Polaris® RFID Conversion Utility Guide





Copyright © 2013 by Polaris Library Systems

This document is copyrighted. All rights are reserved. No part of this document may be photocopied or reproduced in any form without the prior written consent of Polaris Library Systems.

Polaris Library Systems Box 4903 Syracuse, New York 13221-4903 www.polarislibrary.com

Send any comments or questions about this document to your Site Manager or to the Technical Communications Group: TechComm@polarislibrary.com

Trademarks Polaris® is a registered trademark of GIS Information Systems, Inc., dba Polaris Library Systems.

> Microsoft® and Windows® are registered trademarks of Microsoft Corporation.

3M[™] is a trademark of 3M. EnvisionWare[™] is a trademark of EnvisionWare, Inc. ITG DiscXpress IITM is a trademark of Bibliotheca ITG, LLC. Other brands and product names are trademarks of their respective owners.

Disclaimer The information contained in this document is subject to change without notice. Polaris Library Systems shall not be liable for technical or editorial omissions or mistakes in this document nor shall it be liable for incidental or consequential damages resulting from your use of the information contained in this document.

> Printed in the United States of America July 31, 2013

This document is written for Polaris 4.1 or later.

Using the Polaris RFID Station



The Polaris RFID conversion station consists of an RFID antenna pad, the RFID reader, and the Polaris RFID Utility program RFIDutility.exe., which writes item or patron barcodes and (optionally) other information from Polaris item or patron records to RFID tags. The utility also sets the tag's security bit. With the Polaris RFID station, you can convert many materials or patron cards to RFID quickly and easily.

You can run the Polaris RFID Utility to work with the Polaris ILS database (online) or offline. If you are working offline, the item or patron barcode is copied to the RFID tag and the security bit is set. If you are working online, additional information is copied by default from the Polaris record to the RFID tag. The specific additional information depends on your vendor and RFID tag brand. Working online, you can also choose to copy only the barcode and set the security bit with a registry setting **RFIDWriteBarcode**. The default is 0 (write all); 1 writes only the barcode and sets the security bit.

If you are working online, the writing operation also creates a transaction file in the database table RFIDTagltemMapping, which can be used to generate statistics. Once all existing items and patron cards have been tagged and the tags linked to database information, and as new materials or cards are tagged and linked, circulation transactions read Polaris data directly from the RFID tags attached to the materials or patron cards.

Note:

RFID circulation requires RFID to be enabled for the workstation when the Polaris staff client or Polaris ExpressCheck application is installed. For details, see the *Polaris Patron Services Administration Guide* or the *Polaris ExpressCheck Administration Guide*.

Security Manager

The Polaris Security Manager is an executable that runs with the Polaris ExpressCheck, staff client, RFIDVerify and RFIDUtility applications when a security model has been selected. It supports the Polaris security interface and provides the underlying implementation for each supported third-party security model, including:

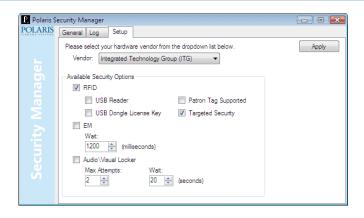
- 3M RFID
- Bibliotheca RFID
- EnvisionWare RFID
- ITG RFID
- ITG DiscXpress
- ITG AV Unlocker
- ITG EM

Polaris can easily perform security fixes, updates and upgrades may be typically made by updating the Security Manager. The Polaris client software communicates with the Security Manager using a common interface and the Security Manager handles the specific details of each RFID implementation. The Security Manager also allows Polaris to tightly integrate security (RFID, AV, EM) operations, allowing Polaris to communicate directly with each security device. Unlike screen-scraping or non-integrated wedge software, Polaris controls when to read from security devices and when to write to security devices. There is no need to manage a second application for security operations.

The Polaris Security Manager is automatically installed if you select RFID, EM, DiscXpress or AV Locker while installing Polaris ExpressCheck, or if you select RFID or DiscXpress while installing the Polaris staff client. Settings in the Security Manager are vendor-specific, not Polaris client-specific, so any changes you make in the Security Manager affect all the client workstations that use the vendor's security features.

The Security Manager is set with the equipment manufacturer's default values and the security options you selected for your vendor when you installed the Polaris client software. If you need to change these settings, open SecurityManager.exe, located by default on the client workstation at C:\Program Files\Polaris\[version]\Bin

This puts the Security Manager icon in the desktop tray. Click the icon to open the Security Manager.



Preparing for Linking and Tagging

- **Install the Polaris RFID Utility** Install the Polaris staff client on your workstation, being sure to check **Enable RFID** for the staff client. The installation program places a shortcut for the utility on your workstation desktop. See the *Polaris Installation Guide*, available on the Polaris Customer Extranet.
- **Register the workstation and user** If the workstation and user are not already registered in Polaris, register them in Polaris Administration before you run the utility. For details, see the *Polaris Administration Guide*. Although you do not need to run Polaris while you run the RFID utility, the utility needs access to the Polaris database if you are working online. No Polaris permissions are required to run the utility.
- Prepare the materials or patron cards for tagging Be sure that the
 materials or cards to be tagged already have barcodes, and have the
 materials or cards at hand, ready to be tagged. If you are using the utility
 in connection with the Polaris database, be sure that Polaris item records
 or patron records have been created for the materials or cards you are
 tagging.
- Apply the tags and scan barcodes The usual workflow is quick and simple: you attach an RFID tag to the item or patron card, place it on the antenna pad, and scan the barcode. The RFID utility verifies tags before attempting to transfer data to them. (A small number of tags may be defective, and these are easily replaced.) See "Apply and link tags" on page 4.

Note:

If defective tags are a concern and you use Bibliotheca tags, you can verify a number of tags before attaching them to the materials or patron cards. See "Verify multiple tags, link barcodes to tags (Bibliotheca tags only)" on page 5.



Tip:

By default, the utility provides audio signals. A single tone indicates a successful operation;

two higher-pitched tones indicate

an error. To turn the audio signals off, select (check) the Silent box.

Apply and link tags

Follow these steps to apply RFID tags to materials or patron cards, and link Polaris database information to them.

Important:

The antenna reads tags placed within a few inches of the antenna pad. Keep unscanned tags and tagged materials or cards at least 8" away from the antenna pad.

1. Open the RFID utility RFIDutility.exe from the desktop shortcut The Logon dialog box appears.





- Type your Polaris username in the Username box if it is not already displayed. If you are using the RFID Utility offline, with no connection to the Polaris database, select (check) Work offline.
- Click OK. 3.

The RFID Initialization Utility window appears.



- In the Type box, select the type of record—Item or Patron—that you are converting.
- Attach an RFID tag to the item or patron card.
- Place the item or patron card on the antenna pad.

Scan the item or patron barcode, or type the barcode in the Enter Item Barcode box.

The utility verifies the tag, and the window's status bar indicates that the tag has been written with the barcode. The security bit has been set. If you are working online with the Polaris database, additional item or patron data is written by default to the tag, and data from the Polaris record is displayed in the RFID Initialization Utility window. The displayed item or patron data is taken from the appropriate Polaris record. It is not a direct representation of the data as it is stored on the

Note:

A statistically small number of tags are defective. If the tag is defective, an error message is displayed. Click OK to acknowledge the message, and place a new tag on the item or card. Then, re-scan or re-type the barcode.

1-2-3

Verify multiple tags, link barcodes to tags (Bibliotheca tags only)

Follow these steps to verify a number of Bibliotheca tags before linking data to them. After the tags are verified, you apply the tags to the items or patron cards and scan the barcodes.

Important:

The antenna reads tags placed within a few inches of the antenna pad. Keep unscanned tags and tagged materials or cards at least 8" away from the antenna pad.

1. Open the RFID utility RFIDutility.exe from the desktop shortcut The Logon dialog box appears.



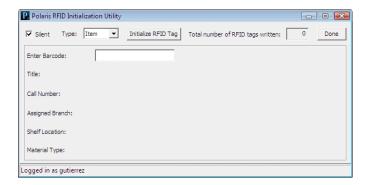


- Type your Polaris user name in the Username box if it is not already displayed. If you are using the RFID Utility offline, with no connection to the Polaris database, select (check) Work offline.
- Click **OK**.

Tip:

By default, the utility provides audio signals. A single tone indicates a successful operation; two higher-pitched tones indicate an error. To turn the audio signals off, select (check) the Silent box.

The RFID Initialization Utility window appears.



- **4.** In the Type box, select the type of record—Item or Patron—that you are converting.
- **5.** Follow these steps to initialize tags:
 - a) Place an RFID tag on the antenna pad.
 - **b)** Click Initialize RFID tag in the RFID Initialization Utility window, or press ALT+V.

The system tests the tag to be sure it can be overwritten without error.

Note:

If the tag is defective, an error message is displayed. Click **OK** to acknowledge the message, and place a new tag on the antenna pad.

- **c)** Repeat these steps for each tag you want to verify.
- **6.** Follow these steps to write barcodes to the verified tags:
 - **a)** Attach a verified RFID tag to the material or patron card.
 - **b)** In the Type box, select the type of record—Item or Patron—that you are converting.
 - **c)** Place the item or patron card on the antenna pad.
 - **d)** Scan the item or patron barcode, or type the barcode in the Enter Item Barcode box.

The window's status bar indicates that the tag has been written.

Note:

If a barcode has already been linked to a tag, the utility displays a message. You can override the message and continue if you still need to link the barcode (for example, an item may need to be retagged).

The window's status bar indicates that the tag has been written with the barcode. The security bit has been set. If you are working online with the Polaris database, additional item or patron data is written by default to the tag, and data from the Polaris record is displayed in the RFID Initialization Utility window. The displayed item or patron data is taken from the appropriate Polaris record. It is not a direct representation of the data as it is stored on the tag.



e) Repeat these steps to attach and link each verified tag.