EQUIPMENT
Tracking

You stack it. We track it

E.R.I.C.A. (Equipment Reconciliation Invoicing and Control Application)

ERICA was designed to be central operations software for users of returnable equipment, a single integrated system for tracking, delivering, collecting, and invoicing for an equipment pool. The system manages every aspect of returnable equipment, from planning customer restocks, through collecting used equipment, to invoicing for equipment use. The system has been designed to be incredibly flexible, and supports almost any conceivable equipment supply scenario.

Model

In order to accurately track equipment movements throughout the supply chain, ERICA's internal model can be set to mirror your real-world logistics network. Through this model ERICA can recognise the types of locations equipment is moving between (Supplier, DC, Factory, Plant, etc) and create the correct movement types (Supplier Inbound, Customer Delivery, etc).

Roles

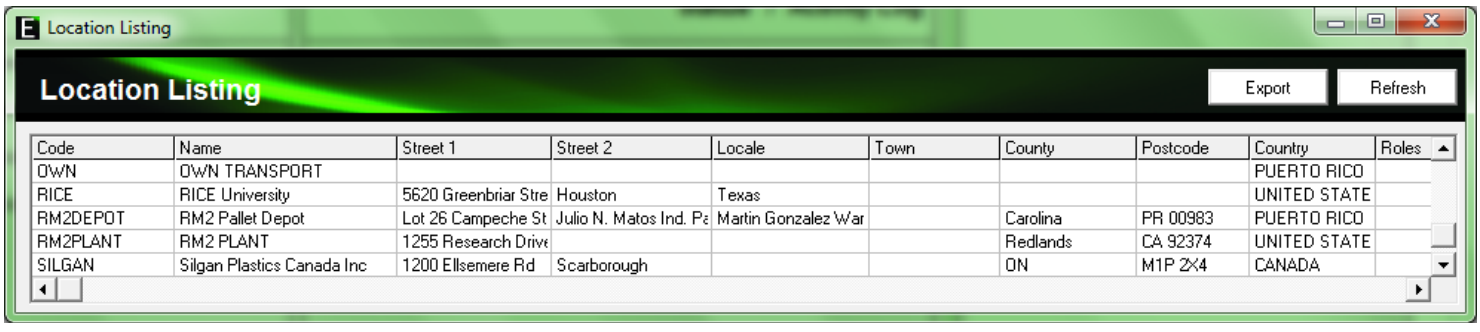
Often equipment at a location can be in varying states of use, under load, stacked in the yard, awaiting cleaning etc. A simple location balance can often be misleading when calculating how much equipment on the site is actually available for immediate use. To address this problem ERICA splits the balance at a location into a number of user definable roles. An example of these roles can be seen in Fig 1.

Fig 1

HOUSTON DISTRIBUTION CENTRE	
Equipment: Steel Stillage	**8'560**
Yard	2'312
Warehouse	6'248
Equipment: Plastic Tote	**11'440**
Yard	5'236
Warehouse	6'204

Locations

In order to maintain complete visibility of all the equipment in circulation, ERICA maintains a list of all the locations in the pool where the equipment may be found. These locations include co-packers, distribution centres, customer sites etc. In the case of very large locations, such as airports, or large manufacturing complex's sub-locations can be defined within the location, for example individual buildings / yards in a complex, or terminals at an airport.



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Equipment & RFID

ERICA recognises two classes of equipment, Generic equipment, and Unique equipment. The former being low cost items such as plastic trays, totes, etc, which are not uniquely identifiable. Unique items are usually more expensive equipment such as roll-cages, which can be uniquely identified by means of a serial number, barcode, or RFID tag. ERICA maintains balances for both classes of equipment, but further to this, the entire population of unique items is represented in ERICA such that a balance of 300 roll-cages shown at a location in ERICA can be drilled down to show the ID's of the 300 individual roll-cages that make up the balance. ERICA maintains a history of the movements of all unique items; the user can add extendable datasets to this history. A dataset is either a String, Date, or Yes/No value that is associated with each item. There is no limit to the number of datasets that can be recorded against an item. When an items dataset is modified, its previous values are added to the items history. These datasets can be useful in recording equipment status, such as the date it was last maintained, or cleaned.

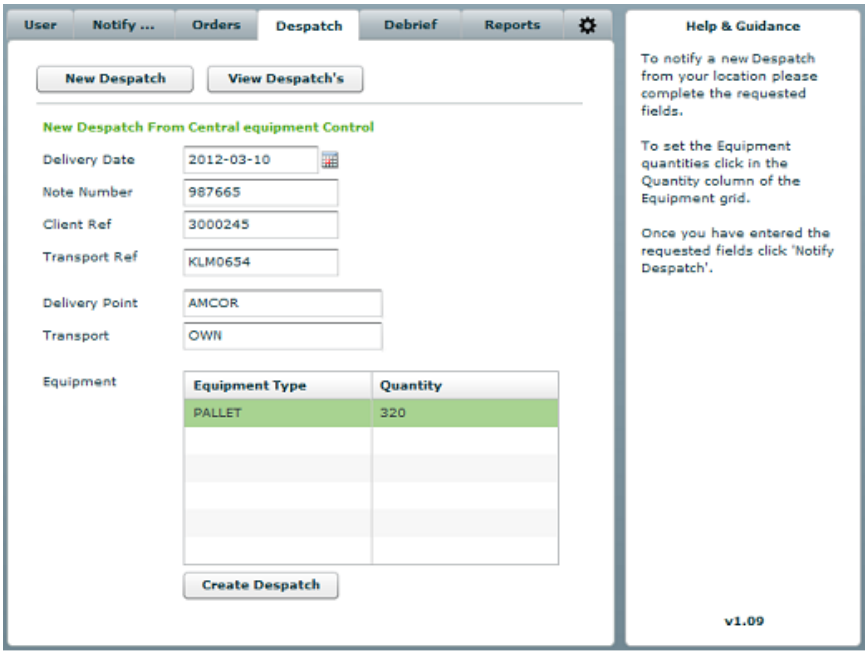
Movements

Equipment movements form the core of ERICA's data, wherever possible movement information will be gathered from interfaces to existing IT Systems, such as WMS or Stock and Order systems. The interfaced movement information can be supplemented with movement information entered manually, or taken via our Web Portal or even from hand-held terminals.

Based on the movement information, ERICA maintains real-time balances of equipment throughout the supply chain. Historical balance reporting allows a user to see how a location balance has changed over a selected period.

SCOUT

ERICA can receive movement information from our SCOUT application, designed to run on Windows CE based handheld terminals. SCOUT supports reading both Barcodes, and RFID tags, and can be provided as a complete hardware solution



Web Portal

ERICA can be connected to our Web Gateway, this is an Adobe Flex application hosted on the public internet which allows remote staff, and optionally third parties to enter or debrief movements on the system. The web gateway provides a simple streamline user interface, ideal for use by Gatehouse / Warehouse staff with minimal or no understanding of the central system.

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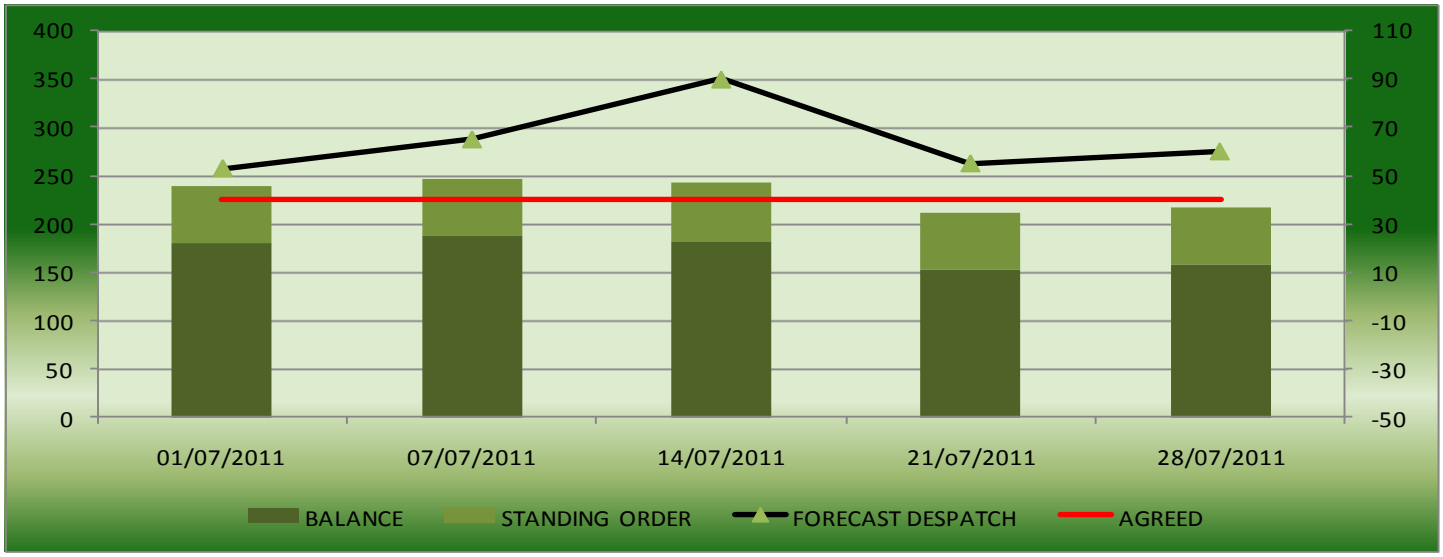
Financials

If appropriate to your supply chain ERICA can generate charges (and credits) for equipment usage. These charges can be used to bill third-parties for equipment usage, or to maintain a deposit and return scheme, helping to focus customers on returning empty equipment. Charges raised on the system can be assigned to an invoice on a weekly or monthly basis, and generated invoices can be automatically emailed or faxed to recipients. To help streamline the accounts process, invoice information can be interfaced to existing Accounts packages such as Oracle or Sage.

Equipment Circulation

In order to help manage circulation of empty equipment throughout the network, ERICA can maintain supply agreements with Production locations in the network, to help ensure that the location always has enough empty equipment to maintain production levels. Where advanced production information is available ERICA can generate advanced forecast reports, highlight any potential shortage of equipment.

Collection agreements can be set to help manage the process of collecting empty equipment from delivery locations, by associating them to the nearest DC or Production site that can make use of the empty equipment.



ERICA Supplier RTE Balance Forecast, highlighting a drop below agreed operating levels

Public Pooling Services (CHEP, iGPS, LPR)

As well as controlling owned equipment, ERICA can provide control of hired equipment from companies such as CHEP or iGPS. In addition to maintaining internal balances of hired equipment throughout the network, the system can make electronic movement declarations to the relevant Pooler (CHEP, iGPS, etc). Where electronic invoice information is also available such as the CHEP PGTL, ERICA can reconcile the chargeable movements, helping to highlight inaccuracies on the provided invoice and prevent equipment losses.

Reporting

Usually as part of any new project implementation a report-pack is defined to provide the user with a collection of simple one-click reports to meet their daily, weekly, monthly need. In addition to these report packs ERICA provides an inbuilt Report Generator which supports queries of all of the data available in ERICA (Movements, Charges, Locations, etc).

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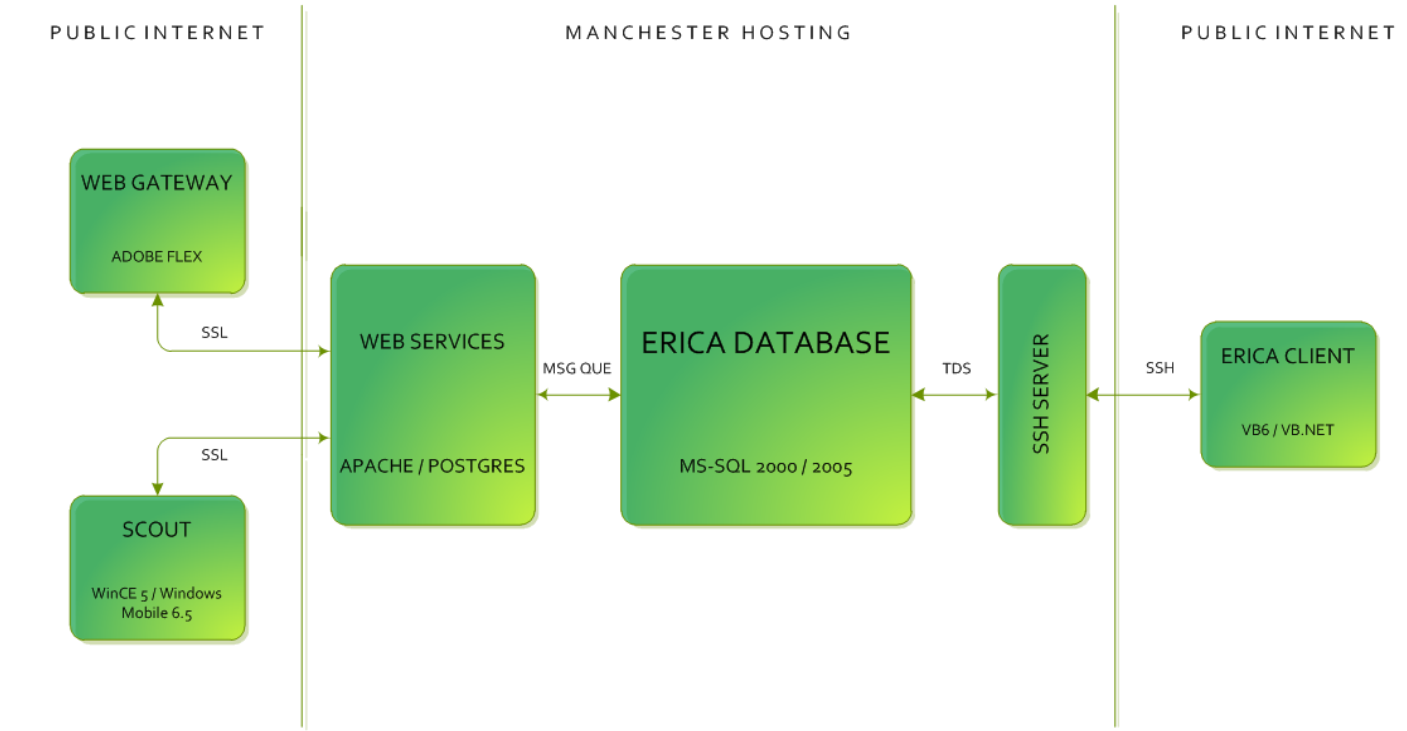
ERICA Technical Details



Client application minimum hardware requirements

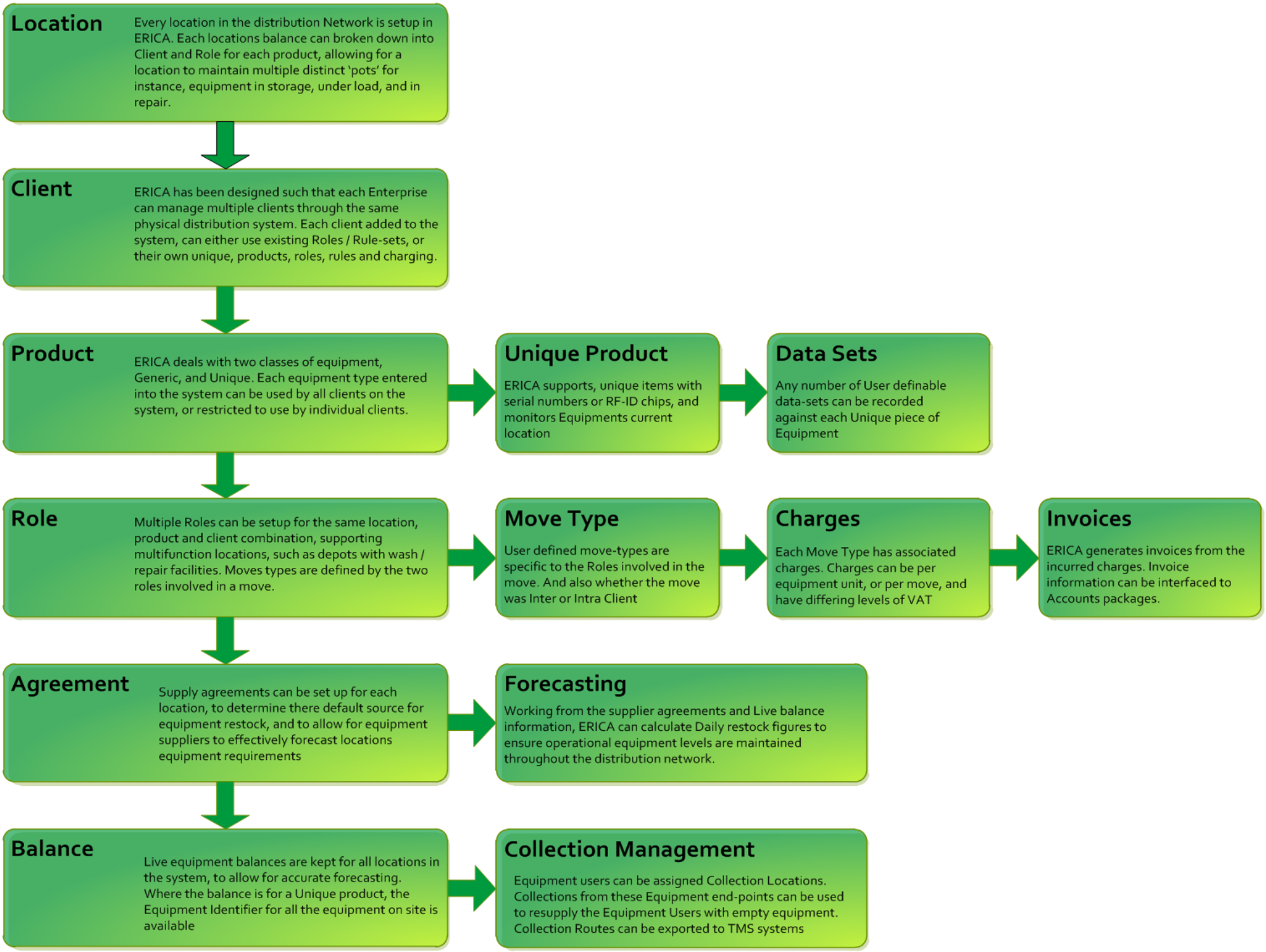
- IA32, AMD 64 or Intel 64 architecture – Intel or compatible Pentium III or
- faster recommended.
- 512Mb RAM
- 20Mb disk space for client application.

Operating System and software

- Microsoft Windows XP, Windows Vista or Windows 7
- MDAC 2.8.1 or later (supplied with the client application)
- Reports can output to Excel. Excel 2003 or later is advantageous.
- Reports may be output as PDF files. Adobe Acrobat Reader is included on the installation CD.

Networking

- TCP/IP networking between client and server.
- Interface file transport from feeder systems.
- Interface file transport to any system requiring files from ERICA.


Location
Every location in the distribution Network is setup in ERICA. Each locations balance can broken down into Client and Role for each product, allowing for a location to maintain multiple distinct 'pots' for instance, equipment in storage, under load, and in repair.
Client
ERICA has been designed such that each Enterprise can manage multiple clients through the same physical distribution system. Each client added to the system, can either use existing Roles / Rule-sets, or their own unique, products, roles, rules and charging.
Product
ERICA deals with two classes of equipment, Generic, and Unique. Each equipment type entered into the system can be used by all clients on the system, or restricted to use by individual clients.
Unique Product
ERICA supports, unique items with serial numbers or RF-ID chips, and monitors Equipments current location
Data Sets
Any number of User definable data-sets can be recorded against each Unique piece of Equipment
Role
Multiple Roles can be setup for the same location, product and client combination, supporting multifunction locations, such as depots with wash / repair facilities. Moves types are defined by the two roles involved in a move.
Move Type
User defined move-types are specific to the Roles involved in the move. And also whether the move was Inter or Intra Client
Charges
Each Move Type has associated charges. Charges can be per equipment unit, or per move, and have differing levels of VAT
Invoices
ERICA generates invoices from the incurred charges. Invoice information can be interfaced to Accounts packages.
Agreement
Supply agreements can be set up for each location, to determine there default source for equipment restock, and to allow for equipment suppliers to effectively forecast locations equipment requirements
Forecasting
Working from the supplier agreements and Live balance information, ERICA can calculate Daily restock figures to ensure operational equipment levels are maintained throughout the distribution network.
Balance
Live equipment balances are kept for all locations in the system, to allow for accurate forecasting. Where the balance is for a Unique product, the Equipment Identifier for all the equipment on site is available
Collection Management
Equipment users can be assigned Collection Locations. Collections from these Equipment end-points can be used to resupply the Equipment Users with empty equipment. Collection Routes can be exported to TMS systems