

# SISTEMA version history

Up to version 2.0.8.4, January 2020

**UPD** = update  
**IMP** = improvement  
**FIX** = bugfix  
**MSC** = miscellaneous  
**ToDo** = in planning

## Version 2.0.8.4

Type	Description
<b>FIX</b>	General bug fixing
<b>FIX</b>	An error occurred when trying to import a device with Category B from the VDMA66413 library. The problem has been fixed.
<b>FIX</b>	Device type 4 was not displayed correctly in the library manager for the VDMA 66413 files, while the import of such a device did work correctly. This display problem has been fixed.
<b>FIX</b>	When copying an entire project, the file name was not reset. This could lead to an unintentional overwriting of the original file. The problem has been fixed.
<b>FIX</b>	Presentation errors in the report. The problem has been fixed.
<b>FIX</b>	There were problems in selecting items in the list of CCF measures. The problem is fixed.
<b>IMP</b>	The signature fields can now be hidden in the report.
<b>IMP</b>	For a Safety function it is now also possible to specify a reference designator (Safety function designator), which is displayed in square brackets in the navigation panel.
<b>ToDo</b>	Update help file

## Version 2.0.8.3

Type	Description
<b>FIX</b>	General bug fixing
<b>FIX</b>	Problems while opening a project file via double click (works only if SISTEMA has already been started). The problem has been fixed.
<b>FIX</b>	The new value range for B10 / B10D values did not work correctly in SISTEMA. The problem has been fixed.
<b>UPD</b>	If a device without a required RDF value is imported from a VDMA library, this RDF value can be set by the user himself.
<b>ToDo</b>	Update help file

## Version 2.0.8

Type	Description
<b>UPD</b>	There was a small adjustment in the VDMA schema file (the B10/B10D range has been extended). This change was adopted in SISTEMA.
<b>UPD</b>	CCF and DC measures have been adjusted to meet the current standard.
<b>UPD</b>	The field "DOCUMENT" can now also save a directory name instead of a file name. A directory has to be entered manually (e. g. by copy & paste) or inserted via drag & drop.
<b>FIX</b>	General bug fixing
<b>FIX</b>	Known bug/Former problem: Copy & paste of a complete project did not reset the creation date. The problem has been fixed.

Type	Description
<b>FIX</b>	For blocks and elements, the B10D value was not correctly transmitted in the summary. The problem has been fixed.
<b>FIX</b>	Refresh problems in the channel manager. The problem has been fixed.
<b>FIX</b>	When performing copy & paste of text e.g. from PDF files, control characters might have been inserted into data fields. After saving the project, the project file could no longer be read by SISTEMA. The problem has been fixed.
<b>FIX</b>	Resetting the window settings by using the SISTEMA-Configurator did not work correctly. The problem has been fixed.
<b>MSC</b>	The color of the VDMA Devices icon has been changed for better visibility.
<b>MSC</b>	The list of messages can be exported as a text file (right-click on the message window).
<b>ToDo</b>	Update help file

### Version 2.0.7

Type	Description
<b>FIX</b>	General bug fixing
<b>FIX</b>	During start-up of SISTEMA an Umlaut in the file paths [DataDir] or [WorkDir] resulted in an error. The problem has been fixed.
<b>FIX</b>	Under certain configurations, there are display errors in the VDMA Library Manager. The problem has been fixed.
<b>FIX</b>	The column "DCavg" had been missing in the list view of subsystems and has been added.
<b>FIX</b>	If the point was used for a decimal separator in the country-specific number formats of Windows, SISTEMA has not allowed the input of numerical values such as in the field of "PFH <sub>D</sub> ". The problem has been fixed.
<b>FIX</b>	Certain constellations led to the list of SISTEMA libraries being reset. The problem has been fixed.
<b>UPD</b>	In the list of "Typical components values" the entry "Push buttons" was missing, it has been added.
<b>MSC</b>	In rare cases, there are display problems, such as the radio buttons in the tabs are not completely visible. A new option has been added (menu: options/view). For these special cases, it will be helpful to set this option to a value like "125" or "150" (magnification of the image in percent).
<b>MSC</b>	The shortcut key CTRL + A was used by SISTEMA to open the VDMA Library Manager so far. This keyboard shortcut changed to CTRL + M.
<b>ToDo</b>	Update help file!

### Version 2.0.6

Type	Description
<b>FIX</b>	General bug fixing
<b>FIX</b>	Update issues in the library manager for the VDMA-66413 format fixed.
<b>UPD</b>	Japanese has been implemented as an additional language in SISTEMA. The translation was done by the company Omron.
<b>UPD</b>	The summary/the report has been revised. The level of detail can be adjusted with the help of new print options.
<b>UPD</b>	"Performance Level Software" was renamed to "Software suitable up to PL".
<b>UPD</b>	Links are updated (for example, "Innovations in SISTEMA 2.0 – Beta" renamed to "Innovations in SISTEMA 2.0")
<b>MSC</b>	If the performance level of a subsystem is determined with the help of a SIL value, a green hint message is generated.
<b>MSC</b>	The default setting for decimal places has been reduced from 2 to 1 or 0.
<b>ToDo</b>	Update help file!

Version 2.0.5 build 2 beta

Type	Description
<b>FIX</b>	While using the copy function a problem occurred. The problem was fixed.
<b>FIX</b>	Project files that were created with a newer version of SISTEMA and having the same data structure were not accepted. The problem was fixed.

Version 2.0.5 beta

Type	Description
<b>FIX</b>	In some situations a project could not be saved. The problem was fixed.
<b>UPD</b>	Firebird has been updated (from 2.5.2 to 2.5.6).

Version 2.0.4 beta

Type	Description
<b>FIX</b>	General bug fixing
<b>FIX</b>	The problem with the text box for "Lambda" values (block/element) is fixed.
<b>UPD</b>	Link "Getting Started" added to the Help menu.
<b>UPD</b>	Links are updated.
<b>UPD</b>	Windows 10 support (Windows 2000 and Windows XP are no longer supported).
<b>UPD</b>	Texts of the user interface have been adjusted/unified.
<b>IMP</b>	Support for multi-user operation of SISTEMA projects. If a project is already being processed by someone else, a message shows up.

Version 2.0.3 beta

Type	Description
<b>UPD</b>	Details of all changes are described in a separate paper. You can find the link to this PDF file in SISTEMA under "Help -> Innovations in SISTEMA 2.0 - Beta".
<b>UPD</b>	Support of the universal data format for safety-related values of components or parts of control systems "VDMA 66413".
<b>UPD</b>	Expansion by many additional documentation fields at all levels, so that all data fields of the format "VDMA 66413" are supported by SISTEMA.
<b>UPD</b>	SIL can be used as a parameter for evaluating a control system. SISTEMA automatically converts the SIL into a matching PL.
<b>UPD</b>	Texts for the category requirements have been revised. If available, additional information is displayed by using tooltips.
<b>UPD</b>	In addition to the category requirements, performance level requirements have been added, which have to be confirmed by the user.
<b>UPD</b>	A new gui-control "Software PL" was added. It can be used to specify the achieved performance level by the application software of the control part.
<b>UPD</b>	The list "Type of safety function" has been enhanced by additional items.
<b>UPD</b>	List of DC and CCF measures has been updated (ISO 13849-1:2015).
<b>UPD</b>	List of substitute values for $MTTF_D/B10_D$ "method of good engineering practice" has been updated (ISO 13849-1:2015).
<b>UPD</b>	Amendments to ISO 13849-1:2015 have been entered into SISTEMA, i.e.: <ul style="list-style-type: none"> <li>- Capping of <math>MTTF_D</math> 2500 a for Category 4 by default True</li> <li>- Reduced testing frequency for category 2 is possible</li> <li>- New simplified method for the output part of the SRP/CS for determining <math>PL/PFH_D</math> without <math>MTTF_D</math></li> <li>- <math>PL_r</math> determination with possibility to consider the probability of occurrence</li> </ul> Details can be found on: <a href="http://www.dguv.de/webcode/e89507">http://www.dguv.de/webcode/e89507</a> ("Amendment of EN ISO 13849-1, A survey of the essential improvements in 2015")

Type	Description
<b>IMP</b>	The texts for CCF measures and DC measures are automatically adjusted to the current SISTEMA language. Self-defined measures are not translated. This behavior can be adjusted by selecting "Expert settings/Use the current language for CCF-/DC-Measures".
<b>IMP</b>	Additional messages, indicating that inputs maybe incorrect or missing, have been added.
<b>IMP</b>	The validation of XML files against a schema file is performed directly by SISTEMA. An additional Windows DLL file (MSXML4.dll) is no longer necessary.
<b>IMP</b>	For creating a new project, the default values have been adjusted in order to avoid incorrect values to be entered or missing inputs.
<b>IMP</b>	When selecting "Typical components values", the description and details for the selection are copied to the clipboard. Thus, if necessary this information can be entered into the documentation field.
<b>FIX</b>	After saving a project, the checksum may change due to non-visible characters like "Tab" at the end of a text which are removed. The problem has been solved.
<b>FIX</b>	Problems while updating the tree view have been fixed.
<b>FIX</b>	The list of libraries in the Library Manager of SISTEMA was not saved when SISTEMA was closed, while the library window was still visible. The problem has been fixed.
<b>FIX</b>	Problems with the Windows display setting unlike 96 DPI were fixed.
<b>MSC</b>	Name changes: MTTF <sub>d</sub> → MTTF <sub>D</sub> ; B10 <sub>d</sub> → B10 <sub>D</sub> ; PFH → PFH <sub>D</sub> etc.
<b>MSC</b>	By pressing "Return/Enter" the next text box will be selected. This behavior can be changed by option and is active by default.
<b>MSC</b>	The filter function has been revised. If the current selection is within a project, also this project will be filtered only. To filter in a different project, the filter must be cancelled before.