VDX Architecture Overview

Web Browser

http

Presentation Services

XSLT Stylesheets

Web Application Server

| End-User Requesting | Request Management | Broadcast Searching | Profile Configuration | Management Information |

Transaction Store Oracle RDBMS

Broadcast Search

Z39.50   **http**

Background Processes

- Auto-Routing & Mediation Agent
- ISO ILL Protocol Driver
- ART Protocol Driver
- Email Request Driver
- User Alerting Agent
- Centralised Request Driver
- Intermediary Request Driver
- Document Delivery Driver
- Circulation System Interface
- E-mail Request Interface

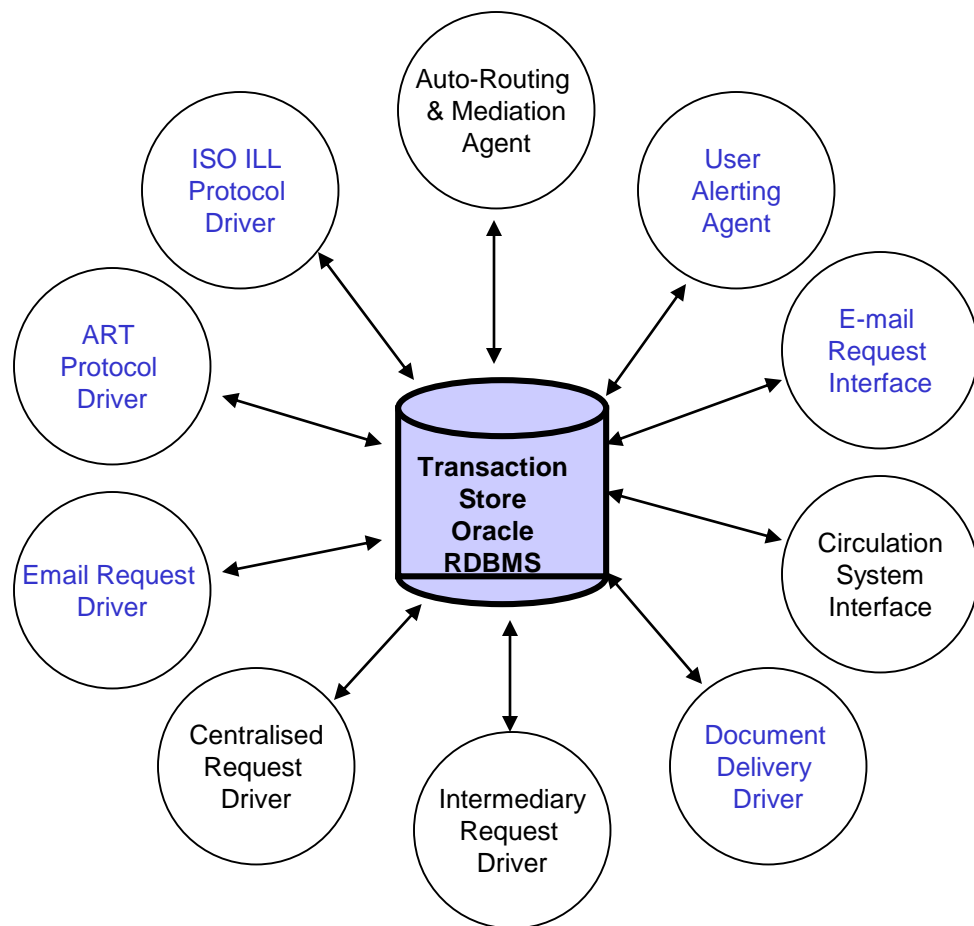**ISO ILL**   **Email**   **Z39.50**   **SIP**   **NCIP**

Features

• Application is accessible through WWW browser.

• All application presentation is configured through styles heets.

• Functionality of application includes:

- Request management.
- Application configuration
- Broadcast search to allow request creation and manual document location.
- Management information

• All transactional data and configuration data stored within Oracle Relational Database management System.

• Background processes give automated processing for

- Document Location
- Request Messaging
- User Communication
- Circulation Integration

• Standard protocols are used to interface to local library management systems.

Process Automation (Organon processes in blue)

Overview

The core functionality of VDX provides automation of the document delivery process. This includes automatic document location, inter-location messaging and messaging with the end-user.

These automation facilities are provided by a set of background processes continuously running on the VDX server.

Overview
- **Auto-routing & Mediation agent** - provides rule based service for automatically locating best supplier of a particular document for the given user. This will conduct multiple background searches and then analyse holdings against the configured rule base.

- **User alerting agent -** Sends configured emails to the end user to inform them about progress of their request.

- **E-mail request interface -** Allows requests to be submitted through structured email.

- **Circulation system interface -** provides SIP and NCIP integration with remote circulation systems for automatic check-out and check-in of items.

- **Document Delivery Driver -** transmits and receives documents electronically and matches them to request transactions.

- **Intermediary Request Driver -** Allows forwarding of requests to other document delivery utilities.
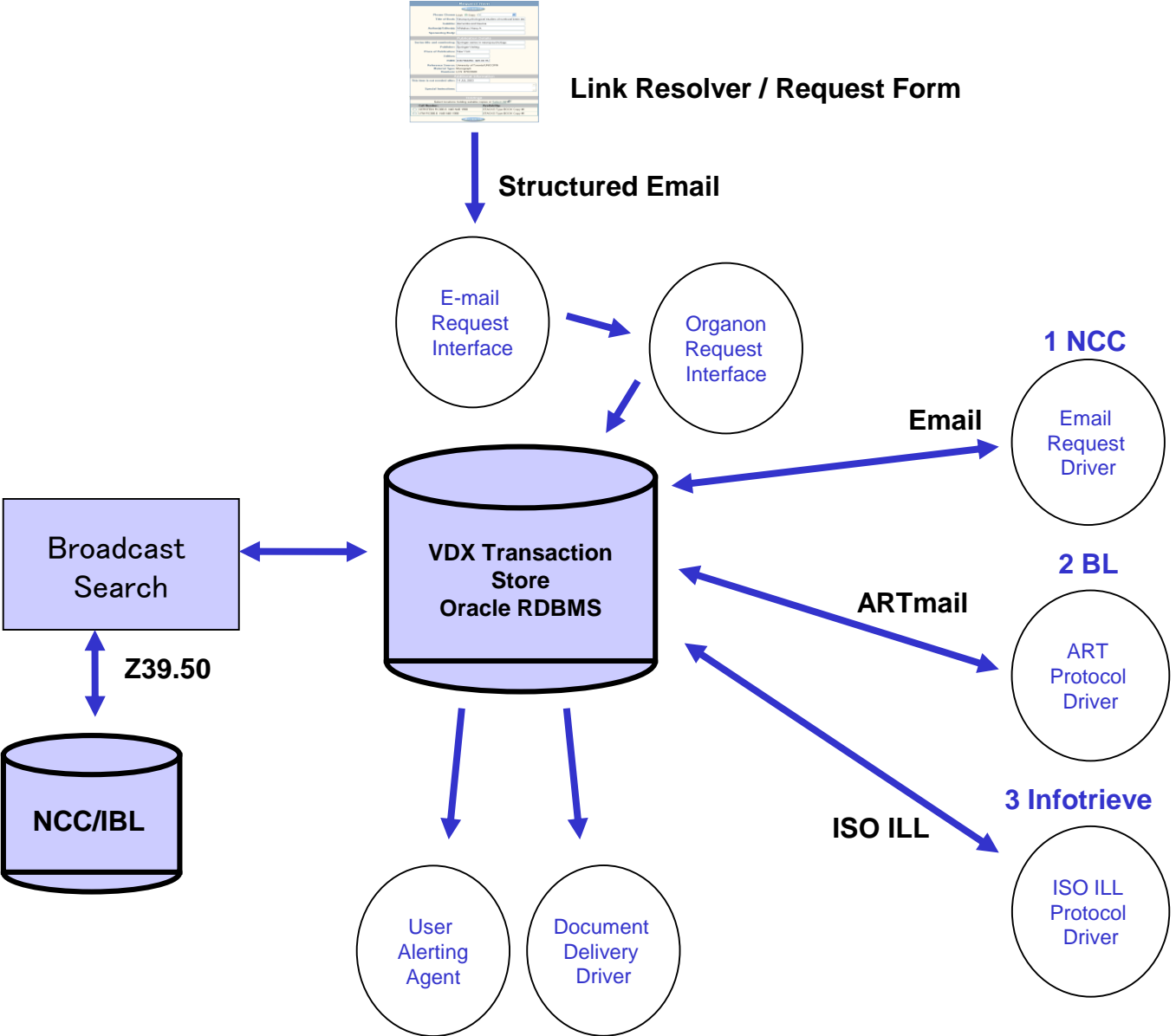
- **Centralised Request Driver -** provides messaging service between libraries using the same VDX server

- **Email Request Driver -** provides the ability to send requests to commercial suppliers who only accept structured email transmissions

- **ART Protocol Driver -** specific driver to interface with the British Library

- **ISO ILL Protocol Driver -** Full IPIG compliant ISO ILL protocol driver.

Organon Processes - Functional Overview

Link Resolver / Request Form

Structured Email

E-mail Request Interface

Organon Request Interface

1 NCC

Email

Email Request Driver

2 BL

ARTmail

ART Protocol Driver

3 Infotrieve

ISO ILL

ISO ILL Protocol Driver

Broadcast Search

VDX Transaction Store Oracle RDBMS

Z39.50

NCC/IBL

User Alerting Agent

Document Delivery Driver

Features Organon

• Request is send by LinkResolver (structured email) if request is not available full text.

• Organon Request Driver identifies the users location (Oss, Newhouse or the World)

• VDX performs a search in NCC database to determine availability within the NCC database and return PPN

> • 1 Structured email is used to send the request to NCC (if available)
>
> • 2 Artmail is used to send the request to the BL (if not available in NCC)
>
> • 3. ISO ILL is used to send the request to Infotrieve (if also not available at BL)

•The Document Delivery Driver is used for automated document delivery to the user

•The User Alerting Agent is used to inform the user about the status of the request

                    .

Fretwell-Downing Informatics/RM/V2.0/31st March 2005