

API document for PDOA/APP Provider to publish Key Performance Indicator on PM-WANI Central Registry

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Introduction

PM-WANI Central Registry facilitates interoperability among PDOAs and APP providers, complying with the WANI framework. At present, information of MAC IDs and associated

SSIDs of Wi-Fi hotspots is maintained by the registry as per the framework which is provided by the PDOAs.

Going forward, Key performance indicators (KPI) of the PM-WANI network shall be maintained in the Central Registry. The main KPIs include the number of Wi-Fi hotspots, subscriber statistics and internet data consumed in the PM-WANI network. Day wise, month wise and year wise statistics shall reflect the usage and growth of the PM-WANI network in the country.

This document facilitates the PDOA and APP Provider to implement APIs in their network to send the KPIs to the Central Registry on a regular basis.

Pre-Requisites

1. PDOA/APP provider shall be signed up on PM-WANI Central Registry
2. Get the **API-KEY** to send the KPI data to CR by logging in to the respective account i.e., PDOA / App Provider.

PDOA login page: <https://pmwani.gov.in/wani/pdoa>

App Provider login page: <https://pmwani.gov.in/wani/app>

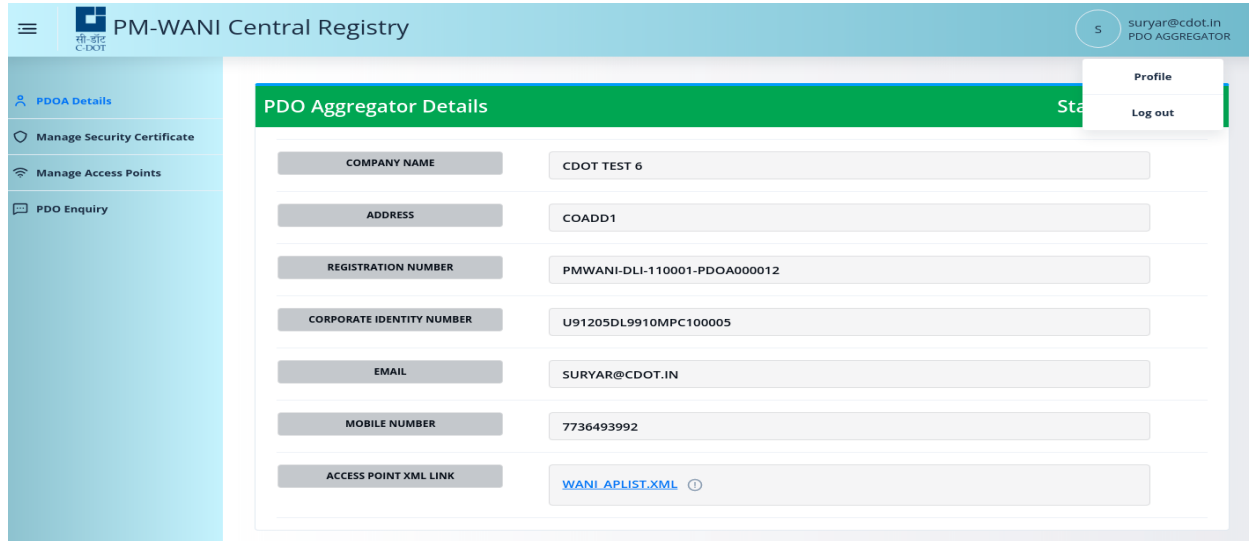
3. API-KEY is available in the user profile section.

API KEY

The API KEY shall be generated from the PM-WANI Central Registry (<https://pmwani.gov.in>)

How to generate API KEY

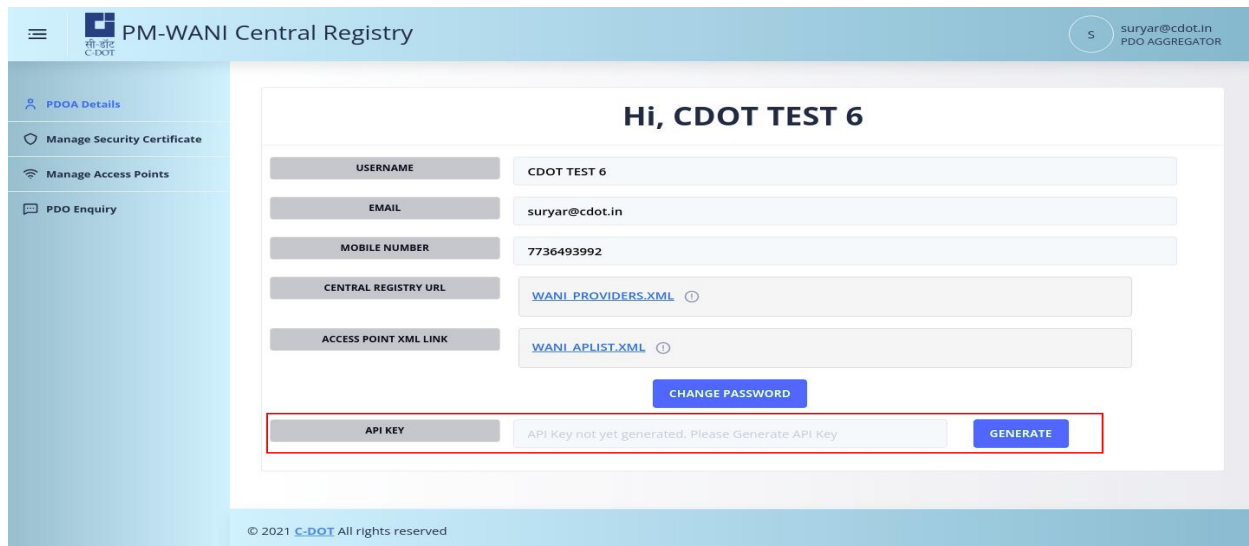
1. Login to the respective PDOA/APP Provider account
2. Once logged in, On the top right side click on username and then click on Profile.



The screenshot shows the PM-WANI Central Registry interface. The user is logged in as 'suryar@cdot.in' (PDO AGGREGATOR). The profile page displays the following details:

PDO Aggregator Details	
COMPANY NAME	CDOT TEST 6
ADDRESS	COADD1
REGISTRATION NUMBER	PMWANI-DLI-110001-PDOA000012
CORPORATE IDENTITY NUMBER	U91205DL9910MPC100005
EMAIL	SURYAR@CDOT.IN
MOBILE NUMBER	7736493992
ACCESS POINT XML LINK	WANI_APLIST.XML

1. In the page at the bottom there will be an option to generate the API KEY. Once generated, this API Key can be used to send the KPI statistics to CR.



The screenshot shows the PM-WANI Central Registry interface. The user is logged in as 'suryar@cdot.in' (PDO AGGREGATOR). The profile page displays the following details:

Hi, CDOT TEST 6

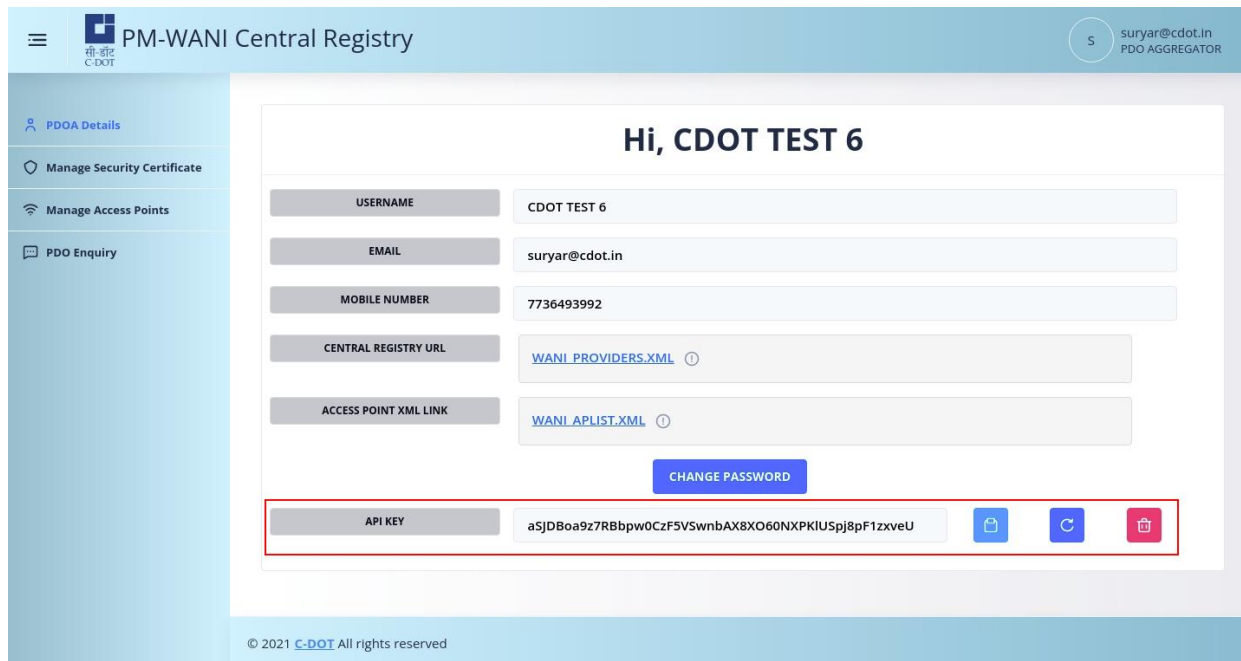
USERNAME	CDOT TEST 6
EMAIL	suryar@cdot.in
MOBILE NUMBER	7736493992
CENTRAL REGISTRY URL	WANI_PROVIDERS.XML
ACCESS POINT XML LINK	WANI_APLIST.XML

CHANGE PASSWORD

API KEY	API Key not yet generated. Please Generate API Key	GENERATE
---------	--	-----------------

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- The PDOA/App Provider may modify the API KEY by clicking on the refresh button or even delete the existing key in case the key is compromised.



PM-WANI Central Registry

surayar@cdot.in
PDO AGGREGATOR

Hi, CDOT TEST 6

USERNAME	CDOT TEST 6
EMAIL	surayar@cdot.in
MOBILE NUMBER	7736493992
CENTRAL REGISTRY URL	WANI_PROVIDERS.XML
ACCESS POINT XML LINK	WANI_APLIST.XML
CHANGE PASSWORD	
API KEY	aSJDBoa9z7RBbpw0CzF5VSwnbAX8XO60NXPkiUSpj8pF1zxveU

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Header Information

In Headers, set the API KEY in the header named WANI-API-KEY. For Example: WANI-API-KEY: aSJDBoa9z7RBbpw0CzF5VSwnbAX8XO60NXPkiUSpj8pF1zxveU

Note: Do not use this key. It's only an example.

Parameter Definitions

- regNumber** - The Registration number received from Saral Sanchar portal.
E.g., PMWANI-DLI-110001-PDOA123456
- day** - Day in YYYY-MM-DD format for which the statistics data to be added/deleted/viewed from CR
- subscriberCount** - Total subscriber served by the PDOA on the day specified by 'day' attribute
- new** - Total new subscribers served by the PDOA in its network on the day specified by the 'day' attribute.
 - New subscribers are defined as subscribers with a 'Username' i.e., MOBILE NUMBER, served by the PDOA for the very first time in its network.

- *For example: if a user with mobile number 900878786 has used the internet for the very first time in a PDOA network, it is considered as 1 new subscriber for that day only.*
- **unique - Total unique subscriber served by the PDOA on the day specified by the 'day' attribute.**
 - *Total unique subscribers are defined as subscribers with a 'Username' i.e., MOBILE NUMBER, served on that day.*
 - *For example, if a user with mobile number 9008787186 has used the internet for 5 times in a day in a PDOA network, it will be considered as 1 unique subscriber.*
- **dataConsumed - Total internet data consumed by subscribers on the day specified by 'day' attribute in MegaBytes (MB)**
- **state - 2 Character State code as provided in the Central Registry**
- **district - Name of the District as provided in the Central Registry.**
- **pdoaStat - The number of PDOA served by an APP provider**
- **pdoald - The ID of the PDOA assigned by the Central Registry.
For example: 1c0023ab-60c1-4213-ccc8-d4c1c2c96641**

PDOA KPI

1. Number of Subscribers served
 - a. New subscriber
 - b. Unique subscriber
2. Amount of Data consumed by subscribers in Mega Bytes (MB)

Periodicity of sending statistics to Central Registry

Statistics for every day, month, quarter and year shall be sent to the Central Registry.

- Data for the day can be sent or modified to the Central Registry till the end of the next day.
 - For example, if data is for 2021-10-26, it shall be sent or modified by 2021-10-27 23:59:59.

PDOA API (POST)

These APIs shall be used for sending day, monthly, quarterly, yearly statistics for country, state and district level data to the Central Registry:

POST API Table

Request Method	POST
Header Name	WANI-API-KEY
API Endpoint	
Country Level	https://pmwani.gov.in/api/stats/pdoa/country/day
State Level	https://pmwani.gov.in/api/stats/pdoa/state/day
District Level	https://pmwani.gov.in/api/stats/pdoa/district/day

Country level API

PDOA data at Country level for a day

Sample Payload:

```
{
  "regNumber":"PMWANI-XXX-XX-XXXXXXX",
  "day":"yyyy-mm-dd",
  "pdoaDataCountry":{
    "subscriberCount":{
      "new":100,
      "unique":1500
    },
    "dataConsumed":1024
  }
}
```

State level API

PDOA data at State level for a day

Sample Payload:

```
{
  "regNumber":"PMWANI-XXX-XX-XXXXXXX",
  "day":"yyyy-mm-dd",
  "pdoaDataState":[
    {
      "state":"KA",
      "subscriberCount":{
        "new":100,

```

```

    "unique":1500
  },
  "dataConsumed":1024
},
{
  "state":"DL",
  "subscriberCount":{
    "new":10,
    "unique":150
  },
  "dataConsumed":2048
}
]
}

```

District level API

PDOA data at District level for a day

Sample Payload:

```

{
  "regNumber":"PMWANI-XXX-XX-XXXXXXX",
  "day":"yyyy-mm-dd",
  "pdoaDataDistrict":[
    {
      "state":"KA",
      "districtsData":[
        {
          "district":"BANGALORE URBAN",
          "subscriberCount":{
            "new":10,
            "unique":1500
          },
          "dataConsumed":1024
        },
        {
          "district":"BANGALORE RURAL",
          "subscriberCount":{
            "new":20,
            "unique":25
          },
          "dataConsumed":1024
        }
      ]
    },
    {
      "state":"DL",
      "districtsData":[
        {

```

```

    "district":"SOUTH DELHI",
    "subscriberCount":{
      "new":6,
      "unique":12
    },
    "dataConsumed":50
  },
  {
    "district":"NORTH DELHI",
    "subscriberCount":{
      "new":66,
      "unique":12
    },
    "dataConsumed":89
  }
]
}

```

Response Status Codes:

S. No	Response Code	Response Message
1	200	{ "message": "Data for the day 2021-06-23 uploaded successfully to PM-WANI Central Registry" }
2	401	{ "message": "Unauthorized Request. Please verify your API Key" }
3	400	{ "message": "Registration Number provided is invalid." }
4	400	{ "message": "Invalid Request. Data for the day: 2021-06-23 is already published to the Central Registry" }
4	400	{ "message": "Invalid Request. Data upload period not allowed as the periodicity is exceeded for the given period." }

PDOA API (DELETE)

APIs for removing monthly, quarterly, yearly statistics for country, state and district level data

from Central Registry:

DELETE API Table

Request Method	DELETE
Header Name	WANI-API-KEY
API Endpoint	
Country Level	https://pmwani.gov.in/api/stats/pdoa/country/day?day={day}
State Level	https://pmwani.gov.in/api/stats/pdoa/state/day?day={day}
District Level	https://pmwani.gov.in/api/stats/pdoa/district/day?day={day}

Response Status Codes

S. No	Response Code	Response Message
1	200	<code>{"message": "Data for the day: 2021-06-23 successfully removed from Central Registry"}</code>
2	404	<code>{"message": "Data for the day: 2021-06-23 is not yet uploaded"}</code>
3	400	<code>{"message": "Deletion of Data for the day: 2021-06-23 is not allowed."}</code>
4	401	<code>{"message": "Unauthorized Request. Please verify your API Key"}</code>

PDOA API (GET)

APIs for verifying monthly, quarterly, yearly statistics for country, state and district level data

uploaded to the Central Registry.

GET API Table

Request Method	GET
Header Name	WANI-API-KEY
API Endpoint	
Country Level	https://pmwani.gov.in/api/stats/pdoa/country/day?day={day}
State Level	https://pmwani.gov.in/api/stats/pdoa/state/day?day={day}
District Level	https://pmwani.gov.in/api/stats/pdoa/district/day?day={day}

Response Status Codes

S.No	Response Code	Response Message
1	200	PdoaCountryResponse PdoaStateResponse PdoaDistrictResponse Refer to the below Get Data Response Objects for examples.
2	404	<pre>{"message": "Data for the day: 2021-06-23 is not yet uploaded"} }</pre> <pre>": "Data for the quarter: 1 is not yet uploaded" }</pre>
4	401	<pre>{"message": "Unauthorized Request. Please verify your API Key"}</pre>

Get Data Response for DAY data (example)

Response Object	Example
PdoaCountryResponse	<pre>{ "pdoaDataCountry":{</pre>

	<pre> "subscriberCount":{ "new":100, "unique":1500 }, "dataConsumed":1024 } } </pre>
PdoaStateResponse	<pre> { "pdoaDataState":[{ "state":"KA", "subscriberCount":{ "new":100, "unique":1500 }, "dataConsumed":1024 }, { "state":"DL", "subscriberCount":{ "new":10, "unique":150 }, "dataConsumed":2048 }] } </pre>
PdoaDistrictResponse	<pre> { "pdoaDataDistrict":[{ "state":"KA", "districtsData":[{ "district":"BANGALORE URBAN", "subscriberCount":{ "new":10, "unique":1500 }, "dataConsumed":1024 }, { "district":"BANGALORE RURAL", "subscriberCount":{ "new":20, "unique":25 }, "dataConsumed":1024 }] }] } </pre>

```

    }
  ]
},
{
  "state":"DL",
  "districtsData":[
    {
      "district":"NORTH DELHI",
      "subscriberCount":{
        "new":6,
        "unique":12
      },
      "dataConsumed":50
    },
    {
      "district":"SOUTH DELHI",
      "subscriberCount":{
        "new":66,
        "unique":12
      },
      "dataConsumed":89
    }
  ]
}
]
}

```

App Provider KPI

1. Number of subscribers served
2. Number of PDOA served
3. Subscriber per PDOA served

Periodicity

Data Consumption statistics for a day shall be sent to the Central Registry.

- Data for the day can be sent or modified to the Central Registry till the end of the next day.
 - For example, if data is for 2021-10-26, it shall be sent or modified by 2021-10-27 23:59:59
- After end of the period date/time. data will be freezed and modifications will not be allowed.

APP Provider API (POST)

POST API Table

Request Method	POST
Header Name	WANI-API-KEY
API Endpoint	
Country Level	https://pmwani.gov.in/api/stats/appprovider/country
State Level	https://pmwani.gov.in/api/stats/appprovider/state
PDOA Level	https://pmwani.gov.in/api/stats/appprovider/pdoa

App Provider Data at Country level for a day

Sample Payload:

```
{
  "regNumber":"PMWANI-XXX-XX-XXXXXXX",
  "day":"yyyy-mm-dd",
  "appProviderDataCountry":{
    "pdoaStat":{
      "total":5
    },
    "subscriberCount":{
      "new":100,
      "unique":1500
    }
  }
}
```

App Provider Data at State level for a day

Sample Payload:

```
{
  "regNumber":"PMWANI-XXX-XX-XXXXXXX",
  "day":"yyyy-mm-dd",
  "appProviderDataState":[
    {
      "state":"KA",
      "pdoaStat":{
```

```

    "total":2
  },
  "subscriberCount":{
    "new":100,
    "unique":1500
  }
},
{
  "state":"DL",
  "pdoaStat":{
    "total":12
  },
  "subscriberCount":{
    "new":10,
    "unique":150
  }
}
]
}

```

App Provider Data at PDOA level for a day

Sample Payload:

```

{
  "regNumber":"PMWANI-XXX-XX-XXXXXXX",
  "day":"yyyy-mm-dd",
  "appProviderDataPdoa":[
    {
      "pdoald":"1c0023ab-60c1-4213-ccc8-d4c1c2c96641",
      "subscriberCount":{
        "total":100,
      }
    },
    {
      "pdoald":"2c0023ab-10c1-3213-acc8-d5c1c2c00005",
      "subscriberCount":{
        "total":100,
      }
    }
  ],
}
]
}

```

Response Status Codes

S. No	Response Code	Response Message
-------	---------------	------------------

1	200	<pre>{"message": "Data for the day 2021-06-23 uploaded successfully to PM-WANI Central Registry" }</pre>
2	400	<pre>{"message": "Registration Number provided is invalid."}</pre>
3	400	<pre>{"message": "Invalid Request. Data for the day: 2021-06-23 is already published to the Central Registry" }</pre>
4	400	<pre>{"message": "Invalid Request. Data upload period not allowed as the periodicity is exceeded for the given period."}</pre>
5	401	<pre>{"message": "Unauthorized Request. Please verify your API Key"}</pre>

APP Provider API (DELETE)

DELETE API Table

Request Method	DELETE
Header Name	WANI-API-KEY
API Endpoint	
Country Level	https://pmwani.gov.in/api/stats/appprovider/country?day={day}
State Level	https://pmwani.gov.in/api/stats/appprovider/state?day={day}
PDOA Level	https://pmwani.gov.in/api/stats/appprovider/pdoa?day={day}

Response Status Codes

S. No	Response Code	Response Message
1	200	<code>{"message": "Data for the day: 2021-06-23 successfully removed from Central Registry"}</code>
2	404	<code>{"message": "Data for the day: 2021-06-23 is not yet uploaded"}</code>
3	401	<code>{"message": "Unauthorized Request. Please verify your API Key"}</code>

APP Provider API (GET)

GET API Table

Request Method	GET
Header Name	WANI-API-KEY
API Endpoint	
Country Level	https://pmwani.gov.in/api/stats/appprovider/country?day={day}
State Level	https://pmwani.gov.in/api/stats/appprovider/state?day={day}
PDOA Level	https://pmwani.gov.in/api/stats/appprovider/pdoa?day={day}

Response Status Codes

S. No	Response Code	Response Message
1	200	AppProviderCountryResponse AppProviderStateRes

		<p>ponse AppProviderPdoAResponse</p> <p>Refer to the below Get Data Response Objects for examples.</p>
2	404	<pre>{ "message": "Data for the day: 2021-06-23 is not yet uploaded" }</pre>
3	401	<pre>{ "message": "Unauthorized Request. Please verify your API Key" }</pre>

Get Data Response Examples

Response Object	Example
AppProviderCountryResponse	<pre>{ "appProviderDataCountry":{ "pdoaStat":{ "total":1234 }, "subscriberCount":{ "new":100, "unique":1500 } }</pre>
AppProviderStateResponse	<pre>{ "appProviderDataState":[{ "state":"KA", "pdoaStat":{ "total":1234 }, "subscriberCount":{ "new":100, "unique":1500 } }, { "state":"DL", "pdoaStat":{ "total":12 }, "subscriberCount":{ "new":10, "unique":150 } }] }</pre>

	<pre>] } </pre>
AppProviderPdoAResponse	<pre> { "pdoaStat":{ "total":5 }, "appProviderDataPdoa":[{ "pdoald":"5609bfea-51ab-4a2f-882f-42ffaa588e7f", "subscriberCount":{ "total":100, } }, { "pdoald":"96ceb3d7-0c52-4765-b8ef-60ee4a91f034", "subscriberCount":{ "total":100, } }], }] } </pre>