Samsung Print Drivers
For Microsoft Windows Operating System

White Paper

Compatible with
Windows®7

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1. Introduction

Microsoft Windows software (Windows) is the most widespread operating system (OS) in use on personal computer (PC) systems. Windows PC compatible device manufacturers must create special files that interface their products with the Windows OS and allow their device features to be available to PC users. This special file is known as a device driver.

Printer devices must use special device drivers called print drivers, which allow the printers and their features to be accessed from the print menus of software running on the PC.

This paper describes the print drivers used by Samsung printers.

2. Overview

Samsung has developed print drivers for its printers for many years. In the beginning each printer needed a unique print driver. This first method of driving a printer device is known as the "Model-Specific" method and it was fine for small installations. However, a network with thousands of printers needed thousands of print drivers - one for each device. This created an unmanageable situation for the IT team.

Print drivers evolved with Samsung's implementation of the "generic" print driver. This basic driver allowed a user to send a print job to any Samsung printer by using one print driver. While this new driver simplified the IT management issues there were still issues with using other brands of printers.

In 2009 Samsung developed our first Universal Print Driver (UPD). This allowed IT teams to avoid downloading multiple print drivers across their enterprises. With the Samsung UPD, businesses were able to reduce the number of print drivers they had to support and maintain. The Samsung UPD is a single driver solution that eliminates the need to install multiple drivers. When installed, it supports other printer brands as well as Samsung brands, providing easy access to multiple printers from one location. Multiple printers are easily located by using a search feature, and the status information for each printer is also displayed.

The latest addition to the Samsung printer driver collection is the "Samsung Universal Print Driver 2" (UPD2), which was released in 2013.

3. Samsung Model-Specific Print Drivers

The Samsung "Model-Specific" print drivers are single drivers specifically developed for each printer model. One print driver must be installed on the OS for each printer device used. Supported features and environments vary for each model. Refer to the Samsung web site for detailed information about specific print driver features.

One driver is used for each printer device and is designed to be device specific. This type of driver does not assure the ability to use other devices. Samsung has released Windows Version 3 drivers for PCL6, PostScript3, and SPL[1] printer languages. Also, a native Version 4 (XPS) print driver for Windows 8 and later OS versions is available for the recent models[2]. Drivers are available on each device's deployment CD and also on the Samsung website.

1)   Samsung Printer Language
2)   The Samsung web site lists information about the supported printer models and OS versions.

4. Samsung Generic Print Driver

The Samsung Generic print driver gives the user generic features commonly used for all Samsung printers. One driver for each printer language exists for all printer models. This is a single driver for all Samsung devices and is built on the UNIDRV component from Microsoft. It is designed for higher Windows OS compatibility so that the user can experience simple and light behavior during normal printing tasks performed on Windows OS.
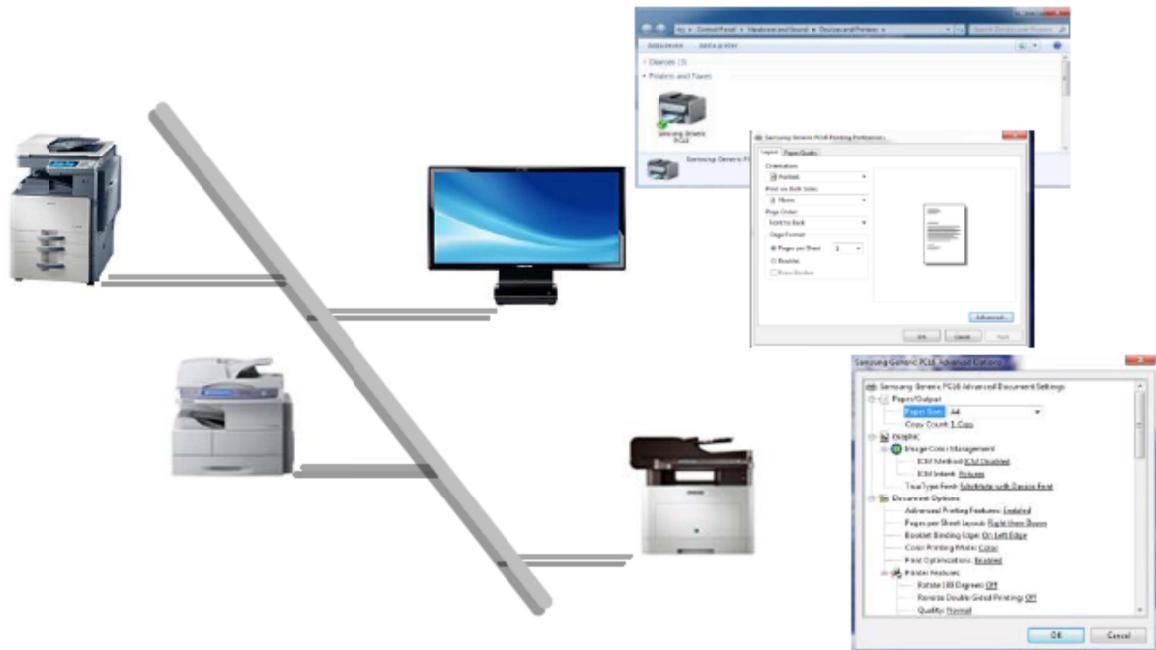
Generic Print Driver Types

There are 2 types of Generic Print Driver, depending on printer language type.

Driver Type	Description
Samsung Generic Driver PCL5	Supporting PCL5 supported models * Recommended for users who want to get PCL5 output
Samsung Generic Driver PCL6	Supporting PCL6 supported models * Recommended for users who want to get PCL6 output

Generic Print Driver Supported Printers

The Samsung Generic print drivers cover all the Samsung printer models which support PCL5 or PCL6.

Generic Print Driver Supported Environments

The Samsung Generic Print Drivers support the following MS Windows environments:

Client Operating Systems

Operating System Name	Architecture	Editions
Microsoft Windows XP	32-bit, 64-bit	Home Edition, Professional
Microsoft Windows Vista	32-bit, 64-bit	Business, Enterprise, Home Basic, Home Premium, Ultimate
Microsoft Windows 7	32-bit, 64-bit	Starter, Home Premium, Professional, Enterprise, Ultimate
Microsoft Windows 8	32-bit, 64-bit	Pro, Enterprise

Server Operating Systems

Operating System Name	Architecture	Editions
Microsoft Windows 2003	32-bit, 64-bit	Datacenter, Enterprise, Standard Edition
Microsoft Windows 2008	32-bit, 64-bit	Datacenter, Enterprise, Standard Edition
Microsoft Windows 2008 R2	64-bit	Datacenter, Enterprise, Standard Edition
Microsoft Windows 2012	64-bit	Foundation, Essentials, Standard, Datacenter

Windows Terminal Server

Operating System Name
Microsoft Windows Server 2003 SP
Microsoft Windows Server 2008
Microsoft Windows Server 2008 R2
Microsoft Windows Server 2012

Windows Cluster Server

Operating System Name
Microsoft Windows Server 2003 SP2
Microsoft Windows Server 2008
Microsoft Windows Server 2008 R2
Microsoft Windows Server 2012

CITRIX

Operating System Name
Citrix XenApp 6.5 – Microsoft Windows Server 2008 R2
Citrix XenApp 6.0 – Microsoft Windows Server 2008 R2
Citrix XenApp 5.0 – Microsoft Windows Server 2003, 2008

Generic Print Driver Features

The Samsung Generic print drivers support the following general printer and print driver features, in the categories of Job Handling, Page Handling, Device-Related Features, and Device Support. Refer to the following lists for more details about each category:

Job Handling Features

- EMF Spooling
- Enable Job Encryption (by Administrator)
- Admin Job Accounting
- Print Mode
- Job Encryption
- Job Accounting

Page Handling Features

- Print as Grayscale Only
- Fit to Page
- Rotate 180 Degrees
- Reverse Double-Sided Printing
- Scaling
- Skip Blank Pages
- Information Page
- True Type Font Download

Device-Related Features

- Staple
- Staple Position
- Hole Punch
- Punch Position
- Sort Options
- Booklet Finishing
- Front /Back/Front and Back Cover Option
- Front /Back/Front and Back Cover Source
- Front /Back/Front and Back Cover Type
- Separator
- Separator Source
- Output Mode
- Output Bin

Device Support

- Tray2/3/4/5
- Finisher
- Optional Hole Punch
- Mass Storage
- RAM Disk
- Duplex Unit
- 4-bin Mailbox
- Optional Inner Output Bin

5. Samsung Universal Print Driver 2 – New for 2013

Businesses today need a more efficient way to manage, install, and connect devices. The majority of businesses use multiple printers for various daily tasks, and each printer requires installation of driver software provided by the manufacturer. This installation and configuration process takes up valuable time and resources.

Downloading multiple print drivers is inconvenient and time consuming. However, by using the Samsung Universal Print Driver (UPD), businesses can reduce the number of print drivers, and now find all of their network printers easily.

The Samsung Universal Print Driver (UPD) is a single driver solution that eliminates the need to install multiple drivers. When installed, it supports other printer brands in addition to Samsung brands, providing easy access to multiple printers from one location. Multiple printers are accessed by using a search feature, and the status information for each printer can also be viewed.

Samsung UPD was first released in 2009 and the new Universal Print Driver 2 (UPD2) was released in 2013. It has been upgraded to give users more useful features and to be more compatible with various IT environments.
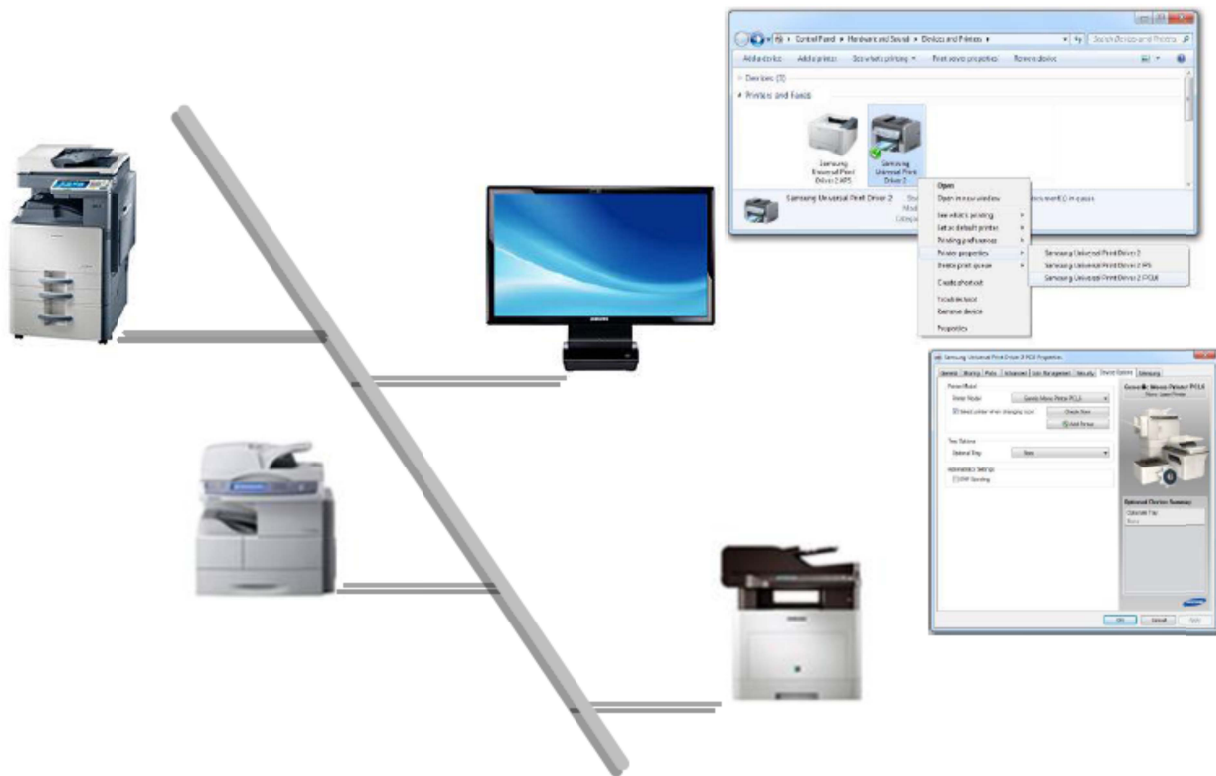
UPD2 is a single driver for supporting all Samsung printers using either PCL6, PS3, XPS, or SPL[1] printer languages. It supports all of the features that Samsung printers support. UPD2 gives users instant access to not only Samsung print devices, but also a range of other vendor's PDL based devices[2] without requiring them to download separate drivers. UPD2 is only available as a download from the Samsung website.

1) Samsung Printer Language
2) Samsung does not guarantee the quality of other vendor's printer devices and Samsung models that are not supported.

Samsung Universal Print Driver 2 - New Features

Samsung UPD2 includes new features that enhance your printing experience. These new features include the following:

- **Samsung Universal Print Driver 2**
  Supports SPL or PCL5 printer models
  Recommended for all users (from home users to IT administrators).

- **Samsung Universal Print Driver 2 PostScript**
  Supports PostScript printer models
  Recommended for all PostScript users.

- **Samsung Universal Print Driver 2 PCL6**
  Supports PCL6 printer models
  Recommended for all PCL6 users.

- **Samsung Universal Print Driver 2 XPS**
  Supporting SPL, PCL6, and XPS supported models
  Recommended for users who use an XPS print path.

  Note: UPD2 XPS printer driver can only be installed on Windows Vista or later OS versions.

All of the Samsung UPD2 drivers are Microsoft certified.

UPD2 – The Solution for Multiple-Printer Environments

Samsung Universal Print Driver 2 can be installed on multiple computers and it serves as a single source for all printers and drivers on a network. The intuitive interface enables users to search for printers on a large network and manage all of them.

- **Reduce the number of print drivers**

  Samsung UPD2 supports multiple drivers, regardless of make or model. Users can manage multiple printer models without having to install separate drivers for each printer.

- **Save time and IT resources**

  Samsung UPD2 delivers business value by saving organizations time and IT resources. UPD2 features Easy Deployment Manager (EDM), a fleet management system that allows administrators to install the driver to multiple client computers and develop installation packages for distribution, consisting of driver configuration files, applications, or both.

- **Readily available status information**

  Samsung UPD2 includes smart interfaces and features that simplify the process of viewing printer status information. A detailed list of printers includes icons, making printer status easy to identify. Users can select printers by name, address, or location.

  Users are able to search and access all local and network printers without additional software. The 'Search' button provides the current status and properties of all printers on the network, enabling businesses to manage all printers effectively through one interface.

- **Find network printers quickly**

  Samsung UPD2 offers three methods for searching for network printers:

  1. Automatic Search
  2. Search by IP address
  3. Search by IP range

  In most cases, business users can find all printers on the network by using the Automatic Search feature. However, with the addition of the IP address and IP range search features, UPD2 adds versatility to the printer search task.

- **Find network printers with a single Samsung printer interface**

  Samsung UPD2 uses a common device search user interface for searching. This gives users the same experience for all Samsung printer software. Users are able to search and access all local and network printers easily without extra effort.

Competitive Comparison

Samsung Universal Print Driver 2 has the following distinct advantages over the competition.

Features		Samsung Universal Print Driver 2	Xerox Mobile Express Driver 5.152	HP Universal Printing 5.4
Various print languages	PCL6	Yes	Yes – static only	Yes
	Adobe Postscript	Yes	Yes	Yes
	GDI (host-based)	Yes	No	No
	XPS	Yes	No	No
Device discovery	Broadcast	Yes	Yes – limited to searching for IP address within the subnet	Yes
	IP address	Yes	Yes	Yes
	IP range	Yes	No	No
High usability and convenience	Manual Printer Selection	Yes	No	No
	Real-time printer, job and supplies status	Yes – when Printer Status feature is enabled	Yes – job status is not supported	Yes
	Familiar user interface with traditional mode	Yes	Yes	Yes
	Localization (number of languages)	24	25	35
Configuration and remote deployment	Pre-configuration and packaging	Yes[1]	Yes – but print driver must be installed prior to pre-configuring	Yes
	Driver Policy Deployment	Yes[1]	No	No
	Deployment through Active Directory	Yes[1]	No	No
Other vendor support	Color printer	Yes	Yes	Yes
	Duplex printer	Yes	Yes	Yes

[1] Easy Deployment Manager

Supported Environments

Samsung Universal Print Driver 2 supports the following environments:

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Microsoft Windows XP	32-bit, 64-bit	Home Edition, Professional
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CITRIX

Operating System Name
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Citrix XenApp 5.0 – Microsoft Windows Server 2003, 2008

Supported Printers

Samsung Universal Print Driver 2 supports the following printer models. Newer models will be added accordingly. Visit http://www.samsung.com/printer/usefulsoftware for the latest version of the Samsung Universal Print Driver.

Device (Model)		Driver (PDL)			
Series	**Model Number**	**SPL/PCL6**	**PCL6**	**PostScript**	**XPS**
Color Models					
CF-	5100P, 530 Series, 555P, 5800P/6800	O	X	X	X
CLP-	300/310/320 Series	O	X	X	X
	350 Series	O	O	O	O
	360 Series	O	X	X	O
	410 Series	O	O	O	O
	500/510 Series	O	X	X	X
	550 Series	O	O	O	X
	600 Series	O	X	X	X
	610/620 Series	O	O	X	X
	650/660/670 Series	O	O	O	X
	680 Series	O	O	O	O
	770 Series	O	O	O	X
	775 Series	O	O	O	O
CLX-	216x/3160/3170/3180 Series	O	X	X	X
	3300/4190/6260 Series	O	O	O	O
	6200/6220/6240/6250 Series	O	X	X	O
	8380/8385X/8540/8540X Series	O	O	O	O
	8640 8650 Series	O	X	X	X
	9250 9350 Series	O	O	O	X
	9252 9352/92x1 93x1/981x/982x Series	O	X	X	X
Monochrome Models					
M	262x 282x/267x 287x Series	O	O	X	O
	332x 382x 402x/337x 387x 407x Series	O	O	O	O
MFP-	560/65x/750 Series	O	X	X	X
	830 Series	O	O	X	X
ML-	1000/1200/1430/1440 Series	O	X	X	X
	1450 Series	O	O	X	X
	1510 700/1520/1610/1630/1630W/1660/1670/1710/1740 Series	O	X	X	X
	1750 Series	O	O	X	X
	1860/1865W/191x 252x/200/2010 Series	O	X	X	X
	2150 Series	O	O	O	X
	2160 Series	O	X	X	O
	2240/2245 Series	O	X	X	X
	2250 Series	O	O	O	X
	2510/2525W/2540 Series	O	X	X	X
	2550/2550S/2570/2580/2850/2853/2855 Series	O	O	O	X
	2950 Series	O	O	X	O
	3050 Series	O	O	O	X
	3300 Series	O	X	X	X
	331x Series	O	X	X	O
	3470/3475/3560 Series	O	O	O	X
	371x/375x Series	O	O	O	O
	4050/4055 Series	O	O	O	X
	4300/4500/5080 Series	O	X	X	X
	451x 501x Series	O	O	O	O
	4550/4555 Series	O	O	O	X
	551x 651x Series	O	O	X	O
	6040/6070/6080 Series	O	O	O	X
	8850 8950/8x00 Series	O	O	O	X
Msys	5150 5200	O	X	X	X

Device (Model)		Driver (PDL)			
Model Number		SPL/PCL6	PCL6	PostScript	XPS
Monochrome Models (continued)					
SCX-	3200 Series	O	X	X	X
	3400 Series	O	X	X	O
	4100/4200 Series	O	X	X	X
	4214F	O	X	X	X
	4300/4500/4500W/4600/4623/4623FW Series	O	X	X	X
	4650 4x21S Series	O	X	X	O
	470x/472x Series	O	O	X	X
	4725 Series	O	O	O	X
	483x 5x3x Series	O	O	O	O
	4x16 Series	O	X	X	X
	4x20 Series	O	O	O	X
	4x24/4x25/4x26 Series	O	O	X	X
	4x28/5635/5835_5953/5835_5935X Series	O	O	O	X
	5x15 Series	O	O	X	X
	5x30 Series	O	O	O	X
	6545/6545X/6x55/6x55X/681x Series	O	O	O	X
	6x20/6x22/6x45 Series	O	O	O	X
	8030 8040 Series	O	O	O	X
	8123 8128/8230 8240/881x/882x Series	O	O	O	O
SF-	5100P/530 Series/555P/5800P/6800P	O	X	X	X
	760 Series	O	X	X	O

6. Samsung Print Driver Comparison

This table contains information about how each Samsung print driver compares to the others:

Capabilities and Attributes		Model-Specific Driver	Universal Driver 2	Generic Driver
Supported Models		Depends on Model Specification	See UPD section	All Samsung Models which support PCL5 or PCL6
Supported Printer Languages	GDI	YES	YES	NO
	PCL5	NO	NO	YES
	PCL6	YES	YES	YES
	PostScript 3	YES [3]	YES	NO
	XPS	YES	YES	NO
Driver Types		1 PDL per model	1 PDL per driver for all supported Samsung models	1 PDL per driver for all Samsung models
Localization		24 Languages[4]	24 Languages[4]	5 Languages[5]
Installation and Uninstaller	Add Wizard	YES	YES	YES
	Installer Support	YES	YES	NO
	Uninstaller Support	YES	YES	NO
Device Configuration	Auto Configure[6]	YES	YES	NO
	Manual Configure	YES	YES	YES
	Bi-Directional	YES	YES	NO
Configuration and Remote Deployment	Pre-Configuration and Packaging	YES	YES	NO
	Driver Policy Deployment	YES	YES	NO
	Deployment through Active Directory	YES	YES	NO
Device Discovery	Broadcast	YES	YES	NO
	IP Address	YES	YES	NO
	IP Range	YES	YES	NO
	Manual	YES	YES	YES
WHQL Certified		YES	YES	YES
Supported Features		All (Depends on model)	All(Up to PDLs)	General Features
Default Color Mode		Up to Models	Up to Models	Color
Other Vendor Support [7]		NO	YES	YES
Utility Support	Easy Deployment Manager	YES	YES	NO
	Easy Color Manager	YES (Depends on model)	YES	NO
Help Support		YES	YES	NO
User Interface		Samsung Printer User Interface	Samsung Printer User Interface	Microsoft Common Print UI (Tree View Style)
Driver Core	PostScript3	PSCRIPT (MS)	PSCRIPT (MS)	NONE
	All Except PostScript3	Samsung Driver Core	Samsung Driver Core	UNIDRV (MS)
Source	Enclosed CD/DVD	YES	NO	NO
	Website[8]	YES	YES	NO[9]

1) Supported PDLs: Depends on the printer model, please refer to each printer model's supported PDLs.
2) SPL: Samsung Printer Language
3) PostScript3: Starting in 2013, Samsung no longer supports model-specific print drivers for PostScript3. UPD PostScript drivers will be supported for each model.
4) 22 languages: English, French, German, Italian, Spanish, Portuguese, Dutch, Swedish, Norwegian, Finnish, Polish, Czech, Hungarian, Russian, Greek, Turkish, Portuguese (Brazilian), Arabic, Hebrew, Korean, Traditional Chinese, Simplified Chinese.
5) 5 languages: English, French, German, Italian, Spanish.
6) Automatic Configuration: Configures all of the installable options automatically, when selected.
7) Samsung does not guarantee the print quality or feature compatibility with other devices.
8) http://www.samsung.com/printer/usefulsoftware
9) Contact your local authorized dealer or distributor of Samsung printers.

Samsung SCX-6260FW

Wireless Digital MFP