CGM OPEN ACTIVITY REPORT — 2000
PARIS TECHNICAL WORKING GROUP

Revision: 1.0-draft

Date: November 30, 2000

Preface

This report describes activities of CGM Open Technical Committee meeting held on September 21, 2000 in Paris.

Table of Contents

1   Meeting Details

1.1   Location and Dates

Paris France, 21 September 2000

1.2   Meetings

- CGM Open Technical Committee 21 September 2000.

1.3   CGM Open Attendees

- Dave Cruikshank – Boeing (Chief Technical Officer)
- Dieter Weidenbruck - ITEDO
- Forrest Carpenter – System Development, Inc.
- Franck Duluc – Aerospatiale Matra Airbus
- Ty Bartosh - Jeppesen
- Lynn Galiger - Boeing
- Gilles Touboul (observing)

2   Agenda

2.1   Technical Committee

The items on the agenda of the Technical Committee include:

- Activities Review
- Final report on # issue with IE
- Disposition of # issue with NN
- WebCGM 2.0 requirements
- XML encoding of CGM project
- Project plan for CGM DOM
- WebCGM test suite and assessment

3   Output and Action Items

Item	Who	When	Status
Meeting Minutes	Cruikshank	9/30	Done
Migrate CGM Open web site to OASIS	Henderson	12/4	In work
Migrate CGM Open from affiliate status to member section status with OASIS	BOD (Henderson)	??	In Work
Early start on XML 2001 Graphics Track	Weidenbruck /Rosenthal?	??	In work

Legal notices for IE BHO	Cruikshank	11/5	Done
XML encoding model of CGM	Cruikshank	??	In work
CGM DOM	Weidenbruck /Henderson	??	In work
Create test suite for WebCGM	Henderson	??	In Work
Forward CGM Defect wording on NUBS/NURBS	Cruikshank to ??	??	—

4 Activity Reports

4.1 Technical

Dave Cruikshank led the technical discussions.

4.1.1 Activity Review

4.1.1.1 CGM Open Web Site

The CGM Open Web Site will be migrated to the OASIS Web Site. Lofton Henderson is doing coordination of that effort.

4.1.1.2 Oasis Member Section Status

Cgm Open will become a member section of OASIS. Lofton Henderson is coordinating with OASIS to migrate CGM Open from an affiliate member to a member section.

4.1.1.3 WebCGM Video

Production of the video has not yet occurred. XEROX is still committed to provide production facilities and Auto-trol has developed the script and necessary files.

4.1.1.4 XML 2000 Conference Graphics Track

At the XML 2000 Conference in Washington DC, CGM Open will be giving a full day tutorial on WebCGM in addition to sponsoring the graphics track. The graphics track is scheduled for a half day, but is expected to expand to a full day with the addition of additional presentations.

4.1.2 Final report on # issue with IE

A browser helper object (BHO) has been developed to resolve the problem with the use of the "#" in fragment addressing for IE. ITEDO sent a developer to the Microsoft campus to spend a week working with MS developers in order to finalize the BHO. In the longer term Microsoft will implement the fragment handling directly into IE, eliminating the need for the BHO.

The BHO is based on ActiveX. All navigation events within IE are examined and those events dealing with CGM are additionally examined for fragments. If there is no fragment, control is passed back to the browser. If there is a fragment, the fragment is stored and control is returned to IE. When the CGM viewer is called a check is made for a stored fragment before the navigation is executed. In the frame environment when a viewer instance exists, the BHO will contact the viewer directly rather than launching a new instance. The architecture requires an addition interface in order to be called directly by the BHO.

The BHO will be placed under configuration control by CGM Open and the appropriate copyright and disclaimer language needs to be developed for legal purposes. Dave Cruikshank will work with OASIS to provide the legal wording.

The development of this BHO is an indication of the kind of success that can occur in a consortium when all the participants cooperate towards a common solution. Lofton Henderson will work with OASIS to produce a press release detailing this work.

4.1.3 Disposition of # issue with NN

Preliminary testing with Netscape indicates that NN 4.73 works correctly with the "#" in fragment addressing. Testing with NN 6.0 has not been completed, since no one has been able to get NN 6.0 to launch a CGM viewer yet. A bug report has been entered into the NN system and coordination with the SVG group has taken place.

This is an important issue for Boeing, who would like the functionality to work with both IE and NN. Airbus currently prefers NN, while EADS primarily uses IE.

4.1.4 WebCGM 2.0 requirements

Need to make NUBS and NURBS permitted in the next version of WebCGM. WebCGM will lack support from CAD vendors if these elements are not permitted.

System Development, Inc. indicated a desire to put protection region into WebCGM 2.0. They have identified a requirement for clipping based on a polygon rather than a rectangle. Shielding via a filled polygon will not satisfy this requirement.

There was a discussion of a generic "group" object that is used just for grouping graphical primitives with no WebCGM hotspot functionality. With the introduction of an XML companion file, such an object would not require additional communication to check for the existence of a linkuri externally.

4.1.5 XML encoding of CGM project

The general approach to developing an XML encoding of CGM is to collect all the graphical primitive elements and analyze the attribute and control elements that affect them. We need to determine whether the concept of the "continued" APS has an effect on doing an XML encoding. There is a question whether this activity is merely an interesting academic exercise. It was noted that, although SVG was written in XML to promote inline graphics, all implementations are plugins.

4.1.6 Project plan for CGM DOM

Dieter and Lofton have not had a chance to get together and work on this activity. Historically there were talks devoted to this subject at XML Europe 1999 by Aerospatiale, Lofton, and Dieter. Those talks along with the SVG DOM are being considered in the creation of a "generic" graphics DOM. Discussions have taken place with W3C technical folks, and there is agreement that a generic approach to a graphics DOM is good. Work will continue, using the SVG DOM as a starting point.

4.1.7 WebCGM test suite and assessment

NIST was not available for this discussion, so it will be continued at a future time. Lofton has been tasked to put together a test suite for WebCGM and will be contacting members for contributions.