

dSPACE Installation Manager

Managing dSPACE Software Installations

Release 2021-A – May 2021

How to Contact dSPACE

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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: <http://www.dspace.com/go/locations>
- For countries not listed, contact dSPACE GmbH in Paderborn, Germany.
Tel.: +49 5251 1638-941 or e-mail: support@dspace.de

You can also use the support request form: <http://www.dspace.com/go/supportrequest>. If you are logged on to mydSPACE, you are automatically identified and do not need to add your contact details manually.

If possible, always provide 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 <http://www.dspace.com/go/patches> for software updates and patches.

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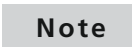



This document shows you how to manage all the dSPACE installations on your host PC with dSPACE Installation Manager. Managing means, for example, activating or deactivating installations, decrypting the encrypted archives of the installed software and connecting dSPACE software installations to MATLAB® software.

Required knowledge

Knowledge in handling the host PC and the Microsoft operating system is required.

Symbols

dSPACE user documentation uses the following symbols:

Symbol	Description
	Indicates a hazardous situation that, if not avoided, will result in death or serious injury.
	Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.
	Indicates a hazard that, if not avoided, could result in property damage.
	Indicates important information that you should take into account to avoid malfunctions.
	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.
	Precedes 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 folders

Some software products use the following special folders:

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

`%PROGRAMDATA%\dSPACE\<InstallationGUID>\<ProductName>`

or

`%PROGRAMDATA%\dSPACE\<ProductName>\<VersionNumber>`

Documents folder A standard folder for user-specific documents.

`%USERPROFILE%\Documents\dSPACE\<ProductName>\<VersionNumber>`

Local Program Data folder A standard folder for application-specific configuration data that is used by the current, non-roaming user.

`%USERPROFILE%\AppData\Local\dSPACE\<InstallationGUID>\<ProductName>`

Accessing dSPACE Help and PDF Files


After you install and decrypt 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**

dSPACE Help (Web) You can access the Web version of dSPACE Help at www.dspace.com/go/help.

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

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

Introduction to dSPACE Installation Manager

Objective	dSPACE Installation Manager handles all the dSPACE installations available on your host PC and provides detailed information, for example, on properties and installed products.
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Where to go from here**Information in this section**

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Working with dSPACE Installation Manager

Purpose

dSPACE Installation Manager lets you manage all the dSPACE installations on your host PC. For example, it supports connecting a dSPACE installation to MATLAB® software, provides license management, and has a diagnostics feature that collects information on your installation for you to send to dSPACE Support if necessary.

dSPACE Installation Manager is installed automatically during dSPACE software installation.

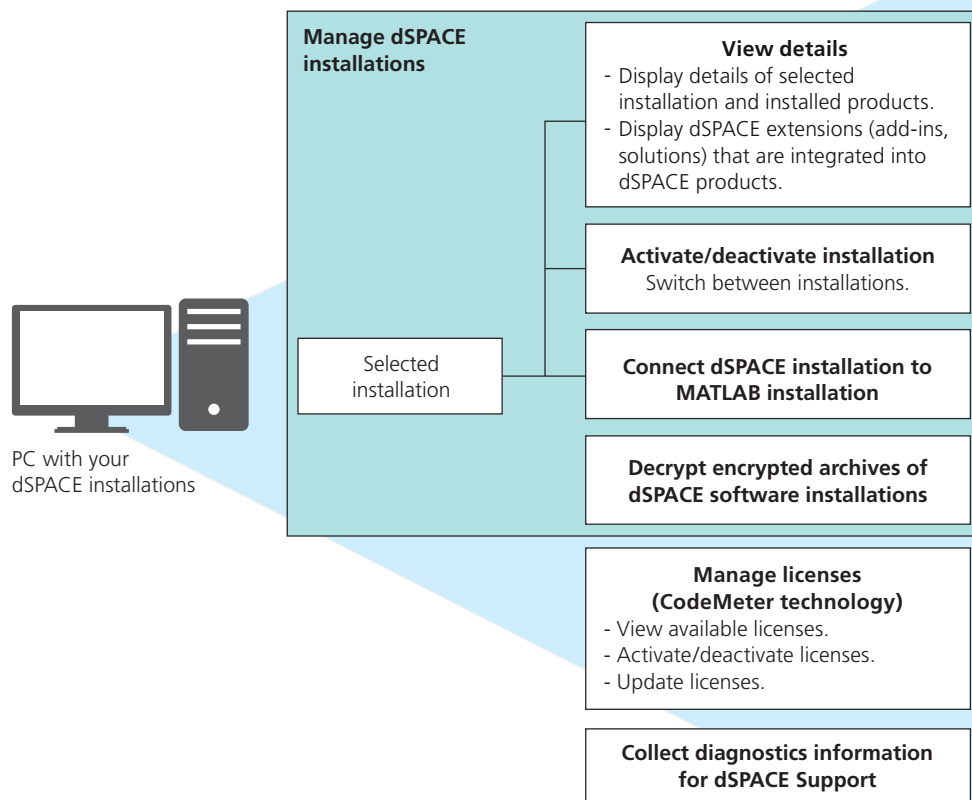
Restriction

Note

- You cannot use dSPACE Installation Manager to install dSPACE software or modify dSPACE installations (add/remove software products) on your host PC. Use dSPACE Setup for installing additional software components instead.
- Since dSPACE Release 7.2 (November 2011), it is not possible to remove dSPACE software via dSPACE Installation Manager.

Features

The following illustration provides an overview of the features of dSPACE Installation Manager:



Viewing details You can use dSPACE Installation Manager to get an overview of all available dSPACE software installations and details on installed products. Refer to [Viewing Details of dSPACE Software Installations](#) on page 15.

Activating a dSPACE installation One of the installations of each dSPACE software product is the *active installation*. If your system contains more than one installation (from different Releases or multiple instances of the same Release), you can activate another installation manually. The previous active installation is then deactivated automatically. You can also deactivate the *active installation* manually without activating another one.


Tip


Not every dSPACE software product needs to be activated before use. For example, this function is not available for installations of TargetLink and Model Compare.

The effects of activating a dSPACE installation depend on the software product. For details, refer to [Activating and Deactivating dSPACE Installations](#) on page 27.


Connecting dSPACE installation to MATLAB dSPACE Installation Manager provides an easy way to connect your dSPACE installations (that require working with MATLAB) to a MATLAB installation. All the available MATLAB installations on your host PC and their integration states are listed. For more information, refer to [Connecting dSPACE Installations to MATLAB](#) on page 35.

Decrypting encrypted archives of dSPACE installations Specific parts of the dSPACE software, the documentation, demo models, and .NET code are installed in encrypted archives on the end user's PC. To use and to work with them, you have to decrypt the encrypted archives of the installed products. Refer to [Decrypting Encrypted Archives of dSPACE Software Installations](#) on page 19.

Managing licenses (CodeMeter technology) dSPACE Installation Manager helps you manage the licenses required for using dSPACE products, for example, to activate licenses. As of dSPACE Release 2017-B, it supports the CodeMeter licensing technology. For more information, refer to [Working with CodeMeter Licensing Technology](#) .

To manage licenses for software installations from dSPACE Release 2017-A and earlier, you have to use dSPACE License Manager (Legacy). This is a separate tool that is always installed together with dSPACE Installation Manager 5.0 and later. For more information, refer to [Working with Legacy Licensing Technologies](#) .

Getting diagnostics information for contacting dSPACE

Support dSPACE Installation Manager collects information about the dSPACE software environment on your PC and saves it to a ZIP file. This you can send to the dSPACE Support for diagnostic purposes. For more information, refer to [Providing Diagnostic Information](#) .

Required user rights

To activate or to deactivate a dSPACE installation and to integrate dSPACE software into a MATLAB installation, you need administrator rights.

Working in restricted mode

Several actions lead to restrictions. In this case, you can use only a subset of the features of dSPACE Installation Manager. Depending on the actions you performed in the Installation Manager, restrictions can differ. dSPACE Installation Manager informs you about restricted mode as well as the actions and features you cannot use.

For more information on two scenarios for working with restricted Installation Manager functionality, refer to:

- [Working Without Administrator Rights](#) on page 10
- [Working While a Restart Is Pending](#) on page 12

Required versions

The required version of dSPACE Installation Manager depends on the latest version of dSPACE software installed on your system.

- As of dSPACE Release 2021-A, you have to use at least dSPACE Installation Manager 5.7. This version is provided with dSPACE Release 2021-A.
- dSPACE Installation Manager is downward-compatible with the last eight dSPACE Releases. So you can always use its latest version to manage the installations on your host PC. However, some features which are necessary to manage earlier dSPACE Releases are available only for those installations which require the specific feature.

You can download the most recent version of dSPACE Installation Manager from <http://www.dspace.com/go/imupdate>.

Using dSPACE Release 2013-A and earlier dSPACE Installation Manager as of version 5.0 is available only as a 64-bit variant and must not be installed on the same PC that is used to run dSPACE Releases 2013-A and earlier.

For various reasons it may be necessary to downgrade dSPACE Installation Manager. For the required steps, refer to the following FAQ <http://www.dspace.com/faq?363>.

Using dSPACE Release 2013-B and later Depending on the products you are using, some limitations currently apply for dSPACE Release 2013-B and later as well. Before you install dSPACE Installation Manager 5.0 (and later) separately or together with the dSPACE Release, refer to the following FAQ <http://www.dspace.com/faq?362>.

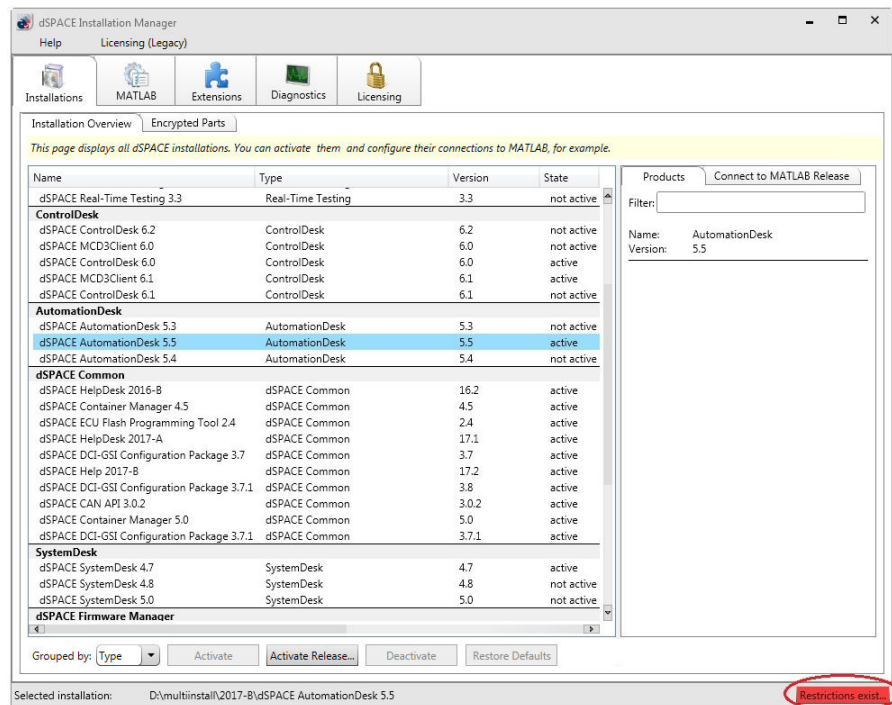
Working Without Administrator Rights

Motivation

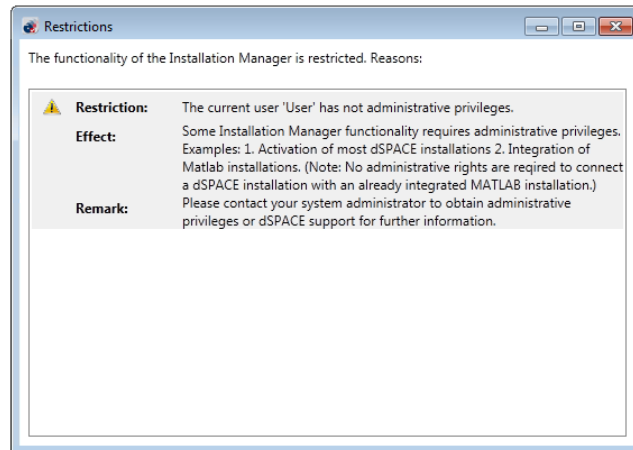
You can work with dSPACE Installation Manager without administrator rights. dSPACE Installation Manager then runs in restricted mode.

Messages provided by dSPACE Installation Manager

When you start dSPACE Installation Manager, a message in the status bar indicates that dSPACE Installation Manager is in restricted mode. Refer to the following illustration:



You can click Restrictions exist... to see which actions are unavailable in dSPACE Installation Manager.



Actions you can perform without administrator rights

You can perform every action that does not explicitly need administrator rights. For example:

- View dSPACE installations and installed products.
- Decrypt encrypted archives of dSPACE software installations.
- Connect a dSPACE installation to a MATLAB installation.
- Manage licenses (e.g., for example, activate or update licenses).
- Collect installation and product information for contacting dSPACE Support.

Tasks that require administrator rights

You cannot perform any task that explicitly needs administrator rights. For example:

- Activate or deactivate dSPACE installations (the buttons for these tasks are grayed out on the Installation Overview page).
- Integrate dSPACE software into a MATLAB installation.

Working While a Restart Is Pending

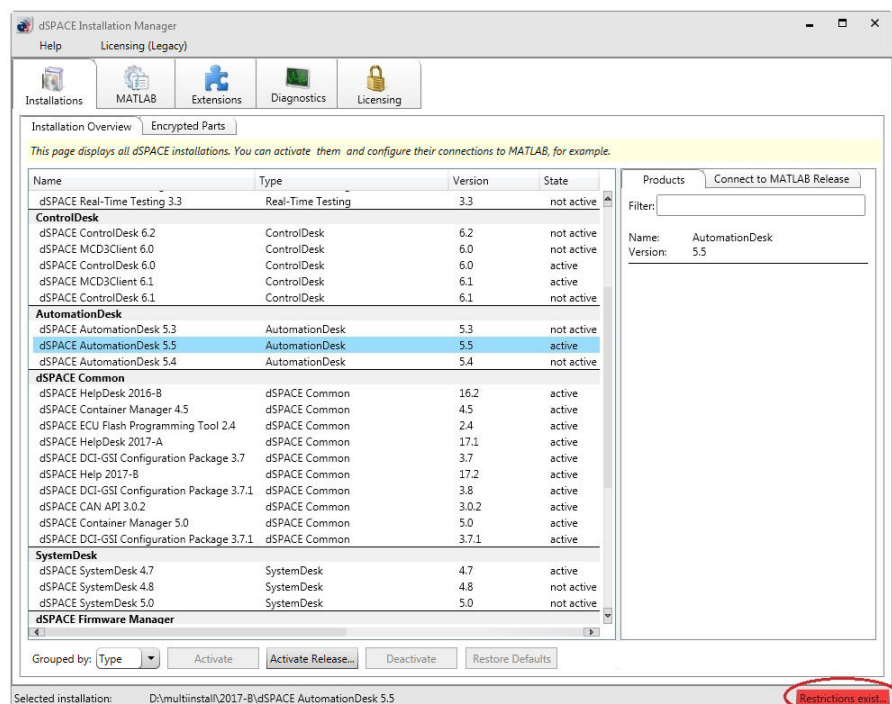
Motivation

You can work with dSPACE Installation Manager while a restart is pending. dSPACE Installation Manager then runs in restricted mode.

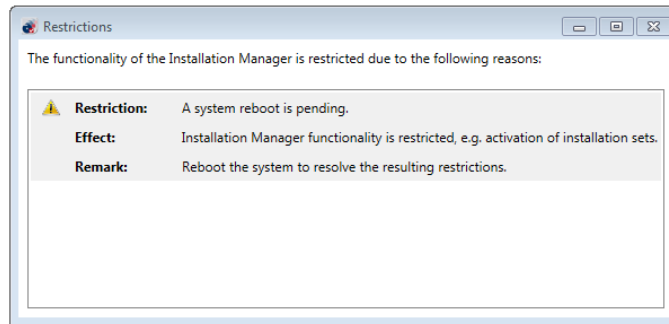
Messages provided by dSPACE Installation Manager

When you start dSPACE Installation Manager, it informs you whether it is running in restricted mode.

For example, if you added dSPACE software to your installation with dSPACE Setup, you are asked to restart your system. If you do not restart your system, dSPACE Installation Manager runs in restricted mode. This is indicated in the status bar:



You can click **Restrictions exist...** to see which actions are unavailable in dSPACE Installation Manager.



Possible actions while a restart is pending

You can perform every task that does not modify the installed software, such as:

- View dSPACE installations and installed products.
- Decrypt the encrypted archives of dSPACE software installations.
- Integrate dSPACE software into a MATLAB installation.
- Manage licenses (e.g., activate or update licenses).
- Collect installation and product information for contacting dSPACE Support.

Unavailable actions while a restart is pending

You cannot perform any task that modifies the installed software, such as:

- Activate or deactivate dSPACE installations (the buttons for these tasks are grayed out on the Installations page).
- Connect a dSPACE installation to a MATLAB installation.

Viewing Details of dSPACE Software Installations

Where to go from here

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How to View dSPACE Installations and Installed Products

Objective

To get an overview of your available dSPACE software installations and installed products, you can use dSPACE Installation Manager.

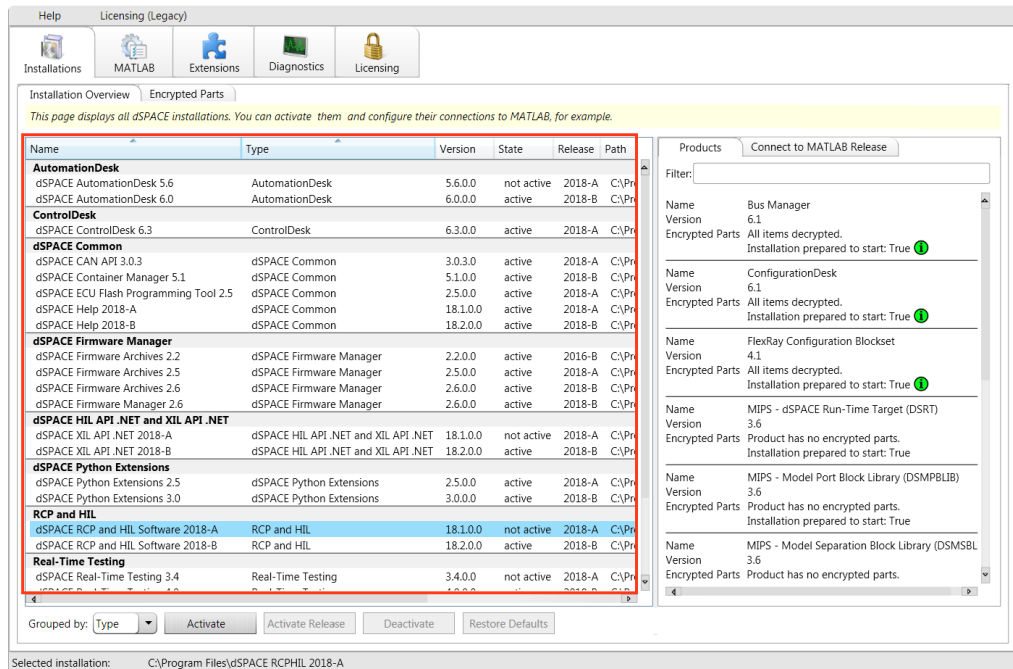
Method

To view dSPACE installations and installed products

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

2 Click the Installations – Installation Overview tab.

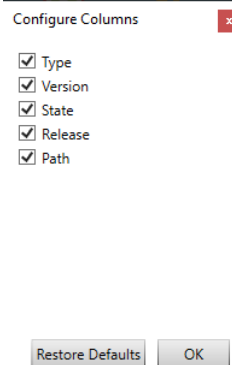
The page lists all dSPACE installations on your host PC as shown below.



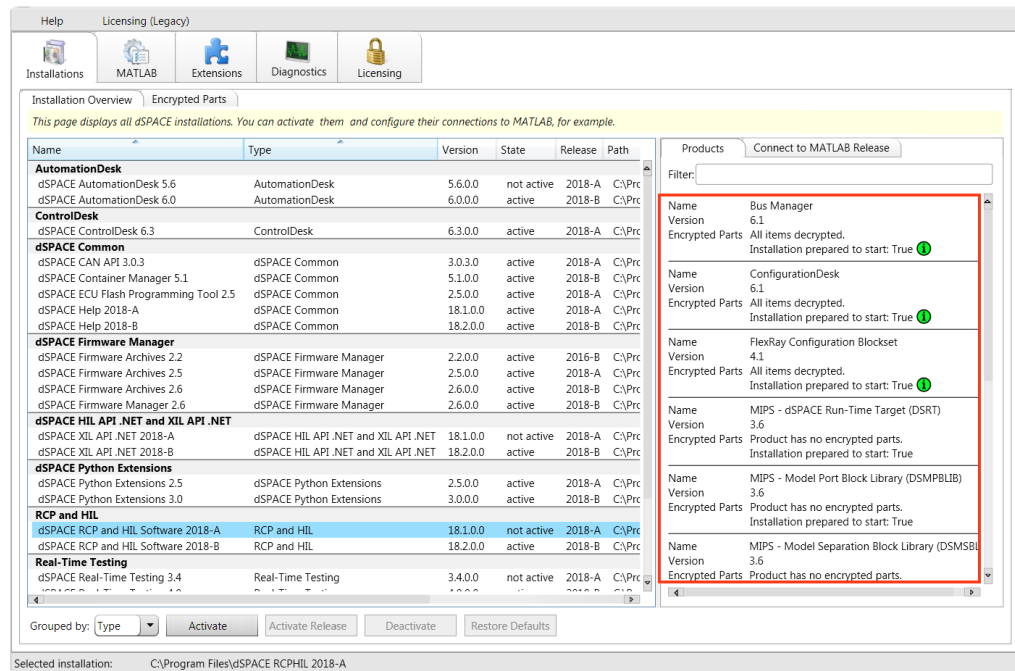
The available installations are displayed with their version numbers, installation paths, and states (active or not active).

3 Right-click the Installation Overview page and select Configure Columns from the context menu.

4 In the Configure Columns dialog, select the attributes you want to display.



5 Select an installation from the list.



Further details on the selected installation are displayed on separate pages on the right of the Installation Overview page. The following information is available:

Page	Description
Products	<p>Lists all the dSPACE products, including their version information, and status information on the encrypted parts of the selected software installation.</p> <p>Enter a product name in the Filter text field to show only specific entries.</p> <p>For installations as of dSPACE Release 2017-B, the Products page provides information about the product state related to out-of-date and decrypted items. For details on the states, refer to Basics on Decryption on page 19.</p>
Connect to MATLAB Release	<p>Lets you connect the selected dSPACE installation to one or more MATLAB installations and select the preferred MATLAB connection, if applicable.</p> <p>This page is displayed only for dSPACE installations that support working with MATLAB.</p> <p>For more information on connecting to MATLAB, refer to Introduction to Connecting a MATLAB Installation on page 35.</p>
Extensions	<p>Lists all the extensions (add-ins, solutions) of the selected software installation with their version number and a short description.</p> <p>The Extensions page is displayed only for dSPACE installations that contain an integrated extension.</p>

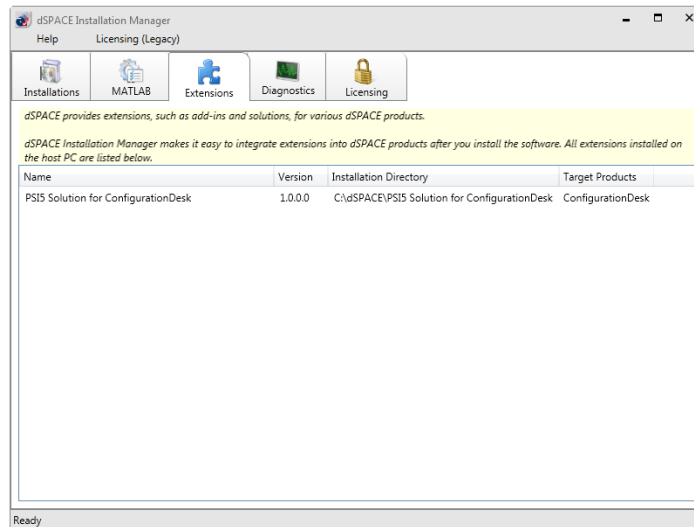
Viewing Installed dSPACE Software Extensions (Add-ins, Solutions)

Handling extensions

In addition to products, dSPACE provides various add-ins and solutions. After installing them, dSPACE Installation Manager displays them.

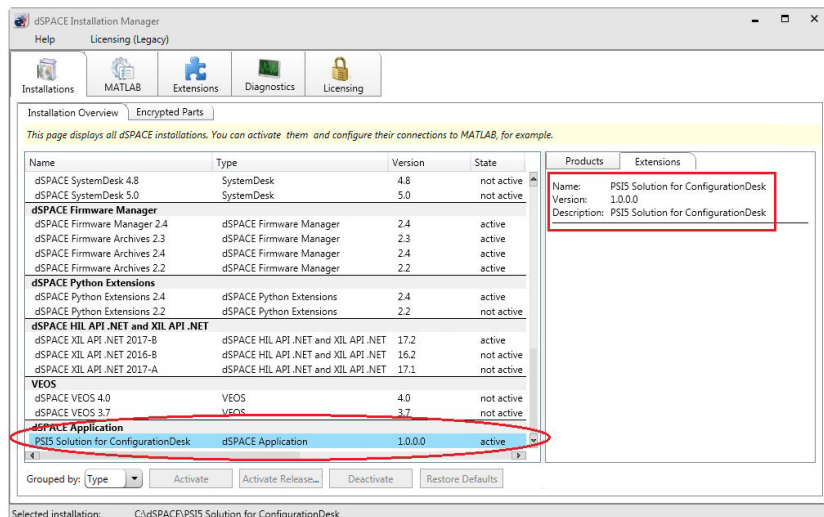
Viewing all installed extensions

All extensions installed on your host PC are listed on the Extensions page, as shown in the following illustration.



Viewing installation-specific extensions

Extensions that are provided by a specific installation are listed on the Extensions page of the installation, as shown in the following illustration.



The Extensions page is displayed only for dSPACE installations that contain an integrated extension.

Decryption Encrypted Archives of dSPACE Software Installations

Motivation Some parts of dSPACE software, the documentation, demo models, .NET code, etc. are installed in encrypted archives on the end user's PC. To use them, you have to decrypt the encrypted archives.

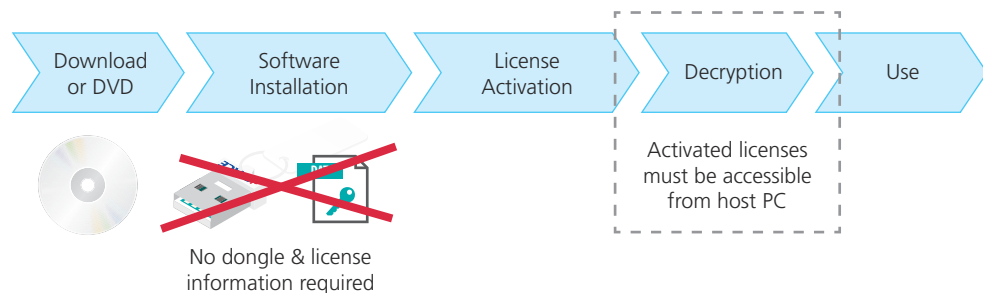
Where to go from here

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Basics on Decryption

Motivation The software installation process is license-independent. No license information and/or dongles are required during the installation.



As a consequence, you can install the complete dSPACE Release without any license. However, specific parts of dSPACE software, the documentation, demo models, .NET code, etc. are installed in encrypted archives on the end user's PC. To use these parts, you first have to activate licenses and then decrypt the encrypted archives.

Preconditions

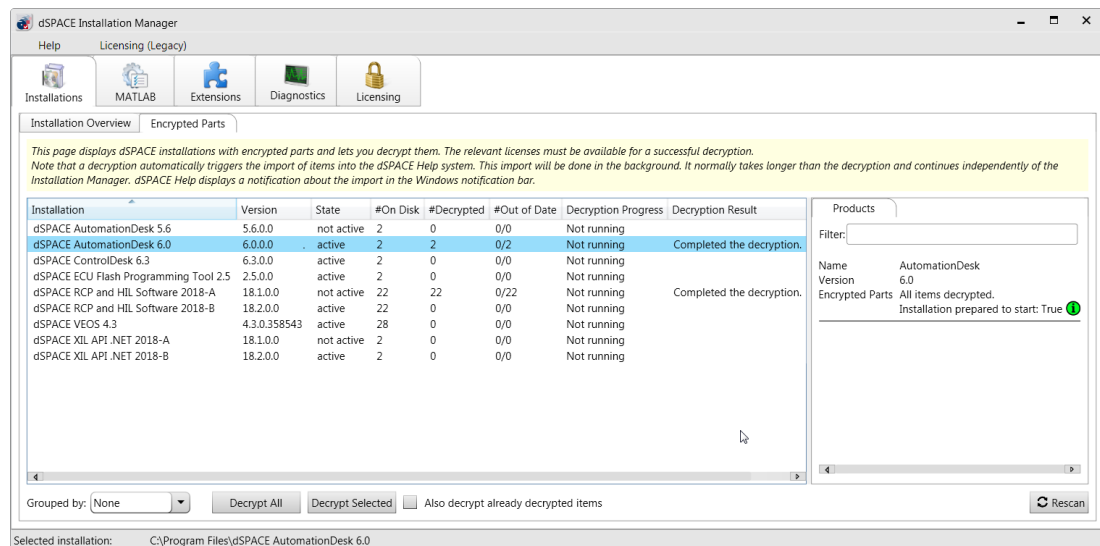
- You can only decrypt archives, for which you activated product licenses. These licenses must be accessible from your host PC during the decryption process, for example, via a connected CmDongle. The decryption process does not block the required licenses.
- Before starting the decryption, close all dSPACE programs (except dSPACE Installation Manager) and also MATLAB. Do not start the programs during decryption.

Tip

Decryption does not require administrator rights, so the end users can perform this step themselves. The files are extracted to folders below %ProgramData%\dSPACE\<InstallationGUID>\.

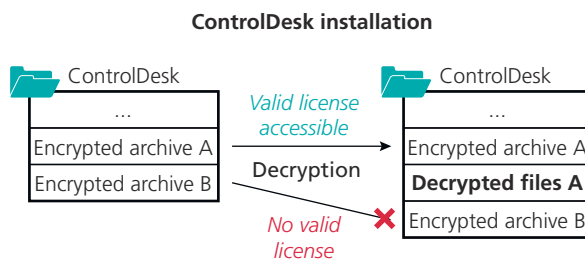
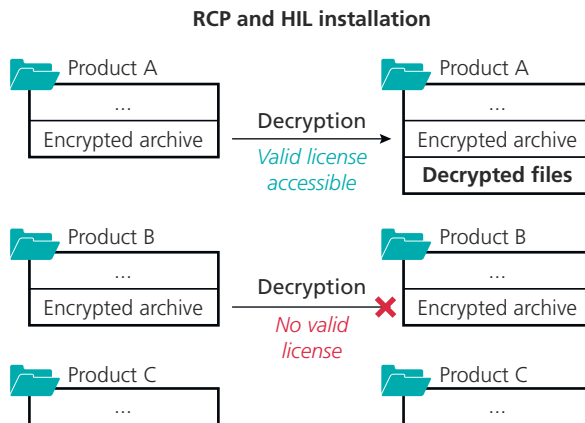
Performing decryption

dSPACE Installation Manager checks if encrypted archives are available and displays all installed software products/packages that contain encrypted archives. Refer to the following illustration. Software products/packages that do not contain encrypted archives are not displayed on the page.



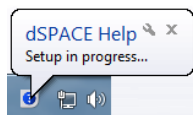
You can start the decryption process either for selected or for all installations that are displayed. Decryption lasts about as long as unpacking ZIP files. Anti virus software can slow down the process.

The following illustration provides an overview of the decryption results:



After initial decryption, all files stay decrypted on the host PC and can be used with the dSPACE software.

Notes on decrypting user documentation When documentation is decrypted, the decrypted files are automatically imported to dSPACE Help. This separate process can take a few minutes longer than decryption. An icon and notifications in the notification area of the Windows taskbar inform you about the progress.



Notes on installing patches After a dSPACE installation was updated with a software patch, check if dSPACE Installation Manager displays "Out of Date" archives on the Encrypted Parts page. In this case, you have to run the decryption process again for the patched installation.

This also applies when you remove a patch from your dSPACE installation.

Displaying the decryption state

On the **Encrypted Parts** page, dSPACE Installation Manager displays the progress of the decryption process and gives helpful status information.

Column	Description
Installation	Name of the selected dSPACE installation. Example: dSPACE RCP and HIL Software Release 2021-A
Version	Version of the dSPACE software product or software package that belongs to the selected installation. Example: 17.2
#On Disc	Number of encrypted archives that are installed on your host PC belonging to the selected installation.
#Decrypted	Number of decrypted archives belonging to the selected installation.
#Out of Date	Number of decrypted archives whose version does not match the version of the new installed encrypted archives. This can occur, for example, after you installed a patch. Decrypt the archives of the related installation again.
Info	Provides information on all archives in the selected installation: <ul style="list-style-type: none"> ▪ Up to date: The time stamp of the decrypted files matches the time stamp of the encrypted archives. ▪ Some expected items are missing: If this state is displayed, repair your installation via dSPACE Setup or contact dSPACE Support. ▪ Some items are not yet decrypted: Not all of the installed archives are decrypted. This occurs if you installed products, containing encrypted archives, that you cannot decrypt due to missing product licenses.
Decryption Progress	Current state of the decryption process displayed via a progress bar. Not running is displayed if no decryption process is running.
Decryption Result	Result of the last decryption (since dSPACE Installation Manager was started): <ul style="list-style-type: none"> ▪ Succeeded: Decryption finished successfully. ▪ Failed: Decryption failed. This can occur, for example, for the following reasons: <ul style="list-style-type: none"> ▪ A required product license is not accessible during the decryption process. ▪ There is not enough disk space on the system partition to extract the encrypted archives. For the exact reason for a failed decryption, check the %CommonProgramFiles%\dSPACE\InstallationManager\ArchiveDecryption_<InstallationGUID> log file.
State	State of the selected installation: <ul style="list-style-type: none"> ▪ Active: The selected installation is the <i>active installation</i>. ▪ Not active: The selected installation is an <i>inactive installation</i>. For more information on activating a dSPACE installation, refer to Activating and Deactivating dSPACE Installations on page 27.
Release	Name of the dSPACE Release. Example: 2021-A
Path	Installation path of the selected installation. Example: C:\ProgramFiles\dSPACE AutomationDesk 6.5

Displaying the product state

For installations as of dSPACE Release 2017-B, the **Products** page provides information about the product state related to out-of-date and decrypted items.

Status Icon	Product Start	Description	Action
No icon	Possible	The product contains no encrypted archives.	–
Grey	Not possible	The encrypted archives installed on your PC are not decrypted. You cannot start the product.	Decryption is required.
Yellow	Possible	The encrypted archives installed on your PC are not decrypted. However, they are not required for starting the product. You can start the product and work with restricted functionality. For example, documentation of the product is not usable.	Decryption is recommended.
Red	Not possible	At least one decrypted archive installed on your PC is out-of-date. This state typically occurs after you installed a software patch for the product. You cannot start the product.	Decryption is required again.
Green	Possible	The encrypted archives are decrypted and the decrypted parts are up to date. You can start the product and work with it without restrictions.	–

How to Decrypt Encrypted Archives of dSPACE Software Installations

Objective

To use the full functionality of the installed dSPACE software, you have to decrypt the encrypted archives of dSPACE software installations.

Basics

For basic information on decryption, refer to [Basics on Decryption](#) on page 19.

Preconditions

Activated product licenses must be accessible from your host PC, for example, via a connected CmDongle.

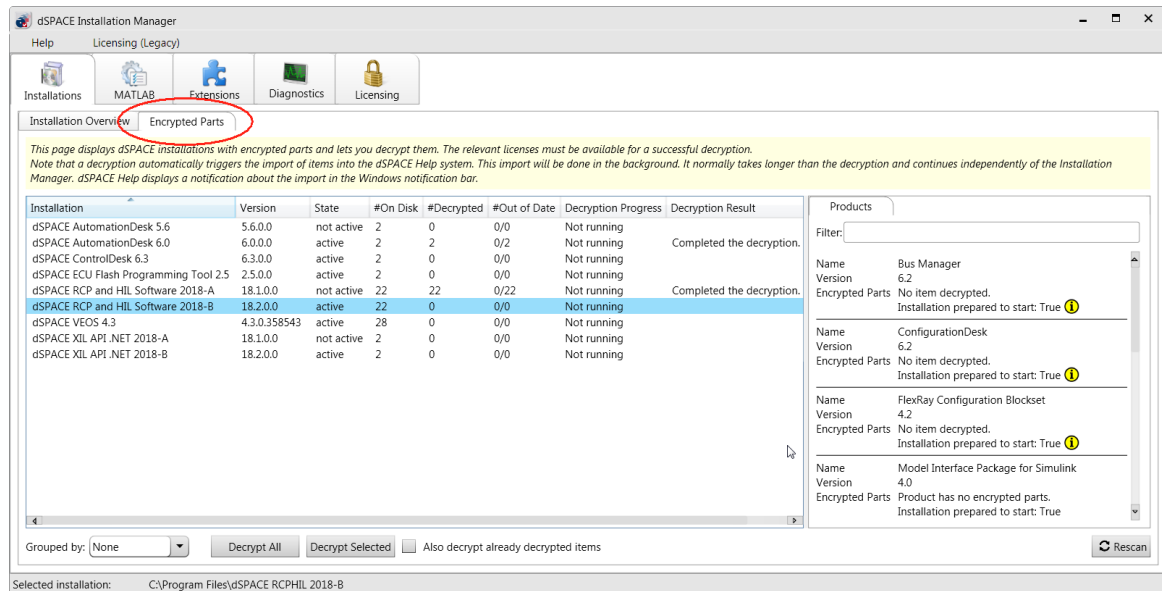
Method

To decrypt encrypted archives of dSPACE software installations

- 1 Close all installed dSPACE programs on your host PC.
- 2 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3 Click the Installations tab.

4 Click the Encrypted Parts tab on the Installations page.

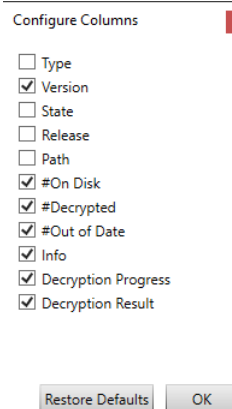
The page displays all installed software products and packages on your host PC that contain encrypted archives. Refer to the following illustration:



5 Click Rescan to update the table.

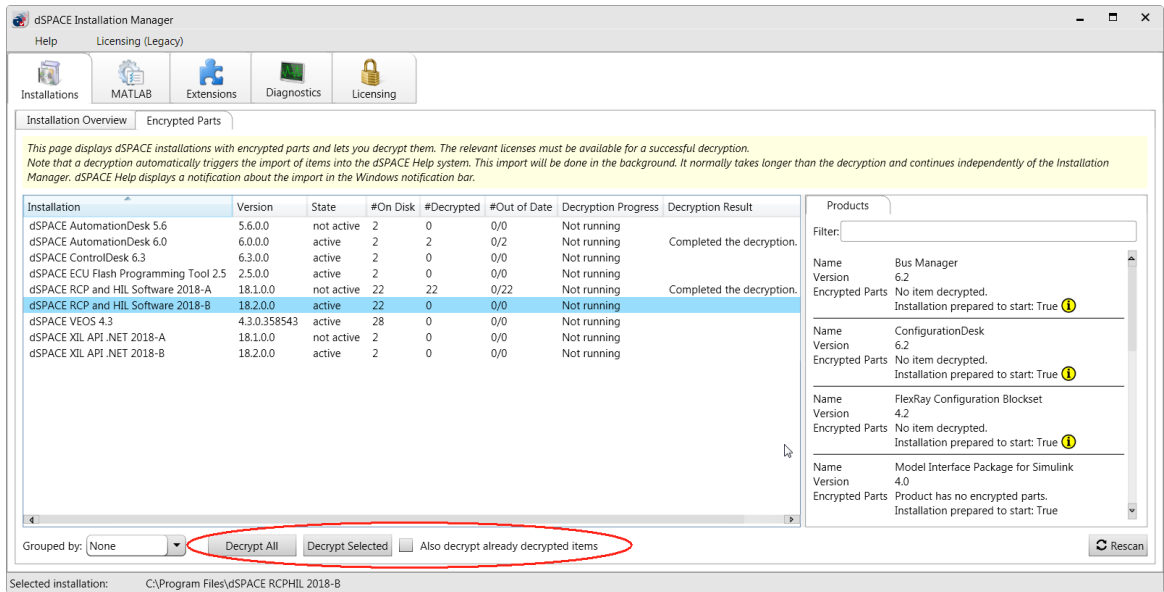
6 Right-click the Encrypted Parts page and select Configure Columns from the context menu.

7 In the Configure Columns dialog, select the attributes you want to display.



For a description of the attributes, refer to [Basics on Decryption](#) on page 19.

8 Click one of the following buttons to start the decryption process:



Button/Option	Description
Decrypt Selected	Decrypts the encrypted archives of the selected dSPACE installation.
Decrypt All	Decrypts the encrypted archives of all displayed dSPACE installations in one run.
Also decrypt already decrypted items	Use this option only if you want to replace already decrypted files. Archives that are not out of date are decrypted again as well. Note, that this has the following result, for example: Demos that you modified are overwritten with the demos delivered in the decrypted archive.

Result

The encrypted archives of the selected dSPACE installations are decrypted.
You can see the decryption result in the corresponding row on the Encrypted Parts page.

Activating and Deactivating dSPACE Installations

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Basics on Activation/Deactivation

Active installation

One of the installations of each dSPACE software installation (for example, ControlDesk) is the *active installation*. If your system contains more than one installation (from different Releases, for example), you can activate a specific installation manually.

Tip

Not every dSPACE software product needs to be activated before use. For example, this function is not available for the installations of TargetLink and Model Compare.

Rules for activation

- The last installation of a software product that you install on your host PC automatically becomes the active installation.
- Every time you activate a deactivated installation manually, the current active installation is automatically deactivated before.

- Valid for installations of dSPACE Release 2017-B and later:
If you modify, repair or remove a product set that contains deactivated installations, the deactivated installation is activated first.

Example for products included in multiple product sets You want to add the VEOS product set to your installation of dSPACE Release 2017-B. The VEOS product set contains the Model Interface Package for Simulink. The Model Interface Package for Simulink is also included in other product sets and it is part of the RCP and HIL software package.

Adding the Model Interface Package for Simulink modifies an existing RCP and HIL installation of dSPACE Release 2017-B, which is therefore automatically activated, even if an installation of an earlier dSPACE Release (e.g., Release 2016-A) is the active installation. Your installation of RCP and HIL software (Release 2016-A) is automatically deactivated. You have to activate it again manually if you want to use it later on.

Activating multiple installations in one step

You can activate all dSPACE installations on your PC that belong to a specific dSPACE Release with the Activate Release button in one step.

The same rules apply as for activating a single installation (see above).

Effects of activation

The effects of activating a dSPACE installation depend on the dSPACE software product or dSPACE installation.

AutomationDesk Activating a specific AutomationDesk installation means registering default settings and file assignments for automatic tasks, for example, to open ADP files from other software products. You can also work with an inactive AutomationDesk installation, but then these automatic tasks are not provided.

ControlDesk Activating a specific ControlDesk installation means registering the ControlDesk automation interface. You can also work with an inactive ControlDesk installation. To access an inactive ControlDesk installation via automation, you have to supply version information on the inactive ControlDesk installation. For more information, refer to [Automating Different ControlDesk Versions \(ControlDesk Automation !\[\]\(dd161862f9164df98f62b726e9846241_img.jpg\)](#)).

MotionDesk Activating a specific MotionDesk installation means registering the MotionDesk automation interface. You can also work with an inactive MotionDesk installation. However, you cannot access an inactive MotionDesk installation via automation.

Note

If you activate/deactivate a MotionDesk installation, the RCP and HIL software installation of the related dSPACE Release also is activated/deactivated.

RCP and HIL software**Tip**

'RCP and HIL software' is a generic term for a software package containing several dSPACE software products, for example, ASM, RTI, ConfigurationDesk, and ModelDesk. These software products are installed in a common folder.

For a complete overview of products in the RCP and HIL software package, refer to [Mapping Between Products and Product Sets \(Installing dSPACE Software !\[\]\(0aff635c4179ba9e710b00f4b01d3b20_img.jpg\)](#)).

Activating a specific RCP and HIL software installation means that you can start the contained products and work with them. The shortcuts in the Start menu change according to the selected installation.

Note

If you activate/deactivate a RCP and HIL software installation, the MotionDesk installation of the related dSPACE Release also is activated/deactivated.

Valid for RCP and HIL software installations of dSPACE Release 2017-A and earlier: The uninstall entries of the operating system are also changed according to the selected installation. The uninstall entries are accessible via **Control Panel – Programs – Uninstall a program**.

Before you can use a product from a deactivated RCP and HIL installation, you have to activate this installation. You can work with only one RCP and HIL installation at a time.

Real-Time Testing (RTT) Activating a specific RTT version means that all products that can work with RTT (AutomationDesk, ControlDesk, Python, customer software) automatically use the active installation. You cannot work with an inactive RTT installation.

SystemDesk Activating a specific SystemDesk installation means registering the SystemDesk automation interface and linking SystemDesk project (SDP) files to the installation to be activated. To access an inactive SystemDesk installation via automation, you have to supply version information on the inactive SystemDesk installation.

VEOS Activating a specific VEOS installation means registering VEOS Player's automation interface and linking offline simulation application (OSA) files to the installation to be activated.

How to Activate a Single dSPACE Installation

Objective

One of the installations of each dSPACE software installation (for example, ControlDesk) is the *active installation*. If your system contains more than one installation (from different Releases, for example), you can activate a specific installation manually.

Tip

Not every dSPACE software product needs to be activated before use. For example, this function is not available for the installations of TargetLink and Model Compare.

Basics

For more information on activation, deactivation, and their effects, refer to [Basics on Activation/Deactivation](#) on page 27.

Precondition

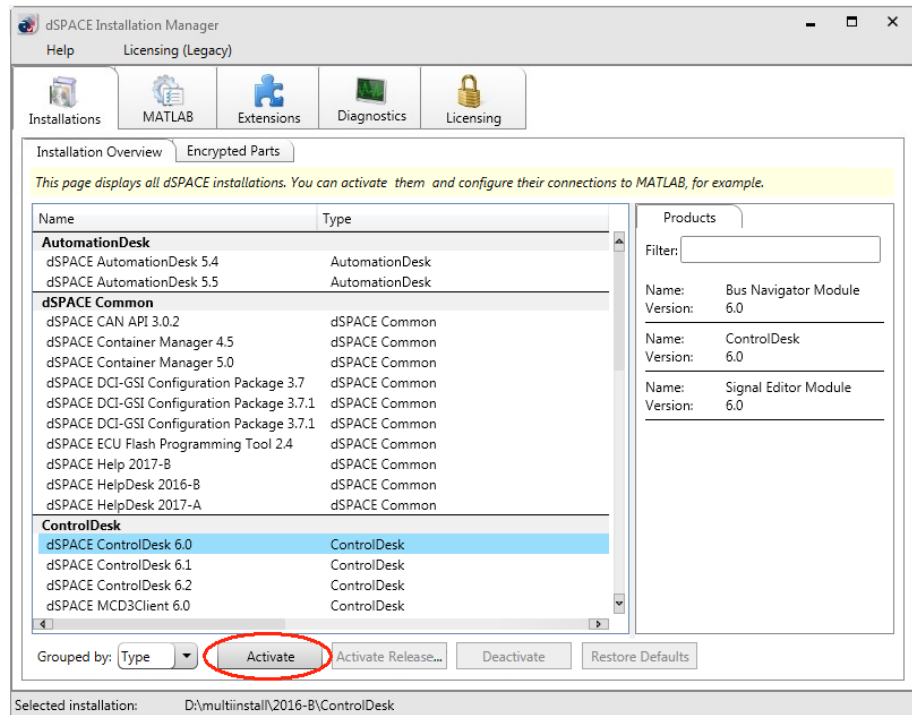
You have administrator rights.

Method

To activate a single dSPACE installation

- 1 Close all dSPACE programs and MATLAB (if used).
- 2 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3 Click the Installations tab.
The Installation Overview page lists all dSPACE installations on your host PC.

4 Select the installation you want to activate.



5 Click Activate.

Note

Activation may take some time.

6 When prompted, restart your system.

Result

The selected installation becomes the active installation.

Valid only for the RCP and HIL software installations of dSPACE Release 2017-A and earlier: The shortcuts in the Start menu and the uninstall entries (via Control Panel – Programs – Uninstall a program) are modified according to the selected installation.

How to Activate All Installations of a Specific dSPACE Release in One Step

Objective

You can activate all installations that belong to a specific dSPACE Release with the Activate Release button in one step.

Basics

For more information on activation, deactivation, and their effects, refer to [Basics on Activation/Deactivation](#) on page 27.

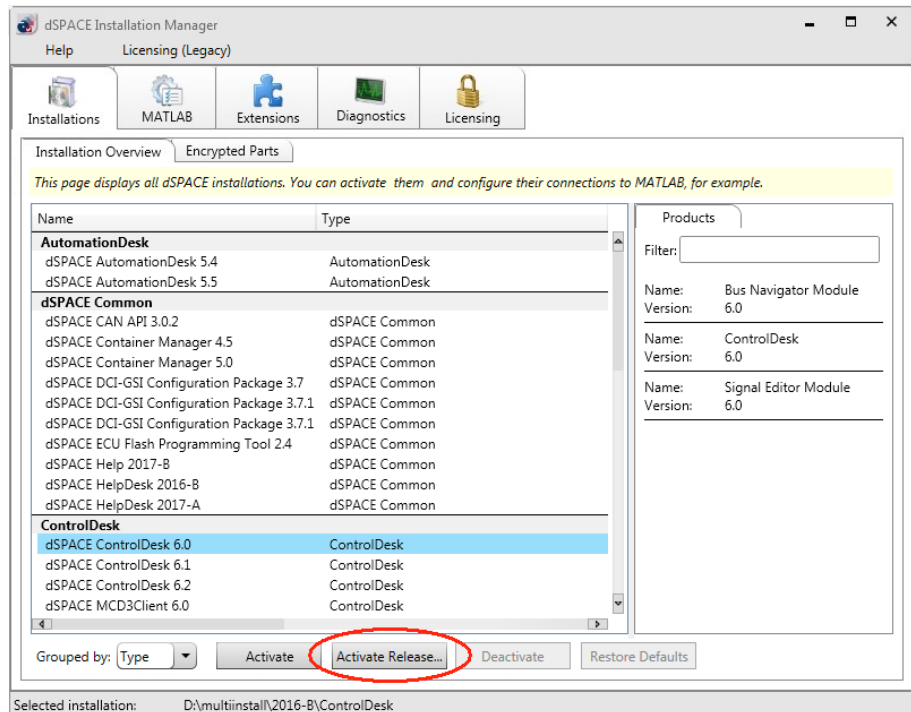
Precondition

You have administrator rights.

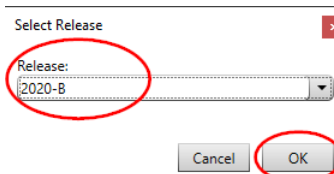
Method

To activate all installations of a specific dSPACE Release in one step

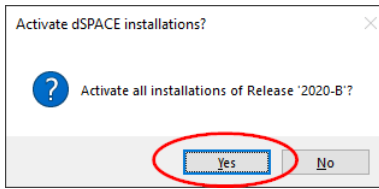
- 1 Close all dSPACE programs and MATLAB (if used).
- 2 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 3 Click the Installations tab.
The Installation Overview page lists all dSPACE installations on your PC.



- 4 Click Activate Release.
- 5 Select the Release you want to activate and click OK.



6 Confirm the following dialog:



Note

Activation may take some time.

7 When prompted, restart your system.

Result

- The installations that belong to the selected dSPACE Release are activated.
- Valid only for the RCP and HIL software installations of dSPACE Release 2017-A and earlier: The shortcuts in the **Start** menu and the uninstall entries (via **Control Panel – Programs – Uninstall a program**) are modified according to the selected installation.

Connecting dSPACE Installations to MATLAB

Where to go from here

Information in this section

Introduction to Connecting a MATLAB Installation.....	35
Basics on Changing the Connection to MATLAB.....	38
How to Change the MATLAB Connection.....	40

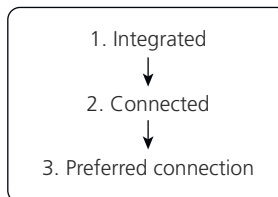
Introduction to Connecting a MATLAB Installation

Motivation

Only a connected MATLAB installation can be used with dSPACE software.

Connection states

A connection between dSPACE software and a MATLAB installation is characterized by the following states:



Integrated dSPACE software is integrated into a specific MATLAB installation. This MATLAB installation then is prepared to be used with dSPACE software.

Connected A dSPACE installation (e.g., RCP and HIL, TargetLink) is connected to a MATLAB installation. As a result, the connected MATLAB installation is ready to be used with the dSPACE installation.

Preferred connection A preferred connection is the connection that dSPACE products use by default, e.g., when starting MATLAB or generating specific MATLAB files.

If only one MATLAB installation is connected, it is automatically the preferred connection. If multiple MATLAB installations are connected to one dSPACE installation, one of them is the preferred connection.

Note

Only some dSPACE products require a preferred MATLAB connection if they are connected to multiple MATLAB installations, for example, AutomationDesk and ConfigurationDesk. Others, such as TargetLink, do not need a preferred MATLAB connection.

Connections established automatically

Condition: MATLAB was installed before dSPACE software.

During software installation, dSPACE Setup automatically performs the following:

- Integrates dSPACE software (that requires MATLAB) into all compatible MATLAB installations that are found locally on the PC.
- Connects all dSPACE installations that require MATLAB to all compatible and integrated MATLAB installations.
- Sets the preferred connection.

If multiple MATLAB installations are connected to one dSPACE installation, the compatible MATLAB installation with the highest version is set as the preferred connection.

Changing connections manually

You can use dSPACE Installation Manager to change the connection between dSPACE software and MATLAB installations at any time after the initial installation of dSPACE software. This is useful in the following cases:

- You want to change the automatic settings made during the installation of dSPACE software.
- You want to integrate dSPACE software into a MATLAB installation from a network drive.
- You install MATLAB after installing dSPACE software and you want the dSPACE software to use it.

Tip

This also applies if a MATLAB installation was installed again but the dSPACE software was not.

Possible connections between dSPACE installations and MATLAB

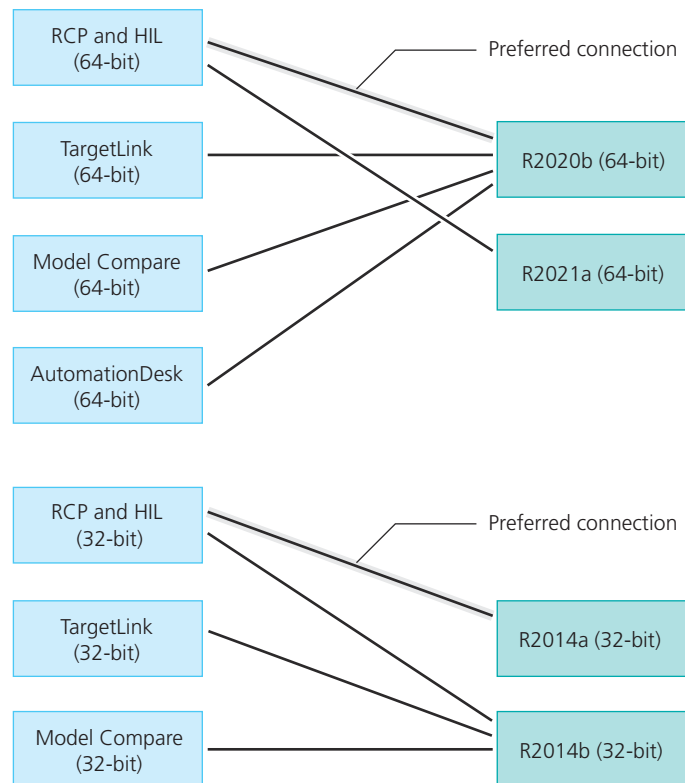
The following rules for connecting apply:

- One dSPACE installation can be connected to multiple MATLAB installations.

- Multiple dSPACE installations can be connected to one MATLAB installation. A one-to-one relationship between a dSPACE installation and a MATLAB installation is not required.
- In general, products of the same bit variant can be connected and used together. For example, TargetLink's 64-bit variant can be connected to a 64-bit MATLAB variant but not to a 32-bit MATLAB variant.
- Multiple installations of the same type (e.g., RCP and HIL, TargetLink) of different Releases cannot be connected to the same MATLAB installation. Example: TargetLink 5.0 (on dSPACE Release 2019-B) and TargetLink 5.1 (on dSPACE Release 2020-B) cannot be connected together to MATLAB R2019b.
- Only compatible MATLAB installations can be connected to a dSPACE installation. For an overview of compatible products of dSPACE Release 2021-A, refer to [Required MATLAB Releases \(Installing dSPACE Software\)](#).

The following illustration shows examples of possible combinations of MATLAB and dSPACE installations:

dSPACE installation ... connected to ... MATLAB installation



Basics on Changing the Connection to MATLAB

Motivation

You can change the connection to MATLAB (as well as the integration state) via dSPACE Installation Manager at any time after the initial installation of dSPACE software.

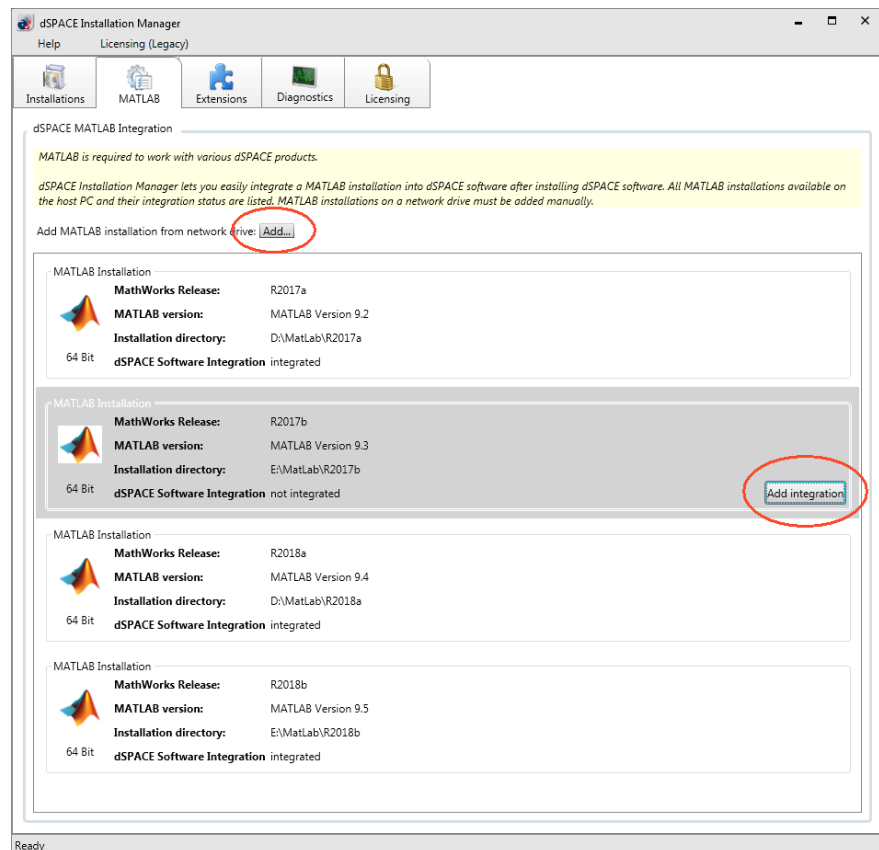
Required user rights and supported actions

Depending on the user rights you have, the following actions are supported:

- You have administrator rights:
 - You can integrate dSPACE software into a MATLAB installation.
 - If you connect a dSPACE installation to a MATLAB installation that is not integrated, the required integration is automatically performed in one step.
 - You can connect a MATLAB installation and set a preferred connection.
- You do not have administrator rights:
 - You can connect a MATLAB installation and set a preferred connection, if the dSPACE software already is integrated.

Changing the integration

To integrate dSPACE software into a MATLAB installation, dSPACE Installation Manager provides the MATLAB page:



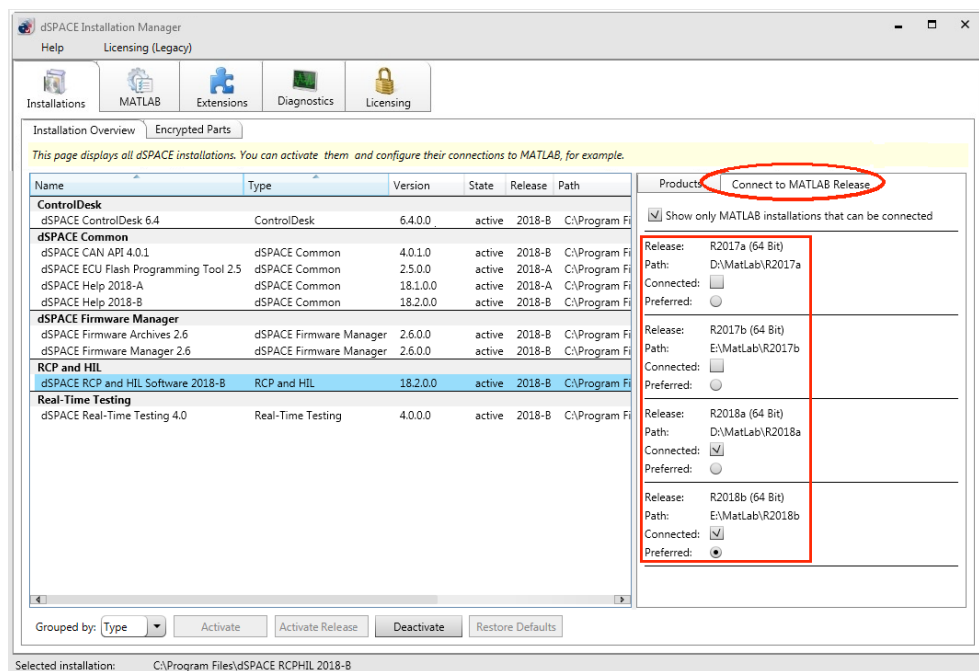
The MATLAB page provides the following features:

- All local MATLAB installations are listed with their installation details and their current integration states.
- You can manually integrate dSPACE software into a MATLAB installation via the Add integration button.
- You can remove all connections between a specific MATLAB installation and multiple dSPACE installations with one click via the Remove integration button.
- You can manually add a MATLAB installation on a network drive to integrate dSPACE software via the Add ... button.
- Error messages showing a failed MATLAB integration are displayed, for example, if you try to integrate dSPACE software that is not compatible with the MATLAB installation.

Changing the connection

To connect a dSPACE installation to a MATLAB installation, dSPACE Installation Manager provides the Connect to MATLAB Release page.

Here, you can connect a MATLAB installation by selecting the Connected checkbox. You also can change the preferred MATLAB installation.



For instructions, refer to [How to Change the MATLAB Connection](#) on page 40.

How to Change the MATLAB Connection

Objective

To change the MATLAB connection, for example, because you installed MATLAB after the initial installation of the dSPACE software, by using dSPACE Installation Manager.

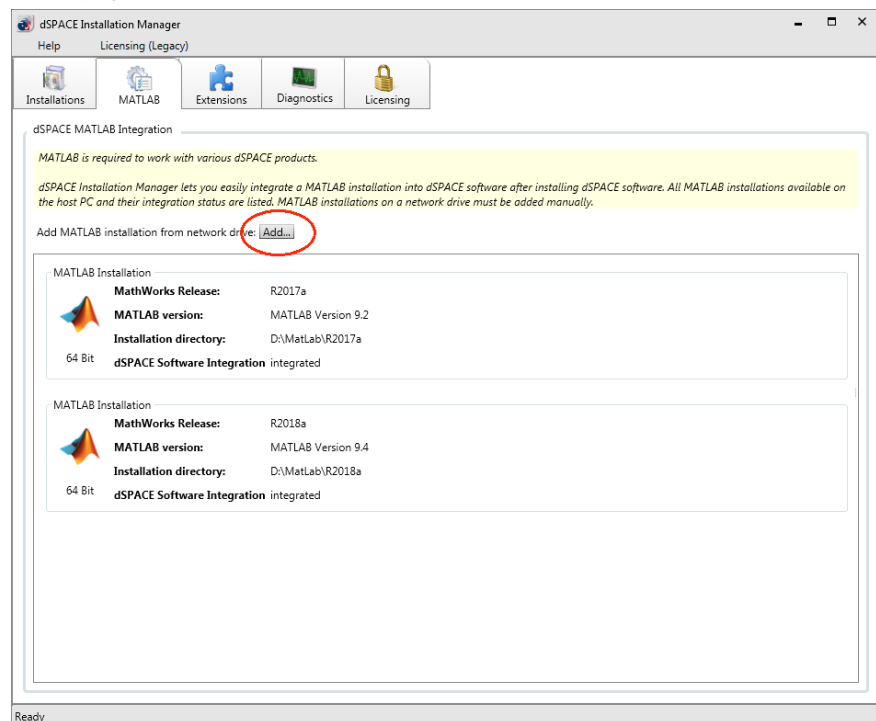
Preconditions

- You have administrator rights: You can connect any compatible MATLAB installation, regardless of the integration state.
- You do not have administrator rights: You can connect only MATLAB installations with integrated dSPACE software.
- A compatible MATLAB installation is available.

Method

To change the MATLAB connection

- 1 From Start – dSPACE Installation Manager, select dSPACE Installation Manager.
dSPACE Installation Manager opens.
- 2 Click the **MATLAB** tab.
All MATLAB installations installed on your host PC are listed on the **MATLAB** page.

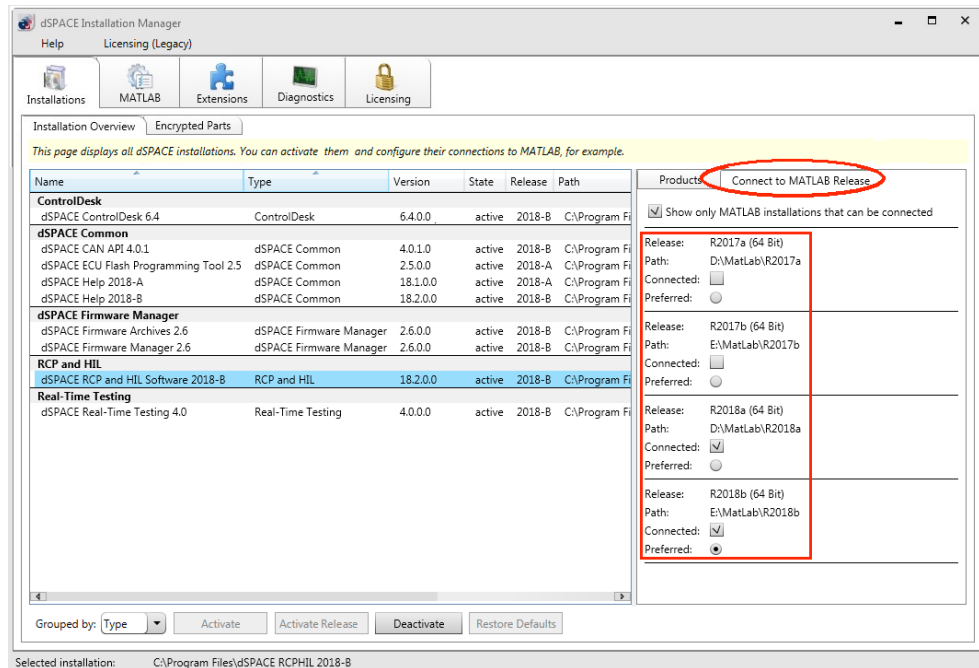


- 3 Check if the MATLAB installation you want to use is listed on the page. If it is not listed but is installed on a network drive, you can add it via the Add ... button.

Tip

MATLAB installations that are installed on a network drive are not listed automatically and must be added manually.

- 4 Click the Installations tab.
- 5 On the Installation Overview page, select the installation you want to connect to a MATLAB installation.
- 6 Click the Connect to MATLAB Release tab on the right.



- 7 Select the Connected checkbox of the MATLAB installation you want to connect your dSPACE software to.
To disconnect a MATLAB Release from the selected dSPACE software, clear the checkbox of the respective MATLAB installation.
- 8 Only for dSPACE software products that require a preferred connection:
If you connected multiple MATLAB installations to your dSPACE installation, select one of them as the preferred connection.
dSPACE products use the preferred installation as the default, for example, to start MATLAB automatically.

Note

If you connect only one MATLAB installation, it is automatically the preferred MATLAB installation.

Result


The dSPACE installation is connected to the selected MATLAB installation.

Automating dSPACE Installation Manager via the API

Introduction to the dSPACE Installation Manager API

Objective	dSPACE Installation Manager provides an API to automate various features of dSPACE Installation Manager.
API features	<p>The API of dSPACE Installation Manager provides access to the following features:</p> <ul style="list-style-type: none">▪ Getting information on the dSPACE installations on your host PC.▪ Getting information on MATLAB installations (on your host PC and on a network drive) and their connection state.▪ As of dSPACE Installation Manager 4.0:<ul style="list-style-type: none">▪ Activating and deactivating dSPACE installations.▪ Adding and removing the integration of dSPACE software into a specific MATLAB installation.▪ Modifying the connection to a MATLAB installation, for example, connecting another MATLAB installation and setting it as the preferred one.▪ As of dSPACE Installation Manager 5.0:<ul style="list-style-type: none">▪ Decrypting encrypted archives of the installed dSPACE software.▪ As of dSPACE Installation Manager 5.2:<ul style="list-style-type: none">▪ Collecting information about the dSPACE software environment on your PC and the problem you may have and saves it to a ZIP file. This you can send to the dSPACE Support for diagnostic purposes.▪ As of dSPACE Installation Manager 5.3:<ul style="list-style-type: none">▪ Activating/deactivating dSPACE installations and decrypting archives of the installed dSPACE software can be executed via Python scripts.

More information

For a description of the API, refer to [dSPACE Installation Manager API Reference](#) .

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