

DataTraveler® 4000 User Manual







Table of Contents

About This Manual	3
System Requirements	3
Recommendations	3
Setup (Windows Environment)	4
Device Initialization (Windows Environment)	5
Device Usage (Windows Environment)	9
Device Options (Windows Environment)	10
Setup (Mac Environment)	12
Device Initialization (Mac Environment)	13
Device Usage (Mac Environment)	17
Device Options (Mac Environment)	18
Device Initialization (Linux Environment)	21
Device Usage (Linux Environment)	23
Help and Troubleshooting	24
Device Lockout	24
Forgot Password	25
Drive Letter Conflict (Windows Operating Sys	stems)26
Error Messages	27



About This Manual

This user manual covers the DataTraveler[®] 4000 (referred to simply as DT4000 from this point forward) based on the factory image with no implemented customizations.

System Requirements

PC Platform

- Pentium III Processor or equivalent (or faster)
- 15MB free disk space
- USB 2.0
- Two consecutive drive letters after the last physical drive*

PC Operating System Support

- Windows® 7
- Windows® Vista SP1, SP2
- Windows® XP SP2, SP3

Mac Platform

- 15MB free disk space
- USB 2.0

Operating System Support

Mac OS X 10.5.x -10.7x

Recommendations

To ensure there is ample power provided to the DT4000 device, insert it directly into a USB port on your notebook or desktop, as seen in *Figure 1.1*. Avoid connecting the DT4000 to any peripheral device(s) that may feature a USB port, such as a keyboard or USB-powered hub, as seen in *Figure 1.2*.





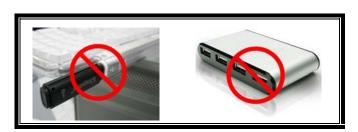


Figure 1.2 – Not Recommended

*Note: See 'Drive Letter Conflict' on page 26.



Setup (Windows Environment)

- Insert the DT4000 into an available USB port on your notebook or desktop and wait for Windows to detect it.
 - Windows XP users will receive a 'Found New Hardware' notification as seen in Figure 2.1.
 - Windows Vista/7 users will receive a device driver notification as seen in Figure 2.2.

Once the new hardware detection is complete, Windows will prompt you to begin the initialization process.

- Windows XP users can skip step 2 and go to page 5 – Device Initialization.
- Windows Vista/7 users will see an AutoPlay window similar to the one in Figure 2.3.
- 2. Select the option 'Run DT4000_Launcher.exe'.

If Windows does not AutoPlay, you can browse to the CD-ROM partition (*Figure 2.4*) and manually execute the DT4000_Launcher program. This will also start the initialization process.

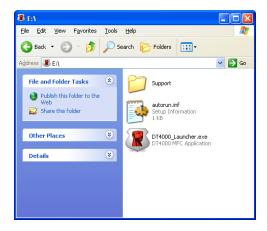


Figure 2.4 – DT4000 Contents



Figure 2.1 – Found New Hardware (Windows XP)



Figure 2.2 – Device Driver Installation (Windows Vista/7)



Figure 2.3 – AutoPlay Window (Windows Vista/7)

(Note: Menu options in the AutoPlay window may vary depending on what programs are currently installed on your computer. AutoRun will start the initialization process automatically.)



Device Initialization (Windows Environment)

1. Select your language preference from the drop-down menu and click 'Next' (Figure 3.1.)



Figure 3.1 – Language Selection

2. Review the license agreement and click 'Next' (Figure 3.2.) (Note: You must accept the license agreement before continuing; otherwise the 'Next' button will remain disabled.)



Figure 3.2 – License Agreement



- 3. Create a password to protect your data on the DT4000. Enter it in the 'Password' field, then re-enter it in the 'Password Confirmation' field, as seen below in Figure 3.3. The password you create must meet the following criteria before the initialization process will allow you to continue:
 - 1. Passwords must contain 8 characters or more (up to 16 characters.)
 - 2. Passwords must contain three (3) of the following criteria options:
 - UPPER CASE, lower case, numeric, and/or special characters (!, \$, etc.)

You may also enter a password hint, but it is not a mandatory field. The hint field can be useful in providing a clue as to what the password is, should the password ever be forgotten. (Note: The hint CANNOT be an exact match to the password.)

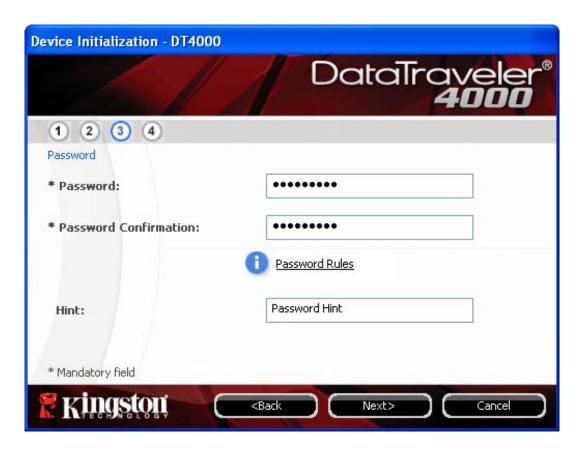


Figure 3.3 - Password Setup



- 4. Enter your contact information into the text boxes provided (see *Figure 3.4*) (*Note: The information you enter in these fields may NOT contain the password string you created in Step 3. However, these fields are optional and can be left blank, if so desired.*)
 - The 'Name' field may contain up to 32 characters, but cannot contain the exact password.
 - The 'Company' field may contain up to 32 characters, but cannot contain the **exact** password.
 - The 'Details' field may contain up to 156 characters, but cannot contain the **exact** password.

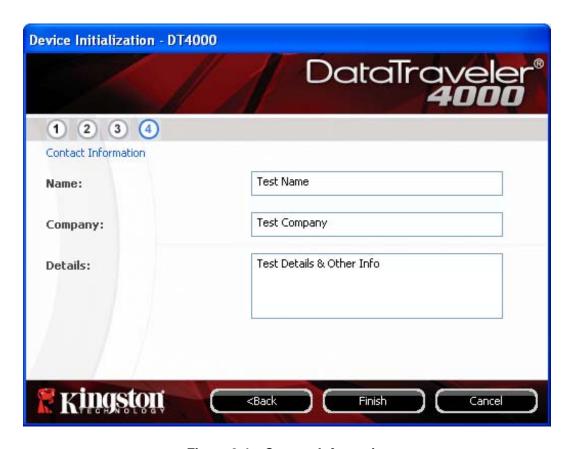


Figure 3.4 - Contact Information

5. Click 'Finish' to complete the device initialization process.

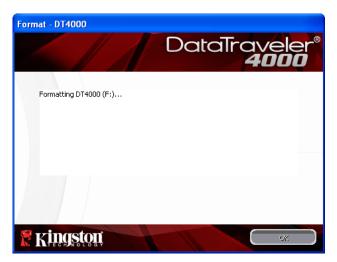


The DT4000 will now format the secure data partition (*Figure 3.5*) and notify you when it is complete (*Figure 3.6*.)



Note: If operating under Windows XP in Non-Admin mode, the 'Format' routine can take up to a minute.*

6. Click 'OK' to continue.





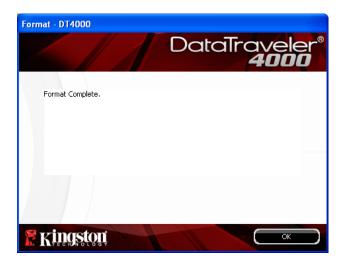


Figure 3.6 - Format Complete

Initialization complete.

*Note: Times may vary based on system hardware and the capacity of the DT4000 drive.



Device Usage (Windows Environment)

Once the DT4000 has been initialized, you can access the secure data partition and utilize the device options by logging into the device with your password. To do so, follow these steps:

- Insert the DT4000 into a USB port on your notebook or desktop and enter your password (see *Figure 4.1*.)
 - Once you've typed your password, click the 'Login' button to continue.
 - If the correct password is entered, the DT4000 will unlock and you can begin using the device.

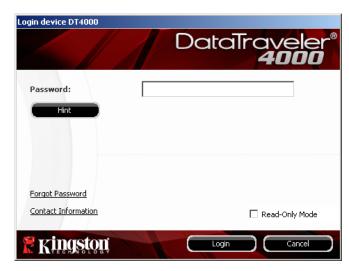


Figure 4.1 – Login Window

• If an incorrect password is entered, an error message will appear just below the 'Hint' field, indicating a login failure.

(NOTE: During the login process, if a bad password is entered, you will be given another opportunity to enter the correct password; however, there is a built-in security feature that tracks the number of failed login attempts*. If this number reaches the pre-configured value of 10 failed attempts, the DT4000 will lock and require a device format of the secure data partition prior to next use. THIS MEANS THAT ALL DATA STORED ON THE DT4000 WILL BE ERASED. For more details on this feature, see 'Device Lockout' on page 24.)

2. You may unlock the secure data partition in read-only mode, sometimes referred to as "write-protect mode", by selecting the checkbox labeled 'Read-Only Mode' prior to logging into the device. Once authenticated under read-only, you will be allowed to open or view content on the DT4000, but not update, change, or erase content while in this mode. (Note: Read-only mode will also prevent the format option from appearing in the DT4000 menu that later appears on page 10.)

If you are currently logged in under read-only mode and wish to unlock the device with full read/write access to the secure data partition, you must shutdown DT4000 (see page 11) and log back in, leaving the 'Read-Only Mode' checkbox unchecked during authentication.

^{*} Once you authenticate to the device successfully, the failed login counter will be reset.



Device Options (Windows Environment)

While you are logged into the device, there will be a 'DT4000' icon located in the right-hand corner of the Windows taskbar (Figure 5.1.) (Note: Windows 7 users will need to click on the up-arrow button in the taskbar in order to access the 'DT4000' icon (Figure 5.2.)

Clicking once on the DT4000 icon will display the following menu:

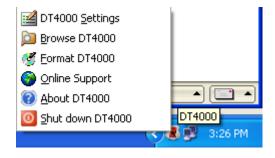


Figure 5.1 – DT4000 icon in taskbar

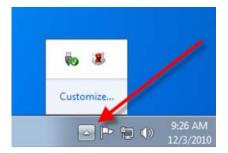


Figure 5.2 – DT4000 icon in taskbar (Windows 7 users)

DT4000 Settings

- Allows you to change your password and/or hint (Figure 5.3)
- Allows you to add/view/change your contact information (Figure 5.4)
- Allows you to change your current language selection (Figure 5.5)

(Note: For security purposes, your current DT4000 password is required to update and/or modify any of these settings.)



Figure 5.3 Change Password



Figure 5.4
Contact Information



Figure 5.5 Select Language



Browse DT4000

• Allows you to browse the contents of the secure data partition while you are logged in

Format DT4000*

 Allows you to format the secure data partition (Warning: All data will be erased.) (Figure 5.6)

Online Support (Requires Internet access)

 Opens your Internet browser and navigates to <u>http://www.kingston.com/support/</u> where you can access additional support information

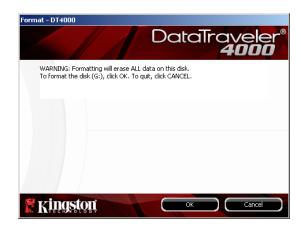


Figure 5.6 – Format Warning

About DT4000

 Provides specific details about the DT4000, including Application and Firmware version information (*Figure 5.7*)

Shutdown DT4000

 Properly shuts down the DT4000, allowing you to safely remove it from your system



Figure 5.7 – About DT4000

*Note: Your current DT4000 password is required in Windows Vista and Windows 7

-Windows Section Complete-



Setup (Mac Environment)

Insert the DT4000 into an available USB port on your notebook or desktop and wait for the Mac operating system to detect it. When it does, you will see a DT4000 volume appear on the desktop, as seen in *Figure 6.1*.

- 1. Double-click the DT4000 CD-ROM icon.
- 2. Double-click the Mac folder found in the window displayed in *Figure 6.2*.
- 3. Double-click the DT4000 application icon found in the window displayed in *Figure 6.3*. This will start the initialization process.



Figure 6.1 - DT4000





Figure 6.2 - DT4000 Contents

Figure 6.3 – DT4000 Application





Device Initialization (Mac Environment)

1. Select your language preference from the drop-down menu and click 'Next' (Figure 7.1.)



Figure 7.1 - Language Selection

2. Review the license agreement and click 'Next' (Figure 7.2.) (Note: You must accept the license agreement before continuing; otherwise the 'Next' button will remain disabled.)



Figure 7.2 – License Agreement



- 3. Create a password to protect your data on the DT4000. Enter it in the 'Password' field, then re-enter it in the 'Password Confirmation' field, as seen below in Figure 7.3. The password you create must meet the following criteria before the initialization process will allow you to continue:
 - 1. Passwords must contain 8 characters or more (up to 16 characters.)
 - 2. Passwords must contain three (3) of the following criteria options:
 - UPPER CASE, lower case, numeric, and/or special characters (!, \$, etc.)

You may also enter a password hint, but it is not a mandatory field. The hint field can be useful in providing a clue as to what the password is, should the password ever be forgotten. (Note: The hint CANNOT be an exact match to the password.)

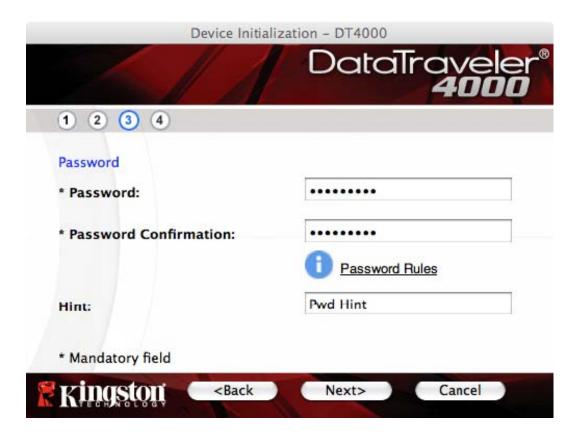


Figure 7.3 - Password Setup



- 4. Enter your contact information into the text boxes provided (see *Figure 7.4*) (*Note: The information you enter in these fields may NOT contain the password string you created in Step 3. However, these fields are optional and can be left blank, if so desired.*)
 - The 'Name' field may contain up to 32 characters, but cannot contain the exact password.
 - The 'Company' field may contain up to 32 characters, but cannot contain the **exact** password.
 - The 'Details' field may contain up to 156 characters, but cannot contain the **exact** password.

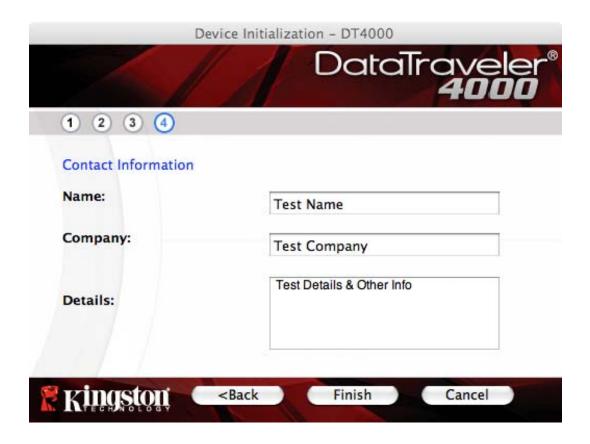


Figure 7.4 – Contact Information

5. Click 'Finish' to complete the device initialization process.



The DT4000 will now format the secure data partition (*Figure 7.5*) and notify you when it is complete (*Figure 7.6*.)

6. Click 'OK' to continue.

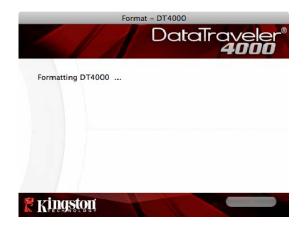




Figure 7.5 – Formatting DT4000

Figure 7.6 – Format Complete

Initialization complete.



Device Usage (Mac Environment)

Once the DT4000 has been initialized, you can access the secure data partition and utilize the device options by logging into the device with your password. To do so, follow these steps:

- Insert the DT4000 into a USB port on your notebook or desktop and enter your password (see *Figure 8.1*.)
- 2. Once you've typed your password, click the 'Login' button to continue.
 - If the correct password is entered, the DT4000 will unlock and you can begin using the device.
 - If an incorrect password is entered, an error message will appear just below the 'Hint' field, indicating a login failure (see Figure 8.2.)

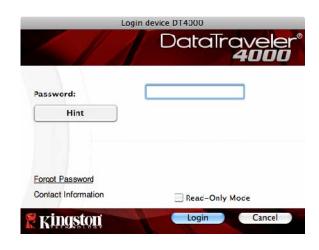


Figure 8.1 - Login Window

(NOTE: During the login process, if a bad password is entered, you will be given another opportunity to enter the correct password; however, there is a built-in security feature that tracks the number of failed login attempts*. If this number reaches the pre-configured value of 10 failed attempts, the DT4000 will lock and require a device format of the secure data partition prior to next use. **THIS MEANS THAT ALL DATA STORED ON THE DT4000 WILL BE ERASED**. For more details on this feature, see 'Device Lockout' on page 24.)

3. You may unlock the secure data partition in read-only mode, sometimes referred to as "write-protect mode", by selecting the checkbox labeled 'Read-Only Mode' prior to logging into the device. Once authenticated under read-only, you will be allowed to open or view content on the DT4000, but not update, change, or erase content while in this mode. (Note: Read-only mode will also prevent the format option from appearing in the DT4000 menu that appears on page 10.)

If you are currently logged in under read-only mode and wish to unlock the device with full read/write access to the secure data partition, you must shutdown DT4000 and log back in, leaving the 'Read-Only Mode' checkbox unchecked prior to login.

^{*} Once you authenticate to the device successfully, the failed login counter will reset.



Device Options (Mac Environment)

While you are logged into the device, there will be a 'DT4000_Launcher' icon located in the Mac OS X Dock as seen in *Figure 9.1* below:



Figure 9.1 – DT4000 Icon In Mac OS X Dock

Holding down the 'control' key on your keyboard and clicking once on the 'DT4000_Launcher' icon will display the menu shown in **Figure 9.2** to the right.

DT4000 Settings

- Allows you to change your password and/or hint (Figure 9.3)
- Allows you to add/view/change your contact information (Figure 9.4)
- Allows you to change your language preference (Figure 9.5)

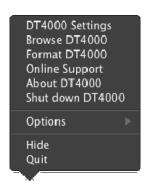


Figure 9.2 DT4000 Options



Figure 9.3 Change Password



Figure 9.4 Contact Information



Figure 9.5 Select Language

(Note: For security purposes, your current DT4000 password is required to update and/or modify any of these settings.)



Browse DT4000

• Allows you to browse the contents of the secure data partition while you are logged in

Format DT4000

 Allows you to format the secure data partition (Warning: All data will be erased.) (Figure 9.6)

Online Support (Requires Internet access)

 Opens your Internet browser and navigates to <u>http://www.kingston.com/support/</u> where you can access additional support information

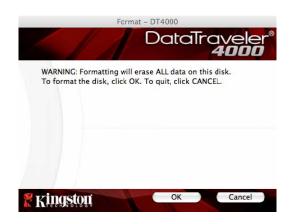


Figure 9.6 - Format Warning

About DT4000

 Provides specific details about the DT4000, including Application and Firmware version information (Figure 9.7)

Shutdown DT4000

 Properly shuts down the DT4000, allowing you to safely remove it from your system



Figure 9.7 – About DT4000

-Mac Section Complete-



Setup (Linux Environment)

(NOTE: With the various distributions of Linux available today, the 'look and feel' of their interfaces may vary from one version to the next. However, the general command set used in the terminal application is very similar and can be referenced in the Linux instructions that follow. The screenshot examples in this section were created in a Linux CentOS v6.x environment.)



Certain distributions of Linux will require super-user (root) privileges in order to execute the DT4000 commands properly in the terminal application window.

Insert the DT4000 into an available USB port on your notebook or desktop and wait for the Linux operating system to detect it. When it does, a DT4000 volume icon will appear* on the desktop, as seen in *Figure 10.1*.



The DT4000 comes with 5 commands that can be used in Linux:

Figure 10.1 - DT4000 Volume

dt4000_about, dt4000_forgotpassword, dt4000_initialize, dt4000_login, and dt4000_logout

(Note: To execute these commands, you must open a "Terminal" application window and navigate to the folder where each of the files exist. Each command must be preceded by the following two characters: './' (a period and a forward slash.)

For 32-bit users, open a "Terminal" application window and change the current directory to /media/DT4000/linux/linux32\$ by typing the following command at the prompt:

cd /media/DT4000/linux/linux32 (and then press ENTER.)

For 64-bit users, open a "Terminal" application window and change the current directory to /media/DT4000/linux/linux64\$ by typing the following command at the prompt:

cd /media/DT4000/linux/linux64 (and then press ENTER.)

*Note: If the DT4000 volume is not loaded automatically by the operating system, you will need to load the volume manually in a terminal window using the Linux 'mount' command. Please refer to the Linux documentation for your specific OS distribution or favorite on-line support site for proper syntax and command options.



Device Initialization (Linux Environment)

Once the DT4000 is connected to your computer and recognized by the operating system, the device will need to be initialized prior to first use. To do so, open the 'Terminal' application (or command-line window) and follow these steps:

(Note: The screenshots and instructions in this section utilize the **linux32** folder (signifying 32-bit) for purposes of demonstrating use of the DT4000 device in the Linux OS. Keep in mind if you are using the 64-bit version of Linux, simply navigate to and use the respective 64-bit folder in place of the 32-bit folder, i.e. **linux64** rather than **linux32**.)

1. Change directory to the DT4000 volume by typing the following command at the terminal prompt (as seen in *Figure 10.2*.):

cd /media/DT4000/linux/linux32

(Note: Commands and folder (directory) names are casesensitive, i.e. 'linux32' is NOT the same as 'Linux32.' Syntax must also be typed exactly as shown.)



Figure 10.2 – Command-Line Navigation

2. Type **Is** (as in **I**ist) at the current prompt and press *ENTER*. This will provide you with a list of files and/or folders in the */media/DT4000/linux/linux32* (or *linux64*) folder. You will see the five DT4000 commands listed, **dt4000_about**, **dt4000_forgotpassword**, **dt4000_initialize**, **dt4000_login**, and **dt4000_logout** as seen in *Figure 10.3*.



Figure 10.3 – List of DT4000 Commands

- The Linux section in this manual is based off of the 64-bit version of CentOS 6.x -



3. To initialize the DT4000, type the following command at the terminal prompt and press *ENTER: .*/dt4000_initialize* (Remember, commands are case-sensitive.) See *Figure 10.4*.

```
File Edit View Terminal Tabs Help

[root@localhost linux64]# ls
dt4000_about dt4000_initialize dt4000_logout
dt4000_forgotpassword dt4000_login
[root@localhost linux64]# ./dt4000_initialize
```

Figure 10.4 – Executing a DT4000 Command

- 4. After pressing *ENTER*, the license agreement will display in the terminal window. Press '**Y**' to accept the license agreement and continue. (*Note: If you press 'N' and do not accept the license agreement, you will be returned to the terminal prompt and unable to continue the initialization process until you repeat step 3 and press 'Y'.)*
- 5. After you accept the license agreement, you will be prompted to input (create) a password, which will be used to protect the files stored on the secure data partition. The password you create must meet the following criteria before the initialization process will allow you to continue:
 - a. Passwords must contain 8 characters or more (up to 16 characters.)
 - b. Passwords must contain three (3) of the following criteria options:
 - UPPER CASE, lower case, numeric, and/or special characters (!, \$, etc.)
- 6. Confirm your password by re-entering it on the command line when prompted to input it again and press *ENTER*. If the passwords match, you will be notified that the DT4000 has been initialized successfully. If the passwords do not match, you will receive a message indicating that you still need to confirm the password correctly. To do so, repeat steps 5 and 6 until they do.

After creating your password, a secure data volume (partition) will appear on the desktop. This indicates that the initialization process was successful and is now complete. You may begin using the DT4000.

*Note: Certain distributions of Linux will require super-user (root) privileges in order to execute the DT4000 commands properly in the terminal application window.



Device Usage (Linux Environment)

Once the DT4000 has been initialized, you can access the secure data partition by logging into the device using the DT4000 password you created on page 22. To do so, follow these steps:

- 1. Open a 'Terminal' application window.
- 2. Type the following command at the terminal prompt: cd /media/DT4000/linux/linux32
- 3. With the command prompt now at /media/DT4000/linux/linux32\$, type the following command to login to the device: ./dt4000_login* and press ENTER. (Note: Commands and folder names are case-sensitive and syntax must be exact.)
- 4. Enter for your DT4000 password and press *ENTER*. After a successful login, the secure data volume will open on your desktop and you can proceed to use the DT4000.

During the login process, if a bad password is entered, you will be given another opportunity to enter the correct password by repeating step 3; however, there is a built-in security feature that tracks the number of failed login attempts. If this number reaches the pre-configured value of 10 failed attempts, the DT4000 will lock and require you to initialize the device by executing the **dt4000_forgotpassword** command, prior to next use. This process will allow you to create a new password, but in order to protect the privacy of your data, the DT4000 will format the secure data partition. **This means that all of your data will be lost**.

Once the **dt4000_forgotpassword** process is complete and you have successfully set up a new password, the built-in security counter that tracks failed login attempts will be reset (*Note:* A successful login prior to reaching the maximum number of attempts (MaxNoA, for short) will also reset the failed-login counter.)

When you are finished using the DT4000, log out of the device and secure your data. To do so, follow these steps:

- 1. Open a 'Terminal' application window.
- 2. Type the following command at the terminal prompt: cd /media/DT4000/linux/linux32
- 3. With the command prompt now at /media/DT4000/linux/linux32\$, type the following command to logout of the device properly: ./dt4000_logout* and press ENTER. (Note: Commands and folder names are case-sensitive and syntax must be exact.)
- 4. Remove the DT4000 from your system and store in a safe place.

*Note: Certain distributions of Linux will require super-user (root) privileges in order to execute the DT4000 commands properly in the terminal application window.

-Linux Section Complete-



Help and Troubleshooting

Device Lockout

The DT4000 includes a security feature that prevents unauthorized access to the data partition once a maximum number of **consecutive** failed login attempts (*MaxNoA* for short) has been made; the default "out-of-box" configuration has a pre-configured value of 10 (no. of attempts.)

The 'lock-out' counter tracks each failed login and gets reset one of two ways: **1)** A successful login prior to reaching MaxNoA or **2)** reaching MaxNoA and performing a device format.*

If an incorrect password is entered, an error message will appear just below the 'Hint' field, indicating a login failure. See Figure 10.1.

If and when a 7th failed attempt is made, you will see an additional error message indicating you have 3 attempts left before reaching MaxNoA (which is set to 10 by default.) See *Figure 10.2*.

After a 10th failed login attempt, the DT4000 will permanently block the data partition and require a device format prior to next use. This means that **all data stored on the DT4000 will be lost** and you will need to create a new password.

This security measure limits someone (who does not have your password) from attempting countless login attempts and gaining access to your sensitive data.

If you are the owner of the DT4000 and have forgotten your password, the same security measures will be enforced, including a device format.*

For more on this feature, see 'Forgot Password' on page 25.



Figure 10.1 – Login Failure



Figure 10.2 – 7th Login Failure

*Note: A device format will erase ALL of the information stored on the DT4000's secure data partition.



Forgot Password

If you forget your password, you can click on the 'Forgot Password' link that appears in the login window when DT4000_Launcher is executed (see Figure 10.3.)

This option will allow you to create a new password, but in order to protect the privacy of your data, the DT4000 will be formatted. This means that all of your data will be erased in the process.*

When you do click on 'Forgot Password', a message box (Figure 10.4) will appear and ask if you want to enter a new password prior to executing the format. At this point, you can either 1) click 'OK' to confirm or 2) click 'Cancel' to return to the login window.

If you opt to continue, you will be prompted to create a new complex password and a new hint. The hint is not a mandatory field, but it can be useful in providing a clue as to what the password is, should the password ever be forgotten.

(Note: The hint CANNOT be an exact match to the DT4000 password.)

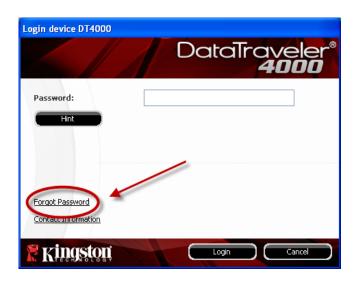


Figure 10.3 - Forgot Password

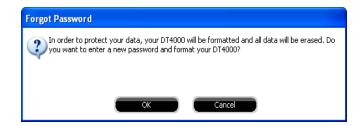


Figure 10.4 – Prompt Before Format

*Note: A device format will erase ALL of the information stored on the DT4000's secure data partition.



Drive Letter Conflict (Windows Operating Systems)

As mentioned in the 'System Requirements' section of this manual (on page 3), the DT4000 requires two consecutive drive letters AFTER the last physical disk that appears before the 'gap' in drive letter assignments (see *Figure 10.5*.) This does NOT pertain to network shares because they are specific to user-profiles and not the system hardware profile itself, thus appearing available to the OS.

What this means is, Windows may assign the DT4000 a drive letter that's already in use by a network share or Universal Naming Convention (UNC) path, causing a drive letter conflict. If this happens, please consult your administrator or helpdesk department on changing drive letter assignments in Windows Disk Management (administrator privileges required.)

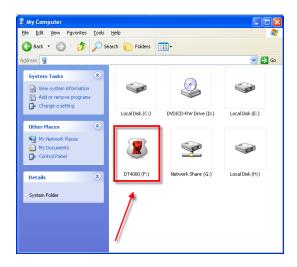


Figure 10.5 – My Computer

In this example, the DT4000 uses drive F:, which is the first available drive letter after drive E: (the last physical disk before the drive letter gap.) Because letter G: is a network share and not part of the hardware profile, the DT4000 may attempt to use it as its second drive letter, causing a conflict.

If there are no network shares on your system and the DT4000 still won't load, it is possible that a card reader, removable disk, or other previously-installed device is holding on to a drive-letter assignment and still causing a conflict.

Please note that Drive Letter Management, or DLM, has improved significantly in Windows XP SP3, Vista, and 7, so you may not come across this issue, but if you are unable to resolve the conflict, please contact Kingston's Technical Support Department for further assistance.



Error Messages

Unable to create file – This error message will appear when attempting to **CREATE** a file or folder **ON** the secure data partition while logged in under read-only mode.



Figure 10.6 – Unable to Create File Error

Error Copying File or Folder – This error message will appear when attempting to **COPY** a file or folder **TO** the secure data partition while logged in under read-only mode.



Figure 10.7 – Error Copying File or Folder Error

Error Deleting File or Folder – This error message will appear when attempting to **DELETE** a file or folder **FROM** the secure data partition while logged in under read-only mode.



Figure 10.8 – Error Deleting File or Folder Error

If you are ever logged in under read-only mode and wish to unlock the device with full read/write access to the secure data partition, you must shutdown DT4000 and log back in, leaving the 'Read-Only Mode' checkbox unchecked prior to login.