



**SAP BUSINESS BYDESIGN**  
HOW-TO GUIDE FOR JOURNAL ENTRY VOUCHER EXCEL  
CUSTOMIZATION

## TABLE OF CONTENTS

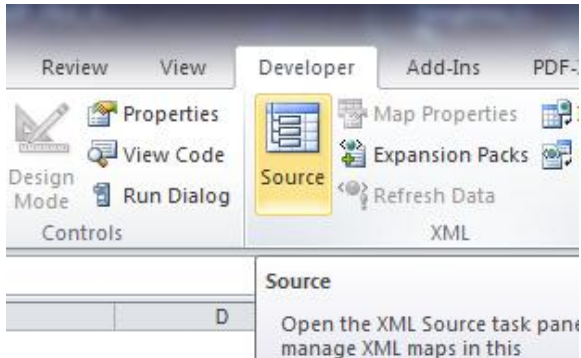
1	PREREQUISITES.....	3
2	ADDING EXISTING FIELDS.....	4
3	ADDING EXTENSION FIELDS.....	6
4	APPENDIX.....	8
4.1	WSDL File:.....	8
4.2	Links.....	8
4.3	Structure Dump.....	8

## 1 PREREQUISITES

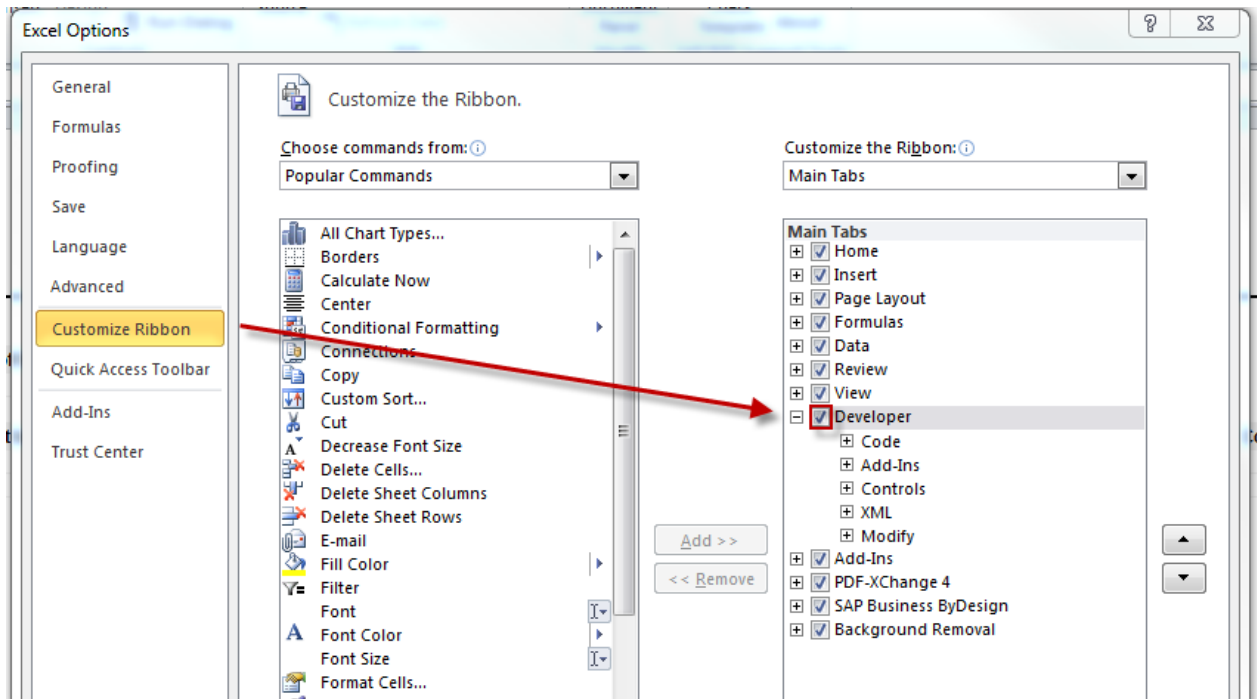
To modify an existing template you will need the following (or similar) tools:

- A Zip-Tool (i.e. WinRar, WinZip, 7-Zip...)
- A tool to modify XML-files

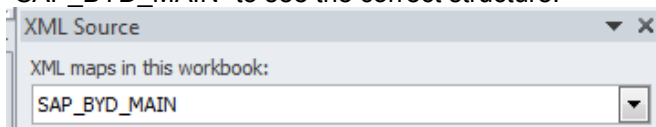
First, you will need to download the Excel sheet which you want to modify from the system. To understand how the Excel works, please start by opening the sheet in Excel. Then, switch to the Developer tab and click “Source”:



If you don't have the developer tab in your Excel, please go to “File” -> “Options” -> “Customize Ribbon” and enable the checkbox for developer:

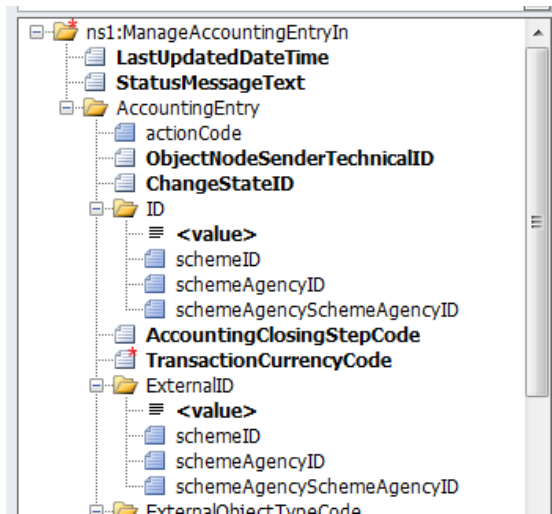


Now you should be able to see the underlying data structure on the right side. Please choose the XML Map “SAP\_BYD\_MAIN” to see the correct structure:



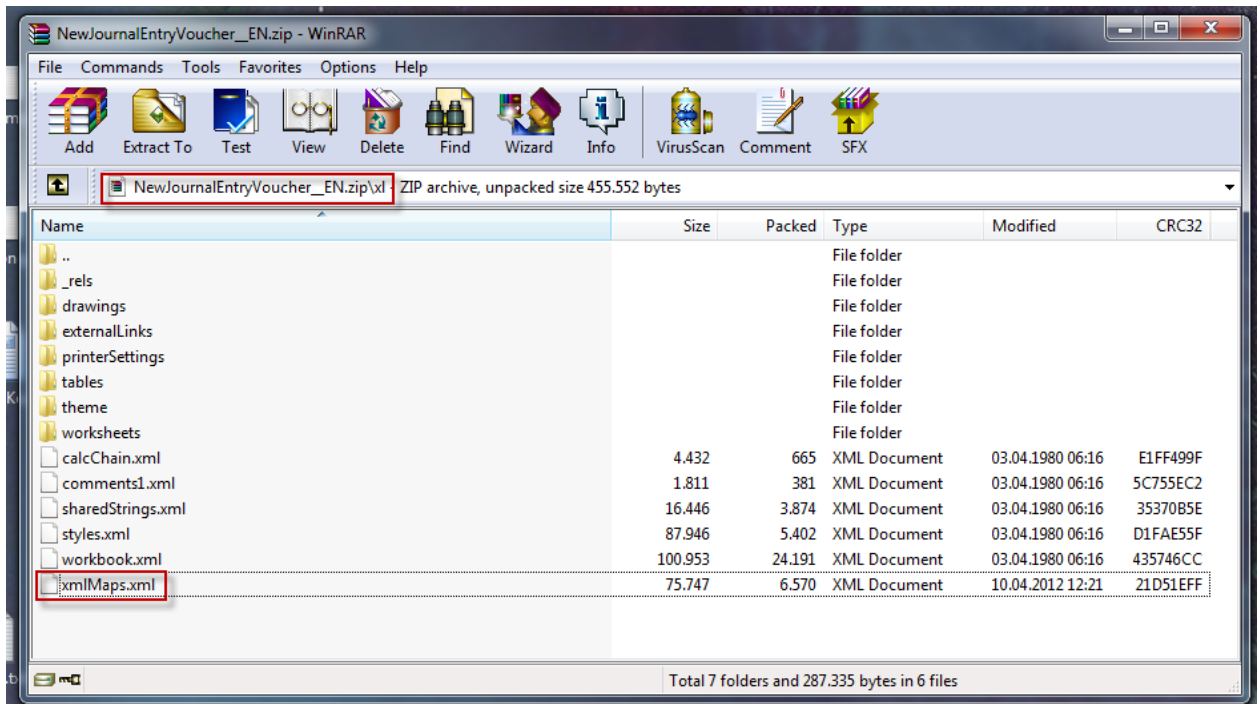
The structure shows all fields which are currently available in the data structure of the Excel sheet. Note that this is only a subset of the data structure of the web service, so if you want to add additional fields of the service, you will need to adjust this structure first.

The bold attributes are mapped to cells in the sheet. To determine which cell an attribute is mapped to, simply click the corresponding attribute and Excel will select the cell on the sheet. This works also vice versa. To bind or unbind a cell, right click on an attribute and select “Map element” or “Remove element”. You can also use drag and drop to map attributes to specific cells on the sheet.



## 2 ADDING EXISTING FIELDS

To adjust the data structure and the template, the data structure needs to be enhanced first. To do this, find the Excel sheet on your hard drive and change its extension to .zip. Then, open it with your preferred Zip-Tool and change to the folder “xl”:



Please extract the file “xmlMaps.xml” and open it with your preferred XML-editor (Notepad++ in this case). This file is very long as it contains many type definitions. The part which is interesting for this guide is the definition of the complex type “AccountingEntryFlatType”, around line 1350:

```

1352      <xs:maxLength value="35"/>
1353    </xs:restriction>
1354  </xs:simpleType>
1355  <xs:complexType name="AccountingEntryFlatType">
1356    <xs:sequence>
1357      <xs:element maxOccurs="1" minOccurs="0" name="
1358      <!-- Added by D043726 on 07/17/2008 -->
    
```

As you can see, this structure represents the tree in the Excel sheet, for example:

```

<xs:element maxOccurs="1" minOccurs="0" name="ExternalID" type="tns:IDType"/>
<xs:element minOccurs="0" maxOccurs="1" name="ExternalObjectTypeCode" type="tns
<xs:element maxOccurs="1" minOccurs="1" name="CompanyID" type="tns:Organisator
    
```

In this context, new fields can now be added. As an example the field “DraftIndicator” should be added, which controls if the created Journal Entry Voucher is created in draft mode or posted directly (the default is posted directly). This field is of the type “Indicator”, which is already defined in the schema, therefore we can use it without further customization. If you want to use a field whose data type is not present in the schema, you need to add it manually or use another compatible data type (eg. Note for string types).

To add this indicator, you add the following line (e.g. after ExternalID):

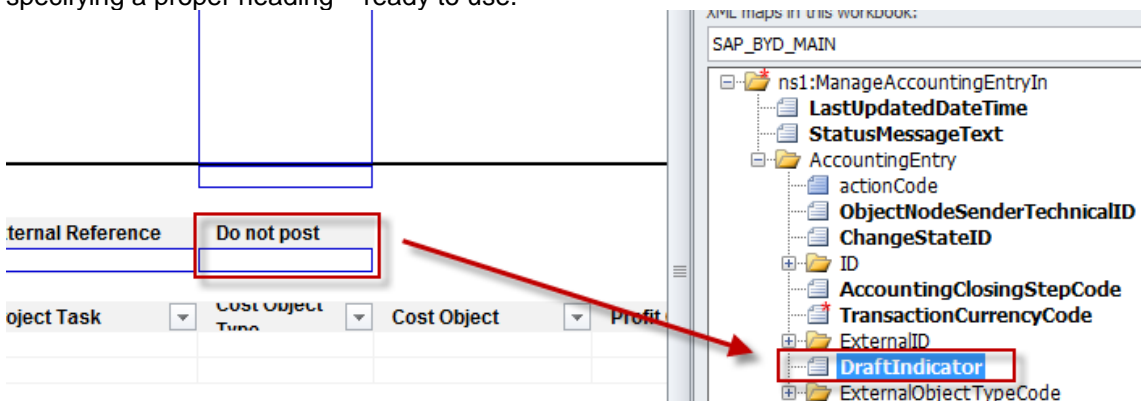
```

<xs:element maxOccurs="1" minOccurs="0" name="DraftIndicator"
type="tns:Indicator"/>
    
```

This adds a new field to the data structure, which will be transferred “as is” to the underlying web service. If you want to add more complex logic behind a field, you can also use XML transformations before the upload to the service is done. In this case please search for the element “<Transformation direction="in">” in the xmlMaps.xml.

As this is a simple boolean field, you are now finished. Save the xml-File and re-add it to the zip-File (which was the Excel sheet before) – make sure you replace the existing file. If this is successful, rename the file ending to “xlsx” again and open it in Excel. As you can see, the DraftIndicator now appears in the tree listing.

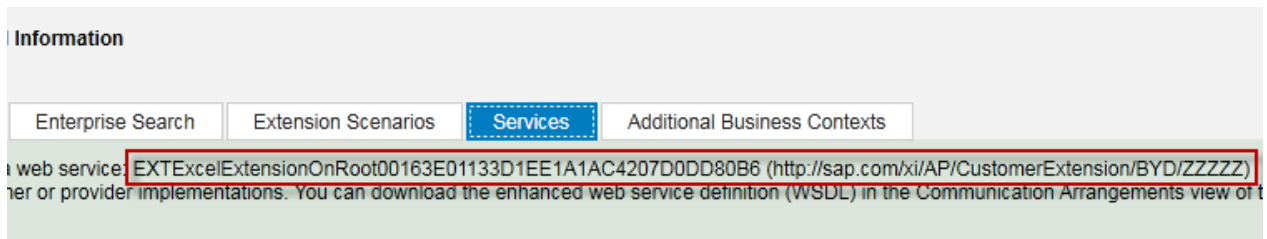
The last step which is now necessary to make this field functional, is to add it to the sheet – map it to a cell. To do this, simply drag the field to a desired cell on header level. The field is now bound and – after specifying a proper heading – ready to use.



Please note: This field is of type “Indicator”, so you will need to supply a bool value (true, false).

### 3 ADDING EXTENSION FIELDS

To add extension fields to the Excel sheet is a little bit more complicated, but possible. First, you'll need to create an extension field in the adaptation mode for the Journal Entry Voucher. Please read the system documentation for details on this topic. If you created the field, use the "Further Usage" functionality to add the extension field to the service and write down or copy the information shown in the screenshot:



The name is created dynamically by the following schema:

Field name: "EXT" + Field name + random UUID

Field namespace: <http://sap.com/xi/AP/CustomExtension/BYD/ZZZZZ>

To add this field to the Excel sheet, follow the first steps of adding an existing field, extract the xmlMaps.xml and open it in your editor. Now, depending on the place where you added the field (Header or Item level), you either need to add a field in the Header structure AccountingEntryFlatType or in the Item sub-node. In this example, we are going for a header field. Add a field to this structure with a name you can identify later, ideally named after the field:

```
<xs:element minOccurs="0" name="ExcelExtensionOnRoot" type="xs:string" />
```

As this field is handled differently in the system, there is one more change in the xmlMaps.xml necessary, in the transformations section.

```
<!-- Changed by D043726 on 07/11/2008 -->
<xs:appinfo source="ServiceConfiguration">
  <OfficeIntegrationConfiguration xmlns="http://sap.com/xi/A1S">
    <ServiceBundle>
      <Service massProcessingType="bundle" purpose="maintain" serviceType="A2X">
        <Name>ManageAccountingEntryIn</Name>
        <Namespace>http://sap.com/xi/AP/FinancialAccounting/Global</Namespace>
        <Operation>MaintainAsBundle</Operation>
        <Transformations>
          <Transformation direction="in">
            <xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.0">
```

Please find the element

```
<!-- / Added by D049256 on 29/07/2010 -->
<xsl:template match="*[contains(local-name(), '_')]" priority="-1">
```

and add the following code snippet **before** this element:

```
<xsl:template match="ExcelExtensionOnRoot">
  <xsl:element namespace="http://sap.com/xi/AP/CustomExtension/BYD/ZZZZZ"
    name="EXTExcelExtensionOnRoot00163E01133D1EE1A1AC4207D0DD80B6">
    <xsl:value-of select="."/>
  </xsl:element>
</xsl:template>
```

Please make sure to replace the values with your specific values. In the first line, replace the value in the match-attribute with the element name you used in the step above. In the second line, replace namespace

and name with the values you wrote down in the first step (Note: The namespace will most likely be the same). Now you can save the XML file and integrate it back into the Excel sheet.

In the last step you need to bind the field to an Excel cell, please see the second chapter for an explanation of this process.

## 4 APPENDIX

### 4.1 WSDL File:

Replace the stars you're your actual system number:

[https://my\\*\\*\\*\\*\\*.sapbydesign.com/sap/bc/srt/wsl/sdef\\_MANAGEACCOUNTINGENTRYIN/wsl11/ws\\_policy/document?sap-vhost=my\\*\\*\\*\\*\\*.sapbydesign.com](https://my*****.sapbydesign.com/sap/bc/srt/wsl/sdef_MANAGEACCOUNTINGENTRYIN/wsl11/ws_policy/document?sap-vhost=my*****.sapbydesign.com)

### 4.2 Links

<https://wiki.wdf.sap.corp/wiki/display/APArchOffSec/Development+Guideline+for+Office+Integration>

<https://wiki.wdf.sap.corp/wiki/display/APArchOffSec/How+to+create+OVS+for+Excel+Write-Back+templates>

### 4.3 Structure Dump

```
<AccountingEntry>
  <ObjectNodeSenderTechnicalID>?</ObjectNodeSenderTechnicalID>
  <ChangeStateID>?</ChangeStateID>
  <ExternalID>?</ExternalID>
  <PartnerObjectReference>
    <UUID>?</UUID>
    <ObjectID>?</ObjectID>
    <FormattedID>?</FormattedID>
    <ObjectTypeCode>?</ObjectTypeCode>
    <ObjectNodeTypeCode>?</ObjectNodeTypeCode>
  </PartnerObjectReference>
  <CompanyID>?</CompanyID>
  <Note languageCode="?">?</Note>
  <AccountingDocumentTypeCode>?</AccountingDocumentTypeCode>
  <EntryDate>?</EntryDate>
  <PostingDate>?</PostingDate>
  <CurrencyConversionDate>?</CurrencyConversionDate>
  <AccountingClosingStepCode>?</AccountingClosingStepCode>
  <BusinessTransactionTypeCode>?</BusinessTransactionTypeCode>
  <TransactionCurrencyCode>?</TransactionCurrencyCode>
  <LocalCurrencyAmountExchangeRate>
    <UnitCurrency>?</UnitCurrency>
    <QuotedCurrency>?</QuotedCurrency>
    <Rate>?</Rate>
    <QuotationDateTime>?</QuotationDateTime>
  </LocalCurrencyAmountExchangeRate>
  <HardCurrencyAmountExchangeRate>
    <UnitCurrency>?</UnitCurrency>
    <QuotedCurrency>?</QuotedCurrency>
    <Rate>?</Rate>
    <QuotationDateTime>?</QuotationDateTime>
  </HardCurrencyAmountExchangeRate>
  <IndexCurrencyAmountExchangeRate>
    <UnitCurrency>?</UnitCurrency>
    <QuotedCurrency>?</QuotedCurrency>
    <Rate>?</Rate>
    <QuotationDateTime>?</QuotationDateTime>
  </IndexCurrencyAmountExchangeRate>
  <SetOfBooksCurrencyAmountExchangeRate>
    <UnitCurrency>?</UnitCurrency>
    <QuotedCurrency>?</QuotedCurrency>
    <Rate>?</Rate>
```



```
<QuotationDateTime>?</QuotationDateTime>
</SetOfBooksCurrencyAmountExchangeRate>
<DraftIndicator>?</DraftIndicator>
<!--1 or more repetitions:-->
<Item>
  <ObjectNodeSenderTechnicalID>?</ObjectNodeSenderTechnicalID>
  <ItemGroupID>?</ItemGroupID>
  <DebitCreditCode>?</DebitCreditCode>
  <ChartOfAccountsItemCode>?</ChartOfAccountsItemCode>
  <Note languageCode="?">?</Note>
  <SubledgerAccountLineItemTypeCode>?</SubledgerAccountLineItemTypeCode>
  <SubledgerAccountTypeCode>?</SubledgerAccountTypeCode>
  <GeneralLedgerMovementTypeCode>?</GeneralLedgerMovementTypeCode>
  <SegmentID>?</SegmentID>
  <ProfitCentreID>?</ProfitCentreID>
  <FinancialAccountingViewOfProjectReference>
    <UUID>?</UUID>
    <ObjectID>?</ObjectID>
    <FormattedID>?</FormattedID>
    <ObjectTypeCode>?</ObjectTypeCode>
    <ObjectNodeTypeCode>?</ObjectNodeTypeCode>
  </FinancialAccountingViewOfProjectReference>
  <FinancialAccountingViewOfProjectTaskReference>
    <UUID>?</UUID>
    <ObjectID>?</ObjectID>
    <FormattedID>?</FormattedID>
    <ObjectTypeCode>?</ObjectTypeCode>
    <ObjectNodeTypeCode>?</ObjectNodeTypeCode>
  </FinancialAccountingViewOfProjectTaskReference>
  <FinancialAccountingViewOfCostObjectKey>
    <CostObjectTypeCode>?</CostObjectTypeCode>
    <CostObjectID>?</CostObjectID>
  </FinancialAccountingViewOfCostObjectKey>
  <FinancialsViewOfContractReference>
    <TypeCode>?</TypeCode>
    <ID>?</ID>
  </FinancialsViewOfContractReference>

<ExpenseClassificationFunctionalAreaCode>?</ExpenseClassificationFunctionalAreaCode>

  <PartnerCompanyID>?</PartnerCompanyID>
  <PartnerSegmentID>?</PartnerSegmentID>
  <PartnerProfitCentreID>?</PartnerProfitCentreID>

<AssignmentDerivationDisabledIndicator>?</AssignmentDerivationDisabledIndicator>
  <TransactionCurrencyAmount currencyCode="?">?</TransactionCurrencyAmount>
  <LocalCurrencyAmount currencyCode="?">?</LocalCurrencyAmount>
  <SetOfBooksCurrencyAmount currencyCode="?">?</SetOfBooksCurrencyAmount>
  <HardCurrencyAmount currencyCode="?">?</HardCurrencyAmount>
  <IndexBasedCurrencyAmount currencyCode="?">?</IndexBasedCurrencyAmount>
  <LineItemCurrencyAmount currencyCode="?">?</LineItemCurrencyAmount>
  <Quantity unitCode="?">?</Quantity>
  <QuantityTypeCode>?</QuantityTypeCode>
  <!--Zero or more repetitions:-->
  <AccountsReceivablePayableLedgerAccountItem>
    <ObjectNodeSenderTechnicalID>?</ObjectNodeSenderTechnicalID>
    <BusinessPartnerID>?</BusinessPartnerID>
    <DueItemOrderReference>
      <UUID>?</UUID>
```

```
<ObjectID>?</ObjectID>
<FormattedID>?</FormattedID>
<ObjectTypeCode>?</ObjectTypeCode>
<ObjectNodeTypeCode>?</ObjectNodeTypeCode>
</DueItemOrderReference>
<PartyRoleCategoryCode>?</PartyRoleCategoryCode>
<BusinessTransactionDocumentReference>
  <ID>?</ID>
  <UUID>?</UUID>
  <TypeCode>?</TypeCode>
  <ItemID>?</ItemID>
  <ItemUUID>?</ItemUUID>
  <ItemTypeCode>?</ItemTypeCode>
</BusinessTransactionDocumentReference>

<AccountsReceivableDueItemTypeCode>?</AccountsReceivableDueItemTypeCode>
  <AccountsPayableDueItemTypeCode>?</AccountsPayableDueItemTypeCode>
</AccountsReceivablePayableLedgerAccountItem>
<!--Zero or more repetitions:-->
<CashLedgerAccountItem>
  <ObjectNodeSenderTechnicalID>?</ObjectNodeSenderTechnicalID>
  <HouseBankID>?</HouseBankID>
  <CashLocationID>?</CashLocationID>
  <CashLocationTypeCode>?</CashLocationTypeCode>
</CashLedgerAccountItem>
<!--Zero or more repetitions:-->
<FixedAssetItem>
  <ObjectNodeSenderTechnicalID>?</ObjectNodeSenderTechnicalID>
  <IndividualMaterialTypeCode>?</IndividualMaterialTypeCode>

<IndividualMaterialIdentifierTypeCode>?</IndividualMaterialIdentifierTypeCode>
  <IndividualMaterialID>?</IndividualMaterialID>

<PartnerIndividualMaterialTypeCode>?</PartnerIndividualMaterialTypeCode>

<PartnerIndividualMaterialIdentifierTypeCode>?</PartnerIndividualMaterialIdentifierTypeCode>
  <PartnerIndividualMaterialID>?</PartnerIndividualMaterialID>
  <FixedAssetMasterFixedAssetID>?</FixedAssetMasterFixedAssetID>
  <FixedAssetID>?</FixedAssetID>

<PartnerFixedAssetMasterFixedAssetID>?</PartnerFixedAssetMasterFixedAssetID>
  <PartnerFixedAssetID>?</PartnerFixedAssetID>
  <FixedAssetValuationViewID>?</FixedAssetValuationViewID>

<OriginalValueCalculationReferenceDate>?</OriginalValueCalculationReferenceDate>
  <ValueCalculationReferenceDate>?</ValueCalculationReferenceDate>
  <FixedAssetMovementCategoryCode>?</FixedAssetMovementCategoryCode>
</FixedAssetItem>
<!--Zero or more repetitions:-->
<MaterialLedgerAccountItem>
  <ObjectNodeSenderTechnicalID>?</ObjectNodeSenderTechnicalID>
  <MaterialTypeCode>?</MaterialTypeCode>
  <MaterialIdentifierTypeCode>?</MaterialIdentifierTypeCode>
  <MaterialProductID>?</MaterialProductID>
  <PermanentEstablishmentID>?</PermanentEstablishmentID>
  <ValuationQuantity unitCode=?>?</ValuationQuantity>
  <ValuationQuantityTypeCode>?</ValuationQuantityTypeCode>
  <ReferenceQuantity unitCode=?>?</ReferenceQuantity>
```

```
<ReferenceQuantityTypeCode?></ReferenceQuantityTypeCode>
</MaterialLedgerAccountItem>
<!--Zero or more repetitions:-->
<OverheadCostsLedgerAccountItem>
  <ObjectNodeSenderTechnicalID?></ObjectNodeSenderTechnicalID>
  <CostCentreID?></CostCentreID>
  <TransactionQuantity unitCode=?></TransactionQuantity>
  <TransactionQuantityTypeCode?></TransactionQuantityTypeCode>
</OverheadCostsLedgerAccountItem>
<!--Zero or more repetitions:-->
<ProductionLedgerAccountItem>
  <ObjectNodeSenderTechnicalID?></ObjectNodeSenderTechnicalID>
  <OperationalDocumentReference>
    <UUID?></UUID>
    <ObjectID?></ObjectID>
    <FormattedID?></FormattedID>
    <ObjectTypeCode?></ObjectTypeCode>
    <ObjectNodeTypeCode?></ObjectNodeTypeCode>
  </OperationalDocumentReference>
  <CostRevenueElementCode?></CostRevenueElementCode>
  <CostRevenueElementChartCode?></CostRevenueElementChartCode>
</ProductionLedgerAccountItem>
<!--Zero or more repetitions:-->
<PurchaseLedgerAccountItem>
  <ObjectNodeSenderTechnicalID?></ObjectNodeSenderTechnicalID>
  <OperationalDocumentReference>
    <UUID?></UUID>
    <ObjectID?></ObjectID>
    <FormattedID?></FormattedID>
    <ObjectTypeCode?></ObjectTypeCode>
    <ObjectNodeTypeCode?></ObjectNodeTypeCode>
  </OperationalDocumentReference>
  <ValuationQuantity unitCode=?></ValuationQuantity>
  <ValuationQuantityTypeCode?></ValuationQuantityTypeCode>
  <ReferenceValuationQuantity
unitCode=?></ReferenceValuationQuantity>

<ReferenceValuationQuantityTypeCode?></ReferenceValuationQuantityTypeCode>
  <ClearingQuantity unitCode=?></ClearingQuantity>
  <ClearingQuantityTypeCode?></ClearingQuantityTypeCode>
</PurchaseLedgerAccountItem>
<!--Zero or more repetitions:-->
<SalesLedgerAccountItem>
  <ObjectNodeSenderTechnicalID?></ObjectNodeSenderTechnicalID>
  <OperationalDocumentReference>
    <UUID?></UUID>
    <ObjectID?></ObjectID>
    <FormattedID?></FormattedID>
    <ObjectTypeCode?></ObjectTypeCode>
    <ObjectNodeTypeCode?></ObjectNodeTypeCode>
  </OperationalDocumentReference>
  <OperationalDocumentItemReference>
    <UUID?></UUID>
    <ObjectID?></ObjectID>
    <FormattedID?></FormattedID>
    <ObjectTypeCode?></ObjectTypeCode>
    <ObjectNodeTypeCode?></ObjectNodeTypeCode>
  </OperationalDocumentItemReference>
```

```
<AccountDeterminationPriceSpecificationElementPurposeGroupCode>?</AccountDeterminationPriceSpecificationElementPurposeGroupCode>
  <CostRevenueElementCode>?</CostRevenueElementCode>
  <CostRevenueElementChartCode>?</CostRevenueElementChartCode>
  <ValuationQuantity unitCode="?">?</ValuationQuantity>
  <ValuationQuantityTypeCode>?</ValuationQuantityTypeCode>
  <OrderQuantity unitCode="?">?</OrderQuantity>
  <OrderQuantityTypeCode>?</OrderQuantityTypeCode>
  <ReferenceQuantity unitCode="?">?</ReferenceQuantity>
  <ReferenceQuantityTypeCode>?</ReferenceQuantityTypeCode>
</SalesLedgerAccountItem>
</Item>
<!--Zero or more repetitions:-->
<SetOfBooks>
  <ObjectNodeSenderTechnicalID>?</ObjectNodeSenderTechnicalID>
  <SetOfBooksID>?</SetOfBooksID>
</SetOfBooks>
</AccountingEntry>
```

© 2012 SAP AG. All rights reserved.

SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP BusinessObjects Explorer, StreamWork, SAP HANA, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries.

Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects Software Ltd. Business Objects is an SAP company.

Sybase and Adaptive Server, iAnywhere, Sybase 365, SQL Anywhere, and other Sybase products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Sybase Inc. Sybase is an SAP company.

Crossgate, m@gic EDDY, B2B 360°, and B2B 360° Services are registered trademarks of Crossgate AG in Germany and other countries. Crossgate is an SAP company.

All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

