Transport Workgroup Meeting
Scott Petronis, Chair
Scott Petronis
Onboard Informatics
Chief Product Officer
spetronis@onboardinformatics.com

Check out our conference app for more information about this speaker and to view the handouts!
Agenda

• Update Goals
• Use Cases
• OData Support
• Discussion
• Next Steps, Volunteers
• Other Open Items
  – If time permits
Goals

• Enable developers to create new applications or augment existing applications to keep MLS data records up-to-date based on information changes.
• Leverage existing standards and technologies as much as possible.
• Deliver a draft specification by Q1 2017.
Update Use Cases

• Questions that must be answered
  – What type of record / resource?
  – Does this user have the rights?
  – Does a record already exist?
  – What minimum fields are required?
  – What values are expected?
  – Complete record or only specific fields required?
Update Use Cases

• Create a new listing
• Modify property attributes
  – e.g. sq ft, rooms, etc.
• Modify listing attributes
  – E.g. price, description, etc.
• Add, change or delete media
• Add, change or delete documents
Update Use Cases

- Add, change or delete an open house
- Update listing status
- Update member info
- Update office info
- Update contact info
- Update saved search
Update Use Cases

• What’s missing?
• Priority?
• Challenges?
OData Support

- 11.4 Data Modification - Create, Update, and Delete
  - Supports Actions (Input Actions)
  - Determine conflicts with ETAGS
  - Preferred method of update is PATCH because clients should handle the case of properties not present in metadata document.
- Handling of Consistency Constraints - Referential integrity
- Update individual properties
  Ex. http://host/service/Property(ID123456)/StandardName body{Active}
- Support for Change sets 11.7.3 (Transactions)
- Upserts – client sends an update, but the entity does not exist then process as insert
OData Requirements

• 13.1.1 OData Minimal Conformance Level:

• In addition, to be considered an Updatable OData Service, the service:
  – 14. MUST include edit links (explicitly or implicitly) for all updatable or deletable resources according to [OData-Atom] and [OData-JSON]
  – 15. MUST support POST of new entities to insertable entity sets (section 11.4.1.5 and 11.4.2.1)
  – 16. MUST support POST of new related entities to updatable navigation properties (section 11.4.6.1)
  – 17. MUST support POST to $ref to add an existing entity to an updatable related collection (section 11.4.6.1)
  – 18. MUST support PUT to $ref to set an existing single updatable related entity (section 11.4.6.3)
  – 19. MUST support PATCH to all edit URLs for updatable resources (section 11.4.3)
  – 20. MUST support DELETE to all edit URLs for deletable resources (section 11.4.5)
  – 21. MUST support DELETE to $ref to remove an entity from an updatable navigation property (section 11.4.6.2)
OData Requirements

• 22. MUST support if-match header in update/delete of any resources returned with an ETag (section 11.4.1.1)
• 23. MUST return a Location header with the edit URL or read URL of a created resource (section 11.4.1.5)
• 24. MUST include the OData-EntityId header in response to any POST/PATCH that returns 204 No Content (Section 8.3.3)
• 25. MUST support Upserts (section 11.4.4)
• 26. SHOULD support PUT and PATCH to an individual primitive (section 11.4.9.1) or complex (section 11.4.9.3) property (respectively)
• 27. SHOULD support DELETE to set an individual property to null (section 11.4.9.2)
• 28. SHOULD support deep inserts (section 11.4.2.2)
OData Support

• What’s missing?
• Priority?
• Challenges?
Turning this into a RESO Standard

- Must have use cases
  - Create? Update? Delete?
  - Specific resources and entities
- Matched to OData standard
  - Actions, PATCH, Change Sets, Upserts
  - Handling constraints, conflicts, integrity
- Recommended approach
  - Write / present to workgroup to move forward
Now for the fun part...

• Participation
  – Small team of 5-6
  – Debate, create outline, initial draft
  – Present to rest of workgroup
  – Receive timely feedback
  – Refine and finalize draft for vote