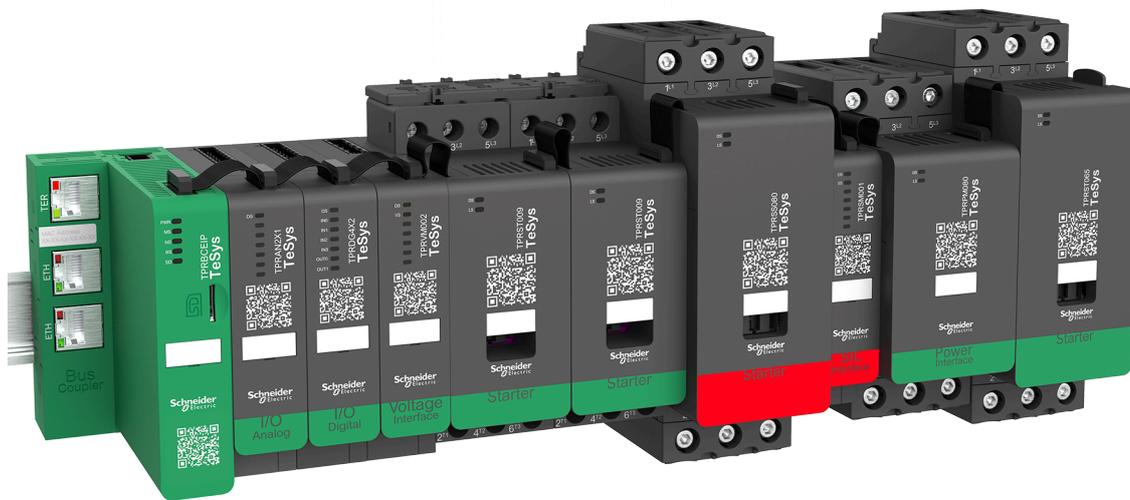# TeSys Active

TeSys™island – Digital Motor Management Solution

DTM Library Release Notes

TeSys offers innovative and connected solutions for motor starters.

Schneider Electric

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Introduction to TeSys island DTM Library

TeSys Master Range

TeSys is an innovative motor control and management solution from the global market leader. TeSys offers connected, efficient products, and solutions for switching and protection of motors and electrical loads in compliance with all major global electrical standards.

TeSys island Overview

TeSys island is a modular, multifunctional system providing integrated functions inside an automation architecture, primarily for the direct control and management of low-voltage loads. TeSys island can switch, help protect, and manage motors and other electrical loads up to 80 A (AC1) or 65 A (AC3) installed in an electrical control panel.

This system is designed around the concept of TeSys Avatars.

These Avatars:

- Represent both logical and physical aspects of the automation functions.
- Determine the configuration of the island.

The logical aspects of the TeSys island are managed with software tools, covering all phases of product and application lifecycle: design, engineering, commissioning, operation, and maintenance.

The physical TeSys island consists of a set of devices installed on a single DIN rail, and connected together with a flat cable providing the internal communication between modules. The external communication with the automation environment is made through a single bus coupler module, and the TeSys island is seen as a single node on the network.

The other modules include starters, power interface modules, analog and digital IO modules, voltage interface modules, and SIL interface modules, covering a wide range of operational functions.

DTM Overview

The DTM (Device Type Manager) is used together with FDT container (Field Device Tool container, also referred to as FDT frame) to commission and diagnose TeSys island. The combination of FDT and DTM is also called commissioning software.

Once a DTM is installed, it can be used by different FDT containers.

Examples of FDT containers:

- SoMove software (Schneider Electric)
- fdtCONTAINER (M&M Software GmbH)

TeSys island DTM Library Release History

The DTM library versions are listed in the following table.

Date	DTM library version	Availability
January 2026	3.0.2	Available for SoMove software.
June 2025	3.0.1	Available for EcoStructure Machine Expert integration.
April 2025	3.0.0	Available for SoMove software and EcoStruxure Automation Expert-Motion integration.
December 2024	3.0.0	Available for SoMove software and EcoStruxure Control Expert integration.
September 2024	2.4.4	• Available for SoMove software. • *Available for EcoStruxure Machine Expert and EcoStruxure Control Expert integration.
April 2024	2.4.3	• Available for SoMove software. • *Available for EcoStruxure Machine Expert and EcoStruxure Control Expert integration.
August 2023	2.4.2	• Available for SoMove software. • *Available for EcoStruxure Machine Expert and EcoStruxure Control Expert integration. **NOTE:** Machine expert Modbus TCP IP is not working.
June 2023	2.4.1	• Available for SoMove software. • *Available for EcoStruxure Machine Expert and EcoStruxure Control Expert integration. **NOTE:** Machine expert Modbus TCP IP is not working.
February 2023	2.4.0	• Available for SoMove software. • *Available for EcoStruxure Machine Expert and EcoStruxure Control Expert integration.
November 2021	2.3.1	Available for SoMove software, EcoStruxure Machine Expert, and EcoStruxure Control Expert integration.
September 2021	2.3.0	Available for SoMove software, EcoStruxure Machine Expert, and EcoStruxure Control Expert integration.
July 2021	2.2.2	Available for SoMove software, EcoStruxure Machine Expert, and EcoStruxure Control Expert integration.
May 2020	2.2.1	Available for SoMove software and EcoStruxure Machine Expert integration.
June 2019	1.1.0	Available for SoMove software and EcoStruxure Machine Expert integration.

NOTE: *Any new features, such as local control for SIL groups and **Power Interface Module** avatars, are not compatible with function blocks.

TeSys island DTM Library Update Policy

TeSys island DTM Library update is recommended to benefit from the latest features and potential bug fixes.
It is recommended not to update the TeSys island DTM Library to the latest version, if the latest features are not required for your application and no bug fixes are provided.

Use this release note to determine whether an update to the latest version of the TeSys island DTM Library is relevant for your application.

Prerequisites

Operating Systems

The following operating systems are supported for TeSys island DTM Library:

- Microsoft Windows 7 SP1 32 or 64-bit
- Microsoft Windows 10 and Windows 11

    NOTE: For Windows 7 SP1 machines, install the package from the Microsoft Download Center to enable support of TLS 1.22 before installing the TeSys island DTM Library.

Software Requirements

The TeSys island DTM Library requires the following software installed on the PC:

- Microsoft .NET Framework v3.5 SP1
- EcoStruxure Control Expert v15.0 SP1 or later, EcoStruxure Machine Expert v1.2.7 or later, SoMove software v2.9.7 or later
- Modbus DTM Library v2.6.12 or later

Hardware Requirements

The following hardware requirements are recommended on the PC to install the TeSys island DTM Library:

Equipment	Minimum requirement	Recommended requirement
Processor	Pentium 4 or Core 2 Duo, 2 GHz	Intel® Core™ i3
RAM	2 GB	4 GB
Display	**Resolution**: 1024 x 768, 1366 x 768, 1600 x 1900, and 1920 x 1080 pixels	**Resolution**: 1600 x 1900 and 1920 x 1080 pixels
	DPI: 96 (100%) and 120 (125%)	**DPI**: 96 (100%) and 120 (125%)
Free hard disk space on system drive	1 GB	2 GB

TeSys island DTM Library Versions

Version 3.0.2

New Features

- **Minor Faults Scope Refined**: Minor faults are limited to individual avatars and do not affect the entire system.
- **ATEX Adaptation Configuration**: ATEX adaptation settings can be enabled which disables protection settings such as thermal overload, current phase loss, and motor overheat at the island level.

Bugs Fixed

I/O Optimization configuration corruption.

Version 3.0.1

New Features

IO Optimization feature extension to EcoStruxure Machine Expert function blocks library.

Bugs Fixed

- **Voltage Fluctuation Status Reset** is not functioning in **DIAGNOSTICS** power voltage section.
- **Voltage Phase Sequence** information is updated incorrectly when there is no voltage supply to Voltage Interface Module (VIM).

Version 3.0.0

New Features

IO Optimization feature extension to EcoStruxure Control Expert and EcoStruxure Automation Expert-Motion function blocks library.

Bugs Fixed

Alarms and trips information is not proper in exported L5X files (Acyclic.L5X and AOI.L5X) from DTM.

Known Issues

Voltage Fluctuation Status Reset is not functioning in **DIAGNOSTICS** power voltage section.

Workaround: User can **Reset Voltage Fluctuation Status** from **ENERGY MONITORING** power voltage section.

Version 2.4.4

Bugs Fixed

If there are more than 15 avatars configured or the total number of avatar input dataset in TeSys island exceeds 250 bytes, then IO scanning will not perform in EcoStruxure Control Expert (ESCE).

Version 2.4.3

New Features

- Configurable **Fallback Mode**

  For starters and IO module outputs, the fallback position can be configured for each Avatar except **Power Interface** Avatar.
- Additional Avatar trip status are available in the **IO PORT ASSIGNMENT** table
- Configurable communication loss timeout for **Fieldbus Protocol**

Bugs Fixed

DTM will automatically changes product code in configuration based on discovered topology.

Version 2.4.2

NOTE: Korean language can be used only with SoMove V2.9.5 or later.

New Features

User interfaces for TeSys island DTM are supported in Korean language.

KC (Korean Certification) will be applicable to the below commercial references:

In scope	
TPRBCEIP	Ethernet/IP bus coupler
TPRBCPFN	PROFINET bus coupler
TPRDG4X2	Digital I/O module
TPRST009	9 A standard starter
TPRST025	25 A standard starter
TPRST038	38 A standard starter
TPRST065	65 A standard starter
TPRST080	80 A standard starter

In scope	
TPRVM001	Voltage interface module
TPRAN2X1	Analog I/O module

Out of scope	
TPRBCPFB	PROFIBUS bus coupler
TPRPM009	9 A Power inteface module
TPRPM038	38 A Power inteface module
TPRPM080	80 A Power inteface module
TPRSM001	SIL interface module
TPRSS009	9 A SIL starter
TPRSS025	25 A SIL starter
TPRSS038	38 A SIL starter
TPRSS065	65 A SIL starter
TPRSS080	80 A SIL starter

Bugs Fixed

Creation of I/O Avatars as part of **IO Optimization** and deletion of I/O modules as part of **Device Optimization** does not work, when the user reopens saved project without visiting **MY AVATAR** tab.

Known Issues

Korean language is not supported by SoMove software.The TeSys island DTM text will be viewed in Korean by choosing the Korean language option in SoMove software. The text which comes from SoMove software is displayed in English.

Version 2.4.1

New Features

Implemented **Power Interface with IO** avatar in **IO Optimization**.

Known Issues

- When Avatar modification is done after **Device Optimization**, then user needs to recheck in to the **IO PORT ASSIGNMENT** for that avatar.
- DTM will automatically changes product code in configuration based on discovered topology.

Version 2.4.0

NOTE: If firmware upgrade is to be done from 001.100.013/002.100.016 to 003.000.001, then it has to be performed two times.

1. Perform an upgrade from 001.100.013/002.100.016 to 002.200.008/ 002.300.006.
2. Perform an upgrade from 002.200.008/002.300.006 to 003.000.001.

NOTE: Function blocks library for PLCs with Machine Expert on Modbus TCP protocol is not compatible.

Workaround: Use the Schneider Electric Machine Expert Modbus TCP PLCs as a third party PLC.

New Features

- **IO Optimization**

  IO Optimization feature allows users to share their I/O devices between different avatars and optimize them to reduce the number of I/O devices required per TeSys island.

  User may also utilize **Device Optimization** feature which will permanently remove free AIOM/DIOM devices from the TeSys island configuration.

- Rearrange Avatar(s)

  Introduces the functionality to automatically try and resolve the warnings like electromagnetic interference and mounting positions by changing the position of avatar(s) in question.

- Local Control

  Local control functionality is extended to the safe category avatars.

- Local Trip Reset

  Introduces the functionality to reset the trips locally at individual avatar level. Resetting trips at TeSys island level through remote is still available through the control panel as before.

- Vertical Orientation

  Introduces a new information message about derating to be applied when mounting position is selected as vertical.

Bugs Fixed

- Load from device does not work when there are more than 16 SIL starters in the configuration.
- After reconnecting to the device, the forced mode status indication of avatar input is not correct for **Motor Two Speeds** avatar.

Known Issues

The following are the known issues in this version for TeSys island DTM Library:

- TeSys island DTM Library does not work with EcoStruxure Control Expert V15.2.

  The issue is because DHCP is enabled without a role name associated.

  Workaround: Open the M580 DTM and add the role name in the address setting of theTeSys island instance.

- Creation of I/O Avatars as part of **IO Optimization** and deletion of I/O modules as part of **Device Optimization** does not work, when the users reopens saved project without visiting **MY AVATAR** tab.

  Workaround: Open the saved project and visit **MY AVATAR** tab before clicking **IO Optimization** and **Device Optimization**.
- **Power Interface with IO** avatar can not be used in **IO Optimization**.
- This release is not applicable for SIL starters.

Version 2.3.1

Bugs Fixed

Installer issue in TeSys island DTM Library version 2.2.2.

Version 2.3.0

New Features

Dahlander motor control is added for **Motor Two Speeds** avatar.

Known Issues

The following are the known issues in this version for TeSys island DTM Library:

- **Load from Device** does not work when there are more than 16 SIL starters in the configuration.

  This issue exists in all the previous TeSys island DTM Library versions.

  Workaround: Save the configurations in SoMove or EcoStruxure Machine Expert software and connect to the device without using **Load from Device**.
- After reconnecting to the device, the forced mode status indication of avatar input is not correct for **Motor Two Speeds** avatar.

  Workaround: Close and open the project again in the configuration software.

Version 2.2.2

New Features

The following new features are added in this version for TeSys island DTM Library:

- EcoStruxure Control Expert Classic v15.0 SP1 and later
- PLC Modicon M580 series

Known Issues

The following are the known issues in this version for TeSys island DTM Library:

- EcoStruxure Control Expert Classic support
  - Only DTM version 2.2.2 or later works with EcoStruxure Control Expert Classic software
  - Supports only PLC Modicon M580 (Modicon M340 not supported)
  - Supports only Modbus TCP protocol (Ethernet or IP support not supported)

    NOTE: To add the TeSys island DTM Library in the EcoStruxure Control Expert Classic software, select **Modbus over TCP** protocol in **Add** window. For more information, refer to the EcoStruxure Control Expert Classic - Quick Start Guide.

- It is recommended to choose short and meaningful names for DTM instances in DTM browser of EcoStruxure Control Expert.

- For Analog IO Avatar, Analog output type value 4 mA or 20 mA does not work. It is recommended to use the value 0 mA or 20 mA.

- When the TeSys island DTM instance is copied and pasted in the Control Expert DTM browser, the DDT types for new TeSys island is not displayed unless the solution is built.

- In **Diagnostics** > **Counters** > **Trip Record Register** table for switch avatar, the trip timestamp is not displayed as expected.

Version 2.2.1

New Features

The following new features are added in this version for TeSys island DTM Library:

- The following TeSys avatars are updated with the Process Variable (PV) inputs and advanced control modes (Local Control, Manual Mode Override, and Bypass mode):
  - Motor One Direction
  - Motor Two Directions
  - Motor Two Speeds
  - Motor Y/D One Direction
  - Motor Y/D Two Directions
  - Motor Two Speeds Two Directions
- Added Predictive Alarms (PA) for the following TeSys avatars:
  - Motor One Direction
  - Motor Two Directions
  - Motor Two Speeds
  - Motor Y/D One Direction
  - Motor Y/D Two Directions

Version 1.1.0

First version of the TeSys island DTM Library.

Installation and Uninstallation of TeSys island DTM Library

Installation

Installation Preparation

The execution of setup file of the TeSys island DTM Library will extract the appropriate set of files on the local hard drive. The installation of the DTM library starts automatically.

Before starting the installation, perform the below steps:

- Close the DTM applications running on the PC before starting the setup program.
- Log in with the user ID having administrator or equivalent role to install the TeSys island DTM Library.

Installation Language

The language of the installation dialog box is derived from the user language setting pre-defined by the Windows.

If the user language does not match any of the languages supported by the installation, then the installation dialog box will be displayed in english by default.

Installation Directories

Once the TeSys island DTM setup files are downloaded, the files are installed in the **Program Files** folder by default.

Supported Operating System	Folder
64 Bit	C:\Program Files (x86)\Common Files\Schneider Electric Shared\Schneider Electric TeSys island DTM Library
32 Bit	C:\Program Files\Common Files\Schneider Electric Shared\Schneider Electric TeSys island DTM Library

The setup files folder will consist of dll and configuration files.

If you are upgrading the setup files from the previous release of the software, the previous version setup files are overwritten by the new version files in the **Program Files** folder.

Uninstallation

Invoking the installation procedure of TeSys island DTM Library will result in a conventional way to notify the user to remove, to modify, or to repair the existing setup.

Troubleshooting

Problem	Probable cause	Solution
Not possible to launch TeSys island DTM Library	Some of the common components that are required for DTM operation may be uninstalled by other softwares.	Reinstall the TeSys island DTM Library.
TeSys island DTM Library does not appear. Even after clicking **Update Catalog**.	This could be an issue with SoMove software is not registered before applying the DTM or an issue with the dll not being registered by Windows.	Use the Windows command line to register a dll required for the DTM to be installed: 1. Launch the Windows command prompt as Administrator and enter: cd C:\Windows\Microsoft.NET\Framework\v2.0.50727 2. Then enter the following (and be careful with the slash directions): RegAsm.exe /codebase C:\Program Files (x86)\Common Files \Schneider Electric Shared \Schneider Electric TeSys island DTM Library \AladdinDtm.Kernel.dll 3. When the registration is successful this message will display: Types registered successfully 4. Launch SoMove software and a Catalog Update screen with progress bar should appear. Wait until it completes 5. After the catalog update is complete, the TeSys island DTM Library should be available.

Related Documents

Document title	Document number
TeSys island – System, Installation, and Operation Guide	DOCA0270EN
TeSys island – Quick Start Guide for EcoStruxure Control Expert Classic	DOCA0236EN
TeSys island – DTM Library Read Me	DOCA0238EN
TeSys island – Firmware Release Notes	DOCA0224EN
TeSys island – DTM Release Notes	DOCA0239EN
TeSys island – Functional Safety Guide	8536IB1904EN
TeSys island – Third Party Function Block Guide	8536IB1905EN
TeSys island – EtherNet/IP™ – Quick Start and Function Block Library Guide	DOCA0271EN
TeSys island – DTM Online Help Guide	8536IB1907
TeSys island – PROFINET and PROFIBUS – Quick Start and Function Block Library Guide	DOCA0272EN
TeSys island – Product Environmental Profile	ENVPEP1904009
TeSys island – Product End of Life Instructions	ENVEOLI1904009
TeSys island, Bus Coupler TPRBCEIP – Instruction Sheet	MFR44097
TeSys island, Bus Coupler TPRBCPFN – Instruction Sheet	MFR44098
TeSys island, Bus Coupler TPRBCPFB – Instruction Sheet	GDE55148
TeSys island, Starters and Power Interface Modules, Size 1 and 2 – Instruction Sheet	MFR77070
TeSys island, Starters and Power Interface Modules, Size 3 – Instruction Sheet	MFR77085
TeSys island, Input/Output Modules – Instruction Sheet	MFR44099
TeSys island, SIL Interface and Voltage Interface Modules – Instruction Sheet	MFR44100
TeSys island – ATEX Adaptation Guide	DOCA0452EN

As standards, specifications, and design change from time to time, please ask for confirmation
of the information given in this publication.

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