24.14. mSupply deployment

This document gives an overview of the process of installing mSupply at a new location.

Terms

- A **virtual store** will usually map to a physical location- either a separate warehouse or an entity within a warehouse that has it's own items and facilities and transactions
  - All virtual stores share the same item and customer/supplier lists, but if an item is not used in all stores, it can be hidden in stores where it is not used. The same applies for customers/suppliers.
- A **transaction** refers to a record that records stock movements- from a supplier, to a customer/facility, or to adjust stock
- A **name** refers to a customer or supplier.
- A **customer** may be a supply point- not necessarily an entity that pays for supplies.

Cloud or local

Criteria for for a robust **local** installation of mSupply:

Physical locations

- Dry, secure locations with the infrastructure connections as detailed below
- Management of security for human access.

Hardware

- You will need to buy hardware as per specifications on this web site.
- Scalability- as the size of your installation grows you might have to buy new hardware (more speed, RAM, storage)
  - Expect to purchase a main server plus one extra server for every 35 remote desktop users and one web server for every 1000 sync users.
  - This is much easier for a cloud or virtual server - you just assign more RAM, storage or CPUs to the server
- Redundancy
  - if hardware failure will create more downtime than is acceptable (realistically it will create one or two days of downtime), then you need to have a redundant system. That is, you need to:
    - replicate the hardware at a different physical location
    - Have a fast network connection between the two sites.
    - The second site will need the same network connectivity for client access as your main site.
    - Have control of DNS to redirect users to the backup site when the primary site fails.

Electricity supply

- Stable, earthed electricity supply
- UPS systems with enough runtime to cover outages and the ability to communicate with the server so it can gracefully shutdown before batteries are exhausted.
- A generator system with auto-start might be needed.
- All of the above at the redundant site as well.

Network

- Enough ingress and egress network capacity for the software's requirements.
- Ability to expand the capacity as the system grows.
- The same capacity at the redundant site.
- A high capacity network connection between the main and the redundant site for realtime replication of server data so the redundant site is up to date.
- You may also decide that redundant connections are needed to the primary server site.

Local IT expertise

- Sufficient local expertise to distinguish between hardware, software, network and electricity issues.
- The expertise must be available during all hours the system must be available
- Written fail-over plans for failures in the above systems.
- Ability to execute plans on time when there is a failure.
- Knowledge transfer to new staff when existing staff leave.

Structure

It is important to design the overall structure to meet your organisation's needs. This mainly focuses on:

- Deciding how to connect users
    - Direct LAN connection
    - Terminal services
    - Discreet servers with synchronisation. This option is useful when internet access is intermittent.
- setting up virtual stores
- Setting up preferences
    - General Preferences
    - Invoices Preferences
    - Printing Preferences
    - Purchase Order Preferences
    - Synchronisation

Importing data

Most sites will have existing lists of items and names. The user guide has sections on:

- Importing items & stock
- Importing Items
- Importing Customers, Suppliers, Patients

Users

The permissions system can be set up for individual users, or be based on groups. See Managing users

Warehouse management

If your warehouse has existing locations you can import them: Locations and Location types Otherwise you will need to design a location scheme.