|  |  |  |
| --- | --- | --- |
|  | **NAME** | **POSITION** |
| **AUTHOR** | <NAME First name> | Functional owner (for <APPLICATION>) |
| <NAME First name> | Middleware Architect |
| <NAME First name> | Middleware Business Analyst |
| **VERIFICATION** | <NAME First name> | Middleware Architect |
| <NAME First name> | Middleware Business Analyst |
|  |  |
| **APPROVAL** | <NAME First name> | Middleware Architect |
| <NAME First name> | Functional owner (for <APPLICATION>) |

| **Version** | **Author** | **Subject of the revision** |
| --- | --- | --- |
| 0.1 | <NAME First name>  <NAME First name> | Draft Version |
| 1.0 | <NAME First name> | CREATION |

|  |
| --- |
| **ASSOCIATED DOCUMENTS** |
|  |

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# General Information

|  |  |
| --- | --- |
| Description | <Flow Description> (Example: Map’s to Salesforce product flow) |
| Source | <Application source> (Exemple: PIM)  <External/Internal?> (Does the application belong to an external partner of Roquette?) |
| Middleware | <Middleware project> (Exemple: TALEND) |
| Target | <Target application> (Exemple: Salesforce)  <External/Internal?> (Does the application belong to an external partner of Roquette?) |
| Data type | (Example: Product) |
| Priority | |  |  |  |  | | --- | --- | --- | --- | | X | High | Interface is required for go-live | | |  | Medium | Either not needed day one or a workaround is possible | | |  | Low | Supports “nice to have” functionality | | |  | Other | Specify: |  | |  | | | |
| Complexity | |  |  |  |  | | --- | --- | --- | --- | |  | Very High | Refer to complexity estimator | | |  | High | Refer to complexity estimator | | | X | Medium | Refer to complexity estimator | | |  | Low | Refer to complexity estimator | | |  | Very Low | Refer to complexity estimator | | |  | Other | Specify: |  | |  | | | |
|  |  |
|  |  |

# Issues

**N/A**

| **Issue #** | **Issue**  **owner** | **Date Raised** | **Issue Description** | **Issue Resolution** | **Resolved By & Date** |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |

# Interface Tracking

## Interface Classification

|  |  |
| --- | --- |
| Flow Code | TLDXXXX |
| Flow Name | (Example: SALESFORCE\_PRODUCT\_UPLOAD) |
| Direction  *(Only for half flows ?)* | |  |  |  |  | | --- | --- | --- | --- | |  | Inbound | Interface data flows inbound to Middleware | | | X | Outbound | Interface data flows outbound from Middleware | | |  | Other | Specify: |  | |  | | | |
| Interface  Type | |  |  |  |  | | --- | --- | --- | --- | |  | Batch (ETL) | One-way transfer of “accumulated” data set; Usually done by scheduled file transfer. | | | X | Near Real-Time (ESB-ETL) | One-way message-based transfer of data; Usually triggered by event. | | |  | Real-Time (ESB) | Immediate transfer of small data set; Usually triggered by event. | | |  | API | Invoked from Application. | | |  | Other | Specify: |  | |  | | | |
| Interface  Frequency | |  |  |  |  | | --- | --- | --- | --- | |  | Hourly | Details: |  | |  | Daily | Details: |  | |  | Weekly | Details: |  | |  | Monthly | Details: |  | |  | Quarterly | Details: |  | |  | Yearly | Details: |  | | X | On-Demand | How often: | On SAP EWM IDoc trigger YSNDDLV | |  | Other | Specify: |  | |  | | | |
| Type of  Records  Sent | |  |  |  |  | | --- | --- | --- | --- | |  | Full record load | Send all records every time interface is executed | | |  | Delta full records | Only send records where one or more fields have changed since previous execution | | |  | Delta records | Only send fields (and keys) that changed since previous interface execution | | | X | Other | Specify: | Trailer information from SAP EWM to GREM | |  | | | |
| Flow type | |  |  |  |  | | --- | --- | --- | --- | |  | File transfers | Send one or more files | | |  | Data consultations | Service for consulting data | | |  | Data search | Service for searching data | | |  | Creating or updating data | Service for creating or updating data | | | X | Other | Specify: |  | |  | | | |
| Availability  *(If the flow is a service)* | |  |  | | --- | --- | | Description of availability: | How available should the stream be? (Exemple : 24h/24, 7j/7, From 8:00 a.m. to 6:00 p.m.) | |  |  | |
| Volume  *(per single*  *execution)* | |  |  | | --- | --- | | Average Volume: |  | | Average number of calls per day: |  | |

# Interface Functionality Requirements

## Business Justification and Requirement

This automatic and direct integration between <Source> and <Target> (<Source REST API) will be enabled via TALEND middleware.

Network traffic to be opened between <Source> environment and <Target>.

## Process Flow / Data Flow and Business and Date Rules

* **Step 1**: Trailer information will be sent from <Source> using a custom file structure “FileName.YYYYMMDD”
* **Step 2:** <Middleware> will perform a message transformation using graphical message mapping to convert the incoming message from <Source> to <Destination> REST API compliant xml message
* **Step 3:** <Middleware> will fetch access token by calling Oauth2.0 authorization server url:
* **POST** call to <Source> authorization server using urls https://login.microsoftonline.com/1c81ebf9-6e52-4cf8-b2c4-a3b65e90edf9/oauth2/v2.0/token (<Source> development / UAT systems)
* **Request Message Header:**

“Content-Type”: "application/json"

* **Request Message Body**: in json format

{

"login" : "foo",

"password" : "bar"

}

Login id and password for DEV/UAT system is already provided by Ubicloud team. Production credentials to be requested before go-live of this interface.

* **Response Message Body:**

{

"token": "TOKEN",

"expirationDate": "2019-12-18T14:56:18Z"

}

Authorization token will be extracted from this message response (<TOKEN>) and will be used in actual web service call to Ubicloud target API

* **Step 4:**  <Middleware> will call actual REST web service:
* XML to JSON conversion at <Middleware> REST receiver adapter level just before calling <Source> REST web service
* **POST** call to <Source> web service url https://apim-nonprod.extranet.roquette.com/midl-cloud-klif/sitecoreavailability/getMarketingProductAvailability?MPCode=MP10781 (<Source> development / UAT systems)
* **Request Message Header**:

“Authorization” : "Bearer [TOKEN]"

* **Request Message Body**:

Json conversion of message mapping target xml will be sent as a payload (message body) to <Source> REST API. Please refer section 5.2 for target REST API message format.

Example diagram :

PIM Map’s Middleware Salesforce

Salesforce API

Trigger event

Message Transformation

JSON

JSON

## Assumptions

**N/A**

## Constraints

**N/A**

| Description of  Constraint | Constraint Reported By | Constraint Type  (Data or Business) | Comment |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |

## Out of Scope

**N/A**

| Description of  Out-of-Scope Item | Item  Reported By | Type  (Data or Business) | Comments |
| --- | --- | --- | --- |
|  |  |  |  |

# Interface Data Requirements

## Source Interface Data Layout

Source data is available as (Type “X” for ***all*** that apply):

|  |  |  |  |
| --- | --- | --- | --- |
|  | Database | Table Name(s): | < Provide Table Name> |
|  | File | Type: |  |
|  | Procedure | Name: | <List function, transaction, or other procedure call that can provide this data set> |
|  | API | Name | <End Point> |
| X | Other | Method: | Json |

Mapping rules are detailed in the attached document

## Sample Data

**Source Sample Data**:

To be updated when source idoc data is available

**Target Sample Data**:



## Data Retention

|  |  |  |  |
| --- | --- | --- | --- |
|  | None | Data retention is not necessary for this interface | |
|  | 7 days | | |
|  | 15 days | (default) | |
|  | 30 days | | |
| X | Other | Specify: | Governed by <Source> standard configuration. No specific requirement for data retention |
|  | | |

# M/W solution (if applicable)

## Middleware Solution

**N/A**

## Mapping Rules & Conversion criteria

| Source | Rules | Target |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

# Configuration and Dependencies

## Other Dependencies

**N/A**

| Dependency | Predecessor or Successor | Description |
| --- | --- | --- |
| FEX\_XXX |  | Scheduling, folder check, file transfert, etc… |
|  |  |  |
|  |  |  |

# Interface Controls

## Completeness & accuracy Control

N/A

| Control | Control Addressed |
| --- | --- |
|  |  |
|  |  |
|  |  |

## Duplicate Records Control

**N/A**

| Control | Control Addressed |
| --- | --- |
|  |  |
|  |  |
|  |  |

## Error Detection and Communication Control

### Data Error (Non-Execution) Notification

Notification Mechanism:

|  |  |  |  |
| --- | --- | --- | --- |
| X | Email Notification | Send To: | <Middleware> monitoring team will notify L2 Support |
|  | Other | Specify: |  |
|  | | |

Urgency:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Immediate |  | |
| x | Next Business Day |  | |
|  | Before Specific Event | Specify: |  |
|  | | |

Impact to business in the event of this error:

|  |
| --- |
|  |

### Non-Fatal Execution Error Notification

|  |  |  |  |
| --- | --- | --- | --- |
| X | Email Notification | Send To: | <Middleware> monitoring team will notify L2 Support |
|  | Write to Error Log | Elements: |  |
|  | Other | Specify: |  |
|  | | |

Urgency:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Immediate |  | |
| x | Next Business Day |  | |
|  | Before Specific Event | Specify: |  |
|  | | |

Impact to business in the event of this error:

|  |
| --- |
|  |

### Fatal Execution Error Notification

|  |  |  |  |
| --- | --- | --- | --- |
| X | Email Notification | Send To: | <Middleware> monitoring team will notify L2 Support |
|  | Write to Error Log | Elements: | Log of all the process |
|  | Other | Specify: |  |
|  | | |

Urgency:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Immediate |  | |
| X | Next Business Day |  | |
|  | Before Specific Event | Specify: |  |
|  | | |

Impact to business in the event of this error:

|  |
| --- |
|  |

### Fatal Execution Error Progress Handling:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Commit Progress | Records that were successfully processed before the error are committed to target before the append | |
|  | Back Out Progress | All records from this interface execution are removed from target system even if they were successful | |
| x | Other | Specify: | IDocs can be retriggered from source SAP EWM for error cases |
|  | | |

## Standard File Format Control

**N/A**

| Control | Control Addressed |
| --- | --- |
|  |  |
|  |  |
|  |  |

# Recovery and Restart

**N/A**

# Testing Scenarios

**General description:**

|  |  |
| --- | --- |
| Normal Functionality - test cases that ensure the enhancement functions as it should. | |
| ID | Description |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| Exception - special logic or exceptions (e.g. report should exclude certain specific condition) | |
| 5 |  |
| *6* |  |
| Error Handling - functionality in case of errors (e.g. Error Message or Error Log ) | |
| 7 |  |
| 8 |  |

**Prerequisites:**

* *Master data creation (To explain which master data to create and explanation how to create to reproduce test data – with screen shot)*

**Step Details & Expected result:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Normal Functionality - test cases that ensure the enhancement functions as it should. | | | | | |
| ID | Step N° | | Description | Test data | Expected result |
| 1 | 1 | |  |  |  |
| 2 | |  |  |  |
| 3 | |  |  |  |
| 4 | |  |  |  |
| 2 |  | |  |  |  |
|  | |  |  |  |
|  | |  |  |  |
|  | |  |  |  |
| 3 |  | |  |  |  |
|  | |  |  |  |
|  | |  |  |  |
|  | |  |  |  |
| 4 |  | |  |  |  |
|  | |  |  |  |
|  | |  |  |  |
|  | |  |  |  |
| Exception - special logic or exceptions (e.g. report shold exclude certain specific condition) | | | | | |
| 5 |  |  | |  |  |
| *6* |  |  | |  |  |
| Error Handling - functionality in case of errors (e.g. Error Message or Error Log ) | | | | | |
| 7 |  |  | |  |  |
| *8* |  |  | |  |  |