

## **RETS Workgroup Meeting Minutes**

**August 2 – 3, 2006**

**Chicago, IL**

Minutes prepared by:

Gina Accawi,  
Kevin McQueen,  
Paul Stusiak

Additional minutes by:

Steve Verba,  
Paula O'Brien

### ***Final Agenda***

#### ***Wednesday, August 2<sup>nd</sup>***

##### **8:30 – 8:45**

- Opening Remarks and Agenda Review

##### **8:45 – 10:15**

- RETS2 Engineering work review

##### **10:30 – 12:00**

Track 1

- Transaction Payload Workgroup

Track 2

- Marketing Forum

##### **13:00 – 14:30**

Track 1

- Compliance Workgroup

Track 2

- Implementation Forum

##### **14:45 – 16:15**

- RETS2 Change Proposal Discussion
- RETS2 Voting

**16:15 - 16:45**

- Day 2 Wrap-up
- Next meeting announcement
- Interesting Applications

**16:45**

Adjourn

***Thursday, August 3<sup>rd</sup>***

**8:30 – 8:45**

- Opening Remarks and Agenda Review
- Related Standards Report

**8:45 – 10:15**

- Security Roadmap

**10:30 – 12:00**

Track 1

- Security Workgroup

Track 2

- Business Façade Forum

**13:00 – 14:30**

Track 1

- RETS2 Toolset Review

Track 2

- Listing Payload Workgroup

**14:30 – 14:45**

Wrap up

**14:45**

Adjourn

## Minutes

### *Day 2 - Wednesday, August 2, 2006*

#### **Opening Remarks** – Paul Stusiak

The opening remarks:

- Provided a summary of what has transpired over the last year.
- Paul suggested that people participate in Compliance. Attendees were reminded the community about the compliance re-certification process. Vendors, per the license agreement, need to re-certify their products. Many vendors have products that should be re-certified and should plan to do this at or before the December meeting.
- Mentioned that a new logo for RETS available. The logo package will need updating.
- Reminded attendees about the RETS2 vote later in the day. A request was made from the floor to change the vote date to tomorrow, Thursday. A show of hands indicated that several attendees would not be in attendance on Thursday and the voting time remained the same as in the agenda.
- Change the agenda. A show of hands indicated that the majority of the Transaction Vendor representatives would not be attending the Thursday session. The group as a whole agreed to move the Transaction Workgroup meeting to Wednesday and move the Toolset Review to Thursday to accommodate the attendees.
- Change the agenda. The Governance session was removed. It was reported to the group that not as much governance background work got done between the April meeting and the August meeting. The group agreed to remove the session from the agenda and table it until the next meeting.
- Change the agenda. Paul reminded the group that one of the goals of the RETS2 initiative was to make implementation simpler for more developers. The addition of security and web services, while making greater use of standards and available tool sets, will make the implementation more difficult for the corporate developer at the Brokerage and Agent level. Several strategies may be possible to address the additional complexity and these should be discussed. The Business Façade session was added on Thursday to discuss the known strategies and to see if there are other solutions that might solve this problem.
- Outline the work accomplished to date over the last year
  - The RETS2 Service Document has been created and revised several times
  - Initial Payloads, Vocabularies and Well-Known Resource names have been created
  - Extensive community feedback has been sought and given to improve the standard.
- Outline of the work to be done over the next trimester

- Continue the community involvement in the process
- Work on finalizing the payloads for TM and MLS
- Continue the work on Security
- Continue work on Compliance – both for RETS1 and RETS2
- Release the updated Reference Implementation for RETS2
- Finalize the RETS 1.7 document

#### **Action Items**

- Action – update the RETS logo package
- Action – Finalized RETS1.7 document for November 1.

## **RETS2 Engineering Review**

### ***History and Review***

#### **Steve Verba**

Steve discussed the goal of 2.0 in reference to supporting the real estate transaction space. He discussed the question of complexity in web services development, via description of training and toolsets. More support is available for developers working in that space. He alluded to the "Big API" or the business façade. The façade will be discussed in a later session.

RETS 1.x metadata is clever, not much adopted. There is a gap between RETS 1.x and the way the rest of the world are doing B2B. Most B2B space at this time is doing SOA, and looking into event driven architecture. He stated that we must keep RETS relevant, and not be orphaned. He encouraged the new people to participate in workgroups in concert with their particular background.

**Other related standards efforts:** RETS/MISMO W3C, OSCRE/PISCES OASIS

#### **ROADMAP**

- Make RETS more useful
- Easier to protect sensitive data
- Improve interoperability: MS/Java focus
- Reduce labor and learning curve
- Easier to use "off the shelf" dev tools
- Provide API to hide complexity

## ***Reference Implementation***

### **Paula O'Brien/Jeff Brush**

The RETS 2.0 framework bus was discussed. Future message transports may include FTP, SMTP and message queuing. The RETS manifest can carry any kind of payload.

The MTOM standard was briefly reviewed, covering the reasons for using it. The key point is to be able to stream large payloads today. The point was stressed that using MTOM means that content is base64 encoded.

The discussion encouraged utilizing SOA approach to development, and separation of concerns to avoid writing brittle code. Copies of the graphic, the “RETS2 Service Bus” were distributed to the group. Paula gathered a list of people active in the transaction space, wishing to participate in the later discussion.

The reference implementation is currently being updated. It will be on rets.org as soon as it is finished.

## **Transaction Payloads**

### **Paul Stusiak**

This session was a review of the collection of schemas available for managing transaction payloads. A suggestion was made and recognized to provide some implementation guides to assist in getting started. In addition, an in-person meeting to further work on the schemas will be scheduled in Los Angeles around the end of September. An agenda will be sent out, and attendance over the telephone will be possible for those who can't make it. Suggestions were made in the discussion to add schemas.

## **Marketing Workgroup**

### **KevinMcQueen**

This session was a continuation of prior discussion on the issues related to increasing adoptions and usage of RETS.

It began with some consideration of an Advisory group suggestion to develop a showcase of interesting broker/agent applications to illustrate the value of RETS to that audience (i.e. to generate a “pull” strategy). It was noted that NAR leadership had expressed recent interest in this initiative.

The discussion shifted to reason why RETS was not being made available at more MLS's. Two segments were discussed. 1.) MLS markets where the local MLS has access

to RETS server technology through their MLS vendor but has not chosen to implement RETS. 2.) MLS markets where the local MLS does not have access to a RETS capability through their MLS vendor.

In both cases, it was noted that data management concerns in general tended to be a problem that impacted any consideration for RETS. The suggestion was made that one or more dedicated fulltime sales person or evangelist be identified to approach such MLS and help them work through their concerns on how to manage data (i.e. to generate a “push” strategy). A “data management in a box” concept was discussed where all the templates and boilerplate materials (policies, forms, positions, checklist, etc.) would be developed to help such MLS’s implement what was needed. Several attendees of the workgroup indicated a willingness to share their own internal materials used with their own customers for assisting with data management issues. The process to assist was seen as possibly requiring many months. NAR was seen as the funding source for this type of effort (both sales person and related collateral).

For the case of MLS organizations without access to RETS Server technology from their vendors, it was suggested that NAR fund a service offering that would set up and manage RETS access for those MLS’s including all local data management policies. This service offering was envisioned as an ASP model where the local MLS did not have to hire staff or add servers.

There was a discussion on the relative merits of tackling one of these segments vs. the other. An argument was posed that tackling the MLS organizations who have access to RETS servers (but haven’t implemented) would be the most critical target, as these tend to be larger.

It was observed that similar ideas had been previously forwarded in marketing workgroup meetings and not implemented.

There was a concern expressed that such efforts would not be feasible with current RETS co-chairs and a new fulltime leader for RETS was needed.

The meeting ended after Mark Lesswing requested proposals from Greg Petch and KevinMcQueen for moving ahead on these issues directly, and indicated he was in a position to approve those proposals himself.

## **Compliance**

### **Mark Lesswing, Paul Stusiak and Steve Verba**

There was agreement that the 1.7 specification needs to be finalized and the 1.x family of standards going into maintenance mode. In addition, an arbitration process would be helpful for discussing controversial or unclear assertions. The suggestion was to have it

be an invisible or obviously authoritative figure to make the final decisions. Any such decisions need to be added to the compliance checker.

Concerns were raised from the floor as to the depth of the compliance checking tools; one suggested item to add was to verify that system names in the metadata do not have underscores.

Action - In any governance discussion, add the need for an arbitration committee or individual to the requirements.

Stuart Schuessler suggested allowing Paul Stusiak, Paula O'Brien and Jeff Brush to serve as the temporary home for this need until decision made otherwise. A suggested name is [compliance@rets.org](mailto:compliance@rets.org) as an email address for grievance reporting. All decisions should be noted in an available location to share the information with all RETS members. The RETS.org site should have a compliance section. Compliance tests can/should be run more often.

The group stated a desire to resolve the electronic voting procedure issues in order to keep items moving quickly in the time periods between meetings. Paul Hethmon suggested a requirement for a 2/3 majority for all e-voting items. The reference book, "Robert's Rules of Order" was pointed to by Jeff Brush to indicate a guideline for carrying out the business. E-voting should/could be done in order to draw out the obvious or non-contentious items. Items failing to secure a majority would be discussed in the next meeting. The question of who can vote also came up, to be deferred until governance tomorrow. E-votes should be carried through a phone conversation or some other collaborative environment.

With respect to expiration of compliance, it would not be needed. Miguel Olivarez asserted that if a server meets compliance for a given level, but would always be compliant to the level, i.e. 1.7. Two concerns, expiration of specification versions vs. expiration of a certification.

There was a general consensus to retire specification version 1.01. This means no more compliance testing done on that version and people are strongly discouraged from developing a new implementation of this level.

There was a discussion on whether the 1.x and 2.0 specifications belong in two separate tracks. General consensus was that in order to have a compliant code base (client or server), the code base must pass testing against an "active" version of the spec. Active versions of the spec would be the current and one back. In this case, this would include 1.5, 1.7 and 2.0, as they are separate tracks.

Stuart Schuessler brought up whether the 2.0 specification could be voted without two verified implementations. Paula O'Brien asserted that the rule applied only two addendums, not to major versions. It was noted that this rule has been disregarded in the past. Steve Verba suggested ensuring that the question be resolved in the governance

discussions. Stuart Schuessler wishes to put it to a vote as to whether to suspend the rule, in order to allow 2.0 voting to continue. He made a motion. Jeff Brush suggested that as a work group, the vote is out of order. Paul Stusiak overruled Jeff Brush.

**Motion:**

“A suspension of the rule requiring two implementations before a vote is allowed for change proposals, the RETS 2.0 service document and the RETS 1.7 specification. This rule suspension will only apply until the governance process is decided.”

**Moved:** Stuart Schuessler, Clarity Security

**Second:** Paula O’Brien, Ronin Technologies

**Vote** (by show of hands) 27 in favor, 0 opposed.

**Motion carries.**

A desire to vote to finalized the 1.7 specification was expressed and discussed. This vote was tabled until the next agenda item.

Dan Mills asked if all change requests/suggestions needed to be officially brought forward via RCP. Paul Stusiak indicated that the more frequent discussions would suffer if this were required. It seemed that there was general agreement in this area.

## **RETS 2.0 Change Proposals**

### **Paul Stusiak, Steve Verba**

Dan Mills brought up concern, and was supported by Matthew McGuire, that the requirement for the server to support R0088. The requirement is that the select or query statement may use field/name values from multiple vocabularies within a resource.

Paula O’Brien stated that the server is required to support vocabularies, but not data dictionary.

Dan Wooley indicated that he did not require this capability for 2.0, and thought it could be removed from the requirements.

Dan Mills indicated that he had no issue leaving it in the specification as something a server MAY provide. Jeff Brush and Dan Wooley indicated that failing to require it would be confusing, and would rather it be removed.

Wantao Zhou indicated that he would like it to be removed to avoid more work, and that it could be added back in later if a need arises.

Jeff Brush provided a use case: Well known names are most commonly used. For fields outside the well-known names, such as soil type, to do a query including that field, all the well-known names must be mapped to the local names manually. The workaround would be to create a humongous vocabulary to cover all cases.

Dan Wooley indicated that clients going between servers that have something, such as internet y/n and status would have to find the local name for status to build that search to get the internet y/n.

Dan Mills indicated that he felt clients would either be writing queries using well-known names, or using local names and not mixing them.

Paul Stusiak indicated that he felt clients would mix vocabularies if possible.

Jeff Brush indicated that he had envisioned some national well-known names and there may be regional well known names, such as earthquake for California.

Sergio Del Rio indicated that writing a client that could speak with multiple servers without change would be adversely impacted by disallowing mixed vocabularies.

Wantao Zhou wanted the default for the vocabulary on the search query to be “local” rather than well-known.

Keith Garner suggested that having well-known the default was good, to help encourage use of them.

Paul Stusiak agreed with this statement.

Wantao Zhou indicated that he felt the more completeness of the local names would be hard to ignore and that standard names are not currently used that much in RETS 1.0.

Paul Stusiak stated that RETS 2.0 is not RETS 1.0, and that it should be used more in 2.0.

Steve Verba and Kevin McQueen indicated that the standard names are the most requested feature by clients for 1.0.

Paul Stusiak stated that in the RETS2 Service document, well-known is required to be supported, public is not required. Therefore the default should be what is required.

Wantao Zhou indicated that the attribute should be required to appear, regardless of the value. Therefore, making the attribute a required, that would be clearer. Default is now moot, since it must always appear. Paul Stusiak agreed that it would be ok to make it a required attribute.

Dan Wooley thought it was silly to require indicating the vocabulary when hitting a server that only supported well known names.

Stuart Schuessler indicated that failing to be clear on the point, would make RETS stand out in comparison to others.

Steve Verba indicated that being able to carry MISMO data is a benefit for RETS implementers, and could be a selling point.

Dan Mills wanted to see the well known names to ensure he knew what he was getting into.

It was stated that the list is not yet finalized.

Paula O'Brien indicated they were the same names discussed in the December meeting that included Steve Clark and Wantao Zhou.

Paul Stusiak indicated that each resource would have a set of well known names.

Paula O'Brien indicated that there may be some common ones between different resources.

Stuart Schuessler asked about a web site for managing the well known names, and it was indicated that the site did not exist at this time. Also, that the vote today would be for service document, and well known names would be forthcoming.

Dan Mills was concerned that there would be more work than simple mapping. Type conversion, translation, etc. may be required. Also, does supporting well known names mean all of them? Only one of them? A subset of them? If there is not a field in the database for the name, you can't populate that. Dan Mills indicated then that it is not required to support well known names. Then, if the data field is there, it must be mapped to a well known name.

Stuart Schuessler indicated that OFFSET support is required by the server, if not supporting unlimited download. He expressed concern that this would dictate how the server is architected. This inspired a discussion on how OFFSET would be implemented, and that clients adamantly wanted it.

Scott Woodard indicated that OFFSET is used by clients because some server vendors limit the number of records returned for a result, not because the client doesn't want to do caching.

Stuart Schuessler is concerned this will limit MLSs who wish to limit how many records are returned then.

Dan Mills indicated that he is observing a trend away from replication of data, and towards a service driven perspective.

Stuart Schuessler stressed that he wanted to make OFFSET support optional for the providers (MAY rather than MUST). He also indicated that OFFSET went against sessionless/stateless design for web services.

Dave Dribin mentioned that without enforcing order, it would make OFFSET pointless. Users today expect that things change live.

**Motion:**

“The language of requirement R0109 be changed from MUST to MAY.”

**Moved:** Stuart Schuessler, Clarity Security

**Second:** Dan Mills, First American MLS

Motion to Amend:

“Remove requirement R0109.”

**Moved:** Stuart Schuessler, Clarity Security

**Second:** Mathew McGuire, First American MLS

**Vote** (by show of hands) 25 in favor, 0 opposed.

Motion Amended

**Vote** on amended motion (by show of hands) 9 in favor, 27 opposed.

**Motion fails.**

**Motion:**

“Add the language used in RETS1.0, section 7.4.4 to RETS2 section 9.2: ‘client implementers should be aware that some data may change between queries’ etc.”

**Moved:** Mathew McGuire, First American MLS

**Second:** Jeff Brush, Ronin Technologies

Motion to Amend:

“Append to the language ‘Ordering is non-deterministic between two searches’.”

**Moved:** Dave Dribin, Pearl Street Group

**Second:** Jeff Brush, Ronin Technologies

**Vote** (by show of hands) 27 in favor, 4 opposed.

Motion Amended

**Vote** on amended motion (by show of hands) 25 in favor, 4 opposed.

**Motion carried.**

Sergio Del Rio had three corrections to the RETS2 Service Document:

- Page 6-17, Data Types, “size independent” but indicated as an integer. Should change it to a long.
- Page 6-24, R0046, a clarification should be made: different users may see different views of the data dictionary.
- Page 6-24, a clarification should be made: which name is used in a query from a lookup list.

Ryan Bonham wanted to clarify the date timestamp value and which time zone this was in. Paul Stusiak indicated that the change would use the W3C date time in a fully

qualified format, defaulting to midnight if there is no time data. This would be the date from the metadata.

Wantao Zhou had a correction for R0150 – it should state provider instead of requestor, similar to R098.

Wantao Zhou put a motion on the floor: Modify page 9-4, Change “optional” to required, remove the sentence with the default value for the vocabulary attribute. Sergio seconded the motion.

Vote: 15 in favor, 15 opposed. Motion does not carry.

Discussion ensued to clarify the statement. Revote called.

Vote: 12 in favor, 21 opposed. Motion does not carry.

**Motion:**

“Change the description for SearchRequest@vocabulary on page 9-4 from ‘optional’ to ‘required’ and strike the sentence “if this attribute is not present the value defaults to the value of WellKnown.”

**Moved:** Wantao Zhou,, First American MLS

**Second:** Sergio Del Rio, Templates 4 Business

**Vote** (by show of hands) 15 in favor, 15 opposed.

This vote resulted in some confusion and subsequent discussion. The chair decided to permit additional discussion to clarify the motion. Following the discussion, the motion was re-read and the vote was taken again

**Re-vote** (by show of hands 12 in favor, 21 opposed

**Motion fails.**

**Motion:**

“To approve the RETS 1.7 specification with the corrections provided by Frank Tadman, RE InfoLink”

**Moved:** Stuart Schuessler, Clarity Security

**Second:** Mark Lesswing, Center for Real Estate Technology

**Vote** (by show of hands) 35 in favor, 0 opposed.

**Motion carried.**

Wantao Zhou brought up a question of whether MTOM streams everything, or whether it must always be cached in memory first. Paul Stusiak stated that the topic has been discussed and is now closed.

Dave Dribin wanted to put a motion on the floor, to defer the vote until tomorrow. Paul Stusiak asked for a show of hands for those people who would not be attending the Thursday session. About 10 put up their hands. Paul Stusiak stated that since several of the attendees were only here today and that the agenda did indicate that the voting would be held today, that it wouldn't be fair to those people if the vote were tabled. Dave Dribin agreed and withdrew his motion.

**Motion:**

“To move the RETS2 Service document from Release Candidate to Final with the corrections provided today”

**Moved:** Stuart Schuessler, Clarity Security

**Second:** Ryan Bonham, Transparent Technologies.

**Vote** (by show of hands) 39 in favor, 1 opposed.

**Motion carried.**

**Motion:**

“To change the support level for compliance from ‘the current and previous version’ to ‘one of the active versions’ and to deprecate the RETS 1.0.1 specification, leaving RETS 1.5, RETS 1.7 and RETS 2.0 as the active versions that are supported for compliance”

**Moved:** Paula O’Brien, Ronin Technologies

**Second:** Mark Lesswing, Center for Real Estate Technologies.

**Vote** (by show of hands) 37 in favor, 0 opposed.

**Motion carried.**

## Day 2 Wrap-up

### Paul Stusiak

The group requested that the next meeting dates end on a Friday to assist with travel planning.

The suggested dates are December 6 – 8, 2006 in San Diego, CA.

The details will be provided later after the meeting agreement is made.

**Thursday, August 3, 2006**

## **Related Standards Report**

**Paul Stusiak**

Paul reported that MISMO has some interest in learning more about the enveloping and messaging work RETS community is doing. There is a real need to push around millions of records, and current methods include FTP and SMTP.

## **RETS2 Security Roadmap**

**Paula O'Brien**

Paula provided a presentation of the roadmap (included as an appendix). It illustrates the deliverable goals for the security portion of the standard. The core directive is to bring web services security to RETS. Paula reviewed the timeline for the deliverables. In addition, she reviewed the key questions asked, including looking to existing standards. She also, reviewed the core purposes and goals for the group. She reviewed the various toolkits, and discussed coverage in the common .NET and Java.

Paul Hethmon's overall impression is that there are lots of documents, and specifications but not a lot of examples or implementations. Most examples would be characterized as trivial. He hopes to take the simple examples, expand on them, and bring them forward to the community.

Dan Wooley asked about the reference implementation, which Paula indicated had user name token/ X.509 and was built using XFire.

## **RETS Security Working Group Report**

**Peter Williams**

Peter provided a presentation (included as an appendix). He asked that we work together and ensure all platforms have coverage.

Peter indicated that nothing done in the current working group world for web services is new, and is really around 10 years old. He asked whether we were really supposed to be leaving behind HTTPS.

- .NET support for RETS programmers
- The solution is to establish federations for MLSs and to extend what is available on the .NET platform to achieve those goals.
- What is SAML?

- How do vendors compete when adding values using RET2 extensions?
- Vendor defined web services for provisioning security systems, Microsoft .NET SAML, .NET 2.0 members, COM+ RBAC.
- Vendor right to add WSDL and specify types for payloads.
- Secure payloads with distributed data management, OASIS XrML wrappers for payloads from Microsoft Rights Management Libraries.

Peter asked the group if vendors were using SSL, and did not get a positive response. He posed the question as to whether the community, who hasn't adopted 10 year old technology, would adopt technologies that are brand new.

It is an open question to determine which security tokens. There are many: Username – passwords, digital certificates, SAML tokens, for application Single Sign on, federated SSO, sessions. He indicated that the specification says there are no sessions, can we afford to throw away the work done to use HTTP sessions.

PKI/Certificates require hardware, and that costs money. Therefore, they will not be widely adopted.

In addition, to do a simple search and send the username/password information adds some 11K worth of data to the message, and applies the hash to the entire messages. Peter's concerns center on the immaturity of the WS-\* specifications, and the toolkits implementing them.

Username/Passwords: In web services, client proxies can store HTTP cookies. Do web services use clients that use HTTP 1.1 keep-alive and cookies? If cookies, can the traditional SSO cookies be used? However, aren't web services supposed to be stateless? It is currently not possible for any client to talk to any RETS server, the MLS community wishes to control the data more than that. The reality of products vs. specifications, where real products do keep client state, the web service proxies generated by .NET toolkits utilize cookies by default. Web services can indeed co-exist with other web application products, such as Rappatoni's data manager. Peter reiterated the business sense of competing by adding additional web services, as non-standard extensions that are useful and give the competitive edge. The web services solutions are provided with the ability to use SAML, which is the XML way to use cookies.

Role based access control, to protect and handle the agent and office information, using Microsoft toolkits while ensuring the interoperability with Java. During testing, found that RPC was concise, and similar to the DCOM model from 15 years ago. However, RETS 2 uses document literal. Document literal takes a very large amount of data relative to RPC. He found that after three revisions, after using the Microsoft SOAP toolkit, component services, he finally got to the ASP.NET which is actually interoperable with Java.

Peter did not use J2EE, but he did use servlets. He began to test to see what could be achieved by starting with a Java implementation. He was able to build an interoperable solution, once again, after three tries with older toolkits.

Concluded:

The spec is well aligned with various toolkits, and that there is good evidence for the viability of the security roadmap.

Following the presentation, the group discussed the teleconference calls and the process that is occurring. The group agreed that a more open process is desirable. In the future, the working group will post to the dev list the announcement of next meetings to allow a more open process.

An open discussion around several topics occurred:

- certificates and their management
- user-agent authentication
- mention of role-based node management: XML encryption, XrML, other RETS specific solutions.
- extended discussion on single sign on.

Session management was also discussed – don't want to have to re-auth on every action – looks like some of the WS-\* discussed by Peter might help. The group felt that there was a need to continue the investigation. It would be good to formalize what everyone has been doing.

The consensus is that the business value of SSO is high and that it should be a priority.

## **Business Façade Forum**

**Steve Verba, Paula O'Brien, Keith Garner**

The discussion session was moderated by Steve Verba. At least 20 participants attended.

Steve introduced the session by indicating that concerns for complexity, learning curve and implementation had been part of the RETS 2 design effort from the start, but that recent months had tended to emphasize other issues. So this session was convened to revisit these topics. Paula O'Brien had been asked to cover some of the work that had been done previously on the topic. Keith Gartner was invited to present some new work being planned by CRT that related to this topic.

Toolsets

Paula covered a list of relevant toolsets for developers to use that make it easier to create RETS 2 solutions. One of the reasons for moving to web services was to have access to these tools and toolkits. Paula presented a set of slides and discussed the following:

- There are WSDL client proxy class generators, but Microsoft wsdl.exe in the Visual Studio 2005 does not generate WSE 3 compliant code.
- There are data binding tools. In .NET using the xsd.exe, castor for Java, JAXB, JibX, XMLBeans, XBinder for C.
- There are tools for monitoring and tracing, Ethereal and PocketSOAP tcpTrace for .NET.
- There are IDEs that make it easier. Eclipse with the WTP plugins. Visual Studio 2005 professional, NetBeans and JDeveloper.
- There are toolkits offering support for SOAP 1.2. Apache axis 2, Sun JWSDP2, Codehaus XFire 1.1. Microsoft WSE3 and .NET 2.0, Axis2 for C, Microsoft WCF and Java 1.6 with JAX-WS betas.

A request was made to have the contents of the slides made available at the RETS site, and Paula indicated she would expedite.

#### “Big API” – Business Facade

Paula introduced the concept of a RETS 2 “Big API” more properly known as Business Facade. The concept is to provide an API that hides most of the underlying RETS 2 web services-related complexity from a developer. In effect, a java developer would only need to create the right POJO to access RETS 2 capability. It hides the RETS specific implementation details.

Paula indicated that an actual implementation of the Business Facade had actually been created earlier in the evolution of RETS 2. She indicated an updated version of the Business Facade available soon at the RETS website through the CVS repository. This version would work with the RES 2 Reference Implementation which in turn is also due to be made available to the community shortly. She indicated she would send out an announcement to the community when each was available.

Keith Garner:

Keith made a presentation that outlined CRT’s intent to develop a new RETS Specification, referred to as “RETS Lite” and to provide associated software and support for their customers for RETS Lite.

He indicated the intended market as less experienced developers who:

- are not familiar with web services
- are not familiar with RETS 1 and 2
- would have trouble with the complexities involved

- tend to use scripting languages
- are building functionality to support advertising use of listing data (IDX sites, newspaper feeds, home books). Other possible uses included intra-office use within large brokers.
- want to do bulk downloads

RETS Lite was described as:

- a new specification
- based on REST only not web services
- not using RETS metadata
- supporting search and payload for 45-50 fields (probably IDX fields) only
- not provide GUI/display information
- not provide any support for field level authentication

The goal was described as a companion spec to go along with RETS 2.

Keith he thought that implementations of RETS Lite could be standalone, could be in a RETS2 server for performance, or a middle layer/translator or intermediary.

He indicated some remaining issues or discussion points:

- Should this be query based or just a dump?
- What will be the IDX vocabulary?
- Extend to allow MLS data sharing agreements, a RETS payload or something else?
- JSON, YAML, delimited. (RSS? Feeds?)

To open up discussion Steve posed the dilemma that others had recently characterized RETS as already having too many flavors.

Kevin McQueen indicated concern over introducing a new spec, but rather to address these needs in the primary RETS2 specification

Steve asked whether the RETS2 spec can cover this for example by adding a REST interface to 2.0?

Matthew McGuire indicated that absorbing the bulk of RETS Lite ideas into the RETS realm would be a good idea.

Sergio mentioned that Conduit already fills this space.

Joshua of Rappatoni indicated that even a RETS Lite would still be tricky.

Michael DelGaudio indicated that a REST style interface would be really good for database vendors, or in a hosted environment.

Keith indicated that whether or not RETS 2 could handle REST, he felt a new RETS specification was required to meet the identified requirements.

Steve made a suggestion that the underlying business use cases might need to be identified more clearly before coming to that conclusion.

Keith indicated that he was convening a RETS Lite call on Thursday 8/10/2006. Meetings between now and December could be executed via mailing list and/or conference calls. Keith stated an intention to have more than a set of use cases available in December, including more technical details of the spec and implementations. Steve objected and reminded the attendees that the RETS community had not agreed to create a new workgroup or a new RETS standard.

Keith apologized that a prior commitment meant that he had to leave the discussion early but that he wanted to invite those interested to participate in the CRT call.

After Keith's departure, a sheet was passed around for interested parties to sign-up.

Steve mentioned that it was possible to create an IDX payload and have it approved relatively quickly. Mathew indicated that this would, in essence, replace ThreeWide, since they fill this need of exporting records.

Steve asked for a show of hands on whether those attending were in favor of recommending that the RETS community conduct appropriate R&D on how to address the issues Keith raised but within the context of the RETS 2 standard (rather than through a new RETS lite standard).

The group was unanimously in favor of this.

## **Listing Payload**

### **Paul Stusiak**

This meeting was deferred because there were not enough people present

## **RETS2 Toolset Review**

**Paula O'Brien**

Paula repeated a portion of the review that she presented in the Business Façade Forum.

## **Day 3 Wrap-up**

**Paul Stusiak**

The meeting was adjourned.