Universal Print Driver

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Change history

Change history

Lexmark Universal Print Driver (UPD) version 3.0.3.0

- Added support for user certificate print encryption.
- Added support for job name masking.
- Added support for new languages:
  - Bahasa Indonesia
  - Thai
  - Vietnamese

  Note: Lexmark UPD does not have ARM support.
- Added support for the following printer models:
  - Lexmark C2335
  - Lexmark CS531
  - Lexmark CS632
  - Lexmark CS737
  - Lexmark CX532
  - Lexmark CX635
  - Lexmark CX737
  - Lexmark M3350
  - Lexmark MS531
  - Lexmark MS631
  - Lexmark MS632
  - Lexmark MX532
  - Lexmark MX632
  - Lexmark XC2335
  - Lexmark XM3350

Lexmark Universal Print Driver (UPD) version 3.0.2.0

- Added the Poster Job information in the print file through the PJL command.
- Added print encryption support in the Printer Driver Configuration Utility.
- Disabled print encryption prompt by default, and added the option to enable it through the registry.
- Fixed the registry bloat issue.
- Fixed the overlay issue.
- Added “emulation” in the driver package names, driver names, and driver installer strings of PostScript® (PS) and PostScript 3 (PS3) emulation drivers. For example:

Changes:

- Driver package: **Lexmark_Universal_v2_UD1_PostScript_Emulation_MMDDYYYY.exe**
- Driver name: **Lexmark Universal v2 PostScript 3 Emulation**
- Driver user interface

The PostScript emulation driver is not upgradable when the name of the driver is changed.

Notes:

- Lexmark UPD does not have ARM support.
- For more information, see "What are the fixes done in UPD?" on page 55.

- Added support for the following printer models:
  - Lexmark MX432
  - Lexmark XM3142

Lexmark Universal Print Driver (UPD) version 3.0.1.0

- Improved the UI performance on UPD 3.0.0.0.
- Fixed the reset port issue while printing using LPR port in UPD 3.0.0.0.
- Added Z-Fold support.
- Added support for print encryption in printer pooling when pointed to a single IP address and the same port number.

  Note: For more information, see "What are the fixes done in UPD?" on page 55.
- Added support for the following printer models:
  - Lexmark C4342
  - Lexmark C4352
  - Lexmark CS730
  - Lexmark CS735
  - Lexmark CS943
  - Lexmark CX730
  - Lexmark CX735
  - Lexmark CX930
  - Lexmark CX931
  - Lexmark CX942
  - Lexmark CX943
  - Lexmark CX944
  - Lexmark MX931
  - Lexmark XC4342
  - Lexmark XC4352
  - Lexmark XC9325
  - Lexmark XC9335
  - Lexmark XC9445
  - Lexmark XC9455
  - Lexmark XC9465

Lexmark Universal Print Driver (UPD) version 3.0

- Added support for print encryption.
- Added support for dynamic driver configuration directly from the printer by using bidirectional communication.
- Added support for the following certifications:
  - Citrix® Virtual Apps and Desktops 7 2103
  - Citrix Virtual Apps and Desktops 7 2012
  - Citrix Virtual Apps and Desktops 7 2009
  - Citrix Virtual Apps and Desktops 7 2006
  - Citrix Virtual Apps and Desktops 7 2003
  - Citrix Virtual Apps and Desktops 7 1912 LTSR
  - Citrix Virtual Apps and Desktops 7 1909

  Note: For a list of supported Citrix implementations, see "Supported operating systems" on page 21.
- Added support for the following operating systems:
  - Microsoft Windows Server 2022
  - Windows 11

  Note: For a list of supported operating systems, see "Supported operating systems" on page 21.

Lexmark Universal Print Driver (UPD) version 2.15.2

- Enhanced security to prevent attacker-controlled codes that are running with system privileges.

Lexmark Universal Print Driver (UPD) version 2.15.1

- Added support for the following printer models:

  Color laser multifunction products
  - Lexmark MC3224i
  - Lexmark MC3326i
  - Lexmark MC3426i
  - Lexmark XC2326

  Monochrome laser multifunction products
  - Lexmark MB3442i
  - Lexmark MB2236i
  - Lexmark XM1342

  Color laser printer

  Lexmark C2326

  Monochrome laser printer

  Lexmark M1342

Lexmark Universal Print Driver (UPD) version 2.15

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.15. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for the following printer models:

  Color laser multifunction products
  - Lexmark CX431adw
  - Lexmark MC3426adw
  - Lexmark XC4143
  - Lexmark XC4153
  - Lexmark XC6153
  - Lexmark XC6153de
  - Lexmark XC8163

  Color laser printers
  - Lexmark C3426dw
  - Lexmark CS431dw

  Monochrome laser multifunction products
  - Lexmark MB3442adw
  - Lexmark MS431adn
  - Lexmark MS431adw
  - Lexmark MX331adn

  Monochrome laser printers
  - Lexmark B3340dw
  - Lexmark B3442dw
  - Lexmark MS331dn
  - Lexmark MS431dn
  - Lexmark MS431dw
- Added support for the following certifications:
  - Citrix Virtual Apps and Desktops 7 1906
  - Citrix Virtual Apps and Desktops 7 1903
  - Citrix Virtual Apps and Desktops 7 1811

  Note: For a list of supported Citrix implementations, see “Supported operating systems” on page 21.
- Added support for Microsoft Windows Server 2019 (64-bit) operating system as a cluster server.

  Note: For a list of supported operating systems, see “Supported operating systems” on page 21.
- Added support for all paper types as the paper source in the device capabilities.
- Added support for all print processor functions to work properly when the "Always prompt for PIN at print time" setting is enabled.

Lexmark Universal Print Driver version 2.14.1

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.14.1. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for the following printer models:

  Color laser multifunction products
  - Lexmark CX331adwe
  - Lexmark MC3224adwe
  - Lexmark MC3224dwe
  - Lexmark MC3326adwe

  Color laser printers
  - Lexmark C3224dw
  - Lexmark C3326dw
  - Lexmark CS331dw

  Monochrome laser multifunction products

  Lexmark MB2236adwe
- Added support for the following certifications:

  Citrix Virtual Apps and Desktops 1808

  Note: For a list of supported Citrix implementations, see "Supported operating systems" on page 21.
- Added support for Microsoft Windows Server 2019 operating system.

  Note: For a list of supported operating systems, see "Supported operating systems" on page 21.

Lexmark Universal Print Driver version 2.14

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.14. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for the following printer models:

  Monochrome laser multifunction products

  Lexmark MB2236adw

  Monochrome laser printers

  Lexmark B2236dw
- Added support for the following certifications:
  - Citrix XenApp® 7.18
  - Citrix XenApp 7.17
  - Citrix XenDesktop® 7.18
  - Citrix XenDesktop 7.17

  Note: For a list of supported Citrix implementations, see "Supported operating systems" on page 21.
- Added support for printing the fax cover page using a 32-bit application on a computer that is running on a 64-bit operating system.

- Added support for the print time setting of the "Confidential print" feature to accept a PIN, and then release the job from the spooler.
- Updated support for locking the watermark by name.

Lexmark Universal Print Driver version 2.13.1

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.13.1. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for the following printer models:

  Color laser multifunction products
  - Lexmark CX421adn
  - Lexmark CX522ade
  - Lexmark CX622ade
  - Lexmark CX622adhe
  - Lexmark CX625ade
  - Lexmark CX625adhe
  - Lexmark CX625adthe
  - Lexmark MC2325adw
  - Lexmark MC2425adw
  - Lexmark MC2535ade
  - Lexmark MC2535adwe
  - Lexmark MC2640adwe
  - Lexmark XC2235
  - Lexmark XC2240
  - Lexmark XC4240

  Color laser printers
  - Lexmark C2240
  - Lexmark C2425dw
  - Lexmark C2535dn
  - Lexmark C2535dw
  - Lexmark CS421dn
  - Lexmark CS521dn
  - Lexmark CS622de

  Monochrome laser multifunction products
  - Lexmark MB2770adwhe
  - Lexmark MX721ade
  - Lexmark MX722ade
  - Lexmark MX722adhe
  - Lexmark MX725adve
  - Lexmark MX822ade

- Lexmark MX822adtfe
- Lexmark MX822adxe
- Lexmark MX824ade
- Lexmark MX824adxe
- Lexmark MX824adtfe
- Lexmark MX826ade
- Lexmark MX826adtfe
- Lexmark MX826adxe
- Lexmark XM5365
- Lexmark XM5370
- Lexmark XM7355
- Lexmark XM7365
- Lexmark XM7370

Monochrome laser printers

- Lexmark B2865dw
- Lexmark M5255
- Lexmark M5265
- Lexmark M5270
- Lexmark MS725dvn
- Lexmark MS821dn
- Lexmark MS821dtn
- Lexmark MS821n
- Lexmark MS822de
- Lexmark MS823dn
- Lexmark MS821n
- Lexmark MS824de
- Lexmark MS824dtn
- Lexmark MS825dn
- Lexmark MS826de
- Lexmark MS826dtn

Lexmark Universal Print Driver version 2.13

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.13. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for the following printer models:

Monochrome laser multifunction products

- Lexmark MB2338adn
- Lexmark MB2338adw
- Lexmark MB2338dw

  - Lexmark MB2442ade
  - Lexmark MB2442adwe
  - Lexmark MB2546ade
  - Lexmark MB2650ade
  - Lexmark MX321adn
  - Lexmark MX321adw
  - Lexmark MX421ade
  - Lexmark MX521ade
  - Lexmark MX521adhe
  - Lexmark MX521adte
  - Lexmark MX521de
  - Lexmark MX622ade
  - Lexmark MX622adhe
  - Lexmark MX622adthe
  - Lexmark XM1242
  - Lexmark XM1246
  - Lexmark XM3250

  Monochrome laser printers

  - Lexmark B2338dn
  - Lexmark B2338dw
  - Lexmark B2442dn
  - Lexmark B2442dw
  - Lexmark B2546dn
  - Lexmark B2650dn
  - Lexmark M3250
  - Lexmark MS321dn
  - Lexmark MS421dn
  - Lexmark MS421dw
  - Lexmark MS521dn
  - Lexmark MS621dn
  - Lexmark MS621dtn
  - Lexmark MS622dne
  - Lexmark MS622dte
- Added support for separator sheets.
- Added support for Hagaki paper size.
- Added support for image watermarks when using PostScript emulation print drivers.
- Added support for the following certifications:
  - Citrix XenApp 7.16
  - Citrix XenApp 7.15
  - Citrix XenApp 7.14

  - Citrix XenApp 7.13
  - Citrix XenApp 7.12
  - Citrix XenDesktop 7.16
  - Citrix XenDesktop 7.15
  - Citrix XenDesktop 7.14
  - Citrix XenDesktop 7.13
  - Citrix XenDesktop 7.12

  Note: For a list of supported Citrix implementations, see “Supported operating systems” on page 21.
- Updated the dmColor value of Devmode to sync properly with color and monochrome print jobs when using PCL® 5 and PCL XL emulation drivers. The "Print in Black and White" setting of UPD syncs with the color and monochrome settings of an application.

Lexmark Universal Print Driver version 2.12

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.12. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for the following printer models:

  Color laser multifunction products
  - Lexmark CX920de
  - Lexmark CX921de
  - Lexmark CX922de
  - Lexmark CX923dte
  - Lexmark CX923dxe
  - Lexmark CX924dte
  - Lexmark CX924dxe
  - Lexmark CX927de
  - Lexmark XC4140
  - Lexmark XC9235
  - Lexmark XC9245
  - Lexmark XC9265

  Color laser printers
  - Lexmark C9235
  - Lexmark CS921de
  - Lexmark CS923de
  - Lexmark CS927de
- Added support for the Novell Open Enterprise Server 15 on SUSE Linux Enterprise Server 11 SP4 x86 and x64 operating systems.

  Note: For a list of supported operating systems, see “Supported operating systems” on page 21.
- Added support for Branch Office Direct Printing.
- Added support for previewing bitmaps of paper sizes with different orientation and finishing settings.
- Added support for user-controlled bidirectional communication.

- Added support for the following certifications:
  - Citrix XenApp 7.11
  - Citrix XenApp 7.9
  - Citrix XenDesktop 7.11
  - Citrix XenDesktop 7.9

  Note: For a list of supported Citrix implementations, see “Supported operating systems” on page 21.

Lexmark Universal Print Driver version 2.11

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.11. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for the following printer models:

  Color laser multifunction products
  - Lexmark CX317dn
  - Lexmark CX417de
  - Lexmark CX517de
  - Lexmark CX727de
  - Lexmark CX827de

  Monochrome laser multifunction products
  - Lexmark MX317dn
  - Lexmark MX417de
  - Lexmark MX517de
  - Lexmark MX617de
  - Lexmark MX717de
  - Lexmark MX718de

  Color laser printers
  - Lexmark CS317dn
  - Lexmark CS417dn
  - Lexmark CS517de
  - Lexmark CS727de
  - Lexmark CS728de
  - Lexmark CS827de

  Monochrome laser printers
  - Lexmark MS317dn
  - Lexmark MS417dn
  - Lexmark MS517dn
  - Lexmark MS617dn
  - Lexmark MS817dn
  - Lexmark MS817n

  - Lexmark MS818dn
  - Lexmark XM5263
  - Lexmark XM5270
  - Lexmark XM7263
  - Lexmark XM7270

  Note: For more information, see “Supported printers” on page 24.
- Added support for the following languages:
  - Croatian
  - Serbian
  - Slovak
  - Slovenian
- Added support for Novell 15 operating system.

  Note: For a list of supported operating systems, see “Supported operating systems” on page 21.
- Added support for Microsoft Windows Server 2016 operating system.

  Note: For a list of supported operating systems, see “Supported operating systems” on page 21.
- Added support for the following certifications:
  - Citrix XenApp 7.8
  - Citrix XenApp 7.7
  - Citrix XenDesktop 7.8
  - Citrix XenDesktop 7.7

  Note: For a list of supported Citrix implementations, see “Supported operating systems” on page 21.
- Improved the time to first print.

Lexmark Universal Print Driver version 2.10

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.10. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for the following printer models:

  Color laser printers
  - Lexmark C4150
  - Lexmark C6160de
  - Lexmark CS720de
  - Lexmark CS725de
  - Lexmark CS820de
  - Lexmark CS820dte
  - Lexmark CS820dtfe

  Color laser multifunction products
  - Lexmark CX725de
  - Lexmark CX725dhe
  - Lexmark CX725dthe

  - CX820de
  - CX820dtfe
  - Lexmark CX825de
  - Lexmark CX825dte
  - Lexmark CX825dtfe
  - Lexmark CX825dtpe
  - Lexmark CX860de
  - Lexmark CX860dte
  - Lexmark CX860dtfe
  - Lexmark CX860dtpe
  - Lexmark XC4150
  - Lexmark XC6152de
  - Lexmark XC6152dtfe
  - Lexmark XC8155de
  - Lexmark XC8155dte
  - Lexmark XC8160de
  - Lexmark XC8160dte

  Note: For more information, see "Supported printers" on page 24.
- Added support for Citrix Ready XenApp 7.6 certification.

  Note: For a list of supported Citrix implementations, see "Supported operating systems" on page 21.
- Added support for two-sided printing.
- Added support for image compression in PostScript emulation print drivers.
- Added support for showing the actual print speed in the Printer Properties dialog.

  Notes:

  - If the print driver is installed and is connected to the printer, then the actual print speed is shown. If the printer is disconnected, then the printer model is set to Universal Mono Laser or Universal Color Laser, and the print speed is 20 ppm.
  - If the print driver is installed and the printer is selected using Set Print Model, then the actual print speed is shown. If the printer is disconnected, then the minimum print speed is shown.
- Removed support for Windows Server 2003.

  Note: For a list of supported operating systems, see "Supported operating systems" on page 21.

Lexmark Universal Print Driver version 2.9.1

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.9.1. If you are using status monitor applications, then use only UPD version 2.6.

Added support for Windows 10.

Note: For a list of supported operating systems, see "Supported operating systems" on page 21.

Lexmark Universal Print Driver version 2.9

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.9. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for applying a configuration file to printers in a cluster or remote environment.

  Note: The configuration file can be applied using the Printer Driver Configuration Utility or from the command prompt using **`ConfigUtil`**. For more information, see the *Printer Driver Configuration Utility Help*.
- Added support for using the LIBJPEG library in rendering JPEG images, and removing GPL2 and GPL3 licensed files.
- Added support for allowing the host application to send JPEG data without converting it to a bitmap image file.

  Note: This feature is available only in PCL XL emulation drivers.
- Added default settings for the print quality feature.
- Added support for job accounting when tracking fax jobs.
- Added support for printing documents from the Google Cloud Print™ web printing service. The following print driver features do not work when printing from Google Cloud Print:

  Emulation drivers
  - Multiple pages per side (N-up)
  - Use full printable area.

  PostScript emulation print drivers
  - Poster
  - Booklet
  - Multiple input options (MIO)
  - PostScript emulation language level (PS)

  PCL XL emulation drivers
  - Send color to the printer.
- Added support for the European Accessibility Mandate 376 (EN 301 549) user interface compatibility.
- Improved the user interface performance of the "Printing preferences" and Printer Properties dialogs in a Point and Print scenario with network latency.
- Replaced the "Enhance fine lines" feature with the Halftone feature.
- Restricted support for color printing when the printer model is set to **Universal Mono Laser**.
- Removed support for the following print quality presets:

  For color printers:
  - Text
  - Text/Photo
  - Photo
  - Custom

For monochrome printers:

- Draft
- Normal
- Best
- Custom

Lexmark Universal Print Driver version 2.8

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.8. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for Citrix XenApp 7.5 certification.

  Note: For a list of supported Citrix implementations, see “Supported operating systems” on page 21.
- Added support for the following operating systems:
  - Novell 12
  - Novell 11

  Note: For a list of supported operating systems, see “Supported operating systems” on page 21.
- Added print support for non-Lexmark printers that support compliant PostScript and PCL emulation page description languages.

  Depending on the non-Lexmark printer, the following basic features are supported:
  - Some paper sizes and types
  - Some source selections
  - Two-sided printing
  - Page layout settings
- Improved support for image compression to reduce the spool file size.
- Improved support for user interface performance of the "Printing preferences" and Printer Properties dialogs.
- Improved the print driver response when updating the printer configuration using the Update Now-Ask Printer setting.
- Improved the finishing performance when printing using a PostScript 3 emulation print driver.
- Improved the printing of watermarks when using a Microsoft Word plug-in.
- Improved the printing of Microsoft Word documents containing embedded PCL 5 emulation macros when using PCL XL and PostScript emulation print drivers.
- Improved the previewing of Microsoft PowerPoint documents when using a PostScript 3 emulation print driver.
- Improved printing from a Windows 8.1 computer when using PCL XL emulation drivers and a PostScript 3 emulation print driver.
- Removed support for enabling two-sided printing by default.

  Note: For printer models that support two-sided printing, this setting can be enabled manually. For a list of supported printers, see “Supported printers” on page 24.

Lexmark Universal Print Driver version 2.7.2

Notes:

- If you are not using status monitor applications, then you can upgrade to UPD version 2.7.2. If you are using status monitor applications, then use only UPD 2.6.
- This version contains only bug fixes. If you are using a private print driver, then check the updates before installing this version to avoid losing specific fixes for your private print driver.
- Improved the printing of Microsoft Word documents with JPEG images when using PCL XL emulation drivers.

  Note: To avoid generating large print spools, we recommend using image compression when printing.
- Improved the printing of Microsoft Excel documents when using PCL XL emulation drivers.
- Removed support for Windows XP.

  Note: For a list of supported operating systems, see "Supported operating systems" on page 21.

Lexmark Universal Print Driver version 2.7.1

Note: If you are not using status monitor applications, then you can upgrade to UPD version 2.7.1. If you are using status monitor applications, then use only UPD version 2.6.

- Added support for some color and monochrome laser printers.

  Note: For a list of supported printers, see "Supported printers" on page 24.
- Added support for Microsoft Device Stage when installing the UPD on a TCP/IP port.
- Added support for the following enhanced resolutions:
  - 1200 IQ
  - 2400 IQ
  - 4800 CQ

  Note: This feature is available only in PCL 5 and PCL XL emulation drivers.
- Added support for image compression to improve printing performance.

  Note: This feature is available only in PCL XL emulation drivers.
- Added support for folding paper in thirds automatically.
- Added support for enabling two-sided printing by default.

  Note: This feature is available only in some printer models. For a list of supported printers, see "Supported printers" on page 24.
- Improved support for UPD installation on a client using a Novell IPP port by using bidirectional communication.

Lexmark Universal Print Driver version 2.*x*.4

The ***x*** is the data stream.

- Added support for some color laser printers.

  Note: For a list of supported printers, see "Supported printers" on page 24.
- Added support for some operating systems.

  Note: For a list of supported operating systems, see "Supported operating systems" on page 21.

Lexmark Universal Print Driver version 2.*x*.3

The *x* is the data stream.

- Added support for some color inkjet printers.

  Note: For a list of supported printers, see “Supported printers” on page 24.
- Added support for some paper sizes in inkjet printers.

  Note: For a list of supported paper sizes, see “Supported paper sizes” on page 38.

Lexmark Universal Print Driver version 2

- Added support for print driver version increments.
- Added support for custom installation package.
- Added support for job accounting.
- Added support for dynamic print driver configuration.
- Added support for Printer Driver Configuration Utility.
- Updated the user interface.

Overview

The InfoPrint Universal Print Driver (UPD) provides a standardized one-driver solution for your printing needs. It supports both color and monochrome laser printers.

This document provides instructions on how to install and use the UPD.

Note: For more information on the print driver version numbering format, see “What is the UPD version numbering format?” on page 55.

Supported Citrix Ready certifications

Starting in October 2012, the UPD has participated in the Citrix Ready Program as a Certified Product. Tests are conducted using the following:

Microsoft Windows Server 2016 x64 operating system

- Citrix Virtual Apps and Desktops 7 2103
- Citrix Virtual Apps and Desktops 7 2012
- Citrix Virtual Apps and Desktops 7 2009
- Citrix Virtual Apps and Desktops 7 2006
- Citrix Virtual Apps and Desktops 7 2003
- Citrix Virtual Apps and Desktops 7 1912 LTSR
- Citrix Virtual Apps and Desktops 7 1909
- Citrix Virtual Apps and Desktops 7 1906
- Citrix Virtual Apps and Desktops 7 1903
- Citrix Virtual Apps and Desktops 7 1811
- Citrix Virtual Apps and Desktops 1808
- Citrix XenApp 7.18
- Citrix XenApp 7.17
- Citrix XenApp 7.16
- Citrix XenApp 7.15
- Citrix XenApp 7.14
- Citrix XenApp 7.13
- Citrix XenApp 7.12
- Citrix XenApp 7.11
- Citrix XenApp 7.9
- Citrix XenApp 7.8
- Citrix XenApp 7.7
- Citrix XenApp 7.6
- Citrix XenApp 7.5
- Citrix XenDesktop 7.18
- Citrix XenDesktop 7.17
- Citrix XenDesktop 7.16

- Citrix XenDesktop 7.15
- Citrix XenDesktop 7.14
- Citrix XenDesktop 7.13
- Citrix XenDesktop 7.12
- Citrix XenDesktop 7.11
- Citrix XenDesktop 7.9
- Citrix XenDesktop 7.8
- Citrix XenDesktop 7.7
- Citrix XenDesktop 7.6
- Citrix XenDesktop 7.5

Microsoft Windows Server 2012 R2 x64 operating system

- Citrix XenApp 7.8
- Citrix XenApp 7.7
- Citrix XenApp 7.6
- Citrix XenApp 7.5
- Citrix XenDesktop 7.8
- Citrix XenDesktop 7.7
- Citrix XenDesktop 7.6
- Citrix XenDesktop 7.5

Microsoft Windows Server 2012 x64 operating system

- Citrix XenApp 7.8
- Citrix XenApp 7.7
- Citrix XenApp 7.6
- Citrix XenApp 7.5
- Citrix XenDesktop 7.8
- Citrix XenDesktop 7.7
- Citrix XenDesktop 7.6
- Citrix XenDesktop 7.5

Microsoft Windows Server 2008 R2 x64 operating system

- Citrix XenApp 7.8
- Citrix XenApp 7.7
- Citrix XenApp 7.6
- Citrix XenApp 7.5
- Citrix XenApp 6.5

Before you begin

Supported operating systems

Microsoft Windows operating systems

The UPD is available in 32-bit and 64-bit (when applicable) versions of the following:

- Windows 11
- Windows 10
- Windows 8.1
- Windows 7
- Windows Vista
- Windows Server 2022
- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows Server 2008 R2
- Windows Server 2008

Notes:

- The UPD version 2.7.1 is the last release that supports the Windows XP operating system.
- Lexmark follows Microsoft Products Support Lifecycle Policy in providing software support for Windows operating systems. For more information on Microsoft Products Support Lifecycle Policy, visit the Microsoft website.

Microsoft Windows Cluster Servers

- Windows Server 2022
- Windows Server 2019 (64-bit)
- Windows Server 2016 (64-bit)
- Windows Server 2012 R2 (64-bit)
- Windows Server 2008 R2
- Windows Server 2008 (32-bit and 64-bit)

Citrix implementations

Microsoft Windows Server 2016 operating system

- Citrix Virtual Apps and Desktops 7 2103
- Citrix Virtual Apps and Desktops 7 2012
- Citrix Virtual Apps and Desktops 7 2009
- Citrix Virtual Apps and Desktops 7 2006

- Citrix Virtual Apps and Desktops 7 2003
- Citrix Virtual Apps and Desktops 7 1912 LTSR
- Citrix Virtual Apps and Desktops 7 1909
- Citrix Virtual Apps and Desktops 7 1906
- Citrix Virtual Apps and Desktops 7 1903
- Citrix Virtual Apps and Desktops 7 1811
- Citrix Virtual Apps and Desktops 1808

Microsoft Windows Server 2012 R2 operating system

- Citrix XenApp 7.16
- Citrix XenApp 7.15
- Citrix XenApp 7.14
- Citrix XenApp 7.13
- Citrix XenApp 7.12
- Citrix XenApp 7.11
- Citrix XenApp 7.9
- Citrix XenApp 7.8
- Citrix XenApp 7.7
- Citrix XenApp 7.6
- Citrix XenApp 7.5
- Citrix XenDesktop 7.16
- Citrix XenDesktop 7.15
- Citrix XenDesktop 7.14
- Citrix XenDesktop 7.13
- Citrix XenDesktop 7.12
- Citrix XenDesktop 7.11
- Citrix XenDesktop 7.9
- Citrix XenDesktop 7.8
- Citrix XenDesktop 7.7
- Citrix XenDesktop 7.6
- Citrix XenDesktop 7.5

Microsoft Windows Server 2012 operating system

- Citrix XenApp 7.16
- Citrix XenApp 7.15
- Citrix XenApp 7.14
- Citrix XenApp 7.13
- Citrix XenApp 7.12
- Citrix XenApp 7.11
- Citrix XenApp 7.9
- Citrix XenApp 7.8
- Citrix XenApp 7.7

- Citrix XenApp 7.6
- Citrix XenDesktop 7.16
- Citrix XenDesktop 7.15
- Citrix XenDesktop 7.14
- Citrix XenDesktop 7.13
- Citrix XenDesktop 7.12
- Citrix XenDesktop 7.11
- Citrix XenDesktop 7.9
- Citrix XenDesktop 7.8
- Citrix XenDesktop 7.7
- Citrix XenDesktop 7.6

Microsoft Windows Server 2008 R2 operating system

- Citrix XenApp 7.16
- Citrix XenApp 7.15
- Citrix XenApp 7.14
- Citrix XenApp 7.13
- Citrix XenApp 7.12
- Citrix XenApp 7.11
- Citrix XenApp 7.9
- Citrix XenApp 7.8
- Citrix XenApp 7.7
- Citrix XenApp 7.6
- Citrix XenApp 7.5
- Citrix XenApp 6.5
- Citrix XenDesktop 7.16
- Citrix XenDesktop 7.15
- Citrix XenDesktop 7.14
- Citrix XenDesktop 7.13
- Citrix XenDesktop 7.12
- Citrix XenDesktop 7.11
- Citrix XenDesktop 7.9
- Citrix XenDesktop 7.8
- Citrix XenDesktop 7.7
- Citrix XenDesktop 7.6
- Citrix XenDesktop 7.5
- Citrix XenApp 6.0

Microsoft Windows Server 2008 R2 operating system

- Citrix XenApp 5.0

Novell operating systems

- Novell NetWare 6.5 Open Enterprise Server
- Novell Open Enterprise Server on SUSE Linux Enterprise Server (32-bit and 64-bit versions):
  - NOES 15 SP1 on SLES 11 SP4
  - NOES 11 SP3 on SLES 12 SP1
  - NOES 11 SP3 on SLES 11 SP4
  - NOES 2 SP3 on SLES 10 SP4

  Note: These configurations support only Windows clients for Micro Focus iPrint for Windows 10, Windows 8.1, Windows 7, and Windows Vista operating systems.

Supported printers

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Color laser multifunction products			
Lexmark CX310dn, Lexmark CX310n, Lexmark CX317dn[1]	✓	✓	✓
Lexmark CX331adwe	✓	✓	✓
Lexmark CX410de, Lexmark CX410e, Lexmark CX417de	✓	✓	✓
Lexmark CX421adn	✓	✓	✓
Lexmark CX431adw	✓	✓	✓
Lexmark CX510de, CX517de[1]	✓	✓	✓
Lexmark CX522ade	✓	✓	✓
Lexmark CX532	✓	✓	✓
Lexmark CX622ade, Lexmark CX622adhe	✓	✓	✓
Lexmark CX625ade, Lexmark CX625adhe, Lexmark CX625adthe	✓	✓	✓
Lexmark CX635	✓	✓	✓
Lexmark CX725de, Lexmark CX725dhe, Lexmark CX725dthe	✓	✓	✓
Lexmark CX727de	✓	✓	✓
Lexmark CX730de	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark CX735adse	✓	✓	✓
Lexmark CX737	✓	✓	✓
Lexmark CX820, Lexmark CX820de, Lexmark CX820dtfe	✓	✓	✓
Lexmark CX825, Lexmark CX825de, Lexmark CX825dte, Lexmark CX825dtfe, Lexmark CX825dtpe	✓	✓	✓
Lexmark CX827de	✓	✓	✓
Lexmark CX860, Lexmark CX860de, Lexmark CX860dte, Lexmark CX860dtfe, Lexmark CX860dtpe	✓	✓	✓
Lexmark CX920de	✓	✓	✓
Lexmark CX921de	✓	✓	✓
Lexmark CX922de	✓	✓	✓
Lexmark CX923dte	✓	✓	✓
Lexmark CX923dxe	✓	✓	✓
Lexmark CX924dte	✓	✓	✓
Lexmark CX924dxe	✓	✓	✓
Lexmark CX927de	✓	✓	✓
Lexmark MC2325adw	✓	✓	✓
Lexmark MC2425adw	✓	✓	✓
Lexmark MC2500, Lexmark MC2535ade, Lexmark MC2535adwe	✓	✓	✓
Lexmark MC2640adwe	✓	✓	✓
Lexmark MC3200, Lexmark MC3224adwe, Lexmark MC3224dwe, Lexmark MC3224i	✓	✓	✓
Lexmark MC3300, Lexmark MC3326adwe, Lexmark MC3326i	✓	✓	✓
Lexmark MC3400, Lexmark MC3426adw, Lexmark MC3426i	✓	✓	✓
Lexmark X543, Lexmark X544, Lexmark X546	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark X548, Lexmark X548e	✓	✓	✓
Lexmark X734de, Lexmark X736de, Lexmark X738de	✓	✓	✓
Lexmark X746de, Lexmark X748de, Lexmark X748dte	✓	✓	✓
Lexmark X762e	✓	✓	✓
Lexmark X772e	✓	✓	✓
Lexmark X782e, Lexmark X782e XL	✓	✓	✓
Lexmark X790, Lexmark X792	✓	✓	✓
Lexmark X912	✓	X	✓
Lexmark X925, Lexmark XS925	✓	✓	✓
Lexmark X940e, Lexmark X945e	✓	✓	✓
Lexmark X950de, Lexmark X952de, Lexmark X954de	✓	✓	✓
Lexmark XC2100[1] Lexmark XC2130, Lexmark XC2132	✓	✓	✓
Lexmark XC2200, Lexmark (XC2235, Lexmark XC2240	✓	✓	✓
Lexmark XC2300, Lexmark XC2326	✓	✓	✓
Lexmark XC2335	✓	✓	✓
Lexmark XC4100, Lexmark XC4140, Lexmark XC4143, Lexmark XC4150, Lexmark XC4153	✓	✓	✓
Lexmark XC4240	✓	✓	✓
Lexmark XC4342	✓	✓	✓
Lexmark XC4352	✓	✓	✓
Lexmark XC6100, Lexmark XC6152de, Lexmark XC6152dtfe, Lexmark XC6153, Lexmark XC6153de	✓	✓	✓
Lexmark XC8100, Lexmark XC8155de, Lexmark XC8155dte, Lexmark XC8160de, Lexmark XC8160dte, Lexmark XC8163	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark XC9235	✓	✓	✓
Lexmark XC9245	✓	✓	✓
Lexmark XC9265	✓	✓	✓
Mono laser multifunction products			
Lexmark 6500e	✓	✓	✓
Lexmark MB2200, Lexmark MB2236adw, Lexmark MB2236adwe, Lexmark MB2236i	✓	✓	X
Lexmark MB2300, Lexmark MB2338adn, Lexmark MB2338adw, Lexmark MB2338dw	✓	✓	✓
Lexmark MB2400, Lexmark MB2442ade, Lexmark MB2442adwe	✓	✓	✓
Lexmark MB2546ade	✓	✓	✓
Lexmark MB2650ade	✓	✓	✓
Lexmark MB2770adwhe	✓	✓	✓
Lexmark MB3400, Lexmark MB3442adw, Lexmark MB3442i	✓	✓	✓
Lexmark MX310[1] Lexmark MX310dn, Lexmark MX317dn	✓	✓	✓
Lexmark MX320, Lexmark MX321adn, Lexmark MX321adw	✓	✓	✓
Lexmark MX410[1] Lexmark MX410de, Lexmark MX417de	✓	✓	✓
Lexmark MX421ade	✓	✓	✓
Lexmark MX330, Lexmark MX331adn	✓	✓	✓
Lexmark MX430, Lexmark MS431adn, Lexmark MS431adw)	✓	✓	✓
Lexmark MX432adwe	✓	✓	✓
Lexmark MX510,[1] Lexmark MX510de, Lexmark MX511de, Lexmark MX511dhe, Lexmark MX517de	✓	✓	✓
Lexmark MX520, Lexmark MX521ade, Lexmark MX522adhe, Lexmark MX521adte, Lexmark MX521de	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark MX532	✓	✓	✓
Lexmark MX610[1], Lexmark MX610de, Lexmark MX611de, Lexmark MX611dhe, Lexmark MX617de)	✓	✓	✓
Lexmark MX620, Lexmark MX622ade, Lexmark MX622adhe, Lexmark MX622adthe	✓	✓	✓
Lexmark MX632	✓	✓	✓
Lexmark MX6500e, [1] Lexmark MX6500e	✓	✓	✓
Lexmark MX710[1] Lexmark MX710, Lexmark MX711, Lexmark MX717de, Lexmark MX718de	✓	✓	✓
Lexmark MX720, Lexmark MX721ade, Lexmark MX721adhe, Lexmark MX722ade, Lexmark MX722adhe	✓	✓	✓
Lexmark MX725adve	✓	✓	✓
Lexmark MX810, [1] Lexmark MX810, Lexmark MX811, Lexmark MX812	✓	✓	✓
Lexmark MX820, Lexmark MX822ade, Lexmark MX822adtfe, Lexmark MX822adxe, Lexmark MX824ade, Lexmark MX824adtfe, Lexmark MX824adxe, Lexmark MX826ade, Lexmark MX826adtfe, Lexmark MX826adxe	✓	✓	✓
Lexmark MX910, [1] Lexmark MX910de, Lexmark MX911dte, Lexmark MX912dxe	✓	✓	✓
Lexmark MX931dse	✓	✓	✓
Lexmark X203n, Lexmark X204n	✓	✓	✓
Lexmark X264dn, Lexmark X363dn, Lexmark X364dn, Lexmark X364dw	✓	✓	✓
Lexmark X340n[2], Lexmark X342n[2]	✓	✓	X
Lexmark X422	✓	X	✓
Lexmark X463de, Lexmark X464de, Lexmark X466dte, Lexmark X466dtwe	✓	✓	✓
Lexmark X642e	✓	✓	✓
Lexmark X644e, Lexmark X646e	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark X646ef	✓	✓	✓
Lexmark X651de, Lexmark X652de, Lexmark X654dte, Lexmark X656de, Lexmark X658de	✓	✓	✓
Lexmark X820e	✓	✓	✓
Lexmark X830, Lexmark X832	✓	✓	✓
Lexmark X850e, Lexmark X852e, Lexmark X854e	✓	✓	✓
Lexmark X860e, Lexmark X862e, Lexmark X864e	✓	✓	✓
Lexmark XM1100, [1] Lexmark XM1135, Lexmark XM1140, Lexmark XM1145	✓	✓	✓
Lexmark XM1200, Lexmark XM1242, Lexmark XM1246	✓	✓	✓
Lexmark XM1300, Lexmark XM1342	✓	✓	✓
Lexmark XM3100, [1] Lexmark XM3150	✓	✓	✓
Lexmark XM3142	✓	✓	✓
Lexmark XM3250	✓	✓	✓
Lexmark XM3350	✓	✓	✓
Lexmark XM5100, [1] Lexmark XM5163, Lexmark XM5170	✓	✓	✓
Lexmark XM5200, [1] Lexmark XM5263, Lexmark XM5270	✓	✓	✓
Lexmark XM5300, Lexmark XM5365, Lexmark XM5370	✓	✓	✓
Lexmark XM7100, [1] Lexmark XM7155, Lexmark XM7163, Lexmark XM7170	✓	✓	✓
Lexmark XM7200, [1] Lexmark XM7263, Lexmark XM7270	✓	✓	✓
Lexmark XM7300, Lexmark XM7355, Lexmark XM7365, Lexmark XM7370)	✓	✓	✓
Lexmark XM9100, [1] Lexmark XM9145, Lexmark XM9155, Lexmark XM9165	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Color laser printers			
Lexmark C2100, [1] Lexmark C2132	✓	✓	✓
Lexmark C2240	✓	✓	✓
Lexmark C2300, Lexmark C2326	✓	✓	✓
Lexmark C2335	✓	✓	✓
Lexmark C2425dw	✓	✓	✓
Lexmark C2500, Lexmark C2535dn, Lexmark C2535dw	✓	✓	✓
Lexmark C3200, Lexmark C3224dw	✓	✓	✓
Lexmark C3300, Lexmark C3326dw	✓	✓	✓
Lexmark C3400, Lexmark C3426dw	✓	✓	✓
Lexmark C4150	✓	✓	✓
Lexmark C4342	✓	✓	✓
Lexmark C4352	✓	✓	✓
Lexmark C510	✓	X	✓
Lexmark C520, Lexmark C522, Lexmark C524	✓	✓	✓
Lexmark C530, Lexmark C532, Lexmark C534	✓	✓	✓
Lexmark C540, Lexmark C543, Lexmark C544, Lexmark C546	✓	✓	✓
Lexmark C6160de	✓	✓	✓
Lexmark C734, Lexmark C736	✓	✓	✓
Lexmark C746dn, Lexmark C746dtn, Lexmark C746n, Lexmark C748de, Lexmark C748dte, Lexmark C748e	✓	✓	✓
Lexmark C750	✓	X	✓
Lexmark C752	✓	X	✓
Lexmark C760, Lexmark C762	✓	✓	✓
Lexmark C770, Lexmark C772	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark C780, Lexmark C782, Lexmark C782 XL	✓	✓	✓
Lexmark C790, Lexmark C792	✓	✓	✓
Lexmark C912	✓	X	✓
Lexmark C920	✓	✓	✓
Lexmark C925	✓	✓	✓
Lexmark C935	✓	✓	✓
Lexmark C950de	✓	✓	✓
Lexmark C9235	✓	✓	✓
Lexmark CS310, [1] Lexmark CS310dn, Lexmark CS310n, Lexmark CS317dn	✓	✓	✓
Lexmark CS330, Lexmark CS331dw	✓	✓	✓
Lexmark CS410, [1] Lexmark CS410de, Lexmark CS410dn, Lexmark CS410n, Lexmark CS417dn	✓	✓	✓
Lexmark CS421dn	✓	✓	✓
Lexmark CS430, Lexmark CS431dw	✓	✓	✓
Lexmark CS510[1], Lexmark CS510de, Lexmark CS517de	✓	✓	✓
Lexmark CS521dn	✓	✓	✓
Lexmark CS531	✓	✓	✓
Lexmark CS632	✓	✓	✓
Lexmark CS622de	✓	✓	✓
Lexmark CS720de	✓	✓	✓
Lexmark CS725de	✓	✓	✓
Lexmark CS727de	✓	✓	✓
Lexmark CS728de	✓	✓	✓
Lexmark CS730de	✓	✓	✓
Lexmark CS735de	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark CS737	✓	✓	✓
Lexmark CS820, Lexmark CS820de, Lexmark CS820dte, Lexmark CS820dtfe	✓	✓	✓
Lexmark CS827de	✓	✓	✓
Lexmark CS921de	✓	✓	✓
Lexmark CS923de	✓	✓	✓
Lexmark CS927de	✓	✓	✓
Lexmark CS943de	✓	✓	✓
Mono laser printers			
Lexmark B2200, Lexmark B2236dw	✓	✓	X
Lexmark B2300, Lexmark B2338dn, Lexmark B2338dw	✓	✓	✓
Lexmark B2400, Lexmark B2442dn, Lexmark B2442dw	✓	✓	✓
Lexmark B2546dn	✓	✓	✓
Lexmark B2650dn	✓	✓	✓
Lexmark B2865dw	✓	✓	✓
Lexmark B3300, Lexmark B3340dw	✓	✓	✓
Lexmark B3440, Lexmark B3442dw	✓	✓	✓
Lexmark E120n[3]	✓	✓	X
Lexmark E220[3]	✓	X	X
Lexmark E230, Lexmark E232, Lexmark E234, Lexmark E234n	✓	X	X
Lexmark E238, Lexmark E240	✓	✓	X
Lexmark E240n, Lexmark E340, Lexmark E342n	✓	✓	✓
Lexmark E250d, Lexmark E250dn, Lexmark E350d, Lexmark E352dn, Lexmark E450dn	✓	✓	✓
Lexmark E260, Lexmark E260d, Lexmark E260dn	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark E320, Lexmark E322	✓	X	✓
Lexmark E321[3], Lexmark E323[3]	✓	X	✓
Lexmark E330, Lexmark E332	✓	X	✓
Lexmark E360d, Lexmark E360dn	✓	✓	✓
Lexmark E460dn, Lexmark E460dw, Lexmark E462dtn	✓	✓	✓
Lexmark M1100[1], Lexmark M1140, Lexmark M1140 Plus, Lexmark M1145	✓	✓	✓
Lexmark M1300, Lexmark M1342	✓	✓	✓
Lexmark M3100[1], Lexmark M3150, Lexmark M3150dn	✓	✓	✓
Lexmark M3250	✓	✓	✓
Lexmark M3350	✓	✓	✓
Lexmark M5100[1], Lexmark M5155, Lexmark M5163, Lexmark M5163dn, Lexmark M5170	✓	✓	✓
Lexmark M5200, Lexmark M5255, Lexmark M5265, Lexmark M5270	✓	✓	✓
Lexmark MS310[1], Lexmark MS310d, Lexmark MS310dn, Lexmark MS312dn, Lexmark MS315dn, Lexmark MS317dn	✓	✓	✓
Lexmark MS321dn	✓	✓	✓
Lexmark MS330, Lexmark MS331dn	✓	✓	✓
Lexmark MS410[1], Lexmark MS410d, Lexmark MS410dn, Lexmark MS415dn, Lexmark MS417dn	✓	✓	✓
Lexmark MS430, Lexmark MS431dn, Lexmark MS431dw	✓	✓	✓
Lexmark MS420, Lexmark MS421dn, Lexmark MS421dw	✓	✓	✓
Lexmark MS510[1], Lexmark MS510dn, Lexmark MS517dn	✓	✓	✓
Lexmark MS521dn	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark MS531	✓	✓	✓
Lexmark MS610[1], Lexmark MS610de, Lexmark MS610dn, Lexmark MS617dn	✓	✓	✓
Lexmark MS620, Lexmark MS621dn,Lexmark MS621dtn Lexmark MS622de, Lexmark MS622dte	✓	✓	✓
Lexmark MS631	✓	✓	✓
Lexmark MS632	✓	✓	✓
Lexmark MS710[1], Lexmark MS710, Lexmark MS711	✓	✓	✓
Lexmark MS725dvn	✓	✓	✓
Lexmark MS810[1], Lexmark MS810, Lexmark MS811, Lexmark MS812, Lexmark MS817dn, Lexmark MS817n, Lexmark MS818dn)	✓	✓	✓
Lexmark MS820, Lexmark MS821n, Lexmark MS821dn, Lexmark MS821dtn, Lexmark MS822de, Lexmark MS823n, Lexmark MS823dn, Lexmark MS824de, Lexmark MS824dtn, Lexmark MS825dn, Lexmark MS826de, Lexmark MS826dtn)	✓	✓	✓
Lexmark MS910[1], Lexmark MS911de	✓	✓	✓
Lexmark Optra S 1625	✓	X	X
Lexmark Optra S 1855	✓	X	X
Lexmark Optra S 2420	✓	X	X
Lexmark Optra S 2450, Lexmark Optra S 2455	✓	X	X
Lexmark Optra T612, Lexmark Optra T614	✓	X	✓
Lexmark T420	✓	X	✓
Lexmark T430	✓	X	✓
Lexmark T520, Lexmark T522	✓	X	✓
Lexmark T620, Lexmark T622	✓	X	✓
Lexmark T630, Lexmark T632, Lexmark T634	✓	X	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Printer model	PCL 5 emulation driver	PCL XL emulation driver	PS emulation driver
Lexmark T640, Lexmark T642, Lexmark T644	✓	✓	✓
Lexmark T650, Lexmark T652, Lexmark T654, Lexmark T656	✓	✓	✓
Lexmark W820	✓	✓	✓
Lexmark W840	✓	✓	✓
Lexmark W850	✓	✓	✓

[1] Two-sided printing is supported by default.

[2] Custom forms, collation, booklet printing, and most print quality controls are not available.

[3] Two-sided printing is not supported.

Device	PCL 5 emulation	PCL XL emulation	PS emulation
Color multifunction products			
InfoPrint Color 1664 MFP	✓	✓	✓
InfoPrint Color 1759 MFP, 1769 MFP	✓	✓	✓
InfoPrint Color 1764 MFP	✓	✓	✓
InfoPrint Color 1826 MFP	✓	✓	✓
InfoPrint Color 1836 MFP	✓	✓	✓
InfoPrint Color 1846 MFP, 1856 MFP, 1866 MFP	✓	✓	✓
InfoPrint C2057 MFP	✓	✓	✓
InfoPrint C2075 MFP	✓	✓	✓
Mono multifunction products			
InfoPrint 1145 MFP	✓	✓	✓
InfoPrint 1410 MFP	✓	X	✓
InfoPrint 1540 MFP, 1560 MFP, 1580 MFP	✓	✓	✓
InfoPrint 1570 MFP	✓	✓	✓
InfoPrint 1572 MFP	✓	✓	✓
InfoPrint 1650 MFP	✓	✓	✓
InfoPrint 1850 MFP, 1860 MFP, 1870 MFP, 1880 MFP	✓	✓	✓
InfoPrint 1930 MFP, 1940 MFP	✓	✓	✓
InfoPrint 1948 MFP, 1968 MFP, 1988 MFP	✓	✓	✓

[1] Two-sided printing is not supported.

Device	PCL 5 emulation	PCL XL emulation	PS emulation
Color laser printers			
InfoPrint Color 1220	✓	X	✓
InfoPrint Color 1334	✓	X	✓
InfoPrint Color 1354	✓	X	✓
InfoPrint Color 1357	✓	X	✓
InfoPrint Color 1454, 1464	✓	✓	✓
InfoPrint Color 1534	✓	✓	✓
InfoPrint Color 1567	✓	✓	✓
InfoPrint Color 1614, 1634	✓	✓	✓
InfoPrint Color 1654, 1664	✓	✓	✓
InfoPrint Color 1754, 1764	✓	✓	✓
InfoPrint Color 1767	✓	✓	✓
InfoPrint Color 1824	✓	✓	✓
InfoPrint Color 1825	✓	✓	✓
InfoPrint Color 1834, 1854	✓	✓	✓
InfoPrint C2047	✓	✓	✓
InfoPrint C2065	✓	✓	✓
Mono laser printers			
InfoPrint 1116	✓	X	✓
InfoPrint 1120, 1125	✓	X	✓
InfoPrint 1130, 1140	✓	X	✓
InfoPrint 1145	✓	X	✓
InfoPrint 1222	✓	X	✓
InfoPrint 1312[1]	✓	X	✓
InfoPrint 1332, 1352, 1372	✓	X	✓
InfoPrint 1412[1]	✓	X	✓
InfoPrint 1422	✓	X	✓
InfoPrint 1512	✓	✓	✓

[1] Two-sided printing is not supported.

Device	PCL 5 emulation	PCL XL emulation	PS emulation
InfoPrint 1532, 1552, 1572	✓	✓	✓
InfoPrint 1585	✓	✓	✓
InfoPrint 1601, 1602, 1612, 1622	✓	✓	✓
InfoPrint 1811, 1812	✓	✓	✓
InfoPrint 1822	✓	✓	X
InfoPrint 1823	✓	✓	✓
InfoPrint 1832, 1852, 1872	✓	✓	✓
InfoPrint 1892	✓	✓	✓
InfoPrint 1985	✓	✓	✓
[1] Two-sided printing is not supported.			

Supported connections

The InfoPrint Universal Print Driver supports direct printing to the following on all supported operating systems:

- IP ports
- USB ports
- Web services ports

Bidirectional communication is available with the following:

- Standard IP ports
- InfoPrint Enhanced TCP/IP ports
- USB connections
- Web services ports
- Novell iPrint ports

InfoPrint Enhanced TCP/IP ports

InfoPrint Enhanced TCP/IP ports are not included in the InfoPrint Universal Print Driver package.

If enhanced port capability is installed separately on the host system, then printing to an enhanced port is supported using the InfoPrint Universal Print Driver.

Supported paper sizes and types

Note: Depending on your printer model and print driver, supported paper sizes and types may vary.

Supported paper sizes

- 12 x 18 inches
- A3 (297 x 420 mm)
- A4 (210 x 297 mm)
- A5 (148 x 210 mm)
- A6 (105 x 148 mm)
- B4 (257 x 364 mm
- B5 (182 x 257 mm)
- Banner 1 (216 x 914 mm)
- Banner 2 (216 x 1219 mm)
- Banner 3 (297 x 914 mm)
- Banner 4 (297 x 1219 mm)
- Envelope (Monarch) 7 3/4 (3.9 x 7.5 inches)
- Envelope 9 (3.9 x 8.9 inches)
- Envelope 10 (4.1 x 9.5 inches)
- Envelope B5 (176 x 250 mm)
- Envelope C5 (162 x 229 mm)
- Envelope DL (110 x 220 mm)
- Executive (7.3 x 10.5 inches)
- Folio (8.5 x 13 inches)
- Hagaki (100 x 148 mm)
- Legal (8.5 x 14 inches)
- Letter (8.5 x 11 inches)
- Oficio (Mexico) (216 x 340 mm)
- Postcard (4 x 6 inches)
- SRA3 (320 x 450 mm)
- Statement (5.5 x 8.5 inches)
- Tabloid (11 x 17 inches)
- Universal (216 x 360 mm)

Supported paper types

- Bond
- Business card
- Card stock
- Colored
- Custom type 1

- Custom type 2
- Custom type 3
- Custom type 4
- Custom type 5
- Custom type 6
- ColorLok certified plain
- Envelope
- Glossy
- Glossy brochure
- Glossy photo
- Heavy
- Heavy glossy
- Heavy plain
- Iron-on transfer
- Labels
- Letterhead
- Light
- Matte brochure
- Matte photo
- Photo greeting cards
- Plain
- Premium plain
- Preprinted
- Recycled
- Rough/Cotton
- Rough Envelope
- Transparency
- Vinyl labels

Supported languages

- Arabic
- Chinese (simplified)
- Chinese (traditional)
- Croatian
- Czech
- Danish
- Dutch
- English
- Finnish
- French

- German
- Greek
- Hungarian
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Portuguese (Brazilian)
- Romanian
- Russian
- Serbian
- Slovak
- Slovenian
- Spanish
- Swedish
- Turkish

Installing the Universal Print Driver

The UPD may be installed through the Windows Add Printer Wizard or through the InfoPrint Universal Print Driver System Administrator Installation package available at the InfoPrint website.

Updating the Universal Print Driver

The UPD version 2 works with UPD version 1. If the UPD is upgraded to version 2, then switching the print driver from the Advanced tab of the Printer Properties dialog box is not supported. The existing UPD version 1 print queues must be deleted, and then print queues using UPD version 2 must be created.

Installing the Universal Print Driver

1. From your computer, go to **www.lexmark.com**.
2. Click **Customer Support** > **Universal Print Driver**.
3. Depending on the operating system of your computer, download the appropriate print driver.

   Notes:

   - We recommend using the specific driver packages depending on whether you have a color or a monochrome printer. If you have a fleet of both color and monochrome printers, then we recommend installing both print drivers.
   - For Windows computers, if you download the emulation-specific UPD, then download the Phone Book and Travel Print applications separately. Both applications install with the administrator package automatically.
   - For more information on the full list of packages for Windows computers, see the Universal Print Driver White Paper section.
4. Follow the instructions on your computer screen.

Updating installed settings

1. From the Printer Properties dialog box, click the **Configuration** tab.
2. Click **Update Now-Ask Printer** > **OK**.

The print driver updates the status of all printer settings. If bidirectional communication is not active or is unavailable for the printer, then the print driver shows an error.

Understanding the Package Creation Utility

The Package Creation Utility lets you create customized installer packages that you can launch without user input, and integrate in your deployment solution. It generates print driver installation packages that automate the installation of print drivers with preconfigured settings.

Understanding Travel Print

This feature lets you search and select a network printer when sending a print job or a fax job from the host computer. It also lets you use multiple printers frequently without installing different print queues to support printers at multiple locations.

When Travel Print is used, a printer selection dialog box appears during the following:

- Sending a print job to the print driver
- Accessing the "Printing preferences" dialog box from a Windows program
- Accessing either the "Printing preferences" or the Printer Properties dialog boxes from the print driver

From the printer selection dialog box, in the Favorites tab, you can designate up to 10 frequently used printers. You can also search for printers using the printer host name or IP address, or by searching a subnet.

The printer search results show the following printer information:

- Model name
- Status
- IP address
- Color
- Two-sided printing capabilities

You can also use Travel Print to access the printer Embedded Web Server, allowing access to more printer information and configuration settings.

Notes:

- You need administrator rights to install and enable Travel Print. To install, run the Travel Print installation package or the UPD system administrator installation package. To obtain a copy of the installation packages, visit the Lexmark website.
- Travel Print is not intended for server-based printing. The print driver and Travel Print must be installed locally on host computers.
- If you want Travel Print to update the printer model and configuration settings, then enable the **Update Configuration from Printer** feature.

Enabling Travel Print

Travel Print is enabled by associating the print driver with the Travel Print port.

Note: The Travel Print port is available only if Travel Print is installed. To install, run the Travel Print installation package or the UPD system administrator installation package. To obtain a copy of the installation packages, visit the Lexmark website.

1. From the Printer Properties dialog box, click the **Ports** tab.
2. Select **Travel Print port**.

Note: To disable Travel Print, change the print driver port to any other printer port.

Understanding the Universal Print Driver

To see the UPD settings, from your computer, right-click a printer, and then select **Printing preferences**.

Understanding the Layout tab

The Layout tab determines the organizational attributes of a print job.

Note: Some settings are available only in some printer models and in some print drivers.

Setting	Description
Copies	The following settings determine the number of copies to be printed and how the copies are organized: • **Number of Copies** • **Collate**—The order in which pages are printed when printing multiple copies of a print job. For example, if you are printing two copies of a five-page print job, then the collated output is 1, 2, 3, 4, 5, 1, 2, 3, 4, 5. The non-collated output is 1, 1, 2, 2, 3, 3, 4, 4, 5, 5. If the installed printer memory is insufficient to collate the output, then the collated output is generated for all pages that are stored in the printer memory. For example, the output can be 1, 2, 3, 1, 2, 3, 4, 5, 4, 5. • **Reverse page order**—Depending on your printer model, the pages of a print job are printed in reverse order so that in the finished output, the last page appears on top. If you want the output back in normal page order, then manually reverse the pages.
Page Orientation	The following settings determine the alignment of the paper or form when it is printed: • **Portrait**—The orientation is vertical, where the page is taller than it is wide. • **Landscape**—The orientation is horizontal, where the page is wider than it is tall. • **Rotate 180°**—The page image is rotated to 180 degrees. This setting can be used with other orientation settings.
Print on Both Sides (Duplex)	If this setting is selected, then the "Long edge" and "Short edge" settings specify which edge of the printed document is used as the binding edge. The following settings determine how long before the printer prints on the opposite side of a page: • **Normal (Default)**—This setting uses the standard drying time. • **Medium**—This setting partially extends the drying time. • **Extended**—This setting uses the maximum drying time.

Setting	Description
Document Reading Order Preset	The reading order of the print job that you are printing. Select either of the following: • **Left to right** • **Right to left** The reading order changes the preset value of the following: • "Page order" setting in the N-up Settings dialog box • "Binding edge" setting in the Booklet Settings dialog box • Near and Far alignment settings in the Edit Watermarks dialog box
Page Layouts	The following settings determine the layout of the page: • **Normal**—Page layout settings are not applied to the print job. • **Multiple pages per side (N-Up)**—Multiple pages are printed on all sheets of paper. • **Booklet**—The print job is printed as a booklet. • **Poster**—The print job is printed in a larger format. • **Mirror**—A mirror image of the print job is printed. **Note:** Some settings are available only in some printer models.
Mixed Media Duplex Bitmap	This feature shows a preview of the selected paper orientation and finishing settings.

Notes:

- Program settings may override the settings in the Layout tab.
- Specifying multiple copies in both the Layout tab and the Windows-based program print dialog box may cause an error.
- To save the Collate setting, in the Configuration tab of the Printer Properties dialog box, select **Use printer-based**.

Understanding the Paper/Finishing tab

Notes:

- The finishing feature is available only in some printer models. For more information, see the printer *User's Guide*.
- To use the finishing settings, attach a finisher to the printer.

Setting	Description
Paper	The following settings determine how paper is handled: • **Paper Size** • **Resizing Options**—If “Fit to paper size” is selected, then the page image is automatically scaled to match a specific paper size. **Notes:** – Some Windows programs have a scaling setting. If the two settings are used at the same time, then an error may occur. – The scaling setting is available only in PostScript emulation print drivers. • **Manage Custom Sizes** • **Use full printable area**—The page image is printed as close to the edge of the page. **Note:** Depending on your printer model, the full printable area may vary. • **Other paper size with different orientation**—The paper size that is loaded in a different orientation. This setting is recommended for two-sided print jobs, jobs that use the finisher, or both. **Note:** To disable two-sided printing, select **Off**. • **Paper type** • **Paper source/tray**—A list of supported paper types that can be used for different pages of a document. • **Use multiple input options**—A paper or other media from different paper trays are used in the same print job. **Note:** This setting is available only in some print drivers.
Finishing	The following settings determine how finishing settings are used: • **Output Bin** **Note:** Depending on your printer model, supported output bins may vary. For a list of available output bins, see the printer *User's Guide*. • **Separator sheets**—The location of the separator sheets. • **Separator sheet source**—The source of the separator sheets. • **Offset**—Print jobs are stacked in staggered sets in the output bin. • **Staple**—The number and placement of staples in the finished print job. • **Hole Punch**—The location and number of holes to be punched in the finished print job. • **Fold**—If this setting is enabled, then the finished print job is folded.

Understanding the Quality tab

The Quality tab determines the print and image quality settings of a print job.

Setting	Description
Print quality settings[1]	The following settings determine the print quality of the print job: • **Draft**—The print job is printed using the lowest resolution for faster printing. • **Normal**—The print job is printed using standard print quality settings. • **Best**—The print job is printed using the best possible resolution. • **Custom**—The print job is printed using the specified settings. **Note:** To let the printer automatically select the appropriate print resolution settings, select **Auto**.
Sharpen[1]	The detail of the print image is sharpened by increasing the contrast around the edges of text and images. **Note:** If images that have had a sharpening effect applied by another application are printed using this setting, then an error may occur.
Resolution[2]	The following settings determine the resolution of the print job: • Dots per inch • Image quality (IQ) • Color quality (CQ)
Halftone	The following settings determine how the halftone screen is used: • **Use printer settings** • **Normal**—A standard halftone screen is used. • **Detail**—An alternate halftone screen designed for thin color lines and text is used.
Color Preference[1]	The following settings determine the intensity of the colors in the print job: • **Auto** • **Natural**—A moderate degree of intensity to printed colors is used. • **Vivid**—The highest degree of intensity to printed colors is used.
Advanced Color Options[1]	The following settings determine the print mode for the print job: • **Auto** • **Use ICC test Chart Process**—A special print mode based on ICC profiles is used.

[1] This setting is available only in inkjet printers.

[2] This setting is available only in laser printers.

[3] This setting is available only in monochrome printers.

[4] This setting is available only in color printers and in some print drivers.

[5] This setting is available only in color printers.

[6] This setting is available only in color laser printers.

[7] This setting is available only in some print drivers.

Setting	Description
Gray Correction[3]	The following settings determine the brightness and contrast of the print job: • **Use printer settings** • **Off** • **Manual**—This setting enables the brightness and contrast sliders.
Pixel Boost[3]	The following settings determine how the pixel density of a print job is enhanced: • **Use printer settings** • **Off** • **Fonts**—The text in the print job is darkened. This setting affects only font data. • **Horizontally**—The horizontal lines of text and images in the print job are darkened. • **Vertically**—The vertical lines of text and images in the print job are darkened. • **Both directions**—Both horizontal and vertical lines of text and images in the print job are darkened.
Color Output[1]	The print job is printed either in color or in black and white.
Send color to printer[3]	Color images are printed in grayscale. **Notes:** • When a print job is sent to the printer, the printer converts color images to monochrome grayscale. • This setting may slow printing performance.
Print Color Text as Black[3]	All color texts are printed using only black ink.
Print text as black[4]	The text is printed in black, but images are printed in color.
Print in black and white[5]	The print job is printed in black and white.
Toner Darkness[2]	The following settings determine whether the print job is either lightened or darkened: • **Use printer settings** • **Use toner darkness**—This setting enables the toner darkness slider.

[1] This setting is available only in inkjet printers.

[2] This setting is available only in laser printers.

[3] This setting is available only in monochrome printers.

[4] This setting is available only in color printers and in some print drivers.

[5] This setting is available only in color printers.

[6] This setting is available only in color laser printers.

[7] This setting is available only in some print drivers.

Setting	Description
ColorSaver[2]	The following settings determine whether the amount of toner that the printer uses is reduced when printing color images: • **Use printer settings** • **On** • **Off**—Text is printed using the default amount of toner.
Edit Color Correction[6]	The following settings determine how the colors of the print job are adjusted to match the colors of other output devices or standard color systems: • **Use printer settings** • **Off** • **Auto**—Depending on the object type and how color is specified, a different color conversion table is applied to all objects in the print job. • **Manual**—This setting enables the RGB and CMYK Manual color correction settings.
RGB Correction[6]	The following settings determine the brightness, contrast, and saturation of the print job: • **Use printer settings** • **Manual**—This setting enables the brightness, contrast, and saturation sliders.
Edit Color Balance[6]	The following settings determine how the colors of the print job are adjusted by increasing or decreasing the amount of toner used for each color plane: • **Use printer settings** • **Manual**—This setting enables the color balance sliders.
Edit Color Matching[6]	The following settings determine how the colors of the print job are matched to the colors on the monitor: • **Contrast (for images)**—Color matching is applied to photographs and images. • **Saturation (for business graphics)**—Color matching is applied to charts and bright colors. • **Colorimetric (for closest colors)**—Color matching is applied to a print job that has a color that needs an exact match. **Note:** To use this setting, you must have a printer that can reproduce the specified color.

[1] This setting is available only in inkjet printers.

[2] This setting is available only in laser printers.

[3] This setting is available only in monochrome printers.

[4] This setting is available only in color printers and in some print drivers.

[5] This setting is available only in color printers.

[6] This setting is available only in color laser printers.

[7] This setting is available only in some print drivers.

Setting	Description
Rich Black[7]	The following settings determine how black objects are made richer: • **On**—During RGB-CMYK color conversion, either composite black for black or gray object is used. • **Off**—Depending on the selected color correction mode, either pure or composite black for black, or gray object is used.

[1] This setting is available only in inkjet printers.

[2] This setting is available only in laser printers.

[3] This setting is available only in monochrome printers.

[4] This setting is available only in color printers and in some print drivers.

[5] This setting is available only in color printers.

[6] This setting is available only in color laser printers.

[7] This setting is available only in some print drivers.

Understanding the Fax tab

The Fax tab determines the settings used with a fax job.

Notes:

- The fax setting is available only in PostScript emulation drivers. For information on installing the PostScript emulation driver, see the *Software and Documentation* CD.
- If the Fax tab is not available, then the fax setting is not installed.
- On UPD version 2.14 or later, the fax cover page can be printed using a 32-bit application on a computer running on a 64-bit operating system.

Setting	Description
Enable fax	If this setting is selected, then the fax feature of the print driver is turned on.
Always display settings prior to faxing	The Send Fax dialog box appears before a fax job is sent to let you verify all recipient fax numbers. If this setting is not selected, then the recipient fax number must be verified from the Fax Settings section in the Fax tab.
Fax Settings	The following settings show the dialing and page information associated with a fax job: • **Fax number(s)** **Note:** Fax numbers can be entered manually or selected from the phone book. • **Dialing prefix**—This setting is needed to access an outside line. If a dialing prefix is not required, then leave this field blank. • **Fax name**—The Windows operating system user ID of the computer where the fax job is sent from. • **Paper size** • **Orientation**

Setting	Description
Cover Page	The following settings determine how the cover page is added to the outgoing fax job: • **Include cover page with fax** • **Include recipient information/comments** • **Include sender information** **Note:** To specify the sender information in the Fax Cover Settings dialog box, click **Settings**.

Understanding the Watermark tab

The Watermark tab determines the use of watermarks in a print job.

Notes:

- This feature is available only in some print drivers.
- On UPD version 2.14 or later, the watermark name can be locked.

Setting	Description
Do not use watermarks	A watermark is not used in the print job.
Use the same watermark on all pages	A watermark appears on all pages of the print job.
Use a different watermark on the first page	The watermark on the first page is different from the watermark on subsequent pages of the print job. **Note:** If two-sided printing (Duplex) is enabled, then the specified watermark is used on the front side of the first page.
Use a different watermark on odd/even pages	Different watermarks appear on odd and on even pages of the print job.
Edit Watermarks	Lets you edit the watermark settings.

Understanding the Overlays tab

The Overlays tab determines the overlay used and how it is shown in a print job.

Note: This feature is available only in PCL and PCL XL emulation drivers, and in some printer models.

Setting	Description
Do not use overlays	An overlay is not used in the print job.
Use the same overlay on all pages	An overlay appears on all pages of the print job.
Use a different overlay on the first page	The overlay on the first page is different from the overlay on subsequent pages of the print job.
Use a different overlay on odd/even pages	Different overlays appear on odd and on even pages of the print job.

Setting	Description
Overlay placement	The following settings determine the placement of the overlay in relation to the page images: • **Over the page's images**—The overlay is printed on top of the text or graphic. • **Under the page's images**—The text or graphic is printed on top of the overlay.

Understanding the Print and Hold tab

The Print and Hold tab provides more settings for how and when a job is printed. When you use this feature, the printer holds the print job until the user releases it from the printer control panel. The Print and Hold tab provides multiple levels of security for held jobs.

Notes:

- This feature is available only in some printer models.
- For more information on releasing held jobs from the printer control panel, see the printer *User's Guide*.

Setting	Description
Use Print and Hold	If this setting is selected, then the Print and Hold feature is turned on.
Use logged-in user name	The Windows operating system for a user ID is queried, and then submitted as the default user name that is associated with the held print job.
User Name	The user name that is associated with a held print job.
Keep duplicate documents	Print jobs having the same user and job names are stored in the printer memory without being overwritten.
Confidential print	Confidential print jobs are secured with a four-digit personal identification number (PIN). For more information on the allowed digits for the PIN, see your printer *User's Guide*. In the following scenarios, a dialog box requiring a four- to 16-digit PIN appears when releasing a print job: **Note:** Not specifying a PIN cancels the print job. • The "Always prompt for PIN at print time" setting is not selected. • The "Always prompt for PIN at print time" setting is not selected and the PIN field is blank. The dialog box requiring a four-digit PIN appears only on the following cases: • The PIN is not specified. • An invalid PIN is specified. • The "Always prompt for PIN at print time" setting is selected. **Note:** A confidential print job does not print until the PIN is entered and a user name is selected on the printer control panel.
Verify print	The first copy of a multiple-copy print job is printed for inspection. The subsequent copies are held until they are canceled or released for printing.
Reserve print	The print job is stored in the printer memory for printing later.
Repeat print	The print job is released, and then a copy is stored in the printer memory for multiple printing later.

Understanding the Other Options tab

The Other Options tab determines the print driver settings that are not associated with a feature-specific tab.

Note: Some settings are available only in some printer models.

Use	To
TrueType Fonts	Determine how TrueType fonts are printed, which character set to show, and whether to send information about printer-resident fonts to the application. • **Bitmaps (each character)**—Create and send a bitmap to the printer for each different TrueType font character and point size in the document. • **Bitmaps (full page)**—Specify whether each page of the text and graphics in a document is saved as a bitmap and sent to the printer. • **Outlines**—Create and send an outline to the printer for each different TrueType font character in a document. • **Automatically select**—Let the print driver select a setting for the print job. This setting is available only in PostScript emulation print driver. • **Adobe Type 1 fonts**—Print smaller TrueType fonts as bitmapped fonts, and print larger TrueType fonts as Adobe Type 1 outline fonts. This setting is available only in PostScript emulation print driver. • **Adobe Type 42 fonts**—Print TrueType fonts as Adobe Type 42 hinted outline fonts. Compared to Adobe Type 1 outline fonts, Type 42 fonts may appear smoother and less jagged, especially at larger point sizes. This setting is available only in the PostScript emulation print driver. **Note:** This setting is available only if the printer supports a TrueType rasterizer.
Image Compression	Reduce the file size of print jobs that contain images. Reducing the file size improves printing performance. **Note:** This feature is available only in PCL XL emulation, Host-based Printing (HBP), and PostScript emulation print drivers. For PCL XL emulation print drivers, select **Enable Image Compression**, and then use the Quality slider to adjust the image quality and compression level. Increasing the image quality decreases image compression. For PostScript emulation print drivers, select how you want the images to be compressed. • **NONE**—Disable image compression. • **Lossless**—Use Lempel-Ziv-Welch (LZW) compression to reduce file size without reducing image quality. Sometimes, the image may not be compressed to retain image quality. • **High**—Use JPEG compression to reduce file size by reducing image quality. To adjust the image quality and compression level, use the Quality slider. Increasing the image quality decreases image compression.

Use	To
Edit Job Accounting	Open the Job Accounting preferences dialog box, and then configure the Job Accounting settings that are associated with the print job. • **Keep history for last 5 entries**—Retain the last five unique entries for each Job Accounting setting. The settings are available in a menu for each setting in the Job Accounting dialog box during printing. • **Prompt for account information at print time**—Prompt the user for job accounting information during printing. • **Do not prompt at print time. Use the following job accounting settings**—Use the Job Accounting settings specified in the following fields: – **Use logged-in user name**—Use the Windows login ID of the current user, and then update the User Name/ID field with the retrieved information. – **User Name/ID**—The user name or user ID associated with the print job. – **Account Code**—The account code associated with the print job. – **Department Code**—The department code associated with the print job. **Note:** Some settings are available only in some printer models.
Metafile spooling	Specify the format of the stored printing information on the disk while a print job is waiting to be printed. • **Automatic**—The print driver determines which format results in the fastest overall print time for each job. • **On**—The print driver spools all jobs in metafile format. • **Off**—All print processor functions are disabled and the print driver no longer spools jobs in metafile (EMF) format.
Encryption option	**Job encryption**—Lets you encrypt the entire job. **Note:** This setting is available only in some printer models.
PostScript	Control how the print driver produces the PostScript emulation data that is sent to the printer. • **Optimize output format**—Optimize the PostScript emulation data stream that the print driver produces based on the selected format. Output formats include Speed, Portability, Encapsulated PostScript emulation, and Archive. • **Language level**—Specify the level of PostScript emulation to be used for the print job. Levels 1, 2, and 3 are available. • **Print error information**—Print information about any PostScript emulation language errors encountered during printing. • **Generate PostScript emulation in driver**—The print driver generates the PostScript emulation language for the print job, rather than the program from which the document is printed. **Notes:** • These settings are available only in PostScript emulation drivers. • When Fax is enabled, some functions are not available for use with the Encapsulated PostScript emulation setting in the PostScript emulation driver. • If Encapsulated PostScript emulation is selected as the output format, then any printer-specific setting is removed. The output file can then be easily imported into other PostScript emulation applications.

Use	To
PCL emulation	Access the PCL emulation settings for both PCL 5 and PCL XL printer emulations. • **Graphic Mode**—Control how the printer processes and prints text and graphics in a document. **Note:** This setting is available only in the PCL 5 emulation driver.
Continuous Image	Print pages without any space in between. The pages look like one continuous page. **Note:** This setting is available only in some print drivers.

Frequently asked questions

What are the fixes done in UPD?

For more information, see the *Windows UPD Release Notes*.

What is the update for UPD version 2.15.2?

Security is enhanced to prevent attacker-controlled codes that are running with system privileges. For more information, see the **support site**.

What are the benefits of using the UPD?

The main benefit is the amount of time saved in deploying and administering a large fleet of printers. The UPD can be used to print to multiple devices and minimize the number of drivers in the network environment.

Does the UPD support Plug'n'Play with devices?

Plug'n'Play is available on all supported devices. For a list of supported devices, see “Supported printers” on page 24.

Is the UPD Microsoft certified?

The UPD version 2 for Microsoft Windows Vista operating system or later is certified for all Windows operating systems for which Microsoft offers certification programs.

Is Point and Print available with this driver?

Point and Print works the same way with the UPD as with any other product-specific driver.

What is a version number?

A version number is a unique number or set of numbers assigned to a specific release of a program, file, firmware, hardware, driver, or software.

What is the UPD version numbering format?

The UPD version number is divided into sets of numbers, separated by decimal points.

UPD version 2.6.0.0 and later versioning schema

For example, ***x.y.xy.yy***
where:

x is the major version.
y is the minor version.
xy is the revision of the minor version.
yy is the private version.

Part	Description
Major version	The primary level of the UPD release. It increments when there are major functional and architectural updates.
Minor version	The secondary level of the UPD release. It increments when there are minor functional updates.
Revision of the minor version	The tertiary level of the UPD release. It increments when there are changes made on the minor functional updates.
Private version	The level of the UPD release for specific customers. **Note:** If the version value is **0**, then the UPD is released to the general public.

UPD version 2*x*.5.0 and older versioning schema

For example, ***y.x.xy.yy***
where:
y is the major version.
x is the data stream.
xy is the minor version.
yy is the private version.

Part	Description
Major version	The primary level of the UPD release. It increments when there are major functional and architectural updates.
Data stream	The data stream value. It varies depending on the following emulations: • PCL emulation = **1** • PostScript emulation = **2** • PCL XL emulation = **3**
Minor version	The secondary level of the UPD release. It increments when there are minor functional updates.
Private version	The level of the UPD release for specific customers. **Note:** If the version value is **0**, then the UPD is released to the general public.

Where can I find the version number of the print driver?

The version number is in the About tab of the Printer Properties dialog box.

Are model-specific print drivers still available?

Yes, while the UPD supports multiple printers and is equivalent to a model-specific print driver.

When must I use a model-specific print driver instead of the UPD?

If your printer is not in the list of supported printers, then use a model-specific print driver.

What printing modes are supported with the PCL Emulation UPD?

Raster and GL/2 modes are supported. Host-based printing is not supported.

Why is the Resource Administration tab missing in Printer Properties?

The Resource Administration tab is available in the previous versions of UPD. The functionality of this tab for the UPD version 2 is now available in the Printer Driver Configuration Utility.

Is the Printer Driver Configuration Utility supported?

The Printer Driver Configuration Utility is supported when using the InfoPrint Universal Print Driver System Installation package. It is available at **www.infoprint.com**.

Is the UPD based on Microsoft system driver technology?

The UPD version 2 for Microsoft Windows Vista operating system or later is based on Microsoft system driver technology.

Notices

Edition notice

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