Software Product Description

PRODUCT NAME: VIDA for DB2™, Version 1.0 **SPD 25.E7.00**

DESCRIPTION

VIDA for DB2™ is an interoperability product which permits access to DB2 databases resident on IBM® mainframe systems. VIDA for DB2 provides read access to DB2 databases from VAX-based applications using the read-only subset of the DIGITAL Standard Relational Interface (DSRI) architecture. VIDA for DB2 users can access IBM-resident DB2 data using products such as VAX DATATRIEVE and VAX TEAMDATA, the VAX Rdb/VMS utilities including interactive SQL and RDO, and VAX Data Distributor, as well as applications with embedded SQL or Data Manipulation Language (DML).

VIDA for DB2 is engineered using a client/server architecture. It consists of two component products and uses DIGITAL's SNA interconnect products. VIDA Client for DB2 (hereafter referred to as VIDA Client) is a VAX-resident product that processes DSRI requests. VIDA Client uses the DECnet/SNA VMS APPC/LU6.2 Programming Interface to send the requests through a DECnet/SNA Gateway or VMS/SNA (hereafter referred to as a gateway) to an IBM mainframe. VIDA Server for DB2 (hereafter referred to as VIDA Server) is an IBM-resident product which accepts the LU6.2 messages and submits the requests to DB2. Data obtained from DB2 is passed back to VIDA Client through the gateway, and VIDA Client returns the data to the requesting application. The application can use the accessed data as it would any locally accessed data. For example, the data can be stored in a VAX database or VAX RMS file, or it could be displayed on a screen or printed.

VIDA Client runs under VMS on VAX, MicroVAX, and VAXstation systems. VIDA Server runs as a CICS/OS/VS transaction on IBM System/370 mainframe systems running the IBM MVS/XA™ Operating System.

Features

- VIDA for DB2 provides direct database access to IBM-based DB2 tables and views. The user application accesses DB2 data the same way it would access Rdb/VMS data.
- VIDA for DB2 does not require users to create a copy of the IBM database on a VAX system. Creating VAX-resident extracts of IBM data is a matter of user preference and convenience.
- Applications can be developed to retrieve data directly from the DB2 database. Data retrieved from the mainframe database can be displayed at a user's terminal, printed, or copied to VAX Rdb/VMS and VAX DBMS databases or to VAX RMS files.
- VIDA for DB2 supports a number of DSRI-compliant user interfaces.
- DB2 data can be accessed interactively using VAX Rdb/VMS interactive SQL or RDO.
- DB2 data can be extracted and stored in Rdb/VMS tables using VAX Data Distributor.
- DB2 data can be accessed directly from third generation language (3GL) programs using embedded VAX Rdb/VMS SQL, SQL module language, dynamic SQL, callable RDO, or VAX Data Manipulation Language (DML). These data access sublanguages are the same sublanguages used to access VAX Rdb/VMS data tables and views. The VAX Rdb/VMS development option is required to develop 3GL applications that use VIDA for DB2. VAX Rdb/VMS provides SQL pre-compiler support for languages such as Ada, C, COBOL, FORTRAN, and PL/I. VAX Rdb/VMS provides DML pre-compiler support for languages such as COBOL, C, BASIC, FORTRAN, and PASCAL. SQL module language or callable RDO can be used with any language that supports the VMS calling standard. Reference VAX Rdb/VMS (SPD 25.59.xx) for a complete description of programming language support.
- When VIDA for DB2 is used with VAX DATATRIEVE, users can generate DATATRIEVE queries and reports that include data from DB2 tables or views.

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- When VIDA for DB2 is used with VAX TEAMDATA, end users can access DB2 data tables and views directly, join them with TEAMDATA tables, store the results in TEAMDATA folders, etc. for use in decision support and other personal and departmental applications.
- VIDA Client accepts a DSRI request from a user application. VIDA Client converts the request into DB2 SQL and sends the request to VIDA Server on the target IBM system. The request is sent through a gateway using the DECnet/SNA VMS APPC/LU6.2 Programming Interface.
- VIDA Server accepts the SQL request from VIDA Client and submits it to DB2 using the dynamic SQL interface. The results of the request are passed back through the gateway to VIDA Client.
- VIDA Client performs automatic EBCDIC/ASCII translation and passes the results to the calling program. EBCDIC/ASCII translation is performed using a default translation table. An alternate user defined translation table can be used if the default is not appropriate.
- VIDA Server runs as a CICS transaction. Sites can apply CICS tuning techniques to the VIDA Server CICS transaction just as they can to other CICS transactions.
- VIDA Server works in conjunction with existing security products in IBM environments, for example ACF2™ , RACF, and default CICS security. VIDA users require an IBM account and must be properly authorized within CICS and DB2 to access DB2 data.
- VIDA Server uses a view to retrieve metadata from the DB2 catalog. The view can be redirected at installation time to access user defined data tables which contain catalog data. The metadata is automatically passed to VIDA Client which converts the definitions into DIGITAL relational data definitions.
- The DIGITAL relational data definitions created by VIDA Client can be stored in CDD/Plus using RDO or SQL INTEGRATE commands. 3GL programs can be compiled against data definitions in CDD/Plus.
- VIDA for DB2 uses DIGITAL's SNA interconnect software and hardware, including the DECnet/SNA Gateways, VMS/SNA, and the DECnet/SNA VMS APPC/LU6.2 Programming Interface to make the VAX to IBM communications link.
- VIDA for DB2 uses LU6.2 communications protocols to achieve fast and efficient data transfer.
- VIDA Client on one VMS system can provide DB2 data access to local or remote users in the same DECnet network provided that users on the remote systems have access to some other DSRI database product with remote capabilities.
- VIDA for DB2 provides a logging facility that can trace communications activity, log errors, and help isolate problems.

Limitations

VIDA for DB2 provides read-only access.

INSTALLATION

Both VIDA Server and VIDA Client need to be installed to provide access to DB2. Due to the complexities of installing software on both IBM and VAX machines and of ensuring proper communications between the Client and Server, DIGITAL will provide advisory service for the installation of the VIDA Server product. The installation advisory service package is included in the VIDA Server for DB2 license.

HARDWARE REQUIREMENTS

VIDA Client for DB2:

VAX, MicroVAX, or VAXstation configuration as specified in the System Support Addendum (SSA 25.E7.00-x).

VIDA Server for DB2:

IBM S/370 configuration as specified in the System Support Addendum (SSA 25.E7.00-x).

SOFTWARE REQUIREMENTS*

VAX Software:

VMS Operating System
DECnet/SNA VMS APPC/LU6.2 Programming Interface

IBM Software:

MVS/XA Operating System
CICS/OS/VS
DB2
DB2 Attachment Facility for CICS/OS/VS
SMP/E
Assembler H

* Refer to the System Support Addendum (SSA 25.E7.00-x) for availability and required versions of prerequisite/optional software.

ORDERING INFORMATION

The VIDA for DB2 components are ordered separately. An installation advisory service package and on-site user orientation program is included with the VIDA Server for DB2 license.

VIDA Server is available only on 6250 BPI Magtape media. VIDA Client is available on 1600 BPI Magtape or TK50 media. TK50 devices are required for VAXstation 2000 and MicroVAX 2000 systems.

Software Licenses:

VIDA Client: QL-VTWA*-**
VIDA Server: QB-VTXA9-BA

Software Media:

VIDA Client: QA-VTWA*-**
VIDA Server: QA-VTXAA-*A

Software Documentation:

VIDA Client: QA-VTWAA-GZ
VIDA Server: QA-VTXAA-GZ

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Software Product Services:

VIDA Client: QT-VTWA*-**
VIDA Server: QT-VTXA*-**

* Denotes variant fields. For additional information on available licenses, services and media refer to the appropriate price book.

SOFTWARE LICENSING

This software is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions. For more information about DIGITAL's licensing terms and policies, contact your local DIGITAL office.

LICENSE MANAGEMENT FACILITY

The VIDA Client for DB2 layered product supports the VMS License Management Facility. The License Management Facility does not apply to the VIDA Server for DB2 product.

License units for the VIDA Client product are allocated on a CPU-capacity basis.

For more information on the License Management Facility, refer to the VMS Operating System Software Product Description (SPD 25.01.xx) or the License Management Facility manual of the VMS Operating System documentation set.

For more information about DIGITAL's licensing terms and policies, contact your local DIGITAL office.

SOFTWARE PRODUCT SERVICES

VIDA for DB2 is a part of a database interconnect solution involving database, networking, decision support and IBM software. It is required that a support contract be purchased with the VIDA Server license.

A variety of service options are available from DIGITAL. For more information contact your local DIGITAL office.

SOFTWARE WARRANTY

Warranty for this software product is provided by DIGITAL with the purchase of a license for the product as defined in the Software Warranty Addendum of this SPD.