

INTERNATIONAL STANDARDIZED PROFILE

ISO/IEC
ISP
12069-7

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Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR) —

Part 7:

ADF22 — Remote Store Management — Full Management Profile

*Technologies de l'information — Profils normalisés internationaux
ADFnn — Classement et recherche documentaire (DFR) —*

Partie 7: ADF22 — Gestion de stock à distance — Profil de gestion totale



Reference number
ISO/IEC ISP 12069-7:1999(E)

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. In addition to developing International Standards, ISO/IEC JTC 1 has created a Special Group on Functional Standardization for the elaboration of International Standardized Profiles.

An International Standardized Profile is an internationally agreed, harmonized document which identifies a standard or group of standards, together with options and parameters, necessary to accomplish a function or a set of functions.

Draft International Standardized Profiles are circulated to national bodies for voting. Publication as an International Standardized Profile requires approval by at least 75 % of the national bodies casting a vote.

International Standardized Profile ISO/IEC ISP 12069-7 was prepared with the collaboration of

- Asia-Oceania Workshop (AOW);
- European Workshop for Open Systems (EWOS);
- Open Systems Environment Implementors' Workshop (OIW).

ISO/IEC ISP 12069 consists of the following parts, under the general title *Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR)*:

- *Part 1: Introduction to the DFR ISP*
- *Part 2: Specification of ROSE, RTSE, ACSE, Presentation and Session protocols for use by DFR*
- *Part 3: ADF11 — Common Document Filing and Retrieval — Read Only Profile*
- *Part 4: ADF12 — Common Filing and Retrieval — Archiving Profile*
- *Part 5: ADF13 — Common Filing and Retrieval — Document Store Manipulation Profile*
- *Part 6: ADF21 — Remote Store Management — Simple Management Profile*
- *Part 7: ADF22 — Remote Store Management — Full Management Profile*

Annex A forms an integral part of this part of ISO/IEC ISP 12069.

Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR) —

Part 7:

ADF22 — Remote Store Management — Full Management Profile

1 Scope

1.1 General

This part of ISO/IEC ISP 12069 contains the overall specifications for the support of document filing and retrieval functionality between a DFR user and a DFR server using DFR access protocol. This specification forms the full management capability of Remote Store Management application functions.

For this part of ISO/IEC ISP 12069, specifications defined in ISO/IEC ISP 12069-1 and ISO/IEC ISP 12069-2 apply. If any specification of another part of ISO/IEC ISP 12069 is used, it is explicitly indicated.

The ADF22 profile specified in this part of ISO/IEC ISP 12069 is intended for combination with applications that manipulate inside documents.

1.2 Position within the taxonomy

This part of ISO/IEC ISP 12069 is the seventh part of the DFR ISPs. The structure of the DFR ISPs is described in ISO/IEC ISP 12069-1.

ADF22 Full Management profile is part of the ADF2n series of profiles, called Remote Store Management profiles. It includes the functionality of ADF21 Simple Management profile (specified in ISO/IEC ISP 12069-6).

It may be combined with any T-Profile (see ISO/IEC TR 10000) specifying the OSI connection-mode Transport service.

1.3 Scenario

ADF22 is intended to work in combination with remote document manipulation applications, which use communication protocols to accomplish this remote manipulation when full management capabilities of a DFR document store are required. This situation is illustrated in Figure 1.

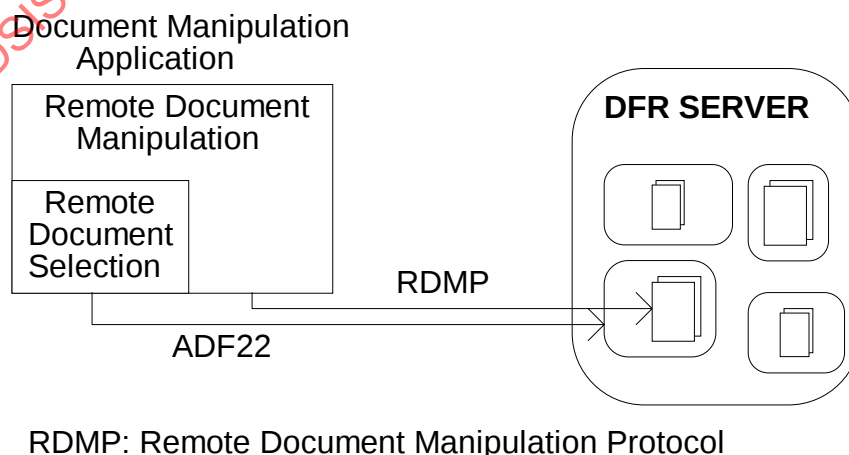


Figure 1: Scenario for the use of ADF22

The only service and protocol for the manipulation of documents which is standardized or currently planned for standardization is specified in DTAM-DM (Document Transfer And Manipulation - confirmed Document Manipulation, ITU-T Recs. T.435 and T.436); therefore, it is considered that ADF22 works with DTAM-DM.

2 Normative References

The following documents contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC ISP 12069. At the time of publication, the editions indicated were valid. All documents are subject to revision, and parties to agreements based on this part of ISO/IEC ISP 12069 are warned against automatically applying any more recent editions of the documents listed below, since the nature of references made by ISPs to such documents is that they may be specific to a particular edition. Members of IEC and ISO maintain registers of currently valid International Standards and ISPs, and ITU-T maintains published editions of its current Recommendations.

ISO/IEC 8326:1996, *Information technology — Open Systems Interconnection — Session service definition*.

ISO/IEC 8327-1:1996, *Information technology — Open Systems Interconnection — Connection-oriented Session protocol: Protocol specification*.

ISO 8649:1988, *Information processing systems — Open Systems Interconnection — Service definition for the Association Control Service Element*.

ISO 8650:1988, *Information processing systems — Open Systems Interconnection — Protocol specification for the Association Control Service Element*.

ISO/IEC 8822:1994, *Information technology — Open Systems Interconnection — Presentation service definition*.

ISO/IEC 8823-1:1994, *Information technology — Open Systems Interconnection — Connection oriented presentation protocol: Protocol specification*.

ISO/IEC 8824:1990, *Information technology — Open Systems Interconnection — Specification of Abstract Syntax Notation One (ASN.1)*.

ISO/IEC 8825:1990, *Information technology — Open Systems Interconnection — Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)*.

ISO/IEC 9072-1:1989, *Information processing systems — Text communication — Remote Operations — Part 1: Model, notation and service definition*.

ISO/IEC 9072-2:1989, *Information processing systems — Text communication — Remote Operations — Part 2: Protocol specification*.

ISO/IEC 9646-7:1995, *Information technology — Open Systems Interconnection — Conformance testing methodology and framework — Part 7: Implementation Conformance Statements*.

ISO/IEC TR 10000-1:1995, *Information technology — Framework and taxonomy of International Standardized Profiles — Part 1: General principles and documentation framework*.

ISO/IEC TR 10000-2:1995, *Information technology — Framework and taxonomy of International Standardized Profiles — Part 2: Principles and Taxonomy of ISO profiles*.

ISO/IEC 10031-2:1991, *Information technology — Text and office systems — Distributed-office-applications model — Part 2: Distinguished-object-reference and associated procedures*.

ISO/IEC 10166-1:1991, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 1: Abstract service definition and procedures*.

ISO/IEC 10166-1:1991/Amd.1:1995, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 1: Abstract service definition and procedures — Amendment 1: Minor Enhancements*.

ISO/IEC 10166-1:1991/Amd.2:1996, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 1: Abstract service definition and procedures — Amendment 2: Combined usage of DFR and DTAM*.

ISO/IEC 10166-1:1991/Cor.1:1994, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 1: Abstract service definition and procedures — Technical Corrigendum 1*.

ISO/IEC 10166-1:1991/Cor.2:1994, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 1: Abstract service definition and procedures — Technical Corrigendum 2*.

ISO/IEC 10166-1:1991/Cor.3:1994, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 1: Abstract service definition and procedures — Technical Corrigendum 3.*

ISO/IEC 10166-2:1991, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 2: Protocol specification.*

ISO/IEC 10166-2:1991/Amd.1:1995, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 2: Protocol specification — Amendment 1: Minor enhancements for additional error.*

ISO/IEC 10166-2:1991/Amd.2:1996, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 2: Protocol specification — Amendment 2: Combined usage of DFR and DTAM.*

ISO/IEC 10166-2:1991/Cor.1:1994, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 2: Protocol specification — Technical Corrigendum 1.*

ISO/IEC 10166-2:1991/Cor.2:1995, *Information technology — Text and office systems — Document Filing and Retrieval (DFR) — Part 2: Protocol specification — Technical Corrigendum 2.*

ISO/IEC ISP 11188-1:1995, *Information technology — International Standardized Profile — Common upper layer requirements — Part 1: Basic connection oriented requirements.*

ISO/IEC ISP 12069-1:1996, *Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR) — Part 1: Introduction to the DFR ISP.*

ISO/IEC ISP 12069-2:1996, *Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR) — Part 2: Specification of ROSE, RTSE, ACSE, Presentation and Session protocols for use by DFR.*

ISO/IEC ISP 12069-3:1996, *Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR) — Part 3: ADF11 — Common Document Filing and Retrieval — Read Only Profile.*

ISO/IEC ISP 12069-4:1998, *Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR) — Part 4: ADF12 — Common Document Filing and Retrieval — Archiving Profile.*

ISO/IEC ISP 12069-5:1999, *Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR) — Part 5: ADF13 — Common Document Filing and Retrieval — Document Store Manipulation Profile.*

ISO/IEC ISP 12069-6:1998, *Information technology — International Standardized Profiles ADFnn — Document Filing and Retrieval (DFR) — Part 6: ADF21 — Remote Store Management — Simple Management Profile.*

3 Definitions

For the purposes of this part of ISO/IEC ISP 12069, the definitions given in ISO/IEC ISP 12069-1 and ISO/IEC ISP 12069-2 apply.

4 Abbreviations

For the purposes of this part of ISO/IEC ISP 12069, the abbreviations given in ISO/IEC ISP 12069-1, ISO/IEC ISP 12069-2 and ISO/IEC ISP 12069-6 apply.

5 Conformance

This part of ISO/IEC ISP 12069 states requirements upon implementation to achieve interworking. A claim of conformance to this ADF22 is a claim that all requirements in the relevant base standards and recommendations are satisfied, that all the requirements in ISO/IEC ISP 12069 Part1 and ISO/IEC ISP 12069 Part2 are satisfied, and that all requirements in clause 6 and annex A of this part of ISO/IEC ISP 12069 are satisfied.

6 Constraints supported by ADF22

This clause describes the characteristics which are supported by this Profile.

The specifications of annex A are required for applications conforming to ADF22.

6.1 Support Classification

For this part of ISO/IEC ISP 12069, the constraints provided in subclause 3.2 of ISO/IEC ISP 12069-1 apply.

6.2 Support classification of service

The support classification for each operation is detailed in Table 1.

Table 1: Support classification for DFR Operations

Operation	Support Classification
DfrBind	m
DfrUnbind	m
Create	i
Delete	m
Copy	m
Move	m
Read	i
Modify	m
List	m
Search	m
Reserve	o
Abandon	o

Support classification: m: mandatory; o: optional; i: out of scope

Annex A

(normative)

Profile requirements list for ISO/IEC ISP 12069 Part 7

In the event of a discrepancy becoming apparent in the body of this part of ISO/IEC ISP 12069 and the tables in this annex, this annex is to take precedence.

In each table, "static client" means static capability required for an ADF22 user implementation, "static server" means static capability required for an ADF22 server implementation, and "dynamic" means the dynamic behavior between ADF22 user and server implementations.

Table A.1 of ISO/IEC ISP 12069-5 defines specific conditions that are used to determine dynamic conditional support classification (see 3.2.2. of ISO/IEC ISP 12069-1).

A.1 DfrBind

This clause specifies restrictions on the DfrBind operation.

The specifications provided in A.1 of ISO/IEC ISP 12069-6 apply.

A.2 DfrUnbind

This clause specifies restrictions on the DfrUnbind operation.

The specifications provided in A.2 of ISO/IEC ISP 12069-6 apply.

A.3 Create

This operation is not supported by this profile.

A.4 Delete

This clause specifies restrictions on the Delete operation.

The specifications provided in A.4 of ISO/IEC ISP 12069-5 apply.

A.5 Copy

This clause specifies restrictions on the Copy operation.

A.5.1 CopyArgument Parameters

This subclause specifies restrictions on the arguments used in the invocation of the Copy operation.

The specifications provided in A.5.1 of ISO/IEC ISP 12069-4 apply with the following modifications:

- The entries for the "object-class", "selection" and "reservation" elements are replaced by the following entries:

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
object-class	DfrObjectClass	-	o	o	c1	see A.5.1.6
modifications	SEQUENCE OF EntryModification	-	o	o	c1	see A.5.1.2
selection	EntryInformationSelection	-	i	i	x	-
reservation	Reservation	-	o	m	c1 (PR)	see A.11.1.1 in ISO/IEC ISP 12069-6

A.5.1.1 Entry

This subclause specifies restrictions on the "Entry" parameter.

The specifications provided in A.5.1.1 of ISO/IEC ISP 12069-4 apply.

A.5.1.2 EntryModification

This subclause specifies restrictions on the "EntryModification" parameter.

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
EntryModification [CHOICE]						
put-attribute	Attribute	-	i	i	x	-
remove-attribute	AttributeType	-	m	m	m1	[c.f. ISO/IEC 9594]
copy-attributes-from	SEQUENCE{ source: SourceEntry, attribute-selection: SET OF Attribute Type OPTIONAL}	-	m	m	m1	[c.f. ISO/IEC 9594] see A.5.1.3
add-values	Attribute	-	o	m	c1	[c.f. ISO/IEC 9594]
remove-values	Attribute	-	o	m	c1	[c.f. ISO/IEC 9594]
add-values-from	SEQUENCE{ source: SourceEntry, attribute-selection: SET OF Attribute Type OPTIONAL}	-	o	m	c1	[c.f. ISO/IEC 9594] see A.5.1.3
put-content	DfrObjectContent	-	i	i	x	-
remove-content	NULL	-	c	m	c2(P7)	-
copy-content-from	SourceEntry	-	c	m	c2(P7)	see A.5.1.3

A.5.1.3 SourceEntry

This subclause specifies restrictions on the "SourceEntry" parameter.

The specifications provided in A.5.1.3 of ISO/IEC ISP 12069-4 apply.

A.5.1.4 ErrorHandlingMode

This subclause specifies restrictions on the "ErrorHandlingMode" parameter.

The specifications provided in A.5.1.4 of ISO/IEC ISP 12069-4 apply.

A.5.1.5 DfrObjectContent

This subclause specifies restrictions on the "DfrObjectContent" parameter.

This data type does not affect any element supported by Copy operation in this part of ISO/IEC ISP 12069.

A.5.1.6 DfrObjectClass

This subclause specifies restrictions on the "DfrObjectClass" parameter.

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
DfrObjectClass [ENUMERATED]						
dfr-document	-	-	m	m	m2	0
dfr-root-group	-	-	-	-	x	1
dfr-proper-group	-	-	i	i	x	2
dfr-reference	-	-	i	i	x	3
dfr-search-result-list	-	-	i	i	x	4

A.5.2 CopyResult Parameters

This sub-clause specifies restrictions on the result parameters of the Copy operation.

The specifications provided in A.5.2 of ISO/IEC ISP 12069-4 apply with the following modifications:

- The entry for the "entry-information" element is replaced by the following entry:

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
entry-information	EntryInformation	-	i	i	x	-

A.5.3 Copy Error

This sub-clause specifies restrictions on the result error of the Copy operation.

The specifications provided in A.5.3 of ISO/IEC ISP 12069-4 apply.

A.6 Move

This clause specifies restrictions on the Move operation.

A.6.1 MoveArgument Parameters

This subclause specifies restrictions on the arguments used in the invocation of the Move operation.

The specifications provided in A.6.1 of ISO/IEC ISP 12069-5 apply with the following modifications:

- The entries for the "object-class" and "selection" elements are replaced by the following entries:

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
object-class	DfrObjectClass	-	o	o	c1	(size: 1 octet) see A.5.1.6
modifications	SEQUENCE OF EntryModification	-	o	o	c1	see A.6.1.2
selection	EntryInformationSe lection	-	i	i	x	-

A.6.1.1 Entry

This subclause specifies restrictions on the "Entry" parameter.

The specifications provided in A.6.1.1 of ISO/IEC ISP 12069-5 apply.

A.6.1.2 EntryModification

This subclause specifies restrictions on the "EntryModification" parameter.

The specifications provided in A.5.1.2 apply with the following modifications:

- The entries for the "add-values", "remove-values" and "add-values-from" elements are replaced by the following entries:

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
add-values	Attribute	-	m	m	m1	[c.f. ISO/IEC 9594]
remove-values	Attribute	-	m	m	m1	[c.f. ISO/IEC 9594]
add-values from	SEQUENCE{ source: SourceEntry, attribute- selection: SET OF Attribute Type OPTIONAL}	-	m	m	m1	[c.f. ISO/IEC 9594] see A.5.1.3

A.6.2 MoveResult Parameters

This sub-clause specifies restrictions on the result parameters of the Move operation.

The specifications provided in A.6.2 of ISO/IEC ISP 12069-5 apply with the following modifications:

- The entry for the "entry-information" element is replaced by the following entry:

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
entry-information	EntryInformation	-	i	i	x	-

A.6.3 Move Error

This sub-clause specifies restrictions on the result error of the Move operation.

The specifications provided in A.6.3 of ISO/IEC ISP 12069-5 apply.

A.7 Read

This operation is not supported by this profile.

A.8 Modify

This clause specifies restrictions on the Modify operation.

A.8.1 ModifyArgument Parameters

This subclause specifies restrictions on the arguments used in the invocation of the Modify operation.

The specifications provided in A.8.1 of ISO/IEC ISP 12069-5 apply with the following modifications:

- The entries for the "object-class" and "selection" elements are replaced by the following entries:

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
object-class	DfrObjectClass	-	o	o	c1	(size: 1 octet) see A.5.1.6
modifications	SEQUENCE OF EntryModification	-	o	o	c1	see A.8.1.1
selection	EntryInformationSelection	-	i	i	x	-

A.8.1.1 EntryModification

This subclause specifies restrictions on the "EntryModification" parameter.

The specifications provided in A.6.1.2 apply with the following modifications:

- The entries for the "remove-content" and "copy-content-from" elements are replaced by the following entries:

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
remove-content	NULL	-	c	m	c2(P8)	-
copy-content-from	SourceEntry	-	c	m	c2(P8)	see A.5.1.3

A.8.2 ModifyResult Parameters

This sub-clause specifies restrictions on the result parameters of the Modify operation.

The specifications provided in A.8.2 of ISO/IEC ISP 12069-5 apply with the following modifications:

- The entry for the "entry-information" element is replaced by the following entry:

Element	Data Type	Default	Static Client	Static Server	Dynamic	Comments
entry-information	EntryInformation	-	i	i	x	-

A.8.3 Modify Error

This sub-clause specifies restrictions on the result error of the Modify operation.

The specifications provided in A.8.3 of ISO/IEC ISP 12069-5 apply.

A.9 List

This clause specifies restrictions on the List operation.

The specifications provided in A.9 of ISO/IEC ISP 12069-6 apply.

A.10 Search

This clause specifies restrictions on the Search operation.

The specifications provided in A.10 of ISO/IEC ISP 12069-6 apply.

A.11 Reserve

This clause specifies restrictions on the Reserve operation.

The specifications provided in A.11 of ISO/IEC ISP 12069-6 apply.

A.12 Abandon

This clause specifies restrictions on the Abandon operation.

The specifications provided in A.12 of ISO/IEC ISP 12069-3 apply.

A.13 Error

This clause explains details on the parameters which report errors that have been detected in each operation.

The table below shows the list of errors responding to each operation.

	Bind	Unbind	Delete	Copy	Move	Modify	List	Search	Reserve	Abandon
AttributeError	-	-	-	m	m	m	m	m	-	-
NameError	-	-	m	m	m	m	m	m	m	-
AccessError	-	-	m	m	m	m	m	m	-	-
UpdateError	-	-	m	m	m	m	-	i	-	-
ReferentAccessError	-	-	-	o	o	o	-	-	-	-
InterServerAccessError	-	-	-	i	i	i	-	-	-	-
ReservationError	-	-	-	-	o	o	o	o	m	-
VersionManagementError	-	-	-	o	o	o	-	-	-	-
SecurityError	m	-	o	o	o	o	o	o	o	-
ServiceError	m	-	m	m	m	m	m	m	m	-
AbandonFailed	-	-	-	-	-	-	-	-	-	m
Abandoned	-	-	o	o	o	o	m	m	o	-
ExternalServerError	-	-	-	o	o	o	-	-	-	-
ManipulationError	o	-	-	-	-	-	-	-	-	-

A.13.1 AttributeError

This subclause specifies restrictions on the parameters of the "AttributeError" error.

The specifications provided in A.13.1 of ISO/IEC ISP 12069-5 apply.

A.13.2 NameError

This subclause specifies restrictions on the parameters of the "NameError" error.

The specifications provided in A.13.2 of ISO/IEC ISP 12069-3 apply.

A.13.3 AccessError

This subclause specifies restrictions on the parameters of the "AccessError" error.

The specifications provided in A.13.3 of ISO/IEC ISP 12069-5 apply.

A.13.4 ReferentAccessError

This subclause specifies restrictions on the parameters of the "ReferentAccessError" error.

The specifications provided in A.13.5 of ISO/IEC ISP 12069-5 apply.

A.13.5 SecurityError

This subclause specifies restrictions on the parameters of the "SecurityError" error.

The specifications provided in A.13.9 of ISO/IEC ISP 12069-3 apply.

A.13.6 ServiceError

This subclause specifies restrictions on the parameters of the "ServiceError" error.

The specifications provided in A.13.10 of ISO/IEC ISP 12069-5 apply.

A.13.7 AbandonedFailed

This subclause specifies restrictions on the parameters of the "AbandonedFailed" error.

The specifications provided in A.13.11 of ISO/IEC ISP 12069-3 apply.

A.13.8 Abandoned

This subclause specifies restrictions on the parameters of the "Abandoned" error.

The specifications provided in A.13.12 of ISO/IEC ISP 12069-3 apply.

A.13.9 ExternalServerError

This subclause specifies restrictions on the parameters of the "ExternalServerError" error.

The specifications provided in A.13.13 of ISO/IEC ISP 12069-3 apply.

A.13.10 VersionManagementError

This subclause specifies restrictions on the parameters of the "VersionManagementError" error.

The specifications provided in A.13.8 of ISO/IEC ISP 12069-3 apply.