Integrating Microsoft® BackOffice™ And The Internet

Todd Warren
Group Program Manager
Microsoft BackOffice
Business Systems Division
Microsoft Corporation

Start

Agenda

- Microsoft BackOffice - what it is
- Microsoft BackOffice and the Internet
- Two applications that bring it all together
- How you can make more powerful Internet applications and sites with Microsoft BackOffice

Microsoft BackOffice Platform Today

Microsoft BackOffice

Microsoft Mail	SNA Server	Microsoft SQL Server	Systems Management Server

**Windows NT Server
with Internet Information Server**

OLE WOSA

Windows 95 and Windows NT Workstation

Microsoft Visual Tools	Third-party products	Microsoft Office

A single, integrated architecture sharing:

Applications

User interface

Administration and security model

Networking model

Programming interfaces and tools

Broad hardware choice

Microsoft BackOffice Platform Future
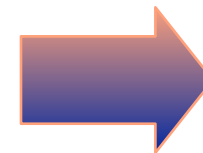
Microsoft BackOffice

Other Microsoft BackOffice servers

Microsoft Exchange	SNA Server	Microsoft SQL Server	Systems Management Server

Internet Proxy Server	Internet "Merchant Server"	"Viper"	"Bengal" Media Server

Windows NT Server with integrated Internet Information Server
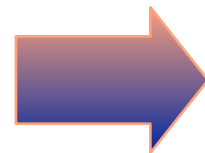
**Network OLE
WOSA**

Windows, Windows NT Workstation

Shared development environment	Third-party products	Office	FrontPage, Internet Studio	Internet Explorer

Intranet Architecture

Microsoft BackOffice: The Core Of The Intranet

- Beyond static Web pages
- Full spectrum of data storage
  - Windows NT™ file system
  - Microsoft Exchange Server
  - Microsoft SQL Server™
- Available reliably and safely
  - Replication
  - Unified security model
  - Common administrative tools

Microsoft BackOffice
The common infrastructure
for the Intranet

- Administration
- Security
- Replication
- Data storage
- Host integration
- Information query
- Common API
  with the desktop

Demonstration: ActiveX Search

- New Windows NT technology
- Indexes HTML files
- Supports indexing of arbitrary data formats via the IFilter interface
- A standard part of the platform

Microsoft Windows NT™ Server
The server application foundation

- **High performance and scalable**
  - Microsoft Product Support, MIPS®, Alpha, IBM® PowerPC™
- **Best integration into Intranet and Internet**
  - TCP/IP, WinSock, DHCP, WINS, DNS
  - Protocol independence with RPC, Network OLE, WinSock, RnR
  - Great support for NetWare®
- **Best server development environment**
  - Administration tools, security, services architecture, high-performance I/O model

Microsoft Windows NT Server
Building great active servers for the Internet

- **Exploit Windows NT™ and be a great server application**
  - **Run as a service, use Win32®, use high-performance I/O**
  - **Build on Windows NT administration: logging, performance monitoring, remote admin, OLE Automation**
- **Integrate into the Windows NT security model**
  - **Support impersonation in your service, compatibility with ISAPI and Internet Information Server**
  - **Use APIs like LogonUser() to have a single ID**

Microsoft SQL Server™ 6.5
Unlocking your data for the Internet

- **High-performance database server**
  - Best price performance ratio, optimized for ODBC access
 - Support for heterogeneous replication, distributed transactions, row locking
- **Best suited for the Internet**
  - Optimized for use with the Internet database connector
  - Wizard to support publishing of tables in HTML format

Using The ODBC/SQL Connector

http://myco.com/myquery.idc

Internet Information Server

httpodbc.dll

ODBC

myquery.idc

mydataview.htx

SQL database
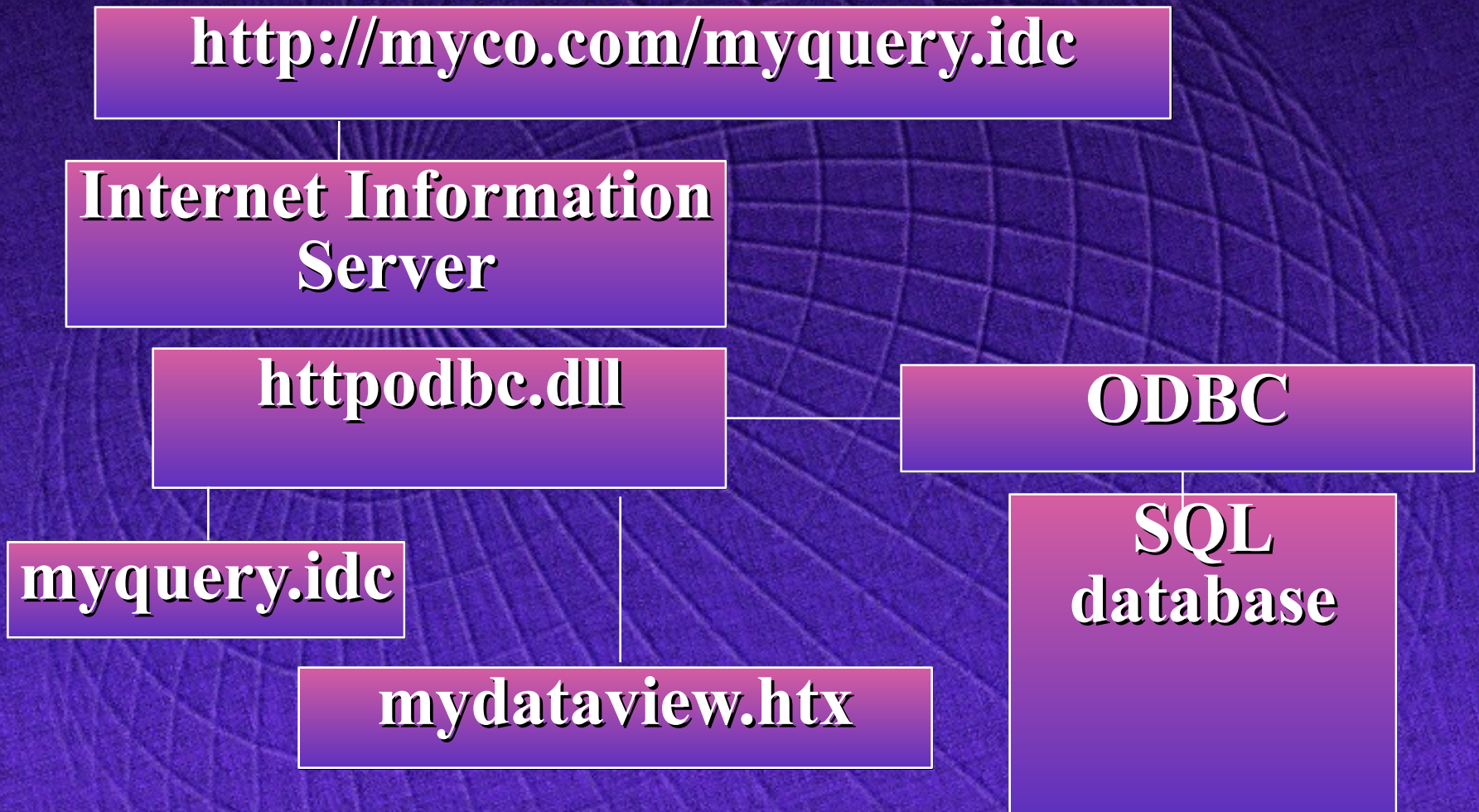
Microsoft Exchange Server 4.0
Client/server messaging built for the Internet

- **Great client/server messaging with groupware**
  - SMTP/MIME support built in
  - Indexed, X.500 directory service
  - Indexed, replicated message, and public folder store
- Additions enhance Internet support
  - Publish public folders as Web pages live
  - NNTP to public folder connector
  - Support for POP 3 clients

Microsoft Exchange Web Connector

Read and post to live public folders

Web browser

http://www.myco.com/webex.dll?<folderinfo>

Internet Information Server

webex.dll

Microsoft Exchange public folder store and directory

Microsoft Exchange News Connector

Read and post to live public folders

NNTP feed

NNTP connector

MAPI store and gateway APIs

Microsoft Exchange
public folder store

Exploiting MAPI

- ActiveX™ Servers using ISAPI
  - Use message store and gateway APIs to move data in and out of replicated storage
  - Use when structured (Microsoft Exchange client) and unstructured (Web client) views are needed
- Client applications
  - Writing to MAPI guarantees applications work in a POP 3/SMTP environment, as well as with Microsoft Mail, Microsoft Exchange, CompuServe®...
  - Attachments can have specific MIME mapping types
  - Custom message types (forms) can be sent over the Internet

SNA Server And Systems Management Server Internet Integration

- SNA Server - unlock the mainframe for the Internet
  - ODBC driver for access to DRDA databases (AS/400®, DB2®) via the IDC
  - FTP-AFTP gateway for download of mainframe data
  - Access the host via IP over the Internet
- Systems Management Server - make managing Web farms easier
  - Software distribution, inventory, SNMP alerting, event log coalescing

Microsoft "Merchant Server"
Complete Internet commerce solution for users and businesses

- Client extensions and APIs for electronic shopping
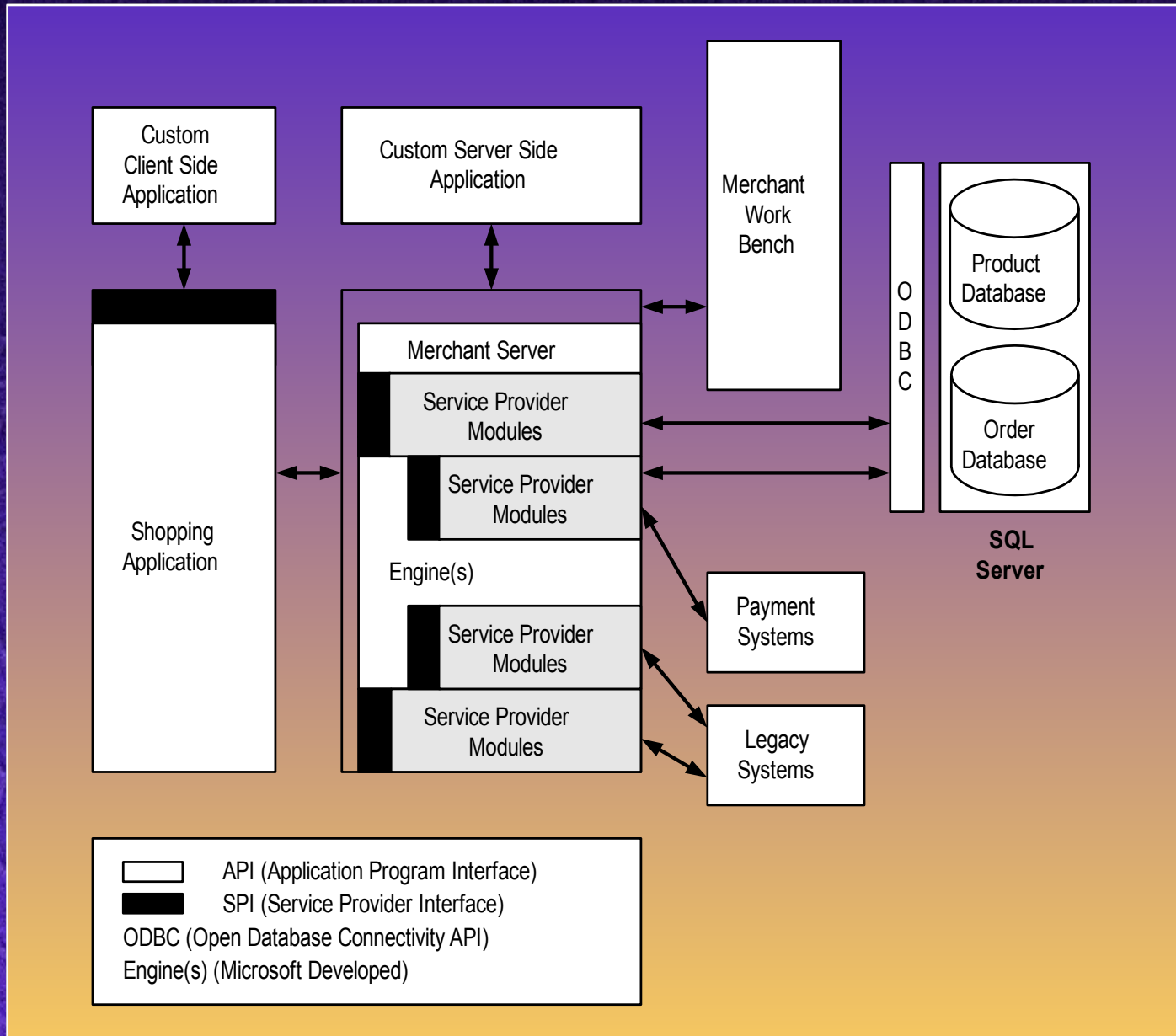   - Encryption and payment
    - Local order cache
    - Address information
- "Merchant Server" application support
    - Links to product information and order database
    - Support for legacy order entry and billing systems

"Merchant Server" Architecture

Custom Client Side Application	Custom Server Side Application

Merchant Work Bench

ODBC

Product Database

Order Database

Shopping Application

Merchant Server

Service Provider Modules

Service Provider Modules

Engine(s)

Service Provider Modules

Service Provider Modules

Payment Systems

Legacy Systems

SQL Server

API (Application Program Interface)
SPI (Service Provider Interface)
ODBC (Open Database Connectivity API)
Engine(s) (Microsoft Developed)

Lante Onsite System

- **Complete activity center for attendees at the PDC**
  - Registrations and session abstracts via the Web
  - E-mail, discussion, and news groups
  - Session surveys via Microsoft Exchange
  - Access to presentations via Web
- **Implemented on Internet Explorer and Microsoft BackOffice**
  - SQL, Microsoft Exchange, Internet Information Server

Demo Of Onsite System And Walk-Through

Mark Tebbe
President
Lante Corporation
www.lante.com

Lante Solution Architecture: SQL

Used for registration system and course listing
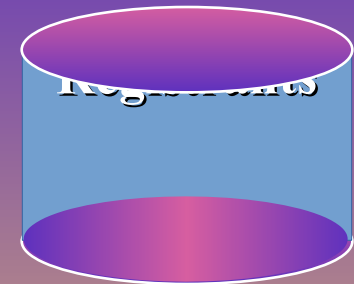
SQL Server

Windows NT with Internet Information Server

httpodbc.dll

login.idc

menu.idc

registration.idc

sessions.idc

Registrants

Courses and descriptions

Lante Solution Architecture: Mail And News

Microsoft Exchange client

Survey forms

Discussion forms

Internet Explorer

MAPI

Web connector

Microsoft Exchange Server

Mailboxes

Discussion

Surveys

Address book of attendees

Software Business Technologies

- Developer of accounting and Internet applications for small to medium-sized businesses
- Over 300,000 users, channel of 3,000 VARs
- Pro Series and VisionPoint: accounting product lines based on Microsoft FoxPro®
- Web Series: electronic commerce applications leveraging the Internet and existing business systems
- WebStreet: hosts over 200 businesses conducting commerce on the Internet

WebTrader™ SQL

- Enables small- and medium-sized businesses to create a full-functioning presence on the Internet

- Presents dynamic catalog of products and services based on a merchant's own data

- "Intelligent Ordering" provides ordering options to customers based on stored profile information

- Full ODBC integration with any existing order processing system

SBT WebStreet™

Before: Windows NT Server 3.51 (Pentium® 90 MHz, 80-MB RAM,) O'Reilly WebSite™ 1.0

After: Windows NT Server 3.51 (Pentium 133 MHz, 32-MB RAM,)
Internet Information Server, SQL Server 6.0

Improvements:

- Better performance
- Easier administration
- Integrated database access
- More robust security

SBT Web Enhanced Accounting System

David Harris
President
SBT Internet Systems
www.sbt.com

SBT System Architecture

Internet Explorer

Windows NT with Internet Information Server

httpodbc.dll

products.idc

orderentry.idc

SQL Server

Orders and accounting info

Stored procedures

MAPI

Microsoft Exchange

Statements

Stock out notification

Microsoft BackOffice Logo
Core requirements

- Server applications:
  - Run as a service
  - Network independent
  - Unified logon
  - Deployable using Systems Management Server
- Client applications:
  - Windows-based client
  - APIs specific to the server application (for example, MAPI, ODBC, SNA APIs)
  - Installable via Systems Management Server

Summary

- Microsoft BackOffice leverages the Internet
  - SQL Server Internet Connector and Publishing Wizard
  - Microsoft Exchange Mail, Web, News Connectors
  - Systems Management Server to manage Web sites, SNA Server to unlock host data
- Microsoft BackOffice can make your application or site
  - More powerful
  - Easier to manage
- Much more to come
  - "Merchant Server", "Viper", "Bengal", Proxy Server
- Get the Microsoft BackOffice logo!

Microsoft ®

Start