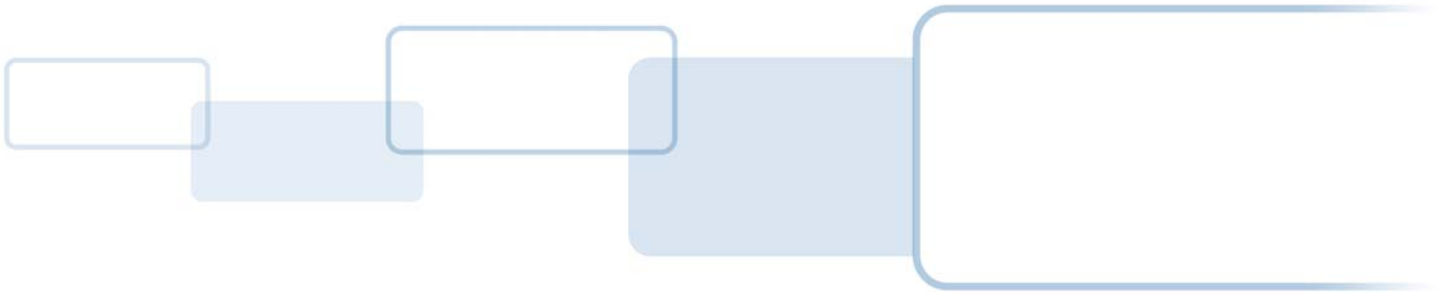
15370 Barranca Parkway
Irvine, CA 92618-2215
USA



iCLASS®

Dell E-Family DDPA PBA Enrollment

APPLICATION NOTE

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March 2011

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1 Introduction

Dell® has integrated a contactless smart card reader into selected models of the new Latitude™ E-Family laptop product line. The base functionality of the contactless reader out-of-the-box is Pre-Boot Authentication (PBA). PBA provides an additional layer of security that utilizes two-factors, card and PIN, before initializing the operating system.

CAUTION: Verify the security software on your laptop before continuing.

Older Latitude E-Family laptops (that is E6400) utilize Dell ControlPoint (DCP) security software. In this case, DO NOT use this document. You need to download the DCP PBA document for the proper process.

Newer Dell Latitude laptops (that is E6410) utilize Dell Data Protection – Access (DDPA). In this case, continue through the process detailed in this document.

2 Contactless Card PBA Compatibility

The Dell embedded 13.56 MHz contactless smart card reader utilizes the most flexible, secure and standardized approach available today. The PBA compatibility with the Dell contactless reader is shown in Table 1 Compatible Card Technologies.

Table 1 Compatible Card Technologies

Card Technology	Compatibility
HID Prox (125 kHz)	None
Indala Prox (125 kHz)	None
HID iCLASS® (13.56 MHz)	Read from a secure memory area
NXP DESFire® (13.56 MHz)	Card Serial Number (CSN) Only
NXP MIFARE® (13.56 MHz)	Card Serial Number (CSN) Only
Sony Felica® (13.56 MHz)	Card Serial Number (CSN) Only
ISO14443 Type A/B (13.56 MHz)	Card Serial Number (CSN) Only
ISO15693 (13.56 MHz)	Card Serial Number (CSN) Only

If you happen to be carrying an HID or Indala proximity card for physical access, you can still utilize your existing infrastructure by upgrading to a multi-technology card. A multi-technology card has both the 125 kHz and the 13.56 MHz technologies inside of a single card. This will allow the cardholder to continue to use the existing readers at the door, as well as the new Dell contactless smart card reader in the Dell Latitude E-Family laptops.

If you are not sure what kind of technology you have, or whether or not it is compatible with the Dell contactless smart card reader, contact HID Global at dellhotline@hidglobal.com.

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3 Prerequisites

Several things must happen before you attempt to enroll a contactless card through the Dell Data Protection – Access (DDPA) manager. Please ensure you have the following equipment and information before continuing.

- **A compatible contactless smart card**

  See compatible contactless smart cards in Table 1 Compatible Card Technologies, page 4.

- **A compatible Dell E-Family Latitude laptop**

  The integrated contactless smartcard reader is available as a build to order option on a variety of different laptop models. To ensure you have the contactless reader option, you will see a small etched card, with concentric arcs on either side, just right of the mouse pad on the palm rest.

- **Microsoft® Windows® Password with Administration Rights**

  For determining the computer user's administration rights, reference the Windows User Accounts Manager. Go to **Start** > **Settings** > **Control Panel** > **User Accounts**.

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4 Enrollment Procedure

Use the following procedure to enroll a contactless smartcard into the Dell laptop for PBA.

1. Launch the DDPA manager by clicking the **Access within the DDPA** folder in the **Programs** menu.

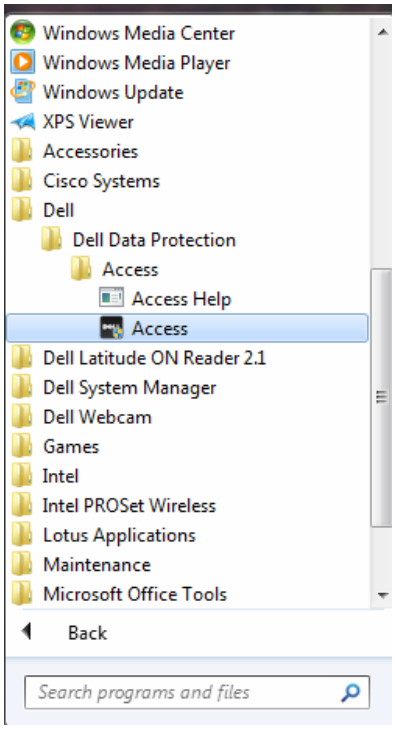

Figure 4-1 Windows Programs Menu

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2. For first time users, the DDPA manager automatically starts the **Security Wizard**.

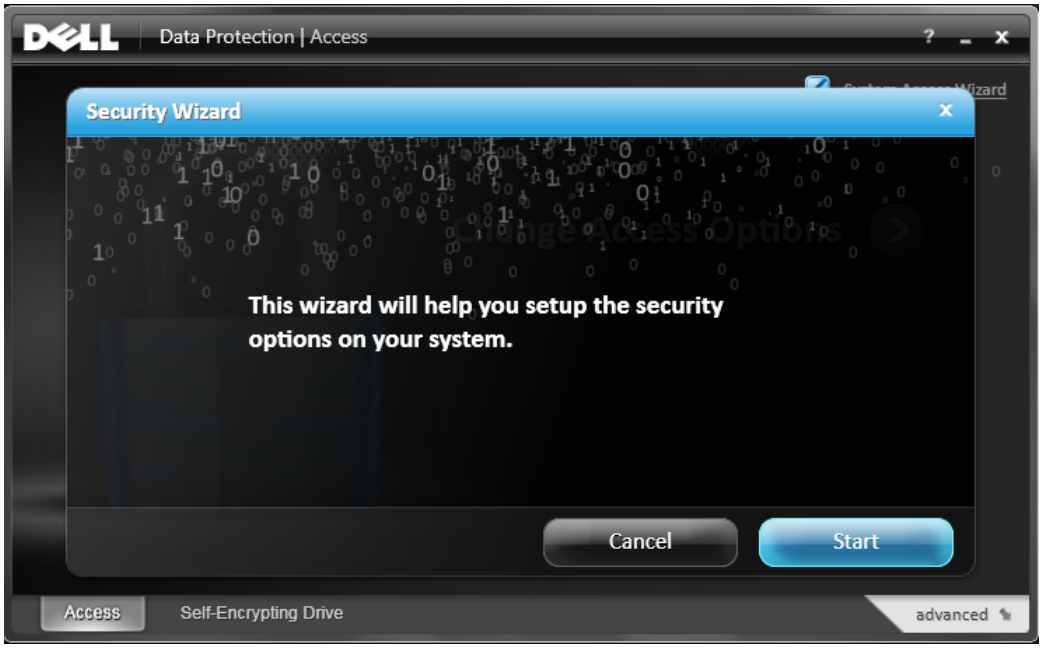

Figure 4-2 Dell Protection | Access – Security Wizard – Start

3. For ease of setup, click **Go directly to the features I want to configure**.

Figure 4-3 Dell Protection | Access – Security Wizard

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4. Select the features. Clicking **Smartcard or contactless smartcard** enabling PBA only and **Pre-Windows login** option allowing for direct access to the Windows Desktop without performing an additional login.

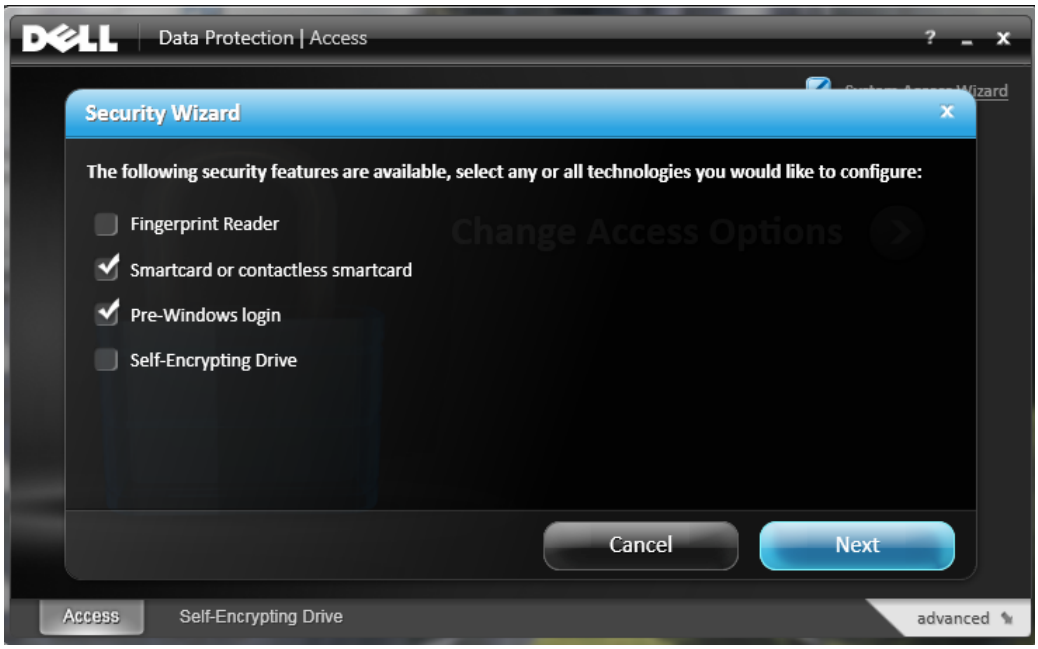

Figure 4-4 Dell Protection | Access – Security Wizard – Features

5. Continue to enroll your contactless smartcard.

Figure 4-5 Dell Protection | Access – Security Wizard – Smartcard Enrollment

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6. Enter your Windows Password and click **Next**.

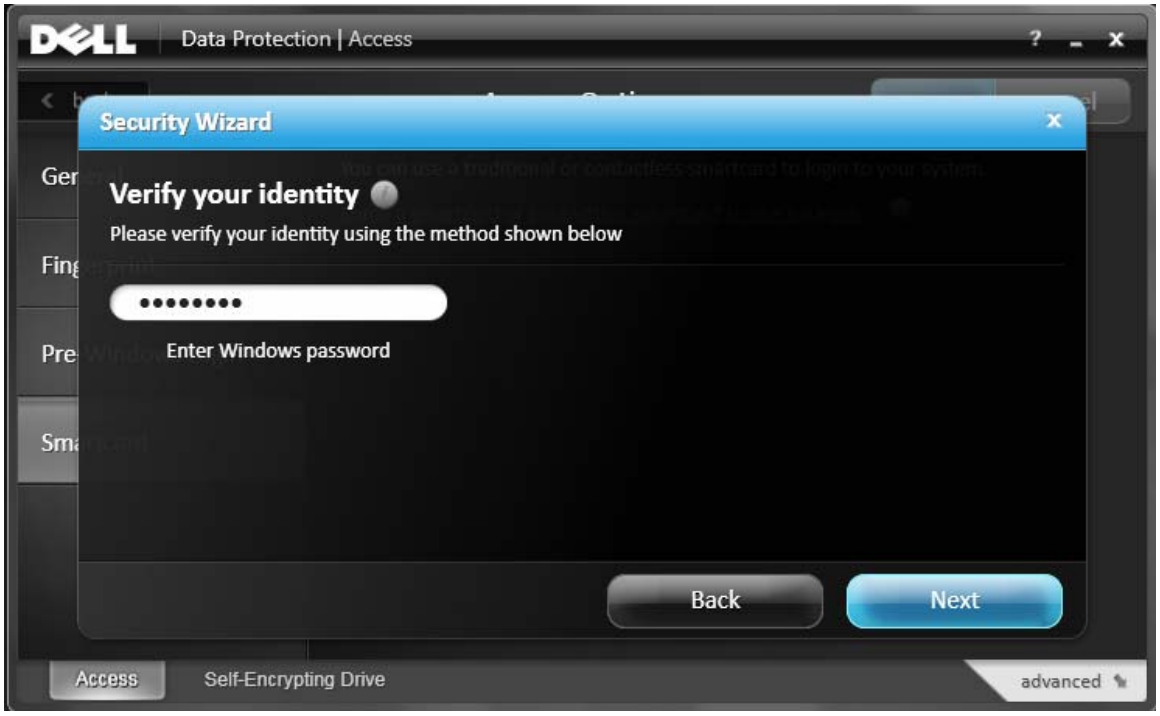

Figure 4-6 Dell Protection | Access – Security Wizard – Identity Verification

7. Enter your PIN twice and click **Save**.

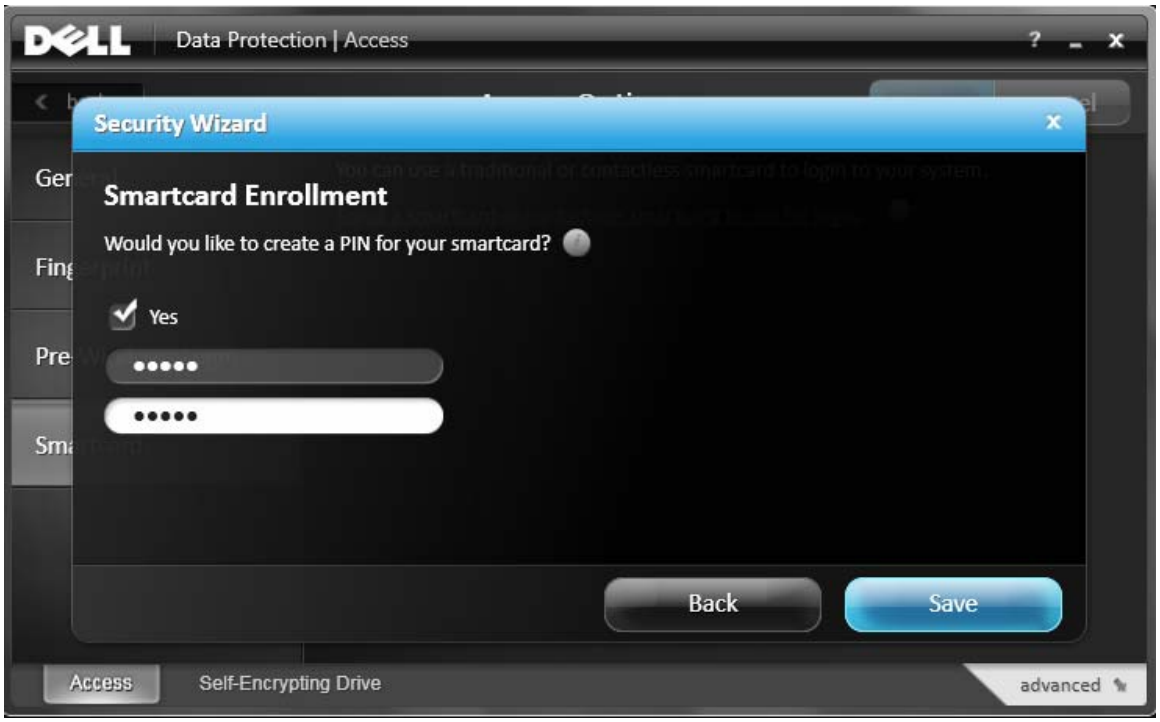

Figure 4-7 Dell Protection | Access – Security Wizard – PIN Confirmation

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8. Present your contactless smartcard to the reader.

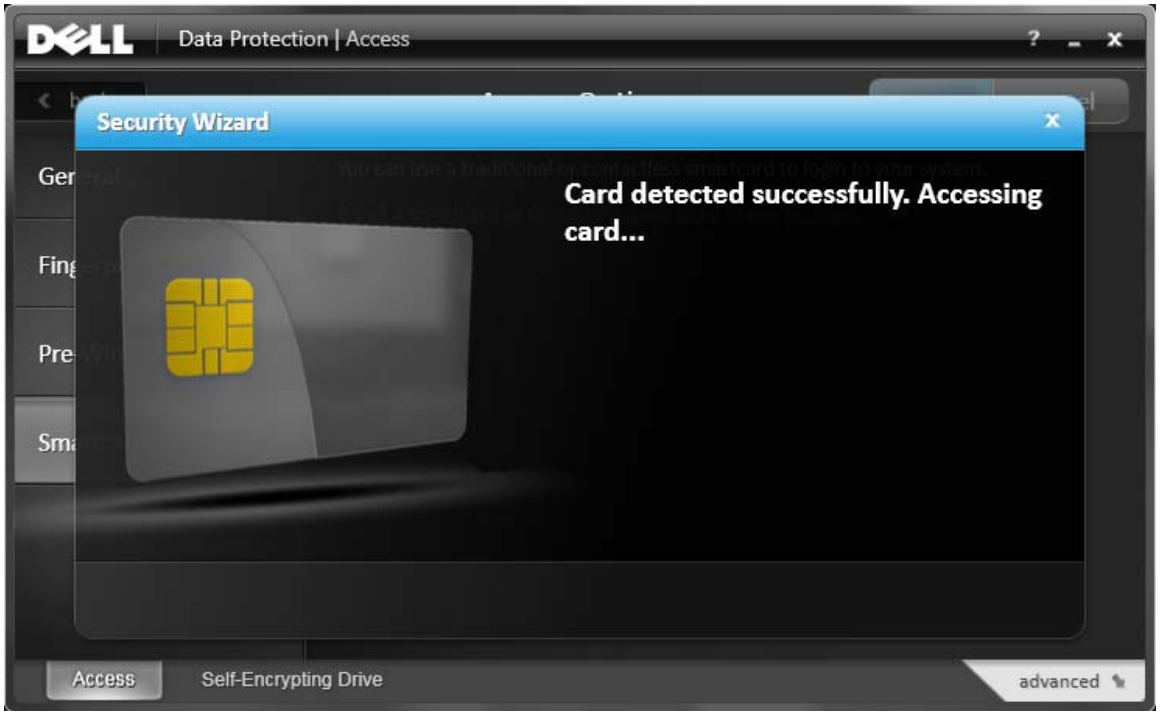

Figure 4-8 Dell Protection | Access – Security Wizard – Card Detected

9. Wait for saving the smartcard information and you see the following screen.

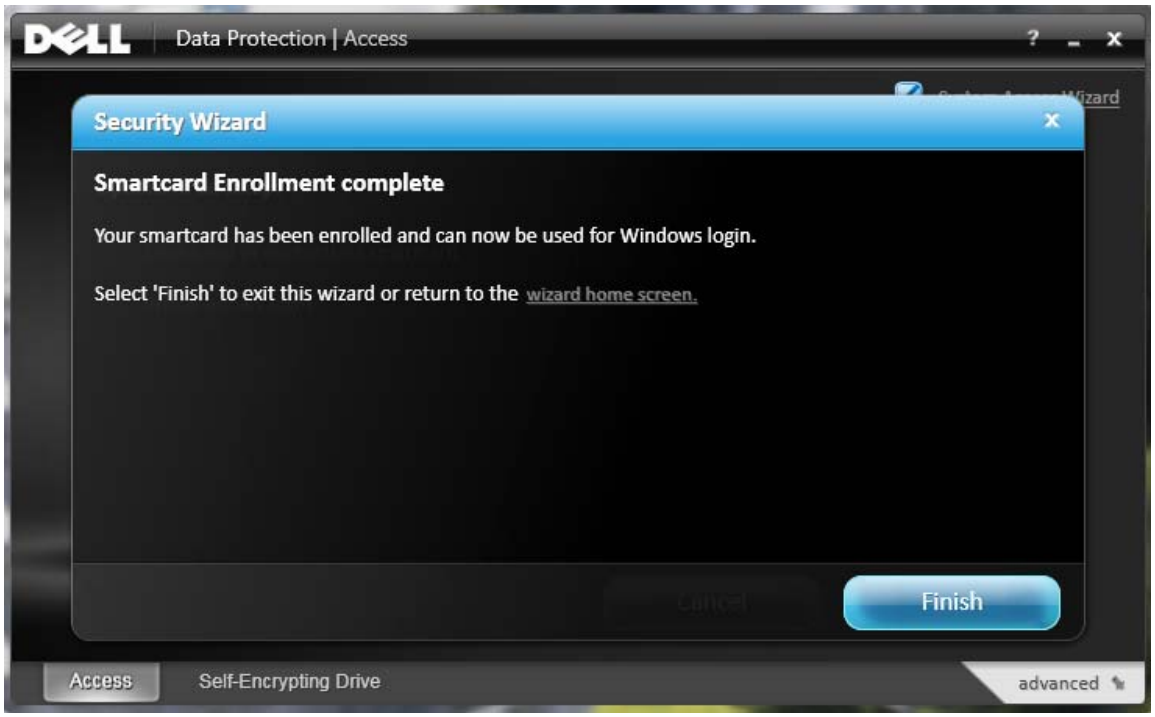

Figure 4-9 Dell Protection | Access – Security Wizard – Complete

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10. If you selected the **Pre-Windows login**, continue through the following process. Otherwise, skip this process.

Figure 4-10 Dell Protection | Access – Security Wizard – Pre-Windows Login

11. For keeping the PBA and Windows login separate, enter any new password twice. To skip Windows login and go directly to your Desktop, enter your Windows password twice and click **Next**.

    Remember this password for passing PBA without your card.

Figure 4-11 Dell Protection | Access – Security Wizard – Pre-Windows Login

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12. The Pre-Windows login setup is complete. Click **Finish**. Exit the DDPA Manager. Restart your computer and verify the configuration.

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5 Card Presentation

1. For both enrollment and during PBA authentication, present your card to the Dell contactless reader.

   The reader is located to the right of the touch mouse, signified by a small card with arcs on each side.

Figure 5-1 Contactless Smartcard Reader Location

2. Shortly, hold your card over the reader.

Figure 5-2 Presenting Card

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6 Contactless PBA Usage Notes

After a successful enrollment, and rebooting the laptop, the BIOS displays a prompt to **Authenticate Using Smartcard**.

Present your card to the reader (see Section 5 Card Presentation, page 13) within 30 seconds.

Without presenting the card in this timeframe, the contactless PBA times out and a dialog displays requesting your BIOS password.

If presenting your card within 30 seconds, the dialog displays requesting you to **Enter your Smartcard PIN**. (See Figure 6-2 Authenticate Using Smartcard – Enter Smartcard PIN, page 15)

CAUTION: There is no textbox for PIN entry, be careful when typing your PIN to ensure not pressing a wrong key.

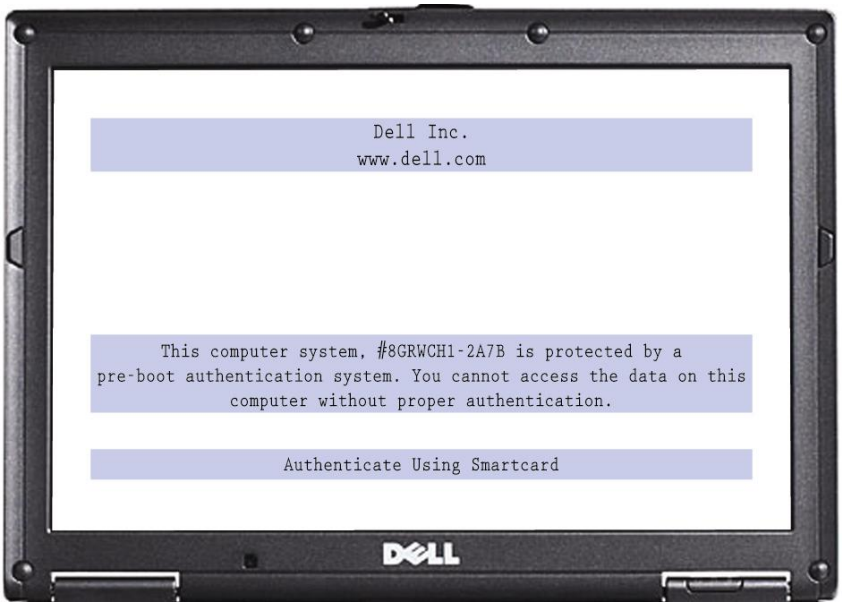

Figure 6-1 Authenticate Using Smartcard Screen

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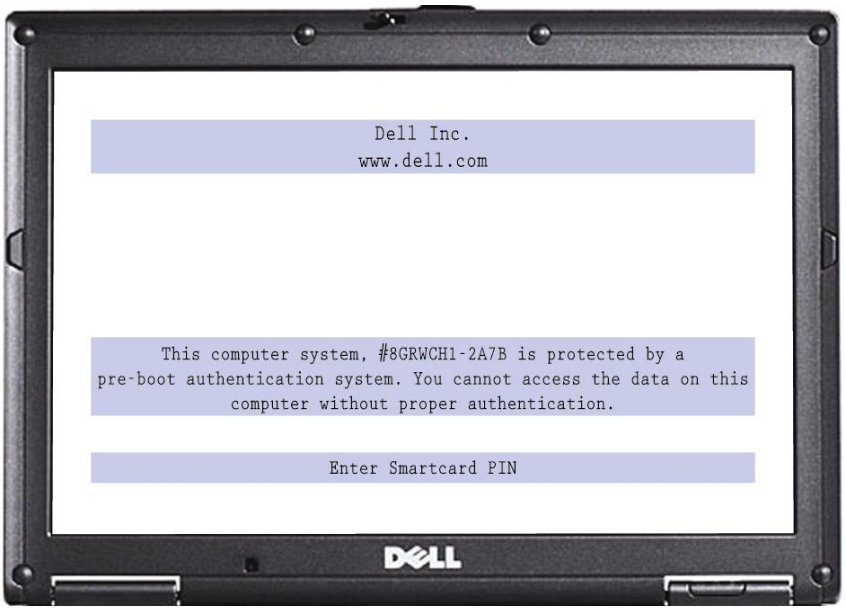

Figure 6-2 Authenticate Using Smartcard – Enter Smartcard PIN

For questions about the card technology or usage of contactless smartcards with Dell's Pre-Boot Authentication (PBA), contact HID Global at dellhotline@hidglobal.com.

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