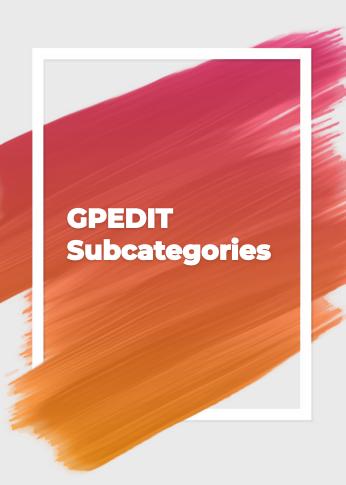
5.5-5.8 Advanced Security

PART II

5.5 GPEDIT in Depth



Computer Configuration
User Configuration



Software Settings

Not a big concern

Windows Settings

 Includes LSP, firewall, startup/shutdown scripts

Administrative Templates

 The restrictive settings you all know and love



Control Panel

Network

Printers

Server

Start Menu and Taskbar

System

Windows Components



Control Panel

Network

<u>Printers</u>

Lock screen settings

Language and input

Other non important ones

A bunch of network related settings

Important considerations include:

DNS k
Network s
Connections
(Firewall)

Printer settings

<u>Server</u>

Some backup settings



Start Menu and Taskbar

More interesting settings

System

Important considerations include:

Logon

Remote Assistance Windows Components

Majority of security settings here

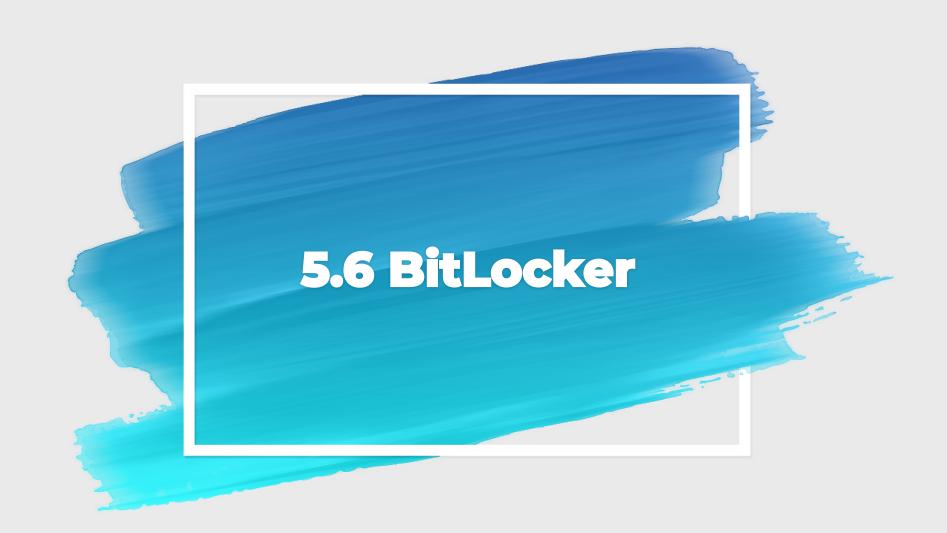
Recommended to check each subcategory for yourself

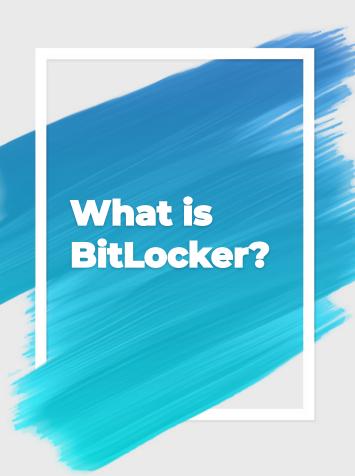
There's BitLocker, Internet Explorer, Windows Update, and much more

Start Menu and a tiny Notifications

setting

Not really important





Encrypts your hard drive

Set up requires a Trusted Platform Module

 Since not provided in VMs, you'll have to set a setting in GPEDIT to ignore that

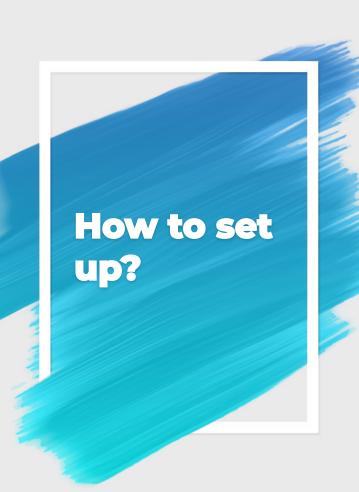
Server versions require you to install the feature first



Windows Components > BitLocker
Drive Encryption > Operating
System Drives > Require additional
authentication at startup

Enable it and check the "Allow BitLocker without a compatible TPM"





You'll need to provide a password or a USB to gain access to the drive, and you'll be asked to set up a recovery key - use a USB or "fake print"

DO NOT MESS UP HERE!!! You may accidentally lock yourself out of your computer if you don't have the password/USB you used.



BitLocker will do its magic

After a while, you may be asked to restart to make changes

When restarting, you'll be greeted with a blue prompt if you chose the password route

Afterwards, you can log in to the computer normally

BitLocker

Enter the password to unlock this drive

Press the Insert key to see the password as you type.

Press Enter to continue Press Esc for BitLocker recovery

5.7 Program Security

Programs have their individual security settings

Each program may come equipped with security settings that you can set to improve security



Most of the time, these settings are found by your own exploration.

Settings are generally found under Edit > Preferences - can vary

Google for the right place for settings



Many commonly used programs will have forums or some documentation outlining secure settings

Take advantage of these sites!

Ex: Google "Filezilla hardening"

5.8 Network Security

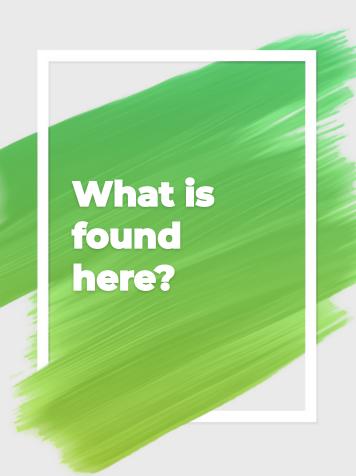


Control Panel\Network and Internet\Network and Sharing Center

- → ▼ ↑ 🛂 > Control Panel > Network and Internet > Network and Sharing Center

File Edit View Tools

Control Panel Home View your basic network information and set up connections



Network settings - WiFi, access type, connection method

You can change adapter settings and advanced settings





Ethernet 2

Network cable unplugged TAP-Windows Adapter V9



Ethernet 6

Network cable unplugged TAP-Windows Adapter V9 #5



Ethernet 3

Network cable unplugged TAP-Windows Adapter V9 #2



Ethernet 7

Network cable unplugged TAP-Windows Adapter V9 #6



Ethernet 4

Network cable unplugged TAP-Windows Adapter V9 #3



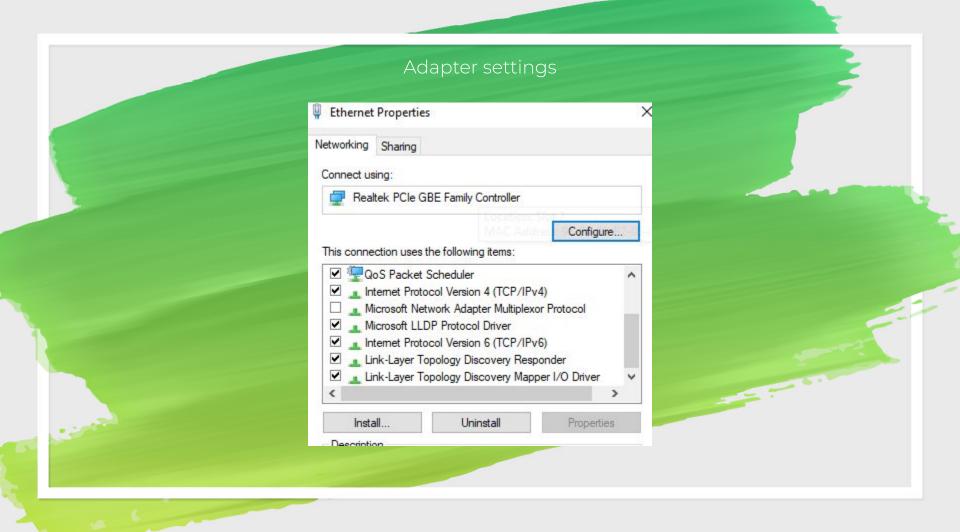
Ethernet 8

Network cable unplugged TAP-Windows Adapter V9 #7



You can configure which adapters are enabled/disabled for Internet connections

Checking the properties of an adapter will allow you to set settings for that





Install/uninstall connection items

 If you are unsure about this, it's better to not screw up your connection

Manage properties of connections

IPv4 Properties Internet Protocol Version 4 (TCP/IPv4) Properties General Alternate Configuration You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. Obtain an IP address automatically Ouse the following IP address: IP address: Subnet mask: Default gateway: Obtain DNS server address automatically Ouse the following DNS server addresses: Preferred DNS server: Alternate DNS server: Validate settings upon exit Advanced...

OK

Cancel

ettings DNS VI P addresses	/INS		
IP address DHCP Enabled		Subnet mask	
-	Add	Edit	Remove
efault gateways:			
Gateway		Metric	
5	Add	Edit	Remove
Automatic metric			

OK

Cancel



If you ever need to double-check or set IP addresses or DNS server addresses, here is where you go to



For each profile, configure the option that makes the most sense

Most of these are common sense, don't worry

Assuming no files are to be shared, is this setting correct?

File and printer sharing

When file and printer sharing is on, files and printers that you have shared from this computer can be accessed by people on the network.

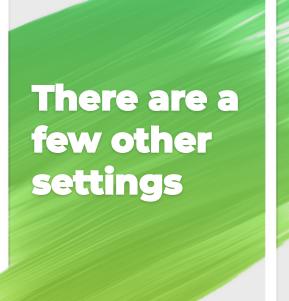
- Turn on file and printer sharing
- Turn off file and printer sharing

To have a password or not to have one ...?

Password protected sharing

When password protected sharing is on, only people who have a user account and password on this computer can access shared files, printers attached to this computer, and the Public folders. To give other people access, you must turn off password protected sharing.

- Turn on password protected sharing
- Turn off password protected sharing



Some settings even provide you the recommended choice

Simple configuration, no wacky settings here

