

Application Note

Cisco Router and Security Device Manager File Management

Introduction

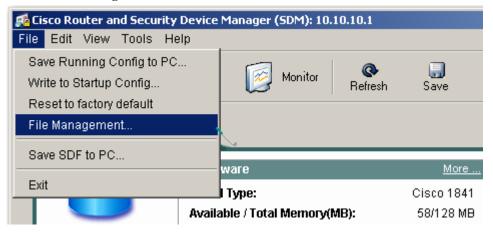
Cisco® Router and Security Device Manager (SDM) allows you to view and manage the file system on your Cisco router flash memory and on USB flash devices connected to that router. Note: Only DOSFS files systems and Cisco IOS® Software images can be viewed and managed by Cisco SDM.

File Management

USB flash file management is not included in this document. It is addressed in the Cisco SDM USB storage application note, which can be found at http://www.cisco.com/en/US/products/sw/secursw/ps5318/prod_technical_reference_list.html.

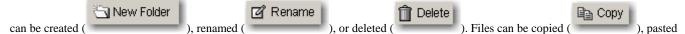
From the Cisco SDM window menu bar, click File, and select File Management... (Figure 1)

Figure 1. Launch Cisco SDM File Management



The File Management window will be displayed (Figure 2). The left side of the window displays an expandable tree representing the directory system on your Cisco router flash memory. The right side of the window displays a list of the names of the files and directories found in the directory that is chosen in the left side of the window. It also shows the size of each file in bytes, and the date and time each file and directory was last modified.

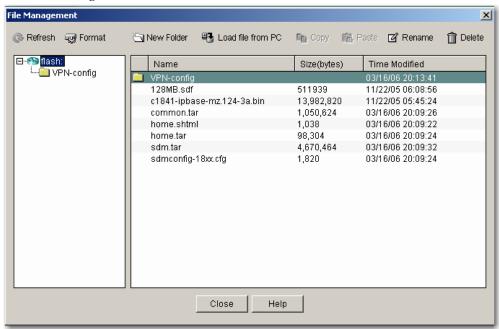
You can choose a file or directory in the list on the right side of the window and then choose one of the commands above the list. Directories





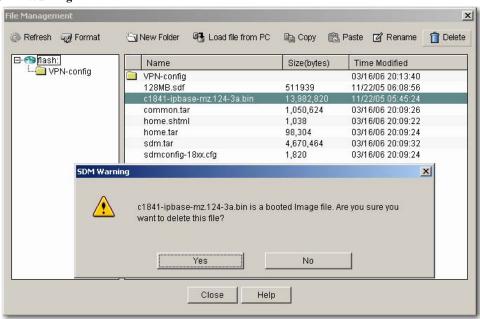
Paste), renamed, or deleted, but files cannot be pasted into the directory from which they were copied. Buttons are grayed out if the function does not apply to the selected items. Figure 2 shows that Copy and Paste do not apply to the selected VPN-config folder.

Figure 2. Cisco SDM File Management Window



Note: The user is allowed to delete the boot image. Cisco SDM will prompt the user for confirmation (Figure 3); however, the user is not allowed to rename Cisco IOS Software images.

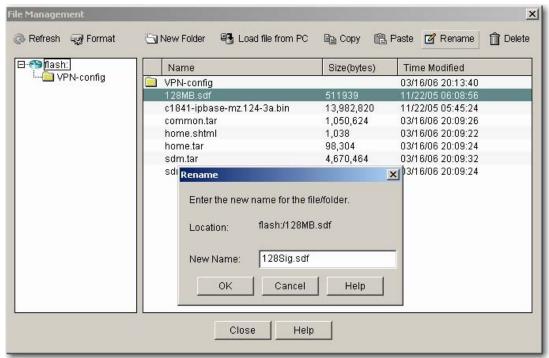
Figure 3. Cisco SDM Warning





If Cisco SDM is launched from a PC, the user is allowed to rename (Figure 4) and delete SDM files in router flash. Cisco SDM files include sdm.tar, common.tar, home.tar, and home.shtml. The user can delete the sdmconfig-xxx.cfg and .sdf files that are bundled with the Cisco SDM package.

Figure 4. Rename Cisco SDM File



If Cisco SDM is launched from a router, the user is not allowed to rename and delete SDM files.

Loading a Cisco IOS Software Image from a Local PC

Cisco SDM supports Cisco IOS Software image management; it checks router flash memory and the Cisco IOS Software image and router compatibility before loading. A Cisco 1841 Integrated Services Router is used in our example. The router runs Cisco IOS Software Release 12.4(3a)T. We will upgrade the router to Release 12.4(6)T.

In our example, c1841-advsecurityk9-mz.124-6.T.bin has been downloaded to the local PC. At the SDM/File Management window, click **Load file from PC** from the command list. Locate **c1841-advsecurityk9-mz.124-6.T.bin** from your PC directory. If the router flash memory is not enough for the new software image, you will be notified by a warning message (Figure 5).

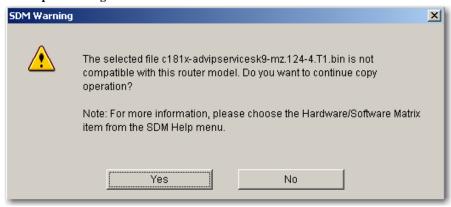


Figure 5. Warning - Not Enough Memory



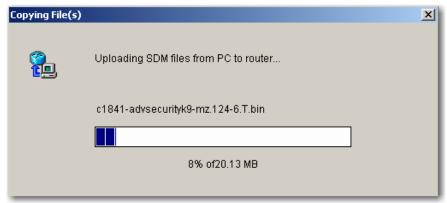
If an incompatible Cisco IOS Software image is selected, you will be prompted by a warning message (Figure 6). In this example, c181x-advipservicesk9-mz.124-4.T1.bin for the Cisco 1811 Integrated Services Router was selected instead of an image for the Cisco 1841 Integrated Services Router.

Figure 6. Warning – Incompatible Image



Once the version of the Cisco IOS Software image has been verified to be compatible, the software will be downloaded (Figure 7).

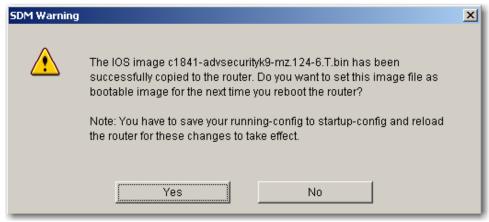
Figure 7. Copying Files



Cisco SDM will prompt to set the newly downloaded Cisco IOS Software image as the boot image (Figure 8) once the image is successfully copied to the router flash. In our example, click **Yes**.

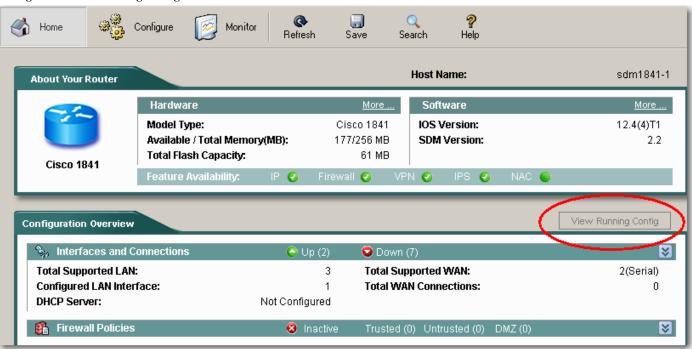


Figure 8. Boot Image



Under the **Home** tab, select **View Running Config** (Figure 9).

Figure 9. View Running Configuration



The boot system is configured with the new image, flash:c1841-advsecurityk9-mz.124-6T.bin (Figure 10).

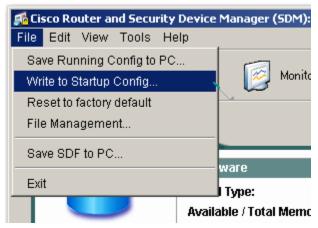


Figure 10. Show Running Configuration



Under the File menu, choose **Write to Startup Config...** (Figure 11). Exit Cisco SDM and restart the router to upgrade the router to Cisco IOS Software Release 12.4(6)T.

Figure 11. Write to Startup Configuration



Relaunch Cisco SDM when the router is rebooted.

In summary, Cisco SDM can help you easily manage router flash and upgrade Cisco IOS Software images on the router flash memory.





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