**API Network – Internal Project**

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| **Salesforce to SAP Customer – Boomi Integration**  **Technical Specifications** |

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| **Encl.:** |

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Objective

This document aims to describe the technical specifications of enabling integration of Account data from Salesforce to SAP Customer via Boomi.

Definitions and Abbreviations

|  |  |
| --- | --- |
| **Definition/Abbreviation** | **Description** |
| API | Application Programming Interface |
| CSRF | Cross-Site Request Forgery |

Retrieving Account Data from Salesforce

## Connector (Start Shape)

|  |  |
| --- | --- |
| **Configuration Field** | **Value** |
| Connector | Salesforce |
| Action | Get |
| Connection | My Salesforce Org |
| Operation | Account Query (Basics Filter) |

Note: Parameters are needed to complete the filters in the Query Operation that follows.

## Operation

|  |  |
| --- | --- |
| **Configuration Field** | **Value** |
| Name | Account Query (Basics Filter) |
| Connector Action | Get |
| Action | query |
| Response Profile | SF\_Account\_Query\_Response |
| Operation | Account Query (Basics Filter) |
| Query Limit | -1 (all results) |

Filters:

|  |  |
| --- | --- |
| **Filter Name** | **Description** |
| >=LastModDate | LastModifiedDate is greater than or equal to Relative Date |
| Logical : AND | |
| =IntegStatus | IntegStatus\_\_c is equal to… |

Mapping Account Salesforce Data to SAP Customer Profile

|  |  |
| --- | --- |
| **Component** | **Name** |
| Map | SF Customer Response to SAP ZCUSTOMER |
| Source XML Profile | SF\_Account\_QUERY\_Response |
| Target XML Profile | Customers |

Sample target xml file: 

From the attached XML example, ensure that all fields and attributes are populated.

*Possible Enhancement: Constant attributes can be dynamically set using Process Properties.*

1. Sending Data to SAP via HTTP Client Connection

## Fetch X-CSRF token from SAP OData – Connector Shape

|  |  |
| --- | --- |
| **Configuration Field** | **Value** |
| Connector | HTTP Client |
| Action | Get |
| Connection | SAP EH7: OData |
| Operation | SAP: Fetch CSRF Token |

## Connector Operation

|  |  |
| --- | --- |
| **Configuration Field** | **Value** |
| Name | SAP: Fetch CSRF Token |
| Connector Action | Get |
| Request Profile Type | NONE |
| Response Profile Type | NONE |
| HTTP Method | GET |
| Request Headers | Name: X-CSRF-Token  Value: Fetch |
| Resource Path | sap/opu/odata/sap/ZTEST\_CUSTOMER\_SRV/Customers |
| Response Headers Mapping | Response Header Field Name: x-csrf-Token  Dynamic Document Property Name: DDP\_CSRFToken |

Note: The returned X-CSRF-Token stored in DDP\_CSRFToken is then passed to Process Property “DPP\_CSRFToken” which will then be used in the next Connector Shape that will send the data to SAP.

## Sending Mapped Data to SAP with the CSRF Token

Set Dynamic Document Property “X-CSRF-Token” with the value of DPP\_CSRFToken that was set in the previous step.

This DDP will then be used as the value of the replacement variable in the Connector Operation as part of the Request Header.

## Connector Shape

|  |  |
| --- | --- |
| **Configuration Field** | **Value** |
| Connector | HTTP Client |
| Action | Send |
| Connection | SAP EH7: OData |
| Operation | SAP: Send Customer |

## Operation

|  |  |
| --- | --- |
| **Configuration Field** | **Value** |
| Name | SAP: Fetch CSRF Token |
| Connector Action | Send |
| Request Profile Type | XML |
| Request Profile | Customers |
| Response Profile Type | NONE |
| Content Type | application/xml |
| HTTP Method | POST |
| Request Headers | Name: X-CSRF-Token  Value: X-CSRF-Token  Replacement Variable: Enabled |
| Resource Path | sap/opu/odata/sap/ZTEST\_CUSTOMER\_SRV/Customers |

1. Update Record in Salesforce

Upon successful integration with SAP, the corresponding Account Record in Salesforce should be updated, specifically the IntegStatus\_\_c and IntegDate\_\_c fields.

## Connector Shape

|  |  |
| --- | --- |
| **Configuration Field** | **Value** |
| Connector | Salesforce |
| Action | Send |
| Connection | My Salesforce Org |
| Operation | Account Update Operation |

## Error-Handling

**Try-Catch**.

Use Try-Catch for handling errors in connectivity to Salesforce or SAP.

**Exceptions**.

Use Exceptions for classifying Connection Errors and Logical Data Errors.

# Change Log

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| --- | --- | --- | --- |
| Vers. | Date | Reason for revision | Revised without changes  Date/Sign. |
| 1 | 2019-10-30 | New Document. | AGPB |