

# Migrate from GFW APIs version 2 to version 3

In **October 2023**, we released version 3 of our APIs, and in June 2022, we announced that **v2 would sunset in April 2023**. Migrating from v2 to v3 involves updating your endpoint URLs to call the new v3 versions and modifying your applications to account for breaking changes introduced in v3.

## Update your API calls to use v3 endpoints

To make calls to v3, update your requests to use the new v3 endpoints. For example, to call the vessel search endpoint with v3, you would use: <https://gateway.api.globalfishingwatch.org/v3/vessels/search>

## Make required changes

In addition to updating the URLs for your API calls, you also need to update your application to account for the breaking changes introduced in v3. Review the following sections and update your application, as needed.

### Events API v3

1. Request changes
  - a. All the enums in query params and body must be uppercase

param name	values
<b>types</b>	ENCOUNTER LOITERING GAP PORT_VISIT
<b>encounterTypes</b> (body) or <b>encounter-types</b> (query param)	For example: <ul style="list-style-type: none"> <li>• CARRIER-FISHING</li> <li>• FISHING-CARRIER</li> <li>• FISHING-SUPPORT</li> <li>• SUPPORT-FISHING</li> </ul>
<b>vesselTypes</b> (body) or <b>vessel-types</b> (query param)	FISHING CARRIER SUPPORT PASSENGER OTHER_NON_FISHING SEISMIC_VESSEL BUNKER_OR_TANKER CARGO
<b>timeseriesInterval</b> (body)	HOUR, DAY, MONTH, YEAR
<b>vesselGroups</b> (body) or <b>vessel-groups</b> (query param)	Id of the vessel group

- b. query params with values separated by comma in v2, must be an array in v3. Example: **datasets, vessels, etc**
    - i. v2 version -> /events?datasets=id1,id2
    - ii. v3 version -> /events?datasets[0]=id1&datasets[1]=id2

### 2. Endpoint `getEventById`



- a. Datasets query param is not supported for **getEventById** endpoint. This endpoint just supports one dataset and the user must use "dataset" instead of "datasets".
3. Response changes
  - a. object **authorizations** was renamed to **publicAuthorizations**
  - b. field **isAuthorized** was renamed to **hasPubliclyListedAuthorization**
  - c. field **vesselAuthorizationStatus** to **vesselPublicAuthorizationStatus**
  - d. Rename statuses:
    - i. **authorized** to **PUBLICLY\_AUTHORIZED**
    - ii. **unauthorized** to **NOT\_MATCHING\_RELEVANT\_PUBLICAUTHORIZATION**
    - iii. **pending** to **PENDING\_INFO**
    - iv. **partial** to **PARTIALLY\_MATCHED**
4. New dataset with AIS off events (GAPs)

## Context Layers API v3

1. Renamed user-context-layer-v1 to user-context-layers
2. Renames context-layer-v1 to context-layers
3. All the requests to get the GeoJSON response of the context datasets should use the context-layers endpoint instead of the user-context-layers endpoint.

## 4Wings API v3

### Endpoint /4wings/report

1. **group-by** query param: Possible values in uppercase (VESSEL\_ID, FLAG, GEARTYPE, FLAGANDGEARTYPE, MMSI)
2. **Report format** query param: Possible values in uppercase (CSV, JSON, TIF)
3. **temporal-resolution** query param: Possible values in uppercase (HOURLY, DAILY, MONTHLY, YEARLY, ENTIRE)
4. **spatial-resolution** query param : Possible values in uppercase (LOW, HIGH)
5. **buffer-unit** query param: Possible values in uppercase (KILOMETERS, MILES, NAUTICALMILES, RADIANS, DEGREES)
6. **buffer-operations** query param: Possible values in uppercase (DIFFERENCE, DISSOLVE)

### Endpoint /4wings/generate-png

7. **interval** query param: Possible values in uppercase (10DAYS DAY HOUR MONTH YEAR)

### Endpoint /4wings/stats/

8. **fields** query param: Possible values in uppercase (FLAGS, VESSEL-IDS, ACTIVITY-HOURS)

### Endpoint /4wings/tile/heatmap/

9. **date-range** query param: it should follow a format like this 2023-05-01,2023-10-20. It used to follow a format like this 2021-01-01T00:00:00.000Z,2021-01-31T23:59:59.000Z
10. **Tile format** query param: Possible values in uppercase (ORC, PARQUET, 4WINGS, INTARRAY, MVT, PNG)
11. **buffer-unit** query param: Possible values in uppercase (KILOMETERS, MILES, NAUTICALMILES, RADIANS, DEGREES)
12. **buffer-operations** query param: Possible values in uppercase (DIFFERENCE, DISSOLVE)

## Vessel API v3

A new version of Vessel API including identity and authorization data from regional and national registries. Request and response were updated, this is the main change in version 3.

1. [Advanced search endpoint](https://gateway.api.globalfishingwatch.org/v2/vessels/advanced-search) was removed (GET <https://gateway.api.globalfishingwatch.org/v2/vessels/advanced-search>)
  - a. Now the endpoint includes **basic** and **advanced search**
2. The response of all endpoints change. Now, the vessel data model contains the next properties instead of the vessel info in the root (v2):
  - a. dataset
  - b. registryAuthorizations
  - c. registryInfo
  - d. registryOwners
  - e. combinedSourcesInfo
  - f. selfReportedInfo
3. datasets must be an array instead of ids separated by commas
4. **Search** endpoint (GET <https://gateway.api.globalfishingwatch.org/v3/vessels/search>) was updated:
  - a. We used to have this endpoint just for basic search but now it also includes advanced search
  - b. Request changes:
    - i. we have 2 query params to search instead of 2 endpoints:
      1. query for basic search
      2. where for advanced search (SQL syntax)
    - ii. new query param named "includes" to enhance the response with new information. It is possible to send all of them.
      1. MATCH\_CRITERIA: add information about the reason why a vessel is returned
      2. OWNERSHIP: Owners information
      3. AUTHORIZATIONS: Public authorizations list for that vessel
  - c. Response changes:
    - i. The response is totally different from the previous version. See [API documentation portal](#) to get more detailed information.
5. **Get list of vessels filtered by ids**
  - a. Request changes:
    - i. the ids and vessel-groups query params must be an array instead of ids separated by commas
    - ii. Added a new query param named registries-info-data to get all the registry objects, only the delta or the latest. Possible values: NONE, DELTA, ALL
  - b. The response is totally different from the previous version. See [API documentation portal](#) to get more detailed information.
6. **Get vessel by id** updated:
  - a. remove support of param "datasets" (with S)
  - b. Added a new query param named registries-info-data to get all the registry objects, only the delta or the latest. Possible values: NONE, DELTA, ALL

## Reference Data API v3

1. **user-context-layers** endpoint was removed and replaced with **context-layers**
2. **Response is the same**

## (new) Insights API v3

This is a new API, there was no API in version 2.