**RESTful Web API For SSF to Open IMIS Data expose.**

A **RESTful API(**Application Program Interface**)** also referred to as a **RESTful** web service - is based on representational state transfer (**REST**) technology, an architectural style and approach to communications often used in web services development. An **API** for a website is code that allows two software programs to communicate with each another.

# This API developed in .net core 2.2 technologies with JWT (JSON Web Token) Authentication.

# A JSON Web Token (JWT) is used to send information that can be verified and trusted by means of a digital signature. It comprises a compact and URL-safe JSON object, which is

# cryptographically signed to verify its authenticity, and which can also be encrypted if the payload contains sensitive information. Tokens can be thought of as packets of information that allow some authorization process to be carried out.

# JWTs encode claims to be transmitted as a JSON object that is base64url encoded and digitally signed and/or encrypted. Signing is accomplished using JSON Web Signature and encryption is accomplished using JSON Web Encryption (JWE).

# In this application we used JWT Authentication that include user credential (user id , user name, user password , Email , Service Type and also token parameters) that firstly it generate a token including above credential with token expiry date and time then check a token validation and also we 2nd level check it means after token valid we check user credential with Sosys before communicating between Open IMIS to SSF System. If token is invalid it not allowed entering to SOSYS Application.

# In this API we expose seven requests that are Login, GetContributor/{ssfid}, GetContributorStatus/{ssfid}, GetContributorDetailsByDate/{From\_Date}/{To\_Date}, PostClaimStatement , PostBatchClaimStatement and PostHospital

# Login: This POST request is used for security to generate token with token parameter and user credential. For example:

# Url: http://103.232.152.86:801/api/auth/login

# And pass Json Format data in body like below

# {"UserId":"ssfgiz",

# "Password":"ssfgiz1",

# "wsType":"HEALTH"

# }

# Finally, response a token data:

# {

# "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy5taWNyb3NvZnQuY29tL3dzLzIwMDgvMDYvaWRlbnRpdHkvY2xhaW1zL3JvbGUiOiJCQU5LIiwiVXNlcklkIjoiZGtyYXV0IiwiVXNlclB3ZCI6ImRrcmF1dCIsIldTVHlwZSI6IkJBTksiLCJzdWIiOiJSYXN0cml5YSBCYW5panlhIEJhbmsiLCJlbWFpbCI6ImRpbGlwa3JhdXRAeWFob28uY29tIiwianRpIjoiM2Q5YjZlM2UtYmE4Yi00ZmIxLThmNDctNzU3OTUwOTgyM2FiIiwiZXhwIjoxNTYyODI3OTUxLCJpc3MiOiJ0ZXN0IiwiYXVkIjoidGVzdCJ9.6-D1eU0JlBABcFSS3-q0kVfft7QAcL72dmJ6VBpRA4I"

# }

# This token used in following request as a Bearer Token.

# GetContributor/{ssfid} : This GET request used to get the contributor information for registering a single contributor to Open IMIS. For Example:

# Url: http://103.232.152.86:801/api/health/getcontributor/20760012203

# Bearer Token: "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy5taWNyb3NvZnQuY29tL3dzLzIwMDgvMDYvaWRlbnRpdHkvY2xhaW1zL3JvbGUiOiJCQU5LIiwiVXNlcklkIjoiZGtyYXV0IiwiVXNlclB3ZCI6ImRrcmF1dCIsIldTVHlwZSI6IkJBTksiLCJzdWIiOiJSYXN0cml5YSBCYW5panlhIEJhbmsiLCJlbWFpbCI6ImRpbGlwa3JhdXRAeWFob28uY29tIiwianRpIjoiM2Q5YjZlM2UtYmE4Yi00ZmIxLThmNDctNzU3OTUwOTgyM2FiIiwiZXhwIjoxNTYyODI3OTUxLCJpc3MiOiJ0ZXN0IiwiYXVkIjoidGVzdCJ9.6-D1eU0JlBABcFSS3-q0kVfft7QAcL72dmJ6VBpRA4I"

# And response json object is:

# {

# "IsSucess": true,

# "IsValid": true,

# "Message": "",

# "DynamicData": null,

# "Token": "",

# "ResponseData": {

# "SSFID": "20760012203",

# "Photo": "",

# "FirstNameEn": "Raju",

# "MiddleNameEn": "Ratna",

# "LastNameEn": "Buddhacharya",

# "Email": "jbuddhacharya@gmail.com",

# "Contact": "9841662430,jbuddhacharya@gmail.com",

# "BloodGroup": "AB+",

# "DOB": "5/23/1962 12:00:00 AM",

# "Gender": "M",

# "CountryCode": "np",

# "StateID": 3,

# "DistrictCD": 26,

# "VdcCD": 30608,

# "WardNO": 15,

# "ToleEn": "स्वयम्भु",

# "FullAddress": "स्वयम्भु, Kathmandu Metropolitian City - 15, Kathmandu, Bagmati Province",

# "DocType": 2,

# "IssueNo": "4942-8486",

# "IssueDate": "2038.02.23",

# "IssuePlace": "जिल्ला प्रशासन कार्यालय काठमाडौं",

# "EnrollDate": "8/27/2019 1:12:58 PM",

# "PolicyStartDate": "8/18/2019 12:00:00 AM",

# "PolicyExpireDate": null,

# "PolicyStatus": null

# },

# "Records": null,

# "TotalRecords": null,

# "IsToken": true

# }

# GetContributorStatus/{ssfid}: This GET request used to get the contributor status for active or not. For Example:

# Url: http://103.232.152.86:801/api/health/getcontributorstatus/20760012203

# Bearer Token: "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy5taWNyb3NvZnQuY29tL3dzLzIwMDgvMDYvaWRlbnRpdHkvY2xhaW1zL3JvbGUiOiJCQU5LIiwiVXNlcklkIjoiZGtyYXV0IiwiVXNlclB3ZCI6ImRrcmF1dCIsIldTVHlwZSI6IkJBTksiLCJzdWIiOiJSYXN0cml5YSBCYW5panlhIEJhbmsiLCJlbWFpbCI6ImRpbGlwa3JhdXRAeWFob28uY29tIiwianRpIjoiM2Q5YjZlM2UtYmE4Yi00ZmIxLThmNDctNzU3OTUwOTgyM2FiIiwiZXhwIjoxNTYyODI3OTUxLCJpc3MiOiJ0ZXN0IiwiYXVkIjoidGVzdCJ9.6-D1eU0JlBABcFSS3-q0kVfft7QAcL72dmJ6VBpRA4I"

# And response json object is:

# {

# "IsSucess": true,

# "IsValid": true,

# "Message": "",

# "DynamicData": null,

# "Token": "",

# "ResponseData": [

# {

# "Pssid": "20760012203",

# "LYear": "2076",

# "LMonth": "7",

# "LDate": "10/18/2019 12:00:00 AM",

# "DiffDay": "264",

# "SchID": "1",

# "NOC": "4",

# "Status": "Active"

# },

# {

# "Pssid": "20760012203",

# "LYear": "2076",

# "LMonth": "7",

# "LDate": "10/18/2019 12:00:00 AM",

# "DiffDay": "264",

# "SchID": "2",

# "NOC": "4",

# "Status": "Acive"

# }

# ],

# "Records": null,

# "TotalRecords": null,

# "IsToken": true

# }

# GetContributorDetailsByDate/{From\_Date}/{To\_Date}: This GET request used to get the contributor information by date range for registering a batch contributor to Open IMIS. Date should be in English and dateFormat: ’dd.mm.yyyy’ For Example:

# Url: http://103.232.152.86:801/api/health/getcontributordetailsbydate/03.09.2019/03.09.2019

# Bearer Token: "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy5taWNyb3NvZnQuY29tL3dzLzIwMDgvMDYvaWRlbnRpdHkvY2xhaW1zL3JvbGUiOiJCQU5LIiwiVXNlcklkIjoiZGtyYXV0IiwiVXNlclB3ZCI6ImRrcmF1dCIsIldTVHlwZSI6IkJBTksiLCJzdWIiOiJSYXN0cml5YSBCYW5panlhIEJhbmsiLCJlbWFpbCI6ImRpbGlwa3JhdXRAeWFob28uY29tIiwianRpIjoiM2Q5YjZlM2UtYmE4Yi00ZmIxLThmNDctNzU3OTUwOTgyM2FiIiwiZXhwIjoxNTYyODI3OTUxLCJpc3MiOiJ0ZXN0IiwiYXVkIjoidGVzdCJ9.6-D1eU0JlBABcFSS3-q0kVfft7QAcL72dmJ6VBpRA4I"

# And response json object is:

# {

# "IsSucess": true,

# "IsValid": true,

# "Message": "",

# "DynamicData": null,

# "Token": "",

# "ResponseData": [

# {

# "SSFID": "20760000001",

# "Photo": null,

# "FirstNameEn": "Bhupendra",

# "MiddleNameEn": null,

# "LastNameEn": "Karki",

# "Email": "kb.bhupen@gmail.com",

# "Contact": "9851127792,kb.bhupen@gmail.com",

# "BloodGroup": "A+",

# "DOB": "12.08.1981",

# "Gender": "M",

# "CountryCode": "np",

# "StateID": 5,

# "DistrictCD": 66,

# "VdcCD": 51203,

# "WardNO": 7,

# "ToleEn": null,

# "FullAddress": ", Thakurbaba Municipality - 7, Bardiya, Province 5",

# "DocType": 2,

# "IssueNo": "8547",

# "IssueDate": "2058.08.17",

# "IssuePlace": "DOA Bardia",

# "EnrollDate": "04.02.2019",

# "PolicyStartDate": "18.08.2019",

# "PolicyExpireDate": null,

# "PolicyStatus": null

# },

# {

# "SSFID": "20760000002",

# "Photo": null,

# "FirstNameEn": "Barsha",

# "MiddleNameEn": null,

# "LastNameEn": "KC",

# "Email": "kcb@cdmsmith.com",

# "Contact": "9841533130,kcb@cdmsmith.com",

# "BloodGroup": "B+",

# "DOB": "31.05.1985",

# "Gender": "F",

# "CountryCode": "np",

# "StateID": 3,

# "DistrictCD": 28,

# "VdcCD": 30802,

# "WardNO": 15,

# "ToleEn": "ताल्छिखेल",

# "FullAddress": "ताल्छिखेल, Lalitpur Metropolitian City - 15, Lalitpur, Bagmati Province",

# "DocType": 2,

# "IssueNo": "16140",

# "IssueDate": "2060.01.26",

# "IssuePlace": "DOA Lalitpur",

# "EnrollDate": "04.02.2019",

# "PolicyStartDate": "18.08.2019",

# "PolicyExpireDate": null,

# "PolicyStatus": null

# },

# 

# {

# "SSFID": "20760000319",

# "Photo": null,

# "FirstNameEn": "Birendra",

# "MiddleNameEn": "Kumar",

# "LastNameEn": "Jha",

# "Email": "kraftmandala@yahoo.com",

# "Contact": "9841597524",

# "BloodGroup": null,

# "DOB": "31.12.1975",

# "Gender": "M",

# "CountryCode": "np",

# "StateID": 2,

# "DistrictCD": 21,

# "VdcCD": 20413,

# "WardNO": 5,

# "ToleEn": "Hardia",

# "FullAddress": "Hardia, Pipara Rural Municipality - 5, Mahottari, Province 2",

# "DocType": 2,

# "IssueNo": "81902435",

# "IssueDate": "2048.11.01",

# "IssuePlace": "Mahotari",

# "EnrollDate": "07.06.2019",

# "PolicyStartDate": "17.07.2019",

# "PolicyExpireDate": null,

# "PolicyStatus": null

# }

# ],

# "Records": null,

# "TotalRecords": null,

# "IsToken": true

# }

# PostClaimStatement: This POST request is used to post the single claim to SSF. For example:

# url: http://103.232.152.86:801/api/health/postclaimstatement

# body param:

# {

# "SSFID":"20760012203",

# "SCHAPPID":"1",

# "SCHID":"2",

# "ApprovedAmount":5000,

# "ApprovedBy":"abd-test",

# "ApprovedDate":"07.08.2020",

# "ClaimAmount":"5000"

# "ClaimDate":"07.08.2020",

# "ClaimAppDate":"07.08.2020",

# "RStatus":"V",

# "ClaimID":"123456",

# "HID":"H123654"

# }

# Bearer Token: "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy5taWNyb3NvZnQuY29tL3dzLzIwMDgvMDYvaWRlbnRpdHkvY2xhaW1zL3JvbGUiOiJCQU5LIiwiVXNlcklkIjoiZGtyYXV0IiwiVXNlclB3ZCI6ImRrcmF1dCIsIldTVHlwZSI6IkJBTksiLCJzdWIiOiJSYXN0cml5YSBCYW5panlhIEJhbmsiLCJlbWFpbCI6ImRpbGlwa3JhdXRAeWFob28uY29tIiwianRpIjoiM2Q5YjZlM2UtYmE4Yi00ZmIxLThmNDctNzU3OTUwOTgyM2FiIiwiZXhwIjoxNTYyODI3OTUxLCJpc3MiOiJ0ZXN0IiwiYXVkIjoidGVzdCJ9.6-D1eU0JlBABcFSS3-q0kVfft7QAcL72dmJ6VBpRA4I"

# And finally give response is

# {

# "IsSucess": true,

# "IsValid": true,

# "Message": "Saved",

# "DynamicData": null,

# "Token": "",

# "ResponseData":null

# "Records": null,

# "TotalRecords": null,

# "IsToken": true

# }

# PostBatchClaimStatement: This POST request is used to post the batch claim to SSF. For example:

# url: http://103.232.152.86:801/api/health/postbatchclaimstatement

# body param:

# [{

# "SSFID":"20760012203",

# "SCHAPPID":"1",

# "SCHID":"2",

# "ApprovedAmount":5000,

# "ApprovedBy":"abd-test",

# "ApprovedDate":"07.08.2020",

# "ClaimAmount":"5000"

# "ClaimDate":"07.08.2020",

# "ClaimAppDate":"07.08.2020",

# "RStatus":"V",

# "ClaimID":"123456",

# "HID":"H123654"

# }]

# Bearer Token: "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy5taWNyb3NvZnQuY29tL3dzLzIwMDgvMDYvaWRlbnRpdHkvY2xhaW1zL3JvbGUiOiJCQU5LIiwiVXNlcklkIjoiZGtyYXV0IiwiVXNlclB3ZCI6ImRrcmF1dCIsIldTVHlwZSI6IkJBTksiLCJzdWIiOiJSYXN0cml5YSBCYW5panlhIEJhbmsiLCJlbWFpbCI6ImRpbGlwa3JhdXRAeWFob28uY29tIiwianRpIjoiM2Q5YjZlM2UtYmE4Yi00ZmIxLThmNDctNzU3OTUwOTgyM2FiIiwiZXhwIjoxNTYyODI3OTUxLCJpc3MiOiJ0ZXN0IiwiYXVkIjoidGVzdCJ9.6-D1eU0JlBABcFSS3-q0kVfft7QAcL72dmJ6VBpRA4I"

# And finally give response is

# {

# "IsSucess": true,

# "IsValid": true,

# "Message": "Saved",

# "DynamicData": null,

# "Token": "",

# "ResponseData":null

# "Records": null,

# "TotalRecords": null,

# "IsToken": true

# }

# PostHospital: This POST request is used to post the hospital information to SSF. For example:

# url: http://103.232.152.86:801/api/health/posthospital

# body param:

# {

# "code":"H123",

# "nameNep":"",

# "nameEng":"Kist Hospital",

# "address":"KTM",

# "phone":"12365478965",

# "fax":"123654789",

# "email":"abc@yahoo.com"

# "bCode":"41256",

# "bBCode":"4563",

# "accCode":"123654789",

# }

# Bearer Token: "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJodHRwOi8vc2NoZW1hcy5taWNyb3NvZnQuY29tL3dzLzIwMDgvMDYvaWRlbnRpdHkvY2xhaW1zL3JvbGUiOiJCQU5LIiwiVXNlcklkIjoiZGtyYXV0IiwiVXNlclB3ZCI6ImRrcmF1dCIsIldTVHlwZSI6IkJBTksiLCJzdWIiOiJSYXN0cml5YSBCYW5panlhIEJhbmsiLCJlbWFpbCI6ImRpbGlwa3JhdXRAeWFob28uY29tIiwianRpIjoiM2Q5YjZlM2UtYmE4Yi00ZmIxLThmNDctNzU3OTUwOTgyM2FiIiwiZXhwIjoxNTYyODI3OTUxLCJpc3MiOiJ0ZXN0IiwiYXVkIjoidGVzdCJ9.6-D1eU0JlBABcFSS3-q0kVfft7QAcL72dmJ6VBpRA4I"

# And finally give response is

# {

# "IsSucess": true,

# "IsValid": true,

# "Message": "Saved",

# "DynamicData": null,

# "Token": "",

# "ResponseData":null

# "Records": null,

# "TotalRecords": null,

# "IsToken": true

# }