



{REST:API} Integration Manual
Revision 1.0.0

NID Demographic Data Verification API

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General Information

Bangladesh Voter Registration System or BVRS is the central enterprise application solution of Bangladesh Election Commission. It is a custom solution designed and developed specifically for Bangladesh Election commission based on their operational requirements.

The system architecture of BVRS was very well planned and sophisticated, considering the time at which it was designed and developed. But, with time and increased usage and demand, it was unable to meet the new requirements. In continuation of running with different issues at BVRS, considering the technological barriers Bangladesh Election Commission has taken steps to upgrade the entire solution with the Up-to- date & High-tech Sophisticated Enterprise Technologies.

Partner Service Application of the CMS Module caters External Partners Requests for Voter Information and Voter Information Verification using the API and Web Portals. Government Agencies like Special Branch, Police & RAB, Non-Government Partners like Banks and Telco Operators can request for Voter Specific Information or Verify Voter Information under a Service Level Agreement (SLA) with the Bangladesh Election Commission.

This guide is intended for the developers (from authorized organizations) who plan to integrate their system with Bangladesh Election Commission over shared RESTful API to get specific services.

Developers are able to build custom applications and services in their platform of choice that supports the open standard RESTful “Web Services” methodology.

RESTful API Functional Overview

Auth Service (Login)

This RESTful Web Service Handles Authentication Process Securely using a valid Login Credentials shared by Bangladesh Election Commission.

Auth Service (Logout)

This RESTful Web Service Handles Authentication Process Securely using a valid Logout request.

Voter Demographic Data Verification

This RESTful Web Service for verification of citizens demographic information using NID and other fields.

Auth Service (Change Password)

This RESTful Web Service for Handles Authentication Reset Process using a valid Change password request. The Election Commission Partners are required to update their passwords according to three specified parameters, ensuring password effectiveness for the following 45 days.

Partner Billing

This RESTful Web Service for getting partner's hit count and verifying billing information using billing report request.

Technical Specification of the RESTful API

Base URL

The Base URL is: <https://prportal.nidw.gov.bd/partner-service/>

Auth Service (Login)

API URL: <https://prportal.nidw.gov.bd/partner-service/rest/auth/login>

Request Type: POST

Parameter Content Type: application/json

Parameter Name	Description	Type
Username	Username Provided by EC to access NID Partner Service	MANDATORY
Password	Password Provided by EC to access NID Partner Service	MANDATORY

Sample Request

```
{
  "username": "string",
  "password": "string"
}
```

Sample Response

```
{
  "status": "OK",
  "statusCode": "SUCCESS",
  "success": {
    "data": {
      "username": "demo_user",
      "access_token":
"eyJ0eXAiOiJhY2Nlc3NfdG9rZW4iLCJhbGciOiJIUzI1NiJ9.eyJzdWliOiJhZmlzX3VzZXliLCJyb2xlcyI6WyJBRklTX1ZFUklGSUNBVElPTiJdLCJpYXQiOiJlNjY4MjQxNTIsImV4cCI6MTU2NjgyNzc0Mn0.vrbtvUDD
RyREJ0xKmK5auqc0N_6cMsEbmb221K8VbDs",
      "refresh_token":
"eyJ0eXAiOiJyZWZyZXNoX3Rva2VuliwiYWxnljoiSFMyNTYifQ.eyJzdWliOiJhZmlzX3VzZXliLCJpYXQi
OiJlNjY4MjQxNTIsImV4cCI6MTU2NjgyNjgzMTM1Mn0.J6lAxUyWefXTSmxmzivj0CGu0agxy6C1qKVzAcf2
AWA"
    }
  }
}
```

Response Code and Messages

Tag: success

- Code: 200
 - Message: Successful

Tag: error

- Code: 201
 - Message: Created
- Code: 400
 - Message: Bad Request
- Code: 401
 - Message: You are not authorized to view the resource
- Code: 403
 - Message: Accessing the resource you were trying to reach is forbidden
- Code: 404
 - Message: The resource you were trying to reach is not found
- Code: 500
 - Message: Internal Server Error

Tag: result

- If the operation was successful, this field will have the result.
 1. Access token
 2. Refresh token
 3. Username

**** Mark that validity of the access token for login authentication is 12 hrs. You should not call the Login API each time or frequently rather use the access token until expired.**

Auth Service (Logout)

API URL: https://prportal.nidw.gov.bd/partner-service/rest/auth/logout

Request Type: POST

Parameter Content Type: application/json

Request Header: Bearer Token

Sample Response

```
{
  "status": "OK",
  "statusCode": "SUCCESS",
  "success": {
    "data": "Logout Successful"
  }
}
```

Response Code and Messages

Tag: success

- Code: 200
- Message: Successful

Tag: error

- Code: 201
- Message: Created
- Code: 400
- Message: Bad Request
- Code: 401
- Message: You are not authorized to view the resource
- Code: 403
- Message: Accessing the resource you were trying to reach is forbidden
- Code: 404
- Message: The resource you were trying to reach is not found
- Code: 500
- Message: Internal Server Error

Tag: result

- If the operation was successful, this field will have the result.
1. Logout success message.

Voter Demographic Data Verification API

API URL: <https://prportal.nidw.gov.bd/partner-service/rest/demographic/verification>

Request Type: POST

Parameter Content Type: application/json

Request Header: Bearer Token

Parameter Name	Description	Type
Identify With		MANDATORY (Any One)
nid10Digit	10 digit NID number provided by partner to access detail of NID	
nid17Digit	17 digit NID number provided by partner to access detail of NID	
Verify With		MANDATORY (Any One)
name	voter name	
dateOfBirth	date of birth of the voter	
nameEn	voter name in English	
father	voter's father's name	
mother	voter's mother's name	
spouse	voter's spouse's name	
permanentAddress		
division	voter's permanent division	
district	voter's permanent district	
upozila	voter's permanent upozila	
presentAddress		
division	voter's present division	
district	voter's present district	
upozila	voter's present upozila	

Sample Request

```
{
  "identify": {
    "nid10Digit": "5090424675", "nid17Digit": null
  },
  "verify": {
    "nameEn": "Abdus Salam",
    "name": "আবদুস সালাম",
    "dateOfBirth": "1978-03-23",
    "father": "আবদুস সাত্তার",
    "mother": "উম্মে হাবীবা",
    "spouse": "",
    "permanentAddress": {
      "division": "চট্টগ্রাম", "district": "চট্টগ্রাম", "upozila": "বোয়ালখালী"
    },
    "presentAddress": {
      "division": "ঢাকা", "district": "ঢাকা", "upozila": "উত্তরা"
    }
  }
}
```

Or

```
{
  "identify": {
    "nid17Digit": "19722699501359687", "nid10Digit": null,
  },
  "verify": {
    "nameEn": "Abdus Salam Osmani",
    "name": "আবদুস সালাম",
    "dateOfBirth": "1978-03-23",
    "father": "আবদুস সাত্তার",
    "mother": "উম্মে হাবীবা",
    "spouse": "",
    "permanentAddress": {
      "division": "চট্টগ্রাম", "district": "চট্টগ্রাম", "upozila": "বোয়ালখালী"
    },
    "presentAddress": {
      "division": "ঢাকা", "district": "ঢাকা", "upozila": "উত্তরা"
    }
  }
}
```

Sample Successful Response

Status Code: 200

```
{
  "status": "OK",
  "statusCode": "SUCCESS",
  "success": {
    "data": {
      "requestId": "01e9f4ad-8888-8888-8888-828b982e0a49",
      "nationalId": "9581877375",
      "pin": "19722699501359634",
      "photo": "https://prportal.nidw.gov.bd/file-bb/b/6/1/bfbc0027-3d5f-4c79-a494-e21afbee774b/Photo-bfbc0027-3d5f-4c79-a494-e21afbee774b.jpg?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=fileobj%2F20250810%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20250810T055529Z&X-Amz-Expires=120&X-Amz-SignedHeaders=host&X-Amz-Signature=5994677be4531b65225639a333e5de861224a573896bf0e303e4fbe64fe3e1a5",
    }
  },
  "verified": true,
  "fieldVerificationResult": {
    "nameEn": true,
    "name": true,
    "dateOfBirth": true,
    "father": true,
    "mother": true
  }
}
```

Sample Error Response

If 100% requested fields does not match but English Name matches, returning the Photo and NID
No mapping

Status Code: 406

```
{
  "message": "Voter data mismatch",
  "status": "NOT_ACCEPTABLE",
  "verified": "false",
  "fieldVerificationResult": {
    "nameEn": true,
    "name": true,
    "dateOfBirth": false,
    "father": false,
    "mother": true
  },
  "partialResponse": {
    "requestId": "01e9f4ad-8888-8888-8888-828b982e0a49",
    "nationalId": "9581877375",
    "pin": "19722699501359634",
    "photo": "https://prportal.nidw.gov.bd/file-bb/b/6/1/bfbc0027-3d5f-4c79-a494-e21afbee774b/Photo-bfbc0027-3d5f-4c79-a494-e21afbee774b.jpg?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=fileobj%2F20250810%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20250810T055529Z&X-Amz-Expires=120&X-Amz-SignedHeaders=host&X-Amz-Signature=5994677be4531b65225639a333e5de861224a573896bf0e303e4fbe64fe3e1a5"
  }
}
```

If all requested fields match except **English Name** it will not return the Photo and NID No mapping

Status Code: 406

```
{
  "message": "Voter data mismatch",
  "status": "NOT_ACCEPTABLE",
  "verified": "false",
  "fieldVerificationResult": {
    "nameEn": false,
    "name": true,
    "dateOfBirth": true,
    "father": true,
    "mother": true
  }
}
```

If the API permission is not provided

Status Code: 403

```
{
  "status": "FORBIDDEN",
  "statusCode": "ERROR",
  "error": {
    "field": "SLA is not Assigned"
  }
}
```

If any mandatory parameter is missing

Status Code: 400

```
{
  "status": "BAD_REQUEST",
  "statusCode": "ERROR",
  "error": {
    "field": "nid10Digit/nid17Digit",
    "message": "Search permission without one of the mandatory fields is not allowed"
  }
}
```

If search permission with this field is not allowed

Status Code: 400

```
{
  "status": "BAD_REQUEST",
  "statusCode": "ERROR",
  "error": {
    "field": "blood/gender",
    "message": "Search permission with this fields is not allowed"
  }
}
```

If no field is provided for verification (in the verify block)

Status Code: 400

```
{
  "status": "BAD_REQUEST",
  "statusCode": "ERROR",
  "error": {
    "field": "verify",
    "message": "Please provide voter information for verification"
  }
}
```

Response Code and Messages

Tag: success

- Code: 200
- Message: Successful

Tag: error

- Code: 201
- Message: Created
- Code: 401
- Message: You are not authorized to view the resource
- Code: 403
- Message: Accessing the resource you were trying to reach is forbidden
- Code: 404
- Message: The resource you were trying to reach is not found
- Code: 500
- Message: Internal Server Error

Consequences of Password Expiration

Users will receive a notification as mentioned in the 'Sample Response' when their password expires. This response applies to all APIs, and users must reset their password through the "Change Password" API.

Sample Response

```
{
  "status": "UNAUTHORIZED",
  "statusCode": "ERROR",
  "error": {
    "field": "Authorization",
    "message": "Access is denied"
  }
}
```

Change User's Password

API URL: <https://prportal.nidw.gov.bd/partner-service/rest/common/change-user-password>

Request Type: POST

Parameter Content Type: application/json

Request Header: Bearer Token

Parameter Name	Description	Type
currentPassword	User's current password	MANDATORY (Less than 50 character)
newPassword	New password that users want to set	MANDATORY (Less than 50 character)
confirmPassword	Rewrite the new password to confirm	MANDATORY (Less than 50 character)

Sample Request

```
{
  "currentPassword": "string",
  "newPassword": "string",
  "confirmPassword": "string"
}
```

Sample Response

```
{
  "status": "BAD_REQUEST",
  "statusCode": "ERROR",
  "error": {
    "field": "password",
    "message": "Old Password and New Password Cannot Be Same"
  }
}

OR

{
  "status": "BAD_REQUEST",
  "statusCode": "ERROR",
  "error": {
    "field": "confirmPassword",
    "message": "Password Should Not Be Greater than 50 Character"
  }
}

OR

{
  "status": "BAD_REQUEST",
  "statusCode": "ERROR",
  "error": {
    "message": "Message not readable or request body is empty"
  }
}

OR

{
  "status": "OK",
  "statusCode": "SUCCESS",
  "success": {
    "data": "Password Updated Successfully"
  }
}
```

[NOTE: Upon successful password update, the user session will terminate.]

Response Code and Messages

Tag: success

- Code: 200
 - Message: Successful

Tag: error

- Code: 201
 - Message: Created
- Code: 401
 - Message: You are not authorized to view the resource
- Code: 403
 - Message: Accessing the resource you were trying to reach is forbidden
- Code: 404
 - Message: The resource you were trying to reach is not found
- Code: 500
 - Message: Internal Server Error

Tag: result

- If the operation was successful, this field will have the result.

Partner Billing

API URL: https://prportal.nidw.gov.bd/partner-service/rest/partner-billing/get-billing-report

Request Type: POST

Parameter Content Type: application/json

Request Header: Bearer Token

Parameter Name	Description	Type
startDate	Billing Start Date	MANDATORY (Any One)
endDate	Billing End Date	MANDATORY (Any One)

Sample Request

```
{
  "startDate": "2023-03-01",
  "endDate": "2023-03-31"
}
```

Sample Response

```
{
  "status": "OK",
  "statusCode": "SUCCESS",
  "success": {
    "data": {
      "generatedTime": "Wed Feb 01 16:46:20 BDT 2023",
      "partnerId": 30,
      "totalCallCount": 172,
      "totalSuccessCount": 101,
      "totalFailedCount": 71,
      "totalProcessingCount": 0,
      "totalBill": 344.0, "partnerBillingBeanList": [
        {
          "partnerId": 30,
          "partnerName": "City Bank",
          "username": "city2",
          "callCount": 12,
          "successCount": 7,
          "failedCount": 5,
          "processingCount": 0,
          "bill": 24.0
        },
        {
          "partnerId": 30,
```

```
    "partnerName": "City Bank",
    "username": "city",
    "callCount": 158,
    "successCount": 94,
    "failedCount": 64,
    "processingCount": 0,
    "bill": 316.0
  },
  {
    "partnerId": 30,
    "partnerName": "City Bank",
    "username": "city4", "callCount": 2,
    "successCount": 0,
    "failedCount": 2,
    "processingCount": 0,
    "bill": 4.0
  }
]
}
```

Response Code and Messages

Tag: success

- Code: 200
- Message: Successful

Tag: error

- Code: 401
- Message: You are not authorized to view the resource
- Code: 403
- Message: Accessing the resource you were trying to reach is forbidden
- Code: 404
- Message: The resource you were trying to reach is not found
- Code: 500
- Message: Internal Server Error

Conclusion

A group of Servers is dedicated to running the Partner Service Application of CMS Module. We are expecting End Users will experience the extraordinary performance with less downtime under the Optimized Application Architecture.

THANK YOU