Bar Code Discovery

Administrator's Guide

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Overview

Bar Code Discovery lets you create and manage bar code templates to specify the location and type of bar code that users frequently scan. These templates can then be accessed by another application (such as Scan to Network Premium) to reduce the amount of time it takes to scan and identify bar codes on a given printer.

Supported bar code types

- Code 11
- Code 128
- Code 32
- Code 39
- Code 93
- Codabar
- Data Matrix
- EAN-13
- EAN-13 plus 2
- EAN-13 plus 5
- EAN-8
- EAN-8 plus 2
- EAN-8 plus 5
- Interleaved 2 of 5
- ITF-14
- Patch Code
- PDF 417
- Planet
- PostNet
- QR
- RM4SCC
- RSS-14
- RSS Limited
- Telepen
- UPC A
- UPC A plus 2
- UPC A plus 5
- UPC E
- UPC E plus 2
- UPC E plus 5

Optimizing bar code detection

Optimizing bar code detection

Tips on scanning bar codes

- When scanning one-dimensional bar codes, position them horizontally to match the linear scaling of the bars.
- If patterns of text and specks are erroneously detected as bar codes, then you can choose to ignore those areas, or you can rescan the page.
- If the bar code is skewed on the page itself, then position the page in such a way that the bar code is aligned horizontally or vertically with the scanner. This is particularly helpful when scanning two-dimensional bar codes, such as PDF417, Data Matrix, and QR codes, which are harder to recognize than basic one-dimensional bar codes, such as Code 3 of 9 and Code 128.

Tips on designing bar codes

- Increase the bar code font size to a more readable size.
- Make sure asterisks appear before and after the bar code characters. Asterisks are used as start/stop characters for most linear bar codes.
- Make sure that only valid bar code characters are used within the data. An invalid character may be recognized as a blank space, which will then result to having increased gaps between the bars.
- Make sure that there is enough contrast between the bar code and the color of the material you are printing on.
- Make sure to know the type, resolution, orientation, placement, and the number of bar codes on a document. These are significant factors that can affect bar code detection.
- To prevent patterns of text and specks from appearing as bar codes in some documents, make sure to establish a *quiet zone* (a clear area without any text or other marks) around the bar code.

Note: There are some scan resolution settings required on a given printer that can also help optimize bar code detection. For a list of recommended scan resolution settings for your printer, see the *ReadMe* file for the application.

Configuring the application

Configuring Bar Code Discovery

Bar Code Discovery is accessed from the home screen.

Creating a bar code template

Automatic bar code discovery recognizes the most common bar code types and orientations on A4- or letter-size paper. If you are using a paper size other than A4 or letter, or if the bar code is not recognized automatically, then you can search for bar codes manually.

To search for bar codes automatically

1. Load a document containing the bar code faceup, short edge first into the automatic document feeder (ADF) or facedown on the scanner glass.

   Notes:

   - Make sure the Adjust ADF Skew option is off on the scan settings.
   - Make sure to position the bar codes horizontally.

2. From the home screen, touch **Bar Code Discovery**.
3. Touch **Automatic bar code discovery**.

   The page is searched for bar codes. If automatic bar code discovery fails, then you can search for bar codes manually.

   Note: Automatic Configuration searches for codes oriented at 0 degrees and 90 degrees.

4. Touch the bar code you want to configure, and then touch **Configure**.

   Note: If you do not want a bar code to appear in the template, then touch the bar code, and then select **Ignore this bar code**.

5. Follow the instructions on the printer display to type a name for the bar code, set an optional delimiter, and assign optional field names.

   Note: Use a delimiter if the bar code contains multiple pieces of information that you want to identify separately, such as first and last names. The delimiter is the space or character that separates two or more fields within the bar code. If the template will be used to create files, then make sure not to use invalid characters, such as `\ / :*?"<>|` for a Windows file name.

6. Repeat step 4 through step 5 for any additional bar codes that appear on the page, and then touch **Next**..
7. Type a name for the template, and then touch **Next**.
8. Confirm that the template is correct, and then touch **Save**.

To search for bar codes manually

1. Load a document containing the bar code faceup, short edge first into the ADF or facedown on the scanner glass.
2. From the home screen, touch **Bar Code Discovery**.
3. Touch **Configure bar code discovery**.

4 Follow the instructions on the printer display to select the paper size and paper orientation.

The page is then scanned.

Note: Manual configuration searches for codes oriented at 0, 90, 180, and 270 degrees.

5 From the scan preview, select the area or areas where the bar code appears.

6 If you know the bar code type, then touch **Specific bar code types** to select the bar code type from the list. If you do not know the bar code type, then touch **All bar code types**.

7 Touch **Next**.

The page is searched for bar codes.

8 Touch the bar code you want to configure, and then touch **Configure**.

Note: If you do not want a bar code to appear in the template, then touch the bar code, and then select **Ignore this bar code**.

9 Follow the instructions on the printer display to type a name for the bar code, set an optional delimiter, and assign optional field names.

Note: Use a delimiter if the bar code contains multiple pieces of information that you want to identify, such as first and last names. The delimiter is the space or character that separates the two or more fields within the bar code. If the template will be used to create files, then make sure not to use invalid characters, such as `\ / :*?"<>|` for a Windows file name.

10 Repeat step 8 through step 9 for any additional bar codes that appear on the page, and then touch **Next**.

11 Type a name for the template, and then touch **Next**.

12 Confirm that the template is correct, and then touch **Save**.

Note: If the bar code cannot be found, then the bar code is either damaged or not supported.

Deleting a bar code template

1 From the home screen, touch **Bar Code Discovery** > **Manage bar code templates**.

2 Touch the template you want to delete.

3 Touch **Delete**, and then follow the prompts to complete the process.

Troubleshooting

Bar Code Discovery troubleshooting

The application icon is missing from the home screen

For the application icon to appear on the home screen, the application must be licensed. For more information, see “Licensing applications” on page 9.

Appendix

Accessing application configuration settings using the Embedded Web Server

1. Obtain the printer IP address:
   - From the printer home screen
   - From the TCP/IP section in the Network/Ports menu
   - By printing a network setup page or menu settings page, and then finding the TCP/IP section

Note: An IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.

2. Open a Web browser, and then type the printer IP address in the address field.

   The Embedded Web Server appears.
3. From the navigation menu on the left, click **Settings** or **Configuration**, and then do one of the following:
   - Click **Apps** > **Apps Management**.
   - Click **Device Solutions** > **Solutions (eSF)**.
   - Click **Embedded Solutions**.
4. From the list of installed applications, click the application you want to configure, and then click **Configure**.

Exporting and importing a configuration using the Embedded Web Server

You can export configuration settings into a text file, and then import it to apply the settings to other printers.

1. From the Embedded Web Server, click **Settings** or **Configuration**, and then do one of the following:
   - Click **Apps** > **Apps Management**.
   - Click **Device Solutions** > **Solutions (eSF)**.
   - Click **Embedded Solutions**.
2. From the list of installed applications, click the name of the application you want to configure.
3. Click **Configure**, and then do one of the following:
   - To export a configuration to a file, click **Export**, and then follow the instructions on the computer screen to save the configuration file.

     Note: If a **`JVM Out of Memory`** error occurs, then repeat the export process until the configuration file is saved.
   - To import a configuration from a file, click **Import**, and then browse to the saved configuration file that was exported from a previously configured printer.

     Notes:

     – Before importing the configuration file, you can choose to preview it first.

- If a timeout occurs and a blank screen appears, then refresh the Web browser, and then click **Apply**.

Licensing applications

Applications require a valid electronic license to run on select printers.

For more information on purchasing a license for an application, or for any other licensing information, contact your Lexmark representative.

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