

IDS-Global

Interface Description Document

Vancouver 2010 Olympic Winter Games

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Document control

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Change Log

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1.0	APP	<ul style="list-style-type: none">• Approved
1.1	APP	<ul style="list-style-type: none">• Section 2.2.3 Document Type Declaration: No reference to any DTD in the case of ODF
1.2	APP	<ul style="list-style-type: none">• Section 2.2.3: Fixed Document Type declaration for INFO Messages• Section 4.1.2: Changed <i>Type</i> attribute length to 25 characters (for ODF messages)
1.3	APP	<ul style="list-style-type: none">• Section 4.1.2: <i>EventStatus</i> attribute removed.• Section 4.1.2: <i>ResultStatus</i> attribute values modified.

Table of contents

<i>Section</i>	<i>Page</i>
1 Introduction	7
1.1 This document	7
1.2 Objective	7
1.3 Main audience.....	7
1.4 Glossary.....	8
1.5 Related Documents.....	8
2 Overall Perspective	9
2.1 Objective	9
2.2 End to end Data Flow.....	9
2.2.1 Encoding	9
2.2.2 Message Structure	9
2.2.3 Document Type Declaration	9
2.3 Operation modes.....	10
2.4 Periods of attended and unattended operations	10
2.5 IT Departments' support functions	10
2.6 Backup and recovery	10
2.7 Disaster Recovery	11
3 Interface Description	12
3.1 From the message generator point of view (message generator – message consumer)	12
3.1.1 Description	12
3.1.2 Rules for the Interface.....	12
3.1.3 Parameters	12
3.1.4 Exceptions	12
3.1.5 Functional conditions for the interface.....	12
3.1.6 Frequency/Triggers.....	12
3.1.7 Expected Results	12
3.2 From the message consumer point of view (message generator – message consumer)	13
3.2.1 Description	13
3.2.2 Rules for the Interface.....	13
3.2.3 Parameters	13
3.2.4 Exceptions	13
3.2.5 Functional conditions for the interface.....	13
3.2.6 Frequency/Triggers.....	13
3.2.7 Expected Results	13

4	Messages.....	15
4.1	Message flowing from/to IDS	15
4.1.1	General Description	15
4.1.2	Header Values	16
4.1.3	Trigger and Frequency.....	19
4.1.4	Message Structure	19
4.1.5	Message Values.....	19
5	Messages sequence.....	20
6	Constraints Requirements	21
7	Annex I List of Codes.....	22
8	Annex II – List of Messages.....	23

1 Introduction

1.1 This document

This document describes common aspects for all XML messages exchanged between IDS and other systems. Things such as character encoding, DOCTYPE definition and outmost tag valid attributes are common to all interfaces with IDS.

1.2 Objective

The objective of this document is all participants in the transaction of one message can fully identify the information being transmitted in the message.

One message is transmitted from one message generator system / application to a message consumer system / application:

The message generator system/application:

- It should be able to correctly build up the XML message to be transmitted, including the header information that identifies the message.
- It should correctly identify the DTD file that syntactically parses the document.
- It should use the encoding when creating / sending the message.

The message consumer system/application:

- It should be able to correctly identify the information that is being transmitted in the XML message being received. It is basically done by understanding the XML message header.
- It should be able to determine the message is syntactically correct, by analyzing the structure of the message against the DTD being used.

1.3 Main audience

The main audience of this document is all the systems participating by any mean in the messages' transactions all over the IDS messages' flow.

It includes both:

- Message generator system / application
- Message consumer system / application

1.4 Glossary

Concept	Description
ACR	Accreditations
CIS	Commentator Information System.
CRS	Central Repository for the Info Diffusion.
IDF	Internet Data Feed.
IDS	Info Diffusion System
INF/INFO	Info
GMS	Games Management System
NOC	National Olympic Committee.
OVR	On Venue Results.
PRD	Print Distribution.
RDF	Results Data Feed (WNPA).
SEQ	Sports Entries and Qualification
TRS	Transport
WTH	Weather

1.5 Related Documents

N/A

2 Overall Perspective

2.1 Objective

The objective of this document is to provide the IDS flowing XML messages generic definition, in terms one generator system/application – one consumer system/application can automatically understand the information being exchanged.

2.2 End to end Data Flow

2.2.1 Encoding

The character set to be used in all information exchange is the standard Unicode UTF-8.

2.2.2 Message Structure

XML messages are to be built following the pattern depicted below:

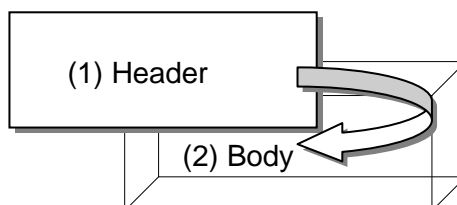


Fig. 1.2.1

(1) Header: Message label. Identifies the system, the event and the time frame in which the message is produced.

(2) Body: Message content. Every particular message requires its own definition of the body.

2.2.3 Document Type Declaration

The DOCTYPE declaration must identify the DTD that defines the interface. Following are the different declarations for all IDS interfaces:

OVR	-	INFO
-----	---	------

<!DOCTYPE Message PUBLIC "-//IDS//ORIS+" "ids/oris+/inf/main.dtd">	
OVR	- CRS
<!DOCTYPE Message PUBLIC "-//IDS//CRS" "ids/oris+/crs/main.dtd">	
GMS (ACR, SEQ, TRS)	- CRS
<!DOCTYPE Message PUBLIC "-//Ids//oris+/crs//CRSGMS.dtd" "ids/oris+/crs/CRSGMS.dtd">	
WTH	- CRS
<!DOCTYPE Message PUBLIC "-//IDS//WTH" "ids/oris+/crs/main_weather.dtd">	
OVR/CRS	- CIS
<!DOCTYPE Message PUBLIC "-//IDS//CIS" "ids/oris+/cis/cis.dtd">	
OVR/CRS	- DF (PRD)
<!DOCTYPE Message PUBLIC "-//IDS//DF" "ids/oris+/df/main.dtd">	
OVR/CRS	- ODF
In this case, no reference to any DTD should be done	

2.3 Operation modes

The definition in this document applies to any kind of operation mode of the interface process for all XML messages:

Example: Initialization, Startup or Bulk, Testing, Training, Production, etc.

2.4 Periods of attended and unattended operations

N/A

2.5 IT Departments' support functions

N/A

2.6 Backup and recovery

Attributes described in the header may be useful to identify messages.

Mostly, a message is identified by a RSC code and a message's Type.

Moreover, version and correction identify the last correct information for a given message.

2.7 Disaster Recovery

N/A

3 Interface Description

3.1 From the message generator point of view (message generator – message consumer)

3.1.1 Description

Any IDS external or internal message generator should create XML messages following the general rules described in this document.

3.1.2 Rules for the Interface

Generate syntactically valid messages, according to the DTD definition.

Generate correctly UTF-8 encoded messages

Inform correctly header's attributes.

Provide a correct version / correction sequence in the message

3.1.3 Parameters

N/A

3.1.4 Exceptions

N/A

3.1.5 Functional conditions for the interface

You may find information in section 4 about what information is to be sent in the message header.

3.1.6 Frequency/Triggers

Message specific

3.1.7 Expected Results

Generate a correct message for a message system / application to be able to process it

Be able to log any message generation for monitoring purposes.

3.2 From the message consumer point of view (message generator – message consumer)

3.2.1 Description

Any IDS external or internal message consumer should be able to accept correct XML messages following the general rules described in this document, if defined as expected.

On the other hand, it should reject any wrong message if not defined as expected, or if defined as expected but

3.2.2 Rules for the Interface

Consume syntactically valid messages, according to the DTD definition, if body specific information is correct (as defined in each IDS interface description document). Message identification should be done according to message attributes (mostly, RSC and message type).

Consume just correctly UTF-8 encoded messages

Perform version / correction checking, and process just messages following correct version / correction.

3.2.3 Parameters

N/A

3.2.4 Exceptions

N/A

3.2.5 Functional conditions for the interface

You may find information in section 4 about what information that may be received in the message header.

3.2.6 Frequency/Triggers

Message specific

3.2.7 Expected Results

Consume and correct and expected message.

Reject any incorrect or not expected message.

Be able to log any message correct or incorrect message reception for monitoring purposes.

4 Messages

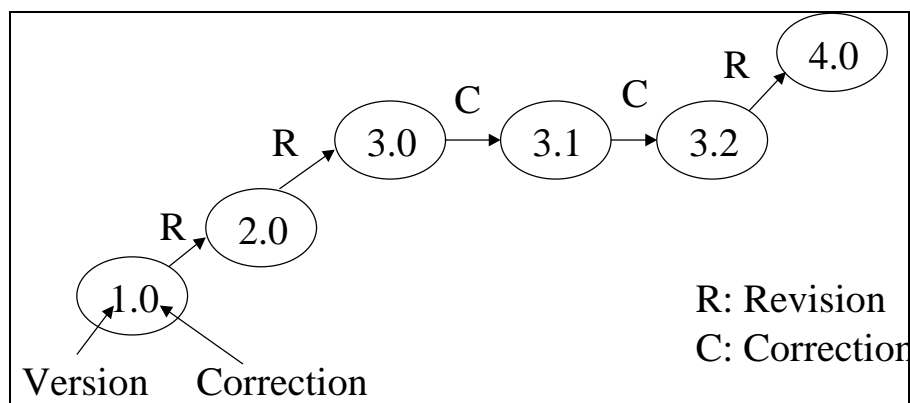
4.1 Message flowing from/to IDS

4.1.1 General Description

A report is basically identified by an RSC and a type. Both are header attributes. Given an RSC code and report type, the version and correction numbers uniquely identify the different releases of a report.

A new version of a report adds information to the previous version. A correction is issued to correct errors in the current version. Corrections are defined as any change that is the result of an error – not new information. Each new version or correction supersedes the previous version or correction of the report. Any new version or correction **MUST** include some change of information from the previous version or correction. Unchanged report content should never be resent with a different version or correction.

The following diagram shows the logic of the updating of the version and correction numbers:



Examples:

CCM730101_71A 1.0 Partial Results Men's Cross Country,
Original release: Version 1 Correction 0

Five more competitors finish

CCM730101_71A 2.0 Second Version of Partial Results, Version
2 Correction 0

Four more competitors finish

CCM040101_71A 3.0 Third Version of Partial Results, Version 3
Correction 0

A time in the third version is corrected

CCM730101_71A 3.1 First Correction of Version 3 of Partial
Results, Version 3 Correction 1

A ranking error in the third version is corrected

CCM730101_71A 3.2 Second Correction of Version 3 of Partial
Results, Version 3 Correction 2

Five more competitors finish

CCM730101_71A 4.0 Fourth Version of Partial Results, Version 4
Correction 0

4.1.2 Header Values

The header contains the outmost tag. This element defines the different types of messages being received / sent and from the outmost tag will hang the rest of the message (the body).

The table below contains the details of the header attributes.

Element	Attribute	Required	Format (1)	Values	Comments
Message	Category	Y	C(3)	Defined in the specific interface documents	Code that identifies the type of feed (it should be defined in each interface description document)
	Origin	Y	VC(32)	To be assigned by the generating system (host name if possible)	Unique WAN identification of the machine that has produced the message
	Serial	Y	N	1..∞	Ascending number that identifies the messages produced per origin and category
	RSC	N	C(9)	Defined in the specific interface documents (mostly, it is the concatenation of the attributes Discipline, Gender, Event, Phase and	Results System Code

Element	Attribute	Required	Format (1)	Values	Comments
				Unit)	
	Discipline	Y	C(2)	Discipline common codes	Code that identifies the discipline of the event
	Gender	Y	C(1)	Gender common codes	Code that shows the gender of the event <i>(must be filled with zeroes if it does not apply)</i>
	Event	Y	C(3)	Event common codes	Event code <i>(must be filled with zeroes if it does not apply)</i>
	Phase	Y	C(1)	Phase common codes	Phase code <i>(must be filled with zeroes if it does not apply)</i>
	Unit	Y	C(2)	Event unit common codes	Event unit code <i>(must be filled with zeroes if it does not apply)</i>
	Venue	N	VC(3)	Venue common codes	Venue code in which the message is produced
	Type	Y	VC(25)	Defined in the specific interfaces	Report code (assigned in the ORIS, ODF, etc specification documentation)
	Format	Y	C(1)	D – Data P – PDF H – HTML	Specifies the format of the information contained in the message body
	Version	Y	N	Refer to each particular system interfaces. Each system (INFO, CRS, PRD, etc.) will have to specify the particular sequence that is expected.	Version number associated with the message's content.
	Correction	Y	N	Refer to each particular system interfaces. Each system (INFO, CRS, PRD, etc.) will have to specify the particular sequence that is expected.	Correction number associated to the message's content.

Element	Attribute	Required	Format (1)	Values	Comments
	Language	N	C(3)	To be specified by each system interface. Possible values are "ENG" for English "FRE" for French	ISO 639.2 Language code
	Date	Y	D	YYYYMMDD Where YYYYY (year) – 0..9999 MM (month) – 1..12 DD(day) – 1..31	Date in which the message is generated
	Time	Y	T	HHMMSSmmm Where HH(hour) – 0..23 MM(minutes) – 0..59 SS(seconds) – 0..59 mmm(miliseconds) – 0..999	Time in which the message is generated
	FeedFlag	N	C(1)	P – Production, T-Test <i>(P is taken as default)</i>	Flag to indicate whether is a test or production message
	Finish	N	C(1)	Y – Yes, N-No <i>(N is takes as default)</i>	Flag to indicate that no more message will be sent (CIS only)
	ResultStatus	N	VC(15)	Refer to ODF documentation for values	Just for ODF messages
	NOC	N	C(3)	For some messages, see specific documentation	NOC attribute, for specific INFO requirements
	Subtype	N	VC(20)	For other possible specificities, see each specific documentation	Generic attribute for specific requirements

Important: This table defines the message outmost tag in a general way. It is possible that specific applications in IDS (CIS, CRS, etc.) may add more restrictions to the optional attributes. Please, refer to specific IDS interfaces document for more restrictions, if they apply.

Notes:

(1) N – Integer

N(n) – Numeric with maximum length n

VC(n) – Variable char with maximum length n

C(n) – Fixed char with length n

F – Text

D – Date

T – Time

4.1.3 Trigger and Frequency

Trigger and frequency will be defined in the rest of the interface descriptions that make reference to the present document being defined.

4.1.4 Message Structure

Outmost tag for all messages that make reference to the present document will be the header defined in this document. The header's name is message. Therefore, a message structure is

<**Message** *header attributes*>

<*Other elements*>

<**Message**>

Other elements in the message must be element "message" dependent, as seen in the example above. The rest of the content of the messages (other elements definition) must be done in each of the interface description documents describing messages flowing through IDS.

4.1.5 Message Values

Header attributes in the messages flowing messages through IDS system are refined in each specific interface description document.

Each interface description document may include stronger requirements, such as making mandatory some of the attributes being defined in the present document, which are optional. Opposite, it may not make use of some of the optional attributes.

5 Messages sequence

N/A

6 Constraints Requirements

Please, review each of the IDS interface description documents for further constraints regarding to the header.

Some of the attributes defined in this interface document, such as Discipline, Gender, Event, Phase and Unit should be chosen from the ones proposed in the common codes definition.

8

Annex II – List of Messages

It applies to all IDS messages. Please, check each of the IDS interface description documents