# Chameleon User Manual



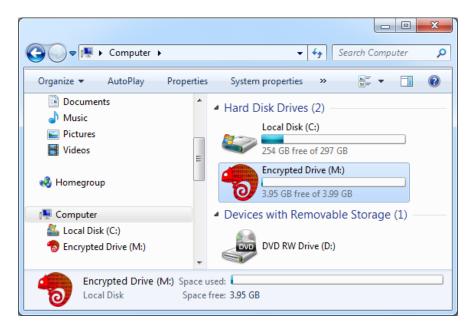


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#### 1 Introduction

Chameleon protects the files on your PC with AES-256 encryption. Chameleon differs from other USB encryption devices by protecting the files on your hard disk rather than transferring them to a USB device. Chameleon creates an encrypted drive using the free space in your hard disk. Files and applications stored in this encrypted drive are protected and can only be accessed when the Chameleon device is plugged in. Like the key for your car, the Chameleon device acts like a physical key for your hard disk.



Chameleon works with Windows XP, Vista, and Win7 based PCs.

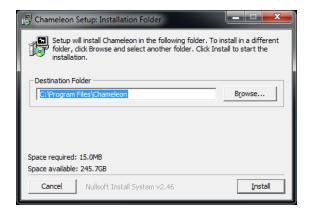
# 2 Installation and Setup

- 1. Before installing the Chameleon software, make sure any previous versions of the Chameleon software are uninstalled. Uninstalling does not delete existing encrypted drives.
- 2. **Insert the installation CD** and **run the Setup** program.<sup>1</sup> (You can also download the setup program from http://www.marathon6.com/chameleon.)

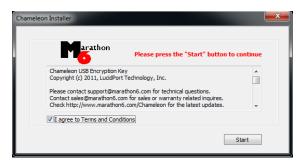
<sup>&</sup>lt;sup>1</sup> On some Windows7 computers, you may get a User Account Control warning that a program is trying to make changes to the computer. Select "Yes" or "Install" if this occurs.



3. **Click on the "Install" button** to load the software.



4. **Insert the Chameleon device** then **press** "**Start**" to launch the installation wizard.



5. Choose between A), B), or C)



**A)** Choose a Recovery Passphrase. This passphrase is only used for making duplicate copies of your Chameleon device (in case you lose it) and not used in normal operation. You can think of the Recovery Passphrase as a password stored on the device itself.

Select a unique passphrase. Another Chameleon device with the same passphrase may be able to access your data. Once programmed, the Recovery Passphrase can never be changed.

A good passphrase is at least 16 characters long and includes random letters (upper and lower case), numbers, and special symbols. Protect your passphrase as you would protect a password. An attacker who learns your passphrase can use it to make a duplicate device. There is no way to duplicate a Chameleon device without your Recovery Passphrase.



- **B**) For the best balance of security and redundancy, use a random sequence of at least 64 numbers and letters as the passphrase. After completing the installation, make several duplicate devices with this sequence as backups (See "5 Duplicating a Chameleon Device"). In order to create additional duplicates in the future, save the random sequence in a secure location. Delete the sequence, otherwise.
- C) Disable the Recovery Passphrase. For the strongest security, disable the Recovery Passphrase. This instructs the Chameleon device to generate its own random encryption key. However, this means that you will not be able to duplicate the device if it is lost or broken.



6. **Enable/Disable Password**. When enabled the password must be entered every time the device is plugged in. A password is not required and may be added or changed at any time.

If enabled, the password should be different from the Recovery Passphrase. A password protects the Chameleon device from unauthorized use.

7. **Create an encrypted drive**. Specify the size and location of the drive. The installer creates the encrypted drive using the free space at that location. It can reside on your local hard disk or on external USB drives. The encrypted drive can be resized later.





All content copied to the encrypted drive is automatically protected. It is accessible when the device is inserted, and disappears when the device is removed.



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#### 2.1 Uninstalling

You can uninstall the Chameleon software by locating "Chameleon" from the Windows start menu and selecting "Uninstall" (Start > All Programs > Chameleon > Uninstall). Uninstalling does not remove your encrypted drives. To remove the encrypted drives, delete the directory ChameleonDrives from your hard disk's top level directory (ex. C:\ ChameleonDrives\). The ChameleonDrives directory can only be deleted when the Chameleon device is disconnected.

# 3 Chameleon Encrypted Drives: Protecting Your Data

Plug in your Chameleon device to access the encrypted drive. The encrypted drive appears like any other hard disk in your system. You can store files in it, open files from it, install and run programs from it, move files from one directory to another, and direct applications to use the encrypted drive. Once the Chameleon device is removed, the encrypted drive disappears from Windows. A forensic examination of your hard disk will reveal only encrypted, apparently random, data.

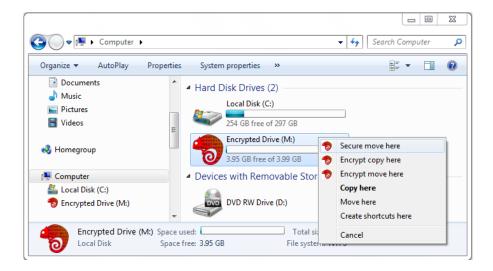
Only files that are stored on the Chameleon drive are encrypted. Any files copied or read from the encrypted drive are automatically decrypted. For instance, if a user were to attach a file from an encrypted drive to an email, that file would be attached decrypted. For securing email attachments and cloud storage, see section "4 Encrypting Individual Files and Folders".

You can copy files to the encrypted drive simply by dragging and dropping them there. However, this retains the original unencrypted file at its original location. A more secure method is to right-click drag and drop. Hold down the right mouse button, then drag the selected file to the encrypted drive. A dialog appears showing "Copy", "Move", and "Secure move". The secure move option moves the file into the encrypted drive, then scrubs away any traces of that file from its original location.<sup>2</sup> If a significant amount of data is involved, this may take some time.

<sup>&</sup>lt;sup>2</sup> The standard Windows move command copies the file, then marks the original file as deleted. The deleted file may be recoverable with specialized tools. The secure move option prevents recovery by overwriting the deleted file.

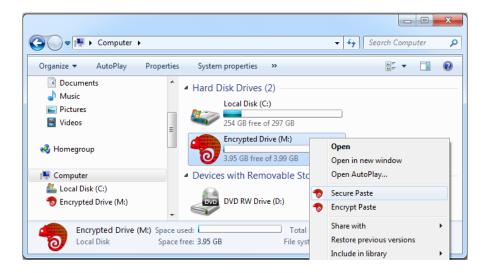


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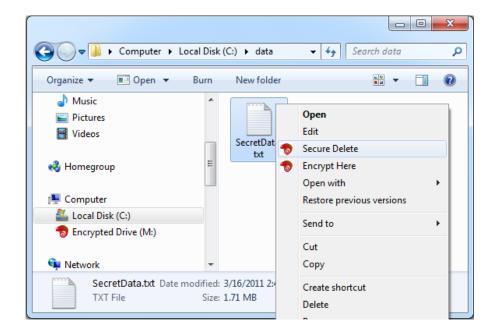
You can also securely move a file to the encrypted drive by using the secure paste option. Right click on the file or folder you want to move, then select "Cut". Next, right click on a encrypted drive or sub-directory, then select "Secure Paste". Like the secure move option, the secure paste command cleans away all traces of the unencrypted files from the hard disk.

Secure commands are only available when the Chameleon device is plugged in.



The Chameleon software also adds a secure delete command. Right click on any file or folder then select "Secure Delete". This is more secure than deleting the file then deleting it again from the Windows' Recycle Bin. Since secure delete overwrites every bit of the file from the hard disk, this may take some time if a significant amount of data is involved. The normal Windows cut, paste, and delete commands are still available.





Deleting a file stored in an encrypted drive places it in the Windows' Recycle Bin. You can recover the file from the Recycle Bin as long as the Chameleon device is still inserted. Deleted files disappear from the Recycle Bin when the device is removed. They reappear in the Recycle Bin when the device is reinserted. There is no need to secure delete any files located in the encrypted drive.

Any files you create directly on the encrypted drive are automatically protected. However, some applications store temporary information to your unencrypted drive. This information may be recoverable with specialized tools. You should direct your applications to store their temporary files in the encrypted drive. This can usually be accomplished by installing your applications directly in the encrypted drive.

You can plug or unplug the Chameleon device at any time. Your computer is still fully functional without the Chameleon device. Only the encrypted drive (and any programs and data in it) will be unavailable. Be aware that unplugging the device while writing data to the encrypted drive may result in data corruption. This is similar to removing an external hard disk in the middle of a write to it. To be absolutely sure that no writes are occurring, use the Windows Safe Remove function before unplugging the device.





If an application is open with an encrypted file, that application and file may still be accessible even after you unplug the Chameleon device. For example, let's say you are editing a protected file in Microsoft Word. If you unplug the device, a copy of this file is still open in Word. You cannot save this file to the encrypted drive until you re-insert the device. However, you are still able to view and edit the parts of the file cached in working memory.

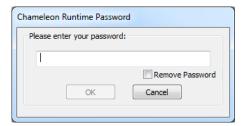
# 4 Encrypting Individual Files and Folders

The Chameleon device automatically encrypts all data placed in the encrypted drive and automatically decrypts all data taken out of the encrypted drive. While convenient and secure, this does not protect information you email or store online. For these situations, the Chameleon device can encrypt and decrypt individual files and folders.

#### 4.1 Encrypting Individual Files and Folders

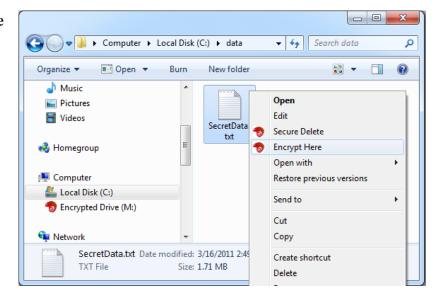
You can encrypt a single file, a group of files, or whole directories (but not shortcuts or special icons like the Windows Recycle Bin). Files encrypted by a Chameleon device can only be decrypted using the same device (or by its Master).

- 1. Plug in the device
- 2. Enter your password (if enabled)





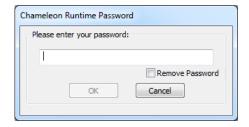
- 3. **Right click on the file** or folder you want to protect.
- 4. **Select "Encrypt** here" to create an encrypted version of the selected file



The encrypted file appears as a file in the same folder with the same file name but with the extension ".cge". If desired, you can change the file name, but not the extension. This file is encrypted using device's AES-256 hardware. Unlike the encrypted drive, the encrypted file is still visible when the device is removed. It can be attached to an email, copied to a thumb drive, stored on the network, or synced to a cloud service.

You can also encrypt individual files and folders with right click drag and drop.

- 1. Plug in the device
- 2. Enter your password (if enabled)

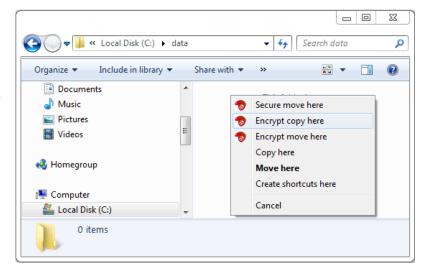


3. Click and hold down the right mouse button on the file or folder you want to protect.



4. **Drag the mouse pointer** to the target folder and release the right mouse button.

The encrypted file will be created in this folder.



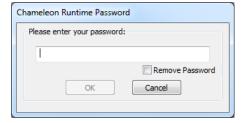
5. Select "Encrypt move here" or "Encrypt copy here".

"Encrypt move here" places the encrypted file at the destination while securely deleting the source file.

"Encrypt copy here" does the same without deleting the source file.

You can also encrypt a file or folder by using the encrypted paste option:

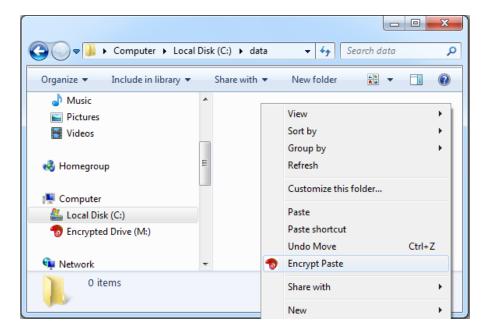
- 1. Plug in the device
- 2. Enter your password (if enabled)



3. **Right click on the file** or folder you want to encrypt, then **select "Cut" or "Copy"**. You can also use the Cut (CTRL+x) or Copy (CTRL+c) keyboard shortcuts.



4. Right click on the destination drive or directory.



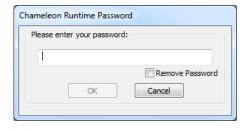
#### 5. Select "Encrypt Paste"

This places the encrypted file at the destination. If you selected "Cut", the source file will be securely deleted after the encryption completes.

# 4.2 Decrypting Files

To decrypt a .cge file:

- 1. Plug in the device
- 2. Enter your password (if enabled)



#### 3. Double click the .cge file.

The decryption process will begin immediately.

Note: if you open the .cge file from an application (e.g. a web browser) using (for example) "Open With", then the file will be downloaded and decrypted in a temporary folder of the application's choosing. This will place the decrypted contents of the .cge file in an unintended folder. Instead of opening the .cge directly from the application, save the .cge file to a folder of your choice (using "Save As"), and then decrypt the file.



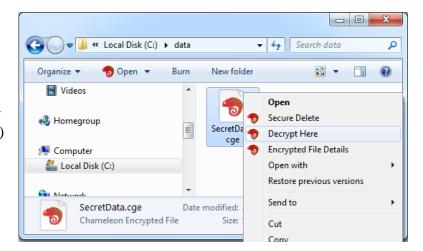
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The other methods for decrypting .cge files are essentially identical to encrypting:

- 1. Plug in the device
- 2. Enter your password (if enabled)



- 3. **Right click on the** .cge file to be decrypted.
- 4. Select "Decrypt here" to create a copy of the decrypted file(s) or folder(s) contained within the .cge file



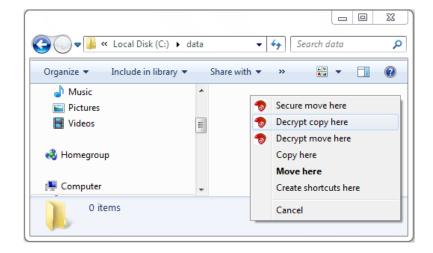
Likewise, you can decrypt .cge files using the right-click/drag and drop method. Use this method when the .cge file is located in unsecure storage. It is more secure because it avoids having your unencrypted data reside (temporarily) in the unsecured storage. For instance, you may have a .cge file stored on a network drive. Instead of double-clicking the file to decrypt it on the network folder, you could use the following method to decrypt the file onto your local hard drive.

- 1. Plug in the device
- 2. Enter your password (if enabled)





- 3. Click and hold down the right mouse button on the .cge file.
- 4. **Drag the mouse pointer** to the target
  folder and release the
  right mouse button.
  The decrypted
  contents will be
  created in this folder.



5. Select "Decrypt move here" or "Decrypt copy here".

"Decrypt move here" places the decrypted contents at the destination while securely deleting the .cge file. You may want to use this method to avoid having your unencrypted data reside (temporarily) in remote or unsecured storage.

"Decrypt copy here" does the same without deleting the source file.

The Decrypt Paste option is also available:

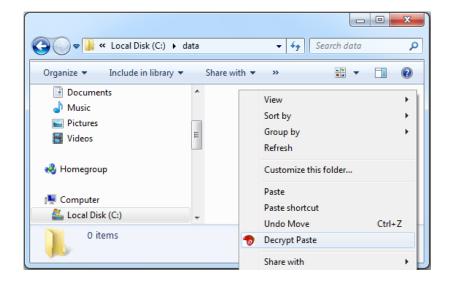
- 1. Plug in the device
- 2. Enter your password (if enabled)



3. **Right click on the .cge file** to be decrypted, then **select "Cut" or "Copy"**. You can also use the Cut (CTRL+x) or Copy (CTRL+c) keyboard shortcuts.



4. Right click on the destination drive or directory.



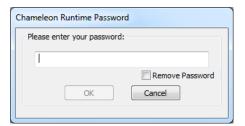
#### 5. Select "Decrypt Paste"

This places the decrypted contents at the destination. If you selected "Cut", the source file will be securely deleted after the decryption completes.

# 4.3 View Encrypted File Details

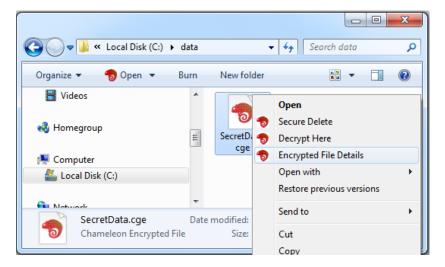
To view the details of an encrypted file:

- 1. Plug in the device
- 2. Enter your password (if enabled)

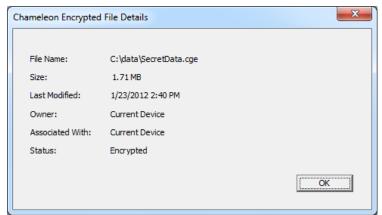




- 3. Right click on the .cge file
- 4. Select "Encrypted File Details"



The file details are displayed in a new window



# 5 Duplicating a Chameleon Device

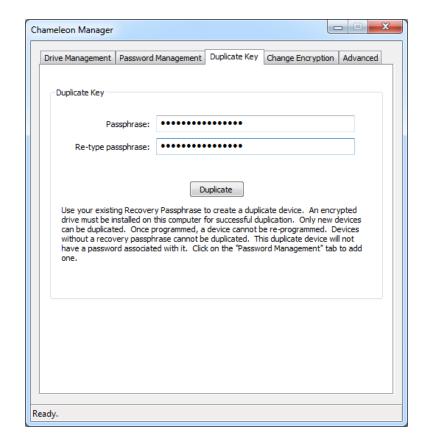
If you lose or break your Chameleon device, the data in the encrypted drive can be recovered using a new Chameleon device and the Recovery Passphrase you specified during installation. This process can also be used to create duplicate Chameleon devices. Devices without a Recovery Passphrase cannot be duplicated.

1. Plug in a new Chameleon device.

2. Start the Click on Windows "Start" > All Programs > Chameleon > Chameleon Manager



- 3. In the "Duplicate Key" tab, enter your original Recovery Passphrase.
- 4. Click the "Create" button.



This new duplicate device will not have a password associated with it. Click on the "Password Management" tab to add one.

You do not need the original Chameleon device to make a duplicate. But as a precaution, an encrypted drive must be present for successful duplication.

# 6 Disabling Lost Chameleon Devices

You can lock out a lost device by changing a device's Recovery Passphrase and migrating all encrypted drives<sup>3</sup> to the new device. Each device can only be changed once. To repeat this procedure, you will need a new Chameleon device. As a precaution, an encrypted drive must be present for successful migration.

You will need a Chameleon device programmed with the original Recovery Passphrase that you specified during installation. If your original device has been lost, you will need to prepare a replacement (see "5 Duplicating a Chameleon Device"). Your hard disk (C:\) must have enough free space to contain all the data on the encrypted drives. Depending on the volume of





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encrypted data, this process may take some time. Any unconnected encrypted drives (and backups) will still be accessible by the original/lost device. You will be prompted to migrate them when they are later connected.

To change the device and migrate the encrypted drives:

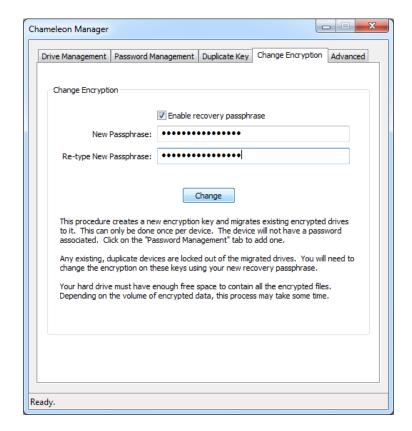
- 1. Plug in a duplicate of the original Chameleon device.
- 2. **Enter your password** (if enabled).



3. Start the Chameleon Manager

Click on Windows "Start" >
All Programs >
Chameleon >
Chameleon Manager

- 4. Select the "Change Encryption" tab.
- 5. Enter the new Recovery Passphrase. (Refer to "2 Installation and Setup" on choosing a Recovery Passphrase).
- 6. Press "Change".





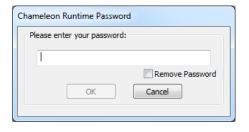
This procedure creates replacement encrypted drives using the new Recovery Passphrase with all your encrypted files in it. The updated Chameleon device will not have a password associated with it. Click on the "Password Management" tab to add one.

Unmigrated encrypted drives are still accessible with the new Chameleon device.

# 6.1 Migrating Encrypted (.cge) Files

In addition to encrypted drives, you must also re-encrypt .cge files that were secured by the original encryption key.

- 1. Plug in the device
- 2. Enter your password (if enabled)



3. Start the "Encrypted File Migrator" Click on Windows "Start" >
All Programs >
Chameleon >
Encrypted File Migrator

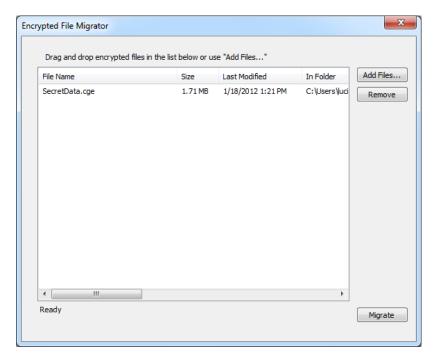


# 4. Select the .cge files to be migrated.

Drag them directly into the file list window.

or

Click on "Add Files", navigate to and select the files.



#### 5. Close all open files residing in the encrypted drives.

Before the migration process begins the encrypted drives will be detached. If a file is open, the Migrator will prompt the user to close it.

#### 6. Click on the "Migrate" button

Once the migration process is complete, the lost device will not be able to access the encrypted file. The hard disk containing the .cge files must have enough free space to contain a copy of the largest file in the list. Depending on the volume of encrypted data, this process may take some time.

Your encrypted drives will be reattached when the migration process is complete.

#### 7 Password Protection

By default, no passwords are required for Chameleon devices. However, adding password protection secures your data in the event that you lose your device along with your PC. When enabled, the Chameleon software requests the password whenever it is plugged in or when the computer is restarted or wakes from sleep.





The password is different from the Recovery Passphrase. The Recovery Passphrase is only entered during initialization or duplication. When enabled, the password must be entered every time the device is plugged in. It is used to prevent unauthorized access to your device, not to protect your data. Chameleon devices with the same Recovery Passphrase, but different passwords can access the same encrypted drives.

If you forget your password, remove password protection by entering your Recovery Passphrase at the password prompt.

#### 7.1 Password Modification

You can add, change, or remove password protection as many times as you want. It is possible to have duplicate devices with different passwords (or no passwords at all). Be aware that a Chameleon device without password protection can access the data protected by a different device with password protection as long as they have the same Recovery Passphrase.

To modify password options:

- 1. Plug in the device
- 2. Enter your password (if already enabled)

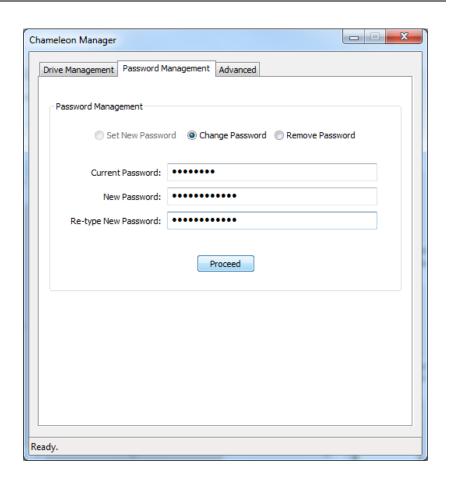


3. Start the Chameleon Manager

Click on Windows "Start" >
All Programs >
Chameleon >
Chameleon Manager



4. Select the "Password Management" tab.



- To add a password, select "Set New Password" then enter the new password and click the "Proceed" button.
- To change your password: Select "Change Password". Enter your existing password. Enter the new password and verify it. Click the "Proceed" button.
- To remove the password, select "Remove Password" then enter your existing password and click the "Proceed" button.

You can change the password as many times as you want.

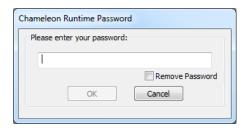
# 8 Adding, Deleting, and Resizing Encrypted Drives

You can add, delete, or resize encrypted drives at any time. As long as there is sufficient disk space, there is no limit to the number of encrypted drives you can have associated with a single device. Encrypted drives can be created on your internal hard disk as well as external USB drives.

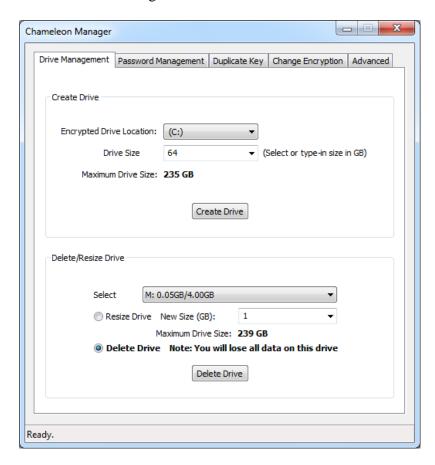


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- 1. Plug in your device.
- 2. Enter your password (if already enabled)



- 3. Start the "Chameleon Manager"
- Click on the Windows "Start" >
  All Programs >
  Chameleon >
  Chameleon Manager
- 4. Select the "Drive Management" tab.



• To add a drive, specify the size and location of the encrypted drive, then click the "Create Drive" button.



- To delete a drive, select the existing drive from the drop down menu, then select "Delete Drive". Click on the "Delete Drive" button. You will be prompted to type in a confirmation.
- To resize a drive, select your drive from the drop down menu, then select "Resize Drive". Enter the desired size, then click the "Resize Drive" button. When reducing drive size, your hard disk (C:\) must have enough free space to temporarily hold all the contents of the encrypted drive.

#### 9 Additional Functions and Limitations

#### 9.1 Using a Chameleon Device with Multiple Computers

A single Chameleon device can be used on multiple computers.

If the Chameleon software has not been installed, follow section 2 "Installation and Setup" to install it on another computer. After Step #4, the installer will jump straight to Step #7 to create an encrypted drive if the device has already been initialized.

If the Chameleon software has already been installed, refer to section 2 "Installation and Setup" Step #7 to create an encrypted drive.

## 9.2 Using Multiple Devices with the Same Computer

You can have multiple encrypted drives associated with different Chameleon devices on the same computer and hard disk.

Additional software installation is unnecessary. Plug in the second device and use the Chamleon Manager to make encrypted drives associated with this device. Unless they are duplicates, the second device can only access its own drives – and not the drives associated with the first device.

Should you no longer want to use a particular device on a particular PC, delete its encrypted drives using the Chameleon Manager instead of uninstalling the Chameleon software. Uninstalling the Chameleon software does not delete the encrypted drives.

The Chameleon software does not support more than one Chameleon device being inserted at a time.

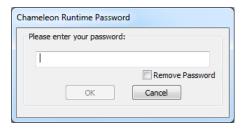


## 9.3 Windows Paging File

Windows may store temporary data in its paging file (virtual memory). This file is usually unencrypted and is updated continuously. Enable pagefile encryption to direct Windows to encrypt its paging file.

To enable page file encryption:

- 1. Plug in the device.
- 2. Enter your password (if already enabled)

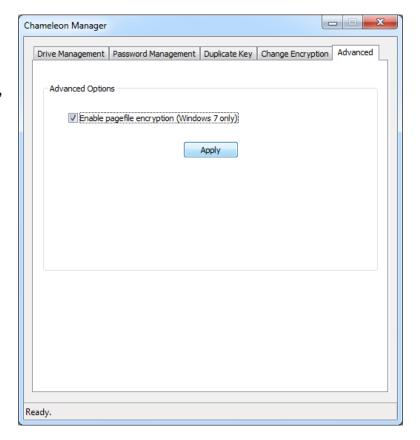


3. Start the "Chameleon Manager"

Click on the Windows "Start" >
All Programs >
Chameleon >
Chameleon Manager



- 4. Select the "Advanced" tab.
- 5. Select "Enable pagefile encryption" then click on "Apply"



Encrypting the paging file eliminates a potential security hole, but slows the computer down slightly. Only Windows 7 supports page file encryption (ignored for other operating systems).

#### 9.4 Safe Removal

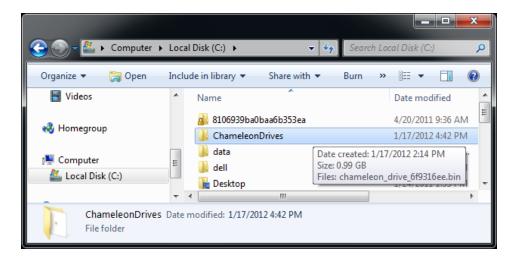
Unplugging the Chameleon device while writing data to the encrypted drive may result in data corruption. This is similar to removing an external hard disk in the middle of a write to it. To be absolutely sure that no writes are occurring, use the Windows Safe Remove function before unplugging the device.





#### 9.5 Backing up your Data

Backup encrypted drives by copying the ChameleonDrives directory to another location. This directory is located at the top level of your hard disk (ex. C:\ChameleonDrives\). Since encrypted drives are always encrypted, backups are protected as well. You must unplug the Chameleon device to back up your data.



You can add the ChameleonDrives directory to your list of scheduled backups.

WARNING: Do not copy the backup ChameleonDrives directory to the top level (root) of a drive (e.g. D:\ChameleonDrives). The Chameleon software cannot distinguish between the original and the copy. If identical drives are detected in the top level, the Chameleon software will not activate either drive. Any subdirectory or network location will work (e.g. D:\backup\ChameleonDrives).

# 10 Limited Warranty and Legal Notices

Chameleon

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Check <a href="http://www.marathon6.com/chameleon">http://www.marathon6.com/chameleon</a> for the latest updates.



LucidPort Technology, Inc. warrants to you that the Chameleon will be free from defects in materials and workmanship under normal use for the 90 day warranty period starting on your date of purchase. Your dated sales or delivery receipt is your proof of purchase date. You may be required to provide proof of purchase as a condition of receiving warranty service.

If LucidPort Technology, Inc. receives, during the warranty period, notice of a defect in the Chameleon, LucidPort Technology, Inc. will repair or replace the product, at LucidPort Technology, Inc.'s option. LucidPort Technology, Inc. shall have no obligation to repair, replace, or refund until you return the defective product to LucidPort Technology, Inc.. If your Chameleon has recurring failures, at LucidPort Technology, Inc.'s option, LucidPort Technology, Inc. may provide you a replacement of LucidPort Technology, Inc.'s choosing that is the same or equivalent in performance or a refund of your purchase price instead of a replacement.

To the extent permitted by local law, LucidPort Technology, Inc., and any replacement products or parts, may contain new and used materials equivalent to new in performance and reliability. Any replacement product or part will also have functionality at least equal to that of the product or part being replaced. Replacement products and parts are warranted to be free from defect in material or workmanship for 90 days.

LucidPort Technology, Inc., at its sole discretion, may subcontract to or engage a third party to provide the warranty services.

DATA LOSS IS A FREQUENT CONSEQUENCE OF REPAIR. DATA STORED WITH THE CHAMELEON IS NEVER COVERED BY WARRANTY.

This Limited Warranty does not apply to expendable or consumable parts or to any product in which the chassis has been opened or if damaged or defective (a) due to accident, misuse, abuse, contamination, virus infection, improper or inadequate maintenance or calibration or other external causes; (b) by software, interfacing, parts or supplies not supplied by LucidPort Technology, Inc.; (c) improper site preparation or maintenance; (d) loss or damage in transit; or (f) modification or service by other than LucidPort Technology, Inc. or an LucidPort Technology, Inc. authorized service provider.

TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT SHALL LUCIDPORT TECHNOLOGY, INC. BE LIABLE FOR ANY DAMAGES CAUSED BY THE PRODUCT OR THE FAILURE OF THE PRODUCT TO PERFORM, INCLUDING ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OF ANY KIND, WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER LEGAL THEORY AND WHETHER ADVISED OF THE POSSIBILITIES OF SUCH DAMAGES. LUCIDPORT TECHNOLOGY, INC. IS NOT LIABLE FOR ANY CLAIM MADE BY A THIRD PARTY OR MADE BY YOU FOR A THIRD PARTY.



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The AES encryption technology in the Chameleon is classified by the United States government as an ECCN 5A002 item and can be exported under License Exception ENC, Sec. 740.17 (b)(3) of the Export Administration Regulations ("EAR"). The Chameleon may not be used or otherwise exported or re-exported into (or to a national or resident of) Cuba, Iran, North Korea, Sudan, or Syria. No further approvals or authorizations from the US government are required.

