

Installation Guide for the CHEOPS Scheduling Feasibility Checker (SFC)

Issue: 1.9

Date: 27 Mar. 2023

Page: 1 / 5

To use the CHEOPS Scheduling Feasibility Checker (SFC) you first have to install and configure the software. This process is described in the following subsection. You will need a total of 15 GB of disk space to install the SFC. Yes, 15 GB ;-)

After you completed the installation process the SFC is ready to be used.

Installing the Scheduling Feasibility Checker (SFC)

Installing the CHEOPS SFC is a two-step process. First, you need to download and install the VirtualBox software. As a second step you must download and configure the SFC virtual image.

1) Installing VirtualBox

If you have VirtualBox already installed please jump to [section 2](#).

Otherwise, download and install VirtualBox for your operating system (Windows, OS X, Linux or Solaris): <https://www.virtualbox.org/wiki/Downloads>

Warning for users with Apple M1 chip sets: VirtualBox is not supported for the Apple M1 chip set. Currently, there is no remedy to this problem other than using different hardware.

Warning for OS X High Sierra (10.13) users: You may experience problems when installing VirtualBox. Please refer to the following post to fix the problem:
<https://github.com/docksal/docksal/issues/417>

Warning for Ubuntu users: If you are using Ubuntu 16 or higher, you may experience problems related to using unsigned kernel modules. Thanks to the feedback provided by a potential GO user, the problem can be solved or avoided by installing VirtualBox directly provided by Ubuntu via 'sudo apt-get install --reinstall virtualbox'. For more details, please refer to

<https://askubuntu.com/questions/777308/virtualbox-problem-kernel-module-is-not-loaded>

- especially the answer provided by user Jordan on Aug 26, 2019 at 17:53.

Installation Guide for the CHEOPS Scheduling Feasibility Checker (SFC)

Issue: 1.9

Date: 27 Mar. 2023

Page: 2 / 5

2) Importing and configuring the SFC virtual image

1. Download the virtual image containing the Feasibility Checker. The download of the 3 GB virtual image may take a while.

To download the virtual image you must use the standard **ftp-protocol** to connect to the host **ssh.esac.esa.int** with the user name **cheops_fc**. A **password** is required to download the image. This password is available via the following web page:

<https://www.cosmos.esa.int/web/cheops-guest-observers-programme/scheduling-feasibility-checker>

Please note that the access to this URL is restricted to registered users only. You must be connected to ESA's Cosmos site.

Once you are logged in via the cheops_fc account, you are in the folder where the file **cheopsfvm09.ova** can be downloaded.

Info: the connection to the ESA server requires the non-secure ftp protocol to be used. The explicit sftp-protocol will not work. As a result, you might see the message "insecure server, it does not support FTP over TLS", which you can ignore.

2. Start the VirtualBox software.
3. Open the 'File' menu item and select 'Import appliance'.

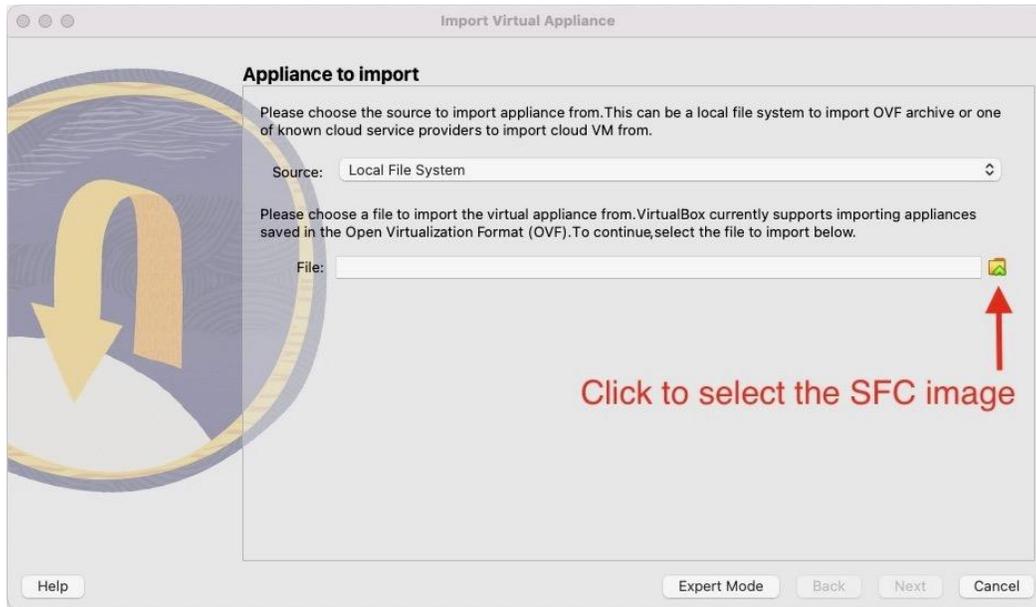
Installation Guide for the CHEOPS Scheduling Feasibility Checker (SFC)

Issue: 1.9

Date: 27 Mar. 2023

Page: 3 / 5

4. Enter the location of the SFC virtual image on your computer.



5. Click on 'Continue'.

6. Click on 'Finish'.



The import may take a while to complete.

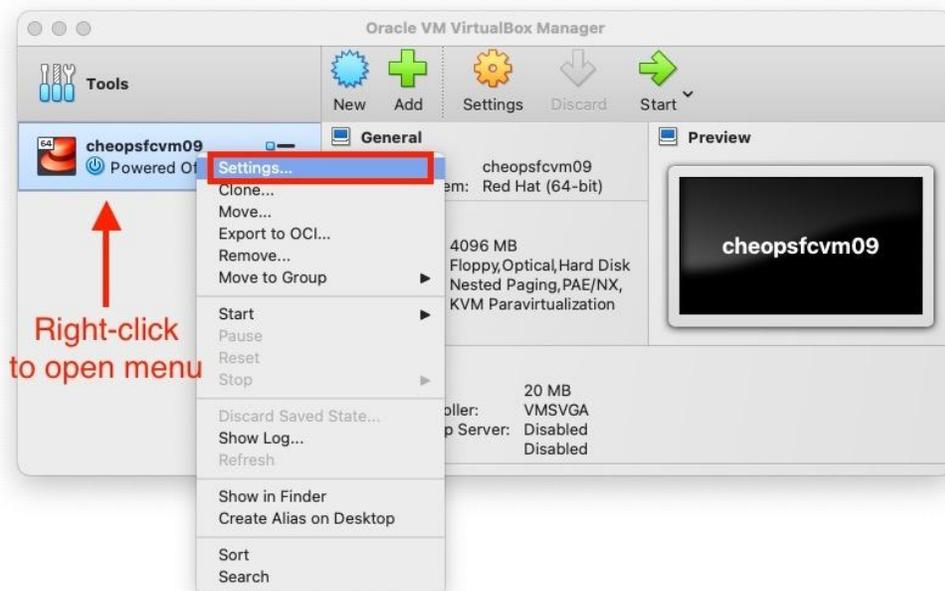
Installation Guide for the CHEOPS Scheduling Feasibility Checker (SFC)

Issue: 1.9

Date: 27 Mar. 2023

Page: 4 / 5

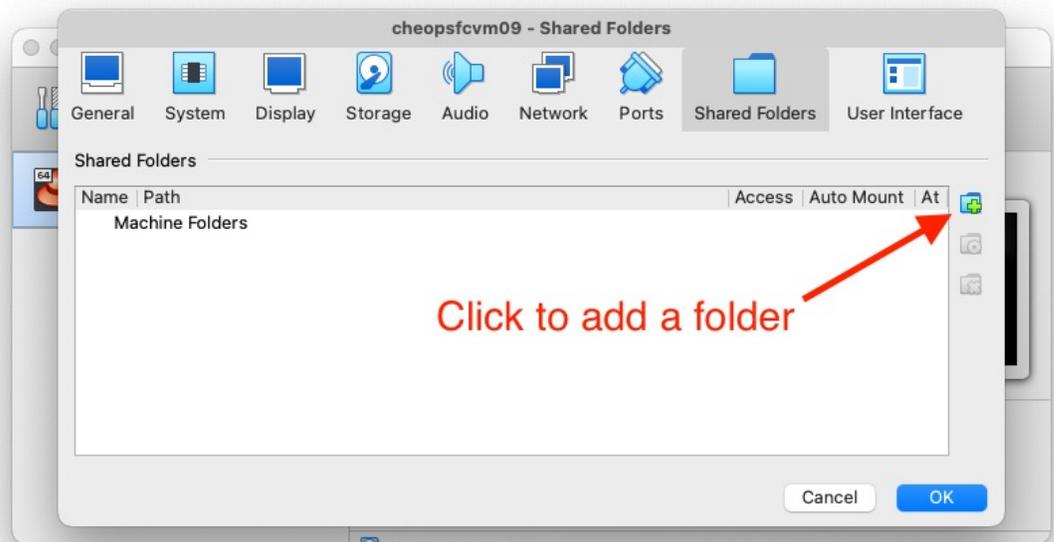
7. Define a shared folder in order to easily transfer files between your computer (host) and the SFC virtual machine (guest):
 - a. In the VirtualBox main window, open the guest machine's settings by right clicking on the SFC virtual image in the left panel of the main window.
 - b. Open the 'Settings'.



- c. Click on 'Shared Folders', then click on the "plus" icon to add a folder to be shared between the guest and the host machine. Make sure to check the "Auto-mount" checkbox. The folder will be mounted as a subdirectory of /media in the guest machine. Note: this folder should be used to provide the input data (Observation Requests) for the SFC.

Installation Guide for the CHEOPS Scheduling Feasibility Checker (SFC)

Issue: 1.9
Date: 27 Mar. 2023
Page: 5 / 5



d. Close the Settings dialog.

The SFC virtual image is now ready to be used.