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	System Res 100 MB NTF Healthy (Sys	Win7_Pro (C:) 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

	InsydeH20 Setup		
nain Security System Configuration Exit			
Language	<english></english>		
Virtualization Technology	<enabled></enabled>		
Card Reader Power Saving	<enabled></enabled>		
Fan Always On	<enabled></enabled>		
Action Keys Mode	<enabled></enabled>		
▶Boot Options			

InsydeH20 Setup Utility

<Enabled> <Disabled>

<<u>Disabled></u> <<u>Enabled></u> Enrolled None

<IPv4+IPv6 (UEF1)

<0>

System Configuration

Boot Options
POST Hotkey Delay (sec)
CD-ROM Boot
Internal Network Adapter De L
Hiterial Metwork 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

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

! Network Adapter

- 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 Windows 8	on it. What would	you like to do?				
O Install U Documer	buntu alongside Windov ts, music, and other personal	rs 8 files will be kept. You o	an choose which ope	rating system you w	vant each time t🏠	computer starts up	
Replace Warning:	Windows 8 with Ubuntu This will delete all of your Win	dows 8 programs, doc	uments, photos, mus	ic, and any other file	н.		
The will of the second	the new Ubuntu installat hoose a security key in the ne	ion for security d step.					
Use LV/ This will s	d with the new Ubuntu in et up Logical Volume Manage	stallation ment. It allows taking r	napshots and easier	partition resizing.			
O Someth	ing else reate or resize partitions your	self, or choose multipl	e partitions for Ubun	tu.			

- 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