

The following document is an example of what an MLS can communicate to its RETS customers about the transition to Matrix.

As far as when/what to communicate ----

- Initial email telling RETS customers the timelines should be sent out 2-3 weeks ahead of when the metadata will be available/final. This allows them to make sure resources are available for the changes. In this communication, it should state when more information will be coming to them.
- Send the information in this document in the second communication along with the generic Matrix RETS Server document.
 - You do not want to send this until data is signed off on so there are no other changes to the metadata.
 - The metadata being available should coincide with the end of the MLS Review phase and as you are entering the MLS Parallel phase. If your MLS has signed off on data earlier, it can be sent then.
 - RETS customers usually need 4-6 weeks of time to change their side of things, make sure parallel has at least that much time.
 - Option – send a spreadsheet with the metadata and highlight any significant changes in it. (Mapping document attached for your use if desired)
- Send reminders every two weeks throughout parallel period. Week of cutover – remind them of cutover one more time and the shutoff of the legacy server.

The document below is written for MIBOR BLC.

Note, default RETS records to pull is 5,000.

Dear RETS Customer,

The Broker Listing Cooperative (BLC) of the Metropolitan Indianapolis Board of Realtors will be changing its MLS software from Tempo 5/Fusion to Matrix. With this change, we will also be getting a new RETS server. Below is information you need regarding the change.

Timeline

The Matrix RETS server will be available **December 15th**. The MLXchange/Fusion and Matrix systems will run in parallel starting at this time. The Tempo 5/Fusion system, including the RETS server, will be turned off by the end of January 2015.

During the parallel time, December 15 to January 31, the Matrix RETS server will be updated each hour. Once the Tempo 5/Fusion system is turned off, the Matrix RETS server will be real-time. Once you make your changes, you are welcome to use Matrix RETS before January 31, 2015, but if you update more than once/hour, please note you will not see changes more often until after cutover.

Please arrange for resources on your end to make the changes necessary for your products and services to work with the Matrix RETS server during this two-month window.

IDs and URL

Your ID and password will remain the same.

The URL for the Matrix RETS server is: <http://matrixrets.miborblc.com/rets/login.ashx>

Data Changes

There were various changes made to the data in listings. Below is a synopsis of the major changes. It is best to use the metadata from the server to see all the data changes and lookup values.

Unique ID

Previously, **Sysid** was a unique listing ID. In Matrix, use **Matrix_Unique_ID**

See the section below called *Downloading the Entire Set of Listings* for the best way to obtain all listings from the Matrix RETS server.

Matrix_Unique_ID (MUI) is the unique id for each record. If there is a relationship between two resources, you will see another ID that would relate to it with MUI in its name. Example:

Open House

- Matrix_Unique_ID = unique id within OH data

- Listing_MUI = MUI to the listing resource (cross property).

Listing

- Matrix_unique_ID = unique id within listing data

The join needed to find the data would be OpenHouse.Listing_MUI = Listing.Matrix_Unique_ID.

The same type of logic would be used for other relationships.

- Rooms.Listing_MUI = Listing.Matrix_Unique_ID
- Listing.ListAgent_MUI = Agent.Matrix_Unique_ID
- Media.Table_MUI = Listing.Matrix_Unique_ID (listing photos)

Classes

Previously, there was one Class per Property Type. With Matrix RETS, there is just one Class – Cross Property. To filter the information, use the fields called Property Type and/ or property SubType. More on Property Type/Property Subtype is below.

Property Types

Property Type is now a field, not a class. Previously, there were ten (10) property types.

- Residential
- Residential Lease
- Vacant Lot/Land
- Multi-Family
- Farms and Agriculture
- Commercial Retail
- Commercial Office
- Commercial Industrial
- Commercial Multi-Family
- Commercial Land

In Matrix, there will be five (5) Property Types. A Property Sub Type has been added to use in your searches. Also, a Transaction Type has been added to distinguish between Lease and Sale listings. These changes were made to allow more flexibility with searching for listings, especially across property types. Below is a list of the options available for each of the four property types as well as the cross property type.

- Residential/Condo
 - Property Sub Type
 - Single Family
 - Condo
 - Transaction Type
 - Lease

- Sale
 - Option to Buy
- Vacant Lot/Land
 - Property Sub Type
 - Residential Lots
 - Commercial Land
 - Transaction Type
 - Exchange
 - Lease
 - Lease Back
- Multi-Family
 - Property Sub Type
 - Residential Multi-Family 2-4 Units
 - Commercial Multi-Family 4+ Units
 - Transaction Type
 - Auction
 - Exchange
 - Sale
- Farms and Agricultural Land
 - Property Sub Type
 - Farms
 - Transaction Type
 - Sale
- Commercial
 - Property Sub Type
 - Retail
 - Industrial
 - Office
 - Transaction Type
 - Auction
 - Exchange
 - Lease
 - Lease with Option to Buy
 - Sale
 - Sales-Lease Back
- Cross Property
 - Property Sub Type
 - Residential/Condo
 - Farm and Agriculture
 - Multi-Family
 - Vacant Lots/Land

- Commercial
- Transaction Type
- Rental
 - Sale
 - Lease with Option to Buy

Status

Previously, there were the following Statuses for listings:

Name	Description
ACT	Active
TEMP	Temporarily Off Market
WITH	Withdrawn
PEND	Pending
RELD	Released
SOLD	Sold/Closed
EXP	Expired

In Matrix, the following Statuses will be available:

Name	Description
A	Active
AC	Active with Contingency
T	Temporarily Off Market
W	Withdrawn
P	Pending
R	Released
S	Sold/Closed
X	Expired
L	Leased

Use Transaction Type if you want to filter out Sale or Rental listings.

Listing Date should be used if you want to highlight a listing as New within a certain timeframe.

Rooms

Previously, the information about Rooms (dimensions, features, etc.) were flattened out in each listing and limited the system to only track information about a certain number of rooms. Rooms in Matrix are considered a separate data set and are unlimited due to this. When you input a listing, you can now enter the following information for as many rooms as you would like:

- Room Type (i.e. Kitchen, Master Bedroom)

- Room Level (upper, main, basement)
- Room Dimensions – Length and Width
- Room Flooring (i.e. Carpet, hardwood, laminated, etc.)
- Room Window Treatments (Yes/No)

Matrix_Unique_ID (MUI) is the unique id for each record. If there is a relationship between two resources, you will see another ID that would relate to it with MUI in its name. For rooms, the relationship is Rooms.Listing_MUI = Listing.Matrix_Unique_ID

Units

Previously, the information about Units was flattened out in each listing and limited the system to only track information about certain units. Units in Matrix are considered a separate data set and are unlimited due to this. When you input a listing for Multi-Family (Residential or Commercial) , you can now enter the following information as needed for as many units as needed:

- Type Num (1,2,3,etc)
- # This Type of Unit (for example 3- Three bedroom units, 2- one bedroom units, etc.)
- Rent
- Rent Frequency
- # Bedrooms
- # Baths
- # Rooms
- Level
- SQFT
- Kitchen Dimensions
- Master Bedroom Dimensions

Matrix_Unique_ID (MUI) is the unique id for each record. If there is a relationship between two resources, you will see another ID that would relate to it with MUI in its name. For units, the relationship is Units.Listing_MUI = Listing.Matrix_Unique_ID

Media

Below are some frequently asked questions regarding the Media resource, which contains photos.

- How do I obtain the largest resolution images? Use the Media Type of Large Photo.
- Do I have the ability to directly link to the images on your server opposed to downloading the images to my local server? No, you must download the media to your server.
- How many photos are allowed per listing? A listing may have up to 24 images in Matrix.
- What is the best way to download photos? See the section below called Downloading Photos

Matrix_Unique_ID (MUI) is the unique id for each record. If there is a relationship between two resources, you will see another ID that would relate to it with MUI in its name. For media, the relationship is Media.Table_MUI = Listing.Matrix_Unique_ID.

Downloading the Entire Set of Listings

There is a limit of 5,000 records that can be downloaded at one time with Matrix RETS. You can use the Offset feature if you have the need to obtain more than 5,000 records. Below is what is recommended for you to do to populate the initial load:

1. Take note of the time that you start this process - it will be used later.
2. Use a query of (matrix_unique_id = 0+)&Limit=1000
3. Retrieve all those listings
4. Find the highest matrix_unique_id from those listings
5. Create a new query with (matrix_unique_id=<HighestID from step 4>+)&Limit=1000
6. Repeat from Start step 3 until you receive all listings.
7. The general download of listings using the dt_mod equal to the date you got in step 1. This makes sure to get any changes you may have missed while getting the entire set of listings.

This process works because all of our output is ordered by the primary key, the Matrix_unique_Id field. The RETS spec does not allow a client to specify an order.

Matrix RETS servers will have only one property resource called Cross Property. Use PropertyType, PropertySubType and TransactionType to query Residential, Commercial or for Lease/for Sale listings.

Downloading Photos

Downloading photos in RETS is performed through the GetObject request. Here is an example of the GetObject request to get an image for a property. It is a sample of the code to retrieve an actual photo.

<http://rets.hgmls.mlsmatrix.com/rets/GetObject.ashx?Type=Photo&Resource=Property&ID=269251:0>

The ID portion of the parameters (ID=269251:0) has two parts.

- The 269251 is the Matrix_Unique_ID of the listing, our primary key, as noted in the METADATA-RESOURCE. It is not the MLS number. This has caught other users in the past.
- The “:0” of the ID is used to get the primary picture.
 - A “:1” will get you the first picture, which on our system is the primary picture, so in effect, :0 and :1 are equivalent.
 - Using “:2” will give you the second picture.
 - If you use a “:*” you will receive a multipart response which contains all of the images for that property.

There is no request in RETS to simply ask for ALL of the images.

There is a field called PhotoCount in the listing tables that indicates the number of photos for that particular listing.

We have added a field to the listings called PhotoModificationTimestamp. This field contains a modification timestamp for the photos for a listing. So if any new pictures are added, removed or replaced the listing's PhotoModificationTimestamp would be changed as well as the MatrixModifiedDT.

You can pull photo updates for listings using a similar method for pulling listing updates, but instead of using MatrixModifiedDT you can PhotoModificationTimestamp. When listings have a newer PhotoModificationTimestamp, you need to download the photos for that listing. Alternatively, you could use a different method whereby when you download updates for a listing, you can compare the old PhotoModificationTimestamp with the new one. If they differ, re-download the photos for that listing. This method works because the MatrixModifiedDT is updated at the same time as the PhotoModificationTimestamp.