ThinPrint®

ThinPrint Port configuration for LPD printing

Technical Information

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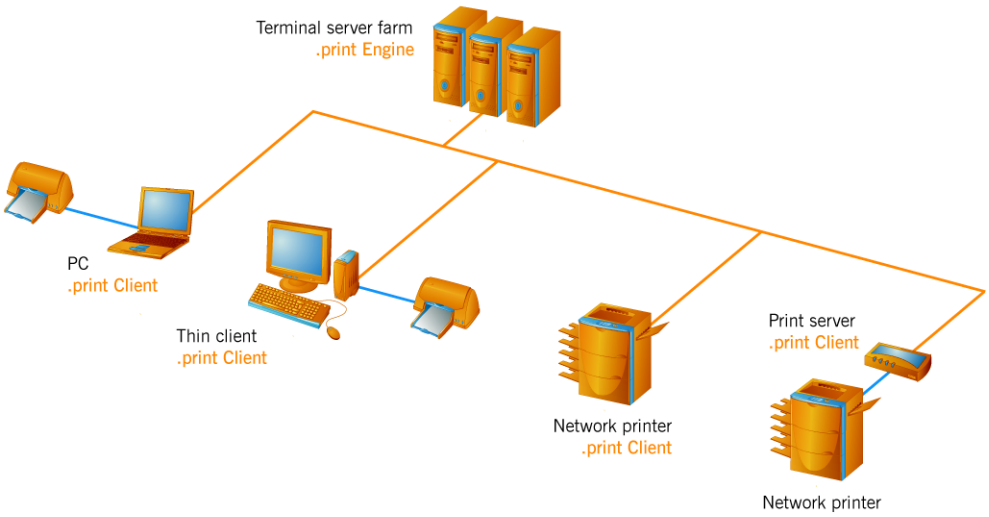
Safety warning

All ThinPrint products are pure software solutions. Please note the safety warnings in the technical documentation from your hardware vendor and from the manufacturer of each device and component.
Before beginning installation, we recommend closing all windows and applications and deactivating any virus scanner.

Introduction

What is ThinPrint?

ThinPrint a print management solution and consists of a server and a client component, the **ThinPrint Engine** and the **ThinPrint Client** (Illus. 1).



Illus. 1 Using ThinPrint with server and client components

The ThinPrint Engine enables limitation of the transfer rate of print data so that other applications, like terminal sessions, can continue to function without problem (= “bandwidth control”). Furthermore, the print data is compressed with no loss of quality and sent to the ThinPrint Client in small packets (= streaming).

On the client side, ThinPrint Client is generally responsible for receiving print data, decompressing it, and sending it to the printer. Most ThinPrint Clients support the following features or components:

AutoConnect	Automatically creates printers on servers
Connection Service	Prints to ThinPrint Clients in masked networks (NAT)
SSL/TLS encryption	Encrypts print data streams

ThinPrint Clients are available for different end devices and areas of deployment: for Mac OS X, Linux and Windows as well as for internal and external print servers of network printers.

When do I print with LPR/LPD?

1. ThinPrint Clients

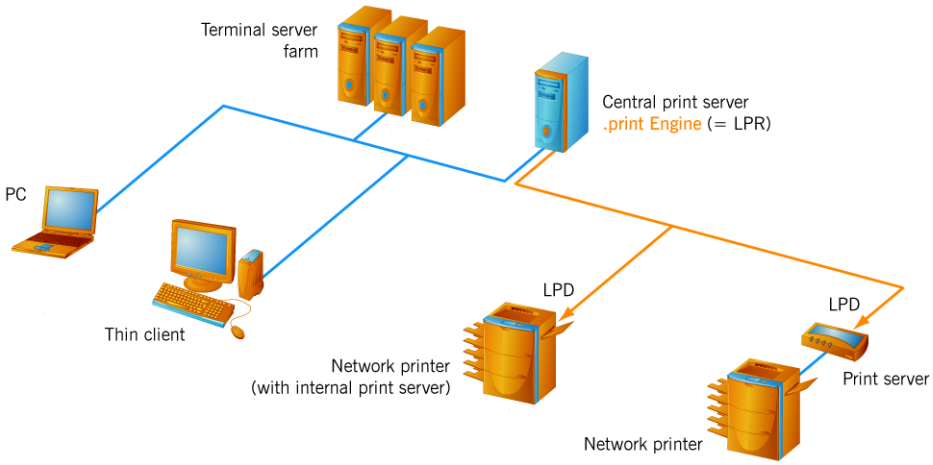
In your print environment, usually you will be able to use a ThinPrint Client for each printer on the client side (Illus. 1).

1. ThinPrint Clients can be installed onto PCs, terminals (thin clients), and local print servers (download: www.thinprint.com/⟶ RESOURCES & SUPPORT⟶ SOFTWARE⟶ THINPRINT CLIENTS & TOOLS⟶ CLIENTS)[1].
2. A wide range of terminals (thin clients), internal print servers (network cards for printers), and external print servers have already an integrated ThinPrint Client. (overview: www.thinprint.com/⟶ RESOURCES & SUPPORT⟶ SUPPORTED DEVICES)

2. Network printers

If you want to print directly to a network printer (Illus. 1, Page 4), the best choice is to purchase a network card with an embedded ThinPrint Client (= internal print server) at the same time as you purchase the printer. If that is not possible, you can also run an external print server. See also:
www.thinprint.com/⟶ RESOURCES & SUPPORT⟶ SUPPORTED DEVICES

If none of these options are possible for you, you have the last option of sending print jobs from the ThinPrint Engine to an LPD device on which no ThinPrint Client is installed (Illus. 2). Because the ThinPrint Client is responsible for decompressing print data, compression will not be available for LPR/LPD printing with the ThinPrint Engine. However, it is still possible to use bandwidth control for print data transmission.



Illus. 2 LPR/LPD printing with ThinPrint Engine
(example for printing with a central print server)

3. Tracking the print data

If you need ThinPrint Tracking to overview of your print volumes, but you are printing traditionally, without bandwidth control or compression, then the print jobs can be sent via a ThinPrint LPD port.

1 Should you require a ThinPrint Client that is not listed on the website, please send an email to info@thinprint.com.

ThinPrint Tracking is only possible if the print jobs are sent via a ThinPrint port. When choosing the ports, you specify which protocol you want to print with. Only select LPDs if you don't want bandwidth control or compression. Bandwidth control can be disabled in all ThinPrint ports, but ThinPrint compression can only be completely removed in LPD ports.

Sample configuration

Below is a description of the options of printing as per RFC 1179 (LPR/LPD) using the ThinPrint Engine.

Preparations on the server

- Either: The following folder requires at least write permission for *Users*:

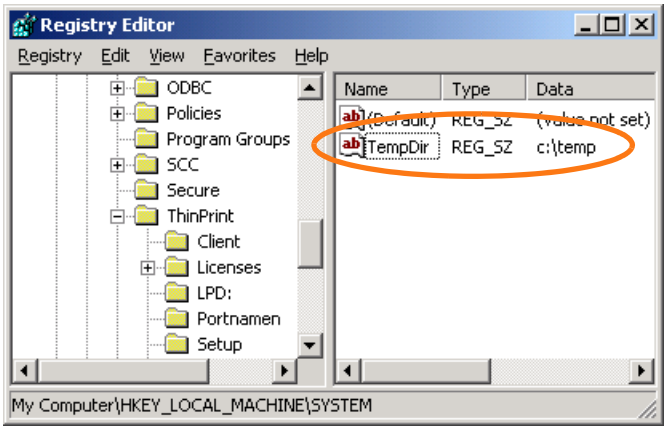
  `%windir%\system32\spool\printers`

- Or: The following value in the Windows registry must name a directory for which the *Users* also have at least write permission (Illus. 3; data type: reg_sz):

  `hkey_local_machine\software\thinprint\TempDir`

Individual spool directories are sometime created for specific printers. In such cases, the *Users* must here, too, have at least write permission. If the server's spool directory has been changed, the Users must also be given write access to the new spool directory.

Note!The TempDir value is only needed for LPR/LPD printing.



Illus. 3 Directory for temporary LPR/LPD files in the Windows registry (example)

Name conventions for printers

A printer with the following name convention must be created on the server for each LPD device (e.g., internal or external print servers):

printer_name#lpd_device_name

If a name resolution is impossible, an alternative would be:

printer_name#IP_address_of_lpd_device

The *printer_name* can be anything you like. For simplicity's sake, only standard addressing is discussed here (example 1). (Reversed addressing can be found in the "ThinPrint Server Engine" manual; Page 10.)

Example 1: 2 printers on 2 printer queues of the same print server

Port name	Printer name	Queue name
LPD_A:	printer1#192.168.20.10	lp0
LPD_B:	printer2#192.168.20.10	lp1

Creating ThinPrint Ports

A separate ThinPrint Port must be configured for each LPD device (example 1) on the server(s). Printers for devices using the same queue name can also be associated with a single ThinPrint Port.

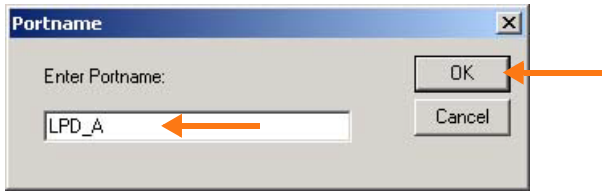
Creating a new ThinPrint Port

Process

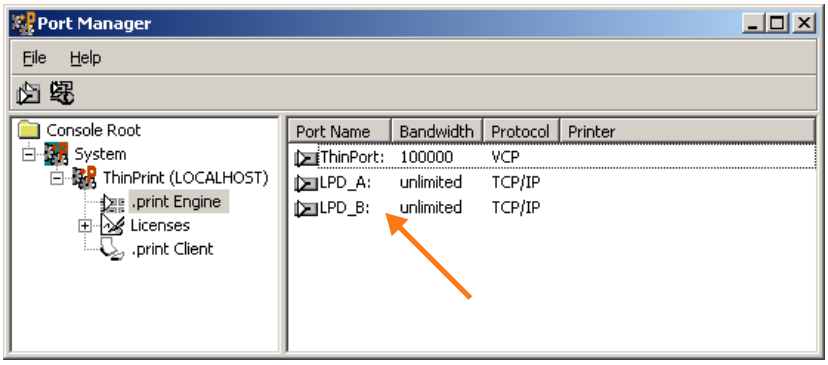
- Open the port configuration with START→ PROGRAMS→ THINPRINT ENGINE → PORT MANAGER.
- Click NEW THINPRINT PORT (illus. left) and enter the port name (Illus. 4). Entries for example 1:

  LPD_A: for *printer1*
  LPD_B: for *printer2*

- Click OK to confirm. The result shows Illus. 5.



Illus. 4 Port name for printer1 (example)

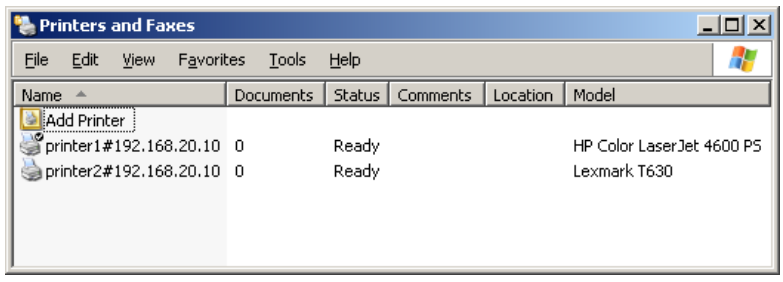


Illus. 5 LPD_A: and LPD_B: in ThinPrint Port Manager

Creating printers

– Open the Printers folder on the server and click ADD PRINTER. During printer creation assign the – newly configured – ports LPD_A: and/or LPD_B: to the printers (Illus. 6). Entries for the example 1:

`printer1#192.168.20.10` and `LPD_A:` for *printer1*
`printer2#192.168.20.10` and `LPD_B:` for *printer2*

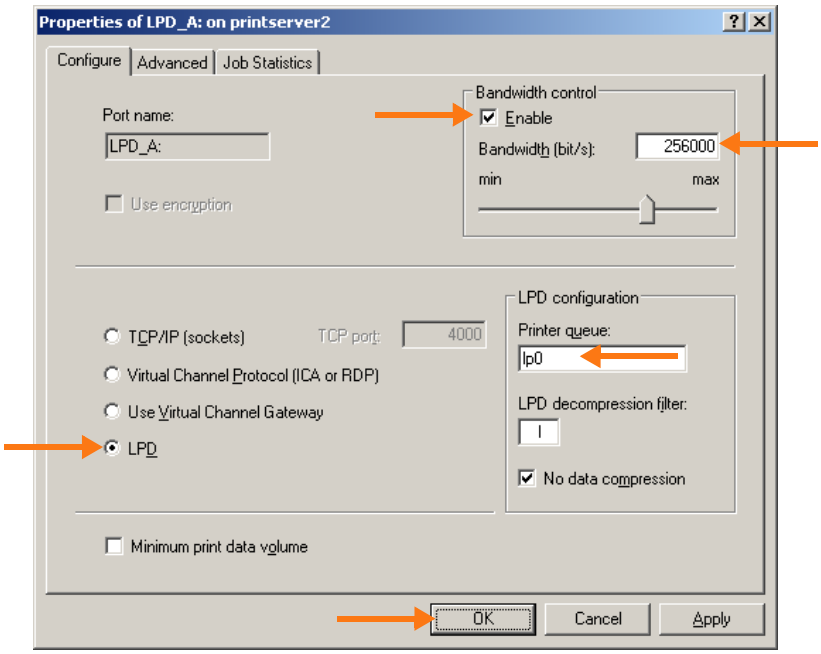


Illus. 6 printer1 and printer2 in PRINTERS folder

Configuring ThinPrint Ports

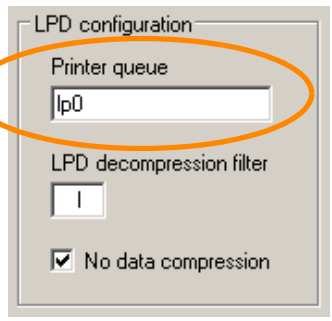
Change back to the port configuration (START→ PROGRAMS→ THINPRINT ENGINE → PORT MANAGER).

– Double click the port name LPD_A: or LPD_B: (Illus. 5) and configure the following settings:
  • Select **LPD** as port type (Illus. 7).
  • Enable bandwidth control and enter a bandwidth for printing.
  • Enter **lp0** or **lp1** as printer queue name (as specified in the user manual of the network printer or print server; Illus. 8).
  • Leave LPD filter **l** and the NO DATA COMPRESSION option unchanged.
– Click OK to confirm. The result shows Illus. 9.

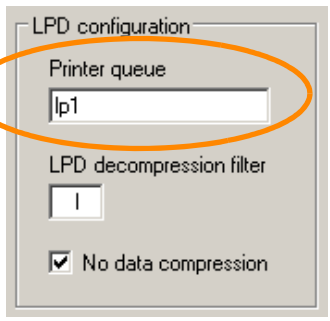


Illus. 7 Select LPD as print protocol and enter a bandwidth and a printer queue name (example for the LPD_A: printer port)

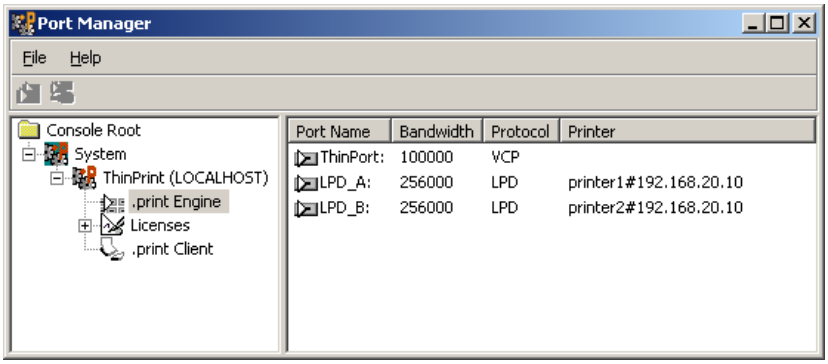
printer1 at LPD_A:



printer2 at LPD_B:



Illus. 8 Names of the printer queues



Illus. 9 LPD_A: and LPD_B: with printer1 and printer2 in ThinPrint Port Manager

Printing

– Make a test print to both printers in Illus. 6.

Appendix

Customer service and technical support

www.thinprint.com/⟶ RESOURCES & SUPPORT
www.thinprint.com/en-us/resourcessupport/supportrequest.aspx

Additional sources

Further information about ThinPrint can be downloaded from our website. The following manuals and technical information are – amongst other – available at www.thinprint.com/manuals:

- ThinPrint Engine on print servers • Quick installation
- ThinPrint Engine on print servers
- Licensing
- License Server
- ThinPrint Tracking
- ThinPrint Management Center
- ThinPrint Connection Service
- ThinPrint Client manuals