

Bitlocker & Powershell

Karl Lehner



Agenda

- Zur Person
- Überblick zu Bitlocker und TPM
- Powershell Module zu Bitlocker und TPM
- Demo
- Linksammlung und Zusammenfassung

Zur Person

➤ Karl Lehner

➤ Infrastruktur Themen - ShareVision IT GmbH

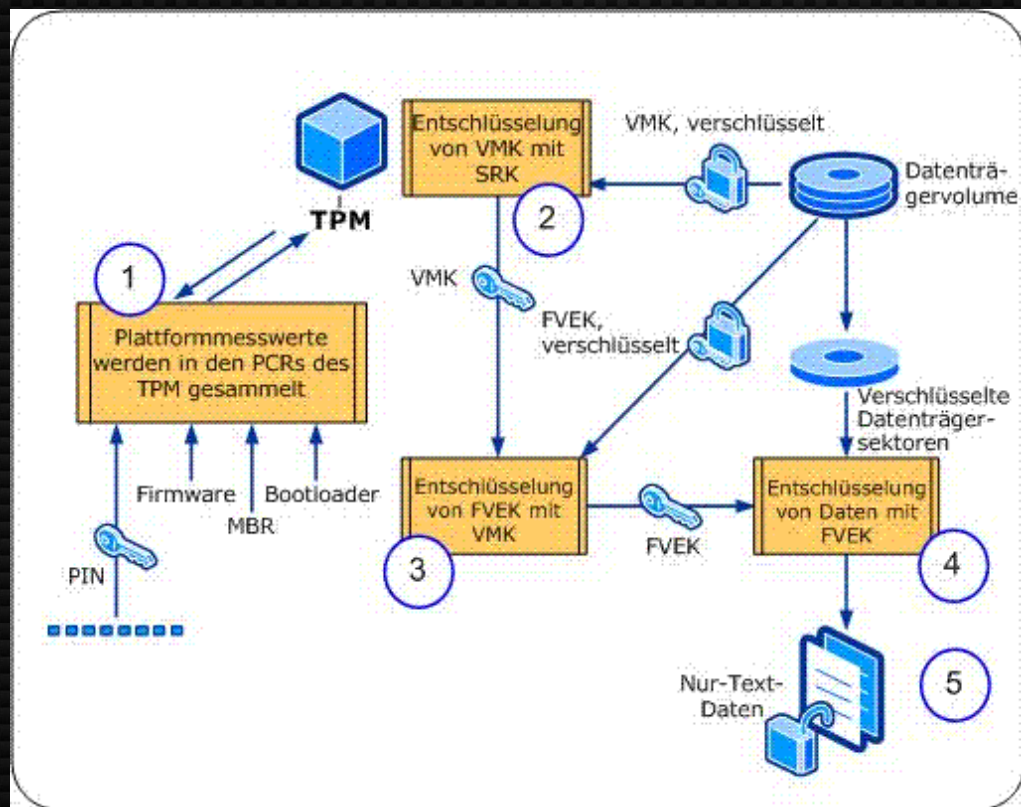


Bitlocker & TPM

Bitlocker

- Microsoft's Festplattenverschlüsselung (FDE)
- Encryption Modes: TPM / +PIN / +USB / Password
- AES encryption algorithm in cipher block chaining (CBC) oder XTS mode with a 128-bit or 256-bit

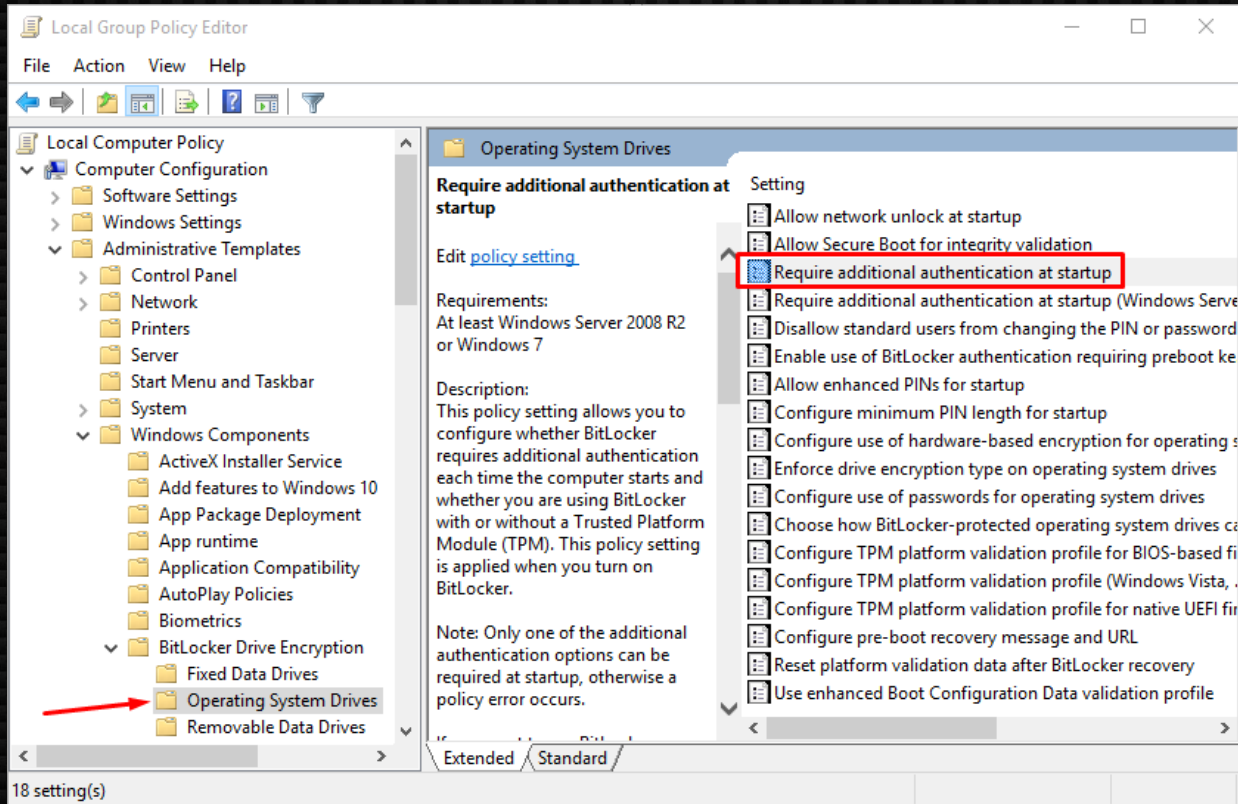
Funktionsweise



Manuelle Verwaltung



Mittels GPO



MBAM

Microsoft Desktop Optimization Pack for Software Assurance

Microsoft BitLocker Administration and Monitoring

Make large-scale BitLocker implementations easier to manage by simplifying deployment and key recovery, centralizing provisioning, monitoring and reporting of encryption status for fixed and removable drives, and minimizing support costs.

MBAM Client 1.0:

- Install MBAM Client 1.0 (32-bit)
- Install MBAM Client 1.0 (64-bit)

MBAM Server 1.0:

- Install MBAM Server 1.0 (32-bit)
- Install MBAM Server 1.0 (64-bit)
- View MBAM 1.0 release notes
- View more information online at <http://go.microsoft.com/fwlink/?LinkId=218349>

Microsoft Desktop Optimization Pack for Software Assurance 2011 R2

Home

- Microsoft Enterprise Desktop Virtualization
- Microsoft Application Virtualization for Desktops
- Microsoft Diagnostics and Recovery Toolset
- Microsoft Advanced Group Policy Management
- Microsoft Asset Inventory Service
- Microsoft BitLocker Administration and Monitoring

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CMD & Powershell

CMD

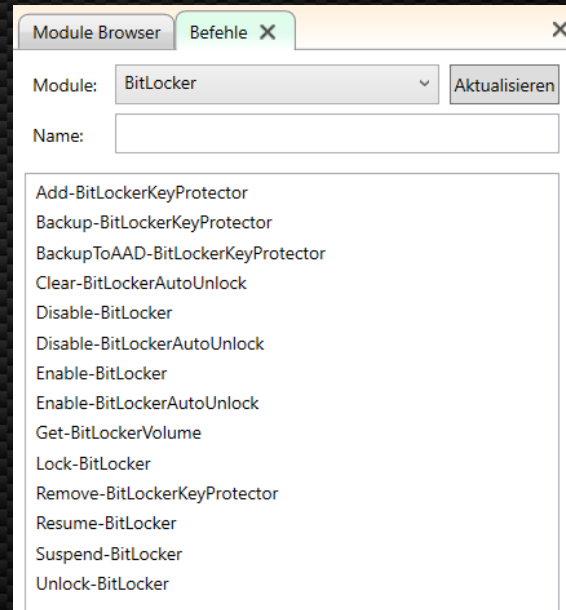
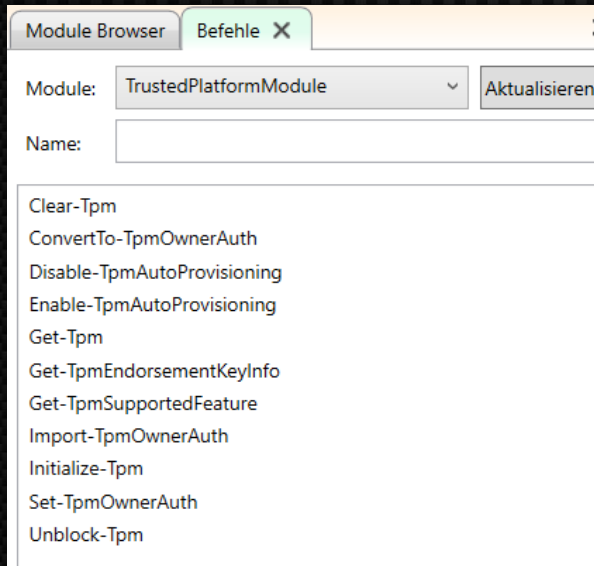
 BdeHdCfg.exe

 Manage-bde.exe

 Repair-bde.exe

Powershell

➤ Module: TrustedPlatformModule & BitLocker



Demo



Beispiele im Zuge der Demo

- Get-Tpm
- (Get-TPM).TpmPresent
- (Get-TPM).TpmReady
- Get-BitLockerVolume
- (Get-BitLockerVolume -MountPoint C:).Protectionstatus
- (Get-BitLockerVolume -MountPoint C:).VolumeStatus
- (Get-BitLockerVolume -MountPoint C:).KeyProtector
- Enable-BitLocker -MountPoint C: -SkipHardwareTest -HardwareEncryption -TpmProtector
- Enable-BitLocker -MountPoint D: -SkipHardwareTest -RecoveryPasswordProtector -EncryptionMethod XtsAes256
- Add-BitLockerKeyProtector -MountPoint D: -RecoveryKeyPath \$RecoveryKeyPath -RecoveryKeyProtector
- Enable-BitLockerAutoUnlock -MountPoint D:
- Resume-BitLocker -MountPoint D:

Linksammlung

- CMD
<https://technet.microsoft.com/de-de/library/ee706522%28v=ws.10%29.aspx?f=255&MSPPError=-2147217396>
- docs.microsoft.com
<https://docs.microsoft.com/en-us/windows/device-security/bitlocker/bitlocker-overview>
- BitLocker basic deployment
<https://docs.microsoft.com/en-us/windows/device-security/bitlocker/bitlocker-basic-deployment>

Danke für eure Aufmerksamkeit

Karl Lehner

