

CANoe Version to Execute vTESTstudio Test Unit

Compatibility Matrix

Version dated 2026-10-07

Minimum CANoe version to execute test units built with a specific version of vTESTstudio.

For test units built with vTESTstudio 1.0 and 1.1 always a matching minimum CANoe version must be used - independent of the commands used within the tests. For test units built with vTESTstudio 2.0 or higher there is a corresponding minimum required CANoe version in case no new features are used.

Please find the list of these version dependencies in the following table. For the usage of new features with vTESTstudio 2.0 or higher see version compatibility below.

vTESTstudio Version	Recommended (Minimum) CANoe Version	Minimum CANoe Version
11 SP2	20 SP2	16 / 17 / 18 / 19
11	20	16 / 17 / 18 / 19
10 SP5	19 SP4 / 20	16 / 17 / 18
10 SP4	19 SP4	16 / 17 / 18
10 SP3	19 SP3	16 / 17 / 18
10 / 10 SP1 / 10 SP2	19	16 / 17 / 18
9 SP3 / 9 SP4 / 9 SP4	18 SP3	12.0 / 13.0 / 14 / 15 / 16 / 17
9 / 9 SP1	18	12.0 / 13.0 / 14 / 15 / 16 / 17
8 SP3 / 8 SP4	17 SP3	12.0 / 13.0 / 14 / 15 / 16
8 SP2	17 SP2	12.0 / 13.0 / 14 / 15 / 16
8	17	12.0 / 13.0 / 14 / 15 / 16
7 SP4	16 SP4	12.0 / 13.0 / 14 / 15
7 SP3	16 SP3	12.0 / 13.0 / 14 / 15
7 SP2	16 SP2	12.0 / 13.0 / 14 / 15
7 SP1	16	12.0 / 13.0 / 14 / 15
6 SP3 / 6 SP4	15 SP3	12.0 / 13.0 / 14
6 SP2	15 SP2	12.0 / 13.0 / 14
6 SP1	15 SP1	12.0 / 13.0 / 14
6	15	12.0 / 13.0 / 14
5.0 SP3	14	11.0 SP3 / 12.0 / 13.0
5.0 SP2	13.0 SP2	11.0 SP3 / 12.0 / 13.0
5.0	13.0	11.0 SP3 / 12.0
4.0 SP3	12.0 SP3	9.0 SP4 / 10.0 / 11.0 / 12.0
4.0 SP2	12.0 SP2	8.5 SP5 / 9.0 / 10.0 / 11.0 / 12.0
4.0	12.0	8.5 SP5 / 9.0 / 10.0 / 11.0
3.0 SP3	11.0 SP3	8.5 SP5 / 9.0 / 10.0 / 11.0
3.0 SP2	11.0 SP2	8.5 SP5 / 9.0 / 10.0 / 11.0
3.0	11.0	8.5 SP5 / 9.0 / 10.0
2.2 SP4	10.0 SP4	8.5 SP5 / 9.0 / 10.0
2.2 SP2 / 2.2 SP3	10.0 SP3	8.5 SP5 / 9.0 / 10.0
2.2 SP1	10.0 SP2	8.5 SP5 / 9.0 / 10.0

vTESTstudio Version	Recommended (Minimum) CANoe Version	Minimum CANoe Version
2.2 (Minimum vTESTstudio Version since CANoe 15)	10.0	8.5 SP5 / 9.0
2.1 SP4 / 2.1 SP5 / 2.1 SP6 / 2.1 SP7	9.0 SP4	8.5 SP5 / 9.0
2.1 SP3	9.0 SP3	8.2 SP6 / 8.5 SP5 / 9.0
2.1 / 2.1 SP1 / 2.1 SP2	9.0	8.2 SP6 / 8.5 SP5
2.0 SP3	8.5 SP4	8.2 SP5
2.0 SP2	8.5 SP3	8.2 SP5
2.0 / 2.0 SP1	8.5	8.2 SP5
1.1 SP2 / 1.1 SP3	8.2 SP3	8.2 SP3
1.1 SP1	8.2	8.2
1.1	8.2	8.2
1.0 SP2 / 1.0 SP3	8.1 SP4	8.1 SP4
1.0 / 1.0 SP1	8.1 SP2	8.1 SP2

TABLE 1

Starting with vTESTstudio 2.0 the compatibility is based on commands really used in test tables and test diagrams.

Test units, which are created with vTESTstudio 2.0 or higher, can be executed with CANoe versions starting from 8.2 SP5, if the commands used in the test tables and test diagrams are also supported by the CANoe version being used (comparable to the functions and classes used in CAPL or C# files).

The following table offers an overview of which CANoe version is needed to execute a specific command. For details about "New Aspects available since vTESTstudio 2.0" see table below.

Test Command (Test Table Editor, Test Diagram Editor)	Available since vTESTstudio Version	Minimum CANoe Version	New Aspects available since vTESTstudio 2.0
Basic Stimulation and Verification			
Await Signals Available		8.2 SP4	J1939 node
Await Value Match		8.2 SP4	Wait for Signal Updates
Check		8.2 SP4	
Reset		8.2 SP4	
Send		8.2 SP4	
Set		8.2 SP4	
State Change		8.2 SP4	
Stimulate Ramp	2.0	8.5	
Stimulate Toggle	2.0	8.5	
Stimulate Waveform		8.2 SP4	
Wait		8.2 SP4	

Test Command (Test Table Editor, Test Diagram Editor)	Available since vTESTstudio Version	Minimum CANoe Version	New Aspects available since vTESTstudio 2.0
Background Checks			
Absence of FlexRay Erroneous Frame		8.2 SP4	
Absence of FlexRay Null Frame		8.2 SP4	
Burst Time Limit		8.2 SP4	
Cycle Time Absolute		8.2 SP4	
Cycle Time Relative		8.2 SP4	
DLC OK		8.2 SP4	J1939 node, J1939 PG
Error Frame Count		8.2 SP4	
Fallback		8.2 SP4	J1939 PG
Message Count Observation		8.2 SP4	
Messages Known		8.2 SP4	
No Value Change		8.2 SP4	
Node Active		8.2 SP4	J1939 node, J1939 PG
Node Inactive		8.2 SP4	J1939 node, J1939 PG
Occurrence Count		8.2 SP4	J1939 PG
Occurrence Distance		8.2 SP4	J1939 node
Occurrence Message		8.2 SP4	J1939 node, J1939 PG
Request Response Check		8.2 SP4	J1939 PG, VLAN ID for Ethernet PDUs
Signal Cycle Time Absolute		8.2 SP4	
Value Dependency		8.2 SP4	
Value Valid		8.2 SP4	
Control Flows			
Break	2.0	8.5	
Continue	2.0	8.5	
Else		8.2 SP4	
Else If		8.2 SP4	
For		8.2 SP4	Explicit type definition for loop variable
For Each		8.2 SP4	
If		8.2 SP4	
Return	2.0	8.5	
While		8.2 SP4	
Diagnostics			
Diagnostic Unlock ECU		8.2 SP4	

Test Command (Test Table Editor, Test Diagram Editor)	Available since vTESTstudio Version	Minimum CANoe Version	New Aspects available since vTESTstudio 2.0
Diagnostics Service		8.2 SP4	Sending Mode
Fault Memory Clear		8.2 SP4	
Fault Memory DTC Support		8.2 SP4	
Fault Memory DTCs		8.2 SP4	
Fault Memory Particular DTC		8.2 SP4	
Fault Memory Status		8.2 SP4	
testCollectDiagEcuInformation		8.2 SP4	
External Hardware			
CANstress Configuration		8.2 SP4	
CANstress State		8.2 SP4	
VT System Configuration		8.2 SP4	
J1939			
J1939 Address Claiming Check		8.2 SP4	
J1939 Address Claiming Conflict	2.0	8.5	
J1939 BAM	2.0	8.5	
J1939 Commanded Address		8.2 SP4	
J1939 Request	2.0	8.5	
J1939 Request Address Claiming	2.0	8.5	
J1939 Request Check	2.0	8.5	
J1939 Request 2	2.0	8.5	
J1939 Request 2 Check	2.0	8.5	
J1939 RTS/CTS	2.0	8.5	
J1939 Wait for DTC	2.0	8.5	
LIN			
linChangeSchedTable		8.2 SP4	
linSetBreakLength		8.2 SP4	
linStartScheduler		8.2 SP4	
linStopScheduler		8.2 SP4	
Report			
Report		8.2 SP4	
testCaseReportMeasuredValue		8.2 SP4	
testReportAddWindowCapture		8.2 SP4	
Structure Elements			
Completion		8.2 SP4	

Test Command (Test Table Editor, Test Diagram Editor)	Available since vTESTstudio Version	Minimum CANoe Version	New Aspects available since vTESTstudio 2.0
Fuzz Test Cases	4.0 SP3	12.0 SP3	Timeout, Combinatorics, Endless, Support of AUTOSAR PDUs (CAN, Ethernet), Support of system variables, Support of J1939 symbols
Preparation		8.2 SP4	
Test Case		8.2 SP4	
Test Fixture		8.2 SP4	
Test Sequence		8.2 SP4	
Tester Interaction			
Set by Tester		8.2 SP4	
testValidateTesterConfirmation		8.2 SP4	
Others			
CAPL Inline		8.2 SP4	
Comment		8.2 SP4	
Set Variable		8.2 SP4	
testValidateSystemCall		8.2 SP4	
testValidateSystemCallWithExitCode		8.2 SP4	
testWaitForReplay		8.2 SP4	
Until Measurement End		8.2 SP4	

TABLE 2: New aspects available since vTESTstudio 2.0

The following table lists properties and parameterizations of test commands and structure elements that are only available since vTESTstudio 2.0. If these parameterizations are not used, the tables from above apply.

Test Command (Test Table Editor, Test Diagram Editor)	Command Parameterization	Available since vTESTstudio Version	Minimum CANoe Version
General			
Element 'PDU' (ASR 4.2)	Usage with bus system FlexRay	2.2 SP2	10.0 SP3
Input fields for system variables, parameters out of parameter files and function parameters	Usage of system variables, parameters and function parameters of type 'Data' (byte array)	2.0 SP3	8.5 SP4
Input fields for system variables	Usage of system variables of type unsigned integer (64bit)	2.0 SP3	8.5 SP4
Input fields for signals	Usage of SOME/IP service signals	2.1 SP3	9.0 SP3
Numeric input field of any test command	Usage of CAPL expression	2.0 SP2	8.5 SP3

Test Command (Test Table Editor, Test Diagram Editor)	Command Parameterization	Available since vTESTstudio Version	Minimum CANoe Version
Function parameters of reusable function definitions	Usage as l-value in test commands, e.g. 'Set'	4.0 SP3	12.0 SP3
Input fields for DOs (Distributed Objects)	Usage of numeric data members	5.0 SP3	14
Input fields for DOs (Distributed Objects)	Usage of data members of type string	6	15
Input fields for DOs (Distributed Objects)	Usage of data members of type array and list	8	17
Input fields for DOs (Distributed Objects)	Usage of data members within structs	8 SP3	17 SP3
Input fields for DOs (Distributed Objects)	Usage of embedded and field data members	9	18
Input fields for DOs (Distributed Objects)	Usage of data members within DO arrays	9 SP3	18 SP3
Structure Elements (Test Table Editor)			
CAPL/.NET/Test Table Test Case Call	Trace Items	2.0	8.5
CAPL/.NET/Test Table Test Case Call	Description, Info, Precondition, External References	2.1	9.0
Fuzz Test Cases	Timeout, Combinatorics, Endless, Support of AUTOSAR PDUs (CAN, Ethernet)	5.0	13.0
Fuzz Test Cases	System Variables Min/Max, Support of system variables	6 SP3	15 SP3
Fuzz Test Cases	Support of J1939 symbols	7	16
Interface Functions	Function parameter of type dbMsg, dbFrFrame, dbPDU, DbNode, dbNetwork	3.0 SP2	11.0 SP2
Interface Functions	Function parameter of type message, pg, linFrame, frFrame, frPDU, pdu	3.0 SP3	11.0 SP3
Interface Functions	Function parameter of type CANdbMessage, LINdbFrame, J1939DbPG, CANdbNode, LINdbNode, J1939DbNode, CANdbNetwork, LINdbNetwork, FlexRayDbNetwork	5.0	13.0
Interface Functions	Function parameter of type DbNetwork, DbNode, DbMsg no longer supported	10	19
Python/.NET Interface Functions	Support of default values for parameters	10	19
Test Case, Test Case Definition, Test Case Call, Test Case Lists	Test Case ID	2.1 SP4	9.0 SP4

Test Command (Test Table Editor, Test Diagram Editor)	Command Parameterization	Available since vTESTstudio Version	Minimum CANoe Version
Test Case, Test Case Definition, Test Case Call, Test Case Lists	Trace items defined in parameter files	4.0 SP3	12.0 SP3
Test Case, CAPL/.NET/Test Table Test Case Call, Test Case Lists	User-defined attributes	2.2 SP2	10.0 SP3
Test Case Call	Properties from Definition	2.1 SP4	9.0 SP4
Test Case Lists	Trace Items	2.0 SP2	8.5 SP3
Test Case Lists	Test Case Caption	2.0 SP2	8.5 SP3
Test Case Lists	Function parameter of type signal, sysvar, envvar	2.0 SP2	8.5 SP3
Test Case Lists	Function parameter of type 'SysvarNamespace'	2.0 SP3	8.5 SP4
Test Case Lists	Combinatorics 'pairwise'	2.2	10.0
Test Case Lists	Trace items for single test case calls	4.0	12.0
Test Case Lists	Trace items of struct lists defined in parameter files	4.0 SP3	12.0 SP3
Test Case Lists	Joint Test Case IDs	8	17
Test Case Lists	Test Case ID Irrelevant Parameters	8 SP2	17 SP2
Test Case Lists	Test Case Description	10	19
Test Fixture	Usage of nested test sequence	2.0 SP2	8.5 SP3
Test Commands (Test Table Editor, Test Diagram Editor)			
Await Signals Available	J1939 node	2.0	8.5
Await Value Match	Wait for Signal Updates	2.0 SP2	8.5 SP3
Check, State Change	Usage of OneOf-operator with list parameter out of a parameter file	2.1 SP4	9.0 SP4
Diagnostic Service	Sending Mode	2.0	8.5
Diagnostic Service	Verdict on Invalid Values	2.1 SP4	9.0 SP4
Request Response	PDU	2.1 SP4	9.0 SP4
Execute Waveform	Usage of DO data member as Stimulus Symbol	6	15
Execute Waveform	Sampling Time	7	16
Background Checks			
All background checks	Usage within Test Table function definition	4.0	12.0
All background checks	Usage within loops (For / For Each / While)	6	15
Cycle Time Relative	PDU	2.1 SP3	9.0 SP3

Test Command (Test Table Editor, Test Diagram Editor)	Command Parameterization	Available since vTESTstudio Version	Minimum CANoe Version
Cycle Time Absolute	PDU	2.1 SP3	9.0 SP3
DLC OK	J1939 node, J1939 PG	2.0	8.5
Fallback	J1939 PG	2.0	8.5
Fallback	PDU	2.1 SP4	9.0 SP4
Node Active	J1939 node, J1939 PG	2.0	8.5
Node Active	PDU	2.1 SP4	9.0 SP4
Node Inactive	J1939 node, J1939 PG	2.0	8.5
Node Inactive	PDU	2.1 SP4	9.0 SP4
Occurrence Count	J1939 PG	2.0	8.5
Occurrence Count	PDU	2.1 SP4	9.0 SP4
Occurrence Distance	J1939 node	2.0	8.5
Occurrence Message	J1939 node, J1939 PG	2.0	8.5
Occurrence Message	PDU	2.1 SP3	9.0 SP3
Request Response Check	J1939 PG	2.0	8.5
Request Response Check	PDU	2.1 SP3	9.0 SP3
Request Response Check	VLAN ID for Ethernet PDUs	5.0	13.0
Request Response Check	Ethernet Port, Direction	10	19
Control Flows			
For	Explicit type definition for loop variable (mandatory)	5.0	12
External Hardware			
VT System Configuration	Measurement Mode, Digital Output	9 SP3	18 SP3
Waveforms			
Check Points		3.0 SP3	11.0 SP3
Non-stimulating curves (check points only)		4.0	12.0
Parametrization of check points		4.0	12.0
Test Sequence Diagrams			
Variables	Support more than 64 variables per diagram	5.0 SP3	12.0
Test Case Attributes on partial paths		10	16

TABLE 3: properties and parameterizations of test commands and structure elements avail. since vTESTstudio 2.0

Connection of REQM/TDM systems:

The connection of vTESTstudio and CANoe to IBM DOORS (classic), IBM DOORS NG and Rational Quality Manager, Siemens Polarion ALM, PTC Integrity, Jama Connect and Intland codeBeamer is supported out-of-the-box. Therefore add-ins and standalone applications (so-called 'connection utilities') are available for download on the Vector website. The following table lists version dependencies between the add-ins and vTESTstudio version.

Add-In for DOORS (classic)	Minimum vTESTstudio/CANoe Version for the Usage of Full Functional Range
4.2	vTESTstudio 1.0, CANoe 8.1 SP2
4.1	vTESTstudio 1.0, CANoe 8.1 SP2
4.0	vTESTstudio 1.0, CANoe 8.1 SP2
3.0	vTESTstudio 1.0, CANoe 8.1 SP2
2.2	vTESTstudio 1.0, CANoe 8.1 SP2
2.1.0	vTESTstudio 1.0, CANoe 8.1 SP2
2.0.2	vTESTstudio 1.0, CANoe 8.1 SP2
2.0.1	vTESTstudio 1.0, CANoe 8.1 SP2

TABLE 4

Connection Utility for IBM Engineering Lifecycle Management - IBM DOORS NG & ETM (RQM)	Minimum vTESTstudio/CANoe Version for the Usage of Full Functional Range
25.1.0	vTESTstudio 10, CANoe 19
24.2.3	vTESTstudio 8 SP3, CANoe 18
3.0.1	vTESTstudio 6, CANoe 15
2.0.0	vTESTstudio 4.0, CANoe 10.0
1.3.1	vTESTstudio 3.0, CANoe 10.0
1.2.1	vTESTstudio 2.2 SP2, CANoe 10.0
1.2.0	vTESTstudio 2.2 SP2, CANoe 10.0
1.1.0	vTESTstudio 2.1 SP4, CANoe 9.0 SP4

TABLE 5

Connection Utility for Siemens Polarion ALM	Minimum vTESTstudio/CANoe Version for the Usage of Full Functional Range
25.1.0	vTESTstudio 10, CANoe 19
24.2.3	vTESTstudio 8 SP3, CANoe 18
3.0.1	vTESTstudio 6, CANoe 15
2.0.0	vTESTstudio 4.0, CANoe 10.0
1.3.1	vTESTstudio 3.0, CANoe 10.0
1.2.0	vTESTstudio 2.2 SP2, CANoe 10.0
1.1.0	vTESTstudio 2.1 SP4, CANoe 9.0 SP4

TABLE 6

Connection Utility for PTC Windchill / Integrity	Minimum vTESTstudio/CANoe Version for the Usage of Full Functional Range
25.1.0	vTESTstudio 10, CANoe 19
24.2.3	vTESTstudio 8 SP3, CANoe 18
2.0.0	vTESTstudio 4.0, CANoe 10.0
1.3.1	vTESTstudio 3.0, CANoe 10.0
1.2.0	vTESTstudio 2.2 SP2, CANoe 10.0
1.0.0	vTESTstudio 2.1 SP4, CANoe 9.0 SP4

TABLE 7

Connection Utility for Jama Connect	Minimum vTESTstudio/CANoe Version for the Usage of Full Functional Range
25.1.0	vTESTstudio 10, CANoe 19
24.2.3	vTESTstudio 8 SP3, CANoe 18
1.0.0	vTESTstudio 4.0, CANoe 10.0

TABLE 8

Connection Utility for Intland codeBeamer	Minimum vTESTstudio/CANoe Version for the Usage of Full Functional Range
25.1.0	vTESTstudio 10, CANoe 19
24.2.3	vTESTstudio 8 SP3, CANoe 18
1.0.0	vTESTstudio 4.0, CANoe 10.0

TABLE 9

CANoe Execution Adapter	Minimum vTESTstudio/CANoe Version for the Usage of Full Functional Range
24.2.3	vTESTstudio 8 SP3, CANoe 18
3.0.0	vTESTstudio 6, CANoe 15
2.0.0	vTESTstudio 4.0, CANoe 10.0, CANoe4SW 14
1.0.1	vTESTstudio 4.0, CANoe 10.0
1.3.1	vTESTstudio 3.0, CANoe 10.0

TABLE 10

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