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Welcome to the REcolorado RETS test server. The test server contains old and possibly inaccurate data and should only be used to validate queries. Please limit the size of the data sets that you are retrieving and do not schedule queries to be run against this service. Additionally, the media that is provided by this service is not accurate and is for test purposes only, do not do large media downloads as this could impact other users on the system.

1.0 RETS URLs

Login:	http://metro.matrixstaging.com/rets/Login.ashx
Logout:	http://metro.matrixstaging.com/rets/Logout.ashx
Search:	http://metro.matrixstaging.com/rets/Search.ashx
GetMetadata:	http://metro.matrixstaging.com/rets/GetMetadata.ashx
Action:	http://metro.matrixstaging.com/rets/Action.ashx
GetObject:	http://metro.matrixstaging.com/rets/GetObject.ashx

2.0 Access Credentials
You will receive an email from REcolorado containing your username and password. Depending on how your product functions you may also receive user-agent information. The username and password are case sensitive.

3.0 Client Requirements
You will need a RETS client to access the Matrix RETS system. If you don't have a RETS Client, one option is Matrix RETS Connector. You can find Matrix RETS Connector and assistance at http://www.retsconnector.com

Please note that we are not able to offer support for RETS client software.

4.0 Documentation
Upon completing the data licensing agreement, you will be provided with a RETS Implementation Guide and list of fields that are available to you.

5.0 Initial Setup and Introduction:
>   5.1 Configure your RETS Client with the Matrix RETS system information:
>>   5.1.1 Server URL: http://metro.matrixstaging.com/rets/login.ashx
>>   5.1.2 The Matrix Server supports versions 1.5, 1.7.2 and 1.8
>   5.2 Pull metadata using your RETS Client
>>   5.2.1   This is where you will see which Resources, Classes and Fields that you will have access to.
>>   5.2.2   Depending on your RETS Profile, you may not see all the following Resources and Classes. The available fields will also vary based on your contract.

5.2.3   Resources:

Resources	Property	Agent	Office	Media	Property Sub Table	Dictionary
	RESI	AGENT	OFFICE	Media	Unit	Dictionary Neighborhood
	LAND				Room	DictionaryBuilderName
	INCOME				Parking	DictionarySchool
					HorseFacility	
					Outbuilding	

The following property sub tables are available depending on your RETS Profile:

RESI
       Listing_Room
       Listing_Parking
       Listing_Outbuilding
       Listing_HorseFacility

INCOME
       Listing_Unit
       Listing_Parking

LAND
       Listing_Parking
       Listing_Outbuilding
       Listing_HorseFacility

a. Type
    i.   Photo: 296 x 222
   ii.   LargePhoto: 640 x 480
  iii.   XLargePhoto: 1600 x 1200 (Contact REcolorado to obtain this size photo)

b. Metadata example for the "Status" field
    -<Field>
        <MetadataEntryID>678</MetadataEntryID>
        <SystemName>Status</SystemName> this is the name you use to search
        <StandardName/>
        <LongName>Status</LongName>
        <DBName>R678</DBName>
        <ShortName>Status</ShortName>
        <MaximumLength>32</MaximumLength> this is the maximum number of characters in the data
        <DataType>Character</DataType> this is the type of data contained in the field
        <Precision/>
        <Searchable>1</Searchable>
        <Interpretation>Lookup</Interpretation>
        <Alignment>Left</Alignment>
        <UseSeparator>0</UseSeparator>
        <EditMaskID/>

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```
                        <LookupName>Status</LookupName>
                        <MaxSelect>1</MaxSelect>
                        <Units/>
                        <Index>1</Index>
                        <Minimum/>
                        <Maximum/>
                        <Default/>
                        <Required>0</Required>
                        <SearchHelpID/>
                        <Unique>0</Unique>
                        <InKeyIndex>0</InKeyIndex>
                    </Field>
```

5.3   Review the metadata and perform sample queries. Refer to the Sample Queries section below.

   Note: Be sure to log out after each session.

5.4   On each page where listing information is displayed, the following microdata must be present:

```
<div itemscope itemtype=https://schema.org?Product>
    <meta itemprop="provider" content="<RETSID>"/>
    <meta itemprop="owns" content="REcolorado"/>
</div>
```

   where <RETSID> is your RETS username. It is acceptable to merge the productID, provider, and owns attributes within an existing itemscope where applicable.

5.5   ListTrac Implementation: We have partnered with ListTrac to provide our membership with real-time online analytics related to their listings. we are requiring that the ListTrac monitoring code be included in the listing detail page on your site. Please register using the following link:

   http://recolorado.listtrac.com/admin/register

6.0   Listing Retrieval Sample Queries

NOTE: For all your queries, use StandardNames=0 and use the SystemName fields.

Listing number queries:

   (MLSNumber=|1234567) – MLSNumber is type CHAR and cannot be used for range searches

Listing modification date and time:

   (MatrixModifiedDT=2013-08-07T00:00:00-2013-08-07T03:00:00) – Date/time range
   (MatrixModifiedDT=2013-08-07T00:00:00+) – Date/time equal to or greater than
   (MatrixModifiedDT=2013-08-06-2013-08-07) – Date range
   (MatrixModifiedDT=2013-08-06+) – Date equal to or greater than

   Note: We support Versions 1.5, 1.7.2 and 1.8 see FAQs for important information regarding timestamps

Row Limits:

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The RETS server limits results to 5000 rows per query. Queries with result sets larger than 5000 rows can be accomplished using offset. Offset=1 must be included in the first query then Offset is incremented based on the row limits e.g. Offset=1 for the first query, Offset=5001 for the second query, Offset=10001 and so on.

Photo Retrieval Sample Queries

PhotoModificationTimestamp is used to determine when a photo last changed.

(PhotoModificationTimestamp=2013-08-07T00:00:00-2013-08-07T03:00:00) – Date/time range
(PhotoModificationTimestamp=2013-08-07T00:00:00+) – Date/time greater than
(PhotoModificationTimestamp=2013-08-06-2013-08-07) – Date range
(PhotoModificationTimestamp=2013-08-07+) – Date equal to or greater than

GetObject

GetObject is used to retrieve photos from the Matrix RETS system. You can identify the listings with new or updated photos using a PhotoModificationTimestamp query. Then you use GetObject to pull the photos for those listings.

GetObject in the Matrix RETS system uses the field "ID" rather than the "MLSNumber"

> **Note** – "ID" is the "Matrix_Unique_ID" for the listing

> *Example:* /GetObject.ashx?Type=Photo&Resource=Property&ID=11738756:0

Keeping the Data Accurate

Because the listing data changes, it is important to keep your data up to date. Not all listings are available to all users. For example, some users may only have access to active listings. If a listing is changed from active status to a different status, that listing will no longer be visible; conversely, if a listing status changes back to active, it will become visible. When there are changes to a listing the MatrixModifiedDT field will reflect the date and time of modification.

Due to the frequency of listing changes, it is recommended that the following process be run nightly:

1. Perform the following RETS query:
    (Matrix_Unique_ID=0+)&Select=Matrix_Unique_ID this will return a list of all of the Matrix_Unique_IDs that you are currently allowed to access and display through your system.
2. Compare this list to your current data.
3. If you have a Matrix_Unique_ID that is not in the updated list, then you need to remove it from your system.
4. If there is a Matrix_Unique_ID in the updated list that is not currently in your system, then you will need to pull it for addition to your system.

Note: It is possible for listings to appear in your Matrix RETS data without a change to the MatrixModifiedDT (modification timestamp). This may occur if there have been changes to your RETS Profile, or if there are timing restrictions as to when listings become available to you. Performing this update nightly helps ensure that your system or website is displaying the most up-to-date information available to you.

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7.0 For Vendors providing IDX data on Broker websites

IDX Data Requirements

REQUIRED Fields for IDX display:
> ContingentApprovalConditions
> ListingOfficeName
> MLSNumber
> StatusConditions
> Status
> AcceptingBackupOffersYN

The following fields are available for display for some statuses:
> ListPrice is available for display on Active and Under Contract Listings
> UnderContractDate is available for Under Contract Listings
> CloseDate is available for Sold Listings
> ClosePrice is available for Sold Listings

REQUIRED for IDX property display:
> Photos
> IDX Logo & Disclaimers

IDX Sold Listing Data

With the IDX data feed you have access to three years of Sold data.

Please note, it is the vendor's responsibility to remove listings from their IDX web sites once the listings are no longer available in the RETS feed e.g. the listing sold more than three years ago.

Photos for IDX Sold data

Per IDX Rules only the first photo on a Sold Listings may be displayed. You will have access to all 35 photos but are only allowed to display the first photo for Sold properties.

> *Example:* /GetObject.ashx?Type=Photo&Resource=Property&ID=11738756:1

8.0 Matrix Unique ID

Matrix_Unique_ID is the primary key for each record in a table. Many classes will have a field that references the Matrix_Unique_ID of the parent record. For instance, the Room SubTable contains the field Listing_MUI which is equal to the Matrix_Unique_ID of the listing record. This information can be used to link the Room data to the parent listing.

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9.0 Glossary:

Resources: A collection of data having the external appearance of belonging to a single database and being accessible for search or update via RETS transactions
Classes: A subset of data elements within a Resource that share common metadata elements
Fields/Datatypes:
Characters: Alphanumeric text e.g. letters, numbers or symbols
Integers: Numbers
Field Lengths: This is noted in the metadata
Database: Where the data about each listing record is stored
GETObject: The process of querying the photo data in order to specify what photos are retrieved
Mapping Document: A guide referencing data field names
MUI: Matrix_Unique_ID
Metadata: The set of data that describes data fields
Query: How to ask the database for records by data field
RETS: Real Estate Transaction Standards
RETS Client: The program used by the user to query the RETS database
RETS Profile: Determines the data that is available to you from Matrix RETS. The RETS Profile is managed by REcolorado.

Also, see http://www.reso.org/glossary for additional definitions of terms.

10.0 Questions and Answers

10.1 I am getting a 401 Unauthorized Error, what should I do?

A 401 Authentication Error indicates that there was a problem logging in.

  i. Ensure that you have entered the correct server information.
      http://metro.matrixstaging.com/rets/login.ashx
  ii. Ensure that your login credentials are entered correctly.
  iii. Note: Login credentials are case sensitive.

10.2 How do I get more than 5000 results?

- You will need to use "offset" to obtain the complete listing data set. Offset must be set to 1 for the first query and is then incremented for each additional query until the entire data set is retrieved. An example of this would be offset=1 for the first query, offset=5001 for the second query, and so on.
- Contact RETSSupport@REcolorado.com with questions about the fields.
- Questions about RETS standard can be found at http://www.reso.org/developers-faq

10.3 What is the Property SubTable Resource?

- This resource provides access to additional information about the listing, such as detailed room, parking and other information. Depending on your profile, you may see the following classes as part of this resource:
- Unit: provides detailed unit information for Income properties, such as number of units by type, number of bathrooms by unit type, etc.
- Room: provides room types, floors, and dimensions.
- Parking: provides the number of parking spaces by type (such as Detached Garage), and other descriptive information about parking.
- HorseFacility: provides detailed information about horse facilities, such as stables and indoor arenas.
- Outbuilding: provides detailed information about outbuildings, such as barns and workshops.

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10.4   Where can I find FAQ about the RETS standard?

- The newest developers frequently asked questions can be found at www.reso.org/developers-faq.

10.5   What photo sizes are available?

- Currently available photo sizes are 296x222, 640x480 and 1600x1200
- The size that you have access to will depend on your contract.

10.6   What is the difference between Matrix_Unique_ID and Listing_MUI?

Listing_MUI is a field in the SubTables, it is equal to the Matrix_Unique_ID in the Listing Table.

10.7   How do I find a list of schools and neighborhoods?

- Resource: Dictionary Class: DictionaryNeighborhood query Matrix_Unique_ID =0+
- Resource: Dictionary Class: DictionarySchool query Matrix_ Unique_ID =0+

10.8   Why are some listings missing the city or other address information in the IDX data?

City is missing on a listing because the listing agent has chosen not to allow the address information to be displayed on the internet. You will get all of the listing data except for the address fields.

10.9   What field do I use to find total parking spaces? What about the number of garage or off-street spaces?

Total parking spaces for the property can be found in ParkingTotalSearchable. The number of spaces by parking type, such as Attached Garage or Off-street, can be found in the Parking subtable in the ParkingType and ParkingSpacesNumberOf fields.

10.10 How does version 1.5 versus 1.7.2 or 1.8 handle time zones?

RETS version 1.5 doesn't support the metadata which indicates the server's local time zone. If your client is version 1.5 all times will be GMT so you will have to manually offset to Mountain Time. Versions 1.7.2 and 1.8 support time zone metadata so all timestamps will be correct.

10.11 What geographical data is available on a listing?

Depending on your contract you might have access to –
  Latitude & Longitude
  City
  Neighborhood (Resource: Dictionary Class: DictionaryNeighborhood

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10.12 What are CDOM and ListingContractDate?

CDOM is property based not listing based *example:* listing is added, it is on market then expires, a new listing for the same property is added less than 30 days after 1st listing expires, it is on market then goes under contract. CDOM is calculated using the listing entry date of the first listing not the second; this can chain back more than 1 listing.

ListingContractDate is the date on the listing contract; it is manually entered by the listing broker and is only valid for the specific listing it is entered on.

10.13 Why are the first and second images always the same in the property image feed?

Per the RETS spec the '0' image is the primary image and the '1' image is the first image. In our case, the primary image is the first image so they are always the same.

10.14 What fields do I use for Short Sales, Bank Owned and Hud?

Status Conditions: Short Sale
Property Information: HUD
Seller Type: Bank/GSE

10.15 Which field should I use for Postal Code, as I see a PostalCode field with max length of 10, and a PostalCodePlus4 field with max length of 4.

Currently the PostCodePlus4 field is not being used. The Broker has the option of entering the 5-digit postal code or the 9 digit in the PostalCode field.

10.16 I am experiencing problems with random records not importing to my database correctly.   Why is this happening?

When choosing a data delimiter, pipe is strongly recommended. The data contains several free form text fields that could contain the tab or comma delimiter characters and will produce unreliable results.

10.17 Virtual Tours are not displaying. What am I doing wrong?

The issue might have to do with the vendors method of querying the RETS data from REcolorado.   Here are examples of the encoded results based on the format chosen by the vendor.

Results using RETS 1.7.2 delimited-decoded format

http://www.spotlighthometours.com/tours/tour.cfm?mls=5559001&state=CO

Results using XML compact-decoded format

http://www.spotlighthometours.com/tours/tour.cfm?mls=5559001&state=CO

Use of XML data format is strongly discouraged.