

ETAS ASCET-DIFF V6.4



Getting Started

www.etas.com

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1 Introduction

In this chapter, you can find information about the intended use, the addressed target group, and information about safety and privacy related topics.

Please adhere to the ETAS Safety Advice (accessible via **Help > ETAS Safety Advice**) and to the safety information given in the user documentation.

ETAS GmbH cannot be made liable for damage which is caused by incorrect use and not adhering to the safety information.

1.1 Intended Use

ASCET-DIFF is a program that compares two ASCET models. The ASCET-DIFF Model Viewer variant allows a thorough inspection of an ASCET model even if no other part of the ASCET product family is installed on your computer.

1.2 Target Group

ASCET-DIFF users should be familiar with the Microsoft Windows operating systems.

Knowledge of ASCET is required for the successful use of ASCET-DIFF.

1.3 Classification of Safety Messages

Safety messages warn of dangers that can lead to personal injury or damage to property:

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

NOTICE indicates a situation that, if not avoided, could result in damage to property.

1.4 Safety Information

Adhere to the ETAS Safety Advice and the safety information given in the online help and user guides. You can open the ETAS Safety Advice from the main ASCET-DIFF window with **Help > ETAS Safety Advice**. A PDF version is available on the installation medium: Documentation\ETAS Safety Advice.pdf

In addition, take all information on environmental conditions into consideration before setup and operation (see the documentation of your computer, hardware, etc.).

Further safety information for this ETAS product is available in the ASCET V6.4 safety manual, available at ETAS upon request.

1.5 Data Protection

If the product contains functions that process personal data, legal requirements of data protection and data privacy laws shall be complied with by the customer. As the data controller, the customer usually designs subsequent processing. Therefore, he must check if the protective measures are sufficient.

1.6 Data and Information Security

To securely handle data in the context of this product, see the next sections about data and storage locations as well as technical and organizational measures.

1.6.1 Data and Storage Locations

The following sections give information about data and their respective storage locations for various use cases.

License Management

When using the ETAS License Manager in combination with user-based licenses that are managed on the FNP license server within the customer's network, the following data are stored for license management purposes:

Data

- Communication data: IP address
- User data: Windows user ID

Storage location

- FNP license server log files on the customer network

When using the ETAS License Manager in combination with host-based licenses that are provided as FNE machine-based licenses, the following data are stored for license management purposes:

Data

- Activation data: Activation ID

Used only for license activation, but not continuously during license usage

Storage location

- FNE trusted storage

C:\ProgramData\ETAS\FlexNet\fne\license\ts

1.6.2 Technical and Organizational Measures

We recommend that your IT department takes appropriate technical and organizational measures, such as classic theft protection and access protection to hardware and software.

2 About ASCET-DIFF

ASCET-DIFF is a program that compares two ASCET models. This allows you to compare, e.g., two development states, and produces clear results in a short time. ASCET-DIFF can be used as standalone tool (see also section 4.1 "Standalone Variant"), or as add-on to ASCET (see also section 4.2 "Starting the Add-On Variant").

The comparison results are displayed in various tabs; different colors are used to distinguish between identical and changed elements, as well as elements occurring in only one component. Details are given in the ASCET-DIFF online help.

In addition, the ASCET-DIFF Model Viewer allows a thorough inspection of an ASCET model even if no other part of the ASCET product family is installed on your computer.

With ASCET-DIFF V6.4, the following types of ASCET components can be compared or viewed:

- block diagram classes/modules,
- AUTOSAR software components,
- AUTOSAR interfaces
- AUTOSAR mode groups
- state machines
- ESDL and C code components
- enumerations
- records
- containers
- projects

2.1 Finding Out More

The ASCET-DIFF documentation consists of the following parts:

- this Getting Started manual
- an online help

The ASCET-DIFF *Getting Started* manual consists of the following chapters:

- "Introduction" on page 4
- "About ASCET-DIFF" on page 7 (this chapter)

You are given a brief overview of ASCET-DIFF.

- "Installation" on page 9

This chapter is intended for all users who install, maintain and uninstall ASCET-DIFF. It provides information on the delivery scope, hardware and software requirements, and the necessary licenses.

- "Starting ASCET-DIFF" on page 19

This chapter explains how to start ASCET-DIFF both as standalone tool and as ASCET add-on.

- "Starting ASCET-DIFF Model Viewer" on page 26

This chapter explains how to start the ASCET-DIFF Model Viewer via the command line or the context menu in the Windows file explorer.

- "Contact Information" on page 31

The ASCET-DIFF *online help* is opened with the **Help > Help Contents** menu option.

🙀 Help - ASCET-DIFF	– o ×	<
Search:	Go Scope: DIFF	
Contents 👜 🔹 🚿 🗖 🗖	(수 수 🟠 🏟 📲 👜	
Scope DIFF: Show all	ASCET-DIFF	^
ASCET-DIFF ASCET-DIFF ASCET-DIFF Instructions References to User Interface Comparison Algorithms Used	ASCET-DIFF is a program to compare two ASCET models, even if no ASCET is installed on your computer. You can easily compare, e.g., two development states, and achieve clear results in a short time.	
Copyright Contact Information Glossary	In the ASCET-DIFF Difference Browser, you can view the comparison results in different tabs. Number and types of the tabs depend on the objects you compared.	l
	The results display identical, changed, and new elements on the left or right side of the comparison.	
i i v v	The items displayed are color coded. Tabs with changes and changed elements are marked in bold and with an asterisk (*).	~

The panes of the help window provide you with the following information:

- The left pane shows the table of content, index, search results, user-defined bookmarks.
- The right pane contains the current help topic.

3 Installation

This chapter provides information preparing and performing the installation of ASCET-DIFF on a computer, for licensing and uninstalling the tool.

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3.1 Preparations

Check the delivery package to make sure it is complete and make sure your system corresponds to the system requirements. Make sure that you have the necessary user privileges.

3.1.1 Delivery Scope

The delivery scope of ASCET-DIFF includes:

- ASCET-DIFF program files
- ASCET-DIFF Getting Started manual in PDF format¹⁾

3.1.2 System Prerequisites

ASCET-DIFF requires the same system prerequisites as ASCET. They are listed in the ASCET V6.4.8 Release Notes.

3.1.3 Required User Privileges for Installation and Operation

User Privileges Required for Installation: In order to install ASCET-DIFF on a computer, you need the user privileges of an administrator.Please contact your system administrator, if necessary.

User Privileges Required for Operation: The operation of ASCET-DIFF requires the same user privileges as ASCET.

3.2 Installation

The installation is independent of whether you install ASCET-DIFF from installation disk or a network drive.

¹⁾ PDF reader required

Windows 10 (64 bit in 32 bit compatibility mode) is required to install ASCET-DIFF.

It is strongly recommended that you uninstall an existing version of ASCET-DIFF V6.4.* before you install ASCET-DIFF V6.4.8, unless you want a side-by-side installation.

See section 3.6 on page 17 for details on uninstalling ASCET-DIFF.

See section 3.4 on page 16 for details on side-by-side installation.

To start the ASCET-DIFF installation

- 1. To install ASCET-DIFF from installation disk, do the following:
 - i. Insert the installation disk into the respective drive of your computer.
 - ii. If the installation does not start automatically, double-click start.exe.An installation dialog opens.
 - iii. In the installation dialog, click the "Main" link to go to the installation page.
 - iv. Click the "ASCET-DIFF" link to install the ASCET-DIFF base system.
- 2. To install ASCET-DIFF from a file share, do the following:
 - i. Navigate to the ASCET-DIFF installation file.
 - ii. Double-click setup.exe.

The installation starts.



3. Click **Next** to continue.

The installer checks if your computer meets the system requirements for ASCET-DIFF installation. The result is displayed in the "System Check" window.

If your system meets the installation requirements, the installer proceeds automatically to the next window.

If your system does not meet the system requirements, follow the instructions in the "System Check" window and re-start the installation.

To check for blocking applications

The "Verify conditions" window shows running applications that block the installation.

🙀 ASCET-DIFF V Setup		—		×
Verifying cond Checking current	itions ntly running pro	cesses		
Please close the following programs before co	ntinuing with se	tup		
Application		Process		
ETAS Licensing Framework		LiMaServer.exe		
ETAS GmbH - ASCET-DIFF III Installation				
	< Back	Next >	Can	cel

1. Close each application with its native closing mechanism.

Or

2. Click Next.

You are asked if you want to close the applications.

3. Click **Yes** to continue.

If an application cannot be closed normally, you are asked if you want to kill the respective process.

NOTICE

Killing a process can lead to data loss.

Before you agree to kill the process, make sure that no crucial data will be lost.

4. Click **Yes** to continue.

Once all blocking applications are closed, the installation continues automatically.

To define path settings

In the "Installation Path" window, you are prompted to enter a destination directory for the installation (referred to as <installation>).

🔂 ASCET-DIFF V Setu	ıp		—		×
	Choose Install Location Choose the folder in whic	n h to install ASCE	T-DIFF VI		
Setup will install ASCET-D Browse and select anothe	IFF V in the following fol er folder. Click Next to continu	der. To install in e.	a differer	it folder, o	dick
Destination Folder			Brow	se	
Space required: ME Space available: Gi	3				
ETAS GmbH - ASCET-DIFF	Installation	ack Next	t>	Cano	el

1. Enter or select (via the **Browse** button) a valid path.

An invalid path deactivates the **Next** button. You have to correct the path before you can continue.

2. Click **Next** to continue.

If the same version of ASCET-DIFF is already installed in the selected directory, or if you selected an existing directory, you are asked to uninstall the existing installation.



3. Click Yes to continue.

If the existing folder does not contain an ASCET-DIFF installation, the folder is deleted. Continue reading at section "To specify a folder in the Start menu" on page 13.

To uninstall an existing version

If you selected an existing folder that contains an ASCET-DIFF installation, the "Uninstall ASCET-DIFF" window opens.

🏹 ASCET-DIFF V	Uninstall	—		×
6	Uninstall ASCET-DIFF V Remove ASCET-DIFF V from your	computer.		
ASCET-DIFF V	will be uninstalled from the following folder. Click	Next to con	tinue.	
Uninstalling from:	C:\ETAS\ASCET-DIFF			
ETAS GmbH - ASCET-D	IFF InstallationNe	ext >	Canc	el

The above screenshot shows the "Uninstall ASCET-DIFF" window of V6.4.8. If you selected a directory with an older ASCET-DIFF version, the uninstall window will look different.

1. Click Next.

The existing version is uninstalled. Once uninstallation is complete, the **Close** button is available.

2. Click Close.

The installation continues.

To specify a folder in the Start menu

ASCET-DIFF V	Setup		—		×
6	Choose Start Choose a Star shortcuts.	t Menu Folder It Menu folder for t	he ASCET-DIFF V		
Select the Start Me can also enter a na	nu folder in which you w me to create a new fold	ould like to create t er.	the program's sho	rtcuts. Yo	u
ETAS ASCET-DIFF					
7-29 Accessibility Accessories Adversed advertise Addee					^
BORDY Bash-Dutput Han Bash-Dutput Han Bush-Results San Dutress Explore Card Participants datar 2	ngerneri Gusten ant Carl				v
ETAS GmbH - ASCET-D	IFF III Installation				
		< Back	Install	Cano	el 🛛

- 1. Do one of the following:
 - Accept the default folder name.

• Enter a new folder name.

If desired, you can enter folder and subfolder.

To install ASCET-DIFF

j) note

The next step will start the installation. You *cannot* cancel the installation once it is running; the **Cancel** button is deactivated.

1. In the "Choose Start Menu Folder" window, click Install.

The installation is performed. A progress indicator shows how the installation is progressing.

When the installation is complete, the final installer window opens.

2. Click Next.

You are prompted to finish the installation.



3. If desired, activate the **Open ASCET-DIFF V6.4 Getting Started** option.

The option opens the Getting Started manual for ASCET-DIFF.

4. Click **Finish** to end the installation.

An icon is placed on the desktop of your PC, and a folder with the following entries is created in the Windows Start menu:



- ASCET-DIFF V6.4

The ASCET-DIFF program is started.

- ASCET-DIFF V6.4*

Links to the Getting Started manual and Release Note for ASCET-DIFF.

The ETAS License Manager is available in the Windows Start menu at **E > ETAS > ETAS License Manager**.

3.3 Command-Line Installation / Uninstallation

This section describes the command-line installation. Installation via dialog windows is described in section 3.2 "Installation" on page 9.

When you start the ASCET-DIFF installation from a command line, you can use several command-line parameters to customize the installation.

The command-line options are case-sensitive. For example, **/s** will cause a silent installation, but **/s** will not.

/s

Silent installation mode. With this installation mode, no dialog windows requiring user information open.

Default values are used for all information normally requested in installation windows. Error messages are hidden, too.

/s must be the first command-line argument. If other arguments precede it, **/s** has no effect.

/NCRC

Skips CRC check of the installer (ignored if CRCCheck force is set in the installer).

/D

Sets the installation directory.

i) note

/p must be the last parameter in the command line.

/p must not contain any quotes. Use the following syntax:

- path without spaces / D=C:\ETAS\ASCET-DIFF
- path with spaces /D=C:\Program Files\ASCET-DIFF

EXAMPLE

```
setup.exe /S
Triggers a silent installation with default installation path and CRC check.
setup.exe /NCRC /D=C:\Tools\ASCET-DIFF
Triggers a non-silent installation without CRC check and with user-
defined installation directory.
uninstall.exe /S
```

with optional **/s** for silent uninstallation.

3.4 Side-by-Side Installation

ASCET-DIFF V6.4. x^{1} and the current version ASCET-DIFF V6.4.8 can be installed in parallel if you observe the following.

- Make sure that you use different installation directories when you install the two ASCET-DIFF versions.

See also "To define path settings" on page 12 or "Command-Line Installation / Uninstallation" on page 15.

- The names of the two ASCET-DIFF V6.4 versions are identical. Therefore, the Windows start menu will show 2 entries **ASCET-DIFF 6.4** if you use the default settings for the Start menu folder.

See also "To specify a folder in the Start menu" on page 13.

- Since the desktop icons of all ASCET-DIFF V6.4.* versions use identical names, the desktop icon created during the second installation will over-write the desktop icon of the previous installation.

Do one of the following if you need desktop icons for both versions:

- Rename the desktop icon of the first ASCET-DIFF V6.4 installation before you start the second installation.
- After the second ASCET-DIFF V6.4 installation, use the ASCET-DIFF.exe file of the first installation to create a new desktop icon.

3.5 Licensing

The Difference Browser and the Model Viewer of ASCET-DIFF each require a valid license if you want to use the tools. You can obtain a license in one of the following ways:

- from your tool coordinator
- via the self-service portal on the ETAS website at www.etas.com/support/licensing
- via the ETAS License Manager

To activate the license, you must enter the Activation ID that you received from ETAS during the ordering process.

For more information about ETAS license management, see the <u>ETAS License</u> <u>Management FAQ</u> or the ETAS License Manager help.

To open the ETAS License Manager help

The ETAS License Manager is available on your computer after the installation of any ETAS software.

 From the Windows Start menu, select E > ETAS > ETAS License Manager. The ETAS License Manager opens.

¹⁾ x≤7

2. Click in the ETAS License Manager window and press <F1>.

The ETAS License Manager help opens.

3.6 Uninstallation

Uninstalling ASCET-DIFF requires the user privileges of an administrator. There are several ways to start the uninstall process:

- Programs and Features from the Windows Control Panel
- Apps > Apps & Features from the Windows settings
- Windows start menu: right-click the ASCET-DIFF entry and select **Uninstall** from the context menu to open the Windows Control Panel

To uninstall ASCET-DIFF

1. Start the uninstall procedure.

An inquiry opens.

2. Confirm with Yes or Uninstall.

The "Uninstall ASCET-DIFF V6.4.8" window opens.

🏹 ASCET-DIFF V	Uninstall	-		×
6	Uninstall ASCET-DIFF V Remove ASCET-DIFF V from your	computer.		
ASCET-DIFF V	will be uninstalled from the following folder. Click I	Next to cor	ntinue.	
Uninstalling from:	C:\ETAS\ASCET-DIFF			
ETAS GmbH - ASCET-DI	IFF Installation	ext >	Cano	cel

This screenshot shows the "Uninstall ASCET-DIFF" window of V6.4.8.

If you uninstall an older ASCET-DIFF version, the uninstall window may look different.

3. Click **Next** to check if you have to close any applications before you can uninstall ASCET-DIFF.

If necessary, the "Verify conditions" window opens. It lists the applications you have to close.

🖏 ASCET-DIFF V Uninstall		—		×
Verifying conditions Checking currently running processes				
Please close the following programs before contin	nuing with setup			
Application	Process ASCET-DI	FF.exe		
ETAS GmbH - ASCET-DIFF I Installation	< Back Unins	tall	Car	ncel

- 4. Do one of the following to close each application listed in the window:
 - Right-click the "Verify conditions" window and select **Close** from the context menu.
 - Use the closing mechanism of each application.

When all applications are closed, ASCET-DIFF is uninstalled

- Or
- 5. Click Uninstall.

The applications are closed. If an application cannot be closed normally, you are asked if you want to kill the respective process.

Killing a process can lead to data loss.

Before you agree to kill the process, make sure that no crucial data will be lost.

6. Click **Yes** to continue.

When all blocking applications are closed, ASCET-DIFF is uninstalled without further notice. A progress indicator shows how the uninstallation is progressing.

Once uninstallation is complete, a success window opens.

7. Click **Close** to end the uninstallation.

4 Starting ASCET-DIFF

Depending on the way ASCET-DIFF is installed, you can start ASCET-DIFF individually or as add-on from within ASCET.

4.1 Standalone Variant

To start the standalone variant

- 1. Do one of the following to start ASCET-DIFF:
 - In the Windows Start menu, select E > ETAS > ASCET-DIFF V6.4 from the app list.





ASCET-DIFF starts.

If no valid license file is detected, a grace mode is activated. That is a limited period of time during which the tool is fully operational, but a license file is searched regularly, and a warning is issued when the search fails.

If you start ASCET-DIFF for the first time, the "Welcome to ASCET-DIFF" window opens.

R ASCET-DIFF	-		×
File View Tool Search Window Help Image: State		$\Leftrightarrow \Rightarrow$	- -
Welcome to ASCET-DIFF			
Learn about ASCET-DIFF			
Learn about ASCET-DIFF modules			
Start ASCET-DIFF			

2. Click the "Start ASCET-DIFF" link.

ASCET-DIFF opens.

4.2 Starting the Add-On Variant

If you want to use ASCET-DIFF V6.4 as add-on to ASCET V6.1 or higher, you have to perform the following steps before you can use ASCET-DIFF within ASCET and – if installed – ASCET-SCM.

If you want to use ASCET-DIFF V6.4 as add-on to older ASCET versions, i.e. V5.2.2 – V6.0, please contact ETAS.

To set up ASCET-DIFF usage

- 1. Open the ASCET component manager.
- 2. In the component manager, select **Tools > Options**.

The ASCET options window opens.

3. In the options window, go to the "ASCET-DIFF" node.

The nodes have been re-structured in ASCET V6.2. The old structure (ASCET V6.1 or older) is shown in the upper image (A), the new structure (ASCET V6.2 or newer) can be seen in the lower image (B)

Options		—		()
File View				
type filter text	SCET-DIFF			
	ASCET-DIFF Version	ned>	\sim	
+ Eurors	 <undefin< li=""> </undefin<>	ned>		
External Tools	V6.	\$ \$	System Defaul	te
ASCII Editor		3 9	System Derau	
ASCET-DIFF	ASCET DIFE Version			~
Compiler				
	Specify which version of	ASCET-DIFF sha	ll be used	
Hardware	when comparing compon	nents.		\sim
	*			_
		OK	Cancel	
Eile View				
type filter text	ASCET-DIFF			_
		and		
Environment	A SCET-DIFF Version - Curdefin	ned>	~	
Experiment External Teals	V6			
		👶 😣	System Defaul	ts
 Integration 				=
ASCET-DIFF	ASCET-DIFF Version:		,	^
T Interfaces				
	Specify which version of a	ASCET-DIFF sha	ll be used	
	Specify which version of a when comparing compon	ASCET-DIFF sha ients.	ll be used	~
	Specify which version of when comparing compon	ASCET-DIFF sha	Il be used	~

- 4. Select the ASCET-DIFF version you want to use with ASCET V6.1 or higher.
- 5. Click **OK** to close the ASCET options window.

With that, the **ASCET-DIFF** submenu is added to the **Tools** menu in the ASCET component manager.

SCET-MD-RP-SE			– 🗆 X
File Edit View Insert Build	Tools SCM Help		
🛛 🕲 🛃 👆 🗈 🛍 💥 💐	Documentation	• 🛃 🖉 🥥	
Solutions\Chapter_3_AUT	Database	► <u></u>	
Database	Arithmetic Service Editor	>	×
Chapter_3_AUTOSARP	AUTOSAR to ASCET Converter Ctrl+	Shift+A	
ARProject	ASCET-DIFF	Open ASCET-Diff	
	Network Settings Ctrl+	Shift+N Compare >	Selected Components
ARProject	Views Ctrl+	Shift+V	Selected Components Recursively

The **Compare** submenu is also available as context menu in the "Database" or "Workspace" field.

Database		×	Contents		
ControllerTe	st				
Module_Bl	Open Component	R	leturn		
—	Insert			Þ	
	Reproduce As			Þ	
	Compare			۱.	Selected Components
-	Add to Block Library				Selected Components Recursively

To start ASCET-DIFF from within ASCET

If the add-on variant of ASCET-DIFF is installed, you can access ASCET-DIFF via the ASCET component manager.

- 1. Open the ASCET component manager.
- 2. In the "Database" or "Workspace" field, select two components you want to compare.
- 3. Do one of the following:
 - Select Tools > ASCET-DIFF > Open ASCET-DIFF to start the tool without comparing the components.
 - Open the components' context menu and select **Compare > Selected Components** or **Selected Components Recursively**.
 - Select Tools > ASCET-DIFF > Compare > Selected Components or Selected Components Recursively.

Selected Components compares only the selected components.

Selected Components Recursively compares the selected components and the referenced components.

The comparison is executed. ASCET-DIFF opens and displays the results.

4.3 Starting ASCET-DIFF via the Command Line

You can start ASCET-DIFF via the command line, too. Use the following syntax:

ASCET-DIFF "<left main file>" "<right main file>"

<left main file> and <right main file> are path and file name (including
extensions) of the *.main.amd files of the components you want to compare.

ASCET-DIFF can be invoked from the command line in two different configurations:

- With switches
- Without switches

With switches: ASCET-DIFF can be invoked from the command line with switches using the following syntax:

```
ASCET-DIFF -lf "<left file path>" -rf "<right file path>" -lc
"<left component name>" -rc "<right component name>" -lv "<left
version string>" -rv "<right version string>"
```

where

- -lf is the left file path switch
- -rf is the right file path switch
- -lc is the left component name switch (optional)
- -rc is the right component name switch (optional)
- -lv is the left version string switch (optional)
- -rv is the right version string switch (optional)

The switches -lf and -rf are mandatory. If you do not specify -lc and -rc, you may be asked to select the components you actually want to compare; see "ASCET-DIFF is started without component names" on page 22 for more information.

The same command line switches can also be used to specify compressed files (originally in AXL or ZIP format) having renamed file names. The file extensions can also be arbitrary, however, the component names have to be specified as arguments.

Without switches: ASCET-DIFF can also be invoked from the command line without switches. In that case, the first argument is assumed to be the absolute path of the left file, and the second argument is assumed to be the absolute path of the right file. The following command line syntaxes are supported:

- A ASCET-DIFF "<left file path>" "<right file path>" See also section "ASCET-DIFF is started without component names" on page 22.
- B ASCET-DIFF "<left file path>" "<right file path>"
 "<relative path of left component>" "<relative path of
 right component>"
- C ASCET-DIFF "<left file path>" "<right file path>"
 "<relative path of left component>" "<relative path of
 right component>" "<timestamp>"

This syntax is used for interfacing ASCET-DIFF to ASCET.

D ASCET-DIFF "<left file path>" "<right file path>" "<left component name>" "<right component name>"

This syntax can be used when left and right archive files have been renamed or have multiple components and the component names are passed as argument.

ASCET-DIFF is started without component names: If ASCET-DIFF is started via command line without explicitly specified component names, the following happens, depending on the content of the left and right files.

The left file (e.g., <left>.*¹⁾) contains a single component
 <leftComponent>. The right file (e.g., <right>.*) contains a single component <rightComponent>.

ASCET-DIFF opens and compares <leftComponent> and <rightComponent>.

This works regardless of the actual values of the names <left>, <right>, <leftComponent> and <rightComponent>. It is not required that any of these names is identical to another.

If <leftComponent> and <rightComponent> cannot be compared, the comparison aborts with the info message

Comparison not supported!

One file (e.g., <left>.*²) contains one parent component
 <leftParent> and one or more child components. The other file
 (<right>.*) contains one parent component <rightParent> and optionally - one or more child components. The parent-child relations are non-recursive.

ASCET-DIFF opens and compares <leftParent> and <rightParent>.

This works regardless of the actual values of the names <left>, <right>, <leftParent> and <rightParent>. It is not required that any of these names is identical to another.

If *<leftParent>* and *<rightParent>* cannot be compared, the comparison aborts with the following info message:

Comparison not supported!

 One file (e.g., <left>.*²⁾) contains one parent component <Parent> and one or more child components. One of the child components, <Child>, contains <leftParent> as a further child (directly or indirectly), i.e. the parent-child relation is recursive.

In ASCET, recursive parent-child relations are strictly forbidden. If your model contains such a relationship, an error is issued during code generation.

If you detect a recursive parent-child relation while working with ASCET-DIFF, make sure that it is removed from the original ASCET model.

^{1) * =} main.amd or - if the file uses AXL format - axl or sxl or zip or an arbitrary extension

^{2) * =} axl or sxl or zip or an arbitrary extension

ASCET-DIFF opens and shows a selection window that displays all components in <left>.axl that are part of the recursive parent-child relation.

🕞 Select Components to Compare		"Left Co
Components Left Component	Right Component	Class_ Class_
Class_Child_1 (/SiDiff/) Class_Child_2 (/SiDiff/)	Class_BDE (/Examples/)	Class_ Class_ Class_ Class_
[OK Cancel	The righ compor

"Left Component": Class_Parent Contains Class_Child_1, Class_Child_1 contains Class_Child_2, Class_Child_2 contains Class_Parent The right file contains a single component.

This works regardless of the actual values of the file or component names. It is not required that any of these names is identical to another.

Select the left component and right component you want to compare, then click **OK** to start the comparison.

If you selected two components that cannot be compared, the comparison aborts with the following info message:

Comparison not supported!

At least one file (e.g., <left>.*¹) contains two or more unrelated² components (<*Parent_1>*, <*Parent_2>*, etc), which may contain child components.

ASCET-DIFF opens and shows a selection window that displays the unrelated components in *<left>*.* and *<right>*.*.

🙀 Select Components to Compare	
Components Left Component	Right Component
Module_BDE1 (/SiDiff/)	Module_BDE2 (/Examples/)
	OK Cancel

This works regardless of the actual values of the file or component names. It is not required that any of these names is identical to another.

Select the left component and right component you want to compare, then click **OK** to start the comparison.



If you selected two components that cannot be compared, the comparison aborts with the following info message:

Comparison not supported!

1) * = axl or sxl or zip or an arbitrary extension

2) i.e. without references from one *.main.amd file to another

left file	left components	right file	right components	action
<left>.*^{a)}</left>	<left-< td=""><td><right>.*^{a)}</right></td><td><right-< td=""><td><leftcomponent></leftcomponent></td></right-<></td></left-<>	<right>.*^{a)}</right>	<right-< td=""><td><leftcomponent></leftcomponent></td></right-<>	<leftcomponent></leftcomponent>
	Component>		Component>	and <right-< td=""></right-<>
				Component> are
				compared
<left>.*^{a)}</left>	<leftparent>,</leftparent>	<right>.*^{a)}</right>	<rightparent>,</rightparent>	<leftparent>and</leftparent>
	<leftchild_1>,</leftchild_1>		<rightchild_1>,</rightchild_1>	<rightparent></rightparent>
				are compared
<left>.*^{a)}</left>	<parent> CON-</parent>	<right>.*^{a)}</right>	*	selection dialog
	tains < <i>Child></i> ,			opens
	which contains			
	<parent></parent>			
<left>.*^{a)}</left>	<parent_1>,</parent_1>	<right>.*^{a)}</right>	*	selection dialog
	< <i>Parent_2></i> ,			opens

The table summarizes the scenarios.

a)* = axl or sxl or zip or an arbitrary extension

5 Starting ASCET-DIFF Model Viewer

You can only start the ASCET-DIFF Model Viewer if you have the required "ASCET-VIEW" license.

For more information on existing licenses, see the online help of the ETAS license manager or contact your system administrator.

The following sections describe how to start ASCET-DIFF in the model viewer mode using a command line prompt or the Windows context menu. It can be invoked from the command line with relative or absolute path specification.

- "Starting ASCET-DIFF Model Viewer via Command Line" on page 26
- "Starting ASCET-DIFF Model Viewer from Windows Explorer" on page 29

5.1 Starting ASCET-DIFF Model Viewer via Command Line

The installation directory of ASCET-DIFF is the starting point within the Command Prompt window. The default on a 64 Bit Windows OS is the following path:

C:\Program Files (x86)\ETAS\ASCET-DIFF 6.4 (standard)

C:\Program Files (x86)\ETAS\ASCET-DIFF V6.4.8 (side by side)

Then a distinction is made between the argument for relative and absolute path. How to invoke the Model Viewer using an absolute path specification is described in this section.

First, you must start the command prompt.

To start the command prompt and change directory to installation directory

1. In the Windows **Start** menu, enter cmd in the "Search programs and files" field and press < ENTER >.

The "Command Prompt" window opens.



2. In the "Command Prompt" window, enter the command for changing to the installation directory.

If you used the default installation path for a 64 Bit Windows OS, the command reads as follows:

```
cd "C:\Program Files (x86)\ETAS\ASCET-DIFF 6.4"
```

You are now in the installation directory of ASCET-DIFF V6.4.

To start ASCET-DIFF Model Viewer

Prerequisite is that you have already changed in the ASCET-DIFF installation directory (see Page 26).

1. In the "Command Prompt" window, enter the following syntax:

ASCET-DIFF.exe

- -f "<path>\<file name>.<format>"
- -c <component name> -v <version>

where

- ASCET-DIFF. exe is the argument to start ASCET-DIFF.
- -f "<path>\<file name>.<format>" is the file path switch. The file path can be specified absolute or relative to the installation directory.

<format>Can be main.amd or - if the file uses AXL format - axl or sxl or zip or an arbitrary extension.

The specification of the switch -f before the path is optional only if no other switch is used in the command line argument.

EXAMPLE

Relative path:

Absolute path:

```
(-f) "C:\Program Files (x86)\ETAS\ASCET-DIFF 6.4\
    Samples\<file name>.<format>"
```

• -c <component name> is the component name switch (optional).

I) NOTE

The specification of the component name (with or without switch -c) is not necessary. See section "Starting Model Viewer without component name" on page 27 for more details.

- -v <version> is the version string switch (optional).
- 2. Press < ENTER >.

The command will be executed and ASCET-DIFF will be invoked in the Model Viewer mode and – if you provided a component name – display the specified component.

Starting Model Viewer without component name

If the Model Viewer is started via command line without component name, the following happens, depending on the content of the file:

- The file (e.g., <file>.*¹⁾) contains a single component <*Component*>.

ASCET-DIFF opens in Model Viewer mode and displays < Component >.

^{1) * =} main.amd or - if the file uses AXL format - axl or sxl or zip or an arbitrary extension

- The file (e.g., <file>.*¹⁾) contains one parent component <*Parent>* and one or more child components. The parent-child relations are non-recursive.

ASCET-DIFF opens in Model Viewer mode and displays < Parent>.

 The file (e.g., <file>.*¹) contains one parent component <Parent> and one or more child components. One of the child components, <Child>, contains <Parent> as a further child (directly or indirectly), i.e. the parentchild relation is recursive.

In ASCET, recursive parent-child relations are strictly forbidden. If your model contains such a relationship, an error is issued during code generation.

If you detect a recursive parent-child relation while working with ASCET-DIFF, make sure that it is removed from the original ASCET model.

ASCET-DIFF opens in Model Viewer mode and shows a selection window that displays all components in *<file>*.* that are part of the recursive parent-child relation.

Component Selection Dialog	"Components":	
	Class_Parent Contains Class_Child_1,	
Class_Child_1 (/Examples/multiComp/)	Class_Child_1 contains Class_Child_2,	
Class_Child_2 (/Examples/multiComp/)	Class_Child_2contains Class_Parent	
OK Cancel		

Select the component you want to view, then click **OK**.

^{1) * =} axl or sxl or zip or an arbitrary extension

- The file (e.g., <file>.*¹⁾) contains two or more unrelated²⁾ components (<*Parent 1*>, <*Parent 2*>, etc), which may contain child components.

ASCET-DIFF opens in Model Viewer mode and shows a selection window that displays the components in *<file>.**.

Component Selection Dialog	x
Components	
👔 Class_Parent_1 (/Examples/multiComp/)	
Revenue 1 (/DIFF/Comp/Folder/)	
Parent_2 (/DIFF/Comp/Folder/)	
Project (/DIFF/Projects/)	
OK Cancel	

Select the component you want to view, then click **OK**.

The table summarizes the scenarios.

File	Components	Action
<file>.*¹⁾</file>	<component></component>	<component> is displayed</component>
<file>.*1)</file>	<parent>, <child_1>,</child_1></parent>	<parent> is displayed</parent>
<file>.*¹⁾</file>	<parent> contains <child>, which contains <parent></parent></child></parent>	selection dialog opens
<file>.*¹⁾</file>	<parent_1>, <parent_2>,</parent_2></parent_1>	selection dialog opens

5.2 Starting ASCET-DIFF Model Viewer from Windows Explorer

This section describes how to invoke the ASCET-DIFF Model Viewer using the Windows explorer context menu.

To start the Model Viewer via context menu

- In the Windows file explorer, right-click the file (<file>.*¹) you want to view.
- 2. Select Open with > Choose another app.

An app selection window opens.

^{1) * =} axl or sxl or zip or an arbitrary extension

²⁾ i.e. without references from one * .main.amd file to another

3. In that window, select ASCET-DIFF.exe and click **OK**.

How do you want to open this file?

Keep using this app
ASCET
Other options
ASCET.exe
ASCET-DIFF.exe
More apps \downarrow
Always use this app to open .amd files
ок

ASCET-DIFF starts in Model Viewer mode and displays the component or opens the "Component Selection" window (see also "Starting Model Viewer without component name" on page 27), if necessary.

6 Contact Information

Technical Support

For details of your local sales office as well as your local technical support team and product hotlines, take a look at the ETAS website:

www.etas.com/en/hotlines.php

ETAS offers trainings for its products:

www.etas.com/academy

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