DFDL WG Call Agenda

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Meeting about Meetings\OGF

Project DFDL 1.0

Meeting Date 25-Nov-14 (Tues)
Meeting Time 16:00 - 17:00

Created by Steve Hanson on 09-Mar-11 Last Modified by Steve Hanson on 24-Nov-14

OGF DFDL Working Group Call, 25 Nov 2014

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. MIL-STD-2045 schemas updated on GitHub

Mike has simplified these.

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

Apologies

IPR Statement

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

Meeting closed

Next regular call

Tues 2nd December @ 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: 275

Actions raised at this meeting

No	Action

Current Actions:

No	Action
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.
	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. Mike observed that an html tutorial could be generated from a tdml file using XSLT. 11/4: Not discussed

15/4: Jonathan will send 4 new mini-tutorials. Need to figure out best way to incorporate into the tutorial structure.

29/4: Tutorials received. Mark has taken a quick read. Mark & Steve to review and report back. 6/5: Still with Mark and Steve

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?

3/6: Steve has also reviewed.

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17/6: No further progress on tutorials. Tim is looking into the creation of some DFDL how-to videos using the IBM Integration Studio.

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25/11: No further progress

248 Discriminators and potential points of uncertainty (Steve)

28/1: Steve to write up a proposal to prevent a discriminator from behaving in a non-obvious manner when used with a potential point of uncertainty that turns out not to be an actual point of uncertainty.

5/2: Steve sent an email to check whether choice branches, unordered elements and floating elements should always be actual points of uncertainty, as there are times when there is no uncertainty, eg, last choice branch; all floating elements found. It was decided that they are always actual points of uncertainty. To do otherwise will complicate implementations and result in fragile schemas. Steve will proceed with the proposal on that basis.

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25/3: No further progress

11/4: Proposal sent to mailing list by Steve. Concern that having a potential PoU that in practice can never be an actual PoU is counter intuitive and we are better off saying that for certain occursCountKinds there is no potential PoU. The behaviour is therefore the same as for scalar elements. Means that occursCountKind 'fixed' and occursCountKind 'implicit' with minOccurs=maxOccurs behave differently wrt to discriminators. Steve will reword the proposal accordingly.

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29/4: No further progress

6/5: Steve came to reword the proposal to say that for certain occursCountKinds there is no potential PoU, but it raised an issue. Steve has resent the original proposal with responses to Tim's questions. It is clear that a discriminator inside an array can not leak outside the array because it is evaluated for each occurrence. But should that be expressed by saying that a) all arrays are potential PoUs and a discriminator can't leak outside a PoU, or b) only some arrays are potential PoUs and a discriminator can't leak outside a PoU or an array. Please can WG members review the email and have a position on the wording.

20/5: Tim has reviewed, back with Steve

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3/6: No progress

10/6: Not complete. Decided that next published specification would not include this .

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26/8: No progress

2/9: No concrete progress although Steve came across this exact scenario when modelling NACHA Addenda records, and used asserts instead of discriminators to side-step the issue.

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28/10: No further progress

11/11: Steve has looked into this again and will email findings for next call.

18/11. Proposal sent by Steve. Mike to review for next call.

25/11:

250 Standardise on a single tdml format for DFDL tests (All)

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.

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18/2: No further progress

11/3: Mike and Steve discussing the best way to share and cooperate on tdml format.

25/3: Discussed the creation of an OGF document that will own and define a standardised tdml format.

11/4: Proposal is for the OGF document to define a tdml format without Tresys or IBM copyright statement.

15/4: Draft document on Redmine

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6/5: No further progress

20/5: Mark has read through the document. Particularly concerned with how namespaces are handled in the infoset.

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17/6: No further progress

25/6: Mike has added bit order capability as per action 233.

25/11: No further progress

260 Positional and non -positional sequences (Steve/Tim)

10/6: Spec defines the above but also allows different occursCountKinds within the same sequence which may have different (implied) separatorSuppressionPolicy, which results in a sequence which is a mixture of both. Should this be allowed? If so what are the rules? Can certain combinations be disallowed?

17/6: IBM have discussed internally and will submit a proposal.

25/6: Proposal sent to WG. Initial reaction is that the intended semantic for Positional sequence is option a) - an observer of the raw data can identify an occurrence of an element in the sequence solely by counting separators.

8/7: Tim emailed an example which he would like to discuss before WG decides on option a) or b).

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22/7: No progress

29/7: Discussed background, Tim and Steve to have a position for next call.

4/8: IBM has held meeting, Steve to write up findings

26/8: Revised proposal sent by Steve - please review. Need to decide if included in next published spec.

2/9: Concern from Tim that the proposal still allows 'hybrid' sequences that mix 'positional' and 'non-positional' separator suppression characteristics. The alternative is to prohibit certain combinations of occursCountKind and separatorSuppressionPolicy. If this makes implementation materially easier then it is a possibility, but care must be taken to minimise breakage of existing schemas. Tim to make new proposal. Separately, clarification needed on behaviour of maxOccurs '0' and occursCount '{0}' - see **new action 271**.

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16/9: With IBM

23/9: IBM held meeting prior to WG call. Discussion ongoing.

14/10: Went though latest email proposal from IBM. Mike to review in depth for next call, and consider spec updates.

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11/11: Still with Mike

18/11: Mike sent email outlining spec updates. The schema definition error for OCK = 'parsed' and SSP <> 'anyEmpty' was questioned, but WG agreed that was the correct behaviour on the grounds of simplicity. Steve will email the full list of spec updates for review on next call. 25/11: Spec updates emailed by Steve. Note stopValue behaviour.

271 Use of maxOccurs '0' (All)

2/9: Legal in XSDL and DFDL. One use case in XSDL is when deriving a complex type by restriction, where it is used to indicate that an element in the base type must not appear. Another use case could be if a schema undergoes a version revision that removes elements; perhaps clearer if the removed element gets maxOccurs '0' rather than omitting it. Steve has seen an instance of its use in a DFDL schema.

So if DFDL continues to support it, need to document the behaviour for the various occursCountKinds and what happens to separator. Also behaviour of occursCount expression that returns 0. Proposal needed. 23/9: No progress 14/10: Went though latest email proposal from IBM. Agreed with conclusions. Mike to consider spec updates. 11/11: Still with Mike 18/11: Mike sent email outlining spec updates. Steve thinks spec needs to say something for OCKs 'fixed', 'implicit' and 'expression' in section 16, and what effect is on separators in section 14. Mike to re-evaluate spec updates needed for next call. 25/11: 272 Catch 22 with emptyValueDelimiterPolicy for fixed length initiated elements 23/9: One solution is to say that a fixed length element can not ever be empty. Needs more 14/10: To be discussed on next call. 28/10: Steve sent out some more thoughts on this. Saying that a 'fixed length' element where length is not zero implies that an empty representation is not possible seems the right thing here. We would define 'fixed length' as 'explicit' (non-expression) or 'implicit' (simple). Noted that 'fixed length' is used in the spec but not defined! 11/11. Review last email for next call. 18/11: Review last email for next call, particularly the implications of saying that a 'fixed length' element can never have an empty representation. 25/11: 274 XPaths: Namespaces of element names in the path (Mike) 23/9: Clarify how path steps are to be interpreted wrt namespace. Mike to look at IBM and MITRE suggestions and how unique/kev/kevref paths work. 14/10: Mike has researched this, and will circulate to the WG. 28/10: Email sent by Mike. Review for next call. 11/11: Mike to update his research after responses from Tim. Review for next call. 18/11: Mike still can't find language in XSDL 1.0 spec that definitively states how this works, but the book 'Definitive XML Schema' says "A child element-type name which must be prefixed if it is in a namespace". WG agreed that this rule is the one that should be adopted. It is therefore not possible in a DFDL expression to refer to an element that has a target namespace without the use of a namespace prefix. Mike to figure out how this is incorporated into section 23 for

Closed actions

next call. 25/11:

0.0004 404010				
No	Action			

Deferred actions

No	Action
	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.

1	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
	09/03: Low priority
	30/03: Deferring for now
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.
	2/12: No further progress
	14/1: Deferring until needed
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.
	23/9: Candidate to be moved out to 1.1?
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.
	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 > 1; should be a processing error, can always use a predicate
	to select one node of an array.
	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.
	6/5: Mike is working on a mind map for the length section. Deferring until needed.
	23/9: Rewrite should be postponed to future 1.1. Still need to answer the original questions
	about the functions though
251	Create official error codes (All)
	5/2: 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.

Work items:

No	Item	Owner	Target	Status