

Print Director™

TECHNICAL REQUIREMENTS



Document Objectives

This document outlines the minimum and recommended hardware and operating system requirements for the Print Director suite of applications. It provides a brief description of each software module and specifies the port usage requirements.

Database Requirements

Print Director supports all versions of Microsoft SQL Server from 2005 to 2016. Express versions are fully supported.

Please consult the Microsoft literature for the minimum requirements.

Print Server Requirements

The minimum and recommended requirements listed below are expressed with the assumption that the server will not be running any other services (e.g. domain controller, Exchange etc). Should the server be running other services, the specifications below should be adjusted accordingly.

Operating System

Print Director supports all Microsoft Windows operating systems from Windows Server 2003 to Windows Server 2016. Desktop operated systems are supporting from Windows XP to Windows 10.

Runtime

Print Director is supported by the .Net Framework 2.0 through to 4.5. The only OS that might require an installation of .Net is Windows XP. All later versions of Windows have .Net pre-installed so no manual installation is required.

Free Hard Drive Space

Installation Files

The Print Director modules installed on a Print Server will use approximately 200MB of hard drive space.

Hard Drive Containing the Spool Folder

More importantly, the size of the hard drive on which the spool folder is hosted must be correctly allocated. Print Director holds the spool files for MFPs running in Secure Document Release mode on the server. Under this mode, the user must release their jobs at the device. Until the jobs are released, these spool files will be using space on the server hard drive. An auto-delete timeout can be set to limit the amount of time the jobs wait at the server.

Recommendations:

- 0-5 MFPs: 40GB free space
- 20-50 MFPs 100GB free space
- 50-100 MFPs: 200 GB free space

RAM

The minimum requirement for RAM is 2GB. The recommended requirements are based on the number of MFPs hosted by the server:

- 0-4 MFPs: 2GB
- 5-20 MFPs: 4GB
- 20-100 MFPs: 8GB

CPU

The minimum required CPU speed is 1.5Ghz single core.

Recommended:

- 0-10 MFPs: 2Ghz dual core
- 10-40 MFPs: 2.6Ghz dual core.
- 40-100 MFPs 2.6Ghz quad core.

Module Description

PDAgent

.Net Framework 2.0 windows service (supports all Windows operating systems)

- Monitors the print queues for the MFPs and printers.
- Prevents print jobs from exiting the queues (i.e. no changes to the port configuration or print processor are made).
- Waits for communication from PDServer before releasing the jobs (i.e. user logs in and selects the jobs for release).
- Required to be installed on the print server.
- Multiple PDAgents can be installed on multiple print servers and connected to the same DB.
- Connects to the SQL Server via ADO.Net.
- Can operate in Offline mode (i.e. if the SQL Server connection is lost it caches transactions to a local MS Access DB).

PDServer

.Net Framework 2.0 windows service (supports all Windows operating systems)

- Can be installed on a single server or multiple servers (multiple servers to prevent MFP authentication requests from going over unreliable WAN links).
- Performs communication with the embedded applications on the MFPs (Authentication and PullPrint).
- Executes scheduled tasks (e.g. report emailing and active directory synchronisation).
- Does not necessarily have to be installed on the print server. It communicates with PDAgent (to receive waiting job subscriptions and forward job release commands) via TCP/IP.
- Can operate in Offline mode (i.e. if the SQL Server connection is lost it caches transactions to a local MS Access DB).

Resource Manager

.Net Framework windows forms application (supports all Windows operating systems)

- Configuration module for print director.
 1. Used to maintain user PIN numbers.
 2. Used to maintain printer definitions and IP addresses

Used to install the embedded applications to the MFPs.

- Can be installed on multiple workstations and connected to the database.

PD Reports

.Net Framework windows forms application (supports all Windows operating systems)

- Reporting module for Print Director.
- Can be installed on multiple workstations and connected to the database.

DBTools:

.Net Framework windows forms application (supports all Windows operating systems)

- Backup and restore of the DB.
- Clearing historical transactions.
- Can be installed on multiple workstations and connected to the database.

Port Usage

The PDAgent and PDServer will make exceptions in Windows Firewall automatically. For other firewalls, please see the port requirements below:

PDAgent

- Listens on TCP port 20111 for communication from other Print Director modules.

PDServer

- Listens on TCP port 20113 for communication from other Print Director modules.
- Listens on port 50002/50004 for communication from embedded Itec MFPs.
- Listens on port 5114 for communication from keypad attached MFPs.
- Listens on port 20114 for communication from embedded Lexmark MFPs.