

RESO  
Authentication and  
Authorization  
Workgroup

Fall 2013 Update

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# Background

**Mission:** "this group was formed to create "a cohesive [authentication] strategy and facilitate the use of recognized protocols. This group is "tasked with researching existing industry methods and recommending the adoption of appropriate and proven technologies."

**Immediate Goal:** To define authentication methods for RETS, primarily for a new (RESTful) API

# Background

The goal is NOT:

- ⦿ To solve the problem of managing passwords
- ⦿ To decide implementation specifics not germane to secure interoperation
- ⦿ To provide mechanisms for Single Sign-On
- ⦿ To provide mechanisms for Federation of Identity

However, standards needed for our goal of secure RETS “back end” authentication may also have “front end” capabilities such as supporting SSO.

# Background

Started in August. Two meetings so far.

**Challenge:** Few API-fielding stakeholders in work group.

**Response:** RESO community survey to solicit additional insight (successful) & resources (not sure yet).

# Step 1: Use Cases (Matt L.)

## **1. Server-to-server authorization.**

Example: A syndicator's recurring bulk download of listing data. What we mostly do today with RETS.

## **2. Typical three-way authorization of a user.**

Example: A web application that interacts with the MLS, e.g., a real-time CMA.

# Step 1: Use Cases (Matt L.)

## **3. Transparent three-way authorization of a user.**

Example: A VOW provider's validation of eligibility for an existing customer.

## **4. Transparent, recurring "on behalf of" authorization of a user.**

Example: Lead Management software that pulls leads from multiple sources for a given customer.

# Step 2: Identification of Possible Standards-based Solutions

- ◎ Digest
- ◎ OAuth 1
- ◎ OAuth 2
- ◎ OAuth2 with SAML 2.0 Bearer Assertion
- ◎ SAML
- ◎ OpenID Connect

Not every approach will work for every use case.

# Step 3: Research / Support

Document:

- ◎ How does standard cover use cases?
  - > Provide Technical Examples (show calls)
- ◎ Suggest “options” within standards
- ◎ What toolkits are available?
- ◎ Pros and cons?
  
- ◎ Cal (FBS) created doc for OAuth2.
- ◎ Others have been solicited as per survey results

# Step 4: Evaluation / Decision-Making

*TO-DO – Select one or more approach*

## Evaluation Criteria

- ◎ 1. Addresses Use Cases
- ◎ 2. Ease of use
- ◎ 3. Use of existing standards
- ◎ 4. Use of (real estate industry) deployed standards?

# Step 5: Documentation

## *TO-DO*

Interoperability requires more “musts” than “mays”. Reduce choices for implementing the more complex standards.