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## Datacard<sup>®</sup> XPS Card Printer Plug-in

*User's Guide*

January 2015

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**XPS Card Printer Plug-in User's Guide**

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# Chapter 1: Use the XPS Card Printer Plug-in



This Guide explains how to use Datacard® ID Works® Identification Software, Datacard® IDCentre™ Identification Software, or Datacard® WebID® Identity Information Software with Datacard SD, CD, and CE Series printers.

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## Introduction to This Guide

*The XPS Card Printer Plug-in User's Guide:*

- Provides background information about how the software applications use plug-ins to translate your card designs into language the printer can understand and use.
- Explains how the software features relate to features in your printer, as well as which software features cannot be used with the printer.
- Describes what you can do to ensure that ID applications produce the correct results on SD, CD, and CE Series printers.

The information in this guide applies to version 6.5 of Datacard® ID Works® Identification Software and Datacard® IDCentre™ Identification Software.

## What is a Plug-in?

A plug-in is a software module that provides an interface between the main Datacard software application and a peripheral device (such as a card printer) or between the peripheral device and a component within the device (such as a magnetic stripe encoder).



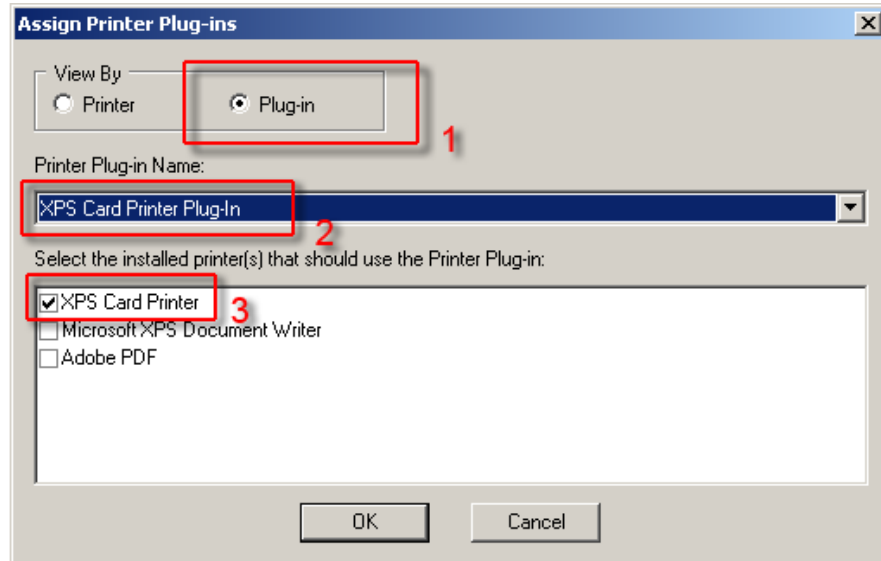
The printer plug-in connects to the software application, and the encoder plug-in connects to the printer plug-in.

# Assign the Printer Plug-in

If the XPS Card Printer Driver was installed before the plug-in, the plug-in is assigned to the printer automatically. Otherwise, you have to assign it manually. The printer plug-in must be assigned on each computer that prints cards with the printer.

You specify associations between available printer plug-ins and installed printers using the Assign Printer Plug-ins utility. How you access the utility depends on which software product you are using:

- In the ID Works or IDCentre suite, log on to the Administrator application and select **Assign Printer Plug-ins** from the **Printing** menu. Refer to the Administrator online help topic “Assign printer plug-ins” for step-by-step instructions.
- WebID users can access the Assign Printer Plug-ins utility through the Workstation Utility.



1. Select **Plug-in** in the **View By** area of the Assign Printer Plug-ins dialog box.
2. Select **XPS Card Printer Plug-in** from the Printer Plug-in Name drop-down list.
3. Check the box next to each XPS card printer. (The default driver name is XPS Card Printer. The names of your printers might be different.)
4. Click **OK**.



## Print Multiple Copies of Cards

When a production operator specifies that two or more copies of a card be printed, the Datacard ID software creates one print job for each copy of each card.

## Use the Printer to Encode Smart Cards

Encoding smart cards requires a custom Smart Card Application Manager plug-in. Refer to the *ID Works Software Development Kit Programmer's Reference Guide* for information about developing and using plug-ins.



# Chapter 2: Design Considerations

# 2

This chapter describes what you need to be aware of as you design a card using Datacard® ID Works® Identification Software, IDCentre™ Identification Software, or WebID® Identity Information Software with SD, CD, and CE Series printers.

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## Project Design

ID Works Designer includes some features that cannot be used with the printer. For example, the application does not know the output device you plan to use, so it cannot provide feedback at design time about whether or not a feature is supported by the printer.



We recommend that you print sample cards from the Designer application to the card printer to ensure that your card design works properly when in production.

# Card Design Properties

You use the Edit Card Design Properties dialog box to change properties of the overall card design. (Refer to the online help topic “Access the Edit Card Design Properties dialog box.”)

The following settings in ID Works Designer are used instead of the setting in the **Printing Preferences** dialog box of the XPS Card Printer:

- Landscape or portrait orientation
- Number of copies
- Print on both sides (duplex printing)
- Rotate by 180 (degrees)
- Magnetic stripe encode only
- Topcoat and print blocking
- Disable printing
- Lamination

## Card Size

The card printers support ISO ID-1 (CR80) cards. If your card design is larger than a CR80 card (3.37 in x 2.125 in, 85.6 mm x 53.98 mm), only a portion of the card design will print.

## Topcoat

The XPS Card Printer Plug-in supports the ID Works card design field and non-field-level topcoat options.

- The Use topcoat panel setting is located on the Appearance tab of the card Edit Field Properties dialog box.
- For field-level settings, the topcoat selection is on the General tab of the card Edit Field Properties dialog box.
- For non-field-level settings, the topcoat selection is on the Printing tab of the Edit Card Design Properties dialog box.

The plug-in does not support drawing text, photos, or graphics to the topcoat layer.

## Ribbon Configurations

The XPS Card Printer Plug-in is not aware of the type of ribbon installed in the printer. The card design determines which fields are rendered in color (YMC), monochrome (K), or topcoat (T). The Card Printer Driver also redirects the rendering to fit the ribbon that is installed.

Refer to your printer's *Installation and Administrator's Guide* and *Driver Guide* for information about setting up color and monochrome printing.

## Lamination

If your printer includes a laminator, you can use the ID Works Card Designer Lamination tab to specify laminator overlay options for each card design.

When you apply an overlay to a card, the card can become bowed slightly due to heat from the laminator. The Card Printer Driver includes a Debow card option that tells the laminator to bend the card back into its proper shape.

If you want to override the Card Printer Driver Lamination Debow card preference, you can specify a lamination escape in your card design. Refer to the printer's *Driver Guide* for complete information on using escapes.

## UV Printing

If the printer supports an ultraviolet (UV) fluorescent ribbon, you can use the "Print to topcoat" card design feature to print text, graphics, or photos using the ribbon UV panel.

If the ribbon installed in the printer has both UV and topcoat panels in the same panel set (YMCKFT), use the Card Printer Driver Printing Preferences Print Area tab to specify how to apply topcoat to the card. The default is to topcoat the entire card. Or, select one of the predefined topcoat masks to apply topcoat to the card. You also can use a topcoat escape to override the Printing Preferences selection. Refer to the printer's *Driver Guide* for complete information about specifying printing preferences and using escapes.



# Chapter 3: Magnetic Stripe Encoding

# 3

This chapter describes how to use the Plug-in to encode magnetic stripe data on your cards.

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## Design an ID Works Project or WebID Application to Encode Magnetic Stripes

Do the following to add magnetic stripe data to your card design.

1. On your ID Works Production Form or WebID page, insert a field for each magnetic stripe track you want to encode. To combine information from two or more fields on a track, create a composite field. For step-by-step instructions, refer to the ID Works Designer online help topic “Add a composite field to a Production Form” or “Data View Page Composite Field Definition” in the *WebID Configurator Utility Guide*.



For WebID applications, the magnetic stripe track fields must be named as follows:  
<Magnetic Stripe Card Field Name> : Track n

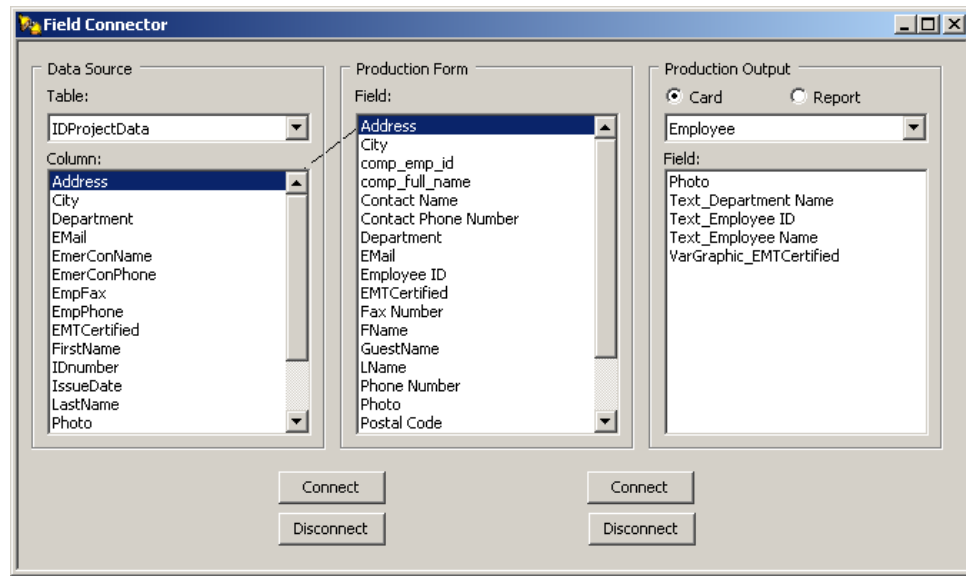
For example, if you accept the default magnetic stripe field name (Mag Stripe Field 1), the composite field for track 1 would be named Mag Stripe Field 1 : Track 1. Note that there is a space on each side of the colon (:).

2. Insert a magnetic stripe field in your card design. Refer to the online help topic “Add a magnetic stripe field to a card” for step-by-step instructions.
3. Double-click the magnetic stripe field to display the Edit Field Properties [Magnetic Stripe] dialog box.
4. On the Encoding tab, select **XPS Card Printer Magnetic Stripe Plug-in** from the Device list.
5. Also on the Encoding tab, select an encoder configuration. Refer to “[Create a New Magnetic Stripe Encoder Configuration](#)” on [page 11](#) or “[Change a Magnetic Stripe Encoder Configuration](#)” on [page 13](#).
6. Click **OK** to close the Edit Field Properties [Magnetic Stripe] dialog box.

- Using the ID Works Field Connector, connect Production Form fields to the appropriate tracks in the Production Output area. Refer to the ID Works Designer online help topic “Connect fields” for step-by-step instructions.



For information about magnetic stripe data formats, refer to “Magnetic Stripe Data Formats” on page 17.



In WebID applications, card fields are connected automatically to database columns if the card field name matches the database column name.

- Print a test card for your project using the ID Works Production application or the WebID Card Issuance Workstation.



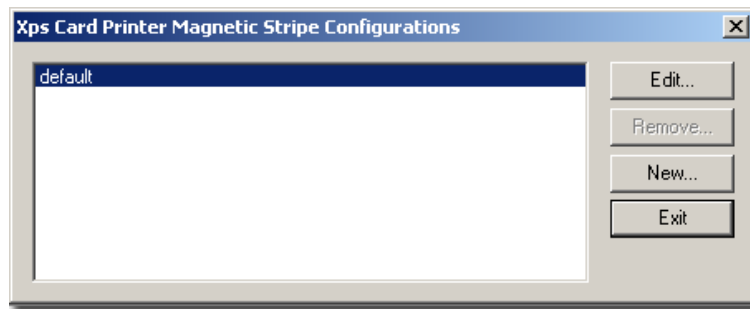
Sample cards printed in the ID Works Designer application are not encoded.



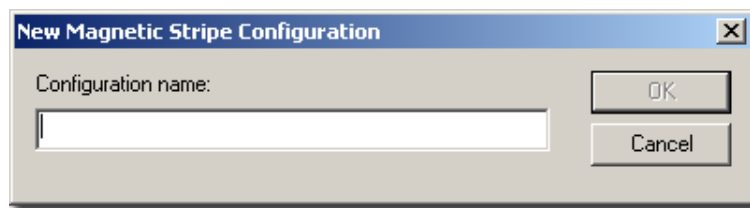
# Create a New Magnetic Stripe Encoder Configuration

To create a new configuration by copying an existing configuration, refer to [“Change a Magnetic Stripe Encoder Configuration”](#) on page 13.

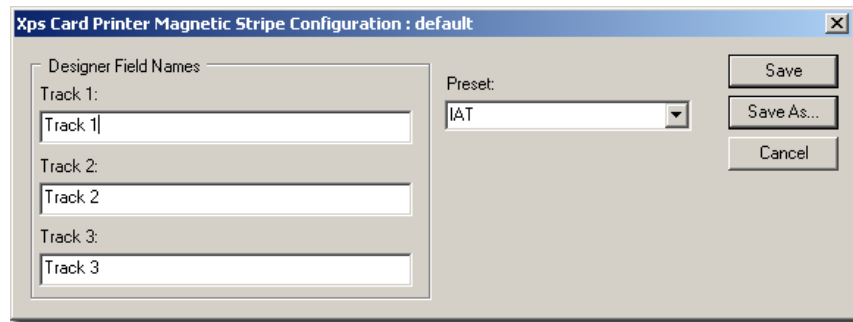
1. Open or create an ID Works project that has a card design with a magnetic stripe field.
2. Select the magnetic stripe field and open the Edit Field Properties [Magnetic Stripe] dialog box. Refer to the online help topic [“Add a magnetic stripe field to a card”](#) for step-by-step instructions.
3. On the Encoding tab of the Edit Field Properties [Magnetic Stripe] dialog box, select **XPS Card Printer Magnetic Stripe Plug-in** from the Device list.
4. Click **Edit Configurations**. The XPS Card Printer Magnetic Stripe Configurations dialog box opens.



5. Click **New**. The New Magnetic Stripe Configuration dialog box opens.



6. Enter a name and click **OK**. The XPS Card Printer Magnetic Stripe Configuration : [name] dialog box opens.

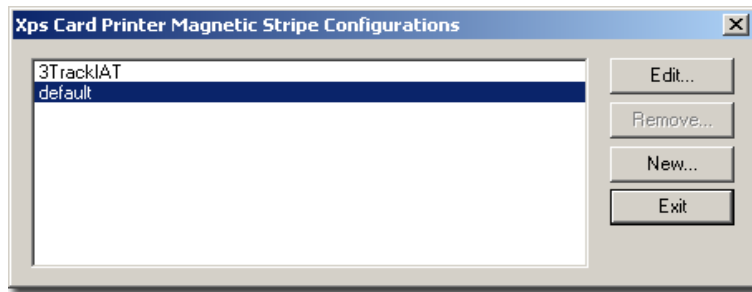


It might be helpful to give the configuration the same name as the ID Works project or WebID application that will use it.

7. (This step is optional): In the Designer Field Names area, change the track names from the default values (Track 1, Track 2, Track 3) to the names of the Production Form or WebID page fields that will supply data for the tracks. The Preset field area also can be used. Refer to [“Magnetic Stripe Data Formats”](#) on [page 17](#) for more information.
8. Click **Save** to save your changes and close the XPS Card Printer Magnetic Stripe Configuration : [name] dialog box. Click **Exit** and then click **OK** to close the Edit Field Properties [Magnetic Stripe] dialog box.

# Change a Magnetic Stripe Encoder Configuration

1. Open or create an ID Works project that has a card design with a magnetic stripe field.
2. Select the magnetic stripe field and open the Edit Field Properties [Magnetic Stripe] dialog box. Refer to the online help topic “Add a magnetic stripe field to a card” for step-by-step instructions.
3. On the Encoding tab, select **XPS Card Printer Magnetic Stripe Plug-in** from the Device list.
4. Click **Edit Configurations**. The XPS Card Printer Magnetic Stripe Configurations dialog box opens.



5. Select the configuration you want to change and click **Edit**. The XPS Card Printer Magnetic Stripe Configuration : [name] dialog box opens.
6. Make the necessary changes.
7. Click **Save** to save your changes with the current configuration name. The XPS Card Printer Magnetic Stripe Configuration : [name] dialog box closes.

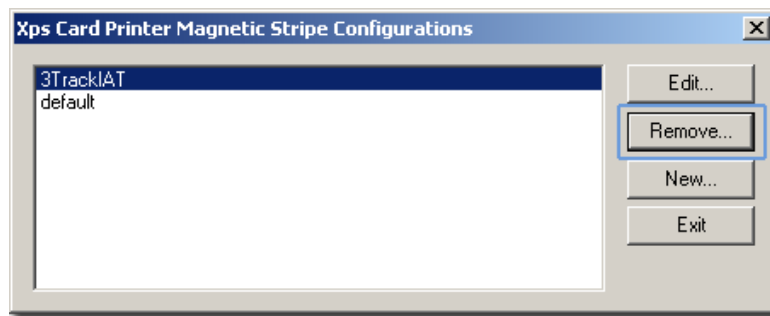
– or –

Click **Save As** to save your changes under a new configuration name without changing the original configuration. The Save Configuration as dialog box opens. Type a configuration name and click **OK**.

8. Click **Exit** to close the XPS Card Printer Magnetic Stripe Configurations dialog box, and then click **OK** to close the Edit Field Properties [Magnetic Stripe] dialog box.

# Delete a Magnetic Stripe Encoder Configuration

1. Open an ID Works project that has a card design with a magnetic stripe field.
2. Select the magnetic stripe field and open the Edit Field Properties [Magnetic Stripe] dialog box. Refer to the online help topic “Add a magnetic stripe field to a card” for step-by-step instructions.
3. On the Encoding tab, select **XPS Card Printer Magnetic Stripe Plug-in** from the Device list.
4. Click **Edit Configurations**. The XPS Card Printer Magnetic Stripe Configurations dialog box opens.



5. Select the configuration you want to delete and click **Remove**. A confirmation dialog box opens.
6. Click **Yes** to remove the configuration. Click **Exit** to close the XPS Card Printer Magnetic Stripe Configurations dialog box and then click **OK** to close the Edit Field Properties [Magnetic Stripe] dialog box.

# Distribute the ID Works Project and Encoder Configuration

If your project will be used in multiple locations, you can distribute both the ID Works project and any encoder configurations you may have changed or created for your card designs.

## Distribute the ID Works Project

ID Works users can use the Export and Import utilities in the Administrator application to distribute projects. Refer to the online help topics “Export a project” and “Import a project” for step-by-step instructions.

## Distribute the WebID Project

WebID users must use Microsoft® Windows® Explorer to copy the entire project folder to the WebID Server.

- On the WebID Server, the default location of the ID Works project is:  
C:\Inetpub\wwwroot\ID Works\Projects.
- The default location for the project folder on the ID Works Workstation PC where it was designed is either:
  - **For version 5.0 to 6.0:**  
C:\Program Files\ Datacard\ID Works\Projects\  - **For version 6.5:**  
In the Shared Documents subfolder, Datacard\ID Software\Projects
- On the WebID Server, the project folder must be placed in:  
Inetpub\wwwroot\ID Works\ Projects\

## Distribute Encoder Configurations

The XPS Card Printer Magnetic Stripe Plug-in stores configurations in a file named XPSCrdPrnMagStripe.ini. The default location for the ID Works version 5.0 and 6.0 bin directory is: C:\Program Files\Datacard\ID Works\bin. You can change the default location using the ID Works installation program. Search for the file in Windows Explorer if you do not know its location.

For ID Works version 6.5, use the option to export the magnetic stripe configuration file with the project.

The Export utility in ID Works Administrator prior to version 6.5 does not include any encoder configurations you may have changed or created for your card designs. If you plan to distribute your ID Works project to other computers in your system, you must ensure that the encoder configurations are available on those computers. There are three ways to accomplish this:

- If you are using ID Works version 6.5, check the “Include Magnetic Stripe Configurations” box when you export and import projects.
- Recreate the encoder configurations on each computer in your system (this requires a copy of ID Works Designer on each computer).
- Distribute the XPSCrdPrnMagStripe.ini file by copying it (using Windows Explorer) from the computer on which it was created to the other computers in your system.

# Magnetic Stripe Data Formats

The XPS Card Printer Driver supports the following magnetic stripe data formats:

## ISO 3-Track Data

The default formats for a three-track magnetic stripe option are:

Track 1 — IATA

Track 2 — ABA

Track 3 — TTS

This combination is often abbreviated IAT. This format is called ISO format.

### IATA (International Air Transport Association)

The maximum number of characters for IATA format is 76 characters. These characters can include spaces, uppercase alphabetic characters, numeric characters, and the following special characters:

! # \$ % ' ( ) \* + , - . / ; : < @ > = ^ \ [ " & \_

### ABA (American Bankers Association)

The maximum number of characters for ABA format is 37 characters. Numeric characters and the following special characters are allowed:

: ; < = >

### TTS (Thrift Third Standard)

The maximum number of characters for TTS format is 104 characters. Numeric characters and the following special characters are allowed:

: ; < = >

## JIS Single Track

The default data format for a single-track magnetic stripe module is the JIS (Japanese Industrial Standard) Type II format.

### Japanese Industrial Standard

The maximum number of characters for the JIS format is 69 characters. These characters can include spaces, numeric characters, uppercase alphabetic characters, lowercase alphabetic characters, and the following special characters:

!"#\$%&'()\*+,-./:;<=>@[ ]^\_~{|}~

Japanese-language characters also are supported from a PC running a Japanese edition of a supported Windows operating system. They include the following:

- Special characters:

。 『 』 、 ・ ー ゝ 。

- 45 Katakana characters:

アイウエオ  
カキクケコ  
サシスセソ  
タチツテト  
ナニヌネノ  
ハヒフヘホ  
マミムメモ  
ヤ ュ ヨ  
ラリルレロ  
ワ                  ン

- 10 Katakana characters:

ヲ アイウエオヤユヨツ

Each time you start or stop using Japanese-language characters, the Card Printer Driver adds a hidden character. Each hidden character reduces the number of characters you can encode by one character.



## Magnetic Stripe Pass Through

The printer plug-in does not process magnetic stripe data that is sent to the printer when Pass Through is selected.

Using Pass Through is useful when you need to encode data that does not conform to IAT or JIS magnetic stripe formats.

## Printer Setup

Refer to the printer's *Driver Guide* for information about magnetic stripe setup.

