



PROJECT MANAGER INFORMATION PACKET - FOR PUBLISHERS

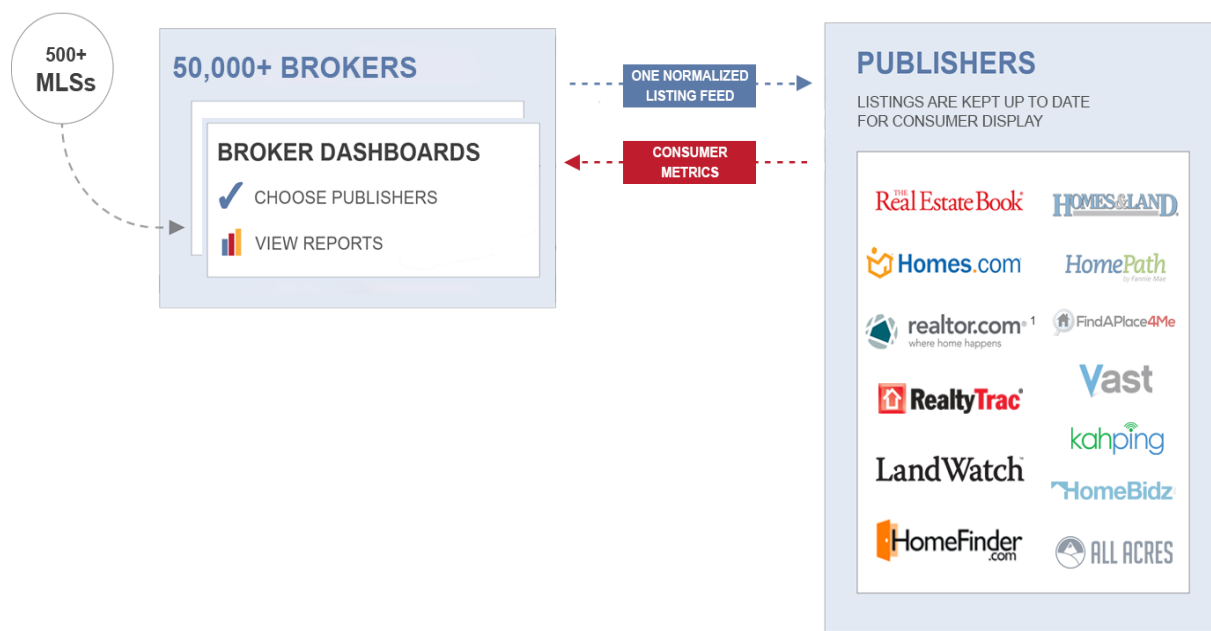


What is ListHub?

ListHub focuses on creating one central place for brokers/agents to manage the distribution of their listings outside of the MLS system. On the receiving end of these listings, ListHub provides vendors with a platform to automate the flow of listing data directly from MLSs and other content providers to the vendor. This provides the vendors with a timely, accurate data feed that is standardized across the country.



ListHub is the leading listing data synchronization engine in the real estate vertical, keeping publishers up-to-date with accurate MLS data feeds. These publishers receive listing data from MLSs and brokers in more than 600 MLS markets and 50 direct broker or custom content sources, whose MLS membership provides 80% coverage of the U.S. market. ListHub currently synchronizes real estate listing content at the MLS and broker level through its proprietary software that is connected to the MLS database and used for exporting data from various sources and synchronizing with multiple destinations. Today, over 2.8 million listings, which are represented by 50,000 brokers, are synchronized with over 160 publisher partners on a daily basis. ListHub is actively expanding its MLS universe on a monthly basis in order to provide expanded listing management services.



¹ Realtor.com generally doesn't receive listings via ListHub but does participate in the network as a metrics provider



PROJECT MANAGER INFORMATION PACKET - FOR PUBLISHERS

After listing data is accessed via the connection to the MLS and custom databases, brokers have the ability to control listing data distribution outside the MLS system. The publisher's individual clients/ media outlets will be available for broker's to select at the request of the publisher's client.

ListHub allows brokers to make individual decisions concerning their own listing data, while not having to re-enter the data or devote technical resources in preparing individual feeds. All listing data is accessed directly from the MLS system where the data is most up-to-date and accurate, with no re-entry required. In the current 600+ MLSs and custom feeds, no additional paperwork is required to begin feeding data to any of the publisher-client sites, only the single click of the broker. In new MLS markets, the MLS is required to sign an agreement with ListHub prior to listing syndication.

Below is a sample channel page within ListHub showing how a new publisher might be displayed. The broker can begin sending listings to you with one click.



Key Value Proposition:

An MLS connected content provider for the real estate vertical is essential to maintain timely synchronization, accurate data, and best-in-class syndication/ monitoring.

Publisher Network 62 62

[Scorecard Flip-Book](#) [Scorecard Comparison](#) [My Publishers](#) [Available Publishers](#)

[My Publishers](#) [Publisher Choices](#) [Publisher Settings](#)

Selecting these criteria will filter the list to display only publishers that meet the selected criteria. The filters may help you choose publishers.

Search for publishers by name

Filter Publishers

- ☐ No Re-Syndication
- ☐ Posts Redirect Link
- ☐ Provides Error Reports
- ☐ Provides Metrics
- ☐ Shows Broker Contact Info
- ☐ Timely Listing Removal
- ☐ Timely Support

Add Selected Total Viewing: 62 out of 62

	Date Selected	Type	Name	Extended Network	Features	Rating
✓		Auto	century21.com		Real Estate Network Display Rules	★★★★☆
✓		Auto	ColdwellBanker.com		Real Estate Network Display Rules	★★★★☆
✓		Auto	RealtyExecutives.com		Real Estate Network Display Rules	★★★★☆
✓		Auto	remax.com		Real Estate Network Display Rules	★★★★☆
		Manual	Your Company		7 / 7	★★★★★
✓	10/12/2009	Manual	Zillow Network	+	7 / 7	★★★★☆
✓	10/12/2009	Manual	Trulia	+	7 / 7	★★★★☆
✓	10/12/2009	Manual	HomeFinder.com	+	6 / 7	★★★★☆



PROJECT MANAGER INFORMATION PACKET – FOR PUBLISHERS



The ListHub Feed

ListHub aggregates listings from more than 600 of the largest MLS's, broker franchises and asset management companies across the USA. We then map and normalize the data according to the [RETS Syndication Specification](#) – a nationally recognized syndication standard endorsed by the National Association of Realtors and managed by a committee of dedicated and diverse I.T. professionals.

Project Managers – there are a few things you need to know about the ListHub feed:

- **Data formatting – Follow the Schema!**

As you may know, in the real estate industry data changes quite often and without notice, therefore we follow the [RETS Syndication Specification](#) which is built to allow for changes without breaking your system. The most common cause of issues, is that the development team built to the file, not the schema.

- **We have comprehensive documentation for developers.**

Go to <http://app.listhub.com/syndication-docs/>

- There are three main sections of the documentation :

1. **Syndication Overview**

Background info and a comprehensive FAQ for developers

2. **RETS Syndication 2012-03**

Includes the schema reference info and an example XML

3. **Downloading Feeds**

Download info plus specific HTTP library workarounds

- **No data may be displayed commercially until ListHub gives you written permission to do so.**

- **File Format and Frequency**

Data is provided to you via an XML feed which is posted to a secure HTTP directory approximately every 12 hours. You will be given a unique URL for your feed and a username and password to access the data. Once you log in this is what you will see. →





PROJECT MANAGER INFORMATION PACKET - FOR PUBLISHERS

- **Data Included in the Feed**

ListHub focuses on Active listings only (no sold or off-market info), completely rewriting our file with each refresh. Therefore, you should have a good process for purging listings that are no longer in the feed.

- **File Size**

Since our network is quite expansive; the file can be very large (as much as 20GB) so we compress the files for easy transmission using ZIP, GZIP or BZIP file formats.

- **Fields Included**

ListHub maps 40 core fields but we also gather an additional 50+ fields and make them available to you as they become available to us (see pages 6-7 for a more comprehensive list.) Keep in mind that we provide the data to you exactly as it is provided to us without corrections for spelling and completeness.

- **Photos, Videos and Virtual Tours**

We provide ALL photos, videos and tours that are available through the MLS – whether that's 1 or 100. All media is provided as an individual link, in order of importance, complete with the time stamp embedded in the URL. We also provide a photo count for your convenience. It's important to note that our servers are not designed to host the photo data for our partners. Therefore you should either download the photos or cache them as requested by the user.



Data Requirements

- **Confidentiality**

You will receive test data. All data must be kept confidential and in no way made accessible to the public until expressly notified.

- **Keeping the Data Clean**

You are required to update the file at least once every 24 hours and purge outdated listings at least once every 1-2 days.

- **Status and Metrics Reporting**

We require reporting on your site's consumer engagement metrics, as well as status and feedback on the listings you post. To help you, we have built a light API for the consumer engagement reporting, while the error and status/feedback reporting is handled separately. To view the full spec visit: <https://app.listhub.com/feedback-docs/> - it has links to both the reporting requirement specs. Your ID will be provided shortly after the contract is signed and the project is kicked off. Reporting must be up and running on the date you go-live / launch the data on your website/service.

QUICK LINKS:

- [**Data Spec**](#)
- [**Feed FAQ**](#)
- [**Reporting Spec**](#)



PROJECT MANAGER INFORMATION PACKET - FOR PUBLISHERS

- **No Resyndication**

You may not resyndicate any portion of the data we provide you; this is strictly against our policies, and critical to the owners of the listings content. Posting to social media sites is not considered syndication as long as the broker is in full control of the process and this is handled on a one-by-one basis.

- **No Non-Display Uses**

All data is for consumer display purposes only. It cannot be used in back end data bases, or B-2-B products. Use for trending/analytics on your site is allowed, but cannot be distributed or sold.

- **No Co-Mingling of Listing Data**

Broker or agent IDX feeds and ListHub syndicated data feeds cannot be comingled on the same site as their intended purpose is much different. Additionally, receiving a ListHub feed is as though you are receiving it directly from the broker themselves. For that reason, while we do not prohibit you from accepting other listing data feeds, in the case of duplicate data, the ListHub feed should trump all other sources, except if the broker sends you a direct data feed.

- **Augmenting the Data**

If you choose, you may augment listings with additional information but you cannot replace the data provided via ListHub. Additionally, we advise that you separate this information in your display and cite the source to add further transparency.

- **Support**

We are happy to provide you with support and expect you to provide the same to us, ensuring data accuracy and agent/broker satisfaction.



Display Requirements

- **Redirection Link**

You are required to post our Listing URL link/redirect on your listing details (field name: ListingURL.) ListHub does not dictate where or how the hyperlink appears, but most often it is linked from words such as “More Detail”, “Original Listing” or “Listing Website”. The purpose is to help drive traffic back to the listings agent/brokerage sites. NoFollow links are not permitted.

- **Per Listing Disclaimer**

If provided (per MLS/Content Source), each listing detail page must display the disclaimer language as provided in the ListingDisclaimer field. Typically it will say something like this:

Copyright © [Year] [Data Source]. All rights reserved. All information provided by the listing agent/broker is deemed reliable but is not guaranteed and should be independently verified.

- **Compliance with State Laws**

State laws require that the brokerage name and contact info be present in all online advertising. A few states require that the brokerage name appear both in the search results page (summary info) and listing detail pages. At minimum it should appear on the listing detail page.

- **Display Minimums (as per the agreement)**

All listings included within the ListHub content must display, at a minimum, the content fields listed below (unless otherwise agreed in writing). If any of the content fields mentioned above are not included in the Licensed Content you are not obligated to display that field.

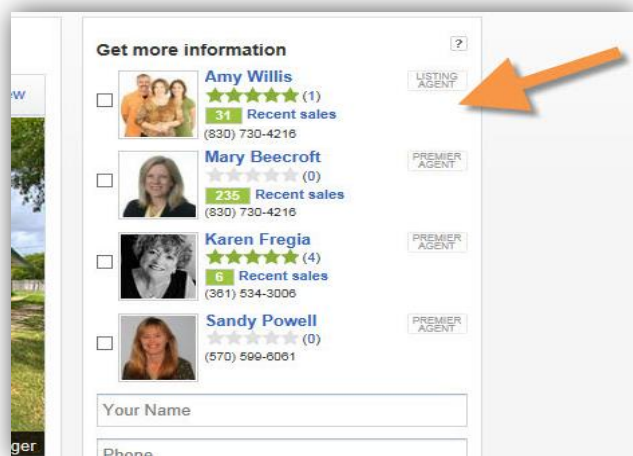
- | | |
|------------------------|---|
| • Property Address | • Broker Name |
| • Listing price | • List agent name |
| • Number of bedrooms | • List agent email (lead routing email) – clickable but not displayed is okay |
| • Number of bathrooms | • Property Status (current status as provided by broker such as active or pending/contingent) |
| • Square footage | |
| • Property Description | |
| • Office phone number | |

- **Listing Updates**

If you send listing updates to the consumer regarding the property status, price changes or other types of information you must display the listing agent and broker information in each communication as well so that the consumer is aware of who represents the property.

- **Competitive Broker Advertising**

In the spirit of syndication and the tenet: “your listing, your lead” brokers prefer that no competitor advertising appears on the listing detail pages. If you do display competitive agent/broker ads, the listing agent may not be minimized on the page and must be treated at least equally with other advertisers. Please see the Competitive Advertising Section of the agreement for more details on what must be displayed and how leads must be handled.





PROJECT MANAGER INFORMATION PACKET - FOR PUBLISHERS



Getting Started

- **Listing Coverage / Broker Subscriptions**

ListHub is a free tool for brokers so there are no barriers. With it brokers can elect to send their listings to the sites of their choice. Brokers have the right to opt in or out of your channel at any time, and there is no guarantee of listing count or participation levels. If you are meeting their needs/expectations it is reasonable to assume they will continue to subscribe to your service and your subscriptions will increase.

- **Listing Breadth**

ListHub accesses all of the broker's available listings in MLS system. As most MLSs are primarily focused on residential property that is for sale, including homes and land, publishers may also receive secondary listing types such as rentals, commercial property and lesser known, "other" property types. The secondary property types vary by market, may not be available in some markets, may have limited available and applicable fields, and may not be a comprehensive representation of those property types in the local market. Filters are available to limit property types if you prefer.

- **Timeframe**

Once the agreement is received, plan on approximately 3 business days to begin receiving your feed(s). Keep in mind that you will still need to test the data to ensure it is integrating properly. From the time of contract to official launch, plan on 3-4 weeks.

- **Marketing**

Once testing is complete, we will send out a new channel announcement to the MLSs followed by a broker announcement a few weeks later. After that, you will probably want to have a marketing plan in place to help drive more sign ups.

- **Unsupported MLSs**

If you would like to aid in bringing on unsupported MLSs in your footprint, please contact our MLS team at MLS.info@listhub.com.



PROJECT MANAGER INFORMATION PACKET - FOR PUBLISHERS



Listing Fields

This is the list of fields we request from the MLSs. For a complete list of all fields and variables we have available please review the data schema which has approximately 100 different fields at <http://app.listhub.com/syndication-docs/>

Address 1	List Office Address 1	Has Deck Y/N
Address 2	List Office Address 2	Has Disabled Access Y/N
City	List Office City	Has Dock Y/N
State	List Office State	Has Doorman Y/N
Postal Code	List Office Postal Code	Has Double Pane Windows Y/N
Country	List Office Country	Has Elevator Y/N
List Price	List Office Website	Exterior Types
List Price Currency	Brokerage Name	Has Fireplace Y/N
Listing URL	Brokerage Phone	Floor Coverings
Provider Name	Brokerage Email	Has Garden Y/N
Bedrooms	Brokerage Website URL	Has Gated Entry Y/N
Bathrooms	Brokerage Address 1	Has Greenhouse Y/N
Property Type	Brokerage Address 2	Heating Fuels Y/N
Property Sub Type	Brokerage City	Heating Systems Y/N
Listing Key	Brokerage State	Has Hot Tub Spa Y/N
Listing Category (Sale, Rent)	Brokerage Postal Code	Intercom Y/N
Listing Status	Brokerage Country	Has Jetted Bath Tub Y/N
Disclose Address Y/N	Franchise Name	Has Lawn Y/N
Automated Valuation Display Y/N	Latitude	Legal Description
Consumer Comments Y/N	Longitude	Has Mother In Law Y/N
Photo URLs	Elevation	Is New Construction Y/N
Photo Modification Timestamp	Directions	Num Floors
Listing Description (Public Remarks)	County	Num Parking Spaces
MLS Id	Parcel Id	Parking Types
MLS Name	Subdivision	Has Patio Y/N
MLS Number	Neighborhood Name	Has Pond Y/N
Living Area	Open House Date	Has Pool Y/N
Lot Size	Open House Start Time	Has Porch Y/N
Year Built	Open House End Time	Roof Types
Listing Date	Open House Description	Room Count
Listing Title	Elementary School Name	Room Types
Full Bathrooms	Middle School Name	Has RV Parking Y/N
Partial Bathrooms	High School Name	Has Sauna Y/N
Foreclosure Status	School District Name	Has Security System Y/N



PROJECT MANAGER INFORMATION PACKET - FOR PUBLISHERS

List Agent First Name	Annual Tax Fee	Has Skylight Y/N
List Agent Last Name	Monthly Association Fee	Has Sports Court Y/N
List Agent Phone	Appliances	Has Sprinkler System Y/N
List Agent Email	Architecture Style	Has Vaulted Ceiling Y/N
List Agent Website URL	Has Attic Y/N	View Types
List Agent Id	Has Barbecue Area Y/N	Is Waterfront Y/N
Virtual Tour URLs	Has Basement Y/N	Has Wet Bar Y/N
Video URLs	Building Unit Count	Is Wired Y/N
List Office Key	Is Cable Ready Y/N	Year Updated
List Office Id	Has Ceiling Fan Y/N	Modification Timestamp
List Office Name	Condo Floor Num	
List Office Phone Number	Cooling Systems	