

ERP-290 System Interface - Create Currency Conversion ECC to Icertis

Status	Approved
Owner	RAI-ext, Praveen
Stakeholders	BAVISKAR-ext, Amit KUMAR-ext, Rajesh
Jira Request ID	 ERP-101 - Jira project doesn't exist or you don't have permission to view it.
Jira Development ID	 ERP-290 - Jira project doesn't exist or you don't have permission to view it.

High- Level Specification

Parameter	Value
Application System	Icertis
Business Process Reference	03.03.04.05. Manage Contract Master Data

Functional Overview

Syniti, the source system for currency conversion master data, will be integrated with Icertis to create and update currency exchange master data records in a custom Currency Exchange Master Data table within Icertis.

This integration will be executed via SAP CPI, which will invoke the Icertis Business API to perform bulk upsert operations.

The exchange rates maintained in Icertis will be used to convert local currency values into Euros in agreements.

Records will be created or updated daily in Icertis. The objective of this FS is to create Currency Exchange Masterdata in Icertis so that the currency exchange rates can be maintained.

Scope and Objectives

Functional Scope:

This document outlines the functional configuration required in Icertis to support the creation and maintenance of currency exchange master data sourced from Syniti.

Scope Includes:

1. Creation and update of currency exchange master data in Icertis.
2. Daily update of exchange rates.

Functional Objectives:

1. **Ensure Accurate Currency Conversion**
 - Maintain up-to-date exchange rates for converting local values to Euros in contracts.
2. **Maintain Data Integrity**
 - Prevent outdated or duplicate exchange rate records.
3. **Enable Auditability and Traceability**

- Ensure all exchange rate records are timestamped and sourced for compliance and audit purposes. In Icertis when the masterdata record is created, system automatically generates the Modified Date and time stamp as displayed below

Entity Name Currency Exchange Rate X Clear All

Entity Name	Masterdat...	Agreement Code	Created Date	Modified Date
Currency Exchange R...	CAD:EUR	ICMCurrencyExchangeRate_1	10/28/2025	10/28/2025

4. Minimize Manual Intervention

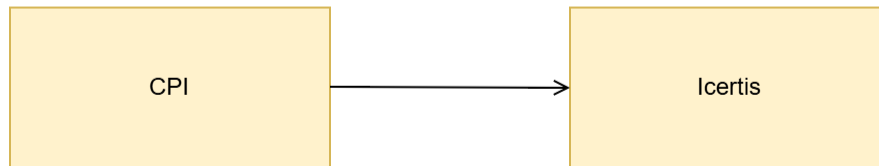
- Automate the daily currency exchange masterdata update process to reduce errors and improve efficiency.

Out of Scope:

1. Deletion of any existing currency exchange masterdata record
2. De-activating any existing currency exchange masterdata record

Process Flow Diagram

Icertis Business API - Bulk Create/Update Currency Conversion Masterdata



Step	Description	Comment
1	CPI will call the Icertis Currency API daily, upon receiving data from Syniti, to create or update the currency exchange master data. It will send only the Source-to-EUR direct rates and update the existing currency exchange master data records accordingly	CPI to Icertis

Assumptions

- Not Applicable.

Dependencies

- Not Applicable.

Security, Integrity and Controls

- **Authentication:** Access to Create Masterdata Contract Type (CT)
- A new security group to be created for the Integration Users with manage access to Currency Exchange Master CT. The new security group title will be "Integration User"



Different Integration Users

We will be using different users for CPI integration, IAG integration, Ariba Integration. All the users will be placed under Integration User security group

Configuration Requirements

- Configure Currency Exchange Masterdata CT in Icertis with below details:

Parent	Field	Description	Mandatory (Y/N)	Data Type

ICMCurrencyExchangeRate	SourceCurrency	Currency code of the local currency	Y	String
ICMCurrencyExchangeRate	TargetCurrency	Currency code of the target currency (EUR)	Y	String
ICMCurrencyExchangeRate	Rate	Conversion rate from source to target	Y	Number - Decimal upto 4 points. Eg: 01.8228 01.0003 01.3001
ICMCurrencyExchangeRate	Unique Name	Name Field	Y	String

Following Technical Configuration is required to enable integration between CPI & Icertis using ICI Business API

- **OAuth Setup**
 - **Microsoft Identity Platform**
 - **Register application** in Microsoft Identity Platform
 - Capture the following details from IDP

Information	Description
Application (client) ID	Application Id for the App created for accessing ICI API's
Directory (tenant) ID	Tenant Id for the App created for accessing ICI API's
Object ID	Object Id for the App created for accessing ICI API's
OpenID Connect metadata document	Metadata document URL for the App created for accessing ICI API's

- **Redirect URI** to be configured - <https://syensqo-dev.icertis.com>
 - **Implicit Grant:** Access Tokens
- **Icertis Side Configuration**
 - Configure **new masterdata CT** in Icertis to store currency exchange rates
 - Create an **Integration User** (CPI Integration User) in Icertis with Admin access.
 - Create Security Group "Integration User" with Manage access to Currency Exchange Rate CT.
 - Configure the following **OAuth keys in Icertis json** file:

Key	Values
Core.API.OAuth.STSDiscoveryEndpoint	https://login.microsoftonline.com/{Directory (tenant) ID}/v2.0/.well-known/openid-configuration
Core.API.OAuth.ValidAudiences	api://{Client ID}
Core.API.OAuth.ValidIssuer	https://sts.windows.net/{Directory (tenant) ID}/
Core.API.OAuth.ExternalUpnClaimUri	http://schemas.microsoft.com/identity/claims/objectidentifier

Special Requirements

- **Localization:** Ensure currency formats comply with regional standards (e.g., decimal separators).

Design Rationale

Create a currency exchange rate masterdata CT in Icertis which will store the currency exchange rates from Syniti.

Data Structure

The following fields will be configured in Icertis to provide the required data structure of the interface:

Parent	Field	Description	Mandatory (Y/N)	Data Type
ICMCurrencyExchangeRate	SourceCurrency	Currency code of the local currency	Y	String
ICMCurrencyExchangeRate	TargetCurrency	Currency code of the target currency (EUR)	Y	String
ICMCurrencyExchangeRate	Rate	Conversion rate from source to target	Y	Number - Decimal upto 4 points. Eg: 01.8228

				01.0003
				01.3001
ICMCurrencyExchangeRate	Unique Name	Name Field	Y	String

API Fields Mapping:

Field Name	Description	Value
ContractTypeName	Name of the Masterdata	Static value - ICMCurrencyConversion
NextState		Always Blank
RequestIdentifier	Use "RequestIdentifier" to uniquely identify each item on the result endpoint's response. This can be used to track the status of each job item of a bulk Job	Auto Increment (Eg: 1,2,3)
EndpointVersion	"EndpointVersion" don't have any default value set. Ensure to set it to a number. The recommended value is 3 for best error handling and reporting. Supported values are 1, 2, and 3. 1 – Not recommended, 2 – Enables attribute validation, and 3 – Handles concurrency errors and enables attribute validation.	Static value - 3
UseExternalId		Static value - true
SysId	Unique technical identifier of the record	- Blank when creating the master data 32 characters when updating
ICMUniqueName	Concatenate FromCurrency and ToCurrency with ":" colon in the middle	Pass Unique Name of the Currency Pairs
ICMFromCurrency	Get the To-currency from ECC extract	FromCurrency (Eg: USD, CAD)
ICMAgreementCode	Unique masterdata code	
ICMToCurrency	Get the From currency from ECC extract	ToCurrency - Static Value EUR
ICMRate	-Replace comma with period (.). -Remove the forward slash / (-1)	Rate (1.07)
TemplateSelection		Static Value: none
EndPointVersion		Static Value: 1

Calculation and Validation

Not Applicable

Processing Logic

- The integration job runs daily.
- Currency Conversion rates are pushed from a [system interface](#) to Icertis via CPI.

Delta or Full Load Requirements

- **Full Load:**
 - The interface always pushes the **complete set of exchange rates** for all supported currencies, for a given date. This does not process historical data.
 - No delta tracking is required since the data is refreshed daily.

Interface Alert & Monitoring

- Not Applicable as this FS objective is to create a masterdata CT in Icertis

Language Requirements

- No multilingual support required for exchange rate data.
- All fields are numeric or standard ISO codes.

User Interface Requirements

Not Applicable

Volumetrics

- See the appendix for the list of Currencies which needs to be converted to Euros

Performance Consideration

Scheduling and Execution Window

- The integration job should be scheduled during **off-peak hours** daily to avoid contention with other system processes.
- The priority of the jobs will be decided based on the other jobs mentioned in the list [DD-TEC-130 R2 Batch Jobs Register and Schedule](#)

Error Handling

Not Applicable

Testing

Test Conditions and Expected Results

ID	Condition	Expected Results
TC1	For the initial load, create new exchange rate masterdata. Valid exchange rate data for Source to EUR currency pairs is pushed from CPI to Icertis	Records are successfully created in Icertis.
TC2	For subsequent loads, update the existing masterdata records from CPI to Icertis	All records updated successfully; API response confirms success.
TC3	Missing mandatory field in the data load sent from CPI to Icertis	Status of batch job should be rejected; error logged; An email notification alert is triggered in CPI

Test Considerations/Dependencies

Not Applicable

Other Information

Not Applicable

Development Details

Package

Package Name	Parent Package

Other Development Objects

Object Type	Object Name	Purpose/High Level Logic	Design Rationale Reference

Appendix

Sample payload:

```
{
  "Messages": null,
  "Data": {
    "ContractTypeName": "ICMCurrencyExchangeRate",
    "JobItems": [
      {
        "NextState": "",
        "RequestIdentifier": 1,
        "EndpointVersion": null,
        "UseExternalId": true,
        "SysId": "5449222c-3d3a-4044-baae-a17165381ed1",
        "RequestBody": {
          "ICMUniqueName": "AUD:EUR",
          "Name": "Masterdata_1_created",
          "ICMFromCurrency": "AUD",
          "ICMAgreementCode": "ICMCurrencyExchangeRate_19",
          "ICMToCurrency": "EUR",
          "ICMRate": "0.59",
```

```
    }
  },
  "TemplateSelection": "none",
  "EndPointVersion": 3
},
{
  "NextState": "",
  "RequestIdentifier": 2,
  "EndpointVersion": null,
  "UseExternalId": false,
  "SysId": "96c08d87-3c89-4b7d-b075-e360bb41db07",
  "RequestBody": {
    "ICMUniqueName": "INR:EUR",
    "Name": "Masterdata_2_created",
    "ICMFromCurrency": "INR",
    "ICMAgreementCode": "ICMCurrencyExchangeRate_20",
    "ICMToCurrency": "EUR",
    "ICMRate": "0.0099",
  }
},
  "TemplateSelection": "none",
  "EndPointVersion": 3
}
]
},
"HasMoreData": false,
"PagingData": null
}
```



See also

File	Modified
File ~CPI to Icertis Currency Conversion.tmp draw.io Draft	Nov 03, 2025 by RAI-ext, Praveen
File CPI to Icertis Currency Conversion draw.io diagram	Nov 03, 2025 by RAI-ext, Praveen
Microsoft Excel Spreadsheet Currency Conversion for Icertis.xlsx	Oct 29, 2025 by RAI-ext, Praveen

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Change log

Version	Published	Changed By	Comment
CURRENT (v. 34)	Nov 19, 2025 13:36	WENNINGER-ext, Sascha	
v. 33	Nov 17, 2025 08:58	WENNINGER-ext, Sascha	
v. 32	Nov 12, 2025 14:53	MCARTHUR-ext, Richard	
v. 31	Nov 06, 2025 02:59	EPASINGHE-ext, Kapila	
v. 30	Nov 04, 2025 12:35	WENNINGER-ext, Sascha	
v. 29	Nov 04, 2025 12:28	WENNINGER-ext, Sascha	
v. 28	Nov 04, 2025 11:23	RAI-ext, Praveen	
v. 27	Nov 04, 2025 11:19	RAI-ext, Praveen	
v. 26	Nov 03, 2025 07:28	RAI-ext, Praveen	
v. 25	Nov 03, 2025 07:06	RAI-ext, Praveen	

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Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

From Nov 04,	Actor	Type	Activity	Version
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2025 to Nov 19,
2025

Approved	EPASINGHE-ext, Kapila , MCARTHUR-ext, Richard and WENNINGER-ext, Sascha	Edit	multiple updates from  EPASINGHE-ext, Kapila ,  MCARTHUR-ext, Richard and WENNINGER-ext, Sascha
	WENNINGER-ext, Sascha	State	changed state to Approved at 11:36 am v30
Edited following Approval	WENNINGER-ext, Sascha	State	gave <i>Minor change</i> approval at 11:36 am
		State	changed state to Edited following Approval at 11:35 am v30
Approved	WENNINGER-ext, Sascha	State	changed state to Approved at 11:35 am v29
Edited following Approval	WENNINGER-ext, Sascha	State	gave <i>Minor change</i> approval at 11:35 am
		State	changed state to Edited following Approval at 11:28 am v29