Transport Workgroup Meeting
Scott Petronis, Chair

ACCELERATING THE REACH OF DATA STANDARDS

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