



# **Downtime Reporting**

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## **Administrator's Guide**

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## Overview

*Downtime Reporting* gives healthcare providers instant access to critical forms and reports online even if their IT system or network is down. As documents are updated throughout the day, the application continuously streams them from an FTP site or a shared folder on the network to the printer, and then stores them on the secure printer hard disk. During a downtime event, medical staff can easily access a form or report from the printer control panel or the Embedded Web Server, and then print it.

# Configuring Downtime Reporting

## Adding or editing a source report folder

- 1 Access the application configuration settings from the Embedded Web Server or MarkVision Professional.
- 2 To add a new source report folder, click **Add**.  
To edit or delete a source report folder, select a folder, and then click **Edit** or **Delete**.
- 3 Customize the settings.

### Source Report Folder Settings

- **Name**—Type the name of the report folder that will appear on the printer and on the Embedded Web Server.
- **Source Type**—Select how forms and reports are stored and retrieved by the application.
- **Source Filenames**—Type the file names of forms and reports that are retrieved by the application. You can specify one or more file names, and separate them with a comma. For example, `*.txt, report1.pdf, report2.pdf`.  
**Note:** To retrieve all files, leave this field blank.
- **Report Update Interval**—Select how long the printer waits before retrieving forms and reports from the FTP site or network share.  
**Note:** If you are using secure FTP (SFTP), then set the minimum update interval to 30 minutes.
- **Report Expiration (in Hours)**—Enter the number of hours the application waits before deleting forms and reports from the printer hard disk. Default expiration is 6 hours. You can enter up to **8736** hours, which is equivalent to 1 year.
- **Retrieve files from subfolders**—Select the check box to retrieve files from nested folders of the source report folder.  
**Note:** The application can retrieve files from subfolders up to the fifth level.
- **Maintain Folder Structure**—Select the check box to also copy the structure of the source report folder and its subfolders when storing the retrieved files on the printer hard disk.  
**Note:** This setting applies only when the application is enabled to retrieve files from subfolders.

### FTP Settings

If the forms and reports are stored on an FTP server, then configure the following settings. The application copies the files from the FTP site and saves them on the printer hard disk.

- **FTP Server**—Type the IP address or host name of the FTP server where the forms and reports are located.
- **Use SFTP?**—Select the check box to use secure FTP.
- **FTP Port**—Enter the port number used to connect to the FTP server.
- **User**—Type the user name to use when connecting to the FTP site.
- **Password**—Type the password to use when connecting to the FTP site.

## Network Share Settings

If the forms and reports are stored on a shared folder on the network, then configure the following settings. The application copies the files from the network share and saves them on the printer hard disk.

- **Network Share Address**—Type the IP address or host name of the network share where the forms and reports are located.
- **Domain**—Type the domain where the network share resides.
- **User**—Type the user name to use when connecting to the network share.
- **Password**—Type the password to use when connecting to the network share.

4 Save or discard your changes.

## Customizing the display icon

- 1 Access the application configuration settings from the Embedded Web Server or MarkVision Professional.
- 2 From the Configure page, change the home screen settings if necessary:
  - **Icon Text**—Type up to 20 characters that will appear above the profile button on the printer home screen. This field is required.
  - **Welcome Screen Up Icon**—Browse to a new image file that represents the profile on the printer home screen. This field is optional.
  - **Welcome Screen Down Icon**—Browse to a new image file that appears while the profile icon is being pressed. This field is optional.
- 3 Save or discard your changes.

## Configuring the device settings

- 1 Access the application configuration settings from the Embedded Web Server or MarkVision Professional.
- 2 Configure the device settings.
  - **Device Access Control**—Select a function access control to secure the application.  
**Note:** This function is available only on select printer models.
  - **Display Report Date and Time**—Select the check box to show the retrieval date and time on the retrieved form or report.
  - **Timestamp Format**—Select a format for the time stamp that appears on the retrieved form or report.
  - **Enable Direct Print Folder Creation**—Select the check box to create nested folders inside the **\Direct Print** folder for print jobs sent through the Direct Print function.  
**Note:** The Direct Print function is enabled if the printer is configured to listen on Port 9444. This function automatically saves all print jobs sent to the printer in the **\Direct Print** folder in the printer hard disk. The files inside this folder can only be printed using the application.

- **Direct Print Folder Delimiter**—Type the delimiter to use when creating subfolders inside the **\Direct Print** folder. Nested folders inside the **\Direct Print** folder are created by specifying a file name that meets the naming convention for Direct Print folder creation. For example, to save a document named **Test.txt** in **\Folder1\Subfolder1\**, rename the document as **Folder1\_Subfolder1\_Test.txt**, where “\_” is the delimiter.

**Note:** A delimiter may be any alphanumeric or non-alphanumeric character.

- **Filename Conversion**—Click **Browse** to import a text (.txt) file containing recognizable strings to overwrite the default file names. The format should be “key=value,” where “key” is the original file name, including the file extension (such as .gif, .jpg .pdf), and “value” is the text shown on the printer display in place of the file name. For example: **dlyflr4nursst=Daily 4th Floor Nurses Station** or **admitform.pdf=Admission Form**.

**Note:** You can have multiple “key=value” entries in one text file. Type each entry in a separate line on the file.

- 3 Save or discard your changes.

## Configuring logging options

- 1 Access the application configuration settings from the Embedded Web Server or MarkVision Professional.
- 2 Configure the logging options.

### Logging options

- **Enable Logging**—Select the check box for the application to log information on events such as configuration changes, file transfers, report retrieval, and report expiration.
- **Save Type**—Select the location for saving log files.

### FTP settings

If the log file is stored on an FTP server, then configure the following settings:

- **FTP Server**—Type the IP address or host name of the FTP server where the log file is saved.
- **Use SFTP?**—Select the check box to use secure FTP.
- **FTP Port**—Enter the port number used to connect to the FTP server.
- **User**—Type the user name to use when connecting to the FTP site.
- **Password**—Type the password to use when connecting to the FTP site.

### Network share settings


If the log file is stored on a shared folder on the network, then configure the following settings:

- **Network Share Address**—Type the IP address or host name of the network share where the log file is saved.
- **Domain**—Type the domain where the network share resides.
- **User**—Type the user name to use when connecting to the network share.
- **Password**—Type the password to use when connecting to the network share.

- 3 Save or discard your changes.

## Configuring the printer driver to print to the application

If you want the application to intercept regular print jobs and save them on the printer hard disk, then you must configure the Universal Print Driver (UPD) to print to Port 9444. This activates the Direct Print function which automatically saves all print jobs sent to the printer in the **\Direct Print** folder in the printer hard disk. The files inside this folder can only be printed using the application.

- 1 Click , or click **Start** and then click **Run**.
- 2 In the Start Search or Run box, type **control printers**.
- 3 Press **Enter**, or click **OK**.  
The printers folder opens.
- 4 Right-click the printer with the application installed, and then select **Printer Properties** or **Properties**.
- 5 Click the **Ports** tab.
- 6 From the list of ports, make sure your printer is selected, and then click **Configure Port**.
- 7 In the Port field, change the port number to **9444**.
- 8 Click **OK > OK**.

# Using Downtime Reporting

## Retrieving forms and reports from the printer

- 1 From the printer home screen, touch the application icon.
- 2 If necessary, type the user name and password to access the application.
- 3 Select the folder that contains the file you want to print.  
To search for a file or folder, touch **Search**, and then type the file or folder name. You can also do a keyword search. For example, if you type **form** in the Search field, the application shows all files and folders containing "form."
- 4 Select the file that you want to print, or touch **Select All** to print all files.  
**Note:** The application can retrieve up to 2000 files, but may display only up to 300 files on select printers. To view all files, retrieve forms and reports from the Web.
- 5 Touch **Print**.

### Notes:

- If the printer is configured to listen on Port 9444, then all print jobs sent to the printer are automatically saved in the **\Direct Print** folder in the printer hard disk. The files inside this folder can only be retrieved for printing by using the application.
- Files in the **\Direct Print** folder are automatically deleted according to the report expiration setting. By default, the application waits 6 hours before removing the files from the printer hard disk. To change the expiration settings, access the application configuration page on the Embedded Web Server or contact your system support person.

## Retrieving forms and reports from the Web

- 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 page appears.
- 3 From the navigation menu on the left, click **Applications > Downtime Reports Web Retrieval**.
- 4 Select the folder that contains the file you want to print.
- 5 To save the file to your computer, click the file name.
- 6 To open the file on the Web browser, click **view** beside the file name.
- 7 To print the file, click **print** beside the file name.



**Notes:**

- If the printer is configured to listen on Port 9444, then all print jobs sent to the printer are automatically saved in the **\Direct Print** folder in the printer hard disk. The files inside this folder can only be retrieved for printing using the application, but cannot be viewed from the Web.
- Files in the **\Direct Print** folder are automatically deleted depending on the report expiration setting. By default, the application waits 6 hours before removing the files from the printer hard disk. To change the expiration settings, access the application configuration page on the Embedded Web Server or contact your system support person.

# Troubleshooting

## Downtime Reporting troubleshooting

### An application error has occurred

Try one or more of the following:

#### CHECK THE SYSTEM LOG

- 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**.
- 4 Click **Device Solutions > Solutions (eSF)**, or click **Embedded Solutions**.
- 5 Click **System** tab > **Log**.
- 6 From the Filter menu, select an application status.
- 7 From the application menu, select an application, and then click **Submit**.

#### ADJUST THE SCAN SETTINGS

**Note:** This applies *only* to applications that support scanning.

In the application configuration settings, select a lower scan resolution. You can select **Off** or a lower resolution from the Scan Color drop-down menu.

#### CONTACT YOUR SOLUTIONS PROVIDER

If you still cannot isolate the problem, then contact your solutions provider for additional help.

### Application cannot retrieve forms and reports

Try one or more of the following:

#### MAKE SURE THE SOURCE FOLDER SETTINGS ARE CONFIGURED CORRECTLY

Verify that the settings for the FTP site or network share on the Embedded Web Server are correct.

## **MAKE SURE THE PRINTER IS CONNECTED TO THE NETWORK**

Make sure all appropriate network cables are securely connected and the network settings of the printer are correctly configured. Except during downtime, verify that all network connections are working so that the application can retrieve files from the source folder. For information on networking the printer, see the printer *User's Guide* or *Networking Guide*.

## **Cannot print or view forms and reports**

Try one or more of the following:

### **MAKE SURE THE FILE TYPE IS SUPPORTED BY THE PRINTER**

To print forms and reports directly from the printer, make sure the file type is supported by the printer. Supported file types are .jpg, .gif, .png, and .pdf files, as well as the PostScript and PCL files in the **\Direct Print** folder. This folder in the printer hard disk captures print jobs if the printer is configured to listen on Port 9444. All the files inside this folder can be printed directly from the printer using the application, but they cannot be viewed from the Web.

### **MAKE SURE THE FILE TYPE IS SUPPORTED BY YOUR WEB BROWSER**

To view forms and reports from the Embedded Web Server, make sure the file type is supported by your browser. Different Web browsers support different file types. Supported file types include .jpg, .gif, .bmp., .txt., and .pdf. For more information, see the documentation for your browser.

Files stored in the **\Direct Print** folder cannot be viewed from the Web browser, but can be printed using the application.

### **SAVE THE FILE TO YOUR COMPUTER**

If the file type is not supported by the printer and your Web browser, then download the file to your computer. Open and print the file using applications designed to work with it.

## **License error**

Try one or more of the following:

### **MAKE SURE THE APPLICATION IS LICENSED**

Applications require a license to run.

For more information on purchasing a license, contact your Lexmark representative.

### **MAKE SURE THE LICENSE IS UP-TO-DATE**

Make sure the license for the application has not yet expired. Check the license expiry date using the Embedded Web Server or MarkVision Professional.

# Appendix

## Configuring applications using the Embedded Web Server

### 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**.

## 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.

## Exporting and importing configuration files

After configuring an application, you can export your current settings into a file that can then be imported and used to configure that application on one or more additional printers.

### 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**.

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