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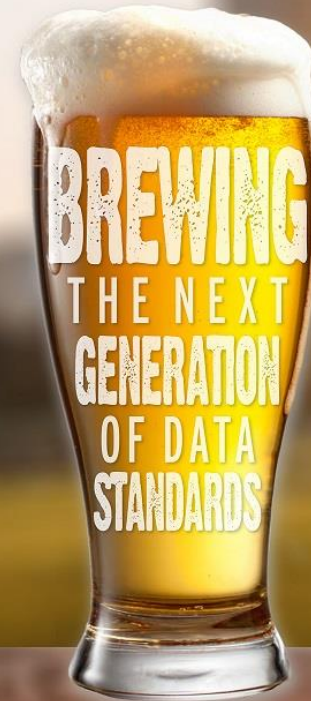
REFLECTING ON  
THE PAST

LOOKING TOWARD  
THE BEAUTIFUL  
FUTURE

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2018 FALL CONFERENCE

OCTOBER 15-18, 2018 • THE PFISTER HOTEL • MILWAUKEE, WI



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## Web API Workgroup Meeting

# S P E A K E R

## Scott Petronis, CPTO

For more than twenty years Scott has defined and delivered data, software and cloud offerings for businesses and consumers including products that powered real estate franchises, brokerages, portals and technology providers.

Since 2012 Scott has been helping to drive the Web API initiative and is currently Co-Chair of the Transport Workgroup.



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# S P E A K E R

## Paul Stusiak, President

BIO: Paul has been involved with real estate standards since 1998.



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# Web API Workgroup

- Responsible for the data transport layer
- Meet monthly by teleconference
- Meet in person at RESO conferences
- Occasional special in person meetings

# Agenda - 1

- Anti-trust statement
- Open RCP changes
  - WEBAPI-013 Process Change
  - WEBAPI-014 Search... Restrictions
  - WEBAPI-021 Query Examples Fix
  - WEBAPI-022 Autofill API

## Agenda - 2

- Web API 1.1 Smart Client Demo
- Web API Security 1.1
- Annotations and Certification
- Rules

# Agenda - 3

- Standard EDMX
- Queue Resource
- Client testing rules: 1.0.3 and 1.1

# RCP Changes - 1

- WEBAPI-013 Process Change
  - RCP must include the impact of the change to the Certification
- WEBAPI-014 Search... Restrictions
  - Representation for noting limitations on \$filter, \$orderby



## RCP Changes - 2

- WEBAPI-021 Query Examples Fix
  - Correct the examples of Appendix 2
- WEBAPI-022 Autofill API
  - Provide a reduced API for external services

# Web API 1.1 Smart Client Demo

- Doug Shamoo and Demian Quinonez

# S P E A K E R



## Doug Shamoo

Director of Engineering, W+R Studios

Doug Shamoo is a Director of Engineering at W+R Studios, where he manages product development teams and develops products for the Cloud Agent Suite, including Cloud CMA, Cloud Streams, Cloud MLX, and Cloud Attract.

Doug has worked for W+R Studios for almost 3 years. He lives in Orange County, CA, where he just got married and bought his first house.

# S P E A K E R



## Demian Quinonez

Development Manager, CRMLS

Demian Quinonez is the development manager for California Regional Multiple Listing Service, where Demian manages the software development projects that support the strategic goals of CRMLS.

Demian has worked for CRMLS for over 10 years working his way up from junior developer to managing developer.

Demian lives near beautiful Los Angeles California, the home of his beloved Dodgers. He has a Bachelor of Science degree in Computer Information Systems from California State Polytechnic University, Pomona.



## Server Side

- ~650 Properties
- ~150+ Validation Rules
  - None in RETS 1.9 Validation syntax
  - Working on a transpiler to the Validation syntax
- ~50+ Calculated Values
  - Server side processing
- Many Display Rules (SET\_DISPLAY)
  - First pass was to define per property type (Residential, Income, etc...)

## Client Side

Evaluating rules and generating actions from those rules is delegated to a rule module that can be shared between javascript clients.

### Module

- antlr4-generated javascript parser from grammar file
- interpreter that evaluates expressions using the visitor pattern
- runner that exports functions for app to call, generates actions

### Client

- Listing input client is initialized
- Rules are run to determine displayed/required/readonly fields
- On changing field values, rules are run to generate actions for the client
- Client handles each of these actions however it wants

# Web API Security 1.1

- Ready for Adoption
  - Vote today or next meeting

# Annotations and Certification

- Section 2.4.8 Annotations
  - Stronger language to clarify the intent
  - New change proposal for this



# Rules

- Section 2.7.11 Improvements
  - Stronger language to clarify the intent
  - Rounding, `.OLDVALUE.` vs `.ENTRY.`,
  - `.EMPTY.`, Warnings

RCP needed.

# Standard EDMX

- Enforce a standard EDMX using the Data Dictionary names
- Permit inheritance to handle case of locale specific fields.
- Simplifies development

# Queue Resource

- Going forward, pay attention to the Queue Resource
- Starting the discussion on Queue/WebHooks/WebSockets/EventSourcing

# Client Certification

- PLEASE review the Client Certification Rules for 1.0.3 and 1.1
- Next teleconference we will be reviewing these rules



# THANK YOU!

## COMMENTS OR QUESTIONS?



Cheers!