



EPLAN License Manager Professional Configuration Guide

Version 7.1.8
Status: 03/2019



EPLAN Software & Service GmbH & Co. KG
Technical Information

EPLAN License Manager Professional Configuration Guide

Version 7.1.8

Status: 03/2019



Copyright © 2019 EPLAN Software & Service GmbH & Co. KG

EPLAN Software & Service GmbH & Co. KG assumes no liability for either technical or printing errors, or for deficiencies in this technical information and cannot be held liable for damages that may result directly or indirectly from the delivery, performance, and use of this material.

This document contains legally protected proprietary information that is subject to copyright. All rights are protected. This document or parts of this document may not be copied or reproduced by any other means without the prior consent of EPLAN Software & Service GmbH & Co. KG.

The software described in this document is subject to a licensing agreement. The use and reproduction of the software is only permitted within the framework of this agreement.

RITTAL® is a registered trademark of Rittal GmbH & Co. KG.

EPLAN®, EPLAN Electric P8®, EPLAN Fluid®, EPLAN Preplanning®, EPLAN Pro Panel® and EPLAN Harness proD® are registered trademarks of EPLAN Software & Service GmbH & Co. KG.

Windows 7®, Windows 8®, Windows 8.1®, Windows 10®, Windows Server 2008 R2®, Windows Server 2012®, Windows Server 2012 R2®, Windows Server 2016®, Microsoft Windows®, Microsoft® Excel®, Microsoft® Access® and Notepad® are registered trademarks of the Microsoft Corporation.

PC WORX®, CLIP PROJECT®, and INTERBUS® are registered trademarks of Phoenix Contact GmbH & Co.

AutoCAD® and AutoCAD Inventor® are registered trademarks of Autodesk, Inc.

STEP 7®, SIMATIC® and SIMATIC HW Config® are registered trademarks of Siemens AG.

InstallShield® is a registered trademark of InstallShield, Inc.

Adobe® Reader® and Adobe® Acrobat® are registered trademarks of Adobe Systems Inc.

TwinCAT® is a registered trademark of Beckhoff Automation GmbH.

Unity Pro® is a registered trademark of Schneider Electric.

RSLogix 5000® and RSLogix Architect® are registered trademarks of Rockwell Automation.

All other product names and trade names are trademarks or registered trademarks of their respective owners.

EPLAN uses the Open Source software 7-Zip (7z.dll), Version 16.00, Copyright © by Igor Pavlov. The source code of 7-Zip is subject to the GNU Lesser General Public License (LGPL). The source code of 7-Zip and details on this license can be found on the following Web site: <http://www.7-zip.org>

Table of Contents

Introduction	5
Notes for the Reader	6
Preconditions	7
Software.....	7
Approved for	8
Configuring EPLAN License Manager Professional.....	9
Additional actions in the "Properties" tab	10
Making Settings for Borrowing Network Licenses.....	11
Borrowing a license online with the EPLAN License Client.....	12
Borrowing a license by using an Offline license file.....	14
Specifying Settings for the Rights Management.....	16
Carrying out Settings for Failure Protection (Failover)	19
Specifying Settings for Storing the Event Log	21
Running a report for the Event log	23
Creating a report.....	23
Output types for the report	26
Command line parameters.....	28
Attributes in the output format file	30
<logfile /> attributes	31
Header data, <head /> elements	31
Summary of the license bundles, <summary /> elements.....	32
Summary of the default bundle, <defaultbundle_summary /> elements .	33
List of the license events, <list /> elements	34
Reporting macros.....	38
Date / time macros.....	40
Example of an output format file	41
Important error numbers.....	43



Introduction

Dear users,

The team at EPLAN Software & Service GmbH & Co. KG is pleased to welcome you as a new user.

You have installed the EPLAN License Manager. You will find any information you may need in the EPLAN License Manager Installation Guide.

The document at hand will walk you through the configuration of the EPLAN License Manager Professional (ELM Professional) version. Functionalities that belong to the standard scope of the EPLAN License Manager are described in the EPLAN License Manager Basic configuration guide.

These instructions are aimed at administrators who are already familiar with EPLAN and who have an in-depth knowledge of programs and systems.



Note:

Please note that only those bundles for which you actually have the rights are displayed in the license status.

Notes for the Reader

Before you begin reading, please note the following symbols and styles used in this document:

Warning:

Texts preceded by this image are warnings. You should be absolutely sure to read this warning before proceeding!

Note:

Text preceded by this image contains extra notes.

Tip:

Useful tips to facilitate your interaction with the program are presented after this image.

Example:

Examples are highlighted by this symbol.

- User interface elements are marked in **bold** so they can immediately be located in the text.
- *Italic* text provides particularly important information that you should definitely pay attention to.
- Code examples, directory names, and direct input (among others) are displayed in a `non-proportional font`.
- Function keys, keyboard keys, and buttons within the program are shown in square brackets (e.g., **[F1]** for the "F1" function key).
- To improve the flow of the text, we often use "menu paths" in this document (for example, **Start > Run**). In order to find a particular program function, the menus and options shown in a menu path must be selected in the sequence shown. For example, the menu path mentioned above calls up the EPLAN help system.

- The operating information provides step-by-step instructions for reaching specific targets, and in many places, after the right-arrow symbol \Rightarrow you'll also find the reaction of the program to your action.
- In combination with settings or fields (e.g., check boxes) which can only be switched on or off, in this document we often use the term "activate" (after which the setting is active) and "deactivate" (after which the setting is inactive)

Preconditions

In order to run the EPLAN License Manager the following conditions must be satisfied:

Software

The following software preconditions must be satisfied:

- An operating system for which the EPLAN License Manager has been released must be installed (see also the following section: "Approved for").
- It is also assumed that the computer systems all have the latest security updates.
- The installation must be performed from a user account with rights equivalent to an Administrator.
- The dongle must be connected to the computer where the EPLAN License Manager is to be installed.

**Note:**

Characters that do not occur in the Latin alphabet are not supported by the EPLAN License Manager (for example Chinese, Cyrillic characters, etc.). If you want to use the EPLAN License Manager, you may only use characters in ASCII format for your user and computer names.



Please inform yourself about the hardware prerequisites and the software approvals of the EPLAN Platform before installing EPLAN products. This information is available in the EPLAN performance descriptions of the respective products.

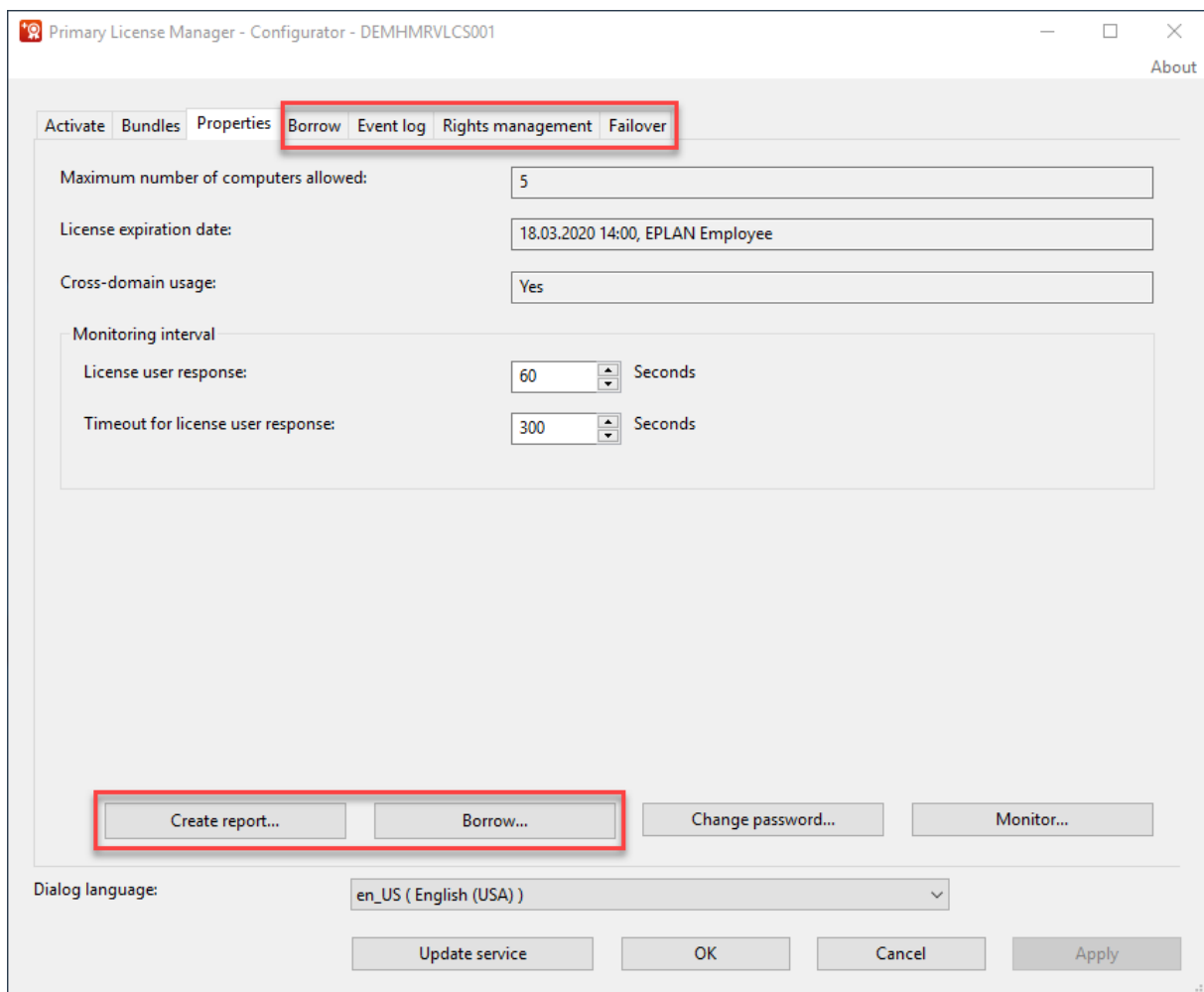
Approved for

The approval is based on the EPLAN Platform.

https://www.eplan.help/en-us/Infoportal/Content/htm/portal_software_approvals.htm

Configuring EPLAN License Manager Professional

EPLAN License Manager Professional offers added functionalities to facilitate the management of network licenses. For example, in the **Properties** tab of the configuration program you will find additional buttons, as well as additional tabs for **Borrow**, **Event log**, **Rights management** and **Failover**.



 **Note:**

Please note that the additional buttons in the **Properties** tab and the tabs **Borrow**, **Event log**, **Rights management** and **Failover** will only be displayed when the EPLAN License Manager has been validated and your program license does in fact include these functionalities.

Additional actions in the "Properties" tab

The following additional actions can be carried out in the **Properties** tab of the "Professional" version:

[Create report]:

This functionality allows you to evaluate the log files (*.rlog) of the EPLAN License Manager that are created by the event log.

Additional information on the topic can be found in the section "Specifying Settings for Storing the Event Log", from Page 21.

[Borrow]:

This button is used to create an offline license file. This will require a request file, created on the client computer. The request file is read into the **Borrow license** dialog.

Additional information about the topic can be found in the section "Creating an offline-license file for borrowing" on Page 14.

Making Settings for Borrowing Network Licenses

You make settings for borrowing network licenses in the **Borrow** tab.

When a network license is borrowed in the **Select license** dialog, the systems and extensions belonging to that network license are used for the predefined **Allowed borrowing period** (in days). The number of licenses available for other users is reduced accordingly during this time.

If you have *not yet* defined a bundle in the **Bundles** tab, the **Available bundles** box only contains the "Default" bundle. This lists all systems and modules belonging to the license you are using.

In the **Number to borrow / Maximum number to borrow** column of this field the number of licenses available to borrow will be displayed behind the respective bundle / system / extension. For example, if in an "EPLAN Electric P8 - Professional" system the numbers displayed in this column would be "4 / 10", it would mean that 4 of a maximum of 10 possible licenses are available to be borrowed.

The values in **Maximum number to borrow** and **Maximum borrowing period** depend on your particular license for the EPLAN License Manager. For the various elements in the **Available bundles** box, you can specify a different, lower number and / or a shorter allowed borrowing period.

If bundles have already been created, all systems and extensions in the ELM license are still listed in the "Default" bundle. However, for the systems and extensions assigned to the defined bundles, the values in the parentheses are reduced (**Number to borrow / Maximum number to borrow**), i.e., fewer elements are available for borrowing outside the bundles.

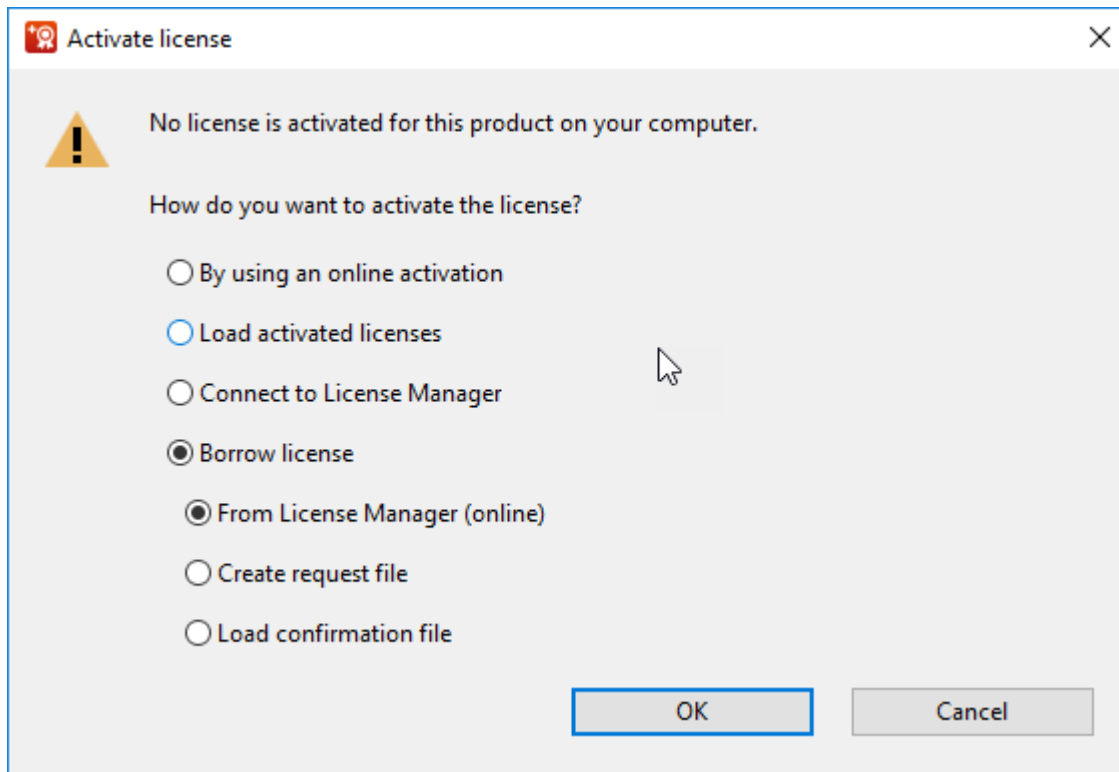
Defining settings for borrowing

1. Switch in the **EPLAN License Manager - Configurator** dialog to the **Borrow** tab.
2. Select a system or extension in the **Available bundles** box.
 - ⇒ Multiple systems and / or extensions can also be selected. If you select a defined bundle, the settings will apply to all systems and extensions in the bundle.
3. In the **Number to borrow** box, define the number available for numbering for the selected bundle, system, and / or extension if you want this number to be different from the maximum number.
4. In the **Allowed borrowing period** box, define the permitted borrowing period for the respective bundles, systems and / or extensions if you want this period to be different from the maximum borrowing period.
5. Define the **Number of systems allowed per computer**. The number can be **Unlimited** or **Limited to** a particular number of systems.
6. Click **[Apply]**.
7. Then click on **[Update service]**.
 - ⇒ The **EPLAN License Manager - Configurator** dialog will remain open, and you can select additional settings.

Borrowing a license online with the EPLAN License Client

You can borrow a license online from the EPLAN License Manager to a Client computer with an installation of an EPLAN application.

On first start-up of an EPLAN application the **Activate license** dialog will be opened if no license exists on the respective computer (e.g. with a first installation of EPLAN Electric P8).



1. Select the **Borrow license > From License Manager (online)** options in this dialog.
- ⇒ The **Borrow license** dialog is opened.

 **Note:**

Should there be no entry in the **License Manager** field, enter the computer name of your EPLAN License Managers in this box.

2. In the **Bundles available to borrow** field, select the desired license bundle and click the **[Borrow]** button.
- ⇒ The license to be borrowed shows in the **Borrow license** dialog.

 **Tip:**

You can also borrow a license by using the **Select license** dialog. Select the **Network license > Borrow license > From License Manager (online)** menu items to do so.

Borrowing a license by using an Offline license file

If it is not possible to borrow a license online on the client's computer (e.g., because there is no connection to the EPLAN License Manager), a license can be borrowed by using the procedure described as follows.

Creating a request file with the EPLAN License Client

1. In the **Validate license** dialog, select the option **Borrow license > Create request file**.
⇒ The **Create request file** dialog opens.
2. In the **File name** field, enter the file path and the name of the request file to be created.
3. If you have already selected a license file, use the **Recently used licenses** check box to select the license last used.
4. If you have not yet selected a license file, enter the license you need in the **Remark** field.
5. Click the **[Create]** button.

As a rule, the request file will be created with your user name at

C:\Users\Public\EPLAN\Common\

The EPLAN user then must send this file to the EPLAN administrator so that the administrator can create an offline license file on the EPLAN License Manager.

Tip:

You can also create a request file by using the **Select license** dialog. To do this use the **Network license > Borrow license > Create request file** menu items.

Creating an offline-license file for borrowing

1. In the **EPLAN License Manager – Configurator** dialog, open the **Properties** tab.
2. Click the **[Borrow]** button.
⇒ The **Borrow license** dialog is opened.
3. Enter the file path and the name of the request file you sent in the **Request file** field, or select it from the **[...]** button.
⇒ The request file is read into the **Borrow license** dialog.
4. In the **Bundles available to borrow** field, select the license bundle designated for the user and click on the **[Borrow]** button.

This will create an offline license file in the default directory of the EPLAN License Manager (e.g. C:\Users\Public\EPLAN\ELM\
<Benutzername>.egb). Send the newly created file to the EPLAN user.



Notes:

- From this point on the borrowed license is no longer available for common use.
- If the request file has already been used to create an offline license file, another request file has to be sent by the EPLAN user before another file can be created. Repeat use of the request file is not possible.

Loading a confirmation file with EPLAN License Client

The EPLAN user can load the offline license file for instance by using the **Validate license** dialog.

1. Select the option **Borrow license > Load confirmation file** in the **Validate license** dialog.
2. Now select the offline license file you received in the open **Load confirmation file** dialog.

⇒ The license to be borrowed shows in the **Borrow license** dialog.

In the **Select license** dialog of the EPLAN License Client the borrowed license is displayed in the **Selection** field.

i Tips:

- You can also load a confirmation file by using the **Select license** dialog. Select the **Network license > Borrow license > Load confirmation file** menu items to do so.
- In the **Select license** dialog you also have the option to return a license before its scheduled time. To do this, select the menu items **Network license > Return license to the License Manager**.

Specifying Settings for the Rights Management

In the **Rights management** tab you assign users or groups with specific authorizations to the created bundles.

Activate Rights management:

When this check box is activated you can use the EPLAN License Manager's rights management function.

Recognizing changes to user group membership automatically:

This check box is selected by default. In this case the user group members are determined during startup of an EPLAN license and this information is stored by the EPLAN License Manager for 15 minutes. If there are no other requests and the user starts the EPLAN application after the 15 minutes have expired, the user group members will be automatically redetermined.

If the check box is deactivated, the user group members are determined once at the startup of the EPLAN License Managers. An automatic update of the user group members will not take place.

 **Note:**

If you deactivate this check box, you will be able to access new users only when the **Remote Dongle Service** is restarted.

Available bundles:

This field provides an overview of all the bundles created by you.

Table of users / groups and authorizations:

The table displays the following columns:




- **User / Group name:** Each bundle contains the user "ELM.Everyone" by default, with the authorization to use and borrow this bundle.
- **Use / Borrow:** By selecting the respective entry in this column you can specify whether a certain user / group is to have the authorization to use / borrow the bundle ("Allowed" entry) or not ("Not allowed" entry).

 **Note:**


"ELM.Everyone" allows all users within and outside a domain to access the EPLAN License Manager. In this respect, it is important that a user is set up, or has the login information of another user with which the user can log on to the server. (Instructions on how to set up a user can be found in the Installation Guide for the EPLAN License Manager in the section "Configuring the DCOM Interface".)

Toolbar:

In the toolbar, above the table with the users / groups and their authorizations, the following buttons are available:

Button	Meaning
 (Add users / groups)	Creates a new user.
 (Remove users / groups)	Deletes the selected user.
 (Add ELM.Everyone)	Adds the user "ELM.Everyone".

Adding a new user or a new group

1. To add a new user or a new group to the displayed bundle, first mark the bundle for which the user or the group is to have the rights.
2. Click the icon  (Add users / groups).
3. In the **Add user / group** dialog, click the [...] button to select a user or a group from the domain.
 - ⇒ The default dialog of the operating system is displayed for this action.
4. Select the domain for the user or the group that you plan to use.
 - ⇒ The added user or added group is displayed in the **Rights management** tab in the **User / group name** field.

The default is for any added users or added groups to receive the authorization for "Use" and "Borrow". You are able to change these authorizations via a setting in the **Use / Borrow** columns.



Note:

Cross-domain groups ("Universal groups") are supported.

Carrying out Settings for Failure Protection (Failover)

In the case of a server failure of your License Manager (primary License Manager) a second, previously inactive EPLAN License Manager (standby License Manager) takes over its function and makes the licenses available.

You carry out the setting for the standby License Manager in the **Failover** tab.



Note:

Make sure that the primary License Manager and the standby License Manager are located in the same domain.

Configuration of the Remote Dongle Service

In order to establish a connection between the two License Managers you have to execute the service under the same user account. Using it you then start the *Remote Dongle Service* service. To do this, switch to the Microsoft administrative services **Services** on your server's operating system.

1. In the **Run** dialog enter the command `services.msc`.
2. In the **Services** dialog search for the entry "Remote Dongle Service" and open the properties of this service.
3. In the **Properties of Remote Dongle Service** dialog select the **Log on** tab.

4. Select the **This account** option in this tab and select a user for the service using the **Find** button.



Note:

The selected user should be set up as the default user for the "Remote Dongle Service" in your domain. Assign administrative rights to this user on the servers on which the EPLAN License Manager runs. If you have any further questions, please contact your system administrator.

5. Change to the **ELM Configurator** program and select the **Failover** tab.
6. Select the **Activate Failover** check box and enter in the **Computer name** field the name for the standby License Manager.
7. Enter the "Fully Qualified Domain name" (FQDN) for the standby License Manager.
8. Click the **[Update service]** button and then **[OK]**.

Configuration of the standby server

1. Change to the computer on which the standby EPLAN License Manager is to be executed.
2. Install the EPLAN License Manager from the DVD. During the installation you can choose the operating mode of the EPLAN License Manager. Select the **Standby License Manager** option here.
3. Configure the standby License Manager with the identical information in the **Component Services** (DCOM) section. (Additional instructions on how to set up a user can be found in the Installation Guide for the EPLAN License Manager in the section "Configuring the DCOM Interface".)
4. Open the **ELM Configurator**.



Note:

The standby License Manager offers only the **Properties** tab in its configuration program.

5. Enter the information of your primary License Manager in this tab (computer name) and the serial number of your Dongle.
6. Enter the Fully Qualified Domain name (FQDN) for the primary License Manager.



Note:

The failover is limited to seven days. Afterwards the Primary EPLAN License Manager should be available again.

Specifying Settings for Storing the Event Log

In the case of event logging the license events are stored in a log file for each day (*.rlog; for example Elm20150521.rlog). By default the EPLAN License Manager stores the files of the last 10 days.

You make settings for storing the logs in the **Event log** tab.

Creating an event log:

When this check box is activated the log will start. In that case, the further settings will be enabled and you have the option of establishing the directory and retention time for the event log.

Directory:

Enter the directory for the log files to be created here, or select it interactively via [...].

Retention time:

Set up the retention times of the log files in this group box:

- **Unlimited:** One log file per day will be created. The created log files will *not* be deleted.

- **Until Date:** Set up a date until when, including which date the log files will be created. Starting the next day no log file will be run.
- **For the last days:** Set up a date from when on the last log files are to be deleted. Number "10" (days) means that for example on the eleventh day the log file created first will be deleted.

 **Notes:**

- The compatibility of the *.rlog file format to previous and possibly future versions of the log format is not guaranteed. This is a purely internal file format that can *only* be used by the EPLAN License Manager and its tools. The file format will be adapted and modified as required.
- The EPLAN License Manager *only* logs when a licensing event occurs. It is therefore possible that no log is created on some days (for example during a weekend).
- In case of a failure of your license manager (primary License Manager) and the activation of a standby License Manager, this standby License Manager will log any additional changes to your licenses.

Running a report for the Event log

You can use the **Create report** functionality to evaluate the log files (*.rlog) of the EPLAN License Manager. In the process the ELM logs are converted into the desired text file format (for example `txt`), under consideration of the respective filter used, and the report is output as a so-called "result file". The functionality supports some filters, but not any evaluations (such as graphics or diagrams).

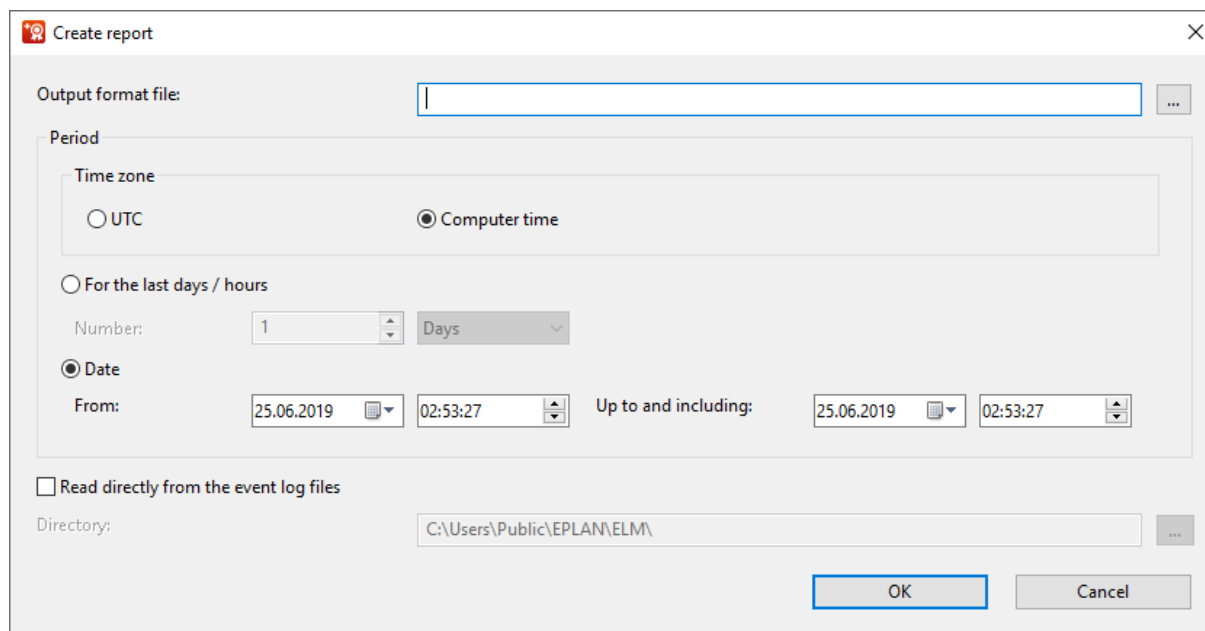
The **Create report** functionality is available in the ELM Monitor and as of Version 7.1.3 also in the ELM Configurator on the **Properties** tab.

Notes:

- The **Create report** functionality of the ELM Monitor depends on the rights management of the EPLAN License Manager. This allows user-specific reports to be created here. We therefore recommend that a user who has all rights to the licenses start the ELM Monitor.
- In the ELM Configurator, on the other hand, the **Create report** functionality does not depend on the rights management. A report that has been created by this method evaluates all the licenses of the EPLAN License Manager.

Creating a report

To create a report you must click in the ELM Configurator on the **Properties** tab / in the ELM Monitor on the **[Create report]** button. You then select various report settings in the dialog that opens.



Output format file:

The so-called "output format file" is used to specify how the report is to be output. The output format file is a configurable XML file. You must create it yourself.

In this file you will determine:

- what is to be listed
- what type of tasks are to be selected (list or summary)
- what type of file will the results be written in
- what type of separator (tabular or semicolon) you will be using.

Additional information about the topic can be found in the section "Attributes in the output format file" on Page 30.

Period:

In this group box you specify the period for which the license events are to be listed.

 **Note:**

Also take the specified time zone into account. The EPLAN License Manager always uses the UTC time zone irrespective of its installation site and its set computer time. You have to select the option **Computer time** in order to set the time zone in which you work. In as far as the "UTC" time zone is not set on your computer, the UTC time is converted and the report created with your computer time.

The specified time zone also influences the time data in the result file. If you have selected the **For the last days / hours** option, the start time of the functionality is also used as the finish time specification.

 **Example:**

On your German computer system the time zone for Western Europe including Daylight Saving Time will be set as (UTC+2); [for US EDT (UTC/GMT-4)]. The **Create report** functionality is started at 21.05.2015 02:00:00. The last three days are set as the period and the **Computer time** option as the time zone. As a result the license event from 18.05.2015 00:00:00 up to and including 20.05.2015 23:59:59 are listed. All time specifications in the result file are listed in Western European Time.

The specifications for the time are evaluated down to the minute from the start to the finish time. The correct specification for one day is therefore "from 00:00:00 up to and including 23:59:59".

 **Example:**

Listings for the day of 21.06.2015:

From: 21.06.2015 00:00:00 **up to and including:** 21.06.2015 23:59:59

Incorrect listing for the day of 21.06.2015:

From: 21.06.2015 00:00:00 **up to and including:** 22.06.2015 00:00:00

With these specifications, the data of 22.06.2015 are also listed for the period from 00:00:00 up to and including 00:00:59 in addition to the license events of 21.06.2015.

Read directly from the event log files:

The **Create report** functionality can also interpret the content of the log file (*.rlog) directly. To this purpose activate the **Read directly from the event log files** check box and specify the desired directory in the box below. Reading rights are required for this directory.

If the check box is not activated, the **Create report** functionality receives the required data from the EPLAN License Manager.

The setting **Read directly from the event log files** helps to ease the burden on the EPLAN License Manager. In such a case the reports are created from log files that do not have the current date.

Note:

Even when the **Read directly from the event log files** setting is activated, the functionality establishes a connection to the EPLAN License Manager in order to obtain some system-specific data from the current EPLAN License Manager.

Output types for the report

The **Create report** functionality outputs the logged license events either as a list or as a summary. In the process the result is always output line-by-line unsorted. Whether the data are output per time, per license bundle or per license extension in a line depends on the configuration of the output format file.

 **Example:**

Result of the **Create report** functionality

a) As a *list*:

Date	User	Action	License
21.06.2015 10:00:01	SKE	IN	EPLAN Electric P8-Professional
21.06. 2015 10:00:01	SKE	IN	Release: EPLAN Electric P8 2.5
21.06. 2015 11:13:20	SKE	OUT	EPLAN Electric P8-Professional
21.06. 2015 11:13:20	SKE	OUT	Release: EPLAN Electric P8 2.5
21.06. 2015 10:02:23	NTB	IN	EPLAN Fluid
21.06. 2015 10:02:23	NTB	IN	Release: EPLAN Fluid 2.5

In the above example a license user called SKE used the license "EPLAN Electric P8-Professional" and the license "Release EPLAN Electric P8 2.5" on 21.06.2015 from 10:00:01 to 11:13:20.

b) As a *summary*:

Date	License	Total used	Total free
21.06.2015 10:00:01	EPLAN Electric P8-Professional	1	3
21.06.2015 10:02:23	EPLAN Fluid	2	1
21.06.2015 10:00:01	Release: EPLAN Electric P8 2.5	1	3
21.06.2015 10:02:23	Release: EPLAN Fluid 2.5	2	1

In the above example the license "EPLAN Electric P8-Professional" was used once on 21.06.2015 at 10:00:01 ("in use"). At this moment a further three licenses for EPLAN Electric P8-Professional were still available.

The *Summary* is structured as follows, because of the bundle properties:

1. Summary of the license bundles (Bundle ID greater than 0)

2nd Summary of the default bundle (Bundle-ID=0, actually: licenses that were not bundled).


Command line parameters

All the user interface settings for the "Create report" functionality can be set by means of a command line. Calling by means of the command line parameters is done using either the file `ElmMonitor.exe` or the file `ElmConfig.exe`.

The following parameters can be used to this purpose:

Parameter	Description
<code>/Createreport</code>	Starts the Create report functionality.
<code>/Server-name:<Value></code>	Name of the computer on which the EPLAN License Manager is installed.
<code>/Xmlfile:<Value></code>	Corresponds to the specification for the Output format file field.
<code>/Timezone:<Value></code>	UTC or Computer, corresponds to the setting for the Time zone field.
<code>/From:<Value></code>	Start time of the report; corresponds to the specification for the field From , time format <code>DD.MM.YYYY HH:MM:SS</code> .
<code>/To:<Value></code>	Finish time of the report; corresponds to the specification for the field Up to and including , time format <code>DD.MM.YYYY HH:MM:SS</code> .
<code>/Lastdays:<Value></code>	Number of logged days; corresponds to the setting For the last days / hours .
<code>/Last-hours:<Value></code>	Number of logged hours; corresponds to the setting For the last days / hours .
<code>/Lang:<Value></code>	Language identifier (for example <code>/Lang:1031</code> for German, <code>/Lang:1033</code> for English (USA)). No specification = language last used.

Parameter	Description
	<p>The following language identifiers are currently supported:</p> <p>1029 cs_CZ (Czech)</p> <p>1030 da_DK (Danish)</p> <p>1031 de_DE (German, Germany)</p> <p>1033 en_US (English, USA)</p> <p>1034 es_ES (Spanish, Spain)</p> <p>1036 fr_FR (French, France)</p> <p>1038 hu_HU (Hungarian)</p> <p>1040 it_IT (Italian, Italy)</p> <p>1042 ko_KR (Korean)</p> <p>1043 nl_NL (Dutch, The Netherlands)</p> <p>1045 pl_PL (Polish)</p> <p>1046 pt_BR (Portuguese, Brazil)</p> <p>2070 pt_PT (Portuguese, Portugal)</p> <p>1049 ru_RU (Russian)</p> <p>1053 sv_SE (Sweden)</p> <p>2052 zn_CN (Chinese, VR China)</p> <p>1041 ja_JP (Japanese)</p>
/Readdirect	Corresponds to the Read directly from the event log file setting
/Elmpath:<Value>	Directory that contains the log file (*.rlog); corresponds to the specification for the Directory field.
/Silent	No messages are displayed.

 **Note:**
 Pay attention to upper / lower case when entering command line parameters. The case of the parameter must agree with the case shown here.

The parameters `/Lastdays` and `/Lasthours` take priority over `/From` and `/To`. If all four parameters are specified, only `/Lastdays` and `/Lasthours` are considered.

If the **Create report** functionality is started from the same computer on which the EPLAN License Manager is installed, you do not need to specify the parameter `/Elmpath` when using `/Readdirect`. In this case the log files (`*.rlog`) are read from the data directory of the EPLAN License Manager. As a rule this is the directory `C:\Users\Public\eplan\elm\`.

If the **Create report** functionality is called up via the `ElmConfig.exe` file, the specified command line parameter `/Servername` is ignored. In this case the server name is the computer name on which the ELM Configurator is located.

Attributes in the output format file

An output format file consists of a `<logfile />` section that can, in turn, have the following four sections:

<code><head /></code>	Header data
<code><list /></code>	List of license events
<code><summary /></code>	Summary of the license bundles
<code><defaultbundle_summary /></code>	Summary of the standard bundle (licenses not combined into bundles)

<logfile /> attributes

Attribute	Description
name	Name of the result file can be formed from the Reporting macros .
extension	The result file extension can be formed from the Reporting macros
path	The directory path of the result file can be formed from the Reporting macros
date	Default date specification: All the date information is output in this time format unless a different time format is stated explicitly (see Date / time macros).
time	Default time specification: All the time information is output in this time format unless a different time format is stated explicitly (see Date / time macros).
separator	Data separator: "TAB" (default), "COMMA" and "SEMICOLON" are currently supported.
sortorigin	Chronological listing
sourcelog	Source of the log file (*.rlog): Possible values are "All", "ELM-Primary" or "ELM-Standby".

Header data, <head /> elements

Header lines of the list.

Attribute	Description
text	Own text can be formed from Reporting macros .
line-spacing	Number of blank lines.

Summary of the license bundles, <summary /> elements

The current summary and the summary within the specified period are currently available.

- Current summary at the specified moment:
 <summary value="current"> ... </summary>
- Summary within the specified period. The license events that were initiated by an action are listed here:
 <summary value="action"> ... </summary>

Element	Description
totalissued	Number of existing licenses, current or within the specified period
totalinuse	Number of licenses being used, current or within the specified period
totalborrow-issued	Number of licenses that can be borrowed, current or within the specified period
totalborrowed	Number of borrowed licenses, current or within the specified period
totalfree	Number of licenses still available, current or within the specified period
bundle	Bundle name
module	System name and name of the license extension
logfrom	Source of the log file (*.rlog): Possible values are "ELM-Primary" or "ELM-Standby".

This section can contain header data attributes (such as <text />).

Summary of the default bundle, <defaultbundle_summary /> elements

The current summary and the summary within the specified period are currently available.

- Current summary at the specified moment:
`<summary value="current"> ... </summary>`
- Summary within the specified period. The license events that were initiated by an action are listed here:
`<summary value="action"> ... </summary>`

Element	Description
totalissued	Number of existing licenses, current or within the specified period
totalinuse	Number of licenses being used, current or within the specified period
totalborrowissued	Number of licenses that can be borrowed, current or within the specified period
totalborrowed	Number of borrowed licenses, current or within the specified period
totalfree	Number of licenses still available, current or within the specified period
module	System name and name of the license extension.
logfrom	Source of the log file (*.rlog). Possible values are "ELM-Primary" or "ELM-Standby".

This section can contain header data attributes (such as `<text />`).

Elements that have the designation `total...`, can have the value `~ number` in the result file (for example `~5`). This means that the total number cannot be determined exactly. This is the case, for example, at a per bundle listing of a static license bundle when the `<module />` element was not specified.

List of the license events, <list /> elements

The current list and the list within the specified period are currently available.

- Current summary at the specified moment:
`<list value="current"> ... </list>`
- List within the specified period. The license events that were initiated by an action are listed here:
`<list> ... </list>`

Element	Description
username	User name of the license user
userid	ID of the license user: The EPLAN License Manager assigns an internal ID in order to identify each license user. After the EPLAN License Manager has been restarted, the IDs are reassigned starting from the beginning. The EPLAN License Manager itself has 0 as the "userid".
userhostid	Host ID of the license user computer
usercomputer	Computer name of the license user
datetime	Date and time when the action (<code>action</code>) was logged
actiontime	Date and time when the action (<code>action</code>) has taken place
action	Shows the executed action: <ul style="list-style-type: none"> • IN = license being used • OUT = license released again • BORROW = license borrowed • RETURN = license returned • ELMSTART = EPLAN License Manager and logging functionality started • ELMSTOP = EPLAN License Manager and logging functionality stopped.

Element	Description
state	<p>State of the action (action): OK = successful, FAILURE = failed</p> <p>In the case of FAILURE an error number with the form [MAX nn.mm] is output (see the section "Important error numbers" on Page 43).</p>
bundle	Bundle name
module	System name and name of the license extension
eventid	<p>ID of a licensing event. The EPLAN License Manager assigns an internal ID in order to identify simultaneous license use. This ID starts with the value of "1", another "1" is added per each simultaneous event. After a day the process starts over with the value "1".</p> <div data-bbox="550 1012 1391 1303" style="background-color: #f0f0f0; padding: 5px;"> <p>i Tip:</p> <p>If there are many records being created simultaneously in the event log, a chronological sorting is difficult. Excel for example, can make correct chronological sorting and output possible by sorting according to date and <code>eventid</code>.</p> </div>
totalchanging	<p>Without the <code>totalchanging</code> element, a distinction between licenses in use several times is <i>not</i> possible.</p> <p>By using <code>totalchanging</code> only one license shows as being in use in EPLAN License Manager when the same license is started up multiple times.</p> <p>In such a case, the value of "1" is issued at the first start of the license, at additional startups of the same license the value of "0" will be issued. This makes an overview of the licenses effectively used possible on the EPLAN License Manager.</p>
logfrom	Source of the log file (*.rlog): Possible values are "ELM-Primary" or "ELM-Standby".

Element	Description
expiretime	Date specification, when the borrowed license will expire


This section can contain header data attributes (such as `<text />`).

In a result file the `<value />` attribute of the `<state />` element can have the following values:

```
OK by name [MAX nn.mm] : Text
FAILURE [MAX nn.mm] : Text
FAILURE by name [MAX nn.mm] : Text
```

To do this, `by name` can be "ELM" or also a user name. `[MAX nn.mm]` is an error number (for example `OK by ELM [MAX 13.38] : The borrow time is expired.`)

The `ELMSTART` and `ELMSTOP` actions are logged when the EPLAN License Manager is started or stopped. The action time can interpret all previous `IN` actions like the `OUT` action time.

 **Example:**

20.07.2015 15:00:10	WS-XY-3	IN	...
20.07.2015 15:30:00	SV-LIC-1	ELMSTART	
20.07.2015 15:30:10	WS-XY-3	IN	...
20.07.2015 15:07:00	WS-YZ-1	IN	...
20.07.2015 15:30:20	WS-YZ-1	IN	...

Headers and filters for list and summary

You can use *headers and filters* for the list and for the summary. The attributes are:

Attribute	Description
header	Text of a header
value	Contents: As a rule this attribute has the value "all" or a filter.
format	A time format that deviates from the format specified in the <code><head /></code> section.

You can use the syntax of the regular expression for the `<value />` in order to filter for a specific value. Semicolons and minus signs are used to filter for integers (integer; attribute `<intvalue />`).



Example:

Listing of the license events on the computer "WS-XY-3":

```
<usercomputer value="^WS-XY-3$" />
```

The characters `^` and `$` are used to specify that the search is to be carried out exactly for the search term contained within them.

Listing of all successful license actions:

```
<state intvalue="0" /> OR
```

```
<state value="0|OK" />
```

Listing of all free licenses equal to 0 or 1:

```
<totalfree intvalue="0;1" />
```

Listing of all free licenses equal to 0, equal to 1 or 2:

```
<totalfree intvalue="0-2" />
```

Reporting macros

Macro	Meaning	Section
%FFYEAR	Specification of the year for the start time of the listing, 4-digit	name, extension, path
%FFMONTH	Specification of the month for the start time of the listing, 2-digit	name, extension, path
%FFDAY	Specification of the day for the start time of the listing, 2-digit	name, extension, path
%FFHOUR	Specification of the hours for the start time of the listing, 2-digit	name, extension, path
%FFMINUTE	Specification of the minutes for the start time of the listing, 2-digit	name, extension, path
%FFSECOND	Specification of the seconds for the start time of the listing, 2-digit	name, extension, path
%FTYEAR	Specification of the year for the end time of the listing, 4-digit	name, extension, path
%FTMONTH	Specification of the month for the end time of the listing, 2-digit	name, extension, path
%FTDAY	Specification of the day for the end time of the listing, 2-digit	name, extension, path
%FTHOUR	Specification of the hours for the end time of the listing, 2-digit	name, extension, path

Macro	Meaning	Section
%FTMINUTE	Specification of the minutes for the end time of the listing, 2-digit	name, extension, path
%FTFSECOND	Specification of the seconds for the end time of the listing, 2-digit	name, extension, path
%FNYEAR	Specification of the year for the start time of the functionality, 4-digit	name, extension, path
%FNMONTH	Specification of the month for the start time of the functionality, 2-digit	name, extension, path
%FNDAY	Specification of the day for the start time of the functionality, 2-digit	name, extension, path
%FNHOUR	Specification of the hours for the start time of the functionality, 2-digit	name, extension, path
%FNMINUTE	Specification of the minutes for the start time of the functionality, 2-digit	name, extension, path
%FNSECOND	Specification of the seconds for the start time of the functionality, 2-digit	name, extension, path
%ELM_SERIALNUMBER	License serial number of EPLAN License Manager	text
%ELM_DONGLESERIALNUMBER	Dongle serial number of EPLAN License Manager	text
%ELM_VERSION	Version of EPLAN License Manager	text
%ELM_LICENSEENDDATE	Expiry date of the EPLAN License Manager license	text

Macro	Meaning	Section
%ELM_CREATORNAME	User name from where the functionality is started	text
%DATE	Date when the functionality is started	text
%TIME	Time when the functionality is started	text
%TZONE	Time zone in which the functionality is started	text
%DOMAIN	Domain name	username
%USER	User name	username

Date / time macros

The following macros are used in the `<logfile />` section for the `date` and `time` attributes.

Macro	Meaning
%a	Abbreviated weekday
%A	Weekday
%b	Abbreviated name of month
%B	Name of month
%c	Date and time using currently set date and time of the computer
%d	Day in the month as a decimal number (01-31)
%H	Hours in 24-hour format (00-23)
%I	Hours in 12-hour format (01-12)
%j	Day in the year as a decimal number (000-366)
%m	Month as a decimal number (01-12)
%M	Minutes as a decimal number (00-59)

Macro	Meaning
%P	Morning and afternoon identifier (a.m. / p.m.), using the currently set date and time of the computer
%S	Seconds as a decimal number (00-59)
%U	Calendar week with Sunday as the first day of the week (00-53)
%w	Weekday as a decimal number (0-6, 0=Sunday)
%W	Calendar week with Monday as the first day of the week (00-53)
%x	Date using currently set date and time of the computer
%X	Time using currently set date and time of the computer
%y	Year, 2-digit (00-99)
%Y	Year, 4-digit
%z, %Z	Time zone specification, complete or abbreviated, depending on the date and time using currently set date and time of the computer

Example of an output format file

Example:

Structure of an output format file:

```
<?xml version="1.0"?>
<logfile name="Report%FFMONTH%FFYEAR-%FTMONTH%FTYEAR" extension="txt"
path="d:\sv-lic-1\report" date="%d.%B %Y" time="%H:%M:%S" separator="TAB">
  <head>
    <text>EPLAN Software & Service GmbH Co. KG</text>
    <text>EPLAN License Manager Version %ELM_VERSION</text>
    <text>License serial number: %ELM_LICENSESERIALNUMBER Dongle: %ELM_DONGLESERIALNUMBER Valid until: %ELM_LICENSEENDDATE</text>
    <linespacing>1</linespacing>
    <text>%CREATORNAME %DATE %TIME</text>
  </head>
```

```
<list>
  <linespacing>2</linespacing>
  <text>State of License</text>
  <username header="User" value="all" format="%USER" />
  <userid header="ID" value="all" />
  <userhostid header="Host ID" value="all" />
  <usercomputer header="Computer" value="^WS-XY-3$" />
  <datetime header="Time" value="all" format="%d.%m.%y %H:%M:%S" />
  <action header="Action" value="all" />
  <state header="State" value="all" />
  <totalissued header="Total Issued" value="all" />
  <totalinuse header="Total license in use" value="all" />
  <totalborrowissued header="Total borrow issued" value="all" />
  <totalborrowed header="Total borrowed" value="all" />
  <totalfree header="Total free" value="all" />
  <bundle header="Bundle" value="all" />
  <module header="Module" value="all" />
</list>

<summary value="action">
  <linespacing>2</linespacing>
  <text>Summary of license using</text>
  <datetime header="Time" value="all" format="%d.%m.%y %H:%M:%S" />
  <totalissued header="Total Issued" value="all" />
  <totalinuse header="Total license in use" value="all" />
  <totalborrowissued header="Total borrow issued" value="all" />
  <totalborrowed header="Total borrowed" value="all" />
  <totalfree header="Total free" value="all" />
  <bundle header="Bundle" value="all" />
  <module header="Module" value="all" />
</summary>

<defaultbundle_summary value="current">
  <linespacing>2</linespacing>
  <text>Summary of all released license (non-bundle) </text>
  <totalissued header="Total Issued" value="all" />
  <totalinuse header="Total license in use" value="all" />
  <totalborrowissued header="Total borrow issued" value="all" />
  <totalborrowed header="Total borrowed" value="all" />
  <totalfree header="Total free" value="all" />
  <module header="Module" value="all" />
</defaultbundle_summary>

</logfile>
```

Important error numbers

Number	Action	Description
MAX 12.67	BORROW	Unable to borrow a license.
MAX 12.68	BORROW	The maximum number of users authorized to borrow has been reached.
MAX 12.70	IN BORROW	The maximum number of users has been reached.
MAX 12.75	BORROW	No systems currently available for borrowing.
MAX 12.76	BORROW	Currently no extensions available for borrowing.
MAX 14.03	IN BORROW	The required system is not available.
MAX 14.04	IN BORROW	No systems available currently.
MAX 14.13	IN BORROW	The required extension is not available.
MAX 14.14	IN BORROW	No expansions are currently available.



EPLAN Software & Service GmbH & Co. KG
An der alten Ziegelei 2
40789 Monheim am Rhein · Germany
Phone: +49 (0) 21 73 / 39 64-0
Fax: +49 (0) 21 73 / 39 64-25
info@eplan.help · www.eplan.de/en