# **DFDL WG Call Minutes**

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#### Meeting about Meetings\OGF

Project DFDL 1.0

Meeting Date 02-Dec-13 (Mon)
Meeting Time 15:00 - 16:00

Created by Steve Hanson on 09-Mar-11 Last Modified by Steve Hanson on 02-Dec-13

#### OGF DFDL Working Group Call, 2 December 2013

#### Agenda

Prepare for your meeting by describing the objectives (both immediate and long-term, if appropriate) of the meeting; and describe key planterials.

## 1. Daffodil Open Source Project

Status update.

#### 2. Go through public comments

Public comment is now complete.

Continue through the public comments, resolving where possible to do so.

#### 3. AOB

#### Minutes

#### **Meeting Minutes**

Reflect on your meeting as you record all topics and issues discussed, and any tabled conversations. What went well, or what would you do differently next time? Document those so others can take advantage of your learning.

#### **Attendees**

Steve Hanson

Mike Beckerle

Tim Kimber

Jonathan Cranford

#### **Apologies**

#### **IPR Statement**

"I acknowledge that participation in this meeting is subject to the OGF Intellectual Property Policy."

#### **Minutes**

#### 1. Daffodil Open Source Project

Not discussed

#### 2. Go through public comments

The following additional public comments were discussed:

- 138. Extend occursCountKind to scalars. Not adopted, change too large at this stage. Resolved.
- 159. Allow choiceBranchKey on groups. Agreed the current restriction is a hangover. Resolved.
- 128. Allow true unordered content. New action 245 raised.

#### Meeting closed

16:00 UK

#### Next regular call

Tues Dec 10th 16:00 UK (probably)

#### Create Action Items

Record the to-do's and individuals assigned by entering the appropriate information in the form below . Press the "Create Action Items" button to create specific to do's that can be tracked in the assignee's Work for Me views. " All Action Items will be tracked in the Action Items and Other Meeting Documents tab.

n Items and Other Meeting Documents	D T		
Subject	Document Type	Created	Modified

Next action: 246

# Actions raised at this meeting

No	Action
245	Public comment: Support for true unordered content. (All)
	2/12: http://redmine.ogf.org/boards/17/topics/128. Current unordered support is a compromise because xs:all is not rich enough to model unordered data and preserve the 'wire' order into the infoset. This is not sufficient for some real-world formats. The question is whether DFDL

#### **Current Actions:**

<u>Current</u>	Actions:			
No	Action			
066	Investigate format for defining test cases (All) 25/11:IBM to see if it is possible to publish its test case format. 04/12: no update			
	17/02: IBM is willing in principle to publish the test case format and some of the test cases . May need some time to build a 'compliance suite'?			
	24/03: No progress 03/03: Discussions have been taking place on the subset of tests that will be provided . 10/03: work is progressing 17/03: work is progressing			
	31/03: work is progressing 14/04: And XML test case format has been defined and is being tested. 21/04. Schema for TDML defined. Need to define how this and the test cases will be made public.			
	05/05: Work still progressing 12/05: Work still progressing 02/06: Work still progressing on technical and legal considerations			
	25/08: Will chase to allow Daffodil access to test cases. The WG should define how implementation confirm that they 'conform to DFDL v1' 01/09: IBM still progressing the legal aspect. Intends to publish 100 or so tests as soon as it			
	can, ahead of a full compliance suite. 08/09: IBM still progressing			
	15/09: IBM still progressing, expect tests to be available within a few weeks 22/09: IBM still progressing, expect tests to be available within a few weeks 29/09:Test cases are being prepared.			
	06/10: Some test cases should be available next week. Steve would like to be able to show the test case information at OGF 30. 13/10: Still progressing			
	10/11: Legal issues cleared, IBM in process of collecting 100 example test cases, ideally ones that fit the 'extended conformance' of NCSA Daffodil 17/11: Work is progressing on verifying the test cases. It should be possible to distribute to the			
	WG in 2 weeks.  24/11: About half the test cases have been completed and are being reviewed internally.  01/12: Test cases should be available shortly			
	08/12: The test cases are in internal IBM review. Probably need a bit of reorganising before publication			
	Stephanie gave a brief overview of the format of the test cases.  15/12: Ruth joined the call to provide the latest status. The test cases have been updated and a draft read.me produced. Although not ready for public distribution Ruth will send them to Joe for feedback.			
	22/12: Test cases were sent to Joe for initial testing which found some problems in the Daffodil parser			
	12/01: All current tests use a default format whih Daffodil doesn't currently support. Joe suggested that there should be test that defined the same function using different definition forms. Also suggested that default formats should be provided by the WG. This had always been the intention. Action 133 raised to track.			
	19/01: There is currently no resource available in IBM to make more tests available. IBM to discuss how/if it can make a 'minimal compliance test suite' available. 26/01: Action kicked off within IBM. There was a brief discussion abot naming and organisation			

of test cases but no preferences were expressed

02/02: IBM will not have the resources to develop a full test suite in the near future. Steve suggested that we produce a list of required test cases so that anyone could supply them.

09/02: Steve had previously sent a list of areas to be tested. Please review.

23/02: Please review Steve's list of areas to be tested

02/03: Alan had reviewed Steve's list and we went through his comments. Agreed there is no need for separate tests for the infoset or for dfdl: property lists, unions etc but comment will be added that these should be exercised during property testing.

09/03: Alan updated the test document. Need more introduction and perhaps adopting the OGF template.

30/03. Ownership of test document passed to Steve. This action is merged with 112 and will cover all aspects of compliance suite.

13/04: IBM will not have time to create a compliance suite in the near future. Probably best to make this action deferred for now.

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10/07/2012: Discussed schemes to create interchangeable tests. Ideally need a DFDL defined error code per failure, in conjunction with specific inserts.

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26/3/2013: Resurrecting deferred action.

We have got to the point where it makes sense to converge the IBM DFDL and Daffodil variations of .tdml file.

Steve to seek permission from IBM to make the list of IBM DFDL error messages available to DFDL WG.

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#### 24/5: No further progress.

28/5: Mike summarised the status of Daffodil's tdml runner. Since IBM shared the tdml format, Daffodil has added a) bit file support with in-line comments; b) embedded schema; c) failure checking by multiple string matching. IBM has added a) some flags that map to parser API 'features' such as optional checks; b) code to handle illegal XML characters. 1200 parser test cases written for Daffodil, about 60 of the original IBM shared tests now pass in Daffodil. Steve will email OGF and ask if there is an approved process for demonstrating that multiple implementations generate the same set of test results. To progress with a shared tdml format, IBM will need to get legal approval to view the Daffodil source test cases, Steve to kick this off. Mark noted that IBM's tdml format has evolved in order to make the infoset comparison easier, Mark will see whether the shared tests use the latest version.

4/6: Steve has emailed OGF for guidance, reply received. Experience documents needed to verify conformance, but there is not a requirement to have executable tests. However, a set of executable tests is what we need ideally.

Discussed error messages and identifiers for different errors and what the granularity should be. Steve has asked for permission to send the IBM DFDL error messages to the DFDL WG, they should be used as a starting point. Need to agree what constitutes the minimum content of an error message.

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22/10: No further progress

31/10: Steve has permission to send IBM DFDL's error messages to the WG.

5/11: Error messages sent

2/12: No further progress

# 200 Establish recommended practices for pushing changes to GitHub (Mike)

29/1: Mike will talk to Tresys who have used Git a lot.

5/2: Mike to talk to Tresys this week, Tim has sent some links.

12/2: Information sent by Mike, Steve to review.

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#### 2/12: No further progress

#### 224 Add section for implementation defined limits (Jonathan)

3/9: Several places in the spec cite this, should be grouped. Currently partially listed in section

2.6. Also note distinction between 'implementation defined' and 'implementation dependent'. Check spec for correct usage. Resolve during public comment. 10/9: No progress 17/9: Jonathan sent a reference to the W3C XProc standard where the distinction is made clear. Jonathan will go through the spec and gather everything that is implementation defined/dependent. Public comment to be raised 24/9: With Jonathan to raise. 1/10: Public comment 97 raised (http://redmine.ogf.org/boards/15/topics/97) 8/10: With Jonathan to provide words. 22/10: Jonathan has defined implementation defined/dependent and started to classify. Steve and Mike had trouble with the definitions, Steve to re-word and send for comment. 31/10: Reworded version sent 5/11: Rewording approved. Jonathan proceeding with classification, will distribute for review when complete. 2/12: Still with Jonathan 228 Review set of tutorial lessons (All) 17/9: Lesson 1 proposes a set of lessons, needs reviewing as over 2 years old. 22/10: No progress 31/10: Becoming a focus for Tresys. Steve to send his 'Modeling Data Formats using DFDL' powerpoint. 19/11: No further progress 26/11: Possibility of help from MITRE high-school student, and from Marisa at IBM. 2/12: No further progress 242 Public comment: dfdl:valueLength and dfdl:contentLength descriptions (Mike) 19/11: http://redmine.ogf.org/boards/15/topics/63. Agreed that the function names were ok as per errata 3.18, and that the spec is clear that they refer to the grammar regions. However the grammar regions mentioned do not fully include literal nil values. Discussed what happens when parsing - remember the length or re-parse? What about lengthUnits 'characters' when the data is binary? Also the 'Notes' that follow the table need to be reworked. 26/11: Needs wording to handle all the issues found, assigned to Mike. 2/12: Still with Mike. 243 OGF 40 at Oxford (Steve) 26/11: Steve to contact Alan Sill to see if there is an opportunity to run a DFDL workshop. 2/12: Steve has emailed Alan who is receptive. Need to work on the format etc. 244 Public comment: textStandardDecimalSeparator rules (Steve) 26/11: Errata 2.27 says that textStandardDecimalSeparator is not used for integer types. But what happens if textNumberPattern specifies a decimal separator? Further, it looks like ICU always accepts a decimal separator in the data even when not in the pattern and even when in strict mode. Verify ICU behaviour. 2/12: Errata 2.54 states ICU's strict behaviour when parsing numbers, established from tests performed by action 170 (closed 18/9/2012). This was done by Richard Schofield at IBM using ICU4C. Steve has re-tested with IBM DFDL Java (so ICU4J) but he does not get the same behaviour - an error occurs if decimal separator is in the data but not in the pattern. More investigation needed.

#### Closed actions

No	Action
237	Public comment: Do we need the lengthKind 'endOfParent' restriction for local groups?
	(Steve)
	5/11: http://redmine.ogf.org/boards/15/topics/51. Stops such an element being wrapped in a

local group. It looks like this was added to make checking easier. Really the restriction is that the element is "last in the box", and could in principle have surrounding intermediate sequences or implicit choices. Need concise language to express this.

12/11: Need language written.

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26/11: With Steve, no progress.

2/12: **Closed**. Steve has rewritten the description of 'endOfParent'. Reviewed and accepted. Noted that neither DFDL nor IBM DFDL has implemented this yet, so likely to be some further discussion in the future. **Resolved**.

# **Deferred actions**

No	Action
131	Transformation of DFDL properties to a canonical form (Joe) 08/12: Joe has produced a XSLT to transform a DFDL schema to a canonical element form. When tested it should be made available on the WG gidforge site. 15/12: Alan tested against test dfdl schema which worked correctly (after fixing some errors in the schema) 22/12: no update 12/01: Joe has some defects to fix before making available on gridforge. 19/01: There is a difficult problem to solve before Joe make the style sheet public 26/01: Working on problems 02/02: no progress 09/02: As it wasn't a simple as exoected this will be treated as a low priority action 23/02: Low priority
233	30/03: Deferring for now  Public comment: Formats with bit order reversed (Mike)  1/10: http://redmine.ogf.org/boards/15/topics/43. Mike to provide words for potential new property for review.  8/10: Words sent by Mike generated considerable discussion. Mike will update the words to make the subject more consumable, and move the bulk of the discussion to a new main section at the end of the spec (suggest between existing sections 24 & 25).  22/10: Mike wants to have a working implementation before closing on this, so marking the public comment as deferred.  31/10: Deferring for now
241	Public comment: Bi-di properties placement in precedence section (All) 7/11: This looks deliberate but the asymmetry between parsing and unparsing is unclear. Really needs Daffodil or IBM DFDL to implement these properties, which has not happened yet. Deferring this action.

## Work items:

No	Item	Owner	Target	Status
045	Resolve public comments and incorporate into spec	All	2013-10-22	Pending