

16/17

BitLocker Encryption – User Guide



This document provides guidance for users of the BitLocker Encryption software installed on University of Wolverhampton managed staff devices as part of the Information Security Project 2016/17 rollout.

Further guidance and assistance can be obtained by contacting the ITS Service Desk (ext.2000).



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DESKTOP BITLOCKER ENCRYPTION – PROCESS

BitLocker hard drive encryption will be scheduled for activation on your device as part of a planned rollout to all staff laptops. The following screen will be displayed allowing the process to begin:

Nicrosoft BitLocker Administration and Monitoring		
BitLocker drive encryption is required to help secure the data on drive C: • You can delay until 23/12/2015 09:08:50. • You can work as usual while this runs in the background. • Encryption can take several hours, depending on the disk size. • We will require some information from you, which will take only a few minutes. Learn About Company Security Policy BitLocker Overview	ł	You can select the Postpone option to delay the encryption process, however after a period of 21 days have passed the Postpone button will deactivate and you will only have the option to start the process

 Select Start to commence the process and the following Configuration – Restart Required screen will be displayed

 Microsoft BitLocker Administration and Monitoring Configuration Restart Required To enable BitLocker, must restart your computer. 1. Save your work and close all applications. 2. Click 'Restart now'. 3. Follow the instructions in the BitLocker Encryption wizard. Important: When your computer starts again, you are presented with a non-Windows system message that lets you enable the TPM chip in your computer. Enable this feature to continue with BitLocker drive encryption. Restart now 	ł	This screen tells you that when your computer is restarted you will need to enable a device change to allow BitLocker drive encryption process to continue
Cancel		

2) Select Restart Now



3) Upon a restart you <u>may</u> be presented with a similar screen to one show below, follow the instructions provided on the screen to continue the process of encrypting your device:



4) When you log back in the encryption process will have started for which you will be presented with the following screen:

Encryption		Close this window
Encrypting C:	Learn About Company Security Policy BitLocker Overview	and the encryptior process will
 Encrypting the disk may take several hours depending on disk size. You can continue to use your computer during the encryption process. 		continue in the background.
 If your computer is turned off, encryption resumes when the computer restarts. Computer should remain plugged in during encryption. (Recommended) 		Continue using the device whilst
		encryption is taking place.
		Shutdown and
		restart your device as required. The process will
	Close	continue next time the device is





How long this takes is dependent on various factors including:

- > The size of the hard drive
- > The amount of data stored on the disk
- > The age of the machine
- 5) You will see with one of the following prompts when the encryption process has successfully completed:

ſ	Re BitLo	cker Drive Encryption	×
	R	Encryption of C: is complete.	
			Close

Click Close

OR

Learn About Company Security Policy BitLocker Overview

Click Exit



LAPTOP BITLOCKER ENCRYPTION - PROCESS

*Ensure your laptop is connected via the mains power before continuing

BitLocker hard drive encryption will be scheduled for activation on your device as part of a planned rollout to all staff laptops. The following screen will be displayed allowing the process to begin and will appear every 90 minutes if postponed.

🙀 Microsoft BitLocker Administration and Monitoring	You can select
 BitLocker drive encryption is required to help secure the data on drive C: You can delay until 23/12/2015 09:08:50. You can work as usual while this runs in the background. Encryption can take several hours, depending on the disk size. We will require some information from you, which will take only a few minutes. Learn About Company Security Policy BitLocker Overview 	the Postpone option to delay the encryption process, however after a period of 21 days have passed the Postpone button will deactivate and you will only have the option to start the
Postpone Start	process

 Select Start to commence the process and the following Configuration – Restart Required screen will be displayed

Microsoft BitLocker Administration and Monitoring	
Configuration	
Restart Required To enable BitLocker, must restart your computer. 1. Save your work and close all applications. 2. Click 'Restart now'. 3. Follow the instructions in the BitLocker Encryption wizard. Important: When your computer starts again, you are presented with a non-Windows system message that lets you enable the TPM chip in your computer. Enable this feature to continue with BitLocker drive encryption.	This screen tells you that when your computer is restarted you wis need to enable a device change to allow BitLocker drive encryption process to continue
Cancel	

2) Select Restart Now



3) After your laptop restarts a screen similar to the following will be presented:



- 4) BitLocker is requesting permission to make the required configuration changes to your laptop, press F10 to allow the changes to be made.
- 5) Your device will restart and load Windows, when it has done this log into your device as normal.
- 6) Once you have logged onto your laptop you will be prompted with the **Configuration Welcome Back** screen:

Microsoft BitLocker Administration and Monitoring	1
Configuration	
Welcome back Additional information is needed to keep your data secure. Click Next to continue. What is this? Learn About Company Security Policy BitLocker Overview	If you would like to learn more about BitLocker there are two links provided for further information namely Computer Security Policy and BitLocker Overview.
Cancel	

7) Select Next to proceed



8) You will be presented with the following **Configuration – Create PIN for C:** screen:

Ricrosoft BitLocker Administration and Monitoring		
Configuration		
Create PIN for C: To keep your data secure, BitLocker requires that you enter a PIN each time you start your computer. Your PIN must contain only 4-20 numbers. Do not use repeating numbers such as 1111 or sequential numbers such as 1234.	Learn About Company Security Policy BitLocker Ovenview Using your PIN	
PIN Confirm PIN		This screen will guide you in creating a
→ Create PIN		BitLocker PIN
	Cancel	

- 9) Please enter a numeric 4-digit PIN in both fields
- NOTE: repeating numbers such as 1111 or sequential numbers such as 1234 are NOT allowed
- 10) Click Create PIN and the encryption process will begin as per the following screenshot:

Microsoft BitLocker Administration and Monitoring Encryption		YOU MAY
 Encrypting C: Encrypting the disk may take several hours depending on disk size. You can continue to use your computer during the encryption process. If your computer is turned off, encryption resumes when the computer restarts. Computer should remain plugged in during encryption. (Recommended) 	Learn About Company Security Policy BitLocker Overview	and the encryption process will continue in the background. Continue using the device whilst encryption is taking place.
	Close	Shutdown and restart your device as required. The process will continue next time the device is





- 11) How long this takes is dependent on various factors including:
 - > The size of the hard drive
 - > The amount of data stored on the disk
 - > The age of the machine
- 12) You will see with one of the following prompts when the encryption process has successfully completed:



Click Close

<u>OR</u>

Microsoft BitLocker Administration and Monitoring	
Encryption	
Successfully Encrypted C:	Learn About
	Company Security Policy BitLocker Overview
Things to remember:	
 Your PIN is confidential. Keep your PIN in a safe place away from your computer. 	
 If you lose your PIN, contact your help desk. 	
 To reset your PIN, open Control Panel, select System and Security, and then click BitLocker Encryption Options. 	
➔ Exit	

Click Exit





LAPTOP BITLOCKER ENCRYPTION - LOGON

Once your laptop has been encrypted, every time you power on you will be presented with the **Windows BitLocker Drive Encryption PIN Entry** screen, as shown here:



If you input an incorrect PIN the laptop will display the **Windows BitLocker Drive Encryption PIN Incorrect** screen:



Try again by pressing Enter or select ESC to go through to recovering your PIN



LAPTOP BITLOCKER ENCRYPTION - LOST / FORGOTTEN PIN

If you are unable to logon at this point don't worry, you will need to enter a **BitLocker Recovery Key** which you can obtain in one of the following ways:

- > By accessing the BitLocker Self-Service Portal, if you have another device available to access
- By contacting the ITS Service Desk

You will be presented with the Windows BitLocker Drive Encryption Recovery Key Entry screen:

Windows BitLocker Drive Encryption Recov Enter the recovery key for this drive. Drive Label: W7N-ITR13906 OSDIsk 22/06/2 Recovery Key ID: 201CE994 45BC-4E0E-A871 Use the function keys F1 - F9 for the di Use the TAB, SHIFT-TAB, HOME, END and AR The UP and DOWN ARROW keys may be used t	016 -2F6C34C5824F gits 1 - 9. Use the F10 key for 0. ROW keys to move the cursor.	You will need to give the first 8- digits of Recovery Key ID when you contact the ITS Service Desk or the BitLocker Self- Service portal
ENTER=Continue	ESC-EXIT	

CONTACTING THE ITS SERVICE DESK

When you contact the ITS Service Desk requesting a recovery key for your laptop they will ask you for the following:

- Your username
- > The first 8-digits of your recovery key ID (as per screenshot above)

They will give you a 48-digit code which you will need to enter as per below:

Enter the	recovery	key for	r this drive.	
044671	492613	045210	567831	
540617	702988	432685	23838	
			OSD15K 22/06/2016 -858C-4E0E-A871-2F8C34C5824F	
ecovery K	ey ID: 20	01CE994-4		
ecovery K se the fu	ey ID: 20 nction ke	01CE994-4 eys F1 -	-858C-4E0E-A871-2F6C34C5824F	





ACCESS BITLOCKER SELF-SERVICE PORTAL

If you have forgotten your PIN and have access to another device with a web browser, you can use the Self-Service Portal at <u>https://mblweb.unv.wlv.ac.uk/SelfService</u> to get a recover key which will enable you to access your laptop.

The Self-Service Portal can be accessed both on and off-campus via a Web browser.

Mttps://mbheeb.unv.akvac.uk/S	University of Wolverhampton	e ×	
	Review the Notice below. Click the checkbox to confirm that you have read and understood this information, then click Continue . Notice Disclaime: The University of Wolverhampton makes no representations about the suitability of this service for a purpose. All warranties, terms and conditions with regard to this service, including all warranties, terms and conditions, implied by statute, or otherwise, of satisfactory quality, fitness for a particular purpos and non-infringement are excluded to the fullest extent permitted by law. University of Wolverhampton shall not in any event be liable for any damages, costs or losses findux without limitation direct, indirect, consequential or otherwise. Nothing in these terms excludes or liability for death or personal injury caused by the negligence of institution in providing this service.	ns e, ing	Select I have read and understand the above notice and select Continue
	I have read and understand the above notice Continue		

1) You will then be displayed with the Get a BitLocker Recovery Key page:

Un	iversity of Wolverhampton		Enter the first
<u></u>	🧛 Get a BitLocker Recovery Key		eight digits of the Recovery Key ID
	Use this page if you are locked out of Windows by BitLocker and need to get a BitLocker Recovery Key to regain access to Windows.		from the device
	NOTE: For security reasons, your session will expire after 5 minute(s) of inactivity. You will need to re-enter your information into the form on this page.		you are accessing.
			Select a Reason
1	Enter a BitLocker Key ID This 32-digit code should be displayed on the BitLocker recovery screen on your computer. Enter a minimum of 8 characters.	`	Select Get Key
L.	Recovery Key ID Reason		
	Get Key		





2) This will create your 48-digit BitLocker Recovery Key.



3) Enter this code into your device at the BitLocker Drive Encryption Recovery Key Entry screen:



4) When you have entered the last digit of the code your device will continue to boot into Windows.

REMEMBER..!

Now you have regained access to your device you should <u>reset your PIN</u> before restarting or shutting down.

Please go to the BitLocker PIN Reset section of this document





BITLOCKER PIN RESET

Resetting your PIN is a simple process with only two steps required on your laptop:

1) Upon successful log onto your laptop, open Control Panel by selecting **Start > Control Panel**:



2) Change the view of your control panel to small icons if required:



3) Select BitLocker Encryption Options.





4) You will see the following screen, select Manage your PIN.



5) At the Reset Your PIN screen, enter a new PIN in both fields provided and select Reset PIN.

Reset your PIN	
To reset your PIN, type the PIN, and then click Reset PIN. Your PIN must contain only 4-20 numbers. Do not use repeating numbers such as 1111 or sequential numbers such as 1234.	Learn About BitLocker Overview Using your PIN or Password
Type new PIN	
••••	
Confirm PIN	
••••	

6) Your PIN has now been reset and you will be prompted for this new PIN next time your device is restarted.





SHARED LAPTOP BITLOCKER ENCRYPTION PROCESS

Shared laptops will follow similar steps to Desktop encryption, users will be prompted to encrypt the device by following the on-screen instructions.

If a shared laptop has already been setup with a PIN from previous methods of encryption the device would need to be re-imaged to allow encryption without a PIN.

<u>PLEASE NOTE:</u> Users are reminded that in no circumstances should personal or commercial sensitive data be stored on shared laptops. Storage of such data on shared devices is a breach of University policy.