

ICI for SAP CPQ and SAP S/4HANA Lead to Cash Adapter Technical Configuration Guide

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Icertis

Purpose

This document provides configuration details required to set up ICI for SAP CPQ and SAP S/4HANA Lead to Cash Adapter.

Audience

This document is intended for ICI Admin Users and Implementation Team who will use it to configure ICI for SAP CPQ and SAP S/4HANA Lead to Cash Adapter integration.

Disclaimer

This is an ICI internal users guide not to be shared with Clients. All contents of this document are solely to help Implementation teams with configuring system in a seamless way for ICI for SAP CPQ and SAP S/4HANA Lead to Cash Adapter. Document author or approvers are not responsible for any data loss if system is configured incorrectly. It is advised to configure these features in the test environment before moving on to the Client Production Environment.

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Overview

SAP CPQ provides a rich customer experience by empowering sales teams and partners to easily offer complex product configurations, optimized pricing, and great-looking proposals. Organizations can accelerate sales by helping sales reps sell through more channels faster by eliminating order errors, generating proposals instantly, and providing customer and channel-specific pricing. Organizations can establish intelligent, integrated sales processes to generate quotes faster, simplify approvals, cut sales cycles, and free staff to focus on sales.



Today, customers use SAP CPQ to automate the sales and quoting process and Icertis Contract Intelligence (ICI) platform to manage the sales contracts and deliver exceptional sales and contracting experience. The ICI for SAP CPQ and SAP S/4HANA Lead to Cash Adapter offers integration with SAP CPQ providing sales users an intelligent and flexible contracting platform that is fully integrated into SAP CPQ, thereby maximizing sales opportunities, increasing cross and up-sell, and optimizing pricing, while protecting margins.

The ICI for SAP CPQ and SAP S/4HANA Lead to Cash Adapter is a part of the end-to-end lead-to-cash business. The integration enables a personalized sales experience that accelerates the selling process and turns customers into advocates. Preconfigured products and pricing models enable the sales organization to easily assemble a quote and thus improve the operational efficiency. Preapproved legal templates and preconfigured workflows enable contract managers to quickly assemble contracts and effectively negotiate them, thus reducing contract time and risk.

Capabilities

The ICI for SAP CPQ and S/4HANA Lead to Cash Adapter provides the following capabilities to integrate with SAP CPQ for quote-to-contract process.

SAP CPQ - SAP Billing and Revenue Innovation Management (BRIM) integration is leveraged for the quote-to-cash process after quote is ready for ordering.



- Quote Preparation and Approval
 - Sales rep creates quote in SAP CPQ for a customer by adding required quantity of items products/services.
 - Price is auto calculated based on quantity, details added during product configuration and discounts applied.
 - Quote status is **Preparing**. Based on rules setup in SAP CPQ, if quote requires approval, it will go through approval workflow. Once final pricing is approved, status of quote will be **Approved**. In case of rejection, Sales rep can move the quote back in **Preparing** status to make further changes.
- Quote Ready for Contracting
 - Once commercials are finalized and approved, Sales Rep can change the status of the quote from **Approved** or **Preparing** to **Ready for Contracting**.
 - ICI checks for quotes in **Ready for Contracting** status and picks them for Contract creation through seamless integration.
- Contract Created
 - Contract is created in ICI by the system through seamless integration. Once done, system stamps contract details on quote and updates the quote status as **Contract Created**.
 - All quote details are captured in agreement as per the configured mappings.
 - All quote line details are captured in agreement Associations as per configured mappings.
- Contract Processed and Executed
 - ICI capabilities are leveraged for Contract Lifecycle – Review, Approval, Signatures.
 - Once contract is signed by both parties, Contract is marked as **Executed**, and this in-turn reflects change in quote status.

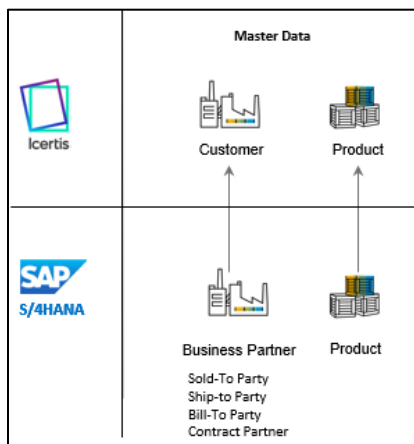
- Quote Ready for Ordering
 - If Auto-ordering is configured for the integration in ICI, system invokes SAP CPQ Place Order action for quote.
 - If manual ordering is configured in ICI, system just updates quote status as **Ready for Ordering** and awaits user to act Place Order through SAP CPQ UI.

- Order Placed
 - Place Order action leverages SAP CPQ and SAP S/4HANA integration to send quote details to SAP S/4HANA for Order Placement.
 - Place Order action changes quote status to **Order Confirmation Pending**
 - From SAP S/4HANA, Solution quote ID is updated back on SAP CPQ quote as Sales Order ID
 - On successful Order, quote status gets updated to **Order Placed** through SAP CPQ – SAP S/4HANA integration.
 - On Order failure, quote status gets updated to **Order Failed** through SAP CPQ – SAP S/4HANA integration.

Customer (Business Partner) Master data present in ICI should be synced from Customer Master. Product Master data present in ICI should be synced from Product Master. With end-to-end integration having SAP S/4HANA, Master Data Integration is available to synchronize the Customer (Business Partner) and Product Master data from SAP S/4HANA to ICI.

The adapter provides following capabilities for master data integration from SAP S/4HANA to ICI for Business Partner and Product for lead-to-cash flow.

Sell-side Master data integration Capabilities:

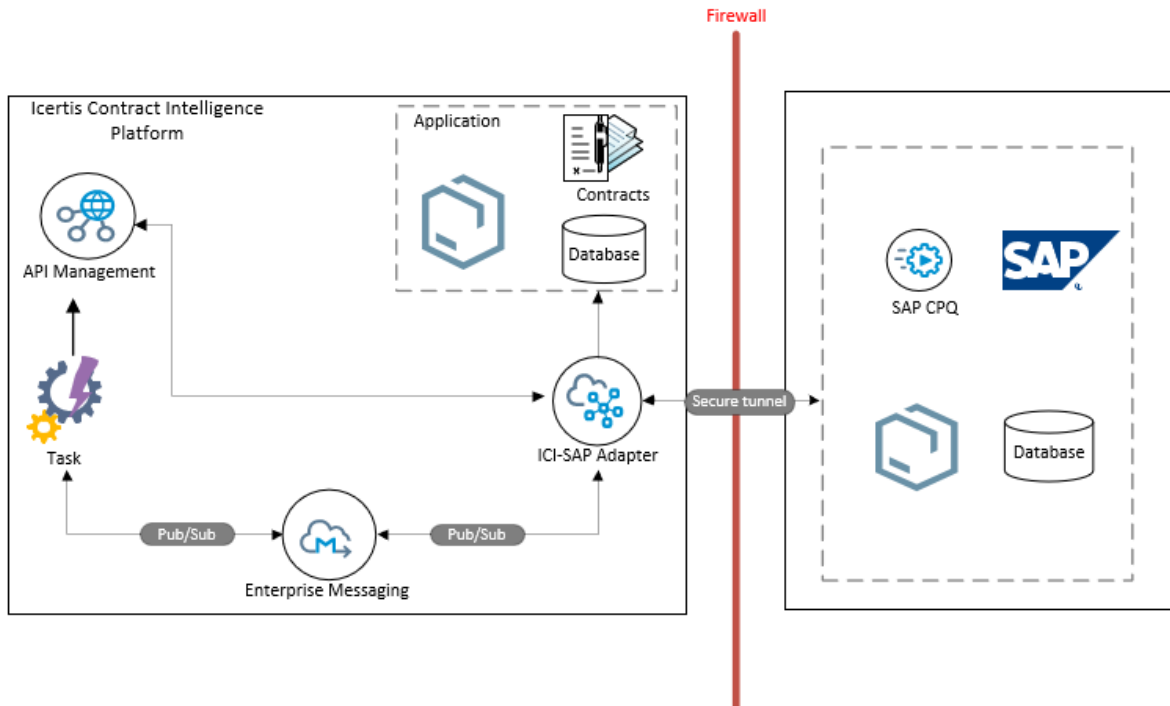


- Realtime, event-based sync (create, update, delete) - Business Partner Record (Organization or Person)
- Incremental, batch sync (create, update, delete) - Business Partner Record (Organization or Person)

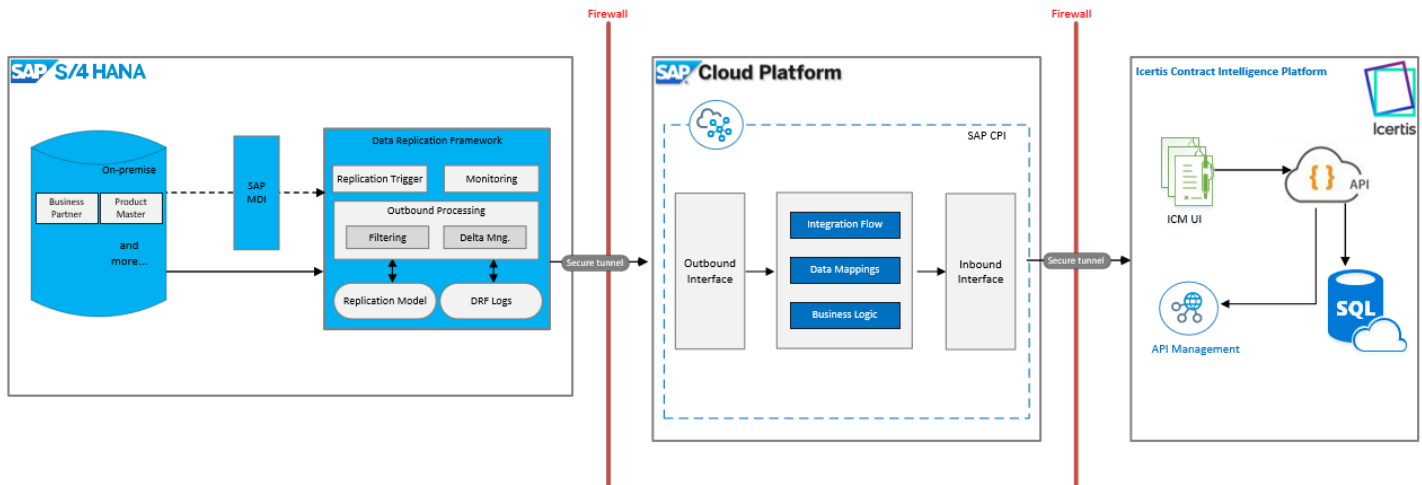
- Manual sync (create, update, delete) - Business Partner Record (Organization or Person), identify by ID
- Realtime, event-based sync (create, update, delete) - Product Record (Service or Subscription or Bundle)
- Incremental, batch sync (create, update, delete) - Product Record (Service or Subscription or Bundle)
- Manual sync (create, update, delete) - Product Record (Service or Subscription or Bundle), identify by ID

High Level Architecture

The ICI for SAP CPQ and SAP S/4HANA Lead to Cash Adapter consumes REST APIs provided by SAP CPQ Quote 2.0 to provide end-to-end integration capabilities.



The following diagram shows master data integration between SAP S/4HANA and ICI.



SAP CPQ Prerequisites

ICI for SAP CPQ and S/4HANA Lead to Cash Adapter integrates with SAP CPQ by leveraging SAP CPQ Quote 2.0 REST APIs. Before calling SAP CPQ REST endpoints, ensure that:

- An SAP CPQ Quote 2.0 tenant with its URL is shared with the ICI team.
- Create an integration user account in SAP CPQ and add the user to the **Sales** user group. This user will be used to authenticate all the REST API calls.
- SAP CPQ configuration is completed as mentioned in the [SAP CPQ configuration](#) section.
- SAP CPQ allows ICI client to consume their APIs.

SAP CPQ REST APIs

- SAP CPQ REST APIs for Quote 2.0 engine are leveraged to integrate ICI with SAP CPQ. Below table lists the API endpoints leveraged to perform integration activities.

Activity	Description	Request Type	URL
Get Access Token	Generates access token for authentication and is used as input to generate JWT token	GET	https://{{baseURL}}/basic/api/token
Generate JWT token	Generates JWT token for accessing Quote 2.0 APIs	GET	https://{{baseURL}}/api/rd/v1/core/GenerateJWT
Get contracts by Status	Gets the quotes with the status as "Ready for Contracting" & "Ready for Ordering"	GET	https://{{baseURL}}/api/rd/v1/QuoteList/GetData
Get Quote by ID	Gets the quote details by ID	GET	https://{{baseURL}}/api/v1/quotes/{QuoteID}
Get Quote Item Details	Gets the Item details of the quote by ID	GET	https://{{baseURL}}/api/v1/quotes/{QuoteID}/items
Update Standard & Custom Fields	Updates Standard and custom fields in SAP CPQ	PATCH	https://{{baseURL}}/api/v1/quotes/{QuoteID}
Update Status	Updates the quote status to "Contract created" and "Order Placed"	POST	https://{{baseURL}}/api/v1/quotes/{QuoteID}/actions/{actionID}/invoke

- Share the {{baseURL}} of SAP CPQ environment with the ICI Dev team to configure the integration correctly.

ICI Configuration Prerequisites

Ensure that the following prerequisites are met:

- Create ICI entities
- Map attributes for ICI entities (Client App Cross Reference and Client App Entity Mapping)
- Create filters in the Client App Filter Condition
- Store SAP CPQ API connection information in the Azure Key Vault
- Import the required SAP CPQ contracts master data to ICI
- Provision SAP CPQ contracts users in ICI
- Configure ICI environment with master data contract types for the following entities and required attributes.
 - Customer
 - ProductCustomer and Product master data is either synced through master data integration or is set up in ICI

Note: The ICI for SAP CPQ and SAP S/4HANA Lead to Cash Adapter is supported with ICI version 8.2 onwards.

Configurations

The integration is designed to be a configurable connector to push quote information from SAP CPQ to ICI. All the technical development for this integration is built in as a native capability of ICI and requires only configurations on the ICI Platform and SAP CPQ platforms to set up.

SAP CPQ Configuration

The following workflow provides detailed steps to set up SAP CPQ for ICI integration.



1) Creating users and configuring user types

a) Create User Types in SAP CPQ

Ensure that the following user types are present in SAP CPQ. To know how to add user types, see [User Types](#).

Group Name	Group Description	Allow Incomplete
Customer Quote Acceptance	Electronic customer quote acceptance	No
CFO	Highest level of authorization	No
Sales Management	Managers of the sales team	No
Partner	Authorized reseller or distributor	No
Customer	Authorized customer	No
Sales	Internal sales representative	Yes

b) Create Users in SAP CPQ

- i) Create users for Sales and Sales Management user types in SAP CPQ. These users should be provisioned in ICI as well. If users are not provisioned in ICI, contact your Icertis POC.
- ii) Share the user credentials with the ICI team. To know how to create users in SAP CPQ, see [Creating a new user](#).

2) Configuring quote

a) Verify Custom Quote Tabs

Ensure that the following custom quote tabs are present. If they are not, create new custom quote tabs.

To know more, see [Create Quote Tab](#).

Name
Quotation
Documents
Additional Info
Involved parties

b) Create/Edit Custom Fields

- i) Navigate to **Setup > Quotes > Custom Fields** in SAP CPQ.
- ii) Click **Add New** and create the following fields.
- iii) Edit **Requester Email, Contract Term**, and update the **Calculation Type** and **Formula**. To know more, see [Quote Custom Fields](#).
- iv) Add the relevant column headings.

Name	Label/Column heading	Type	Tab	Order within Tab	Calculation Type, Formula	Show on order confirmation page	Personally Identifiable Information
Opportunity Name	Opportunity/Quote Name	Free Form	Additional Info	1		FALSE	FALSE
Description	Description	Free Form	Additional Info	2		FALSE	FALSE
Terms	Terms	Attribute	Additional Info	3		FALSE	FALSE
Contract Number	Contract Number	Free Form	Additional Info	4		FALSE	FALSE
Contract Link	Contract Link	Free Form	Additional Info	5		FALSE	FALSE
Contract Term	Contract Term (Months)	Attribute	Additional Info	6	Calculation Type: Once when quote is created Formula: 24	FALSE	FALSE
Account ID	Account Id	Free Form	Additional Info	7		FALSE	FALSE
Opportunity Id	Opportunity Id	Free Form	Additional Info	8		FALSE	FALSE
Requester Email	Requester Email	Free Form	Additional Info	9	Calculation Type: Once when quote is created <*CTX(Visitor.Email)*>	FALSE	FALSE
Additional Comments	Additional Comments	Long Text	Additional Info	10		FALSE	FALSE

c) Configure Quote Visibility

- Define the following quote visibility rules.
To know how to add quote visibility rules, see [Quote Visibility](#).

Group
Sales
Sales Management
Partner

d) Configure Partner Functions

Ensure that the following partner functions are present.
To know more, see [Create Partner Functions in SAP CPQ](#).

Name	Key	Default	Can be used only once on quote
Sold-to party	SP	Yes	Yes
Ship-to party	SH	No	Yes
Bill-to party	BP	No	Yes
Payer	PY	No	Yes

3) Configuring workflow

a) Create Workflow Status

- i) Navigate to **Setup > Workflow/Approval > Statuses**.
- ii) Create the following workflow statuses.
- iii) Ensure that you share the Status ID with the ICI team post creation of statuses.
To know more, see [Statuses](#).

Status Name	Rank	Default Status	is Editable	Status of Locked Cart Revisions	Status ID
Contract Created	100	NO	Yes	NO	<Auto-generated>
Ready for Contracting	100	NO	Yes	NO	<Auto-generated>
Ready for Ordering	100	NO	Yes	NO	<Auto-generated>

b) Edit Workflow Action

- i) Navigate to **Setup > Workflow/Approval > Actions** from the left navigation in SAP CPQ.
- ii) Search for **Reprice** action and click on edit icon.
- iii) Uncheck **Primary Action** checkbox and click **Save**.
To know more, see [Actions](#).

c) Configure Workflow- My Quotes tab

- i) Navigate to **Setup > Workflow/Approval > Workflow**.
- ii) Click on the **My Quotes** tab and set the following status transitions, actions, and conditions.
To know how to set workflow actions, see [Workflow](#).

Start Status	End Status	Action, Condition
<Preferred start status> For example, Preparing	Ready for Contracting	Change Status Add Condition: [NOT](<*CTX(Quote.DiscountExceeded)*>)

Start Status	End Status	Action, Condition
Approved	Ready for Contracting	Change Status
Contract Created	Contract Created	View
Contract Created	Ready for Ordering	Change Status Add Condition: [EQ](<* UserId *>,201)
Contract Created	Cancelled	Change Status
Ready for Contracting	Contract Created	Change Status Add Condition: [EQ](<* UserId *>,201)
Ready for Contracting	Ready for Contracting	Edit
		External Reprice
		Reprice
		View
Ready for Contracting	Cancelled	Change Status
Ready for Ordering	Open	Change Status
Ready for Ordering	Order Confirmation Pending	Place Order
Ready for Ordering	Ready for Ordering	Edit
		External Reprice
		View

d) Configure Workflow- Waiting for Approval tab

- i) Navigate to **Setup > Workflow/Approval > Workflow**.
- ii) Click on the **Waiting for Approval** tab and set the following status transitions, actions, and conditions.

Start Status	End Status	Action, Condition
Ready for Contracting	Ready for Contracting	View
Ready for Ordering	Ready for Ordering	View

e) Configure Workflow- Other Quotes

- i) Navigate to **Setup > Workflow/Approval > Workflow**.
- ii) Click on the **Other Quotes** tab and set the following status transitions, actions, and conditions.

To know how to set workflow actions, see [Workflow](#).

Start Status	End Status	Action, Condition
Approved	Ready for Contracting	Change Status
Contract Created	Contract Created	View
Contract Created	Ready for Ordering	Change Status Condition: [EQ](<* UserId *>,201)

Start Status	End Status	Action, Condition
Ready for Contracting	Contract Created	Change Status Condition: [EQ](<* UserId *,201)
Ready for Contracting	Ready for Contracting	Edit
		Reprice
		View
Ready for Ordering	Order Confirmation Pending	Place Order
Ready for Ordering	Ready for Ordering	Edit
		View

You can set item actions, workflow permissions, and approval rules based on your requirements. To know more, see [Workflow-Approvals](#).

4) Configuring custom field permissions

- i. Navigate to **Setup > Quotes > Custom Field**.
- ii. Edit **Account ID** field.
- iii. Click on **Permissions** tab and use the following table to set field permissions. To know more, see [Quote Custom Fields](#).

All permissions	Default (for New User Type)	Sales	Sales Management
Order Placed	Read-Only	Read-Only	Read-Only
Contract Created	Read-Only	Read-Only	Read-Only
Ready for Contracting	Read-Only	Read-Only	Read-Only
Ready for Ordering	Read-Only	Read-Only	Read-Only
Cancelled	Read-Only	Read-Only	Read-Only

- iv. Edit **Additional Comments** custom field and set the following permissions:

All permissions	Default (for New User Type)	Sales	Sales Management
Order Placed	Editable	Editable	Editable
Contract Created	Editable	Editable	Editable
Ready for Contracting	Read-Only	Read-Only	Read-Only
Ready for Ordering	Read-Only	Read-Only	Read-Only
Cancelled	Read-Only	Read-Only	Read-Only

- v. Set the following permissions for **Contract Term (Months)**, **Opportunity ID**, **Opportunity/Quote Name**, **Requester Email**, and **Terms** custom fields:

All permissions	Default (for New User Type)	Sales	Sales Management
Order Placed	Read-Only	Read-Only	Read-Only

All permissions	Default (for New User Type)	Sales	Sales Management
Contract Created	Read-Only	Read-Only	Read-Only
Ready for Contracting	Read-Only	Read-Only	Read-Only
Ready for Ordering	Read-Only	Read-Only	Read-Only
Cancelled	Read-Only	Read-Only	Read-Only

vi. Set the following permissions for **Contract Link** field:

All permissions	Default (for New User Type)	Sales	Sales Management
Order Placed	Read-Only	Read-Only	Read-Only
Preparing	Editable	Read-Only	Read-Only
Contract Created	Read-Only	Read-Only	Read-Only
Ready for Contracting	Editable	Editable	Editable
Ready for Ordering	Read-Only	Read-Only	Read-Only
Cancelled	Editable	Editable	Read-Only

vii. Set the following permissions for **Contract Number** field:

All permissions	Default (for New User Type)	Sales	Sales Management
Order Placed	Read-Only	Read-Only	Read-Only
Preparing	Editable	Read-Only	Read-Only
Contract Created	Read-Only	Read-Only	Read-Only
Ready for Contracting	Editable	Editable	Editable
Ready for Ordering	Read-Only	Read-Only	Read-Only
Cancelled	Editable	Editable	Read-Only
Order Created with Errors	Editable	Read-Only	Read-Only

5) Adding global scripts

Navigate to **Setup > Develop > Global Scripts** and add the following global scripts. To know more, see [Create a Script](#).

Script

```
context.Quote.GetCustomField('Contract Number').Value = Param.ContractNumber
context.Quote.GetCustomField('Contract Link').Value = Param.ContractLink
```

ICI Platform Configuration

This topic provides information about the ICI platform configurations required for the integration.

SAP CPQ Endpoint information in AKV (Azure Key Vault)

All the API endpoint details with the authentication information is stored in Azure Key Vault (AKV) in json format as shown below.

Secret name is “SAPCXAapiIntegrationConnections”. All the API endpoint details with the authentication information are stored in Azure Key Vault (AKV) in JSON format as shown below.

Refer to the `CPQ_API_Json.json` file in the `SAP CPQ Reference Files.zip` folder

SAP CPQ-ICI Attribute mapping Configuration

This configuration allows users to map the different attributes of SAP CPQ Quote to attributes in ICI.

Attributes required in ICI Agreement Object:

Attribute Name	Technical Name	Data Type	Description	Possible Values	Required
Quote ID	ICMQuoteId	String	Quote ID	SAPCX	Yes
Phone Number	ICMPhoneNumber	String	Phone Number	NA	Yes
Requester Name	ICMRequesterName	String	Requester Name	NA	Yes
Requester Email	ICMRequesterEmail	String	Requester Email	NA	Yes
Client Entity Name	ICMRequesterPhone	String	Requester Phone	NA	Yes
ICI Attribute Name	ICMAgreementLinkUrl	String	Agreement Link URL	NA	Yes
Total Net Value	ICMTotalNetValue	Currency	Total Net Value	NA	Yes
Recurring Total Amount	ICMMRCTotalAmount	Currency	Recurring Total Amount	NA	Yes
Effective Date	ICMEffectiveDate	Date	Effective Date	NA	Yes
Expiry Date	ICMExpiryDate	Date	Expiry Date	NA	Yes
Client Attribute Name	ICMContractValue	String	Currency	NA	Yes
Data Flow Type	ICMContractTerm	Choice	Number	NA	Yes

Attributes required in Extended User Entity Masterdata Object:

Attribute Name	Technical Name	Data Type	Description	Possible Values	Required
Phone Number	ICMPhoneNumber	String	Phone Number	NA	Yes
Requester Name	ICMRequesterName	String	Requester Name	NA	Yes
Requester Email	ICMRequesterEmail	String	Requester Email	NA	Yes

MasterData Mappings

In ICI, use the Masterdata form to define the mappings. Every mapping is stored as a form record. Users can modify the mapping if necessary.

SAP CPQ-ICI Attribute mapping Configuration:

This configuration allows users to map the different attributes of SAP CPQ and ICI entity.

Contract Type: Client App Entity Mapping

Purpose: This masterdata is used to map the ICI attributes with Client attributes.

For details, refer to the **ICMClientAppEntityMapping.Xlsx** file in the **SAP CPQ Reference Files.zip** folder.

Metadata Attribute Name	Technical Name	Data Type	Description	Possible Values	Required
Client Name	ICMClientName	Choice	Client Name of the Integrated System	SAPCX	Yes
Masterdata Code	ICMAgreementCode	Auto	Masterdata Code	NA	Yes
Name	Name	String	Name of the master data entry (free text)	NA	Yes
ICI Entity Name	ICMICMEntityName	String	Technical name of ICM Entity	NA	Yes
Client Entity Name	ICMClientEntityName	String	API Name of the SAPCXAPI setup in the integration Adapter.	NA	Yes
ICI Attribute Name	ICMICMAttributeName	String	ICM attribute name	NA	Yes
Client Attribute Name	ICMClientAttributeName	String	Client Attribute Name	NA	Yes
Data Flow Type	ICMDataFlowType	Choice	Data flow type	- Client to ICM - ICM to Client - Both	No

Contract Type: Client App Cross Reference

Purpose: This masterdata is used to enable the API for a particular event of the entity.

For details, refer to the **ICMClientAppCrossReference.Xlsx** file in the **SAP CPQ Reference Files.zip** folder.

Metadata Attribute Name	Technical Name	Data Type	Description	Possible Values	Required
Client Name	ICMClientName	Choice	Client Name of the Integrated System	Ariba Salesforce MSCRM SCIM Generic Integration API Integration Workday Fieldglass SAPCX	Yes
Masterdata Code	ICMAgreementCode	Auto	Masterdata Code	NA	Yes
Name	Name	String	Name of the master data entry	NA	Yes

Metadata Attribute Name	Technical Name	Data Type	Description	Possible Values	Required
			(free text)		
ICI Entity Name	ICMICMEntityName	String	Technical name of ICM Entity	NA	Yes
Client Entity Name	ICMClientEntityName	String	API Name of the SAPCX API setup in the integration Adapter.	NA	Yes
ICI Reference Key	ICMICMReferenceKey	String	ICI Reference Key	NA	No
Client Reference key	ICMClientReferencekey	String	Client Attribute Name	NA	No
API Provider	ICMClientDataProvider	Choice	API Provider Name	Ariba S4HANA Oracle Fieldglass SAPCX	Yes
Root Element	ICMClientRootElement	String	Root Element	Not applicable for SAPCX	No
Task Category	ICMTaskCategory	Choice	Task Category	Event Based Scheduled	Yes
Cron Expression	ICMCronExpression	String	Cron Expression	Not applicable for SAPCX	No
AKV Connection Name	ICMAKVConnectionName	String	AKV Connection Name	NA	Yes
Date Time Format	ICMDateTimeFormat	String	Date Time Format	NA	Yes
External Contract Creation Event	ICMExternalContractCreationEvent	Choice	External Contract Creation Event	Created Updated Approved Published Executed Terminated Expired AmendmentCreated AmendmentUpdated AmendmentPublished AmendmentApproved	No
External Amendment Creation Event	ICMExternalAmendmentCreationEvent	Choice	External Amendment Creation Event	AmendmentCreated AmendmentAmendmentUpdated AmendmentPublished AmendmentApproved AmendmentExecuted Terminated	No
External Amendment Update Event	ICMExternalAmendmentUpdateEvent	Choice	External Amendment Update Event	AmendmentAmendmentUpdated AmendmentApproved AmendmentPublished AmendmentExecuted	No
External Contract Update Event	ICMExternalContractUpdateEvent	Choice	External Contract Update Event	Updated Approved Published Executed Terminated Expired	No

Metadata Attribute Name	Technical Name	Data Type	Description	Possible Values	Required
				AmendmentCreated AmendmentUpdated AmendmentPublished AmendmentApproved AgreementResetExpiry	
Is Association Record	ICMIsAssociationRecord	Boolean	Is Association Record	True/False	No
ICI Association Name	ICMICIAssociationName	String	ICI Association Name	NA	No
ICI Association Contract Type Name	ICMICIAssociationContractType	String	ICI Association Contract Type Name	NA	No
Action On Association	ICMActionOnAssociation	Choice	Action On Association	Create Update Delete	No

Contract Type: Client App Entity Filter Condition

Purpose: This masterdata is used to enable the API for a particular event of the entity. For details, refer to the **ICMClientAppEntityFilterCondition.Xlsx** file in the **SAP CPQ Reference Files.zip** folder.

Metadata Attribute Name	Technical Name	Data Type	Description	Possible Values	Required
Client Name	ICMClientName	Choice	Client Name of the Integrated System	SAPCX	Yes
Masterdata Code	ICMAgreementCode	Auto	Masterdata Code	NA	Yes
Name	Name	String	Name of the master data entry (free text)	NA	Yes
ICI Entity Name	ICMICMEntityName	String	Technical name of ICM Entity	NA	Yes
Client Entity Name	ICMClientEntityName	String	API Name of the Fieldglass API setup in the integration Adapter.	NA	Yes
Client Filter Name	ICMClientFilterName	String	Client Filter Name	NA	No
Client Filter Condition	ICMClientFilterCondition	String	Client Filter Condition	NA	No
Client Param Type	ICMClientParamType	Choice	Client Param Type	Query String Form Body Relative URL	No
Client Body Content Type	Client Body Content Type	Choice	Client Body Content Type	JSON XML	No
Is Encoded	ICMClientDatalsEncoded	Boolean	Is Encoded	- Client to ICM - ICM to Client - Both	No

Contract Type: Client App Integration Configuration

Purpose: This masterdata is used to enable the API for a particular event of the entity. For details, refer to the **ICMClientAppIntegrationConfiguration.Xlsx** file in the **SAP CPQ Reference Files.zip** folder.

Metadata Attribute Name	Technical Name	Data Type	Description	Possible Values	Required
Client Name	ICMClientName	Choice	Client Name of the Integrated System	SAPCX	Yes
Masterdata Code	ICMAgreementCode	Auto	Masterdata Code	NA	Yes
Name	Name	String	Name of the master data entry (free text)	NA	Yes
Notification Email To	ICMIntegrationNotificationEmailTo	String	Notification Email To	NA	No
Notification Email Cc	ICMIntegrationNotificationEmailCc	String	Notification Email Cc Integration Adapter.	NA	No
Notification Email Bcc	ICMIntegrationNotificationEmailBcc	String	Notification Email Bcc	NA	No
ICM Admin User	ICMIntegrationAdminUser	String	ICM Admin User	NA	No
ICI Agreement Name	ICMMasterAgreementLinkageAssociationName	String	ICI Agreement Name	NA	Yes
Auto Order Place in SAP CX	ICMAutoOrderPlaceinSAPCX	Boolean	Flag for Auto Order Place in SAP CX	NA	No
Change Status Action Id	ICMReadyForOrderActionId	String	Ready For Order Action ID	NA	Yes
Order Place Action Id	ICMOrderPlaceActionId	String	Order Place Action ID	NA	Yes
Ready For Ordering Status Id	ICMReadyForOrderingStatusId	String	Ready For Ordering Status ID	NA	Yes

Master Data Integration Configuration

Master data integration involves the following setup and configurations:

- Leverage Integration flow (iFlow) packages from SAP CPI to synchronize SAP S/4HANA master data to ICI.
- In SAP S/4HANA, master data sync can be setup in two ways. You can choose either of the following ways based on your requirement:
 - Event-based (create, update, delete) real time Sync
 - Scheduled batch sync (Incremental updates for date-time range)
- Map each attribute of the SAP S/4HANA master data for Business Partner and Product with the corresponding master data attributes in ICI.

Depending on customer implementation, mappings can be setup for specific attributes. A sample list of attributes is mentioned below:

- Business Partner Attributes - ID, Type (Organization, Person), Name, Address (Street Address, City, Region, Country, Zip code), Communication details (phone number, email, language)
- Product Attributes – ID, Type, Category, Name, Description, Unit of Measurement

For more information about the Integration flow (iFlow), see [ICI Integration with SAP CPQ and SAP S/4HANA Lead to Cash](#).