EZ-EDS Editor - Version 3.34.1.20231010
Freeware based on:

CIP Specification Edition 3.34
EtherNet/IP Adaptation of CIP Edition 1.32,
DeviceNet Adaptation of CIP Edition 1.16,
ControlNet Adaptation of CIP Edition 1.9,
CIP Safety Specification Edition 2.25,
CompoNet Adaptation of CIP Edition 1.8,
Integration of Modbus Devices into the CIP Architecture Edition 1.11
CIP Security Edition 1.14

Contact: conformance@odva.org

RELEASE NOTES

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1. What is EZ-EDS?

    EZ-EDS is a tool that creates and edits CompoNet, ControlNet, DeviceNet, EtherNet/IP and Generic EDS files. It was created in hopes of simplifying the process of creating and maintaining EDS files.

    EZ-EDS uses a simple tree structure to organize the sections, entries and the end comment in an EDS file. Selecting these items displays various forms that allow the user to edit the values of the EDS keywords. The forms are meant to speed the process of entering data and to minimize the possibility of errors in the EDS.

2. What are the requirements?

    EZ-EDS should run on any Pentium class computer or higher with 32-bit/64-bit versions of Windows.

3. Installation

        Installing EZ-EDS is very easy. Either copy or un-ZIP the following
files:
            EZEDS.EXE
            EZEDS.CHM
into a directory on your hard drive and run EZEDS.EXE.

        Notes:
        If EZEDS can't display help page, go to EZEDS.CHM file, Right
click and select Properties, Click the Unblock button on the General tab.

4. What's in this release?

        What's in:

        General:

            -   Create/Load/Save CompoNet, ControlNet, DeviceNet, EtherNet/IP
                an Generic EDS files
            -   EDS files will be saved in a standardized format
            -   Standard help

        Editor:

            -   Multiple Document Interface allows editing several EDS files
                at once
            -   Fully navigable tree view of an EDS file (only the [EnumPar]
                section will not be displayed in the tree view, but is
                accessible within [Params])Form entry for each section and
                entry
            -   Copy/Paste entries from the [Params] and [Connection Manager]
                section within and between documents
            -   Copy/Paste the [Params] and [Connection Manager] section
                between documents
            -   Copy/Paste Vendor Specific entries within and between
                documents
            -   Special forms for entering entry specific information(ie
                Parameter Enumerations, Assembly creation, etc)

        Restrictions:

            -   Catenated strings are usually converted to a single String,
                unless they include \n; in this case string concatenation
                will be used, when saving the EDS file
            -   If you find the note "In the EDS, this will appear as written
                here!" in the tool, the user is responsible for that field
                value; i.e. the user should not forget the enclosing double
                quotes, when entering a value of data type STRING, for

example. Apart from that the user shall not fill in any value, that does not belong to any data type; otherwise the EDS might not be loaded again (hint: you can try to open the saved file in another instance of EZ-EDS before closing it finally)
- STRINGI and STRINGN cannot be verified if selected as Data Type of a Parameter, i. e.:
    - Warnings will be displayed then and
    - the user is responsible for entering a valid value.
    - Values of data type STIME are verified as of data type DINT
    - Values of data type EDS_URL are verified as of data type STRING
    - Values of data type EPATH are verified as of data type STRING
    - Verification of data types REAL and LREAL is done within the limits of the corresponding IEEE Standard 754 for float and double, because of rounding errors and limited significant digits unexpected verification results might occur sections and entries will be written into the EDS in a default order
- If both ParamN entries in [EnumPar] and EnumN entries in [Params] exist in an EDS, the ParamN entries from [EnumPar] will be converted to EnumN entries in [Params]
- The [EnumPar] section is only supported, if it exsists in an EDS; otherwise enumeration will automatically be inserted as EnumN entries in [Params]

What's not:

- Support of UNICODE (L"..."); instead UNICODE is converted to a normal String
  Note:
  special case 1: STRINGI, see Version Notes for Version 3.3
  special case 2: default value of a parameter of data type STRING2, see Version Notes for Version 3.11
- Menu to convert enumeration from the [EnumPar] section to enumeration in the [Params] section
- Support of vendor specific entries in [EnumPar]
- Support of vendor specific entries inside of a selection in [Internationalization]
- Support of STRINGN as a valid structure of the character string and of ISO-10646-UCS-4 as a valid character set in a STRINGI field
  Note:
  both will be accepted by EZ-EDS, if used in an existing EDS
- Detailed help

5. Who can I contact?

For suggestions for improvement, comments, bug reports etc. contact conformance@odva.org

6. Version Notes

Version 3.34.1.20231010
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➤ Support new object class /section:
    [Process Measurement Value Class]
    [Process Totalized Value Class]
    [**Ingress Egress** Class]

➤ Update ParamN Scaling Types for IO-Link Device
➤ Support new data types in EnumN
➤ Allow additional value (Nested Member Reference) for GroupN,
    VariantN

➤ Updated / Bugs fixed related to:
    Empty path in ArrayN
    STime size issue

Version 3.31.1.20220811
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➤ Support new object class /section:
    [CIP Security Class]
    [Certificate Management Class]
    [In-Cabinet Actual Topology Class]
    [In-Cabinet Commissioning Class]
    [LLDP Data Table Class]
    [LLDP Management Class]
    [Pilot Light Supervisor Class]
    [Select Line Link Class]

➤ Support "High" or "Scheduled" priority in safety connection

➤ Updated / Bugs fixed related to:
    Connection section
    NTIME and UTIME
    Group Section

Version 3.29.1.20201218
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➤ Support Exclude_Aggregation entry keyword in Connection
    Manager section
➤ Updated / Bugs fixed related to:
    Ranges/Params section

Version 3.27.1.20191218
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- ➤ Support RangesN/ProxyRangesN/ProxiedRangesN entry keyword in Parameters section
- ➤ Support REAL/LREAL data type in Enum entry Keyword
- ➤ Support ApplicationProfileAssembly entry keyword in [Device] section
- ➤ Updated / Bugs fixed related to:
  Assembly section
  Groups section
  HART Process Device Object
  Modbus Mapper
  ConstructedParamN

Version 3.25.1.20181216

- ➤ Support "HART" and "IO-Link" Port type
- ➤ Support entries in [Assembly] Section:
  BitStringVariantN
- ➤ Bugs fixed

Version 3.23.1.20171205

- ➤ Support "AssociatedInterfaceObjects" entry in [Time Sync Class] Section
- ➤ Support new object class /section:
  [SNMP]
  [RSTP Bridge]
  [RSTP Port]
  [Parallel Redundancy Protocol]
  [PRP Notes Table]
  [Scheduling]
  [Engery]
  [Modbus Mapper]
  [Power Management]

- ➤ Support following entries in [Params] Section:
  FixedN
  ConstructedParamN
  ProxyContructedParamN
  ProxiedConstructedParamN

- ➤ Warning in Connection Object, o->T Real Time Format must be "heartbeat' when 'application type' using 'listen only' or 'input only'.
- ➤ Use rule for object class attribute (1 to 3) instead of previous "required" in EDS file.
- ➤ New Flash
- ➤ Bugs fixed

Version 3.21.1.20161208

- ➢ Support Object_Name keyword (required) keyword for all class sections
- ➢ Support Object_Class_Code keyword (required) keyword for all class sections
- ➢ Support Service_DescriptionN (Optional) keyword for all class sections
- ➢ Support Service_DescriptionN localization
- ➢ Support of the following new Object Class sections:
  [CIP Security Class]
  [EtherNet/IP Security Class]
  [Certificate Managment Class]

- ➢ Support new Entry keyword ArrayN in Assembly section
- ➢ Support new Entry keyword ArrayN in Symbolic Translation and Internalization Sections
- ➢ Support ArrayN in all related entry format as following:
  Member Reference in AssemExaN
  Sepcification in CfgAssemblyExa
  First bit reset selection entry, Subsequent bit set selection entry and Subsequent bit reset selection entry in BitStringVariantN
  First selection entry, Second selection entry and Subsequent selection entry in VariantExaN O->T format, T->O format, Proxy Config format and Target Config format in ConnectionN
  ProxyConnectN
  ProxiedConnectN
  ConnectivityTestConnection1
- ➢ Support Port Routing Capabilities for Port Object Class section (required)

Version 3.11.1.20151008

- ➢ Verification of data type EDS_External_Id
- ➢ Verification of uniquness of the Connection Name String
- ➢ Updated verificiation of assembly entries: an assembly shall not reference itself in the Member Reference list
- ➢ Added 'Clear all' button in the enumeration dialog in the [Params] and the [Internationalization] sections
- ➢ Added note for sort functionality in the Member Reference list in assembly entries
- ➢ Changed description of Query fields in the [Modular] section
- ➢ Updated verification of a [Modular] section that describes a module: a Rack entry shall exist
- ➢ Support of entry keyword ConnectivityTestConnect1 in the
- ➢ [Connection Manager] section
- ➢ Verification of data type DATE_AND_TIME
- ➢ Corrected verification of data types
  DATE
  TIME_OF_DAY
  FTIME

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ITIME
TIME
LTIME
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- ➤ Forms for editing Formatted, Decimal and Hexadecimal Notation of data types DATE, TIME_OF_DAY, DATE_AND_TIME, FTIME, ITIME,
- ➤ TIME and LTIME
- ➤ Updated Product Type String list (Device Profiles) in the
- ➤ [Device] section
- ➤ Support of the special characters '/' and '-' internal to a section name, as these are used in
  [AC/DC Drive Class],
  [S-Device Supervisor Class],
  [S-Analog Sensor Class],
  [S-Analog Actuator Class],
  [S-Single Stage Class],
  [S-Gas Calibration Class],
  [S-Partial Pressure Class],
  [S-Sensor Calibration Class],
  [Non-Electrical Energy Class] and [TCP/IP Interface Class]
- ➤ Support of the following new Object Class sections:
  [SERCOS III Link Class]
  [Target Connection List Class]
  [Energy Class]
  [Electrical Energy Class]
  [Non-Electrical Energy Class]
  [Base Switch Class]
- ➤ Support of entry keyword DeviceStatusAssembly2 in the [Device] section
- ➤ Changed handling of DeviceStatusAssembly entry in the [Device] section
- ➤ SERCOS_III added to Port Type list
- ➤ Corrected verification of Minimum and Maximum values of parameters of data type EPATH
- ➤ Verification of Minimum and Maximum values of parameters of data type STRINGI
- ➤ Support of UNICODE for parameters of data type STRING2, i. e. the default value will be preceded by a capital L and enclosed in double quotes
  Note: the default value will not be checked for the preceding capital L for UNICODE when opening an EDS, but it will be added automatically when saving the EDS
- ➤ Verification of bit fields ((Proxy)ParamN:b) as Member Reference in an assembly
- ➤ Corrected calculation of the Member Size (in bits) in
- ➤ Assem entries, if a parameter Member Reference is of a string data type
- ➤ Log file (<filename>.log) is written on each verification that includes all errors and warnings from the error/warning list; if a valid filename does not exist, the log file is named EZEDS.log
- ➤ Added the ability to select several items from the reference list in GroupN entries to put them into the group and vice versa

- ➢ Corrected use of packed and padded EPATH
- ➢ Corrected verification for data types REAL and LREAL
- ➢ No longer support of verification of data type DATE_AND_TIME
- ➢ Update data type of PacketsPerSecond from UINT16 to UDINT
- ➢ Bug fixes:
- ➢ Warning multiple entry keywords indicating the same path value (Param and Assem)
- ➢ Warning multiple entries reporting the same name value (Param)

Version 3.10 and previous

- ➢ Omitted