

# DFDL WG Call Minutes

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## Meeting about Meetings\OGF

Project	DFDL 1.0
Meeting Date	28-Apr-15 (Tues)
Meeting Time	16:00 - 17:00

Created by Steve Hanson on 09-Mar-11

Last Modified by Steve Hanson on 29-Apr-15

## OGF DFDL Working Group Call , 28 Apr 2015

### Agenda

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

#### 1. Daffodil Open Source Project

Status update.

#### 2. Typos in spec

- a) Broken links in sections 6.3.1.4 and 33.1; should be to Table 2 in section 6.3.1.2.
- b) Missing bullets in section 12.3.6 (endOfparent) when listing what a simple element must have one of.
- c) Bullet indentation in section 22 not correct for dfdl:textNumberRounding and dfdl:calendarPatternKind.

#### 3. Choice unparsing and empty sequences

- a) Section 15.1.3 needs to be clearer for choice branches that are empty sequences.
- b) Section 14.1 on empty sequences should mention hidden groups.

#### 4. The minOccurs <= 0 rule for choice branches

What about cases where minOccurs is not used when parsing, namely when occursCountKind is 'parsed', 'expression' or 'stopValue'. These can return 0 occurrences so what is the behaviour? Is that allowed or an error? If allowed, does the known-to-exist definition need to be enhanced for arrays? Does wrapping in a sequence change things?

#### 5. 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  
Alex Wood  
Mike Beckerle

## Apologies

## Minutes

### 1. Daffodil Open Source Project

No update.

### 2. Typos in spec

- a) Broken links in sections 6.3.1.4 and 33.1; should be to Table 2 in section 6.3.1.2.
  - b) Missing bullets in section 12.3.6 when listing what a simple element must have one of.
  - c) Bullet indentation in section 22 wrong for dfdl:textNumberRounding and dfdl:calendarPatternKind.
- All added to tracker** <https://redmine.ogf.org/issues/233>

### 3. Choice unparsing and empty sequences

- a) Section 15.1.3 is correct but it would help if it included a link to 9.4.3.2 which describes defaulting. This led on to a discussion of the description of defaulting in 9.4, and agreed that it needed to be improved to explicitly mention local sequences and choices. **New action 279**
- b) Section 14.1 on empty sequences should mention hidden groups by referring ahead to 4.5. **Erratum taken, tracked by** <https://redmine.ogf.org/issues/282>.

### 4. The minOccurs <> 0 rule for choice branches

Discussed whether the minOccurs <> 0 rule is needed, given that when occursCountKind is 'parsed', 'expression' or 'stopValue' then minOccurs is not used when parsing, and so zero occurrences can be returned. Also noted that wrapping in a sequence gets round the restriction. Believed that the restriction was originally added so that there were not two points of uncertainty - the array and the choice branch. **New action 280.**

### 5. Complex nillable elements

- a) Spec incorrectly states that nilKind and nilValue apply to elements of simple type only. **Erratum taken, tracked by** <https://redmine.ogf.org/issues/283>.
- b) Does a nillable complex element have to be limited to ES? The feature was added to handle sparse arrays where position needed preserving. But is it any more of a problem to allow other nil literal values? The parser is just matching a string literal and no type or type-related properties are needed to do that. Formats that could benefit from this have been seen. **New action 281.**

## IPR Statement

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

## Meeting closed

17:10 UK

## Next regular call

Tues 12th May 2015 @ 16:00 UK

## 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 .

## Action Items and Other Meeting Documents

Subject	Document Type	Created	Modified

Next action: **282**

### Actions raised at this meeting

No	Action
<b>279</b>	<b>Improve defaulting description to explicitly cover local groups (All)</b> 28/4: Only talks about elements, should mention local sequence and choice.
<b>280</b>	<b>Choice branch rule minOccurs &lt;= 0 ? (All)</b> 28/4: Is this still needed given how occursCountKind and discriminators now work ?
<b>281</b>	<b>Allow nil literal values other than ES for complex elements ? (All)</b> 28/4: Formats seen that could use this, but does it introduce complexity that ES on its own avoids?

### Current Actions :

No	Action
<b>228</b>	<b>Review set of tutorial lessons (All)</b> 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. ... 11/3: No further progress 25/3: MITRE have produced a couple of new tutorials under the guidance of James Gariss . Jonathan to forward for review.

	<p>Mike observed that an html tutorial could be generated from a tdml file using XSLT .</p> <p>11/4: Not discussed</p> <p>15/4: Jonathan will send 4 new mini-tutorials. Need to figure out best way to incorporate into the tutorial structure.</p> <p>29/4: Tutorials received. Mark has taken a quick read. Mark &amp; Steve to review and report back.</p> <p>6/5: Still with Mark and Steve</p> <p>20/5: Mark has reviewed. Will ask IBM information development to recommend a way to portray the existing and new lessons, preferably web-based. Find somewhere to host them. OGF?</p> <p>GitHub? developerWorks? NCSA?</p> <p>3/6: Steve has also reviewed.</p> <p>...</p> <p>17/6: No further progress on tutorials. Tim is looking into the creation of some DFDL how-to videos using the IBM Integration Studio.</p> <p>...</p> <p>31/3: No further progress</p> <p>14/4: Agreed that the need for better tutorials has become pressing for Daffodil users who aren't using IBM's tools and material. Discussed creating tutorials based on a tdml file with comments that is processed to produce html. Mike to investigate.</p> <p>28/4: Mike has sent an example tdml file which embeds instances of a new 'tutorial' element in various places. These elements contain html which can be extracted and formatted in a browser. Suggest future DFDL tutorials are created using this technology.</p>
250	<p><b>Standardise on a single tdml format for DFDL tests (All)</b></p> <p>5/2: Steve has requested permission for IBM to view / use the Daffodil tdml files, as a precursor to trying to standardise on a common tdml format. Was formerly part of action 066.</p> <p>...</p> <p>18/2: No further progress</p> <p>11/3: Mike and Steve discussing the best way to share and cooperate on tdml format.</p> <p>25/3: Discussed the creation of an OGF document that will own and define a standardised tdml format.</p> <p>11/4: Proposal is for the OGF document to define a tdml format without Tresys or IBM copyright statement.</p> <p>15/4: Draft document on Redmine</p> <p>...</p> <p>6/5: No further progress</p> <p>20/5: Mark has read through the document. Particularly concerned with how namespaces are handled in the info set.</p> <p>...</p> <p>17/6: No further progress</p> <p>25/6: Mike has added bit order capability as per action 233.</p> <p>...</p> <p>9/12: No further progress</p> <p>6/1/15: Mike to resurrect this as Tresys would like to run their tdml suite against both Daffodil and IBM DFDL.</p> <p>...</p> <p>10/2: No further progress</p> <p>24/2: Mike updating the Daffodil TDML test runner to handle unparser (ie, serializer) tests</p> <p>...</p> <p>14/4: No further progress</p> <p>28/4: Tresys have enhanced their tdml runner to allow unparser tests and round-trip tests (parser-&gt;unparser-&gt;parser) as well as the new tutorial tag (see action 228)</p>

#### Closed actions

No	Action

## Deferred actions

No	Action
131	<p><b>Transformation of DFDL properties to a canonical form (Joe)</b></p> <p>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.</p> <p>15/12: Alan tested against test dfdl schema which worked correctly (after fixing some errors in the schema)</p> <p>22/12: no update</p> <p>12/01: Joe has some defects to fix before making available on gridforge.</p> <p>19/01: There is a difficult problem to solve before Joe make the style sheet public</p> <p>26/01: Working on problems</p> <p>02/02: no progress</p> <p>09/02: As it wasn't a simple as exoected this will be treated as a low priority action</p> <p>23/02: Low prioity</p> <p>09/03: Low priority</p> <p>30/03: Deferring for now</p>
200	<p><b>Establish recommended practices for pushing changes to GitHub (Mike)</b></p> <p>29/1: Mike will talk to Tresys who have used Git a lot.</p> <p>5/2: Mike to talk to Tresys this week, Tim has sent some links.</p> <p>12/2: Information sent by Mike, Steve to review.</p> <p>...</p> <p>2/12: No further progress</p> <p>14/1: Deferring until needed</p>
241	<p><b>Public comment : Bi-di properties placement in precedence section (All)</b></p> <p>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.</p> <p>...</p> <p>23/9: Candidate to be moved out to 1.1 ?</p>
242	<p><b>Public comment : dfdl:valueLength and dfdl:contentLength descriptions (Mike)</b></p> <p>19/11: <a href="http://redmine.ogf.org/boards/15/topics/63">http://redmine.ogf.org/boards/15/topics/63</a>. 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.</p> <p>26/11: Needs wording to handle all the issues found , assigned to Mike.</p> <p>...</p> <p>11/3: Still with Mike</p> <p>25/3: Mike has sent out revised wording, reviewed by Mark and Steve. Noted that the words need to explain the concept of building a complex element from the bottom up , and these words are equally applicable to several places in section 12.3. Mike to revise accordingly .</p> <p>11/4: More revised wording sent by Mike. Started to review but realised it needed some off-line preparation and thought. Review for next call.</p> <p>15/4: Review comments from Steve and Tim. The functions need to be clear that they work off the infoSet value. The detailed wording is needed but should be removed to a new sub-section of 12.3, probably at end. Most sub-sections of 12.3, and the functions in 23.5.3 will refer to this new sub-section. 23.5.3 should limit itself to behaviour specific to the functions , such as not potentially represented, the effect of the \$lengthUnits argument. Also discussed what happens if \$path argument returns a nodeSet &gt; 1; should be a processing error, can always use a predicate to select one node of an array.</p> <p>29/4: See various email discussions. Several things noted by Mike, and he recommends a rewrite of some of section 12.3. Then the description of the two functions becomes much simpler. Deferring for now, and will resurrect after current spec revision is finalised .</p>

	<p>6/5: Mike is working on a mind map for the length section . Deferring until needed.</p> <p>....</p> <p>23/9: Rewrite should be postponed to future 1.1. Still need to answer the original questions about the functions though...</p>
251	<p><b>Create official error codes (All)</b></p> <p>5/2/14: Create official error codes for all possible errors implied by the DFDL spec . This is a big piece of work, so this action is deferred for now. Was formerly part of action 066.</p> <p>...</p> <p>10/2/15: Un-deferring this action for consideration . The IBM error message numbers could be a good starting point for a list of error codes, although they are a mixture of generic and specific so some revision likely to be needed. Tresys to evaluate.</p> <p>...</p> <p>24/2: No progress</p> <p>24/3: Mike has read through the IBM error messages and will write up findings</p> <p>31/3: No further progress</p> <p>14/4: Mike has sent email. Concluded that this is a large exercise and effort better put in to tutorials. Deferring again.</p>

#### Work items :

No	Item	Owner	Target	Status