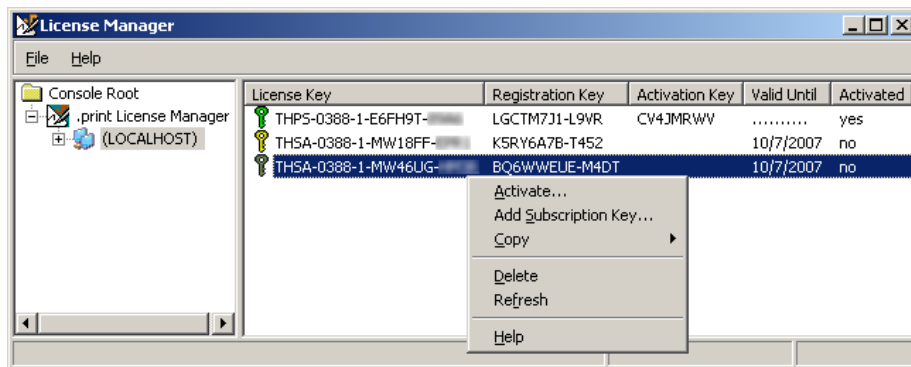


ThinPrint licensing

Using License Manager for .print licenses (v 8.0)



ThinPrint License Manager (.print version 8.0)

This white paper is intended to simplify the use of the ThinPrint License Manager. It provides an overview of the processes and options in licensing and explains the necessary license keys.

The process is explained based on the product .print Server Engine v8.0.

The types of license keys are listed in the appendix, along with examples of products, for the licensing of which, several license keys are required.

Introduction

Testing software and activating licenses

- Registered users
- Productive licenses
- License activation
- Reactivation

The update subscription

- First installation
- Update subscription renewal

Appendix

- Customer service and technical support
- List of license keys
- Products and license types
- Example for multiple licenses per product
- Black/Whitelist
- Additional sources

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Introduction	4
Overview	4
License Manager	4
Demo licenses	5
Testing software and activating licenses	7
Registered users	7
Productive licenses	7
License activation	8
Reactivation	10
Update to 8.0 with simultaneous server upgrade	10
Update subscription	11
First installation	11
Update subscription renewal	11
Appendices	12
Customer service and technical support	12
List of licenses	12
Products and license types	13
Examples for multiple licenses per product	14
.print Application Server Engine: user-based licensing	14
.print Server Engine: server-based licensing	14
Deleting a license key	14
License usage	15
Black/Whitelist	16
Black/whitelist setup	17
Example for black/whitelists	18
Additional sources	19

Introduction

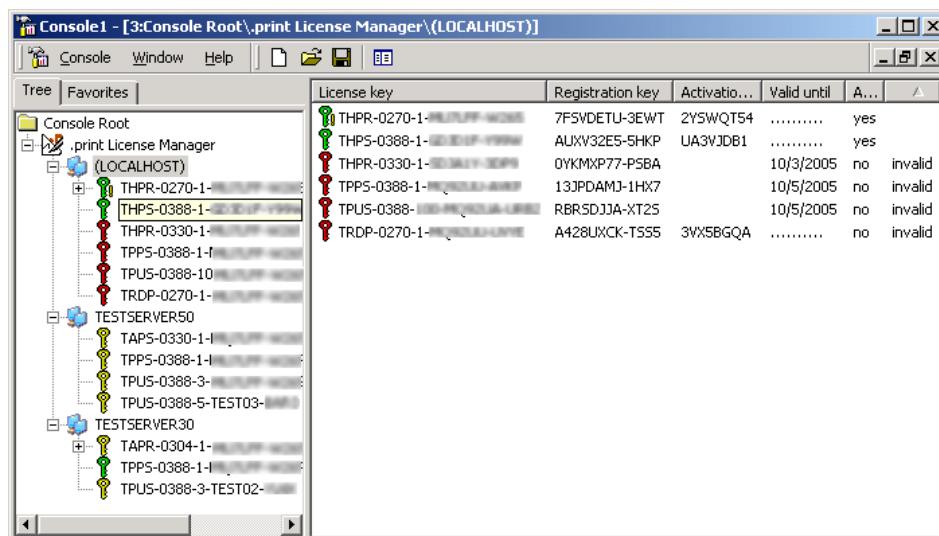
Overview

The different types of ThinPrint licenses are optimally designed for their different areas of application. Different licenses can be purchased according to system requirements. The use of licensable ThinPrint products could function as follows:

1. A demo software is downloaded from the ThinPrint website for the desired product.
2. A full ThinPrint license with 30-day test phase is purchased.
3. The full license is activated (with in the 30-day test phase) for unlimited use.
4. update subscription entitles user to install new software releases.

License Manager

License Manager can be opened in the Microsoft Management Console (MMC). That means that all of the advantages of the MMC can also be used for licensing and distributing licenses. In particular, license keys can be entered and managed at a central point for remote servers (Illus. 1). The server on which the license keys are entered can be any Windows server in the network on which a ThinPrint product is installed.



Illus. 1 License Manager

Moreover, the different colors of the keys show you immediately which license keys are valid and which not. The color shows the status of the license. An exclamation point next to the key shows that the subscription is expired.

- Green key: license is activated
- Yellow key: license is valid but not activated
- Red key: license is invalid
- Yellow exclamation point (to the right of a key): subscription expired

You can of course install and activate the license keys with unattended installation. This also applies for remote computers.

The advantages of the License Manager:

- Central license management
- Display of license status (active/valid/invalid)
- Simple license key distribution to remote computers
- Indication of expired update subscriptions
- Central unattended installation and activation of license keys



Caution! License Manager offers the possibility of deleting license keys. Be aware however, that once license keys have been deleted they can not be reentered on the same machine – not even if they had been previously activated.

Note! Only use the Delete option in the License Manager, if you wish to delete licenses irrevocably on this machine. For example, if you wish to transfer User or Server Access license keys from one machine to another in order to split them between several servers.

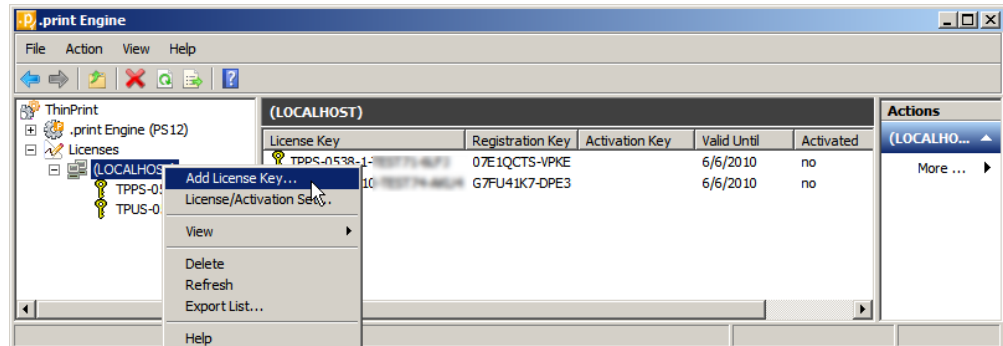
Demo licenses

Free demo versions of the various ThinPrint products can be downloaded from: www.thinprint.com/ → PRODUCTS → OVERVIEW → <product name>. Clicking the DEMO VERSION button opens a form requesting your contact information. Once the terms of the user license agreement have been accepted and the form has been filled out completely, ThinPrint will send you an e-mail with one or more demo license key/s (contain/s the word TEST in the fourth block, see Illus. 1).

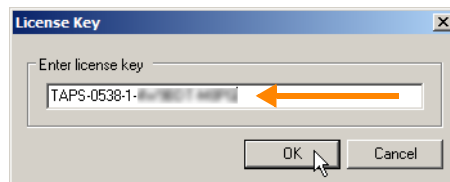
Many ThinPrint products have an integrated demo license key, so that you can immediately install and test them. To do this, select DEMO MODE during installation.

Entering a license During software installation, a windows or License Manager for entering license keys opens. License Manager can also be started separately in MMC.

- Select ADD LICENSE KEY... (Illus. 2); a new window opens (Illus. 3). Enter a (demo) key here (case sensitive!).

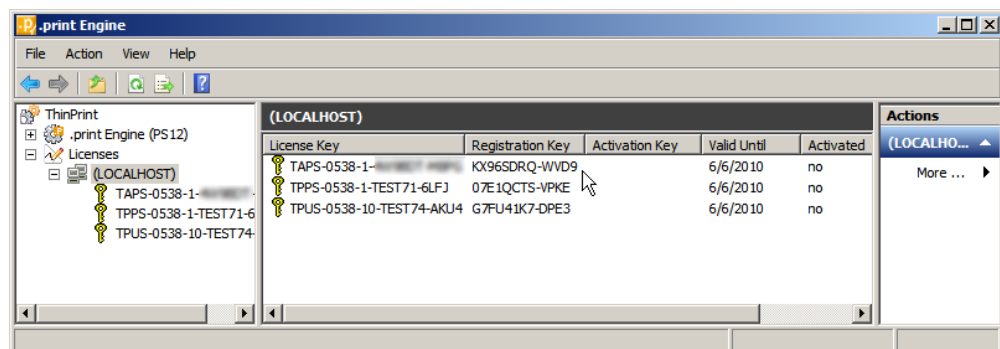


Illus. 2 Entering a license key



Illus. 3 Entering a license key

- Confirm with OK. The license key is now listed under LICENSE KEY (Illus. 4). A registration key appears automatically, and the time period during which the demo license key can be used is displayed under VALID UNTIL.
- Repeat this procedure for any further license keys required for the respective product (refer to Illus. 4, to the relevant handbook and/or to [Page 14](#)).



Illus. 4 License Manager with (demo) license keys

Demo licenses are fully functional for 30 days but cannot be activated. Printouts created with ThinPrint Output Gateway have a watermark. Once you have completed testing the software, you can purchase a full version from your nearest ThinPrint Reseller or Distributor. It is not necessary to uninstall the demo software version and its license key(s).

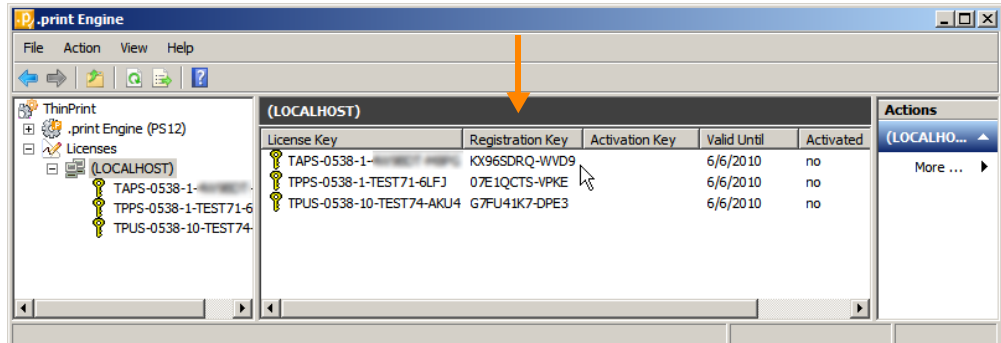
Testing software and activating licenses

Registered users

Once you have purchased a ThinPrint license, you should register as ThinPrint customer. On www.thinprint.com/ under SUPPORT→ CUSTOMER REGISTRATION you'll find a registration form. Besides your contact information, your license key is entered in this form. Once the form has been submitted, you will receive a customer ID and a password. As registered customer, you are given access to the Customer Download Area of the ThinPrint website, where you have fast, free access to ThinPrint software updates. You can also use the convenient support and activation area of the website (under SUPPORT).

Productive licenses

In contrast to a demo installation, when you install a purchased ThinPrint component, you enter a **productive** (or full) license keys (**instead of demo** license keys) in License Manager. If you have already installed the software as a demo version and now wish to install the productive license/s without reinstalling the software, simply open License Manager and enter the license key/s you received by e-mail – as described in "Demo licenses" ([Page 5](#)). License Manager then creates a registration key automatically; the registration keys are displayed in License Manager (Illus. 5).



Illus. 5 License Manager with Registration Keys

Note! Demo license key haven't got to be deleted from License Manager. The system applies the more valuable license automatically.



Caution! The License Manager offers the possibility of deleting license keys. Be aware however, that once license keys have been deleted they can not be reentered – not even if they had been previously activated!

All newly purchased ThinPrint software has a 30-day test period, which should be used to configure the software to the specific requirements of your IT environment and test its function. After configuration and trial period, the license can be activated to allow its use without time restriction.

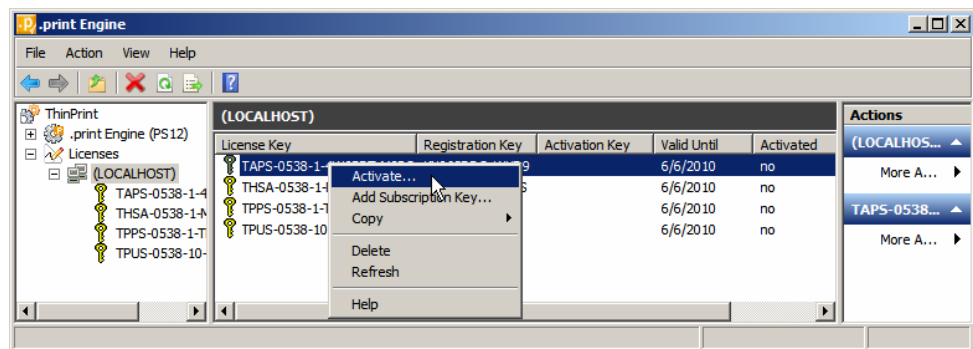
Note! If you want to test the ThinPrint software in a productive environment, ask your reseller for NFR license keys (not for resale). These licenses are full licenses which can be activated by the reseller. Unlike demo licenses, an **NFR license does not print with a watermark.**

License activation

Request activation of a productive license by entering the **license keys** and their **registration keys** in the form found on the ThinPrint website under SUPPORT→ SOFTWARE ACTIVATION. If you have not already registered as customer, you will be required to provide additional contact information as well as information about where you acquired your ThinPrint software. As an alternative, you can also send the activation information by e-mail to activation@thinprint.com (see the “Unattended installation and licensing of .print server components” white paper; [Page 19](#)).

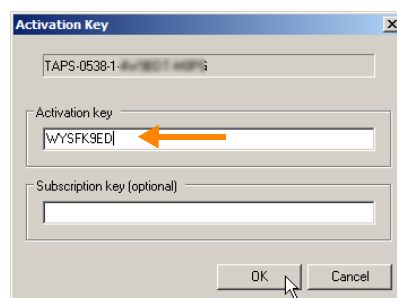
Within one workday you will receive **activation keys** and a subscription key each by e-mail.

- In License Manager, mark a license key to be activated.
Select **ACTIVATE** in the Context Menu (Illus. 6).



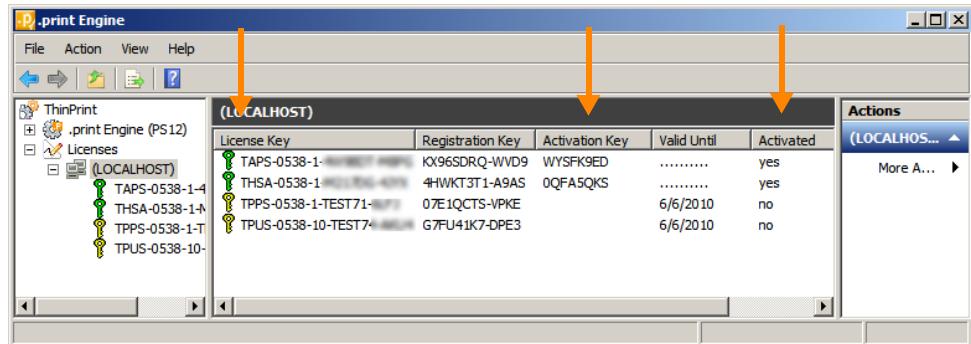
Illus. 6 Activating a license

- A window opens, in which you can enter the activation key (Illus. 7).



Illus. 7 Enter activation key

Once you confirm your entry with OK, the activation key (green) is displayed in License Manager and the ACTIVATED column shows YES. (Illus. 8).

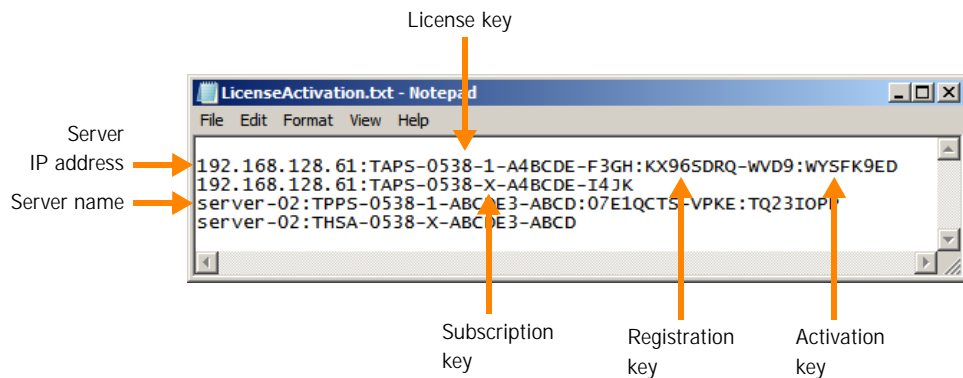


Illus. 8 Productive license activated

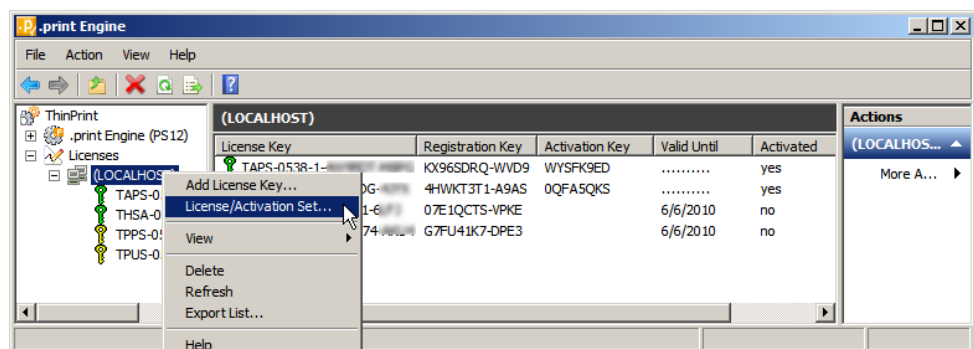
The ThinPrint software now no longer has a time limit to its use.

Multiple activations

If you sent the activation information to ThinPrint by e-mail in an **activation file** (see also the "Unattended installation and licensing of .print server components" white paper; [Page 19](#)), ThinPrint will activate the file (Illus. 9) and return it to you, you can also enter this file in the License Manager with LICENSE/ACTIVATION SET in the Context Menu (Illus. 10).

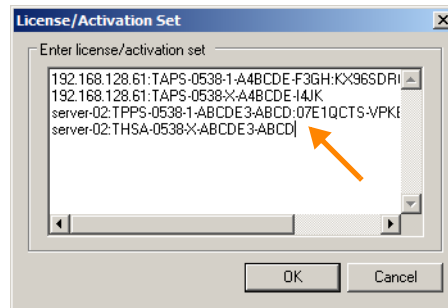


Illus. 9 Activation file returned by ThinPrint for two servers



Illus. 10 Activating multiple licenses simultaneously

- Select LICENSE/ACTIVATION SET (Illus. 10) in License Manager.
- Open the activation file (Illus. 9), mark either the entire file or only the entries valid for the specific server, and copy-and-paste the contents into License Manager (Illus. 11). Click OK.



Illus. 11 Paste the contents of the activation file

Reactivation

If a fundamental system modification has been made to a computer on which a ThinPrint license has been activated (e.g., domain change or installation of Active Directory Services), it could invalidate the activations. In such cases, the licenses are valid for 30 days and must be reactivated within that time.

Reactivation of licenses is also necessary if the software is to be run on a different server (e.g., if the first server has been replaced), because the server will automatically calculate new registration keys. To reactivate licenses, simply send an e-mail to activation@thinprint.com explaining why the licenses must be reactivated. You will be sent new activation keys and subscription keys.

Update to 8.0 with simultaneous server upgrade

If, while updating to version 8.0, you want to simultaneously upgrade the servers, (e.g. from server 2003 to 2008), proceed as follows:

- Install version 8.0 on the new server
- During the installation, select Demo Mode (printing with watermark)
- Enter and activate your 7.6 licenses in License Manager
- Then enter your subscription keys (printing without watermark)

Note! If you have **accidentally deleted a license key**, you can apply for a replacement from ThinPrint. To do this you need the license key, the registration key and the **4-digit code**, as shown in the appendix (see paragraph "Deleting a license key", [Page 14](#)).

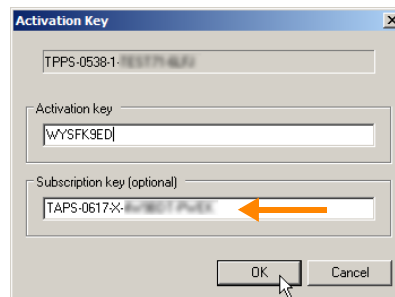
Update subscription

First installation

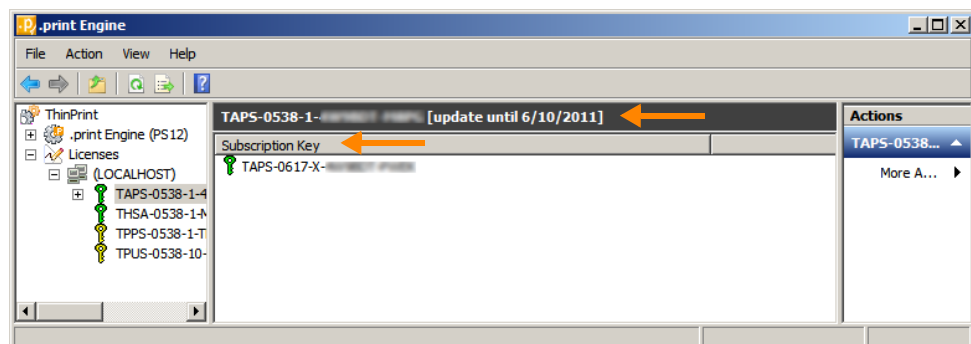
All ThinPrint licenses generally include a 12-month update subscription, which can be used as long as you have registered with ThinPrint as a customer. The update subscription entitles you to use all new software releases, which can be downloaded from the Customer Download Area of the ThinPrint website, without having to buy new licenses.

The subscription keys (have an X as the third block), which enable installation of updates to the software with a key's license, are sent with the activation keys.

- Enter a subscription key together with the activation key under ACTIVATE and confirm with OK (Illus. 12). Click on the node of the activated license key in License Manager (Illus. 13). The subscription key is automatically activated. You can now update your software released within subscription period.



Illus. 12 Enter subscription key together with activation key



Illus. 13 Node of an activated license with expiry date and subscription key

Use ADD SUBSCRIPTION KEY in a license key's Context menu (License Manager, Illus. 6) to enter subscription keys later ([Page 10](#)).

Update subscription renewal

The update subscription can be renewed at any time during subscription period. At that time you can take advantage of the "Early Bird Special", at a reduced update price. Four weeks before expiration, you will receive an e-mail notifying you that your update subscription is about to expire.

If your subscription has already expired, then you still have six months during which to extend your update entitlement, using the "Update Service". **If the update entitlement has not been renewed six months after the expiration of the update subscription, no further update service is possible.**

In addition, a yellow exclamation mark will appear before expiration next to the green icon of the license key in License Manager (Illus. 1, [Page 4](#)).

If you would like to maintain your access to updates thereafter, you can renew your update subscription with the Subscription Renewal Form on www.thinprint.com → SUPPORT → UPDATE SERVICE → RENEW YOUR UPDATE SERVICE HERE. Enter the license key(s) and select one of the renewal options (1 to 5 years).

Once the renewal fee has been paid, you will receive new subscription keys which enables the use of all updates released before the update subscriptions expire without reinstallation of the software.

Note! Even if the update subscription is renewed very early, the next subscription period of course first begins after the first period has expired.

Appendices

Customer service and technical support

Customer Service www.thinprint.com/ → SUPPORT
support@thinprint.com

List of licenses

Demo license key Many ThinPrint products have an integrated demo license key, so that you can immediately install and test them. To do this, select DEMO MODE during installation. Otherwise, demo keys are sent by e-mail from ThinPrint after a demo version download from the ThinPrint website. With the 30-day demo version, ThinPrint Output Gateway prints a watermark on all printed documents.

Example: THPS-0538-2-TEST01-ABCD

(Productive or Full) License key Included with every licensable component. Enables full use of the software for 30 days.

Example: THPS-0538-1-ABCDE5-FGH3

Registration key Appears in License Manager of each type of software after a license key has been entered. Must be included with the productive license key when requesting activation.

Example: E3QVM88R-YXEG

Activation key Sent by request. Once entered in License Manager, the activation key enables unlimited use of the activated ThinPrint license.

Example: 62LD5L20

Subscription key Sent with the activation key. Includes information about the subscription period for the associated license. Must be entered in the License Manager of the ThinPrint component. When the update subscription is renewed, a new key is added.
Example: THPS-0538-X-ABCDE5-ABCD

Products and license types

The following table shows a selection of ThinPrint licenses:

Product/License	Type of license key
.print Application Server Engine (32 bit)	THPR-0538-1 or TPPR-0538-1 + TPUS-0538-
.print Application Server Engine 64 bit	TAPR-0538-1 or TPPR-0538-1 + TPUS-0538-
.print RDP Engine (32 bit)	TRDP-0538-1
.print RDP Engine 64 bit	TADP-0538-1
.print Server Engine (32 bit)	THPS-0538-1 + THSA-0538- or TPPS-0538-1 + TPUS-0538-
.print Server Engine 64 bit	TAPS-0538-1 + THSA-0538- or TPPS-0538-1 + TPUS-0538-
.print Desktop Engine (32 bit)	THPR-0538-2
.print Desktop Engine 64 bit	TAPR-0538-2
.print Engine for VMware View	TPVM-0462-
.print Management Center	TPMC-0466-
.print Queue Manager <ul style="list-style-type: none"> • for terminal servers (32 bit) • for terminal servers (x64) • for central print servers (32 bit) • for central print servers (x64) 	<ul style="list-style-type: none"> • THRP-0330-1 • TARP-0330-1 • THSP-0330-1 • TASP-0330-1
.print Connected Gateway	THCG-0242-
.print Host Integration Service	TPHS-0330-1
.print V-Layer Basic	TPVL-0538-10

Examples for multiple licenses per product

.print Application Server Engine: user-based licensing

User-based licensing of an Application Server Engine requires the following licenses:

1. **TPPR-XXXX-1**

The .print Application Server Basic Pack is the basic license for user-based licensing of a terminal server.

2. **TPUS-XXXX-10**

.print Engine can not be installed using the basic license key only. Together with the basic license a license for 10 users is delivered. Additional user licenses can be purchased for 10, 20, 50 or 100 users, as required.

The number of licensed users for a license is shown in the third block of the license key, i.e. -10-, -20-, -50- etc.

.print Server Engine: server-based licensing

Server-based licensing of a Server Engine requires the following licenses:

1. **THPS-XXXX-1** (32-bit) or **TAPS-XXXX-1** (x64)

The .print Server Engine is the basic license for server-based licensing of a central print server or a web server under Windows.

2. **THSA-XXXX-1**

.print Engine can not be installed using the basic license key only. Every server using .print Engine on the central print server needs a .print Server Access License (Windows Terminal Server) or a .print Host Access License (non Windows Server). The Server Access License keys (THSA) will be delivered together with the license keys of the .print Application Server Engine (THPR or TAPR). The number of access licenses is shown in the third block of the license key, i.e. -10-, -20-, -50- etc.

Deleting a license key

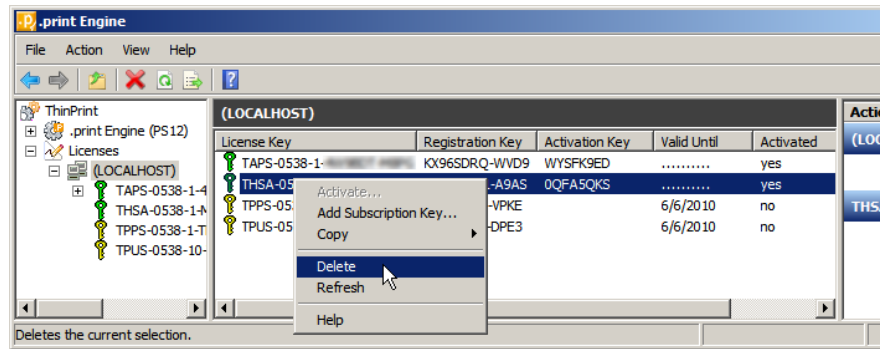
With License Manager it is possible to delete license keys.



Caution! Note that you can not reinstall license keys once they have been deleted, not even if they had been activated!

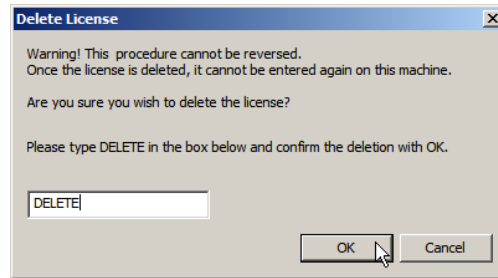
As it is not possible to reinstall license keys once you have deleted them, please take heed of the following:

- If you select a license key in License Manager you can choose DELETE in the context menu (Illus. 14).



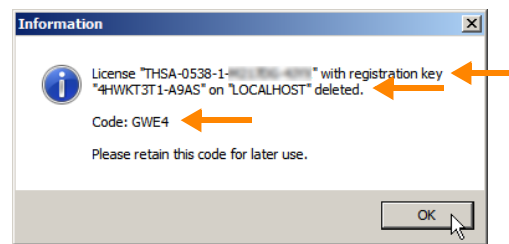
Illus. 14 Deleting a license key

- You will then be asked, if you are sure to with to delete the license (Illus. 15) If in doubt, choose CANCEL.



Illus. 15 Security prompt

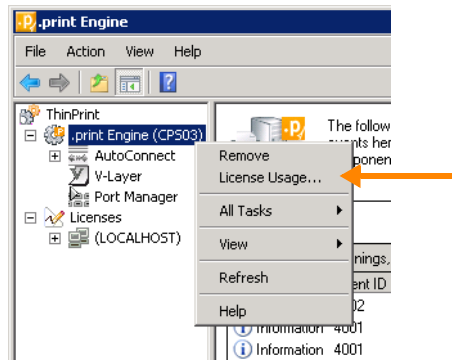
- If you choose OK, a window will open, giving you information about the license key deleted (Illus. 16). **Record this information (the license key, the registration key and the 4-digit code) or save a screen shot.** You may need this information later if you have to apply for a new license key from ThinPrint.



Illus. 16 Record the license key, the registration key and the 4-digit code

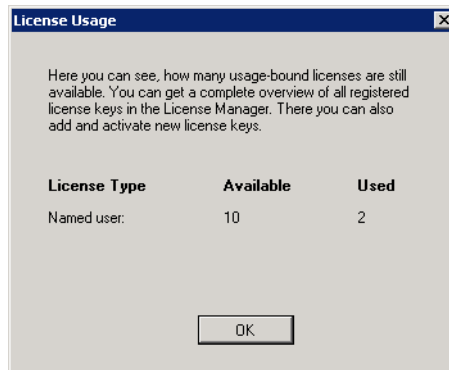
License usage

With both server-based and user-based licensing you can check how many licenses are already used. Select LICENSE USAGE in the respective .print Engine node (Illus. 17).



Illus. 17 Context menu of .print Engine node

Afterwards the license type, the number of licenses installed on this machine and the number of used licenses are shown (Illus. 19)



Illus. 18 License usage

Black/Whitelist

Black/whitelists can exclude or allow user or computer groups to access the ThinPrint printers of the printserver.

These lists are only relevant, if you have an environment in which only some staff members are using ThinPrint .print to print, but others are not. If all staff members are printing with .print, you don't need this list.

The access licenses TPUS (user-based) and THSA (server-based) counts the accesses; every access requires a license. The same goes for TPVM, which counts the virtual desktops. With the Black/whitelist you can define which users or computers are allowed to print or not. That way, you can exclude the consumption of licenses by groups for whom .print printing is not designated.

Whitelist Only those computers or users, appearing in the whitelist can print. If they were already able to print before the whitelist was created, they can continue to print. Anyone else trying to print will be rejected, but without taking up a license.

Blacklist Computers and users appearing in the blacklist, are not allowed to print, but nor do they use up a license. If they have already printed before the blacklist was created, they have already taken up a license, which will not be released when creating the list (except by a server restart). All computers and users that do not appear in the blacklist, are allowed to print.

Black/whitelist setup

There are two registry keys used with the black/whitelists - to identify which user groups or computer groups are involved, and whether they belong to either the blacklist (rejected) or the whitelist (approved).

With the first key, you specify which user or computer groups¹ of Active Directory are involved. Depending on the environment, the key is `TPMachineList` (THSA licenses), `TPUserList` (TPUS licenses) or `VMMachineList` (TPVM licenses for VMware View environments). Use the following path:

`HKLM\SYSTEM\CURRENTCONTROLSET\CONTROL\PRINT\MONITORS\THINPRINTPORT`

License	Registry Key (REG_SZ)	Value
THSA .print Server Engine, server-based licensing	<code>TPMachineList</code>	[name user or computer group in AD ¹]
TPUS .print Server Engine, user-based licensing	<code>TPUserList</code>	[name user or computer group in AD ¹]
TPVM .print Engine for VMware View; licensing per virtual desktop	<code>VMMachineList</code>	[name user or computer group in AD ¹]

With the second key, you can specify whether a Black or a whitelist is involved. To do so, use the following key, using the same path as used above:

`BWListFlags`

As determined by the first key (`TPMachineList`, `TPUserList`, `VMMachineList`) enter the registry value as specified in the table above and select decimal as the numbering system.

Registry Key (Reg_DWORD)	Black or Whitelist?	Registry Value (decimal)
<code>TPMachineList</code>	Whitelist	1
<code>TPMachineList</code>	Blacklist	3
<code>TPUserList</code>	Whitelist	4
<code>TPUserList</code>	Blacklist	12
<code>VMMachineList</code>	Whitelist	16

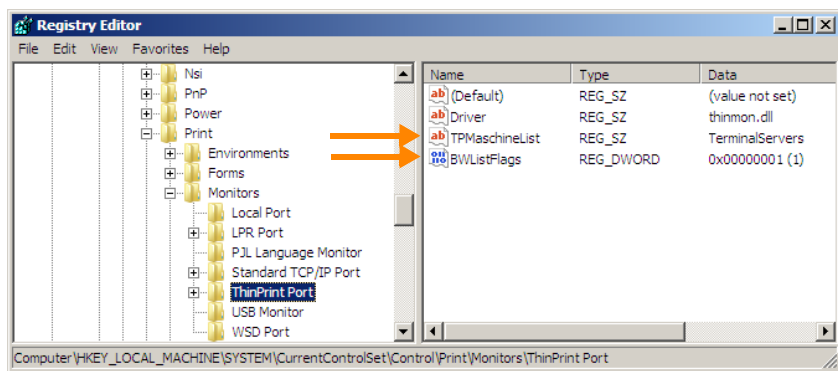
¹ You can also specify a domain. Syntax: `DOMAIN\GROUP`.

Registry Key (Reg_DWORD)	Black or Whitelist?	Registry Value (decimal)
VMMachineList	Blacklist	48

Example for black/whitelists

Example 1: Whitelist You want to place all your terminal servers in the whitelist. Use the registry key `TPMachineList`, which deals with the AD computer group. Enter as the value, the name of the AD group (here: `TerminalServers`, see Illus. 20, top arrow).

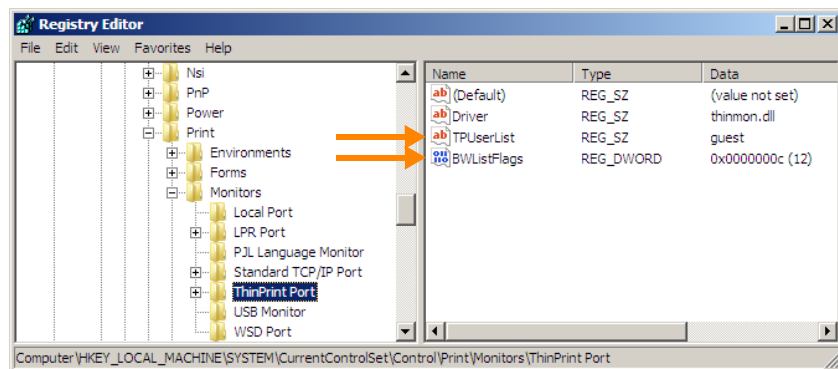
Set up `BWListFlags` as your second registry key to identify that this is a whitelist for a computer group (MachineList) with THSA licenses (Illus. 20 bottom arrow). Enter "1" as a decimal value (see table above).



Illus. 19 Example for whitelist: Registry key `TPMachineList` and `BWListFlags`

Example 2: Blacklist You are using a user-based license (TPUS) and wish to prevent your guest users from taking up licenses. To do this you add the guest account to the blacklist. Select `TPUserList` as your first registry key, enter the user group from the AD as your value, e.g. `guest` (Illus. 21, top arrow).

With your second registry key `BWListFlags` you will determine that this is a blacklist for user-based licensing (TPUS). Enter "12" as a decimal value (see table above) as shown in Illus. 21, bottom arrow.



Illus. 20 Example for blacklist: Registry key `TPUserList` and `BWListFlags`

Additional sources

Further information about ThinPrint .print can be downloaded from our website.

Manuals ThinPrint manuals are available at www.thinprint.com/ → PRODUCTS → OVERVIEW → <product name> → MANUAL(S).

White papers The "Unattended installation and licensing of .print server components" white paper can be downloaded at www.thinprint.com/ → PRODUCTS → OVERVIEW → <product name> → WHITE PAPERS or ... → SUPPORT → WHITE PAPER DOWNLOAD.