Document Title:	EPOSS Component Catalogue
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Pathway		Ref:	EP/DES/007
	EPOSS Component Catalogue	Version:	2.0
		Date:	12/12/97

CONTENT

0.1 DOCUMENT HISTORY

Version	Date	Reason
A	13/08/96	First Draft
1.0	02/09/96	First Issue
2.0	12/12/97	This document has been administratively baselined in order to bring the document under formal change control

0.2 ASSOCIATED DOCUMENTS

Version	Date	Title	Source

0.3 ABBREVIATIONS

0.4

CONTENTS

1.   INTRODUCTION

This document provides a technical overview of the Pathway EPOSS components. A short description of functionality and a diagram illustrating relationships with other EPOSS and Riposte components is included for each component.

The EPOSS Accounting and Reporting components are the subject of a separate technical design document.

2.   SCOPE

This document does not document the methods and properties exposed by EPOSS components.

3.

COMPONENT GROUPS

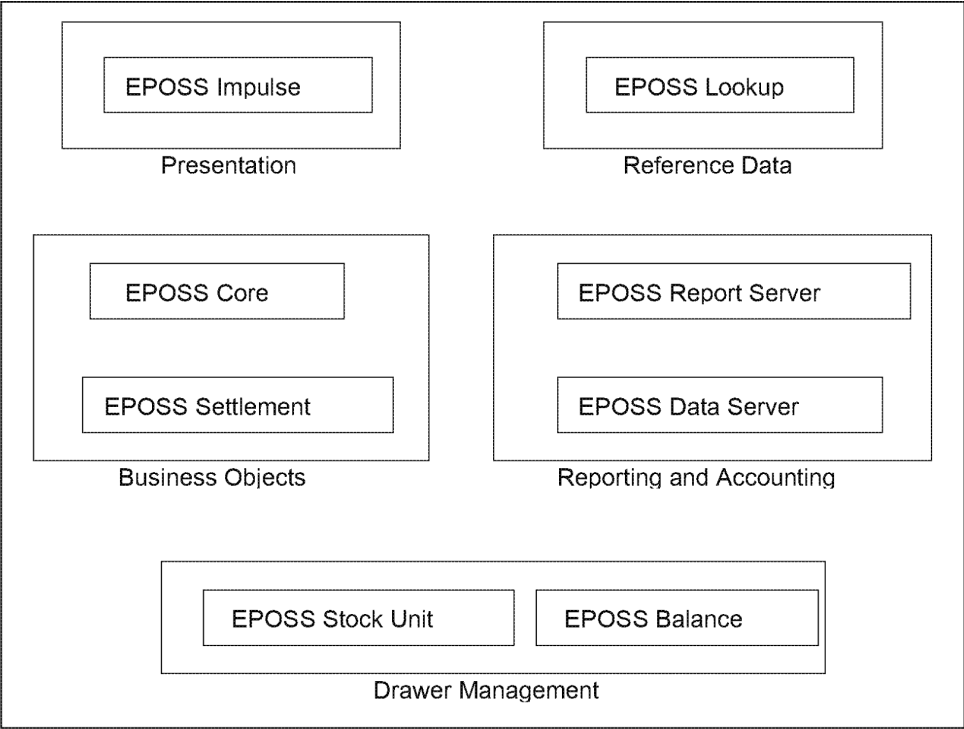The following diagram illustrates the EPOSS component groups.

Figure 1 - Component Overview

4.

Pathway

EPOSS Component Catalogue

Ref: EP/DES/007
Version: 2.0
Date: 12/12/97

RUN-TIME OBJECTS

The run time objects are the EPOSS components that will be resident on each Pathway terminal to drive the EPOSS functionality.

4.1   EPOSS CORE

The EPOSS Core Object implements the business rules surrounding Point of Sale activities.

Driven by reference data, this component provides the functionality for transacting Products. This functionality includes defining the Desktop User Interface for data entry, committing transactions to the Desktop Stack and managing integration with other applications.

All impulses (Token, Button and PLU) result in a call to the CallInterface of EPOSS Core.

The Interaction between EPOSS Core and other Riposte and EPOSS components is illustrated below :
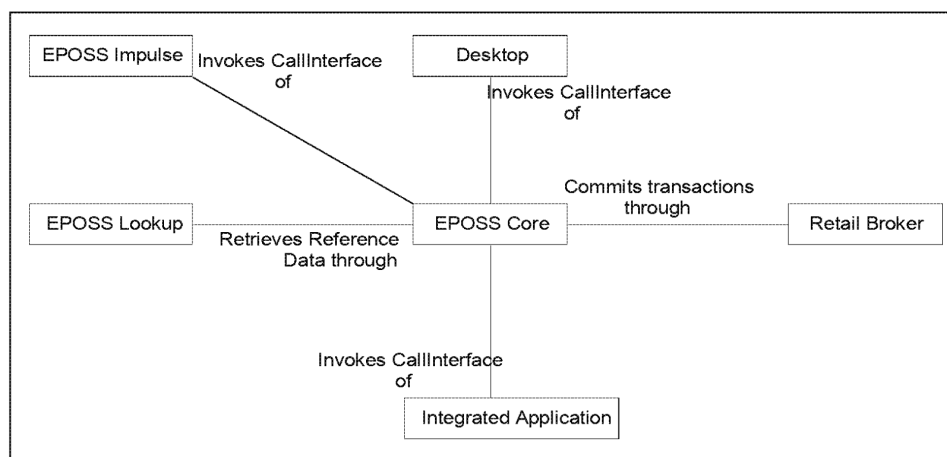

Figure 2 - EPOSS Core Relationships

4.2

EPOSS IMPULSE

The EPOSS Impulse Object handles the definition, management and routing of all Impulses. Impulses fall into 3 categories :

1. Menu Hierarchy / Buttons
2. PLU Impulses
3. Token Impulses

Once defined, the Riposte Desktop and Validation Objects manage the invocation of the required application whenever an Impulse fires. The EPOSS Impulse definitions are defined by reference data. All Impulse reference data is stored as persistent objects.

The diagram below illustrates the relationships between the EPOSS Impulse Object and other EPOSS and Riposte components.
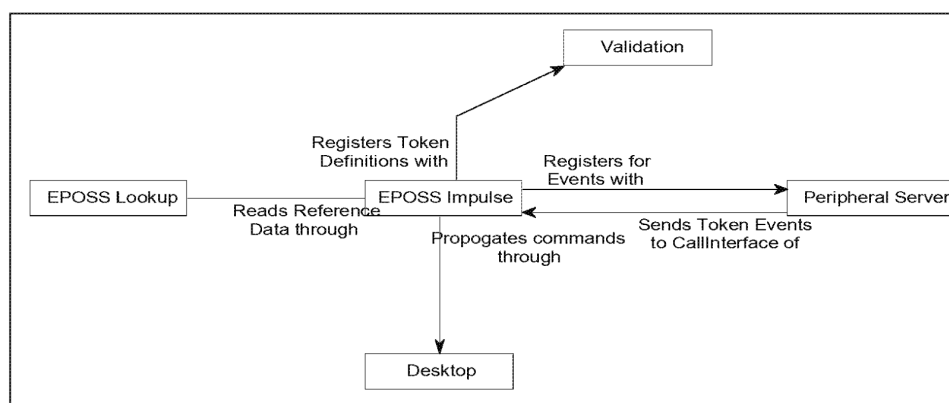

Figure 3 - EPOSS Impulse Relationships

4.3

EPOSS SETTLEMENT

The Settlement Object has several responsibilities :

1. Ensuring that a session is not ended until the session balance is zero;
2. Providing quick access to designated EPOSS Products (Settlement Products);
3. Providing fast settlement (automatic generation of a balancing transaction) using designated EPOSS Products (Settlement Products);
4. Generation of a Session record;
5. Consolidation of Session information for subsequent receipt production.

The EPOSS Settlement Object integrates with the Riposte Retail Broker using existing hooks. All committal of transaction and session information to the Journal is handled by the Retail Broker.

Relationships between the EPOSS Settlement Object and other EPOSS and Riposte components is illustrated below :
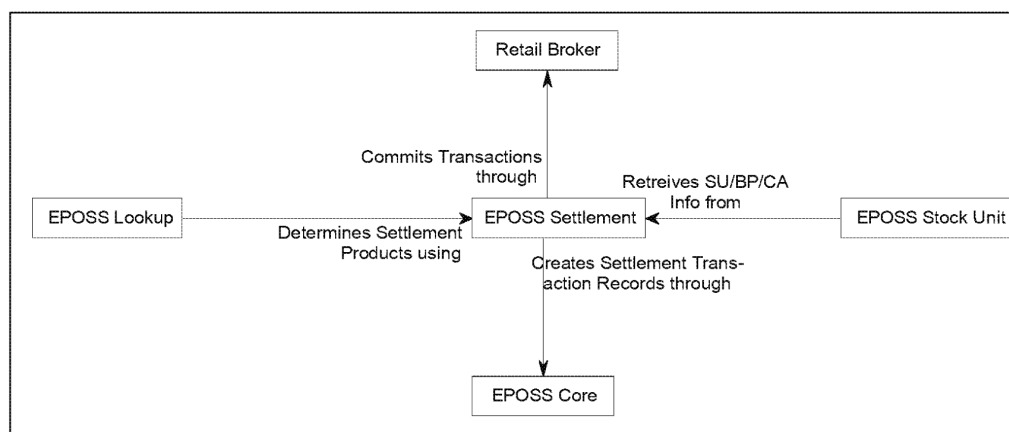

Figure 4 - EPOSS Settlement Object Relationships

4.4

EPOSS LOOKUP

The EPOSS Lookup Object allows EPOSS components to retrieve reference data items from the Journal. This extra layer of abstraction from standard Riposte facilities is provided for a number of reasons.

1. To simplify the complex problems of EPOSS reference data management by providing hidden mechanisms controlling the availability of persistent objects in the office;
2. To provide a caching mechanism for commonly accessed persistent objects if necessary;
3. To provide commonly required functions for accessing collections of persistent objects.

The lookup server is used by all EPOSS components making use of reference data (persistent objects).

4.5

EPOSS STOCK UNIT

The EPOSS Stock Unit Object provides functionality surrounding the area of Stock Unit management and information about the currently logged on User / Stock Unit. Functions include :

1. Provision of Stock Unit Attachment information;
2. Provision of current Accounting Period information (Cash Account Week and Balance Period);
3. Validation of Stock Unit logon;
4. Creation / Deletion of Attachments;
5. Creation / Deletion of Stock Units;
6. Management of Stock Unit Smart Cards.

The various Stock Unit Management functions will result in the creation, deletion or amendment of Persistent Objects and Stock Unit Smart Card contents.

The information provided by the EPOSS Stock Unit Object regarding the currently logged on Stock Unit session is used by the EPOSS Settlement Object and EPOSS Core Object when writing Session and Transaction through the retail broker.

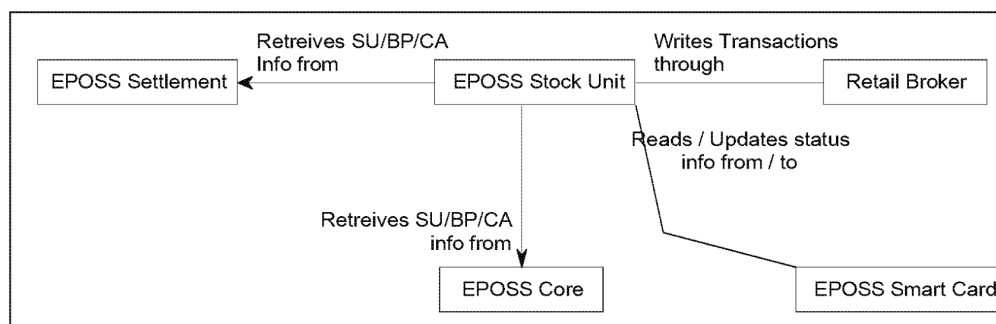The following diagram illustrates the Relationships between EPOSS Stock Unit and other EPOSS and Riposte components.

Figure 5 - EPOSS Stock Unit Object Relationships

4.6

Pathway

EPOSS Component Catalogue

Ref: EP/DES/007
Version: 2.0
Date: 12/12/97

EPOSS BALANCE

The EPOSS Balance Object provides the EPOSS balancing functionality. Responsibilities include :

1. Validation of a balance request (ensuring all required pre-balancing activities such as Cash Declaration are complete);
2. Production of the Balance Report using the Report Server;
3. Control of rollover into the next balancing period and production of required opening stock figures persistent objects;

The diagram below illustrates the relationships between the EPOSS Balance Object and other EPOSS and Riposte components :
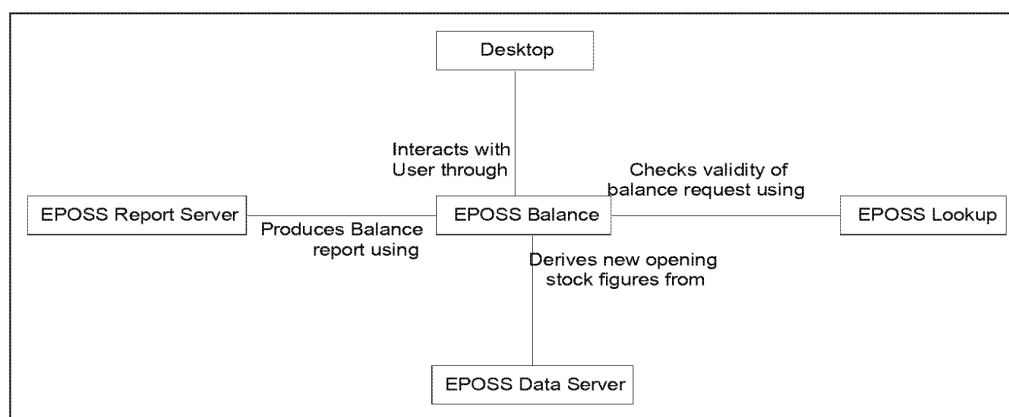

Figure 6 - EPOSS Balance Object Relationships

4.7

EPOSS DATA SERVER

The EPOSS Data Server provides a generic summarisation mechanism whereby Journal messages can be grouped and totalled using a reference data driven Accounting and Reporting hierarchy.

The Data Server is used primarily by the EPOSS Report Server to group and summarise for individual reports. It is also used by the EPOSS Balance Object to transparently derive product totals for the production of opening figures as part of the rollover process.

The Data Server is driven by a hierarchy of Nodes and Accumulates. The design of the Reporting and Accounting Hierarchy is the subject of a separate Technical design document and is not described fully here.

The relationship between the EPOSS Data Server and other EPOSS and Riposte components is illustrated below :
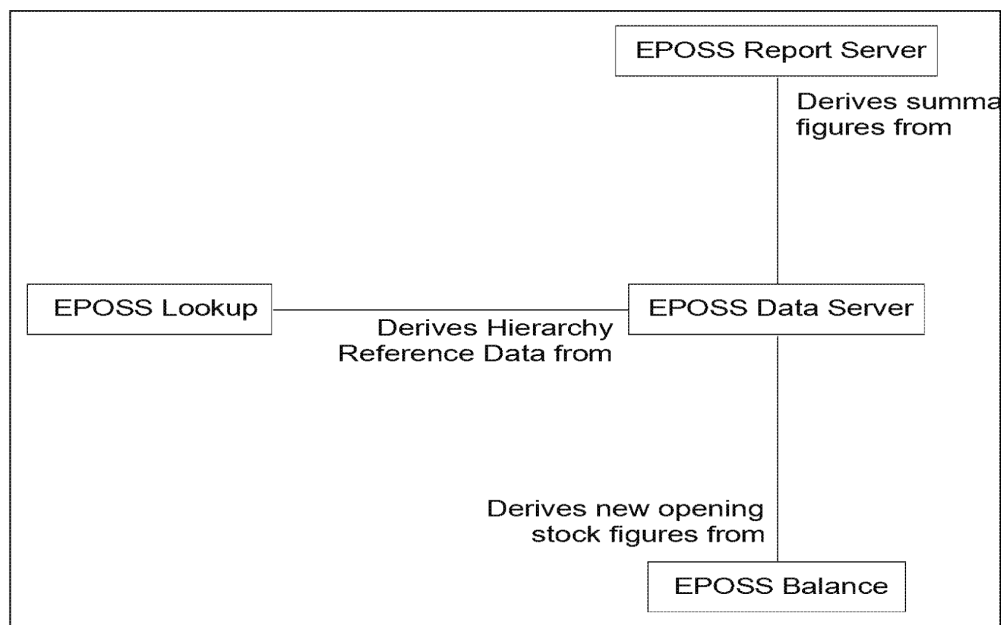

Figure 7 - EPOSS Data Server Relationships

4.8

Pathway

EPOSS Component Catalogue

Ref: EP/DES/007
Version: 2.0
Date: 12/12/97

EPOSS REPORT SERVER

The EPOSS Report Server provides all of the EPOSS Reports and Receipts. The Report layouts are defined by reference data and stored as Riposte persistent objects.

The EPOSS Report Server is only concerned with the presentation aspects of reporting, making use of the EPOSS Data Server to derive grouping and summarisation values.

The Report Server provides the ability to output to either Counter Printer, Back Office Printer or Print Preview window. For printing, standard Windows printer drivers are used.

The reference data that defines report layouts is the subject of a separate technical design document and is not described in full here.

The diagram below illustrates the relationship between the EPOSS Report Server and other EPOSS and Riposte components.
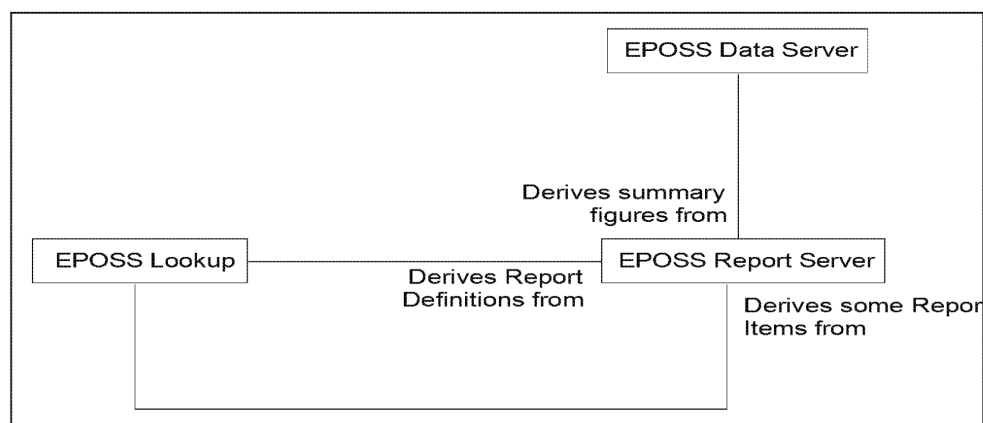

Figure 7 - EPOSS Report Server Relationships

5.

Pathway		Ref:	EP/DES/007
	EPOSS Component Catalogue	Version:	2.0
		Date:	12/12/97

DEVELOPMENT TOOLS

5.1 PERSISTENT OBJECT GENERATOR

5.2 REPORT DESIGNER

5.3 REFERENCE DATA MANAGEMENT DATABASE