

Lockmagic Secure GDrive

09.04.2016

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Overview

Lockmagic enables secure, encrypted collaboration using google drive shared folders. Secure shared folders improves user productivity by eliminating excessive email attachments and providing a single location for users to find all related documents and files. It also simplifies adding and managing encryption policies to shared content.

Goals

1. Define a single encryption policy that is centrally managed by the shared folder owner.
2. Transparently apply policy to encrypt files added to shared folder
3. Retain applied protection policy when encrypted files are downloaded or copied outside the shared folder.
4. Track access of all files in the shared folder
5. Updates to the protection policy are immediately effective on all files. As new people are added or removed, their accesses to all files in the shared folder are granted or revoked transparently. This enables a single point of control for all secure files stored in the shared folder.
6. By default users are not added with rights to modify the shared folder sharing settings. This is important in order to prevent people from adding others without the owner's consent or knowledge. Only the owner has the ability to add and remove other people.
7. People can only delete the files they saved or uploaded to the shared folder. The owner has the rights to delete any file

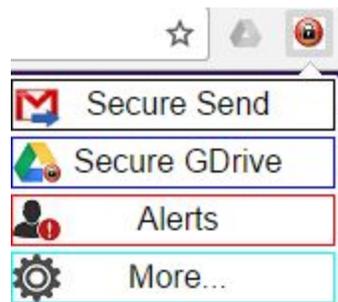
Specifications

Lockmagic achieves the above goals by integrating with the Google Drive through a browser-based web application. All encryption and decryption operations are performed on the user web browser from any device and no software installation is required.

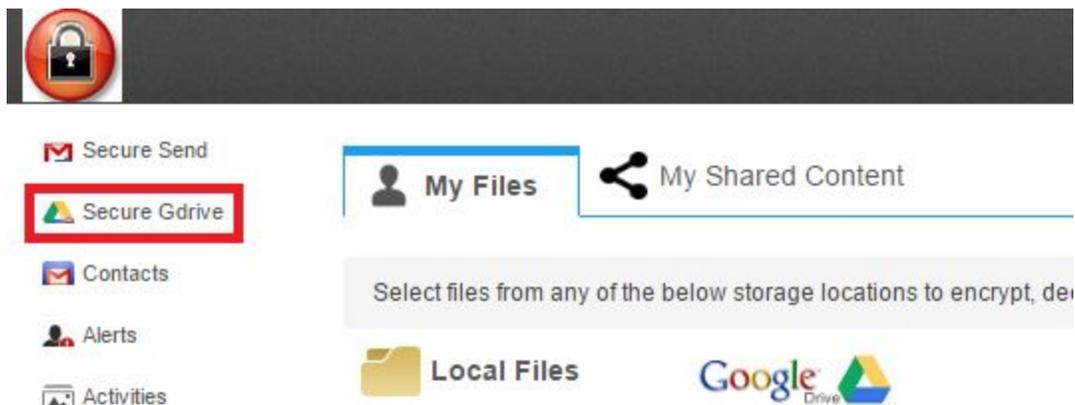
How do I open the Lockmagic Web Application for Google Drive?

There are three options :-

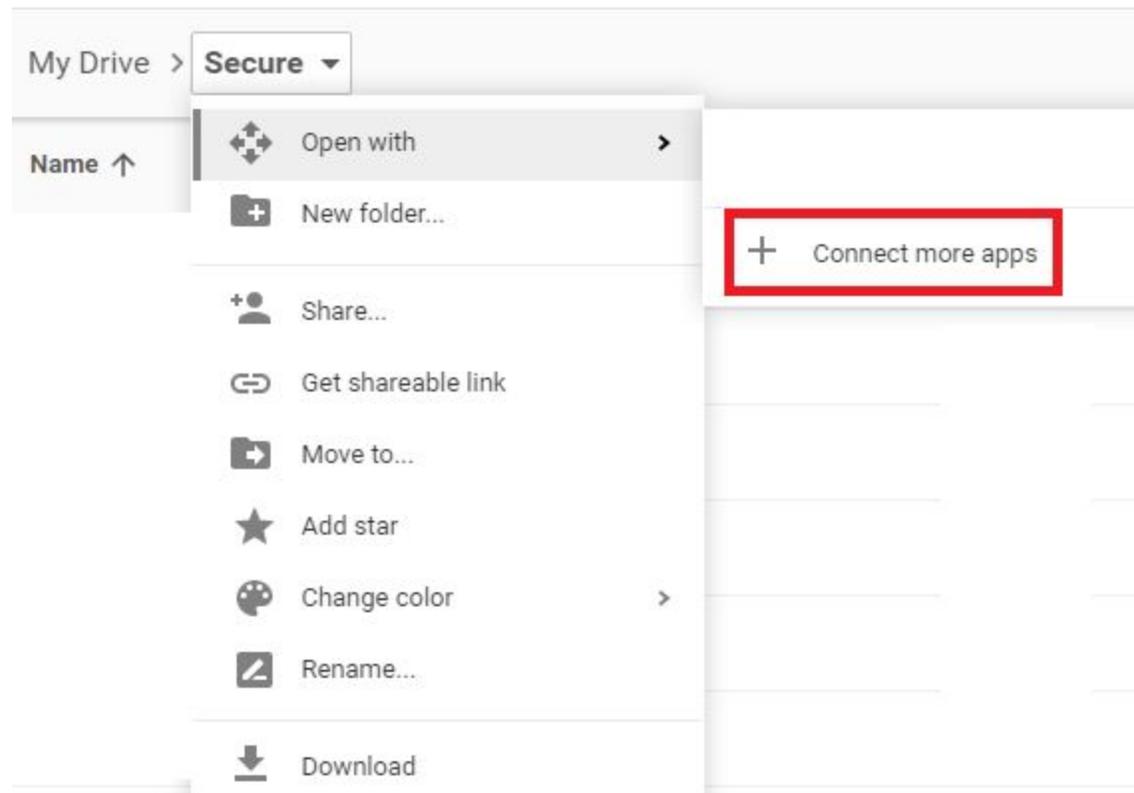
- Install Lockmagic [Firefox](#) or [Chrome](#) browser extension for quick access to [lockmagic](#). Search for “Chrome Lockmagic” or “Firefox Lockmagic” in google to find links to browser extension. Install the extension to create shortcuts in your browser to send secure email, open secure google drive web app, view alerts and more.



- Or, login to Lockmagic @ <https://www.lockmagic.com/apps/lmdrive.html>



- Or, from your google drive select “Open with” -> “Connect Application” and search for Lockmagic.



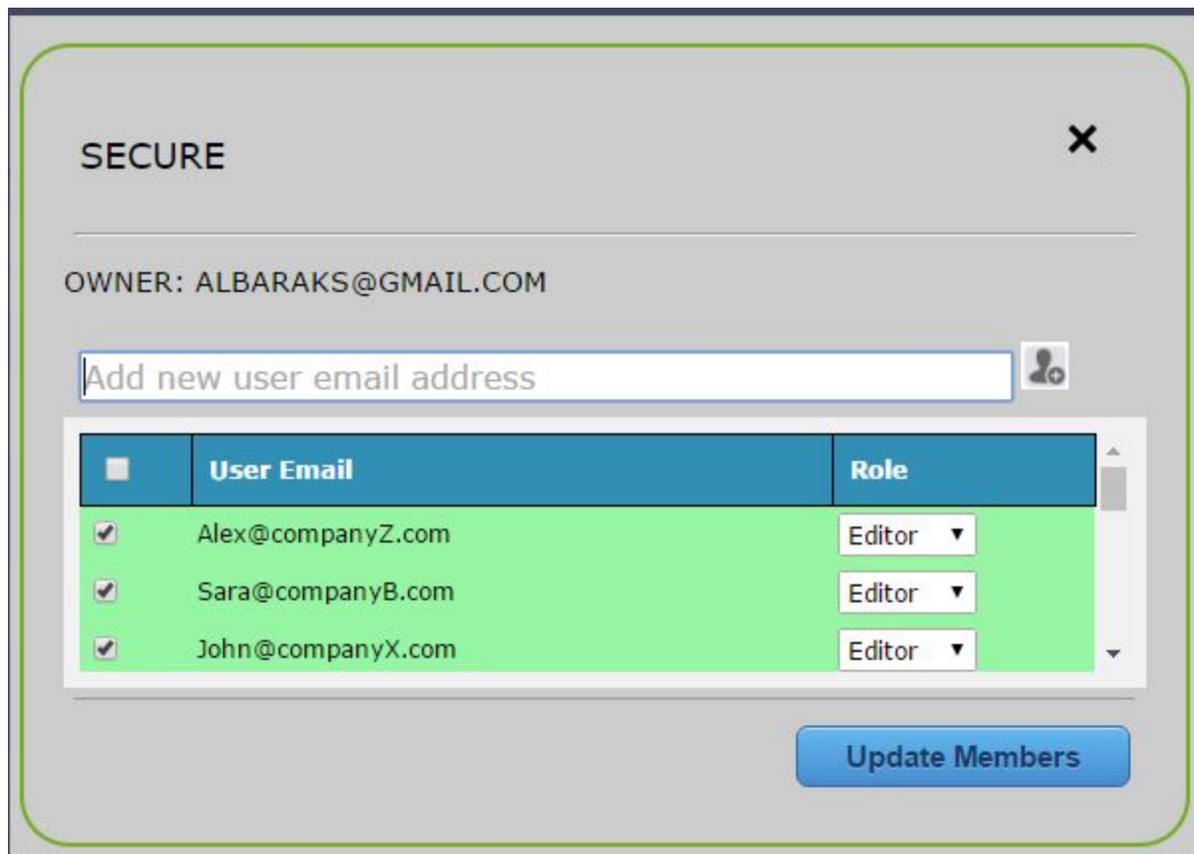
How do I create secure shared folder in Google Drive?

From inside the Lockmagic Web App for google drive, do the following steps :-

- Create a folder
- Place mouse on newly created folder and select first action “Share”



- Add or select email addresses of people to include in shared folder. By default the user role is Editor and can be changed to “Viewer”. Please don't use Owner role.



Each user in the list will receive an invitation email from google with link to shared folder. Note, if you want users that are not on google then you must explicitly enable the “anyone with link” option on the shared folder.

How do I export a secure, encrypted Google Docs to a shared folder?

A google document can be securely shared using the following step:

1. Select google document by click on checkbox on left-hand side
2. Select “Copy To” from the toolbar
3. Navigate to the secure shared folder
4. Select “Encrypted Paste”

The google document is exported as an Office Document, encrypted using the secure shared folder policy and uploaded to google drive. Other people can access the document and view it online and download a copy if the role is not viewer.

Using the “Recent” tab to quickly locate files is more convenient sometime than to navigate through the folder structure. You can navigate quicker by moving between “My Drive” and “Recent” views. On the “My Drive” view navigate to the shared folder and then select “Recent” view tab and follow these steps;

1. Select checkbox next to google document name you want to securely share
2. Select “Copy To” option from toolbar
3. Select “My Drive” tab. This will switch views and you are on the shared folder
4. Select “Encrypted Paste”

The screenshot shows the Google Drive interface. At the top, there are three tabs: "My Drive" (highlighted with a red box), "Shared with Me", and "Recent" (also highlighted with a red box). Below the tabs, the text "My Drive / Secure" is displayed. A toolbar contains several icons: "Office" (dropdown), "Encrypt", "Copy to" (highlighted with a red box), "Move to", "Download", "Rename", and "Remove". Below the toolbar, a table lists files with columns for "Title", "Size", and "Modified". The table has a header row with a checkbox, "Title", "Prepare Copy Operation on selected items", "Size", and "Modified". The first row shows a file named "PI - LockMagic Business Security Ready Presentation_pptx.wef" with a size of "2 MB" and a modified date of "Mar 3 2014 1:35:00 am". The second row shows a folder named "Secure Shared Folder" with a size of "-" and a modified date of "Nov 7 2016 3:21:08 pm". The checkbox for the "Secure Shared Folder" is checked and highlighted with a red box. Below the table, another toolbar shows "Office" (dropdown), "Encrypted Paste" (highlighted with a red box), "Paste", and "Cancel". Below this toolbar, the table header "Title", "Size", and "Modified" is visible.

<input type="checkbox"/>	Title ▲	Size	Modified
<input type="checkbox"/>	PI - LockMagic Business Security Ready Presentation_pptx.wef	2 MB	Mar 3 2014 1:35:00 am
<input checked="" type="checkbox"/>	Secure Shared Folder	-	Nov 7 2016 3:21:08 pm

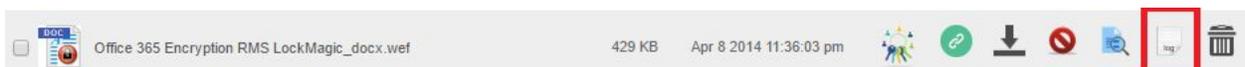
How do I upload secure, encrypted files to a shared folder?

You add new files by using the upload button on the Lockmagic Web Application. Use the “Encrypt & Upload” option. The files are encrypted and uploaded using the policy defined by the owner on the shared folder.



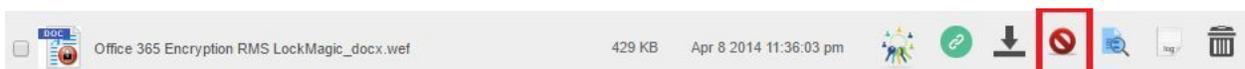
How do I track and view who is accessing files from shared folder?

You can discover who is accessing your files by placing mouse on top of the file of interest and select the log action. You will get a list of events on successful and unsuccessful events (unauthorized users).



How do I block access to secure, encrypted files in Google Drive?

You can block access to a shared file for all users by using the block option.



How do I download a file from Google Drive?

You can download a secure copy by using the download option.



How do I place encrypted files in shared folder with different access policy?

In some cases it's desirable to add files to the shared folder that are only accessible to specific set of people or with different roles from the roles defined in the folder protection policy. For example, a user may want to share a file with the shared folder owner while granting only viewing access. Instead of creating a different shared folder and invite the owner to it, it's easier to contribute files with different access rights. In other words, the shared folder services as a single place to store information to simplify sharing and finding files but users should have flexibility to save files with different protection policies.

A simply way to upload a file to a shared folder with explicit authorization policy is following these steps:

- Select "Shared With me" tab to display list of shared folders
- Locate shared folder and select it to show actions
- Select Upload action 
- Select file to upload to shared folder
- Specify authorized users in authorization UI
- Press "Encrypt & Upload"



lock magic



Alternatively, add an already encrypted files to the shared folder in order to bypass the shared folder protection policy. When an encrypted file is uploaded or saved to the shared folder, it retains it's own authorization policy.

Steps:

- Upload a file to a private folder in google drive or encrypt an existing file in google drive located on a private folder
- Specify desired authorization policy for newly encrypted file
- Select encrypted file using checkbox on the left-hand side
- Select "Move to" option from toolbar
- Navigate to the shared folder via "Shared with Me" tab
- Press "Move here" to move the encrypted file to the shared folder

Although the encrypted file is placed in the shared folder, it's original authorization policy is retained and remains intact.

How do I search encrypted files in Google Drive?

Lockmagic transparently indexes PDF and Microsoft Word (Docx) files before saving the files encrypted in GDrive. The index itself is encrypted and stored in Google Drive as part of the file meta-data. Because the index is encrypted the user must perform search operations from the Lockmagic Web Application in order for the search to succeed.

Lockmagic, also, allows users to specify a set of keywords that can then be used for search on any file type. Lockmagic will extract properties such as "author, keyword, category, ...etc" for Microsoft Excel (.xlsx) files and add them to the keywords without any user action. We recommend the author of the document defines these properties in the document template or for each document in order to make it searchable on google drive while being stored encrypted.

All indexes are stored encrypted in GDrive and the Lockmagic web app UI must be used to search for files. If the user searches using any of these keywords on the regular Gdrive UI the files will not be found. That way the security of the content is never disclosed and discoverable as a side-effect of search operations. To add any set of keywords to any encrypted file use the search option.



More Information

I. Frequently Asked Questions

More information on Lockmagic can be found on our FAQ page
<http://www.lockmagic.com/faq.html>

II. Videos

You can view the online videos in youtube <https://youtu.be/oXlzfTfKFjk>