


Using the BR IFIC (Space services) ISO image

The ISO image of the BR IFIC (Space services) can be downloaded from the ITU Publications page

<http://www.itu.int/pub/R-SP-LN.IS>

For each BR IFIC (Space services) edition there are two files available for download:

	 2762 - 04.02.2014 (ISO copy)	38673	600 CHF	ADD	
	2762 - 04.02.2014 (SHA-1 Checksum)		Free of charge	DOWNLOAD	

- The first file is a compressed (zip) copy of the ISO image of the BR IFIC (Space services).
- The second file (marked SHA-1 checksum) contains a checksum that can be used to verify the authenticity of the ISO image and it is optionally needed.
- To access the contents of the BR IFIC (Space services), only the first (zip) file is needed.
- Once the zip file has been fully downloaded it needs to be uncompressed. There are several programs available that can uncompress zip files. In case you do not have already one installed on your system, you may use the default tools coming with the Windows (or other operating systems).
- The uncompressed ISO image size is close to 3GB and sufficient free disk space is required for the successful use of it.

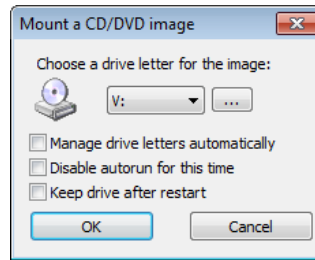
Manipulating the BR IFIC (Space services) ISO image

After the ISO image is downloaded it can be either mounted as a virtual DVD drive, or it can be burnt onto physical DVD media. The easiest way to proceed is mounting the image on a virtual drive on as needed basis.

There are several tools available on the internet that can mount ISO images. If you have a DVD writer drive, chances are that you have already the necessary tools installed on your system. Alternatively, you may use WinCDemu (Windows CD emulator) available here

<http://wincdemu.sysprogs.org/>

After the installation has finished, double-click on the ISO file. The following dialog will appear:



The system offers an unallocated drive letter to be used with the virtual drive and the mounted image. Clicking on the OK button, a new drive will be created and the image file will be mounted like a normal DVD drive.

Right clicking on the drive letter or double clicking on the ISO filename, will offer the options to either eject the image or unmounts it.

Verifying the Authenticity of the BR IFIC (Space services) ISO image file

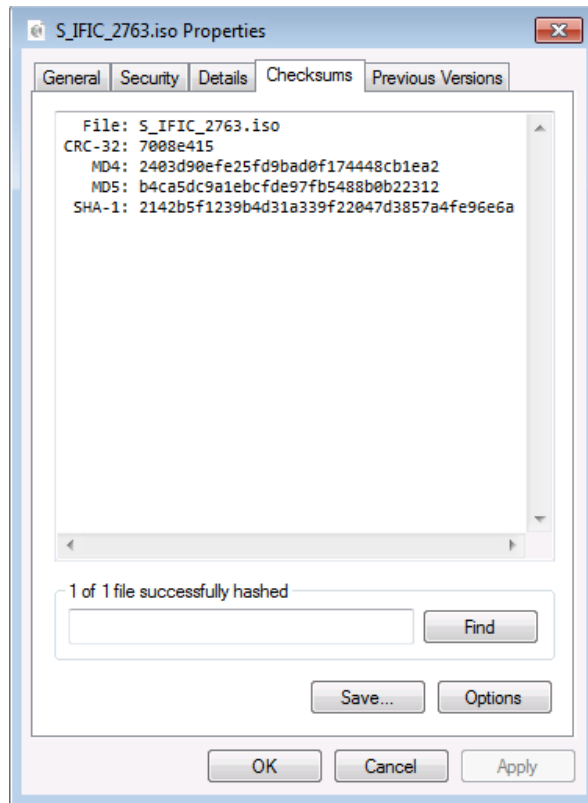
A downloaded BR IFIC (Space services) ISO image file can be verified to be authentic with the master copy issued by the Bureau. This is achieved by downloading the SHA-1 checksum file from the publications page of the BR IFIC (Space services).

A SHA-1 checksum will have to be calculated for the local copy of the ISO image and then compared with the checksum downloaded from the ITU servers.

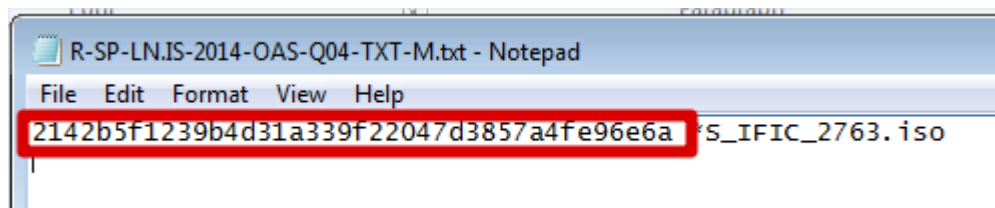
There are several tools available to calculate checksums of files. A free tool for this purpose is the **HashCheck Shell extension**, available at:

<http://code.kliu.org/hashcheck/>

After the tool has been installed, right-click on the ISO image file and select the *Properties* menu entry. There will be a new Tab at the top called Checksums. Clicking on the checksums tab, it will start the checksum generation process of the file of which we selected its properties. Please note that this will take some time and that a progress bar is available at the bottom of the screen. When the checksum is generated the screen will look like this:



The checksum that we will be comparing with, needs to be copied from the downloaded checksum file



and inserted in the text box at the bottom of the screen.

A successful match will highlight with blue colour the SHA-1 checksum

An unsuccessful match will be indicated with a message from the HashCheck tool.

Common Problems

A successful download of the ISO zip file will always lead to a zip file that can successfully decompressed. If the unzipping the file results into errors, very likely the transfer was interrupted and the file was not fully downloaded.

Disk problems may further corrupt the downloaded and uncompressed image. It is important that in any doubt of the integrity of the ISO image to verify the authenticity with the procedure described above.