



# Setup and user guide OIOUBL

Microsoft Dynamics C5 2012  
and 2010

June 2014

# Contents

Introduction	3
<b>Setting up OIOUBL</b>	<b>4</b>
XML schema	4
Setting up XML conversion	7
Setting up Actions	8
Setting up action lists for customers and vendors	10
Specifying EAN numbers for customers and vendors	10
Specifying VAT numbers and Vat number type for customers and vendors	10
Specifying which customers and vendors can accept incoming OIOUBL documents	11
Duties and VAT	11
Attach/Embed a document in an XML file	11
<b>User guide</b>	<b>13</b>
Outgoing XML files	13
Incoming XML files	13
XML Inbox	13
XML conversion (automatic update)	16
Further processing of sales/purchase orders created by OIOUBL import	17
Requirements for extended OIOUBL functionality	18
OIOUBL – known restrictions	19
Online validation of OIOUBL documents	20

## Introduction

In connection with the new requirements laid down in the "Statute on information in the OIOUBL Electronic Invoice for use with invoicing of public sector organizations" a solution that makes it possible to generate outgoing electronic documents in OIOUBL format has been deployed in Microsoft Dynamics C5 2010.

In Microsoft Dynamics C5 2010 Service Pack 1 OIOUBL functionality is extended to be able to import documents from both customers and suppliers.

The following documents are released:

Document	Export	Import
Sales invoice	x	
Sales credit note	x	
Project invoice	x	
Project credit note	x	
Reminder	x	
Purchase order (export of purchase requisition)	x	
Sales order (import of purchase requisition)		x
Sales order (export of order confirmation)	x	
Project (export of order confirmation)	X	
Purchase order (import of order response)		x
Purchase order (import of sales invoice)		x
Purchase order (import of credit note)		x

Microsoft Dynamics C5 provides a standard OIOUBL Setup, which is based on OIOUBL schemas published by IT og Telestyrelsen. The default mapping between schemas and database in Microsoft Dynamics C5 is based on standard business logic.

The instructions in this document are based on a default installation of Microsoft Dynamics C5 where the data folder is located in **C:\ProgramData\Microsoft Dynamics C5 <version> Data.**

## Setting up OIOUBL

Before you can use OIOUBL you must do the following:

1. Download schemas
2. Manually download Presentation style sheets and Schematron validation files (optional)
3. Import the mapping setup supplied with Microsoft Dynamics C5
4. Manually link Presentation style sheets and Schematron validation files to the schemas if they have been downloaded in step 2.
5. Manually set up actions (OIOUBL actions are not set up on customers or vendors action lists automatically)
6. Specify EAN numbers and VAT numbers for relevant Customers/Vendors
7. Set up data conversion
8. Specify which customers/vendors can accept incoming OIOUBL documents
9. Setup duty and VAT codes

These steps are described in detail below.

### XML schema

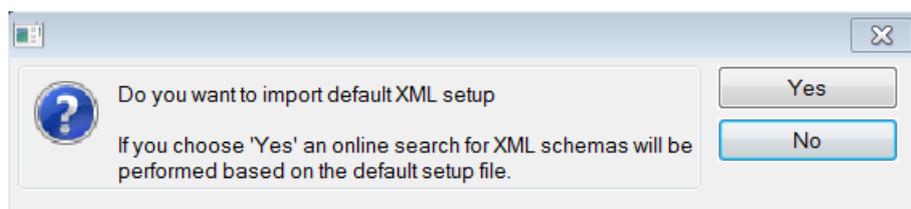
The setup and mapping of existing schemas is performed in **General/Table/XML/XML Schema**.

Microsoft Dynamics C5 provides a standard setup for the selected OIOUBL version 2.0 schemas.

When you access the menu item **XML schema** and no XML schemas are set up yet, you can run an automatic standard setup that downloads XSD files (XML schema files), sets up the paths and loads mappings for the schema files.

The following dialog appears and if "Yes" is selected XSD files will automatically be downloaded from

<http://rep.oio.dk/ubl/xml/schemas/2.0/maindoc/>.



The files to be downloaded are defined in the file **OIOUBL. Schemas. c5c**, which is placed in the folder **C:\ProgramData\Microsoft Dynamics C5 <version> Data\Country\DK**

Two default paths are set up in the **XML Setup**: the path to the folder with the downloaded schema files and the path to the folder where all incoming XML document files must be placed in order to be imported.

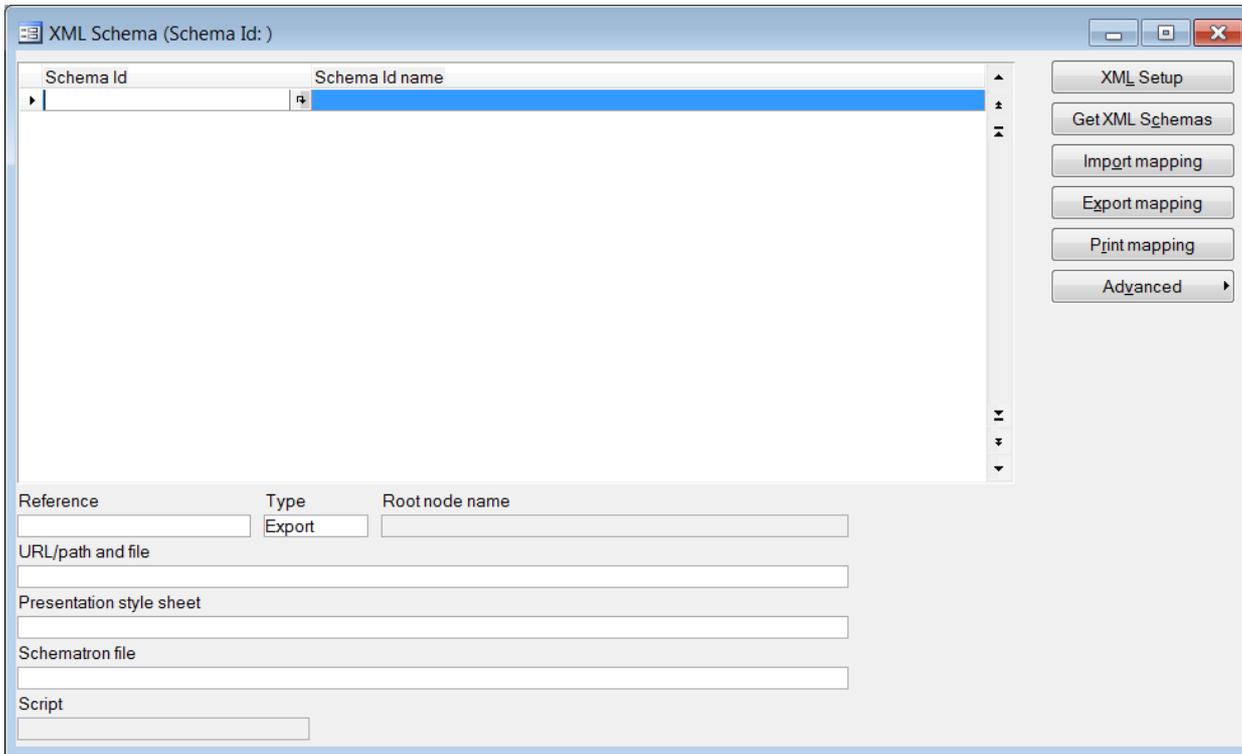
Both folders are created in the directory where C5 is installed. The folder with the schema files is by default named

**XSDCache**. The folder for incoming XML files is by default named **<Database extension>\_XMLFileImport**, e.g.

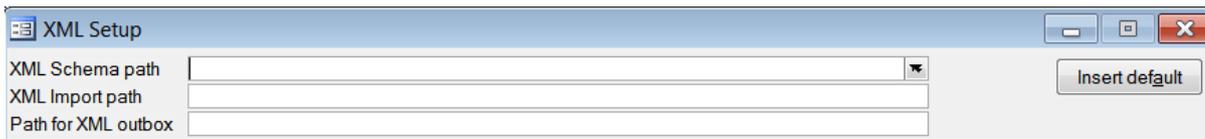
*DAT\_XMLFileImport*.

*It should be noted that only Supervisor can perform this setup and that internet access is required during the download of schemas.*

If you declined the automatic setup, all setup in the **XML Schema** window must be performed manually.



The menu item-XML Setup



**XML Schema Path** is the path to the folder where all schema files are located, schemas can be downloaded automatically — see more about this in the section **Get XML schemas**.

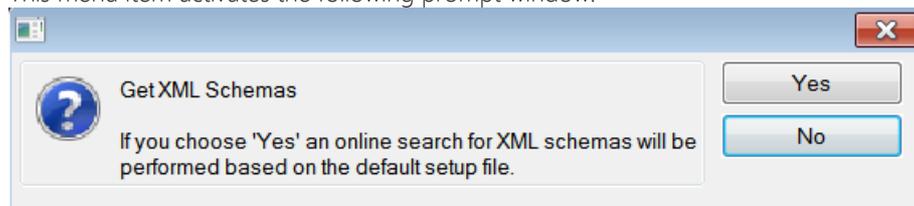
**XML import path** is the path to the folder where all incoming XML document files are collected in order to be imported. The menu item **Insert default** inserts the default values as described in the previous section. The default folders will then be created automatically.

**NB** - if the XML Import path is changed after some XML documents have already been imported, a warning about lost references to these documents will appear as the document management system does not save import paths with the saved documents, but dynamically retrieves the current path from the XML Setup.

In Microsoft Dynamics C5 version 2012 HF 1 and newer versions it is furthermore possible to specify a path to a folder where all outgoing XML files of all types must be collected together, for example, in connection with a centralized dispatch of files. This path can be specified in the **Path for XML outbox** field. If this path is specified in the XML Setup window a copy of all outgoing XML files that are generated in the current data file will be saved in the specified folder.

### The menu item – Get XML schemas

This menu item activates the following prompt window:



To proceed with the schema download you must agree to continue and select the default schema download definition file in the Windows Explorer window that opens immediately after the prompt window.

The default schema download definition file **OIOUBL.Schemas.c5s** contains internet links to the supported OIOUBL schema files and is located under:

**C:\ProgramData\Microsoft Dynamics C5 <version> Data\Country\DK\**

Download will start automatically from <http://rep.oio.dk/ubl/xml/schemas/2.0/common/> and from <http://rep.oio.dk/ubl/xml/schemas/2.0/maindoc/>

The schema files will be downloaded to a number of new subfolders that will be created automatically in the XML Schema path folder specified in the XML setup.

The manual schema download can be used to update the already downloaded schema files without affecting the related mappings.

### The menu item – Import mapping

This menu item opens Windows Explorer where you must select an XML mapping file to be imported. The default XML mapping file is named **OIOUBL.Mapping.c5m** and is located under:

**C:\ProgramData\Microsoft Dynamics C5 <version> Data\Country\DK\**

If the mapping import is called from an empty line in the XML Schema window, the mapping import proceeds automatically.

If the mapping import is called from an existing line in the XML Schema window, the mapping import script will prompt you to select one of the following options: Import mapping for the line's Schema Id only if it is available in the selected file or Import all mappings that are available in the selected file.

If a mapping being imported already exists you can choose to skip the import or to overwrite the existing mapping.

It is also possible to make a comparison when importing. A report will be printed to show the differences between the existing mapping and the mapping that will be imported.

**NB** – The default mapping file supplied with Microsoft Dynamics C5 has been changed since the original version 2010 release and may also be changed in the future. It is therefore recommended to check if a newer version of the file is available and to manually update the mapping setup by overwriting all existing mappings. It is also recommended to back up the existing mappings prior to performing the update as all user modifications will be lost after the update.

**When importing a new mapping it is possible to print a comparison report before you decide if the existing mapping should be overwritten.**

### The menu item – Export mapping

This menu item can only be called from an existing line in the XML Schema window. The menu opens Windows Explorer where you must select a location and specify a name for the file that will contain the mapping export.

The mapping export script will then prompt you to select one of the following options: Export mapping for the line's Schema Id only or Export all existing mappings.

After a mapping has been exported it can be imported using the **Import mapping** menu item.

### The menu item – Print mapping

This menu item can only be called from an existing line in the XML Schema window. The print mapping prompt will then prompt you to select one of the following options: For this schema, For all schemas of the same type or For all schemas. The schemas of the same type use the same schema file e.g. Invoice-2, Order-2 or OrderResponse-2

### Schematron and Presentation style sheets files

Presentation style sheet files that are used to display the contents of XML files in a more user-friendly layout are not included in the Schema download, but they can be downloaded manually from this link:

<http://digitaliser.dk/resource/2455502>

It is recommended to create a new sub folder "Stylesheets" in the folder with XML Schema files and to download the style sheets to this folder.

After the style sheets have been downloaded you will need to link them to appropriate schemas. This is done manually by specifying an appropriate style sheet file for a Schema in the field **Presentation style sheet**.

Schematron files that are used to validate the contents of XML files are not included in the Schema download either; they can be downloaded manually from this link:

<http://www.oioubl.info/oioubltools/da/oioubltools.html> - Validationpackage with test examples (new)

It is recommended to create a new sub folder "Schematron" in the folder with XML Schema files and to download the Schematron files to this folder.

After the Schematron files have been downloaded you will need to link them to appropriate schemas. This is done manually by specifying an appropriate Schematron file for a Schema in the field **Schematron file**.

The table below shows the correlation between Schemas, Representation style sheets and Schematron files.

Schema Id	Presentation style sheet	Schematron file
CustomerReminderUBL	ReminderHTML.xsl	OIOUBL_Reminder_Schematron.xsl
Proj_CreditNoteUBL	CreditNoteHTML.xsl	OIOUBL_CreditNote_Schematron.xsl
Proj_InvoiceUBL	InvoiceHTML.xsl	OIOUBL_Invoice_Schematron.xsl
Proj_OrdConfirm	OrderResponseHTML.xsl	OIOUBL_OrderResponse_Schematron.xsl
Purch_In_CredNoteUBL	CreditNoteHTML.xsl	OIOUBL_CreditNote_Schematron.xsl
Purch_In_InvoiceUBL	InvoiceHTML.xsl	OIOUBL_Invoice_Schematron.xsl
Purch_In_OrdConfUBL	OrderResponseHTML.xsl	OIOUBL_OrderResponse_Schematron.xsl
Purch_OrderReqUBL	OrderHTML.xsl	OIOUBL_Order_schematron.xsl
Sales_CreditNoteUBL	CreditNoteHTML.xsl	OIOUBL_CreditNote_Schematron.xsl
Sales_InvoiceUBL	InvoiceHTML.xsl	OIOUBL_Invoice_Schematron.xsl
Sales_In_PurchReqUBL	OrderHTML.xsl	OIOUBL_Order_schematron.xsl
Sales_OrdConfirmUBL	OrderResponseHTML.xsl	OIOUBL_OrderResponse_Schematron.xsl

**NB** - We recommend that you regularly check the above mentioned webpages for newly released files.

### The menu item **Advanced**

See the technical guide.

### Detailed description of fields in XML Schema

See the technical guide.

### Setting up XML conversion

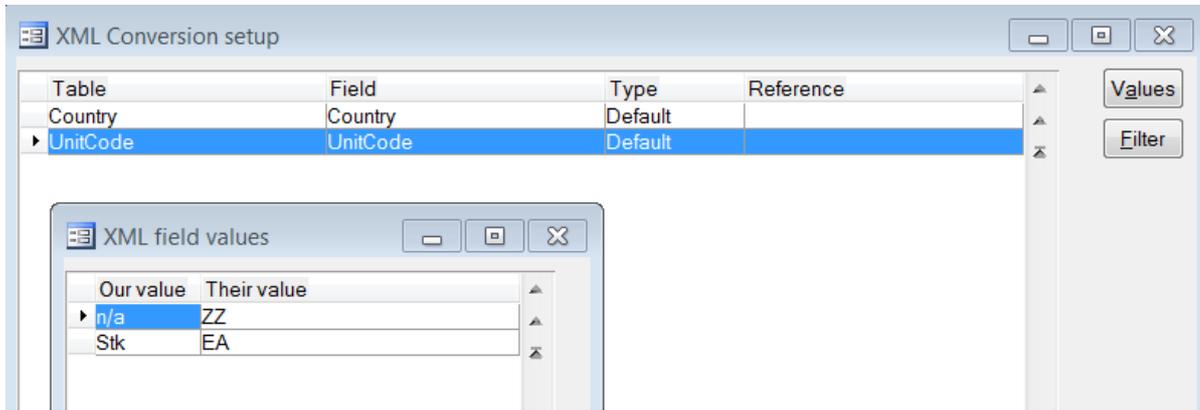
XML conversion may be necessary in case some values in C5 do not comply with OIOUBL requirements or if the company's base data entries (e.g. item numbers) are different from the OIOUBL customers' or vendors'.

XML conversion can be set up under **General/Table/XML/XML conversion**.

To specify what type of value must be converted - first select a table and then a field. Then specify conversion values using the menu item **Values**.

If a table is not selected you can, in the field **Field**, select an ENUM type whose values must be converted - for instance **Language\_**. In **Values** select individual Enum value(s) and specify the conversion value.

Conversion of unit codes is necessary if the unit codes used in the C5 database do not comply with OIOUBL requirements, for example, it will be necessary to convert "Stk" or "Pcs" as they are specified as "EA" in OIOUBL files. A blank unit code must be converted to "ZZ".



### Country codes

The country codes used in C5 are defined in the Country codes table. The country codes that are used with OIOUBL must comply with ISO standard.

From September 15, 2013 the validation of the country codes in OIOUBL files has been made mandatory. This is part of the common European standardization of electronic documents.

This means that it is no longer possible to send electronic documents with an incorrect country code. The XML documents with incorrect country codes will thus be rejected after September 15, 2013.

The country code for Denmark is DK, SE for Sweden, NO for Norway etc. - see current Country codes under General/Table/Country codes. If a country code specified in the field Co (CountryVatCodes) complies with ISO standard, no country code conversion is needed.

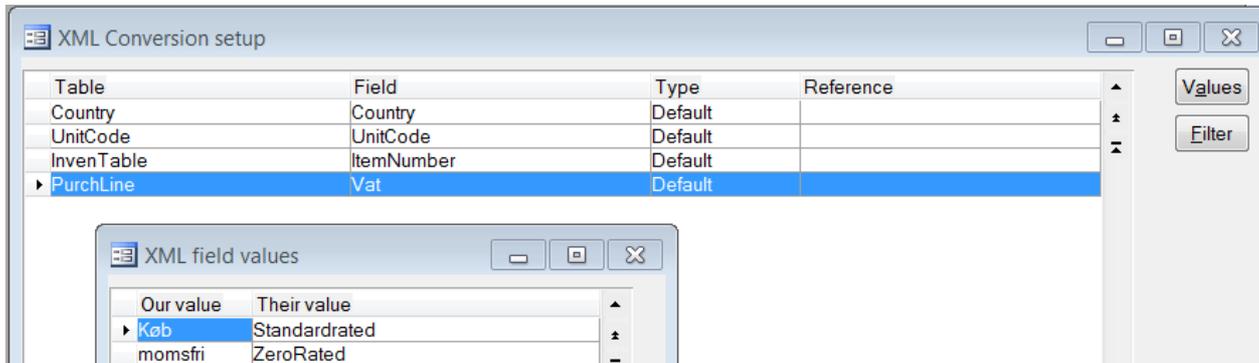
### Conversion of VAT

The mapping is by default set up to import VAT codes from XML file to purchase order lines. This is necessary in case a purchase order contains lines with mixed VAT rates.

To import a purchase invoice correctly, the following conversion has to be set up:

Our value is set to a VAT code using 25% from the VAT code table and

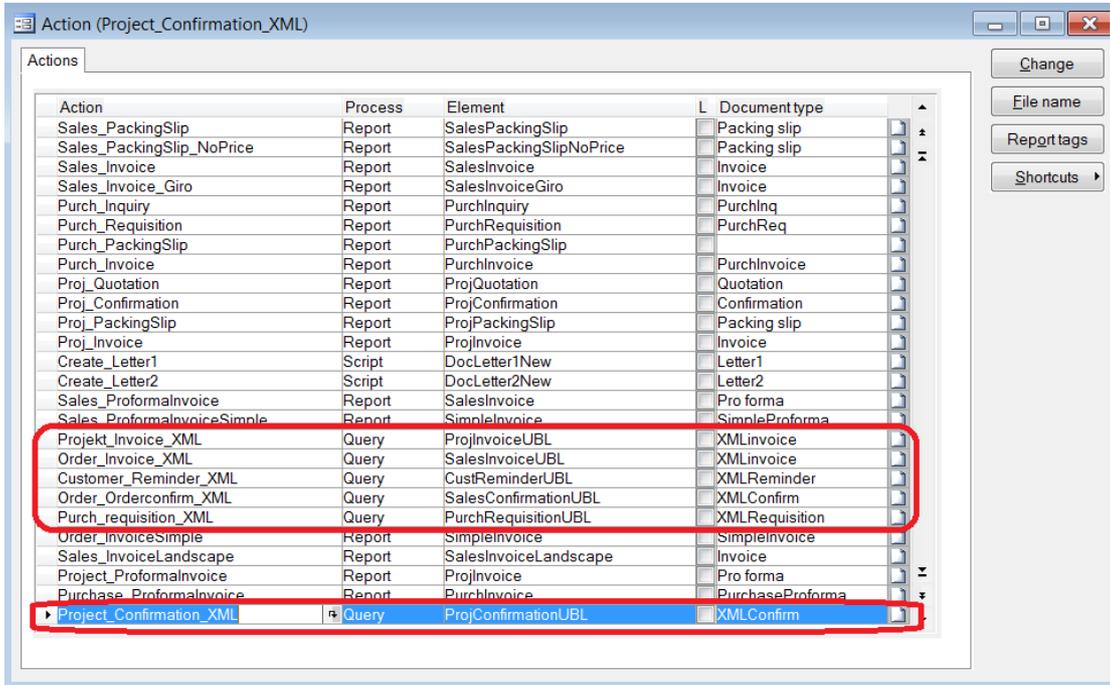
Our value is set to a VAT code using 0% from the VAT code table



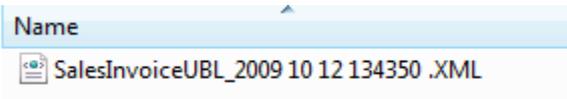
The Conversion table is also used to establish and store links between related documents, e.g. an incoming XML purchase requisition and a C5 sales order that has been created from this requisition.

### Setting up Actions

Under General/Table/Actions the following new actions are created automatically. These actions are used when generating and saving outgoing XML documents.



All outgoing XML documents follow the usual logic used in the Document management module: any outgoing XML document will be saved in a document type subfolder to the company's document management folder. If, for example, a DAT Company uses the Danish functionality and the default document management folder, all OIOUBL invoices will be saved in: `\\DocMgmt\DAT\XMLFaktura`. Default XML file names are composed as follows: `<Name of the script that has generated the file>_<Date as YYYY MM DD and Time as number of seconds elapsed since midnight when the document was created>`, e.g.

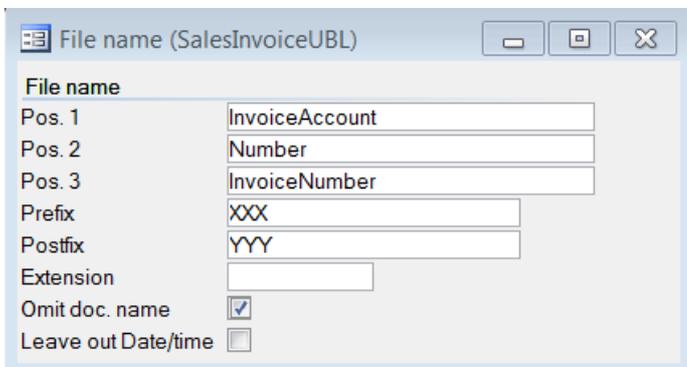


You can redefine the composition of file names using the local menu item **File name**.

The file name setup is stored with the element that generates the files. An element can have only one file name setup at a time.

All outgoing XML files in C5 are generated by Query elements (QTX). In the File name setup window it is possible to select up to 3 fields from the table that the element's query is based on and use the values of these fields as part of the file name. It is also possible to omit Date and Time specification in the file names.

It is important to ensure that the values of the selected field's together produce a unique file name for a document so that overwriting of other documents with the same file name is avoided.



Starting with version 2012 SP1 it is possible to specify pre-fix, post-fix and extension when naming the OIOUBL file. If nothing is stated in Extension, this will be set to "xml". It should be noticed that the Schematron validation requires that the file extension is "xml".

The setup for OIOUBL Sales invoice shown above and based on Customer invoice journal table will produce the following file name: <XXX> <Invoice account> <Order number> <Invoice number> <YYY>, e.g. XXX 9999991 670 89 YYY.Xml

**Note** The setup of file available in version 2012 SP1 and later versions. Omit doc. name is introduced in 2012 SP2.

### Setting up action lists for customers and vendors

The output of all outgoing business documents such as invoice, reminder, order, confirmation and purchase requisition is controlled by action lists. This means that in order to be able to output a document you must set up an action associated with the document on an action list.

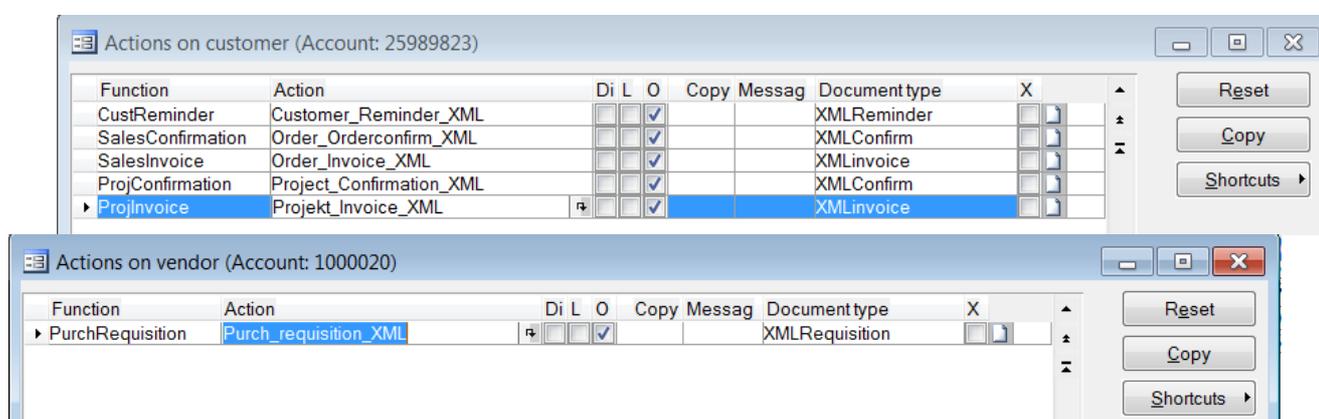
Action Lists in customer and vendor modules can be created on two levels:

The default action lists are automatically applicable to all customers/vendors

Local action lists are only applicable to the customer/vendor for whom the local action list is created and override the default action lists.

To add a new action to an action list select system functions that must trigger the document output and then select an action that is associated with the output of the desired document.

If, for example, a customer should receive invoices in OIOUBL format, a new Order\_Invoice\_XML action for SalesInvoice function must be added to the customer's action list.



### Specifying EAN numbers for customers and vendors

The OIOUBL format requires unique identification of the document's sender and recipient. EAN number is one of the accepted identification formats.

To set up an EAN number for a customer or a vendor you must create an EAN address in the customer's or vendor's address table: **Customer/Table/ (Menu) Setup/Addresses**.

It is possible to create multiple EAN addresses in the address table, however only the EAN number that is specified in the field **EAN Number** in the Customer table will be used as the default EAN Address for the customer.

Invoice

EAN

A/c dimension

### Specifying VAT numbers and Vat number type for customers and vendors

VAT number specification and VAT number types are mandatory when using OIOUBL. VAT numbers must be specified in numeric format. All characters for country identification must be omitted.

VAT number type refers to **General/Table/Country codes** (Menu) UBL, VAT number type.

VAT number and VAT number type are specified in the customer or vendor table on the Setup tab

VAT number type

VAT No.

If the company does not use an EAN number, it is possible to use the VAT number and VAT number type for sending and receiving OIOUBL documents.

(VAT number type is introduced in version 2012 SP1 HF3 and 2010 SP2 HF1)

### Specifying which customers and vendors can accept incoming OIOUBL documents

In order to be able to receive and import OIOUBL documents from a particular customer or a vendor, the customer or the vendor must be marked as a valid XML sender.

VAT No

XML import

Approve a customer or vendor as a valid XML sender by setting the check mark in the customer's or vendor's **XML import** field. As soon as a customer or a vendor has been approved it will be possible to import incoming OIOUBL documents that are sent by the customer or the vendor.

### Duties and VAT

The Duty code table is extended with 2 fields. Tax Category and Tax Scheme.

These codes refer to the following OIOUBL code lists: TaxCategoryID and TaxSchemeID. The codes are mandatory when invoicing duties using OIOUBL.

It is important that the Duty code text is also specified, as it required in the OIOUBL file.

The 2 similar new fields are also created in the **VAT code table** and can be filled out as follows:

VAT rate	TAX category	TAX scheme
25%	StandardRated	63
0% (VAT free)	ZeroRated	63
25%	ReverseCharge	63

If the fields are not set up, the default values for Tax Category and Tax Scheme (see example above) will automatically be used when using OIOUBL.

In order to be able to use the new TAX category 'ReverseCharge' every VAT code that is used with OIOUBL must have a setup of TAX category and TAX scheme .

### Attach/Embed a document in an XML file

It is now possible to embed certain types of files in the OIOUBL files.

The documents/files can be embedded into AdditionalDocumentReference element that exists in all OIOUBL files. Note that the functionality requires the new mapping provided with this Service Pack (see Installation guide)

The functionality can be used as follows:

- 1) In an action list a report can be marked as **XML attachment**. When marked as XML attachment the PDF file generated by the report will automatically be embedded in the OIOUBL file that is generated by the corresponding XML action  
Pre-conditions:
  - a. The report action must be executed prior to the corresponding XML action.  
Note that the report's document type will be used as the description of the embedded document in the XML file.
  - b. The report must be printed to MS Word PDF
- 2) XML Attachments can be also specified manually in the document management screen. Use (Ctrl+N) in the sales order/purchase order/project screen BEFORE updating the order. In the document management screen use the menu **New** and the new document type **XML Attachment** to specify which documents must be embedded in the XML document that will be generated upon next order update. Note that the text from the document management line will be used as the description of the embedded document in the XML file.

All XML Attachments must have an ID to be used in XML files. New number series **XML attachment** is created automatically in order to be able to dynamically assign ID numbers for every new XML attachment.

In case the new number series does not exist or is exceeded – all updates involving XML Attachments will be automatically cancelled by the system.

Currently only the following file types are supported as XML Attachments: tiff, tif, png, jpg, jpeg, gif, pdf and XML.

The XML Attachments that are specified manually in the document management screen can only be used once. As soon as an XML file with these attachments is created the attachments are removed from the document management overview screen and become a part of the generated XML file. It is still possible to view which attachments that are embedded in a particular XML document by using new menu **XML Attachment** in the document management screen. This menu can be activated from a line with an XML document and shows all XML attachments that the XML document contains.

To reuse previously used XML Attachments – they must be created again or copied back to the document management overview from previously generated XML files by using menu **Copy** in the XML Attachment screen.

Reprint of already updated documents from e.g. archives and invoice journal will automatically reuse the XML attachments included in the original XML file, but only those specified manually in the document management. Automatic XML attachments from action lists will be created again with every reprint.

### Import of OIOUBL files with XML Attachments

If an XML file that is intended for import contains XML Attachments it can be seen in the new field **XML Attachment** in the XML inbox screen.

To see which files are embedded in a received XML file – in the XML Inbox screen use document management (Ctrl+N) and the menu XML Attachment.

The attachments from the incoming XML files can only be opened after they have been saved. The system automatically adds '**\_notSaved**' to file names in the Save as dialog for new attachments in order to avoid possible coincidence with the already existing file names and to encourage users to change the file name.

After an XML file with attachments has been accepted and imported into a sales or a purchase order – the XML file and the attachments can be accessed directly from the sales or purchase order by using the document management shortcut.

## User guide

### Outgoing XML files

As already mentioned, all outgoing XML documents follow the usual logic used in the Document management module which means that the output of these documents like that of any other outgoing business document is triggered by action lists.

If the OIOUBL setup has been done correctly all OIOUBL documents will be generated automatically as soon as a relevant standard system function (such as invoicing, order confirmation etc.) has been activated.

If however the OIOUBL setup contains errors or omissions the generation of an OIOUBL document may be aborted or you may be prompted to specify missing mandatory information, e.g. missing VAT numbers.

Any outgoing XML document will be saved in a document type subfolder to the company's document management folder. If, for example, a DAT Company uses the Danish functionality and the default document management folder, all OIOUBL invoices will be saved in: `\DocMgmt\DAT\XMLFaktura`.

If a **Path for XML outbox** has been set up, a copy of the document will be placed in the outbox folder. (This functionality is only available in version 2012 HF1 and newer versions)

When an OIOUBL document has been generated and before it is saved it is automatically validated against the document's schema and Schematron (if a Schematron file has been specified for the document's Schema).

If the document fails to validate it will be saved in a special folder that is created automatically in the company's document management folder. This folder is named **XML OUTGOING VALIDATION ERROR**.

Any outgoing OIOUBL document will also automatically be saved in the document management module and attached to the document's source record. An OIOUBL sales invoice made for a sales order, for example, will be saved with the invoiced archived sales order and can be accessed at any time from this archived order using **Ctrl N**.

**NB** Microsoft Dynamics C5 only provides the functionality for generating OIOUBL files. The dispatch of the generated files to the recipients is not a part of this functionality.

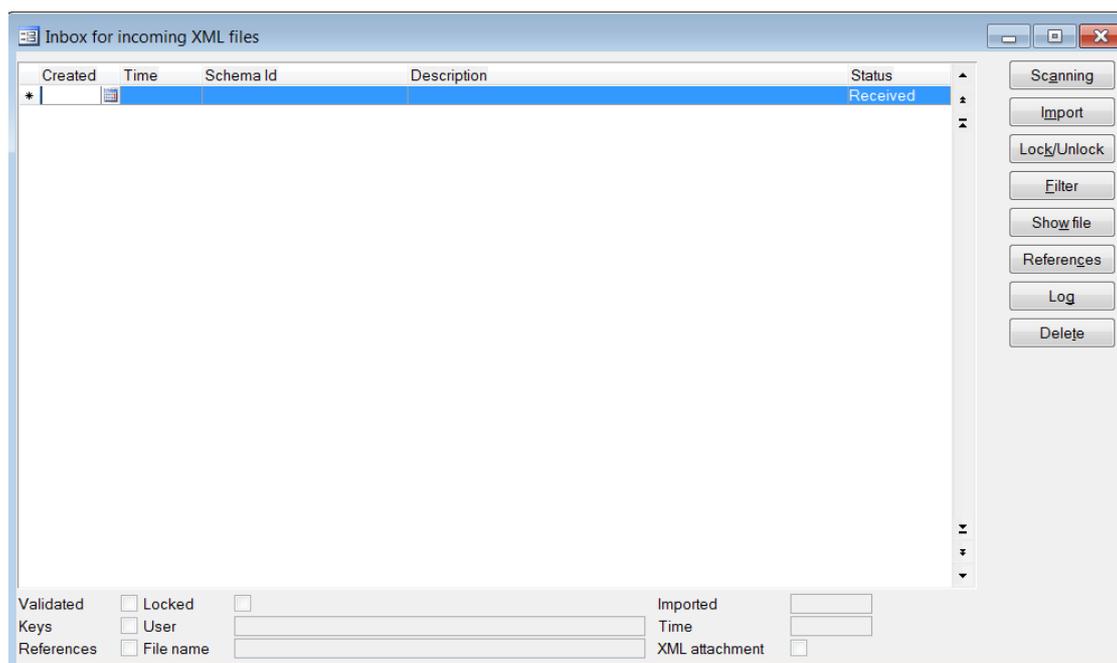
### Incoming XML files

Processing of all incoming XML documents of any type is done in the **XML inbox (General/Daily/XML Inbox)**.

All incoming XML files that can be imported into C5 must be collected in the folder that is specified in the **XML import path**.

### XML Inbox

XML inbox is designed to be used by one user at a time. If the XML inbox is already in use when you try to access it you will receive a warning. It is then only recommended to proceed if you believe that the XML Inbox has been locked by mistake or if you just want to look at the contents of the XML inbox without performing any other actions.



## The menu item - Scanning

This menu item is used to scan the XML import folder for new XML files or to rescan the already received XML files. When called from a blank line the scanning proceeds automatically and only new files in the XML import folder will be scanned.

When called from an existing line the scanning script will prompt you to select one of the following options: To rescan the line's XML file or To scan the import folder for new XML files. Note that only lines with status *Received* can be rescanned.

Any new XML file found during the scanning is moved to the automatically created subfolder **RECEIVED** and a new line for the file with status *Received* is created in the XML Inbox.

When an XML file is scanned it is simultaneously validated as follows:

- Against the appropriate XML schema if the file contains a Schema reference. If the file has been validated with success the field **Validated** for the file's line is updated with a check mark, if the validation fails the field **Validated** is cleared.

If the file does not contain any Schema reference, any further validation is aborted and the file's line in the XML Inbox will be created without indication of Schema Id. Any processing of files without Schema Id is not possible, you can however specify a Schema Id manually and then rescan the file.

- Against the Schematron file if it has been specified for the file's Schema. If the file has been validated with success the field **Validated** for the file's line is updated with a check mark, if the validation fails the field **Validated** is cleared.
- The key values according the file's Schema mapping are retrieved from the file and validated. The validation script attempts to find the values in the C5 database (after they have been converted if any conversion setup exists). If the key values have been found, the field **Keys** for the file's line is updated with a check mark, if the Keys have not been found the field Keys is cleared.

The existence of key values is crucial for the further processing of the file. For example, the unique Customer identification must be specified in the file and it must exist in the C5 database either directly in the Customer table or in the conversion setup before the file from the customer can be imported.

- The reference values according the file's Schema mapping are retrieved from the file and validated. The validation script attempts to find the values in the C5 database (after they have been converted if any conversion setup exists). If the reference values have been found, the field **References** for the file's line is updated with a check mark, if the references have not been found the field References is cleared.

The reference values are similar to the Key values but they are not crucial for the file import and can be corrected after the file has been imported. For example, an item number specified in the XML file may not exist in the C5 database, but an order for the item can still be created. This order cannot be invoiced before the item is created in the database, but this can be done during manual processing of the order.

All errors and discrepancies found during the scanning and validation are saved in the file's Scanning log that can be accessed using the local menu item **Log**. A scanning log may be divided into 5 different sections depending on the log's subject:

- **Technical log** contains general XML errors and errors found during Schema validation
- **Schematron** contains errors found during Schematron validation
- **Key fields** contains information about missing mandatory key fields

- **Application log** contains information about missing reference values
- **XML Import – comparison log** contains information about differences between file values and corresponding values in the C5 database found during file import. See the detailed description in the next section.

#### The menu item - Import

When an XML file has been successfully validated and all key values exist the file can be imported into the C5 database. Note also that only lines with status *Received* can be imported.

If some reference values have not been found during the scanning the import script will warn you about the missing references. If you agree to continue with the file import the XML Inbox line becomes locked with your user name until the file import is finished.

The import script will either create a new document in the C5 database (such as a Sales or a Purchase order) from the file's document or update a document in the C5 database (such as a Sales or a Purchase order) with any changes present in the file if the file contains reference to an already existing document in the C5 database. Note, that during import the data from an XML file may either be ignored or imported depending on the value of the **Import** field in the mapping setup for the particular XML data. (See Technical guide for further information)

All documents in the C5 database are first of all created according to the standard application business logic and not entirely from the file's data as it may not be directly compatible with the application logic. It is therefore necessary to compare the created or updated document with the file's data and notify users about any differences that may require manual resolution. The differences are logged in the **XML Import – comparison log**.

If any differences in document totals have been found during the import the import script will show these differences in a new window and ask you either to confirm or to decline the import.

If you agree to continue the import script will create or update the document, mark it as created from XML and attach the source XML file together with the import log to the document's document management archive. The created or updated document number will then be shown in a separate window with the possibility to open the document directly from this window.

When the import is finished:

- the line's XML file is moved to the automatically created subfolder IMPORTED
- the line in the XML Inbox becomes unlocked
- the line status is changed to *Transferred*
- the line is updated with the date and the time of the import
- the line's log is updated with the XML import – comparison log
- the link between the file's reference number and our document number is updated in the XML conversion table if necessary

#### The menu item - Show file

This menu item displays the line's XML file. If any Presentation style sheet has been specified for the file's Schema it will be used for display. If no Presentation style sheet has been specified for the file's Schema the file will be displayed by the default program associated with the file type.

#### The menu item - References

This menu item shows references to all C5 documents (such as Sales or Purchase orders) that have been created or updated from the line's XML file

#### The menu item - Log

This menu item shows the scanning and import log for the line

#### The menu item - Filter

This menu item is used to filter the display of the lines in the XML Inbox according to the selected line status

#### The menu item- Delete

This menu item is used to delete the lines with status *Transferred* and *Rejected*

If necessary the lines with status *Received* must be deleted manually

#### The menu item – Lock/Unlock

This menu item is used to lock or unlock the line manually. This function can be used to lock some lines in order to prevent other users from e.g. importing the line

#### The field – Status

This field showing the line's status is normally updated automatically. In some situations however this field can and must be changed manually:

- if a line in the XML Inbox cannot be approved for import (e.g. due to unknown origin or similar) it is recommended to manually change the line's status to *Rejected* or to delete the line. When a line's status is changed to *Rejected* the line's XML file is moved to the automatically created subfolder REJECTED
- manually change the line's status from *Imported* back to *Received*, if a line has already been imported but for some reason needs to be imported again and/or rescanned.

Note that once a line has been imported, a reference between the file's reference number and the corresponding C5 document was created in the XML conversion table. When you change the status and import the line again it won't create any new document because of the existing reference in the XML conversion table, but only update the existing document. If you want to create an entirely new document you must manually delete the existing reference in the XML conversion table. See also next section.

## XML conversion (automatic update)

As already mentioned the import of incoming XML documents creates a link between the reference number from an XML file and a C5 document number that was created from this file.

These links are stored and maintained in the XML Conversion table. To view the existing links or conversion between a customer's or vendor's reference numbers (such as Sales order numbers or Purchase order numbers) use the local menu item **Filter** to view conversion lines for individual customers and vendors.

The screenshot shows the 'XML Conversion setup' window. It contains a table with the following data:

Table	Field	Type	Reference
Country	Country	Default	
UnitCode	UnitCode	Default	
PurchTable	Number	Vendor	1000050
PurchTable	ReferenceNumber	Vendor	1000020
PurchTable	ReferenceNumber	Vendor	1000050
SalesTable	ReferenceNumber	Customer	34181835

Below this table is a pop-up window titled 'XML field values' with two columns: 'Our value' and 'Their value'. The data in this window is as follows:

Our value	Their value
10081	20063
10086	20068
10087	20069
10088	20071
10090	20075
10091	20076

The example above shows that a company has received and imported an XML file from the customer 34181835 with the Purchase order number 20063 that corresponds to the Sales number 10081 in the company's database. If the company later receives another XML file from the same customer and with the same reference number (i.e. Purchase order number) no new Sales order will be created in the company's database by the file import script as the corresponding Sales order already exists according to the XML conversion table and the import script will only update the Sales order with changes.

Conversion lines for individual customers and vendors can be accessed directly from the Customer and Vendor table using the local menu items Setup and XML conversion.

## Further processing of sales/purchase orders created by OIOUBL import

All purchase and sales orders created by OIOUBL import are automatically marked as XML orders which can be seen in the field **From XML**. The value of FromXML cannot be changed by users and users are warned when making any changes to XML orders.

Note that the field **Invoice** on Purchase orders is by default updated with the vendor's sales invoice or confirmation number.

PaymentId and Due date are also updated from the file.

As mentioned before the original XML source files are saved in the document management module and can be accessed directly from the related Sales or Purchase order by using the Ctrl+N shortcut.

Type	Date	Time	Text
File	24/06-14	11:37	XML import

User name: Supervisor  
Folder: Imported\  
File name: PurchRequisitionUBL\_2014 06 24 113340  
File type: XML  
XML Schema: Sales\_In\_PurchReqUBL

Data source: Notes

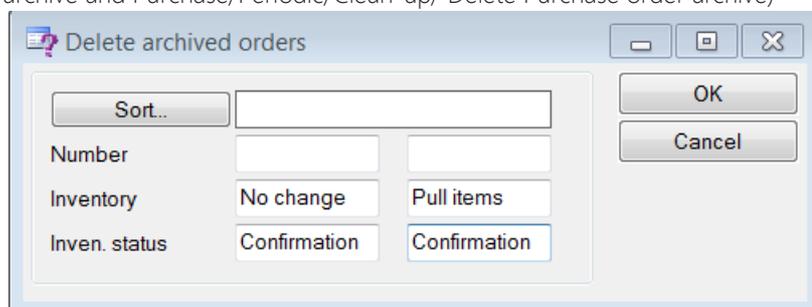
In the example above the line in the document management window for the sales order number shows that the Sales order has been created from an OIOUBL purchase requisition. The menu item **Open** is used to open and view the original XML file. The **Notes** for the line contain the XML import comparison log while **References** menu item is used to view all references to the XML file in the C5 database.

## Requirements for extended OIOUBL functionality

### Save order confirmation/save purchase requisition

In order to be able to generate sales order confirmations and purchase requisitions in OIOUBL format they must be saved in the Sales order archive and Purchase order archive respectively. Ensure that the relevant Sales and Purchase order parameters are set correctly.

If you don't want to keep the sales confirmations and purchase requisitions in the archives after they have been generated you can delete them using Periodic clean-up functionality (Sales/Periodic/Clean-up/ Delete Sales order archive and Purchase/Periodic/Clean-up/ Delete Purchase order archive)



Field	Option 1	Option 2
Number		
Inventory	No change	Pull items
Inven. status	Confirmation	Confirmation

Delimit the deletion to the required document type in the field **Inven. status**

**NB** It won't be possible to re-create the documents in their original form after they have been deleted from the archives.

## OIOUBL – known restrictions

- The solution supports only the following payment methods: Bank transfer and Inpayment form.
- All sales and purchase orders that originate from XML files are created with Inventory = No change
- The field "Country code in VAT no." must be specified for each OIOUBL relevant country in the Country table
- Bank a/c no. in the Company table must be specified as follows: [BankRegNo] <single space>[BankAccountNo] e.g. 1234 12345678901 (hyphens are not permitted)
- All VAT numbers must have numeric format e.g. 12345678
- The mandatory OIOUBL node "BuyerContact" is filled with the value of the "Your contact" field from Sales and Purchase orders. This field is therefore also mandatory when generating OIOUBL documents
- The OIOUBL node "Buyers (Order) Id" is filled with the value of the "Order" field from Sales and Purchase orders.
- OIOUBL documents support only the following VAT types: 25% and 0% (tax exempt).
- Microsoft Dynamics C5 only provides the functionality for generating OIOUBL files. The dispatch of the generated files to the recipients is not a part of this functionality.
- All notes (multi line free text fields) are only supported in CDATA format
  
- It is not recommended to use lines of Blank type
- It is important not to change the sequence of the sales/purchase order lines after an OIOUBL document for the order has been generated.
- The fields Deliver now and Receive now on sales and purchase orders are not updated when the quantity is updated
- If, according to the existing mapping, the quantity field should not be used when importing and creating new purchase or sales order lines all quantities in the created lines will by default be set to 1
- If, according to the existing mapping, the price/discount fields should not be used when importing and creating new purchase or sales order lines all prices/discounts in the created lines will by default be retrieved from the C5 database
- Negative quantity is not supported for Requisitions and Confirmations
- Import of purchase invoices for non-vat registered companies – mark the field Incl. VAT for the vendor. In this case the VAT amount will be added to the price – remember to setup VAT conversion.
- OIOUBL does not accept delivery information on both header and line level.  
Delivery date is by default exported at line level, if it should be exported at header level the mapping has to be changed:  
Remove from:  
  
InvoiceLine/Delivery/ActualDeliveryDate - Tabel: SalesLineArch Fixed value: LineDlvDate  
  
Add to:  
  
Invoice/Delivery/ActualDeliveryDate Tabel: SalesTableArch Fixed value: TableDlvDate
- Module texts – if you want to use the notes created under Sales order/Setup/Text has to be exported in the OIOUBL file following has to be changed in the mapping:  
Go to General, Table, XML, XML Schema. Find the SchemaID that should be changed, click button Advanced – Mapping. Click Alt+Z and find the element Note and change the table to CustJournal and field to RecID.
- ProfilID  
The mapping is default setup to use "Procurement-BilSim-1.0"  
You can change this in General, Table, XML, XML Schema. Find the SchemaID that should be changed, click button Advanced – Mapping. Click Alt+Z and find the element ProfilID and change the profile to the one that you want to use.

Which profile to use depends of how your company is registered and how you use the system. Different profiles are described in the document OIOUBL\_GUIDE\_PROFILER, that can be found on OIOUBL.info homepage.

## Online validation of OIOUBL documents

It is possible to validate OIOUBL files online following the instructions found at:

<http://www.oioubl.info/validator/default.aspx>

The validation tool validates OIOUBL documents against the relevant schemas and Schematron style sheets. The validation page also contains links to the latest Schematron files that can be downloaded directly from the page.

See <http://www.oioubl.info/classes/en/index.html> for further information and latest updates on the OIOUBL.

Microsoft Dynamics is a line of integrated, adaptable business management solutions that enables you and your people to make business decisions with greater confidence. Microsoft Dynamics works like and with familiar Microsoft software, automating and streamlining financial, customer relationship, and supply chain processes in a way that helps you drive business success.

United States and Canada toll free: (888) 477-7989 Worldwide: (1) (701) 281-6500 [www.microsoft.com/dynamics](http://www.microsoft.com/dynamics)

The information contained in this document represents the current view of Microsoft Corporation on the issues discussed as of the date of publication. Because Microsoft must respond to changing market conditions, this document should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information presented after the date of publication.

This white paper is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, AS TO THE INFORMATION IN THIS DOCUMENT.

Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in, or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation. Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2014 Microsoft. All rights reserved. Microsoft, Microsoft Dynamics and the Microsoft Dynamics logo are trademarks of the Microsoft group of companies.