



ThinPrint Client Windows for ICA, RDP, and TCP/IP

(ThinPrint version 8.6)

Manual

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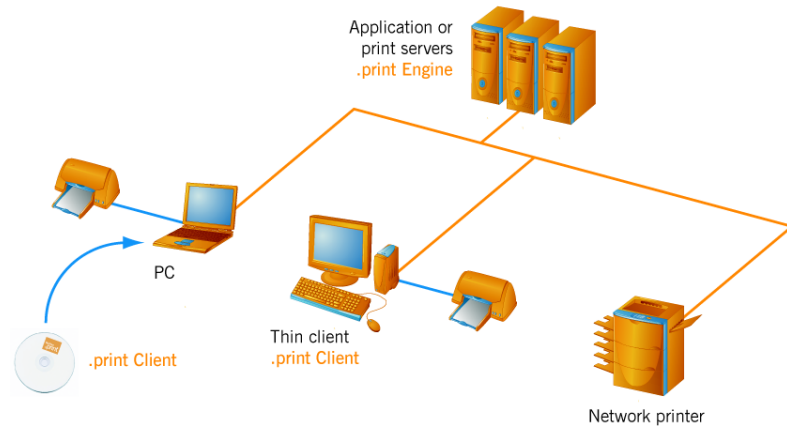
Safety warning

All Cortado 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.

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What is ThinPrint?

ThinPrint is a software solution and consists of a server and a client component (Illus. 1).



Illus. 1 Using of ThinPrint with server and client components

Server component The **ThinPrint Engine** is the actual core of the ThinPrint framework. It provides complete printer driver management including Driver Free Printing. The ThinPrint Engine performs the following main functions:

- Bandwidth control, encryption, and compression for print data
- Virtual printer driver ThinPrint Output Gateway
(replaces printer drivers on printing computers = Driver Free Printing).

Client component A software component on the client side, **print Client** is generally responsible for receiving print data, decompressing and decrypting it, and sending it to the print device. Many ThinPrint Clients are available for different end devices and areas of deployment: for all Windows versions incl. Windows CE, for Linux, Solaris, Dos, Win OS/2, Java, as well as for internal and external print servers for network printers. The following ThinPrint Client types are available for Windows:

- ThinPrint Client Windows for ICA
- ThinPrint Client Windows for RDP
- ThinPrint Client Windows for TCP/IP (as a Windows application)
- ThinPrint Client Service Windows (as a Windows service)¹

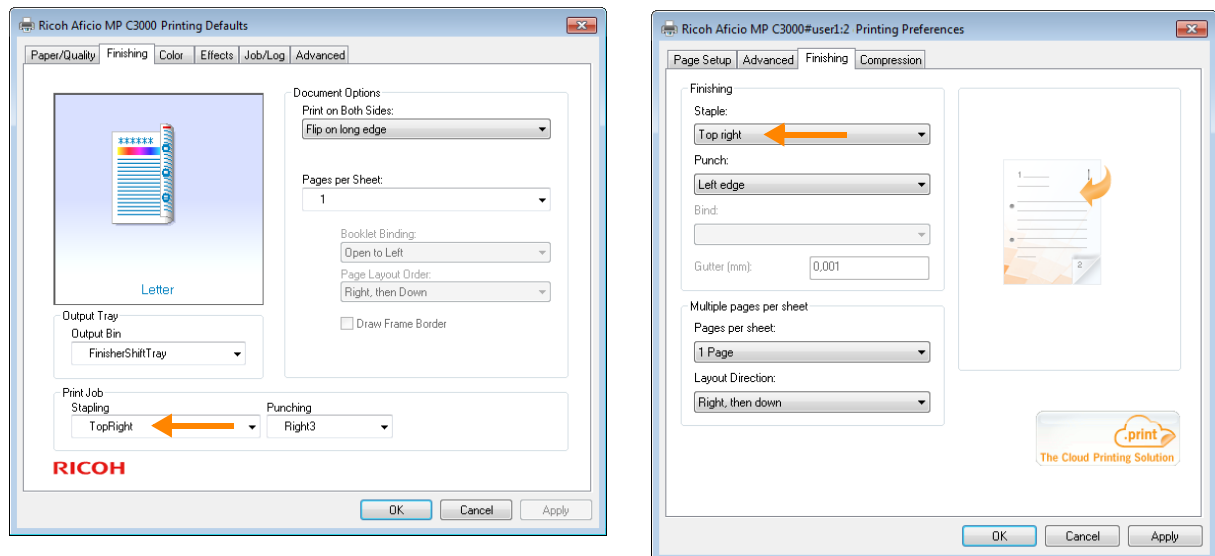
Driver Free Printing

ThinPrint Output Gateway is a virtual printer driver which enables print jobs to be rendered only on clients with Windows as the operating system; an optional print preview is also available on the client.

Note! When printing over Output Gateway, the fonts used in the document must also be installed on the client.

¹ Information on installing and configuring the ThinPrint Client Service Windows can be found in the *ThinPrint Client Service Windows* manual ([Page 21](#)).

Page setup Client-side printer properties such as paper sizes and sources, print quality, color, orientation, print on both sides and finishing options will be displayed in Output Gateway's user interface (Illus. 2, left).



Illus. 2 Display of paper sources on a workstation (left) and in a terminal session (right)

System requirements

ThinPrint Client can be installed onto the following systems²:

- Windows XP with Service Pack 2 or later
with Microsoft XML Paper Specification Essentials Pack (XPSEP)
- Window Vista
with Microsoft XML Paper Specification Essentials Pack (XPSEP)
- Windows 7

Either x86 or x64.

Installing ThinPrint Client Windows

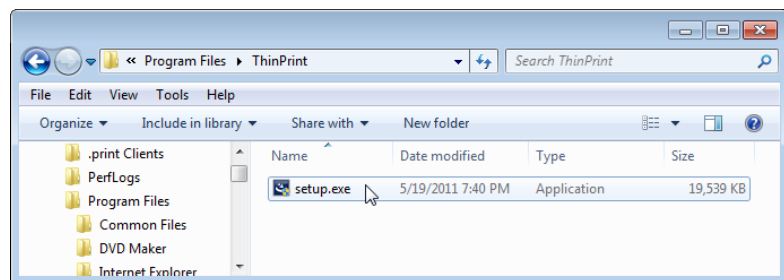
Administrator permissions are required for all installation and configuration procedures. It is therefore best to log on under Windows always with the same account – e.g. as ADMINISTRATOR.

For the unattended installation see the *Pre-configuration and unattended installation of ThinPrint Client Windows* white paper.

The following describes the attended installation.

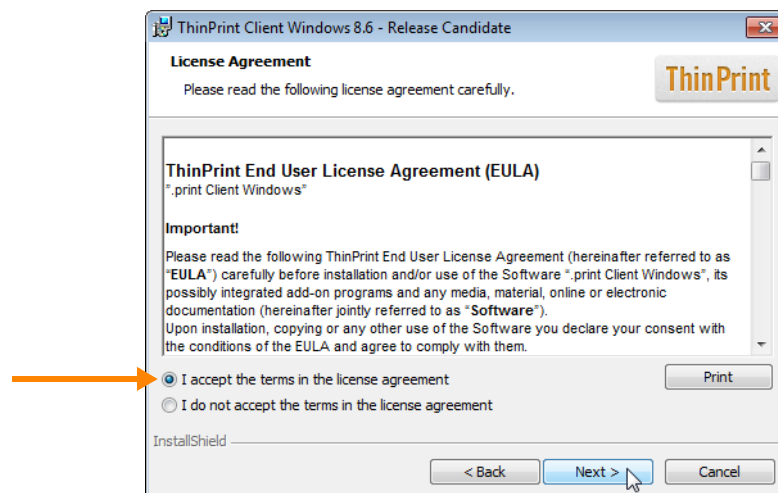
² For older operating systems install ThinPrint Client 7.0

1. Download of ThinPrint Client at www.thinprint.com → SUPPORT → CLIENTS & TOOLS. Start SETUP.EXE (Illus. 3) or the relevant .msi file³.



Illus. 3 Installing ThinPrint Client Windows

2. Select the language for your installation: English, French, German or Spanish.
3. InstallShield Wizard opens. Click Next.
4. Read the license agreement and accept its terms with NEXT (Illus. 4).



Illus. 4 Read and accept the license agreement; click NEXT

5. Select the protocol for printing (Illus. 5). Additionally, this protocol needs to be specified in ThinPrint Engine ([Page 21](#)).

Which protocol?

ThinPrint Client RDP

Requires an RDP connection to a Microsoft terminal server (the Terminal Services client⁴ version must be 5.00.x or higher; the terminal server must be running Windows 2003/2008). The ThinPrint Client starts automatically when an RDP session is opened.

ThinPrint Client TCP/IP

A TCP/IP connection must exist between server and client machines. It must also be possible to access the client machine's TCP port from the server.

Connections with Network Address Translation (NAT) or with asynchronous connections require ICA or RDP. In case of NAT ThinPrint Connection Service⁵ can also be used. The ThinPrint Client is started by a shortcut that is automatically created in the Windows STARTUP folder during setup.

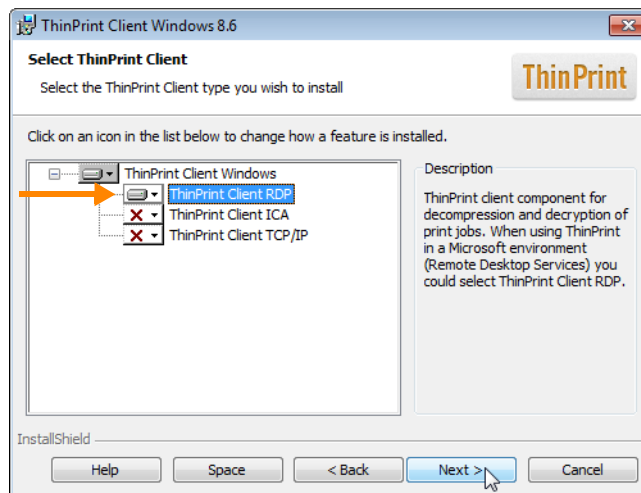
³ can be extracted from this using the call: `Setup.exe /a`

⁴ Other Microsoft denominations are: Remote Desktop Client and Remote Desktop Connection

During installation, you will be asked whether ThinPrint Client should run as an application or as a service. Select **AS AN APPLICATION**. If you need it as a service, read the *ThinPrint Client Service Windows* manual ([Page 21](#)).

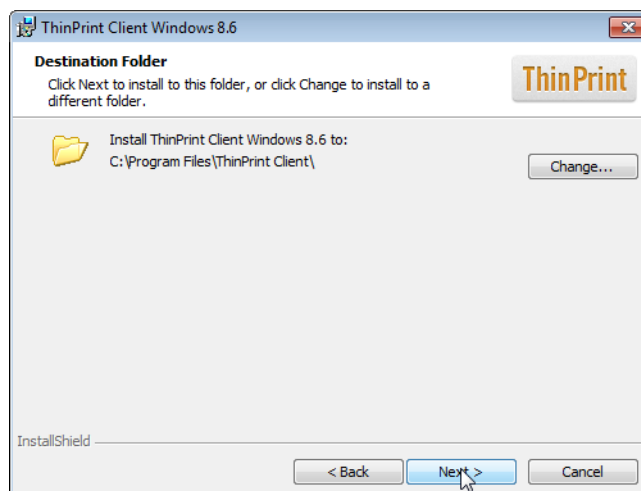
ThinPrint Client ICA Requires an ICA connection to a Citrix server (the ICA client version must be 6.0 or higher). The ThinPrint Client starts automatically when an ICA session is opened. To successfully complete ThinPrint Client installation, **the correct path to the Citrix ICA Client must be entered**.

If you are not sure, select ThinPrint Client RDP (default). Choosing subfeatures is not necessary.



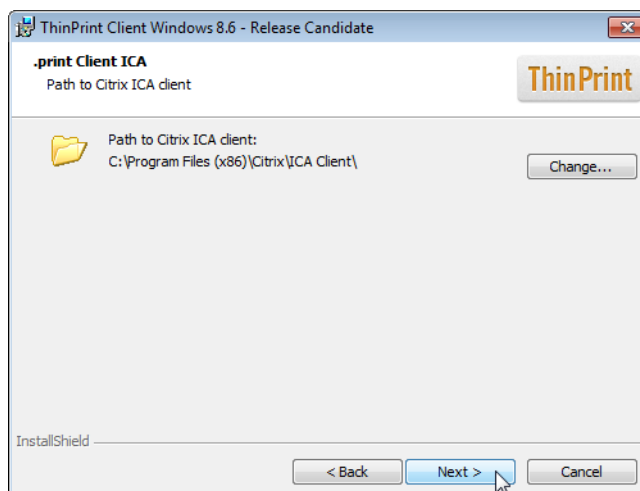
Illus. 5 Select print protocol

6. With SPACE you can verify if your hard disc space is sufficient for the installation of this software.
7. Choose the installation path (Illus. 6) and click NEXT.



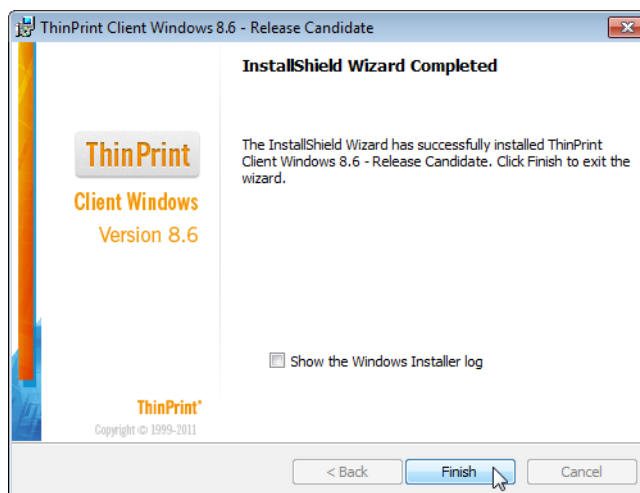
Illus. 6 Changing installation path if necessary

8. With ICA specify the **installation path of Citrix ICA Client** (is usually automatically detected). See Illus. 7.



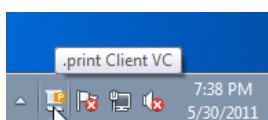
Illus. 7 Entering path to the Citrix ICA Client

9. Then click **INSTALL**, to start installation. Please wait while the Install Shield Wizard installs ThinPrint Client Windows. This may take several minutes.
10. Following a successful installation you will see the screen shown in Illus. 8 with the message: "InstallShield Wizard Completed". Click **FINISH** (Illus. 8).



Illus. 8 ThinPrint Client 8.6 successfully installed

Completing installation An icon is displayed in the task bar when ThinPrint Client Windows is running (Illus. 9).



Illus. 9 ThinPrint Client Windows icon in the task bar

ThinPrint Client start

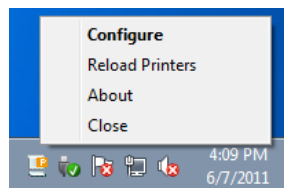
- TCP/IP type as an application: is started automatically with a Windows login
- TCP/IP type as a service: is started automatically with the operating system
- RDP type: is started automatically with a Remote Desktop session

- ICA type: is started automatically with a XenApp or XenDesktop session.
Please note: Log off once from the workstation before.

ThinPrint Client context menu

ThinPrint Client has a context menu, which can be opened by clicking the ThinPrint icon in the task bar. That offers quick access to important functions.

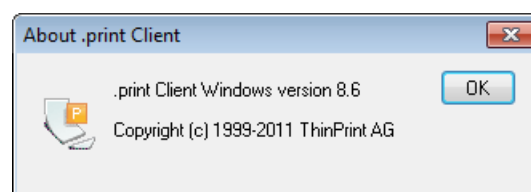
- Right click the ThinPrint icon in the task bar. The context menu shown in Illus. 10 opens.



Illus. 10 ThinPrint Client context menu

The following options are available in context menu:

- **CONFIGURE:** Clicking CONFIGURE opens ThinPrint Client Manager (see also “Configuration with ThinPrint Client Manager”, [Page 10](#)).
- **RELOAD PRINTERS:** This function is enabled by default and updates ThinPrint Client immediately when a new printer is created in the printers folder. However, the function does not update the session printers; a logon-/logoff is required for that.
If you have disabled ENABLE SENDING PROPERTIES (see [Page 12](#)), the RELOAD PRINTERS function will also be disabled. In that case, you can update the printer manually here.
- **ABOUT:** This option displays version information on the installed ThinPrint Client (Illus. 11).



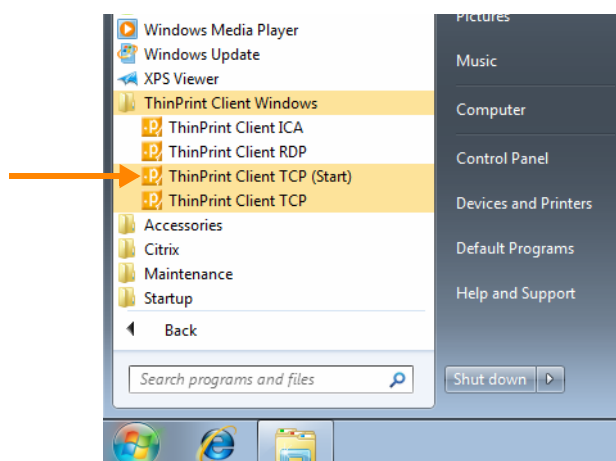
Illus. 11 Version information

- **CLOSE:** Click CLOSE to close ThinPrint Client. This option is only available in TCP/IP versions (and not in the ICA and RDP version as well as in the ThinPrint Client Service Windows).
How to restart the ThinPrint Client? See the following chapter.

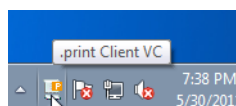
Configuration with ThinPrint Client Manager

Remember, several changes only take effect after restarting the ThinPrint Client Windows. Please follow the steps described below to do so.

- Close ThinPrint Client Windows (TCP/IP version only; see above and [Page 14](#)).
- Restart ThinPrint Client Windows:
 - TCP/IP: Select START→ ALL PROGRAMS→ ThinPrint CLIENT WINDOWS→ ThinPrint Client TCP (START) (Illus. 12).
 - ICA/RDP: Disconnect and reconnect each terminal session (Client starts up automatically with the session).

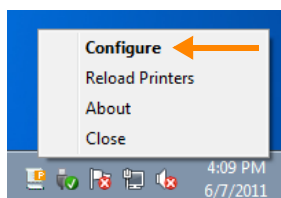


Illus. 12 Start ThinPrint Client Windows for TCP/IP



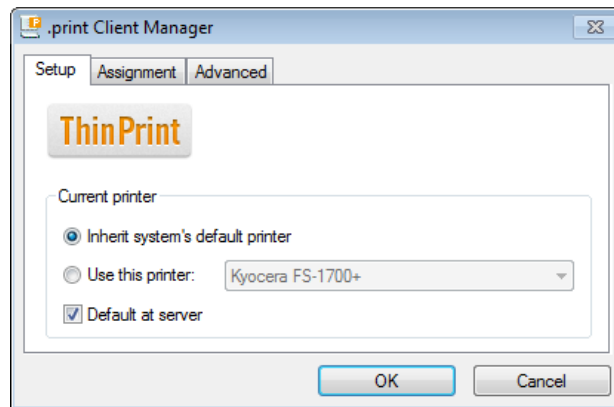
ThinPrint Client Windows is configured with ThinPrint Client Manager. Open ThinPrint Client Manager

- either by double clicking its icon in the task bar (see illustration left)
- or with START→ ALL PROGRAMS→ THINPRINT CLIENT WINDOWS→ CONFIGURE (see Illus. 12)
- or by opening the context menu using the right mouse-button and selecting the CONFIGURE option.



Illus. 13 ThinPrint Client Windows context menu

- This opens the panel in Illus. 14.



Illus. 14 ThinPrint Client Manager: CURRENT PRINTER

Setup tab

Current printer Select CURRENT PRINTER here (Illus. 14). Print jobs are printed from the current printer if the printer *ID* can't be determined (e.g., no printer ID is given in the printer name at the server).

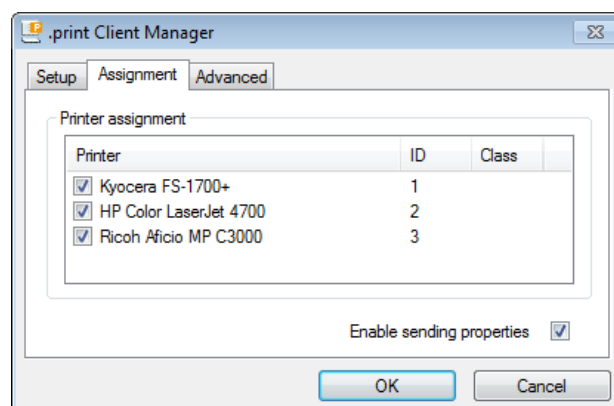
Should you want to specify that the *current printer* of ThinPrint is the same as the local Windows default printer, simply leave the default setting INHERIT CLIENT'S DEFAULT PRINTER. Or select the current printer manually with USE THIS PRINTER; in this case, the current printer can be different than the local Windows default printer.

Furthermore, the current printer can be set as default printer in a session for Auto-Connect (see Illus. 14).

Take note that the default printer can also be determined by certain server settings. These settings might then take priority over the settings in ThinPrint Client. For assistance, read the corresponding ThinPrint Engine manual.

Assignment tab

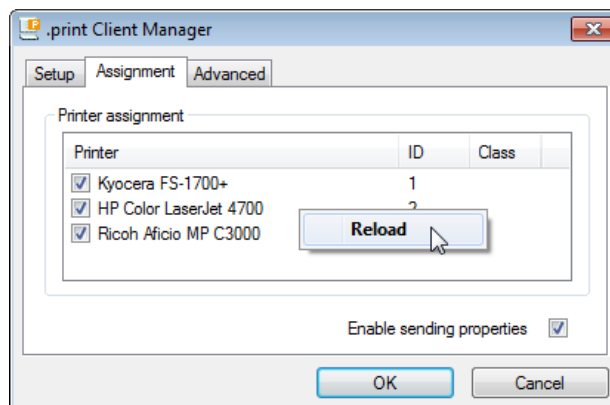
Printers and their IDs ASSIGNMENT lists all printers that are found in the client's printer folder with their IDs and their classes (Illus. 15).



Illus. 15 Printers with assigned IDs

The ASSIGNMENT panel displays information about available printers. This is also where you find printer IDs, which are automatically assigned by the ThinPrint Client Windows and are necessary for manually assigned printer names on the ThinPrint Engine (without AutoConnect; for more information, see ThinPrint Engine manual; [Page 21](#)).

Reload Printers You can immediately update the printer list if you click on RELOAD in the context menu (right mouse button) of the printers listed in the window (Illus. 16).



Illus. 16 Reload Printer list

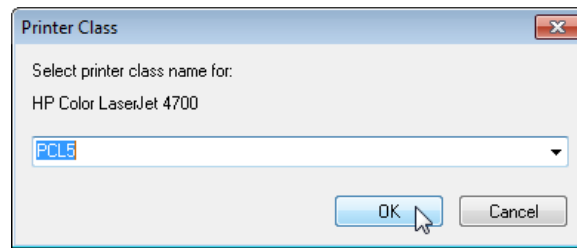
Enable sending properties If this option is enabled and AutoConnect is used, the client printer's properties (such as **paper trays, paper formats, color settings, print quality, stapling, binding or punching**) will be applied to the printer created on the server.

Take note: If ENABLE SENDING PROPERTIES is disabled, automatic updating of the printer list is also disabled (and vice versa).

AutoConnect

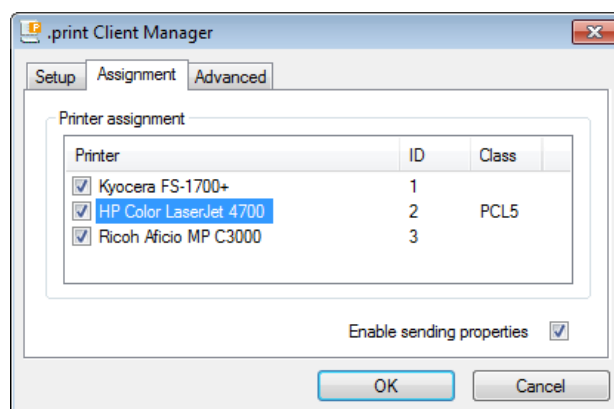
It's also possible to select different printers by checking the box next to them. AutoConnect will automatically map all selected printers on a server and connect them with a ThinPrint Port – provided templates exist and AutoConnect is running on the server (= auto-created printers). When starting a terminal session all marked printers are created automatically in the session. For more information refer to the AutoConnect chapter in the ThinPrint Engine manual ([Page 21](#)).

Printer class Double clicking a printer name opens an input box for specifying the printer class for AutoConnect (Illus. 17). The result is shown in Illus. 18.



Illus. 17 Enter class name (see AutoConnect in the ThinPrint Engine manual; [Page 21](#))

Note! Unlike printer names, class names may not be longer than 7 characters and may not include blank spaces.



Illus. 18 Printers with ID and class

Advanced tab

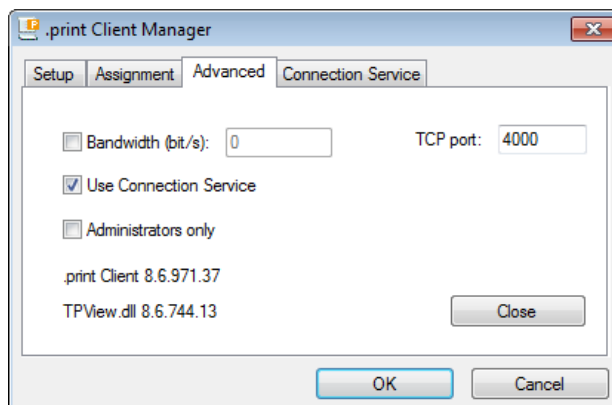
The ADVANCED panel (Illus. 19) offers the following settings:

- Bandwidth** – Check this box and enter a bandwidth value. Note: If the value is larger or if CLIENT CONTROL is disabled at the server, server settings (see ThinPrint Engine manual; [Page 21](#)) are applied.
- TCP Port** – Enter here the port number where ThinPrint Client Windows should receive incoming connections. Be sure: Same TCP port number for both ThinPrint Client Windows and ThinPrint Engine printer port to which the client printer is connected.⁶ Otherwise, communication between the two ThinPrint components is impossible.
- The TCP port number is only relevant for printing over TCP/IP.** Default port number is 4000. Make certain that this port is open for both incoming and outgoing connections. If you want to avoid that condition, you can print via ICA/RDP, or use the ThinPrint Connection Service (outgoing connection only).

⁶ see also ThinPrint Engine manual ([Page 21](#))

Use Connection Service

- If you want to use the ThinPrint Connection Service, enable its check box. Once it has been activated, the additional tab card called CONNECTION SERVICE will be added. This tab offers settings for using the Connection Service (see “Connection Service tab”, [Page 15](#)). Default: disabled



Illus. 19 ThinPrint Client Manager for Windows: advanced options

Administrators only

Checking this box prevents users from making changes to ThinPrint Client Windows settings. The users see the (grayed-out) settings, but can not make any changes.

OK

Changes are applied without quitting ThinPrint Client Windows – changes could, however, first be functional after restarting ThinPrint Clients or the session ([Page 10](#)).

CANCEL

Previous settings remain intact, all changes are ignored.

CLOSE

Quits ThinPrint Client Windows for TCP/IP. The ThinPrint Client icon disappears from the task bar. The ThinPrint Client Windows must be restarted before ThinPrint printing resumes ([Page 10](#)).

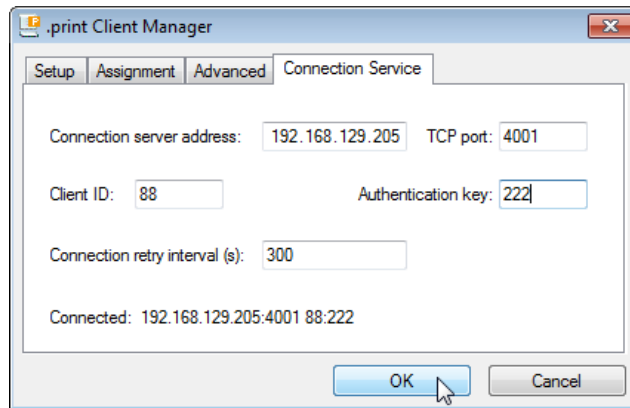
Tip! The CLOSE button is only active for ThinPrint Client Windows for TCP/IP. The ThinPrint Clients for ICA and RDP automatically close when the session ends. The ThinPrint Client Service Windows is closed in the SERVICES folder.

Info line

The info line displays the version numbers of the ThinPrint Client and of TPView.

Connection Service tab

The CONNECTION SERVICE tab (Illus. 19) offers settings for using the ThinPrint Connection Service. Please also note the information about installing and configuring the Connection Service in your ThinPrint Engine manual and in the “ThinPrint Connected Gateway” manual ([Page 21](#)).



Illus. 20 ThinPrint Client Manager started; CONNECTION SERVICE tab

- | | |
|--------------------------------------|--|
| <i>Connection server address</i> | – Enter the IP address of the server on which the Connection Service has been installed. |
| <i>TCP port</i> | – Enter the number of the TCP port via which the ThinPrint Client connects to the Connection Service. Default port number is 4001. |
| <i>Client ID</i> | – The Connection Service uses the client ID to forward print jobs to a client. The client ID can be found on the server on which the Connection Service is running. |
| <i>Authentication key</i> | – Enter the authentication key (see Connection Service server). |
| <i>Connection retry interval (s)</i> | – Enter the wait time (in seconds) after which a new attempt should be made to establish a connection if the Connection Service is not reachable. Default: 0. |
| <i>Status line</i> | After successful connection to the Connection Service, the status line will display the server IP address as well as the TCP port number, client ID, and authentication key. If no connection could be established to the Connection Service, the status line shows the message “Not connected” (see Illus. 20). |

SSL encryption

If you want a secure SSL connection between ThinPrint Engine and ThinPrint Client, you can encrypt print data with the SSL based TLS⁷ norm.

⁷ TLS = Transport Layer Security; SSL = Secure Socket Layer

This print data encryption is based on client authentication. When using SSL encryption, two certificates are installed on the server (or on the virtual desktop) where ThinPrint Engine is running, and a certificate signed by the server is installed on the client. More information is found in the “ThinPrint Server Engine” manual.

We recommend creating certificates with an individual certificate server or requesting them from an official source⁸. Please note that the certificate must be a **x.509** certificate (file format *.cer or *.p12). See the “Creating SSL certificates for printing with ThinPrint” white paper.

Importing SSL certificates

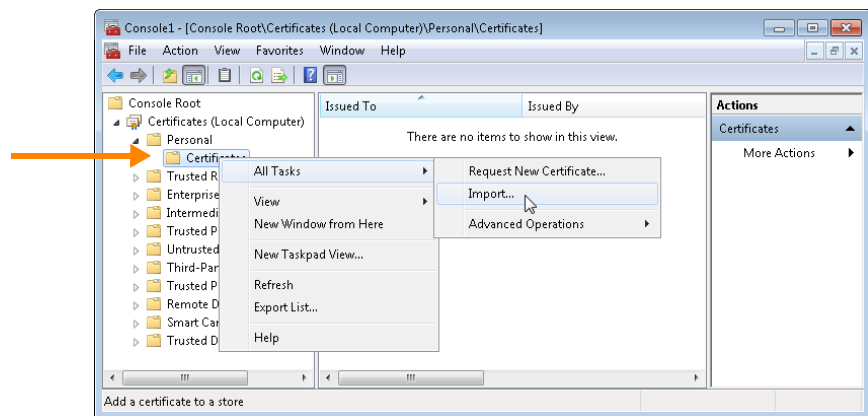
If the USE ENCRYPTION option is enabled in the ThinPrint Port configuration⁹ on the server, a relevant SSL certificate, which has been signed by the server, must be imported to the machines on which a ThinPrint Client is running.

Note! Client certificates have to be imported in the client machine's certificate store. **Either** you import the certificates **individually for each user** (at MY USER ACCOUNT) **or one time per machine** (at COMPUTER ACCOUNT). Did you choose the Computer Account you have to assign permissions to the certificate afterwards, if the computer user(s) are not members of the Administrators group (to do so see the “Creating SSL certificates for printing with ThinPrint” white paper). If the computer has its own certificate set the registry value “CertStore” to 1 ([Page 26](#)).

1. To install a client certificate, open the Microsoft Management Console (MMC) with **mmc.exe** from the COMMAND PROMPT.
2. Select **either** the following in MMC on the client PC **per user**:
FILE→ ADD/REMOVE SNAP-IN→ CERTIFICATES→ ADD→ MY USER ACCOUNT→ FINISH→ OK
Or select for the machine:
FILE→ ADD/REMOVE SNAP-IN→ CERTIFICATES→ ADD→ COMPUTER ACCOUNT→ NEXT→ LOCAL COMPUTER→ FINISH→ OK
3. Now import the certificate by selecting ALL TASKS→ IMPORT in the context menu (Illus. 21) and then
NEXT→ BROWSE→ OPEN→ NEXT→ PASSWORD→ NEXT→ PLACE ALL CERTIFICATES IN THE FOLLOWING STORE→ NEXT→ FINISH→ OK

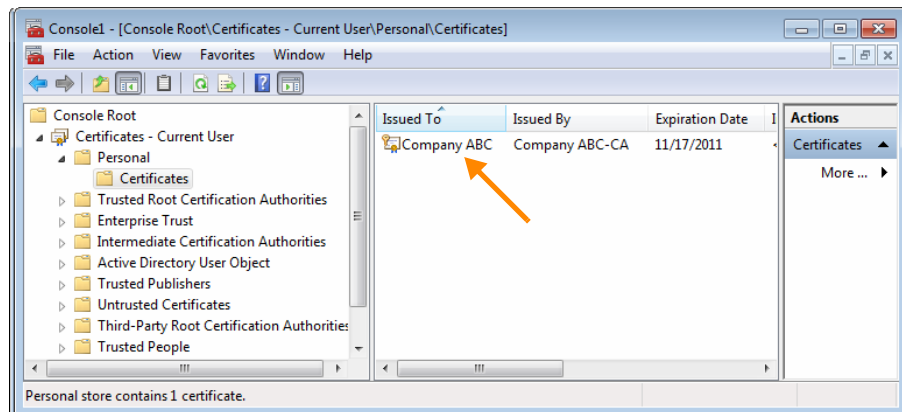
⁸ e. g., www.verisign.com or www.trust-center.de

⁹ see ThinPrint Engine manual ([Page 21](#))

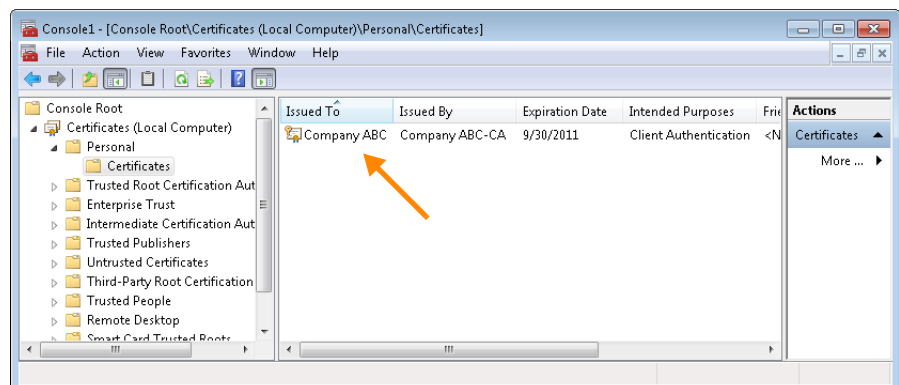


Illus. 21 Starting import of an SSL certificate
(example for COMPUTER ACCOUNT or LOCAL COMPUTER)

Illus. 22 and 23 show the results of import.



Illus. 22 SSL certificate imported to a client machine
(example for MY USER ACCOUNT or CURRENT USER)



Illus. 23 SSL certificate imported to a client machine
(example for COMPUTER ACCOUNT or LOCAL COMPUTER)

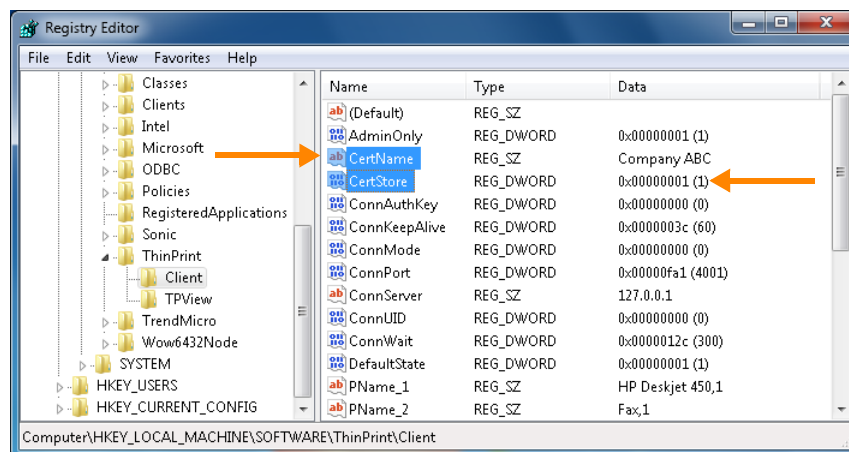
Registry entry CertName

Before sending encrypted print data, the server checks whether the name of the imported certificate is included in the `CertName` entry in the client machine's Reg-

istry and whether the stored certificate is present on the client. The `CertName` entry in the Registry can be entered manually as follows:

1. After the certificate has been imported, create the following Registry entry on the client machines with REGEDIT (Illus. 24; arrow left; data type: `reg_sz`):

`hkey_local_machine\software\thinprint\client\CertName`



Illus. 24 Registry entry for SSL encryption on Windows clients
(example for `Company ABC` certificate on COMPUTER ACCOUNT or LOCAL COMPUTER)

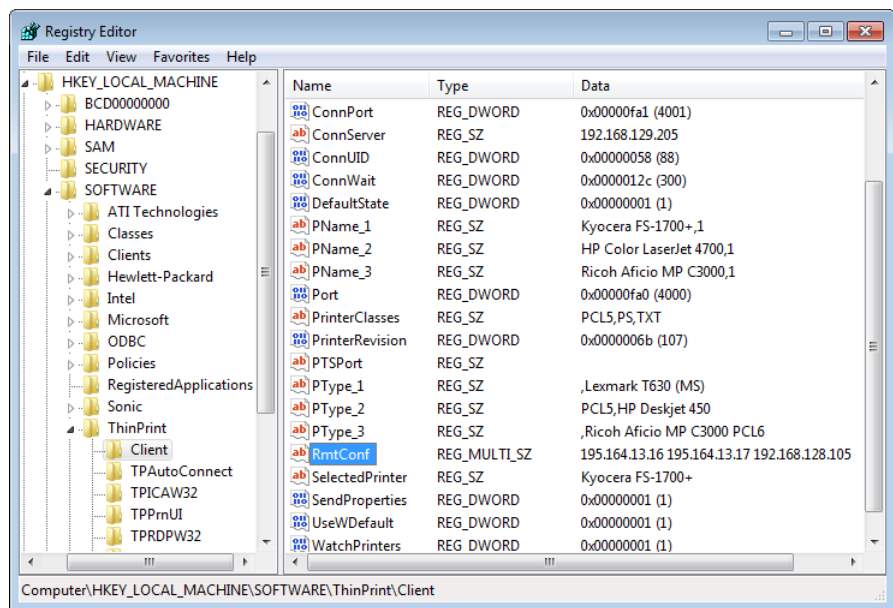
2. Enter as value the name of the imported certificate as displayed in the column ISSUED TO of the MMC's certificate overview (`Company ABC` as example in illus. 22 and 24).
3. If you saved your certificate in the certificate store of the machine (LOCAL COMPUTER) (see Illus. 23), you must set the "CertStore" registry key to "1" (see Illus. 24, arrow right). When using user-specific (CURRENT USER) certificates, set it to "0".
4. Restart ThinPrint Client Windows ([Page 10](#)).

The `CertName` Registry entry is only needed for encrypting print data; receipt of unencrypted print data is still possible.

Remote client configuration

Remote configuration is possible for ThinPrint Client Windows printing with TCP/IP protocol. The entry `RMTCONF` is needed in the Windows registry of all client machines you want to configure (see Illus. 25).

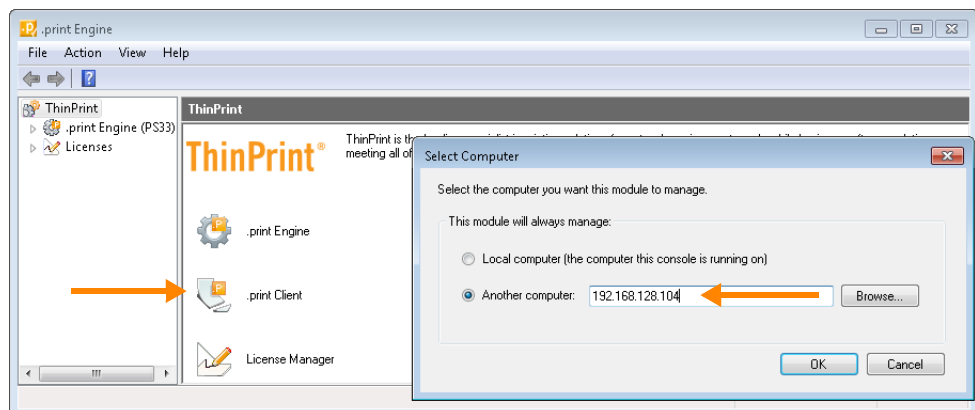
- Open the Windows registry of the client machine you want to configure. Add the entry `RMTCONF` (`reg_mult_sz`) under `HKEY_LOCAL_MACHINE\SOFTWARE\THIN-PRINT\CLIENT`. Enter the IP addresses of all those machines from which the client should be configured (Illus. 25).



Illus. 25 ThinPrint Client machine:

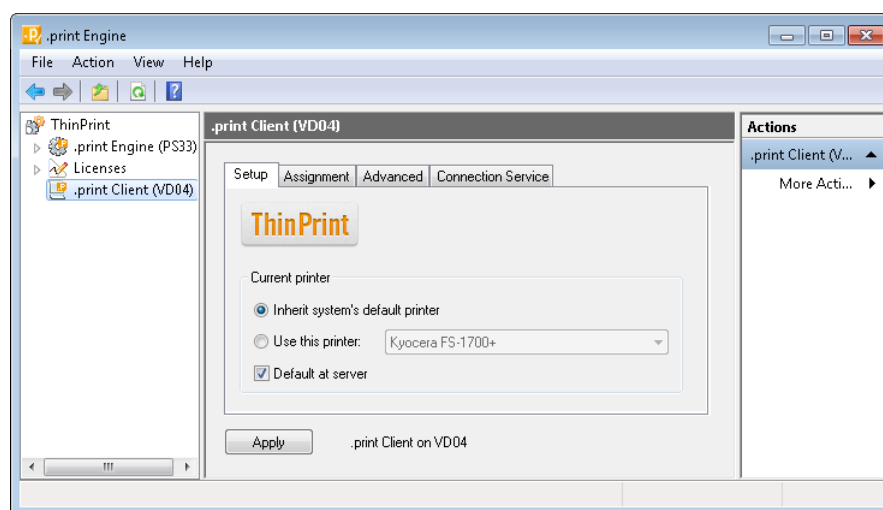
Registry entry RMTCONF added for remote configuration of ThinPrint Client

- Restart ThinPrint Client.
- Go to the machine on which ThinPrint Engine is installed. Open the MMC, select ThinPrint Client snap-in and enter the address of the client machine to configure (Illus. 26).



Illus. 26 ThinPrint Engine machine: Open the MMC, select ThinPrint Client snap-in and enter the address of the client machine to configure

- Now, the selected machine is ready for remote configuration (Illus. 27).



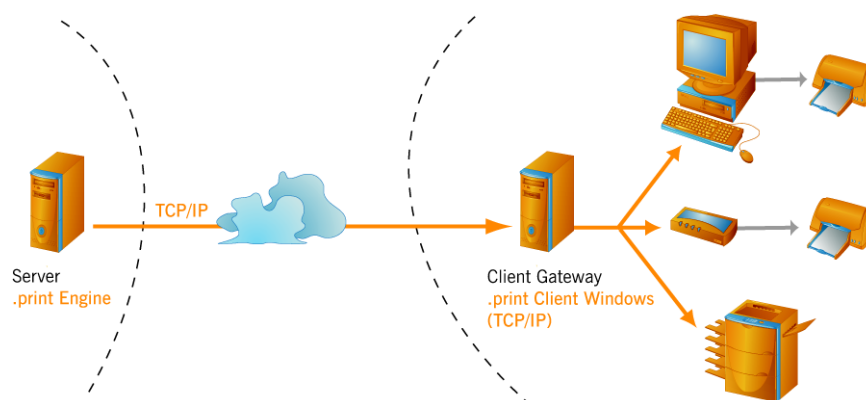
Illus. 27 ThinPrint Engine machine: Remote configuration of a ThinPrint Client

ThinPrint Client Gateways and ThinPrint Connected Gateways

The ThinPrint Client Gateway can greatly simplify the introduction of ThinPrint because it can receive *ThinPrint* print jobs for an entire group of clients and printers, decompress and decrypt them, and then distribute them conventionally in a local network – like a local print server (Illus. 28). Then the ThinPrint Client is only necessary on the Client Gateway (local print server) for this remote LAN.

Otherwise, the ThinPrint client must be installed on each end device: rich clients, printers, print servers, thin clients, etc. This could mean that with thin clients, for example, a BIOS update is necessary. Even mixed environments pose no problem: The ThinPrint client is installed onto all devices where simple installation is possible, and all others are served by a Client gateway.

More information can be found in the “Windows computer as a ThinPrint Client Gateway” white paper.

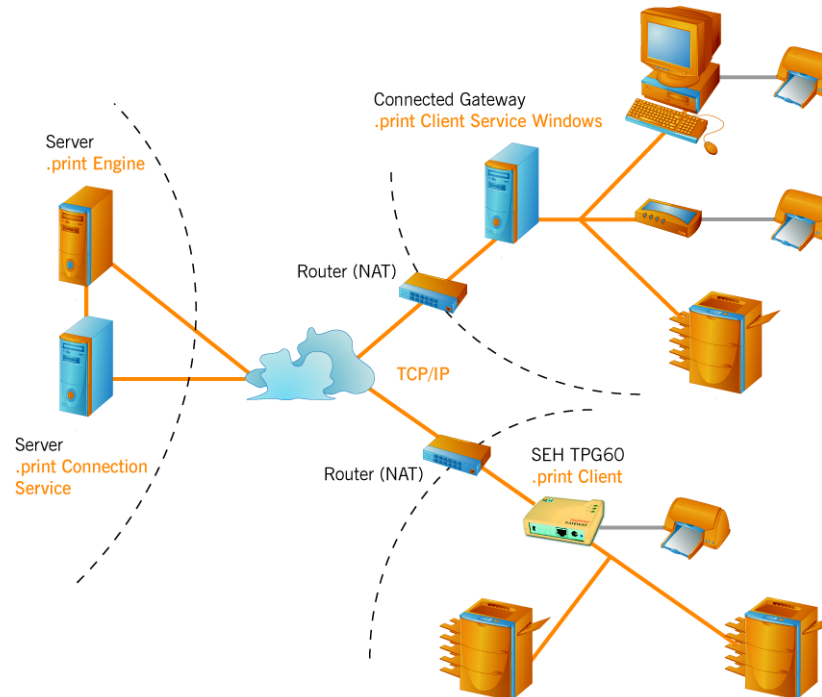


Illus. 28 Windows computer as a ThinPrint Client Gateway (example)

The ThinPrint Connected Gateway is a variation of the ThinPrint Client Gateway. The ThinPrint Client installed on the Client Gateway can connect to the ThinPrint Connection Service installed on the server. Print jobs can then be sent via TCP/IP, even where

the Client Gateways are found in a masked network (e.g., behind a router with Network Address Translation; Illus. 29).

More information can be found in the “ThinPrint Connected Gateway” manual and in the “SEH TPG60/120 as a ThinPrint Client Gateway” white paper.



Illus. 29 Windows machine and SEH TPG60 as ThinPrint Connected Gateways

Appendix

Customer service and technical support

Customer Service www.thinprint.com/ → SUPPORT
www.thinprint.com/Support/SupportRequest.aspx

Additional sources

Further information about ThinPrint can be downloaded from our website.

Manuals The following manuals (amongst others) are available at
www.thinprint.com/ → PRODUCTS → OVERVIEW → <product name>.

- ThinPrint Client Service Windows
- ThinPrint Application Server Engine
- ThinPrint RDP Engine
- ThinPrint Desktop Engine
- ThinPrint Tracking Service
- ThinPrint Server Engine

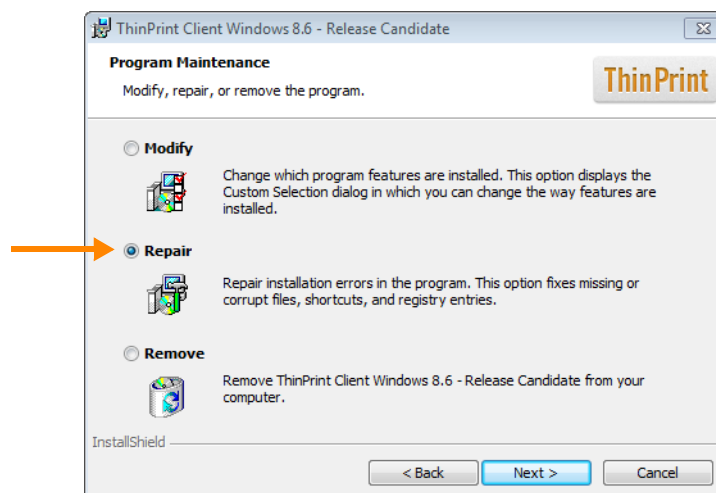
- ThinPrint Personal Printing
- ThinPrint Connected Gateway

White papers The following white papers (amongst others) are available at www.thinprint.com/
→ PRODUCTS→ OVERVIEW→ <product name> or → SUPPORT→ WHITE PAPER
DOWNLOAD.

- Preconfiguration and unattended installation of ThinPrint Client Windows
- Creating SSL certificates for printing with ThinPrint
- Tips for configuring ThinPrint
- ThinPrint addressing
- Windows computer as a ThinPrint Client Gateway
- Intermate IAPS ThinPrint as a ThinPrint Client Gateway
- SEH ISD200/300 as a ThinPrint Client Gateway
- SEH TPG60/120 as a ThinPrint Client Gateway
- Intermate 10x as a ThinPrint Client Gateway

Repairing ThinPrint Client Windows

Should ThinPrint Client Windows ever quit functioning, you do not have to reinstall it – you can repair it. To repair ThinPrint Clients Windows, start SETUP.EXE again and select REPAIR (Illus. 30).



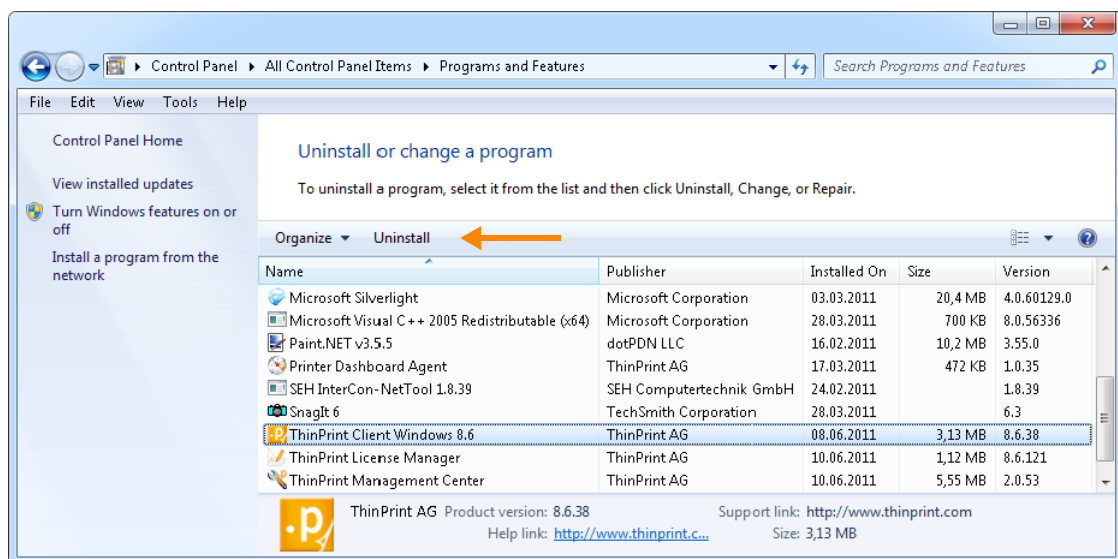
Illus. 30 Repairing ThinPrint Client Windows

Updating ThinPrint Client Windows

Please note that previous settings are still valid when updating or installing ThinPrint Client on a machine where it was installed before. Simply install the new client as described on [Page 5](#).

Uninstalling ThinPrint Client Windows

1. Select CONTROL PANEL→PROGRAMS AND FEATURES select THINPRINT CLIENT WINDOWS, and click UNINSTALL (Illus. 31).



Illus. 31 Uninstalling ThinPrint Client

2. Confirm the following windows with REMOVE and FINISH.

Installing two ThinPrint Clients

It is possible to install two ThinPrint Clients on the same machine. This can make sense if you not only need an RDP session (with ThinPrint Client RDP) to a terminal server, but also an ICA session to another server (Citrix server).

In this case, simply install ThinPrint Client RDP. Then, run SETUP.EXE once more and select MODIFY (see Illus. 30). You will find a dialog where you can select the protocol (see Illus. 5 on [Page 7](#)). Select here THINPRINT CLIENT ICA, as an example.

Relevant entries in Windows Registry

Registry entries of ThinPrint Client Windows

The ThinPrint Client creates the following registry entries, if necessary:

hkey_local_machine\software\ThinPrint\client

| Name | Menu item (ThinPrint Client Manager) | Description | Type | Default value |
|----------------|--|---|-----------|------------------|
| AdminOnly | ADMINISTRATORS ONLY | Restricts client configuration to administrators only | reg_dword | 0 |
| Bandwidth | BANDWIDTH | Client-side bandwidth setting (bit/s or bps) | reg_dword | none |
| ConnAuthKey | AUTHENTICATION KEY | Value can be defined by the admin on the connection server; otherwise it's irrelevant for the first logon, but may not be changed thereafter | reg_dword | 0 |
| ConnKeep-Alive | — | Interval for refreshing the connection; has to be lower or equal than Connection Service's "KeepAliveTO" (server side); (in seconds) | reg_dword | 60 |
| ConnMode | USE CONNECTION SERVICE | 0 = Receiving print jobs without Connection Service (Listen Mode) 3 = Using Connection Service 1 = both modes at the same time (0 + 3) | reg_dword | 0 |
| ConnPort | TCP PORT (CONNECTION SERVICE) | TCP port for communication with the Connection Service; be sure: same TCP port number as Connection Service's "ClientPort" | reg_dword | 4001 |
| ConnServer | CONNECTION SERVER ADDRESS | IP address of the computer on which Connection Service is running | reg_sz | 127.0. 0.1 |
| ConnUID | CLIENT ID | Client ID for Connection Service – an unambiguous ID must be assigned for all clients (TPUID) | reg_dword | 0 |
| ConnWait | CONNECTION RETRY INTERVAL | Wait time for connection retries if Connection Service is not reachable (in seconds) | reg_dword | 300 |
| DefaultState | DEFAULT AT SERVER | AutoConnect defines current printer as default printer at server; Page 11 | reg_dword | 1 |

| Name | Menu item (ThinPrint Client Manager) | Description | Type | Default value |
|------------------|---|--|-----------|---------------------|
| DefPrintState | RELOAD (printers) | New printers in ThinPrint Client are checked immediately; Page 12 | reg_dword | 1 |
| PName_ <i>n</i> | PRINTER (ASSIGNMENT) | Name(s) of client printer(s) as read from the system settings | reg_sz | none |
| Port | TCP PORT (ADVANCED) | TCP-Port for communication with the ThinPrint Engine; must be the same as ThinPrint Engine “port” with a normal ThinPrint port | reg_dword | 4000 |
| PrinterClasses | CHOOSE CLASS NAME | Names of the created printer classes | reg_sz | PCL5, PS, TXT |
| PType_ <i>n</i> | CLASS (ASSIGNMENT) | Assigned printer class (<i>n</i> corresponds to <i>n</i> from PName_ <i>n</i>) plus printer driver name | reg_sz | none |
| Selected Printer | CURRENT PRINTER | ThinPrint Client's default printer | reg_sz | UseWD efault |
| Send Properties | ENABLE SENDING PROPERTIES | AutoConnect option for sending printer properties | reg_dword | 1 |
| UseWDefault | INHERIT CLIENT'S DEFAULT PRINTER | Set to use local Windows default printer as CURRENT PRINTER | reg_dword | 1 |
| WatchPrinters | — | Observes the printer folder and refreshes printers in ThinPrint Client immediately. Enabling/disabling depends on “Enable sending properties”, Page 12 . | reg_dword | 1 |

hkey_local_machine\software\ThinPrint:

| Name | Menu item (ThinPrint Client Manager) | Description | Type | Default value |
|------|---|---|--------|---------------|
| Lang | — | Available languages for ThinPrint Client: enu : English deu : German fra : French esn : Spanish | reg_sz | enu |

Additional Registry entries of ThinPrint Client Windows

The following Registry entries can be created manually under:
 hkey_local_machine\software\ThinPrint\client

| Name | Description | Type | Default value |
|----------------|---|--------------|---------------|
| CertName | Name of the imported SSL/TLS certificate; Page 17 | reg_sz | none |
| CertStore | 0 = use the user's certificate store 1 = use the computer's certificate store Note: Permissions has to be assigned to the certificate (see the "Creating SSL certificates for printing with ThinPrint" white paper). | reg_dword | 0 |
| HKCU | 1 = ThinPrint Client configuration is user specific saved under: hkey_current_user\software\thinprint\client | reg_dword | 0 |
| NewID | Specifies the starting value for printer ID assignment | reg_dword | none |
| PreviewPrinter | Specifies whether a preview should be displayed on the client computer when using ThinPrint Output Gateway, | reg_dword | none |
| RmtConf | IP address of the administration machine from which the ThinPrint Client remote configuration is allowed (it is possible to enter more than one address); Page 18 | reg_multi_sz | none |
| SetIDList | Specifies whether changes in the ThinPrint Client (new printers, classes, etc.) should be applied when client is restarted 1 = changes are applied (printer list is updated) 0 = changes are reset Note: The „Reload printers“ function (see Page 9) has a higher priority than these settings. | reg_dword | none |
| StartDelay | Specifies whether and how long (in seconds) ThinPrint Client startup should be delayed after user login (applies only to ThinPrint Client Windows TCP/IP) | reg_dword | none |

Further information on the single entries can be found in the respective chapters of this manual and of the "Preconfiguration and unattended installation of ThinPrint Client Windows" white paper.

ThinPrint Clients and supported features

| ThinPrint Client + possible – not possible | Network protocol | | | | | | | | | | | |
|--|------------------|--------|-----|-----------------------|---------------------------|-------------------|--------------------|----------------|--------------------|-------------------------|--------------------|--|
| | ICA | TCP/IP | RDP | ThinPrint AutoConnect | Compression and streaming | Bandwidth control | SSL/TLS encryption | Output Gateway | ThinPrint Viewture | Virtual Channel Gateway | Connection Service | |
| Windows (TCP/IP) ^a | – | + | – | + | + | + | + | + | + | – | + | |
| Windows (ICA) | + | – | – | + | + | + | + | + | + | + | – | |
| Windows (RDP) ^b | – | – | + | + | + | + | + | + | + | + | – | |
| Service Windows (TCP/IP) ^a | – | + | – | + | + | + | + | + | – | – | + | |
| Linux (TCP/IP) ^a | – | + | – | + | + | + | + | – | – | – | + | |
| Java (TCP/IP) ^a | – | + | – | + | + | + | + | – | – | – | + | |
| Java as an applet (ICA) | + | – | – | + | + | + | + | – | – | + | – | |
| Win16 (TCP/IP) ^a | – | + | – | + | + | + | – | – | – | – | – | |
| MS-DOS (TCP/IP) ^a | – | + | – | + | + | + | – | – | – | – | – | |
| Windows CE (TCP/IP) ^a | – | + | – | + | + | + | – | – | – | – | – | |
| Windows CE (ICA) | + | – | – | + | + | + | – | – | – | + | – | |
| Windows CE (RDP) | – | – | + | + | + | + | – | – | – | + | – | |
| LPD device | – | + | – | – | + | + | – | – | – | – | – | |

a Also usable for ICA/RDP sessions, provided a TCP/IP connection exists between server and client

b RDP 5.0 required

c If a decompression filter can be installed