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| API Specification |
| {api\_name} |
| SOA Enterprise Services |

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# REST API Specification

## API Description

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| **Name of API** | {Drools-rule-engine} |
| **Description** | Drools Rule Engine is configured as centralised microservice that accepts input payload as Member object along with RequestFor attribute and gives rules as output.  Detail Description :We configured different rules for SmartPCP,Affinity and MDO services.These services calls the Drools microservice and get the rules as output.The below details are needed in the input payload to call the drools microservice.  1)Lob  2)Market  3)Product  4)AssignmentType  5)AssignmentMethod  6)Requestfor  Drools service is configured with common end point as /smartPCPSelect and other services calls this endpoint to get the rules. |
| **Resources** | |  |  | | --- | --- | | Resource | Summary | | {smartPCPSelect } | This service executes the drools rule engine and provides output as Invocation Order for SmartPCP and rules for Affinity and MDO | | {resource\_name} | Summary description | | {resource\_name} | Summary description | |

## Resource Specification

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| **Resource Name** | { smartPCPSelect } |
| **Description** | Detail Description: This service executes the drools rule engine and provides output as Invocation Order for SmartPCP and rules for Affinity and MDO. |
| **Resource URL** | /smartPCPSelect |
| **Request Verb** | POST |
| **Request Headers** | InputPayload object  Content-type: json |
| **Request Parameters** | |  |  |  |  | | --- | --- | --- | --- | | Parameter Name | Required/  Optional | Description | Parameter Type | | lob | R | LineOfBusiness like ‘Commercial’ | String | | market | R | Market/State like ‘CA’,’ALL’,’VA’ | String | | product | R | Product like ‘PPO’’,’HMO’,’ALL’ | String | | assignmentType | R | Assignment type like ‘New’,’Rollover’ | String | | assignmentMethod | R | AssignmentMethod like ‘Batch/Online’ | String | | requestFor | R | This will be name of the service requested for rules.RequestFor can be ‘SMARTPCP’,’AFFINITY’,’MDO’ | String | |
| **Request URI Examples** | POST /smartPCPSelect |
| **Request Body Example** | {  "requestFor": "SMARTPCP",  "member": {  "market": "CT",  "lob": "Commercial",  "product": "ALL",  "assignmentType": "New",  "assignmentMethod": "Batch",  "hcid": "80054178",  "sorCode": "1234",  "subscriberId": "1234",  "sequenceNbr": "1234",  "fname": "CAROLYN",  "lname": "ANDREWS",  "gender": "F",  "dob": -568099440000,  "address": {  "addrLine1": "ACV ",  "addrLine2": "QWE",  "street": "Wall Street",  "houseNumber": null,  "state": "NJ",  "zip": "12345",  "latitude": 0.0,  "longitude": 0.0  },  "ssn": "455981703",  "certNbr": "123",  "memberCode": null,  "productCode": "PCI"  },  "logId": "de91dbd6-1dc0-4608-aa39-0f1901e29585"  } |
| **Response Headers** | contentType:Application/JSON |
| **Response Body Example** | {  "rules": {  "market": "CT",  "lob": "Commercial",  "product": "ALL",  "assignmentType": "New",  "assignmentMethod": "Batch",  "invocationOrder": "AM",  "poolSize": 0,  "maxRadiusToPool": 0,  "ageMatch": null,  "ageScore": 0,  "languageMatch": null,  "languageScore": 0,  "limitedTimePanelLimit": null,  "limitedTimeTimeLimit": 0,  "limitedTimeScore": 0,  "proximity": null,  "proximityScore": 0,  "specialityMatch": null,  "specialityScore": 0,  "fallbackRequired": false,  "primarySpecialties": null,  "daysToTerminationAllowed": 0,  "drivingDistance": 0,  "specialtyMinAge": {},  "specialtyMaxAge": {},  "validationYesNoFlag": {},  "specialtyGender": {}  },  "responseCode": 200,  "responseMessage": "Rules successfully applied on Payload"  } |
| **Input Data validations performed** | 1)InputPayload object should not be null  2)RequestFor attribute should not be empty or null and should not contain any other value apart from “SMARTPCP”,”AFFINITY”,”MDO”. |
| **Error Response HTTP Status Codes** | Code = 200, message = “success”  code = 600, message = "JSON\_VALIDATION\_ERROR"  code = 700, message = "SERVICE\_NOT\_AVAILABLE "  code = 800, message = "OTHER\_EXCEPTIONS" |

## General API Components

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Request Headers** | |  |  |  |  | | --- | --- | --- | --- | | Header Name | Description | R/O | Values | | inputPayload | MemberInputPayload | R |  | | Accept |  | O | json | |
| **Response Headers** | |  |  |  |  | | --- | --- | --- | --- | | Header Name | Description | R/O | Values | | Content-Type |  | O | application/json | |
| **Error Response HTTP Status Codes** | |  |  | | --- | --- | | HTTP Status Code | Description | | 200 OK | Successful response | | 600 JSON\_VALIDATION\_ERROR | Json Input error | | 800 OtherExceptions | OtherExceptions | |
| **Error Response Format** | |  |  | | --- | --- | | Element | Description | | Responsecode | 600 | | Responsemessage | JSON\_VALIDATION\_ERROR | | detail | RequestFor is Null or Empty in Input Payload troubleshooting. | | Responsecode | 800 | | Responsemessage | OTHER\_EXCEPTIONS | | detail | Internal Error in Drools Rules Engine. |   {  "rules": null,  "responseCode": 600,  "responseMessage": "RequestFor is Null or Empty in Input Payload"  }  {  "rules": null,  "responseCode": 800,  "responseMessage": "Internal Error in Drools Rules Engine"  } |

# Terms & Definitions

|  |  |
| --- | --- |
| **Term** | **Description** |
| **REST** | Representational State Transfer |
| **HTTP** | Hyper Text Transfer Protocol |
| **API** | Application Programming Interface |

# Revision History

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| --- | --- | --- | --- |
| **Date** | **Revision** | **Description** | **Author** |
| 4/12/2018 |  | Draft Template | Gouse |

# REST API Specification

## API Description

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| **Name of API** | {MDOProcessing} |
| **Description** | This microservice receives member as input from Smart PCP select. Sends the member data to MDO Pooling to receive a list of PCP. If It receives a list of PCP , it calls MDO scoring. Else checks whether PCP is dummy or not and send the PCP data back to Smart PCP Select mvc. |
| **Resources** | |  |  | | --- | --- | | Resource | Summary | | {smartPCPSelect } | This component sends the request member payload to the MDO Processing msvc. | | {MDO Pooling} | MDO Processing invokes MDO Pooling with the member payload to get a list of PCPs or a single PCP (dummy or true) | | {Drools Rule Engine} | MDO Processing invokes drools rule engine to get all the rules pertaining to a member. | | {MDO Scoring} | This msvc is invoked to get the mdo score and mdo ranking for a list of PCPs. | |

## Resource Specification

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| **Resource Name** | { MDOProcessing } |
| **Description** | This microservice receives member as input from Smart PCP select. Sends the member data to MDO Pooling to receive a list of PCP. If It receives a list of PCP , it calls MDO scoring. Else checks whether PCP is dummy or not and send the PCP data back to Smart PCP Select mvc. |
| **Resource URL** | /MDOProcessing |
| **Request Verb** | POST |
| **Request Headers** | Member object  Content-type: json |
| **Request Parameters** | Member Object |
| **Request URI Examples** | POST /MDOProcessing |
| **Request Body Example** | {                  "market": "CT",                  "lob": "Commercial",                  "product": "ALL",                  "assignmentType": "New",                  "assignmentMethod": "Batch",                  "hcid": "12345",                  "sorCode": "1234",                  "subscriberId": "1234",                  "sequenceNbr": "1234",                  "fname": "CAROLYN",                  "lname": "ANDREWS",                  "gender": "F",                  "dob": -568099440000,                  "address": {                                  "addrLine1": "ACV ",                                  "addrLine2": "QWE",                                  "street": "Wall Street",                                  "houseNumber": null,                                  "state": "NJ",                                  "zip": "12345",                                  "latitude": 0.0,                                  "longitude": 0.0                  },                  "ssn": "12345",                  "certNbr": "123",                  "memberCode": null,                  "productCode": "PCI"  } |
| **Response Headers** | contentType:Application/JSON |
| **Response Body Example** | {  "pcpId": 12345,  “mdoScore”: 123,  “mdoRanking”: 1  "responseCode": 200,  "responseMessage": "SUCCESS"  } |
| **Input Data validations performed** | 1)InputPayload object should not be null. |
| **Error Response HTTP Status Codes** | Code = 200, message = “SUCCESS”  code = 600, message = "JSON\_VALIDATION\_ERROR"  code = 700, message = "SERVICE\_NOT\_AVAILABLE "  code = 900, message = "NULL\_INPUT\_PAYLOAD "  code = 800, message = "OTHER\_EXCEPTIONS" |

## General API Components

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Request Headers** | |  |  |  |  | | --- | --- | --- | --- | | Header Name | Description | R/O | Values | | inputPayload | MemberInputPayload | R |  | | Accept |  | O | json | |
| **Response Headers** | |  |  |  |  | | --- | --- | --- | --- | | Header Name | Description | R/O | Values | | Content-Type |  | R | application/json | |
| **Error Response HTTP Status Codes** | |  |  | | --- | --- | | HTTP Status Code | Description | | 200 | Successful response | | 600 | Json Input error | | 800 | OtherExceptions | | 700 | Service Not Available | | 900 | Input Payload is null | |
| **Error Response Format** | |  |  | | --- | --- | | Element | Description | | Responsecode | 700 | | Responsemessage | Service Not Available | | detail | The called service or the nested service is not available. |   {  "pcpId": null,  “mdoScore”: null,  “mdoRanking”: null  "responseCode": 700,  "responseMessage": "Sevice is temporarily unavailable. Please try after some time."  } |

# Terms & Definitions

|  |  |
| --- | --- |
| **Term** | **Description** |
| **REST** | Representational State Transfer |
| **HTTP** | Hyper Text Transfer Protocol |
| **API** | Application Programming Interface |

# Revision History

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| --- | --- | --- | --- |
| **Date** | **Revision** | **Description** | **Author** |
| 4/16/2018 |  | Draft Template | Priya Chowdhury |

## API Description

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| **Name of API** | {mdo-pool-builder} |
| **Description** | Mdo pool builder microservice will be invoked by Mdo processing microservice with member as input and output is validated providers list. It will be interacting with drools engine micoservice for getting rules as output and member as input then by using these rules mdo pool builder microservice will build a pool of providers by calculating the aerial distance between member and provider locations.The formed pool of providers will be sent to provider validation microservice for validation that will return validated providers to mdo pool builder. |
| **Resources** | |  |  | | --- | --- | | Resource | Summary | | {mdo-pool} | This will execute mdo pool builder microservice and will return validated list of providers to mdo processing. | |

## Resource Specification

|  |  |
| --- | --- |
| **Resource Name** | {mdo-pool} |
| **Description** | This will execute mdo pool builder microservice and will return validated list of providers to mdo processing. |
| **Resource URL** | /mdo-pool |
| **Request Verb** | POST |
| **Request Headers** | Refer to General API components section |
| **Request Parameters** | |  |  |  |  | | --- | --- | --- | --- | | Parameter Name | Required/  Optional | Description | Parameter Type | | market | R | LineOfBusiness like ‘Commercial’ | String | | lob | R | Market/State like ‘CA’,’ALL’,’VA’ | String | | product | R | Product like ‘PPO’’,’HMO’,’ALL’ | String | | assignmentType | R | Assignment type like ‘New’,’Rollover’ | String | | assignmentMethod | R | AssignmentMethod like ‘Batch/Online’ | String | | hcid | O | String value | String | | sorCode | O | It should be a string | String | | subscriberId | O | Subscriber id should be given | String | | sequenceNbr | O | Subscriber number should be given here | String | | fname | O | First name the member | String | | lname | O | Last name of the member | String | | gender | O | Male/female/none | String | | dob | O | It shoud be in date format | Date | | address | O | Detailed address of the meber | Address | | ssn | O | Unique number | String | | certNbr | O | String alue should be given | String | | memberCode | O | Member code should be given | String | | productCode | O | Product code should be given | String | |
| **Request URI Examples** | POST mdo/pool |
| **Request Body Example** | {  "market": "CT",  "lob": "Commercial",  "product": "ALL",  "assignmentType": "New",  "assignmentMethod": "Batch",  "hcid": "80054178",  "sorCode": "1234",  "subscriberId": "1234",  "sequenceNbr": "1234",  "fname": "CAROLYN",  "lname": "ANDREWS",  "gender": "F",  "dob": -568099440000,  "address": {  "addrLine1": "ACV ",  "addrLine2": "QWE",  "street": "Wall Street",  "houseNumber": null,  "state": "NJ",  "zip": "12345",  "latitude": 0.0,  "longitude": 0.0  },  "ssn": "455981703",  "certNbr": "123",  "memberCode": null,  "productCode": "PCI"  } |
| **Response Headers** | Refer to General API components section |
| **Response Body Example** | {  "pcps": [  {  "pcpId": "AD8908",  "address": null,  "network": null,  "contractEffDate": null,  "speciality": null,  "language": null  }  ],  "responseCode": 200,  "responseMessage": "SUCCESS",  "dummyFlag": false  } |
| **Input Data validations performed** | 1. In input member market,lob,product,assignment type and assignment method should not be null. 2. SSN should be numeric in member |
| **Error Response HTTP Status Codes** | Code = 200, message = “success”  code = 600, message = "JSON\_VALIDATION\_ERROR"  code = 700, message = "SERVICE\_NOT\_AVAILABLE "  code = 800, message = "OTHER\_EXCEPTIONS" |

## General API Components

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Request Headers** | |  |  |  |  | | --- | --- | --- | --- | | Header Name | Description | R/O | Values | | X-ANTHEM-CLIENT-ID | Consumer key |  |  | | X-ANTHEM-CLIENT-SECRET | Consumer secret |  |  | | APIKey | Access Token, Client ID, sender app etc., | R |  | | Accept |  | O | application/json | |
| **Response Headers** | |  |  |  |  | | --- | --- | --- | --- | | Header Name | Description | R/O | Values | | Content-Type |  | O | application/json | |
| **Error Response HTTP Status Codes** | |  |  | | --- | --- | | HTTP Status Code | Description | | 200 OK | Successful response | | 400 Bad request | Problem with request, parameter values or format | | 401 Unauthorized | Could not authenticate | | 403 Forbidden | Not allowed to access the resource | | 404 Not Found | Unable to find the resource requested | | 500 Internal Server Error | A generic error message, given when an unexpected condition is encountered | | 503 Service Unavailable | If the API gateway is unable to communicate with the backend service, it will return this error | |
| **Error Response Format** | |  |  | | --- | --- | | Element | Description | | responseCode | Internal application error code, classification of error. | | responseMessage | Summary of the Error; message to be displayed to user. |   {  "pcps": null,  "responseCode": 700,  "responseMessage": "Service is temporarily down. Please try after some time",  "dummyFlag": false  } |

# Terms & Definitions

|  |  |
| --- | --- |
| **Term** | **Description** |
| **REST** | Representational State Transfer |
| **HTTP** | Hyper Text Transfer Protocol |
| **API** | Application Programming Interface |

# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Revision** | **Description** | **Author** |
| 4/12/2018 | 1.0 | Draft Template | Rohit Kothuru |
| 4/16/2018 | 1.1 | Intial version | Ibrahim Shaik |