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NAV 2016: ELECTRONIC DOCUMENT MANAGEMENT & OCR

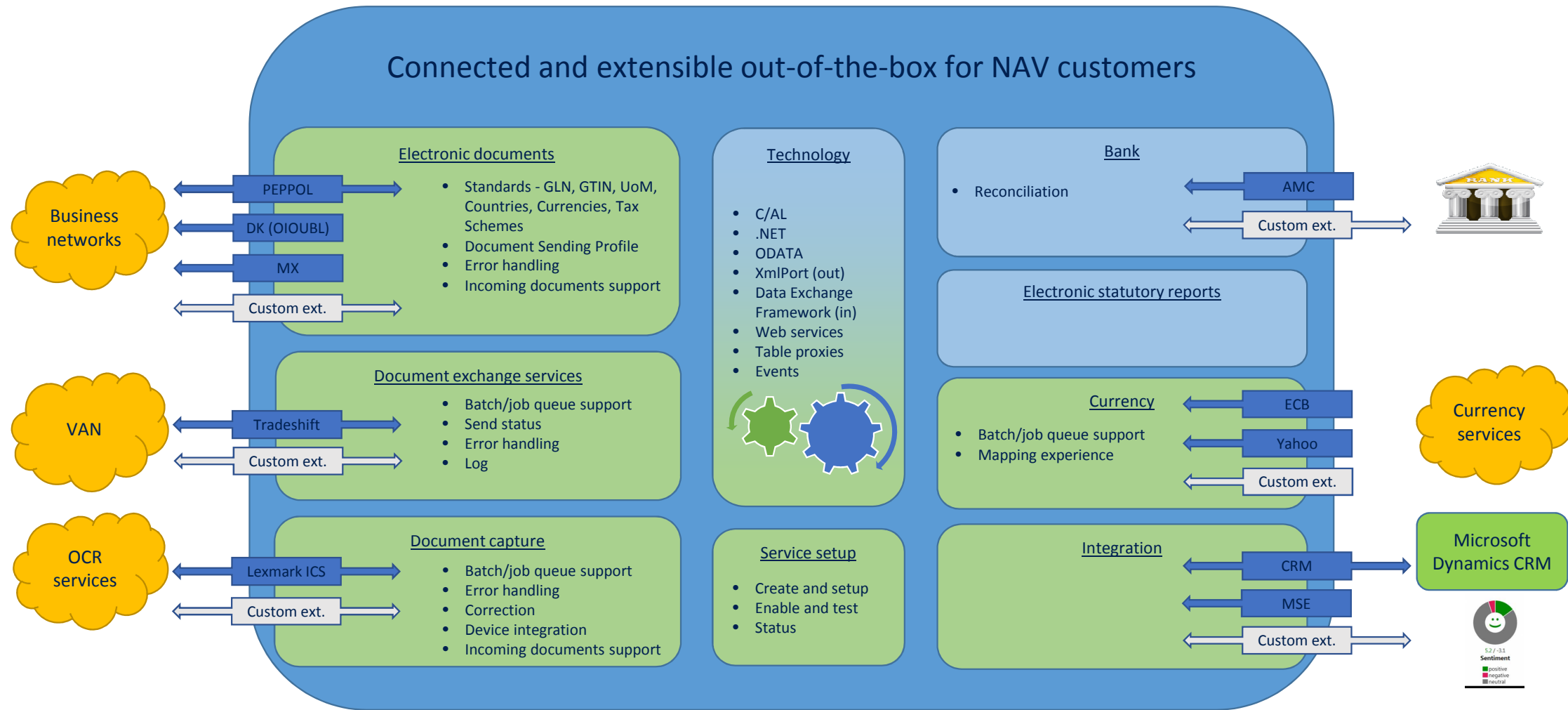
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(Microsoft MDCC)

WHEN YOU ARE PASSIONATE ABOUT MICROSOFT DYNAMICS NAV | www.navtechdays.com



Microsoft Dynamics NAV 2016

Connected and extensible out-of-the-box for NAV customers



Session objectives

1



Introduce up to date currency rates
Automatically update currency rates from feeds

2



Introduce e-invoices and Document management
Send and receive electronic documents

3



Introduce OCR
Capture, store, extract and find incoming documents

Currency Exchange Rate Services

What we need....

Automated Currency Exchange Rate updates

Freedom of choice*

Easy setup - Must be easier than writing code

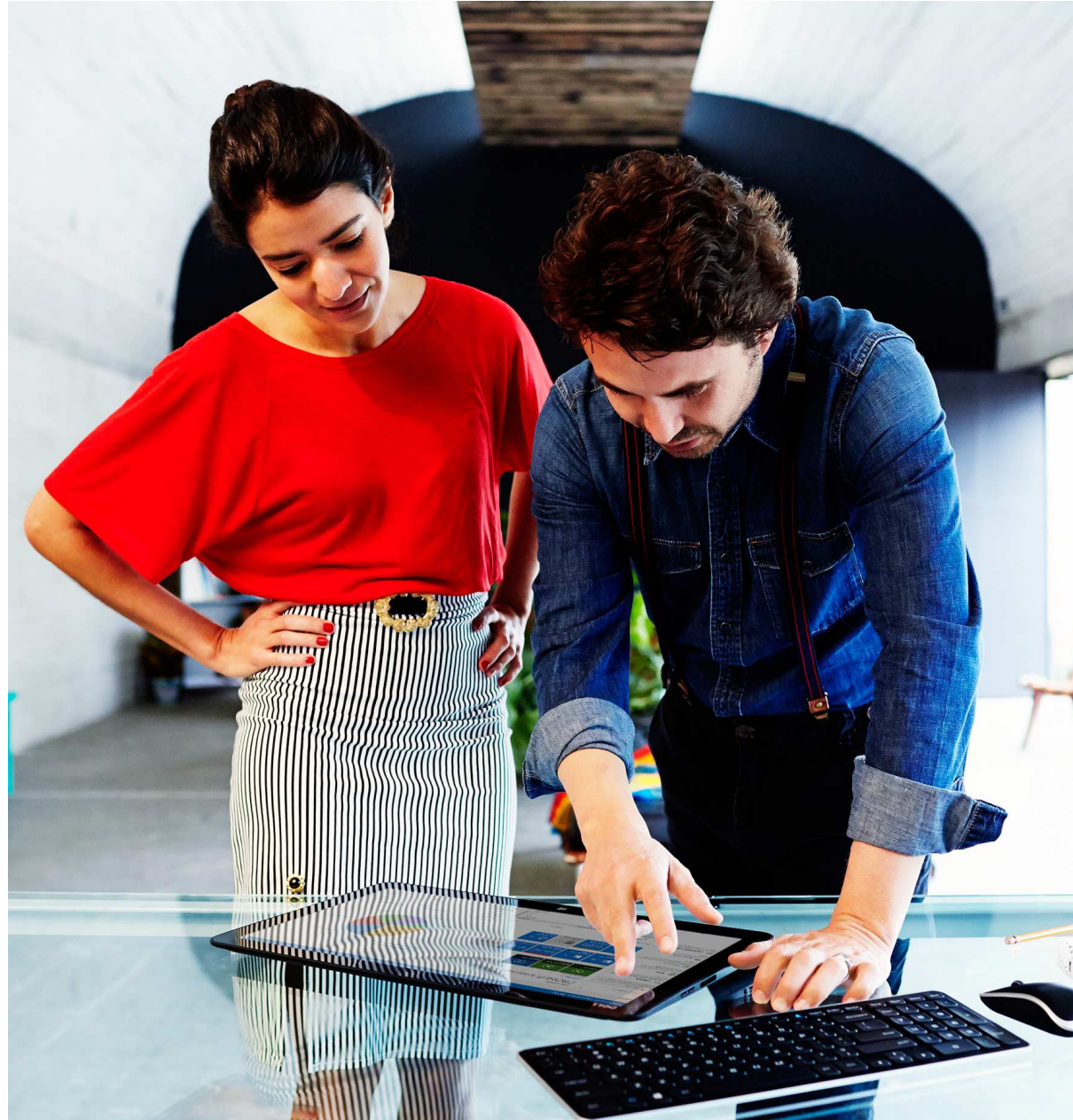
No code modification** - For majority of scenarios

* Some restrictions might apply

Demo

Setup Currency Exchange Rate from ECB

Advanced Setup - Text Transformations



Currency exchange rate feed example

Yahoo feed

One example of a currency exchange rate feed is **Yahoo**.

By providing parameters in the url to the feed, the list of returned currencies and the base currency can be controlled.

Supported currency feeds

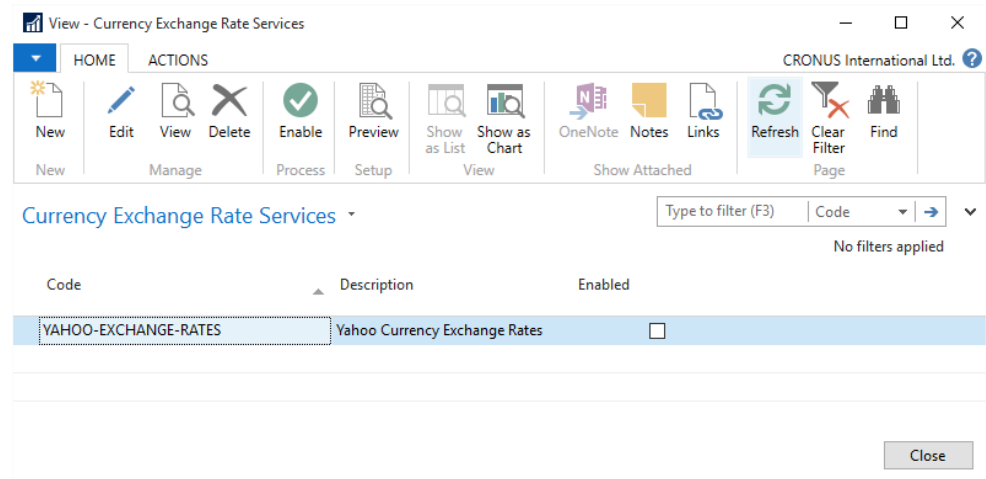
The currency exchange rate service feature has been **tested** with a number of available feeds.

Some local feeds might require data transformation, such as for dates and decimal formatting.

```
▼<query xmlns:yahoo="http://www.yahooapis.com/v1/base.rng"
  yahoo:count="47" yahoo:created="2015-09-14T08:49:14Z"
  yahoo:lang="en-GB">
  ▼<results>
    ▼<rate id="GBPAED">
      <Name>GBP/AED</Name>
      <Rate>5.6747</Rate>
      <Date>9/14/2015</Date>
      <Time>9:49am</Time>
      <Ask>5.6771</Ask>
      <Bid>5.6724</Bid>
    </rate>
    ▼<rate id="GBPAUD">
      <Name>GBP/AUD</Name>
      <Rate>2.1721</Rate>
      <Date>9/14/2015</Date>
      <Time>9:49am</Time>
      <Ask>2.1733</Ask>
      <Bid>2.1709</Bid>
    </rate>
    ▼<rate id="GBPBGN">
      <Name>GBP/BGN</Name>
      <Rate>2.6647</Rate>
      <Date>9/14/2015</Date>
      <Time>9:49am</Time>
      <Ask>2.6655</Ask>
      <Bid>2.6639</Bid>
    </rate>
    ▼<rate id="GBPBND">
      <Name>GBP/BND</Name>
      <Rate>2.1747</Rate>
      <Date>9/14/2015</Date>
      <Time>9:49am</Time>
      <Ask>2.1755</Ask>
      <Bid>2.1740</Bid>
    </rate>
    ▼<rate id="GBPBRL">
      <Name>GBP/BRL</Name>
      <Rate>5.9882</Rate>
      <Date>9/14/2015</Date>
      <Time>9:49am</Time>
      <Ask>5.9944</Ask>
      <Bid>5.9820</Bid>
    </rate>
  </results>
</query>
```

Setting up a currency exchange rate service

- Services overview
 - The new **Currency Exchange Rate Services** page lists defined feed mappings.
 - Multiple service feed mappings can be created, but only a single service can be used.



Mapping feed data

- Define service url
 - To map a currency exchange feed, the **Service URL** must be provided.
- Map fields
 - With the url provided, Dynamics NAV inspects the feed and allows mapping feed elements to the various Dynamics NAV currency fields, such as **Currency Code** and **exchange rates**.
 - The mapping is done in an "**Source**" feed element picker, with data preview available.
- Controlling iteration
 - To ensure proper iteration of the currencies in the feed, the currency loop element must be provided. This is typically the parent node of a currency element.

The screenshot shows the 'Edit - Currency Exch. Rate Service' window for 'YAHOO-EXCHANGE-RATES'. The 'General' tab is active, showing the service code 'YAHOO-EXCHANGE-RATES' and description 'Yahoo Currency Exchange Rates'. The 'Service' tab shows the 'Service URL' as 'http://query.yahooapis.com/v1/public/yql?q=select * from yahoo.finance.xchange where pair in' and the 'Service Provider' as 'Yahoo!'. The 'Field Mapping' tab is also visible, showing a table with columns for 'Caption', 'Source', 'Default Value', and 'Transformation Rule'. The table lists various fields like 'Currency Code', 'Starting Date', 'Exchange Rate Amount', and 'Relational Exch. Rate Amount'. A data preview window is open, showing the 'query' and 'results' for the 'rate' element, with fields like 'id', 'Name', 'Rate', 'Date', 'Time', 'Ask', and 'Bid'.

Element	Example Value
query	
xmlns:yahoo	http://www.yahooapis.com/v1/base.rng
yahoo:count	47
yahoo:created	2015-09-14T08:47:38Z
yahoo:lang	en-US
results	
rate	
id	GBPAED
Name	GBP/AED
Rate	5.6745
Date	9/14/2015
Time	9:47am
Ask	5.6763
Bid	5.6727

Transformation rules

Data transformation

<rate>1 EUR = 1.07 USD</rate>

Supported formatting

Casing (upper, lower and title)

Trim

Substring

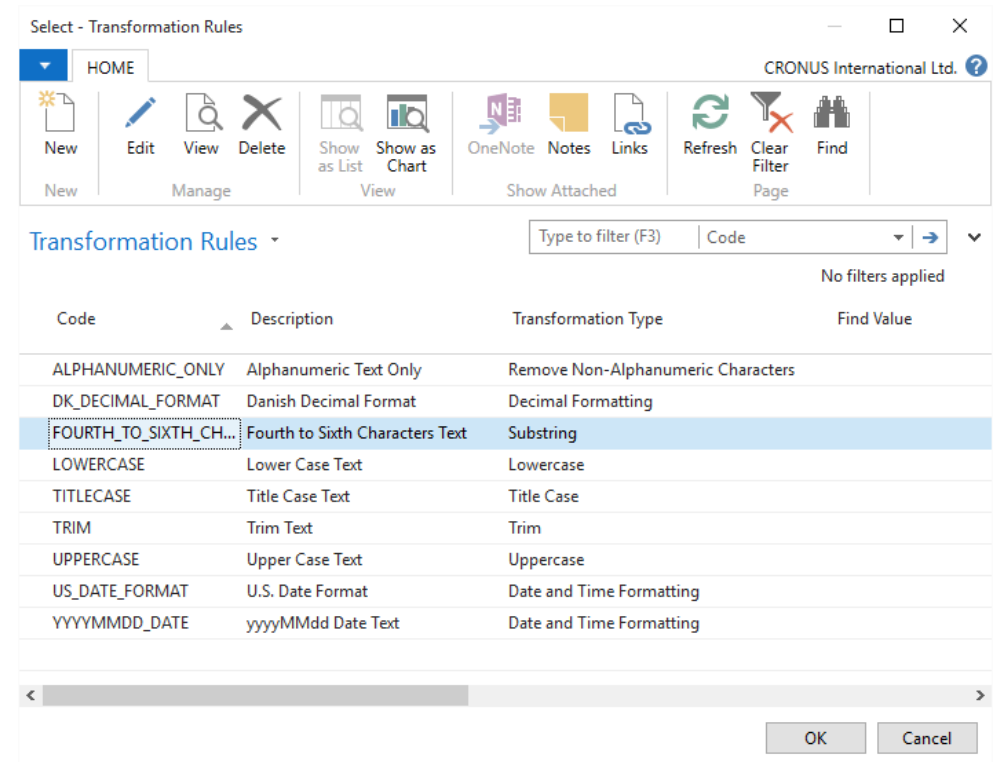
Replace

Regular expression

Remove non-alphanumeric characters

Date and time

Decimal



Preview currencies

Test mapping

Before enabling a currency exchange rate feed mapping, it can be **previewed** to ensure proper mapping.

Edit - Currency Exchange Rates

CRONUS International Ltd. ?

HOME

New View List Edit List Delete Show as List Show as Chart OneNote Notes Links Refresh Clear Filter Find

Currency Exchange Rates

Type to filter (F3) Starting Date

Show results:

Where Starting Date is Enter a value.

+ Add Filter

ig	Curre... Code	Relational Currenc...	Exchange Rate Amount	Relational Exch. Rate Amount	Adjustment Exch. Rate Amount	Relational Adjmt Exch Rate Amt	Fix Exchange Rate Amount
2015	NGN		307,6646	1,0	307,6646	1,0	Currency
2015	NOK		12,6208	1,0	12,6208	1,0	Currency
2015	NZD		2,4413	1,0	2,4413	1,0	Currency
2015	PHP		72,2513	1,0	72,2513	1,0	Currency
2015	PLN		5,7399	1,0	5,7399	1,0	Currency
2015	RON		6,0239	1,0	6,0239	1,0	Currency
2015	RSD		164,1187	1,0	164,1187	1,0	Currency
2015	RUB		104,8766	1,0	104,8766	1,0	Currency
2015	SAR		5,7977	1,0	5,7977	1,0	Currency
2015	SBD		12,5697	1,0	12,5697	1,0	Currency

OK

Automating updates

Job Queue Entries

When a currency exchange rate service is enabled, a **Job Queue Entry** for periodically updating the exchange rates is created.

The user can set up the recurring frequency of the automatic updates in the created job queue entry.

The screenshot shows the configuration window for a job queue entry titled "Codeunit · 1281 · Update Currency Exchange Rates". The window has a ribbon interface with tabs for "HOME", "ACTIONS", and "NAVIGATE". The "ACTIONS" tab is active, showing buttons for "View", "Edit", "New", "Delete", "Set Status to Ready", "Set On Hold", "Restart", "Log Entries", "Report Request Page", "Report", "OneNote", "Notes", "Links", "Refresh", "Clear Filter", "Go to", "Previous", and "Next".

The main configuration area is divided into two sections: "General" and "Recurrence".

General Section:

- Object Type to Run: Codeunit
- Object ID to Run: 1281
- Object Caption to Run: Update Currency Exchange Rates
- Description: (empty)
- Parameter String: (empty)
- Job Queue Category Code: (empty)
- User ID: EUROPE\PBORRING
- Timeout (sec.): 0
- Maximum No. of Attempts to Run: 3
- Last Ready State: 14-09-2015 11:08
- Earliest Start Date/Time: 14-09-2015 11:08
- Expiration Date/Time: (empty)
- Priority: 1000
- Run in User Session: (unchecked)
- Status: Ready

Recurrence Section:

- Recurring Job: ☒
- Run on Mondays: ☒
- Run on Tuesdays: ☒
- Run on Wednesdays: ☒
- Run on Thursdays: ☒
- Run on Fridays: ☒
- Run on Saturdays: ☒
- Run on Sundays: ☒
- Starting Time: 08:00:00
- Ending Time: (empty)
- No. of Minutes between Runs: 5

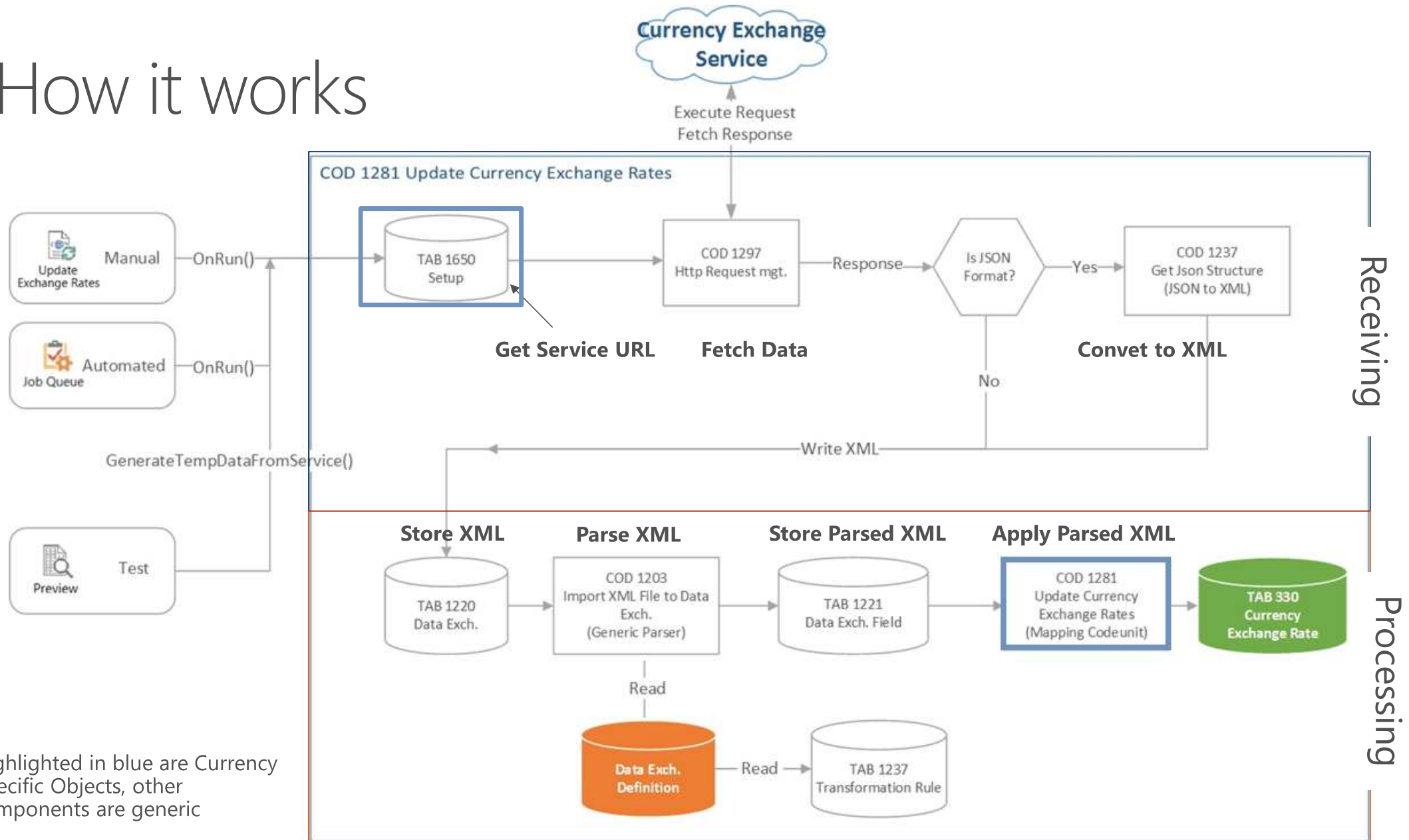
An "OK" button is located at the bottom right of the window.

How it works

Components:

- Data Exchange Framework - Parsing the response
- Simplified UI – View model pattern was used
- JSON to XML Converter
- Text Transformations – new library

How it works



Data Exchange Framework

Edit - Data Exchange Definition - YAHOO-EXCHANGE-RATES

HOME ACTIONS CRONUS International Ltd.

Imp
Exchang

YAHOO-EXCHANGE-RATES · CURREXCHANGE · 330

General

Table ID: Pre-Mapping Codeunit:

Use as Intermediate Table: ☐ Mapping Codeunit:

Name: Post-Mapping Codeunit:

Field Mapping

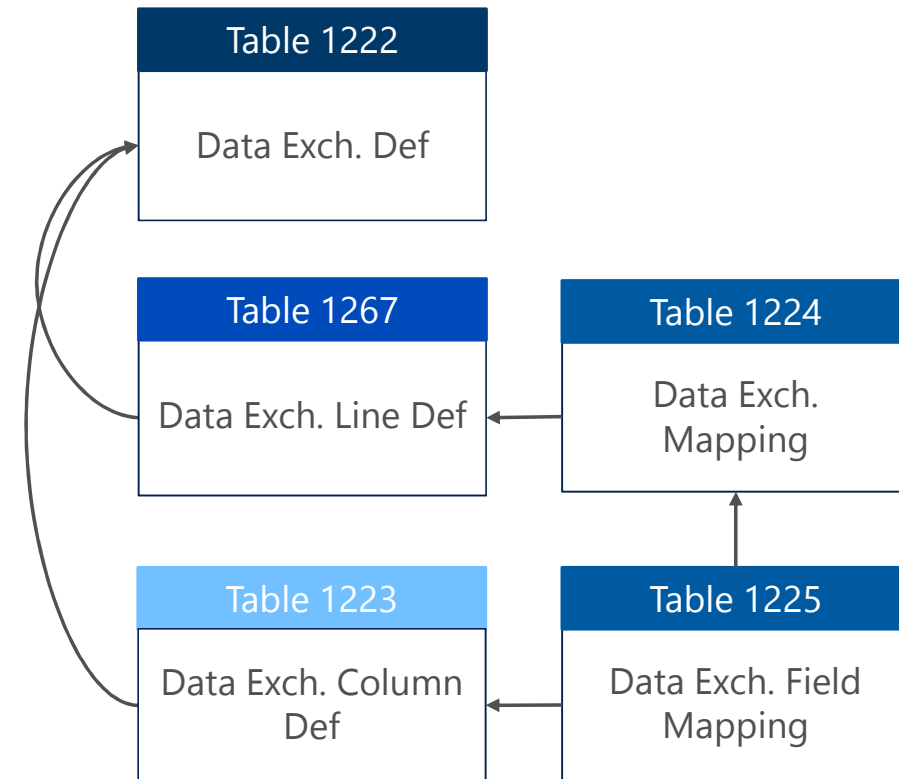
Column No.	Column Caption	Field ID	Field Caption	Opti...	Transformat...
80000	id	1	Currency Code	<input type="checkbox"/>	FOURTH_TO_...
100000	Rate	3	Exchange Rate Amount	<input type="checkbox"/>	
110000	Date	2	Starting Date	<input type="checkbox"/>	US_DATE_FO...
150000		6	Relational Exch. Rate Amount	<input type="checkbox"/>	

OK

20000 xmlns:yahoo Text 0 /query/@xmlns:yahoo

30000 yahoo:count Text 0 /query/@yahoo:count

OK



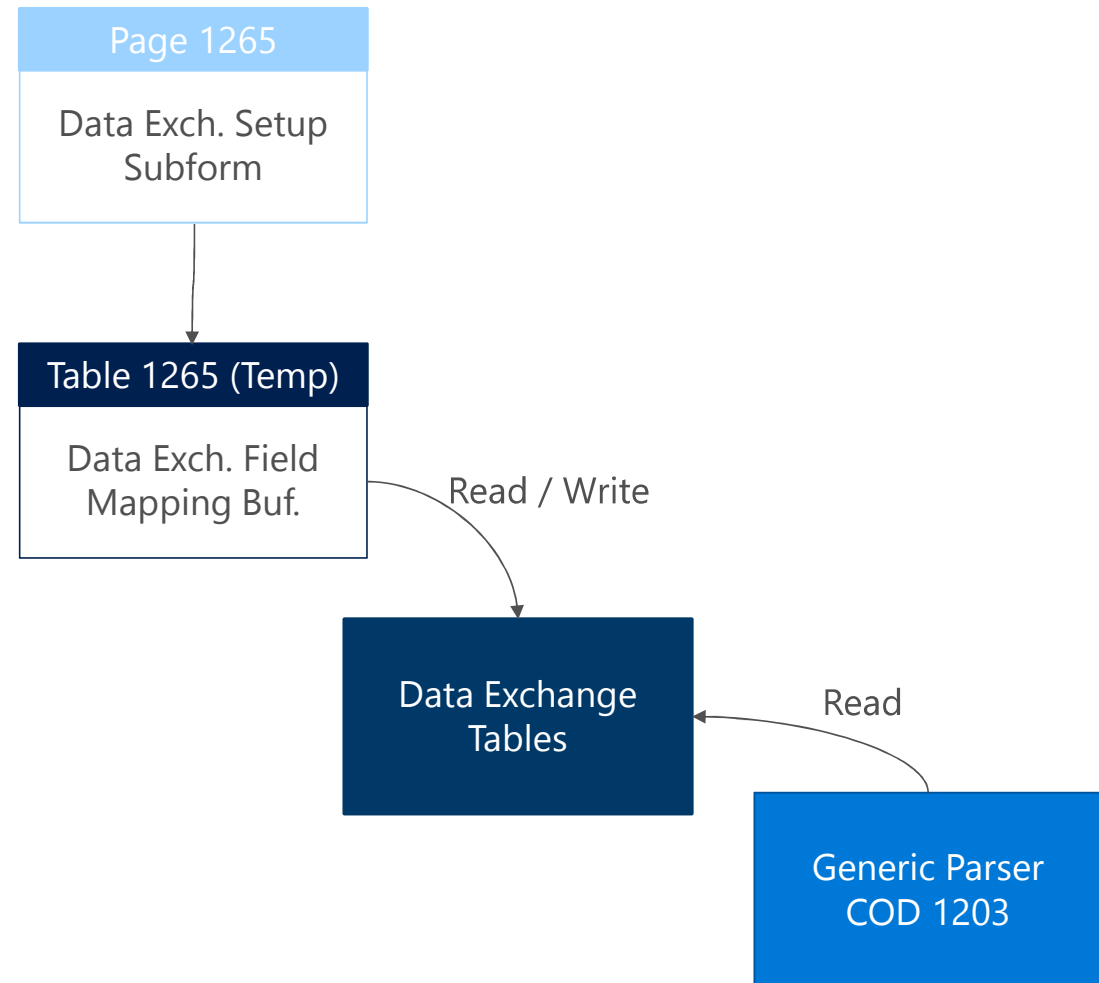
Simplified UI

The screenshot shows a software interface for configuring a data service. The title bar reads "Edit - Currency Exch. Rate Service - YAHOO-EXCHANGE-RATES - Yahoo Currency...". The interface includes a menu bar with "HOME" and "ACTIONS", and a toolbar with icons for View, Edit, New, Delete, Preview, Job Queue Entry, OneNote, Notes, Links, Refresh, Clear Filter, Go to, Previous, and Next. The main content area is titled "YAHOO-EXCHANGE-RATES · Yahoo Currency Exchange Rates" and contains several sections:

- General:** Code: YAHOO-EXCHANGE-RATES, Description: Yahoo Currency Exchange Ra..., Enabled: ☐
- Service:** Service URL: [http://query.yahooapis.com/v1/public/yql?q=select *](http://query.yahooapis.com/v1/public/yql?q=select%20), Service Provider: Yahoo!, Terms of Service: <https://policies.yahoo.com/us...>
- Field Mapping:** A table with columns "Caption", "Source", and "Default Value".

Caption	Source	Default Value
Parent Node for Currency Code	/query/results/rate	
Currency Code	/query/results/rate/@id	
Starting Date	/query/results/rate/Date	
Exchange Rate Amount	/query/results/rate/Rate	
Relational Exch. Rate Amount		1

An "OK" button is located at the bottom right of the field mapping section.



Simplified UI – How to implement

'. The Service section shows 'Service URL: http://query.yahooapis.com/v1/public/yql?q=select *', 'Service Provider: Yahoo!', and 'Terms of Service: https://policies.yahoo.com/us...'. The Field Mapping section shows a table with columns 'Caption', 'Source', and 'Default Value'. The table has a header 'Parent Node for Currency Code' and four rows: 'Currency Code', 'Starting Date', 'Exchange Rate Amount', and 'Relational Exch. Rate Amount'. At the bottom right is an 'OK' button."/>

YAHOO-EXCHANGE-RATES · Yahoo Currency Exchange Rates

General

Code: YAHOO-EXCHANGE-RATES

Description: Yahoo Currency Exchange Ra... Enabled: ☐

Service

Service URL: http://query.yahooapis.com/v1/public/yql?q=select * Service Provider: Yahoo!

Terms of Service: <https://policies.yahoo.com/us...>

Field Mapping

Caption	Source	Default Value
Parent Node for Currency Code		
Currency Code		
Starting Date		
Exchange Rate Amount		
Relational Exch. Rate Amount		

OK

1. Add a part on the page
2. Add following code on the page

```
OnInsertRecord(BelowxRec : Boolean) : Boolean  
MapCurrencyExchangeRate.GetSuggestedFields(TempField);  
CurrPage.SimpleDataExchSetup.PAGE.SetSuggestedField(TempField);  
UpdateSimpleMappingsPart;
```

```
OnAfterGetCurrRecord()  
UpdateSimpleMappingsPart;
```

```
LOCAL UpdateSimpleMappingsPart()  
CurrPage.SimpleDataExchSetup.PAGE.SetDataExchDefCode("Data Exch...");  
CurrPage.SimpleDataExchSetup.PAGE.UpdateData;  
CurrPage.SimpleDataExchSetup.PAGE.UPDATE(FALSE);
```

Simplified UI – Create Data Exch. Definition

Table 1650

```
LOCAL CreateDataExchangeDefinition(DataExchCode : Code[20])
IF DataExchDef.GET(DataExchCode) THEN
    EXIT;

DataExchDef.INIT;
DataExchDef.Code := DataExchCode;
DataExchDef.Name := Code;
DataExchDef.Type := DataExchDef.Type::"Generic Import";
DataExchDef."Reading/Writing Codeunit" := CODEUNIT::"Import XML File to Data Exch.";
DataExchDef.INSERT(TRUE);

DataExchLineDef.INIT;
DataExchLineDef."Data Exch. Def Code" := DataExchDef.Code;
DataExchLineDef.Code := DataExchangeLineDefCodeTxt;
DataExchLineDef.Name := DataExchangeLineDefNameTxt;
DataExchLineDef.INSERT(TRUE);

DataExchMapping.INIT;
DataExchMapping."Data Exch. Def Code" := DataExchDef.Code;
DataExchMapping."Data Exch. Line Def Code" := DataExchangeLineDefCodeTxt;
DataExchMapping.Name := DataExchangeMappingDefNameTxt;
DataExchMapping."Table ID" := DATABASE::"Currency Exchange Rate";
DataExchMapping."Mapping Codeunit" := CODEUNIT::"Map Currency Exchange Rate";
DataExchMapping.INSERT(TRUE);
```

Need to create a Skeleton:

- Which table we are mapping
- Mapping CodeUnit
- Parsing Code unit
- Data Exch. Definition Lines (blue line)

Text in red needs to be changed for new implementations

Caption	Source	Default Value
Parent Node for Currency Code		
Currency Code		
Starting Date		
Exchange Rate Amount		
Relational Exch. Rate Amount		

JSON to XML Converter

Codeunit 1237 Get Json Structure

```
GenerateStructure(Path : Text;VAR XMLBuffer : Record "XML Buffer")  
File.OPEN(Path);  
File.CREATEINSTREAM(JsonInStream);
```

```
TempBlob.INIT;  
TempBlob.Blob.CREATEOUTSTREAM(XMLOutStream);  
JsonToXML(JsonInStream,XMLOutStream);  
XmlDocument := JsonConvert.DeserializeXmlNode(FileContent);
```

```
XMLBufferWriter.GenerateStructure(XMLBuffer,XMLOutStream);
```

```
[TryFunction] JsonToXML(JsonInStream : InStream;VAR XMLOutStream : OutStream)  
WHILE JsonInStream.READ(NewContent) > 0 DO  
    FileContent += NewContent;  
  
XmlDocument := JsonConvert.DeserializeXmlNode(FileContent);  
XmlDocument.Save(XMLOutStream);
```

```
[TryFunction] JsonToXMLCreateDefaultRoot(JsonInStream : InStream;VAR XMLOutStream : OutStream)  
WHILE JsonInStream.READ(NewContent) > 0 DO  
    FileContent += NewContent;  
  
FileContent := '{"root":' + FileContent + '}';  
  
TempBlob.INIT;  
TempBlob.INSERT;  
TempBlob.Blob.CREATEOUTSTREAM(OutStream);  
OutStream.WRITETEXT(FileContent);  
  
TempBlob.Blob.CREATEINSTREAM(JsonInStream);  
  
JsonToXML(JsonInStream,XMLOutStream);
```

Transformation Rule

Table 1237 Transformation Rule

Supported formatting

Casing (upper, lower and title)

Trim

Substring

Replace

Regular expression

Remove non-alphanumeric characters

Date and time

Decimal

```
TransformText(OldValue : Text) : Text  
NewValue := OldValue;
```

```
CASE "Transformation Type" OF  
  "Transformation Type"::Uppercase:  
    NewValue := UPPERCASE(OldValue);  
  "Transformation Type"::Lowercase:  
    NewValue := LOWERCASE(OldValue);  
  "Transformation Type"::"Title Case":  
    NewValue := TextToTitleCase(OldValue);  
  "Transformation Type"::Trim:  
    NewValue := DELCHR(OldValue,'<>');  
  "Transformation Type"::Substring:  
    NewValue := Substring(OldValue);  
  "Transformation Type"::Replace:  
    NewValue := StringReplace(OldValue,"Find Value","Replace Value");  
  "Transformation Type"::"Regular Expression":  
    NewValue := RegularExpression(OldValue,"Find Value","Replace Value");  
  "Transformation Type"::"Remove Non-Alphanumeric Characters":  
    NewValue := RemoveNonAlphaNumericCharacters(OldValue);  
  "Transformation Type"::"Date and Time Formatting":  
    NewValue := DateTimeFormatting(OldValue);  
  "Transformation Type"::"Decimal Formatting":  
    NewValue := DecimalFormatting(OldValue);  
END;
```


Currency exchange rate services summary

Benefits

Up-to-date currencies

Automatically get regular currency exchange rate updates

Freedom of choice*

Use the currency exchange rate feed that best fits the required currency support and regulatory requirements

Easy to set up

Feeds are mapped as a configuration, allowing power users to set up currency mapping themselves

Demo data

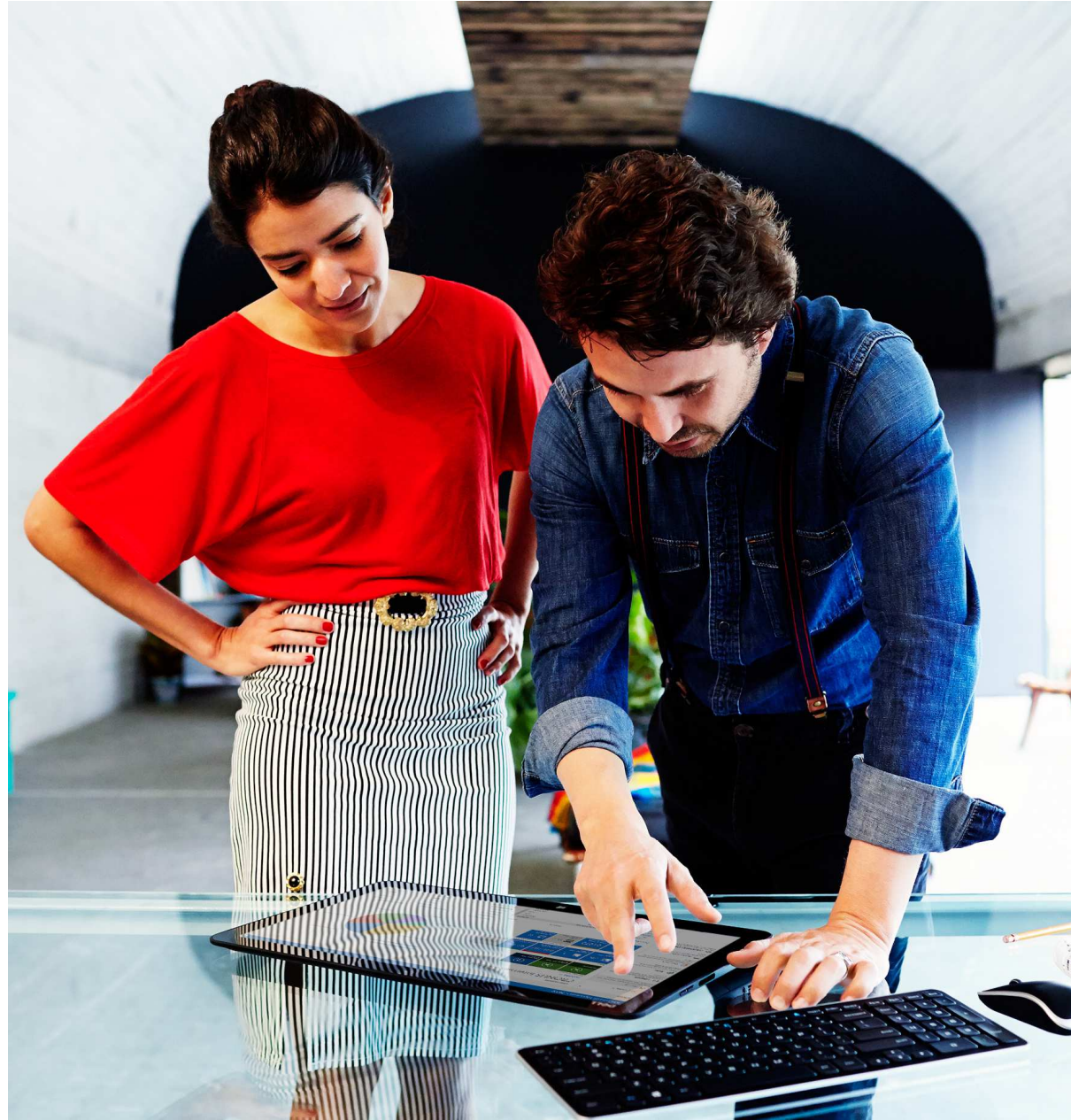
Yahoo example available out of the box

* Some restrictions might apply

Incoming Documents

Demo

Incoming Documents



Incoming documents - summary

- "Legacy" support
 - Manual creation of documents/entities
- Automatic creation
 - document type "sniffing"
- Main attachment and supporting attachments
- Camera integration
- Integration with document exchange service and OCR service

Capture and store invoices in Dynamics NAV

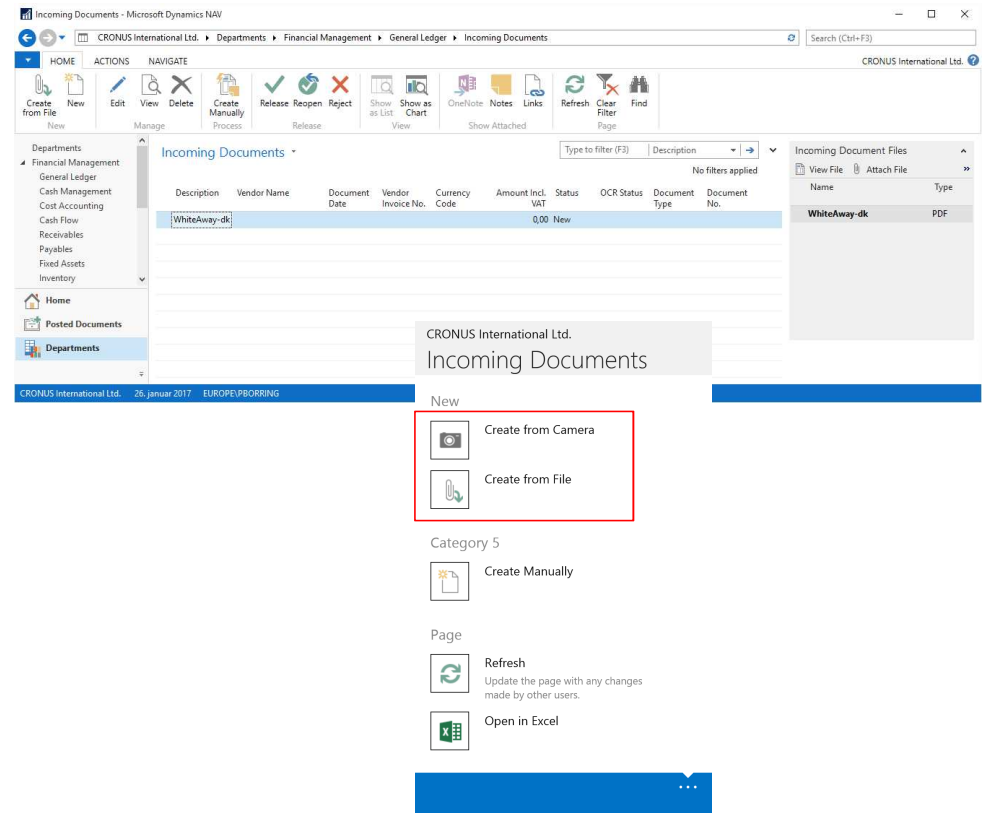
Incoming documents

Add **PDF** or **images** as incoming documents in Dynamics NAV.

Device camera integration

Dynamics NAV device apps now include the ability to create an incoming document directly by taking a photo using the **device camera**.

You can also use a photo app, such as **Office Lens**, and attach the image to an incoming document.



Adding invoices to Microsoft Dynamics NAV

Incoming documents

Invoice capture works on incoming documents that have been added in Microsoft Dynamics NAV, either by attaching a PDF or an image of the invoice. Additional documents such as emails or terms can be added as supporting attachments.

Microsoft Dynamics NAV - Incoming Documents

CRONUS International Ltd. > Departments > Financial Management > General Ledger > Incoming Documents

Search (Ctrl+F3)

CRONUS International Ltd.

HOME ACTIONS NAVIGATE

Create from File New Edit View Delete Create Manually Process Release Reopen Reject Show as List Show as Chart View OneNote Notes Links Refresh Clear Filter Find

Departments

Financial Management

General Ledger

Cash Management

Cost Accounting

Cash Flow

Receivables

Payables

Fixed Assets

Inventory

Home

Posted Documents

Departments

Incoming Documents

Type to filter (F3) Description No filters applied

Description	Vendor Name	Document Date	Vendor Invoice No.	Currency Code	Amount Incl. VAT	Status	OCR Status	Document Type	Document No.
WhiteAway-dk					0,00	New			

Incoming Document Files

View File Attach File

Name	Type
WhiteAway-dk	PDF

CRONUS International Ltd. 26. januar 2017 EUROPE\PBORRING

Using devices to capture images

Using camera integration

The Microsoft Dynamics NAV device apps offer the ability to create an incoming document directly by taking **a photo** using the device camera.

Using a photo app

Another option is to use a photo app, such as **Office Lens**. Create an incoming document and attach the image from the device photo album. Functionality such as **deskew** and **background removal** increases the overall quality.

Image quality is important

Notice that the Lexmark ICS result quality depends on the quality of the captured image. In general it is better to scan paper documents. Photo capture is great for storing incoming documents for manual processing in small businesses.

CRONUS International Ltd.

Incoming Documents

New



Create from Camera



Create from File

Category 5



Create Manually

Page



Refresh

Update the page with any changes made by other users.



Open in Excel



Create documents in Dynamics NAV

Manual creation

Users can manually create Dynamics NAV documents from an incoming document.

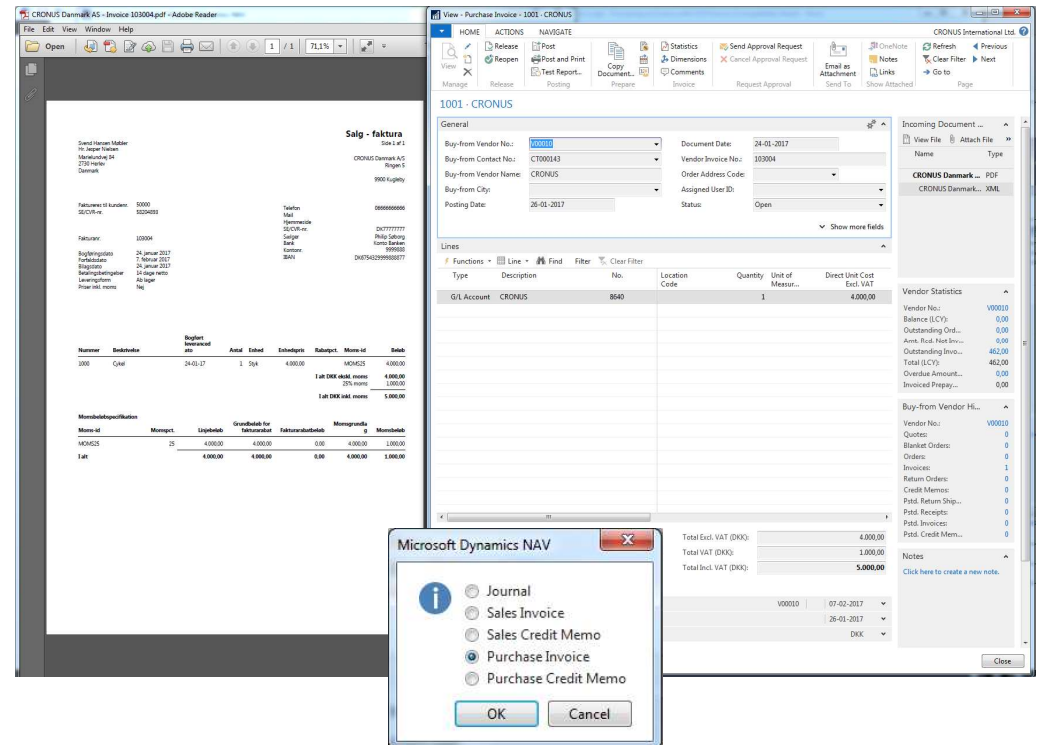
This is typically applicable when an optional Lexmark Invoice Capture Service (Lexmark ICS) service is not utilized.

Create purchase invoice

Purchase invoices can be created using Text-to-account mapping, resulting in a single line with a total amount.

Create journal line

General journal lines can be used when there is no desire to create the vendor in Dynamics NAV.



Preview header data

Extracted data

The **Incoming Document** card page shows extracted header data from the electronic document. The same information is shown on the **Incoming Document** list page, providing easy overview and sorting options.

Edit - Incoming Document - CRONUS International Ltd. - 103039 - Invoice 103039

HOME ACTIONS NAVIGATE

View Manage Create Document Process Release Incoming Document OCR Request Approval Show Attached Page

CRONUS International Ltd. - 103039 - Invoice 103039

General

Description: invoice.103039 Status: New

Main Attachment: 19dbf140-76d6-558f-9835-aafdfd775141.xml

Record: OCR Status: Job Queue Status: Posted:

Financial Information

Vendor Name: CRONUS International Ltd. Vendor Order No.: Document Date: 26-01-2017

Vendor VAT Registration No.: Vendor IBAN: GB12CPBK08929965044991 Due Date: 26-01-2017

Vendor Bank Branch No.: BG999999 Currency Code: GBP

Vendor Bank Account No.: FTSBGB2L Amount Excl. VAT: 15,560.00

Vendor Invoice No.: 103039 Amount Incl. VAT: 15,560.00

VAT Amount: 0,00

Errors and Warnings

Open Related Record View Details Find

Message Field Name Description Type

OK

Incoming Documents - Microsoft Dynamics NAV

CRONUS Customer Departments Financial Management General Ledger Incoming Documents

HOME ACTIONS NAVIGATE

Create from File New Edit View Delete Release Reopen Reject Create Manually Category 3 Show as List Show as Chart OneNote Notes Links Refresh Clear Filter Find

Departments

Financial Management General Ledger Cash Management Cost Accounting Cash Flow Receivables Payables

Incoming Documents

Type to filter (F3) Description No filters applied

Description	Vendor Name	Document Date	Vendor Invoice No.	Currency Code	Amount Incl. VAT	Status	OCR Status	Document Type	Document No.
Invoice 103039	CRONUS International Ltd.	26-01-2017	103039	GBP	15,560.00	New			

Incoming Document Files

View File Attach File

Name Type

19dbf140-76d6-558f-... XML

https://sandbox.trade...

CRONUS Customer 26, januar 2017 NAVUSER

Create Dynamics NAV purchase documents

Document creation

If the incoming document type is recognized as an invoice or a credit memo, a corresponding Microsoft Dynamics NAV document can be created based on the data of the electronic document.

Create purchase invoice

Purchase invoices can be created for existing vendors.

Create journal line

General journal lines can be used when there is no need to create the vendor or track lines in Microsoft Dynamics NAV. A single line with the total amount is added, using a matching G/L account rule. Text-to-account mapping rules can be used for creating general journal lines.

The screenshot displays the Microsoft Dynamics NAV interface for creating purchase documents. It is divided into three main sections: 'Incoming Document', 'Purchase Invoice', and 'General Journal Line'.

Incoming Document - CRONUS International Ltd. - 103039 - Invoice 103039

General

Description: Invoice 103039
Main Attachment: 19dbf140-76d6-558f-9835-aafdf775141.xml
Record: [Empty]
Status: New
OCR Status: [Empty]
Job Queue Status: [Empty]
Posted: [Empty]

Financial Information

Vendor Name: CRONUS International Ltd.
Vendor VAT Registration No.: GB12CPBK08929965044991
Vendor IBAN: BG999999
Vendor Bank Branch No.: BG999999
Vendor Bank Account No.: FTSBGB2L
Vendor Invoice No.: 103039
Vendor Order No.: [Empty]
Document Date: 26-01-2017

Errors and Warnings

Open Related Document View Details Find

1005 - CRONUS International Ltd.

General

Buy-from Vendor No.: 5000
Buy-from Contact No.: CT000073
Buy-from Vendor Name: CRONUS International Ltd.
Buy-from City: Guildford
Posting Date: 26-01-2017
Document Date: 26-01-2017
Vendor Invoice No.: 103039
Order Address Code: [Empty]
Assigned User ID: [Empty]
Status: Open

Lines

Type	Description	No.	Location Code	Quantity	Unit of Measur...	Direct Unit Cost	Excl. VAT	Line Amount
Item	Bicycle	1000	YELLOW	4	PCS		4,000.00	16,000.00

Invoice Discount Amount: 440.00
Invoice Discount %: 2.75
Total Excl. VAT (GBP): 15,560.00
Total VAT (GBP): 0.00
Total Incl. VAT (GBP): 15,560.00

Invoicing 20000 CM 26-01-2017

Vendor Statistics

Vendor No.	20000
Balance (LCY):	2,904.53
Outstanding Ord...	0.00
Amt. Rcd. Net Inv...	0.00
Outstanding Invo...	15,560.00
Total (LCY):	18,464.53
Overdue Amount...	0.00
Invoiced Prepay...	0.00

Buy-from Vendor His...

Close

Manage conversion errors and warnings

Incoming document card

Errors such as vendors not found in Microsoft Dynamics NAV when creating a new purchase invoice, are highlighted in the **Errors and Warnings** FastTab on the **Incoming Document** card page.

Hyperlinks help users to fix the issue (such as creating a new vendor).

CRONUS International Ltd. - 103039 - Invoice 103039

General

Description: Invoice 103039
Main Attachment: 19dbf140-76d6-558f-9835-aafdf673141.xml
Record:

Status: Failed
OCR Status:
Job Queue Status:
Posted: ☐

Financial Information

Vendor Name: CRONUS International Ltd.
Vendor VAT Registration No.: 0812CPB00809965044991
Vendor IBAN: BG99999
Vendor Bank Branch No.: FT38082L
Vendor Invoice No.: 103039

Vendor Order No.:
Document Date: 26-01-2017
Due Date: 26-01-2017
Currency Code: GBP
Amount Excl. VAT: 15.560,00
Amount Incl. VAT: 15.560,00
VAT Amount: 0,00

Errors and Warnings

Message	Type	Description
Cannot find buy-from vendor 'CRONUS International Ltd.' based on the vendor's GLN 871245000035 or VAT registration.	Error	
Cannot find pay-to vendor 'CRONUS International Ltd.' based on the vendor's GLN 871245000035 or VAT registration.	Error	
Cannot find an appropriate G/L account for the line with description 'Bicycle'. Choose the Map Text to Account button, or	Error	
Cannot find item 'Bicycle' based on the vendor item number 1000 on the incoming document. Make sure that a card for t	Error	

Incoming documents list

The list of incoming documents also displays the status of conversion to a Microsoft Dynamics NAV document.

CRONUS Customer - Departments - Financial Management - General Ledger - Incoming Documents

Search (Ctrl+F3)

HOME ACTIONS NAVIGATE

Create from File Create Document Attach File Map Text to Account Release Reopen Reject Send Approval Request Cancel Approval Request Open Record Remove Reference to Record Navigate Send to Job Queue Remove from Job Queue Send to OCR Service Receive from OCR Service

Incoming Documents

Description	Vendor Name	Document Date	Vendor Invoice No.	Currency Code	Amount Incl. VAT	Status	OCR Status	Document Type	Document No.
Invoice 103039	CRONUS International Ltd.	26-01-2017	103039	GBP	15.560,00	Failed			

Incoming Document Files

Name	Attach File	Type
19dbf140-76d6-558f-9835-aafdf673141.xml	http://sandbox.trade...	XML

CRONUS Customer 26. januar 2017 NAVUSER

Navigate documents

From incoming document

The **Record** link on the **Incoming Document** card page allows easy navigation to the created document.

From generated purchase invoice or credit memo

On the generated Dynamics NAV document, a link to the incoming document as well as to the attachments is available.

From ledger entry

Once the document is posted, the generated ledger entries have links to the incoming document, allowing viewing the original invoice.

The screenshot displays the Dynamics NAV interface, illustrating the navigation path from an incoming document to a purchase invoice and then to a ledger entry.

Top Panel (Incoming Document): The "Edit - Incoming Document - CRONUS International Ltd. - 103039 - Invoice 103039" window is shown. The "NAVIGATE" tab is active, and the "Open Record" button is highlighted with a red box. The "General" section shows the "Record" link, which is also highlighted with a red box.

Bottom Panel (Purchase Invoice): The "View - Purchase Invoice - 1005 - CRONUS International Ltd." window is shown. The "General" section displays the "Buy-from Vendor No." (20000) and "Document Date" (26-01-2017). The "Lines" section shows a table with columns: Type, Description, No., Location Code, Quantity, Unit of Measur..., Direct Unit Cost, and Line Amount. The table contains one line item: "Bicycle" (No. 1000, Location Code YELLOW, Quantity 4 PCS, Direct Unit Cost 4,000.00, Line Amount 16,000.00). The "Vendor Statistics" section shows the "Vendor No." (20000) and "Balance (LCY)" (2,904.53).

Right Panel (Incoming Document List): A small window titled "Incoming Document ..." is open, showing a list of documents. The "Name" column contains "19dbf140-76d6-55...", and the "Type" column contains "XML". The "URL" column contains "https://sandbox tra...".

Text-to-account mappings

Default G/L accounts

Use text-to-account rules to map G/L accounts used when creating documents in Microsoft Dynamics NAV.

Mapped accounts can be changed in the generated document or general journal line before posting.

Edit - Incoming Document - CRONUS International Ltd. · 103039 · Invoice 103039

HOME ACTIONS NAVIGATE

View Edit New Delete Manage Create Document Create Journal Line Map Text to Account Attach File Release Reopen Reject Release Open Record Incoming Document

CRONUS International Ltd. · 103039 · Invoice 103039

General

Description: Invoice 103039

Main Attachment: 19dbf140-76d6-558f-9835-aafdfd775141.xml

Record: Purchase Invoice - 1004

Financial Information

Vendor Name: CRONUS International Ltd.

Edit - Text-to-Account Mapping - 10000

HOME ACTIONS

View Edit New Delete Manage Set Up Default Accounts OneNote Notes Links Refresh Clear Filter Go to Previous Next

CRONUS International Ltd.

10000

Default Debit Account for Non-Item Lines: 8640 - Miscellaneous Default Credit Account for Non-Item Lines:

Mapping Text	Debit Acc. No.	Credit Acc. No.	Bal. Source Type	Bal. Source No.
Gasoline	8510		G/L Account	

OK

Electronic Invoicing

Electronic invoicing

Challenges

Mandatory
B2G
invoicing

Common
vocabulary

Empower
small
business

What do we
need

A generic
electronic
invoice
platform

Support for
common
standards
and formats

Common
document
exchange
service

Challenges to address

Mandatory B2G invoicing

More and more countries are mandating the use of electronic invoices for business to government (B2G) trade. US, e.g., will mandate from 2018. Mandatory B2G requirements can trigger B2B adoption as well.

Empowering small businesses with electronic invoicing

Many small businesses struggle with electronic invoices due to cost and complexity. They can be forced by larger customers to support specific formats, or to support various country specific formats due to a global customer base.

Supporting a common vocabulary

Exchanging electronic documents between parties, often in different countries and using different ERP software, require support for international standards when it comes to the vocabulary used in data. For example item identifiers, unit of measure codes, and so on.

What do we need....

A generic electronic invoice platform

Dynamics NAV should be able to send and receive electronic invoices out of the box, with the specific format and document exchange service (VAN) being variable.

Support for common B2G formats and standards

The PEPPOL initiative is a recent electronic document format based on the Universal Business Language (UBL), and access point infrastructure, built on United Nations standards to facility B2G and B2B trade, including cross-border.

Support for a common document exchange service

Besides being able to generate and consume electronic documents, having a seamless ability to connect and send documents electronically, directly through a document exchange service simplifies the customers experience and reduce costs even further.

Electronic Invoicing

In Microsoft Dynamics NAV 2016,

You can send and receive electronic invoices and credit memos, as files, or by using a document exchange service. Out of the box, the PEPPOL format and the free Tradeshift document exchange service are supported, but the architecture allows partners to add additional formats or document exchange services. The focus is on simple B2G and B2B trade, not complex EDI workflows.

A number of standards used in electronic document exchange are now supported, including GLN for customers and vendors, GTIN for items, and international codes on unit of measures, currencies, tax codes, tax schemes and countries.

A new Document Sending Profile combines all tasks of sending documents, by email, print, file or electronic format, and allows assigning preferred sending options to customers and vendors, or to a group of customers and vendors.

Documents can be sent to, and received from other parties on the Tradeshift network. A delivery status as well as an activity log is available in Dynamics NAV for the document exchange service interaction.

Received electronic documents are integrated with the document management features. They are stored as Incoming Documents, from which the user can create Purchase Invoices, Purchase Credit Memos, or General Journal Lines. Users are notified with errors and warnings when converting incoming documents. Navigating to created documents, posted documents or ledger entries in Dynamics NAV is as simple as clicking on the incoming document link. Text-to-account rules allow mapping default accounts based on the vendor or line data.

Workflow can be added to automatically process any incoming electronic document.

Electronic invoicing

Microsoft Dynamics 2016

Standards support

Out-of-the-box support for GLN, GTIN, etc.

Flexible document sending options

Combined options for sending documents.

Extensible formats

Out-of-the-box PEPPOL format.

Easy to extend with new formats.

Free document exchange service

Out-of-the-box Tradeshift integration.

Process automation

Out-of-the-box workflow automation.

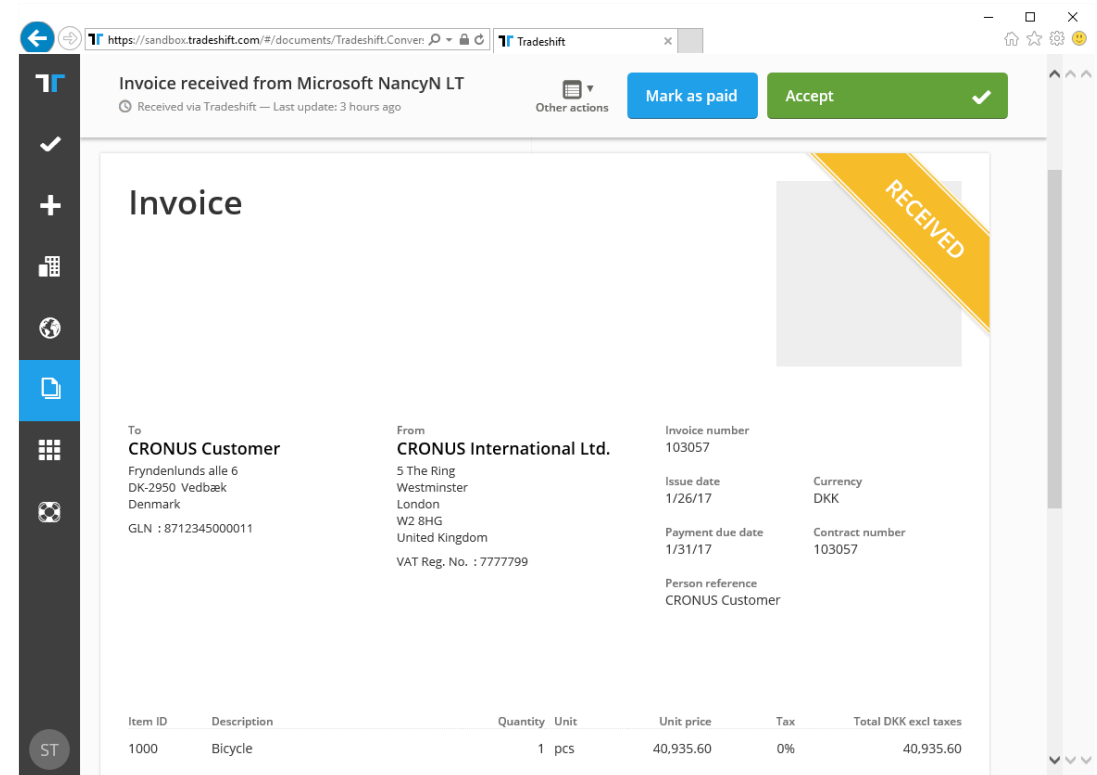
Tradeshift - document exchange service

Vision

Connect every business in the world

More than 20 formats are supported

Easy to Setup



Demo - content

- Setting up TradeShift integration
- Sending an electronic invoice
- Receiving an electronic invoice

Demo

Setting up Tradeshift integration



Demo

Sending an electronic
invoice



Demo

Receiving an electronic
invoice



Demo

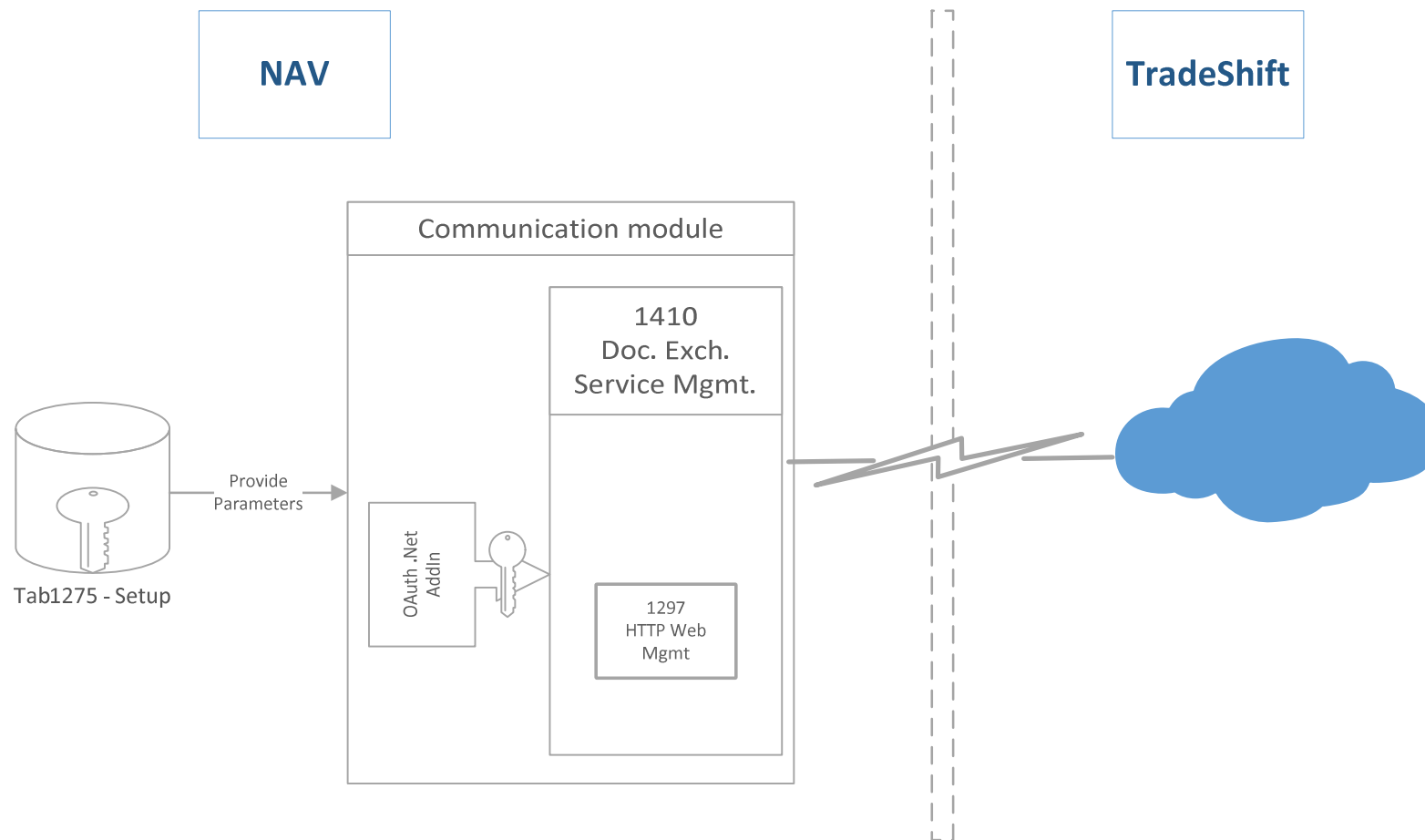
Behind sending
electronic invoices



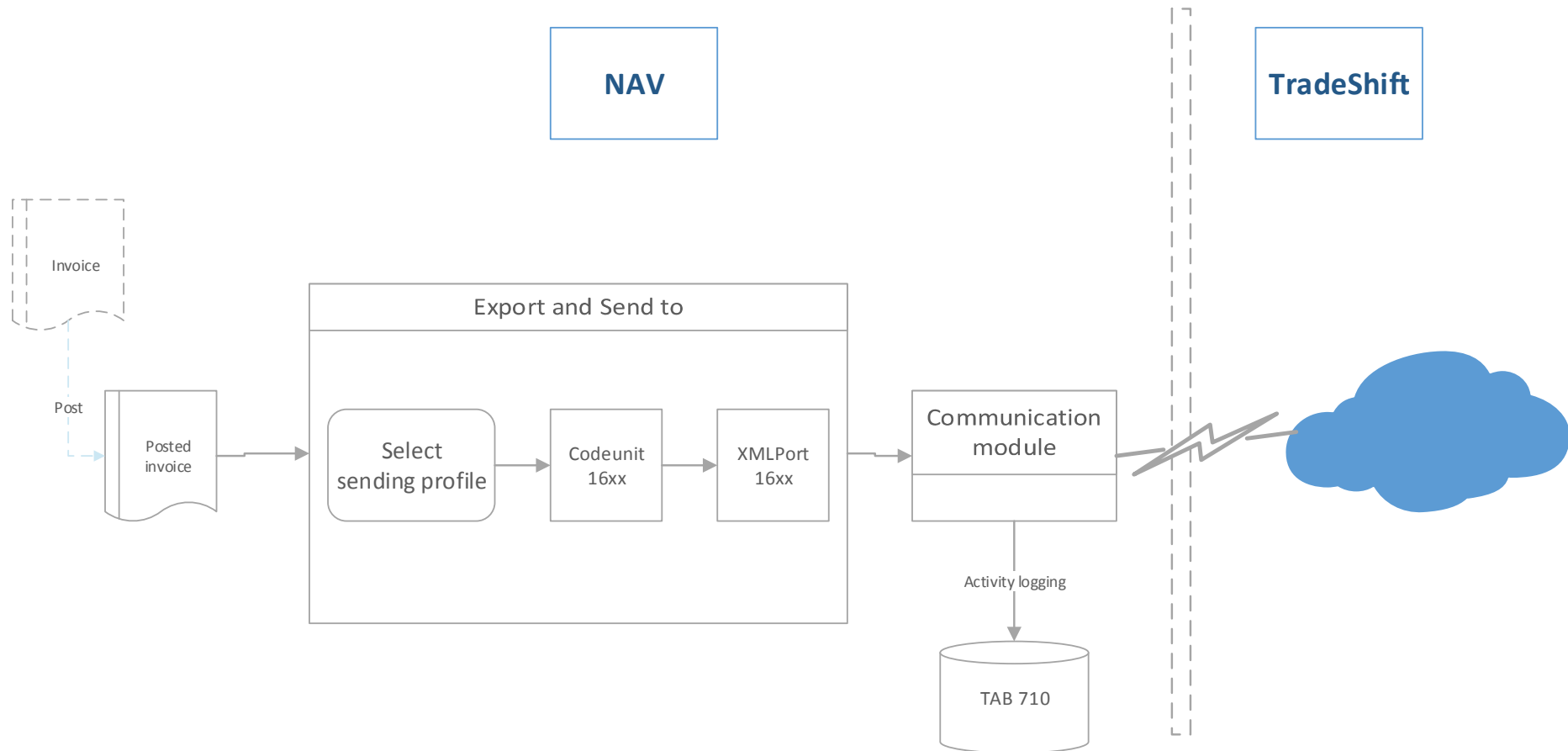
How it works - components

- Communication “manager”
 - **OAuth add-in**
- Data Exchange Framework
 - **Create entity**
- Document Sending profile
- Error and warnings
- Activity log

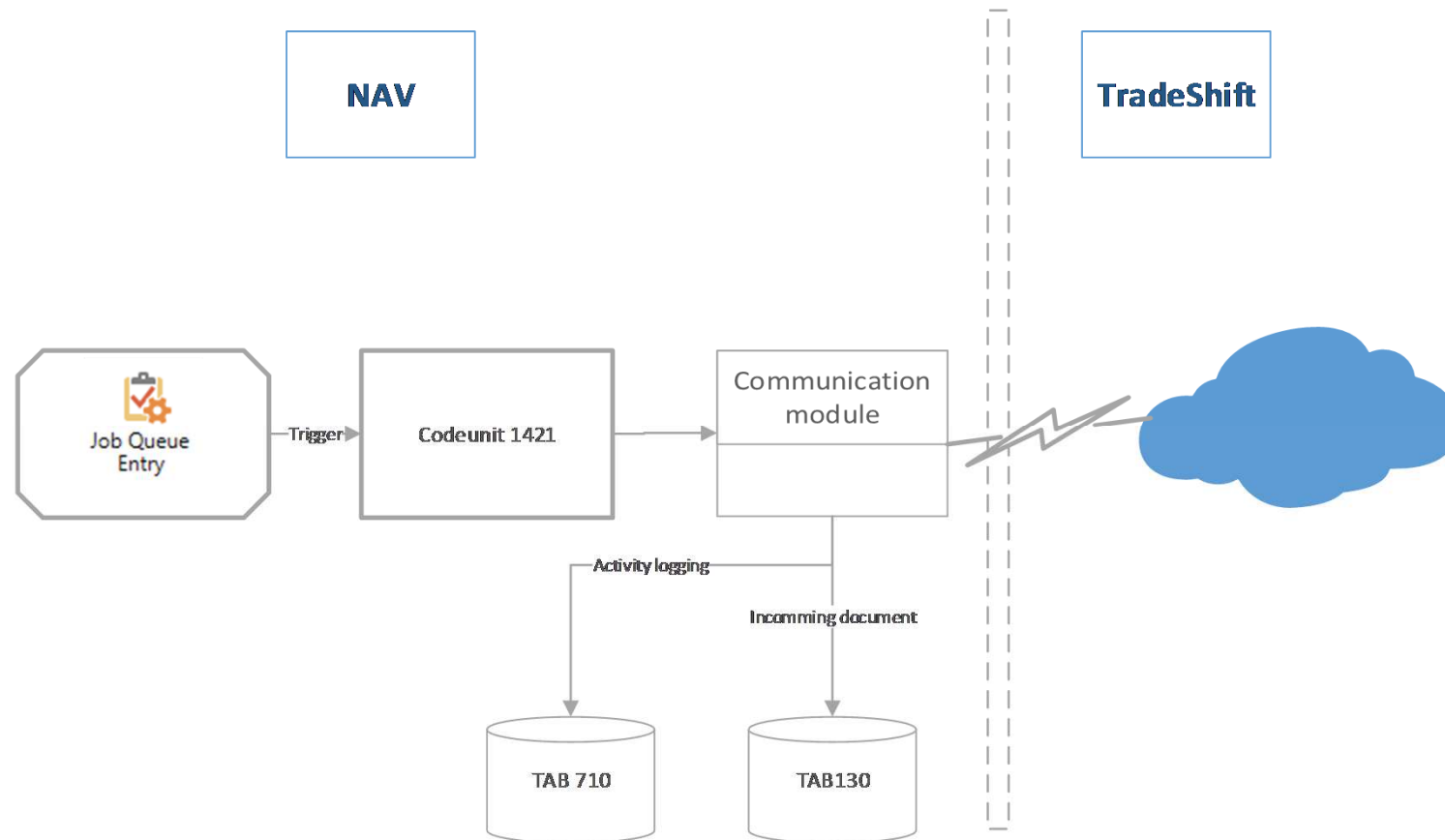
Communication manager - Setup



Communication manager - Send



Communication manager - Receive



Data Exchange Definitions



Data Exch

Code
BANKDATA
BANKDATA
BANKOFAME
CITIBANK-PP
ECB-EXCHAN
OCRCREDITM

ID	Table ID	Field ID	Value
49	38	68	103030
50	38	99	2016-12-04
51	38	32	
53	23	86	GB777777777
54	38	79	CRONUS International Ltd.
55	79	19	582048936
56	79	19	582048936
57	38	5	CRONUS International Ltd.
58	38	122	0
59	461	3	0.00
61	38	61	666.75
60	38	114	GBP
61	38	61	666.75

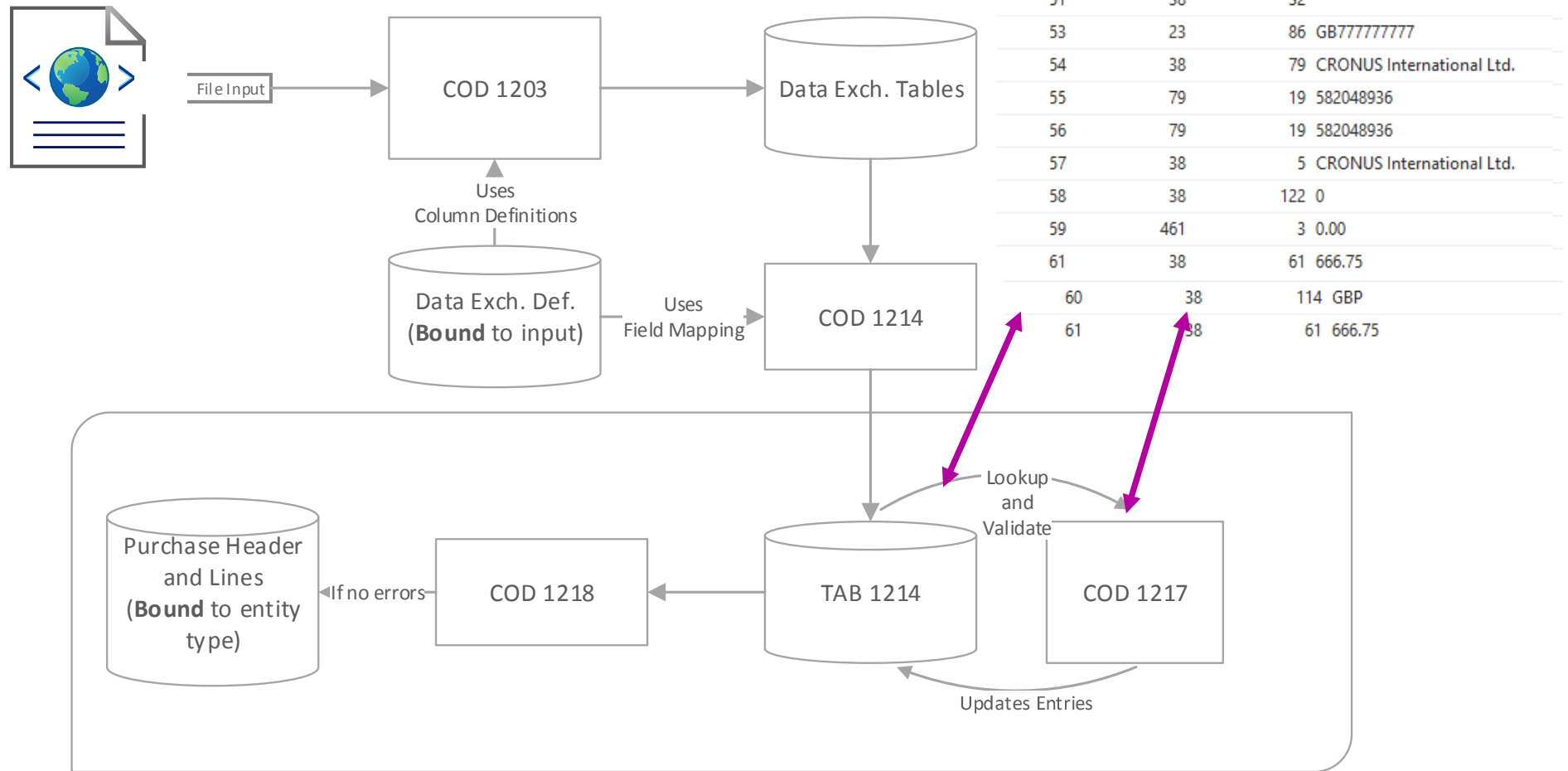


Data Exchange Definitions

Data Exchange Definitions ▾

Code ▲	Name
BANKDATACONVSERVCT	Bank Data Conversion Service - Credit Transfer
BANKDATACONVSERVSTMT	Bank Data Conversion Service - Bank Statement
BANKOFAMERICA-PP	BANKOFAMERICA-Positive Pay
CITIBANK-PP	CITIBANK-Positive Pay
ECB-EXCHANGE-RATES	European Central Bank Currency Exchange Rates
OCRCREDITMEMO	OCR - Credit Memo
OCRINVOICE	OCR - Invoice
PEPPOLCREDITMEMO	PEPPOL - Credit Memo
PEPPOLINVOICE	PEPPOL - Invoice
SEPA CAMT	SEPA CAMT
YAHOO-EXCHANGE-RATES	Yahoo Currency Exchange Rates

Data Exchange Definitions



Document Sending Profile

Electronic document formats –

Defines export format and validation logic per document type.

Default sending options - profiles to control how invoices and documents are sent. The sending options are **Printer, E-Mail, Disk, Electronic Document** (with the above defined format).

Document Sending Profile

The 'Document Sending Profile' dialog box, General tab, is shown. It contains the following fields:

- Code:** PEPPOL VAN
- Description:** (empty text box)
- Default:** ☐

The 'Sending Options' section is expanded, showing the following settings:

- Printer:** No
- E-Mail:** No
- Disk:** No
- Electronic Document:** Through Document Exchange Service
- Format:** PEPPOL 2.0 (highlighted with a red box)

The 'Edit - Send Document to' dialog box is shown, overlaid on a list of document types. It contains the following settings:

- Printer:** No
- E-Mail:** No
- Disk:** No
- Electronic Document:** Through Document Exchange Service
- Format:** PEPPOL 2.0 (highlighted with a red box)

At the bottom, there is a link that says 'Use the customer's default Sending Profile' and two buttons: 'OK' and 'Cancel'.

Errors and warnings

Errors and Warnings

Message	Field Name	Description
Error	Cannot find buy-from vendor 'CRONUS International Ltd.' based on the vendor's GLN 8712345000035 or VAT registration	
Error	Cannot find pay-to vendor 'CRONUS International Ltd.' based on the vendor's GLN 8712345000035 or VAT registration	
Error	Cannot find an appropriate G/L account for the line with description 'Bicycle'. Choose the Map Text to Account button, or	
Error	Cannot find item 'Bicycle' based on the vendor item number 1000 on the incoming document. Make sure that a card for i	

Description	Vendor Name	Document Date	Vendor Invoice No.	Currency Code	Amount Incl. VAT	Status	OCR Status	Document Type	Document No.
Invoice 103039	CRONUS International Ltd.	26-01-2017	103039	GBP	15,560.00	Failed			

Error
Error
Error
Error
Error
Error

Error Messages

- Field 'VAT Registration No.' in 'Customer: 42147258' must not be blank.
- Field 'RFC No.' in 'Customer: 42147258' must not be blank.
- Field 'VAT Registration No.' in 'Vendor: 01863656' must not be blank.
- Field 'RFC No.' in 'Vendor: 01863656' must not be blank.
- Field 'RFC No.' in 'Customer: 32656565' must not be blank.
- Field 'Bank Code' in 'Bank Account: WWB-EUR' must not be blank.
- Field 'Bank Code' in 'Bank Account: WWB-OPERATING' must not be blank.

Page where to Fix

Feature X Setup

Provide Data

Other field 1

Other field 2

Table 700 – Error Message
Page 700 – Error Messages
Page 701 – Error Messages Part
Cod 700 – Page management
Cod 701 – Data type management

Activity log

View - Activity Log

HOME

ACTIONS

CRONUS International Ltd.

Open Related Record

Process

Show as List

View

Show as Chart

OneNote

Notes

Links

Show Attached

Refresh

Clear Filter

Find

Page

Activity Log

Type to filter (F3)

Activity Date

Filter: Sales Invoice Header: 173033

Activity Date	User ID	Context	Status	Description	Activity Message
02-09-2015 13:22	EUROPE\CI...	Document exchange service.	Success	Check document status.	The current status of the electronic document is SENT.
02-09-2015 13:22	EUROPE\CI...	Document exchange service.	Failed	Check document dispatch errors.	A call to System.Xml.XmlDocument.Load failed with this message: Root element is missing.
02-09-2015 13:21	EUROPE\CI...	Document exchange service.	Failed	Check document status.	The remote service has returned the following error message: Request URI could not be m...
02-09-2015 13:21	EUROPE\CI...	Document exchange service.	Failed	Check document dispatch errors.	A call to System.Xml.XmlDocument.Load failed with this message: Root element is missing.
02-09-2015 13:21	EUROPE\CI...	Document exchange service.	Success	Dispatch document.	The document was successfully sent for dispatching.
02-09-2015 13:21	EUROPE\CI...	Document exchange service.	Success	Send document.	The document was successfully uploaded to the document exchange service for processing.

Close

Table 710 Activity Log

Page 710 Activity Log

Document Exchange Status and Logs

Status

If a document exchange service is used to deliver electronic documents, a delivery status will be available both on the posted sales document as on the sales document lists.

Activity logs

By drill into the activity log for each document, more information becomes available.

The screenshot displays the Microsoft Dynamics NAV interface. The top window, titled 'Posted Sales Invoices - Microsoft Dynamics NAV', shows a list of sales invoices. The bottom window, titled 'Activity Log', provides a detailed view of the document exchange process for a specific invoice.

Posted Sales Invoices Table:

No.	▲	Sell-to Custom...	Sell-to Customer Name	Curr... Code	Amount	Amount Including VAT	Location Code	No. Printed	Document Exchange Status
103021		49633663	Autohaus Mielberg KG	EUR	1,340,37	1,340,37	GREEN	0	Not Sent
103022		46897889	Englunds Kontorsmöbler AB	SEK	9,123,91	9,123,91	YELLOW	0	Not Sent
103023		01445444	Progressive Home Furnishin...	USD	2,888,58	2,888,58	YELLOW	0	Not Sent
103024		20000	Selanganon Ltd.		918,26	1,145,33		0	Not Sent
103025		47563218	Klubben	NOK	134,945,03	134,945,03	YELLOW	0	Not Sent
103026		35963852	Hemilipyyli	ISK	233,445,40	233,445,40	YELLOW	0	Not Sent
103027		35451236	Gagn & Gaman	ISK	101,178,64	101,178,64	YELLOW	0	Not Sent
103028		10000	The Cannon Group PLC		3,281,50	4,101,88	BLUE	0	Not Sent
103029		40000	Deerfield Graphics Company		1,063,10	1,328,88	BLUE	0	Not Sent
103030		50000	Guildford Water Department		533,40	666,75	BLUE	0	Not Sent
103031		30000	John Haddock Insurance Co.		688,90	861,13	BLUE	0	Not Sent
103032		10000	The Cannon Group PLC		8,000,00	10,000,00	BLUE	0	Sent to Document Exchange Service
103033		C00010	CRONUS Customer		12,000,00	12,000,00		0	Delivered to Recipient
103034		C00010	CRONUS Customer		40,800,00	40,800,00		0	Delivered to Recipient
103035		C00010	CRONUS Customer		20,720,00	20,720,00		0	Delivered to Recipient
103036		C00010	CRONUS Customer						
103037		C00010	CRONUS Customer						
103038		C00010	CRONUS Customer						
103039		C00010	CRONUS Customer						

Activity Log Table:

Activity Date	User ID	Context	Status	Description	Activity Message
15-09-2015 16:46	NAVUSER	Document exch...	Success	Check document status.	The current status of the electroni...
15-09-2015 16:46	NAVUSER	Document exch...	Failed	Check document dispatch errors.	A call to System.Xml.XmlDocume...
15-09-2015 16:46	NAVUSER	Document exch...	Success	Dispatch document.	The document was successfully s...
15-09-2015 16:46	NAVUSER	Document exch...	Success	Send document.	The document was successfully u...

Document Exchange Service Navigation

Status link

Once a document has been delivered, a hyperlink to the document exchange storage for the document is added to the status field. If using Tradeshift as the document exchange service, the document will open on the Tradeshift site.

The screenshot displays two overlapping web interfaces. The background interface is the '103039 - CRONUS Customer' portal, featuring a top navigation bar with 'HOME', 'ACTIONS', and 'NAVIGATE' tabs. The 'ACTIONS' tab is active, showing options like 'Send...', 'Comments', 'Navigate', 'Dimensions', 'Credit Cards', 'Transaction Log Entries', 'Notes', 'Links', 'Refresh', 'Clear Filter', 'Previous', 'Next', 'Go to', and 'Page'. The main content area is divided into 'General' and 'Lines' sections. The 'General' section contains fields for 'No.' (103039), 'Document Date' (26-01-2017), 'Document Exchange Stat...' (Delivered to Recip...), 'Quote No.', 'Order No.', 'Pre-Assigned No.' (1012), 'External Document No.', 'Salesperson Code', 'Responsibility Center', and 'No. Printed'. The 'Lines' section shows a table with columns for 'Lines', 'Invoicing', 'Shipping', and 'Foreign Trade'. The foreground interface is a Tradeshift invoice page titled 'Invoice received from Microsoft NancyN LT'. It features a 'Mark as paid' button and an 'Accept' button. The invoice details include 'To: CRONUS Customer', 'From: CRONUS International Ltd.', 'Invoice number: 103057', 'Issue date: 1/26/17', 'Currency: DKK', 'Payment due date: 1/31/17', 'Contract number: 103057', and 'Person reference: CRONUS Customer'. The bottom section of the invoice shows a table with columns for 'Item ID', 'Description', 'Quantity', 'Unit', 'Unit price', 'Tax', and 'Total DKK excl taxes'. The table contains one row: '1000 Bicycle' with a quantity of '1 pcs' and a unit price of '40,935.60'.

Item ID	Description	Quantity	Unit	Unit price	Tax	Total DKK excl taxes
1000	Bicycle	1	pcs	40,935.60	0%	40,935.60

Receive electronic invoices

Incoming documents

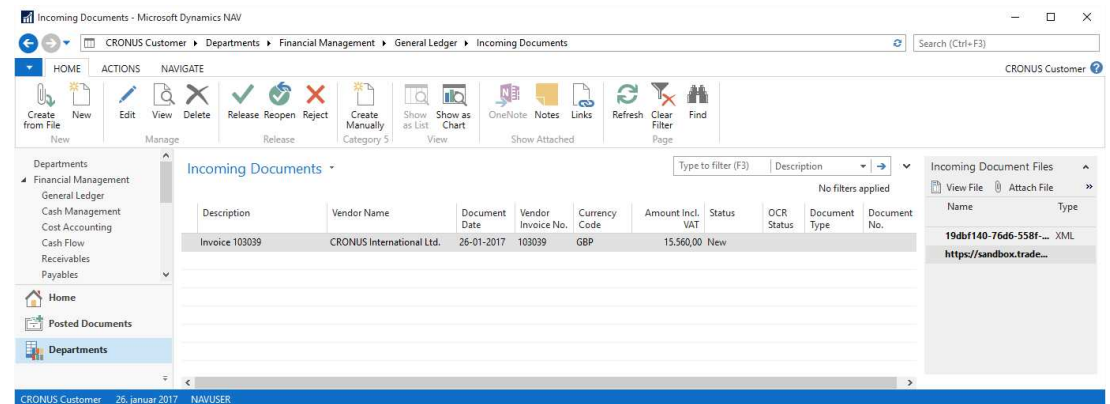
Electronic invoices and credit memos are stored as incoming documents, similar to invoices and credit memos that are based on PDFs or images

Automatic delivery

If a document exchange service is setup, incoming document entries for each electronic document are added automatically, with the xml source attached for traceability

Manual upload

If a document exchange service is not used, the user can manually add an electronic invoice to the incoming documents and take advantage of the functionality to generate corresponding documents in Microsoft Dynamics NAV without having to reenter data.



Extending functionality

General

Description:

filexml

Main Attachment:

CRONUS International Ltd. - Invoice 103030.xml

Record:

Extract additional attachments

Supporting Attachments

View File

Find

Name	File Extension	Type
WP_20150731_002	jpg	Image
filexml	xml	XML

Additional export formats

Edit - Electronic Document Format

CRONUS International...

General

Code: Usage:

Code	Usage	Codeunit ID	Codeunit Caption
PEPPOL 2.0	Sales Invoice	1602	Export Sales Inv. - PEPPOL 2.0
PEPPOL 2.0	Sales Credit Memo	1603	Export Sales Cr.M. - PEPPOL2.0
PEPPOL 2.0	Sales Validation	1620	PEPPOL Validation
PEPPOL 2.0	Service Invoice	1606	Export Serv. Inv. - PEPPOL 2.0
PEPPOL 2.0	Service Credit Memo	1609	Exp. Service Cr.M. - PEPPOL2.0
PEPPOL 2.0	Service Validation	1621	PEPPOL Service Validation
PEPPOL 2.1	Sales Invoice	1600	Export Sales Inv. - PEPPOL 2.1
PEPPOL 2.1	Sales Credit Memo	1601	Export Sales Cr.M. - PEPPOL2.1
PEPPOL 2.1	Sales Validation	1620	PEPPOL Validation
PEPPOL 2.1	Service Invoice	1604	Export Serv. Inv. - PEPPOL 2.1
PEPPOL 2.1	Service Credit Memo	1608	Exp. Service Cr.M. - PEPPOL2.1
PEPPOL 2.1	Service Validation	1621	PEPPOL Service Validation

OK

Document Management and Invoice Capture (OCR)

Challenges to address

Getting incoming documents archived

Sometimes incoming documents get lost. Capturing them as soon as possible reduce missing documents and helps keeping the books up to date.

Supporting workflows

The ability to easily set up both approval and automatic processing workflows, based on for instance vendor and amount values.

Reduce Paper Administration

Reduce the need to mail and process paper invoices and credit memos.

Sharing documents for auditing

Make it simpler to share digital incoming documents with external advisors such as an auditor.

What we need....

Integrated document storage

An easy, low cost solution to store incoming documents in Dynamics NAV that allows archiving, backup and sharing with BPO and auditors.

An inexpensive, plug and play invoice capture solution

An easy-to-use solution with minimal setup requirements, and with no up-front costs, supporting small businesses and BPOs.

Workflow support

The ability to easily setup both approval and automatic processing workflows, based on values such as vendor and amount.

Challenges to address

Outsourcing accounting

Invoice capture implementation can be costly

Manual entry is tedious and error prone

Documents require approval

Supporting workflows

Document Management and Invoice Capture

In Microsoft Dynamics NAV 2016,

We have introduced the ability to store incoming documents in Dynamics NAV. These documents can be **PDFs** from vendors, or **scanned** or captured **images** of paper versions.

Incoming documents can be used to create corresponding purchase documents or journal lines in Dynamics NAV. They allow tracking and viewing the original document from both non-posted and purchase documents as well as ledger entries.

We also offer the ability to use an external Lexmark ICS service to capture invoices in Dynamics NAV. The **Lexmark ICS integration** extracts unstructured PDF or scanned invoices and credit memos into structured data allowing further automatic processing similar to electronic documents. The **Lexmark ICS** service is supported out of the box. With the Lexmark ICS integration, header and total information can be extracted. Documents can also be forwarded directly to the Lexmark ICS service using email. To use Lexmark ICS, an account must be created on Lexmark ICS, a free SKU will be available.

Workflows can be added for both approval flows and automated processing, based on for instance vendor or amount data.

Document Management and Invoice Capture

Benefits

Capture

Use device cameras to capture paper documents on the go.

Store

Archive documents in Dynamics NAV as incoming documents, allowing a single storage and easy backup.

Extract

Use a cloud based OCR service to extract data from invoices or credit memos and create corresponding purchase documents or journal lines in Dynamics NAV without any typing.

Automate

Add approval workflows and automatic processing to optimize the incoming document handling and reduce time spent.

Find

Locate the original document from any generated purchase document or journal line, e.g., as part of auditing.

Introducing Lexmark Invoice Capture Service

Cloud based

You're up and running in 10 min

Freemium SKU


Zero obligation, leave if you want

No setup fee

Free up to 75 invoices per month

Pay per invoice above free limit

Lexmark Invoice Capture Service




Get started immediately

Freemium



Test it out for free

Subscription



Choose your invoice volume

Price from	\$0.00 /Month	Price from	\$105.05 /Month
Cost per extra invoice	\$0.99	Cost per extra invoice	\$0.56
Short description	Process up to 75 invoices per month without any charge. It's a great way to try out the service, obligation-free. For more than 75, you can pay the cost per extra invoice or sign up for Subscription.	Short description	Sign up for a monthly volume of invoices at a fixed rate, keeping processing costs predictable and saving you money in the long run. If you exceed the monthly volume, sign up for a greater volume or pay the cost per extra invoice.

Demo

Invoice capture and
generating journal lines



Using Lexmark ICS service to capture invoices

Send and receive

The **Job Queue automatically** sends any released incoming document and receives captured documents on a recurring frequency.

You can also **manually** send and receive incoming documents to/from the Lexmark ICS service directly.

Email

Alternatively send invoices directly **by email** to the cloud Lexmark ICS service. After invoice capture it will be downloaded to Dynamics NAV on receive and an incoming document automatically created.

The screenshot shows the Microsoft Dynamics NAV interface for an 'Incoming Document' from 'WhiteAway.com - 283566 - WhiteAway-dk'. The top ribbon includes tabs for 'HOME', 'ACTIONS', and 'NAVIGATE'. The 'ACTIONS' tab is active, showing various buttons. The 'Send to OCR Service' button is highlighted with a red box. Below the ribbon, the form is divided into sections: 'General', 'Financial Information', and 'Errors and Warnings'. The 'General' section shows the document description, main attachment, and status. The 'Financial Information' section displays vendor details, order numbers, and amounts. The 'Errors and Warnings' section is currently empty.

Message Type	Field Name	Description
--------------	------------	-------------

Data extraction

Extracted data

The incoming document card page shows the extracted data under the Financial Information as well as in the incomind document list page for easy overview and sorting. Out of the box, header data and totals are supported. Lines can be added, but require a Readsoft Online partner subscription.

Edit - Incoming Document - WhiteAway.com - 283566 - WhiteAway-dk

CRONUS International Ltd.

General

Description: WhiteAway-dk
Main Attachment: WhiteAway-dk.pdf
Record:
Status: Released
OCR Status: Success
Job Queue Status:
Posted: ☐

Financial Information

Vendor Name:	WhiteAway.com	Vendor Order No.:	WS00207628
Vendor VAT Registration No.:	29780595	Document Date:	02-05-2012
Vendor IBAN:		Due Date:	
Vendor Bank Branch No.:		Currency Code:	DKK
Vendor Bank Account No.:	22116276690548	Amount Excl. VAT:	1,599,20
Vendor Invoice No.:	283566	Amount Incl. VAT:	1,999,00
		VAT Amount:	399,80

Errors and Warnings

Message Type	Field Name	Description
--------------	------------	-------------

OK

Incoming Documents - Microsoft Dynamics NAV

CRONUS International Ltd. > Departments > Financial Management > General Ledger > Incoming Documents

Search (Ctrl+F3)

Actions | **NAVIGATE**

Incoming Documents

Description	Vendor Name	Document Date	Vendor Invoice No.	Currency Code	Amount Incl. VAT	Status	OCR Status	Document Type	Document No.
WhiteAway-dk	WhiteAway.com	02-05-2012	283566	DKK	1,999,00	Released	Success		

Incoming Document Files

Name	Type
WhiteAway-dk	PDF
WhiteAway-dk	XML

CRONUS International Ltd. 26. januar 2017 EUROPE/BJORING

Correcting extracted data

Fixing capture issues

The **Lexmark ICS Data Correction** page offers the ability to correct wrong data or add missing data from the capturing process.

You can send the correction back to the Lexmark ICS service for feedback.

Visual validation and correction is also available on Readsoft Online, but requires a Readsoft Online partner subscription.

The screenshot shows a web application window titled "Edit - OCR Data Correction - WhiteAway.com · 283566 · WhiteAway-dk". The interface includes a navigation bar with "HOME" and "ACTIONS" tabs, and a user profile "CRONUS International Ltd.". The "ACTIONS" menu contains options like "Reset OCR Data", "Send OCR Feedback", "Show File", "OneNote", "Notes", "Links", "Refresh", "Clear Filter", "Go to", "Previous", and "Next". Below the navigation bar, the page title is "WhiteAway.com · 283566 · WhiteAway-dk". The main form is titled "Vendor Name" and contains the following fields:

Field	Value
Vendor Name	WhiteAway.com
Vendor VAT Registration No.	29780595
Vendor IBAN	
Vendor Bank Branch No.	
Vendor Bank Account No.	22116276690548
Vendor Invoice No.	283566
Vendor Order No.	WS00207628
Document Date	02-05-2012
Due Date	
Currency Code	DKK
Amount Incl. VAT	1.999,00
Amount Excl. VAT	1.599,20
VAT Amount	399,80

An "OK" button is located at the bottom right of the form.

Creating documents using captured data

Document creation

If the incoming document type is recognized as an invoice or credit memo, a corresponding Dynamics NAV document can be **automatically** created based on the Lexmark ICS captured data.

Create purchase invoice

Purchase invoices can be created for existing vendors. **Text-to-account** mapping rules can be used to control this.

Create journal line

General journal lines can be used when there is no desire to create the vendor in Dynamics NAV.

The screenshot displays the Microsoft Dynamics NAV interface. The top window, titled 'Edit - Incoming Document - WhiteAway.com · 283566 · WhiteAway-dk', shows a ribbon with 'HOME', 'ACTIONS', and 'NAVIGATE' tabs. Under the 'ACTIONS' tab, the 'Process' group contains 'Create Document', 'Create Journal Line', and 'Create Manually', with 'Create Journal Line' highlighted by a red box. Other groups include 'Release' (Release, Reopen, Reject), 'Incoming Document' (Open Record, Remove Reference to Record, Data Exchange Types), 'OCR' (Send to OCR Service, Receive from OCR Service, Correct OCR Data), and 'Request Approv' (Send Approval Re, Cancel Approval R). Below the ribbon, the document details are shown: Description: WhiteAway-dk, Main Attachment: WhiteAway-dk.pdf, Record: Purchase Invoice - 1001, Status: Created, OCR Status: Success, Job Queue Status: , and Posted: .

The bottom window, titled 'View - Purchase Invoice - 1001 · WhiteAway.com', shows the 'Financial Information' tab. The 'Vendor Name' is 'WhiteAway.com'. The 'General' section contains fields for Buy-from Vendor No. (V00010), Buy-from Contact No. (CT000143), Buy-from Vendor Name (WhiteAway.com), Buy-from City (Risskov), Posting Date (26-01-2017), Document Date (02-05-2012), Vendor Invoice No. (283566), Order Address Code, Assigned User ID, and Status (Open). The 'Lines' section shows a table with columns: Type, Description, No., Location Code, Quantity, Unit of Measur..., Direct Unit Cost, and Line A Ex. The table contains one line: G/L Account WhiteAway A/S, No. 8640, Quantity 1, Direct Unit Cost 1,599.20. Below the table, the 'Invoice Discount Amount' is 0.00, 'Invoice Discount %' is 0, 'Total Excl. VAT (DKK)' is 1,599.20, 'Total VAT (DKK)' is 399.80, and 'Total Incl. VAT (DKK)' is 1,999.00. The 'Vendor Statistics' section shows: Vendor No. V00010, Balance (LCY) 0.00, Outstanding Ord... 0.00, Amt. Rcd. Net In... 0.00, Outstanding Inv... 184.71, Total (LCY) 184.71, Overdue Amount... 0.00, and Invoiced Prepay... 0.00. The 'Buy-from Vendor Hi...' section shows 'Vendor No.' V00010. The bottom right corner has a 'Close' button.

Managing conversion errors and warnings

Incoming document card

In **Errors and Warnings** on the Incoming Document card page, all errors of the purchase creation process are registered.

Hyperlinks guide the user where to fix the issue.

WhiteAway.com · 283566 · WhiteAway-dk

Description: WhiteAway-dk
Main Attachment: WhiteAway-dk.pdf
Record: [Link]

Status: Failed
OCR Status: Success
Job Queue Status: [Link]
Posted: [Link]

Financial Information

Vendor Name: WhiteAway.com
Vendor VAT Registration No.: 29780595
Vendor IBAN: [Link]
Vendor Bank Branch No.: [Link]
Vendor Bank Account No.: 22116276690548
Vendor Invoice No.: 283566

Vendor Order No.: W500207628
Document Date: 02-05-2012
Due Date: [Link]
Currency Code: DKK
Amount Excl. VAT: 1,599.20
Amount Incl. VAT: 1,999.00
VAT Amount: 399.80

Errors and Warnings

Message	Type	Field Name	Description
Cannot find buy-from vendor 'WhiteAway.com'	Error		

Incoming documents list

The list of incoming documents also display the **Status** of conversion on a Dynamics NAV document.

Incoming Documents

Description	Vendor Name	Document Date	Vendor Invoice No.	C...	Amount	Status	OCR	Document	D...
Food, marketing event	Bilimo Nord	17-03-2012	410	DKK	28,575.00	Failed	Success	Purchase Invoice 1002	
Window glass replacement	Gleason.dk	05-02-2013	1989	DKK	1,686.00	Created	Success	Purchase Invoice 1003	
Door and windows for facade...	VinduesPladsen	13-04-2012	12810	DKK	13,072.00	Created	Success	Purchase Invoice 1003	
Appliances	Whiteaway.com	02-05-2012	283566	DKK	1,999.00	Failed	Success		

Navigating documents

From incoming document

You can easily navigate from the incoming document to the created document using a link on the document.

From generated purchase invoice or credit memo

On the generated Dynamics NAV document, a link to the source incoming document as well as attachments is available.

From ledger entry

Once the document has been posted, the generated ledger entries will also have links back to the source incoming document.

The screenshot displays the Dynamics NAV interface, illustrating the navigation path from an incoming document to a generated purchase invoice and then to a ledger entry.

Top Window: Edit - Incoming Document - WhiteAway.com - 283566 - WhiteAway-dk

- Navigation Pane:** Shows the document hierarchy. The 'Open Record' link is highlighted in red.
- Form Fields:** The 'Record' field is set to 'Purchase Invoice - 1001' and is highlighted in red.

Bottom Window: View - Purchase Invoice - 1001 - WhiteAway.com

- Navigation Pane:** Shows the document hierarchy. The 'Incoming Document...' link is highlighted in red.
- Form Fields:** The 'Incoming Document...' field is set to 'WhiteAway-dk' and is highlighted in red.
- Table:** The 'Lines' table shows the ledger entry for 'WhiteAway A/S' with a quantity of 1 and a direct unit cost of 1,599.20.

Text-to-account mappings

Default G/L accounts

Use text-to-account rules to select G/L accounts used when creating documents in Dynamics NAV.

Mapped accounts can be changed in the generated document or general journal lines before posting.

The screenshot displays the Dynamics NAV interface for configuring text-to-account mappings. The top window, titled 'Edit - Incoming Document - WhiteAway.com - 283566 - WhiteAway-dk', features a ribbon with tabs for HOME, ACTIONS, and NAVIGATE. The 'Map Text to Account' button is highlighted with a red box. Below this, the 'General' tab is active, showing fields for Description (WhiteAway-dk), Link to Document, Main Attachment (WhiteAway-dk.pdf), Data Exchange Type (OCRINVOICE), and Record.

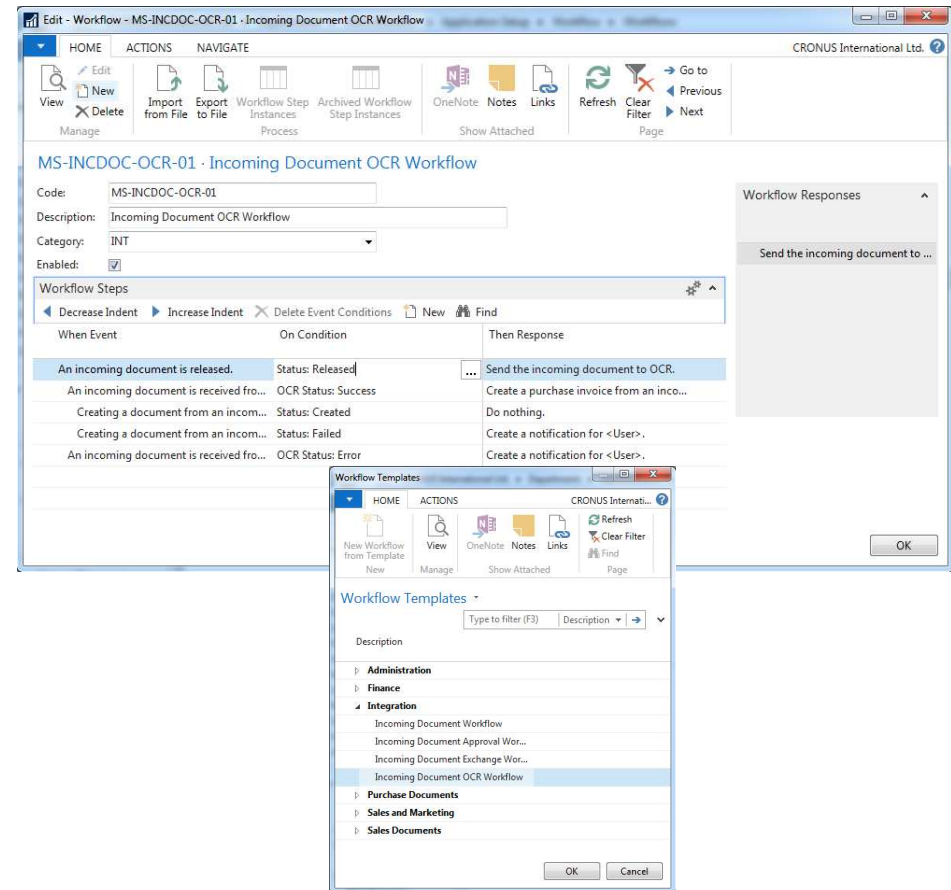
The bottom window, titled 'Edit - Text-to-Account Mapping - 10000', shows the configuration for the mapping. The ribbon includes tabs for HOME and ACTIONS. The 'Set Up Default Accounts' button is highlighted. Below the ribbon, the '10000' mapping is shown with the following table:

Mapping Text	Debit Acc. No.	Credit Acc. No.	Bal. Source Type	Bal. Source No.
Gasoline	8510		G/L Account	

The table also includes default debit and credit accounts for non-item lines: 8640 - Miscellaneous (Debit) and 8640 - Miscellaneous (Credit). An 'OK' button is located at the bottom right of the window.

Adding workflows

- Approvals
 - Use the new workflow features to set up approval workflows. You can use this , for example, before sending an incoming document to Lexmark ICS or before you post it.
- Add workflows to automatically process incoming electronic documents
 - Send and receive documents to/from Lexmark ICS automatically, using job queue entries
 - Create draft purchase document in Dynamics NAV
 - Post draft document
 - Create payment lines for posted documents
- Workflow conditions can be defined by the user to control flow based on, for instance, vendor or amount.



Extending invoice capture support

- The freemium Lexmark ICS SKUs support header and totals extraction
- Become a Lexmark partner to resell OCR instances yourself, and customize with line extraction, master data replication, new field mappings etc.

ReadSoft Online | Velkommen Peter Barring Sørensen | [Skift adgangskode](#) | [Hjælp](#)

Spore ID: 20151004-9/1

Faktura

Fakturaadresse
Kundenummer 45934220
Bardur Knudsen
Buddingevej 18A
2800 Kgs. Lyngby
Denmark

Leverandøradresse
Bardur Knudsen
Buddingevej 18A
2800 Kgs. Lyngby
Denmark

WhiteAway.com

Faktura
Nummer 283566
Dato 02-05-12
Side 1
Salger WhiteAway.com
Deres ref WS00207628
Valuta DKK

Køber & Leverandør
Køber NAV Peter Test
Leverandør WhiteAway.com

Generelt
Faktura/Kredit Faktura
Fakturanummer 283566
Fakturado 02-05-2012
Betalingsdato <dd-MM-yyyy>
Ordrenummer WS00207628
IDref 29780595

Amount
Nettobeløb 1.999,00
Totalbeløb 1.999,00
Valuta DKK
Momsbeløb 399,80

Account
Kontonummer 22116276690548
IBAN

Karenr.	Beskrivelse	Antal	A-Pris	Pris
WKT50U117W1 KNAU WKT50U117W1	Levering til kanten	1	1.999,00	1.999,00
204	Ring en % time for på 29229230	1	0,00	0,00
Skl: Køberskatten under trappen til hoveddøren				

Linjenr

Antal	A-Pris	LT_Emballage	LT_Enhed	LT_Fragt	LT_Linjenummer	LT_Momsbeløb	LT_Momsats	LT_Ordrenummer	LT_Rabatbeløb	LT
1,00	1.999,00	0,00		0,00		0,00	0,00	WS00207628	0,00	
1,00	0,00	0,00		0,00		0,00	0,00	WS00207628	0,00	

Bundt 1 Dokument 1 af 1

OK

Demo

Lexmark Invoice Capture Service Setup



Lexmark ICS service setup

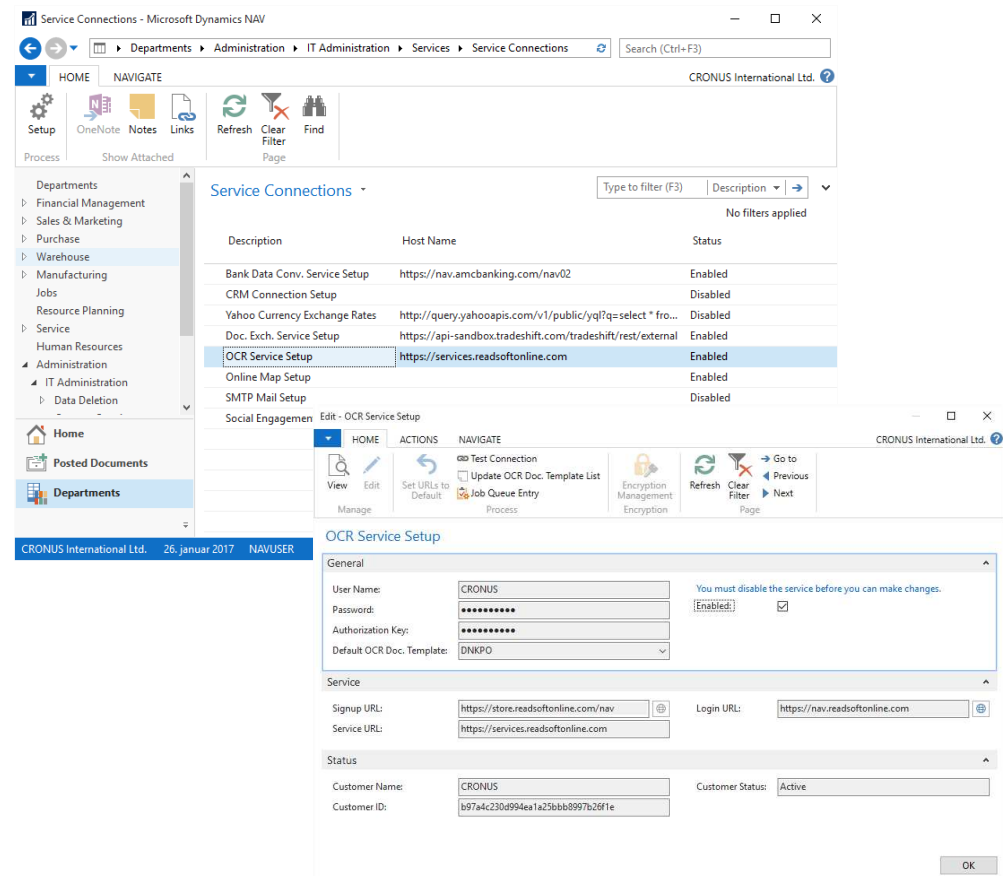
Service setup

All services in Dynamics NAV can be configured in the new **Service Connections** page.

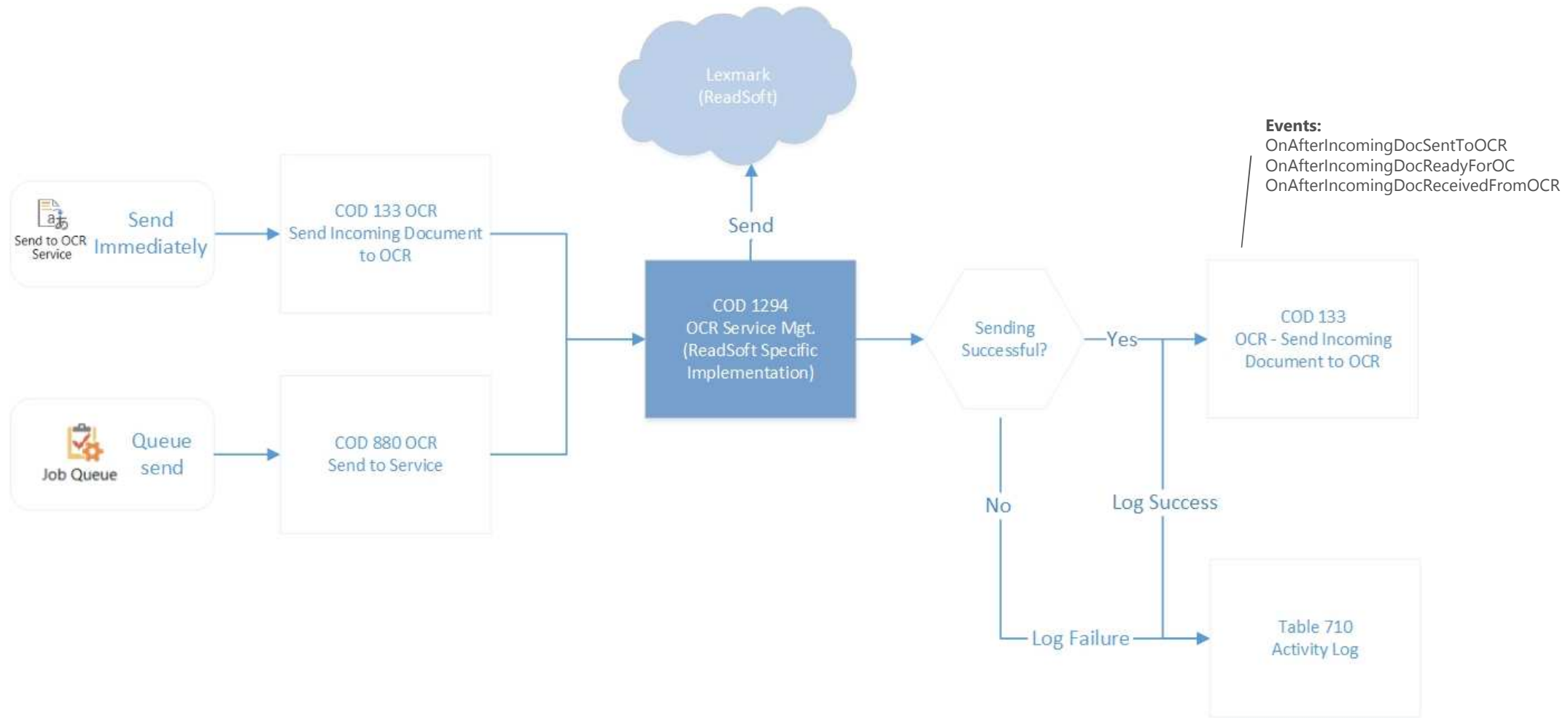
The new **Lexmark ICS Service Setup** page is used to connect to the Lexmark ICS service.

You need to **create an account** on Readsoft Online and receive a username and password and an authorization key, before you can use or configure Readsoft Online.

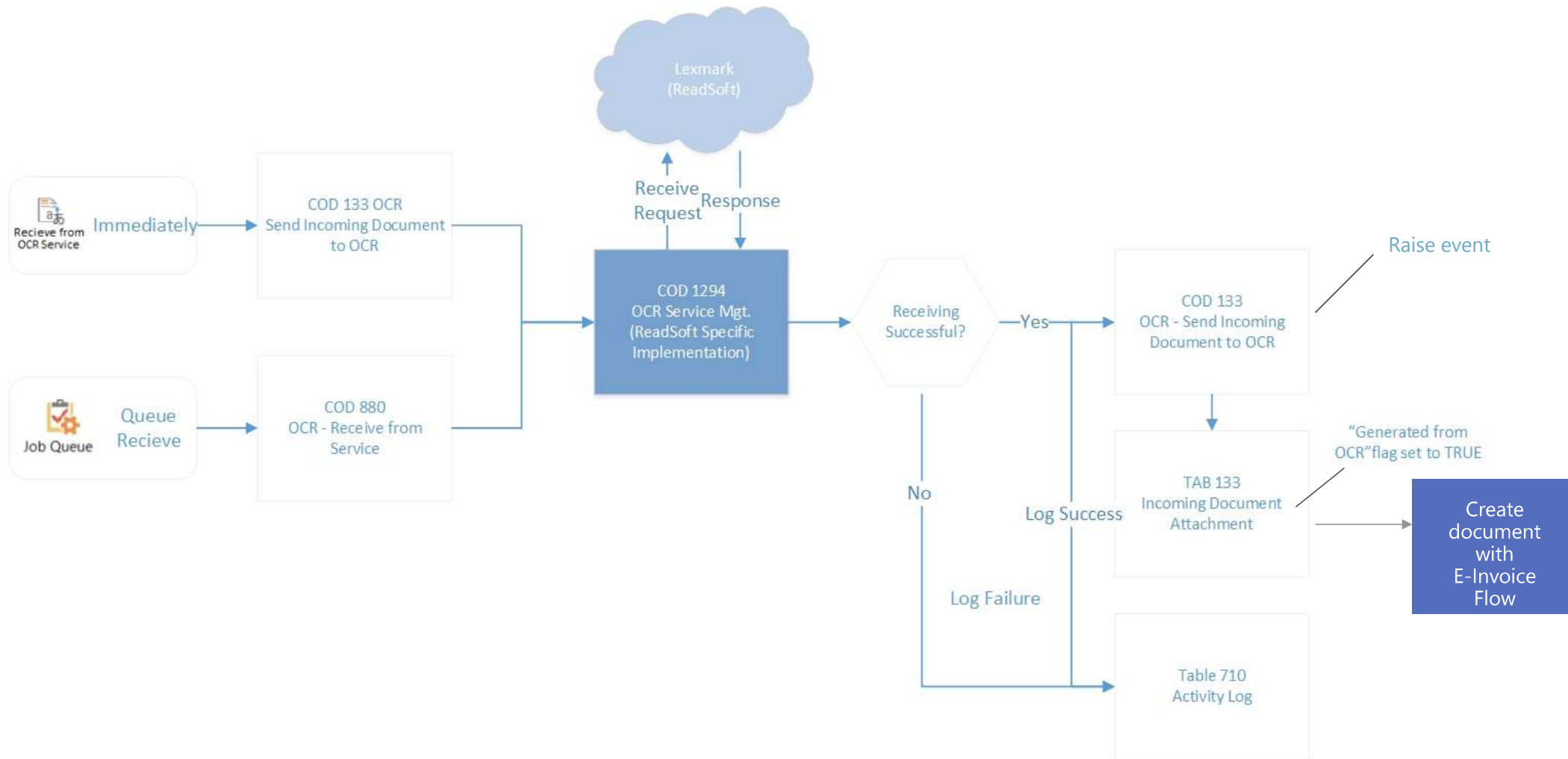
After setup, the service can be tested and enabled.



Sending Overview



Receiving Overview



E-services workflow

Demo

E-invoice workflow



Incoming document workflows

Approvals

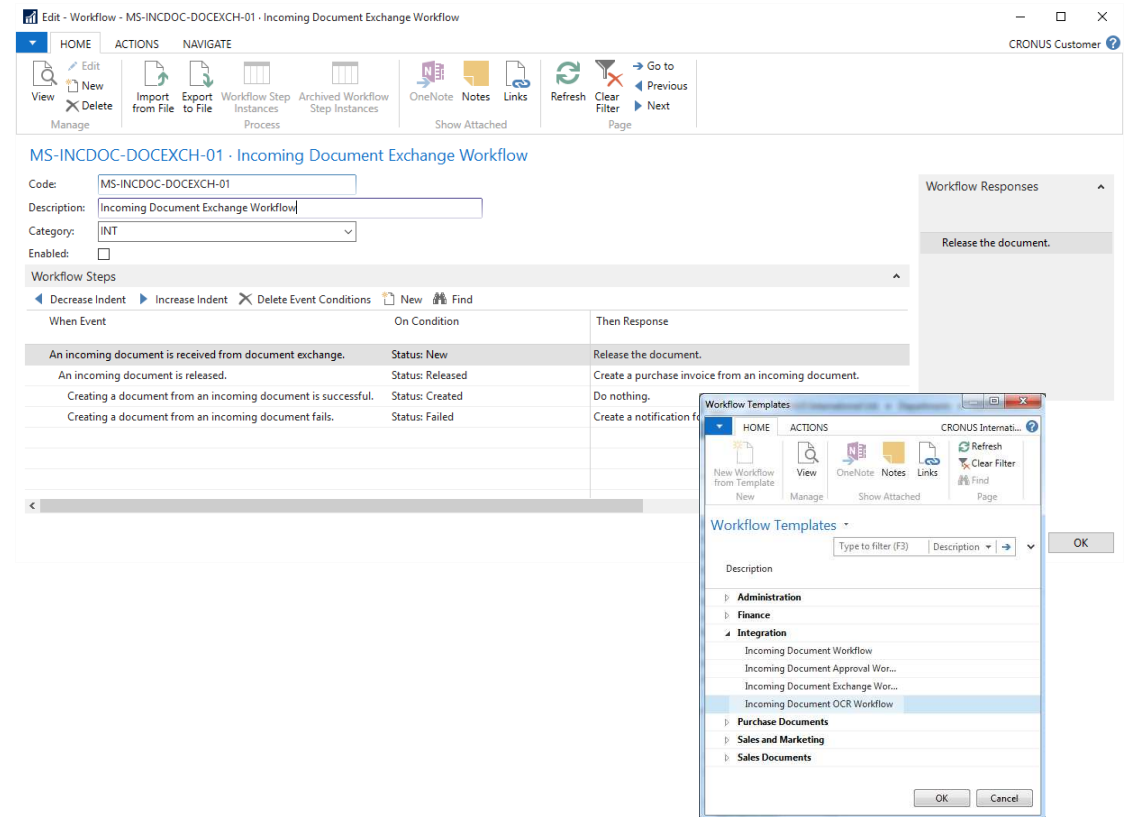
Use the new workflow features to set up approval workflows.

Automatic processing

Add workflows to automatically process any incoming electronic document. For example:

- Create a purchase document in Microsoft Dynamics NAV
- Post the purchase document
- Create payment lines for the posted document

Workflow conditions, such as vendor or amount, can be defined by the user.



Summary

Dynamics NAV 2016 services summary

Currency exchange rates

Get up to data currency exchange rates automatically

Use a rate feed of your choice

Electronic invoicing

Improved standards support

Send and receive PEPPOL invoices out of the box, through free document exchange service

Extend with additional formats

Document Management and Invoice Capture

Store incoming documents in NAV

Use Lexmark Invoice Capture Service to avoid retyping information

Workflow

Utilize workflows for, e.g., approval flows, OCR automation and to generate purchase documents or general journal lines

Learn more

<http://aka.ms/NAVGetReady>



Any Questions?

WHEN YOU ARE PASSIONATE ABOUT MICROSOFT DYNAMICS NAV | www.navtechdays.com



THANK YOU

WHEN YOU ARE PASSIONATE ABOUT MICROSOFT DYNAMICS NAV | www.navtechdays.com





LUNCH BREAK

see you back in 60 min.

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