

TECHNIA TRANSCAT

ADDNODE GROUP



CAVA 1.27.x
for CATIA V5

Installation Guide

Revision 2016-03-02

Instruction symbols used in this manual

The following symbols are used in this guide; these should enable you to navigate throughout the text with greater ease:

Warning triangle



The warning triangle refers to *critical circumstances*, which should be considered imperatively in order to avoid serious problems in your work.

Note symbol



The hand symbol relates to *notes*, which you should pay attention to in order to assure that you can *work without problems*.

Hint symbol



The light bulb relates to *hints*, which provide you with practical examples to simplify your work.

Information symbol



The information symbol relates to *Information*, which illustrates a situation.

Work steps symbol



The work steps symbol relates to a *step-by-step instruction sheet*.

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1. System requirements



CAVA is supported only on systems certified for the corresponding CATIA release. For detailed software requirements, refer to the CATIA Program Directory that is included with CATIA software.

Supported operating systems

- Microsoft Windows XP Professional 32-bit SP3 (until CATIA V5-6R2012)
- Microsoft Windows XP Professional x64 Edition SP2 (until CATIA V5-6R2012)
- Microsoft Windows Vista Enterprise / Business Edition 32-bit SP1 (until CATIA V5-6R2012)
- Microsoft Windows Vista Enterprise / Business Edition 64-bit SP1 oder SP2 (until CATIA V5-6R2012)
- Microsoft Windows 7 Enterprise / Pro Edition 64-bit SP1 oder SP2



The last CAVA version supporting UNIX is CAVA 1.19.

Installation manuals of older versions are available on request at support.transcat@transcat-plm.com.

Supported CATIA versions and releases

CATIA V5R18 and later

CATIA V6R2012 to V6R2013x

CATIA 3DEXPERIENCE 2014x and later

2. Installing and Uninstalling

2.1 Installing and Uninstalling under WINDOWS

2.1.1 Installing



STEPS:

Do the following steps to install CAVA:

- (1) Start the installation routine in WINDOWS EXPLORER by double-clicking on the file name `cava_xxxx_RYY.exe`.)
(where *x* stands for the CAVA version number, *y* for the CATIA release number).
- (2) Follow the installation instructions displayed on the monitor, which will be explained in the following text.

After starting `cava_xxxx_RYY.exe` file; the following welcome screen will be displayed.

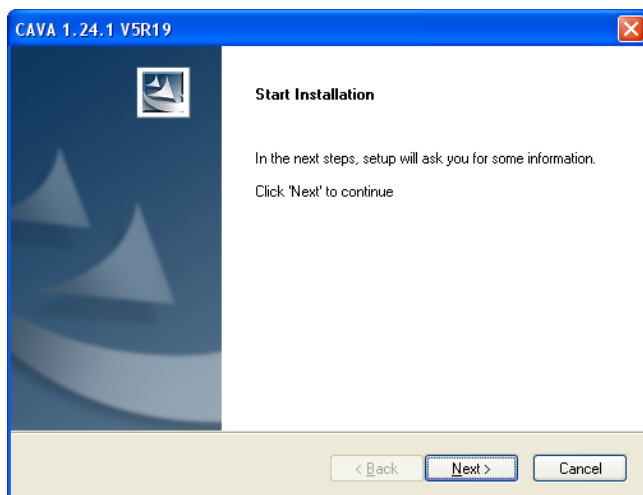


Fig. 2—1: “Welcome” screen of the CAVA installation routine

- To continue installing, click the *Next* button.
- To abort installing, click the *Cancel* button.
The installation preparation can be aborted in every one of the steps by clicking the *Cancel* button, as long as the installing itself not yet has been started. But if in the “Dialog box displaying the settings made for installation” (Fig. 2—11) the „*Next*“ button is clicked, the installation with the selected settings will be started with no return possibility.

If on the computer several instances of one CATIA release are installed, on the CATIA *Installations* window (Fig. 2—2) it can be selected in which one of the CATIA instances CAVA is to be integrated.

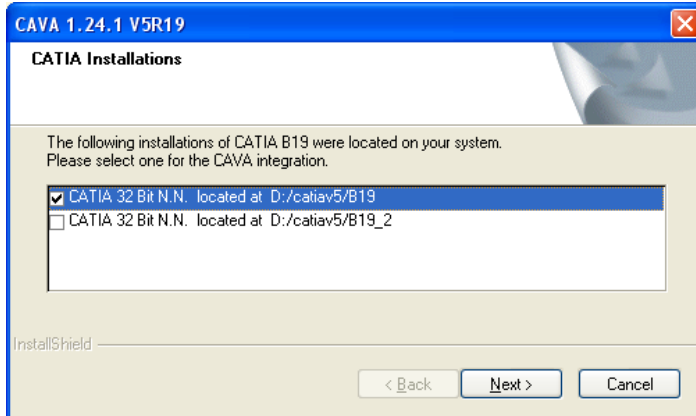


Fig. 2—2: Selection of a CATIA instance (here, only one instance is available)

Selecting the installation directory for the CAVA program files

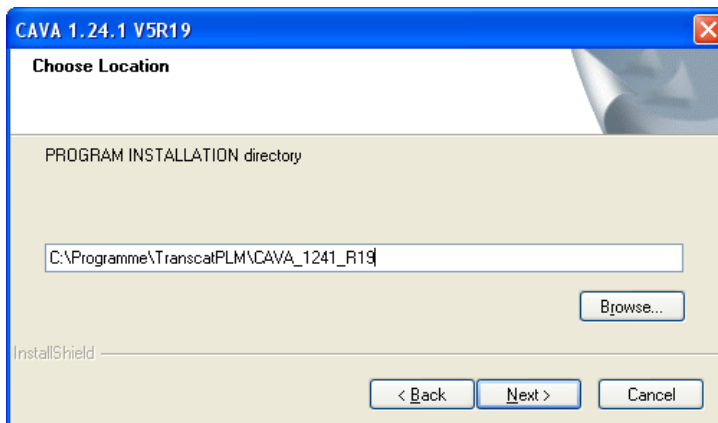


Fig. 2—3: Selecting the installation directory

In this dialog box, the installation directory for CAVA is to be selected. This window offers two alternatives:

- (1) To accept the indicated directory. To do so, press the „*Next*“ button, the next installation step will be initiated.
- (2) To define your own installation directory. To do so, press the *browse* button and select in the *Choose Folder* dialog box a target directory (see Fig. 2—4).

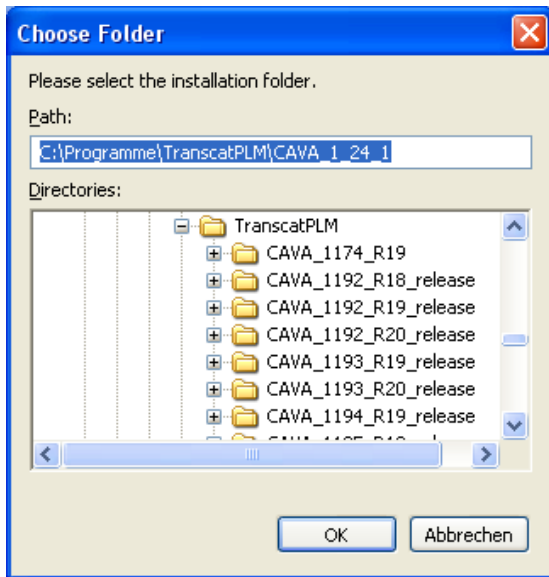
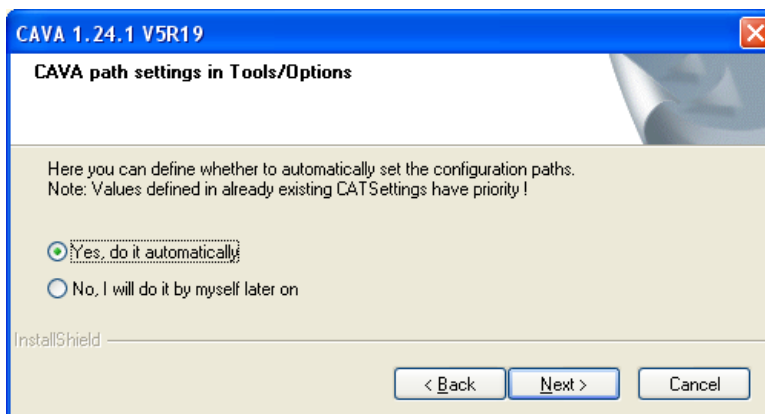


Fig. 2—4: Selecting your own installation directory

After having selected the directory, confirm the selection by clicking the *OK* button. After that, the preceding window will be reopened with the selected directory name filled in. After clicking the *Next* button, the *CATIA environment* dialog box will be opened.

Configuration settings

You can set the most important CAVA paths in the Tools/Options settings by default during runtime of the setup program. These paths are used only if no corresponding settings are available in the CATSettings.



(1) Set paths automatically

This option adds some variables to the CATIA Environment file for the following folders:

- Configuration
- Base Data Database
- DrawingTextCongfiguration
- Report Templates

If there are no existing definitions for this locations (e.g. from an older installation), the fields in the CAVA Tools/Options settings will contain a variable name which is linked to the paths from the CATIA Environment file

(2) Define the location later on inside the CAVA Tools/Options settings.

Preparing the CATIA environment

To make the CAVA workbench available in CATIA, an environment must be prepared. This can be made in two ways:

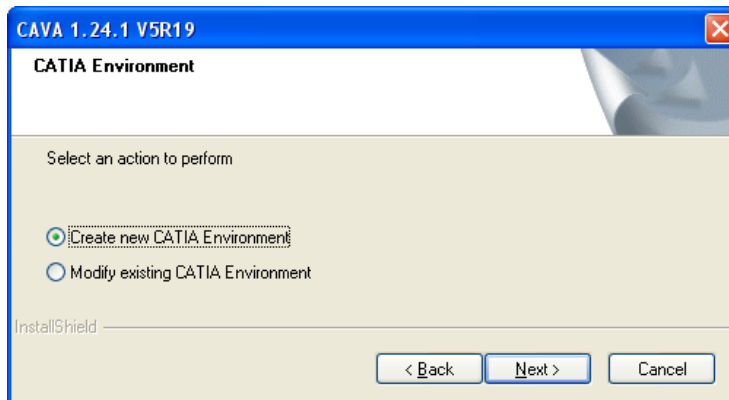


Fig. 2—5: Creating a CATIA environment

- (1) Create a new CATIA environment with all required entries *or*
- (2) Adapt an existing environment in order to integrate the CAVA workbench in it.

Both alternatives will be explained below.

Alternative (1): Creating a new CATIA environment

Select the *Create new CATIA Environment* option and click *Next* button. This opens the *Choose Location* dialog box.

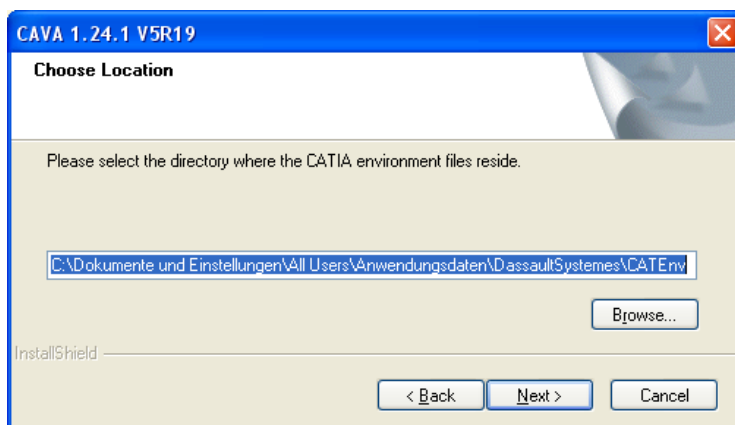


Fig. 2—6: Creating a new CATIA environment

Enter in the text box the name of the CATIA environment to be created, or select it using the file selection dialog box. After clicking the *Next* button, the *New CATIA environment* dialog box will be opened.

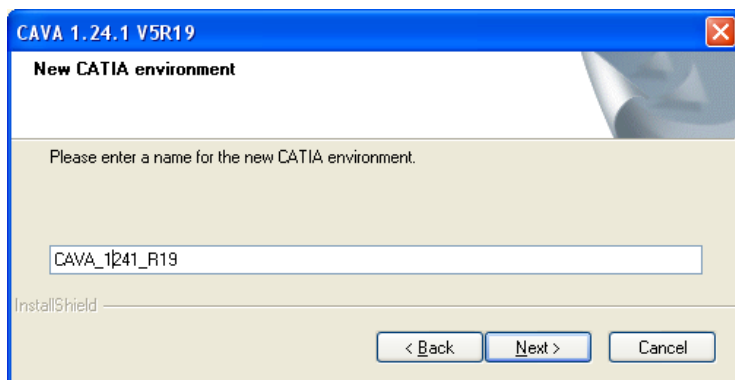


Fig. 2—7: Dialog box for defining the environment name

Enter in the text box the name of the new environment. It should be chosen a name indicating that it is a CATIA environment with integrated CAVA workbench. The name must contain no blanks.

If there should already exist a CATIA environment with the name you have specified, a dialog box will be opened with a message (see Fig. 2—8).

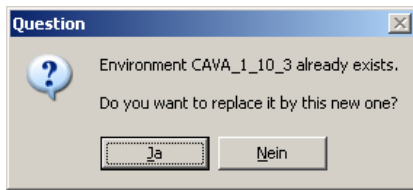


Fig. 2—8: Message pointing out that a CATIA environment with the respective name already exists

If the *YES* button is clicked, the existing CATIA environment will be replaced by the new one.

When the *NO* button is pressed, the *Creating a new CATIA environment* dialog box will be reopened (Fig. 2—6). Enter a different name for the CATIA environment to be created.

After clicking the *Next* button, the „*Check Setup Information*“ dialog box will be opened (Fig. 2—11).

Alternative (2): Adapting an existing CATIA environment

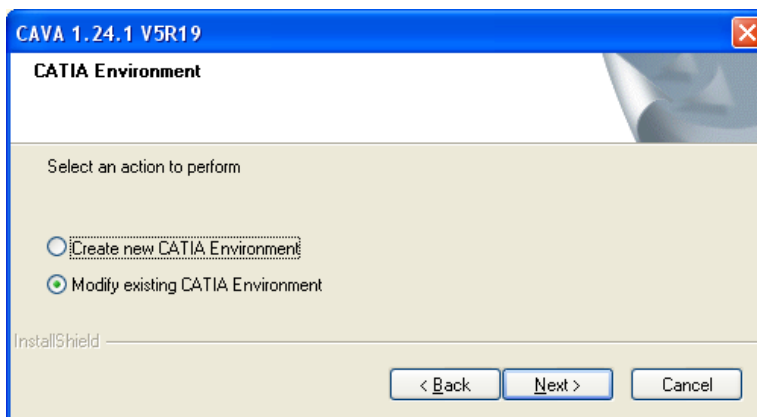


Fig. 2—9: Adapting an existing CATIA environment



Adapting an existing CATIA environment consists in adding to the text file with the environment variables the CAVA path information (additionally to the path information already existing on the programs to be loaded).

Select in CATIA in the *CATIA Environment* dialog box the *Modify existing CATIA Environment* option and click than the *Next* button.

After this, a file selection window is opened with the environment directory displayed that is preselected on your computer for the respective CATIA version. (Example: If you are

installing CAVA for CATIA R16, the environment directory preselected for CATIA R16 will be opened.)

If your environment files are saved in a different directory, open this directory.

Select now the CATIA environment file that you want to modify for the work with CAVA and click than the *Open* button.



If as directory to be adapted a file had been selected that already contains settings for CAVA, a warning message is displayed (Fig. 2—10). To resolve the problem, select one of the following procedures:

- (1) Delete the old CAVA settings from the environment file *or*
- (2) Create a new environment file.

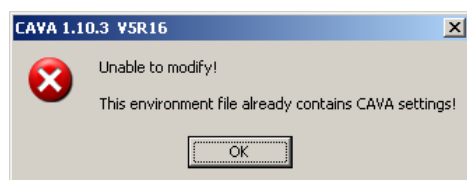


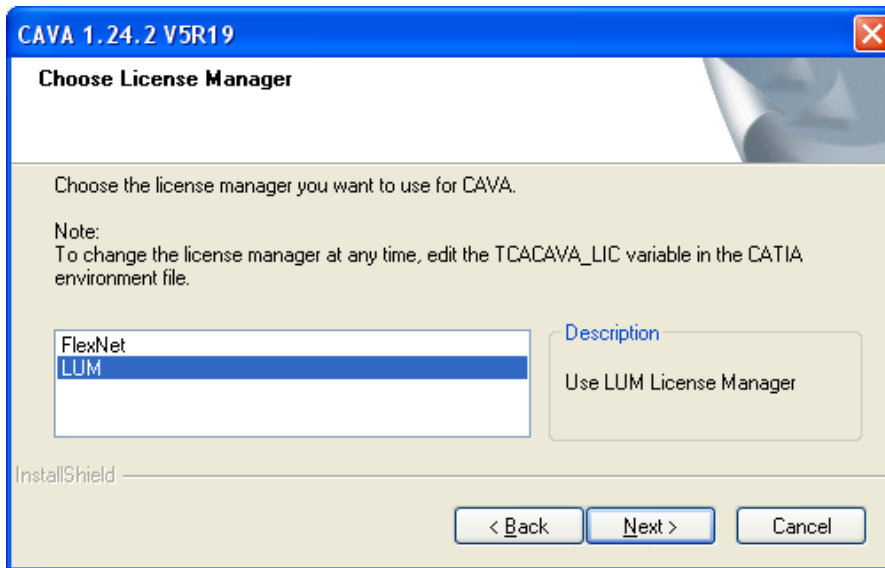
Fig. 2—10: Warning message displayed in case that an environment file has been selected that already contains CAVA settings.

Selecting license management

The next step is to define the license mechanism which you intend to use with CAVA.

Starting from version 1.24.2 it is possible to use FlexNet or LUM license mechanism.

Depending on your selection, the setup process will prepare specific entries in the CATIA environment file. Please refer to chapter 3 "License management" for more details.



After clicking the *Next* button, the „*Check Setup Information*“ dialog box will be opened (Fig. 2—11).

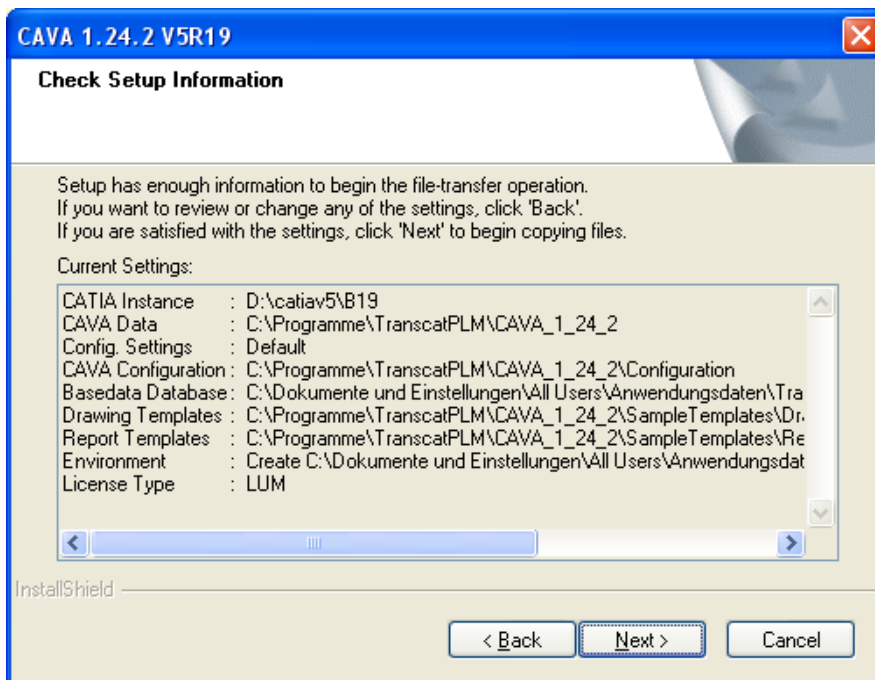


Fig. 2—11: Dialog box displaying the settings made for installation

In this dialog box, all settings selected for the installation are shown in order to be able to verify them before starting the installation. Control the settings.

If you want to modify the settings, click the *Back* button to return to the respective

dialog box. After verifying the settings, click on the *Next* button to create the CATIA environment and to start the installation.

Completion of the installation routine

After clicking the *Next* button, the CATIA environment is created and the installation is started. The installation progress is shown in the following dialog box.

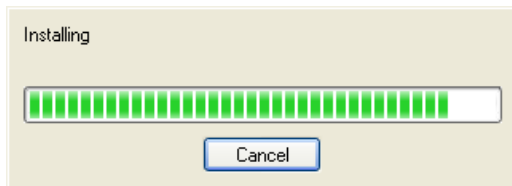


Fig. 2—12: Dialog box with the installation progress bar

In the course of the installation process, a message is displayed saying that a new environment file has been created or the selected environment file has been adapted, as the case may be (Fig. 2—13).



Fig. 2—13: Messages indicating the adaption and the creation of the CATIA environment respectively

When installing is completed, the following message is edited (Fig. 2—14).



Fig. 2—14: Installing completed

Confirm this message by clicking the *Finish* button.

For the newly-created CATIA environment, now on your PC desktop an icon is available with the environment name, you have just entered. With this icon, you can start CATIA with integrated CAVA workbench.

The installation directory now contains the following directories:

• Intel_a or • win_b64	Contains the CAVA program files.
• Configuration	Contains the CAVA configuration files in several sub folders.
• SampleTemplates	Contains the DrawingTextConfiguration and ReportTemplates sub-directories with some pre-defined sample templates, which can be used as base to create own templates that fit to your own special need.
• ReferenceParts	Contains files that are referenced by certain CAVA features to create geometry.



When the installation is accomplished, it is strongly recommended to check up the adapted CATIA environment. Some circumstances (write protection, very complex CATIA environment etc.) might have affected the adaptation.



Before starting the work with CAVA, some basic settings must be done.

In the CAVA *General* manual you can learn which settings must be made imperatively, and which ones are optional.

2.1.2 Uninstalling



STEPS:

To uninstall CAVA, do the following steps :

- (1) Click in WINDOWS the *Start* button and select the menu sequence *Settings > Control Panel > Add/Remove Programs*.
- (2) Select CAVA and click the *Add/Remove* button.

3. License management

3.1 License types

You can choose between FlexNet and LUM license management.

Prior to CAVA 1.24.2 for V5, only LUM license management is available.

FlexNet and LUM license keys are not compatible with each other. Please order the required type of license key from TechniaTranscat.

To use CAVA with FlexNet or LUM licensing, choose the corresponding option during CAVA installation. To change the license manager at any time, edit the `TCACAVA_LIC` variable in the CATIA environment file:

License Manager	Environment Variable
LUM	TCACAVA_LIC=LUM
FLEXNET	TCACAVA_LIC=FLEXNET

Two licenses schemes are available:

Licensing scheme	Description
<i>NODELOCK</i>	Password valid only on one computer (license is bound to the CPU number).
<i>CONCURRENT</i>	License is available in the network, license server is essential. Concurrent licenses are also called "floating licenses".



Note:

On PCs, licenses can be enrolled only by user with administrator rights.



Note:

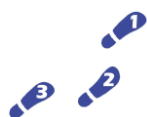
For CAVA different license packs are available. Before starting the work, under the menu item *Tools > Options > Infrastructure > Cava Vehicle Architecture* it must be set which license is to be used. Depending on this setting, for the user afterwards different modules will be available. See "CAVA GENERAL MANUAL".

3.2 LUM Licenses

3.2.1 Installing a Nodelocked License (LUM)

The *Nodelock* password must be added to the `nodelock` file, which can be edited with a text editor. Dependent on the operating system, this file is in one of the following directories:

Operation system	Directory
WINDOWS XP	c:\Documents and Settings \All Users\Application Data\IBM\LUM
WINDOWS VISTA/7	c:\ProgramData\IBM\LUM



ENROLLING A NODELOCKED LICENSE

In the license e-mail, sent by TechniaTranscat you can find a text similar to the following example:

Put the following 2 lines into your `nodelock` file:

```
# TransCAT: TC-qchecker-all, version 1.x, expiration date 12/31/2037
7db765b90080.02.81.96.00.18.00.00.00 64tkq3wfxi2gzci5j7t8p49keaa "" "1"
```

For the step *"Incorporate password"*, copy the last two lines, starting with the number sign # (including it), and insert these two lines in your `nodelock` file.

3.2.2 Installing a Concurrent License (LUM)

Concurrent licenses are generated for a specific license-server and are bound to its CPU ID. As a precondition a *LUM License Manager* must be installed, configured and activated, so that *Concurrent* passwords can be entered. To enroll the license keys of the *Concurrent* type, you can use: the *i4blt command line interface* (in all platform cases) or the *Graphic User Interface* (since LUM version 4.6.5 for WINDOWS)

For more information refer to the *LUM Documentation* delivered with your operating system—chapter 6 *"Using License Use Management Runtime"*.



Note:

A license can be entered only by users, having administrator rights.

The tools and entries for the license manager are located in the following directories:

Operating System	Directory
WINDOWS (XP/Vista/7)	X:\i4b\WIN\BIN (X is the drive, on which <i>LUM</i> is installed)

Enrolling a Nodelocked License

The registration can be made in three ways:

- **Automatic registration**

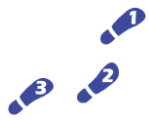
If you have got the license certificate as e-mail attachment, automatic registration is recommend.

To install the license, store the file on the *LUM* server in a directory of your choice. Then enter the following command:

Command	Description
<code>i4b1t -a -f filename</code>	' <i>filename</i> ' stands for path and name of the certificate file stored on the LUM server.

- **Registration using the *IMPORT* function of the *GUI i4b1t* version**

After starting the *GUI i4b1t* version, the license certificate file can be read in and registered by the means of the *IMPORT* function.

**STEPS:**

Proceed as follows:

- (1) Start the `i4blt` tool.
- (2) Select the *Products* menu > *Single product...* submenu.
- (3) The *Enroll Product* window is opened. Press there the *Import* key.
- (4) The *Import* window is opened. Select there the license certificate and confirm by pressing the *OK* button.
- (5) After the return to the *Enroll Product* window, conclude the registration pressing the *OK* button.

- **Manual registration with the *i4blt* command line interface**

To enter the license, use to following syntax:

```
i4blt -a -n Server-Name -v "VendorName [VendorID VendorPassword]"
-p "ProductName ProduktVersion ProductPassword"
```

(The text above is shown on the screen in one line.)

Example:

```
i4blt -a -v "TransCAT 7db765b90080.02.81.96.00.18.00.00.00 ak9nui9b2ftjs" ##
-p "TC-qchecker 1 46pdi5veptf5wket9xriygptqpnaaaa"
```



Note:

- The text must be entered in one line without line brake.
- The two number signs ## stand for 1 space sign.

The parameters are to be entered in analogy to the following example.

Note: For the exact parameters to be used for the different key words, please, refer to your license certificate. The parameters used in the following example can differ from the parameters in your license certificate.

Example:

```
# i4admin -a -v "TransCAT" 7db765b90080.02.81.96.00.18.00.00.00 chh5afnqs6jx6
# i4admin -a -p "TransCAT" "TC-qcheckerV5" vmbif9d3s3vfcttqcpaiv83ug2qsaaa "1"

[LicenseCertificate]
Checksum=D08CE54292F1ECE4720A49A52ADC70E1
TimeStamp=382196610
VendorName=TransCAT
VendorPassword=chh5afnqs6jx6
VendorID=7db765b90080.02.81.96.00.18.00.00.00
ProductName=TC-CAVA-ALL
ProductID=5000
ProductVersion=1
ProductPassword=vmbif9d3s3vfcttqcpaiv83ug2qsaaa
ProductAnnotation=
LicenseStyle=concurrent
LicenseStartDate=02/05/2002
LicenseDuration=14214
LicenseEndDate=12/31/2037
LicenseCount=1
MultiUseRules=none
RegistrationLevel=3
TryAndBuy=No
SoftStop=No
TargetType=13
TargetTypeName=IBM AIX
TargetID=4fbf5a4c
```

3.3 FlexNet Licenses

Starting with CAVA 1.24.2, it is possible to use FlexNet licensing. To use FlexNet licensing, choose the FlexNet option offered during CAVA installation.

3.3.1 Installing a Nodelocked License (FlexNet)

If you use a nodelocked license for CAVA, you do not need to install a license server manager.

To configure nodelocked licenses for CAVA, follow these steps:

- (1) Identify the FlexNet Hostid of the machine where CAVA is installed. See chapter 3.3.3, Identifying the FlexNet Hostid.
- (2) Order the required license key from TechniaTranscat.
- (3) Place the license file in a local directory, for example `C:\Flexnet\nodelock`
- (4) Set the `TRANSCAT_LICENSE_FILE` environment variable to the path of the license file, for example

```
TRANSCAT_LICENSE_FILE=c:\Flexnet\nodelock\mylicense.lic
```

3.3.2 Installing a Concurrent License (FlexNet)

If you use concurrent (floating) licenses, you need a license server manager. Download the following required software:

<https://www.transcat-plm.com/support/downloads/flexnet-publisher.html>

- FlexNet License Server Manager and Utilities, version 11.12 or later
- TRANSCAT vendor daemon (CAVA version 1.27.1 or later requires TRANSCAT vendor daemon 11.12.1.4 or later)

Please consult the *FlexNet Publisher – License Administration Guide* for installation details. You can either use `lmadmin` (recommended) or `lmgrd` as license server manager for CAVA.

Installing concurrent licenses on the server

To configure concurrent licenses for CAVA, follow these steps:

- (1) Identify the hardware hosting the license server manager. Note that CAVA requires FlexNet license server manager to run on a non-virtual machine.
- (2) Identify the FlexNet Hostid of the hardware hosting the license server manager. See chapter 3.3.3, Identifying the FlexNet Hostid.
- (3) Order the required license keys from TechniaTranscat.

Place the TRANSCAT vendor daemon and the license file in a directory on the license server. Usually, these files are placed in the `INSTALLDIR` of the FlexNet license server manager.

- (4) Run `lmadmin` or `lmgrd` to configure the license server.
- (5) Set TRANSCAT as the vendor daemon (see *FlexNet Publisher – License Administration Guide*).

Configuring clients

To use concurrent licenses, set the environment variable on each client computer:

```
TRANSCAT_LICENSE_FILE=port@myserver
```

Alternatively you can use this environment variable:

```
LM_LICENSE_FILE=port@myserver
```

Replace `port` with the port for connecting to the license server, and `myserver` with the license server name. If necessary, contact your system administrator about port and server details.

3.3.3 Identifying the FlexNet Hostid

The FlexNet license must be "locked" to its server. There are several ways to lock the server, to the machine's network adapter using its physical address (MAC), or to another unique ID on the machine such as a hard disk ID or a CPU ID. We recommend using the physical address of use the primary network adapter.

Use one of the described methods (`ipconfig`, `lmutil`, `lmtools`) to identify the Hostid:

Using `ipconfig`

IPCONFIG is a built-in Windows command for configuring and reading the network settings. At the command prompt, enter the command:

```
C:\> ipconfig /all
```

The output for the command should look similar to the following example:

```
Ethernet adapter Local Area Connection:
```

```
Connection-specific DNS Suffix . . :  
Description . . . . . : Linksys LNE100TX  
Physical Address. . . . . : 00-05-6E-1A-42-C4  
DHCP Enabled. . . . . : No  
IP Address. . . . . : 192.168.xxx.xxx  
Subnet Mask . . . . . : 255.255.255.0  
Default Gateway . . . . . : 192.168.1.1  
DNS Servers . . . . . : 128.xxx.xxx.xxx  
                          128.xxx.xxx.xxx
```

The FlexNet Hostid is the physical address of the primary network adapter. In the given example, the Hostid is 00-05-6E-1A-42-C4.

Using `lmutil.exe`

`lmutil.exe` is a command line license utility. You can download this file from the TechniaTranscat website at <http://www.techniatranscat.com>.

At the command prompt, enter the command:

```
C:\flexlm\> lmutil.exe lmhostid -ether
```

The output for the command should look similar to the following example:

lmutil - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.

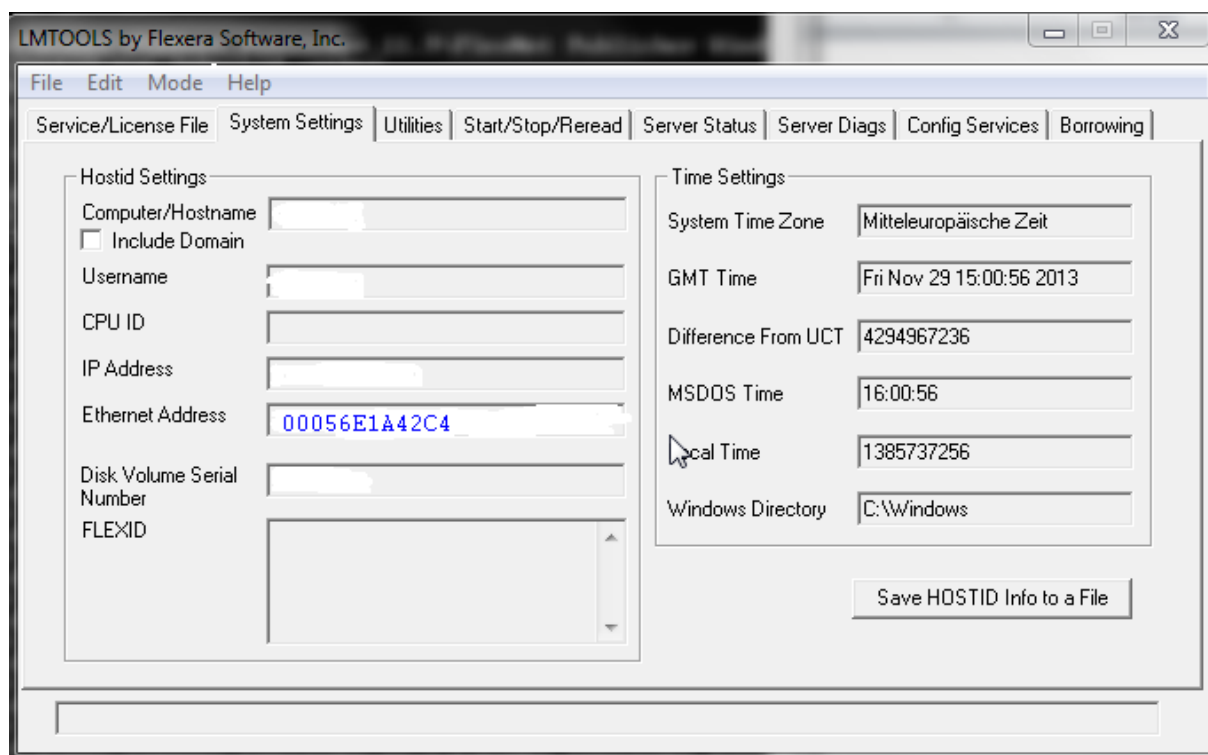
The FlexNet host ID of this machine is "00056E1A42C4".

Using lmtools.exe

lmtools.exe includes a wide range of tools for diagnosing and testing. You can download this file from www.techniatranscat.com.

To determine the hostid, run lmtools.exe.

Choose the System Settings tab, as shown in the screen shot below.

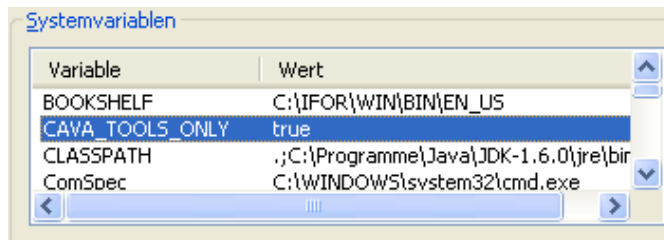


The Ethernet Address is the FlexNet hostid.

3.4 Silhouette functionality in the Generative Shape Design (GSD) workbench

If you are using the CAVATOOLS or the CAVA ALL license and you want the *Silhouette* functionality to be available not only in the CAVA Workbench but also in the Generative

Shape Design (GSD) workbench, create a system variable named CAVA_TOOLS_ONLY and sets its value to *true*.



* * *