

Username: Palm Beach State College IP Holder **Book:** Kali Linux – Assuring Security by Penetration Testing. No part of any chapter or book may be reproduced or transmitted in any form by any means without the prior written permission for reprints and excerpts from the publisher of the book or chapter. Redistribution or other use that violates the fair use privilege under U.S. copyright laws (see 17 USC107) or that otherwise violates these Terms of Service is strictly prohibited. Violators will be prosecuted to the full extent of U.S. Federal and Massachusetts laws.

Downloading Kali Linux

The first thing to do before installing and using Kali Linux is to download it. You can get Kali Linux from the Kali Linux website (<http://www.kali.org/downloads/>).

On the download page, you can select the official Kali Linux image based on the following items, which is also shown in the next screenshot:

- **Machine architecture:** i386, amd64, armel, and armhf
- **Image type:** ISO image or VMware image

The screenshot shows the Kali Linux Downloads page. The browser address bar displays www.kali.org/downloads/. The page title is "Downloads". Below the title is a dark blue banner that reads "DOWNLOAD YOUR FLAVOUR OF KALI LINUX...". The main content area is titled "Download your flavour of Kali Linux:". It contains a form with the following fields:

- Select release:** A dropdown menu showing "Kali 1.0".
- Architecture:** A dropdown menu with "i386" selected. The dropdown list is open, showing options: i386, amd64, armel, and armhf.
- Custom Image:** A dropdown menu showing "official".
- Window manager:** A dropdown menu showing "Gnome".
- Image type:** A dropdown menu showing "ISO".
- Download type:** A dropdown menu showing "Direct".
- Filename:** A text input field containing "kali-linux-1.0.1-i386.iso".
- sha1sum:** A text input field containing "41e5050f8709e6cd6a7d1baaa3ee2e89f8dfae83".
- Size (MB):** A text input field containing "2285".

At the bottom of the form is a button labeled "Download Kali".

If you want to burn the image to a DVD or install Kali Linux to your machine, you might want to download the ISO image version. However, if you want to use Kali Linux for VMWare, you can use the VMWare image file to speed up the installation and configuration for a virtual environment.

After you have downloaded the image file successfully, you need to compare the **SHA1** hash value from the downloaded image with the SHA1 hash value provided on the download page. The purpose of checking the SHA1 value is to ensure the integrity of the downloaded image is preserved. This prevents the user from either installing a corrupt image or an image file that has been maliciously tampered with.

In the UNIX/Linux/BSD operating system, you can use the `sha1sum` command to check the SHA1 hash value of the downloaded image file. Remember that it might take some time to compute the hash value of the Kali Linux image file due to its size. For example, to generate the hash value of the `kali-linux-1.0.1-i386.iso` file, the following command is used:

```
sha1sum kali-linux-1.0.1-i386.iso
```

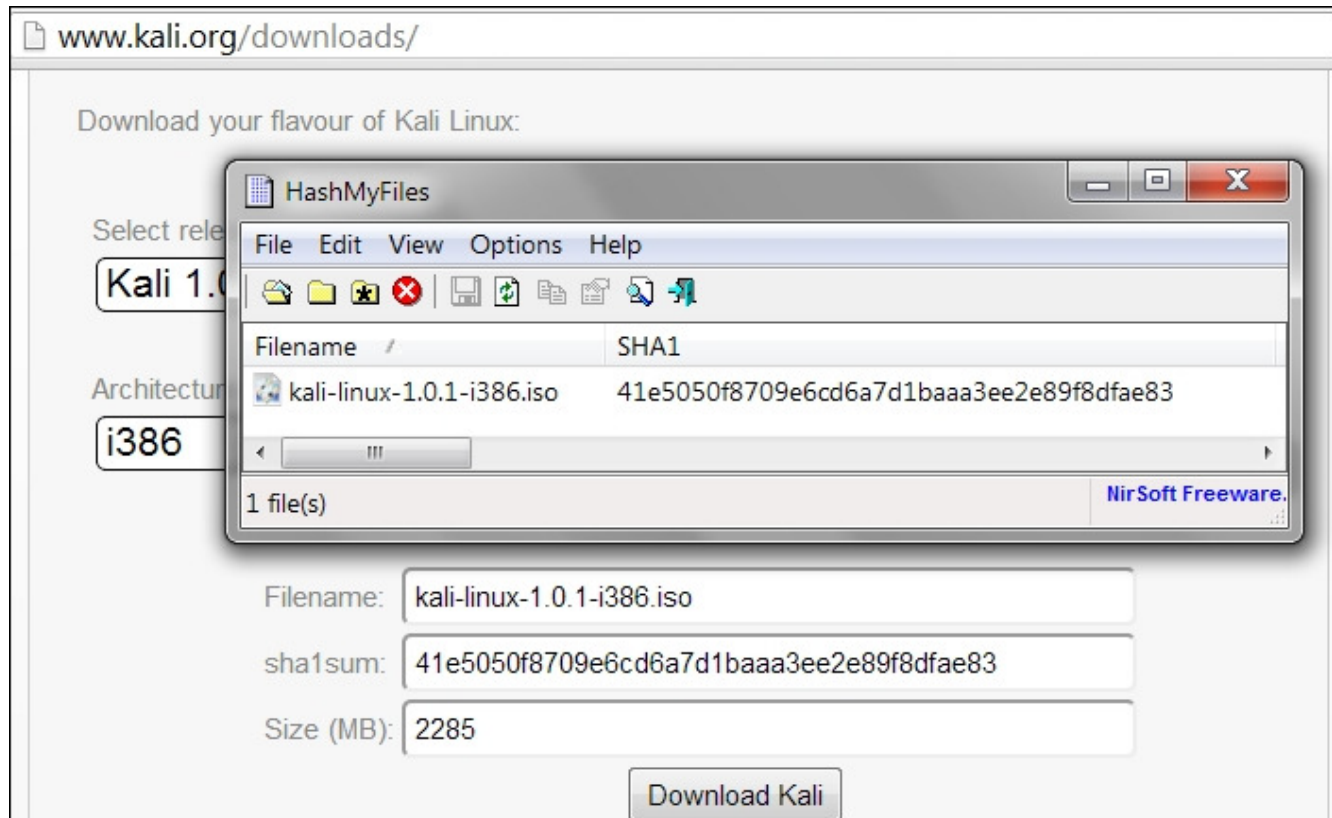
```
41e5050f8709e6cd6a7d1baaa3ee2e89f8dfae83 kali-linux-1.0.1-i386.iso
```

In the Windows world, there are many tools that can be used to generate the SHA1 hash value; one of them is [sha1sum](#). It is available from <http://www.ring.gr.jp/pub/net/gnupg/binary/sha1sum.exe>.

We like it because of its small size and it just works. If you want an alternative tool instead of [sha1sum](#), there is [HashMyFiles](#) (http://www.nirsoft.net/utils/hash_my_files.html). HashMyFiles supports MD5, SHA1, CRC32, SHA-256, SHA-384, and SHA-512 hash algorithms.

After you have downloaded [HashMyFiles](#), just run the [HashMyFiles](#) and select the file by navigating to **File | Add Files** to find out the SHA1 hash value of a file. Or, you can press *F2* to perform the same function. Then, choose the image file you want.

The following screenshot resembles the SHA1 hash value generated by [HashMyFiles](#) for the Kali Linux i386 ISO image file:



You need to compare the SHA1 hash value generated by [sha1sum](#), [HashMyFiles](#) or other similar tools with the SHA1 hash value displayed on the Kali Linux download page.

If both the values match, you can go straight to the *Using Kali Linux* section. But if they do not match, it means that your image file is broken; you may want to download the file again from an official download mirror. For this case, we can see that the SHA1 hash values match.