How to Maintain the ROC Toolkit Code Repository

*By Robbie Pearson*

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# Introduction:

The ROC Toolkit utilizes HCPAnywhere to host both the Microcode upgrade files and a repository text file which contains links to those upgrade files. When the Toolkit is run, it downloads a copy of this repo to the SVP and references information regarding code availability, links to code files and MD5 hash.

When editing and updating the code repo, it is recommended to use the HCPAnywhere desktop sync application and browse to the directory where the “code\_repo.txt” file resides. It is also recommended to use a decent text editor such as Notepad++.

# Repository Format:

Firstly, the repository is located at:

HCP Anywhere\ROC\_Firmware\_Microcode\Toolkit\code\_repo.txt

The top section of the repository is important and must **not** be changed at all.

Starting at line 10, you will find the current Hi-Track version, the formatting of this line is important so please speak with me if this needs to be updated.

At line 12, you will find the list of available code versions and their respective array type as seen below. This is used for the Toolkit drop down selection.

HUS-VM:

|73-03-63||73-03-62|73-03-60

VSP:

|70-06-60||70-06-59|70-06-58

G1x00:

|80-06-65||80-06-63|80-06-62

Gx00:

|83-05-29||83-05-28|83-05-27

Suggested format is newest code to oldest (left to right). Note the pipe character “|” This is used to separate the code versions and each line must start with a pipe. The double pipe “||” is placed after the most recent version and is used for the tool to auto-select the most recent code version after selecting the array type.

Line 21 is the start of the code file links in sections: HUS-VM, VSP, G1x00 and Gx00. Each section contains the code versions from newest to oldest, followed by the latest SVP security file for the different flavors of Windows.

Within each code section, the format is as follows:

Code version “73-03-63”

<Link to Microcode ISO>

MD5 hash for Microcode ISO

<Link to OSS ISO>

MD5 hash for OSS ISO>

<Link to ExportTool.zip>

“EOF”

The very bottom of the repo contains links for both latest Hi-Track and ImDisk. Please do not change these.

# File[name] structure:

*Note: Please avoid spaces in filenames.*

## Code Version:

We have decided to **prepend** the code version to the beginning of both the Microcode ISO and the export tool. For example:

Code version: **73-06-63**

Original ISO filename: **H7-03-70\_ECN\_M097.iso**

New ISO filename: **73-03-63\_H7-03-70\_ECN\_M097.iso**

## OSS:

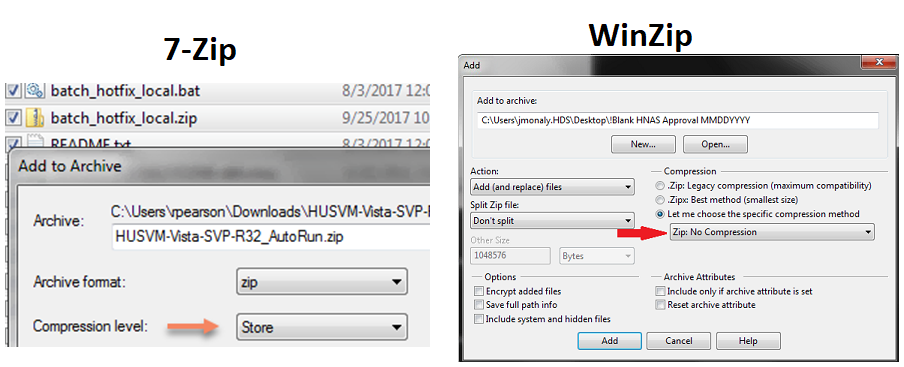
OSS remains untouched as OSS is not code level dependent.

## Export Tool:

The export tool needs to be extracted out of the Customer Tools ISO and the folder contents then need to be zipped up as to **not be nested within another folder**. The .zip filename should also have the code version prepended like so: “73-06-03\_ExportTool.zip”

## SVP Security Files:

We need to extract the AutoRun folder from within the SVP Security ISO. The folder contents then need to be zipped up as to **not be nested within another folder**. Also, when zipping the contents of the AutoRun directory, select a compression level of “Store”. The update packages are already compressed so it is unnecessary to compress the files once more…and it’s much quicker to unzip when the contents are only “stored” within the resulting zip file.

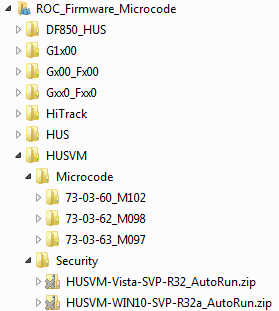


The .zip filename should be the original SVP Security ISO with “\_AutoRun” appended. The suggested workflow here is:

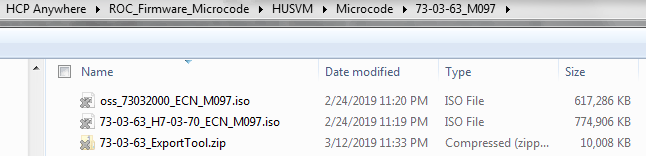
1. Download SVP Security ISO: HUSVM-Vista-SVP-R32.iso
2. Open with 7zip and extract the AutoRun folder: 3-AutoRunVista
3. Rename this ^ folder to: HUSVM-Vista-SVP-R32\_AutoRun
4. Open folder and select all
5. Right click selection and (using 7zip) click Add to archive…
   1. Note the resulting zip filename should match the parent directory folder name we just renamed
6. Select Compression level
   1. 7-Zip set Compress Level to “Store”
   2. Winzip use the Let me choose the specific compression method and set it to “Zip: No Compression”
7. Click OK

# HCPAnywhere folder structure:

Under the “ROC\_Firmware\_Microcode” share, you will find folders of each array type. Within the array type folder is a Microcode and Security folder. The Security folder only contains the latest SVP security zip for each flavor of Windows. The Microcode folder will contain a new folder for each code version with the ECN number appended.

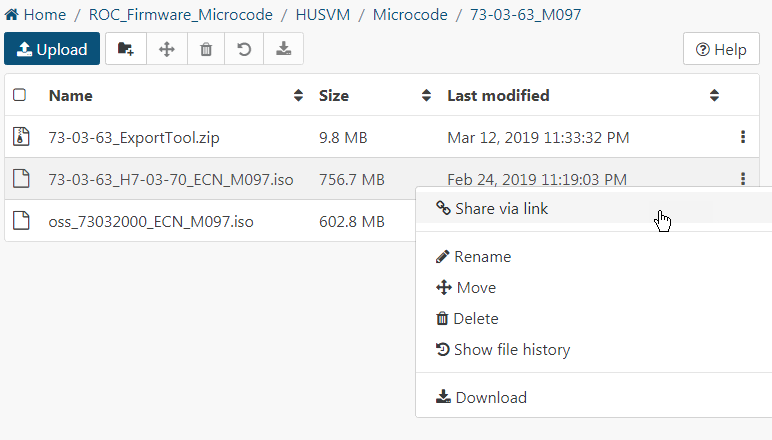


Each Microcode level folder will then contain the Microcode ISO, OSS ISO and export tool.



# Generating Links and MD5:

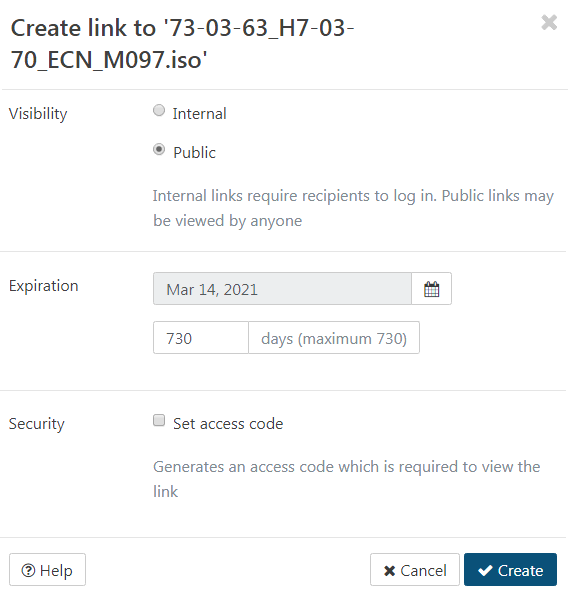
Using the HCPAnywhere Website, navigate to the file you need to create a link for and click the 3-dot menu button followed by “Share via link”



Visibility: **Public**

Expiration: **730 Days**

Security: **None**



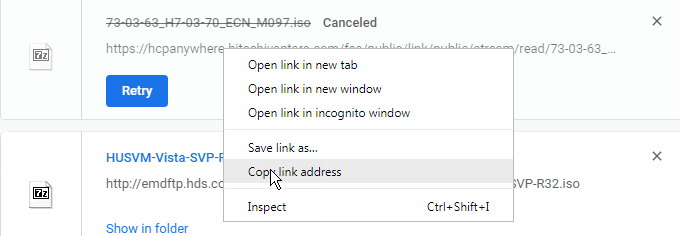
Copy the resulting link which should look something like this:

<https://hcpanywhere.hitachivantara.com/u/pnLhrs1y4XS0cuGk/73-03-63_H7-03-70_ECN_M097.iso?l>

Now, the Toolkit requires **direct links** to the files to work and these links ^ are not since they bring you to a webpage for you to click the download button. That download button does not provide the direct link either.

The fastest way I’ve come up with to retrieve the direct link is:

1. Open the download page for the newly created link and start the download.
2. Once the download is started, navigate to the web browser’s download manager (in this case Chrome)
   1. Ctrl+J **or** type “chrome://downloads” in the address bar
3. Cancel the download
4. Right click on the item and click “Copy link address”



Now you should have the direct link copied to your clipboard and it will look something like this:

<https://hcpanywhere.hitachivantara.com/fss/public/link/public/stream/read/73-03-63_H7-03-70_ECN_M097.iso?linkToken=pnLhrs1y4XS0cuGk&itemName=73-03-63_H7-03-70_ECN_M097.iso>

The MD5 hash is copied from TISC for the corresponding file and placed under the link in the repo as seen in the Repository Format section of this document. The tool currently only supports verifying MD5 for the Microcode ISO and OSS ISO.