GISB FTTF

June 1 - 2, 1998

Duke Energy, Houston, TX

Call To Order

Susan Croley, Chairperson of the Future Technology Task Force (FTTF), call the meeting to order at 1:10 PM, on June 1, 1998, at Duke Energy in Houston, TX.

Welcome

Susan Croley welcomed the FTTF to Duke Energy.

Antitrust

Susan Croley read the GISB antitrust statement.

Minutes

Mike Shahan, from CNG, volunteered to take the minutes of the meeting.

Agenda

ON MOTION, the printed agenda was adopted.

Introductions

The participants in the room introduced themselves. See attached attendance list.

Minutes From Previous Meeting

The minutes from the April 24, 1998 meeting were reviewed.

Steve Hinton submitted several changes to the minutes -- see written changes as submitted. Susan Croley asked that the proper companies be recorded for two of the participants. ON MOTION the minutes were approved as corrected. Pete Whatley will incorporate the changes and produce a corrected copy of the minutes.

Our Directive

The EC, through the Internet Transition Team, must formulate a plan of action to transition current EBBs to the Internet. XML has been suggested as a possible technology to use. The FTTF is going to provide a report on XML/EDI stating the group's findings from research on XML and how it might be used in the industry.

There was discussion as to the purpose of our task. Some expressed concerns that there are too many unknowns at this point to talk about specific technologies. Susan Croley answered that we are only defining a technology for the business groups within GISB.

Further Discussion

It was noted by several participants that the company who proposed XML to the EC was not in attendance and therefore we could not hear from them on their proposal to use XML.

Proposed Report Outline

Susan presented a proposed outline for our report on XML.

I. Executive Summary
II. Definition of XML
III. Standards Development in Progress
IV. Related Standards
V. Products that Support XML
VI. Potential Applications for the Gas Industry
VII. Conclusions

It was noted that you would not need a X12 translator for XML/EDI. The DTD would act as the translator. Transcapacity did not agree with this stating that pipelines are required to use a X12 translator. It was clarified that we are not addressing FERC order 587-G, but technology, and you would not need the translator with XML.

Report Section II - Definition

The following were extracted from web documents brought to the meeting:

XML (Extensible Markup Language), like HTML (Hyper Text Markup Language), is a subset of SGML (Standard Generalized Markup Language).

The World Wide Web Consortium (W3C) has created an SGML

Most documents on the web are stored and transmitted in HTML. HTML is a simple language well suited for hypertext, multimedia, and the display of small and reasonably simple documents. HTML is based on SGML (Standard Generalized Markup Language, ISO 889), a standard system for defining and using documents formats.

The goal of SGML is to enable the delivery of self-describing data structures of arbitrary depth and complexity to applications that requires such structures. XML (Extensible Markup Language) is the first phase of an effort to simplify SGML. This subset retains the key SGML advantages of extensibility, structure, and validation in a language that is designed to be vastly easier to learn, use, and implement than full SGML.

XML differs from HTML in three major respects:

1. Information providers can define new tag and attribute names at will.
2. Document structures can be nested to any level of complexity.
3. Any XML document can contain an optional description of its grammar for use by applications that need to perform structural validation.

Our definition:

The goal of SGML is to enable the delivery of self-describing data structures to applications over the Internet. HTML is based on SGML (Standard Generalized Markup Language, ISO 889), a standard system for defining and using document formats. XML (Extensible Markup Language) is a subset of SGML. This subset retains the key SGML

advantages of extensibility, structure, and validation in a language that is designed to be vastly easier to learn, use, and implement than full SGML.

XML differs from HTML in three major respects:
1. XML allows information providers to define new tag and attribute names at will
2. In XML, document structures can be nested to any level of complexity.
3. Any XML document can contain an optional description of its grammar for use by applications that need to perform structural validation

XML is a meta-language for creating other markup languages. Unlike HTML, XML allows you to define the usage of tags. Use of standardized DTDs (Document Type Definition). The DTD defines the elements, their order, the relationship between elements, and processing of the elements.

Report Section III - Standards Development

XML is a subset of ISO's SGML developed by the World Wide Web consortium (W3C) SGML on the Web working party during the latter half of 1996 and early 1997. The formal recommendation for XML 1.0 was submitted for approval by W3C members on February 10, 1998. It has not yet been adopted as a standard.

At present the forms handling characteristics of XML are yet to be fully agreed (agreement is expected during 1998).

XML/EDI isn't creating a new standard. XML/EDI is defining how companies can use current standards to solve their business problems. (this sentence may be moved elsewhere later)

Many industry groups are currently developing standards for XML documents specific to their industry. For example, the Open Molecule Foundation is currently developing Chemical Markup Language (CML) for chemistry and molecular data encoding.

Products Supporting XML

Browsers: Microsoft has already shipped partial XML support in Internet Explorer 4.0 and they are likely to expand their XML functionality in a further release. Netscape will potentially support XML in the 1998 version of Communicator.

X12 Translators: Various X12 suppliers have announced plans to support XML. Some as soon as the end of 1998.

Web Servers: Currently, the various web server vendors have plans to release versions of their products that support XML.

Adjourned

ON MOTION, the meeting was adjourned until 9:00 tomorrow morning.

Meeting Resumes

On June 2, 1998, the FTTF reconvened at 9:05 am at Duke Energy in Houston, TX at the call of the Chairperson, Susan Croley.

Antitrust

Susan Croley reminded the group of the Antitrust guidelines that were reviewed yesterday.

Products Supporting XML (continued)

XML Editors: Various vendors are currently offering authoring tools for XML or have announced development of such tools.

Issues to be considered

- Interactive access of gas information for transactional and non-transactional data
- Low entry cost for users (packages readily available)
- Delivery date (June 1, 1999)
  - availability of browsers
  - availability of servers
  - availability of knowledgeable and experienced of resources (both internally or externally)
  - availability of software development kits
  - prototype/pilot test
  - availability of third-party providers
- standardized look and feel
- definition rigor of conformity
- back-end processing support
- end user data formats for downloading information
- security and non-repudiation
- use of the public Internet
- coexistence/comparability with batch
  - There was a long discussion about comparability and that perhaps instead of always taking the viewpoint that pipes must make their systems slower and dumber to compare to 3rd party systems, perhaps we should look to 3rd party systems to be responsible to find ways to compete at the higher level currently being offered to customers of the gas industry. It was noted that this group should evaluate technology and make recommendations that are best and allow other groups to address the comparability issue.

Potential Application of XML in the Gas Industry

NOTE: Most, if not all of the following would require major enhancements, if not total rewrites, to front-end and back-end systems. We are not assessing this impact, we are only listing potential uses of XML without addressing the feasibility of the idea or related issues. The FTTF is not currently advocating any of these potential uses!

XML would allow you to create a standard interchange file of which X12 could be one of the formats. Translator vendors will probably have support for these various formats.

- Could be used as an alternative to X12
  - Could be used as a front end to X12
  - Could eliminate the need for an X12 translator
- Could be used as an alternative to HTML
- The structure of XML allows the same file to be used for interactive presentation (web page) and batch processing.

XML for Presentation Format Only

In this implementation, the industry would define standard web page layouts (look & feel). However, this is limiting the power of XML and has few advantages over HTML.

XML for user-defined presentation

The flexibility is placed in the hands of the user to customize their XML presentations. So in theory, a SR could develop their own forms to access multiple TSPs. This would require the underlying industry data structures to be standardized.

XML for EDI

Industry standard DTDs could be defined to use the current GISB defined X12 standard documents. Efforts are currently underway by the XML/EDI Group to define DTDs for ANSI X12 documents. An advantage of using ANSI X12 formats is to leverage those processes already in place.

Another way to utilize DTDs would be to develop new standard document formats for the industry. This would allow more flexibility for flexibility for the Gas Industry to develop standard document formats specific to their needs.

Conclusions

Although XML has future potential, it is still an immature product. Until XML standards have been refined and products are commercially available and widely accepted, the Gas Industry should not consider it as an alternative at this time.

XML has a lot of potential and GISB should monitor the maturing of the technology for future applications.

Implementing XML would require the development of standards as well as programming. These would not be trivial tasks and would take a considerable amount of time by industry participants.

Given the maturity of the technology and the effort required to develop standards and compliant systems, a June 1, 1999 implementation would not be feasible.

It would be premature to select any particular technology on which to standardize prior to defining and developing business requirements.

Correction to XML Status

Andy Sicignano reported that he had done more research on the status of the XML standard and found that W3C had recommended it, which is the highest status given by W3C.

Executive Summary

The following are points we want included in the executive summary:

- XML is a technology that has been promoted as a possible web-enabled solution for electronic commerce in Gas Industry.
- This paper is not intended to either promote or dissuade the use of XML.
- XML has future potential but is still immature.
- As with any technology, XML's value and benefits to the Gas Industry are uncertain until business requirements are defined.
- It would not be feasible to implement an XML industry solution by June 1, 1999.

Report

Steve Hinton volunteered to put the draft report together based on these minutes and the documents generated during this meeting. Susan Croley will draft the executive summary. The report will be posted on GISB's home page and a continuation of this meeting via teleconference will be held on Monday, June 8, 1998 at 2 PM CST to review and edit the draft report.

Next Meeting

A tentative date of Monday, August 17, 1998, was set as the next meeting of the FTTF. George Heal will find a host in Calgary.

Adjournment

The meeting was adjourned to reconvene Monday, June 8, 1998, at 2:00 PM CST via teleconference.

Respectfully submitted,
Michael Shahan

Attendees:

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* first day only

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