Introduction

Welcome to Open mSupply for Desktop, Web & Android!

History🔗

Open mSupply builds on over 20 years of mSupply, over which time it has become the most used Logistics Management Information System (LMIS) in low & middle income countries.

What platforms are supported?🔗

Open mSupply runs on Desktop (Windows, Linux & Mac), as a web application in your browser, or also as an Android application (for tablets, not for phones at this stage).

Where can I download it?🔗

We provide a number of downloads on our releases page hosted in our GitHub repository. The latest version will be shown at the top of the list of releases - we generally recommend using the latest version where possible.

Within each release there is an `Assets` section which has the files you need to install open mSupply.

Windows🔗

There are installers built for each release, providing:

- **Server**: which supports either SQLite or postgreSQL and runs as a windows service. The installer name for the server is `omSupply_Server_[version].exe`
- **Desktop**: A windows application which allows you to connect to a running server. The installer name for the server is `omSupply_Desktop_[version].exe`
- **Standalone**: combines the above two; runs a server as a windows service and has a windows application which will connect to it. The installer name for the server is `omSupply_Standalone_[version].exe`
- **Demo**: A pre-configured server installation which does not require a central server to run. The installer name for the server is `omSupply_Demo_[version].exe`

Android🔗

The android version is distributed as an `.apk` file which you can install. This file has the name `open-msupply-[version]-release.apk`

MacOS🔗

For the mac desktop version, we provide a `.dmg` file, which has the name `omSupply_[version].dmg`.

What does it do?🔗

In short, Open mSupply manages your inventory, recording every receipt and issue of goods, and thereby providing a running balance of your stock on hand of each item.

Open mSupply does much more than that. Features include:

- Inventory management
    - Easily see per-batch stock on hand
    - Manage shelf locations for your store/warehouse
    - Assign locations to incoming stock, or change locations as you rearrange stock in your warehouse
    - Perform stocktakes, and assign reasons for inventory adjustments
- Receive and fulfil orders from customers (facilities you supply)
- Place orders with your supplying store
    - Quantify amounts required based on simple or complex formulas
    - Track order status as your supplying store fulfils and ships the order!
    - Receive goods into stock when the order arrives
- Be alerted to low stock levels from the dashboard

What makes mSupply special?🔗

There are a lot of systems that manage inventory. Open mSupply has unique features that make it ideal to use for health supply chains in low resource settings:

- **Offline first**: mSupply is designed from the ground up to work without internet. We know from 20 years of experience that even the most reliable internet connections sometimes fail or get overloaded. mSupply allows you to work without having to worry

about second-by-second internet quality. Of course, when you need to place orders or receive updates from other facilities, you need internet for a few minutes then.
- **Scalable**: We've designed Open mSupply to handle billions of transactions a year, but to also work on an Android tablet! You can implement mSupply in one facility, knowing that if you later decide to deploy thousands of sites, mSupply will still be the right tool.

To get some insight into the full breadth of mSupply's functionality, have a look at the legacy mSupply software documentations at https://www.msupply.org.nz - it's almost 1000 pages if you print it all (so maybe don't ☺)

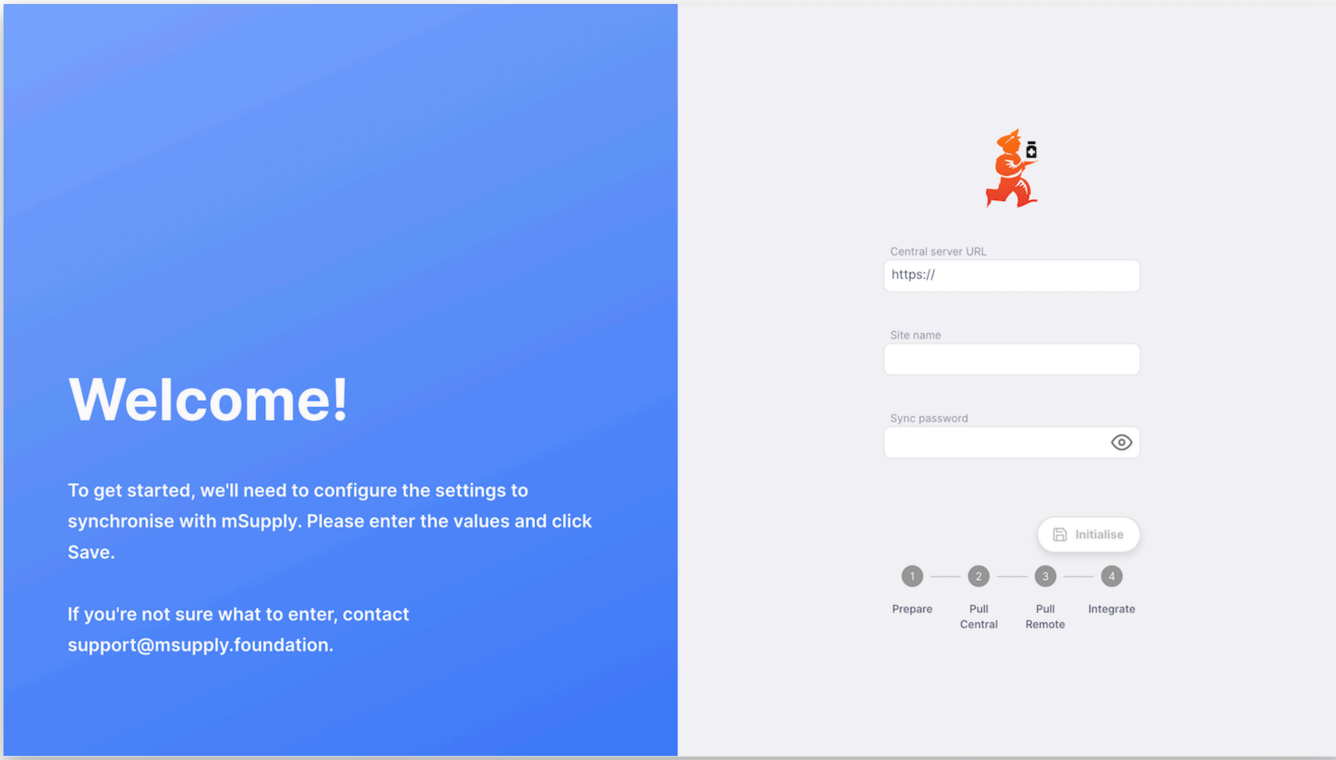
Terminology🔗

The following table outlines some of the common terms used in mSupply, and also guides users of legacy mSupply regarding terminology improvements we have made.

Open mSupply Term	Legacy mSupply term	Definition
Outbound Shipment	Customer Invoice	The creation of a supply of goods to a particular customer (facility)
Inbound Shipment	Supplier Invoice	The receiving of a supply of goods from a particular supplier
Requisition	Customer Requisitions	An order for supply of goods made by a particular customer (facility)
Internal Orders	Supplier Requisitions	A request for stock made for a particular supplier (facility)

Getting Started🔗

If you are running the server for the very first time, you may see this screen:



Don't panic! This simply means that the server needs to know how to connect to the central mSupply server. If you don't know what to enter, contact support and they can help.

Current Road Map

This road map will be updated about once every six weeks. It only covers our immediate committed work stream. Our planned feature list is much larger.

Road map🔗

%%{init: {"securityLevel": "loose", "theme":"base", "themeVariables": {"darkMode": false, "primaryColor": "#f2913d", "taskTextColor": "#fff", "sectionBkgColor": "#f2913d", "sectionBkgColor2": "#3e7bfa", "altSectionBkgColor": "white" }}}%% gantt title Open mSupply Road Map dateFormat YY-MM-DD axisFormat %B section Version 1.1 Fridgetag integration :t1-1-1,23-02-21, 35d Splitting packs :t1-1-2,23-03-06, 35d Programs feature RC1 :t1-1-3,23-02-01, 30d Android stabilisation :t1-1-4,23-02-01, 25d section Version 1.2 Preferences: t1-2-3, after t1-1-2, 28d Cold chain integration :t1-2-1, after t1-1-1, 56d Programs feature rc2: t1-2-2, after t1-1-3, 90d section Version 2.0 Dispensing: t2-0-1, after t1-2-2, 70d Enhanced R&R functionality: after t1-2-3, 56d DHIS2 Integration: t2-0-3, after t1-2-2, 28d HL7 Integration: t2-0-4, after t2-0-3, 28d Dispensing : milestone, m2, after t2-0-1, section Version 2.1 Customer returns: t2-1-1, after t2-0-4, 32d Supplier returns: t2-1-2, after t2-0-4, 32d section Version 2.2 Item properties: t3-0-1, after t2-1-1, 14d Serialisation: t3-0-2, after t3-0-1, 21d Front-end plugin framework: after t2-1-1, 32d

Planned features🔗

Area	Transaction	Feature / Capability
QUANTIFICATION	Demand Planning	Rules-based calculation of estimated product volume requirement X by distribution tier and user-defined time periods
QUANTIFICATION	Supply Planning	
QUANTIFICATION	Demand Planning	Manually edit forecasts
PROCUREMENT	Tender/ Request for quotation	Purchaser: create a new tender
PROCUREMENT	Tender/ Request for quotation	Purchaser: publish tender to a list of suppliers

Area	Transaction	Feature / Capability
PROCUREMENT	Tender/ Request for quotation	Purchaser: create electronic request for quotation (EDI 840)
PROCUREMENT	Tender/ Request for quotation	Purchaser: create benchmark prices
PROCUREMENT	Tender/ Request for quotation	Suppliers: can upload their response in Open mSupply (web portal)
PROCUREMENT	Tender/ Request for quotation	Purchaser: manually receive supplier's responses/ quotations
PROCUREMENT	Tender/ Request for quotation	Purchaser: automatically receive supplier's responses/ quotations (web portal)
PROCUREMENT	Tender/ Request for quotation	Purchaser: receive an electronic response to a request for quotation (EDI 843 / PEPPOL)
PROCUREMENT	Tender/ Request for quotation	Purchasers: evaluation of received quotations
PROCUREMENT	Tender/ Request for quotation	Purchasers: select preferred suppliers (awarding)
PROCUREMENT	Tender/ Request for quotation	Contracts and Grants management
PROCUREMENT	Purchase Orders	Create PO from a tender
PROCUREMENT	Purchase Orders	Create Calculated PO
PROCUREMENT	Purchase Orders	Create Blank PO
PROCUREMENT	Purchase Orders	Create an electronic Purchase Order (EDI 850)

Area	Transaction	Feature / Capability
PROCUREMENT	Purchase Orders	Add items from master list
PROCUREMENT	Purchase Orders	PO categories
PROCUREMENT	Purchase Orders	PO line attributes
PROCUREMENT	Vendor Management	Create/View/Edit Vendors
PROCUREMENT	Advanced Shipping Notice	Create a manual ASN from a PO
PROCUREMENT	Advanced Shipping Notice	Receive an electronic ASN (EDI 856)
PROCUREMENT	Good Receipts	Print a good receipt form (pdf, csv) from an inbound shipment (when VERIFIED status is confirmed)
PROCUREMENT	Payments	Print a supplier invoice form (pdf, csv) from an inbound shipment (when VERIFIED status is confirmed)
PROCUREMENT	Payments	Record payments made to suppliers (from a supplier invoice)
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Accept notification of arrival of shipment
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Automatically receive inbound shipment data prior to arrival
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Manually record inbound shipment data prior to arrival
RECEIVING	Inbound Shipments (ex Supplier	Display any diffrerence between ordered (req or PO) quantities and notified quantities

Area	Transaction	Feature / Capability
	Invoices)	
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Notify appropriate parties of discrepancies
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Reject order if necessary
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Display the storage requirements based on quantity shipped gross volume
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Display amount of storage space available by type
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Flag if insufficient storage space by type
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Acknowledge arrival of inbound shipment
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Manually record inbound shipment data on arrival
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Barcode scanning for goods receiving
RECEIVING	Inbound Shipments (ex Supplier	Flag discrepancies compared to the shipment received

Area	Transaction	Feature / Capability
	Invoices)	
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Record damage, discrepancy, batch mismatch, indicator, and variation information for individual line items
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Record notes concerning discrepancies and variations in goods received
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Report damages and discrepancies to appropriate individuals
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Confirm goods into stock (update of inventory records)
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Print receiving reports, stock release form, receipt authorisation, etc...
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Assign an operator to an Inbound Shipment for putting away received stock
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Putaway app: load the inbound shipment's items list and instructions for putaway.
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Display storage conditions for items (eg. temperature controlled)
RECEIVING	Inbound Shipments (ex Supplier	Display default storage location for each item

Area	Transaction	Feature / Capability
	Invoices)	
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Propose space/positions for each stock item based on define rules (eg. current space availability, based on ABC category)
RECEIVING	Inbound Shipments (ex Supplier Invoices)	Print pallet/shelf tag specifying status of goods, if appropriate
INVENTORY MANAGEMENT	Locations	Create/edit inventory storage locations (Aisle, Bin, Slot, etc.)
INVENTORY MANAGEMENT	Locations	Define storage locations hierarchy
INVENTORY MANAGEMENT	Locations	Define storage conditions (cold chain, volume, item restrictions, use restrictions, etc...)
INVENTORY MANAGEMENT	Locations	Record temperatures for storage locations (see category COLD CHAIN)
INVENTORY MANAGEMENT	Items - Stock Movement and Expiry	Record VVM status
INVENTORY MANAGEMENT	Locations	Record frozen conditions status
INVENTORY MANAGEMENT	Items - Master data	Set temperature threshold conditions per product, as appropriate
INVENTORY MANAGEMENT	Items - Stock Movement and Expiry	Alert conditions outside threshold
INVENTORY MANAGEMENT	Items - Stock Movement and Expiry	Track lots and expiry dates
INVENTORY MANAGEMENT	Items - Stock Movement and Expiry	Transfer stock from one location to another
INVENTORY MANAGEMENT	Items - Stock Movement and	Display and transmit alerts and notifications for pending expiries

Area	Transaction	Feature / Capability
	Expiry	
INVENTORY MANAGEMENT	Items - Stock Movement and Expiry	Display and transmit alerts and notifications for stock outs, overstock, understock
INVENTORY MANAGEMENT	Items - Master data	Flag items as hazardous, as appropriate
INVENTORY MANAGEMENT	Stocktake	Create/edit a stocktake for a list of items
INVENTORY MANAGEMENT	Stocktake	Filter the stock to be included: by item attributes (category, department, expiry date, etc...)
INVENTORY MANAGEMENT	Stocktake	Filter the stock to be included: by location
INVENTORY MANAGEMENT	Stocktake	Filter the stock to be included: by master list
INVENTORY MANAGEMENT	Stocktake	Print stocktake sheets (PDF format)
INVENTORY MANAGEMENT	Stocktake	Print stocktake sheets (CSV format)
INVENTORY MANAGEMENT	Stocktake	
INVENTORY MANAGEMENT	Stocktake	Stocktake app: load the stocktake sheet on a mobile device
INVENTORY MANAGEMENT	Stocktake	Stocktake app: use a barcode scanner/mobile device camera to select the item the operator is counting
INVENTORY MANAGEMENT	Stocktake	Barcode scanning for stocktaking
INVENTORY MANAGEMENT	Stocktake	Create inventory adjustments (finalise stocktake)
INVENTORY MANAGEMENT	Stocktake	Add inventory adjustments reasons
INVENTORY MANAGEMENT	Stocktake	Cycle counting
INVENTORY MANAGEMENT	Kits	
INVENTORY	Inventory	

Area	Transaction	Feature / Capability
MANAGEMENT	Adjustments	
INVENTORY MANAGEMENT	Repacks	
INVENTORY MANAGEMENT	Items - Stock Movement and Expiry	Split stock line
INVENTORY MANAGEMENT	Items - Stock Movement and Expiry	Merge stock line
INVENTORY MANAGEMENT	Pickface replenishments	
INVENTORY MANAGEMENT	Labor Management	Create/edit warehouse operators
DISPATCH	Outbound Shipment	Create a pick slip from an allocated outbound shipment
DISPATCH	Outbound Shipment	Pick slip: Display current location(s) for requisitioned items
DISPATCH	Outbound Shipment	Pick slip: create pick slip sorted by storage locations
DISPATCH	Outbound Shipment	Pick slip: Display stock expiry date
DISPATCH	Outbound Shipment	Pick slip app: load a pick slip on a mobile device.
DISPATCH	Outbound Shipment	Barcode scanning and order picking
DISPATCH	Outbound Shipment	Confirm outbound shipment as picked
DISPATCH	Outbound Shipment	Pack Order
DISPATCH	Outbound Shipment	Pack Order: Box / cartonisation
DISPATCH	Outbound Shipment	Print documents for delivery: packing list, customer invoice, goods received note
DISPATCH	Outbound Shipment	Confirm outbound shipment as shipped (Update of inventory records)

Area	Transaction	Feature / Capability
TRANSPORT	Transport order/request	Draft transport order
TRANSPORT	Transport order/request	Assign one or multiple "picked" outbound shipments to transport order (same trip or location)
TRANSPORT	Transport order/request	Determine Payload, Volume, and Dimensions
TRANSPORT	Transport order/request	Select Transportation Mode and Type
TRANSPORT	Transport order/request	Determine temperature control requirements
TRANSPORT	Transport order/request	Confirm transport order
TRANSPORT	Transport order/request	Schedule transport resources
TRANSPORT	Transport order/request	Record/Display delivery instructions
TRANSPORT	Transport order/request	Record/Display tracking number, vehicle, driver
TRANSPORT	Transport order/request	Confirm outbound shipments have been loaded
TRANSPORT	Transport order/request	Track location and update ETA
TRANSPORT	Transport order/request	Record transport history (location, temperature)
TRANSPORT	Transport order/request	Confirm delivery / print/send proof of delivery
TRANSPORT	Carrier	Create/edit Carriers
TRANSPORT	Route	Create/edit Routes
TRANSPORT	Fleet Management	
REQUISITIONS	General Request Requisition (Int. Order)	Suggest order quantities based on past comsumption data (eg. AMC)
REQUISITIONS	General	Suggest order quantities based on minimum quantity

Area	Transaction	Feature / Capability
	Request Requisition (Int. Order)	threshold
REQUISITIONS	General Request Requisition (Int. Order)	Suggest order quantities based on patient records / registry data
REQUISITIONS	General Request Requisition (Int. Order)	estimate stock needs based on aggregating requisitions by intermediate levels
REQUISITIONS	General Request Requisition (Int. Order)	estimate stock needs based on target populations
REQUISITIONS	General Request Requisition (Int. Order)	estimate stock needs quantities based on statistical forecasts
REQUISITIONS	General Request Requisition (Int. Order)	estimate stock needs point based on user-defined criteria
REQUISITIONS	General Request Requisition (Int. Order)	Display past consumption data
REQUISITIONS	General Request Requisition (Int. Order)	Display current available and usable on-hand quantity of each stock item
REQUISITIONS	General Request Requisition (Int. Order)	Display open order and inbound shipments
REQUISITIONS	General	Display open outbound orders and projected usage

Area	Transaction	Feature / Capability
	Request Requisition (Int. Order)	
REQUISITIONS	General Request Requisition (Int. Order)	Display current stock levels (SOH) at all relevant levels
REQUISITIONS	General Request Requisition (Int. Order)	Display expiry dates for on-hand stock
REQUISITIONS	General Request Requisition (Int. Order)	Generate suggested order quantities (Requested - SOH) = Suggested Qty
REQUISITIONS	General Request Requisition (Int. Order)	Display lead time for order fulfillment
REQUISITIONS	General Request Requisition (Int. Order)	Display item cost at time requisition is generated
REQUISITIONS	General Request Requisition (Int. Order)	Calculate order cost at time requisition is generated
REQUISITIONS	General Request Requisition (Int. Order)	Submit requisition (electronically or manually)
REQUISITIONS	General Request Requisition (Int. Order)	Provide approval/rejection mechanism at appropriate levels
REQUISITIONS	General	Approver can modify the requisition, if needed

Area	Transaction	Feature / Capability
	Request Requisition (Int. Order)	
REQUISITIONS	General Request Requisition (Int. Order)	Record requisition approval date
PER-PATIENT DISPENSING	Dispensing	Record dispensed medicines to an individual patient
PER-PATIENT DISPENSING	Prescription	Create/edit a prescription
PER-PATIENT DISPENSING	Prescription	Abbreviations
PER-PATIENT DISPENSING	Prescription	Drug Interactions Group
PER-PATIENT DISPENSING	Prescription	Payments and receipt / cash register
PER-PATIENT DISPENSING	Prescription	Create/edit patients
PER-PATIENT DISPENSING	Prescription	Create/edit prescribers
PER-PATIENT DISPENSING	Prescription	Repeats
PROCUREMENT	Good receipt to verify stock on POs	Create Goods Receipt / Inbound Shipment
PROCUREMENT	Good receipt to verify stock on POs	Add lines from a PO to an Inbound Shipment
COLD CHAIN	Temperature monitoring	Display and transmits alerts for temperature breach (home screen dashboard), assign one or several temperature sensors to a storage location, define threshold per item
COLD CHAIN	Temperature monitoring	Sync of temperature records to the server to feed mSupply dashboard (via Cold Chain app)
COLD CHAIN	Temperature	Integration with Berlinger temperature loggers and fridge

Area	Transaction	Feature / Capability
	monitoring	tab
SYNC	Sync Carry over	https://github.com/openmsupply/open-msupply/issues/608
OVERALL SYSTEM	User permission	Build in variable user access
OVERALL SYSTEM	Currency	Ability to support several currency and their exchange rate
OVERALL SYSTEM	Any	Upload scanned documents
PROCUREMENT	Manage templates	Ability to maintain templates
DASHBOARDS	View data on dashboards	Reports on stock consumption
PROCUREMENT	Purchase Orders	All approvers can access system to approve procurement forms
REQUISITIONS	General Request Requisition (Int. Order)	Intuitive requisition template with pull-down menus
REQUISITIONS	General Request Requisition (Int. Order)	Requested items can be routed for storage release or purchase
PROCUREMENT	Add notes and process waivers	Ability to document notes to file and procurement process waivers
OVERALL SYSTEM	Any	Ability to store contracts and Goods Received Note (GRN) in the system
PROCUREMENT	Referencing	Facilitate 3-way matching for vendor payments (PO, GRN, invoice)
PROCUREMENT	Purchase Orders	Notify PO change in status to different users or when the full PO is not fulfilled
PROCUREMENT	Matching information	Procurement and inventory modules communicate data on received goods, POs, and master lists with each other
DISPATCH	Outbound	Send a notification of approved outbound shipment

Area	Transaction	Feature / Capability
	Shipment	
DISPATCH	Outbound Shipment	Approval system of outbound shipment
PROCUREMENT	Generate Delivery note	Generate Delivery note and Waybill/Packing List
TRANSPORT	Vehicle data sheet	Record for each vehicle with key parameters (VIN, model, plate, fuel type, model year, reg. data & number, insurance date & policy number, price, etc.)
TRANSPORT	Reporting	Track key monthly vehicle data (# of days vehicle in use and under repair, km driven, odometer reading, fuel cost, liters of fuel consumed)
TRANSPORT	Reporting	"Track key monthly generator data (running hours, maintenance costs, fuel consumed)
Add notifications when expected levels are not met"		
TRANSPORT	Reporting	"Track repairs per vehicle and generator (type, date, cost, spare parts & consumables used)
Add notifications when expected levels are not met"		
TRANSPORT	Interoperability	Can be integrated with vehicle tracking hardware to capture km traveled
TRANSPORT	General	Send notifications when key documents are soon to expire (insurance, registration, etc.)
OVERALL SYSTEM	Comments	Users can communicate in the platform (i.e., leave comments during approvals process)
TENDER	General	Manage competitive bidding process
TENDER	General	maintain fixed price list for preferred vendors
TENDER	General	maintain standard list of products with estimated prices

Frequent Asked Questions

Questions about Open mSupply

Does Open mSupply work offline?🔗

Yes! Open mSupply is designed to be 'offline first' which means that users can continue to perform their daily operations without needing an internet connection. Occasional internet connectivity is required to sync data from remote sites to the central server.

What are the limits to data handling?🔗

There are three aspects to this question with Open mSupply-

- **Remote Sites** are where you do day-to-day work.
- **Cloud hosted remote sites** can be used when you have full time high quality internet.
- The **Central Server** is where master data is managed, and where all data from remote sites is aggregated for reporting.

Remote sites🔗

On a particular remote site, the database will be SQLite if running on Android, or usually Postgres if running a desktop server. We are assuming that if you have a busy site, you will upgrade to desktop (which is a painless process), so the Android limits are less relevant.

Type of record	Record limit
Products	> 1,000,000
Trade items	> 1,000,000,000
Users	configured centrally - no practical limit at a site
Suppliers	configured centrally - no practical limit at a site
Transactions	> 1,000,000,000

Cloud hosted remote sites🔗

If you host your remote site in the cloud, it can have thousands of connected users. The record limits are as above, but performance will be determined by available bandwidth both for the server and for each user's own internet connection.

The Central Server🔗

The Central Server uses Postgres, and aggregates all data from all sites, as well as being the master data server for Sites, Products (Items), Facilities, Suppliers and Users.

Type of record	Record limit
Products	> 1,000,000
Trade items	> 1,000,000,000
Users	> 100,000
Suppliers	> 100,000
Sites	> 100,000
Transactions	> 1,000,000,000

(As of 2023 we are still to rewrite the central server as an open source project - the limits for the commercial mSupply central server are lower, but we still have sites with tens of millions of transactions, and growing fast. We don't expect any site to run into limits before we transition to an open source central server).

Can you have multi-users on one Android tablet with Open mSupply?🔗

Yes!

You can have multiple users log into the one tablet.

Can you have multi-stores on one tablet with Open mSupply?🔗

Yes!

The stores visible on each tablet at each site are configured centrally. When you log in you will see all stores that you have permission to log in to. If you don't see a store you expect, check permissions on the central server and make sure the remote site has synchronised after updating permissions.

Can you have multiple users on multiple Open mSupply tablets accessing the same store concurrently🔗

Yes!

You can also access an Open mSupply server running on an Android tablet from a machine running Open mSupply desktop or from a web browser on any device.

Further, Open mSupply "publishes" its availability on the local network, so you can log into the server without messing aroudn with IP addresses and the like.

Can multiple people view/edit the same shipment/stocktake/requisiton at the same time🔗

Yes! Although the last edit will override previous edits if you both edit the same line at the same time. Stock integrity will be maintained though.

Are there any concurrent license restrictions?🔗

There aren't any restrictions on the number of users connected to a server.

Requirements

Open mSupply Requirements🔗

Open mSupply runs on a number of platforms and for a basic installation has very modest hardware requirements. The client can be a web browser, an android tablet or a PC running windows or mac OS. The server requires a little more memory and processing capability, depending on the number of users. It can run on windows, mac or linux operating systems.

Hardware Requirements🔗

General hardware recommendations🔗

- In environments with regular power outages, it is highly recommended to procure Laptop machines rather than desktop machines. Laptop machines will almost always be the best solution in terms of both cost and effectiveness for these reasons:
    - In environments with poor quality electricity supply, laptop computers will generally be more reliable than desktop computers with UPS protection. In such environments UPS batteries will normally die within 2 years. Laptop batteries have better power management and the batteries last longer
    - Even when the battery runs out on a laptop, the power management will normally cause the machine to shut down gracefully.
    - Laptop computers have built-in microphone and camera for provision of support
    - Laptop computers have built-in Wi-Fi adaptor for network connection
    - Laptop computers are smaller and lighter than desktop computers, and so are less costly to ship.
- A connected printer is not absolutely necessary in every situation, but for most situations it is a requirement. An ink-jet or laser is preferable.
- Buy hardware for which good after sales support is available
- Buy brands with a reputation for quality (even if it means buying a slower/older machine)

Windows, Mac, and, Linux hardware requirements🔗

Hardware requirements vary widely depending on what you want to use Open mSupply for. Here's a rough guide:

Machine	Technical Minimum	Recommended
Windows Client machine for use with server	64 bit processor Windows 10 4 Gb RAM, 300Mb of disk space	64 bit processor Windows 10 8 Gb RAM, 500Mb of disk space
Mac Client machine for use with server	64 bit processor macOS Mojave (10.14) – macOS Big Sur (11)(Latest release of major version is required, such as 10.14.6) 4 Gb RAM, 300Mb of disk space	64 bit processor Mac OS 10.14.6 or later 8 Gb RAM, 500Mb of disk space
Windows server	64 bit processor Windows 10 Pro or Win server 2019 8 Gb RAM 50 GB HDD/SDD volume with daily backups to an external volume	64 bit processor Windows Server 2019+ 8 Gb RAM 4 x HDD/SDD volumes, 3 configured as RAID1 or RAID5 with hot spare Daily backups to the fourth volume plus daily off-site backups Attached to a Smart UPS (see below)
Linux client or server	64 bit processor Ubuntu 20+ or similar 4 Gb RAM 256 Gb storage	64 bit processor Ubuntu 20+ or similar 8 Gb RAM 256 Gb storage
Android client or server	64 bit processor Android 10 or later 4 Gb RAM 64 Gb storage	64 bit processor Android 10 or later 4 Gb RAM 64 Gb storage

Recording stock transactions is a core Open mSupply activity. Most stock transaction data is numeric. A numeric keypad is often helpful for machines that have a lot of data entry done on them.

Mobile / tablet requirements🔗

You are able to use a browser on a tablet to connect to an open mSupply server, and the only requirement here is a suitably fast tablet with a browser such as chrome or firefox.

For a stand-alone, offline, solution a mobile application is also available for android devices.

Recommended Specifications: In short, open mSupply mobile runs on Android tablets (not on phones as there is too much data to use well on small phone screens). The application requires at least Android 5.0 (Lollipop)

	Minimum	Recommended
Display size	9.8 inches	10.1 inches
Resolution	768 x 1024 pixels	800 x 1200 pixels
Android version	5.0	8.1
Processor		Quad-core 1.3GHz
Memory		1.5 Gb RAM

In order to provide support, the device must also be compatible with MDM (Mobile Device Management) software and support google services. Please contact mSupply Foundation for details.

Please contact us for testing and / or advice before making a large hardware purchase.

Smart UPS🔗

A 'smart' UPS (Uninterruptible Power Supply) detects when the battery power is about to run out and sends a notification to software on the server which triggers a graceful shut down of the computer. To enable this, there needs to be a cable connection (normally USB) between the UPS and the computer combined with software running on the computer.

In our experience, the primary cause of computer hardware failure is data corruption due to ungraceful shutdowns. This happens when power to the computer is cut instantly, without any notification to the computer to shut down gracefully. If the machine is 'protected' by a normal UPS, then this can still happen when the battery power runs out. Even if the machine is notionally protected by a 'smart' UPS, there are a number of circumstances where this UPS protection fails:

- Cable connection and software can fail.

    - Cable becomes disconnected
    - Software isn't configured correctly
    - Software doesn't start up
- UPS batteries degrade (normally within 2 years of installation in environments with regular power cuts) and there is too little capacity to run long enough for the computer to shut down gracefully after receiving the notification from the UPS

Laptop computers tend to be much more resilient to power failure:

- A laptop's built-in 'smart' UPS is very reliable
- The internal batteries last much longer than UPS batteries
- Even if the laptop internal battery degrades, the 'smart' function appears to work much more reliably than a standalone UPS communicating with a 'tower' computer.

Here are some additional advantages of laptops vs. desktop machines:

- Lower cost of freight:
    - To send the machine to site
    - To send spare parts for repair on-site
    - To retrieve the machine from site for any repairs that can not be undertaken on site
- It is standard to have features such as Wi-Fi, Bluetooth and camera included by default and this may not be the case with desktops

A concern with laptop computers is security. It is easier to steal a laptop computer from an office than it is to steal a desktop computer. For this reason, laptops are normally configured with a physical locking feature such as Kensington lock slot.

Because Open mSupply is dealing with lots of numbers (quantities of stock), **it is highly recommended to have a keyboard with a numeric keypad**. Smaller laptop computers (14“ screen or less) will not have this. Smaller laptop computers normally have an impractically small screen. It is therefore recommended to procure a laptop computer with a keyboard that includes a numeric keypad - which will necessarily entail a larger screen.

Useful productivity accessories for laptop computers include

- External mouse (not wireless - batteries replacement is expensive and environmentally problematic)
- External keyboard (not wireless - batteries replacement is expensive and environmentally problematic)

- External screen

Bandwidth and Latency requirements🔗

Firstly, this is a good time to mention our synchronisation system, which has saved many countries from a failed installation!

Offline (Sync) mode🔗

- 128kbps bandwidth
- high latency (e.g. satellite) is OK, and users will not notice it in day-to-day operations, as sync is running in the background, and requests for data a fulfilled from the local database, not over the internet.
- intermittent (say only once a week) is OK

Cloud hosted (Online) mode🔗

- The initial download of Javascript code is around 1 Mb, so a 512kbps connection or faster is best (loads in 10 seconds or so)
- You need an internet connection on to use Open mSupply in this mode.
- high latency (e.g. a satellite or overloaded connection) will result in slower performance

Backup system🔗

Once you start using Open mSupply, it's important that you have a method of backing up your data. In a default installation, Open mSupply stores all its data in a file that rapidly becomes large. You need, therefore, to have a high capacity removable storage device. We strongly recommend the use of an external hard disk using either firewire (IEEE 1394) or USB2 to facilitate off-site storage of backups.

- If not using our internet backup service, you need to be able to store backed up data off-site to prevent the risk of loss by fire, theft, etc.

Antivirus🔗

Windows based operating systems are particularly prone to malware if precautions are not taken. We recommend the following precautions:

- Install a reputable anti-virus program, including web protection if the computer has access to the internet
- Disable USB ports - refer to this site for suggested methods

Ensure that access to passwords to allow exceptions to the above two measures are kept secure.

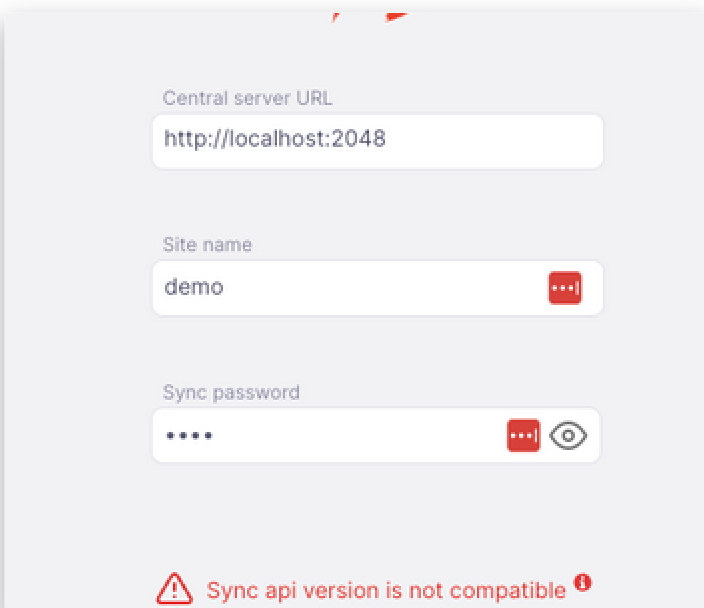
mSupply🔗

An installation of mSupply is currently required when running open mSupply (this is used to manage a number of centralised aspects of the system). The version of both mSupply and open mSupply is important, as not all versions of each are compatible with each other.

The table below shows which version of mSupply you will require when running open mSupply

Open mSupply	mSupply
1.1.00 - 1.1.16	7.04.01+
1.2.00+	7.05.05+

If you attempt to connect to an imcompatible server you'll get an error message like this:



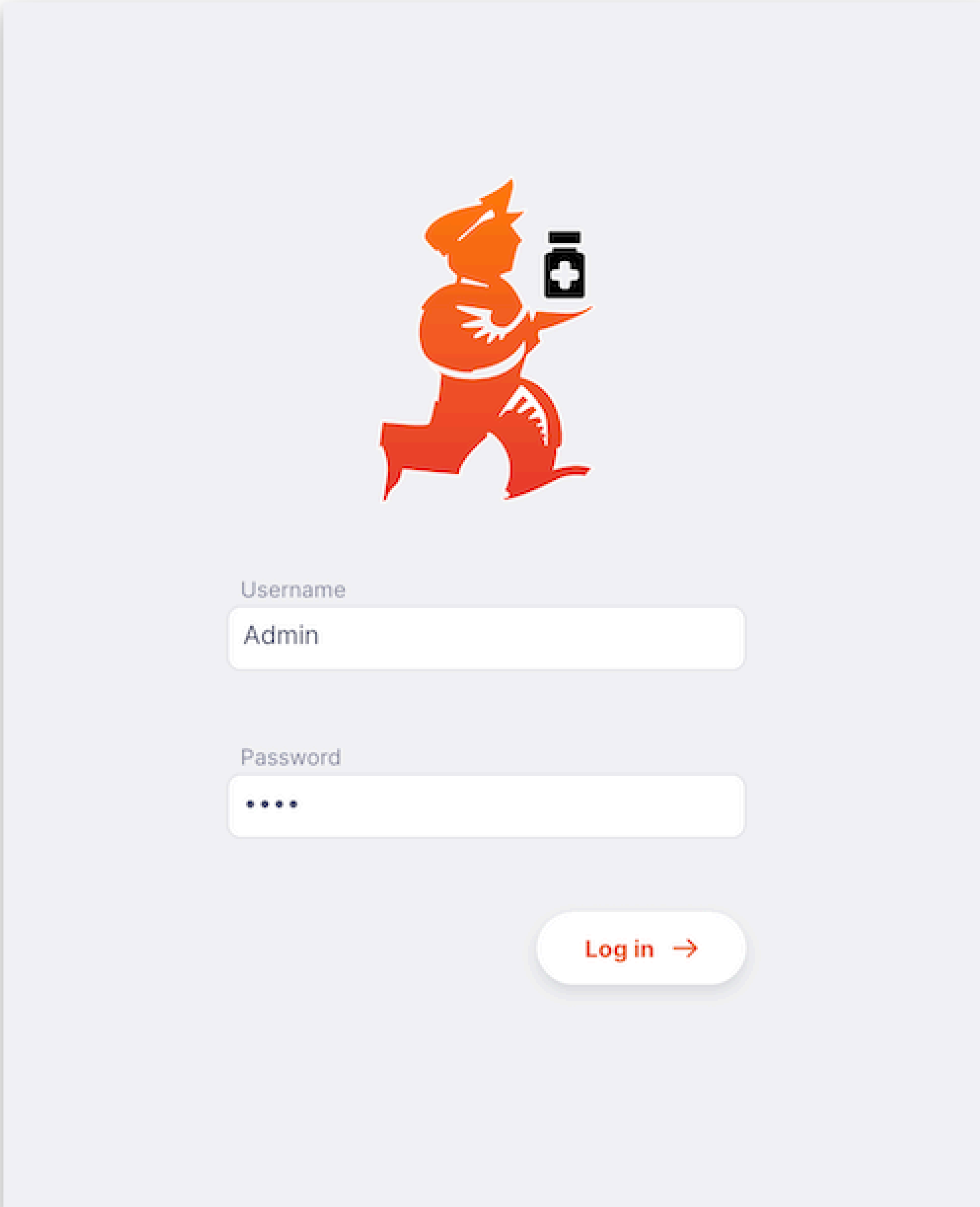
Tutorial

Open mSupply Tutorial🔗

This tutorial is designed to guide you through the basics of using Open mSupply

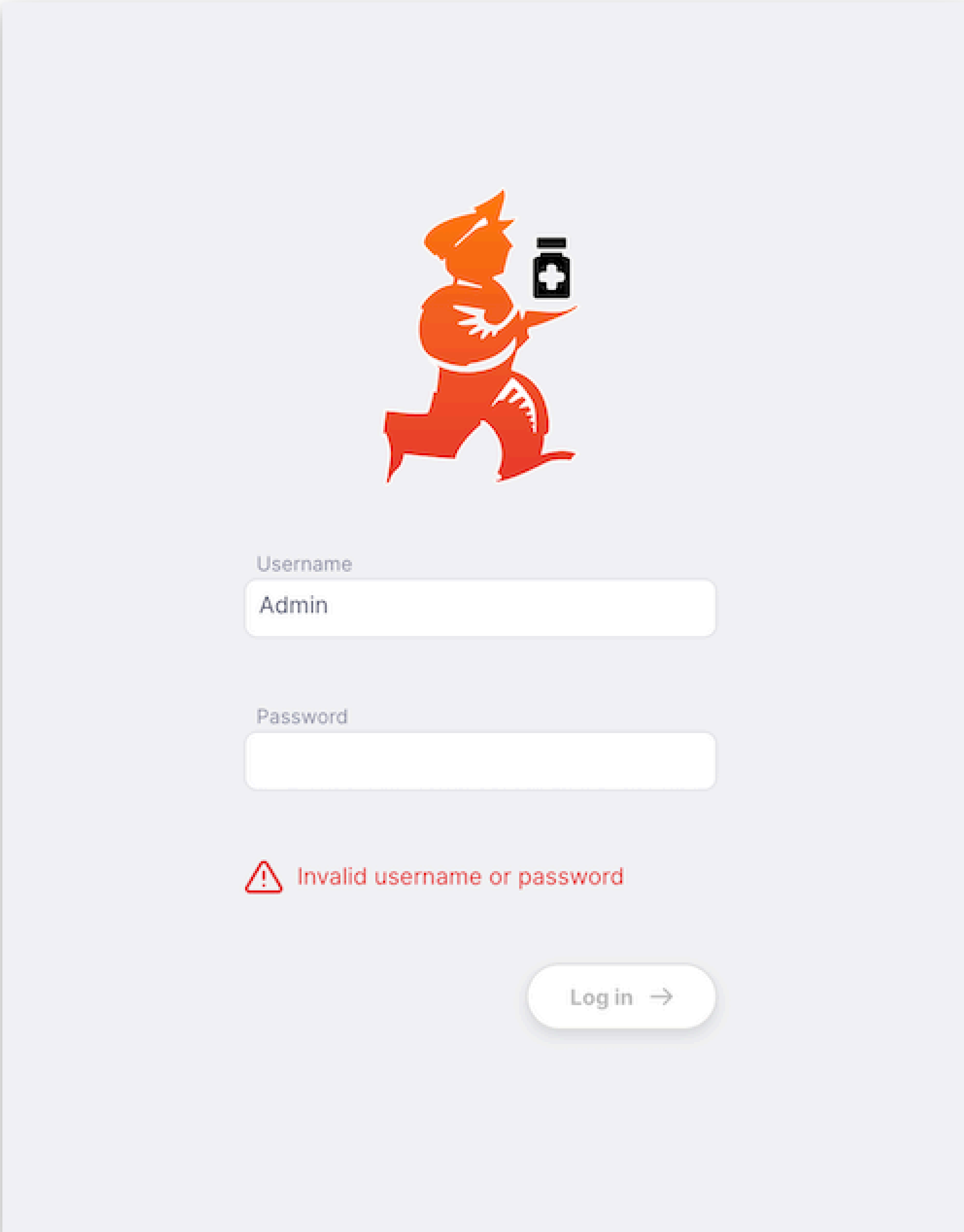
Logging in🔗

1. For a start, you'll need to open your web browser. We like Firefox, but Chrome and its myriad children will also suffice.
2. Enter the web address (URL) of your mSupply server. In our case we're using https://demo-open.msupply.org - our test web site.
3. After pressing on your keyboard you'll be shown the login page



4. Enter your user name and password and press on your keyboard, or click the [Log in] button

All going well, you'll be redirected to the dashboard page. If there was a problem, you'll see an error message, like this:

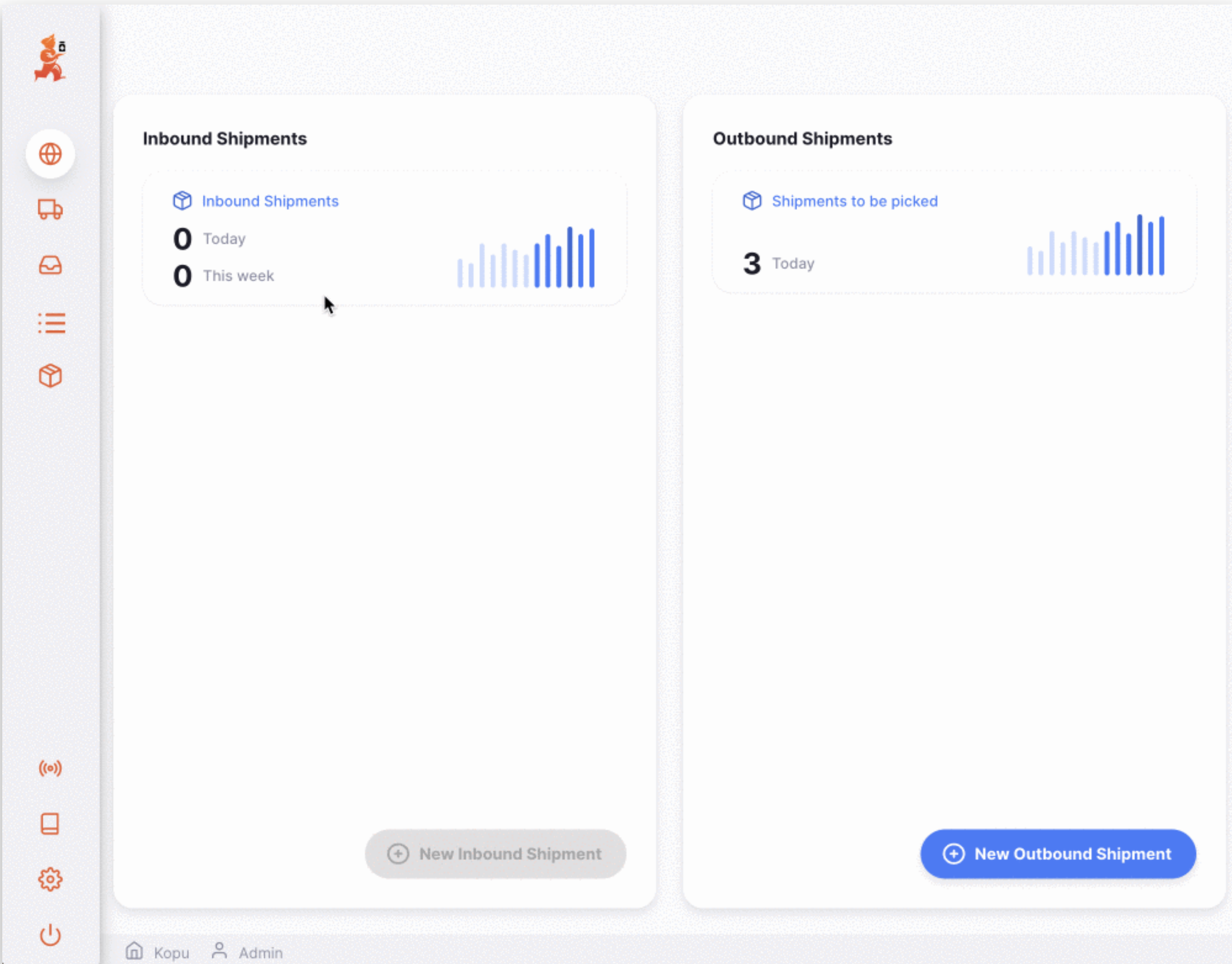


Try re-typing the username and password (note that both are case-sensitive). When you log in, the default store for your user is selected as the current store. If you have access to other stores, you'll be able to change stores after logging in (see below). If you have logged in previously, and changed stores, then the most recent store will be selected for you when you log in.

Navigating around

The main menu is on the left side of the screen. If you have a small screen size, then it will be collapsed by default - for larger screens it will instead be open by default. To open and close you can click on the logo at the top, as shown below. The menu remains either open or closed once you have selected an option.

If the menu is closed, simply hovering over the menu items will open it, in which case clicking on an item will let the menu close again. If you are on a tablet, clicking on a menu item will have the same effect.

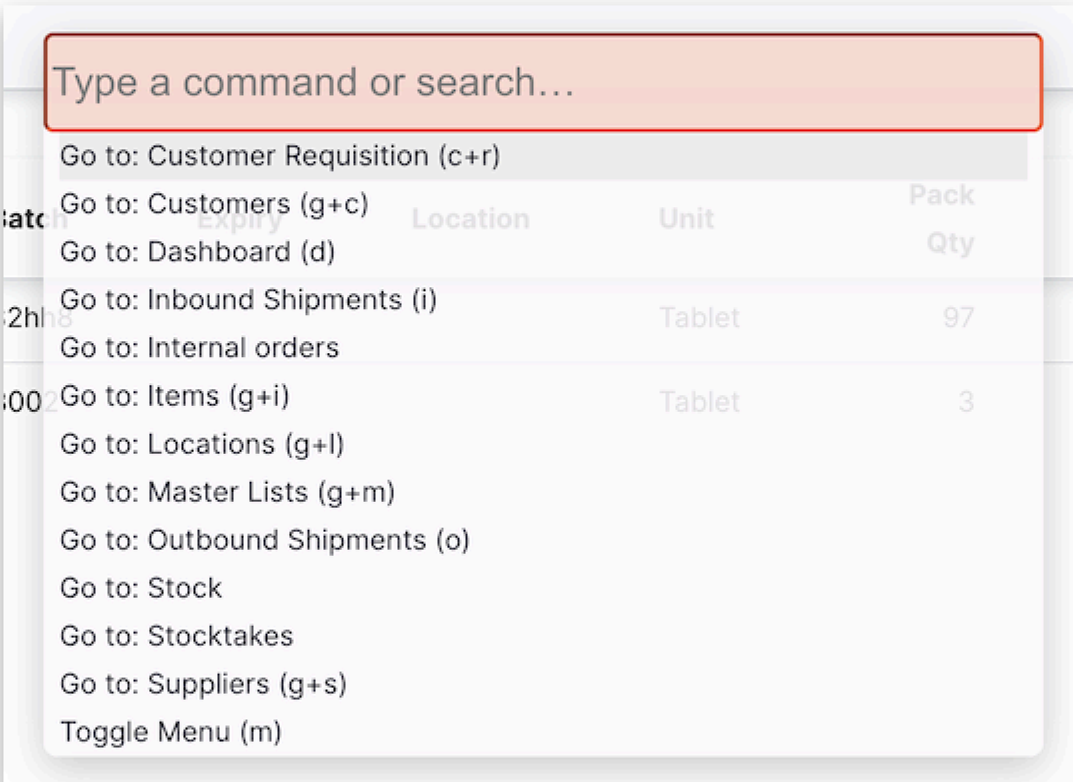


On some screens you'll see that the header shows a heading, such as **Outbound Shipment** in the example above. Clicking on a specific shipment then changes that heading to **Outbound Shipment/ #[the shipment number].** You are able to click on the **Outbound Shipment** part to return to the list - or use the main navigation on the left.

Keyboard shortcuts🔗

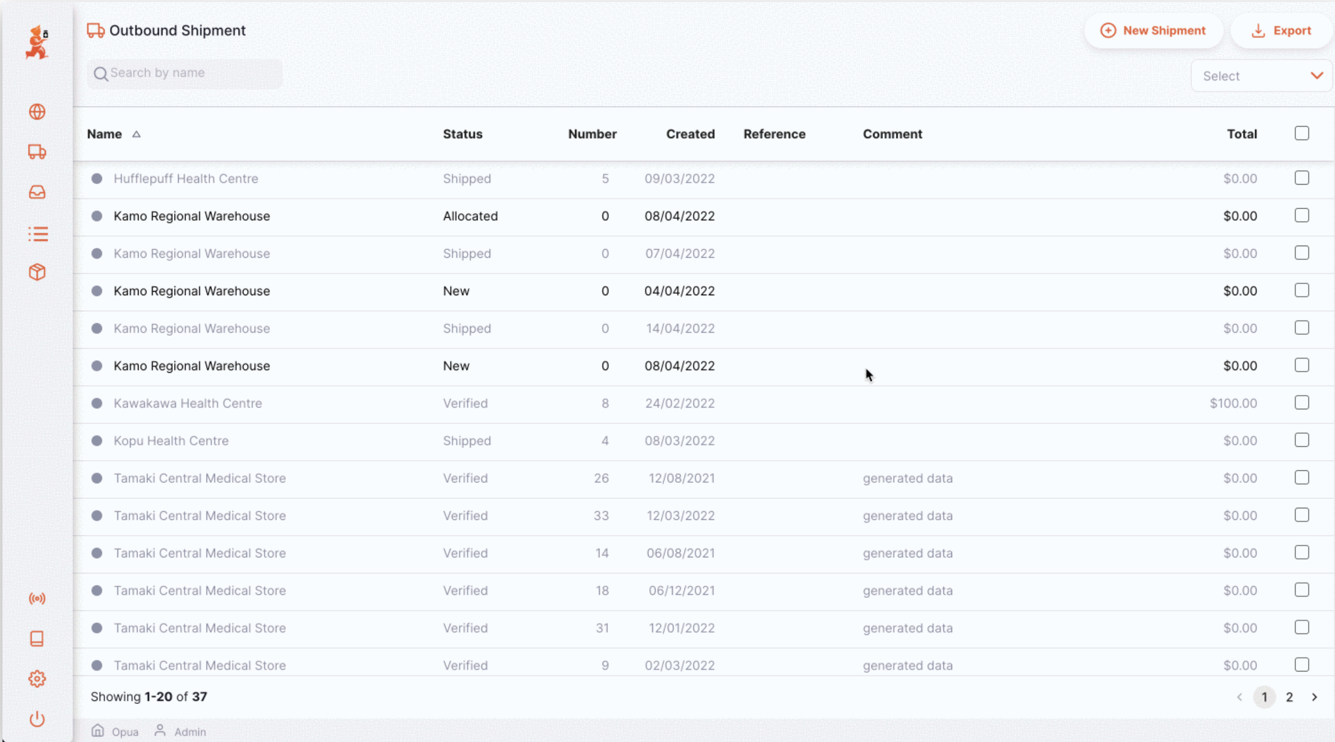
There are keyboard shortcuts used throughout open mSupply. Rather than remember them all, to get started you simply have to remember the combination `control (ctrl)+k` (windows and linux) or `cmd (⌘)+k` (mac)

This will bring up the following window, no matter which page you are on:

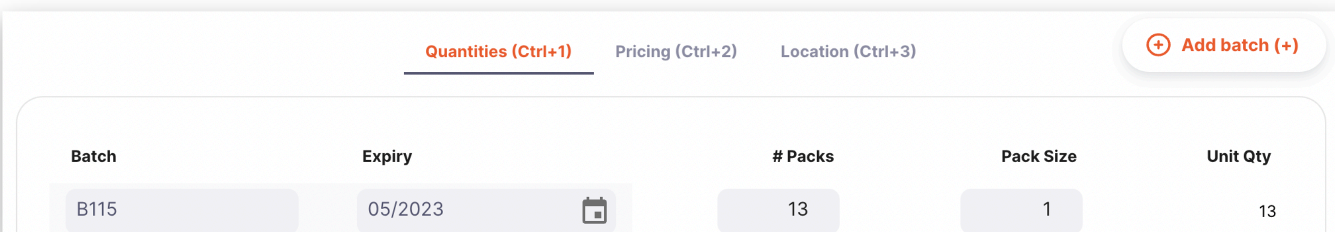


This shows you the list of globally available shortcuts, for example pressing `d` on your keyboard will take you to the dashboard (unless you are entering text into an input field!).

However, you can also click on an item in the list, or search available commands:

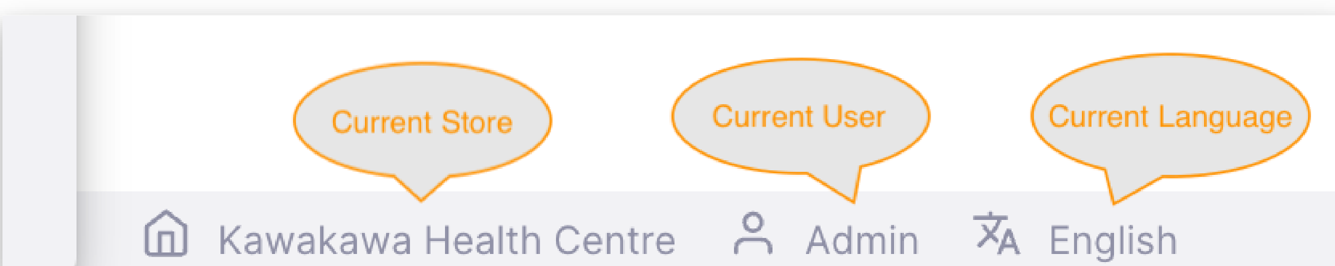


In addition - there are various places where specific keyboard shortcuts are available. An example is the tab control used in both Stocktakes and Inbound Shipments. Here you can use `control+1` to navigate to the first tab (Quantities) or `control+2` for the second tab (Pricing) etc. If you press + on your keyboard, you can add a new batch.

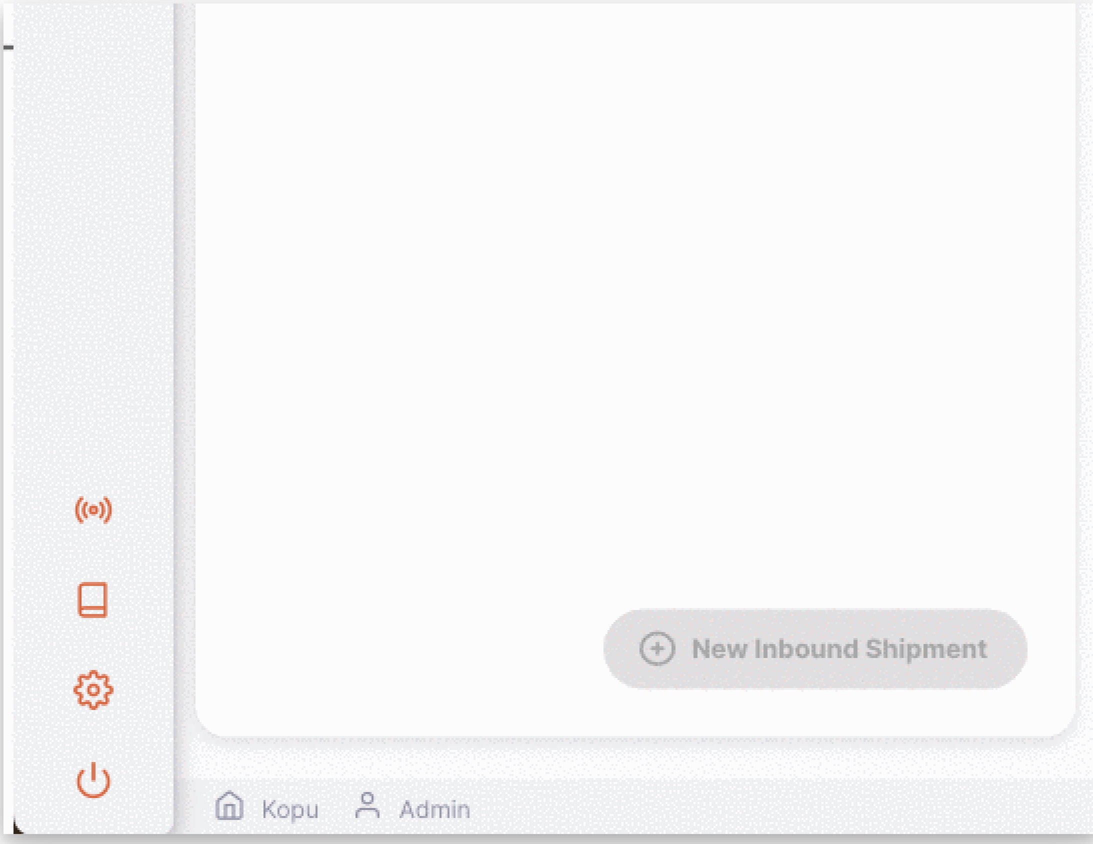


Footer🔗

The bottom of the screen contains some useful information and is shown on every screen

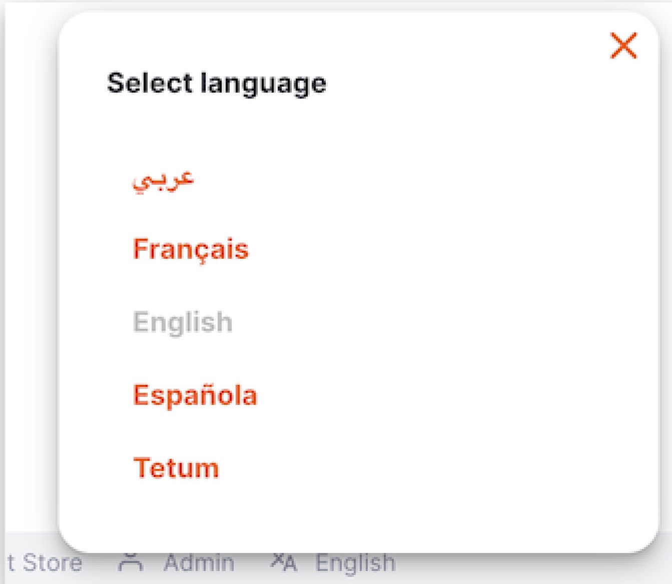


Some users have access to more than one store. To change the store which is currently selected, simply click on the store name in the footer:



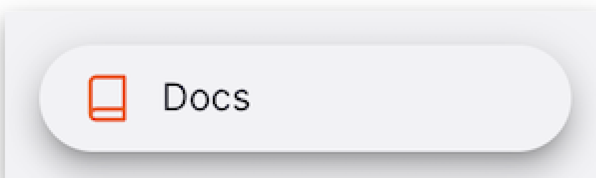
You will see the notification and the store name in the footer will be updated. From now, all actions will be in the newly selected store.

In a similar way, you can select another language by clicking on the current language in the footer:



Help!🔗

If you get stuck at any time when using the site, click on the `Docs` menu item.



This will take you to the documentation page which relates to the current page you are viewing.

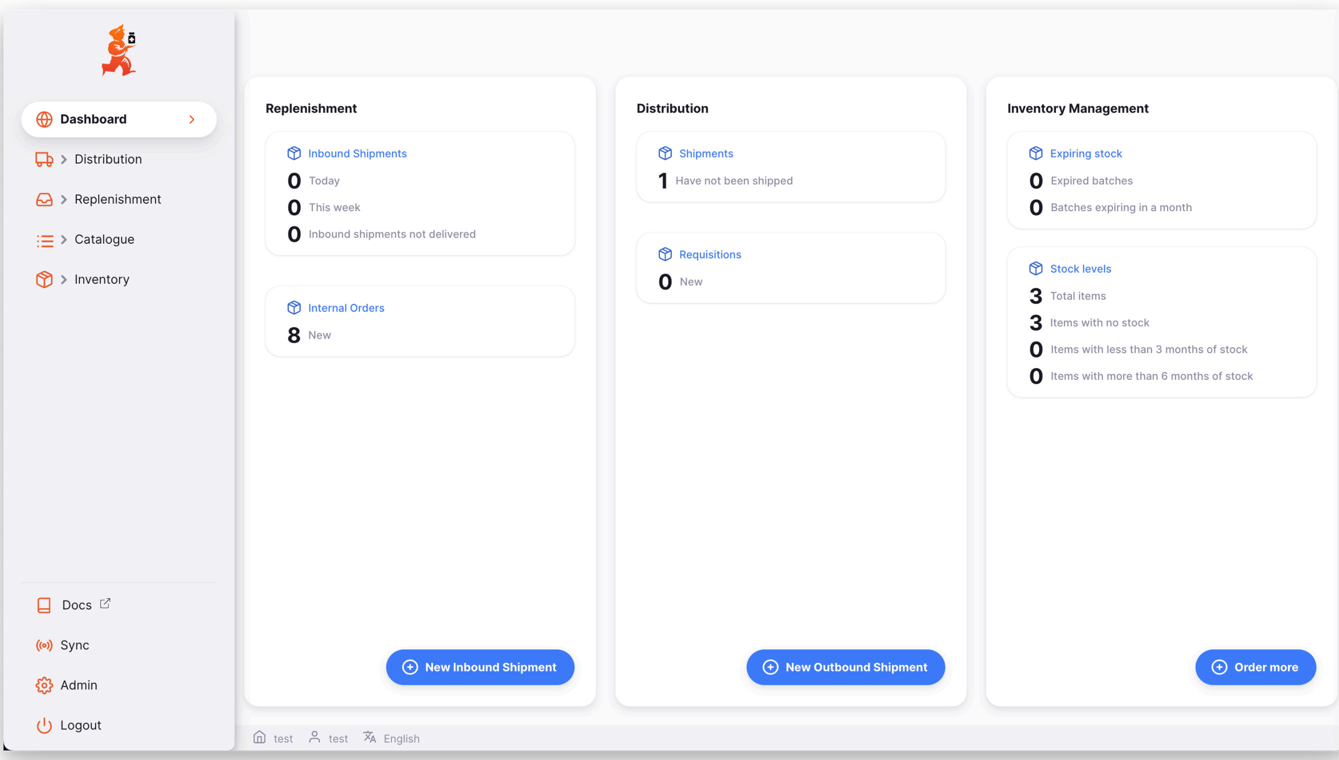
Dashboard

The landing page

Too many Dashboards!🔗

Yes, we use the term *Dashboard* for more than one thing. Open mSupply has a landing page which gives an overview of some statistics, and has some useful links, which we will talk about here, and also a system dashboard that uses Grafana, and gives an overview of all sites in your country (or organisation).

What's on display?🔗



You can see some statistics for shipments and stock:

- Replenishment
    - Inbound Shipments
        - **Today**: Shows the number of inbound shipments created today
        - **This week**: The number created during the current week

        - **Inbound shipments not delivered**: Number of shipped invoices that have yet to be delivered
    - Internal Orders
        - **New**: Shows the number of new Internal Orders
- Distribution
    - Shipments
        - **Have not been shipped**: The number of Outbound Shipments that have not been set to `Shipped` (or later) status
    - Requisitions
        - **New**: The number of new customer requisitions
- Inventory Management
    - Expiring Stock
        - **Expired batches**: The number of stock lines in the current store which have expired
        - **Batches expiring in a month**: The number of stock lines in the current store which will expire within the month
    - Stock levels
        - **Total items**: A count of the number of items in this store
        - **Items with no stock**: The item is visible in this store, but have no stock recorded
        - **Items with less than 3 months of stock**: Which is based on the average monthly consumption (AMC) for this item in the current store
        - **Items with more than 6 months of stock**: As above, based on AMC for the item in the current store

There are buttons towards the bottom of the page as well which allow you to create shipments and requisitions.

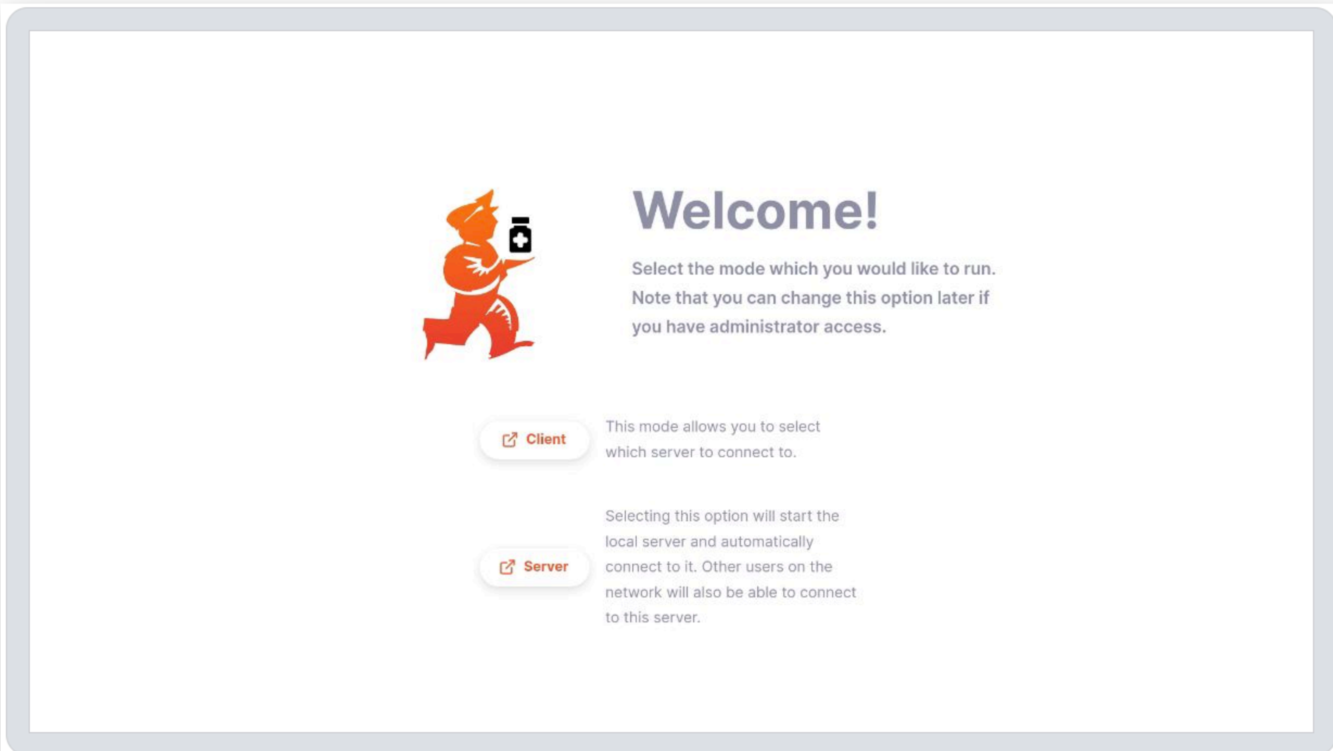
Mobile

Getting started with the mobile application.

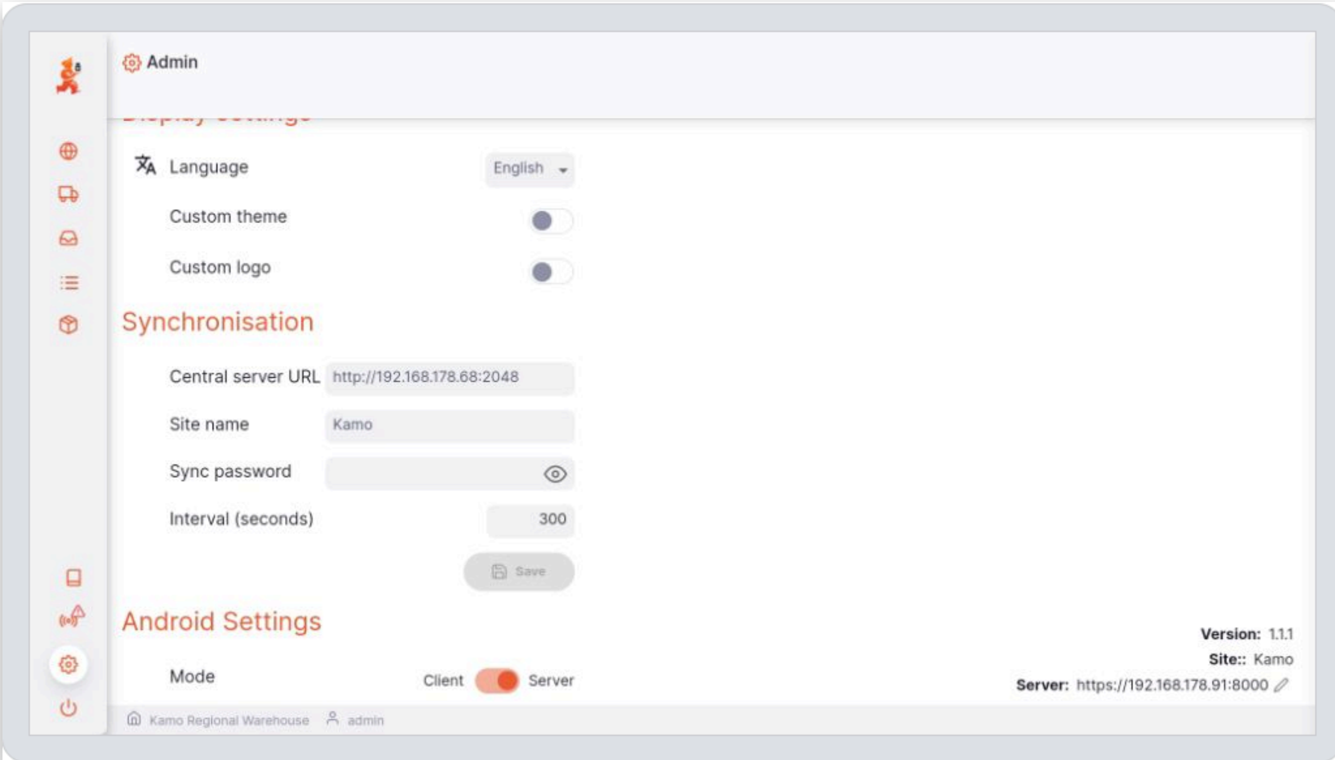
Getting started🔗

When you first start the mobile app, you'll be greeted with a welcome screen which asks if you'd prefer to run in one of two modes:

- **Client** Which is where the mobile app connects to a server on your local network
- **Server** The app will run a full version of the Open mSupply server locally. You can configure this server to sync with a central server



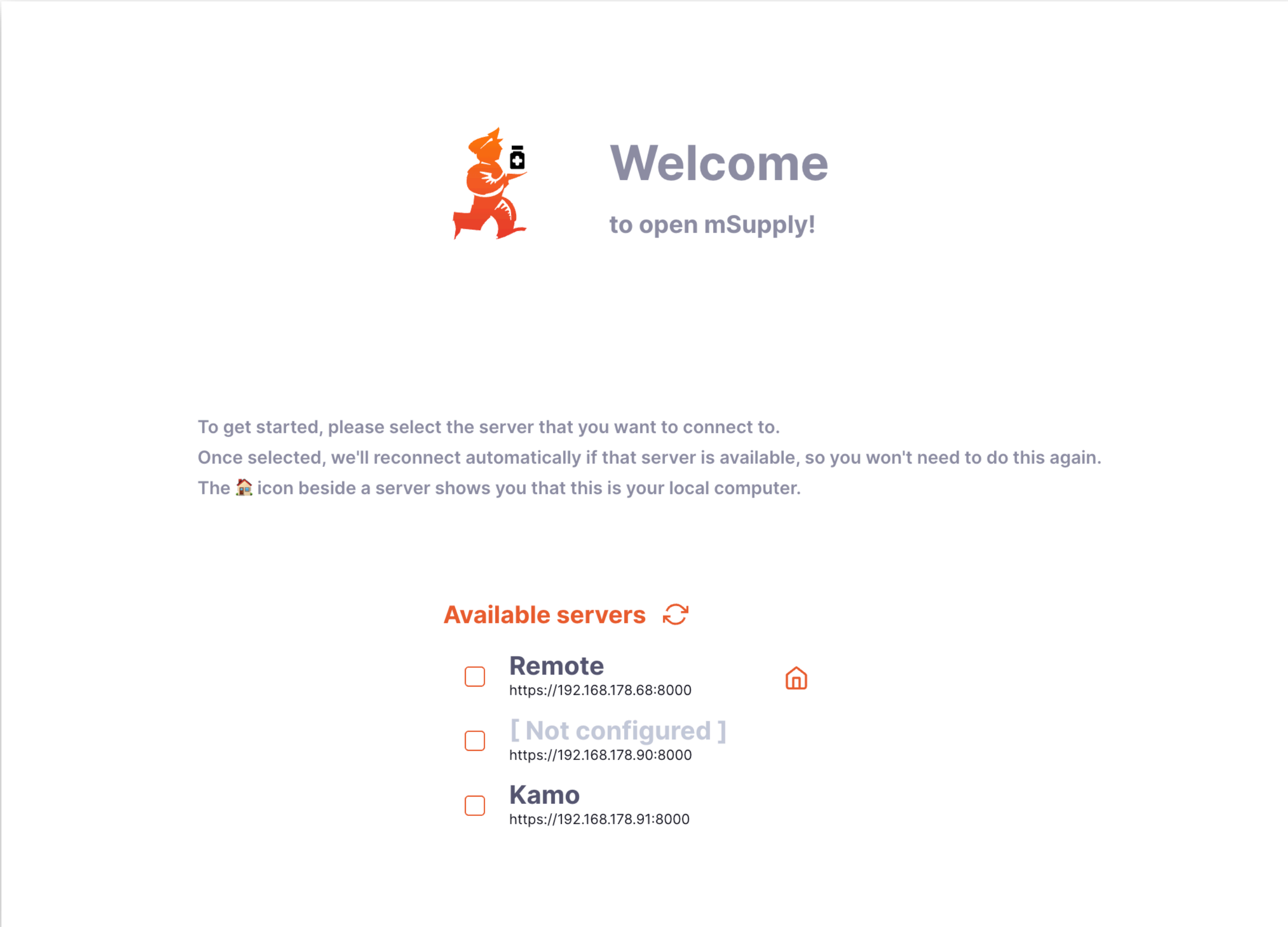
Simply click the button of the option you prefer. Don't worry though! this can be changed later. If you navigate to settings after configuring your app, you will have an additional option when viewing on mobile:



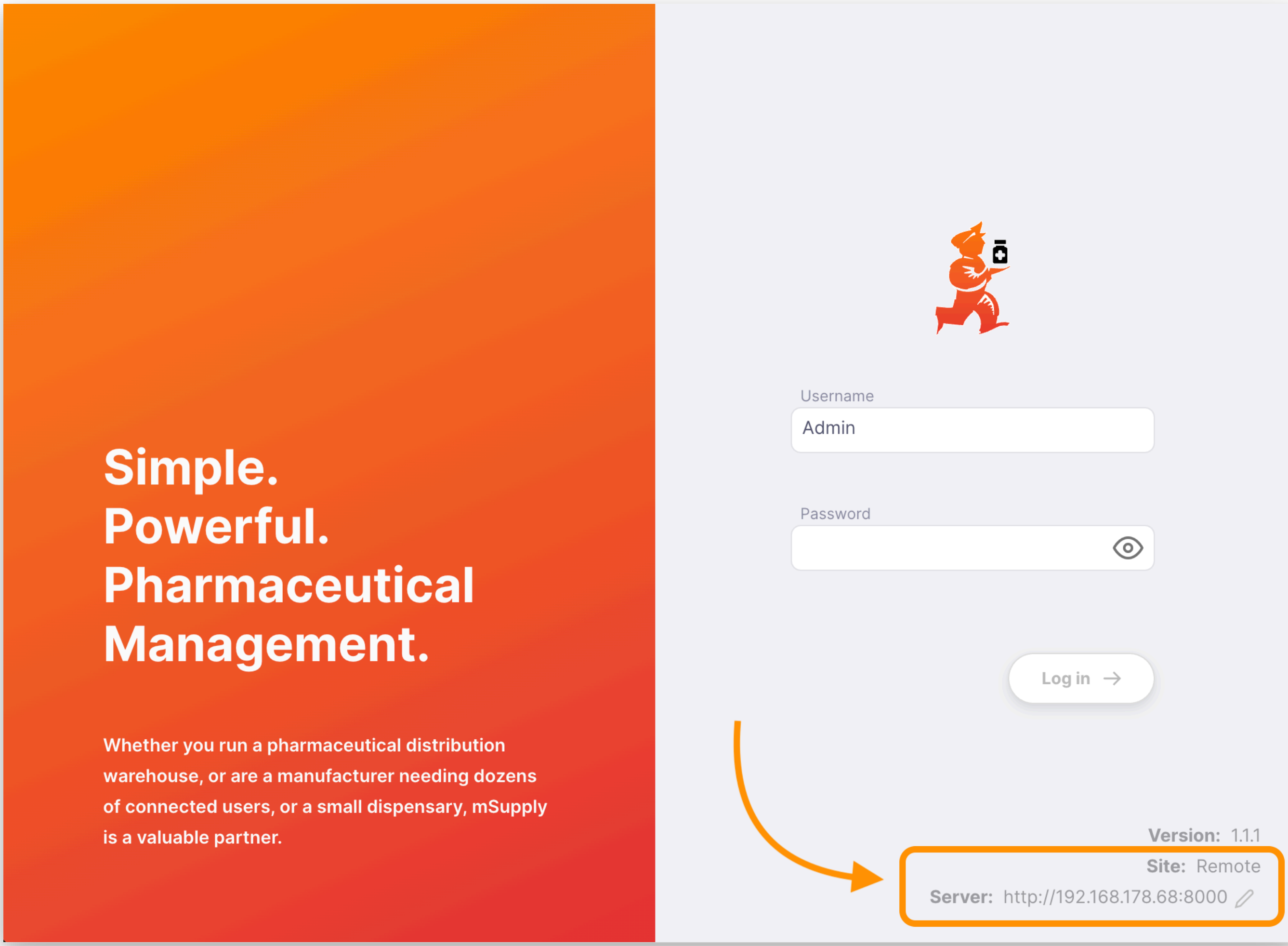
Client mode🔗

After selecting the client mode, you'll see a list of available servers. These are the servers on your local network.

You may see `[ Not configured ]` next to some of the servers - this indicates that the server hasn't yet been configured to synchronise with a central server yet.

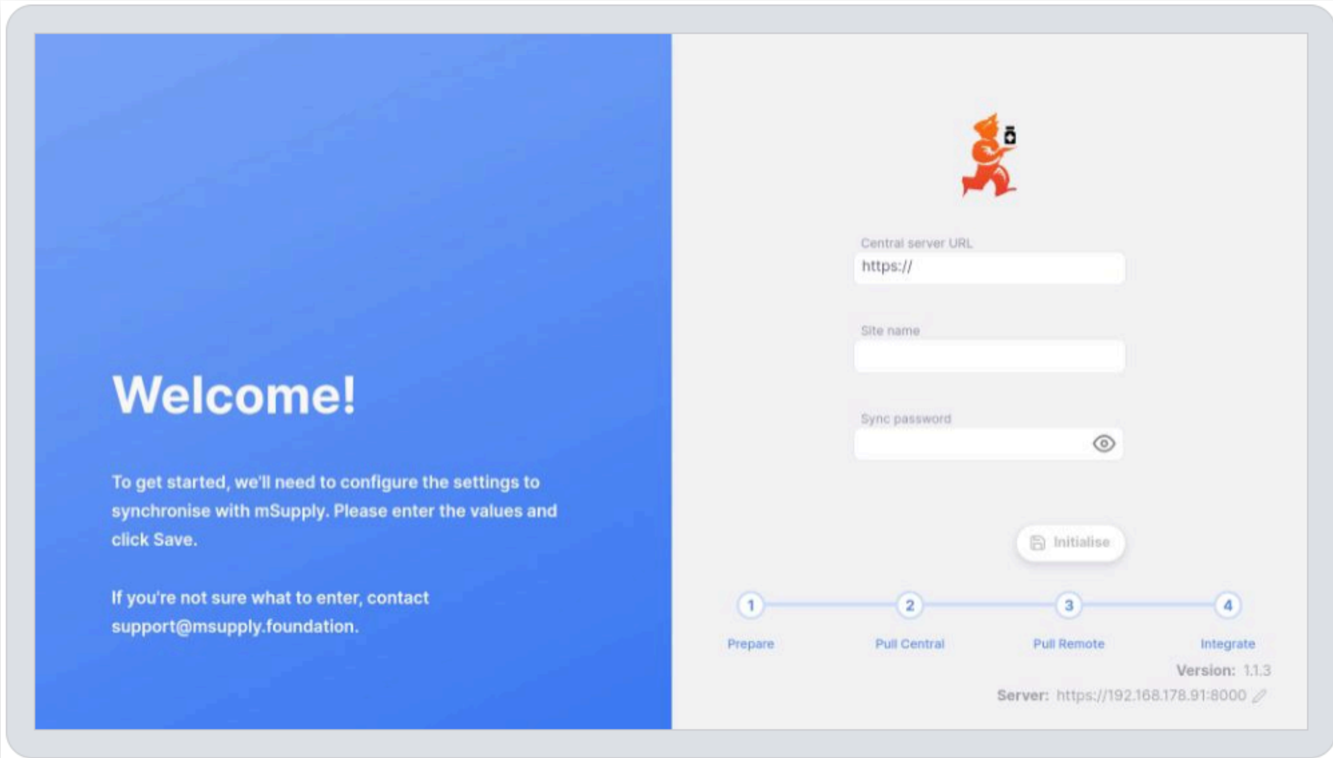


Click on the name of the server to select it. If you wish to change server later, you can do this from the login screen. When using the mobile app, the login screen has two additional items, as shown. Clicking the pencil icon will redirect you back to the server selection screen.



Server mode🔗

In server mode, you will configure the server to run on the mobile device, and synchronise with a central server. The initialisation screen is the same as for the desktop and web versions, with the addition of the server details in the bottom right:


Welcome!
To get started, we'll need to configure the settings to synchronise with mSupply. Please enter the values and click Save.
If you're not sure what to enter, contact support@msupply.foundation.
Central server URL
https://
Site name
Sync password
Initialise
1
2
3
4
Prepare
Pull Central
Pull Remote
Integrate
Version: 1.1.3
Server: https://192.168.178.91:8000

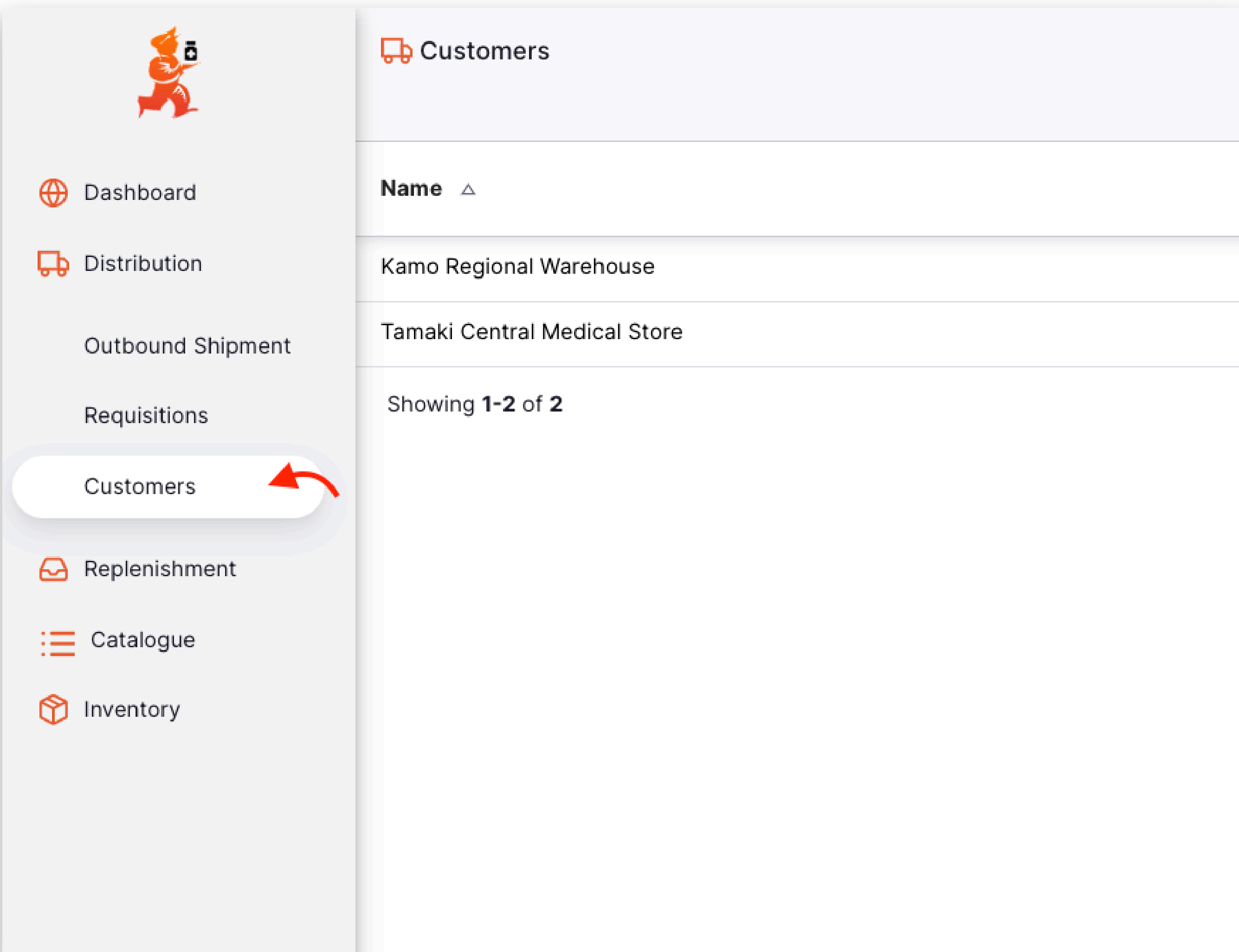
Customers

View and manage your customers

At the moment, you are only able to view your customers and their information. In the future, you will be able to create and edit your customers (provided you have the authorisation to do so!).

Viewing Customers🔗

To view the customers of your store, go to the `Distribution` menu and click on `Customers`.



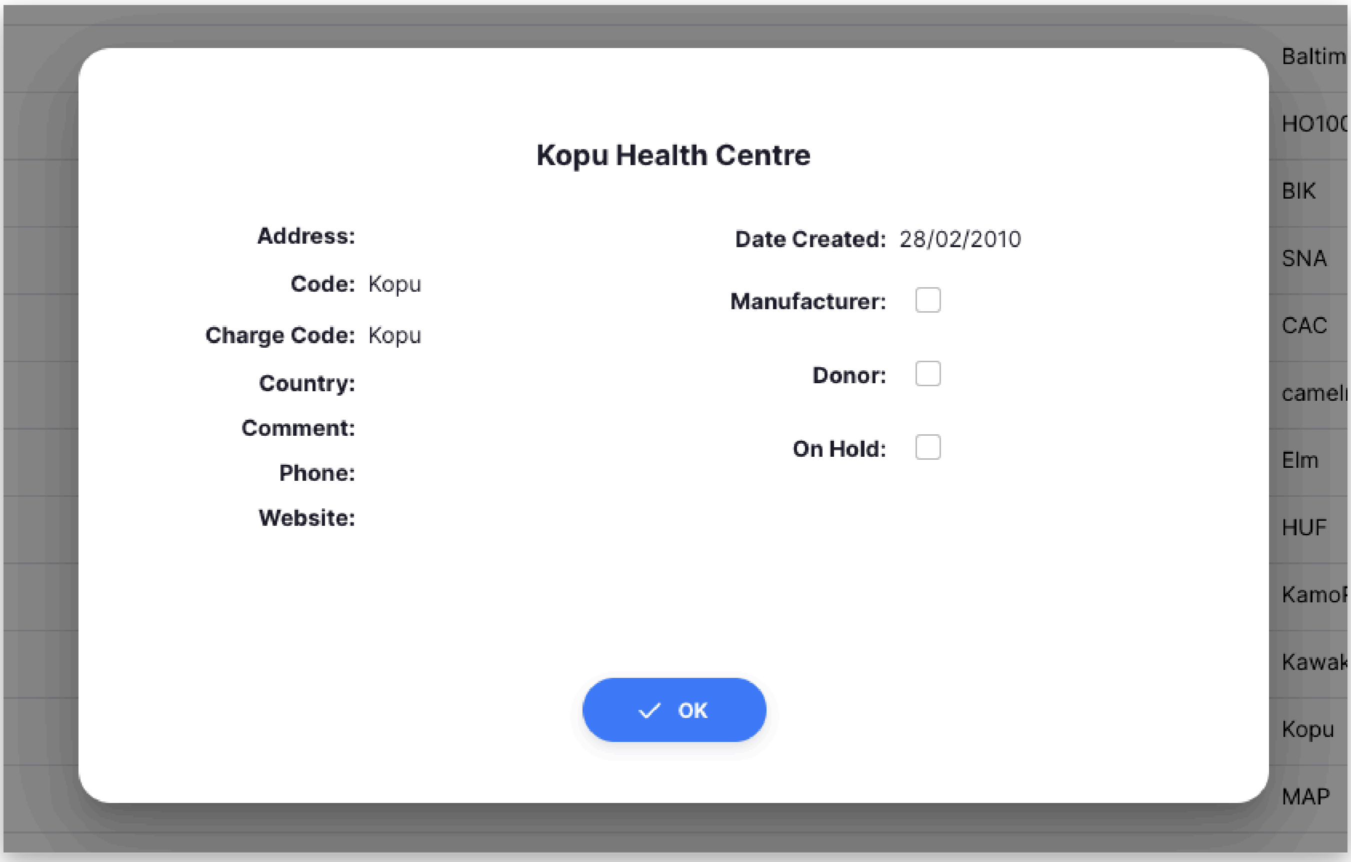
You will be presented with a list of customers visible to your store.

You can only see customers that are visible for your store. There may be more customers in your organisation.

If you don't find the customer you are looking for, contact your administrator.

Viewing Customer Details🔗

Tap on one of your customers to see their details.



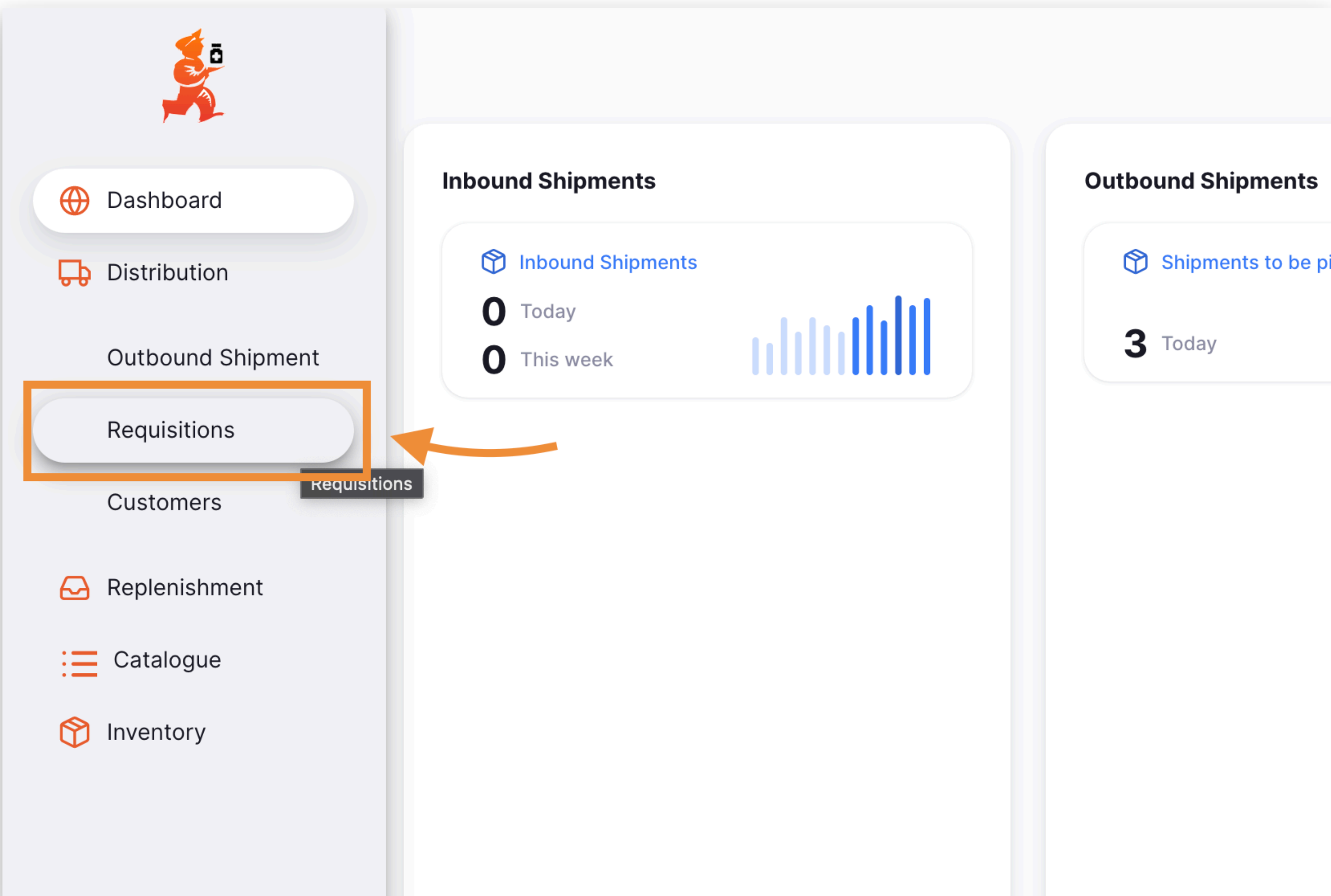
Requisitions

Managing your customers' orders

When a customer orders stock from you, they create an **Internal Order** in their store. This will appear as a **Requisition** in your store.

Viewing Customers' Requisition🔗

To know if you have received requisitions from your customers, go to `Distribution` > `Requisition`

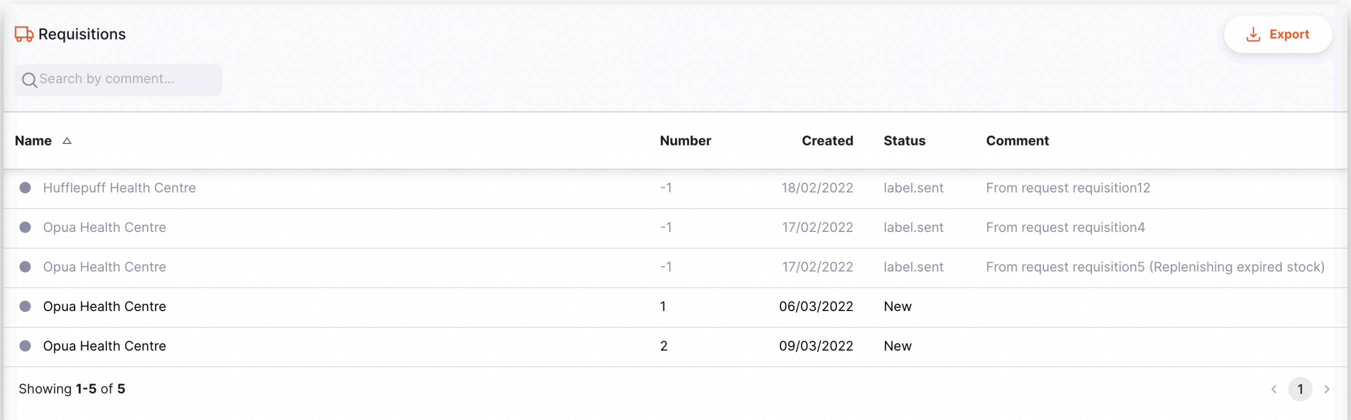


You should see a list of all requisitions sent by your customers.

From this screen you can:

- View a list of Requisitions

- Export Requisitions to a `.csv` file

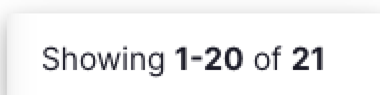


Requisition list🔗

1. The list of Requisitions is divided into 5 columns:

Column	Description
Name	Name of the Customer
Number	Reference Number of the requisition
Created	Creation date of the requisition
Status	Current Status of the requisition
Comment	Comment for the requisition

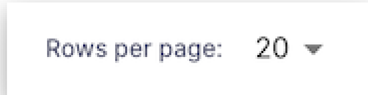
1. The list can display a fixed number of requisitions per page. On the bottom left corner, you can see how many requisitions are currently displayed on your screen.



3. If you have more requisitions than the current limit, you can navigate to the other pages by tapping on the page number or using the right of left arrows (bottom right corner).

4. You can also select a different number of rows to show per page using the option at

the bottom right of the page.



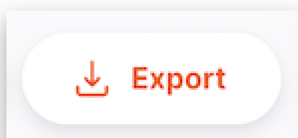
Search by comment

You can filter the list of requisitions by comment. This can be useful if you're looking for one particular requisition!

Start typing in the `Search by comment` field (on the left, just above the list headers). All the requisitions which have a comment matching the entered text will appear in the list.

Exporting Requisitions

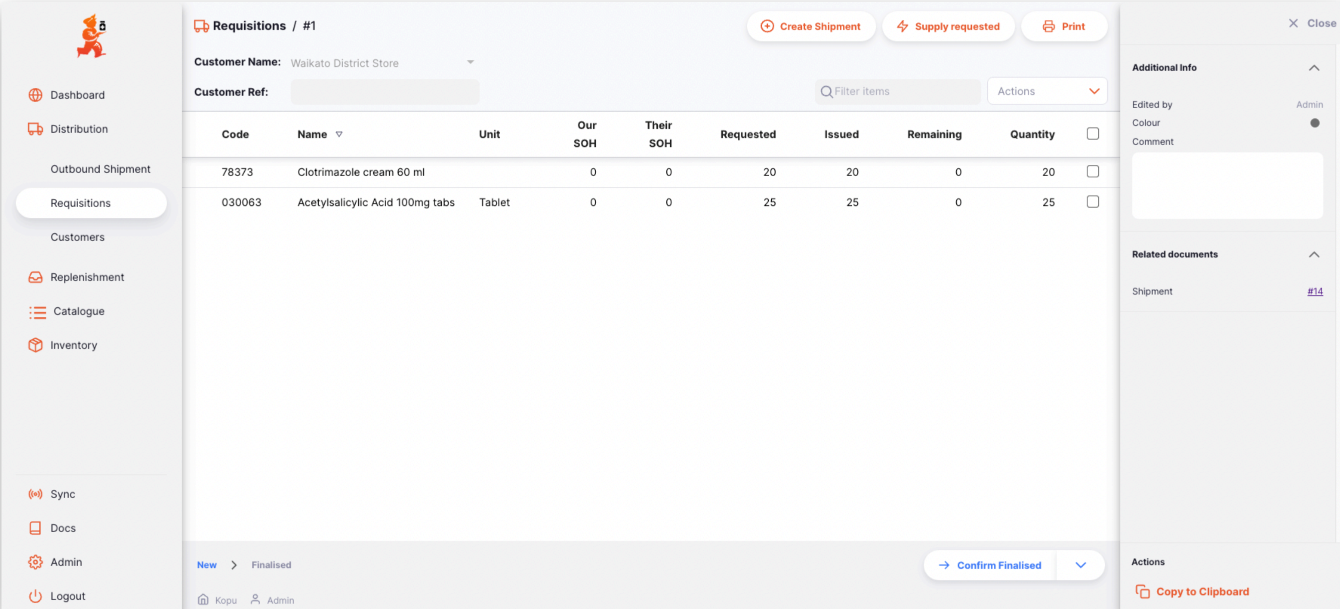
The list of Requisitions can be exported to a comma separated file (csv). Simply click the export button (on the right, at the top of the page)



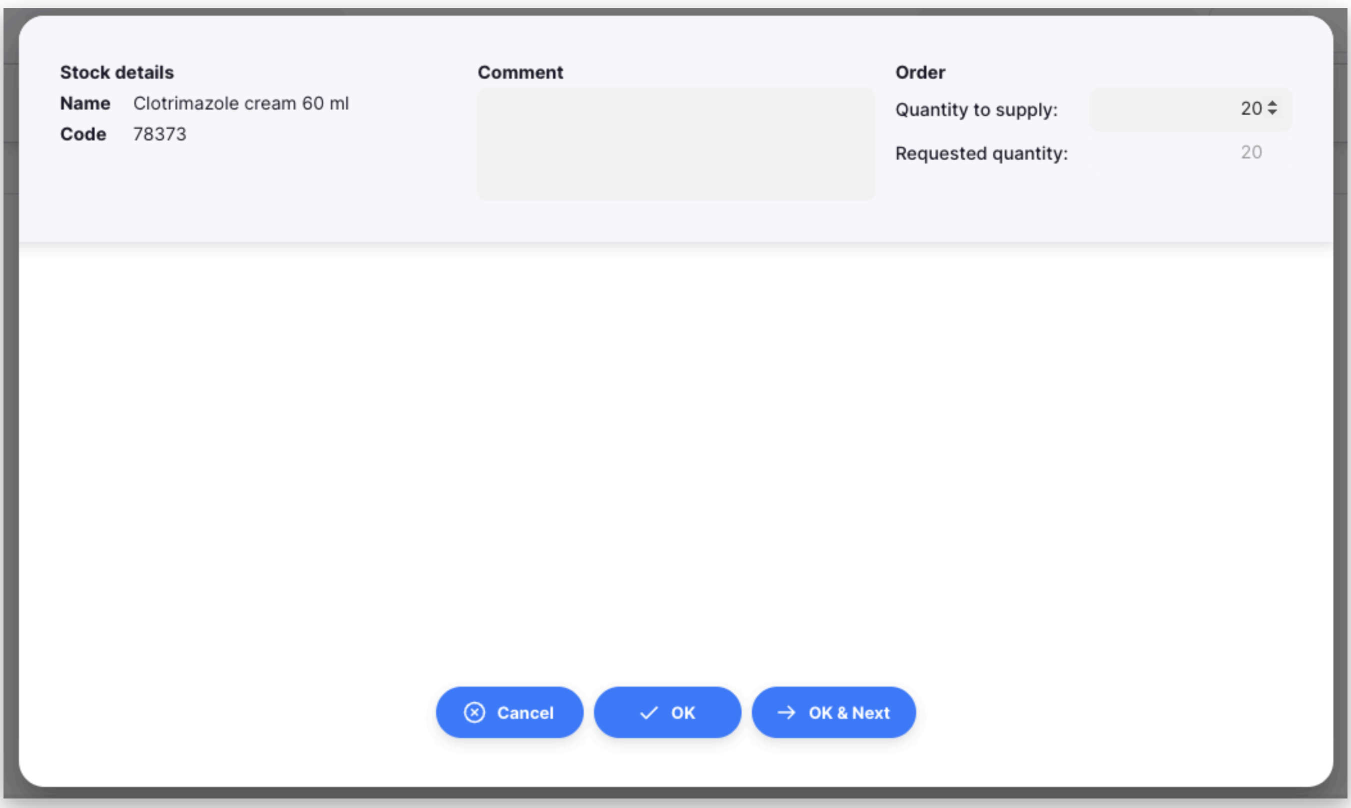
and the file will be downloaded. The export function will download all Requisitions, not just the current page, if you have more than 20 of them.

Viewing a requisition

To view the detail of a particular requisition, simply click on it in the list view. You will then see the detail view of the requisition:

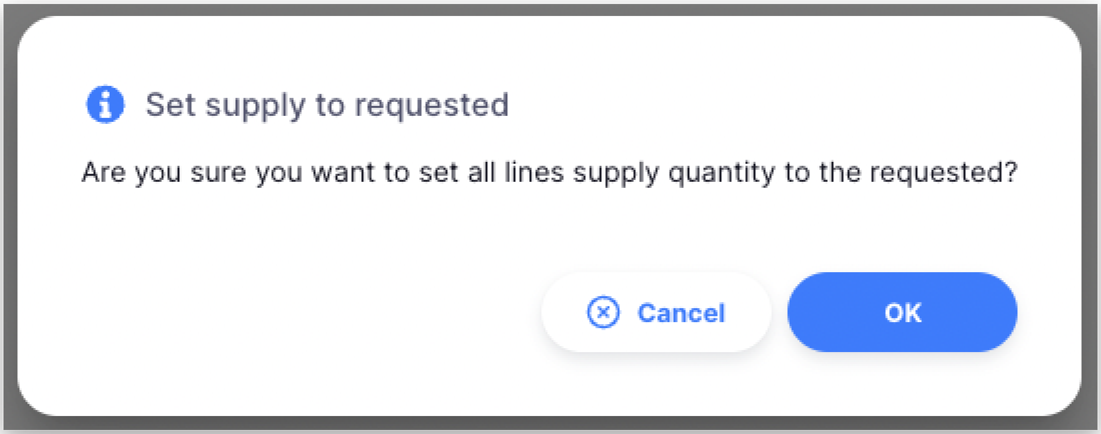


Clicking on an individual item in this view, will then show you details of the particular item. Here you can adjust the quantity to supply:

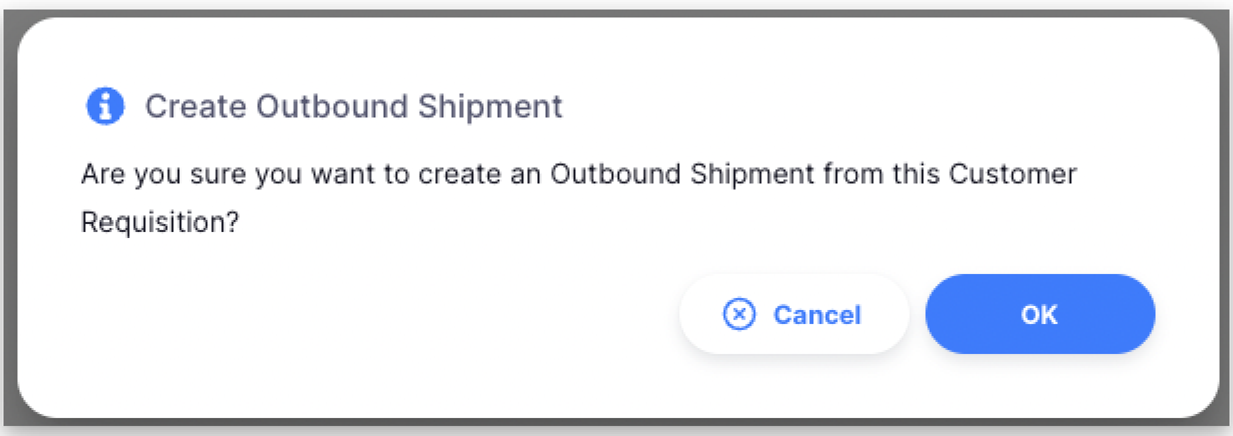


The requested quantity is also shown, along with the stock item details.

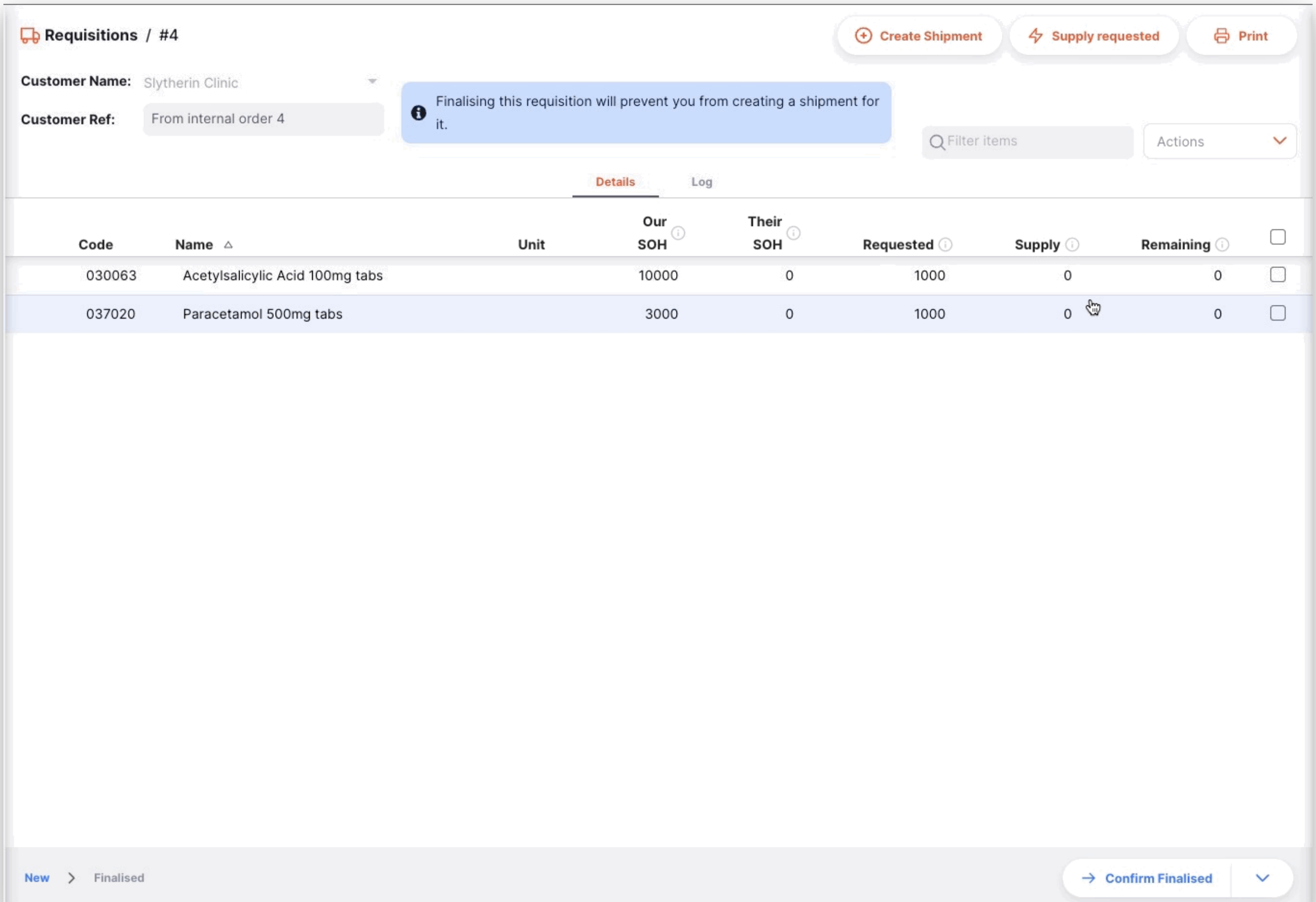
Another way to adjust the supply quantity, is to click the button `Supply requested` at the top of the page. This will automatically set the supply quantity to be that of the quantity requested for that item. Click the button and you are asked for confirmation before the adjustment happens:



To create an Outbound Shipment which will supply the items requested, click on the `Create Shipment` button. This will create a shipment, add all of the items which are not fully supplied, and then, open that shipment in a new tab. Before doing so, you are prompted to confirm:



If the supply quantity is changed for any item/s in the requisition after a shipment has been made for it and a new shipment is created through clicking the `Create Shipment` button, then a new shipment will be created with the remaining supply amount (supply quantity minus any linked Outbound Shipment quantity).



After creating such a shipment, you will see the shipment number, along with a link to view it, in the `Related documents` section of the additional details panel on the right of the screen.

Outbound Shipments

Outbound Shipments can be used to issue stock to a customer.

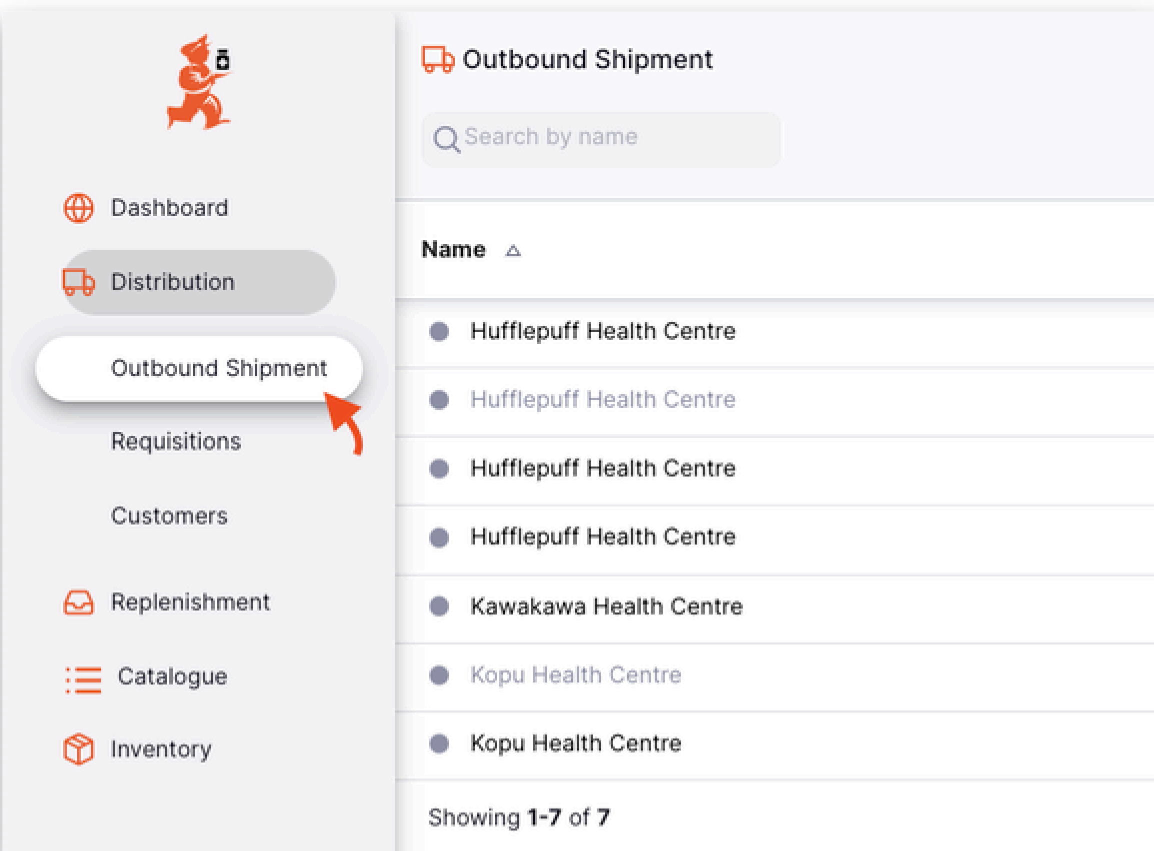
If you have used mSupply in the past, you may be familiar with the term **Customer Invoice** instead of Outbound Shipment. An Outbound Shipment can be used to:

- Transfer stock to another store which also uses mSupply
- Issue stock to a customer
- Fulfill requisitions (customer orders)

Viewing Outbound Shipments🔗

Open the Outbound Shipments Menu🔗

Choose `Distribution` > `Outbound Shipment` in the navigation panel.



You will be presented with a list of Outbound Shipments (if you don't see any, you are probably just starting!).

From this screen you can:

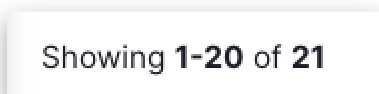
- View a list of Outbound Shipments
- Create a new Outbound Shipment
- Export Outbound Shipments to a `.csv` file
- Print one or multiple Outbound Shipments

Outbound Shipment list🔗

1. The list of Outbound Shipments is divided into 7 columns:

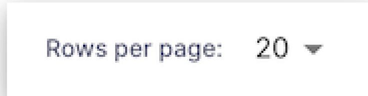
Column	Description
Name	Name of the Customer
Status	Current Status of the shipment
Number	Reference Number of the shipment
Created	Creation date of the shipment
Reference	Customer reference
Comment	Comment for the shipment
Total	Total value of the shipment

1. The list can display a fixed number of shipments per page. On the bottom left corner, you can see how many shipments are currently displayed on your screen.



3. If you have more shipments than the current limit, you can navigate to the other pages by tapping on the page number or using the right of left arrows (bottom right corner).

4. You can also select a different number of rows to show per page using the option at the bottom right of the page.



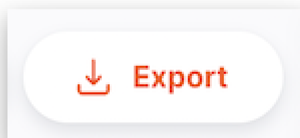
Search by Customer Name🔗

You can filter the list of shipments by customer name. This can be useful if you're looking for one particular shipment!

Type the name of a customer in the `Search by name` field (on the left, just above the list headers). All the shipments for this customer will appear in the list.

Exporting Outbound Shipments🔗

The list of Outbound Shipments can be exported to a comma separated file (csv). Simply click the export button (on the right, at the top of the page)



and the file will be downloaded. The export function will download all Outbound Shipments, not just the current page, if you have more than 20 of them. Shipments are exported using sort order selected in the table, though of course you could easily sort the list in Excel or whatever you open the .csv file with!

Delete an Outbound Shipment🔗

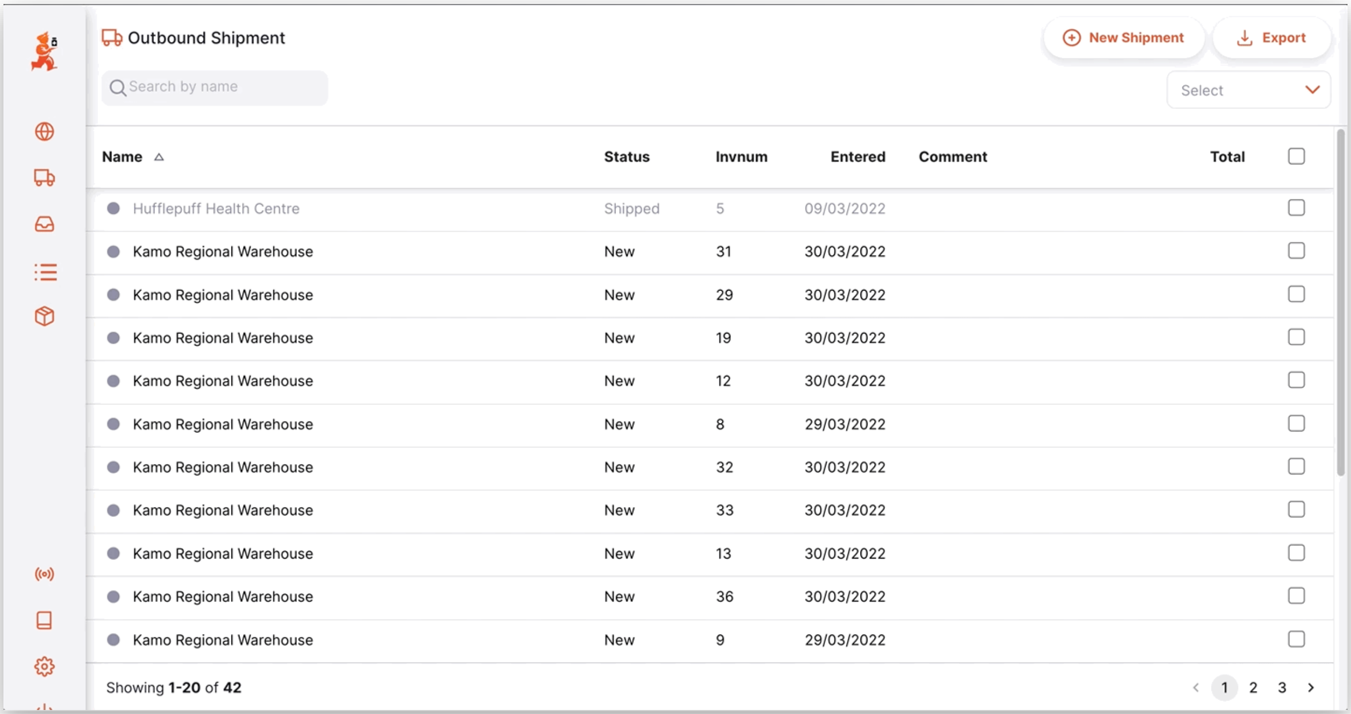
You can delete a shipment from the Outbound Shipment list.

1. Select the shipment that you want to delete by checking the box on the left end of the list. You can select more than one shipment to be deleted. You can even select them all using the master checkbox in the list headers.

2. Open the `Select` dropdown (top right corner, above the list) and select `Delete selected lines`.

3. A notification confirms how many shipments were deleted (bottom left corner).

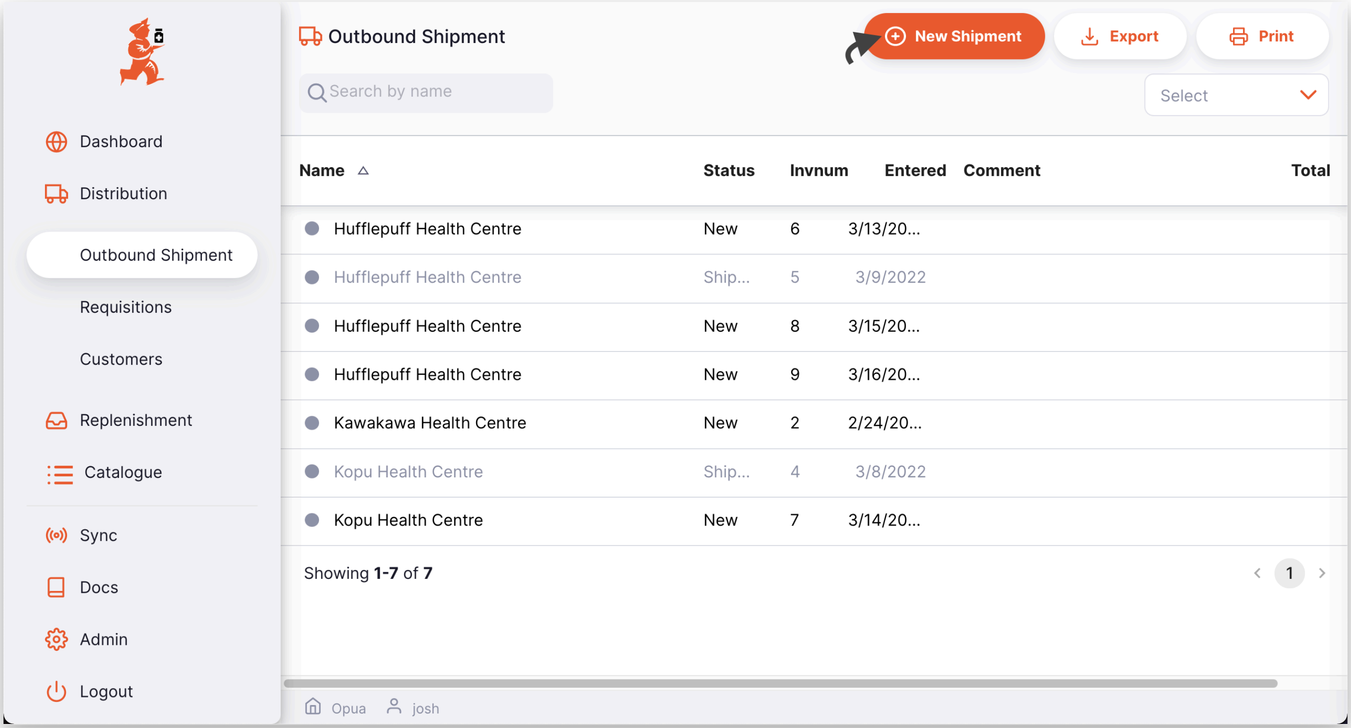
You can only delete Outbound Shipments with a status `NEW`.



Creating an Outbound Shipment🔗

1. Go to `Distribution` > `Outbound Shipment`.

2. Press the `New Shipment` button, in the top right corner

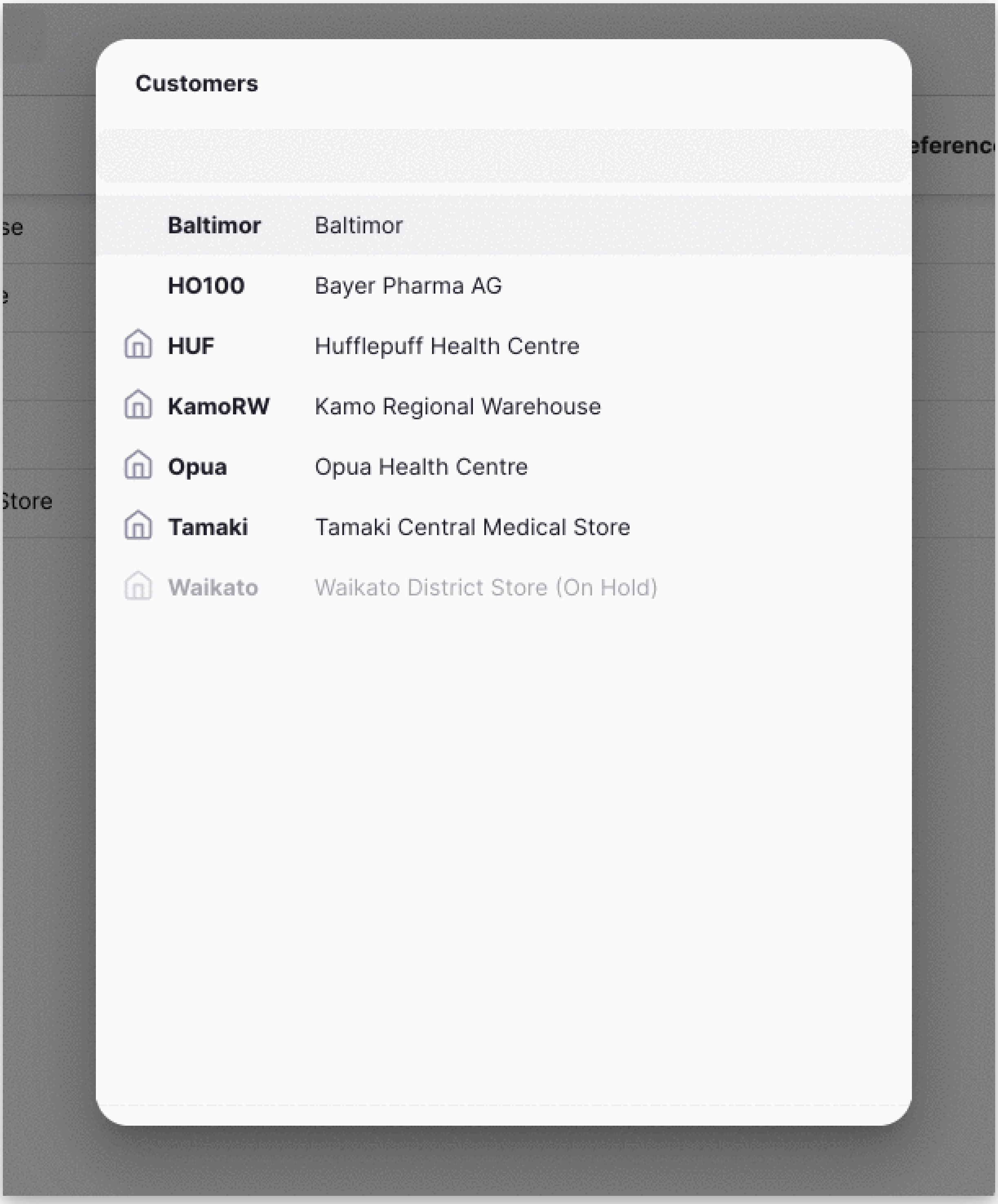


3. A new window `Customers` opens, inviting you to select a customer.

Select a Customer🔗

1. In the `Customers` window, you will be presented with a list of available customers. You can select your customer from the list or you can type as much of a customer name.

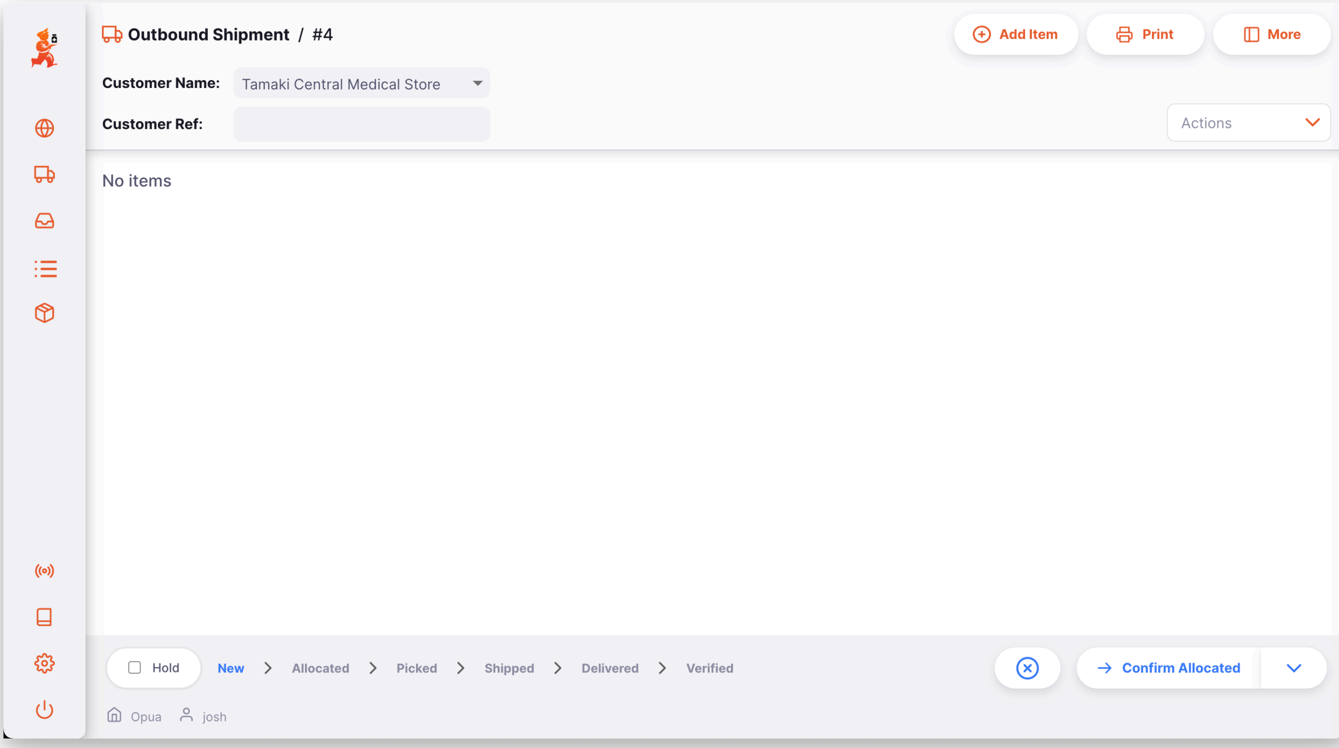
In below example, we are issuing stock to **Kamo Regional Warehouse**.



You can tell if a customer is also using mSupply in their store. If they do, you will see icon like this () next to the supplier code.

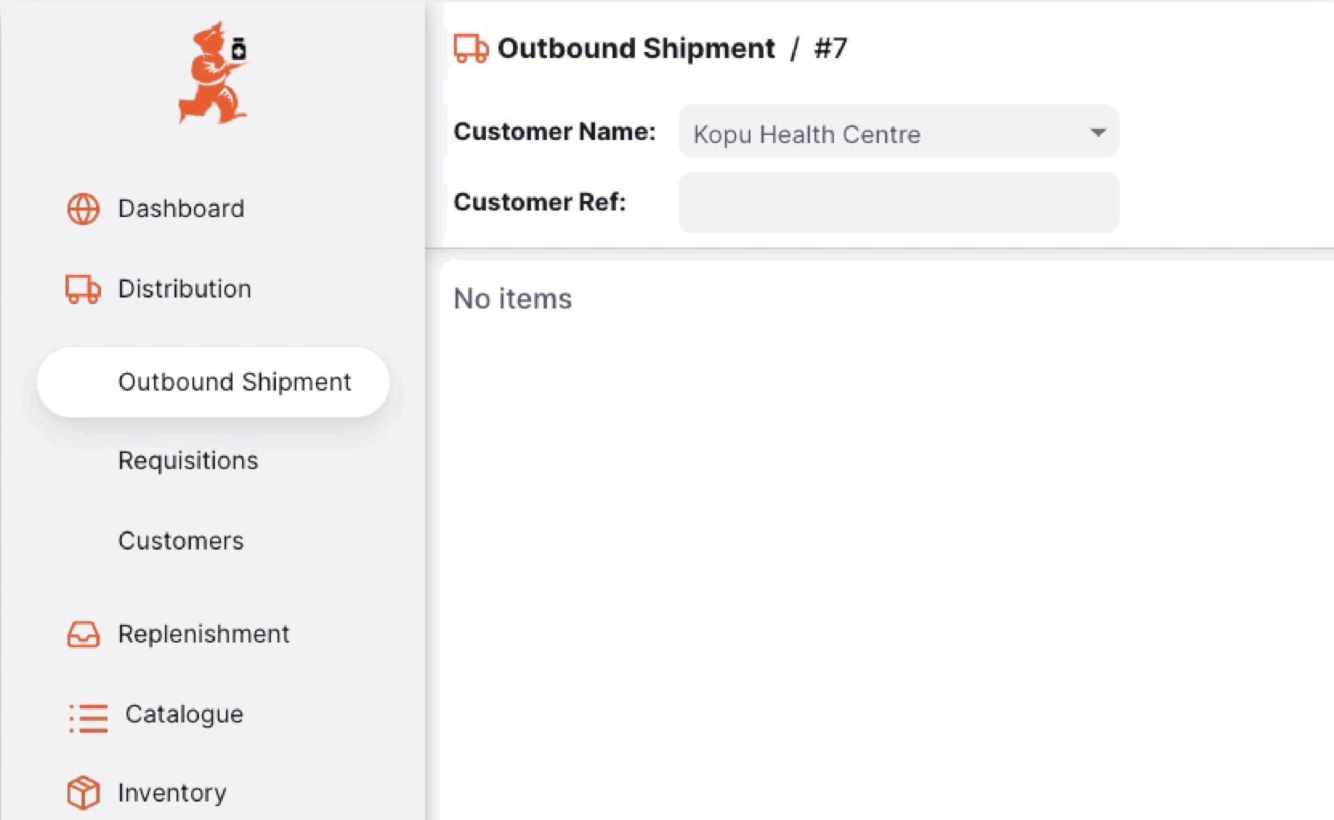
2. Once you tap or press `Enter`, your Outbound Shipment is automatically created

If everything went well, you should see the name of your customer in the top left corner and the status should be `NEW`



Edit the Customer Name🔗

If you have selected the wrong customer, you can change the customer name in the `Customer Name` field or select one the dropdown list:



Enter a Customer Reference🔗

Once your Outbound Shipment has been created, you can enter a customer reference in the `Customer Ref` field, if they have one (eg. *PO#1234567*)

View or edit the Outbound Shipment Information Panel🔗

The Information Panel allows you to see or edit information about the Outbound Shipment. It is divided into multiple sections:

- Additional Info
- Related Documents
- Invoice Details
- Transport Details

We are planning to add more sections in the future as Open mSupply grows.

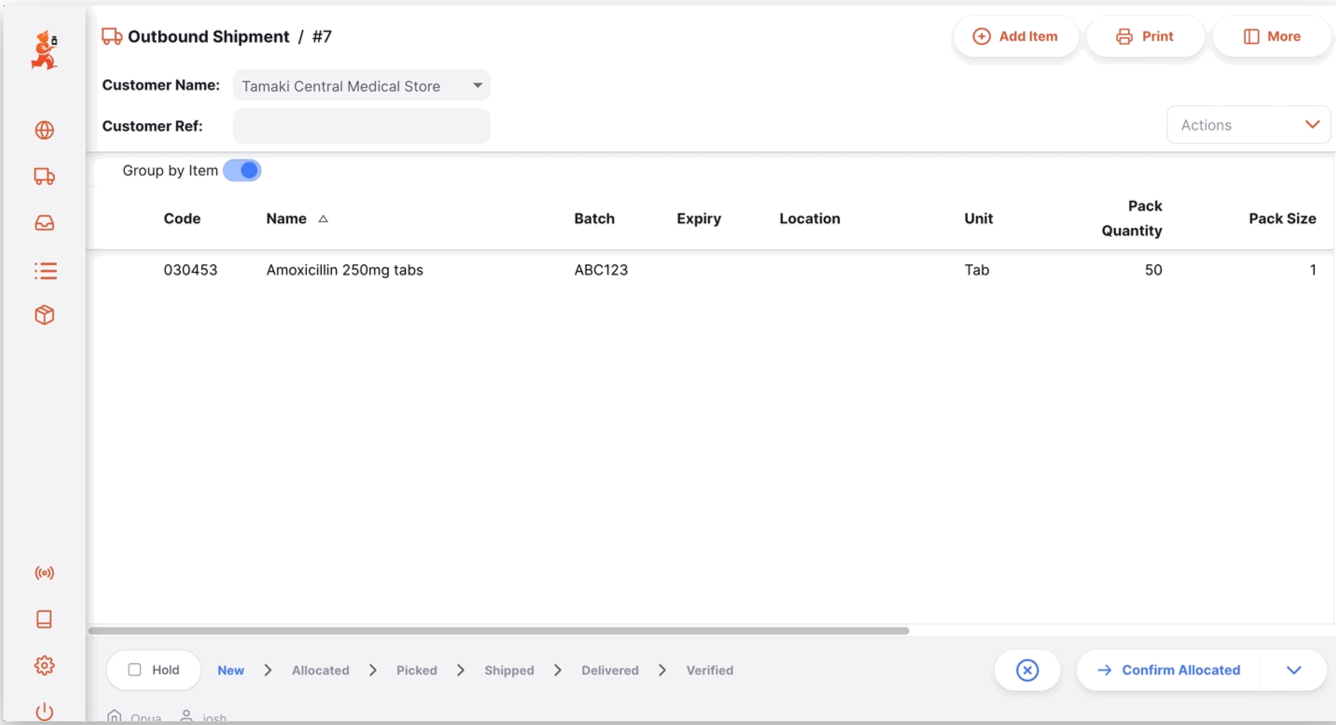
How to open and close the Information Panel?🔗

If you are using a large screen, the information panel will be automatically opened for you.

However, on an average sized screen, the information panel will be closed by default.

To open the Information Panel, you can tap on the `More` button, located in the top right corner of the Outbound Shipment view.

You can close by tapping on the `X Close` button, on the top right corner of the information panel.



Additional Info

In the **Additional Info** section, you can:

- See who created the Outbound Shipment (name of the user)
- View and edit the Outbound Shipment color. To edit the color, tap on the coloured circle and select a color from the pop-up
- Write or edit a comment

Related Documents

In the **Related Documents** section, you can see other related transaction document for the Outbound Shipment.

If your Outbound Shipment was created to fulfill a **Requisition**, the reference number of the requisition would appear in this section.

In the future, we would also include other documents such as temperature records, transportation documents or pick slips.

Invoice Details🔗

In this section, you will see by default the total selling price of the items listed in the Outbound Shipment.

You can also add a **Service charges** if you wish to add other charges such as Freight Costs. To add a Service charges to the Invoice Details:

1. Tap on the `Edit Service Charges` button. A new window opens.
2. Tap on the `Add charge` button on the new window. A new line appears in the list of charges. You tap on `Cancel` if you do not wish to add anything.
3. **Name:** Select a service charges in the dropdown list. You can customise the list of available charges. Contact your administrator
4. **Comment:** You can add a comment to provide further details about the new charge
5. **Amount:** Enter the amount of the charge
6. **Tax:** Enter a % of tax for the charge
7. **Total:** The total field is automatically calculated based on the Amount and the Tax percentage
8. **Delete:** You can tap on the `Delete` icon to delete the charge

In this section, you can also edit the tax rate (%) for the items sell price. Tap on the pencil icon and enter a value.

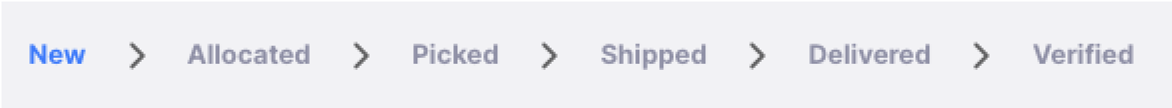
Transport Details🔗

In this section, you can see or edit a transport reference number (eg. a booking or a tracking reference number).

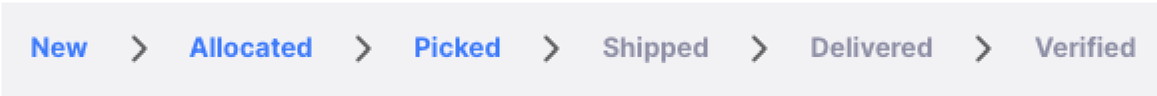
Outbound Shipment Status Sequence🔗

The status sequence is located at the bottom left corner of the Outbound Shipment screen.

Passed statuses are hightlighted in blue, next statuses appear in grey.



Status Sequence: current status is `NEW`.



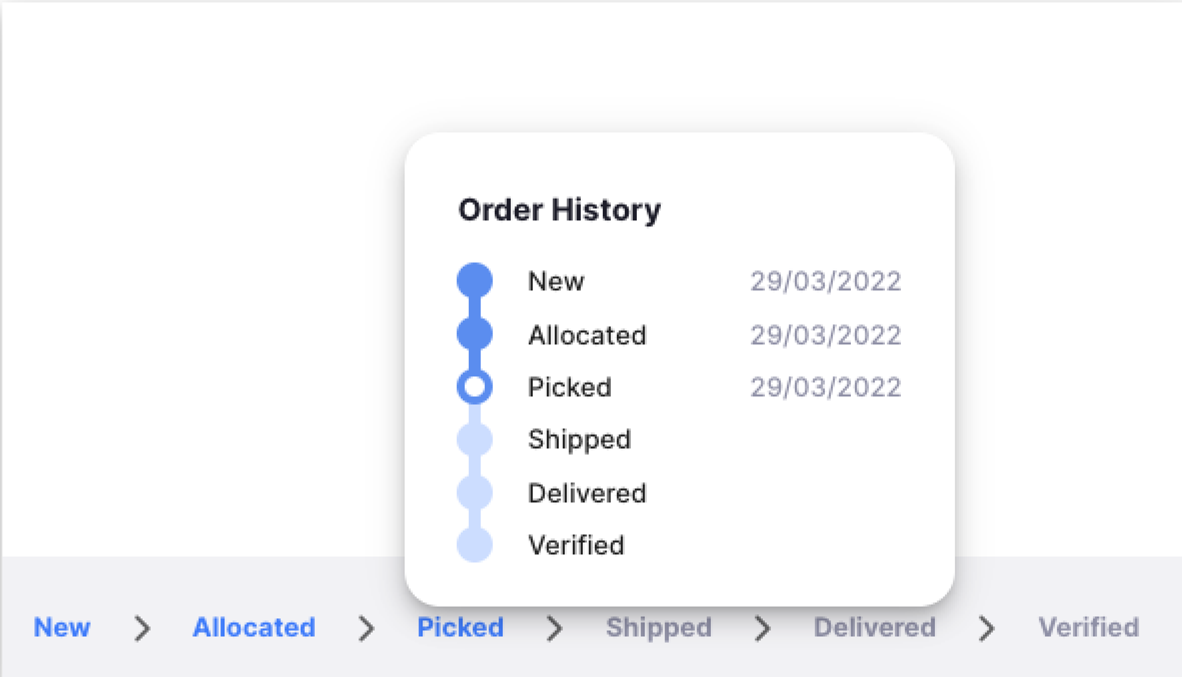
Status Sequence: current status is `PICKED`.

There are 6 status for the Outbound Shipment:

Status	Description
New	This is the first status when you create a shipment
Allocated	Allocation is confirmed. Goods are no longer available for other shipments but are still part of your inventory.
Picked	Shipment is picked and is now ready to ship. Goods are still part of your inventory.
Shipped	Shipment has been shipped and goods are no longer part of your inventory
Delivered	Your customer has received the shipment
Verified	Your customer has verified the quantity of the shipment. Goods are now part of their inventory.

If you hover over the status sequence, a shipment history window appears. You can see the date when a shipment was updated from one status to another.

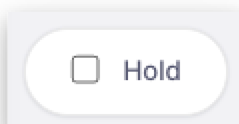
This shipment has been created, allocated and picked on 29/03/2022



Hold checkbox🔗

Located on the bottom left corner, on the left of the status sequence.

Checking the `Hold` checkbox prevents the Outbound Shipment from being updated to the next status.



Cancel and Confirm button🔗

Cancel Button🔗

Tap on the `Cancel` button to quit the Outbound Shipment view and return to the Outbound Shipments list.

Confirm Button🔗

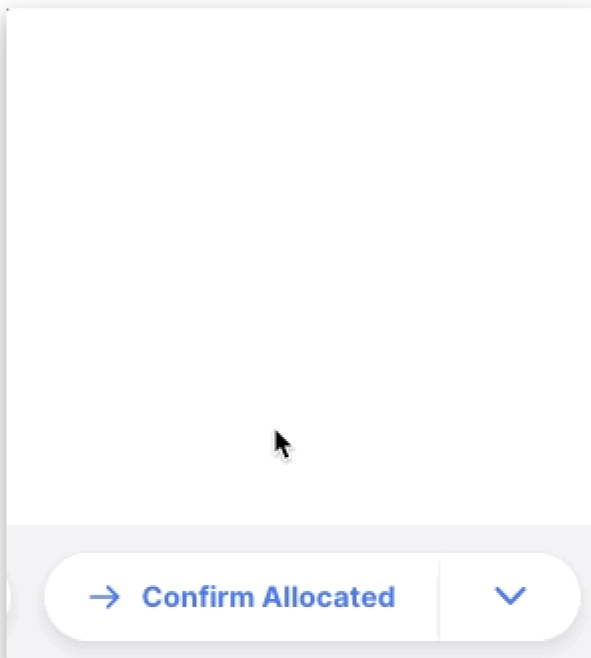
The `Confirm` button updates the status of a shipment. The status which you can confirm depends on the current status of the shipment and follows the sequence shown below.

When managing an Outbound Shipment, you can only confirm the Allocation, Picked and Shipped statuses.

Confirm...	Current Status	Next Status
Confirm Allocated	New	Allocated
Confirm Picked	Allocated	Picked
Confirm Shipped	Picked	Shipped

You don't have to update a shipment to the next status in the sequence. You can choose to skip some of them to go directly to `Confirm Shipped` for example.

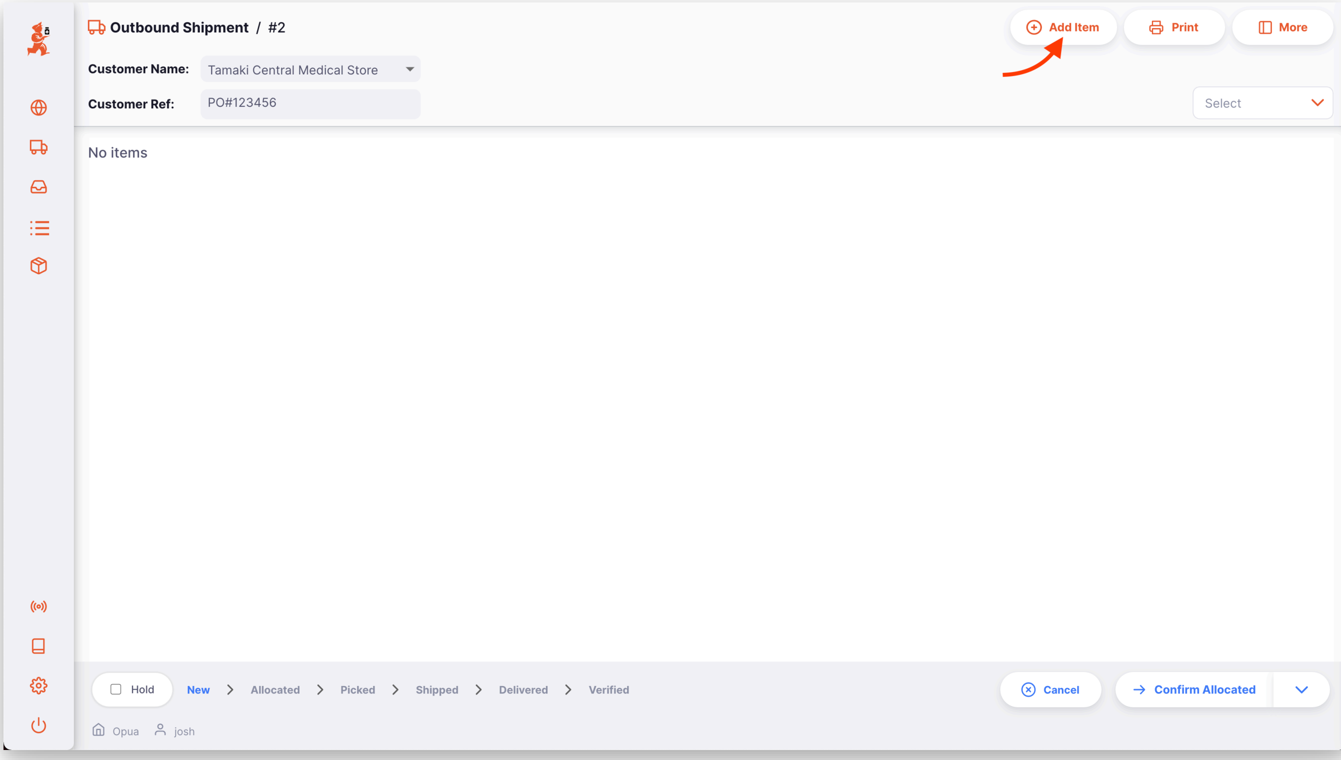
As demonstrated below, tap on the down arrow of the `Confirm` button and select the status you want the shipment to be updated to.



Adding lines to an Outbound Shipment🔗

Tap on the `Add Item` button (top right corner).

A new `Add Item` window opens.



Adding using a barcode scanner🔗

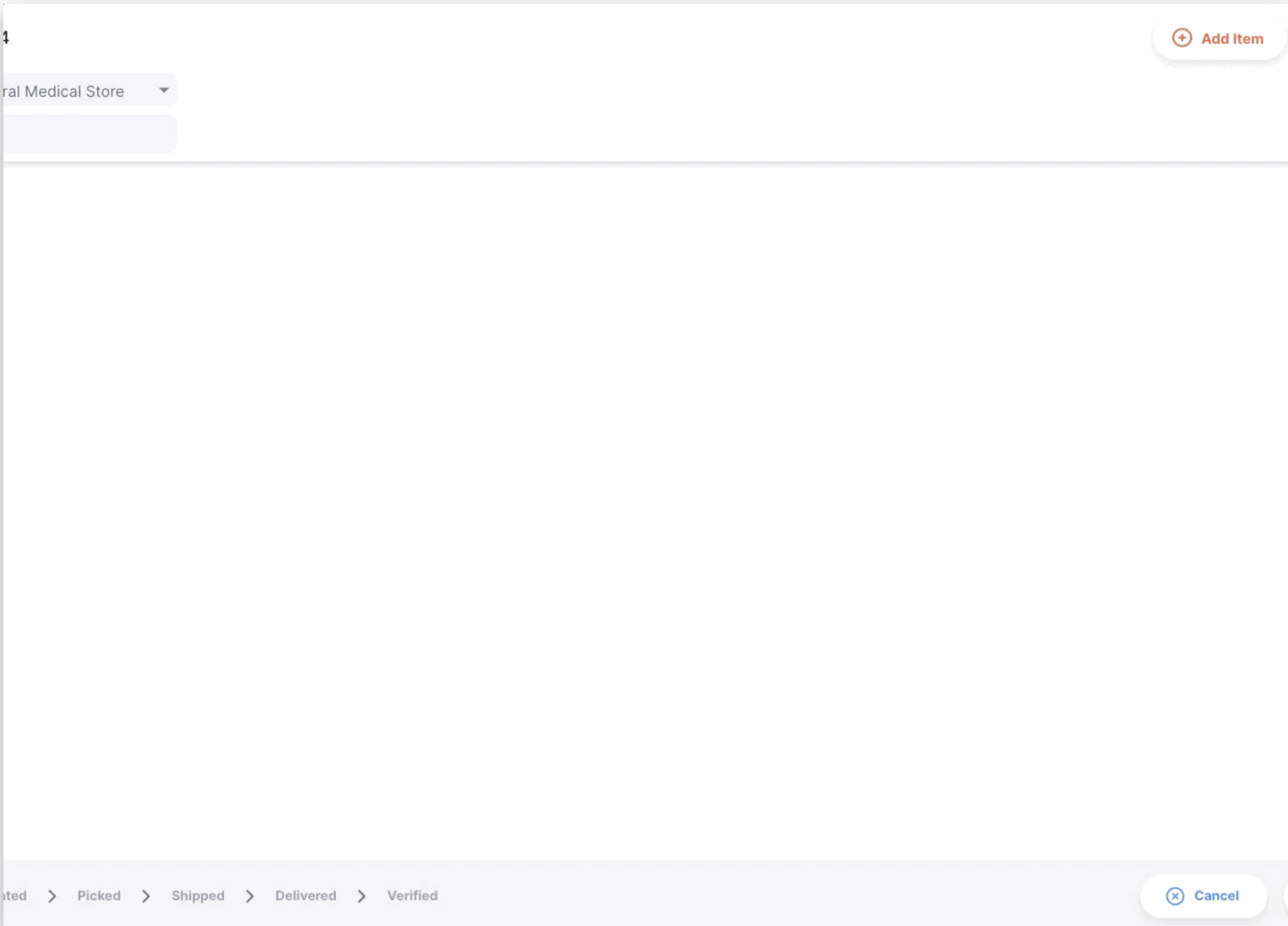
For another way to add items, if you are using the desktop client or android app, you can make use of barcode scanning to add items.

Select an Item🔗

In the `Add Item` window, you can look up an item by:

- Reading through the list of available items
- or by typing some or all of the item name
- or by typing some or all of an item code

Once your item is highlighted, tap on the name or press `Enter`.

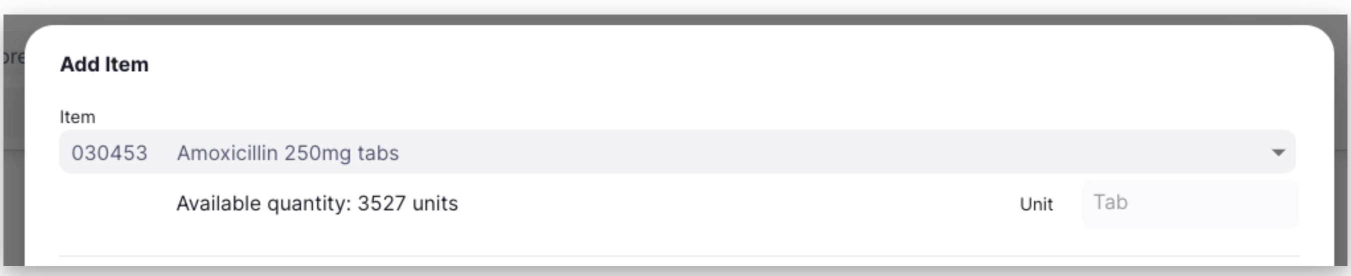


Once the item is selected, you can see the following information:

Headers🔗

- Item code and name (eg. *030453 Amoxicillin 250 mg Tabs*)
- the available stock quantity for this item (eg. *3527 units*)
- the item's unit (eg. *Tab*)

Example: For the item *030453 - Amoxicillin 250mg tabs*, there are 3527 tabs available.

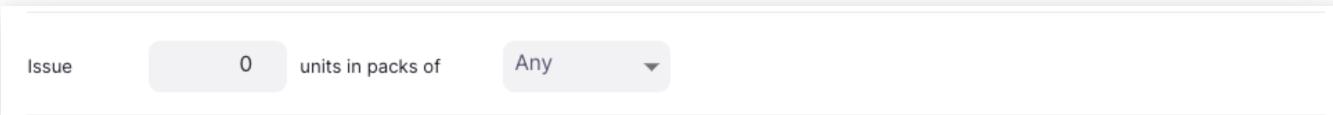


Issue [Quantity] of units in packs of [Pack Size]

In the `Issue Quantity` field, you can enter the quantity that you want to issue to your customer.

By default, you are invited to issue a quantity of **units.** However, you have the possibility to issue a quantity of packs instead by changing the value in the second dropdown (`Pack Size`).

Default value is `Any` when you are issuing units.



List of available batches:

This is a list of batch numbers that you have in store for this item:

- **Batch**: Batch number. It is a designation given to products made in the same manufacturing run.
- **Expiry**: Expiry date of the batch (format: MM/YYYY)
- **Location**: This is the name of the location where the item is stored if your inventory is managed with storage locations
- **Pack Size**: Quantity of units per pack
- **Pack Sell Price**: Selling unit price of the item
- **On Hold**: Indicates whether a batch is on hold or not. You cannot issue a batch that is on hold.
- **In Store (packs)**: Total number of packs in your store
- **Available (packs)**: Number of packs available (not already allocated to other shipments)
- **[Unit] Qty Issued**: Total quantity of units to be issued
- **Pack Qty Issued**: Number of packs to be issued

There is also a final row in the table which is a placeholder line, if the status of the Outbound Shipment is `NEW`. The placeholder line is used when the quantity you are issuing is higher than your available stock.

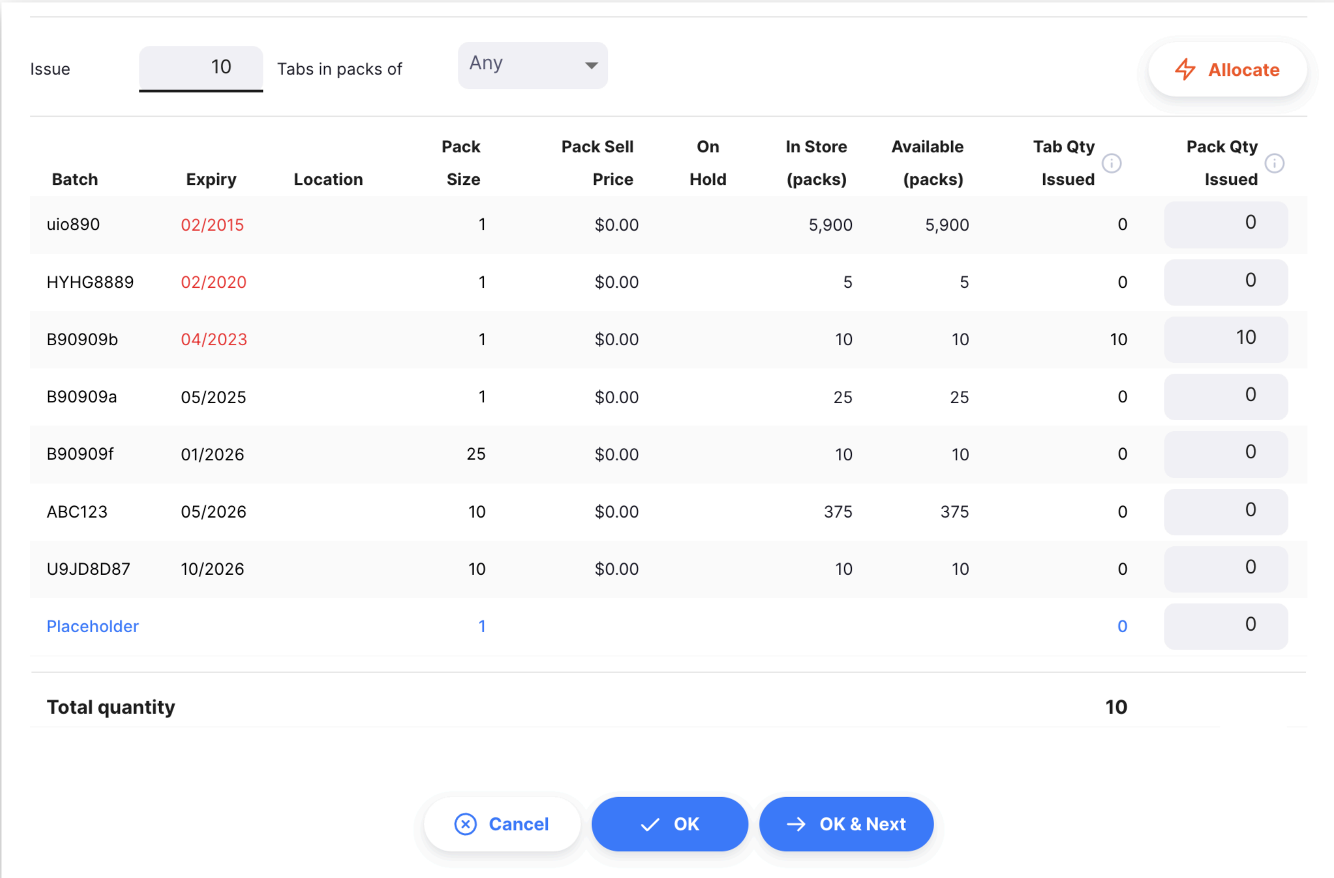
Batch	Expiry	Location	Pack Size	Pack Sell Price	On Hold	In Store (packs)	Available (packs)	Tab Qty Issued	Pack Qty Issued
uio890	02/2015		1	$0.00		5,900	5,900	0	0
HYHG8889	02/2020		1	$0.00		5	5	0	0
B90909b	04/2023		1	$0.00		10	10	0	0
B90909a	05/2025		1	$0.00		25	25	0	0
B90909f	01/2026		25	$0.00		10	10	0	0
ABC123	05/2026		10	$0.00		375	375	0	0
U9JD8D87	10/2026		10	$0.00		10	10	0	0
Placeholder			1					0	0
Total quantity								**0**	

Issue a quantity of units🔗

By default, you are invited to issue a quantity of **units**, regardless of the pack size (number of units in a pack).

When entering a number in the `Issue` field, after clicking the `Allocate` button, the system automatically chooses the batch number(s) with the closest expiry date (First to Expire, First Out or FEFO logic).

In below example, we are issuing 10 units of the item. All 10 units will be taken from the same batch (third row). The first two batches were not selected because they are expired.



Batch	Expiry	Location	Pack Size	Pack Sell Price	On Hold	In Store (packs)	Available (packs)	Tab Qty Issued	Pack Qty Issued
uio890	02/2015		1	$0.00		5,900	5,900	0	0
HYHG8889	02/2020		1	$0.00		5	5	0	0
B90909b	04/2023		1	$0.00		10	10	10	10
B90909a	05/2025		1	$0.00		25	25	0	0
B90909f	01/2026		25	$0.00		10	10	0	0
ABC123	05/2026		10	$0.00		375	375	0	0
U9JD8D87	10/2026		10	$0.00		10	10	0	0
Placeholder			1					0	0
Total quantity								**10**	

In this other example, we are issuing 100 units. System selects three batches with different pack sizes.

Batch	Expiry	Location	Pack Size	Pack Sell Price	On Hold	In Store (packs)	Available (packs)	Tab Qty Issued	Pack Qty Issued
uio890	02/2015		1	$0.00		5,900	5,900	0	0
HYHG8889	02/2020		1	$0.00		5	5	0	0
B90909b	04/2023		1	$0.00		10	10	10	10
B90909a	05/2025		1	$0.00		25	25	15	15
B90909f	01/2026		25	$0.00		10	10	75	3
ABC123	05/2026		10	$0.00	✓	375	375	0	0
U9JD8D87	10/2026		10	$0.00		10	0	0	0
Placeholder			1					0	0
Total quantity								**100**	

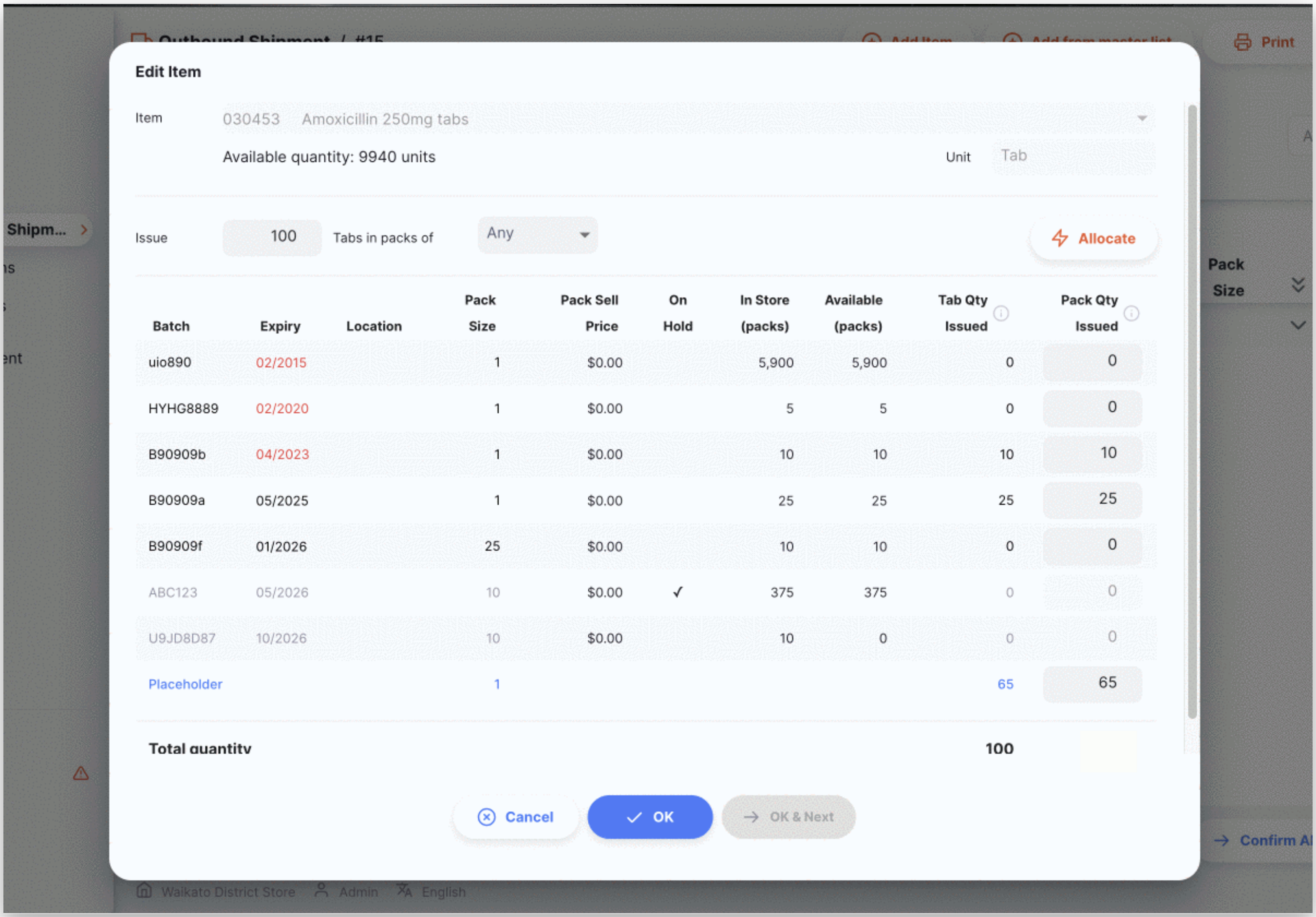
Cancel OK OK & Next

Note that in this list, the batches which are available for selection are shown first and batches which are not (on hold or no stock available) are shown below and in a grey font.

Issue a quantity of packs🔗

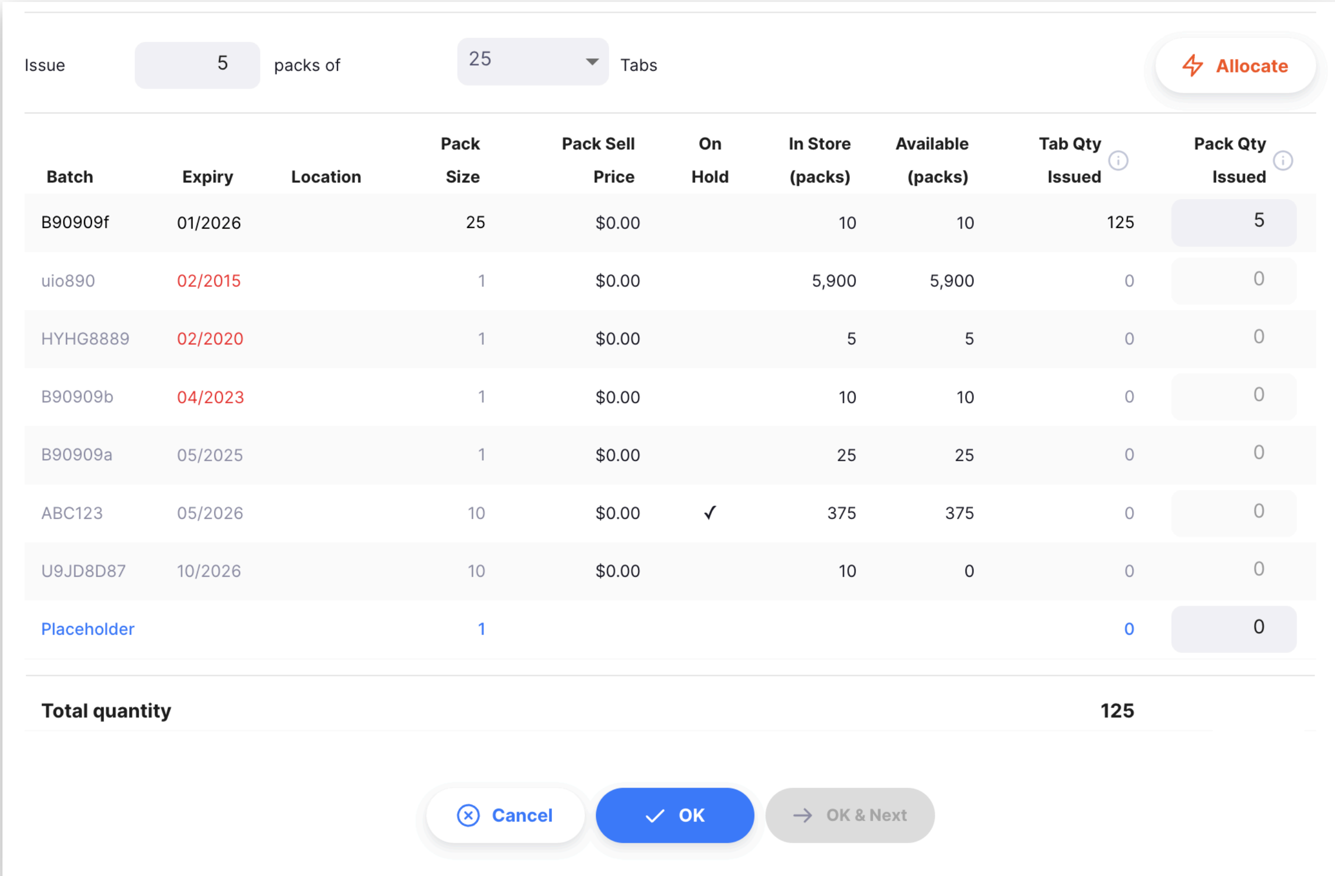
You can decide to issue a quantity of **packs**. To do this, you can change the value in the `Pack Size` dropdown.

Let's imagine that your customer only wants pack size of 25 units. You can change the dropdown value from `Any` to `25`.



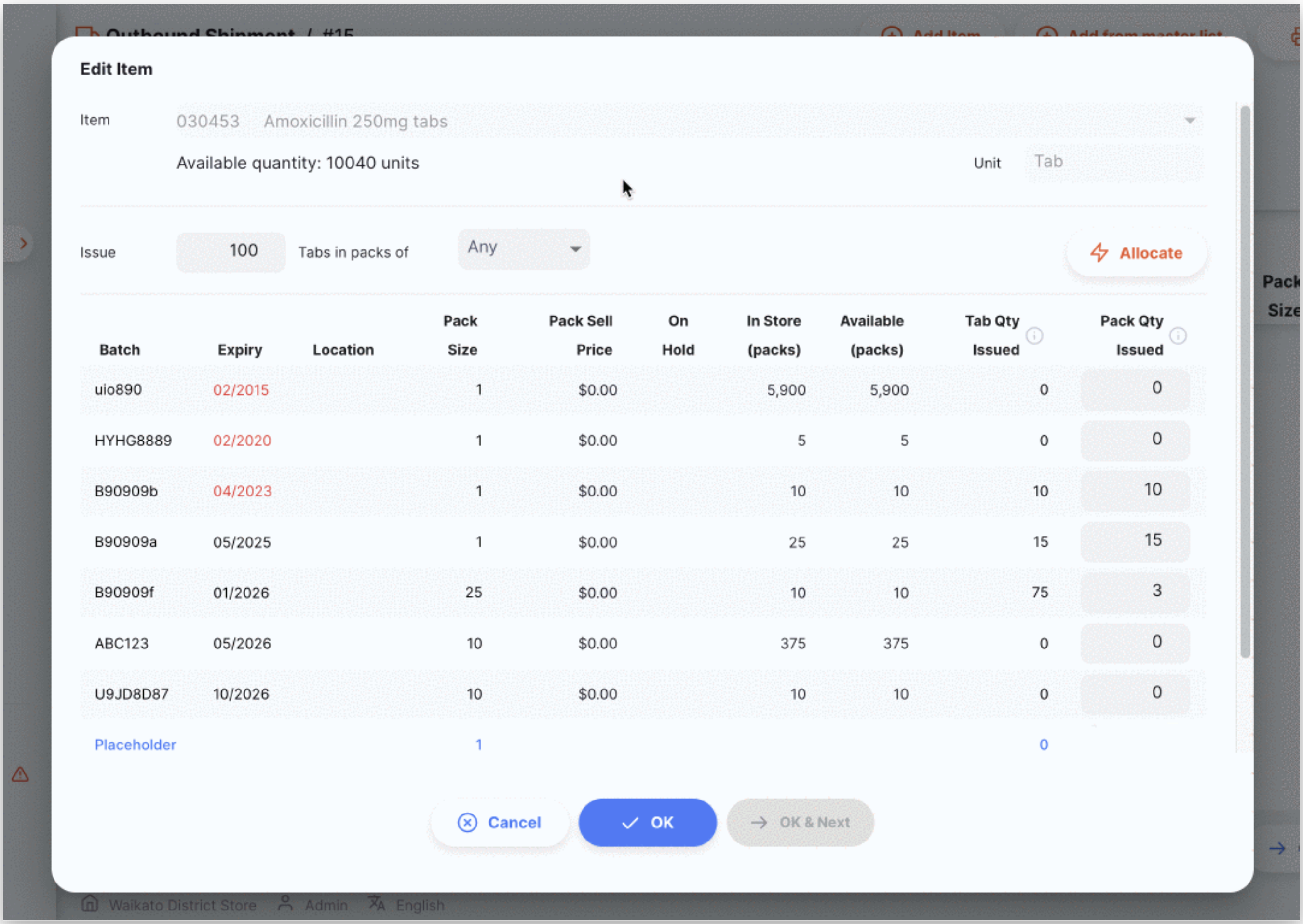
You are now offered to issue a number of packs of 25 units. Only batch number(s) with a pack size of 25 units can be automatically issued.

In below example, we are issuing 5 packs of 25 units:



Batch	Expiry	Location	Pack Size	Pack Sell Price	On Hold	In Store (packs)	Available (packs)	Tab Qty Issued	Pack Qty Issued
B90909f	01/2026		25	$0.00		10	10	125	5
uio890	02/2015		1	$0.00		5,900	5,900	0	0
HYHG8889	02/2020		1	$0.00		5	5	0	0
B90909b	04/2023		1	$0.00		10	10	0	0
B90909a	05/2025		1	$0.00		25	25	0	0
ABC123	05/2026		10	$0.00	✓	375	375	0	0
U9JD8D87	10/2026		10	$0.00		10	0	0	0
Placeholder			1					0	0
Total quantity								**125**	

If you had previously entered a quantity of units and you switch to a quantity of packs, the quantity of units will automatically be converted into the correct quantity of packs.



When a pack size is selected, stock lines which have a different pack size from the one selected are not available for selection. As such, those rows are listed lower down in the table and are shown in a grey font, in the same way as other unavailable rows.

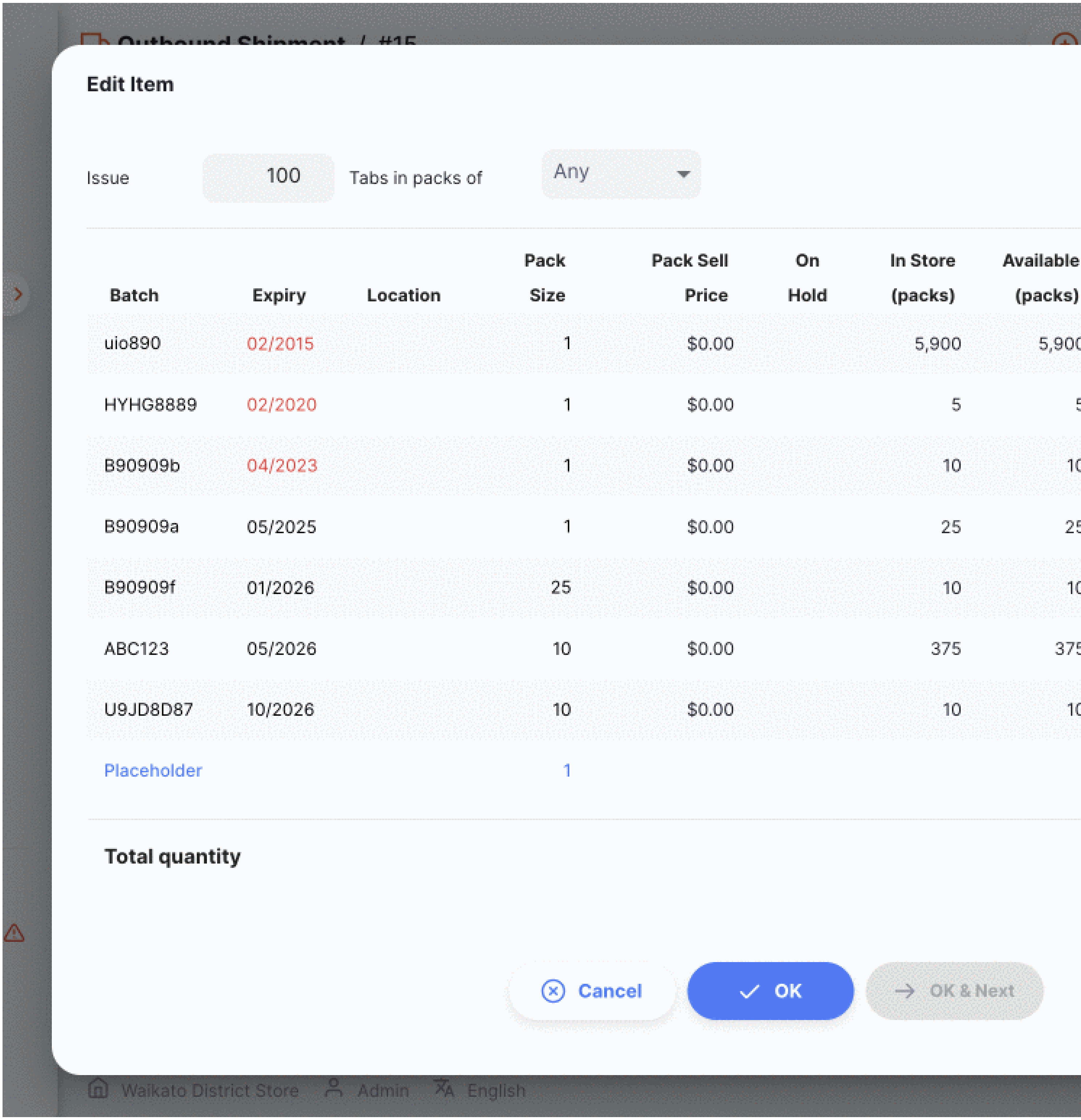
Manual Allocation🔗

Regardless if you chose to issue a quantity of units or packs, you can always manually change the quantity at the batch number level directly before pressing on OK.

You simply have to enter or edit the quantity in the `Packs Qty Issued` column.

The values in the **Total** row will be automatically updated with the new quantity.

When allocating quantities at the batch number level, the quantity you enter is always a quantity of packs.



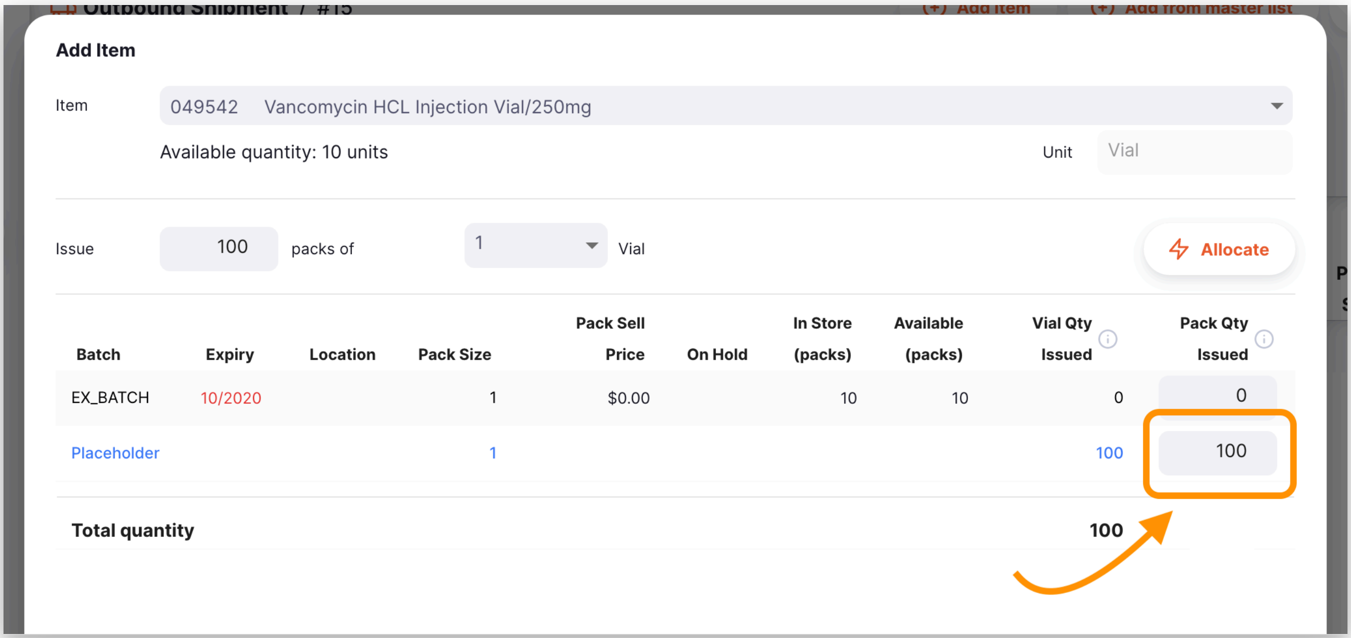
Manual allocation at the batch number level.

Issuing when there is not enough stock (Placeholder Line)🔗

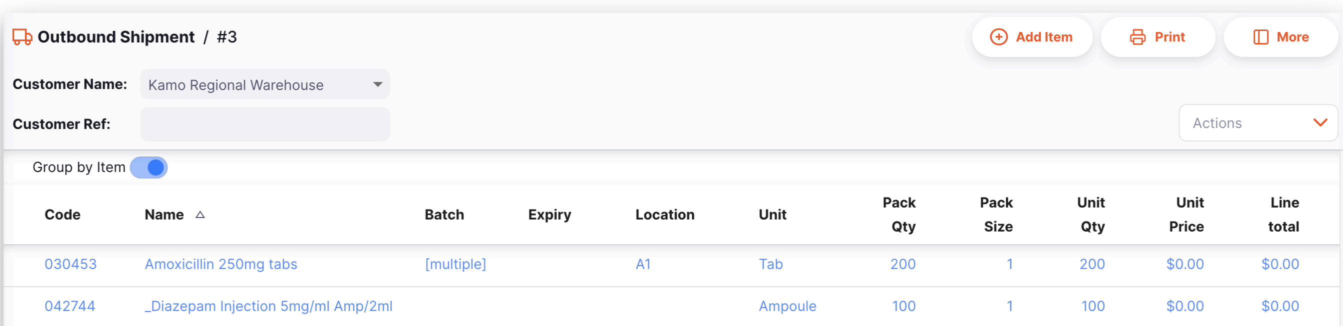
If the amount to be issued is greater than the total stock available from all of the available lines, then the quantity to be issued will automatically be placed in the `placeholder` field, at the bottom of the list of available batch numbers.

Placeholder lines can be allocated later when new stock arrives. However, all shipment lines must be allocated before confirming the allocation.

Since there is no stock available for *042744-Diazepam Injection 5mg/ml Amp/2ml*, the system is issuing 100 units in the placeholder field.



When you look at an Outbound Shipment, you can see if a shipment line has not been allocated or has been partially allocated when it is highlighted in blue.



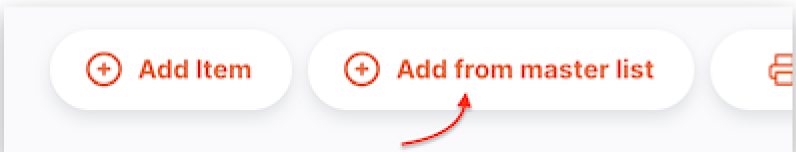
Confirm Item and Quantity🔗

When you are happy with the quantity, you can either press on:

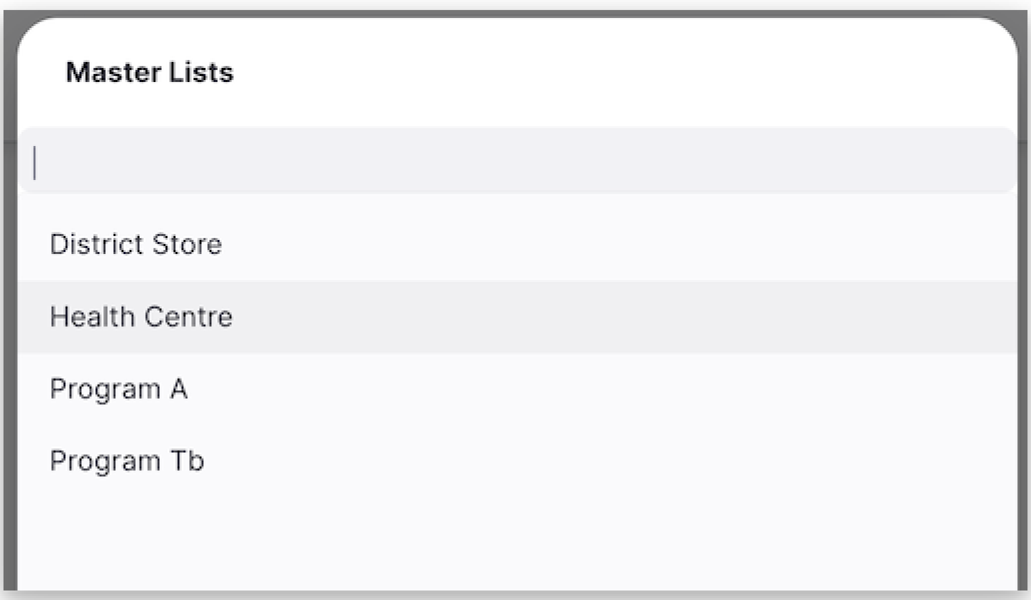
- the `OK` button. You are redirected to the Outbound Shipment view and your item has been added to the list
- the `OK & Next` button to add another item right away
- the `Cancel` button if you do not want to add the item to the Outbound Shipment any more

Adding lines to an Outbound Shipment using a Master List🔗

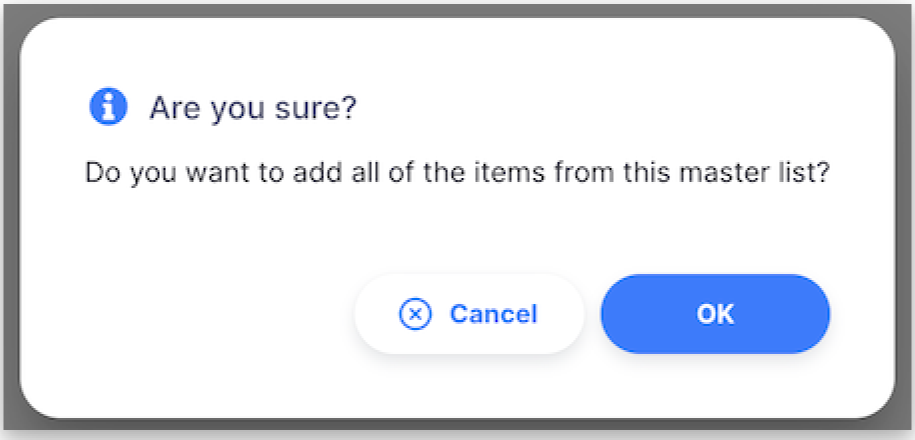
Tap on the `Add from master list` button (top right corner).



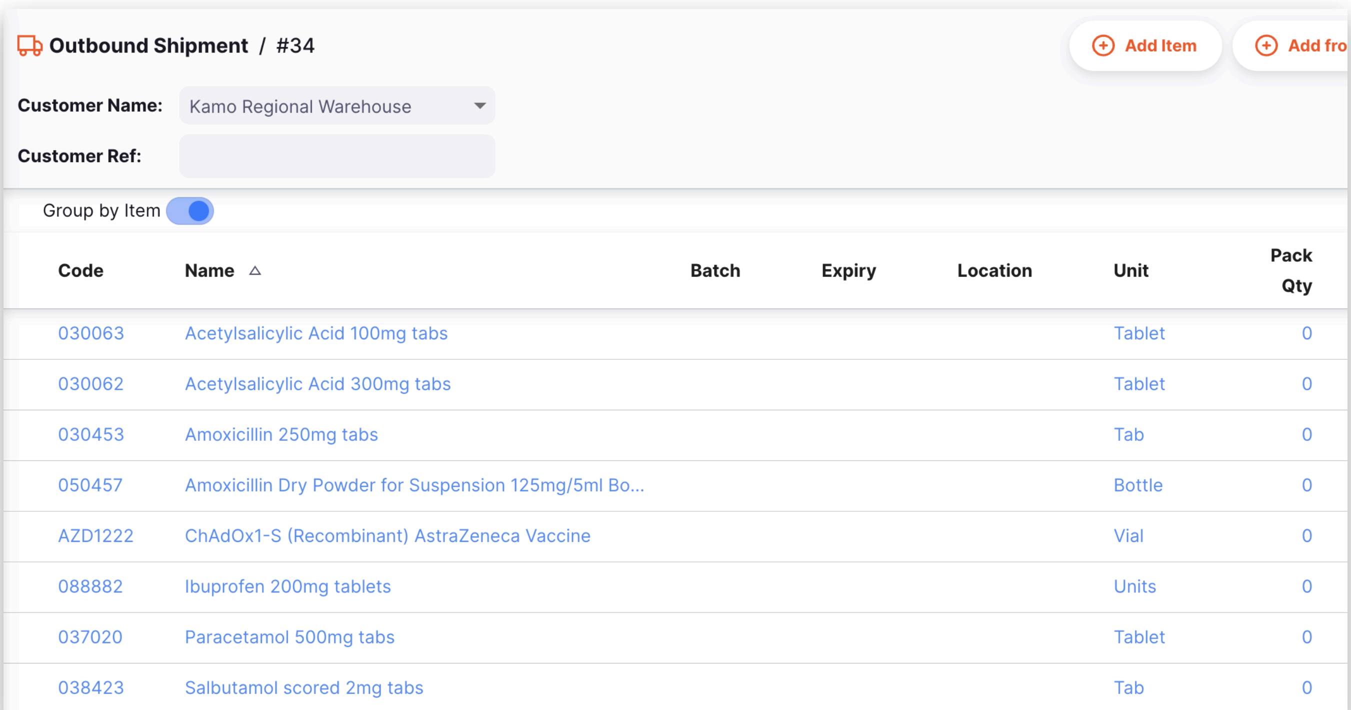
A new `Master Lists` window opens. This allows you to select the required master list. Simply click on one of the lists (if you have some available). Note that the lists shown are those which are visible to the customer of the shipment.



Click `OK` on the prompt:



You will then have unallocated (placeholder) lines added to your shipment, which will then look like this:



As you can see - all of the quantities are zero. You can follow the steps for editing these lines, as detailed above.

Editing an Outbound Shipment Line🔗

To edit a shipment line, tap on it. You will be presented with the `Edit Item` window, which is identical to the `Add Item` window, except that the item is already chosen.

Edit a Shipment Line🔗

You can edit a shipment line if the shipment has a status lower than `Shipped`.

1. Open the Outbound Shipment you want to edit.

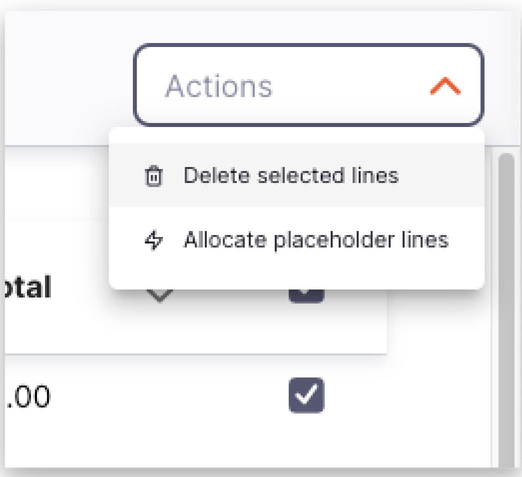
2. Tap on the line you want to edit. An identical window to `Add Item` appears. At this stage:

    - Edit the main `Issue Quantity` field
    - or change the number of packs value at the batch number level

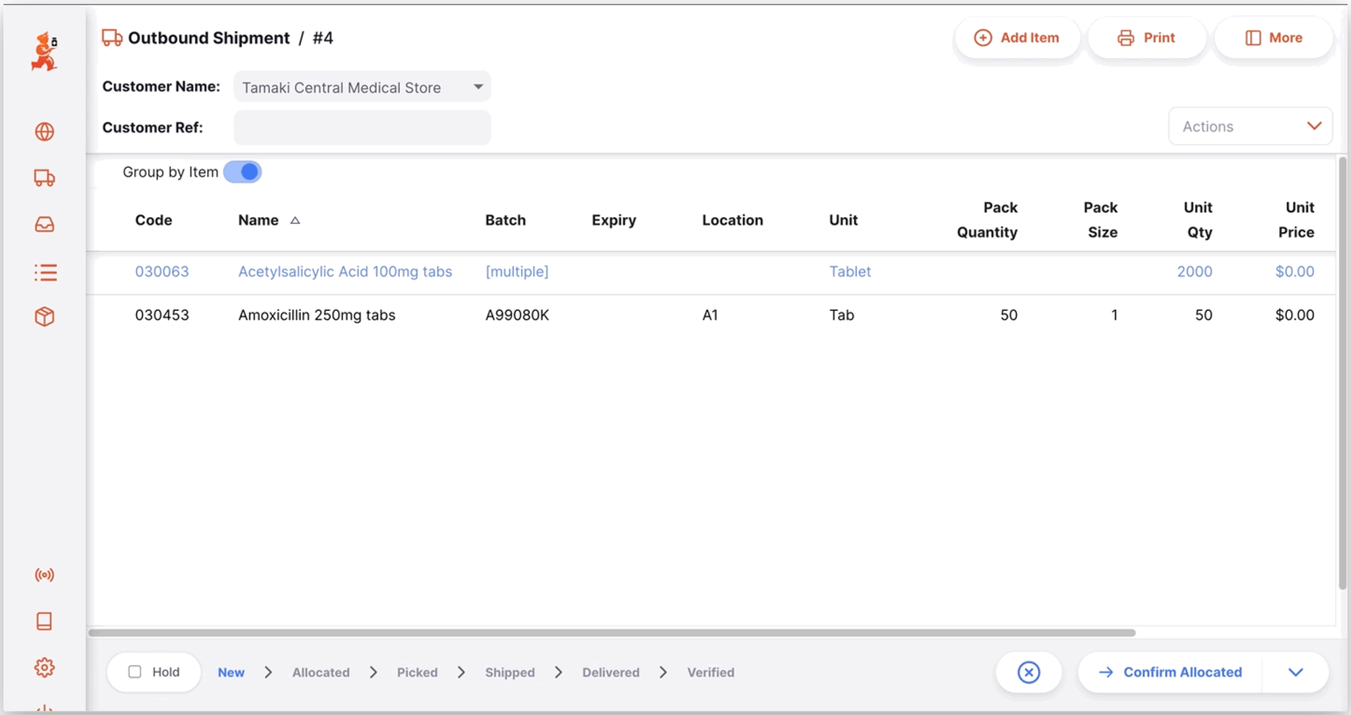
When editing a shipment line, you cannot change the item. You would need to delete the shipment line and create a new one.

Delete a Shipment line🔗

1. Open the Outbound Shipment you want to edit.
2. Select the line(s) you want to delete by checking the box(es) on the right of the list.
3. Go to the `Actions` dropdown menu (top right corner, above the list)
4. Select the action `Delete selected lines`



In below example, we are deleting *item 030063 - Acetylsalicylic Acid 100mg tabs*



You can delete multiple lines at once. Be sure to review what is selected before performing the Delete action.

Processing an Outbound Shipment🔗

Allocating an Outbound Shipment🔗

Allocation is the process of assigning one or multiple batch numbers from the inventory to a shipment line. In other words, you are assigning stock to your shipment. Once allocated, the stock is reserved for the shipment and thus for your customer.

There are 2 main ways to allocate a shipment line:

1. When adding items, the system will automatically assign stock to the new shipment line when you enter a quantity. If you don't have enough stock, the system will add placeholder lines (unallocated lines).
2. Bulk action `Allocate placeholder lines`:
    - Select the lines that you want to allocate by checking boxes on the right hand side of the list
    - In the `Actions` dropdown menu, select `Allocate placeholder lines`.

System will check if there is available stock for each selected line and allocate them using the First to Expire, First Out (FEFO) logic. A notification will let you know whether the operation is successful or not.

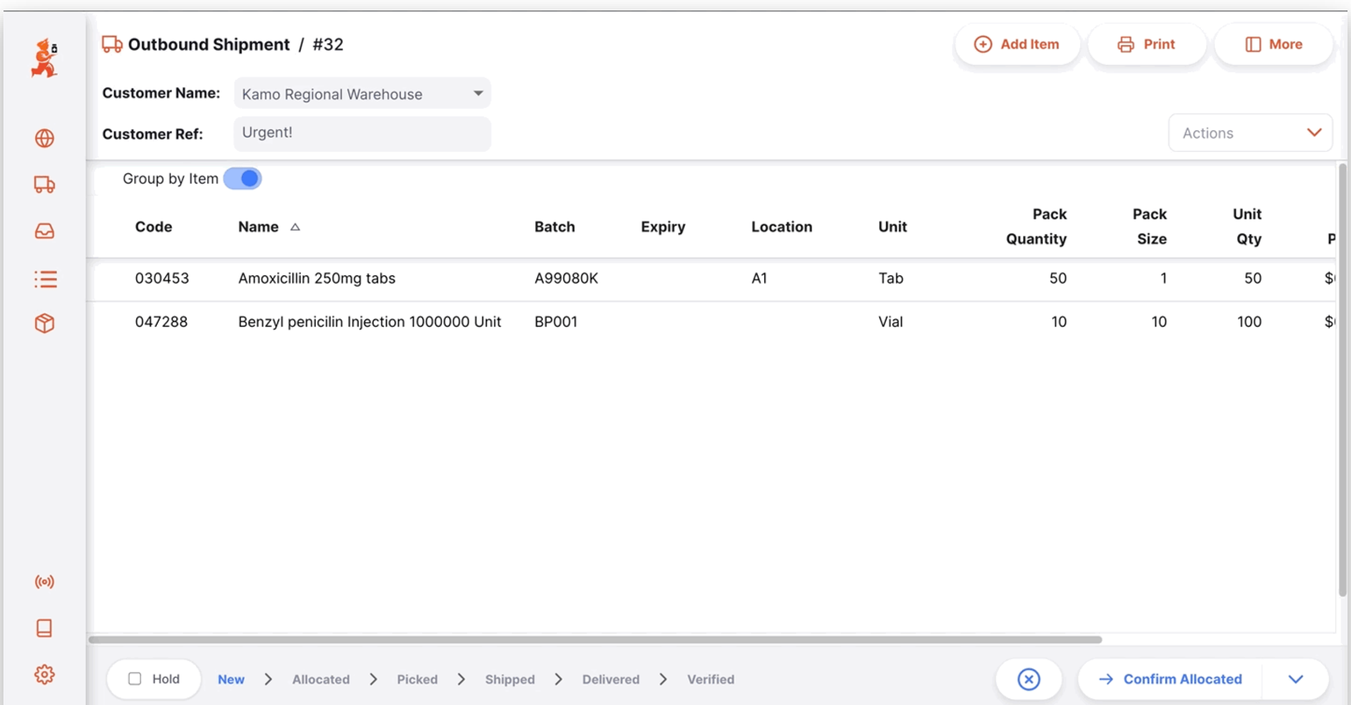
You won't be able to process your Outbound Shipment if you have unallocated lines (shipment lines without batch number(s) assigned to them) with a quantity greater than 0. You can wait for more stock to arrive or you can delete the placeholder lines. Any unallocated lines with a 0 quantity will automatically be removed for you when you allocate.

Confirming an Outbound Shipment's allocation

Once all your shipments lines have been allocated, you can **confirm the allocation**:

- Current status of the shipment has to be `NEW`
- Lines must be assigned with one or several batch numbers. You won't be able to confirm the allocation if your shipment contains lines without batch numbers assigned to it (placeholder lines).

To confirm the allocation, press the `Confirm Allocated` button.



Once the allocation is confirmed:

- Shipment status is `ALLOCATED`
- You are now invited to confirm the picking via the `Confirm Picked` button
- All the items and their quantities will be reserved, meaning that they are no longer available for allocation
- You can print a **pick slip** to be sent to your warehouse so they can start preparing the shipment

Confirming Outbound Shipment picking🔗

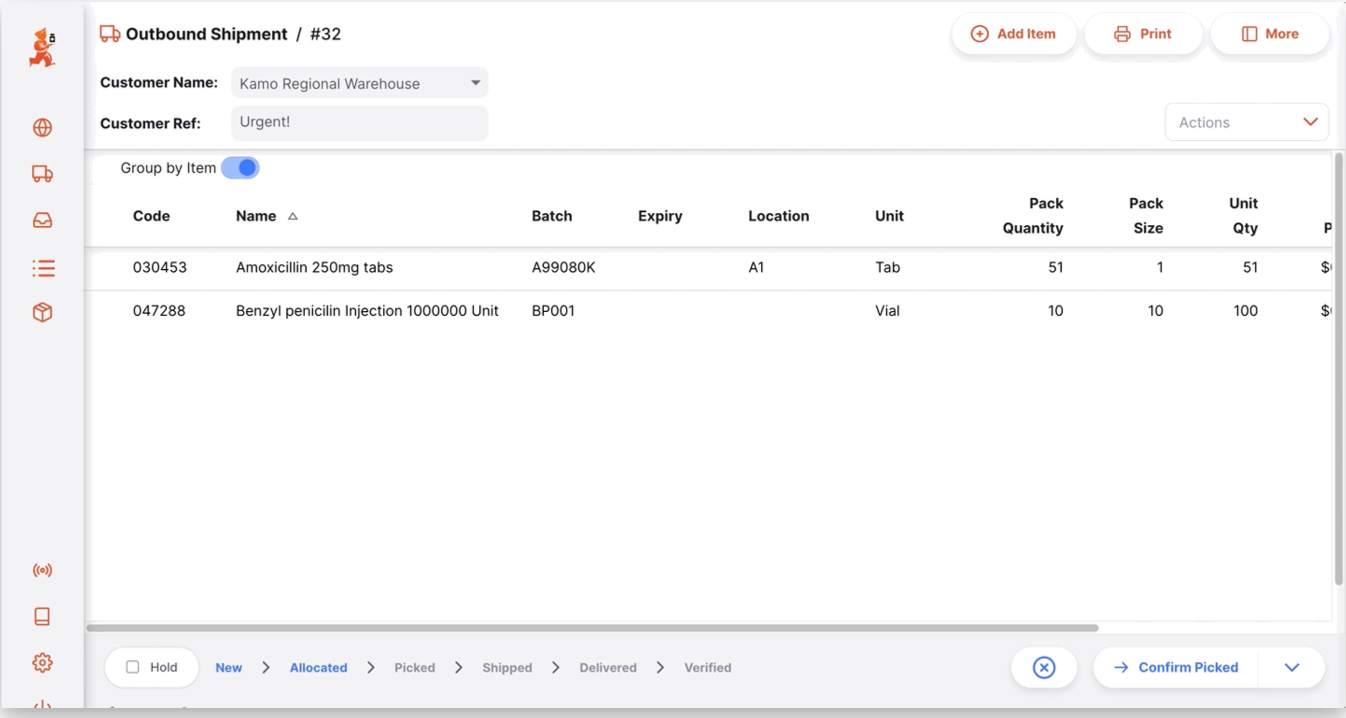
Picking refers to the process where individual items are picked from a fulfillment facility (usually a warehouse or a pharmacy store).

Once a shipment has been allocated, next step is to go get the items to prepare the actual shipment. To help with that, you are able to generate a **pick slip** document. A pick slip indicates:

- The items to be picked
- The quantity and batch numbers for each item
- If you manage your inventory with storage locations, where the items are located

Once all items are picked and packed. You can then confirm the picking of the shipment to indicate that it is ready to be dispatched.

To confirm that a shipment has been picked, tap on the `Confirm Picked` button.



Once picking is confirmed:

- Shipment status is now `PICKED`
- You are now invited to confirm the shipping via the `Confirm Shipped` button
- An **Inbound Shipment** has been generated and is now visible to your customer

At this stage, you are still able to edit shipment lines, to add items or to delete existing lines. However, if picking has been confirmed, you need to make sure to inform your fulfillment facility of any change so they can make sure that the shipment is still correct.

Confirming the Outbound Shipment shipping🔗

The last step to issue stock with an Outbound Shipment is to confirm that stock has been shipped. This is a critical step because when goods are confirmed as shipped, they are no longer a part of your inventory records.

To confirm that an Outbound Shipment has been shipped, tap on the `Confirm Shipped` button.

Once shipping has been confirmed:

- Shipment status is now `SHIPPED`

- Goods are no longer part of your inventory
- You can no longer edit shipment lines
- You can no longer delete the shipment
- You can print a **delivery note** or an **invoice**

Tracking Progress of Outbound Shipments

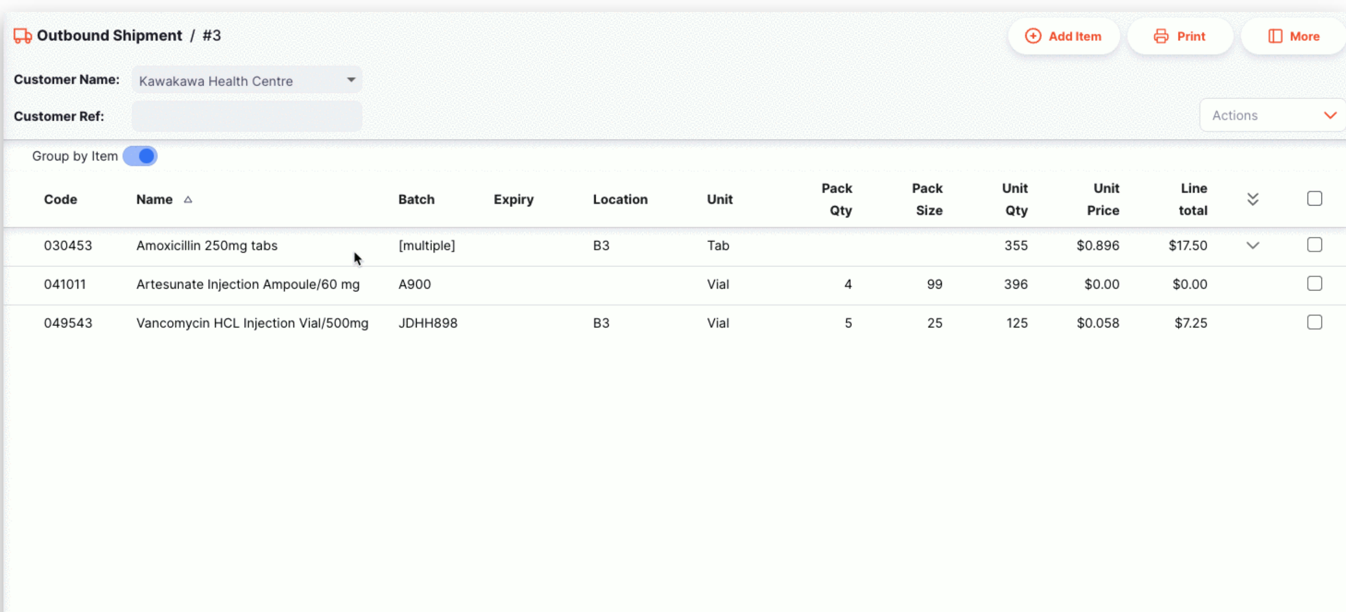
If your customer is also using mSupply, you will be able to see when they'll receive your shipments:

- status will become `DELIVERED` when goods are received: your customer confirmed that they received your goods
- status will become `VERIFIED` when shipment has been verified by your customer. Goods are now a part of their inventory.

Viewing an Outbound Shipment

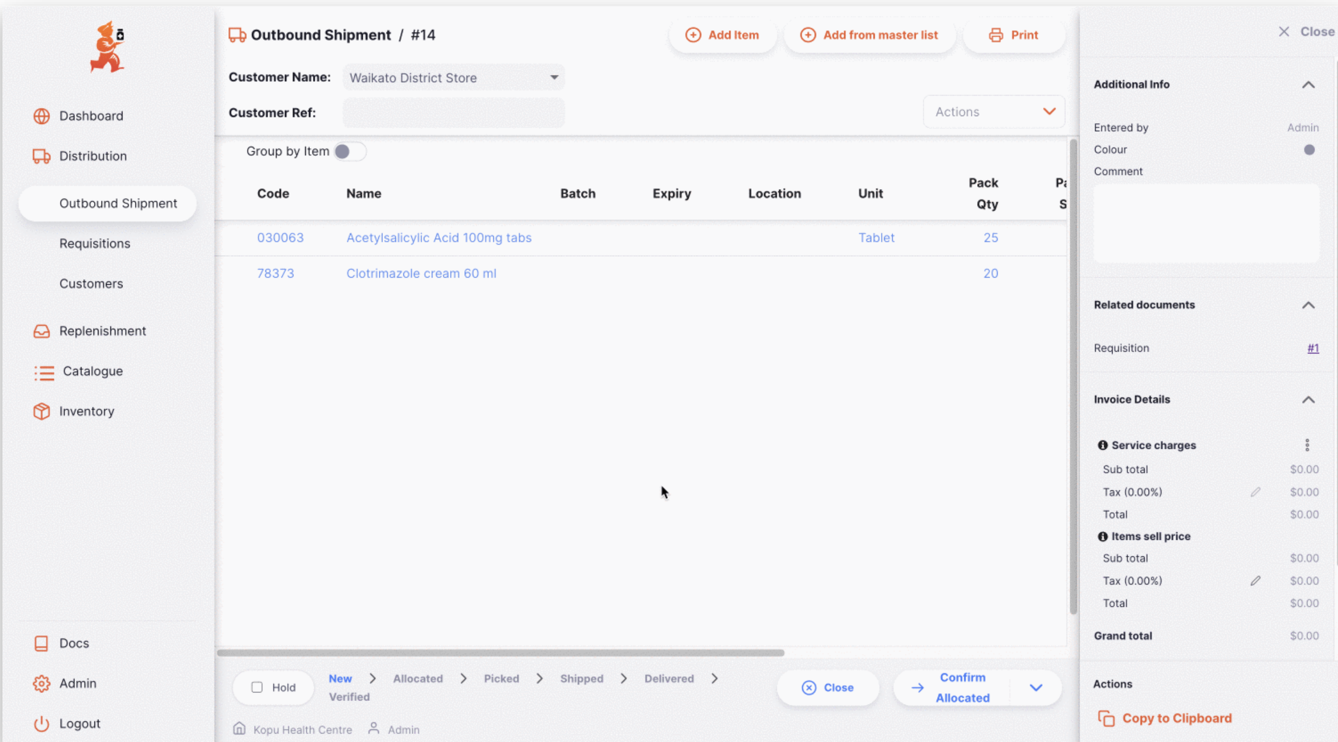
When viewing a specific shipment, you can view the batches on that shipment grouped by item or with each batch listed separately. To change the view mode, click the `Group by item` switch.

When grouped by item, you can expand the item to see individual batches, or use the expand in the table header to expand all grouped rows. If you click on an item you will also see all selected batches, as shown in this example:



If you do not have enough room on your screen, or simply aren't interested in some of the columns shown, you have the option of hiding which columns are shown in this view.

Click on the `Show / hide columns` button which is at the top right of the table. This gives a list of the columns available - you can check the columns you want to see. The options chosen are stored for the current browser, so next time you view an Outbound Shipment, you will see the selected columns only. If you have chosen which columns to show, then the button is shown in blue to remind you that there are more columns available.



Suppliers

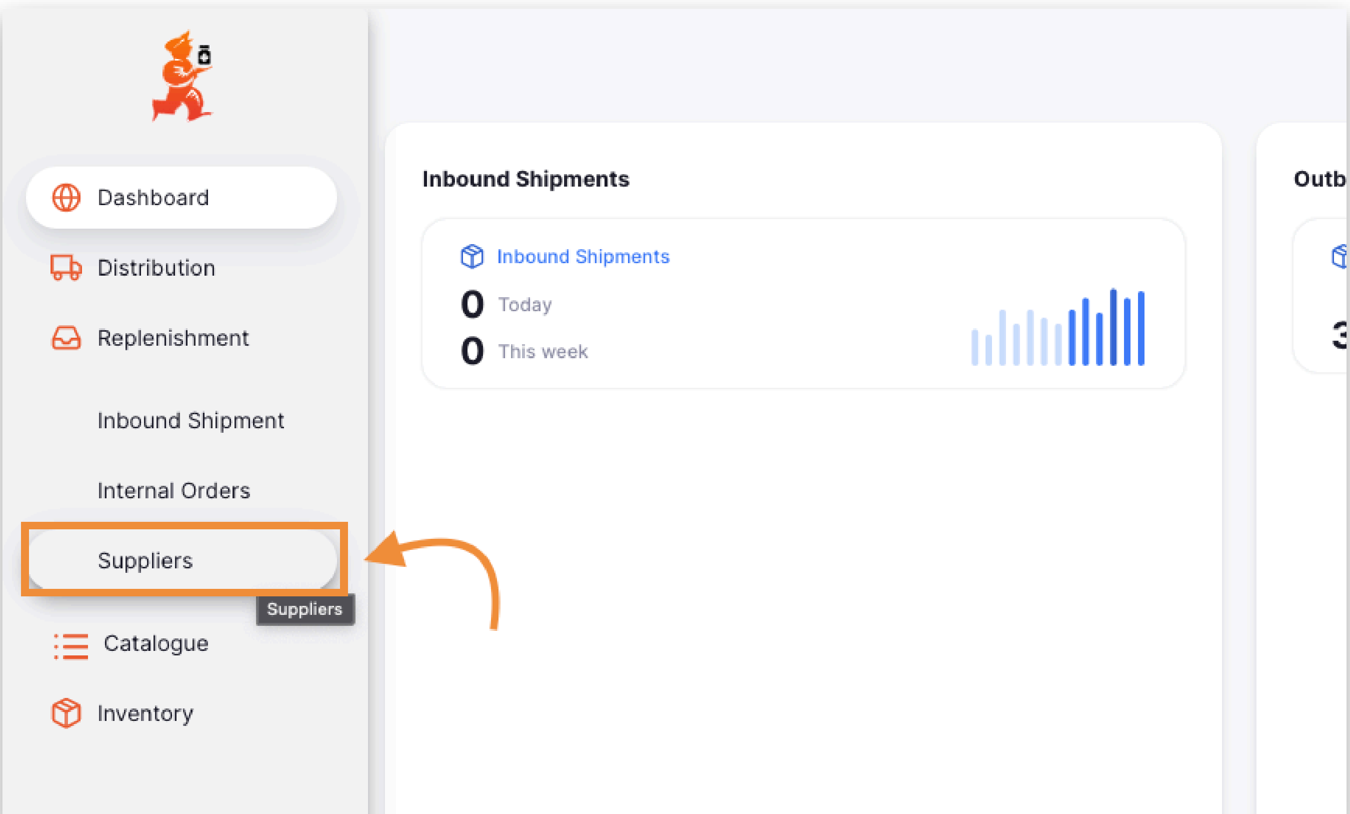
View and manage your suppliers

In mSupply, a supplier is an entity that is sending stock to your store.

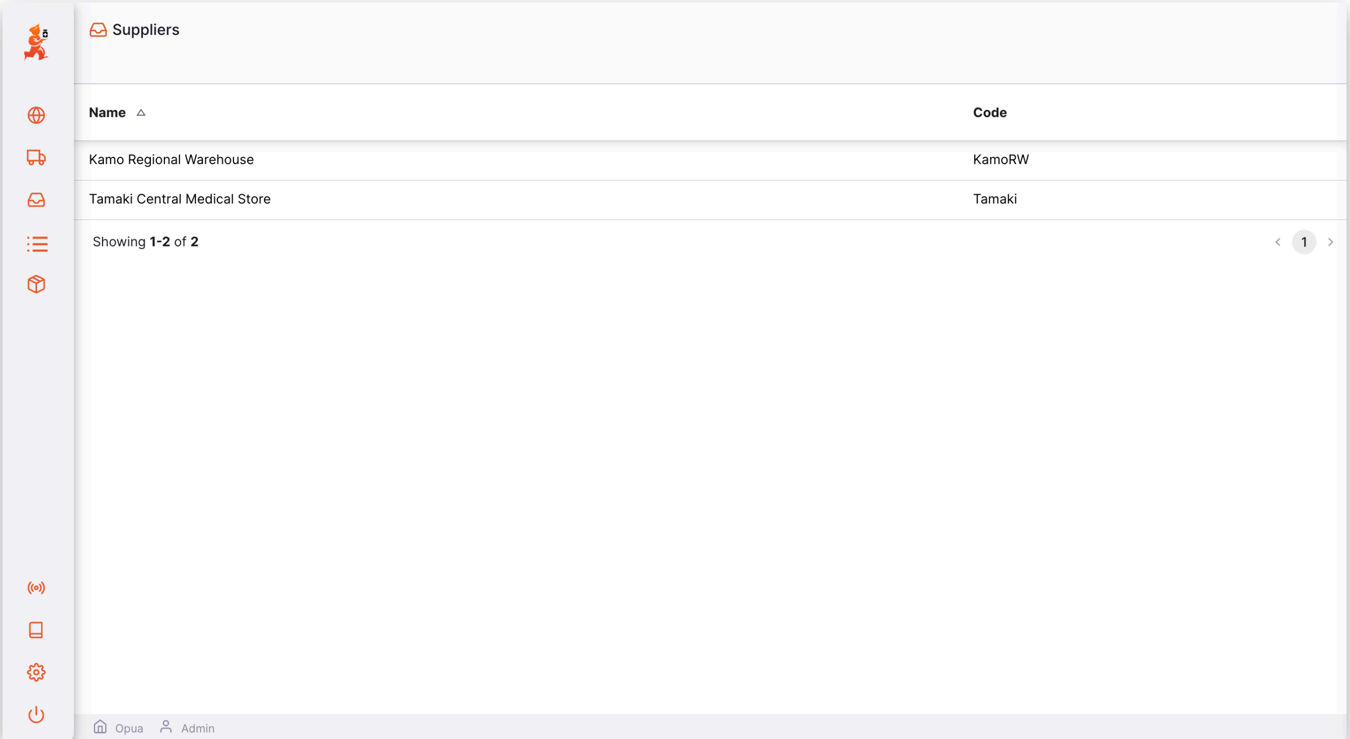
At the moment, you are only able to view your supplier and their details. In the future, you will be able to create and edit your customers (provided you have the authorisation to do so!).

Viewing Suppliers🔗

To view the suppliers of your store, go to `Replenishment` > `Supplier` in the navigation panel:

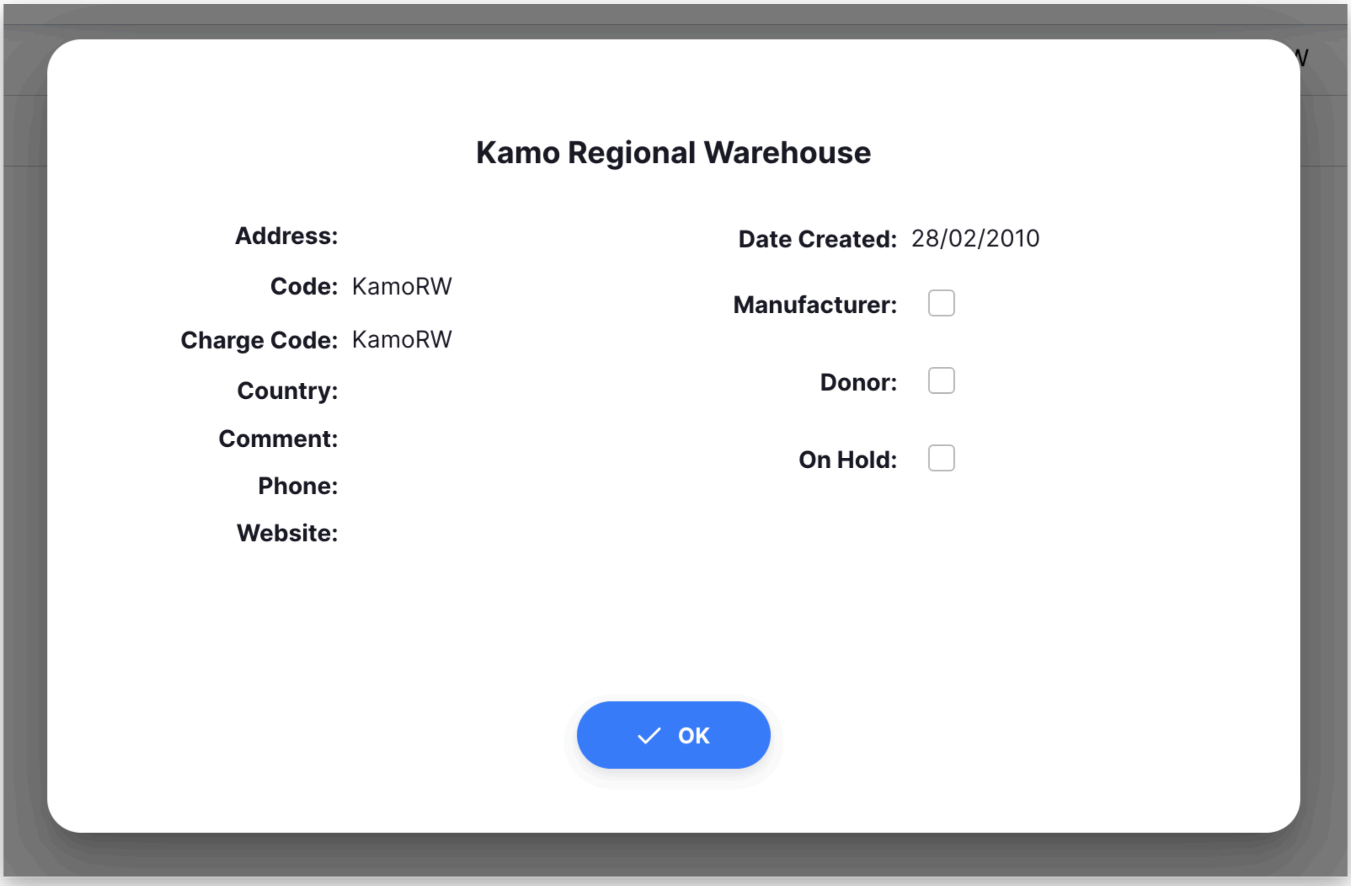


A list of your store's suppliers appears:



Viewing Suppliers Details

To see the details of one supplier, simply tap on its name:



- **Address**: Address of the supplier
- **Code**: This is the code assigned to this supplier in mSupply
- **Charge Code**: Generally the same value as code, however it may be useful when working with your accounting system to have a different code for this supplier
- **Country**: country of the supplier
- **Comment**: Comment about this supplier
- **Phone**: Phone number of the supplier
- **Website**: Web site or email address of the supplier
- **Date Created**: Date when supplier was created in mSupply
- **Manufacturer**: If this is checked, the supplier is also a manufacturer
- **Donor**: If this is checked, supplier is also a donor
- **On Hold**: If this is checked, you won't be able to create new transactions for this supplier

Internal Orders

Internal Orders go by several other names in certain countries or systems:

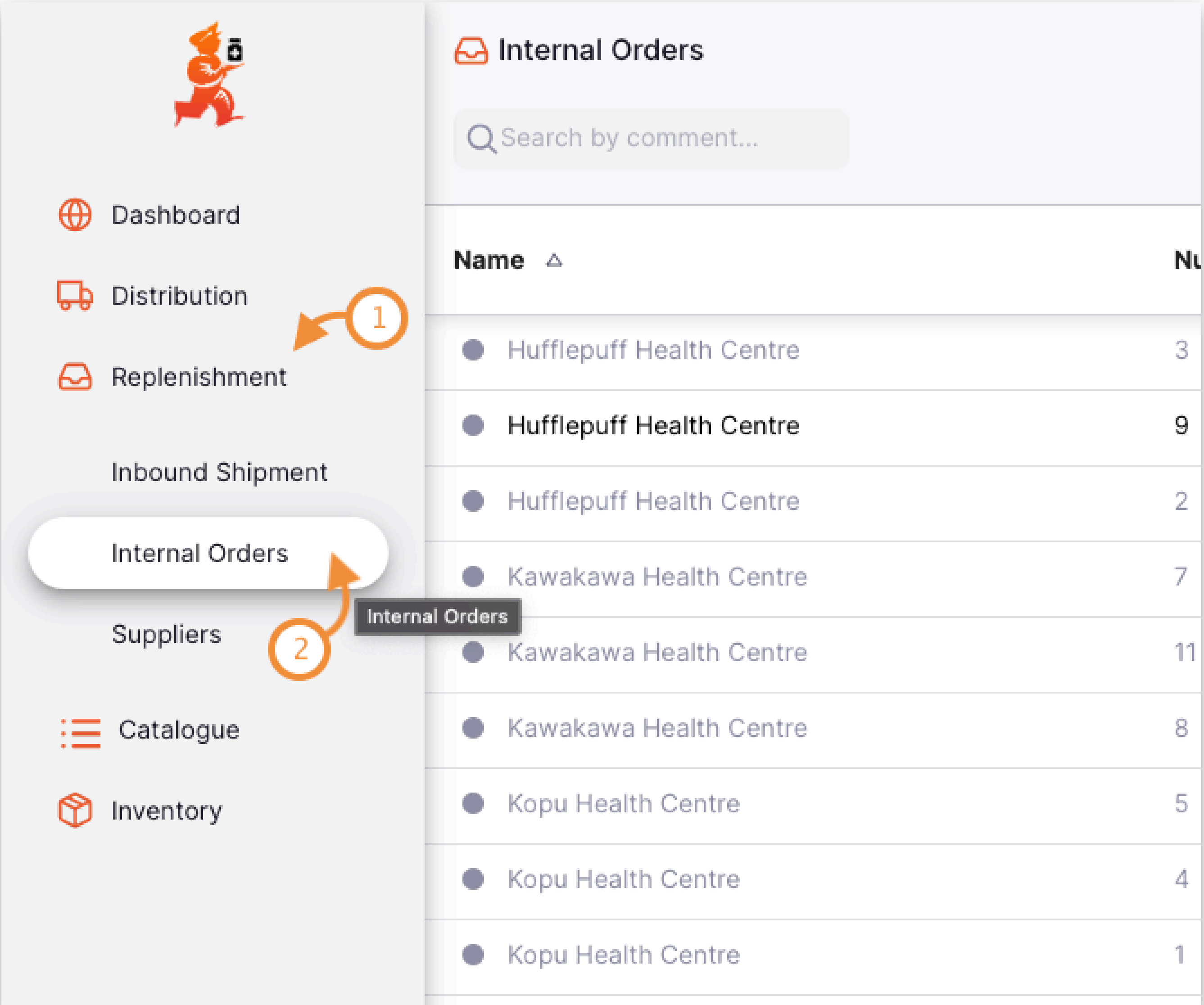
- Requisitions
- Orders
- Report & Requisition
- R&R

Internal Orders are a way to support users in requesting new stock from another store.

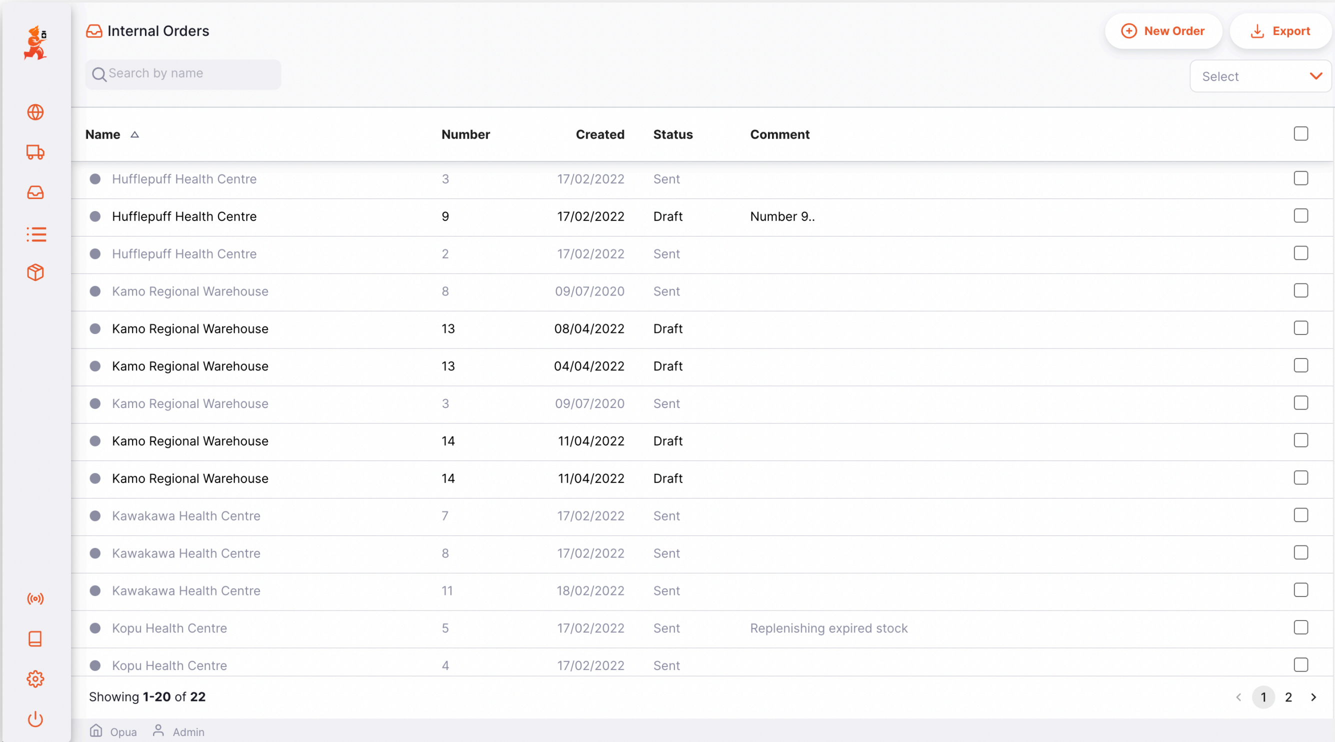
Viewing Internal Orders🔗

If you would like to order some stock from your supplier:

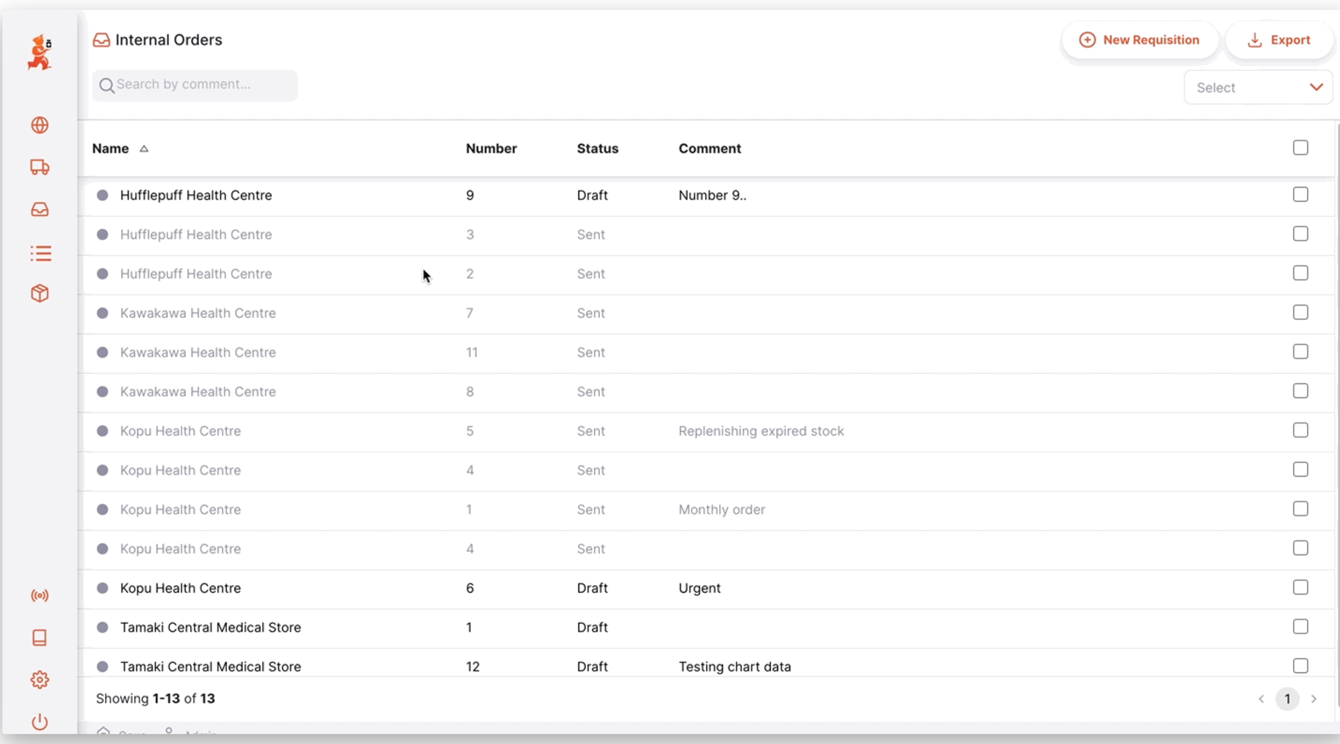
1. Navigate to the `Replenishment` menu
2. Tap on `Internal Orders`



You will see a list of all existing Internal Orders:



You can use the `Search by comment` field to filter the list by the comments of the Internal Orders:



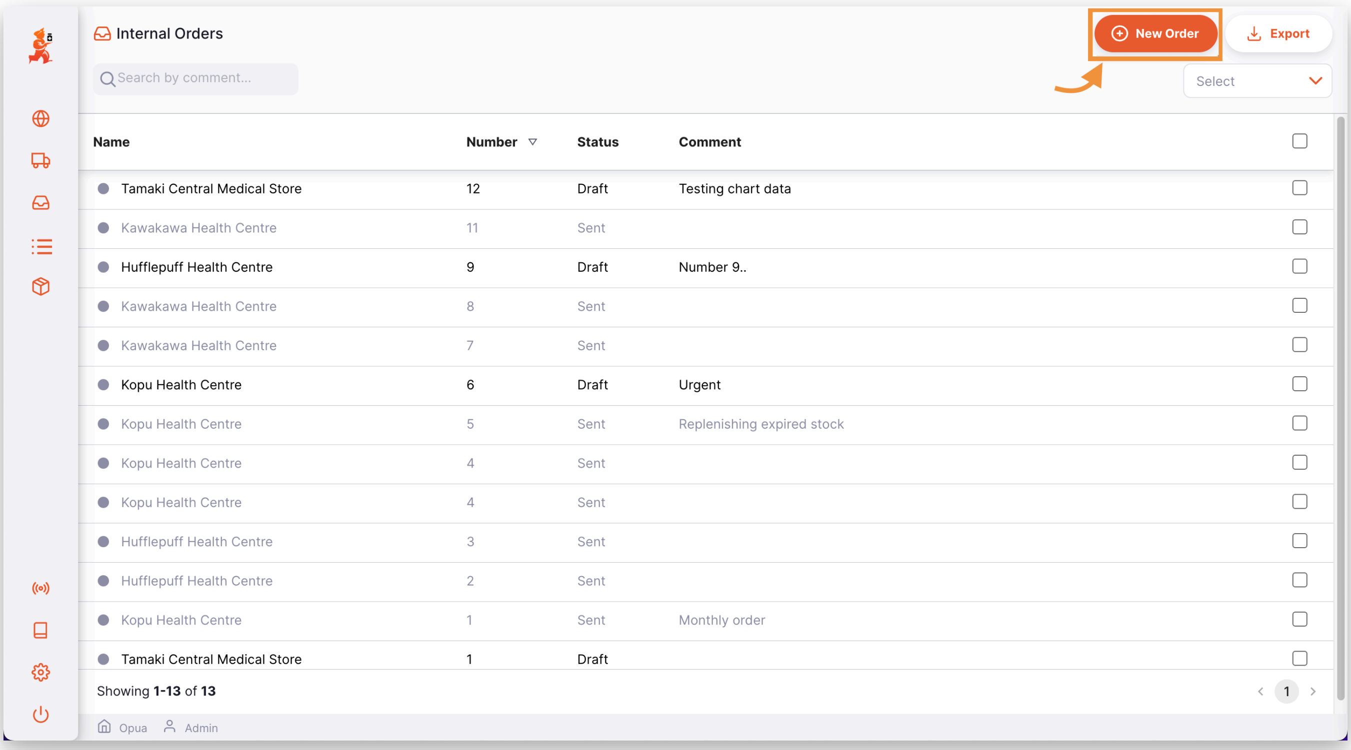
You can sort the list using the column headers:

1. Tap the column header of the column that you want to sort. The column is sorted in ascending order.
2. Tap the column header again and column will be sorted in the opposite order.

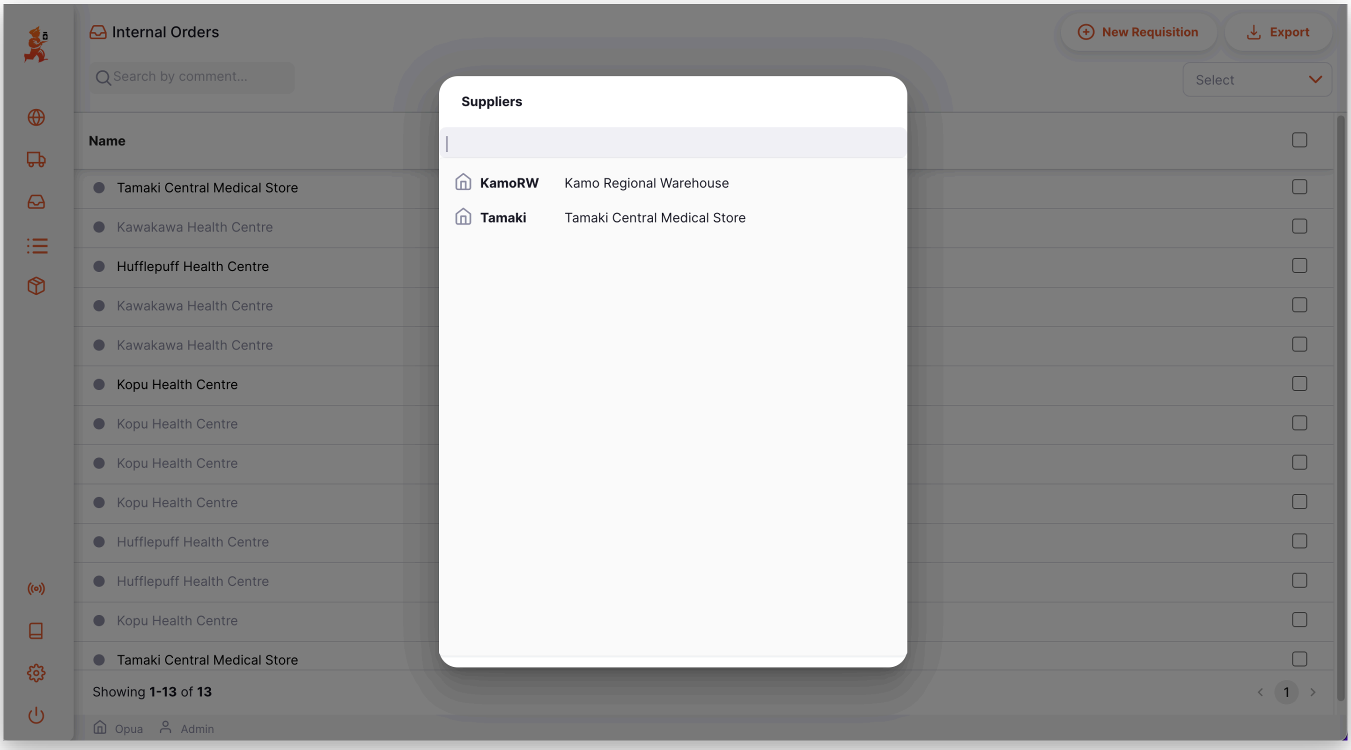
Creating a new Internal Order

Select a supplier

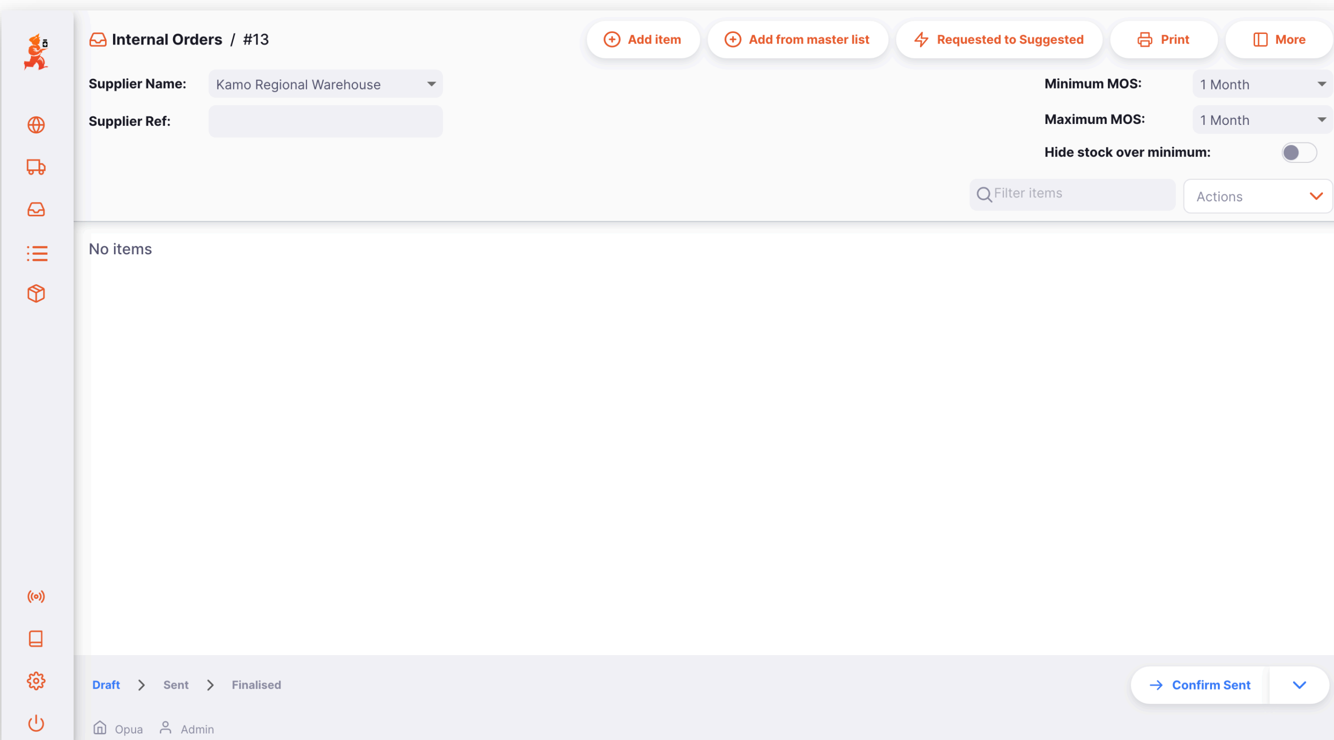
1. Click on the `New Order` button (top right corner):



2. A new window opens, inviting your to select a supplier:



3. Select a Supplier by pressing on their name. You will see a window like this:

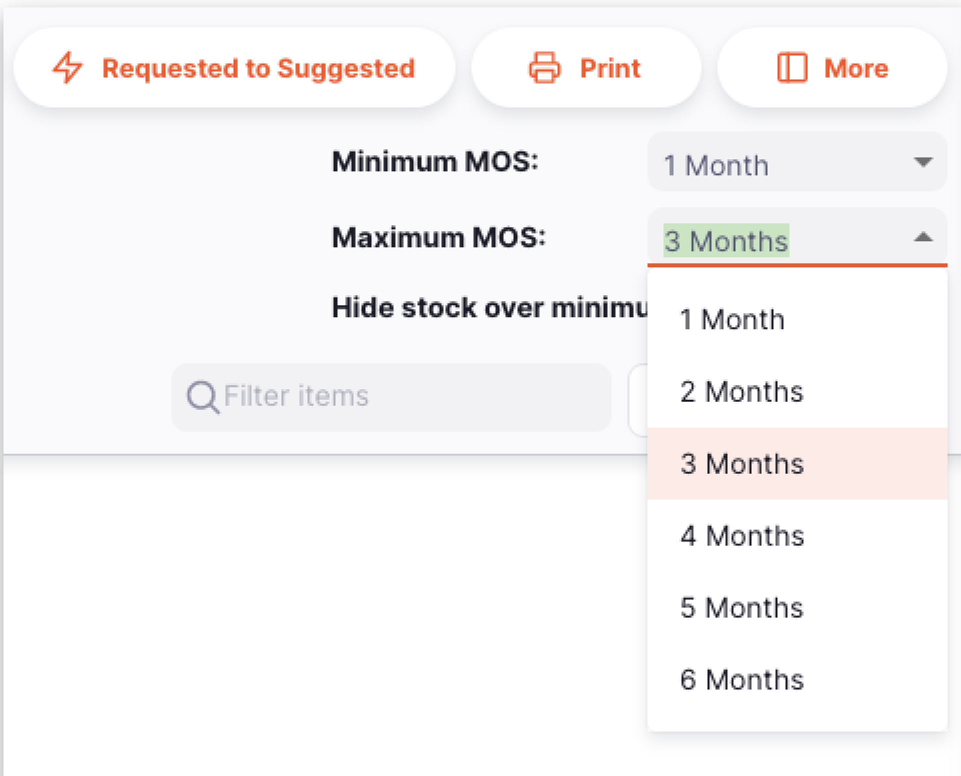


Defining Maximum Month of Stock (Maximum MOS)🔗

Defining the Maximum MOS (Month of Stock) is critical to the calculation of the **Suggested Quantity** and you can change it:

- There is an industry rule of thumb that the *Maximum MOS* should be set to 3 times the ordering cycle
- The default *Maximum MOS* is `3.0`, which is based on a monthly ordering cycle
- If for example, the ordering cycle was every two months, then *Maximum MOS* should be set to 3 x 2 = `6.0`

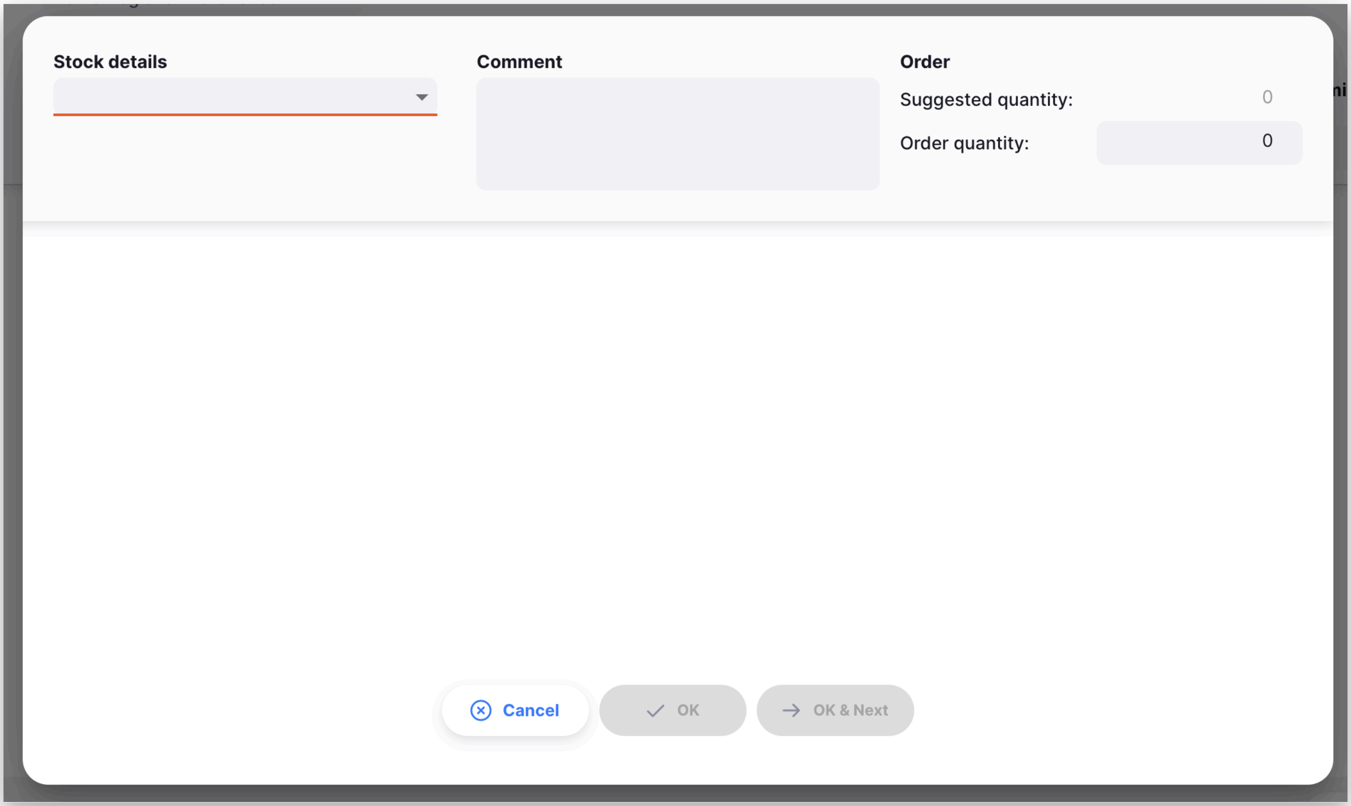
In below example, we are setting our Maximum MOS to 3 Months.



This can be done before or after adding items to your order.

Adding a single item🔗

Tap on `Add Item` to add a single item to your order. A new window opens:



First select the item you want to add to your order. Open the `Stock details` dropdown menu and select your item from the list. You can also type some or all of an item name (or code) to look for a specific item.

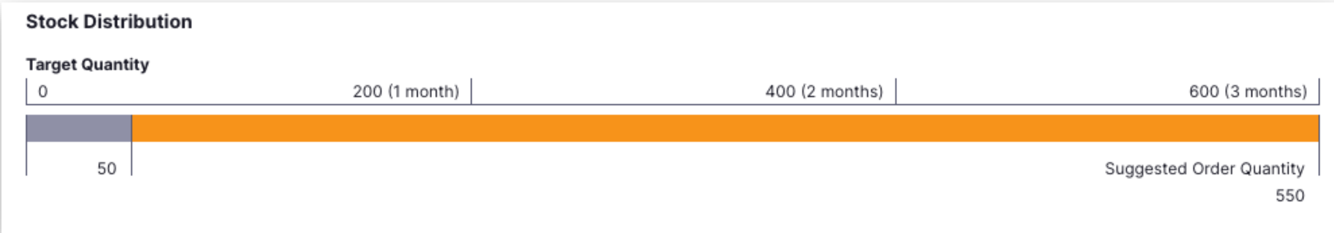
Once item is selected, you should see the following information on the window:

- **Item Code** and **Item Name**
- **Unit**: the default unit used for this item (*eg. Tablet, Vial*)
- **AMC**: Average Monthly Consumption. How much stock your store uses each month on average (based on a configurable number of months, default is set to 3 months)
- **Suggested Quantity**: how much stock mSupply suggests that your order to reach your stock target quantity
- **Order quantity**: the quantity of units that you request from your supplier

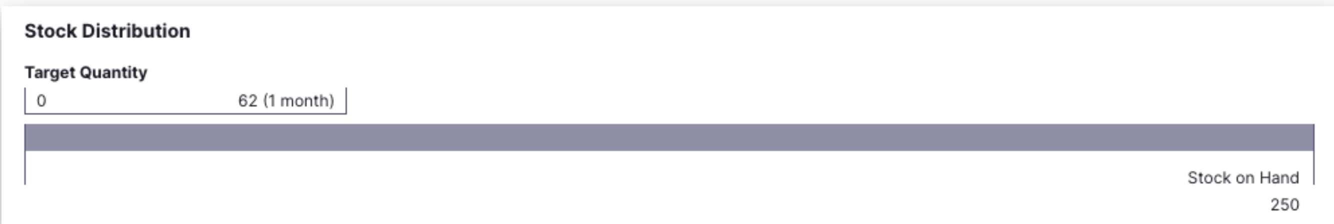
You should also see the following charts:

- **Stock distribution**: In this chart, you will see the following information:
    - The *Target Quantity* for the item. This is calculated as: Maximum MOS x AMC.
    - Your current *Stock on Hand* (in grey)
    - The *suggested quantity* calculated by mSupply

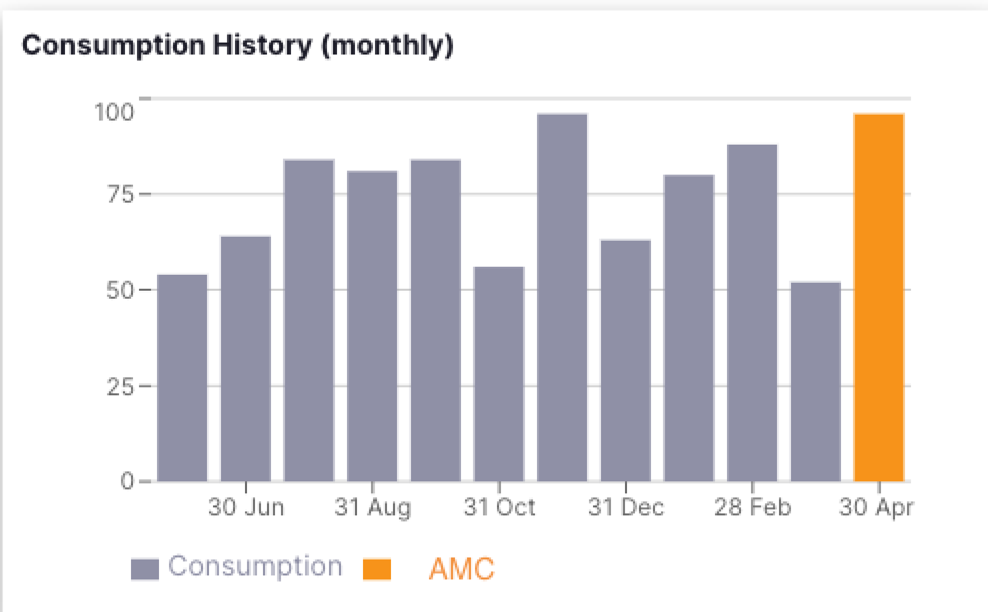
In below example, our target quantity is 600 units which is the equivalent of 3 months of stock (3 x 200 = 600 units). Our stock on hand (in grey) is 50 so in order to reach my target, mSupply suggests to order 550 units (600 - 50).



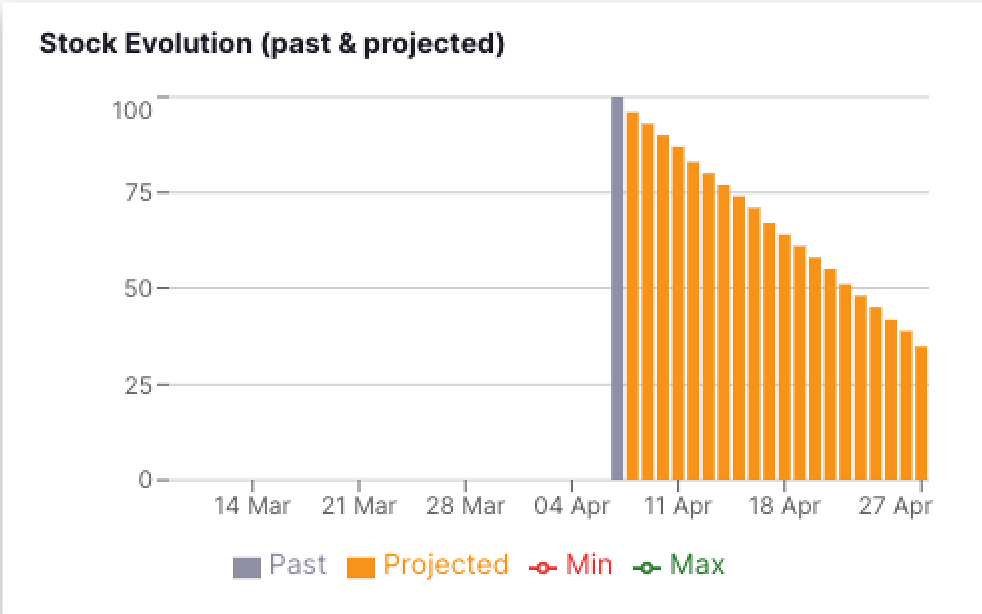
In below example, the target quantity is 62 units. Since we already have 250 units in stock (in grey), the suggested quantity is zero.



- **Consumption History (monthly)**: this chart shows the monthly consumption up to 12 months in the past (in grey) and the current AMC (in orange):

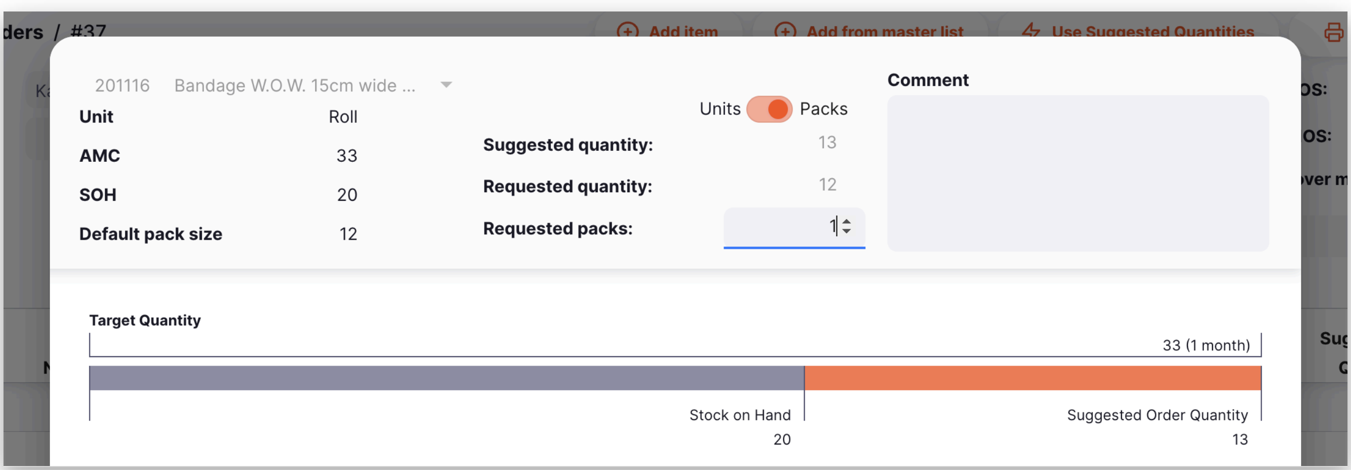


- **Stock Evolution**: this chart shows you your stock level for the last 30 days and your projected inventory for the next 30 days. The projected stock will be updated based on your inputs in the `Order quantity` field:



Requesting a quantity in packs🔗

If the item which you have selected has a default pack size configured (see the mSupply documentation on [editing units](#) for details on how to do this) then you will see a few additional elements on the 'Add item' window:



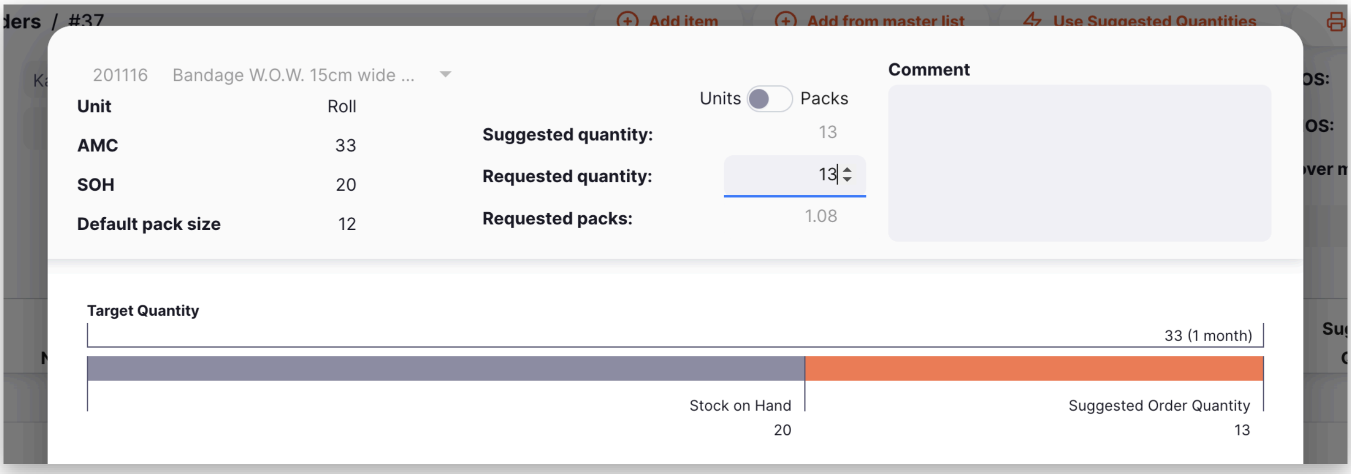
The new elements are:

- The Default pack size
- A switch to toggle between `Units` and `Packs`

- An input field for `Requested packs`

When entering the requested quantity in the number of packs, you'll see the fields as above. The `Requested packs` input is enabled, and the `Requested quantity` is disabled, and automatically calculated for you.

The reverse happens when you are entering by units, as you can see below:



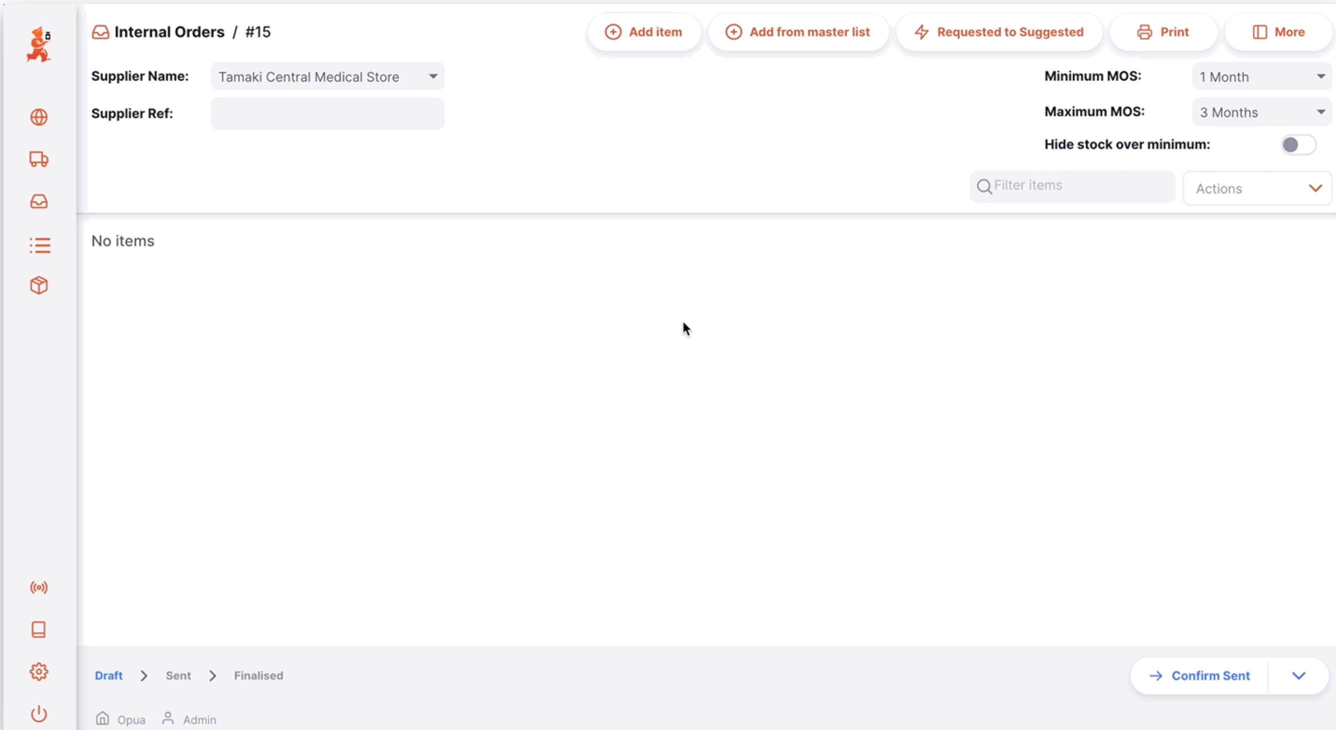
Adding items using a master list🔗

If your organisation is using Master Lists, you can add multiple items at once using your store's master lists. It is particularly useful when you have a lot of items in your order and you don't want to add them all one by one.

1. Tap on the `Add from master list` button
2. Select a master list
3. A dialog window opens asking you whether you want to add all of the items from this master list. Tap `OK` if you wish to proceed.

All the items of the master list are now listed in your order. If you had previously added single item, it will add items that are not already there.

Tap on an order line to change the **Order Quantity** or tap on the button `Requested to Suggested` button



Master Lists are defined and assigned to stores at the central server level. You can only see the master lists that are visible to your store.
Also be aware that if you are using programs functionality, only master lists which are not part of a program can be selected.

If you don't find the master list you are looking for and if you want to create a new one, please contact your administrator.
You can create Internal Orders from multiple master lists by repeating above actions with another master list.

Reading the Internal Order's list🔗

When you add items (using a master list or not), the item is added to the order's table. The following information is provided for each order line:

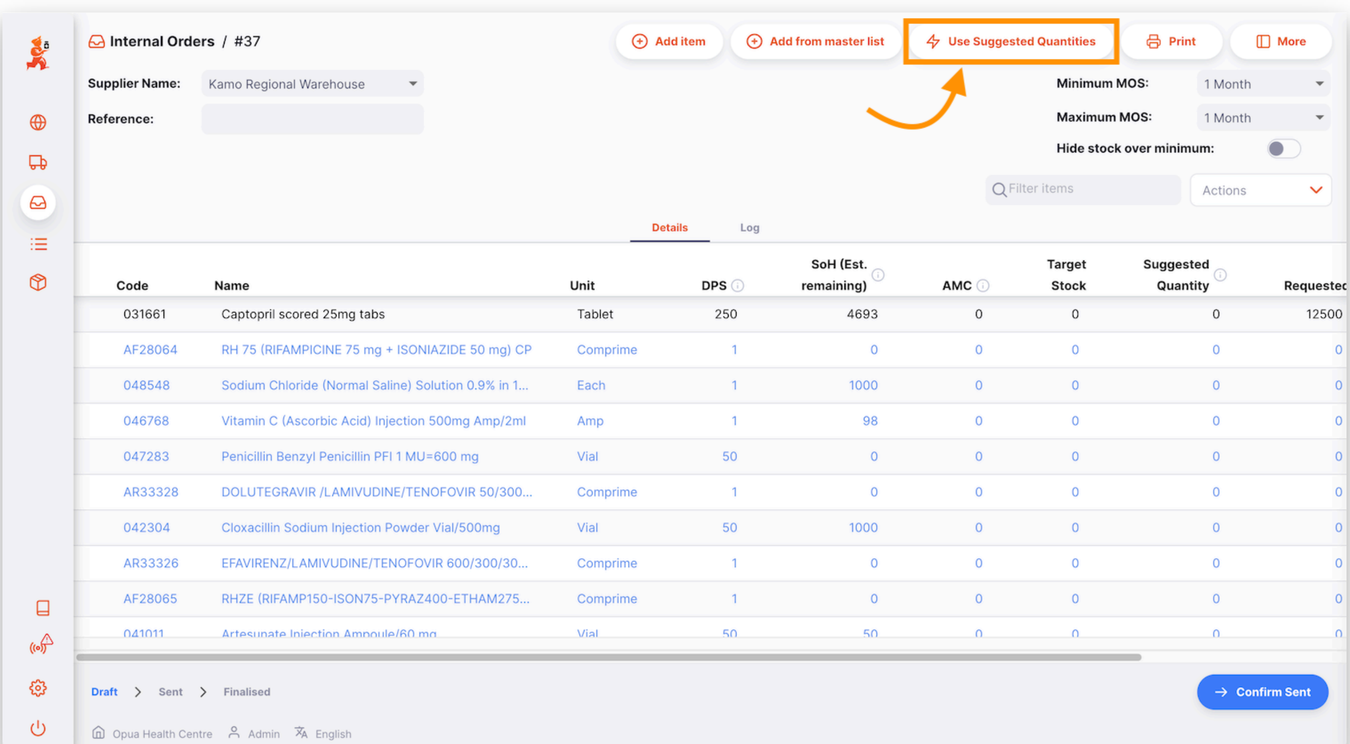
Status	Description
Code	Code of the item
Name	Name of the item
Unit	Unit of the item e.g. Tablet, Capsule, Vial
DPS	Default pack size of the item
SoH (Est.	How much stock currently available in your store for this store

Status	Description
remaining)	
AMC	Average Monthly Consumption: how much stock your store uses each month on average (based on a configurable number of months, defaults to 3 months)
Target Stock	This is the stock you are aiming for. Calculated as: AMC x Maximum MOS
Suggested Quantity	How much stock mSupply suggests that your order. This is calculated as: AMC x Maximum MOS - SoH
Requested	This is set to zero by default. This is the quantity of units you are ordering from your supplier.
Requested packs	An approximation of the number of packs requested, which is the requested quantity / default pack size
Comment	A comment for the order line. Comments will be visible to your supplier.

Using Suggested Quantities🔗

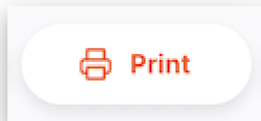
If you tap on the `Use Suggested Quantities` on the requisition header, mSupply will automatically copy the values in the **Suggested Quantity** column into the **Requested Quantity** column.

You can always manually edit the order quantity for each by tapping on an order line.



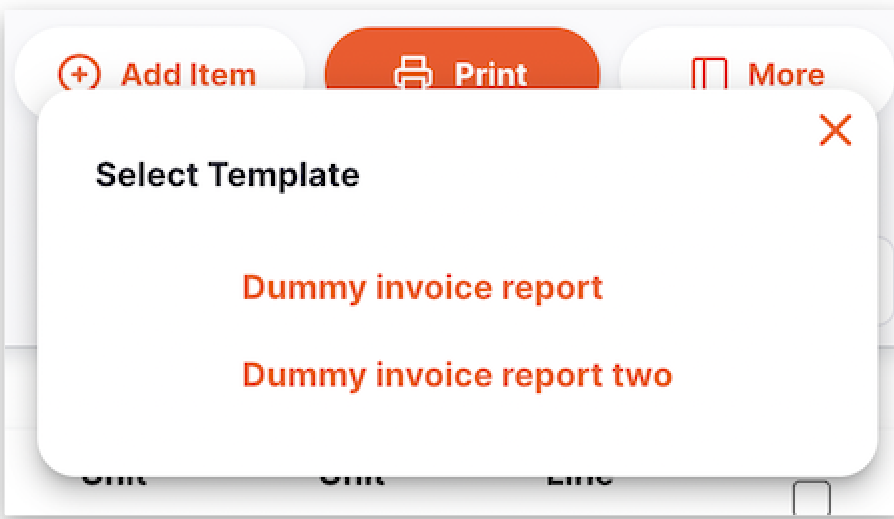
Printing an Internal Order🔗

When viewing a specific Internal Order, simply click the `Print` button which is on the top right of the page. When printing, a PDF file is generated for you, which will then open in a new browser tab. This can then be printed using your browser by clicking print or using `control+P` (if using windows) or `cmd+P` keys on your keyboard (if using a mac).



This will either

- Show a menu of possible reports for you to select from before creating a PDF. This will happen if there are more than one report defined for the `Requisition` report type.
- Create a PDF immediately, if there is only one report to select from



Sending an Internal Order🔗

To send the order to your supplier:

1. Tap on the `Confirm Sent` button (bottom right corner)
2. A dialog window opens asking you whether you are sure to want to send the order. Tap on `OK` to proceed
3. Status of your order is now `SENT` and the order is no longer editable

Ensure that your order is correct before sending it to your supplier. Once sent, no further changes can be made to finalised orders.

Approving Internal Orders

Remote approval process

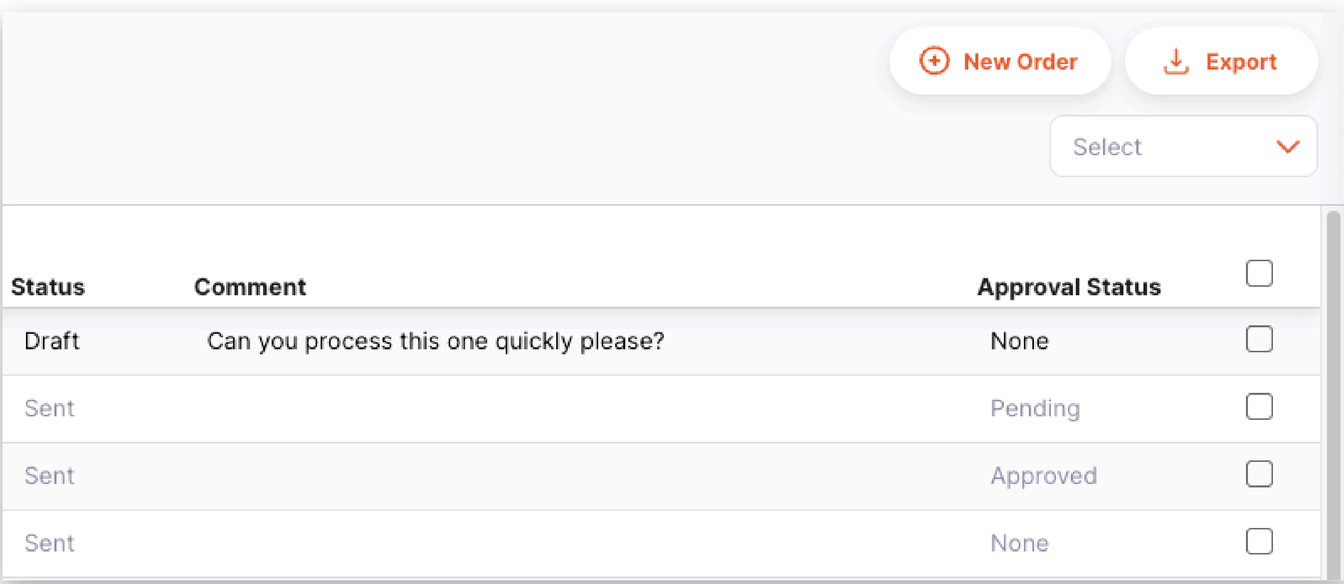
It is possible to configure stores, so that requisitions require approval from specified users before they can be fulfilled. For a full description of this process refer to the mSupply Remote Authorisation documentation.

To do this:

- In the requesting store, enable the store preference `Include requisitions from this store in supplier's remote authorisation process`
- In the supplying store, enable the store preference `Use remote authorisation for response requisitions`

For further detail on configuring store preferences, refer to the mSupply documentation on the topic.

When configured in this way, the requesting store will see an additional column in the Internal Order list, showing the approval status:



And when viewing a specific Internal Order, there are columns showing the approved quantity, approved number of packs and a comment entered by the approver, if there is one:

Filter items Actions

Details Log

Suggested Quantity	Requested	Requested packs	Approved Quantity	Approved packs	Approval Comment
0	53	53	0	0	
0	4	0.4	0	0	

Similarly, the supplying store will have an additional column in the requisition list view showing the approval status :

Approval Status	Comment
Pending	From internal order 18
None	From internal order 16
Approved	From internal order 17
Approved	From internal order 6

And finally, a specific requisition will also have new columns, for the approved quantity and an approval comment, if one has been entered by the approver:

Filter items Actions

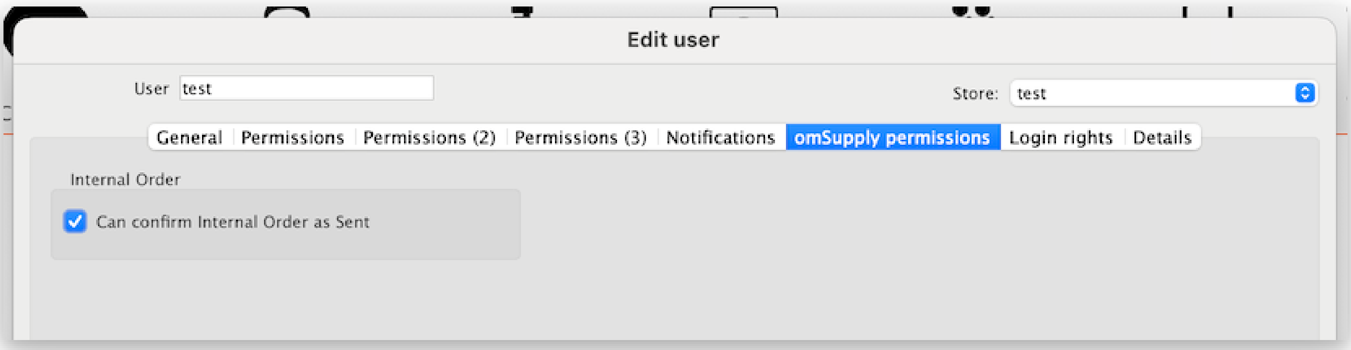
Details Log

Requested	Approved Quantity	Approval Comment	Supply	Remaining
9	8	Unable to supply full quantity	8	8
3	4	Quantity increased due to available pack size	4	4

Local approval process🔗

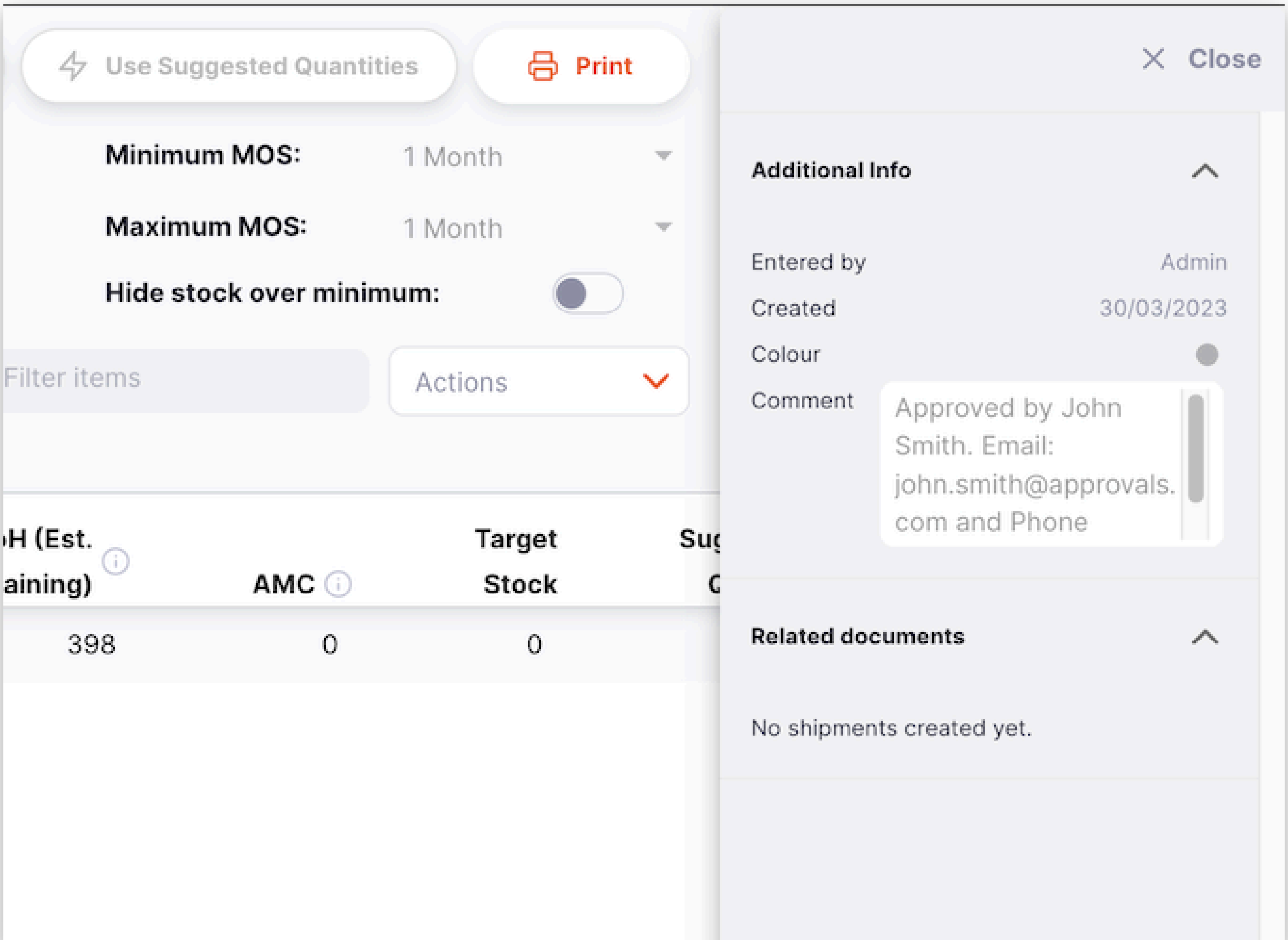
Another option for implementing an approval step for Internal Orders is to enable what is called 'local approval'. With this, you can allow only certain users to change the status of an Internal Order to `Sent`. To allow a user to change the status of an Internal Order to `Sent`, they require the permission `Can confirm Internal Order as Sent` to be enabled.

To set the permission, edit the user within mSupply and change to the `Open mSupply permissions` tab, shown below:



Without this option checked, the user will not be able to update the Internal Order status to `Sent` and the order is unable to be processed.

On changing the status to `Sent`, the user's details are added to the comment field; this can be seen when viewing the Internal Order, in the details panel:



and is also shown to the approver in the remote authorisation web application if that is being used.

The additional text is of the form:

```
Approved by [user's full name]. Email: [user's email address] and
Phone Number: [user's phone number].
```

These details are taken from the user, as configured in mSupply. Refer to the Managing Users section on how to do this.

Inbound Shipments

Inbound Shipments can be used to receive stock from suppliers.

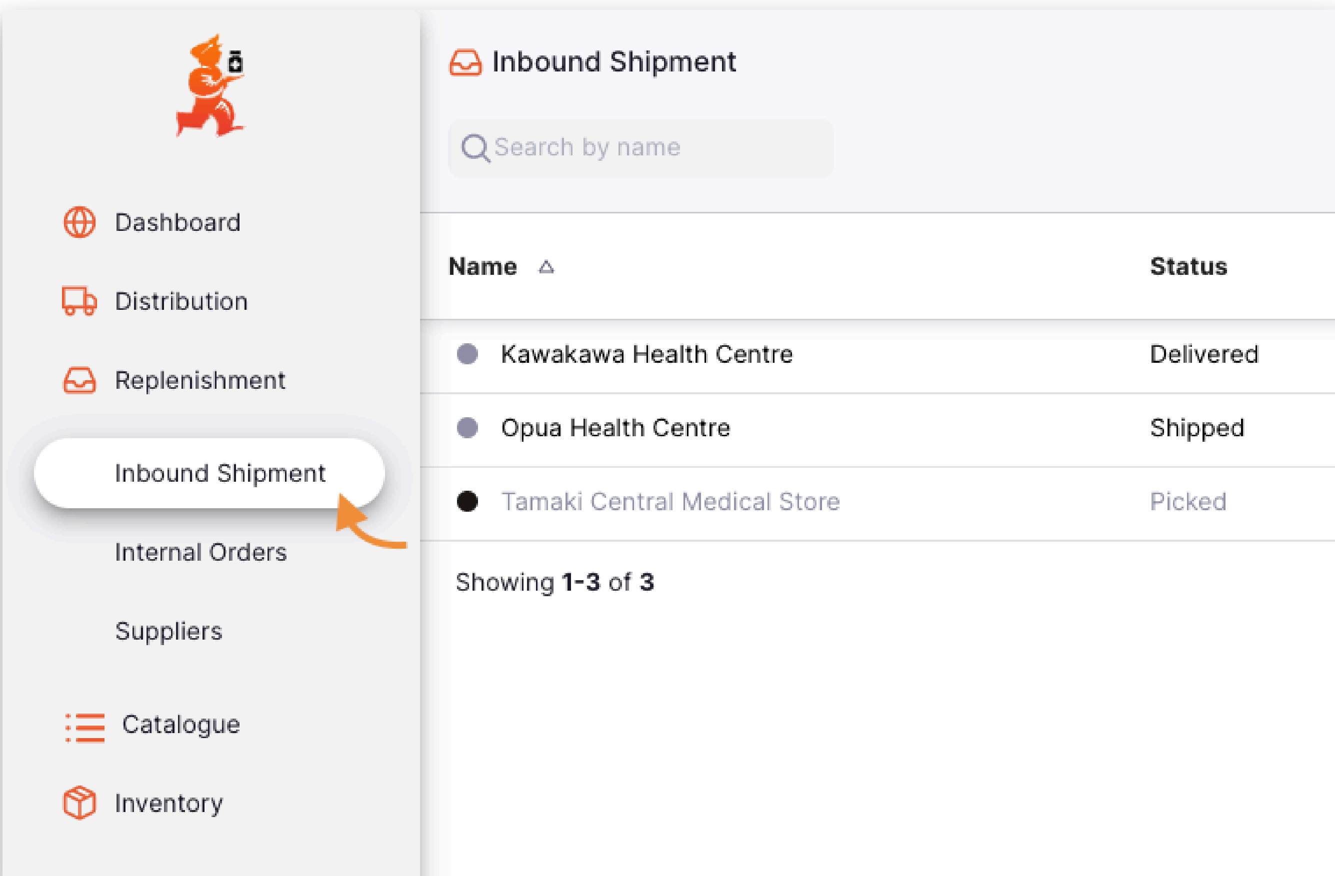
If you have used mSupply in the past, you may be familiar with the term **Supplier Invoice** instead of Inbound Shipment.

All received goods should be recorded in mSupply either by:

- Manually creating an Inbound Shipment (manual Inbound Shipment)
- Working with an Inbound Shipment that has been created automatically as a result of a stock transfer from another store in your mSupply

Viewing Inbound Shipments🔗

Go to the Inbound Shipments Menu🔗



To access the **Inbound Shipment** menu:

1. Go to the `Replenishment` menu in the navigation panel
2. Click on `Inbound Shipment`

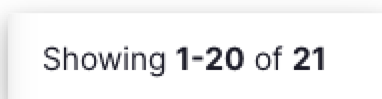
Inbound Shipments list🔗

First thing you see is a list of existing Inbound Shipments.

The Inbound Shipments list is divided into 7 columns:

Column	Description
Name	Name of the Supplier
Status	Current Status of the shipment
Number	Reference Number of the shipment
Created	Creation date of the shipment
Comment	Comment for the shipment
Total	Total value of the shipment

2. The list can display a fixed number of shipments per page. On the bottom left corner, you can see how many shipments are currently displayed on your screen.



3. If you have more shipments than the current limit, you can navigate to the other pages by clicking on the page number or using the right of left arrows (bottom right corner).

4. You can also select a different number of rows to show per page using the option at the bottom right of the page.

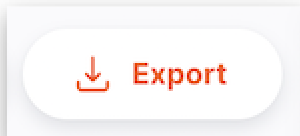
Search by Supplier Name🔗

You can filter the list of shipments by supplier name. This can be useful if you're looking for one particular shipment!

Type the name of a supplier in the `Search by name` field (on the left, just above the list headers). All the shipments for this supplier will appear in the list.

Exporting Inbound Shipments🔗

The list of Inbound Shipments can be exported to a comma separated file (csv). Simply click the export button (on the right, at the top of the page)



and the file will be downloaded. The export function will download all Inbound Shipments, not just the current page, if you have more than 20 of them.

Delete an Inbound Shipment🔗

You can delete a shipment from the Inbound Shipment list.

1. Select the shipment that you want to delete by checking the box on the left end of the list. You can select more than one shipments to be deleted. You can even select them all using the master checkbox in the list headers.

2. Open the Select dropdown (top right corner, above the list) and select `Delete selected lines`.

A notification confirms how many shipments were deleted (bottom left corner).

You can only delete Inbound Shipments with a status `NEW`.

Creating a new manual Inbound Shipment🔗

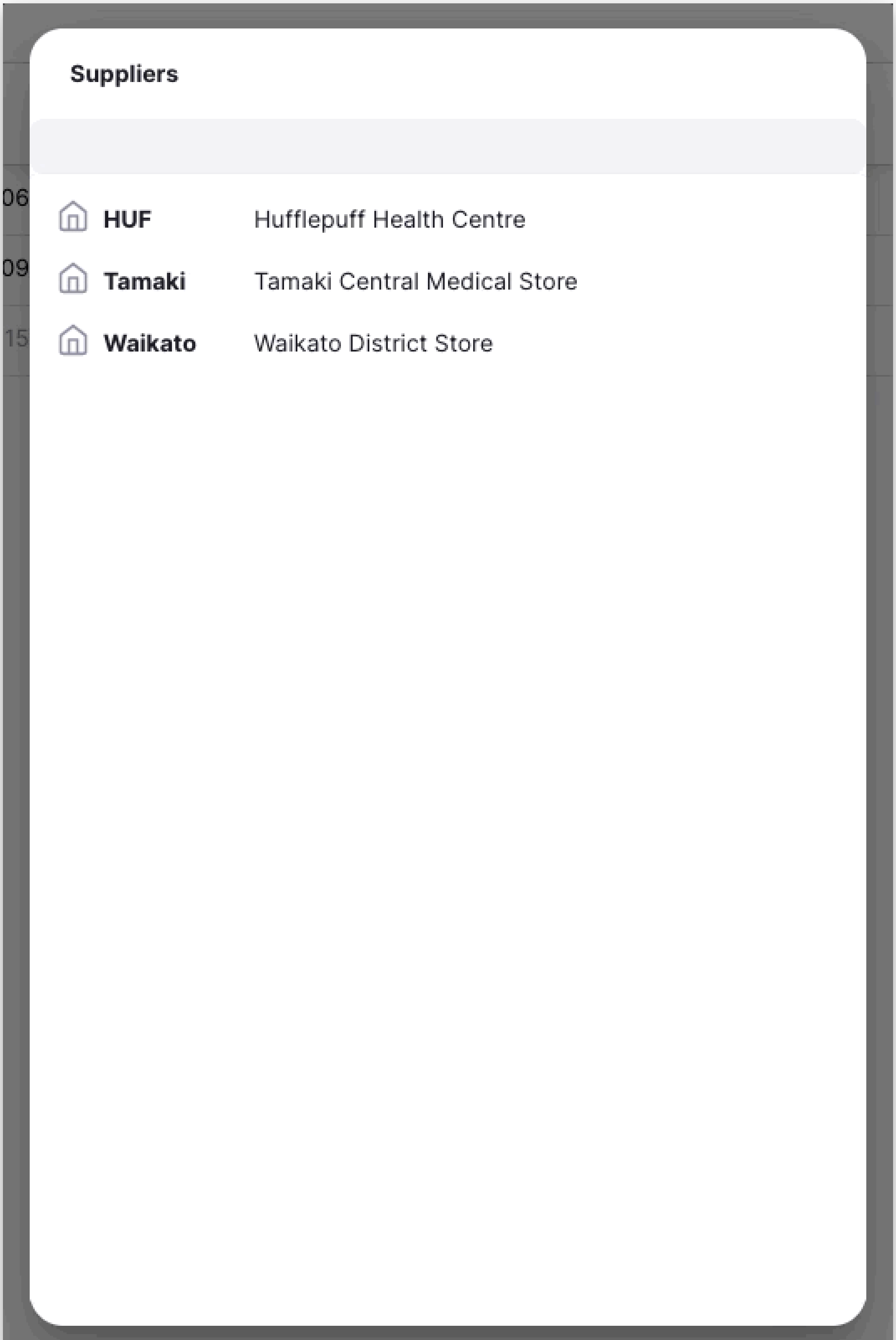
1. Go to `Replenishment> Inbound Shipment`
2. Press the `New Shipment` button, in the top right corner

3. A new window `Suppliers` opens, inviting you to select a supplier

Select a Supplier🔗

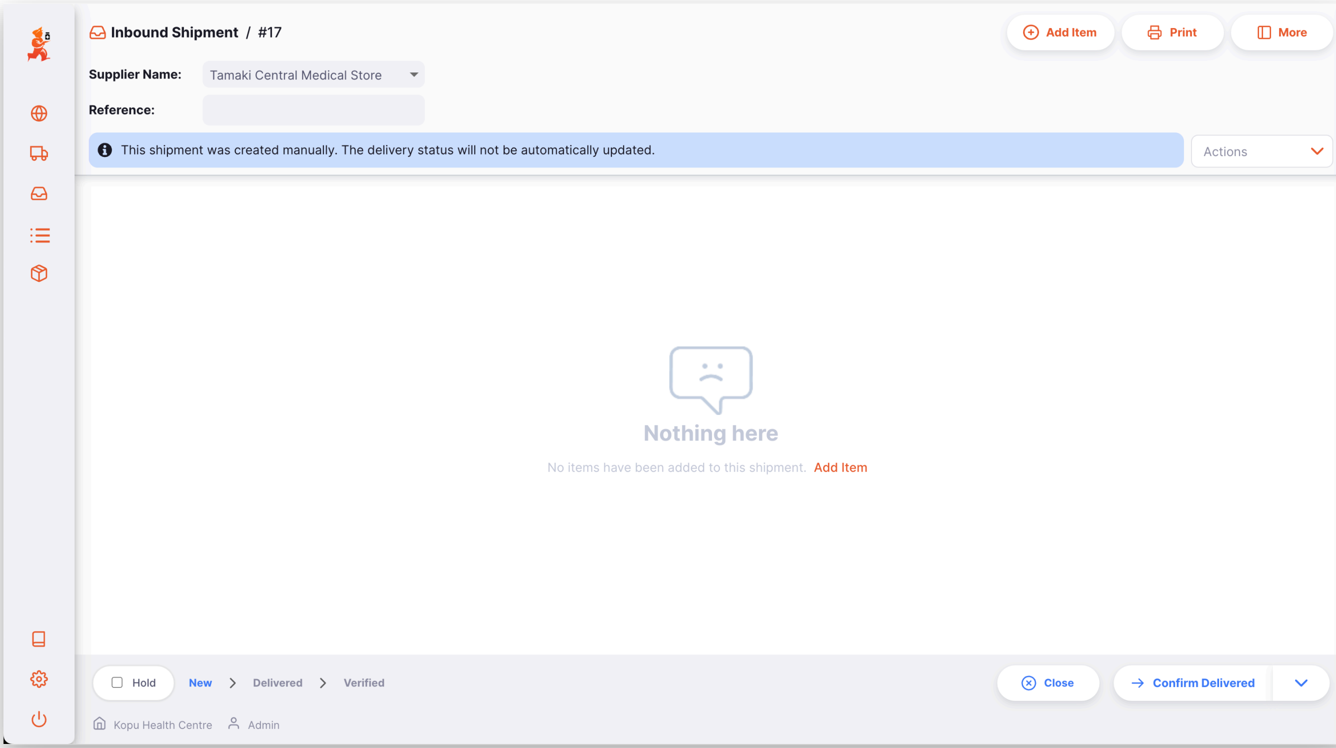
1. In the `Suppliers` window, you will be presented with a list of suppliers. You can select your supplier from the list or you can type as much of a supplier name.

You can tell if a supplier is also using mSupply in their store. If they do, you will see icon like this () next to the supplier code.
In below example, we are receiving stock from **Tamaki Central Medical Store**.



2. Once you have selected a supplier, your Inbound Shipment is created.

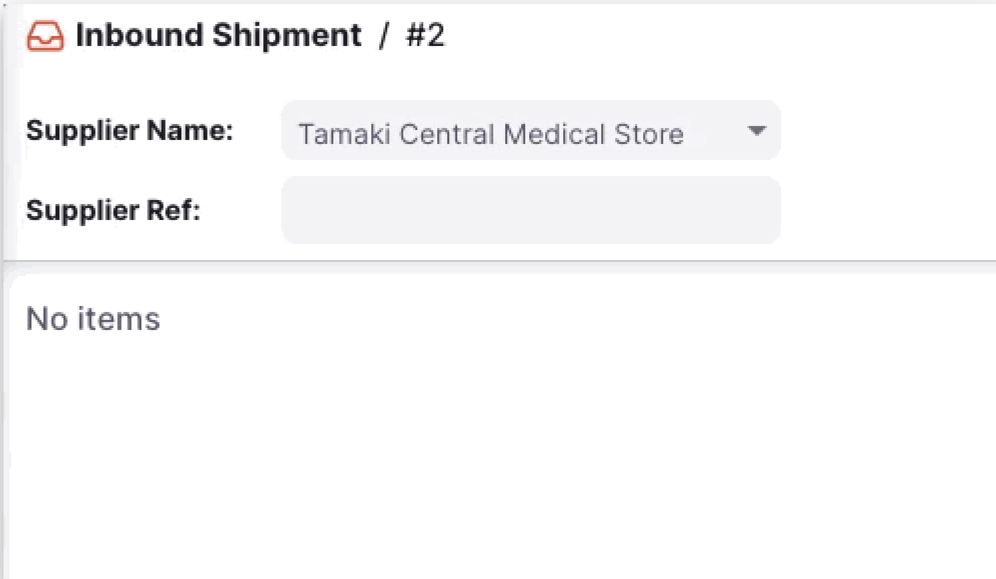
If everything went well, you should see the name of your supplier in the top left corner and current status should be `New`.



Edit the Supplier Name🔗

If you have selected the wrong supplier, you can change the supplier name in the `Supplier Name` field or select one the dropdown list:

In below example, we are replacing **Tamaki Central Medical Store** by **Waikato District Store**.



Enter a Supplier Reference

Once your Inbound Shipment has been created, you can capture a supplier reference in the `Supplier Ref` field, if they have one (eg. _ PO#1234567 _)

View or edit the Inbound Shipment Information Panel

The Information Panel allows you see or to edit information about the Inbound Shipment. It is divided in multiple sections:

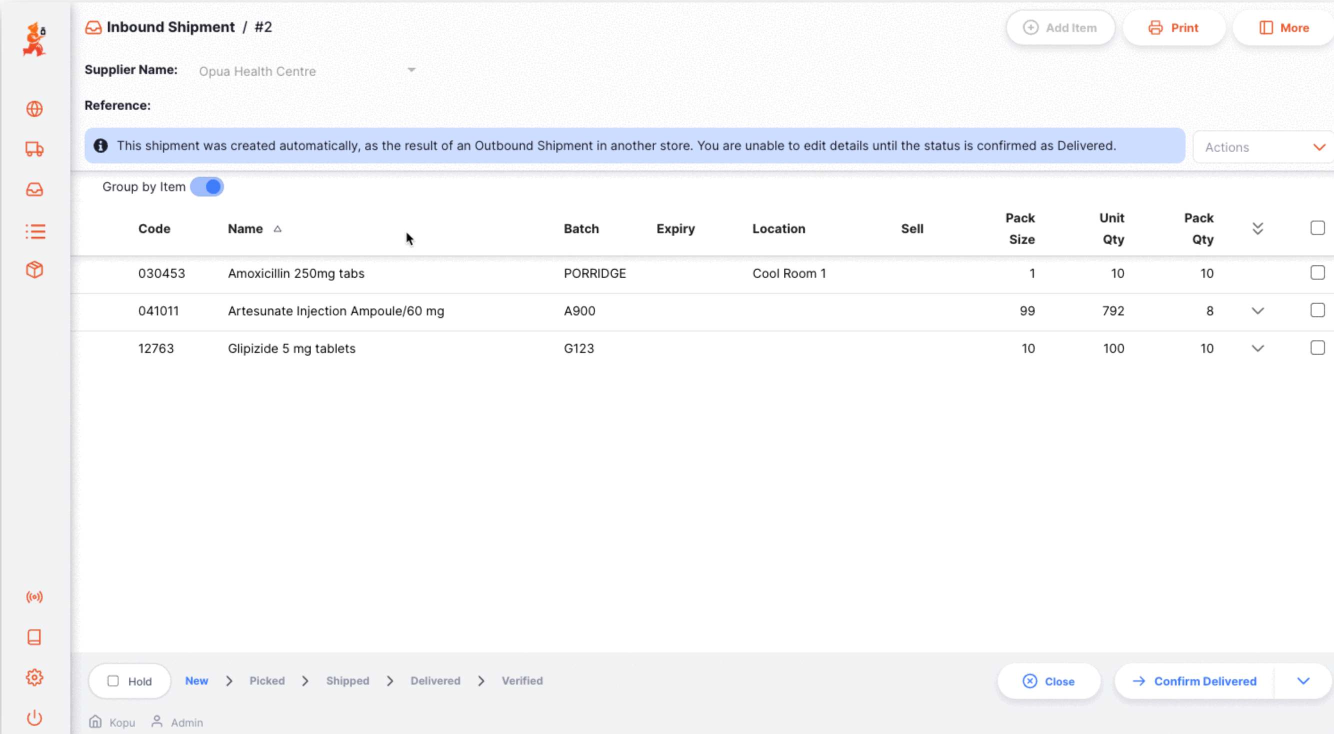
- Additional Info
- Related Documents
- Invoice Details
- Transport Details

We are planning to add more sections in the future as Open mSupply grows.

How to open and close the Information Panel ?

To open the Information Panel, you can tap on the `More` button, located in the top right corner of the Inbound Shipment view.

You can close by tapping on the `X Close` button, on the top right corner of the information panel.



Additonal Info🔗

In the **Additional Info** section, you can:

- See who created the Inbound Shipment (name of the user)
- View and edit the Inbound Shipment color. To edit the color, tap on the colored circle and select a color from the pop-up
- Write or edit a comment

Related Documents🔗

In the **Related Documents** section, you can see other related transaction document for the Inbound Shipment.

If your Inbound Shipment was created to fulfill a **Internal Order**, the reference number of your order would appear in this section.

In the future, we would also include other documents such as temperature records, transportation documents or pickslips.

Invoice Details

In this section, you will see by default the total cost price of the items listed in the Inbound Shipment.

You can also add a **Service charges** if you wish to add other charges such as Freight Costs. To add a Service charges to the Invoice Details:

1. Tap on the `Edit Service Charges` button. A new window opens.
2. Tap on the `Add charge` button on the new window. A new line appears in the list of charges. You tap on `Cancel` if you do not wish to add anything.
3. **Name:** select a service charges in the dropdown list. You can customise the list of available charges. Contact your administrator.
4. **Comment:** You can add a comment to provide further details about the new charge
5. **Amount:** Enter the amount of the charge
6. **Tax:** Enter a % of tax for the charge
7. **Total:** The total field is automatically calculated based on the Amount and the Tax percentage
8. **Delete:** You can tap on the `Delete` icon to delete the charge

In this section, you can also edit the tax rate (%) for the cost price. Tap on the pencil icon and enter

Transport Details

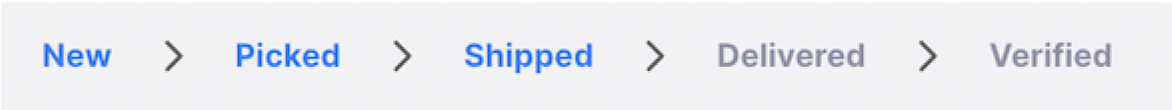
In this section, you can see or edit a transport reference number (eg. a booking or a tracking reference number).

Inbound Shipment Status Sequence

The status sequence is located at the bottom left corner of the Inbound Shipment screen.

Passed statuses are hightlighted in blue, next statuses appear in grey.

Status Sequence: current status is `New`.

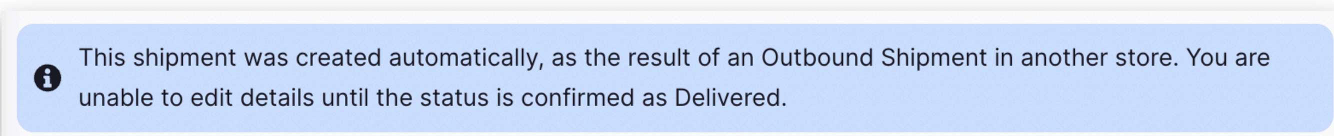


Status Sequence: current status is `Shipped`.

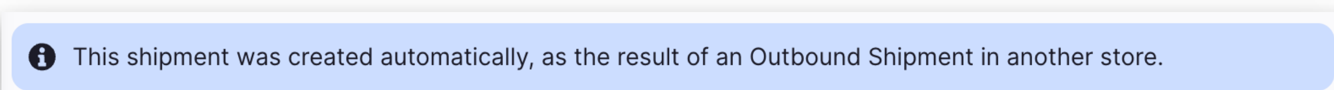
There are 5 status for the Inbound Shipment:

Status	Description
New	This is the first status when you create a new manual Inbound Shipment
Picked	Supplier has confirmed that shipment is picked and ready to ship (applies only to automatically created shipments)
Shipped	Shipment has been shipped and goods are now in transit (applies only to automatically created shipments)
Delivered	When you confirm that the shipment has been delivered
Verified	When you have verified the inbound shipment

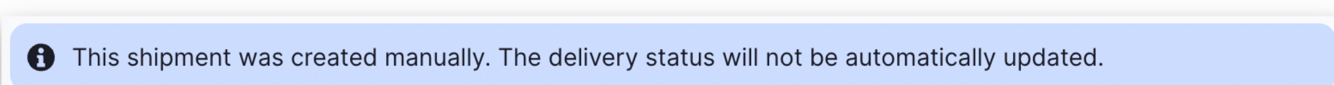
You probably noticed that two of the status values only apply to automatically created shipments. These are created by the system when another store in the system creates an Outbound Shipment to deliver stock to your store. If this is the case you'll see a message near the top of the page:



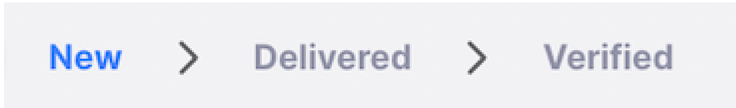
Note that this message appears differently if the status is `Delivered` or `Verified`



If, however, you've created an Inbound Shipment manually, then the following message shows:



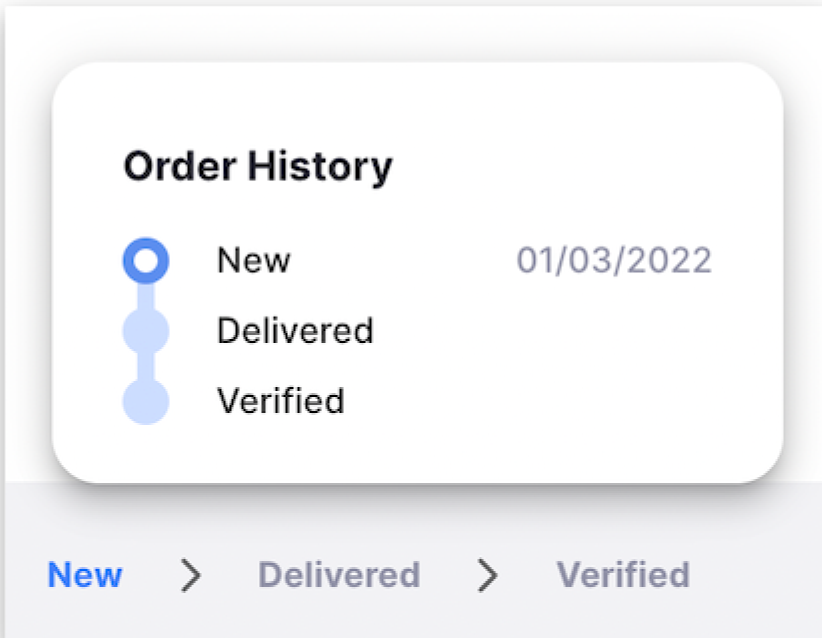
and you'll see that the status bar has only the status values which apply to this type of shipment.



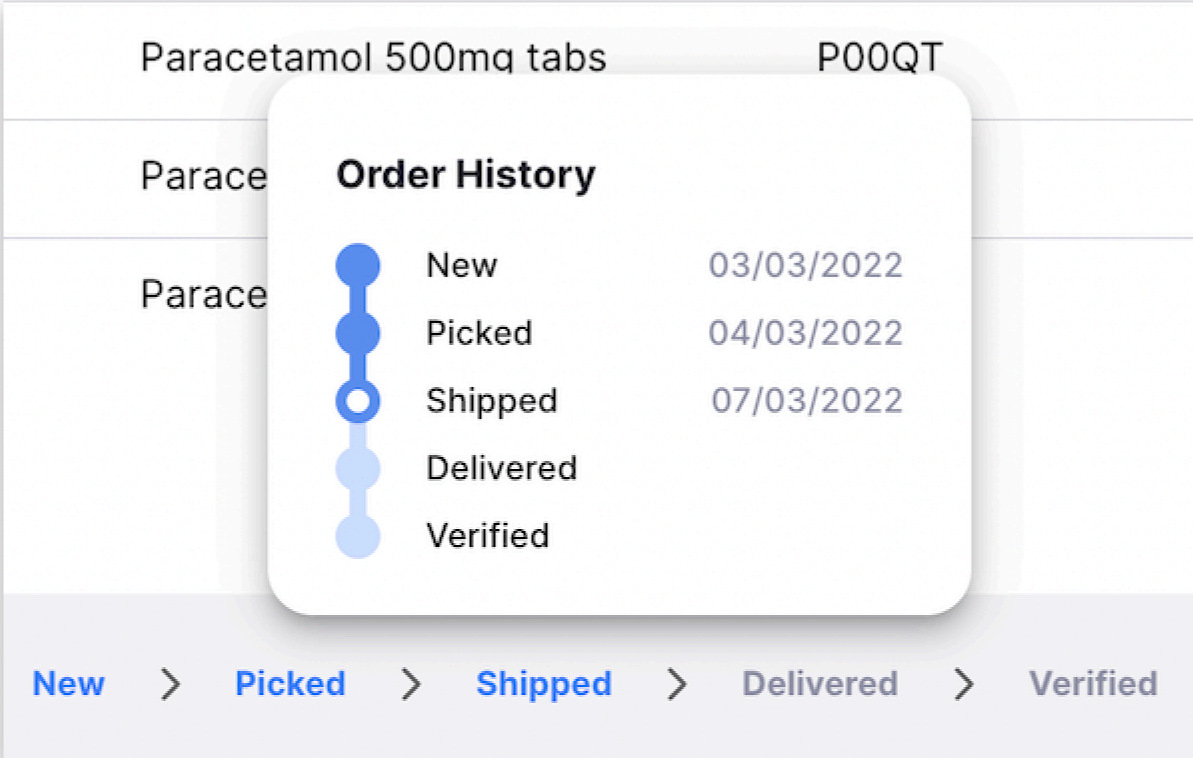
Status Sequence: current status is `New`.

If you hover over the status sequence, a shipment history window appears. You can see the date when a shipment was updated from one status to another.

This manual shipment has been created on 03/03/2022



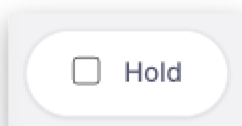
This automatic shipment has been created on 03/03/2022, allocated on 04/03/2022 and picked on 07/03/2022



Hold checkbox🔗

Located on the bottom left corner, on the left of the status sequence.

Check the `Hold` checkbox prevents the Inbound Shipment from being updated to the next status.



Close and Confirm button🔗

Close Button🔗

Click on the `Close` button to quit the Inbound Shipment view and return to the Inbound Shipments list.

Confirm Button🔗

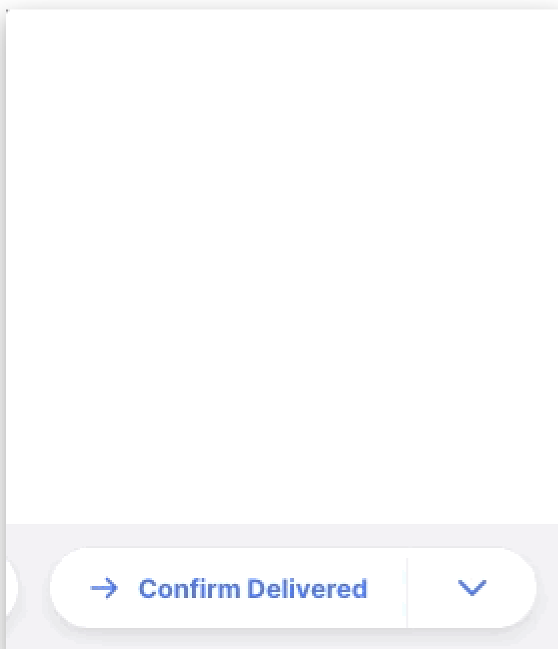
The `Confirm` button is the button to update the status of a shipment. The status which you can confirm depends on the current status of the shipment and follows the sequence shown below.

When managing an Inbound Shipment, you can only confirm it as Delivered or Verified.

Confirm...	Current Status	Next Status
Confirm Delivered	Shipped	Delivered
Confirm Verified	Delivered	Verified

You don't have to update a shipment to next status in the sequence. You can choose to skip some of them to go directly to `Confirm Verified` for example.

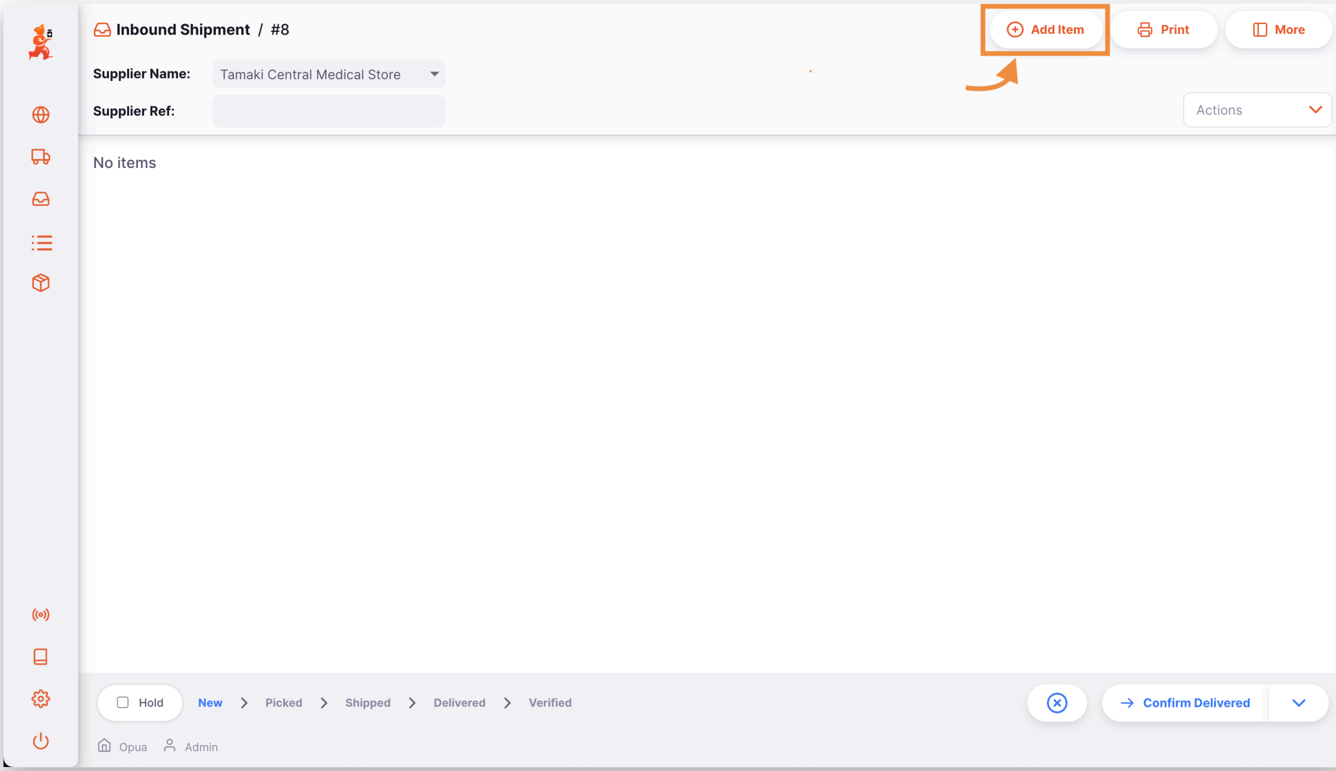
As demonstrated below, tap on the down arrow of the `Confirm` button and select the status you want the shipment to be updated to.



Adding lines to an Inbound Shipment🔗

To add a line, tap on the `Add Item` button located in the top left corner of your screen.

A new `Add Item` window opens.

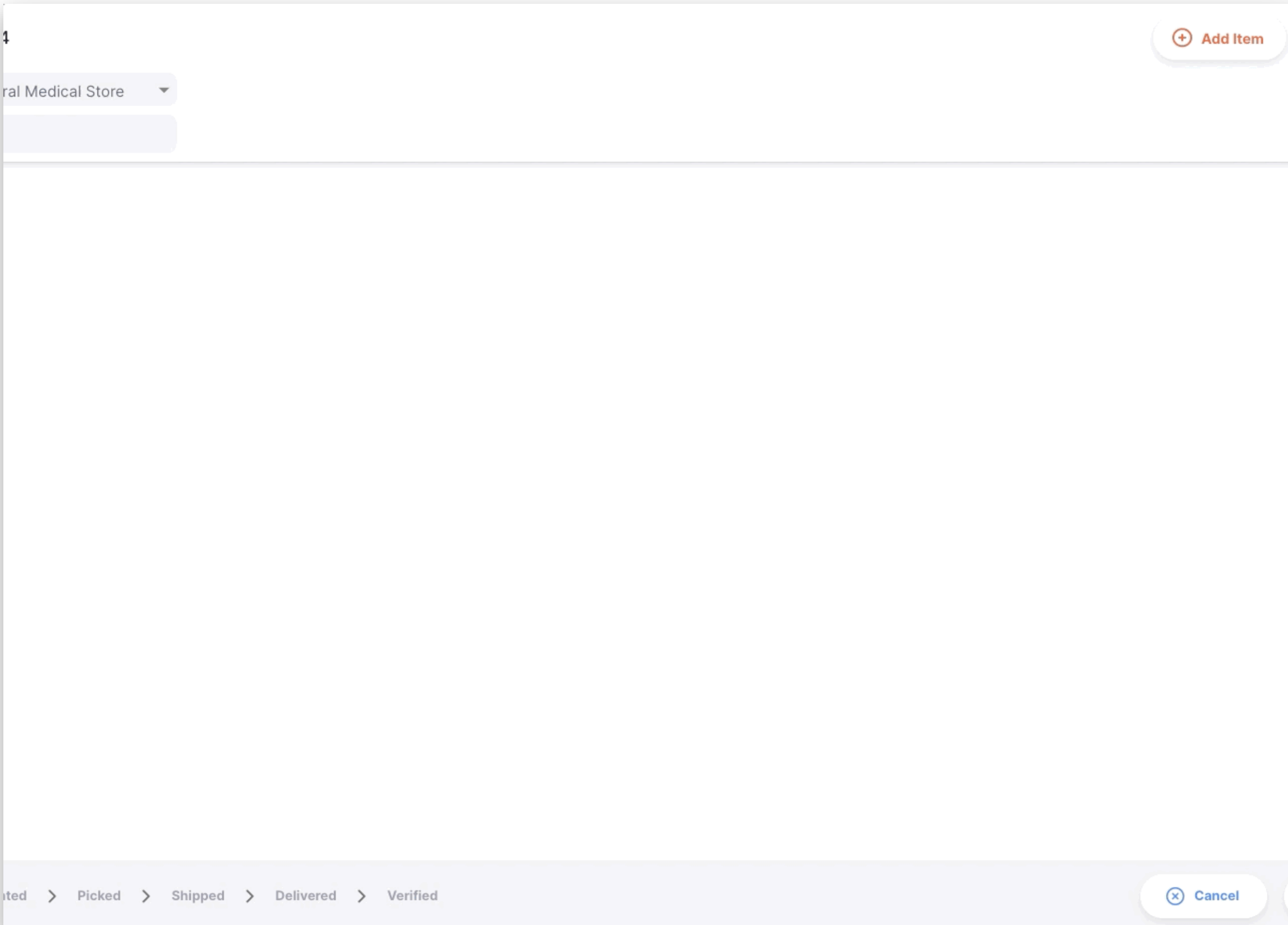


Select an Item🔗

In the `Add Item` window, you can look up an item by:

- Reading through the list of available items
- or by typing some or all of an item name
- or by typing some or all of an item code

Once your item is highlighted, tap on the name or press `Enter`.

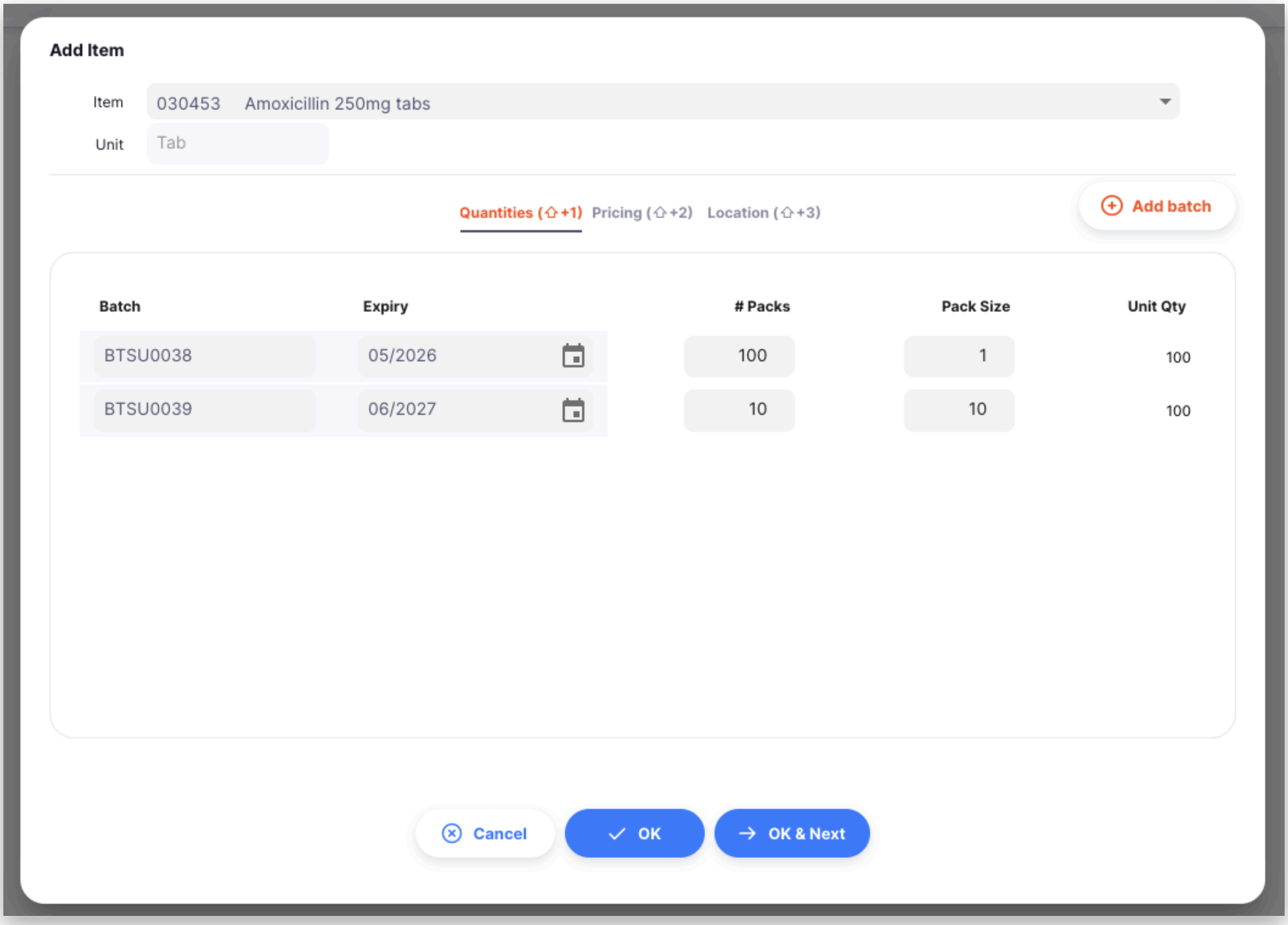


Quantities tab🔗

In the `Quantities` tab, you can update the following fields:

1. **Batch**: Type here the batch number. Leave blank if item is not managed with batch number.
2. **Expiry**: The expiry date of the batch number. Leave blank is not applicable
3. **# Packs**: The quantity of packs you are receiving
4. **Pack Size**: The quantity of units per pack (by default, pack size is 1)
5. **Unit Qty** (read-only): Automatically calculated based on # Packs and Pack Size (`[# Packs] x [Pack Size]`)
6. If you are receiving more than one batch number for the same item, you can tap on the `Add Batch` button

In below example, we are receiving 2 batch numbers for item *030453 - Amoxicillin 250mg tabs* with a different pack size.

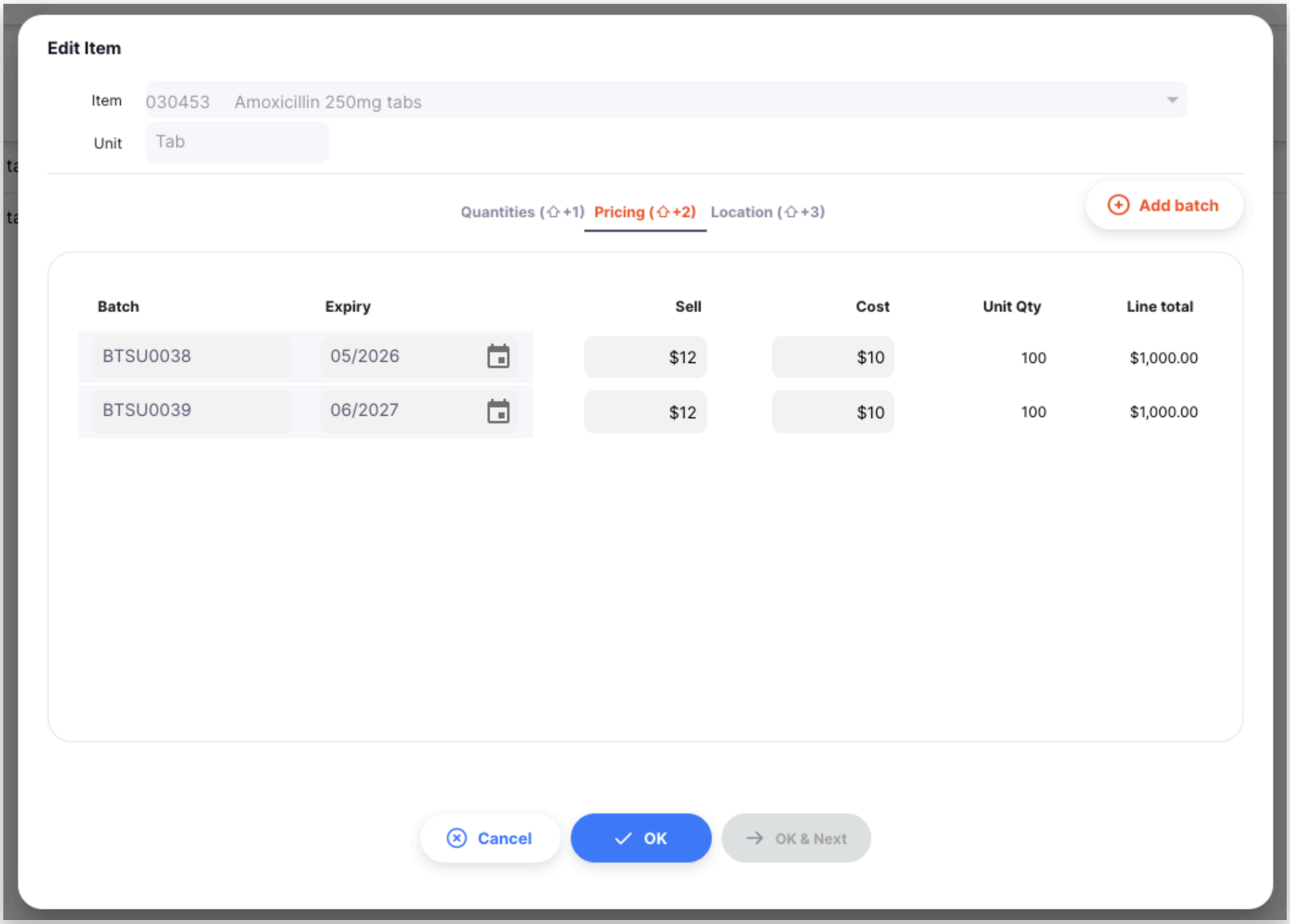


Pricing tab🔗

On the second tab, `Pricing`, you can update the following fields (all are optional):

- **Sell**: The selling unit price of the item (default value is 0)
- **Cost**: The purchasing unit price of the item (default value is 0)
- **Unit Qty** (read-only): Total number of units for the batch number
- **Line Total** (read-only): Total purchasing value for the batch number (`[Unit Qty] x [Cost]`)

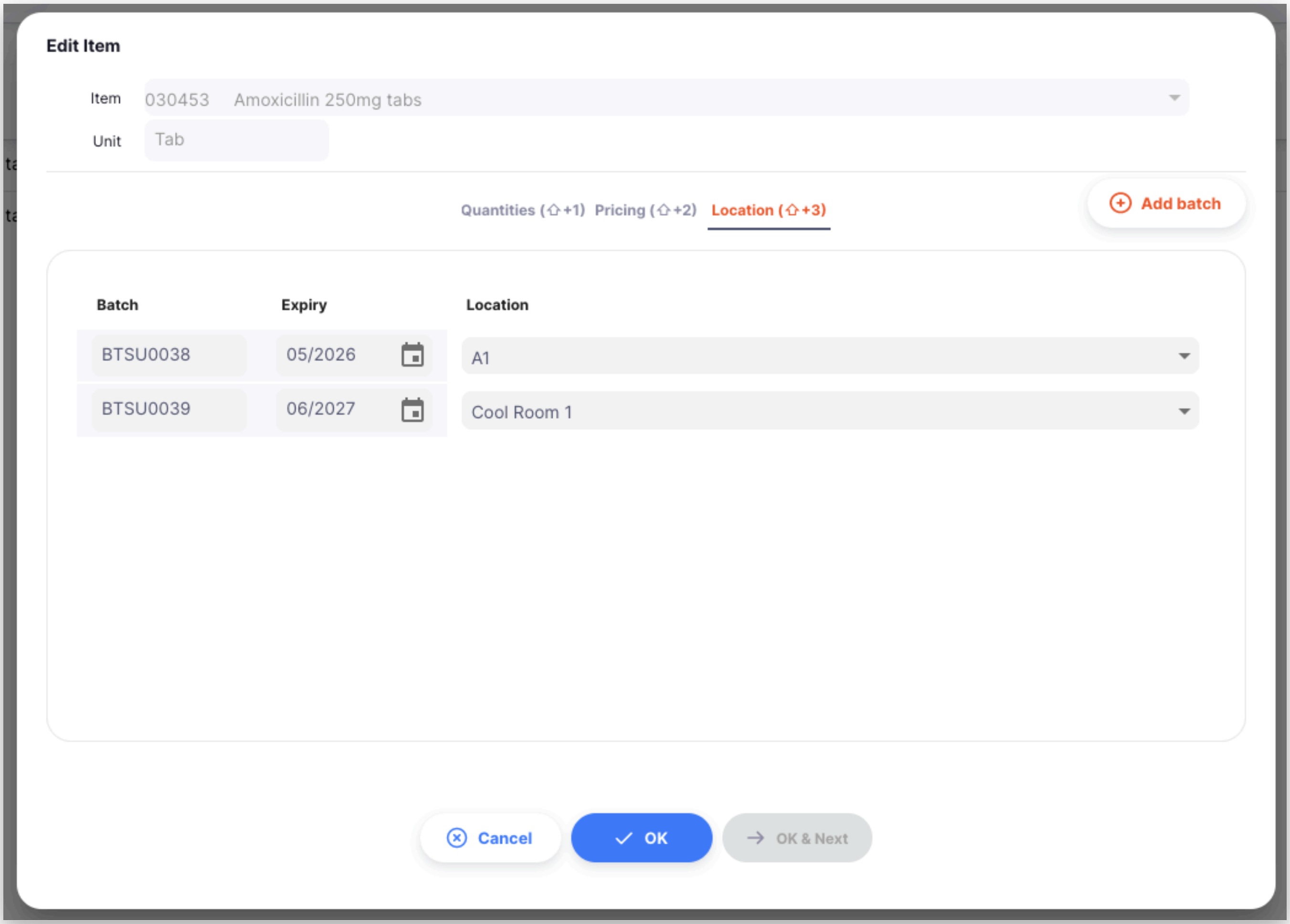
Sell & Cost prices are per units and not per pack.
In below example, sell price $12 per unit and cost price is $10 per unit.



Location tab🔗

In the third tab, `Location`, you can select a storage location to assign the batch number to a location in your storage facility.

Simply select a storage location from the `Location` dropdown menu.



Don't know the storage location yet ? You don't have to capture it right away. You can update the storage location at any time if you haven't confirmed the verification yet.

Confirm item and quantities🔗

When you're done, you can add the new line by tapping on:

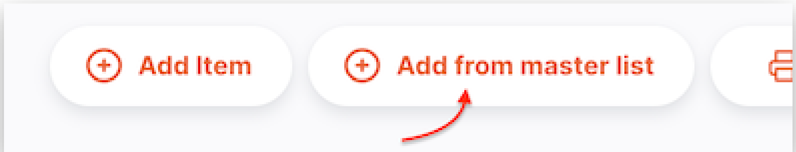
- `OK`if you don't want to add another line to your shipment
- `OK & Next`if you have other lines to create

Otherwise, you can tap on `Cancel` and your changes won't be saved.

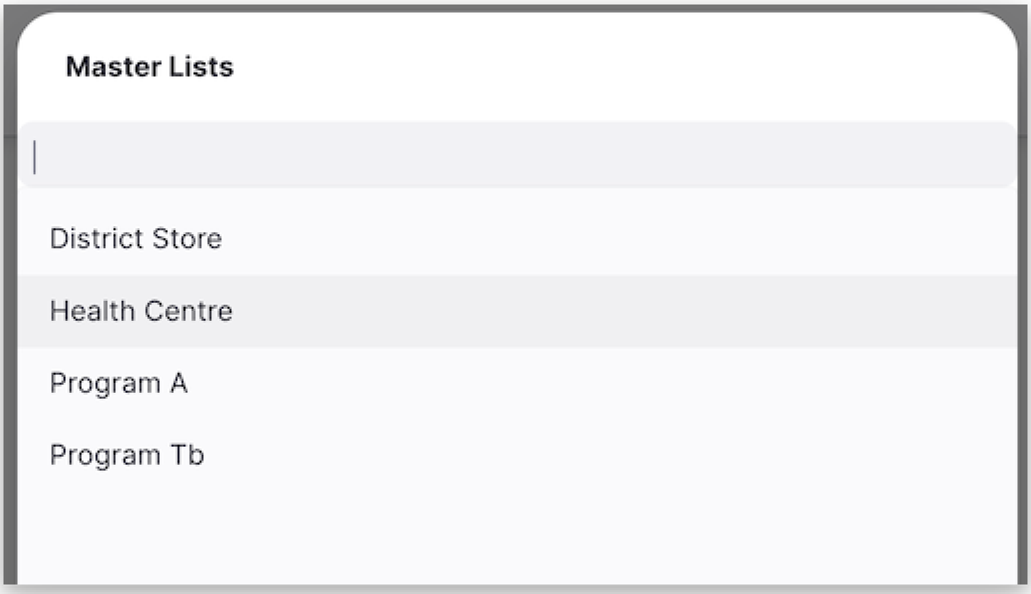
Adding lines to an Inbound Shipment using a Master List🔗

Tap on the `Add from master list` button (top right corner).

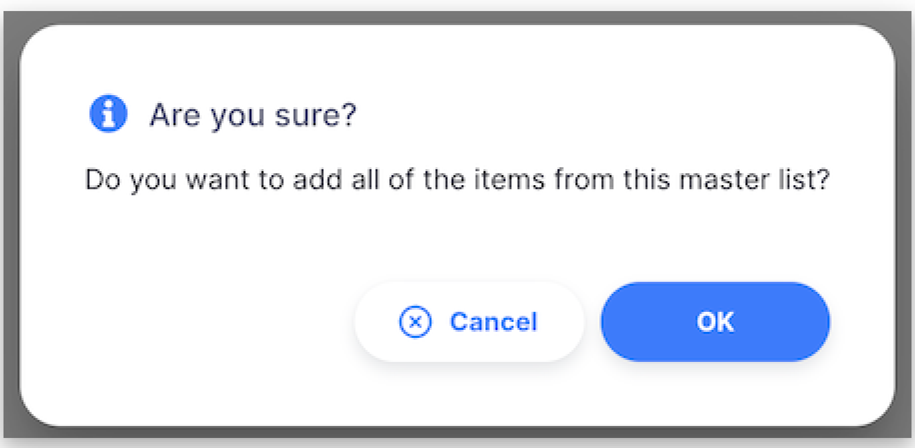
The button will be disabled if the status of the Inbound Shipment is anything other than `New`



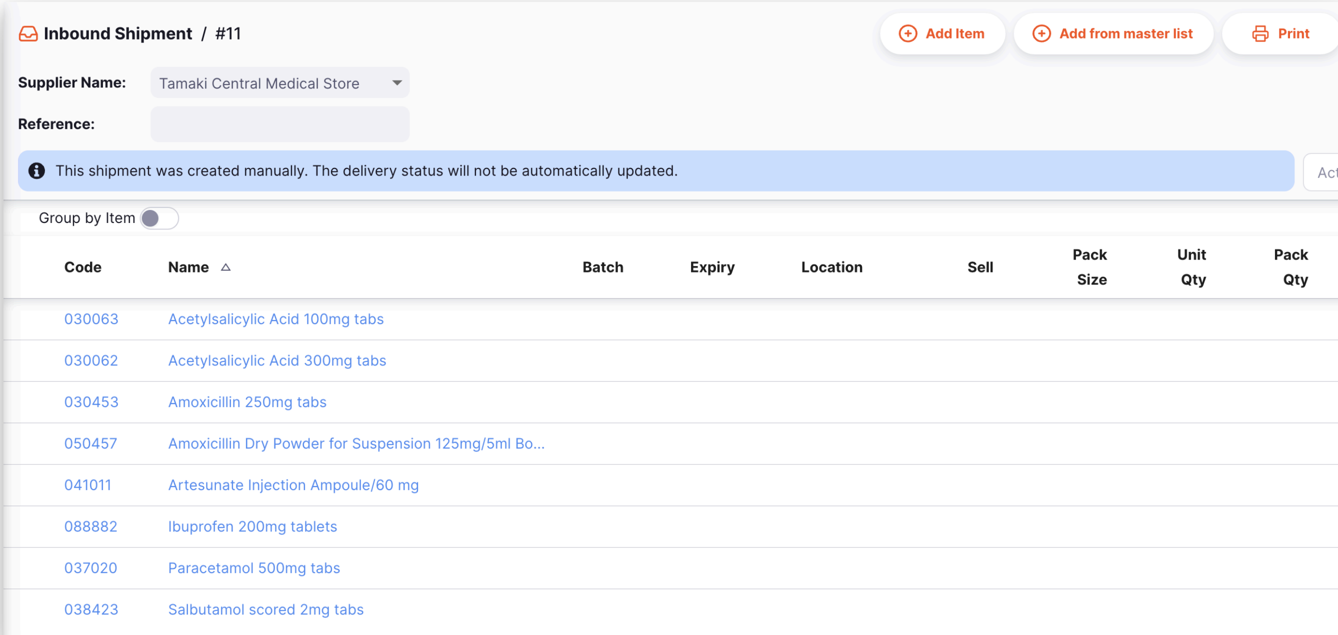
A new `Master Lists` window opens. This allows you to select the required master list. Simply click on one of the lists (if you have some available).



Click `OK` on the prompt:



You will then have placeholder lines added to your shipment, which will then look like this:



The imported rows will have zero for the number of packs value, and are therefore shown in a blue font with the batch, expiry, location etc not shown. You can follow the steps for editing these lines, as detailed above.

Editing an Inbound Shipment line🔗

To edit an Inbound Shipment line, simply tap on it. You will be presented with the `Edit Item` window, which is identical to the `Add Item` window, except that the item is already chosen and cannot be modified.

Edit a Shipment Line🔗

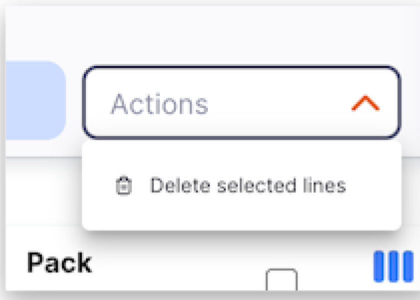
you can edit a shipment line if the shipment has a status higher lower than `Verified`.

1. Open the Inbound Shipment you want to edit
2. Tap on the line you want to edit. An identical window to `Add Item` appears. At this stage:
    - Edit the main `Issue Quantity` field
    - or change the number of packs value at the batch number level

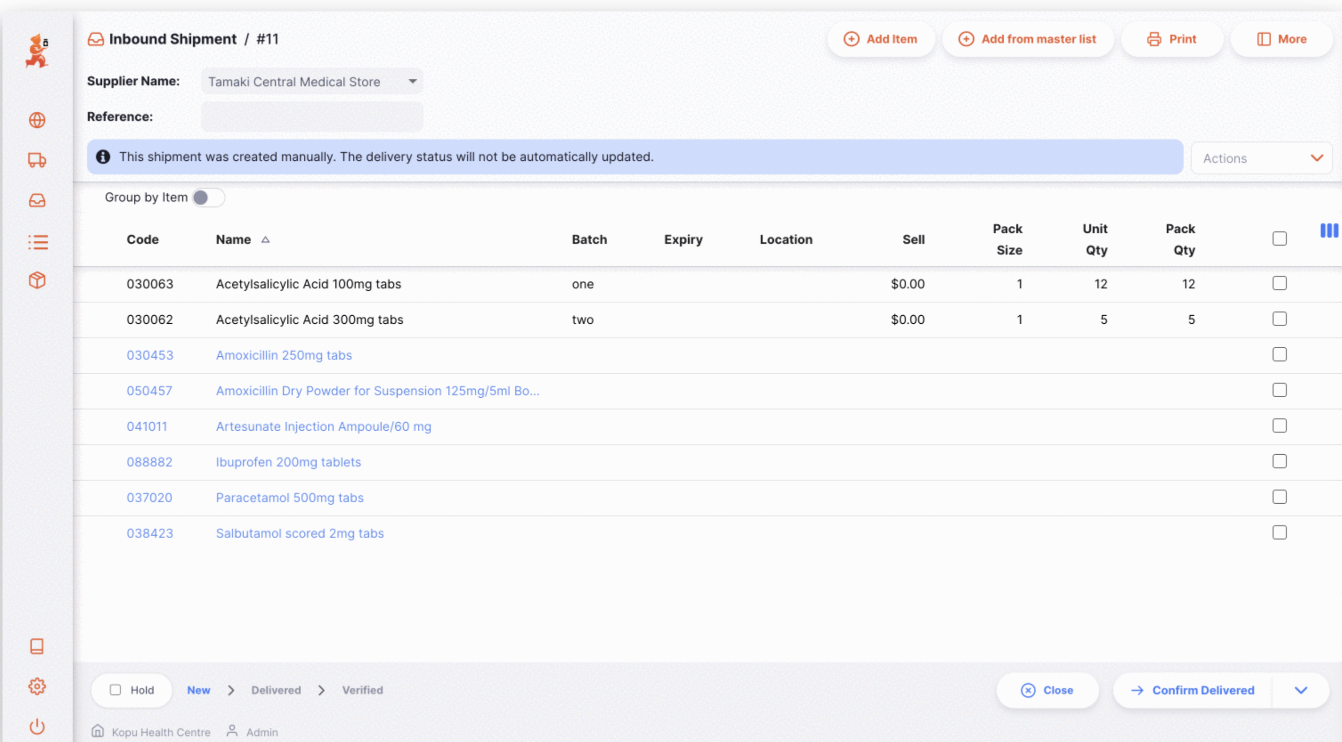
When editing a shipment line, you cannot change the item. You would need to delete the shipment line and to create a new one.

Delete a Shipment line🔗

1. Open the Inbound Shipment that you would like to edit
2. Make sure that status is not yet `VERIFIED`
3. Select the line(s) you want to delete by checking the box(es) on the right of the list
4. Go to the `Actions` dropdown menu (top right corner, above the list)
5. Select the action `Delete selected lines`



In below example, we are deleting *item 030453 - Amoxicillin 250mg tabs*



You can delete multiple lines at once. Be sure to review what is selected before performing the Delete action.

Receiving stock with an Inbound Shipment🔗

Confirm the delivery of the shipment🔗

Whether your Inbound Shipment is **manual** or **automatic**, the first step to receive the goods is to confirm the delivery.

At this stage, you don't have to check if quantities or other information are correct, you just have to acknowledge that you have received the goods from your supplier.

To confirm that an Inbound Shipment has been delivered, click on the `Confirm Delivered` button.

In case your Inbound Shipment is **automatic**, you cannot confirm its delivery unless the supplier has confirmed its shipment. In other words, your shipment status has to be `SHIPPED` before you can confirm that you have received the goods.
Any unallocated lines with a 0 number of packs value will automatically be removed for you when you confirm.

Verify your Inbound Shipment🔗

Verification is the last step to receive goods in mSupply. At this stage, you can check what you have received and make sure that that information in mSupply are correct.

You have the possibility to verify the following information:

- Batch numbers and their expiry dates
- Quantity of packs and pack size
- Pricing information: cost and sell prices

You can also capture where received goods are to be stored in the `Location` tab.

Once all information have been captured or verified, you can confirm the Shipment as `VERIFIED` by tapping on the `Confirm Verified` button.

Once you have done this:

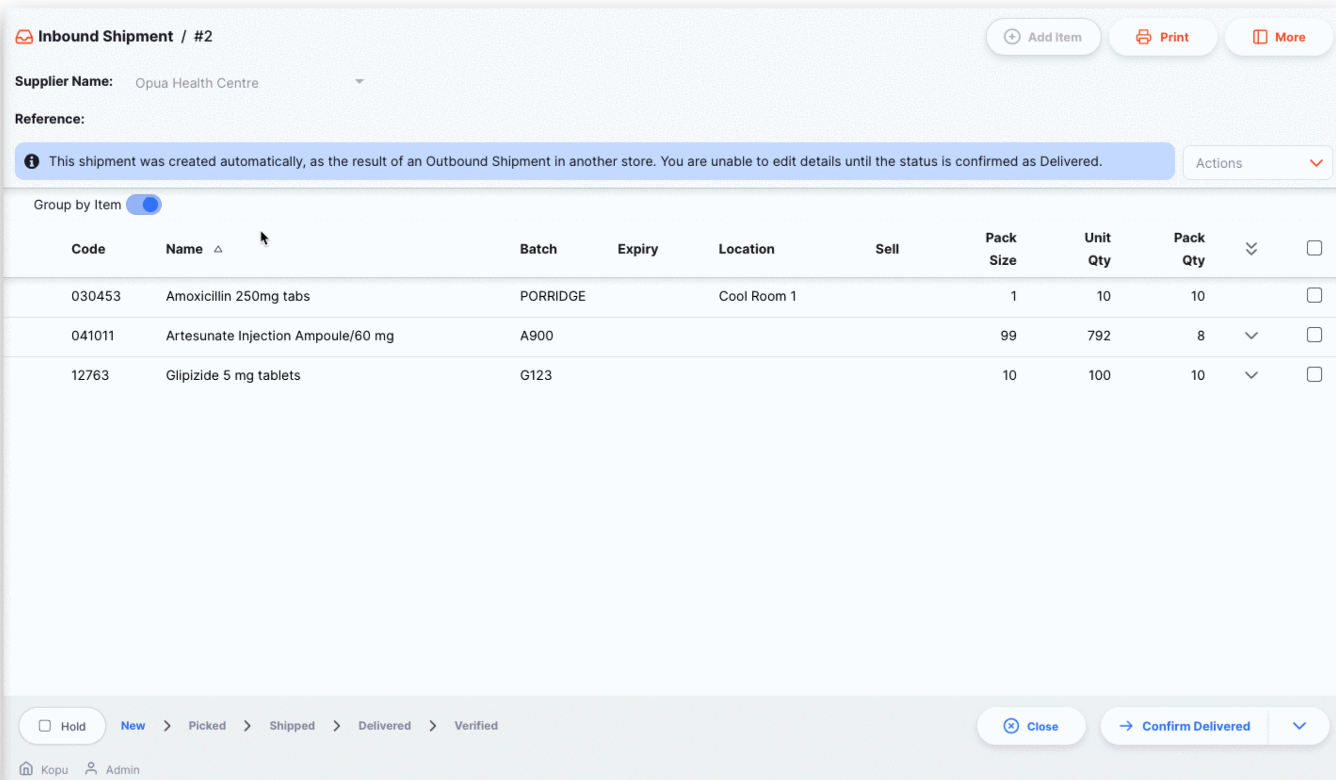
- Goods are now part of your inventory

- Shipment status is now `VERIFIED`
- You can no longer edit shipment lines
- You can no longer delete the shipment

Viewing an Inbound Shipment🔗

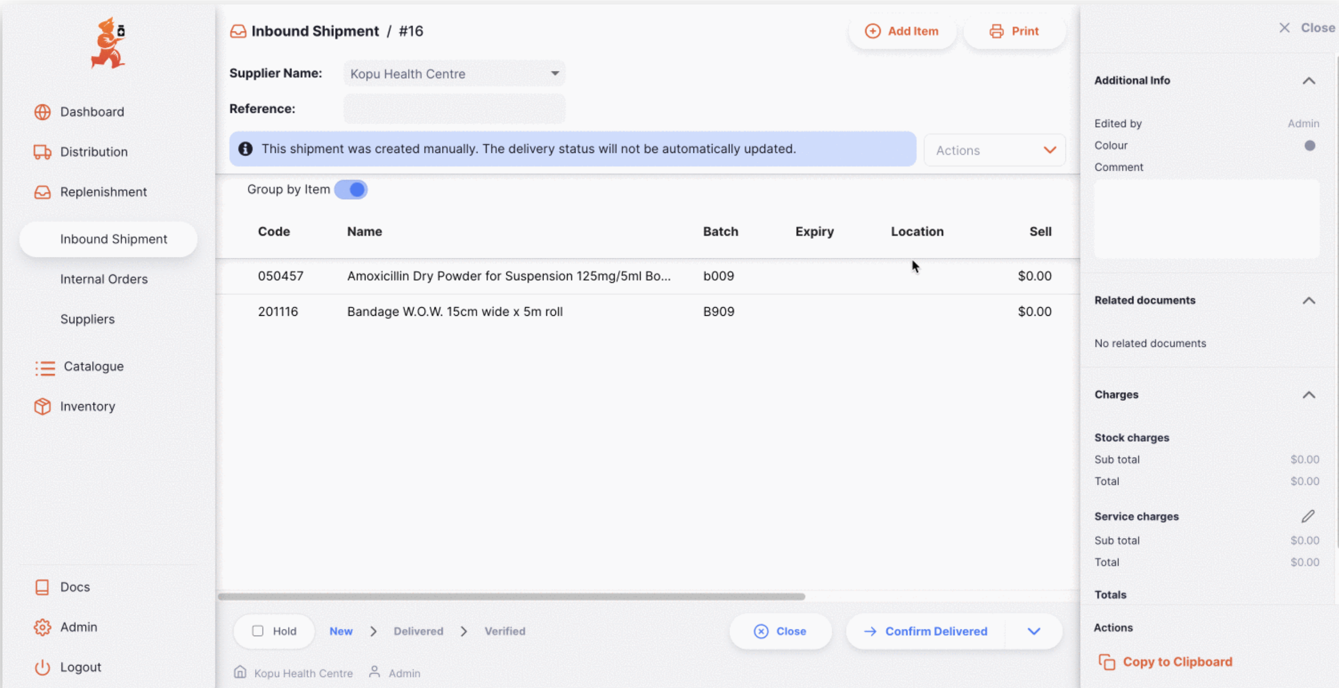
When viewing a specific shipment, you can view the batches on that shipment grouped by item or with each batch listed separately. To change the view mode, click the `Group by item` switch.

When grouped by item, you can expand the item to see individual batches, or use the expand in the table header to expand all grouped rows. If you click on an item you will also see all selected batches, as shown in this example:



If you do not have enough room on your screen, or simply aren't interested in some of the columns shown, you have the option of hiding which columns are shown in this view.

Click on the `Show / hide columns` button which is at the top right of the table. This gives a list of the columns available - you can check the columns you want to see. The options chosen are stored for the current browser, so next time you view an inbound shipment, you will see the selected columns only. If you have chosen which columns to show, then the button is shown in blue to remind you that there are more columns available.



Remote Authorisation

Authorise customer requisitions remotely

Remote authorisation allows people with the appropriate permission to authorise program-based requisitions using a web app. This allows the ordering process to have an additional validation step before an Outbound Shipment is created and stock is sent out to customers.

The remote authorisation process is currently available only for requisitions which have been created for a program. You will need to have programs configured to use this feature.

When using remote authorisation, the process flow is as follows:

- An Internal Order is created in a customer store, using a program
- The customer store synchronises and the request is sent to the supplying store
- The process waits until the Internal Order status is set to `Sent`
- The requisition is automatically created in the supplying store, and has an approval status of `Pending`
- Authorisers are notified via email that there is a requisition requiring authorisation
- On clicking the link in the email, the authoriser is taken to the web app (which is hosted by the central server)
- After logging in, they are able to adjust, comment and authorise (or deny) the request
- Once authorised, the status is updated:
    - for the Internal Order (in the customer store)
    - for the requisition (in the supplying store)
- Comments made by the authoriser and any adjusted quantities, are shown in the customer store's Internal Order

Configuration🔗

The setting up of the authorisation workflow requires some configuration changes on the central server:

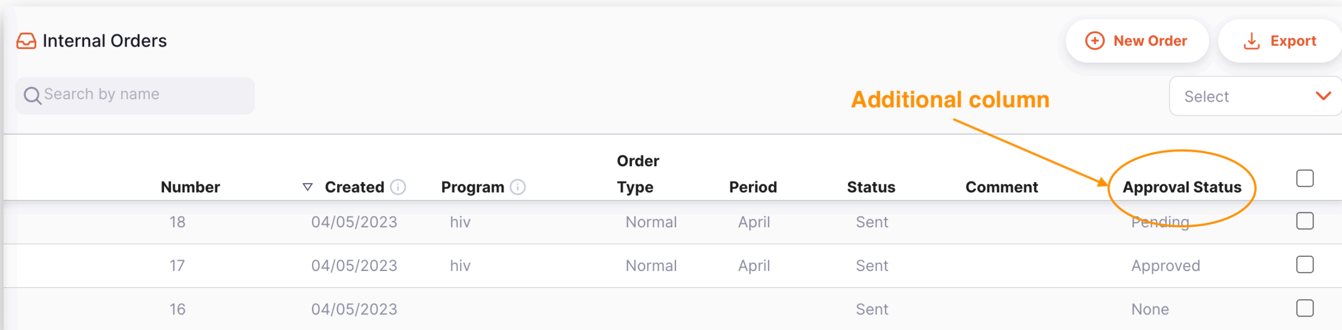
1. Turn on remote authorisation. Follow these instructions in the central server documentation
2. Set up authorisers. See these instructions
3. You may also need to enable emailing on the central server

In addition, you'll need to have the stores configured for normal usage in Open mSupply, with the supplier and customer relationships configured. Stores will need to have [master lists](#) assigned to both customer and supplier stores, and programs and program periods configured.

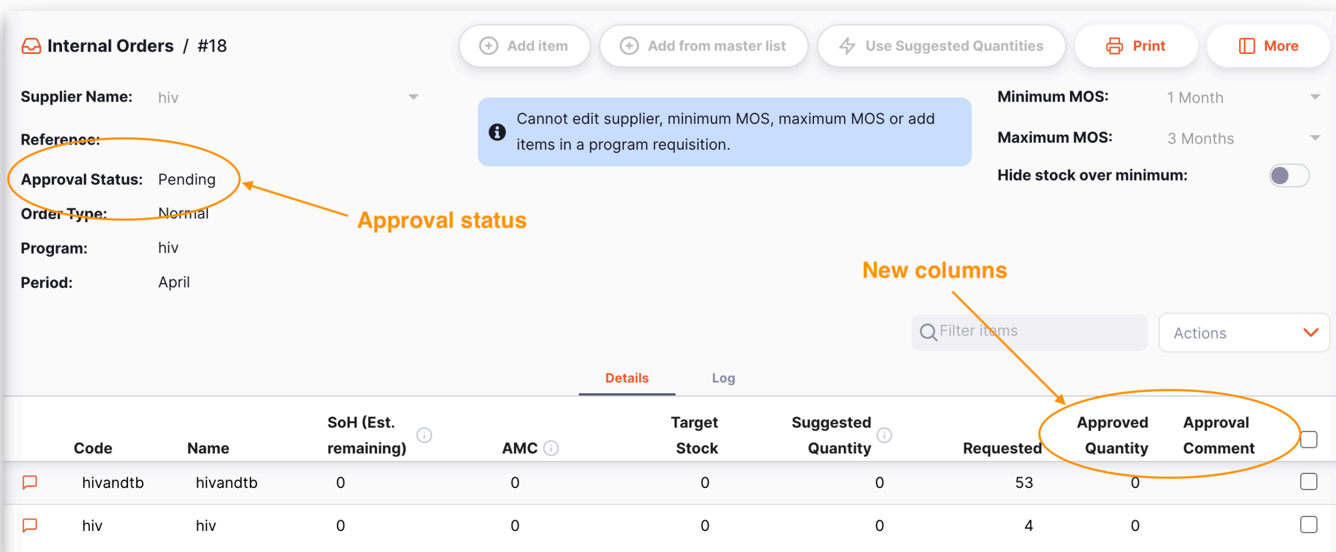
Using remote authorisation🔗

Internal Orders🔗

Follow the process of creating a program based Internal Order. If you have the store preferences configured correctly, you will see an additional column in the list view of Internal Orders, which shows the approval status of the newly created order:



In addition, when viewing the details of the Internal Order, you'll see two new columns and the approval status of the order:



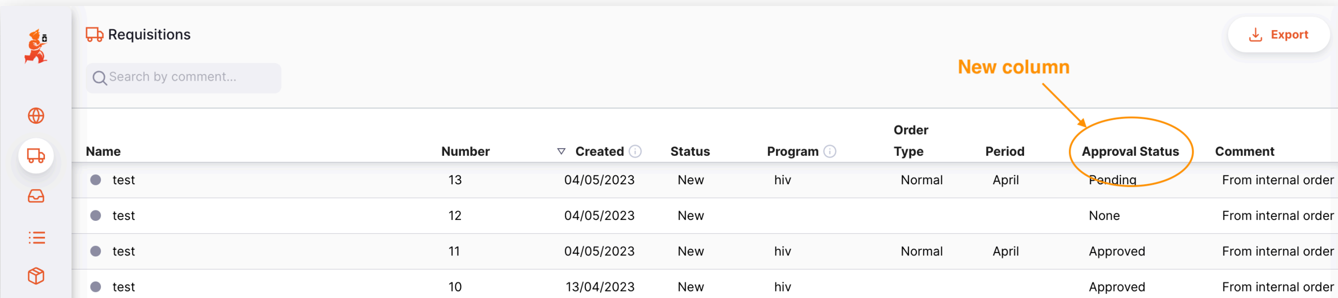
The **Approved Quantity** is the quantity approved by the authoriser. This may be different to the requested quantity. If so, the authoriser has the option of entering an explanatory comment, which is shown in the **Approval Comment** column.

Authorisation

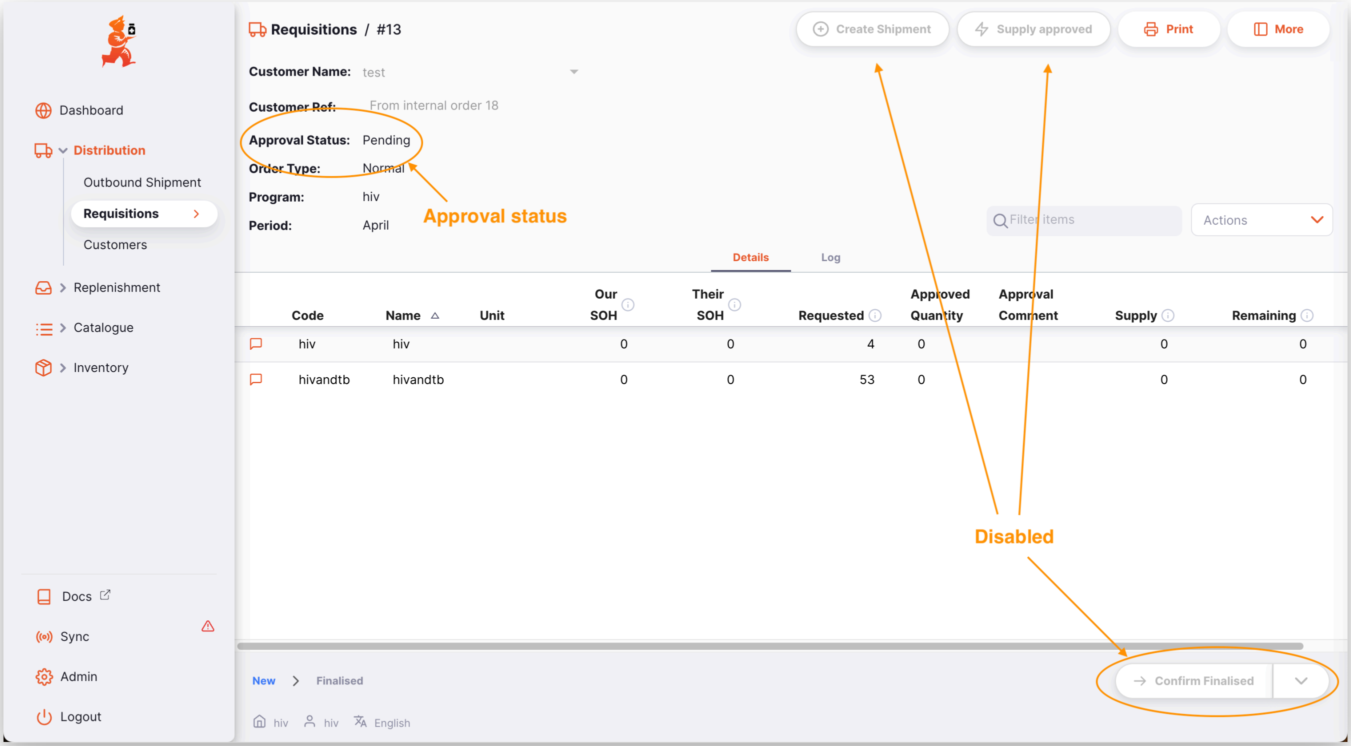
The authorisation process is detailed in the [central server documentation]. Please refer to that for the steps required when authorising.

Requisitions

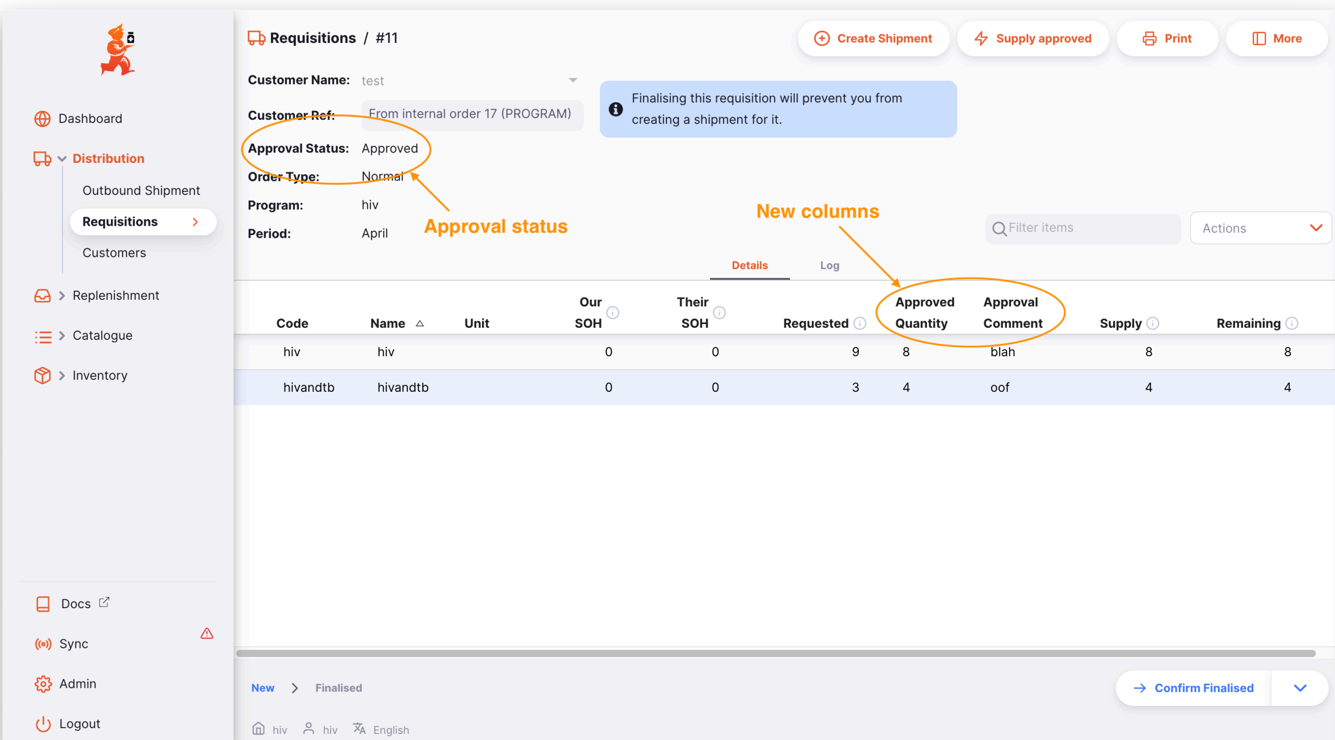
In the supplying store, you'll see a few changes too. The requisition list has gained an additional column:



And when viewing details, you can see the approval status and new columns, just as in the Internal Order. When the requisition is in the `Pending` approval state, you also cannot confirm finalised or create a shipment:



Once approved by the remote authorisation process though, the status is updated, and you can edit the requisition:



The authorisation status can have a few different values:

- **None**: the requisition does not need authorisation and is not subject to the remote authorisation system. This is true for requisitions which are not for a program. All requisitions with this status can be edited normally.
- **Pending**: the requisition is awaiting authorisation of one or more of its lines. A requisition with this status cannot be edited and you cannot create Outbound Shipments from it.
- **Authorised**: all lines that were waiting for authorisation have been authorised (with or without adjustments). The comments and quantity to supply can be edited and Outbound Shipments can be created from requisitions that are authorised.
- **Denied**: the authoriser has reviewed the requisition and the lines have all been denied. Like the Pending status, a requisition with this status cannot be edited and you cannot create Outbound Shipments from it.

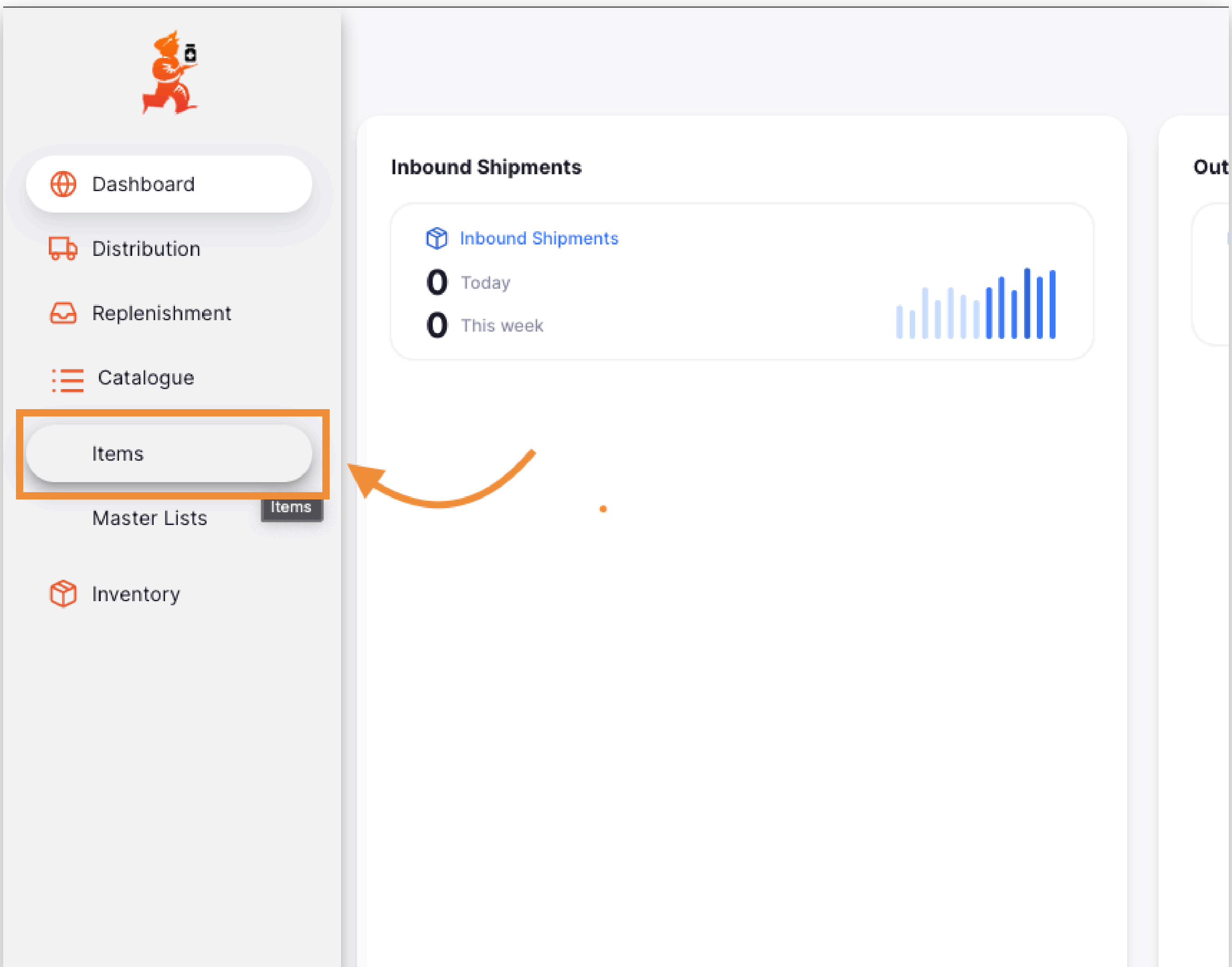
Items

Managing your catalogue

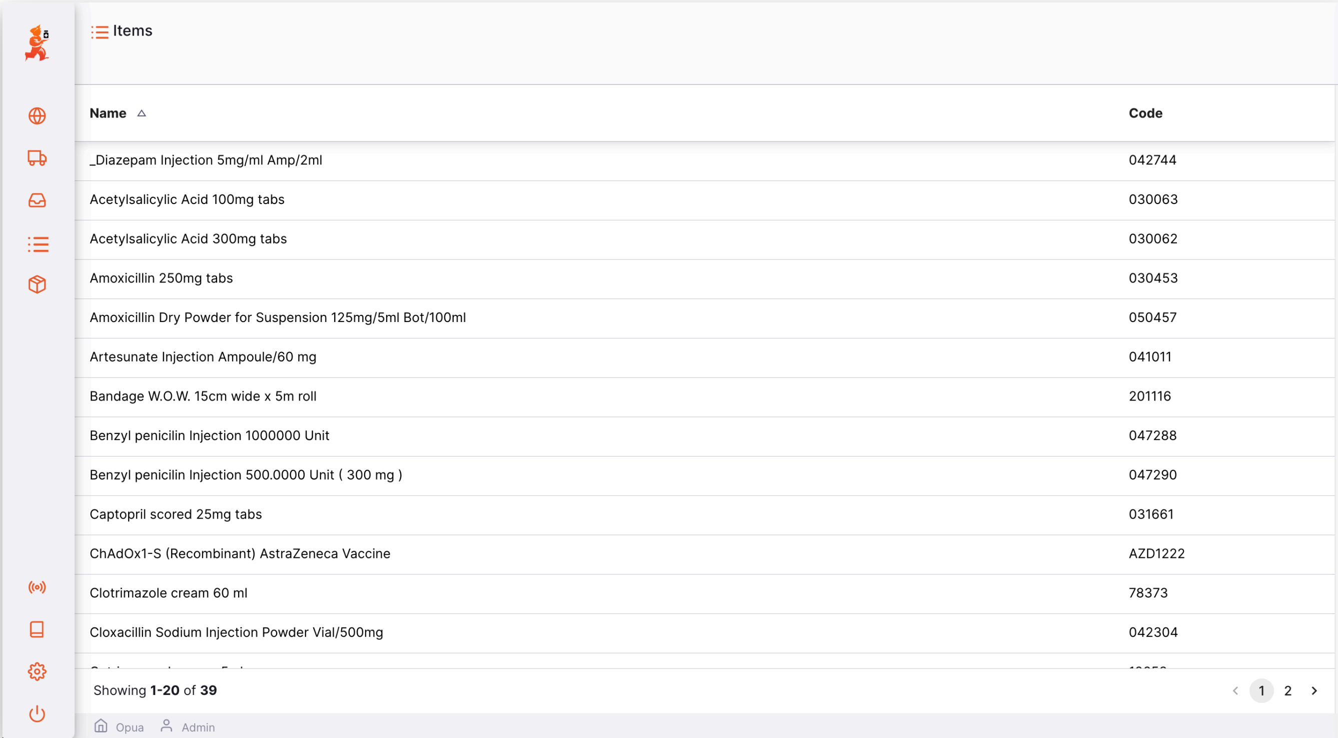
An item in Open mSupply is usually a product that you purchase from a supplier, hold in stock and supply to a customer. From the **Items** menu, you can view all of the items that are currently visible in your store.

Viewing items list🔗

In the navigation panel, tap on `Catalogue` > `Items` to show the items list:

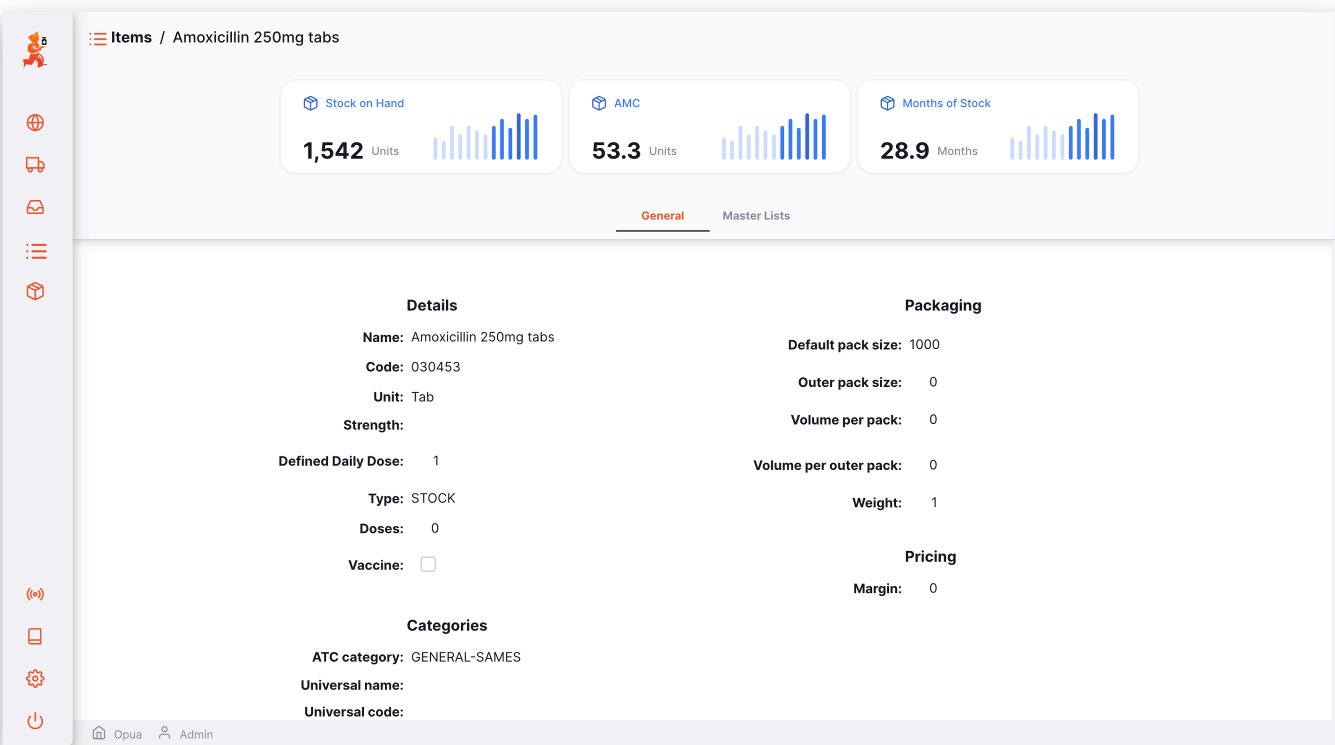


You can see all the items which are available for use by your store:



Viewing an item's details

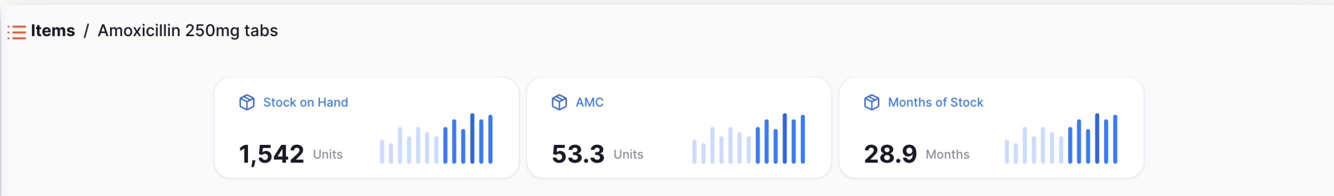
To view the details of an item, simply tap on one. A new window opens:



On top of the screen, you can the following information:

- **Stock on Hand**: How much stock is currently available in your store
- **AMC**: Average Monthly Consumption. This is how much stock your store uses each month on average (based on a configurable number of months, defaults to 3 months).
- **Months of Stock**: Number of months of consumption left with current stock. This is calculated as: `Stock on Hand / AMC`.

In below example, we have 1542 units of Amoxicillin available in our store. The average consumption is 53.3 units per month which means that there is the equivalent of 28.9 months of stock in the inventory.



In the bottom part, item details are divided into several sections:

Details🔗

- **Name**: This is the name by which mSupply will refer to the item
- **Code**: This should be unique for each item and is a helpful shorthand for referring to items
- **Unit**: The unit you use for this item. It is useful to distinguish items you issue by pack (eg. eye drops) from items you issue by volume (eg. oral liquids)
- **Strength**: For a medicine, the concentration of its active ingredients (eg. for Amoxillin 250mg, the strength is 250mg)
- **Defined Daily Dose**: The assumed average maintenance dose per day for a medicine used for its main indication in adults
- **Doses**: For vaccines, the number of dose per vial
- **Vaccine** (check box): If this is checked, this item is a vaccine and a number of dose can be assigned

Categories🔗

- **ATC Category**: ATC stands for Anatomical, Therapeutic, Chemical and is a method of classifying entities, and identifying them by category

- **Universal Name**: if the item is linked to the universal drug code database, this shows the universal, or generic name for the given item
- **Universal Code**: similarly, the code allocated to the universal drug code item

Packaging🔗

- **Default pack size**: This is the default pack size that will be assigned to incoming stock as it is received
- **Outer pack size**: The number of units in a carton (outer pack). Not the number of preferred pack size packs in a carton (outer pack).
- **Volume per pack**: The default volume per preferred pack size pack. This is the volume that will be used by default when receiving goods. We recommend you divide a carton volume by the number of preferred pack size packs in a carton to get this figure. Open mSupply always stores volumes in m3 (cubic metres), but you can enter a volume as millilitres (ml) or litres (l) by entering the appropriate abbreviation after the number representing the volume. e.g. enter “0.5l” to enter a volume of 0.5 litres (= 0.0005m3).
- **Volume per outer pack**: The default volume of an Outer pack size pack of this item
- **Weight**: The weight of a preferred pack size pack in kg

Pricing🔗

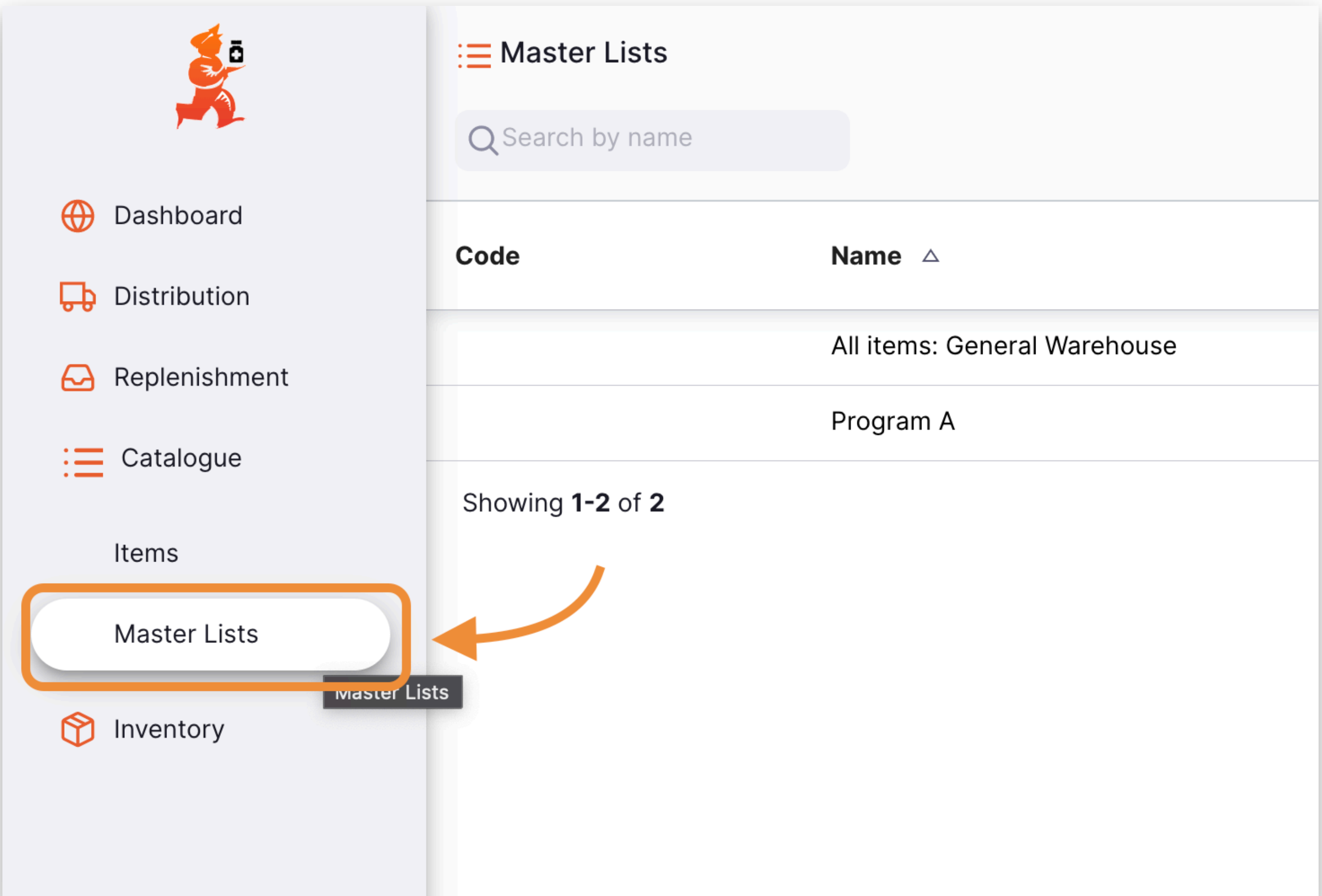
- **Margin**: This is the default margin that will be applied to this item on Inbound Shipments to calculate the selling price

Master Lists

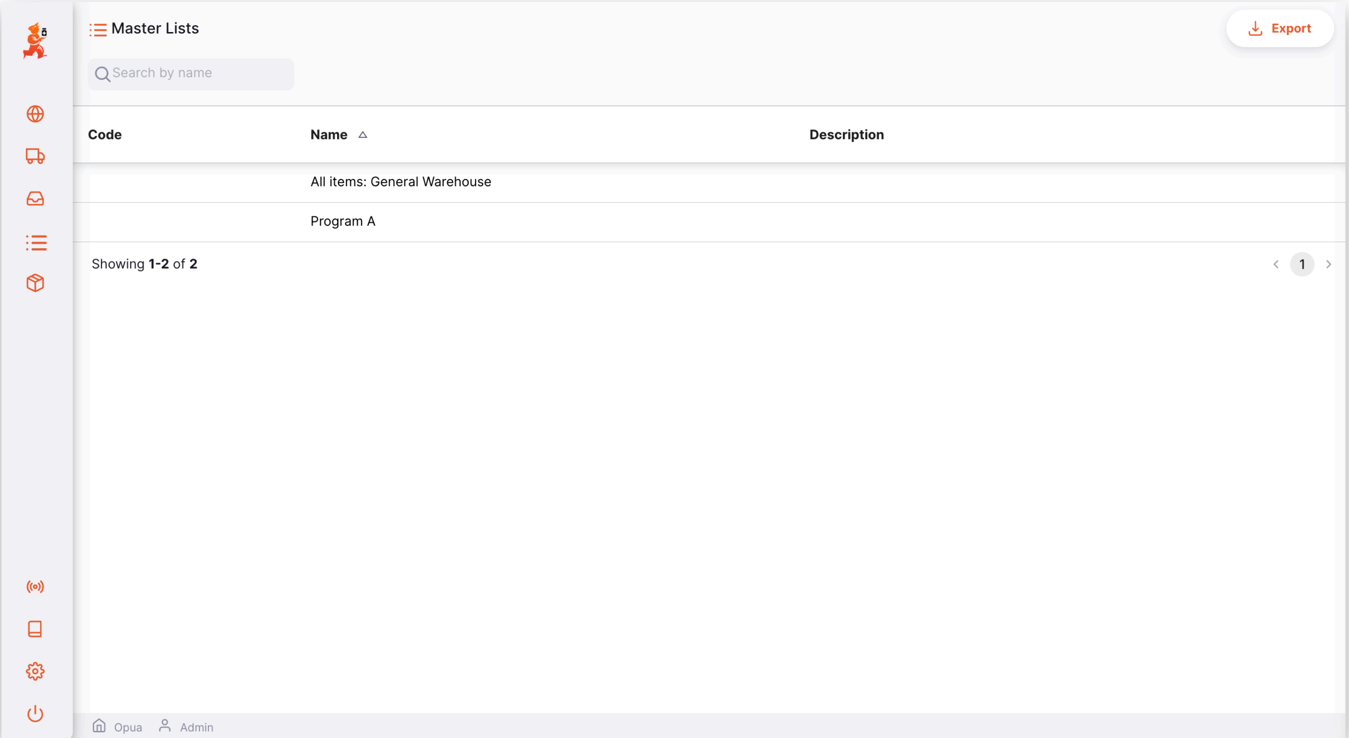
Master lists are standard lists of items that can only be defined at the central server level.

Viewing Master Lists🔗

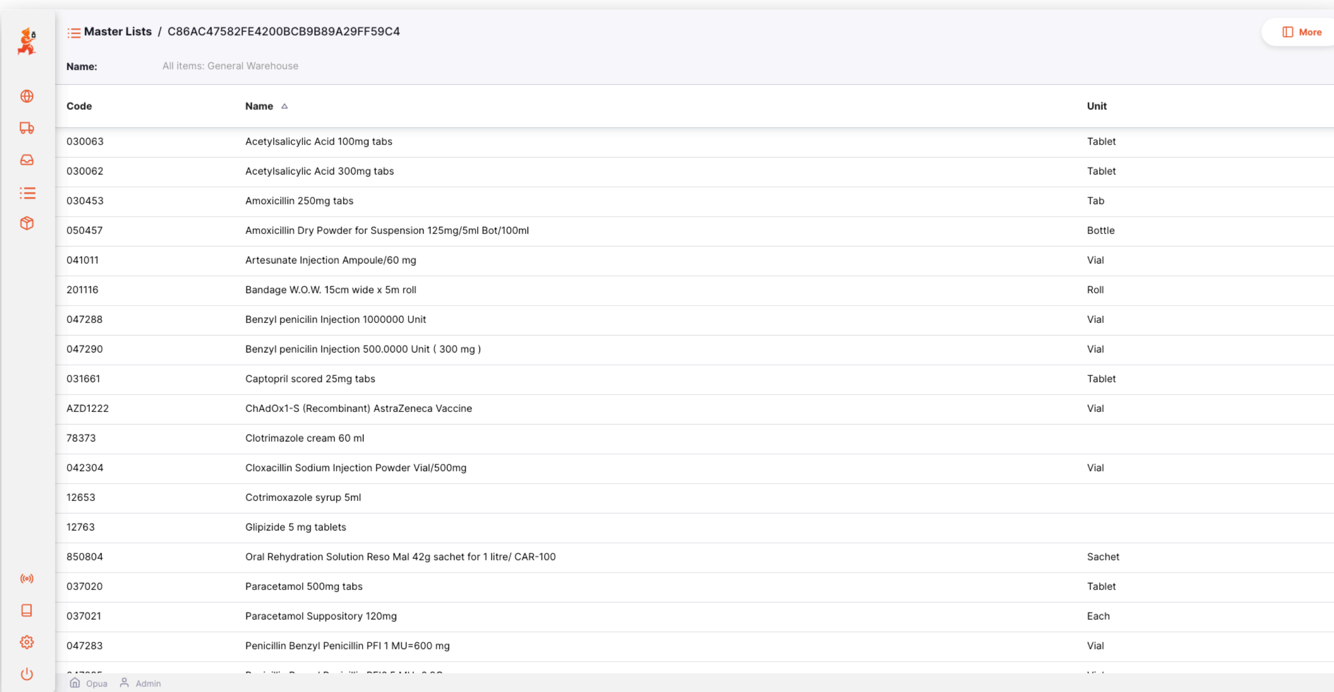
Go to `Catalogue` > `Master Lists` in the navigation panel:



You will see a window like this:



To view all the items of a master list, simply tap on one:



Locations

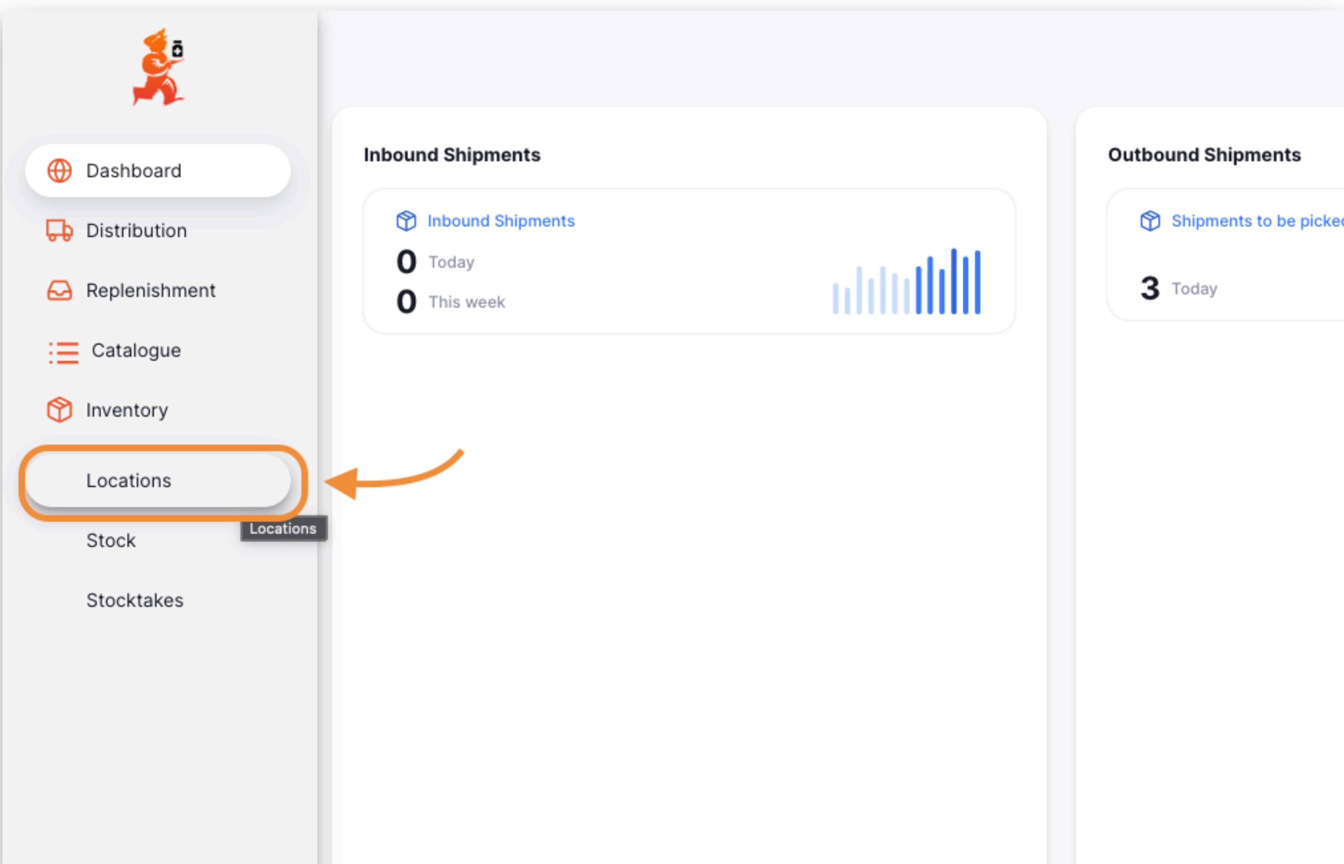
View and manage your storage locations

Keeping track of where stock is in your store is an important part of good warehouse practice. You don't want to have to go hunting through your whole store for stock, wasting time and energy when mSupply can tell you exactly where it is!

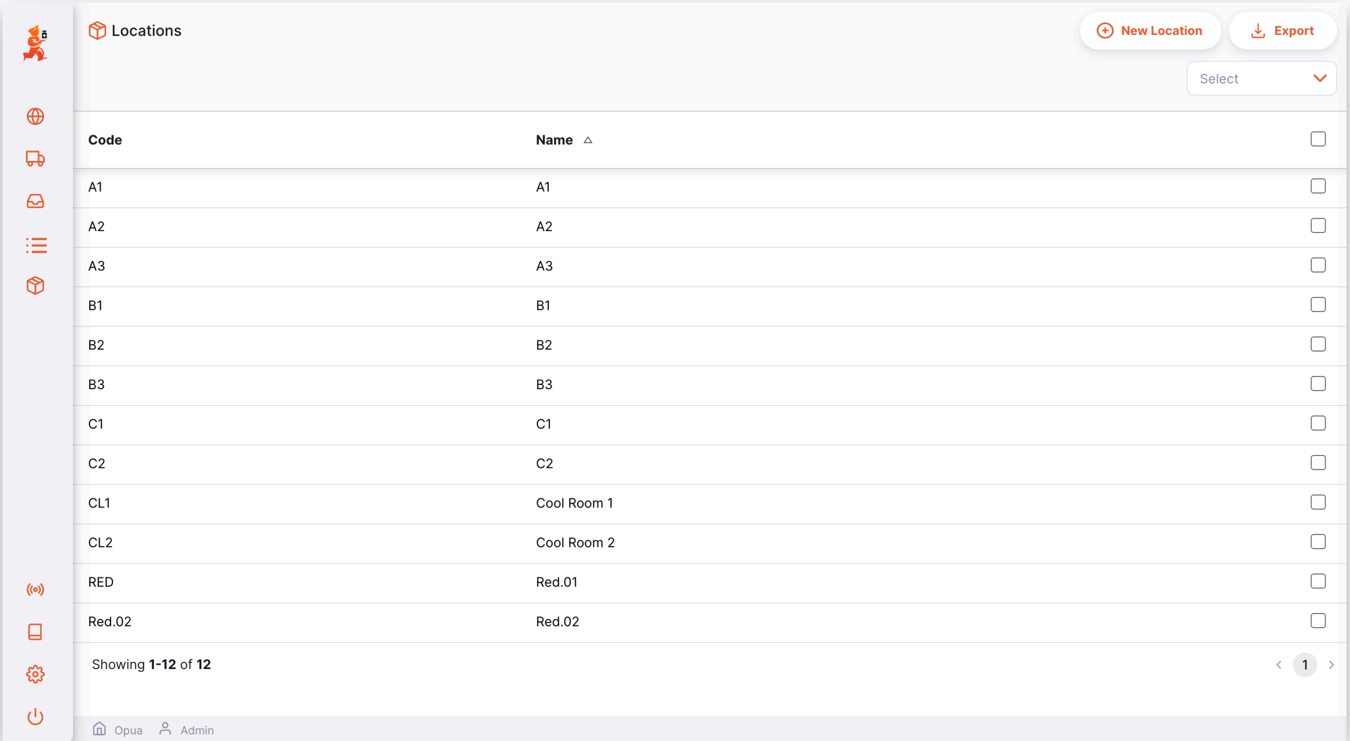
Locations in mSupply are the places you store stock.

Viewing your store's locations🔗

To view the storage locations of your store, go to `Inventory` > `Locations` in the navigation panel:

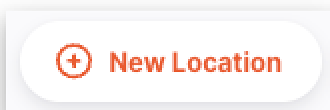


You will see a list of your storage locations:

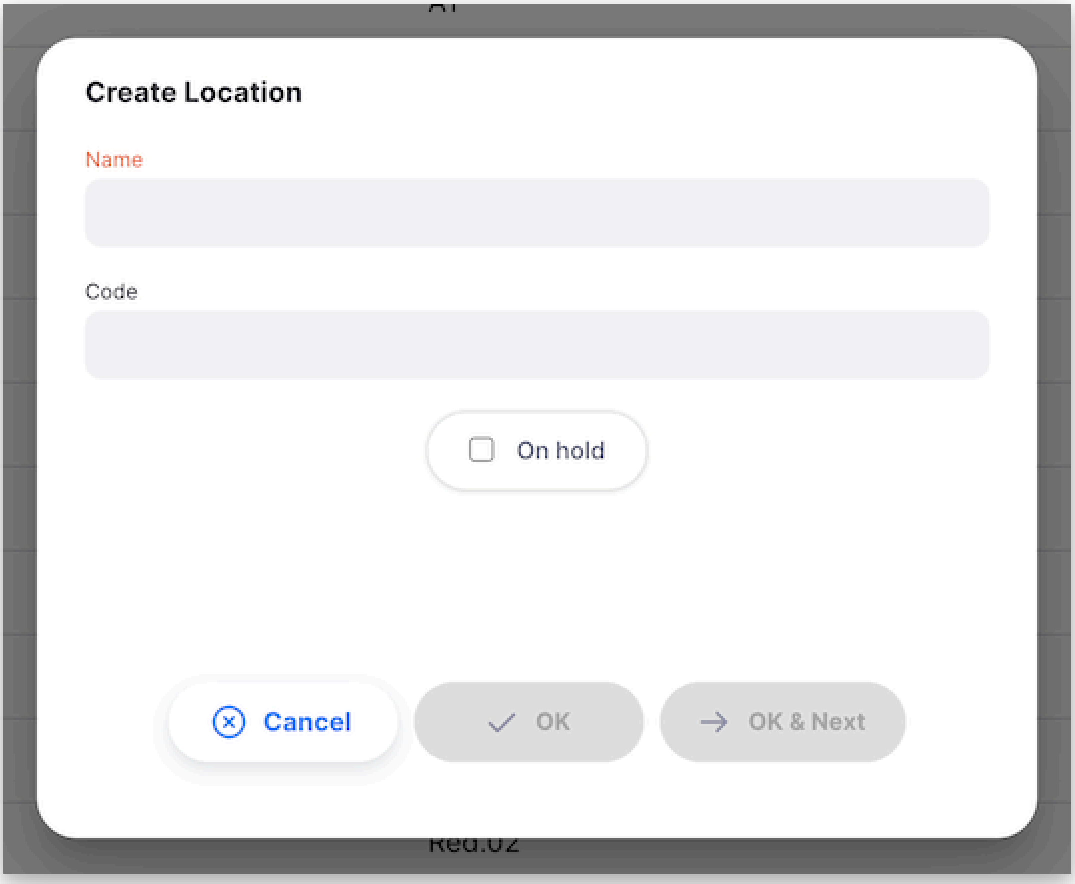


Creating a new location

To create a new location, tap on the `New Location` button in the top right corner of the screen:



A window like this opens:



1. **Name**: Enter the name of the new location
2. **Code**: Enter a code for the new location
3. **On Hold** (checkbox): If you check this box, then goods in this location cannot be selected for issue to customers. Goods can be moved in to, and out, of the location but they cannot be issued from that location.

Putting a location on hold can be useful if:

- The stock needs to be kept from being issued until some inspection / approval (e.g. quarantine or under bond)

- The stock is a bulk quantity with the same expiry date as another stock line in another location from which you want stock issued. You can use this feature to force mSupply to always suggest issuing stock of this item from the 'issue' location rather than this 'bulk' location. When you have finished issuing stock from the 'issue' location, and you want to issue the stock that is in the 'bulk' location, you will need to either take the 'bulk' location off hold, or, move all, or some of it (split), the stock from the 'bulk' location.

Editing a new location🔗

To edit a location, simply tap on one in the location list.

Deleting a location🔗

To delete a location:

1. Check the box of the location that you want to delete in the location list
2. Click on the `Select` dropdown menu and select `Delete selected line`

Stocktakes

Counting and adjusting stock

mSupply will automatically keep track of your stock levels for you, as you receive and distribute it. But sometimes data gets entered incorrectly or stock goes out without anyone making an entry in the system.

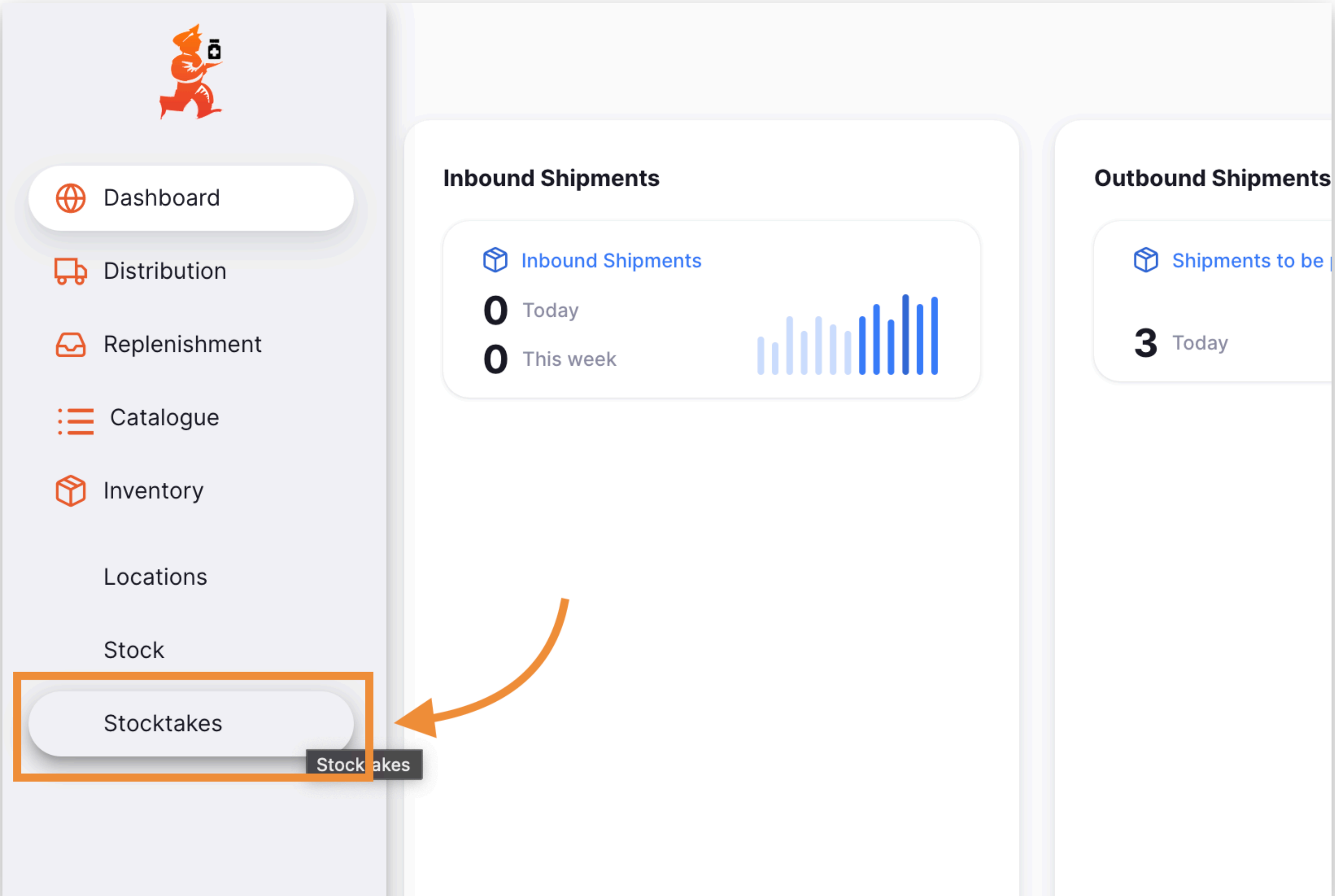
Of course, we try not to let that happen but, if it does happen, we can make corrections. The easiest way to correct mistakes is to do a **Stocktake**.

In mSupply, you can easily do a stocktake for:

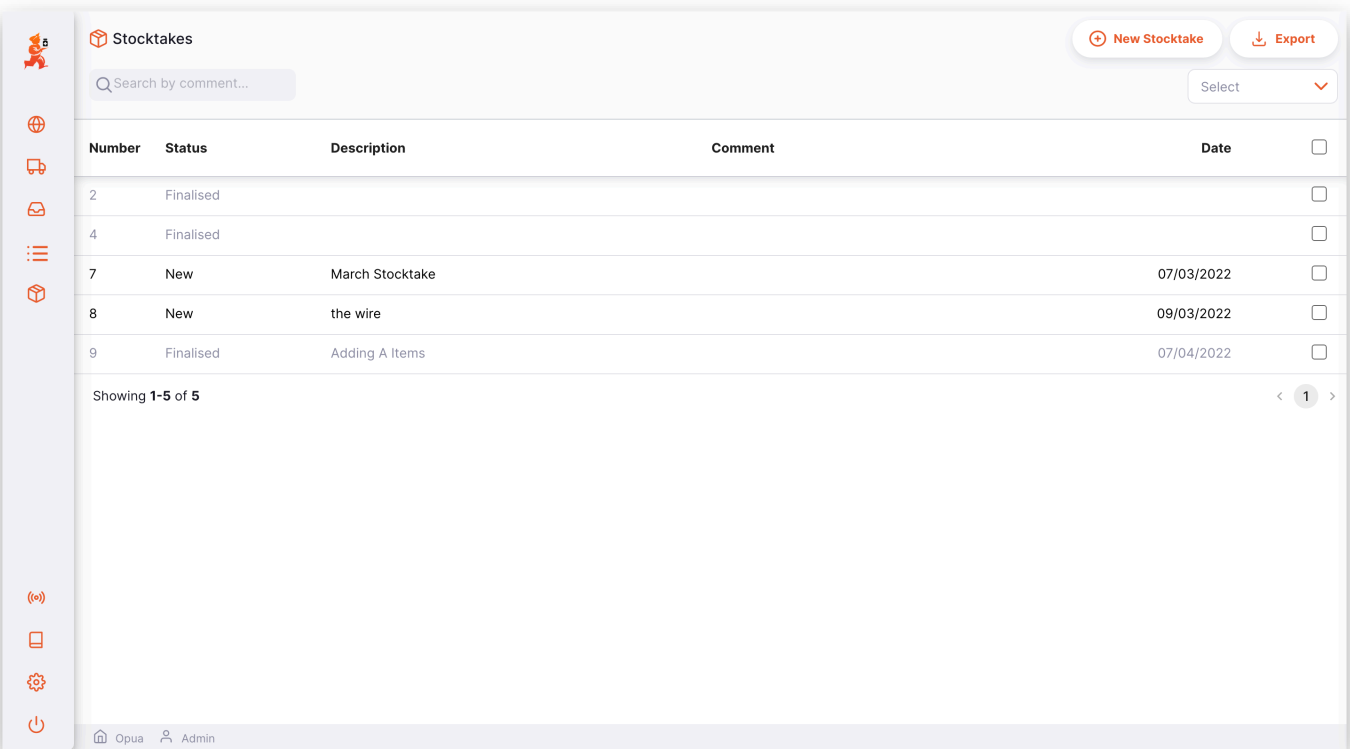
- A full inventory
- A limited range of items
- A single item

Viewing Stocktakes🔗

To view your stocktakes, go to `Inventory` and then `Stocktakes` in the navigation panel:



This brings up a list of all your stocktakes:



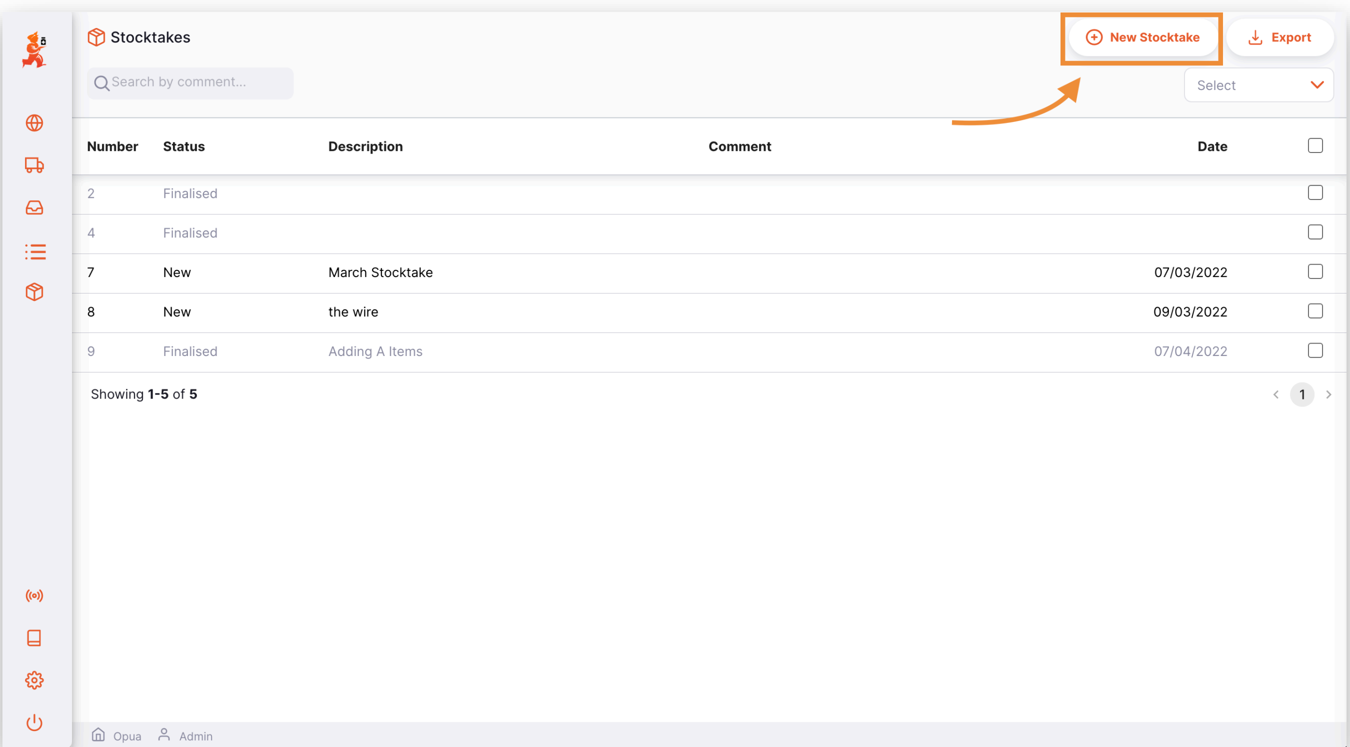
For each stock stake you can see:

- The stock take **number**
- The stock take **status**. There are two stock take statuses:
    - *New*: a stocktake you are still working on
    - *Finalised*: a stocktake that has alredy been performed. You can no longer edit it.
- A **description** of the stocktake (eg. March Stocktake)
- If any, a **comment** about the stoctake
- The **date** of the stock take

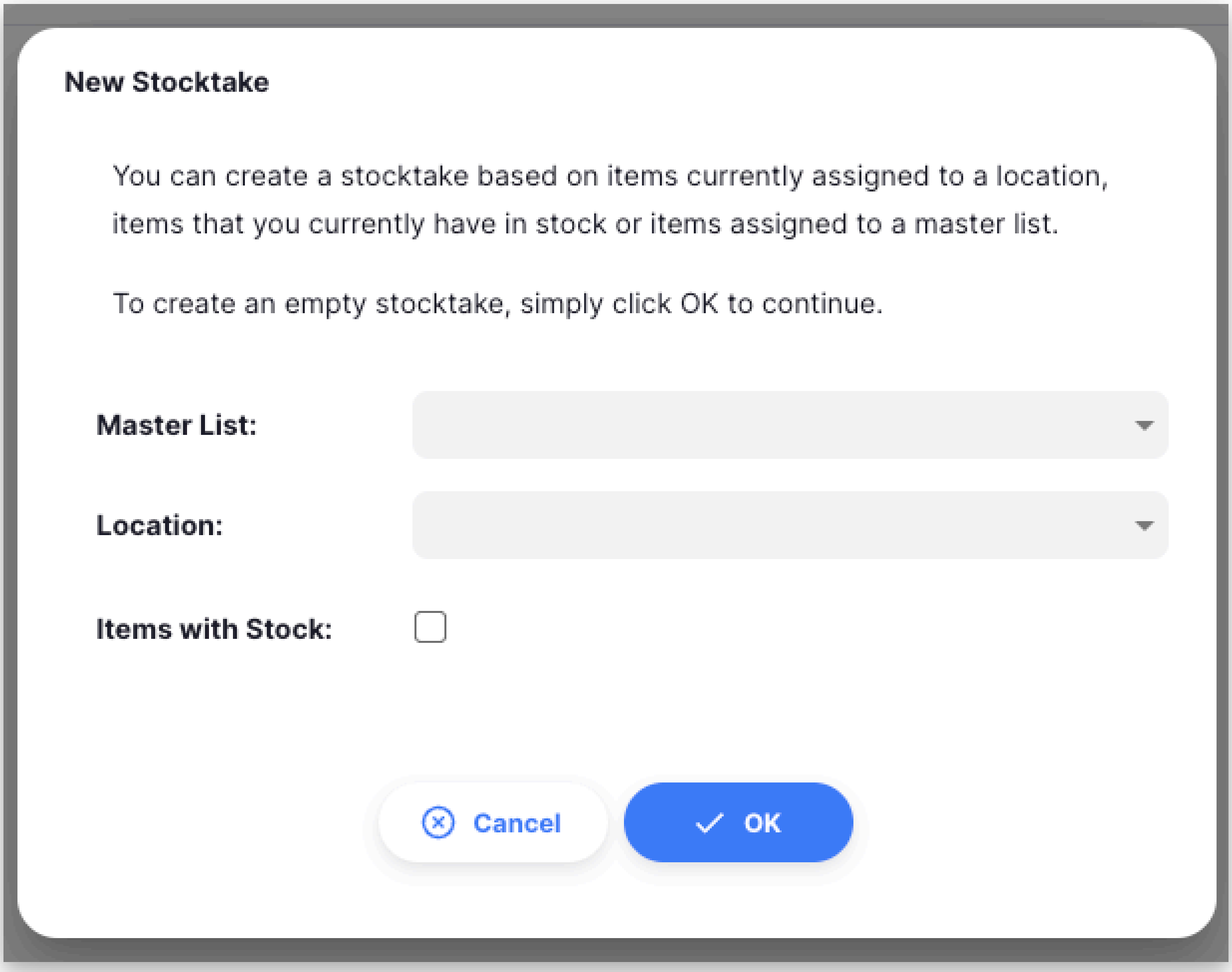
There is little point in keeping old stocktakes with status = `NEW`, especially if you are about to create a new stocktake containing the same items. Indeed, it can be quite dangerous to leave old stocktakes with status `NEW` in your system. If time has passed since the stocktake was created, then the snapshot and actual quantities are almost certainly incorrect. For good housekeeping reasons, it is good practice to delete old `NEW` stocktakes.

Creating a new stock take🔗

Let's start a new stocktake. To do so, tap on the `New Stocktake` button in the right corner of the screen.



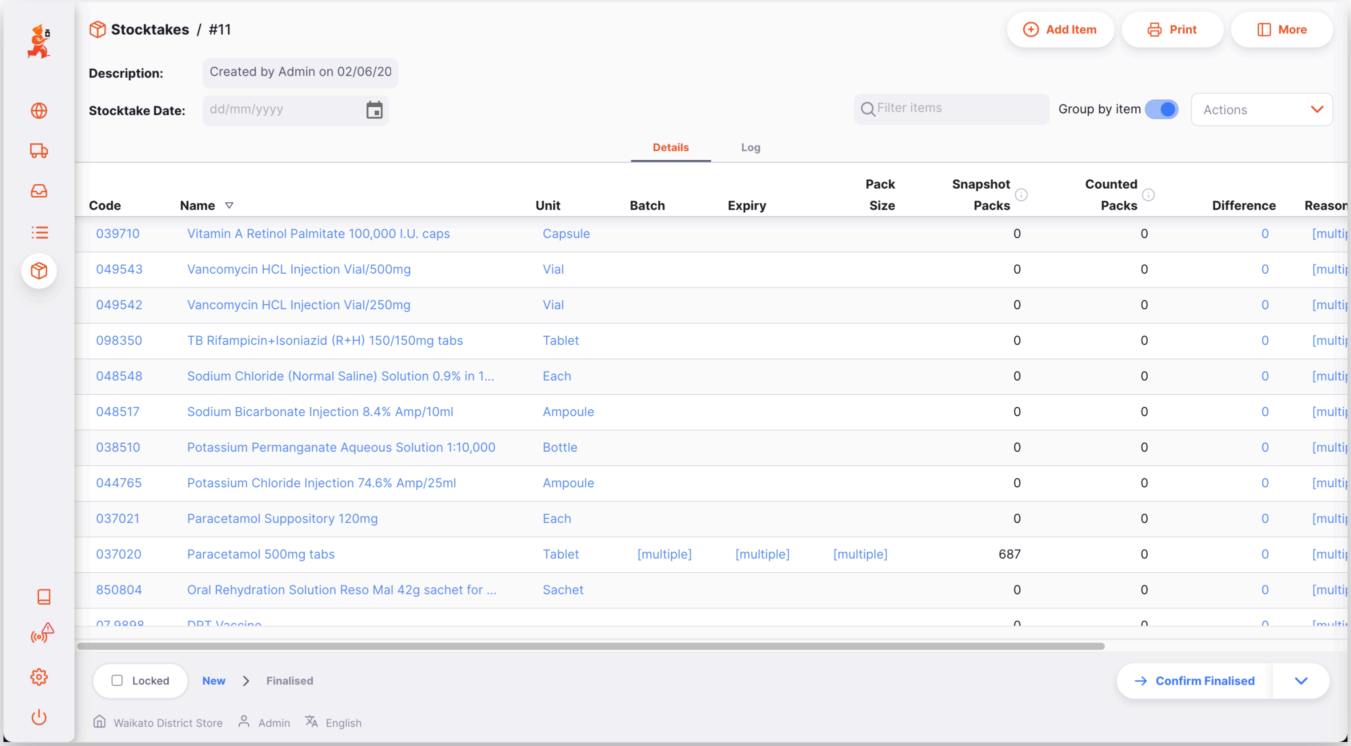
A window appears, where you can opt to create a stocktake based on items in a master list, items in a particular location, items that are in stock, or an empty stocktake:



Click on OK when you have selected the option you would like.

The stocktake will then be created, and existing stock lines will be used to populate the values for batch, expiry, pack size and snapshot number of packs. The lines show as light blue, and will change to black when a value is entered for the counted quantity.

You are not able to edit the pack size of stocktake rows which are linked to an existing stock line. If you wish to repack, you can delete the row and add a new row or rows, as necessary.

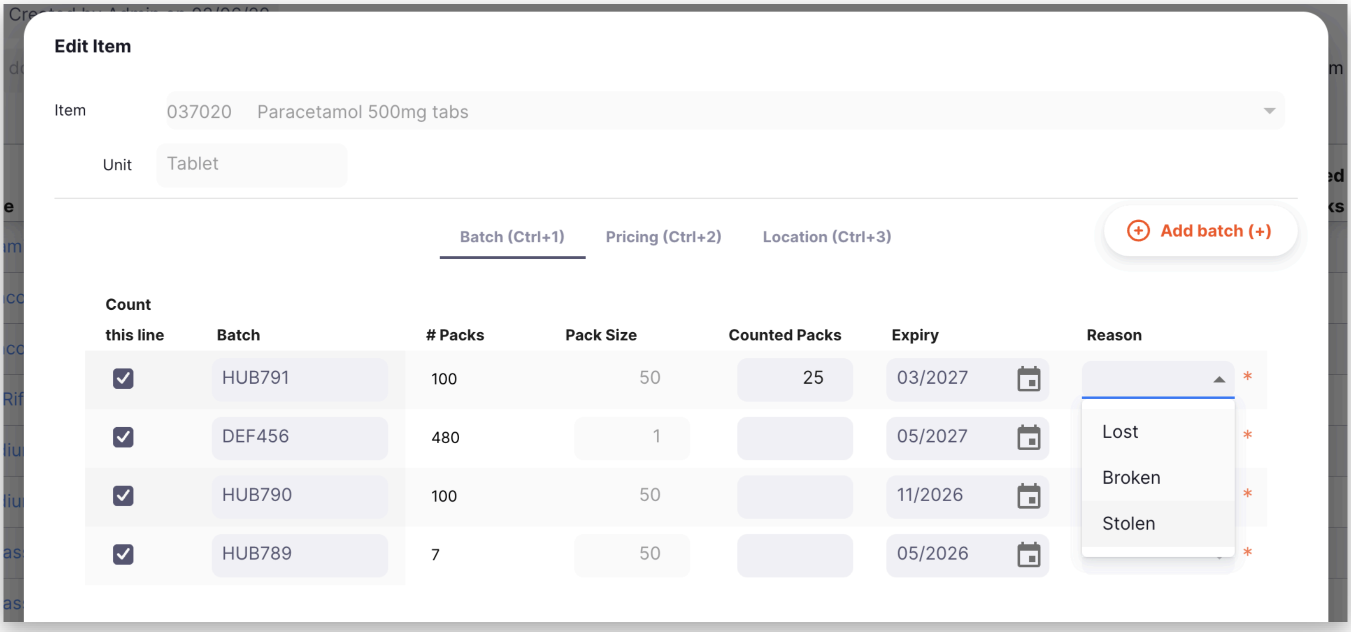


Don't worry if an item is missing from your newly created stocktake. You will have the possibility to add more items to your stocktake afterwards.

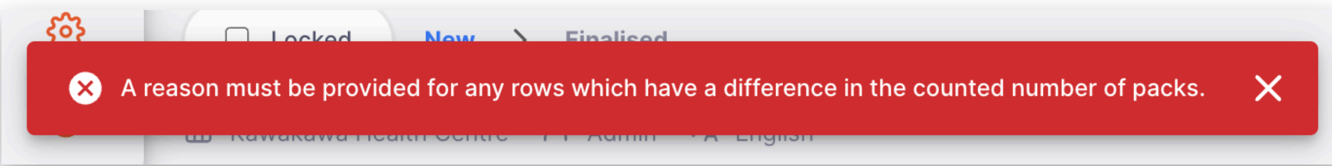
Entering reasons🔗

If you have inventory adjustment options configured in your central server, then you are required to enter a reason when the `counted number of packs` specified does not match the snapshot number of packs.

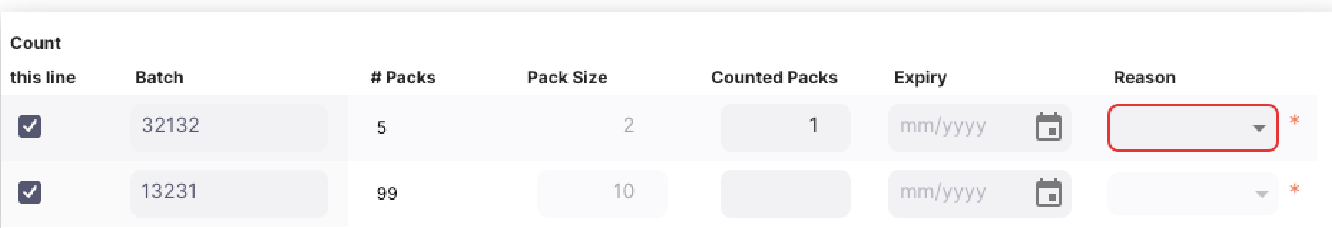
For example, entering `25` for the counted quantity of Paracetamol, will add a red * to the right of the `Reason` input and show the negative inventory adjustment reasons:



If you try to save the stocktake row without entering a reason you will see an error:



and the stocktake row that requires a reason to be entered will be highlighted in red as shown below.

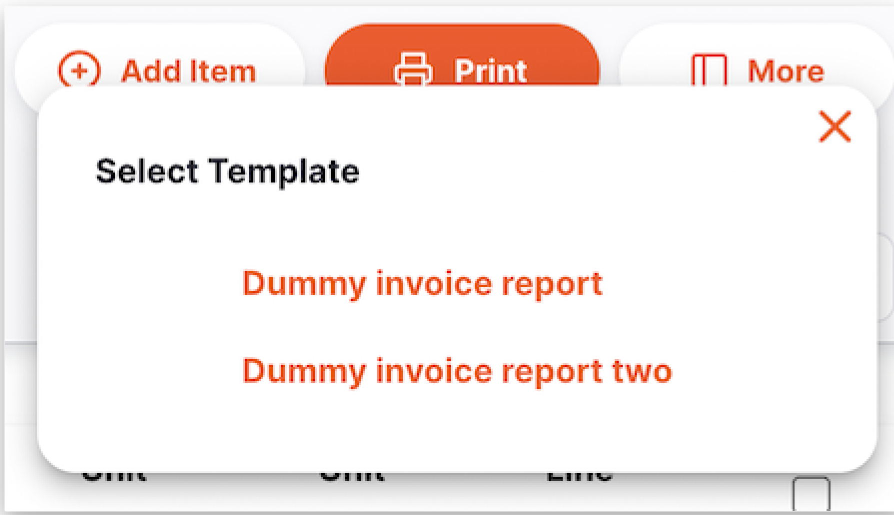


Printing Stocktake sheet

When viewing a specific Stocktake, simply click the `Print` button which is on the top right of the page. When printing, a PDF file is generated for you, which will then open in a new browser tab. This can then be printed using your browser by clicking print or using `control+P` (if using windows) or `cmd+P` keys on your keyboard (if using a mac).

This will either

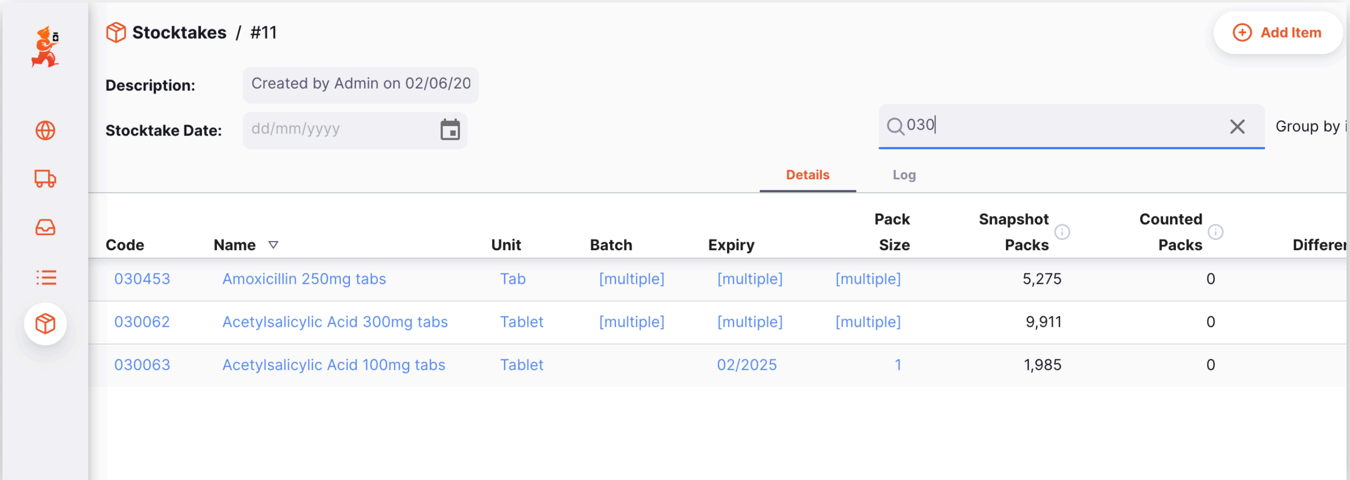
- Show a menu of possible reports for you to select from before creating a PDF. This will happen if there are more than one report defined for the `Stocktake` report type.
- Create a PDF immediately, if there is only one report to select from



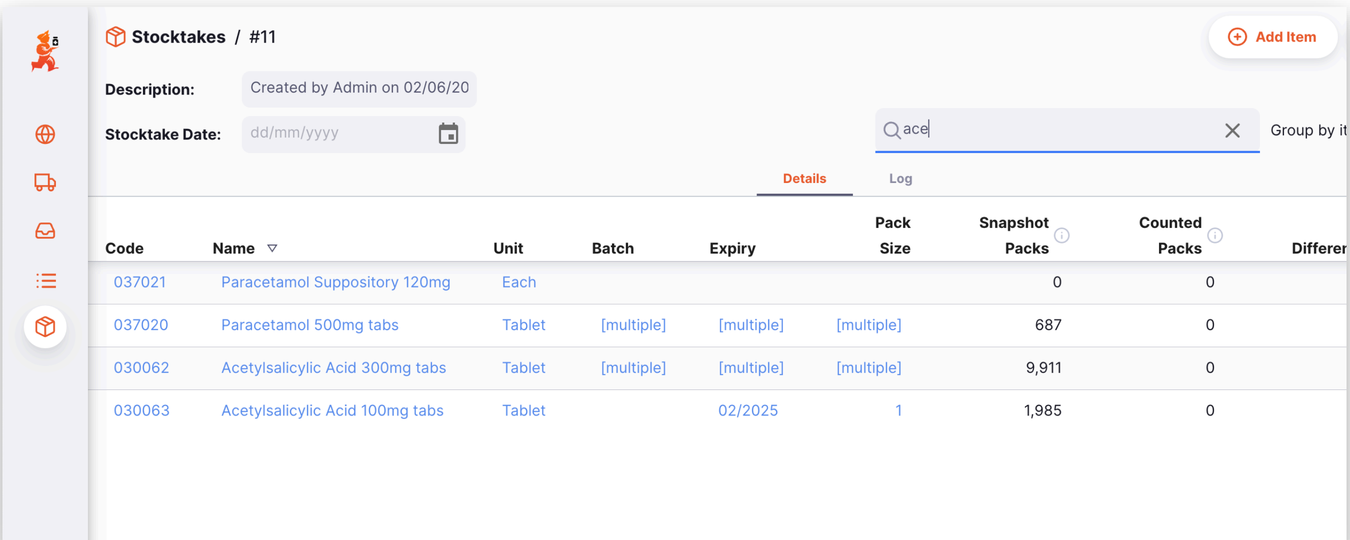
Filtering lines🔗

The list of stocktake lines can get very long if you have a large stocktake. To make working with the stocktake easier to manage, you can filter the list by item name or code.

Simply enter some or all of an item code in the filter input:



or, enter some of an item's name:



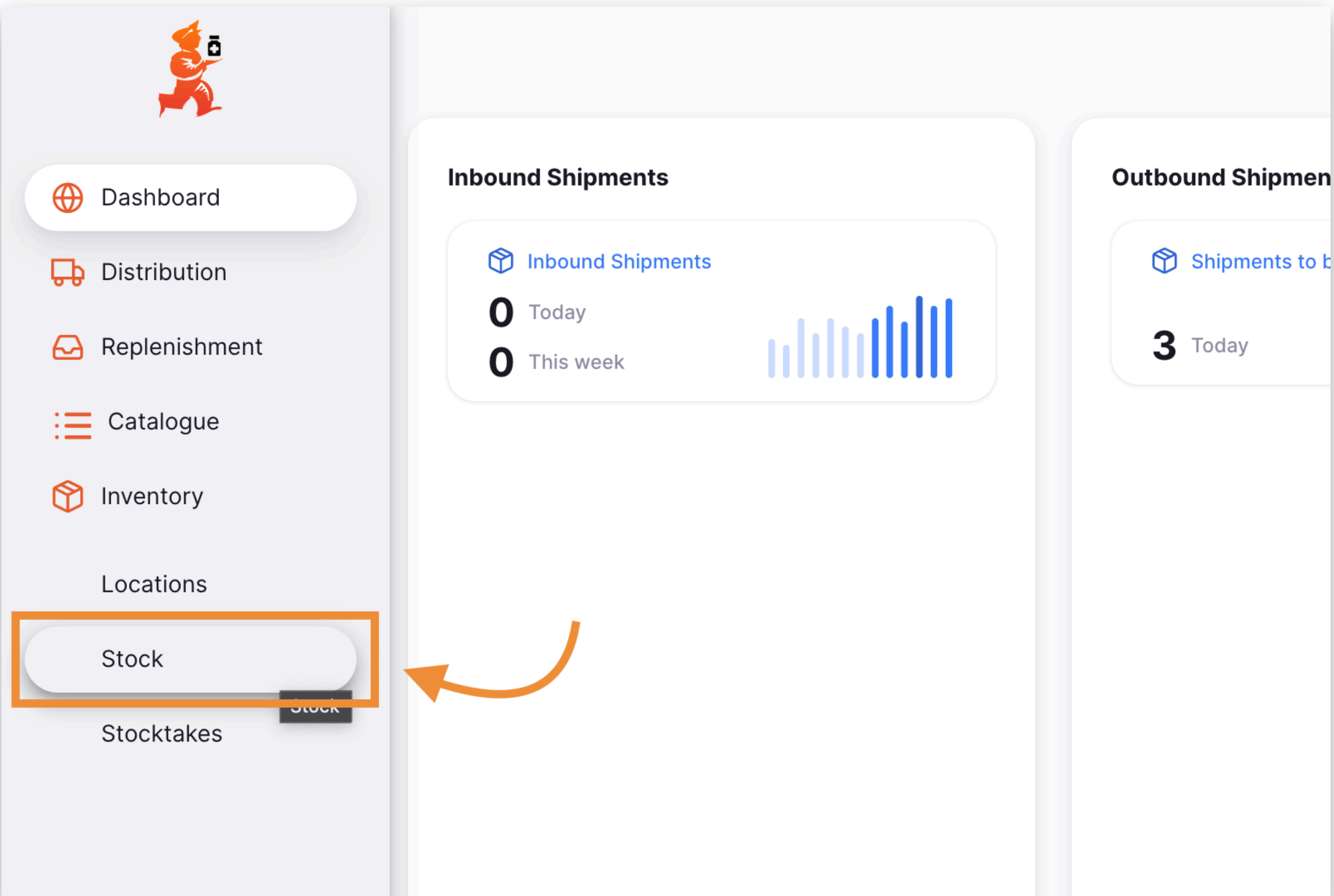
You can also group the lines by item by enabling the `Group by item` switch.

Stock

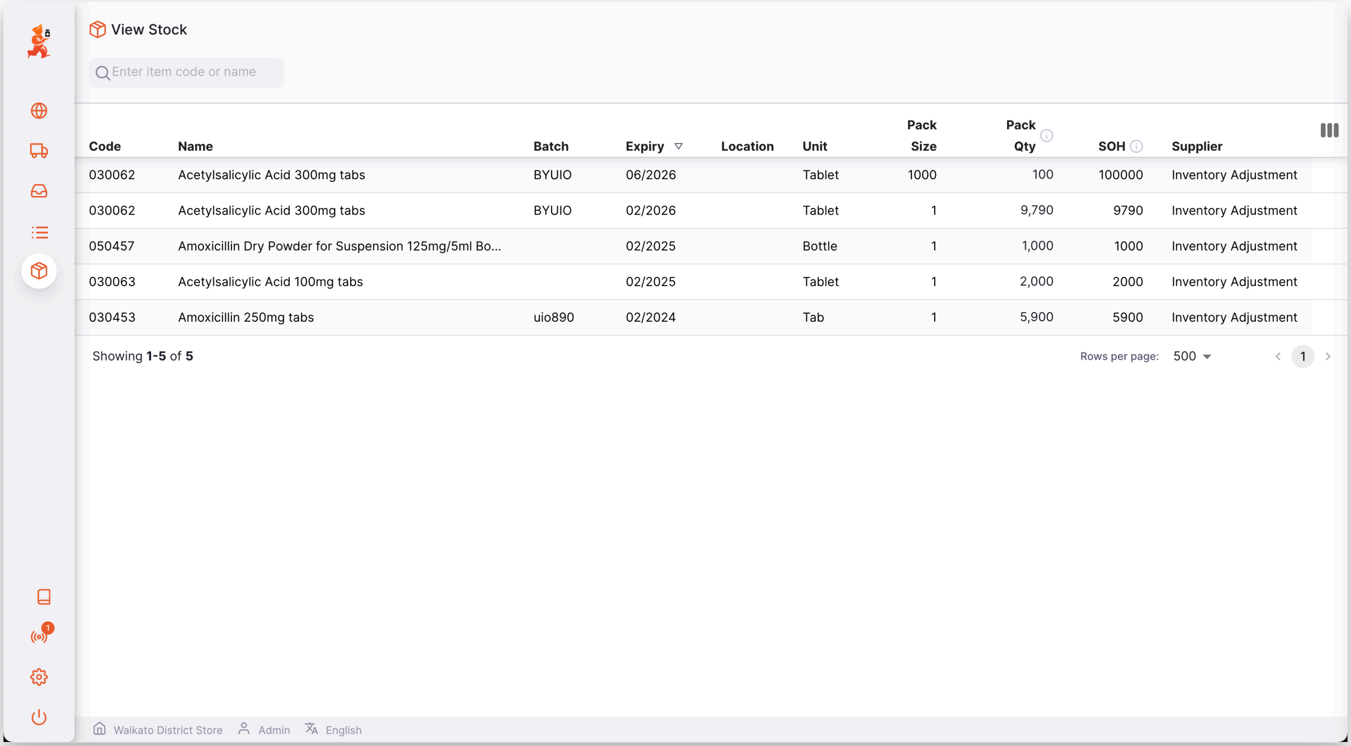
One of the most important - but easiest - tasks in mSupply is to check how much stock you have on hand. When you create an Outbound Shipment and add an item, mSupply will tell you if you have enough stock. But at many other times, you might want to quickly check, and it is very simple to do so.

Viewing stock🔗

In the navigation panel, Go to `Inventory` and tap on the `Stock` submenu:



A detailed list of your inventory appears:

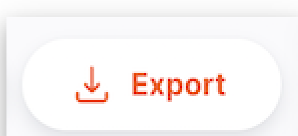


The list is divided into 8 columns:

- **Code**: This is the code assigned to this item in mSupply
- **Name**: This is the name by which mSupply will refer to the item
- **Batch**: Batch number of the stock line
- **Expiry**: Expiry date of the batch
- **Location**: Where the item is being stored in your facility
- **Unit**: The unit you use for this item
- **Pack Size**: Number of units per pack
- **Pack Qty**: Number of packs available in your store
- **SOH**: The total quantity of stock on hand, in number of packs
- **Supplier** Shows the source of this stock item

Exporting Stock🔗

The list of Stock can be exported to a comma separated file (csv). Simply click the export button (on the right, at the top of the page)

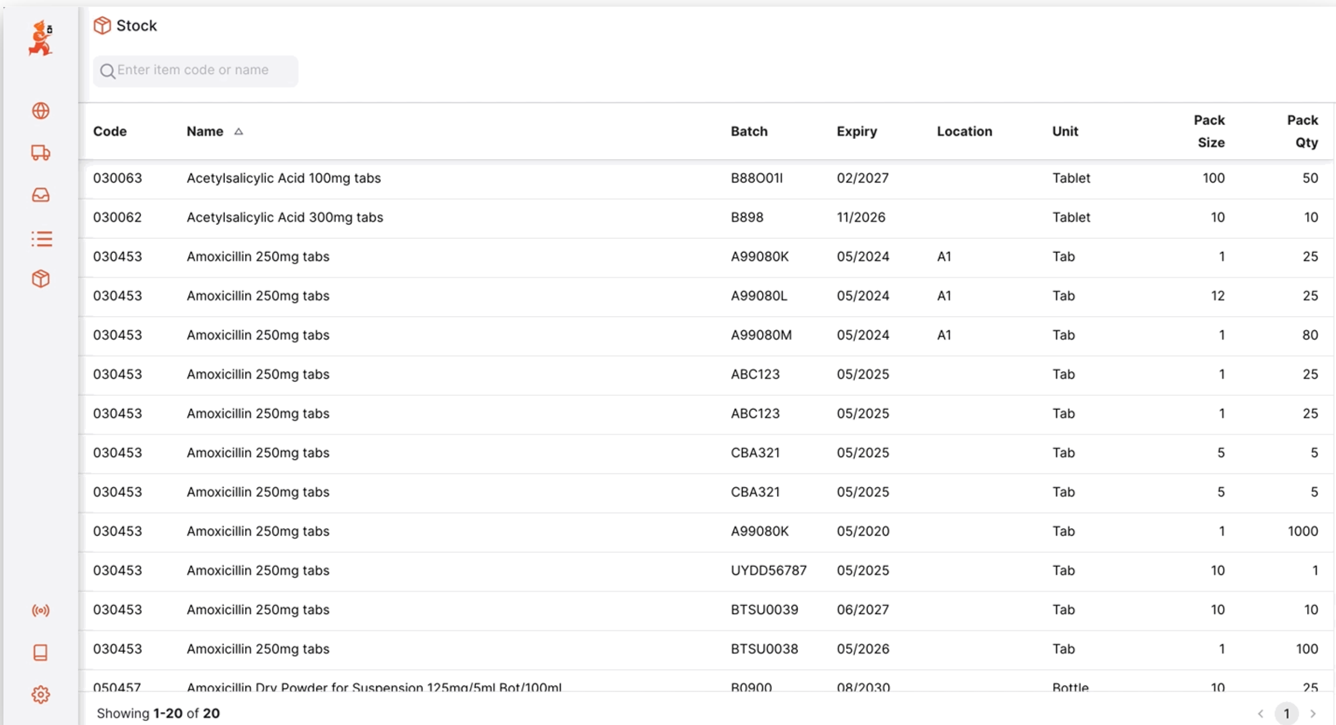


and the file will be downloaded. The export function will download all Stock lines, not just the current page, if you have more than 20 of them.

Looking for a specific item🔗

You can filter the list by item name or code. This can be useful if you're looking for one particular item.

Type as much of an item name or code in the `Enter item code or name` field:


Stock

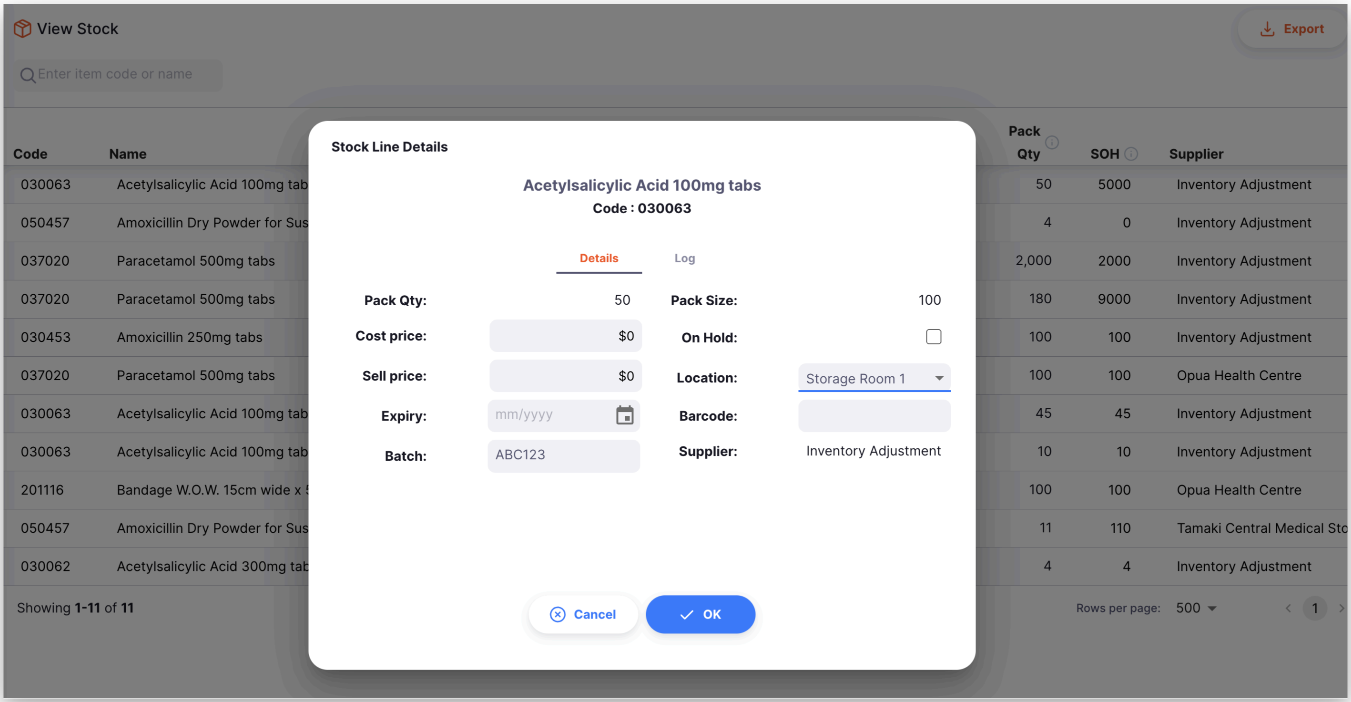
Enter item code or name

Code	Name	Batch	Expiry	Location	Unit	Pack Size	Pack Qty
030063	Acetylsalicylic Acid 100mg tabs	B88O01I	02/2027		Tablet	100	50
030062	Acetylsalicylic Acid 300mg tabs	B898	11/2026		Tablet	10	10
030453	Amoxicillin 250mg tabs	A99080K	05/2024	A1	Tab	1	25
030453	Amoxicillin 250mg tabs	A99080L	05/2024	A1	Tab	12	25
030453	Amoxicillin 250mg tabs	A99080M	05/2024	A1	Tab	1	80
030453	Amoxicillin 250mg tabs	ABC123	05/2025		Tab	1	25
030453	Amoxicillin 250mg tabs	ABC123	05/2025		Tab	1	25
030453	Amoxicillin 250mg tabs	CBA321	05/2025		Tab	5	5
030453	Amoxicillin 250mg tabs	CBA321	05/2025		Tab	5	5
030453	Amoxicillin 250mg tabs	A99080K	05/2020		Tab	1	1000
030453	Amoxicillin 250mg tabs	UYDD56787	05/2025		Tab	10	1
030453	Amoxicillin 250mg tabs	BTSU0039	06/2027		Tab	10	10
030453	Amoxicillin 250mg tabs	BTSU0038	05/2026		Tab	1	100
050457	Amoxicillin Dry Powder for Suspension 125mg/5ml Bot/100ml	B0900	08/2030		Bottle	10	25

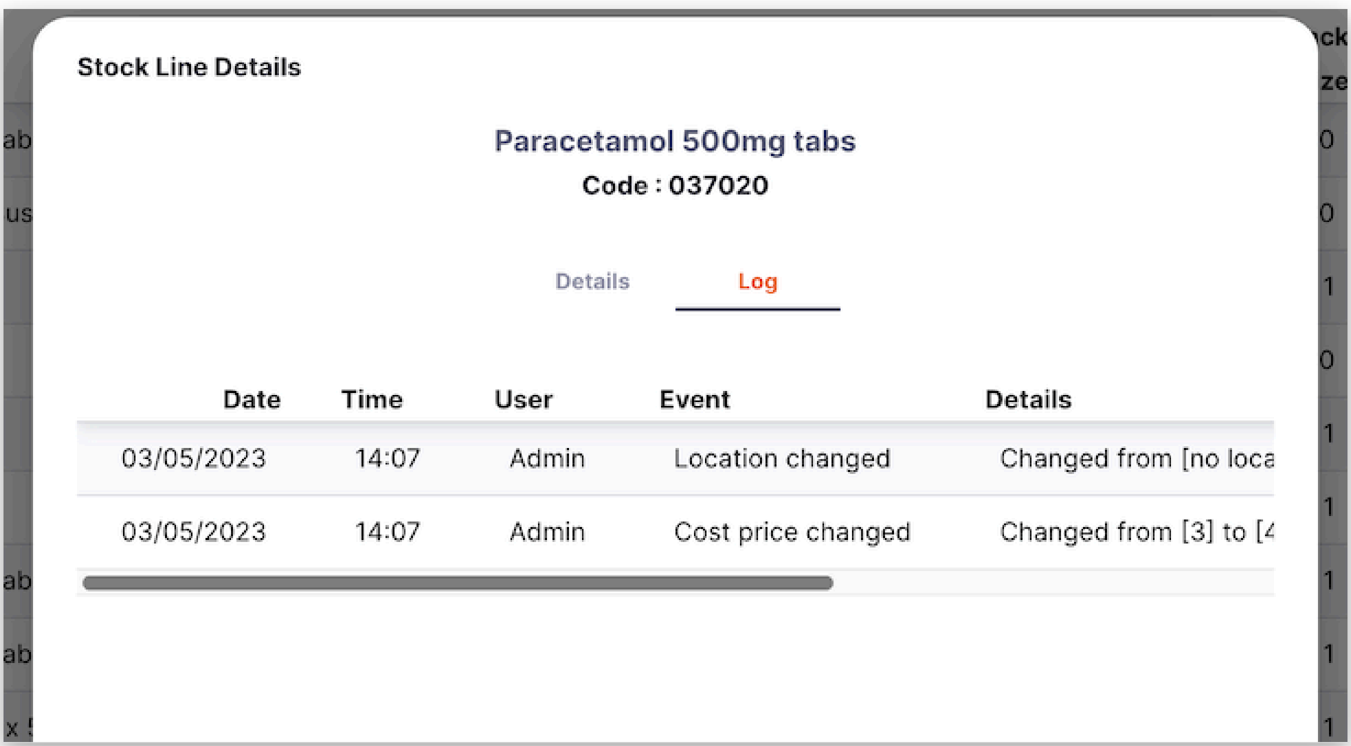
Showing 1-20 of 20

Editing a stock line🔗

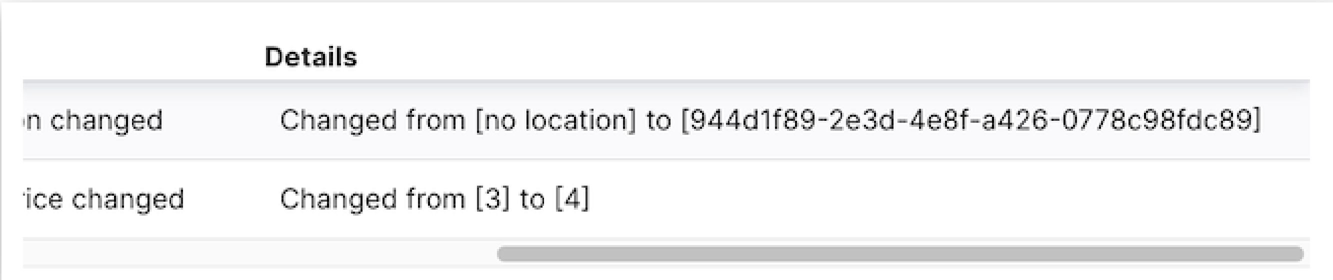
Clicking on a line in the list will open the edit screen. Here, you can change the properties of this stock line.



To see changes made to this stock line, you can click the `Log` tab. Note that you might have to scroll to the right in order to see all of the details!



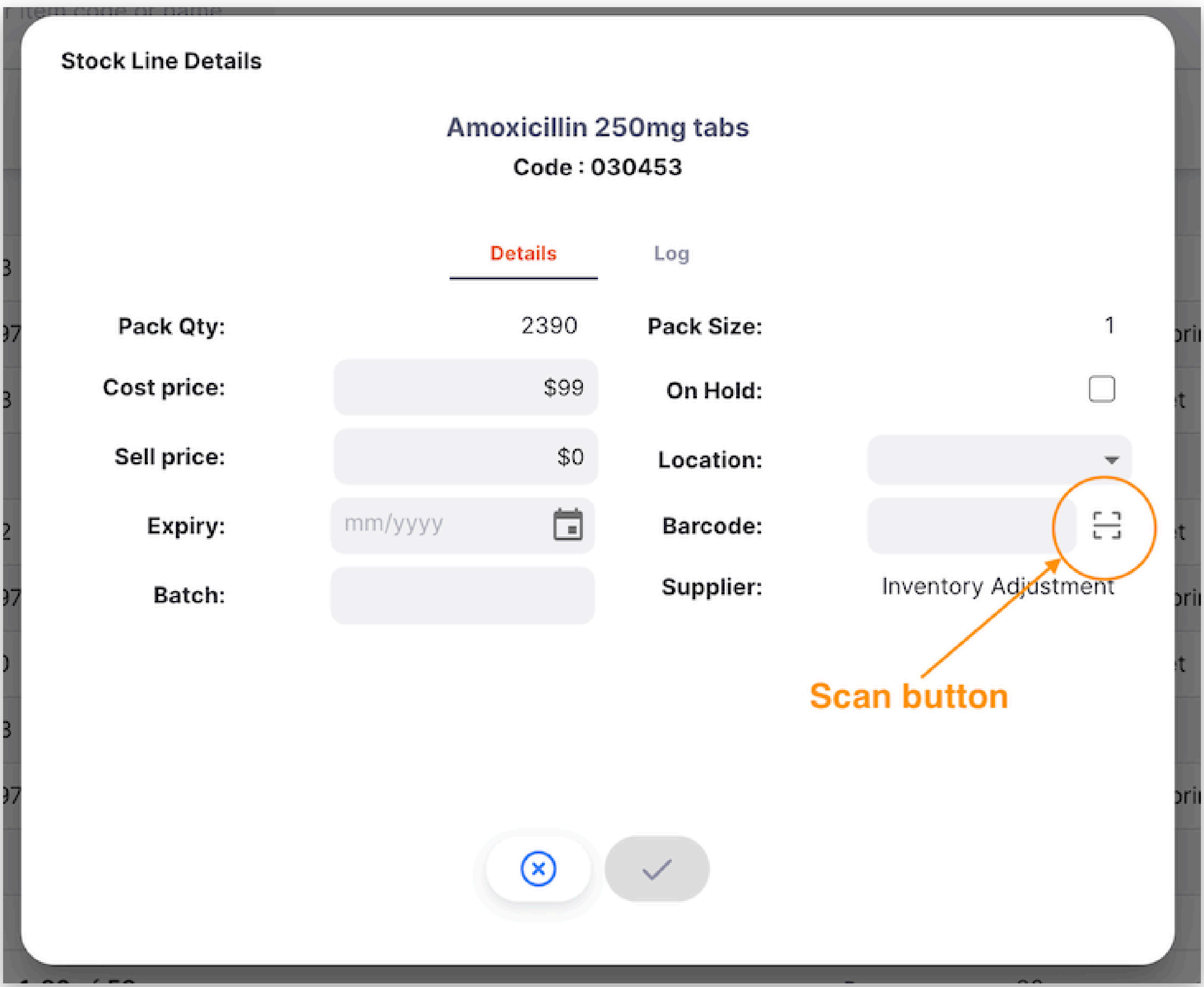
Log, showing changes made to this item



With the log scrolled to the right

Updating barcode🔗

This feature is available when running either the android or desktop versions of Open mSupply. There is an additional button shown when editing a stock line:



Clicking this will start the barcode scanner - if one is attached, when running desktop. If running on android, the camera on the device is used. If a barcode is scanned successfully, then the barcode field is populated with the scanned value. If a QR code which has a batch and expiry information is scanned, then these fields on the stock edit window are also populated from the scanned code.

You can also press the 'control (ctrl)' and 's' keys at the same time to start the barcode scanner

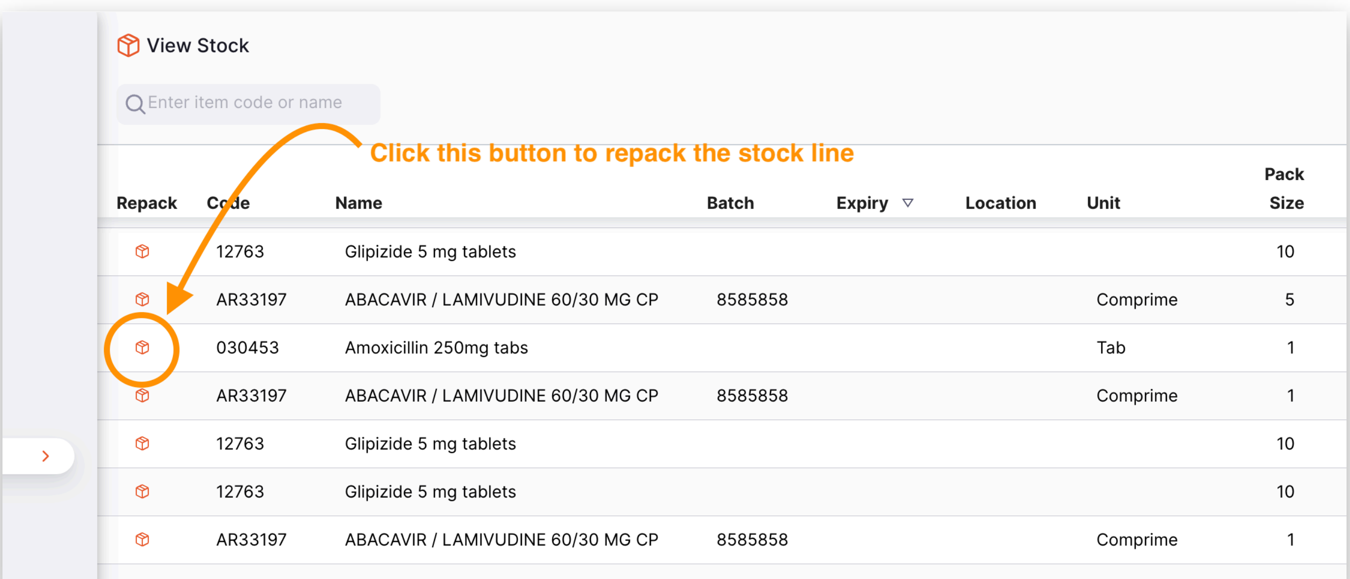
Once you have updated the barcode, this code is associated with the item, for this particular pack size. This item will now be automatically detected when adding items to an Outbound Shipment using a barcode scanner.

Barcodes updated in this way will also synchronised with other stores, which means that codes you scan here will allow other stores to automatically add these items to Outbound Shipments using a barcode scanner.

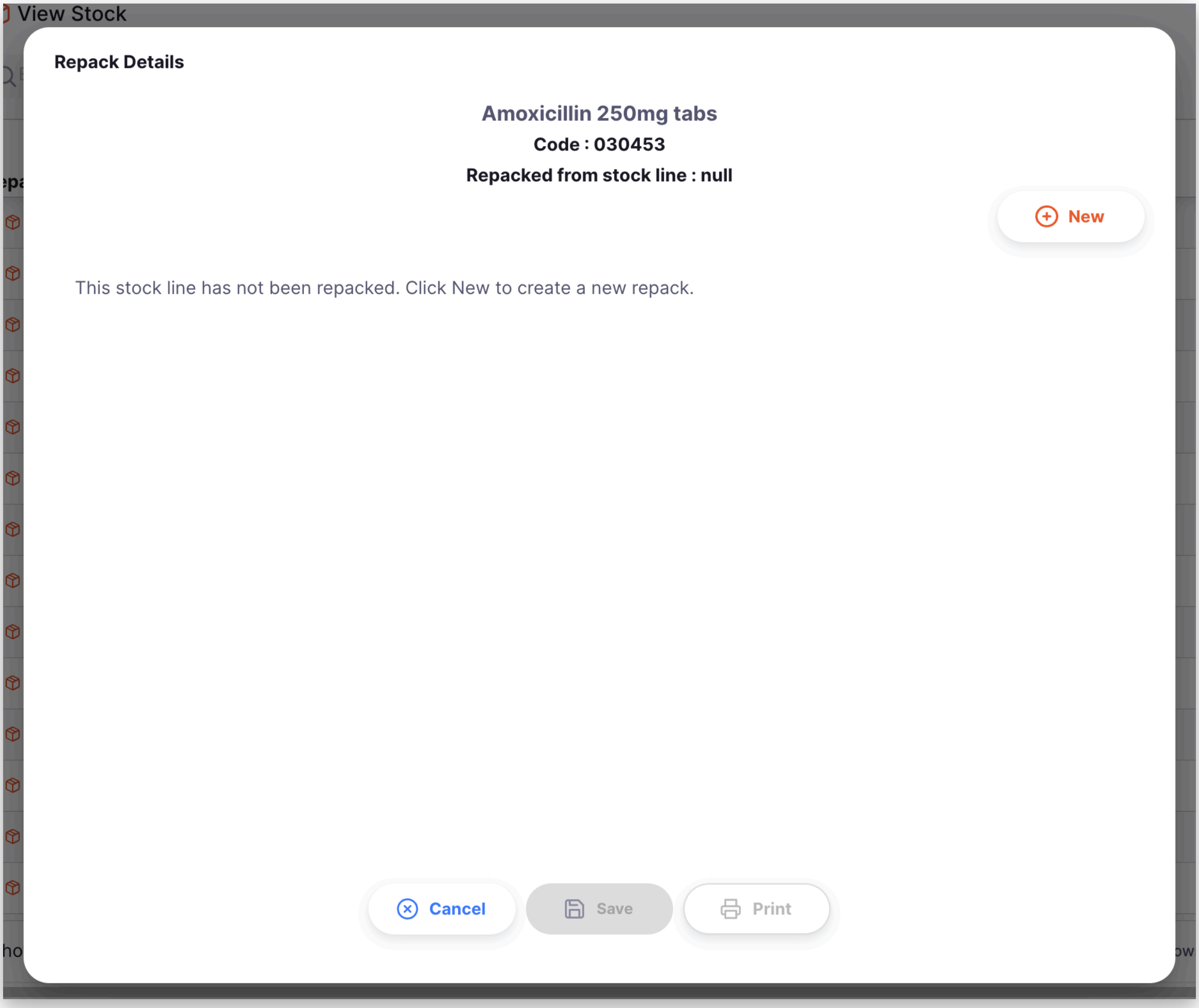
Repacking stock🔗

The repack feature gives us the ability to break down stock into smaller pack sizes, consolidate it into larger pack sizes or move part or all of a stock line to a new location. Here's how to use it:

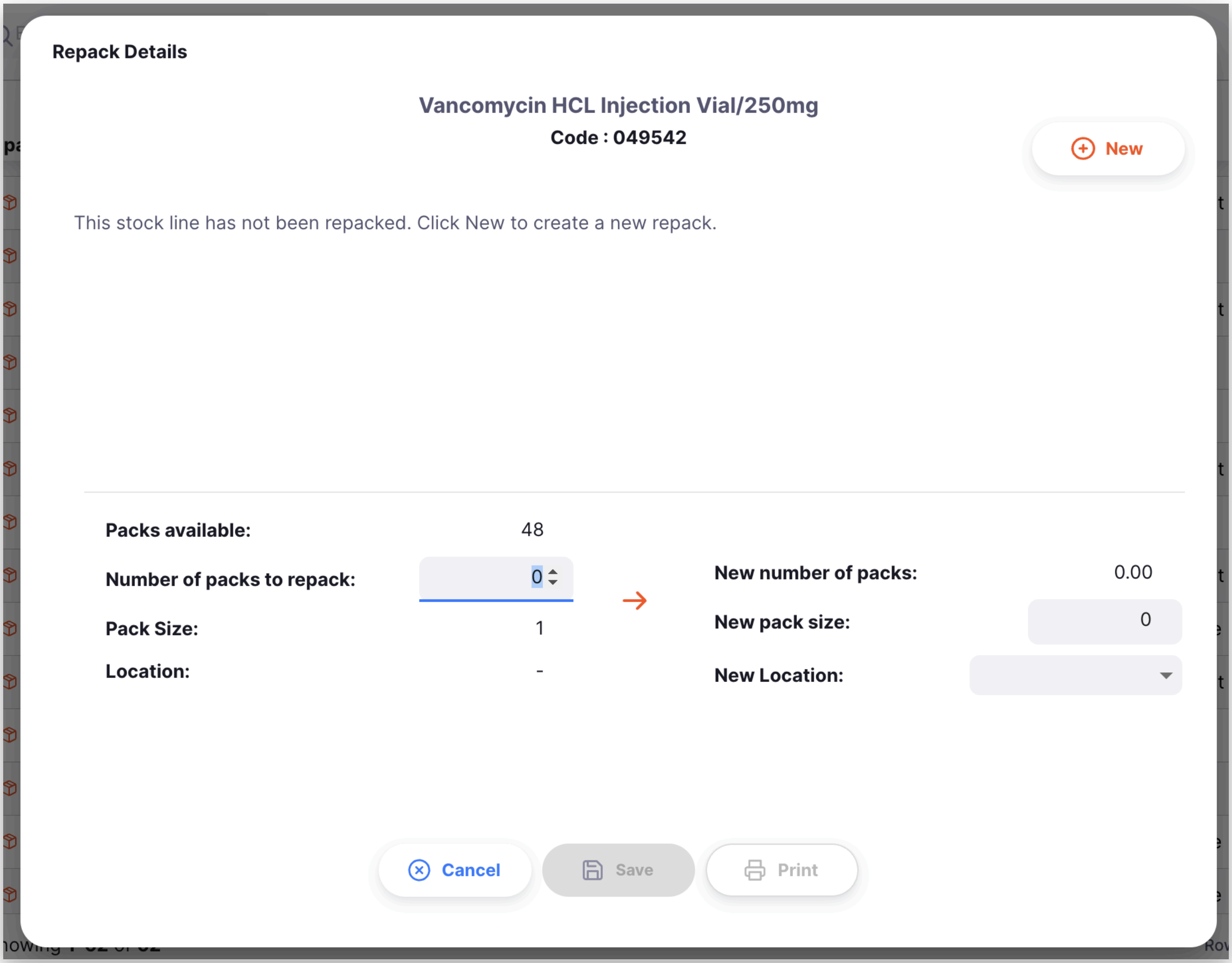
In the list showing all current stock, there is a column on the far left, titled `Repack`. To repack a stock item, click the repack icon for that line, like so:



To begin with, the stock line won't have any repacks showing, so you'll see a window like this:



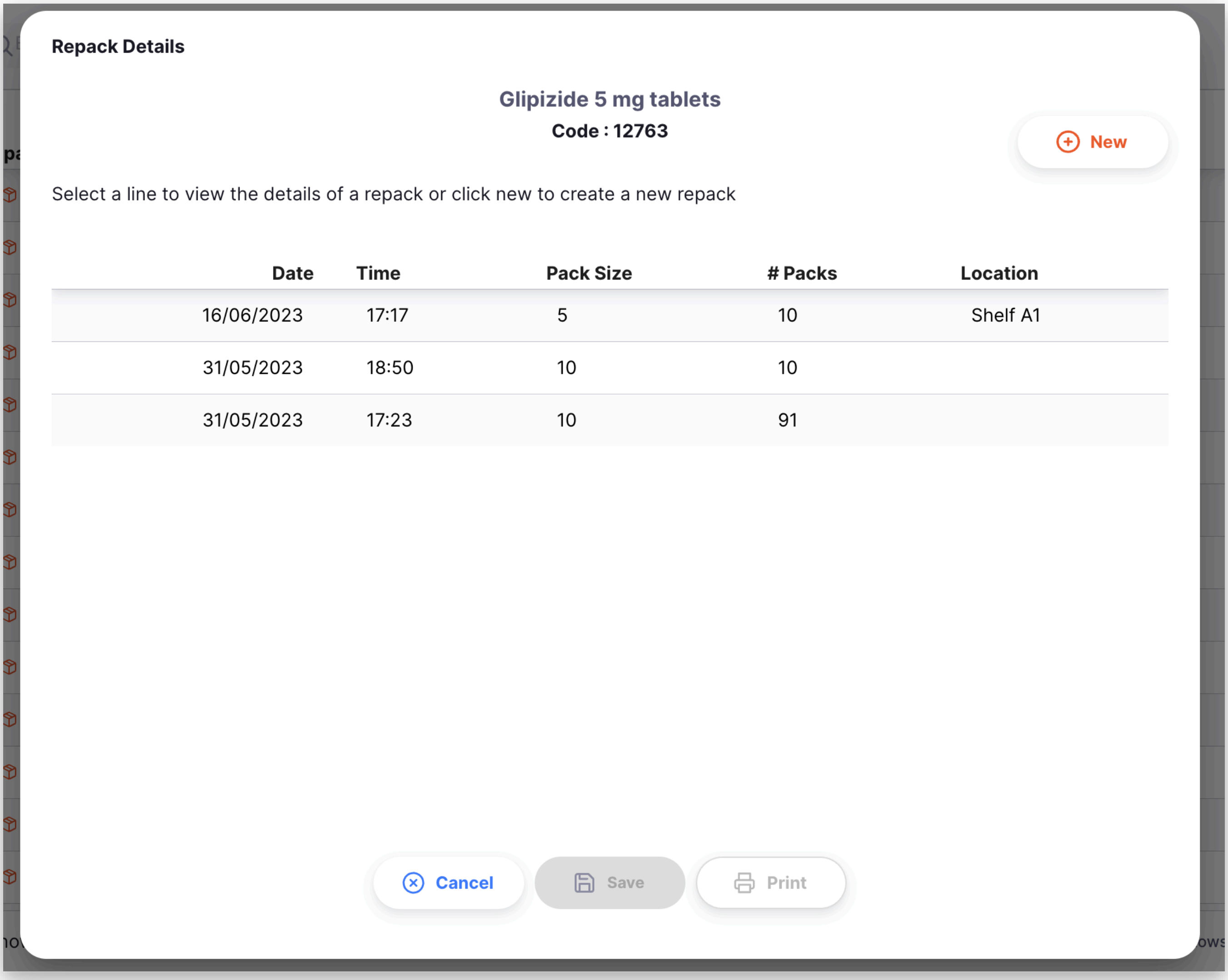
Click the `New` button to start a repack:



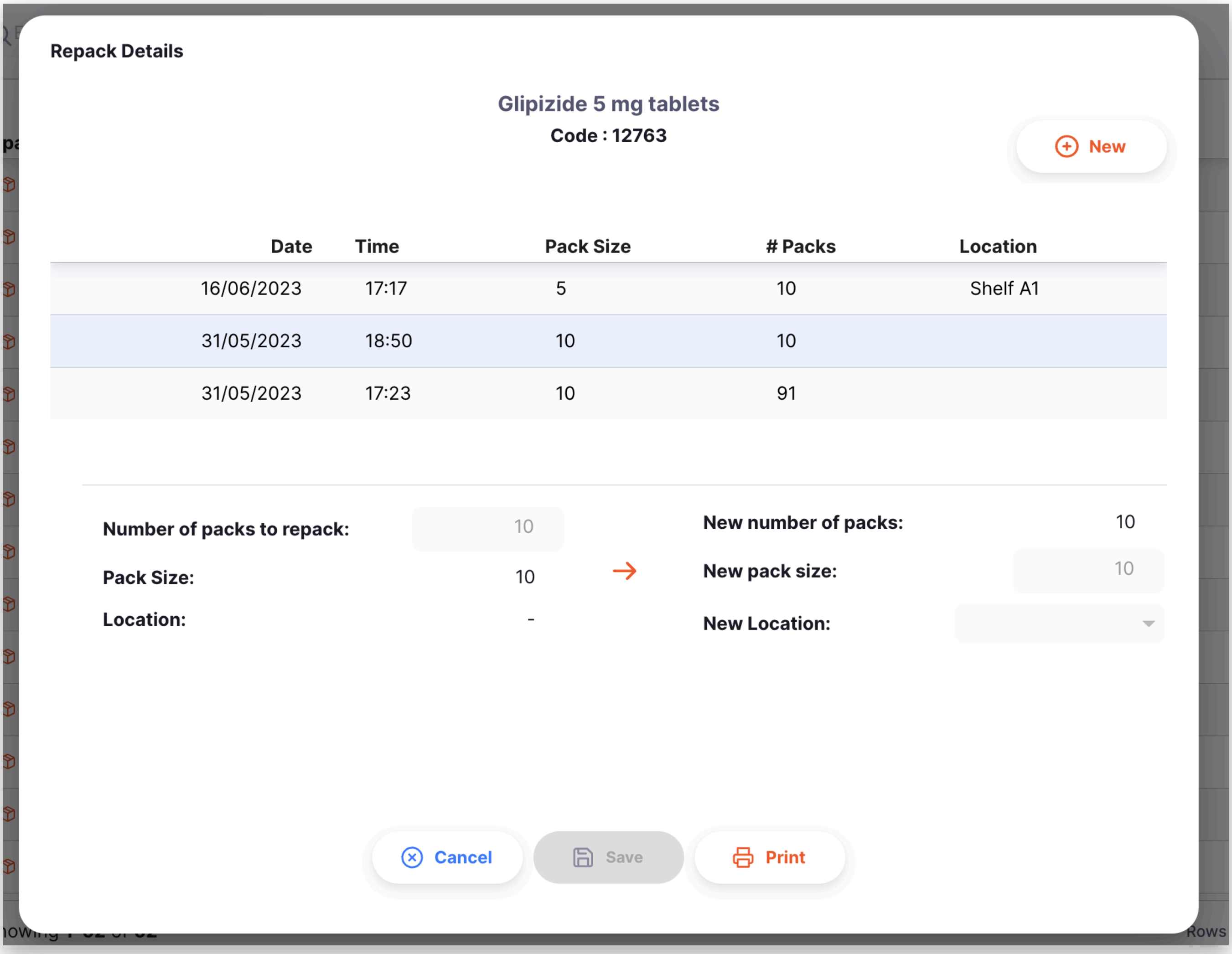
From here, you can enter the number of packs which you'd like to repack, up to a maximum of the current number of packs in stock. This number is the number shown next to `Packs available` - in this case there are 48 packs available.

You can then enter a new pack size, and optionally, enter a location for the new stock. The `New number of packs` is calculated automatically. Click `Save` to save the changes. Clicking `Print` will allow you to print details of this repack action.

The repacks made from this stock item are shown in a list:



Clicking on one of the lines will show details of the repack, and allow printing of it:


Repack Details
Glipizide 5 mg tablets
Code : 12763
New
Date
Time
Pack Size
Packs
Location
16/06/2023
17:17
5
10
Shelf A1
31/05/2023
18:50
10
10
31/05/2023
17:23
10
91
Number of packs to repack:
10
Pack Size:
10
Location:
-
New number of packs:
10
New pack size:
10
New Location:
Cancel
Save
Print

Prescriptions

Prescriptions can be used to prescribe medicine to patients.

A Prescription can be used to:

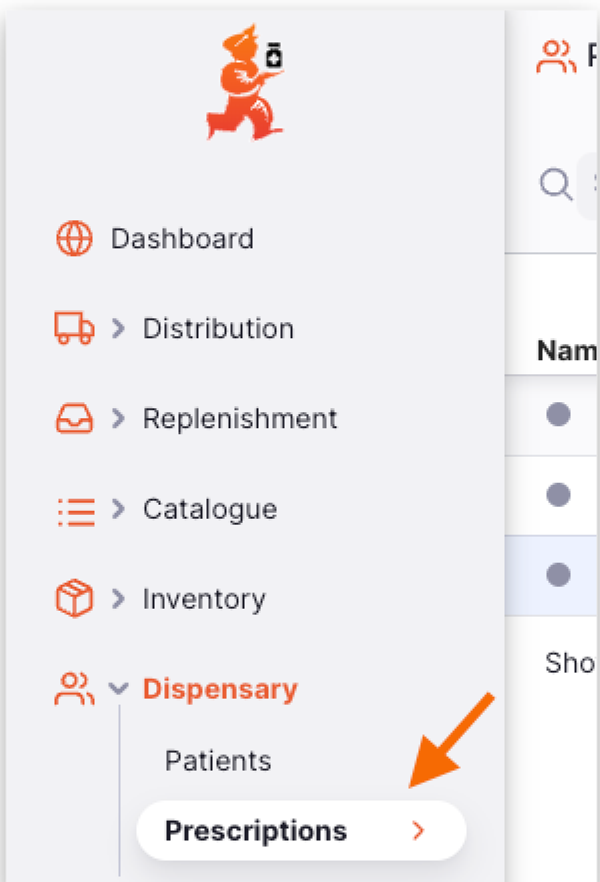
- Issue medicine to a patient

Viewing Prescriptions

To use prescriptions, ensure that your store is set to `Dispensary` mode (see the [virtual stores]() documentation for how to do this).

Open the Prescriptions Menu

Choose `Dispensary` > `Prescription` in the navigation panel.



You will be presented with a list of Prescriptions (if you don't see any, you are probably just starting!).

From this screen you can:

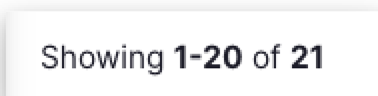
- View a list of Prescriptions
- Create a new Prescription
- Export Prescription to a `.csv` file

Prescription list

1. The list of Prescriptions is divided into 5 columns:

Column	Description
Name	Name of the Patient
Status	Current Status of the prescription
Number	Reference Number of the precription
Created	Creation date of the prescription
Comment	Comment for the prescription

1. The list can display a fixed number of prescriptions per page. On the bottom left corner, you can see how many prescriptions are currently displayed on your screen.



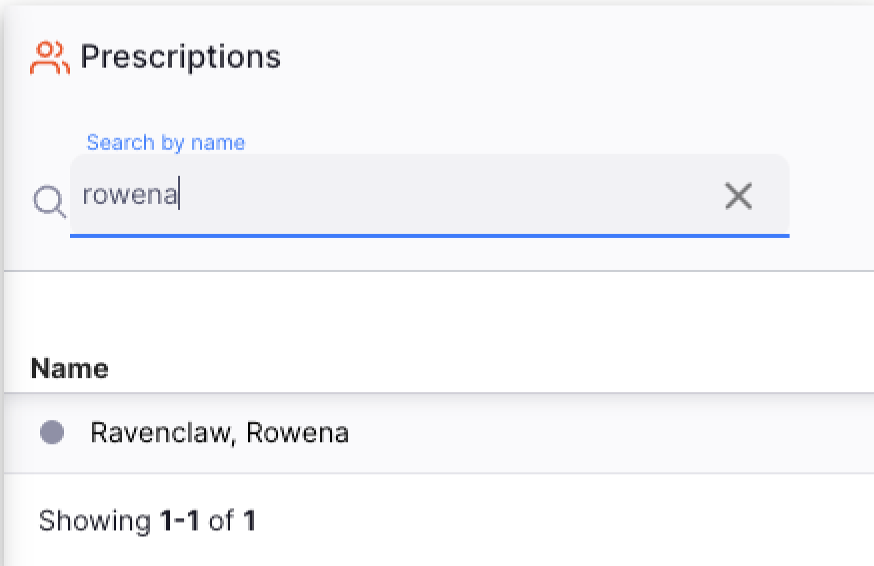
3. If you have more prescriptions than the current limit, you can navigate to the other pages by tapping on the page number or using the right of left arrows (bottom right corner).

4. You can also select a different number of rows to show per page using the option at the bottom right of the page.

Search by Patient Name

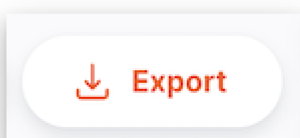
You can filter the list of prescriptions by patient name. This can be useful if you're looking for one particular prescription!

Type the name of a patient in the `Search by name` field (on the left, just above the list headers). All the prescriptions for this patient will appear in the list.



Exporting Prescriptions

The list of Prescriptions can be exported to a comma separated file (csv). Simply click the export button (on the right, at the top of the page)



and the file will be downloaded. The export function will download all Prescriptions, not just the current page, if you have more than 20 of them. Prescriptions are exported using sort order selected in the table, though of course you could easily sort the list in Excel or whatever you open the .csv file with!

Delete a Prescription

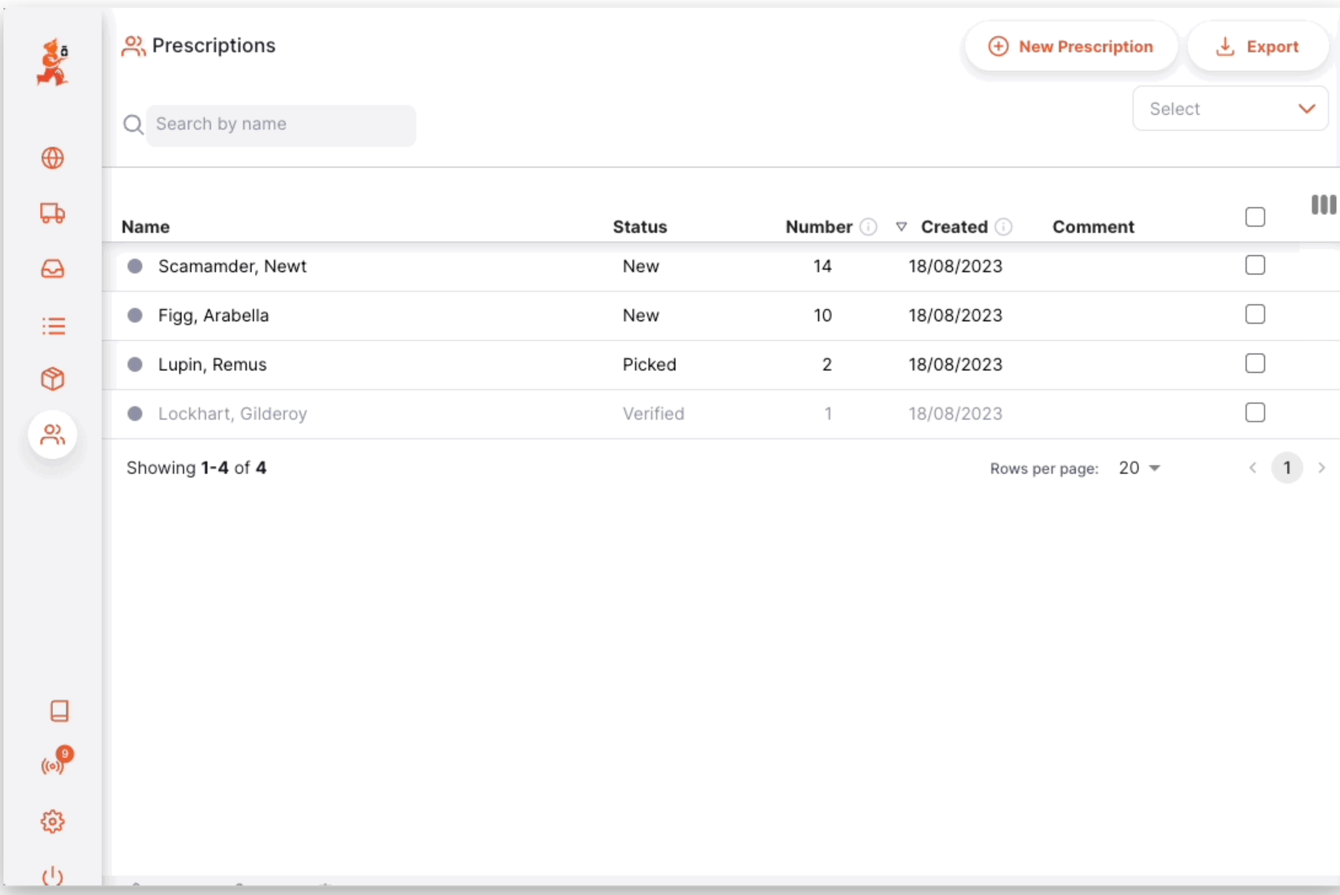
You can delete a prescription from the Prescription list.

1. Select the prescription that you want to delete by checking the box on the left end of the list. You can select more than one prescription to be deleted. You can even select them all using the master checkbox in the list headers.

2. Open the `Select` dropdown (top right corner, above the list) and select `Delete selected lines`.

3. A notification confirms how many prescriptions were deleted (bottom left corner).

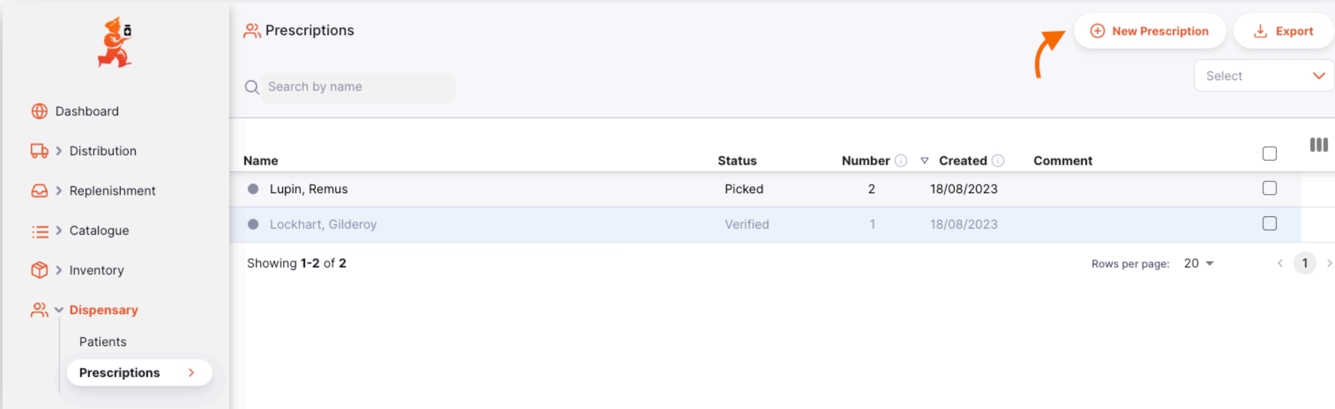
You can only delete Prescriptions with a status `NEW`.



Creating a Prescription

1. Go to `Dispensary` > `Prescriptions`.

2. Press the `New Prescription` button, in the top right corner

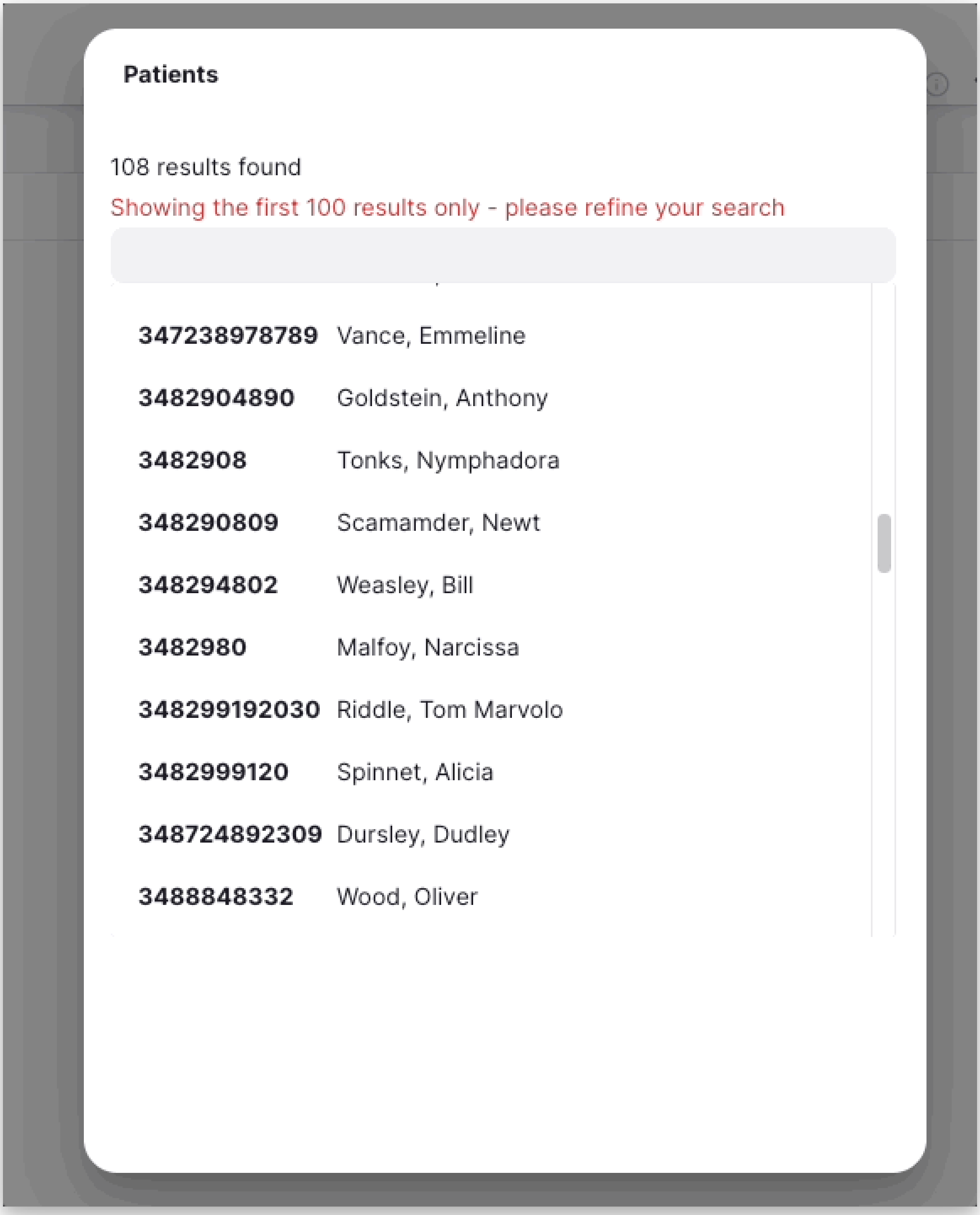


3. A new window `Patients` opens, inviting you to select a patient.

Select a Patient

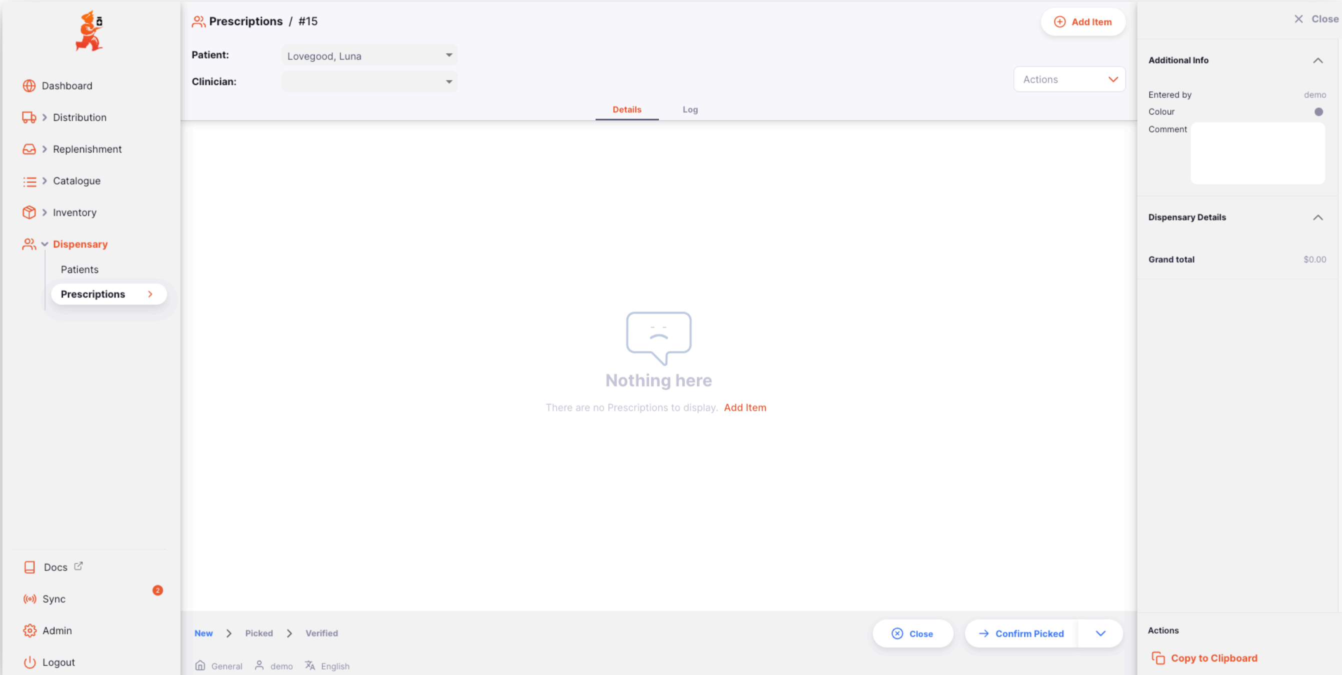
1. In the `Patients` window, you will be presented with a list of available patients. The patients list will load the first 100 patients and prompt you to refine your search by typing as much of the patient's name or code as you can.

In below example, we are prescribing medicine to **Luna Lovegood**.



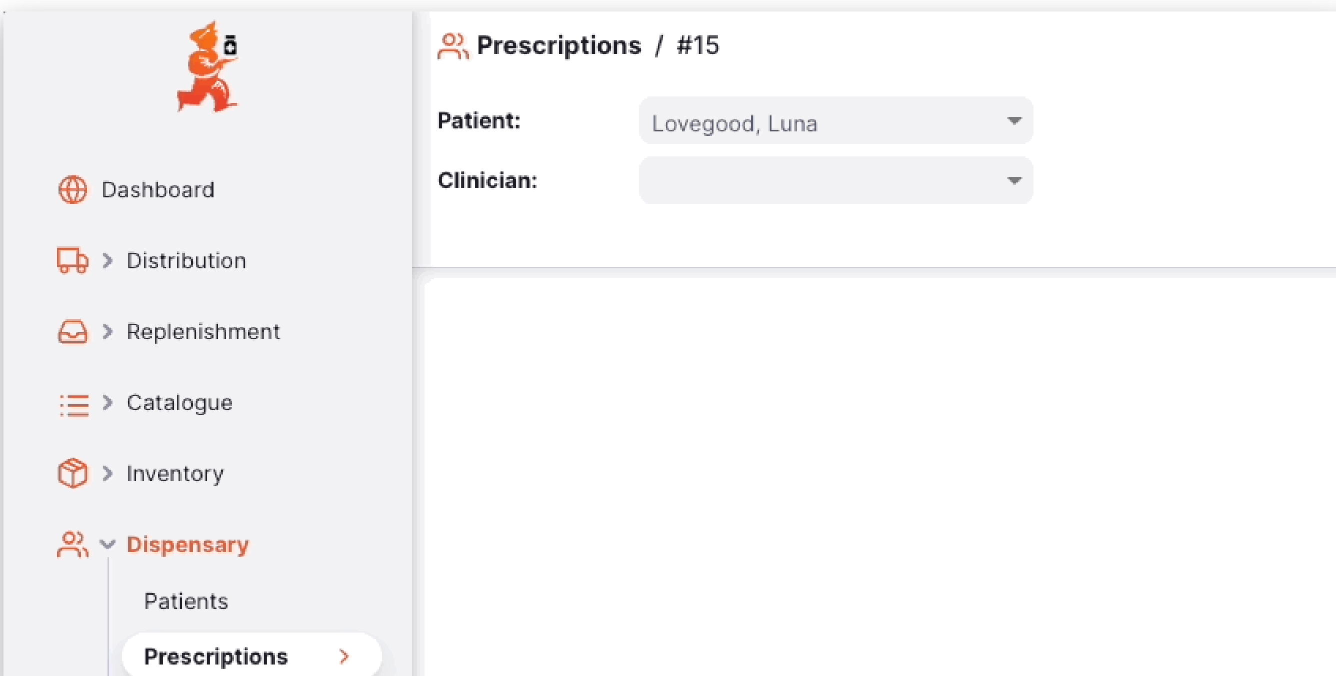
2. Your Prescription is automatically created once you click on the patient in the dropdown list.

If everything went well, you should see the name of your patient in the top left corner and the status should be `NEW`



Edit the Patient Name

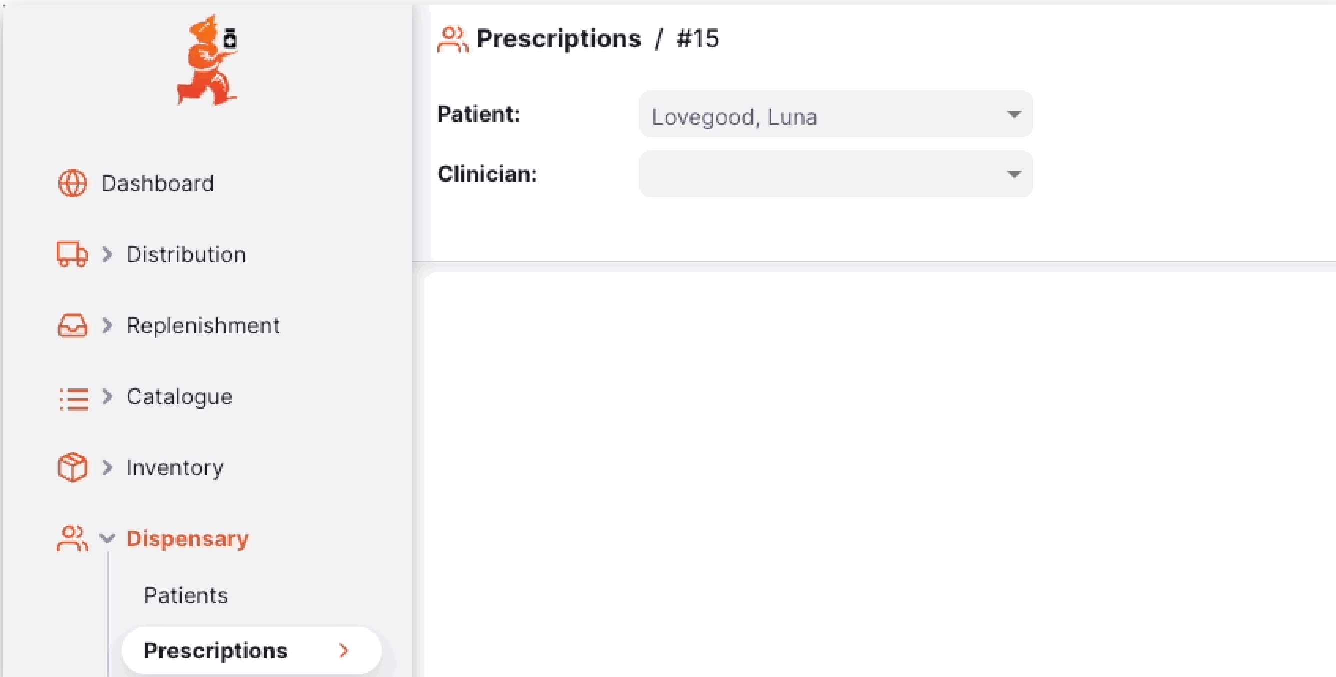
If you have selected the wrong patient, you can change the patient name in the `Patient Name` field or select one the dropdown list:



You may need to type more of the patient's name or code if you have more than 100 patients for the patient's name to show on the dropdown list.

Select the Clinician

Once your Prescription has been created, you can select a clinician from the `Clinician` dropdown list.



View or edit the Prescription Information Panel

The Information Panel allows you to see or edit information about the Prescription. It is divided into multiple sections:

- Additional Info
- Invoice Details

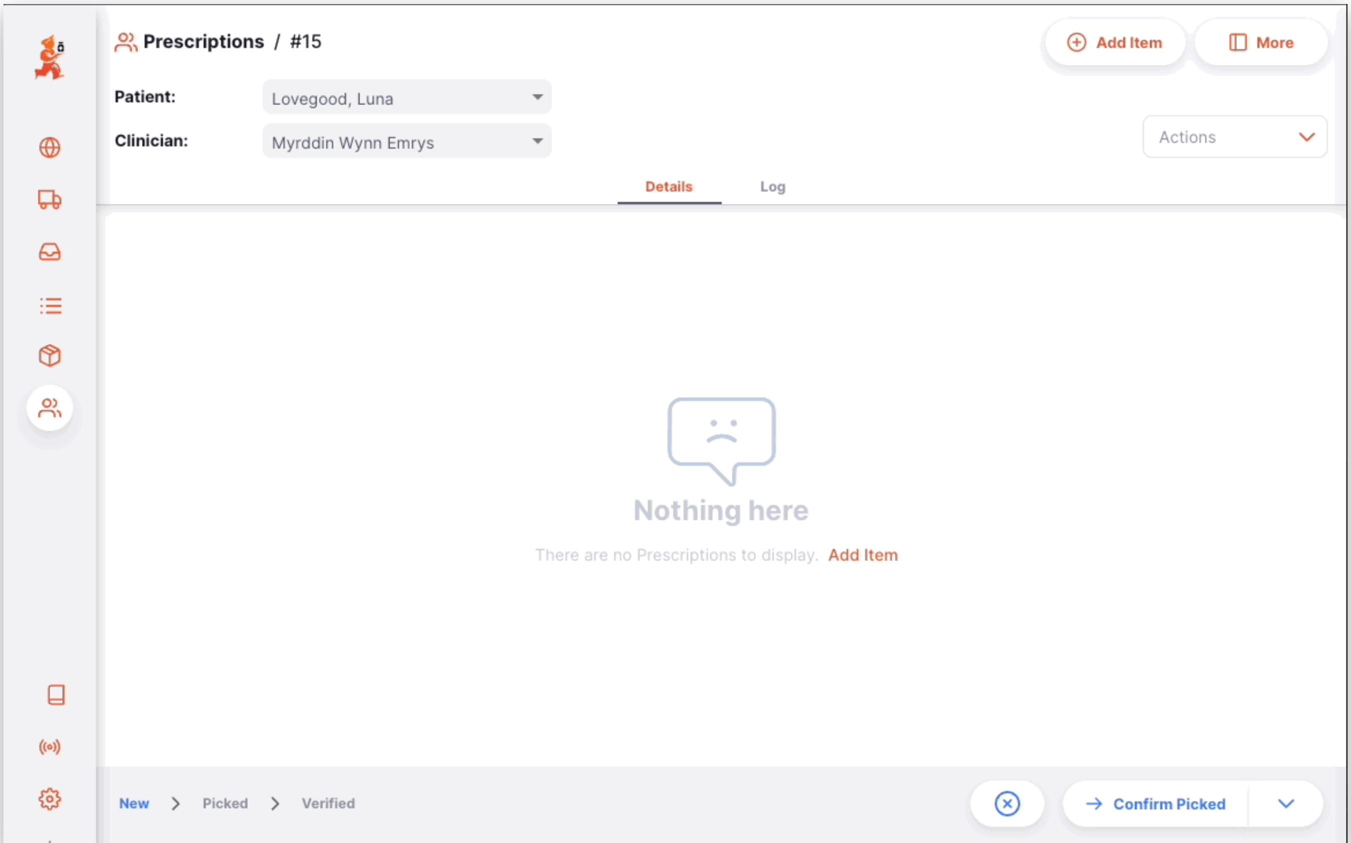
We are planning to add more sections in the future as Open mSupply grows.

How to open and close the Information Panel?

If you are using a large screen, the information panel will be automatically opened for you. However, on an average sized screen, the information panel will be closed by default.

To open the Information Panel, you can tap on the `More` button, located in the top right corner of the Prescription view.

You can close by tapping on the `X Close` button, on the top right corner of the information panel.



Additional Info

In the **Additional Info** section, you can:

- See who created the Prescription (name of the user)
- View and edit the Prescription color. To edit the color, tap on the coloured circle and select a color from the pop-up
- Write or edit a comment

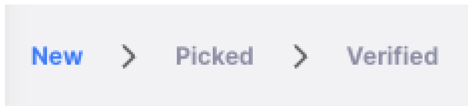
Prescription Details

In this section, you will see by default the total selling price of the items listed in the Prescription.

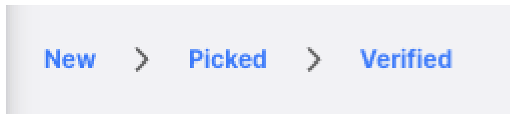
Prescription Status Sequence

The status sequence is located at the bottom left corner of the Prescription screen.

Passed statuses are hightlighted in blue, next statuses appear in grey.



Status Sequence: current status is `NEW`.



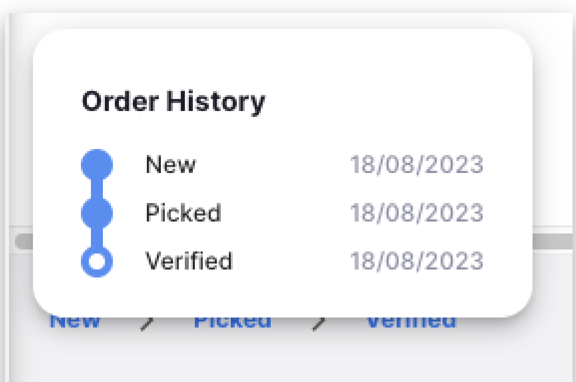
Status Sequence: current status is `VERIFIED`.

There are 3 status for a Prescription:

Status	Description
New	This is the first status when you create a prescription.
Picked	Prescription is picked and is now ready to give to the patient. Goods are still part of your inventory and prescription can still be edited.
Verified	The patient has received their medicine.

If you hover over the status sequence, a prescription history window appears. You can see the date when a perscription was updated from one status to another.

This prescription has been created, picked and verified on 18/08/2023



Cancel and Confirm button

Cancel Button

Tap on the `Close` button to quit the Prescription view and return to the Prescriptions list.

Confirm Button

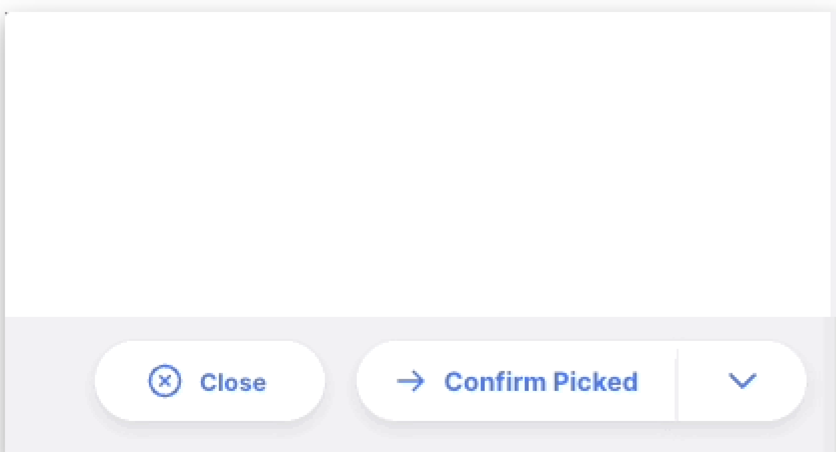
The `Confirm` button updates the status of the prescription. The status which you can confirm depends on the current status of the prescription and follows the sequence shown below.

When managing an Prescription, you can only confirm the Picked and Verified statuses.

Confirm...	Current Status	Next Status
Confirm Picked	New	Picked
Confirm Verified	Picked	Verified

You don't have to update a prescription to the next status in the sequence. You can choose to skip `Confirm Verified` and go directly to `Confirm Shipped` for example.

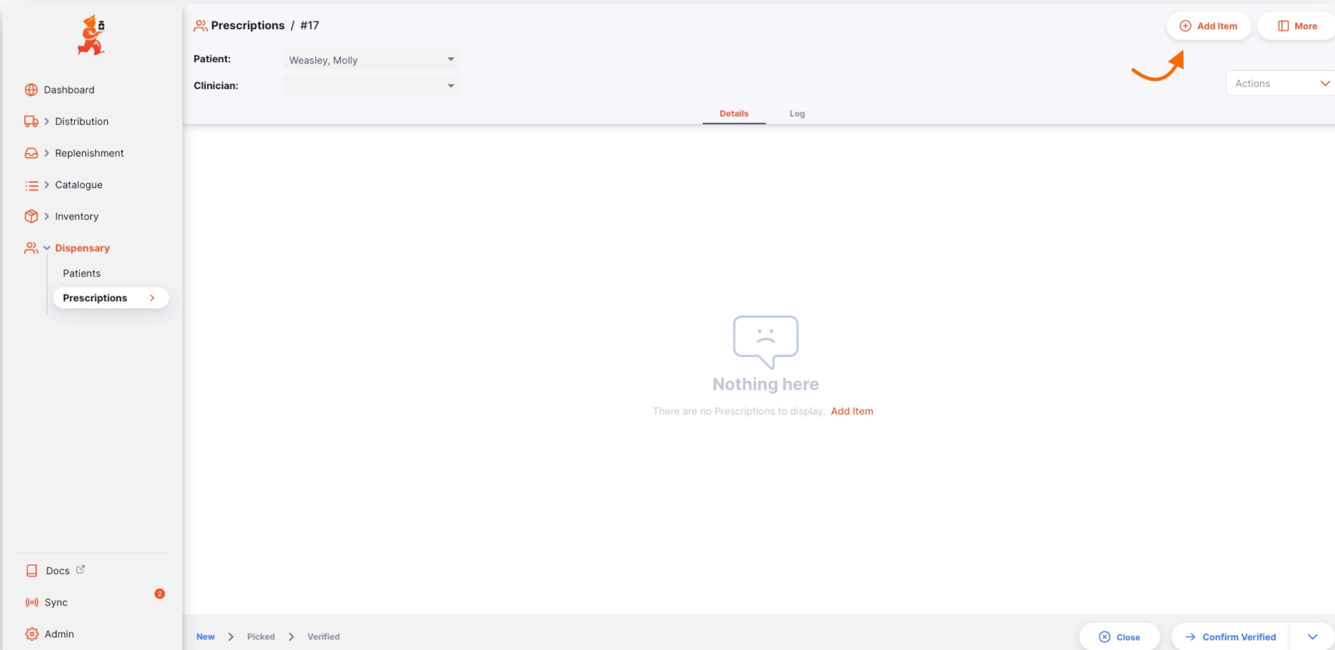
As demonstrated below, tap on the down arrow of the `Confirm` button and select the status you want the prescription to be updated to.



Adding lines to a Prescription

Tap on the `Add Item` button (top right corner).

A new `Add Item` window opens.

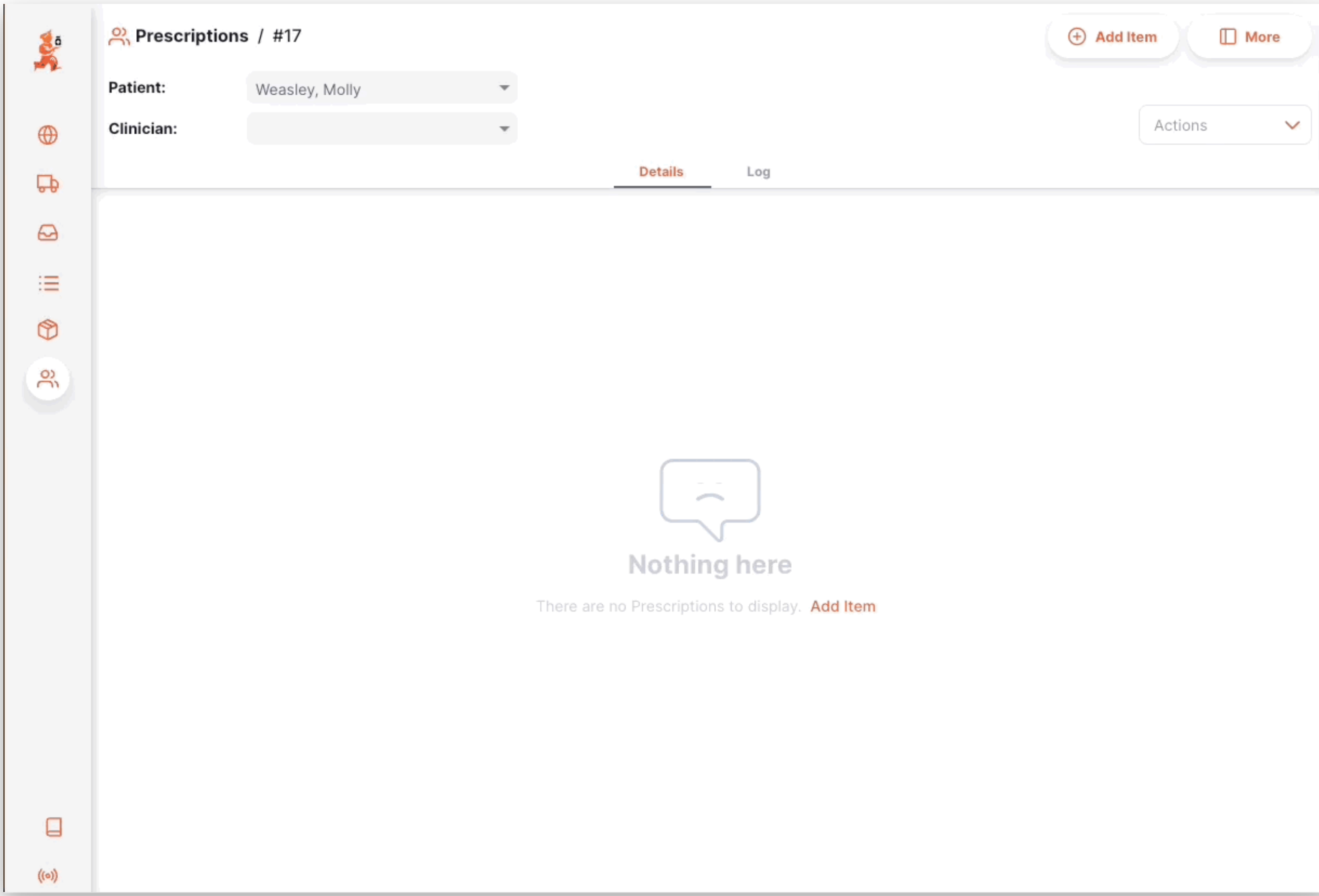


Select an Item

In the `Add Item` window, you can look up an item by:

- Reading through the list of available items
- or by typing some or all of the item name
- or by typing some or all of an item code

Once your item is highlighted, tap on the name or press `Enter`.

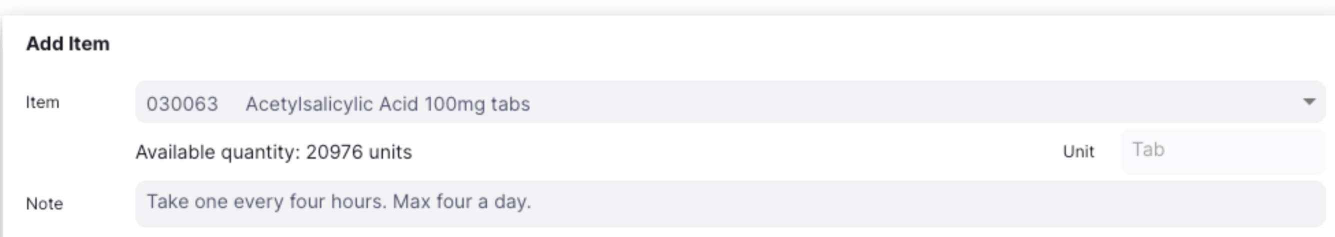


Once the item is selected, you can see the following information:

Headers

- Item code and name (eg. *030063 Acetylsalicylic Acid 100mg tabs*)
- the available stock quantity for this item (eg. *20,976 units*)
- the item's unit (eg. *Tab*)
- **Note**: The medicine's instruction for use.

Example: For the item *030063 Acetylsalicylic Acid 100mg tabs*, there are 20,976 tabs available.

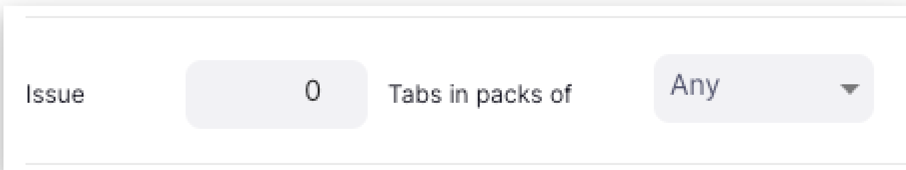


Issue [Quantity] of units in packs of [Pack Size]

In the `Issue Quantity` field, you can enter the quantity that you want to issue to your patient.

By default, you are invited to issue a quantity of **units.** However, you have the possibility to issue a quantity of packs instead by changing the value in the second dropdown (`Pack Size`).

Default value is `Any` when you are issuing units.



List of available batches:

This is a list of batch numbers that you have in store for this item:

- **Batch**: Batch number. It is a designation given to products made in the same manufacturing run.
- **Expiry**: Expiry date of the batch (format: MM/YYYY)
- **Location**: This is the name of the location where the item is stored if your inventory is managed with storage locations
- **Pack Size**: Quantity of units per pack
- **On Hold**: Indicates whether a batch is on hold or not. You cannot issue a batch that is on hold.
- **In Store (packs)**: Total number of packs in your store
- **Available (packs)**: Number of packs available (not already allocated to other shipments)
- **[Unit] Qty Issued**: Total quantity of units to be issued
- **Pack Qty Issued**: Number of packs to be issued

Batch	Expiry	Location	Pack Size	On Hold	In Store (packs)	Available (packs)	Tab Qty Issued	Pack Qty Issued
KKAL399	08/2022	Cardiology	10		100	100	0	0
KALDX23	09/2024	Back warehouse	100		100	100	0	0
AHD218	12/2024	Back warehouse	1		9,976	9,976	0	0
Total quantity								**0**

The batches which are available for selection are shown first and batches which are not (on hold or no stock available) are shown below and in a grey font.

Issue a quantity of units

By default, you are invited to issue a quantity of **units**, regardless of the pack size (number of units in a pack).

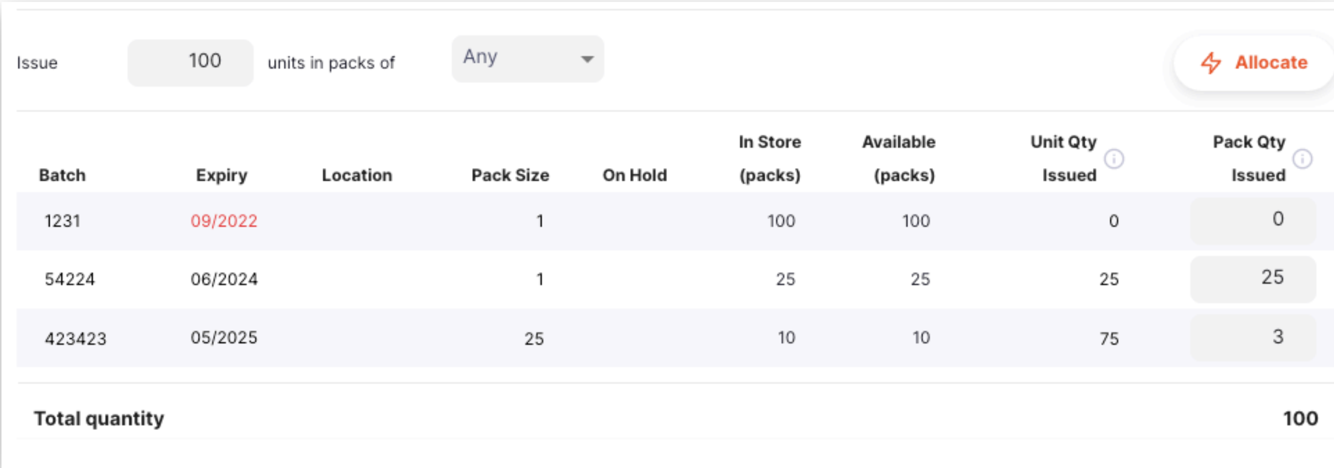
When entering a number in the `Issue` field, after clicking the `Allocate` button, the system automatically chooses the batch number(s) with the closest expiry date (First to Expire, First Out or FEFO logic).

In below example, we are issuing 100 units of the item. All 100 units will be taken from the same batch (second row). The first batch was not selected because it is expired.

Issue 100 Tabs in packs of Any — Allocate

Batch	Expiry	Location	Pack Size	On Hold	In Store (packs)	Available (packs)	Tab Qty Issued	Pack Qty Issued
KKAL399	08/2022	Cardiology	10		100	100	0	0
KALDX23	09/2024	Back warehouse	100		100	100	100	1
AHD218	12/2024	Back warehouse	1		9,976	9,976	0	0
Total quantity								**100**

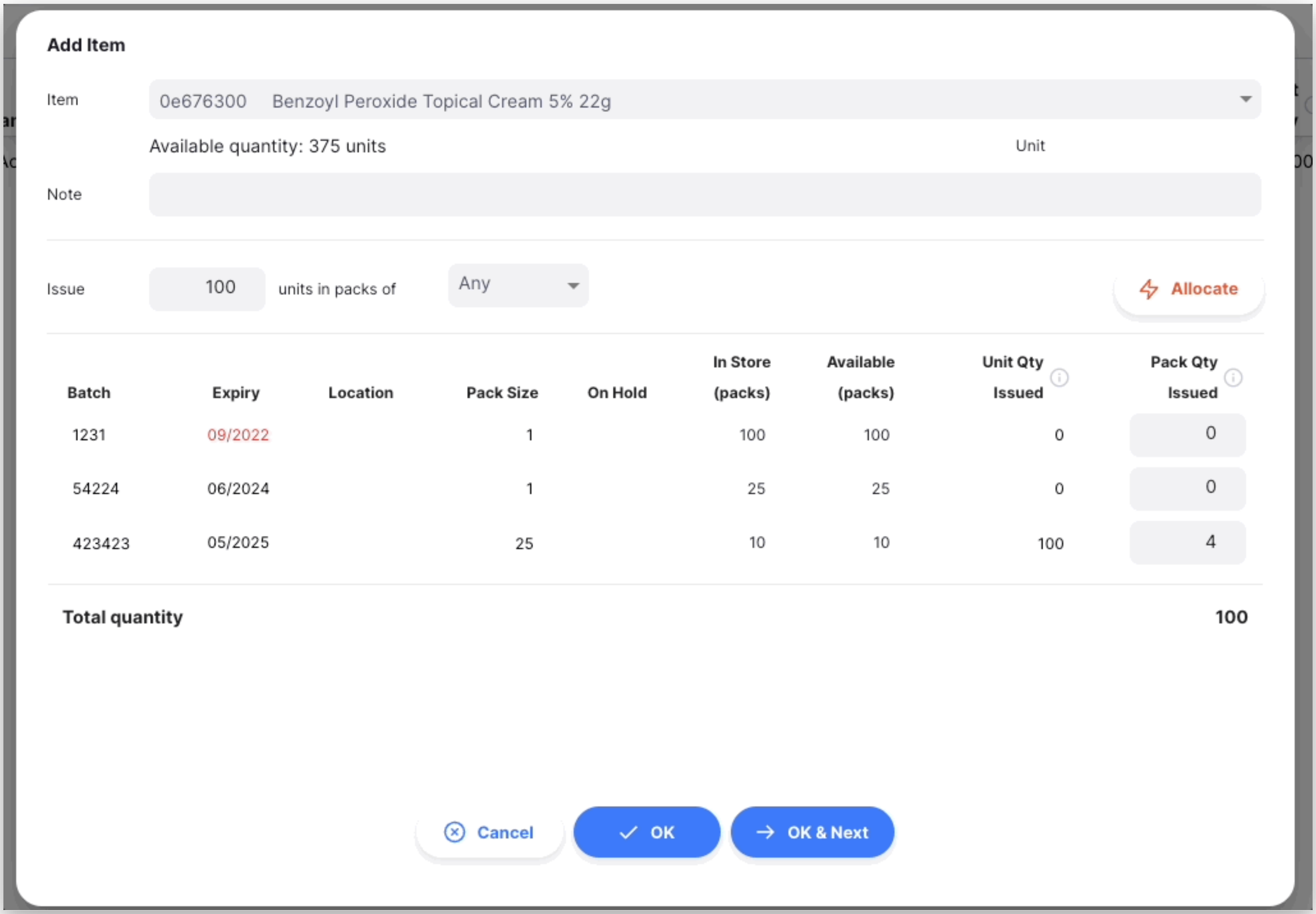
In this other example, we are issuing 100 units. System selects two batches with different pack sizes.



Issue a quantity of packs

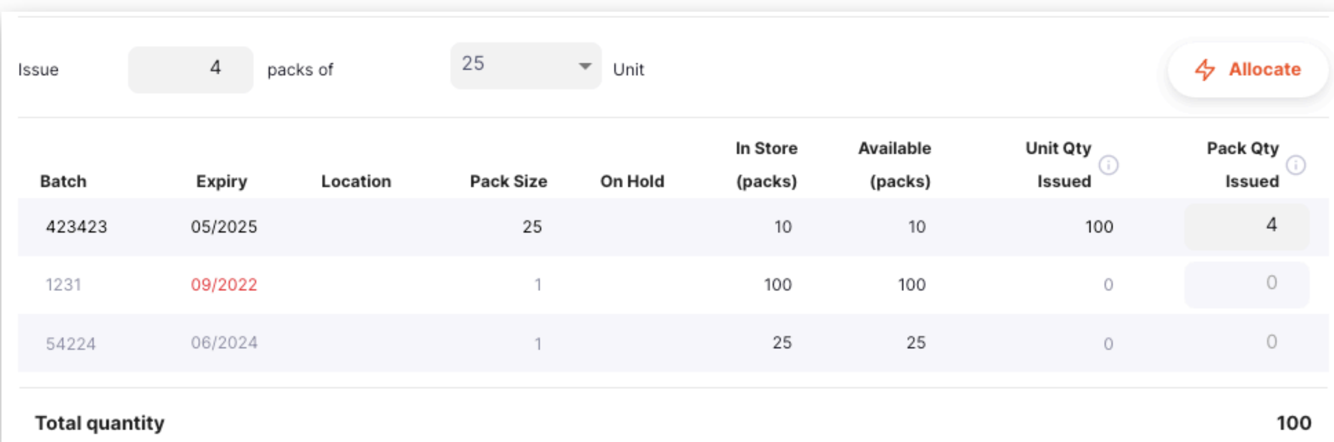
You can decide to issue a quantity of **packs**. To do this, you can change the value in the `Pack Size` dropdown.

Let's imagine that you only want to dispense in a pack size of 25 units. You can change the dropdown value from `Any` to `25`.

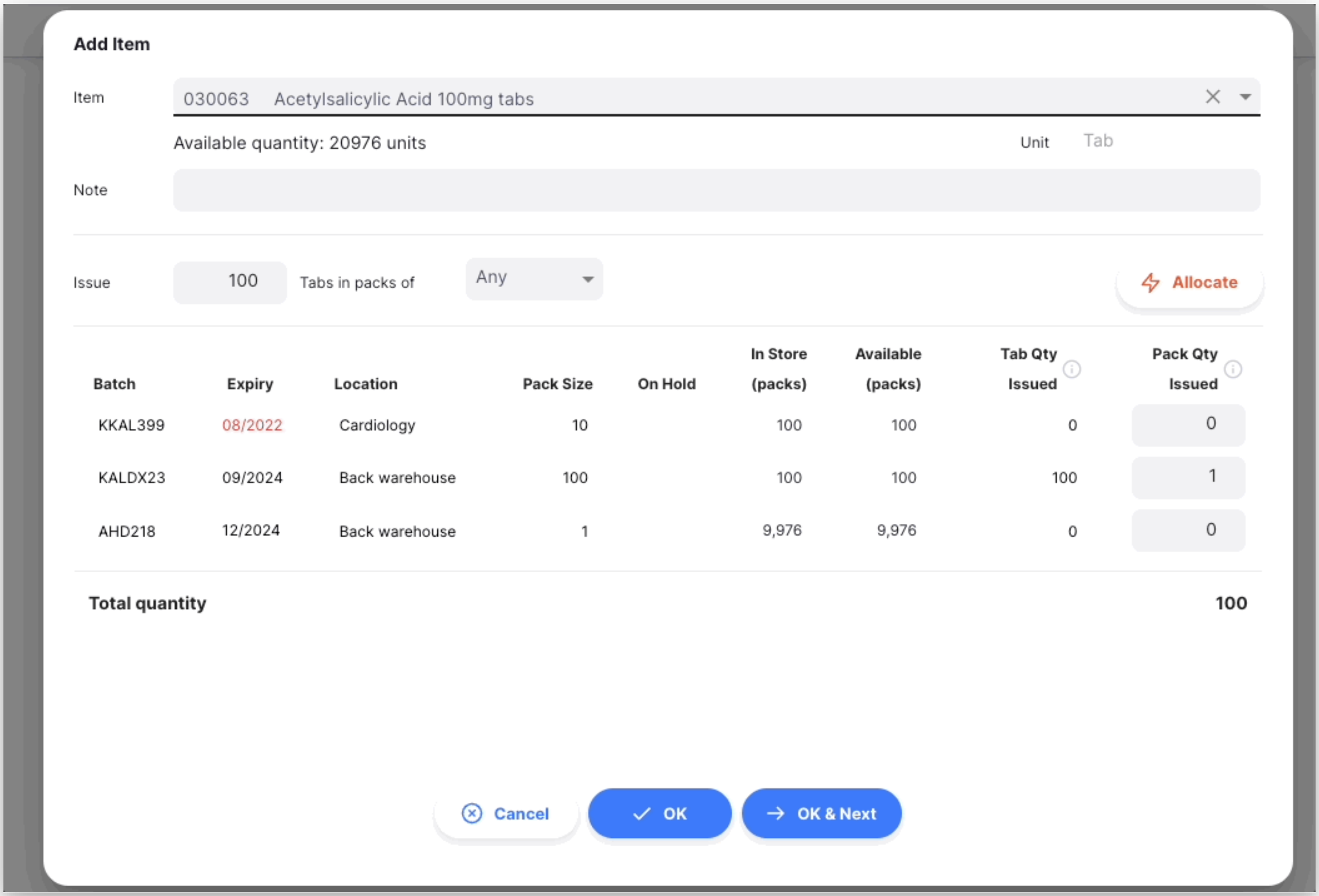


You are now offered to issue a number of packs of 25 units. Only batch number(s) with a pack size of 25 units can be automatically issued.

In below example, we are issuing 4 packs of 25 units:



If you had previously entered a quantity of units and you switch to a quantity of packs, the quantity of units will automatically be converted into the correct quantity of packs.



When a pack size is selected, stock lines which have a different pack size from the one selected are not available for selection. As such, those rows are listed lower down in the table and are shown in a grey font, in the same way as other unavailable rows.

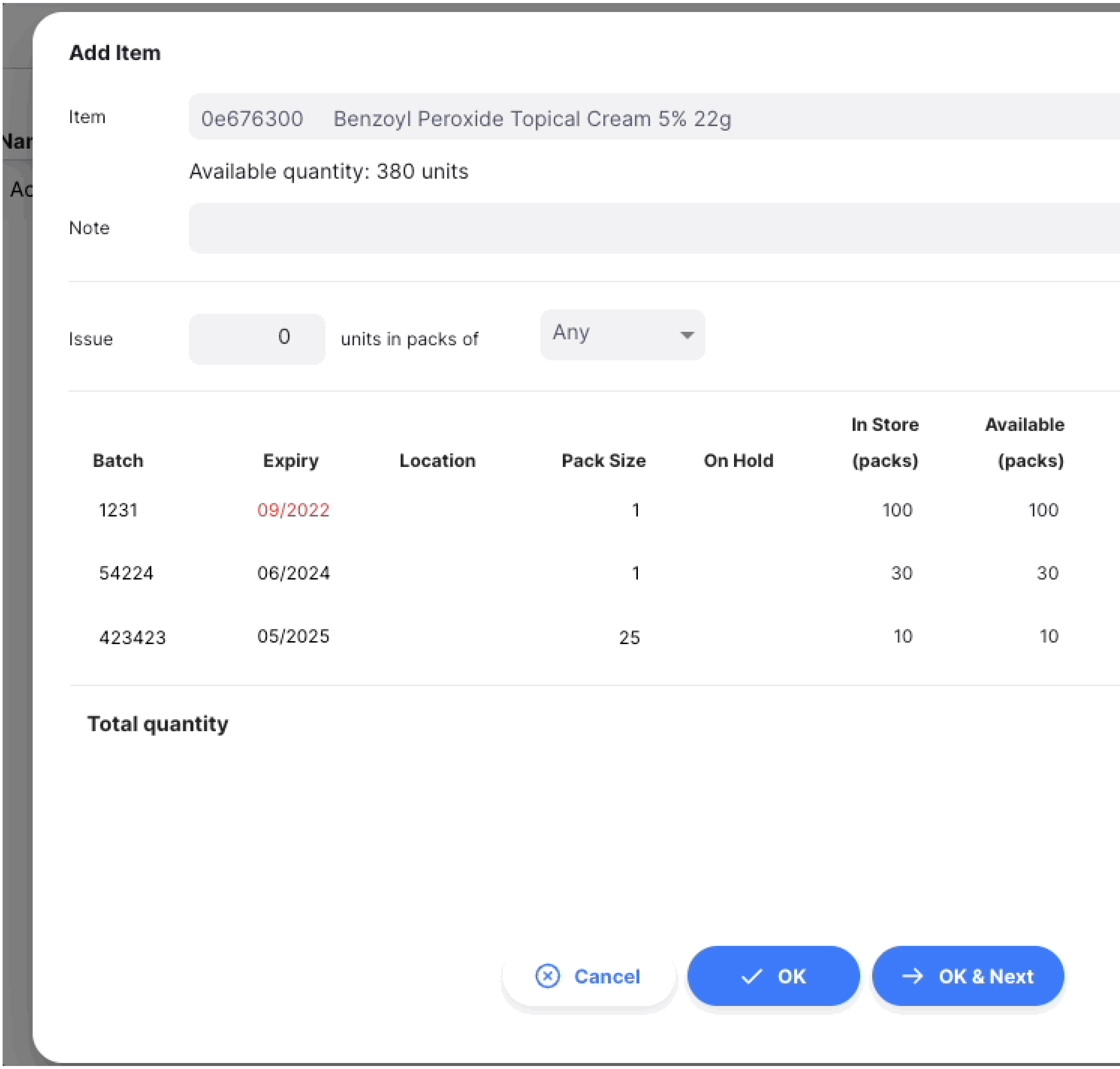
Manual Allocation

Regardless if you chose to issue a quantity of units or packs, you can always manually change the quantity at the batch number level directly before pressing on OK.

You simply have to enter or edit the quantity in the `Packs Qty Issued` column.

The values in the **Total** row will be automatically updated with the new quantity.

When allocating quantities at the batch number level, the quantity you enter is always a quantity of packs.



Manual allocation at the batch number level.

Confirm Item and Quantity

When you are happy with the quantity, you can either press on:

- the `OK` button. You are redirected to the Prescription view and your item has been added to the list

- the `OK & Next` button to add another item right away
- the `Cancel` button if you do not want to add the item to the Prescription any more

Editing a Prescription Line

To edit a prescription line, tap on it. You will be presented with the `Edit Item` window, which is identical to the `Add Item` window, except that the item is already chosen.

Edit a Prescription Line

You can edit a prescription line if the prescription has a status lower than `Verified`.

1. Open the Prescription you want to edit.

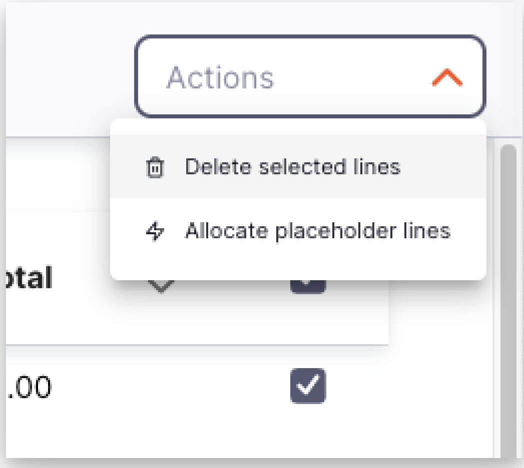
2. Tap on the line you want to edit. An identical window to `Add Item` appears. At this stage:

    - Edit the main `Issue Quantity` field
    - or change the number of packs value at the batch number level

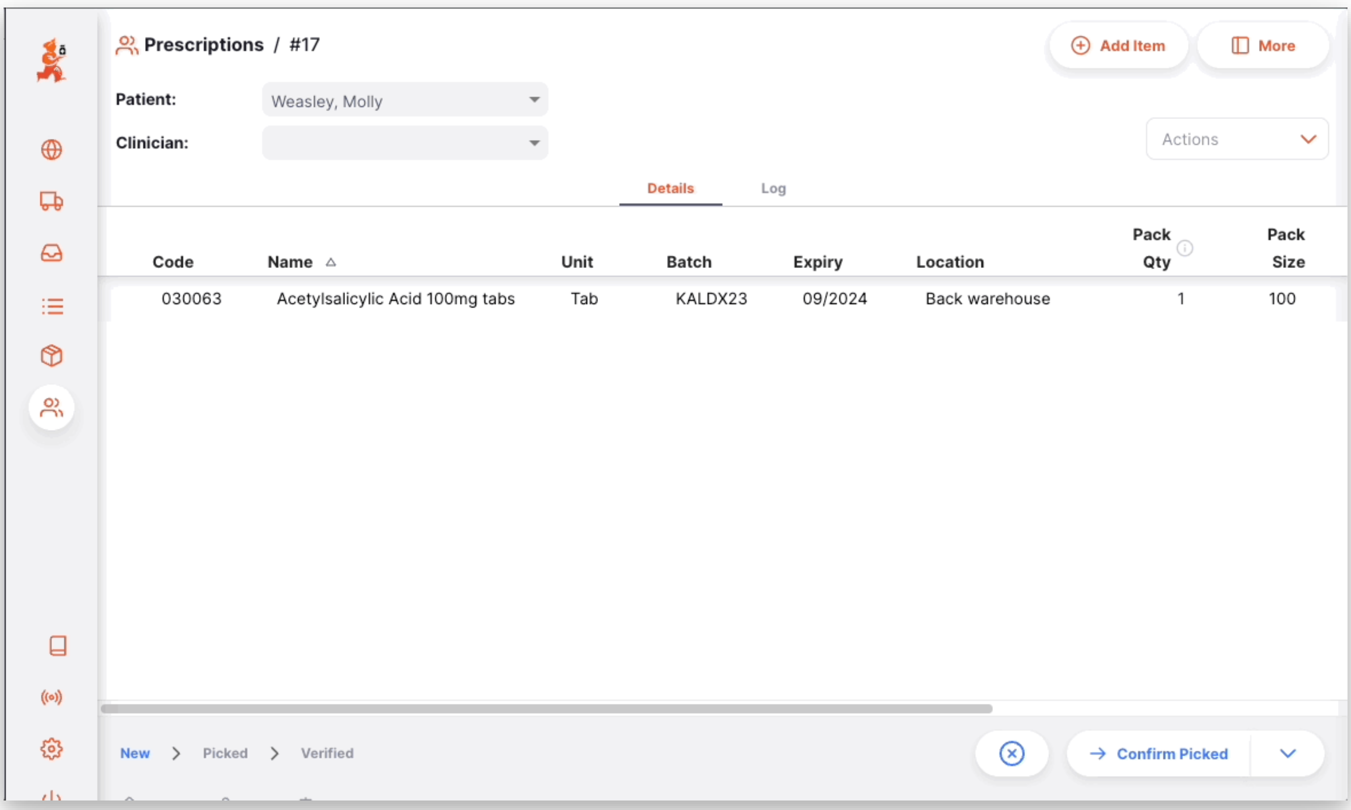
When editing a prescription line, you cannot change the item. You would need to delete the prescription line and create a new one.

Delete a Prescription line

1. Open the Prescription you want to edit.
2. Select the line(s) you want to delete by checking the box(es) on the right of the list.
3. Go to the `Actions` dropdown menu (top right corner, above the list)
4. Select the action `Delete selected lines`



In below example, we are deleting *item 030063 - Acetylsalicylic Acid 100mg tabs*



You can delete multiple lines at once. Be sure to review what is selected before performing the Delete action.

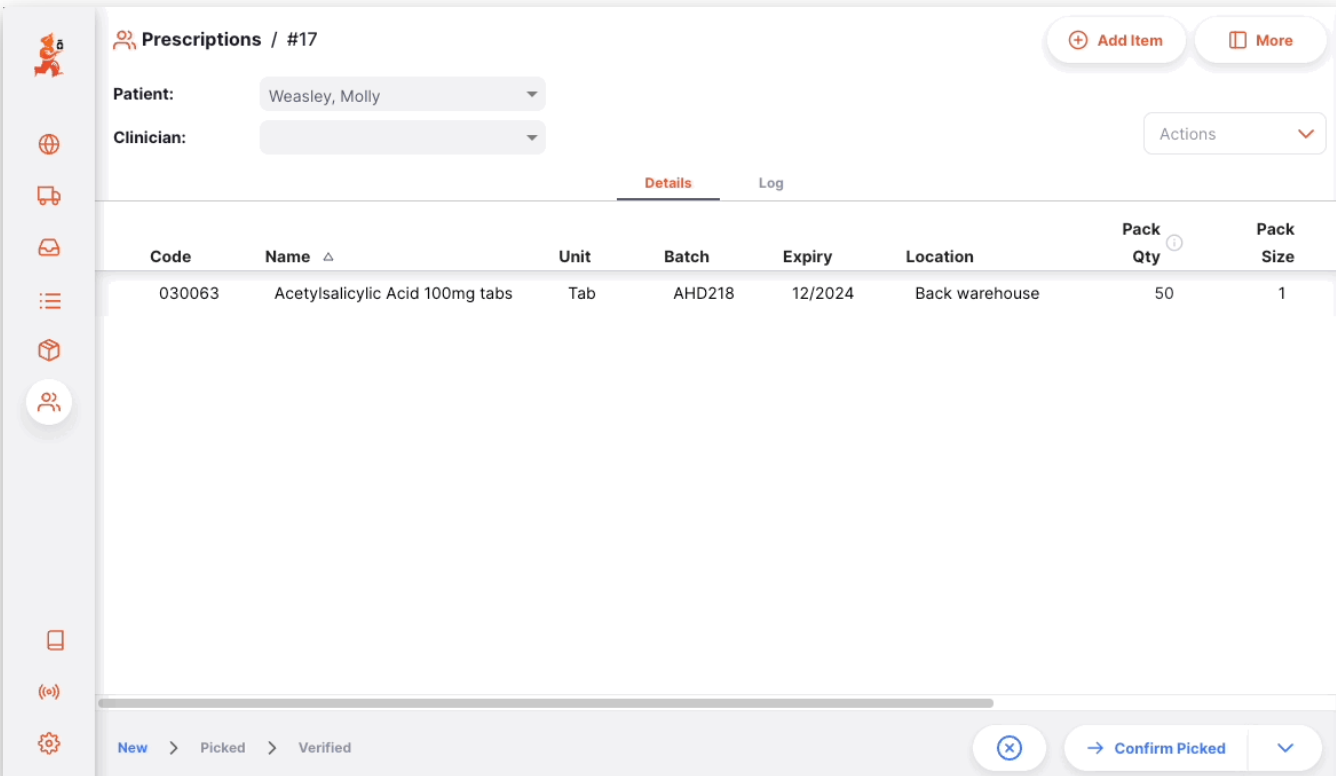
Processing a Prescription

Confirming Prescription picking

Picking refers to the process where individual items are picked from pharmacy.

Once all items are picked and packed. You can then confirm the picking of the prescription to indicate that it is ready to be dispatched.

To confirm that a prescription has been picked, tap on the `Confirm Picked` button.



Once picking is confirmed:

- Prescription status is now `PICKED`
- You are now invited to confirm the prescription via the `Confirm Verified` button

At this stage, you are still able to edit shipment lines, to add items or to delete existing lines.

Verify the Prescription

The last step to prescribe medicine is to verify the prescription.

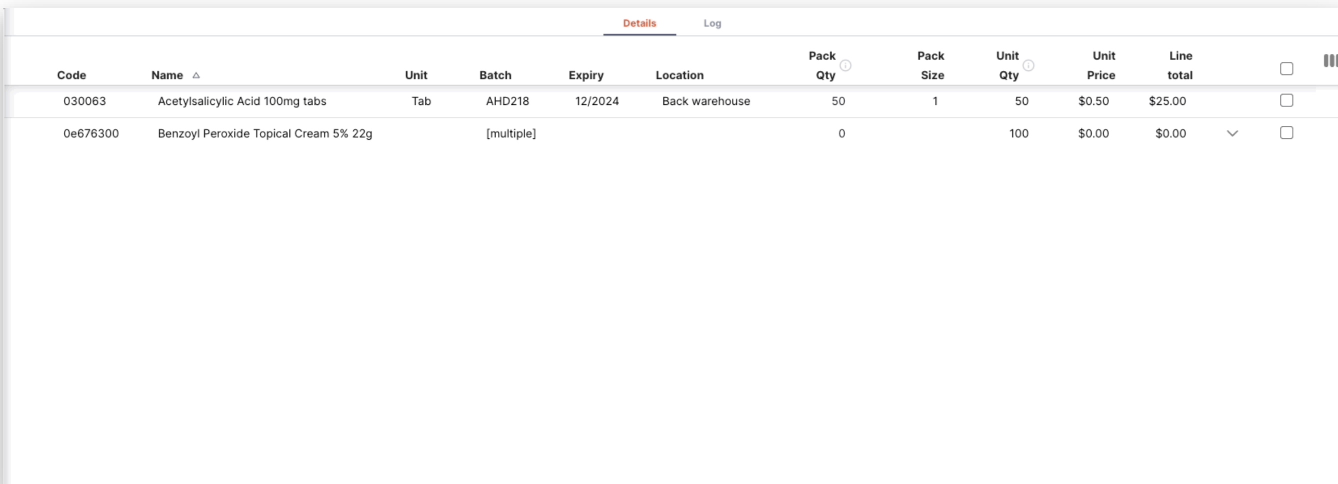
To verify a prescription, tap on the `Confirm Verified` button.

Once the prescription has been confirmed:

- Prescription status is now `VERIFIED`
- Goods are no longer part of your inventory
- You can no longer edit prescription lines
- You can no longer delete the prescription

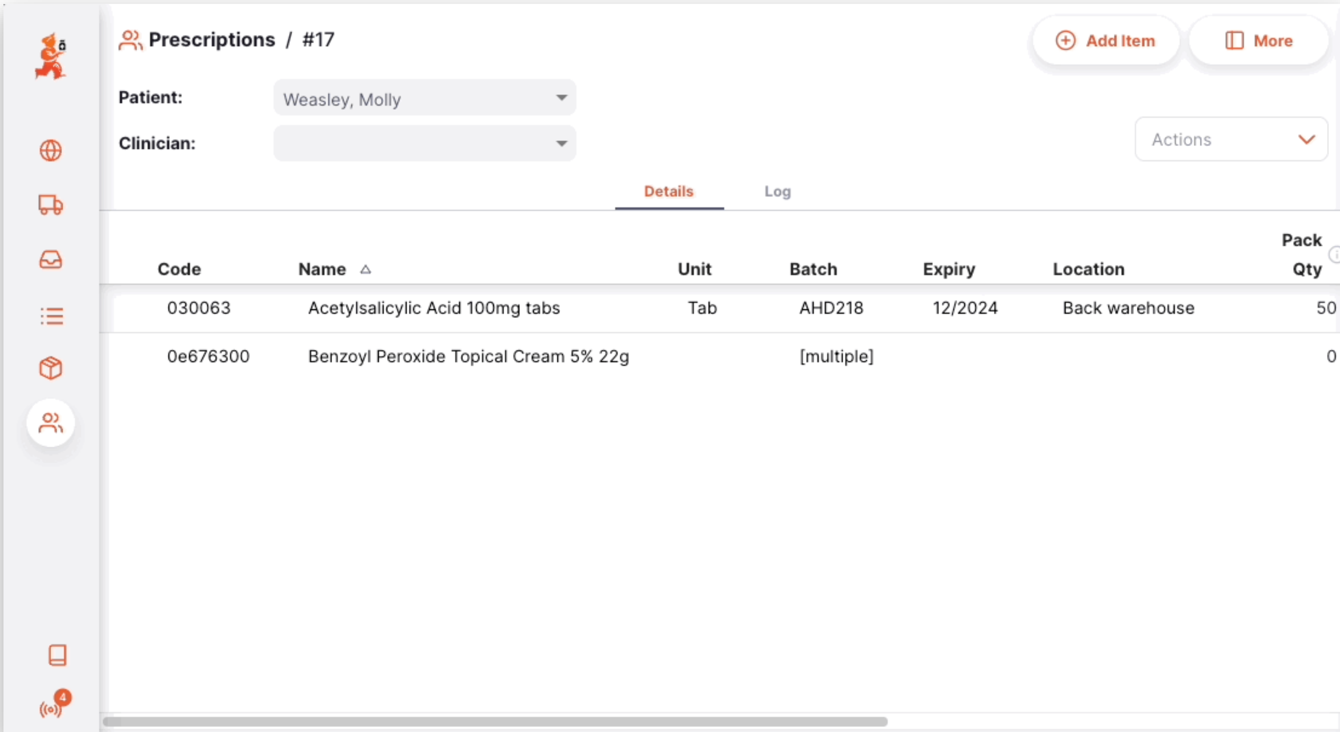
Viewing Prescription

Batches are automatically grouped by item when viewing a specific prescription. Use the expand in the table header to expand all grouped rows.



If you do not have enough room on your screen, or simply aren't interested in some of the columns shown, you have the option of hiding which columns are shown in this view.

Click on the `Show / hide columns` button which is at the top right of the table. This gives a list of the columns available - you can check the columns you want to see. The options chosen are stored for the current browser, so next time you view an Outbound Shipment, you will see the selected columns only. If you have chosen which columns to show, then the button is shown in blue to remind you that there are more columns available.


Prescriptions / #17
Add Item
More
Patient:
Weasley, Molly
Clinician:
Actions
Details
Log
Code
Name
Unit
Batch
Expiry
Location
Pack Qty
030063
Acetylsalicylic Acid 100mg tabs
Tab
AHD218
12/2024
Back warehouse
50
0e676300
Benzoyl Peroxide Topical Cream 5% 22g
[multiple]
0

Patients

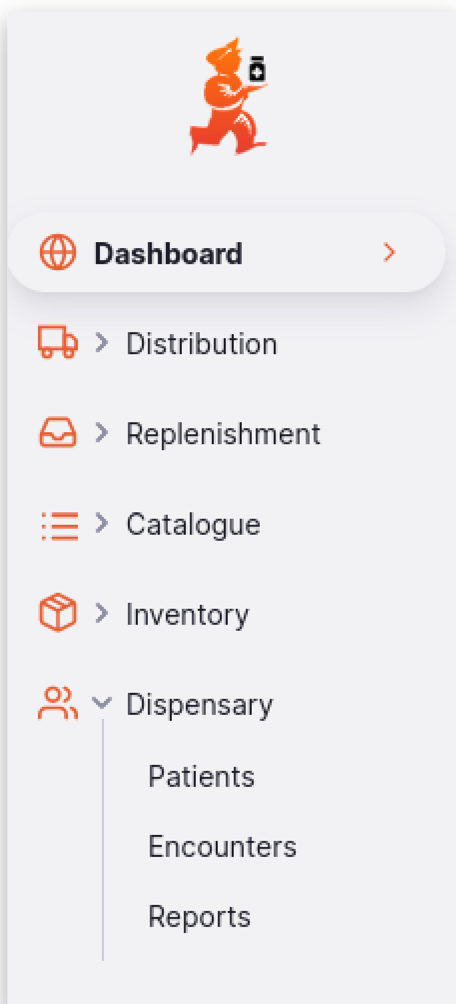
Introduction to the program patient management module

The Open mSupply patient program allows users to collect general as well as program specific patient information. A patient can be enrolled into multiple patient programs such as an HIV program, a TB program or an immunisation program.

For every program enrolment there can be multiple patient encounters, e.g. doctor visits.

All data collected in the patient program module is stored in documents. For example, patient data is stored in a patient document, program enrolment data is stored in program enrolment documents and encounter data is stored in an encounter document.

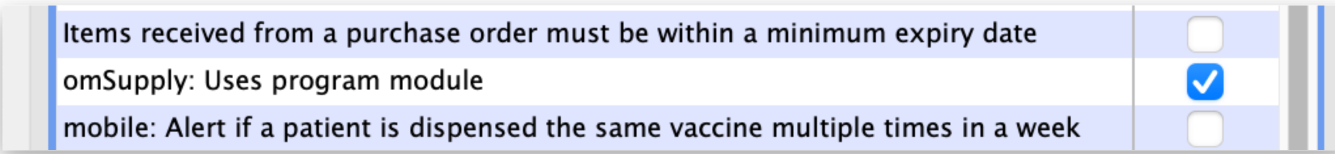
All patient program related functionality can be found in the “Dispensary” menu item.



Enabling the patient management module

To use the module, ensure that your store is set to `Dispensary` mode (see the virtual stores documentation for how to do this).

You will also need to enable the store preference for `Open mSupply: Uses program module`. This preference is compatible with Open mSupply `v1.2.0+` and mSupply `v7-07-00-beta9+`.

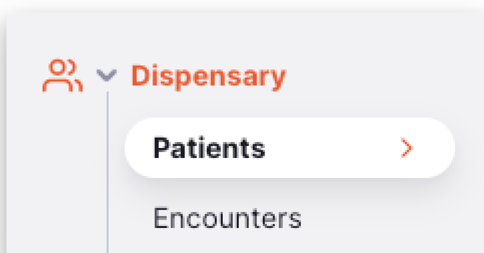


Patients

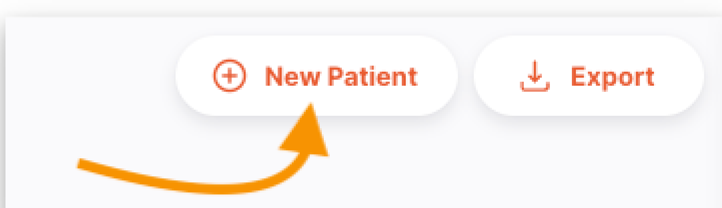
In order to use the program module, you'll first need to create and manage patients to dispense to.

Patient Registration

To create a new patient file, click on 'dispensary' and then the 'patients' icon from the Dashboard:



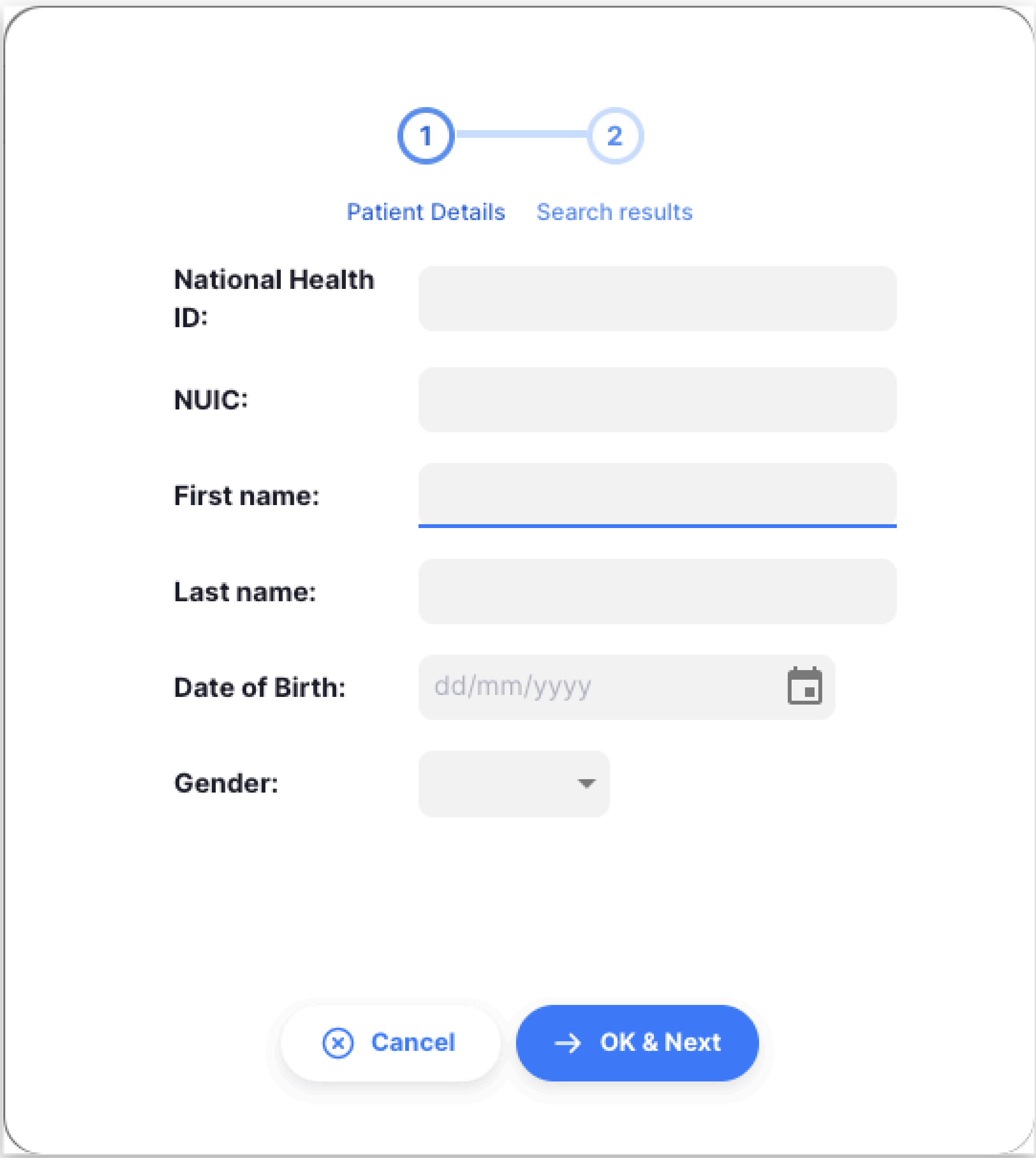
This will bring up the 'Patient' page. To create a new patient click the “New Patient” button in the right top corner.



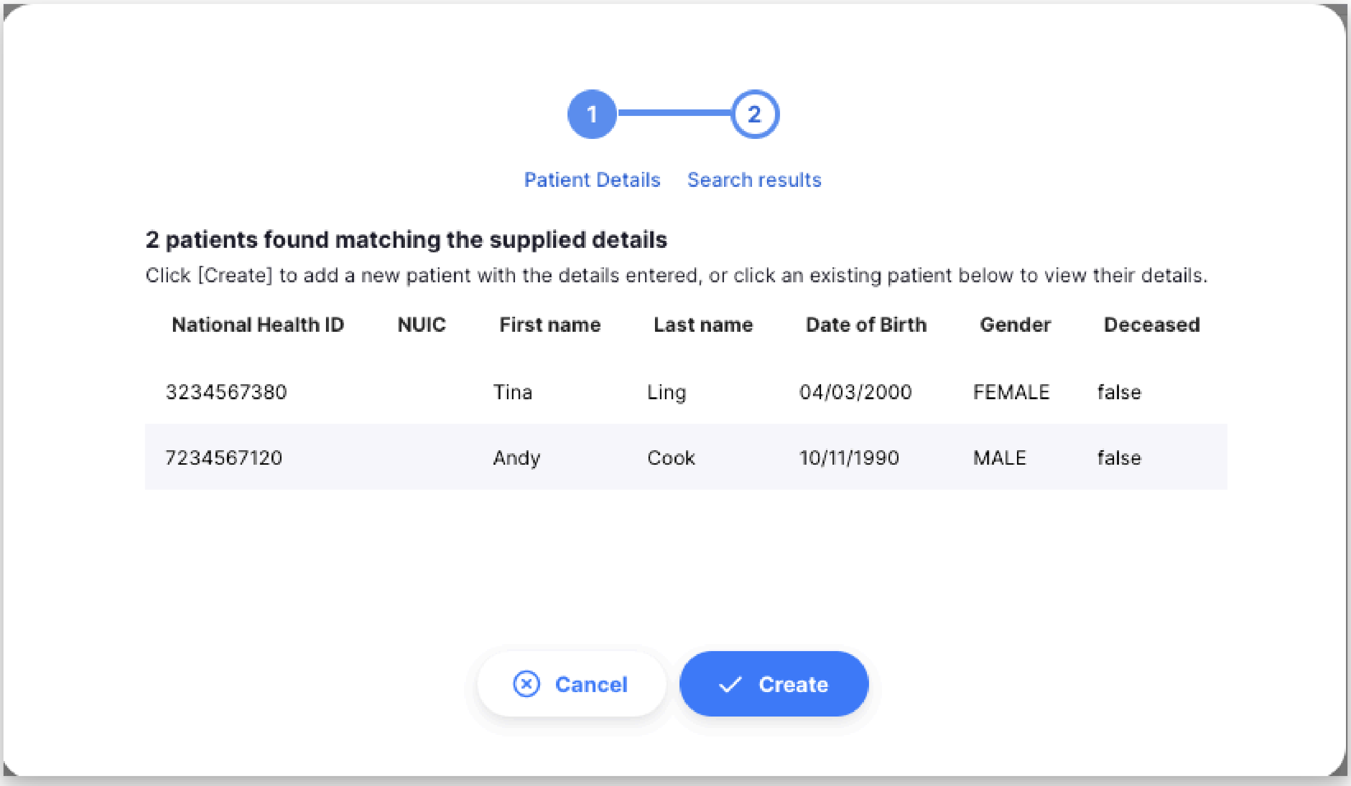
The patient creation is split into three steps:

1. Entering of basic patient information such as name or date of birth
2. Search for existing similar patients to avoid duplicated patient entries
3. Entering full patient information and finalising the patient

After clicking the `New Patient` button, you'll be shown a dialog window.

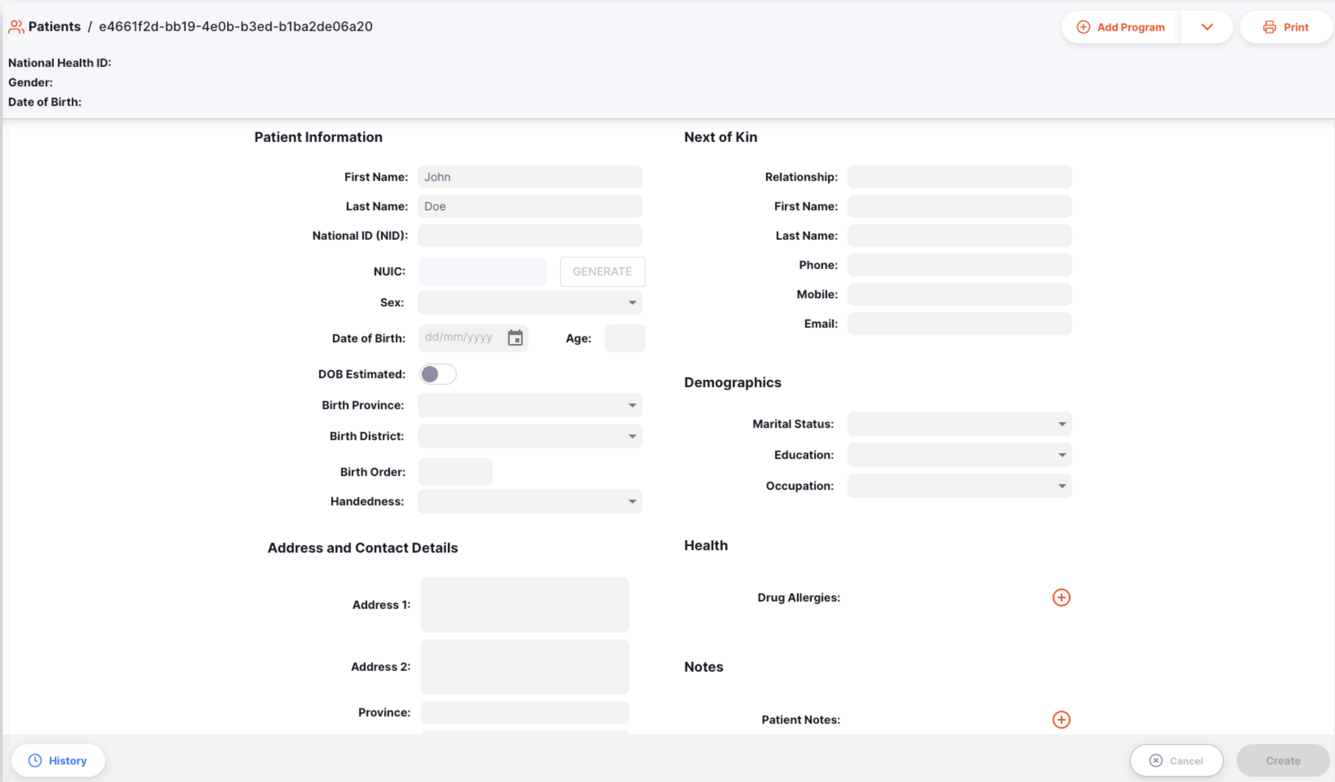


Enter in some of the patient details and click `OK & Next` to bring up all matching patients, such as in the example below:



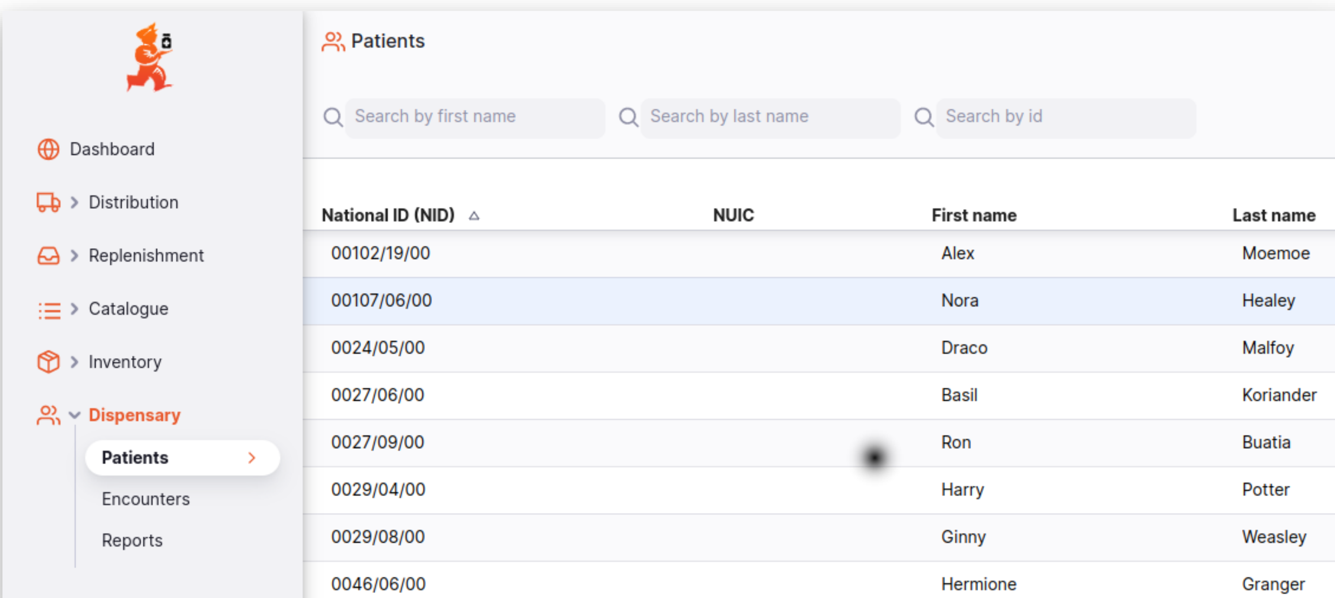
If one of the returned patients looks to have the correct details, simply click on that line and you'll be taken to the patient details. If none of them look correct, or if no results are returned, you'll want to create a new patient record.

Clicking the `Create` button will create the new patient record, and you'll see a new screen, showing the patient details:



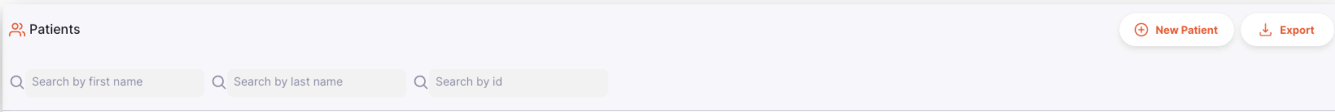
Patient List

Navigating to the `Dispensary` → `Patients` menu item will show a list of existing patients.



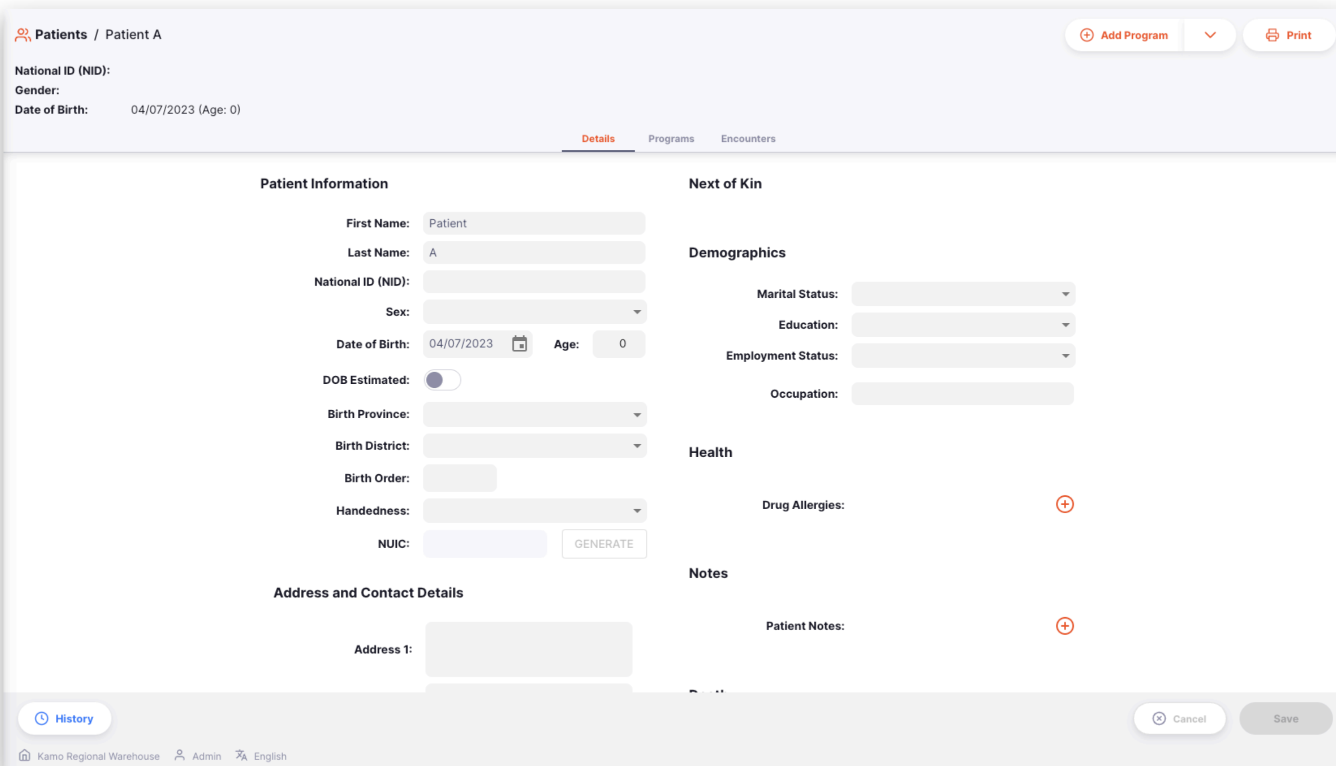
Searching for a Patient

In the list view, search bars are above the patient list that can be used to narrow and specify the search. You can search by both first and last name as well as by ID. This can be useful to quickly find patients with common names or if there is a large number of existing patients.



Patient Details View

Selecting a patient from the patient list will open the patient details view.

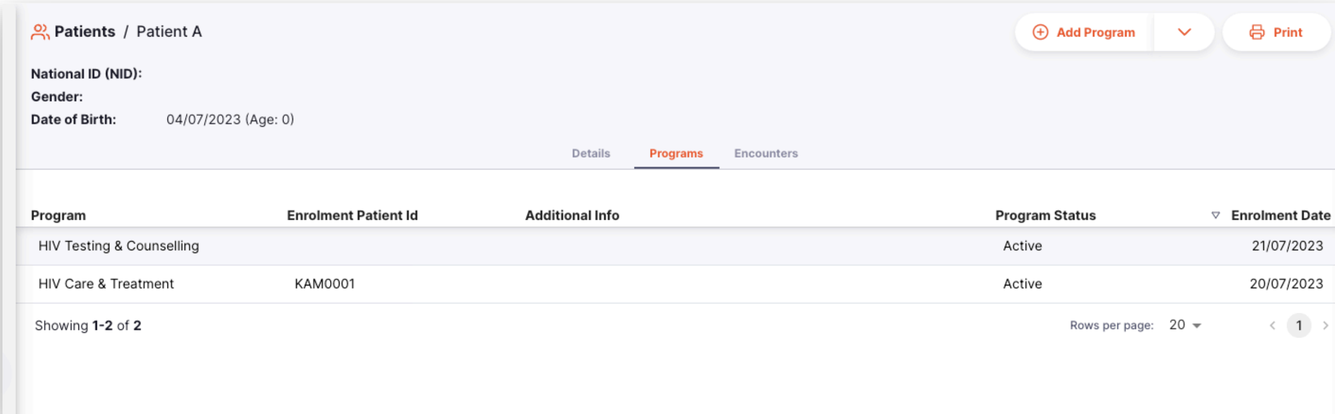


The information recorded here is customisable for a specific installation of open mSupply. While there's a base set of data recorded, such as name and birth date, there is also a range of types of data which can be configured in addition to this. Your patient detail view will likely look slightly different to that shown above.

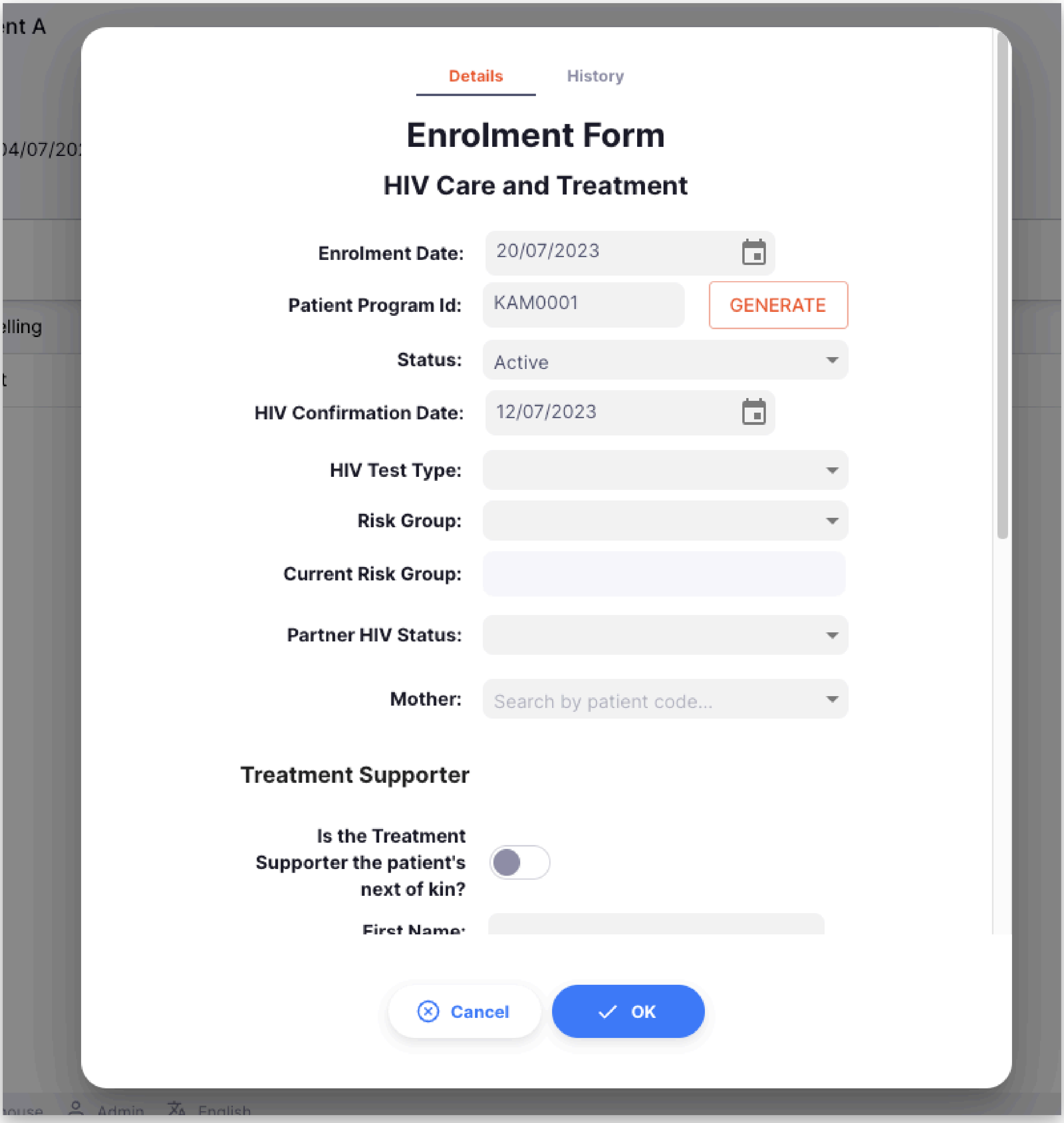
On the patient detail view there are three tabs:

1. Details: shows the general patient information
2. Programs: shows a list of program enrolments for the selected patient
3. Encounters: shows a list of encounters for the selected patient

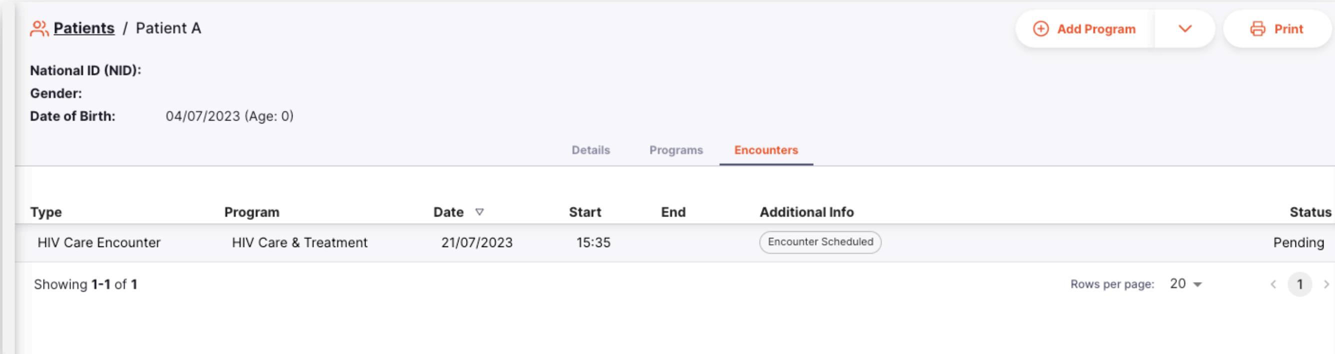
To view the list of programs which this patient is enrolled in, click the `Programs` tab.



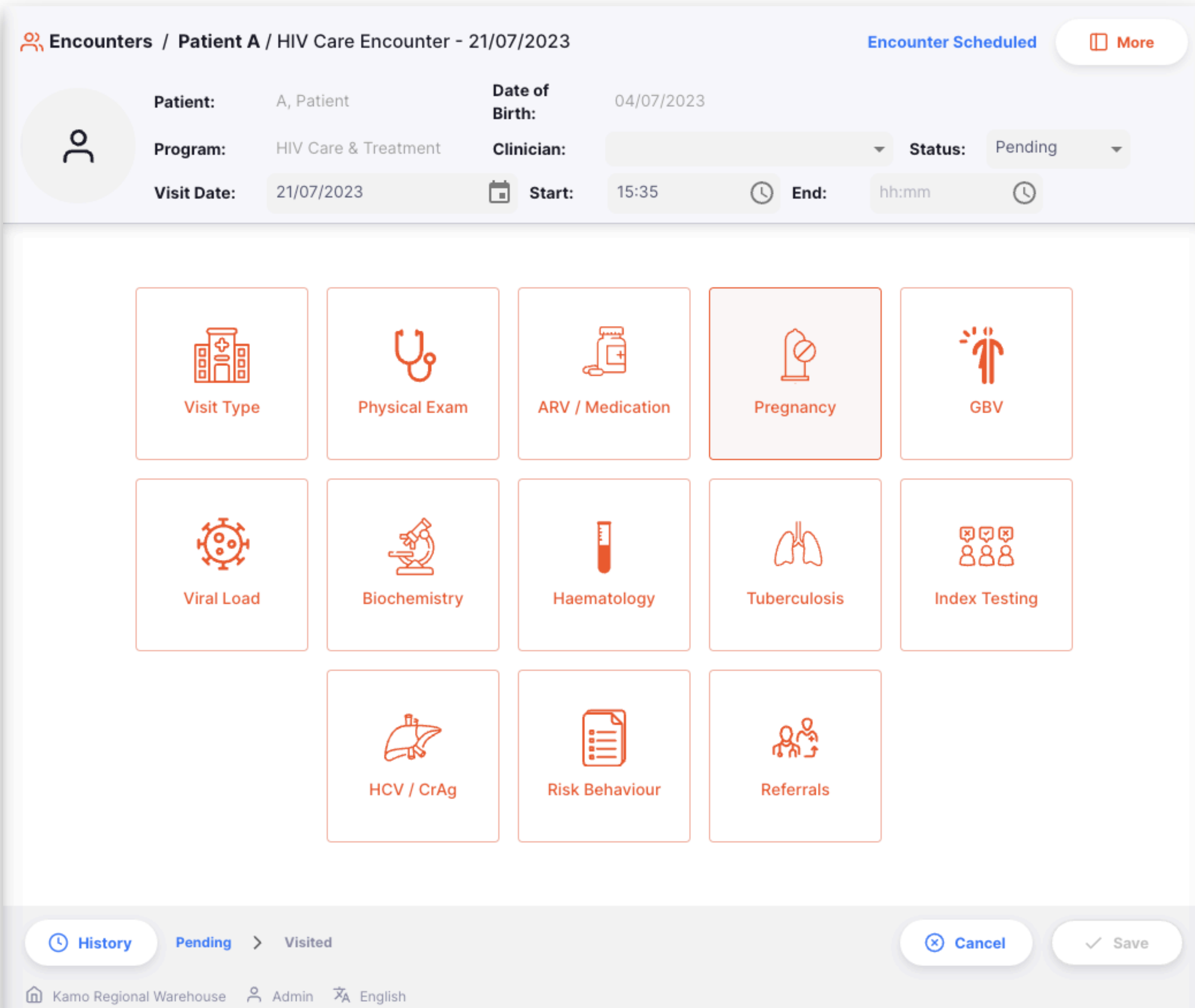
In this list you can click on a specific program to edit details of the program enrolment, as shown below:



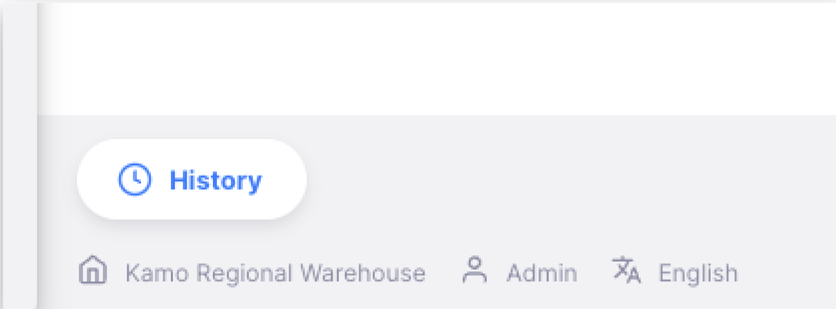
The `Encounters` tab behaves in the same way. Clicking on it will show a list of encounters which have been recorded for this patient:



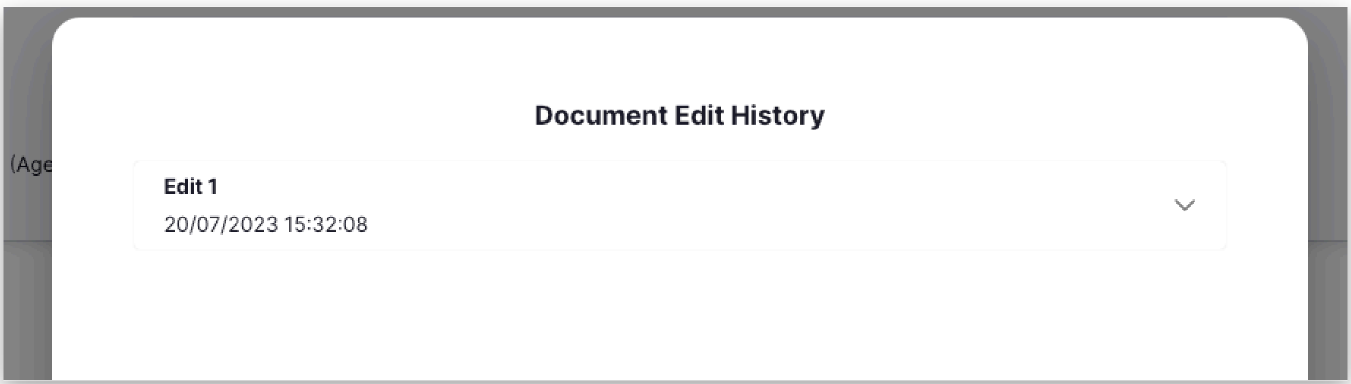
Clicking on an encounter in the list will then take you to the details page for that encounter. For example:



You can also view a simple history of changes made to the patient record, by clicking the `History` button which is on the bottom left of the screen:



This will show a dialog window with a basic history view:



Click the down arrow beside an edit for more information.

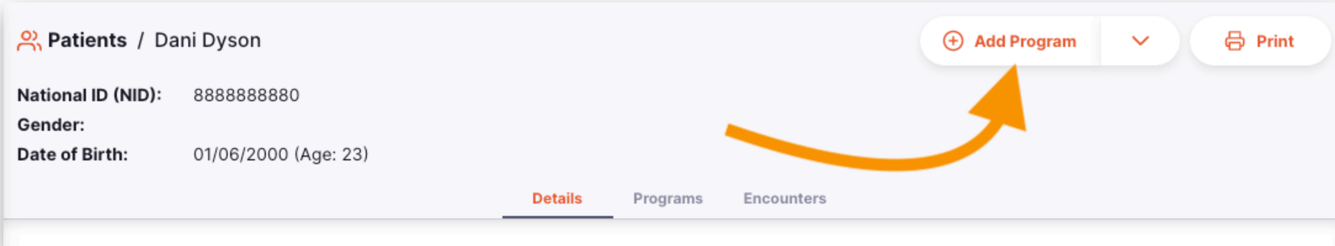
Programs

Patients can be enrolled in a program relevant to the intervention and the patient's illness.

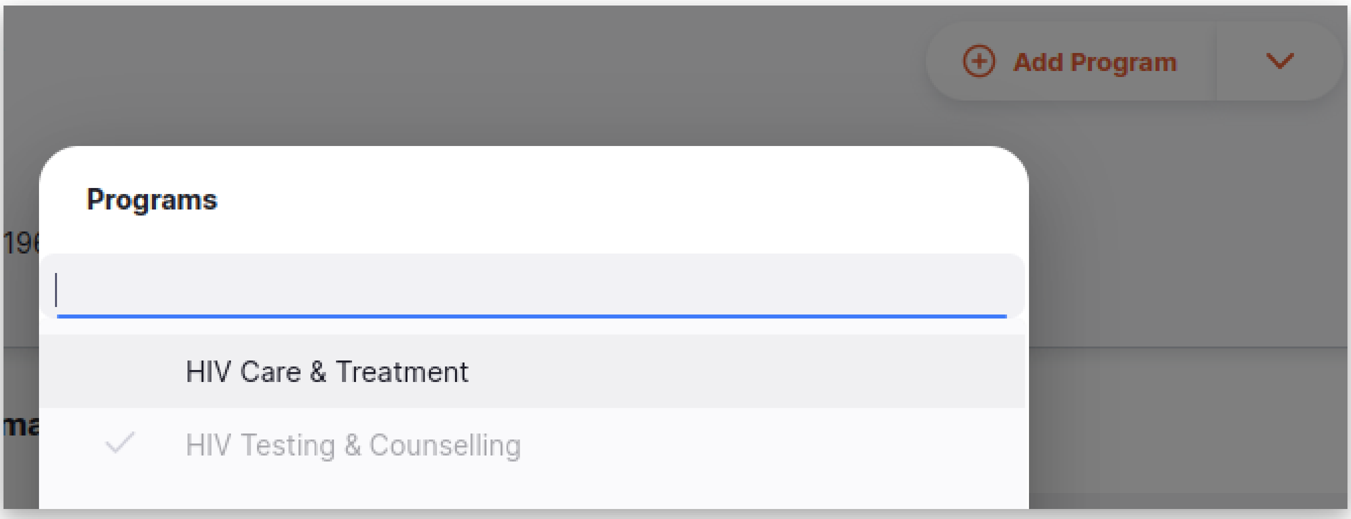
Programs are customisable and specific to each context and country. Examples of programs are HIV Testing & Counselling, HIV Care & Treatment, TB & Malaria programs. For each program you can have defined any number of fields which are entered when registering patients, containing information in defined formats, such as dates, text, drop down lists and the like.

Patient Program Enrolment

To enrol a patient into a program select the `Add Program` button in the top right corner of the patient details view.



This will open a dialog window with a list of available patient programs. Programs which the patient is already enrolled in are greyed out and can't be selected.



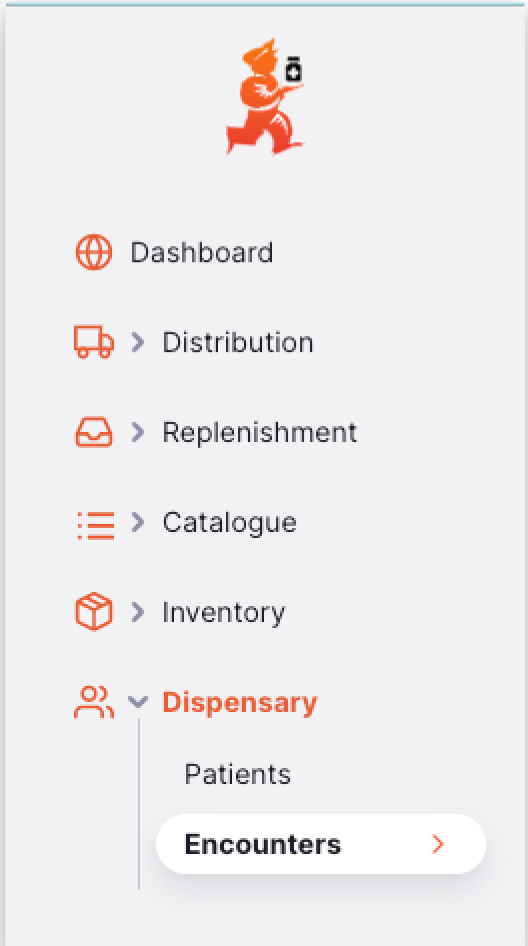
To enrol a patient into a program select the desired program from the list. This opens the program enrolment document where program specific information can be entered.

Note, the content of the program enrolment document is program specific and can be configured by the site administrator.

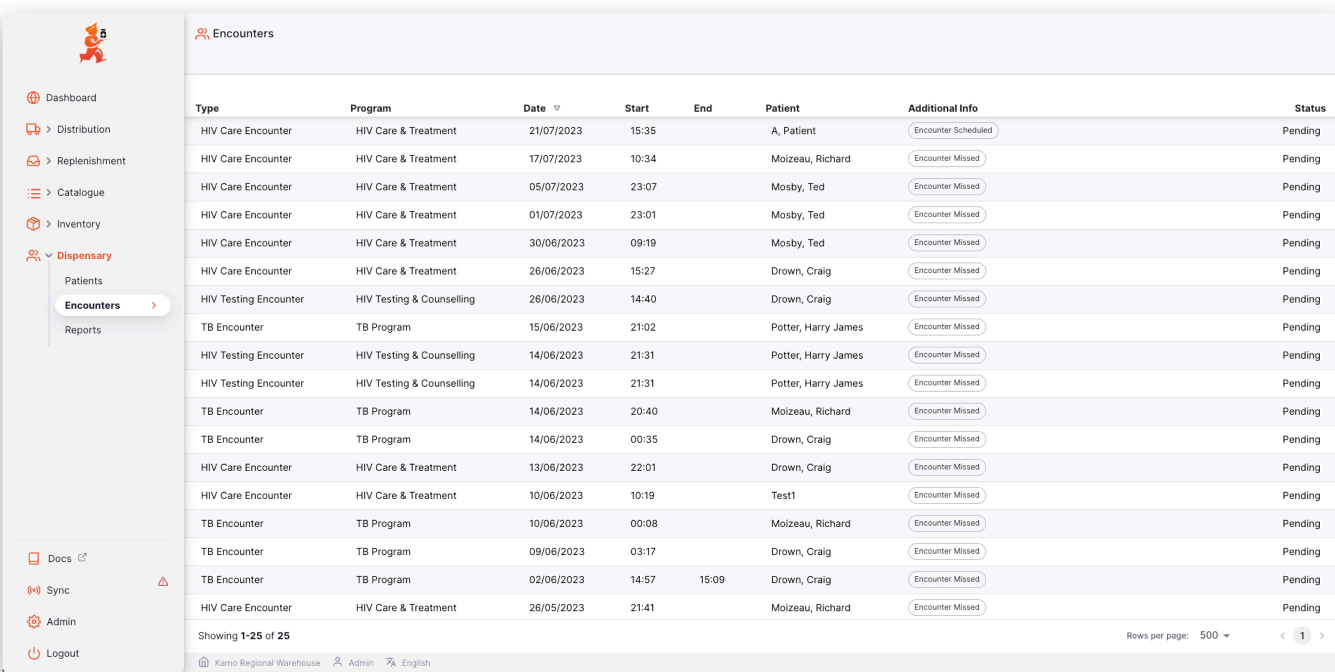
Encounters

An 'Encounter' is the recorded visit of a patient, and their treatment, under a specific program.

To view the list of encounters, navigate to the `Encounters` item under the `Dispensary` menu:



Clicking on this will bring up a list of encounters that have been recorded, and shows details about the encounter as you can see below:



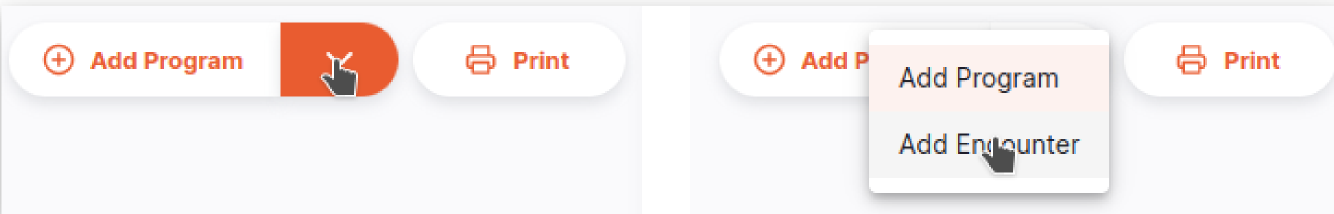
Patient Program Encounters

Once a patient is enrolled in a program, an encounter for this program can be created.

Like programs, encounters are highly customisable and are tailored to a specific situation. The encounter has some basic information, such as date & time of the encounter, status and clinician; and a range of fields of information, divided into sections. These can be as simple or complex as you like.

To create an encounter, select `Add Encounter` through the drop-down menu in the right top corner.

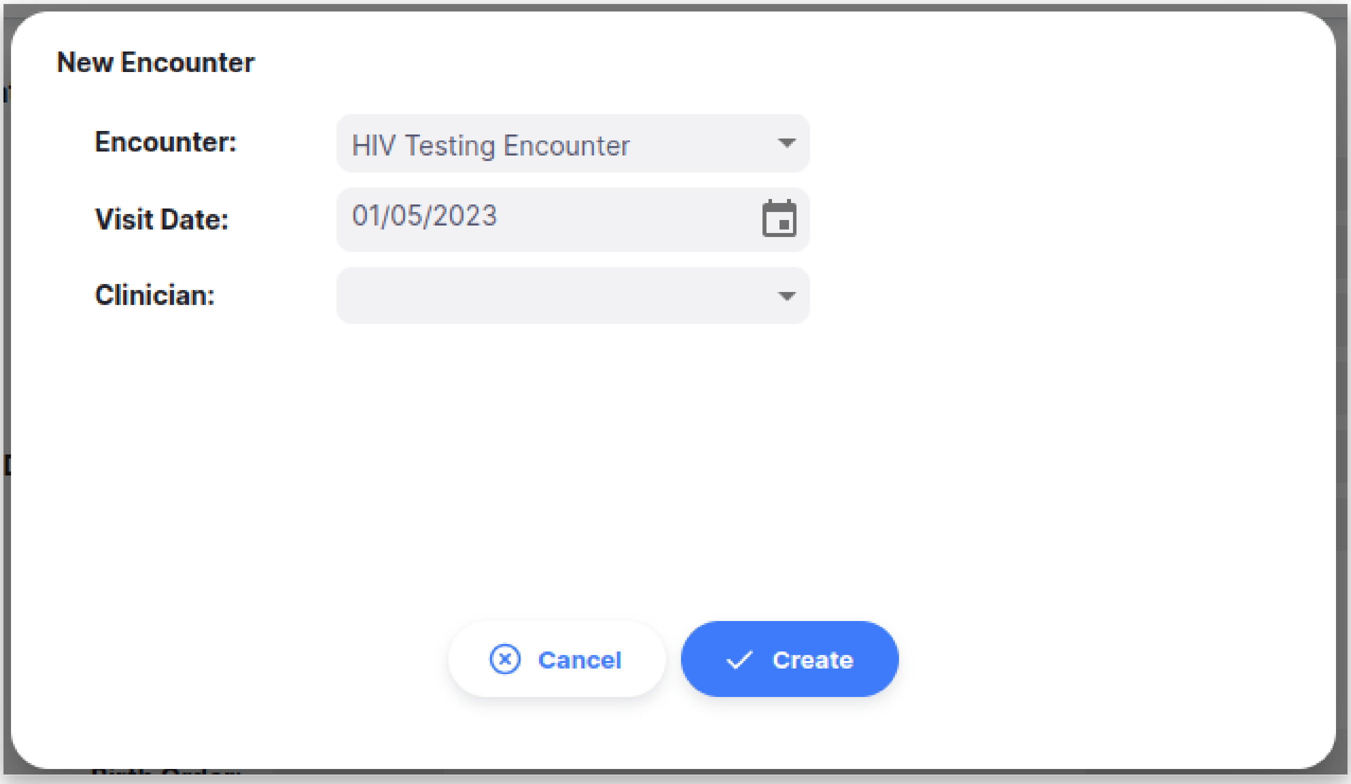
A patient must be enrolled in a program to input an encounter



This will open a dialog window to create an encounter.

First, the program enrolment associated with the encounter must be selected.

Secondly, the encounter date must be selected. The encounter date can be in the past (for entering a finished encounter), or in the future (to schedule an encounter - AKA make an appointment).



Once an encounter is created, the full encounter document will open to allow encounter details to be entered.

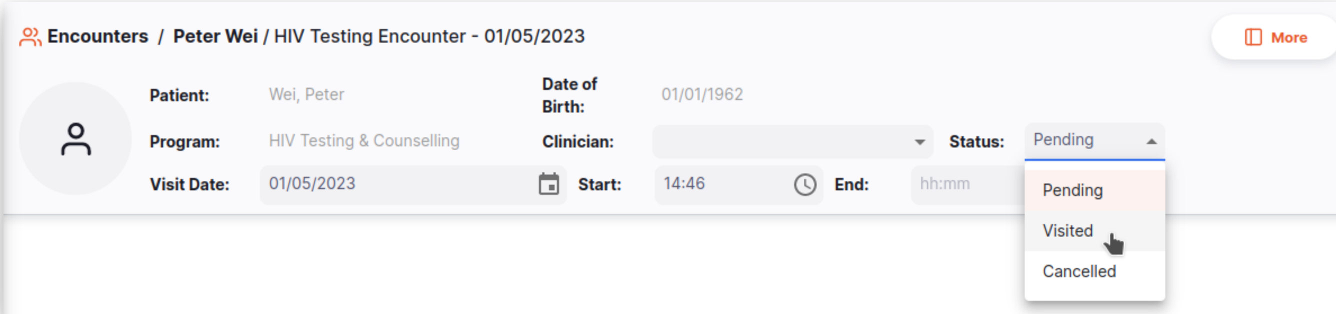
The content of the encounter document is program specific and can be configured by the system administrator

Every encounter has an encounter header where common encounter details can be updated, e.g. the clinician who handles the encounter or the encounter status.

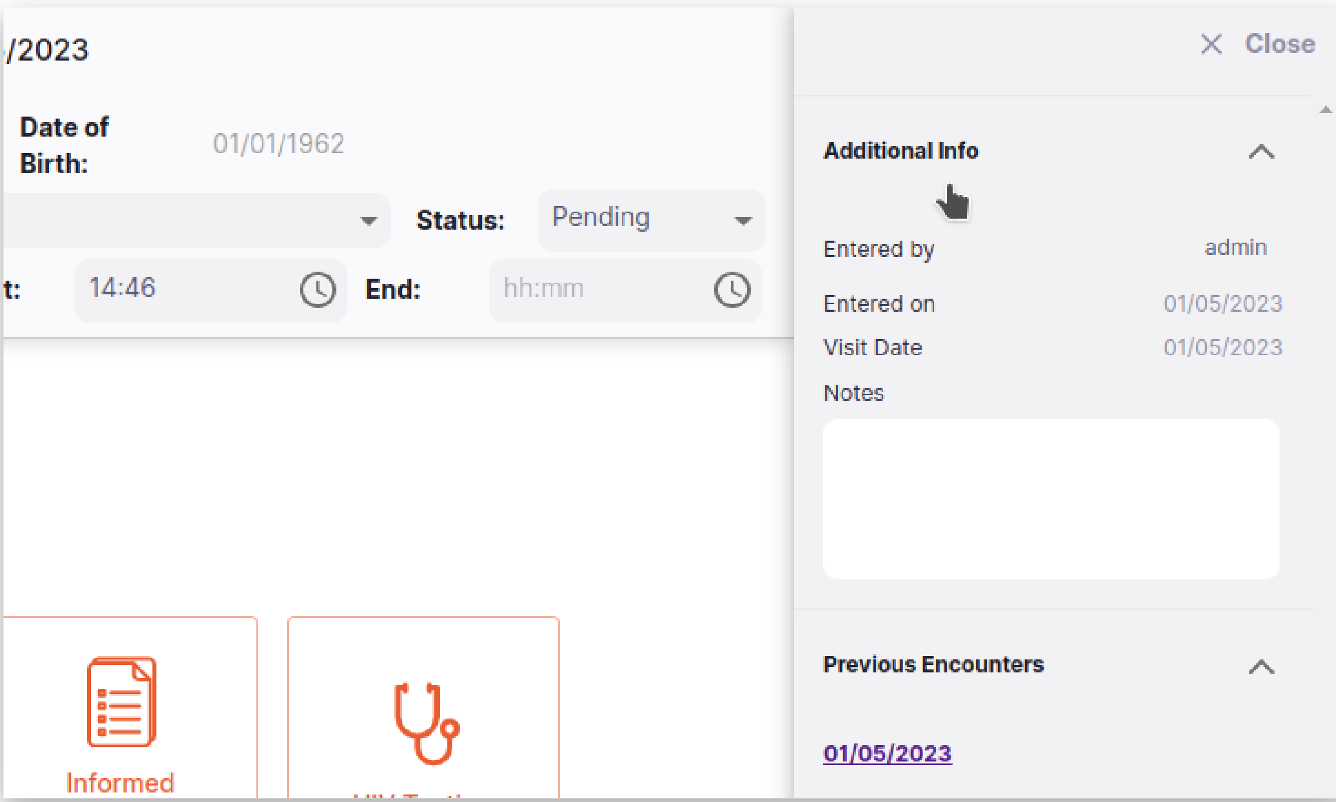
The list of clinicians is managed by the site administrator and must be updated on the mSupply central server

An encounter can have three statuses:

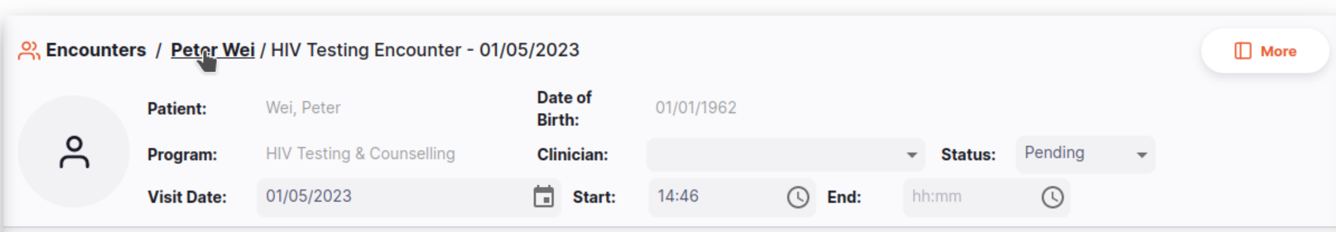
- Pending (this status can be displayed as scheduled or missed depdning on the current date)
- Visited
- Cancelled



The `More` button in the right top of the encounter detail view opens a column with additional encounter information such as a summary of previous encounters and the option to add an encounter note.



You can easily view patient details while looking at an encounter. Simply click on the patient name at the top of the encounter header, as shown:

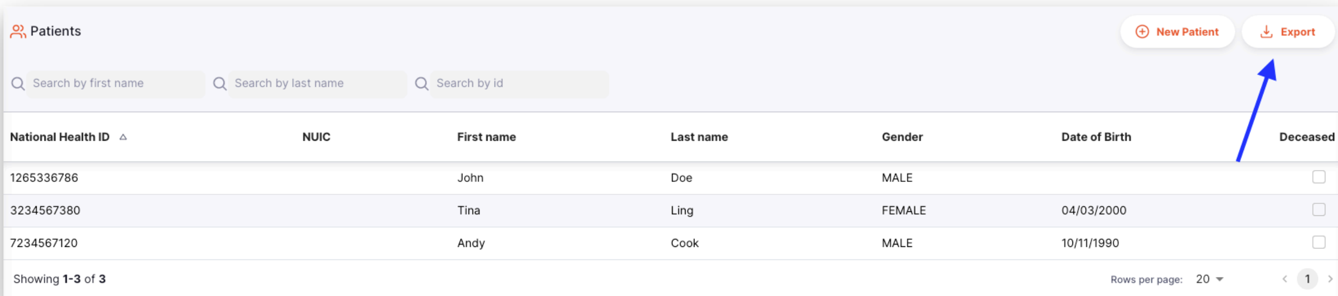


Export Patient List

The list of patients can be exported to a comma separated file. This will export the following patient details:

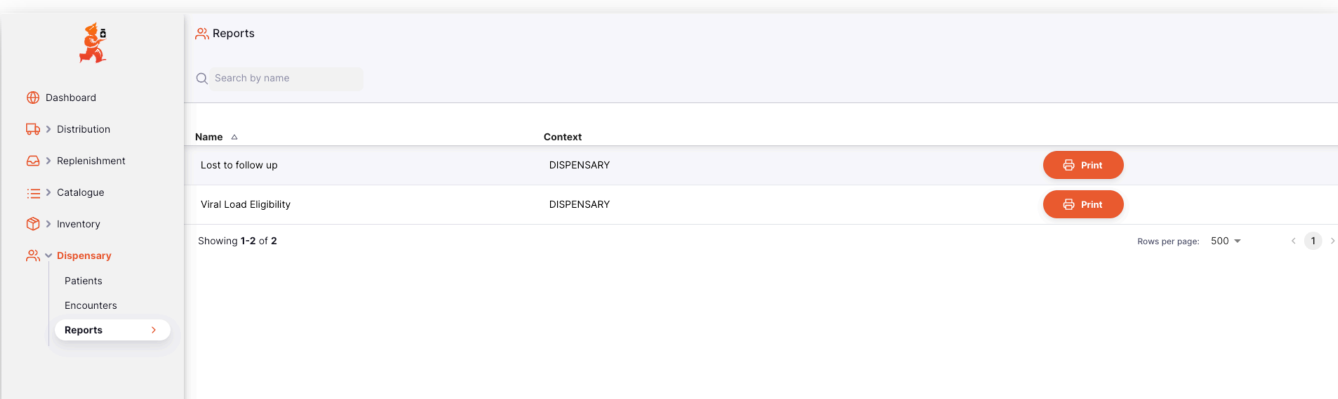
1. ID
2. National ID
3. First name
4. Last name
5. Date of Birth

This can be done by clicking on the `Export` button in the top right corner of the patient list view.



Reports

Navigating to `Dispensary` > `Reports` will show you a list of reports that have been configured for your system.



You can click on the `Print` button beside a report to print it. The system may show a dialog window requesting more information to be entered first.

Requisitions

Program based requisitions

You can manage Internal Orders by program within Open mSupply. This involves using some special settings for master lists. In this method, a program is an extension to a master list. A program includes a standard list of items as well as:

- **Order Types**: defined categories setting the maximum number of orders and quantity of stock to be ordered per period
- **Period Schedules**: defined time intervals when orders can be placed; schedules and periods must be set up before creating programs
- **Regimen Data**: a defined list of additional information that may need to be provided by a customer when making a program requisition

Examples of items commonly managed by programs include Malaria, HIV and TB medicines and medical supplies.

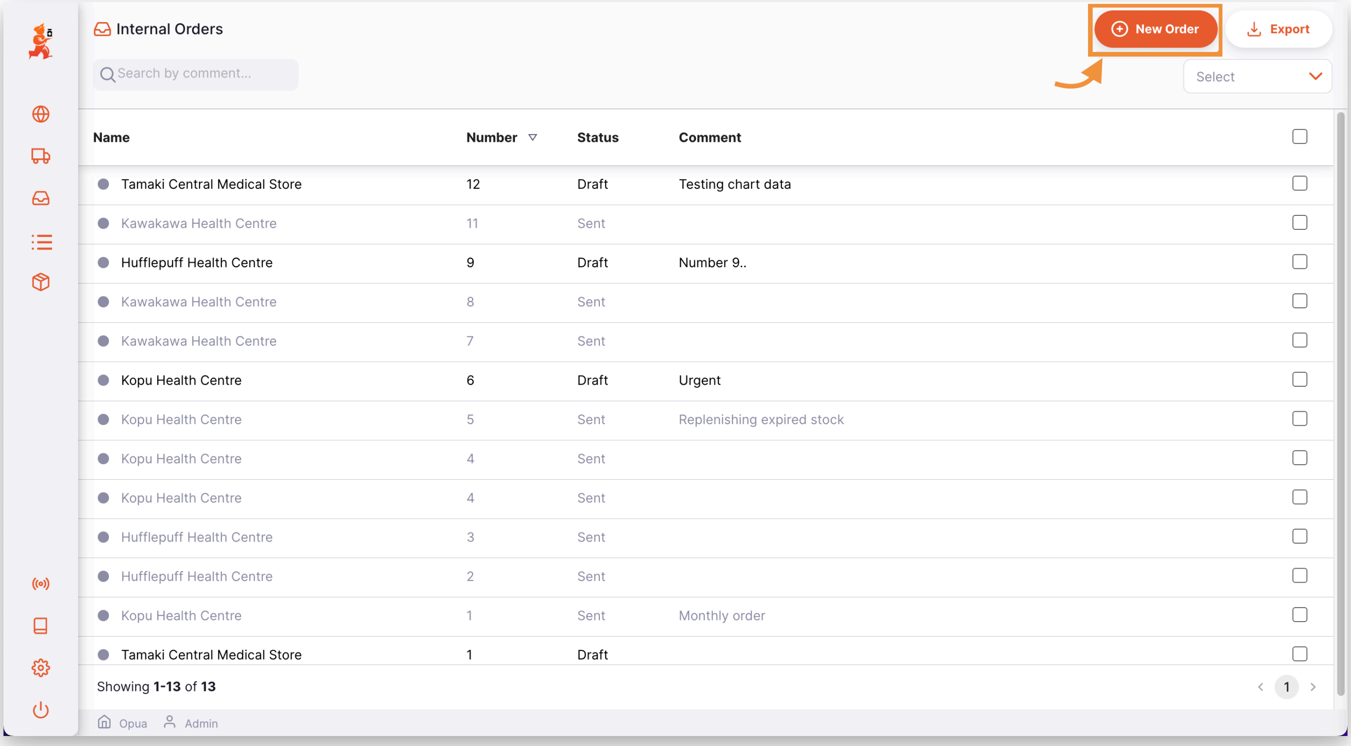
The configuration changes needed when setting up a program are made on the central server. See the documentation below for an explanation:

- [Creating a program]
- [Connecting a program to a store]

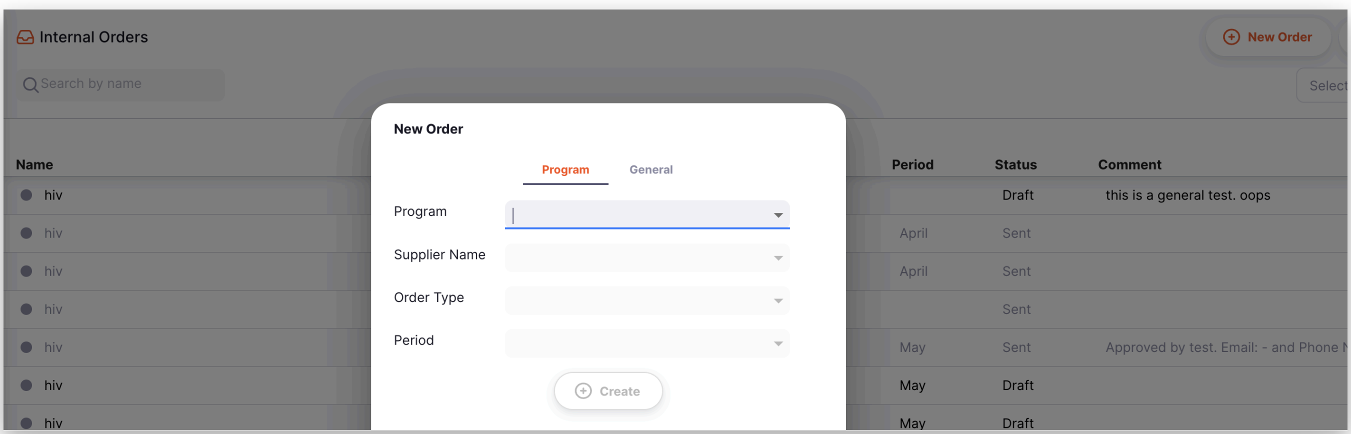
Creating a program Internal Order

Let's create a program based Internal Order.

1. Click on the `New Order` button (top right corner):



2. If you have programs configured, you'll see a different modal to the usual one:



Here, you can select the:

- Program
- Supplier
- Order Type
- Period

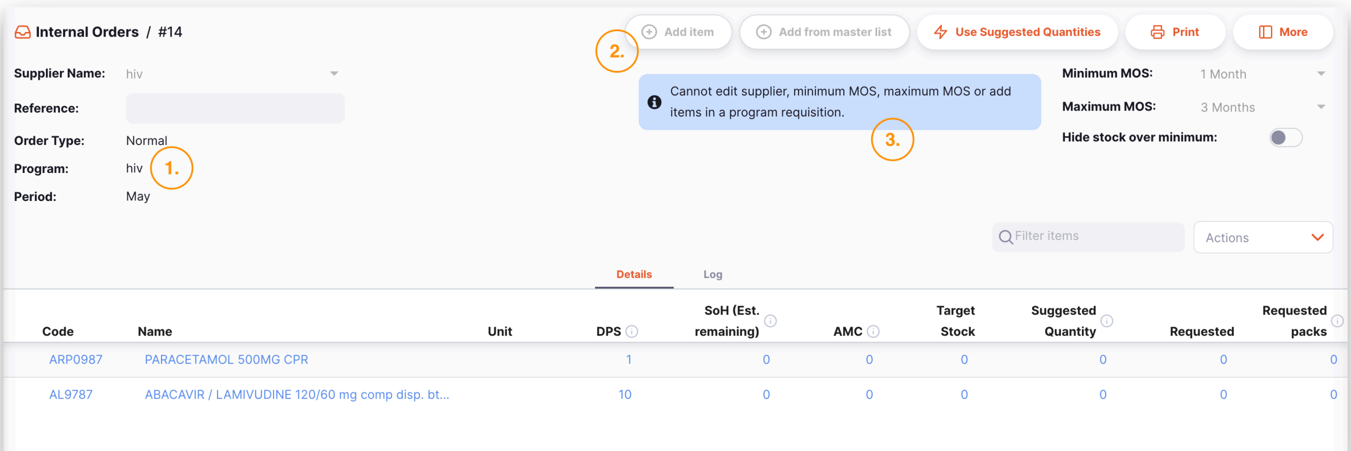
3. Only when you have selected all of the above, can you click `Create` and continue.

The program you select will affect which suppliers, order types and periods are available for selection

Differences when using program requisitions

Internal Orders

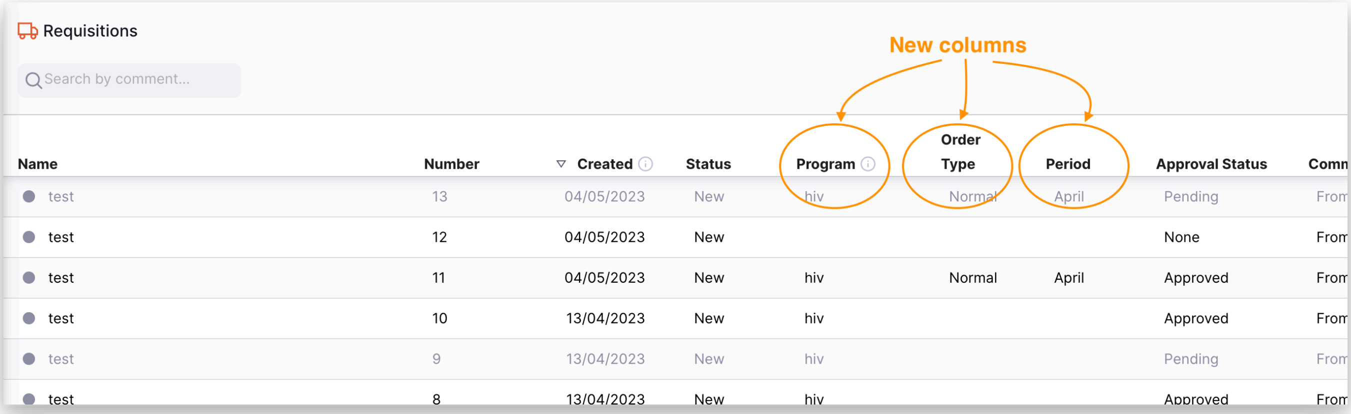
There are several areas where you'll see additional information when using a program based requisition.



1. Additional information telling you which program, order type and period this Internal Order is for.
2. As the message says, you cannot add items, so the `Add item` and `Add from master list` buttons are disabled.
3. The message also states that you cannot edit the maximum or minimum MOS on a program based Internal Order. These values are configured by the program.

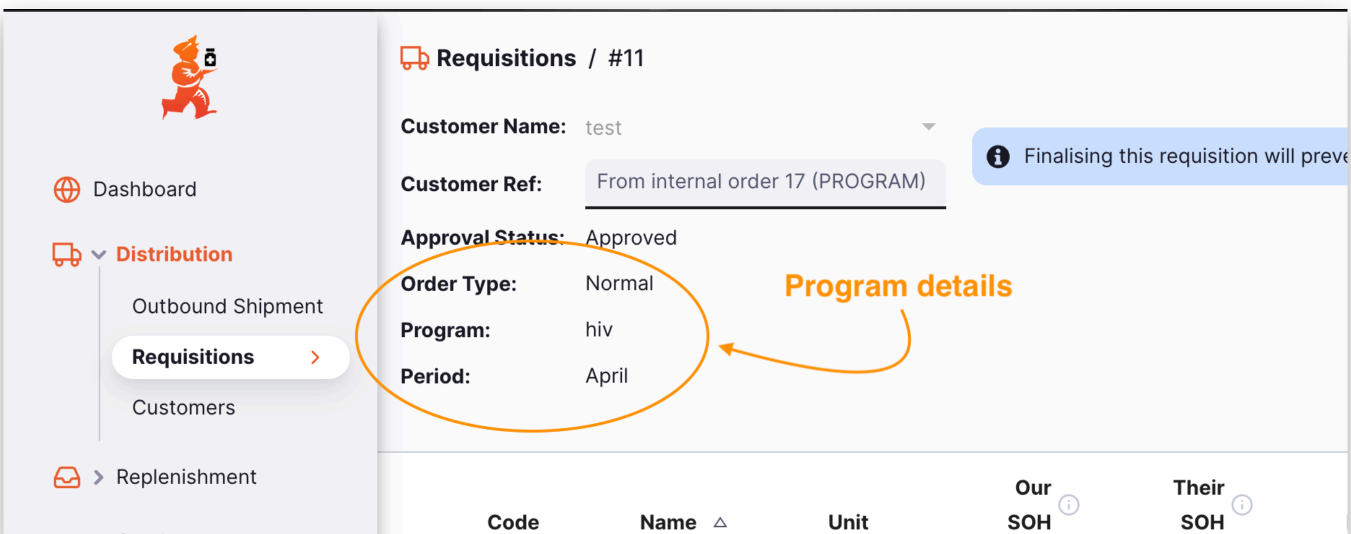
Requisitions

The list view has gained some additional columns, showing the program related data:



- **Program**: the name of the program this Internal Order was created for
- **Order type**: the name of the order type (typically, a normal or emergency order)
- **Period**: the name of the period selected

And the detail view also has program information shown:



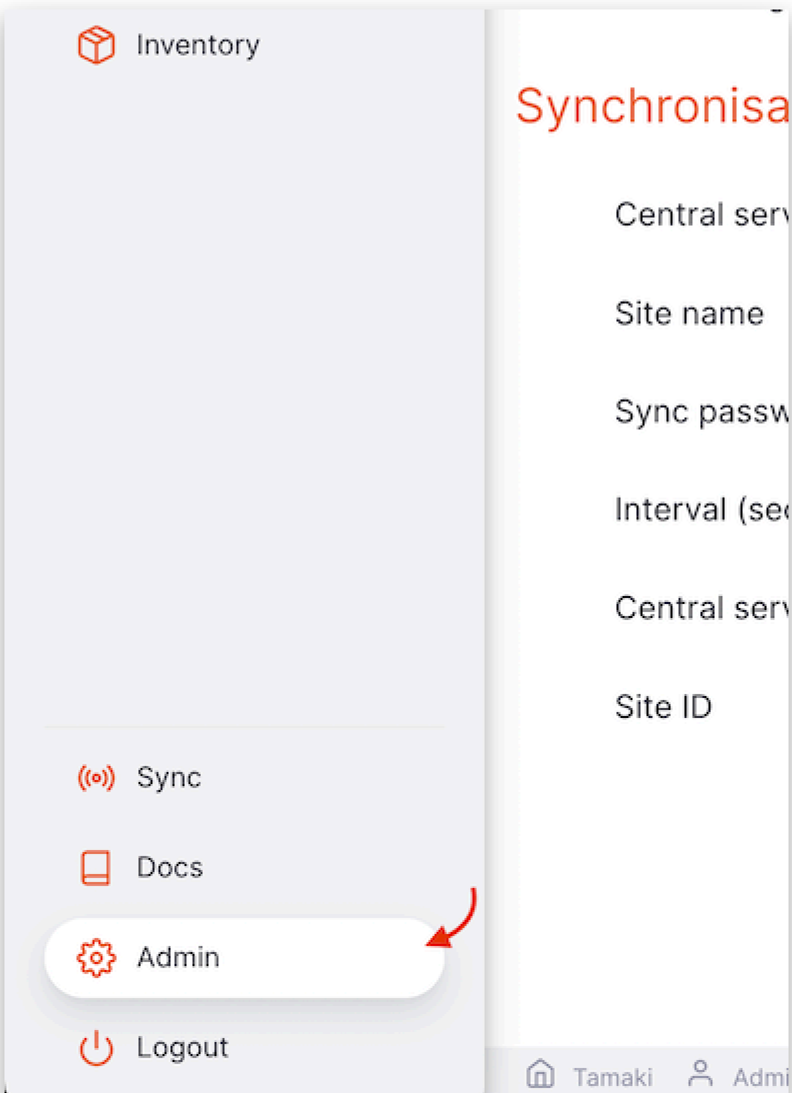
Display Settings

The display settings section allows you to customise how the site looks for you. Changes made will only affect your experience - if other people would like to change the logo, for example, they will have to make the change themselves.

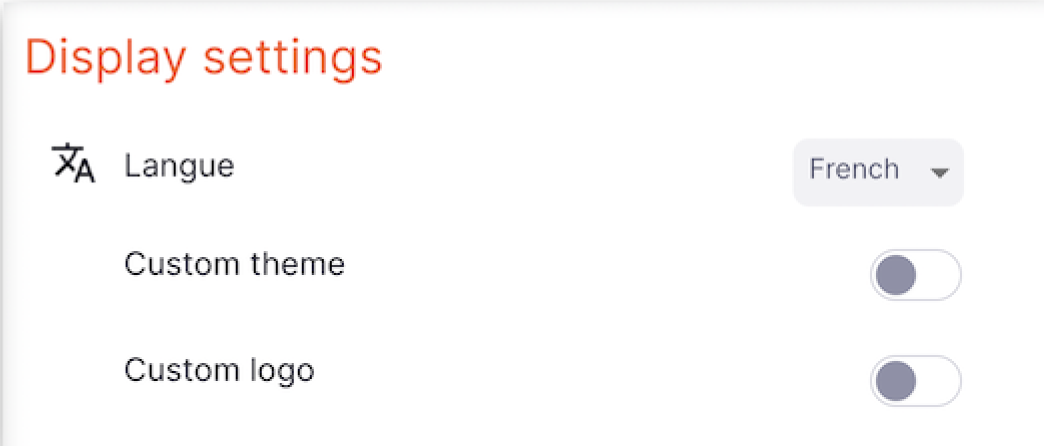
Let's explore what's possible...

Viewing the display settings🔗

To view the display settings, go to `Admin` in the lower section of the navigation panel:

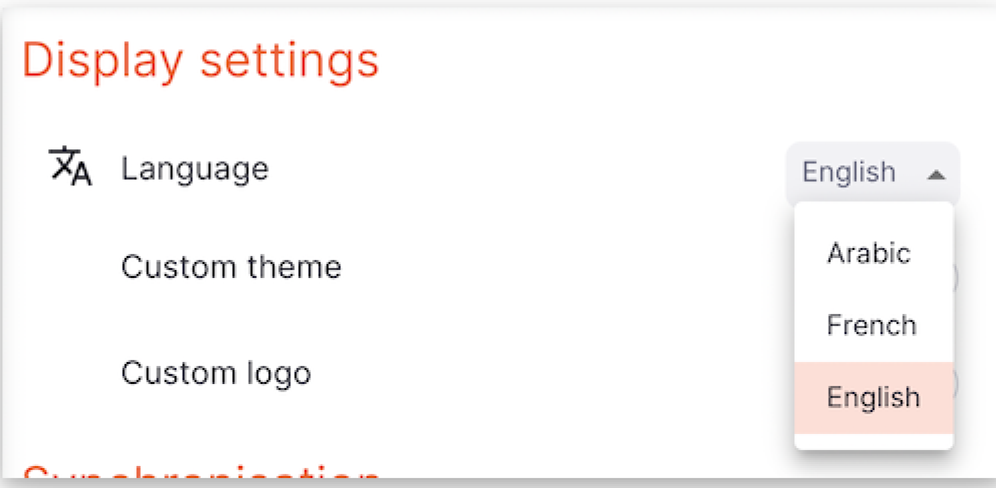


You will see the display settings section at the top of the page:



Language

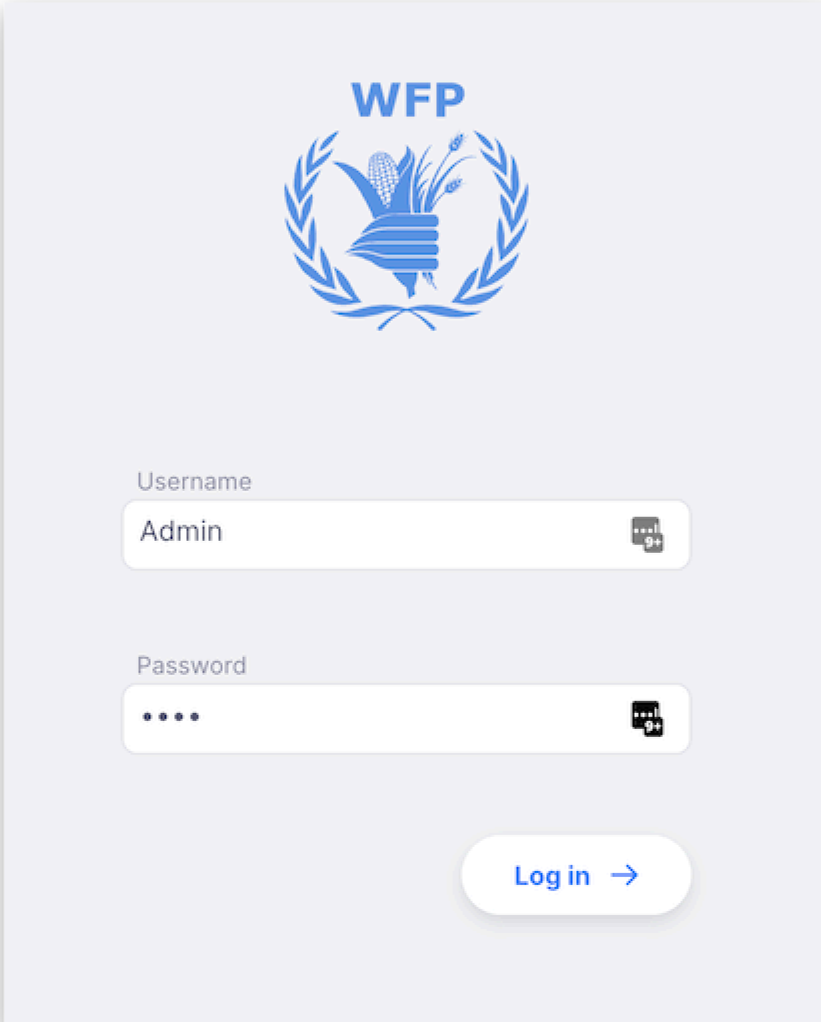
To change the language, you simply have to select from the drop down list

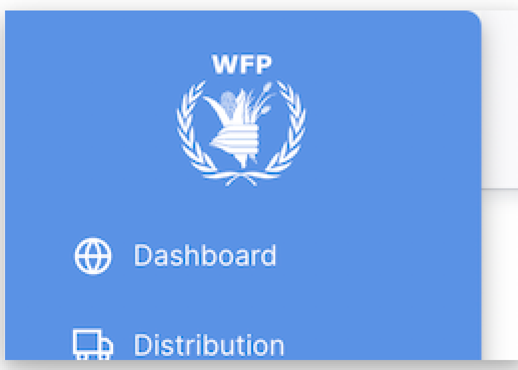


The selected language will be used for everything you do on the site. If you reload the page or open a new tab, this language will be used. However if you view the site in a different browser (for example Firefox after changing the language in Chrome) you will need to select the language again.

Custom logo

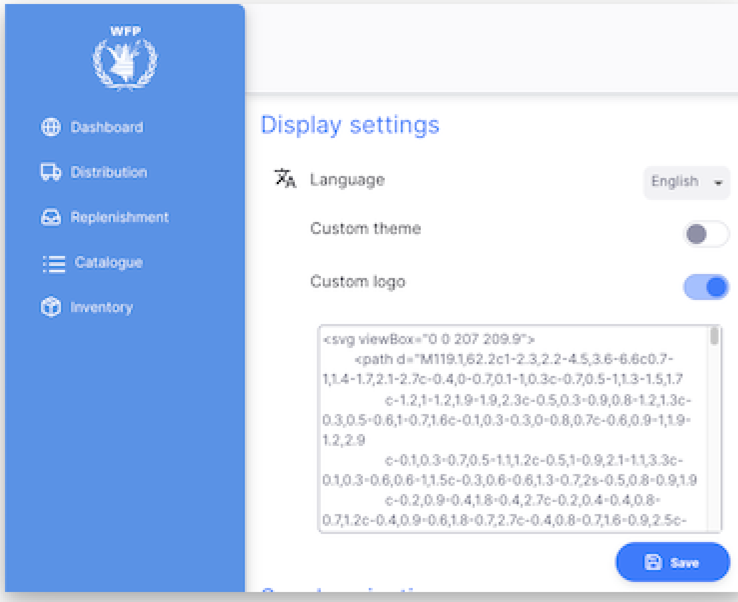
It is possible to use a custom logo for the site. This shows in the left navigation and on the login screen. For example:





The logo will need to be in the `svg` format. To update, simply

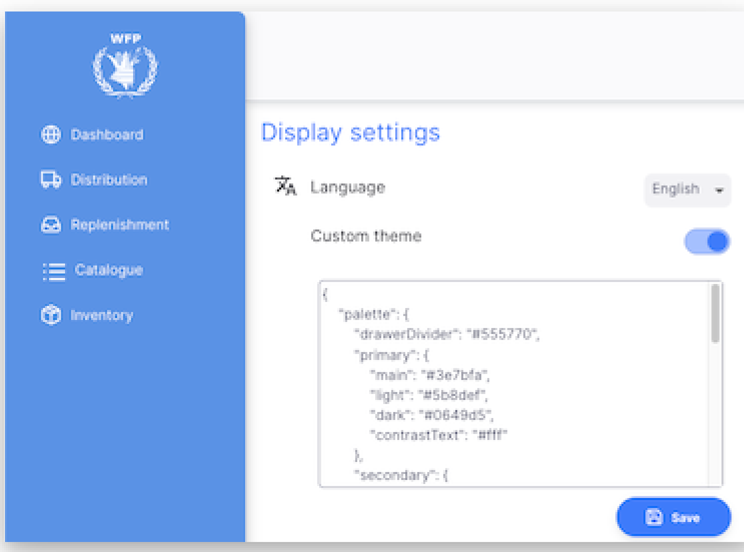
- enable the custom logo by clicking the toggle switch
- copy the text of the .svg file and paste it into the text area
- click save



Custom theme🔗

You can also configure a custom look for your site by using a custom theme. To do this:

- enable the custom theme by clicking the toggle switch
- you'll see a sample of the current theme in the text area - this shows you what can be updated
- edit the theme and click save to view the results

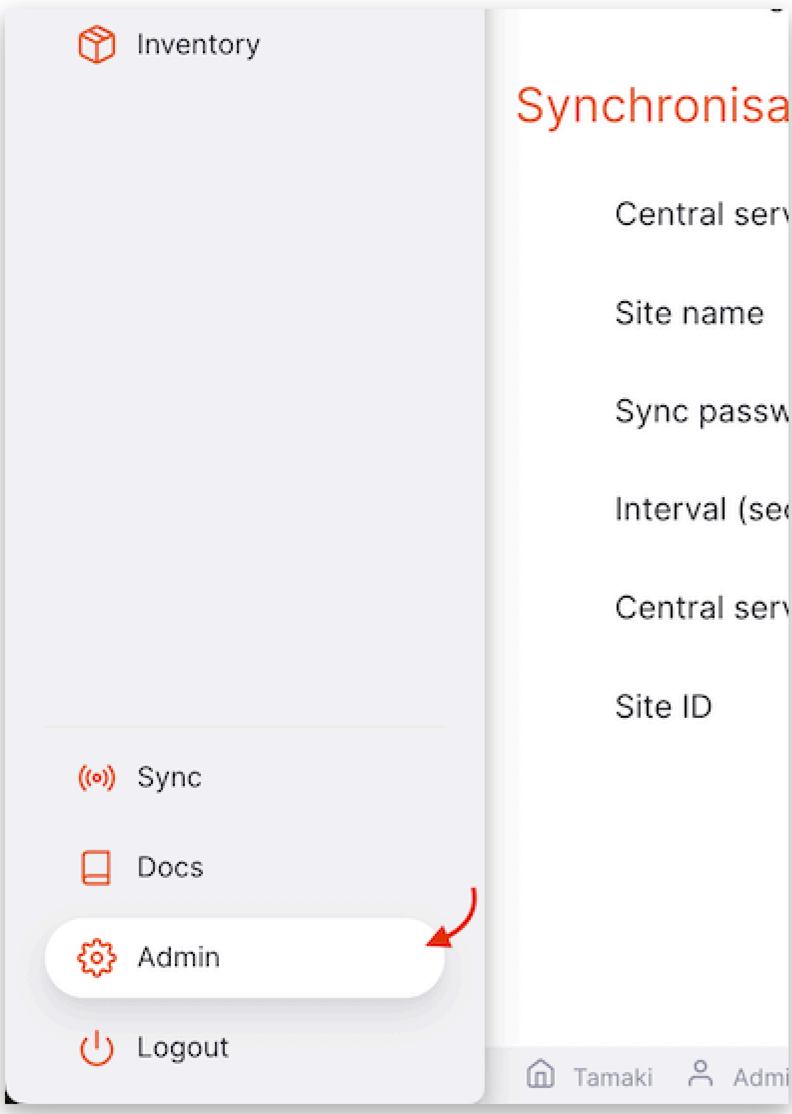


Synchronisation

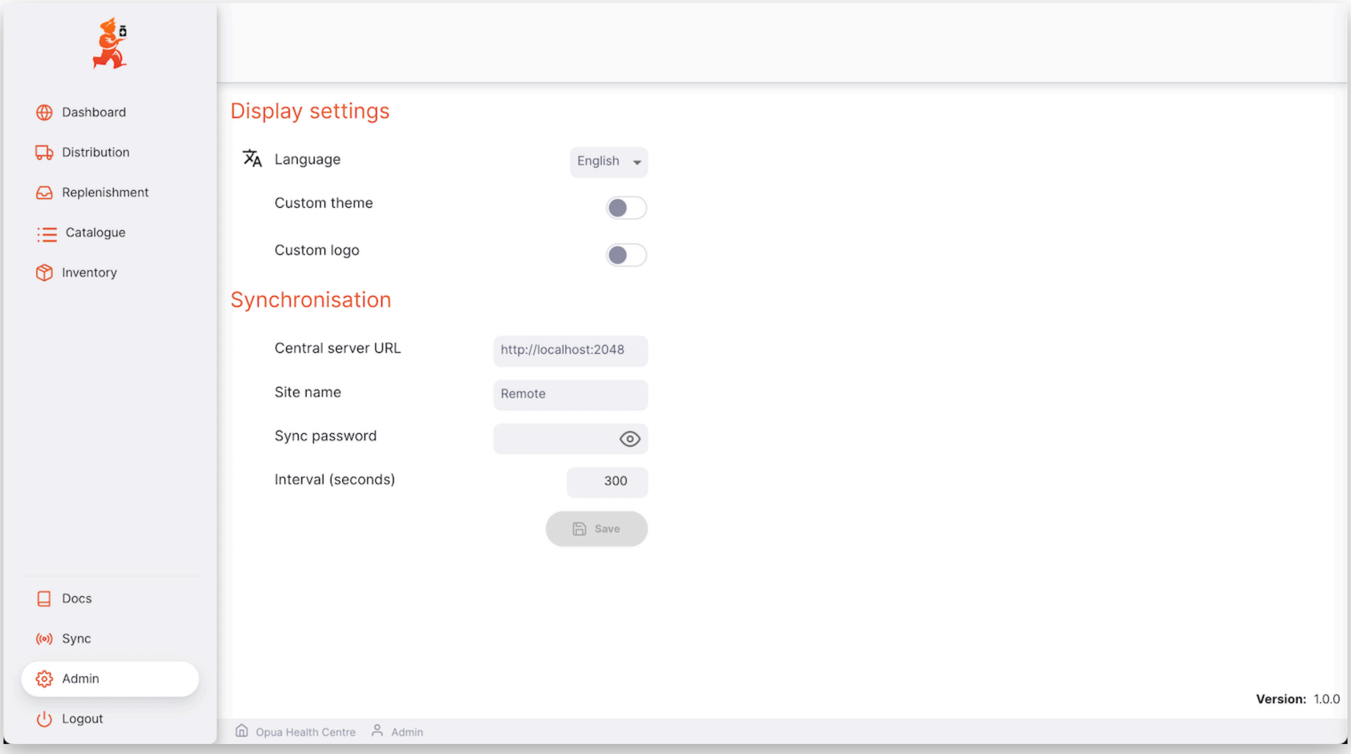
Synchronisation is the term we use to denote the process of transferring data between your server and the central server. This page covers viewing and managing the settings, viewing the current status and how to manually initiate synchronisation.

Viewing the synchronisation settings🔗

To view the synchronisation settings, go to `Admin` in the lower section of the navigation panel:



You will see the synchronisation section below the display settings:



Updating settings🔗

Be very careful updating these settings! They control how the server connects to the central server and do not usually need to be changed. If you make any changes without consulting the administrator of the central server, it is very likely that you will break the sync connection.

Permissions

User permission configuration and how the permissions relate to central server users.

Updating settings🔗

Permissions are configured on a per user basis, and this is done on the central server. See the central server documentation for an explanation of how to do this.

Settings available🔗

The following table lists the area and name of the permissions in the central server which are of relevance to Open mSupply. In the table, the description explains where this permission might be used in Open mSupply and why you may need to enable it.

In addition to these specific permissions, you'll need to ensure that the user has access to the store(s) which they'll be working in.

Tab	Area	Permission	Description
Permissions	Admin	Access server administration	Allows access to the `Admin` page
Permissions	Items	Manage locations	Allows a user to maintain locations
		Edit items	Able to edit items, required when saving a barcode
		View stock	View stock lines
		Edit stock	Modify stock lines
Permissions (2)	Invoices	View customer invoices	Can view Outbound Shipments. Also used to query statistics on the dashboard
		Create customer invoices	Can maintain Outbound Shipments
		Edit customer invoices	Can maintain Outbound Shipments - if either edit or create permission is given the user can edit
		View supplier invoices	Can view Inbound Shipments. Also used to query statistics on the dashboard
		Create supplier	Can maintain Inbound Shipments

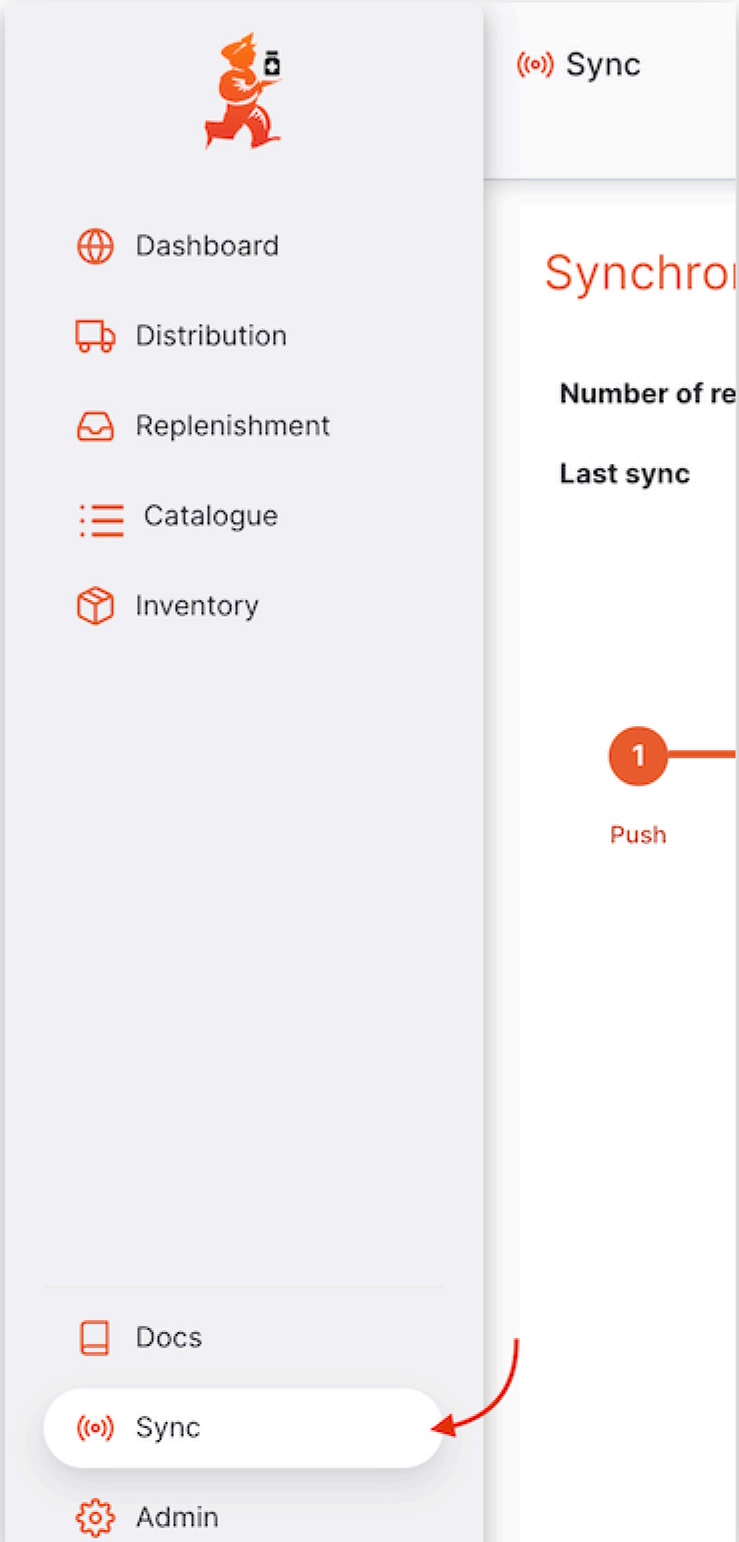
Tab	Area	Permission	Description
		invoices	
		Edit supplier invoices	Can maintain Inbound Shipments - if either edit or create permission is given the user can edit
Permissions (2)	Reports	View reports	Required to print pages, as this uses the reporting system
Permissions (3)	Admin	View log	Able to view the logs, these show as a tab on many windows
Permissions (3)	Requisitions	View requisitions	RequisitionQuery
		Create and edit requisitions	RequisitionMutate
Permissions (3)	Stocktakes	Create stocktake	Can create stocktakes
		Delete stocktake	Can delete stocktakes

Synchronisation

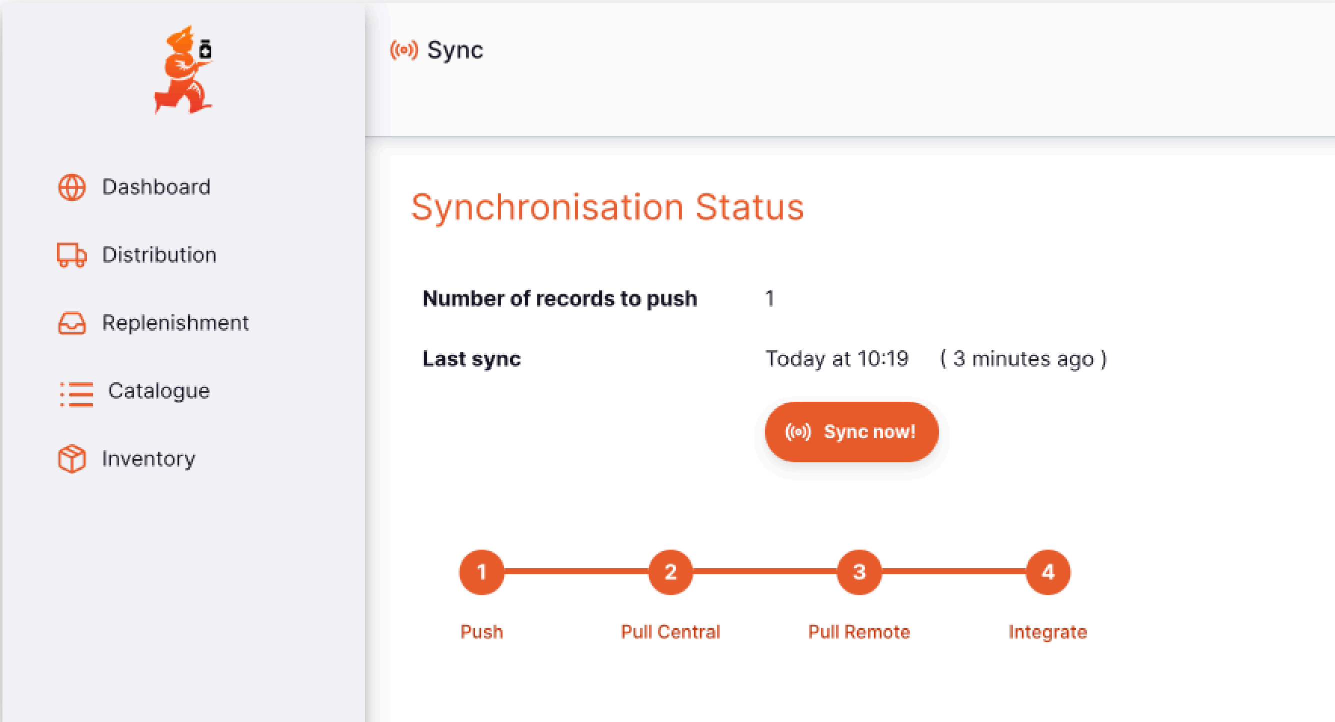
Synchronisation is the term we use to denote the process of transferring data between your server and the central server. This page covers viewing the current status and how to manually initiate synchronisation.

Viewing the synchronisation status🔗

To view the synchronisation status, go to `Sync` in the lower section of the navigation panel:



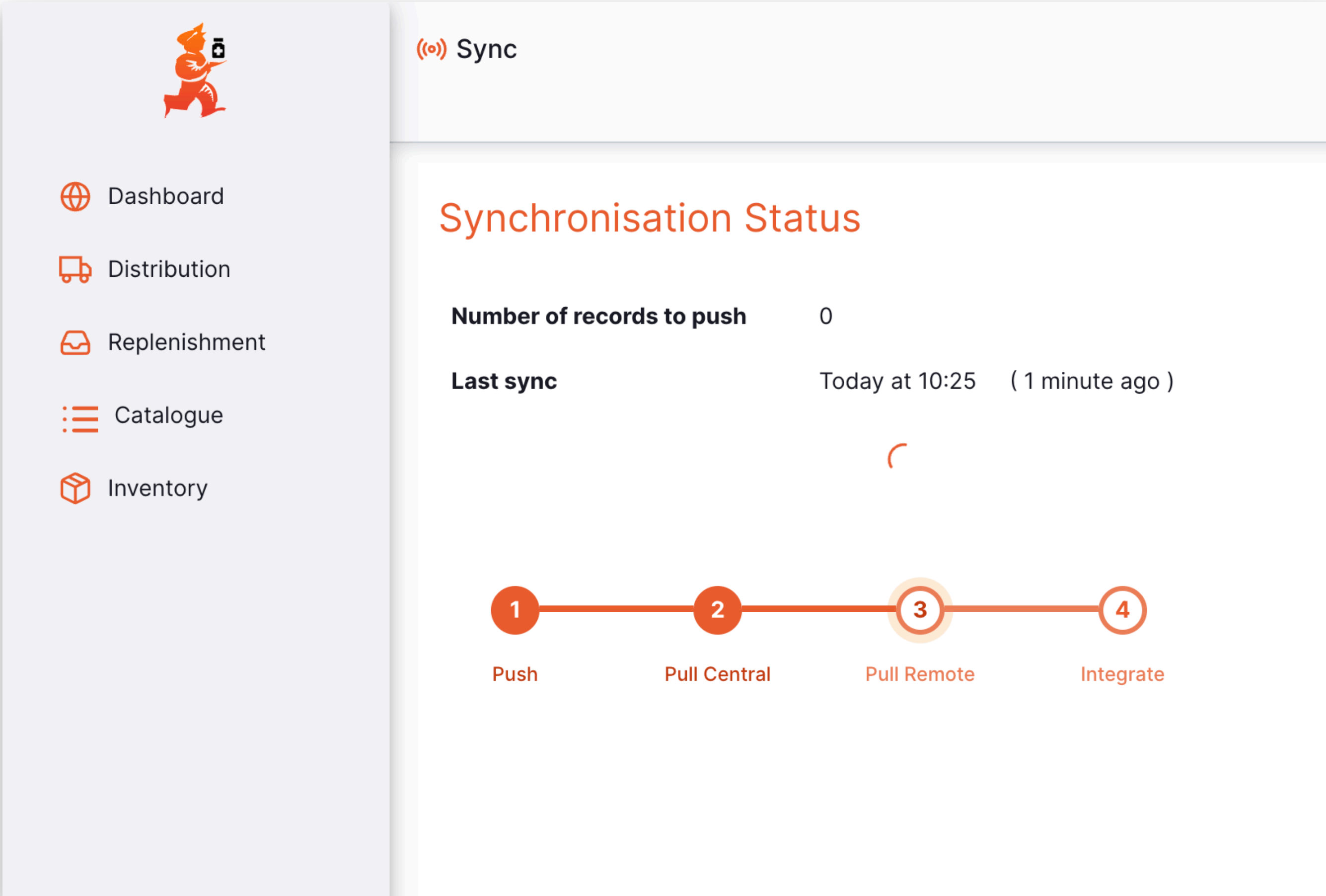
The page shows the number of records waiting to be pushed to the central server and the time that the last sync happened.



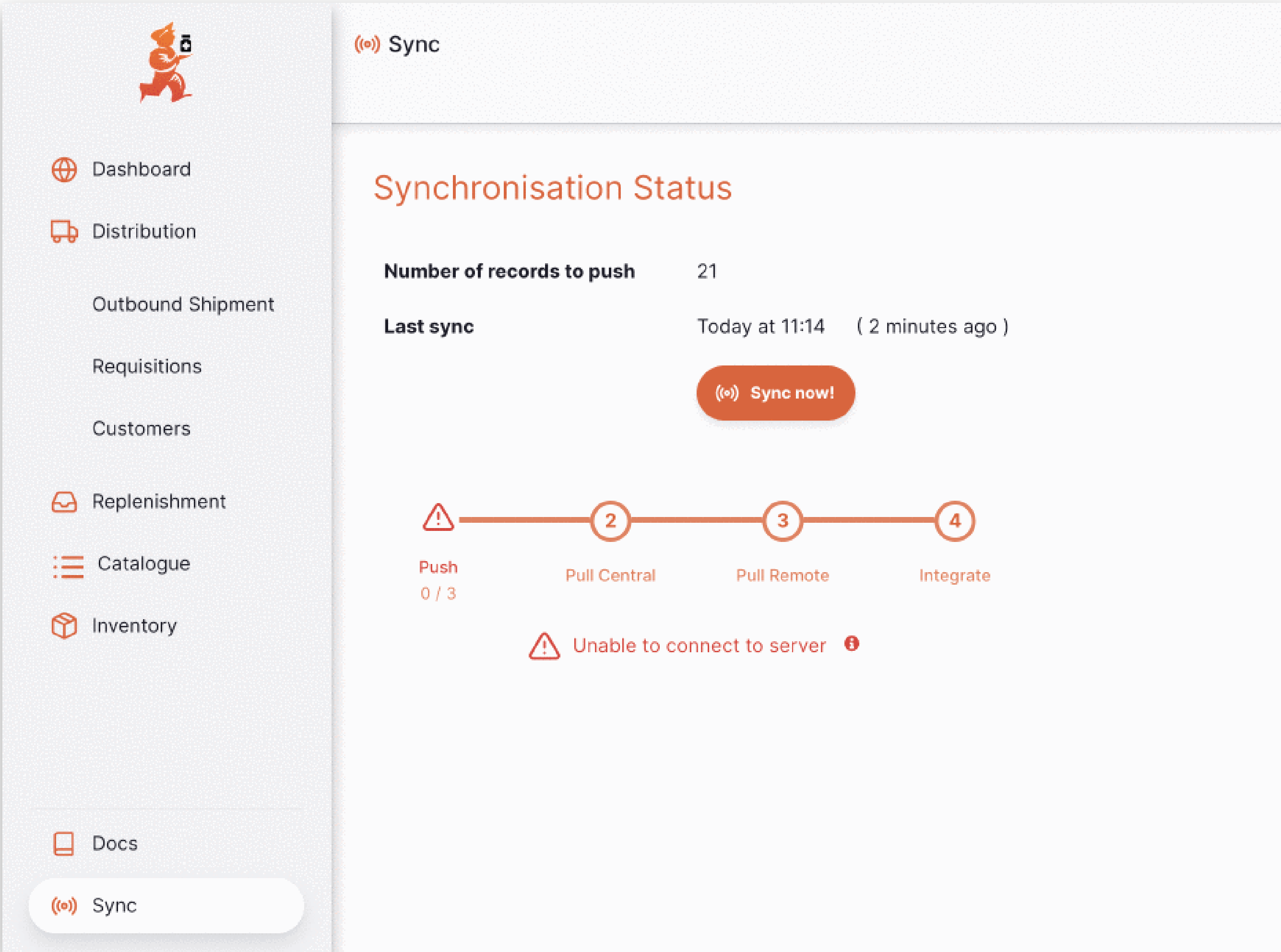
Manual synchronisation🔗

On this (sync) screen you are also able to initiate synchronisation immediately rather than wait for the scheduled time (remember, the sync interval is configured in the Admin > Synchronisation section, see the Administration page for details).

To start sync manually, simply click the `Sync now!` button. When you do, you'll see that the button changes to a spinner and the progress is indicated with the stepper icons which change to show which step is currently active. For example, in the image below you'll see that `Pull remote` is active.



Here is the complete process in action, with the steps slowed down. You'll notice when you try this that the sync is usually very quick, though it depends on how many items you have to sync:



If any errors are encountered during the sync progress you will see these on this screen too. Hover over the `i` icon to see additional details.

Target Software Standards

The mSupply Foundation's goal is 100% compliance with the Interagency Supply Chain Group's Target Software Standards for Low, Medium and High resource settings.

These charts indicate Open mSupply's current progress towards that goal. (Purple indicates compliance when used in a hybrid open/closed source system in conjunction with the mSupply application)

The breakdown of Open mSupply's TSS compliance can be seen in the following table:

Note: A link to the full interactive table, including preset filter views, can be found here.