Schneider Electric Altivar Process ATV6xx DTM Library V3.7.2
- Release Notes -

This document contains important information about the Altivar Process ATV6xx DTM Library software component and Release Content.

1. Package Content

Software Component Name	Version
Altivar Process ATV6xx DTM Library	V3.7.2
Altivar Process ATV6xx	V3.7.2.0

2. Features

2.0 What's new in V3.7.2

2.0.1 Evolutions

>> **279450**: Support of VW3A3530D Distributed Programmable Automation Controller (dPAC) module.

>> **280187**: Support of a new custom I/O profile named "Ecostruxure Automation Expert dPAC", available in both ModbusTCP & EthernetIP protocols.

2.0.2 Bug Fixes

>> **273959**: APM registration exception issue (Index was out of range).

2.1 Features of V3.7.1

2.1.1 Evolutions

>> **269177**: Support of a new firmware V3.7IE40_B02.

>> **268738**: Adjustable filter on torque data addition of TPFV parameter.

>> **273332**: Management of the second source of IGBT for size 7 Product PWVU.

2.1.2 Bugs Fixes

>> **210165**: Ethernet/IP connection parameters are missing in NOC4XX legacy master.

>> **274088**: DTM shows Error 2001 when connecting to ATV630 (version 2.6).

>> **275195**: Changing IO scanner content in online mode affects command & reference parameters.

2.2 Features of V3.6.1

2.2.1 Evolutions

>> **242160**: Support for MxPro substitution.

>> **234016**: Support of a new firmware V3.6IE38_B10.

>> **235830**: Latest help manual integration on the DTM.

>> **240118**: Support for Altivar Process Modular additional references.

>> **242017**: Support for new variant of drive reaction on 4-20 mA input loss.

>> **261681**: DTM updated with latest definition of Safety messages.

>> **242295**: Vortex control functionality support

>> **245961**: Altivar Process Modular(APM) server migration from Schneider Data Hub(SDH) to Asset LifeCycle Manager(ALM).

2.2.2 Bugs Fixes

>> **257629** : ATV6xx DTM errors on Control Expert, after R-Click or copy-paste actions

>> **192933** : SoMove Error History display issue

>> **245814** : FDR issues - Device name, SPFC

>> **180402** : Customized unit is not saved correctly on .PSX

>> **253135** : Modbus TCP IO scanner table is exchanged with the PLC, instead of Eth/IP IO scanner table.

>> **213083** : Dateline Standard time

2.3 Features of V3.5.0

2.3.1 Evolutions

>> **214784**: Support of a new firmware V3.5IE36_B03.

>> **216911**: Support of a new user interface to manage the Rapid Spanning Tree Protocol (RSTP) settings from the DTM and as well as the graphical display terminal.

2.3.2 Bugs Fixes

>> **217730** : ATV6xx : Device results in EPF1 fault after applying the IO scanner configuration from the dtm

>> **200208**: ATV6xx : DTM error while opening saved projects in ECE(14.1) "Kernel error when initializing / root element missing"

>> **192933**: SoMove Error History display issue

2.4 Features of V3.4.3

>> Support for APM liquid cooled 400-480V references

>> **Bug Fixes**

2.5 Features of V3.4.0

>> Supports of ATV6xx V3.4IE35#5 firmware release

>> Safety message updates

>> **Bug Fixes**

2.6 Features of V3.3.1

>> As part of the California CS Law compliance (IEC-62443-4-2 CR 1-1 Human user identification and authentication), the DTM comes with a new set of features meant to provide a more secured connection to the device over Modbus TCP (only applies to Ethernet and PROFINET fieldbuses)

>> In a few words:

>> User authentication will be required at every attempt to connect to the device. **Note**: this mechanism is by default enabled but the user can still disable it if required.

>> A default password is provided by the factory setting (available in the Keypad), however the user will be requested at each authentication attempt, to define a different and secured password (according to a customizable password policy). It remains possible to keep the default password temporarily, but the same reminder will pop up over again during next connection attempts

>> The User authentication can be enabled/disabled and the Password policy can be modified from the Security node (Parameters List tab) of the considered fieldbus

Note: For legacy option card (Modbus TCP/PROFINET), User authentication and Password Policy configuration will be deactivated since they are not supported by these version of cards.

>> Support for new firmware versions

>> V3.2IE32B03 **->** Support new APM LC Family 690V references

>> V3.3IE34B01 **->** Support the User authentication for California Law compliance purposes

>> Bug Fixes

>> Updated help and programming manuals

2.7 Features of V2.6.5

> IFW API migration to the new Apigee enterprise service

2.8 Features of V2.6.1

> Bug Fixes

2.9 Features of V2.6.0

> Support for New FW V2.6IE31_B12

> Bug Fixes

2.10 Features of V2.5.4

> APM-S6 reference filtering fix

2.11 Features of V2.5.3

> Introduction of APM SE tab

> Bug Fixes

2.12 Features of V2.5.2

> Support for APM 400V References

> Bug Fixes

2.13 Features of V2.5.1

> Support for New FW V2.5IE27_B03

> Support for FW compatibility

> Bug Fixes

2.14 Features of V2.4.3

> Fix for FMK Version incompatibility

> Tab Style change as per Schneider guideline

> Bug Fixes

2.15 Features of V2.4.2

> Support for ATV6xx firmware version V2.4IE26_B11

> CR Fixes

2.16 Features of V2.3.0

> Support for ATV6xx firmware version V2.3IE25_B06p

> Safety message updates (TUN, AUT, APPT, SLPM, PST)

> CR Fixes

2.17 Features of V2.2.1

> Support for ATV6xx firmware version V2.2IE24_B07

> Improved SNTP section with Support for Daylight saving time

> Support for Powerlink option board

> CR Fixes

2.18 Features of V2.1.2

> Introducing APM Partner Tab

> CR Fixes.

2.19 Features of V2.1.0

> Support for ATV6xx Firmware version V2.2IE24

> CR Fixes.

3. System Requirement

3.1 Supported operating systems

>This software can be installed on the following operating systems:

> **Microsoft Windows 7 32/64-bit .**

> **Microsoft Windows 8.1 32/64-bit .**

> **Microsoft Windows 10.0 32/64-bit .**

3.2 Minimum PC Requirements

Equipment	Minimum
Processor	Pentium 4 / Core 2 Duo, 2 GHz
RAM	2 GB
Free Hard Disk Space	1 GB of free disk space Must be available
Display	Resolution: 1024 x 768 pixels with 32 bit colors DPI: 96 (100%)

3.3 Recommended PC Requirements

Equipment	Recommended
Processor	Intel(R) Core(TM) i3
RAM	4 GB
Free Hard Disk Space	2 GB
Display	Resolution: 1920 x 1080 pixels with 32 bit colours DPI: 96 (100%)

4. Restrictions which we are working on

> IO Scanning profile change takes more than 5 seconds to update screen

> Offline compare feature is limited to DTM version 2.5 and above

> Empty file is created or the existing psx file is overwritten when Save option is canceled by the user or when it is restricted by the DTM while the motor is running.

> When FLO is assigned and activated and the Control Panel is enabled, the "Local Stop" message will not be displayed

> Connection Interruption in Unity FDT Container if there are multiple instances of DTM

> DPI Restriction : DTM hangs in 120 DPI when you visit Protocol and Drive Profiles section in the ParametersList tab for the first time.

You need to wait for some minutes for DTM to get back to normal state.

> Local Stop Message will not be displayed,if Local Stop button is pressed momentarily or quickly.The button has to be pressed firmly for 4-5 Sec.

> Parameter dependency is not well handled in the software. ie, visibility or disabling of parameters depending on other parameter values are not managed at the moment.

> We observed that for some drive references, the CLI (Current Limitation) parameter does not reset after a factory setting.

> Firmware compatibility - The drive is tripping to CFI2 (Invalid configuration) error if you create a new drive configuration (V1.3 or V1.2) in SoMove and download to an older drive version (V1.1).

> Parameter LCFB is not visible in parameter layout tab.This parameter can be accessed from parameter grid.

> Drive will result in CFF error if you change NSPS (Nominal synchronous motor speed) parameter and store to device.

> DI5 and DI6 Frequency Signal value is not available in My Dashboard - IO Terminal section.

> SoMove hangs after I select all parameter in parameter tab Ctrl + A.

> Sometime when toplogy is created with option board ,automatic switching between different representation is not working properly.

> When connected through Modbus TCP channel of Profinet option board, the IO terminals section in My Dashboard will not display the input/output status

> DTM goes to connection lost while saving Unity project for the first time.

> AIV1, AIV2 & AIV3 Assignment data and Values are missing in Dashboard

> Embedded Ethernet port IP details are not correct in SoMove after inserting Advance Ethernet Option Card

> DTM File Export to PDF sometimes shows out of memory exception

> RTH Parameter Value displayed in DDT variable Animation table is not correct

> Setting Device name not possible when device is running

> The device menu will not be accessible sometime when we open the saved SoMove project file and modifying the topology.Activate the control panel and try accessing device menu.

> Motor brand and type value from Motor Page will be filled in the standard startup report (Service Tab), Only when we first fill the text box and later select the checkbox.

> FDT M&M: Unexpected Danger message is displayed after the warning message when parameters are modified.

> DTM disconnects after store to device and connect is done from a new project for the first time.

Limitations for DTM version V3.6.1, V3.7.1 & V3.7.2

When there is a firmware mismatch

	Load from device	**Store to device**
Device ver. > DTM ver.	YES/NO, ①③	YES, ④
Device ver. < DTM ver.	YES, ②	YES/NO, ⑤

① When device firmware version is higher than the DTM (firmware version) project and trying to do load from device, following message is shown.

"You are trying to load from a device a newer version of the configuration file. Parameters that are not supported will not be loaded from the device."

② When DTM is of higher firmware version than device and any parameter, that leads to firmware incompatibility, is modified in the DTM and loading from device, the following message is shown.

"The configuration file activates some behaviour that are not known by the device. The related parameters will be reset to factory setting."

For ex: DTM (firmware version)project is 3.6 and Device firmware version is 3.5 and when TQNC(new parameter) in the DTM is modified, load from device operation will reset TQNC to its default value in the DTM.

③. When the device is of higher firmware version than DTM (firmware version) and any parameter, that leads to firmware incompatibility, is modified in the device and loading from device, the following message is shown.

"This configuration of the device cannot be loaded because it activates at least one behaviour that is not available."

For ex: Device firmware version is 3.6 and DTM (firmware version)project is 3.5 and when TQNC(new parameter) in the Device is modified, load from device operation is not allowed as the new parameter is not available in the DTM.

④ When device firmware version is higher than the DTM (firmware version) and storing to device, the following message is shown.

"You are trying to download an older version of the configuration file to a newer version device.
Some parameters in the newer version device may be inconsistent with the older version configuration file. This may lead to disconnection."

For ex: DTM (firmware version)project is 3.5 and Device firmware version is 3.6 and after successful store and connect to the device, when TQNC(new parameter) in the Device is modified, DTM will be disconnected from the Device.

⑤ When any newly added parameter modified in the DTM with higher firmware version than the device and trying to store to device, following message is shown.

"This configuration file cannot be stored to device because it activates atleast one behaviour that is not available in the device."

For ex: DTM (firmware version)project is 3.6 and Device firmware version is 3.5 and when TQNC(new parameter) in the DTM is modified, store to device operation is not allowed as the new parameter in the DTM is modified which is not available in the device.

Workaround for ① ,② , ③, ④ & ⑤**:** Use the modify topology feature to change the topology options like reference, family, option board details in the DTM to match the details in the device and then retry the operation

When there is a topology mismatch

1. If there is a mismatch between the device and the DTM topology, following message is show

"The device topology (hardware configuration) does not match the DTM configuration, it could be due to:
 >Mismatch in the device reference and power rating (refer to device nameplate)
 >Mismatch in the option module inserted in the device."

Workaround: Use the modify topology feature to change the topology options like reference, family, option board details in the DTM to match the details in the device and then retry the operation.

2. **CFI2 error occurs while performing store to device operation if multi configuration is enabled and active configuration is other than conf0.**

3. In FDT containers other than SoMove, in case of inconsistency between DTM and device configurations following message is shown

 Device Inconsistency: "Cannot continue with the current operation because the device configuration has activated atleast one behavior that is not compatible with the DTM configuration."

 DTM Inconsistency: "Cannot continue with the current operation because the DTM configuration activates atleast one behavior that is not compatible with the device configuration."

5. Container Supported

> SoMove V2.0 onwards (California CS Law compliance support from SoMove V2.8.4 onwards)

> Ecostructure Machine Expert V2.1

> M&M FDT Container V4.6.19323.2

> Ecostructure Control Expert V15.2

6. Altivar Process DTM in EcoStruxure Machine Expert

6.1 Versions Provided & Compatibility

Activity	Version
Altivar Process DTM	V3.7.2.0

Altivar Process Firmware	V1.1IE02 V1.1IE03 V1.2IE05 V1.2IE06 V1.2IE09 V1.3IE07 V1.4IE10 V1.5IE11 V1.6IE12B10 V1.7IE16B05 V1.8IE21B01 V1.9IE19B07 V2.1IE22B05 V2.2IE24B05 V2.3IE25B06 V2.4IE26B11 V2.5IE27B03 V2.6IE31B12 V3.2IE32B03 V3.3IE34B01 V3.4IE35B05 V3.5IE36B03 V3.6IE38B10 V3.7IE40B02
EcoStruxure Machine Expert	Ecostruxure Machine expert V2.1

7. Altivar Process DTM in Control Expert

7.1 Versions Provided & Compatibility

Activity	Version
Altivar Process DTM	V3.7.2.0
Altivar Process Firmware	V1.1IE02 V1.1IE03 V1.2IE05 V1.2IE06 V1.2IE09 V1.3IE07 V1.4IE10 V1.5IE11 V1.6IE12B10 V1.7IE16B05 V1.8IE21B01 V1.9IE19B07 V2.1IE22B05 V2.2IE24B05 V2.3IE25B06 V2.4IE26B11 V2.5IE27B03 V2.6IE31B12 V3.2IE32B03 V3.3IE34B01 V3.4IE35B05 V3.5IE36B03 V3.6IE38B10 V3.7IE40B02
Control Expert	ControlExpert V15.2
EcoStruxure Control Expert PSx DTM Library	V3.16.22
M580 CPU RUN boot	V4.0
M580 BME CPU	V4.0

8. Features

> **CHM for Unity online help.**

> **Embedded ethernet card manual link:** **http://www.schneider-electric.com/ww/en/download/document/EAV64327**

9. Known issues or Observations

> Downloading a configuration with a version anterior to V3.3IEXX will automatically and inevitably enable the User authentication feature.

> In EcoStruxure Control Expert and EcoStruxure Machine Expert , the "Return", "Tab", and "Esc" keys are not processed during Login, Change Password, Security panels or any notification dialogs.

> Under M580 EIP protocol, whenever there is a channel policy switched from OFF -> ON either by keypad or by DTM while DTM is ONLINE, it results in connection lost.

The reason is when drive rejects the private request after the policy is ON, Master Comm DTM does not return correct response . Master DTM returns response as a communication error which is not valid in this scenario, the device DTM is not able to do a handshake again and login.

This will be rectified in the upcoming releases of the M580 DTM. Until then the following use cases will be a limitation resulting in a connection lost and the user must reconnect to continue with the operation

1. When DTM is ONLINE and user modify channel policy from OFF -> ON through Keypad.

2. When DTM is ONLINE and user applied channel policy from OFF -> ON through DTM

3. When DTM download a config package where channel policy is ON to device.
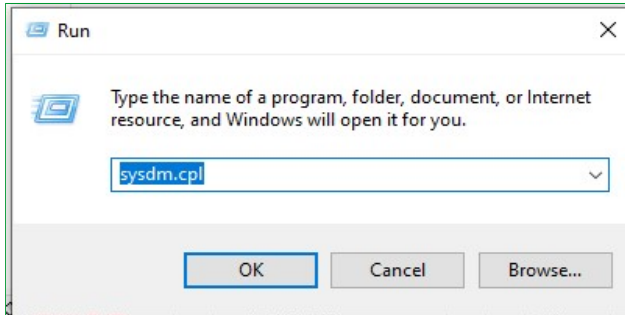
10. Troubleshooting

> Please ensure below troubleshooting steps, failing to comply with these might results in crashes, hangs or other possible commissioning-blocking issues.
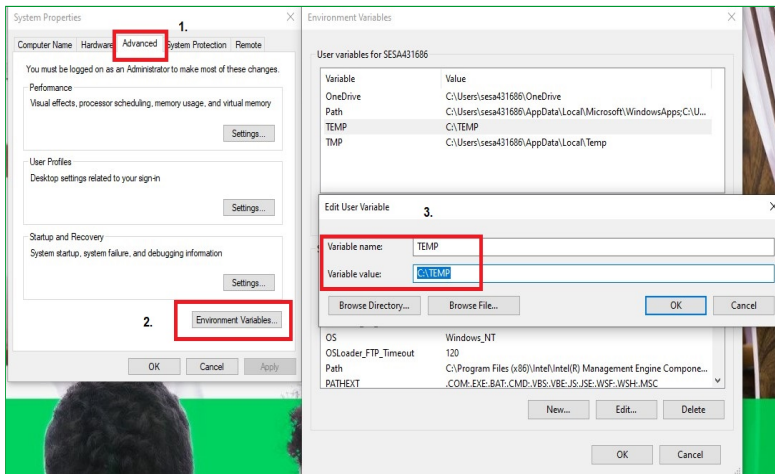
10.1 Modify Temp location:

> Press 'Windows Key' and 'R Key' together, It will open "Run Window".

> Type "sysdm.cpl" in "Run Window", Click on "OK"

> Navigate to Advanced tab, Click on environment variables button.

> Edit the temp variable entry from "%USERPROFILE%\AppData\Local\Temp" to "C:\Temp".

If the issue still persists, please contact the support team.