A faster road to innovation for real estate

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Understanding the RESO Web API

A short guide for MLSs and data consumers

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Evolve alongside technology standards

Bridge Interactive has been a leader in real estate data management for over a decade. As the industry moves from RETS to Web API, we recognize you have many factors to consider. We hope the following information helps you better understand this new distribution solution.

Your Questions Answered

What is the RESO Web API?

The RESO Web API is a technology standard that allows data consumers to more easily access listing data. It uses code syntax that is familiar to modern software developers, so it's easier and cheaper to get started quickly. It is the successor to RETS, the most widely used method of accessing listing data currently. The Bridge API platform allows users to get data using the RESO Web API standard.

Why do we need it?

Even though RETS is still available (for now), it has been eclipsed by more modern standards in software development. The RESO Web API is more consistent between markets, more flexible, more transparent, easier to configure and easier to use.

How does it differ from RETS?

In the context of data distribution, RETS and the RESO Web API actually have similar functionality: they both authenticate a user, allow them to request data, and then send data back. However, they use different methods to do these things, like different query languages and different payload formats.

A big difference is that the RESO Web API is better at making on-demand queries for data, whereas RETS is more geared toward replicating the entire dataset. Importantly, RETS is only found in real estate technology, which can make it tough to hire and retain developers.

Are the RESO Web API and the Data Dictionary the same thing?

While the RESO Web API and the RESO Data Dictionary go hand-in-hand, they are two very different specifications. The Web API is the way the data is queried. The Data Dictionary refers to the actual data being sent: the field names and the values. Generally when an MLS is making data available via the Web API, it has already been converted to the standardized Data Dictionary.

What are RESO Certifications?

RESO has two separate certifications, one for the Web API and one for Data Dictionary compliance. The certification levels (Bronze, Silver, Gold and Platinum) for Web API refer to the amount of functionality the API is providing and how complex the data requests can be.

What are the differences between on-demand queries and replicating?

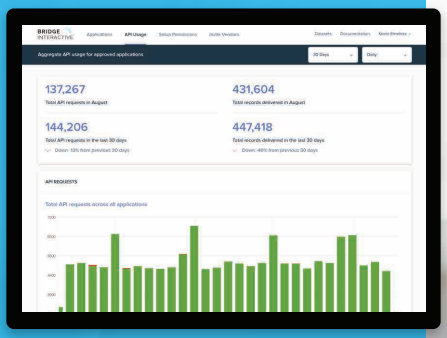
One of the big attractions for the Web API is that there is no need for the average developer to manage continuous data ingestion and storage. It is performant and flexible enough to make on-demand queries to power websites, CMAs, form auto-population and more. In this case, the user leverages the API platform's database as if it was their own.

Alternatively, there are some use-cases that require the developer to replicate and store the entire dataset such as analytics or machine learning. For these cases, the Bridge API platform allows the developer to use the API to seed their database by duplicating the dataset, and then keep it in sync with regular updates.

How the Bridge API platform works

The Bridge API platform sits on top of any existing MLS vendor system. Data is mapped to RESO Data Dictionary standards and MLSs can configure, distribute and monitor access. The platform can also be integrated with Bridge Agreement Management to manage licensing and collect fees.

Data consumers access data using a Platinum Certified RESO Web API. Our robust documentation and API Explorer help new API users get over the learning curve. Users can either use our database as their own, making on-demand queries or replicate entire datasets.



What to look for in an API platform

Bridge API

RESO Platinum Certified
Using a Platinum Certified RESO Web API means users have the full gamut of API functionality available. Adherence to standards improves interoperability with other platforms.

No additional costs or contracts
We do not believe in charging consumers fees or forcing them into unnecessary contracts to get data access from our MLS customers. Licensing and fees are between data consumers and the MLS.

Get the support you need
A good API platform should be able to provide great support to both the MLS and their members. Robust documentation is a must to get teams started with the API quickly.

Excellent Data Quality
MLS data should be mapped to RESO Data Dictionary standards as closely as possible with the least amount of data loss. Accurate metadata and fast responses to update requests should be a given.

The ability to get data in a way that suits the use-case
On-demand queries should be lightning fast so there's no need for users to manage data ingestion. For use-cases that require storing all the data, a streamlined replication option should be available.

Complete flexibility and data sharing functionality
An MLS should be able to setup data feeds exactly as they need to with an intuitive user interface. Brokerages should have control of where to share their data.

Get all the data you would expect
A new data transport should not mean less available data. An API platform should facilitate access to all resources and native fields with full MLS control.

Web API Terminology

API Key	Also called an API Token, it's an authorization code sent with an API request that identifies the user, and also what data they are allowed to see.
API Platform	The system that an MLS will leverage to manage and monitor data distribution, and provide software developers with various APIs to get data.
Authentication	Identifying the user of the API. Common techniques include API Keys and OAuth Tokens
Authorization	The data an authenticated user of the API is allowed to access and query
Endpoint	A web address that specifies the data or service the user is requesting. For example, going to the "/Offices" address in the Bridge API will return office data.
JSON	Similar to XML or CSV, JSON is a simple way to represent data, but it's easy for both humans and machines to interpret. By default, the RESO Web API returns data in JSON.
Latency	The amount of time it takes to get data back. This may include how long it took the server to find the right data and how long data took to travel back to the recipient.
OAuth	A specification for token-based authentication and authorization. The RESO Web API can use this to determine who is allowed to get data and what data they are allowed to see.
OData	A standard specification for APIs that defines how the data should be organized and how it can be queried. The RESO Web API is based on this specification.
Metadata	Information about the data the user has access to, usually accessible from a dedicated API endpoint. May include things like the available fields and their possible values.
Payload	A bundle of data that is returned by an API.
Query	The request a user makes to an API endpoint, which usually contains their API key, what data they want, and any additional parameters, like filters.
Rate Limit	Limits on how many requests to an API can be made within a specific time frame. There may be multiple rate limits in place specific to the user or the data they are requesting.
Replication	The process of recreating and storing your own version of the original database and continuously updating to keep the two copies in sync.
Resource	A collection of data within a dataset, e.g. Properties, Members, Offices, or Open Houses.

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