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**Demand No#114 - API**

**Facility API**

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| --- | --- | --- | --- |
| **Version & Date** | **Created/Changed by** | **Change details** | **Reviewed/Approved By** |
| **1.0: July 16, 2020** | **Vikrant Sharma** | **Initial Version** |  |
| **2.0: July 21, 2020** | **Vikrant Sharma** | **Modified** |  |
| **3.1: Aug 10, 2020** | **Vikrant Sharma** | **Included more details** |  |
|  |  |  |  |

# **API Name**

**AViD API Design URL:** <https://se-avid.stoplight.io/studio/gh1/AViD-API-Design/Facility-API-Design>

Underlying Backend API including Technical Specification and payload sample:

**Backend URLs:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ENV | API Operation path (Apigee) | Backend Service-Host | Backend Service Base Path | Backed Service Operation Path |
| DEV | GET: <https://api.dev.se.com/v1/reference-data/facility/details> | https://train-schneiderelectric.lucernex.com/ | /rest/businessObject/Facility | details |
| QA | GET: <https://api.qa.se.com/v1/reference-data/facility/details> | https://train-schneiderelectric.lucernex.com/ | /rest/businessObject/Facility | details |
| PRE-PRDO | GET: <https://api.preprod.se.com/v1/reference-data/facility/details> | https://train-schneiderelectric.lucernex.com/ | /rest/businessObject/Facility | details |
| PROD | GET: <https://api.se.com/v1/reference-data/facility/details> | https://schneiderelectric.lucernex.com/ | /rest/businessObject/Facility | details |

**Backend Security Credentials:**

Provide the process and credentials to generate token for all environment based the security model.

NOTE: Basic Authorization will be used.

**Syntax**

Key: Authorization

Value: Basic {base64‐encoded triplet of username:firm:password}

**Backend Security Credentials/Certificate:**

|  |  |
| --- | --- |
| **ENV** | **Credentials** |
| DEV | username: **schneider-seapim-integration**  firm: **schneider-electric**  password: **sCA3cKcY62** |
| QA | username: **schneider-seapim-integration**  firm: **schneider-electric**  password: **sCA3cKcY62** |
| UAT | username: **schneider-seapim-integration**  firm: **schneider-electric**  password: **sCA3cKcY62** |
| PROD | username: **schneider-seapim-integration**  firm: **schneider-electric**  password: **sCA3cKcY62** |

Backend Error Structure and Http Status code:

**HTTP 400 – Sample Structure (if Error structure is different from APIM Standard)**

Example: If a field name is not correct, the response (400 Bad Request) body is:

“WrongFieldName” is not a valid field of objectType Facility

**Consumer App:** Currently there are two applications that are planning to use this API:

1. iTOP (STAC ID: 50999)
2. TalentLink Workforce Administration (STAC ID: 41576)

**-Developer Name :** Vikrant Sharma

**-Developer Email :** vikrant2.sharma@se.com

**Resource Specific Sample Success Request Example:** This will be used for basic testing also if there is any mash up required for success as well as error.

Sample request to Lucernex (Train/Dev) backend:

<https://train-schneiderelectric.lucernex.com/rest/businessObject/Facility/details?fiql=&fields=City,CountryID,HTMLAddress,PostalCode,StreetAddress,StreetAddress1,StreetAddress2,StreetAddress3,StreetAddress4,CodeFacilityCategoryID,ClientEntityID,FacilityName,FacilityID,CodeFacilityStatusID,Inactive,SE_Temp_Staff_Consultants,SE_Number_of_Employees,SE_Total_Employees_Headcount,SE_Total_Workstations,Location.City,Location.CountryID,Location.HTMLAddress,Location.LatitudeDegrees,Location.LongitudeDegrees,Location.PostalCode,Location.StreetAddress,Location.StreetAddress1,Location.StreetAddress2,Location.StreetAddress3,Location.StreetAddress4,Location.Inactive,Location.ClientEntityID,Location.LocationName,Location.LocationID,Location.CodeLocationStatusID,Location.SE_GSCcode>

Sample response for the above request:



Fields mapping from Lucernex to SEAPIM (Request and Response)



## Project Background

Lucernex is a cloud SaaS used by Schneider Electric to manage the various physical facilities and offices in various locations. Lucernex also exposes APIs to provide the data for consumer applications. This API is being implemented on SEAPIM to provide a single source of facility data for all Schneider Electric internal applications, without having to give them access to Lucernex APIs directly. The API will be implemented in SEAPIM from where the actual call to Lucernex API will be made.

## Sequence Diagram

GET /v1/reference-data/facilities/all

Lucernex GET API

SE Apps

Lucernex

APIM

## SEAPIM Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Security** | Yes/No | Parameter | Value | |
| Apigee Token Generation | Yes | Grant Type | Client Credentials | |
| Apigee Token Verification | Yes |  | After SEAPIM token is validated, remove the Authorization header. | |
| Apigee Token Caching | Yes | Expiry | 1 hour | |
| Backend Server Apikey Caching |  |  |  | |
|  |  | |
| JSON & XML Threat Protection | No | Max Array Length | NA | |
| Max Depth |
| Logging | Yes, but limited |  |  | |
| Mask payload fields e.g. personal data | No |  | Token, Request/Response payload | |
| Back end Security | No |  |  | |
| **Traffic Management** | Yes/No | Parameter | Value | |
| Spike Arrest | Yes | Rate | Default: 30 calls/sec.  Initial volume | |
| Developer Quota (External Consumer) | No | Rate | NA | |
| Developer Quota (Internal Consumer) | Yes | Rate | NA | |
| Concurrency Limit | No | Rate | NA | |
| Get Response Caching | YES | Expiry | 1 day | |
|  |  |  |  | |
| **Mediation** | Yes/No | Mapping Rule | | |
| Forward Client App token to Backend | No | NA | | |
| Request is pass through to the backend | Yes |  | | |
| Response is pass though to the client from backend |  |  | | |
| Request mapping logic (header, verb, path, query param, payload attributes) | No | If query parameter “fields” is not being passed by the consumer then apigee should send this query parameter with all the fields comma separated as mentioned in above example. | | |
| Response mapping logic(header, path, payload attributes) | No |  | | |
| Backend server routing logic | No | NA | | |
| HTTP Status code mapping logic | No | NA – Validate with backend team | | |
| Data Validation | No | Backend will be doing all data validation | | |
| Standard Error Response mapping logic | No |  | | |
|  |  |  | | |
| **Reporting/Monitoring** | **Yes/No** | **Mapping Rule** | | |
| Custom Statistics Collection | Yes | OOTB | | |
|  |  |  | | |
| **Network connectivity** | **Yes/No** | Value | | |
| Backend regional server routing | No |  | | |
| Continuous streaming mode | No |  | | |
| Backend connection time out | Yes |  | |  |
| Backend IO time out | Yes |  | |  |
| SSL – 2-WAY / 1-WAY |  |  | | To be validated |
| Accessibility – Public | Yes |  | |  |
| RP – Configuration (To make service publicly accessible) | No | Provide all the environment, region server IP ,Port and Resource Path | |  |

|  |  |  |
| --- | --- | --- |
| **Backend Service Supported Content** | **YES/NO** | Comments |
| Backend produce/consume both - XML/JSON | NO |  |
| Backend produce/consume only - JSON | YES | We will be using the backend in JSON mode only |
| Backend produce/consume only - XML | NO |  |

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| --- | --- | --- |
| **Pay Load Size** | Maximum Limit in MB | Comments |
| Response | 10 MB | Worst case response size (max-limit) |
| Request |  | GET API – no payload in request |

|  |  |  |
| --- | --- | --- |
| **Support Contact details** | Name | Email |
| Backend support group | Vikrant Sharma | vikrant2.sharma@se.com |
| Product Owner | Shweta Desai | shweta.desai@se.com |

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| --- | --- | --- | --- |
| **Backend Service Availability** | Environment | Date | Comments |
| API:  GET Facility Details | DEV | Available | Use Lucernex Train Server |
|  |  |  |
|  |  |  |
|  |  |  |
| PROD | Available | Use Lucernex Prod Server |

## Approvals: