

CGM OPEN WEBCGM TC ACTIVITY REPORT — 2005 MUNICH MEETING

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Preface

This report describes activities of CGM Open WebCGM TC meeting held from February 14-16, 2004 in Munich, Germany at the Holiday Inn Hotel Unterhaching.

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1 Meeting Details

1.1 Location and Dates

Holiday Inn Hotel Munich-Unterhaching, Munich, February 14-16, 2005

1.2 Meeting

- CGM Open 14 February 2005.

1.3 CGM Open Attendees

- Dave Cruikshank – Boeing
- Dieter Weidenbruck – ITEDO
- Lofton Henderson – Henderson Analytic LLC
- Ulrich Laesche – Ematek
- Benoit Bezaire – ITEDO
- Franck DuLuc – EADS/Airbus
- Andrew Moorhouse – UK MOD
- Stuart Galt - Boeing
- Don Larson – Larson Software Technology
- Peter Zimmermann – EADS (invited expert)

2 Agenda

2.1 Committee

The items on the agenda of the Committee included:

- MS business
- TC business
- ATA developments
- WebCGM 2.0 CD
 - Introduction
 - Concepts
 - Intelligent content
 - Profile
 - XML companion file
 - DOM
- Approval of CD draft with contingencies
- User guide for interoperability project
- S1000D alignment
- WebCGM 2.0 test suite
 - Review of example
 - Test suite requirements

- Test suite development
- Implementation status

3 Output and Action Items

Item	Who	When	Status
Meeting Minutes	Cruikshank	2/28	Draft – 3/13
MS business			
Continue with shutdown of CGM Open, Inc.	Lofton	2/28	
TC business			
Open discussion on TC chairs list on issue of Spam originating from OASIS mail lists	Dave	3/30	
Review new OASIS IPR documents	All	3/30	
Work parallel process of WebCGM 2.0 approval in W3C	SC	3/9	
WebCGM 2.0			
Compile changes into draft CD and publish	Lofton	3/18	
Find place to store references from draft CD	Lofton	3/14	
Provide editing directives to Lofton and Benoit based on review in the meeting	Dave	2/22	Complete
Introduction			
Update requirements document for reference	Don	2/22	??
Update cascading profile document for reference	Dave	2/22	Not done
Create appendix with normative and informative sections for conformance, references, new features, and deprecated features	Lofton	3/9	Complete
Concepts			
Move information on single picture requirement to new features section in appendix	Lofton	3/9	Complete
Move references to sRGB to deprecated section in appendix	Lofton	3/9	Complete
Intelligent content			
Update text to include description of loading XCF and	Dieter	2/14	Complete

rewrite EBNF			
Rewrite examples as metafiles	Dave	2/21	3/11
Reword viewer behavior and align with event model	Benoit/Dieter	2/22	Complete
Profile			
Validate tail sequences for UTF-8 and UTF-16	Lofton	??	
Research use of sRGB	Benoit	3/9	Complete
XML companion file			
Update section and deliver to Lofton	Benoit	2/28	Complete
DOM			
Draft a proposal for dealing with string lists	Benoit	2/28	Complete?
Update section and deliver to Lofton	Benoit	2/28	Complete
User guide for interoperability project			
Update tool and provide to Lofton	Franck	2/28	
Update user guide	Lofton	3/30	
Work with OASIS web crew to include user guide	Lofton	3/30	
Test suite development			
WebCGMPicture	Ulrich	3/30	
WebCGMStringList	Benoit	2/23	Complete
WebCGMNodeList	Stuart	3/30	
Set/clear style attributes for picture	Stuart	3/30	
Set/clear style attributes for APS	Stuart	3/30	
Combination of style attributes	Not assigned		
WebCGMNode – PictureNode	Ulrich	3/30	
WebCGMNode – AppStructureNode	Ulrich	3/30	
WebCGMNode – XMLMetadataNode	Benoit	3/30	
WebCGMNode – TextNode	Lofton	3/30	
WebCGMNode – AttrNode	Benoit	3/30	
WebCGMNode – NS	Benoit	3/30	
WebCGMAppStructure – content	Forrest	3/30	
WebCGMAppStructure – interactivity	Benoit	3/30	

WebCGMAppStructure – layerdesc	Don	3/30	
WebCGMAppstructure – layername	Don	3/30	
WebCGMAppStructure – linkuri	Franck	3/30	
WebCGMAppStructure – name	Franck	3/30	
WebCGMAppStructure – region	Lofton	3/30	
WebCGMAppStructure – screentip	Forrest	3/30	
WebCGMAppStructure – viewcontext	Lofton	3/30	
WebCGMAppStructure – visibility	Benoit	3/30	
WebCGMEvent	Ulrich	3/30	
gnode and interactivity “off”	Not assigned		

4 Agenda discussions

4.1 MS business

There was unanimous approval of the 2 year reelection of Dieter and Dave to the CGM Open MS steering committee.

The final shutdown of CGM Open, Inc. is awaiting action for approval of the conditions by the OASIS BOD.

4.2 TC business

There appears to be a lot of Spam generation from the harvesting of mail lists from the OASIS web site. Dave will open a discussion on the chair lists to see if we can address this.

The new OASIS IPR policy has been released. The TC has until April 15, 2007 to agree to and implement one of the modes. All the members need to review the policy in preparation for TC approval of an IPR mode. In anticipation of processing WebCGM 2.0 through the W3C process, it would be better to decide on this soon.

Status of processing WebCGM 2.0 in W3C needs follow-up. The introduction of WebCGM 2.0 CD in OASIS needs to be coordinated with the start of the W3C process for review. The SC will address this issue.

4.3 ATA developments

The ATA is in the process of signing an MOU with ASD and AIA to collaborate on requirements for civil aviation in S1000D to replace the ATA Future Data Exchange project. It's not believed that this will have much impact on ATA graphics work, since collaboration has been taking place with ASD for several years on graphics issues.

4.4 WebCGM 2.0 CD

The goal of the meeting was to approve by ballot a first CD with contingencies of comments made during the meeting. All issues will be resolved during the meeting or deferred to the first review period. First CD will be published ~ 2 weeks after the meeting with a 30-day comment period. There is a plan for a second CD review after that time before submitting as an OASIS standard.

There was a general statement to the group that response to technical issues has been unsatisfactory. Benoit has been doing most of the work on the DOM without contributions from many of the other vendors.

Each of the chapters of the draft WebCGM 2.0 was reviewed and comments captured and approved for the CD copy. Editing directives were to be prepared by Dave and delivered to Lofton and Benoit.

4.4.1 *Introduction*

The creation of an appendix to contain conformance, reference, new feature, and deprecated feature sections was proposed and approved.

4.4.2 *Concepts*

A few items were moved to the appendix covering new and deprecated features.

4.4.3 *Intelligent content*

Wording was proposed to covered dealing the XML companion files and the EBNF was modified to include updated object behavior and reference to the XML companion file.

4.4.4 *Profile*

Run length encoding for both the Bitonal and Tile elements were removed from the deprecated list based on discussions. A question on whether deprecating sRGB as a color model was raised. Benoit will research.

4.4.5 *XML companion file*

A proposal on reorganizing the material was made by Franck and approved by the committee.

4.4.6 *DOM*

A reorganization clarification of the material was discussed and approved. Benoit raised an issue of dealing with string lists and he will propose a solution.

4.5 Approval of CD draft with contingencies

The committee held a ballot to approve publishing of the CD with revisions made based on decisions made during the committee review and initiate and formal public review within OASIS. The results of the ballot were as follows:

ITEDO - Yes

Ematek - Yes

Henderson Analytic LLC- Yes

Airbus - Yes

MoD UK - Yes

Larson Software Technology - Yes

Boeing - Yes

4.6 User guide for interoperability project

The use of the word “bug” to mean interoperability issue was discussed and a decision was made to replace it with “interoperability trouble report”. “Interoperability trouble report” will be used in titles and later referred to as “report” in menus. The tool and screen shots will be updated by Franck and provided to Lofton. Lofton will change the user manual and will work with OASIS web crew to put the user guide on the CGM Open web pages in the appropriate style

4.7 S1000D alignment

The S1000D CGM profile will be cascaded from WebCGM 1.0 in S1000D 2.2. Alignment with the ATA profile will occur when WebCGM 2.0 is published, probably in S1000D 2.3.

Peter Zimmermann presented an overview of the S1000D hotspot and xref mechanisms. The hotspot mechanism will remain in S1000D, but alignment with the WebCGM DOM and XML companion file will be documented as an “on the fly” generation during presentation. The issue the came up was the

referencing of figure containers in the xref mechanism to APS name attributes within sheets (or CGM files). The group will continue to work on resolving this issue.

4.8 WebCGM 2.0 test suite

4.8.1 Review of example

Ulrich provided an example test for the WebCGMPicture Interface. Ulrich also provided a proposed set of tests that might be addressed with his example. Ulrich's list lead to the creation of a plan for test suite development.

Benoit provided an example of a test that included application of an XML companion file.

4.8.2 Test suite requirements

Potential test files supplied by Boeing, Airbus, and ITEDO were reviewed. It was agreed that these files would supply a good set of initial files for the test suite.

4.8.3 Test suite development

A complete set of tests was defined for the WebCGM 2.0 test suite.

4.8.3.1 Test Page for Interface WebCGMPicture

The following buttons and associated actions should be present:

pictid: button (retrieves Picture ID in message box)

width/height: button (retrieves image width/height)

add/remove event listener: button, subsequently click into the viewer window to prove the existence or non-existence of event listeners. This should be a very simple test concerning events. For a full test of available events, see below.

getAppStructureById & highlight: button (highlights one specific APS)

getAppStructuresByName & highlight: button (highlights a number of specific APS)

reloadPicture: button (forces reloading of previously changed image, possibly by reloading after highlighting an object)

Issue: test for applyCompanionFile (probably separate test case)

4.8.3.2 Test Page for WebCGMStringList

The following buttons and associated actions should be present:

createStringList: button to create a string list and display count

appendItem: button to append 2 items to a string list and display count

item: button to get item and displays what was appended & display count

removeItem: button to remove item from string list and display count

clear: button to clear string list and verify display count is zero

4.8.3.3 Test Page for WebCGMNodeList

The following buttons and associated actions should be present:

getNodeList: button to get a list of children and display count

appendItem: button to append an item to a node list and display count

item: button to get item and display item and display count

removeItem: button to remove item from node list and display count

4.8.3.4 Test Page for set/clear style attribute functions of picture interface

At the picture level all functions will test relative value settings. The following buttons and associated actions should be present:

Background-color: button to control background color

Stroke: button to test stroke color and stroke weight

Text: button to test character height, text font, and text color

Raster-Intensity: button to test relative raster intensity

Picture-Intensity: button to test relative intensity of the picture

Visibility: button for picture visibility

Fill-color: button to test setting fill color on object with interior style attribute set to something other than empty – need to test empty to assure that it is not filled

Additive: button to test that application of style are not additive

4.8.3.5 Test Page for set/clear style attribute functions of APS interface

At the APS level all functions will test absolute value settings as applicable. The following buttons and associated actions should be present:

Background-color: button to control background color

Stroke: button to test stroke color and stroke weight

Text: button to test character height, text font, and text color

Raster-Intensity: button to test relative raster intensity

APS-Intensity: button to test relative intensity of the APS

Visibility: button for APS visibility

Fill-color: button to test setting fill color on object with interior style attribute set to something other than empty – need to test empty to assure that it is not filled

Additive: button to test that application of style are not additive

4.8.3.6 Test Page for set/clear combinations of style attribute functions

TBD

4.8.3.7 Test Page for Interface WebCGMNode - PictureNode

The following buttons and associated actions should be present:

nodeName/nodeValue/nodeType: button displays results

parentNode/ownerPicture: button displays results

hasChildNodes/childNodes: button displays results

firstChild/lastChild: button displays results

previousSibling/nextSibling: button displays results

hasAttributes/attributes: button displays results

namespaceURI/prefix/localName: button displays results

4.8.3.8 Test Page for Interface WebCGMNode - AppStructureNode

The following buttons and associated actions should be present:

nodeName/nodeValue/nodeType: button displays results

parentNode/ownerPicture: button displays results
hasChildNodes/childNodes: button displays results
firstChild/lastChild: button displays results
previousSibling/nextSibling: button displays results
hasAttributes/attributes: button displays results
namespaceURI/prefix/localName: button displays results

4.8.3.9 Test Page for Interface WebCGMNode – XMLMetadataNode

This test requires an applied XML companion file. The following buttons and associated actions should be present:

nodeName/nodeValue/nodeType: button displays results
parentNode/ownerPicture: button displays results
hasChildNodes/childNodes: button displays results
firstChild/lastChild: button displays results
previousSibling/nextSibling: button displays results
hasAttributes/attributes: button displays results
namespaceURI/prefix/localName: button displays results

4.8.3.10 Test Page for Interface WebCGMNode – TextNode

The following buttons and associated actions should be present:

nodeName/nodeValue/nodeType: button displays results
parentNode/ownerPicture: button displays results
hasChildNodes/childNodes: button displays results
firstChild/lastChild: button displays results
previousSibling/nextSibling: button displays results
hasAttributes/attributes: button displays results
namespaceURI/prefix/localName: button displays results

4.8.3.11 Test Page for Interface WebCGMNode – AttrNode

The following buttons and associated actions should be present:

nodeName/nodeValue/nodeType: button displays results
parentNode/ownerPicture: button displays results
hasChildNodes/childNodes: button displays results
firstChild/lastChild: button displays results
previousSibling/nextSibling: button displays results
hasAttributes/attributes: button displays results
namespaceURI/prefix/localName: button displays results
WebCGMAttr: button to test WebCGMAttr interface

4.8.3.12 Test Page for Interface WebCGMNode (NS)

This test case will require the application of an XML companion file with namespace content. These tests should not only be targeting grobject, but also include para and subpara objects. The following buttons and associated actions should be present:

hasAttributesNS: button displays results

getAttributesNS: button displays results

setAttributesNS: button displays results

getElementsByTagNameNS: button displays results

4.8.3.13 Test Page for WebCGMAppStructure – content

The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.14 Test Page for WebCGMAppStructure – interactivity

Test file should have a gmode within an APS to validate inheritance. The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.15 Test Page for WebCGMAppStructure – layerdesc

The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.16 Test Page for WebCGMAppStructure – layername

The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.17 Test Page for WebCGMAppStructure – linkuri

The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.18 Test Page for WebCGMAppStructure – name

The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.19 Test Page for WebCGMAppStructure – region

The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.20 Test Page for WebCGMAppStructure – screentip

The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.21 Test Page for WebCGMAppStructure – viewcontext

The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.22 Test Page for WebCGMAppStructure – visibility

Test file should have a gnode within an APS to validate inheritance. The following buttons and associated actions should be present:

getAppStructureAttr(1): button to get initial state of attribute from CGM file

setAppStructureAttr(1): button to set new value

setAppStructureAttr(2): button to set and existing value

getAppStructureAttr(2): button to get current state of attribute after being set from CGM file

removeAppStructureAttr: button to remove attribute

4.8.3.23 Test Page for Interface WebCGMEvent

This is a highly interactive test page. An Add/Remove Event Handler button makes sense though (perform test w/o event handler installed). The interactive tests should cover the following steps while launching message boxes (or executing link & pan operations) with the information as specified in brackets:

target: click on a specific APS (retrieves APS ID)

clientX/Y: click on a specific position in viewer window (retrieves X/Y position)

Repeatedly go through the two steps above with the following additional parameters enabled:

button: in addition to information above, indicates mouse button pressed

ctrlKey: according to button

shiftKey: according to button

altKey: according to button

metaKey (a specific one): according to button

numPressed (simulate double click): according to button

preventDefault: button to call preventDefault to disable hyperlinking

4.8.3.24 Need also to test gnode with interactivity="off".

4.8.4 Assignments

Each of the tests defined were assigned to TC members for creation and submittal. See the action item list for individual assignments. In addition, the following members were teamed to provide a review of each test:

Stuart/Benoit

Franck/Ulrich

Lofton/Don

Forrest/Dave

4.9 Implementation status

ITEDO – 75% to 80%

Ematek – 65% to 70% without XML companion file

Larson Software Technology – 10% to 15% - expect to apply resources 3rd quarter

SDI – no report

Auto-trol – no report on authoring support

5 Note of appreciation

CGM Open WebCGM TC would like to express our thanks to ITEDO for arranging the meeting and for both EADS and ITEDO for arranging an event