

Microsoft Dynamics 365 Business Central – Key Usage Scenarios

Introduction

Lucy is an automated sales order processing solution. She turns emailed PDF purchase orders into sales orders in Microsoft Dynamics 365 Business Central, eliminating the need for Customer Service staff to perform manual data entry tasks.



When a PDF purchase order is emailed from a customer to the business, Lucy opens the attachment and reads the order data (order number, stock codes, prices, quantities). Lucy assigns the order to the correct Customer Code, uses a document map to identify critical order fields, and uses full integration to Dynamics Business Central to validate the data before creating a sales order in the ERP.

When validation errors arise, Lucy notifies the business to have the data corrected. Lucy remembers stock code translations and can store multiple document maps for each customer.

Setup

To make Lucy Business Central testing as straightforward as possible, we've created some CRONUS test data and 3 PDF purchase orders for you to use. Processing these orders will run you through the main user scenarios in order to test Lucy's major functions.

Save these 3 documents somewhere you can access them later.

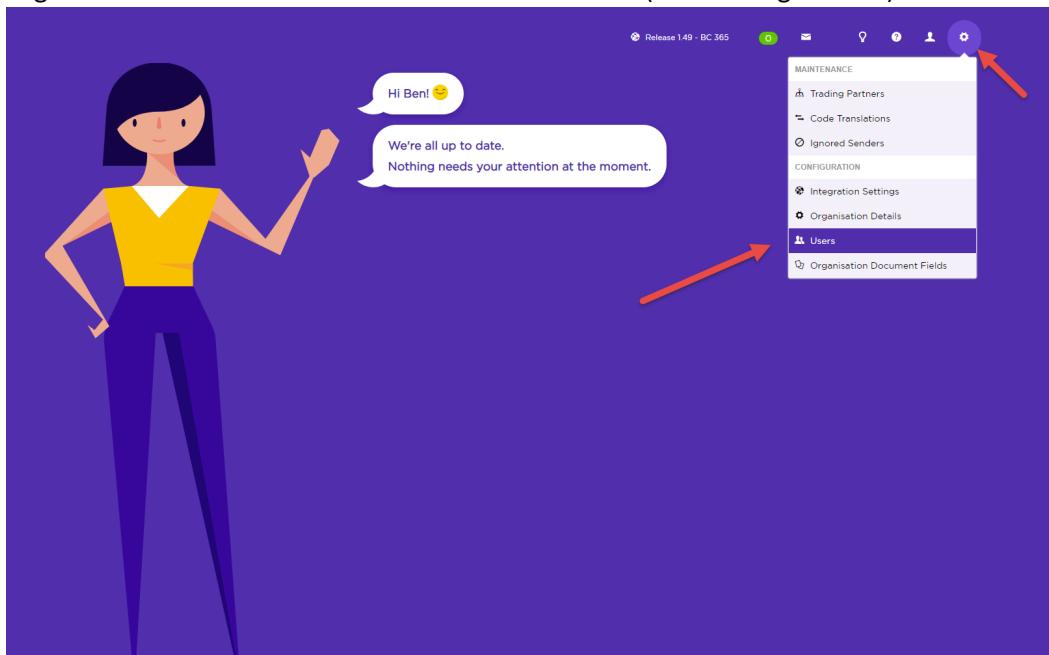
Your **Lucy credentials** to login to the application at <https://go.letlucy.com>:

Username: mslucytest@outlook.com

Password: 5QkZDEnP%;9~N/?Y

1. First you need to create a user for testing.

- I. Login and select '**Users**' from the Maintenance menu (under the gear icon).



- II. Click **Add New User**

- III. Enter a **First Name**, **Surname**, and **valid Email Address** (as this mailbox will receive email notifications from Lucy)

IV. Toggle the following settings ON:

- Active (user status)
- Admin User
- Customer Service User
- Notify on error
- Notify on success
- Notify when attention required

The screenshot shows the 'Add User' page in a software application. On the left, there is a cartoon illustration of a woman with dark hair, wearing a yellow top and purple pants. The main form has three sections: 'User Details', 'Admin User', and 'Notify on ...'. Red arrows point to each of the six toggle switches listed in IV. A red arrow also points to the 'Save & Exit' button at the top right.

User Details

- First Name: Your (highlighted with a yellow box)
- Surname: Details (highlighted with a yellow box)
- Email Address: your@emailaddress.com (highlighted with a yellow box)
- Active: (highlighted with a red arrow)

Admin User

- Admin User: (highlighted with a red arrow)
- Billing User:
- Customer Service User: (highlighted with a red arrow)

Notify on ...

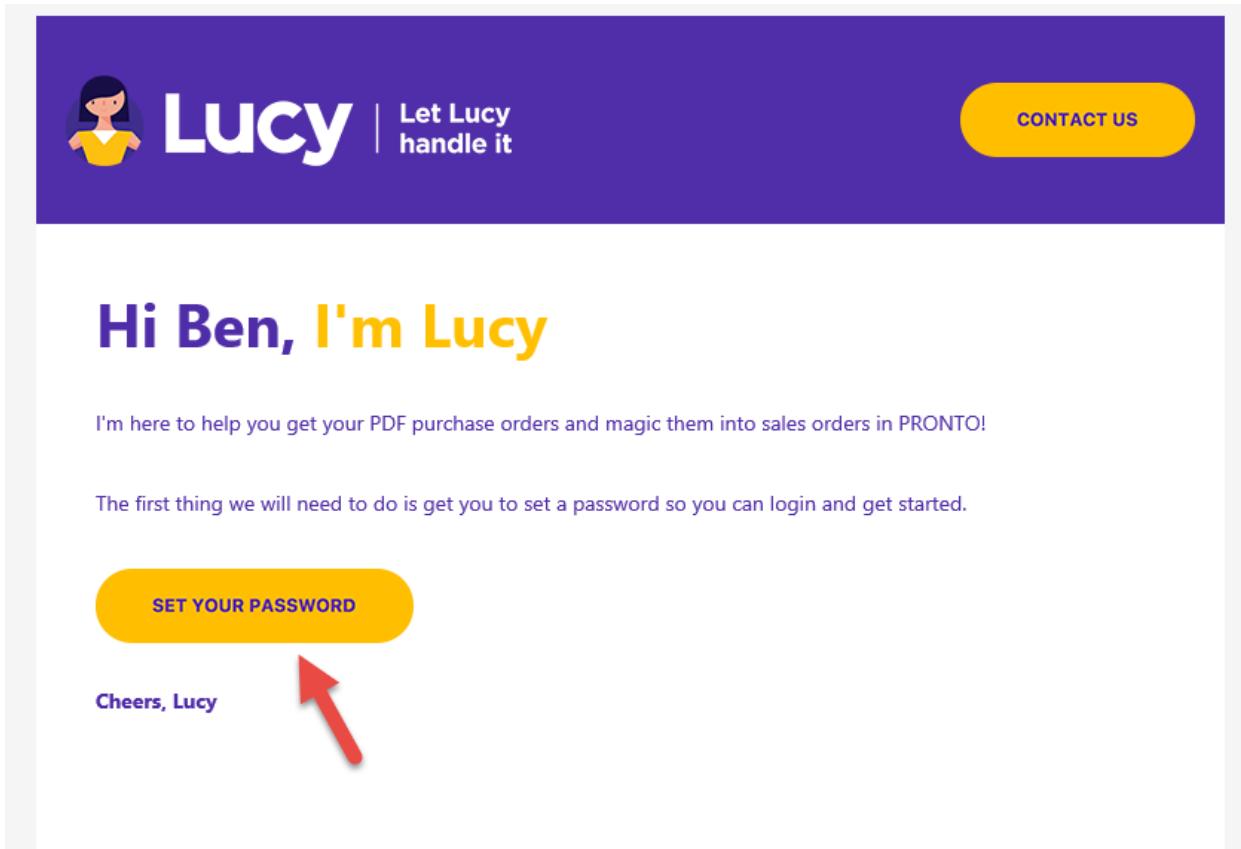
- Notify on error: (highlighted with a red arrow)
- Notify on success: (highlighted with a red arrow)
- Notify when attention required: (highlighted with a red arrow)

Buttons

- Save & Exit (highlighted with a red arrow)
- Cancel

V. Click Save & Exit.

The user you just added will receive an email with a link to set the password. Follow the prompts to set the password and login to Lucy.



Note - The 'Set Password' link contains a token that is valid for 24hrs once requested. If you attempt to set your password after 24hrs and receive an error due to an expired token, you will need to use the 'Forgot Your Password?' link on the login page (<https://go.letlucy.com>). We'll email you a fresh link so that you can reset it.

2. Next, please install the Lucy integration package that has been provided to you.
3. Now, login to Dynamics Business Central and navigate to 'Web Services'.

The screenshot shows the Microsoft Dynamics 365 Business Central homepage. At the top, there's a search bar labeled "TELL ME WHAT YOU WANT TO DO" and a red arrow pointing upwards from the bottom right towards it. Below the search bar, there are several key performance indicators (KPIs) and navigation links. One prominent KPI is "The best-selling item was BERLIN Guest Chair, yellow with 13 units sold". The page also displays ongoing sales, purchases, payments, and incoming documents. On the left, there's a sidebar with "Activities" and "START" buttons for various actions like Sales Quote, Sales Order, and Sales Invoice.

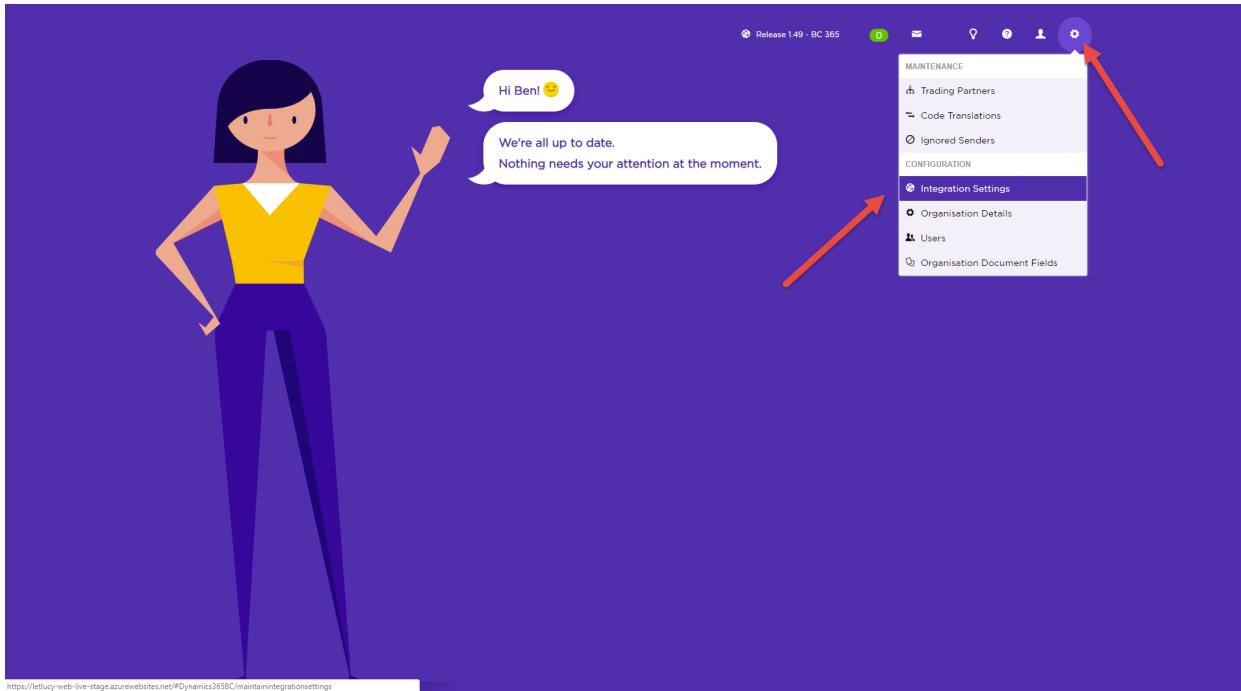
4. Search for the Lucy Integration Codeunit and copy the Soap URL.

This screenshot shows the "WEB SERVICES" list in Microsoft Dynamics 365 Business Central. The "LucyIntegration" codeunit is highlighted with a blue selection bar. The list includes various service names and their corresponding URLs, many of which begin with "https://". The interface is similar to the main dashboard, with sections for "Activities", "START" buttons, and "Insights".

OBJECT TYPE	OBJECT ID	OBJECT NAME	SERVICE NAME	ALL TE...	PUB...	ODATA V...
Codeunit	1801	Company Setup Service	CompanySetupService	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not a...
Codeunit	1803	Encrypted Key/Value Managem...	EncryptedKeyValue	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not a...
Codeunit	5324	Exchange Service Setup	ExchangeServiceSetup	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not a...
Codeunit	50101	LucyIntegration	LucyIntegration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not a...
Codeunit	1544	Workflow Webhook Subscription	WorkflowActionResponse	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Not a...
Page	1314	AccountantPortal Activity Cues	AccountantPortalActivityCues	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	1315	Accountant Portal Finance Cues	AccountantPortalFinanceCues	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	1316	Accountant Portal User Tasks	AccountantPortalUserTasks	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2160	O365 Sales Graph	C2Graph	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	16	Chart of Accounts	Chart of Accounts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	5500	agedAccountsPayable	ExcelTemplateAgedAccountsPa...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	5499	agedAccountsReceivable	ExcelTemplateAgedAccountsRe...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	5501	balanceSheet	ExcelTemplateBalanceSheet	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	5493	cashFlowStatement	ExcelTemplateCashFlowStatem...	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	5503	incomeStatement	ExcelTemplateIncomeStatement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	5497	retainedEarningsStatement	ExcelTemplateRetainedEarnings	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	5502	trialBalance	ExcelTemplateTrialBalance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	1320	ExcelTemplateCompanyInfo	ExcelTemplateViewCompanyInfo	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2200	Sales Invoice Document API	InvoiceDocument	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2201	Sales Invoice Reminder API	InvoiceReminder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	89	Jobs	Job List	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	1007	Job Planning Lines	Job Planning Lines	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	1002	Job Task Lines	Job Task Lines	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2820	nativeInvoicingAttachments	nativeInvoicingAttachments	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2803	Native - Contact	nativeInvoicingContacts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2863	countriesRegions	nativeInvoicingCountryRegion	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2001	invoicingCustomers	nativeInvoicingCustomer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2823	nativeInvoicingEmailPreview	nativeInvoicingEmailPreview	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2842	nativeEmailSetup	nativeInvoicingEmailSetting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2822	nativeInvoicingExportInvoices	nativeInvoicingExportInvoices	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://
Page	2840	nativeInvoicingGeneralSettings	nativeInvoicingGeneralSettings	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	https://

5. In the Lucy application, navigate to the Integration Settings page and enter the Soap URL (i.e.

<https://api.businesscentral.dynamics.com/v1.0/d9832bec-98df-4f9c-ac90-f459d86cbd96/sandbox/WS/CRONUS%20AU/Codeunit/LucyIntegration>)



6. It's here that you'll also enter your Dynamics Business Central username and password, then click Test Connection.

A screenshot of the "Integration Settings" page. At the top, there is a green success message box that says "Connection Successful". Below it, there is a section titled "Server Settings" with the sub-section "Code Unit Soap URL". There is a text input field for the URL, with a note below it: "The URL of the Code Unit Lucy will talk to." There are also fields for "Username" and "Password / Web Service Access Key". At the top right of the page, there are two buttons: "Test Connection" (with a lightning bolt icon) and "Save" (with a checkmark icon).

7. Once you've received the "Connection Successful" message, click Save and navigate back Home by clicking anywhere on the Lucy character.

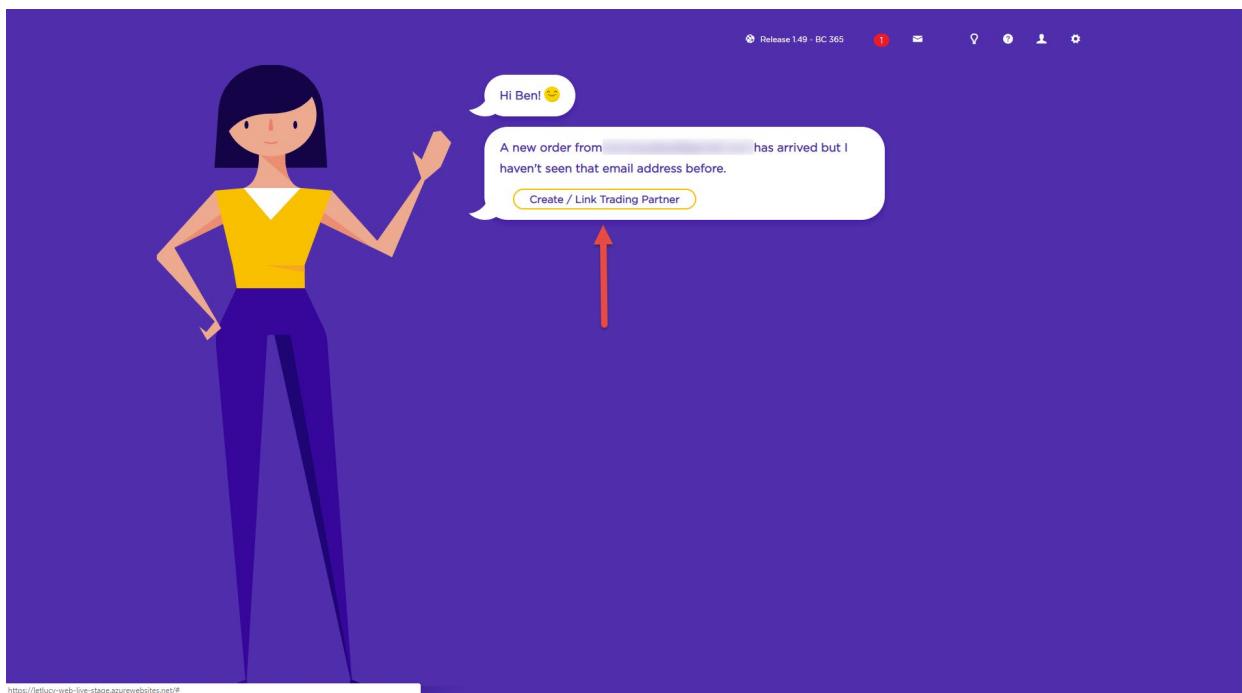
Order Processing

The email address to send all orders to will be **MSLucyTest@letlucy.biz** – Lucy will be monitoring this inbox.



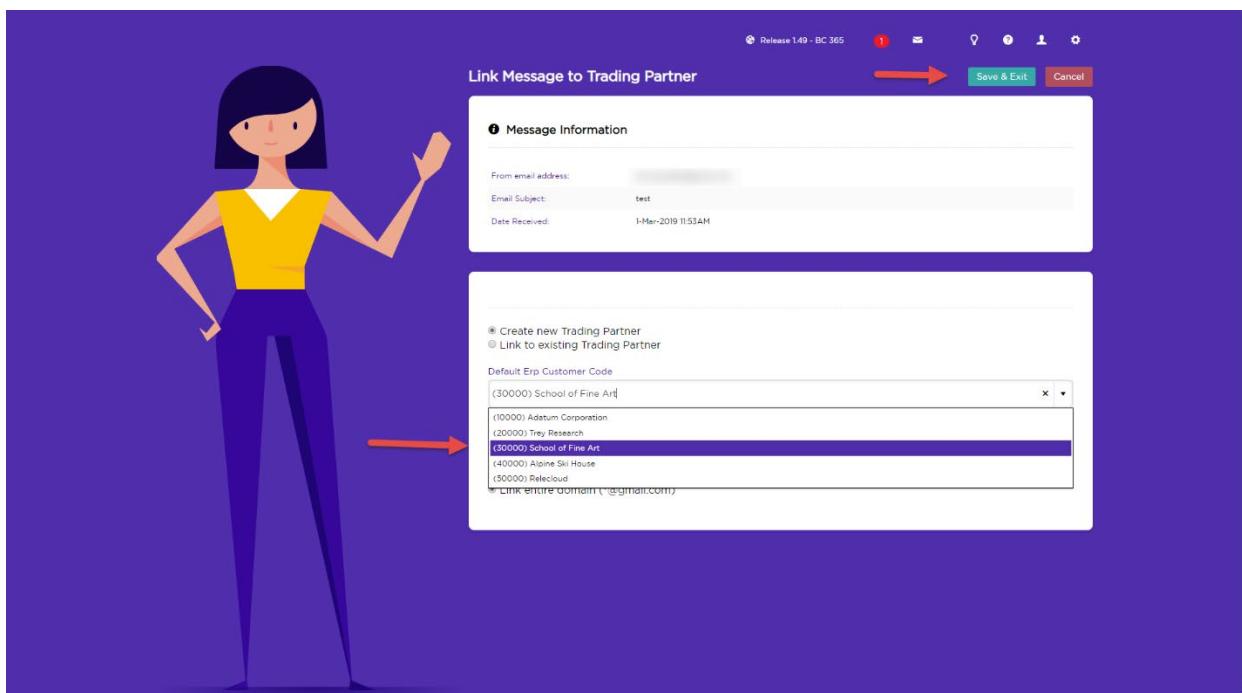
Example 1 – First order, all data correct

1. When you're ready to start, attach PDF 1 (**44256_BC_Perfect.pdf**) to an email and send it to Lucy at the address above.
2. When Lucy receives that email, she won't recognize you as an existing customer. So you need to follow the prompts to **link your sender to a Trading Partner**.



3. Create a new Trading Partner. Tick the **Create New Trading Partner** option and enter the School of Fine Art's account code (3000) into the **Default Erp Customer Code** field. Alternatively, you can select this customer from the drop down menu. Your PDFs contain data for CRONUS customer 'School of Fine Art', which is why you need to be linked to this customer in order for the data to match.

4. Lucy needs to link an email address to the trading partner so that she can determine who an order is from, so you can **either link your single email address or entire domain** for this test. Click **Save & Exit** and Lucy will attempt to process the order.



5. **Mapping.** The first order from any customer is going to require a document map. Lucy will ask you to identify the important information on a purchase order such as: Order Number, Product Code, Price, and Quantity.

All you need to do is click the **Map** button for the field you want to map, and then use the mouse to **drag and highlight** that field. Click the grey square to verify that Lucy's found the data you want her to. Repeat this process for each of the required fields to create the document map. (*Please refresh the page if the mapping screen does not load*).

Here's an example of what it looks like:

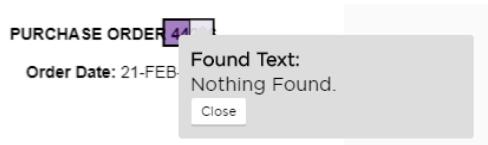
- Click Map for the Order Number field on the right side of the page.

The screenshot shows a SAP Fiori application window. On the left, there is a PDF preview of a purchase order document titled "PURCHASE ORDER 44256". The document details a transaction from "School of Fine Art" to "School of Fine Art". It lists various items such as "ATHENS Desk", "PARIS Guest Chair, black", etc., with their respective quantities, UOM, unit cost, and line total. On the right side of the screen, there are two panels for mapping fields. The top panel is titled "Order Items" and contains fields for "Order Number", "Customer Code", "Order Date", and "Delivery Address", each with a "Map" button. A red arrow points to the "Map" button next to "Order Number". The bottom panel is titled "Line Items" and contains fields for "Stock Code", "Qty.", and "Item Price", also with "Map" buttons. At the very top of the screen, there is a header bar with icons for release information, notifications, and user profile.

- Locate the purchase order number on the PDF, then use the mouse to click, drag and release to highlight the field for Lucy. You can also click on the grey square of the mapped field to see what data Lucy has found.

This screenshot is similar to the one above, but the "Order Number" field in the PDF document is highlighted with a yellow selection box. In the mapping interface on the right, the "Order Number" field is shown with a grey background and a small grey square icon, indicating it has been mapped. The rest of the interface and document content are identical to the previous screenshot.

c. If nothing has been found, highlight a larger area to ensure that Lucy can access all the data.



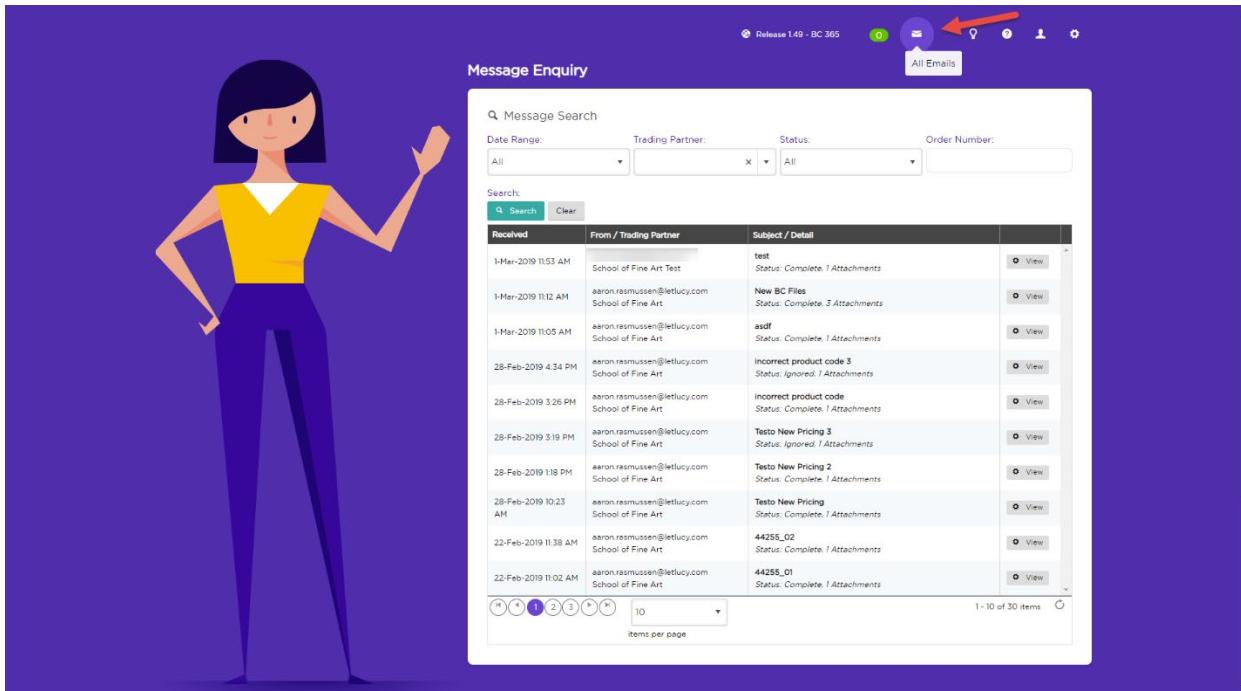
6. Once you have mapped the Purchase order number, Delivery Address, Stock Code, Price and Quantity, click **Reprocess**. It should only take a few seconds for Lucy to go through and validate every line of the order against the ERP data, and integrate it.

7. The timeline will show the sequence of events and a timestamp for each. You'll see that the status has been marked as complete and you'll see that the document has been successfully integrated.

A screenshot of the Lucy platform interface. On the left, there's a sidebar with a user icon and some navigation links. The main area is divided into two sections. The left section shows a timeline of events for a purchase order, with a red arrow pointing down from the top of the timeline area towards the event list. The right section is a large, mostly empty white space with a "View Full Email" button at the bottom. The timeline events include:

- 1 Mar 2019 12:17 pm Processing is complete
- 1 Mar 2019 12:17 pm Order 44256_BC_Perfect.pdf Integrated
- 1 Mar 2019 12:17 pm Ben Dalton reviewed 44256_BC_Perfect.pdf and made the following changes:
 - Changed Order Number from 44256 to 44256test@test123
- 1 Mar 2019 12:16 pm Order 44256_BC_Perfect.pdf Failed Validation. Please Review the Order Errors:
 - Duplicate Customer Reference Number
- 1 Mar 2019 12:16 pm Document Map (133) assigned for 44256_BC_Perfect.pdf
- 1 Mar 2019 12:16 pm Document Map (133) updated by dalton.ben@hotmail.com
- 1 Mar 2019 12:14 pm Order 44256_BC_Perfect.pdf Failed Validation. Please Review the Order Errors:
 - Invalid Product Code(12345)
 - Invalid Product Code(12345)
 - Invalid Product code(12345)

(Note - If ever you need to refer back to a particular email or purchase order, click the envelope icon to get to the Message Enquiry page. Every message that Lucy receives is stored here so if you are looking for an email or purchase order, here's where to find it.)



Now we'll proceed to Example 2, where we'll handle an order with incorrect data.

Example 2 – Customer sends an order with an incorrect product code

1. Attach PDF 2 (**44255_BC_IncorrectProductCode.pdf**) to an email and send it through to the Lucy email address.
2. Lucy will notify you via email (and on screen if you're logged in) that she's found something interesting that requires attention. Check that you have received this email.
3. View the order by either clicking the **Read More** link on the email...

The screenshot shows an email from "Lucy" with the subject "Action Required". The email body contains the following text:

I've found something interesting with this order from **School of Fine Art Test** so would like your advice on what to do next.

The current status of the order is: **ActionRequired**

I've attached the order so you can check it out.

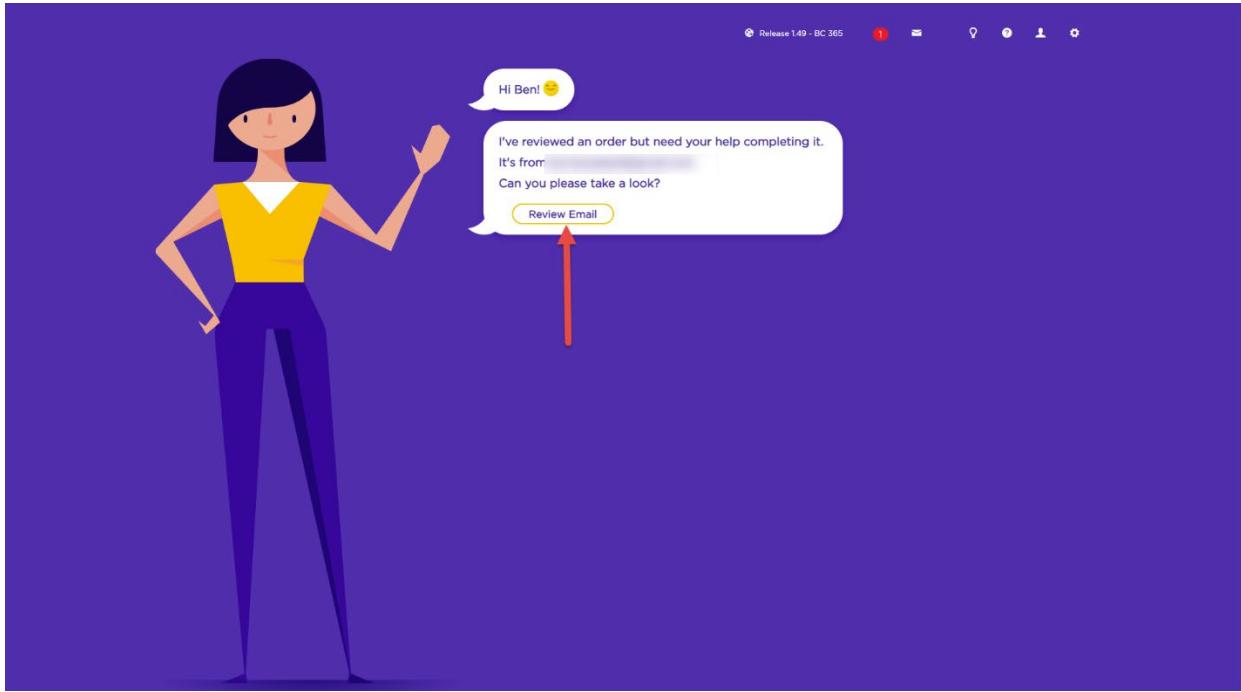
READ MORE

Let me know what you would like to do.

Cheers, Lucy

At the bottom of the email, there is a footer with links for "Help" and "Ideas", and the URL "https://ideas.letlucy.com".

...or you can access it via the Lucy home page. On logging in, you'll see Lucy has reviewed an order and needs your help completing it. Click **Review Email** to view the order.



4. On the Message review screen you'll see that Lucy has highlighted an incorrect product code. For this example, just focus on fixing the incorrect product (stock) code.

A screenshot of the Lucy application showing a message review. At the top, a message from Lucy says, "I've found data that needs correcting. See below." Below this, there are two main sections. The left section shows a table of order items with stock codes, quantities, item prices, and actions. One row for stock code 1906-S has a red border around it, indicating an error. A tooltip over this row says "Invalid Product Code(1906)". Below the table, a message says "Please select the correct product or update the product manually." with a dropdown menu showing options like "1906-S - (1906-S) ATHENS Mobile Pedestal", "1996-S - (1996-S) ATLANTA Whiteboard, base", and "1936-S - (1936-S) BERLIN Guest Chair, yellow". A red arrow points to this dropdown. The right section shows a purchase order summary for Purchase Order 44255, dated 21-FEB-19, with details for the supplier (Cronus Australia Pty Ltd) and delivery address (School of Fine Art, 10 High Tower, Miami FL 37125). A red arrow points to the "Reprocess" button at the top right of this section. The interface includes standard navigation buttons like View Email Details, Create New Mapping, and Reprocess.

What was on the Purchase order as stock code (1906) should have been (1906-S).

5. Enter the correct code into the stock code field - the lookup will start populating with all possible products and you can simply select the correct one.

Or, select the correct stock code from the list of suggestions that Lucy has provided.

6. Directly below the stock code field is a toggle to remember what you've done. If you toggle that on, Lucy will remember for next time that Product 1906 for Customer 'School of Fine Art' should be product 1906-S. Feel free to toggle that on and then click the **Reprocess** button.

7. Lucy will now finalize the order. The status should now be **Complete** and the order integrated to Dynamics Business Central.

The screenshot shows a Dynamics Business Central interface. At the top, there's an email from 'test' to 'School of Fine Art Test' with a status of 'Complete'. Below the email is a purchase order for item 44255. The order details include:

PURCHASE ORDER 44255
Order Date: 21 FEB 19
Supplier: School of Fine Art Australia Pty Ltd
5789 Real Street
Melbourne, VIC 3000
Phone: 03 1234 5678

Deliver To:
School of Fine Art
10 High Tower
Miami FL 37125

Warehouse **Account Code** **Currency** **Order Terms** **Required By**
so SOFA USDT 03-MAR-19

Item Code	Supplier Item Code	Item Description	Quantity	UOM	Unit Cost	Line Total
1972-W	1896-S	ATHENS Desk	2	PCS	1646.00	3292.00
709005	1900-S	PARIS Guest Chair, black	4	PCS	317.00	1268.00
12345	1906	ATHENS Mobile Pedestal	2	PCS	715.00	1430.00
1952-W	1906-S	LONDON Swivel Chair, blue	3	PCS	310.00	930.00
1929-W	1920-S	ANTWERP Conference Table	1	PCS	1065.22	1065.22
1966-S	1925-W	Conference Bundle 1-6	4	PCS	310.44	1241.76
1966-W	1928-S	AMSTERDAM Lamp	1	PCS	90.44	90.44
1920-S	1929-W	Conference Bundle 1-8	2	PCS	354.35	708.70
LS-150	1936-S	BERLIN Guest Chair, yellow	1	PCS	317.39	317.39

Example 3 - Customer sends an order with an incorrect price

1. Attach PDF 3 (**44257_BC_IncorrectPrice.pdf**) and send it to Lucy.
2. Click the **Read More** link on the email Lucy sends you, or select the order within the Lucy application.

In the message review screen, you'll see that Lucy has highlighted an incorrect price.

Lucy gives you a few options here:

- You can either update the price to use whatever is listed in the ERP
- You can override the ERP price and accept the customer's purchase order price
- Or you can enter a completely different value in the field.

The screenshot shows two windows side-by-side. The left window is a 'DocumentValidationException' message from Lucy, indicating a price variance for item 1900-S. It shows the customer PO price of 312.18 and the ERP price of 317.39. The right window is the Lucy application interface displaying a PURCHASE ORDER (ID: 44257) for the School of Fine Art. The order details include the supplier (Cronus Australia Pty Ltd) and delivery address (School of Fine Art, 10 High Tower, Miami FL 37125). The order terms table lists various items with their descriptions, quantities, unit costs, and line totals. A tooltip on the right side of the order table indicates a required by date of 03-MAR-19.

Warehouse	Account Code	Currency	Order Terms	Required By
SO	SOFIA			03-MAR-19

Item Code	Supplier Item Code	Item Description	Quantity	UOM	Unit Cost	Line Total
1972-W	1986-S	ATHENS Desk	2	PCS	1944.00	3888.00
70008	1900-S	PARIS Guest Chair, black	4	PCS	312.18	1248.72
12345	1906-S	ATHENS Mobile Pedestal	2	PCS	713.04	1426.08
1952-W	1905-S	LONDON Swivel Chair, blue	3	PCS	313.04	939.12
1929-W	1920-S	ANTWERP Conference Table	1	PCS	1065.22	1065.22
1963-S	1925-W	Conference Bundle 1-8	4	PCS	310.44	1241.76
1963-W	1928-S	AMSTERDAM Lamp	1	PCS	60.44	60.44
1920-S	1929-W	Conference Bundle 1-8	2	PCS	354.35	708.70
L5-150	1936-S	BERLIN Guest Chair, yellow	1	PCS	317.39	317.39
L5-515	1953-W	Guest Section 1	1	PCS	204.00	204.00
80000-W	1962-S	ROCK Swivel Chair, green	2	PCS	317.35	634.70
90203	1944-S	TOKYO Swivel Chair, blue	16	PCS	317.38	5113.02
90211	1965-W	Conference Bundle 2-8	8	PCS	384.35	3074.80
90208-T	1986-S	MEXICO Swivel Chair, black	12	PCS	313.04	3756.48
90218	1969-W	Conference Package 1	22	PCS	562.61	12377.40
90109	1972-S	MUNICH Swivel Chair, yellow	15	PCS	313.04	4695.60
8924-W	1960-S	MOSCOW Swivel Chair, red	1	PCS	313.04	313.04
70101	1986-S	SEOUL Guest Chair, red	6	PCS	317.39	1904.34
70102	1996-S	ATLANTA Whiteboard, base	6	PCS	2299.26	13798.60
70103	2000-S	SYDNEY Swivel Chair, green	6	PCS	313.04	1878.24

3. In this case we'll say the customer's purchase order is incorrect and toggle the **Update to ERP Price** option on.

4. Click the **Reprocess** button and Lucy will complete the order.

The screenshot shows a Purchase Order screen for Order Number 44257. On the left, a table lists items with their stock codes, quantities, and item prices. A message bubble says, "I've found data that needs correcting. See below." A red arrow points to a green toggle switch labeled "Update to ERP Price". On the right, the Purchase Order details are shown, including the supplier (Cronus Australia Pty Ltd) and delivery address (School of Fine Art, 10 High Tower, Miami FL 37125). A red arrow points to the "Reprocess" button at the top right of the order details section.

With this last order integrated successfully, Lucy testing is now complete.

The screenshot shows the integration of an email and a purchase order. The top part shows an email from "test" to "School of Fine Art Test" with a status of "Complete". The bottom part shows the Purchase Order screen for Order Number 44257, which has been successfully processed. The order details match the email, and the purchase order table shows all items listed with their respective quantities, UOMs, unit costs, and line totals.