1 Introduction

VeDAS (**Ve**rsatile **D**epository **A**ccounting **S**ystem) developed by CMC Ltd. India for CDBL (Central Depository Bangladesh Ltd.) provides a facility, which enables securities transactions to be processed by the way of book entry. It facilitates holding of securities in an electronic form.

VeDAS helps in reducing the infrastructure requirements required for vaults and physical verification of securities by providing various services like Beneficial Owner's account opening, Dematerialization, Rematerialization, settlement of trades (on market and off market) and also advanced features like pledging, unpledging and confiscation of securities, calculation and distribution of cash and non-cash benefits arising out of corporate announcements distribution of securities to Beneficial Owner's for new issues coming in the Dematerialized environment, transfer and transmission of securities and lending and borrowing of securities to its participants.

The participants in the depository are classified on the basis of there DP Type viz. DP type 1 stands for Exchange DP, DP type 2 stands for Broker DP, DP type 3 stands for Regular DP, DP type 4 stands for Issuer, DP type 5 stands for Depository and DP type 6 stands for Custodian DP. Other entities in the depository are Stock exchanges and Banks.

To avail the various services offered by the depository, DPs and Issuers must register themselves with CDBL. The procedure for registration of the participants is defined according to the byelaws of CDBL. The system shall maintain the database of registered participants. The BOs desirous of availing the services of the depository have to open an account through designated DPs with CDBL.

1.1 Acronyms/ Abbreviations

The following abbreviations are used in this document

ATR	Application Transaction Router
BO	Beneficial Owner (Investor)
CDBL	Central Depository Bangladesh Limited
CGS	Communication Gateway Server at DP/ISSUER
CSE	Chittagong Stock Exchange
CSTC4	Communication Server at the Host
Demat	Dematerialization
DP	Depository Participant of CDBL
DRF	Dematerialization Request Form
DRN	Dematerialization Request Number
DSE	Dhaka Stock Exchange
GTP	Global Transaction Processor
IPO	Initial Public Offering
ISIN	International Securities Identification Number
ISO	International Organization for Standardization
MMR	Miscellaneous Message Router
NDP	Non-Depository Participant Broker

Remat	Rematerialization
RRF	Rematerialization Request Form
RRN	Rematerialization Reference Number
VeDAS	Versatile engine for Depository Accounting System
EOD	End Of the Day
SOD	Start Of the Day

1.2 Targeted Audience

This manual is intended for CDBL personnel who are involved with the day-to-day operations of the CDBL depository.

1.3 System Scope And Architecture

Communication with all DP/ISSUER systems will be achieved through a set of servers called Communication Gateway Servers (CGS) that run on the LAN of the individual DP/ISSUER s and the Communication Server on the Host System (CSTC4) that runs on Unix Operating System on Host machine HP-UX system. Both the servers are developed using TCP/IP in order to make them independent of the actual communication media and the protocols used.

CGS receives the messages from individual workstations in DP/ISSUER through the socket interface and sends them to CSTC4. In the backward direction it receives response from CSTC4 and sends them to the respective workstations.

CSTC4 receives messages (both system and application) from CGS through socket interface and forwards them to either ATR (application messages) or to MMR (system messages). In the backward direction it receives response from either of the servers and sends them to the respective CGS

The Architecture of VeDAS is broadly divided into two Components:

Front-End: -
This is the component of VeDAS that the user interfaces with on a daily basis. This part is also called the Delivery System (DS), as it delivers the transactions to the Back End for processing. The DS is the only part of VeDAS that is installed in all CDS/DP/Issuer systems. All depository operations are performed from the DS. The DS is based on a Client Server Architecture, which uses a Local Area Network within a CDBL/DP/Issuer office. The DS is linked to the Back End through communication lines, with software that controls the flow of information between the two.

Back-End: -
This is the component of VeDAS that is not seen but felt by the users. This part is also referred to as the Host or the Back End. All data pertaining to the Depository is stored at the Back End. This data is processed by the Host system.

Some Operations like BO Account Opening, Demat, Transfer and Transmission etc. in VeDAS can be carried out in Offline Mode i.e. no connectivity to the Host. The data set up in Offline mode is stored in the Front End Database and can be uploaded to the Host when there is connectivity to the Host.

The Diagram below presents a typical DP/Issuer system.
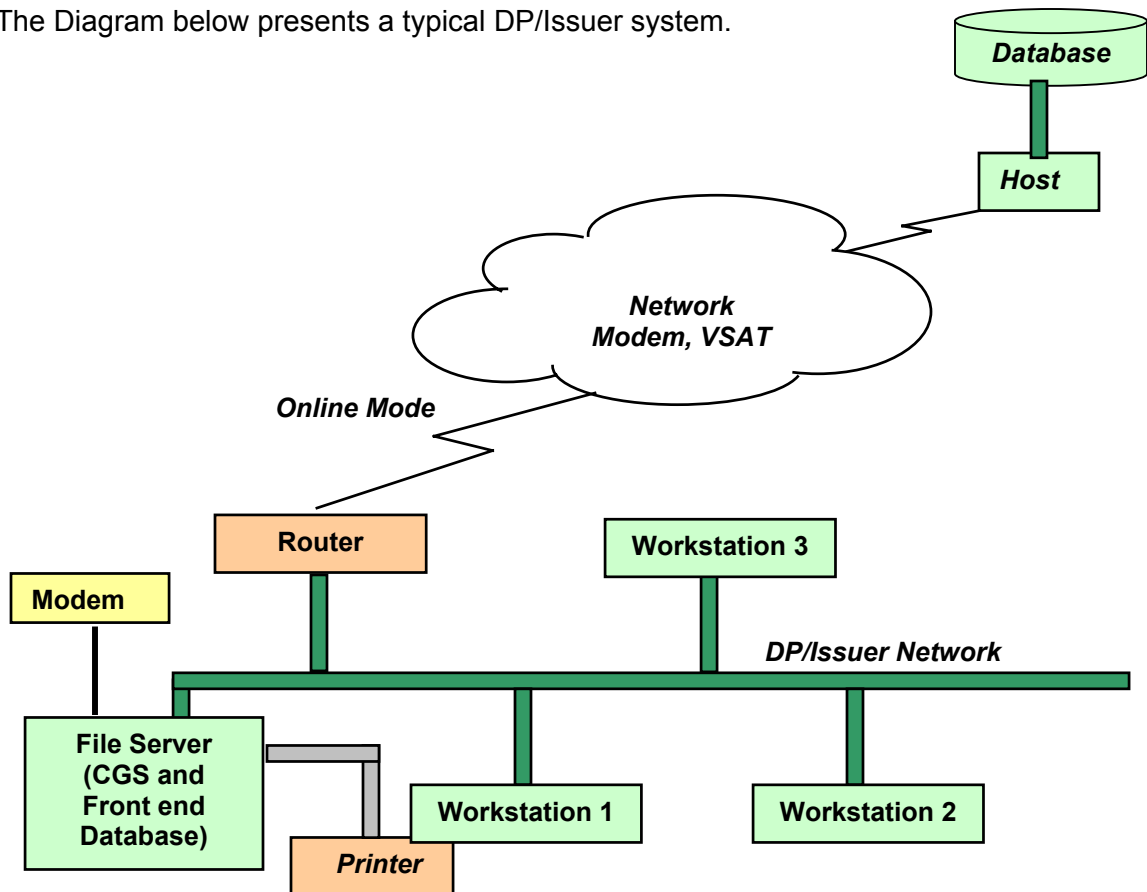
1. **File Server (CGS and Front End Database)** – The Machine on which the Common Gateway Server is installed on the CDBL/DP/Issuer Network. During Offline Mode Data is stored in the F.E Database and Uploaded to the Host whenver the connectivity to the Host is established

2. **Workstations** – The CDBL/DP/Issuer Workstations.

3. **Network –** Connectivity to the Host can be established using Modem, Radio Link, VSAT etc

4. **Host –** Host Machine on which the Communication Server (CSTC4) runs on Unix operating system on HP-UX System.

5. **Database –** Host Database (Oracle Database)

1.4 Customer Support

Any Queries Or Suggestions Should Be Forwarded To:

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