

JOLLY TECHNOLOGIES

Jolly Encoder Configuration Guide

The purpose of this guide is to document the supported hardware, media and configuration process for the Jolly Encoder.



Jolly Encoder

The Jolly Encoder is a software module for Jolly software products including ID Flow and Lobby Track. The module is capable of reading and writing several variations of MIFARE contactless cards and HID Prox cards when used with compatible card printers and smart card readers.

The Jolly Encoder is evolving as a product and may support additional hardware and card formats as development continues.

Supported Hardware and Media

- Evolis Card Printers with SpringCard CrazyWriter, HID OMNIKEY 5x21 or 5x25 Smart Card Readers
- FARGO Card Printers with HID OMNIKEY 5x21 or 5x25 Smart Card Readers
- MIFARE Classic contactless cards; other variations of MIFARE that do not require encryption / certificates may also work; MIFARE DESFire is not currently supported
- HID Prox cards

Installation

- 1. Install Jolly ID Flow or Lobby Track software
- 2. Install the card printer as instructed by card printer manufacturer
- 3. Install the smart card reader drivers; these are often not included with the card printer and must be downloaded and installed separately

Configuration

- 1. After installation is complete, start the Jolly software and edit the card design
- 2. Click the Smart Card toolbox item

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- 3. Check the Enable Encoding checkbox
- 4. Select Jolly Encoder
- 5. Click the Configure button



6. The smart card readers detected on the system will be listed

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Jolly Encoder			-x-				
Connection							
Configure the e	ncoder and connection setti	ngs.					
Encoder	OMNIKEY CardMan 5x214	CL 0	•				
Share Mode	OMNIKEY CardMan 5x21 (OMNIKEY CardMan 5x21-(OMNIKEY CardMan 5x25 (OMNIKEY CardMan 5x25-() CL 0) CL 0					
Command List							
Add Command							
Have questions? C	lick here for help.	Ok	Cancel				

- 7. Select the contactless smart card reader you would like to use, **for HID readers, the contactless versions are denoted with the -CL suffix**; Jolly software does not currently support contact smart cards
- 8. Click Add Command to add a reader command to the list. For more information about smart card commands, refer to the Help file

🔊 Comman	d Properties	×						
Command								
Family	MIFARE							
Subfamily	MIFARE Classic							
Action	ction MIFARE Classic Get Data							
Parameters								
	Value Type Data Source Data							
P1	Hex Fixed Value 00							
P2	Hex Fixed Value 00							
Buffer Leng	gth Hex Fixed Value OB							
Response								
Save the re	Save the response data to a database field.							
	Value Type Data Source Data							
Data	Hex 💌 Database Field 💌	▼ Assign ▼						
Data Lengt	th Hex Fixed Value 00							
<u>Have questio</u>	ns? Click here for help.	Ok Cancel						

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Example Command:

Read a MIFARE Classic card's unique ID (UID) and save it to a database field called "CardNumber"

Select the Get Data command as shown below, and set the Response Data field to CardNumber

<u> Command</u>	Properties								
Command -									
Family	MIFARE								
Subfamily	MIFARE Classic 🔹								
Action	MIFARE Classic Get Data								
Parameters									
	Value Type Data Source Data								
P1	Hex Fixed Value Hex								
P2	Hex Fixed Value Fixed Value Hex								
Buffer Lengt	th Hex Fixed Value OB								
Response									
Save the rea	Save the response data to a database field.								
	Value Type Data Source Data								
Data	Hex Database Field CardNumber Assign 								
Data Length	Hex Fixed Value Total								
Have question	s? Click here for help. Cancel								

See the Advanced section later in this document for UID formatting information

- 9. When you are done adding commands, click Ok to close the dialogs
- 10. Close the card designer and save the changes to the card design when prompted
- 11. Open Workstation Settings and open the Printer Options dialog for the card printer you will be using; for example, in ID Flow, open Workstation Settings, click on Tasks > Enrollment, then click on Printer Options
- 12. Select your card printer in the Printer box
- 13. Select the printer's encoder station in the Encoder Station box; if you will be using MIFARE contactless cards, select MIFARE; if you will be using HID Prox cards, select Proximity Card

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Workstation Device	Settings				×			
Card Printer Report Printer								
Configure the printer that will be used to print ID cards at this workstation.								
☑ Display print dialog before printing								
Printer DTC4000 Card Printer Properties								
Printer Type	Fargo Card Printer		•	Auto	Detect			
		Ad <u>v</u> ance	d Settings					
Paper Size	CR-80	•	Auto Sele	ct				
Pap <u>e</u> r Tray	First Available	•	Crop Marks					
Paper Type	Plain Paper	•	No Ma	arks	•			
Print <u>M</u> ode	Automatically Select	•	Cali <u>b</u> rate F	Printer				
Spooling	Spool Entire Batch	•						
Print Side	Front Side	•						
Encoder Station	MIFARE	•						
		<u>O</u> k	Can	cel	<u>H</u> elp			

- 14. Click Ok to save the settings
- 15. Confirmation is complete; when a card is printed, it will be read / written as configured

Alternatively you can choose to read / write a card without printing from the Record Center by selecting More (downward arrow button) > Current Record > Encode Card

Advanced

UID Formatting

The data returned by the GetData command will vary by card and reader type. You may be able to format the data returned by the reader, for example, to just return an HID Prox card number and not the facility code, by altering reader settings. Refer to your smart card reader documentation for details.

Example - read only the card number when using an OMNIKEY reader with an HID Prox card

- 1. Use the Windows Registry Editor to view the entry [HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\CardMan]
- 2. There should be a key "ProxFormat" with a DWORD value
- 3. Set the DWORD value to 2
- 4. Restart the PC

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