

Windows Print Transition

An introduction to Microsoft Modern Print platform and Xerox's support for it.



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Preface

This document provides an overview of the new Windows modern print platform being introduced by Microsoft and how Xerox supports it.

The Modern print platform is Windows preferred method to interact with Mopria certified printers and multifunctional devices using Internet Printing Protocol (IPP), eSCL scanning, and Universal Print.

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1. Overview

Microsoft is transitioning from the traditional print driver architecture to the modern print platform. In the old architecture, print vendors produced print drivers in support of each of their products, for example, the Xerox Global print driver. With the modern print platform, Microsoft provides a common IPP Class driver that can communicate with all Mopria Certified printers, and the print vendors provide a Print Support App to enhance user experience and print functionality.

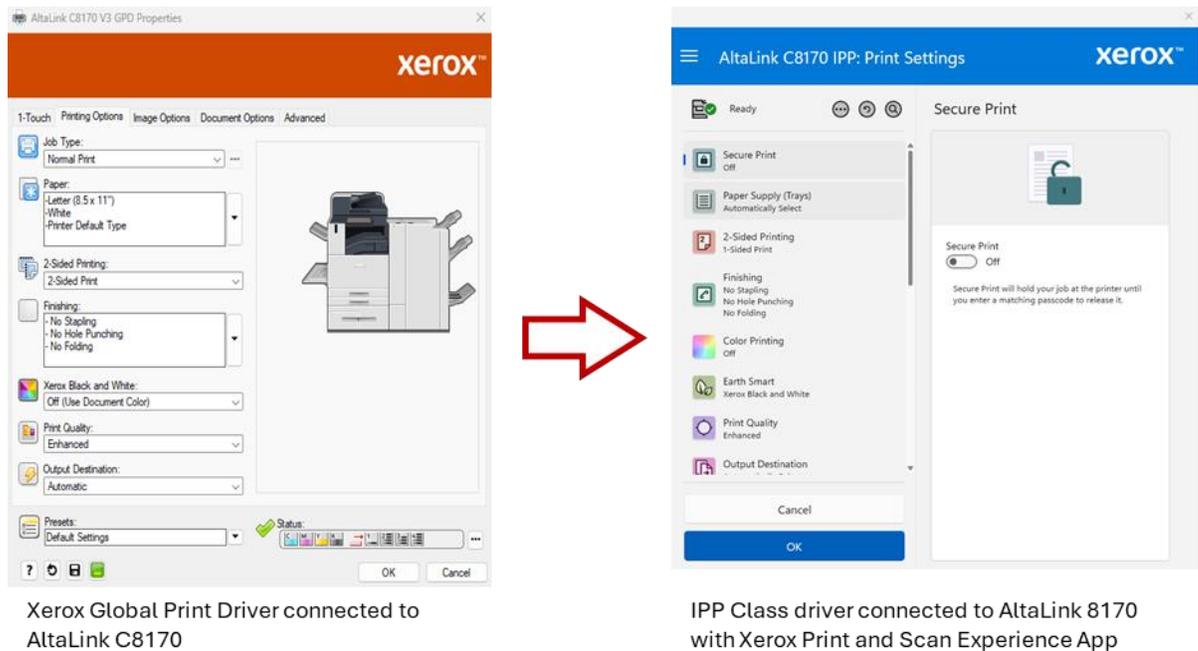


Figure 1: User interface of Xerox Global Print driver and MS IPP Class Driver with Xerox Print and Scan Experience app providing PSA support

Supporting this transition, in late 2023, Microsoft announced the end of servicing plan for third-party drivers on Windows. The complete announcement can be found at <https://learn.microsoft.com/en-us/windows-hardware/drivers/print/end-of-servicing-plan-for-third-party-printer-drivers-on-windows>.

The end of servicing timeline currently set by Microsoft is as follows:

Timeline	MS Plan	What does this mean?
September 2023	Announcement	
July 1, 2025	No new printer drivers will be published to Windows Update.	After this date Xerox will not be able to create WHQL certified print drivers for new products or add support for new products to the Xerox Global Print Driver. Xerox will

Timeline	MS Plan	What does this mean?
		continue releasing updates for existing print drivers to resolve problems found by customers.
July 1, 2026	Printer driver ranking order modified to always prefer Windows IPP inbox class driver.	After this date when a printer is added to a PC using “Add Device” or “Add Print Wizard” Windows will create a print queue using the Microsoft IPP Class driver by default.
July 1, 2027	Except for security-related fixes, third-party printer driver updates will no longer be allowed.	After this date Xerox will not be able to create WHQL certified print drivers to resolve bugs. This includes bug fixes to resolve regular problems found by customers. The only exception are security bug fixes.

Note: the end of servicing timeline applies to all print vendors, not only Xerox.

In support of this transition, Microsoft has:

- Released the Microsoft IPP Class Driver which comes inbox with all Windows 10 21H2 and above and Windows 11 OSs.
- Released the Windows Protected Print mode feature with Windows 11 24H2 and above.

2. Windows Modern Print Platform

Frequently, PCs rely on print drivers to communicate with printers. Currently these drivers are created by printer manufacturers and are usually specific to each printer. When a PC user wants to print a document to a specific printer, they need to install a print driver and create a print queue connecting the PC to the printer. These drivers can be acquired from Windows Update or the printer manufacturer web site.

With the modern print platform Microsoft introduced inbox class drivers which rely on Internet Printing Protocol (IPP) to communicate with any Mopria certified printer – independent of printer manufacturer. As the driver is already part of the operating system and does not have to be installed, this is considered a “driverless” print model. The PC user only needs to create a print queue connecting the PC to the printer and start printing.

The two class drivers provided by Microsoft are the IPP Class Driver and the Universal Print Class Driver. They are included with Windows 11 and Windows 10 21H2 and above.

The new Microsoft print architecture also allows printer manufacturers such as Xerox to create a Print Support Application (PSA) which works in conjunction with the IPP class drivers to augment the printer’s feature set and provide an enhanced customer experience. Xerox created the Xerox Print and Scan Experience App to work as the PSA for their A4 and A3 products.

What are the advantages of the modern print platform:

1. Increased security: with the current Windows print architecture (type 3 and type 4 drivers), the print driver processes run as SYSTEM in Windows which is one of the highest privilege levels in the OS. That makes drivers very attractive to nefarious characters and led to problems such as the [PrintNightmare vulnerability](#). In the modern print platform, Microsoft provides class drivers and ensures their security.
2. Reduced confusion and increased reliability: there are hundreds if not thousands of drivers available and it is difficult for a PC user to choose and install the correct one to work with their printer. The Microsoft IPP Class driver is common, available with every PC architecture, works with all Mopria certified printers, and it is always up to date.

More information about the Windows modern print platform can be found at <https://learn.microsoft.com/en-us/windows-hardware/drivers/print/modern-print-platform>

How does Xerox Support the Windows Modern Print Platform?

The Microsoft IPP Class Driver supports all Mopria certified printers and multifunctional printers (MFPs). Xerox is a founding member of the [Mopria Alliance](#) and our products have been Mopria certified for many years. A full list of Xerox Mopria certified devices can be found at <https://mopria.org/certified-products>.

The Microsoft IPP Class Driver exposes the most used printing features through a common Microsoft user interface.

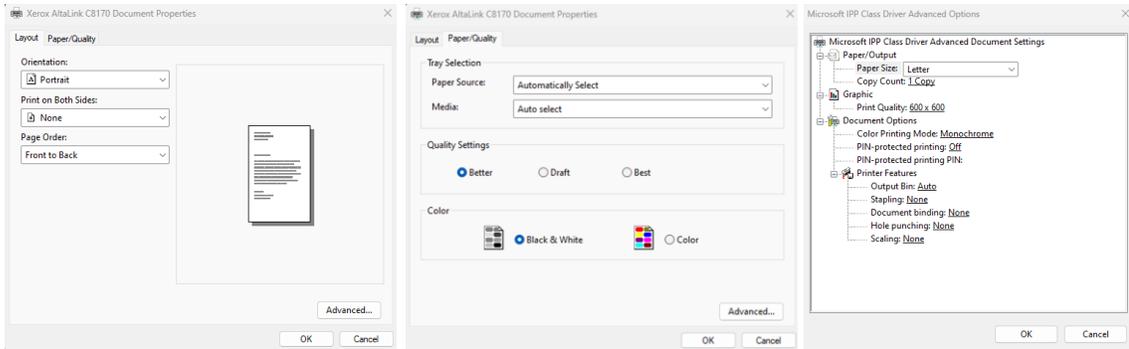


Figure 2: Common Windows print settings with Windows IPP Class Driver connected to Xerox AltaLink C8170

Xerox has also released the Xerox Print and Scan Experience (XPSE) application which works as a Print Support Application (PSA) for Xerox products augmenting printing features and providing enhanced user experience. More information about the XPSE can be found at <https://www.xerox.com/en-us/office/software-solutions/xerox-print-and-scan-experience-app>.

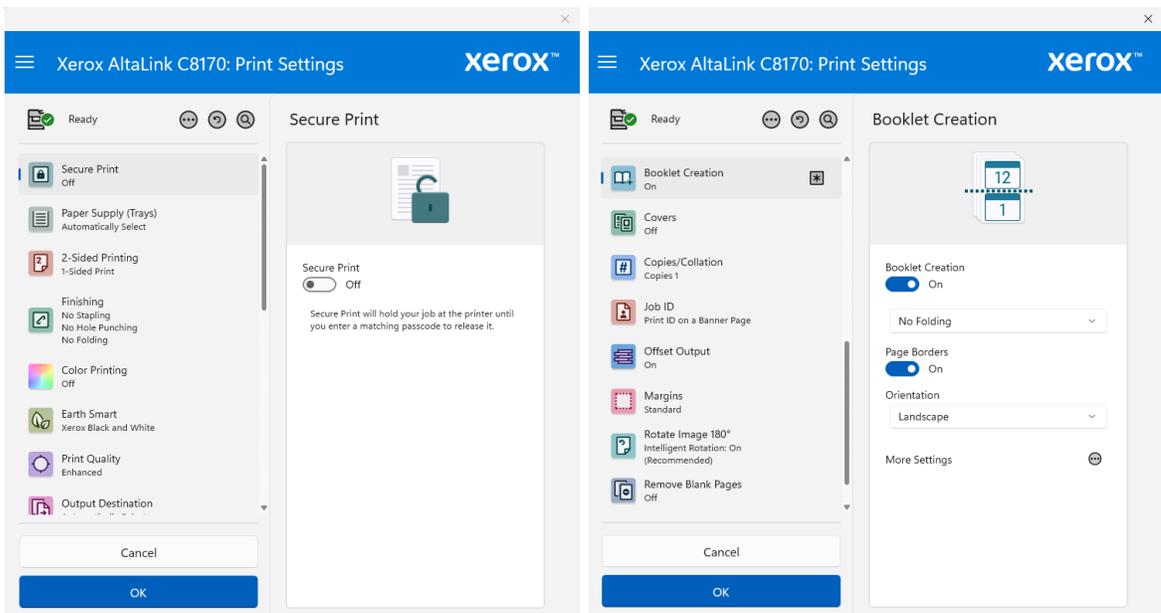


Figure 3: Xerox Print and Scan Experience print settings with Windows IPP Class Driver connected to Xerox AltaLink C8170

The print settings feature set exposed depends on the capabilities reported by the Xerox device.

3. Windows Protected Print (WPP)

WPP builds upon the Windows modern print platform and, when enabled, prevents users from loading and using third-party print drivers. This feature was introduced with Windows 11 24H2, and it is disabled by default. It can be found under Settings > Bluetooth & devices > Printers & scanners > Printer Preferences

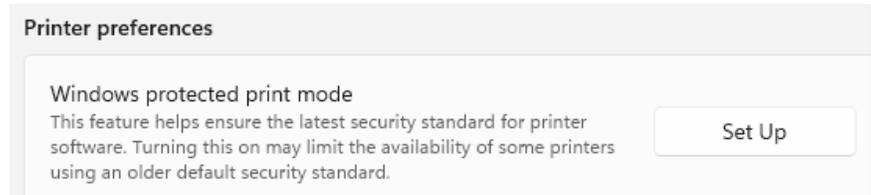


Figure 4: Windows protected print mode feature

When the user enables WPP, all existing third-party print drivers and queues are removed from the PC. The user will be able to create new print queues using Microsoft IPP/UP class drivers. Given the destruction of the existing print queues when WPP is enabled, we recommend extreme care and planning to ensure the ability to print is not interrupted.

More information about WPP can be found at <https://learn.microsoft.com/en-us/windows-hardware/drivers/print/windows-protected-print-mode>.

Points of note:

- The XPSE Print Support App functionality is not impacted by WPP
- When WPP is disabled, users can install and use any type of print driver
- When WPP is enabled, users can only install and use Microsoft IPP/UP class drivers.
- When a user enables WPP, all existing third-party print drivers and queues are automatically removed from the PC.

4. Xerox Print and Scan Experience App

The Xerox Print and Scan Experience app (XPSE) works in conjunction with print drivers to enhance the functionality and facilitate the use of Xerox printers and MFDs in Windows systems.

It can be used in two different ways:

- When printing from a Windows application
- As a standalone Windows application

Printing from any Windows Application

XPSE acts as the **Print Support App** for Microsoft IPP and Universal Print Class driver queues connected to Xerox devices. In this capacity it augments the feature set provided by the Microsoft IPP class driver with features such as Page Layout, Booklet Creation, Earth Smart, and Covers. It also provides a modern, and easy to use user interface.

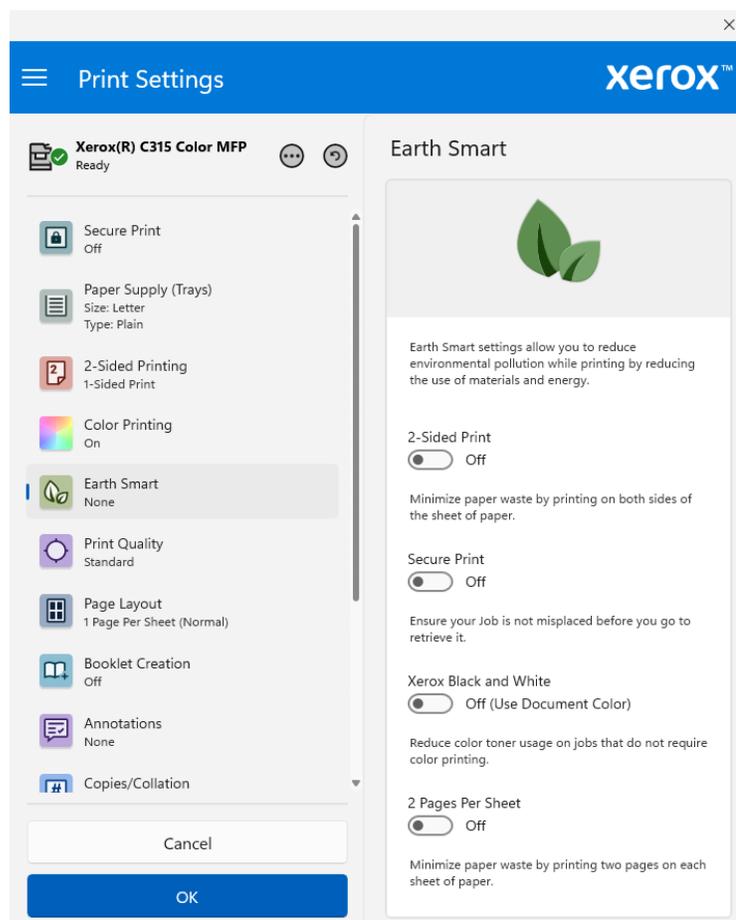


Figure 5: Xerox Print and Scan Experience print settings with Windows IPP Class Driver connected to Xerox C315 Color MFP

The specific feature set depends on the printer model and configuration (for example, finisher installed on the device). More detailed information on the feature set can be found at section [Print Feature Comparison](#).

Xerox Print and Scan Experience Standalone Windows application

The Xerox Print and Scan application can be run in standalone mode just like any other Windows application. In this capacity it allows users to:

- Identify all print queues connected to Xerox devices – this includes queues with: Microsoft IPP Class Driver, Microsoft Universal Print Class Driver, Xerox Global Print Driver, and Xerox Type 4 Print Driver
- Scan jobs with automatic options such as crop, rotation, straightening, and removal of blank pages.
- Capture images from camera
- Edit captured document by adding signatures and dates, using markups, adjusting brightness and contrast, and reordering pages. Once edited, the document can be distributed in PDF or JPG formats by using Save to Folder, Share with App, Copy to Clipboard or Upload to Workflow Central options.
- Open and print PDF files
- Check Device Status and Print Queue Settings
- Order Supplies
- Access Support
- Install new print queues

More information about Xerox Print and Scan Experience app can be found at <https://www.xerox.com/en-us/office/software-solutions/xerox-print-and-scan-experience-app>

Supported Printers

A list of XPSE supported printers can be found at https://download.support.xerox.com/pub/docs/GLOBALPRINTDRIVER/userdocs/any-os/ar/Supported_Products.pdf

5. Managed Printer Environments

The modern print platform supports managed print environments with:

- Client-Server – on premise hosted environment
- Universal Print – cloud print solution

Follow up with the software provider to learn more about how each print management solution supports the modern print platform.

Client-Server

With this configuration print queues are installed on the print server using the Microsoft IPP Class driver and shared with users. Users install the print queue on their client. As the Microsoft IPP Class driver is part of the OS, the user does not need admin rights to create a print queue on the client. The Xerox Print and Scan Experience app is installed on the client augmenting its functionality including admin defined defaults and enforced settings configured through the Xerox XML Config tool.

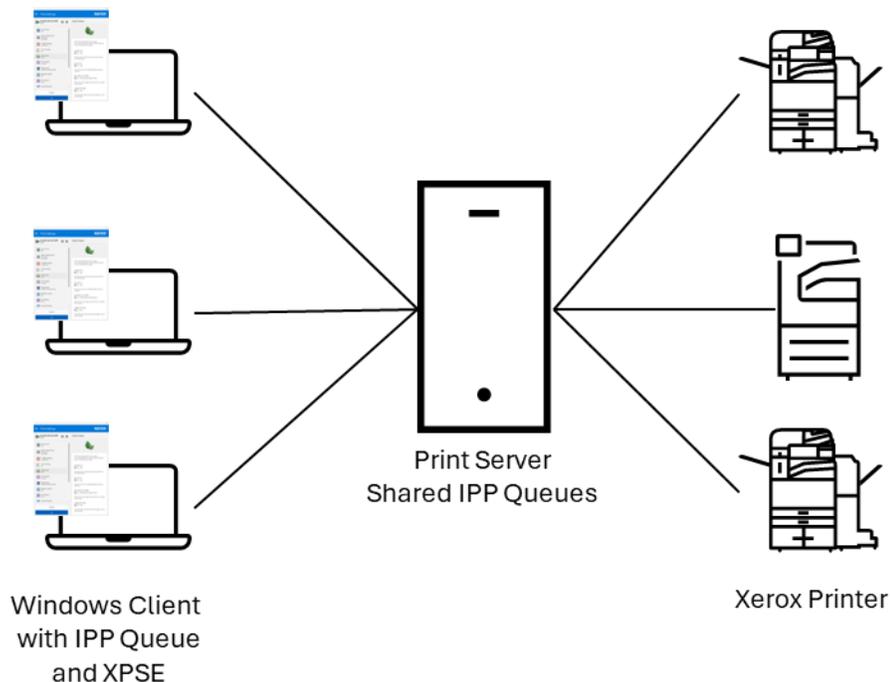


Figure 6: Client-Server with modern print platform

Universal Print

Universal Print is a cloud print solution provided by Microsoft that eliminates the need for on premise print servers. It is based on the modern print platform and takes full advantage of the feature set and advantages for the new architecture. More information can be found at <https://learn.microsoft.com/en-us/universal-print/discover-universal-print>

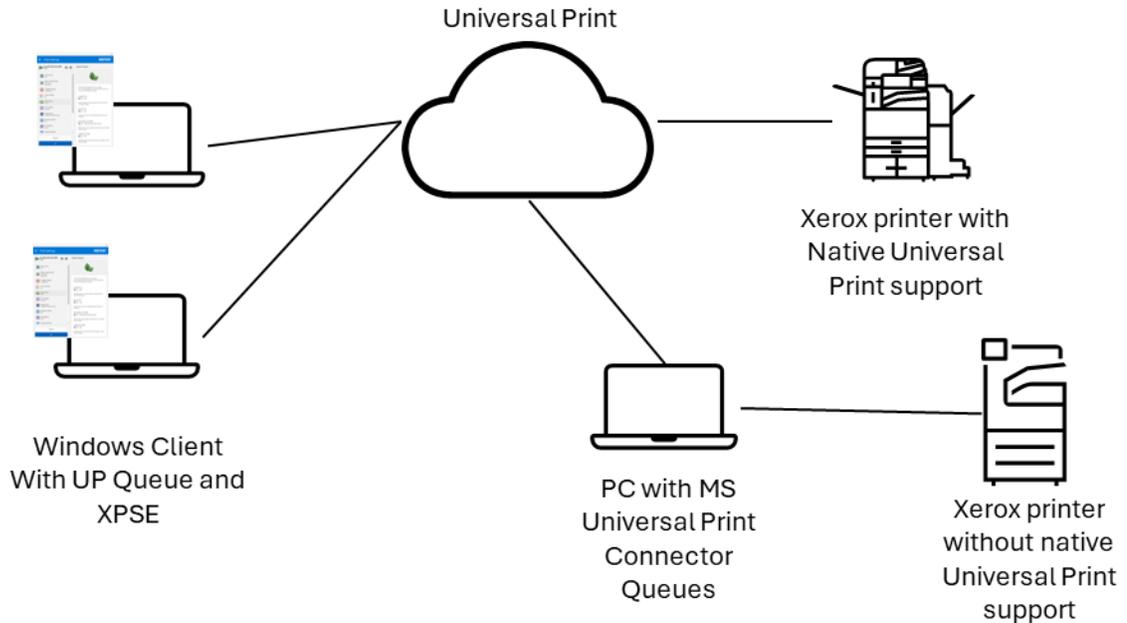


Figure 7: Universal Print

Universal print native support is provided by many Xerox devices. More information and a complete list of products can be found at: <https://www.xerox.com/en-us/office/software-solutions/universal-print>. Universal print queues created for these products in the client use the Microsoft Universal Print class driver. The Xerox Print and Scan Experience application provides print support app functionality for these queues (same as IPP Class driver queues).

Xerox printers that do not have native Universal Print support can be connected to Universal print using the Universal Print Connector and a Xerox print driver such as the Xerox type V4 driver or the Xerox Global Print Driver. More information about the Microsoft Universal Print Connector can be found at <https://learn.microsoft.com/en-us/universal-print/fundamentals/universal-print-connector-overview>.

6. Frequently Asked Questions

Can a user continue using the Xerox print drivers after July 1, 2025?

Yes. All Xerox print drivers will continue to work with their supported products and operating systems if Windows Protected Print mode is disabled in the PC.

Will Xerox continue supporting Xerox print drivers?

Yes, Xerox will continue normal print driver SPAR support for all released print drivers while Microsoft allows print drivers to be WHQL certified (currently until July 1, 2027). After that date only security issues can be addressed.

Will Xerox add support for new products to the Xerox Global Print Driver?

Per Microsoft's [end of servicing plan for third party drivers](#), after July 1, 2025, Xerox will not be able to add support for new products to the Xerox Global Print Driver.

How do I print to printer that is not Mopria certified?

If your printer is not Mopria certified, make sure Windows Protected Print mode is turned off on the PC and continue using the third-party print driver provided for your printer.

7. Print Feature Comparison

The table below has a high-level comparison of the feature set supported by the XPSE in print support mode. The specific feature set and options presented depend on many factors including:

- The printer model and configuration
- Printer software version
- XPSE version
- Windows Operating System version

Feature	Xerox Global Print Driver	MS IPP/UP Class Driver	MS IPP/UP Class Driver with XPSE
Paper Size	Y	Y	Y
Custom Paper Size	Y	N	N
Paper Type	Y	Y	Y
Paper Color	Y	N	Y
2-Sided Print	Y	Y	Y
Color / Black & White printing	Y	Y	Y
Secure Print	Y	N	Y
IPP PIN-protected printing	N	Y	Y
Basic Finishing	Y	Y	Y
Advanced Finishing	Y	N	Y
Earth Smart	Y	N	Y
Print Quality	Y	Y	Y
Paper Supply Information	Y	N	Y
Input Tray	Y	Y	Y
Page Layout	Y	N	Y

Feature	Xerox Global Print Driver	MS IPP/UP Class Driver	MS IPP/UP Class Driver with XPSE
Booklet Creation	Y	N	Y
Copies	Y	Y	Y
Collation	Y	Y	Y
JobID	Y	N	Y
Intelligent Page Rotation	Y	N	Y
Remove Blank Pages	N	N	Y
Output Destination	Y	Y	Y
Accounting	Y	N	Y
Earth Smart	Y	N	Y
Image Shift	Y	N	Y
Job Types: Sample, Saved Job, Store in Folder	Y	N	Y
Job Type: Delayed	Y	N	N
Access and Verification (CAC/PIV)	Y	N	Y
Output delivery (page up/down)	Y	N	Y
Skip Black Pages	N	N	Y
Saved Settings	Y	N	Y
Job Notification	Y	N	Y
Adaptive learning	Y	N	Y
1-Touch	Y	N	Y
Find Settings	N	N	Y
Device Status	Y	N	Y
Admin Defined defaults	Y	N	Y
Admin Enforced Settings	Y	N	Y

Feature	Xerox Global Print Driver	MS IPP/UP Class Driver	MS IPP/UP Class Driver with XPSE
Personalized Print Settings	N	N	Y
Color Correction	Y	N	N
Color by Words	Y	N	N
Color Adjustments	Y	N	N
Covers	Y	N	Y
Inserts and Exception pages	Y	N	N
Annotations	Y	N	N
Job Type Fax	Y	N	N

Xerox is actively working to enhance the feature set provided with the Microsoft modern print platform. Expect changes to this list as new Xerox device software and Xerox Print and Scan app releases come to market.

8. Additional Information

For additional information on the following topics please refer to:

Xerox Global Print Driver - <https://www.xerox.com/en-us/office/software-solutions/global-printer-driver>

Mopria - <https://mopria.org/>

IPP – Internet Printing Protocol - <https://www.pwg.org/ipp/ippguide.html>

eSCL Scanning - <https://mopria.org/mopria-escl-specification>

Microsoft modern print platform - <https://learn.microsoft.com/en-us/windows-hardware/drivers/print/modern-print-platform>

Print Support App - <https://learn.microsoft.com/en-us/windows-hardware/drivers/devapps/print-support-app-design-guide>

Windows protected print mode (WPP) - <https://learn.microsoft.com/en-us/windows-hardware/drivers/print/windows-protected-print-mode>

Universal Print - <https://learn.microsoft.com/en-us/universal-print/discover-universal-print>

Universal Print Connector - <https://learn.microsoft.com/en-us/universal-print/fundamentals/universal-print-connector-overview>

Xerox Print and Scan Experience Application - <https://www.xerox.com/en-us/office/software-solutions/xerox-print-and-scan-experience-app>

Xerox Universal Print support - <https://www.xerox.com/en-us/office/software-solutions/universal-print>

Xerox XML Config Tool - <https://www.office.xerox.com/latest/SFTHT-01U.pdf>