ISO 15745-1:2003-03 (E)

Industrial automation systems and integration - Open systems application integration framework - Part 1: Generic reference description

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Terms and definitions 2

4 Abbreviated terms 5
4.1 General 5
4.2 IAS interfaces types 6

5 AIF concept 6
5.1 Elements and rules 6
5.2 Using the AIF to develop an AIP 7
5.2.1 Overview 7
5.2.2 Integration models 7
5.2.3 Profiles 8

6 Integration model types 8
6.1 Process integration model 8
6.2 Information exchange integration model 9
6.3 Resource integration model 9
6.3.1 General 9
6.3.2 Device integration model 9
6.3.3 Communication network integration model 9
6.3.4 Equipment integration model 10
6.3.5 Human integration model 10
6.3.6 Material integration model 10

7 Profile templates and types 11
7.1 Profile template relationships 11
7.2 Master profile template 12
7.2.1 Structure 12
7.2.2 Header section 12
7.2.3 Body section 14
7.2.4 Header data types 14
7.2.6 XML Representation 15
7.3 Generic profile templates 17
7.3.1 AIP 17
7.3.2 Process profile 18
7.3.3 Information exchange profile 18
7.3.4 Resource profile 19

8 Compliance 25

Annex A (informative) UML terminology and notation 26

A.1 General 26

A.2 UML diagrams 26
A.2.1 Use case diagram 26
A.2.2 Class diagram 26
A.2.3 Behaviour diagrams 26
A.2.4 Implementation diagrams 27
A.3 UML notation 27

Annex B (informative) IAS interface types 28

B.1 IAS interface types (ISO/IEC TR 14252) 28
B.3 User defined IAS interface types 30

Bibliography 31