

CuteKdmMaker v1.0.0

A Key Delivery Messages (KDM) maker

Users Manual

1. Introduction

Thank you for selecting CuteKdmMaker as your KDM creation tool.

CuteKdmMaker allows you to create KDMs for your encrypted DCP, the work flow is very easy and straightforward.

The only limitation in the demo version of CuteKdmMaker is that you can not set a validity time window for the issued KDM larger than 5 days.

You could also issue DKDM (Distribution KDM) for other DCP mastering stations.

2. What is a KDM?

KDM is the acronym for “Key Delivery Message” and is the key for your encrypted DCP to be unlocked for a specific cinema.

For each and every cinema you are going to show your movie, you need to issue a KDM.

Every cinema has a certificate that identifies them, this certificate is used in the KDM creation process.

- A KDM only works for one composition in the DCP on one cinema server
- A KDM will only work within a specific time period

System requirements

Operating system:

Windows 7, Windows 8 and Windows 10

MacOSX: 10.7 or later

3. Installation of CuteKdmMaker

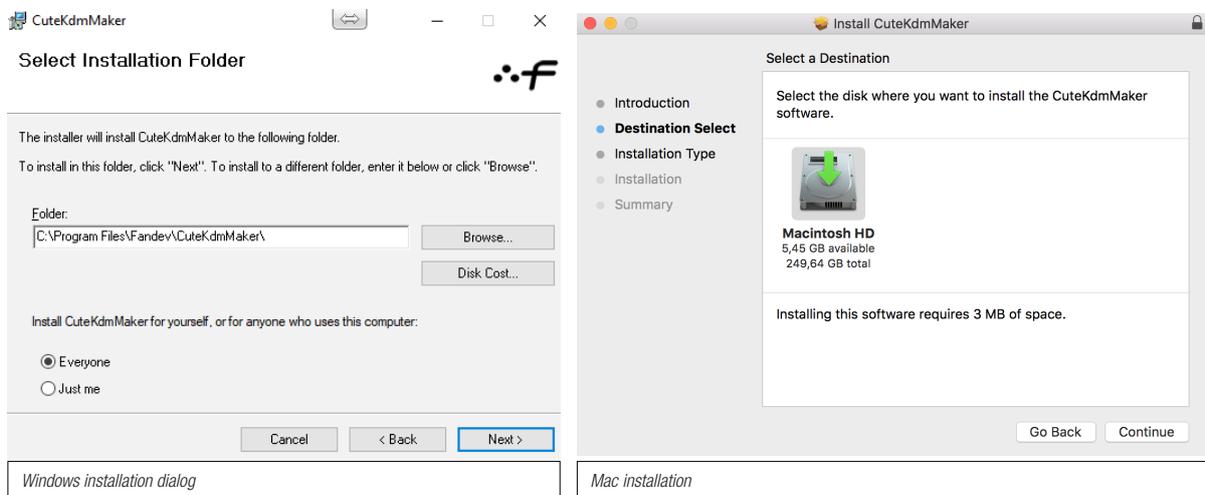
It will only take a minute or two to install CuteKdmMaker.

You can download the latest version of CuteKdmMaker from the Fandev website: <http://www.fandev.com>

Windows: If you have already installed a previous version, go to the control panel and uninstall the older version.

Double-click on the executable setup file downloaded from the Fandev website and follow the on-screen instructions.

Mac: Double-click on the downloaded installer, the installer will guide you through the installation.



Where are CuteKdmMaker installed?

Windows: C:\Program Files\Fandev\CuteKdmMaker.exe

Mac: /Applications/CuteKdmMaker.app

4. Preferences

Setting up your certificates for CuteKdmMaker

In CuteKdmMaker you have the options to install your own certificates or to create a new set of certificates. These certificates is used for signing the KDM.

For users who not yet has purchased the software, a set of demo certificates is created

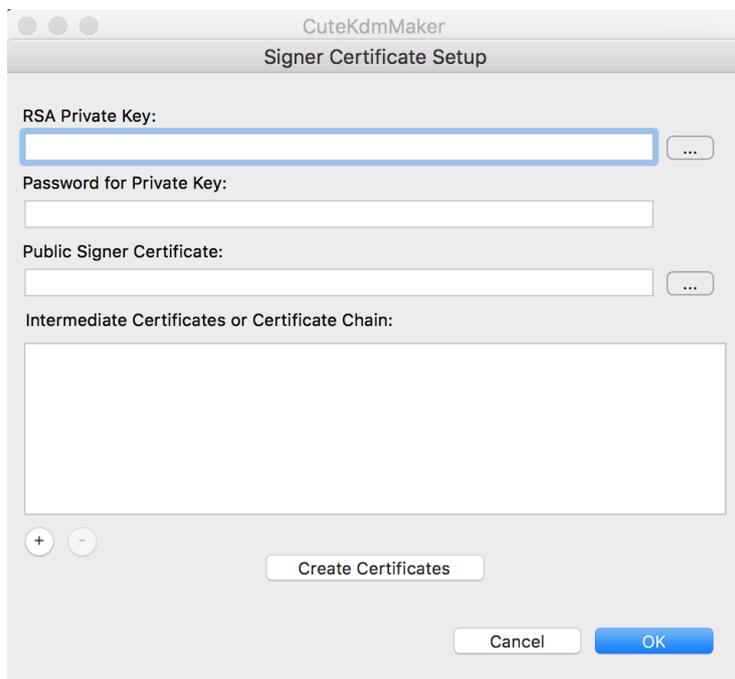
1. Launch CuteKdmMaker
2. Open the CuteKdmMaker Preferences:
Win: Goto menu File->Preferences
Mac: Goto menu CuteKdmMaker->Preferences



To create a new set of certificates, simply just press the “Create Certificates” button.

When pressed you will be asked to specify a password. When the auto generation process is finished, all text fields are filled out.

When you press ok to leave the”Signer Certificate Setup”, the certificates are checked and verified.



RSA Private Key: This textfield contains the signatures private key.

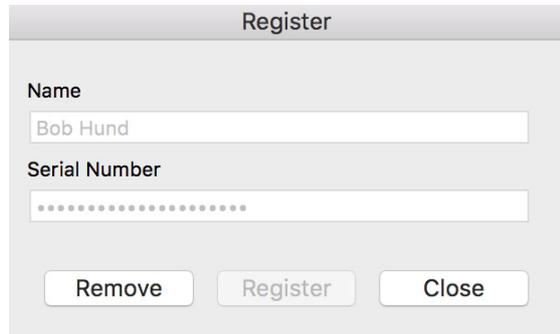
Password for Private Key: Password used for the Private Key

Public Signer Certificate: This is the signatures public key

Intermediate Certificates or Certificate Chain: Your root and intermediate certificates is added here

5. Registration dialog

1. Launch CuteKdmMaker
2. Open the CuteKdmMaker Preferences:
Win: Goto menu About->Register
Mac: Goto menu Register->Register



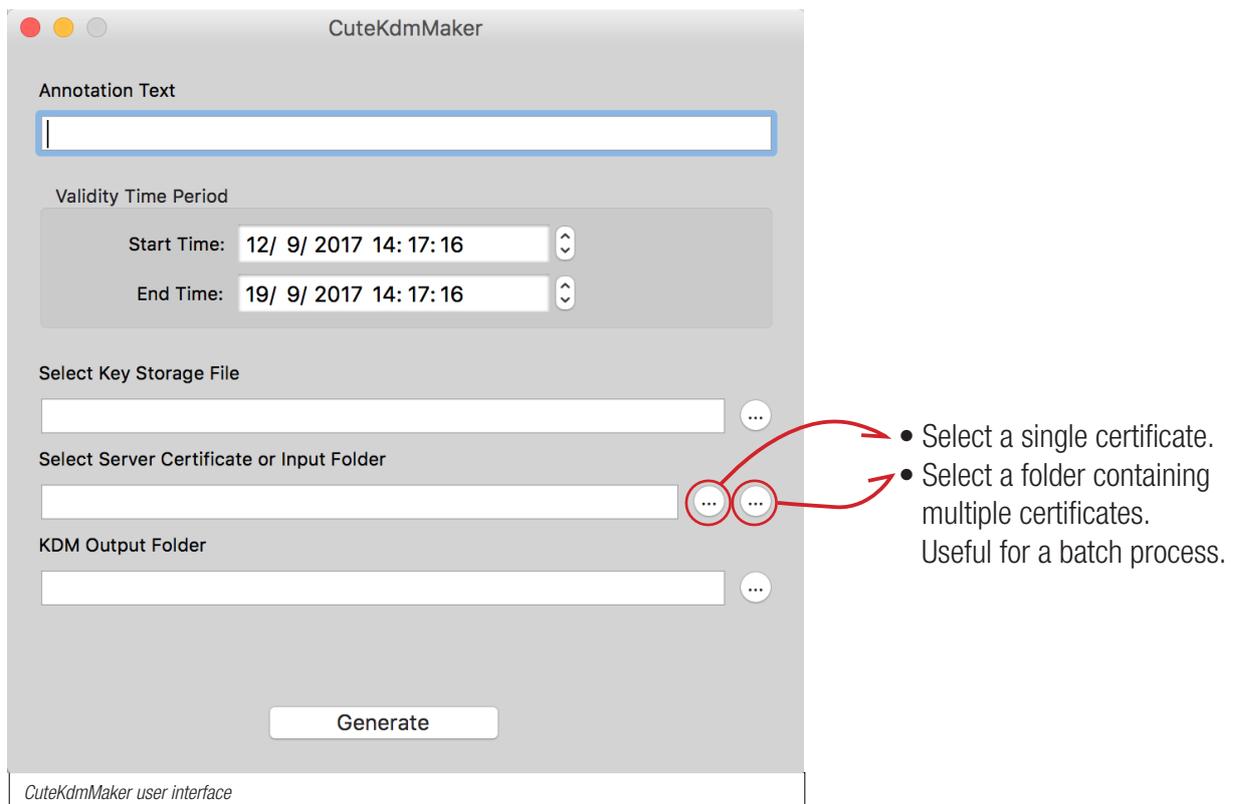
The image shows a 'Register' dialog box with a title bar. It contains two text input fields: 'Name' with the text 'Bob Hund' and 'Serial Number' with a series of dots. At the bottom, there are three buttons: 'Remove', 'Register', and 'Close'.

In this dialog you can unlock your purchased copy CuteKdmMaker.
Just add your name and the serial number you received when the purchase was completed.

6. KDM Maker

Example 1: Create your first KDM

Before you start to create your KDMs, there are a few things that you need arrange. For every cinema that are going to play your movie, you need to collect their server certificates. You need to contact them and ask them to send the certificates to you, sometimes they are just sending you the serial number of the server. If that is the case you need to get the certificate by yourself. Each server manufacturer has a web site or ftp for collecting the certificates.



Annotation Text: Any annotation text for KDM is filled out here. (optional)

Validity Time Period: Set the validity time window for the KDM here.

Select Key Storage File: Select your “Key Storage File” here, this file were created during the encryption of the DCP. If this file is lost, there is no way to open your encrypted DCP.

Select Server Certificate or Input Folder: Select the cinema server certificate here.

KDM Output Folder: Set the destination folder for your KDM(s).

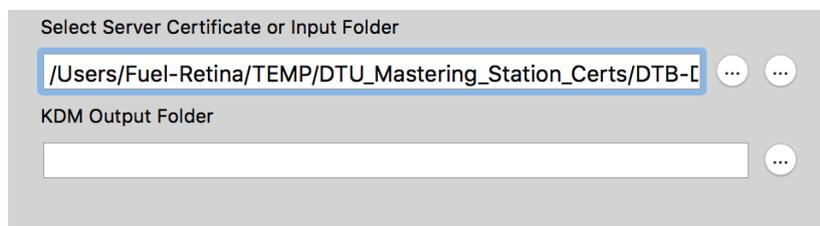
Generate: Starts the KDM creation process.

Example 2: Create a DKDM (Distribution Key Delivery Message)

Mastering systems and cinema playback servers has certificates that identifies them, from these certificates a DKDM or KDM could be issued.

Instead of targeting a cinema server, you could target a DCP mastering station that would gain full control over the DCP.

The process of making a DKDM is identical to how you make a KDM and structurally they are the same.



Select Server Certificate or Input Folder

/Users/Fuel-Retina/TEMP/DTU_Mastering_Station_Certs/DTB- [...]

KDM Output Folder

[...]

1. To the “Select Server Certificate or Input Folder” text field, browse to the mastering certificate that you are going to issue a DKDM from.
2. Press “Generate” and your DKDM is created.

7. Sending the KDM to the cinema

A KDM is very lightweight and could easily be mailed to the cinema.

But before sending it away, it is a good practice add the KDM files to a zip archive.

A zip-archive is a safe container and if it gets corrupt the receiver sees that and know that it is something wrong with the zip-archive instead of your KDM files.

If you are going send the KDMs on a thumb drive, make sure to format the thumb drive as a FAT file system. This file system is supported on Linux, Mac and Windows

Using FTP for delivery.

There is one important thing to keep mind when uploading or downloading a KDM to/from a ftp server.

During the upload and download process, the line endings of the xml-files that are ASCII files could be altered.

What you need to do is to change the transfer mode in your ftp application.

Ftp applications has different transfer modes, ASCII/Binary/Auto. "Auto" is mostly a default setting.

The "Auto" setting treats your xml-files as ASCII and video and audio files as binary

It is crucial to set the transfer mode to "Binary", if not, the kdm files could be changed and results in bad signature values; errors may occur during KDM load.

We welcome your feedback on CuteKdmMaker

If you have any feedback, problems or questions, please contact us at:
info@fandev.com

