

## ODVA Specification Mandatory Change List

### Definition and Legend

*This document tracks changes made in the specifications that are mandatory for products implementing the technologies.*

*ODVA publishes this list separately from the specifications in order to give developers and managers advanced notice of changes that will impact the products for which they are responsible.*

*This document does not list any optional changes. For optional changes and enhancements, see the Revision page at the front of each specification volume.*

### Scope of Change

O: Optional: An optional feature/function

C: Conditional: An optional feature/function that is required under specific conditions, see specification

M: Mandatory: A feature/function that is required

If the Scope of Change differs between Descriptions of a single spec change, separate rows are shown.

### Scope of Products Impacted

New: Products taking the conformance test the first time

Existing: Products that already have a valid DOC and are being updated with new features, as defined in section 8 of the Conformance Policy (PUB00008)

### Additional Notes

With most of the changes, the object revision is being changed, so be sure to check for that detail in the specification.

The effective date is the date when the change will be enforced by conformance testing.

Specification volumes are referenced by number. The titles of the volumes can be found on

<https://www.odva.org/Technology-Standards/Common-Industrial-Protocol-CIP/CIP-Specifications-Library>

If there is a discrepancy between this spreadsheet and the specification, the latest released specification(s) will prevail.

The title of each page identifies the the publication cycle of the changes shown. There are two publication update cycles each year, typically in April and November.

**Updated**      **May 22, 2019**

**ODVA Specification Mandatory Change List**  
2019 PC 1

Topic	Volume	Edition	Description	Scope of Products Impacted	Scope of Change	Publish Date	Effective Date
Standard Network Diagnostic Assy	1	3.26	1. Assembly Object Revision attribute should be 3, 1 and 2 are only allowed for Static Assemblies (Table 5A-5.3). New Conditional attribute Member List Signature (Table 5A-5.4). 2. New Conditional Get_Connection_Point_Member_List service for Connection Manager, Time Sync Object (Table 3-5.3, Table 5B-2.17).	New and Existing	C	Apr-19	Nov-20
DTLS Timeout Enhancement	8	1.8	EtherNet/IP Security Object Revision updates to 3. New required attribute DTLS Timeout is added for CIP Security device.	New and Existing	C	Apr-19	Apr-19
Requiring CIP Security for Services	8	1.8	After a device's CIP Security Object has attained the CONFIGURED state configuration changes must only be accepted if the changes are made over a CIP Security connection for File Object, TCP/IP Object and Ethernet Link Object (Section 4-3.1.3).	New and Existing	C	Apr-19	May-19
CMO State Machine Clarification	8	1.8	Verify_Certificate service clarification and CMO State clarification. (Table 5-5.17 and Table 5-5.18)	New and Existing	C	Apr-19	Apr-19
Feedback Ratio	5	2.18	Add new Conditional attributes and services to Safety Dual Feedback Channel Object for multiport safety devices. (Section 5-4)	New and Existing	C	Apr-19	Apr-19

**ODVA Specification Mandatory Change List**  
2018 PC 2

Topic	Volume	Edition	Description	Scope of Products Impacted	Scope of Change	Publish Date	Effective Date
Common Object Class EDS Correction	1	3.25	Object_Name and Object_Class_Code keywords are required in the [Assembly], [Parameter], [Group] section of eds file if such object exists in the device.(Table 7-3.32, Table 7-3.5, Table 7-3.29.)	New and Existing	M	Nov-18	Apr-19
HART Hooks	1	3.25	New required attributes are added to Identity Object for HART devices (Table 5A-2.3)	New	C	Nov-18	Nov-18
File Instance Clear_File and Save Params	1	3.25	Clear_File service shall not clear File Save Parameter. (Section 5A-42.5.7)	New and Existing	M	Nov-18	Nov-18
STIME correction	1	3.25	STIME shall be data type ULINT not LINT.	New and Existing	M	Nov-18	Nov-18
Remove Integrity Profile	8	2.17	Integrity Profile is obsolete for CIP Security device.	New and Existing	M	Nov-18	Nov-18

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2018 PC 1

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System Time Definition	1	3.24	Improve elementary data type for System Time (STIME) (Table C2.1, Section C-3.3, Section 7-3.5.1.12)	New and Existing	M	Apr-18	Apr-18
Invalid Connection Size Status Code	1	3.24	Allow an exception for CIP-Modbus translators to use Status Code 0x109 (Table 3-5.33)	New and Existing	M	Apr-18	Apr-18
Pull Model	8	1.6	Pull Model is a new mandatory capability of CIP Security devices. (Section 4-3, 5-4, 5-5, 6-5.3)	New and Existing	C	Apr-18	May-21
EIP Security Object IF Linkage	8	1.6	Each CIP Security device with more than one IP address shall support the Port Object and the Associated Communication Objects attribute. (Section 5-4.1)	New and Existing	C	Apr-18	Apr-18
Multiport Safety Devices	5	2.17	Add new Required attributes and services of Safety Supervisor Object for multiport safety devices. (Section 5.4)	New and Existing	C	Apr-18	Apr-18

**ODVA Specification Mandatory Change List**  
2017 PC 2

Topic	Volume	Edition	Description	Scope of Products Impacted	Scope of Change	Publish Date	Effective Date
PTP_Leap_Seconds_Attribute	1	3.23	a. Revision Class attribute can be 3 or 4 (required for Master capable device). (Section 5B-2.3) b. New conditional attribute 30. (Section 5B-2.4)	New and Existing	C	Nov-17	May-19
Port Type 0 Associated Communication Objects Issue	1	3.23	a. Port Type and associated objects classification. (Table 3-7.4) b. Associated Communication Object attribute clarification. (Section 3-7.2.1.9)	New and Existing	C	Nov-17	Nov-17
CIP Sync over PRP	1	3.23	A new PTP profile for PRP (Table 5B-2.20)	New and Existing	C	Nov-17	Nov-17
Connection Manager Error Codes Updates	1	3.23	New Connection Manager Error Codes (Table 3-5.33)	New and Existing	C	Nov-17	Nov-17
Get-Set_Attribute_List Clarifications	1	3.23	Clarification of Get/Set_Attribute_List service (Section A-4.3 and Section A-4.4)	New and Existing	C	Nov-17	Nov-18
Commissioning Updates	8	1.5	Enhanced commissioning requirements. (Section 4-3 and section 5-3)	New and Existing	C	Nov-17	Nov-17
Enhance Certificate Trust	8	1.5	a. New required Trusted Identities attribute of EtherNet/IP Security Object (Section 5-4.4) b. Clarification of Certificate Management Object (Section 5-5.4)	New and Existing	C	Nov-17	Nov-17
Correct CIP Security Object Get Attr All	8	1.5	Correct error in CIP Security Object instance level Get_Attribute_All response layout (Table 5-3.8)	New and Existing	C	Nov-17	Nov-17
Secure CL3 and Non-Secure CL1 Clarification	8	1.5	Guideline on how to open non-secure Class 0/1 connection via secure UCMM or Class 3 connection (Section 3-5.7.2.4)	New and Existing	C	Nov-17	May-18

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2017 PC 1

Topic	Volume	Edition	Description	Scope of Products Impacted	Scope of Change	Publish Date	Effective Date
File Object Enhancements	1	3.22	a. Revision Class attribute can be 1 or 2. (Section 5A-42.2) b. Changed definition of the File Save Parameters attribute. (Section 5A-42.2.1.8) c. State Event Matrix change for Download Transfer, First-and-last and Upload_Transfer event. (Table 5A-42.26)	New and Existing	C	Apr-17	Nov-17
PTP port number association	1	3.22	a. Associated Interface Objects attribute is added to Time Sync Object to declare the PTP port number association. (Table 5B-2-3) b. [AssociatedInterfaceObjects] Entry Keyword is added to eds file. (Section 7-3.6.6.1)	Only New	C	Apr-17	Nov-17
Missing Item Count	8	1.4	Added Item Count to CPF Item for Unconnected Message over UDP for DTLs. (Table 3-5.4)	New and Existing	M	Apr-17	Apr-17
Null Fwd Open Clarification	8	1.4	Specify how a Null ForwardOpen should be sent in the presence of CIP Security. (Section 3-7)	New and Existing	C	Apr-17	Apr-17
Cert Format Clarification	8	1.4	Certificate Encodings Flag attribute and Certificate Encoding attribute are added to Certificate Management Object to specify certificate format. (Section 5-5.3.3 and Section 5-5.4.1)	New and Existing	M	Apr-17	Apr-17
PSK Format Clarification	8	1.4	Specify encoding format for Pre-shared keys. (Section 5-4.4.5)	New and Existing	M	Apr-17	Apr-17
MCAO_Not_Required	9	1.1	A Motion Control Axis Object or a vendor specific equivalent construct needs to be in CIP Motion Controller. (Section 1-2.2)	New and Existing	C	Apr-17	Apr-17
Enhancements for PRP HSR	2	1.23	a. PRP/HSR Nodes Table with Active Status attribute is added to PRP/HSR Table Object. (Section 5-14.3.3.1) b. Get_Member service is now Required for PRP/HSR Table Object. (Table 5-14.4) c. Diagnostic attributes 17 - 20 are added to PRP/HSR Protocol Object. (Table 5-13.3)	New and Existing	C	Apr-17	Nov-17