



RIXML.org

Quarterly Update

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RIXML Standards Committee



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Highlights from the September Meeting

As Summer gave way to Autumn, the RIXML membership came together for our regular quarterly meeting hosted by Thomson Reuters downtown near the new, dramatic WTC Transportation Hub. Designed by Santiago Calatrava, the Oculus atop the Hub offered a sweeping flourish to inspire our agenda.



Our featured speaker, Fabrice Bouland of Alphametry, presented “Revolution in Investment Research: A Look at Economic, Digital & Regulatory Changes”.



Derived from many recent interviews with both analysts and asset managers, the perspectives highlighted in the presentation questioned the state of Equity Research as an industry in trouble. Shrinking revenues, content dispersion, and supply issues all challenge the industry to adapt and evolve. However, regional opportunities, new strategies, data-driven methods, industrialized procurement, and deeper integration all offer possibilities toward expanding the Research universe.

From there, the discussion covered unbundling and the broader regulatory journey toward separation from execution and Research spending transparency. Our thanks again to Fabrice for his insightful presentation, and to Thomson Reuters for hosting.

New Member

Jack Roehrig announced our newest member: BCA Research is an Independent Research provider headquartered in Montreal, with offices around the globe. “BCA Research is proud to join RIXML.org” said Paul Chow, Director of Information Technology. “The ever-increasing amount of available investment research makes it critical to ensure more effective targeting, personalization, and overall usability are present in all forms of research dissemination. We are excited and eager to participate with other members in shaping the future of research distribution.”



Emerging Technology

Mark Daniels of Thomson Reuters led two calls for our Emerging Technology work stream since our last Quarterly Meeting – on November 6th And December 4th. (The October and January Emerging Tech calls were canceled due to the proximity with the September quarterly meeting and the New Years Day holiday, respectively.) The group also met for an in-person workshop on November 17th at Citi in New York.

The Emerging Tech calls prepared for and followed-up on the topics covered in the Workshop. The Link-Back conversation has reached entitlement synchronization and API standards across publishers and aggregation vendors. The Componentization effort is progressing along the Pilot Program and also taking a second look at RDFa.

Componentization

Based on recent work, Richard Brandt added a new page to our Wiki called “Pilot Specification” and populated it with objectives and a structure for the Pilot Program for RIXML Componentization.

<i>Objectives</i>	<i>Structure</i>
<ul style="list-style-type: none">• Value to buy-side consumers: What will Componentization deliver that can be leveraged to incrementally elevate the Research experience?• Implications to producers: What best practices should producers adopt to enable the value chain?• Opportunity for products that serve the buy-side: How can buy-side applications (vendor or proprietary) use componentization to add value?	<ul style="list-style-type: none">• Sample content (need sources)• Hosting• Accessibility/security• Product online upload interface: RIXML, PDF, HTML5, XML• Manual report loading: RIXML, HTML5, XML• XML schema• HTML5 schema• RIXML base requirements• Spot Tag syntax (folksonomy): RIXML context, not so much social media context• Lifecycle syntax: attributes for actions• Use-cases: component types, UI (i.e. light box), component comparison, search, ratings, valuation survey, year ahead, morning call, etc.

The Componentization working group discussed progress and plans during an October 15th call. We resolved to focus on the descriptive rather than the proscriptive, and attempt to pursue the objectives in that manner. The call resulted in some specific task assignments, as follows:

1. Assemble samples from the list of free sources compiled earlier in the year.
2. Tag the samples with component type labels as described in our Guidelines.

Recall that the team from Moody’s Analytics had proposed augmenting our component tagging with lifecycle attributes, such as unique component IDs, publication actions, date/time stamps, primary indicators, sequence numbers, and cardinality information. We dug further into this proposal via an in-person meeting at Moody’s World Trade Center location on October 9th and found some promising possibilities. Work on the Pilot Program, including the lifecycle attributes, flowed naturally into our subsequent Tech Workshop.

Tech Workshop

Citi hosted our November 17th Tech Workshop down on Greenwich Street. We followed the agenda outlined below.

During the part of the Workshop about Link-Back, we reviewed ideas about IAM, entitlement synchronization and API standards. The discussion of entitlement synchronization raised several questions. How are unique identifiers initially set up for a given user? Once stored for each channel in a broker database, how are they updated and regularly synchronized? Standardizing an API for this purpose would involve user attribute definitions, IAM data storage, and action definitions. Handshake specifications would need to cover message definitions, acknowledgements, credential conflict resolution, firm-level vs. user-level issues, data privacy provisions, and more.

Agenda

- Link-Back Landscape
 - Entitlement Synchronization
 - Entitlement API Standards
 - Link-Back for PDF/Print/Offline vs. HTML/Online
 - Componentization
 - Expectations
 - Near Term Deliverables
 - Pilot Program
 - Tech Topics "On the Horizon"
 - 2016 Goals & Deliverables
-

We've seen two different implementations for link generation, one from Citi and one from Thomson Reuters. Each builds a link (URL) up from constituent parts and yields dynamic references to remote content in a way that facilitates Link-Back.

Under the banner of workflow support, we talked about possibilities for handling PDF-based use-cases, such as batch printing and offline consumption. Citi agreed to itemize key workflows that they've identified during their own implementation of Link-Back. We're very grateful to Citi, and Sara Noble and Hammad Akbar, especially, for leading this effort and for their continued contributions on this topic.

Moving on to the Componentization part of the Workshop, Richard Brandt demonstrated progress along the plan for the RIXML Componentization Pilot Program. Having assembled two sample documents from Edison, he converted both to HTML5 and tagged one of them according to the RIXML Guidelines. The second is in progress. Richard also began to create a cloud-based showcase environment for further developing and displaying the desired use cases.

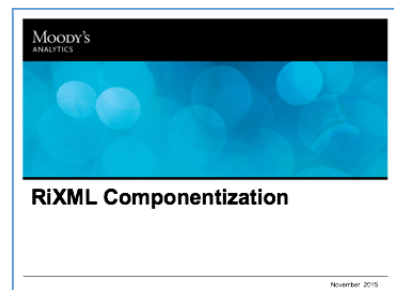
Also, the basic framework for the enhanced lifecycle attribute syntax we'd been discussing has been prototyped, as shown below:

```
<body>
  <article>
    <section
      title="Sample Section Title"
      data-rixml-sectionID="6171896a-b527-4219-9bf3-9cf0ce9c647e"
      data-rixml-sectionValue="sampleSectionValue"
      data-rixml-sectionName="Sample Section Name"
      data-rixml-action="new | update | delete"
      data-rixml-sectionDateTime="YYYY-MM-DDThh:mm:ssTZD"
      data-rixml-sectionRestriction="public | internal | client | other values..."
      data-rixml-sectionReference="parent:9c2bb5db-3d0d-4411-8342-
        a2ae050b925c;previous:e0d7c275-7577-4581-b0c5-0634fe02f861">
    </section>>
  </article>
</body>
```

Moody's Analytics put together some slides proposing a second look at RDFa for Componentization, with illustrative examples. We're grateful to Maribeth Martorana, Alex Shifrin, and John Armstrong for their initiative and thoughtful presentation.

Summary

- Currently, RIXML Componentization implementation is limited to HTML5. HTML5 is a legitimate option and has great adoption across different browsers and devices.



- Looking at other possibly more flexible options that work across different standards, including HTML5. The RIXML Componentization Guidance mentions exploring RDFa.
- Propose to look at RDFa as a complementary implementation for RIXML Components. RDFa provides flexibility to work with many XML based formats.

Benefits of RDFa for RIXML Components

- Decoupled from the Delivery Method
 - Publisher Independence – Publishers can inject RDFa Component tags in existing delivery formats.
 - Each publisher is able to continue using existing processes/delivery formats.
 - RDFa can easily be extracted and queried as structured data.
- Self Containment
 - Separate XML and HTML sections are not required for the same content.
 - RDFa would be inserted inline with content eliminating data duplication.
 - Consumption easier due to smaller file sizes.
- RDFa Can Evolve and Grow
 - RDFa models are extensible in terms of defining a structure for components.
 - RDFa is a complementary standard for current standards (e.g. HTML5) and future standards that may emerge.

2016 Objectives for the RIXML Organization

We're carrying forward our organizational objectives from 2015 into the new year. Our top focus areas will continue to be Componentization and the Link-Back Landscape. Both of these areas have gained traction and we look forward to greater progress in the coming weeks.

Componentization

Finalize and productize our documentation detailing the guidelines for componentization agreed by our Working Group. Complete a pilot program to illustrate and exercise our ideas.

Link-Back Landscape

With many research publishers broadening their platforms to embrace various forms of digital content delivery, issues around Identity & Access Management (IAM) and workflow support arise between publishers, consumers, and aggregators. RIXML will continue our conversations about how to add value in this space.

Areas for consideration in a future release of the RIXML core schema receive ongoing attention, so that we're prepared with our best ideas when the timing is right.

Social Media

Propose specific modifications to the RIXML schema to facilitate the inclusion of social media messages within both new and existing Research authoring and publishing platforms.

Side-Car Schemas

Explore the adoption of these schemas and evaluate meaningful updates and additions. (The release of RIXML schema version 2.4 in 2013 included a pair of "side-car" schemas intended for communicating analyst roster and coverage universe data.)

Spot Tags

Propose one or more specific solutions to address the need to avoid fragmentation of keywords in “breaking news” situations. RIXML should offer an easy method for research content publishers to tag new products with non-canonical keywords in a fashion consistent across publishers and in timeframes much shorter than the RIXML schema release cycle.

Identifying Authors and Documents

Discover opportunities to do a better job of uniquely and portably identifying authors and documents/products within RIXML. Further our relationships with ORCID and CrossRef.

And largely through our Emerging Technology work stream, the RIXML organization monitors new technology topics of importance to the Research marketplace. We try to keep our eyes and ears open for opportunities to add value by offering standardization ideas.

Big Data

Continue to monitor the opportunities for RIXML at the intersection of the Investment Research marketplace and the application of “Big Data” methods toward discovering actionable investment signals.

Happy New Year and Best Wishes for 2016!