Imprest System and Oracle Interfaces

This document explains what the Barcode Logic Imprest System (currently ImprestCE2 V2.2.0) is for, and how it integrates with the NSW Health Oracle inventory system.

What is an Imprest?

A dictionary definition:
"An **imprest** is a cash account a business relies on to pay for small, routine expenses. Funds contained in **imprests** are regularly replenished, in order to maintain a fixed balance".

In the health environment, an Imprest is a cupboard or other location containing consumables such as dressings, tape, canulas etc. which must be regularly replenished to a fixed stock level.

How does the Barcode Logic Imprest System work?

Before barcoding technology was introduced, consumables were reordered by manually writing down the items required and creating requisitions directly into the Oracle R12 Inventory Management System (from here on referred to as Oracle).
Barcoding and automation improves the speed and accuracy of this data collection.

In simple terms, Oracle produces a text file called **Labels.txt** containing imprest location and item data which is transmitted by FTP to the Imprest system which is installed on a Windows PC.

Barcode labels for locations and items are printed and attached to the shelves in each imprest location.
When reordering, using a mobile computer with an integrated barcode reader, the operator scans the location barcode, followed by the item barcode and enters the quantity required.

This order information is then transferred from the mobile computer, to the imprest system on the PC, and from there, a file called **stores.txt** is created and sent back to Oracle using FTP.

How the Imprest system uses the Labels.txt file and creates the stores.txt file is explained in the ImprestCE2 User Guide (ImprestCE2.pdf) and is not covered by this document.

Creation and transmission of the Labels.txt file, and retrieval and processing of the stores.txt file are the responsibility of each LHD, but here is our understanding of how it works:

IF1063 - Creation of Labels.txt

The Labels.txt file (with capital L) is created by running report IF1063 in Oracle.
After the report is run, the file is transmitted by FTP to a server with an IP Address tied to the employee number of the person running the report.

To enable this to happen, the FMIS department must be notified of the Employee number of the staff member running the report, and the IP Address of the FTP server where the file is to be sent.

LHD's can do this in two ways.

1. Labels.txt sent to Shared drive.

The IF1063 report is run once in the morning by a manager.

The FTP Server is located somewhere on the shared network so when the Labels.txt file is created and transmitted it is accessible by all the Imprest Systems within the LHD via a drive share.

Oracle must be configured with the employee number of the manager and the IP Address of the FTP server.

Each Imprest System is configured to find the file in this location by selecting the shared drive and/or folder in **Tools > Options> File Paths > Item Import** from the main menu.

Pros:
The report only needs to be run by one person each day.
No need to configure an FTP Server on each Imprest System PC.
No need to configure Oracle with several employee numbers and IP addresses.

Cons:
Changes to locations, items in those locations, min and max quantities etc. made in Oracle during the day will not be reflected in the Imprest system data until the next morning unless a request is made to the manager to run IF1063 again.

2. Labels.txt sent to Local Drive

IF1063 is run on each Imprest System PC whenever required by the operator in that location.

The Windows FTP server is enabled on each Imprest System PC.

Oracle must be configured with the employee number of the operator of the Imprest System PC and the IP Address of that PC.
Note: I believe each IP Address (and therefore each Imprest PC) can be configured for only one operator.

The Labels.txt file will be transmitted to the PC where the IF1063 report was run.
Traditionally, the file it transmitted to the **C:\Imprest\In** folder
The root directory of the FTP Server is set to **C:\Imprest**.

Each Imprest System is configured to find the file in this location by selecting the local drive and folder in **Tools > Options> File Paths > Item Import** from the main menu.

Pros:
The report can be run by the operator whenever they like, meaning changes they have made to the data in Oracle will be reelected in the Imprest System almost immediately..

Cons:
The FTP Server must be configured on each Imprest System PC.
Oracle must be configured with employee numbers and IP addresses of each PC..

Method 2. Is more commonly used for historical reasons but method 1 (shared drive) is easier to configure and maintain.

Labels.txt - File Format

The Labels.txt file is a flat text file, pipe delimited containing these fields:
Imprest Location code (Subinventory)
Item Code
Item Description
Unit of Measure
Min Quantity

Max Quantity

E.g.

ARM EMERG HNE	845118	DRESSING, WOUND, ABSORBENT, ADHESIVE, 5x7cm, ISLAND, TRANSPARENT FILM, WATERPROOF, STERILE (TEGADERM PAD)	BOX OF 50	1	4
ARM EMERG HNE	845119	DRESSING, WOUND, ABSORBENT, ADHESIVE, 9x10cm, ISLAND, TRANSPARENT FILM, WATERPROOF, STERILE (TEGADERM PAD)	BOX OF 25	1	1
ARM EMERG HNE	845120	DRESSING, WOUND, ABSORBENT, ADHESIVE, 9x15cm, ISLAND, TRANSPARENT FILM, WATERPROOF, STERILE (TEGADERM PAD)	BOX OF 25	1	1
ARM ICU HNE	500045	TAPE, ADHESIVE, ELASTIC COTTON, 7.5cm x 2.5m, WATER REPELLANT, ZINC OXIDE (TENSOPLAST)	EACH	1	2
ARM ICU HNE	500058	TAPE, ADHESIVE, NON-WOVEN, 10cm x 10m, RETENTION (HYPAFIX)	EACH	1	2
ARM ICU HNE	500064	TAPE, ADHESIVE, RIGID, 1.25cm x 9.2m, WATERPROOF, ZINC OXIDE, TAN (LEUKOPLAST STANDARD)	EACH	1	2
ARM ICU HNE	500067	TAPE, ADHESIVE, OCCLUSIVE PLASTIC, 7.5cm x 5m, WATERPROOF, ZINC OXIDE, TAN (LEUKOPLAST SLEEK)	EACH	1	4

Steps required

To get the Labels.txt file to a location where the Imprest System can import it requires:

1. The employee number and IP address of the destination FTP Server configured in Oracle (Contact FMIS Dept.).
2. An FTP Server enabled and configured, either on a shared server or locally on the Imprest System PC.
3. Configure the Imprest System by selecting the drive and folder in **Tools > Options> File Paths > Item Import** from the main menu to point to the drive where the Labels.txt file will be sent.

IF1035 - Processing of stores.txt

A file called **stores.txt** (with lower case s except for SWSLHD) is created by the Imprest System.
Traditionally, the file is created in the **C:\Imprest\Out** folder on the Imprest System PC.
This file contains the list of items to be ordered.
The file is transmitted to an FTP Server and will be turned into requisitions by Oracle.

Transmission of stores.txt

The stores.txt is sent using FTP to the Oracle FTP server by one of two methods:

1. Oracle R12 Barcode transfer script

A Windows script was created by HealthShare to transmit the file by clicking on an icon on the desktop labelled **Oracle R12 Barcode transfer script**.
It transmits the file and renames it to
BL_IMPREST_STORES_REQ_nnn.nnn.nnn.nnn_yyyymmddhhmmss.dat
where nnn.nnn.nnn.nnn is the IP Address of the Imprest System PC the file was sent from

and yyyymmddhhmmss is the date and time the file was sent.
This stops data being overwritten and helps the operator identify their file later.

2. Integrated FTP Client

In version 1.6 of the Imprest System the functionality of the **Oracle R12 Barcode transfer script** was integrated into the Imprest System application as occasionally the operators were forgetting to transmit the file to Oracle.
If enabled (from **Tools > Options > Automatically Send Data to Oracle**) the stores.txt file will be transmitted and renamed immediately after uploading the order data from the scanner (Load Imprest Data From Scanner to Oracle).

stores.txt - File Format

The stores.txt file is a flat text file, pipe delimited containing these fields:
Organisation ID.
Imprest Location code (Subinventory)
Item Code
Order Quantity

E.g.
321|ACAT BD2041 HNELHN|641627|1|
321|ACAT BD2041 HNELHN|642134|3|
321|ACAT BD2041 HNELHN|500173|4|
321|ACAT BD2041 HNELHN|641978|2|

Processing stores.txt

To convert the order data in the stores.txt file to requisitions in Oracle, it is necessary to perform these steps (note: This procedure may well vary between one LHD and another):
1. **Log on** to Oracle.
2. Select **PO Imprest Import**
3. In Find Requests, select **Submit a New Request**.
4. Select **Single Request**.
5. Click on the … icon to the right of the name field. A list of reports should appear.
6. Select **IF1035 Barcode Logic Imprest System Requisition Processing**.
7. A Parameters box will appear. Click on the button with the … icon at the end of the Imprest field.
8. A list of Imprest reports (the files transmitted to the FTP Server) will appear. Select the report that has your IP address and the correct date and time within the description..
9. Click OK

10. Orders should now be processed.

If any of this information is incorrect, doesn't make sense, or more useful information can be added, please email suggestions to: info@barcodelogic.com.au