Extensibility for Billing Document Printout

SAP S/4HANA Cloud

Table of Contents

1 Provide Service Contract Dates on Billing Document Output

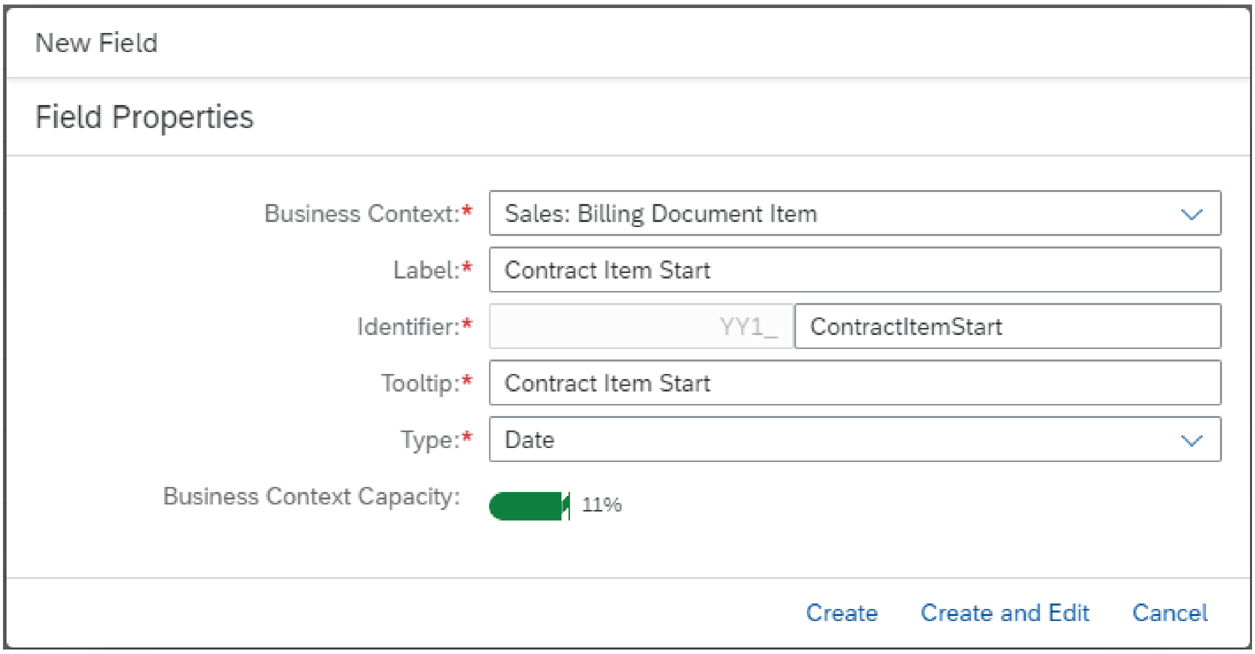
1.1 Aim

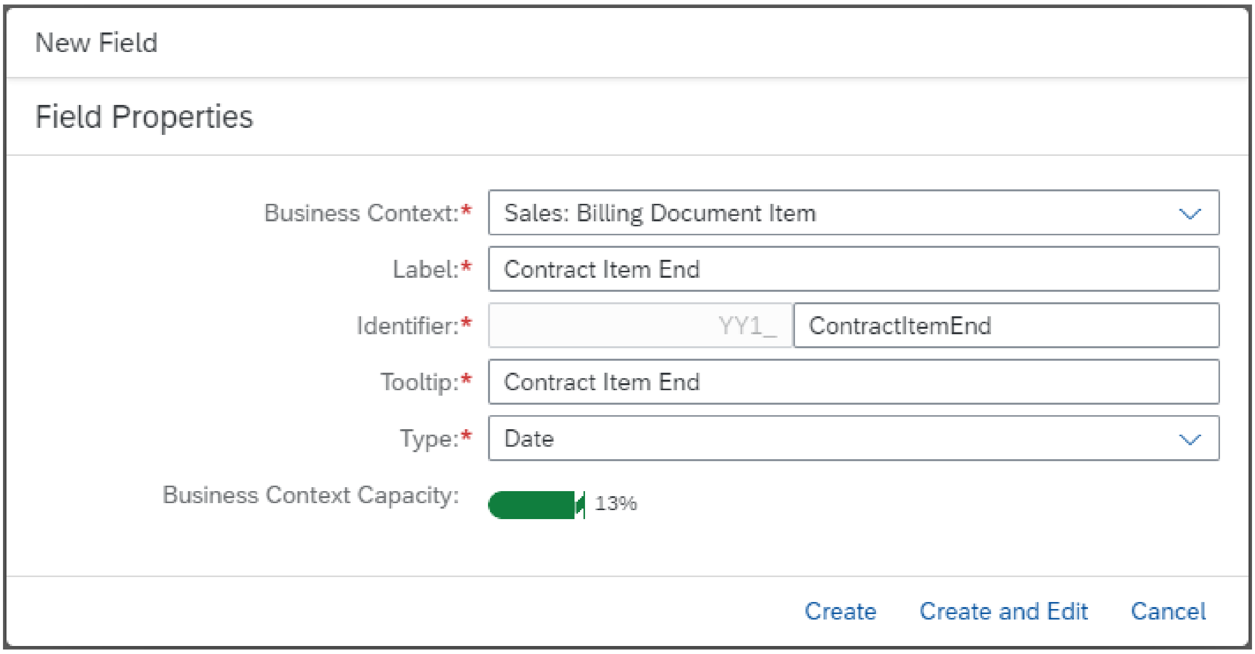
Make service contract dates (item start/end date and settlement start/end date) visible on the form template for billing documents.

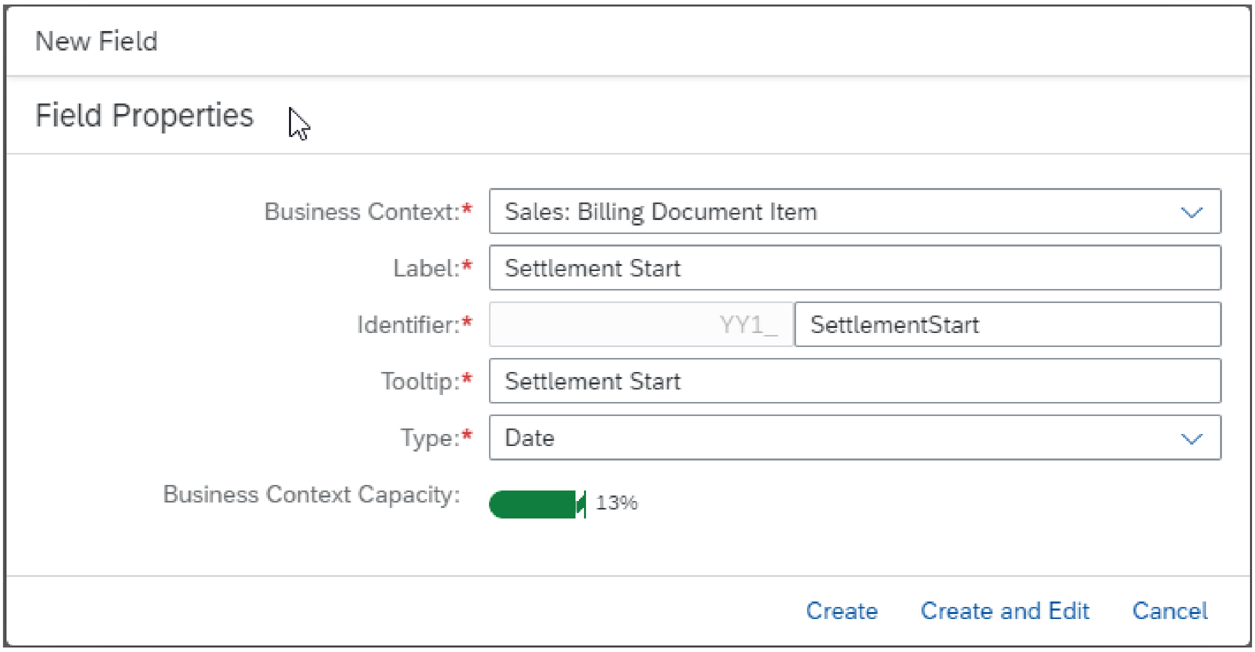
1.2 Steps to do

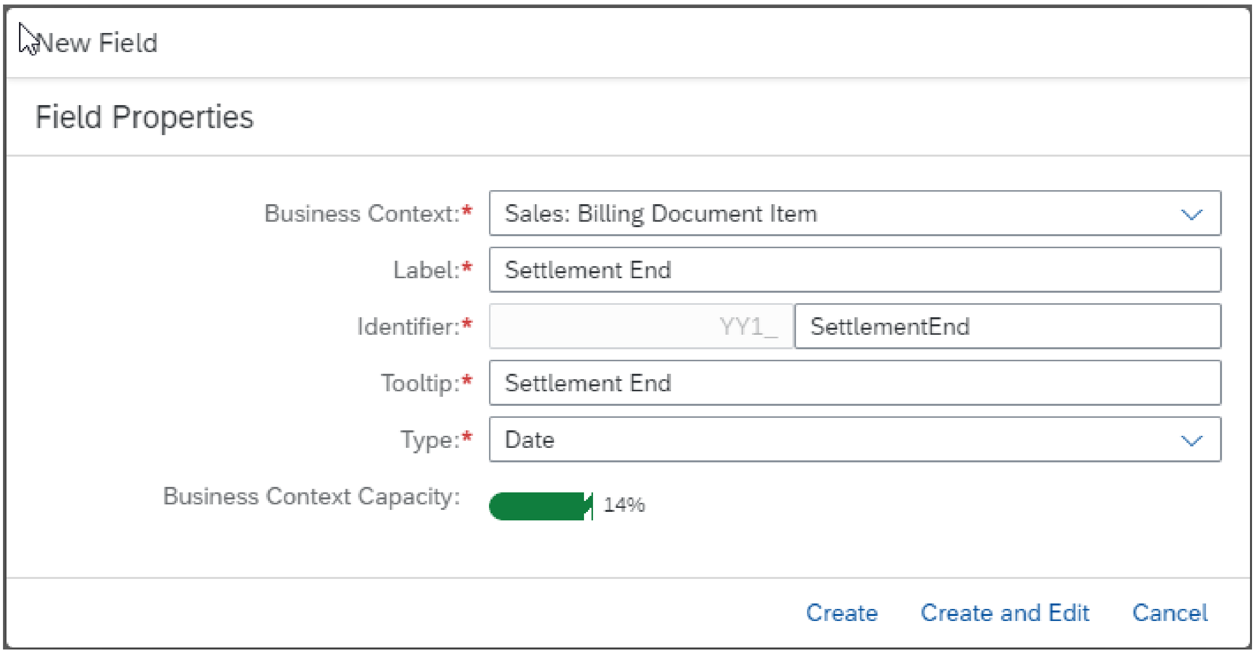
1.2.1 Creation of four extension fields at Billing Document

Use the app *Custom Fields and Logic* and tab *Custom Field*, in the Extensibility business catalog. Create four new custom fields in *Business Context* Billing Document Item with an appropriate type.




New Field
Field Properties
Business Context:*
Sales: Billing Document Item
Label:*
Contract Item End
Identifier:*
YY1_
ContractItemEnd
Tooltip:*
Contract Item End
Type:*
Date
Business Context Capacity:
13%
Create
Create and Edit
Cancel


New Field
Field Properties
Business Context:*
Sales: Billing Document Item
Label:*
Settlement Start
Identifier:*
YY1_
SettlementStart
Tooltip:*
Settlement Start
Type:*
Date
Business Context Capacity:
13%
Create
Create and Edit
Cancel

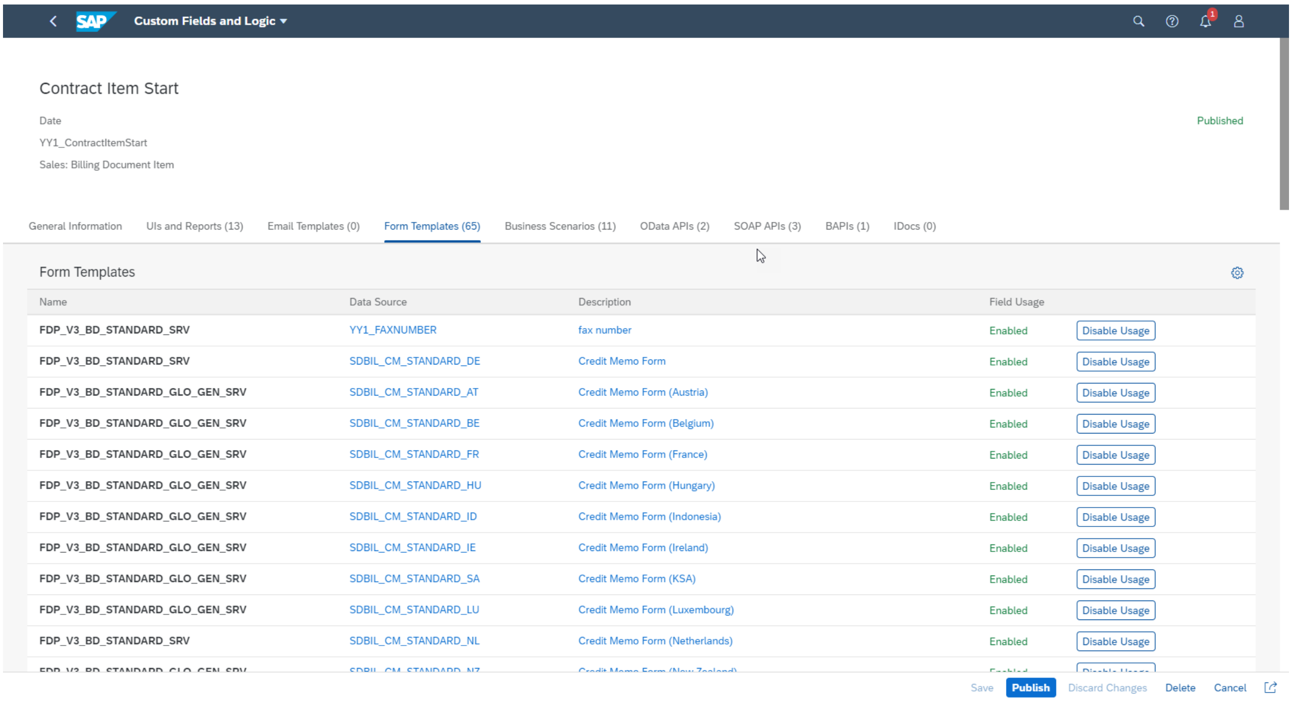


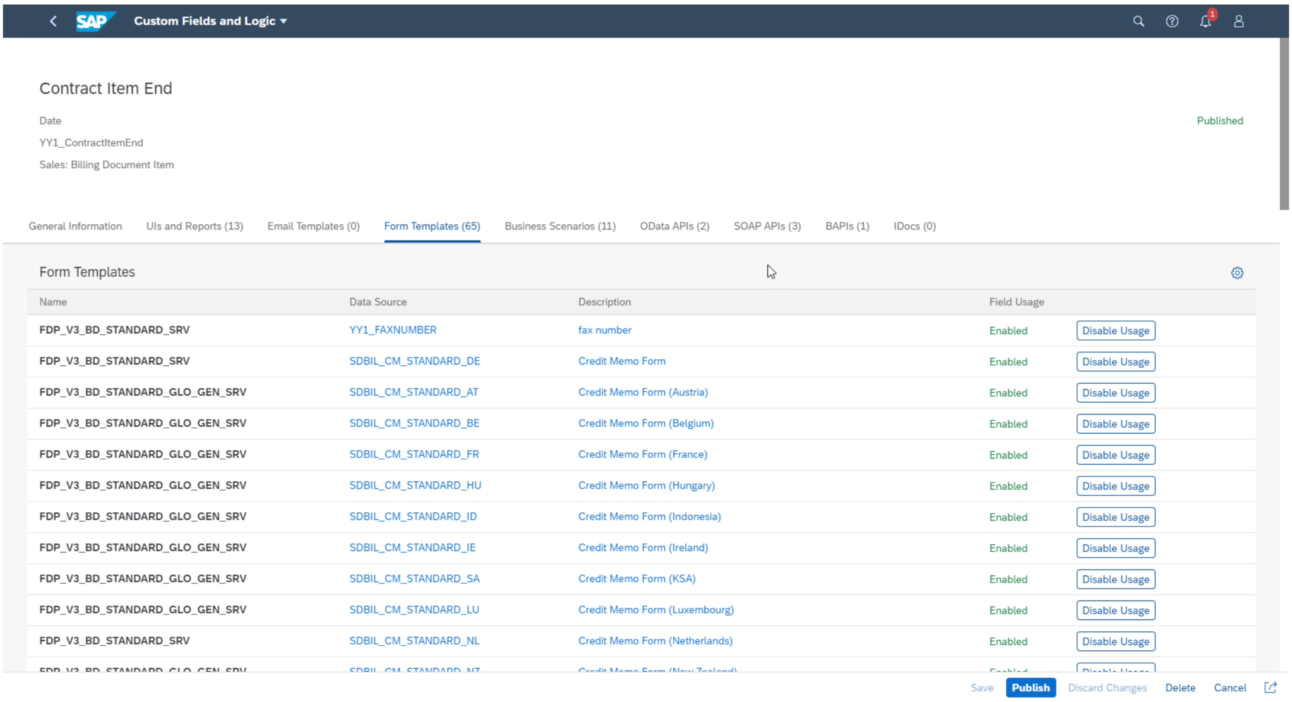
These four custom fields are intended to store the Contract Item Start/End and Settlement Start/End in the billing document.

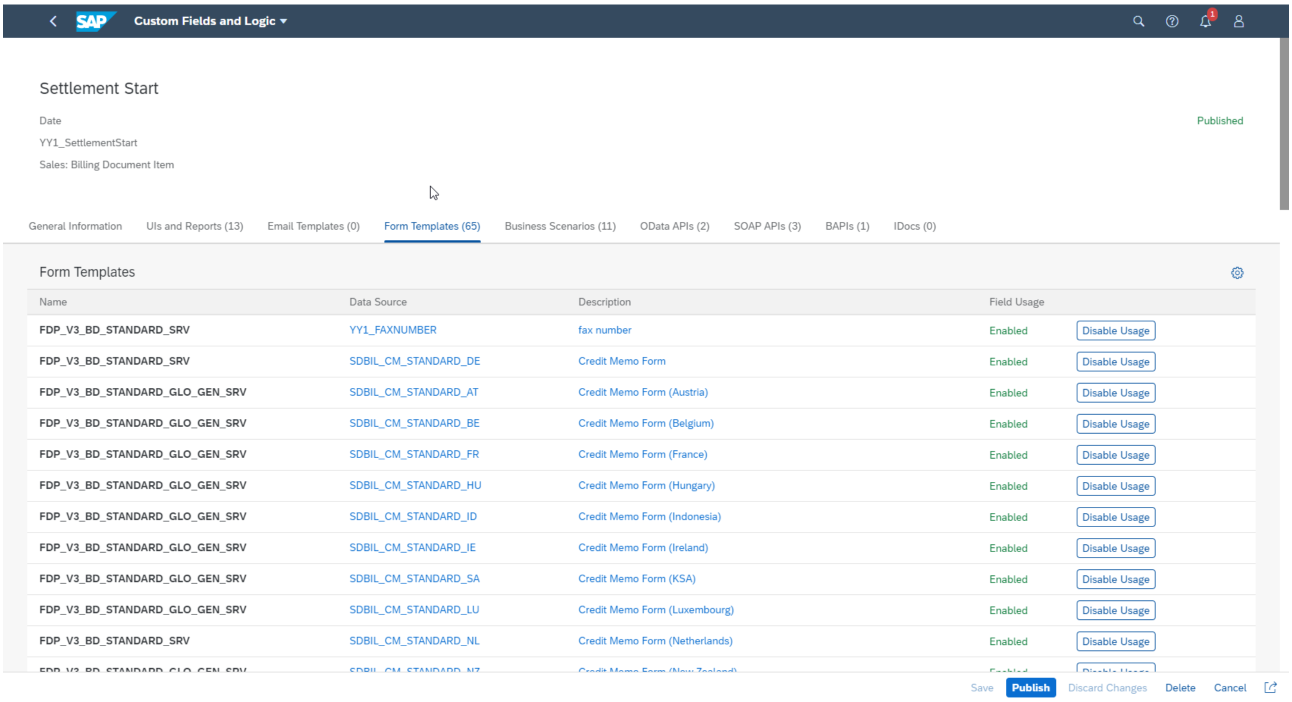
Remark: The custom fields will only be filled when the output request is triggered.

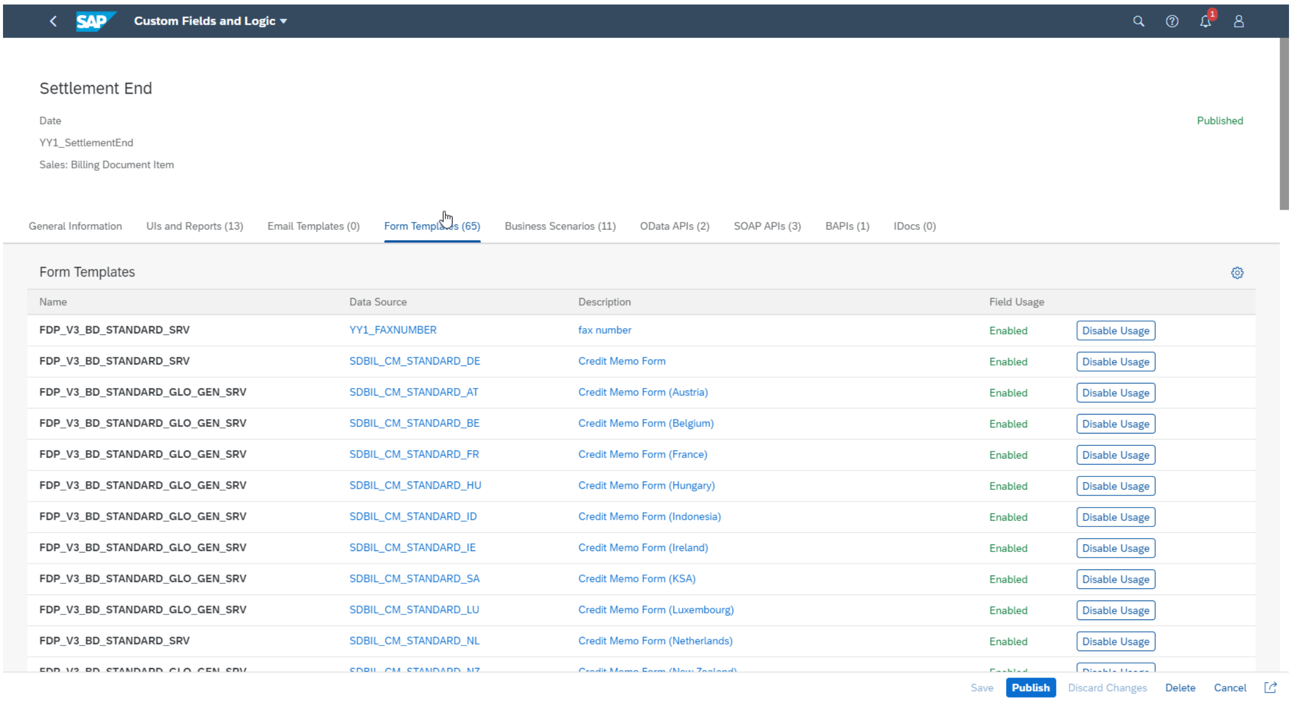
1.2.2 Extend the Form Template with the Extension Field

Within the same App *Custom Fields and Logic* and tab *Custom Field* enable the Form Templates for the Billing Document with the extension fields.


Custom Fields and Logic
Contract Item Start
Date
YY1_ContractItemStart
Sales: Billing Document Item
Published
General Information
UIs and Reports (13)
Email Templates (0)
Form Templates (65)
Business Scenarios (11)
OData APIs (2)
SOAP APIs (3)
BAPIs (1)
IDocs (0)
Form Templates
Name | Data Source | Description | Field Usage
FDP_V3_BD_STANDARD_SRV | YY1_FAXNUMBER | fax number | Enabled | Disable Usage
FDP_V3_BD_STANDARD_SRV | SDBIL_CM_STANDARD_DE | Credit Memo Form | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_AT | Credit Memo Form (Austria) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_BE | Credit Memo Form (Belgium) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_FR | Credit Memo Form (France) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_HU | Credit Memo Form (Hungary) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_ID | Credit Memo Form (Indonesia) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_IE | Credit Memo Form (Ireland) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_SA | Credit Memo Form (KSA) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_LU | Credit Memo Form (Luxembourg) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_SRV | SDBIL_CM_STANDARD_NL | Credit Memo Form (Netherlands) | Enabled | Disable Usage
Save
Publish
Discard Changes
Delete
Cancel


Custom Fields and Logic
Contract Item End
Date
YY1_ContractItemEnd
Sales: Billing Document Item
Published
General Information
UIs and Reports (13)
Email Templates (0)
Form Templates (65)
Business Scenarios (11)
OData APIs (2)
SOAP APIs (3)
BAPIs (1)
IDocs (0)
Form Templates
Name | Data Source | Description | Field Usage
FDP_V3_BD_STANDARD_SRV | YY1_FAXNUMBER | fax number | Enabled | Disable Usage
FDP_V3_BD_STANDARD_SRV | SDBIL_CM_STANDARD_DE | Credit Memo Form | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_AT | Credit Memo Form (Austria) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_BE | Credit Memo Form (Belgium) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_FR | Credit Memo Form (France) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_HU | Credit Memo Form (Hungary) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_ID | Credit Memo Form (Indonesia) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_IE | Credit Memo Form (Ireland) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_SA | Credit Memo Form (KSA) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_GLO_GEN_SRV | SDBIL_CM_STANDARD_LU | Credit Memo Form (Luxembourg) | Enabled | Disable Usage
FDP_V3_BD_STANDARD_SRV | SDBIL_CM_STANDARD_NL | Credit Memo Form (Netherlands) | Enabled | Disable Usage
Save
Publish
Discard Changes
Delete
Cancel



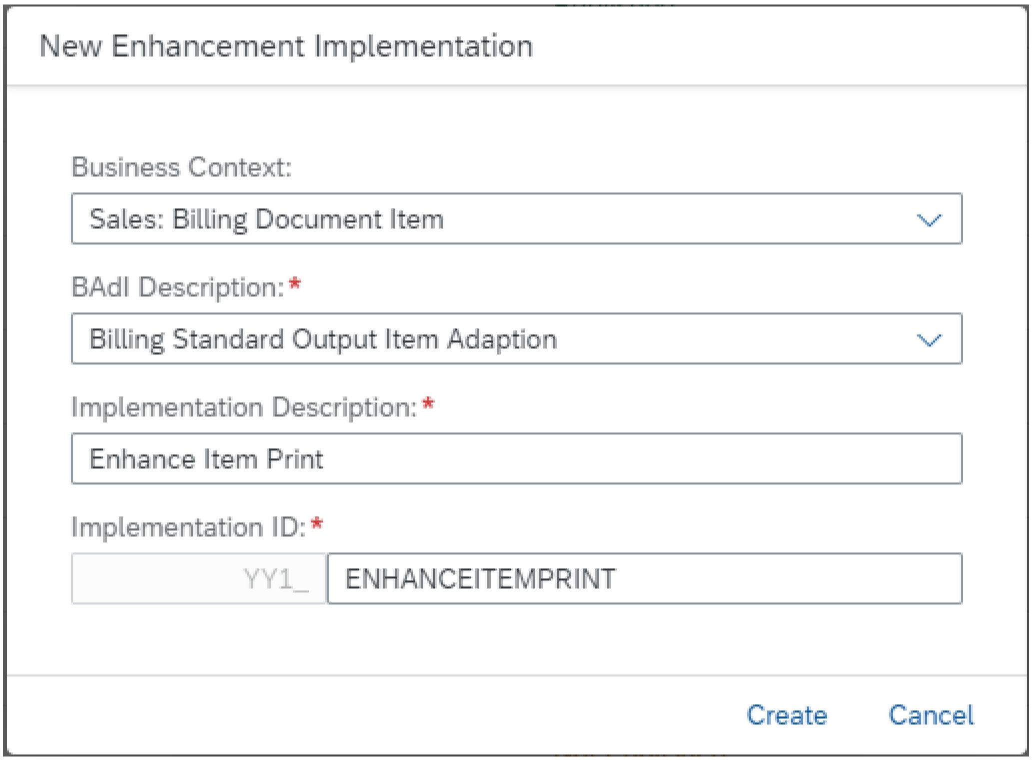


Save and publish the extension field.

1.2.3 Creation of an extension logic

Use app *Custom Fields and Logic*, tab Custom Logic, in the Extensibility business catalog. Create a new Enhancement Implementation in *Business Context* **`Sales: Billing Document`** with *Definition*

Description **`Billing Standard Output Item Adaption`** and an appropriate Implementation Description. In case the Enhancement Implementation already exist, this step can be skipped.



Add the following example code to the Draft:

```
*   This method can be used to set values for output to billing document item
extension fields.
*   Example:
*
*   First of all assign existing extension field values to output parameter:
   billingdocitem_ext_out = billingdocitem_ext_in.
   billingdocitemdescr_ext_out = billingdocitemdescr_ext_in.

*   This sample code is used to enhance customer logic for service contract
related billing document's output
*    Get service Contract Item Start/End date
    SELECT SINGLE servicecontritemstartdatetime,
                  servicecontritemenddatetime
        FROM I_ServiceDocumentItem
        WHERE ServiceObjectType    = 'BUS2000112'  "Service Contract
          AND ServiceDocument      = @billingdocitem-servicedocument
          AND ServiceDocumentItem = @billingdocitem-servicedocumentitem
        INTO ( @DATA(lv_contrstart),
               @DATA(lv_contraend) ).
    IF sy-subrc <> 0.
        RETURN.
    ENDIF.
```

```
*    Document category
    CASE billingdoc-sddocumentcategory.

*[Use Case 1]: Create released status service contract-> Generate BDR-> Create
Invoice-> output Invoice
*[Use Case 2]: Create released status service contract-> Generate BDR-> Create
Invoice->Cancel Invoice-> output cancel Invoice
    WHEN 'M' or 'N'.

*       Invoice number
        DATA(lv_billingdoc)      = billingdocitem-billingdocument.
        DATA(lv_billingdocitem)  = billingdocitem-billingdocumentitem.

*       BDR number
        IF billingdocitem-referencesddocumentcategory = 'EBDR'.
           DATA(lv_bdr)     = billingdocitem-referencesddocument.
           DATA(lv_bdritem) = billingdocitem-referencesddocumentitem.
        ELSE.
           RETURN.
       ENDIF.

    WHEN 'O'.   "Credit memo

*[Use Case 3]: Create released status service contract-> Generate BDR-> Create
Invoice->Create credit memo request reference invoice->Create credit memo
Invoice->output Invoice
        IF billingdocitem-referencesddocumentcategory = 'K'.

            DATA(lv_crm_rq)      = billingdocitem-referencesddocument.
            DATA(lv_crm_rq_item) = billingdocitem-referencesddocumentitem.

            "Get original invoice
            SELECT SINGLE referencesddocument,
                          referencesddocumentitem
                FROM I_CreditMemoRequestItem
               WHERE CreditMemoRequest           = @lv_crm_rq
                 AND CreditMemoRequestItem       = @lv_crm_rq_item
                INTO ( @lv_billingdoc,
                       @lv_billingdocitem ).
        ELSE.
*[Use Case 4]: Create released status service contract-> Generate BDR-> Create
Invoice->Create credit memo reference invoice-> output credit memo Invoice
            "Get original invoice
            lv_billingdoc     = billingdocitem-referencesddocument.
            lv_billingdocitem = billingdocitem-referencesddocumentitem.

        ENDIF.

        "get BDR
        SELECT SINGLE referencesddocument,
                      referencesddocumentitem
            FROM i_billingdocumentitembasic
           WHERE billingdocument             = @lv_billingdoc
             AND billingdocumentitem         = @lv_billingdocitem
             AND referencesddocumentcategory = 'EBDR'
            INTO ( @lv_bdr,
                   @lv_bdritem ).

    WHEN OTHERS.
```

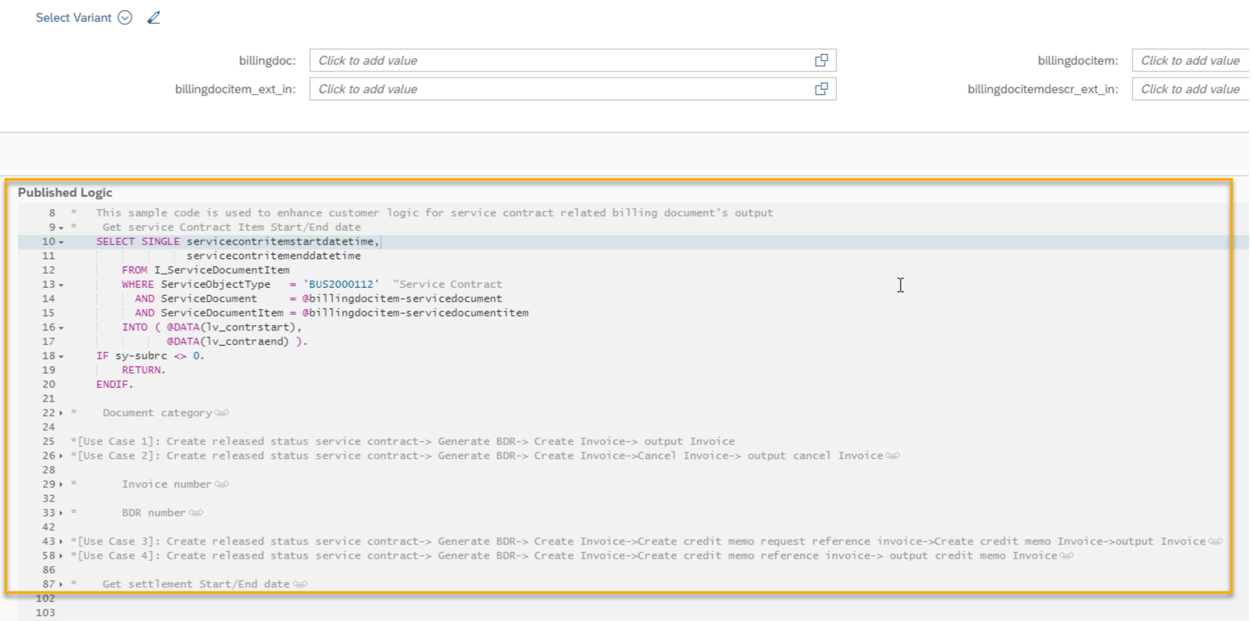
```
        RETURN.
    ENDCASE.

    "get Billing request line number
    SELECT SINGLE referencesddocumentitem
        FROM i_billingdocumentitembasic
        WHERE billingdocument             = @lv_bdr
          AND billingdocumentitem         = @lv_bdritem
          AND referencesddocumentcategory = 'CSCT'
         INTO @DATA(lv_record_no) .

*    Get settlement Start/End date
    SELECT SINGLE settlementstartdatetime,
                  settlementenddatetime
        FROM i_billingrequestitem
       WHERE ServiceObjectType    = 'BUS2000112'  "Service Contract
         AND servicedocument      = @billingdocitem-servicedocument
         AND servicedocumentitem = @billingdocitem-servicedocumentitem
         AND billingrequestitem  = @lv_record_no
        INTO ( @DATA(lv_settlementstart),
               @DATA(lv_settlementend) ).

    CONVERT TIME STAMP lv_contrstart      TIME ZONE 'UTC' INTO DATE
billingdocitem_ext_out-yy1_contractitemstart_bdi.
    CONVERT TIME STAMP lv_contraend       TIME ZONE 'UTC' INTO DATE
billingdocitem_ext_out-yy1_contractitemend_bdi.
    CONVERT TIME STAMP lv_settlementstart TIME ZONE 'UTC' INTO DATE
billingdocitem_ext_out-yy1_settlementstart_bdi.
    CONVERT TIME STAMP lv_settlementend   TIME ZONE 'UTC' INTO DATE
billingdocitem_ext_out-yy1_settlementend_bdi.
```

Save and publish the extension Logic.



Remark: To see the newly created custom fields on the billing document output, it is necessary to create a new form template.