BEST PRACTICES FOR OBTAINING DATA FROM MLS GRID

The MLS Grid Web API is built to accommodate replication access. To assist Data Consumers and Brokerages in using replication with the MLS Grid we have created the following requests as the Best Practices to use when obtaining data from the MLS Grid.

REQUESTS FOR YOUR INITIAL DATA IMPORT

You can use the following request to begin your initial import, using the appropriate OriginatingSystemName for the MLS. A list of the the OriginatingSystemName for each MLS can be found here: https://docs.mlsgrid.com/api-documentation/api-version-2.0#originatingsystemname

https://api.mlsgrid.com/v2/Property?$filter=OriginatingSystemName eq 'actris' and MlgCanView eq true&$expand=Media

We add MlgCanView eq true to your initial request. You do not want any records that are marked for deletion included in your initial request. MlgCanView is our deletion flag. If the MlgCanView flag is set to "true," it means that the record is permitted to be distributed in the data subscription. If the MlgCanView flag is set to "false," it means the record no longer qualifies for distribution in the data subscription, is marked for deletion, and should be removed from your database.

We use $expand for Media, Rooms, and UnitTypes in the request to return any Media, Rooms, or UnitTypes data that belongs to the Property record. Including the $expand in your request is the only way to retrieve these 3 expanded resource types. These 3 types will be included as fields on the property record if the record contains any data for them.

In the JSON object that is returned from this query there will be a field @odata.nextLink. The value of this field is the URL to the next page of results:

https://api.mlsgrid.com/v2/Property?$filter=OriginatingSystemName eq 'actris' and MlgCanView eq true&$expand=Media&$skip=500

Use this URL to request the next page of data. Repeat this process until the @odata.nextLink field is not retuned as part of the JSON object. This will mean that you will have successfully requested all the records that match your request. This is the easiest way to pull every page of data. This process should be repeated with the Member, Office, and OpenHouse resources.

If you encounter an error during your initial import **DO NOT START OVER**. Add a filter for ModificationTimestamp to your request and use the greatest ModificationTimestamp of the data you have received so far to pick up where you left off. This will avoid re-pulling data you have already downloaded.

https://api.mlsgrid.com/v2/Property?$filter=OriginatingSystemName eq 'actris' and MlgCanView eq true and ModificationTimestamp gt [GREATEST ModificationTimestamp RECEIVED SO FAR]&$expand=Media&$skip=500

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The MLS Grid API is designed to allow easy replication. This is why we encourage you to adhere to our Best Practices Guide. The intent of the Guide is to help data consumers avoid inefficient usage patterns. Please review and adhere to these guidelines.

PLEASE NOTE THE FOLLOWING

1. All responses from our API are compressed. Your API client must send all requests with the header Accept Encoding:gzip,deflate

2. All requests must include a filter for OriginatingSystemName.

3. There is a prefix that precedes Key and Local fields. These prefixes must be used when requesting records from the MLS Grid, but removed before displaying publicly. A list of the prefixes can be found here: https://docs.mlsgrid.com/api-documentation/api-version-2.0#prefixed-keyfield-values

AVOID THE FOLLOWING PRACTICES

1. **DO NOT** perform range queries on the ModificationTimestamp. To keep your database in sync use a normal replication request with ModificationTimestamp gt [THE GREATEST MODIFICATION TIMESTAMP FROM YOUR DATABASE]

2. **DO NOT** send the same request multiple times. Each time you make a replication request include the greatest ModificationTimestamp from your database. If you are following this process the greatest ModificationTimestamp will change each time you receive records so the replication request will change each time.

3. **DO NOT** pull OpenHouse records one listing at at time (ex. ListingId eq 'ATC1234567'). Due to number of OpenHouse records pulling them one listing at a time is very resource intensive. This is an unnecessary practice and may result in the MLS Grid suspending access temporarily.

4. **DO NOT** pull OpenHouse records using "or" statements (ex. (ListingId eq 'ATC12345467' or ListingId eq 'ATC2345678')). This can be very resource intensive, especially if a high number of "or" statements are included in the request. This is an unnecessary practice and may result in the MLS Grid suspending your access temporarily.

5. **DO NOT** use "or" statements if possible; these are discouraged for all resources. Instead use "in" statements when requesting multiple records. (ex. $filter=ListingId in ('ATC1234567','ATC2345678'))

6. **DO NOT** use parentheses around anything other than "or" statements or "in" statements in your request. Avoid placing parentheses around OriginatingSystemName, MlgCanView, or ModificationTimestamp.

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7. **DO NOT** send more that one replication request at a time. If you have a multi-threaded or multi-process API client, do not split replication requests. Replication requests must be in sequential order. If you split requests you will either send the same request for the same page of results multiple times, or you will request a page out of order.

8. **DO NOT** send a request with $top=0 as this will return no results because you are requesting "0" records.

9. **DO NOT** send more than 2 requests per second as this can degrade service and slow response time to other data consumers. This may result in the MLS Grid placing a rate limit on your access or suspending access temporarily.

10. **DO NOT** link directly to the Media URLs you receive. You should store and post to Media locally on your end. If you wish to use a Content Delivery Network (CDN), we recommend Amazon CloudFront because it works nicely with the MLS Grid URLs stored in Amazon S3.

MLS GRID RATE LIMITS

The usage limits for the MLS Grid are:

1. No more than 7,200 request submitted in any given hour.

2. No more than 4 GB downloaded in any given hour.

3. No more than 2 request per second (RPS) at all times.

4. No more than 40,000 requests in a rolling 24-hour period.

5. No more than 60 GB downloaded in a given 24-hour period.

In cases where it may be necessary to exceed these limits please contact support@mlsgrid.com in advance for guidance

When your access token has been suspended for concerning behavior the permissions for the token will be automatically reinstated once sufficient time has passed to decrease the number of requests submitted or the amount of data consumed to acceptable levels.

Information regarding your API usage can be reviewed under the Usage tab of your data subscription.

BEST PRACTICES FOR OBTAINING DATA FROM MLS GRID

To assist in using replication with the MLS Grid we have created the following requests as the Best Practices to use when keeping your database in sync with ours. These requests will ensure that you have the most current records available from each MLS.

KEEPING YOUR DATABASE IN SYNC WITH THE MLS GRID

Once you have the initial data all you need to do to keep your database in sync with the MLS Grid is to send a replication request for each resource. As with the initial import look for the @odata.nextLink field and use that URL to request each page of the search results.

Here are all of the replication requests that you will need to keep all of the Resource Types in sync with your database. Performing these requests once every 15 minutes will be sufficient to keep your database fresh and in sync.

If you are only storing a subset of the data for a given resource you will need to keep track of the greatest ModificationTimestamp for all the records you have received not just the records in your database.

PROPERTY RESOURCE

https://api.mlsgrid.com/v2/Property?$filter=OriginatingSystemName eq 'actris' and ModificationTimestamp gt [GREATEST ModificationTimestamp FROM YOUR DATABASE FOR THIS RESOURCE]&$expand=Media,Rooms,UnitTypes

MEMBER RESOURCE

https://api.mlsgrid.com/v2/Member?$filter=OriginatingSystemName eq 'actris' and ModificationTimestamp gt [GREATEST ModificationTimestamp FROM YOUR DATABASE FOR THIS RESOURCE]

OFFICE RESOURCE

https://api.mlsgrid.com/v2/Office?$filter=OriginatingSystemName eq 'actris' and ModificationTimestamp gt [GREATEST ModificationTimestamp FROM YOUR DATABASE FOR THIS RESOURCE]

OPENHOUSE RESOURCE

https://api.mlsgrid.com/v2/OpenHouse?$filter=OriginatingSystemName eq 'actris' and ModificationTimestamp gt [GREATEST ModificationTimestamp FROM YOUR DATABASE FOR THIS RESOURCE]