

# CGM Open face-to-face meeting minutes

Location: Needham, MA

Dates: 28-30 May 2008

Hosted by PTC

## ***Participants:***

Dave Cruikshank – Boeing

Dieter Weidenbruck – PTC

Lofton Henderson – HAL

Forrest Carpenter – SDI

Don Larson – Larson S/W

Ulrich Laesche - Ematek

Stuart Galt – Boeing

Benoit Bezaire – PTC

Rob Orosz – Auto-trol (via telecon)

## ***Regrets:***

Franck Duluc – Airbus

Andrew Moorhouse – MOD UK

## ***Topic: MS business***

The re-chartering of the W3C WebCGM WG is under discussion by the W3M. The CGM Open MS Steering Committee as provided Chris Lilley information to present to the W3M on the use of SVG vs. WebCGM in technical illustrating. We are awaiting communication from Chris on resolution. (post meeting update: re-charter of the W3C WG has been approved)

Discussions continue on the addendum to the OASIS/W3C MOU.

## ***Topic: WebCGM TC chair position***

With Dave Cruikshank retiring from Boeing, the TC needs to elect a new chair. The unanimous feeling in the TC is that the replacement chair should be Stuart Galt. Dave will run a TC ballot to affirm this position. (post meeting update: ballot took place with everyone voting to approve Stuart as the chair, but declared invalid because of voting rights – Dave will resubmit the ballot)

## ***Topic: Deprecation of background***

The question of whether we should deprecate the use of the background param on the object tag was discussed.

Resolution: Deprecate background

## ***Topic: Relationship of WebCGM 2.1 with WebCGM 1.0 and WebCGM 2.0***

Does WebCGM 2.1 supersede the older versions of WebCGM? It was pointed out that, because of cascading profiles, it cannot supersede the older versions.

Resolution: WebCGM does not supersede WebCGM 1.0 or WebCGM 2.0

## ***Topic: Response to comment about Geometric Pattern***

Dave will respond and invite further definition of the question. (post meeting update – Dave responded to question)

## Topic: WebCGM 2.1 CD review open issues

### ACI file

- Should ACI file contain both font mapping and default attributes?
  - Resolution: Yes
- Can we come up with a standard way of associating ACI file with a viewer?
  - Resolution: We are unable to come up with a viewer independent solution because using a DOM call requires scripting and we might want to be able to associate an ACI file with a converter also. For a solution that is platform independent maybe best thing is to just put an informative subsection in chapter 9, specifying how environmental variables, program switches, search paths, etc. could be used to do the association. Details of final implementation would have to be done with the purchasing contract for the product.
  - Effects:
    - Remove structure from EBNF supporting fragment for association
    - Remove example in Chapter 4 using XCF PI for association
- Review of default attributes
  - Line and Edge Type Definition – lineTypeIndex or lineTypeIndicator?
    - Resolution: lineTypeInd
  - Line and Edge Type Definition Line and Edge Type Definition & Hatch Style Definition – ambiguity of how the sequence of "repeatable string" comprises the 'list of dash elements'.
    - Resolution: Need to clarify the "dashElement" list as described in the CGM standard
  - Line and Edge Type Definition & Hatch Style Definition – as stated, it is possible to override general "look" of CGM defined styles
    - Resolution: Allow generality
- Font mapping syntax
  - The question of case sensitivity for font names was discussed.
    - Resolution: Full normalization of font names will be implemented by the vendors (names are converted to lower case and dashes, underscores, and whitespace are compressed out) before mapping is attempted
  - The question of the usefulness of the font scaling attributes was discussed.
    - Resolution: Remove the scale factors
  - The two use cases of "conditional" and "unconditional" font mapping were discussed at length. Conditional font mapping means that if a font is available on a system no font mapping will take place. Unconditional font mapping forces the mapping to take place whether a font is available on a system or not. Unconditional font mapping is really a styling function. All of the vendors currently to unconditional font mapping.
    - Resolution: Add an attribute to control whether mapping is forced or not
  - A proposal from Airbus was submitted by Ulrich dealing with a list of fonts for substitution. After much discussion, the group decided to allow a list of fonts in the font mapping target using a CSS style font list. Display might contain something like "Arial, 'Times New Roman', monospace".
    - Resolution: Redesign ACI syntax to support CSS style font list
  - Proposed new syntax snipped for font mapping

```
<!ELEMENT fontMap ( defaultFont?, maplist* ) >
<!ELEMENT defaultFont EMPTY >
<!ATTLIST defaultFont
    useFont CDATA #REQUIRED >
<!ELEMENT maplist EMPTY >
<!ATTLIST maplist
    forceSubstitution ( yes | no ) "yes"
    cgmFont CDATA #REQUIRED
```

substitutionList CDATA #REQUIRED >

## **getObjectExtent issues**

- Syntax for return values  
Resolution: Benoit will propose a rectangle method to return the 2 corners of the extents
- Error condition on an APS with no graphical primitives  
Resolution: The return values for xmin, ymin, xmax, ymax will be set as follows: xmax < xmin and ymax < ymin. This will indicate that the extents are invalid.

## **Style property issues**

- stroke-type  
Resolution: Allow line types 1-15, plus negatives. A reference to an undefined negative has no effect. Use numbers for all the indices, instead of names.
- fill-style  
Resolution: Use integers. Note: The name should be interior-style.
- hatch-type  
Resolution: Allow negative values. Note: The name should be hatch-index
- pattern-type  
Resolution: The user would need some knowledge of pattern table to use it. Note: The name should be pattern-index
- fill-offset  
Resolution: The name should be fill-referencepoint

## **gnode issues**

- Access of gnode via WebCGMNode?  
Resolution: Will clarify text
- Retrieval of gnode via getAppStructureById  
Resolution: Will clarify text

## **Transform issues**

A continuing discussion is going on about whether we need to add a matrix method to handle the transform. Benoit will continue the discussion with a proposal on an email thread.

## **References to other standards**

- ISO/IEC 10646 standards  
Resolution: Lofton will check with Chris on whether to change the references
- ISO/IEC 8632:1999(E)  
Resolution: Update link
- ISO/IEC 8632:1999/Cor 2:2007  
Resolution: Will add link to Cor 1:2006
- RFC 1951  
Resolution: Update link
- JPEG  
Resolution: Rob will compare the registration with what we have in 6.18 to see whether we should just have a reference

## ***Topic: Test Suite assignments***

- Substring hotspots – Dave/Stuart  
Test for support for closing and opening APS in Text Open State  
Test for link activation on a substring  
Test for screentip on a substring

- Test initial and final substrings (note: requires null strings)
  - Test substring as a target of a link?
  - getApsExtent for a substring?
  - Text search
    - The only test we can write is to test Stuart's script for searching content attribute using WebCGM 2.0 functionality. Stuart will modify his example code to search for content. Sample F.2
  - regex APS addressing
    - inherited from text search above.
  - DOM/XCF style properties - Forrest
    - 7 new style properties
    - Need a test that covers each of these for APS and picture
    - All seven in 1 file or seven files? Forrest will determine how to package.
    - getStyleProperty test - Forrest
    - setView test - Benoit
    - Line animation test - Forrest
  - Geometric transformation – Benoit/Ulrich
    - Tests for scale method, rotate method, translate method, and transform at APS.
    - Test for both combine and replace
    - A couple of nested transforms to check ctm
    - getTransform test
    - getCtm test
    - animation test
  - Font mapping (ACI file) – Dave/Stuart
    - Test for defaultFont element
    - Test a cgm file with an “unsupported” font (with font properties) and use a mapping file to map to something unique and recognizable
    - Test unconditional font mapping
    - Test multiple font mapping options (Airbus' list)
  - Default attributes (ACI file) - Don
    - Probably need a static test for line/edge type cont before we put a test in here
    - Probably need a static test for anything that we don't already have – hatch style, restricted text type, line/edge type continuation (Dave may have these)
  - 1. z-compression - Don
    - 1 test of a compressed cgm file
  - Get object extents - Stuart
    - Test getObjectExtent
    - Test getObjectExtent on a transformed object
    - Test getObjectExtent on an APS with no primitives
    - Test getObjectExtent on an APS containing text.
  - Redraw control - Ulrich
    - Put it on “postpone”, do a bunch of style properties, and turn it to “now”, then turn it back to “postpone”
  - Rob will compare the current static tests with the profile requirements to make sure everything is covered in the tests.
- Roughly half of the tests are due by July 15.

### ***Topic: Next steps***

- Telecons
  - June 11
  - June 18 – tentative
  - June 25 – tentative
- Update of timeline
  - We need to finalize timeline to coordinate with W3C WG

## ***Topic: Resolutions***

**Resolution:** The WebCGM TC thanks Dieter Weidenbruck and PTC for the excellent meeting facilities and support and for the generous hospitality extended to the group.

**Resolution:** The WebCGM TC wishes to express its deep appreciation to Dave Cruikshank, retiring Chair of the TC, for his many years of steady leadership of the TC, and for his substantial contributions to the development and proliferation of the WebCGM standard. We wish him the best in all his future endeavors.

**Resolution:** The WebCGM TC unanimously endorses Stuart Galt as the new chair of the TC.