

# DFDL WG Call Minutes

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## Meeting about Meetings\OGF

Project	DFDL 1.0
Meeting Date	25-Aug-15 (Tues)
Meeting Time	16:00 - 17:00

Created by Steve Hanson on 09-Mar-11

Last Modified by Steve Hanson on 25-Aug-15

## OGF DFDL Working Group Call , 25 August 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. 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

Mike Beckerle

Steve Hanson

#### Apologies

Alex Wood

Andrew Edwards

#### Minutes

##### 1. Daffodil Open Source Project

Unparser implementation continuing. Looking at the complexities arising from expressions being able to forward reference.

#### IPR Statement

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

#### Meeting closed

16:50 UK

**Next regular call**

Tues 22nd September 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: 285

**Actions raised at this meeting**

No	Action

**Current Actions :**

No	Action
228	<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. ...

	<p>19/11: No further progress</p> <p>26/11: Possibility of help from MITRE high-school student, and from Marisa at IBM.</p> <p>...</p> <p>11/3: No further progress</p> <p>25/3: MITRE have produced a couple of new tutorials under the guidance of James Gariss . Jonathan to forward for review.</p> <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? 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> <p>12/5: Not discussed</p> <p>...</p> <p><a href="#">25/8: No further progress</a></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 infoaset.</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> <p>12/5: Not discussed</p> <p>...</p> <p><a href="#">25/8: No further progress</a></p>
<b>279</b>	<p><b>Improve defaulting description to explicitly cover local groups (Mike)</b></p> <p>28/4: Only talks about elements, should mention local sequence and choice.</p> <p>12/5: Not discussed</p> <p>23/6: Section 15.1.3 needs to say what happens when a choice branch does not contain any elements; such a choice branch is selected (but see action 280 below as minOccurs '0' might change this). Section 9.4 also needs updating to say what happens when local groups are found within a complex type.</p> <p>11/8: Steve did some tests with IBM DFDL. Just need some words as above. Action assigned to Mike.</p> <p><a href="#">25/8: In progress</a></p>
<b>280</b>	<p><b>Choice branch rule minOccurs &lt;= 0 ? (All)</b></p> <p>28/4: Is this still needed given how occursCountKind and discriminators now work ?</p> <p>12/5: Not discussed</p> <p>23/6: Steve sent an email where he attempted to find the justifications for the restriction (extra point of uncertainty, known-to-exist rules). Steve will do some more digging to see at what point this restriction was introduced, and look at XML scenarios.</p> <p>11/8: Steve believes that the restriction is to be consistent with not allowing minOccurs =0 on the choice itself, as both allow the choice to be absent logically. Think about this more for next call. Also is the inputValueCalc restriction needed ?</p> <p><a href="#">25/8: Steve has emailed his thoughts. Mike in agreement. Steve to check with Alex who raised the problem originally.</a></p>
<b>282</b>	<p><b>Does XPath have operators for checking a value is in a range ? (Steve)</b></p> <p>12/5: Investigate whether equivalent to DFDL4S 'in' operator exists.</p> <p>23/6: Mike has found an XPath 'intersect' operator. Handles the enumeration case well, but not as convenient for ranges as DFDL4S's 'in' operator.</p> <p>11/8: Looked back at the motivating example from DFDL4S. Agreed that DFDL functions to do the equivalent of 'in' and 'inrange' would be useful if nothing can be re-used from XPath. Steve to write up a proposal taking into account different data types.</p> <p><a href="#">25/8: No progress</a></p>
<b>283</b>	<p><b>Investigate incorporation of ICU fallback mappings into dfdl:encodingErrorPolicy (Steve)</b></p> <p>23/6: IBM has requirements from customers to support fallback mappings.</p> <p>11/8: No progress. Steve to look at prior proposal.</p> <p><a href="#">25/8: Discussion and proposal emailed by Steve. Should DFDL add a new property or can it all be handled by extra dfdl:encodingErrorPolicy enums?</a></p>

## Closed actions

No	Action
<b>281</b>	<p><b>Allow nil literal values other than ES for complex elements ? (Mike)</b></p> <p>28/4: Formats seen that could use this, but does it introduce complexity that ES on its own avoids?</p> <p>12/5: Not discussed</p> <p>23/6: Mike to create a fully worked proposal to see whether this is a simple extension, or whether it drags in too many other properties. To consider variable length and fixed length cases.</p> <p>11/8: No further progress.</p> <p><a href="#">25/8: Closed. On consideration, Mike does not think the enhancement is needed.</a></p>
<b>284</b>	<p><b>Clarify calendarPattern 'S' symbol behaviour to match ICU (Steve)</b></p> <p>11/8: Steve to update DFDL spec section that describes S behaviour.</p> <p><a href="#">25/8: Closed. Steve has emailed suggested updates to cover the 'S' behaviour, covering when</a></p>

the supported accuracy is less than the number of S symbols , and when adjacent symbols cause runs of abutting numbers. One modification - the maximum number of S symbols accepted by implementations should also be implementation-defined. **Erratum taken , tracked by <https://redmine.ogf.org/issues/297>.**

## 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 . 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 prioity 09/03: Low priority 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 . 5/2: Mike to talk to Tresys this week, Tim has sent some links . 12/2: Information sent by Mike, Steve to review . ... 2/12: No further progress 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 . ... 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 . 26/11: Needs wording to handle all the issues found , assigned to Mike . ... 11/3: Still with Mike 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 . 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 . 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</p>

	<p>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>
<b>251</b>	<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