Integrating SAP Business ByDesign with SAP Subscription Billing Using the SAP Cloud Integration – Configuration Guide

Follow this guide to integrate SAP Business ByDesign with SAP Subscription Billing using the SAP Cloud Integration





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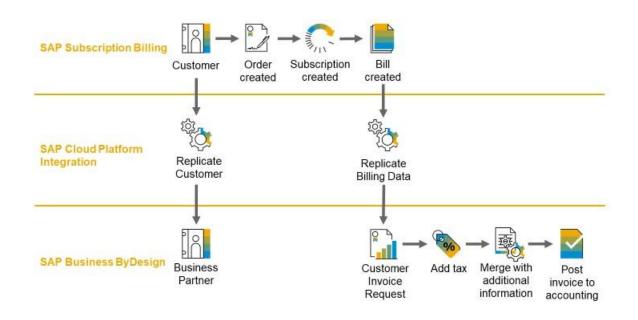
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1. OVERVIEW

This document describes additional configuration steps that have to be carried out by customers in order to activate the integration between SAP Business ByDesign and SAP Subscription Billing. As these configuration steps are customer-specific, they cannot be delivered by SAP, and must be carried out by the customer.

The integration package SAP Business ByDesign to SAP Subscription Billing Integration offers the following features:

- · Replication of bills from SAP Subscription Billing to SAP Business ByDesign as customer invoice requests
- Master data replication of customer data from SAP Subscription Billing to SAP Business ByDesign business partners



The integration package is editable and should be regarded as a kind of template, which can be adapted to specific customer requirements.

2. SET UP AND CONFIGURE SAP SUBSCRIPTION BILLING SYSTEM

For detailed information on the settings which have to be done in your SAP Subscription Billing instance please refer to the <u>Setup and Administration Guide</u> on the SAP help portal.

3. BUSINESS CONFIGURATION IN SAP BUSINESS BYDESIGN

In your SAP Business ByDesign solution you have to enable the update of business partner data and the creation of customer replication requests via web service. To do so, please perform the following settings in the *Business Configuration* work center:

3.1 Communication Scenario

Create a new communication scenario via Application and User Management \rightarrow Communication Scenarios \rightarrow New.

Maintain the communication scenario name (e.g. "SAP Subscription Billing") and add the following operations:

Operation Description	Service Description
Maintain customer invoice requests	Manage Customer Invoice Requests
Maintain accounts	Manage Accounts
Save your changes.	·

SAP [®] Business By De		Communication Scenario: SAP Subsc	cription Billing 😒	Q 🛞
Save and Close	e Save Close New Configuration			
Communication Name:	Scenario * SAP Subscription Billing			
Assigned Ope	rations			
Remove	Add Operations			
10000	Add Operations e Status Operation Description	. Service Description	A Service Name	Dependent Object Service
Releas			▲ Service Name ManageCustomerin	Dependent Object Service

3.2 Communication System

Create a new communication system via Application and User Management \rightarrow Communication System \rightarrow New.

Ξ	SAP ^{® Business} ByDesign			Communicatio
ක 7	Status: Active Save Close Action			
	General System Insta	ances		
<i>ද∿</i> උ#	Communication System			
ŝ	Host Name:*	SAPSubscriptionBilling		
	System Access Type:*	Internet	~	
\$ #	SAP Business Suite:			
	Contact Information			
* - ,	First Name:			
ā	Last Name:			
8	Email:			
14	Phone:			
•	Fax:			
₽				
5				

Maintain the following properties:

- Host Name: SAPSubscriptionBilling
- System Access Type: Internet
- Internal Comment: SAP Subscription Billing

Set the communication system to Active and save your changes.

3.3 Communication Arrangement

Create a new communication arrangement via Application and User Management \rightarrow Communication Arrangements \rightarrow New.

In step 1 select the Communication Scenario "SAP Subscription Billing".

In step 2 select the Communication System Instance ID "SAPSubscriptionBilling".

≡	SAP ^{®Business} ByDesign	New Communica	tion Arrangeme	ent: SAP Subscriptio	n Billing 🚫
ଜ	1 Select Scenario 2 Defi	ne Business Data 3 Define Technical Data 4 Rev	riew 5 Confirmat	ion	
₹ 81	< Previous Next >	Finish ⑦ Close Preview Check Com	oleteness	ive as Draft ⑦	
ô	Communication System			My Communication	Data
•0	System Instance ID:*	SAPSUBSCRIPTIONBILLING1	ل	My System:	0M28CJN
Ê	Communication System:	SAPSUBSCRIPTIONBILLING1			
ප්	Contact				
2	Contact Name:				
e <mark>du</mark>	Phone:				
品	E-Mail:				
35					
~					

In step 3, maintain the following properties:

- Communication Method: Direct Connection
- Inbound Communication Enabled: selected
- Application Protocol: Web Service
- Authentication Method: SSL Client Certificate
- Set the password for the newly created User ID (e.g. "_SAPSUBSCRIP") by clicking the button "Edit Credentials"
- · Go to the next step and confirm your changes with "Finish".

Ξ	SAP ^{*Business} ByDesign		New Communication Arrange	ement: SAP Subscription Billing 😣
â	1 Select Scenario 2 Define	Business Data > 3 Define	Technical Data 4 Review 5 Cont	irmation
₹ &/	< Previous Next >	Finish ⑦ Close P	Preview Edit Advanced Settings	Check Completeness ⑦ Save as Draft ⑦
ô	Communication Method:	Direct Connection	N	×
	Inbound Communication: E	asic Settings		Outbound Communication: Basic Settings
۵	Inbound Communication Enabled:	\checkmark		No Outbound Communication
10000	Application Protocol:*	Web Service		\sim
<u></u>	Authentication Method:*	SSL Client Certificate		\sim
<u>.</u>	User ID:*	_SAPSUBSCRIP	Edit Credentials	
品 公司	Services Used			
Ô	Manage Customer Invoice	Uses Basic Settings	Enabled	
	Manage Accounts	Uses Basic Settings	Enabled	
	¢			>
424				
8⁼				
٢				
R				
R =				
Applicati	on and User Ma Rew Commun	icati 🔞		

≡ S	AP ^{® Business} ByDesign	New Communication Arrangement: SAP Subscription Billing 😒
命 で	1 Select Scenario 2 D	Define Business Data 3 Define Technical Data 4 Review 5 Confirmation Finish ⑦ Close Preview Edit Advanced Settings Check Completeness ⑦ Save as Draft ⑦
<i>2√</i> ° φ	Communication Method:	Edit Communication User
	Inbound Communication Inbound Communication Enabled: Application Protocol:* Authentication Method:* User ID:*	Depending on the chosen authentication method, you need to upload a certificate or define a password for the communication user. The user ID of the communication user is created automatically. User ID: _SAPSUBSCRIP User Account: _SAPSUBSCRIP
品 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Services Used Manage Customer Invoice Manage Accounts	Change Password Certificate Password: OK
≗ ¥ 8 2 €		
A ■		

4. CONFIGURATION OF THE SAP CLOUD INTEGRATION CONTENT

4.1 Maintain Security Material and Check Certificates

Go to Monitor (Operations View) \rightarrow Manage Security – Keystore and check that all necessary certificates are imported. Usually, your SAP Cloud Integration tenant is pre-delivered accordingly.

Ξ	SAP	SAP Cloud Platform Integration				
\oslash	Discover >	Overview				
0	Design	Manage Security				
۲	Monitor	Security Material Keystore 0	Certificate-to-User			
°¢	Se Operations view		Aappings			
		1 52 Artifacts	O Artifacts			
	SAP	SAP Cloud Platform Integration				
\oslash	Discover >	Overview / Manage Keystore				
ı	Design	Current Backup New SAP keys SAP Key History				
۲	Monitor					
Ŷ¢	Settings	Entries (52)	Filter by Alias			
		Alias	Туре			
		addtrust external ca root	Certificate			
		baltimore cybertrust root	Certificate			
		certum ca	Certificate			
		certum level iv ca (certum ca) Certificate				
		comodo high-assurance secure server ca (addtrust external ca root)	Certificate			
		cybertrust public sureserver sv ca (baltimore cybertrust root)	Certificate			

Go to the *Operations* view \rightarrow Manage Security Material. Here you can deploy the user credentials that are needed to log on to your SAP Subscription tenant and your SAP Business ByDesign solution.

Ξ	SAP	SAP Cloud Platform Integration			
\oslash	Discover >	Overview / Manage Security Material			
0	Design			Filter by Name or Deployed By	
۲	Monitor	Security Material (1)	Security Material (1)		
°¢	Settings	Name	Туре	Status	
		system.jks	Keystore	Deployed	

Add and deploy the "User Credentials" for SAP Subscription Billing:

SAP	SAP Clou	d Platform Integration		Data Service
	3/1 00	SAP Cloud Platform Integration		sts (SSH)
Ø Discover	> Overview / Manage Security Material		OAuth2 C	redentials
Ø Design			PGP Publi	
Monitor	Security Material (2)	Filter by N	ame or Deple PGP Secre	et Keyring
😋 Settings	Name	Туре	S Secure Pa	arameter Deployed By
	SubscriptionBilling_ClientID	Credentials	S User Cred	lentials
	system.jks	Keystore	Deployed	

Client ID and Client Secret of the SAP Subscription Billing system

- □ The client ID and the client secret have to be deployed as the password of the respective user credentials.
- □ To do so, add the two user credentials one for the client ID and one for the client secret and store the value in the password field.
- Remark: You can provide any value in the user name field, this is not considered in the replication process.

pe	Sidius		Dep
edentials	Deployed		D02
f	Add User Credentials		ÖV
*Name:	SubscriptionBilling_ClientId		- 1
Description:			
*User.	CLIENTID		
Password:	•••••		
Repeat Password:	•••••		
SuccessFactors			
		Deploy	Cancel
		Depioy	Cancer

	Add User Credentials		
*Name: Description:	SubscriptionBilling_ClientSecret		
*User.	CLIENTSECRET		
Password:			
Repeat Password:			
SuccessFactors			
		Deploy	Cancel

E SAP	SAP Cloud	Platform Integration		Data Services	Integration Content Advisor 🔕 🕛
Ø Discover	> Overview / Manage Security Material				
🖉 Design	1 A 4				
Monitor	Security Material (4)	Filter by Na	ame or Deployed By	Q Add Downli	oad Edit Undeploy C
😳 Settings	Name	Туре	Status	Deployed By	Deployed On
	SubscriptionBilling_client_secret	Credentials	Deployed		Jan 18, 2019, 15:21:12
	SubscriptionBilling_ClientID	Credentials	Deployed		Jan 18, 2019, 15:20:19
	ByD100_Admin	Credentials	Deployed		Jan 17, 2019, 16:36:23

- Note down the name of the credentials for further use. In the following chapters, it will be referred as
 SubscriptionBilling_ClientId and
- SubscriptionBilling_ClientSecret.

Second step is to add the user credentials for the logon to your SAP Business ByDesign system from the

ByDesign Communication Agreement above and note down the name of the credentials for further use (in the following chapters it will be referred as XYZ123_SAPSUBSCRIP, a concatenation of the 3 characters system ID, the 3 digits tenant number and the name of the API user).

	Add User Credentials	
*Name:	XYZ123_SAPSUBSCRIP	
Description:		
*User:	_SAPSUBSCRIP	
Password:	•••••	
Repeat Password:		
SuccessFactors		

4.2 Copy Package

In your SAP Cloud Integration instance, go to the *Discover* area. Search for the package SAP Business ByDesign to SAP Subscription Billing Integration. Copy the package to your workspace.

The package contains the following artifacts:

- Value Mapping: SAP Subscription Billing SAP Business ByDesign
- Integration flow Get SAP Subscription Billing Token (ID com.sap.byd.subscriptionBilling.getToken) © 2018 SAP SE or an SAP affiliate company. All rights reserved.
- Integration flow Replicate Customers from SAP Subscription Billing to SAP Business ByDesign (ID com.sap.byd.subscriptionBilling.replicateCustomers)
 © 2018 SAP SE or an SAP affiliate company. All rights reserved.
- Integration flow Replicate Billing Documents from SAP Subscription Billing to SAP Business ByDesign (ID com.sap.byd.subscriptionBilling.replicateBills)

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4.3 Value Mapping

The integration package contains the value mapping artifact *Value Mapping: SAP Subscription Billing - SAP Business ByDesign.* Here you have the possibility to maintain the mapping for the following list of objects which deviate between your SAP Subscription Billing solution and your SAP Business ByDesign solution.

SAP Subscription Billing	SAP Business ByDesign
CustomerType value: INDIVIDUAL, CORPORATE	CustomerCategoryCode value: 1, 2
Country	CountryCode
State	RegionCode
MarketId	CompanyID
PriceType value: e.g. Net	PriceComponentTypeCode value: 7PR1
PriceType value: e.g. Net	PricingProcedureCode value: PPSTD1
ProductCode	ProductID
Unit	UnitCode

Maintain deviating values only. The mapping is evaluated with "use key" as default. This means, if no explicit entry is found in the mapping, the value of the source structure is used in the target structure.

After you have maintained all entries needed in your scenario, deploy the artifact via Actions \rightarrow Deploy.

4.4 Integration Flow Get Token

The integration flow *Get SAP Subscription Billing Token* is used internally in the replication flows to fetch the token which is required for the API calls to the SAP Subscription Billing system. Before deploying this flow, you must configure the following externalized parameters:

- Select Receiver
 - Subscription Billing Authentication Hostname: For Receiver SubscriptionBillingAuthSystem enter the host name of your subscription billing authentication server e.g. YourSubscriptionBillingSystemXYZ.authentication.eu10.hana.ondemand.com.

		Configure "Get SAP Subscription Billing
Receiver	More	
	Receiver:	SubscriptionBillingAuthSystem ~
	Adapter Type:	HTTP v
onnection		
	Address:	https://{{Subscription Billing Authentication Hostname}}/oauth/token
Subscription E	Billing Authenticat	YourSubscriptionBillingSystemXYZ.authentication.eu10.hana.ondemand.

- Select More
 - Subscription Billing Client ID: enter the name of the credentials artifact you deployed under Manage Security Material to store the client ID of your SAP Subscription Billing instance (e.g. SubscriptionBilling_ClientId)
 - Subscription Billing Client Secret: enter the name of the credentials artifact you deployed under Manage Security Material to store the client secret of your SAP Subscription Billing instance (e.g. SubscriptionBilling_ClientSecret)

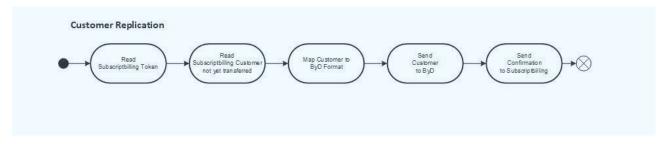
		Configure "Get SAP Subscription Billing Token"	
Receiver	More		
ß	Туре:	All Parameters ~	
Subscription	Billing Cli	SubscriptionBilling_ClientID	
Subscription	Billing Cli	SubscriptionBilling_ClientSecret	

After you have configured the externalized parameters, deploy the integration flow via Action \rightarrow Deploy.

		Configure "Get SAP Subscription Billing Token"
er More		
Туре:	All Parameters	
Subscription Billing Client ID:	SubscriptionBilling_ClientId	
Subscription Billing Client Secret:	SubscriptionBilling_ClientSecret	
		i Deployment
		'Get SAP Subscription Billing Token' is triggered for deployment.
		ОК

4.5 Integration Flow Replicate Customer Data

With the integration flow *Replicate Customers from SAP Subscription Billing to SAP Business ByDesign*, a master data replication for newly created customers in SAP Subscription Billing is triggered on a regular basis to make them available in the SAP Business ByDesign solution as well. After a successful replication, the ByDesign customer ID is stored as external ID on the customer instance in the SAP Subscription Billing solution.



Apart from the required token handling, the customer replication simply reads the customer from the SAP Subscription Billing system, maps it to the ByD customer format, and sends it to the ByDesign API. Finally, a confirmation is sent to the Subscription Billing system submitting the ByDesign system ID and the ByDesign customer ID.

The integration flow uses the following APIs:

- SAP Subscription Billing Business Partner (V3)
 - □ GET /customers
 - PUT /customers/{customerNumber}/externalObjectReferences
 - refer to https://api.sap.com/api/BusinessPartner_APIs/resource
- SAP Business ByDesign Manage Accounts (/managecustomerin1)
 - operation MaintainBundle_V1
 - □ refer to https://api.sap.com/api/PSM_ISI_R_II_MANAGE_CUSTOMER_IN/overview

Configure the flow by setting the following externalized parameters to adapt it to your environment:

- Select Timer
 - □ Schedule the integration flow as a recurring run.

Timer:	Start Timer 1 [StartEvent_418]				~			
O Run One	се	Schedule to Recur							
	e on Day	Daily ~							
 Schedul 	e to Recur		03:08 PM						
		O On Time							
		 Every 	1 hr		00:00		and	1	

- Select Receiver SubscriptionBilling
 - Subscription Billing System Hostname: Enter the host name of your subscription billing client. If your Subscription Billing System has the following address in the browser https://yoursystem1.eu10.revenue.cloud.sap/ the host name will be yoursystem1.eu10.revenue.cloud.sap

	Configure "Replicate Customers from SAP Subscription Bill	ing to SAP Business ByDesign'
Timer Receiver More		
Receiver:	SubscriptionBilling	
Adapter Type:	HTTP	~
Connection		
Address:	https://{{Subscription Billing System Hostname}}/api/business-partner/v3/customers	
Subscription Billing System Hostname:	.eu10.revenue.cloud.sap	
Timeout (in ms):	60000	

- Timeout (in ms): Each call to the SAP Subscription Billing solution is timed out per default after 1 minute (60000 ms). If you expect to have long-running API calls you can change this parameter accordingly.
- Select Receiver ByD
 - Business ByDesign System Hostname: Enter the host name of your SAP Business ByDesign solution. If your ByDesign System has the following address in the browser https:// my999999.sapbydesign.com/ the host name will be my999999.sapbydesign.com
 - □ Credential Name: Enter the name of the user credentials you deployed for the login to your SAP Business ByDesign solution (e.g. XYZ123_SAPSUBSCRIP)
 - □ *Timeout (in ms)*: Each call to the SAP Business ByDesign solution is timed out per default after 1 minute (60000 ms). If you expect to have long-running API calls you can change this parameter accordingly.

	Configure "Replicate Customers from SAP Subscription Billing to	SAP Business ByDesign"
Timer Receiver More		
Receiver:	ByD	
Adapter Type:	SOAP ~	
Connection Address:	https://{{Business ByDesign System Hostname}}/sap/bc/srt/scs/sap/managecustomerin1	
Business ByDesign System Hostname:	sapbydesign.com	
Credential Name:	XYZ123_SAPSUBSCRIP	
Timeout (in ms):	60000	

- Select More
 - Business ByDesign System ID: Enter the ID of your SAP Business ByDesign system. The value entered here is used to store the Business ByDesign customer ID as an external ID at the SAP Subscription Billing Customer instance (like XYZ123, a concatenation of the 3 characters system ID and the 3 digits tenant number)
 - Default Communication Language: Enter the language key you want to set as default communication language for the customers replicated to SAP Business ByDesign (e.g. EN)
 - Page Size: Page size used to fetch packages of customer data from SAP Subscription Billing (default 100). If more than 100 customers are to be replicated the system will only replicate the first 100 customers in the first run and continue to replicate the remaining instances in the next scheduled runs.

	Configure "Replicate Customers from SAP Subscription of the SAP Subscription o	otion Billing to SAP Business ByDesign"
Timer Receiver More		
Туре:	All Parameters	×
Account Determination Group Code:	4010	
Business ByDesign System ID:	XYZ123	
Default Communication Language:	EN	
Page Size:	100	

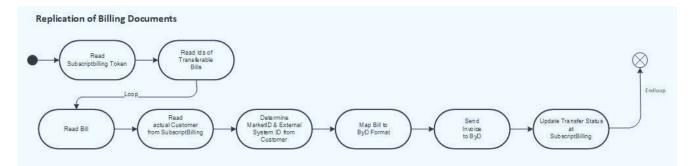
Deploy the Integration Flow after you have done the necessary configuration.

Remark:

- Only newly created customer instances are fetched for replication. Later changes are not considered, so the customer data will run out-of-sync if you update customer data in SAP Subscription Billing.
- The customer instances are only replicated from SAP Subscription Billing to SAP Business ByDesign. Customers created in the SAP Business ByDesign solution are not replicated to SAP Subscription Billing.

4.6 Integration Flow Replicate Billing Documents

With the integration flow *Replicate Documents from SAP Subscription Billing to SAP Business ByDesign* you can transfer billing documents from SAP Subscription Billing to SAP Business ByDesign to create customer invoice requests on a regular basis. All billing documents with status *transferable* are processed and marked with the ID of the successor document after successful processing.



Apart from the required token handling, the billing flow initially reads the IDs of those billing documents to be transferred from the SAP Subscription Billing system. Within a loop then bill by bill is processed: First the bill data is read from the SAP Subscription Billing system as well as related customer to determine the external system ID (equals ByD System ID) and the market ID (corresponds to ByDesign company). Then the message is mapped to the ByDesign Customer Invoice request and transferred to ByDesign. Finally, the transfer status is submitted to the SAP Subscription Billing system.

The integration flow uses the following APIs:

- SAP Subscription Billing Bills (V2)
 - GET /bills/transerable
 - □ GET bills/{identifier}
 - POST bills/{identifier}/successorDocuments
 - □ refer to <u>https://api.sap.com/api/BillV2_APIs/resource</u>
 - SAP Subscription Billing Business Partner (V3)
 - □ GET /customers/{customerNumber}/

- refer to https://api.sap.com/api/BusinessPartner_APIs/resource
- SAP Business ByDesign Manage Customer Invoice Requests (/managecustomerinvoicerequesti4)
 - □ refer to https://api.sap.com/api/PSM_ISI_R_II_A1SCI_CIR_MANAGE_IB/overview

Please configure the flow by setting the following externalized parameters to adapt it to your environment:

- Select Timer
 - □ Schedule the integration flow as a recurring run.

Timer.	Start Timer 1 [StartEvent_418]			~		
O Run On	ce	Schedule to Recur					
O Schedul	e on Day	Daily ~					
 Schedul 	e to Recur		03:08 PM				
		O On Time	00,001 10				
		 Every 					

- Select Receiver SubscriptionBilling
 - □ Subscription Billing System Hostname: Enter the host name of your subscription billing client (e.g. yoursystem1.eu10.revenue.cloud.sap)
 - □ *Timeout (in ms)*: Each call to the SAP Subscription Billing solution is timed out per default after 1 minute (60000 ms). If you expect to have long-running API calls you can change this parameter accordingly.

	Configure "Replicate Billing Documents from SAP Subscription Bil	ling to SAP Business ByDesig
Timer Receiver More		
Receiver:	SubscriptionBilling	~
Adapter Type:	НТТР	v
Connection		
Address:	https://{{Subscription Billing System Hostname}}/api//bill/v2/bills/\${property.BillId}/succes.	
Subscription Billing System Hostname:	.eu10.revenue.cloud.sap	
Timeout (in ms):	60000	

- Select Receiver ByD
 - Business ByDesign System Hostname: Enter the host name of your SAP Business ByDesign solution (e.g. my999999.sapbydesign.com)
 - □ Credential Name: Enter the name of the user credentials you deployed for the login to your SAP Business ByDesign solution (e.g. XYZ123_SAPSUBSCRIP)
 - □ *Timeout (in ms)*: Each call to the SAP Business ByDesign solution is timed out per default after 1 minute (60000 ms). If you expect to have long-running API calls you can change this parameter accordingly.

	Configure "Replicate Billing Documents from SAP Subscription Billing to SA		
Timer Receiver	More		
	Receiver:	ByD	
	Adapter Type:	SOAP	
Connection			
	Address:	https://{[Business ByDesign System Hostname]}/sap/bc/srt/scs/sap/managecustomerinv	
Business ByDesign S	System Hostname:	.sapbydesign.com	
	Credential Name:	XYZ123_SAPSUBSCRIP	
	Timeout (in ms):	60000	

- Select More
 - Business ByDesign System ID: Enter the ID of your SAP Business ByDesign system. The value entered here is used to store the Business ByDesign customer ID as an external ID at the SAP Subscription Billing Customer instance (like XYZ123, a concatenation of the 3 characters system ID and the 3 digits tenant number)
 - CIR Document ID Number Range Prefix: To follow the number range configured for customer invoice requests, a prefix for document IDs is considered in the mapping between billing data from SAP Subscription Billing and Customer Invoice Requests to be sent to SAP Business ByDesign. Maintain the prefix here.
 - □ Settlement Priority Code: Enter the Settlement Priority Code to be used in the customer invoice requests.
 - Successor Document Type: Enter the type of the successor document you want to use in your SAP Subscription Billing system to store the corresponding SAP Business ByDesign document for a transferred bill.

	Configure "Replicate Billing Documents from SAP Subscription Billin	g to SAP Business ByDesign"
Timer Receiver More		
Туре:	All Parameters]
Business ByDesign System ID:	XYZ123	
CIR Document ID Number Range Prefix:	100]
Settlement Priority Code:	1]
Successor Document Type:	ByDCIR	

Deploy the Integration Flow after you have done the necessary configuration.

4.7 Monitor replication processes

After the configuration steps have been done, you should be able to go into your SAP Subscription Billing System to

- create a new customer,
- create a quote for this customer and transfer it into an order

The bill is created automatically by the system and is considered by the integration flow as soon as it is closed and not yet transferred.

The next run of the deployed integration flows is started according to your timer configuration. You should monitor their processing and check for errors. If the runs were successfully performed, you should

- · check if the customer is created in SAP Business ByDesign,
- · check if an external object reference is created for the customer in SAP Subscription Billing
- check if the invoice request is created in SAP Business ByDesign and is correct.
- check if the bill in SAP Subscription Billing is now in status Closed and Transferred and there is a successor document reference created for this instance.

5. APPENDIX

5.1 Mapping of Customer Master Data

In the integration flow *Replicate Customers from SAP Subscription Billing to SAP Business ByDesign*, the customer master data fields are mapped as follows (CustomerList – Customers mapped to CustomerBundleMaintainRequest_sync_V1 – Customer)

SAP Subscription Billing Customer	SAP Business ByDesign Customer	Comment
	actionCode = 04	All relevant actionCode fields
externalObjectReferences – externalId (with externalSystemID of SAP Business ByDesign system)	InternalID	Usually initial, only prepared for update case
customerType	CategoryCode	Considering value mapping
	CustomerIndicator = true	
	LifeCycleStatusCode = 2	
personalInfo	Person	
personalInfo – firstName	Person – GivenName	
personalInfo – lastName	Person – FamilyName	
	Person – NonVerbalCommunicationLanguageCode	External parameter; in case of a person only
corporateInfo	Organisation	
corporateInfo – company	Organisation – FirstLineName	
	AddressInformation	For default address only
addresses	AddressUsage, Address, PostalAddress	
	AddressUsage – AddressUsageCode = XXDEFAULT	
	AddressUsage –DefaultIndicator = true	
addresses – email	Address – EmailURI	
addresses – country	Address – PostalAddress – CountryCode	Considering value mapping
addresses – state	Address – PostalAddress – RegionCode	Considering value mapping
addresses – city	Address – PostalAddress – CityName	
addresses – postalCode	Address – PostalAddress – StreetPostalCode	

Address DestalAddress StreetName	
Address – PostalAddress – Streethame	
Address – PostalAddress –	
StreetSuffixName	
Address – PostalAddress – HouseID	
Address – PostalAddress – CareOfName	
Address – PostalAddress – Telephone;	
FormattedNumberDescription	
SalesArrangement	
SalesArrangement –	
SalesOrganisationID	
5	
DistributionChannelCode	
SalesArrangement – CurrencyCode	
PaymentData – CompanyID	Considering value mapping
PaymentData – AccountDeterminationDebitorGroupCode	External Parameter
	Address – PostalAddress – HouseID Address – PostalAddress – CareOfName Address – PostalAddress – CareOfName Address – PostalAddress – Telephone; FormattedNumberDescription SalesArrangement SalesArrangement – SalesOrganisationID SalesArrangement – DistributionChannelCode SalesArrangement – CurrencyCode PaymentData – CompanyID

5.2 Mapping of Billing Data

In the integration flow *Replicate Documents from SAP Subscription Billing to SAP Business ByDesign,* the Customer Invoice Request fields are filled as follows

SAP Subscription Billing Bill	SAP Business ByDesign CustomerInvoiceRequest	Comment
	actionCode = 04	All relevant actionCode fields
documentNumber	BaseBusinessTransactionDocumentID	Concatenated with external parameter "CIR Document ID Number Range Prefix"
	SettlementPriorityCode = 1	
	BuyerParty – InternalID	ByDCustomerID determined from externalID of customer master data
	SalesUnitParty – InternalID	salesOrganization determined from market
	SalesAndServiceBusinessArea – DistributionChannelCode	distributionChannel determined from market
market – priceType	PricingTerms – PricingProcedureCode	Considering value mapping

market – currency	PricingTerms – CurrencyCode	
billtems – charges	Item	
	BaseBusinessTransactionDocumentItemID	Sequential number
	ReceivablesPropertyMovementDirectionCode = 2	
billItems – subscription – documentNumber billItems – charges – metricId	Description	String concatenated from "Subscription Doc." And the both source fields
billItems – product	Product	
billItems – product – code	Product – InternalID	Considering value mapping
billItems – charges – consumedQuantity - value	Quantity	
billItems – charges – consumedQuantity - unit	Quantity – unitCode	Considering value mapping
	QuantityTypeCode	External Parameter
market – typeCode	PriceAndTax – PriceComponent – TypeCode	Considering value mapping
billItems – charges – netAmount / grossAmount	PriceAndTax – PriceComponent – Rate	Only one of both is provided
billItems – charges – net/grossAmount – amount	PriceAndTax – PriceComponent – Rate – DecimalValue	Rounded
billItems – charges – net/grossAmount – currency	PriceAndTax – PriceComponent – Rate – CurrencyCode	
billItems – charges – consumedQuantity – value	PriceAndTax – PriceComponent – Rate – BaseDecimalValue	
billItems – charges – consumedQuantity – unit	PriceAndTax – PriceComponent – Rate – BaseMeasureUnitCode	Considering value mapping

Response Mapping: CustomerInvoiceRequetBundleMaintainConfirmation mapped to payload for POST bills/{identifier}/successorDocuments

SAP Business ByDesign Confirmation	SAP Subscription Billing successorDocument	Comment
Log - MaximumLogItemSeverityCode	success	Severity < 3 = true Severity 3 = false
	successorDocumentSystem	External parameter "Business ByDesign System ID"

CustomerInvoiceRequest – BaseBusinessTransactionDocumentID	successorDocumentID	
	successorDocumentType	External parameter "Successor Document Type"
Item – Note	messages	

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