UEFI-VT

Installation

# Installation

## Installation Media

The installation media can be found under the folder ‘setup-files’.

This guide assumes that the user has a 64-bit Windows Operating System. If your operating system is not as previously mentioned, adapt from the guide as necessary. This guide was written in February 2018.

The software to be downloaded are as follows:

1. Python 2.7
2. NodeJS 8.9.4
3. Windows Driver Kit
4. MySQL Server
5. MySQL Workbench
6. OPTIONAL: Google Chrome (viewed best in Chrome)
7. OPTIONAL: A text editor e.g. Notepad++, Visual Studio Code, Sublime Text

## INSTALLING PYTHON 2.7

1. Under the folder ‘<installation\_directory>\UEFI-VT\setup-files’, run the executable file named ‘python-2.7.14.amd64.msi’
2. Select ‘Install for all users’ or ‘Install just for me’ depending on your computer usage
3. Keep the default destination directory and click Next
4. In the ‘Customize Python 2.7.14 (64-bit)’ window:
   1. Scroll down and select ‘Will be installed on local hard drive’ for the option ‘Add python.exe to path’ and click Next
5. Click Finish to complete installation
6. Installation is complete

## INSTALLING CHIPSEC

1. Refer to the CHIPSEC manual ‘<installation\_directory>\UEFI-VT\chipsec\chipsec-manual.pdf’ if needed
2. Open Command Prompt as Administrator
3. In Command Prompt, run ‘python <installation\_directory>\UEFI-VT\setup-files\get-pip.py’
4. Run ‘pip install pywin32’
5. Refer to the CHIPSEC readme ‘<installation\_directory>\UEFI-VT\chipsec\drivers\win7\readme’ if needed
6. Download WDK from <http://www.microsoft.com/en-us/download/details.aspx?id=11800>
7. Open the file that has been downloaded, ‘GRMWDK\_EN\_7600\_1.iso’.
   1. In the opened folder, run KitSetup.exe
      1. Under the ‘Features’ window, select all the checkboxes and click Install
      2. When prompted, select Download this feature (.NET Framework 3.5)
8. Open the WDK build environment command prompt named ‘x64 Checked Build Environment’ as Administrator
9. In the Build command prompt, cd to ‘<installation\_directory>\UEFI-VT\chipsec\drivers\win7’
10. Run ‘build -cZg’
11. Run ‘makecert -r -n "CN=Chipsec" -ss ChipsecCertStore -sr LocalMachine’
12. Copy the file ‘chipsec\_hlpr.sys’ found in ‘<installation\_directory>\UEFI-VT\chipsec\drivers\win7\sys\amd64’ and paste it in ‘<installation\_directory>\UEFI-VT\chipsec\drivers\win7\sign’
    1. Replace file found in destination
13. Run ‘sign64\_sys.bat’ to sign the ‘chipsec\_hlpr.sys’ file
14. If any error or warning message is returned, modify ‘sign64\_sys.bat’ as stated and re-run ‘sign64\_sys.bat’
15. Copy the file ‘chipsec\_hlpr.sys’ to ‘<installation\_directory>\UEFI-VT\chipsec\chipsec\helper\win\win7\_amd64’
    1. Replace the file found in destination
16. Refer to Chipsec Manual (UEFI-VT\chipsec\chipsec-manual.pdf) from Step 6 onwards if needed
17. Open Command Prompt as Administrator
18. Run the following commands:
    1. bcdEdit /set TESTSIGNING ON
    2. bcdEdit /set noIntegrityChecks ON
    3. bcdEdit /set loadoptions DISABLE\_INTEGRITY\_CHECKS
19. Restart the computer
20. Open Command Prompt as Administrator
21. Run ‘pip install <UEFIVT\_home\_directory>\mysqlclient-1.3.12-cp27-cp27m-win\_amd64.whl’
    1. E.g. ‘pip install C:\Users\User\Desktop\UEFI-VT\mysqlclient-1.3.12-cp27-cp27m-win\_amd64.whl’
22. Installation is complete

## INSTALLING NODEJS

1. Under the folder ‘<installation\_directory>\UEFI-VT\setup-files’, run the executable file named ‘node-v8.9.4-x64.msi’
2. Open Command Prompt
3. Cd to ‘<installation\_directory>\UEFI-VT’
   1. E.g. C:\Users\User\Desktop\UEFI-VT\
4. Run ‘npm install’

## INSTALLING MYSQL

1. Under the folder ‘<installation\_directory>\UEFI-VT\setup-files’, run the executable file named ‘mysql-installer-web-community-5.7.21.0.msi’
2. Select ‘Developer Default’
3. Select Execute
4. Select Next until selection of password
5. Choose ‘p@ssw0rd’
6. Select Next until Apply Config page
7. Select Execute
8. Under the folder ‘<installation\_directory>\UEFI-VT\setup-files’, run the executable file named ‘mysql-connector-python-2.1.7-py2.7-windows-x86-64bit.msi’
9. Open MySQL Workbench
10. Under the ‘Schemas’ tab in the sidebar, delete any existing schemas
11. Go to File > Run SQL Script
12. Select ‘createSchema.sql’ under the folder ‘<installation\_directory>\UEFI-VT\setup-files’
13. Click the Refresh button under the Schema tab to see the database table
14. Installation is complete

# Running the Web Application

1. Open Command Prompt as Administrator
2. Cd to source folder ‘<installation\_directory>\UEFI-VT’
3. Run ‘npm start’