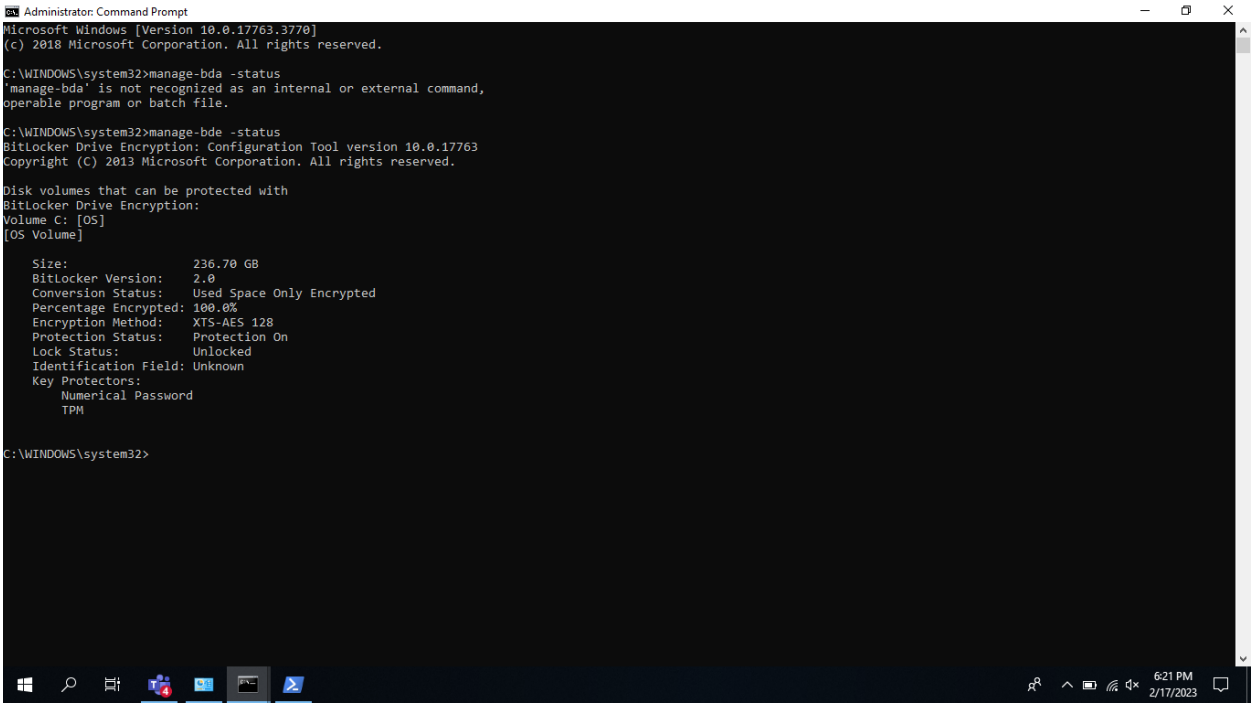
Demonstrate the execution of full disk encryption via BitLocker. Does your computer have Trusted Platform Module (TPM) chip? Are you doing software encryption or hardware encryption? Why? Please provide screenshots for each stage as evidence for your work. You can watch the short video about the execution of BitLocker, attached to this assignment.

Iam performing Removable Disk(USB OR PENDRIVES)to perform this assignment as my Drivers are already configured and even Group policies are disabled so that I cant perform Change password or BitLocker Off operations

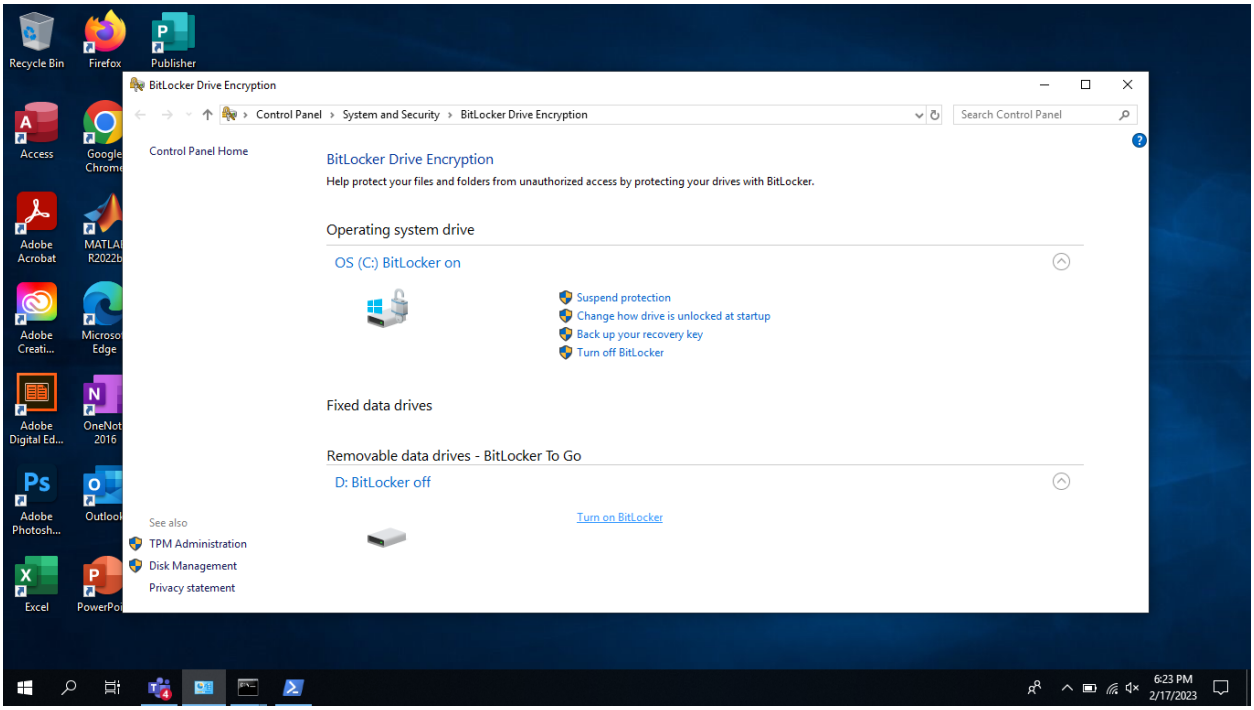
So lets get started

Windows and type Bitlocker open **Manage BitLocker in control panel**

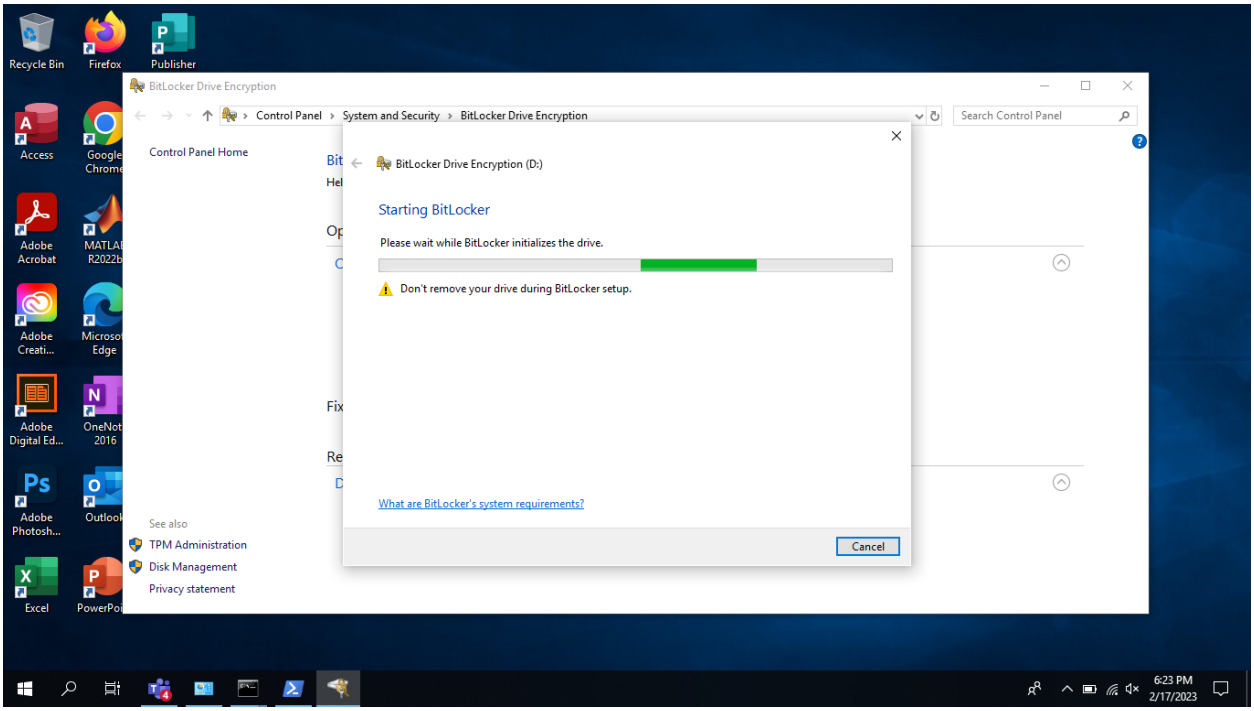


So above proves that my drivers are already are encrypted so will show you on my removable drivers

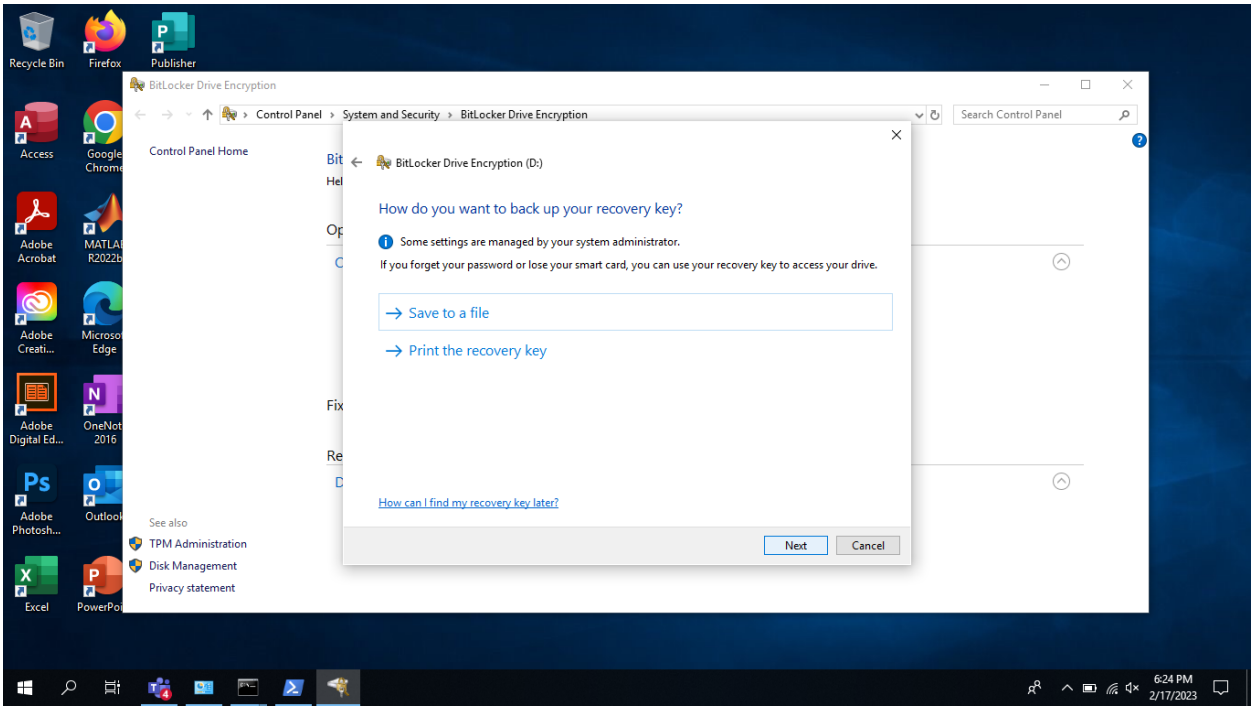
As you can see initially Bit locker is off for my Removable USB/Drivers **AS WE DON'T SEE LOCK SYMBOL ON THE DRIVERS**



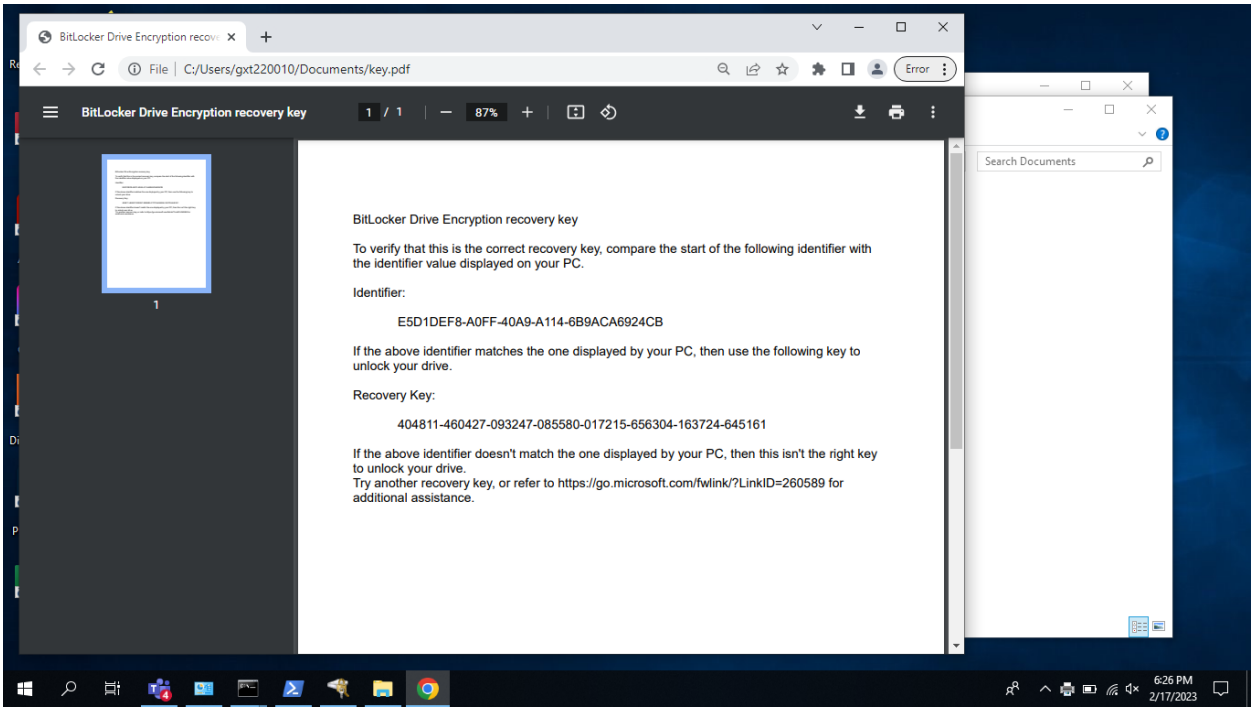
Now I turn on Bit locker



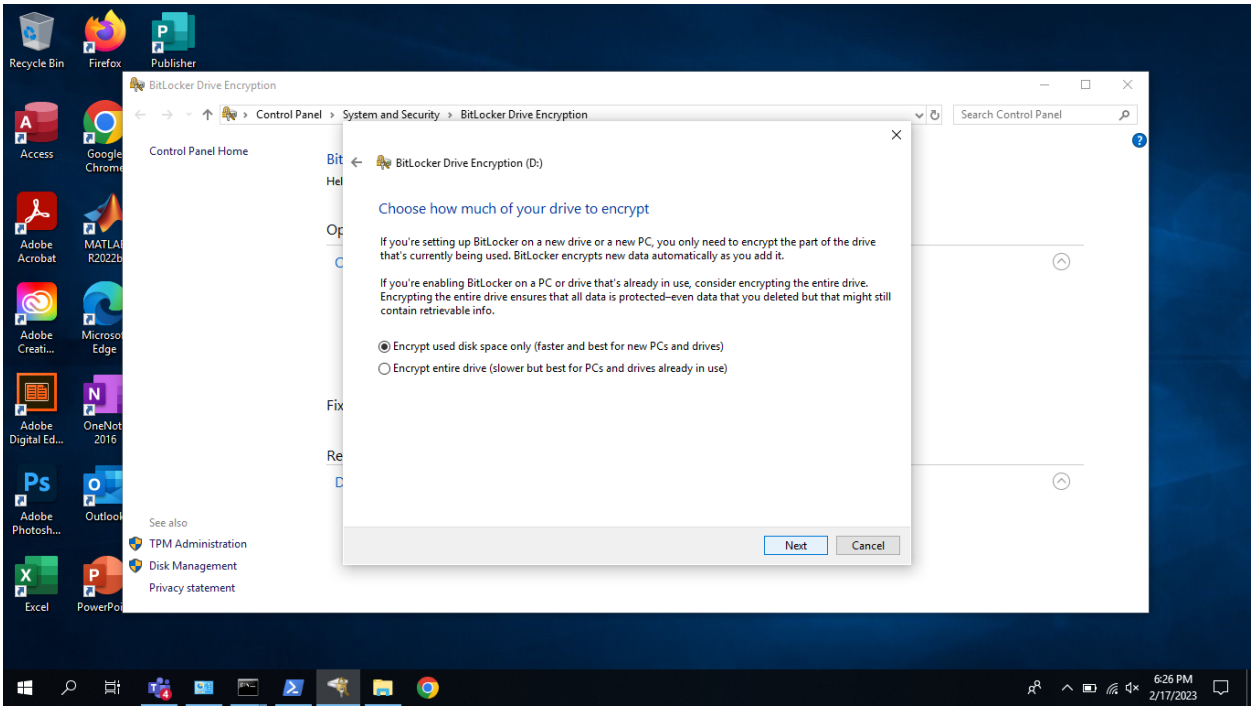
Save the key both as **file** and **PRINT THE KEY AS WELL** so if file is corrupted so that you can type with naked eye



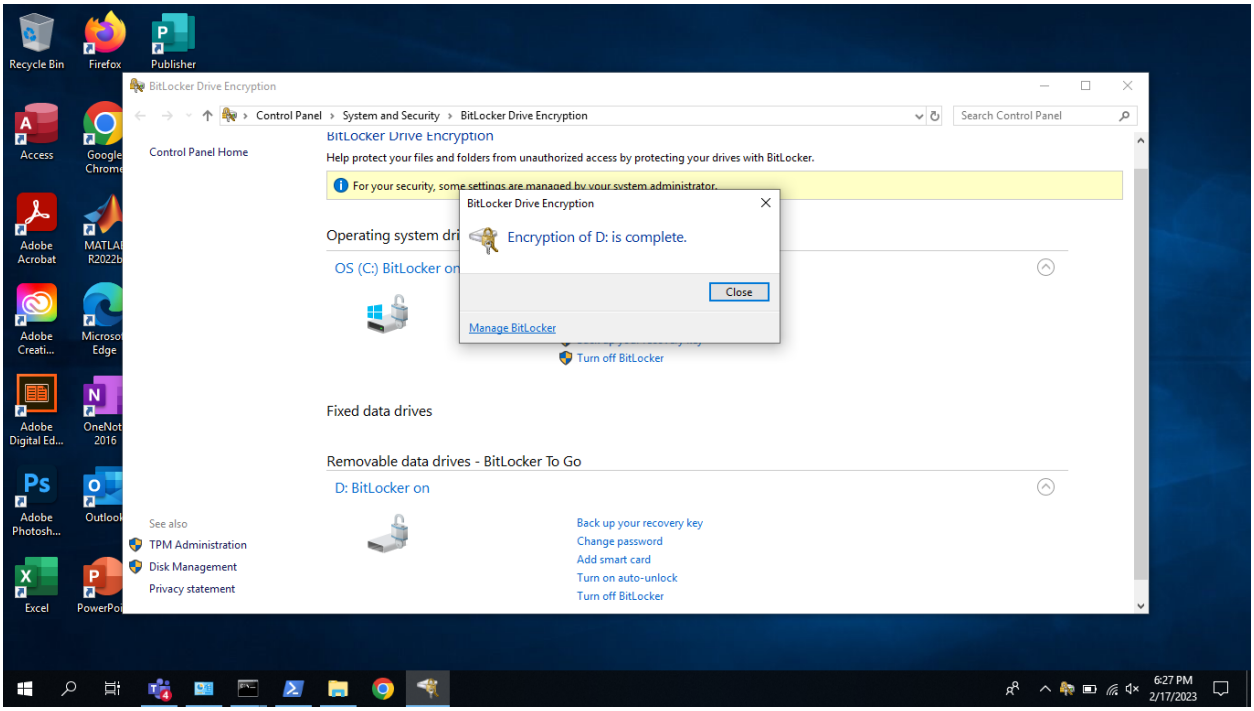
My recovery key



I chose option1 u can use 2 as well your wish as long as u remember your PASSWORD and had your RECOVERY KEY



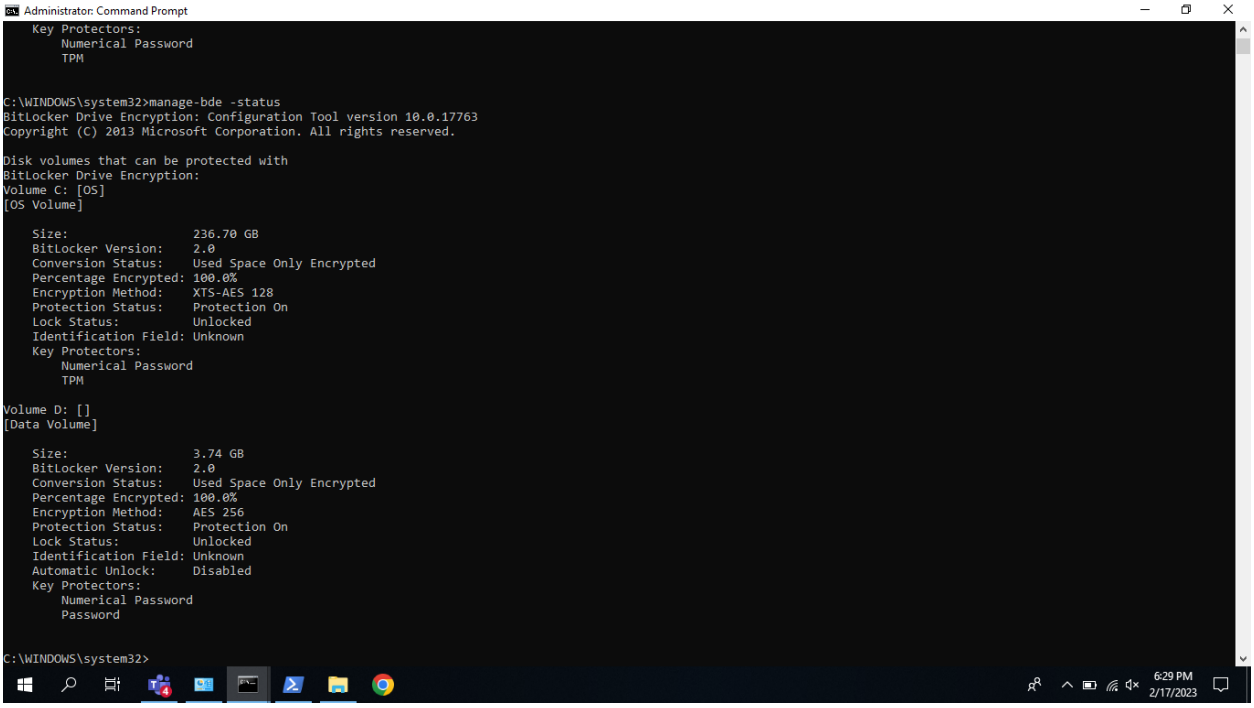
Encryption is completed



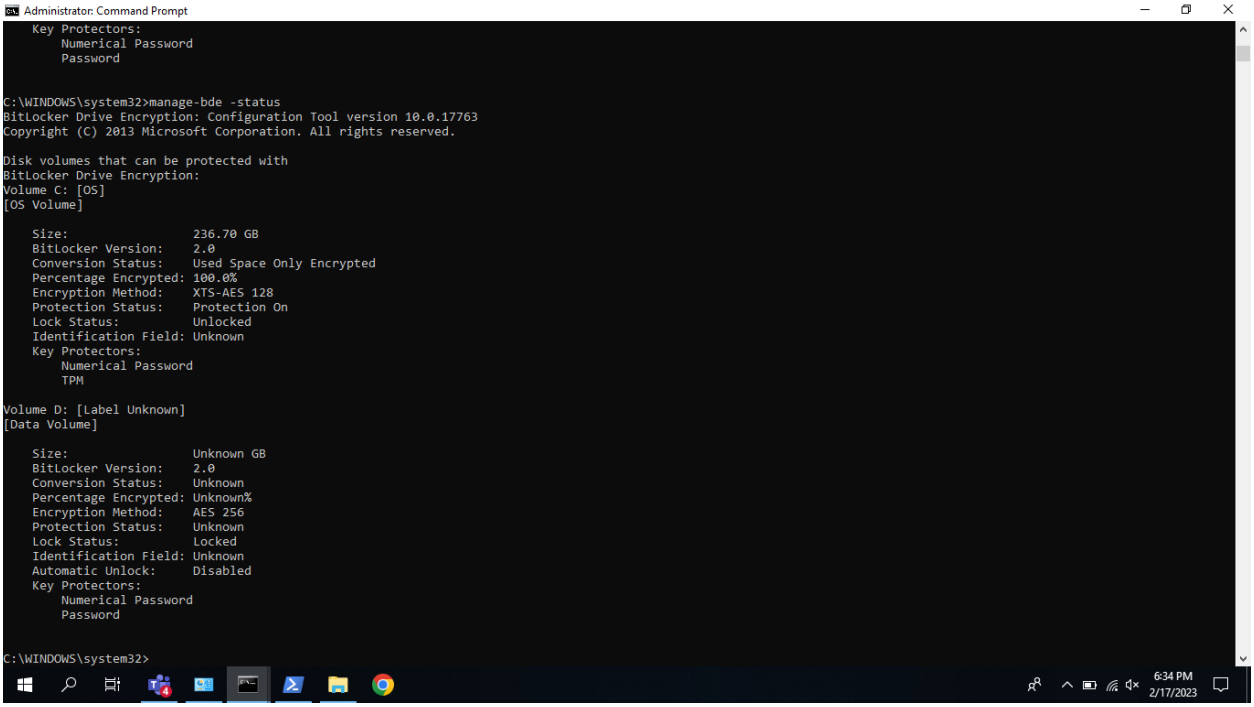
Other method of verifying the status of bit locker

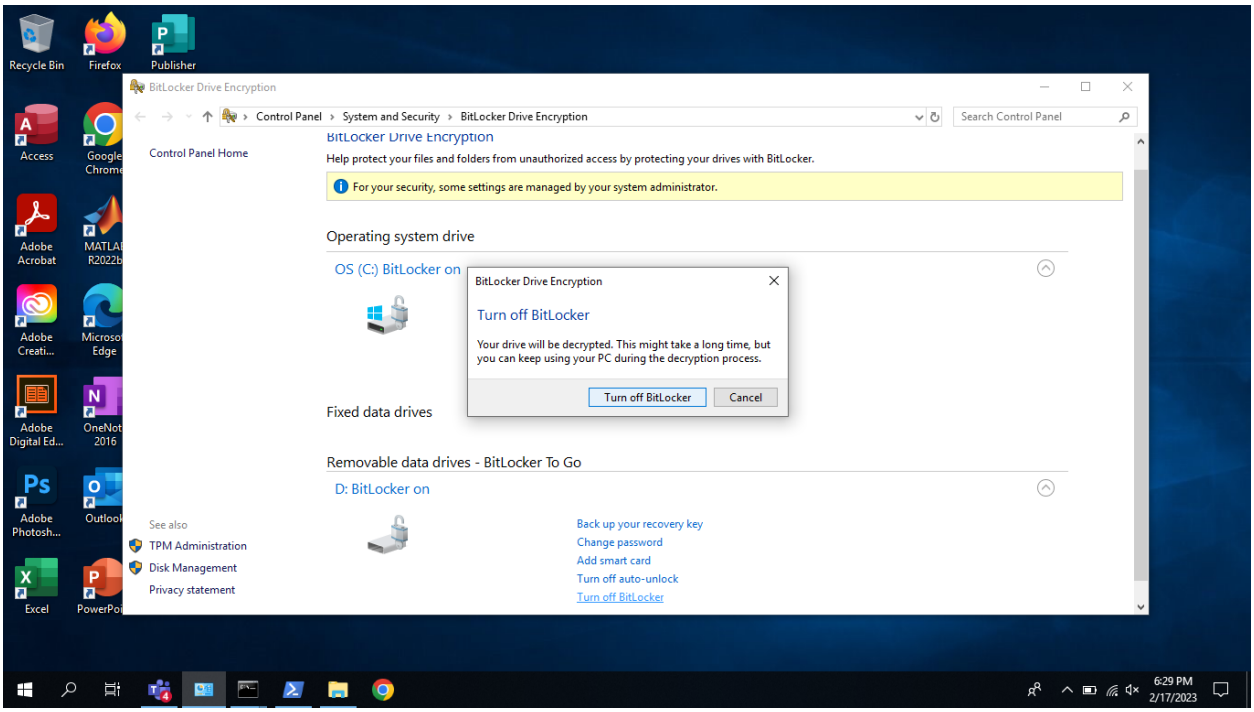
Run CMD as Administrator and put the below command

Manage-bde -status



So now eject the USB and attach again now you can see the USB is locked




Recycle Bin
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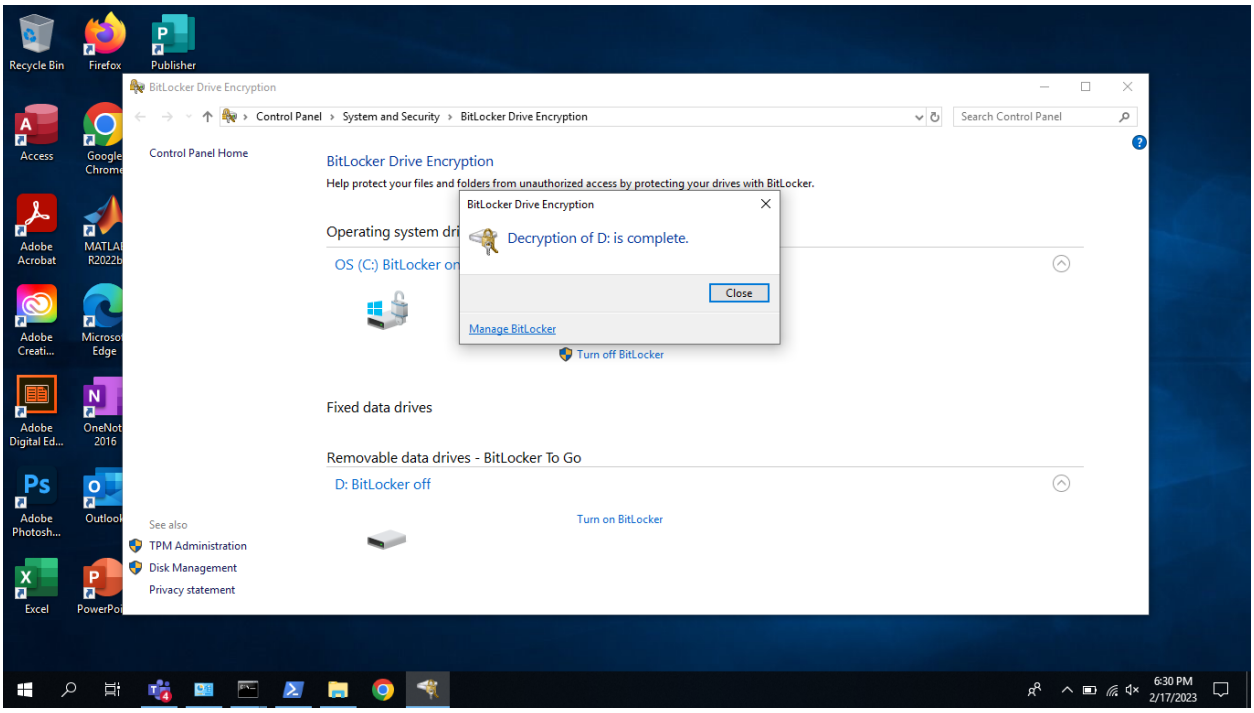
Google Chrome
Adobe Acrobat
Adobe Creati...
Microsoft Edge
Adobe Digital Ed...
OneNote 2016
Adobe Photosh...
Outlook
Excel
PowerPoint
BitLocker Drive Encryption
Control Panel › System and Security › BitLocker Drive Encryption
Search Control Panel
Control Panel Home
BitLocker Drive Encryption
Help protect your files and folders from unauthorized access by protecting your drives with BitLocker.
For your security, some settings are managed by your system administrator.
Operating system drive
OS (C:) BitLocker on
BitLocker Drive Encryption
Turn off BitLocker
Your drive will be decrypted. This might take a long time, but you can keep using your PC during the decryption process.
Turn off BitLocker
Cancel
Fixed data drives
Removable data drives - BitLocker To Go
D: BitLocker on
Back up your recovery key
Change password
Add smart card
Turn off auto-unlock
Turn off BitLocker
See also
TPM Administration
Disk Management
Privacy statement
6:29 PM
2/17/2023


Recycle Bin
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Microsoft Edge
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OneNote 2016
Adobe Photosh...
Outlook
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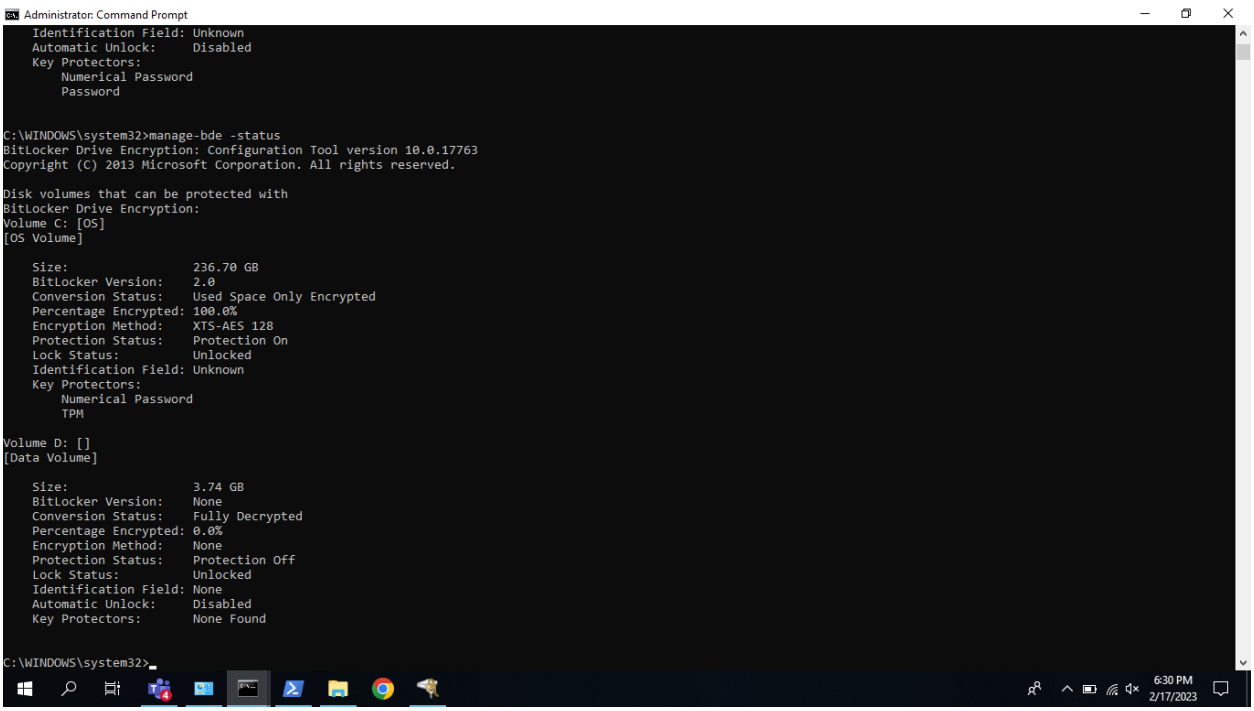
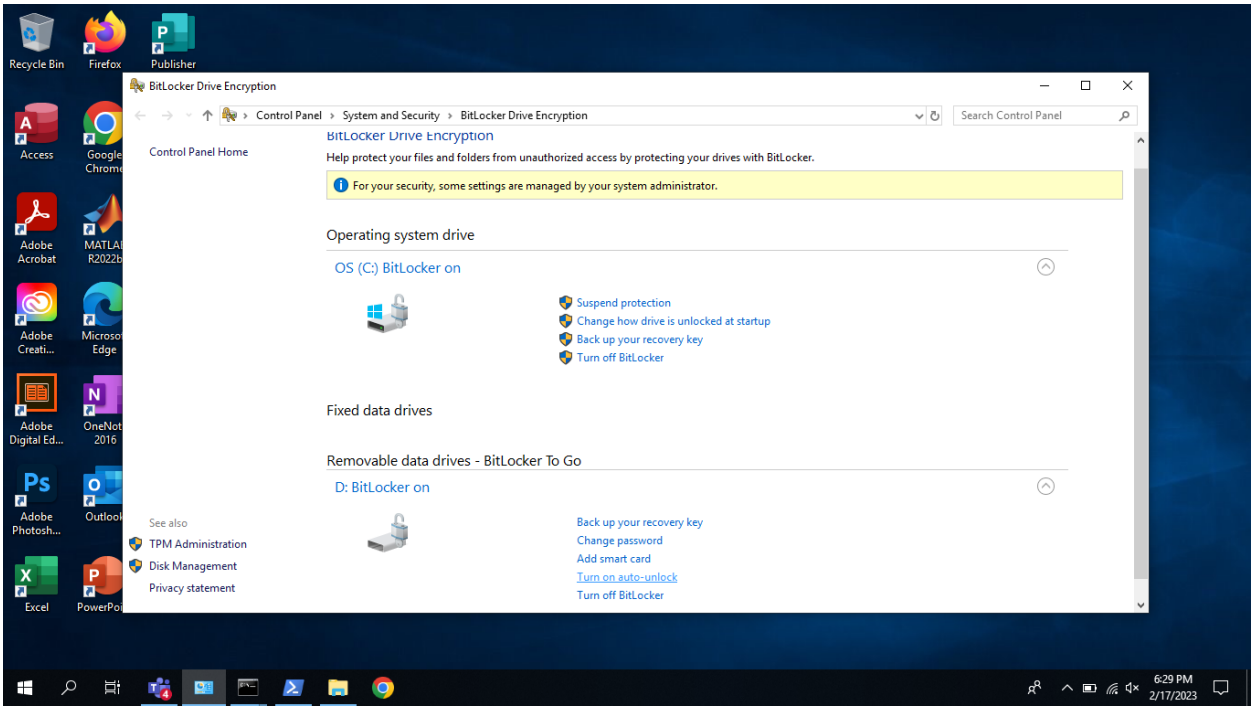
BitLocker Drive Encryption
Decryption of D: is complete.
Close
Manage BitLocker
Operating system dri
OS (C:) BitLocker on
Turn off BitLocker
Fixed data drives
Removable data drives - BitLocker To Go
D: BitLocker off
Turn on BitLocker
See also
TPM Administration
Disk Management
Privacy statement
6:30 PM
2/17/2023


Administrator: Command Prompt
Identification Field: Unknown
Automatic Unlock: Disabled
Key Protectors:
Numerical Password
Password
C:\WINDOWS\system32>manage-bde -status
BitLocker Drive Encryption: Configuration Tool version 10.0.17763
Copyright (C) 2013 Microsoft Corporation. All rights reserved.
Disk volumes that can be protected with
BitLocker Drive Encryption:
Volume C: [OS]
[OS Volume]
Size: 236.70 GB
BitLocker Version: 2.0
Conversion Status: Used Space Only Encrypted
Percentage Encrypted: 100.0%
Encryption Method: XTS-AES 128
Protection Status: Protection On
Lock Status: Unlocked
Identification Field: Unknown
Key Protectors:
Numerical Password
TPM
Volume D: []
[Data Volume]
Size: 3.74 GB
BitLocker Version: None
Conversion Status: Fully Decrypted
Percentage Encrypted: 0.0%
Encryption Method: None
Protection Status: Protection Off
Lock Status: Unlocked
Identification Field: None
Automatic Unlock: Disabled
Key Protectors: None Found
C:\WINDOWS\system32>
6:30 PM
2/17/2023


Recycle Bin
Firefox
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Adobe Acrobat
Adobe Creati...
Adobe Digital Ed...
Adobe Photosh...
Excel
BitLocker Drive Encryption
Control Panel › System and Security › BitLocker Drive Encryption
Search Control Panel
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For your security, some settings are managed by your system administrator.
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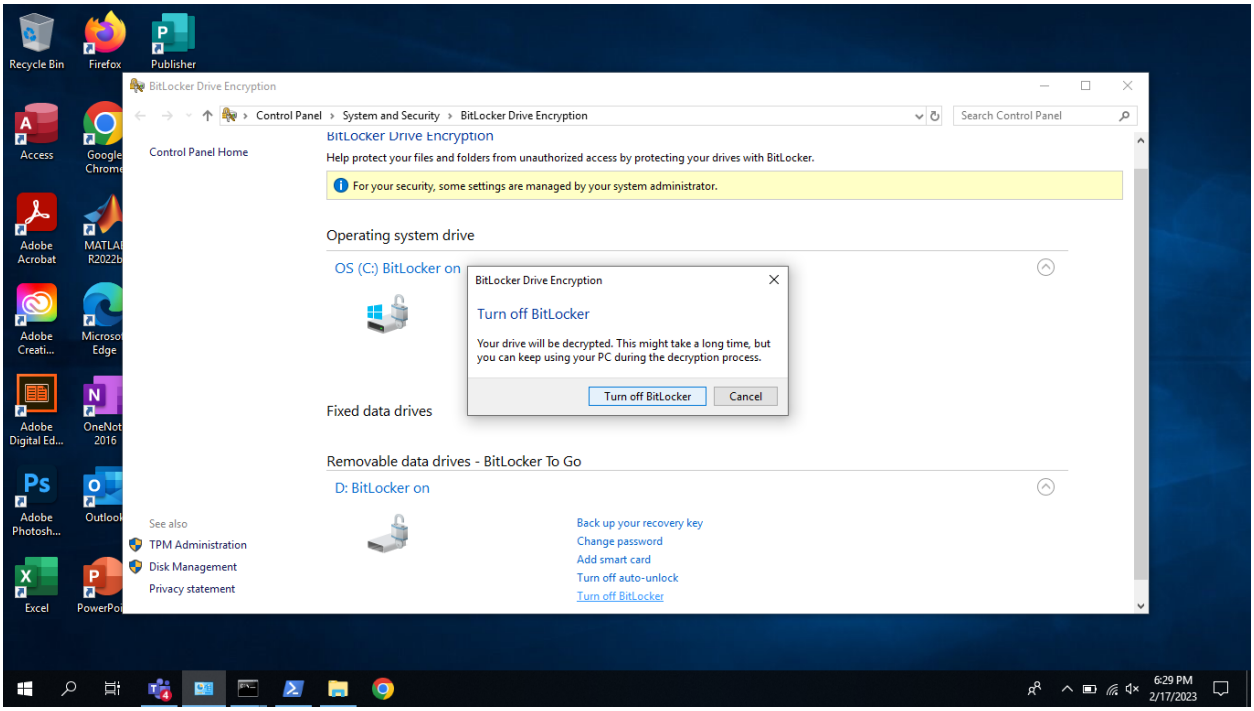
OS (C:) BitLocker on
Suspend protection
Change how drive is unlocked at startup
Back up your recovery key
Turn off BitLocker
Fixed data drives
Removable data drives - BitLocker To Go
D: BitLocker on
Back up your recovery key
Change password
Add smart card
Turn on auto-unlock
Turn off BitLocker
See also
TPM Administration
Disk Management
Privacy statement
6:29 PM
2/17/2023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TPM Administration
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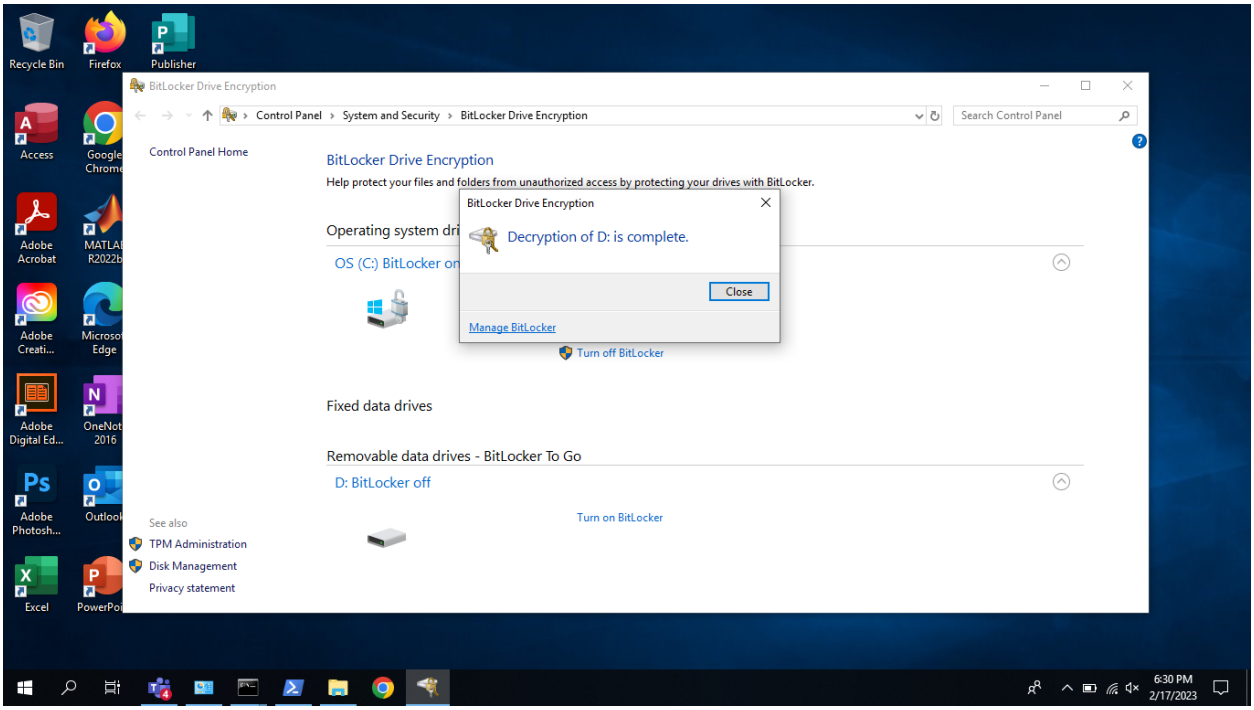
Turn off BitLocker
Your drive will be decrypted. This might take a long time, but you can keep using your PC during the decryption process.
Turn off BitLocker
Cancel
6:29 PM
2/17/2023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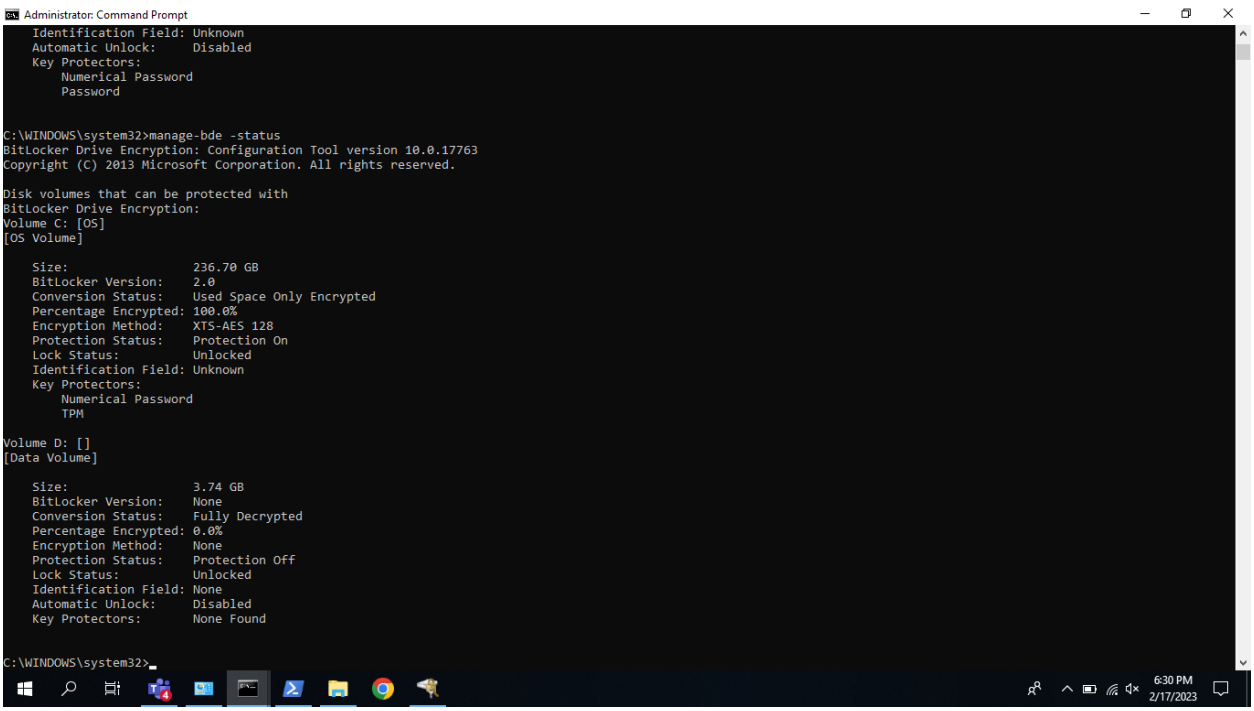
D: BitLocker off
See also
TPM Administration
Disk Management
Privacy statement
Turn off BitLocker
Turn on BitLocker
BitLocker Drive Encryption
Decryption of D: is complete.
Close
Manage BitLocker
6:30 PM
2/17/2023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Identification Field: Unknown
Automatic Unlock: Disabled
Key Protectors:
Numerical Password
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TPM
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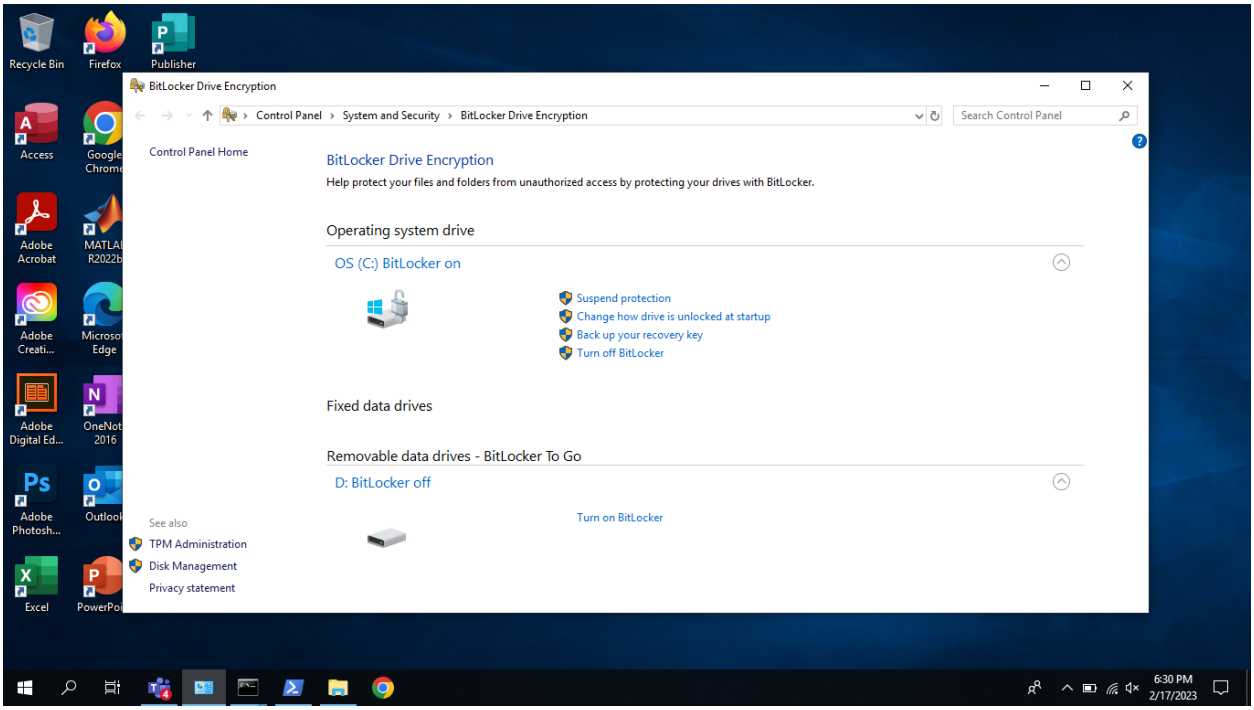
C:\WINDOWS\system32>
6:30 PM
2/17/2023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BitLocker Drive Encryption
Control Panel › System and Security › BitLocker Drive Encryption
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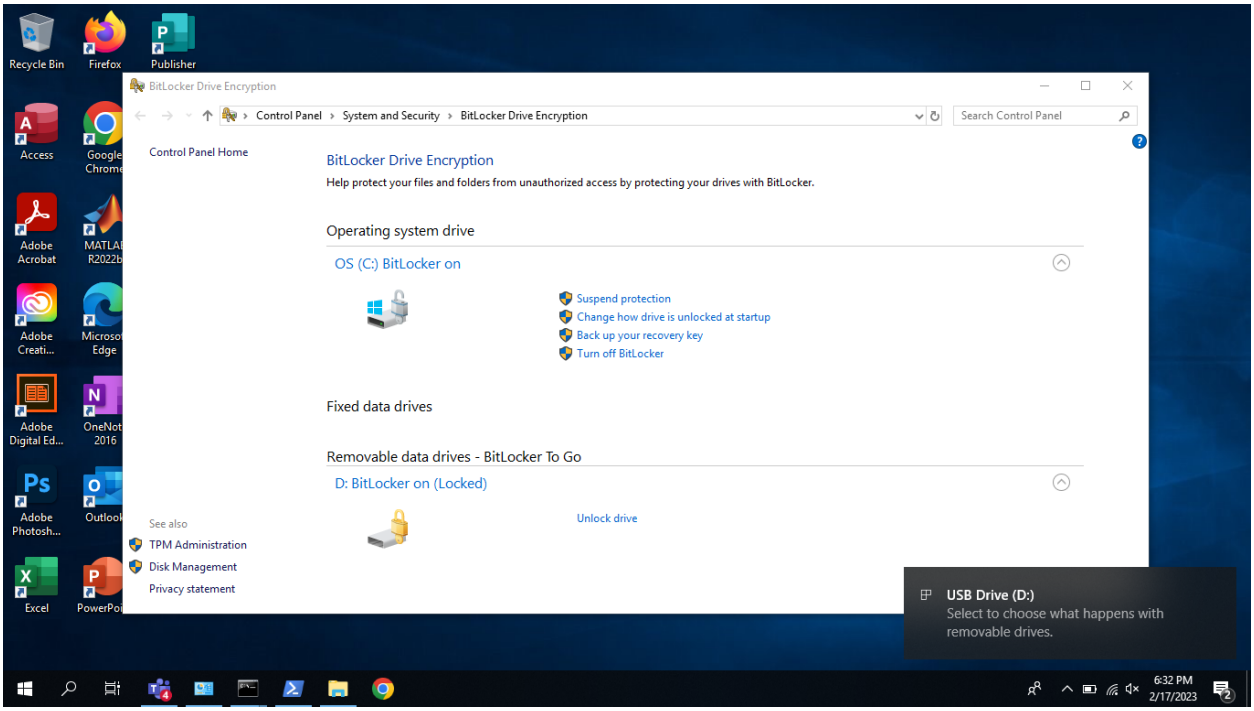
Suspend protection
Change how drive is unlocked at startup
Back up your recovery key
Turn off BitLocker
Fixed data drives
Removable data drives - BitLocker To Go
D: BitLocker off
Turn on BitLocker
See also
TPM Administration
Disk Management
Privacy statement
6:30 PM
2/17/2023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BitLocker Drive Encryption
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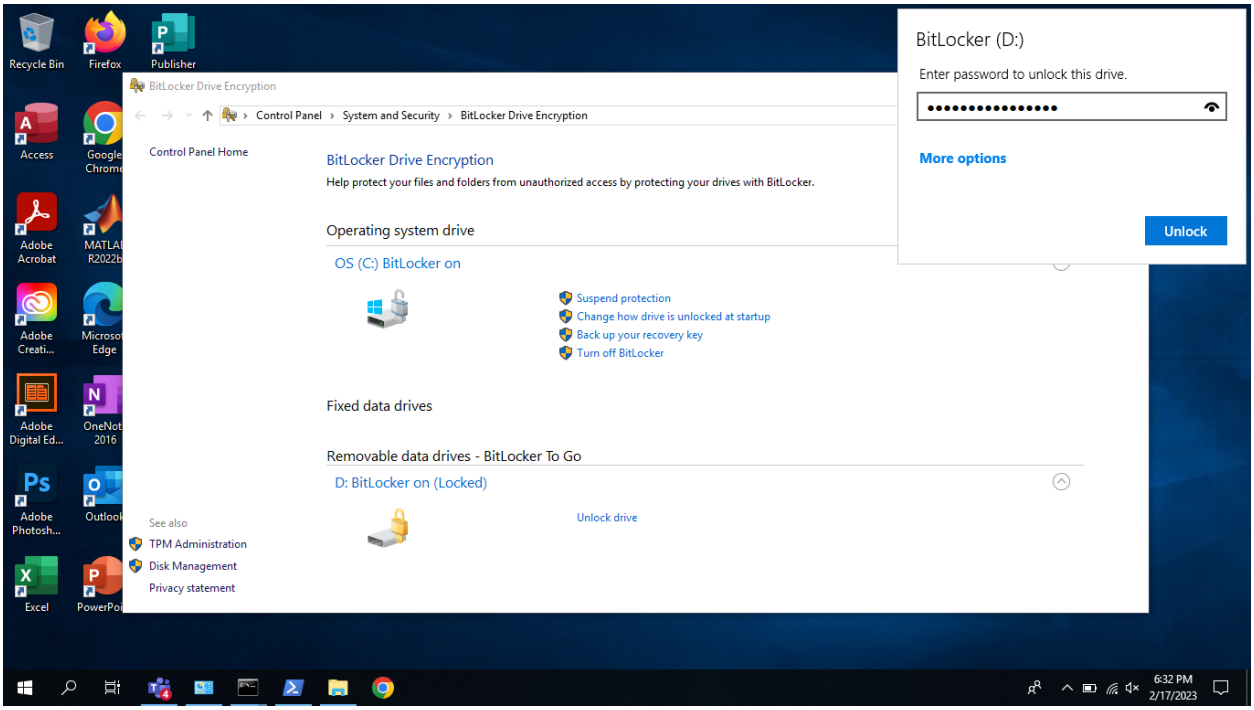
Fixed data drives
Removable data drives - BitLocker To Go
D: BitLocker on (Locked)
Unlock drive
See also
TPM Administration
Disk Management
Privacy statement
USB Drive (D:)
Select to choose what happens with removable drives.
6:32 PM
2/17/2023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Suspend protection
Change how drive is unlocked at startup
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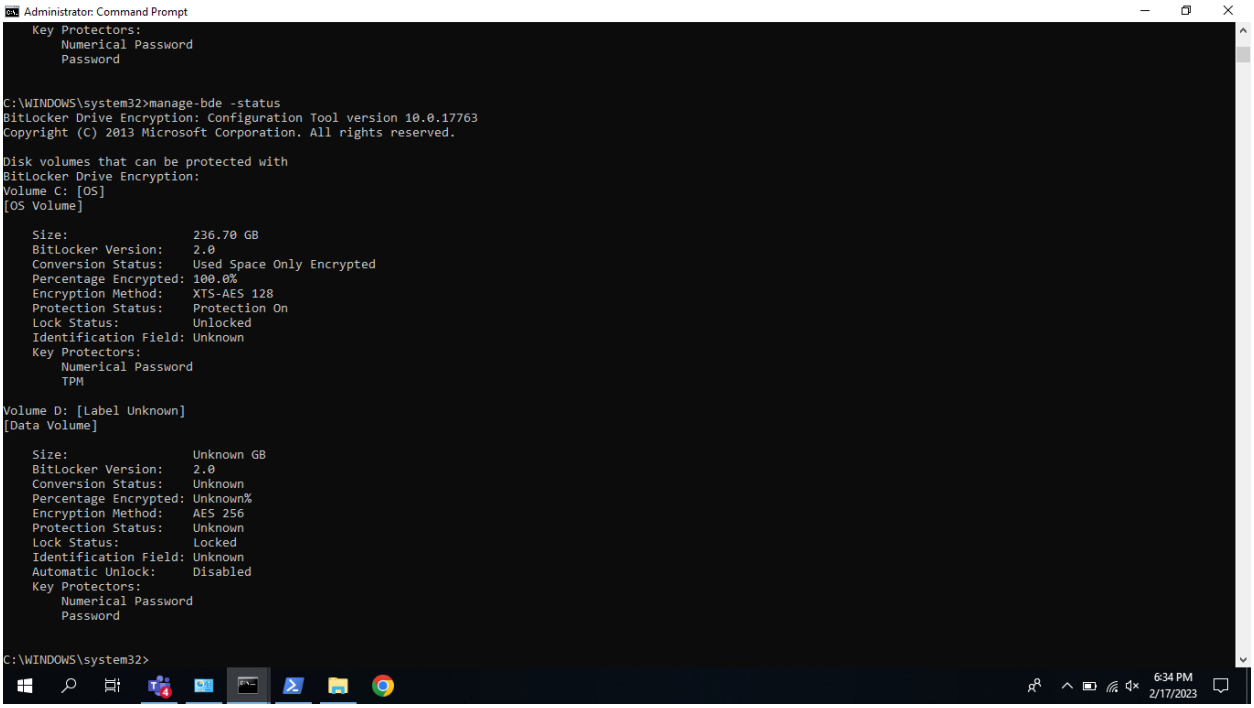
Turn off BitLocker
Fixed data drives
Removable data drives - BitLocker To Go
D: BitLocker on (Locked)
Unlock drive
See also
TPM Administration
Disk Management
Privacy statement
BitLocker (D:)
Enter password to unlock this drive.
More options
Unlock
6:32 PM
2/17/2023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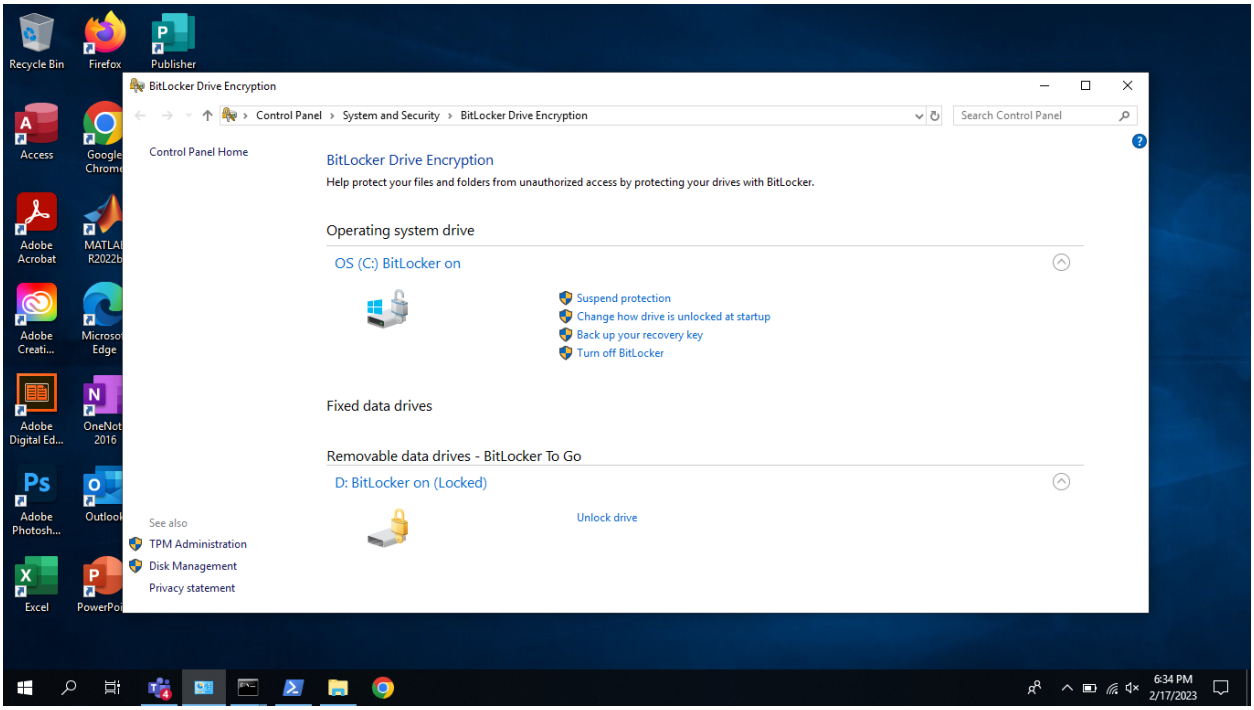
Percentage Encrypted: 100.0%
Encryption Method: XTS-AES 128
Protection Status: Protection On
Lock Status: Unlocked
Identification Field: Unknown
Key Protectors:
Numerical Password
TPM
Volume D: [Label Unknown]
[Data Volume]
Size: Unknown GB
BitLocker Version: 2.0
Conversion Status: Unknown
Percentage Encrypted: Unknown%
Encryption Method: AES 256
Protection Status: Unknown
Lock Status: Locked
Identification Field: Unknown
Automatic Unlock: Disabled
Key Protectors:
Numerical Password
Password
C:\WINDOWS\system32>
6:34 PM
2/17/2023


Recycle Bin
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Adobe Digital Ed...
Adobe Photosh...
Excel
BitLocker Drive Encryption
Control Panel › System and Security › BitLocker Drive Encryption
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OS (C:) BitLocker on
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Unlock drive
See also
TPM Administration
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Privacy statement
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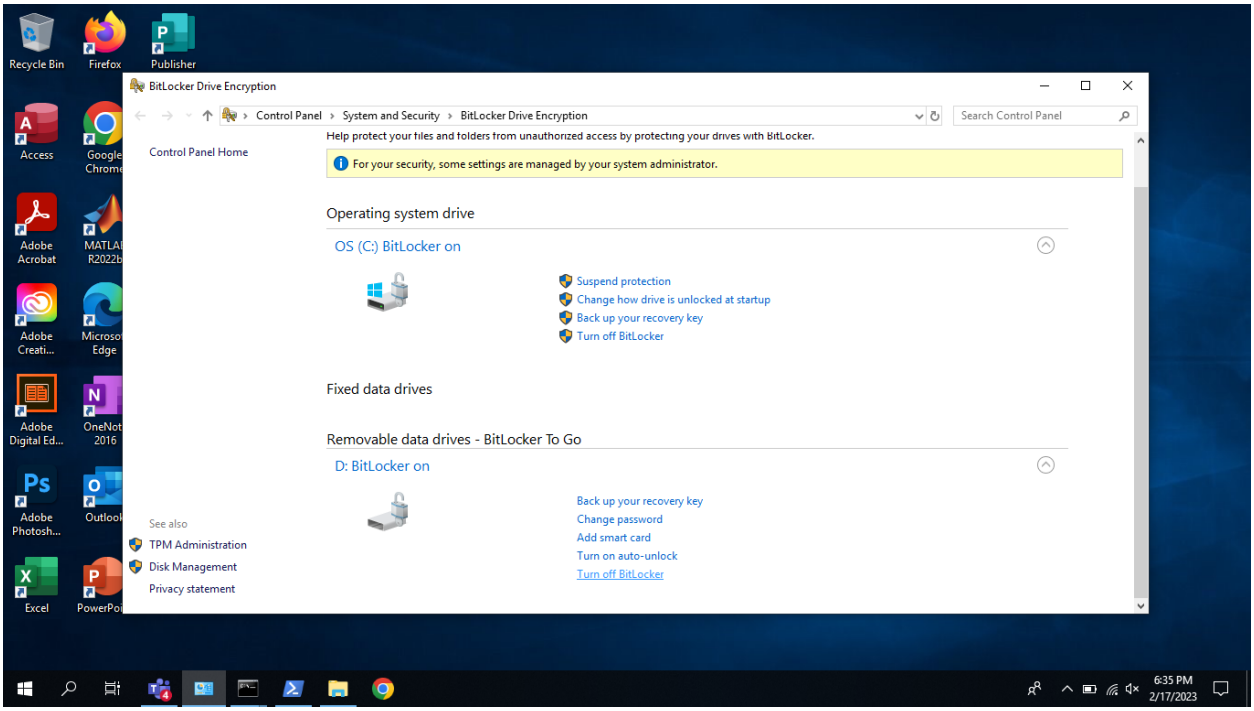
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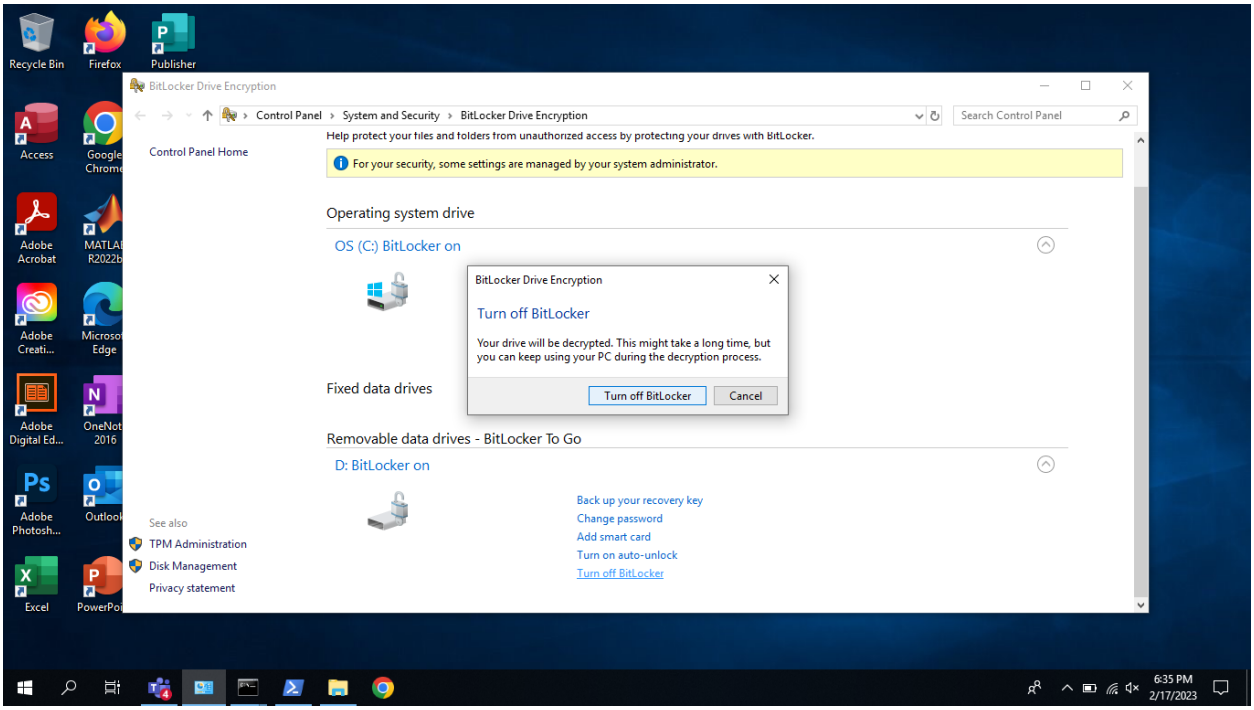
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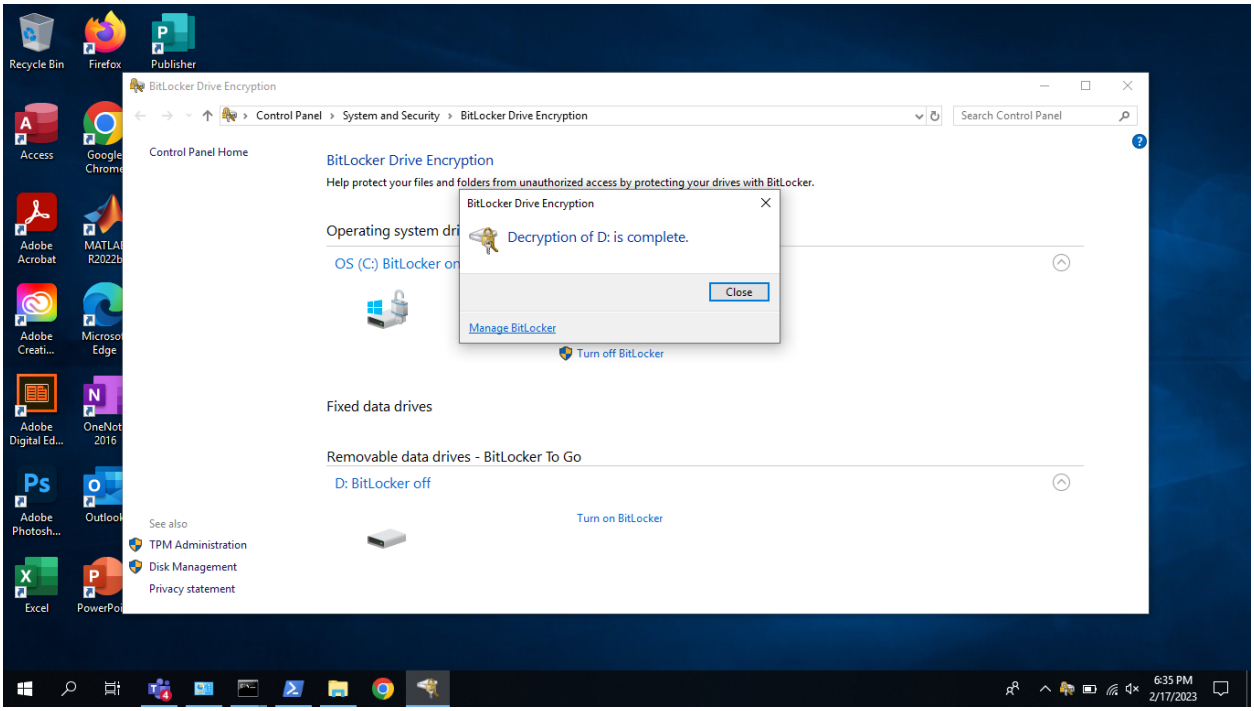
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Turn off BitLocker
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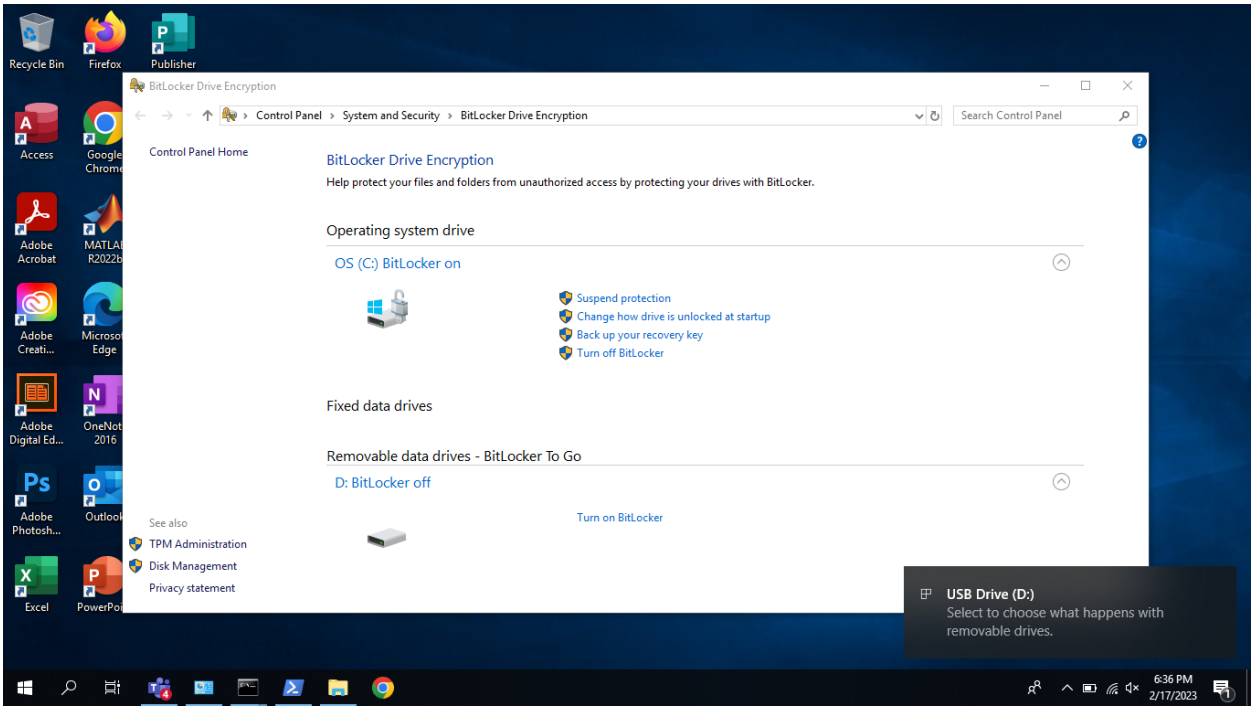
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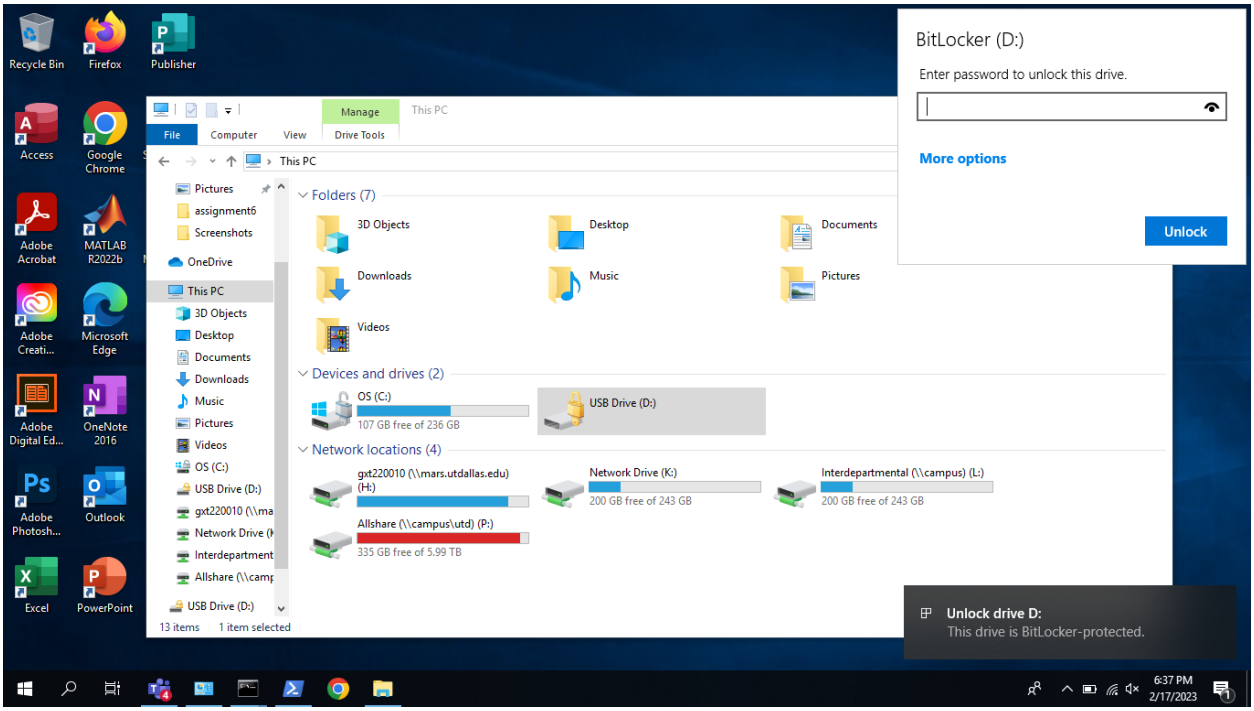
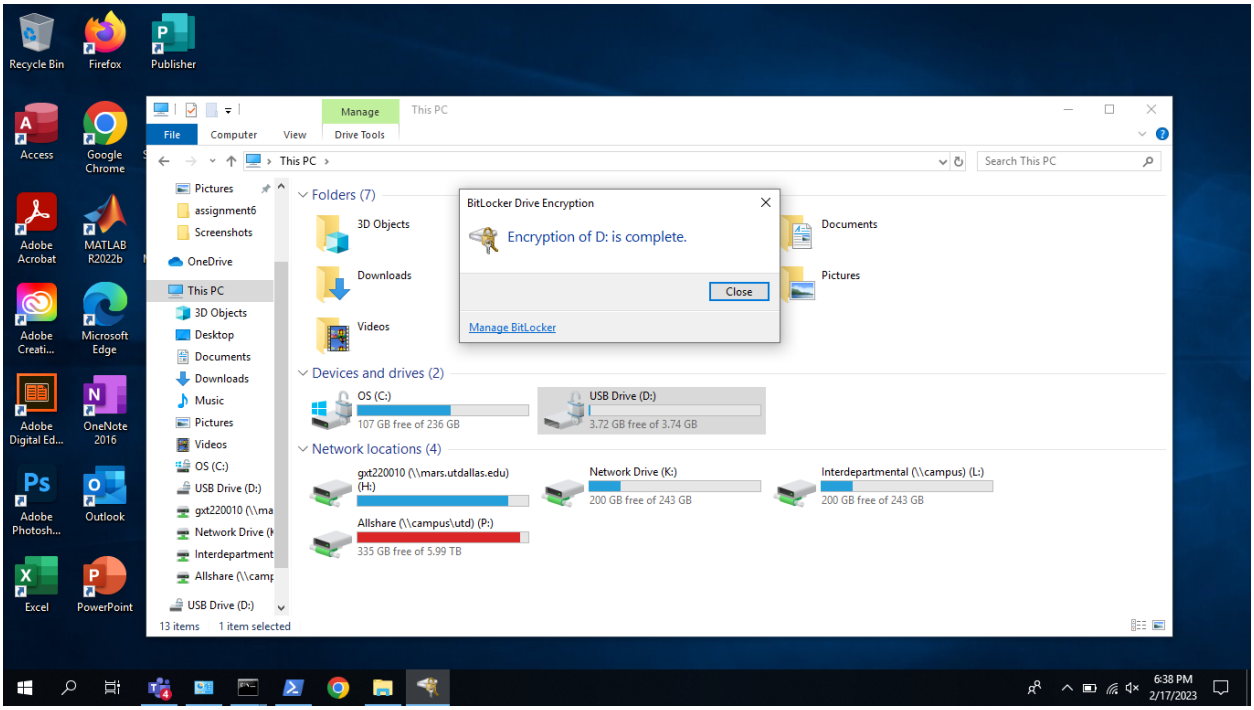
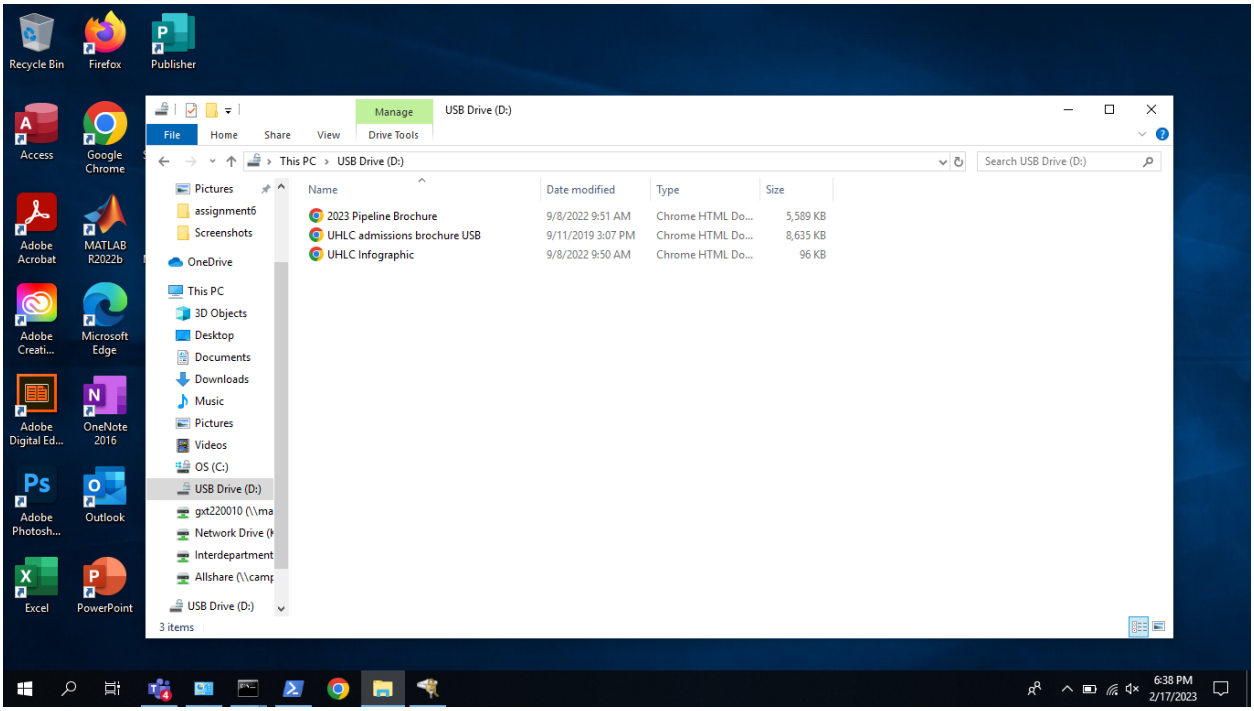
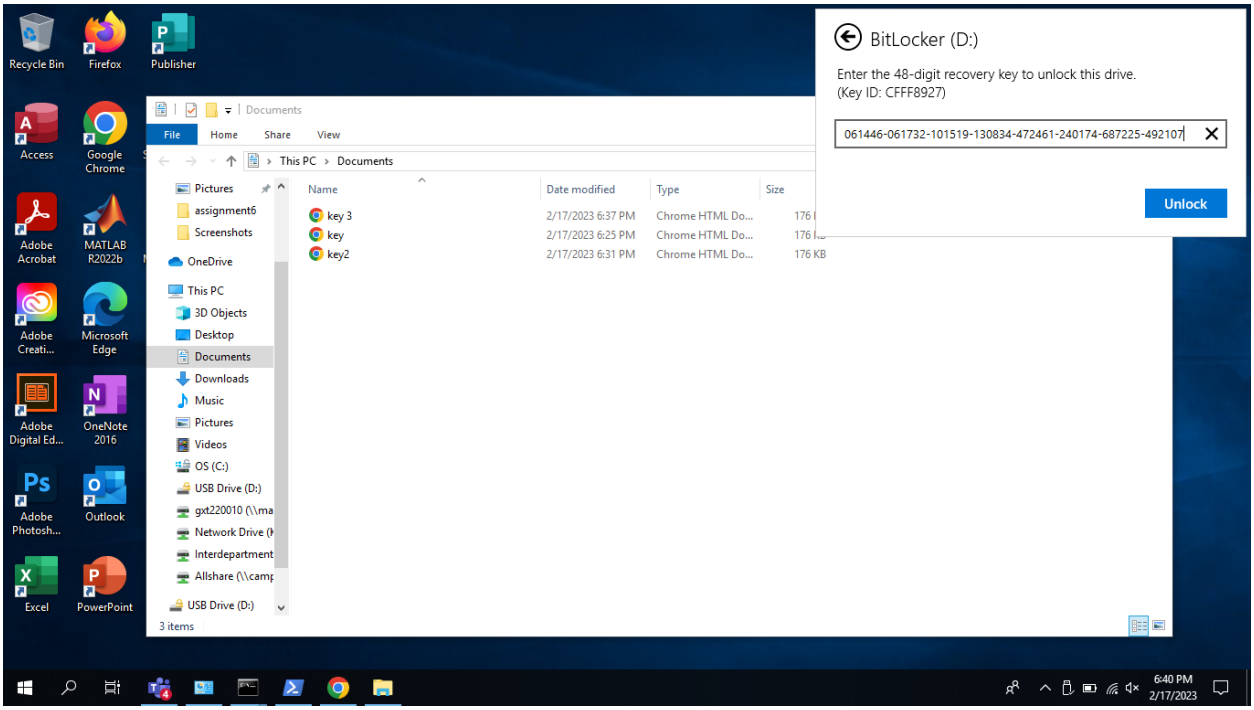
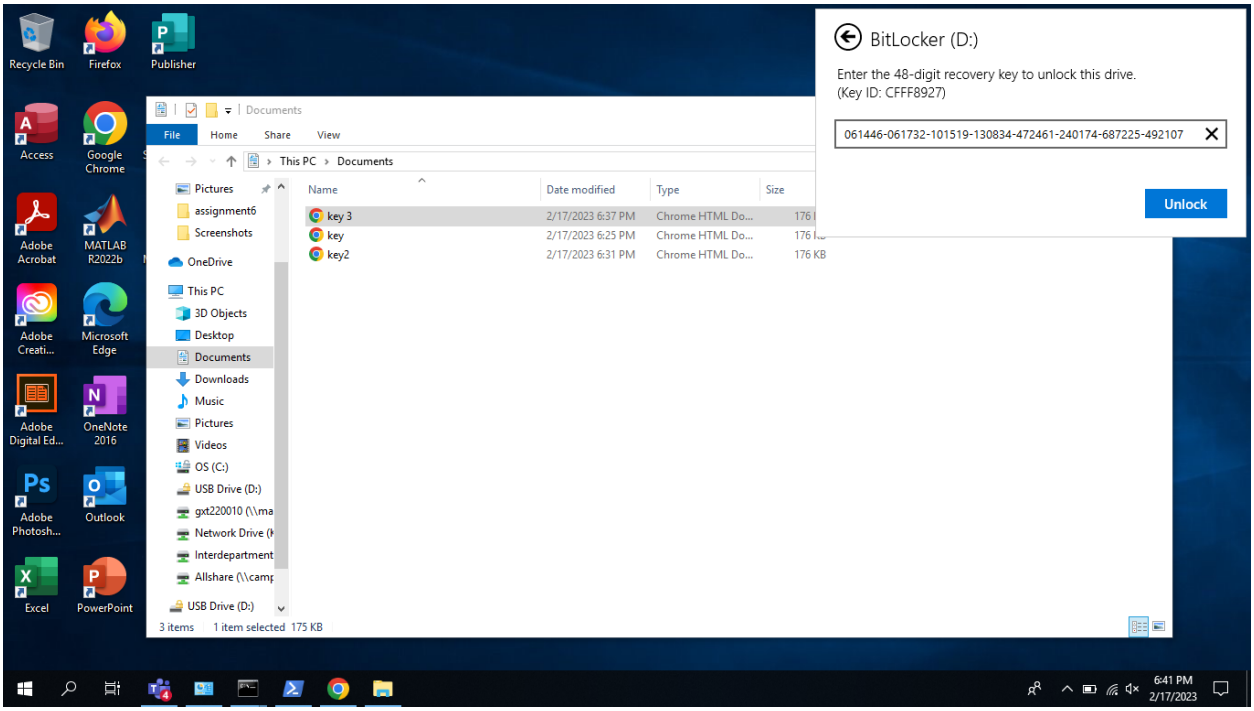
USB Drive (D:)
Select to choose what happens with removable drives.
6:36 PM
2/17/2023

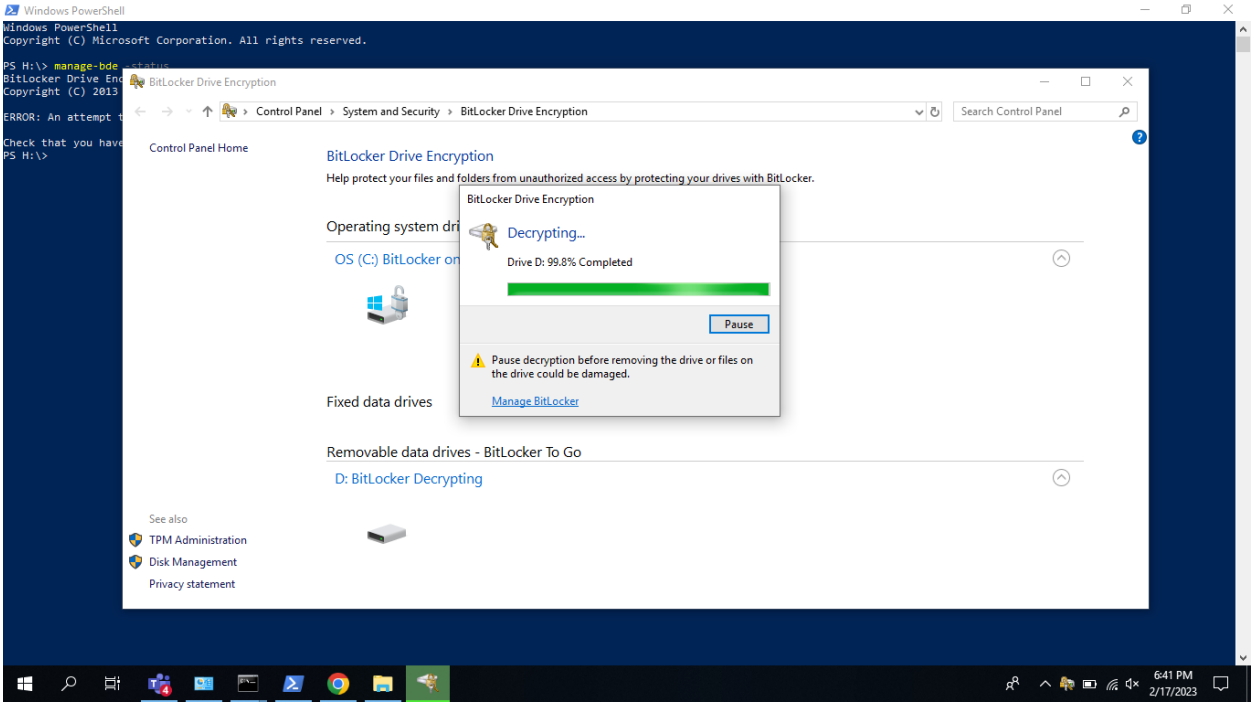

BitLocker (D:)
Enter password to unlock this drive.
More options
Unlock
Unlock drive D:
This drive is BitLocker-protected.
Folders (7)
Devices and drives (2)
Network locations (4)
OS (C:)
107 GB free of 236 GB
USB Drive (D:)
Network Drive (K:)
200 GB free of 243 GB
Interdepartmental (\\campus) (L:)
200 GB free of 243 GB
Allshare (\\campus\utd) (P:)
335 GB free of 5.99 TB
13 items
1 item selected
6:37 PM
2/17/2023

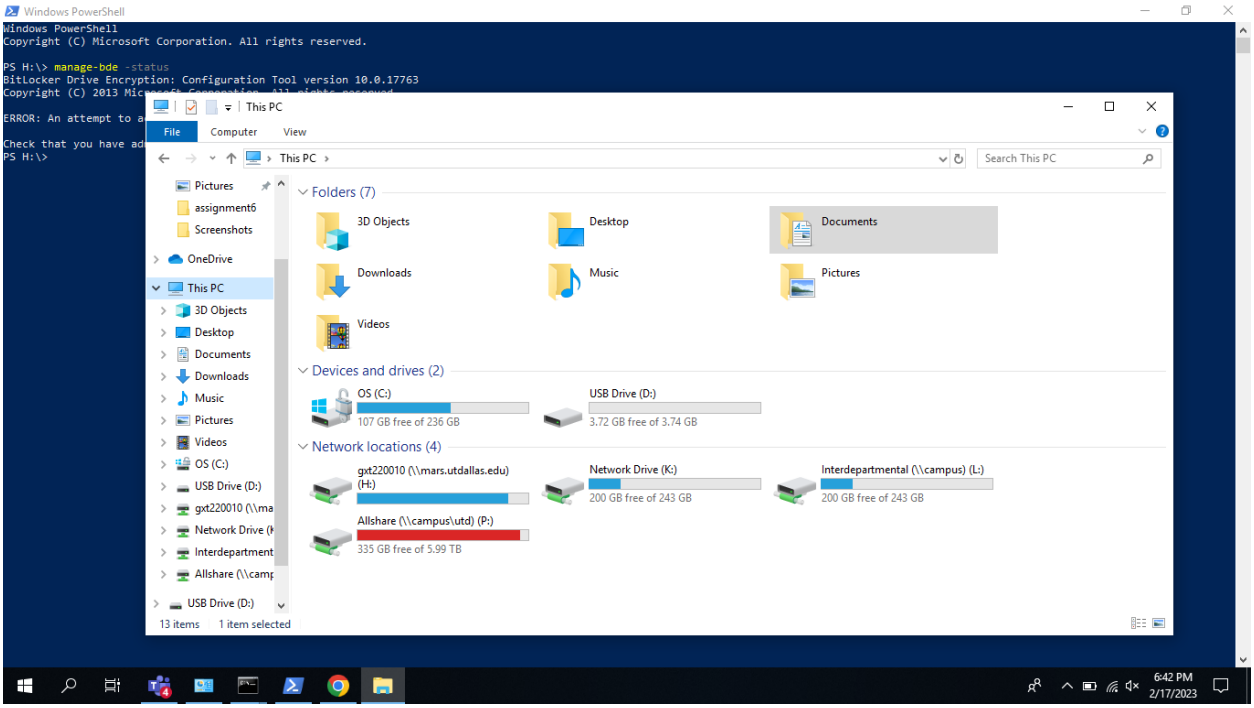

BitLocker Drive Encryption
Encryption of D: is complete.
Close
Manage BitLocker
Folders (7)
Devices and drives (2)
Network locations (4)
OS (C:)
107 GB free of 236 GB
USB Drive (D:)
3.72 GB free of 3.74 GB
Network Drive (K:)
200 GB free of 243 GB
Interdepartmental (\\campus) (L:)
200 GB free of 243 GB
Allshare (\\campus\utd) (P:)
335 GB free of 5.99 TB
13 items
1 item selected
6:38 PM
2/17/2023

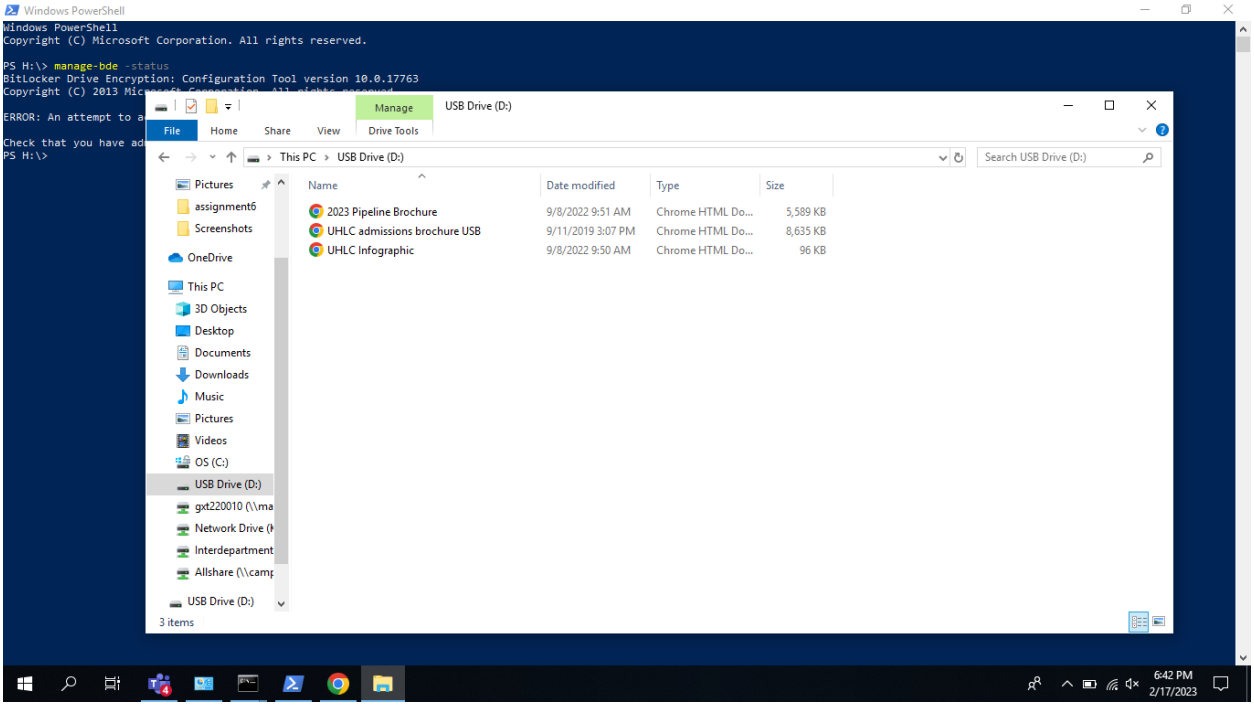

Recycle Bin
Firefox
Publisher
Access
Google Chrome
Adobe Acrobat
MATLAB R2022b
Adobe Creati...
Microsoft Edge
Adobe Digital Ed...
OneNote 2016
Adobe Photosh...
Outlook
Excel
PowerPoint
Manage
USB Drive (D:)
File
Home
Share
View
Drive Tools
This PC › USB Drive (D:)
Search USB Drive (D:)
Pictures
assignment6
Screenshots
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
OS (C:)
USB Drive (D:)
gxt220010 (\\ma
Network Drive (
Interdepartment
Allshare (\\camp
USB Drive (D:)
3 items
Name
Date modified
Type
Size
2023 Pipeline Brochure
9/8/2022 9:51 AM
Chrome HTML Do...
5,589 KB
UHLC admissions brochure USB
9/11/2019 3:07 PM
Chrome HTML Do...
8,635 KB
UHLC Infographic
9/8/2022 9:50 AM
Chrome HTML Do...
96 KB
6:38 PM
2/17/2023


Recycle Bin
Firefox
Publisher
Access
Google Chrome
Adobe Acrobat
MATLAB R2022b
Adobe Creati...
Microsoft Edge
Adobe Digital Ed...
OneNote 2016
Adobe Photosh...
Outlook
Excel
PowerPoint
Documents
File
Home
Share
View
This PC › Documents
Pictures
assignment6
Screenshots
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
OS (C:)
USB Drive (D:)
gxt220010 (\\ma
Network Drive (
Interdepartment
Allshare (\\camp
USB Drive (D:)
3 items
Name
Date modified
Type
Size
key 3
2/17/2023 6:37 PM
Chrome HTML Do...
key
2/17/2023 6:25 PM
Chrome HTML Do...
key2
2/17/2023 6:31 PM
Chrome HTML Do...
176 KB
BitLocker (D:)
Enter the 48-digit recovery key to unlock this drive.
(Key ID: CFFF8927)
061446-061732-101519-130834-472461-240174-687225-492107
Unlock
6:40 PM
2/17/2023


BitLocker (D:)
Enter the 48-digit recovery key to unlock this drive.
(Key ID: CFFF8927)
061446-061732-101519-130834-472461-240174-687225-492107
Unlock
Documents
File
Home
Share
View
This PC › Documents
Name
Date modified
Type
Size
key 3
2/17/2023 6:37 PM
Chrome HTML Do...
key
2/17/2023 6:25 PM
Chrome HTML Do...
key2
2/17/2023 6:31 PM
Chrome HTML Do...
176 KB
3 items
1 item selected 175 KB
6:41 PM
2/17/2023


Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
PS H:\> manage-bde -status
BitLocker Drive Encryption
Control Panel › System and Security › BitLocker Drive Encryption
Search Control Panel
Control Panel Home
BitLocker Drive Encryption
Help protect your files and folders from unauthorized access by protecting your drives with BitLocker.
Operating system dri
OS (C:) BitLocker on
Fixed data drives
Removable data drives - BitLocker To Go
D: BitLocker Decrypting
See also
TPM Administration
Disk Management
Privacy statement
BitLocker Drive Encryption
Decrypting...
Drive D: 99.8% Completed
Pause
Pause decryption before removing the drive or files on the drive could be damaged.
Manage BitLocker
6:41 PM
2/17/2023


Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
PS H:\> manage-bde -status
BitLocker Drive Encryption: Configuration Tool version 10.0.17763
ERROR: An attempt to a
Check that you have ad
PS H:\>
This PC
File
Computer
View
This PC
Search This PC
Pictures
assignment6
Screenshots
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
OS (C:)
USB Drive (D:)
gxt220010 (\\ma
Network Drive (
Interdepartment
Allshare (\\camp
USB Drive (D:)
13 items
1 item selected
Folders (7)
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Devices and drives (2)
OS (C:)
107 GB free of 236 GB
USB Drive (D:)
3.72 GB free of 3.74 GB
Network locations (4)
gxt220010 (\\mars.utdallas.edu) (H:)
Network Drive (K:)
200 GB free of 243 GB
Interdepartmental (\\campus) (L:)
200 GB free of 243 GB
Allshare (\\campus\utd) (P:)
335 GB free of 5.99 TB
6:42 PM
2/17/2023


Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
PS H:\> manage-bde -status
BitLocker Drive Encryption: Configuration Tool version 10.0.17763
ERROR: An attempt to a
Check that you have ad
PS H:\>
Manage
USB Drive (D:)
File
Home
Share
View
Drive Tools
This PC
USB Drive (D:)
Search USB Drive (D:)
Pictures
assignment6
Screenshots
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
OS (C:)
USB Drive (D:)
gxt220010 (\\ma
Network Drive (
Interdepartment
Allshare (\\camp
USB Drive (D:)
3 items
Name
Date modified
Type
Size
2023 Pipeline Brochure
9/8/2022 9:51 AM
Chrome HTML Do...
5,589 KB
UHLC admissions brochure USB
9/11/2019 3:07 PM
Chrome HTML Do...
8,635 KB
UHLC Infographic
9/8/2022 9:50 AM
Chrome HTML Do...
96 KB
6:42 PM
2/17/2023