

SISTEMA version history

Up to version 1.1.7, March 2015

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

Version 1.1.7

Type	Description
IMP	The tree view has been revised and its rendering has been accelerated.
IMP	Searching and filtering of objects in the tree view and list view has been implemented (in the list view only reachable by using the right-click pop-up menu).
IMP	Sorting in the tree view has been implemented (the new sort order will be saved).
IMP	Sorting in the list view has been implemented (the new sort order will NOT be saved).
IMP	You can drag (via drag and drop) documents/files into the Documentation field of an object. These files will be listed there.
IMP	Representation of drawing thousands separator (can be disabled via [Options ⇒ General]).
IMP	The list of CCF-Measures now supports multi selection.
IMP	The operation of Windows drag & drop functionality was adapted. During dragging an object you can switch between "move" and "copy" by using the "Shift" respectively "Ctrl" key. If you use the middle or the right mouse button for drag and drop, a pop-up menu will be opened for selecting the desired operation.
IMP	In the library window, the selection of the object-category is now realized by using buttons (no combo box anymore) above the tree view. This has the advantage that it is directly obvious, how many objects are included in each category.
IMP	The list of library has been improved. On mouse over on the table field "Database" the properties are showed by the hint. The database property windows can also be shown by using the short cuts "Ctrl+I" or "Ctrl+Alt+I".
IMP	A library will be loaded only once. You can switch between loaded libraries without new loading procedure. There is a new option in [Options ⇒ Experts] „Reload library on selection (library auto-reset)", that will disable this new functionality.
IMP	A bug report has been integrated. The report is automatically created on a crash of SISTEMA and offers the user the option to send it to the Institute for Occupational Safety and Health.
IMP	Entering values such as MTTFd is directly checked and highlighted if they are out of range.
IMP	Creating of reports has been improved and accelerated.
IMP	The report has been revised and e.g. the distances between the values decreased. The contents have remained the same but require less pages.
IMP	A one-time calculated checksum of a project is visible until a change occurs and thus also changes the checksum.
UPD	Spanish has been implemented as an additional language in SISTEMA. The translation was done by the companies SICK and Omron.
UPD	The list "Typical components values" (Element ⇒ MTTFd) has been revised.
FIX	The checksum calculation of a project has been revised. It doesn't matter which language of SISTEMA is used or how many decimal places are displayed.
FIX	Projects in version 1.1.6 and older are calculated with the old routine, so it returns the same checksum (if you are using the same language and the same number of decimal places).
FIX	In rare cases the creating of a report crashed SISTEMA (mostly with large projects). The problem has been fixed.
FIX	Copying from the tree view (selected an Object ) now works.
MSC	The general option "Show state marks after selection (faster) " was removed because the speed gain is very low.
MSC	A new option for setting the date format [Options ⇒ General] has been added.
MSC	Information panels such as context display, messages and properties of the library can be minimized by using their title bar.
MSC	The library window can be reduced by using the vertical title bar (only displaying the tree view).
MSC	The currently visible tree view can be printed (pop-up menu with a right mouse click ⇒ "Print

Version 1.1.6

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

Version 1.1.5

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

Type	Description
FIX	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
IMP	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.
UPD	Finnish has been implemented as a further language in SISTEMA. The task of translation was conducted by Sundcon Oy.
UPD	Italian has been implemented as a further language in SISTEMA. The task of translation was conducted by ISPEL – Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro – Dipartimento Tecnologie di Sicurezza.
UPD	The languages French, Finnish and Italian are now also available in the setup of SISTEMA.
UPD	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.
FIX	Missing translations have been added.
FIX	The list of possible categories was not fully displayed in other languages (e.g. French). The problem has been corrected.
FIX	Changes of the default project folder were not accepted. The problem has been corrected.
FIX	A cancel of the open file dialog when looking up a local library file caused an error message. The problem has been corrected.
FIX	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.
FIX	Icons on columns in lists were not displayed under Vista and Windows 7. The problem has been corrected.

Version 1.1.2

Type	Description
IMP	The GUI has been made as dynamic as possible and now adjusts to the main SISTEMA window.
IMP	In the report, pressing the Ctrl key enables the user to zoom in and out by means of the mouse wheel.
IMP	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).
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 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.

Type	Description
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_e produced from a PFH value was displayed correctly in the GUI (PLe) 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 (PLe 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.