AMEX Sales OCH Integration



This is a preliminary document and may be changed substantially.

The information contained in this document represents the current project behavior and data flow mechanism

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# AMEX OCH Integration

# Document History

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Comments | Published By | Reviewed By |
| 05-13-2024 | Version 1.0 – Initial Draft | Raman Kumar |  |

# Introduction

## Purpose of Document

The document lists all following HTTP APIs that AMEX requires to integrate with Elita System

* Get Token
* Enrol Certificate
* Get Certificate
* Get Equipment
* Get Manufacturers
* Get Products
* Search Certificate

Elita system is also integrated with OCH external API to check the device eligibility.

* Device Eligible API

## Scope of document

This document defines the above policy designed for AMEX.

## Scope of Requests

Amex can call all the provided APIs with the specified request structure below in document in json format.

# AMEX Program Configuration APIs

These APIs are used to define configuration for AMEX in a way to integrate AMEX APIs with ELITA. There are many configurations which is required for the integration and that needs to be done prior to use AMEX Apis like (Dealer Code, Company Group Code, Risk Type Code etc.).

These APIs are used to Add / Update / Delete configuration for a specific configuration code. Configuration code is used as a key in the API url and the same code will be used as to perform other operations on Configurations like get. put.

## Post – /Programs/AMEX

Base URL : https://apim-elita-modl-de.azure-api.net/elita/d1/apim-program/v1/programs/AMEX

Ocp-Apim-Subscription-Key: 495796af3c914c229906eb2dd4b69b7d

### Request Body

Sample Json Payload for AMEX Client:

|  |
| --- |
| {  "partitionKey": "AMEX",  "comments": "Amex added billing cycle",  "code": "AMEX",  "name": "American Express",  "policy": [  {  "code": "DealerCode",  "value": "AMEX"  },  {  "code": "CompanyCode",  "value": "ADG1"  },  {  "code": "RiskTypeCode",  "value": "TECH SUPPORT"  },  {  "code": "cancellationCode",  "value": "000"  },  {  "code": "PaymentInstrumentType",  "value": "D"  },  {  "code": "PaymentType",  "value": "AssurantGenBilling"  },  {  "code": "BillingFrequency",  "value": "1"  },  {  "code": "BillingCycle",  "value": "1"  }  ],  "claim": [  {  "code": "DealerCode",  "value": "AMEX"  }  ],  "decryption": null,  } |

### Response

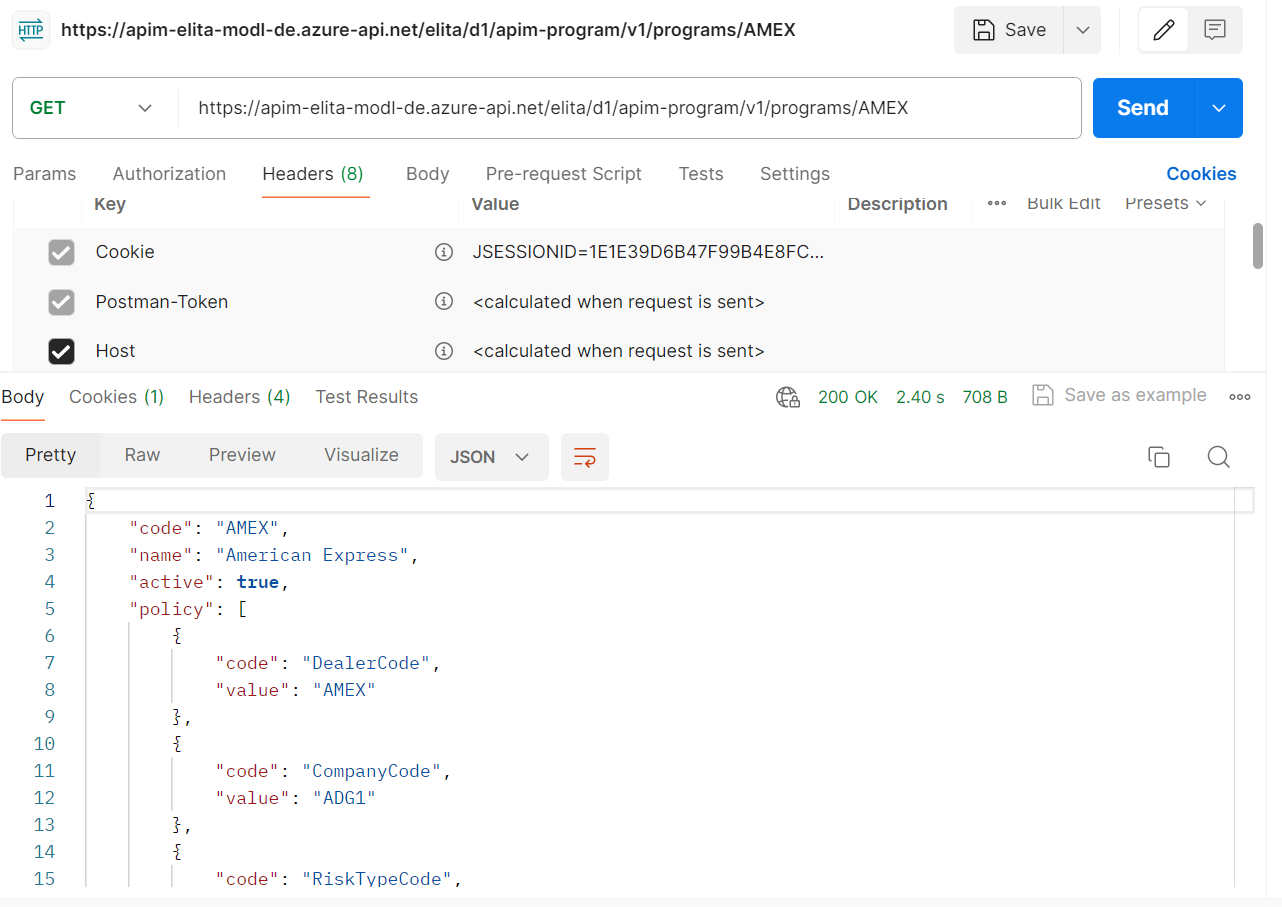
201 Created

## Get – /Programs/AMEX

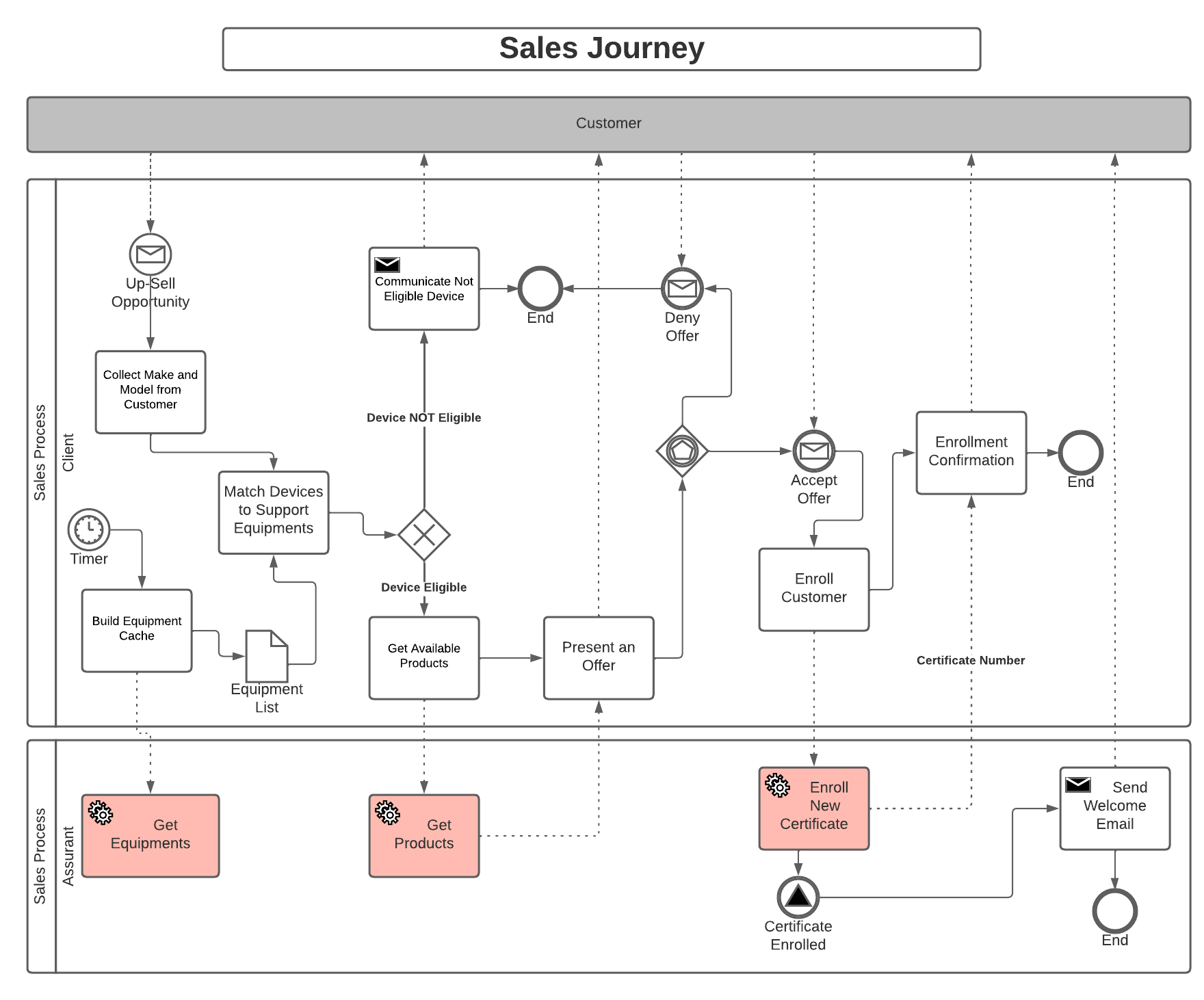
Get the Program configuration based on configuration code

### Response

|  |
| --- |
| {  "partitionKey": "AMEX",  "id": "4c6e39a0-48f9-437d-b902-458bd3f6fa4d",  "comments": "Amex added billing cycle",  "code": "AMEX",  "name": "American Express",  "active": true,  "policy": [  {  "code": "DealerCode",  "value": "AMEX"  },  {  "code": "CompanyCode",  "value": "ADG1"  },  {  "code": "RiskTypeCode",  "value": "TECH SUPPORT"  },  {  "code": "cancellationCode",  "value": "000"  },  {  "code": "PaymentInstrumentType",  "value": "D"  },  {  "code": "PaymentType",  "value": "AssurantGenBilling"  },  {  "code": "BillingFrequency",  "value": "1"  },  {  "code": "BillingCycle",  "value": "1"  }  ],  "claim": [  {  "code": "DealerCode",  "value": "AMEX"  }  ],  "domain": null,  "lastModified": "2024-03-06T14:07:10.4687984Z",  "lastModifiedBy": "Reginald Jean-Mary",  "decryption": null,  "\_rid": "y9xgAJW5tNgDAAAAAAAAAA==",  "\_self": "dbs/y9xgAA==/colls/y9xgAJW5tNg=/docs/y9xgAJW5tNgDAAAAAAAAAA==/",  "\_etag": "\"70029510-0000-1500-0000-65e8788e0000\"",  "\_attachments": "attachments/",  "\_ts": 1709734030  } |



# AMEX Integration Sales Journey



# AMEX Integration APIs (Operations)

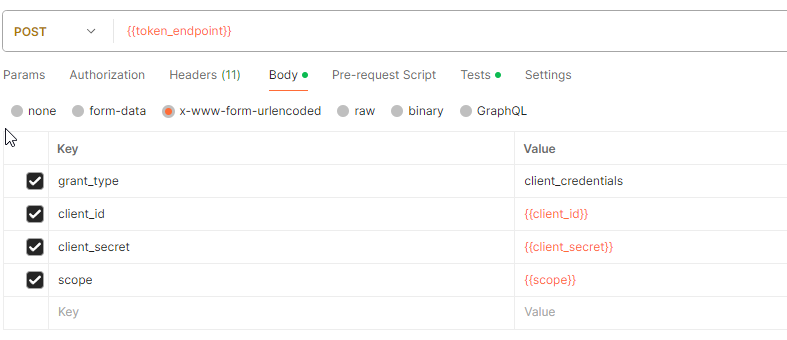
## Post- v1/Token – Authorization

To be able to connect to this API client need to provide the Bearer token get it from our Security API

URL : <https://apim-model.de.assurant.com/elita/d1/security/v1/token>

The post request should be x-www-form-urlencoded with these fields:

| **Field** | **Value** | **Description** |
| --- | --- | --- |
| grant\_type | client\_credentials |  |
| client\_id |  | Client id assigned to the client by Okta. |
| client\_secret |  | Client secret provide by Okta for the client. |
| scope |  | Scope provide by Okta for the client. |



Response:

|  |
| --- |
| {  "token\_type": "Bearer",  "expires\_in": 3600,  "access\_token": "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*",  "scope": "read"  } |

The "access\_token" field received in the response should be use as token for the future calls.

To summarize the header requirements to call AMEX API we have:

| **Key** | **Value** | **Description** |
| --- | --- | --- |
| Ocp-Apim-Subscription-Key | \*\*\*\*\*\* | APIM Subscription for AMEX |
| Authorization | Bearer \*\*\*\*\* | The access token from Security API |
| Content-Type | application/json |  |

## Post – v1/Policy (Enroll)

This Post API is used to enroll certificate in Elita.

**BASE Url** : https://apim-model.de.assurant.com/elita/d1/amex-policy/v1/

**Request URL**: [https://apim-model.de.assurant.com/elita/d1/amex-policy/v1/{{ProgramCode}}/certificates](https://apim-model.de.assurant.com/elita/d1/amex-policy/v1/%7b%7bProgramCode%7d%7d/certificates)

### Headers

Following Headers are required to call Enroll Policy

|  |  |  |
| --- | --- | --- |
| Header Key | Value | Description |
| Ocp-Apim-Subscription-Key | APIM Subscription Key | Key used to connect with Azure APIM instance |
| Authorization | Bearer Token | Token received from Get Token API based on client id and secret |

### Request Body

* Payment Instrument Type: Bank

|  |
| --- |
| {    "productSalesDate": "2020-08-14",    "product": {      "productCode": "MPR100000000000000H",       "equipment": {              "manufacturerName": "Apple",              "model": "iPhone 15 Plus 128GB  Black",              "description": "iPhone",              "color": **null**,              "capacity": **null**,              "carrier": **null**,              "skuNumber": **null**,              "imeiNumber": "35387411265458",              "equipmentSalesDate": "2020-08-14"      }    },    "payment": {      "instrument": {        "instrumentType": "Bank",        "authorizationNumber": "F740320",        "authorizationSource": "External",        "ibanNumber": "DE89370400440532013000"      }    },    "certificateReferenceData": {      "clientReferenceNumber": "0190727851234"    },    "clientReferenceData": [      {        "name": "SALES\_CHANNEL",        "value": "Online"      }    ],    "customers": [      {        "firstName": "John",        "lastName": "Doe",       "birthPlace": {          "dateOfBirth": "1970-03-17"        },        "addresses": [          {            "addressType": "Home",            "address1": "Hauptstr.",            "address2": "45",            "city": "Frankfurt",            "postalCode": "60385",            "country": "DE"          }        ],        "homePhone": "1234567890",        "emailAddress": "john.doe@gmail.com"      }    ]  } |

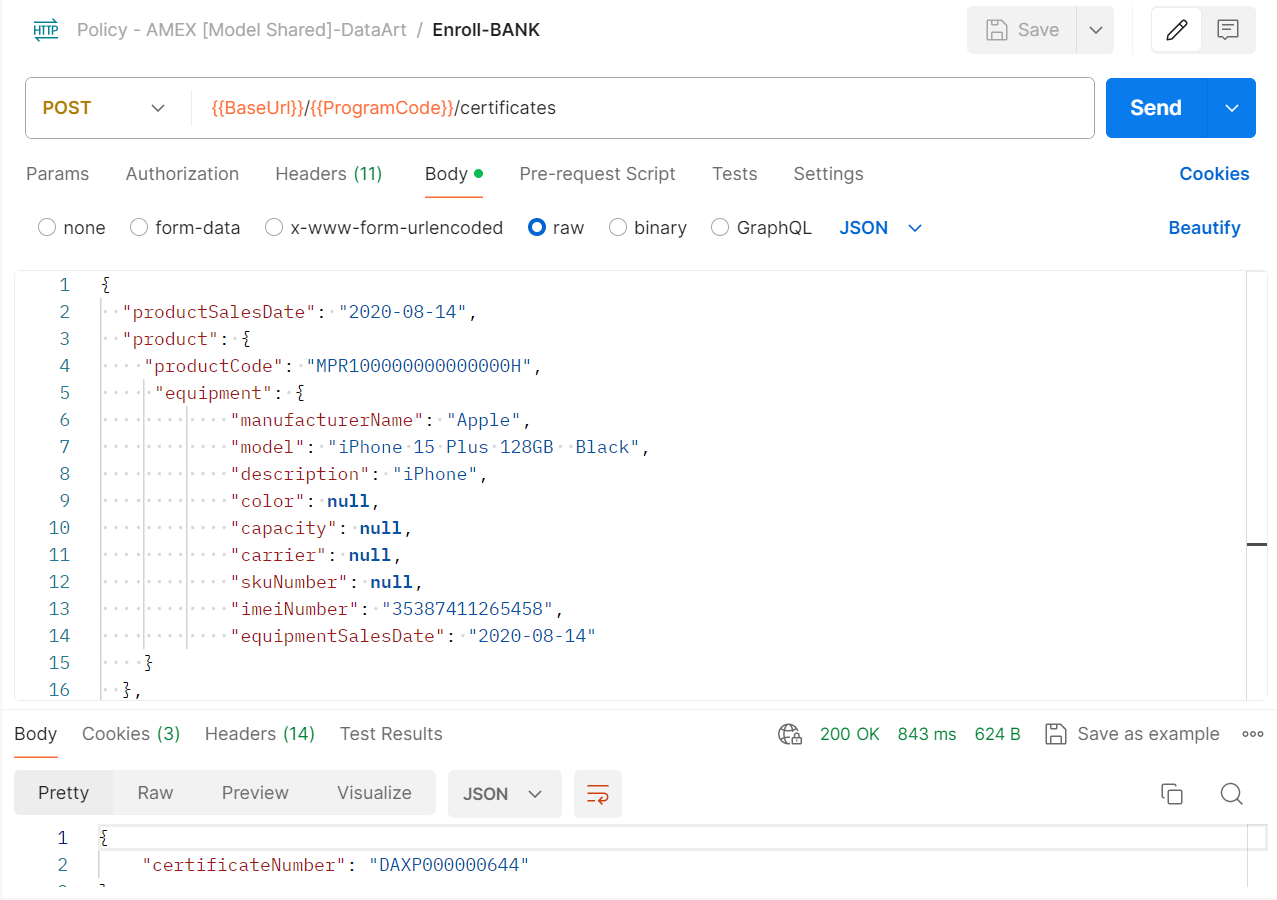
* Payment Instrument Type: Token

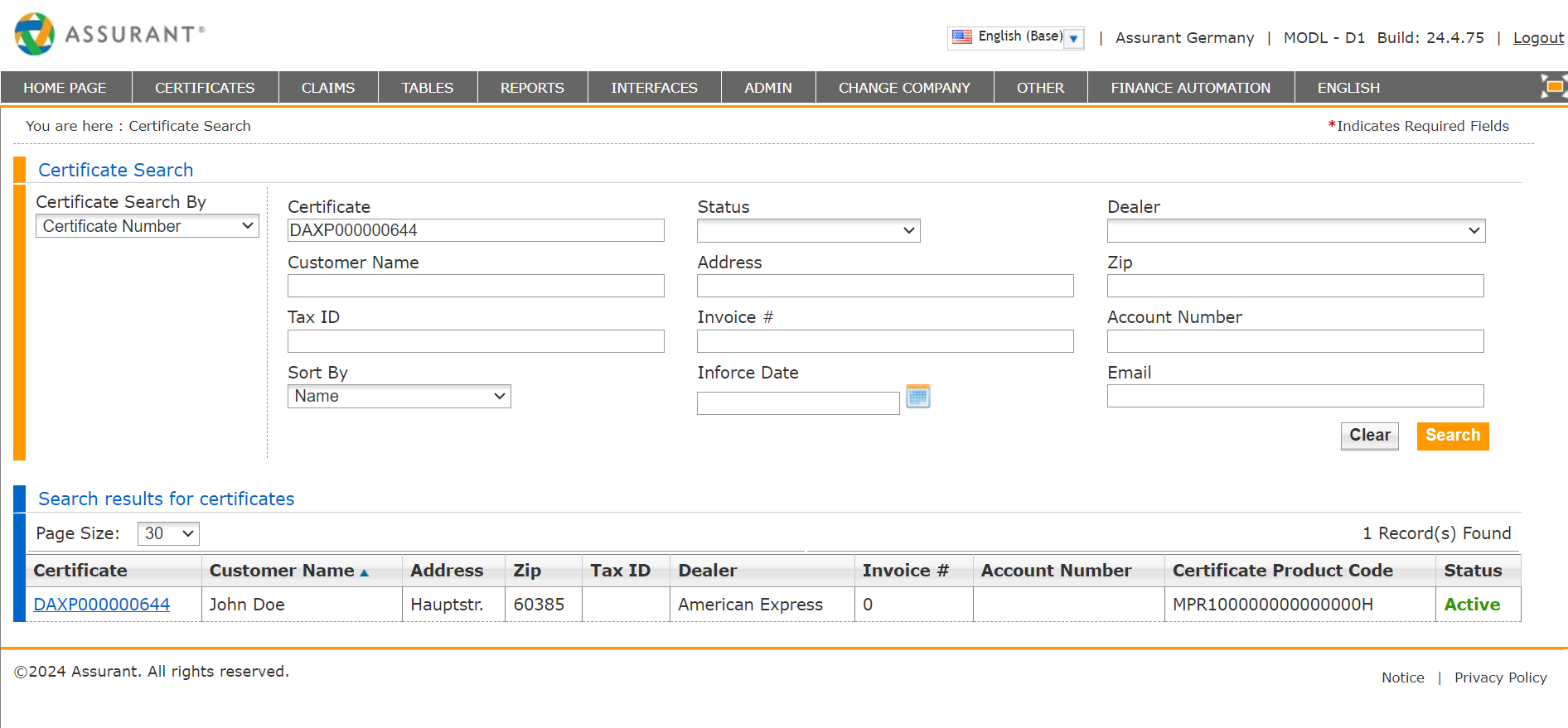
|  |
| --- |
| {      "productSalesDate": "2020-08-14",      "product": {          "productCode": "MPR100000000000000H",          "equipment": {              "manufacturerName": "Apple",              "model": "iPhone 15 Plus 128GB  Black",              "description": "iPhone",              "color": **null**,              "capacity": **null**,              "carrier": **null**,              "skuNumber": **null**,              "imeiNumber": "35387411265458",              "equipmentSalesDate": "2020-08-14"          }      },      "payment": {          "instrument": {              "instrumentType": "TOKEN",              "authorizationNumber": "F740320",              "authorizationSource": "External",              "token": "DE89370400440532013000"          }      },      "certificateReferenceData": {          "clientReferenceNumber": "0190727851234"      },      "clientReferenceData": [          {              "name": "SALES\_CHANNEL",              "value": "Online"          }      ],      "customers": [          {              "firstName": "John",              "lastName": "Doe",              "birthPlace": {                  "dateOfBirth": "1970-03-17"              },              "addresses": [                  {                      "addressType": "Home",                      "address1": "Hauptstr.",                      "address2": "45",                      "city": "Frankfurt",                      "postalCode": "60385",                      "country": "DE"                  }              ],              "homePhone": "1234567890",              "emailAddress": "john.doe@gmail.com"          }      ]  } |

### Response

**Status Code: 201**

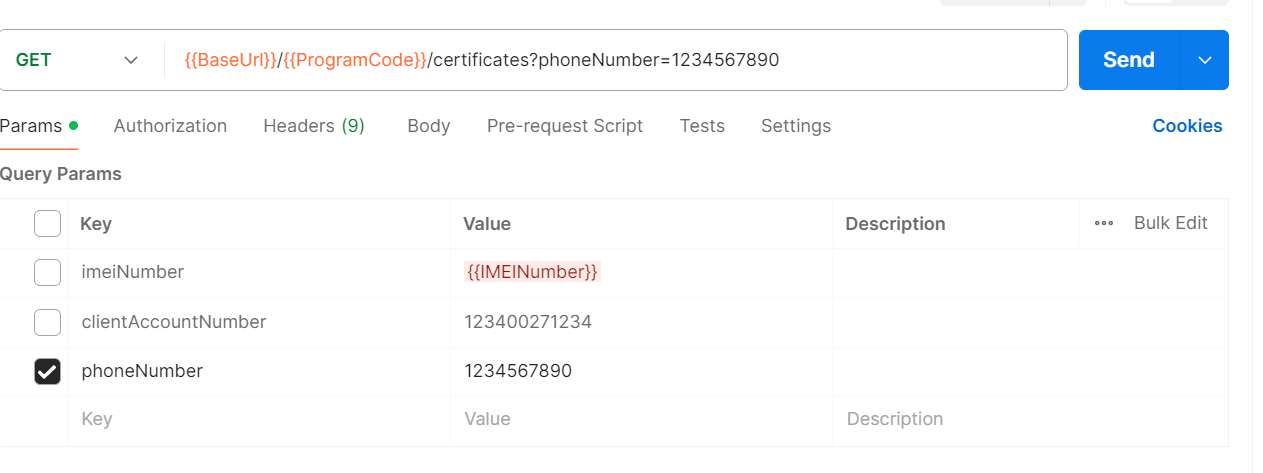
If request is valid then following Json response will be returned with Status Code: 201 and certificate will be created in ELITA





## /{{ProgramCode}}/certificates?phoneNumber=1234567890

This GET API is used to search certificate based on following query parameters



### Headers

Following Headers are required to call Search Certificate

|  |  |  |
| --- | --- | --- |
| Header Key | Value | Description |
| Ocp-Apim-Subscription-Key | APIM Subscription Key | Key used to connect with Azure APIM instance |
| Authorization | Bearer Token | Token received from Get Token API based on client id and secret |

### Response

|  |
| --- |
| [      {          "certificateNumber": "DAXP000000101",          "dealerCode": "AMEX",          "status": "Active",          "productSalesDate": "2020-08-14",          "warrantySalesDate": "2020-08-14",          "productActivationDate": "2020-08-14",          "product": {              "productCode": "MPR100000000000000H",              "equipment": {                  "clientSkuNumber": "SAMG00123423",                  "manufacturerName": "Apple",                  "model": "iPhone 15 Plus 128GB  Black",                  "description": "iPhone 15 Plus",                  "imeiNumber": "35387411265458",                  "equipmentSalesDate": "2020-08-14"              }          },          "certificateReferenceData": {              "clientReferenceNumber": "0190727851234"          },          "customers": [              {                  "firstName": "John",                  "lastName": "Doe",                  "homePhone": "1234567890",              }          ]      }] |

## Get – /{{ProgramCode}}/certificates/{{CertificateNumber}}

This GET API is used to retrieve certificate from Elita based on Certificate Number passed in url.

### Headers

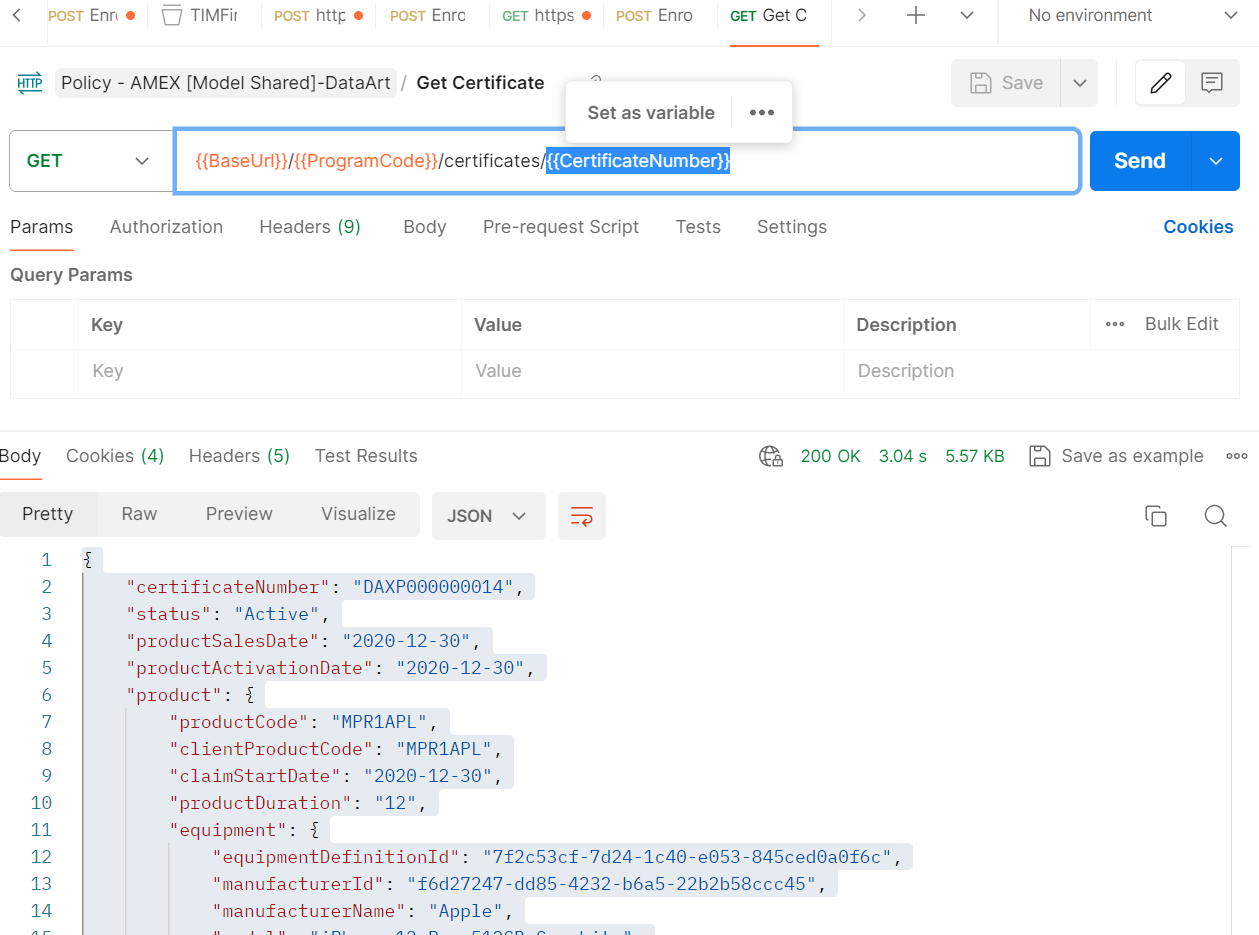
Following Headers are required to call Get Policy

|  |  |  |
| --- | --- | --- |
| Header Key | Value | Description |
| Ocp-Apim-Subscription-Key | APIM Subscription Key | Key used to connect with Azure APIM instance |
| Authorization | Bearer Token | Token received from Get Token API based on client id and secret |

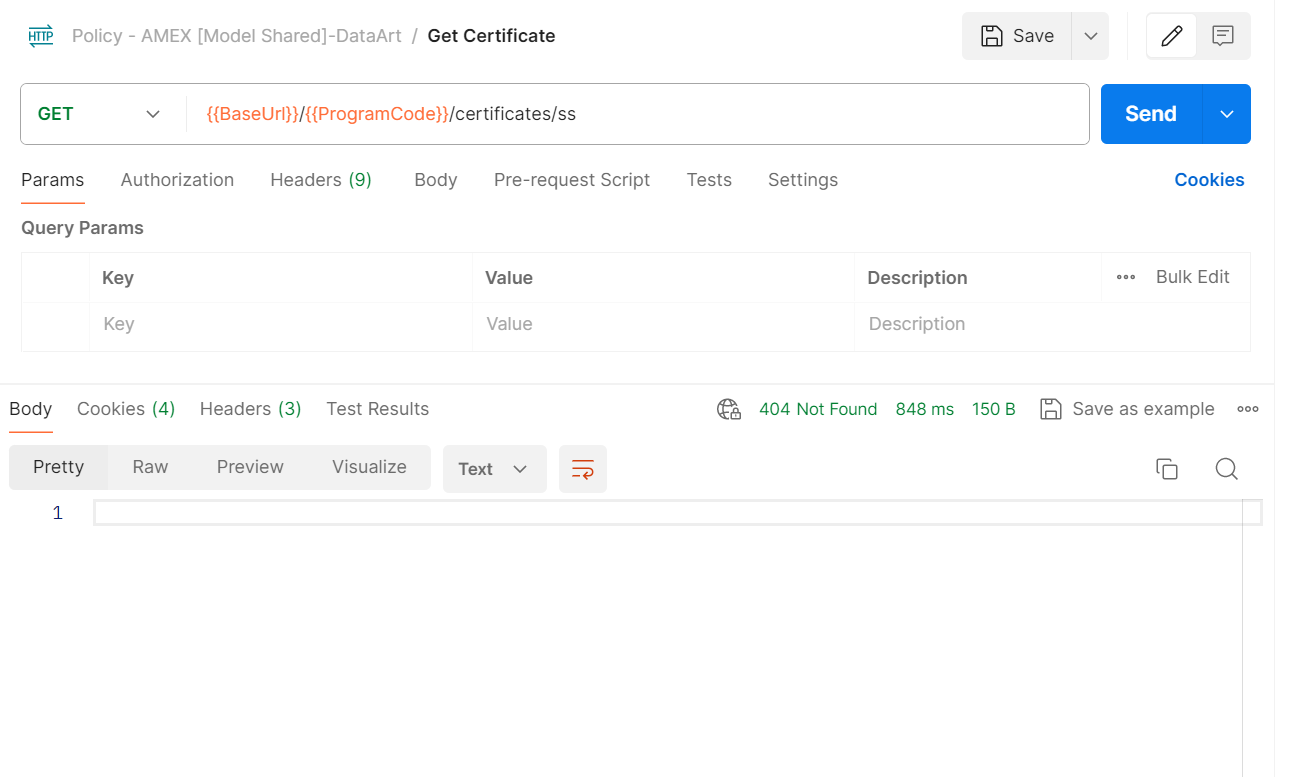
### Response

|  |
| --- |
| {      "certificateNumber": "DAXP000000014",      "status": "Active",      "productSalesDate": "2020-12-30",      "productActivationDate": "2020-12-30",      "product": {          "productCode": "MPR1APL",          "clientProductCode": "MPR1APL",          "claimStartDate": "2020-12-30",          "productDuration": "12",          "equipment": {              "equipmentDefinitionId": "7f2c53cf-7d24-1c40-e053-845ced0a0f6c",              "manufacturerId": "f6d27247-dd85-4232-b6a5-22b2b58ccc45",              "manufacturerName": "Apple",              "model": "iPhone 12 Pro 512GB Graphite",              "description": "iPhone 12 Pro 512GB Graphite",              "color": **null**,              "capacity": **null**,              "carrier": **null**,              "clientSkuNumber": "iPhone",              "equipmentTypeId": "f6d27247-dd85-4232-b6a5-22b2b58ccc45",              "equipmentTypeName": "SMRT",              "serialNumber": "352262595100004",              "imeiNumber": "352162595176273",              "equipmentSalesDate": "2020-12-30",              "equipmentSalesPrice": 629          },          "coverages": [              {                  "certificateCoverageId": "4f4562fd-fbdc-a436-e053-845ced0af116",                  "coverageTypeCode": "B",                  "beginDate": "2020-12-30",                  "endDate": "2021-12-29"              },              {                  "certificateCoverageId": "4f4562fd-fcdc-a436-e053-845ced0af116",                  "coverageTypeCode": "A",                  "beginDate": "2020-12-30",                  "endDate": "2021-12-29"              }          ]      },      "payment": {          "instrument": {              "instrumentType": "Other",              "authorizationNumber": "PRF-6199619133",              "authorizationSource": "External"          }      },      "branch": {          "name": **null**,          "code": "4992532",          "address": {              "address1": **null**,              "address2": **null**,              "address3": **null**,              "city": **null**,              "state": **null**,              "postalCode": **null**,              "country": **null**          },          "contact": {              "name": **null**,              "phone": **null**,              "fax": **null**,              "email": **null**          }      },      "certificateReferenceData": {          "clientReferenceNumber": "33122998913888"      },      "clientReferenceData": [          {              "name": "PaymentReferenceNumber",              "value": "PRF-6199619133"          }      ],      "customers": [          {              "customerId": "4f4562fd-f1dc-a436-e053-845ced0af116",              "firstName": "Anne",              "middleName": **null**,              "lastName": "de Laulanié",              "firstNamePronunciation": **null**,              "lastNamePronunciation": **null**,              "nationality": "DE",              "birthPlace": {                  "dateOfBirth": "1970-03-17",                  "cityOfBirth": "Berlin",                  "countryOfBirth": "DE"              },              "gender": **null**,              "maritalStatus": **null**,              "addresses": [                  {                      "addressee": {                          "firstName": "Anne",                          "lastName": "de Laulanié"                      },                      "address1": "45",                      "address2": **null**,                      "address3": **null**,                      "city": "Berlin",                      "state": **null**,                      "postalCode": "12103",                      "country": "DE"                  }              ],              "homePhone": "+330207090589",              "cellPhone": "+330327592467",              "emailAddress": "anne.delaulanie@assurant.com",              "identifications": []          }      ]  } |

**Status Code: 200 OK**



**Status Code: 400 Not Found**



## Get – /{{ProgramCode}}/manufacturers

This Get API returns all the manufacturer from ELITA SOAP product service

### Headers

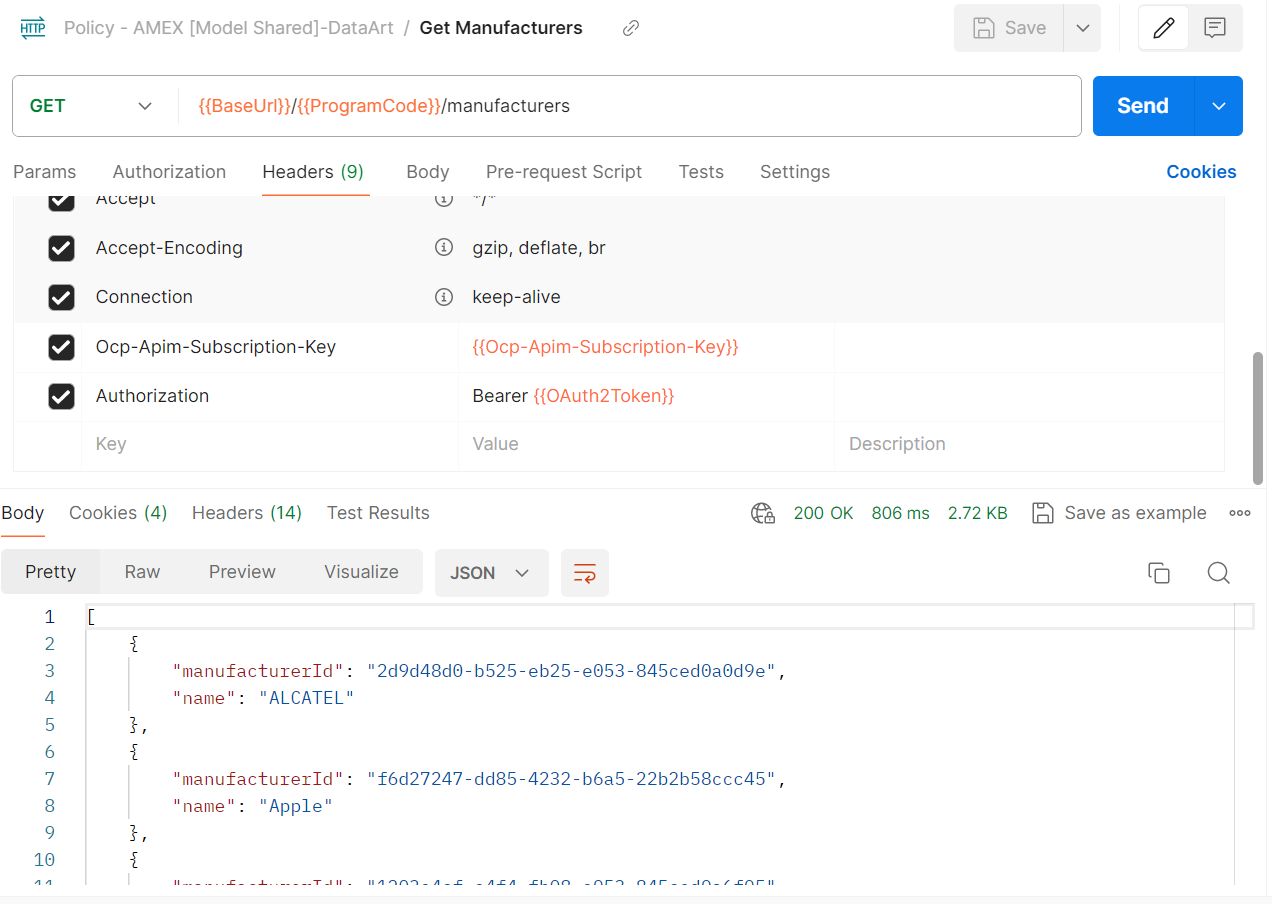
Following Headers are required to call Get manufacturer Policy

|  |  |  |
| --- | --- | --- |
| Header Key | Value | Description |
| Ocp-Apim-Subscription-Key | APIM Subscription Key | Key used to connect with Azure APIM instance |
| Authorization | Bearer Token | Token received from Get Token API based on client id and secret |

### Response

|  |
| --- |
| [      {          "manufacturerId": "2d9d48d0-b525-eb25-e053-845ced0a0d9e",          "name": "ALCATEL"      },      {          "manufacturerId": "f6d27247-dd85-4232-b6a5-22b2b58ccc45",          "name": "Apple"      },      {          "manufacturerId": "1203e4cf-e4f4-fb08-e053-845ced0a6f05",          "name": "CAT"      },      {          "manufacturerId": "5d0cbf74-ee02-4bfa-9c87-60cb64ee8190",          "name": "Doro"      },      {          "manufacturerId": "2d9d48d0-b625-eb25-e053-845ced0a0d9e",          "name": "EMPORIA"      },      {          "manufacturerId": "1203e4cf-e5f4-fb08-e053-845ced0a6f05",          "name": "Fairphone"      },      {          "manufacturerId": "1203e4cf-e6f4-fb08-e053-845ced0a6f05",          "name": "Google"      },      {          "manufacturerId": "9daec443-3c94-4b1e-9504-9d9cf648515d",          "name": "Huawei"      },      {          "manufacturerId": "1203e4cf-e7f4-fb08-e053-845ced0a6f05",          "name": "Lenovo"      },      {          "manufacturerId": "1203e4cf-e8f4-fb08-e053-845ced0a6f05",          "name": "Motorola"      },      {          "manufacturerId": "1203e4cf-e9f4-fb08-e053-845ced0a6f05",          "name": "Nokia"      },      {          "manufacturerId": "b0b232ae-03c3-44e5-bfc3-06b83cb9fd6a",          "name": "Nothing"      },      {          "manufacturerId": "00000000-0000-0000-0000-000000000000",          "name": "OTHER"      },      {          "manufacturerId": "1203e4cf-eaf4-fb08-e053-845ced0a6f05",          "name": "Oneplus"      },      {          "manufacturerId": "1203e4cf-ebf4-fb08-e053-845ced0a6f05",          "name": "Oppo"      },      {          "manufacturerId": "bbb4d2e4-d1d3-420e-b56c-0b602a40d80d",          "name": "Samsung"      },      {          "manufacturerId": "1fc59182-2b5c-444a-8590-9e55199f917e",          "name": "T-Mobile"      },      {          "manufacturerId": "1203e4cf-ecf4-fb08-e053-845ced0a6f05",          "name": "Xiaomi"      }  ] |

**Status Code: 200**



## Get –/{{ProgramCode}}/equipments?manufacturerId=a0a499d8dc754b5a98871d2e3e001602

This api will return all the equipment based on manufacturer id fetched from manufacturer api

### Headers

Following Headers are required to call equipment Policy

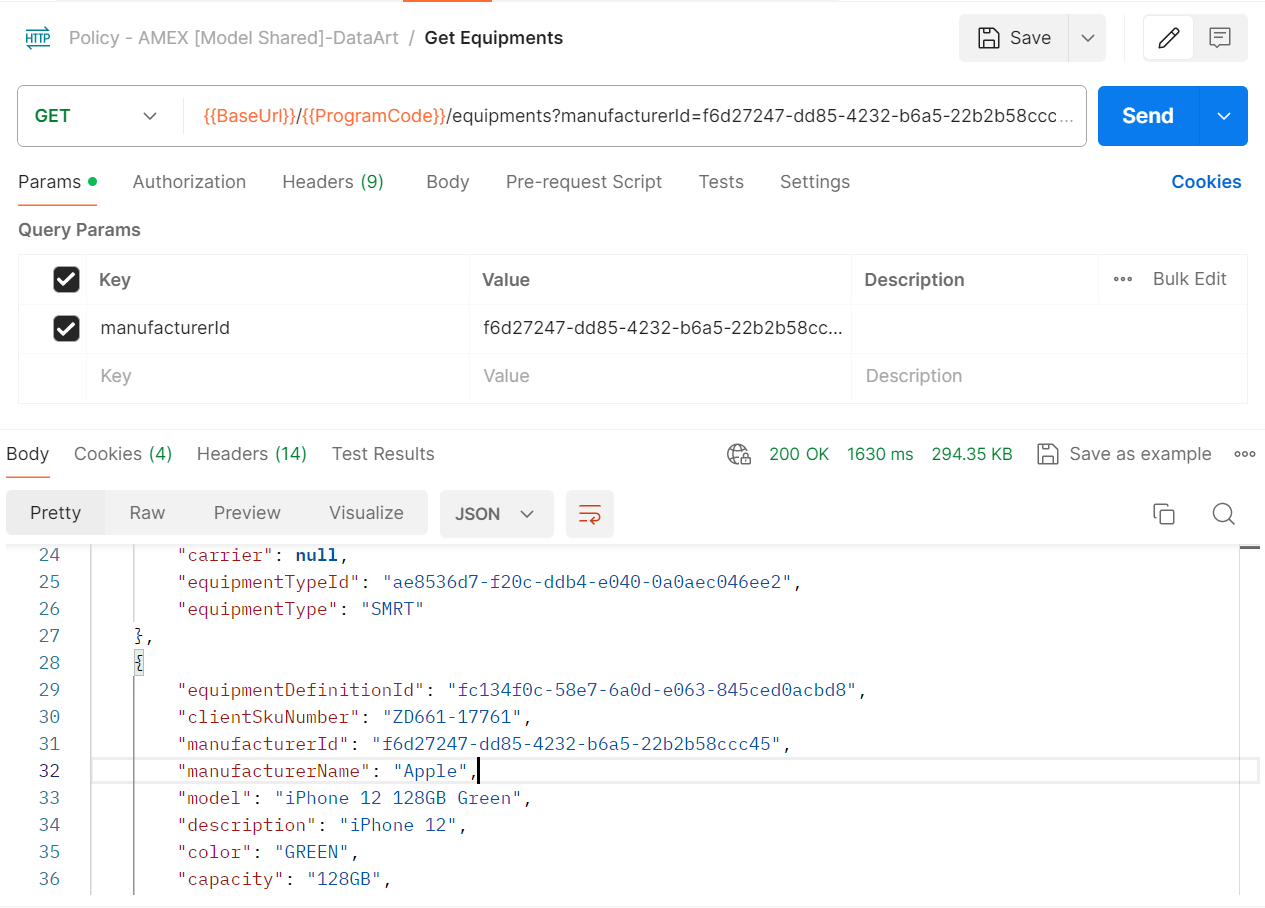
|  |  |  |
| --- | --- | --- |
| Header Key | Value | Description |
| Ocp-Apim-Subscription-Key | APIM Subscription Key | Key used to connect with Azure APIM instance |
| Authorization | Bearer Token | Token received from Get Token API based on client id and secret |

### Response

|  |
| --- |
| [      {          "equipmentDefinitionId": "fc134f0c-5ee7-6a0d-e063-845ced0acbd8",          "clientSkuNumber": "ZD661-17757",          "manufacturerId": "f6d27247-dd85-4232-b6a5-22b2b58ccc45",          "manufacturerName": "Apple",          "model": "iPhone 12 128GB Black",          "description": "iPhone 12",          "color": "BLACK",          "capacity": "128GB",          "carrier": **null**,          "equipmentTypeId": "ae8536d7-f20c-ddb4-e040-0a0aec046ee2",          "equipmentType": "SMRT"      },      {          "equipmentDefinitionId": "fc134f0c-55e7-6a0d-e063-845ced0acbd8",          "clientSkuNumber": "ZD661-17760",          "manufacturerId": "f6d27247-dd85-4232-b6a5-22b2b58ccc45",          "manufacturerName": "Apple",          "model": "iPhone 12 128GB Blue",          "description": "iPhone 12",          "color": "BLUE",          "capacity": "128GB",          "carrier": **null**,          "equipmentTypeId": "ae8536d7-f20c-ddb4-e040-0a0aec046ee2",          "equipmentType": "SMRT"      }] |

**Status Code: 200**

If request is valid then following Json response will be returned with Status Code: 200



## Get – /{{ProgramCode}}/products

This api can be used to Get products based on following query string params

**equipmentDefinitionId**: this is the retrieved from “Get Equipment” API response

**IMEINumber**: Imei number of a specific equipment. Result from “Get Equipment”

**manufacturerName**: manufacturer name of a specific equipment. Result from “Get Equipment”

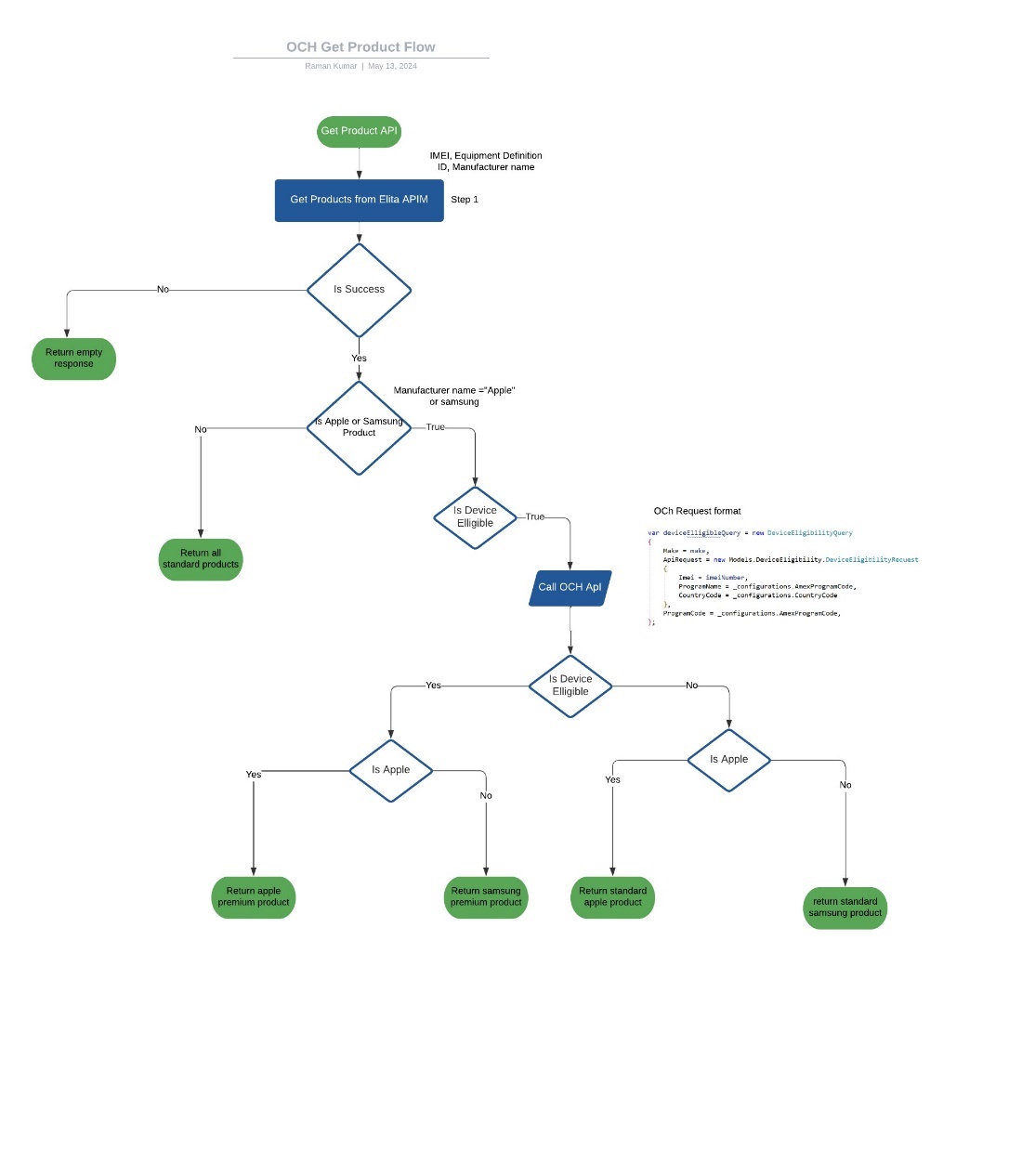
### Headers

|  |  |  |
| --- | --- | --- |
| Header Key | Value | Description |
| Ocp-Apim-Subscription-Key | APIM Subscription Key | Key used to connect with Azure APIM instance |
| Authorization | Bearer Token | Token received from Get Token API based on client id and secret |

### Response

**Status Code: 200 OK**

### Get Product Journey



# Debugging and Diagnostics

Application Insight in Azure bring us visibility about the requests that we get from the client and the impact in our components. The name of the Application Insight name can be extracted from the variable "AppInsightsName" in the pipeline library group Elita-SharedVariables-[Environment]-[Hub] in the target environment, for example: for AMEX in Model D1 the pipeline library group should be "Elita-SharedVariables-Model-D1" and the value for the variable "AppInsightsName" should be "ai-elita-modl-d1". Most of the troubleshooting can be done using these three application insight tables: requests, dependencies and exceptions.

|  |  |
| --- | --- |
| requests | Capture the incoming requests to APIM or Function App |
| dependencies | Capture informacions related to a specific operation (request) |
| exceptions | List the exceptions reported to application insight. |

# Resource Detail

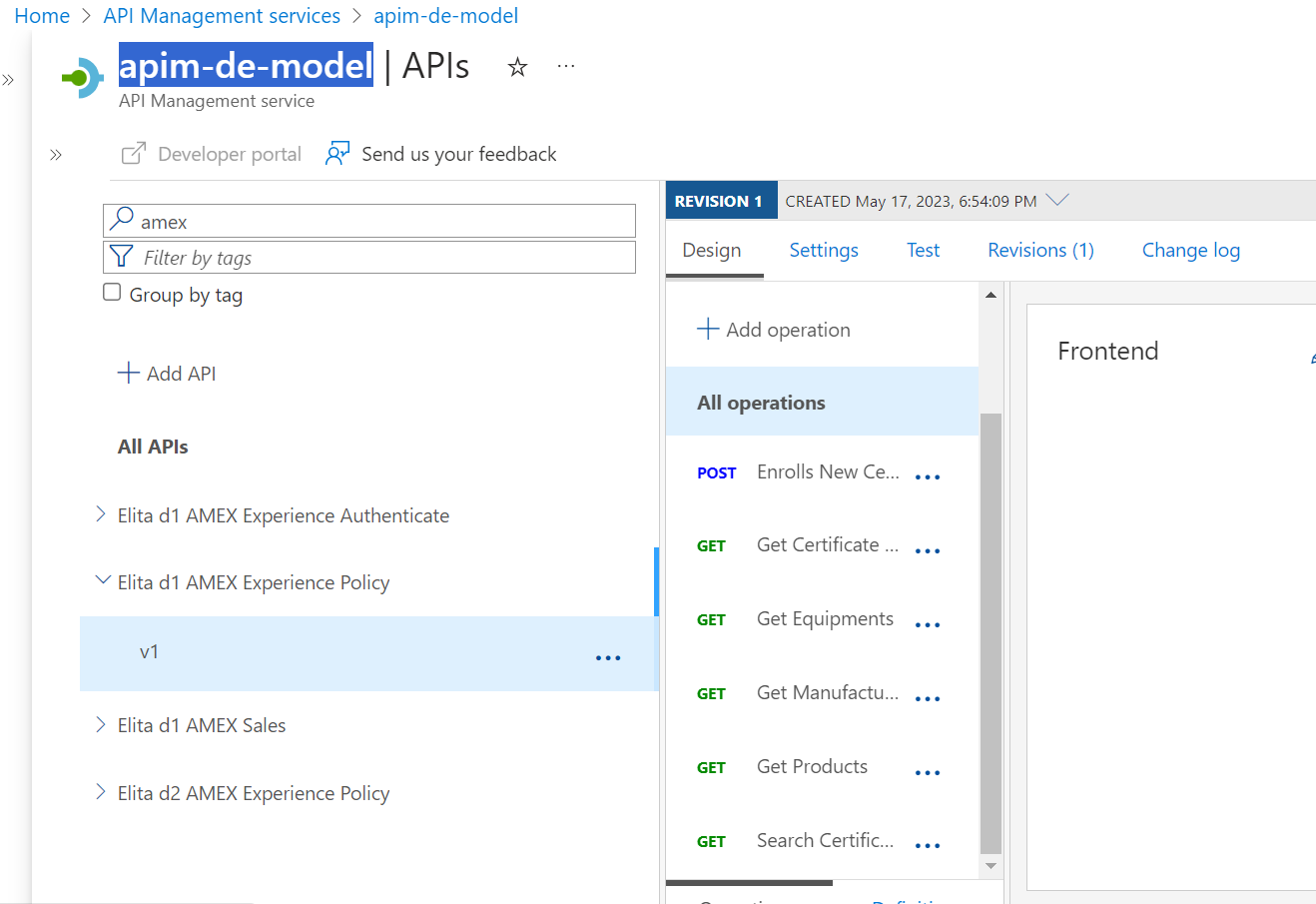
## AMEX deployment details

The AMEX project has following components.

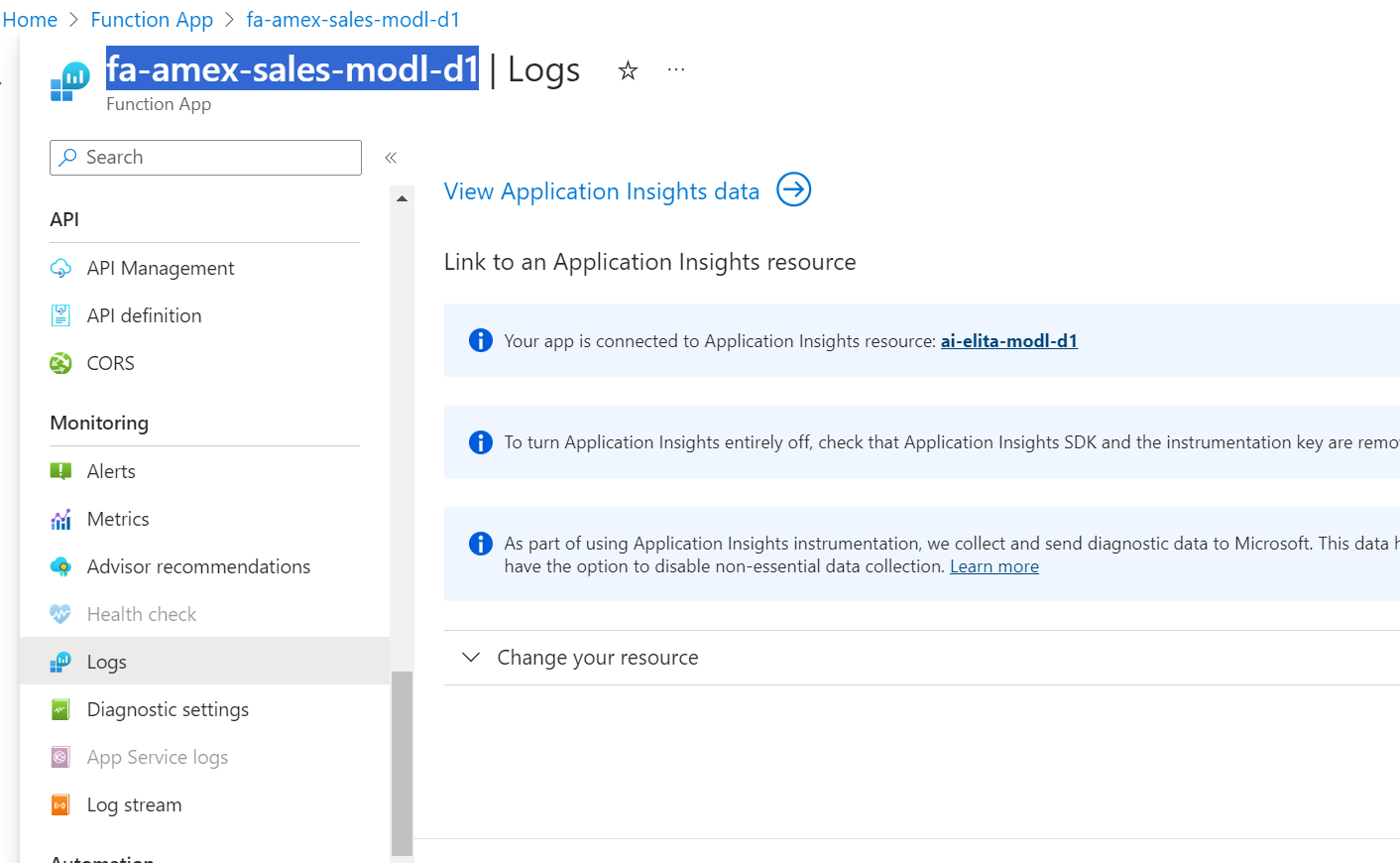
| **Variable** | **Value** | **Description** |
| --- | --- | --- |
| Function App Name | fa-amex-sales-modl-d1 | The app services plan used to deploy the function app for AMEX |
| APIM Name | apim-de-model | APIM where all apis are deployed |
| App insight name | Ai-elita-modl-d1 | Name of the app insight |
| Library Groups | AMEX-Sales-Test-D1  AMEX-Sales-Model-D1  AMEX-Sales-Producton-DE | All variables defined in this library for AMEX API. This variable group contains all OCH api details and apple and samsung premium product list |

## Reference

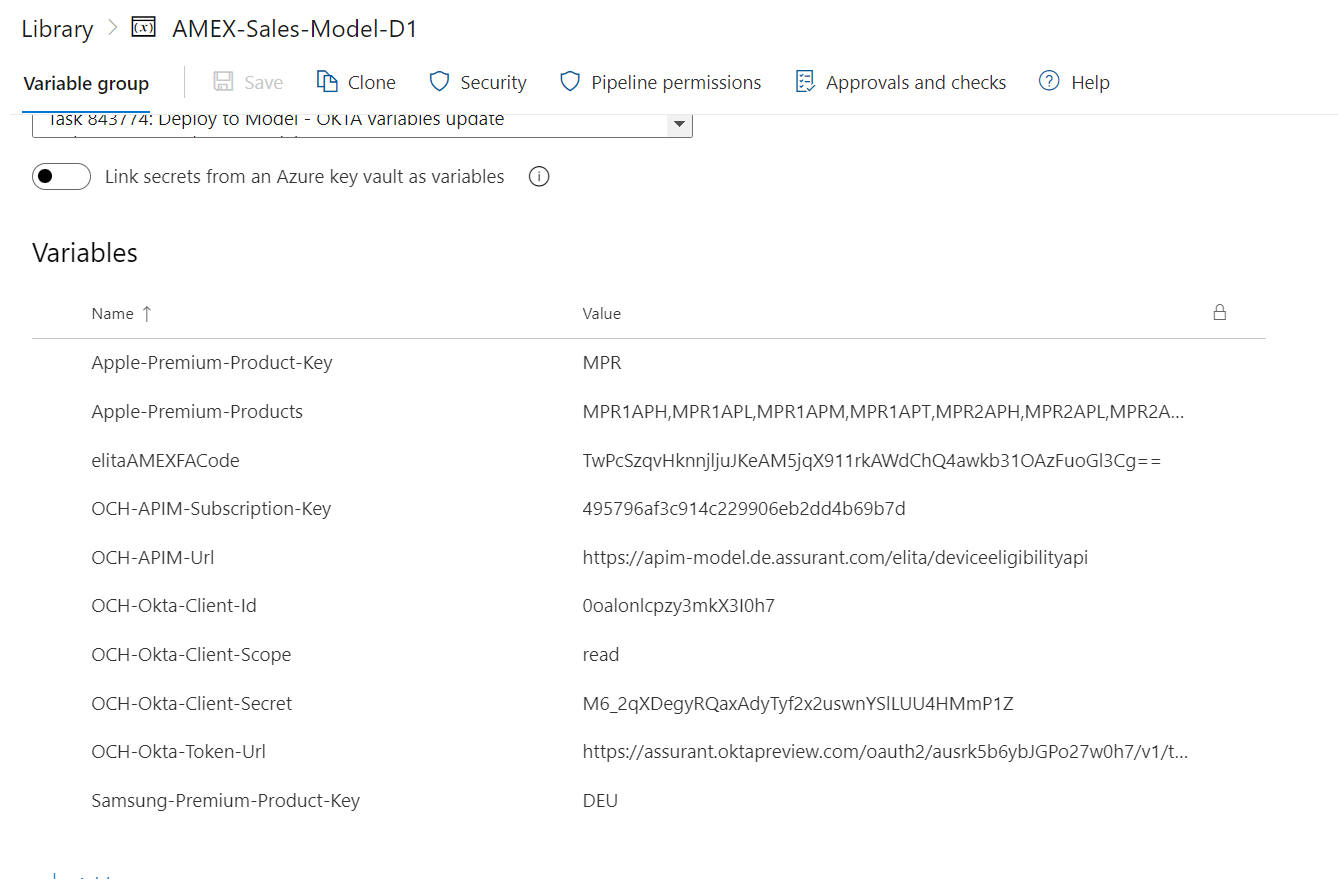
* Azure APIM



* Function app name



* Variable Group



# 