Working Implementation Agreements for Open Systems Interconnection Protocols: Part 20 - Manufacturing Message Specification (MMS)

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This part of the Working Implementation Agreements was prepared by the Manufacturing Message Specification (MMS) Special Interest Group (MMSSIG) of the National Institute of Standards and Technology (NIST) Workshop for Implementors of Open Systems Interconnection (OSI). See Procedures Manual for Workshop charter.

Text in this part has been approved by the Plenary of the above-mentioned Workshop. No significant technical change has occurred in this part since it was previously presented.

Future changes and additions to this version of these Implementor Agreements will be published as a new part. Deleted and replaced text will be shown as strikeout. New and replacement text will be shown as shaded.

Table of Contents

Part 20 -	Manufacturing	Message S	pecification	(MMS)	1
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0	Intro	Introduction 1				
1	Scop	Scope 1				
2	Field	Field of Application 1				
3	Norm	Normative References 1				
4	Defin	Definitions 1				
5	Corrigenda and Addenda 1					
6	Statu	Status 1				
7	Gene 7.1 7.2 7.3 7.4	Order of capabilities 2				
8	Servi 8.1	ce-Specific Agreements 2 Environment and general management 2 8.1.1 Initiate 2 8.1.1.1 Negotiation of MMS abstract syntaxes 2 8.1.1.2 Max serv outstanding 2 8.1.1.3 Local detail calling 3 8.1.1.4 Local detail called 3 8.1.1.5 Rules of Extensibility 3				
	8.2	VMD Support 3 8.2.1 Get Capability List service 3 Domain Management 3 8.3.1 List of capabilities 3 8.3.2 Initiate Download Sequence service 3 8.3.3 Download Segment service 3 8.3.4 Terminate Download Sequence service 4 8.3.5 Initiate Upload Sequence service 4 8.3.6 Upload Segment service 4 8.3.7 Get Domain Attributes service 4				
	8.4	Program Invocation Management 4 8.4.1 Start service 4 8.4.2 Stop service 4 8.4.3 Resume service 4 8.4.4 Reset service 4				
	8.5	Variable Access 5 8.5.1 Scattered access 5 8.5.2 Floating point 5 8.5.3 Unsigned Data 5				

Order of variable specifications 5 8.5.4 8.5.5 Parameter CBBs 5 8.5.6 Named Variable Scope 5 8.5.7 Address Types 6 Semaphore Management 6 8.6 8.7 Operator Communication 6 8.8 Event Management 6 8.9 Journal Management 6

Annex A (normative)

Backwards compatibility agreements 7

Annex B (normative)

DIS 9506 modifications required for backwards compatibility 8

Annex C (normative)

Basic functional tests 9

Part 20 - Manufacturing Message Specification (MMS)

0 Introduction

(Refer to the Stable Agreements, Version 6.)

Scope

(Refer to the Stable Agreements, Version 6.)

Field of Application

Normative References

(Refer to the Stable Agreements, Version 6.)

[3] ISO/IEC 9506-1:1993 - Industrial automation systems - Manufacturing Message Specification: Technical Corrigenda 1

Definitions

(Refer to the Stable Agreements, Version 6.)

Corrigenda and Addenda

ISO/IEC 9506-1:1993 - Industrial automation systems - Manufacturing Message Specification: Technical Corrigenda 1

Status

Phase 1 is in progress.

General Agreements

Max supported PDU size

(Refer to the Stable Agreements, Version 6.)

FileName

(Refer to the Stable Agreements, Version 6.)

Order of capabilities

(Refer to the Stable Agreements, Version 6.)

Constructed Encodings

Constructed encodings shall not be used for bit strings shorter than 256 bits, nor for octet strings (or types derived from octet strings by tagging) shorter than 1024 octets. For such strings, only primitive encodings shall be used. Upon receipt of a constructed bit string or octet string that violates this restriction, the receiving implementation may reject the corresponding PDU, but shall not send a P-P-Abort.

Service-Specific Agreements

Environment and general management

Initiate

Negotiation of MMS abstract syntaxes

(Refer to the Stable Agreements, Version 6.)

Max serv outstanding

(Refer to the Stable Agreements, Version 6.)

Local detail calling

(Refer to the Stable Agreements, Version 6.)

Local detail called

(Refer to the Stable Agreements, Version 6.)

Rules of Extensibility

(Refer to the Stable Agreements, Version 6.)

VMD Support

(Refer to the Stable Agreements, Version 6.)

Get Capability List service

Only one capability shall be described in each VisibleString of the SEQUENCE OF.

Domain Management

List of capabilities

(Refer to the Stable Agreements, Version 6.)

Initiate Download Sequence service

(Refer to the Stable Agreements, Version 6.)

Download Segment service

(Refer to the Stable Agreements, Version 6.)

Terminate Download Sequence service

(Refer to the Stable Agreements, Version 6.)

Initiate Upload Sequence service

(Refer to the Stable Agreements, Version 6.)

Upload Segment service

(Refer to the Stable Agreements, Version 6.)

Get Domain Attributes service

(Refer to the Stable Agreements, Version 6.)

Program Invocation Management

Start service

(Refer to the Stable Agreements, Version 6.)

Stop service

(Refer to the Stable Agreements, Version 6.)

Resume service

(Refer to the Stable Agreements, Version 6.)

Reset service

(Refer to the Stable Agreements, Version 6.)

Variable Access

Scattered access

(Refer to the Stable Agreements, Version 6.)

Floating point

(Refer to the Stable Agreements, Version 6.)

Any implementation which supports data of the MMS Floating Point Type, shall be capable of supporting a size parameter of format width 32 and exponent width 8.

Unsigned Data

(Refer to the Stable Agreements, Version 6.)

Order of variable specifications

(Refer to the Stable Agreements, Version 6.)

Parameter CBBs

(Refer to the Stable Agreements, Version 6.)

Each server implementation that claims support for the Read, Write or InformationReport service shall be capable of supporting either the VNAM or VADR parameter CBB.

Each client implementation that claims support for the Read, Write or InformationReport service shall be capable of supporting the VNAM and VADR parameter CBBs.

Named Variable Scope

(Refer to the Stable Agreements, Version 6.)

Each server implementation that claims support for the VNAM parameter CBB shall be capable of supporting either VMD-Specific or Domain-Specific named variables.

Each client implementation that claims support for the VNAM parameter CBB shall be capable of supporting both VMD-Specific and Domain-Specific named variables.

Address Types

(Refer to the Stable Agreements, Version 6.)

Each server implementation that claims support for the VADR parameter CBB shall be capable of supporting either the Symbolic-Address or Numeric-Address choice.

Each client implementation that claims support for the VADR parameter CBB shall be capable of supporting both the Symbolic-Address and Numeric-Address choices.

Semaphore Management

Semaphore services are not considered in Phase 1.

Operator Communication

(Refer to the Stable Agreements, Version 6.)

Event Management

Event Management services are not considered in Phase 1.

Journal Management

Journal Management services are not considered in Phase 1.

Annex (normative)

Backwards compatibility agreements

(Refer to the Stable Agreements, Version 6.)

Annex (normative)

DIS 9506 modifications required for backwards compatibility

(Refer to the Stable Agreements, Version 6.)

Annex (normative)

Basic functional tests

(Refer to the Stable Agreements, Version 6.)