TeamRoom Plus

This OPEN document will not be filed. It is being kept active.

Meeting about Meetings\OGF

Project	**DFDL 1.0**
Meeting Date	**24-May-13 (Fri)**
Meeting Time	**15:00 - 16:00**

Created by Steve Hanson on 09-Mar-11
Last Modified by Steve Hanson on 23-May-13

OGF DFDL Working Group Call , 24 May 2013

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. ICU 51 changes
IBM DFDL has picked up ICU 51 for its next release, and has observed some behaviour changes for time zones.
A ticket was raised with ICU to understand why both ICU4C and ICU4J have modified what happens with 'zzz' and 'VVVV'. ICU have responded saying that their behaviour is defined by http://www.unicode.org/reports/tr35/ which is maintained by the CLDR technical committee, and this has changed. IBM has responded asking that no more changes take place that change behaviour of existing symbols. ICU have said "there is no plan for big changes".
DFDL WG needs to decide what to do here. We could freeze on an ICU release, but IBM DFDL has found that it needs to adopt ICU releases as they appear in order to obtain bug fixes, of which there have been several, and there are more bug fixes due in ICU 52.

3. New ICU time zone symbols .
ICU have added support for the latest CLDR symbols - 'x', 'X', 'o' and 'O'. These are defined here: http://icu-project.org/apiref/icu4j/com/ibm/icu/text/SimpleDateFormat.html. They fill in some gaps in the existing symbol support, including use of Z for UTC. Should we adopt them via errata?

4. 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

Minutes

Meeting closed

Next call
Tues 28th May 15:00 UK

Action Items and Other Meeting Documents

Subject	Document Type	Created	Modified

Next action: **211**

Actions raised at this meeting

No	Action

Current 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. ... 10/07/2012: Discussed schemes to create interchangeable tests. Ideally need a DFDL defined error code per failure, in conjunction with specific inserts. ... 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. ... 24/5: No further progress.
123	**DFDL tutorial (Steve)** 13/10: Draft of first 3 chapters has been written and will be distributed to WG 10/11: Posted to grid forge here (http://forge.gridforum.org/sf/go/doc16106?nav=1), work continuing at IBM to define a standard example-based chapter framework and to author additional chapters. Contributors welcome! 17/11: Steve, Stephanie and Alan had a meeting to discuss the best structure for the tutorial and decide which examples to use throughout. The meeting raised more questions. Further discussions will be held. 24:11: The list of topics to be covered in the remaining lessons has been produced and a lesson template. Alan will write lesson 4 01/12: Alan has started lesson 4 which covers fixed and variable fields and arrays. 08/12: Alan has almost completed lesson 4. Will send out for review. 15/12: First draft of lesson 4 is available for review. Alan to send to Bob and Joe. 22/12: Alan has distributed drafts for tutorials on Basic Structure and Optional/Repeating elements. Please review 12/01: Alan distributed a tutorial for choices and updated the others. Alan and Steve reviewed them and updated versions will be sent soon. Should start on the 'representation' tutorials soon. 19/01: The tutorials for basic structure, optional/arrays and choices have be updated. Please review. The tutorial for text elements should be available soon. 26/01: No comments received about 3 tuorials distributed last week. Alan is still working on Text representation. 02/02: Steve has sent comments on three tutorials. Alan to send updated versions by the end of the week. Alan has also distributed the first part of the tutorial on text representation and would like feedback. 09/02: Steve had reviewed tutorials 3,4,5 and updated versions have been distributed. Joe reviewed lesson on text elements. Main points. Using 'represented as text' is confusing. Examples are too cluttered. Suggest simple targeted examples but still build up to final complete schema 23/02: New versions distributed and Steve has commented. 02/03: Alan has published the final versions of tutorials 4,5,6 and is working on text respresentations. There was some discussion about the detail that needs to be covered. Should limit it to 'common usage' and refer to the spec for details of edge cases. 09/03: Alan distributed an update to the text tutorial. Please review. 30/03: Steve has spent half a day tidying up lessons 1 to 6 and has uploaded them as pdfs to gridforge. They are now more coherent, and many inconsistencies and errors fixed. Ownership of draft lessons (text properties, binary properties, advanced features) has been passed to Steve. Also need to make a schema available for the examples. 13/04: Steve is working on the text properties tutorial.

04/05: No progress

...

15/06: This is on hold until Steve clears up spec issues and other workload. Steph has looked at the later lessons, and noted that they are more direct compared to the more wordy earlier lessons.

28/06: On hold.

...

29/11: Tim offered to take a look at the next outstanding tutorials. Steve / Tim to discuss

6/12: No progress

...

10/01: No progress, offer from Mike to help. First step is to make any corrections due to errata.

17/01: No progress

24/01: No update

31/01: Daffodil project team will be working their way through the existing tutorials and reviewing

14/02: Daffodil team to start reviewing tutorials hopefully this Friday.

21/02: Moved to this coming Friday

28/02: No update

13/03: No progress

21/03: No progress from Daffodil team. IBMers are starting to use the tutorial and will feedback any comments.

28/03: No change

05/04: Steve will send Alan's two draft lessons on binary & text data to Mike to complete.

17/04: No progress

8/5: No update

...

4/9: No progress:

11/9: IBM DFDL infocenter will start to reference these directly before the end of the year, so they need updating soon.

18/9: Noted that several requests have been received asking for chapters 7 to 17 as implied by chapter 1. At minimum chapter 1 needs updating to make it clear what exists today.

28/9: Steve has updated and re-issued chapters 1 to 3.

...

12/2: No further progress

19/2: Noted that tutorials need updating to reflect updated spec when it is issued.

26/2: MITRE are using DFDL heavily now and suggesting ideas for tutorials.

...

24/5: No further progress

140	Spec issue: Parsing: 'missing' v 'empty', role of initiators, default values (All)

01/06: See minutes.

08/06: Still under discussion. Tim has sent Mike a selection of data formats to guide the discussion.

15/06: Not discussed - an extra call has been scheduled to go through this.

28/06: A series of extra calls are being held between Mike, Steve, Tim and Steph.

05/07: Next extra call is Wed 6th July - Steve to send invite

12/07: Two more calls held. Next call is Wed 13th July.

19/07: More calls held, next call is Fri 22nd July.

26/07: More calls held, good progress

16/08: Steve will set up next call for when Tim has returned from holiday

23/08: Two more calls scheduled for this week, remaining issues: separator suppression, empty strings, sparse arrays (see action 136)

30/08: Call held earlier today. Still remaining - separator suppression (matrix); sparse arrays; empty strings; empty value delimiter policy. Steve to summarise where we have got so far before remaining items are tackled.

20/09: Steve has summarised where we are with action 140, which Tim and Mike have reviewed. 2 hours call planned for Thursday.

27/09: Calls held, progressing the separator suppression behaviour

4/10: More calls held, progressing separator suppression, sparse arrays (see action 136) and emptyValueDelimiterPolicy behaviour

18/10: All issues now in a single document, call held earlier today. Next call Thursday.

1/11: Extra calls still ongoing

8/11: Extra calls still going, when action 140 document complete will send to Steph for review

15/11: Mike is verifying the action 140 conclusions by writing an algorithm in SCALA which can be ultimately be used in Daffodil

22/11: Call to be held next week

29/11: Next call 30/11

6/12: Next call 7/12

13/12: Had call earlier today, making good progress. Next call first week of Jan.

10/01: Next call to be scheduled for Wed or Fri

17/01: No call last week, call tomorrow

24/01: Two calls held, next call Wed, looking at separator suppression

31/01: Separator suppression discussions ongoing, proposal to rename policy and enums. Call later this week.

14/02: Now looking at separator suppression and unparsing. Next call on Friday

21/02: Separator suppression on parsing/unparsing matrix agreed.

28/02: Two more calls this week

13/03: Call tomorrow

21/03: Two more calls held

28/03: Hopefully all issues now addressed. Steve to start folding in action 140 document comments into the body of the document.

05/04: Still with Steve. Noted that action 140 will not be in the next spec rev, likely the one after.

17/04: No further progress

8/5: Steve has started rewriting the action 140 document

23/5: Steve continuing the work on the action 140 document. Empty/missing/defaults and Arrays have been rewritten. Separators not started. Please review.

12/6: Steve will resend the latest action 140 document for review. Note use of 'missing representation' to describe zero length input data with same semantic as missing altogether.

19/6: Latest action 140 resent. Separate call on Thursday this week.

26/6: Call held, revisions need to be made before action 140 can be circulated more widely. Next call will be Tues 3rd July.

3/7: Steve not found time to update action 140 doc, call postponed to 10th July

10/7: Call held, document still being refined. Spin off **action 179** to sort out use of term 'representation' in spec and grammar.

17/7: No progress on core action 140.

25/7: No progress - Steve will aim to finish refinement before Aug 16

31/7: No progress

7/8: No progress

14/8: Steve has started to create v16 of the action 140 document and will mail it to Mike & Tim this week

4/9: v16 mailed to Mike & Tim - some issues noted in the email - Steve will set up a separate call

11/9: Separate call held. Re-examining the role of minOccurs for occursCountKind 'parsed', 'expression', 'stopValue'. For these occursCountKinds, where the occurrences are extracted without reference to minOccurs, it seems more natural that a minOccurs violation is not a processing error but instead it is just a validation error. Need to evaluate the knock-on effect of this proposal - it potentially affects points of uncertainty, default values, use of terms required & optional, and separator suppression.

18/9: Tim and Steve have worked through the proposal, it looks good in principle. Steve to update action 140 document and see if anything problematic surfaces.
Note that current definitions of 'required' and 'optional' retained - it's just that now a required element missing from the infoset (after defaulting applied) is not necessarily a processing error

(that now depends on occursCountKind). Please review for next call.

28/9: Tim & Mike to review Steve's updated document. Other things to do before it can be incorporated into the spec:
- SMH1 comment: What do dfdl:xxxlength() functions return when rep is absent? Error or 0?
- English words for separator suppression tables
- Decide the fate of Appendix A? Perhaps replaced by tutorials?

2/10: Key to explaining all this when it is rolled into the spec is defining the different reps plus 'missing' plus concepts of 'well-formed' and 'badly-formed' in the glossary. Clearly sections 13.15, 14 and 16 are affected in a major way, but it is likely that it affects several other sections such as 9.

Discussed the dfdl:xxxLength() functions and what they should return when there is nothing in the infoset. This led to a more general discussion of whether a failure to find a path should be treated as a schema definition error or a processing error. New **action 188** raised.

16/10: Steve to take one more pass through the document in the the light of the above, and also try to put into words the separator suppression tables. In order to do this need action 187 needs resolving.

23/10: Action 187 resolved far enough to allow Steve to proceed with document pass.

30/10: Still with Steve.

5/11: Still with Steve.

12/11: Steve has updated action 140 to v018 to reflect action 187 terminology, which has made it clearer. Next step is to create readable descriptions of the separator suppression tables.

20/11: No further progress. Consider making separator suppression stuff a separate action?

27/11: No progress

4/12: Steve has started work on the separator suppression policy descriptions. Key to this is a definition of 'potentially trailing' as this is one of the criteria that allows separator suppression to take place. Steve will circulate a draft definition as it is not as obvious as it appears. Also it is important that the WG re-review action 140 v018 as Steve believes there are inconsistencies in there.

A call may be scheduled later in the week if needed.

11/12. Steve sent out a v019 of the action 140 document which corrected some mistakes from earlier updates, added comments for issues that needed resolving, and contained a rewritten section 4 on separator suppression. An extra call was held on 7/12 which addressed the comments and reviewed section 4. Actions arising were:
- Mike to reword some of the section 4 text to make clear the distinction between a potentially trailing element and actually trailing occurrences of an element.
- Steve to correct a mistake in the separator suppression tables where column headings got swapped and resend the spreadsheet
- Tim to create some introductory words to explain the motivation for the separator suppression property

8/1: v020 and v021 of the action 140 document have been circulated. Steve has spotted a possible error in always equating 'empty' representation to 'known to exist', after reading Mike's choice example email, so we need to revisit that.

Tim has created words for separator suppression introduction. Review and comment please.

15/1: Tim's separator suppression intro approved.

Discussed Mike's example of a choice with a complex element branch that evaluated to empty representation.

This is an instance of the behaviour of a required complex element when it has empty representation.

Action 140 currently says that defaults are not applied but does not say whether this is a processing error or you get a child-less element in the infoset. Steve had expected the former, but is not happy that this is appropriate for all circumstances.

Steve will think about all the instances of empty representation, taking into account initiator/terminator, lengthKind, emptyValueDelimiterPolicy, etc.

22/1: Reviewed the action 140 behaviour for all use cases of empty representation. Essentially there are three main cases, 1) simple element (non-string), 2) simple element (string) and 3) complex element, each of which has sub-cases for optional occurrence versus required

	occurrence, and there is also EVDP to take into account. Reached a proposal where all were comfortable. Steve to write up and circulate for review. 29/1: Reviewed Steve's proposal, looks good. Steve will update action 140 document. Hopefully this can be merged into the next draft of the spec (ie, post the draft that includes errata v011). The action 140 changes should be merged on their own for ease of reviewing. 5/2: Steve has sent out an updated action 140 document for review. Discussed one issue that Steve had noted, specifically whether empty representation for a non-string simple type causes a type conversion processing error, or whether no type conversion takes place and it is the fact that nothing is added to the infoset that causes a processing (or validation) error. 12/2: Mike has reviewed and his comments were discussed. Steve will make another revision. 19/2: Steve has sent out v023 for review. Two comments remaining. Steve to address in a new revision. Mike to start folding v023 into the spec once action 197 complete. 26/2: Steve has addressed the final two comments and sent out v024. Mike has started to fold the content into the spec, initially as Word comments. Steve will create errata v12 to contain <u>only</u> the action 140 information, in the form of a link to the action 140 document which will be tidied up and placed on Redmine as an errata addendum. Action 140 content will be folded into spec and reviewed before any of the post-v11 batch of errata. 5/3: Errata v12 created. Errata Addendum 1 created from Action 140 document. Both posted on Redmine. Next step is to complete the folding of these errata into the spec. 12/3: No further progress 19/3: Steve has folded in most of the errata for arrays (section 16 of the spec). Reviewed by Mike and Tim. Next step is for Mike to fold in the errata for separator suppression (section 14). 26/3: Mike has folded in most of the remaining errata for action 140 and sent to Steve to review. 5/4: Steve has reviewed and updated the spec. Several open comments remain to be resolved, started to go through these on the call, got as far as the end of section 9.3.1. New **action 209** raised to consider one specific comment. 23/4: Will continue the review on the next WG call. 7/5: Extra call scheduled for 10/5 @ 15:00 UK 24/5:
172	**Clarify how a DFDL string literal is matched against the data stream** (Tim) 23/5: Non-trivial algorithm, worth stating it in the spec. .. 25/7: No progress. 31/7: Tim has been making notes but nothing written up formally. Will include treatment of %WSP*; ... 24/5: No further progress
199	**Review the unordered sequence rewrite -into-a-repeating-choice section** (Tim) 16/1: This needs to be worded in a way that allows implementations to check for occurs violations in a manner which is consistent with the description of array processing in action 140 document, and is not overly constraining on implementers. 22/1: Tim will propose revised words as he proceeds with the IBM implementation ... 26/2: No progress 5/3. Tim has rewritten this and sent for review. Mike is happy with content, Steve to review. 12/3: Reviewed an updated document from Tim that includes empty representation discussion. Tim to update further. ... 24/5: 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. ... 24/5: No further progress
204	**Establish strict versus lax behaviour for ICU calendar patterns** (Steve)

	5/2: ICU ticket raised, response awaited
	12/2: Response received. The only leniency involved is when lax is specified, in which values can be outside the usual range and cause the calendar to be normalized, eg, 2013-01-35 would give 2013-02-04.
	19/2: Re-opened. More info from ICU. There is more leniency than published when lax, and there is also some leniency when strict. ICU will update the ticket with more details within 2 weeks.
	26/2: No update from ICU yet
	5/3: ICU working on this now
	12/3: Seems like it is a bigger job than ICU anticipated! They are still working on it. Steve has noted that IBM DFDL accepts any number of fractional seconds for 'SSS', not sure whether this is ICU leniency or mis-interpretation of the spec.
	19/3: No reply so far
	26/3: Reply received which describes the scope of leniency and what lenient behaviour is included in strict mode. Some of the information requires clarification so Steve has asked some further questions in the ticket.
	5/4: No further response yet.
	23/4: Further reply received from ICU. Steve will assemble into a coherent form and mail to the WG. IBM have proposed to ICU that they implement a 'super strict' mode where there is no leniency at all. DFDL could then expose this as a new enum 'exact' (say) when it appears in an ICU release. Same for text numbers.
	...
	24/5: Still with Steve
205	**Establish XML white space rules for DFDL annotations (Suman)**
	19/2: Steve will experiment with IBM DFDL and see what XML rules are being applied by default, and the effect of xml:space.
	26/2: Using IBM DFDL, dfdl:assert has external white space (ie, outside the { }) stripped, and internal white space (ie, inside the { }) normalised to a single space, for both attribute and element renderings. Use of xml:space 'preserve' made no difference. Also looked at DFDL properties such as dfdl:length ' 10 ' and dfdl:initiator ' abc def ' and they showed the same behaviour. However enum properties like dfdl:lengthKind ' explicit ' give a schema definition error. Is this deliberate? Action passed to Suman to confirm the intended behaviour.
	5/3: IBM DFDL uses JAXP which handles white space according to type. In Suman's XSDs for DFDL enums are modelled as xs:string (spaces preserved), but DFDL string literals are modelled as xs:token (spaces trimmed and collapsed). This explains the observed behavior. Steve will update section 6.3 to make clear the behaviour expected for the different property types and send for review.
	12/3: No progress
	19/3: Further investigation: DFDL integer properties get leading/trailing spaces stripped. DFDL string will collapse all white space, not just leading/trailing. For DFDL expressions DFDL should use xs:string, but trim off leading and trailing white space, which it is safe to do. Need to see how pattern facets are handled and base DFDL regular expression on that.
	26/3: The XSD schema-for-schemas has pattern facet as xs:string, which implies DFDL should do same for regexs. Also noted that the whirespace facet (an enum) is xs:NMTOKEN which derives from xs:token. Does that change what we had decided about DFDL enums? Steve to investigate further.
	...
	24/5: Still with Steve
208	**Create errata v13 and incorporate into DFDL spec (Steve, Mike)**
	26/3: Mike to review Steve's errata v13 document.
	5/4: Looks ok, Steve will publish on redmine.
	23/4: Published v13 of the errata document.
	7/5: One TBD in v13 for Tim's 'unordered rewrite' - outlook is a couple of weeks. Steve will add in recent errata if he has time.
	24/5:
209	**Parsing Algorithm - establishing representation (Mike)**

No	
	5/4: Revise the summary words at the end of section 9.3.1 to lead on correctly from the first step of establishing content length zero. Need to handle the nil logical value case for xs:string & xs:hexBinary as there is a clash with the empty case when nil logical value is %ES;. Maybe we don't allow this combination? 23/4: Mike has reorganised section 9.3.1. Confirmed existing spec rule that when nilKind is 'logicalValue', no DFDL entity syntax is supported in the List of Logical Values. That sidesteps the problem with %ES;. 7/5: Keeping open until section 9.3.1 fully reviewed. 24/5:
210	**Ensure no implications to allowing occurs properties on global elements (Steve)** 23/4: Steve will change IBM DFDL to allow this and see if any unforeseen issues arise. IBM DFDL to consider an option to validate that global elements are complete, instead of always doing so, to match Daffodil. 7/5: Still with Steve 24/5: Steve has changed IBM DFDL, no problems encountered

Closed actions

No	Action

Deferred actions

No	Action
129	**Press release to publicise DFDL (Steve)** Steve is pulling together a press release at IBM. Want to include as many contributors and interested parties as possible.NCSA are keen to be included. Also likely that US National Archive will want to be included. Mike has indicated OCO are too. 17/11: no progress ... 08/12: Still no response from IBM press office 15/12: no progress .... 09/03: No progress 30/03: Making this action deferred until IBM is in a position to say something more concrete about any implementation.
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 agoainst 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

Work items:

No	Item	Owner	Target	Status

| 043 | Track errata list for 1.0 of the spec. | Steve | N/A | Draft 012 on Redmine. |
| 044 | Incorporate errata list into DFDL spec. | Steve/Mike | N/A | Draft merged document. |