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Transportation Management System Setup & Settings



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Introduction

The TMS configuration process involves the creation and editing of TMS directories and entities to ensure optimal alignment of the TMS module with the company's business processes.

The configuration process is contingent on the company type, whether it is a Shipper, that is, it manages the shipment of its own goods, or an LSP (Logistic Service Provider), whose business revolves around managing the transportation of third-party cargo.

Many settings are utilized in both scenarios but with varying levels of detail.



Introduction

TMS comprises two main components: the core TMS and the Logistic Units extension. The core TMS utilizes functions provided by Logistic Units, which offers functionality for handling pallets and containers and features its own configuration system.



All settings related to working with logistic units are located in the [Logistic Units](#) module settings.



After installing the TMS extension, several steps must be completed to make TMS available to users.

1. **Purchase and assign licenses.** Immediately after installation, TMS is not available to users and is not visible in the Business Central menu, therefore, it is necessary to purchase TMS licenses. This can be done from the TMS page on AppSource by selecting the pricing plan that best suits your company. Then, assign licenses to users who will work with TMS in the Microsoft 365 Admin Center.

p.s. It is not mandatory to buy as many licenses as Business Central licenses; you can limit it to only those who work with transportation and TMS.



Licenses are purchased directly on the TMS page on the AppSource portal. Click **Buy now** button.

The screenshot shows the Microsoft AppSource interface for the 'Transportation Management System (TMS)' app. At the top, the Microsoft AppSource logo is on the left, and a search bar is on the right. Below the logo, there are navigation links for 'All', 'Apps', 'Categories', 'Industries', 'Consulting Services', and 'Partners'. The main heading is 'Apps > Transportation Management System (TMS)'. The app card features a teal truck icon, the title 'Transportation Management System (TMS)', the developer 'EXTENSIONSFORCE', and compatibility with 'Dynamics 365 Business Central'. It has a 5.0 star rating from one review. Action buttons include 'Starts at Free', 'Buy now', 'Contact me', and 'Save to my list'. Below the app card, there are tabs for 'Overview', 'Plans + Pricing', 'Ratings + reviews', and 'Details + support'. The 'Overview' tab is selected, showing a sub-heading 'Streamline your logistic operations with comprehensive management tools' and a paragraph: 'Introducing the ultimate solution seamlessly integrated with Microsoft Dynamics 365 Business Central, designed to revolutionize your logistics and transportation operations. Our Transportation Management System (TMS) is not just a tool; it's your gateway to optimizing the delivery of your goods, from planning and execution to freight payment, all in one place.'



Choose the suitable pricing plan according to the number of users you need. Each plan includes a one-month trial period.

The screenshot shows the Microsoft AppSource checkout interface for the Transportation Management System (TMS). The page is titled "Checkout" and includes a navigation sidebar with steps: Plan (selected), Price + billing, Payment, and Complete purchase. The main content area is titled "Select a plan" and displays three license options, each with a "Free trial" badge:

- TMS - Start** (Free trial):
 - Description: 1-9 user plan.
 - Number of users: 1-10
 - Price/payment options:
 - 1-month subscription: First month free, then \$19.00/user/1-month
 - 1-year subscription: First month free, then \$200.00/user/1-year
- TMS - Medium** (Free trial):
 - Description: 10-24 user plan
 - Number of users: 10-25
 - Price/payment options:
 - 1-month subscription: First month free, then \$16.00/user/1-month
 - 1-year subscription: First month free, then \$170.00/user/1-year
- TMS - Beneficial** (Free trial):
 - Description: 25+ user plan
 - Price/payment options:
 - 1-month subscription: First month free, then \$16.00/user/1-month

A "Next" button is visible at the bottom of the page.



Set the subscription parameters. For demo mode, auto-renewal can be disabled (Recurring billing).

Microsoft | AppSource

Search AppSource Apps

United States | EN

All Apps Categories Industries Consulting Services Partners

Apps > Transportation Management System (TMS) > Checkout

Checkout

- Plan
- Price + billing**
- Payment
- Complete purchase

Price + billing

Billing term ⓘ *

- 1-month subscription
- 1-year subscription

Annual or monthly subscription

Price/payment options ⓘ *

First month free, then \$19.00/user/1-month

Recurring billing ⓘ *

- On
- Off

Extend automatically for the next period upon the expiration of the paid term.

Number of users (1-10) *

1

The maximum number of licenses is limited by the tariff plan selected in the previous step.

Up next, choose your payment method:

Credit card

Use a credit card to make an online payment.

Accepted payment methods:

Invoice pay *New!*

If your organization has been approved for payment by invoice, select Invoice pay on the next page to pay with a check or wire transfer.

Back Next



In the next step, it is necessary to check the subscription parameters and select the billing account from which payments will be made and to which Microsoft will issue invoices.

The screenshot shows the Microsoft AppSource checkout interface. The breadcrumb trail is 'Apps > Transportation Management System (TMS) > Checkout'. The page is divided into several sections:

- Checkout Progress:** A vertical list of steps: 'Plan' (checked), 'Price + billing' (checked), 'Payment' (selected), and 'Complete purchase' (unchecked).
- Payment Section:**
 - Product name:** Transportation Management System (TMS)
 - Price (USD):** First month free, then \$19.00/user/one-time payment
 - Quantity:** 1
 - Subtotal (USD):** \$19.00 for 1 month
 - Offer:** Transportation Management System (TMS)
 - Plan:** TMS - Start Free trial
 - Billing term:** 1-month subscription
 - Recurring billing:** On
- Sold-to address *:** Enter the address of the legal entity responsible for payment and identified on the invoice. The address provided here is used to determine your tax rate.
- Billing account:** A dropdown menu showing 'Contoso'. Below it is an 'Edit' link and the address: 'Contoso, 1 Microsoft Way, Redmond, WA 98052, US'.
- Bill to *:** Select the billing profile you want to use for this purchase. You can also edit an existing profile. [Learn more about billing profiles](#)
- Billing profile:** A dropdown menu showing 'No billing profile selected'. Below it is an '+ Add new' link.

At the bottom of the page, there are two buttons: 'Back' and 'Place order'.

Legal terms: By clicking "Place order" and completing the purchase with the provider, I (a) agree to the [Terms of Sale](#) and [Privacy Statement](#) associated with each Marketplace offering above, (b) authorize Microsoft to charge or bill my current payment method for the fees associated with my use of the offering(s), including applicable taxes, until I discontinue use of the offering(s), (c) agree that Microsoft may share my contact information, and transaction details (including usage volume associated with the offering) with the seller(s) of the offering(s). Microsoft does not provide rights for third-party products or services, and (d) agree to the additional [Marketplace terms](#).



Payment by card is possible. To do this, it is necessary to press the +Add new button to add a new payment method.

The screenshot shows the Microsoft AppSource checkout interface. The main page displays the checkout progress (Plan, Price + billing, Payment, Complete purchase) and a table of items. A modal window titled "Add a payment method" is open on the right, showing fields for card details and address.

Microsoft | AppSource Search AppSource Apps

Apps > Transportation Management System (TMS) > Checkout

Checkout

- Plan
- Price + billing
- Payment
- Complete purchase

Product name	Price (USD)	Quantity
Offer: Transportation Management System (TMS)	First month free, then \$19.00/user/one-time payment	1
Plan: TMS - Start Free trial		
Billing term: 1-month subscription		
Recurring billing: On		

Sold-to address *
Enter the address of the legal entity responsible for payment and identified on the invoice. The address provided here is used to determine your tax rate.

Billing account
Contoso [Edit](#)
Contoso
1 Microsoft Way
Redmond, WA 98052
US

Bill to *
Select the billing profile you want to use for this purchase. You can also edit an existing profile. [Learn more about billing profiles](#)

Billing profile
No billing profile selected [+ Add new](#)

Add a payment method
We'll save the payment method you add here so you can use it for future purchases. We accept the following cards:

Card number *

Security code * ⓘ

Expiration month * Expiration year *

Name on card *

Address line 1 *
1 Microsoft Way

Address line 2 (Optional)

City *
Redmond

State *
Washington

Zip *
98052

Country/Region *
United States

[Save](#) [Cancel](#)

[Back](#) [Place order](#)



Assigning licenses to users is done in the Microsoft 365 admin center.

The screenshot displays the Microsoft 365 Admin Center interface. On the left, the 'Apps' list includes OneDrive, Word, Excel, PowerPoint, OneNote, SharePoint, Power Automate, Admin (highlighted), Business Central, and Power Apps. The main dashboard shows a navigation bar with 'Finance', 'Cash Management', 'Sales', 'Purchasing', and 'TMS'. Below this, there are several key performance indicators (KPIs) and reports:

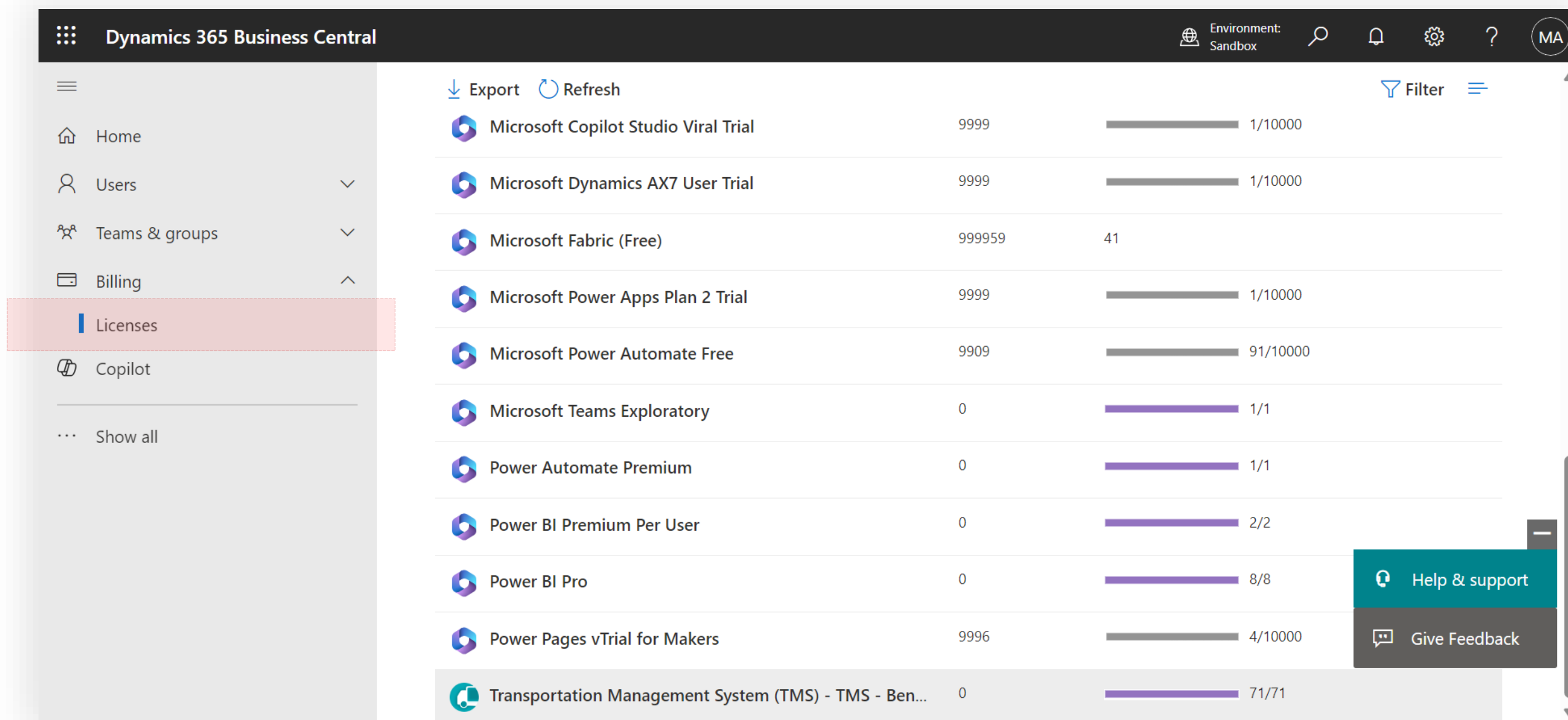
- Overdue Sales Invoice Amount:** £66,657
- Overdue Purch. Invoice Amount:** £748,186
- Sales Invoices Predicted Overdue:** 0
- Sales Orders:** 68
- Completely Re... from Stock:** 0
- Sales Invoices:** 24
- Purchase Orders:** 17
- Ongoing Purc... Invoices:** 24
- Purch. Invoices... Next Week:** 0
- Payments:** 1
- Average Collec... Days:** 0.0
- Outstanding V... Invoices:** 28

The 'Admin' app icon in the left-hand navigation pane is highlighted with a red box, and an orange arrow points from the underlined text in the previous block to this icon.

Assigning Licenses



Select the **Billing > Licenses** menu item and scroll down to the TMS product licenses



The screenshot shows the Dynamics 365 Business Central interface. The left-hand navigation pane has the 'Licenses' menu item highlighted in a light red box. The main content area displays a table of licenses with columns for product name, quantity, and usage. The 'Transportation Management System (TMS) - TMS - Ben...' license is highlighted in grey at the bottom of the list. A 'Help & support' and 'Give Feedback' overlay is visible in the bottom right corner.

Product Name	Quantity	Usage
Microsoft Copilot Studio Viral Trial	9999	1/10000
Microsoft Dynamics AX7 User Trial	9999	1/10000
Microsoft Fabric (Free)	999959	41
Microsoft Power Apps Plan 2 Trial	9999	1/10000
Microsoft Power Automate Free	9909	91/10000
Microsoft Teams Exploratory	0	1/1
Power Automate Premium	0	1/1
Power BI Premium Per User	0	2/2
Power BI Pro	0	8/8
Power Pages vTrial for Makers	9996	4/10000
Transportation Management System (TMS) - TMS - Ben...	0	71/71



On this page, licenses are distributed among users. Click **Assign licenses** button and find users.

The screenshot displays the Dynamics 365 Business Central interface. The left-hand navigation pane includes options for Home, Users, Teams & groups, Billing, Licenses (highlighted in red), and Copilot. The main content area shows the 'License details' for 'Transportation Management System', published by EXTENSIONSFORCE. It indicates that 1/1 license is assigned and provides a link to 'Install this product'. Below this, there is a section for 'Users' with a table containing one entry: Alan Steiner (alans@CRMbc830621). At the bottom of the main area are buttons for '+ Assign licenses', '↓ Export users', and '↻ Refresh'. A modal dialog titled 'Assign licenses' is open on the right, featuring a note about additional Microsoft licenses, a search bar with 'Admin' entered, and an 'Assign' button.



To revoke TMS licenses from users, you need to select the users and press the 'Unassign licenses' button.

The screenshot shows the Dynamics 365 Business Central interface. The left-hand navigation pane has the 'Licenses' option highlighted in red. The main content area is titled 'Licenses' and shows 'Licenses assigned' with a purple bar and a link to 'Install this product'. Below this is the 'Users' section, which includes the instruction 'Manage and view licenses for your users.' and three action buttons: 'Unassign licenses' (highlighted in grey), 'Export users', and 'Refresh'. A table below the buttons lists three users, all of whom are selected with blue checkmarks.

<input type="checkbox"/>	Name	Email	Type
<input checked="" type="checkbox"/>	Alan Steiner	alans@CRMbc830621.OnMicrosoft.com	
<input checked="" type="checkbox"/>	Alicia Thomber	aliciat@CRMbc830621.OnMicrosoft.com	
<input checked="" type="checkbox"/>	Allie Bellew	allieb@CRMbc830621.OnMicrosoft.com	



2. **Assign user permissions.** Users can be divided into two groups: those who work with TMS, perform operations, and handle documents, and administrators who can configure TMS and change settings.

The permission sets that need to be added to the User:

- TMA USER
- TMAC USER

To the Administrator:

- TMA ADMIN
- TMAC ADMIN

For external access via API or Power BI

- TMA API

The next slide provides an example of user settings.

The screenshot shows a 'Permission Set Lookup' dialog box with a search icon and a close button. It contains a table with the following columns: Permission Set, Name, Extension Name, and Scope. The table lists various permission sets, with several rows highlighted in red.

Permission Set ↑	Name	Extension Name	Scope ↑
STATISTICAL ACC...	STATISTICAL ACCOUNTS	Statistical Accounts	System
SUPER	This role has all permissi...		System
SUPER (DATA)	Superuser of data	System Application	System
SYSTEM APP - AD...	SYSTEM APP - ADMIN	System Application	System
SYSTEM APP - BA...	SYSTEM APP - BASIC	System Application	System
TEST TOOL	Test Tool	Base Application	System
TMA ADMINISTR...	TMS - Administrator	Transportation Management System (TMS)	System
TMA API	TMS - API	Transportation Management System (TMS)	System
TMA USER	TMS - User	Transportation Management System (TMS)	System
TMAC ADMIN	Logistic Units - Administr...	Logistic Units	System
TMAC USER	Logistic Units - User	Logistic Units	System
TROUBLESHOOT ...	Troubleshoot Tools	System Application	System
VAT GROUP MEM...	VAT Group Member	VAT Group Management	System
VAT GROUP REPR...	VAT Group Representative	VAT Group Management	System

At the bottom right of the dialog box, there are two buttons: 'OK' and 'Cancel'.



User/Operator

User Card

Alan Steiner

Effective Permissions | Send Email | Sent Emails | Actions | Automate | Fewer options

General

User Name: ALANS | Contact Email: alans@CRMbc830621.OnMicrosc
 Full Name: Alan Steiner | Microsoft 365
 Status: Active | Authentication Email: alans@CRMbc830621.OnMicro...
 Authentication Status: Active

User Group Memberships >

User Permission Sets | New Line | Delete Line | Permissions

Permission Set ↑	Description	Company ↑	Extension Name	Permission Scope
D365 BUS PREMIUM	Dyn. 365 Prem. ...	CRONUS UK Ltd.	Base Application	System
SECURITY	Assign permissi...	CRONUS UK Ltd.		System
→ TMA USER	TMS - User		Transportation Management S...	System
TMAC USER	Logistic Units - ...		Logistic Units	System
TROUBLESHOOT TOOLS	Troubleshoot To...	CRONUS UK Ltd.	System Application	System

Administrator

User Card

Amy Alberts

Effective Permissions | Send Email | Sent Emails | Actions | Automate | Fewer options

General

User Name: AMYA | Contact Email: amya@CRMbc830621.OnMicrosc
 Full Name: Amy Alberts | Microsoft 365
 Status: Active | Authentication Email: amya@CRMbc830621.OnMicro...
 Authentication Status: Active

User Group Memberships >

User Permission Sets | New Line | Delete Line | Permissions

Permission Set ↑	Description	Company ↑	Extension Name	Permission Scope
D365 READ	Dyn. 365 Read a...	CRONUS UK Ltd.	Base Application	System
TROUBLESHOOT TOOLS	Troubleshoot To...	CRONUS UK Ltd.	System Application	System
TMA ADMINISTRATOR	TMS - Administr...		Transportation Management S...	System
→ TMAC ADMIN	Logistic Units - ...		Logistic Units	System

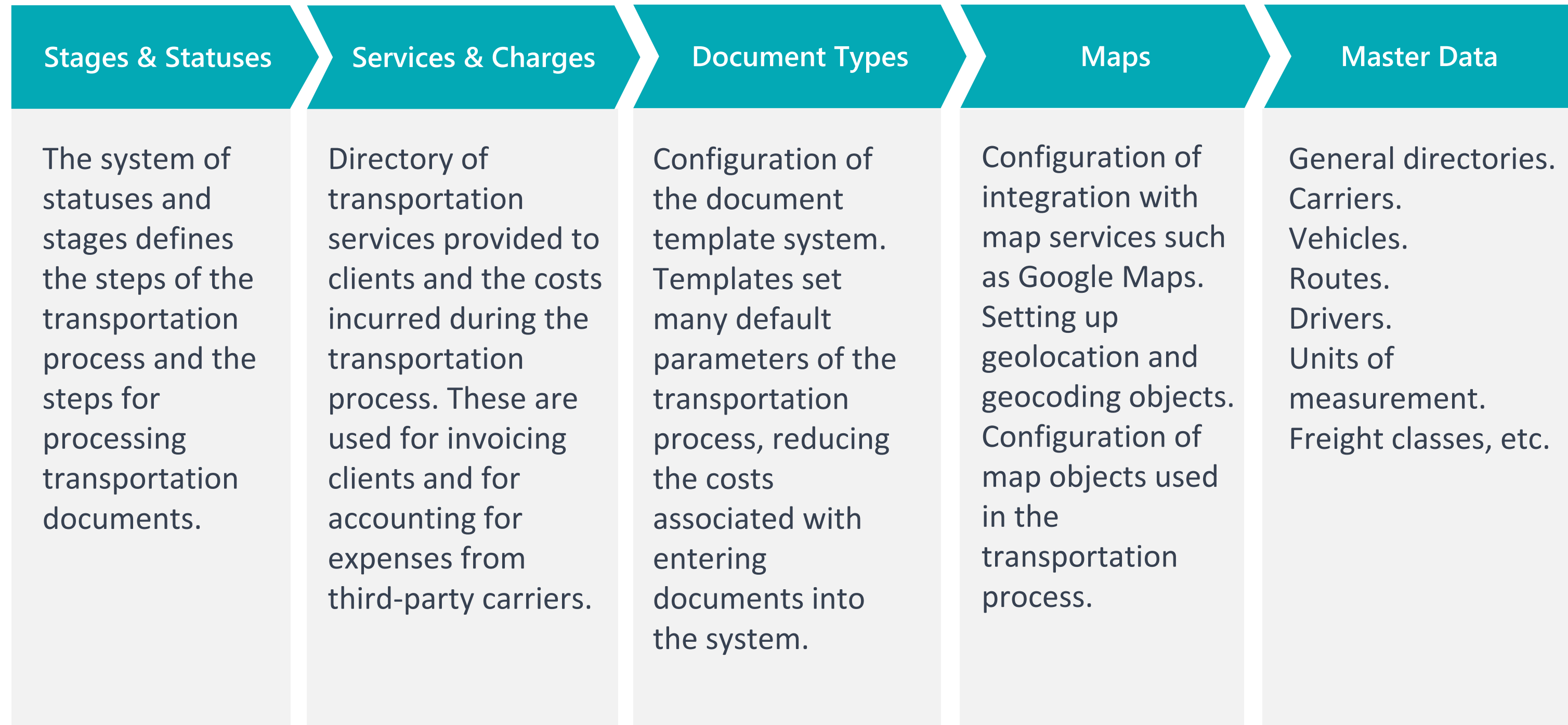


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Transportation Management System Setup & Settings

Overview

Setup & Settings Workflow



Settings

	Description	LSP scenario comment	Shipper Scenario comment
Stages profiles	Defines the structure of the transportation process, including the number of stages, such as whether it will be a single-stage delivery or a three-stage multimodal transportation.		
Status profiles	Statuses are used to organize the workflow of document processing in accordance with the business process. Different types of documents may have different status structures.		
Services	The Services directory is a reference within the TMS system designed for accounting for transportation services provided by the company. These services are used to invoice clients for transportation services.	Required for invoicing	
Charges	The Charges directory is a reference within the TMS system intended for the recording and allocation of costs to orders and the calculation of profitability for transportation orders.	Required for profit calculation	
Service Set	This setting allows for the definition of sets of services and costs that can be added automatically when creating orders, or for the use of restrictions on the sets of services and costs that can be utilized in an order.		
Content Set	Predefined set of content automatically added to an order upon its creation.		

Settings

	Description	LSP scenario comment	Shipper Scenario comment
Forwarding Order Types	Templates for forwarding orders that establish the structure of the order and the business process for handling said order, as well as setting default values.	Required	
Freight Order Types	Templates for freight orders define order parameters, including the status structure and the model for order numbering.		
Logistic Unit Type	Templates for logistics units, such as pallets, containers, and boxes, define dimensional parameters: length, width, height, as well as fill control parameters: by weight or volume.		
Map Locations	Map Locations is a directory of map-based locations utilized for precise pinpointing using geolocation services. Map Locations are employed for route mapping, distance calculations, and estimating transportation durations. Map Locations can be linked to the addresses of clients and suppliers.		useful if we have our own fleet
Map Location Types	A directory of location types on the map, such as Client, Vendor, Port, Gateway, Hub, etc.		useful if we have our own fleet
Google Maps services integration	Configuration of Google Maps and TMS integration		useful if we have our own fleet

Settings

	Description	LSP scenario comment	Shipper Scenario comment
Carriers	A directory of third-party carriers that provide transportation services to our company		useful if we have our own fleet
Vehicles	A directory of transportation vehicles, either owned by our company or by third-party carriers.		useful if we have our own fleet
Drivers	Configuration of the directory for drivers, whether from our company or external.		useful if we have our own fleet
Routes	Routes are used for the logical grouping of customer addresses by geographical attribute to facilitate the assignment of a set of customer orders to a specific truck or carrier.		
Units of measure	The TMS module's measurement units directory defines the primary linear, volumetric, and weight measurement units, along with their interrelationships and conversion coefficients.		
Freight Classes	The Freight Class Directory is a standardized classification system for less-than-container load (LCL) freight shipments, categorizing them based on specific attributes. The classification of cargo freight is established using various criteria, such as value, weight, length, density, and additional factors.		



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Transportation Management System Setup & Settings

Forwarding Order Type



Forwarding Order Type

Customizable template defining transportation order flow.

The Forwarding Order Type specifies parameters for the document such as:

- Structure - A template that shapes the entire transportation order lifecycle.
- Default Parties - Pre-establishes consignee and shipper details for consistency.
- Service Catalog - A catalog of available services for tailored shipping solutions.
- Number Series - Default numbering for organized tracking of orders.
- Status System - A comprehensive list of statuses for clear order progression.
- Content Presets - Includes default content settings for quicker order creation.

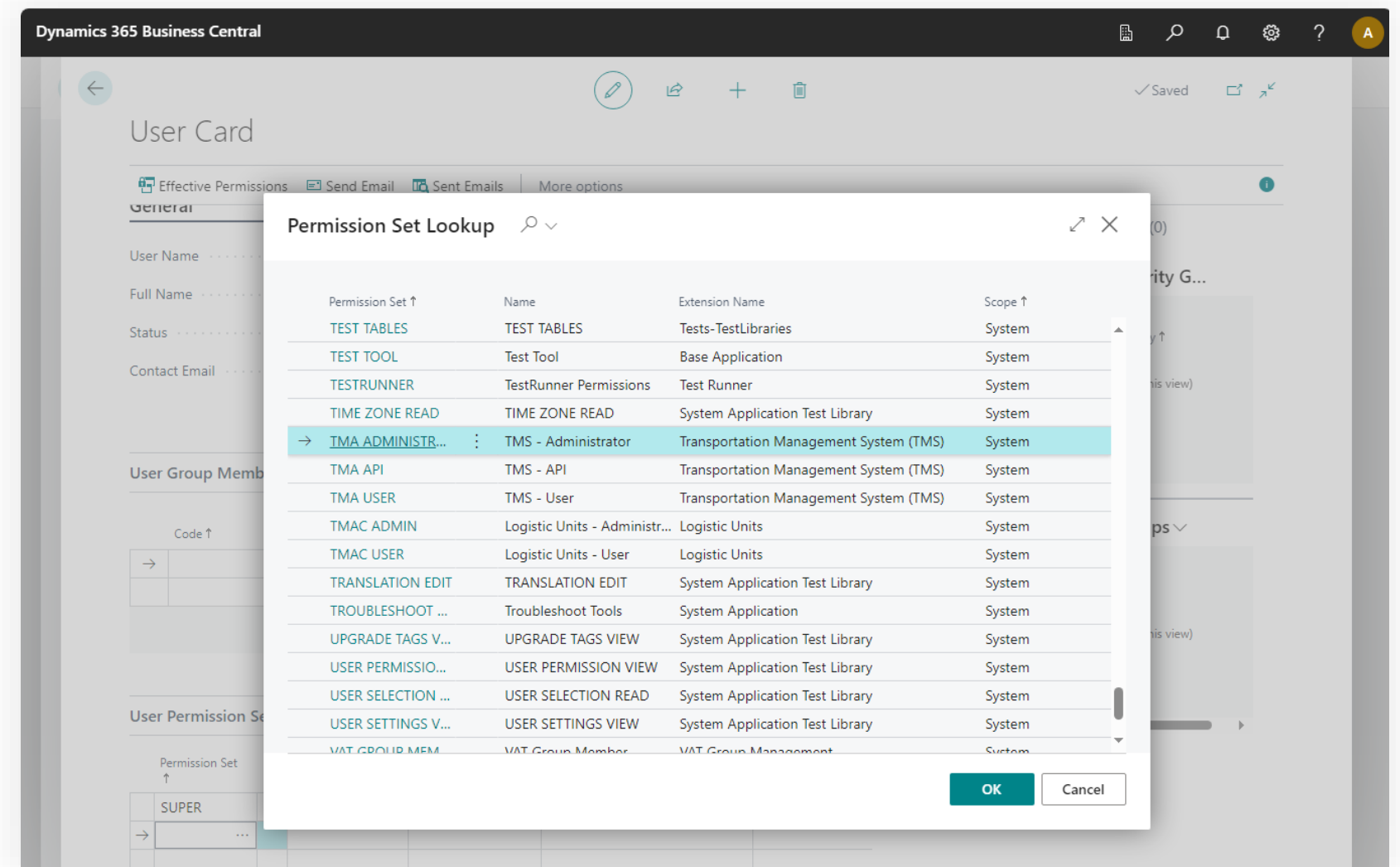


Prerequisites

To change “Forwarding Order Types” user must have TMS Admin Permissions.

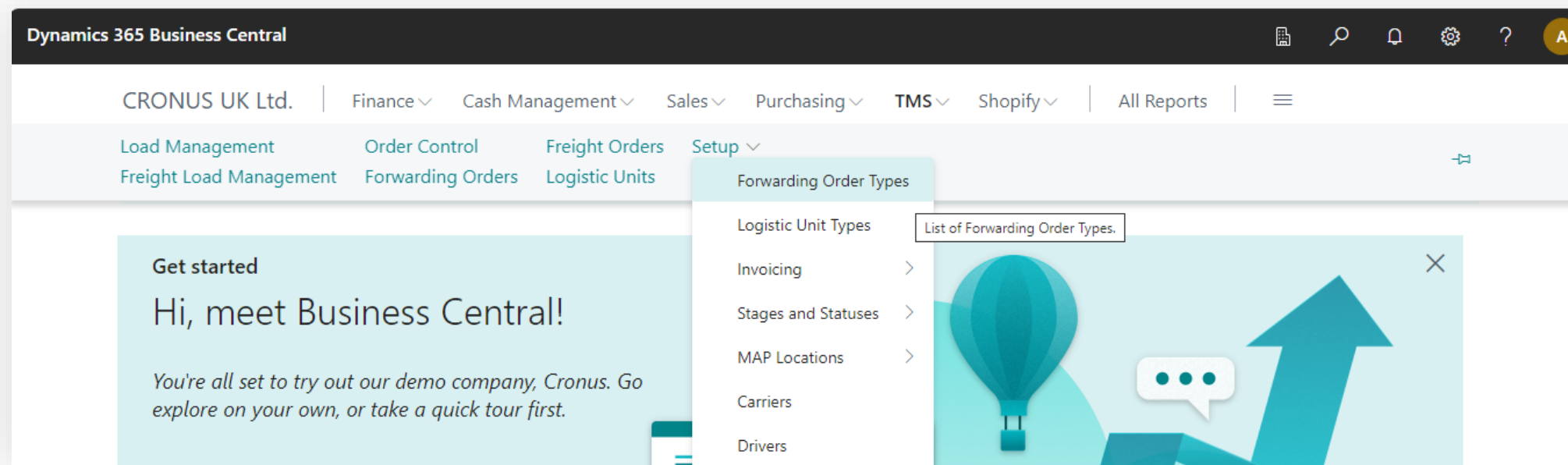
- ! Before configuring forwarding order types, you must create the required entities: a set of services, a number series, a shipper and consignee, status profiles, and stages profiles.

If necessary, refer to the supplementary documentation.

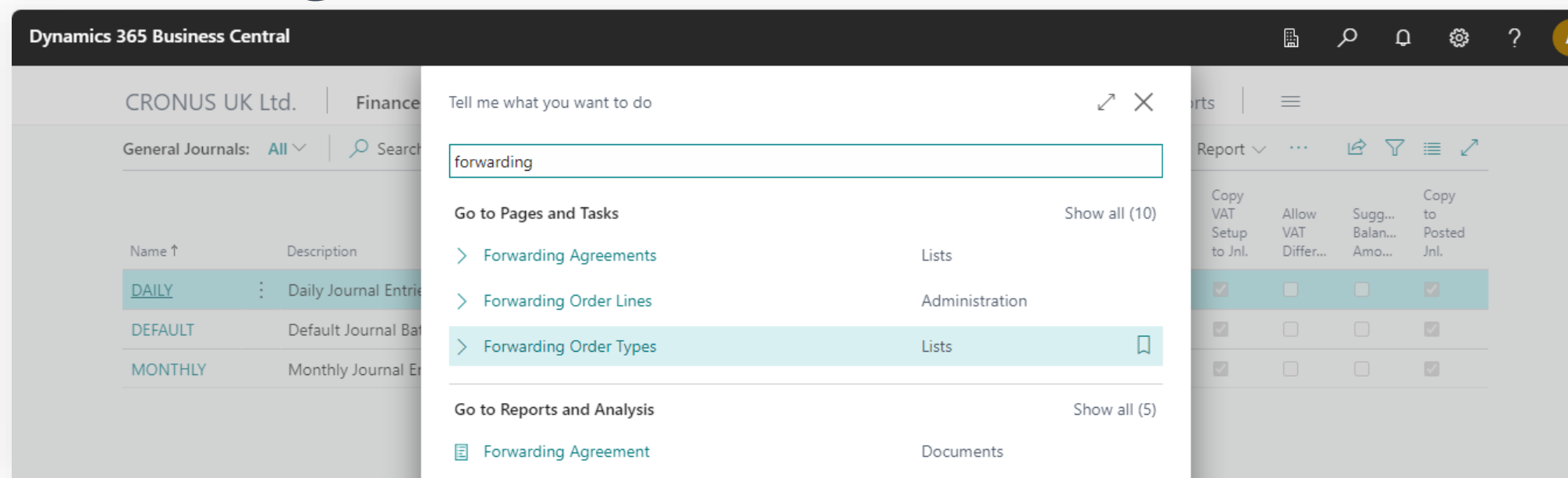




Where to find using main menu of the TMS



Where to find using search



Setup & Settings – Forwarding Order Type



To establish a new forwarding order template or modify an existing predefined set, please proceed as follows.

The screenshot shows the Dynamics 365 Business Central interface for 'CRONUS UK Ltd.' with the 'Purchasing' module selected. The 'Forwarding Order Types' table is displayed, listing various order types and their configurations.

Code ↑	Description	Default Status Profile	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set	Def. Order Party Type	Def. Order Party No.	Def. S Type
<u>DELIVERY</u>	Delivery	DEFAULT		DELIVERY				Company		Com
FWO	Forwarding Order	DEFAULT		INTERMODAL				Company		Com
IN.DELIVERY	Incoming Delivery	DEFAULT		DELIVERY				Company		Com
INTERMOD...	Intermodal Transportation	DEFAULT		INTERMODAL				Company		Com
MULTIMOD...	Multimodal transportation	DEFAULT		MULTIMODAL				Company		Com
OUT.DELIV...	Outgoing Delivery	DEFAULT		DELIVERY				Company		Com
PURCHASE	Company items purchase deliv...	DEFAULT		TRANSFER				Company		Com
TRANSFER	Company items transfer	DEFAULT		TRANSFER				Company		Com

Setup & Settings – Forwarding Order Type



Switch the page to Edit mode, click the "Edit List" button. The Forwarding Order Type does not have a card page.

The screenshot shows the Dynamics 365 Business Central interface for the 'Forwarding Order Types' table. The table is in 'Edit List' mode, as indicated by the 'Edit List' button being highlighted in the command bar. The table has 10 columns: Code, Description, Default Status Profile, Default Status Code, Default Stage Profile, Default Service Set, Allowed Service/Char... Set, Default Content Set, Def. Order Party Type, and Def. Order Party No. The 'DELIVERY' row is selected, and its description 'Delivery' is highlighted. The 'Analyse' toggle is turned on.

Code ↑	Description	Default Status Profile	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set	Def. Order Party Type	Def. Order Party No.
→ DELIVERY	Delivery	DEFAULT		DELIVERY				Company	
FWO	Forwarding Order	DEFAULT		INTERMODAL				Company	
IN.DELIVERY	Incoming Delivery	DEFAULT		DELIVERY				Company	
INTERMOD...	Intermodal Transportation	DEFAULT		INTERMODAL				Company	
MULTIMO...	Multimodal transportation	DEFAULT		MULTIMODAL				Company	
OUT.DELIV...	Outgoing Delivery	DEFAULT		DELIVERY				Company	
PURCHASE	Company items purchase deliv...	DEFAULT		TRANSFER				Company	
TRANSFER	Company items transfer	DEFAULT		TRANSFER				Company	



Default Status Profile - the status profile that will be set for an order upon its creation for the selected order type. A status profile is a set of statuses that a document can have within the business process of its handling.

Code ↑	Description	Default Status Profile	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set
→ DELIVERY	Delivery	DEFAULT		DELIVERY			
FWO	Forwarding Order						
IMPORT	Company items purchase- import						
IN.DELIVERY	Incoming Delivery						
INTERMODAL	Intermodal Transportation						
MULTILOAD							
MULTILOAD2							
MULTIMODAL	Multimodal transportation						
OUT.DELIVERY	Outgoing Delivery	DEFAULT		DELIVERY			
TRANSFER	Company items transfer	DEFAULT		TRANSFER			

Default status code - the status value that a document will have upon creation, thereby allowing for the automatic advancement of the document to a specific stage of its processing.



You can find detailed information on configuring the status profile in [Setup.Settings.StatusProfile.pdf](#).



Default Stage Profile - the stage profile defines the structure of the transportation, whether it be a simple single-stage delivery or a complex multi-stage intermodal transportation involving multiple carriers.

Forwarding Order Types

Search Analyze + New Edit List Delete

Code ↑	Description	Default Status Profile	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set	Def. Order Party Type	Def. Or... Party N...
DELIVERY	Delivery	DEFAULT		DELIVERY				Company	
→ FWO	Forwarding Order	DEFAULT		INTERMOI ▾				Company	
IMPORT	Company items purchase- import	DEFAULT							
IN.DELIVERY	Incoming Delivery	DEFAULT							
INTERMODAL	Intermodal Transportation	DEFAULT							
MULTILOAD		DEFAULT							
MULTILOAD2		DEFAULT	2.CONFIRMED						
MULTIMODAL	Multimodal transportation	DEFAULT							
OUT.DELIVERY	Outgoing Delivery	DEFAULT							
TRANSFER	Company items transfer	DEFAULT							

Code ↑ Description

→ INTERMODAL Intermodal transportation

MULTILOAD Multiload delivery

MULTILOIAD333

MULTIMODAL Multimodal transportation

PURCH-NO-DELIVERY Purchases

TRANSFER

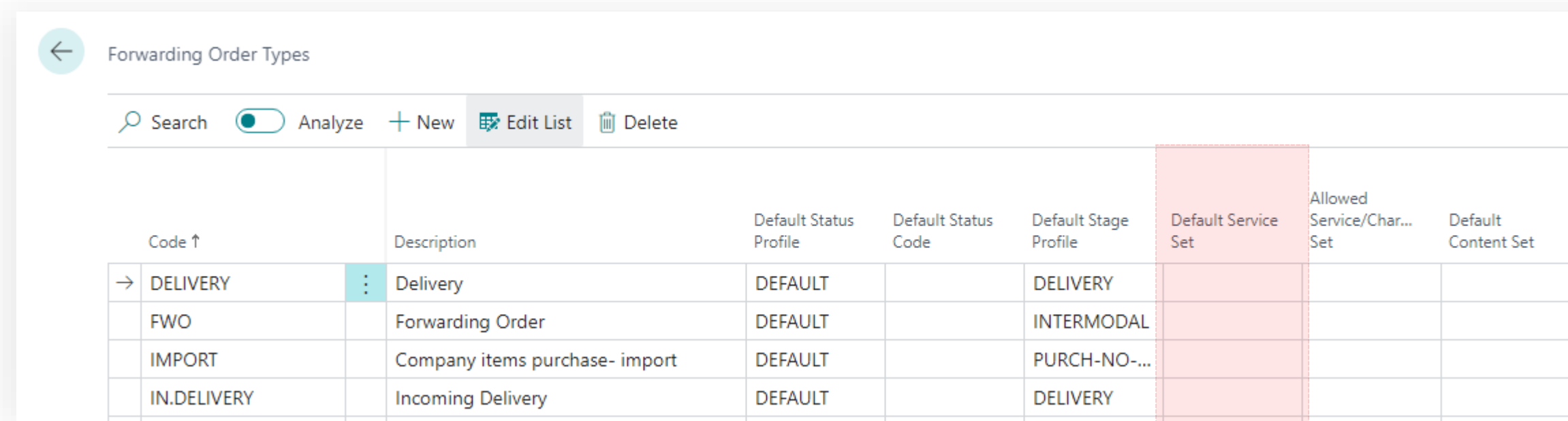
Show details Select from full list



You can find detailed information on configuring the status profile in [Setup.Settings.StageProfile.pdf](#).



Default Service Set - is a set of lines for default settlement. This setting allows for the creation of a set of services and charges that will be automatically added to the order upon its creation. The Service Set can include services to be invoiced as well as charges whose structure may be known in advance.



The screenshot shows a mobile application interface for managing Forwarding Order Types. At the top, there is a back arrow and the title "Forwarding Order Types". Below the title is a toolbar with a search icon, a toggle for "Analyze", and buttons for "+ New", "Edit List", and "Delete". The main content is a table with the following columns: Code ↑, Description, Default Status Profile, Default Status Code, Default Stage Profile, Default Service Set, Allowed Service/Char..., and Default Content Set. The table contains four rows of data.

Code ↑	Description	Default Status Profile	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char...	Default Content Set
→ DELIVERY	Delivery	DEFAULT		DELIVERY			
FWO	Forwarding Order	DEFAULT		INTERMODAL			
IMPORT	Company items purchase- import	DEFAULT		PURCH-NO-...			
IN.DELIVERY	Incoming Delivery	DEFAULT		DELIVERY			



Allowed Service/Charges Set - a set of permitted services or charges that can be added to the settlement. If this field is filled, a restriction system is activated, allowing only values from this set to be added to the settlement.

The screenshot shows two tables: 'Services' and 'Charges'. The 'Services' table lists items like DAC (Documents and customs processing), DL (Delivery), EC (Extra cost), ED (Express delivery), FR (Freight), and FRE (Freight Express). The 'Charges' table lists items like DELAY, EXTRA, FREIGHT, FUEL, HANDLING, INSURANCE, MILEAGE, and PF (Pickup Fee). A red highlight is placed on the 'Freight' row in the Services table and the 'Freight' row in the Charges table.

No. ↑	Description	Unit of Measure Code	Invoice Line Type	Invoice No.
DAC	Documents and customs processing		Item	TMS1000
DL	Delivery			
EC	Extra cost			
ED	Express delivery			
FR	Freight		Item	TMS1001
FRE	Freight Express		Item	TMS1003

No. ↑	Description	Unit of Measure Code	Default Vendor No.	Purchase Line Type	Purchase Line No.
DELAY	Delay				
EXTRA	Extra			Item	TMS1003
FREIGHT	Freight			Item	TMS1001
FUEL	Fuel surcharge				
HANDLING	Handling			Item	TMS1002
INSURANCE	Insurance				
MILEAGE	Mileage				
PF	Pickup Fee				

Allowed Service/Charges Set

The screenshot shows the 'Forwarding Order Types' table. It lists various codes and descriptions, such as DELIVERY, FWO, IMPORT, IN.DELIVERY, INTERMODAL, MULTILOAD, MULTILOAD2, MULTIMODAL, OUT.DELIVERY, and TRANSFER. A red highlight is placed on the 'Delivery' row, and an arrow points from the 'Allowed Service/Charges Set' text to this row.

Code ↑	Description	Allowed Service/Char... Set	Default Content Set
DELIVERY	Delivery		
FWO	Forwarding Order		
IMPORT	Company items purchase- import		
IN.DELIVERY	Incoming Delivery		
INTERMODAL	Intermodal Transportation		
MULTILOAD			
MULTILOAD2			DEFAULT
MULTIMODAL	Multimodal transportation		
OUT.DELIVERY	Outgoing Delivery		
TRANSFER	Company items transfer		



Default Content Set - a default set of contents for transportation. It's possible to create a set of standard contents and add them automatically when an order of this type is created. This is convenient for LSPs with abstract cargo descriptions like SHIPMENT (cargo space).

The screenshot displays the 'Content Set (TMS)' configuration page on the left and a table of 'Forwarding Order Types' on the right.

Content Set (TMS) Configuration:

- General:** Code: DEFAULT, Description: Default set
- Lines:** New Line, Delete Line
- Table:**

Type	No.	Description	Quantity	Unit of Measure Code	Gross Weight per Unit of Measure
→ Product	AUTO	Auto parts	0.00	PCS	10

Forwarding Order Types Table:

	Default Status Profile	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set
	DEFAULT		DELIVERY			
ng Order	DEFAULT		INTERMODAL			
/ items purchase- import	DEFAULT		PURCH-NO-...			
Delivery	DEFAULT		DELIVERY			
al Transportation	DEFAULT		INTERMODAL			
	DEFAULT		MULTILOAD			
	DEFAULT	2.CONFIRMED	MULTILOAD	MULTILOAD		DEFAULT
al transportation	DEFAULT		MULTIMODAL			
Delivery	DEFAULT		DELIVERY			
/ items transfer	DEFAULT		TRANSFER			



Default values - specific default values for the ordering party, shipper, and consignee can be set for regular transportation orders. Fill in the type value and then select the value in the "... No." field.

Forwarding Order Types							Shipper				
Search Analyze + New Edit List Delete											
Code ↑	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set	Def. Order Party Type	Def. Order Party No.	Def. Shipper Type	Def. Shipper No.	Def. Consignee Type	Def. Consignee No.
DELIVERY		DELIVERY				Company		Company		Company	
FWO		INTERMODAL				Company		Company		Company	
IMPORT		PURCH-NO-...				Company		Company		Company	
IN.DELIVERY		DELIVERY				Company		Company		Company	
INTERMODAL		INTERMODAL				Company		Company		Company	
MULTILOAD		MULTILOAD				Company		Company		Company	
→ MULTILOAD2	2.CONFIRMED	MULTILOAD	MULTILOAD		DEFAULT	Customer	C00010	Customer	C00020	Customer	C00030
MULTIMODAL		MULTIMODAL				Company		Company		Company	
OUT.DELIVERY		DELIVERY				Company		Company		Company	
TRANSFER		TRANSFER				Customer	20000	Company		Company	

Ordering party
Consignee



Other parameters

Default Incoterm code

Number series for numbering Forwarding Orders

Code ↑	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set	Incoterm	No. Series	Volume Weight Multiplier	Ship... and Con... Fields
DELIVERY		DELIVERY						0.00	<input type="checkbox"/>
FWO		INTERMODAL					TMS.FWO-01	0.00	<input type="checkbox"/>
IMPORT		PURCH-NO-...					TMS.FWO-08	0.00	<input type="checkbox"/>
IN.DELIVERY		DELIVERY					TMS.FWO-04	0.00	<input type="checkbox"/>
INTERMODAL		INTERMODAL					TMS.FWO-06	0.00	<input type="checkbox"/>
MULTILOAD		MULTILOAD					TMS.FWO-09	0.00	<input checked="" type="checkbox"/>
→ MULTILOAD2	2.CONFIRMED	MULTILOAD	MULTILOAD		DEFAULT		TMS.FWO-09	0.00	<input type="checkbox"/>
MULTIMODAL		MULTIMODAL					TMS.FWO-07	0.00	<input type="checkbox"/>
OUT.DELIVERY		DELIVERY					TMS.FWO-03	0.00	<input type="checkbox"/>
TRANSFER		TRANSFER					TMS.FWO-05	0.00	<input type="checkbox"/>

A flag in the field determines whether the shipper and consignee fields can be edited in the forwarding order or if they are only set in the corresponding counterparty's card.

Forwarding Order (TMS)

DLV.00040 · DELIVERY

Home Logistic Units Print/Send Invoicing

Forwarding Order (TMS)

FWO.00006 · FWO

Home Logistic Units Print/Send Invoicing

Forwarding Order (TMS)

I00001 · INTERMODAL · C

Home Logistic Units Print/Send Invoicing

General



Other parameters

Default Incoterm code

Number series for numbering Forwarding Orders

Code ↑	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set	Incoterm	No. Series	Volume Weight Multiplier	Ship... and Con... Fields
DELIVERY		DELIVERY						0.00	<input type="checkbox"/>
FWO		INTERMODAL					TMS.FWO-01	0.00	<input type="checkbox"/>
IMPORT		PURCH-NO-...					TMS.FWO-08	0.00	<input type="checkbox"/>
IN.DELIVERY		DELIVERY					TMS.FWO-04	0.00	<input type="checkbox"/>
INTERMODAL		INTERMODAL					TMS.FWO-06	0.00	<input type="checkbox"/>
MULTILOAD		MULTILOAD					TMS.FWO-09	0.00	<input checked="" type="checkbox"/>
→ MULTILOAD2	2.CONFIRMED	MULTILOAD	MULTILOAD		DEFAULT		TMS.FWO-09	0.00	<input type="checkbox"/>
MULTIMODAL		MULTIMODAL					TMS.FWO-07	0.00	<input type="checkbox"/>
OUT.DELIVERY		DELIVERY					TMS.FWO-03	0.00	<input type="checkbox"/>
TRANSFER		TRANSFER					TMS.FWO-05	0.00	<input type="checkbox"/>

A flag in the field determines whether the shipper and consignee fields can be edited in the forwarding order or if they are only set in the corresponding counterparty's card.

Forwarding Order (TMS)

DLV.00040 · DELIVERY

Home Logistic Units Print/Send Invoicing

Forwarding Order (TMS)

FWO.00006 · FWO

Home Logistic Units Print/Send Invoicing

Forwarding Order (TMS)

I00001 · INTERMODAL · C

Home Logistic Units Print/Send Invoicing

General



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Transportation Management System Setup & Settings

Status Profiles



Status Profile

- A status profile constitutes a defined sequence of statuses that a forwarding and freight order can assume during its lifecycle within a business process.
- The profile specifies the permissible operations and restrictions applicable to the document when it is in a given status. This framework ensures structured progression and governance of document states throughout the processing workflow.

	Code		Description
→	1.NEW	:	New
	2.CONFIR...		A forwarding order confirmati...
	3.PLAN		Planning process. Dates. Stage...
	4.EXECUTI...		Execution process. Units and fr...
	5.EXECUTED		Order was executed. Invoicing
	6.INVOICING		Order is in the invoicing proce...
	7.COMPLE...	:	Order was completed. Posting.
	8.CANCELED		Order was canceled.



How TMS uses the status system

The status system is utilized for document types such as Forwarding Orders and Freight Orders. Different types of documents may have diverse status structures, allowing for more flexible configuration of the document processing business process.

Forwarding Order Types

✓ Saved

Search Analyse + New Edit List Delete

Code ↑	Description	Default Status Profile	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set	Def. Order Party Type	Def. Order Party No.	Def. Shippe Type
→ DELIVERY	Delivery	DEFAULT	1.NEW	DELIVERY				Company		Company
FWO	Forwarding Order							Company		Company
IN.DELIVERY	Incoming Delivery							Company		Company
INTERMOD...	Intermodal Transportation							Company		Company
MULTIMO...	Multimodal transportation							Company		Company
OUT.DELIV...	Outgoing Delivery							Company		Company
PURCHASE	Company items purchase deliv...							Company		Company
TRANSFER	Company items transfer							Company		Company

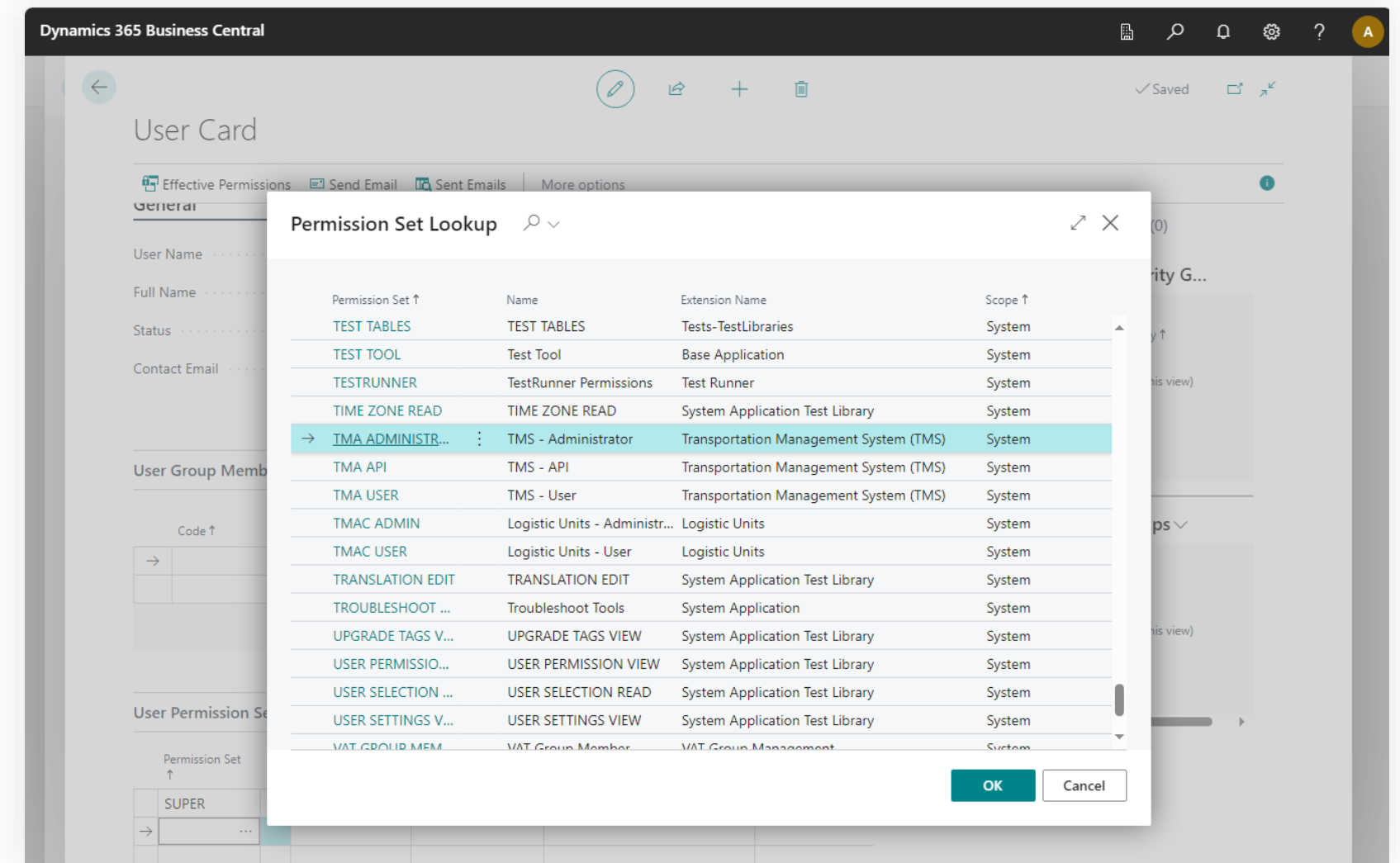
Code ↑	Description
→ <u>DEFAULT</u>	Default Profile
EXECUTION	Freight order stage execution
FO	Freight orders
WORK	Work Profile

[Show details](#) [Select from full list](#)



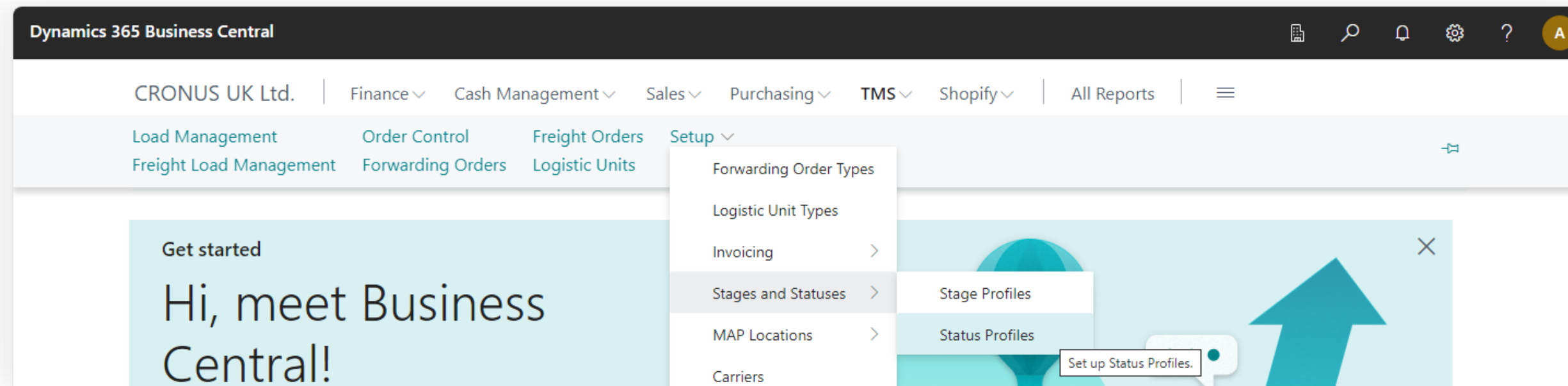
Prerequisites

To change or create status profiles user must have TMS Admin Permissions.

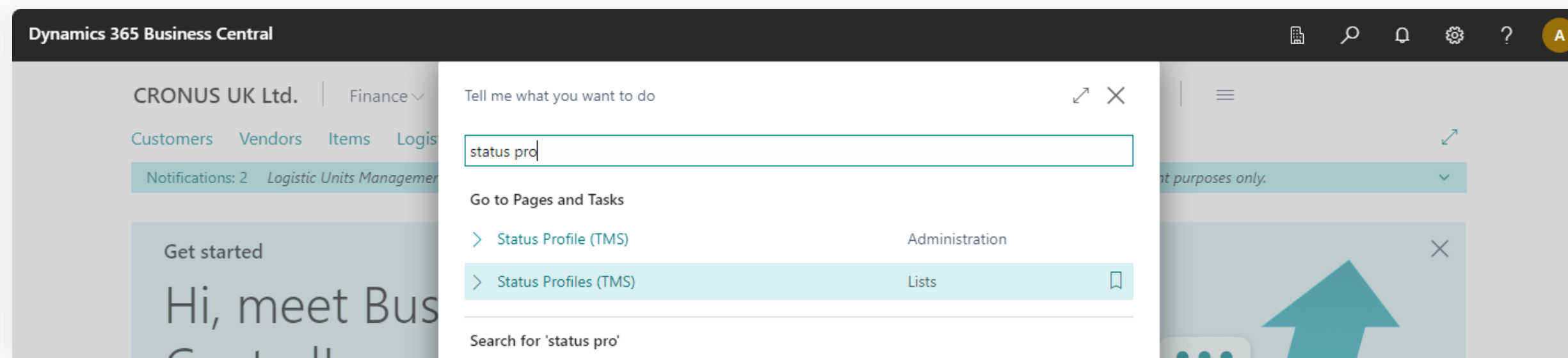




Where to find using main menu of the TMS



Where to find using search





Status Profiles page

The screenshot shows the Dynamics 365 Business Central interface for the 'Status Profiles (TMS)' page. The page title is 'Status Profiles (TMS)'. Below the title, there are search and action buttons: 'Search', 'Analyse' (with a toggle switch), '+ New', and 'Manage'. A table lists the status profiles with columns for 'Code' and 'Description'. The 'Code' column is sorted ascending. The table contains the following data:

Code ↑	Description
DEFAULT	Default Profile
EXECUTION	Freight order stage execution
FO	Freight orders
WORK	Work Profile

To the right of the table, there is a column for 'Action Control Enabled' with four checkboxes, one for each row. A red dashed box highlights this column. A red dashed box also highlights the 'DEFAULT' row in the table. A red dashed box with a pointer connects the text below to the 'Action Control Enabled' column.

Displays whether the system for monitoring specific actions is activated at each status. The status monitoring system can be locked for all profiles in TMS Setup.

Setup & Settings – Status Profile



Status Profile (TMS)

Status profile

General

Code DEFAULT Action Control Enabled

Description Default Profile

Statuses | [New Line](#) | [Delete Line](#) | [Extended Control Setup](#)

Code	Description	Line Style
→ 1.NEW	New	
2.CONFIRMED	A forwarding order confirmation has been received.	
3.PLAN	Planning process. Dates. Stages. Routes.	
4.EXECUTION	Execution process. Units and freight order planning.	
5.EXECUTED	Order was executed. Invoicing	
6.INVOICING	Order is in the invoicing process.	
7.COMPLETED	Order was completed. Posting.	
8.CANCELED	Order was canceled.	

Displays whether the system for monitoring specific actions is activated at each status.

Enhanced system for monitoring additional actions that the system can control for documents with a selected status.

Color highlighting of the document in the list for documents having this status.



You can activate verification by setting a flag in the field of the corresponding column. Determine whether an order can be posted, whether an invoice can be issued, and whether copying or modifying a document with the given status is allowed.

← Status Profile (TMS)
✎ ↗ + 🗑
✓ Saved 📌 ↗

Status profile

General

Code Action Control Enabled

Description

Statuses | [+ New Line](#) [✕ Delete Line](#) [⚙ Extended Control Setup](#)


Code	Description	Cha... Order Type	Ship... Cha...	Lines Cha...	Date Plan...	Rount Plan...	Del... Doc...	Logi... Units Build	Cre... Frei... Order	Invo...	Post	Copy	Sett... Sett... Lines	Sett... Cost Lines	Line Style
1.NEW	New	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
→ 2.CONFIR...	A forwarding order confirmati...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.PLAN	Planning process. Dates. Stage...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.EXECUTI...	Execution process. Units and fr...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.EXECUTED	Order was executed. Invoicing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.INVOICING	Order is in the invoicing proce...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7.COMPLE...	Order was completed. Posting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

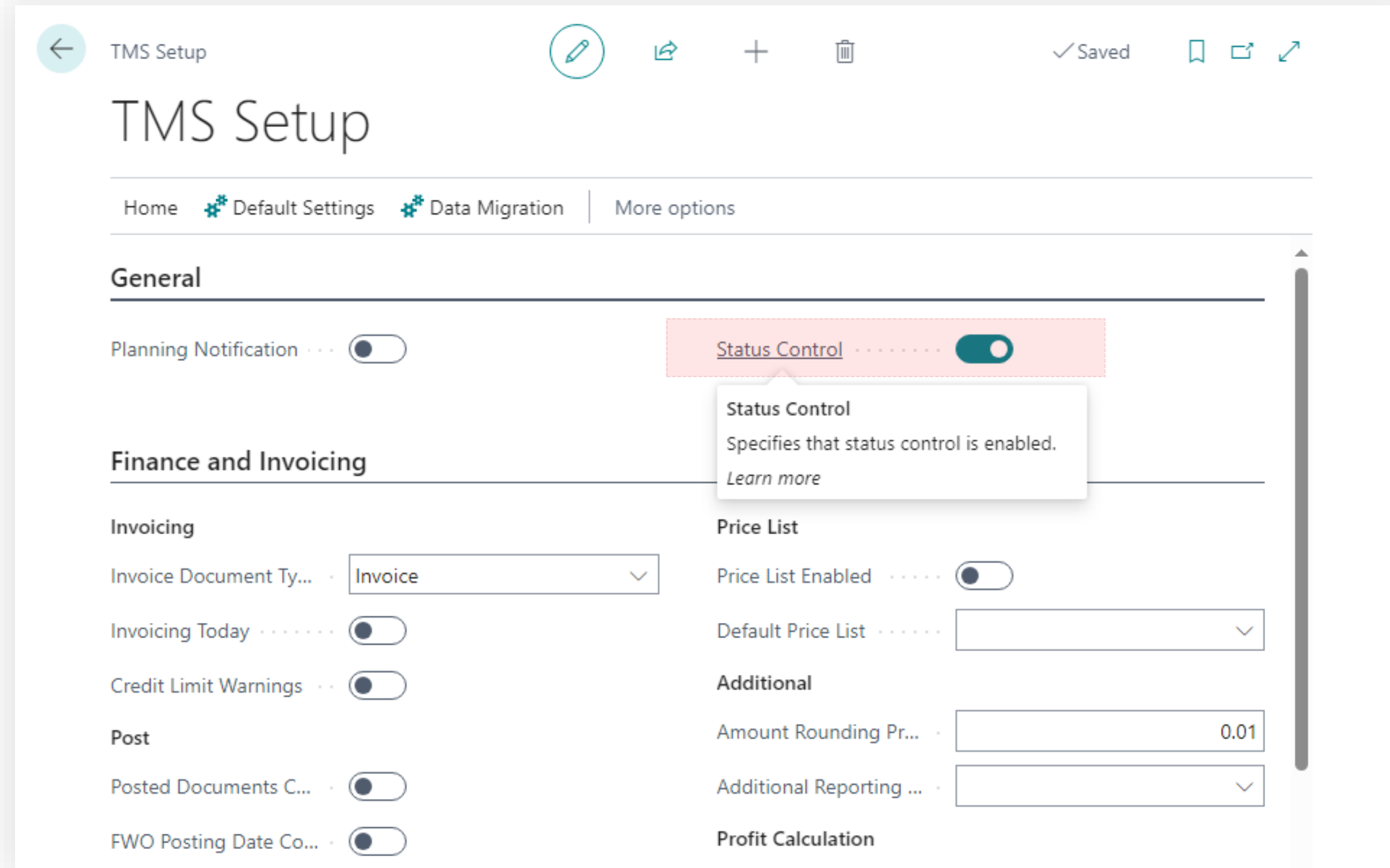
Settlement

Specifies whether the settlement lines can be created for forwarding order with this status.

[Learn more](#)



 To ensure the action control system functions, it must be activated globally in the TMS Setup page.



The screenshot displays the 'TMS Setup' interface. At the top, there is a navigation bar with a back arrow, 'TMS Setup' text, and icons for edit, share, add, and delete. A 'Saved' status and additional icons are on the right. Below the navigation bar is a breadcrumb trail: 'Home' > 'Default Settings' > 'Data Migration' > 'More options'. The main content area is titled 'TMS Setup' and is divided into sections: 'General', 'Finance and Invoicing', 'Invoicing', 'Post', 'Price List', 'Additional', and 'Profit Calculation'. In the 'General' section, the 'Status Control' toggle is turned on and highlighted with a red box. A tooltip points to this toggle, stating 'Status Control' and 'Specifies that status control is enabled.' with a 'Learn more' link. Other settings include 'Planning Notification' (off), 'Invoice Document Ty...' (set to 'Invoice'), 'Invoicing Today' (off), 'Credit Limit Warnings' (off), 'Posted Documents C...' (off), 'FWO Posting Date Co...' (off), 'Price List Enabled' (off), 'Default Price List' (empty dropdown), 'Amount Rounding Pr...' (set to '0.01'), and 'Additional Reporting ...' (empty dropdown).



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Transportation Management System Setup & Settings

Stage Profiles



Stage Profile

- The Stage Profile defines the sequence of steps that will occur during the transportation process.
- The profile may include both mandatory steps executed via the Freight Order and additional steps that are manually added to the transportation process.

Delivery

	Code		Description	Mode Of Transport Code
→	100	:	Delivery	ROAD

Multimodal

	Code		Description	Mode Of Transport Code
→	100	:	Precarriage	ROAD
	200		Main carriage	OCEAN
	300		Delivery	ROAD



How TMS uses the stage system

Stages are used in Forwarding Order to define steps, schedule, and duration of the transportation

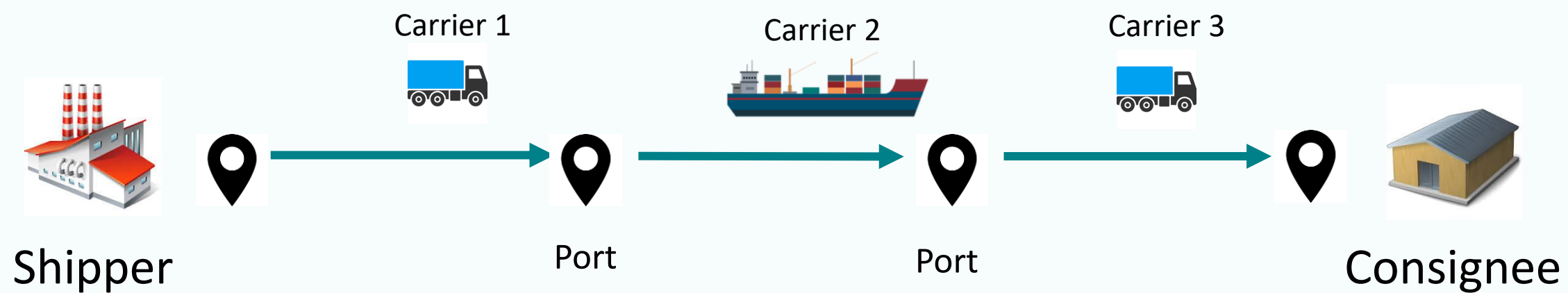
The screenshot displays the TMS interface for a line item. The top section shows a table with columns: Type, No., Description, Freight Class, Quantity, Unit of Measure Code, Gross Weight per Unit of Measure, Weight Unit of Measure, Gross Weight, and Length. The data row shows: Unit Type, C20RC, 20' Reefer container, 060, 3.00, (blank), 30,000, KG, 90,000, 5.44.

Summary statistics below the table:

- Total Gross Weight (kg): 90,000.00
- Total Volume (m³): 83.72
- Total Chargeable Weight (kg): 90,000.00
- Number of Packages: 3

The bottom section is titled "Stages" and contains a table with columns: Stage Code, Stage Description, Mode of Transport, Para..., Start Date Time, Duration, Wait Duration, End Date Time, Actual Date and Time, and From I. The data rows are:

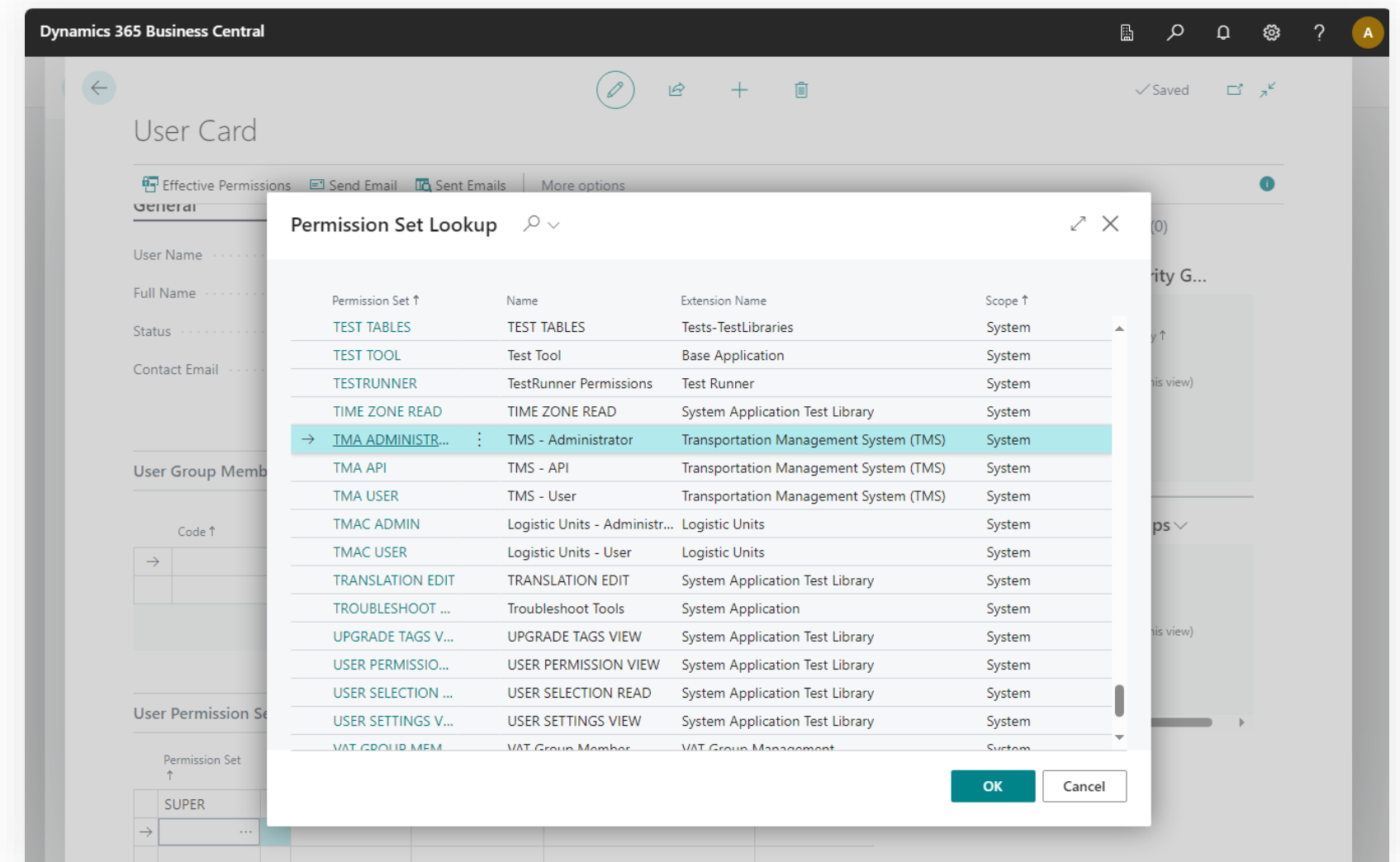
Stage Code	Stage Description	Mode of Transport	Para...	Start Date Time	Duration	Wait Duration	End Date Time	Actual Date and Time	From I
100	Precarriage	ROAD	<input type="checkbox"/>	07/02/2024 00:00	1 day		08/02/2024 00:00		*
200	Main carriage	OCEAN	<input type="checkbox"/>	08/02/2024 00:00	10 days		18/02/2024 00:00		*
300	Delivery	ROAD	<input type="checkbox"/>	18/02/2024 00:00	2 days		20/02/2024 00:00		*





Prerequisites

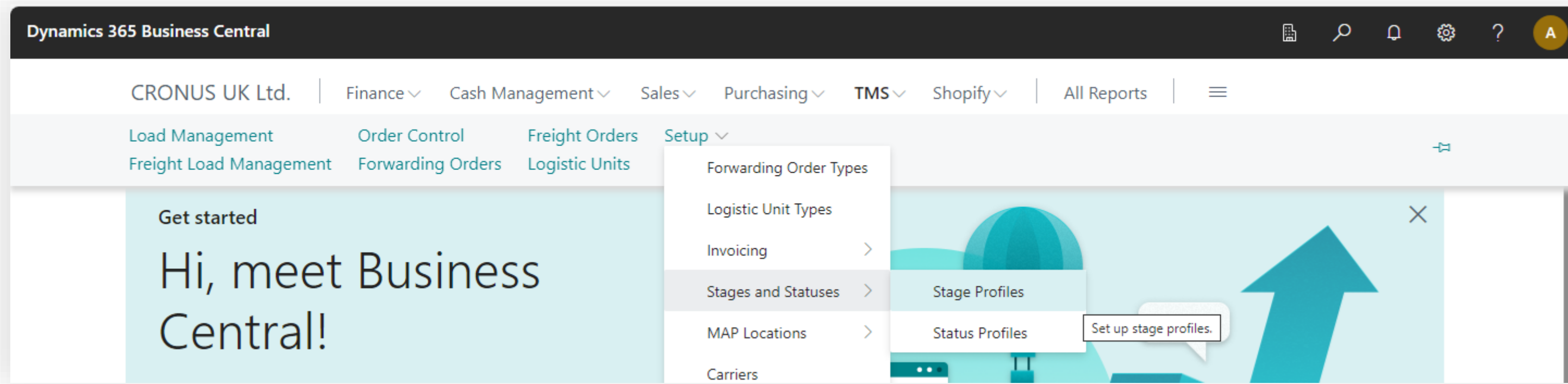
To change or create status profiles user must have TMS Admin Permissions.



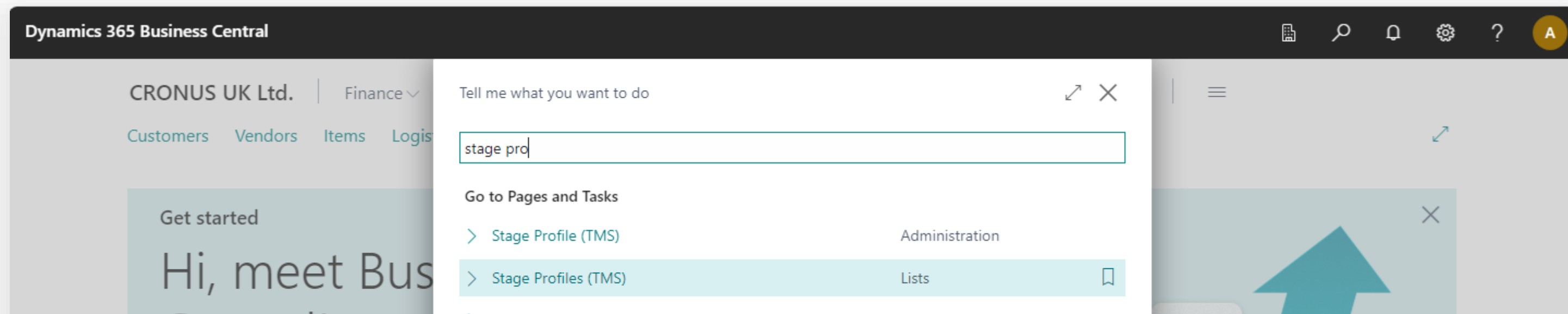
Setup & Settings – Stage Profile



Where to find using main menu of the TMS



Where to find using search



Setup & Settings – Stage Profile



Status Profiles page

The screenshot shows the Dynamics 365 Business Central interface for the 'Stage Profiles (TMS)' page. The page title is 'Stage Profiles (TMS)'. Below the title, there is a search bar, a toggle for 'Analyse', and buttons for '+ New' and 'Manage'. A table lists the stage profiles with columns for 'Code' and 'Description'. The 'DEFAULT' profile is highlighted.

Code ↑	Description
<u>DEFAULT</u>	Default
DELIVERY	Delivery
INTERMODAL	Intermodal transportation
MULTIMODAL	Multimodal transportation
TRANSFER	Item Transfer

Setup & Settings – Stage Profile



Stage Profile (TMS)

Stage profile

General

Code INTERMODAL Description Intermodal transportation

Stages | New Line Delete Line

Code	Description	Mode Of Transport Code	Additi...	Def. Carrier Name	Def. Pay-to Vendor Name
→ 100	Precarriage	ROAD	<input type="checkbox"/>		
200	Main carriage	OCEAN	<input type="checkbox"/>		
300	Delivery	ROAD	<input type="checkbox"/>		

Stages/Steps/Legs through which transportation will occur.

Additional Stage. The additional stage is not automatically added to the order but can be manually selected.

Default Carrier. This carrier is automatically assigned upon the creation of a freight order for the given stage.

Default Vendor. This is the vendor to whom payment for transportation will be made for the given stage. This could be either the carrier directly or their agent.



Where stages are using

Stages are used in Forwarding Orders Types page. By assigning a stage profile to the forwarding order type, a set of stages is defined for all documents of this type.

Forwarding Order Types ✓ Saved

Search Analyse + New Edit List Delete

Code ↑	Description	Default Status Profile	Default Status Code	Default Stage Profile	Default Service Set	Allowed Service/Char... Set	Default Content Set	Def. Order Party Type	Def. Order Party No.	Def. Shippe Type
DELIVERY	Delivery	DEFAULT	1.NEW	DELIVERY				Company		Company
FWO	Forwarding Order	DEFAULT		INTERMODAL				Company		Company
IN.DELIVERY	Incoming Delivery	DEFAULT		DELIVERY				Company		Company
→ INTERMOD...	Intermodal Transportation	DEFAULT		INTERMOI ▾				Company		Company
MULTIMO...	Multimodal transportation	DEFAULT								Company
OUT.DELIV...	Outgoing Delivery	DEFAULT								Company
PURCHASE	Company items purchase deliv...	DEFAULT								Company
TRANSFER	Company items transfer	DEFAULT								Company

Code ↑	Description
DEFAULT	Default
DELIVERY	Delivery
→ INTERMODAL	Intermodal transportation
MULTIMODAL	Multimodal tr Intermodal transportation
TRANSFER	Item Transfer

[Show details](#) [Select from full list](#)



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Transportation Management System Setup & Settings

Services

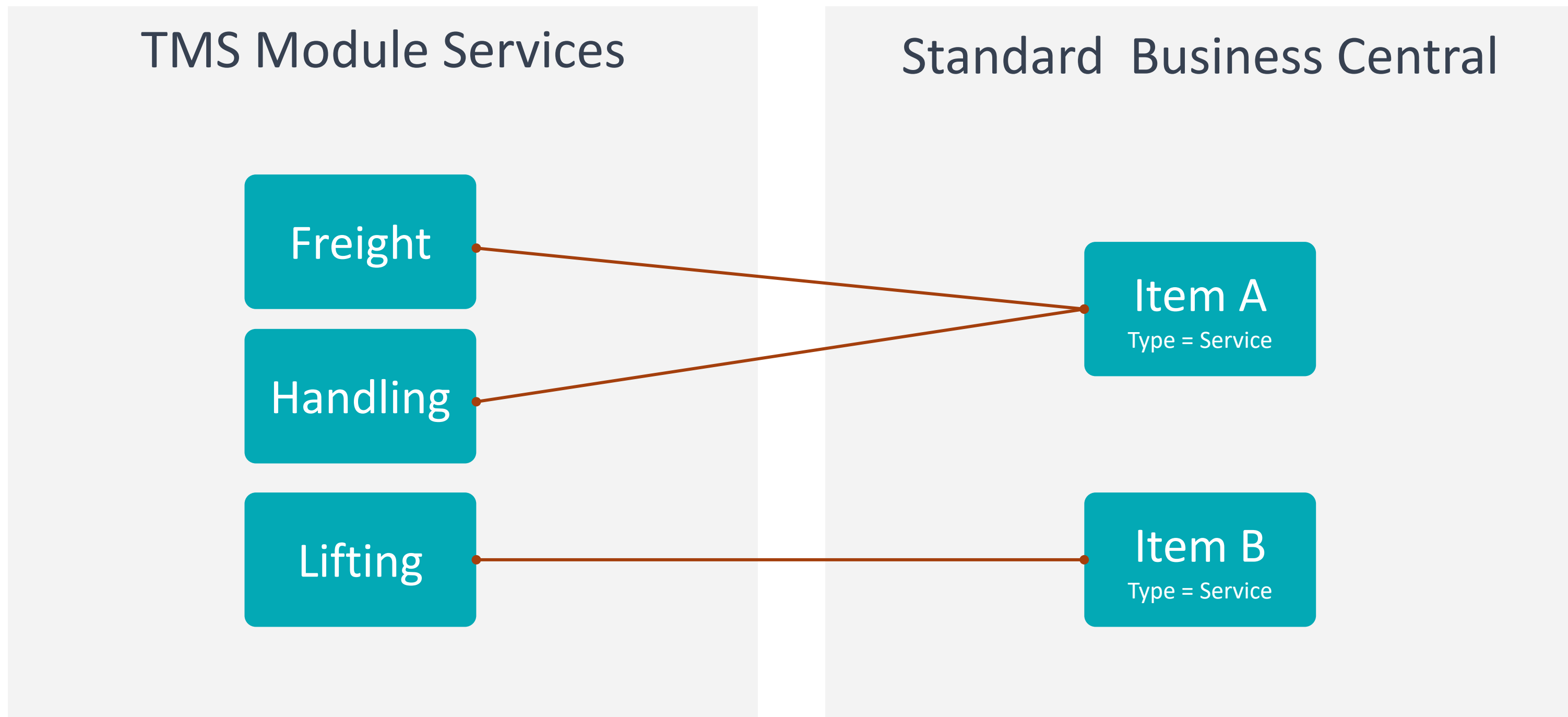


Services

- The TMS module possesses its own service directory/system, enabling the flexible customization of services offered within the context of the transportation process.
- TMS services are mapped to entities within the standard Business Central, facilitating operations for billing.
- Mapping can be one-to-one, where a TMS service is directly mirrored in the item directory, or many-to-one, where multiple TMS services aggregate into a single billable item-service.
- TMS services are employed in the settlement of forwarding orders, and setting up TMS services is essential for invoicing clients.
- TMS represents the suite of transportation services we provide to the client and for which we issue invoices.



Possible relations between TMS Services and Items of the Business Central



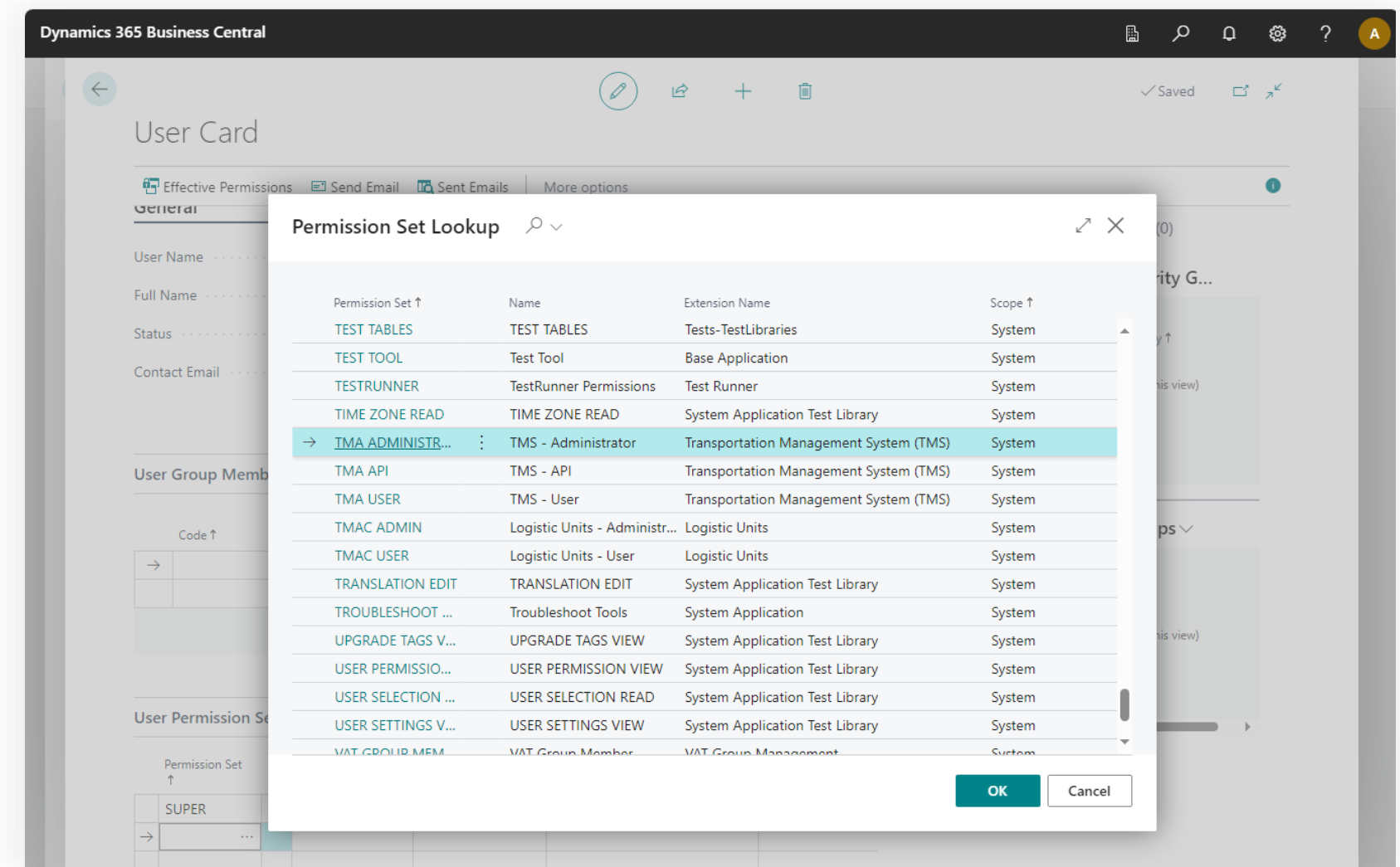


- Mapping TMS services to BC items means that within the TMS module, we operate and work with TMS services, but when invoicing or allocating costs in standard BC documents, items will appear instead.
- Business Central is unaware of the TMS module and cannot interact with its entities.



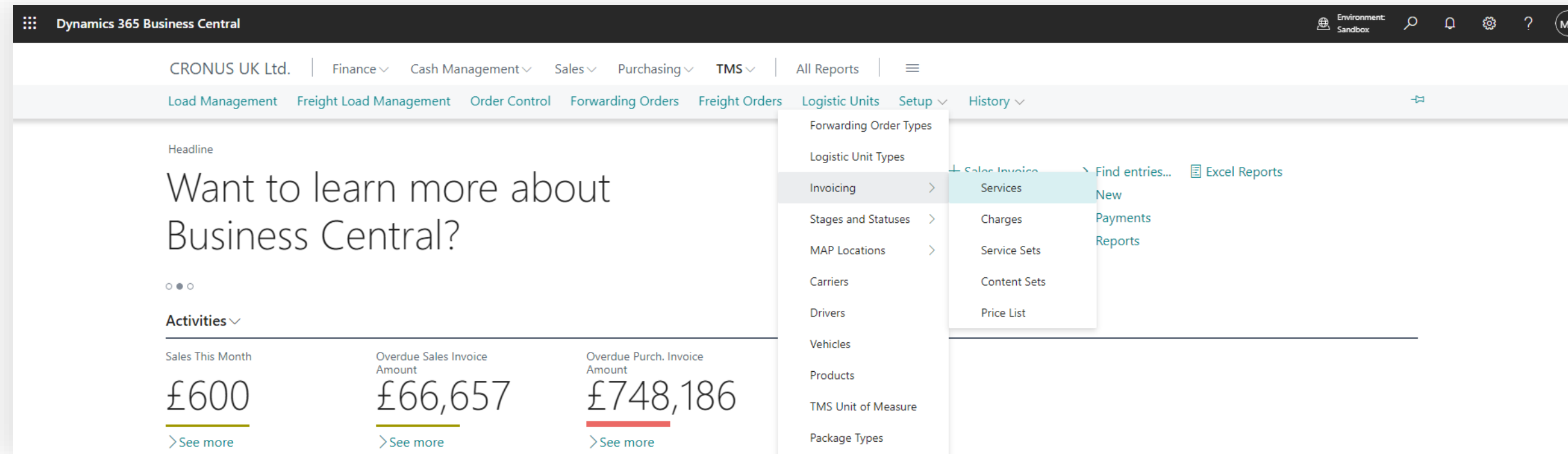
Prerequisites

To change or create status profiles user must have TMS Admin Permissions.

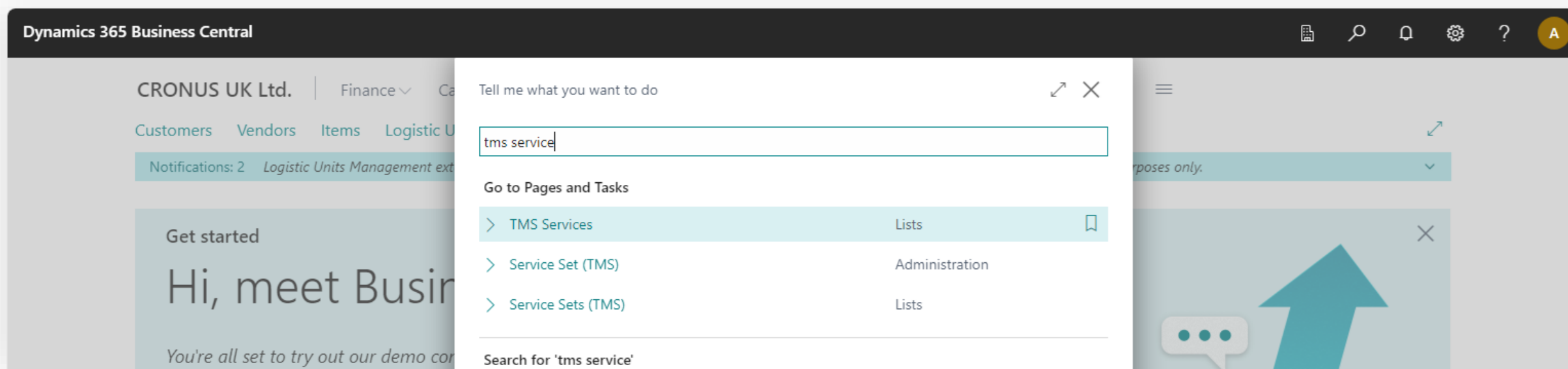




Where to find using main menu of the TMS



Where to find using search





TMS Services page

← TMS Services

Search Analyse + New Edit List Delete

No. ↑	Description	Unit of Measure Code	Invoice Line Type	Invoice No.
DAC	Documents and customs processing			
DL	Delivery			
EC	Extra cost			
ED	Express delivery			
→ FR	Freight		Item	.1000
FRE	Freight Express			
HNDL	Handling			
LFT	Lifting			
MIL	Mileage			
PS	Pick-up service			
RDLL	Road linehaul			
RPB	Receiving per box			
RPP	Receiving per pallet			
SS	Secondary Screening			
STR	Storage per day			

Link to the Business Central entity, for example Item (Type = Service).

Structure of our TMS services



Set link to the Business Central entity

TMS Services ✓ Saved 🔖 📄 🔗

🔍 Search 🔘 Analyse + New 📝 Edit List 🗑 Delete 🔗 🔍 ☰

No. ↑	Description	Unit of Measure Code	Invoice Line Type	Invoice No.
DAC	Documents and customs processing			
DL	Delivery			
EC	Extra cost			
ED	Express delivery			
→ FR	⋮ Freight		Item	1000
FRE	Freight Express			
HNDL	Handling			
LFT	Lifting			
MIL	Mileage			
PS	Pick-up service			
RDLL	Road linehaul			
RPB	Receiving per box			
RPP	Receiving per pallet			
SS	Secondary Screening			
STR	Storage per day			

No. ↑	Description	Base Unit of Measure	Unit Price
→ 1000	Freight	HOUR	0.00
SER101	Equipment Fee	DAY	10.00
SER102	Repair	HOUR	100.00

+ New Show details Select from full list

1. Create a product that will serve as a reflection of the TMS service in the standard Business Central module.
2. Establish the link.

p.s. The entity type corresponds to the type of purchase or sales order line.



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Transportation Management System Setup & Settings

Charges



Charges

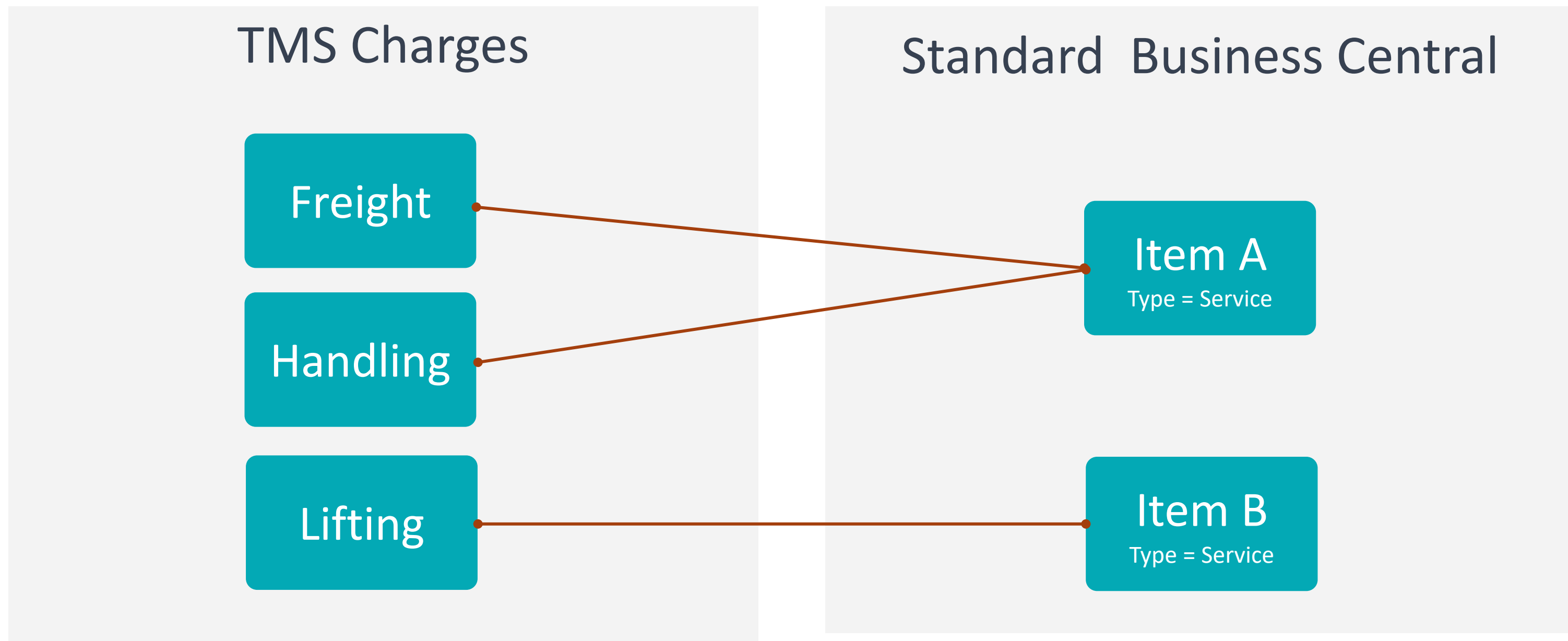
- The TMS module includes a charges directory, allowing for the accounting of costs incurred during transportation.
- TMS Charges, similar to TMS Services, have mapping to the standard business center items, facilitating the allocation of transportation order costs.
- Mapping can be one-to-one, where a TMS charge has its equivalent in the product directory, or many-to-one, where multiple TMS Charges are represented by a single item.
- TMS Charges are used in the settlement of forwarding orders to account for expenses entered in Business Central as a purchase invoice.



When a service provider (transportation or others) issues an invoice to our company, we enter it into Business Central as a Purchase Invoice document, specifying products (with a Type = Service) that are mapped to TMS Charges in the lines.



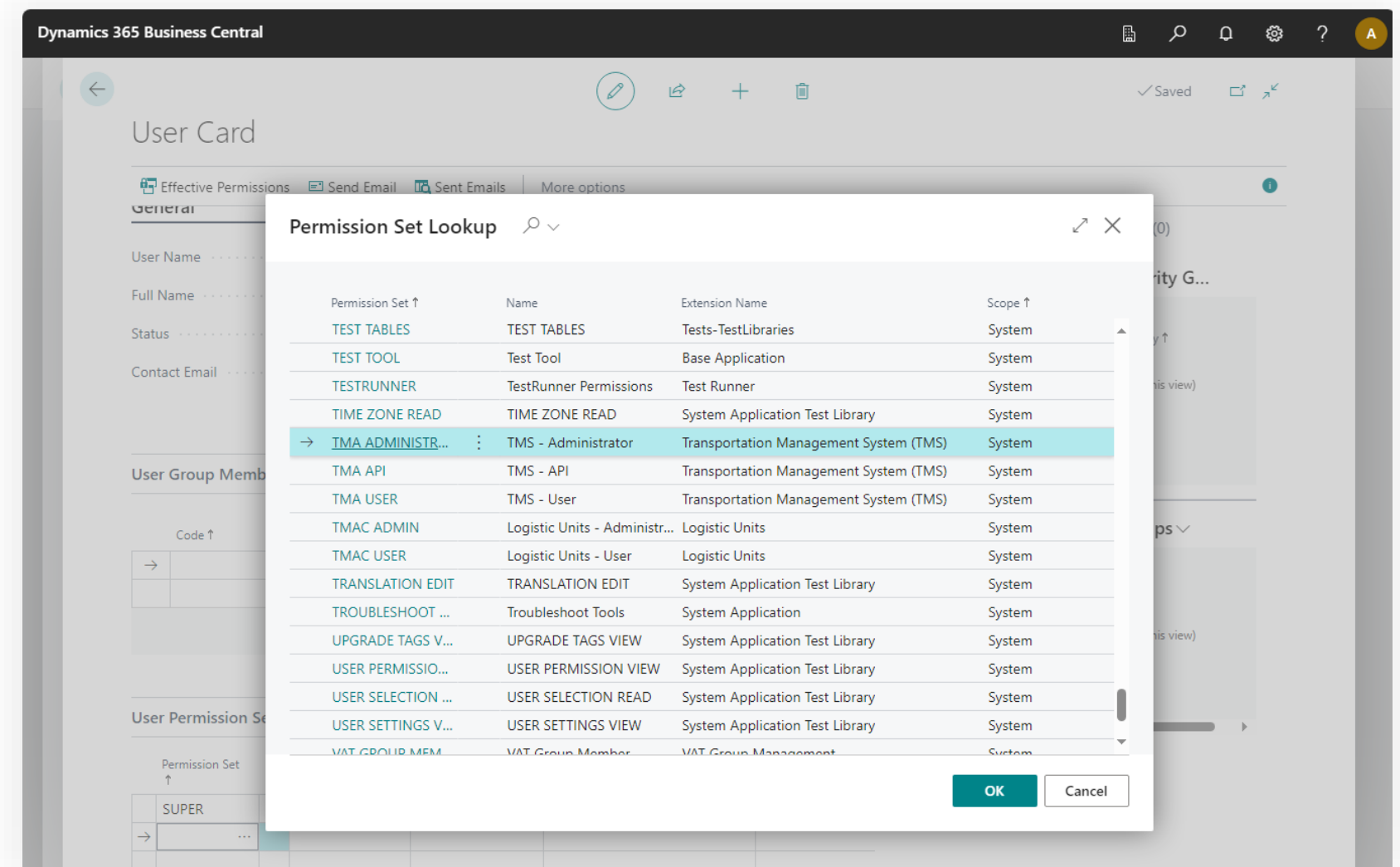
Setting up a connection between TMS charges and items with type = Service in Business Central is implemented similarly to “TMS Services”





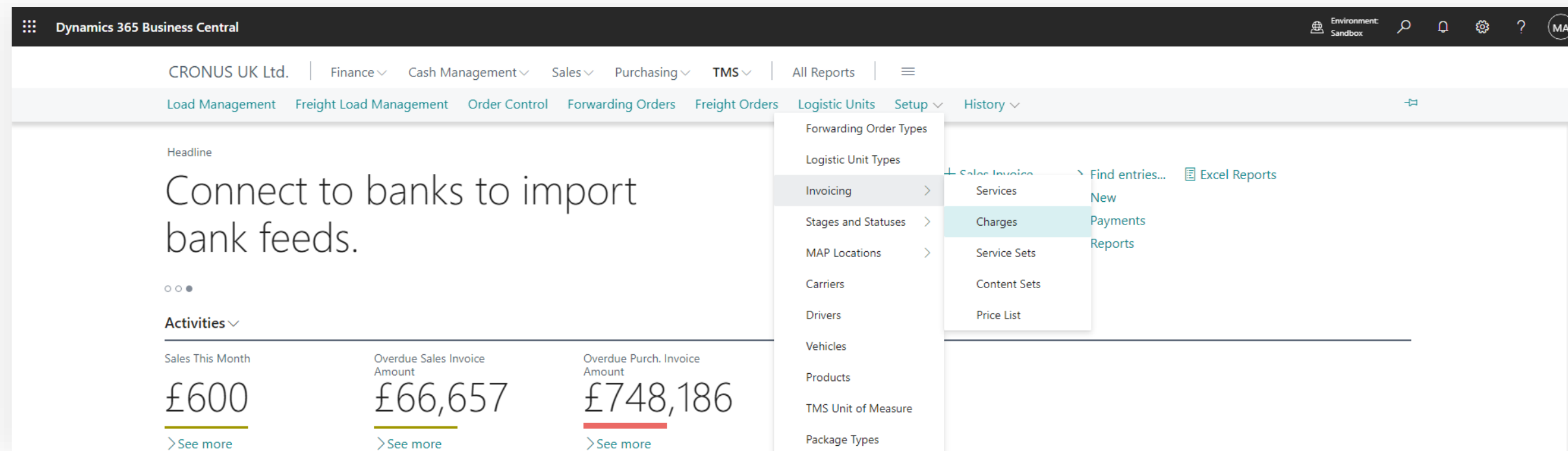
Prerequisites

To change or create status profiles user must have TMS Admin Permissions.

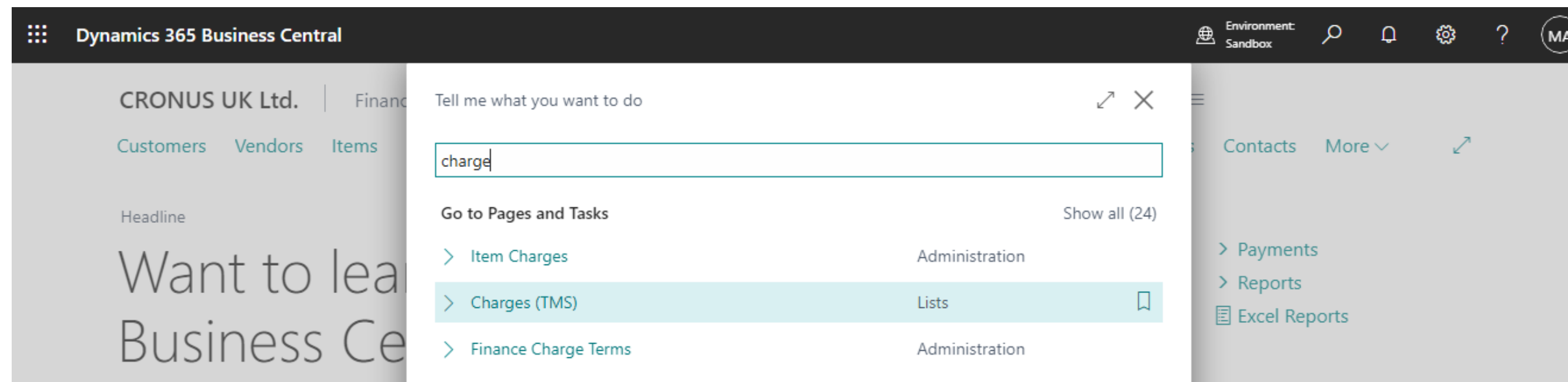




Where to find using main menu of the TMS



Where to find using search





TMS Charges page

Charges (TMS)

Search Analyze + New Edit List Delete

No. ↑	Description	Unit of Measure Code	Default Vendor No.	Purchase Line Type	Purchase Line No.
DELAY	Delay				
→ EXTRA	Extra			Item	TMS1003
FREIGHT	Freight			Item	TMS1001
FUEL	Fuel surcharge				
HANDLING	Handling			Item	TMS1002
INSURANCE	Insurance				
MILEAGE	Mileage				
PF	Pickup Fee				
PLACE	Place				
STORAGE	Storage				

Link to the Business Central entity, for example Item (Type = Service).

Structure of our TMS Charges



How it works

When planning the transportation, we estimated that the sea stage would cost 3500 pounds. After the transportation, the supplier Maersk sent an invoice for 4596. In the Forwarding Order, we select TMS Charges, which in the purchase order are represented as item.

Forwarding Order (TMS) 100010 · INTERMODAL

Home Logistic Units Print/Send Invoicing Navigate More options

Stages Manage Process

New Line Delete Line

Stage Code	Stage Description	Mode of Transport	Parallel	Start Date Time	Duration	Wait Duration	End Date Time
100	Precarriage	ROAD	<input type="checkbox"/>	2/1/2024 12:00 AM	1 day		2/2/2024 12:00 AM
200	Main carriage	OCEAN	<input type="checkbox"/>	2/3/2024 12:00 AM	10 days		2/13/2024 12:00 AM
→ 300	Delivery	ROAD	<input type="checkbox"/>	2/19/2024 12:00 AM	2 days		2/21/2024 12:00 AM

Settlement Manage Calculation Functions Prices Charge Allocation

New Line Delete Line

Type	Code	Description	Qua...	Price	Curr... Code	Amount	Amount (LCY)	Customer/Vendor Name	Docume Type
→ Income	FR	Freight	1.00	5,000.00		5,000.00	5,000.00		
Cost	FREIGHT	Freight	1.00	-3,500.00		-3,500.00	-3,500.00	Maersk	0

Total Income (LCY) 6,000.00 Total Profit (LCY) 2,500.00

Total Cost (LCY) -3,500.00

Purchase Invoice 107234 · Maerks

Home Prepare Request Approval Invoice Actions Related Automate Fewer options

General Show more

Vendor Name Maerks VAT Date 12/5/2023

Contact Due Date 1/5/2024

Document Date 12/5/2023 Vendor Invoice No. D45456334.2024

Posting Date 12/5/2023 Status Open

Lines Manage TMS Line

New Line Delete Line Select items...

Type	No.	Description/Comment	Quantity	Unit of Mea... Code	Direct Unit Cost Excl. VAT	Location Code	A
→ Item	TMS1001	Freight 4 containers	1	PCS	4,596.00		

Subtotal Excl. VAT (G... 4,596.00 Total Excl. VAT (GBP) ... 4,596.00

Inv. Discount Amount... 0.00 Total VAT (GBP) 919.20

Invoice Discount % 0 Total Incl. VAT (GBP) 5,515.20



How it works

We will allocate the actual costs to the transportation order. Click "Charge Allocation" then "Purchase Invoice Line" (cost allocation is performed at the line level). In the window that appears, select the lines of the desired invoice and click OK. The system relies on the mapping of TMS charges and items.

Forwarding Order (TMS) 100010 · INTERMODAL

Home Logistic Units Print/Send Invoicing Navigate More options

Stages Manage Process

New Line Delete Line

Stage Code	Stage Description	Mode of Transport	Parallel	Start Date Time	Duration	Wait Duration	End Date Time
100	Precarriage	ROAD	<input type="checkbox"/>	2/1/2024 12:00 AM	1 day		2/2/2024 12:00 AM
200	Main carriage	OCEAN	<input type="checkbox"/>	2/3/2024 12:00 AM	10 days		2/13/2024 12:00 AM
→ 300	Delivery	ROAD	<input type="checkbox"/>	2/19/2024 12:00 AM	2 days		2/21/2024 12:00 AM

Settlement Manage Calculation Functions Prices Charge Allocation

Purchase Invoice Line Posted Purchase Invoice Line Credit-Memo Line Delete Allocation

Creates the charge allocation link to purchase invoice line.

Type	Code	Description	Qua...	Price	Curr... Code	Amount	Amount (LCY)	Customer/Vendor Name	Docume Type
Income	FR	Freight	1.00	5,000.00		5,000.00	5,000.00		0
→ Cost	FREIGHT	Freight	1.00	-3,500.00		-3,500.00	-3,500.00	Maerks	

Total Income (LCY) 5,000.00 Total Profit (LCY) 1,500.00

Total Cost (LCY) -3,500.00

Forwarding Order (TMS) 100010 · INTERMODAL

Home Logistic Units Print/Send Invoicing Navigate More options

Stages Manage Process

New Line Delete Line

Settlement Manage Calculation Functions Prices Charge Allocation

Purchase Invoice Line Posted Purchase Invoice Line Credit-Memo Line Delete Allocation

Creates the charge allocation link to purchase invoice line.

Purchase Document Assignment

Document Type	No.	Description	Quantity	Direct Unit Cost Excl. VAT	Line Amount Excl. VAT	Depart Code
Invoice	TMS1001	Freight	1	3,000.00	3,000.00	
Invoice	TMS1001	Freight	1	1,000.00	1,000.00	
Invoice	TMS1001	Freight	1	2,000.00	2,000.00	
Invoice	TMS1001	Freight	1	2,000.00	2,000.00	
→ Invoice	TMS1001	Freight 4 containers	1	4,596.00	4,596.00	

OK Cancel

Total Income (LCY) 5,000.00 Total Profit (LCY) 1,500.00

Total Cost (LCY) -3,500.00



How it works

The system will establish a connection between the settlement line and the purchase invoice line, adjusting the amounts in accordance with the actual values.

Forwarding Order (TMS) 100010 · INTERMODAL

Home Logistic Units Print/Send Invoicing Navigate More options

Stages Manage Process

Stage Code	Stage Description	Mode of Transport	Parallel	Start Date Time	Duration	Wait Duration	End Date Time
100	Precarriage	ROAD	<input type="checkbox"/>	2/1/2024 12:00 AM	1 day		2/2/2024 12:00 AM
200	Main carriage	OCEAN	<input type="checkbox"/>	2/3/2024 12:00 AM	10 days		2/13/2024 12:00 AM
→ 300	Delivery	ROAD	<input type="checkbox"/>	2/19/2024 12:00 AM	2 days		2/21/2024 12:00 AM

Settlement Manage Calculation Functions Prices Charge Allocation

Type	Code	Description	Qua...	Price	Curr... Code	Amount	Amount (LCY)	Customer/Vendor Name	Docume Type
Income	FR	Freight	1.00	5,000.00		5,000.00	5,000.00		0
→ Cost	FREIGHT	Freight 4 cont...	1.00	-4,596.00		-4,596.00	-4,596.00	Maerks	Invoice

Total Income (LCY) 5,000.00 Total Profit (LCY) 404.00
Total Cost (LCY) -4,596.00

Purchase Invoice 107234 · Maerks

Home Prepare Request Approval Invoice Actions Related Automate Fewer options

General Show more

Vendor Name Maerks VAT Date 12/5/2023
Contact Due Date 1/5/2024
Document Date 12/5/2023 Vendor Invoice No. D45456334.2024
Posting Date 12/5/2023 Status Open

Lines Manage TMS Line

New Line Delete Line Select items...

Type	No.	Description/Comment	Quantity	Unit of Mea... Code	Direct Unit Cost Excl. VAT	Location Code	Allocated Amount	Allocated Amount (Posted)	FA Posting Date
→ Item	TMS1001	Freight 4 containers	1	PCS	4,596.00		-4,596.00	0.00	

Subtotal Excl. VAT (GBP) 4,596.00 Total Excl. VAT (GBP) 4,596.00
Inv. Discount Amount (GBP) 0.00 Total VAT (GBP) 919.20
Invoice Discount % 0 Total Incl. VAT (GBP) 5,515.20



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Transportation Management System Setup & Settings

Google MAPs Integration



TMS utilizes the Google Maps service for access to mapping services for geocoding addresses, route planning, and determining distances and transport durations.

Companies using TMS must have their own Google account with activated Google Maps services, which will be used by TMS.

! Google Maps is a paid service.

To enable Google Maps in TMS, it is necessary to enter the Google API Key in the Assisted Setup window of the TMS module.

The screenshot shows a window titled "Assisted Setup" with a close button (X) and a refresh button (↶). Below the title bar is a gear icon. The main content area is titled "Map Provider Settings" and contains the following text: "The map provider allows show the routes, calculate distances and duration of the transportation." followed by "To get an API key, you need to register with the map api provider. This service is paid. At the moment, TMS only supports Google Map, but Bing MAP support will appear in the next versions." Below this is the instruction "Enable Maps JavaScript API, Geocoding API, Distance Matrix API, Directions API in your google map account." There are two input fields: "Map Provider" with a dropdown menu showing "Google Map" and a downward arrow, and "Google Api Key" with a masked input field containing ".....". A blue link is provided: <https://developers.google.com/maps/documentation/javascript/get-api-key>. At the bottom right, there are three buttons: "Back", "Next" (highlighted in teal), and "Finish".



How to receive Google MAP API Key

Follow the link from the Assisted Setup window. Click on blue “Go to Credentials page” button.

The screenshot shows the Google Maps Platform documentation page for "Create API keys". The page is titled "Before you begin" and "Create API keys". It provides instructions on how to generate and restrict API keys. A blue button labeled "Go to the Credentials page" is prominently displayed. A video thumbnail titled "How to generate and restrict A... Generate & restrict API keys" is also visible. The page includes a navigation menu on the left and a table of contents on the right.

Before you begin

Before you start using the Maps JavaScript API, you need a project with a billing account and the Maps JavaScript API enabled. To learn more, see [Set up in Cloud Console](#).

Create API keys

The API key is a unique identifier that authenticates requests associated with your project for usage and billing purposes. You must have at least one API key associated with your project.

To create an API key:

1. Go to the **Google Maps Platform > Credentials** page.
[Go to the Credentials page](#)
2. On the **Credentials** page, click **Create credentials > API key**.
The **API key created** dialog displays your newly created API key.
3. Click **Close**.
The new API key is listed on the **Credentials** page under **API keys**.
(Remember to [restrict the API key](#) before using it in production.)

Restrict API keys

Setup & Settings – Google MAPs Integration



On the page that opens, click "Create Credentials" and then "API Key."

The screenshot displays the Google Cloud console interface for a project named "My First Project". The main section is titled "Keys & Credentials" and includes a "CREATE CREDENTIALS" button. A dropdown menu is open, showing options: "API key", "OAuth client ID", "Service account", and "Help me choose". Below this, there are sections for "API Keys", "OAuth 2.0 Client IDs", "Service Accounts", and "URL Signing Secret". The "API Keys" section contains a table with the following data:

Name	Creation date	Type	Actions
API key 3	Jan 4, 2024	None	SHOW KEY
API key 2	Jun 26, 2023	None	SHOW KEY
Maps API Key	Aug 6, 2020	None	SHOW KEY

The "OAuth 2.0 Client IDs" section shows "No OAuth clients to display". The "Service Accounts" section shows "No service accounts to display". The "URL Signing Secret" section includes a "Secret Generator" section.

The right sidebar features a "Recommended for you" section with the following items:

- Maps Console Quick Tour (Tutorial, 3 min)
- Restrict Your API Key (Tutorial, 3 min)
- Introduction to Cloud-based Maps Styling (Tutorial, 10 min)



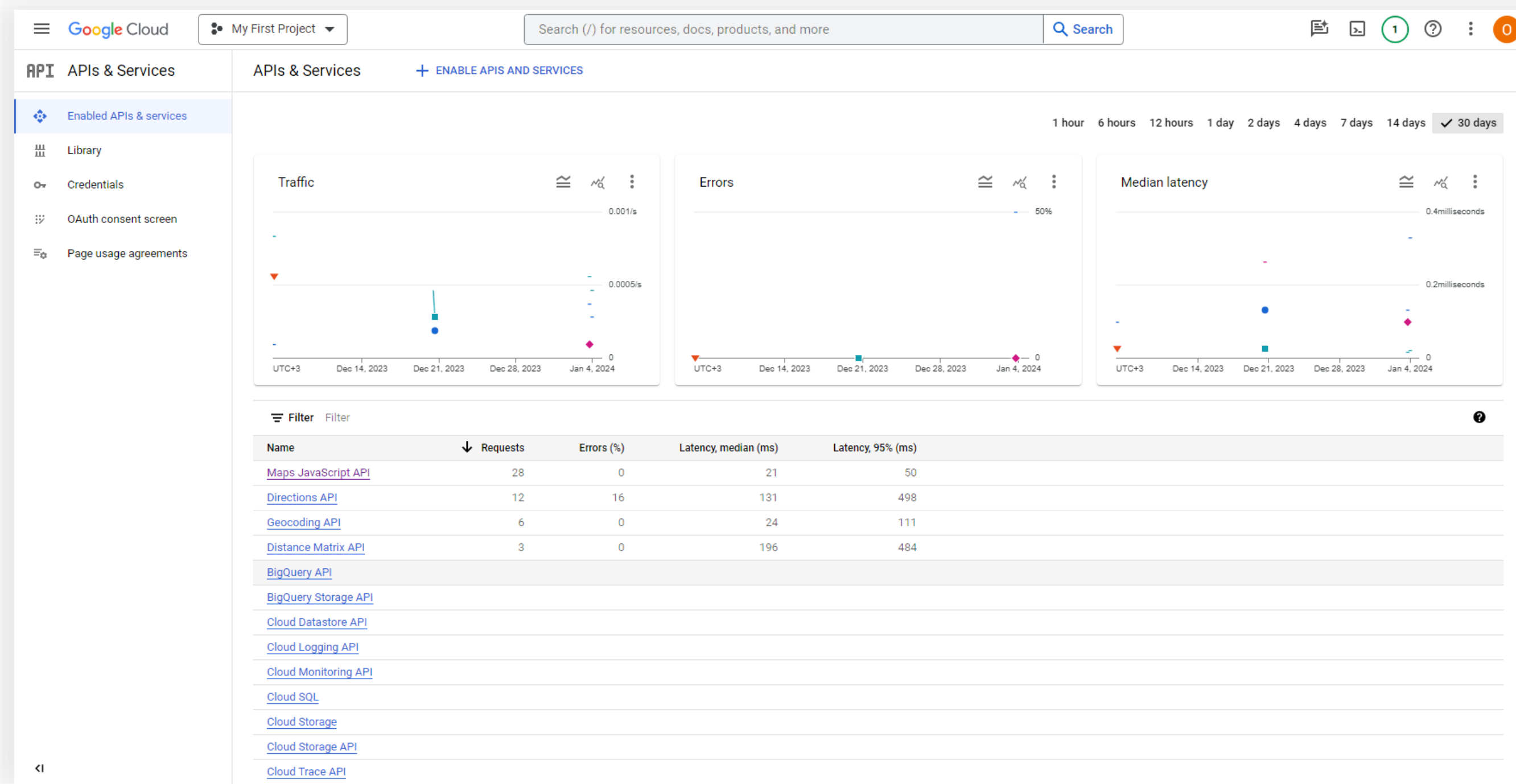
Copy API Key field value to past in field Google API of the TMS Assisted Setup page.

The screenshot displays the Google Cloud console interface for editing an API key. The top navigation bar includes the Google Cloud logo, the project name 'My First Project', a search bar, and utility icons. The left sidebar shows the 'APIs & Services' menu with 'Credentials' selected. The main content area is titled 'Edit API key' and includes buttons for 'REGENERATE KEY' and 'DELETE'. The 'Name' field is set to 'Maps API Key'. Under 'Key restrictions', a warning message states: 'This key is unrestricted. To prevent unauthorized use, we recommend restricting where and for which APIs it can be used. [Learn more](#)'. The 'Set an application restriction' section has radio buttons for 'None', 'Websites', 'IP addresses', 'Android apps', and 'iOS apps', with 'None' selected. The 'API restrictions' section has radio buttons for 'Don't restrict key' (selected) and 'Restrict key'. The 'Additional information' section shows the 'API Key' as 'AIzaSyBB4k0ZCBB4k0ZC+k0ZCnVAqSkPPNqReAA' and the 'Creation date' as 'August 6, 2020 at 3:42:52 PM GMT+3'. At the bottom, there are 'SAVE' and 'CANCEL' buttons.

Setup & Settings – Google MAPs Integration



Enable 4 services for API key: Maps JavaScript API, Directions API, Geocoding API, Distance Matrix API





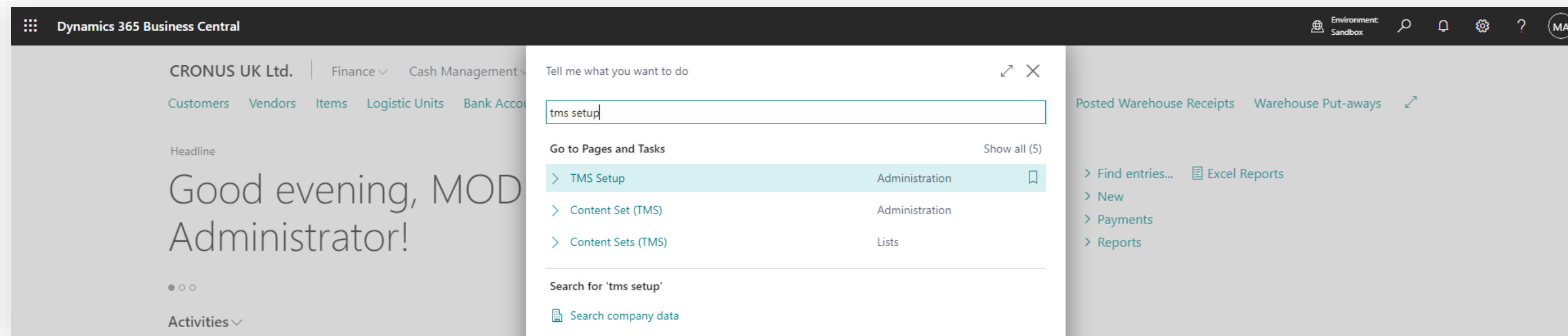
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Transportation Management System Setup & Settings

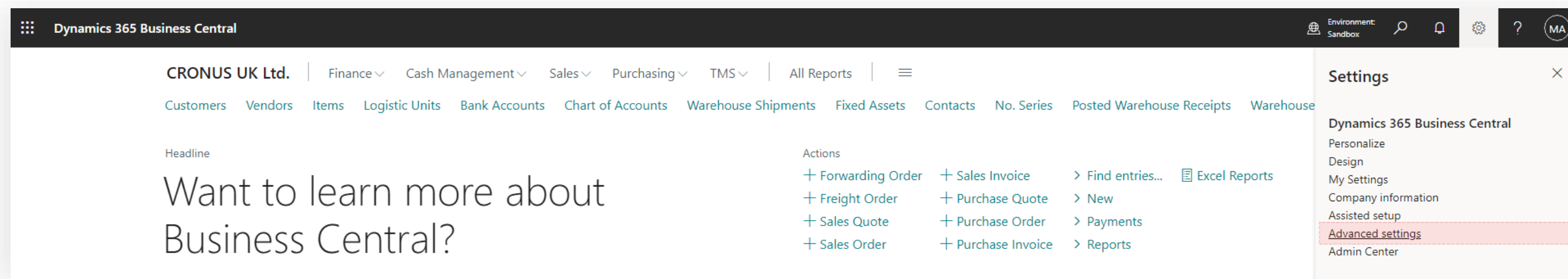
TMS Setup



TMS Setup is accessible via search



or through Manual Setup in Advanced settings.





On the TMS Setup page, the core settings for the TMS module are established, such as default types for created documents, document accounting features, numbering, etc.

The type of sales document created for the function of invoicing **Income** lines in Settlement.

Activation of credit limit check when selecting a client in Forwarding Order.

Verification during the posting of Forwarding Order of the fact that all related documents in settlement have been posted for: Sales Invoices for issued bills and Purchase Invoice for expenses.

Ensuring that the posting date of the Forwarding Order is later than the posting date of any documents in the settlement.

The screenshot displays the 'TMS Setup' interface with the following sections and settings:

- General:** Status Control (disabled).
- Finance and Invoicing:**
 - Invoicing:** Invoice Document Type (Invoice), Invoicing Today (disabled), Credit Limit Warnings (disabled).
 - Price List:** Price List Enabled (enabled), Default Price List (DEFAULT).
 - Additional:** Amount Rounding Precision (0.01), Additional Reporting Currency (USD).
 - Post:** Posted Documents Check (disabled), FWO Posting Date Check (disabled).
 - Profit Calculation:** Profit Calculation Enabled (disabled), Profit Calculation Method (Profit/Cost * 100%).
- Forwarding Orders:** Def. Forwarding Order Type (DELIVERY), Default FWO Type for IN.DELIVERY (IN.DELIVERY), Default FWO Type for OUT.DELIVERY (OUT.DELIVERY), Default FWO Type for TRANSFER (TRANSFER), Select FWO Type For (disabled), Chargeable Weight Percentage (1.00).

Enabling/disabling the action control system for statuses across all profiles

An additional reporting currency for recalculating all Forwarding Order metrics such as Income, Cost, Profit. This setting allows viewing the efficiency/profitability of operations in the holding's currency.

Displaying the profitability percentage of transportation orders in the Forwarding Orders list.



Set default values

Order types for Forwarding Orders depending on their creation method.

Selection of Forwarding Order Type when creating from a sales invoice (LSP scenario)

Freight Order Type for new freight orders. Freight order type defines parameters of the FOs

Default vehicle unit type for new freight orders. This parameter sets the dimensional parameters of the vehicle.

The screenshot shows the 'TMS Setup' configuration page. It is divided into several sections: 'Forwarding Orders', 'Freight Order', 'Number Series', and 'Map Provider Settings'. The 'Forwarding Orders' section includes fields for 'Def. Forwarding Order Type' (set to DELIVERY), 'Default FWO Type for...' (set to IN.DELIVERY), 'Default FWO Type for...' (set to OUT.DELIVERY), 'Default FWO Type for...' (set to TRANSFER), and 'Chargeable Weight P...' (set to 1.00). The 'Freight Order' section includes 'Def. Freight Order Type' (set to FO), 'Freight Order Charge...' (toggle off), 'Default Vehicle Unit T...' (empty), 'Charge Distribution P...' (set to 0.01), and 'Stage Execution Status' (set to EXECUTION). The 'Number Series' section has 'Location Nos.' set to TMS-MAP-LOC. The 'Map Provider Settings' section has 'Map Provider' set to Google Map and 'Google Api Key' set to a masked field. Callouts from the left and right sides point to these specific fields.

Rounding factor when allocating freight order costs to forwarding orders

Status profile for transportation stages. This set of statuses is used for PoD (Proof of Delivery) and monitoring the actual execution of the physical delivery process.

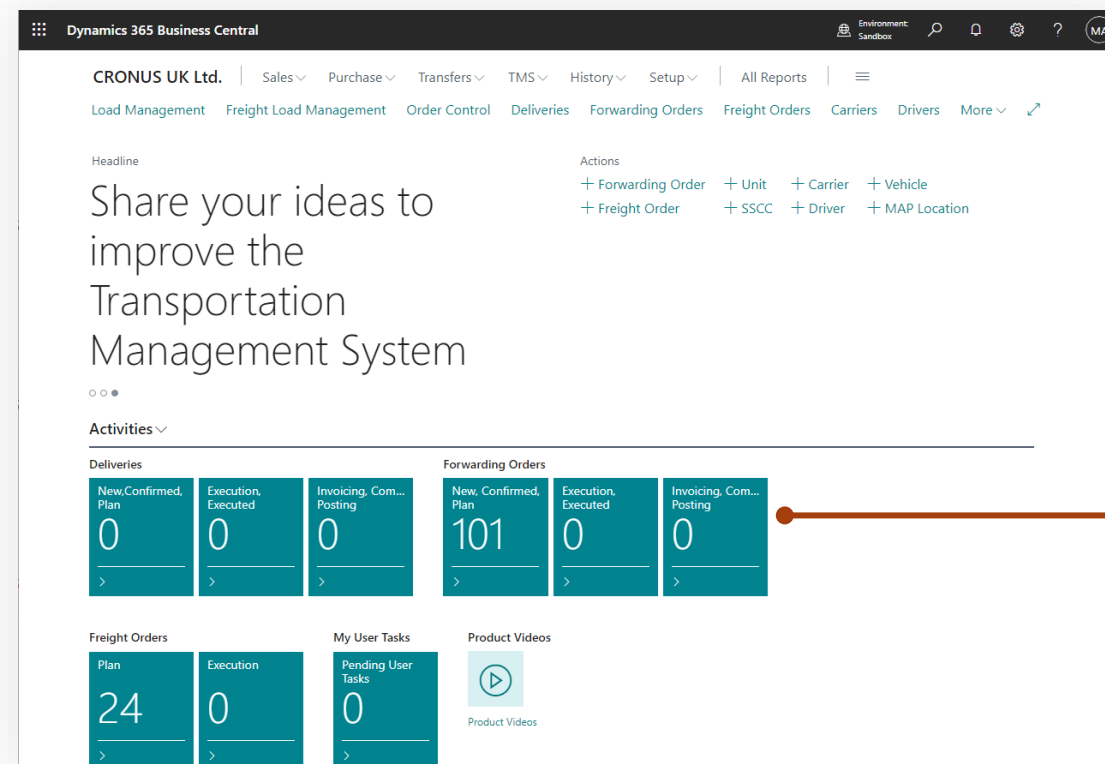
Number series for new MAP locations.

Google MAP API Key storage field

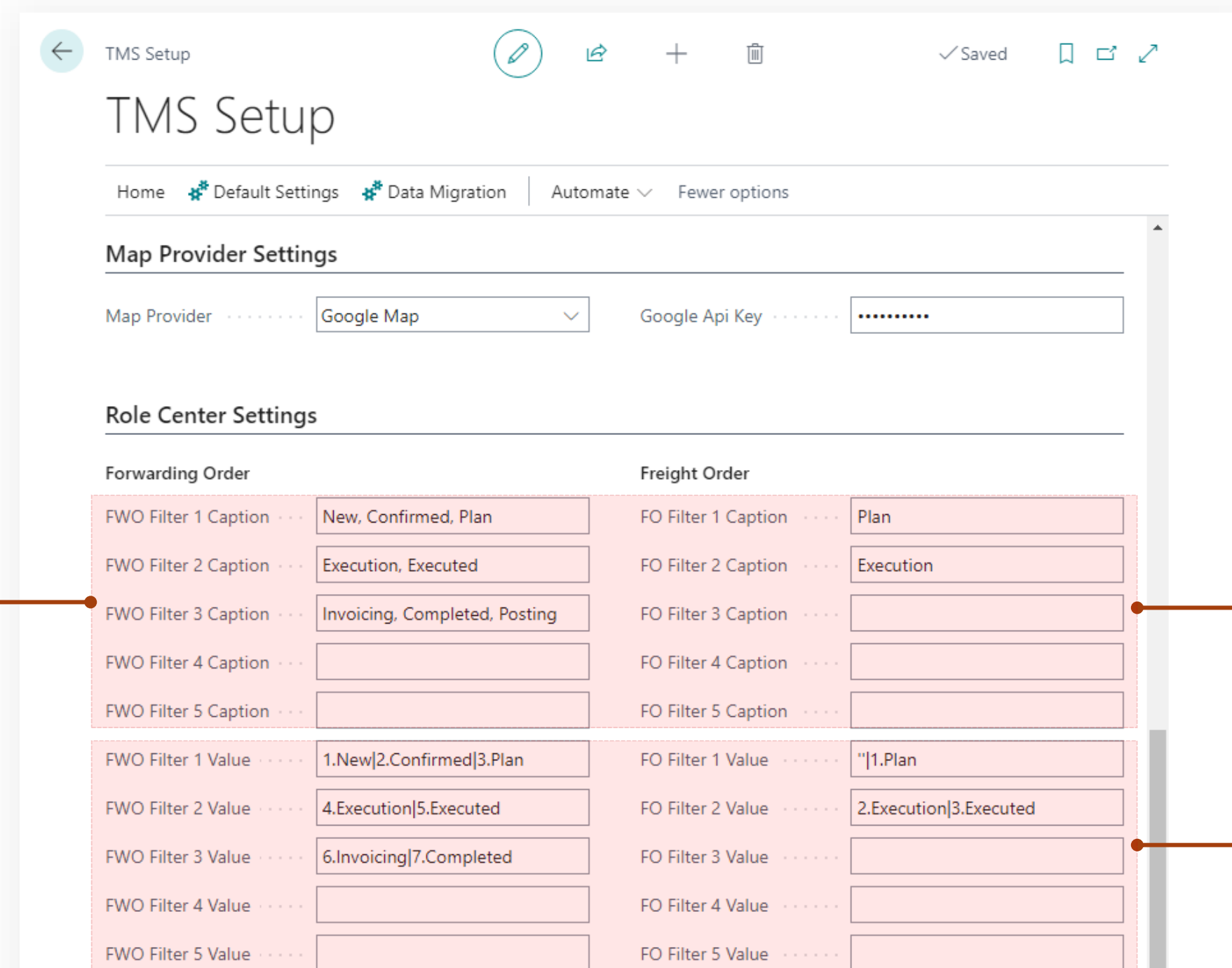


Role center settings

If you are using the TMS module role center for a user, you can set filters for documents based on the status field value, which are displayed in tiles. This allows quick access to a list of documents filtered by that status.



It enables the manager responsible for processing documents at a certain status to respond more quickly to new documents relevant to them.



Tile captions

Filter value by status field