Dell ControlVault

Installation Instructions for the ControlVault Update

Dell End User Computing

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A Dell Deployment and Configuration Guide

Revisions

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Executive Summary

Dell ControlVault is a unique hardware-based security solution that provides a hardened and secure bank for storing and processing user credentials. ControlVault keeps passwords, biometric templates, and security codes within the firmware and separated from the Windows operating system environment and memory.

This white paper provides the background and description of updating ControlVault for use with the latest Dell Data Protection security offerings:

- Dell Data Protection | Security Tools
  Scroll down to **Dell Data Protection Technical Documents and Support**, then click on **Advanced Authentication**.
- Dell Data Protection | Encryption
  Scroll down to **Dell Data Protection Technical Documents and Support**, then click on **Encryption**.

Note: You are required to update ControlVault so that it works with the latest Dell Data Protection security products.

1 Dell ControlVault Update Overview

The ControlVault update package provides a single source to update the ControlVault driver and firmware. The ControlVault update package consists of two components:

- The ControlVault Windows Driver
- The ControlVault Firmware

This white paper provides information on why the ControlVault update is required, and the instructions to run the installation and perform the required integrity checks.

Before using the ControlVault update installer, you need to be aware that any previously enrolled fingerprints with a prior version of Dell Data Protection | Security Tools will need to be re-enrolled after the update completes. Make sure you can login to Windows using your password or recovery questions before you proceed.

Note: If you are planning the use of the Dell Data Protection | Access or Wave Systems' EMBASSY Trust Suite (ETS) security products, do not apply this software update.

1.1 Supported Operating Systems

The ControlVault software is supported on the following Microsoft Windows operating system:

- Microsoft Windows 7
- Microsoft Windows 8
- Microsoft Windows 8.1

1.2 Supported Dell Systems

Note: ControlVault requires specific hardware installed on the motherboard to run. You can order ControlVault only during point of sale of the system.

ControlVault is supported on the following Dell systems:

- Dell Latitude E6230
- Dell Latitude E6330
- Dell Latitude E6430s
- Dell Latitude E6430
- Dell Latitude E6430ATG
- Dell Latitude E6530
- Dell Latitude E6440
- Dell Latitude E6440 ATG
- Dell Latitude E6540
- Dell Latitude E7240
- Dell Latitude E7440
- Dell Precision M4700
- Dell Precision M6700
- Dell Precision M4800
- Dell Precision M6800

2 Downloading the ControlVault Update

1. Go to **dell.com/dataprotection.**
2. Click on **Advanced Authentication**.
3. Download the ControlVault software update package.

3 Installation Procedure

Before using the ControlVault update installer you need to be aware that any previously enrolled fingerprints with a prior version of Dell Data Protection | Security Tools will need to be re-enrolled after the update completes. Make sure you can login to Windows using your **password** or recovery questions before you proceed.

The ControlVault software update package first detects the presence of the following security products on the system:

- Dell Data Protection | Access (v2.3.3 and older)
- Trusted Platform Module (TPM) security device v1.2
- Dell Data Protection | Encryption (v8.0.1 and older)
- BitLocker Drive Encryption – Available in certain flavors of Windows® operating systems

Specific combinations of one or more of the above mentioned products already installed in your system may prevent a smooth migration to the latest Dell Data Protection security offering. Based on the product combination, this software update package guides you to a successful migration of the latest Dell Data Protection security products.

Note: On systems with BitLocker Drive Encryption, the drive must be completely (100%) encrypted to allow detection by the update package.

The package updates the ControlVault driver. Once this is successful, the package updates the ControlVault firmware. It is advisable to reboot the system after the Dell ControlVault Software Update package successfully completes installation.

3.1 Dell ControlVault Software Update Caveats

Follow the sections below if you have any issues updating ControlVault.

3.1.1 ControlVault Update Requires Bitlocker Drive Encryption Suspension

If the software update package requires suspending the Bitlocker Drive Encryption feature, re-initialize the TPM (Trusted Platform Module) within the Windows operating system (TPM.MSC) **before resuming Bitlocker**.

For information on initializing TPM, see **technet.microsoft.com/en-us/library/cc753140.aspx**.

3.1.2 ControlVault Firmware Installer Prompts for Owner Password

On older generation platforms, the Dell ControlVault Firmware installer may also prompt for an "owner password" (prompt will be in English only).

If this prompt is displayed, enter the TPM owner password for the installation to proceed. If the TPM owner password is not known, clear the TPM owner password using BIOS Setup (this clears the password) and re-try the Dell ControlVault update.

3.1.3 ControlVault Firmware Installed Displays Error Code 0x00000008

On older generation platforms, the ControlVault firmware installer may fail with error 0x00000008. This is a result of the current ControlVault firmware on the system being very old to allow proper communication during the update.

To resolve the issue, follow the steps below:

1. Go to **dell.com/support**
2. Download and install the ControlVault Driver, version 2.3.309.1625, followed by the ControlVault Firmware update package, version 23.7.009.0A.
3. After the intermediate driver and firmware are updated, you may use this Dell ControlVault Software update package to upgrade to the latest ControlVault driver and firmware.

3.2 Post Installation Procedure

After a successful installation of the ControlVault update package and a successful upgrade to the latest version of the Dell Data Protection | Security Tools product, delete any previous fingerprint enrollments using DDP Security Console or DDP Admin Console (for multiple users) before proceeding to re-enroll fingerprints.