




RESO

Real Estate Standards Organization


Certification & Compliance Systems



Certification - Background

- What is a Certification System
 - Verify Systems claiming to be RESO/RETS Compliant
 - Project Goals
 - Add Credibility and Value to RESO/RETS Standards
 - Recognize RESO/RETS Compliant
 - Make RESO Nationally Relevant
 - Previous RESO Certification Efforts
 - Certification Startup in 2003
 - Hitachi Certification re-write in 2009
 - Issues Project on Hold
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Certification Applicants & Awards

- Who Applies for a Certificate (?)
 - RETS Clients
 - RETS Servers
 - **Sites** & MLS
 - Awards
 - Pass or No Pass
 - Certificates, Badges, Logos & Mentions
 - Compliance Testing is Planned for ...
 - RETS **1.8** Client & RETS **1.8** Server
 - Data Dictionary for RETS Version 1.5 - 1.8
 - Future Certificates
 - OData / REST API
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RESO Certification & Compliance

Three aspects of RETS Certification

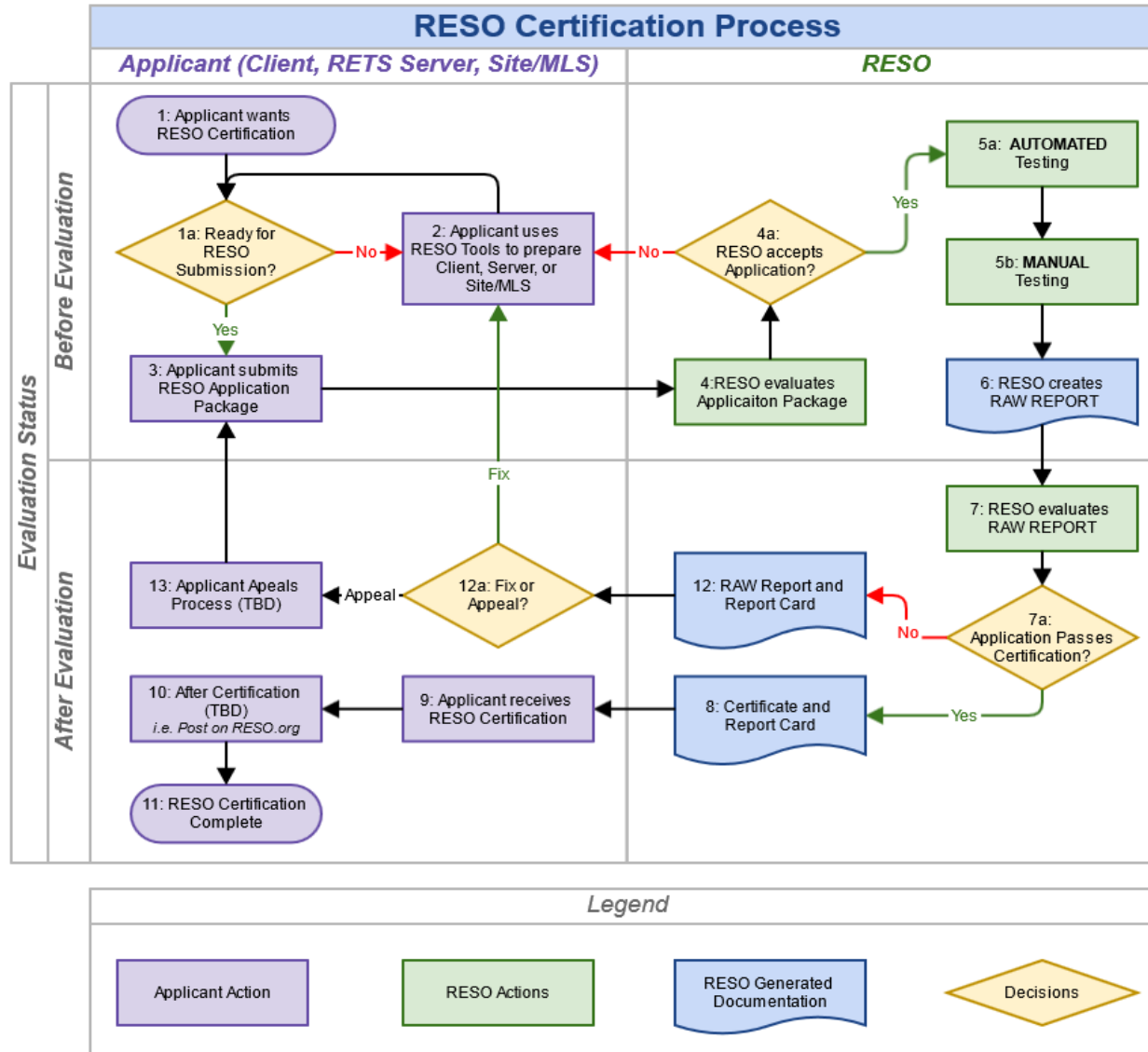
- Site/MLS Certification
- Client Certification
- Data Dictionary Certification




Data Dictionary Certification

- Testing Site/MLS Metadata
 - Using Dictionary Data field correctly
 - Non-DD fields in Site/MLS Metadata are ignored
 - DD Certification on multiple RETS Standards
 - RETS 1.5-1.7.2, 1.8
 - Exact implementation TBD
 - One Data Dictionary Certificate
 - Additional special mentions are still being discussed.
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Certification & Compliance Process



Work in Progress

- Status
 - Certification & Compliance Committee
 - Building Compliance Engine for Client/Server
 - Items under discussion *(more info coming later)*
 - *DD Compliance Rules*
 - *Actual Reports sent back to Applicants*
 - *Re-Certification*
 - *Certification Program Awards*
 - *Awards, Badges and Logos*
 - *RESO/RETS Trademarks Agreements*
 - *Audits*
 - *Certification Fees*
 - *Appeal Process*
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Timeline

Site/MLS & Client Certification Timeline			
October '13	November '13	December '13	January '14
Requirements			
	Development		
		Alpha/Beta Testing	
			Production Rollout

- Site/MLS & Client Certification - January '14
- Data Dictionary Certification - TBD

RESO Compliance Testing: Targeting 1.8 and Data Dictionary

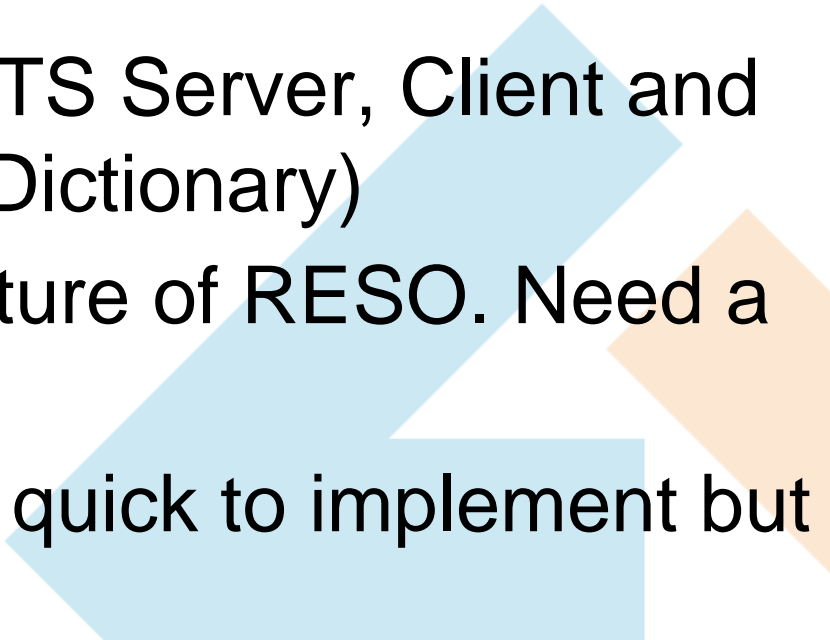
Paula O'Brien
Ronin Technologies
(mailto:pobrien@ronintech.org)



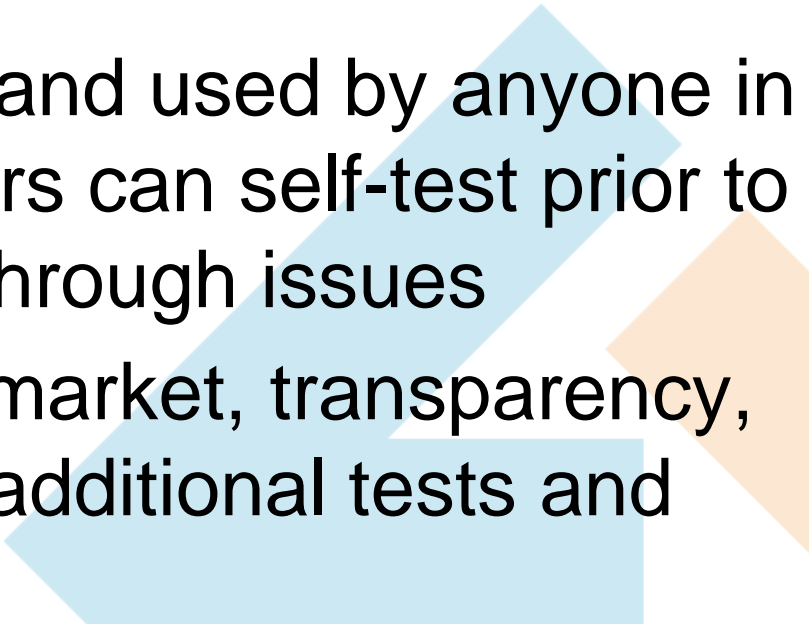
Ronin Technologies Background

- Formed in 2006: domain experts in real estate technology and business integration
- Paula O'Brien and Jeff Brush involved in RETS since 1999
- Paula led compliance workgroup 2003-2010, on BOD 2010-2012
- Developed open source compliance testing tools for server and client 2003-2009 and other open source RETS clients, servers and libraries for NAR

Compliance Testing and RESO

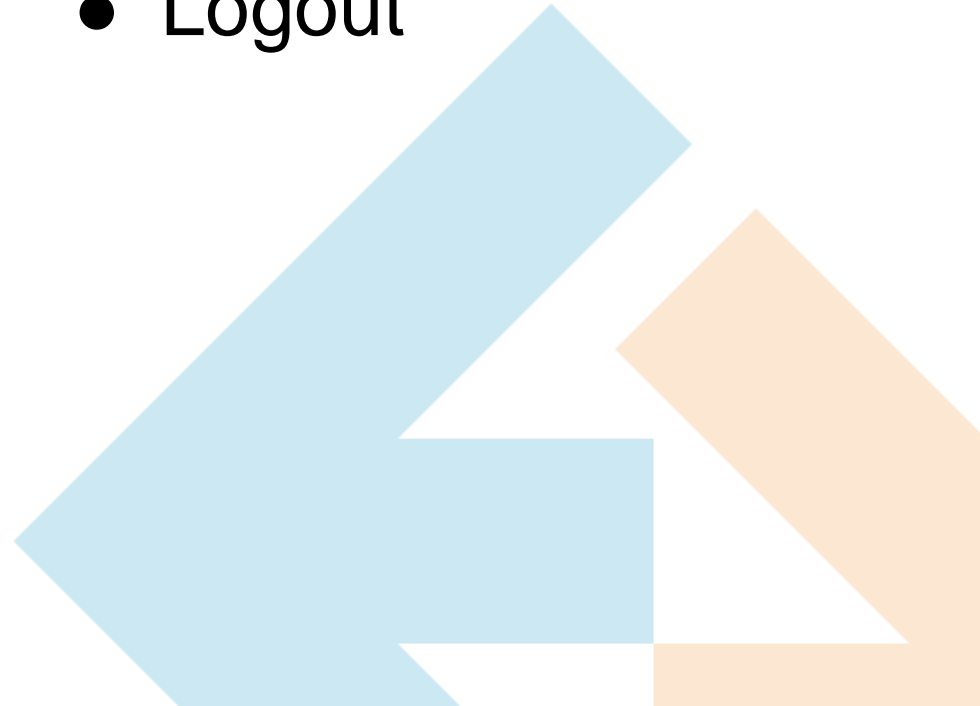
- Compliance testing integral part of RESO since 2003
 - Immediate need for 1.8 testing to drive adoption
 - Tests needed for RETS Server, Client and Site/MLS (e.g. Data Dictionary)
 - Data Dictionary = Future of RESO. Need a way to test
 - Challenge: agile and quick to implement but thorough tests
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Proposed Testing Approach

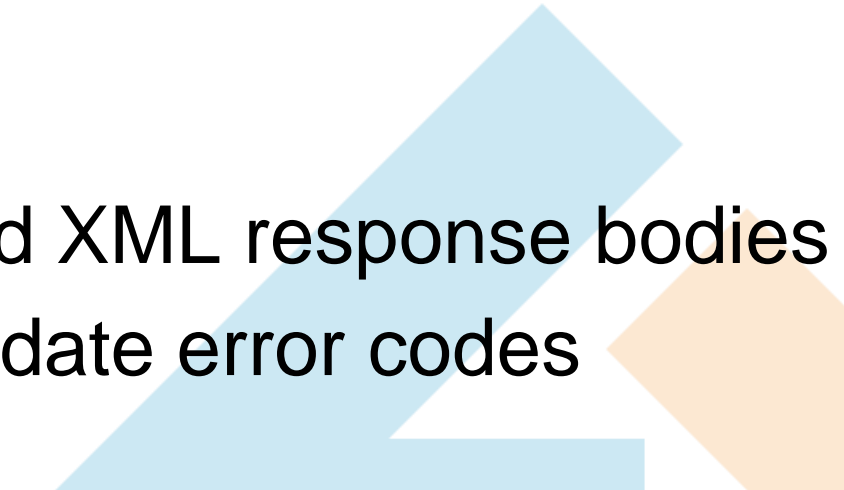
- Use existing, working frameworks and update test scripts and reporting
 - Developed originally as open source; will remain open source
 - Can be downloaded and used by anyone in the community – users can self-test prior to certification to work through issues
 - Emphasizes time to market, transparency, designed to support additional tests and input
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1.8 Tests – Server and Client

- Login
- Metadata
- Search
- GetObject
- Update (basic)
- PostObject
- GetPayloadList
- ChangePassword
- Logout



Test Details

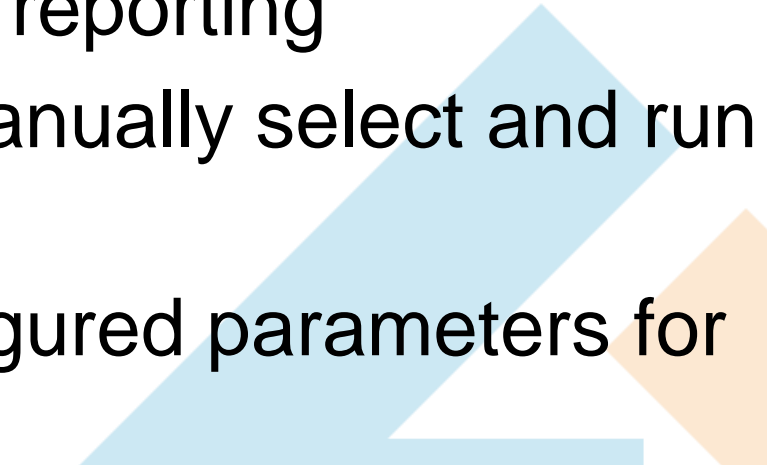
- Validate required request/response headers and arguments
 - **Info:** validate optional request/response headers and arguments – if it's there, make sure it's compliant
 - Walk metadata
 - Well-formed and valid XML response bodies
 - Negative testing: validate error codes
 - All the MUSTS
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Reports

- Currently support summary and detail reports in XML output. XML can be exported to Excel xls files.
- Final reports downloaded to applicant Compliance Department.

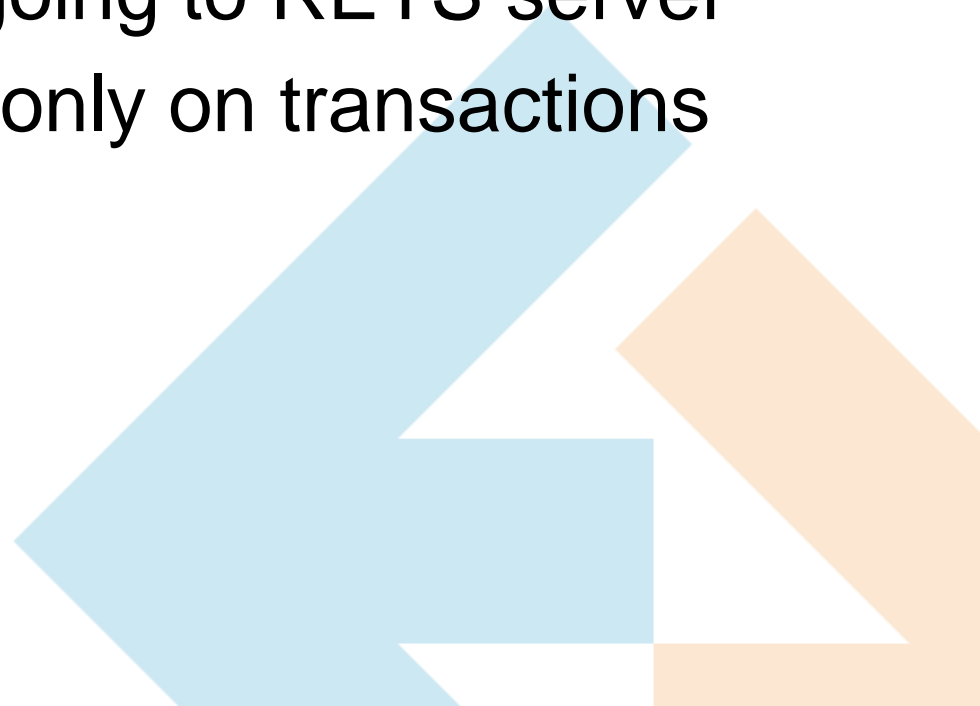


Server Testing Tool


- Java desktop app
 - Interprets metadata
 - Uses test scripts
 - Detailed logging and reporting
 - Requires tester to manually select and run tests
 - Allows for user-configured parameters for specific tests
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Client Testing Tool

- Java web application
- Stateless testing – no workflow required
- Acts as Proxy and listens to client and evaluates requests going to RETS server
- Records test results only on transactions used by client



Client Testing Tool (.. Continued)

- Configured to be linked to any compliant RETS server in order to test clients
 - Passes a client on a transaction according to reply codes from the RETS server in addition to the requests it evaluates
 - Clients can reset tests and self-evaluate prior to formal certification
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Questions?

