

KIEMS

KENYA ELECTRONIC RESULT TRANSMISSION SYSTEM API DOCUMENTATION

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1 Introduction

This document explains how to access to different data files containing results data and territorial configuration for diverse Kenya elections.

2 Territorial Structure

Kenya Elections has 6 levels corresponding with:

- **Level 1:** Country
- **Level 2:** County
- **Level 3:** Constituency
- **Level 4:** Ward
- **Level 5:** Polling Center
- **Level 6:** Polling Station

Results data is contained on multiple json files "info.json" inside on different folders and subfolders corresponding with its territorial level.

All json files, results and other configuration files are under ELECTION_TYPE / ROUND folder. Only Presidential Elections can have a 2nd round but for standardization reasons the route were normalized so round is included on the path always, adding "round1" or "round2" as available values.

These static files are accessible through HTTP GET request by a URL that follows the pattern:

[HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE
COUNTRY_ID/COUNTY_ID/CONSTITUENCY_ID/WARD_ID/POLLING_CENTER_ID/POLLING STA
TION_ID/info.json](HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE/COUNTRY_ID/COUNTY_ID/CONSTITUENCY_ID/WARD_ID/POLLING_CENTER_ID/POLLING_STATION_ID/info.json)

The possible Election types are:

- Kenya_Elections_Presidential
- Kenya_Elections_Senator
- Kenya_Elections_Governor
- Kenya_Elections_Women_Rep
- Kenya_Elections_Parliamentary
- Kenya_Elections_Caw

The possible ROUNDS are:

- round1
- round2

COUNTRY_ID is:

- 1

Parts of territorial level IDs:

- Country level:
 - 1
- County level:
 - 1 + COUNTY_ID

- Constituency level:
 - $1 + \text{PARENT_COUNTY_ID} + \text{CONSTITUENCY_ID}$
- Ward level:
 - $1 + \text{PARENT_COUNTY_ID} + \text{PARENT_CONSTITUENCY_ID} + \text{WARD_ID}$
- Polling Center level:
 - $1 + \text{PARENT_COUNTY_ID} + \text{PARENT_CONSTITUENCY_ID} + \text{PARENT_WARD_ID} + \text{POLLING_CENTER_ID}$
- Polling Station level:
 - $1 + \text{PARENT_COUNTY_ID} + \text{PARENT_CONSTITUENCY_ID} + \text{PARENT_WARD_ID} + \text{PARENT_POLLING_CENTER_ID} + \text{POLLING_STATION_ID}$

3 JSONs Structure

3.1 Level_X.json

There is a json by territorial level where X is the level number. Kenya Elections has 6 levels corresponding with:

- **Level 1:** Country
- **Level 2:** County
- **Level 3:** Constituency
- **Level 4:** Ward
- **Level 5:** Polling Center
- **Level 6:** Polling Station

Level 2 example:

```
[  
  [1001, "MOMBASA", 1],  
  [1002, "KWALE", 1],  
  [1003, "KILIFI", 1],  
  [1004, "TANA RIVER", 1],  
  ...,  
  ...  
  [COUNTY_ID*, "COUNTY NAME", PARENT_COUNTY_ID]  
]
```

* County Id starts by "1" for compatibility reasons

* Note that Kenya_Elections_Parliamentary and Kenya_Elections_Caw doesn't apply for some higher levels, but Level_X.json is consistent per all the elections by standardization needs.
Is accessible through this HTTP GET URL:

HTTPS://BASE_URL/jsons/ROUND/config/ELECTION_TYPE/Level_1.json

HTTPS://BASE_URL/jsons/ROUND/config/ELECTION_TYPE/Level_2.json

HTTPS://BASE_URL/jsons/ROUND/config/ELECTION_TYPE/Level_3.json

HTTPS://BASE_URL/jsons/ROUND/config/ELECTION_TYPE/Level_4.json

HTTPS://BASE_URL/jsons/ROUND/config/ELECTION_TYPE/Level_5.json

HTTPS://BASE_URL/jsons/ROUND/config/ELECTION_TYPE/Level_6.json

3.2 election.json

```
{
  "elections": [
    {
      "territories": [], CONSTANT, INTERNAL USE
      "id": "home", CONSTANT, INTERNAL USE
      "name": "Home" CONSTANT, INTERNAL USE
    },
    {
      "territories":
        ["Level_2", "Level_1", "Level_6", "Level_4", "Level_5", "Level_3"], Territorial
        Levels
      "hasDiaspora": true, Indicates when Election has Diaspora and Prison Votes
      "hasDashboard": true, Indicates when Election has Dashboard implemented
      "id": "Kenya_Elections_Presidential", Unique election identifier
      "name": "President" Election name
    }
    ...
  ]
}
```

Is accessible through this HTTP GET URL:

HTTPS://BASE_URL/jsons/ROUND/config/elections.json

3.3 info.json

```
{
  "progress": {
    "processed": 0, Number of Polling Stations that submitted results
    "timestamp": 0, UNUSED
    "total": 0 Total Polling Station in corresponding Territorial Level
  },
  "results": {
    "parties": [{
      "id": "CANDIDATE_id", Internal ID
      "acronym": "PARTY_NAME", Political Party Label
      "code": null, UNUSED
      "name": "CANDIDATE_TITLE", Candidate name
      "ord": 1, Order by territory, # votes and name A-Z
      "color": "CANDIDATE_COLOR", UNUSED
      "seats": 0, UNUSED
      "members": [], UNUSED
      "votes": {
        "presential": 0, Total Candidate Votes
        "absentee": 0, UNUSED
        "international": 0, UNUSED
        "special": 0, UNUSED
        "percent": Votes %
      }
    }],
    "abstention": #_DISPUTED_VOTES, Disputed Votes
    "blank": #_VALID_VOTES, Valid Votes
    "null": #_REJECTED_VOTES, Rejected Votes
    "census": #_REJECTED_OBJECTED_VOTES, Rejected Objected Votes
    "participation": [{
      "time": 0, UNUSED
      "value": 0 UNUSED
    }]
  },
  "historic": UNUSED
  "timestamp": 0, Creation Timestamp
  "tallySheetNumber": NULL UNUSED
}
```

JSON with Country level results:

HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE/1/info.json

JSON with County level results:

HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE/1/1002/info.json

JSON with Constituency level results:

HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE/1/1002/1002003/info.json

JSON with Ward level results:

HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE/1/1002/1002003/10020030004/info.json

JSON with Polling Center level results:

HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE/1/1002/1002003/10020030004/10020030004005/info.json

JSON with Polling Station level results:

HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE/1/1002/1002003/10020030004/10020030004005/10020030004005006/info.json

Note that Kenya_Elections_Parliamentary and Kenya_Elections_Caw doesn't apply doesn't apply for some higher levels aggregation. In this case info.json will be initialized to zero without candidates data for standardization needs.

3.4 lastUpdate.json

These json files are located on the root of each election results folder, and indicates last time election results were updated.

```
{  
  "lastUpdate": TIMESTAMP Last Time Election results were updated  
}
```

Is accessible through this HTTP GET URL:

HTTPS://BASE_URL/jsons/ROUND/results/ELECTION_TYPE/lastUpdate.json