

dSPACE Installation Manager 24.1

Working with CodeMeter Licensing Technology

Release 2024-A – May 2024

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How to Contact dSPACE Support

If you encounter a problem when using dSPACE products, contact your local dSPACE representative:

- Local dSPACE companies and distributors: <https://www.dspace.com/go/locations>
- For countries not listed, contact dSPACE GmbH in Paderborn, Germany.
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You can also use the support request form: <https://www.dspace.com/go/supportrequest>. If you are logged on to mydSPACE, you are automatically identified and do not have to add your contact details manually.

If possible, always provide the serial number of the hardware, the relevant dSPACE License ID, or the serial number of the CmContainer in your support request.

Software Updates and Patches

dSPACE strongly recommends that you download and install the most recent patches for your current dSPACE installation. Visit <https://www.dspace.com/go/patches> for the software updates and patches themselves and for more information, such as how to receive an automatic notification when an update or a patch is available for your dSPACE software.

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About This Document


Contents This document shows you how to manage licenses for dSPACE Release 2017-B and later. Licenses for these Releases are based on the CodeMeter licensing technology. The document introduces you to the technology and gives instructions for license handling, for example, for license activation.

Required knowledge Knowledge in handling the host PC and the Microsoft operating system is assumed.

Printed document A printed copy of this document is available on demand. You can order it free of charge by using the following link:
<https://www.dspace.com/go/requestreleasematerial>

Symbols dSPACE user documentation uses the following symbols:

Symbol	Description
 DANGER	Indicates a hazardous situation that, if not avoided, will result in death or serious injury.
 WARNING	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
 CAUTION	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a hazard that, if not avoided, could result in property damage.
Note	Indicates important information that you should take into account to avoid malfunctions.
Tip	Indicates tips that can make your work easier.
	Indicates a link that refers to a definition in the glossary, which you can find at the end of the document unless stated otherwise.

Symbol	Description
	Follows the document title in a link that refers to another document.

Naming conventions

dSPACE user documentation uses the following naming conventions:

%name% Names enclosed in percent signs refer to environment variables for file and path names.

<> Angle brackets contain wildcard characters or placeholders for variable file and path names, etc.

Special Windows folders

Windows-based software products use the following special folders:

Common Program Data folder A standard folder for application-specific program data that is used by all users.

`%PROGRAMDATA%\dSPACE\\`

or

`%PROGRAMDATA%\dSPACE\\`

Documents folder A standard folder for application-specific files that are used by the current user.

`%USERPROFILE%\Documents\dSPACE\\`

Local Program Data folder A standard folder for application-specific program data that is used by the current user.


`%USERPROFILE%\AppData\Local\dSPACE\\`

Accessing dSPACE Help and PDF files

After you install and decrypt Windows-based dSPACE software, the documentation for the installed products is available in dSPACE Help and as PDF files.

dSPACE Help (local) You can open your local installation of dSPACE Help:

- On its home page via Windows Start Menu
- On specific content using context-sensitive help via **F1**

PDF files You can access PDF files via the  icon in dSPACE Help. The PDF opens on the first page.

dSPACE Help (Web) Independently of the software installation, you can access the Web version of dSPACE Help at <https://www.dspace.com/go/help>.

To access the Web version, you must have a *mydSPACE* account.

For more information on the mydSPACE registration process, refer to <https://www.dspace.com/faq?097>.

Basics on CodeMeter Licensing Technology

Objective As of dSPACE Release 2017-B, dSPACE uses the CodeMeter licensing technology from Wibu-Systems for protecting dSPACE software.

Where to go from here

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Introduction to CmContainers

Basics on CmContainers

CmContainers are basic components of the CodeMeter licensing technology, and the license information is stored in them. Each CmContainer can contain multiple licenses. A CmContainer can store licenses of different license types, for example, single-user licenses and floating network licenses.

A CmContainer can be a CmDongle (hardware-based) or a CmActLicense (software-based). Thus, license information for all dSPACE products and versions is no longer distributed over many files on your PC, but stored in one license container.

CmDongle Hardware-based variant of the CodeMeter protection and licensing technology. The complete license information is stored on a smart card

chip in the CmDongle. With CmDongles, you can move the license information between PCs by plugging the dongle into the PC you want to use. License files are no longer needed.

CmDongles are available in different variants. The one provided by dSPACE is called CmStick. This variant is not a mass storage device. CmSticks are configured as human interface devices (HID). It is not possible to read or write arbitrary information. Therefore the CmSticks can be considered safe. You can even use them in restricted areas and with restricted PCs where standard USB stick mass storage devices are not permitted.

CmActLicense Software-based variant of the CodeMeter protection and licensing technology. CmActLicense containers are bound to a specific PC or hardware. They cannot be transferred to another system. A CmActLicense container can be, for example, one of the following variants: dSPACE Activation Container, dSPACE Borrow Container, dSPACE Hardware Container.

dSPACE Activation Container A specific variant of a software-based CmContainer. dSPACE Activation Containers can be used to store floating network licenses in them.

dSPACE Borrow Container A specific variant of a software-based CmContainer. You can borrow floating network licenses from a CmContainer on a dSPACE License Server in a dSPACE Borrow Container.

dSPACE Hardware Container A specific variant of a software-based CmContainer. dSPACE Hardware Containers are stored on and bound to a specific dSPACE hardware system.

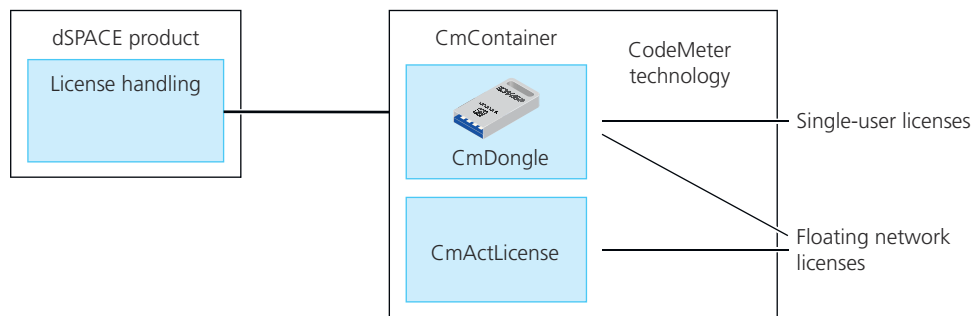
License information in CmContainers A license entry in a CmContainer can be viewed as a data record with various entries, such as the license name, license

type, license quantity, and maintenance end date. dSPACE Installation Manager shows this information as follows:

License Name	Location	Maintenance End	CmContainer	CmContainer Name	CmContainer Type	Expiration Date
130-1035942853						
VEOS - Virtual LIN	Local	30.12.2021	130-1035942853	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
VEOS - Virtual ECU	Local	30.12.2021	130-1035942853	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
VEOS - Virtual CAN	Local	30.12.2021	130-1035942853	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
VEOS - Base	Local	30.12.2021	130-1035942853	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
130-181405216						
ConfigurationDesk - Implementation Version (100)	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ControlDesk Bus Navigator Module	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ControlDesk ECU Diagnostics Module	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ControlDesk ECU Interface Module	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ControlDesk	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ConfigurationDesk - Implementation Vers. MultiCore	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ConfigurationDesk - Implementation Version (300)	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ConfigurationDesk - Implementation Version (200)	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ConfigurationDesk - Implementation Version (1000)	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
ControlDesk - Operator Version	Local	30.12.2021	130-181405216	dSPACE Activation Container	dSPACE Activation Container	31.12.2021
3-3582494						
ControlDesk Bus Navigator Module	Local	27.05.2018	3-3582494	dSPACE-Test	CmDongle	n/a
ControlDesk	Local	27.05.2018	3-3582494	dSPACE-Test	CmDongle	n/a
ControlDesk - Operator Version	Local	27.05.2018	3-3582494	dSPACE-Test	CmDongle	n/a
Installation Manager - Extended Admin	Local	30.12.2021	3-3582494	dSPACE-Test	CmDongle	n/a

Supported license types

dSPACE Release 2024-A supports single-user licenses and floating network licenses. Both are based on the CodeMeter licensing technology.



As shown above, dSPACE Release 2024-A provides single-user licenses only on CmDongles. Floating network licenses are typically stored in CmActLicense containers, but you can also store floating network licenses on CmDongles. In case of a defect or a planned upgrade of the license server, the CmDongle only needs to be plugged into the new license server. You can immediately work with the licenses again.

Limitation for using single-user licenses If you use a PC with a Windows Server operating system, for example, Windows Server 2019, and you want to work with dSPACE software on this PC using Microsoft Remote Desktop Connection, you have to use a floating network license to activate license-protected software. Single-user licenses are not supported in this case.

Basics on License Management

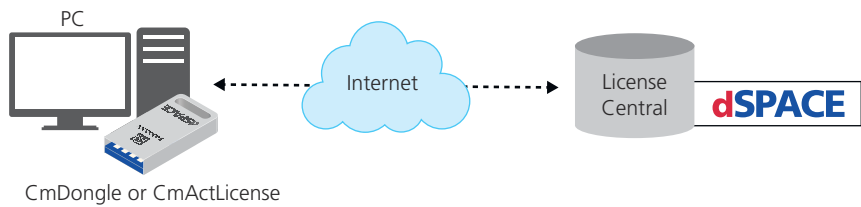
License management tools

The CodeMeter Runtime software provides the basic functionality of the CodeMeter licensing technology. dSPACE Installation Manager is based on CodeMeter Runtime and is the central dSPACE tool for license management. It features almost all tasks required for handling licenses, for example, to activate licenses. CodeMeter tools from Wibu-Systems are required only for certain tasks, for example, setting up a license server and connecting license clients to the server.

CodeMeter software and dSPACE Installation Manager are installed automatically with dSPACE software installations. Furthermore, the tools can be downloaded separately from the dSPACE website.

License management via database

License activation, license updates and deactivation are carried out via dSPACE Installation Manager in combination with a database (dSPACE License Central) on the basis of tickets.

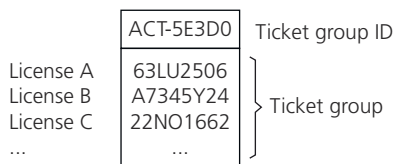


dSPACE License Central is hosted by dSPACE GmbH and is secured against unauthorized access by a web gateway.

Ticket and ticket ID License handling, for example, license activation, uses a ticket-based system. Depending on your order, dSPACE specifies the attributes for each license and provides this information to the database. dSPACE License Central then generates a ticket ID for each license.

The ticket ID is a unique alphanumeric string of characters. The ticket ID of a license remains unchanged as long as the license exists, but the license information related to it can be updated, for example, in case the maintenance end date of a license is extended with an SMS order.

Ticket group and ticket group ID A ticket group combines multiple tickets based on your purchase order. For example, a ticket group combines tickets that dSPACE expects to be activated in one CmContainer. The ticket group ID represents all the tickets in the group. You can also clear individual tickets to exclude them from activation, for example.



License overview After you ordered dSPACE products, dSPACE sends a license overview as PDF file via e-mail. This overview lists the required ticket IDs for the purchased products as follows:

License Overview



Sales order: 4000000000
 Purchase order: 4000000000
 Your Ref.: 4000000000 - dSPACE

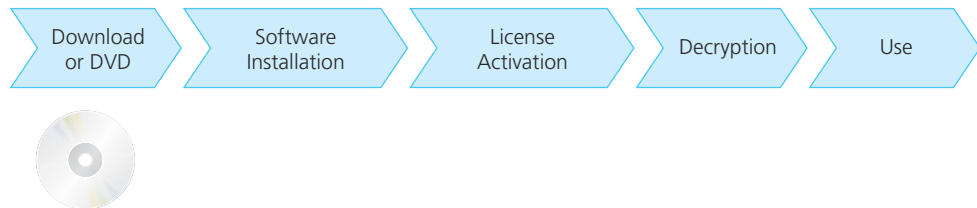
Date: 2023-09-07
 Delivery Date: 2023-09-08

CmContainer: #Licenses are not activated yet

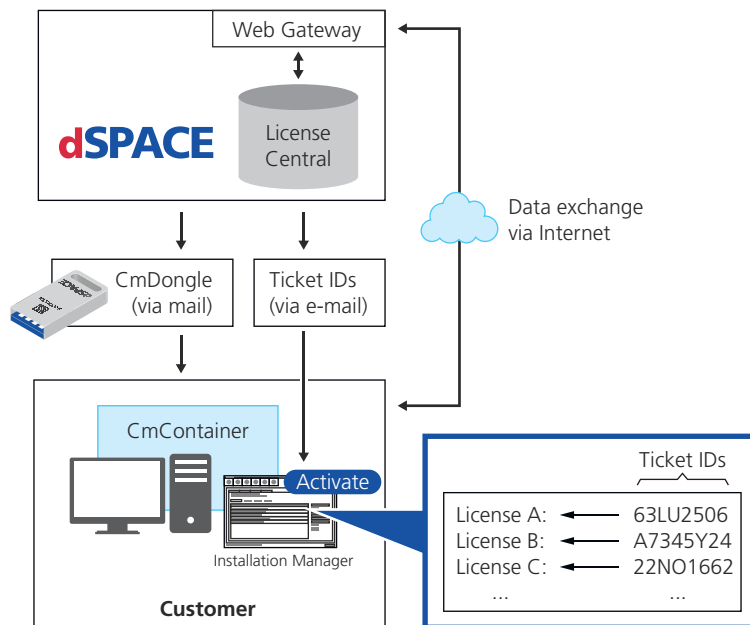
Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
CCPPPC	Microtec C PowerPC Cross Compiler	63LU2506	Local	1,00	2024-03-31				2023-09-08
CONTROLDESK	ControlDesk	A7345Y24	Local	1,00	2024-03-31				2023-09-08
CONTROLDESK_SE	ControlDesk Signal Editor Module	22NO1662	Network	4,00	2024-03-31				2023-09-08
PLATFORM_API	Platform API Package		Local	1,00	2024-03-31				2023-09-08

License activation

The software installation process is now license-independent. Thus, after software installation, you have to activate licenses to run license-protected dSPACE software.



To start the activation process, you have to enter the ticket IDs that you received from dSPACE via e-mail. During activation, data is transferred between dSPACE Installation Manager and dSPACE License Central.



You can activate licenses online, which requires an Internet connection between the Installation Manager and dSPACE License Central, or offline by means

of manual file transfer. dSPACE strongly recommends to use online activation whenever possible.

Note

It is recommended to activate a maximum of 50 licenses in one CmContainer. If you have a larger number of licenses, distribute them over several CmContainers. A higher number of licenses in one CmContainer can lead to long run-times for the activation or update of the licenses.

The workflow differs depending on how dSPACE Installation Manager can access the CmContainer. Refer to [License Activation](#) on page 55.

License updates

License updates are used if the license information of an already activated license was updated by dSPACE. This applies, for example, if the maintenance end date of your dSPACE product is extended, because you purchased a Software Maintenance Service (SMS) contract.

dSPACE informs you when the SMS order has been processed for a certain CmContainer number. You only have to provide access to the CmContainer (for example, connect the corresponding CmDongle), select it in dSPACE Installation Manager, and start the update. dSPACE Installation Manager then automatically performs the update. You do not have to send files by e-mail to dSPACE, for example, with ticket IDs.

If you do not have Internet access, you can use an offline update method. However, dSPACE does not recommend this method, because it is inconvenient and time-consuming.

The workflow differs depending on how dSPACE Installation Manager can access the CmContainer. Refer to [License Update](#) on page 81.

License borrowing

You can borrow floating network licenses from a CmContainer on a dSPACE License Server to a dSPACE Borrow Container (software-based CmContainer) or to a CmDongle.

License borrowing offers the following advantages:

- A borrowed license does not require access to the source CmContainer while you are working with it. You can use it on a PC that is not connected to the dSPACE License Server.
- A borrowed license is treated like an exclusive single-user license. This means that it is blocked for other users of the floating network license and guaranteed to be available on the PC with the dSPACE Borrow Container or the target CmDongle.

Refer to [License Borrowing](#) on page 113.

Moving activated licenses

You can move activated licenses from one CmContainer to another CmContainer, for example, if a changed use case requires a redistribution of activated licenses between different CmContainer.

Refer to [Use Cases and Workflows for Moving Licenses](#) on page 129.

Downloading license files to install dSPACE Releases earlier than dSPACE Release 2017-B

If you own a software product from dSPACE Release 2017-B or later and you want to install and use a version of this product from a dSPACE Release earlier than 2017-B, you must have legacy license files and a CodeMeter CmContainer with activated licenses.

As of October 2019, you can use dSPACE Installation Manager 5.4 up to dSPACE Installation Manager 22.3 to download license files specifically prepared on the basis of the licenses you purchased. Legacy licensing using CodeMeter licenses maps former product versions to an available license so that you can install and use products from dSPACE Release 7.4 (2012-B) up to and including dSPACE Release 2017-A.

Discontinuation of legacy licensing technologies As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports legacy licensing technologies (WibuKey from Wibu-Systems for dongle licenses and FlexNet from Flexera for floating network licenses). This means:

- dSPACE Installation Manager 23.1 (on dSPACE Release 2023-A) and later will support only the CodeMeter licensing technology introduced with dSPACE Release 2017-B.
- dSPACE Installation Manager 23.1 and later no longer provides the file download (keys.dsp and license.dsp) for legacy licensing based on CodeMeter licenses.
- Installing dSPACE Release 2023-A or later on the same PC as dSPACE Release 2017-A or earlier is no longer supported and therefore not recommended.
- As of dSPACE Release 2023-A, dSPACE License Manager (Legacy) is no longer shipped and installed with the dSPACE Installation Manager. The associated command line utilities are also discontinued, including in particular the `IMLicUtil.exe` and the `InstallationReporter.exe` utilities.
- If you still need to use the legacy licensing method, you must use the latest version of dSPACE Installation Manager that supports this technology. This is dSPACE Installation Manager 22.3. You can download dSPACE Installation Manager 22.3 from <https://www.dspace.com/go/IM>.

Validity of CodeMeter Licenses

Introduction

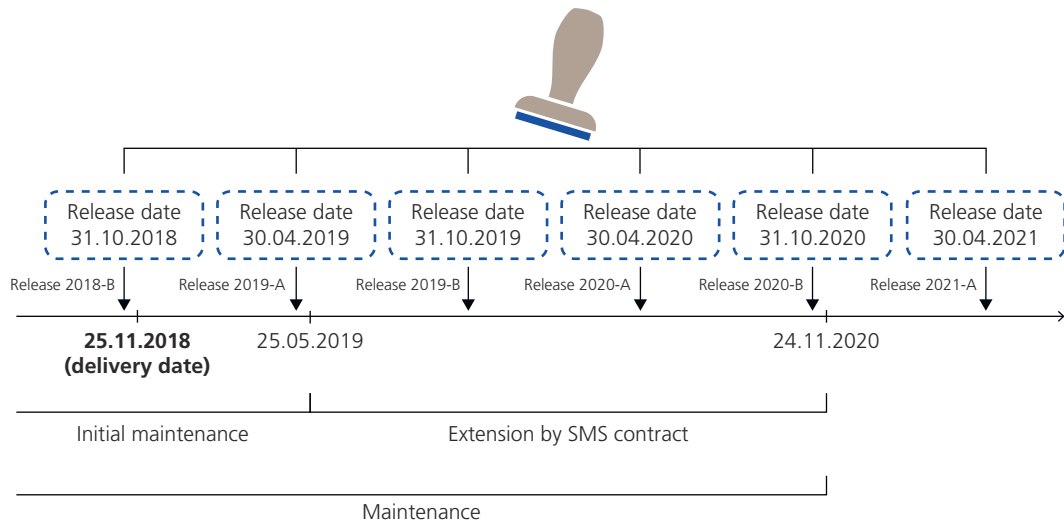
CodeMeter licenses are Release-independent and can be valid for various dSPACE Releases. Therefore, license handling becomes easier, especially for customers with a Software Maintenance Service (SMS) contract.

Release-independent license validity

License validity is not bound to a specific dSPACE Release. Release-dependent license.dsp files are not used anymore.

Therefore, you can install a new dSPACE Release as soon as it is available. Each license-protected software product is stamped with its release date. You can use

the delivered initial Release and in addition every Release of the product that is published (released) before the maintenance end date of the license.



Maintenance end date The maintenance end date limits the usable versions of a software product. All product versions released before the maintenance end date can be executed. The initial maintenance ends six months after the delivery date of the product but can be extended by purchasing SMS contracts.

SMS end date The SMS end date defines the extension by the optional SMS contract for a specific software product. The SMS end date equals the maintenance end date of the related license. It thus permits the execution of newer software versions.

Validity of evaluation licenses

To evaluate or to test dSPACE software, dSPACE provides evaluation licenses. There are two forms of evaluation licenses related to the evaluation time:

- Licenses with a fixed expiration date.
You can use the protected software up to a fixed date, for example, up to March 1, 2020.
- Licenses with a fixed usage period.
The usage period, for example, 60 days, begins with the first use of the activated license from the related dSPACE product and ends after the usage period has expired.

Viewing license validity

Depending on your order, dSPACE Installation Manager displays certain validity entries for each activated license. For example, you can view the maintenance end date, the expiration date of the license, or information on the usage period (duration, start and end date). Refer to [How to Show Available Licenses and Their Attributes](#) on page 40.

Extending license validity

There are certain use scenarios, where the license validity must be extended. For example, if you purchase an SMS contract for the first time, if you want to extend an existing SMS contract, or if you want to extend the evaluation time.

In these cases, dSPACE provides license updates to make the modifications available in your CmContainer. Refer to [License Update](#) on page 81.

Methods for Accessing CmContainers

Motivation dSPACE Installation Manager provides several methods to access CmContainers from a PC. It is possible to manage licenses regardless of whether the PC with the CmContainer has an Internet connection.

Recommended method

Note

Online activation with local access to the CmContainer is the recommended way to activate, update, and deactivate licenses.

Overview

The following table provides an overview of the possible ways to access CmContainers and the actions that are supported for each license type.

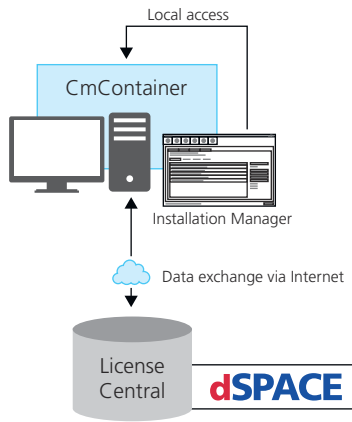
License Type	Action	Access of dSPACE Installation Manager to CmContainer				
		Local Access	LAN Access	dSPACE Hardware Access	File-Based Access	File-Based Remote Access
Single-user licenses	Activate licenses	✓	✓ ¹⁾	—	✓	✓
	Update licenses	✓	✓ ¹⁾	—	✓	✓
	Deactivate licenses	✓	✓ ¹⁾	—	✓	✓
Floating network licenses	Activate licenses	✓	✓ ¹⁾	—	✓	✓
	Update licenses	✓	✓ ¹⁾	—	✓	✓
	Deactivate licenses	✓	✓ ¹⁾	—	✓	✓
Hardware licenses	Activate licenses	—	—	✓	✓	✓
	Update licenses	—	—	✓	✓	✓
	Deactivate licenses	—	—	—	—	—

¹⁾ LAN access is disabled by default. For details, refer to [LAN access to CmContainer](#) on page 18.

Local access to CmContainer

dSPACE Installation Manager must be installed on the PC with direct access to the CmContainer. dSPACE Installation Manager lists the CmContainers it finds on the PC (CmActLicense containers) and that are connected to it (CmDongles).

dSPACE Installation Manager has an Internet connection to dSPACE License Central.



LAN access to CmContainer

You can use the LAN access method if one of the following cases applies:

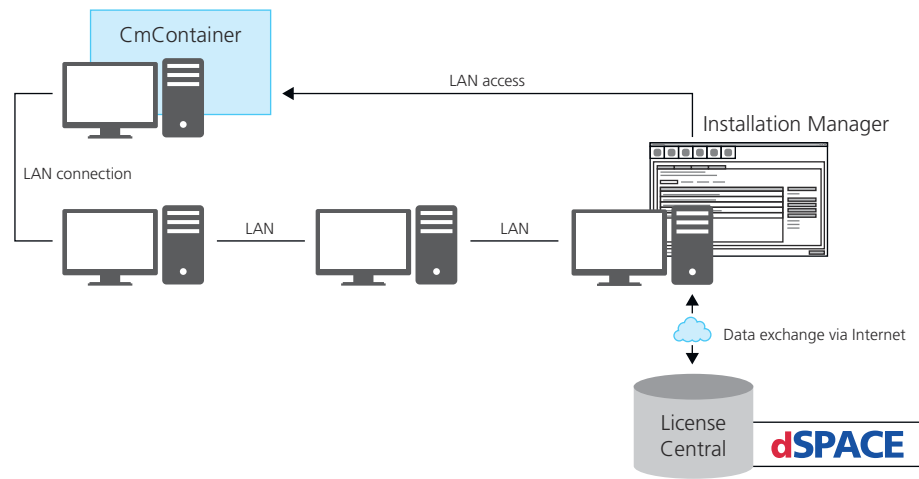
- The PC with dSPACE software and a CmContainer does not have an Internet connection but is connected to other PCs via LAN. For example, PCs used in HIL test benches.
- A PC configured as a dSPACE License Server uses a non-Windows operating system and can therefore not run dSPACE Installation Manager.

dSPACE Installation Manager must be installed on a PC that is connected to the LAN. This PC must also be connected to dSPACE License Central via the Internet. dSPACE Installation Manager can then access CmContainers via the LAN connection and automatically performs the required actions and the data exchange with dSPACE License Central online.

Note

LAN access is disabled by default.

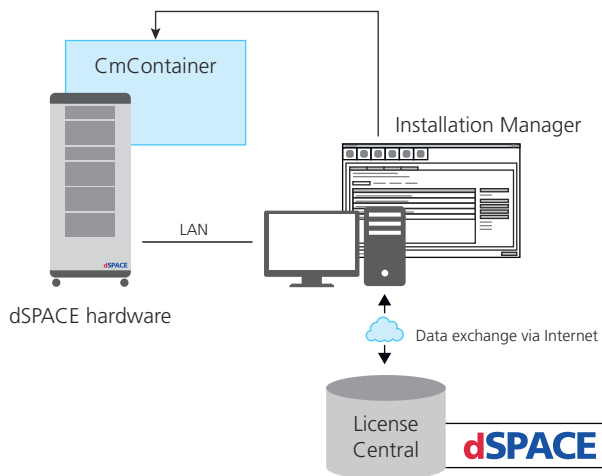
To protect CmContainers on PCs in a LAN from unwanted actions (license activation, license update, license deactivation), LAN access is disabled by default. To use the LAN access feature, a local, activated InstallationManager – Extended Admin license must be available on the PC with Installation Manager. Contact your local dSPACE sales representative or contact dSPACE Support (www.dspace.com/go/supportrequest).



dSPACE hardware access

You have to use this access method when a license must permanently enable license-protected features directly on a dSPACE hardware system, for example, the advanced feature package for the MicroLabBox II.

dSPACE Installation Manager must be installed on a PC that is connected to the dSPACE hardware. This PC must also be connected to dSPACE License Central via the Internet. dSPACE Installation Manager can then access the dSPACE Hardware Container on the dSPACE hardware via LAN connection and automatically performs the required actions and the data exchange with dSPACE License Central online.

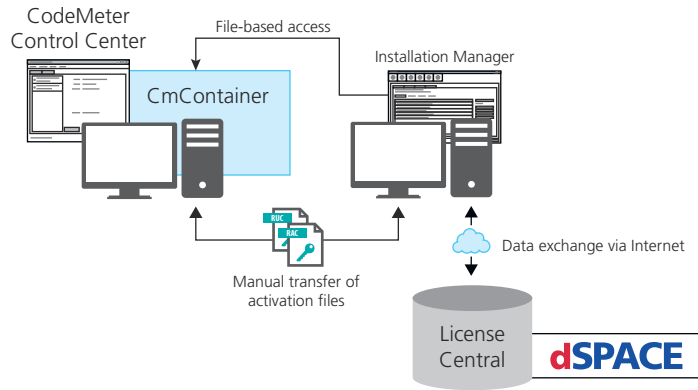


File-based access to CmContainer

You have to use this access method if dSPACE Installation Manager cannot access the CmContainer at all.

On the PC with the CmContainer, CodeMeter Control Center can be used to create the files required for license activation, update, and deactivation. These files must be transferred between the PC and the PC on which dSPACE Installation Manager is installed. Do this with a USB stick or via a network folder, for example.

On another PC, dSPACE Installation Manager must be installed and connected to dSPACE License Central via the Internet. dSPACE Installation Manager exchanges data (reads and sends the activation files) with dSPACE License Central online.



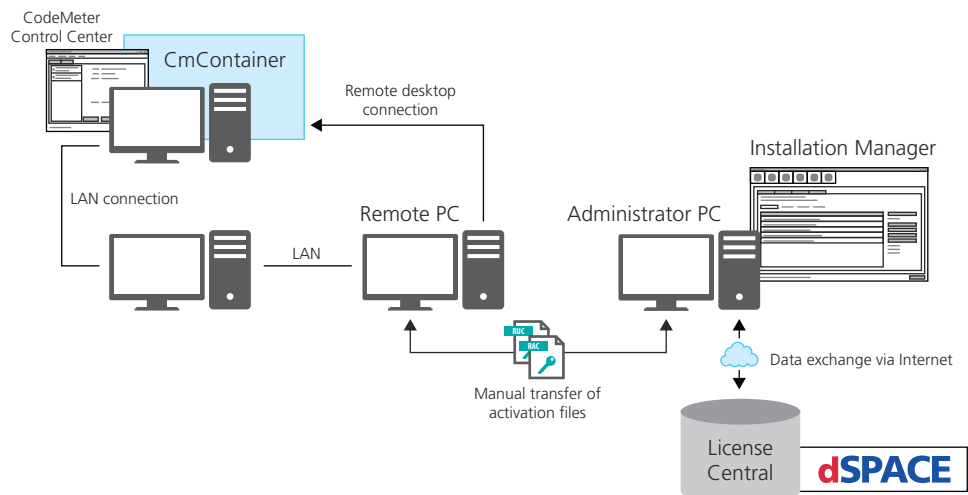
Activation files The files to transfer contain a fingerprint of the CmContainer contents. There are two types of files:

- Remote activation context (RAC) files. These files are created by CodeMeter Control Center and have to be sent to dSPACE License Central via dSPACE Installation Manager.
- Remote activation update (RAU) files. These files are created by dSPACE License Central and are used to update CmContainers.

File-based remote access to CmContainer

This method also uses manual file transfer, but CodeMeter Control Center on the PC with the CmContainer is operated from a remote PC. You can use a remote desktop tool to access the PC with the CmContainer. This tool can be installed on the PC with dSPACE Installation Manager or on any other PC in the LAN to control CodeMeter software and to transfer files manually between the PCs.

Remote access is useful if you want to access multiple CmContainers and work with CodeMeter software installed on the PCs from only one administrator PC. Another use case is to manage single-user licenses that are not accessible directly in a LAN.



As shown above, CodeMeter Control Center can be started on a remote PC to generate the files required for license activation. These files must be transferred between the remote PC and an administrator PC. On the administrator PC, dSPACE Installation Manager reads and sends activation files from the remote PC. dSPACE Installation Manager also exchanges data with dSPACE License Central via the Internet.

Basics on Adding Ticket IDs

Motivation

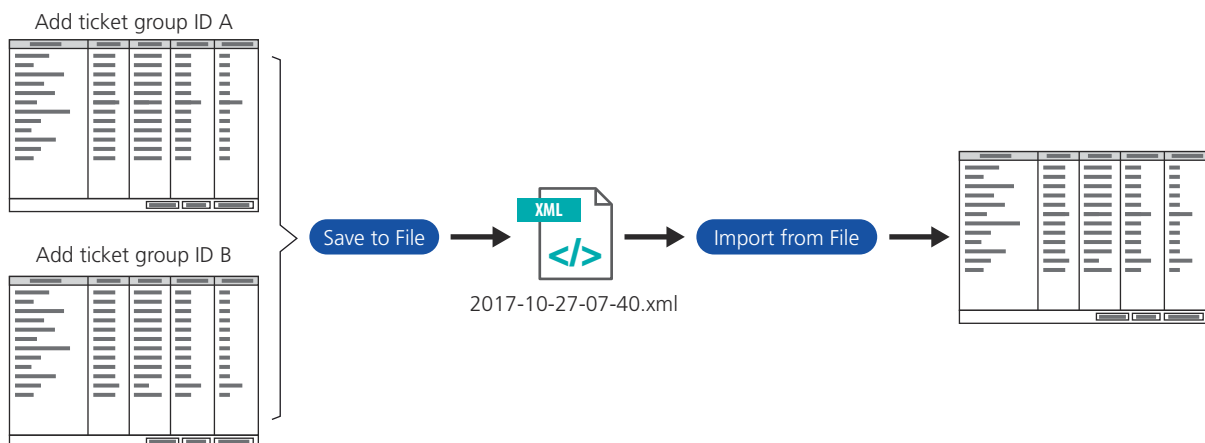
In most license management scenarios, for example, license activation, you have to enter or paste ticket IDs or a ticket group ID in a specific edit field to start the process. Each time you add ticket IDs in the edit field, dSPACE Installation Manager connects to dSPACE License Central, gets the current ticket information, and displays it.

Saving ticket information to file

With the Save to File functionality, you can save the displayed ticket information to an XML or CSV file. The saved information can be regarded as a snapshot. A time stamp is added to the file name.

You can use the file for documentation purposes, or you later can import the file via the Import from File functionality. This makes it much easier to handle multiple ticket IDs.

The following illustration shows that tickets from two ticket group IDs can be saved in one file.



Note

Each time you import a file, the contained ticket information is updated immediately from dSPACE License Central.

Deleting entries

You can delete single ticket entries from the overview by selecting the entry and pressing the **Del** key.

Requirements for Communication

Purpose

To communicate with dSPACE License Central (via a Web gateway), with CodeMeter tools from Wibu-Systems or other PCs in a LAN, your PC must be able to establish a TCP/IP connection.

Communication with dSPACE License Central

To access dSPACE License Central from your PC, you need an Internet connection. dSPACE Installation Manager connects to <https://licensing.dspace.de/gateways>, HTTPS, Port 443.

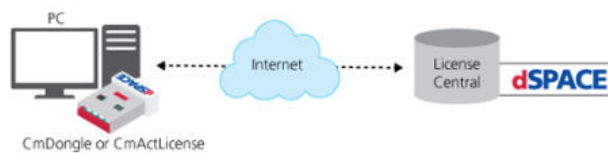
Checking the Internet connection You can check the Internet connection to dSPACE License Central by entering the following address in your Edge Browser: <https://licensing.dspace.de>. If the Internet access to the dSPACE License Central works, the following dialog is displayed. Then, the connection also works with dSPACE Installation Manager.



Congratulations!

You have successfully connected to <https://licensing.dspace.de>

Your browser is configured correctly to communicate with dSPACE license services using HTTPS protocol, port 443.



Ticket Service Running: true
License Gateway Running: true

Specifying proxy settings for proxy servers If your network administrator has configured a proxy server, you must specify the appropriate proxy credentials (address, user name, password) to access the dSPACE server. Otherwise, the connection to the dSPACE server will not be possible.

To specify the proxy credentials, dSPACE Installation Manager uses the `ProxySettings.json` file. It is located in the `ProgramFiles\dSPACE\InstallationManager\bin` folder after installation of the software.

You have to enter the settings directly in the file. The following illustration shows the entries with an example of a proxy address:

```
{
  "proxyAddress": "http://proxy.dspace.de:3128",
  "proxyUsername": "",
  "proxyPassword": ""
}
```

- If you want to work only with the API of the dSPACE Installation Manager on your host PC and not with the GUI application: You have to enter all settings (address, user name, password) directly in the file.
- If you use the GUI application of the dSPACE Installation Manager, and you have not specified the Username and the Password: A dialog for entering the required settings appears. Refer to the following dialog.

Internal LAN communication

For LAN communication between CodeMeter software on different PCs, for example, for connections between floating network license servers and clients, a standard TCP/UDP protocol is required. The default port number is 22350, which is an officially registered port number (IANA). If needed, you can change the port number.

For communication with CmContainers on remote PCs in a LAN, dSPACE Installation Manager uses the CodeMeter functionality. Thus, the connected PCs require the same open TCP/IP network port: 22350 (TCP and UDP).

Required open TCP/IP network ports

dSPACE Installation Manager and CodeMeter licensing software require the following open TCP/IP network ports:

- 22350 (TCP and UDP) for communication in a LAN network (if not changed from the default setting).
- 22352 (TCP and UDP): To access CodeMeter WebAdmin via http.
- 22353 (TCP and UDP): To access CodeMeter WebAdmin via https.

Compatibility with Earlier Releases

Compatibility of dongles

CmDongles shipped for dSPACE Release 2017-B and later support CodeMeter licensing without modifications.

Note

All CmDongles (Rev. 3-xxxx), including those shipped with dSPACE Release 2017-B and later, can still be used with dSPACE Releases 2017-A and earlier, because they can emulate WibuKey dongles.

As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports migration from old dongles (delivered for dSPACE Release 2017-A and earlier) to currently delivered CmDongles.

If you still have an old dongle that needs to be migrated to use dSPACE Release 2017-B or later, the following applies:

- You are still using a WibuKey dongle (Type 1): Migration is no longer possible. A dongle exchange by dSPACE is required. For more information, refer to <http://www.dspace.com/go/DongleReplacement>.
- You are still using a first-generation CmDongle (Type 2), with serial number starting with 2-xxxx and white connector: Migration is no longer possible. A dongle exchange by dSPACE is required. For more information, refer to <http://www.dspace.com/go/DongleReplacement>.
- You are still using a CmDongle (Type 3), with serial number starting with 3-xxxx and old firmcode: Migration is required by using an earlier version of dSPACE Installation Manager (from 5.0 ... to 22.3). For the download of dSPACE Installation Manager 22.3, refer to <https://www.dspace.com/go/IM>.

Discontinuation of legacy licensing technologies

As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports legacy licensing technologies (WibuKey from Wibu-Systems for dongle licenses and FlexNet from Flexera for floating network licenses). This means:

- dSPACE Installation Manager 23.1 (on dSPACE Release 2023-A) and later will support only the CodeMeter licensing technology introduced with dSPACE Release 2017-B.
- dSPACE Installation Manager 23.1 and later no longer provides the file download (keys.dsp and license.dsp) for legacy licensing based on CodeMeter licenses.
- Installing dSPACE Release 2023-A or later on the same PC as dSPACE Release 2017-A or earlier is no longer supported and therefore not recommended.
- As of dSPACE Release 2023-A, dSPACE License Manager (Legacy) is no longer shipped and installed with the dSPACE Installation Manager. The associated command line utilities are also discontinued, including in particular the `IMLicUtil.exe` and the `InstallationReporter.exe` utilities.
- If you still need to use the legacy licensing method, you must use the latest version of dSPACE Installation Manager that supports this technology. This is dSPACE Installation Manager 22.3. You can download dSPACE Installation Manager 22.3 from <https://www.dspace.com/go/IM>.

Use Cases for Starting with CodeMeter Licensing with dSPACE Release 2024-A

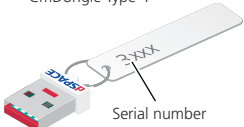
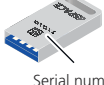

Where to go from here

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Use Case 1: New Customer or Starting with New CmDongle

Your use case

Use Case	Current Dongle	Dongle Provided by dSPACE	License Overview ¹⁾	Dongle Migration/Dongle Exchange	Instructions
1	-	<p>CmDongle Type 4</p>  <p>Serial number</p> <p>OR</p> <p>CmDongle Type 7</p>  <p>Serial number</p>	 <p>File name pattern: LicenseOverview_<xxx></p> <p><xxx> matches your purchase order number. One pdf document is sent per purchase order number.</p>	-	<p>Required steps:</p> <ul style="list-style-type: none"> Install dSPACE Release 2024-A Activate licenses Decrypt encrypted software archives <p>For details, see below.</p>

¹⁾ As of July 2023, the license overview is provided as a PDF file and no longer as an Excel sheet.

Introduction videos

dSPACE has created videos to explain the CodeMeter licensing technology. The following videos address your use case:

- [Installing dSPACE Software](#)
- [Licensing for dSPACE Products: An Overview](#)
- [Activating Licenses and Decrypting Software Archives](#)

License Overview

dSPACE has sent you an e-mail with a PDF file, called License Overview. You received one PDF file per purchase order. The PDF files provide the license information and contain ticket IDs for the Release 2024-A licenses. There is one ticket ID for each software product.

The file name of the License Overview resembles the number of your purchase order as closely as Windows file name conventions permit. The licenses can be activated on any CmDongle. With your shipment, you may receive one or more CmDongles Type 7, but you may also activate the new licenses on existing CmDongles Type 7 or CmDongles Type 4 from an earlier delivery.

The License Overview lists the required ticket IDs for the purchased products as follows:

License Overview



Sales order
Purchase order
Your Ref.

Date: 2023-09-07
Delivery Date: 2023-09-08

CmContainer: #Licenses are not activated yet

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
CCPPPC	Microtec C PowerPC Cross Compiler		Local	1,00	2024-03-31				2023-09-08
CONTROLDESK	ControlDesk		Local	1,00	2024-03-31				2023-09-08
CONTROLDESK_SE	ControlDesk Signal Editor Module		Local	1,00	2024-03-31				2023-09-08
PLATFORM_API	Platform API Package		Local	1,00	2024-03-31				2023-09-08

Getting started

Tip

dSPACE recommends using the same PC for license activation as you use for installing and running dSPACE software.

If you want to set up a separate PC only for license activation, the PC must meet the following requirements:

- Windows 10 (64-bit version only) or Windows 11
- At least dSPACE Installation Manager 24.1, installed either together with dSPACE Release 2024-A or downloaded from <http://www.dspace.com/go/IM>.
- An Internet connection for accessing dSPACE License Central must exist (might require appropriate proxy settings).
- One free USB port

Note

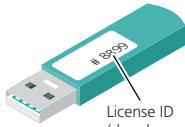
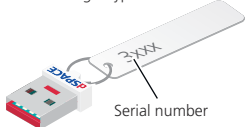
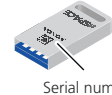



If you want to install dSPACE software (ControlDesk, TargetLink, etc.) on the same PC, the PC must meet additional requirements. Refer to [Appendix: System Requirements \(Installing dSPACE Software\)](#).

Workflow steps

1. *Optional:* Install dSPACE Release 2024-A by using a downloaded image or the distributed DVDs. Refer to [How to Install dSPACE Software \(Installing dSPACE Software\)](#).
Install the product sets containing the products you want to use and for which you have licenses.
2. *Mandatory:* Activate CodeMeter licenses on the CmDongle. Refer to [How to Activate Licenses \(Local Access to CmContainer\)](#) on page 60.
3. *Optional:* To use software of dSPACE Release 2024-A, decrypt the encrypted parts of the installed software products by using the CmDongle with the CodeMeter licenses you just activated. Refer to [How to Decrypt Encrypted Archives of dSPACE Software Installations \(Managing dSPACE Software Installations\)](#).
4. *Optional:* Verify that Release 2024-A works with the CmDongle.

Use Case 2: Starting with WibuKey Dongle

Your use case

Use Case	Current Dongle	Dongle Provided by dSPACE in 2018	License Overview Provided by dSPACE in 2017	Dongle Exchange by dSPACE	Instructions
2	<p>WibuKey dongle Type 1</p>  <p>License ID (dongle number)</p>	<p>The WibuKey dongle (Type 1) cannot be used for CodeMeter licensing. Therefore dSPACE has already sent you a CmDongle Type 6 or Type 7 via mail.</p> <p>CmDongle Type 6</p>  <p>Serial number</p> <p>or</p> <p>CmDongle Type 7</p>  <p>Serial number</p> <p>As of dSPACE Release 2023-A, these CmDongles can no longer be used for migration. Send them back to dSPACE together with the WibuKey dongle when exchanging the old dongle.</p>	 <p>File name pattern: WKID-xxxxx.xlsx</p> <p>As of dSPACE Release 2023-A, this delivered license overview is obsolete. Therefore, delete the file. A new license overview is delivered as PDF file with the new CmDongle Type 7 when exchanging the dongle.</p>	<p>As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports migration from WibuKey dongles (Type 1) to currently delivered CmDongles. Therefore a dongle exchange by dSPACE is required. With the dongle exchange you will receive a CmDongle Type 7 and a new license overview as PDF file from dSPACE.</p> <p>CmDongle Type 7</p>  <p>Serial number</p>  <p>File name pattern: LicenseOverview_<xxx></p>	<p>Required steps:</p> <ul style="list-style-type: none"> Exchange the WibuKey dongle. Install dSPACE Release 2024-A Activate licenses Decrypt encrypted software archives <p>For details, see below.</p>

Exchanging the WibuKey dongle

You have been using a WibuKey dongle (Type 1). This type of dongle cannot be used for CodeMeter licensing.

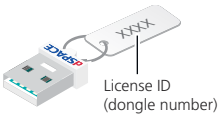

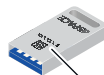
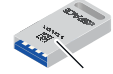

As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports migration from WibuKey dongles (Type 1) to currently delivered CmDongles. A dongle exchange by dSPACE is required. For more information, refer to <http://www.dspace.com/go/DongleReplacement>.

Further instruction details

After dongle exchange, continue with [Use Case 1: New Customer or Starting with New CmDongle](#) on page 26.

Use Case 3: Starting with Old CmDongles (Rev. 2-xxxx)

Your use case

Use Case	Current Dongle	Dongle Provided by dSPACE in Q1/2017	License Overview	Dongle Exchange by dSPACE	Instructions
3	<p>CmDongle Type 2</p>  <p>License ID (dongle number)</p>	<p>The CmDongles Type 2 can no longer be used for CodeMeter licensing. Therefore dSPACE has already sent you a CmDongle Type 5 or Type 7 via mail.</p> <p>CmDongle Type 5</p>  <p>or</p> <p>CmDongle Type 7</p>  <p>Serial number</p> <p>As of dSPACE Release 2023-A, these CmDongles can no longer be migrated. Send them back to dSPACE together with the CmDongle Type 2 when exchanging the dongle.</p>	-	<p>As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports migration from CmDongles (Type 2) to currently delivered CmDongles. Therefore a dongle exchange by dSPACE is required.</p> <p>With the dongle exchange you will receive a CmDongle Type 7 and a new license overview file from dSPACE.</p> <p>CmDongle Type 7</p>  <p>Serial number</p>  <p>File name pattern: LicenseOverview_<xxx></p>	<p>Required steps:</p> <ul style="list-style-type: none"> Exchange the CmDongle Type 2. Install dSPACE Release 2024-A Activate licenses Decrypt encrypted software archives <p>For details, see below.</p>

Exchanging the CmDongle

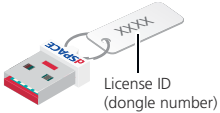

You are still using a first-generation CmDongle (Type 2), with serial number starting with 2-xxxx and white connector: Migration is no longer possible. A dongle exchange by dSPACE is required. For more information, refer to <http://www.dspace.com/go/DongleReplacement>.

Further instruction details

After dongle exchange, continue with [Use Case 1: New Customer or Starting with New CmDongle](#) on page 26.

Use Case 4: Starting with Old CmDongles (Rev. 3-xxxx)

Your use case

Use Case	Current Dongle	Dongle Provided by dSPACE	License Overview ¹⁾	Dongle Migration	Instructions
4	CmDongle Type 3 	-	 File name pattern: LicenseOverview_<xxx> <xxx> matches your purchase order number. One pdf document is sent per purchase order number.	As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports migration from old dongles (delivered for dSPACE Release 2017-A and earlier) to currently delivered CmDongles.	Required steps: <ul style="list-style-type: none"> ▪ Migrate license information. ▪ Install dSPACE Release 2024-A ▪ Activate licenses ▪ Decrypt encrypted software archives For details, see below.

¹⁾ As of July 2023, the license overview is provided as a PDF file and no longer as an Excel sheet.

Migrating the old CmDongles (Rev. 3-xxxx)

You are still using an old CmDongle (Type 3), with serial number starting with 3-xxxx and old firmcode. This type of dongle must be migrated so you can use it with the CodeMeter technology. After you migrate the license information, you can activate the licenses for dSPACE Release 2024-A on the CmDongle.


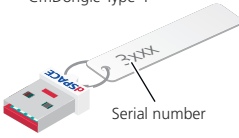
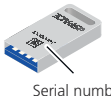

For migrating the CmDongle you have to use an earlier version of dSPACE Installation Manager (from 5.0 ... to 22.3). For the download of dSPACE Installation Manager 22.3, refer to <https://www.dspace.com/go/IM>. For migration instructions, refer to the documentation of the dSPACE Installation Manager version used.

Further instruction details

After dongle migration, continue with [Use Case 1: New Customer or Starting with New CmDongle](#) on page 26.

Use Case 5: Updating the Maintenance End Date of Activated Licenses (SMS Contracts)

Your use case

Use Case	Current Dongle	Dongle Provided by dSPACE	License Overview ¹⁾	Dongle Migration	Instructions
5	<p>CmDongle Type 3</p>  <p>- or -</p> <p>CmDongle Type 4</p>  <p>- or -</p> <p>CmDongle Type 7</p> 	-	 <p>File name pattern: LicenseOverview_<xxx></p> <p><xxx> matches your purchase order number. One pdf document is sent per purchase order number..</p>	-	<p>Required steps:</p> <ul style="list-style-type: none"> Update licenses <p>For details, see below.</p>

¹⁾ As of July 2023, the license overview is provided as a PDF file and no longer as an Excel sheet.

If you use a CmDongle Type 3, Type 4 or Type 7 and the CodeMeter licenses were already activated on a CmDongle, you can easily update licenses, for example, by entering a Software Maintenance Service (SMS) contract to extend the maintenance end date of the licenses.

Introduction videos

dSPACE has created videos to explain the CodeMeter licensing technology. The following video addresses your use case:

- [Updating Licenses](#)

License Overview

dSPACE has sent you an e-mail with a PDF file, called License Overview. You received one PDF file for each purchase order (containing all related CmContainer) for which you ordered the SMS.

The files are sent only to document the maintenance end update. The ticket IDs are the same as those used when initially activating the licenses. If you did not purchase SMS for all licenses on a CmDongle, the License Overview shows only the tickets of the licenses that can be updated.

The file name of the License Overview resembles the number of your purchase order as closely as Windows file name conventions permit.

The License Overview lists the required ticket IDs for the licenses for which you ordered the SMS with the new maintenance end as follows:

License Overview



Sales order
Purchase order
Your Ref.

Date: 2023-09-07
Delivery Date: 2021-12-16

CmContainer: 3-5441560

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
BUS_MANAGER	Bus Manager		Local	1,00	2023-06-30				2021-12-16
CFD_I_100	ConfigurationDesk for 100 Functions		Local	1,00	2023-06-30				2021-12-16

CmContainer: 3-5441561

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
AUD_BASIC	AutomationDesk Basic Version		Local	1,00	2023-06-30				2021-12-16
CONTROLDESK	ControlDesk		Local	1,00	2023-06-30				2021-12-16
CONTROLDESK_BNV	ControlDesk Bus Navigator Module		Local	1,00	2023-06-30				2021-12-16

Getting started

Tip

dSPACE recommends using the same PC for license updates as you use for installing and running dSPACE software.

If you want to set up a separate PC only for license updates, the PC must meet the following requirements:

- Windows 10 (64-bit versions only) or Windows 11
- At least dSPACE Installation Manager 24.1, installed either together with dSPACE Release 2024-A or downloaded from <http://www.dspace.com/go/IM>.
- An Internet connection for accessing dSPACE License Central must exist (might require appropriate proxy settings).
- One free USB port

Note


If you want to install dSPACE software (ControlDesk, TargetLink, etc.) on the same PC, the PC must meet additional requirements. Refer to [Appendix: System Requirements \(Installing dSPACE Software\)](#).

Workflow steps

1. *Mandatory:* Update CodeMeter licenses on the CmDongle. Refer to [How to Update Licenses \(Local Access to CmContainer\)](#) on page 86.

FNL Use Case 1: New Customer or Starting with a New Floating Network License Installation

Your use case

Use Case	License Overview ¹⁾	Instructions
FNL 1	 <p>File name pattern: LicenseOverview_<xxx></p> <p><xxx> matches your purchase order number. One pdf document is sent per purchase order number.</p>	<p>Required steps on the license server:</p> <ul style="list-style-type: none"> Configure one PC in the network as the dSPACE License Server Activate licenses on the server <p>Required steps on each license client:</p> <ul style="list-style-type: none"> Install dSPACE Release 2024-A on dSPACE License Clients Decrypt encrypted software archives <p>For details, see below.</p>

¹⁾ As of July 2023, the license overview is provided as a PDF file and no longer as an Excel sheet.

Introduction videos

dSPACE has created videos to explain the CodeMeter licensing technology. The following video addresses your use case:

- [Installing dSPACE Software](#)
- [Licensing for dSPACE Products: An Overview](#)

License Overview

dSPACE has sent you an e-mail with a PDF file, called License Overview. You received one PDF file per purchase order. The PDF files provide the license information. They contain ticket IDs for the Release 2024-A licenses. There is one ticket ID for each software product.

The file name of the License Overview resembles the number of your purchase order as closely as Windows file name conventions permit.

The License Overview lists the required ticket IDs for the purchased products as follows:

License Overview



Sales order: [redacted]
 Purchase order: [redacted]
 Your Ref.: [redacted]

Date: 2023-09-12
 Delivery Date: 2021-01-14

CmContainer: #Licenses are not activated yet

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
TAS	TargetLink AUTOSAR Module	[redacted]	Network	4,00	2023-02-28			[redacted]	2021-01-14
TBS	TargetLink Base Suite	[redacted]	Network	4,00	2023-02-28			[redacted]	2021-01-14

An important attribute of floating network licenses is the license quantity, which defines the number of licenses that can be used on client PCs at the same time. Floating network licenses can have a quantity ≥ 1 .

Getting started

Installing dSPACE License Clients The PC must meet system requirements so you can use dSPACE software on it. Refer to [Appendix: System Requirements \(Installing dSPACE Software\)](#).

Repeat the following steps on every dSPACE License Client:

1. *Mandatory:* Install dSPACE Release 2024-A by using a downloaded image or the distributed DVDs. Refer to [How to Install dSPACE Software \(Installing dSPACE Software\)](#).

Install the product sets containing the products you want to use and for which you have licenses.

2. *Mandatory:* Add the license server to the server search list by entering the name or the IP address of the license server. Refer to [How to Set up a Connection Between Client and Server](#) on page 156.

By default, `localhost` is added to the server search list during software installation to avoid unwanted network broadcasts by the CodeMeter Runtime software.

3. *Mandatory:* To use software of dSPACE Release 2024-A, decrypt the encrypted parts of the installed software products by using the CmDongle with the CodeMeter licenses you just activated. Refer to [How to Decrypt Encrypted Archives of dSPACE Software Installations \(Managing dSPACE Software Installations\)](#).

Installing dSPACE License Server The PC that you want to configure as the dSPACE License Server, should meet the following requirements:

- Windows 10 (64-bit version only) or Windows 11
 - An Internet connection for accessing dSPACE License Central must exist (might require appropriate proxy settings).
1. *Mandatory:* Install dSPACE Installation Manager 24.1, either together with dSPACE Release 2024-A or downloaded from <http://www.dspace.com/go/IM>.
 2. *Mandatory:* Configure CodeMeter Runtime as the floating network server. Refer to [How to Set Up the dSPACE License Server](#) on page 153.
 3. *Mandatory:* Activate CodeMeter floating network licenses on the license server. Refer to [How to Activate Licenses \(Local Access to CmContainer\)](#) on page 60.

FNL Use Case 2: Migrating Floating Network Licenses

Your use case

Use Case	License Overview ¹⁾	Instructions
FNL 2	 <p>File name pattern: LicenseOverview_<xxx></p>	Proceed as described in FNL Use Case 1: New Customer or Starting with a New Floating Network License Installation on page 33.

Use Case	License Overview ¹⁾	Instructions
	<xxx> matches your purchase order number. One pdf document is sent per purchase order number.	

¹⁾ As of July 2023, the license overview is provided as a PDF file and no longer as an Excel sheet.

You have been using a FlexNet floating network license server. The FlexNet licensing technology and CodeMeter licensing technology are not compatible. However, FlexNet and CodeMeter floating network servers can be hosted on the same PC at the same time.

License Overview

dSPACE has sent you an e-mail with a PDF file, called License Overview. The former `license.dsp`, `license.dat` and `keys.dsp` files are not applicable and not needed for dSPACE Release 2024-A.


The PDF files provide the license information and replace the old license files. They contain ticket IDs for the Release 2024-A licenses.

Getting started

Continue with [FNL Use Case 1: New Customer or Starting with a New Floating Network License Installation](#) on page 33.

FNL Use Case 3: Updating the Maintenance End Date of Activated Licenses (SMS Contracts)

Your use case

Use Case	License Overview ¹⁾	Instructions
FNL 3	 <p>File name pattern: LicenseOverview_<xxx></p> <p><xxx> matches your purchase order number. One pdf document is sent per purchase order number.</p>	<p>Required steps:</p> <ul style="list-style-type: none"> Update licenses <p>For details, see below.</p>

¹⁾ As of July 2023, the license overview is provided as a PDF file and no longer as an Excel sheet.

If the CodeMeter licenses were already activated in a CmActLicense container or on a CmDongle, you can easily update licenses, for example, by entering a Software Maintenance Service (SMS) contract to extend the maintenance end date of the licenses.

License Overview

dSPACE has sent you an e-mail with a PDF file, called License Overview. You received one PDF file for each purchase order (containing all related CmContainer) for which you ordered the SMS.

The files are sent only to document the maintenance end update. The ticket IDs are the same as those used when initially activating the licenses. If you did not purchase SMS for all licenses in a CmContainer, the License Overview shows only the tickets of the licenses that can be updated.

The file name of the License Overview resembles the number of your purchase order as closely as Windows file name conventions permit.

The License Overview lists the required ticket IDs for the licenses for which you ordered the SMS with the new maintenance end as follows:

License Overview



Sales order: **130-11964619**
 Purchase order: **130-11964619**
 Your Ref.: **130-11964619**

Date: **2023-09-12**
 Delivery Date: **2020-11-03**

CmContainer: 130-11964619

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
XSG_UTILS_PROC_SOL	XSG Utils Processor Interface Lib	130-11964619-0001	Network	2,00	2022-12-31				2020-10-21

CmContainer: 130-1570630541

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
VEOS_BASE	VEOS - Base	130-1570630541-0001	Network	2,00	2023-12-31				2020-11-03

Getting started

Use the same PC you set up to activate the floating network licenses.

Workflow steps

1. *Mandatory:* Update CodeMeter floating network licenses. Refer to [How to Update Licenses \(Local Access to CmContainer\)](#) on page 86.

Showing Available Licenses, CmContainers, and Tickets

Motivation dSPACE Installation Manager provides several overviews to show detailed information on available licenses, CmContainers, tickets and their attributes.

Where to go from here

Information in this section

How to Show Available CmContainers and Their Attributes.....	37
How to Show Available Licenses and Their Attributes.....	40
How to Request and Show Ticket Information.....	44
Notifications for Expiring Licenses.....	48
How to Update the Firmware of a CmDongle.....	51

How to Show Available CmContainers and Their Attributes

Objective To view available CmContainers and their attributes, you can use dSPACE Installation Manager.

Accessible CmContainers

With dSPACE Installation Manager, the following CmContainers are accessible and displayed:

- All CmDongles connected to your PC.
dSPACE Installation Manager can access and therefore display only CmDongles which contain a dSPACE firm code. CmDongles without a dSPACE firm code cannot be displayed. Therefore you cannot use them to activate dSPACE licenses, for example.

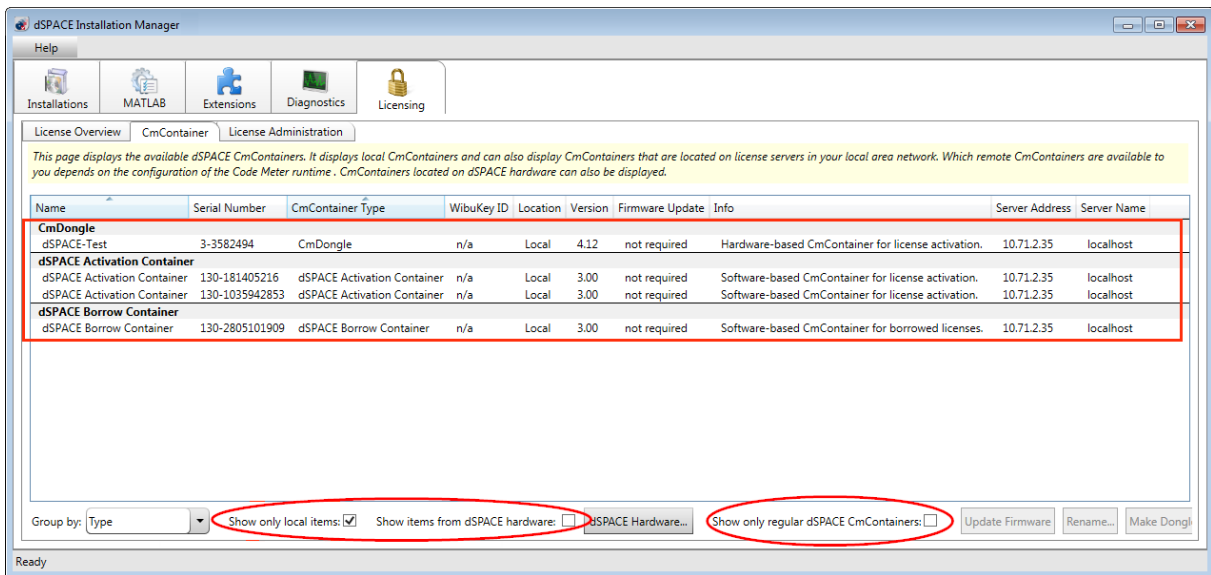
- All CmActLicense containers on your PC.
- All CmContainers in a LAN connected to a PC that is configured as a dSPACE License Server. The server must be listed in the server search list on your PC.
- All CmContainers (dSPACE Hardware Containers) that are located on a dSPACE hardware system connected to your PC.

Method

To show available CmContainers and their attributes

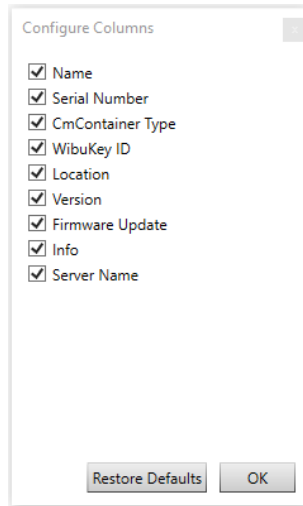
- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – CmContainer tab.
- 3 Check the settings of the following checkboxes:
 - Show only local items: Clear this checkbox if you also want to view CmContainers that are accessible in a LAN.
 - Show items from dSPACE hardware: Select this checkbox if you also want to view dSPACE Hardware Containers that are located on dSPACE hardware systems. This functionality is relevant for the SCALEXIO Hypervisor Extension and the advanced feature package for the MicroLabBox II.
 - Show only regular dSPACE CmContainers: Select this checkbox if you only want to view CmContainers that contain the required dSPACE firm code and can therefore be used for dSPACE license handling.

All accessible CmContainers are displayed:



- 4 Right-click the CmContainer page and select Configure Columns from the context menu.

- In the Configure Columns dialog, select the attributes you want to display on the CmContainer page.



The following attributes are available:

Attribute	Description
Name	The name of the CmContainer. If the selected CmContainer is a CmDongle, you can modify this entry via Rename.
Serial number	The unique serial number of the CmContainer. Valid for CmDongles shipped with dSPACE Release 2017-B and later: The serial number is also printed on the dongle tag.
CmContainer Type	The type of the CmContainer: <ul style="list-style-type: none"> CmDongle dSPACE Activation Container. This specific variant of a software-based CmContainer can be use to store floating network licenses in it. dSPACE Borrow Container. The dSPACE Borrow Container is a specific variant of a software-based CmContainer. You can borrow floating network licenses from a CmContainer on a dSPACE License Server in a dSPACE Borrow Container. dSPACE Hardware Container. This specific variant of a software-based CmContainer is located on a dSPACE hardware system and is permanently bound to this system. This CmContainer is available for the SCALEXIO Hypervisor Extension and the advanced feature package for the MicroLabBox II.
WibuKey ID	A special ID used to emulate the license ID (dongle number) required for dSPACE Release 2017-A and earlier.
Location	The location of a CmContainer: <ul style="list-style-type: none"> Local: The CmContainer is located on your PC. LAN: The CmContainer is located on a PC connected to the LAN. dSPACE Hardware: The CmContainer is located on a dSPACE hardware system connected to your PC.
Version	The CmContainer version number.
Firmware Update	Indicates whether the firmware of the CmContainer is outdated and needs to be updated. If Required is displayed, refer to How to Update the Firmware of a CmDongle on page 51.
Info	Provides further status information on the CmContainer. Possible entries are: <ul style="list-style-type: none"> Hardware based CmContainer to activate licenses on it. Software based CmContainer to activate licenses on it. Migration required via 'dSPACE Dongle Migration' utility. Migration required. Go to 'License Administration - Dongle Migration'.

Attribute	Description
	<ul style="list-style-type: none"> ▪ CmContainer not prepared for license activation. Go to 'License Administration - Manual CmContainer Creation'. ▪ Unsupported CmDongle. No WibuKeyID found. ▪ Unsupported CmDongle. No ID_DSPACE entry found.
Server Name	<ul style="list-style-type: none"> ▪ The name of the dSPACE License Server that hosts the CmContainer with the floating network licenses. - or - ▪ The URL of the dSPACE hardware system, where the dSPACE Hardware Container is located.

Result dSPACE Installation Manager displays accessible CmContainers with the selected attributes.

Note

- dSPACE Installation Manager stores the settings you made in the Configure Columns dialog.
- Use the Restore Defaults button in the Configure Columns dialog to reset the display of attributes to a default setting.

How to Show Available Licenses and Their Attributes

Objective To view available dSPACE licenses and their attributes, you can use dSPACE Installation Manager.

Accessible licenses With dSPACE Installation Manager, the following licenses are accessible and displayed:

- All licenses in CmContainers (CmDongles or CmActLicense containers) on your PC.
- All licenses in CmContainers in a LAN network connected to a PC that is configured as a dSPACE License Server. The server must be listed in the server search list on your PC.

In a LAN, dSPACE Installation Manager can show only floating network licenses.

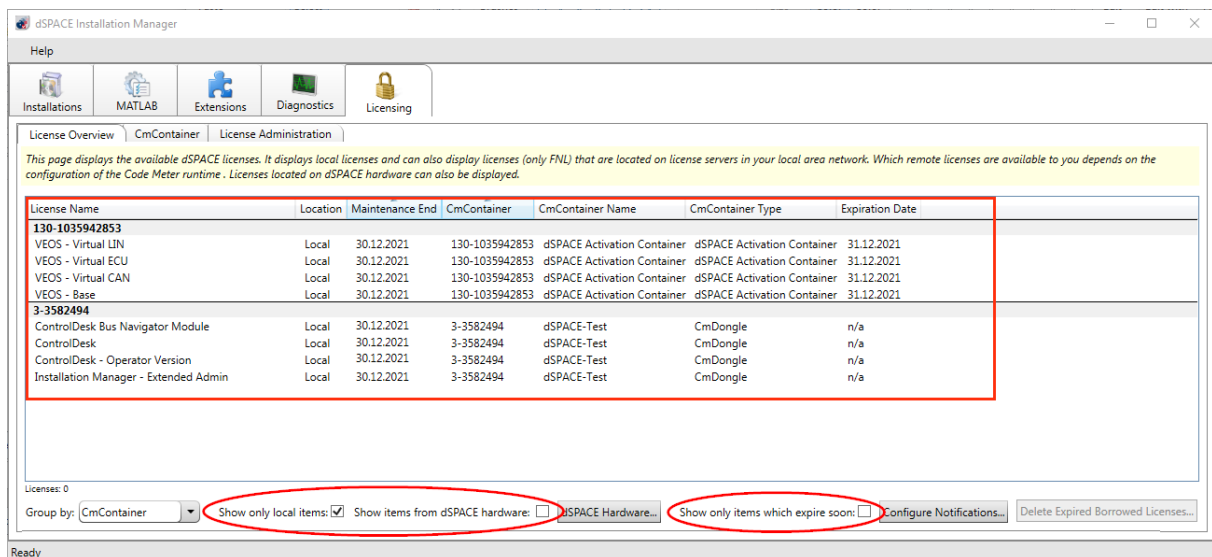
Note

Single-user licenses are not accessible and therefore not displayed.

- All licenses in a dSPACE Hardware Container located on a dSPACE hardware system connected to your PC.

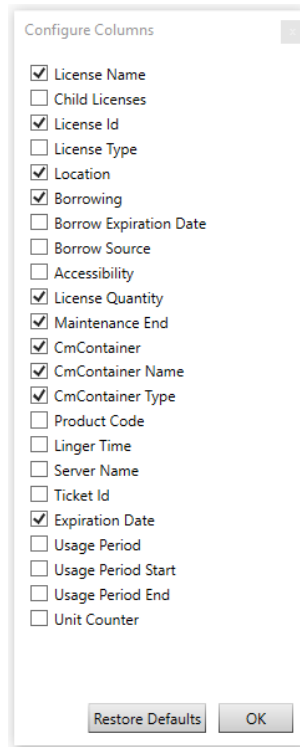
Method**To show available licenses and their attributes**

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Overview tab.
- 3 Check the settings of the following checkboxes:
 - Show only local items: Clear this checkbox if you also want to view also licenses that are located in CmContainers that are accessible in a LAN.
 - Show items from dSPACE hardware: Select this checkbox if you also want to view licenses that are stored in dSPACE Hardware Containers located on dSPACE hardware systems. This functionality is relevant for the SCALEXIO Hypervisor Extension and the advanced feature package for the MircoLabBox II.
 - Show only items which expire soon: Select this checkbox if you want to view only licenses that are about to expire. The specified alert time has been reached.



- 4 Right-click the License Overview page and select Configure Columns from the context menu.

- In the Configure Columns dialog, select the attributes you want to display on the Licence Overview page.



The following attributes are available:

Attribute	Description
License Name	The name of the license.
Child Licenses	The name of the licenses contained in the displayed license. The properties of the child licenses are included in the displayed parent license.
License ID	<p>Unique ID of the instance of a license. Every license which is purchased gets a license ID. With this ID, you can clearly identify instances of licenses, for example, available in the same CmContainer on a floating-network license server.</p> <p>Example: The AutomationDesk Basic license is contained twice in a CmContainer. The two instances can be clearly distinguished by their license IDs (8644956 and 8644975).</p> <p>The ID does not change when the license is updated or moved to a different CmContainer.</p>
License Type	<p>The type of the license. Possible entries are:</p> <ul style="list-style-type: none"> Standard: The license is a single-user license or a floating network license. Named: Named licenses let you work on a SYNECT server with a specific SYNECT user or from a PC with a specific host name. For details, refer to Basics on License Protection (The SYNECT Server Guide). Unknown: dSPACE Installation Manager does not know the license type of the license.
Location	<p>The location where the license is accessible:</p> <ul style="list-style-type: none"> Local: The license is located on your PC. LAN: The license is a floating network license and located on a dSPACE License Server in the LAN. dSPACE Hardware: The license is located on a dSPACE hardware system connected to your PC.
Borrowing ¹⁾	<p>The state of a license with regard to license borrowing:</p> <ul style="list-style-type: none"> Borrowable: The floating network license is available on a dSPACE License Server and can be borrowed as long as licenses are available according to the license quantity.

Attribute	Description
	<ul style="list-style-type: none"> ▪ Borrowed: The license was borrowed to the local PC from a floating network license on a dSPACE License Server. Use the Delete Expired Borrowed License button to remove licenses whose borrow period has expired from the license overview. ▪ n/a: The license is neither borrowable nor borrowed.
Borrow Expiration Date ¹⁾	The date and time when the borrow period of a borrowed license expires. You can manually return borrowed licenses prior to the expiration date.
Borrow Source ¹⁾	The serial number of the source CmContainer a borrowed license is borrowed from.
Accessibility	The way the license can be accessed. Possible entries are: <ul style="list-style-type: none"> ▪ Single-user ▪ Floating network
License Quantity	Maximum number of licenses that can be used in parallel on client PCs. The quantity depends on your order. Floating network licenses can have quantities ≥ 1 .
Maintenance End	The current maintenance end date. The maintenance end date limits the usable versions of a software product. All product versions released before the maintenance end date can be executed. The initial maintenance ends six months after the delivery date of the product but can be extended by purchasing SMS contracts. Refer to Validity of CodeMeter Licenses on page 15.
CmContainer	The serial number of the CmContainer where the related license is activated. Valid for CmDongles shipped with dSPACE Release 2017-B and later: The serial number is also printed on the dongle tag.
CmContainer Name	The name of the CmContainer.
CmContainer Type	The type of the CmContainer where the related license is activated: <ul style="list-style-type: none"> ▪ CmDongle ▪ dSPACE Activation Container. This specific variant of a software-based CmContainer can be use to store floating network licenses in it. ▪ dSPACE Hardware Container. This specific variant of a software-based CmContainer is located on a dSPACE hardware system and is permanently bound to this system. This CmContainer is available for the SCALEXIO Hypervisor Extension and the advanced feature package for the MicroLabBox II.
Product Code	The product code identifies the dSPACE software product associated with the license entry via a unique code.
Linger Time	Some floating network licenses have linger times. After a license is released by the software product, it remains reserved for the same license client PC for the duration of the linger time. After the linger time has elapsed, the license can be used by other license clients.
Server Name	<ul style="list-style-type: none"> ▪ The name of the dSPACE License Server that hosts the CmContainer with the floating network licenses. - or - ▪ The URL of the dSPACE hardware system, where the dSPACE Hardware Container is located.
Ticket ID	The ticket ID for the license. Ticket IDs are used, for example, for license activation.
Expiration Date	The date when the time-limited license expires. After this date the related dSPACE software product is no longer usable.
Usage Period	The time in days for which the license can be used. The period begins with the first use of the activated license from the related dSPACE product and ends when the number of days specified expires.
Usage Period Start	Date when a dSPACE product first uses a license with a defined usage period.
Usage Period End	Expiration date of a license with a defined usage period.
Unit Counter	For internal use.

- 1) For more information on borrowable and borrowed licenses, for example, on the number of licenses still available in a floating network license, refer to [How to Borrow Licenses](#) on page 115.

Result

dSPACE Installation Manager displays available dSPACE licenses with the selected attributes.

Note

- dSPACE Installation Manager stores the settings you made in the Configure Columns dialog.
- Use the Restore Defaults button in the Configure Columns dialog to reset the display of attributes to a default setting.

How to Request and Show Ticket Information

Objective

dSPACE uses a ticket-based system to manage licenses, for example, to activate licenses.

With dSPACE Installation Manager, you can request the current information of your tickets from dSPACE License Central and view it. For example, you can see licenses and their activation states, and the current CmContainer on which they are activated.

Ways to request ticket information

Depending on your use case, you can request ticket information as follows:

- You have a specific ticket ID or ticket group ID, or a file with ticket IDs, and want to get the related ticket information. In this case, you have to enter the ticket ID or ticket group ID in an edit field or to import the file with ticket IDs.
- You have access to a local CmContainer, for example, a connected CmDongle, and want to get ticket information related to the licenses on the CmContainer. In this case, you can have dSPACE Installation Manager read and collect all ticket information from the local CmContainer.

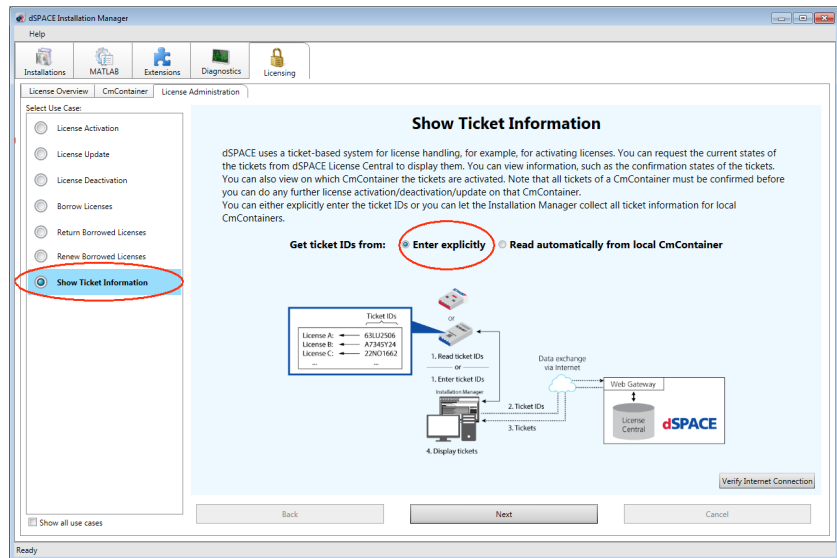
Preconditions

- An Internet connection for accessing dSPACE License Central exists.
- Depending on your use case:
 - A valid ticket ID is available.
 - A locally accessible CmContainer, for example, a CmDongle, with valid licenses is available.

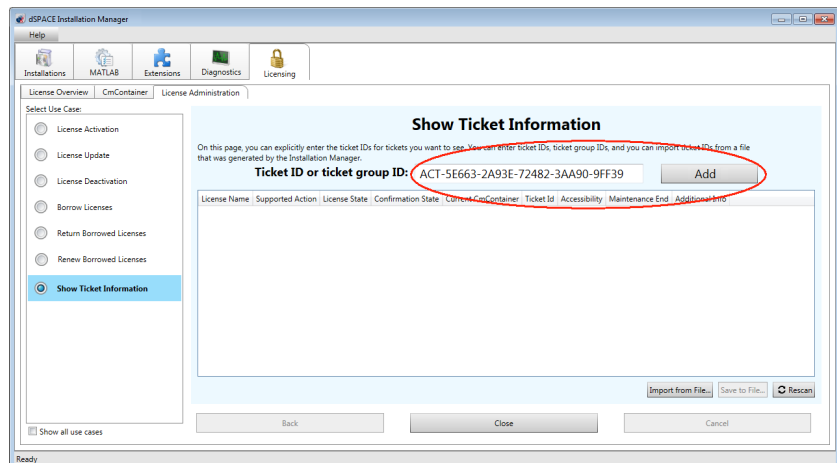
Method

To request and show ticket information

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.
- 3 Select Show Ticket Information and then select Enter explicitly or Read automatically from local CmContainer, depending on your use scenario.
These instructions proceed with the Enter explicitly option.

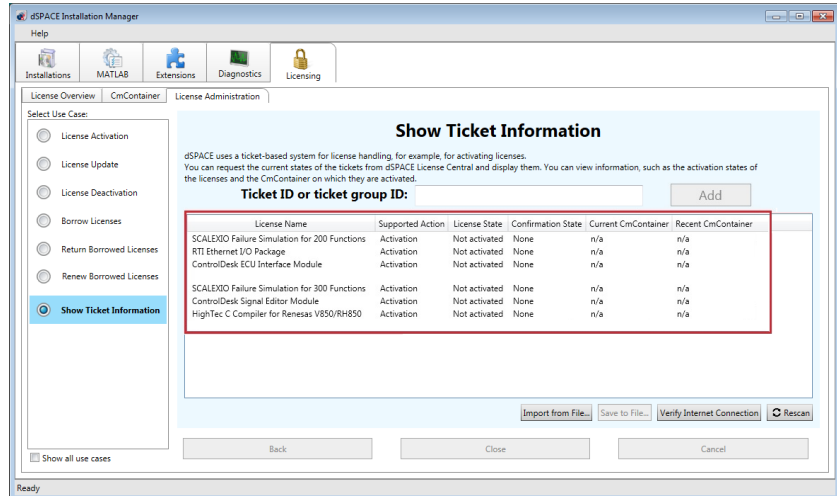


- 4 Click Next.
- 5 Enter a ticket ID or ticket group ID in the edit field.



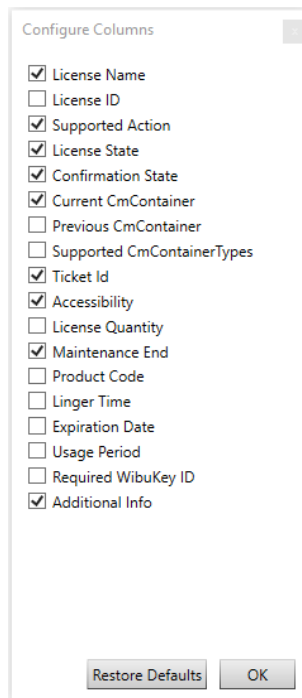
6 Click Add.

dSPACE Installation Manager connects to dSPACE License Central, gets ticket information from the database, and displays the information as follows:



7 Right-click the License Administration page and select Configure Columns from the context menu.

8 In the Configure Columns dialog, select the attributes you want to display on the License Administration page.



The following information is available:

Attribute	Description
License Name	The name of the license.
License ID	<p>Unique ID of the instance of a license. Every license which is purchased gets a license ID. With this ID, you can clearly identify instances of licenses, for example, available in the same CmContainer on a floating-network license server.</p> <p>Example: The AutomationDesk Basic license is contained twice in a CmContainer. The two instances can be clearly distinguished by their license IDs (8644956 and 8644975).</p> <p>The ID does not change when the license is updated or moved to a different CmContainer.</p>
Supported Action	<p>The action you can perform with the license. Possible actions are:</p> <ul style="list-style-type: none"> ▪ None ▪ Activation ▪ Deactivation ▪ Update
License State	<p>The state of the license. Possible states are:</p> <ul style="list-style-type: none"> ▪ Activated ▪ Not activated
Confirmation State	<p>Confirmation is the last step in activating, updating and deactivating a license. Possible states are:</p> <ul style="list-style-type: none"> ▪ None ▪ Confirmed ▪ Unconfirmed
Current CmContainer	The CmContainer where the related license is activated.
Previous CmContainer	The CmContainer where the related license was activated before.
Supported CmContainer Types	<p>The CmContainer type that is supported for the related license. Possible types are:</p> <ul style="list-style-type: none"> ▪ CmDongle ▪ dSPACE Activation Container. This specific variant of a software-based CmContainer can be use to store floating network licenses in it. ▪ dSPACE Hardware Container. This specific variant of a software-based CmContainer is located on a dSPACE hardware system and is permanently bound to this system. This CmContainer is available for the SCALEXIO Hypervisor Extension and the advanced feature package for the MicroLabBox II.
Ticket ID	The ticket ID of the related license.
Accessibility	<p>The way the license can be accessed. Possible entries are:</p> <ul style="list-style-type: none"> ▪ Single-user ▪ Floating network
License Quantity	Maximum number of licenses that can be used in parallel on client PCs. The quantity depends on your order. Floating network licenses can have quantities ≥ 1 .
Maintenance End	<p>The current maintenance end date.</p> <p>The maintenance end date limits the usable versions of a software product. All product versions released before the maintenance end date can be executed. The initial maintenance ends six months after the delivery date of the product but can be extended by purchasing SMS contracts. Refer to Validity of CodeMeter Licenses on page 15.</p>
Product Code	The product code identifies the dSPACE software product associated with the license entry via a unique code.
Linger Time	Floating network licenses of some products have linger times. After a license is released by the software product, it remains reserved for the same license client PC for the duration of the linger time. After the linger time has elapsed, the license can be used by other license clients.

Attribute	Description
Expiration Date	The date when the time-limited license expires. After this date the related dSPACE software product is no longer usable.
Usage Period	The time in days for which the license can be used. The period begins with the first use of the activated license from the related dSPACE product and ends when the number of days specified expires.
Required WibuKey ID	The WibuKey ID required for license activation, deactivation, or update. License handling is possible only if the related CmDongle contains the displayed WibuKey ID.
Additional Info	Additional information provided by dSPACE.

Result

dSPACE Installation Manager gets the current state of your tickets from dSPACE License Central and displays this information.

Note

- dSPACE Installation Manager stores the settings you made in the Configure Columns dialog.
- Use the Restore Defaults button in the Configure Columns dialog to reset the display of attributes to a default setting.

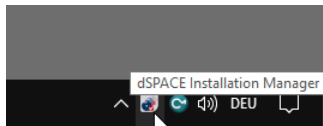
Notifications for Expiring Licenses

Introduction

dSPACE Installation Manager checks whether licenses have expired or are about to expire. If this is the case for a license, dSPACE Installation Manager uses notifications to warn you. You can configure these notifications. Notifications for the following license attributes are supported: borrow expiration date, maintenance end, expiration date, and usage period end.

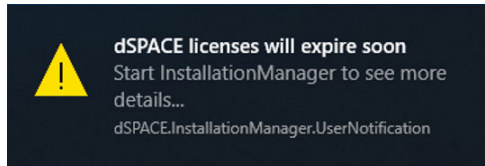
Displaying of notifications via Windows taskbar

The dSPACE Installation Manager notification icon is available in the notification area of the Windows taskbar. It is started by the Windows autostart function when you start your PC. Refer to the following illustration.



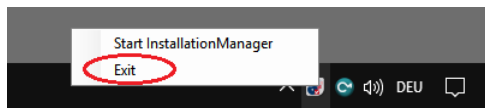
With this feature, notifications are displayed without starting and running dSPACE Installation Manager.

If there is a notification, dSPACE Installation Manager displays a message on the screen. Refer to the following example.



You can start the dSPACE Installation Manager by clicking on the message box. In this case, the dSPACE Installation Manager automatically switches to the License Overview page. There, the affected attributes are displayed automatically (see below).

Closing the Windows taskbar notification feature You can use the Exit command in the context menu to close the Windows taskbar notification feature until the next time you start your PC.

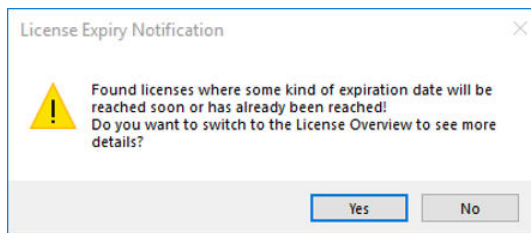


Note

When you close the dSPACE Installation Manager notification feature, note that the notifications about available software updates are also closed.

Displaying of notifications after starting dSPACE Installation Manager

Independent of the notifications via the Windows taskbar, a notification message is also displayed in the tool itself after dSPACE Installation Manager has been started. Refer to the following example.



Clicking Yes in the message opens the License Overview page. There, the affected attributes are displayed automatically (see below).

Displaying relevant licenses on the License Overview page

On the License Overview page, the relevant licenses are displayed as follows:

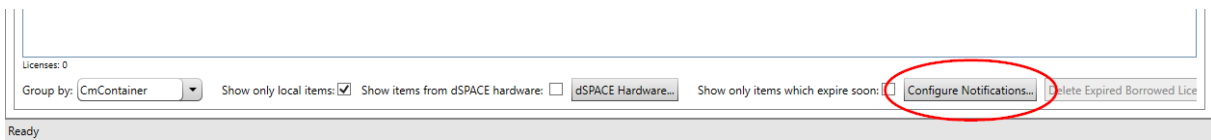
- Licenses that are about to expire are displayed with a yellow icon and the related attribute in yellow font as soon as the specified alert time has been reached.
- Expired licenses are displayed with a red icon and in red font.

Refer to the following example.

License Name	Location	Borrow Expiration Date	Maintenance End	CmContainer	CmContainer Name	CmContainer Type	Expiration Date
130-1425020862							
ConfigurationDesk - Configuration Version	Local	29.08.2019 11:56:39	01.01.2019	130-1425020862	dSPACE Borrow Container	dSPACE Borrow Container	n/a
ConfigurationDesk - Configuration Version	Local	04.10.2019 12:12:58	01.01.2019	130-1425020862	dSPACE Borrow Container	dSPACE Borrow Container	n/a
ConfigurationDesk - Configuration Version	Local	09.09.2019 16:55:25	01.01.2019	130-1425020862	dSPACE Borrow Container	dSPACE Borrow Container	n/a
Lic1000FNL10_MainEnd_ExpDat	Local	29.08.2019 11:56:22	31.12.2019	130-1425020862	dSPACE Borrow Container	dSPACE Borrow Container	31.12.2020
Lic1000FNL10_MainEnd_ExpDat	Local	02.09.2019 10:22:50	31.12.2019	130-1425020862	dSPACE Borrow Container	dSPACE Borrow Container	31.12.2020
130-815072939							
ConfigurationDesk - Configuration Version	Local	n/a	01.01.2019	130-815072939	dSPACE Activation Container	dSPACE Activation Container	n/a
Lic1000FNL10_MainEnd_ExpDat	Local	n/a	30.12.2020	130-815072939	dSPACE Activation Container	dSPACE Activation Container	31.12.2020
Lic1000FNL10_MainEnd_ExpDat	Local	n/a	31.12.2019	130-815072939	dSPACE Activation Container	dSPACE Activation Container	31.12.2020
Lic1000FNL10_MainEnd_ExpDat	Local	n/a	31.12.2019	130-815072939	dSPACE Activation Container	dSPACE Activation Container	31.12.2020
3-3951598							
ConfigurationDesk - Configuration Version	Local	02.09.2019 10:23:55	01.01.2019	3-3951598	dSPACE Dongle	CmDongle	n/a

Configuring notifications

dSPACE Installation Manager provides a specific dialog for configuring notifications. You can access this dialog via the Configure Notifications button on the License Overview page. Refer to the following illustration.

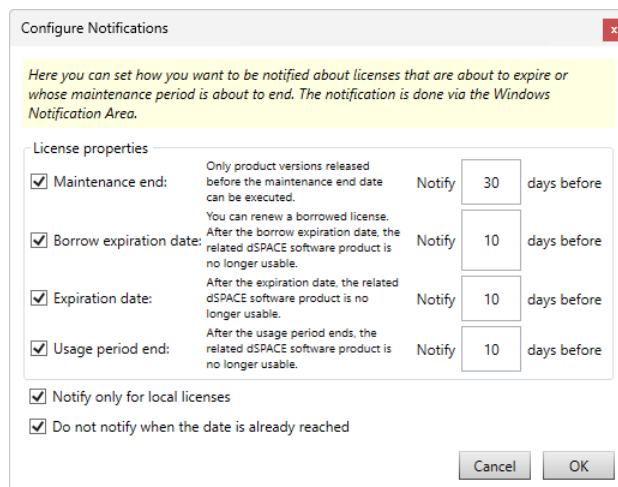


In the Configure Notifications dialog, you can configure notifications (in days) for the following attributes of a license:

- Borrow expiration date
- Maintenance end
- Expiration date
- Usage period end

For details on the listed attributes, refer to [How to Show Available Licenses and Their Attributes](#) on page 40.

The following illustration shows the default settings of the dialog.



- You can clear the Notify only for local licenses checkbox if you also want to set the notifications for licenses that are accessible in your LAN.
- You can clear the Do not notify when the date is already reached checkbox if you would like to receive a notification even after the end date has been reached.

How to Update the Firmware of a CmDongle

Objective

dSPACE Installation Manager checks if the firmware of a connected dongle matches at least the firmware version that was defined by dSPACE. If the firmware version does not match, a firmware update is required before you can continue the license activation, deactivation, or update.

Required firmware

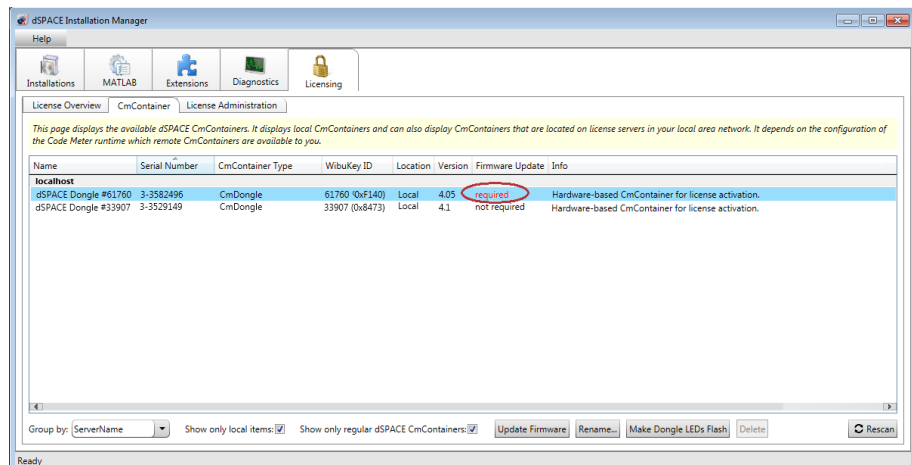
If you want to work with licenses on CmDongles in combination with dSPACE Installation Manager 24.1, the dongles must have at least firmware version 4.10.

CmDongles shipped for dSPACE Release 2019-A and later contain at least the required minimum firmware version.

The installed dSPACE Installation Manager provides the latest firmware version to update the CmDongles that do not contain the required minimum firmware version.

Showing firmware status

dSPACE Installation Manager shows the firmware update state, for example, on the CmContainer page. A required firmware update is displayed in the following example..

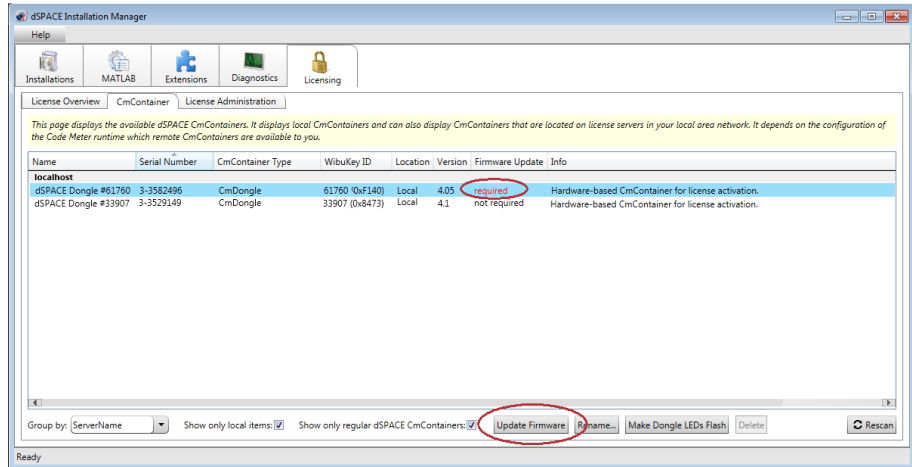


In addition, the state is displayed on every workflow page that uses dongles. On these pages, the Update Firmware button is available if a firmware update is necessary or possible.

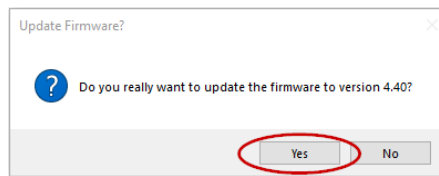
Method

To update the firmware of a CmDongle

- 1 Click Update Firmware as shown in the following illustration.



A confirmation prompt is displayed.



- 2 Click Yes.
The update process starts.

Note

Do not remove the CmDongle during the update process. Removing the CmDongle from the host PC might cause data loss.

Result

You updated the firmware of a CmDongle to the version that is provided with the installed dSPACE Installation Manager. The version number is displayed in the Firmware Update column. You can now continue to activate, deactivate or update licenses on the CmDongle.

Dongle Migration

Notes on Dongle Migration

Motivation CmDongles shipped for dSPACE Release 2017-B and later support CodeMeter licensing without modifications.

Dongles delivered for earlier Releases cannot be used for the new CodeMeter license technology.

Discontinuation of the dongle migration with dSPACE Installation Manager As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports migration from old dongles (delivered for dSPACE Release 2017-A and earlier) to currently delivered CmDongles.

If you still have an old dongle that needs to be migrated to use dSPACE Release 2017-B or later, the following applies:

- You are still using a WibuKey dongle (Type 1): Migration is no longer possible. A dongle exchange by dSPACE is required. For more information, refer to <http://www.dspace.com/go/DongleReplacement>.
- You are still using a first-generation CmDongle (Type 2), with serial number starting with 2-xxxx and white connector: Migration is no longer possible. A dongle exchange by dSPACE is required. For more information, refer to <http://www.dspace.com/go/DongleReplacement>.
- You are still using a CmDongle (Type 3), with serial number starting with 3-xxxx and old firmcode: Migration is required by using an earlier version of dSPACE Installation Manager (from 5.0 ... to 22.3). For the download of dSPACE Installation Manager 22.3, refer to <https://www.dspace.com/go/IM>.

License Activation

Introduction

Before you can use licenses for the first time, you have to activate them. For license activation, dSPACE GmbH uses a ticket-based system and hosts a database. This database is called dSPACE License Central. To start the activation process, you have to enter the ticket IDs that you received from dSPACE via e-mail. During activation, data is transferred between dSPACE Installation Manager and dSPACE License Central.

You can activate multiple licenses on one CmContainer (for example, CmDongle) in one step.

Where to go from here

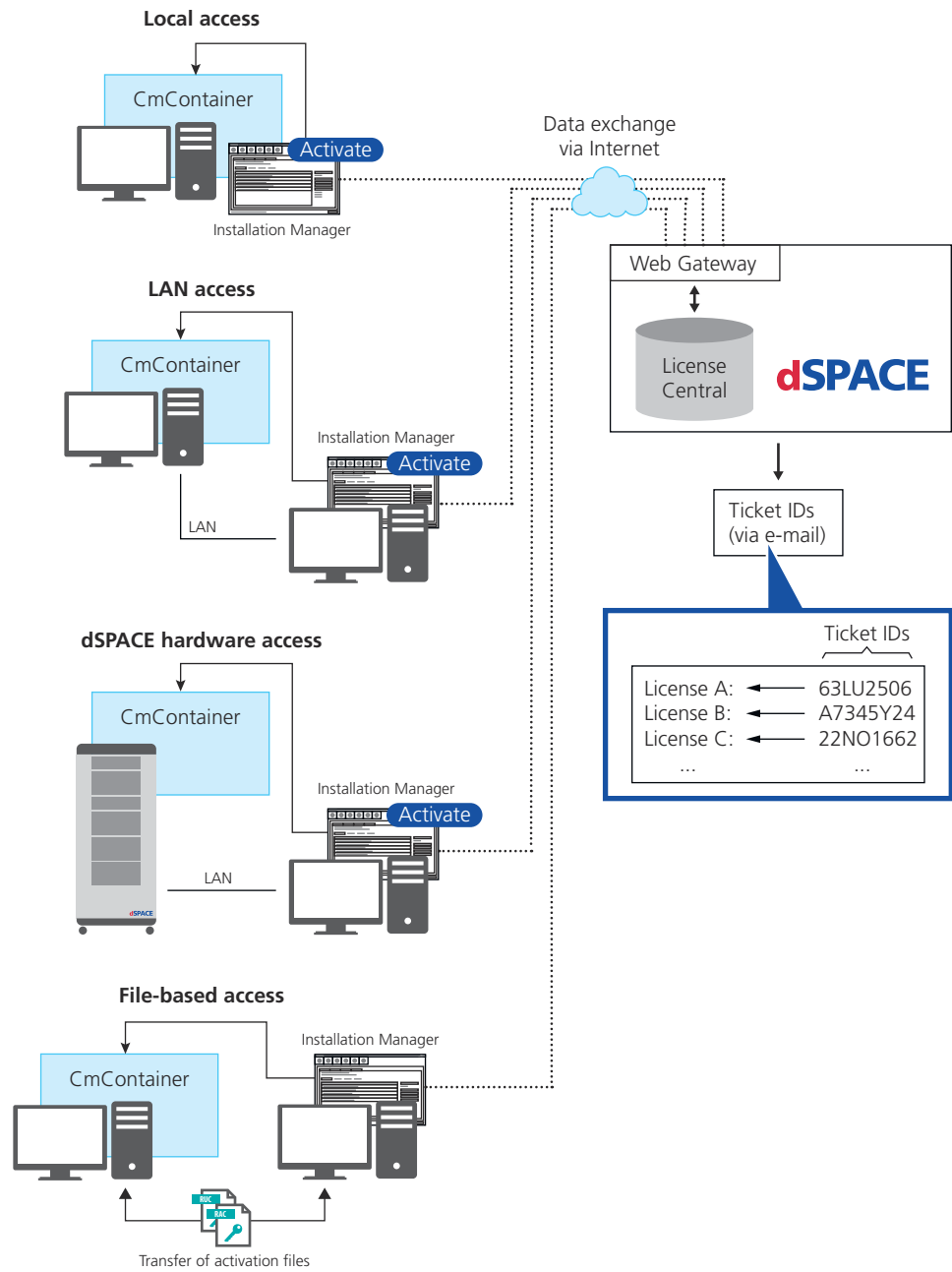
Information in this section

Use Cases and Workflows for License Activation.....	55
How to Activate Licenses (Local Access to CmContainer).....	60
How to Activate Licenses (LAN Access to CmContainer).....	64
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Use Cases and Workflows for License Activation

Use cases

Online activation with local access of the dSPACE Installation Manager to the CmContainer is the recommended way to activate license. For a detailed description of the use cases, refer to [Methods for Accessing CmContainers](#) on page 17.



The workflow differs depending on how dSPACE Installation Manager can access the CmContainer.

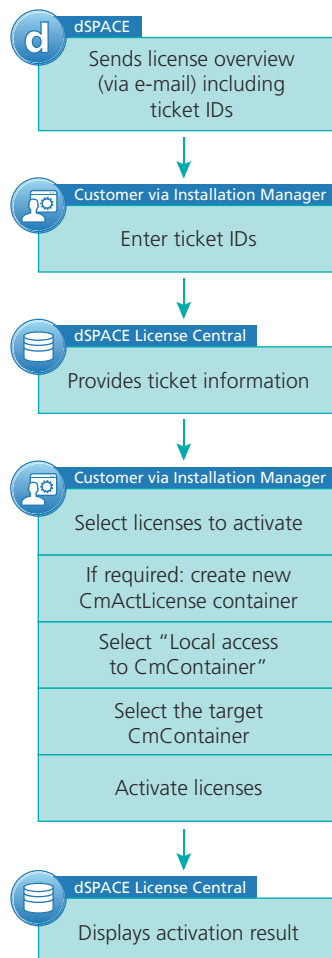
Note

LAN access is disabled by default.

To protect CmContainers on PCs in a LAN from unwanted actions (license activation, license update, license deactivation), LAN access is disabled by default. To use the LAN access feature, a local, activated InstallationManager – Extended Admin license must be available on the PC with Installation Manager. Contact your local dSPACE sales representative or contact dSPACE Support (www.dspace.com/go/supportrequest).

Workflow for local access

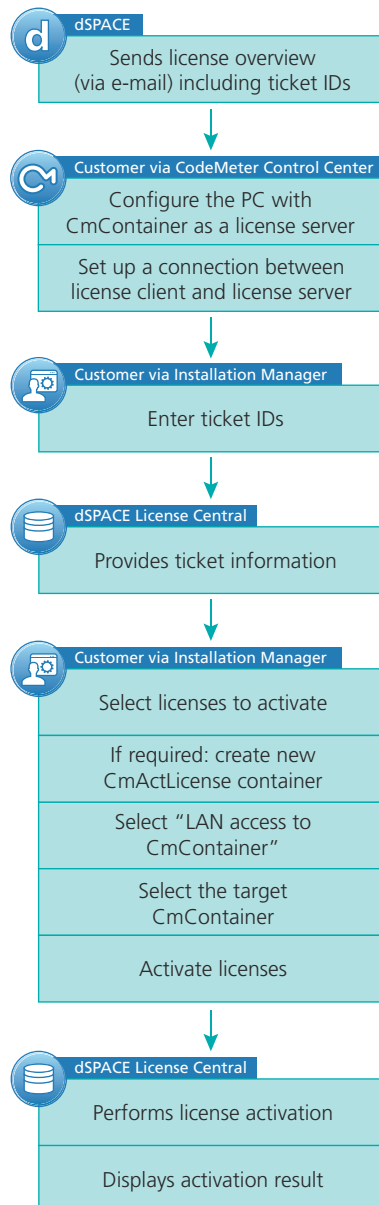
The following illustration shows the workflow for single-user licenses as well as for floating network licenses:



For instructions, refer to [How to Activate Licenses \(Local Access to CmContainer\)](#) on page 60.

Workflow for LAN access

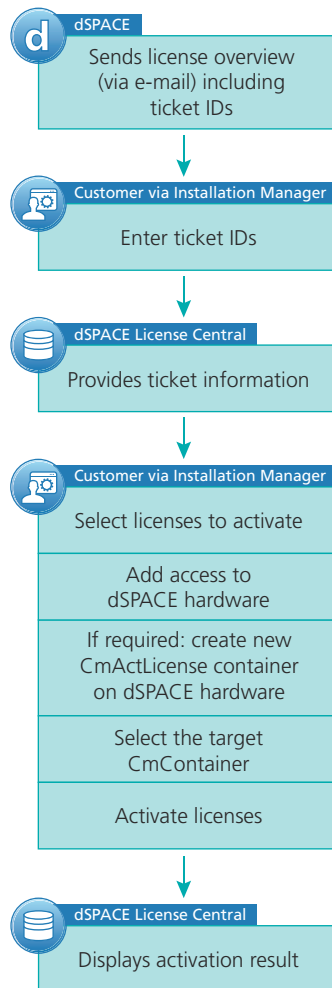
The following illustration shows the workflow for single-user licenses as well as for floating network licenses:



For instructions, refer to [How to Activate Licenses \(LAN Access to CmContainer\)](#) on page 64.

Workflow for dSPACE hardware access

The following illustration shows the workflow for activating hardware licenses in a dSPACE Hardware Container:



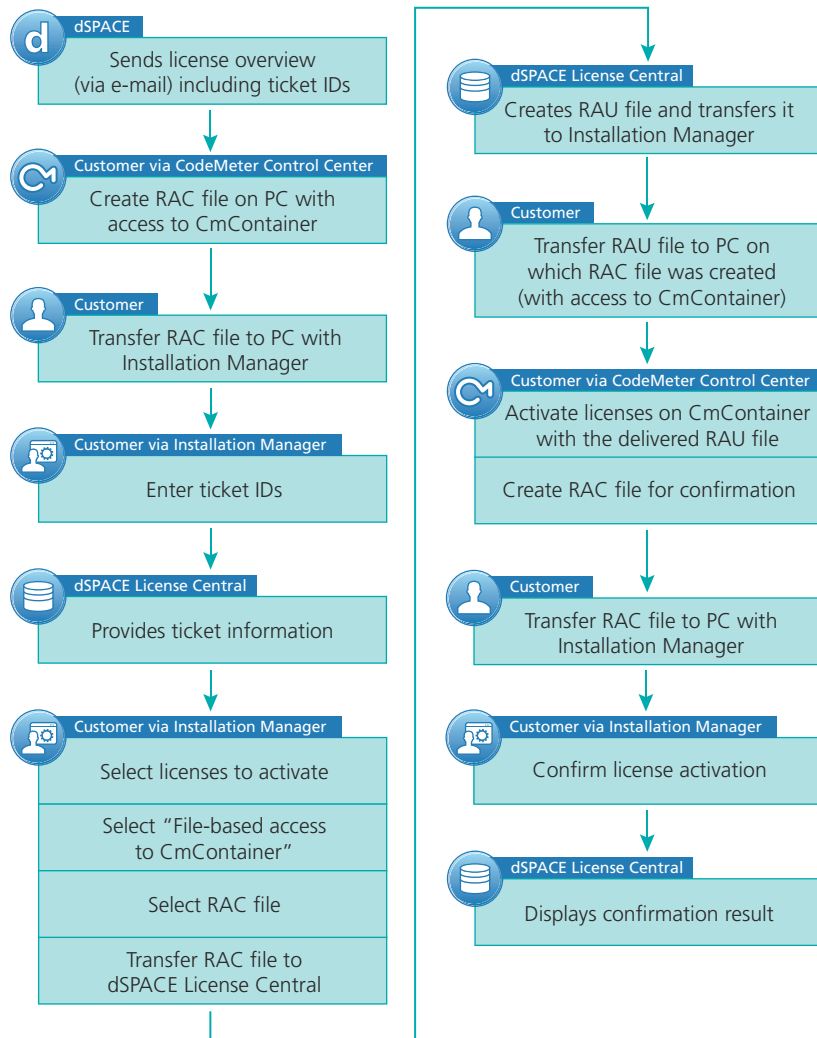
For instructions, refer to [How to Activate Licenses \(Hardware Access to CmContainer\)](#) on page 69.

Workflow for file-based access

Note

This workflow also applies if you want to access the CmContainer via a remote desktop connection.

The following illustration shows the workflow for single-user licenses as well as for floating network licenses:



For instructions, refer to [How to Activate Licenses \(File-Based Access to CmContainer\)](#) on page 75.

How to Activate Licenses (Local Access to CmContainer)

Objective

To activate single-user and floating network licenses on a CmContainer that is accessible locally on your PC.

General notes and tips

Tip

You can activate multiple licenses on one CmContainer in one step.

Note

It is recommended to activate a maximum of 50 licenses in one CmContainer. If you have a larger number of licenses, distribute them over several CmContainers. A higher number of licenses in one CmContainer can lead to long run-times for the activation or update of the licenses.

Preconditions

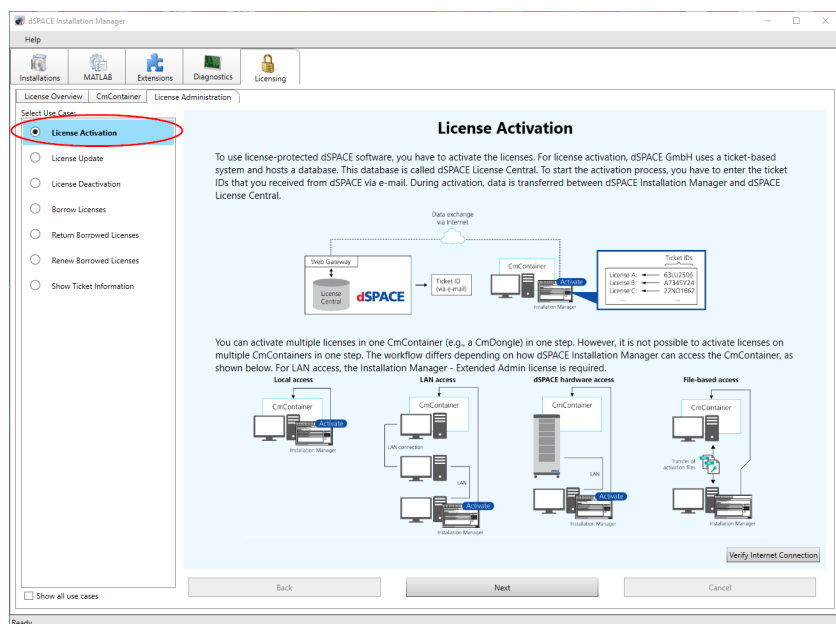
- dSPACE Installation Manager is installed on your PC.
- An Internet connection for accessing dSPACE License Central exists.
- At least one ticket ID is available.

Note

Dongles delivered for dSPACE Releases 2017-A and earlier cannot be used for the new CodeMeter license technology without modifications. Therefore, dongle migration is required for these dongles before you can activate licenses on them. Refer to [Dongle Migration](#) on page 53.

Method**To activate licenses (local access to CmContainer)**

- 1 Connect the CmDongle to your PC if you want to activate the license on a CmDongle.
- 2 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3 Click the Licensing – License Administration tab.
dSPACE Installation Manager opens.
- 4 Select License Activation and click Next.



- Enter or paste the ticket ID for license activation you received from dSPACE via e-mail in the edit field and click Add.

The license overview displays the required ticket IDs and ticket group IDs as in the following example:

License Overview



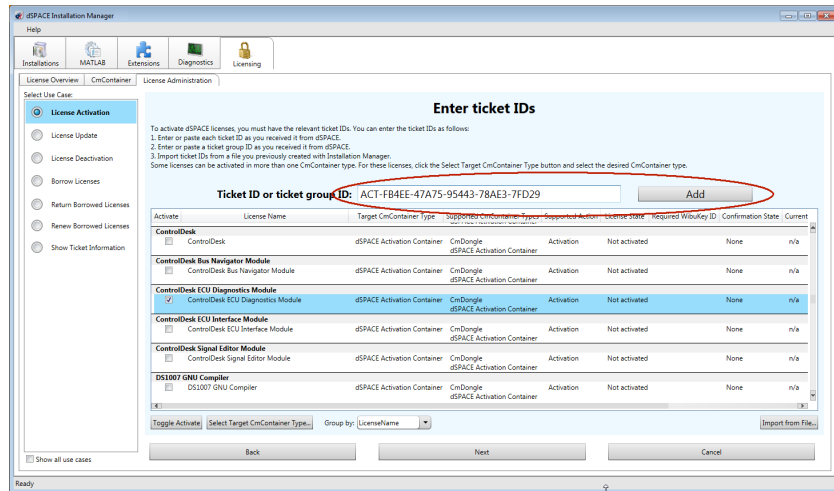
Sales order: 40-001040
 Purchase order: 40-001040
 Your Ref.: 40-001040 - Release Activation

Date: 2023-09-07
 Delivery Date: 2023-09-08

CmContainer: #Licenses are not activated yet

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
CCPPPC	Microtec C PowerPC Cross Compiler	ACT-104040-001040-001040-001040	Local	1,00	2024-03-31			Release Activation	2023-09-08
CONTROLDESK	ControlDesk	ACT-104040-001040-001040-001040	Local	1,00	2024-03-31			Release Activation	2023-09-08
CONTROLDESK_SE	ControlDesk Signal Editor Module	ACT-104040-001040-001040-001040	Local	1,00	2024-03-31			Release Activation	2023-09-08
PLATFORM_API	Platform API Package	ACT-104040-001040-001040-001040	Local	1,00	2024-03-31			Release Activation	2023-09-08

The ticket information is provided by dSPACE License Central.



- Select the licenses you want to activate.
- For floating network licenses: Click Choose CmContainer Type and select the desired CmContainer type: (CmDongle or dSPACE Activation Container):

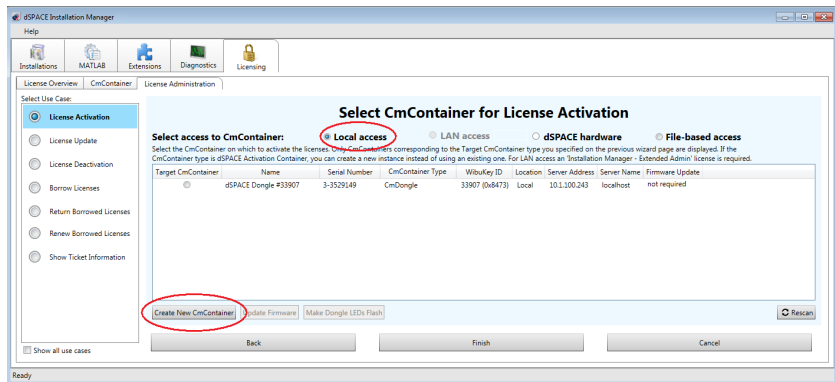
Activate	License Name	Target CmContainer Type	Supported CmContainer Types
<input type="checkbox"/>	ControlDesk Bus Navigator Module	dSPACE Activation Container	CmDongle dSPACE Activation Container
<input checked="" type="checkbox"/>	ControlDesk ECU Diagnostics Module	dSPACE Activation Container	CmDongle dSPACE Activation Container
<input type="checkbox"/>	ControlDesk ECU Interface Module	dSPACE Activation Container	CmDongle dSPACE Activation Container
<input type="checkbox"/>	ControlDesk Signal Editor Module	dSPACE Activation Container	CmDongle dSPACE Activation Container

Toggle Activate: Select Target CmContainer Type... Group by: None

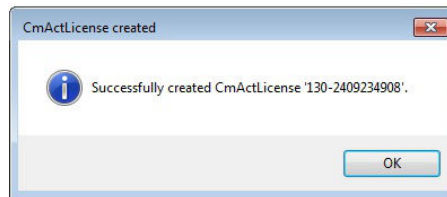
- Click Next.

9 Select Local access.

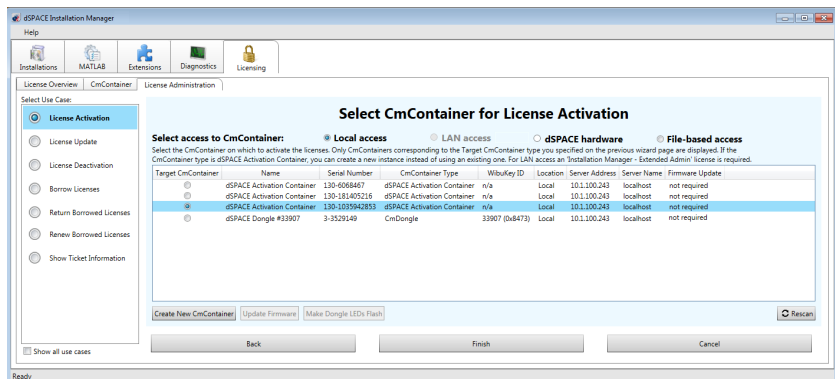
dSPACE Installation Manager displays all accessible CmContainers.



10 Only for floating network licenses: Click Create New CmContainer if no CmActLicense container is available or if you want to create a new one. After creating the CmActLicense container, dSPACE Installation Manager displays a confirmation prompt with the serial number of the new CmContainer:

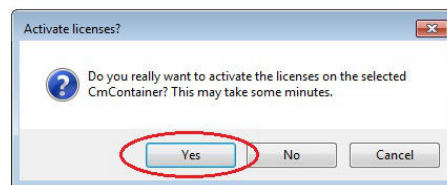


11 Select the target CmDongle or CmActLicense container.



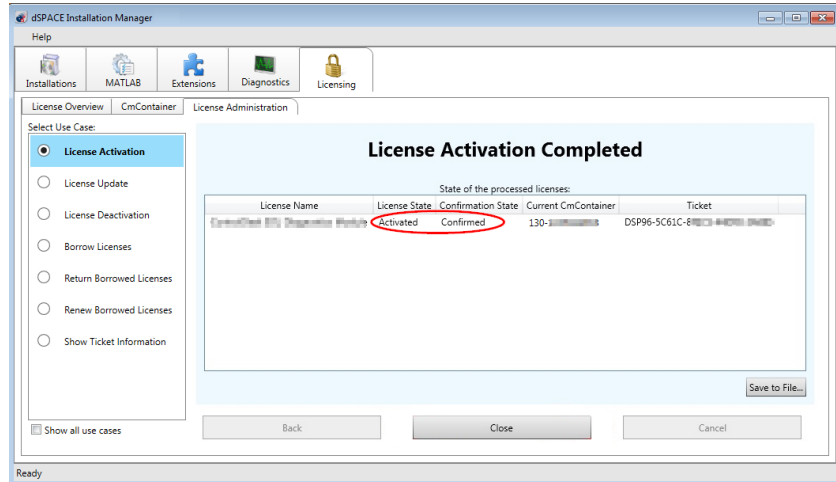
12 Click Next.

A confirmation prompt is displayed.



13 Click Yes to start the activation process.

dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the activation result as follows:



14 Click Close.

Result

You activated single-user licenses or floating network licenses. The licenses are now ready for use.

How to Activate Licenses (LAN Access to CmContainer)

Objective

To activate floating network licenses on a CmContainer that is accessible from dSPACE Installation Manager via LAN.

General notes and tips

Tip

You can activate multiple licenses on one CmContainer in one step.

Note

It is recommended to activate a maximum of 50 licenses in one CmContainer. If you have a larger number of licenses, distribute them over several CmContainers. A higher number of licenses in one CmContainer can lead to long run-times for the activation or update of the licenses.

Restriction**Note****LAN access is disabled by default.**

To protect CmContainers on PCs in a LAN from unwanted actions (license activation, license update, license deactivation), LAN access is disabled by default. To use the LAN access feature, a local, activated InstallationManager – Extended Admin license must be available on the PC with Installation Manager. Contact your local dSPACE sales representative or contact dSPACE Support (www.dspace.com/go/supportrequest).

Preconditions

- The PC with the CmContainer is configured as a dSPACE License Server. Refer to [How to Set Up the dSPACE License Server](#) on page 153.
- The PC with dSPACE Installation Manager is able to establish a TCP/IP connection to the dSPACE License Server. Refer to [How to Set up a Connection Between Client and Server](#) on page 156.
- At least one ticket ID is available.
- An Internet connection for accessing dSPACE License Central exists.
- A CmDongle is available if you want to activate the floating network licenses on a CmDongle.

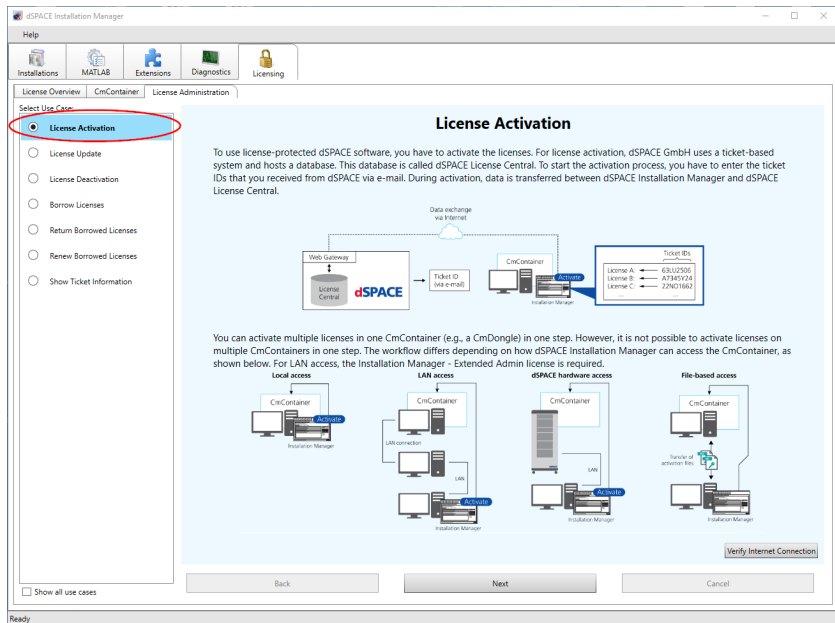
Note

Dongles delivered for dSPACE Releases 2017-A and earlier cannot be used for the new CodeMeter license technology without modifications. Therefore, dongle migration is required for these dongles before you can activate licenses on them. Refer to [Dongle Migration](#) on page 53.

Method**To activate licenses (LAN access to CmContainer)**

- 1** Connect the CmDongle with the activated InstallationManager – Extended Admin license to the PC with dSPACE Installation Manager. For instructions on activating the license, refer to [How to Activate Licenses \(Local Access to CmContainer\)](#) on page 60.
- 2** From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3** Click the Licensing – License Administration tab.

4 Select License Activation and click Next.



- 5 Enter or paste the ticket ID for license activation you received from dSPACE via e-mail in the edit field and click Add.
The license overview displays the required ticked IDs and ticket group IDs as in the following example:

License Overview



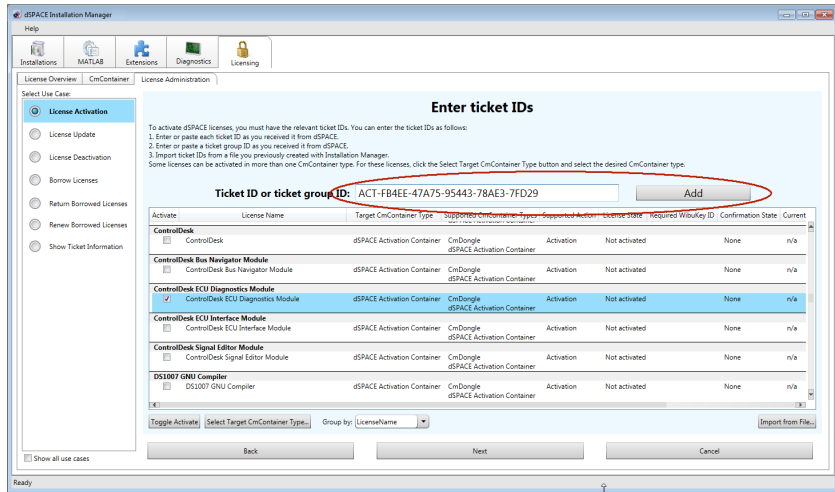
Sales order: [blurred]
Purchase order: [blurred]
Your Ref.: [blurred]

Date: 2023-09-12
Delivery Date: 2021-01-14

CmContainer: #Licenses are not activated yet

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
TAS	TargetLink AUTOSAR Module	[blurred]	Network	4,00	2023-02-28			[blurred]	2021-01-14
TBS	TargetLink Base Suite	[blurred]	Network	4,00	2023-02-28			[blurred]	2021-01-14

The ticket information is provided by dSPACE License Central.

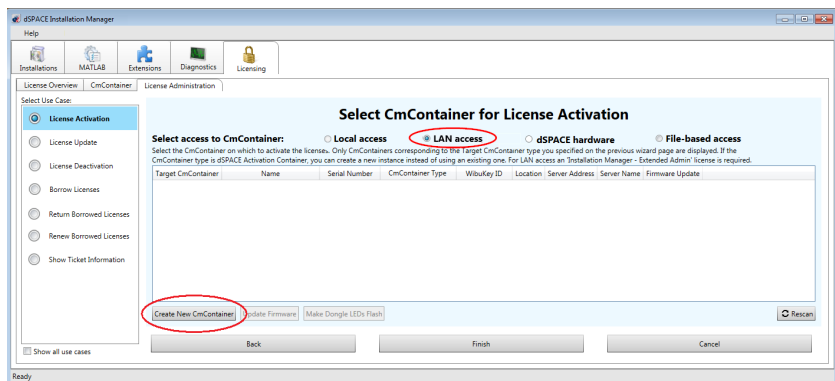


- 6 Select the licenses you want to activate.
- 7 Click Choose CmContainer Type and select the desired CmContainer type: (CmDongle or dSPACE Activation Container).

Activate	License Name	Target CmContainer Type	Supported CmContainer Types
<input type="checkbox"/>	ControlDesk Bus Navigator Module	dSPACE Activation Container	CmDongle dSPACE Activation Container
<input checked="" type="checkbox"/>	ControlDesk ECU Diagnostics Module	dSPACE Activation Container	CmDongle dSPACE Activation Container
<input type="checkbox"/>	ControlDesk ECU Interface Module	dSPACE Activation Container	CmDongle dSPACE Activation Container
<input type="checkbox"/>	ControlDesk Signal Editor Module	dSPACE Activation Container	CmDongle dSPACE Activation Container

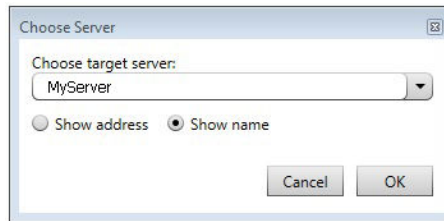
Toggle Activate | **Select Target CmContainer Type** | Group by: None

- 8 Click Next.
- 9 Select LAN access.
dSPACE Installation Manager displays all accessible CmContainers.

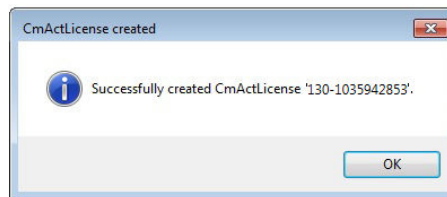


- 10 Click Create New CmContainer if no CmActLicense container is available or if you want to create a new one.

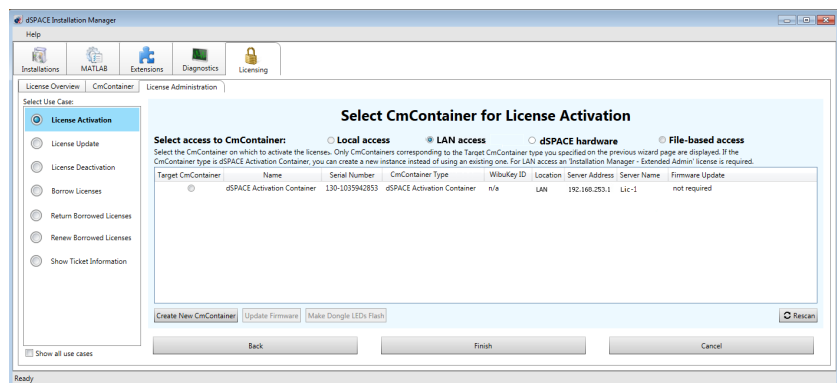
Select the server on which you want to create the CmActLicense container from the list and click OK.



After creating the CmActLicense container, dSPACE Installation Manager displays a confirmation prompt with the serial number of the new CmContainer:

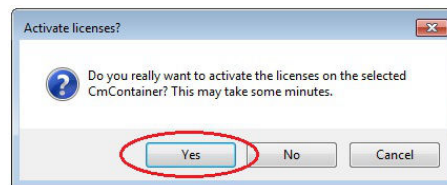


11 Select the target CmDongle or CmActLicense container.



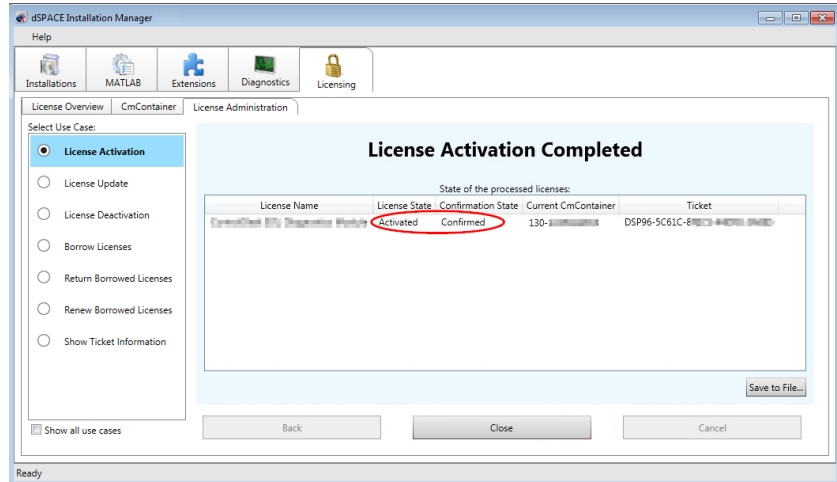
12 Click Finish.

A confirmation prompt is displayed.



13 Click Yes to start the activation process.

dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the activation result as follows:



14 Click Close.

Result

You activated floating network licenses. The licenses are now ready for use.

How to Activate Licenses (Hardware Access to CmContainer)

Objective

To activate hardware licenses in a CmContainer located on a dSPACE hardware system that can be accessed by dSPACE Installation Manager via LAN.

Basics on working with hardware licenses

Hardware licenses are a specific type of licenses that are used when a license must permanently enable license-protected features directly on a dSPACE hardware system. Hardware licenses reside in a software-based CmContainer called dSPACE Hardware Container which is stored directly on the dSPACE hardware.

- If you have ordered the dSPACE hardware system together with the license-protected feature, the hardware is delivered with an activated hardware license. In this case, you can use the feature directly. No further steps are required for licensing.
- If you have ordered the license-protected features separately from the hardware at a later date, you will receive the necessary ticket information from dSPACE. You must then activate the license on the hardware by yourself.

Currently, dSPACE offers the following license-protected features, which must be enabled directly on the hardware:

- SCALEXIO Hypervisor Extension (for the SCALEXIO system)
Required license: SCLX_HVR_KVM_LIC

- Advanced feature package for the MicroLabBox II
Required license: MLBX2_AFP_LIC

Note

Moving an activated hardware license to another hardware system is not possible.

A hardware license can be activated only once. Deactivation is not possible. Therefore you cannot move the license from one dSPACE hardware system to another system, for example, from one MicroLabBox II to another.

- Carefully plan your work before you activate a license.

Note

Activating multiple hardware licenses on one dSPACE hardware system

If you have purchased multiple hardware licenses for the same license-protected feature, make sure that only one license is activated on each dSPACE hardware system. It is currently technically possible to activate multiple licenses on the same hardware, but you should not do this.

- Before you select a hardware system for activation, be sure that there is no activated license on it.
- You cannot deactivate a hardware license that was activated, for example, by mistake. This means that this license can no longer be used on any other dSPACE hardware system. In such a case, contact dSPACE Support (www.dspace.com/go/supportrequest).

Preconditions

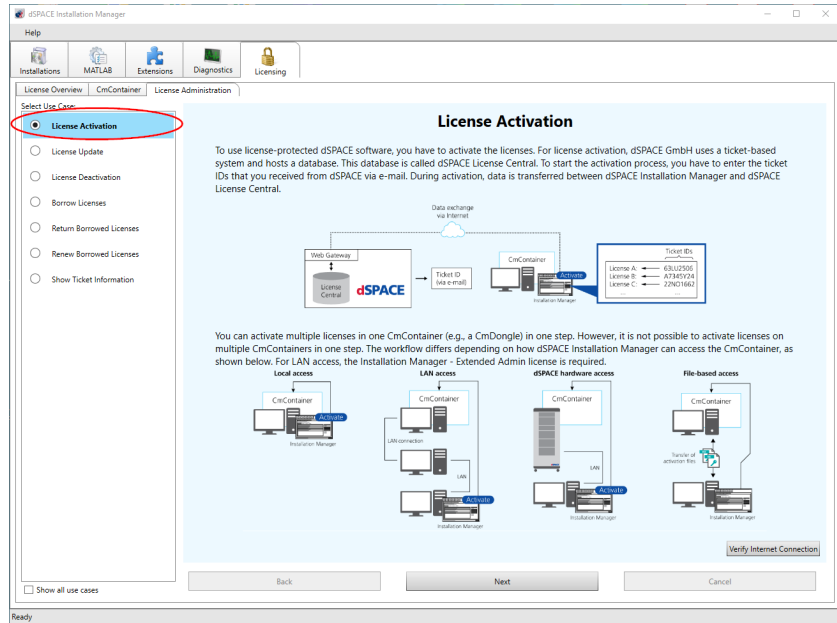
- dSPACE Installation Manager is installed on your PC.
- An Internet connection for accessing dSPACE License Central exists.
- A ticket ID for license activation containing a hardware license is available.
- The dSPACE hardware system (MicroLabBox II or SCALEXIO) is accessible directly from your PC via LAN.

Method

To activate licenses (hardware access to CmContainer)

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.

3 Select License Activation and click Next.

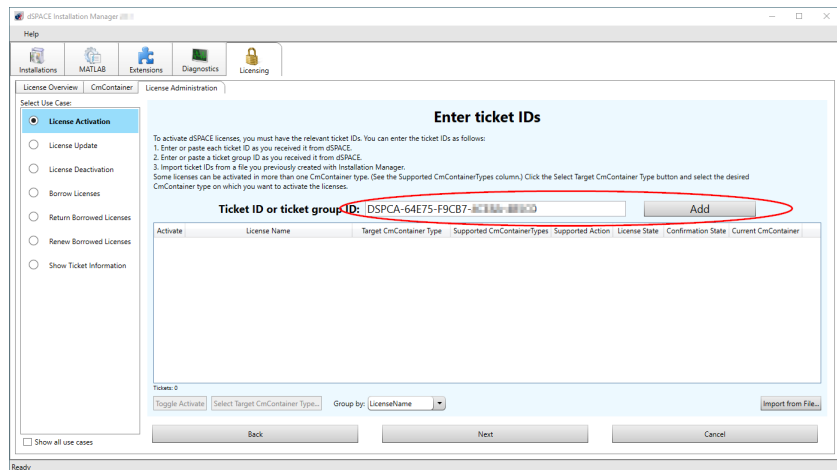


4 Enter or paste the ticket ID for license activation you received from dSPACE via e-mail in the edit field and click Add.

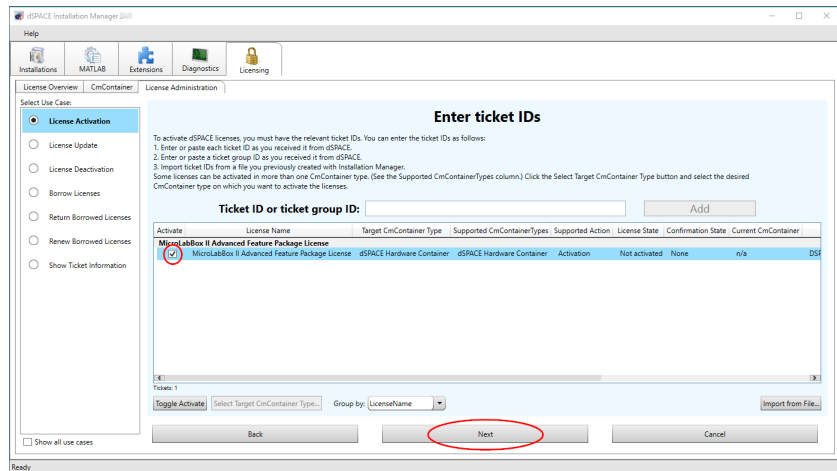
The license overview displays the required ticket IDs and ticket group IDs as in the following example:

License Overview		dSPACE							
Sales order	433-123456789	Date:	2024-02-22						
Purchase order	987654321098	Delivery Date:	2024-02-22						
Your Ref.	123456789012								
CmContainer: #Licenses are not activated yet									
TicketGroup	ACT-123456789								
Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
SCLX_HVR_KVM_LIC	SCALEXIO Hypervisor Extension	DSP33-BF72C-21	Hardware	1,00					2024-02-22

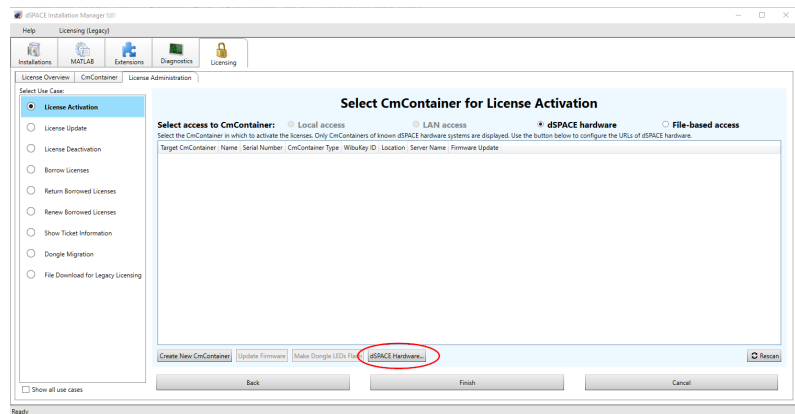
The ticket information is provided by dSPACE License Central.



5 Select the license you want to activate and click Next.

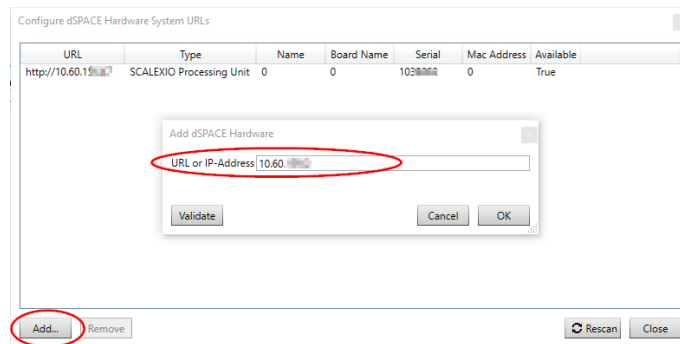


6 Click dSPACE Hardware at the bottom of the pane to edit the URL or IP address of the connected dSPACE hardware.

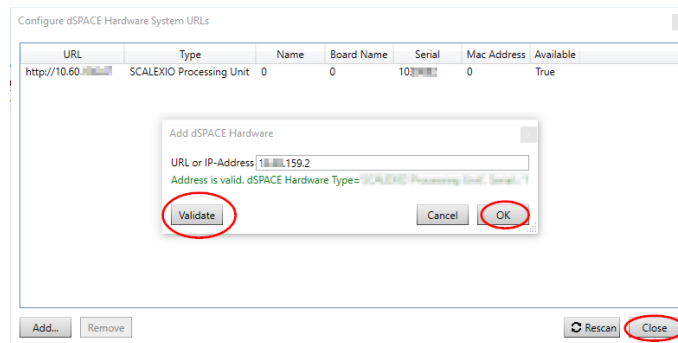


The Configure dSPACE Hardware System URLs dialog opens. Use this dialog to register the dSPACE hardware for dSPACE Installation Manager.

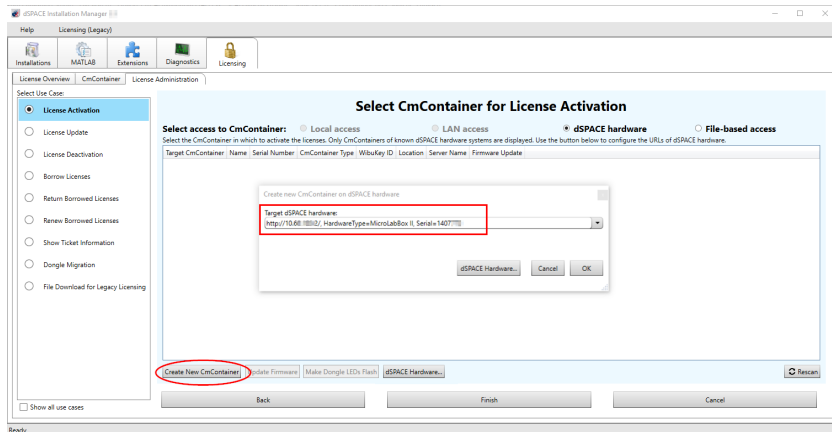
7 Click Add and enter the URL or the IP address of the connected dSPACE hardware.



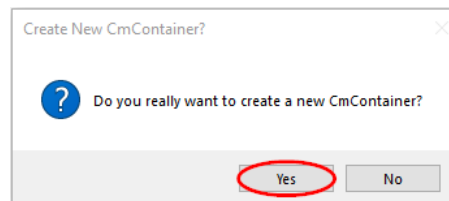
8 Click Validate to check if a suitable dSPACE hardware system is available for this address. After the check, dSPACE Installation Manager displays a corresponding message with the result. If the address is valid, the hardware type and the serial number of the hardware are displayed.



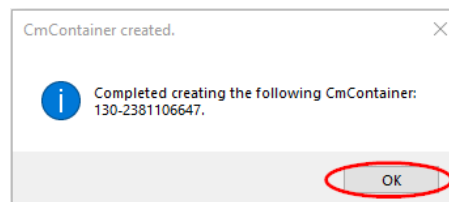
- 9 Click OK and Close to register the added URL and hardware.
- 10 Click Create New CmContainer and select the target dSPACE hardware on which you want to create the new CmContainer.



- 11 Click OK to confirm the selection of the target dSPACE hardware.
- 12 Click Yes to start creating the new CmContainer.



After creating the CmContainer, dSPACE Installation Manager displays a confirmation prompt with the serial number of the new CmContainer:



- 13 Click OK.

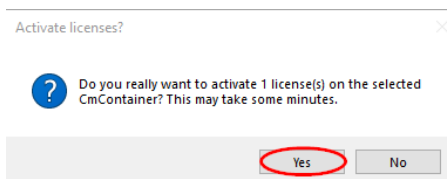
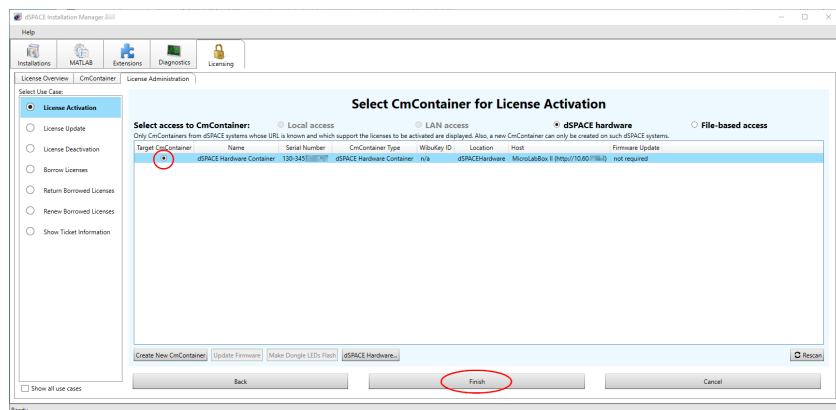
14 To activate the license, select the target CmContainer and click Finish.

Note

Activating multiple hardware licenses on one dSPACE hardware system

If you have purchased multiple hardware licenses for the same license-protected feature, make sure that only one license is activated on each dSPACE hardware system. It is currently technically possible to activate multiple licenses on the same hardware, but you should not do this.

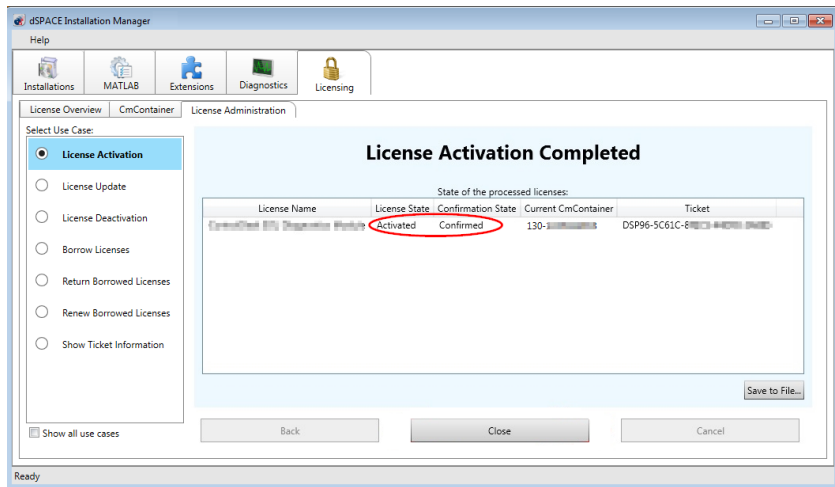
- Before you select a hardware system for activation, be sure that there is no activated license on it.
- You cannot deactivate a hardware license that was activated, for example, by mistake. This means that this license can no longer be used on any other dSPACE hardware system. In such a case, contact dSPACE Support (www.dspace.com/go/supportrequest).



15

Click Yes to start the activation process.

dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the activation result as follows:



16 Click Close.

Result

You activated a license-protected feature in a newly created dSPACE Hardware Container on the dSPACE hardware system. The feature is now ready for use.

How to Activate Licenses (File-Based Access to CmContainer)

Objective

To activate single-user and floating network licenses on a CmContainer that is accessible only via manual file transfer from your PC.

General notes and tips

Tip

You can activate multiple licenses on one CmContainer in one step.

Note

It is recommended to activate a maximum of 50 licenses in one CmContainer. If you have a larger number of licenses, distribute them over several CmContainers. A higher number of licenses in one CmContainer can lead to long run-times for the activation or update of the licenses.

Preconditions

- An administrator PC (with dSPACE Installation Manager installed) has an Internet connection for accessing dSPACE License Central.
- CodeMeter Runtime software is installed on the PC with the CmContainer.
- At least one ticket ID is available.

- A CmContainer (CmDongle or CmActLicense) is available. If no CmActLicense container is available or if you want to create a new one, refer to [Manual CmContainer Creation](#) on page 185.

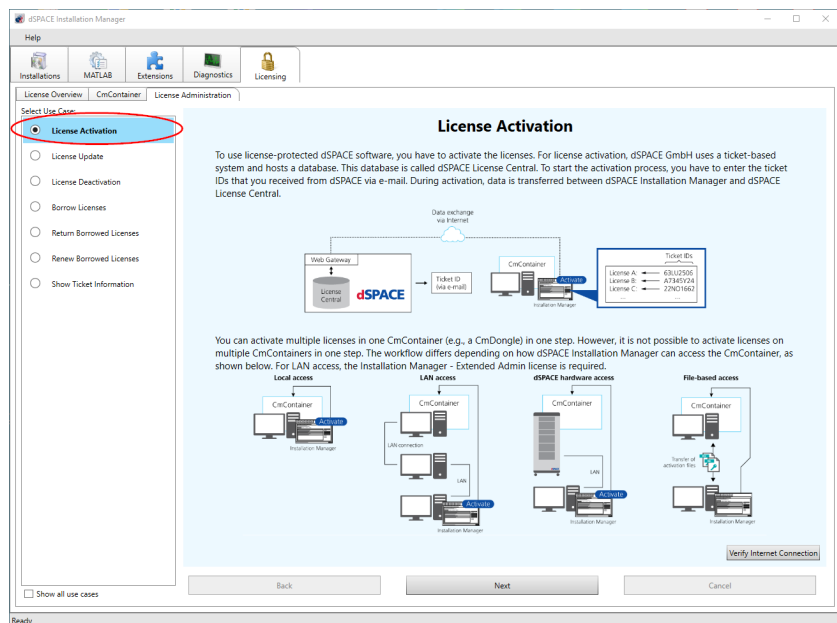
Note

Dongles delivered for dSPACE Releases 2017-A and earlier cannot be used for the new CodeMeter license technology without modifications. Therefore, dongle migration is required for these dongles before you can activate licenses on them. Refer to [Dongle Migration](#) on page 53.

Method

To activate licenses (file-based access to CmContainer)

- 1 Create an initial RAC file (*.WibuCmRaC) with CodeMeter Control Center. Refer to [How to Create an Initial RAC File](#) on page 133.
- 2 On the administrator PC: From Start – dSPACE Installation Manager, select dSPACE Installation Manager. dSPACE Installation Manager opens.
- 3 Click the Licensing – License Administration tab.
- 4 Select License Activation and click Next.



- 5 Enter or paste the ticket ID for license activation you received from dSPACE via e-mail in the edit field and click Add.

The license overview displays the required ticket IDs and ticket group IDs as in the following example:

License Overview



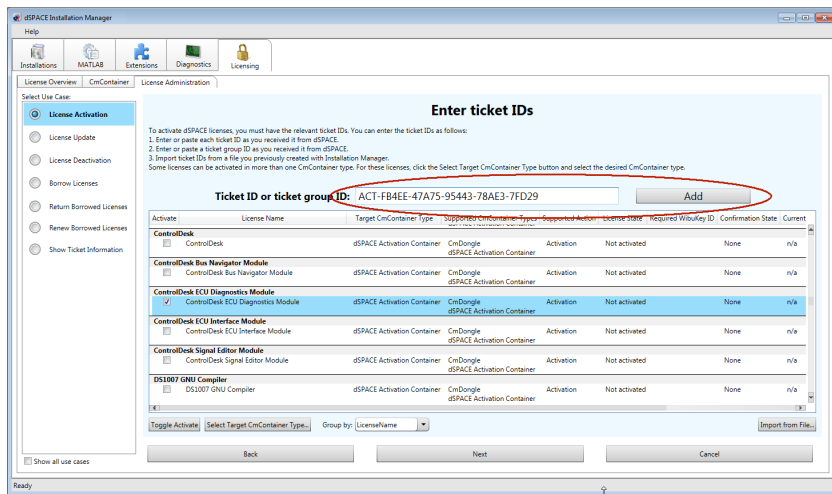
Sales order: [blurred]
 Purchase order: [blurred]
 Your Ref.: [blurred]

Date: 2023-09-07
 Delivery Date: 2023-09-08

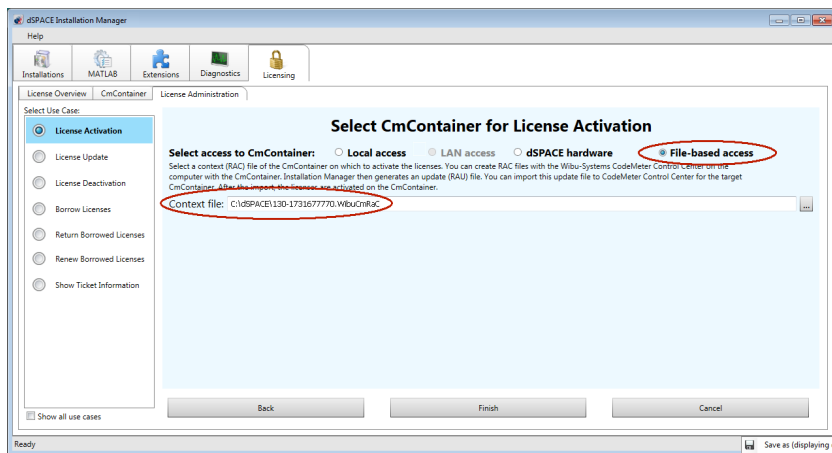
CmContainer: #Licenses are not activated yet

Order number	Product	Ticket ID	Licensing Model	License Quantity	Maintenance Date	Expiration Date	Usage Period	End User	Delivery Date
CCPPPC	Microtec C PowerPC Cross Compiler	[blurred]	Local	1,00	2024-03-31			[blurred]	2023-09-08
CONTROLDESK	ControlDesk	[blurred]	Local	1,00	2024-03-31			[blurred]	2023-09-08
CONTROLDESK_SE	ControlDesk Signal Editor Module	[blurred]	Network	4,00	2024-03-31			[blurred]	2023-09-08
PLATFORM_API	Platform API Package	[blurred]	Local	1,00	2024-03-31			[blurred]	2023-09-08

The ticket information is provided by dSPACE License Central.

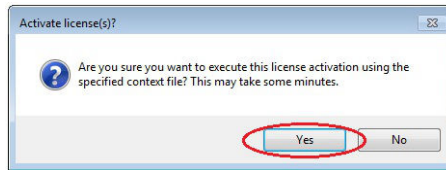


- 6 Select the licenses you want to activate.
- 7 Click Next.
- 8 Select File-based access and enter the path of the RAC file.



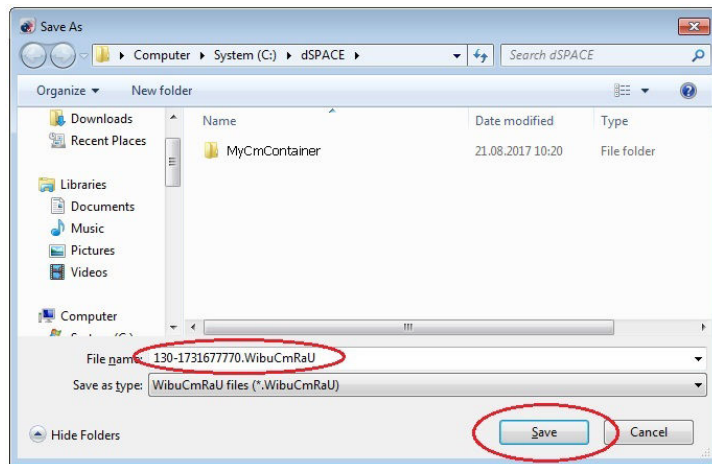
9 Click Finish.

A confirmation prompt is displayed.



10 Click Yes to start the activation process.

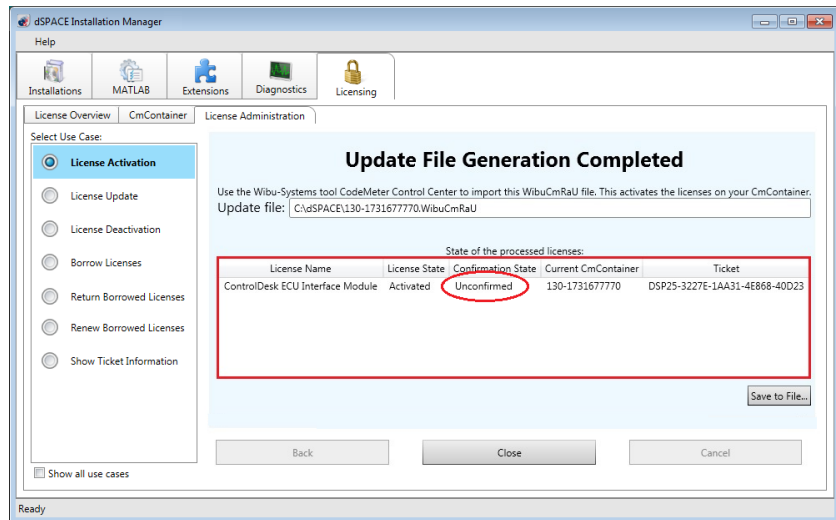
11 Select a folder to store the RAU file in and click Save.



Note
You must not rename the file. The file name is the serial number of the CmContainer.

On the basis of the delivered RAC file, dSPACE License Central generates an RAU file (*.WibuCmRaU) that contains information about the activated license.

When the process is completed, dSPACE Installation Manager displays the result as follows:



12 Click Close.

13 Transfer the RAU file (*.WibuCmRaU) to the PC with the CmContainer. Do this with a USB stick or via a network folder, for example.

14 Update the CmContainer with the delivered RAU file (*.WibuCmRaU). Use CodeMeter Control Center to do this. Refer to [How to Update a CmContainer with an RAU File](#) on page 138.

You updated the CmContainer with an RAU file and created another RAC file to confirm the process.

15 Confirm the license activation. Use dSPACE Installation Manager to do this. Refer to [How to Confirm the License Status Manually \(File-Based Access to CmContainer\)](#) on page 176.

Result

You activated dSPACE software licenses by using the file-based access method. The licenses are now ready for use.

License Update

Motivation License updates are required if the license information of an activated license has been updated by dSPACE.

Where to go from here

Information in this section

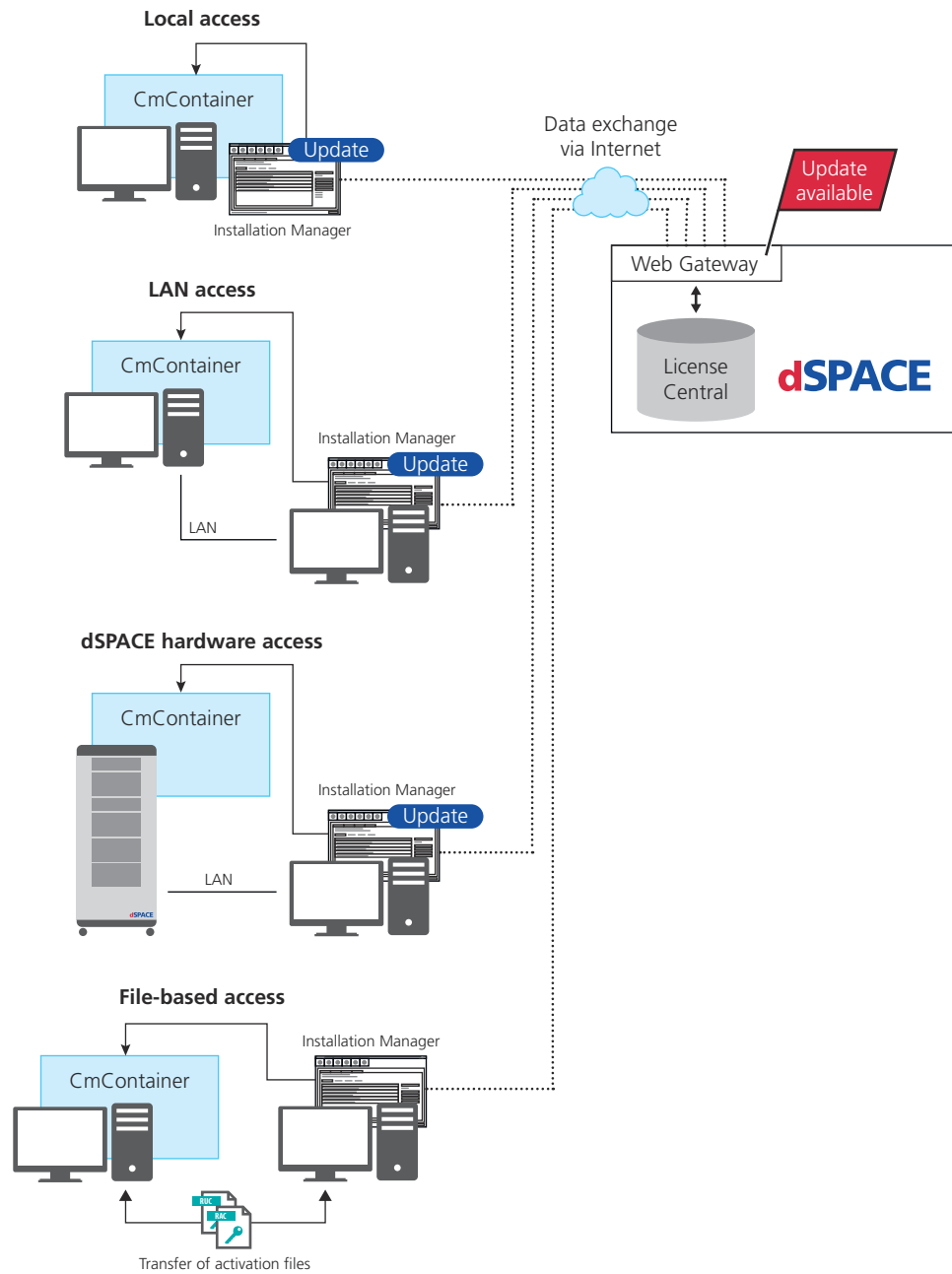
Use Cases and Workflows for License Updates.....	81
How to Update Licenses (Local Access to CmContainer).....	86
How to Update Licenses (LAN Access to CmContainer).....	89
How to Update Licenses (Hardware Access to CmContainer).....	92
How to Update Licenses (File-Based Access to CmContainer).....	94

Use Cases and Workflows for License Updates

Use cases

A license update becomes necessary if the license information of an activated license is updated by dSPACE. For example, if you purchased a Software Maintenance Service (SMS) contract for your dSPACE product and the maintenance end date is extended, you have to update the license.

When the update becomes available in dSPACE License Central, the licenses to be updated are displayed in dSPACE Installation Manager. To perform the update, you only have to provide access to the relevant CmContainer, for example, by connecting the relevant CmDongle.



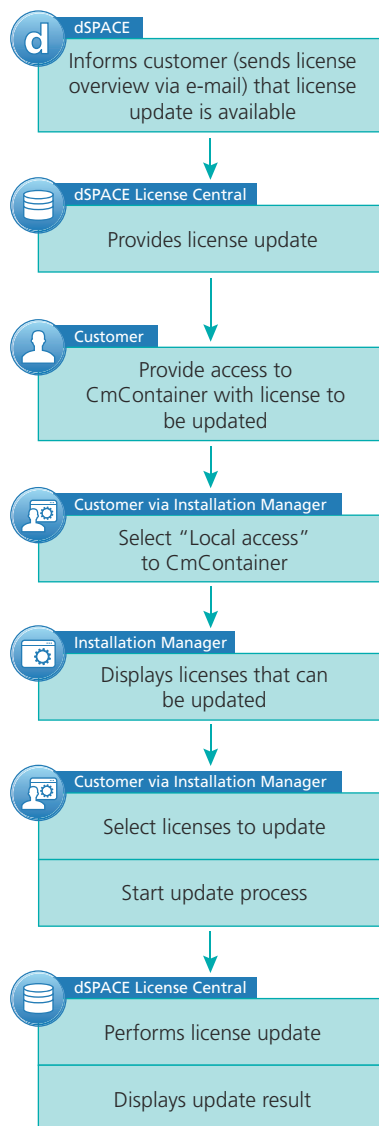
The workflow differs depending on how dSPACE Installation Manager can access the CmContainer.

Note

LAN access is disabled by default.

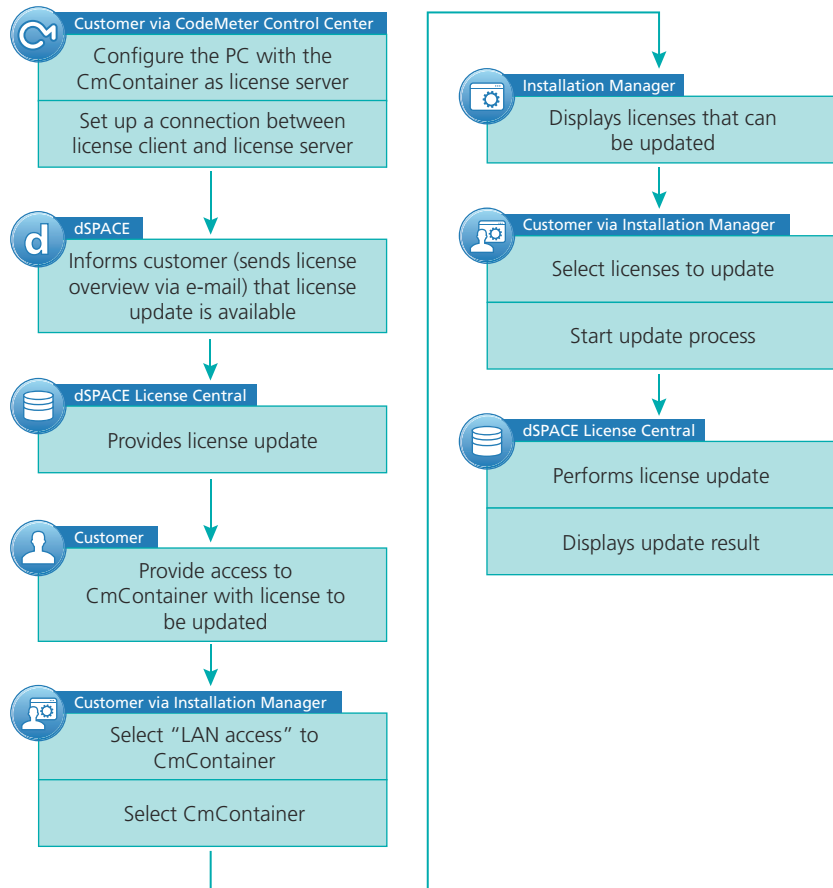
To protect CmContainers on PCs in a LAN from unwanted actions (license activation, license update, license deactivation), LAN access is disabled by default. To use the LAN access feature, a local, activated InstallationManager – Extended Admin license must be available on the PC with Installation Manager. Contact your local dSPACE sales representative or contact dSPACE Support (www.dspace.com/go/supportrequest).

Workflow for local access to CmContainer

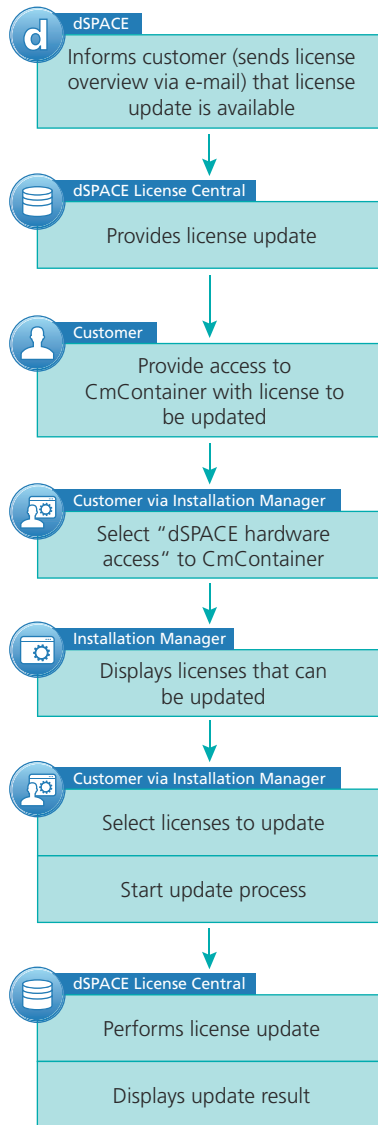


For instructions, refer to [How to Update Licenses \(Local Access to CmContainer\)](#) on page 86.

Workflow for LAN access to CmContainer

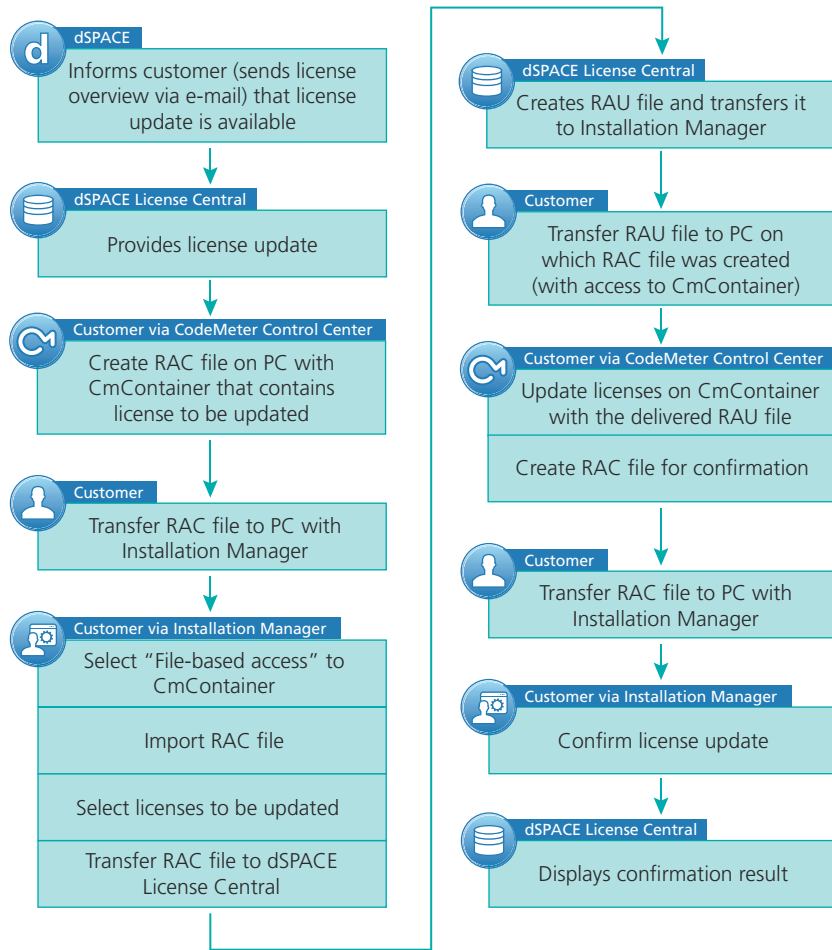


For instructions, refer to [How to Update Licenses \(LAN Access to CmContainer\)](#) on page 89.

**Workflow for dSPACE
hardware access to
CmContainer**

For instructions, refer to [How to Update Licenses \(Hardware Access to CmContainer\)](#) on page 92.

Workflow for file-based access to CmContainer



For instructions, refer to [How to Update Licenses \(File-Based Access to CmContainer\)](#) on page 94.

How to Update Licenses (Local Access to CmContainer)

Objective

To update licenses in a CmContainer that is accessible from dSPACE Installation Manager locally.

Tip

dSPACE Installation Manager supports the update of multiple licenses in one or multiple CmContainers in one step.

When to update

Note

Valid for floating network licenses: Depending on the number of the licenses you want to update, updating licenses on a dSPACE License Server might be time-consuming. Therefore, it is recommended to perform license updates on a license server only during maintenance.

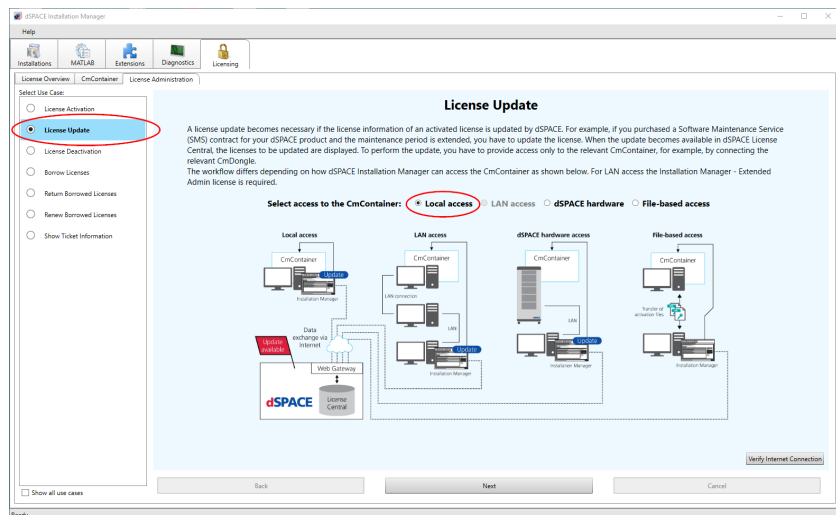
Preconditions

- dSPACE License Central provides an update for activated licenses.
- An Internet connection for accessing dSPACE License Central exists.
- The CmContainer (for example, a CmDongle) you want to update is accessible with dSPACE Installation Manager.

Method

To update licenses (local access to CmContainer)

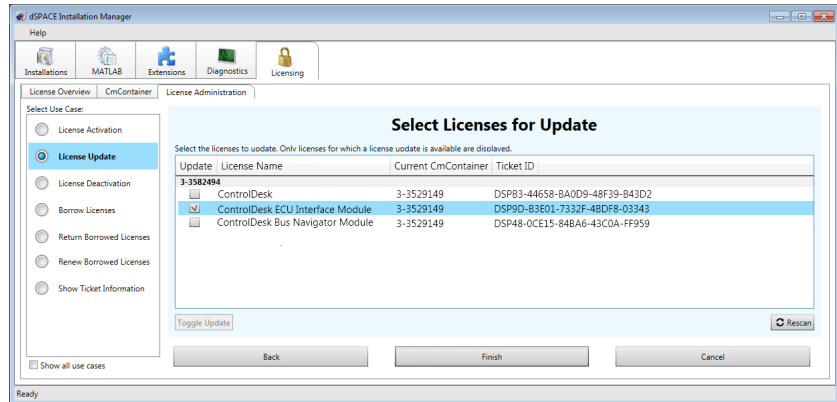
- 1 If you want to update the licenses on a CmDongle, connect the CmDongle to your PC.
- 2 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3 Click the Licensing – License Administration tab.



- 4 Select License Update and then select Local access.

5 Click Next.

dSPACE Installation Manager displays only those licenses of all CmActLicense containers and CmDongles on your PC for which dSPACE provides an update.

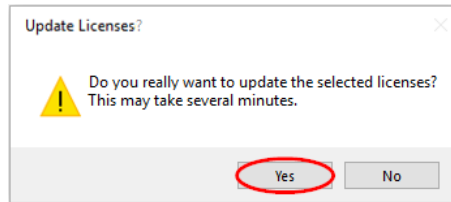


Note
 Updatable licenses on a CmDongle are displayed only if the related CmDongle is connected to the PC. Do not remove the CmDongle from the PC during the update process. This causes the update to fail.

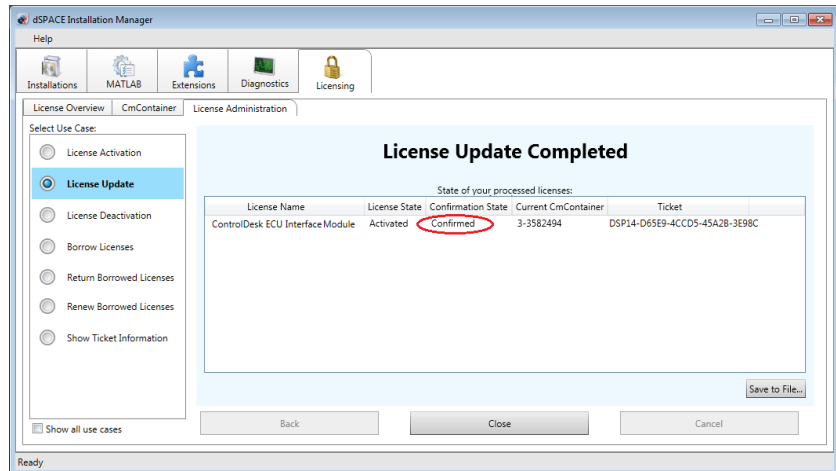
6 Select the licenses you want to update.

7 Click Finish.

A confirmation prompt is displayed.



- 8 Click Yes to start the update process.
dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the result as follows:



- 9 Click Close.

Result

You updated dSPACE licenses.

How to Update Licenses (LAN Access to CmContainer)

Objective

To update licenses in a CmContainer that is accessible from dSPACE Installation Manager via LAN.

Tip

dSPACE Installation Manager supports the update of multiple licenses in one or multiple CmContainers in one step.

When to update

Note

Valid for floating network licenses: Depending on the number of the licenses you want to update, updating licenses on a dSPACE License Server might be time-consuming. Therefore, it is recommended to perform license updates on a license server only during maintenance.

Restriction

Note

LAN access is disabled by default.

To protect CmContainers on PCs in a LAN from unwanted actions (license activation, license update, license deactivation), LAN access is disabled by default. To use the LAN access feature, a local, activated InstallationManager – Extended Admin license must be available on the PC with Installation Manager. Contact your local dSPACE sales representative or contact dSPACE Support (www.dspace.com/go/supportrequest).

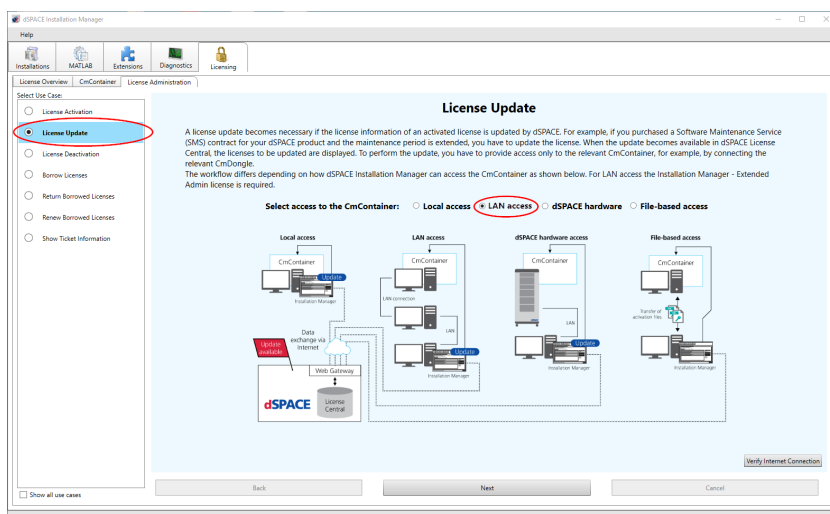
Preconditions

- The PC with the CmContainer is configured as a dSPACE License Server. Refer to [How to Set Up the dSPACE License Server](#) on page 153.
- The PC with dSPACE Installation Manager is able to establish a TCP/IP connection to the dSPACE License Server. Refer to [How to Set up a Connection Between Client and Server](#) on page 156.
- dSPACE License Central provides an update for activated licenses.
- An Internet connection for accessing dSPACE License Central exists.
- The CmContainer (for example, a CmDongle) you want to update is accessible with dSPACE Installation Manager.

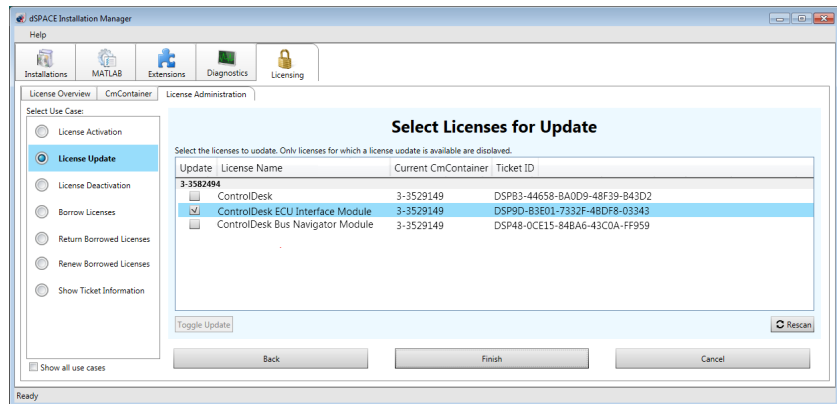
Method

To update licenses (LAN access to CmContainer)

- 1 Connect the CmDongle with the activated InstallationManager – Extended Admin license to the PC with dSPACE Installation Manager.
- 2 If you want to update the licenses on a CmDongle, connect the CmDongle to the PC configured as dSPACE License Server.
- 3 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 4 Click the Licensing – License Administration tab.



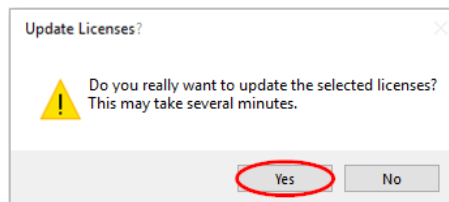
- 5 Select License Update and then select LAN access.
- 6 Click Next.
dSPACE Installation Manager displays all CmActLicense container and all CmDongles that can be accessed via LAN.
- 7 Select the CmContainer that contains licenses to be updated.
- 8 Click Next.
dSPACE Installation Manager displays only those licenses for which dSPACE provides an update.



Note

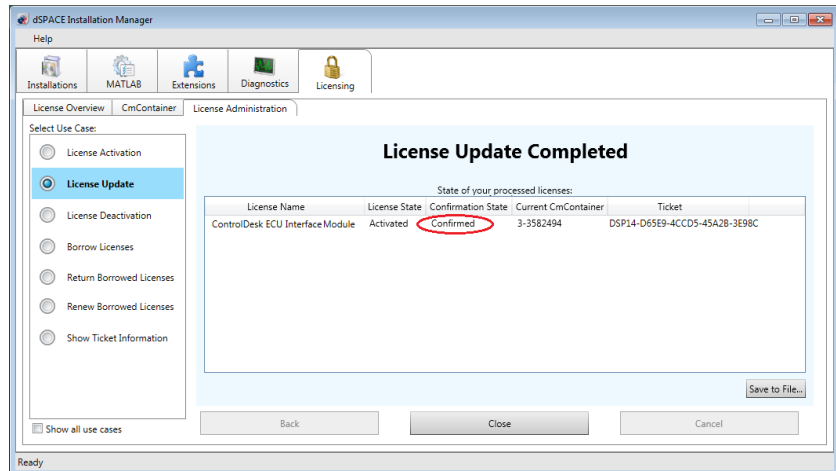
Updatable licenses on a CmDongle are displayed only if the related CmDongle is connected to a PC accessible via LAN. Do not remove the CmDongle from the PC during the update process. This causes the update to fail.

- 9 Select the licenses you want to update.
- 10 Click Finish.
A confirmation prompt is displayed.



11 Click Yes to start the update process.

dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the result as follows:



12 Click Close.

Result

You updated dSPACE licenses.

How to Update Licenses (Hardware Access to CmContainer)

Objective

To update hardware licenses stored in a CmContainer located on a dSPACE hardware system that can be accessed by dSPACE Installation Manager via LAN.

Preconditions

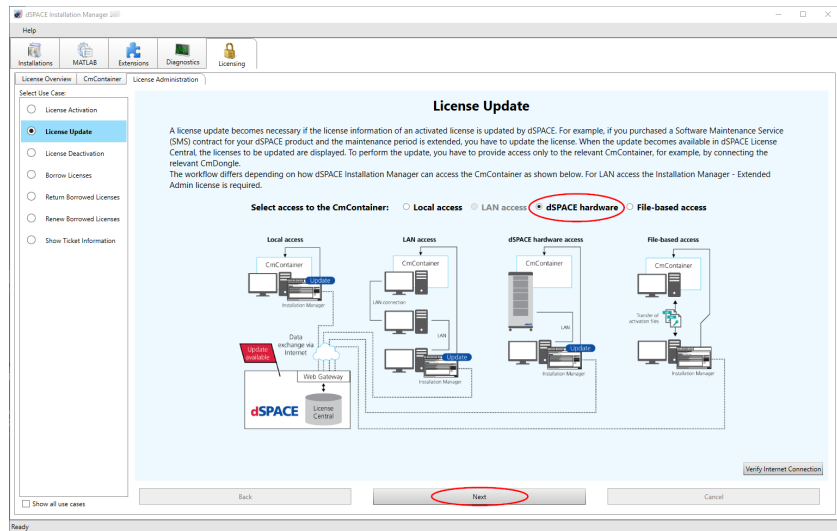
- dSPACE License Central provides an update for activated licenses.
- An Internet connection for accessing dSPACE License Central exists.
- The dSPACE hardware system (MicroLabBox II or SCALEXIO) is accessible directly from your PC via LAN.
- The URL or IP address of the hardware system is known by dSPACE Installation Manager and is therefore displayed in the Configure dSPACE Hardware System URLs dialog. This dialog is accessible via the dSPACE Hardware button.

Method

To update licenses (hardware access to CmContainer)

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.

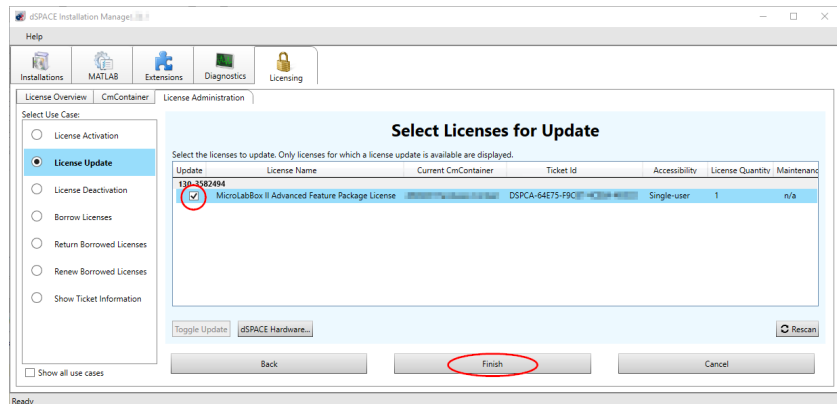
2 Click the Licensing – License Administration tab.



3 Select License Update and then select dSPACE hardware.

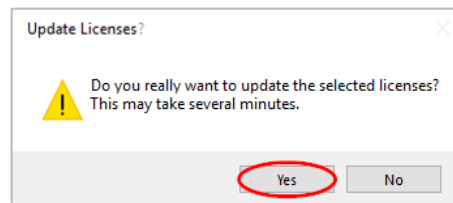
4 Click Next.

dSPACE Installation Manager displays only those licenses for which dSPACE provides an update.

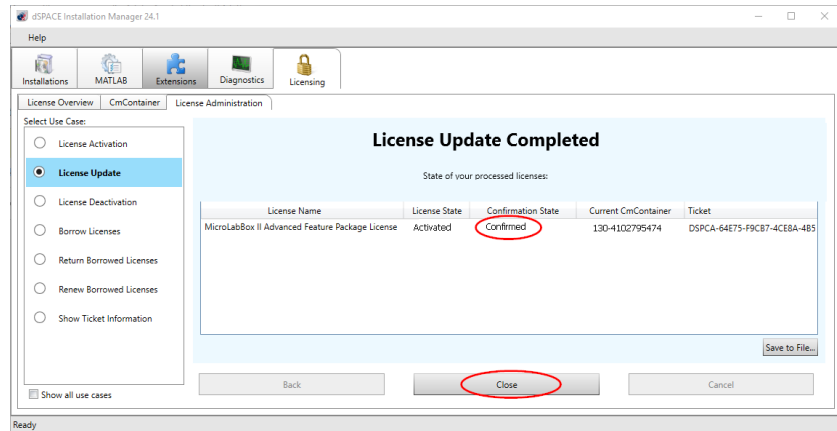


5 Select the licenses you want to update and click Finish.

A confirmation prompt is displayed.



- 6 Click Yes to start the update process.
dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the result as follows:



- 7 Click Close.

Result

You updated dSPACE licenses.

How to Update Licenses (File-Based Access to CmContainer)

Objective

To update single-user and floating network licenses on a CmContainer that is accessible only via manual file transfer.

When to update

Note

Valid for floating network licenses: Depending on the number of licenses you want to update, updating licenses on a dSPACE License Server might be time-consuming. Therefore, it is recommended to perform license updates on a license server only during maintenance.

Preconditions

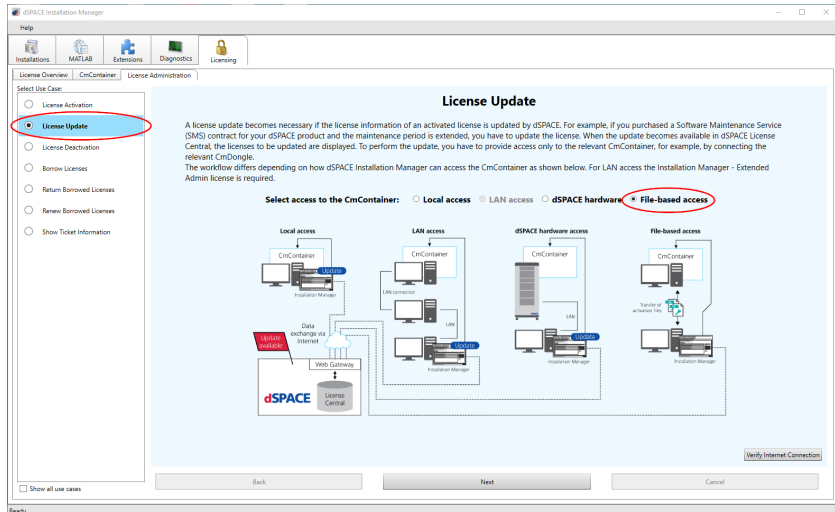
- dSPACE License Central provides an update for activated licenses.
- An administrator PC (with dSPACE Installation Manager installed) has an Internet connection for accessing dSPACE License Central.
- CodeMeter Runtime software is installed on the PC with the CmContainer.

Method

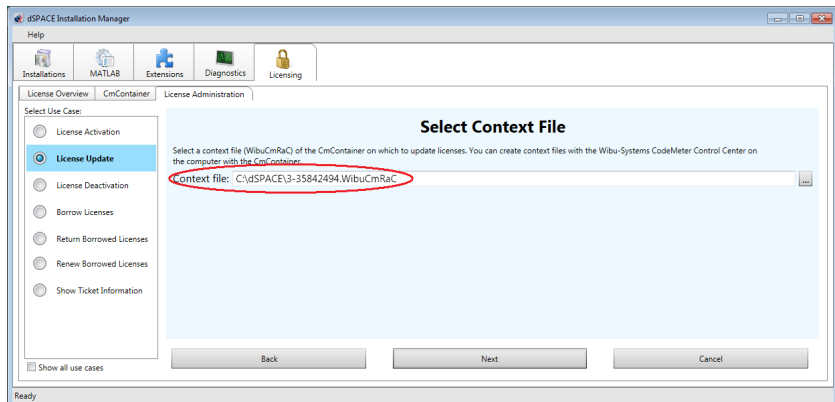
To update licenses (file-based access to CmContainer)

- 1 Create an initial RAC file (*.WibuCmRaC) with CodeMeter Control Center. Refer to [How to Create an Initial RAC File](#) on page 133.

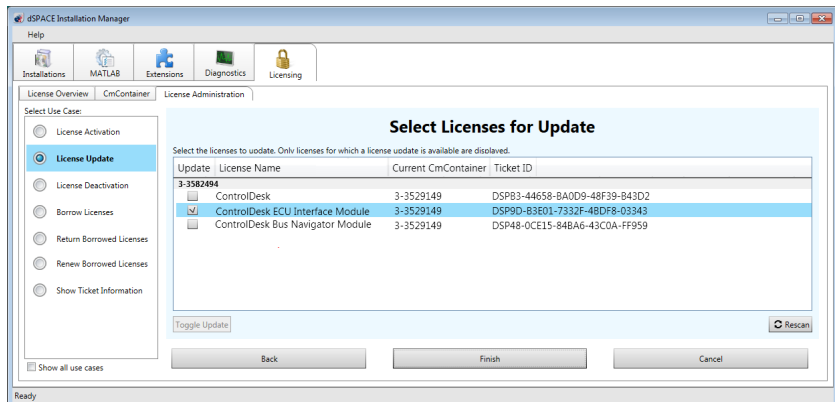
- 2 On the administrator PC: From Start – dSPACE Installation Manager, select dSPACE Installation Manager. dSPACE Installation Manager opens.
- 3 Click the Licensing – License Administration tab.



- 4 Select License Update and then select File-based access.
- 5 Click Next.
- 6 Enter the path of the RAC file (*.WibuCmRac).

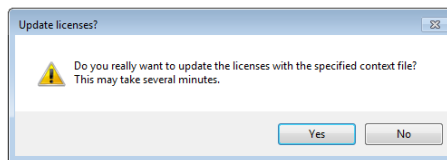


7 Click Next.

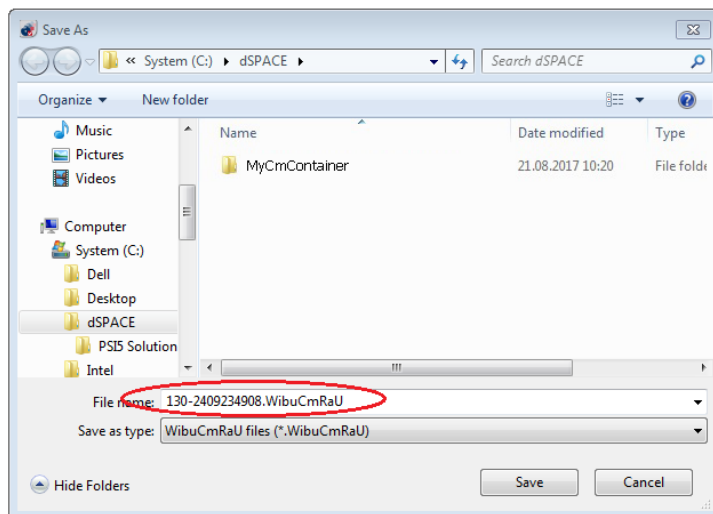


Note
Licenses are displayed only if dSPACE provides an update for them.

8 Select the licenses you want to update and click Next. A confirmation prompt is displayed.



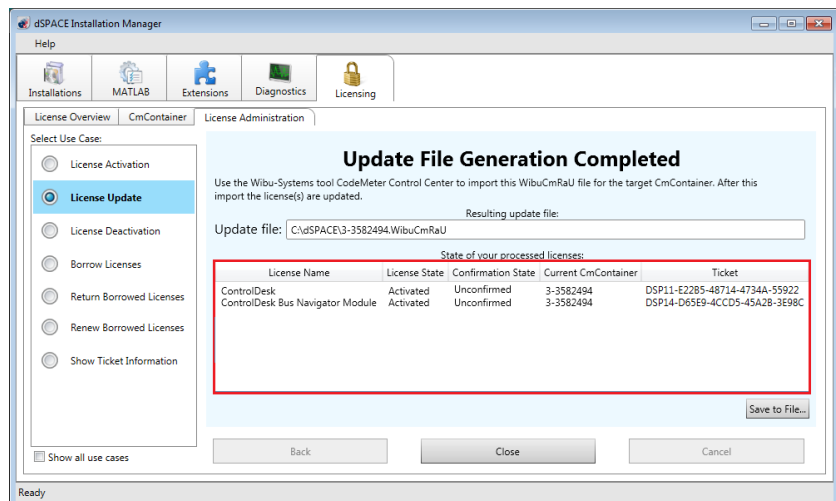
- 9 Click Yes to start the update process. On the basis of the delivered RAC file, dSPACE License Central generates an RAU file (*.WibuCmRaU) that contains information about the licenses which are updated.
- 10 Select a folder to store the RAU file in and click Save.



Note

Do not rename the file. The file name is the serial number of the CmContainer.

When the process is completed, dSPACE Installation Manager displays the result as follows:



- 11 Click Close.
- 12 Transfer the RAU file (*.WibuCmRaU) to the PC with the CmContainer. Do this with a USB stick or via a network folder, for example.
- 13 Update the CmContainer with the delivered RAU file (*.WibuCmRaU). Use CodeMeter Control Center to do this. Refer to [How to Update a CmContainer with an RAU File](#) on page 138.
- 14 Confirm the license update. Use dSPACE Installation Manager to do this. Refer to [How to Confirm the License Status Manually \(File-Based Access to CmContainer\)](#) on page 176.

Result

You updated licenses by using the file-based access method.

License Deactivation

Motivation Deactivated licenses can be activated again if you want to use them in a different CmContainer.

Where to go from here

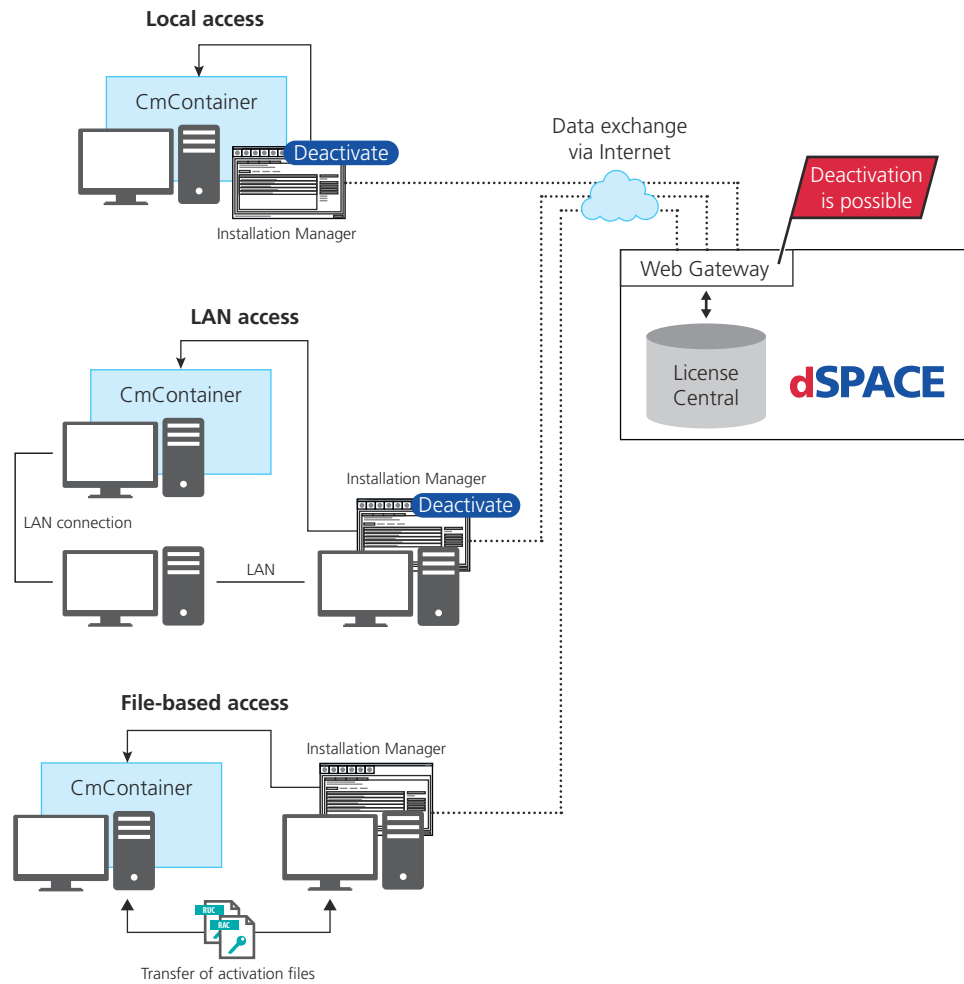
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Use Cases and Workflows for License Deactivation.....	99
How to Deactivate Licenses (Local Access to CmContainer).....	104
How to Deactivate Licenses (LAN Access to CmContainer).....	106
How to Deactivate Licenses (File-Based Access to CmContainer).....	109

Use Cases and Workflows for License Deactivation

Use case For license deactivation, you transfer activated licenses from a CmContainer back to dSPACE License Central. The deactivated licenses can be activated again if you want to use them in a different CmContainer. dSPACE Installation Manager displays only the licenses that can be deactivated.

The workflow differs depending on how dSPACE Installation Manager can access the CmContainer.

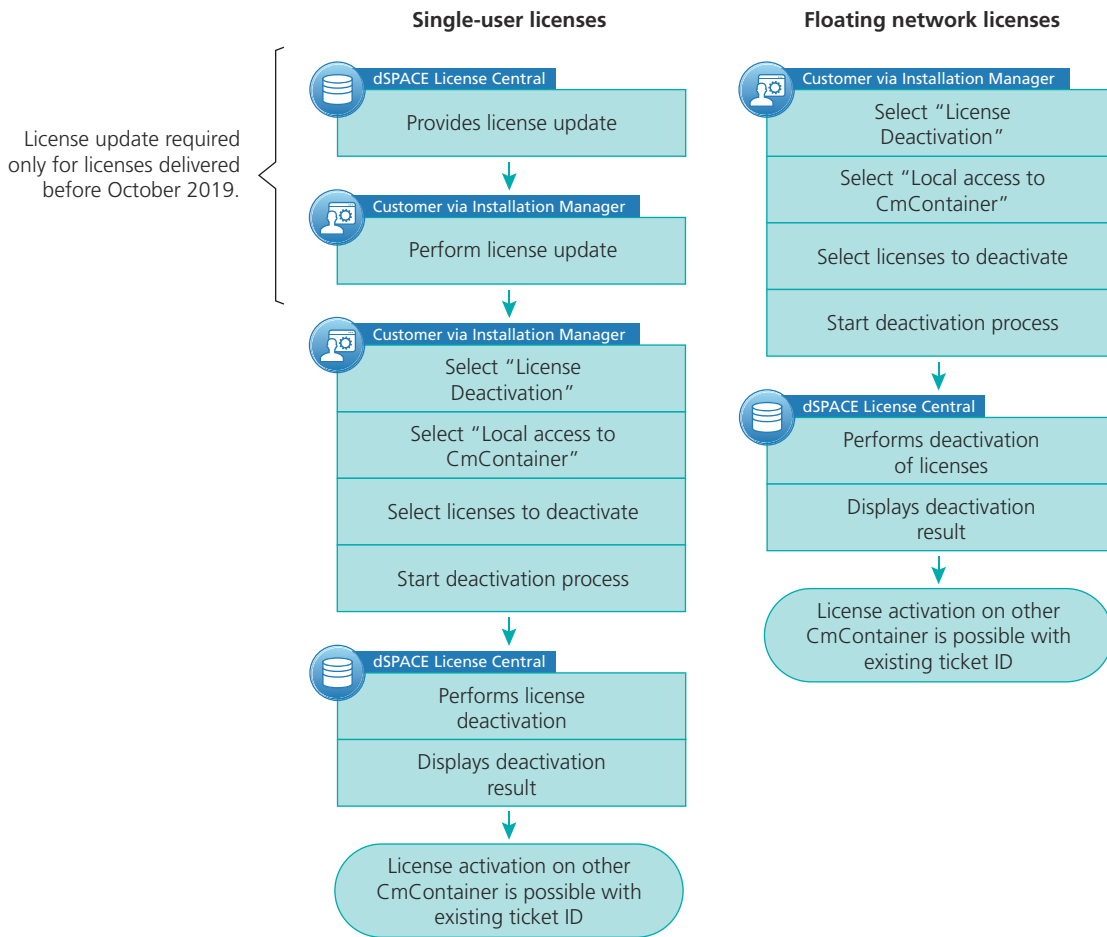


Note

LAN access is disabled by default.

To protect CmContainers on PCs in a LAN from unwanted actions (license activation, license update, license deactivation), LAN access is disabled by default. To use the LAN access feature, a local, activated InstallationManager – Extended Admin license must be available on the PC with Installation Manager. Contact your local dSPACE sales representative or contact dSPACE Support (www.dspace.com/go/supportrequest).

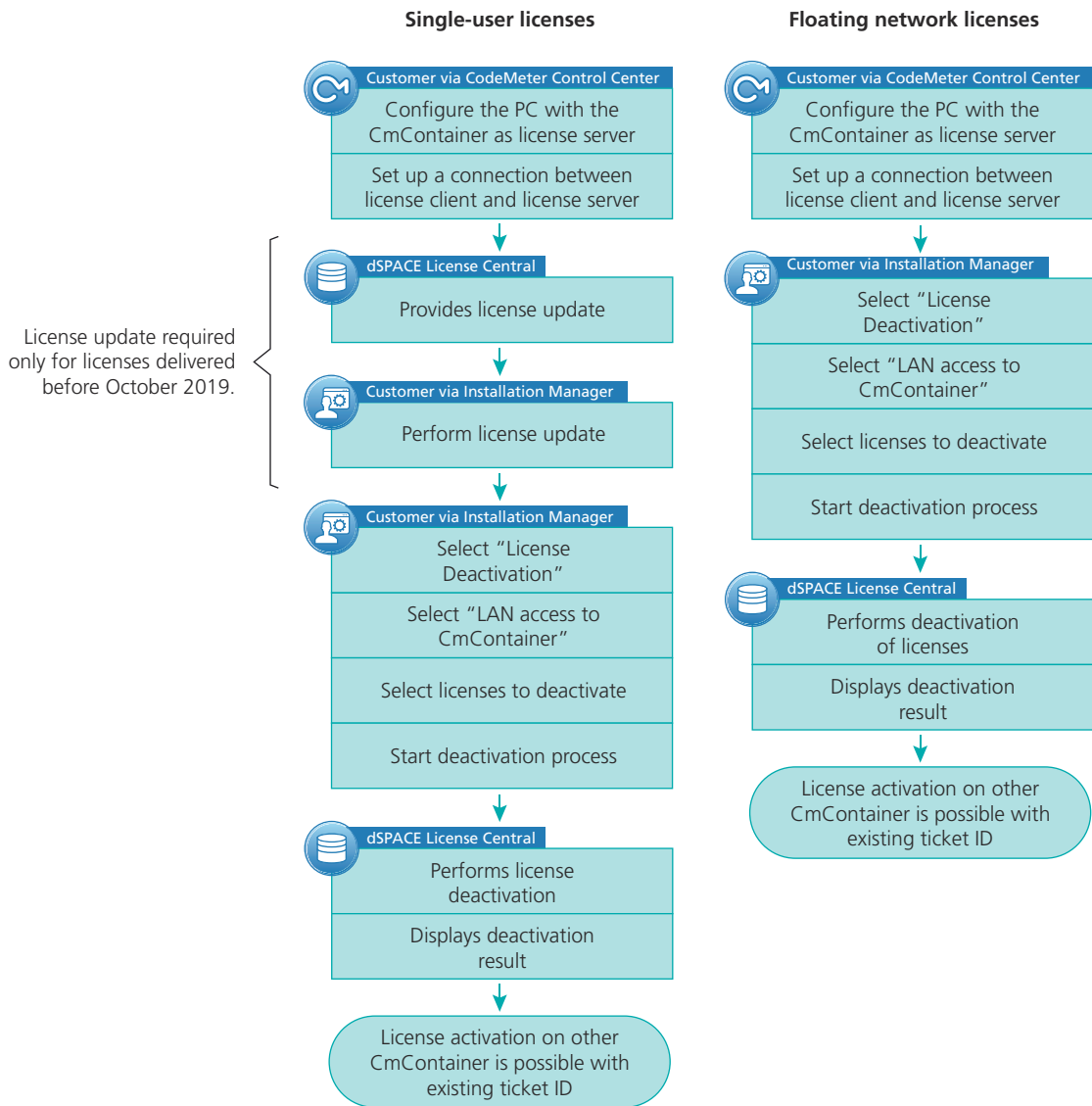
Workflow for local access



For instructions, refer to:

- [How to Update Licenses \(Local Access to CmContainer\)](#) on page 86
- [How to Deactivate Licenses \(Local Access to CmContainer\)](#) on page 104

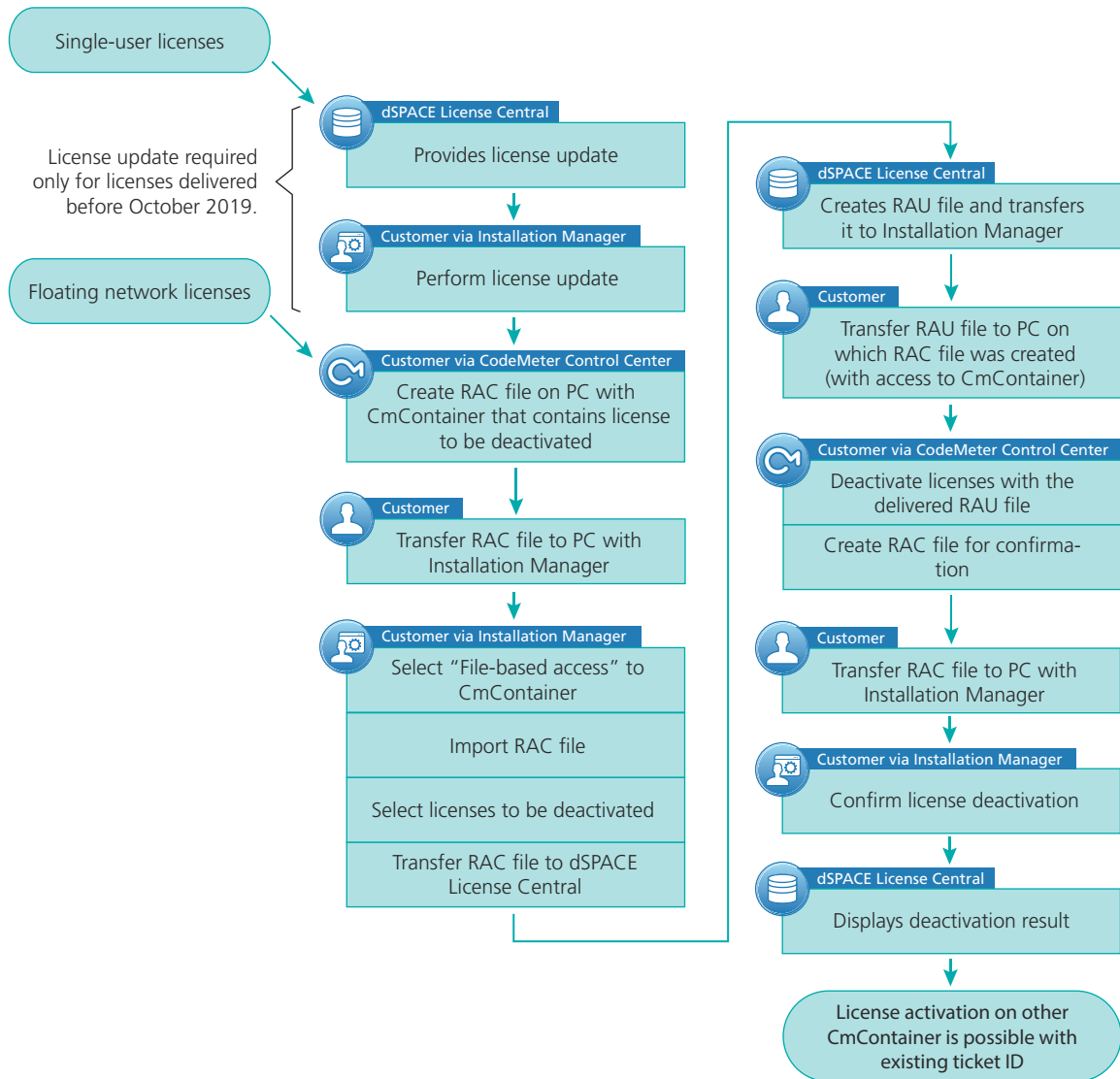
Workflow for LAN access



For instructions, refer to:

- [How to Update Licenses \(LAN Access to CmContainer\)](#) on page 89
- [How to Deactivate Licenses \(LAN Access to CmContainer\)](#) on page 106

Workflow for file-based access



For instructions, refer to:

- [How to Update Licenses \(File-Based Access to CmContainer\)](#) on page 94
- [How to Deactivate Licenses \(File-Based Access to CmContainer\)](#) on page 109

How to Deactivate Licenses (Local Access to CmContainer)

Objective

To deactivate single-user and floating network licenses on a CmContainer that is accessible locally on your PC.

Tip

dSPACE Installation Manager supports the deactivation of multiple licenses in one or multiple CmContainers in one step.

When to deactivate

Note

Valid for floating network licenses: Depending on the number of the licenses you want to deactivate, deactivating licenses on a dSPACE License Server might be time-consuming. Therefore, it is recommended to perform license deactivation on a license server only during maintenance.

Preconditions

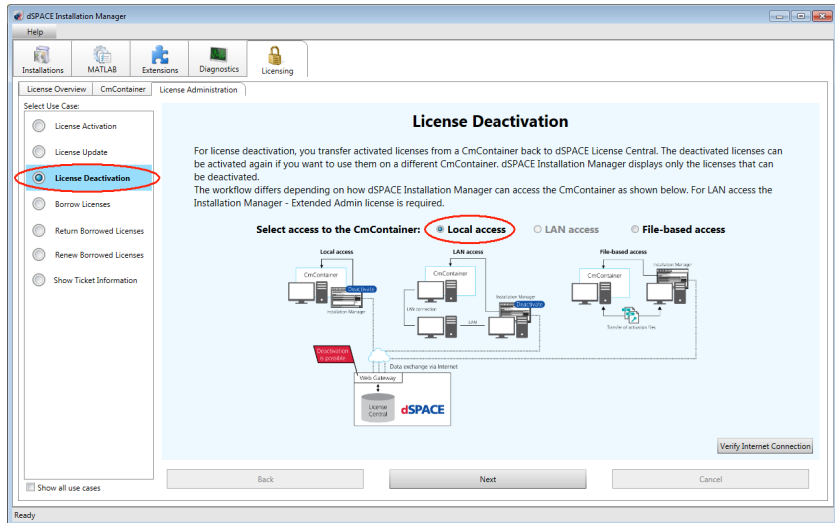
- An Internet connection for accessing dSPACE License Central exists.
- Only for single-user licenses delivered before October 2019: You performed the license update. Refer to [How to Update Licenses \(Local Access to CmContainer\)](#) on page 86. You can deactivate the license afterwards.

Method

To deactivate licenses (local access to CmContainer)

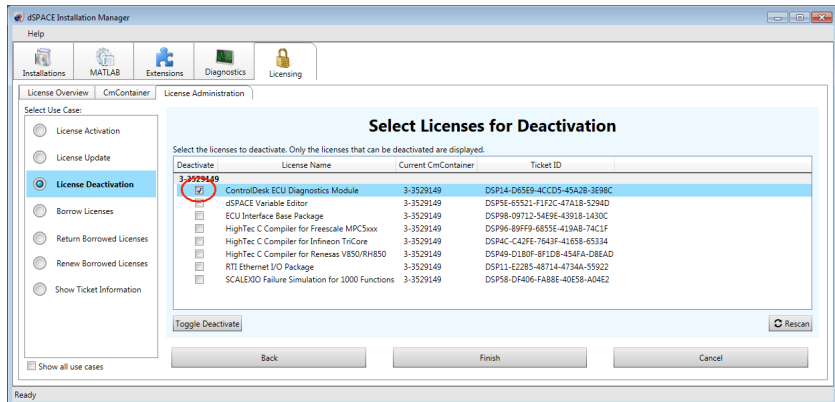
- 1** Connect the CmDongle to your host PC if you want to deactivate the licenses on a CmDongle.
- 2** From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3** Click the Licensing – License Administration tab.

4 Select License Deactivation and then select Local access.



5 Click Next.

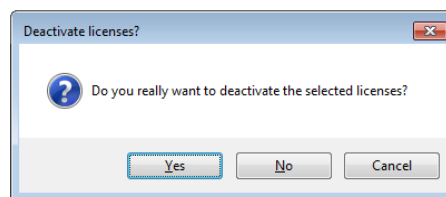
dSPACE Installation Manager displays only licenses that can be deactivated.



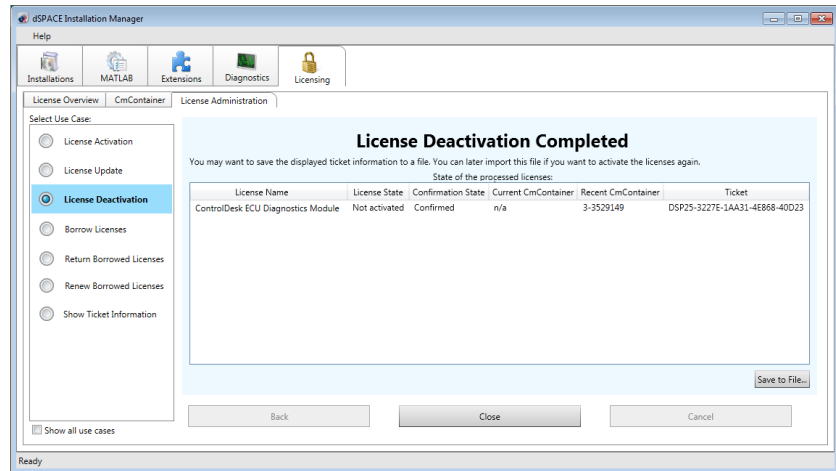
6 Select the licenses you want to deactivate.

7 Click Finish.

A confirmation prompt is displayed.



- 8 Click Yes to start the deactivation.
dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the deactivation result as follows:



- 9 A message asking you if you want to save the ticket information to an XML file is displayed.
Click Yes to save the file to a location of your choice.

Tip

Your are recommended to save the ticket information, for example, to activate the licenses again later.

- 10 Click Close.

Result

You deactivated the selected licenses.

How to Deactivate Licenses (LAN Access to CmContainer)

Objective

To deactivate single-user and floating network licenses on a CmContainer that is accessible in a LAN.

Tip

dSPACE Installation Manager supports the deactivation of multiple licenses in one or multiple CmContainers in one step.

When to deactivate**Note**

Valid for floating network licenses: Depending on the number of the licenses you want to deactivate, deactivating licenses on a dSPACE License Server might be time-consuming. Therefore, it is recommended to perform license deactivation on a license server only during maintenance.

Restriction**Note****LAN access is disabled by default.**

To protect CmContainers on PCs in a LAN from unwanted actions (license activation, license update, license deactivation), LAN access is disabled by default. To use the LAN access feature, a local, activated InstallationManager – Extended Admin license must be available on the PC with Installation Manager. Contact your local dSPACE sales representative or contact dSPACE Support (www.dspace.com/go/supportrequest).

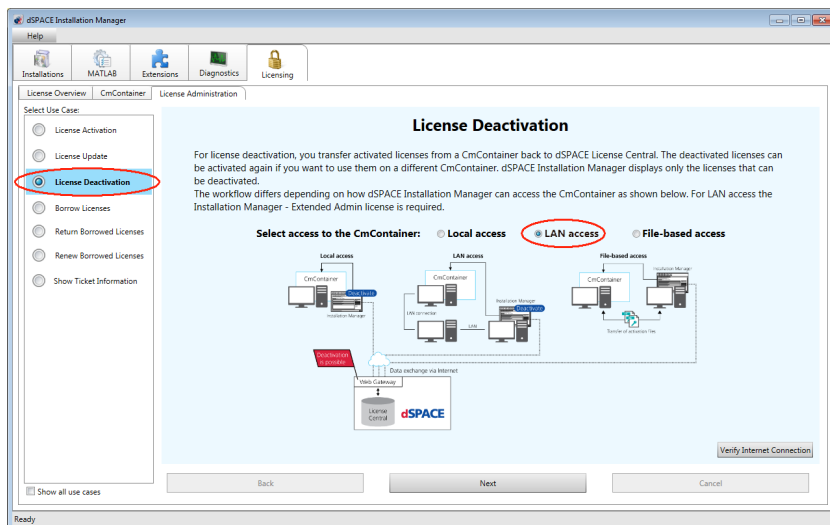
Preconditions

- The PC with the CmContainer is configured as a dSPACE License Server. Refer to [How to Set Up the dSPACE License Server](#) on page 153.
- The PC with dSPACE Installation Manager is able to establish a TCP/IP connection to the dSPACE License Server. Refer to [How to Set up a Connection Between Client and Server](#) on page 156.
- An Internet connection for accessing dSPACE License Central exists.
- Only for single-user licenses delivered before October 2019: You performed the license update. Refer to [How to Update Licenses \(Local Access to CmContainer\)](#) on page 86. You can deactivate the license afterwards.

Method**To deactivate licenses (LAN access to CmContainer)**

- 1** Connect the CmDongle with the activated InstallationManager – Extended Admin license to the PC with dSPACE Installation Manager.
- 2** If you want to deactivate the licenses on a CmDongle, connect the CmDongle to the PC configured as dSPACE License Server.
- 3** From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 4** Click the Licensing – License Administration tab.

5 Select License Deactivation and then select LAN access.



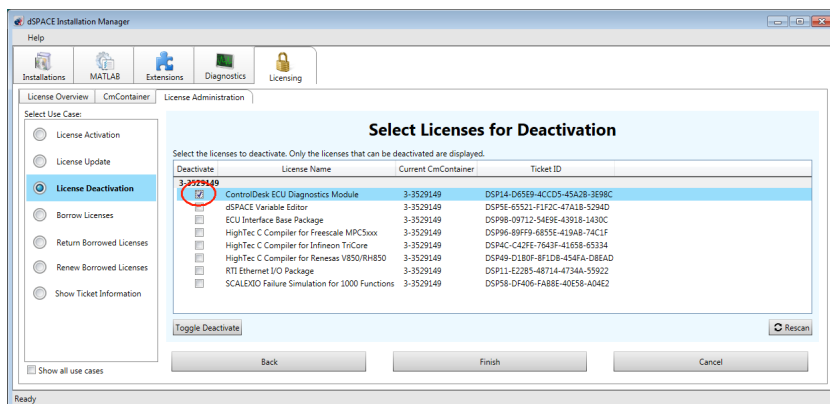
6 Click Next.

dSPACE Installation Manager displays all CmActLicense container and all CmDongles that can be accessed via LAN.

7 Select the CmContainer that contains licenses to be deactivated.

8 Click Next.

dSPACE Installation Manager displays only licenses that can be deactivated.

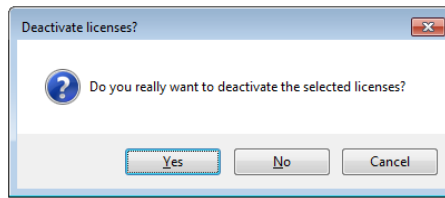


Note
Deactivatable licenses on a CmDongle are displayed only if the related CmDongle is connected to a PC accessible via LAN. Do not remove the CmDongle from the PC during the update process. This causes the update to fail.

9 Select the licenses you want to deactivate.

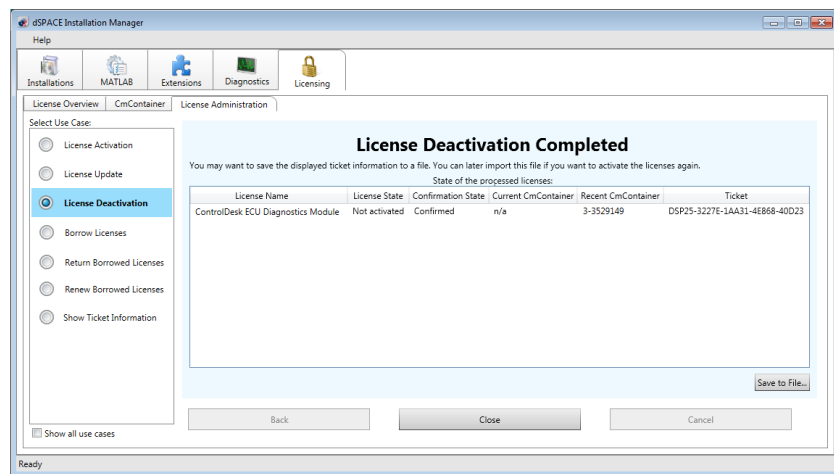
10 Click Finish.

A confirmation prompt is displayed.



11 Click Yes to start the deactivation.

dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the deactivation result as follows:



12 Click Close.

Result

You deactivated the selected licenses.

How to Deactivate Licenses (File-Based Access to CmContainer)

Objective

To deactivate single-user and floating network licenses in a CmContainer that is accessible only via manual file transfer from the host PC.

Tip

dSPACE Installation Manager supports the deactivation of multiple licenses in one or multiple CmContainers in one step.

Restriction

Note

For deactivating single-user licenses, you have to contact dSPACE. You can deactivate single-user licenses only if dSPACE approved the deactivation. However, you can deactivate floating network licenses at any time.

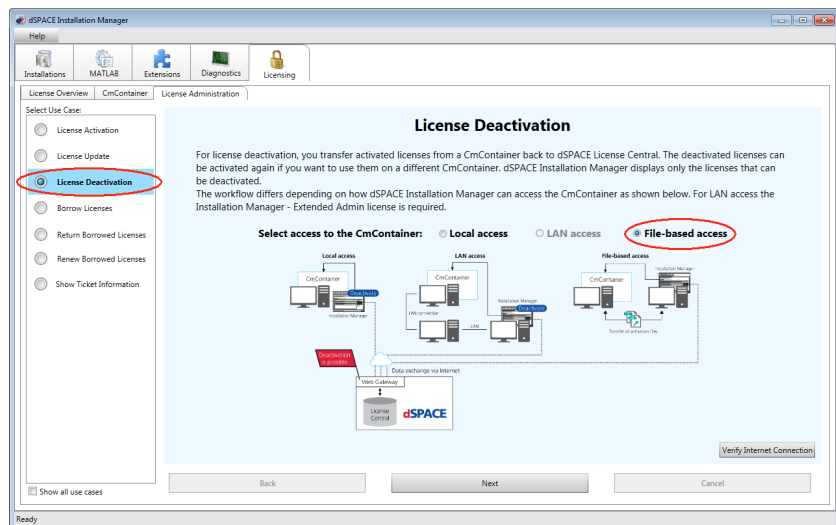
Preconditions

- An administrator PC (with dSPACE Installation Manager installed on it) has an Internet connection for accessing dSPACE License Central.
- CodeMeter Runtime software is installed on the PC with the CmContainer.
- A CmDongle is available (mandatory for deactivating single-user licenses).
- Only for single-user licenses delivered before October 2019: You performed the license update. Refer to [How to Update Licenses \(Local Access to CmContainer\)](#) on page 86. You can deactivate the license afterwards.

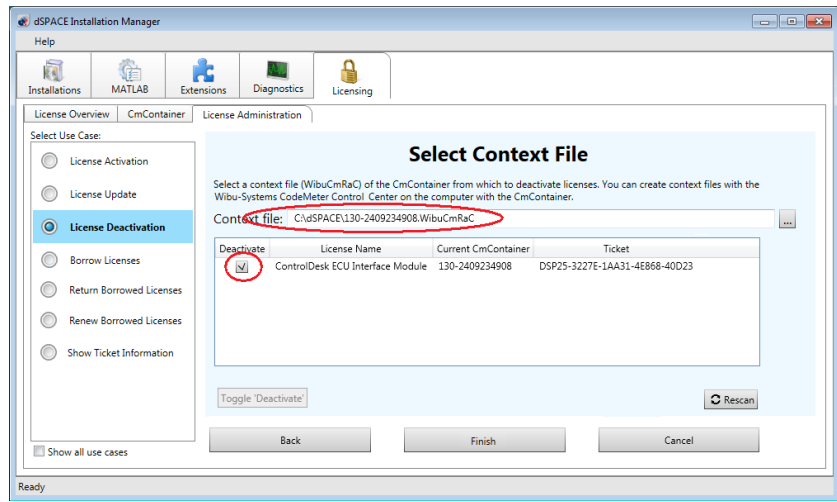
Method

To deactivate licenses (file-based access to CmContainer)

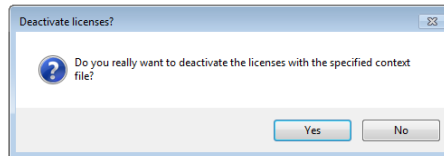
- 1 Create an initial RAC file (*.WibuCmRaC) with CodeMeter Control Center. Refer to [How to Create an Initial RAC File](#) on page 133.
- 2 On the administrator PC: From Start – dSPACE Installation Manager, select dSPACE Installation Manager. dSPACE Installation Manager opens.
- 3 Click the Licensing – License Administration tab.
- 4 Select License Deactivation and then select File-based access.



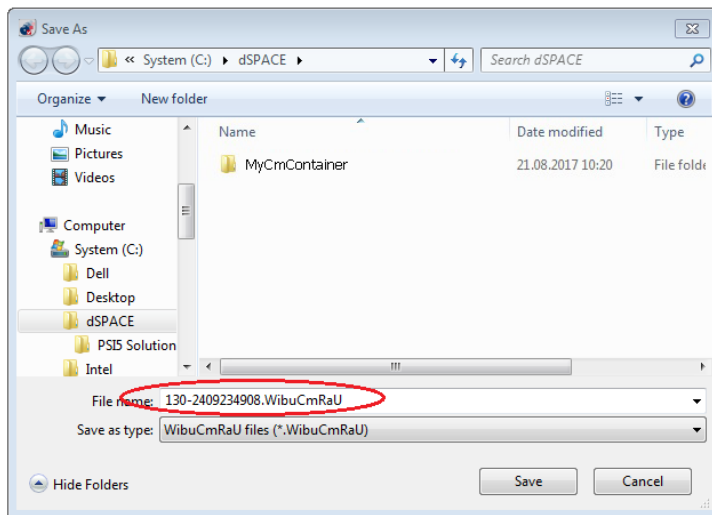
- 5 Enter the path of the RAC file (*.WibuCmRaC).



- 6 Select the licenses you want to deactivate and click Finish. A confirmation prompt is displayed.



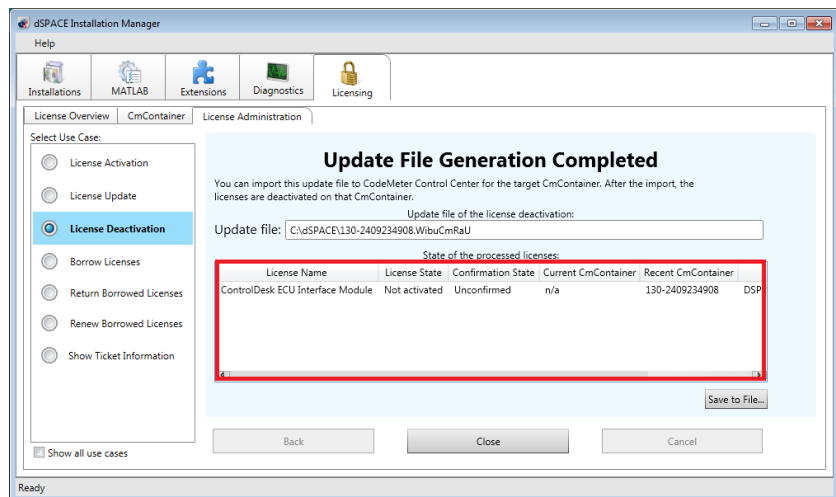
- 7 Click Yes to start the deactivation process. On the basis of the delivered RAC file, dSPACE License Central generates an RAU file (*.WibuCmRaU) that contains information about the deactivated license.
- 8 Select a folder to store the RAU file in and click Save.



Note

Do not rename the file. The file name is the serial number of the CmContainer.

When the process is completed, dSPACE Installation Manager displays the result as follows:



9 Click Close.

10 Transfer the RAU file (*.wibuCmRaU) to the PC with the CmContainer. Do this with a USB stick or via a network folder, for example.

11 Update the CmContainer with the delivered RAU file (*.wibuCmRaU). Use CodeMeter Control Center to do this. Refer to [How to Update a CmContainer with an RAU File](#) on page 138.

12 Confirm the license deactivation. Use dSPACE Installation Manager to do this. Refer to [How to Confirm the License Status Manually \(File-Based Access to CmContainer\)](#) on page 176.

Result

You deactivated the selected licenses by using the file-based access method.

License Borrowing

Motivation You can borrow floating network licenses from a CmContainer to a dSPACE Borrow Container or to a CmDongle. This way you can block a license for exclusive use. You can also use it on a PC without a network connection.

Where to go from here

Information in this section

Use Cases for License Borrowing.....	113
How to Borrow Licenses.....	115
How to Return Borrowed Licenses.....	120
How to Renew Borrowed Licenses.....	123

Use Cases for License Borrowing

Advantages

License borrowing offers the following advantages:

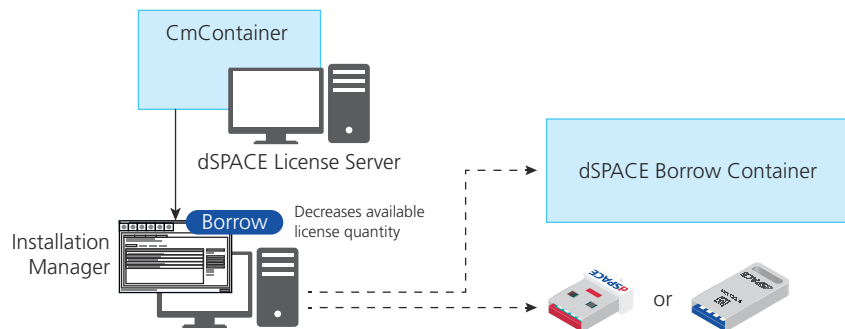
- A borrowed license does not require access to the source CmContainer while you are working with it. You can use it on a PC that is not connected to the dSPACE License Server.
- A borrowed license is treated like an exclusive single-user license. This means that it is blocked for other users of the floating network license and guaranteed to be available on the PC with the dSPACE Borrow Container or the target CmDongle.
- Because borrowed floating network licenses are handled like single-user licenses, they can be used for legacy licensing using CodeMeter licenses. Refer to [Legacy Licensing Using CodeMeter Licenses](#) on page 197.

Basics on borrowing dSPACE licenses

You can borrow floating network licenses from a CmContainer (on a dSPACE License Server) to a dSPACE Borrow Container (software-based CmContainer) or to a CmDongle. Licenses can be borrowed for a specific period of time after which they are automatically available again in the source CmContainer.

Note

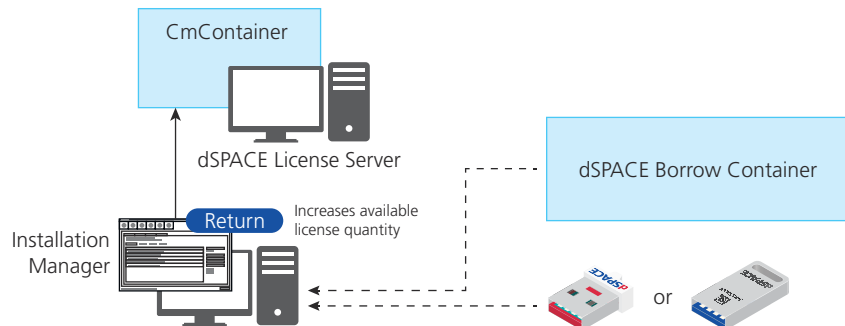
- Borrowed licenses decrease the number of licenses available on the dSPACE License Server.
- A license update might be necessary to make your floating network licenses borrowable.



For instructions, refer to [How to Borrow Licenses](#) on page 115.

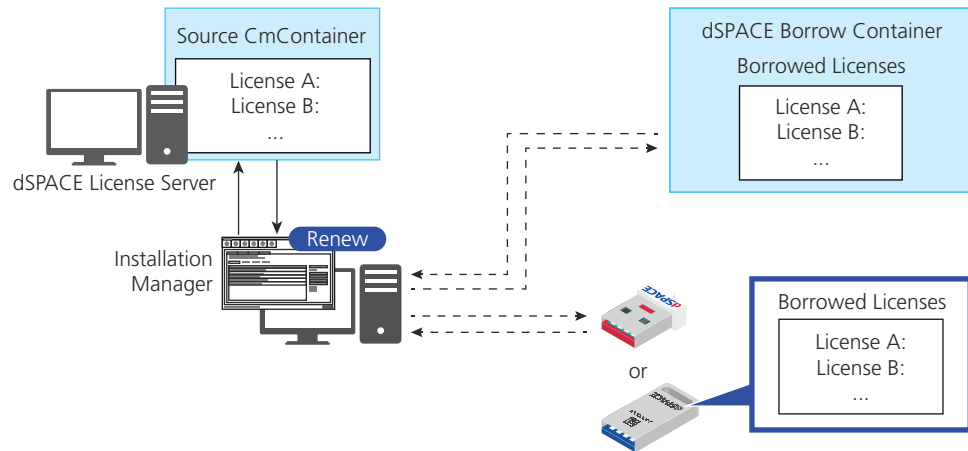
Returning borrowed licenses

You can manually return borrowed licenses to the source CmContainer to make them available again before the borrow period expires.



For instructions, refer to [How to Return Borrowed Licenses](#) on page 120.

Renewing borrowed licenses You can renew borrowed licenses to extend the borrow period before it expires.



For instructions, refer to [How to Renew Borrowed Licenses](#) on page 123.

How to Borrow Licenses

Objective To borrow floating network licenses from a CmContainer on a dSPACE License Server for exclusive access, even without connection to the dSPACE License Server.

Preconditions

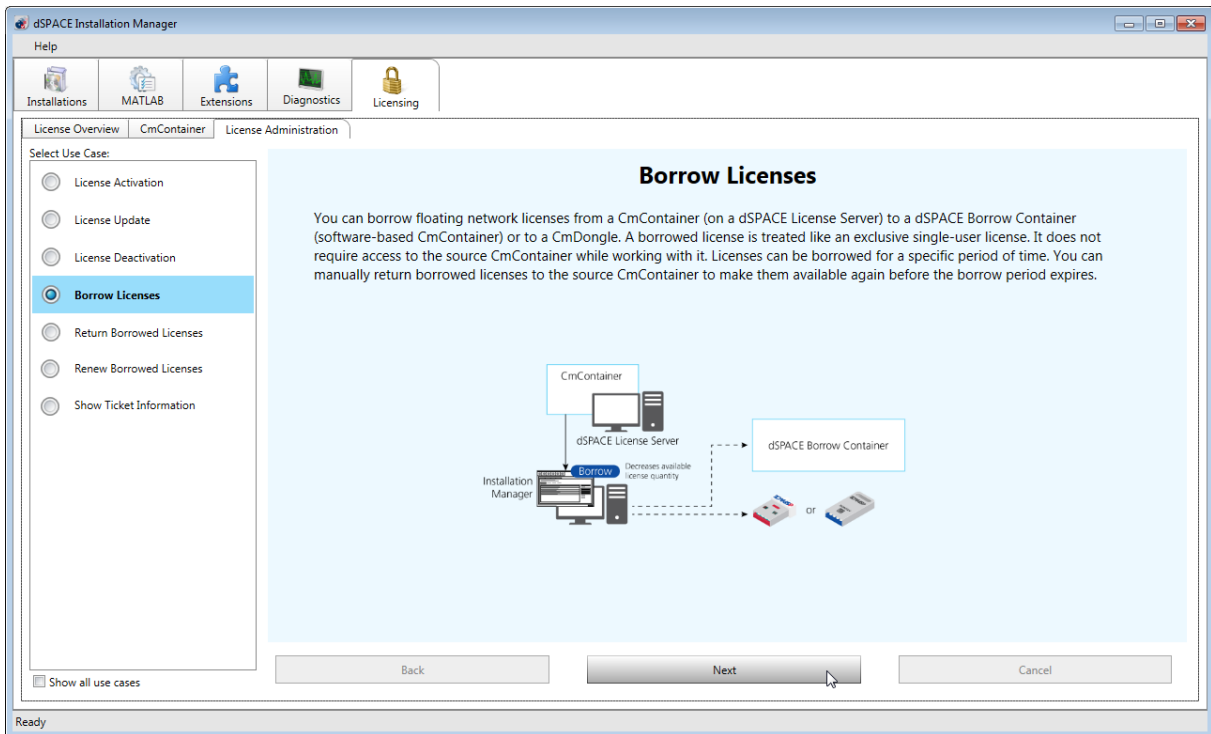
- The local PC must be connected to the dSPACE License Server with the source CmContainer at the moment of borrowing.
- The licenses must be borrowable. You can check this in the Borrowing column on the License Overview page in the dSPACE Installation Manager.

Method

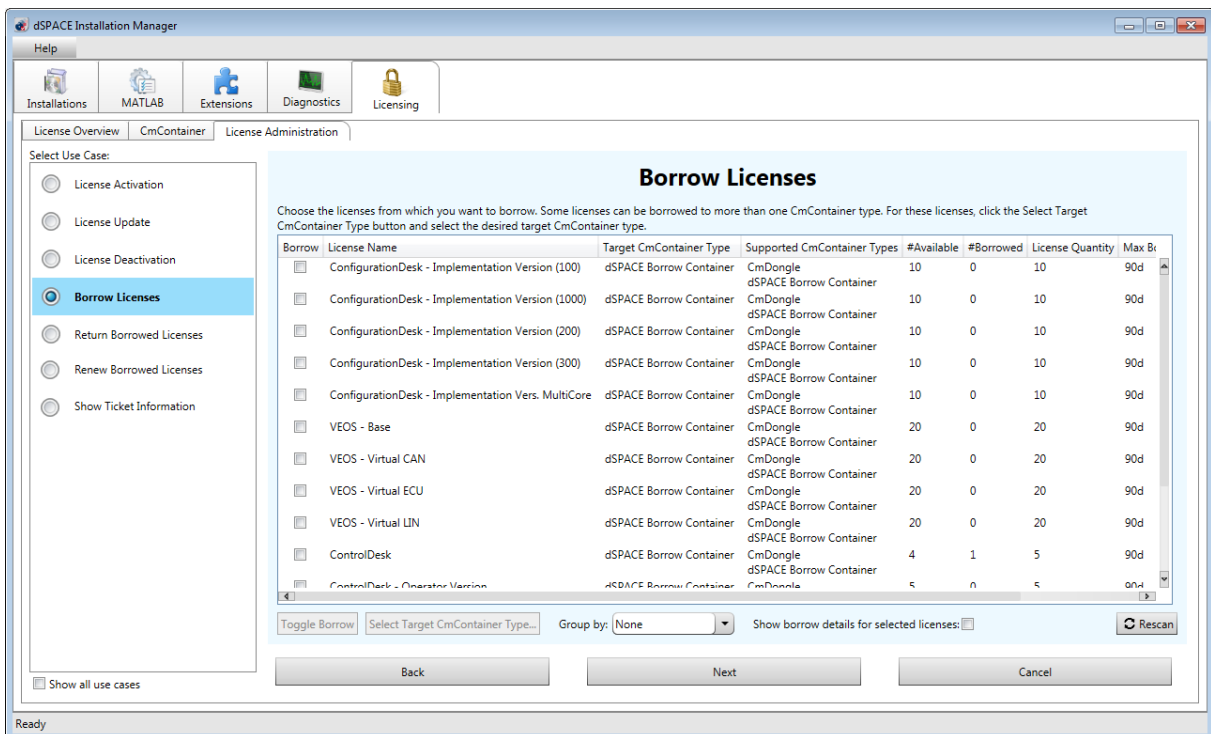
To borrow licenses

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.

3 Select Borrow Licenses and click Next.



The Installation Manager checks for borrowable floating network licenses and displays them.



The following columns are displayed by default:

Column	Description
Borrow	Lets you select checkboxes to specify the licenses you want to borrow.
License Name	The name of the license.
Target CmContainer Type	The selected CmContainer type that the license is to be borrowed to. You can specify the target CmContainer type by using the Select Target CmContainer Type button.
Supported CmContainer Types	The types of CmContainer you can borrow the license to. <ul style="list-style-type: none"> ▪ dSPACE Borrow Container ▪ CmDongle
#Available	The number of available licenses in the source floating network license. Must be at least 1. Otherwise, you cannot select the Borrow checkbox.
#Borrowed	The number of licenses that are currently borrowed from the source floating network license.
License Quantity	Maximum number of licenses available in the floating network license.
Max Borrow Period	The maximum period of time for which you can borrow the license. You can manually return borrowed licenses to make them available again before the borrow period expires. Refer to How to Return Borrowed Licenses on page 120. <div style="border: 1px solid #ccc; background-color: #f9f9f9; padding: 10px; margin-top: 10px;"> <p>Note</p> <p>The maximum borrow period for dSPACE licenses delivered or updated as of 03/09/22 has been extended to 180 days. However, to be able to use this maximum period without restrictions, you must also extend the borrow history on the dSPACE License Server via CodeMeter WebAdmin to 200 days. The default setting is 100 days. For instructions, refer to How to Set Up the dSPACE License Server on page 153.</p> </div>
Product Code	The product code identifies the dSPACE software product associated with the license entry via a unique code.

Tip

- Click a column header to sort the licenses by a column.
- To add or remove columns, right-click the Borrow Licenses page and select Configure Columns. In the Configure Columns dialog, select the columns you want to display. For more information on the additional columns, refer to [How to Show Available Licenses and Their Attributes](#) on page 40.
- Use the Group by: list to group the licenses according to different criteria. For example, you can group them by their CmContainer or server name.

4 Select the licenses you want to borrow in the Borrow column.**Tip**

- Use the **Shift** or **Ctrl** key to highlight multiple licenses and the Toggle Borrow button to select their checkboxes.
- Select the Show borrow details for selected licenses checkbox to display information on the borrow status of the highlighted licenses. This shows you to which CmContainers licenses have already been borrowed and for how long.

Borrow Licenses

Choose the licenses from which you want to borrow. Some licenses can be borrowed to more than one CmContainer type. For these licenses, click the Select Target CmContainer Type button and select the desired target CmContainer type.

Borrow	License Name	Target CmContainer Type	Supported CmContainer Types	#Available	#Bk	Borrow Details for Selected Licenses
<input type="checkbox"/>	ConfigurationDesk - Implementation Version (100)	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	10	0	Shows the borrowed items of the currently selected licenses. Expires on: [calendar icon] Borrowed on: [calendar icon] Expires on: [calendar icon] Borrowed on: [calendar icon]
<input type="checkbox"/>	ConfigurationDesk - Implementation Version (1000)	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	10	0	
<input type="checkbox"/>	ConfigurationDesk - Implementation Version (200)	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	10	0	
<input type="checkbox"/>	ConfigurationDesk - Implementation Version (300)	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	10	0	
<input type="checkbox"/>	ConfigurationDesk - Implementation Vers. MultiCore	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	10	0	
<input checked="" type="checkbox"/>	VEOS - Base	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	19	1	
<input type="checkbox"/>	VEOS - Virtual CAN	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	19	1	
<input type="checkbox"/>	VEOS - Virtual ECU	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	19	1	
<input checked="" type="checkbox"/>	VEOS - Virtual LIN	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	19	1	
<input type="checkbox"/>	ControlDesk	dSPACE Borrow Container	CmDongle dSPACE Borrow Container	5	0	

5 Click Next.

The Enter borrow period dialog opens.

6 In the Enter borrow period dialog, enter the period for which you want to borrow the licenses. The licenses will automatically expire in the borrow container and become available on the server again after that period. By default, the borrow period is set to one day.

Enter borrow period

Days: Hours: Minutes:

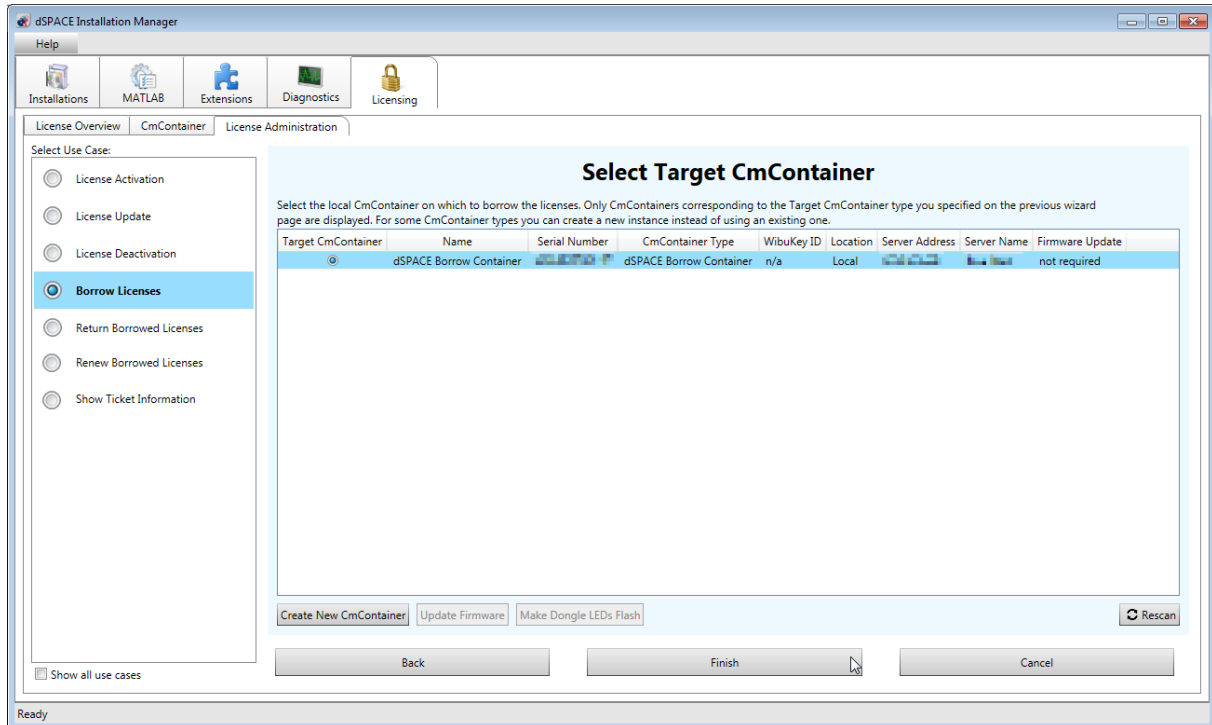
Cancel OK

7 Click OK.

The Select Target CmContainer page opens.

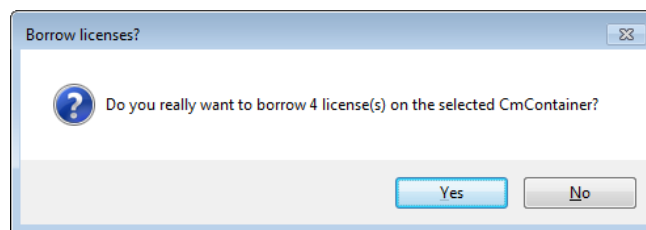
8 Select the CmContainer you want to borrow the licenses to in the Target CmContainer column.

If no target CmContainer is available, click **Create New CmContainer** to create a new dSPACE Borrow Container. If the target CmContainer just became available, for example, after you connected a CmDongle, click **Rescan**.



9 Click **Finish**.

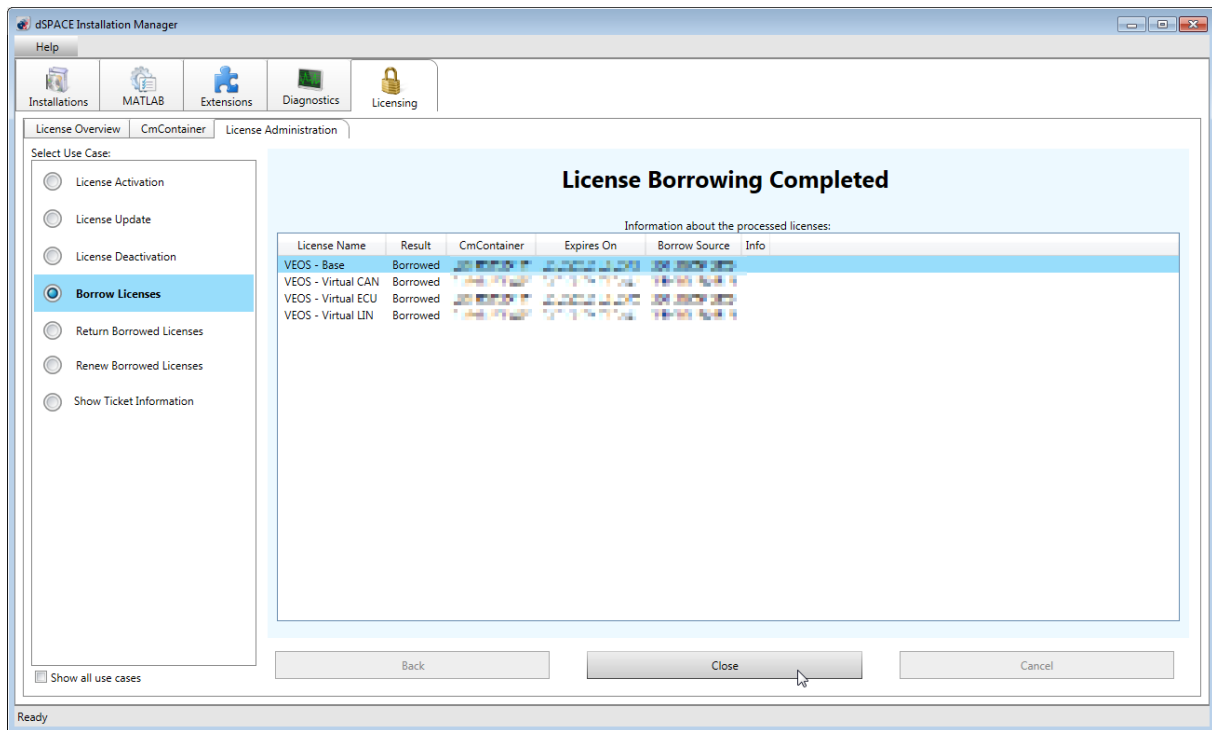
10 Click **Yes** in the confirmation prompt.



The Installation Manager borrows the selected licenses to the selected target CmContainer and the License Borrowing Completed page showing a summary of the results opens.

Tip

For a large number of licenses, the borrow process might take a while.

**Result**

You borrowed licenses. They are exclusively available to you until the borrow period expires or you return them.

How to Return Borrowed Licenses

Objective

To make borrowed licenses available again in the borrow source CmContainer before the borrow period expires.

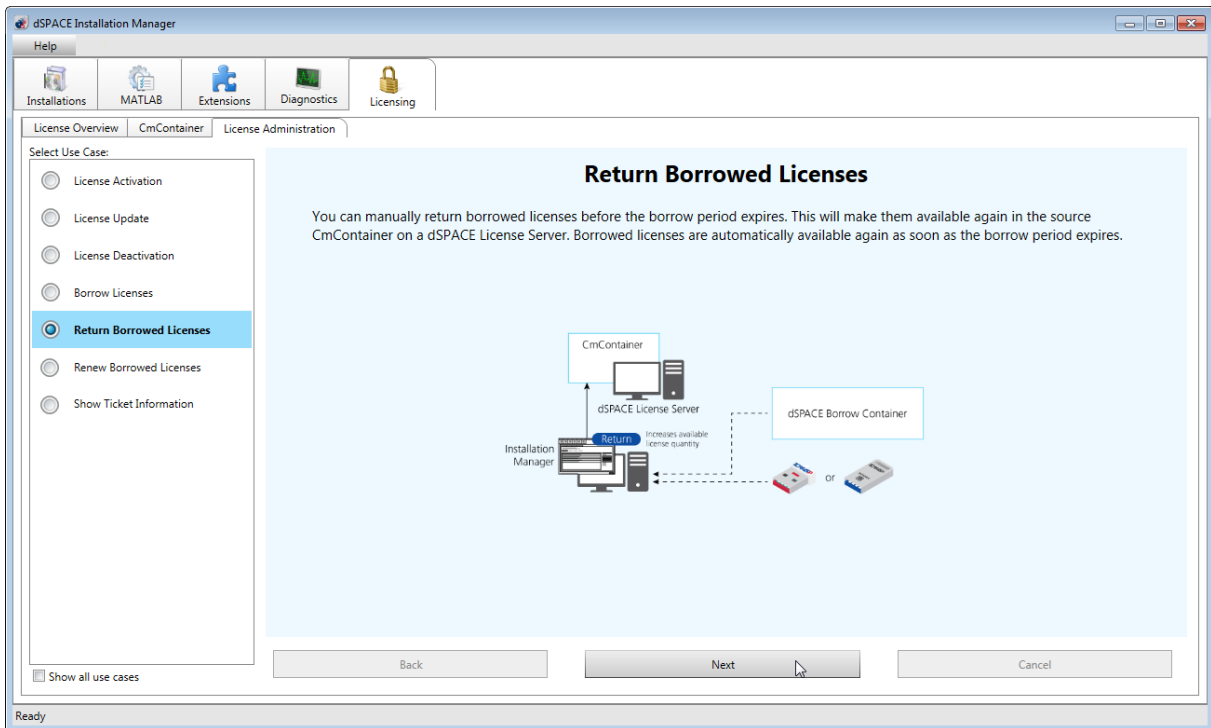
Precondition

The local PC must be connected to the dSPACE License Server with the source CmContainer.

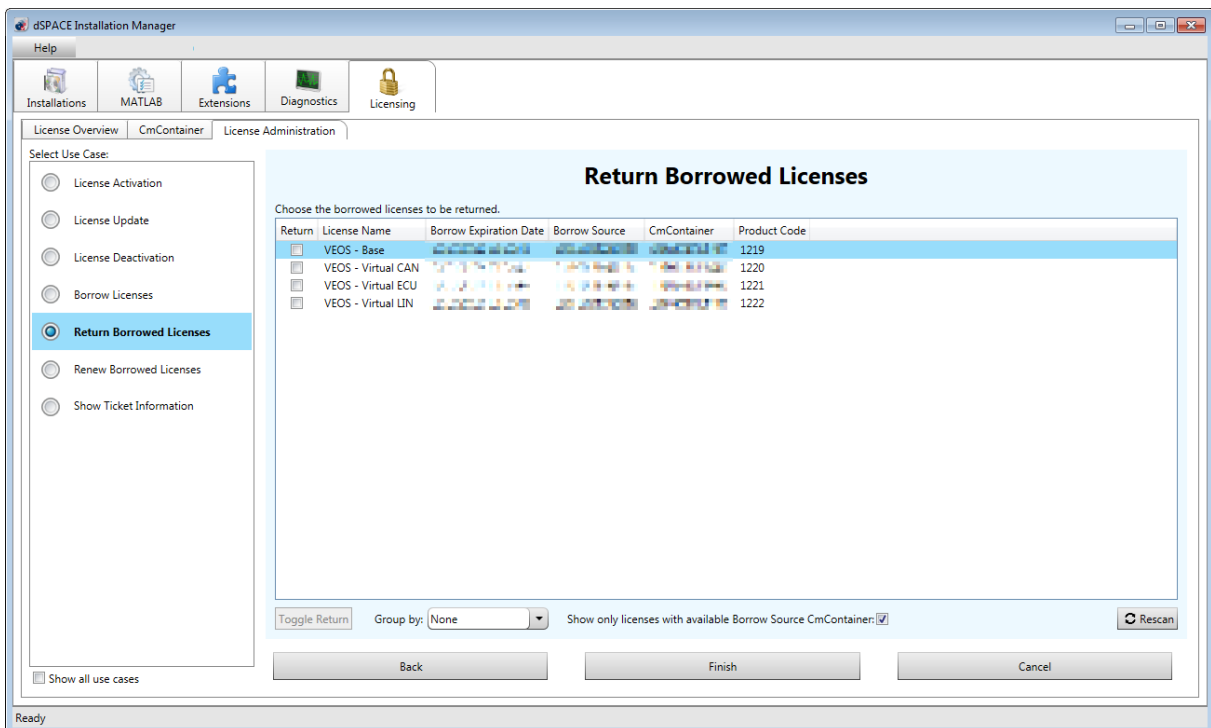
Method**To return borrowed licenses**

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.

3 Select Return Borrowed Licenses and click Next.



The Installation Manager checks local dSPACE Borrow Containers and CmDongles for borrowed licenses and displays them.



The following columns are available:

Column	Description
Return	Lets you select checkboxes to specify the licenses you want to return.
License Name	The name of the license.
Child Licenses ¹⁾	The name of the licenses contained in the displayed license. The properties of the child licenses are included in the displayed parent license.
Borrow Expiration Date	The date and time when the borrow period expires.
Borrow Source	The serial number of the CmContainer the license is borrowed from.
CmContainer	The serial number of the CmContainer the license is borrowed to.
CmContainer Name ¹⁾	The name of the CmContainer the license is borrowed to.
CmContainer Type ¹⁾	The type of the CmContainer the license is borrowed to, dSPACE Borrow Container or CmDongle.
Product Code	The product code identifies the dSPACE software product associated with the license entry via a unique code.
Borrow Server Name ¹⁾	The server name of the dSPACE License Server the license is borrowed from.

¹⁾ Not displayed by default.

Tip

- To add or remove columns, right-click the **Return Borrowed Licenses** page and select **Configure Columns**. In the **Configure Columns** dialog, select the columns you want to display.
- By default, only licenses whose source CmContainer is available are displayed. To show all borrowed licenses, clear the **Show only licenses with available Borrow Source CmContainer** checkbox. However, you cannot select licenses in the **Return** column whose source CmContainer is not available.
- Click a column header to sort the licenses by a column.
- Use the **Group by:** list to group the licenses according to different criteria. For example, you can group them by their CmContainer or server name.

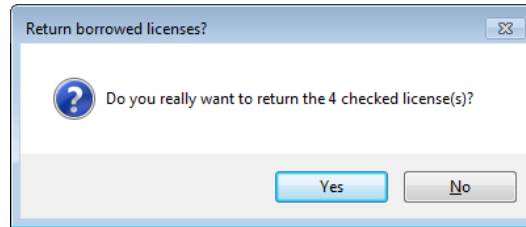
- 4 Select the licenses you want to return in the **Return** column.

Tip

Use the **Shift** or **Ctrl** key to highlight multiple licenses and the **Toggle Return** button to select their checkboxes.

- 5 Click **Finish**.

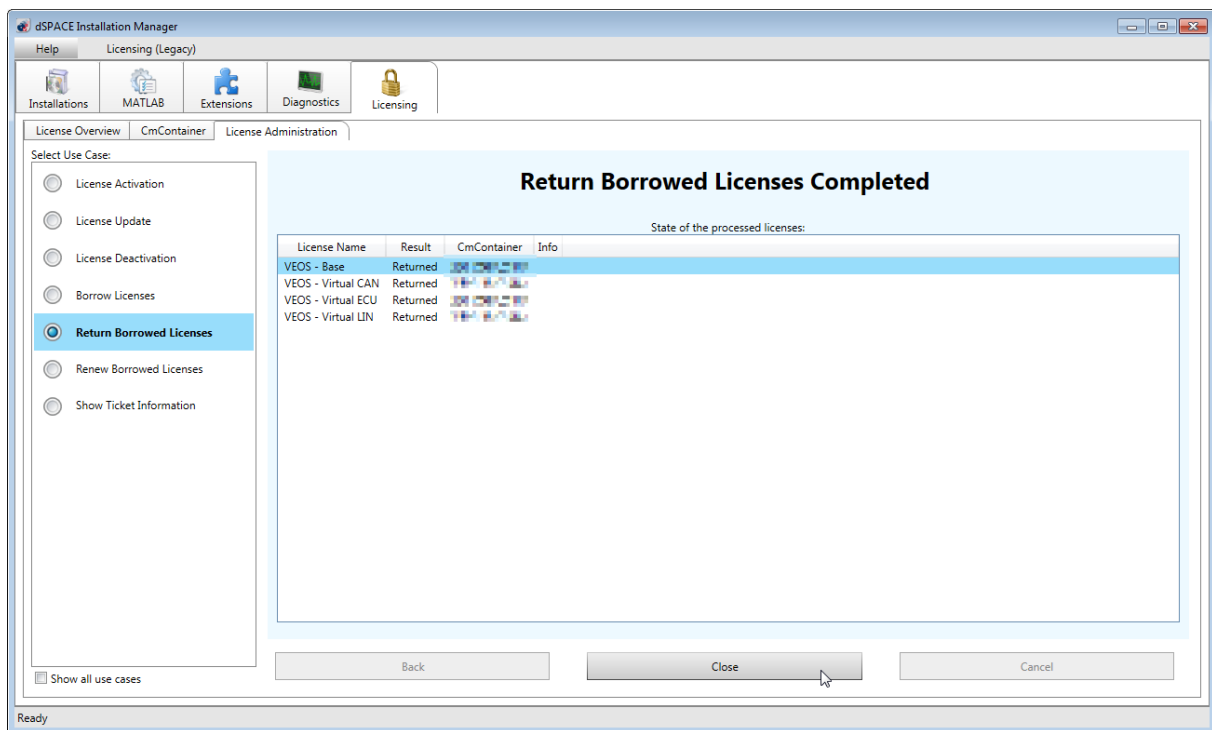
- 6 Click Yes in the confirmation prompt.



The Installation Manager returns the selected licenses to their source CmContainer and the Return Borrowed Licenses Completed page showing a summary of the results opens.

Tip

For a large number of licenses, the return process might take a while.



Result

You returned borrowed licenses.

How to Renew Borrowed Licenses

Objective

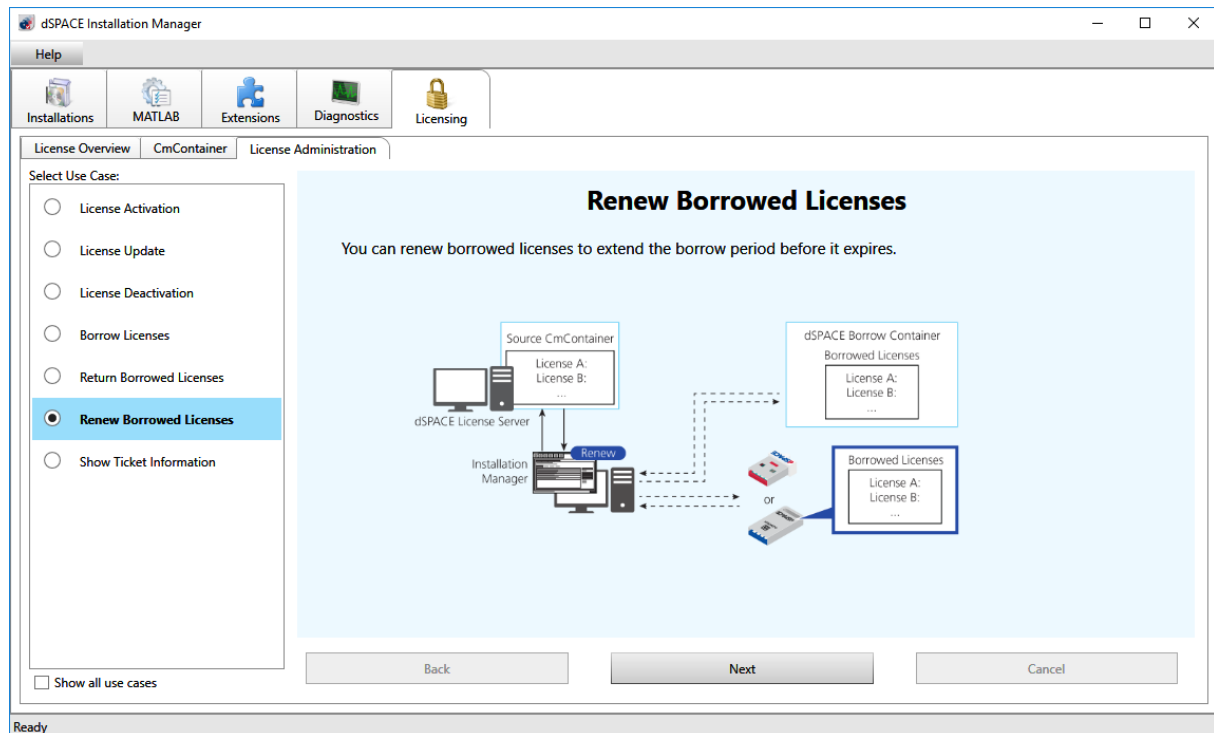
To extend the borrow period of borrowed licenses before it expires.

Precondition

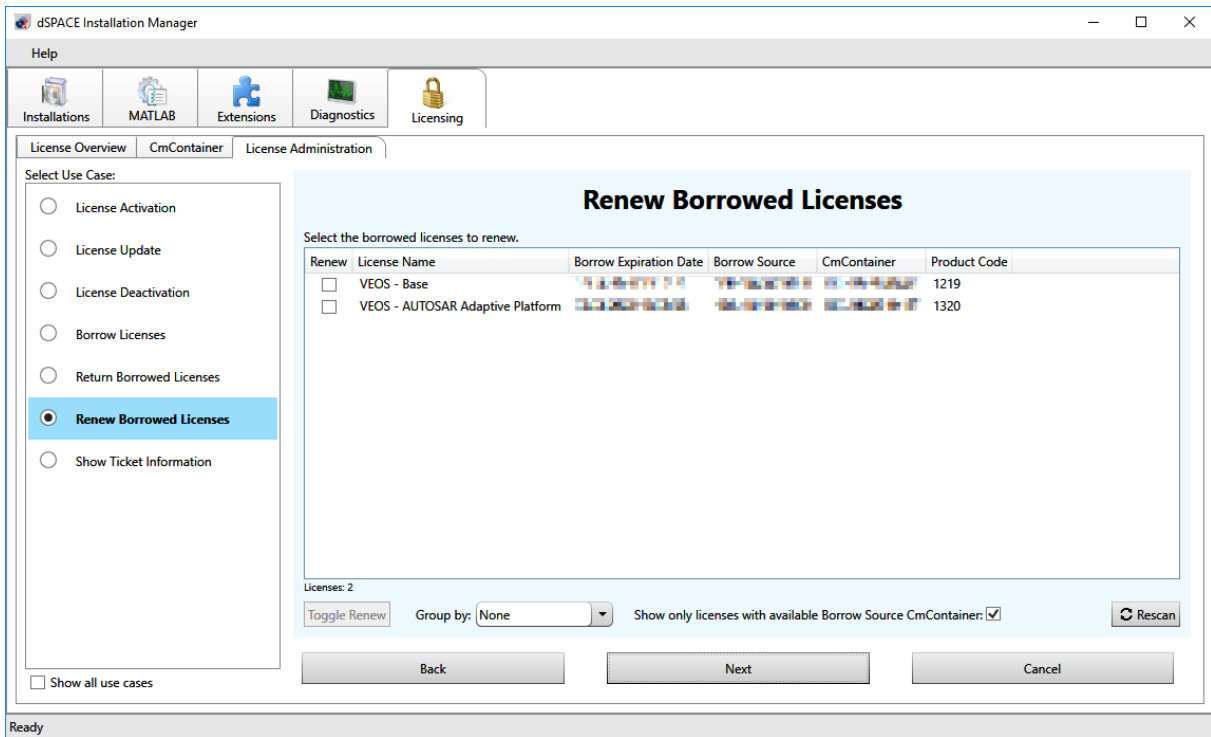
The local PC must be connected to the dSPACE License Server with the source CmContainer.

Method**To renew borrowed licenses**

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.
- 3 Select Renew Borrowed Licenses and click Next.



dSPACE Installation Manager checks local dSPACE Borrow Containers and CmDongles for borrowed, renewable licenses and displays them.



The following columns are available:

Column	Description
Renew	Lets you select checkboxes to specify the licenses you want to renew.
License Name	The name of the license.
Child Licenses ¹⁾	The name of the licenses contained in the displayed license. The properties of the child licenses are included in the displayed parent license.
Borrow Expiration Date	The date and time when the borrow period expires.
Borrow Source	The serial number of the CmContainer the license is borrowed from.
CmContainer	The serial number of the CmContainer the license is borrowed to.
CmContainer Name ¹⁾	The name of the CmContainer the license is borrowed to.
CmContainer Type ¹⁾	The type of the CmContainer the license is borrowed to, dSPACE Borrow Container or CmDongle.
Product Code	The product code identifies the dSPACE software product associated with the license entry via a unique code.

Column	Description
Borrow Server Name ¹⁾	The server name of the dSPACE License Server the license is borrowed from.

¹⁾ Not displayed by default.

Tip

- To add or remove columns, right-click the Renew Borrowed Licenses page and select Configure Columns. In the Configure Columns dialog, select the columns you want to display.
- By default, only licenses whose source CmContainer is available are displayed. To show all borrowed, renewable licenses, clear the Show only licenses with available Borrow Source CmContainer checkbox. However, you cannot select licenses in the Renew column whose source CmContainer is not available.
- Click a column header to sort the licenses by a column.
- Use the Group by: list to group the licenses according to different criteria. For example, you can group them by their CmContainer or server name.

- 4 Select the licenses you want to renew in the Renew column.

Tip

Use the **Shift** or **Ctrl** key to highlight multiple licenses and the Toggle Renew button to select their checkboxes.

- 5 Click Next.

The Enter borrow period dialog opens.

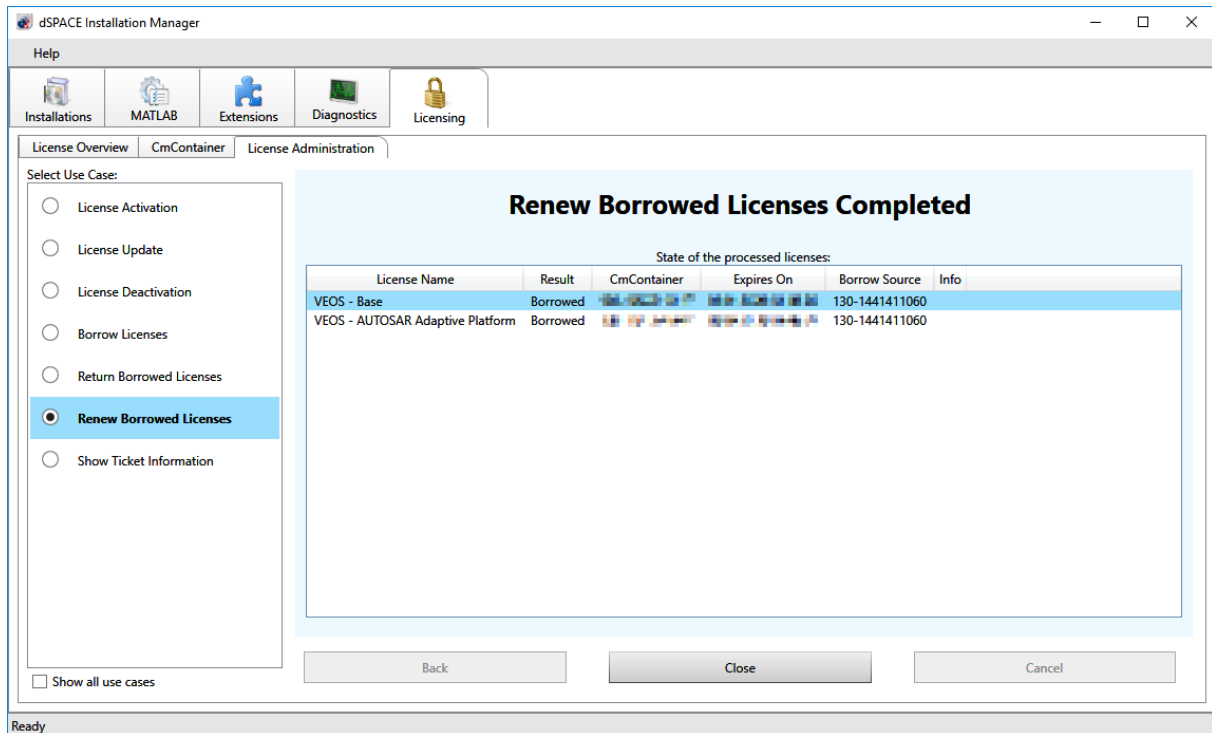
- 6 In the Enter borrow period dialog, enter the period for which you want to renew the borrowed licenses. The licenses will automatically expire in the borrow container and become available on the server again after that period. By default, the borrow period is set to one day.

- 7 Click Yes in the confirmation prompt.

dSPACE Installation Manager renews the borrow period of the selected licenses on the selected target CmContainer and the Renew Borrowed Licenses Completed page showing a summary of the results opens.

Tip

For a large number of licenses, the renew process might take a while.



Result

You extended the borrow period of borrowed licenses.

Moving Activated Licenses Between CmContainers

Use Cases and Workflows for Moving Licenses

Use cases

- The licenses activated on one CmDongle should be split to two CmDongle so that two users can work in parallel with separate CmDongles.
- The licenses activated on a floating network license server should be hosted on a new license server.
- The number of licenses in a CmContainer has reached a critical size. Therefore certain licenses should be moved to another CmContainer.

Note

It is recommended to activate a maximum of 50 licenses in one CmContainer. If you have a larger number of licenses, distribute them over several CmContainers. A higher number of licenses in one CmContainer can lead to long run-times for the activation or update of the licenses.

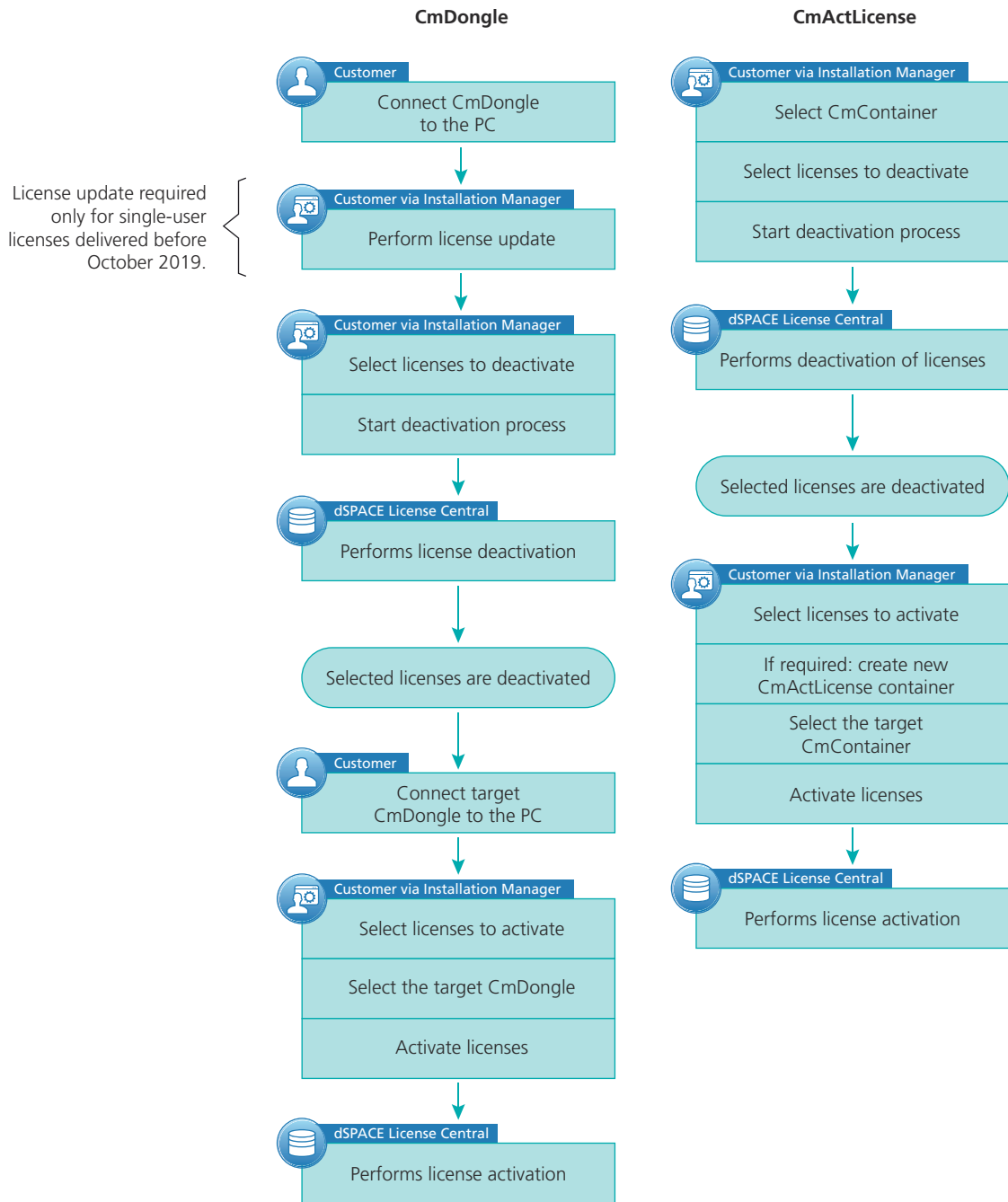
Focus of workflows

Tip

The workflows show the steps for online activation/deactivation using dSPACE Installation Manager.

Workflow

There are separate workflows for the different types of CmContainer.



Further information

ToDo	Basics	Instructions
License deactivation	Basics on License Management on page 12	How to Deactivate Licenses (Local Access to CmContainer) on page 104 How to Deactivate Licenses (LAN Access to CmContainer) on page 106 How to Deactivate Licenses (File-Based Access to CmContainer) on page 109

ToDo	Basics	Instructions
License activation	Basics on License Management on page 12	How to Activate Licenses (Local Access to CmContainer) on page 60
		How to Activate Licenses (LAN Access to CmContainer) on page 64
		How to Activate Licenses (File-Based Access to CmContainer) on page 75

Executing Steps in CodeMeter Control Center (for File-Based Access)

Motivation If you use the file-based method for license activation, deactivation or license updates, you have to execute some steps in CodeMeter Control Center.

Where to go from here

Information in this section

How to Create an Initial RAC File.....	133
How to Update a CmContainer with an RAU File.....	138

How to Create an Initial RAC File

Objective If you use the file-based method for license activation, deactivation or license updates, you first have to create an initial RAC file (*.wibuCmRaC) with CodeMeter Control Center.

Remote access to CmContainer

You can use a remote desktop tool to access the PC with the CmContainer. This tool can be installed on the PC with dSPACE Installation Manager or any other PC in the LAN to control CodeMeter software and to transfer files manually between the PCs.

Remote access is useful if you want to access multiple CmContainers and work with CodeMeter software installed on the PCs from only one administrator PC. Another use case is to manage single-user licenses that are not accessible directly in a LAN. For more information, refer to [Methods for Accessing CmContainers](#) on page 17.

Precondition

- CodeMeter Runtime software is installed on the PC with the CmContainer.
- The CmContainer (CmDongle or CmActLicense container) on which you want to activate, update, or deactivate licenses is accessible with CodeMeter Control Center.

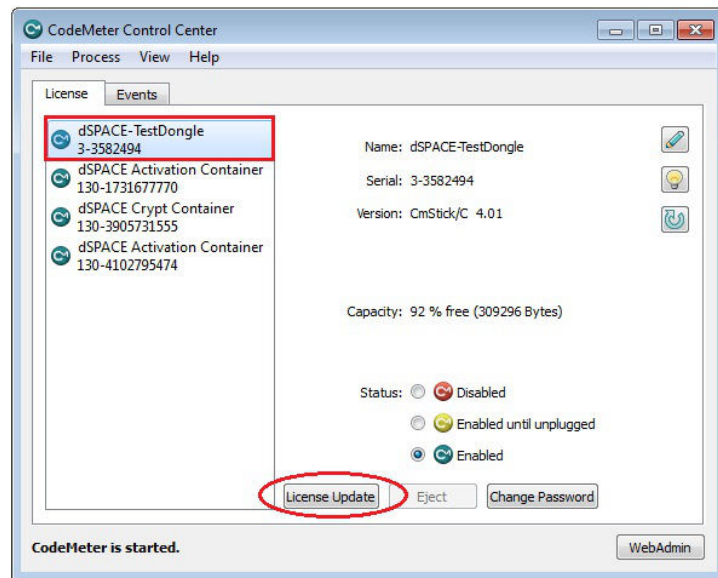
If no CmActLicense container exists on your PC or you want to create a new one, you first have to import a license information file (LIF) that you created with dSPACE Installation Manager beforehand. Refer to [How to Create a License Information File \(LIF\)](#) on page 187.

Method

To create an initial RAC file

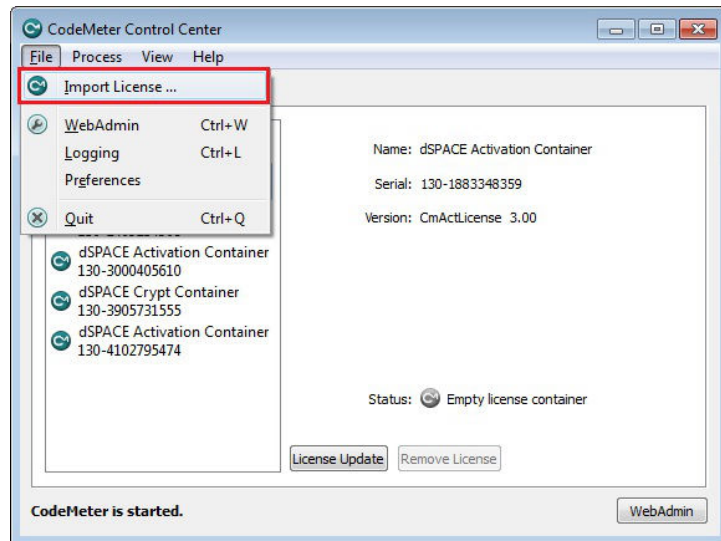
- 1 On the PC with the CmContainer: From Start – CodeMeter, select CodeMeter Control Center.

CodeMeter Control Center opens and list all accessible CmContainers on the License page.

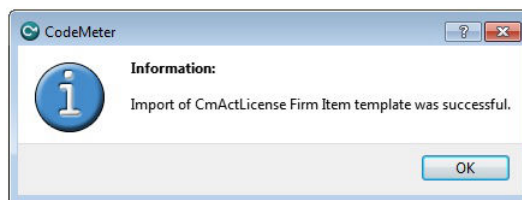


- 2
 - If the CmContainer you want to use is displayed, continue with step 5.
 - If you want to create a new CmActLicense container on the PC, continue with the next step.

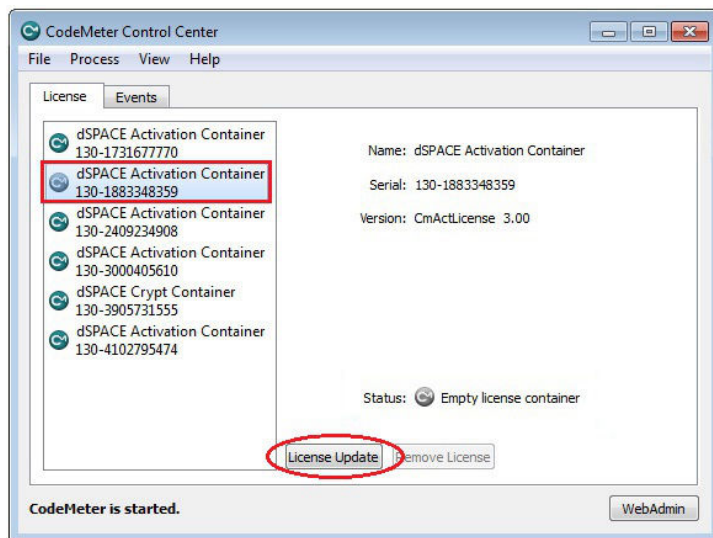
- 3 Select File – Import License and import a LIF from a USB stick or a network folder, for example.



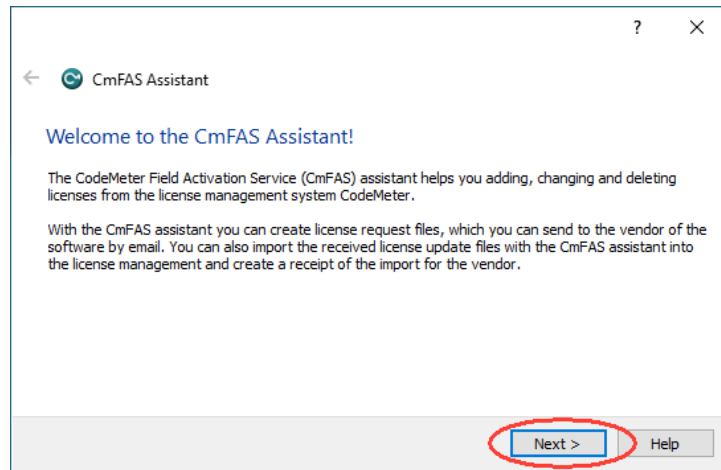
CodeMeter Control Center displays the following confirmation prompt:



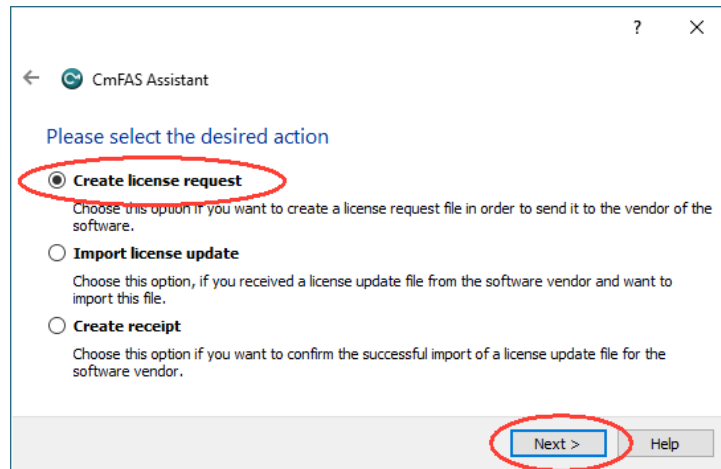
- 4 Click OK.
CodeMeter Control Center creates an empty CmActLicense container and displays it as follows:



- 5 Select the CmContainer for which you want to create an RAC file and click License Update.

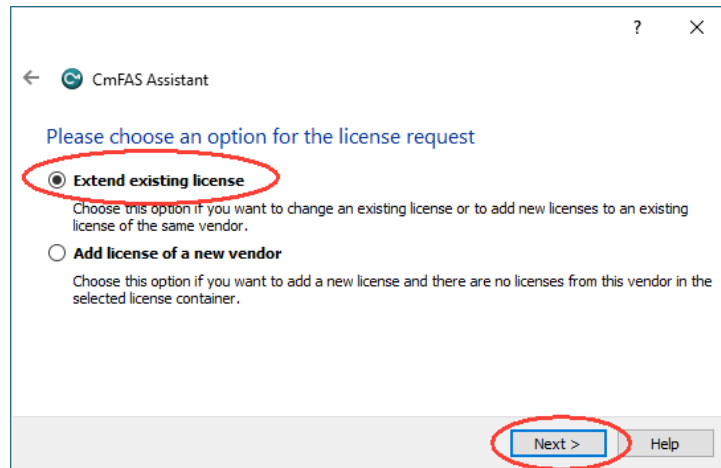


- 6 Click Next and select Create license request to create an RAC file (*.WibuRaC).

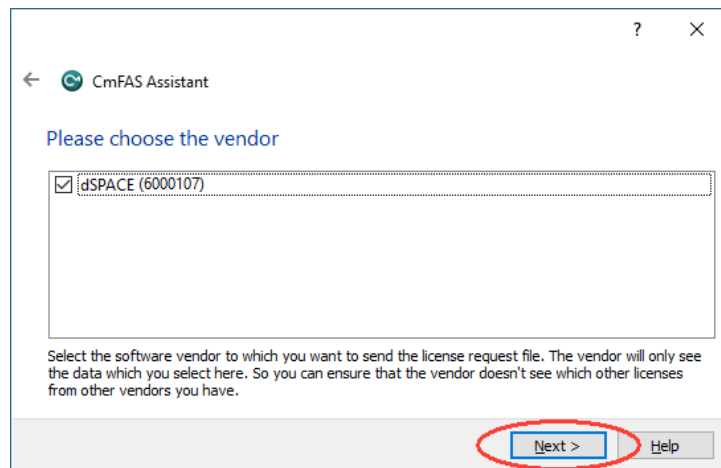


- 7 Click Next to continue.
- 8 If you want to create an RAC file for a CmActLicense container, continue with step 11.

- 9 Only if you use CmDongles: Select Extend existing license.

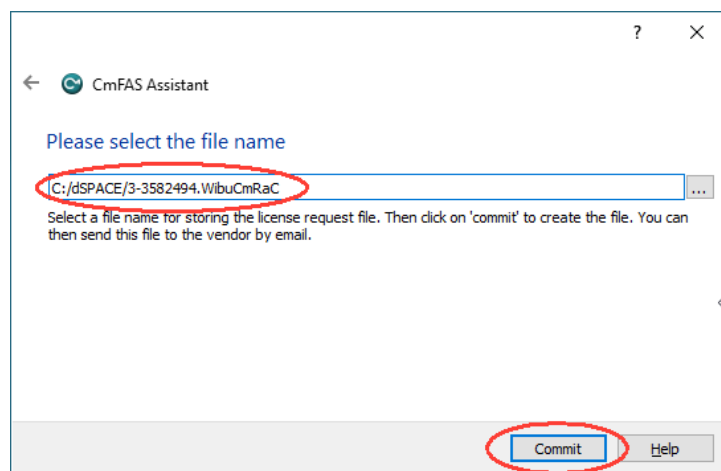


Click Next and select the vendor "dSPACE (6000107)".



Click Next to continue.

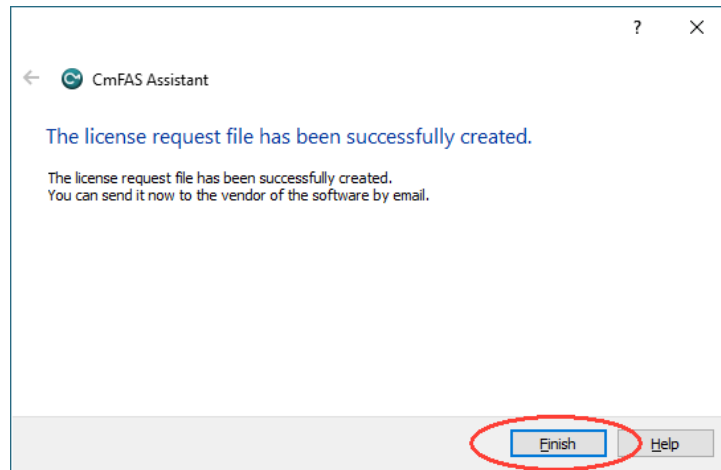
- 10 Select a folder to store the RAC file and click Commit.



Note

Do not rename the file. The file name is the serial number of the CmContainer.

CodeMeter Control Center creates the RAC file and displays the result as follows:



11 Click Finish.

Result

You created an initial RAC file for the selected CmContainer.

Next steps

- Transfer the RAC file (*.WibuCmRaC) to the administrator PC. Do this with an USB stick or via a network folder, for example.
- If you created the RAC file for a new CmActLicense container, you first have to request a RAU file for the new container. Refer to [How to Request an RAU File for the New CmActLicense Container](#) on page 189
- If you select an existing CmActLicense container, refer to (depending on your workflow):
 - [How to Activate Licenses \(File-Based Access to CmContainer\)](#) on page 75
 - [How to Update Licenses \(File-Based Access to CmContainer\)](#) on page 94
 - [How to Deactivate Licenses \(File-Based Access to CmContainer\)](#) on page 109

How to Update a CmContainer with an RAU File

Objective

After you request an RAU file via dSPACE Installation Manager, you have to update the CmContainer with this file.

Remote access to CmContainer

You can use a remote desktop tool to access the PC with the CmContainer. This tool can be installed on the PC with dSPACE Installation Manager or any other PC in the LAN to control CodeMeter software and to transfer files manually between the PCs.

Remote access is useful if you want to access multiple CmContainers and work with CodeMeter software installed on the PCs from only one administrator PC. Another use case is to manage single-user licenses that are not accessible directly in a LAN. For more information, refer to [Methods for Accessing CmContainers](#) on page 17.

Preconditions

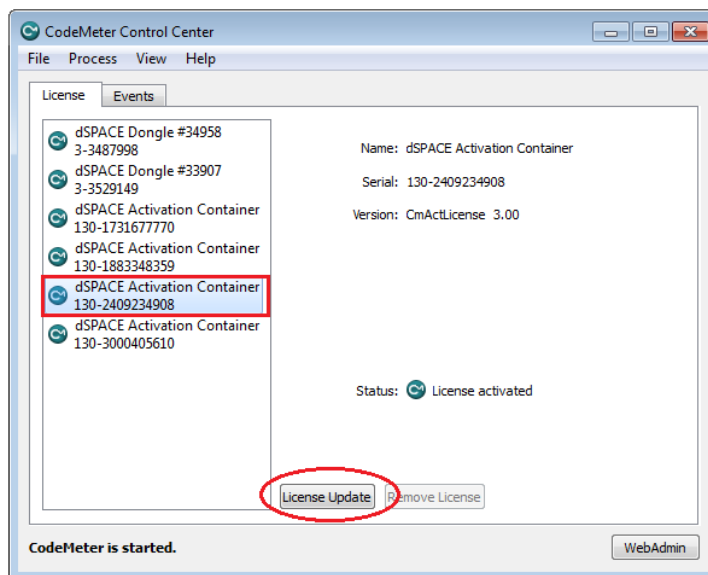
- CodeMeter Runtime software is installed on the PC with the CmContainer.
- An RAU file (*.wibuCmRaU) requested via dSPACE Installation Manager is available.
- The CmContainer (e.g., CmDongle) you want to update is accessible with CodeMeter Control Center.

Method

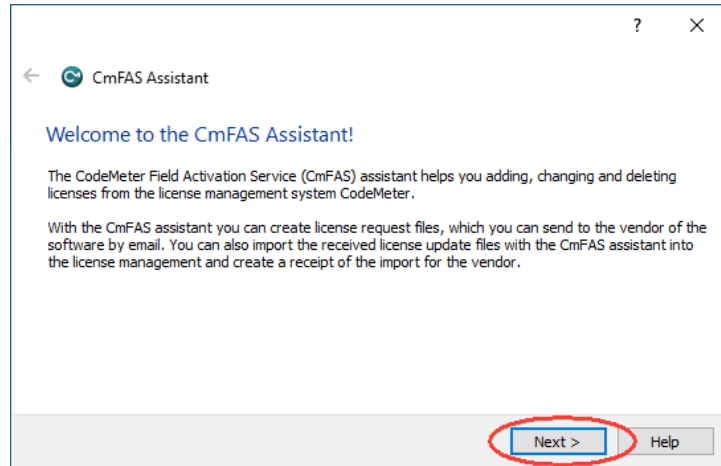
To update a CmContainer with an RAU file

- 1 On the PC with the CmContainer: From Start – CodeMeter, select CodeMeter Control Center.

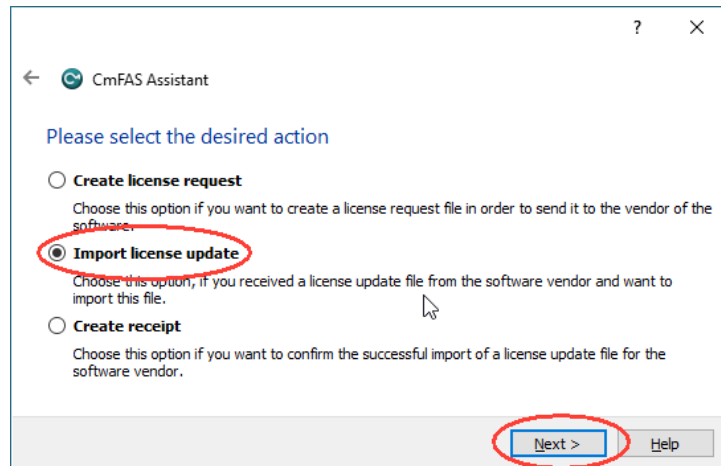
CodeMeter Control Center opens and lists all accessible CmContainers on the License page.



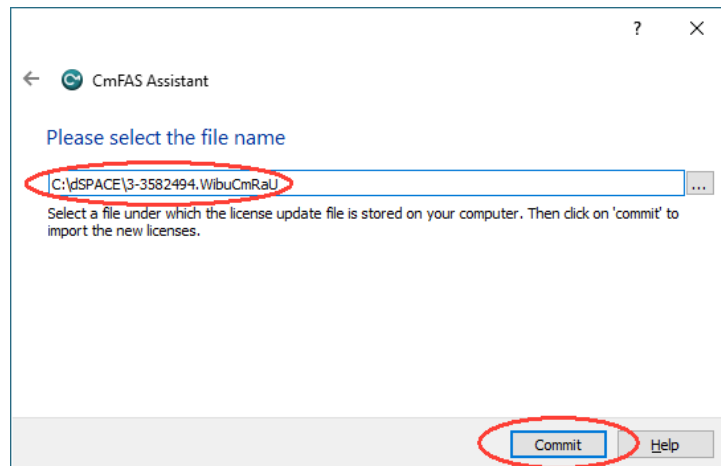
- 2 Select the CmContainer you want to update and click License Update.



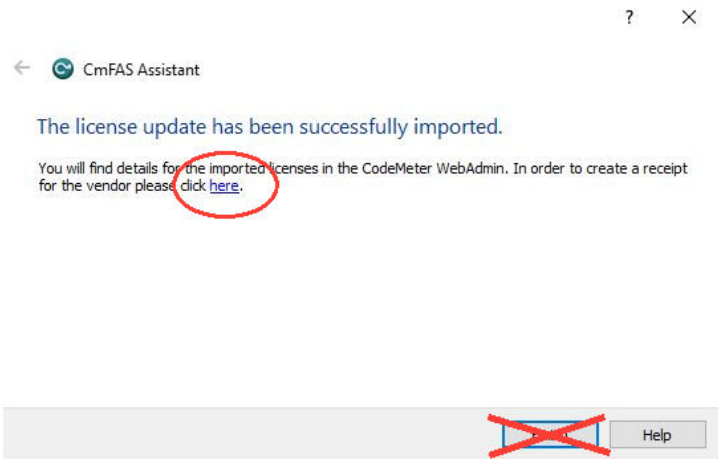
- 3 Click Next and select Import license update to import the RAU file.



- 4 Click Next and enter the path of the RAU file.



- 5 Click Commit to start the import process. CodeMeter Control Center performs the update and displays the update result as follows:

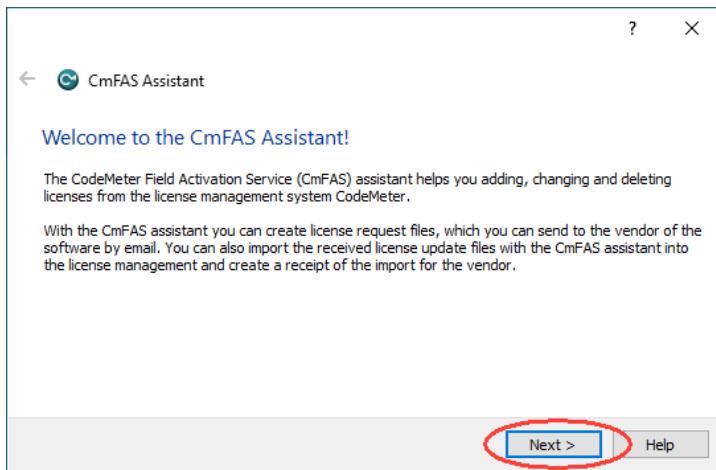


- 6 Click here in the dialog to create an RAC file (*.WibuCmRaC) for confirming the license update.

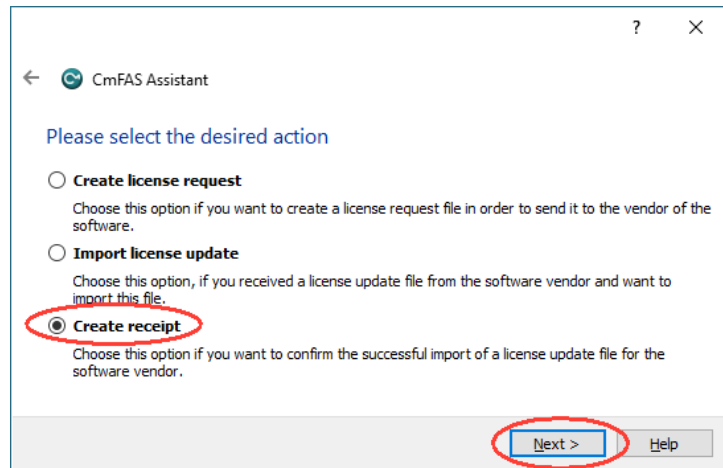
Note

- If you click Finish in the dialog, you have to use an indirect way to create an RAC file. See below.
- If you click here, proceed with step 7.

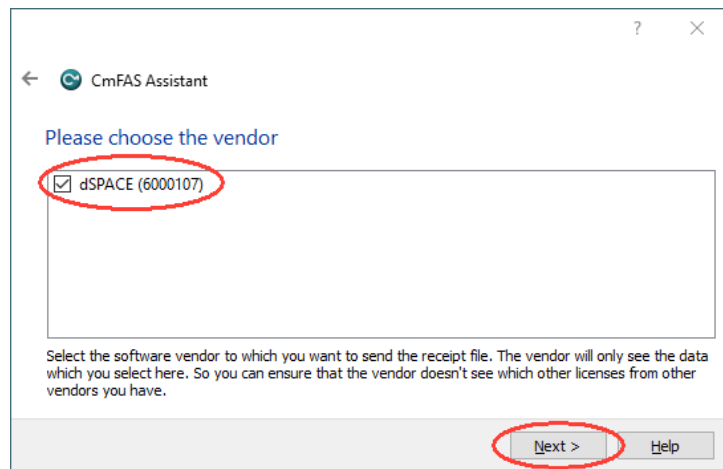
- Click License Update.
- Click Next in the following dialog.



- Select Create receipt.

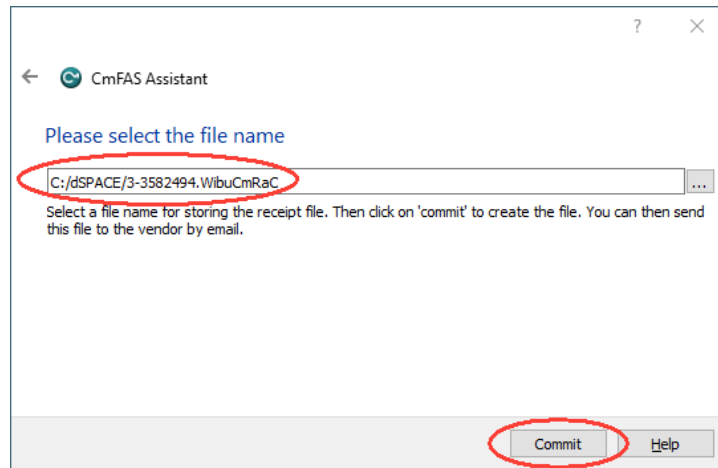


- Click Next.
- For CmDongles: Select the vendor (dSPACE 6000107) of the CmContainer you want to create the RAC file for.



- Click Next.

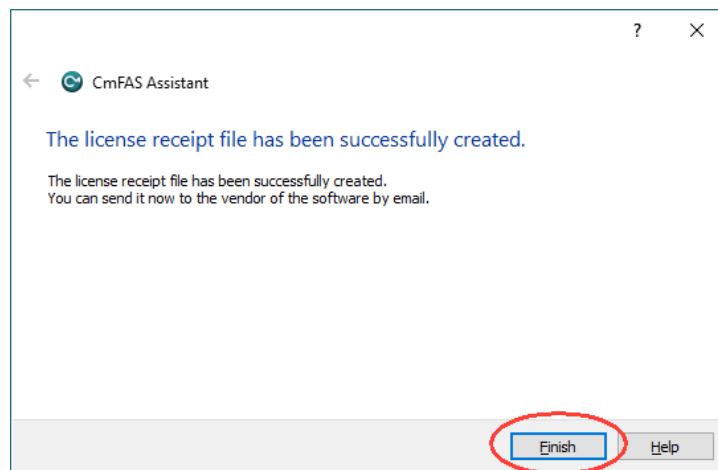
- 7 Select a folder to store the RAC file and click Commit.



Note

Do not rename the file. The file name is the serial number of the CmContainer.

CodeMeter Control Center creates the RAC file and displays the result as follows:



- 8 Click Finish.

Result

You updated the CmContainer with an RAU file and created another RAC file to confirm the process.

Next steps

You now have to confirm the activation, update or deactivation process. Refer to [How to Confirm the License Status Manually \(File-Based Access to CmContainer\)](#) on page 176 .

Using Floating Network Licenses

Motivation dSPACE software products support floating network licenses.

Where to go from here

Information in this section

Basics on Using Floating Network Licenses.....	145
Basics on Setting Up a License Server and the License Clients.....	148
How to Set Up the dSPACE License Server.....	153
How to Set up a Connection Between Client and Server.....	156
License-Specific Linger Times.....	160

Basics on Using Floating Network Licenses

Principle of floating network licenses

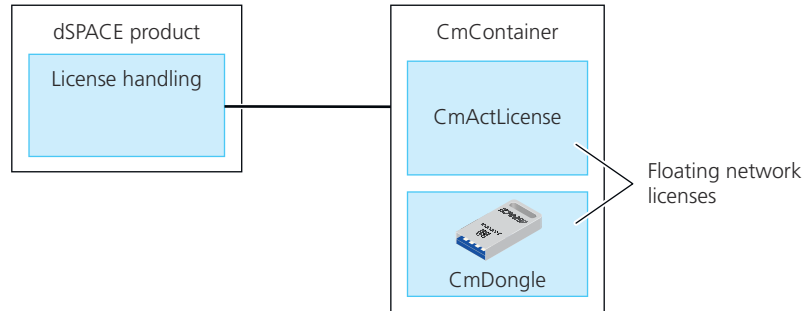
Floating network licenses are useful when a limited number of licenses for a software product has to be shared among a larger number of users.

When a user wants to run a software product or a license-protected process, the software requests a license from a central license server. If a license is available, the license server allows the software or the process to run. When the user closes the software product or the license-protected process, the license is reclaimed by the license server and made available to other users (client PCs) connected to the license server.

Using floating network licenses requires a permanent TCP/IP connection between server and client.

Supported CmContainer types

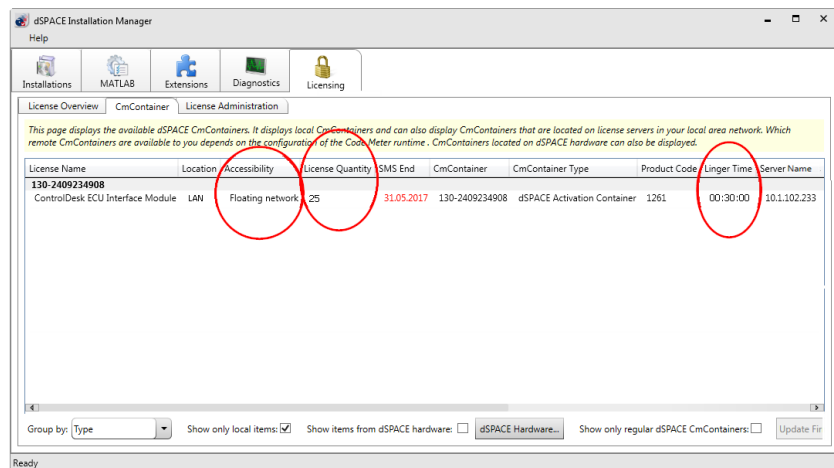
Floating network licenses are typically stored in CmActLicense containers, but it is also possible, to store floating network licenses on CmDongles.



In case of a defect or a planned upgrade of the license server, the CmDongle only has to be plugged into the new license server. Users can immediately work with the licenses again.

Identifying floating network licenses

The type of a license is shown in dSPACE Installation Manager. On the License Overview page, the Accessibility column displays Floating network. Refer to the following screenshot:



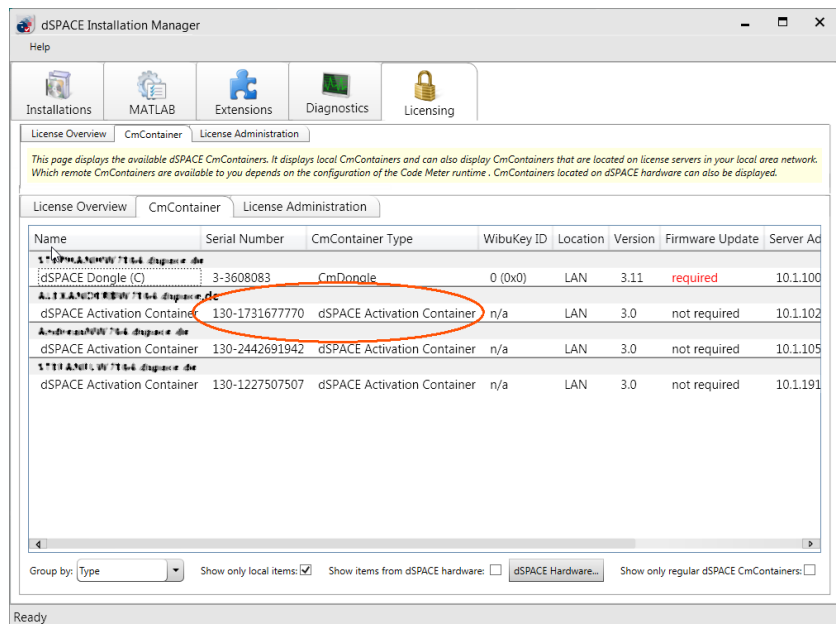
An important attribute of floating network licenses is the license quantity, which defines the number of licenses that can be used in parallel on client PCs. The license quantity is also displayed on the License Overview page.

The license quantity is also stated in the license overview PDF file (provided by dSPACE via e-mail) that also contains the ticket IDs.

Identifying CmActLicenses

A software-based CmActLicense container that is suitable for storing floating network licenses is called dSPACE Activation Container. The serial number of such a container always begins with 130. Example: 130-1186644671.

The following screenshot shows an example for a dSPACE Activation Container. It is displayed on the CmContainer page in dSPACE Installation Manager.



Searching for licenses

Usually, floating network licenses are requested from dSPACE software installed on client PCs connected to a server via a TCP/IP connection. However, they also can be requested by dSPACE software installed locally on the PC that also hosts the floating network licenses (i.e., the license server).

dSPACE software products first search for a local CmContainer with the required license. If they do not find a relevant local CmContainer, they search for CmContainers that are stored on license servers.

License behavior of floating network licenses

Licenses are *checked* and *blocked*, for example, when a product or a process is started.

The license is *released* immediately after the product or the process is closed. If a license has a linger time, the license is released after the linger time has elapsed. Then, the license can be used by other license clients.

The linger time of a specific floating network license is shown in dSPACE Installation Manager. On the License Overview page, the Linger time entry displays the specified time in the format *hh:mm:ss*. For all products the linger time is defined by dSPACE. For an overview, refer to [License-Specific Linger Times](#) on page 160.

Extending the linger time You cannot directly extend the linger time on the dSPACE License Server. However, there is a workaround using CodeMeter WebAdmin. In its advanced mode, you can specify access rules to reserve a license (i.e., to block it) for a longer period without losing the license. For more information, refer to the CodeMeter user documentation

installed on your PC at [http://localhost:22350/\\$help/CmUserHelp/us/index.html?license_access_permissions.htm](http://localhost:22350/$help/CmUserHelp/us/index.html?license_access_permissions.htm).

Compatibility with FlexNet technology (earlier Releases)

For floating network licenses, the CodeMeter licensing technology cannot provide downward compatibility with Releases earlier than dSPACE Release 2017-B. If you need to use product versions of dSPACE Releases earlier than dSPACE Release 2017-B, you have to keep your FlexNet License Server running in parallel. Both FlexNet and CodeMeter floating network servers can be hosted on the same PC.

Note

The dSPACE EULA does not allow FlexNet and CodeMeter license servers to provide the *same floating network license* in parallel. If you have any questions or encounter any problems, contact dSPACE Support (www.dspace.com/go/supportrequest).

Basics on Setting Up a License Server and the License Clients

Setting up license server and clients

If you purchased floating network licenses, you have to configure one PC in the network as the dSPACE License Server. The PCs on which you want to run dSPACE software (dSPACE License Clients) need to be connected to the dSPACE License Server via TCP/IP connection.

The CodeMeter technology does not need special license server software. Every PC with a CodeMeter Runtime software installation can be configured as a license server.

The configuration of a license client to connect to a license server is done by means of a server search list.

Note

You cannot use dSPACE Installation Manager to set up a license server and connect license clients to the server. This can be done only via CodeMeter WebAdmin from Wibu-Systems.

Single-user licenses that are stored in local CmContainers on the dSPACE License Server do not become floating network licenses when the PC is configured as a license server. The license itself contains an attribute whether it can be used as a single-user or as a floating network license.

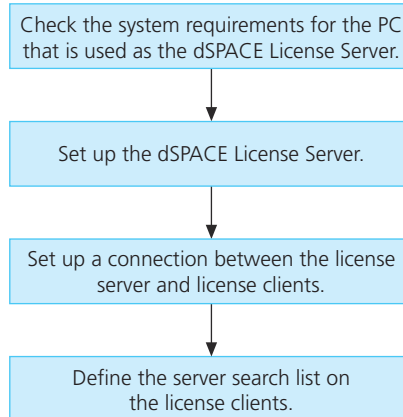
Required knowledge

Preparing the dSPACE License Server requires knowledge about the network configuration, e.g., TCP/IP addresses, available TCP/IP ports on the dSPACE License Server, and configuration of firewalls and routers. Therefore, it is

recommended that only experienced network administrators prepare the dSPACE License Server.

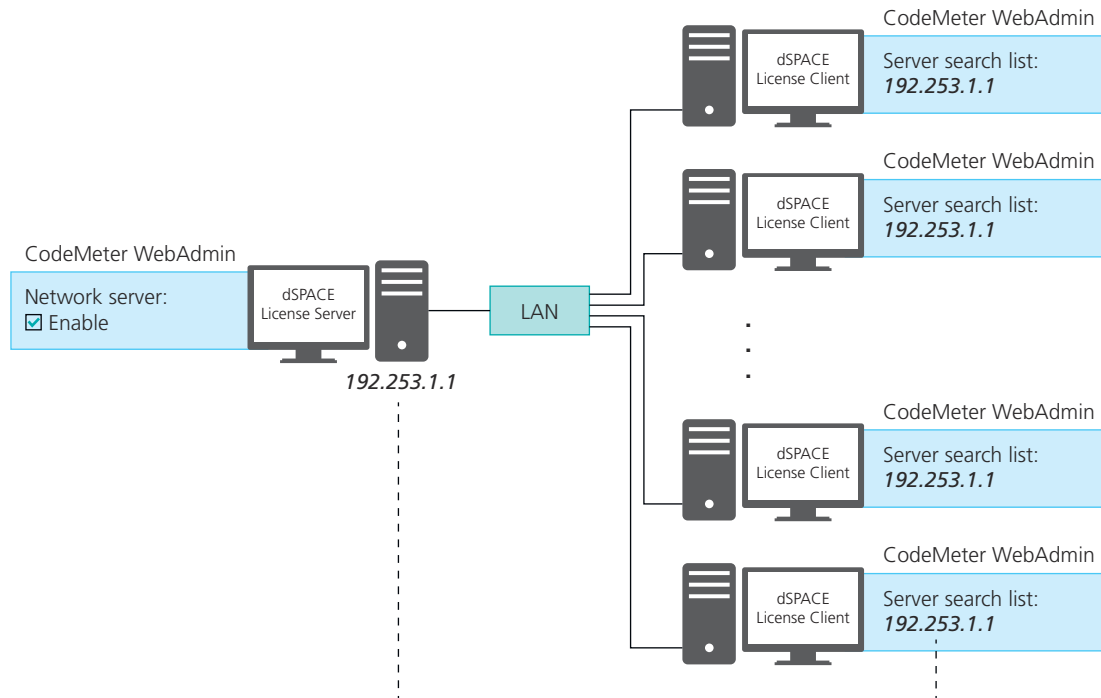
Recommended workflow

The following steps show the recommended workflow for configuring a host PC as a dSPACE License Server:



Accessing floating network licenses

dSPACE software products first search for a local CmContainer with the required license. If they do not find a relevant local CmContainer, they search for CmContainers stored on license servers. Any PC in the network can be set up as a license server with a few clicks. Refer to [How to Set Up the dSPACE License Server](#) on page 153. The license servers are available via the client's server search list that has to be defined by the user. Refer to the following illustration.



Define the server search list as follows to prevent network broadcasts:

- On the dSPACE license clients, add the license server to the server search list by entering the name or the IP address of the license server.
- If you have more than one license server in the network, move the preferred server to the top of the server search list. dSPACE software searches for CmContainers on the license server in the order listed in the server search list of the clients.
- If dSPACE software products are installed and executed on the dSPACE License Server, leave the list empty. This way installed dSPACE software does not search for license servers in the network.

Note

If you add the **Automatic server search** option to the server search list, the dSPACE software on the clients searches for available license server in the connected LAN. The clients send network broadcasts to get access to license servers. To reduce network broadcasts and thus the traffic in your network, always define at least one server in the server search list and do not add **Automatic server search** to the list.

By default, the **Automatic server search** option is not added to the server search list during software installation. This way installed dSPACE software does not search for license servers in the network.

Activating licenses on a license server

To use license-protected dSPACE software, you have to create a CmContainer on the dSPACE License Server and activate the floating network licenses in it. As an alternative, you can activate floating network licenses in CmDongles. These tasks are done via dSPACE Installation Manager. For more information, refer to [License Activation](#) on page 55.

If you cannot install dSPACE Installation Manager on your license server (for example, because the required operating system does not match), you can activate the floating network licenses via LAN connection from another PC. Thus, dSPACE Installation Manager needs not to be installed on the dSPACE License Server.

Getting required firewall settings on license server

As of CodeMeter 6.90, the required TCP share of port 22350 in the firewall is not added by default during installation. If you want to set up a dSPACE License Server, the following measures are required depending on the software you install:

- You install dSPACE software (e.g., dSPACE Installation Manager) on the PC which should work as license server: After installation of the dSPACE software, use the **Change** option in the CodeMeter Runtime setup dialog and activate the **Network Server** setting. This adds a TCP share of port 22350 in the firewall during the modify process.
- You only install CodeMeter Runtime software on the PC which should work as licenser server: Activate the **Network Server** setting in the CodeMeter Runtime setup dialog. This adds a TCP share of port 22350 in the firewall during the installation process.

Installing the floating network server on a VM (virtual machine)

NOTICE

Using the 'Revert to snapshot' feature in the virtual machine causes licenses to become invalid.

If you use the 'Revert to snapshot' feature in a VM, all software-based CmContainers on your host PC (dSPACE Activation Container and/or dSPACE Borrow Container) become invalid and the contained licenses are lost.

- Do not use the 'Revert to snapshot' feature for VMs that contain software-based CmContainers with activated licenses.
- Store the license information on CmDongles. There, the CmContainers do not become invalid after use the 'Revert to snapshot' feature.

NOTICE

Moving the virtual machine to a host PC with a different hardware configuration causes licenses to become invalid.

If you move your virtual machine to a host PC with a different hardware configuration, all software-based CmContainers on your host PC (dSPACE Activation Container and/or dSPACE Borrow Container) become invalid and the contained licenses are lost. This happens, for example, if the CPU type of the physical PC changes.

- Do not move a virtual machine that contains software-based CmContainers with activated licenses to a host PC with a different hardware configuration.
- Store the license information on CmDongles. There, the CmContainers do not become invalid after the virtual machine is moved.
- However, if moving the virtual machine is absolutely necessary, contact dSPACE Support (www.dspace.com/go/supportrequest) beforehand to find solutions that can avoid major downtimes.

Further settings for the license server and license clients

- You can use CodeMeter WebAdmin to configure further network options for the license server and its clients, for example, allowing remote access from other PCs with CodeMeter software in a network. For more information, refer to the CodeMeter user documentation.
- On the floating network server, it is recommended to monitor the 'CodeMeter Runtime Server' service automatically, e.g., to restart the service after it has crashed. For example, you can configure this using the Windows Services Manager: Set the recovery actions via the properties of the service according to your requirements.

System requirements for the dSPACE License Server

The following table lists hardware and software requirements:

Subject	Host PC and Network Requirements
Required hardware	<ul style="list-style-type: none"> ▪ Intel Core 2 Duo processor at 2 GHz or equivalent ▪ 4 GB RAM main memory (or more)

Subject	Host PC and Network Requirements
Operating system	<ul style="list-style-type: none"> ▪ Valid for servers without dSPACE software: You can use operating systems from Microsoft Windows on a license server in combination with protected dSPACE software. <div style="background-color: #f0f0f0; padding: 10px; margin: 10px 0;"> <p>Note</p> <ul style="list-style-type: none"> ▪ If you want to use Ubuntu Linux as operating system for the license server, contact dSPACE Support (www.dspace.com/go/supportrequest). ▪ Other operating systems are not tested. You can use them at your own risk. dSPACE does not provide support in this case. </div> <ul style="list-style-type: none"> ▪ Valid for servers with dSPACE Installation Manager: dSPACE Installation Manager supports the same operating systems as the other dSPACE software products. Refer to Operating System (Installing dSPACE Software).
Required software	<ul style="list-style-type: none"> ▪ On dSPACE License Clients: <ul style="list-style-type: none"> ▪ CodeMeter Runtime Version 8.0 (required for Microsoft Windows and Ubuntu Linux) ▪ The required versions are automatically installed with dSPACE software installations. ▪ On a dSPACE License Server: CodeMeter Runtime. The version installed on the server must be equal to or higher than the version installed on the dSPACE License Clients. ▪ If you want to use a PC as a dSPACE License Server, but do not want to install dSPACE software on it, you can download and install the CodeMeter Runtime software from http://www.dspace.com/go/wibudrv. Here you will always find the latest version that has been tested to be used in combination with dSPACE software. ▪ CodeMeter Runtime requires the DigiCert Trusted Root G4 root certificate (https://cacerts.digicert.com/DigiCertTrustedRootG4.crt). If CodeMeter Runtime should be installed on a PC without an Internet connection and the certificate is not already installed on your PC, you have to download and install the required root certificate manually before installing CodeMeter Runtime.
Enabling floating network licenses	<p>All host PCs on which you want to run dSPACE software (<i>license clients</i>) must be able to establish a TCP/IP connection (standard TCP/UDP protocol is required) to the dSPACE License Server.</p> <p>The default port number is 22350 (TCP and UDP), which is an officially registered port number (IANA). If needed, you can specify a different port number.</p>
Accessing CodeMeter WebAdmin	<p>CodeMeter licensing software requires the following open TCP/IP network ports:</p> <ul style="list-style-type: none"> ▪ 22352 (TCP and UDP): To access CodeMeter WebAdmin via http.

Subject	Host PC and Network Requirements
	<ul style="list-style-type: none">▪ 22353 (TCP and UDP): To access CodeMeter WebAdmin via https.

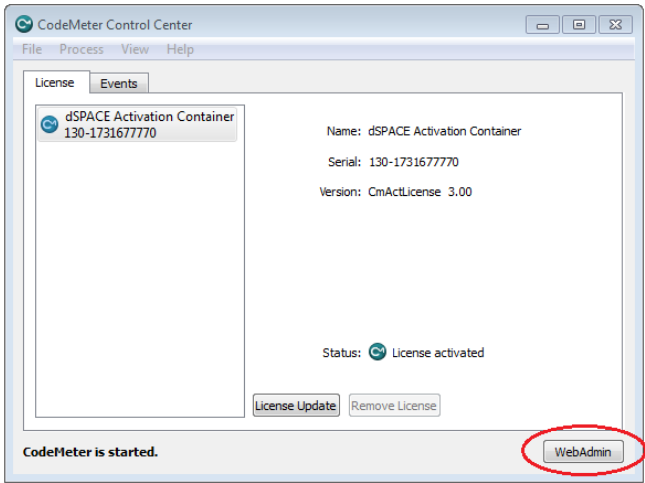
How to Set Up the dSPACE License Server

Objective You have to install and configure one of the network PCs as the dSPACE License Server.

Preconditions The PC used as a dSPACE License Server must meet the system requirements. Refer to [Basics on Setting Up a License Server and the License Clients](#) on page 148.

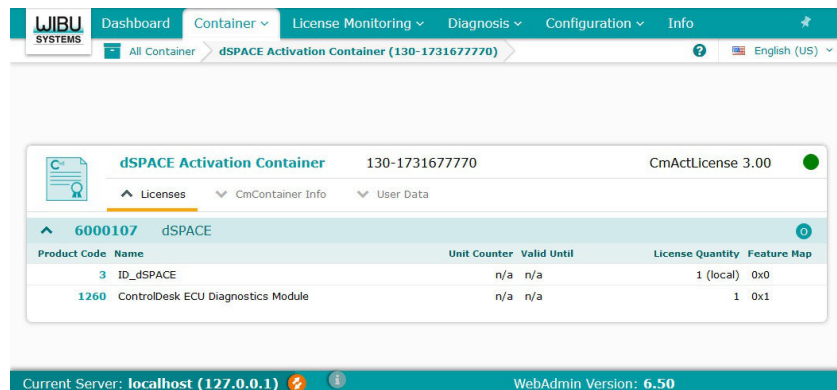
Method **To set up the dSPACE License Server**

- 1 From Start – CodeMeter, select CodeMeter Control Center. CodeMeter Control Center opens.



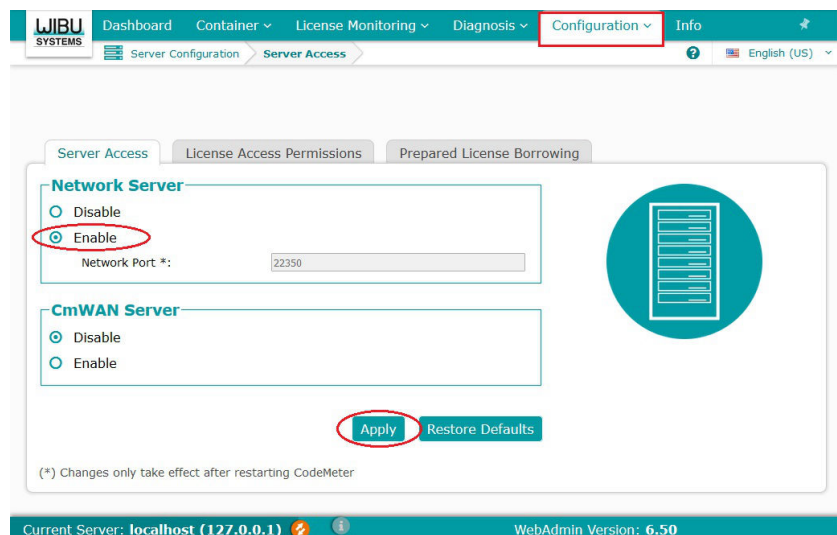
2 Click WebAdmin.

CodeMeter WebAdmin opens in a new page in the Web browser.



3 From the CodeMeter WebAdmin menu, select Configuration – Server – Server Access.

4 Select Enable in the Network Server group.



By default, the network port 22350 is set as the CodeMeter communication port. The port number is registered at Internet Assigned Numbers Authority (IANA) and uniquely assigned to CodeMeter communication.

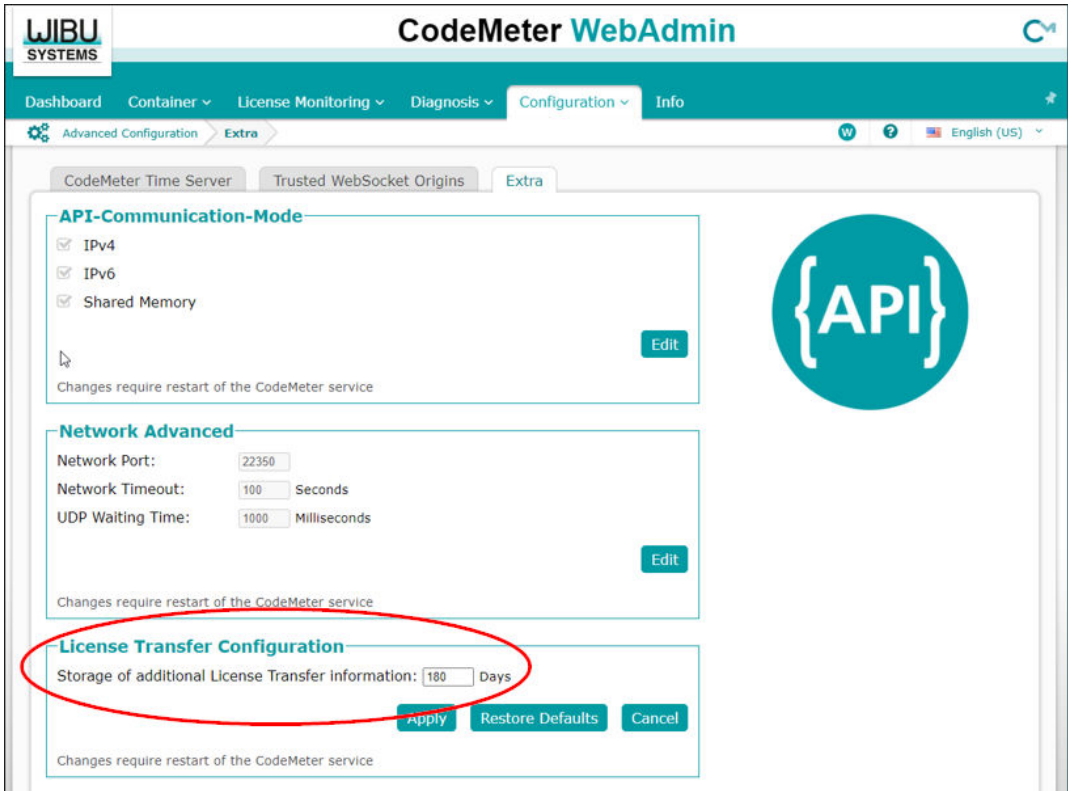
Note

You can change the default port setting. In this case, make sure that all dSPACE License Servers and license clients in your network use the same port settings. If they do not, you cannot use CodeMeter software in a network without restrictions. For instructions on changing the port setting, refer to the CodeMeter user documentation.

5 Click Apply.

6 From the CodeMeter WebAdmin menu, select Configuration – Advanced – Extra.

- 7 In the License Transfer Configuration group, set the Storage of additional License Transfer information property to 180 days.



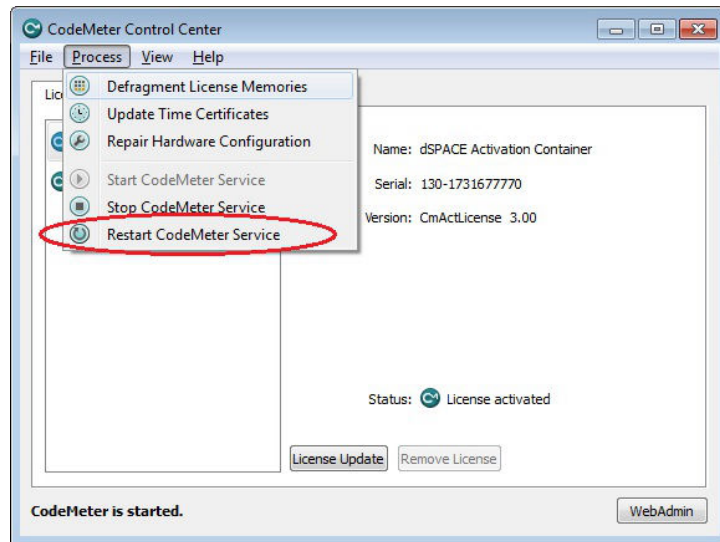
Background: The maximum borrow period for dSPACE licenses delivered or updated as of 03/09/22 has been extended to 180 days. However, to be able to use this maximum period without restrictions, you must also extend the borrow history on the dSPACE License Server via CodeMeter WebAdmin to 200 days.

Tip

You can explicitly limit the maximum borrow period for all dSPACE licenses hosted on the dSPACE License Server via CodeMeter WebAdmin. To do this, select Configuration – Server – License Transfer Configuration. For details, refer to the corresponding documentation from Wibu-Systems.

- 8 Click Apply.
- 9 Change to CodeMeter Control Center.

10 From the Process menu, select Restart CodeMeter Service.



The changes take effect after CodeMeter Service restarted.

Result

You configured a PC as a dSPACE License Server.

Next steps

- Set up a connection between dSPACE License Client and dSPACE License Server. Refer to [How to Set up a Connection Between Client and Server](#) on page 156.
- Create a CmContainer on the dSPACE License Server and activate the floating network licenses on it. You also can activate floating network licenses in CmDongles. Refer to [License Activation](#) on page 55.

How to Set up a Connection Between Client and Server

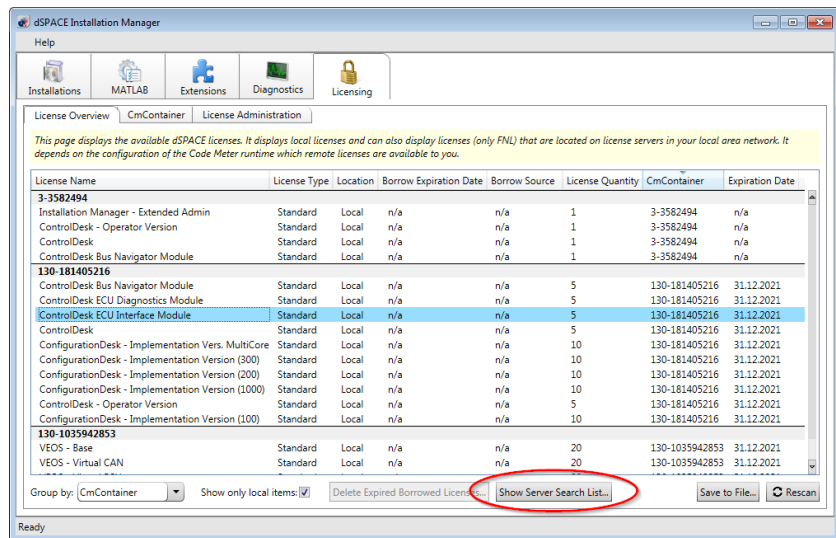
Objective

To set up a connection between client and server, you have to adjust the settings of your dSPACE License Client to the address of the dSPACE License Server to instruct the client to use the server.

Basics

To configure dSPACE License Clients, you have to use CodeMeter WebAdmin. You can set up a connection to as many servers as you need.

You can access CodeMeter WebAdmin via the CodeMeter Control Center or via the dSPACE Installation Manager. In the dSPACE Installation Manager, click the Show Server Search List button on the License Overview page as shown in the following illustration:



Method

To set up a connection between client and server

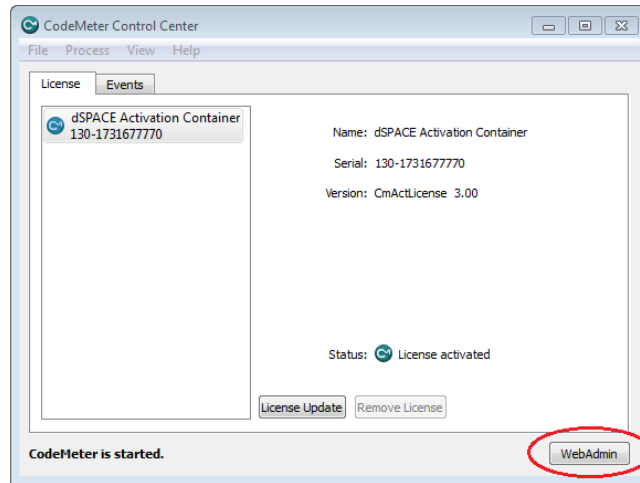
- 1 Establish a TCP/IP connection to the dSPACE License Server.
- 2 If necessary, configure firewall and/or other network components, such as routers and switches, to open the specified TCP/IP port to allow network communication between the client and server.

The default network port that is specified on the dSPACE License Server is 22350.

Note

If you specified a different network port on the license server than the default network port (22350), you have to change it on the license clients as well. To change the communication port, use CodeMeter WebAdmin. For more information, refer to the CodeMeter user documentation.

- From Start – CodeMeter, select CodeMeter Control Center. CodeMeter Control Center opens.

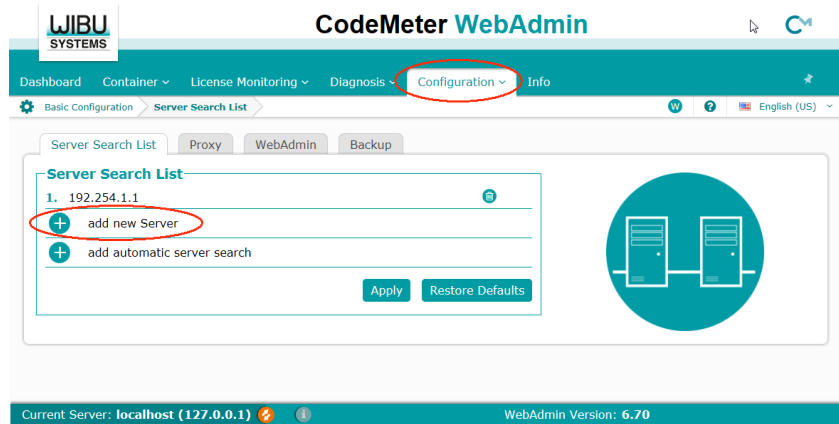


- Click WebAdmin. CodeMeter WebAdmin opens a new page in the default Web browser.



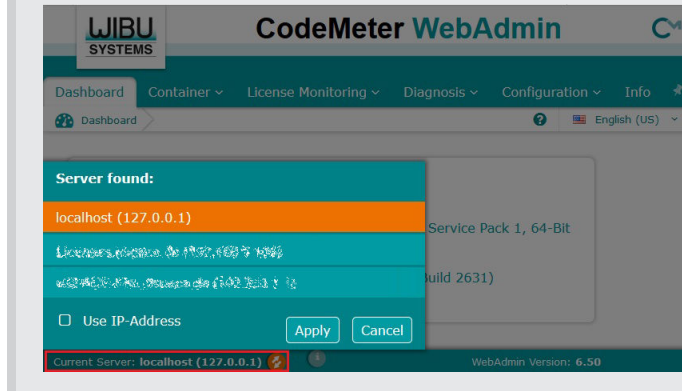
- From the CodeMeter WebAdmin menu, select Configuration – Basic – Server Search List. The server search list opens.

6 Click add new Server.



Tip

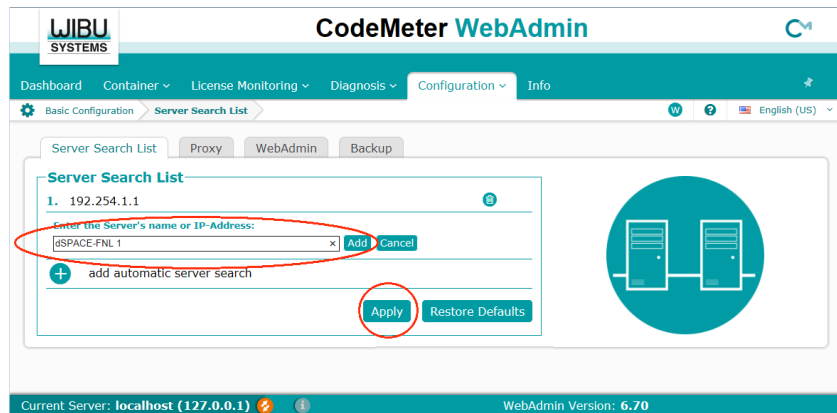
To display available license servers, click Current Server: <servername (IP-address)> at the bottom left in the CodeMeter WebAdmin window.



7 Enter the server's name or IP address in the edit field and click Add.

Tip

The license server connects to the first found Ethernet adapter by default. If your dSPACE License Server is located in another subnet, enter the server's IP address instead of its host name. This prevents problems with UDP broadcasts.



You can add as many servers as needed.

Note

If you add the Automatic server search option to the server search list, the dSPACE software on the clients searches for available license server in the connected LAN. The clients send network broadcasts to get access to license servers. To reduce network broadcasts and thus the traffic in your network, do not add Automatic server search to the list.

- 8 Click **Apply** to confirm your changes.

Result You set up a connection between the client and the server.

License-Specific Linger Times

Motivation For all products the linger time is defined by dSPACE as shown below. After a license is released by the software product, it remains reserved for the same license client PC for the duration of the linger time. After the linger time has elapsed, the license can be used by other license clients.

Overview table

License	Order Number	Linger Time (Minutes)
ASM Battery Library	ASM_L_BAT	30
ASM Battery Library (run-time version)	ASM_L_BAT_RTV	30
ASM Brake Hydraulics Library	ASM_L_BH	30
ASM Brake Hydraulics Library (run-time version)	ASM_L_BH_RTV	30
ASM Diesel Exhaust Library	ASM_L_DEXH	30
ASM Diesel Exhaust Library (run-time version)	ASM_L_DEXH_RTV	30

License	Order Number	Linger Time (Minutes)
ASM Drivetrain Basic Library	ASM_L_DTB	30
ASM Drivetrain Basic Library (run-time version)	ASM_L_DTB_RTV	30
ASM Electric Components Library	ASM_L_EC	30
ASM Electric Components Library (run-time version)	ASM_L_EC_RTV	30
ASM Engine Diesel Library	ASM_L_ED	30
ASM Engine Diesel Library (run-time version)	ASM_L_ED_RTV	30
ASM Engine Diesel InCylinder Library	ASM_L_EDIC	30
ASM Engine Diesel InCylinder Library (run-time version)	ASM_L_EDIC_RTV	30
ASM Engine Gasoline Library	ASM_L_EG	30
ASM Engine Gasoline Library (run-time version)	ASM_L_EG_RTV	30
ASM Engine Gasoline InCylinder Library	ASM_L_EGIC	30
ASM Engine Gasoline InCylinder Library (run-time version)	ASM_L_EGIC_RTV	30
ASM Environment Library	ASM_L_ENV	30
ASM Environment Library (run-time version)	ASM_L_ENV_RTV	30
ASM Fuel Cell Library	ASM_L_FC	30
ASM Fuel Cell Library (run-time version)	ASM_L_FC_RTV	30
ASM InCylinder Base Library	ASM_L_ICB	30
ASM InCylinder Base Library (run-time version)	ASM_L_ICB_RTV	30
ASM Kinematics and Compliance Testbench	ASM_L_KNC	30
ASM Pneumatics Library	ASM_L_PNM	30
ASM Pneumatics Library (run-time version)	ASM_L_PNM_RTV	30
ASM Turbocharger Library	ASM_L_TC	30
ASM Turbocharger Library (run-time version)	ASM_L_TC_RTV	30
ASM Trailer Library	ASM_L_TRA	30
ASM Trailer Library (run-time version)	ASM_L_TRA_RTC	30
ASM Traffic Library	ASM_L_TRF	30
ASM Traffic Library (run-time version)	ASM_L_TRF_RTV	30
ASM Truck Library	ASM_L_TRU	30
ASM Truck Library (run-time version)	ASM_L_TRU_RTV	30
ASM Vehicle Dynamics Library	ASM_L_VD	30
ASM Vehicle Dynamics Library (run-time version)	ASM_L_VD_RTV	30
AURELION Camera	AURELION_CAMERA	0
AURELION Lidar	AURELION_LIDAR	0
AURELION Platform	AURELION_PLATFORM	0
AURELION Radar	AURELION_RADAR	0
AutomationDesk Basic	AUD_BASIC	0
AutomationDesk Server Basic	AUS_BASIC	0
Bus Manager	BUS_MANAGER	30
Calibration API Package	CALIBRATION_API	30
Communication Matrix Manager	COM_MATRIX_MANAGER	0
ConfigurationDesk for RapidPro	CFD_C	0

License	Order Number	Linger Time (Minutes)
ConfigurationDesk for 100 Functions	CFD_I_100	0
ConfigurationDesk for 200 Functions	CFD_I_200	0
ConfigurationDesk for 300 Functions	CFD_I_300	0
ConfigurationDesk for 1000 Functions	CFD_I_1000	0
ConfigurationDesk for unlimited Functions	CFD_I_UNLTD	0
ConfigurationDesk CAN Module	CFD_I_CAN	0
ConfigurationDesk Ethernet Module	CFD_I_ETH	0
ConfigurationDesk XCP Module	CFD_I_XCP	0
ConfigurationDesk LIN Module	CFD_I_LIN	0
ConfigurationDesk MultiCore	CFD_I_MC	0
ConfigurationDesk MultiProcessor	CFD_I_MP	0
ControlDesk	CONTROLDESK	0
ControlDesk Bus Navigator Module	CONTROLDESK_BNV	0
ControlDesk ECU Diagnostics Module	CONTROLDESK_DIAG	0
ControlDesk ECU Interface Module	CONTROLDESK_ECU	0
ControlDesk - Operator Version	<ul style="list-style-type: none"> ▪ CONTROLDESK_OPERATOR (old) ¹⁾ ▪ CONTROLDESK_OPER (new) 	0
ControlDesk Signal Editor Module	CONTROLDESK_SE	0
Data Dictionary Manager	DSDD_Manager	30
dSPACE AUTOSAR Compare	DARC	0
ECU Flash Programming Tool	DSPACE_ECU_FLASH	0
ECU Interface Base Package	EIF_BASE	30
ECU Interface Binary Code Management for ARM	EIF_BCM_ARM	30
ECU Interface Binary Code Management for MPC5XXX	EIF_BCM_MPC5XXX	30
ECU Interface Binary Code Management for TriCore	EIF_BCM_TRICORE	30
ECU Interface Binary Code Management for V850X	EIF_BCM_V850X	30
ECU Interface On-Target module for ARM	EIF_OT_ARM	30
ECU Interface On-Target module for MPC5XXX	EIF_OT_MPC5XXX	30
ECU Interface On-Target module for TriCore	EIF_OT_TRICORE	30
ECU Interface On-Target module for V850X	EIF_OT_V850X	30
Ethernet Configuration Package	ETHERNET_BUS	30
Failure Simulation Package	FAILURE_SIM	30
FlexRay Configuration Package	FLEXRAY_BUS	30
HighTec C Compiler for Freescale MPC5xxx	HIGHTECC_MPC5XXX	30
HighTec C Compiler for Infineon TriCore	HIGHTECC_TRICORE	30
HighTec C Compiler for Renesas V850/RH850	HIGHTECC_V850X	30
MicroLabBox GNU Compiler	MLBX_COMP	0
Microtec C PowerPC Cross Compiler	CCPPPC	30
Model Compare	MOC	30
ModelDesk	MODELDESK	0
Platform API Package	PLATFORM_API	30

License	Order Number	Linger Time (Minutes)
Real-Time Interface	RTI	30
RTI E-Motor Control Blockset	RTI_EMC_BS	30
RTI Ethernet I/O Package	RTI_ETHERNET_IO	30
Real-Time Interface MultiProcessor	RTI_MP	30
Real-Time Interface RapidPro Blockset	RTI_RP_BS	30
Real-Time Interface Watchdog Blockset	RTI_WATCHDOG_BS	30
RTI CAN Blockset	RTICAN_BS	30
RTI CAN MultiMessage Blockset	RTICANMM_BS	30
RTI LIN MultiMessage Blockset	RTLINMM_BS	
FPGA Programming Blockset for Vitis™ Model	FPGA_Blockset_1	30
FPGA Programming Blockset for HDL™ Coder	FPGA_Blockset_2	30
FPGA Programming Blockset Handcode Framework	FPGA_HANDCODE	30
Real-Time Testing	RTT	30
Real-Time Testing Observer Library	RTT_OBSERVER_LIB	30
SystemDesk V-ECU Generation Module	SYD_GEN	0
SystemDesk Modeling Module	SYD_MOD	0
SYNECT Module - Base	<ul style="list-style-type: none"> ▪ SYNECT_BASE (old) ¹⁾ ▪ SYN_BASE (new) 	-. ²⁾
SYNECT Module - Base Local	<ul style="list-style-type: none"> ▪ SYNECT_BASE_LOCAL (old) ¹⁾ ▪ SYN_BASE_LOCAL (new) 	-. ²⁾
SYNECT Module - Model Management	<ul style="list-style-type: none"> ▪ SYNECT_MODEL_MGMT (old) ¹⁾ ▪ SYN_MODEL_MGMT (new) 	-. ²⁾
SYNECT Test Management - Test Development	<ul style="list-style-type: none"> ▪ SYNECT_TM_DEV (old) ¹⁾ ▪ SYN_TM_DEV (new) 	-. ²⁾
SYNECT Test Management - Planning & Execution	<ul style="list-style-type: none"> ▪ SYNECT_TM_PLAN_EXEC (old) ¹⁾ ▪ SYN_TM_PLAN_EXEC (new) 	-. ²⁾
SYNECT Module - Variant Management	<ul style="list-style-type: none"> ▪ SYNECT_VARIANT_MGMT (old) ¹⁾ ▪ SYN_VARIANT_MGMT (new) 	-. ²⁾
SYNECT Module - Workflow Management	<ul style="list-style-type: none"> ▪ SYNECT_WORKFLOW_MGMT (old) ¹⁾ ▪ SYN_WORKFLOW_MGMT (new) 	-. ²⁾
TargetLink Adaptive AUTOSAR Module	TAAS	30
TargetLink AUTOSAR Module	TAS	30
TargetLink Base Suite	TBS	30
TargetLink Module for MATLAB Code	TMMLC	30
TargetLink Module for Operating Systems - OSEK	TMOS_OSEK	30
Target Optimization Module/C16x	TOM_C16X_TASKING	30
Target Optimization Module/SH2	TOM_SH2_SHC	30
Target Optimization Module/TriCore	<ul style="list-style-type: none"> ▪ TOM_TRICORE_TASKING (old) ¹⁾ ▪ TOM_TRIC_TASK (new) 	30
TargetLink Simulation Module	TSM	30
TargetLink Automation Package	TL_AUTO	0
VEOS - Base	VEOS_BASE	0
VEOS - Virtual CAN	VEOS_CAN	0

License	Order Number	Linger Time (Minutes)
VEOS - Virtual ECU	VEOS_ECU	0
VEOS - Virtual Automotive Ethernet	VEOS_ETH	0
VEOS - Virtual LIN	VEOS_LIN	0
XCP Host Blockset	XCP_HOST_BS	30

- 1) Due to technical changes in the dSPACE order management, this order number has to be changed. This will not happen for customers of all countries at the same time. Therefore, both the old and the new order numbers will apply for this transition period.
- 2) The linger time depends on the used license and SYNECT server service. You can view specific linger times on the License Overview page of the SYNECT Server Administrator. Refer to [Basics on License Protection \(The SYNECT Server Guide !\[\]\(13b6bdd0ca077c333d50231f1443cb1d_img.jpg\)](#)).

Manual License Confirmation

Motivation In certain cases, you might have to perform license confirmation manually. This particularly applies if dSPACE Installation Manager has file-based access to the CmContainer. However, in most cases, dSPACE Installation Manager performs the license confirmation automatically.

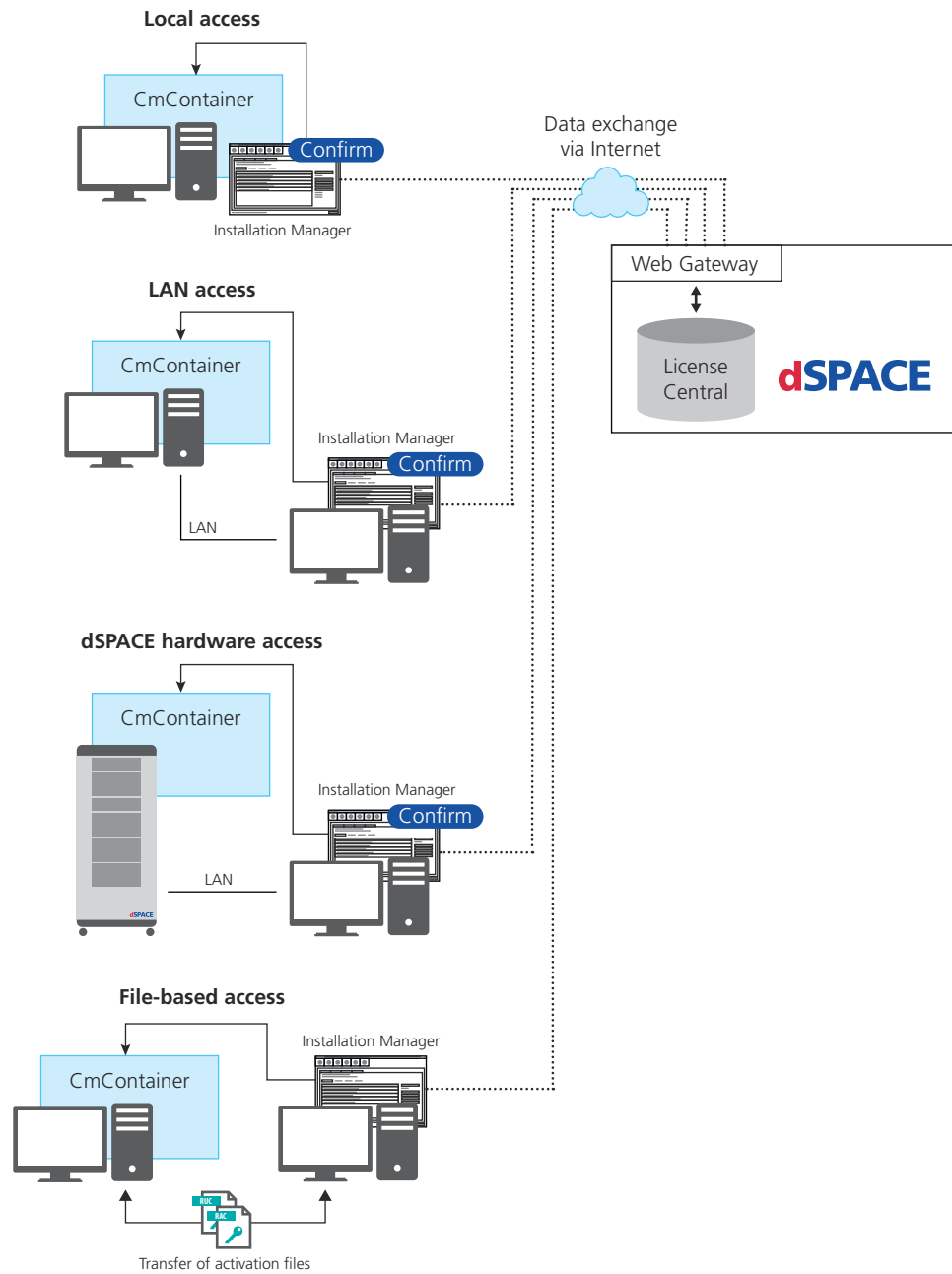
Where to go from here

Information in this section

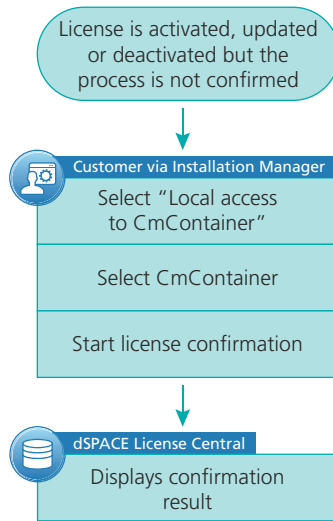
Use Scenario and Workflows for License Confirmation.....	165
How to Confirm the License Status Manually (Local Access to CmContainer).....	169
How to Confirm the License Status Manually (LAN Access to CmContainer).....	171
How to Confirm the License Status Manually (dSPACE Hardware Access to CmContainer).....	173
How to Confirm the License Status Manually (File-Based Access to CmContainer).....	176

Use Scenario and Workflows for License Confirmation

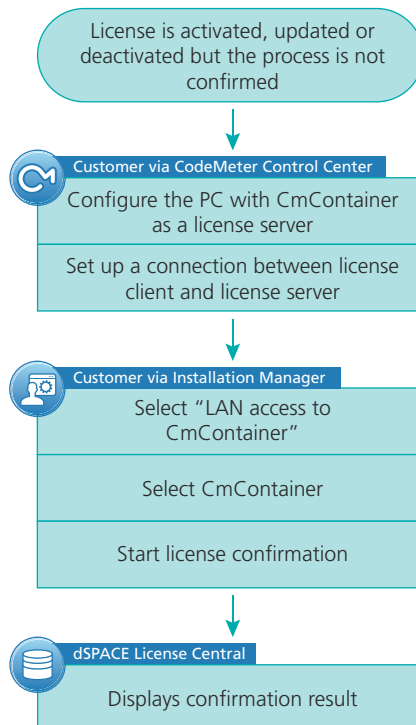
Purpose To confirm the license status, you transfer a fingerprint of the CmContainer to dSPACE License Central after you activated, updated, or deactivated the licenses. This is the last step in the related process.



The workflow differs depending on how dSPACE Installation Manager can access the CmContainer.

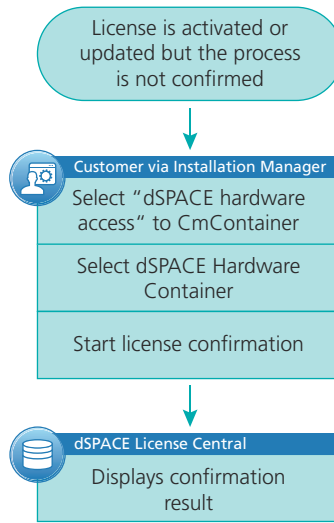
Workflow for local access

For instructions, refer to [How to Confirm the License Status Manually \(Local Access to CmContainer\)](#) on page 169.

Workflow for LAN access

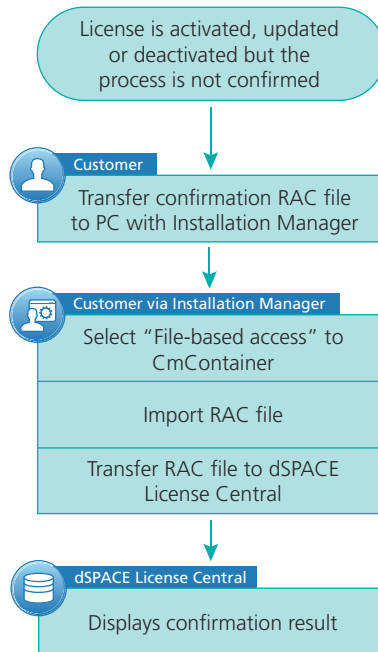
For instructions, refer to [How to Confirm the License Status Manually \(LAN Access to CmContainer\)](#) on page 171.

Workflow for dSPACE hardware access



For instructions, refer to [How to Confirm the License Status Manually \(dSPACE Hardware Access to CmContainer\)](#) on page 173.

Workflow for file-based access



For instructions, refer to [How to Confirm the License Status Manually \(File-Based Access to CmContainer\)](#) on page 176.

How to Confirm the License Status Manually (Local Access to CmContainer)

Objective

To confirm an activation, update or deactivation process manually on a CmContainer that is accessible on your PC.

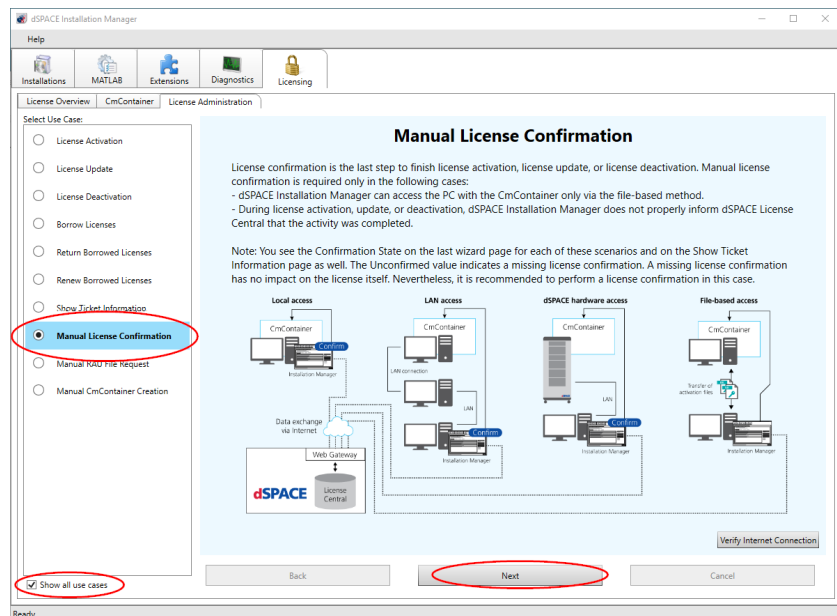
Preconditions

- An Internet connection for accessing dSPACE License Central exists.
- An activation, update or deactivation process is not yet confirmed to dSPACE License Central.

Method

To confirm the license status manually (local access to CmContainer)

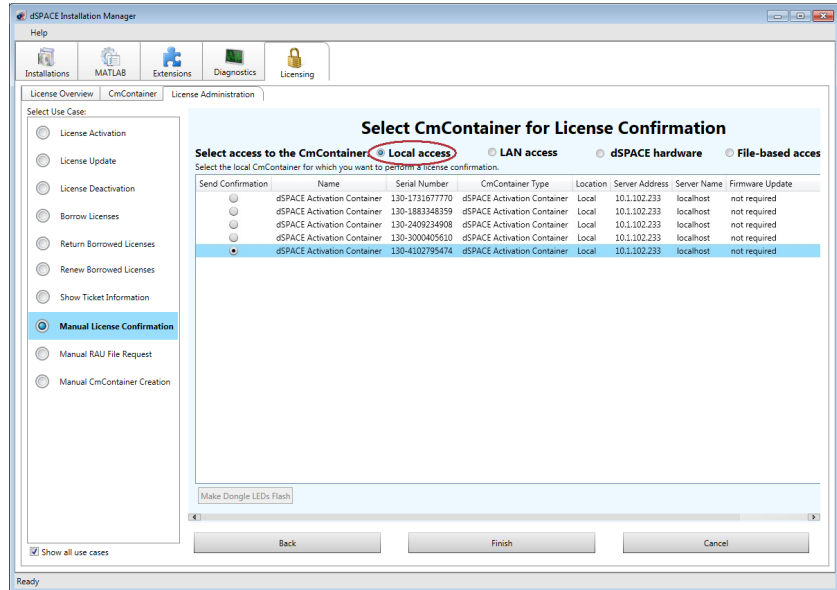
- 1 If you want to confirm the license status on a CmDongle, connect the CmDongle to your PC.
- 2 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3 Click the Licensing – License Administration tab.
- 4 Select Show all use cases on the left of the page.



- 5 Select Manual License Confirmation and click Next.

6 Select Local access.

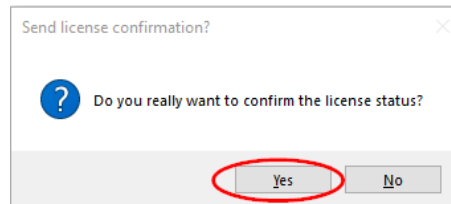
dSPACE Installation Manager displays all CmContainers that it can access locally on your PC.



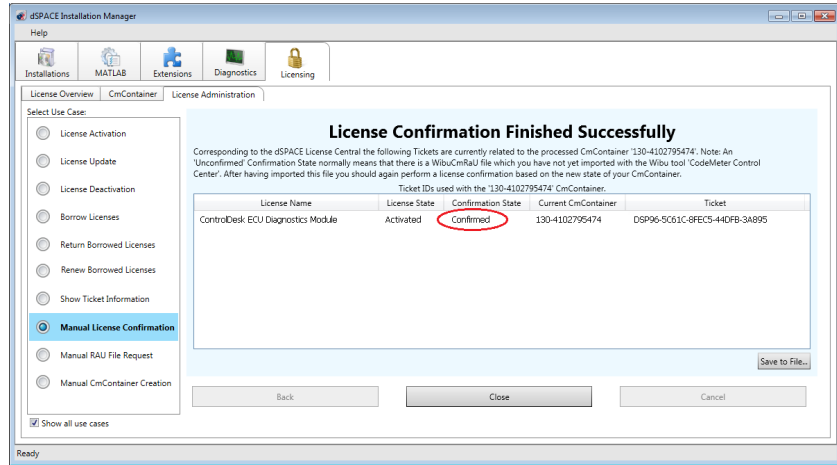
7 Select the CmDongle or CmActlicense container on which you want to confirm the license status.

8 Click Finish.

A confirmation prompt is displayed.



- Click Yes to start the confirmation process.
dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the result as follows:



- Click Close.

Result

You made the completion of an activation, update or deactivation process is known to dSPACE License Central.

How to Confirm the License Status Manually (LAN Access to CmContainer)

Objective

To confirm an activation, update or deactivation process manually on a CmContainer that is accessible from your PC via LAN.

Preconditions

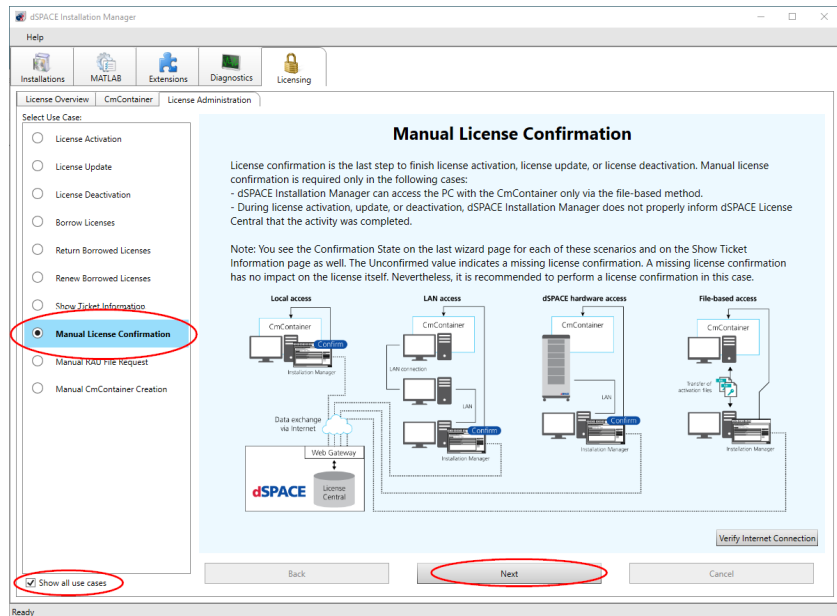
- The PC with access to the CmContainer is configured as a dSPACE License Server. Refer to [How to Set Up the dSPACE License Server](#) on page 153.
- The PC on which dSPACE Installation Manager is installed to confirm the license status is able to establish a TCP/IP connection to the dSPACE License Server. Refer to [How to Set up a Connection Between Client and Server](#) on page 156.
- An Internet connection for accessing dSPACE License Central exists.
- An activation, update or deactivation process is not yet confirmed to dSPACE License Central.

Method

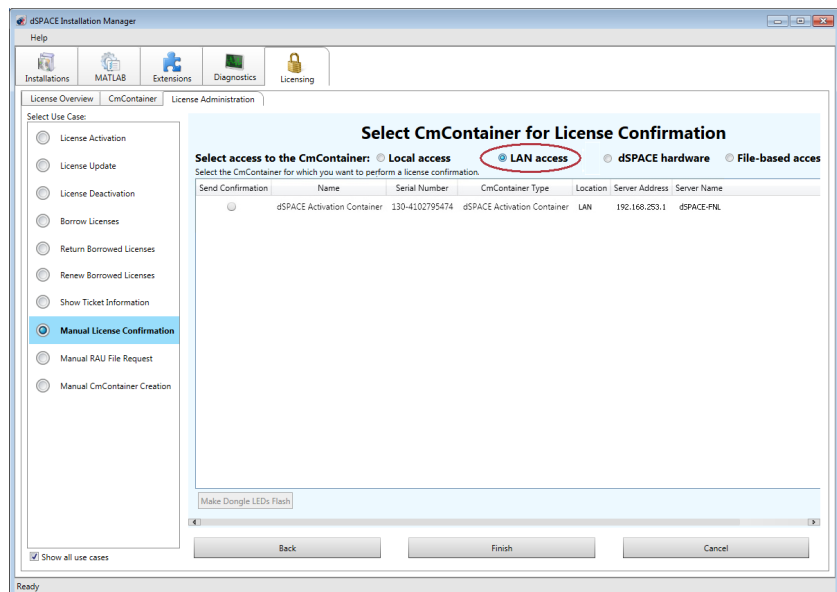
To confirm the license status manually (LAN access to CmContainer)

- If you want to confirm the license status on a CmDongle, connect the CmDongle to the PC configured as the dSPACE License Server.

- 2 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3 Click the Licensing – License Administration tab.
- 4 Select Show all use cases on the left of the page.



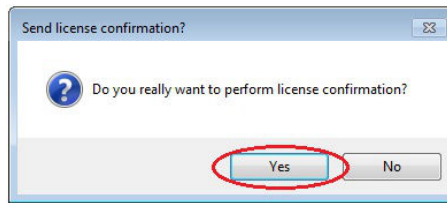
- 5 Select Manual License Confirmation and click Next.
- 6 Select LAN access.
dSPACE Installation Manager displays all CmContainers that it can access via LAN.



- 7 Select the CmDongle or CmActLicense container on which you want to confirm the license status.

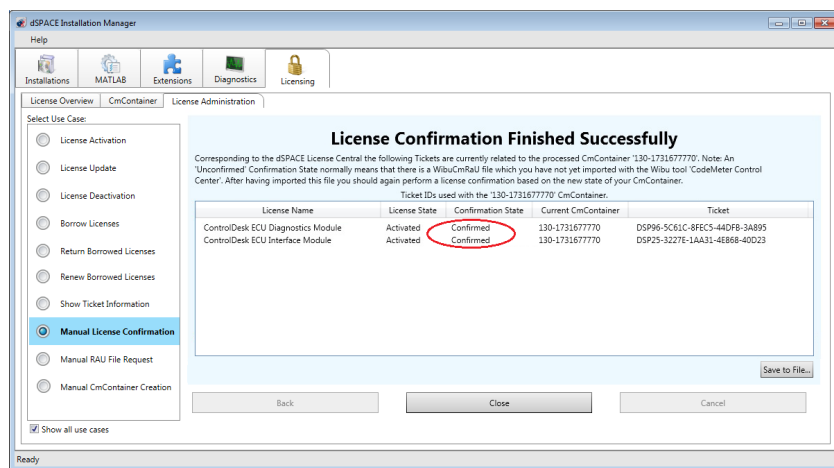
8 Click Finish.

A confirmation prompt is displayed.



9 Click Yes to start the license confirmation.

dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the result as follows:



10 Click Close.

Result

You made the completion of an activation, update or deactivation process known to dSPACE License Central.

How to Confirm the License Status Manually (dSPACE Hardware Access to CmContainer)

Objective

To confirm an activation or update process manually on a CmContainer that is located on a dSPACE hardware system that can be accessed by dSPACE Installation Manager via LAN.

Preconditions

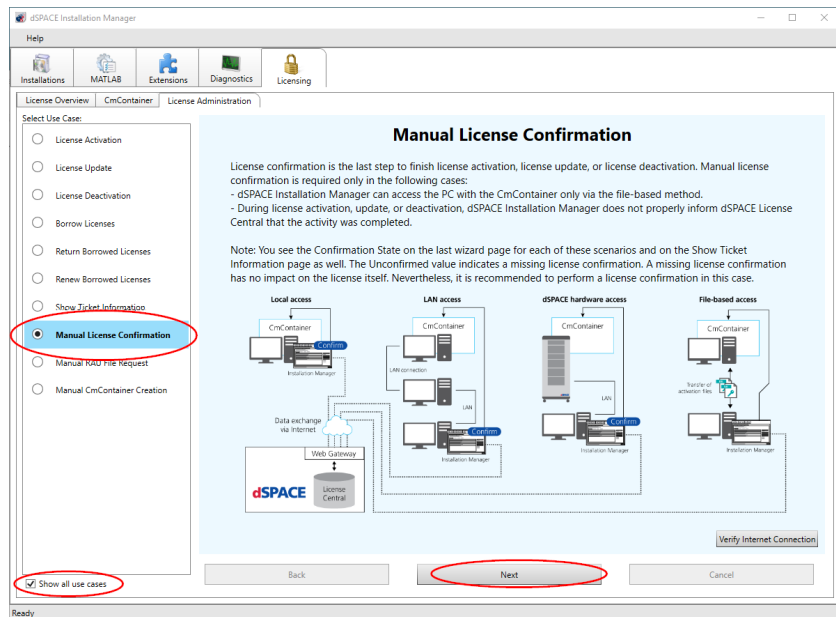
- An Internet connection for accessing dSPACE License Central exists.
- An activation or update process is not yet confirmed to dSPACE License Central.
- The dSPACE hardware system (MicroLabBox II or SCALEXIO) is accessible directly from your PC via LAN.

- The URL or IP address of the hardware system is known by dSPACE Installation Manager and is therefore displayed in the Configure dSPACE Hardware System URLs dialog. This dialog is accessible via the dSPACE Hardware button.

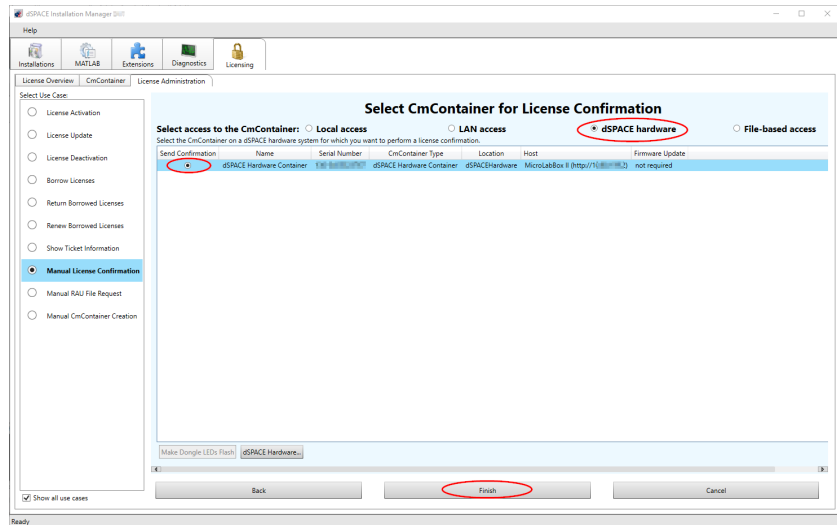
Method

To confirm the license status manually (dSPACE hardware access to CmContainer)

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.
- 3 Select Show all use cases on the left of the page.



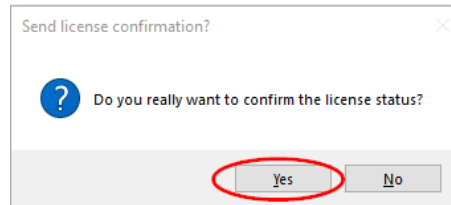
- 4 Select Manual License Confirmation and click Next.
- 5 Select dSPACE hardware.
dSPACE Installation Manager displays all dSPACE Hardware Containers that are located on connected hardware and that can be accessed directly from your PC via LAN.



6 Select the dSPACE Hardware Container on which you want to confirm the license status.

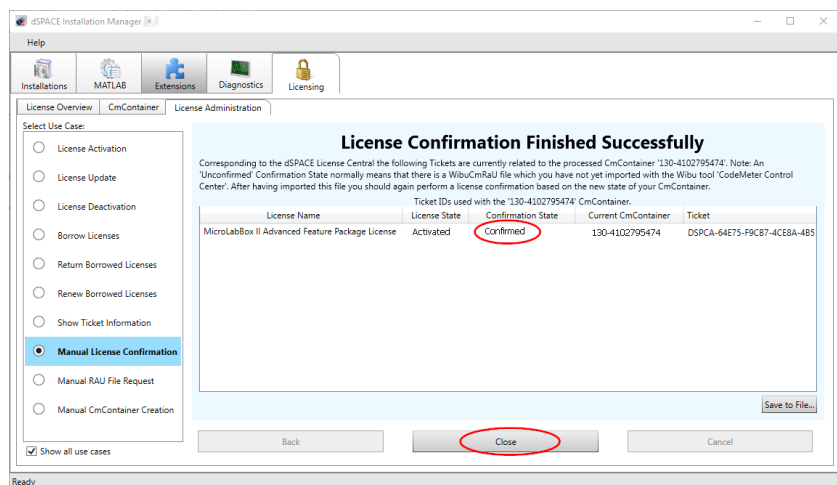
7 Click Finish.

A confirmation prompt is displayed.



8 Click Yes to start the confirmation process.

dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the result as follows:



9 Click Close.

Result

You made the completion of an activation or update process is known to dSPACE License Central.

How to Confirm the License Status Manually (File-Based Access to CmContainer)

Objective

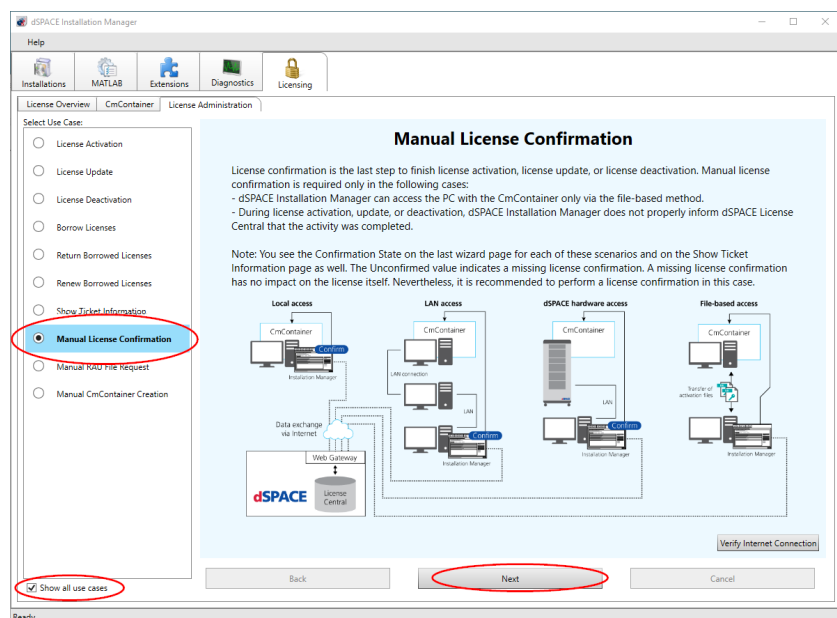
To confirm an activation, update or deactivation process manually on a CmContainer that is accessible from the host PC only via manual file transfer.

Preconditions

- An Internet connection for accessing dSPACE License Central exists.
- An RAC file (*.WibuCmRaC) that was created after updating the CmContainer with an RAU file (*.WibuCmRaU) exists and is available on the PC with dSPACE Installation Manager. Refer to [How to Update a CmContainer with an RAU File](#) on page 138.

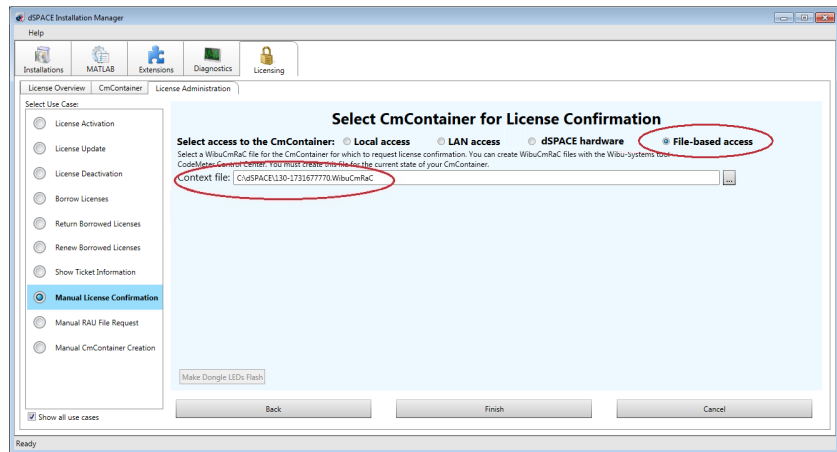
Method**To confirm the license status manually (file-based access to CmContainer)**

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.
- 3 Select Show all use cases on the left of the page.



- 4 Select Manual License Confirmation and click Next.

5 Select File-based access and enter the path of the RAC file (*.WibuCmRaC).



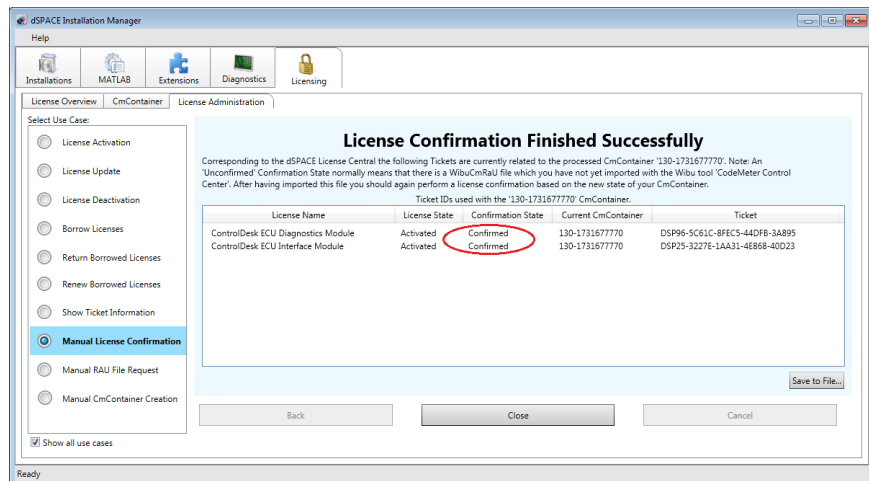
6 Click Finish.

A confirmation prompt is displayed.



7 Click Yes to start the confirmation process.

dSPACE Installation Manager automatically performs the data exchange with dSPACE License Central and displays the result as follows:



8 Click Close.

Result

You made the completion of an activation, update or deactivation process known to dSPACE License Central.

Manual RAU File Request

Motivation You have to request a RAU file manually if dSPACE Installation Manager only has file-based access to the CmContainer.

Where to go from here

Information in this section

[Use Scenario and Workflow for Requesting a RAU File.....](#) 179

[How to Request an RAU File Manually.....](#) 180

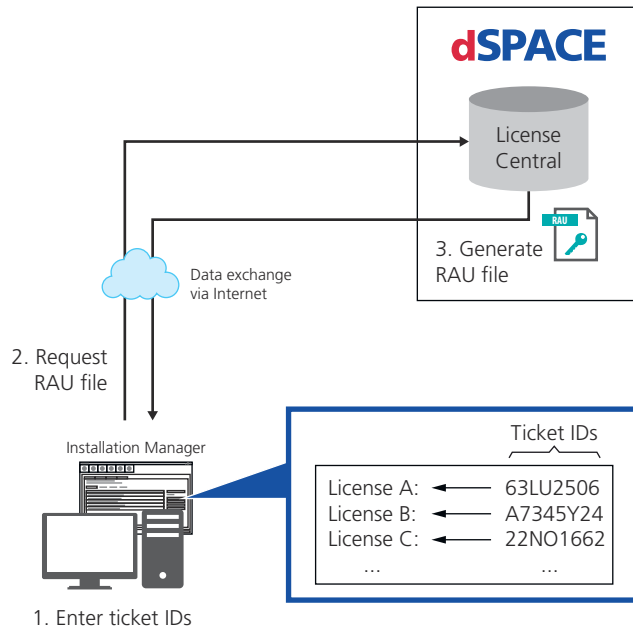
Use Scenario and Workflow for Requesting a RAU File

Use scenario

You can request an RAU file (*.wibuCmRaU) from dSPACE License Central. This is useful if an existing RAU file is missing on your PC, for example. After you receive the RAU file, you can complete the file-based activation, update, or deactivation process.

If dSPACE Installation Manager has local or LAN access to the CmContainer, RAU files are transmitted automatically.

Workflow



How to Request an RAU File Manually

Objective

To request an RAU file (*.WibuCmRAU) from dSPACE License Central manually.

Preconditions

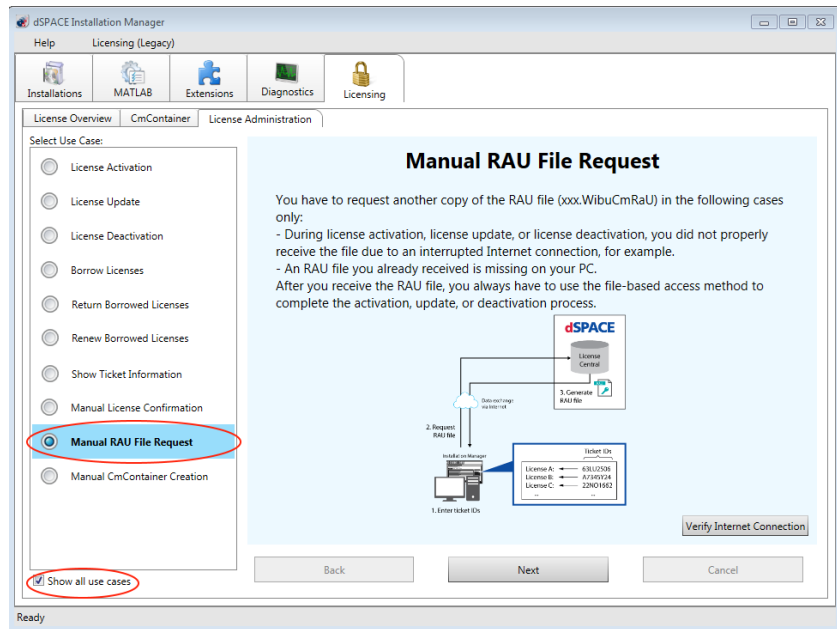
- An Internet connection for accessing dSPACE License Central exists.
- You want to activate, deactivate or update your licenses using the file-based method.
- The ticket ID or ticket group ID used to create the initial RAU file is available.

Method

To request an RAU file manually

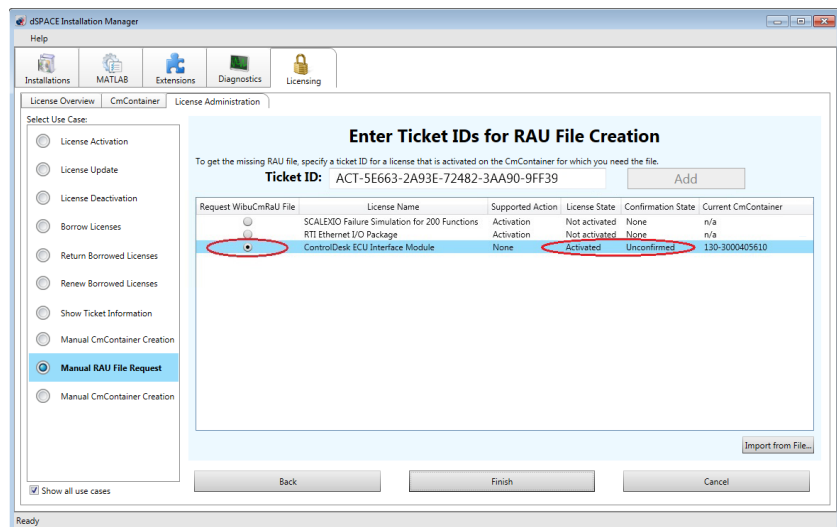
- 1** From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2** Click the Licensing – License Administration tab.

3 Select Show all use cases on the left of the page.



4 Select Manual RaU File Request and click Next.

5 Enter or paste the ticket ID or ticket group ID that was used to create the initial RAU file into the edit field and click Add. dSPACE Installation Manager lists all licenses associated with the ticket IDs as follows:

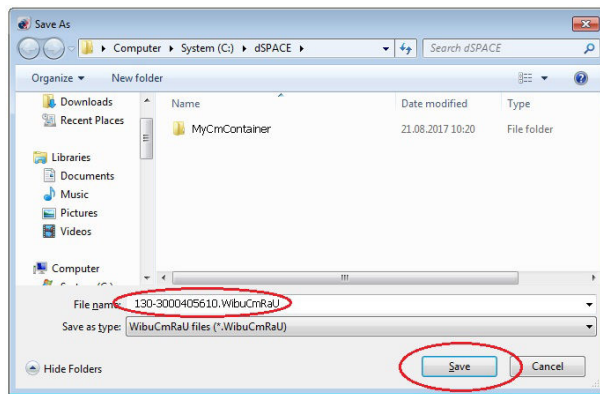


- 6 Select a license of the desired CmContainer.

Note

An RAU file contains all licenses stored in a specific CmContainer. Thus, it is sufficient to select any license stored in the CmContainer, regardless of the license and the confirmation state. However, dSPACE License Central creates the requested RAU file only if at least one license in the CmContainer has the state Unconfirmed and in addition one of the following states: Activated, Updated or Deactivated.

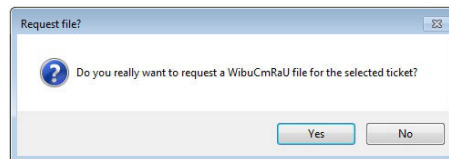
- 7 Click Finish.
- 8 Select a folder to store the RAU file (*.WibuCmRaU) in and click Save.



Note

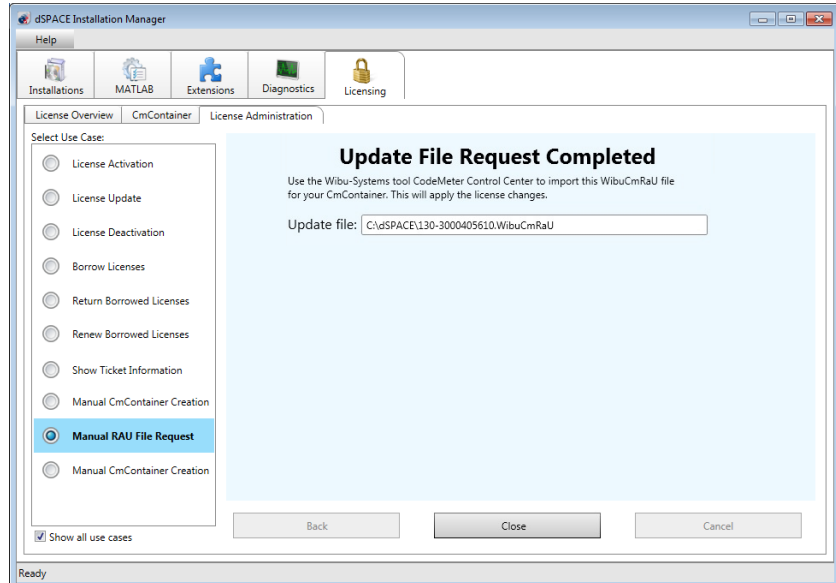
Do not rename the file. The file name is the serial number of the CmContainer for which you need the RAU file.

A confirmation prompt opens.



9 Click Yes.

dSPACE Installation Manager automatically requests the RAU file from dSPACE License Central and displays the result as follows:

**10** Click Close.**Result**

You received the desired RAU file (*.WibuCmRaU).

Next step

You can now use the RAU file to update the CmContainer by using CodeMeter Control Center. Refer to [How to Update a CmContainer with an RAU File](#) on page 138.

Manual CmContainer Creation

Motivation

If you do not use a CmDongle, you have to create the required CmActLicense container (software-based CmContainer) by yourself. CmActLicenses are node-locked containers and therefore bound to a specific PC. They cannot be transferred to another PC.

Where to go from here

Information in this section

Workflows for Creating CmActLicense Containers	185
How to Create a License Information File (LIF).....	187
How to Request an RAU File for the New CmActLicense Container.....	189

Workflows for Creating CmActLicense Containers

Introduction

The workflow differs depending on how dSPACE Installation Manager can access the PC on which you want to create the new CmActLicense container.

Workflows for local and LAN access

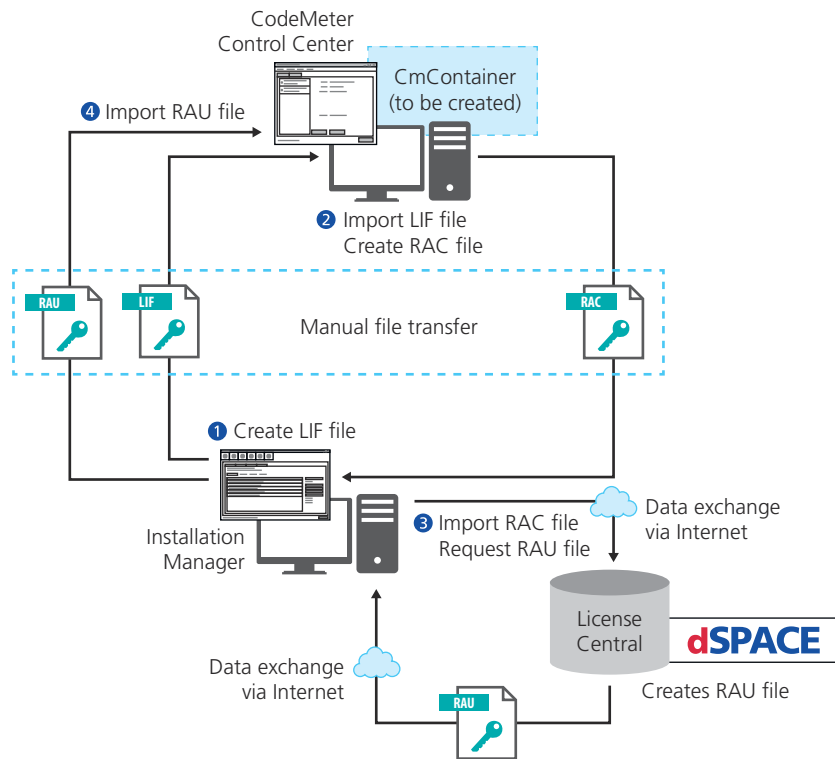
If you want to create the CmActLicense container locally on your PC or on a PC that you can access via LAN, dSPACE Installation Manager creates the CmContainer online during license activation.

Refer to:

- [How to Activate Licenses \(Local Access to CmContainer\)](#) on page 60
- [How to Activate Licenses \(LAN Access to CmContainer\)](#) on page 64

Workflow for file-based access

If dSPACE Installation Manager does not have access to the PC on which you want to create the new CmActLicense container, you have to create it manually using activation files.



You have to perform the following main steps to create a CmActLicense container manually:

1. Create a license information file (*.wibuCmLif). Use dSPACE Installation Manager to do this. Refer to [How to Create a License Information File \(LIF\)](#) on page 187.
2. Create an RAC file (*.wibuCmRaC) on the basis of the LIF. Use CodeMeter Control Center to do this. Refer to [How to Create an Initial RAC File](#) on page 133.
3. Request an RAU file (*.wibuCmRaU). Use dSPACE Installation Manager to do this. Refer to [How to Request an RAU File for the New CmActLicense Container](#) on page 189
4. Update the CmContainer with the delivered RAU file (*.wibuCmRaU). Use CodeMeter Control Center to do this. Refer to [How to Update a CmContainer with an RAU File](#) on page 138.

The license information file (LIF) is the basis for creating CmActLicense containers manually. You only have to create the LIF once. You then can use the file to create several CmActLicense containers. Each CmActLicense container created from the same LIF is given a unique serial number. After you created a new CmActLicense container, you have to activate the CmContainer with an RAU file that you request from dSPACE License Central.

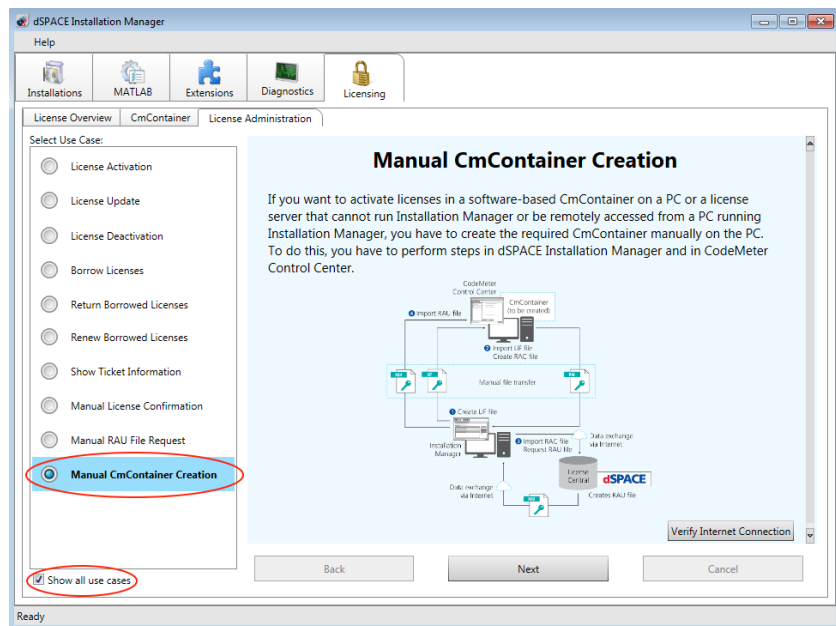
How to Create a License Information File (LIF)

Objective To create a license information file (LIF) that is the basis for creating a CmActLicense container manually.

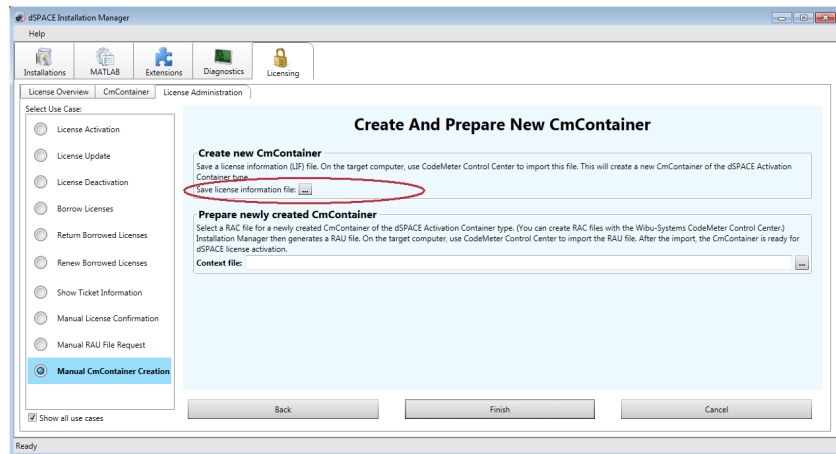
Basics You only have to create the LIF once. You can then use the file to create several CmActLicense containers. Each CmActLicense container created from the same LIF is given a unique serial number.

Method **To create a license information file (LIF)**

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.
- 3 Select Show all use cases on the left of the page.



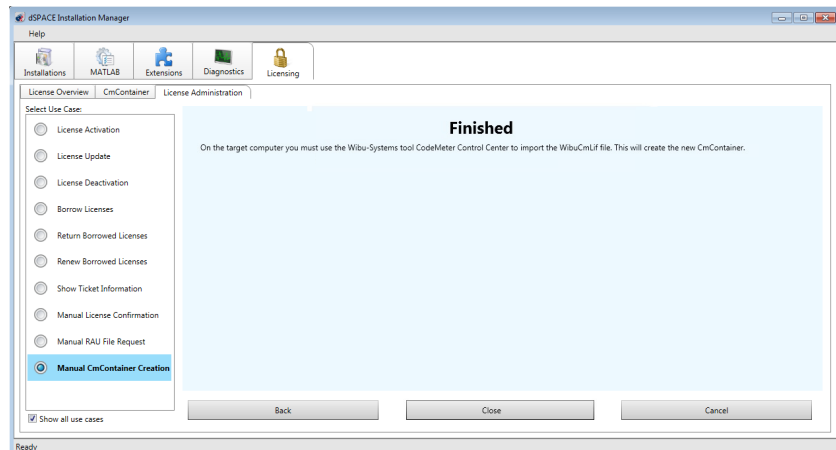
4 Select Manual CmContainer Creation and click Next.



5 Select Save License Information File and specify the path to save the LIF file (*.WibuCmLif), i.e., C:\dSPACE*.WibuCmLif.

6 Click Finish.

dSPACE Installation Manager displays the result as follows:



7 Click Close.

Result

You created and saved a license information file (*.WibuCmLif).

Next steps

- Transfer the LIF file (*.WibuCmLif) to the PC on which you want to create a CmActLicense container. Do this with a USB stick or via a network folder, for example.
- Create an RAC file (*.WibuCmRaC) on the basis of the LIF file. Use CodeMeter Control Center to do this. Refer to [How to Create an Initial RAC File](#) on page 133.

How to Request an RAU File for the New CmActLicense Container

Objective

After you created a new CmActLicense container, you have to activate the container with an RAU file (*.WibuCmRaU) that you have to request via dSPACE Installation Manager.

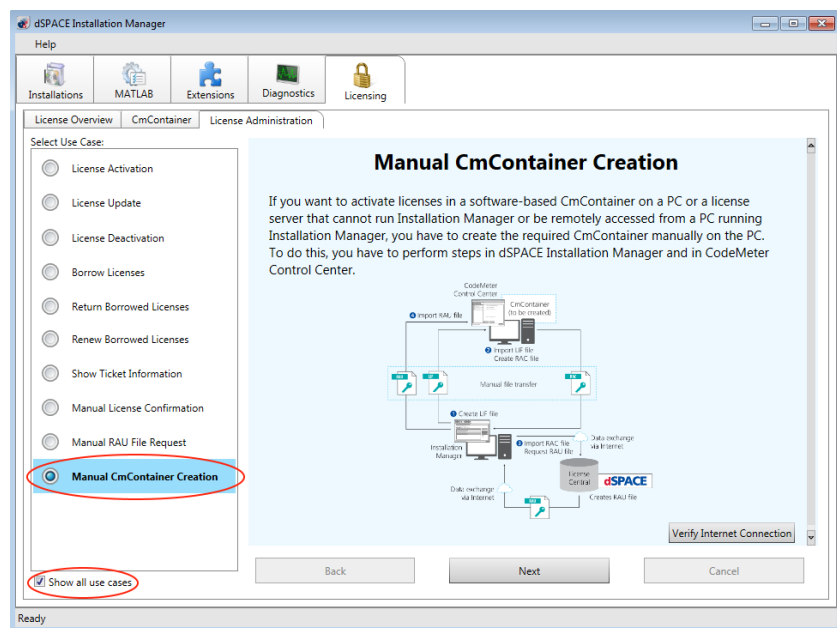
Preconditions

- An Internet connection for accessing dSPACE License Central exists.
- An RAC file (*.WibuCmRaC) exists and is available on the PC with dSPACE Installation Manager. Refer to [How to Create an Initial RAC File](#) on page 133.

Method

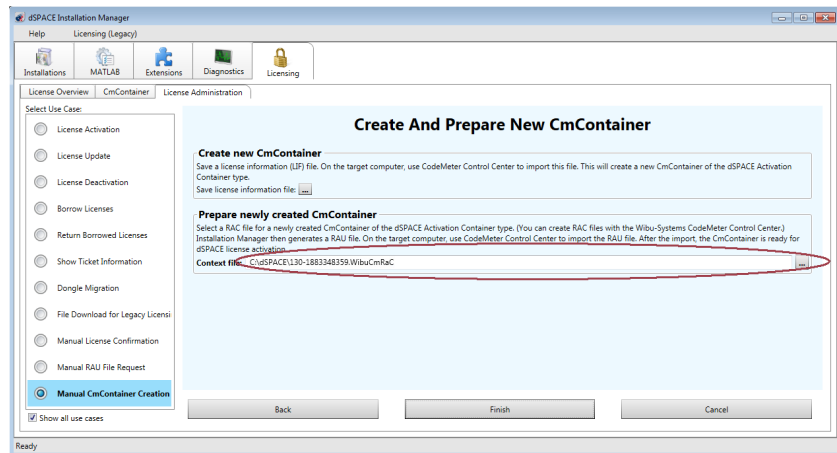
To request an RAU file for the new CmActLicense container

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager
dSPACE Installation Manager opens.
- 2 Click the Licensing – License Administration tab.
- 3 Select Show all use cases on the left of the page.

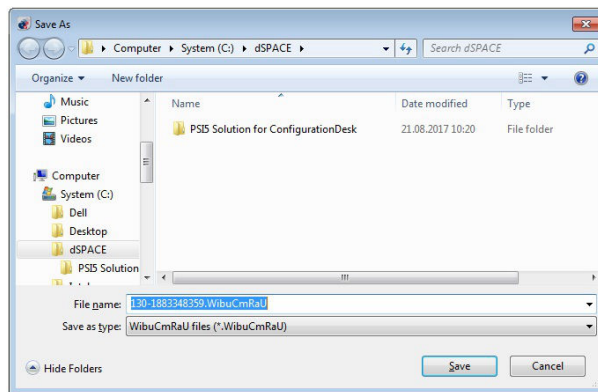


- 4 Select Manual CmContainer Creation and click Next.

- 5 Select Prepare newly created CmContainer and enter the path to the RAC file.



- 6 Click Finish to start the creation process.
- 7 Select a folder to store the RAU file (*.WibuCmRaU) in and click Save.

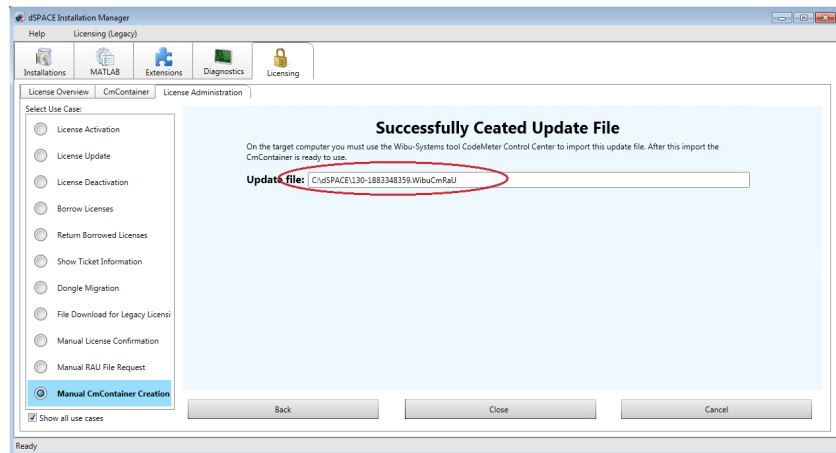


Note

Do not rename the file. The file name is the serial number of the CmContainer.

On the basis of the delivered RAC file, dSPACE Installation Manager creates an RAU file (*.WibuCmRaU) that contains information about the created CmContainer.

When the process is completed, dSPACE Installation Manager displays the result as follows:



8 Click Close.

Result

You received the requested RAU file (*.WibuCmRaU).

Next steps

- Transfer the RAU file (*.WibuCmRaU) to the PC with the CmActLicense container. Do this with an USB stick or via a network folder, for example.
- Update the CmActLicense container with the delivered RAU file (*.WibuCmRaU). Use CodeMeter Control Center to do this. Refer to [How to Update a CmContainer with an RAU File](#) on page 138.

Special License Handling Scenarios

Motivation Handling licenses is also required in some non-standard licensing scenarios.

Where to go from here

Information in this section

Workflow for License Activation for dSPACE Release 2017-A and Earlier.....	193
Workflow for Replacing a Missing CmContainer.....	194

Workflow for License Activation for dSPACE Release 2017-A and Earlier

Use cases

- You purchased a new dSPACE system with dSPACE Release 2024-A. However, you want to use dSPACE Release 2017-A or earlier with this dSPACE system.
- You purchased a new dSPACE product that you want to add to your existing dSPACE Release 2017-A installation.

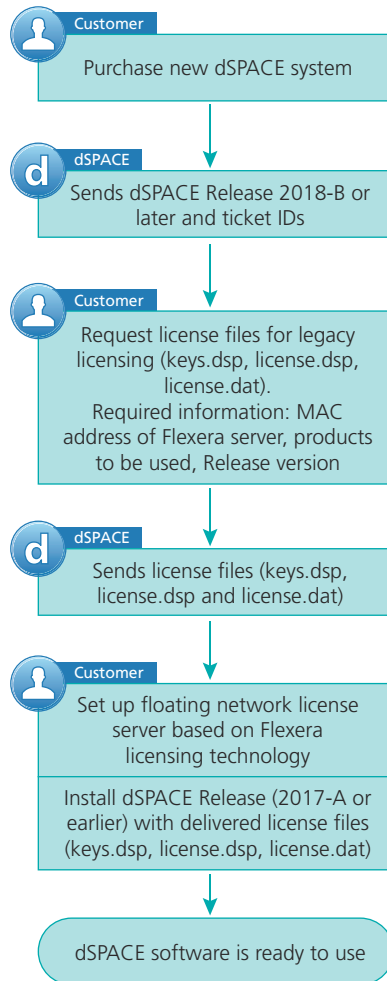
Workflow

Note

As of October 2019, the workflow for single-user licenses has changed. Refer to [Legacy Licensing Using CodeMeter Licenses](#) on page 197.

The following workflow shows the steps for using floating network licenses.

Floating Network License



Note

The dSPACE EULA does not allow FlexNet and CodeMeter license servers to provide the *same floating network license* in parallel. If you have any questions or encounter any problems, contact dSPACE Support.

Workflow for Replacing a Missing CmContainer

Use cases

- The CmDongle is lost or damaged.
- The CmActLicense container is no longer available, for example, because the hard disk of your PC is defective.

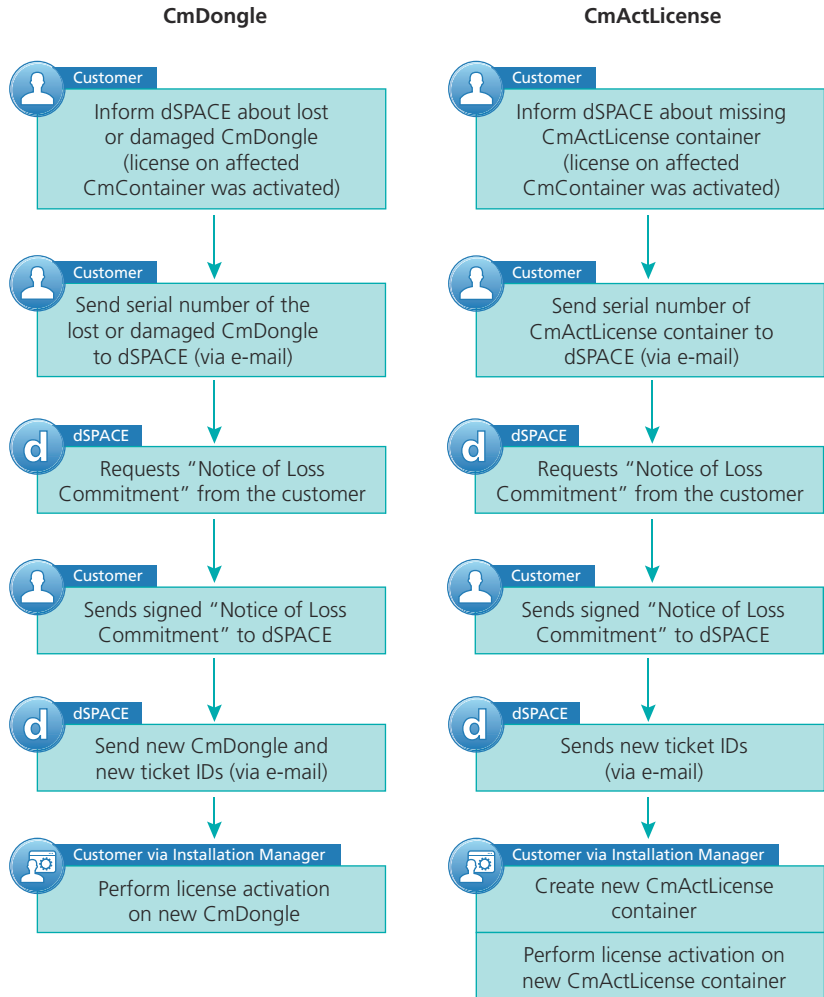
Focus of workflows

Tip

The workflows show the steps for online activation using dSPACE Installation Manager.

Workflow

There are separate workflows for the different types of CmContainer.



NOTICE

Make sure that you can always determine the serial number of all CmContainers you use. dSPACE strongly recommends to document the serial numbers in a place different from the PC on which they are used. dSPACE does not provide new CmDongles or new ticket IDs, if you are not able to determine the unique serial number and forward it to dSPACE. dSPACE agrees to the Notice of Loss / Commitment if it is possible to unambiguously identify the lost CmContainer. If you have any questions or encounter any problems, contact dSPACE Support.

Further information

ToDo	Basics	Instructions
License activation	Basics on License Management on page 12	How to Activate Licenses (Local Access to CmContainer) on page 60
		How to Activate Licenses (LAN Access to CmContainer) on page 64
		How to Activate Licenses (File-Based Access to CmContainer) on page 75

Legacy Licensing Using CodeMeter Licenses

Notes on Legacy Licensing Using CodeMeter Licenses

Motivation

If you own a software product from dSPACE Release 2017-B or later and you want to install and use a version of this product from a dSPACE Release earlier than 2017-B, you must have legacy license files and a CodeMeter CmContainer with activated licenses.

As of October 2019, you can use dSPACE Installation Manager 5.4 up to dSPACE Installation Manager 22.3 to download license files specifically prepared on the basis of the licenses you purchased. Legacy licensing using CodeMeter licenses maps former product versions to an available license so that you can install and use products from dSPACE Release 7.4 (2012-B) up to and including dSPACE Release 2017-A.

Discontinuation of legacy licensing technologies

As of dSPACE Release 2023-A, dSPACE Installation Manager no longer supports legacy licensing technologies (WibuKey from Wibu-Systems for dongle licenses and FlexNet from Flexera for floating network licenses). This means:

- dSPACE Installation Manager 23.1 (on dSPACE Release 2023-A) and later will support only the CodeMeter licensing technology introduced with dSPACE Release 2017-B.
- dSPACE Installation Manager 23.1 and later no longer provides the file download (keys.dsp and license.dsp) for legacy licensing based on CodeMeter licenses.
- Installing dSPACE Release 2023-A or later on the same PC as dSPACE Release 2017-A or earlier is no longer supported and therefore not recommended.
- As of dSPACE Release 2023-A, dSPACE License Manager (Legacy) is no longer shipped and installed with the dSPACE Installation Manager. The associated command line utilities are also discontinued, including in particular the `IMLicUtil.exe` and the `InstallationReporter.exe` utilities.
- If you still need to use the legacy licensing method, you must use the latest version of dSPACE Installation Manager that supports this technology. This is dSPACE Installation Manager 22.3. You can download dSPACE Installation Manager 22.3 from <https://www.dspace.com/go/IM>.

Compliance Check for Run-Time Version Licenses

Where to go from here

Information in this section

Basics on the Compliance Check for Run-Time Version Licenses.....	199
How to Determine and List All Licenses Required for Executing an OSA or an RTA File.....	202

Basics on the Compliance Check for Run-Time Version Licenses

Motivation

Real-time applications often contain models that need run-time version licenses, for example, the run-time version licenses for Automotive Simulation Models (ASM_..._RTV licenses). These licenses are required for downloading and executing a real-time application on the dSPACE real-time hardware, such as SCALEXIO.

As of dSPACE Release 2023-A, the dSPACE software performs a compliance check for such run-time version licenses when you download the real-time application. This check gives you the possibility to verify and fulfill the agreements in the dSPACE End User License Agreement (EULA).

Note

- With dSPACE Release 2023-A, dSPACE introduces the compliance check only for the required run-time version licenses for Automotive Simulations Models (ASM), for example, for the ASM Battery Library (run-time version) license. The check for run-time version licenses for other products will be included in later dSPACE Releases.
- Run-time version licenses for Automotive Simulations Models (ASM) are also required, if you want to execute offline simulation applications (OSAs) on the VEOS platform. An availability check for licenses required for OSAs has already been implemented since dSPACE Release 2017-B. This check is performed by VEOS when starting the simulation. If at least one of the required license is not available, executing the OSA is not possible.

Compliance check during download of RTAs

The compliance check is always performed when an RTA file is downloaded to a dSPACE platform. During the download, the license information contained in the RTA is evaluated and the required licenses are listed in the Message Viewer and written to the dSPACE Log. Checking the required licenses for availability is done using the standard functionality of the CodeMeter licensing technology.

Note

- The compliance check does not affect the run-time behavior of the application. There are no delay times during run-time, even if licenses are not available.
- Even if at least one of the requested licenses is not available, the RTA file is downloaded to the dSPACE platform. However, the download is delayed for 10 seconds and a warning message is displayed in the Message Viewer and in the dSPACE Log. This shows you that you are not working in compliance with the agreements with dSPACE. For details, see below.
- The download delay time used when the required licenses are not available might be increased in subsequent dSPACE Releases.

All required licenses are available If all required licenses are available, the download is performed directly without delay. The following example shows the Message Viewer with three licenses that are required. Their status is Available.

Severity	Module	Time	Message
Info	Platform Management	16:42:14.527	Starting activity of type 'Load Application'...
Info	LicenseChecker	16:42:14.898	Product: ASM_L_EC_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1028, Status: Available
Info	LicenseChecker	16:42:14.898	Product: ASM_L_ENV_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1044, Status: Available
Info	LicenseChecker	16:42:14.898	Product: ASM_L_VD_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1064, Status: Available
Warning	SCALEXIO	16:42:14.910	You tried to load an application to RAM memory. However, one or more processing units of your registration platform...
Info	SCALEXIO	16:42:15.350	Loading application 'C:\Scalexio\ASM_VehicleDynamics_Hybrid.rta' to platform SCALEXIO...
Info	Platform Management	16:42:15.350	The application does not use I/O function blocks with failure simulation allowed. Failure simulation is disabled.
Info	Platform Management	16:42:16.298	The loaded application ASM_VehicleDynamics_Hybrid on platform SCALEXIO has not been started.
Info	Platform Management	16:42:16.300	Application download completed.
Info	SCALEXIO	16:42:16.318	Download of the following real-time application is succeeded: C:\Scalexio\ASM_VehicleDynamics_Hybrid.rta.
Info	Platform Management	16:42:16.249	Registered platform messages:
Info	Platform Management	16:42:16.253	Platform SCALEXIO Real-Time PC messages:
Info	SCALEXIO Real-Time PC	16:42:16.255	Application loaded by host 'VW-PREETAMM' (10.100.160.138). [390179,946672192]
Info	Platform Management	16:42:17.257	Platform SCALEXIO Real-Time PC messages:
Info	SCALEXIO Real-Time PC	16:42:17.257	Application loaded. [390180,883503857]
Info	SCALEXIO Real-Time PC	16:42:17.257	Application stopped. [390180,925955552]

Note: If you use a floating network license with a linger time, the license remains reserved for the requesting PC until the linger time has elapsed.

At least one required license is not available If at least one license is not available, the following happens:

- The required run-time version licenses for the download of the RTA are listed in the Message Viewer. For each unavailable license, a warning message (entry in blue font) with the status Not available is displayed.
- After a delay time of 5 seconds, a second loop begins. This loop also contains a delay time of 5 seconds.

Note

Keep in mind, that this delay time will be increased in subsequent dSPACE Releases.

- The download finally takes place despite the missing license.

The following example shows the Message Viewer with a license that is required but has the status Not Available (entry in blue font). The Message Viewer also displays the two loops of the compliance check.

Product: messages

0 Errors 3 Warnings 19 Messages

Severity	Module	Time	
Info	Platform Management	16:43:32.482	Starting activity of type 'Load Application'...
Info	LicenseChecker	16:43:32.606	Product: ASM_L_EC_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1028, Status: Available
Info	LicenseChecker	16:43:32.606	Product: ASM_L_ENV_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1044, Status: Available
Warning	LicenseChecker	16:43:32.607	Product: ASM_L_VD_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1064, Status: NotAvailable
Info	LicenseChecker	16:43:32.607	One or more license is not available. Retrying 1/2...
Info	LicenseChecker	16:43:37.725	Retrying 2/2...
Info	LicenseChecker	16:43:42.727	Product: ASM_L_EC_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1028, Status: Available
Info	LicenseChecker	16:43:42.727	Product: ASM_L_ENV_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1044, Status: Available
Warning	LicenseChecker	16:43:42.727	Product: ASM_L_VD_RTV, Release Date: 30.10.2022, Count: 1, ProductCode: 1064, Status: NotAvailable
Info	LicenseChecker	16:43:42.727	Loading application anyway.
Warning	SCALEXIO	16:43:42.738	You tried to load an application to RAM memory. However, one or more processing units of your registration platform
Info	SCALEXIO	16:43:42.999	Loading application 'C:\Scalexio\ASM_VehicleDynamics_Hybrid.rta' to platform SCALEXIO...
Info	Platform Management	16:43:42.999	The application does not use I/O function blocks with failure simulation allowed. Failure simulation is disabled.
Info	Platform Management	16:43:43.921	The loaded application ASM_VehicleDynamics_Hybrid on platform SCALEXIO has not been started.
Info	Platform Management	16:43:43.921	Application download completed.
Info	SCALEXIO	16:43:44.081	Download of the following real-time application is succeeded: C:\Scalexio\ASM_VehicleDynamics_Hybrid.rta.
Info	Platform Management	16:43:43.309	Registered platform messages:
Info	Platform Management	16:43:43.309	Platform SCALEXIO Real-Time PC messages:

Note: If you use a floating network license with a linger time, the license remains reserved for the requesting PC until the linger time has elapsed.

Notes on using floating network licenses

If you use floating network licenses, it is possible that a license is displayed with the Not available status, although you have purchased this license. It is possible that the license is not accessible because it is/was used by another PC and is therefore locked. Note that floating network licenses usually have a linger time of 30 minutes.

Using the CmdLoader.exe command line utility

You can also download the RTA file to a dSPACE platform via the `CmdLoader.exe` command line utility. In this case, the compliance check is performed in the same way as when you download the application with the Platform Manager component in the dSPACE software products. The messages are then displayed in the Command Prompt window.

Determining required licenses offline via command line utility

The `CalculateLicenseDemand.exe` command line utility allows you to determine and list the required run-time version licenses offline, without having access to a dSPACE hardware system. Refer to [How to Determine and List All Licenses Required for Executing an OSA or an RTA File](#) on page 202.

How to Determine and List All Licenses Required for Executing an OSA or an RTA File

Objective

The dSPACE Release contains the `CalculateLicenseDemand.exe` command line utility. This is an independent utility that lists all run-time version licenses required to execute a real-time application (RTA) on a dSPACE real-time

hardware, such as SCALEXIO, or an offline simulation application (OSA) on the VEOS platform.

This allows you to determine the required run-time version licenses (e.g., the ASM_..._RTV licenses) offline, without having access to VEOS or a dSPACE hardware system.

Affected licenses and RTA/OSA files

With dSPACE Release 2024-A, the command line utility can only list the required run-time version licenses for Automotive Simulation Models (ASM), for example, the ASM Battery Library (run-time version) license.

RTA and OSA files built with the following dSPACE Releases are prepared for this license check and the `CalculateLicenseDemand.exe` utility can therefore list the required run-time version licenses:

- RTAs files built with dSPACE Release 2022-A and later.
- OSA files built with dSPACE Release 2017-B and later.

Note

Checking and listing run-time version licenses for other products will be included in subsequent dSPACE Releases.

Accessing the CalculateLicenseDemand.exe command line utility

After installation of the dSPACE software, the utility is located in the `%ProgramFiles%\<dSPACE Product>\bin` folder of certain installed dSPACE products, for example, ModelDesk, ControlDesk, ConfigurationDesk.

You can access the utility via a Command Prompt window.

Options of the command line utility

The following options are available for the `CalculateLicenseDemand.exe` command line utility.

Option	Purpose
-Help	Lets you display the help information on the command line utility.

Method

To list all licenses required for executing an OSA or an RTA file

- 1 Open a Command Prompt window.

Tip

Administrator rights are not required.

- 2 In the Command Prompt window, change to the folder with the `CalculateLicenseDemand.exe`.
After software installation, the utility is located in the `%ProgramFiles%\<dSPACE Product>\bin` folder of certain installed dSPACE products, for example, ModelDesk, ControlDesk, ConfigurationDesk.

3 Enter the following command according to your use case:

- You want to examine a file that is located in the same folder as the command line utility:

```
CalculateLicenseDemand.exe <RTA or OSA file name>
```

- You want to examine a file that is located in a different folder. The command must include the file name and its path:

```
CalculateLicenseDemand.exe <Path name> <RTA or OSA file name>
```

- You want to examine several files at once:

```
CalculateLicenseDemand.exe <RTA or OSA file name> <RTA or OSA file name>
```

- You want to examine a file and write the result to a file:

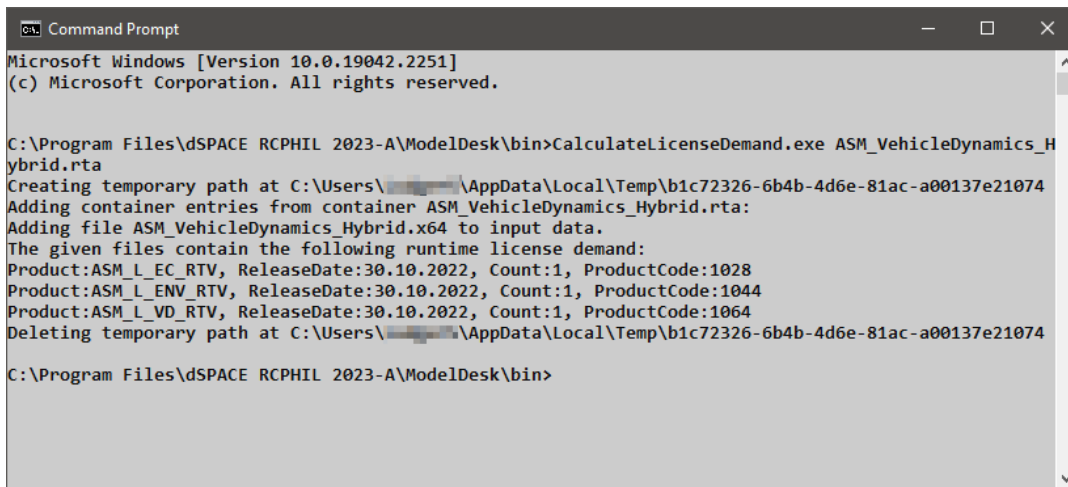
For this use scenario, you have to open a Command Prompt window with the Run as administrator option.

```
CalculateLicenseDemand.exe <RTA or OSA file name> >  
<MyResultfile.txt>
```

4 Press Enter.

Result

The CalculateLicenseDemand.exe command line utility displays the required licenses as shown in the following example.



You can now check whether you have purchased the listed licenses. If not, you have to order them to comply with the dSPACE EULA and to avoid time delays when downloading the RTA files to the dSPACE hardware platform.

Description of the entries in the output result

Option	Purpose
Product	The order number of the license.
Release Date	The release date of the ASM model libraries used in RTA or OSA files. A valid license must contain a maintenance end date greater than the given release date. The maintenance end date limits the usable versions of a software product. All product versions released before the maintenance end date

Option	Purpose
	can be executed. The initial maintenance ends six months after the delivery date of the product but can be extended by purchasing SMS contracts. For details, refer to Validity of CodeMeter Licenses on page 15.
Count	The required quantity of the license.
Product Code	The product code identifies the dSPACE software product associated with the license entry via a unique code.

Appendix

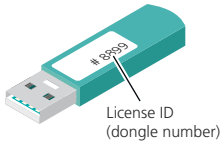
Appendix: Dongle Types

Introduction

Below you find descriptions of all dongle types mentioned in this document as well as their relevant features.


Type 1

WibuKey dongles

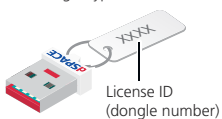
Design	Description
<p>WibuKey dongle Type 1</p>  <p>License ID (dongle number)</p>	<ul style="list-style-type: none"> ▪ Have the original green design. ▪ Have 16-bit dongle numbers smaller than 65536. ▪ Have a sticker with the dongle number. ▪ Work with the legacy licensing method using <code>license.dsp</code> and <code>keys.dsp</code> files. ▪ Suitable for the legacy licensing method for all Releases up to and including dSPACE Release 2017-A. ▪ Cannot be used for dSPACE Release 2017-B and later. ▪ As of dSPACE Release 2023-A: Cannot be migrated to a suitable CmDongle via dSPACE Installation Manager. The WibuKey dongle must be replaced by dSPACE. For details, refer to http://www.dspace.com/go/DongleReplacement.

Type 2

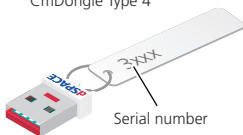
CodeMeter dongles 2-xxx, delivered 12/2014 - 9/2015

Design	Description
<p>CmDongle Type 2</p>  <p>License ID (dongle number)</p>	<ul style="list-style-type: none"> ▪ Have the white design. ▪ Have 16-bit dongle numbers smaller than 65536. ▪ Have a small aluminum tag with the engraved dongle number. ▪ Work with the legacy licensing method using <code>license.dsp</code> and <code>keys.dsp</code> files. ▪ Suitable with legacy licensing for dSPACE Release 3.5 on Windows XP SP3 up to and including dSPACE Release 2017-A. ▪ Cannot be used for dSPACE Release 2017-B and later. ▪ As of dSPACE Release 2023-A: Cannot be migrated to a suitable CmDongle via dSPACE Installation Manager. The CmDongle (Type 2) must be replaced by dSPACE. For details, refer to http://www.dspace.com/go/DongleReplacement.

Type 3 CodeMeter dongles 3-xxx, delivered 9/2015 – 12/2017


Design	Description
<p>CmDongle Type 3</p> 	<ul style="list-style-type: none"> ▪ Have the white design with LEDs and a red plastic inlay. ▪ Have 16-bit dongle numbers smaller than 65536. ▪ Have a small aluminum tag with the engraved dongle number. ▪ Work with the legacy licensing method using <code>license.dsp</code> and <code>keys.dsp</code> files. ▪ Suitable for legacy licensing for dSPACE Release 3.5 on Windows XP SP3 up to and including dSPACE Release 2017-A. ▪ Migration is required by using an older version of dSPACE Installation Manager (from 5.0 ... to 22.3). ▪ Can then also be used with CodeMeter licensing. ▪ Suitable for CodeMeter licensing as of dSPACE Release 2017-B.

Type 4 CodeMeter dongles 3-xxx, delivered 1/2018 - 12/2021

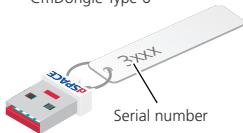
Design	Description
<p>CmDongle Type 4</p> 	<ul style="list-style-type: none"> ▪ Have the white design with LEDs and a red plastic inlay. ▪ Have dongle numbers greater than 70000. ▪ Have large aluminum tag with a sticker stating the CmDongle serial number. ▪ Work for legacy licensing method using <code>license.dsp</code> and <code>keys.dsp</code> files. ▪ Suitable for legacy licensing for dSPACE Releases 2013-B ... 2017-A¹⁾ ▪ Suitable for CodeMeter licensing as of dSPACE Release 2017-B.

¹⁾ The lower limit of dSPACE Release 2013-B is due to the License Manager version used in all products in earlier dSPACE Releases. The License Manager version was limited to handling 16-bit dongle numbers.

Type 5 CodeMeter dongles 3-xxx, delivered as the 2-xxx replacement

Design	Description
<p>CmDongle Type 5</p> 	<ul style="list-style-type: none"> ▪ Were delivered in Q1/2017 to replace existing CmDongles (Type 2). ▪ Come without an embedded WibuKey ID. ▪ Do not have an aluminum tag. ▪ Receive the embedded WibuKey ID from the CmDongle (Type 2) during dongle migration. Note: As of dSPACE Release 2023-A, the CmDongles (Type 2) cannot be migrated to a suitable CmDongle via dSPACE Installation Manager. The CmDongle (Type 2) must be replaced by dSPACE. For details, refer to http://www.dspace.com/go/DongleReplacement. ▪ Have to receive their aluminum tag with engraved dongle number from the migrated CmDongle (Type 2). ▪ Are identical to type 3 dongles after dongle migration.

Type 6 CodeMeter dongles 3-xxx, delivered with SMS updates to dSPACE Release 2017-B or later

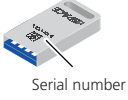
Design	Description
<p>CmDongle Type 6</p> 	<ul style="list-style-type: none"> ▪ Were delivered as of Q1/2018 to replace existing WibuKey dongles. ▪ Have a large aluminum tag with a sticker with the CmDongle serial number. ▪ Come without an embedded WibuKey ID. ▪ Receive the embedded WibuKey ID from the WibuKey dongle during dongle migration. Note: As of dSPACE Release 2023-A, the WibuKey dongles (Type 1) cannot be migrated to a suitable CmDongle

Design	Description
	<p>via dSPACE Installation Manager. The WibuKeyDongle (Type 1) must be replaced by dSPACE. For details, refer to http://www.dspace.com/go/DongleReplacement.</p> <ul style="list-style-type: none"> Are identical to type 3 CmDongles after dongle migration. The only difference is the number on the aluminum tag, which is the serial number instead of the dongle number.

The same procedure is applied if WibuKey dongles (Type 1) were not subject to the SMS update in Q1/2018, but are later updated to dSPACE Release 2017-B or later.

Type 7

CodeMeter dongles 3-xxx, delivered 1/2022 - present

Design	Description
<p>CmDongle Type 7</p>  <p>Serial number</p>	<ul style="list-style-type: none"> Have a metal design with a blue plastic inlay. Do not have an aluminum tag. The CmDongle serial number is printed on the the metal housing near the dSPACE logo. Come without an embedded WibuKey ID. Can receive the embedded WibuKey ID from an old dongle during dongle migration. <p>Note: As of dSPACE Release 2023-A, the WibuKey dongles (Type 1) and the CmDongles (Type 2) cannot be migrated to a suitable CmDongle Type 7 via dSPACE Installation Manager. The dongles must be replaced by dSPACE. For details, refer to http://www.dspace.com/go/DongleReplacement.</p> <ul style="list-style-type: none"> Work for legacy licensing method using <code>license.dsp</code> and <code>keys.dsp</code> files. Only if the WibuKey ID was previously stored on the CmDongle via dongle migration. Suitable for legacy licensing using CodeMeter licenses to receive <code>license.dsp</code> and <code>keys.dsp</code> for dSPACE Releases 2013-B ... 2017-A. Suitable for CodeMeter licensing as of dSPACE Release 2017-B.

Dongle types and supported dSPACE Releases

Dongle Type	Supported dSPACE Releases
Type 1	All Releases up to and including dSPACE Release 2017-A.
Type 2	dSPACE Release 3.5 ... dSPACE Release 2017-A.
Type 3	dSPACE Release 3.5 ... dSPACE Release 2017-A and later.
Type 4	<p>dSPACE Release 2013-B ... dSPACE Release 2017-A and later.</p> <ul style="list-style-type: none"> All CmDongles delivered by the end of 2017, including their migrated replacements, support all Releases as of dSPACE Release 3.5. All CmDongles delivered as of 1/2018 support dSPACE Release 2013-B and later.
Type 7	dSPACE Release 2013-B and later

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