

**Preface**

This report describes activities of CGM Open meeting held on June 5 & 6, 2002 in Denver, Colorado at the Auto-trol facility.

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1 Meeting Details

1.1 Location and Dates
Auto-trol Technology, Denver, CO, June 5, 6, 2003

1.2 Meeting
- CGM Open 5-6 June 2003.

1.3 CGM Open Attendees
- Dave Cruikshank – Boeing
- Lofton Henderson – Lofton Henderson Consultant
- Dieter Weidenbruck – ITEDO
- Don Larson – Larson Software Technology
- Ulrich Laesche – Ematek
- Benoit Bezaire – Corel Corp
- Kevin O’Kane – Auto-trol
- Tim Horsch – Auto-trol

2 Agenda

2.1 CGM Open meeting
The items on the agenda of the CGMO meeting include:
- CGM Open governance & Bylaws
- Product/interoperability web pages
- Proposed Navy XML-coded CGM
- WebCGM DOM Core
- WebCGM DOM Events
- WebCGM DOM Style

3 Output and Action Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Who</th>
<th>When</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting Minutes</td>
<td>Cruikshank</td>
<td>6/20</td>
<td>Done</td>
</tr>
<tr>
<td>Governance Actions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Circulate changes to bylaws</td>
<td>Henderson</td>
<td>8/1</td>
<td>In-work</td>
</tr>
<tr>
<td>Product/interoperability Web Pages Actions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check with Franck on status of problem tracker</td>
<td>Cruikshank</td>
<td>6/20</td>
<td></td>
</tr>
</tbody>
</table>
4 Agenda discussions

4.1 CGM Open governance & Bylaws
A governance meeting took place in London XML Europe 2003 in May. Present were Lofton, Dieter, and Dave. The governance structure of CGM Open will transition to a CEO plus two advisors. In addition, the voting process for approval of proposals will be modified. In order to do this the bylaws will be modified and approved by the membership. Lofton will submit proposed changes to the bylaws to the general membership for a vote in August.

4.2 Product/interoperability web pages
During a review of the links from the WebCGM product pages, several were found to be broken or pointing to the incorrect Implementation Conformance Statement (ICS). Lofton documented all irregularities and distributed them to the appropriate vendors. Lofton will begin updating the web pages on June 30, so vendors have until June 27 to provide Lofton with the corrected link. Those vendors that fail to meet the June 27 date will have that product removed from the product list until the next scheduled update.

Lofton will replace the category “filters/transcoders” with “filters/converters” throughout the web pages. Proposed changes to the ICS formats include restructuring the viewer ICS to include tables at the level of the test files and restructuring the editor ICS to replace the initial implementation question with a multi-row table asking specifically about interpreter/generator capabilities and the V4 preservation. Lofton will update the viewer ICS. Kevin will update the editor ICS and forward to Lofton.

4.3 Proposed Navy XML-coded CGM
CGM Open received an updated proposal on XML encoding of WebCGM from John Junod representing the Navy. XML encoding of WebCGM does not address the validation issue, since neither XML or XML Schema can enforce rules as complex as exist in the CGM standard. The interest
in XML encoding of CGM appears to be primarily driven by a desire to generate web graphics in XML. CGM Open will continue to investigate this matter.

## 4.4 WebCGM DOM

Based on the work done with analyzing the DOM Core, DOM Events, and DOM Style, Dave will create a draft WebCGM DOM modeled after the SVG DOM and circulate for review.

### 4.4.1 WebCGM DOM Core

The following DOM Core interface functions/attributes were identified for use in a DOM for WebCGM:

- **Document level (picture level) functions required**
  - `getElementsByID`
  - `getElementsByTagName`
  - `getElementsByAttributeNameValue` (This function is not currently available, but there is discussion within the W3C DOM Core activity to add it)

- **Element level (APS level) functions required**
  - `getAttribute`
  - `hasAttribute`
  - `removeAttribute`
  - `setAttribute`

- **Node level (APS level) attributes required**
  - `childNodes`
  - `firstChild`
  - `lastChild`
  - `nextSibling`
  - `parentNode`

### 4.4.2 WebCGM DOM Events

Don reviewed the W3C DOM events and identified those required by the WebCGM DOM events.

<table>
<thead>
<tr>
<th>Event name</th>
<th>Description</th>
<th>Event attribute name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>click</strong></td>
<td>Occurs when the pointing device button is clicked over an APS. A click is defined as a mousedown and mouseup over the same screen location. The sequence of these events is: mousedown, mouseup, click. If multiple clicks occur at the same screen location, the sequence repeats with the <code>detail</code> attribute incrementing with each repetition.</td>
<td><code>onclick</code></td>
</tr>
<tr>
<td><strong>mousedown</strong></td>
<td>Occurs when the pointing device button is pressed.</td>
<td><code>onmousedown</code></td>
</tr>
<tr>
<td><strong>mouseup</strong></td>
<td>Occurs when the pointing device button is released.</td>
<td><code>onmouseup</code></td>
</tr>
<tr>
<td><strong>mouseover</strong></td>
<td>Occurs when the pointing device is moved onto an APS.</td>
<td><code>onmouseover</code></td>
</tr>
<tr>
<td><strong>mousemove</strong></td>
<td>Occurs when the pointing device is moved.</td>
<td><code>onmousemove</code></td>
</tr>
<tr>
<td><strong>mouseout</strong></td>
<td>Occurs when the pointing device is moved away from an APS.</td>
<td><code>onmouseout</code></td>
</tr>
<tr>
<td><strong>CGMLoad</strong></td>
<td>The event is triggered at the point at which the user <em><strong>agent has fully parsed the CGM and</strong></em> is ready to act appropriately upon that CGM, such as being ready to render the element to the target device.</td>
<td><code>onload</code></td>
</tr>
<tr>
<td><strong>CGMUnload</strong></td>
<td>The unload event occurs when the DOM implementation</td>
<td><code>onunload</code></td>
</tr>
</tbody>
</table>
removes a document from a window or frame.

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
<th>Event Handler</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGMAbort</td>
<td>The abort event occurs when loading is stopped before an element has been allowed to load completely.</td>
<td>onabort</td>
</tr>
<tr>
<td>CGMError</td>
<td>The error event occurs when an element does not load properly or when an error occurs during script execution.</td>
<td>onerror</td>
</tr>
<tr>
<td>CGMResize</td>
<td>Occurs when a document view is being resized. This event is dispatched after the resize operation has taken place.</td>
<td>onresize</td>
</tr>
<tr>
<td>CGMScroll</td>
<td>Occurs when a document view is being shifted along the X or Y or both axis, either through a direct user interaction or any change on the 'Viewport' property available on CGM interface. This event is dispatched after the shift modification has taken place.</td>
<td>onscroll</td>
</tr>
<tr>
<td>CGMZoom</td>
<td>Occurs when the zoom level of a document view is being changed, either through a direct user interaction or any change to the 'Viewport' property available on CGM Element interface. This event is dispatched after the zoom level modification has taken place.</td>
<td>onzoom</td>
</tr>
</tbody>
</table>

4.4.3 WebCGM DOM Style

A decision was made to address the issue for the WEB CGM DOM style by making use of the DOM Core functions to get/set attributes.

4.5 Miscellaneous

4.5.1 XML 2003

Lofton and Dieter will resubmit their XML Europe paper entitled “Applicability of WebCGM versus SVG for Technical Graphics”. In addition, Lofton will present the paper at the SVG Open conference in July. The possibility of using a vendor demo slot to demonstrate the interoperability problem tracker was discussed. Dave will discuss this with Franck.

4.5.2 Interoperability problem tracker

In the last telecon requirements were finalized for the public interface. Franck will provide a status of this work and an indication of when we can make the problem tracker available to the membership.

5 Note of appreciation

CGM Open would like to express our thanks to Auto-trol for hosting and providing the facilities for this meeting.