## SAP Garage Series Enable business partner address cleansing in SAP S/4HANA

Hozumi Nakano, Product Management SAP Data Quality Management October 04, 2023



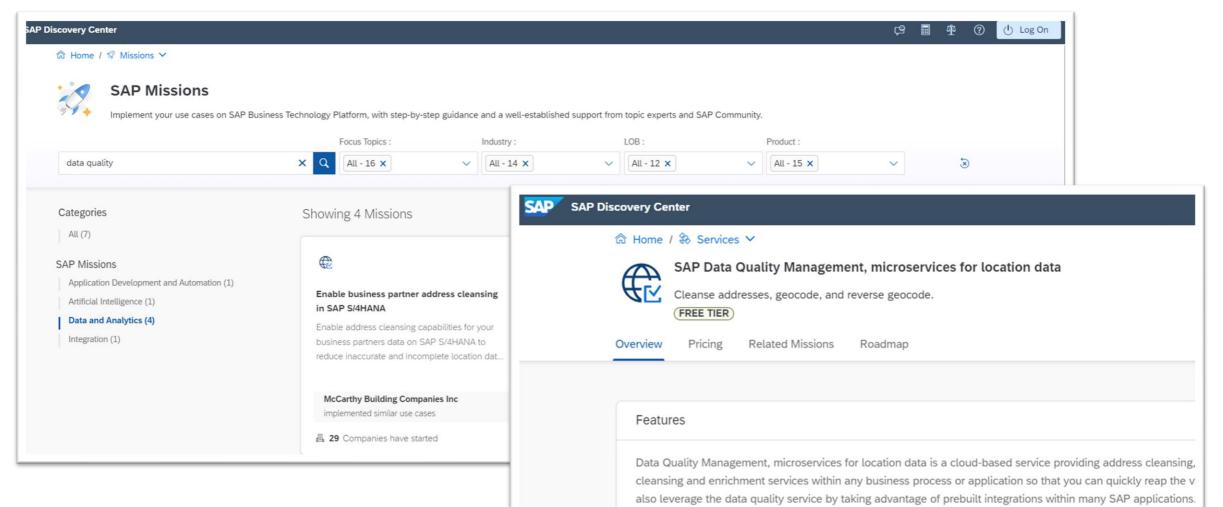
Public



## **SAP Data Quality Management**

#### **Mission: Enable business partner address cleansing in SAP S/4HANA**

Showcasing Address Validation Add-on for Business Partners



## **Enable Business partner Address Cleansing in SAP S/4HANA**

What You Will Learn

#### Data Quality Services on SAP Business Technology Platform

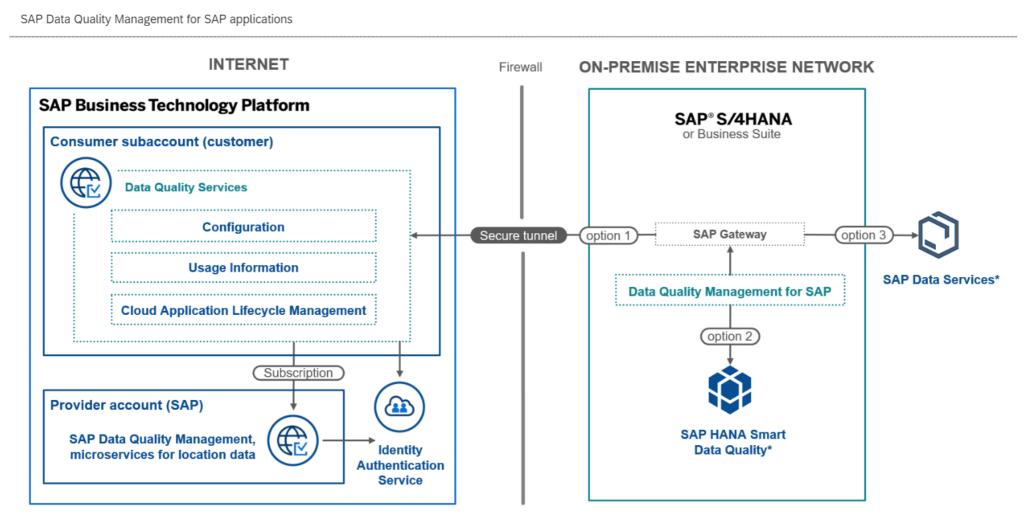
- Service capabilities
- Consumption based pricing
- API samples
- Service provisioning

#### SAP S/4HANA DQM Add-on

- Supported versions
- Configuring RFC server
- Address Check in Business Partner creation

SAP Discovery Center			çe 🖩 🕸 🕐 ໜ
	5		
Enable business partner addre	ss cleansing in SAP S/4HANA		Start Mission More ~
Dverview Project Board Resources	Support Customer Stories Related	Missions	
DISCOVER	SET UP	COMPLETE	
(BASICS) Learn the basics of SAP BTP	(PREREQUISITES) Check if your SAP system has SAP Data Quality Management Add-on	<b>OPTIONAL</b> Tell us what do you think	
(BASICS) Learn how Data Quality Services on SAP BTP can help you	Configure your global account and subaccount in SAP BTP	(BASICS) Complete the mission	
(BASICS) Check which regions the Data Quality Services is available in	(IMPORTANT) Configure the Data Quality Management solution on SAP S/4HANA	Get involved on SAP Community	
BASICS			
Learn about the consumption based billing with Data Quality Services	(BASICS) Test the address check for your business partners		

## Enable business partner address cleansing in SAP S/4HANA Solution Diagram



## Enable business partner address cleansing in SAP S/4HANA Business Challenges

What challenges do you see with poor address data?

#### **Poor Business Execution**

- Packages are not delivered or delayed
- Ineffective marketing campaign based on inaccurate location data
- Compliance breach with employees without valid address information

#### Low Customer Satisfaction

- Delayed or undelivered packages
- Irrelevant information for the location received

#### **Costly Data Quality Solution**

- Proactive data quality solution requires complex integration effort
- Infrastructure cost and reference data management
- Lack of experts with address knowledge of multiple countries

Where do you want to go from there?

#### **Accurate Location Analytics**

- Reduce erroneous package delivery and shipping cost
- Sales representatives can identify relevant accounts for marketing campaigns
- Ensure government compliance with correct employee
   address information

#### **Increased Customer Satisfaction**

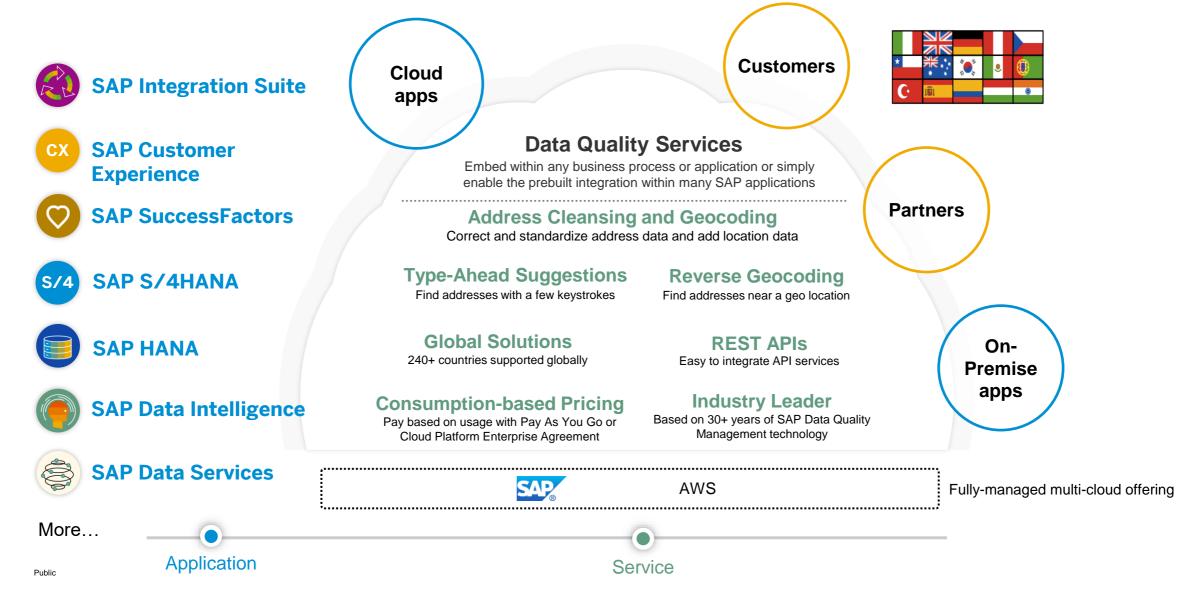
- Timely delivery of packages
- Communication and promotion relevant to the location

#### Zero or Low Cost of Ownership

- Out-of-box integration in Line of Business applications
- No reference data and infrastructure management
- Consumption based pricing
- Trusted industry leading solution with global country coverage

## SAP Data Quality Management, microservices for location data

Cloud-based Address Cleansing and Geolocation Services on SAP BTP



## **Global coverage for SAP Data Quality Management microservices**

As of August 2023, 49 countries and territories at the primary address level support

	Address Clea	Geocode	
Latir	Latin Scripts Local Scripts		Geocode and Reverse Geocode
<ul> <li>Argentina</li> <li>Australia <sup>M</sup></li> <li>Austria</li> <li>Belgium</li> <li>Brazil</li> <li>Canada <sup>M</sup></li> <li>Chile</li> <li>Columbia</li> <li>Czechia</li> <li>Denmark</li> <li>Ecuador</li> <li>Estonia</li> <li>Finland</li> <li>France</li> <li>Germany</li> <li>Hungary</li> <li>India</li> <li>Ireland</li> <li>Italy</li> <li>Latvia</li> </ul>	<ul> <li>Liechtenstein</li> <li>Lithuania</li> <li>Luxembourg</li> <li>Mexico</li> <li>Monaco</li> <li>Monaco</li> <li>Netherlands<sup>M</sup></li> <li>New Zealand</li> <li>Norway</li> <li>Peru</li> <li>Poland</li> <li>Portugal</li> <li>Singapore</li> <li>Slovakia</li> <li>Spain</li> <li>Sweden</li> <li>Switzerland</li> <li>Turkey</li> <li>United Kingdom</li> <li>United States<sup>M</sup></li> <li>Uruguay</li> </ul>	<ul> <li>Bulgaria</li> <li>China (including Macao and Taiwan)<sup>™</sup></li> <li>Greece<sup>™</sup></li> <li>Hong Kong</li> <li>Japan</li> <li>Russian Federation<sup>™</sup></li> <li>South Korea<sup>™</sup></li> </ul> All World <sup>™</sup> 240+ Countries support validation to the city, region, postal code level under what we call "All World" processing	Geocoding for 240+ countries following a cascading assignment sequence. (Parcel, Interpolated, Centroid) Primary Address Geocoding for 118+ countries.

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## SAP Data Quality Management, microservices for location data Pricing Options

- Cloud Platform Enterprise Agreement (CPEA) / Pay As You Go for SAP BTP
- <u>SAP Store</u> or contact your account executive
- Consumption based pricing pay per call
- Free Tier up to 1000 transactions within 30 days (option to upgrade to Standard plan thereafter)

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	念 Home / 衾 Services ✓										
	SAP Data Quality Management, microservices for location data (FREE TIER)										
	Ove	erview Pricing Related Missions Roadmap									
		Metric	Ranges	Fixed Fee	Unit Price per Month	Description					
		API Calls	Up to 425	~	EUR 26.00 A single call made between a customer or a back-end data source and a cloud s send any user action or system action.						
			From 425		EUR 0.06						

## SAP Data Quality Management, microservices for location data GitHub Postman API Sample

□ SAP-samples / clo	ud-dqm-sample-paylo	ads Public	Q Nc	
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LICENSES     images	POST Germany Single Field POST Germany GeoLocation POST Germany Business Suite POST China Fielded POST China Free-form	9 ····* country": "US", 10 ····* po_box": "5500", Body Cookies Headers (8) Test Results Pretty Raw Preview Visualize JSON ~ =>	A Status: 200 OK Time: 1680 ms Size: 1.28 KB 🖺 Save as Example 🚥	
	POST China Single Field POST China GeoLocation POST China Business Suite	<pre>1 { 2 "std_addr_locality_full": "Chicago", 3 "std_addr_po_box_number": "5500", 4 "addr_po_box_asmt_level": "PR", 5 "addr_info_code_msg": "", </pre>		
<ul> <li>README.md</li> <li>SamplePostmanReque</li> </ul>	<ul> <li>Batch</li> <li>Miscellaneous</li> <li>Reference Configurations</li> <li>Suggestions</li> </ul>	<pre>6 "addr_info_code": "", 7 "std_addr_locality2_full": "", 8 "std_addr_floor_number": "", 9 "std_addr_locality3_4_full": "", 10 "std_addr_postcode_full": "60611-1882", 11 "std_addr_po_box_postcode_full": "60680-5500",</pre>		
Public	<ul><li>&gt; samplesAdminTasks</li><li>&gt; samplesReverseGeo</li></ul>	12       "std_addr_prim_number_full": "875",         13       "std_addr_po_box_region_full": "IL",         14       "addr_remainder_extra_pmb_full": "",		

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## SAP Data Quality Management, microservices for location data SAP Business Accelerator Hub

SAP Business Accelerator Hull / SAy Management, microser SAP Data Quality Embed data quality services to	vices for location data y Management,	microse		Partner with Us	Ç© 📻	C Login Show API Key
	C	Overview	API Reference SAF	P Cloud SDK Try C	out	
						Try Out
Location Data	POST /address Parse, star		t, validate, and enhance addre	ss data.		
	PUSI	Cleanse/batch	<b>1</b> t, validate, and enhance addres	ss data in multiple records.		
	POST /reversed Provide lat		ude coordinates and receive o	ne or more nearby textual ad	dresses.	FEEDBACK
	GET /refData/ Return the		supported by the service.			Ĩ
	GET /refData/ Return the		upported by the service.			Chat (Beta)

## Data Quality Services Service Provisioning

Create a Data Quality Services instance on SAP BTP

≡	SAP BTP Cockpit	
몲	Overview	
<b>Ļ</b> ĝ	Services 🗸	Subaccount: PM CF - Service Marketplace
	Service Marketplace	Filtered: 5 of 23
	Instances and Subscriptions	data       X       Q       All Types       V       All Environments       V       All Solutions       V       All Statuses       V
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5	HTML5 Applications	Data and Analytics
ষ	Connectivity >	
•	Security >	$\mathcal{A}$
5.	Entitlements	Data Quality Services     Data Quality Services UI       Embed data quality services to validate addresses     UI to manage configurations and view usage for
<b>3</b> 4	Usage Analytics	and enrich with geocodes. Data Quality Services.

## Data Quality Services UI Configurations

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	India 🔅 Russia ۞	HOUSE_N	NUM1 $\xrightarrow{\text{maps to}}$	House Number	Щ, ©	Street Number (Expanded)	populates	HOUSE_NUM1	Щ, ©
	tabla t <sub>er</sub> r	HOUSE_N	$\frac{\text{maps to}}{\longrightarrow}$	House Number	Щ, Ф	Secondary Address	populates	HOUSE_NUM2	<b></b>
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	Postal Format Most common for each	HOME CI		Locality	<b>1</b> , ©	City (Expanded)	populates	CITY1	IJ, (?)
	country/region		···· →	Loodiny		Cubaity (Europeded)	populates	UOME CITY	≡≡ <i>ɛ</i> ́?}
<b>E</b> 9			≙⁼		æ				
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Create and Edit Configurations	View Transaction To	tals	Manag	ge Integration		Assist with Service Authentication			

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SAP

Home

Configurations

Usage Information

**Cloud ALM Integration** 

Service Authentication

## Data Quality Services UI Usage Information

Transaction usage tracked per subaccount

SAP	SAP Data Q	uality Management, microservices f	or location	n data		0	?	8	
Home	<	Usage	Informatio	on					
Configurations							Hide	Filter Ba	ır
Usage Information	Country/Region:	Transaction Date:		Operation:					
⊆ Cloud ALM Integration	,	Aug 20, 2023 - Sep 19, 2023	<b>•••</b>	2 Items	~	]			
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	1	KR	Address (	Cleanse			A	ug 21, 2	:02
	1	JP	Address (	Geocode			A	ug 21, 2	202
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	1	QA	Address (	Cleanse			S	ep 13, 2	202

## Data Quality Services UI Cloud Application Lifecycle Management (ALM)

Real User Monitoring to track performance of API calls

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<u>^</u>	Home			<			SAP Cloud ALM	SAP Business Transformation Cen	ter SAP Cloud ALM for I	mplementation SAP Clos	d ALM for Operations SAP
	Configurations	s		Credentials			SAP Cloud ALM	for Operations			
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## SAP Data Quality Management, version for SAP solutions Supported Versions

#### SAP S/4HANA (Version 1809 or later)

DQM Add-On is already included

#### ECC and older S/4HANA (Version 1709 or earlier)

- Install DQM Installation Package
- BASIS component version 700 or higher is required to work with SAP Data Quality Management, microservices for location data
- BASIS component version 756 or higher is required to enable authentication using OAuth 2.0 Client

## SAP Data Quality Management, version for SAP solutions Configuring RFC Destination to Data Quality Services

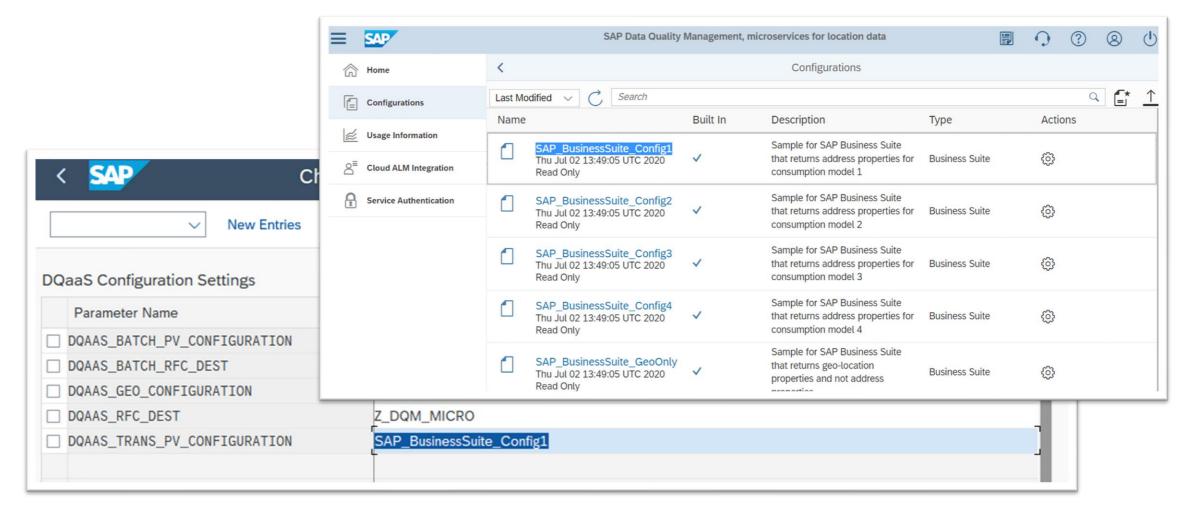
SM59 - HTTP Connections to External Server

< SAP RFC Destination	Z_DQM_MICRO			
✓ Connection Test <sup>6</sup> ⁄ <sub>2</sub> More ✓				
RFC Destination: Z_DQM_MICRO				¢
Description	品 Overview	⊕ ∨ / Q ∨		
Description 1: test Description 2: Description 3:	Services V Service Marketplace	Subaccount: Create Instances and Subscriptions	dqmm	View Credentials
Description 3.	Instances and Subscriptions	All: 4	Instance ID: Service: Data Quality Services (dq-services)	Runtime Environment: Cloud Foundry Scope: space1
Administration Technical Settings Logon & Security Special Options	Cloud Foundry	Search Q All Serv V	Plan: standard	Status: Created
Target System Settings	HTML5 Applications	All Serv V	Bound Applications (0) Service Keys (1) Labels (0)	
Host: ana.ond	ℵ Connectivity >	Subscriptions (1)		Create
Path Prefix: //dq/addressCleanse	🕏 Security 🗸 🗸	Applications to which your subaccount is currently	Name	Status
	Users	subscribed	No bound applications.	
HTTP Proxy Options	Role Collections	Application Status		
Global Configuration	Roles	Data Quality Subscribed > >	Service Keys (1)	
Proxy Host:	Trust Configuration			Create
Proxy Service:	Settings	Instances (2)	Name	Status
Proxy User: Proxy PW Status: is initial	Entitlements	Service instances created in: Cloud Foundry   Kyma/Kubernetes   Other environments	key1	Created
	💥 Usage Analytics	Instance 🚔 Status	Labels (0)	
		dqmm Created >		

## SAP Data Quality Management, version for SAP solutions

### **Data Quality Services Configurations**

SM30 - /FLDQ/DQAAS\_CFG



### SAP Data Quality Management, version for SAP solutions

### **Business Partner Address Check**

	≡	Address Valida	tion - Review Changes	×
< SAP Create Person				
✓ I Person Organization Organization Group T I I Relationships				
Business Partner:	Please review Address val	lidation results.		
Create in BP role: * Business Partner (Gen.)	Address Component	Original Address	Validated Address	
	House Number		3999	
	House no. suppl			
Address Address Overview Identification Control Payment Transactions Status Whe	Street	3999 West Chester Pike	W Chester Pike	
Address Address Overview Identification Control Payment transactions Status whe	City	Newtown Square	Newtown Square	
Name	Region	PA	PA	
	Postal Code		19073-2305	
Title:	Country	US	US	
First Name:				
Last Name: * Smith				
Search Terms				
Search Term 1/2:				
Standard Address				
Print Preview Internat. Versions				
Street Address				
Street/House number: 3999 West Chester Pike				
Postal Code/City: Newtown Square				
Country/Region: US USA Region: PA Q Pennsylvania			✓ Accept Validated Address 1×	Use Original Address 🛛 🗙 Cancel

SAP Data Quality Management, version for SAP solutions Enable business partner address cleansing in SAP S/4HANA

## Demo



## **SAP S/4HANA and Cloud LoB Applications**

## **Address Validation Solutions**

#### **Line of Business Applications**

- SAP Master Data Governance for Business
   Partners on S/4HANA
- SAP MDG Central Governance on S/4HANA
- SAP MDG Consolidation on S/4HANA and S/4HANA Cloud
- MDG Cloud Edition
- SAP Success Factors Employee Central
- Sales and Service Cloud

**Data Integration** 

- SAP HANA Cloud Smart Data Quality
- <u>SAP Data Intelligence Cloud</u>

#### **Sample Scenario**

- <u>Collaborative Address Validation Using SAP</u>
   <u>Enterprise Eventing Services</u>
- Validate Customer Addresses Using a Microservice

# SAP Data Quality Management, microservices for location data References

#### **Product Information**

- Product Information
- <u>Technical Documentation</u>
- Product Overview Video

#### **SAP Discovery Center**

- Enable business partner address cleansing in SAP
   S/4HANA
- SAP Data Quality Management, microservices for location
   <u>data</u>

#### **Customer Influence Portal**

SAP S/4HANA Cloud for Master Data Maintenance

#### **SAP Community Blogs**

- <u>Getting Started with SAP Data Quality Management,</u> microservices for location data: BTP Free Tier
- Enabling SAP Data Quality Management, microservices for location data on S/4HANA

#### **SAP Guided Answers**

 How to enable SAP Data Quality Management, microservices for location data for Business Partner on S/4HANA

#### **API References**

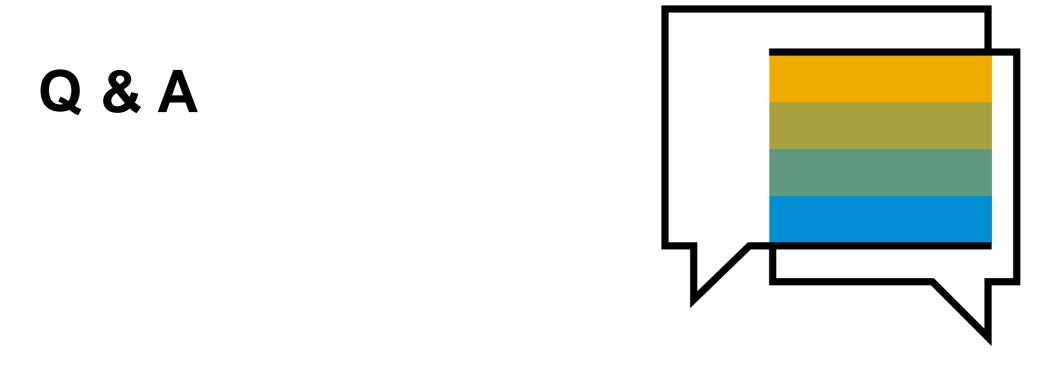
- SAP Business Accelerator Hub
- Postman Samples for SAP Data Quality Management, microservices for location data

# **Call for Customer Success Stories!!**

Contact information:

Hozumi Nakano hozumi.nakano@sap.com





## Ask a Question on <u>SAP Community</u>!