LS Central 15

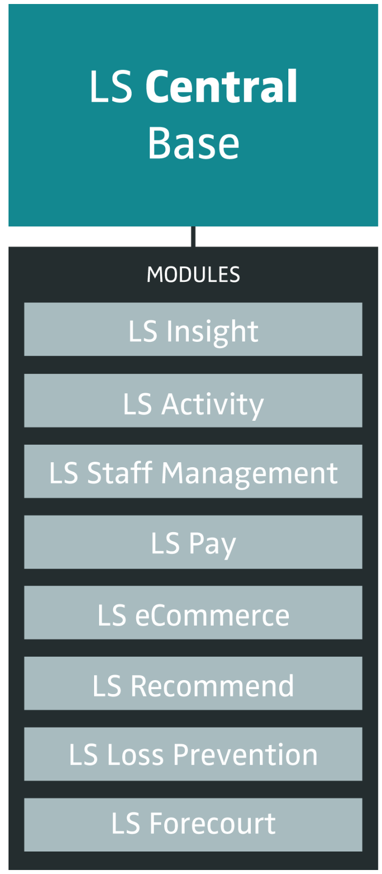
Product Overview

The purpose of this document is to provide information about the functionality of LS Central as well as providing guidelines on how to license LS Central.

LS Central

LS Central is available with the following options:

- LS Central Base
- ERP Users
  - Essentials User
  - Premium User
  - Team Members
- Retail Devices
  - Retail Device CAL for Retail & Hospitality
  - Retail Device CAL for Mobile POS App
  - Retail Device CAL for Mobile Inventory App
  - Retail Device CAL for Kitchen Display Server
  - Retail Device CAL for Back Office
- Store/Commerce Pack
  - Includes Retail Device CAL
- LS Central Modules
  - LS Activity
  - LS Staff Management
  - LS Pay - Per Device
  - LS eCommerce
  - LS Recommend
  - LS Loss Prevention
  - LS Forecourt



More information about the different options is in the following chapters.

LS Central Base

The LS Central Base includes the following functionality:

- Back Office functionality
  - Product Design
    - Variant Framework - Color and Sizes
    - Barcodes
  - Sales and Marketing
    - Retail Customers
    - Price Management
    - Offers and Coupons
    - Campaign Management
  - Store Management
    - Cash and Safe Management
    - Staff and Sales Person
    - End-of-Day Procedures
  - Sales History
  - Reports and Analysis
- Point of Sale Support
  - Support for POS client
  - Support for Mobile POS
  - POS Design (POS Setup data)
- Inventory Management
  - Support for Mobile Inventory
- Member Management
  - Member Campaign
  - Member Offers
  - Mobile Loyalty Support
  - Loyalty Portal Support
- Sales Commission
- Item Import
- Customer Orders
- eCommerce Support
  - Content Management
  - Order Processing
- Scheduler
  - Batch Posting
  - Data Communication
  - Data Director
- Hospitality
  - Back Office Functionality
  - Support for Kitchen Display System (KDS)
  - Meal Planning
  - Recipe Management
  - Delivery System
- Online Call Center
- Table Allocation and reservation

- Replenishment
    - Automatic Replenishment
    - Manual Replenishment
- Open-to-Buy
- Franchise Management
- Offline Call Center

The LS Central gives the ability to configure system functionality and maintain master data to be used in the system.

Back Office functionality

The Back Office functionality includes the general setup for LS Central.

In Product Design, data needed for retail products is set up. Retail Items is an advanced version of Items where some extra information for the items can be configured. This includes information needed in the retail business, for example Variant Framework, which makes it possible to sell one item, number in different colors, sizes and styles.

Sales & Marketing includes the setup of data for sales operations. Here, the Promotions, Offers and Coupons are configured. The system has options for many different types of offers that can be set for items, line and total discounts, tender discounts and member offers. Each offer type has its own triggers, settings, lines and benefit setup.

Store Management includes the setup and maintenance of Stores, Terminals, and Sales Staff. The system gives the possibility to have staff with different permission levels on the POS. Tasks such as Store Statements and different Cash and Safe Management methods are parts of Store Management. With Store Statements, the POS sales data is collected and then the data is posted to Inventory, Customer and General Ledger.

Point of Sale Support

The Point of Sale includes the POS client and the POS setup.

The POS layout, look and functionality are configured mainly in five different types of POS Profiles: Interface, Menu, Functionality, Style and Hardware. The Profiles are then linked to Stores, Terminals and/or Retail Users. The POS Profiles and their default concept make the setup quick and easy.

The POS client can be started in the LS Central menu or directly in Windows with LS Start.

LS Central registers all POS transactions into the Transaction Register where it is easy to make enquiries for every detail of the POS sale.

This is only the POS support functionality. The Retail Device CAL for Retail & Hospitality module needs to be purchased separately for each device.

Mobile Point of Sale Support

The Mobile POS allows the retailers to mobilize their sales associates, providing personalized service to the customers from the first greeting to finalizing the transaction on the shop floor. The Mobile POS is a simplified POS application containing a subset of the operations found on the stationary POS, yet capable of handling all but the most complex POS operations. The Mobile POS can be integrated with a secure payment cradle to allow credit card payments, all in a single compact device. It can be deployed using the Wi-Fi connectivity in the store as well as connecting to LS Central via cellular connectivity when roaming.

This is only the Mobile POS support functionality. The Retail Device CAL for Mobile module needs to be purchased separately for each device.

Inventory Management

When an employee works on the store back office system, he or she only sees data that is relevant for them and the store to which they are assigned. For example, they only see items that are in the store's product range and purchase orders that belong to their store.

All processes for worksheets and documents are simplified and controlled for that user and store.

Inventory management also supports mobile devices to simplify all inventory processes performed in the store to increase productivity and the quality of the store processes. This is only the functionality; the Retail Device CAL for Mobile Inventory module needs to be purchased separately for the Mobile device to work properly.

Member Management

The Member Management functionality gives the possibility to handle multiple Member Clubs in a company with different rules and setups suitable for loyalty or staff clubs.

Each club can have one to many Member Schemes such as Standard, Silver and Gold. Members are registered in the clubs either directly in the BackOffice system or via the Loyalty pack.

Members of the club are linked to a scheme but can move between schemes based on calculation rules for issued member points. Each Member can be registered with defined Member Attributes that make it possible to gather information about the member.

Members collect Member Points from either POS Sales, Sales Orders or Member Point Journals. The issued points are based on point setup rules that can be different between clubs and items.

On top of this, Retail Offers and Coupons can be made valid for specific Member Clubs, Member Schemes and/or Member Attributes.

Member Campaign gives the ability to identify members through dynamic queries that analyze data and create a campaign that can be connected to offer/benefits for the members.

A member can have a discount budget assigned to him that limits the discount amount he or she can earn within a given timeframe.

Member Management is fundamental for eCommerce and Loyalty apps.

Sales Commission

Sales Commission is a functionality that calculates a sales person’s commission for sold items.

The system supports two types of sales commission rules:

- **Transaction**:Sales Commission is calculated as a percentage or a fixed amount of a specific item or if an offer is triggered.
- **Sales Target:**Sales Commission is based on a percentage or a fixed amount based on the total sales amount over the selected Commission Sales period

Each Sales Commission rule can be set up for a predefined period, selected items or group of items where each line has its percentage value or fixed amount. Sales Commission can be calculated for the individual sales person or group of sales persons.

Sales Commission works for POS Sales and Retail Sales Orders.

The system registers all sales commission transactions to commission periods. Transactions within the commission period can be transferred to a general journal and from there posted to General Ledger.

eCommerce Supported

In LS Central Base, you have the ability to create content for items, offers and notifications to be presented on eCommerce platforms and mobile devices. The content can contain single or multiple pictures.

The system receives orders from eCommerce platforms and mobile devices, creating sales orders and customer orders that are processed and delivered to the customer.

Note that this is only the functionality; the eCommerce module must be purchased separately

Scheduler

The Scheduler is a functionality to set up tasks, which can be run on a pre-set date and time. The tasks can be different kinds of LS Central system jobs.

The Scheduler plays a role in the replication setup where data is replicated between databases, primarily from the Head Office database, where the basic data is maintained, to databases in the stores.

The Scheduler combines all scheduler jobs in the system, regardless of whether they are replication jobs or miscellaneous.

Hospitality

Hospitality supports fine dining and casual dining restaurants including catering, cafeterias, pubs, bars and cafés. The system supports Table Management by list or/and graphical layout showing relevant status and further information. The system offers possibility to plan your restaurant capacity in the future by managing sections that can be open/closed in different periods of a day or week. Table Reservations can be made by using LS Activity and then these can be allocated either manually or automatically (based on table ranking) in the Table Allocation module.

The system includes support for Kitchen Display System that works with the LS Kitchen Service. This system includes a flexible setup of Kitchen Displays and full control of Kitchen Orders. This makes it easier for the kitchen staff and waiters to monitor orders prepared in the kitchen. This is only the functionality; Retail Device CAL for Kitchen Display Server module needs to be purchased separately

Delivery and Takeout, with or without an online call center, is also included with delivery or takeout, within the restaurant or centralized. Driver management is part of the restaurant functionality

The Meal Plan gives the ability to plan future menus, including the materials required. The solution automatically updates the POS system with the correct menus for each day. Central item and recipe management with cost calculation, ingredient exclusion, item modifiers and recipe versions. There are extended pricing possibilities including an offers system with the option of including loyalty.

Kitchen Display System

The LS Central Kitchen Display System, KDS, is an advanced kitchen production system. It is designed for use in a hospitality environment and is well suited for bars, cafes, quick service restaurants, casual dining and fine dining; in short, wherever orders need to be prepared at a production station.

System highlights:

- While orders are being processed in the kitchen, the Hospitality POS is updated with process information
- Users in the preparation area have a good overview what is in the line
- Waiters and users at the POS can monitor the process at all times
- Setup of stations is configurable in LS Central back office
- The Kitchen Service works with Display Stations and Printers
- Possibility to activate different configuration depending on the restaurant’s load

Item Import

The functionality of Item Import is to import files from vendors, and to create and update the company item master. The files from vendors typically contain vendor item no., barcodes, description, item group, size and color information, purchase price and sales price. The Item Import functionality imports the data into an import data pool from where it can be selected into an import journal and there the user can correct and finalize the information before the items are updated.

Customer Orders

With Customer Orders, it is possible to service the customers so they can order items through all customer touchpoints. Items that can be on customer order can be from all the stock in retailer’s stores and warehouses or items that are not in stock and can be sourced from the retailer’s vendors.

With this, the retailer has the options to sell to customers items from all locations and items that are stocked by vendors. With the vendor, sourcing feature retailers get the opportunity to increase their range of available products without having to increase the floor space.

Customer order can handle orders from all available channels that is POS, eCommerce and mobile.

The process is that the customer can place orders in the store, with mobile loyalty app or in e-commerce and decide to either collect the order at selected store/warehouse or have it delivered to his address.

With integrations to the eCommerce and POS systems, the fulfillment process, i.e. inventory transfers, payment and shipping processes are done in a uniform way. This allows the customer to return/exchange goods in any store no matter if the customer made the purchase online, in the Loyalty app or in the store, creating a seamless experience for the customer.

Replenishment

The Replenishment module is a tool to assist the purchasing department in creating purchase orders, which are order suggestions for items with quantity volume. These suggestions are based on pre-set data, which details for example minimum and maximum quantity that is supposed to be available in store. The system is based on either automatic or manual replenishment rules.

Automatic replenishment supports four methods of calculating reorder quantity for store and/or warehouses. Manual replenishment methods are also offered where the buyer decides how to push stock to stores or franchise partners.

Utilizing the Replenishment module simplifies item distribution and planning, lowers item stock cost and provides a higher level of item availability in warehouses and store.

Part of the functionality is that it:

- Supports cross-docking a single purchase order, pushing existing stock from warehouses and then recalling stock from the stores back to warehouse or to an outlet store at end of season.
- Ability to create campaigns with special offering and replenishing process to support the campaign.
- Includes an effective workbench for the buyer to get a good overview of all relevant information and document within their domain.
- Includes vendor performance discrepancy reports with detail logging to show ordered, delivered and then invoiced quantity and prices.

They cover features such as Average Usage, Manual Estimate, Stock Levels and Like for Like. Average Usage analyses sales history to predict future stock needs for the store/warehouse. Sales History Adjustment allows to correct a biased sales history and to simulate a sales history for new items and stores. Planned Demand Events are used to plan the changes of demand quantity for future discounts, promotions or ad-hoc events.

Store Stock Redistribution helps to reduce markdowns and increase sales. The feature calculates the actual stock and demand for seasonal items and proposes Transfer Orders to balance the stock across the store network to maximize sales - considering transportation cost, distance and transportation time.

The LS Central Allocation Plan is a powerful tool to prepare a season, preplan purchasing and how to distribute retail items. It supports the buyer in:

- Planning the buying process
- Allocating to stores and customers
- Planning buffer quantity

Two different methods are used for allocation. Firstly, distribute is a top-down method where the total quantity is decided and calculated down to each store. Secondly, in Defined, the user defines pattern quantities for each distribution group, for instance size and color combinations. Allocation Plan can then create Purchase, Transfer and Sales Orders according to the plan. Buyer’s Push and Cross Docking support the same user interface and process as the Allocation Plan.

Open-to-Buy

Open-to-Buy (OTB) is used to show the difference between how much inventory is needed and how much is available. This includes inventory on hand, in transit and any outstanding orders. This can also be thought of to control that the value of the inventory is within some given limits at any given time - not too little and not too much.

Franchise Management

Basic document communication between the franchiser and franchisee is supported where either party can initiate the document. Both parties need to run LS Central. The Data Director manages the communication between the franchiser and franchisee. Automation is used in error checking and in the creation of documents and matching is configurable as well. Purchase and sales order documents are used where a purchase order is created at the franchisee and sent. The system checks the document for errors and possibly then automatically creates a sales order document in the database of the franchises. Manual replenishment processes support the franchise business by the ability to create sales orders and define customers to receive goods.

Call Center

There are two ways to set up a Call Center in LS Central

Single database environment

All restaurants (stores) are in the same database – the Call Center is set up as a separate store, which can take orders for other stores in the database.

Distributed environment

Restaurants can be in different databases – the Call Center is in a separate store in a separate database. The Call Center communicates with other restaurants through Web Services so data is only looked up and used when needed. Communication is confirmed directly with the user who initiates the communication, for example, when staff at the call center sends an order to a restaurant. The system will connect to the restaurant database where a success message is returned if the task was successful.

The LS Central Modules

A prerequisite for the Modules is LS Central Base.

LS Central Add-on Modules are:

- LS Insight
- LS Activity
- LS Staff Management
- LS Pay
- LS eCommerce
- LS Recommend
- LS Loss Prevention
- LS Forecourt

LS Insight

LS Insight is a new Business Intelligence (BI) and Analytics Intelligence solution. A cloud-based (or Hybrid BI) SaaS solution powered by Microsoft Azure and Power BI, offering a powerful alternative in terms of agility and speed of deployment.

The solution offers a robust Data Warehouse in Azure SQL Database and with powerful Reporting.

LS Activity

The LS Activity module allows you to manage reservations and appointments, both details facing the client and reservation of the resources needed to perform the services, such as specialists or facilities. The functions are available both in the back-end of LS Central and on the POS

The appointments or reservations can reserve multiple resources if needed, both automatically and manually assigned by the user. It is defined what the resources can do, and priority settings can also be assigned, which are then followed when being automatically assigned for specific services.

The services are defined as products, which are assigned pricing and dates, when they are available for selling. The availability of the product depends on the availability of the resources required by the product definition.

You can also manage events with LS Activity with scenarios where you need to manage the reservation of dining- / meeting rooms, associated equipment and have food and beverage (or any retail item) registered prior to the event, to be finalized and invoiced at the POS after the event has been concluded. Events can also be quoted through standard quote, and as well finalized using standard invoice. The point of sale features can be used to select food and beverage products for the event, then pushed to the event reservation, and added to the additional charges section.

It is possible to handle courses, which have a specific starting date, limited seat availability and reserving resources according to a predefined schedule. Then each participant can be registered and payments finalized through the point of sale.

Any activity, for example reservations or appointments, can trigger the issuing of tasks, which according to pre-set templates can be assigned to dates and time prior to arrival, during stay or after the activity is completed.

These tasks can be assigned to specific employees and the manager can keep track of their status on the role center.

The reservation features can also handle classes where you have a fixed schedule of individual sessions going on for a set timeframe, and keep track of the necessary resources to perform the classes.

LS Staff Management

The Staff Management module suits both the retail and hospitality market segments. Staff members are assigned to roles and shifts according to who is available for the job and their skill level. Salary cost is calculated at planning and compared to either finance budgets or role budgets. Roster planning is supported, with the ability to automatically schedule shifts according to fixed shifts or shift patterns, and the estimated cost is compared to budgets and actual figures as they come. The system can provide the managers with resource adjustment suggestions based on logic, which can fetch information from any data stored within the solution, or from external sources. For example, a weather forecast integration is provided as standard option in the solution and can affect the resource needs based on the forecasted results.

The module also covers time registration, using either designated clock terminals, or at the point of sale. Time registration is automatically compared to roster assignments, and only passed on to managers for inspection when not according to the schedule.

The time entries are converted to salary hours and cost according to very flexible conversion mechanism, which can also provide warnings according to defined comparison values, for example if overtime is passing certain limit or sick days are exceeding the monthly allowance.

For employee-facing functionality, LS Staff management includes an employee portal, where employees can view their shift assignments, receive shift requests, request shifts and vacation, and look at their planned or worked hours in various ways. The employee portal can run smart device, mobile phone, using the standard mobile client.

On the analysis front, managers can view planned or actual figures (both hours and amounts) based on days, weeks, months and location comparison, along with sales results and cost of goods sold from the LS Retail POS, and cost figures from the General Ledger. The final estimated profit/loss figures are one click away at the end of the day.

Finally, the hours can be exported to any salary solution, both within the Business Central environment or externally for processing the final pay slip results.

LS Pay

LS Pay is an integrated Electronic Fund Transfer (EFT) solution for retail and hospitality platforms, which allow you to accept payments regardless of the solution you are running, LS Central, LS One or LS Omni.

Through the years, card payments have been fragmented and difficult to work with especially in a multi-regional context. With LS Pay, we are unifying the payment landscape, offering integrations to multiple payment service providers, leveraging the latest technology available in the payment space.

Supporting Omni-channel payments is a key focus for LS Pay, allowing businesses to have the same payment service provider for all their channels. This means that transactions, regardless of their origin can be handled by the same PSP, whether on a stationary POS, on a mobile POS on the shop floor, or on-line on your eCommerce platform. This cross-channel tokenization supported by LS Pay enables you to return Items easily between channels.

Please see our Portal for a list of supported Payment Service Providers & countries: https://portal.lsretail.com/Products/LS-Pay

LS eCommerce

The LS Retail eCommerce solution is an addition to LS Central and meets the increasing demand for online shopping. This solution makes it possible to run a web store based on LS Central. The web store can be accessed from computers, tablets and mobile phones. The LS eCommerce solution is composed of two parts, the standard LS Central and LS eCommerce. The latter solution supports the storefront presence, but LS Central handles all retail configuration and Back Office functionality of the store.

The eCommerce functionality offers the management of in-store, mobile commerce and online store systems. Offers can be presented online and in-store alike. LS Central master data such as items, categories, contacts, discount offers and more are replicated and updated into the eCommerce database.

Basket and pricing calculation is done by web services along with the order creation where sales orders and customer orders are created in LS Central.

The LS Central eCommerce solution is integrated with LS Central (Version 11.x and upwards) providing an online retail platform for LS Central. It leverages the LS Central Member Management solution and member contacts available discounts.

LS eCommerce supports multiple front-end eCommerce platforms such as Magento (www.magento.com), Avensia Storefront (www.avensiastorefront.com) and Dynamicweb, (www.dynamicweb.com) – all supporting various plugins, templates and themes.

LS Loss Prevention

The Loss Prevention module gives the user the ability to analyze POS transactions to identify situations where loss to the retailer may occur. The solution views all the POS transactions and extracts transactions that match defined triggers. It then further analyzes the extracted results to create loss prevention events. The solution comes with twenty pre-defined triggers and the option for the retailer to define additional triggers. The events can then be analyzed further by store, POS, staff, date and time, and can be escalated from events to incidents.

LS Recommend

LS Recommend is a new tool in LS Central developed by LS Retail so that companies can recommend products to their consumers based on their purchase history.

LS Recommend provides item and user based recommendation that can be displayed in the LS Central POS or printed on the slip. LS Recommend provides an interface on the Azure Cognitive Services Recommendations API with addition of LS Central specifications.

The recommendation engine is based on items and sales history. The sales history can be user based where the user would be a member or a customer.

Recommendation can be given based on an item or a user, or both. There are three options available:

- Item to basket: recommends items based on items in a shopping basket. Note that the basket can only contain one item.
- Item to member or customer: recommends items based on a member's or customer's purchase history.
- Item to Basket with member or customer: recommends items based on items in a shopping basket, and on a member's/customer's purchase history.

If there is no sales history available for the user, the recommendation is based on the items in his basket.

LS Forecourt

LS Forecourt adds functionality to LS Central POS to interact with fuel pumps in a petrol station, show status of pumps in a graphical way and finalize fuel sales.

With the LS Forecourt comes the Forecourt Manager, a GUI program that runs on top of the POS and communicates seamlessly to the pumps and LS Central POS and thus allows POS user to have real time overview of pump status and transactions on a pump. The Forecourt Manager also provides some pump control from POS like stop and start pumps and authorize pumps. Number of types of fuel sales are supported like Post-pay were a fuel transaction is finalized after pumping and Pre-pay were the fuel sale is paid in advanced and the pump is pre-set to an amount or volume. The Forecourt Manager also supports scenario like Drive-off.

The Forecourt Manager interacts with the fuel pumps thru a forecourt controller that is a connection hub to all the hardware (pumps, tanks, price signs) in a petrol station. The POS needs a driver to be able to connect to the forecourt controller. LS Retail has developed drivers for a few types of forecourt controllers but if a driver does not exist for a specific forecourt controller type, the POS cannot connect to the pumps.

Apps for LS Central

There are few apps available for LS Central. LS Central Apps can be downloaded from Play Store (Android) and LS Retail site: https://mobiledemo.lsretail.com/Apps

LS Central app

The LS Central App is developed to run the LS Central web POS on mobile devices. The app eases the use of the web POS on mobile devices allowing the web POS to use peripherals like printer, scanner or PED that are connected to the mobile device via Bluetooth or Wi-Fi.

Two versions are available:

- Version for Android operating system with full functionality
- Version for iOS with a limited functionality that can only run the web POS and has not the support of connecting the web POS to peripherals

Mobile POS

Mobile POS is an app for sales personnel in the store to create and finish a sale.

With the app, the user can for example:

- search for items
- sell items by scanning the barcode, use lookup and find them in predefined menus
- give discounts
- suspend /retrieve transactions
- finish the sale with different tender types
- void line / void transaction

Each retail business can have the app customized for their own style, with their color and logos.

This work is done by LS Retail consulting services.

Mobile Inventory

Mobile Inventory is an app for staff to perform inventory processes.

Each retail business can have the app customized for their own style, with their color and logos.

This work is done by LS Retail consulting services.

Master data lookup

The ability to look up and show data on the mobile device from item, customer and vendor master

- Item master has 3 views:
    - General
    - Show quantity on hand in all colors of an item
    - Show quantity on hand in all sizes for an item
- The views are all developed within LS Central therefore the partner can change them as he wants or create new views

Worksheets

The mobile device can give you the ability to enter data into any worksheet that has been defined for the user:

- Process is that you select the worksheet
- If it is counting worksheet with areas, then it will ask you for the area
- Now the user selects the item (item number, scans or search with a list)
- Enter the quantity

The whole worksheet process is offline with an item master on the mobile device

When finished, the user sends the worksheet to the central database for posting

Processes supported:

- Purchasing
- negative stock adjustment
- positive stock adjustment
- order SEL or item labels
- pre-pack explosion
- stock counting with or without areas

Receiving documents

The user needs to select the document he wants to receive by vendor, list of all, by scanning an item. The document is downloaded to the mobile device for receiving. The mobile device needs to be online to select and download the document.

The actual receiving process can be offline. There are two methods from which to choose.

- Blind receiving
    - The user scans all items he is receiving and enters quantity. The Mobile device will let the user know if it does not find the item master or if the item is not in the document
    - When the user has entered all the items, he closes the process and the system will compare the entered items and quantity to the document and ask him to re-scan and enter the quantity of the item with differences, without telling him what the document quantity is. It is possible to define how many recounts are done
    - The result is then sent to the central database for posting

- Receiving by list
    - The user sees a list of all items and quantity in the document
    - User selects or scans an item to be received and enters the quantity
    - The mobile can show the list with filtering showing all records, only records with difference, only records that have not been received
    - Then the result is then sent to the central database for posting

The types of document that can be received are:

- Purchase Order
- Transfer Order (in)
- Sales Return Order

Picking documents

The types of documents that can be picked are:

- Transfer Order (out)
- Purchase Return Order
- Sales Order

All document types can be picked as create. Staff can walk around with a mobile device and scan items per order from a customer on a piece of paper. The Sales Order is then created when posted.

Otherwise, the process is like Receiving documents, where you can pick blind or by list as mentioned above.