

# Table of Contents

## Dokumentacja

Advanced Intercompany

Installing Advanced Intercompany

Setting up Advanced Intercompany

Basic Application Setup

Web services

Endpoints

IIC Setup

Synchronizing remote Endpoints

Status Codes

Message Types

Message Templates

Mapping

Job Queue Automation

Working with Advanced Intercompany

Process Overview

Working with buffer documents

Sending sales and purchase documents

Sending sales shipments

Sending sales invoices

IIC Messages

Working with drop shipment orders

Sending standalone invoices

Pre-invoice processing

Event subscriptions

Intracompany transactions

FAQ

# Release Notes

# Advanced Intercompany

Advanced Intercompany (IIC) allows users from different Business Central companies to exchange purchase and sales documents in real-time, ensuring instant feedback and control at the same time. The app has been designed for groups of companies as an extension of the intercompany functionality in Business Central.

Advanced Intercompany (IIC) enables you to:

- Use Web Services to send and receive data;
- Exchange purchase or sales document (including, posted shipments and invoices);
- Track your document by reviewing up-to-date document log entries;
- Verify all the changes made by your intercompany partner, prior to accepting.

## UWAGA

Advanced Intercompany (IIC) for Microsoft Dynamics 365 Business Central® is an application available in both licensing models - cloud (online, SaaS) and on-premises (perpetual and subscription).

TO	SEE
Install Advanced Intercompany	<a href="#">Installing Advanced Intercompany</a>
Set up Advanced Intercompany	<a href="#">Setting up Advanced Intercompany</a>
Work with Advanced Intercompany	<a href="#">Working with Advanced Intercompany</a>
See frequently asked questions	<a href="#">FAQ</a>

## See Also

[Advanced Intercompany - part of Global Apps from IT.integro](#)

[Managing Intercompany Transactions in Business Central Base App](#)

# Installing Advanced Intercompany

This article shows the application installation.

## Requirements

1. Additional Requirements for onPremise installation:

- BC Instance with NavUserPassword authentication must exist.
- There must be a service account for the NUP instance (can be the same as for other instances). It must have the "Log on as a Service" permission.
- There must be SSL certificate installed on and trusted by each communicating server. It can be either an external CA certificate, or a self-signed added as trusted on each server.
- The service account must have permissions to the certificate private key.

See more at [Authentication and Credential Types for Dynamics 365 Business Central](#).

2. User account with password or Web Service Access Key, that has permissions to both companies, or multiple users.

## OnPremise Installation

It must be first published and synchronized using [Powershell Cmdlets](#).

Then it can be installed from the **Extension Management** page.

## OnCloud Installation

The application must be added from the [AppSource](#).

## Sandbox Installation

In sandbox environment application can be both published and installed from the **Extension Management** page.

1. Upload the file as an extension. Choose **Extensions, Manage** and **Upload Extension**:

Select the file in the **Select .app** file field, then select the **Accept** toggle button and **Deploy**:

2. Wait until the deployment of the extension is completed.

# Setting up Advanced Intercompany

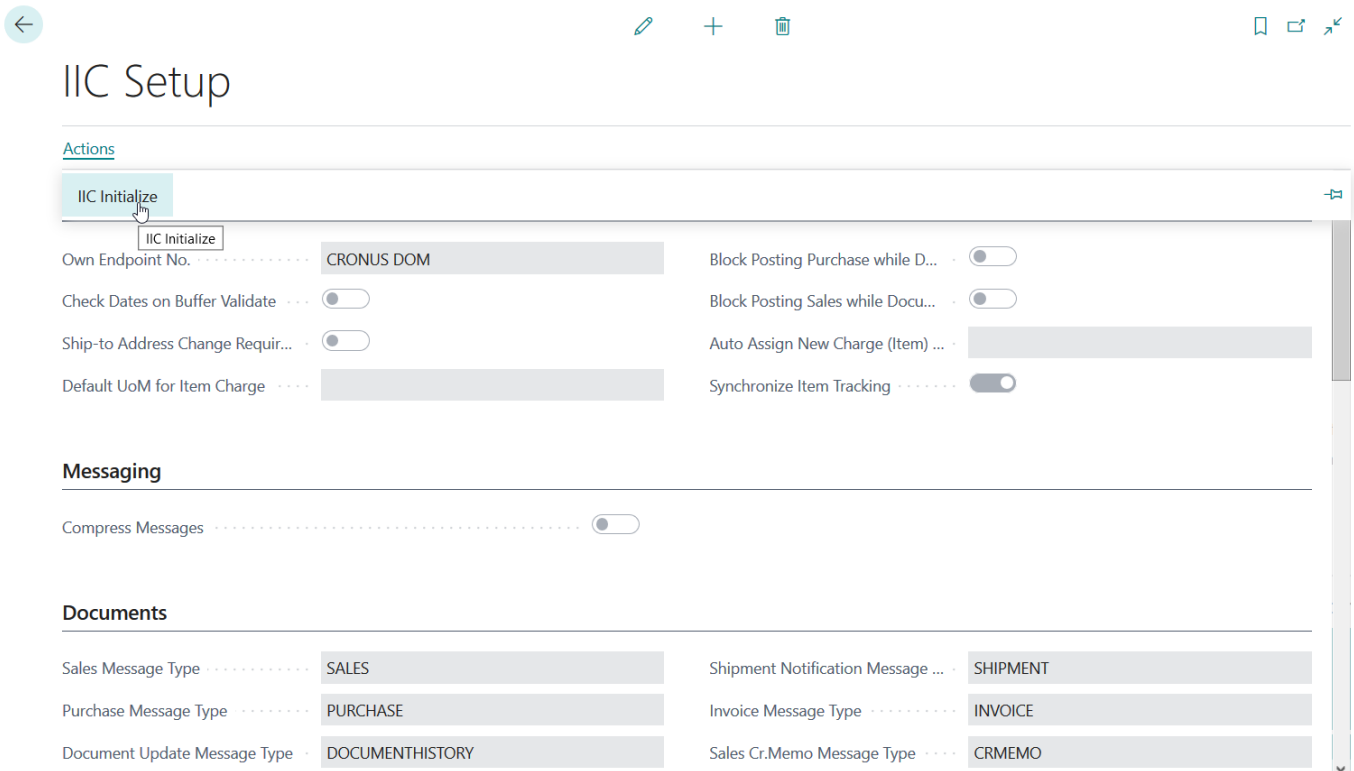
These articles guide through application setup.

TO	SEE
Create the basic setup	<a href="#">Basic Setup</a>
Publish Web Services	<a href="#">Web services</a>
Set up remote endpoints	<a href="#">Endpoints</a>
Customize settings	<a href="#">IIC Setup</a>
Synchronize remote endpoints	<a href="#">Synchronizing remote Endpoints</a>
Read about document statuses definitions	<a href="#">Status Codes</a>
Read about message types	<a href="#">Message Types</a>
Read about message structure definitions	<a href="#">Message Templates</a>
Set up mapping	<a href="#">Mapping</a>
Automate using job Queue	<a href="#">Job Queue Automation</a>

# Basic Setup

This article presents the basic setup of the module.

IIC Setup table can be found under **Advanced Intercompany / Administration / Setup** or just searched for **IIC Setup**:



**IIC Setup**

**Actions**

IIC Initialize

Own Endpoint No. .... CRONUS DOM

Check Dates on Buffer Validate ...

Ship-to Address Change Requir...

Default UoM for Item Charge ....

Block Posting Purchase while D...

Block Posting Sales while Docu...

Auto Assign New Charge (Item) ...

Synchronize Item Tracking .....

**Messaging**

Compress Messages .....

**Documents**

Sales Message Type ..... SALES

Purchase Message Type ..... PURCHASE

Document Update Message Type ···· DOCUMENTHISTORY

Shipment Notification Message ... · SHIPMENT

Invoice Message Type ..... INVOICE

Sales Cr.Memo Message Type ···· CRMEMO

Default setup can be created using action **IIC Initialize** – it will also create required message types, templates and status codes.

Following things will be created:

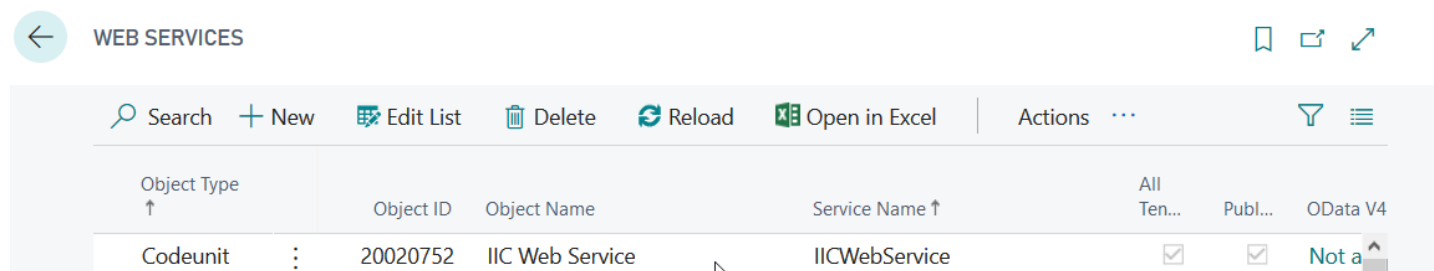
- Default [IIC Setup](#)
- Default [Status Codes](#)
  - ACCEPTED
  - CANCELLED
  - CLOSED
  - CONFIRMED
  - NEW
  - OPEN
  - OUTBOUND
  - REJECTED
  - STANDALONE
- Default [Message Types](#)
  - DOCUMENTHISTORY
  - PURCHASE
  - SALES
  - SHIPMENT
  - INVOICE
- Default [Message Templates](#)
  - DOCUMENTHISTORY
  - PURCHASE
  - SALES
  - SHIPMENT

o INVOICE

# Web Services Setup

As IIC module uses Dynamics BC Web Services to send data between intercompany partners, it is necessary to set up dedicated Codeunit as a Web Service. It is published automatically when installing extension.

This can be seen in the **Web Services** window:



Object Type ↑	Object ID	Object Name	Service Name ↑	All Ten...	Publ...	OData V4
Codeunit	20020752	IIC Web Service	IICWebService	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not a

Please note down SOAP Address for codeunit 20020752. You will need it later when setting up IIC Endpoints. If the service is not published, then it must be done manually - service name must be exactly **IICWebService**.







# Endpoints


IIC Endpoint is key setup table for IIC module. It links to a remote IIC partner, usually, a BC company. It can be located in the same database & service, or different environment.

IIC Endpoint = "Remote Company I will exchange documents with".

List of available endpoints can be found under: **Advanced Intercompany / Administration / Endpoints** or searched for **IIC Endpoint List**.

← ITI IIC ENDPOINT | WORK DATE: 27.01.2022  +  ✓ SAVED  

## CRONUS INT

 Synchronize | More options

---

### General

No. ....	<input type="text" value="CRONUS INT"/>	Last Date Modified .....	<input type="text" value="06.03.2020"/>
Description .....	<input type="text" value="CRONUS International Ltd."/>	LCY Code .....	<input type="text" value="GBP"/>
Test Endpoint .....	<input type="checkbox"/>		

---

### Web Service

Web Services Address .....	<input type="text" value="r:7047/BC/WS/CRONUS%20International%20Ltd."/>	Web Services Password .....	<input type="password" value="....."/>
Web Services Username .....	<input type="text" value="admin"/>	Web Services CU Name .....	<input type="text" value="IICWebService"/>

## UWAGA

Not only partner endpoints must be created, but also an own endpoint.

Following fields need to be set up in IIC Endpoint:

- No.: Type in Endpoint name.
- Description.: Type in Endpoint Description.
- Web Services Address: This is the company Web Services address. Example address below:

[http://arche.integro.pl:7047/IC\\_DEV/WS/CRONUS%20International%20Ltd/Codeunit/IICWebService](http://arche.integro.pl:7047/IC_DEV/WS/CRONUS%20International%20Ltd/Codeunit/IICWebService).

So, the address contains: `http(s)://<server name>:<port number>/<BC instance>/<BC company name>/Codeunit/IICWebService`

## PORADA

You can check default Web Services address when setting up Web Services. You only need to remember that in Web Services window, BC will display default Web Services Address for current instance. If you have set up your environment so you have different BC services for client connections and Web Service connections, you will need to adjust this address accordingly.

- Authentication Type: Basic or AAD, depending on remote endpoint configuration, next field visibility will change depending on selected option.

## UWAGA

When Basic is selected, Web service calls use Basic authentication so BC Instance must be set to accept the NAVUserPassword type. When AAD is selected, the Azure Active Directory authentication must be active, and an application registration must be configured.

- Web Services Username: User account that will be used for Basic BC authentication. This should be a separate domain user.
- Web Services Password: User password or Web Services Access Key from User Card.
- AAD Tenant ID - tenant where the login and access is managed.
- AAD Client ID - Application Registration Client ID
- AAD Client Secret - Secret created for the application registration.

Once IIC Endpoint(s) are set up, they need to be assigned to Customer and/or Vendor cards (under Communication tab): **IIC Endpoint No.** Just after the endpoint number, the document types to exchange can be selected using the **Select Document Types** field.

VENDOR CARD | WORK DATE: 27.01.2022



## V00010 · IIC Vendor

Process Request Approval New Document Navigate Vendor | Actions Navigate Report

### ADDRESS

Address .....	Brass 123
Address 2 .....	
Country/Region C... ..	GB
City .....	Birmingham ...
County .....	Lancashire
Post Code .....	B27 4KT ...

[Show on Map](#)

### CONTACT

Primary Contact C... ..	CT000258 ...
Contact .....	...
Phone No. ....	
Email .....	
Home Page .....	
Our Account No. ....	

IIC Endpoint No. .... CRONUS DOM

# Synchronizing remote endpoints

It is possible to synchronize setup between endpoints. Setup should be consistent, so it is recommended instead of making the same manual changes in each endpoint.

## Synchronization process

To create synchronization message use the **Synchronize** action on remote Endpoint Card. Only **IIC Super User** can perform this action - it is necessary to add own user record in **User Setup** table and mark the **IIC Super User** field.

IIC ENDPOINT | WORK DATE: 1/27/2022

CRONUS USA

Synchronize | More options

No. CRONUS USA Last Date Modified 7/27/2020

Description LCY Code

Test Endpoint  Combined Invoice Action Default

The message must then be sent using the **Send** action on **IIC Message List** page or the **IIC Send Outbound Messages** report which is available through the **Tell me...** feature.

## Synchronized data

Depending on the **Synchronization** tab of **IIC Setup** following data can be synchronized:

### Synchronization

- Synchronize Message...
- Synchronize Message...
- Synchronize Endpoints
- Synchronize Status C...
- Synchronize IIC Setup

- Synchronize Message Types

All defined [Message Types](#) are sent.

- Synchronize Message Templates

Only released [Message Templates](#) are sent

- Synchronize Endpoints

All endpoints are sent. The password field is skipped so must be filled in remote company.

- Synchronize Status Codes

All [Status Codes](#) are sent.

- Synchronize IIC Setup

This synchronizes only several fasttabs, other setup is independent:

- Documents
- Status Update Messaging
- Synchronization

# IIC Status Codes

IIC Status Codes contain information about document status.

Current document status is calculated based on IIC Document Log Entries.

Status codes can be found under **Advanced Intercompany/Administration/Status Codes** or by searching **IIC Status Codes**:

← STATUS CODES | DATA ROBOCZA: 27/01/2022 ✓ ZAPISANO

Wyszukaj + New Edit List Delete Open in Excel

Code ↑	Description	Block Release	Block Reopen	Block IIC Send	Block Posting	Block Add Lines	Block Delete Lines
→ ACCEPTED	Accepted By Endpoint. Waiting For...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CANCELLED	Document Cancelled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLOSED	Document Closed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CONFIRMED	Confirmed By Endpoint	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NEW	New Document received from End...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OPEN	Open IIC Document	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OPEN AT ENDP...	Document Open At Endpoint	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OUTBOUND	Waiting to be send	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REJECTED	Rejected By Endpoint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SENT	Sent and Pending Confirmation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STANDALONE	Stanalone Invoice	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

By default, following status codes are available:

- ACCEPTED (for sales & purchase documents) = Document has been accepted in the buffer in IIC partner company. New purchase/sales order has been created, however it is not yet finally confirmed.
- CANCELLED (sales & purchase documents) = Document has been cancelled and will not be included in IIC document flow.
- CLOSED (s & p) = Document has been fully invoiced (and no longer exists) in IIC partner company. Any further changes do not need to be negotiated between endpoints.
- CONFIRMED (s & p) = Document has been confirmed. Purchase or sales order has been approved and released in IIC partner company.
- NEW (s & p) = New document that has been received (it has ACCEPTED status in IIC partner company).
- OPEN (s & p) = Document has been reopened (locally).
- OPEN AT ENDPOINT (s & p) = Document has been reopened (in IIC partner company).
- OUTBOUND (s & p) = Document has been queued for sending and should be sent soon.
- REJECTED (s & p) = Document has been rejected in IIC partner company.
- SENT (s & p) = Document has been sent and awaits confirmation.
- STANDALONE (invoice) = This is a special status used only in IIC Standalone Invoice process.

Additionally, for each status, it is possible to set up which actions should be allowed (or blocked) for documents belonging to that status. Following options are available:

- Block Release: It will not be possible to release a document.
- Block Reopen: It will not be possible to reopen a document.
- Block IIC Send: It will not be possible to send a document to IIC partner.
- Block Posting: It will not be possible to post a document.
- Block Add Lines: It will not be possible to add a line to a document.
- Block Delete Lines: It will not be possible to delete line from a document.

Status codes can be assigned to document states on **IIC Setup** page.

# IIC Message Types

Each message exchanged within IIC module has a type. It is basically a connection between a document type, message template and processing codeunit. They should usually not be changed.

After IIC Initialize, IIC contains following message types:

- DOCUMENTHISTORY: Simple message that contains information about current IIC document status,
- PURCHASE: Purchase document,
- SALES: Sales document,
- SHIPMENT: Shipment notification,
- INVOICE: Posted Sales Invoice,.

## UWAGA

Each of above message types needs to be set up in IIC Setup table.\*

Following fields are available in IIC Message Type table:

- Code,
- Name,
- Message Template Code: reference to IIC Message Template table. Specifies which IIC Message Template will be used to compose IIC messages that belong to current type.
- Codeunit No.: NAV Codeunit No. that will be used for sending and processing IIC messages,
- Process Immediately: When selected, as soon as IIC message is received, it will be processed automatically.
- Create Doc. Log Entry on Send: When selected, as soon as IIC message is sent, a Document Log Entry will be created.  
Recommended: **YES** (but only for message types for documents: PURCHASE, SALES, SHIPMENT, INVOICE).

# Message Templates

IIC Message Template table contains definitions of data that is sent with IIC message. It can be either simple (flat structure, only couple of fields) or complex (multi-level structure).

## IIC Message Templates (Simple)

Following fields are available in IIC Simple Message Template table:

In header:

- Code
- Name
- Buffered: Specifies whether IIC message will be buffered. Buffered IIC messages, after they are received, are de-composed in internal IIC table so their contents can be easily accessible by various processing tasks. Recommended setting for simple messages: **No**.
- Last Date Modified: Date & time when the template was modified last time.
- Status: Open or Released. You cannot make any changes to message template once it is released.

In lines:

- Line No.
- Code: Identifier of simple message line.

Simple messages should contain only one line. Behind that line, you can find definition of message fields:

### General

Code .....	<input type="text" value="DOCUMENTHISTORY"/>	Last Date Modified .....	<input type="text" value="04.03.2020"/>
Name .....	<input type="text" value="Document History"/>	Status .....	<input type="text" value="Released"/>
Buffered .....	<input type="checkbox"/>		

Lines | Manage | Line | Fewer options

<input type="button" value="Show Fields"/>			
→	10000	⋮	DOCUMENTHISTORY

Following fields are available in IIC Message Template Fields table:

- Processing Order: Sequence number,
- Code
- Field Type: Type of the field.

The purpose of simple message template is to provide easy framework for creating your own messages that are usually not related to any document and only contain few simple fields.

Following simple message templates can be found in default setup:

- DOCUMENTHISTORY

## IIC Message Templates (Complex)

Complex message templates contain definition of document-like structures.

Structure of the header for complex messages is similar to simple messages.

The lines are possible to change only by the IIC Super Users. Following fields are available in complex message lines:

- Level: Level of line. It is greater than 0 for indented lines. You can adjust line indentation by using **Functions / Increase Indent** and **Functions / Decrease Indent** functions.
- Parent Line No.: Automatically calculated for indented lines.
- Line No.
- Code: Free-type text.
- Source Table No.: Table which data will be taken from. Example for header line for SO message template: 36 = Sales Header.
- Source Table Name: Automatically calculated
- Target Table No.: Table where data will be imported into. Example for SO: 20020756 = IIC Purchase Header Buffer, as outgoing sales order will be imported as purchase document in IIC partner company.
- Target Table Name: Automatically calculated.
- Additional Table No.: Table where data will be imported into, after inbound message has been accepted in the buffer. See Additional Tables chapter below.
- Additional Table Name: Data from this table can also be included in message and will be imported directly without buffer.
- Generator Codeunit No.: Codeunit which will fill in data set programmatically. Useful when working with temporary tables, e.g. Tracking Specification.
- Record Filter: Allows user to put a filter against a table records, to exclude certain records from being exported. Uses the SetView syntax.
- Overwrite if Exists: When selected, if record being transmitted already exists in IIC partner company, it will be overwritten.

## Source Link & Target Link

In order to maintain a link between indented tables, you need to set it up using **Line / Source Link** and **Line / Target Link** shortcuts.

Below is an example of source link for Sales header + line:

### EDIT - IIC MESSAGE TEMPLATE LINE LINK

Field No.	Field Caption	Parent Field No.	Parent Field Caption
1	Document Type	1	Document Type
3	Document No.	3	No.

Source link for Sales Header + Sales Line tables is natural. For mirrored buffers, however, table keys are different. Is there may be multiple buffer documents that concern one source document, the table key for buffer has been changed to unique Entry No. Thus, target link for header buffer + line for SO message looks like below:



## EDIT - IIC MESSAGE TEMPLATE LINE LINK

Field No.	Field Caption	Parent Field No.	Parent Field Caption
20020750 ...	Entry No.	20020750	Entry No.

### Complex message fields

You can access complex message fields setup using **Line / Show Fields** action. Fields coming from default templates can be changed only by IIC Super User.

Following fields are available:

- Message Template Field Type: It can be either:
  - Normal: Used for normal fields that you want to transfer
  - Constant: Used when you want to use a fixed value for a field
  - IIC Message: Used for fields that should contain a field value taken from IIC Message envelope they are being transferred within. Example: SALES / Header / "FROM" field - this way, sending endpoint code will be included in the message
  - Additional: Used for additional fields, which are fields that will be transferred to final table directly, without being stored in buffer tables.
- Processing Order: Order in which fields should be processed. 1 = the first.
- Track Difference: Specifies what should happen if this field is part of confirmation message of either PURCHASE or SALES (PURCHASE is confirmation to SALES and vice versa). When document confirmation is imported into the buffer, user can see if received field values match values found on original document. If there is a difference, field Track Difference drives whether it should be raised as Information, Warning or Error on buffer document.
- Code: Identifier of a field.
- Source Table No.: Field value automatically taken from message template line.
- Source Field No.: Field No. of source field (from source table).
- Source Field Name: Non-editable. Calculated automatically.
- Mapping Code: If you want to assign a mapping (e.g. of currency codes) to a field, select mapping code in this field.
- Target Table No.: Automatically taken from message template line.
- Target Field No.: Field No. of target field (from target table).
- Target Field Name: Non-editable. Calculated automatically.
- Const Field Value: Type in fixed value if Message Template Field Type is set to Constant.
- IIC Message Field No.: If Message Template Field Type is IIC Message, select field from IIC Message table you want to include.
- Field Type: Type of field data.
- Additional Table No.: Field value automatically taken from message template line.
- Additional Field No.: Specify additional field.
- Additional Field Name: Non-editable, calculated automatically.

### Default Setup

Following complex message templates can be found in the default setup:

- PURCHASE
- SALES
- SHIPMENT
- INVOICE

- CRMEMO

# Mapping setup

There are two ways of setting up mapping.

## IIC Currency Mapping

Setting up IIC Mapping allows you to seamlessly translate currency codes that are LCY for one of the partners.

The Currency Mapping can be set on IIC Endpoint:

← IIC ENDPOINT | WORK DATE: 27.01.2022 ✎ + 🗑️ ✓ SAVED 🔗 ↗️

# CRONUS INT

🔄 Synchronize | More options

---

### General

No. ....	<input type="text" value="CRONUS INT"/>	Test Endpoint .....	<input type="checkbox"/>
Description .....	<input type="text"/>	Last Date Modified .....	09.03.2020
Endpoint Type .....	<input type="text" value="Web Service"/>	LCY Code .....	<input type="text" value="GBP"/>

Setting the field will cause some replacement when sending documents. LCY (empty currency code) to be sent as currency from General Ledger Setup, and Partner LCY as LCY (empty code).

**UWAGA**

The setup must be consistent in Endpoints in all IIC Companies. Before running the **Synchronize** action, make sure that LCY Code of own endpoint contains the same currency as in General Ledger Setup.

## Type & No. Mapping

Type & No. Mapping window allows to set up conversion between document-line types: Item, Fixed Asset, G/L Account, Charge (Item) or Resource.

Mapping is available in **Advanced Intercompany / Administration / Type & No Mapping::**

# Type & No Mapping

🔍 Search + New 🔧 Edit List 🗑️ Delete 📄 Open in Excel 🔍 ☰

Endpoint No. ↑	External Type ↑	External No. ↑	Own Type	Own No.
→ CRONUS INT	: G/L Account	123	Resource	↔ 321

Following fields are available:

- Endpoint No.: IIC Endpoint No. Document lines coming from this Endpoint will be converted.
- External Type: Type of external line.
- External No.: No. of external line.
- Own Type: Local type.
- Own No.: Local No.

#### UWAGA

Type & No. mapping is applied when user validates buffer document. Converted values are placed in "Own Type" and "Own No." fields.

# Job Queue Setup

Following objects can be scheduled using Job Queue Entries to improve IIC processes:

- **Report 20020697 - IIC Send Outbound Messages**

If IIC Message is not sent manually, with this report scheduled (recommended recurrence: Every 5 minutes, all day long), IIC module will try to send all messages that were not send successfully.

**UWAGA**

If an error occurs while sending, it will stop processing to keep messages in order.

- Objects connected to the Auto Process tab of IIC Setup. When run, they will check the setup and perform selected action on all buffer documents of specific type. Confirmations can be understood as documents that already exist locally.
  - Auto Process Purchase Conf. - codeunit 20020784 "ITI IIC Auto Proc. P. Conf"
  - Auto Process New Purch. Doc. - codeunit 20020782 "ITI IIC Auto Proc. New P. Doc"
  - Auto Process New Sales Doc. - codeunit 20020783 "ITI IIC Auto Proc. New S. Doc"
  - Auto Process Sales Conf. - codeunit 20020785 "ITI IIC Auto Proc. Sales Conf."
  - Auto Process Shipment Not. - codeunit 20020786 "ITI IIC Auto Proc. Sh. Not."
  - Auto Process Invoice/ Auto Process Cr. Memo - codeunit 20020787 "ITI IIC Auto Proc. Inv./Cr.M."
- Objects connected with the Auto Send tab:
  - Auto Send Posted S.Shipment - codeunit 20020790 "ITI IIC JQ Send Posted S.Sh."
  - Auto Send Posted S.Invoice - codeunit 20020791 "ITI IIC JQ Send Posted S.Inv."
- Codeunit 20020788 "ITI IIC Auto P.&S. Conf. S.Inv" - will post and send confirmed sales invoices.

To make setting up easier there are dedicated actions on **IIC Setup** page:



# IIC Setup

## Actions

IIC Initialize	Job Queue ▾	
Own Endpoint M	Send Outbound Messages	Block Pc
Check Dates on	Auto Process New Purchase Document	Auto As:
Ship-to Address	Auto Process New Sales Document	Synchro
Default UoM for	Auto Process Purchase Confirmation	Default
Block Posting Pu	Auto Process Sales Confirmation	
	Auto Process Shipment Notification	
<b>Messaging</b>	Auto Process Invoice/Cr. Memo	
Compress Mess	Auto Post & Send Confirmed Sales Invoices	Notificat
	Auto Send Posted Sales Shipments	
<b>Documents</b>	Auto Send Posted Sales Invoices	

# Working with Advanced Intercompany

These articles guide through different scenarios of working with the application.

TO	SEE
Read about the process flow	<a href="#">Process Overview</a>
Read about document buffers	<a href="#">Document Buffers</a>
Exchange sales and purchase documents	<a href="#">Sending sales and purchase documents</a>
Send posted sales shipment	<a href="#">Sending sales shipments</a>
Send posted sales invoice	<a href="#">Sending sales invoices</a>
Read about IIC Messages	<a href="#">IIC Messages</a>
Process drop-shipment order	<a href="#">Working with drop shipment orders</a>
Process standalone invoice	<a href="#">Sending standalone invoices</a>
Process pre-invoice	<a href="#">Pre-invoice processing</a>
Add custom code	<a href="#">Event subscriptions</a>
Process intracompany transaction	<a href="#">Intracompany transactions</a>

# Process Overview

This article presents the process overview.

## Purchase Order to Sales Order

In this process, BUYER company buys goods in SELLER company.

1. [BUYER] Purchase Order is created.
2. [BUYER] PO is released.
3. [BUYER] PO is sent to SELLER company using **IIC Send** function.
4. [SELLER] Document is placed in sales buffer.
5. [SELLER] Document is accepted in sales buffer.
6. [SELLER] New Sales Order is created.
7. [SELLER] Sales Order is adjusted (if needed) and released.
8. [SELLER] SO is sent to BUYER company using **IIC Send** function.
9. [BUYER] Document (PO confirmation) is placed in purchase buffer.
10. [BUYER] Confirmation is accepted.
11. Document is ready in both companies - Next steps are optional.
12. [SELLER] SO is posted.
13. [SELLER] Posted Sales Shipment and Invoice are sent.
14. [BUYER] Shipment Notification is accepted
15. [BUYER] Purchase Receipt is posted.
16. [BUYER] Invoice is accepted in buffer which posts the invoice.

Below table presents status changes in both companies





STEP	PURCHASE ORDER STATUS IN BUYER	SALES ORDER STATUS IN SELLER
PO is created		
PO is released and sent	OUTBOUND	
Message is sent	SENT	
Document is validated in sales buffer		
SO is created	ACCEPTED	NEW
SO is released and sent		OUTBOUND/SENT
Document is validated in purchase buffer		
Document is accepted in the buffer	CONFIRMED	CONFIRMED
SO is posted.	CLOSED	CLOSED








# Purchase & Sales Buffers

When sales / purchase IIC document is sent to IIC partner, it is first created as a buffer document in IIC partner database. There are two buffers available: purchase and sales buffer. They are similar so only one is described below.

## Purchase Buffer Structure

← ...R DOCUMENT | WORK DATE: 27.01.2022  +  ✓ SAVED  

### 106027 · IIC Vendor

 Validate  Accept  Reject  Document Log Entries  Show Local Document ...

#### General

Entry No. ....	12	Local Assigned User ID ..	
Created Date & Time ...	09.03.2020 11:16	Vendor Order No. ....	1005
Created By .....	ADMIN	Vendor Shipment No. ..	
Document Type .....	Order	Vendor Invoice No. ....	
IIC Document Type ....	Purchase Document	Vendor Cr. Memo No. ..	
IIC Standalone Invoice ..	<input type="checkbox"/>	Order Date .....	
IIC Pre-Invoice .....	<input checked="" type="checkbox"/>	Buy-from Vendor No. ..	V00010
IIC Action .....	Update Document	No. of Information .....	1
Local Document Exists ..	<input checked="" type="checkbox"/>	No. of Warnings .....	0
Local Document Type ..	Order	No. of Errors .....	1
Local Document No. ....	106027	No. of Differences .....	2

Following fields are available in purchase buffer header:

- Entry No.: This is internal, sequence number.
- Create Date & Time: Timestamp of document creation.
- Created By: User who created the document.
- Document Type: Sales or Purchase document type.
- IIC Document Type: One of the following: Purchase Document, Shipment Notification, Invoice.
- IIC Standalone Invoice: Indicates that document is a standalone invoice (see Standalone Invoice chapter for details).
- IIC Pre-Invoice: Indicates that document is a pre-invoice (see Pre-Invoicing chapter for details).
- IIC Action: Specifies action that will be carried out when buffer document is accepted.
- Local Document Exists: Indicates if document is a confirmation or update to a document that already exists.
- Local Document Type: When local document exists, it shows document type.
- Local Document No.: When local document exists, it shows document no.
- Local Assigned User ID: When local document exists, it shows user assigned to it.
- Vendor Order No.: Order No. for inbound order.
- Vendor Invoice No.: Invoice No. for inbound invoice.
- Order Date: Date of the order.

## Buffer validation

Each buffer document has to be validated using **Validate** function prior to accepting.

On validation, the system looks for a customer or vendor that have the sending endpoint assigned.

After buffer document is validated, following types of information may be assigned to the document:

- Information: Purely informational.
- Warning: Warning message will be displayed when document is accepted, but it will be possible to accept the document.
- Error: It will not be possible to accept the document.

After all errors are resolved, user should validate the document again, and then proceed.

### UWAGA

Mapping set up in Type & No. mapping window is applied when user validates the document.

## Buffer acceptance

When there are no more errors, the buffer document should be accepted using the **Accept** action. It performs action depending on document type, for example create new order, update existing one or post invoice.

After document is accepted, a DOCUMENTHISTORY message is created. It needs to be sent using the **IIC Send Outbound Messages** report, or **IIC Messages** page.

## Rejecting buffer document

If something on document is not correct, it can be rejected. First, **rejection reason** field must be filled, and then the **Reject** action can be used. It will create special DOCUMENTHISTORY message.

When received, it will create special buffer document to show the rejection reason. If the **Notifications e-mail address** field is filled on the **IIC Setup** page, then an e-mail is also sent.

# Sending sales and purchase documents

This article presents the process of exchanging documents between partners.

## IIC Document

Following fields have been added to sales & purchase documents:

- IIC Document: Indicates that current document is IIC document = is included in IIC document flow.
- IIC Status Code: Current document status.
- IIC Created By: User who created the document.
- IIC (Posted) Buffer Document Exists: Indicates if there are buffer documents awaiting action.

Status	Released
IIC Document	<input type="checkbox"/>
IIC Status Code	CONFIRMED
IIC Created By	ADMIN
IIC Buffer Document ...	No
IIC Posted Buf. Doc. E...	No

When sales or purchase document is issued for customer/vendor that has "IIC Endpoint No." assigned, this document automatically becomes an IIC document.

This means that all restrictions related to current IIC Document Status are enforced.

## Sending Document

First, a message must be created. It is indicated by the OUTBOUND status code. It can happen automatically on document release, if the option **IIC Send on Document Release** is selected on the **IIC Setup** page. If not, then the **IIC Send** action should be used.

Then, the message must be sent. It can be done using action on the **IIC Messages** page, or the **IIC Send Outbound Messages** report.

TELL ME WHAT YOU WANT TO DO

iic send o

Go to Pages and Tasks

> IIC Send Outbound Messages

Tasks

## Further processing


Document must be then accepted in the buffer on the other side. Receiving a DOCUMENTHISTORY message about that will change status to ACCEPTED.




Next, the remote document must be released and sent. Receiving the confirmation will create new buffer document. Accepting it will change status to CONFIRMED. Sending the DOCUMENTHISTORY message will change remote status to CONFIRMED as well.

## IIC Document Log Entries

Current document status is placed in "IIC Status Code" field.

Value of this field is calculated on-the-fly, based on **IIC Document Log Entries** table content. It can be accessed by **IIC Document Log Entries** action.

← IIC DOCUMENT LOG ENTRIES | WORK DATE: 27.01.2022 

 Search  Open in Excel 

IIC Endpoint No.	Date & Time	User ID	Message	IIC Status Code
CRONUS DOM	09.03.2020 11:29	ADMIN	Document was queued for sending.	OUTBOUND
CRONUS DOM	09.03.2020 11:29	ADMIN	Document was sent.	SENT
CRONUS INT	09.03.2020 11:30	ADMIN	Document was accepted.	ACCEPTED
CRONUS DOM	09.03.2020 11:30	ADMIN	Document was accepted.	CONFIRMED
CRONUS INT	09.03.2020 11:32	ADMIN	Document was closed (fully invoice...	CLOSED

After each action, no matter in which company, an entry is created and synchronized between companies.

## Cancelling document

Document can be cancelled using the **IIC Cancel** action. It clears the **IIC Document** field, so it is excluded from the intercompany process.

A DOCUMENTHISTORY message is also created, so that it is also cancelled on the other side.

# Shipment Notifications

Posted Sales Shipments can be sent using IIC module.

Action is available on Posted Sales Shipment card: **IIC Send**. The message must then be sent using the action on the **IIC Messages** page, or the **IIC Send Outbound Messages** report.

When posted sales shipment is sent, it is placed in IIC Purchase Buffer in BUYER company, with type = Shipment Notification.

When shipment notification is accepted, *system does not post anything*. Shipment notification informs that the goods have been sent from SELLER company and they are in transit. Purchase order receipt should be posted manually when the goods arrive on BUYER premises.

When shipment notification is accepted, system creates entry in table **IIC Order Dispatch Entry**. If the warehouse receipt are required for location, it will be created automatically.

Two new fields are available on Purchase Order sub-page, that allow users to keep track of inbound quantities:

- IIC Shipment Status
- IIC Shipped Qty. (Base)

Order Fewer options

Salescampaign Code	IIC Shipment Status	IIC Shipped Qty. (Base)	IIC Drop Ship...
	Fully Shipped	10,00	<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

It is possible to drill down value in latter field, to see a list of underlying entries:

IIC ORDER DISPATCH ENTRIES | WORK DATE: 27.01.2022 📄 ↗

Document Type	Document No.	Line No.	Item No.	Posting Date	Document Date	Shipment No.	Shipped Qty. (Base)	Package No.
Order	106026	10000	1000	27.01.2022	27.01.2022	106026	10,00	

"Shipment No." contains Posted Sales Shipment No. from SELLER company.

If specified in SELLER company, "Package Tracking No." is filled in as well.

If Synchronization of Item Tracking is enabled on seller side then it is sent with this type of message. If it is also enabled on buyer side – it will be added to original purchase document when accepted.

# Invoices

Posted Sales Invoices can be sent using IIC module.

## Standard invoices

Action is available on Posted Sales Invoice card: **IIC Send**. The message must then be sent using the action on the **IIC Messages** page, or the **IIC Send Outbound Messages** report.

When posted invoice is sent, it is placed in IIC Purchase Buffer in BUYER company, with type = Invoice.

When invoice is accepted, system finds source Purchase Order and carries out following actions:

1. Verifies that for all received lines, there is enough received quantity.
2. Nullifies all lines "Qty. to Invoice" field.
3. Fills in "Qty. to Invoice" field in received lines only.
4. Fills in "Vendor Invoice No." field.
5. Posts Purchase Order (action = Invoice).

All above steps are carried out in one transaction so if invoicing process fails, no data is changed.

Sending and processing invoices is optional. Invoicing can be also done manually.

## Combined invoices

Invoices created from multiple orders can also be sent.

## Sales Invoice

There is possibility to send sales invoices created using the **Get Shipment Lines** functionality for Intercompany Partner.

Customer Name	CRONUS Domestic	IIC Document	<input type="checkbox"/>
Contact		IIC Status Code	
Posting Date	27/01/2022	IIC Standalone Invoice	<input checked="" type="checkbox"/>
Due Date	27/02/2022	IIC Buffer Document Exists	No

Lines | Manage | Line | Fewer options

⚡ Functions | 📅 Item Availability by | Related Information

- Get Price...
- Get Line Discount...
- Explode BOM
- Insert Ext. Texts
- Get Shipment Lines...

Select multiple shipments to the same customer because you want to combine them on one invoice.

If all lines are created this way, then the document can be posted without sending. The posted document should be sent using the



# 103051 · CRONUS Domestic

Process Invoice Correct Print/Send Navigate More options

IIC Send IIC Document Log Entries

Type	No.	Description	Quantity
→	:	Shipment No. 102064:	
Item	1000	Bicycle	3
		Shipment No. 102065:	
Item	1000	Bicycle	5

IIC Send action

## Purchase Buffer

When such invoice is validated in buffer, the system looks for purchase order connected to the source sales order of each line and checks for quantity received.



Search Open in Excel

Line No.	Severity	Message Text
20000	Information	Local Purchase Line found: Purchase Line: Order,106047,10000.
20000	Error	There is not enough received quantity of item 1000.
40000	Information	Local Purchase Line found: Purchase Line: Order,106049,10000.
40000	Error	There is not enough received quantity of item 1000.

Information about found purchase order lines can be also found in buffer lines:

# CRONUS International

Validate   Accept   Reject   Document Log Entries   Show Local Document   ...

IIC Action	.....	Create Document	No. of Information	.....	
Local Document Exists	..	<input type="checkbox"/>	No. of Warnings	.....	
Local Document Type	..		No. of Errors	.....	
Local Document No.	...		No. of Differences	.....	

Lines							
	IIC Source Line No. ↑		Quantity	Direct Unit Cost Excl. VAT	No. of Item Tracking Lines	Order No.	Order Line No.
→	10000	⋮	0	0.00	0		0
	20000		3	4,000.00	0	106047	10000
	30000		0	0.00	0		0
	40000		5	4,000.00	0	106049	10000

## Purchase Invoice

When the buffer document is accepted, then the system creates new purchase invoice, and runs the **Get Receipt Lines** function for matching lines. As the result both the shipment and receipt numbers can be seen on the created invoice:



# 1006 · CRONUS International

Process Invoice Posting Request Approval Incoming Document Release Navigate | More options

## General >





CRONUS International

27/01/2


Lines | Manage Line Fewer options

Type	No.	Description/Comment	Location Code	Quantity	Unit of Measure
→ Comment	:	Shipment No. 102064:			
Comment		Receipt No. 107063:			
Item	1000	Bicycle		3	PCS
Comment		Shipment No. 102065:			
Comment		Receipt No. 107064:			
Item	1000	Bicycle		5	PCS


It can be set up if the created invoice should be automatically posted, or left for possible local changes. It can be done on endpoint level:

← IIC ENDPOINT | WORK DATE: 27/01/2022  +  ✓ SAVED  

## CRONUS INTERNATIONAL

 Synchronize | Actions Fewer options

### General

No. ....	<input type="text" value="CRONUS INTERNATIONAL"/>	Last Date Modified .....	<input type="text" value="16/06/2020"/>
Description .....	<input type="text" value="CRONUS International Ltd."/>	LCY Code .....	<input type="text"/>
Test Endpoint .....	<input type="checkbox"/>	Combined Invoice Act... ..	<input type="text" value="Default"/> 

- Default
- Create Document
- Post Invoice
- Default

### Web Service

The default can be defined on **IIC Setup** page.



✓ SAVED



# IIC Setup

Actions

## General

Own Endpoint No. ····· CRONUS DOM

Check Dates on Buffe... ·

Ship-to Address Cha... ·

Default UoM for Item... ·

Block Posting Purcha... ·

Block Posting Sales w... ·

Auto Assign New Ch... ·

Synchronize Item Tra... ·

Default Combined In... ·  
Create Document  
Create Document  
Post Invoice

# IIC Messages

Each message sent between companies is transferred via IIC Message entry. Following fields are available in IIC Message table:

- Message No.: Running number.
- Message ID: Unique Message ID.
- Document ID: Unique Document ID.
- Direction: Inbound or Outbound
- From: Message sender.
- To: Message receiver.
- Created Date/Time: Date & time when message entry was created.
- Message Type: Type of message. Refers to IIC Message Type table.
- Sent: Indicates whether message was successfully sent.
- Sent by User ID: User sending message.
- Sent Date/Time: Date & time when message was sent.
- Received: Indicates whether message was successfully received.
- Received by User ID: User receiving message.
- Received Date/Time: Date & time when message was received.
- Confirm Processing: Indicates whether message needs delivery confirmation.
- Processed: Indicates whether message was successfully processed.
- Processed by User ID: User processing message.
- Processed Date/Time: Date & time when message was processed.
- Buffered: Indicates whether message is buffered (internal field).
- Buffer Processed: Indicates whether buffered message has been processed.
- Error: Field not used.
- Errors Count: Count of error entries.
- Status Code: Auxiliary field with current document status.
- Compressed: Indicates whether message has been compressed.

Following actions are available on IIC Messages page:

- Send: Allows user to send a message (if it was not sent before). Action is available for outbound messages only.
- Process: Allows user to process a message. Action is available for inbound messages only.
- Show message data: shows the xml data of the message.
- Send Outbound Messages: runs the IIC Send Outbound Messages report.
- Skip Message: skips the message from sending. Its useful if the message contains corrupted data - it can be used only by IIC Super User.

# Drop Shipment

There are some enhancements to the drop shipment process in context of intercompany.

## Setup

There must be a purchasing code marked as IIC Drop shipment.

← PURCHASING CODES | WORK DATE: 27/01/2022 ✓ SAVED

Search + New Edit List Delete Open in Excel

Code ↑	Description	Drop Shipment	Special Order	IIC Drop Shipment
CALL IN	This order must be called in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
→ DROP SHIP	Call in and send to customer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPEC ORDER	Call in and send to us	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

On the IIC Setup page it can be defined if accepting a shipment notification about drop shipment should post purchase receipt and sales shipment.

←

IIC Setup

Actions

**Drop Shipment**

Auto Post Drop Shipment Receipts

## Sales Order

There is new field for drop shipment vendor that should be filled with the IIC Vendor.

### Shipping and Billing

Show more

Ship-to	Default (Sell-to Address)	Location Code	YELLOW
Contact	Mr. Mike Nash	Shipment Date	27/01/2022
Bill-to	Another Customer	Drop Ship. Vendor No.	V00010
Name	New Concepts Furniture		
Contact	Ms. Tammy L. McDonald		

The IIC Drop Shipment purchasing code should be assigned to lines.

Lines	Manage	Line	Order	Fewer options				
Type	Area Code	Businessgroup Code	Salescampaign Code	IIC Drop Ship...	IIC Package Tracking No.	Purchasing Code	ICI Availability	
→ Item	70	OFFICE		<input checked="" type="checkbox"/>		<b>DROP SHIP</b>	19,884.00	

When the above requirements are met, the new action can be used: **Actions/Functions/Create Drop Shipment Purch. Order**

← SALES ORDER | WORK DATE: 27/01/2022 ✎ + 🗑

## 1001 · Spotsmeyer's Furnishings

Process Release Posting Prepare Order Request Approval Print/Send Navigate [Actions](#)

⚡ Functions ▾ 📅 Plan ▾ ✅ Request Approval ▾ 🏠 Warehouse ▾ ➕ Posting ▾ 🖨 Print ▾ 📄

IIC Buffer Document Exists ... No

Fewer options

Businessgroup Code	Salescampaign Code	IIC Drop Ship...	IIC Package Tracking No.	Purchasing Code
OFFICE		<input checked="" type="checkbox"/>		DROP SHIP

138,712.50	Total Excl. VAT (USD)	
0.00	Total VAT (USD)	
0	Total Incl. VAT (USD)	

📄 Create Purchase Document >
 📄 Calculate Invoice Discount
📄 Get Recurring Sales Lines...
📄 Copy Document...
📄 Move Negative Lines...
📄 Archive Document
📄 Send IC Sales Order
📄 Incoming Document >
 📄 IIC Send
📄 IIC Cancel
📄 **Create Drop Shipment Purch. Order**
📄 Create Special

Created purchase order can be then processed as usual IIC Purchase Document. If the Auto Post option is selected, then accepting shipment notification buffer document will post receipt and shipment.

# Standalone Invoices

In case of simple invoices (e.g. service invoices), it may not always be necessary to negotiate document contents and await confirmation.



Such invoice can be created as Sales Invoice in SELLER company and marked as "Standalone Invoice".

**UWAGA**

In this scenario, an invoice document is created, instead of order.

**UWAGA**

Unlike standard purchase + sales order IIC process, standalone invoice process is initiated from SELLER company.

← SALES INVOICE | WORK DATE: 27.01.2022  + 

## 1004 · IIC Customer

Process   Posting   Prepare   Invoice   Release   Request Approval   Navigate   More options

### General Show more

Customer Name	IIC Customer	IIC Document	<input checked="" type="checkbox"/>
Contact		IIC Status Code	-
Posting Date	27.01.2022	IIC Standalone Inv...	<input checked="" type="checkbox"/>
Due Date	27.02.2022	IIC Buffer Docume...	<input type="checkbox"/>

"IIC Standalone Invoice" field should be marked before document is released. Otherwise, document would need to be negotiated as any other IIC document.

When IIC sales invoice is released, system will check if this invoice only contains lines of following types: G/L Account, Resource, Charge(Item). If so, system will ask whether user would like to convert this document to standalone invoice.

Once released, standalone invoices do not need to be negotiated. Their IIC Status remains blank and can be reopened / released without any limitations.

Standalone invoices are sent after they are posted, from Posted Sales Invoice card.

When standalone invoice is sent to BUYER, it is placed in the IIC purchase buffer. When it is accepted, purchase invoice is created. It has special status code assigned = STANDALONE.

**UWAGA**

If below option is selected in **IIC Setup** table, created purchase invoices will be automatically released.

# Purchases

Auto Release Standalone Invoices

Below is the recommended setup for STANDALONE invoice (if the above option is not selected then Release must not be blocked):

IIC STATUS CODES | WORK DATE: 27.01.2022

Code ↓		Description	Block Relea...	Block Reop...	Block IIC Send	Block Posting
→	STANDALONE	Stanalone Invoice	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

# Pre-invoice

Pre-invoice enables posting of a purchase order before the goods are received. It can be useful when it takes long time to deliver goods, and they should be visible on stock. When received invoice is posted as pre-invoice, the items are received on a special location and a transfer order is created.

## Requirements

1. **Pre-Invoice Enabled** and **Pre-Invoice Location** must be set on **IIC Setup/Pre-Invoice**:

### Pre-Invoice

Pre-Invoice Enabled

Auto Post Transfer Sh...

Pre-Invoice Location ... PREINVOICE

2. The purchase order lines which should be pre-invoiced must have the same location code.
3. Transfer Route from Pre-Invoice Location to the target location must be defined.

## Processing

On purchase buffer document, the **Pre-Invoice** field should be filled.

# 106048 · CRONUS International

Validate Accept Reject Document Log Entries Show Local Document ...

### General


Entry No. ....	80	Local Assigned User ID	ADMIN
Created Date & Time ...	18/06/2020 15:19	Vendor Order No. ....	
Created By .....		Vendor Shipment No. ...	
Document Type .....	Invoice	Vendor Invoice No. ....	103050
IIC Document Type ...	Invoice	Vendor Cr. Memo No. ...	
IIC Standalone Invoice ..	<input type="checkbox"/>	Order Date .....	
<b>IIC Pre-Invoice .....</b>	<input checked="" type="checkbox"/>	Buy-from Vendor No. ...	V00010
IIC Action .....	Post Invoice	No. of Information .....	0
Local Document Exists ..	<input type="checkbox"/>	No. of Warnings .....	0
Local Document Type ..	Order	No. of Errors .....	0
Local Document No. ...	106048	No. of Differences .....	0

If a warehouse receipt exists, a dialog will be shown with question if it should be removed, unless disabled in [IIC Setup](#)



Then, the validation is not showing errors about not received items.

After accepting, a message about transfer order is shown:

 Transfer Header 1022 has been created.

OK

If **Auto Post Transfer Shipment** is selected on IIC Setup, then after the transfer order creation, the transfer shipment is posted.

# Event Subscriptions

There are several events published that can be subscribed to.

## Codeunit 20020750 "ITI IIC Message Mgt."

- OnAfterSendIICMessage(sender: Codeunit "ITI IIC Message Mgt."; var IICMessage: Record "ITI IIC Message")

This event occurs after sending an IIC Message

## Codeunit 20020755 "ITI IIC Document Mgt."

- OnBeforeSendSalesDocument(var SalesHeader: Record "Sales Header")

This event occurs before a message for sales document is created.

- OnAfterSendSalesDocument(var SalesHeader: Record "Sales Header")

This event occurs after a message for sales document is created.

- OnBeforeCancelSalesDocument(var SalesHeader: Record "Sales Header")

This event occurs before a sales document is IIC Cancelled.

- OnAfterCancelSalesDocument(var SalesHeader: Record "Sales Header")

This event occurs after a sales document is IIC Cancelled.

- OnBeforeSendSalesShipment(var SalesShipmentHeader: Record "Sales Shipment Header")

- OnAfterSendSalesShipment(var SalesShipmentHeader: Record "Sales Shipment Header")

- OnBeforeSendSalesInvoice(var SalesInvoiceHeader: Record "Sales Invoice Header")

- OnAfterSendSalesInvoice(var SalesInvoiceHeader: Record "Sales Invoice Header")

- OnAfterSendSalesCrMemo(var SalesCrMemoHeader: Record "Sales Cr.Memo Header")

- OnBeforeSendSalesCrMemo(var SalesCrMemoHeader: Record "Sales Cr.Memo Header")

- OnBeforeSendPurchaseDoc(var PurchaseHeader: Record "Purchase Header")

- OnAfterSendPurchaseDoc(var PurchaseHeader: Record "Purchase Header")

- OnBeforeCancelPurchaseDoc(var PurchaseHeader: Record "Purchase Header")

- OnAfterCancelPurchaseDoc(var PurchaseHeader: Record "Purchase Header")

## Codeunit 20020761 "ITI IIC Buffer Validation Mgt."

- OnBeforePurchaseBufferValidate(var IICPurchaseHeaderBuffer: Record "ITI IIC Purchase Header Buffer")

This event occurs before a purchase buffer document is validated.

- OnAfterPurchaseBufferValidate(var IICPurchaseHeaderBuffer: Record "ITI IIC Purchase Header Buffer")

This event occurs after a purchase buffer document is validated.

- OnBeforeSalesBufferValidate(var IICSalesHeaderBuffer: Record "ITI IIC Sales Header Buffer")
- OnAfterSalesBufferValidate(var IICSalesHeaderBuffer: Record "ITI IIC Sales Header Buffer")
- OnBeforeCheckFieldDifference(ITIICMessageTemplateField: Record "ITI IIC Message Template Field"; EndpointCode: code[20]; var Value: Text)

This event occurs before received field is compared to local document field in order to count errors, warnings and information. This happens for every filed in a template, so can be used to make some custom mappings.

- OnAfterCheckDifferences(var ReceivedRecRef: RecordRef; BufferType: Option; BufferEntryNo: Integer; BufferLineNo: Integer; MessageTemplateLine: Record "ITI IIC Message Template Line")

This event occurs after all fields are compared and any mappings defined for previous event applied. It can be used to do some more complicated mappings based on several fields. Any changes must be saved using the `Modify()` function.

## Codeunit 20020762 "ITI IIC Purchase Buffer Mgt."

- OnAfterAcceptBufferDocument(IICPurchaseHeaderBuffer: Record "ITI IIC Purchase Header Buffer")

This event occurs after a purchase buffer document is accepted, before archiving the buffer.

- OnAfterRejectBufferDocument(IICPurchaseHeaderBuffer: Record "ITI IIC Purchase Header Buffer")

This event occurs after a purchase buffer document is rejected, before archiving the buffer and logging.

- OnAcceptCrMemo(var IICPurchaseHeaderBuffer: Record "ITI IIC Purchase Header Buffer"; var isHandled: Boolean)

This event occurs before accepting credit memo buffer document. The `isHandled` parameter can be used to skip standard way of processing.

- OnAcceptReturnReceipt(var IICPurchaseHeaderBuffer: Record "ITI IIC Purchase Header Buffer"; var isHandled: Boolean)

This event occurs before accepting return receipt buffer document. The `isHandled` parameter can be used to skip standard way of processing. At this moment return receipts are not handled by standard, so this is the only way to process return receipts.

- OnBeforeCreateWarehouseReceipt(PurchaseHeader: record "Purchase Header"; var ReceiptRequired: Boolean)

This event is triggered before warehouse receipt creation during acceptance of shipment notification. The `ReceiptRequired` parameter (always initially set to true) can be used to skip the WR creation by setting to false.

## Codeunit 20020764 "ITI IIC Sales Buffer Mgt."

- OnAfterAcceptBufferDocument(IICSalesHeaderBuffer: Record "ITI IIC Sales Header Buffer")

This event occurs after a sales buffer document is accepted, before archiving the buffer.

- OnAfterRejectBufferDocument(IICSalesHeaderBuffer: Record "ITI IIC Sales Header Buffer")

This event occurs after a sales buffer document is rejected, before archiving the buffer and logging.

## Codeunit 20020766 "ITI IIC Pre-Invoice Mgt."

- OnBeforeModifyTransferLine(var TransferLine: Record "Transfer Line"; TempPurchLine: Record "Purchase Line" temporary; var TempReservEntry: Record "Reservation Entry" temporary)

This event occurs when creating transfer order during pre-invoice acceptance. TransferLine contains already inserted transfer line, just before modification. TempPurchLine contains purchase line on which the transfer is based - the line is already posted so it does not exist in the database. TempReservEntry contains the tracking of the original document which will be alter copied to transfer order.

## **Codeunit 20020769 "ITI IIC Event Integration Mgt."**

These events are triggered after setting the IIC Document field on customer/vendor validation. They can be used to clear the field to skip IIC processing for the document:

- OnAfterSetIICDocumentPurchase(var PurchaseHeader: Record "Purchase Header")
- OnAfterSetIICDocumentSales(var SalesHeader: Record "Sales Header")

# Intracompany transactions

## Description

If there is one customer and vendor in the company, the same endpoint as Own Endpoint can be assigned to them.

If more of them are needed, then a specific Sender Endpoint needs to be set on the customer/vendor cards (**IIC Sender Endpoint** field). It will be used instead of Own Endpoint when sending documents, which will allow to determine correct customer/vendor when receiving documents.

# Frequently asked questions

## Introduction

Please send any questions or problems to [sd.aic@it.integro.pl](mailto:sd.aic@it.integro.pl).

# Release Notes

## 1.8

### New features

- New events after archiving buffers
- Possibility to select what types of documents should be exchanged with specific partners.

## 1.7.2

### Bugfixes

- Fixed a bug where system would not detect changes done by code as a difference.
- Fixed a bug where tracking was not synchronized to drop shipment sales order.
- Fixed a bug where system required receipt posted for invoice.

## 1.7.1

### Bugfixes

- Added possibility to set up sender of notifications.

## 1.7

### New features

- Possibility to combine transfer order from combined pre-invoice.

### Bugfixes

- Delete warehouse receipt dialog is only shown when at least one WR exists.
- Fixed a bug when closed document could be reopened regardless of status block.

## 1.6.1

### Bugfixes

- Fixed compilation error on BC19.
- Fixed empty number error when creating special order.
- Several field size fixes.
- Added event with Purchase Line and Transfer Line for pre-invoice.
- Added Purchase Order Line No. field in Transfer Line for pre-invoice.
- Added possibility to view and delete buffer archives.

## 1.6

### New features

- Pre-invoice will delete existing warehouse receipts.
- New event to skip Warehouse Receipt creation on Shipment Notification acceptance.
- New events to skip setting the "IIC Document" field on specific documents.

### Bugfixes

- IIC Cancel fixed on purchase invoice
- Added upgrade code to delete document log entries without document ID.
- Added upgrade code to change type in IIC Document log entries to Sales if the sales document exists and purchase document does not.

## 1.5.1

### Bugfixes

- No. series field extended to 20 characters.

## 1.5

### New features

- Possibility to support receipt notifications and purchase invoices through custom extension.

## 1.4

### New features

- Support for intracompany transactions - sender endpoint on customer and vendor cards.
- Possibility to send line deletions - buffer will show a warning in this case.

### Bugfixes

- Fixed field sizes in buffers and archives.
- Fixed default invoice template.
- Fixed mapping to allow purchasing resources.
- Fixed for Order Dispatch Entries to contain shipment no.
- Fixed issue when reopening document would send Open a Endpoint Status even if it was not sent before.

## 1.3.3



## Bugfixes

- Accepting invoice updates posting date.
- Reopened drop shipment sales lines are reread from database after reopen to not conflict with custom reopen triggers.
- Fixed compilation error on BC18

### 1.3.2

## Bugfixes

- Fixed issue with mapping of not existing records.
- Fixed issue when shipped document was marked as closed.
- Changes to drop shipment sales order allowed only for IIC processes.

### 1.3.1

## Bugfixes

- Autoaccepting ignores cancelled and rejected buffer documents.
- Evaluating data uses xml format for all types.
- Accepting posting buffers skips posting commits to avoid partial acceptance.
- Fields on posted documents filled before commit after posting to stay after error.

## 1.3

## Changes

- Removed workflow features.

### 1.2.4

## Bugfixes

- Fixed refreshing headers after sending, to not be blocked by status filters.

### 1.2.3

## Bugfixes

- IIC Drop Shipment is marked on Purchase Orders created using Requisition Worksheet (based on Purchasing Code).

### 1.2.2

## Bugfixes

- Line Buffers field Description extended to 100 characters.

### 1.2.1

## Bugfixes

- Check if field exists locally before checking differences.
- Fixed default template.
- Fixed logging for long error messages.

### 1.2

## New features

- Comments and additional tables added to default templates.
- Several columns hidden on message template lines. Editability disabled for non-IIC Super Users.
- Editability disabled for message template fields, new actions to edit or delete (for default fields available only for super users).
- Changed processing of comment flow to allow adding new fields.
- Field type check when editing template fields.
- All fields are difference tracked by default.
- Local Salesperson/Purchaser Code and Ship-to Name visible on buffer document list.

## Bugfixes

- Fixed display issues (captions instead of data) of field list (Add Fields action).
- Empty Endpoint No. not allowed.

### 1.1.1

## Bugfixes

- Several captions and texts fixed
- Allowed accepting buffer for documents with statuses of **Pending Prepayment** and **Pending Approval**.
- When release of accepted document fails, it is left open with message instead of acceptance error. If message is not allowed, the error is logged.
- Event subscription changed for BC15 compatibility.
- Log Entries page visibility fixes.
- Function creating Warehouse Receipt on Shipment Notification acceptance is run only when required by any purchase line.
- Object number fixed to match license.

### 1.1

## New Features

- Added possibility to process returns (fields and events - requires customized extension)
- Possibility to synchronize mapping.

## Bugfixes

- Fixed Item Charge Assignment issues and Unit of Measure.
- Added missing prefixes.
- Fixed Item type Mapping.
- Differences don't break autoprocessing of Sales.
- Invoice quantities compared to not base quantities.
- Check if release allowed not only when auto send enabled.
- Fixed mapping table relations.
- Fixed posting prepayments.
- Failed release of accepted document results in message instead of error.
- Caption and text fixes.

## 1.0.0.12

### New Features

- Fields Added to Buffer Documents subforms: **Description 2, Unit of Measure Code, Shipment/Expected Receipt Date.**
- Autoprocessing errors are logged also in buffer validation entries.
- Added possibility to skip messages.
- Change default sorting to descending in messages list.

### Bugfixes

- Refresh headers after sending (required for further processing on release).
- Removed fields from Endpoint: *File System Path, Customer No., Vendor No.*
- Fix for posting standalone invoice.
- Increased Lot and Serial No. size in tracking buffer from 20 to 50.

## 1.0.0.11

### Bugfixes

- Removed *Skip Local Status* field.
- Fixed **IIC Ship. Agent Service Code** table relation

## 1.0.0.10

### New Features

- E-mail notification on document rejection.

### Bugfixes

- Added commits save logs during autoprocessing.
- Autoaccepted documents will be validated even if already validated.

## 1.0.0.6

### New Features

- Differences don't stop autoprocessing.
- Added Item as option in mapping.
- Removed field for service name - whole address in one field.
- Actions to view/create job queue entries.
- Auto create warehouse receipt when accepting shipment notification.

## 1.0.0.5

### Bugfixes

- Fixed field selection filters.
- Fixed comment buffer keys.