

Accessing SQL Server Data

Jonathan Zuck

V.P., Client-Server Technology

Advanced Paradigms, Inc.

(703) 578-1400 CIS: 76702,1605

Five Techniques

Direct Access with VBSQL

The ODBC API Directly

Visual Basic Database Objects

Integra VDB

Q+E Multilink

Methods of Distinction

Ease of Use

Performance

Flexibility

Portability

Support for Proprietary Features

A Note About ODBC...

Bad Rap

Provides Portability

Multi-vendor support

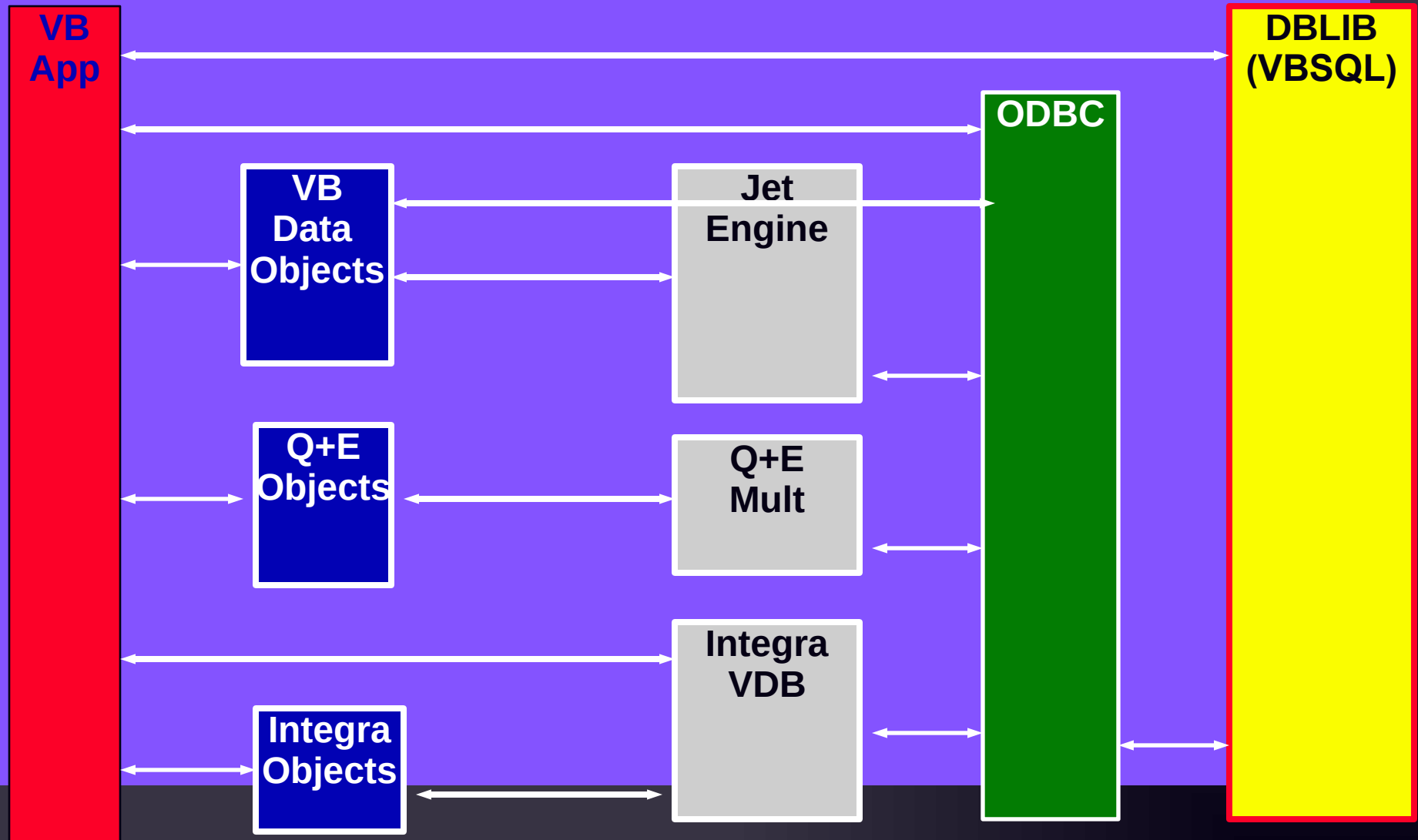
Four Methods (of Five) use it

Need a Standard

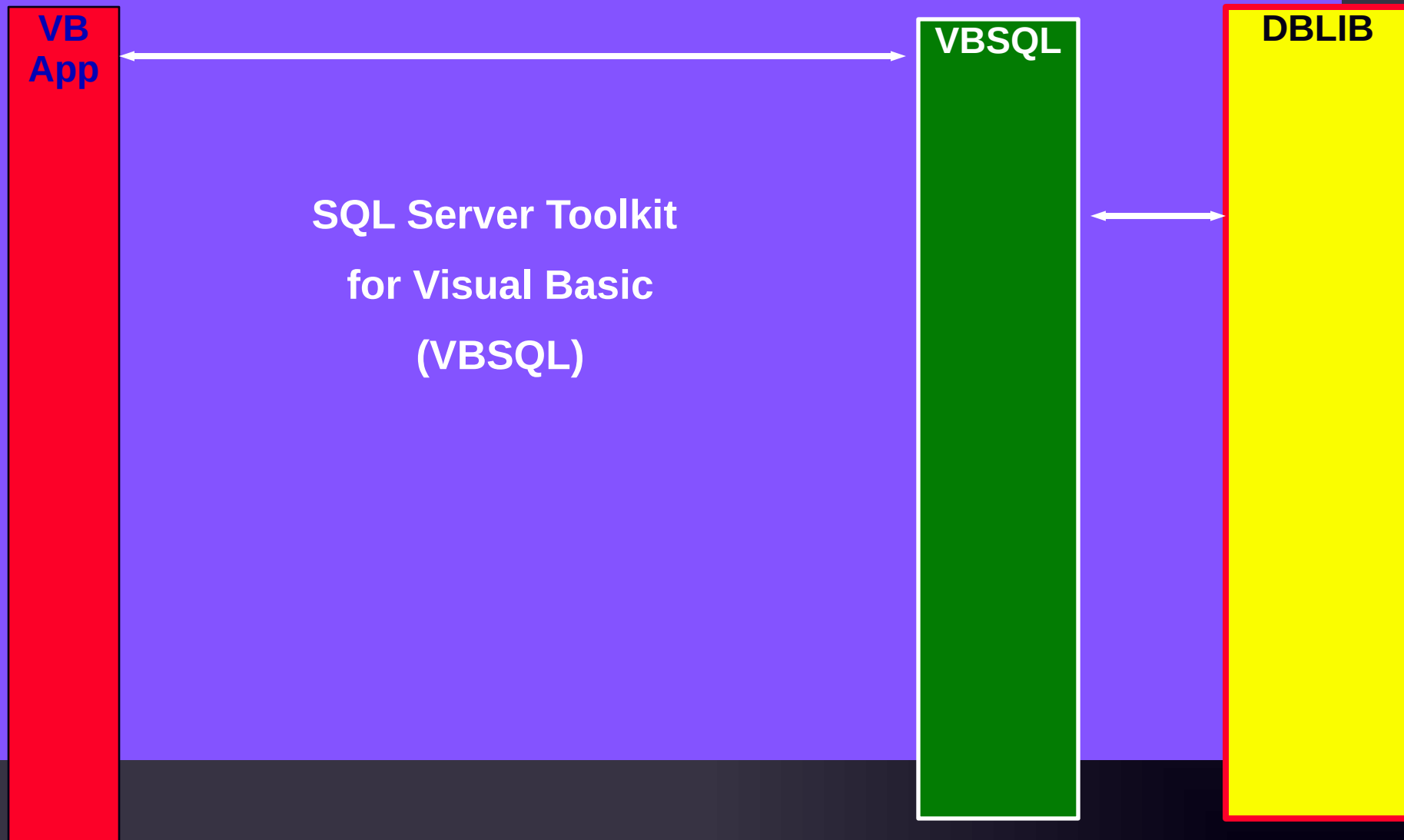
Sometimes slow to keep up

Look towards implementation

The Many Layers We Weave



Direct to SQL Server



Overview

DLL Wrappers around DBLIB
Field by Field Info Retrieval
CC for Errors and Messages

Advantages

Fastest Solution

Best exploitation of specific features

Smallest Additional Overhead

Language Portability

Disadvantages

No System Portability

Proprietary

Low Level Data Manipulation

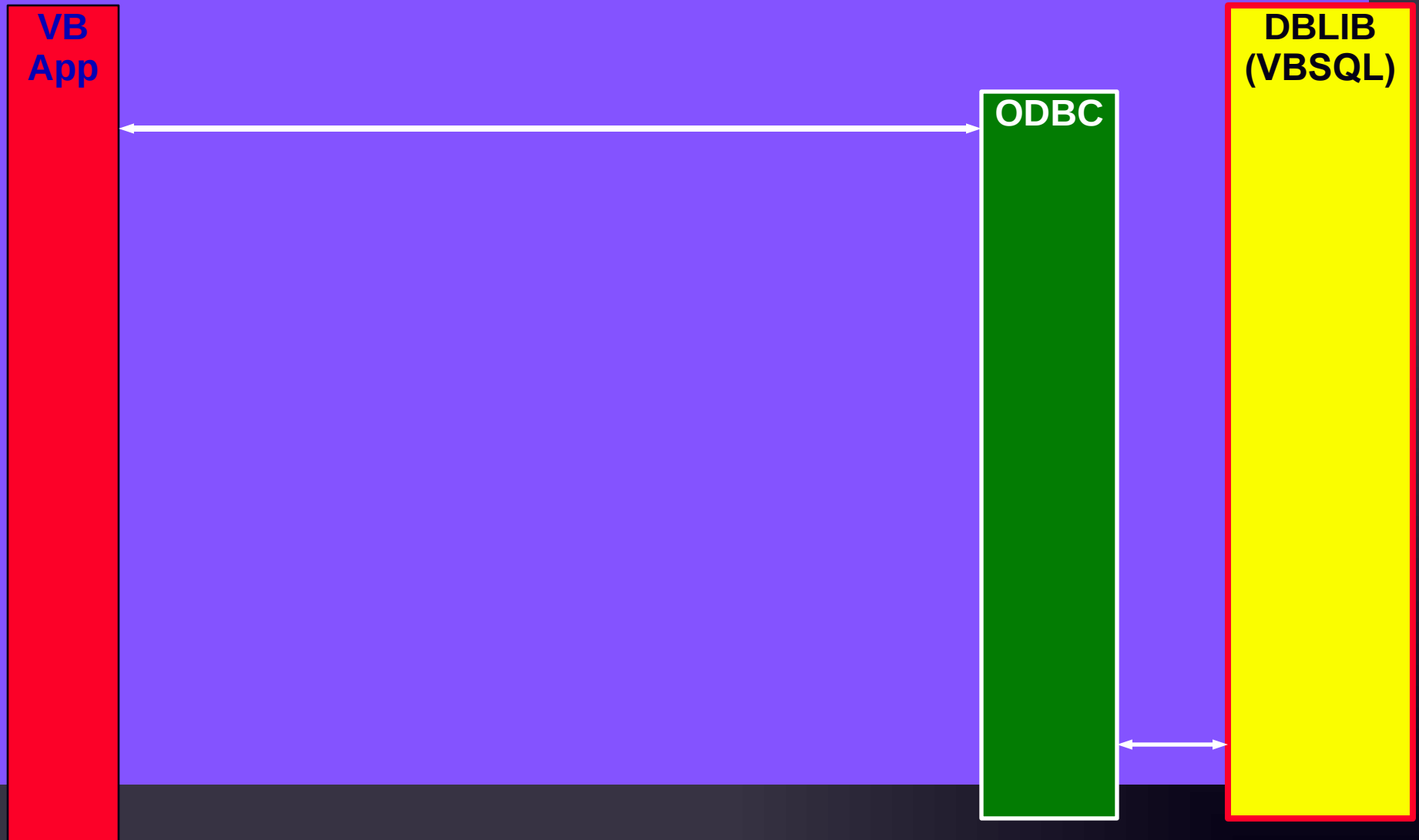
No Object Orientation

Techniques

Build Wrapper Functions

Take Maximum Use of SQL Server Features

Going Direct to the ODBC API



Overview

30+ API Functions

Field by Field Retrieval

SQL Syntax

Levels of Compliance

Advantages

Flexible

Fast

Portable Accross Languages

Portable Accross Databases

Wide Acceptance

Disadvantages

Least Common Denominator

Low Level API

No Object Model

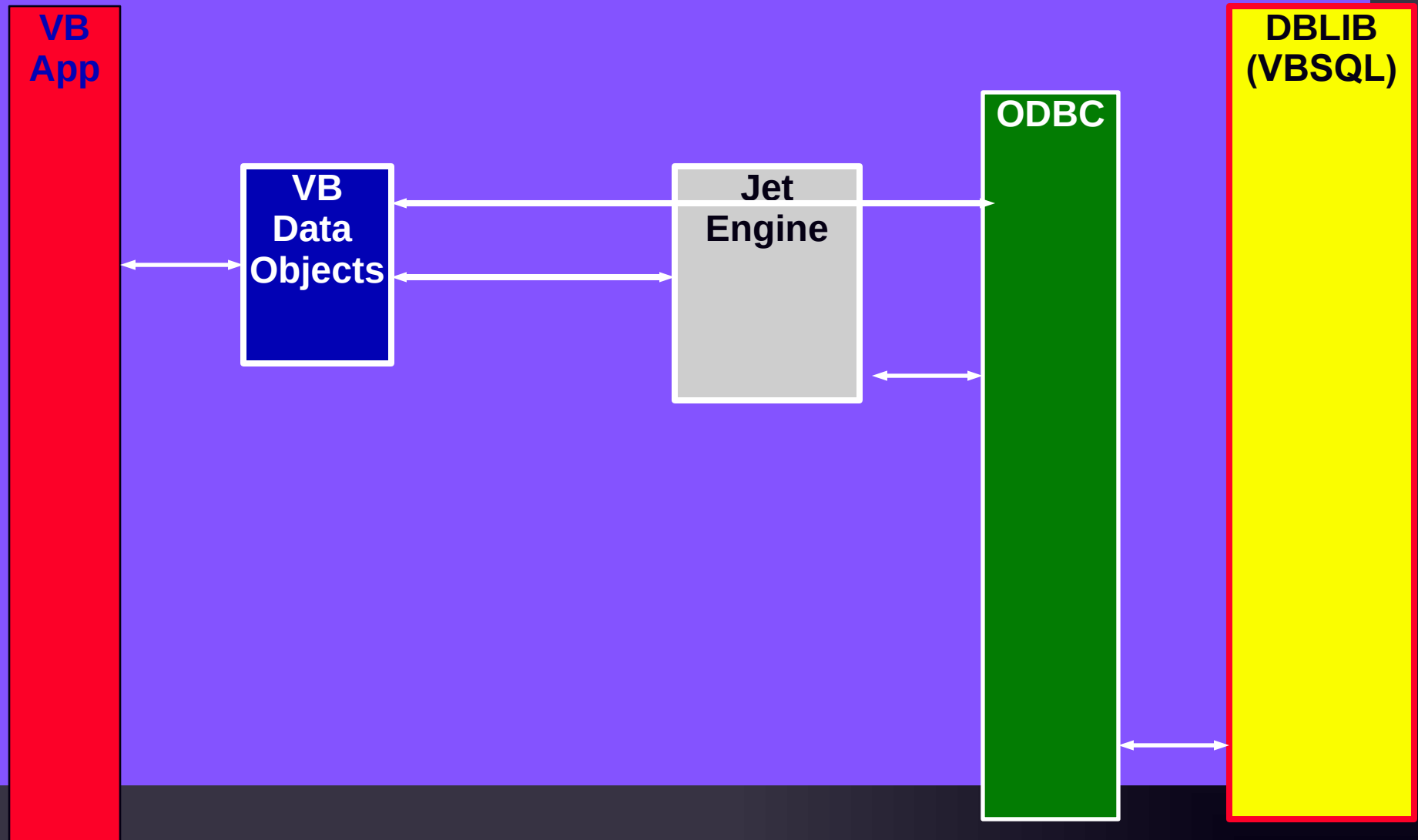
Techniques

Build Wrapper Functions

Be Aware of Compliance Levels

Be Aware of Proprietary SQL Features

Using the Jet Engine



Overview

Object Model

Cross Database Joins

Controls or Objects

Advantages

Object Model

Features of Access

- Cross DB Joins

- Multiple File Formats

- Stored Queries

Easy to Use

Comes with VB

Large 3rd Party Support

Some C++ Compatibility

Disadvantages

Lack of Control

Lack of Flexibility

No Exploitation of SQL Server Features

Some Performance Problems

Techniques

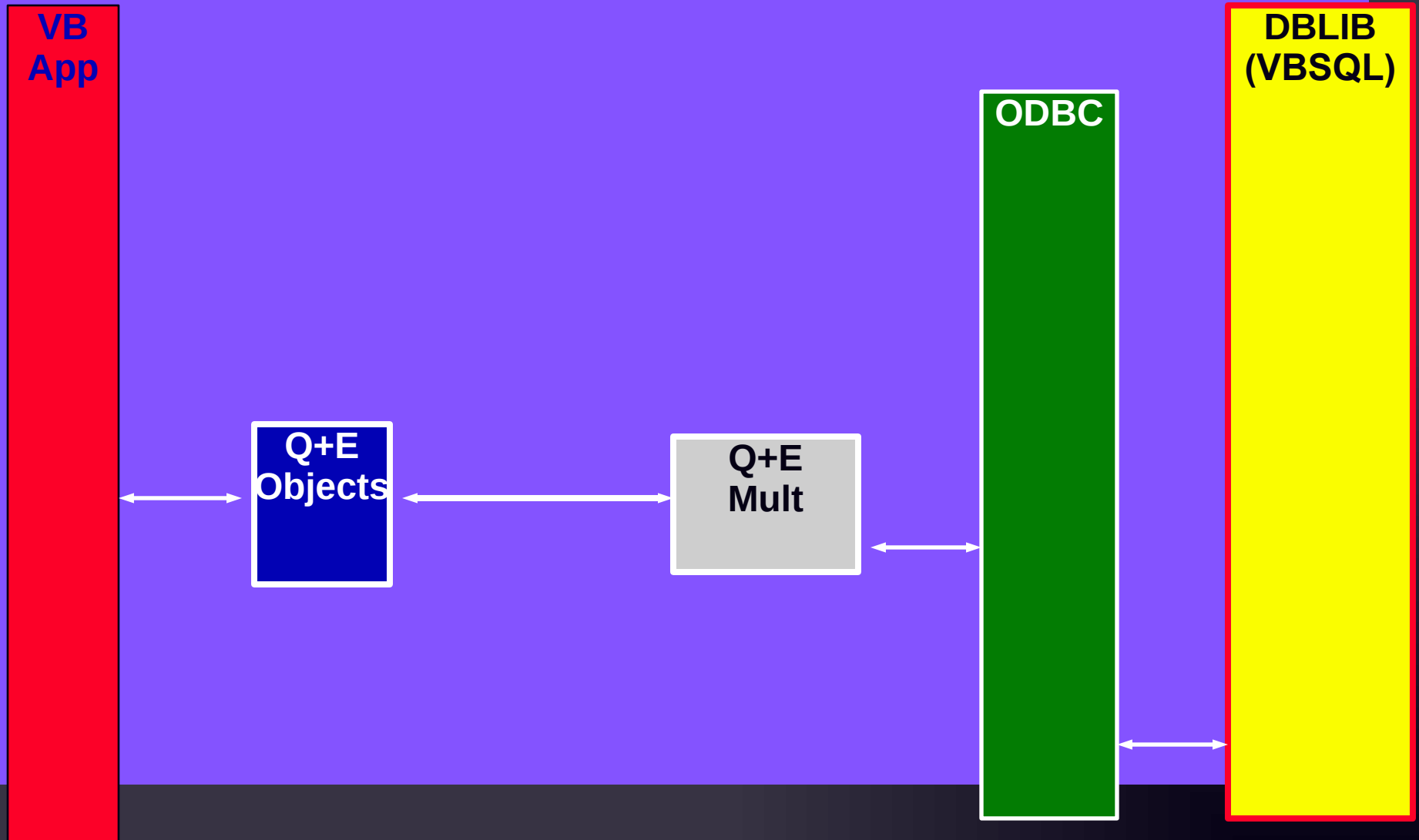
Use Attached Tables

Use SQLPassThrough

User Query Definitions

Take Care with Data Types

Using Q+E Multilink



Overview

Bound Controls

Define Relationships

Automatic Data Management

Easy to Learn and Use

Advantages

Close Links to ODBC
Established Product
Good Product Support
Support for Multiple Methodologies

Disadvantages

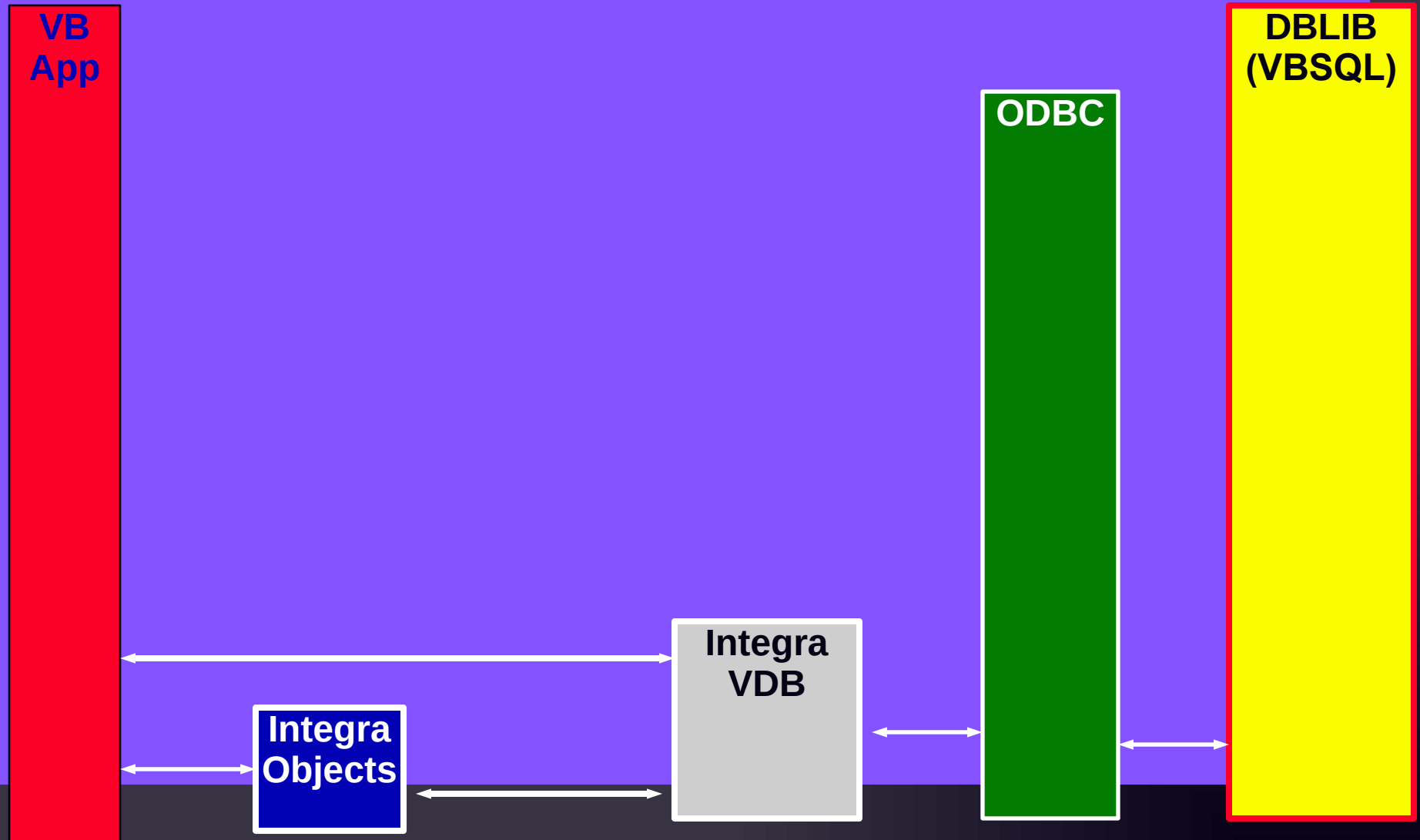
Proprietary

Non Extendible

No Low level support

Single Firm Solution

Using Integra VDB



Overview

Bound Controls

Bind to other Controls

Form Generator

Low Level Back-up API

Advantages

Close Ties to ODBC

High Performance

Support for other vendor controls

Single connection control

Disadvantages

Single Vendor

Proprietary API

Poor Support

Poor Documentation

Some Internal Inconsistencies

Discussion?

What do you use?

What are your results?

Is SQL Server your only target?