

# *TAME YOUR BEASTS*



Wavv 2007  
Green Bay

***Use the VSAM API and ViaSQL™  
Redirector to access relational  
data systems***



**SQL Server**



**Sybase**



**Oracle**



**DB2/UDB**



**MS Access**



**Others**

- Primary emphasis is on robust and efficient access to RDBMS services
- VSAM transparency is a secondary concern
- Maintain stability of target RDBMS structures



VSAM API



Read data

Execute Stored Procedures

Update data



**SQL Server**



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**MS Access**



**Others**

- Read-only operations never require RDBMS changes
- Update operations may require definition of a unique column or index in the targeted table
- RBA/RRN values can be provided by suitable columns defined in the table or generated by ViaSQL Redirector



VSAM API



ODBC

Proprietary APIs

JDBC



**SQL Server**



**Sybase**



**Oracle**



**DB2/UDB**

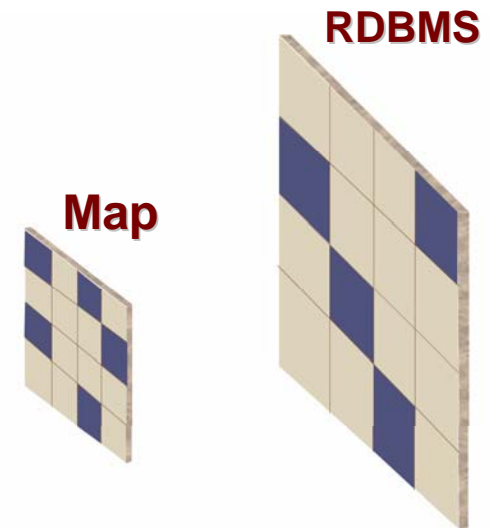


**MS Access**



**Others**

- Windows-based GUI application
- Maps specify correspondence between VSAM calls and tables in the target RDBMS
- Map definitions specify the SQL text used to satisfy VSAM GET, PUT, and ERASE requests
- Maps are stored on the mainframe in a VSAM dataset



- Mapping Tool automatically generates SQL statements which can be customized as necessary
- Use of complex SQL in a SELECT statement will force use of a mapped result VR map instead of mapped data
- SQL text may include SQL skeleton keywords which define VSAM record elements and runtime values



- Text of dynamic SQL statement is provided by the VSAM application and passed to ViaSQL Redirector using VSAM POINT or INSERT requests
- Requires use of mapped result ViaSQL Redirector map



- Mapping Tool is used to maintain both configuration information and map definitions
- Single VSAM dataset is used to store the information
- No configuration or map definition information is stored at the RDBMS
- If desired, multiple VSAM datasets can be used: one for production, one for test, one for training, etc.
- Runtime configuration information stored in SYSTEM GETVIS area
- Supports multiple runtime definitions on VSE



- Transaction management level defined in each map definition
- NATIVE mode – transaction management aspects defined by the ODBC, JDBC, or proprietary RDBMS API in use
- SHORT mode – processes each VSAM request (GET, PUT, ERASE) as a single unit of work
- LONG mode – defaults to one unit of work on each string between OPEN and CLOSE; VR application may define additional unit of work boundaries at runtime
- USER mode – requires VR application to define all unit of work boundaries at runtime



- VSE DLBL statements defined to the ViaSQL Redirector do not require corresponding VSE/VSAM datasets in a VSE/VSAM catalog.
- ViaSQL Redirector does not impose restrictions and requirements on the VSAM application's view of the available remote RDBMS services and functions.
- ViaSQL Redirector places no limits on the SQL that is supported. Supported SQL is defined by the specific RDBMS.
- ViaSQL Redirector uses VSE Vendor Exits instead of VSAM Data Access exits to intercept VSAM requests.



- Available via the web
- Demonstration package includes the Mapping Tool and accompanying documentation
- Requires access to at least one ODBC datasource on the workstation to effectively use the demonstration package

Download the demonstration package at . . .

<http://www.viaserv.com/viaserv/register.htm>



- ViaSQL Redirector currently in Beta status
- Assembler, COBOL, C, and REXX have been tested with ViaSQL Redirector. Other programming languages have not yet been tested
- If you are interested in helping test the newest feature in the ViaSQL product line, please contact us
  - (303) 415-9083 or (800) 348-3964
  - [techsupport@viaserv.com](mailto:techsupport@viaserv.com)



## ViaSQL™ Direct

- SQL access to mainframe data
- Execution of CICS and batch programs

## ViaSQL™ Blue Direct

- CICS and batch access to LAN-based data sources
- CICS and batch access to Web Services

## ViaSQL™ Integrator

- All the features of Direct and Blue Direct
- Bi-directional transfer between mainframe and LAN-based data sources



***Enhancing and  
Sustaining Your  
Investment in the  
Mainframe***



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