

BitLocker Management

Vista Full Volume Encryption

Feature Overview

- ▶ **BitLocker - Full Volume Encryption**
 - ▶ Vista Enterprise and Ultimate
 - ▶ AD management & Key backup options
 - ▶ Save recovery password to USB, Printer, or File Share
- ▶ **TPM 1.2 – Enables Drive Tampering Protection**
- ▶ **WMI Interface**
- ▶ **Vista Tool compatibility**
 - ▶ MS Boot Loader, System Restore, Disk Management



BitLocker Tools

- ▶ **Manage-bde.wsf - RTM**
 - ▶ Add / Remove key protectors

Tools from MS Premier Support Site:

- ▶ **BitLocker Drive Preparation**
- ▶ **BitLocker Recovery Password Viewer**
- ▶ **BitLocker Repair Tool**
 - ▶ Searches HD for unlinked FVEKs



BitLocker Group Policy

- ▶ Computer Config\Admin Templates\Windows Components\BitLocker Drive Encryption
- ▶ AD Key Backup Options
 - ▶ Backup Recovery Password to AD
 - ▶ Backup Key Package to AD
 - ▶ Require Backup to AD before encryption is enabled
- ▶ Backup Recovery Password to Share
- ▶ Recovery Options
 - ▶ Require Creation of Recovery Password - Default
 - ▶ Require Creation of Recovery Key Package - Default



BitLocker Group Policy

- ▶ **Advanced Options**
 - ▶ Allow BitLocker without TPM
 - ▶ Startup Key or Pin with TPM
- ▶ **Encryption Method AES 128 Diffuser – Default**
- ▶ **Prevent Memory Overwrite on Restart – Disabled**
- ▶ **TPM Platform Validation –7 Default Metrics**
 - ▶ Rom Code
 - ▶ MBR Code – not partition table
 - ▶ Boot Manager



Windows BitLocker Drive Encryption key needed.

Insert key storage media.

Press ESC to reboot after the media is in place.

Drive Label: AHOWARD-PC C: 7/11/2007

Key Filename: 49520EF7-A39C-485C-BA1E-04885F7B9F44.BEK



TPM Group Policy

- ▶ Computer Config\Admin Templates\System\Trusted Platform Module
- ▶ Backup TPM Owner information to AD
 - ▶ Require backup
- ▶ 3 settings related to TPM blocked commands
 - ▶ BDE Security and Compatibility



BitLocker Tips

- ▶ **AD Backup only occurs when BDE is enabled**
 - ▶ Or when TPM is initialized
- ▶ **Manage-bde does more than the wizard**
 - ▶ Data volumes or Removable Drives (NTFS only)
 - ▶ Auto-unlock feature
 - ▶ System volumes on some dual boot machines
- ▶ **Only simple or basic volumes can be encrypted**
- ▶ **Enabling FIPS compliant encryption disables ability to create recovery passwords**



BitLocker Resources

- ▶ Tech ED Presentation & Article – Byron Hynes

<http://blogs.technet.com/tnmag/archive/2007/06/08/byron-hynes-on-bitlocker.aspx>

- ▶ MS BitLocker Site

<http://technet.microsoft.com/en-us/windowsvista/aa905065.aspx>

The Planning and Implementation Guide

<http://www.microsoft.com/downloads/details.aspx?familyid=41ba0cf0-57d6-4c38-9743-b7f4ddbe25cd&displaylang=en&tm>

Manage-bde

<http://blogs.technet.com/steriley/archive/2006/11/25/bitlocker-command-line.aspx>

Repair tool

<http://support.microsoft.com/kb/928201/en-us>

<http://helpdesk.its.uiowa.edu/encryption/>

