## Dual Boot PC (Windows and Ubuntu) with UEFI

- 1. Disable Fastboot in Windows Power settings
  - Search for and open "Power options" in the Start Menu.
  - Click "Choose what the power buttons do" on the left side of the window.
  - Click "Change settings that are currently unavailable."
  - Under "Shutdown settings" make sure "Turn on fast startup" is enabled
- 2. Check which drive has more than 100GB free space and select which drive to shrink
- 3. Defragment that drive first
  - Select your hard drive and click Analyze.
  - Check the percentage of fragmented files in the results
  - Click on defragment this drive and wait till process completes (this takes a lot of time)
  - When Windows is done, your drive should say 0% fragmented in the Optimize Drives utility.
- 4. Unallocate partition from that drive
  - Open Disk Management and right click on the partition you want
  - Select the "Shrink Volume" option
  - In option enter amount to shrink put 102400MB (for 100 GB Linux partition)
  - Click on "Shrink" and wait
  - You should get something like this

Disk 0				
Basic 465.76 GB Online	<b>Win7_Pro (C:)</b> 245.62 GB NTFS Healthy (Boot, Page File, Crash Dump	200.00 GB Unallocated	Recovery (D:) 20.04 GB NTFS Healthy (Primary Partition)	

5. Create bootable Ubuntu pendrive using Rufus software

- Download Ubuntu 16.04 ISO image from official site
- Extract file if downloaded in .rar format
- Download Rufus software
- Open Rufus.exe (no need to install)
- Insert your USB stick
- Rufus will update to set the device within the Device field
- If the Device is incorrect, select the correct one from the device field's drop-down menu
- When asked select path to Ubuntu iso file
- Select MBR partition for UEFI
- Click OK and say yes to Hybrid image
- Wait till process is done
- 6. Boot into BIOS mode
  - Shut down Windows
  - Press Power On button and quickly press startup pause button (usually escape or F12)
  - Go to BIOS settings and disable Secure boot

Main Security System Configuration Exit	InsydeH20 Setup L
Language	<eng i="" sh=""></eng>
Virtualization Technology	<enab ed="" i=""></enab>
Card Reader Power Saving	<enab ed="" i=""></enab>
Fan Always On	<enab ed="" i=""></enab>
Action Keys Mode	<enab ed="" i=""></enab>
*Boot Options	<enab ed="" i=""></enab>

## InsydeH20 Setup Utility

<Enabled> <Disabled>

<Disabled> <Enabled> Enrolled None

<IPv4+IPv6 (UEFI)

<0>

## System Configuration

Boot Options	
POST Hotkey Delay (sec)	
CD-ROM Boot	
Internal Network Adapter Boot	
Network Boot Protocol	
Legacy Support	
Secure Boot	
Platform Key	
Pending Action	
Clear All Secure Boot Keys	
Load HP Factory Default Keys	
UEFI Boot Order	
▶ OS boot Manager	
Internal CD/DVD ROM Drive	
USB Diskette on Key/USB Hard Disk	
USB CD/DVD ROM Drive	
! Network Adapter	
Legacy Boot Order	

Notebook Hard Drive Internal CD/DVD ROM Drive USB Diskette on Key/USB Hard Disk USB CD/DVD ROM Drive ! Network Adapter

- Save and exit
- Again go into BIOS settings
- Select "boot from" options menu
- Select your USB drive and press enter
- Ubuntu installation will start

## 7. Ubuntu installation

- Select Install Ubuntu
- Check Install Third party software
- Next screen will show something like this

This computer	currently has Window	8 on it. What wou	ıld you like to o	do?				
	buntu alongside Wind ts, music, and other perso		bu can choose wh	hich operating syste	m you want each	time t <b>()</b> co	mputer starts up	
	Windows 8 with Ubur This will delete all of your		documents, phot	os, music, and any o	ther files.			
	the new Ubuntu instal hoose a security key in the							
	t with the new Ubuntu et up Logical Volume Mana		ing snapshots and	easier partition res	izing.			
O Someth	ing else reate or resize partitions y	ourself, or choose mu	tiple partitions fo	or Ubuntu.				

- Always select Install alongside Windows and click on Install now (If this option is not shown seek help)
- Further options are fairly easy and just follow on screen instructions

- 8. Next Steps
  - After completion installation shut down computer
  - Press power button and following possible things will happen
    - i. Windows will directly boot up
    - ii. GRUB screen will appear showing OS selection menu where windows and Ubuntu is listed Your Dual boot is successful
  - For people who had Windows direct boot up:
    - i. When you are in Windows desktop, hover the mouse in left corner, right click and select administrator's command prompt
    - ii. Then run the following command:
      - bcdedit /set "{bootmgr}" path \EFI\ubuntu\grubx64.efi
    - iii. Shut down PC and restart
    - iv. GRUB screen will appear showing OS selection menu where windows and Ubuntu is listed Your Dual boot is successful