KANGURU™
Secure. Anytime. Anywhere.

Kanguru Defender 2000
User Manual

Model no: KDF2K

NOTICES AND INFORMATION

Please be aware of the following points before using your Kanguru Defender 2000

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Customer Service

To obtain service or technical support for your system, please contact Kanguru Solutions Technical Support Department at 508-376-4245, or visit www.Kanguru.com for web support.

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Defragmenting Flash Memory Warning

Do not attempt to defragment your Kanguru Defender Flash Drive. Flash memory does not need to be defragmented and does not gain any performance by doing so. Defragmenting your flash drive can actually degrade the flash memory which may reduce the drive's total capacity and lifespan.

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1. Introduction

The Kanguru Defender 2000 is a hardware encrypted, tamper proof USB flash drive. The Defender 2000 contains two partitions: a CD-ROM partition and a secure, encrypted partition. The CD-ROM partition contains the login application that will allow you to access the secured partition.

The Kanguru Defender 2000 flash drive secures your sensitive data using:
- 256-bit AES hardware encryption
- Secure password protection

1.1 Package Contents

Please check the contents of the package you received. If any of the parts listed below are missing, please contact Kanguru Solutions (508-376-4245) and you will be shipped replacement parts immediately.

- Kanguru Defender 2000 USB Flash Drive
- Quick Start Guide
- Registration Form
- USB Extension Cable (select models only)

1.2 System Requirements

- 1 Available USB port (USB 2.0 Recommended)
- 256MB of internal DDR RAM or more
- 500MHz internal CPU or faster
- Operating Systems (32 and 64 bit compatible)
    - Windows XP SP3*, Windows Server 2003, Win Vista, Win 7, Win 8
    - Max OS X 10.5 and above (Intel based Macs only)
    - Red Hat Enterprise Linux 5, Ubuntu 9/10, OpenSUSE 11.1 gnome
    - Linux Kernel 2.6.02 - 2.634

      Note: Linux Red Hat users must have Super User or Root privileges in order to run KDM2000

** In line with Microsoft's End-of-Support announcement for Windows XP, Kanguru Solutions is ending support for its line of products running on the Windows XP platform. While our products have been quality tested internally on Windows XP, we cannot guarantee normal product operation on an unsupported OS.*

1.3 Features

- √ 256-bit AES hardware encryption
- √ FIPS 140-2 Certified
- √ Password protected data partition for your secure files
- √ Does NOT require Admin privileges (except with Red Hat Enterprise Linux 5)
- √ Driverless installation (Plug & Play)
- √ High-strength alloy housing
- √ Tamper-proof design
- √ On-board antivirus protection
- √ HIPAA Compliant
- √ Sarbanes Oxley Compliant
- √ GLB Compliant

Remote Management Capability

The Kanguru Defender 2000 flash drive can be remotely managed using the Kanguru Remote Management Console (KRMC). KRMC is a web-based application that gives administrators a complete USB management system.

With KRMC you will be able to:

- √ Create and manage a master password for your Defender drives
- √ Remotely delete all data on a target drive
- √ Schedule actions for present or future times
- √ Audit at administrator and super administrator level
- √ Locate devices via IP address (IP Address / network location)
- √ Locate devices via hostname
- √ Create remote policy modifications like:
    - ○ Password Strength and Length (e.g. 10 characters: 2 upper, 2 numbers, etc)
    - ○ Limit Invalid Login Attempts (e.g. 3 retries before drive is wiped)
    - ○ Rate at which password should be changed (e.g. every 30, 60, or 90 days)
    - ○ Change user password
    - ○ Change master password
- √ Create user groups

You Kanguru Defender 2000 does not come with KRMC enabled by default.
For more information about KRMC, visit: https://www.kanguru.com/index.php/flash-management

1.4 Kanguru Defender 2000 Models

The Kanguru Defender 2000 comes in two models, depending on your drive's capacity. Differences between the models are detailed in section 1.5 *Technical Specifications* on page 7.

1.5 Technical Specifications

General Specifications

Interface	USB 2.0 (USB 1.1 compatible)
Encryption Features	Hardware based 256-bit AES encryption
OS Compatibility	Windows Server 2003, Vista, 7, 8 Max OS X 10.5 and above (Intel based only) Red Hat Enterprise Linux 5, Ubuntu 9/10, OpenSUSE 11.1 Linux Kernel 2.6.02 - 2.6.34 32 and 64 bit compatible
Write Cycles	10,000 write cycles / block
Data Retention	10 years or more
Operating Temp	0°C – 70°C
Humidity Range	20% - 90%
Shock Resistance	1000G Max
Vibration	15G Peak to Peak Max

4GB - 16GB Defender 2000 Specifications

Data Transfer Rate	Read: 30 MB/s Write: 20 MB/s
Weight	35g
Dimensions	72.6mm x 19.5mm x 9mm
Power (Read)	Max Read: 5 VDC @ 122mA
Power (Write)	Max Write: 5 VDC @ 182mA

32GB - 64GB Defender 2000 Specifications

Data Transfer Rate	Read: 30 MB/s Write: 20 MB/s
Weight	51g
Dimensions	77.3mm x 26.6mm x 9mm
Power (Read)	Max Read: 5 VDC @ 150mA
Power (Write)	Max Write: 5 VDC @ 266mA

2. Kanguru Defender Manager 2000

Kanguru Defender Manager 2000 (KDM2000) is the client program preloaded on the Defender 2000's CD-ROM partition. The user needs to login to KDM2000 in order to access the secure, encrypted partition. KDM2000 comes pre-installed on your Defender 2000. No installation on your PC is necessary.

2.1 Identifying the Device Edition

Users can open the **version.ini** file located in the CD-ROM partition to verify whether the device is running a Cloud edition, Enterprise edition or No-Comms edition client.

Open the **version.ini** file in a text editor and check the line for "Product Version" and check whether the product version number ends in - 2, - 3 or - 6 suffix.

Version suffix	Edition	Description
-2	Cloud edition	The standard Defender model.
-3	Enterprise edition	Enterprise edition devices have been configured to be able to communicate with KRMC Enterprise.
-6	No-Comms edition	The No-Comms version is identical to the Cloud version but with all communication functionality disabled.

Some other general differences are identified below:

In KDM Cloud:

- Anti-Virus (AV) definitions are downloaded from Kanguru server. The list with the most current definitions is received from the Kanguru Central Server (KCS).
- Cannot be managed by KRMC Enterprise

In KDM Enterprise:

- AV definitions are downloaded from a KRMC enterprise server.
- Devices must be provisioned using UKLA - setting device properties and exporting them to a .krm file that is added in KRMC Enterprise.
- "Enterprise Edition" appears on the splash screen

In KDM No-Comms:

- There is no AV functionality.
- There is no communication to any network or internet server.
- All drive communications, including live updates for the KDM client software for the drive, are disabled.
- The drive operates in a completely offline mode, and cannot be managed by KRMC.

2.2 Running KDM2000

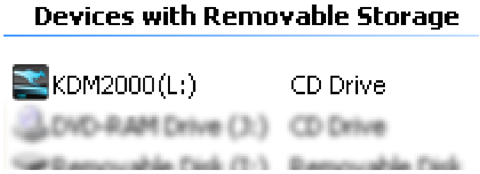
The Kanguru Defender 2000 is compatible with multiple operating systems. Running the KDM2000 application can be different depending on the OS your computer is running.

2.2.1 Running KDM2000 on Windows

To run KDM2000 from a Windows operating system, simply connect your Defender 2000 to your computer through a USB port. The KDM2000 application should start automatically if Autorun is enabled.

If KDM2000 does not start automatically:

1. Open **My Computer** and open the Defender 2000's CD-ROM partition named **KDM2000**. The drive letter (e.g. D:, E:, F:) will depend on your computer.



Devices with Removable Storage

KDM2000(L:)	CD Drive
DVD-RAM Drive ([illegible])	CD Drive
Removable Disk ([illegible])	Removable Disk

2. Double-click on the **KDM2000.exe** file to launch the KDM2000 application.

If it is your first time running KDM2000 you will need to complete the setup wizard in order to set your security password (see section 2.3 *The Setup Wizard* on page 14). If you have already setup your security password, you will be prompted to login (see section 2.4 *Unlocking the Security Partition* on page 20).

Caution! The **KDM2000.exe** file needs to remain on your Defender 2000's CD-ROM partition at all times. Always run the application from the Defender 2000's CD-ROM partition. Do not try to copy KDM2000 or run KDM2000 from your computer's hard drive.

Note: Windows 7 users may not see the removable disk partition until you have logged into KDM2000. If you are running Windows 7 and for any reason need to see the removable disk before you log into KDM2000 please refer to the instructions on p.10.

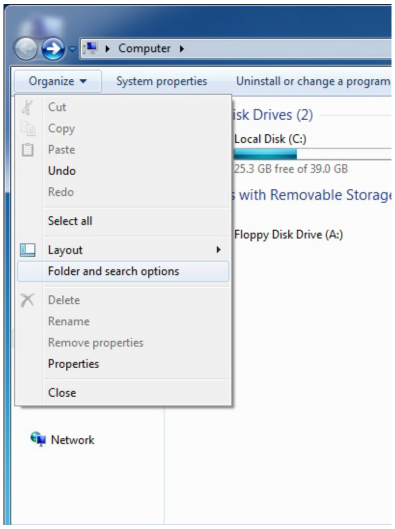
Attention Windows 7 Users

Windows 7 users may not see the removable disk partition until you have logged into KDM2000 (see section 2.4 *Unlocking the Security Partition* on page 20 for more information). This is normal.

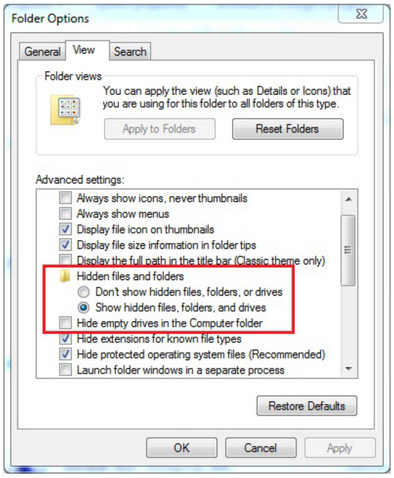
If you are running Windows 7 and for any reason need to see the removable disk before you log into KDM2000, you will need to configure Windows in the following manner:

Note: This is user preference only. There is no need to configure Windows in order to use your Defender 2000.

1. From My Computer, click on the **Organize** tab and then select **Folder and search options**.



2. The Folder Options window appears. Scroll down to the option for Hidden Files and Folders and select **Show hidden files, folders, and drives**.



You can apply the view (such as Details or Icons) that you are using for this folder to all folders of this type.

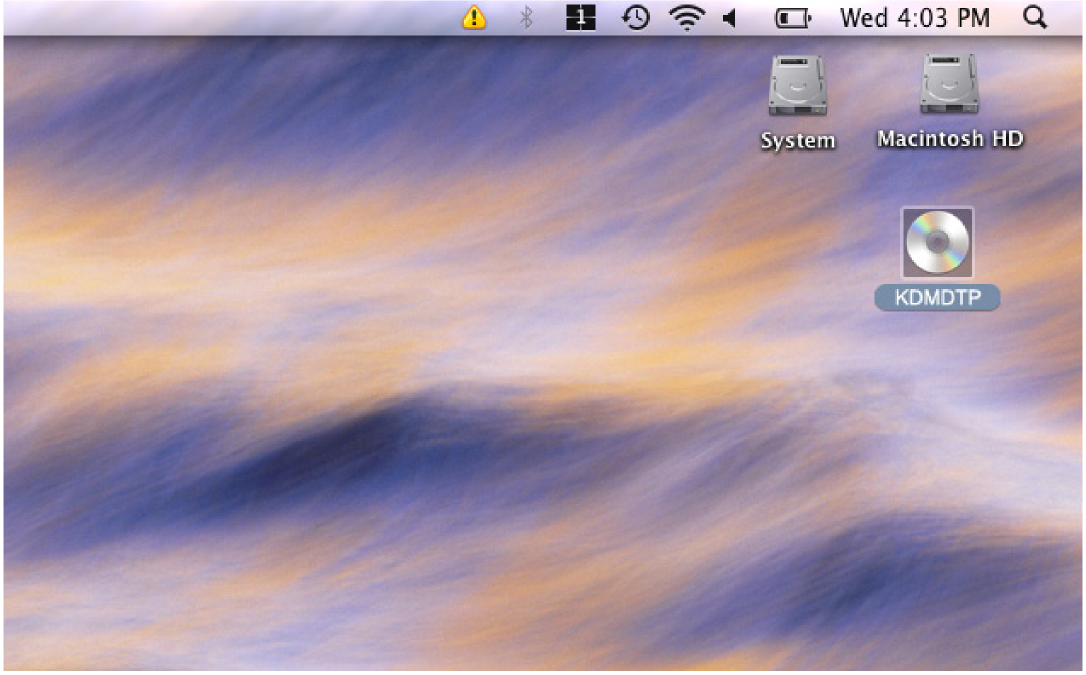
Advanced settings:

□ Always show icons, never thumbnails
□ Always show menus
☑ Display file icon on thumbnails
☑ Display file size information in folder tips
□ Display the full path in the title bar (Classic theme only)
Hidden files and folders
○ Don't show hidden files, folders, or drives
● Show hidden files, folders, and drives
□ Hide empty drives in the Computer folder
☑ Hide extensions for known file types
☑ Hide protected operating system files (Recommended)
□ Launch folder windows in a separate process

3. Click on the **OK** button to finish configuring Windows. The removable disk is now visible before you log into KDM2000.

2.2.2 Running KDM2000 on Mac OS X

To run KDM2000 from Mac OS X, connect your Defender 2000 to your computer through a USB port. A CD icon named 'KDM2000' will appear on the desktop. Double click on the **KDM2000** icon to open it.



In the window that opens, double-click on the **KDM2000.app** file to launch the KDM2000 application.

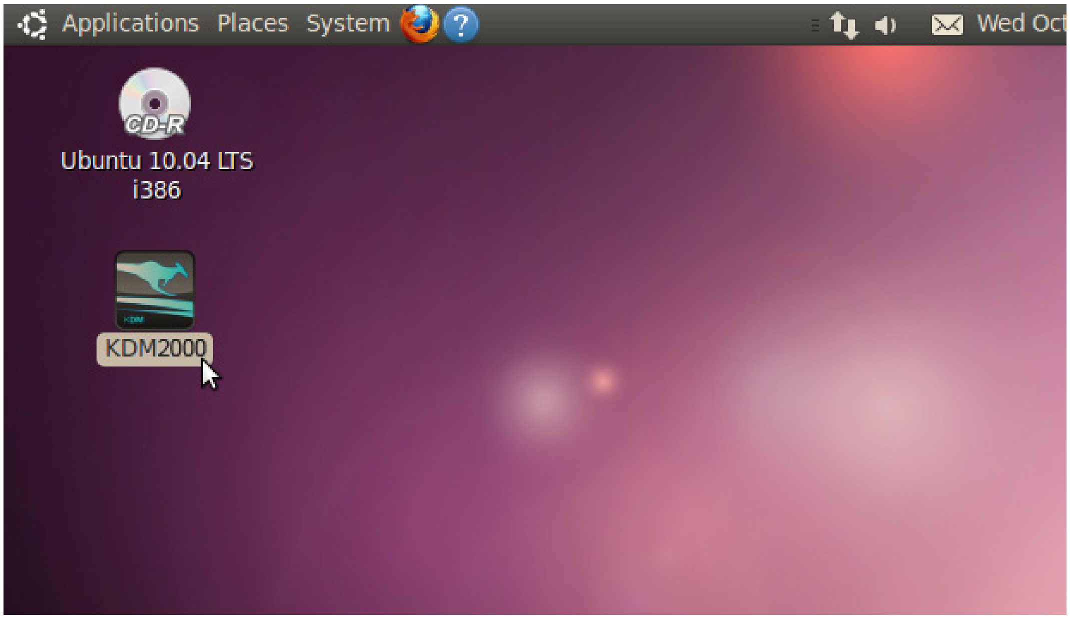
If it is your first time running KDM2000 you will need to complete the setup wizard in order to set your security password (see section 2.3 *The Setup Wizard* on page 14). If you have already setup your security password, you will be prompted to login (see section 2.4 *Unlocking the Security Partition* on page 20).

Caution! The **KDM2000.app** file needs to remain on your Defender 2000's CD-ROM partition at all times. Always run the application from the Defender 2000's CD-ROM partition. Do not try to copy KDM2000 or run KDM2000 from your computer's hard drive.

Note: The **KDM2000** icon is not always displayed on the desktop. If you do not see the **KDM2000** icon on your desktop, you can locate the **KDM2000.app** file on the CD-Rom partition through the Finder window.

2.2.3 Running KDM2000 on Ubuntu Linux

To run KDM2000 from a Ubuntu Linux operating system, connect your Defender 2000 to your computer through a USB port. A ‘KDM2000’ icon will appear on the desktop. Double click on the **KDM2000** icon to open it.



In the window that opens, double-click on the **KDM2000** file to launch the KDM2000 application.

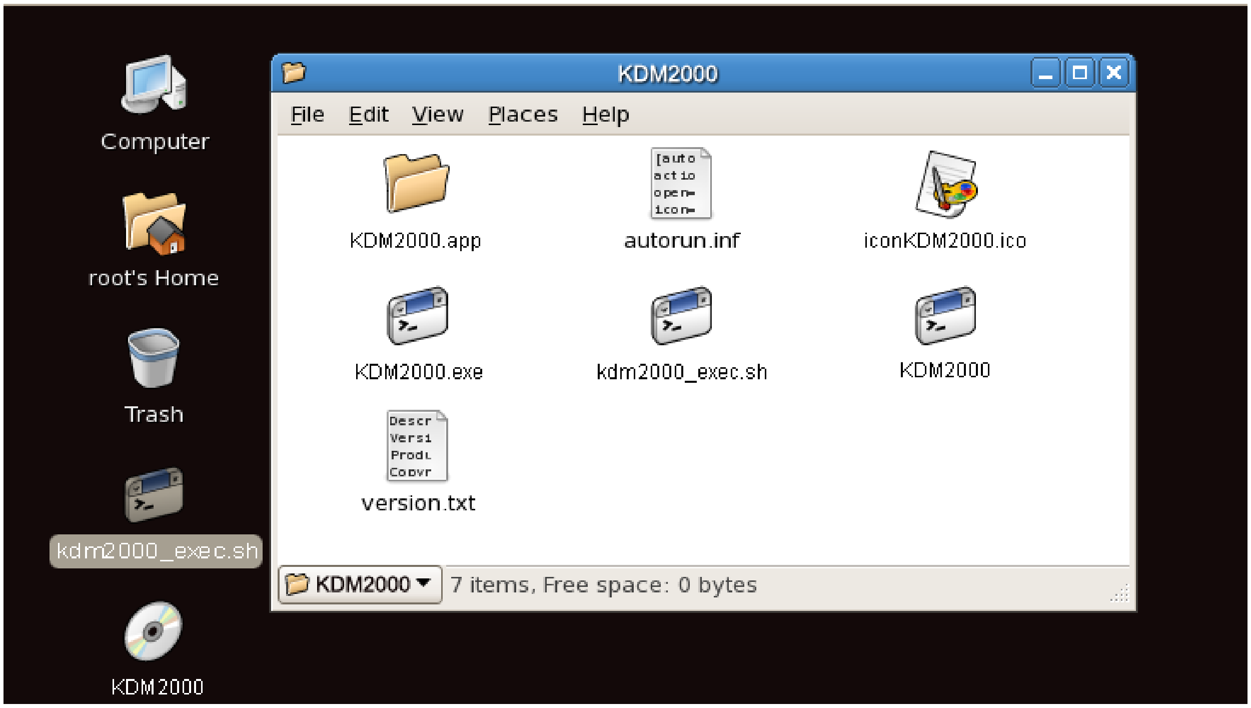
If it is your first time running KDM2000 you will need to complete the setup wizard in order to set your security password (see section 2.3 *The Setup Wizard* on page 14). If you have already setup your security password, you will be prompted to login (see section 2.4 *Unlocking the Security Partition* on page 20).

Caution! The **KDM2000** file needs to remain on your Defender 2000’s CD-ROM partition at all times. Always run the application from the Defender 2000’s CD-ROM partition. Do not try to copy KDM2000 or run KDM2000 from your computer’s hard drive.

2.2.4 Running KDM2000 on Red Hat Enterprise Linux 5

Note: You must have Super User or Root privileges in order to run KDM2000 on Red Hat Enterprise Linux 5.

To run KDM2000 from the Red Hat Enterprise Linux 5 operating system, connect your Defender 2000 to your computer through a USB port. A CD icon named 'KDM2000' will appear on the desktop. If the KDM2000 window doesn't open automatically, double click on the **KDM2000** icon to open it.



From the window that opens, copy the **kdm2000_exec.sh** shell script file to a location on your computer's local hard drive.

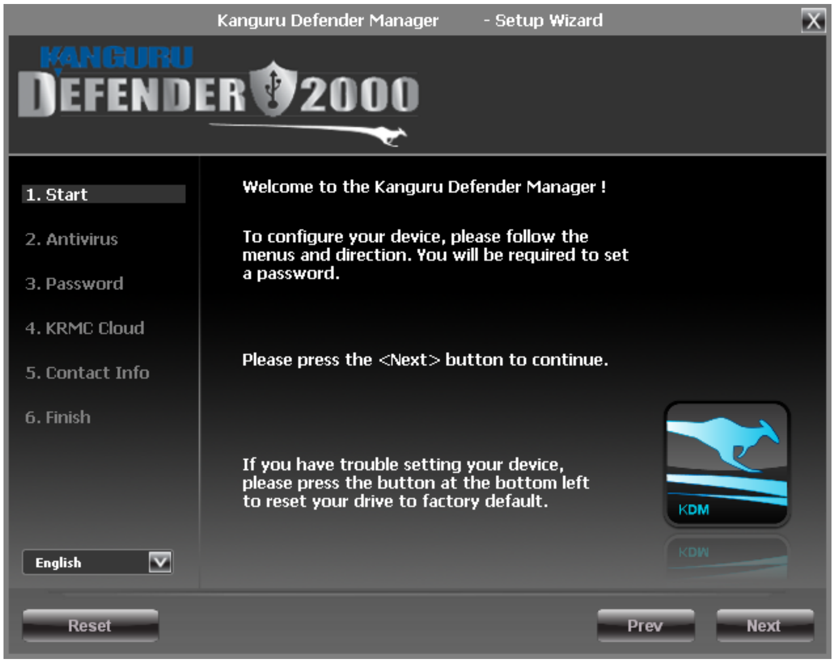
Once the **kdm2000_exec.sh** shell script has been copied to a local hard drive, you can execute KDM2000 through the Terminal:

1. Open the Terminal window by clicking on **Applications** → **Accessories** → **Terminal**. The Terminal location may be different depending on which version of Red Hat you are running.
2. From the Terminal, navigate to the directory where you copied the **kdm2000_exec.sh** shell script file to.
3. Type, "chmod 007 kdm2000_exec.sh" to allow full execute permission.
4. Type, "./kdm2000_exec.sh" to execute the shell script.

If it is your first time running KDM2000 you will need to complete the setup wizard in order to set your security password (see section 2.3 *The Setup Wizard* on page 14). If you have already setup your security password, you will be prompted to login (see section 2.4 *Unlocking the Security Partition* on page 20).

2.3 The Setup Wizard

When you start KDM2000 for the first time you will be greeted by the Setup Wizard. Follow the Setup Wizard instructions to create a security password for your Defender 2000's secure, encrypted partition.



Welcome to the Kanguru Defender Manager !

To configure your device, please follow the menus and direction. You will be required to set a password.

Please press the <Next> button to continue.

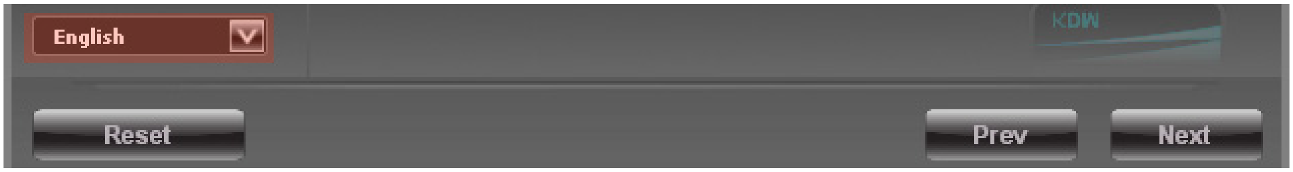
If you have trouble setting your device, please press the button at the bottom left to reset your drive to factory default.

Caution! Once the Setup Wizard has started, you should not disconnect your Defender 2000 without either first completing the Setup Wizard or closing the Setup Wizard by clicking on the **X** button.

2.3.1 Selecting a Setup Language

The default language for the Setup Wizard is set to English. To run the Setup Wizard in a different language:

1. From the Welcome screen, click on the ▼ icon next to the Language Menu.



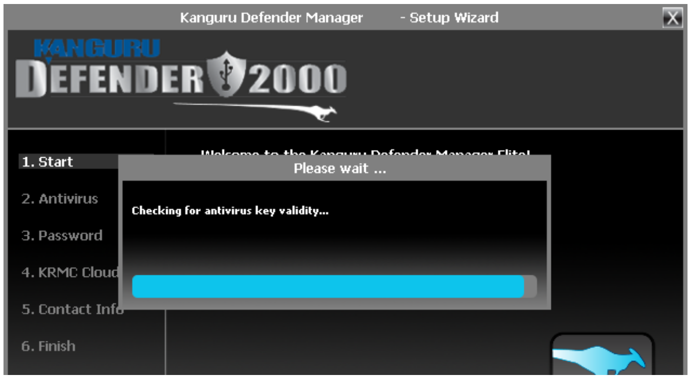
2. A list of available languages will appear in a drop down menu. Select your desired language from the drop down menu. The Setup Wizard will switch to the new language.

3. Click on the **Next** button to continue to the next step.

2.3.2 Activating On-board Antivirus Protection (Windows only)

Note: This section does not apply if you are running the Setup Wizard in Linux or Mac OS X.
Note: This section does not apply to Enterprise Edition devices. Antivirus for Enterprise Edition is activated by an administrator using Kanguru Remote Management Console (KRMC).
Note: This section does not apply to No-Comms Edition devices.

KDM2000 will automatically check if your device has a valid antivirus license key.
Note: Your Defender 2000 will need to be connected to a computer with internet access in order to register for on-board antivirus protection.



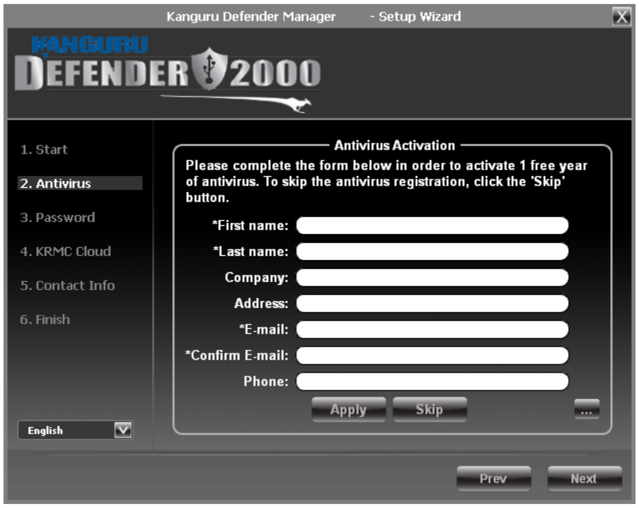
Welcome to the Kanguru Defender Manager Elite!

Please wait ...

Checking for antivirus key validity...

If your Defender 2000 does not already have a valid antivirus license key, then you must fill out the following registration form with the required information and then click on the **Apply** button in order to activate your free antivirus trial.

Click on the **Skip** button if you do not wish to activate antivirus protection. If you decide to skip activating your antivirus now, you will not be able to activate it in the future without first resetting your drive to the factory default setting.



Antivirus Activation

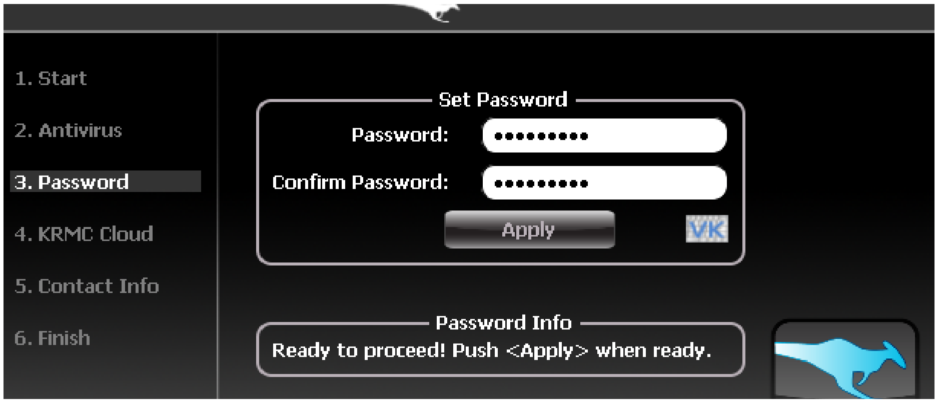
Please complete the form below in order to activate 1 free year of antivirus. To skip the antivirus registration, click the 'Skip' button.

*First name:
*Last name:
Company:
Address:
*E-mail:
*Confirm E-mail:
Phone:

Click on the **Next** button to continue with setting up your Defender 2000's security password.

2.3.3 Setting a Password

From the Set Password screen:



Password: •••••••••

Confirm Password: •••••••••

Ready to proceed! Push <Apply> when ready.

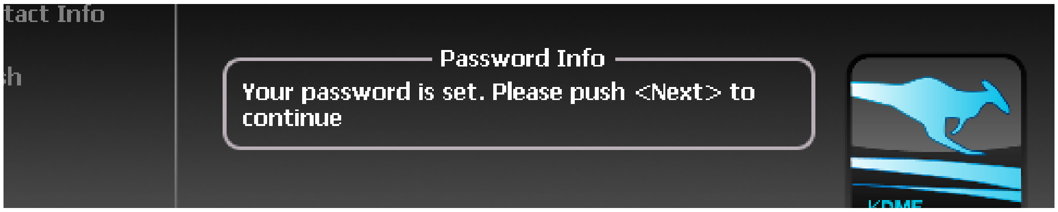
1. Enter your password in the **Password** data field. You can enter your password using KDM2000's Virtual Keyboard by clicking the **VK** button. For more information on using the Virtual Keyboard see section 2.5 *Using the Virtual Keyboard to Enter Your Password* on page 22.

   Note: For security reasons, it is recommended that you incorporate letters, numbers and symbols to achieve maximum security.

2. Enter the same password in the **Confirm Password** field for verification. If your passwords do not match or there is any other issue with the password which you have entered in the Set Password section, an explanation will be visible in the Password Info window.

   Note: The Password Info window will inform you if there are any password requirements. It updates in real time. Disregard the messages in the Password Info box until you have finished entering your password into both the Password and Confirm Password fields.

3. Click on the **Apply** button to set your password. Once the password has been set you will see the following message in the Password Info box:



Your password is set. Please push <Next> to continue

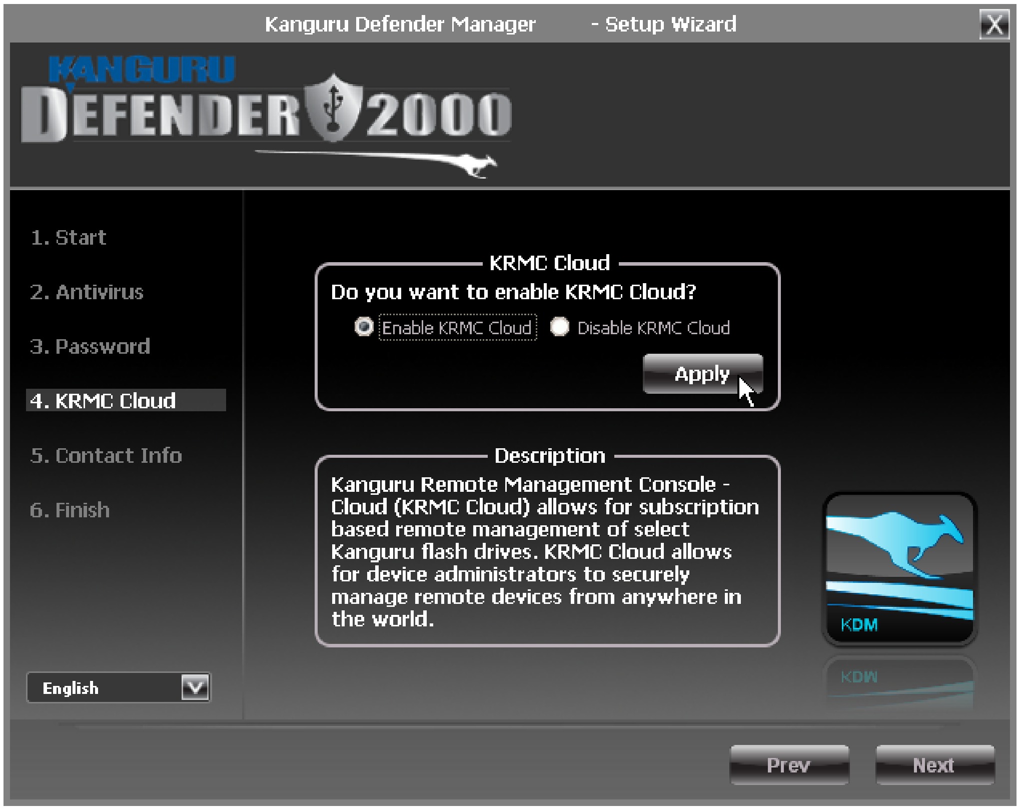
4. Click the **Next** button and KDM2000 will automatically configure the security parameters.

Note: If you are managing your Defender 2000 with an administrative program like KLA or KRMC, you can set a Master Password which can be used to reset the user password if it is lost or forgotten.

2.3.4 KRMC Cloud

Note: This section does not apply to Enterprise Edition devices
Note: This section does not apply to No-Comms edition devices
Note: KRMC Cloud has not been evaluated for Common Criteria.

Kanguru Defender 2000 drives can be remotely managed using the Kanguru Remote Management Console (KRMC). KRMC Cloud is hosted on Kanguru's server and can be enabled on any Cloud edition Defender 2000 drive.



KRMC Cloud

Do you want to enable KRMC Cloud?

● Enable KRMC Cloud ○ Disable KRMC Cloud

Apply

Description

Kanguru Remote Management Console - Cloud (KRMC Cloud) allows for subscription based remote management of select Kanguru flash drives. KRMC Cloud allows for device administrators to securely manage remote devices from anywhere in the world.

To Enable KRMC Cloud functionality:

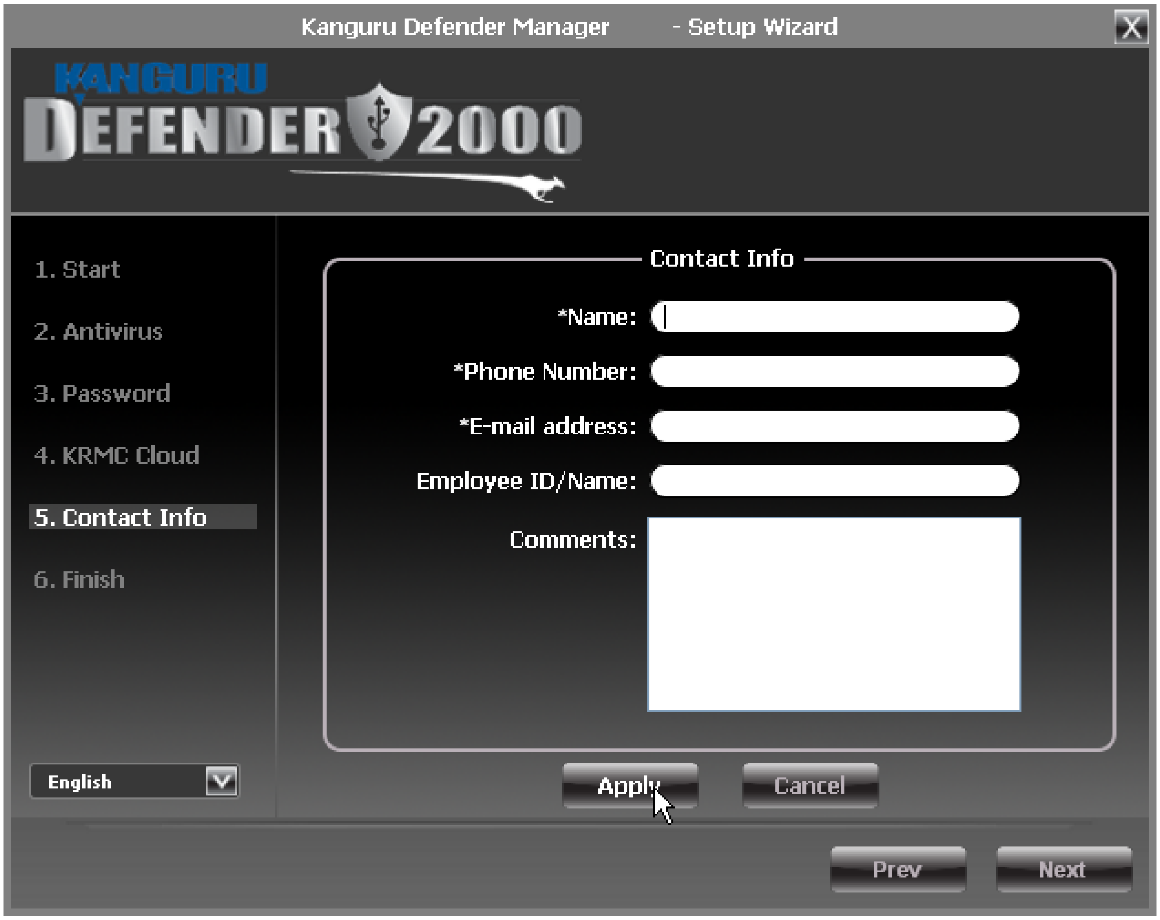
1. Select the **Enable KRMC Cloud** option and then click on the **Apply** button.
2. A dialog box will appear asking if you want to register your device with KRMC Cloud. Click on the **Yes** button.
3. Your web browser will open and direct you to the KRMC Cloud login page. If you do not have an account, you will need to register before logging in.
4. Purchase a license for your drive in order to use it with KRMC Cloud.

If you choose not to remotely manage your Defender using KRMC Cloud, select the **Disable KRMC Cloud** option and then click on the **Apply** button. You will not be able to enable KRMC Cloud functionality again, unless you first reset your drive to the factory default.

Click on the **Next** button to continue setting up your drive.

2.3.5 Contact Info

Note: This section does not apply to Enterprise Edition users.


Kanguru Defender Manager - Setup Wizard

Contact Info

*Name:

*Phone Number:

*E-mail address:

Employee ID/Name:

Comments:

Your contact info will be saved to the drive. If you are managing your drive using KRMC Cloud, the information entered here will be automatically be imported to the KRMC Cloud server when you register your drive.

Fill in your information in the appropriate fields and then click on the **Apply** button. A window will appear confirming that your data has been saved. Click on the **OK** button to close the window and then click on the **Next** button to finish setting up your drive.

Congratulations! Your Defender 2000 is now ready to use.

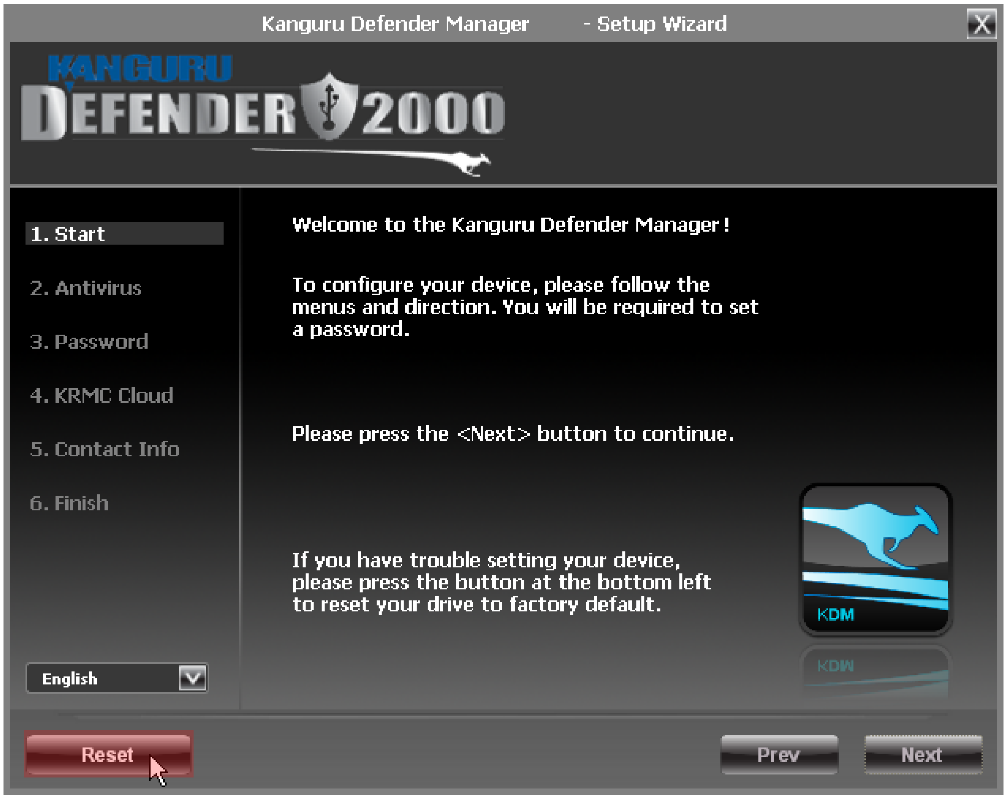
2.3.6 Resetting the Device through the Setup Wizard

If you experience any problems during the Setup Wizard, you may have to perform a device reset before you can complete the setup process.

To perform a device reset while in the Setup Wizard:

1. From anywhere in the Setup Wizard, click on the **Prev** button until you return to the Welcome Screen.

2. On the Welcome Screen you will see a **Reset** button in the lower-left side of the application window. Click on the **Reset** button.



Welcome to the Kanguru Defender Manager!

To configure your device, please follow the menus and direction. You will be required to set a password.

Please press the <Next> button to continue.

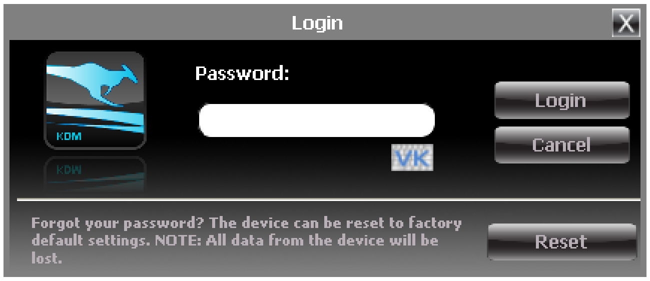
If you have trouble setting your device, please press the button at the bottom left to reset your drive to factory default.

3. A dialog box appears asking you to confirm the reset. Click on **Yes** to reset your device to the factory default settings.

After the device has been reset to the factory default setting you will be required to restart the Setup Wizard.

2.4 Unlocking the Security Partition

Anytime you run KDM2000, you will be asked to login using your security password. You need to provide the correct security password in order to access the Defender 2000's secure partition.



Forgot your password? The device can be reset to factory default settings. NOTE: All data from the device will be lost.

When the login screen appears:

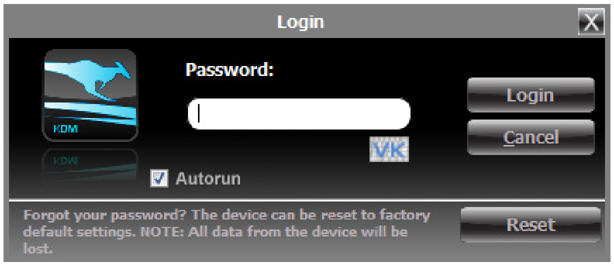
1. Enter your password in the **Password** field.
2. Click on the **Login** button.

Caution! If you enter your password incorrectly six times in a row (six is the default setting, this may be different depending on your setup), for security purposes, any data stored on the secure partition will automatically be erased. You will be issued an on-screen warning when you have one attempt remaining, to prevent accidental erasure. To cancel the login process, click on the **Cancel** button. Unplugging and then reinserting your Defender 2000 or manually running KDM2000.exe will bring the login window back.

Once you have successfully logged in to KDM2000, the Defender 2000's secure partition will be accessible through My Computer or Windows Explorer. For more information on accessing the secure partition, see section 2.6 *Encrypting Files and Folders* on page 23.

Caution! Once KDM2000 has started, you should never disconnect your device without first closing KDM2000 properly by clicking the KDM2000 task bar icon and selecting **Unmount Kanguru Defender** as described in section 2.13 *Unmounting Your Defender 2000* on page 32.

Note: If your Defender 2000 drive is being managed by KRMC, you may see an **Autorun** checkbox. This means that your administrator has configured your drive to auto-execute a file saved on your drive's secure partition every time you successfully login. You can disable the Autorun functionality by unchecking this box.



Forgot your password? The device can be reset to factory default settings. NOTE: All data from the device will be lost.

2.4.1 Resetting from the Login Screen

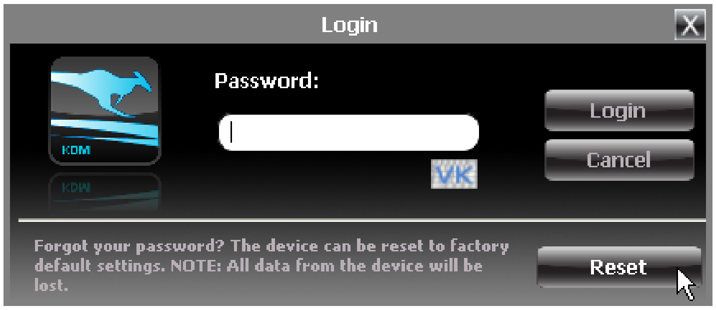
In the event you have forgotten your password, you can use the Reset to Factory Default function to reset your password. This function will restore the device to the factory settings, erasing all saved passwords and data residing on the device's secure partition.

Caution! Using the Reset to Factory Default function will format and wipe all data off the device! All data on the device will be lost!

To reset your Defender 2000 to the factory default:

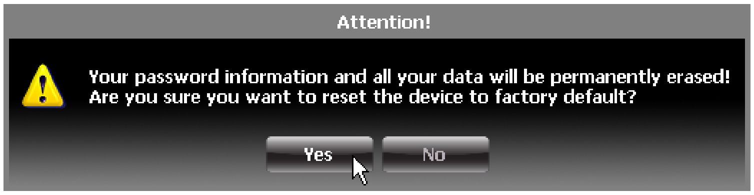
1. Start KDM2000.

2. When the login screen appears, click on the **Reset** button. **Note:** The **Reset** button is not visible if your device is managed by KRMC or KLA. Please check with your administratror.



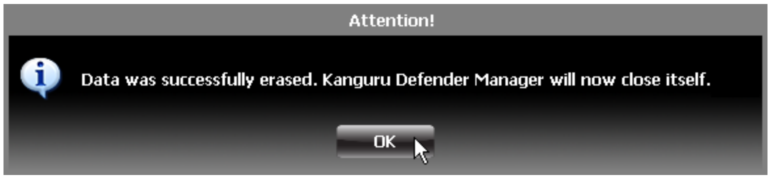
Forgot your password? The device can be reset to factory default settings. NOTE: All data from the device will be lost.

3. When you are prompted to confirm the reset, click on the **Yes** button.



Your password information and all your data will be permanently erased!
Are you sure you want to reset the device to factory default?

4. When your password and data stored on the secure partition have been erased, the following message will appear. Click on the **OK** button to complete the reset.



Data was successfully erased. Kanguru Defender Manager will now close itself.

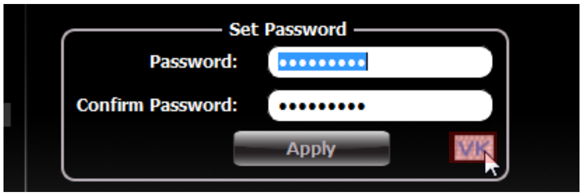
The next time you run KDM2000, you will have to complete the Setup Wizard again before you are able to access the secure partition. Please see section 2.3 *The Setup Wizard* on page 14 for instructions on completing the Setup Wizard.

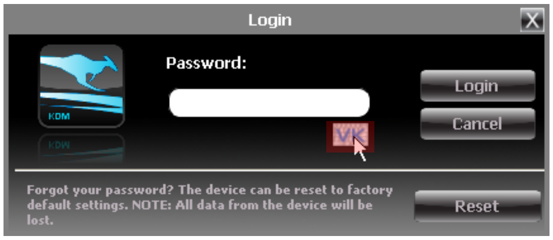
2.5 Using the Virtual Keyboard to Enter Your Password

The virtual keyboard feature can be accessed anytime you are required to enter your password in order to prevent key logging applications from recording your key strokes and potentially stealing your password.

To use the virtual keyboard to enter your password:

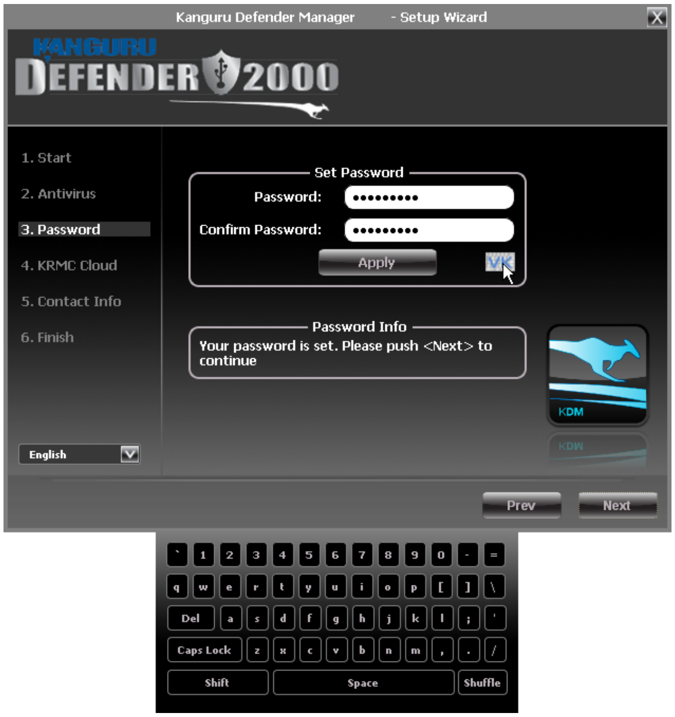
1. Click on **VK** button which is located near the password entry field.



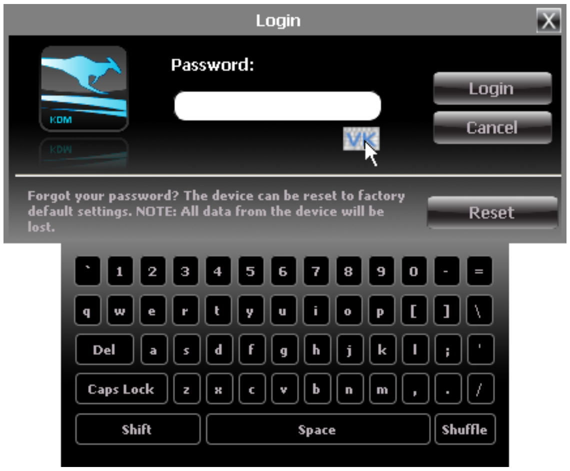


Forgot your password? The device can be reset to factory default settings. NOTE: All data from the device will be lost.

2. The virtual keyboard will appear below the Setup Wizard window. Click on the keys on the virtual keyboard to enter your password.



Your password is set. Please push <Next> to continue


Login
Password:
Login
Cancel
VK
KDM
Reset
` 1 2 3 4 5 6 7 8 9 0 - =
q w e r t y u i o p [ ] \
Del a s d f g h j k l ; '
Caps Lock z x c v b n m , . /
Shift
Space
Shuffle

Forgot your password? The device can be reset to factory default settings. NOTE: All data from the device will be lost.

3. Click on the **VK** button again to close the virtual keyboard.

Note: You can click on the **Shuffle** key on the bottom right corner of the virtual keyboard to randomize the virtual keyboard layout. Randomizing the keyboard layout protects your password from mouse tracking programs designed to thwart virtual keyboards.

2.6 Encrypting Files and Folders

A key feature of the Defender 2000 is drag & drop encryption; allowing you to simply drag files that you want encrypt directly onto the drive. The Defender 2000 automatically encrypts these files as they are transferred to the secure partition, ensuring that your data stays safe and private.

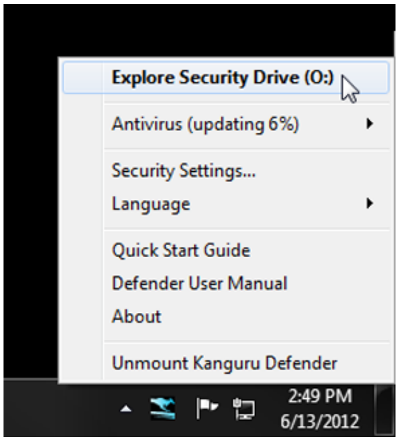
To open the secure partition:

1. Start KDM2000.

2. Login to KDM2000 to gain access to the secure partition.

3. Click on the KDM2000 icon located in the task bar and then select **Explore Security Drive** from the popup menu.

Note: Linux users must right-click on the KDM2000 icon in the task bar.



We recommend using either the drag & drop action, right-click copy/paste action, or the shortcut keys (Ctrl+C and Ctrl+V) to copy and paste files and folders directly to and from the secure partition.

Note: Data saved on the Defender 2000's secure partition are only accessible after you have successfully logged into KDM2000.

2.7 On-board Antivirus (Windows only)

Note: This section does not apply to No-Comms edition devices

You must register your device with Kanguru Solutions in order to take advantage of the Defender 2000's on-board antivirus functions (see section 2.3.2 *Activating On-board Antivirus Protection (Windows only)* on page 15).

Once your on-board antivirus has been activated, real-time virus scanning is automatically enabled whenever you log into your device. All files copied to the Defender are scanned for viruses and malware. Real-time scanning is enabled once all virus definitions have been downloaded.

Note: Updates for the latest the virus definitions are downloaded automatically when the device is connected to a computer with internet access. If you disconnect your Defender before the latest update has finished downloading, the Defender will save your place and continue the download the next time it is connected to a computer with internet access.

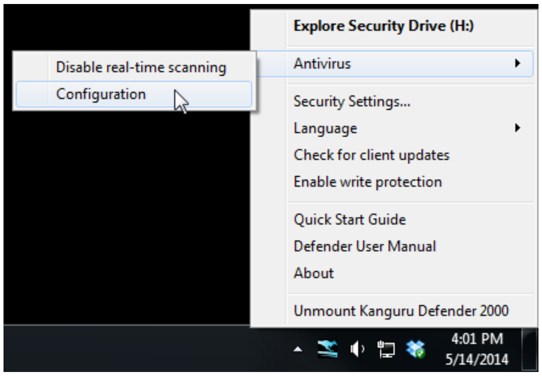
Virus definitions are stored in the 'System' folder on the secure partition. If these files are deleted, they will be automatically re-downloaded. If the device is reset to the factory default, these files will be deleted and will need to be re-downloaded.

Caution! Do not store any data in the 'System' folder. Any data saved here that does not pertain to virus definitions will be automatically deleted.

The Onboard Antivirus console

You can access the on-board antivirus console to scan your device, a path or a file. To open the antivirus console:

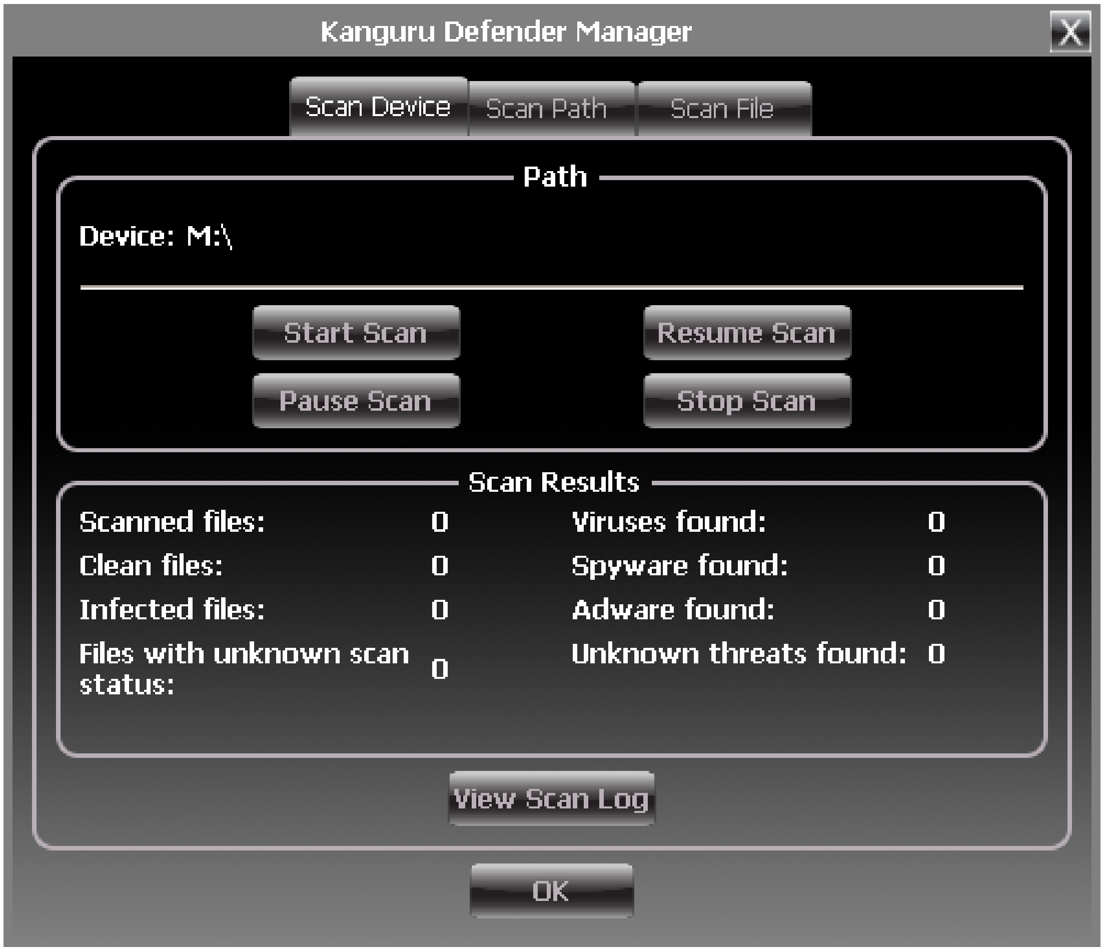
1. Right-click on the KDM2000 icon located in the task bar.
2. Select **Antivirus** from the popup menu and then click on **Configuration** from the submenu.



The antivirus console appears.

2.7.1 Device Scan

The antivirus console allows you to scan your Defender 2000 for known viruses and malware.



Device: M:\

Scanned files: 0
Clean files: 0
Infected files: 0
Files with unknown scan status: 0
Viruses found: 0
Spyware found: 0
Adware found: 0
Unknown threats found: 0

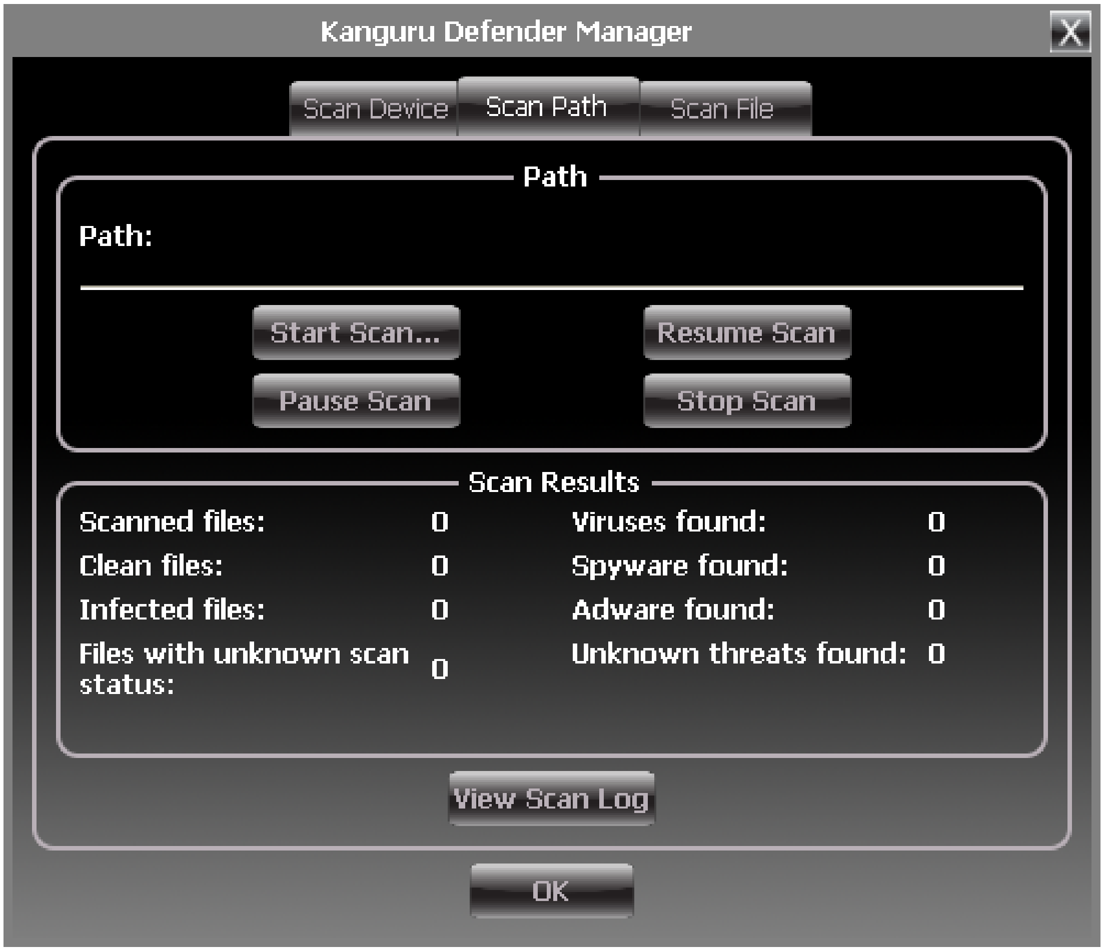
To scan your Defender 2000:

1. Click on the **Scan Device** tab at the top of the antivirus console.
2. Click on the **Start Scan** button to begin scanning your Defender 2000.
3. Once the scan has started:
   - Click on the **Pause Scan** button to pause the scan process. Click on the **Resume Scan** button to resume the scan.
   - Click on the **Stop Scan** button to cancel the scan process.
4. The scan results will appear in the **Scan Results** window.
5. Click on the **View Scan Log** button to view a log of the previous scan.
6. Click on the **OK** button to close the antivirus console.

2.7.2 Path Scan

The antivirus console allows you to scan any path on your computer for known viruses and malware.

Note: The **Scan Path** feature can be disabled on Enterprise Edition drives, please contact your administrator for more information.



Path:

Scanned files: 0
Clean files: 0
Infected files: 0
Files with unknown scan status: 0
Viruses found: 0
Spyware found: 0
Adware found: 0
Unknown threats found: 0

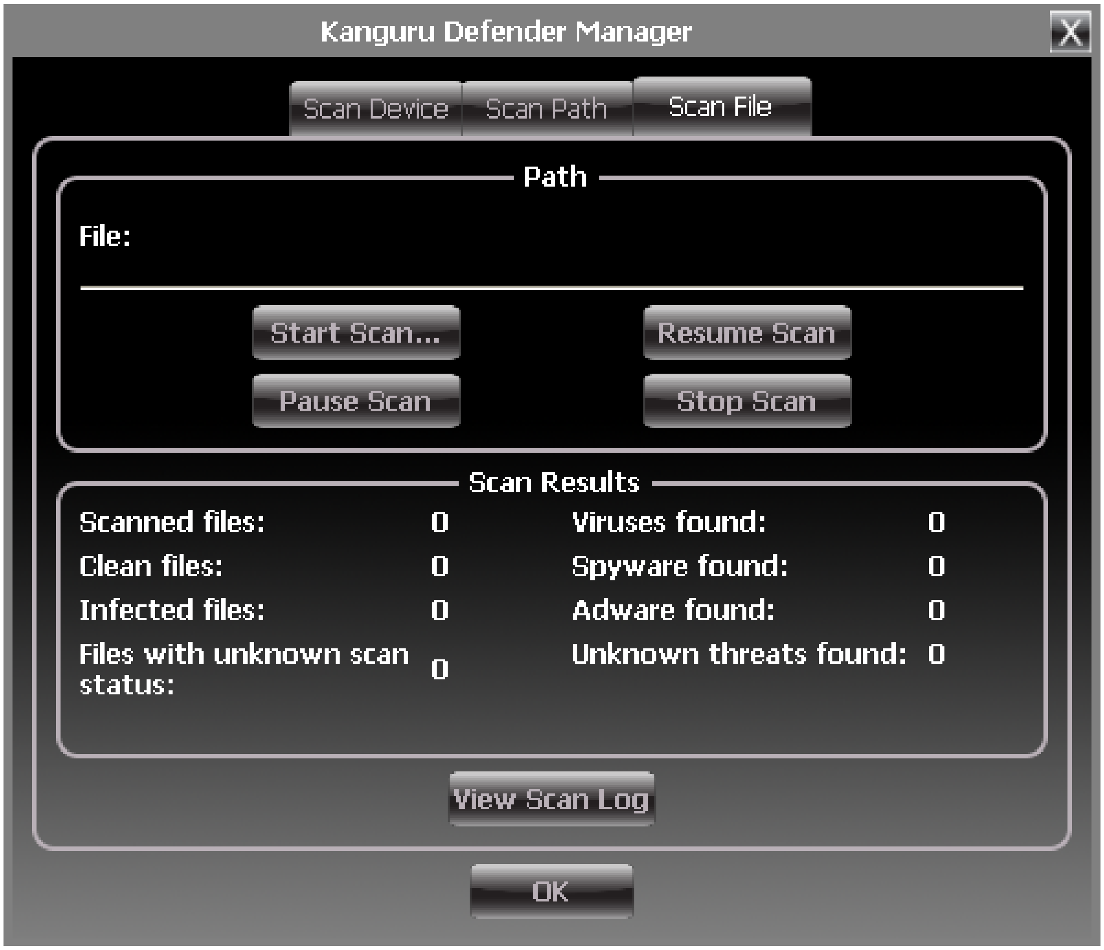
To scan a path on your computer:

1. Click on the **Scan Path** tab at the top of the antivirus console.
2. Click on the **Start Scan** button and then select a path on your computer to begin scanning.
3. Once the scan has started:
   - Click on the **Pause Scan** button to pause the scan process. Click on the **Resume Scan** button to resume the scan.
   - Click on the **Stop Scan** button to cancel the scan process.
4. The scan results will appear in the **Scan Results** window.
5. Click on the **View Scan Log** button to view a log of the previous scan.
6. Click on the **OK** button to close the antivirus console.

2.7.3 File Scan

The antivirus console allows you to scan any file on your computer for known viruses and malware.

Note: The **Scan File** feature can be disabled on Enterprise Edition drives, please contact your administrator for more information.



Scanned files: 0
Clean files: 0
Infected files: 0
Files with unknown scan status: 0
Viruses found: 0
Spyware found: 0
Adware found: 0
Unknown threats found: 0

To scan a file:

1. Click on the **Scan File** tab at the top of the antivirus console.
2. Click on the **Start Scan** button and then select a file to begin scanning.
3. Once the scan has started:
   - ○ Click on the **Pause Scan** button to pause the scan process. Click on the **Resume Scan** button to resume the scan.
   - ○ Click on the **Stop Scan** button to cancel the scan process.
4. The scan results will appear in the **Scan Results** window.
5. Click on the **Advanced Info** button to view a log of the previous scan.
6. Click on the **OK** button to close the antivirus console.

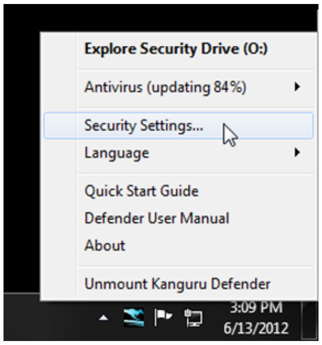
2.8 Changing Your Password

You can change your security password through the Security Settings.

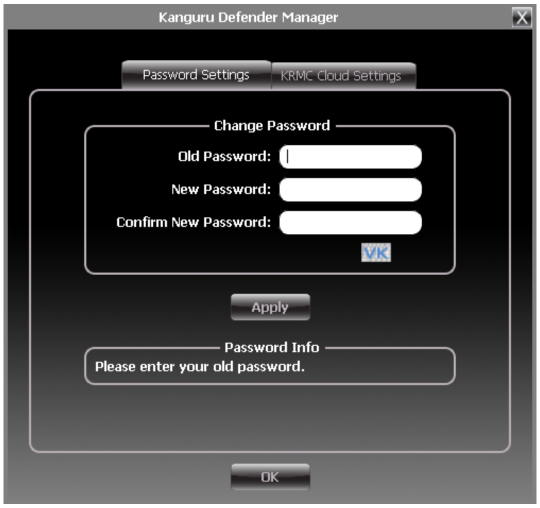
To change your password:

1. Click on the KDM2000 icon located in the task bar and then select **Security Settings…** from the popup menu.

Note: Linux users must right-click on the KDM2000 icon in the task bar.



2. The Password Settings window opens. Enter your current password in the **Old Password** field. Enter your new password in the **New Password** field and then enter it again in the **Confirm New Password** field.



Please enter your old password.

3. When you are ready to proceed, click on the **Apply** button to set your new password.

4. Once your new password has been set, a confirmation window appears informing you that your password has been successfully changed. Click on the **OK** button to complete setting your new password.

2.9 KRMC Cloud Settings

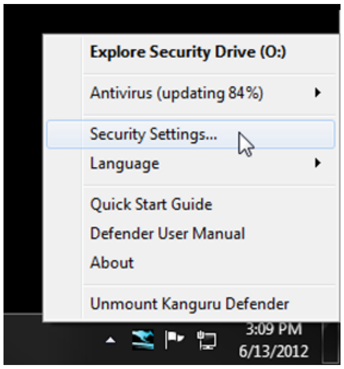
Note: This section does not apply to Enterprise Edition devices
Note: This section does not apply to No-Comms edition devices

You can enable or disable KRMC Cloud functionality through the Security Settings.

To change your device's KRMC functionality:

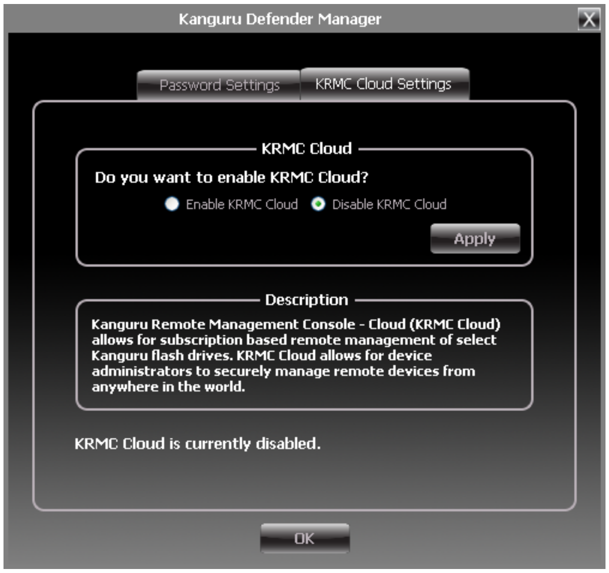
1. Click on the KDM2000 icon located in the task bar and then select **Security Settings…** from the popup menu.

Note: Linux users must right-click on the KDM2000 icon in the task bar.



2. The Password Settings window opens. Click on the KRMC Cloud Settings tab at the top of the window to enter the KRMC Cloud Settings window.

3. Enable or Disable KRMC Cloud by selecting the appropriate radio button and then click on the **Apply** button.



Do you want to enable KRMC Cloud?

○ Enable KRMC Cloud ● Disable KRMC Cloud

Kanguru Remote Management Console - Cloud (KRMC Cloud) allows for subscription based remote management of select Kanguru flash drives. KRMC Cloud allows for device administrators to securely manage remote devices from anywhere in the world.

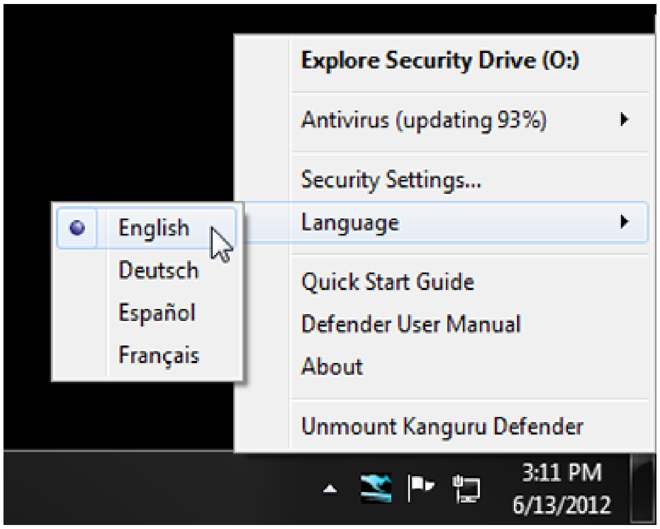
KRMC Cloud is currently disabled.

2.10 Changing Languages

KDM2000 supports several languages. The KDM2000 language is set to English by default.

To change the language:

1. Right -click on the KDM2000 icon located in the task bar and then hover your cursor over the **Language** option in the popup menu. A list of available languages appears.



2. Click on the desired language from the submenu that you want KDM2000 to be displayed in.

2.11 Online Documentation

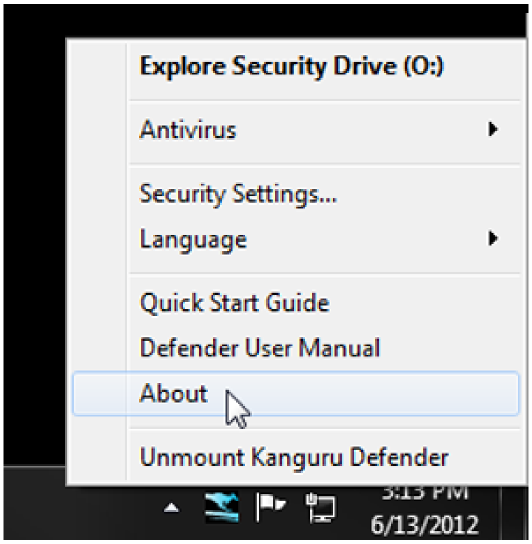
You can download digital copies of the Kanguru Defender 2000's documentation from the internet.

To download your Defender 2000's documentation, right-click on the KDM2000 icon located in the task bar

- Click on **Quick Start Guide** to download a digital copy of the Defender 2000's Quick Start Guide.
- Click on **Defender User Manual** to download a digital copy of the Defender 2000's User Manual

2.12 About KDM2000

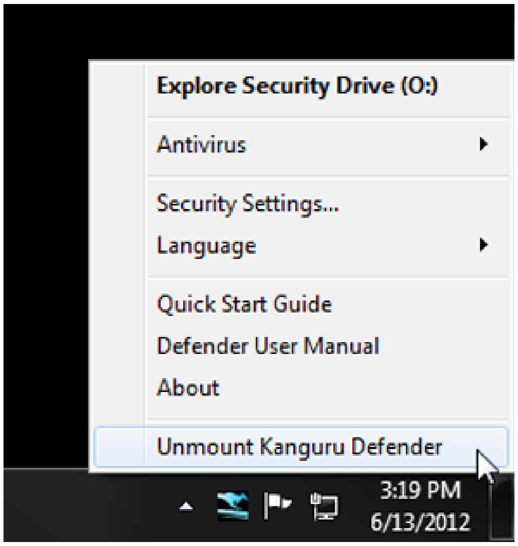
To view information regarding the version of KDM2000 currently installed on your device, right-click on the KDM2000 icon located in the task bar and then select **About**.



2.13 Unmounting Your Defender 2000

When you unmount your Defender 2000, the KDM2000 application will close and the secure partition containing your encrypted data will be inaccessible until you log into KDM2000 again.

To unmount your Defender 2000, right-click on the KDM2000 icon located in the task bar and then select **Unmount Kanguru Defender.**



The KDM2000 icon in the task bar will disappear and the Defender 2000's secure partition will no longer be accessible.

Caution! Do not disconnect the Kanguru Defender 2000 without first properly unmounting your device as detailed in this section and then safely removing the device from your computer as described in chapter 4. *Safely Removing Your Kanguru Defender 2000* on page 35. Doing so may result in file damage or data corruption.

3. Updating Your Defender 2000

Updates for your Defender 2000 flash drive's client application may be released from time to time. To view the version of the KDM2000 client application currently running on your drive, see section 2.12 *About KDM2000* on page 31.

You must identify which Defender 2000 edition device you are updating, as the update process is different for enterprise edition, cloud edition and No-Comms edition drives. Please refer to section 2.1 *Identifying the Device Edition* on page 8 for more information on identifying your device edition.

3.1 Updating cloud edition drives

Cloud edition Defender 2000 drives will automatically check the Kanguru Central Server (KCS) for client updates. Once you have successfully logged into your Defender 2000's secure partition, KDM2000 will check KCS for any available client updates. If an update is available, you will receive a pop-up notification with instructions for downloading the updater file.

Note: The drive will only check KCS if it is connected to a computer with internet access.

Cloud edition Defender 2000 users can also manually search and download available client updaters from the Kanguru Support site. Defender 2000 client updaters can be found under the 'USB Client Software Updates' forum in the 'Software Downloads and Updaters' section (support.kanguru.com).

3.2 Updating KRMC enterprise edition drives

Enterprise edition Defender 2000 drives are managed by the Kanguru Remote Management Console (KRMC). Updaters for enterprise edition Defender 2000 drives are available for download from the Kanguru Support site. The KRMC system administrator is granted access to the enterprise edition downloads when their KRMC order is processed. Enterprise edition updaters can be found under the 'KRMC Enterprise' forum in the 'Software Downloads and Updaters' section (support.kanguru.com).

Once you have downloaded your enterprise edition updater, you can create an 'Upgrade Client Application' action in KRMC to deploy the update to all of your managed drives remotely.

Note: Only KRMC administrators are given access to download the enterprise edition updaters.

3.3 Updating No-Comms edition drives

No-Comms edition Defender 2000 users must manually search and download available client updaters from the Kanguru Support site. Defender 2000 client updaters can be found under the 'USB Client Software Updates' forum in the 'Software Downloads and Updaters' section (support.kanguru.com).

3.4 Verifying the download checksum

To verify the integrity of the KDM2000 updater that you downloaded, please use the SHA256 Checksum tool. The SHA256 Checksum tool will generate a 64-character checksum which can be verified against the checksum list published by Kanguru Solutions. This ensures that the updater file was downloaded correctly and wasn't altered.

The SHA256 Checksum tool and a list of valid checksum values can be found on Kanguru's Support site: https://kanguru.zendesk.com/entries/21747773-sha256-checksum-utility

To view and verify your download's checksum:

1. Download the SHA256 Checksum tool from the Kanguru Solutions' support site.
2. Save the SHA256 Checksum tool to the same directory that KDM2000 updater file is saved in.
3. Open a command prompt window by clicking on **Start** → **All Programs** → **Accessories** → **Command Prompt.**
4. Within the command prompt window, navigate to the directory containing your KDM2000 updater file and the SHA256 Checksum tool.
5. Type "sha256.exe <filename.exe>", where <filename.exe> is the name of the updater file that you are checking.
6. Press the **Enter** key. A 64-character string appears. This is the SHA256 checksum of the updater.
7. Verify that the checksum generated by the SHA256 Checksum tool matches the checksum published by Kanguru Solutions for your updater version.

If the checksum generated by the SHA256 Checksum tool matches the checksum published, then your updater downloaded correctly. If the checksum generated does not match the checksum published by Kanguru Solutions, please delete the updater from your computer and download it again.

4. Safely Removing Your Kanguru Defender 2000

Before unplugging the Defender 2000 from the USB port, you should always make sure that you have unmounted the secured partition (see section 2.13 *Unmounting Your Defender 2000* on page 32). After the Defender has been unmounted, you should use you operating system's method for safely removing a USB device.

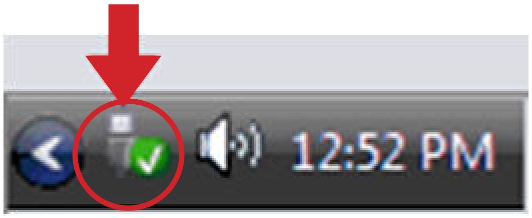
4.1 Safely Removing from Windows

Caution! Be sure that the secure partition has been unmounted before attempting to remove the Defender drive. See section 2.13 *Unmounting Your Defender 2000* on page 32.

Please use the Windows 'Safely Remove Hardware' function before disconnecting your Defender drive.

To safely remove your Defender 2000:

1. Click on the **Safely Remove Hardware icon** located in the task bar.



2. A popup menu appears listing all USB devices connected to your computer. Select the Defender 2000 from the menu (it will appear with two drive letters).

A message will appear indicating that the portable storage device can be safely removed. You can now disconnect your Defender 2000.

If a message saying "The device cannot be stopped right now" appears, please make sure that any windows or applications accessing the Defender 2000 are closed and then try again.

4.2 Safely Removing from Mac OS X

Caution! Be sure that the secure partition has been unmounted before attempting to remove the Defender drive. See section 2.13 *Unmounting Your Defender 2000* on page 32.

To remove the Defender drive, click and drag the **KDM2000 icon** from the desktop into the trash can icon. When you start dragging the KDM2000 icon, the trash can icon will turn into an eject icon.

Alternatively, you can right-click on the **KDM2000 icon** from the desktop and then select 'Eject' from the pop-up menu, or you can eject it through the Finder window.

Once the KDM2000 icon no longer appears on your desktop then it is safe to disconnect your Defender 2000.

4.3 Safely Removing from Linux

Caution! Be sure that the secure partition has been unmounted before attempting to remove the Defender drive. See section 2.13 *Unmounting Your Defender 2000* on page 32.

To remove the Defender drive, right-click the **KDM2000 icon** on the desktop and then click on **Eject** from the popup menu. Once the KDM2000 icon no longer appears on your desktop then it is safe to disconnect your Defender 2000.

5. Warranty Information

This product carries a 3-year warranty from the date of purchase. Kanguru Solutions is not responsible for any damages incurred in the shipping process. Any claims for loss or damage must be made to the carrier directly. Claims for shipping errors should be reported to Kanguru Solutions within three (3) working days or receipt of merchandise.

6. Tech Support

If you experience any problems using your Kanguru Defender 2000 or have any technical questions regarding any of our products, please call our technical support department. Our tech support is free and available Monday thru Friday, 9am to 5pm EST.

Call 1-508-376-4245 or
Visit our website at www.Kanguru.com

Appendix A - Common Criteria Certified Versions

The Common Criteria for Information Technology Security Evaluation, referred to more commonly as Common Criteria, is an international standard for computer security. Common Criteria provides an international set of guidelines for evaluating data security products, ensuring that they meet strict, security standards for government deployments.

Defender 2000s with the following specifications have been certified by Common Criteria:

- Client software version : **1.2.1.8**
- Firmware version : **02.03.10**

Important! Defender 2000s running these specific client software and firmware versions have been certified by Common Criteria. If you update the client software version to a newer version, your device will no longer be Common Criteria certified.

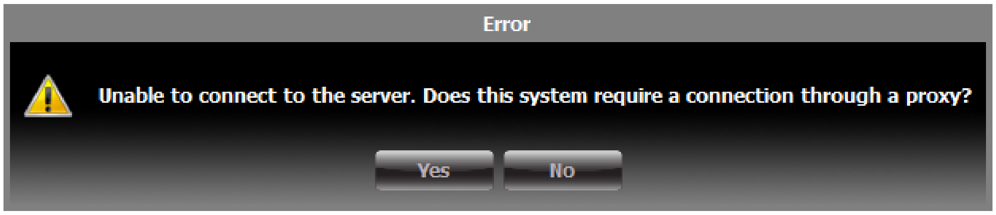
The Defender 2000's firmware version is specific to the device's hardware. The firmware version is not accessible to the user. You are not able to view, update or modify the firmware version on your Defender 2000 in any way.

Updates to the Defender 2000's client software are released by Kanguru Solutions regularly. To prevent you from accidentally updating your device to a non-Common Criteria certified client version, the client application's auto-update feature has been disabled on Common Criteria certified Defender 2000s. For more information about updating your Defender 2000's client software version, please see Chapter 3. *Updating Your Defender 2000* on page 33.

Appendix B - Proxy Support

If your computer uses a proxy server to access the internet, the correct proxy information will need to be configured in KDM2000.

If the KDM2000 client application cannot connect to the internet you will see the following error message:



Error

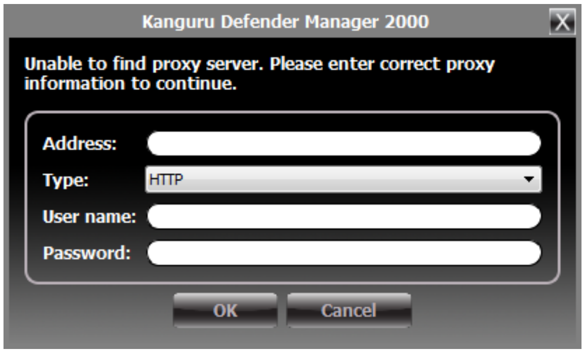
Unable to connect to the server. Does this system require a connection through a proxy?

If the computer that the Defender 2000 is connected to uses a proxy server to access the internet, click on the **Yes** button. KDM2000 will try to read the proxy server information from the computer's configuration.

- If KDM2000 is able to determine your proxy server's address and no authentication is required then KDM2000 will read this information and connect to the internet as normal.

- If KDM2000 is able to determine your proxy server's address but the proxy requires authentication then you will need to enter your credentials in the window that appears.

- If KDM2000 is unable to determine your proxy server's address then you will need to enter the proxy server address, proxy type and credentials:



Kanguru Defender Manager 2000

Unable to find proxy server. Please enter correct proxy information to continue.

Address:
Type: HTTP
User name:
Password:

Enter the proxy address and the port to connect to in the address field (e.g. 192.168.0.193:8080 or proxycomp:8080). Select your proxy type and then enter your credentials. If KDM2000 is able to connect to the proxy server using those credentials then the authentication information is saved in an encrypted proxy settings file on the host computer.

Note: Proxy information must be configured once for each computer the Defender 2000 is connected to that connects to the internet through a proxy server.

KANGURU™

Secure. Anytime. Anywhere.

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