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VWGRCLite "License Borrowing" Borrowing FlexNet Licenses under Windows EN

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Preface

For the creation of this documentation, the following programs were used:

- Microsoft® Windows 7® Enterprise Service Pack 1
- FlexNet® License Manager v11.12.1.4
- VWGRCLite 5.4.1.0

If not stated otherwise, this documentation also applies to other Microsoft® Windows® operating system versions, FlexNet®-versions of VWGRCLite approved by VOLKSWAGEN.

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1 General

This document briefly describes the "Borrowing" of VWGRCLite CAx Floating licenses, as is currently possible.

"*Other applicable documents*" referred to at various points in this document, are to be observed.

The use of "Borrowing" is at your own risk and will not be supported individually in case of problems!

"Borrowing" allows the user to borrow floating licenses from the FlexNet license server. The borrowed licenses can be used locally on the machine without connection to the license server (offline) for a specified period.

The following topics are covered:

- Prerequisites
- Procedure of "Borrowing" ("Imtools", "Imutil", Variable LM_BORROW)
- Optional control options of borrowing (opt-file)
- Examples for error screens

The figures and scenarios in this document are examples only. Your own installation may differ from these examples.

For more information, please see the FlexNet 11.12 Original Product Documentation.

Due to capacity reasons and permanently changing boundary conditions, VWGRCLite as well as the license framework are in a continuous development process. Thus possible extensions of the functionality of "Borrowing" might not always have been documented promptly.

1.1 Readership

This document is intended for FlexNet VWGRCLite administrators who want to enable their users to borrow VWGRCLite CAx license features.

It is strongly recommended that the administrator informs the users about the company-specific borrowing rules and the borrowing process.

1.1.1 Convention VWGRCLite CAx licenses with key word "BORROW"

As of January 1st 2016, all new VWGRCLite floating licenses are delivered with "Borrowing" functionality.

Note: Nodelocked licenses are excluded from "Borrowing". By storing the Nodelocked license file locally and by corresponding configuration of the VWGRCLite system variable "VWGRCLITE_LICENSE_PATH", offline use is possible.

Depending on the underlying license model, the license features for a possible "Borrowing" are set up. The maximum borrowing duration, which can be seen in the key word "BORROW" in the license feature line, can be found in table 1-1 below. The borrowing period is limited by the license period. Borrowing is only possible as long as the license is valid.

If you have an older, but still valid floating license for which you want to use "Borrowing", as of January 1st 2016 you can apply for a license switch. The license switch is **not** free of charge and will be checked for plausibility! The necessary form can be found under following link: <u>https://servicenet.t-systems.com/orderprocess</u>.

Floating License Feature	License Definition on maximum borrowing duration in hours (BORROW= <hours>) Note: The borrowing period is generally limited by the license period</hours>
VWGRCLITE	BORROW=9528 → License period
All other VWGRCLite CAx Li- cense features, e.g.: CV5_VALIDAT_BASIC CV5_NTOOL CV5_OUTGEN CV5_VTA CV5_NETLINE CV5_CADGLYPH CV5_BOMTOKSL CV5_ELENA CV5_EETOOLS usw.	BORROW=169 → 1 week plus 1 hour

Table 1-1 Overview License features / maximum borrowing duration

Note: For borrowed licenses the licensing law is to be observed also. A transfer of the license to a third party, unauthorized licensees or users is prohibited!

2 Prerequisites (To-Do Administrator)

To use "BORROWING", the following is necessary:

- FlexNet Server 11.12.1.4 with VW Daemon (vwagkdoe)
- <u>VWGRCLite Installation as of version 5.4.1.x</u>
- FlexNet System Variable LM_LICENSE_FILE
- <u>VWGRCLite CAx Licenses with Key Word "BORROW" in the license feature lines</u>
- FlexNet Tools: Imtools / Imutils

2.1 FlexNet license server

The Flexera FlexNet License Manager is installed on a server in the network and is configured for the use of VWGRCLite CAx licenses

The FlexNet Service is up and running. The floating licenses provided in the license file can be used by the client. For details, see document "Enabling_FlexNet_License_for_VWGRCLite.pdf".

The configured license file contains VWGRCLite CAx License feature with Borrowattribute.

FlexNet 11.12.1.4 is released for the VWGRCLite Borrowing functionality. The software and documentation can be found on T-Systems ServiceNet under the following link: <u>https://servicenet.t-systems.de/flexIm</u>.

2.2 VWGRCLite environment is installed and executable interactively

VWGRCLite has been installed and configured on the client. The environment variable "VWGRCLITE_LICENSE_PATH" has been set up according to the license server and VWGRCLite can be started if a network connection to the license server is available.

As of VWGRCLite 5.4.1.x, "Borrowing" is supported by VWGRCLite CAx applications (e.g.:Validat, NTool, Netline, VTA, RPS, LTA, KVS PlugIn).

In one step of the borrowing process, VWGRCLite can be started interactively (GUI) or via the command line (catstart.bat). The examples used in this document were started via VWGRCLite GUI.

2.3 FlexNet system variable LM_LICENSE_FILE

The FlexNet variable "LM_LICENSE_FILE" has to be set on the client machine.

Details on the use of the variable LM_LICENSE_FILE can be found in the original FlexNet Product Documentation.

In general, the value from variable VWGRCLITE_LICENSE_PATH can be adapted to variable LM_LICENSE_FILE.

Examle Windows 7 computer with German locale: Start \ Control Panel → System and Security →→ System →→→ Advanced System Settings →→→→ Environment Variables →→→→enter LM_LICENSE_FILE manually under system variables

Note: When specifying several values for LM_LICENSE_FILE on Windows, the semicolon ";" has to be used as separator.

Example 1: Variable LM_LICENSE_FILE defined with a FlexNet Server				
Example with a FlexNet Server for VWGRCLite	CAx Licenses.			
Examle Windows 7 computer with German Start \ Control Panel \rightarrow System and Security $\rightarrow \rightarrow$ System $\rightarrow \rightarrow \rightarrow$ Advanced System Settings $\rightarrow \rightarrow \rightarrow \rightarrow$ Environment Variables $\rightarrow \rightarrow \rightarrow \rightarrow$ enter LM_LICENSE_FILE manual	n locale: Illy under "system variables"			
System Properties				
Computer Name Hardware Advanced System Protection Remote	Environment Variables			
You must be logged on as an Administrator to make most of these changes.	User variables for sitani			
Performance	Variable Value			
Visual effects, processor scheduling, memory usage, and virtual memory Settings	TEMP %USERPROFILE%\AppData\Local\Temp TMP %USERPROFILE%\AppData\Local\Temp			
User Profiles				
Desktop settings related to your logon	New Edit Delete			
Settings	System variables			
Startup and Recovery	Variable Value			
System startup, system failure, and debugging information	windir C: Windows			
Settings	windows_tracing_flags 3			
Environment Variables	New Edit Delete			
OK Cancel Apply	OK Cancel			
	Variable name: M LTCENSE ETLE			
	Variable value: @hoet1234			
	OK Cancel			

The environment variable LM_LICENSE_FILE may contain the value: [Port]@[Server] or @[Server]. Here it has the value "@host1234"; the same value is set for VWGRCLITE_LICENSE_PATH.

Note: Save all changes by clicking the button "OK" in each individual open dialog. Otherwise changes will not be saved.

Example 2-1 Variable LM_LICENSE_FILE defined with a FlexNet server

Example 2: Variable LM_LICENSE_FILE defined with two values

Example with a VWGRCLite CAx Nodelock license file (here: C:\Lic\ValBasicNode.dat) and a FlexNet Server (here: @host1234). **Note**: For licenses in a Nodelock license file, Borrowing does not have to be carried out!

Examle Windows 7 computer with English locale:

Start \ Control Panel

- \rightarrow System and Security
- $\rightarrow \rightarrow$ System

 $\rightarrow \rightarrow \rightarrow$ Advanced System Settings

 $\rightarrow \rightarrow \rightarrow \rightarrow$ Environment Variables

 $\rightarrow \rightarrow \rightarrow \rightarrow$ enter LM_LICENSE_FILE manually under "system variables"

puter Name Hardware Novancoo System Protection Nemote	User variables fo	r sitani
ou must be logged on as an Administrator to make most of these changes.	Variable	Value
Performance	TEMP	%USERPROFILE%\AppData\Local\Temp
Visual effects, processor scheduling, memory usage, and virtual memory	TMP	%USERPROFILE%\AppData\Local\Temp
Settings		
Jser Profiles		New Edit Delete
Desktop settings related to your logon	System variables	
Settings	Variable	Value
Deter and Decemen	VWGRCLITE_K	_DATA C:\vwg\data
Startup and Recovery	VWGRCLITE_K	PATH C:\vwg
system startup, system failure, and debugging information	VWGRCLITE_L	ICENSE_PATH C:\Lic\ValBasicNode.dat;@host12
Settings	7	
		New Edit Delete
Environment Variables	· · · · · · · · · · · · · · · · · · ·	
		OK Cance
OK Cancel Apply	New System Varia	ble 💌
	Variable name:	LM_LICENSE_FILE
	Variable value:	▷:\Lic\ValBasicNode.dat;@host1234
		OK Cancel

LM_LICENSE_FILE has the value "C:\Lic\ValBasicNode.dat;@host1234"

Note: Save all changes by clicking the button "OK" in each individual open dialog. Otherwise changes will not be saved.

Example 2-2 Variable LM_LICENSE_FILE defined with Nodelocked license file and FlexNet Server

2.4 License feature with Borrowing attribute

Borrowing FlexNet licenses is only possible if the "Borrowing attribute" has been added to the respective license feature during license generation. For further details, please see <u>Convention VWGRCLite CAx licenses with key word "BORROW"</u>.

For the features "VWGRCLITE" and "CV5_VALIDAT_BASIC", such a license could look like this (Figure 2-1):

```
#Firma: Company XY
  1
  2
     #Lizenz-ID: 3644220572.29
     #=== Anfang der Lizenz ===
  3
  4 SERVER host1234 ECF4BB1185FE
  5
     DAEMON vwagkdoe
  6 FEATURE VWGRCLITE vwagkdoe 1.0 31-mar-2016 9999 BORROW=9528
         SIGN="08CE DB91 BC7F 39A8 BCAA 5A16 339D 91FD 62FE 121C CE51 \
  7
  8
         80EB AEAD D54E 1035 0D2C 2552 938A 69B2 10D8 B802 64AE 518B \
  9
         31AD 5303 C9CA AC5E 219F 990A B03C"
 10 FEATURE CV5 VALIDAT BASIC vwagkdoe 1.0 31-mar-2016 2 BORROW=169
         SIGN="01D6 2788 9A15 2429 85F0 498C F18E A6CC 4BBB 7E07 2EDA \
 11
         4E47 11EF 9A2D 5C31 0415 650C 3719 475D CF86 F444 D669 E110 \
 12
         7510 6C7F C1B3 AD8C 5D39 8E87 80A0"
 13
Figure 2-1: Example license with Borrow
```

Explanations:

9999 BORROW=9528

9999 \rightarrow the number of licenses (here 9999 for the feature VWGRCLITE)

BORROW=9528 \rightarrow the borrowing attribute with number of hours indicating the maximum borrowing duration of a license (here 9528 hours \rightarrow as the license period generally is one year, the license feature VWGRCLite can be borrowed for the entire term of the license period). In addition, the borrowing period is limited by the license period (in this example March 31st 2016).

2 BORROW=169

2 \rightarrow the number of licenses (here 2 for the feature CV5_VALIDAT_BASIC \rightarrow Validat Basic)

BORROW=169 \rightarrow the borrowing attribute with number of hours indicating the maximum borrowing duration of a license (here 169 hours \rightarrow 1 week plus 1 hour)

In addition, the borrowing period is limited by the license period (in this example March 31st 2016).

Notes:

The number of VWGRCLite licenses as well as the borrowing duration are set at generation of the license and may not be changed in the license file!

If necessary, the borrowing duration and the number of licenses to be borrowed can be further restricted by the administrator. More details can be found in <u>chapter 4</u>.

2.5 Windows FlexNet utilities

The FlexNet programs "Imgrd" and "vwagkdoe" are not required for borrowing on the client.

FlexNet provides the utilities "Imtools" and "Imutil" for administration. "Borrowing" can be done interactively via "Imtools" or via the command line with "Imutil".

Here, entries in the Windows registry are made by FlexNet:

```
Computer\HKEY_CURRENT_USER\Software\FLEXIm License Manager\Borrow
Figure 2-2: Registry entry for "Borrowing"
```

Both tools are contained in the provided FlexNet package and are available after unzipping (see figure 2-3)

For further details, see "Enabling_FlexNet_license_for_VWGRCLite.pdf".

					×
Computer > System (C:)	▶ FlexIm	✓ ⁴ → Search Fl	exlm		Q
File Edit View Tools Help					
Organize 🔻 Include in library 👻 Sh	are with 🔻 New fol	der	:==	- 🗔	0
Name	Date modified	Туре	Size		
README EN.txt	29.10.2014 11:32	Text Document	7 KB		
README DE.txt	29.10.2014 11:32	Text Document	8 KB		
Imgrd.exe	25.03.2014 11:33	Application	1.855 KB		
📰 Imtools.exe	25.03.2014 11:33	Application	2.126 KB		
💷 Imutil.exe	25.03.2014 11:33	Application	1.601 KB		
💷 vwagkdoe.exe	25.03.2014 11:33	Application	2.324 KB		
🔁 FlexNet_11_12_LicAdmin.pdf	04.12.2013 09:13	Adobe Acrobat D	2.254 KB		

Figure 2-3: Example FlexNet software and documentation in directory C:\FlexIm

If you want to make the utilities "Imtools" or "Imutil" available to your users (e.g. by copying Imutil.exe or Imtools.exe to a place suitable for the users) you must ensure that permissions remain in the desired limits.

You must inform the users about the handling, the possibilities and restrictions.

The examples shown in chapter 3 may possibly help to decide how to provide the utilities in your environment.

3 Procedures of "Borrowing"

"Borrowing" allows to borrow licenses from the license server. The borrowed licenses can be used locally on the machine without connection to the license server (offline) for a specified period.

The use of LMTOOLs, Imutil and the special variable LM_BORROW for "Borrowing" is largely described in the subchapters by means of examples.

The following points will be considered in the course of Borrowing:

- Initialization of the borrowing mode
- Borrowing licenses
- Determination of the borrowing status
- Switching off the borrowing mode
- Testing of the borrowed license
- Returning the license:
 - o by early return
 - o after expiration of the borrowing duration

At the end of chapter 3, the steps for a possible <u>Borrowing scenario from user's</u> <u>perspective</u> are listed.

The prerequisites described in <u>chapter 2</u> must all be fulfilled!

Reminder: A borrowed license is deducted from the number of licenses on the license server and will no longer be available as floating license for the duration of the borrowing.

Possible consequence:

If only one Validat basic license (license feature name CV5_VALIDAT_BASIC) is available on the license server and if it is borrowed, no other floating license will be available for the borrowing period. Only the user that borrowed the license for his computer will be able to work with Validat Basic.

3.1 FlexNet utility LMTOOLS

"Imtools" is a FlexNet admin tool which can be used for much more than just "Borrowing". In the following, only the parts necessary for "Borrowing" are described. For more information, please see the FlexNet 11.12 Original Product Documentation.

Double-click to run the FlexNet utility "Imtools.exe".

LMTOOLS GUI opens. Switch to register "Borrowing" (figure 3-1).

LMTOOLS by Flexera Software LLC	
File Edit Mode Help	1º
Service/License File System Settings Utilities Start/Stop/Reread Server Status Server Diags Config Services	lorrowing
To borrow licenses (with applications and licenses that support borrowing): (1) Enter the date (and optionally time) you want the licenses to be returned. (2) Use all applications you want to borrow while you're on the network. (3) Disconnect. Borrow expires on the date and time specified, or end-of-day, if no time is specified.	
Set Borrow Expiration Vendor Name: All Return Date: dd-mmm-yyyy Return Time: hl	h:mm
List Currently Borrowed Features Don't Borrow Anymore Today	
Return Borrowed Licenses Early Display Name: Feature Name: Feature Name:	
	*
	Ŧ

Figure 3-1 LMTOOLS Register Borrowing

3.1.1 Initialization of the borrowing mode

Licenses can only be borrowed the day the borrowing mode was initialized. By <u>switching off the borrowing mode</u> this time slot can be prematurely terminated.

Register "Borrowing" section "Set Borrow Expiration" (figure 3-2)

Enter "Vendor Name" and "Return Date", "Return Time" is optional. Confirm entry by clicking "Set Borrow Expiration".

Borrow expires on the date and time	specified, or end-of-day, if no time is specified.	
Set Borrow Expiration	Vendor Name: All Return Date: dd-mmm-yyyy	Retum Time: hh:mm

Figure 3-2 Borrowing: "Set Borrow Expiration"

Vendor Name: Either "all" or the specific Vendor Daemon name. If a specific Vendor Daemon is indicated, only licenses from this Daemon can be borrowed. The Vendor Daemon for VWGRCLite CAx license features is "vwagkdoe".

Return Date: dd-mmm-yyyy → Format of the return date

This value may not exceed the license validity indicated in the license file and the maximum borrowing duration in "<u>BORROW</u>". Further restrictions may exist when using an <u>opt-file</u>.

Note on "mmm": English three-digit months (jan, feb, mar, apr, mai, jun, jul, aug, sep, oct, nov, dec)

Return Time: [hh:mm] \rightarrow Return time. The entry is optional. If not specified, the end of the last borrowing day is valid (24:00).

Example: Initialization of	f the borrowing	g mode		
Registry "Borrowing"				
Volkswagen Vendor Daem	non Name=vwag	gkdoe		
Return date=29.09.2015 a	and Return Time	=15:50		
Borrow expires on the date and time s	specified, or end-of-day	, if no time is specified	l.	
	Vendor Name: vwa	akdoe		
Set Borrow Expiration	Return Date:	dd mmm y	anar Datum Timas Ist	col bhimm
	Neturn Date. 294	sep-2015 dd-mining	yyyy Return time: [15:	50
Set Borrow Expir	ation			
Output in status field:				
Imborrow				
Setting LM_BORROW=29	-sep-2015:vwa	gkdoe:29-sep-	2015:15:50	
Explanation:				
First date (29-sep-2015): I	Borrowing date.	On this day, lie	censes can be bo	rrowed
Daemon Name (vwagkdoe	e): only license f	eatures create	ed for this Daemor	n can be
borrowed	-			
Second date and time (29	-sep-2015:15:50)): Return date	and time for a bo	prrowed
license Note: If required	borrowed licens	es can be retu	rned early	
			mou ouny.	
Additional information:				
	can then he fou	nd in the regio	trv.	
			u y.	
Computer\HKEY_CURRENT	_USER\Software\	FLEXIm License	Manager\Borrow	
FLEXIm License Manager 🔺 Name		Туре	Data	
EW EW	ault)	REG_SZ	(value not set)	
Google	borrow BORROW	REG_BINARY	00 29-sep-2015:www.akdoor2	9-sen-2015-15-50
	BONNOW	NEG_3Z	29-Sep-2013:vwagkd0e:2	2-2ch-5010(10(0)

Example 3-1 LMTOOLS: initialization of the borrowing mode

3.1.2 Borrowing of licenses

After successful initialization, licenses can be borrowed. For further details, please see <u>Borrowing of VWGRCLite CAx licenses</u>.

3.1.3 Determination of the Borrowing status

Registry "Borrowing", Button "List Currently Borrowed Features". The information output is shown in the status field. (Figure 3-3).

List Currently Borrowed Features	Don't Borrow Anymore Today
Return Borrowed Licenses Early	Display Name: Feature Name: Feature Name:
	4
	-
Figure 3-3 Borrowing: "List Currently	Borrowed Features"

Note: The borrowed license feature generally shows 1 minute less than the borrowing end specified at initialization.

Example: Determination of the	Borrowing status			
The underlying license file see	figure 2-1.			
Check borrowed license featur Output in status field:	e with	Borrowed Fe	eatures	
List All Currently Borrowed Fe	atures			
Vendor Feature	Expiration			
vwagkdoe VWGRCLITE vwagkdoe CV5_VALIDAT_B	29-Sep-15 ASIC 29-Sep-15	 15:49 5 15:49		
Additional information: Information on borrowed licen Computer\HKEY_CURRENT_USE	ses can then be fou R\Software\FLEXIm I	nd in the _icense M	registry: anager\Borrow	
💣 Registry Editor				
File Edit View Favorites Help				
>- Dell A >- FLEXIm License Manager () >- Borrow >- FW >- Google >- Hewlett-Packard >- Intel	e efault) prrow-d973d0e1-CV5_VALIDAT_BASIC prrow-d973d0e1-VWGRCLITE ioborrow M_BORROW	Type REG_SZ REG_BINARY REG_BINARY REG_BINARY REG_SZ	Data (value not set) 30 64 30 34 35 36 30 65 36 35 63 64 15 6 36 34 39 38 35 36 30 65 36 35 65 64 a4 8 76 77 61 67 6b 64 6f 65 2b 2b 2b 56 57 29-sep-2015:vwagkdoe:29-sep-2015:1	e1 93 d 34 1f 6f 47 52 4 5:50
	of the homewing of the			

Example 3-2 LMTOOLS: Determination of the borrowing status

3.1.4 Switching of the Borrowing mode

Licenses can only be borrowed the day the borrowing mode was initialized. By <u>switching off the borrowing mode</u> this time slot can be prematurely terminated.

Register "Borrowing", Button "Don't Borrow Anymore Today". The information output is shown in the status field (figure 3-4).

The borrowing mode is terminated. No further licenses can be borrowed. The status of already borrowed licenses is not changed.

List Currently Borrowed Features	Don't Borrow Anymore Today
Return Borrowed Licenses Early	Optional) Feature Name:
	× ^
	~

Figure 3-4 Borrowing: "Don't Borrow Anymore Today"

Example: Switching off the Borrowing mode		
Click Don't Borrow Anymore Today		
Output in status field:		
List Currently Borrowed Features Don't Borrow Anymore To	day	
Return Borrowed Licenses Early Display Name: optional)	Feature Nai	
Removing All Currently Borrowed Features		
Clearing LM_BORROW		
Additional information: The Key "LM_BORROW" is no longer found in the regist	ry:	
Computer\HKEY_CURRENT_USER\Software\FLEXIm License	Manager\Bo	rrow
Registry Editor	-	
File Edit View Favorites Help		
Dell Name FLEXIm License Manager (Default) Borrow borrow-d973d0e1-CV5_VALIDAT_BASIC FW Google Hewlett-Packard Winfoborrow	Type REG_SZ REG_BINARY REG_BINARY REG_BINARY	Data (value not set) 30 64 30 34 35 36 30 65 : 36 34 39 38 35 36 30 65 : 76 77 61 67 6b 64 6f 65 2

Example 3-3 LMTOOLS: Switching off the borrowing mode

3.1.5 Tests for the use of offline licenses

See chapter "Test of borrowed licenses".

3.1.6 Early return of a license

Note: The client computer must be connected to the network to reach the FlexNet license server. The FlexNet license server must be running.

Register "Borrowing" section "Return Borrowed Licenses Early"

Enter "Feature Name" and click "Return Borrowed Licenses Early". Information is shown in the status field.

Retum Borrowed Licenses Early Display Name: (optional)	Feature Name:	
---	---------------	--

Display Name: Optional. For Windows it is the system name of the client (Hostname). Attention: The name is case-sensitive!

Feature Name: The spelling of the feature name can be seen in the license file. Attention: The name is case-sensitive!

Example: I	Early retur	n of a lice	nse feature			
For the ea	rly return	of the VW	/GRCLITE I	icense, enter "\	/WGRCLITE	" in the field
"Feature I	Name"	Feature Name				
and click	Return Bo	orrowed Licens	ses Early			
Output in	the status	field:				
Returning	- Borrowed	Licenses	Early			
Feature "	₌ /WGRCLI	TE" returr	ned success	sfully		
Check the Output in	borrowing the status	g status w field:	/ith List Cu	rrently Borrowed Feat	ures	
List All Cu	= rrently Bo =	rrowed Fe	eatures			
Vendor	Feature		E	Expiration		
vwagkdoe	CV5_VA	 ALIDAT_B	ASIC 2	9-Sep-15 15:4	9	
Explanation The licens license fea 29.09.201	ons: se feature ature "CV5 5 15:49)	"VWGRC 5_VALIDA	LITE" was .T_BASIC" i	returned and is s still borrowed	no longer bo l (regular retu	prrowed. The Irn date / time:
Additiona Only the ir	l information	t ion: on "CV5_	_VALIDAT_E	BASIC" is found	d in the regist	iry
Computer	HKEY_CUR	RENT_USE	R\Software	FLEXIm License	Manager\Bor	row
Registry Edit	or				-	
File Edit Vie	w Favorites H	lelp				
	FLEXIm License FLEXIm License Borrow FW Google	e Manager	Name (Default) borrow-d973d0 infoborrow	e1-CV5_VALIDAT_BASIC	Type REG_SZ REG_BINARY REG_BINARY	Data (value not set) 30 64 30 34 35 36 30 65 36 76 77 61 67 6b 64 6f 65 2b

Example 3-4 LMTOOLS: Early return of a license feature

3.1.7 Return of the license after expiration of the regular Borrowing period

The license is returned automatically at the end of the regular borrowing period.

After expiration of the regular borrowing period, the license cannot be used any more by the client. The server returns the expired license to the license pool. The client does not have to be connected to the server.

Example: Return of the license after expirati	on of the regular Borrowing period
Note: Borrowing status check for license fe	atures expired regularly:
The display of List Currently Borrowed Features not up to date because of an old entry in th	in the register "Borrowing" possibly is e registry.
Alternative:	
IMTOOLS by Elevera Software LLC	
Eile Edit Made Hale	
Service/License File System Settings Utilities Start/Stop/Rerea	ad Server Status Server Diags Config Services Borrowing
Helps to monitor the status of network licensing activities	Ontions
	Individual Daemon
Reform Status Enguiny	
r enorm status Enquiry	Individual Feature
	Server Name
If "Perform Status Enquiry" is clicked withou played without filtering. It can be viewed by In this example: Extract information in the status field	ut further options, the whole status is dis- scrolling the status field.
Users of CV5_VALIDAT_BASIC: (Total of 2	2 licenses issued; Total of 1 license in
use)	
"CV5_VALIDAT_BASIC" v1.0, vendor: vw floating license sitani host1234 host1234 (v1.000) (host	agkdoe, expiry: 31-mar-2016 1234/27005 102), start Tue 9/29 15:30
(linger: 1140)	
Explanations on the output Line1 shows the total number of licenses (feature (CV5_VALIDAT_BASIC) and how r	Fotal of 2 licenses issued) for the license many of them are in use (Total of 1 li-

cense in use)

Line 2 shows the required Vendor Daemon (vendor: vwagkdoe) and the expiration date of the license (expiry: 31-mar-2016)

Line 3 shows which user (sitani) borrowed the license feature and when (start Tue 9/29 15:30). The possible borrowing duration is specified in seconds (linger: 1140 \rightarrow 19 minutes \rightarrow regular end of borrowing: 15:49)

After expiration of the license (15:50), the status is displayed correctly:

Users of CV5_VALIDAT_BASIC: (Total of 2 licenses issued; Total of 0 licenses in use)

Explanation:

The license feature (CV5_VALIDAT_BASIC) is currently not in use (Total of 0 licenses in use).

Tip: A better solution for "Borrowing" status request is offered by the <u>Command line:</u> <u>"Imutil Imborrow -purge -status"</u>. Using the option "-purge", expired licenses are deleted.

Example 3-5 LMTOOLS: Return of the license after expiration of the regular borrowing period

3.2 FlexNet utility "Imutil"

"Imtools" is a FlexNet admin tool which can be used for much more than just "Borrowing". In the following, only the parts necessary for "Borrowing" are described. For more information, please see the FlexNet 11.12 Original Product Documentation.

Open Windows cmd.: Start \rightarrow run cmd.exe (figure 3-5)



Figure 3-5 Windows cmd

Go to FlexNet installation directory. In the example FlexNet installation directory: C:\FlexNet.

General function test and syntax overview via help output "Imutils Imborrow -help" (figure 3-6)



3.2.1 Initialization of the Borrowing mode

Licenses can only be borrowed the day the borrowing mode was initialized. By <u>switching off the borrowing mode</u> this time slot can be prematurely terminated.

Syntax command:

Imutil Imborrow {all|vendorname} dd-mmm-yyyy [hh:mm]

{all|vendorname} \rightarrow Either "all" or the specific Vendor Daemon name. If a specific Vendor Daemon is indicated, only licenses from this Daemon can be borrowed. The Vendor Daemon for VWGRCLite CAx license features is "vwagkdoe".

dd-mmm-yyyy → Format of the return date

This value may not exceed the license validity indicated in the license file and the maximum borrowing duration in "<u>BORROW</u>". Further restrictions may exist when using an <u>opt-file</u>.

Note on "mmm": English three-digit months (jan, feb, mar, apr, mai, jun, jul, aug, sep, oct, nov, dec)

[hh:mm] \rightarrow Format of the return time. The entry is optional. If not specified, the end of the last borrowing day is valid (24:00).Note: The borrowed license feature generally shows 1 minute less than the borrowing end specified at initialization (see figure 3-7).



Figure 3-7 Example borrowed license feature valid until end of last borrowing day



3.2.2 Borrowing of licenses

After successful initialization, licenses can be borrowed. For further details, please see <u>Borrowing of VWGRCLite CAx licenses</u>.

3.2.3 Determination of the Borrowing status

The borrowed license feature generally shows 1 minute less than the borrowing return time specified at initialization. If no return time was specified, the default time is 23:59.

Syntax command:

Imutil Imborrow -purge -status

-purge \rightarrow deletes expired licenses and effectuates a status update.

-status \rightarrow shows the status of borrowed licenses.



3.2.4 Switching off the Borrowing mode

Licenses can only be borrowed the day the borrowing mode was initialized. By switching off the borrowing mode this time slot can be prematurely terminated.

Syntax command:

Imutil Imborrow -clear

-clear \rightarrow ends the borrowing mode. Further licenses cannot be borrowed. The status of already borrowed licenses remain unchanged.





3.2.5 Testing of offline licenses

See chapter "Test of borrowed licenses".

3.2.6 Early return of a license

Note: The client computer must be connected to the network and the FlexNet license server must be running.

Syntax command:

Imutil Imborrow -return [-vendor name] feature

-return \rightarrow early return of a borrowed license

[-vendor name] \rightarrow Either "all" or the specific Vendor name of the license feature. The name for VWGRCLite CAx license features is "vwagkdoe".

feature \rightarrow Name of the license feature to be returned. The spelling of the feature can be seen in the license file. The name is case-sensitive!

Example: Early return of a license

Return command for the borrowed VWGRCLite license feature: Imutil Imborrow -return -vendor vwagkdoe VWGRCLITE

Command Prompt C:\Flex1m>1mutil 1mborrow -purge -status 1mutil - Copyright (c) 1989-2014 Flexera Software LLC. All Rights Reserved. Feature Vendor Expiration UWGRCLITE vwagkdoe 18-Dec-15 11:59 vwagkdoe CV5_VALIDAT_BASIC 18-Dec-15 11:59 C:\Flexlm><mark>lmutil lmborrow -return -vendor vwagkdoe UWGRCLITE</mark> lmutil - Copyright <c> 1989-2014 Flexera Software LLC. All Rights Reserved. Feature "UWGRCLITE" returned successfully. C:\Flex1m>1mutil 1mborrow -purge -status 1mutil - Copyright (c) 1989-2014 Flexera Software LLC. All Rights Reserved. Vendor Feature Expiration 18-Dec-15 11:59 CU5_UALIDAT_BASIC vwagkdoe C:\Flexlm> Explanations: The license feature "VWGRCLITE" was returned and is no longer borrowed. The license feature "CV5_VALIDAT_BASIC" is still borrowed (regular return date / time: 18.12.2015 11:59) Additional information: Only the information on "CV5 VALIDAT BASIC" is found in the registry Computer\HKEY_CURRENT_USER\Software\FLEXIm License Manager\Borrow Registry Editor - 6 6 -File Edit View Favorites Help 👂 퉲 Dell Name Data Туре FLEXIm License Manager (Default) REG_SZ (value not set) Borrow REG_BINARY borrow-d973d0e1-CV5_VALIDAT_BASIC 37 62 31 62 35 36 37 33 65 37 30 FW REG_BINARY 76 77 61 67 6b 64 6f 65 2b 2b 2b 👪 infoborrow Google



3.2.7 Return of the license after expiration of the regular Borrowing period

The license is returned automatically at the end of the regular borrowing period.

After expiration of the regular borrowing period, the license cannot be used any more by the client. The server returns the expired license to the license pool. The client does not have to be connected to the server.

Example: Return of the license after expirati	on of the regular Borrowing period
The license is returned automatically at t	he end of the regular borrowing period.
After expiration of the regular borrowing period	, the license cannot be used any more by the
client. The server returns the expired license to	the license pool. The client does not have to
be connected to the server.	
Borrowing status check for license feature	ures expired regularly:
Imutil Imborrow -purge -status	
Status display after expiration of the regula	r borrowing period:
c:\Flexlm>lmutil lmborrow -purge -status lmutil - Copyright (c) 1989-2014 Flexera Vendor Feature	Software LLC. All Rights Reserved. Expiration
vwagkdoe CV5_VALIDAT_BASIC	1-Oct-15 14:29
c:\Flexlm>date /t 01.10.2015	
c:\Flexlm≻time ∕t 14:30	
c:\Flexlm> <mark>lmutil lmborrow -purge -status</mark> lmutil - Copyright (c) 1989-2014 Flexera	Software LLC. All Rights Reserved.
c:\Flexlm>	

Examplel 3-10 Imutil: Return of the license after expiration of the regular borrowing period

3.3 FlexNet Variable LM_BORROW

As an alternative to initialization of the borrowing mode with <u>LMTOOLS</u> oder <u>Imutil</u>, the FlexNet system variable "LM_BORROW" can be used.

Licenses can only be borrowed the day the defined "borrowing date" of LM_BORROW matches the current date.

In this case, switching off the borrowing mode is done by deleting the variable LM_BORROW.

Attention: The variable LM_BORROW is dominant. That means as long as the variable is set, any initialization made with LMTOOLS or Imutil will be ignored! This applies even if the value of LM_BORROW is outdated. "Switching of the borrowing mode" carried out with <u>LMTOOLS</u> oder <u>Imutil</u> will not remove the LM_BORROW variable.

3.3.1 Setting LM_BORROW

The variable LM_BORROW can be set as system variable or as user variable. The setting of system variables requires administration rights. User variables can be set by the users.

Setting FlexNet "LM_BORROW" as system variable can be done via Windows Control Panel.

Examle Windows 7 computer with German locale: Start \ Control Panel → System and Security →→ System →→→ Advanced System Settings →→→→ Environment Variables →→→→enter LM_BORROW manually under "system variables" Setting FlexNet "LM_BORROW" as user variable can be done via Windows Control Panel.

Examle Windows 7 computer with German locale: Start \ Control Panel → System and Security →→ System →→→ Advanced System Settings →→→→ Environment Variables →→→→enter LM_BORROW manually under "user variables for <userid>"

- Name of the variable: LM_BORROW
- Value of the variables: Borrowing date: Vendor:Return date[:return time]

e.g.: 05-oct-2015:vwagkdoe:15-oct-2015

- Borrowing date: if it matches the current date, licenses can be borrowed that day!
 Format dd-mmm-yyyy
 the month abbreviation must be entered as three digits in English, e.g.: jan, feb, mar, apr, mai, jun, jul, aug, sep, oct, nov, dec,
- Vendor: Name of the license daemons (e.g: vwagkdoe) or for all (all)
- Return date: → dd-mmm-yyyy. This value may not exceed the license validity indicated in the license file and the maximum borrowing duration in "BORROW". Further restrictions may exist when using an <u>opt-file</u> Note on "mmm":English three-digit months (jan, feb, mar, apr, mai, jun, jul, aug, sep, oct, nov, dec)
- Return time (optional) \rightarrow If not specified, the end of the last borrowing day is valid (24:00).

Example Setting LM_BORROW as system variable

Examle Windows 7 computer with English locale: Start \ Control Panel \rightarrow System and Security \rightarrow System \rightarrow \rightarrow Advanced System Settings \rightarrow \rightarrow \rightarrow Environment Variables

 $\rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$ enter LM_BORROW manually under "system variables"

System Properties	Environment Variables
Computer Name Hardware Advanced System Protection Remote	User variables for sitani
You must be logged on as an Administrator to make most of these changes.	Variable Value
Performance	
Visual effects, processor scheduling, memory usage, and virtual memory	TMP %USERPROFILE % AppData Local Temp
Settings	
User Profiles	New Edit Delete
Desktop settings related to your logon	
	System variables
Settings	Variable Value
Startup and Recovery	VWGRCLITE_K_DATA C:\vwg\data
System startup, system failure, and debugging information	VWGRCLITE_K_PATH C:\vwg
-,	
Settings	New Edit Delete
Environment Variables	
	OK Cancel
OK Cancel Apply	New System Variable
	Variable name: LM_BORROW
	Variable value: 11-dec-2015:vwagkdoe:18-dec-2015:15:30
	OK Cancel
Value of the variable LM BORROW:	
11-uec-2015.vwayku0e.10-uec-2015.15.50	
Meaning: On 11.12.2015 license features fe	or vendor daemon "vwagkdoe" can be
borrowed Maximum return date/time here.	
18.12.2015 15:30.	
Note: Save all changes by clicking the but	ton "OK" in each individual open dialog.

Example 3-11 Setting LM_BORROW as system variable

Example Setting LM_BORROW as user variable

Examle Windows 7 computer with English locale: Start \ Control Panel \Rightarrow System and Security $\Rightarrow \Rightarrow$ System $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$ Advanced System Settings $\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$ Environment Variables $\Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow \Rightarrow$ enter LM_BORROW manually under "user variables for <userid>"

omputer Name Hardware Advanced System Protection Remote	User variables for sitani	
You must be logged on as an Administrator to make most of these changes. Performance Visual effects, processor scheduling, memory usage, and virtual memory	Variable Value TEMP %USERPROFILE%\AppData\Local\Temp TMP %USERPROFILE%\AppData\Local\Temp	
Settings User Profiles Desktop settings related to your logon Settings Startup and Recovery System startup, system failure, and debugging information	New Edit Delet Sy New User Variable Variable name: Im_BORROW Variable value: 11-dec-2015:vwagkdoe:18-dec-2005	te X
Settings	ОК Са	ncel
OK Cancel Apply	ОК Са	ncel

Value of the variable LM_BORROW:

11-dec-2015:vwagkdoe:18-dec-2015

Meaning: As of 11.12.2015 license features for vendor daemon "vwagkdoe" can be borrowed until max. 18.12.2015 24:00.

Note: Save all changes by clicking the button "OK" in each individual open dialog. Otherwise changes will not be saved.

Example 3-12 Setting LM_BORROW as user variable

3.3.2 Deleting the variable LM_BORROW

The deletion of LM_BORROW ends the borrowing mode. If the variable persists after the end of the regular borrowing period, it prevents new initializations made with LMTOOLS or Imutil from coming into effect!

The FlexNet system variable "LM_BORROW" can be deleted via Windows Control Panel.

Examle Windows 7 computer with German locale: Start \ Control Panel → System snd Security →→ System →→→ Advanced System Settings →→→→ Environment Variables $\rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$ delete LM_BORROW under "system variables"

The FlexNet user variable "LM_BORROW" can be deleted via Windows Control Panel.

Examle Windows 7 computer with German locale: Start \ Control Panel → System and Security →→ System →→→ Advanced System Settings →→→→ Environment Variables →→→→ delete LM_BORROW under "user variables for <userid>"

Figure 3-8 shows an example of how to delete user variable LM_BORROW.

Envi	ironment Variables	A REAL PROPERTY AND ADDRESS OF TAXABLE PARTY.	x
	User variables for xy	/user	
	Variable	Value	
	LM_BORROW	10-dec-2015:vwagkdoe:18-dec-2015	
•	TEMP	%USERPROFILE% \AppData Local \Temp	_
	TMP	%USERPROFILE%\AppData\Loog \Temp	
		New Edit Delete	:

Figure 3-8 Example deletion of FlexNet user variable LM_BORROW

Note: Save all changes by clicking the button "OK" in each individual open dialog. Otherwise changes will not be saved.

3.4 Borrowing of VWGRCLite CAx licenses

After initialization of the borrowing mode (with <u>LMTOOLS</u>, <u>Imutil</u> or the variable <u>LM_BORROW</u>), VWGRCLite CAx licenses can be borrowed. Therefore, each application whose license is to be borrowed has to be called once (see example 3-13).

Use the application you want to borrow while you are in the network.

Borrowing is only possible if a <u>corresponding license</u> is available on the server.



If the call of the function is successful, the Validat Basic License is borrowed and not checked out from the server any more.

Reminder: Which Validat license (Basis/Prof) is checked out may depend on your settings in Tools/Options/Infrastructure/Validat/Licensing. In this example, only the Validat Basic License is preset.

Example 3-13 Borrowing of VWGRCLite CAx licenses

3.5 Testing the borrowed license

Disconnect the client computer from the network (no access to the FlexNet license server any more). Call of the applications for which licenses were borrowed (see example 3-14).

Note: The CATIA licenses must be suitable for the use without network (e.g. Nodelocked or borrowed licenses). The borrowing of CATIA licenses or the use of CATIA Nodelocked licenses are not part of this document.

Example Testing the borrowed licenses VWGRCLITE, CV5_VALIDAT_BASIC
Start of VWGRCLite without license error message.
File Tools Documentation Help
Level Additionals Dassault VWGRCLite
w group
Brand
audi
Brand Department
def ·
Supplier Department
def
license
def
~
Start CATIA
"Start CATIA"
The Validat functions can be used.
CATIA V5 - VWGRCLite - vw_group / audi / def - [PRODUCT1]
No Start Elle Edit View Insert Iools Analyze Window Help
VALIDAT Check Version
Check Profile
VWG_Basis_3D_2D.xml / (VWG_Basis_3D_2D)
Document - Filter Group (PDA) O Tyme (Part Prod. Draw)
Working - Mode
Check O Check and Repair
None O Check O Clean Level_2_(ghostlinks_and_optimize_data_size)
Start Batch
G Cancel
Additional information:
Additional information:
As the computer is online, only the borrowed licenses can be used until the effo of the bor-



Example 3-14 Testing of borrowed licenses (VWGRCLite, Validat Basis)

3.6 A small Borrowing scenario from user's point of view

The administrator must have fulfilled the qualifications for the user and his machine as described in <u>chapter 2</u>. The user was informed about "Borrowing" and the maximum borrowing duration. In the following, a possible small Borrowing procedure from user's perspective:

- For initialization, set the <u>Variable LM_BORROW</u> as user variable, see Example 3-12 setting LM_BORROW as user variable
- o Borrowing of VWGRCLite CAx licenses
- o <u>Testing the borrowed licenses offline</u>
- if test ok, <u>delete variable LM_BORROW</u>,
 see Figure 3-8 Example deletion of FlexNet user variable LM_BORROW

For the <u>check of the borrowing status</u> or the <u>early return</u>, the FlexNet utility "Imutil" can be used in the command line. If this not possible without problems, the user should ask the administrator for support.

4 Controlling the Borrowing options by an opt-file (Administrator)

Borrowing licenses can be controlled more detailed by using an opt-file which contains the required FlexNet borrowing options. The following can be controlled, for instance:

- Limit borrowing to a certain number of licenses (BORROW_LOWWATER)
- Set maximum borrowing duration (MAX_BORROW_HOURS)
- Permit / prohibit users / groups to borrow license features (IN-CLUDE_BORROW / EXCLUDE_BORROW)
- 4.1 Defining an opt-File

There are two ways to define an opt-file. It is recommended to choose one definition type.

1) Creation of an opt-file with the name of the Vendor Daemon in the license directory. In case of VW Vendor Daemon vwagkdoe it would be vwagkdoe.opt (see figure).

license.dat
vwagkdoe.opt

Figure 4-1 Example opt-file (vwagkdoe.opt) in the license directory

2) The Vendor Daemon line in the license file is amended by the indication options=<path>\<opt-filename>

E.g..:

DAEMON vwagkdoe options=C:\FLEXNET\vw.opt

4.2 Configuration of Borrowng options

In the following table you will find the special borrowing options for the opt-file including examples.

For further details, please see the FlexNet Original Product Documentation.

Option / Examples	Description
BORROW_LOWWATER	Specifies how many licenses of a license feature cannot be bor-
Example:	
BORROW_LOWWATER VWGRCLITE 100	Ensures that 100 VWGRCLITE licenses cannot be borrowed.
	Note: In general, the number of VWGRCLITE floating licenses is 9999.
MAX_BORROW_HOURS	Besides the general license va- lidity, the maximum borrowing period for the feature is defined in the license file (e.g. BOR- ROW=9528). If required, the maximum borrowing period can be further restricted using the option MAX_BORROW_HOURS
Example:	For the feature VWGRCLITE, the
MAX_BORROW_HOURS VWGRCLITE 720	to 720 hours (720/24 → equiva- lent to 30 days).
GROUP	A list of users can be assigned to
Example:	a group.
GROUP cad joe tom fred	joe, tom and fred are members of the group "cad"

Option / Examples	Description
INCLUDE_BORROW	Defines who may borrow which license feature.
Examples:	Onlywoor frod" is allowed to
INCLUDE_BORROW VWGRCLITE USER fred	borrow the VWGRCLITE license.
or:	
GROUP cad joe tom fred INCLUDE_BORROW VWGRCLITE GROUP cad	Only members of the group "cad" are allowed to borrow VWGRCLITE licenses.
	Note: User groups and names are case-sensitive and must not contain any blanks.
EXCLUDE_BORROW	Defines who may not borrow which license feature.
Examples:	
EXCLUDE_BORROW VWGRCLITE USER joe	Only user "joe" may not borrow VWGRCLITE licenses.
or:	
GROUP cad joe tom fred EXCLUDE_BORROW VWGRCLITE GROUP cad	Only members of the group "cad" may not borrow VWGRCLITE licenses.
	Note: It is recommended to use either INCLUDE_BORROW or EXCLUDE_BORROW for one license feature.

Table 4-1 Borrow options

4.3 Activating the opt-file

To make the contents of the opt-file operational, at least the license file has to be reread. Alternatively, the FlexNet server (Imgrd) can be restarted.

The procedure depends on your FlexNet server configuration and your access permissions.

Example for "Imutil Imreread"			
Example command line with permission to use "Imutil Imreread":			
Imutil Imreread -c C:\License\license.dat -vendor vwagkdoe			
-c <path filei="" license="" with=""></path>			
vendor <vendor daemonname=""></vendor>			
essary, Imgrd will restart the Daemon.			
LMTOOLS-Example for "ReRead License File"			
Run Imtools.exe with the necessary permission. Go to register "start/stop/reread". Should you have configured several FlexNet services make sure that the VW service (here vw_cax) is activated. Run "ReRead License File". After completion the success message has to appear in the status line ("ReRead Server License File Completed").			
LMTOOLS by Flexera Software, Inc.			
File Edit Mode Help			
Service/License File System Settings Utilities Start/Stop/Reread Server Status Server Diags Config Services Borrowing			
FLEXnet license services installed on this computer			
Vw_cax			
Start Server Stop Server ReRead License File			
Advanced settings >>			
licenses are borrowed.			
Using License File: C\FLEXNET\license.dat			



Example 4-1 Reread license file (with Imutli or LMTOOLS)

5 Error screens

For error screens not listed here, please see the FlexNet Original Product Documentation or the FlexNet manufacturer's website.

5.1 Message: "Cannot borrow that long"

Error message at the start of VWGRCLite (highlighted in yellow in figure 5-1) or VWGRCLite GUI can be started, but an error message appears at the start of an VWGRCLite application (e.g. NTool in figure 5-2)



Figure 5-1 VWGRCLITE Message "Cannot borrow that long"



Figure 5-2 Example NTool message: "Cannot borrow that long"

The return time specified (LM_BORROW: <u>Variable</u> or defined via <u>Imtools</u> \ <u>Imutil</u>) exceeds the maximum borrowing duration and must be reduced accordingly.

The Administrator has to inform the users about the maximum borrowing duration.

Possible causes:

The return date specified lies beyond the license validity date.

The maximum borrowing period as defined in the license file (see table 1-1) was exceeded.

Attention: The borrowing period may have been further restricted via an <u>opt-file</u> (MAX_BORROW_HOURS, for details, see table 4-1).

5.2 Despite Initialization (LMTOOLS, Imutil), no license is borrowed

If despite successful initialization with Imtools or Imutil licenses cannot be borrowed it has to be determined whether the FlexNet variable "LM_BORROW" is set.

The variable LM_BORROW is dominant. That means as long as the variable is set, any initialization made with LMTOOLS or Imutil will be ignored! This applies even if the value of LM_BORROW is outdated (see example in figure 5-3).

"Switching of the borrowing mode" carried out with LMTOOLS oder Imutil will not remove the LM_BORROW variable. Solution: see <u>Deleting the variable LM_BORROW</u>.

			System Properties
LMTOOLS by Flexera Software LLC		X	Computer Name Hardware Advanced System Protection Remote
File Edit Mode Help			
File Edit Mode Help Service/License File System Settings Utilities Stat/Stop/Reread Server Status Server Diags Config Services Borrowing To borrow licenses (with applications and licenses that support borrowing): (1) Enter the date (and optionally time) you want the licenses to be returned. (2) Use all applications you want to borrow while you're on the network. (3) Disconnect. Borrow expires on the date and time specified, or end of day, if no time is specified. Vendor Name: wwagkdoe Set Borrow Expiration Vendor Name: Wwagkdoe Ist Currently Borrowed Features Don't Borrow Anymore Today Return Borrowed Licenses Early Display Name: Feature Name: Imborrow Setting LM_BORROW=14-dec-2015/vwagkdoe:18-dec-2015 *		User variables for sitani Variable Variable Value Variable Value Value Value Value Value Value Value Value Variable Value Citywg Value Value Value Value Citywg Value Value Value Citywg Value Value Value Citywg Value Value Value Value Citywg Value Value Value Citywg Value Value Value Citywg Value Value Value Value Citywg Value Citywg Value Value Value Value Citywg Value Value Citywg	
No FLEXIm Services defined use Configure Services to add services			
Registry Editor			OK Cancel
File Edit View Favorites Help.			
Dell	Name	Turne	Data
FLEXIm License Manager	ab (Default)	PEG S7	(value pot sot)
Borrow	minfohorrow	REG BINARY	
Þ 퉲 FW	ab) I M BORROW	REG SZ	14-dec-2015:vwaqkdoe:18-dec-2015
👂 🌗 Google 🗸 🗸		1120_02	TH dec Louismagradero dec Louis
< Þ	•		>
Computer\HKEY_CURRENT_USER\Software\FLEXIn	n License Manager\Borrow		

Figure 5-3 Example conflict variable LM_BORROW with Imtools initialization

5.3 LMTOOLS\Imutil: "Cannot find license file"

Error message at early return of borrowed licenses "Cannot find license file"

LMTOOLS by Flexera Software LLC			
File Edit Mode Help			
Service/License File System Settings Utilities Start/Stop/Reread Server Status Server Diags Config Services Borrowing			
To borrow licenses (with applications and licenses that support borrowing):			
 (1) Enter the date (and optionally time) you want the licenses to be returned. (2) Use all applications you want to borrow while you're on the network. (3) Disconnect. 			
Borrow expires on the date and time specified, or end-of-day, if no time is specified.			
Set Borrow Expiration Vendor Name: All Return Date: dd-mmm-yyyy Return Time: hh:mm			
List Currently Borrowed Features Don't Borrow Anymore Today 1			
2 Return Borrowed Licenses Early Display Name: Feature Name: WWGRCLITE			
Returning Borrowed Licenses Early 3			

Figure 5-4 Example LMTOOLS error message "Cannot find license file" at early license return

Command Prompt			
c:\Flexlm>set LM_ 1 LM_BORROW=15-dec-2015:vwagkdoe:18-dec-2015			
c:\Flexlm>date /T 15.12.2015			
c:\Flexlm>lmutil lmborrow -status -purge lmutil - Copyright (c) 1989-2014 Flexera Vendor Feature	2 Software LLC. All Rights Reserved. Expiration		
vwagkdoe VWGRCLITE vwagkdoe CV5_NTOOL	18-Dec-15 23:59 18-Dec-15 23:59		
c:\Flexlm>lmutil lmborrow -return -vendor vwagkdoe CU5_NTOOL 3 lmutil - Copyright (c) 1989-2014 Flexera Software LLC. All Rights Reserved. lmborrow: Cannot find license file. (-1,359:2 "No such file or directory")			
c:\Flexlm>			
<			

Figure 5-5 Example Imutil error message "Cannot find license file" at early license return

Possible cause:

LM_LICENSE_FILE not set or not set correctly.

5.4 LMTOOLS\Imutil: "Error: ... not currently borrowed"

When trying to return a license feature early, the error ".. not currently borrowed" appears. Examples see figure 5-6 and figure 5-7.

The license feature is not currently borrowed and can therefore not been returned early.

LMTOOLS by Flexera Software, Inc.			
File Edit Mode Help			
Service/License File System Settings Utilities Start/Stop/Reread Server Status Server Diags Config Services Borrowing			
To borrow licenses (with applications and licenses that support borrowing): (1) Enter the date (and optionally time) you want the licenses to be returned. (2) Use all applications you want to borrow while you're on the network. (3) Disconnect. Borrow expires on the date and time specified, or and of day, if no time is specified.			
Vendor Name: vwagkdoe Set Borrow Expiration Return Date: 27-feb-2014 dd-mmm-yyyy Return Time: 23:59 hh:mm			
List Currently Borrowed Features Don't Borrow Anymore Today			
2 Return Borrowed Licenses Early Display Name: Feature Name: WGRCLITE 1 (optional)			
Returning Borrowed Licenses Early			

Figure 5-6 Example LMTOOLS error message ".. not currently borrowed."

Command Prompt			
c:∖Flexlm> lmutil - C Vendor	lmutil lmborrow -purge -status opyright (c) 1989-2014 Flexera So Feature	ftware LLC. All Rights Expiration	Reserved.
vwagkdoe c:\Flexlm> lmutil - C <mark>Error: UWG</mark>	 CV5_NTOOL lmutil lmborrow -vendor vwagkdoe opyright (c) 1989-2014 Flexera So RCLITE not currently borrowed.		Reserved.
c:\Flexlm>			

Figure 5-7 Example Imutil error message ".. not currently borrowed."

5.5 Message: "License server machine is down or not responding"

The message License server machine is down or not responding appears:

- if the die client machine is offline and its borrowed license has expired (see figure 5-8)
- if the FlexNet license server is no longer available or no longer active
- if in variable "VWGRCLITE_LICENSE_PATH" an incorrect FlexNet license server was defined

ex. Command	d Prompt	
c:\Flexlm) 16.12.2015 c:\Flexlm) lmutil - (Vendor)/date /T 5 1)/lmutil lmborrow -purge -status Copyright (c) 1989-2014 Flexera Software I Feature Exp:	LLC. All Rights Reserved. iration
vwagkdoe	UWGRCLITE 16-J	Dec-15 09:29
c:∖Flexlm) Ø9:30	i>time ∕T	
c:\Flexlm) lmutil - (c:\Flexlm))>lmutil lmborrow -purge -status 2 Copyright (c) 1989-2014 Flexera Software I)>	LLC. All Rights Reserved.
WWGRCLite	te - INFO	
	Volkswagen AG FlexLm Version 2.4.5 based on FlexNE License server machine is down or not responding. See the system administrator about starting the license make sure you're referring to the right host (see VWGRC Feature: VWGRCLITE Hostname: host1234 License path: @host1234 FlexNet Licensing error:-96,491	T Version 11.12.1.4 server system, or CLITE_LICENSE_PATH).
	ОК	
	WWGRCLite	

Figure 5-8 Example scenario for error message "License server machine is down or not responding"