

System Requirements Drivve | Print Version 4 + 5

Knowledge base article #5714

Note For system requirements of older Drivve | Print versions, please refer to the following document:

System requirements Drivve | Print older versions

Version 5.0

AA



Caution: Drivve | Print CANNOT be installed on a Domain Controller. The service needs to run as the local system account, and this is not possible on the Domain Controller.

Supported Devices

For an overview on all devices supported by Drivve | Print, refer to the following article:

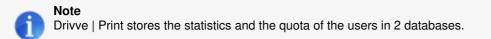
A A Which devices does Drivve | Print (Version 4 and higher) support?

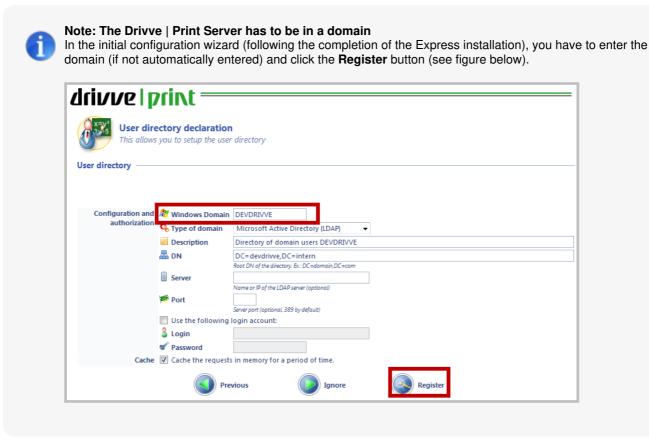
Server Architecture

To operate, Drivve | Print needs 4 Windows services. The 4 services can be on one or more physical machines:

- · Website on a dedicated web server
- · Databases on a SQL server
- · Directory on a domain controller
- Its core on a print server

The components need to interact with each other either locally or over the network. Regarding the network, it is important to





Operating System

For the print server and the application server, the same operating system requirements for the operating system apply.



Note: Only 64 bit systems are supported.

Recommended:

- Windows Server 2012 (V3 Print drivers only)
- Windows Server 2016

For demonstration purposes:

- Windows 7, 8, 10 Professional
- Windows Small Business Server (not recommended because of possible performance limitations)

Drivve | Print is compatible with the "clusters" editions and "virtual" (VMware, Hyper-V...) versions of the print servers listed above.

Further components required:

Microsoft .NET Framework 3.5, 4.0 or 4.5

Print Server

Hardware Requirements

Minimum requirement:

· Dual Core processor, 1 GB RAM available

Recommended number of CPUs:

- Less than 200 print queues: 4 cores
- Between 200 and 1000 print queues: 8 cores

Recommended memory size:

- · Less than 200 print queues: 2 GB available
- Between 200 and 1000 print queues: 4 GB available

Supported Printer Languages

- PJL
- PCL: 5c/e and 6 (PCL-XL)
- HPGL2
- PostScript DSC (Document Structuring Conventions)
- ESC/P2
- EMF

Preview

The preview features are only available with the EMF and PCL6 datastreams. Removal of pages within a print document is only possible in the case of prints made with PCL6 drivers.

Virtual Queue (Pull Printing)/Redirection

Redirection of print jobs can only be used with printers using the same language and having compatible print files.

Application Server

On the application server, the following components have to be installed:

• Internet Information Server with the following components: Web-Server, Web-ASP, Basic-Auth, Web-Metabase,

Windows-Auth

Microsoft .NET Framework 4.0 or 4.5

Administration Interface

The administration interface is fully web based.

Supported browsers:

- Internet Explorer (8 and higher)
- Mozilla Firefox (3 and higher)
- Google Chrome
- Safari

Directory Server

The following directory servers are supported:

- Active Directory / ADAM
- Open LDAP
- XML File
- SQL Database
- Proxy Directory: Correspondence between user login and badge number or between the name or user login known on the device (data via SNMP, copiCodeIP).

Database Server

For the database server, the following conditions have to be met:

- MS SQL Server (Express/Standard/Enterprise) 2008, 2008 R2, 2012, 2012 R2, 2014.
- Prerequisite:
- Mixed mode authentication
- SQL browser (if remote SQL with a named instance)
- MySQL 5.X (no support on settings)
 Prerequisite:
 ODBC connector 5.1/6.0
- PostGreSQL 8 / 9, (no support on settings)

In the case of using *"Report Services for Drivve | Print"* (to generate comprehensive printing activity reports), Reporting Services (included in MS SQL Server) must be installed. Minimum version of SQL: 2008 R2

Notifications

If you client workstations run on Windows Vista, Windows 7 or Windows 8, we recommend to set the value of the following registry key from 1 to 0 zu:

HKEY_CURRENT_USERS\Printers\Settings\EnableBalloonNotificationsRemote

Changing this registry key disables the display of tooltips for print jobs sent do the print server.

In order to send notifications, the following conditions have to be met:

- Email: SMTP protocol
- Popup: MSG.exe service from Microsoft



Prerequisite (for MSG.EXE) For each workstation set the following registry key to 1: HKLM\SYSTEM\CurrentControlSet\Control\TerminalServer

Network Ports Used

Drivve | Print

- TCP/UDP 5744 between the web application and the print server. The local agent may also use this port.
- TCP/UDP 5743 between NetPOD and the print server.

HTTP or HTTPS

• Client or administration workstations to web application server (TCP 80 or 443)

SQL

• Print server to the database server (e.g. TCP 1433/UDP 1434 for MS SQL Server TCP 3306 for MySQL)

Directory

• Print server to the users directory server (e.g. TCP 389 or 636 SSL)

SNMP

Print server to printers (UDP 161)

Capacitiy Planning

- Up to 1,500 printers and 5,000 to 10,000 client workstations 4-Core Server 2 GHz, 4 GB RAM
- Up to 2,500 printers an 10,000 client workstations
 1 cluster with 2 nodes with 5-Core Server 3 GHz, 4 GB RAM

Local Agent Network Traffic

For each document printed on a local printer, the agent sends a message to the Drivve | Print server. Its actual size depends on the protocol being used:

- .NET Remoting (TCP on 5744 port): 2.5 KB per transaction
- HTTP: 3.5 KB per transaction

Database Storage Requirements

- 2.5 KB per print document
 - For monitored network printers and MFP:
 - Incidents: 1 KB per incident on connected devices (if SNMP is active)
 - Supplies and counters: 600 bytes/device/hour or 5,2 MB/device/year
 - Server counters (RAM, CPU...): 200 bytes/server/hour or 1.8 MB/server/year

Device Monitoring

- Drivve | Print can retrieve information about the printer or multifunction via SNMP.
- Information on consumables: paper, ink, toner, staples etc.
- Information on device status in the administration site: LCD display messages, LED Status, errors and warnings
- · Collection of counters: Prints, copies, 'scan to disk "or" scan to mail " operations...

Workstation Client Architecture

By default, no installation is required on the client workstation. The user must print to shared printer queues on the print server. The printer is installed as a network printer - manually or using tools like **Microsoft Group Policy (GPO)** or other utilities.

Client System

For the client system, the following conditions have to be met:

- Windows 7 / 8 / 10: With or without client popup
- Mac OS X / Linux: printing via Samba or LPR. Possible loss of identity of the user.
- Unix printing via LPR (e.g. Mainframe): Validation necessary, no information about the identity of the owner of the print
 job or t

Version 4.0



Caution: Drivve | Print CANNOT be installed on a Domain Controller. The service needs to run as the local system account, and this is not possible on the Domain Controller.

Supported Devices

For an overview on all devices supported by Drivve | Print, refer to the following article:

Server Architecture

To operate, Drivve | Print needs 4 Windows services. The 4 services can be on one or more physical machines:

- Website on a dedicated web server
- Databases on a SQL server
- · Directory on a domain controller
- Its core on a print server

The components need to interact with each other either locally or over the network. Regarding the network, it is important to know the necessary ports for proper operation.



Note Drivve | Print stores the statistics and the quota of the users in 2 databases.



Note: The Drivve | Print Server has to be in a domain

In the initial configuration wizard (following the completion of the Express installation), you have to enter the domain (if not automatically entered) and click the **Register** button (see figure below).

drivve print		
User directory declaration This allows you to setup the user directory		
User directory		
Configuration and	💐 Windows Domain	DEVDRIVVE
authorization	🗞 Type of domain	Microsoft Active Directory (LDAP) -
	Description	Directory of domain users DEVDRIVVE
	🛃 DN	DC= devdrivve, DC= intern
		Root DN of the directory. Ex.: DC=domain,DC=com
	Server	
		Name or IP of the LDAP server (optional)
	🏁 Port	Server port (optional, 389 by default)
	Use the following	
	Login	
	Password	
Cache		in memory for a period of time
Cache 🕼 Cache the requests in memory for a period of time.		
	Pre	vious Dgnore Register

Operating System

For the print server and the application server, the same operating system requirements for the operating system apply.



Note: Only 64 bit systems are supported.

Recommended:

- Windows Server 2008 R2 (64 bits)
- Windows server 2012 (V3 Print drivers only)

For demonstration purposes:

- Windows 7, 8, 10 Professional
- · Windows Small Business Server (not recommended because of possible performance limitations)

Drivve | Print is compatible with the "clusters" editions and "virtual" (VMware, Hyper-V...) versions of the print servers listed above.

Further components required:

Microsoft .NET Framework 4.0 or 4.5

Print Server

Hardware Requirements

Minimum requirement:

• Dual Core processor, 1 GB RAM available

Recommended number of CPUs:

- Less than 200 print queues: 4 cores
- Between 200 and 1000 print queues: 8 cores

Recommended memory size:

- Less than 200 print gueues: 2 GB available
- Between 200 and 1000 print queues: 4 GB available

Supported Printer Languages

- PJL
- PCL: 5c/e and 6 (PCL-XL)
- HPGL2
- PostScript DSC (Document Structuring Conventions)
- ESC/P2
- EMF

Preview

The preview features are only available with the EMF and PCL6 datastreams. Removal of pages within a print document is only possible in the case of prints made with PCL6 drivers.

Virtual Queue (Pull Printing)/Redirection

Redirection of print jobs can only be used with printers using the same language and having compatible print files.

Application Server

On the application server, the following components have to be installed:

- Internet Information Server with the following components: Web-Server, Web-ASP, Basic-Auth, Web-Metabase, Windows-Auth
- Microsoft .NET Framework 4.0 or 4.5

Administration Interface

The administration interface is fully web based.

Supported browsers:

- Internet Explorer (8 and higher)
- Mozilla Firefox (3 and higher)
- Google Chrome
- Safari

Directory Server

The following directory servers are supported:

- Active Directory / ADAM
- Open LDAP
- XML File
- SQL Database
- Proxy Directory: Correspondence between user login and badge number or between the name or user login known on the device (data via SNMP, copiCodeIP).

Database Server

For the database server, the following conditions have to be met:

- MS SQL Server (Express/Standard/Enterprise) 2008, 2008 R2, 2012, 2012 R2, 2014.
 Prerequisite:
 - Mixed mode authentication
 - SQL browser (if remote SQL with a named instance)
- MySQL 5.X (no support on settings)
 Prerequisite:

- ODBC connector 5.1/6.0
- PostGreSQL 8 / 9, (no support on settings)

In the case of using *"Report Services for Drivve | Print"* (to generate comprehensive printing activity reports), Reporting Services (included in MS SQL Server) must be installed. Minimum version of SQL: 2008 R2

Notifications

If you client workstations run on Windows Vista, Windows 7 or Windows 8, we recommend to set the value of the following registry key from 1 to 0 zu:

HKEY_CURRENT_USERS\Printers\Settings\EnableBalloonNotificationsRemote

Changing this registry key disables the display of tooltips for print jobs sent do the print server.

In order to send notifications, the following conditions have to be met:

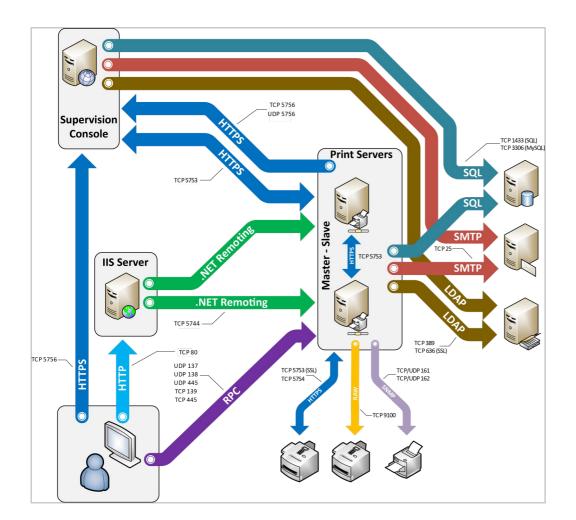
- Email: SMTP protocol
- Popup: MSG.exe service from Microsoft



Prerequisite (for MSG.EXE)

For each workstation set the following registry key to 1: HKLM\SYSTEM\CurrentControlSet\Control\TerminalServer

Network Ports Used



Drivve | Print

- TCP/UDP 5744 between the web application and the print server. The local agent may also use this port.
- TCP/UDP 5743 between NetPOD and the print server.

HTTP or HTTPS

• Client or administration workstations to web application server (TCP 80 or 443)

SQL

• Print server to the database server (e.g. TCP 1433/UDP 1434 for MS SQL Server TCP 3306 for MySQL)

Directory

• Print server to the users directory server (e.g. TCP 389 or 636 SSL)

SNMP

• Print server to printers (UDP 161)

Capacitiy Planning

- Up to 1,500 printers and 5,000 to 10,000 client workstations 4-Core Server 2 GHz, 4 GB RAM
- Up to 2,500 printers an 10,000 client workstations 1 cluster with 2 nodes with 5-Core Server 3 GHz, 4 GB RAM

Local Agent Network Traffic

For each document printed on a local printer, the agent sends a message to the Drivve | Print server. Its actual size depends on the protocol being used:

- .NET Remoting (TCP on 5744 port): 2.5 KB per transaction
- HTTP: 3.5 KB per transaction

Database Storage Requirements

- 2.5 KB per print document
- For monitored network printers and MFP:
- Incidents: 1 KB per incident on connected devices (if SNMP is active)
- Supplies and counters: 600 bytes/device/hour or 5,2 MB/device/year
- Server counters (RAM, CPU...): 200 bytes/server/hour or 1.8 MB/server/year

Device Monitoring

- Drivve | Print can retrieve information about the printer or multifunction via SNMP.
- Information on consumables: paper, ink, toner, staples etc.
- · Information on device status in the administration site: LCD display messages, LED Status, errors and warnings
- Collection of counters: Prints, copies, 'scan to disk "or" scan to mail " operations...

Workstation Client Architecture

By default, no installation is required on the client workstation. The user must print to shared printer queues on the print server. The printer is installed as a network printer - manually or using tools like **Microsoft Group Policy (GPO)** or other utilities.

Client System

For the client system, the following conditions have to be met:

- Windows 7 / 8 / 10: With or without client popup
- Mac OS X / Linux: printing via Samba or LPR. Possible loss of identity of the user.
- Unix printing via LPR (e.g. Mainframe): Validation necessary, no information about the identity of the owner of the print job or the type of document.

