Erlangen, 04/28/2023

SIMATIC/SIMOTION ProjectGenerator

Changes from V1.4.5 to V1.4.5.1

- **New function:**
  Support of SIMOTION V5.5:
  - New device exports, technology object exports, …
  - Upgrade of device-dependent libraries
- **New function:**
  Latest versions of included standard applications are delivered with this revision:
  - SIMOTION:
    - Axis Function Block (LMCBasic library) V1.3.7
    - Cam Disk Creation (LCamHdl library) V1.4.3
    - Cartoner (LCarton library) V1.1.1
    - TCP/IP Communication (LCom library) V2.0.2
    - TCP/IP Communication (LCom library) V1.2.6
    - Converting Module V1.0.5
    - DPV1 Services (LDPV1 library) V4.2.12
    - DRIVE-CLiQ Topology Viewer V1.0.4
    - Intelligent Belt V2 (LIBeltV2 library) V1.0.9
    - Machine Data Acquisition V1.1.1
    - Machine Energy Acquisition V1.0.3
    - Message Handling (LMsgHdl library) V1.3.4
    - Modular Machine (LMoMa library) V1.2.6
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Packaging Library LPac V2.1.6 (LPac library)
    - Startup Check (pStartupCheck program) V1.1.6
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihenstephan library) V1.1.2
  - SIMATIC:
    - TCP/IP Communication (LCom library) V1.2.6 *(not updated)*
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihStd library) V1.2.3
    - Weihenstephan Client (LWeihCli library) V1.3.2

Changes from V1.4.4 to V1.4.5

- **New function:**
  Support of SIMOTION V5.4:
  - New device exports, technology object exports, …
  - Upgrade of device-dependent libraries
- **New function:**
  Latest versions of included standard applications are delivered with this revision:
  - SIMOTION:
    - Axis Function Block (LMCBasic library) V1.3.7

    - Cam Disk Creation (LCamHdl library) V1.4.3 *(updated)*
    - Cartoner (LCarton library) V1.1.1
    - TCP/IP Communication (LCom library) V2.0.2 *(updated)*
    - TCP/IP Communication (LCom library) V1.2.6
    - Converting Module V1.0.5 *(updated)*
    - DPV1 Services (LDPV1 library) V4.2.12
    - DRIVE-CLiQ Topology Viewer V1.0.4
    - Intelligent Belt V2 (LIBeltV2 library) V1.0.9
    - Machine Data Acquisition V1.1.1
    - Machine Energy Acquisition V1.0.3
    - Message Handling (LMsgHdl library) V1.3.4 *(updated)*
    - Modular Machine (LMoMa library) V1.2.6 *(updated)*
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Packaging Library LPac V2.1.6 (LPac library) *(updated)*
    - Startup Check (pStartupCheck program) V1.1.6
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihenstephan library) V1.1.2
  - SIMATIC:
    - TCP/IP Communication (LCom library) V1.2.6 *(not updated)*
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihStd library) V1.2.3
    - Weihenstephan Client (LWeihCli library) V1.3.2
- **Bug-fix:**
  A TM Timer DIDQ module present in the project is handled correctly at the internal function SelectProjectTP. The SelectProjectTP function is used for example in the Message Handling module.
- **Bug-fix:**
  Access problems (sender="get__getDOConfig" Exception: Public member 'LocalInAddresses' on type 'IS7Station' not found), which occurred during the integration of the Message Handling module, are fixed. The values of the following three library constants are now set correctly and do not need to be adjusted manually to make the project compilable:
  LMSGHDL_NUMBER_OF_CYCLIC_DOS,
  LMSGHDL_NUMBER_OF_ACYCLIC_DOS,
  LMSGHDL_NUMBER_OF_PERIPHERAL_DEVICES
- **Bug-fix:**
  The RestoreConstants command saves now also constants which have a letter in their value, e.g. "LDPV1_MAX_ALLOCATION_TIME_SERVICE : TIME := T#40s;".
- **New function:**
  The communication slot identifier for "CBE30-2 at D455-2" (PN2) has been added in the TelegramConfig.XML.

Changes from V1.4.3.1a to V1.4.4

- **New function:**
  Support of SIMOTION V5.3:
  - New device exports, technology object exports, …
  - Upgrade of device-dependent libraries
- **New function:**
  A new version (V1.3.3) of the SIMOTION script AxisSimulationOnOff exists.
- **New function:**

Latest versions of included standard applications are delivered with this revision:
- SIMOTION:
    - Axis Function Block (LMCBasic library) V1.3.7 *(updated)*
    - Cam Disk Creation (LCamHdl library) V1.3.3
    - Cartoner (LCarton library) V1.1.1
    - TCP/IP Communication (LCom library) V2.0.1 *(new)*
    - TCP/IP Communication (LCom library) V1.2.6
    - Converting Module V1.0.4 *(updated)*
    - DPV1 Services (LDPV1 library) V4.2.12 *(updated)*
    - DRIVE-CLiQ Topology Viewer V1.0.4
    - Intelligent Belt V2 (LIBeltV2 library) V1.0.9
    - Machine Data Acquisition V1.1.1
    - Machine Energy Acquisition V1.0.3
    - Message Handling (LMsgHdl library) V1.3.3
    - Modular Machine (LMoMa library) V1.2.5
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Packaging Library LPac V2.1.5 (LPac library)
    - Startup Check (pStartupCheck program) V1.1.6
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihenstephan library) V1.1.2
- SIMATIC:
    - TCP/IP Communication (LCom library) V1.2.6 *(not updated)*
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihStd library) V1.2.3
    - Weihenstephan Client (LWeihCli library) V1.3.2

Changes from V1.4.3.1 to V1.4.3.1a

- **New function:**
  Support of SIMOTION V5.2:
  - New device exports, technology object exports, …
  - Upgrade of device-dependent libraries
  - Adaptations at the login dialog of the SIMOTION IT framework from which the user-defined web pages can be started centrally
- **New function:**
  Latest versions of included standard applications are delivered with this revision:
  - SIMOTION:
    - Axis Function Block (LMCBasic library) V1.3.6 *(updated)*
    - Cam Disk Creation (LCamHdl library) V1.3.3
    - Cartoner (LCarton library) V1.1.1
    - TCP/IP Communication (LCom library) V1.2.6
    - Converting Module V1.0.3
    - DPV1 Services (LDPV1 library) V4.2.11 *(updated)*
    - DRIVE-CLiQ Topology Viewer V1.0.4
    - Intelligent Belt V2 (LIBeltV2 library) V1.0.9 *(updated)*
    - Machine Data Acquisition V1.1.1
    - Machine Energy Acquisition V1.0.3
    - Message Handling (LMsgHdl library) V1.3.3 *(updated)*
    - Modular Machine (LMoMa library) V1.2.5 *(updated)*
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0

    - Packaging Library LPac V2.1.5 (LPac library)
    - Startup Check (pStartupCheck program) V1.1.6 *(updated)*
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihenstephan library) V1.1.2
- SIMATIC:
    - TCP/IP Communication (LCom library) V1.2.6 *(not updated)*
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihStd library) V1.2.3
    - Weihenstephan Client (LWeihCli library) V1.3.2

Changes from V1.4.3 to V1.4.3.1

- **Bug-fix:**
  SINAMICS Control Units CU320-2 PN are now handled correctly by the command 'ConfigureProfinetIRT'.
- **Bug-fix:**
  A superimposed/second following object is now imported correctly by the command 'ImportTO'.

Changes from V1.4.2 to V1.4.3

- **New function:**
  Support of SIMOTION V5.1:
  - New device exports, technology object exports, …
  - Upgrade of device-dependent libraries
- **Changed behavior:**
  SIMOTION version V4.2 is not supported anymore
- **New function:**
  The SIMOTION IT framework with the capability to open the user-defined web pages centrally was expanded by a login dialog
- **New function:**
  Latest versions of included standard applications are delivered with this revision:
  - SIMOTION:
    - Axis Function Block (LMCBasic library) V1.3.4
    - Cam Disk Creation (LCamHdl library) V1.3.3 *(updated)*
    - Cartoner (LCarton library) V1.1.1
    - TCP/IP Communication (LCom library) V1.2.6
    - Converting Module V1.0.3 *(updated)*
    - DPV1 Services (LDPV1 library) V4.2.10 *(updated)*
    - DRIVE-CLiQ Topology Viewer V1.0.4 *(updated)*
    - Intelligent Belt V2 (LIBeltV2 library) V1.0.7 *(updated)*
    - Machine Data Acquisition V1.1.1
    - Machine Energy Acquisition V1.0.3
    - Message Handling (LMsgHdl library) V1.3.2 *(updated)*
    - Modular Machine (LMoMa library) V1.2.4 *(updated)*
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Packaging Library LPac V2.1.5 (LPac library) *(new)*
    - Startup Check (pStartupCheck program) V1.1.5
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihenstephan library) V1.1.2

- SIMATIC:
    - TCP/IP Communication (LCom library) V1.2.6
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihStd library) V1.2.3
    - Weihenstephan Client (LWeihCli library) V1.3.2

Changes from V1.4.0 to V1.4.2

- **New function:**
  Support of SIMOTION V4.5:
  - New device exports, technology object exports, …
  - Upgrade of device-dependent libraries
  - Adaptation of some user-defined web pages (Beginners Example, DRIVE-CLiQ Topology Viewer, Machine Energy Acquisition, OMAC PackTags, Startup Check)
- **New function:**
  Latest versions of included standard applications are delivered with this revision:
  - SIMOTION:
    - Axis Function Block (LMCBasic library) V1.3.4 *(updated)*
    - Cam Disk Creation (LCamHdl library) V1.3.1
    - Cartoner (LCarton library) V1.1.1
    - TCP/IP Communication (LCom library) V1.2.6
    - Converting Module V1.0.1 *(updated)*
    - DPV1 Services (LDPV1 library) V4.2.8 *(updated)*
    - DRIVE-CLiQ Topology Viewer V1.0.3 *(updated)*
    - Intelligent Belt V2 (LIBeltV2 library) V1.0.5
    - Machine Data Acquisition V1.1.1
    - Machine Energy Acquisition V1.0.3
    - Message Handling (LMsgHdl library) V1.3.0 *(updated)*
    - Modular Machine (LMoMa library) V1.2.3
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Startup Check (pStartupCheck program) V1.1.5
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihenstephan library) V1.1.2
  - SIMATIC:
    - TCP/IP Communication (LCom library) V1.2.6
    - OMAC V3.0 (LPMLV30 library) V1.3.3
    - Interface Generator for OMAC PackTags V1.0.0
    - Weihenstephan Standards for Production Data Acquisition – Server (LWeihStd library) V1.2.3
    - Weihenstephan Client (LWeihCli library) V1.3.2

Changes from V1.3.3.1 to V1.4.0

- **New function:**
  Support of new commands
  - Insertion of PROFINET IO systems and setup of the PROFINET IRT communication
  - Modification of isochronous operation parameters at PROFIBUS Integrated interface (SIMOTION)
  - Insertion of PROFINET devices (now also SIMATIC ET200) via MLFB or GSDML file to PROFINET IO systems

  - Insertion and configuration of particular ET200 modules
  - Set up of the PROFINET topology
  - Configuration of the distributed synchronous operation via controller-controller communication
- **New function:**
  Expansion of SIMOTION module 'FAQs related to generate SIMOTION projects'. This module supports the user creating his own ProjectGenerator modules.
  The use of the new commands for "modifying PROFINET IO systems" is shown by means of a further chapter (IRT Reference Application). The user data are thereby read from an Excel file.
- **New function:**
  Integration of the ProjectGenerator module of branch Converting.
- **New function:**
  Latest versions of included standard applications are delivered with this revision.

Changes from V1.3.3 to V1.3.3.1

- **New function:**
  Latest versions of included standard applications are delivered with this revision.

Changes from V1.3.2 to V1.3.3

- **Bug-fix:**
  Some small enhancements were made in ProjectGenerator.exe, e.g. detailed status display for the import of drive objects.
- **Changed behavior:**
  The Tag-number associated data points will not be sorted anymore in ascending order for the Weihenstephan SIMATIC module. The order of the PDACONF.xml is taken.

Changes from V1.3.1 to V1.3.2

- **New:**
  New functionality since V1.3.0 is now described in the manual and some smaller corrections have been done.

Changes from V1.3.0 to V1.3.1

- **Bug-fix:**
  Access problems ("SOM_ACCESS_DENIED", "Public member 'Slaves' on type 'Decimal' not found"), which occurred during integration of Message Handling module with the SCOUT integrated ProjectGenerator, are fixed.
- **Bug-fix:**
  Drive Objects order fixed in SINAMICS telegram configuration.
- **Bug-fix:**
  Corrections at activation and deactivation of symbolic assignment in a SIMOTION SCOUT project via ProjectGenerator.
- **New function:**
  Latest versions of included standard applications are delivered with this revision.

Changes from V1.2.4 to V1.3.0

- **New function:**
  As of SIMOTION V4.4 the ProjectGenerator can be executed inside of SCOUT directly.
- **New function:**
  The ProjectGenerator uses the language set up in the SIMATIC Manager. If the selected language is not available in the ProjectGenerator, English language is used.
- **New function:**
  Drive objects in SINAMICS Integrated of SIMOTION D devices can be created and be assigned to SIMOTION axes.
- **New function:**
  New SIMOTION module 'Intelligent Belt V2' (multi belt control) to control multiple belts and stations.
- **New function:**
  New SIMOTION module 'Machine Data Acquisition' for data collection and long-term archiving of SIMOTION variables, SINAMICS parameters and SENTRON PAC parameters.
- **New function:**
  New commands, e.g. deletion of axes and sources to be able to adapt projects to a reduced quantity structure.
- **New function:**
  As of SIMOTION V4.4 there are new web pages with a new design (grey) available and a SIMOTION IT framework with the capability to open the user-defined web pages centrally.
- **New function:**
  Latest versions of included standard applications are delivered with this revision.

Changes from V1.2.3 to V1.2.4

- **New function:**
  If an existing project is selected with the 'Browse' button on screen 'Open an existing project' then it will not be continued with the next screen automatically. Instead the project will be added to the project list and preselected. Now the project can be opened directly ('Next') or as a copy ('Open a Copy').
- **New function:**
  Latest versions of included standard applications are delivered with this revision.
- **New function:**
  A new harmonized data interface for OMACV30PackTags and Weihenstephan is available. It is called Plant Data Interface (PDI) and is located in subfolder MachineInterface.
- **Bug-fix:**
  Input and output addresses of the technology data block are now handled correctly by the command 'SetTODOConnection'.

Changes from V1.2.2 to V1.2.3

- **New function:**
  New ProjectGenerator mode 'Download SIMOTION IT web pages to SIMOTION device'. Project web pages that were stored by ProjectGenerator in the project directory can be loaded to all CPUs of the project.
- **New function:**

New SIMOTION module 'FAQs related to generate SIMOTION projects'. This module supports the user creating his own ProjectGenerator modules.

- **New function:**
  The LDPV1 BufferManager for arbitration of acyclic DPV1 services to SINAMICS drives was optimized. Now one DPV1 request can be active per SINAMICS Control Unit at the same time. The BufferManager is used by i.e. 'Startup Check' and 'Message Handling'. Performance rises with the number of SINAMICS Control Units.
- **New function:**
  For the administration of user defined messages in different languages an Excel tool is provided in the SIMOTION module 'Message Handling'.
- **New function:**
  A new version (V1.1.1) of the SIMOTION script AxisSimulationOnOff exists.
- **New function:**
  SIMATIC module 'OMAC V3.0 Mode and State Manager' provides a programming template now. Only user specific program code has to be added in the state changes.
- **New function:**
  New SIMATIC module 'Weihenstephan Standards – Client' to be able to connect subsidiary Weihenstephan server components or to do horizontal machine communication via Weihenstephan protocol.
- **New function:**
  A SIMATIC OPC export file *.STI can be created out of an Weihenstephan data block in SIMATIC module 'Weihenstephan Standards'. Therefore it is also possible to do data access i.e. with a SCADA system.
- **New function:**
  The existing SINAMICS export files were extended with firmware V4.6 exports.
- **New function:**
  The latest versions of all existing standard applications in ProjectGenerator are provided.
- **New function:**
  ProjectGenerator manual was revised. A description of new functionalities was added. Most of the examples were revised.

Contact

Application center
Siemens AG
Digital Industries
Factory Automation
Production Machines
DI FA PMA APC
Frauenauracher Str. 80
91056 Erlangen, Germany
mailto: tech.team.motioncontrol@siemens.com

Internet links:
www.siemens.com/simotion
www.siemens.com/sinamics
www.siemens.com/motioncontrol/apc