

# SISTEMA version history

Up to version 1.1.6, June 2013

**IMP** = improvement  
**FIX** = bugfix  
**MSC** = miscellaneous  
**UPD** = update

Version 1.1.6

Type	Description
<b>IMP</b>	While generating new libraries, upper/lower case of file names will be maintained.
<b>IMP</b>	While loading libraries by double-click, the library manager will automatically open. In addition, projects and libraries are selected automatically.
<b>FIX</b>	Calling a SISTEMA file by double-click while a SISTEMA instance is already running, resulted in an error message.
<b>FIX</b>	If SISTEMA was started without administrative rights, the registration of the file extension *.ssm and *.slb (VISTA, Windows7, Windows8) resulted in an error.
<b>FIX</b>	Adding a network library by a database alias name did not always work.
<b>FIX</b>	The list of libraries in the SISTEMA library manager has been cleared under certain circumstances.
<b>FIX</b>	The order of objects in SISTEMA libraries was not saved.
<b>FIX</b>	Copying and pasting objects did not always work. A possible reason for this has been found and corrected.
<b>FIX</b>	The initial directory for file-browsing was determined partly wrong.
<b>FIX</b>	Division of infinity/infinity led to an exception error.
<b>FIX</b>	On selection of documents from a network drive, the relative path was generated incorrectly.
<b>FIX</b>	References to the standard in DC/CCF library manager were corrected.

Version 1.1.5

Type	Description
<b>IMP</b>	Update of data and status of objects is optimized and update problems have been fixed
<b>IMP</b>	Speed of loading and processing the data has been optimized
<b>IMP</b>	Messages about files or directories (e.g. Save, Create) are detailed (including file/folder name)
<b>IMP</b>	Additional information icon (question mark) in the "Tab" (if this is not relevant, but an input error is suspected)
<b>IMP</b>	In the tab "blocks" of a subsystem only relevant channels are displayed
<b>MSC</b>	Progress bar when loading libraries ('show progress bar' option, default is: not visible)
<b>MSC</b>	Context and message panel can be hidden (Ctrl+K and Ctrl+H)
<b>MSC</b>	Calculating the checksum must be triggered manually (is a performance benefit)
<b>MSC</b>	Moving objects in the tree using the mouse (drag & drop) possible in all directions
<b>MSC</b>	Drag & drop files, text and URLs is possible e.g. directly from the file manager or web browser to SISTEMA.
<b>MSC</b>	List of shortcuts stored in a readme file
<b>MSC</b>	Improvement of information display in the status bar.
<b>MSC</b>	Focusing on the work area when you press the Enter key and an object is actively selected in the tree view.
<b>MSC</b>	By a longer click on an object (or key 'F2') in the tree view, direct editing of the name is possible.
<b>FIX</b>	Problems when rounding floating point numbers (used for display only) have been fixed
<b>FIX</b>	Problems with copy & paste are fixed, now possible in both directions (library <-> main window)
<b>FIX</b>	Calculating the checksum is revised (exclusive date and file name, independent of language and country)
<b>FIX</b>	Display issues when changing the DPI setting fixed
<b>FIX</b>	Problems when displaying lists are fixed (sometimes led to a crash)
<b>FIX</b>	In certain situations a PL in the SF was shown, although no PFH could be calculated (non-safety relevant). This has been fixed.

Type	Description
<b>FIX</b>	Registration/update again possible (new server URL)
<b>FIX</b>	Problems in the visualization of the currently selected GUI element fixed.
<b>FIX</b>	At Cat 4 subsystems it had been checked only whether the symmetrized $MTTF_d$ is high. Now both redundant channels are checked for $MTTF_d$ high. If necessary, a message will be generated.

#### Version 1.1.4

Type	Description
<b>FIX</b>	There was an error in the completion of the relative path to the language files. The problem has been corrected.
<b>FIX</b>	Under certain conditions a project file was damaged during saving. It was a memory error which tended to crash SISTEMA. The problem has been corrected.
<b>FIX</b>	After closing a project and opening a new one, under certain conditions an error occurred (with no impact) ['Access violation...' or / and 'Error in FormItemManager...']. The problem has been corrected.
<b>FIX</b>	DC values greater than 99% could be entered but were not completely considered by the calculation. While reading a project file under certain conditions an error occurred if a DC value was defined outside of the maximum range (e.g. DC measure with a DC > 100%). The problem has been corrected. Now only DC values within the range of 0% to 99% can be entered. In projects where a DC value outside of this range had been defined, the value will be adjusted to maximum/minimum limit.

#### Version 1.1.3

Type	Description
<b>IMP</b>	Libraries can now be shared by using a network. This requires a database server (at least Firebird 1.5). Further information is provided in the SISTEMA Cookbook 2.
<b>UPD</b>	Finnish has been implemented as a further language in SISTEMA. The task of translation was conducted by Sundcon Oy.
<b>UPD</b>	Italian has been implemented as a further language in SISTEMA. The task of translation was conducted by ISPESL – Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro – Dipartimento Tecnologie di Sicurezza.
<b>UPD</b>	The languages French, Finnish and Italian are now also available in the setup of SISTEMA.
<b>UPD</b>	The files for language, help and readme are now directly stored in the program directory, where they are used by SISTEMA (which will not create anymore copies in the application data directory of SISTEMA). Because these files are used as read-only and the Vista Manifest is now integrated, SISTEMA is still conform to Vista and Windows 7.
<b>FIX</b>	Missing translations have been added.
<b>FIX</b>	The list of possible categories was not fully displayed in other languages (e.g. French). The problem has been corrected.
<b>FIX</b>	Changes of the default project folder were not accepted. The problem has been corrected.
<b>FIX</b>	A cancel of the open file dialog when looking up a local library file caused an error message. The problem has been corrected.
<b>FIX</b>	SISTEMA still runs on Vista and Windows 7 in a kind of compatibility mode. For this reason, the Vista Manifest, which deals with this problem, has been integrated.
<b>FIX</b>	Icons on columns in lists were not displayed under Vista and Windows 7. The problem has been corrected.

#### Version 1.1.2

Type	Description
<b>IMP</b>	The GUI has been made as dynamic as possible and now adjusts to the main SISTEMA window.
<b>IMP</b>	In the report, pressing the Ctrl key enables the user to zoom in and out by means of the mouse wheel.
<b>IMP</b>	The F5 key can now be used to expand the project structure completely (an object must be selected for this purpose). In the process, all values are updated (this is not normally necessary, since SISTEMA should update all values online).

Type	Description
UPD	French has been implemented as a further language in SISTEMA (with the exception of the Help texts, which are still in English). The task of translation was assumed by Cetim – Centre technique des industries mécaniques.
UPD	Besides the window settings, the positions and sizes of the GUI panels are now saved also.
UPD	The standard settings (global settings/window settings only) can be restored by means of the configuration tool. The configuration tool cannot be launched from within SISTEMA, but must be executed separately.
UPD	The path of a file indicated in relative form in a library is no longer expanded (assuming that the file existed) during loading into a project; instead, the procedure in libraries has been modified with relative paths. The path of the folder containing the current library is used as a relative path when a file is selected.
UPD	A fault exclusion can be set at subsystem level (represented by $PFH = 0 \text{ 1/h}$ ).
UPD	When the report is generated, selection is now possible between an abridged report (overview of the safety functions) and the familiar detailed version. One form of the report can also be selected in the Options menu as the corresponding default.
UPD	In the report, the risk graph has been modified such that the selected path is still visible even when printed in black & white.
UPD	In the report, the checksum of the project is now also shown on each page.
UPD	In the report (software version field), the number of the version with which the report concerned was generated is displayed, and not as previously the version with which the project was created.
MSC	Should the XML schema test return an error during loading of a project, loading of the project can now still be attempted. (An error message is displayed which can be ignored).
MSC	The BGIA has been renamed the IFA; this has also been implemented within SISTEMA. Besides the GUI and the report, the root path in the registry (HKCU\Software\IFA) under which the SISTEMA settings are saved is also affected by this change.
MSC	The version information is now saved in the SISTEMA installation file and in SISTEMA.exe.
MSC	Minor editorial changes have been made to some dialogs.
FIX	The report caused SISTEMA to crash on occasions (generally with large projects). The problem has been corrected.
FIX	During saving of a project as a PDF file, the extension .pdf and the name of the file were not always accepted as expected. The problem has been corrected.
FIX	A PL superior to PL <sub>e</sub> produced from a PFH value was displayed correctly in the GUI (PL <sub>e</sub> ) but saved incorrectly in the project file. This did not lead to an error; it was however possible for third-party applications to use these incorrect values. The problem has been corrected.
FIX	The content of the context panel and of the associated tab were not always updated correctly, with the result that they differed in some cases (for example during the exchange of channels). The problem has been corrected.
FIX	Missing translations have been added.
FIX	In the report, the documentation was cut off at subsystem level at a page return. The problem has been corrected.
FIX	In the database files, the requirements of the category could be set but not cleared again. The problem has been corrected.
FIX	At element level, an $MTTF_d$ of zero can be set by means of the $B_{10d}$ value. This $MTTF_d$ was interpreted incorrectly (infinity instead of zero) by the levels above it (block, channel, subsystem). The problem has been corrected.

#### Version 1.1.1

Type	Description
FIX	Determining of the PFH value by means of a defined PL resulted in an error (PL <sub>e</sub> was affected), i.e. incorrect PFH limit values were used. The problem has been corrected.
FIX	In the report, the documentation for the DC measures was cut off at a page return on the element level. The problem has been corrected.
FIX	Errors occurred during loading of protected libraries originating from older SISTEMA versions. The problem has been corrected.