

History Real Estate Standards Organization (RESO)

Nearly twenty years ago in 1999, the National Association of REALTORS[®] (NAR) joined forces with leaders in the technology industry to explore ways to make access to MLS data easier for individual Realtors, as well as other third-party organizations. The Real Estate Standards Organization, or RESO, was born.

By March of 2002, RESO was officially created as a working group in conjunction with NAR and soon presented its first version of the well-documented Real Standard Transaction Specifications (RETS). RETS became the framework used by the real estate industry in the U.S. and Canada to facilitate the exchange of data: it is what has made real estate "work" for the last quarter century in America.

Standards create compatibility across different computer systems within and outside organizations, as well as between business partners. The creation of standards in real estate results in more consistent and higher quality data among those that support those standards.

In short, RESO was created to develop standards that would be implemented in real estate to make it easier for programmers to handle real estate information from many different entities because standards force consistency when exchanging data between different systems. Without RESO standards, data programmers would spend more time (and for their companies, more money) dealing with many different types of systems, fixing more bugs and correcting data errors.

RESO was incorporated in November 2011 as its own independent, not-for-profit 501(c)6 trade organization, and is no longer a section of the National Association of REALTORS[®]. RESO steadily grew its membership and by January 2015, RESO encompassed 125 organizations, including NAR, multiple listing services, real estate associations and industry technology providers.

RESO Growth and Influence Explodes

In the last few years, the influence and growth of RESO within the real estate industry has been remarkable, growing more than five-fold and aggressively adding members from real estate brokerages. Today RESO members include many of the biggest brands in real estate, such as News Corp.'s Move/Realtor.com, CoreLogic, Zillow, RE/MAX, Keller Williams, Berkshire Hathaway's Home Services of America, Homes.com, The Realty Alliance, Leading Real Estate Companies of the World, DocuSign, Black Knight, FBS, and all of the largest MLSs in America.

Today, RESO has some 880 active members, including NAR, multiple-listing services, real estate associations, brokerages and industry technology providers.

Introduction of the RESO Data Dictionary

Key to the growth and success of RESO has been the development and maturation of the RESO Data Dictionary. The RESO Data Dictionary serves as the real estate industry's "Rosetta Stone" for real estate data as it establishes a common language allowing real estate information to be understood and translated between systems. Today, more than 600 MLSs and other information providers, gather data. **But what good is it if the data cannot be shared or understood?** The RESO Data Dictionary serves as a common standard that defines real estate data fields – fields that contain real estate information including vital property listing information – and that data is presented using consistent terms and data structures. The RESO Data Dictionary creates a common language so the real estate information can be more easily shared and understood.

The first version of the Data Dictionary was introduced by RESO in 2012 with RESO Data Dictionary 1.1. Subsequent improvements were made, adding new fields and variables. The NAR accelerated the growth of the Data Dictionary in 2014 when it announced that by January 1, 2016, every NAR-affiliated MLS (almost all of them in the U.S.) was required to adopt the RESO Data Dictionary Standard policy. RESO provides certification to allow MLSs to demonstrate compliance with NAR mandate, and today, MLSs with more than 1.3 million REALTOR[®] members are RESO Data Dictionary Certified.

Data Dictionary Keeps Getting Better

The RESO Data Dictionary 1.6 update in 2017 was one of the biggest updates in its history. This 1.6 release (RESO Data Dictionary Wiki is here) included more than 225 new data fields -- available through both RETS and the Web API – and over 625 additional "look up" values; that's a total of 1,272 Fields and 2,108 Pick-List Lookup (Enumeration) Values. It took a massive volunteer effort to create, maintain, improve and continuing to improve the RESO Data Dictionary since its creation, one that has involved more than five dozen real estate and technology industry <u>experts</u>.

The new data field standards issued from the 1.6 update improved the ability for MLSs, brokerages and software technology firms to provide a wide range of new websites, apps, and other technologies related to Accessibility, Showing Data, Saved Searches, Internet Tracking, Member Data, standardized Universal Identification of Organizations distributing data, Historical Transaction information and more.

This year, RESO released its newest update, Data Dictionary 1.7, which includes a "brokerage breakthrough" with IDX data standards for Broker Reciprocity, including 219 fields related to the property. This new standard provides for the same MLS property listing information from different MLSs to be delivered to brokers.

IDX is an essential tool for brokers as it enables them the right to display each other's listings on websites and mobile apps. This move solves a common problem that occurs when brokers are members of more the one MLS. Because IDX information brokers currently receive is not standardized, brokers must spend time and resources to "normalize" the property information

they collect from different MLSs before using it. The new requirement is being applauded by the brokerage industry, which has pushed for IDX standardization.

Also, the first time, the RESO Data Dictionary 1.7 update mandates that MLS organizations *must* implement the RESO Data Dictionary on the RESO Web API to obtain certification for the new version. This certification combines the validation of a company's system to structure real estate information to RESO standards and communicate the information to others through an Application Programming Interface (API). In layman terms, the transition to APIs will mean that more real estate agents and brokers will gain access to the most current and accurate data available, thus delivering the right information to their consumers.

The Data Dictionary 1.7 update also included Spanish language fields serving both Spanish speaking countries and also responds to requests from brokers and agents to better serve their sellers and buyers. In the U.S. 52 million people comprise the U.S. Hispanic and Latino population alone, according to the U.S. Census, and it's growing at four times the rate of the nation's total population.

The RESO Data Dictionary 1.7 version also added hundreds of new data fields to provide for information on real estate agent teams, Open Houses, social media, roster information, property history, saved searches, showing events, and hundreds of pick list items related to property, members and offices. Finally, the update added new fields for the RESO Organization Unique Identifier (OUID), a common method to give firms an identification number in the RESO ecosystem, as well as additional fields for to track web user activity across the Internet.

RESO Certification

RESO provides specific <u>Data Dictionary Certification</u> services to ensure MLSs correctly adapt to standards and ensuring brokers and technology companies can utilize MLS data in a cost-effective and efficient manner. RESO provides, on its website, detailed instructions on how MLS may obtain Certification, as well as information about its testing process and the Testing Rules it uses, which it makes publicly available.

RESO Certification ensures that structured data can move between systems without losing information. That translates into cost reduction and also provides a smoother path for internal and external development of data-driven applications and services. That lowers development costs and reduces development cycles. Plus, when a technology vendor is RESO Certified, that is a quality stamp of approval that signals the interoperability of your systems.

<u>RESO Certification</u> is available for MLSs and Technology Partners, which can include Real Estate Brokerages that develop their own software systems. In addition to RESO Certification for the Data Dictionary, RESO Certification is available for the new <u>RESO Web API</u>.

RESO Web API: The future of data

The RESO Web API Specification is key to the future of real estate data standards and that's why the National Association of REALTORS[®] required that all NAR affiliated MLSs adopt the RESO Web API by June 30, 2016. Compliance with this policy is demonstrated through RESO Web API Certification.

The API acronym stands for "Application-Programming Interface." From a technical standpoint, it is a range of programming standards and instructions released publicly that allow software developers to access a web-based software application or tool. From a practical standpoint at RESO, an API makes everyone's life simpler, as it reduces the amount of time it takes for software developers to connect to, retrieve and organize listing data within a website, web application or tool.

The RESO Web API supports the widely adopted, RESTful (<u>Representational State Transfer</u>) to help the development for web, mobile, social and other HTTP-based applications. The implementation of the Web API will deliver several key benefits for developers:

- **Speedier development, more robust features:** Web API offers a quicker path for software development. RETS, while fully functional, can be heavy to develop against and is proprietary, where the Web API leverages Global Technology Standards.
- Faster path to listing data deployment: For a software developer, having unified data standards for every product whether it is a website, web app or tool reduces their development time, speeding up their time to market. The new Web API accomplishes this.
- Simplification: A Web API means eliminating the need to have multiple software solutions for multiple markets. For firms working with MLSs in multiple marketing, the RESO Web API removes this barrier.

Additional information about the RESO Web API is on the RESO website <u>here</u> and an article that details real world applications of the API can be found <u>here</u>.

RESO as an organization

RESO is a nearly all-volunteer organization with a very limited paid staff (just three full-time employees, including its CEO) and hundreds of active members. Volunteer members collectively contribute thousands of hours annually through participation in RESO Workgroups, on its Board and by attending its Conferences to improve standards for the real estate industry.

RESO has seven Workgroups, which is where innovations in standards are created before they are deployed. They include Research & Development, Data Dictionary, Distributed Ledger Workgroup, RESO Web API, Internet Tracking, Payloads, and Universal Property Identification (UPI). RESO also has two active committees, the Board of Directors' Workgroup Liaison Committee and Marketing Committee. Detailed information about RESO Workgroups is available on its <u>website</u>.

RESO as a collaborator

RESO also leads real estate industry efforts for standards by partnering with a myriad of real estate standards organizations, creating an umbrella of standards that will help the real estate thrive.

RESO has created new green listing standard by working with the U.S. Department of Energy's Better Buildings <u>Home Energy Information Accelerator</u> program. RESO also collaborates with

the National Multi-Family Housing Council and their Multifamily Information and Transactions Standards (<u>MITS</u>), the mortgage industry with the Mortgage Industry Standards Maintenance Organization (<u>MISMO</u>), the Building Industry with the Building and Land Development Standards (<u>BLDS</u>). These collaborations make it easier for brokers to participate in multifamily sales, green home sales, mortgage transactions, and new home sales. Through the RESO collaboration with <u>OpenID</u>, which provides standards for internet identity, RESO is able to provide better security and ease of use for its RESO Web API. In addition, RESO is a member within <u>OASIS</u>, ensuring the real estate industry leverages global technology standards that complement the needs of the real estate industry.

The role of RESO

The real estate industry and the systems and technology that supports it are highly segmented and until RESO, largely without universal standards. RESO was established to produce a common language spoken by systems that handle and exchange real estate information, such as Multiple Listing Services (MLS) and other technology that support real estate brokerages and their agents. Using RESO Standards means having to write one program to work with many different systems. This means lower costs, more products, more competition among technology partners and faster implementations of new systems, all of which directly benefit people who work with real estate information as a living.

RESO actively develops, adopts and implements open and accepted data standards and processes across all real estate transactions. RESO provides an environment for the development and implementation of data standards and processes that facilitate software innovation, ensures portability, eliminates redundancies and obtains maximum efficiencies for all parties participating in real estate transactions.

The mission of RESO is to create and promote the adoption of standards that drive efficiency throughout the real estate industry.

RESO headquarters

RESO is based in Raleigh, North Carolina, but has a distributed workforce.

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