has to send to you the installation code 154 (8 digit hardware ID), Serial Number, name, E-Mail address, and you have to send back the Unlock Key (Copy Protection Key). The Unlock Key is generated within the Administration 116 screen. If selected during the creation of the project, time limitation will be removed 73.

Start of application, type in Serial Number,
Name and E-Mail

Transfer installation code and
Serial Number

Licence Generator

✓ Select Copy Protection Method
✓ Type in Installation Code
✓ Generate **Unlock Key**

Transfer Unlock Key

If selected, time limitation is removed

Note
You have to check manually wether the Serial Number was already used or not. If the Web Activation server is installed but the customer sends the information via E-Mail, Phone or Fax, starting with version 2.5 of the web Activation Server the Unlock Key can be generated within the Web Activation interface, which ensures that the key cannot be used twice.

Sample Screen - Enter Serial Number - Request Unlock Key by E-Mail

4.21 Web Activation Server

4.21.1 About Online Activation

The Web Activation and Registration module is an *out of the box* solution for activating a license and changing license information online. The Multimedia Playerconnects to the registration server and performs the following operations:

- Activate copy protection
- Change a license, e.g. from demo mode to full version mode
- Verify Serial Numbers and Activation Keys

The registration server ensures that each license can be registered only once. Every transaction is logged to a database.

Optionally, keys can be transmitted to the activation server before they are applied to the license file. It is checked, whether the key was already used or not. This is to ensure that the key cannot be passed on and used multiple times.

See workflow 321 for default options of activation.

This feature is available only in Multimedia Protector *Premium* 56 version. The Web Activation Server is provided via a hosting 326 model. Mirage provides installation and

maintenance of the server. The hosting has to be ordered separately. You can run your own server. Contact sales@mirage-systems.de.

See also

Enable Online Activation ⌐63⌐
Online Activation Workflow ⌐321⌐
Web Administration Interface ⌐326⌐
Hosting of the Web Activation Server ⌐326⌐
Sample project to test online activation ⌐57⌐

4.21.2 Online Activation - Step by Step

To use the Online Activate feature, perform the following steps:

One time configuration

- You need the Multimedia Protector Premium version - check your license ⌐237⌐
- You need a valid hosting account - Order Hosting.
- Type in you hosting data in the screen Administration, Web Activation Server Administration ⌐103⌐

Configuration per project

- Select Online Activation in the screen - Settings ⌐63⌐ and also set correct URL to Web Activation Server
- Save your project - Screen - Save ⌐89⌐
- Upload configuration files ⌐94⌐ to Activation Server
- Log into Web Administration Interface using the Link in the Web Activation Server Administration ⌐103⌐
- Select menu Tools, select: **Restart Webservice**

Now you can start using a Serial Number and activate the product online.

Retrieve Statistics

- Log into Web Administration Interface using the Link in the Web Activation Server Administration ⌐103⌐
- Browse the tutorial of the Web Activation Server

4.21.3 Web Administration Interface

The Web Activation Server comes with an browser-based Web Administration interface. You can monitor each activation, allow reactivation or detect fraudulent usage of Activation Keys.

The Web Administration interface can be accessed within the Administration ⌐103⌐ screen.

Have a look at the administration interface on the demo Web Activation Server or browse the tutorial of the Web Activation Server.

4.21.4 Hosting of the Web Activation Server

Mirage provides the Web Activation Server as a hosting service, which allows you to start without worrying about running an own server, applying updates or any firewall issues.

You pay per number of activations. For details including used hardware and pricing, see hosting service on our website.

4.21.5 Activation Server for Testing

We provide a Test Activation Server, which allows you to make real activations with your product before you order the hosting service.

Use the following configuration settings.

- In the Screen - Settings ⌐63⌐, set the URL to Web Activation Server to ***http:// registerserver.net/9999999/lpweb/lpws.asmx***
- In the Screen - Administration ⌐103⌐, Set Hosting Number to **9999999** and Password to **lp9999999**
- In the Screen - Administration ⌐103⌐, press the button *Change URL* and type in the URL to the Webserver, ***https://www.registerserver.net/9999999/lpweb***

Configure Activation Server

- [Save the project](#) [89]
- [Upload configuration files](#) [94] to Activation Server
- Log into Web Administration Interface using the Link in the [Web Activation Server Administration](#) [103]
- Select menu Tools, select: **Restart Webservice**

Now you can start using a Serial Number and activate the product online.

Retrieve Statistics

- Log into Web Administration Interface using the Link in the [Web Activation Server Administration](#) [103]
- Browse the [tutorial](#) of the Web Activation Server

As this is a testing environment the projects are removed from time to time and the activations are deleted.

4.22   Your Multimedia Protector License

Multimedia Protector comes with an own license file - **mp.lic**. The license is a license **PER PC / COMPUTER**. Copy Protection is turned on after activation. We recommend making a backup of the license file.

- You have to activate the product before you can use it without the restrictions of the demo version 56 - see How to activate Multimedia Protector 228

- Find out more about your license in the chapter - Display your Licence 237

- See Licence Agreement 333 for details of usage.

See also

Demo version 56
Browse your License 237
Apply Activation Key 234
License Agreement 333

4.22.1   Demoversion

The demo version has the following restrictions:

- Limited by days - normally 15 days
- During the program start of the Multimedia Player a message is displayed: **This is an unregistered Version of Multimedia Protector**

All other parts of the application are fully functional.

Demo versions are available for the *Standard* and Premium version on the website www. Multimedia-Protector.com. See: Standard or Premium Version 56 ? for differences.

The Online Activation can be tested with the project *flash-demo.mme* (only with Premium version).

4.22.2   Browse your License

You can access your license information and your Serial Number within the
<u>administration</u> |108| screen.

Multimedia Protector or Multimedia Protector Premium

For differences see chapter <u>Standard or Premium Version?</u>|56|

- Number of Computers which have a license - normally 1
- <u>Demo version</u> |56| - if omitted, it is a full version
- Valid until (time limitation) - if omitted, it is a non time limited version
- <u>Web Activation</u>|228|- either done or required

Your Serial Number
To retrieve your Serial Number:

- click on the + sign in the first line with the label Multimedia Protector
- click on the + sign with the label *Activation Keys*

The visible number is your Serial Number.

Update Subscription

The update subscription entitles you to install the latest updates as long as it has not
expired. See chapter <u>Check for Updates</u> |101| how to download updates.

- Available / Not available
- Time limitation - the date when the update subscription expires

Release Number

- Internal release information

4.22.3 Apply Activation Key

An Activation Key is used to modify the license information (e.g. increase number of licenses). All Activation Keys are unique and have the same format like.

dO8uc-G1iC9-jOGeA-BqgEX-U71ID-0V1VX

There are 6 blocks each with 5 characters. The blocks are separated by a hyphen for better readability.

Where do I apply the Activation Key

If you got an Activation Key via E-Mail or Fax, you can enter the key within the screen *Administration, TAB Misc, **Show License Information*** [108].

Multimedia Protector - flash-demo [C:\Program Files\...2.0\demodata\flash-demo.mme]

Administration

About Multimedia Protector   Check for Updates

Repair and Compress Project file

Web Activation Server Administration   Change URL

☐ I use an own Activation Server

Hosting Number	1381806
Hosting Password	***********

FTP-Server address	
FTP Account	
FTP Password	****
Path on FTP-Server	

Primary Hardware ID (Installation Code)	Netbios Name(local)(4) ▼
Alternative Hardware ID (Installation Code)	MAC Address(2) ▼

☐ Display Quick Introduction help

☑ Error Tracking Enabled

Select path for Log-files

Show License Information

Settings	Image	Player Options
License Information	Data Import	Save

Screen - Administration, TAB Misc

Online Validation

⬙ Some Activation Keys are validated online and they require an Internet connection. After pressing the OK button this screen appears.

Apply Activation Key after Evaluation Period has expired

If the evaluation period has expired, select **Show Licence Information** *(see screen below)* and then press the button Activation Key.

4.22.4 Licence Agreement

PERPETUAL END USER LICENCE AGREEMENT

- You may distribute and install only those files marked for distribution in the chapter Deploy 160 on any machines of your end users
- You can distribute the Multimedia Player to any customer you like - without paying more fees
- The license entitles to install Multimedia Protector on one single PC (license per PC/ seat)

NOTICE TO ALL USERS: CAREFULLY READ THE FOLLOWING LEGAL AGREEMENT ('AGREEMENT'), FOR THE LICENCE OFSPECIFIED SOFTWARE ('SOFTWARE') BY MIRAGE COMPUTER SYSTEMS GMBH ('MIRAGE'). BY CLICKING THE ACCEPT BUTTON OR INSTALLING THE SOFTWARE, YOU (EITHER AN INDIVIDUAL OR A SINGLE ENTITY) CONSENT TO BE BOUND BYAND BECOME A PARTY TO THIS AGREEMENT. IF YOU DO NOT AGREE TO ALL OF THE TERMS OF THIS AGREEMENT, CLICK THE BUTTON THAT INDICATES THAT YOU DO NOT ACCEPT THE TERMS OF THIS AGREEMENT AND DO NOT INSTALL THE SOFTWARE.(IF APPLICABLE, YOU MAY RETURN THE PRODUCT TO THE PLACE OF PURCHASE FOR A FULL REFUND.)

1. LICENCE Grant. Subject to the payment of the applicable LICENCE fees, and subject to the terms and conditions of this Agreement, MIRAGE hereby grants to you a non-exclusive, non-transferable right to use one copy of the specified version of the Software and the accompanying documentation (the 'Documentation'). You may install one copy of the Software on one computer, workstation, personal digital assistant, pager, 'smart phone' or other electronic device for which the Software was designed (each, a 'Client Device'). If the Software is LICENCED as a suite or bundle with more than one specified Software product, this LICENCE applies to all such specified Software products, subject to any restrictions or usage terms specified on the applicable price list or product packaging that apply to any of such Software products individually.

a. Use. The Software is LICENCED as a single product; it may not be used on more than one Client Device or by more than one user at a time, except as set forth in this Section 1. The Software is 'in use' on a Client Device when it is loaded into the temporary memory (i.e., random-access memory or RAM) or installed into the permanent memory (e.g., hard disk, CD-ROM, or other storage device) of that Client Device. This LICENCE authorizes you to make one copy of the Software solely for backup or archival purposes, provided that the copy you make contains all of the Software's proprietary notices.

b. Server-Mode. You may use the Software on a Client Device as a server ('Server') within a multi-user or networked environment('Server-Mode') only if such use is permitted in the applicable price list or product packaging for the Software. A separate LICENCE is required for each Client Device or 'seat' that may connect to the Server at any time, regardless of whether such LICENCED Client Devices or seats are concurrently connected to, accessing or using the Software. Use of software or hardware that reduces the number of Client Devices or seats directly accessing or utilizing the Software (e.g., 'multiplexing' or 'pooling' software or hardware) does not reduce the number of LICENCES required (i.e., the required number of LICENCES would equal the number of distinct inputs to the multiplexing or pooling software or hardware 'front end'). If the

number of Client Devices or seats that can connect to the Software can exceed the number of LICENCES you have obtained, then you must have a reasonable mechanism in place to ensure that your use of the Software does not exceed the use limits specified for the LICENCES you have obtained. This LICENCE authorizes you to make or download one copy of the Documentation for each Client Device or seat that is LICENCED, provided that each such copy contains all of the Documentation's proprietary notices.

c. Volume LICENCES. If the Software is LICENCED with volume LICENCE terms specified in the applicable price list or product packaging for the Software, you may make, use and install as many additional copies of the Software on the number of Client Devices as the volume LICENCE authorizes. You must have a reasonable mechanism in place to ensure that the number of Client Devices on which the Software has been installed does not exceed the number of LICENCES you have obtained. This LICENCE authorizes you to make or download one copy of the Documentation for each additional copy authorized by the volume LICENCE, provided that each such copy contains all of the Documentation's proprietary notices.

2. Term. This Agreement is effective for an unlimited duration unless and until earlier terminated as set forth herein. This Agreement will terminate automatically if you fail to comply with any of the limitations or other requirements described herein. Upon any termination or expiration of this Agreement, you must destroy all copies of the Software and the Documentation.

3. Updates. For the time period specified in the applicable price list or product packaging for the Software, you are entitled to download revisions or updates to the Software when and as MIRAGE publishes them via its electronic bulletin board system, website or through other online services. For a period of thirty (30) days from the date of the of original purchase of the Software, you are entitled to download one(1) revision or upgrade to the Software when and as MIRAGE publishes it via its electronic bulletin board system, website or through other online services. After the specified time period, you have no further rights to receive any revisions or upgrades without purchase of a new LICENCE to the Software.

4. Ownership Rights. The Software is protected by German copyright laws and international treaty provisions. MIRAGE and its suppliers own and retain all right, title and interest in and to the Software, including all copyrights, patents, trade secret rights, trademarks and other intellectual property rights therein. Your possession, installation, or use of the Software does not transfer to you any title to the intellectual property in the Software, and you will not acquire any rights to the Software except as expressly set forth in this Agreement. All copies of the Software and Documentation made hereunder must contain the same proprietary notices that appear on and in the Software and Documentation.

5. Restrictions. You may not sell, lease, LICENCE, rent, loan or otherwise transfer, with or without consideration, rent, lease, loan or resell the Software. MIRAGE updates its Software frequently and performance data for its Software change. Before conducting benchmark tests regarding this Software, contact MIRAGE to verify that you possess the correct Software for the test and the then current version and edition of the Software. Benchmark tests of former, outdated or inappropriate versions or editions of the Software may yield results that are not reflective of the performance of the current version or edition of the Software. You agree not to permit any third party (other than third parties

under contract with you which contains nondisclosure obligations no less restrictive than those set forth herein) to use the LICENCED Program in any form and shall use all reasonable efforts to ensure that no improper or unauthorized use of the LICENCED Program is made. You may not permit third parties to benefit from the use or functionality of the Software via a timesharing, service bureau or other arrangement, except to the extent such use is specified in the applicable price list, purchase order, or product packaging for the Software. You may not transfer any of the rights granted to you under this Agreement. You may not reverse engineer, decompile, or disassemble the Software, except to the extent the foregoing restriction is expressly prohibited by applicable law. You may not modify, or create derivative works based upon, the Software in whole or in part. You may not copy the Software or Documentation except as expressly permitted in Section 1 above. You may not remove any proprietary notices or labels on the Software. All rights not expressly set forth hereunder are reserved by MIRAGE.

6. Warranty and Disclaimer.

a. Limited Warranty. MIRAGE warrants that for sixty (60) days from the date of original purchase the media (e.g., diskettes) on which the Software is contained will be free from defects in materials and workmanship.

b. Customer Remedies. MIRAGE' and its suppliers' entire liability and your exclusive remedy for any breach of the foregoing warranty shall be, at MIRAGE's option, either (i) return of the purchase price paid for the LICENCE, if any, or (ii) replacement of the defective media in which the Software is contained. You must return the defective media to MIRAGE at your expense with a copy of your receipt. This limited warranty is void if the defect has resulted from accident, abuse, or misapplication. Any replacement media will be warranted for the remainder of the original warranty period. Outside the United States, this remedy is not available to the extent MIRAGE is subject to restrictions under United States export control laws and regulations.

c. Warranty Disclaimer. Except for the limited warranty set forth herein, THE SOFTWARE IS PROVIDED 'AS IS.' TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, MIRAGE DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT WITH RESPECT TO THE SOFTWARE AND THE ACCOMPANYING DOCUMENTATION. YOU ASSUME RESPONSIBILITY FOR SELECTING THE SOFTWARE TO ACHIEVE YOUR INTENDED RESULTS, AND FOR THE INSTALLATION OF, USE OF, AND RESULTS OBTAINED FROM THE SOFTWARE. WITHOUT LIMITING THE FOREGOING PROVISIONS, MIRAGE MAKES NO WARRANTY THAT THE SOFTWARE WILL BE ERROR-FREE OR FREE FROM INTERRUPTIONS OR OTHER FAILURES OR THAT THE SOFTWARE WILL MEET YOUR REQUIREMENTS.

7. Limitation of Liability. UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER IN TORT, CONTRACT, OR OTHERWISE, SHALL MIRAGE OR ITS SUPPLIERS BE LIABLE TO YOU OR TO ANY OTHER PERSON FOR ANY INDIRECT, CONSE-QUENTIAL OR PURELY FINANCIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF GOODWILL,WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR FOR ANY AND ALL OTHER DAMAGES OR LOSSES. IN NO EVENT WILL MIRAGE BE LIABLE FOR ANY DAMAGES IN EXCESS OF THE LIST PRICE MIRAGE CHARGES FOR A LICENCE TO THE SOFTWARE, EVEN IF MIRAGE SHALL HAVE BEEN

ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY TO THE EXTENT THAT APPLICABLE LAW PROHIBITS SUCH LIMITATION.

8. United States Government. The Software and accompanying Documentation are deemed to be 'commercial computer software' and' commercial computer software documentation,' respectively, pursuant to DFAR Section 227.7202 and FAR Section 12.212, as applicable. Any use, modification, reproduction, release, performance, display or disclosure of the Software and accompanying Documentation by the United States Government shall be governed solely by the terms of this Agreement and shall be prohibited except to the extent expressly permitted by the terms of this Agreement.

9. Export Controls. You have been advised that the Software and Documentation (the 'Products') are subject to the U.S. Export Administration Regulations. You shall not export, import or transfer Products contrary to U.S. or other applicable laws, whether directly or indirectly, and will not cause, approve or otherwise facilitate others such as agents or any third parties in doing so. You represent and agree that neither the United States Bureau of Export Administration nor any other federal agency has suspended, revoked or denied your export privileges. You agree not to use or transfer the Products for end use relating to any nuclear, chemical or biological weapons, or missile technology unless authorized by the U.S. Government by regulation or specific LICENCE. Additionally, you acknowledge that the Products are subject to export control regulations in the European Union and You hereby declare and agree that the Products will not be used for any other purpose than civil (non-military) purposes. The parties agree to cooperate with each other with respect to any application for any required LICENCES and approvals, however, You acknowledge it is Your ultimate responsibility to comply with any and all export and import laws and that MIRAGE has no further responsibility after the initial sale to You within the original country of sale.

10. High Risk Activities. The Software is not fault-tolerant and is not designed or intended for use in hazardous environments requiring fail-safe performance, including without limitation, in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, weapons systems, direct life-support machines, or any other application in which the failure of the Software could lead directly to death, personal injury, or severe physical or property damage (collectively, 'High Risk Activities'). MIRAGE expressly disclaims any express or implied warranty of fitness for High Risk Activities.

11. Miscellaneous. This Agreement is governed by the laws of Germany, without reference to conflict of laws principles. The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded. This Agreement sets forth all rights for the user of the Software and is the entire agreement between the parties. MIRAGE reserves the right to periodically audit you to ensure that you are not using any Software in violation of this Agreement. During your standard business hours and upon prior written notice, MIRAGE may visit you and you will make available to MIRAGE or its representatives any records pertaining to the Software to MIRAGE. The cost of any requested audit will be solely borne by MIRAGE, unless such audit discloses an underpayment or amount due to MIRAGE in excess of five percent (5%) of the initial LICENCE fee for the Software or you are using the Software in an unauthorized manner, in which case you shall pay the cost of the audit. This Agreement supersedes any other communications with respect to the Software and Documentation. This Agreement may not be modified except by a written addendum issued by a duly authorized representative

of MIRAGE. No provision hereof shall be deemed waived unless such waiver shall be in writing and signed by MIRAGE or a duly authorized representative of MIRAGE. If any provision of this Agreement is held invalid, the remainder of this Agreement shall continue in full force and effect. The parties confirm that it is their wish that this Agreement has been written in the English language only.

12.MIRAGE CUSTOMER CONTACT. If you have any questions concerning these terms and conditions, or if you would like to contact MIRAGE for any other reason, please call +49 700/54885342, or write: : MIRAGE Computer Systems GmbH, Auf der Steige 12, 88326 Aulendorf – E-Mail: Info@Mirage-Systems.de) . You will find our internet web- site at www.mirage-systems.de.

Date: 01.08.2003
LA-DE-01082003

Index