A DEVELOPER'S GUIDE TO THE MICROSOFT PLATFORM

.NET FROM 0 TO 100 IN 100 MINUTES

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Microsoft Switzerland
Email : ronnies@microsoft.com

I'M NOT TALKING ABOUT THIS☺

OPERATING SYSTEMS

- Windows XP SP2
- Windows Vista
- Windows Server 2008 Beta
- Windows Server 2003 Compute Cluster Edition
- Windows Embedded CE 6.0
- Windows Small Business Server 2003 R2

IT OPERATIONS

- Microsoft System Center Data Protection Manager 2006
- Microsoft System Center Reporting Manager 2006
- Microsoft System Center Essentials 2007
- Microsoft System Center Operations Manager 2007
- Microsoft Systems Management Server 2003 R2
- Microsoft System Center Configuration Manager 2007 Beta 2
- Microsoft Virtual Server 2005 R2
- Microsoft Virtual PC
- Microsoft Desktop Optimization Pack for Software Assurance

SECURITY

- Antigen for Exchange
- Microsoft Antigen Spam Manager
- Antigen for SMTP Gateways
- Microsoft Antigen Enterprise Manager
- Microsoft Internet Security & Acceleration Server 2006
- Microsoft Forefront Client Security
- Windows Defender
- Microsoft Forefront Security for SharePoint
- Microsoft Identity Lifecycle Manager 2007
- Microsoft Forefront Security Management Console
- Microsoft Forefront Security for Exchange Server

BUSINESS APPLICATIONS

- Microsoft Dynamics AX
- Microsoft Dynamics CRM
- Microsoft Dynamics GP
- Microsoft Dynamics NAV
- Microsoft Dynamics SL
- Microsoft Dynamics Point of Sale
- Microsoft Dynamics Retail Management System

APPLICATION PLATFORM

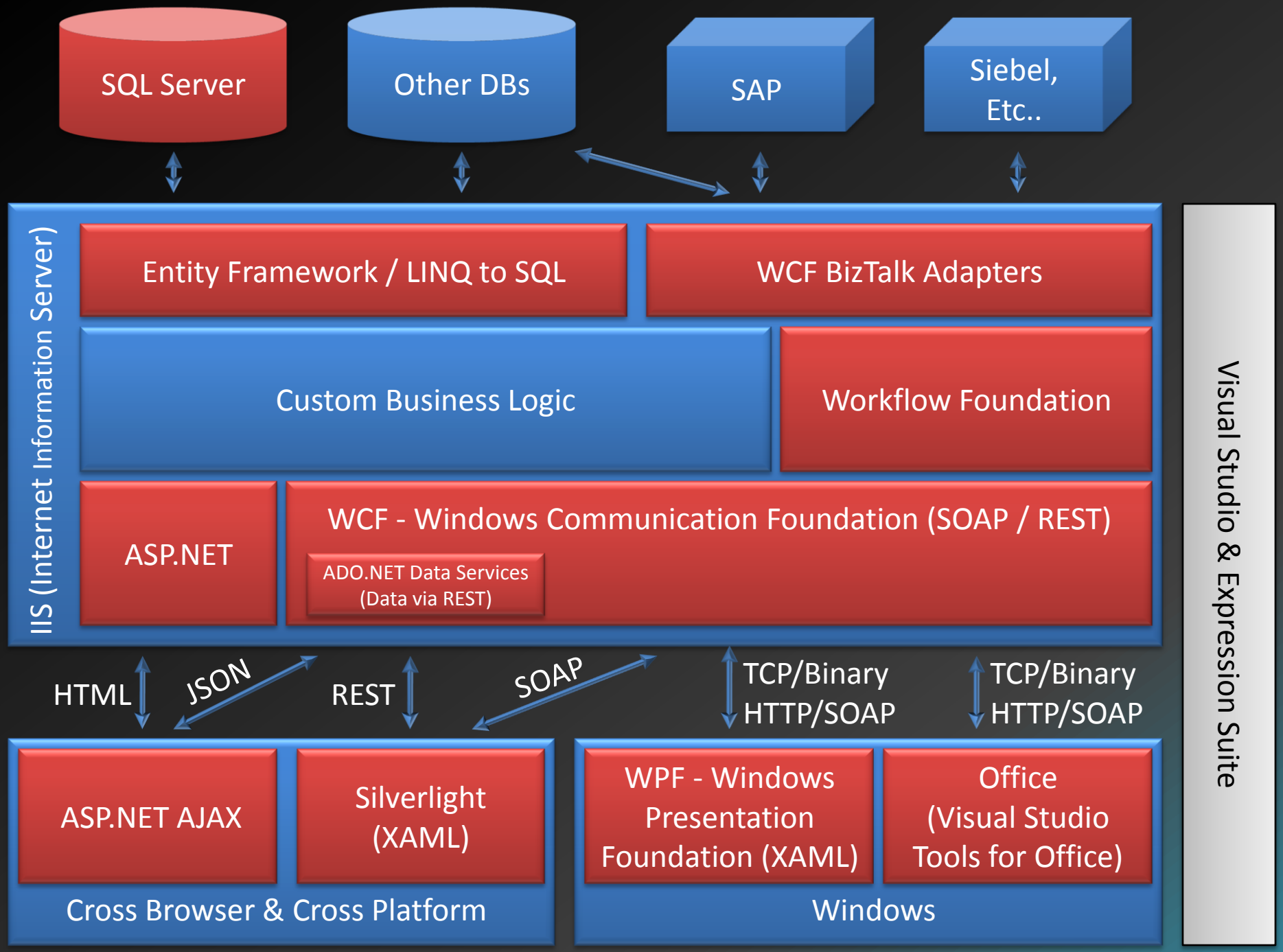
- Microsoft Visual Studio 2008 Beta 1
- Microsoft Visual Studio 2005 Team Edition for Database Professionals
- Microsoft .net Framework
- Microsoft Host Integration Server 2006
- Microsoft Silverlight
- Microsoft Forecaster
- Microsoft Expression
- Duet for Microsoft Office and SAP
- Microsoft Commerce Server 2007
- Microsoft SQL Server 2005 Express Edition with Advanced Services
- Microsoft BizTalk Server 2006 R2
- Microsoft ROBOTICS STUDIO

COLLABORATION

- Microsoft Office SharePoint Server 2007
- Microsoft Office Project Portfolio Server 2007
- Microsoft Office SharePoint Designer 2007
- Microsoft Office Forms Server 2007
- Microsoft Office Groove Server 2007 Groove Relay
- Microsoft Office Groove Server 2007
- Microsoft Office Groove Server 2007 Groove Data Bridge
- Microsoft Office Groove Server 2007 Groove Manager
- Microsoft Office Groove 2007
- Microsoft Office OneNote 2007
- Microsoft Office Visio Professional 2007
- Microsoft Office Enterprise 2007
- Microsoft Office InfoPath 2007
- Microsoft Office Publisher 2007 with Digital Imaging
- Microsoft Exchange Server 2007
- Microsoft Office Communicator Mobile
- Microsoft Office Small Business Management 2007
- Microsoft Office Accounting 2007
- Microsoft Speech Server 2004 R2
- Microsoft Speech Server 2007
- Microsoft Encarta 2007 Premium
- Microsoft MapPoint 2006

ENTERTAINMENT & DEVICES

- Microsoft Surface
- soapbox Beta on msn video
- zune
- Windows Media
- Discover the Difference Microsoft Hardware
- Windows Mobile
- Windows Automotive
- XBOX 360 ELITE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Siebel, Etc..
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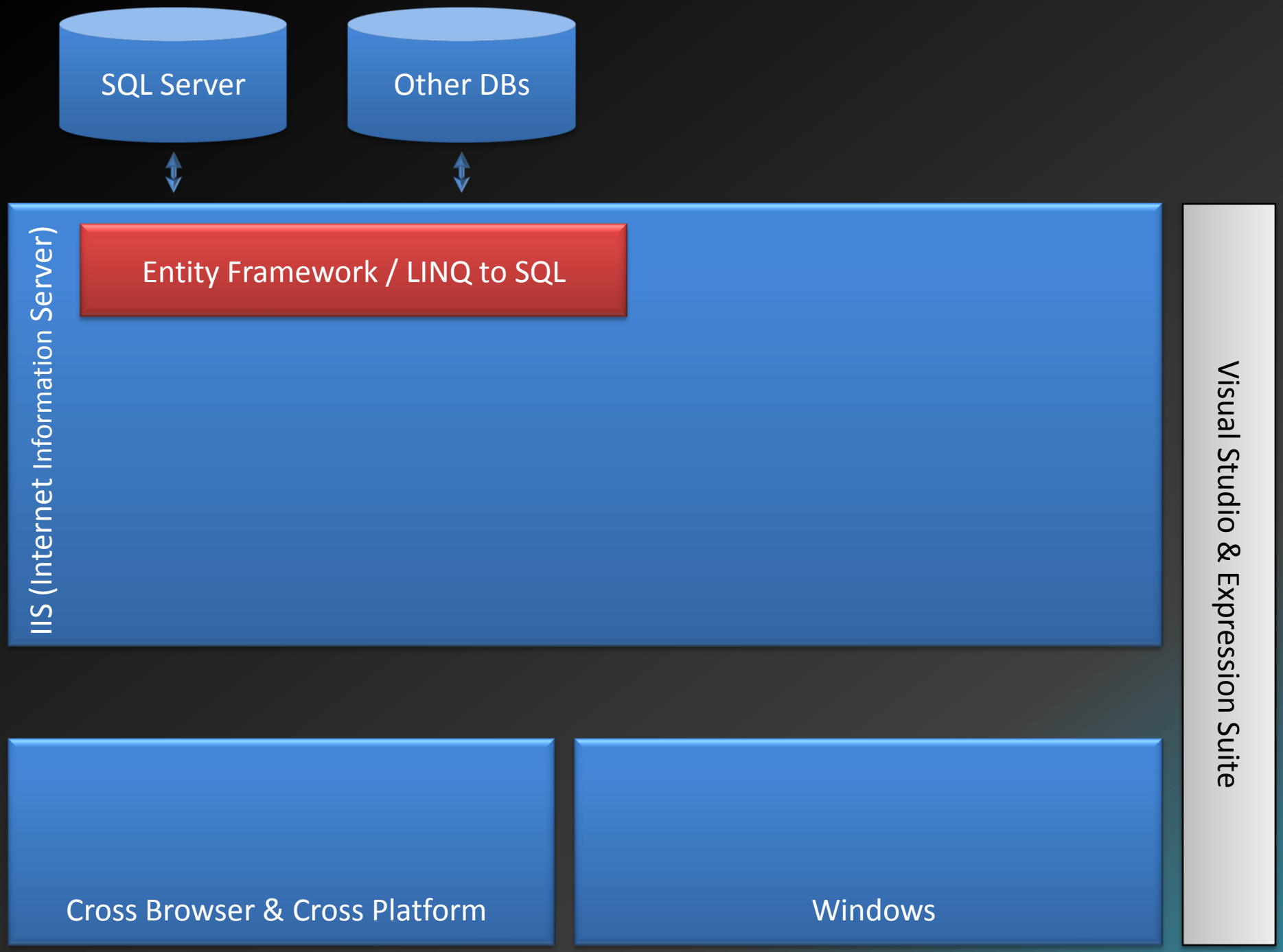
DATA ACCESS LAYER

Entity Framework & LINQ to SQL

(O/R mapping)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LINQ

C# 3.0

VB 9.0

Others…

.NET Language Integrated Query

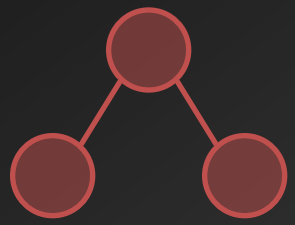
LINQ to Objects

LINQ to DataSets

LINQ to SQL

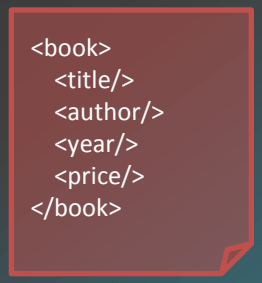
LINQ to Entities

LINQ to XML



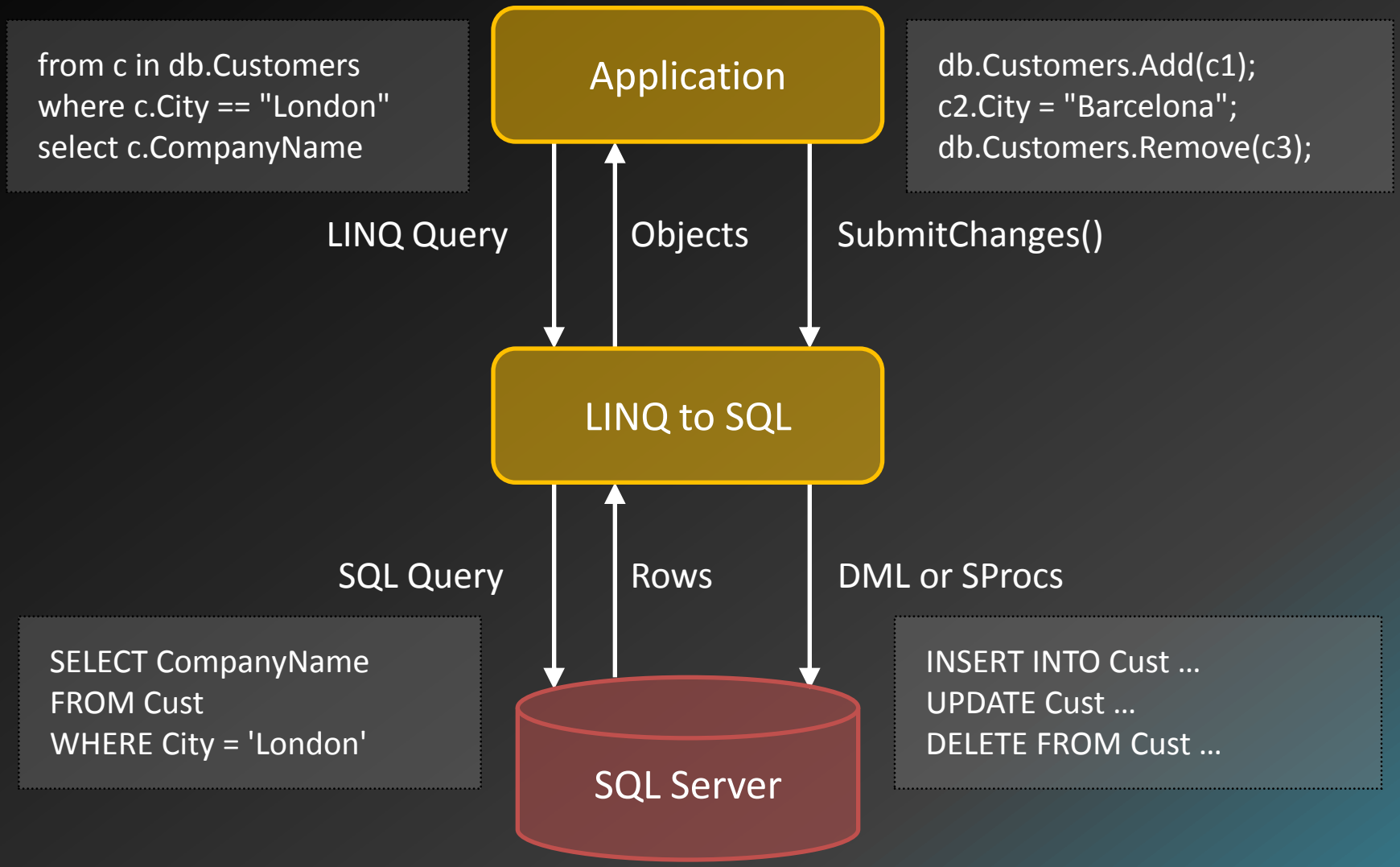
Objects

Relational



XML

LINQ TO SQL ARCHITECTURE

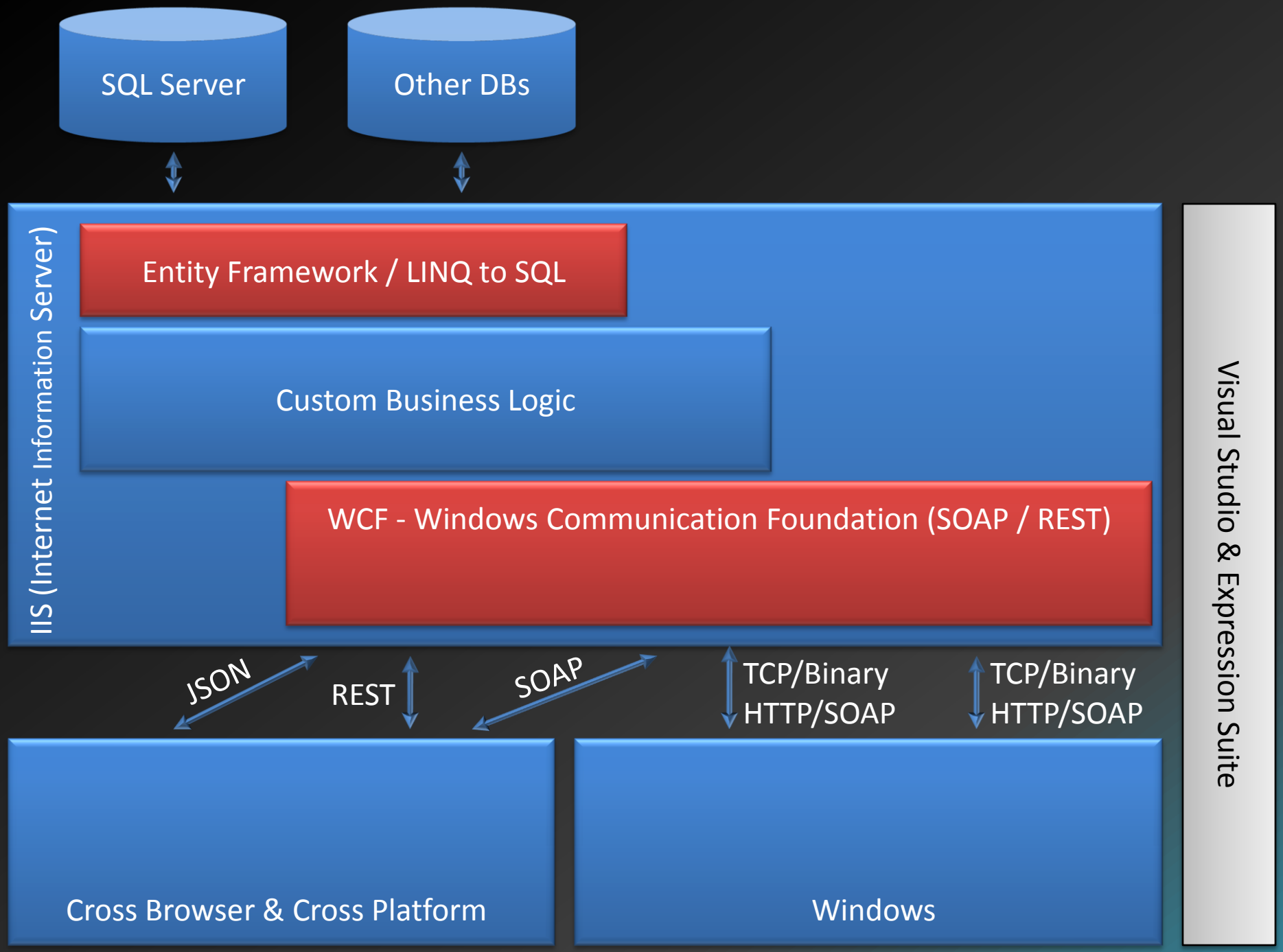


DEMO

LINQ to SQL

CONNECTING THE SYSTEMS

Windows Communication Foundation
(Message-oriented communication)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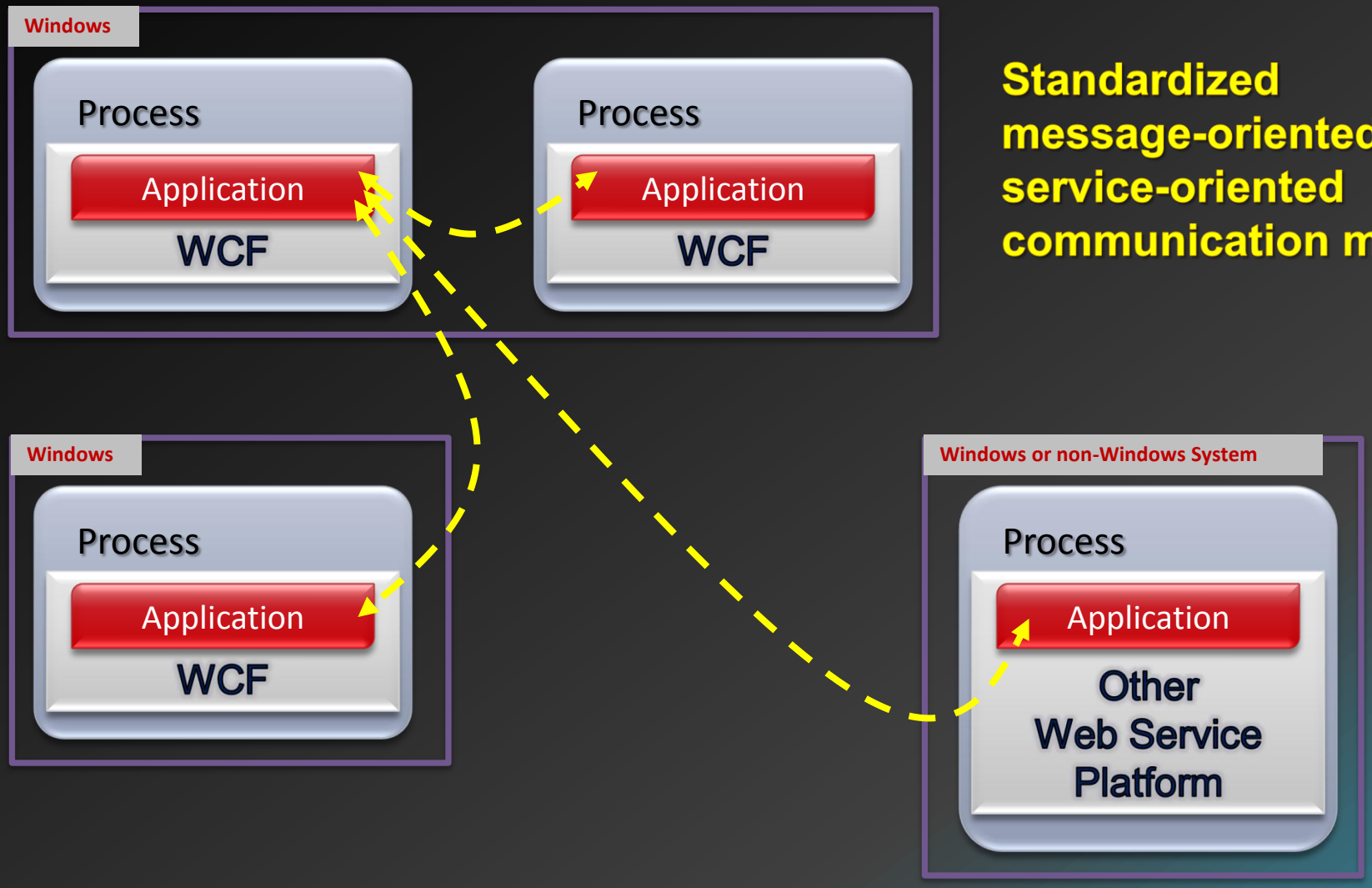
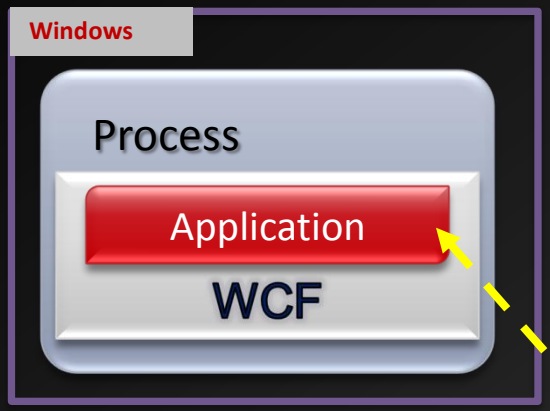
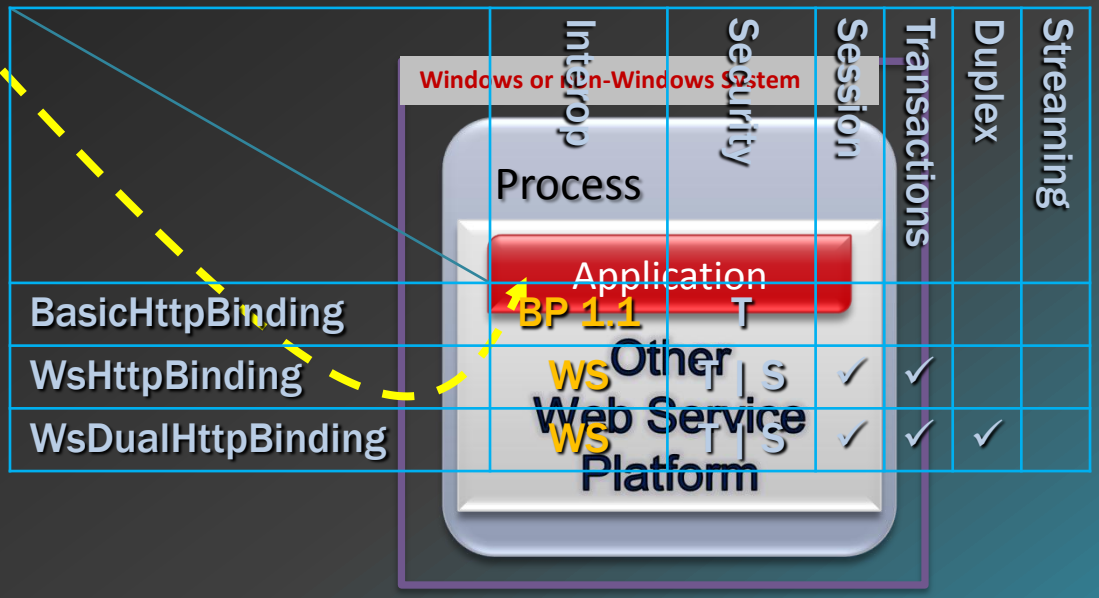
WCF: WORKS EVERYWHERE



Standardized message-oriented service-oriented communication model

WCF BINDINGS





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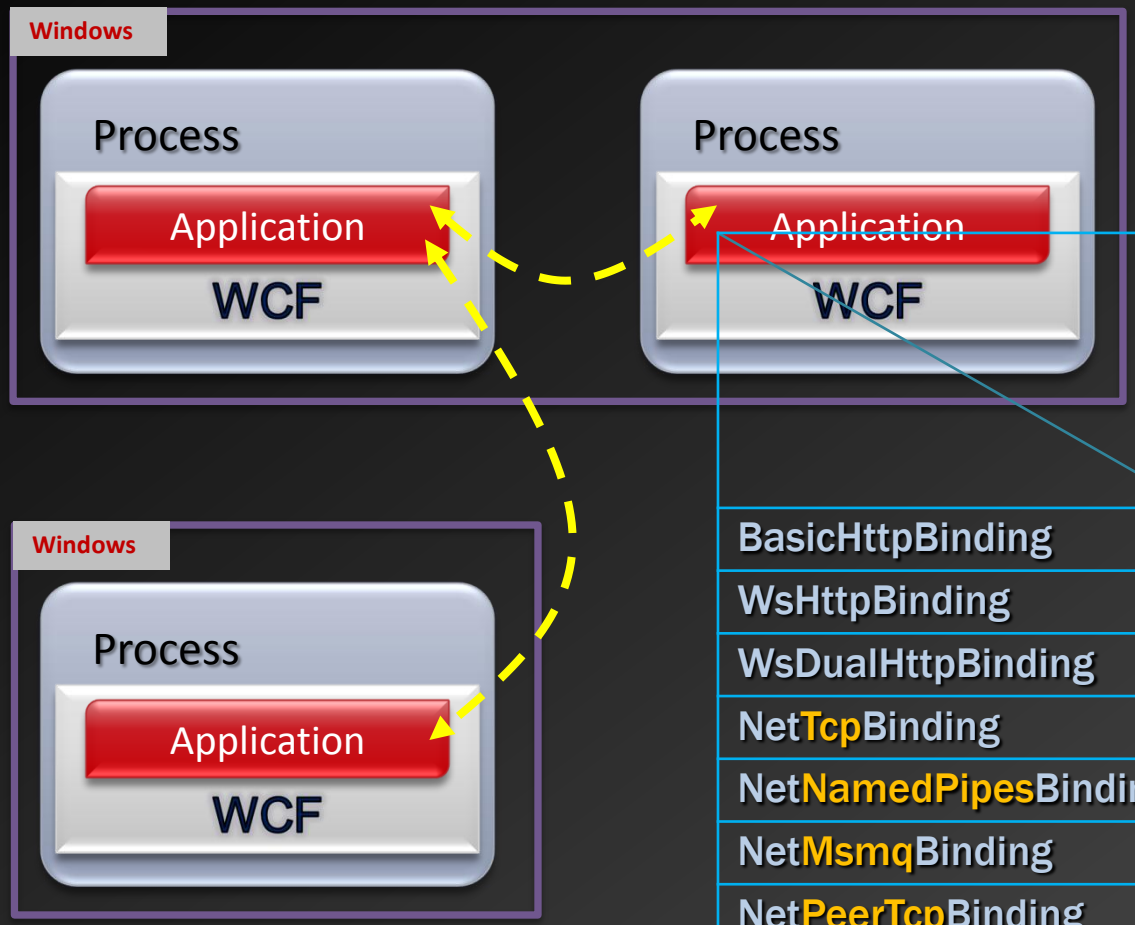

	Interop	Security	Session	Transactions	Duplex	Streaming
BasicHttpBinding	BP 1.1	T				
WsHttpBinding	WS	T | S	✓	✓		
WsDualHttpBinding	WS	T | S	✓	✓	✓	
NetTcpBinding	.NET	T | S	✓	✓	✓	O
NetNamedPipesBinding	.NET	T | S	✓	✓	✓	O
NetMsmqBinding	.NET	T | S	✓	✓		
NetPeerTcpBinding	.NET	T | S			✓	

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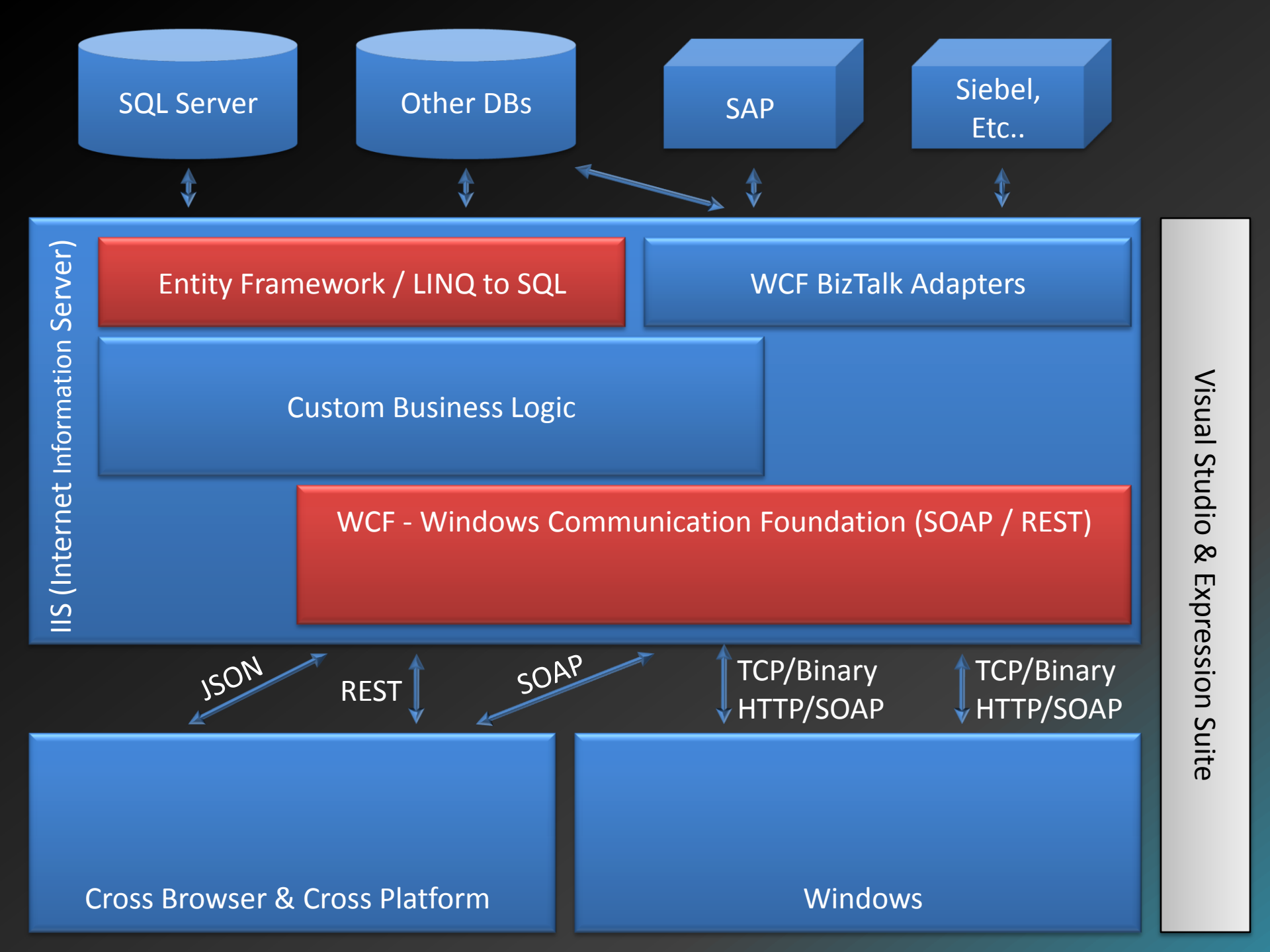
WCF

WCF BIZTALK ADAPTERS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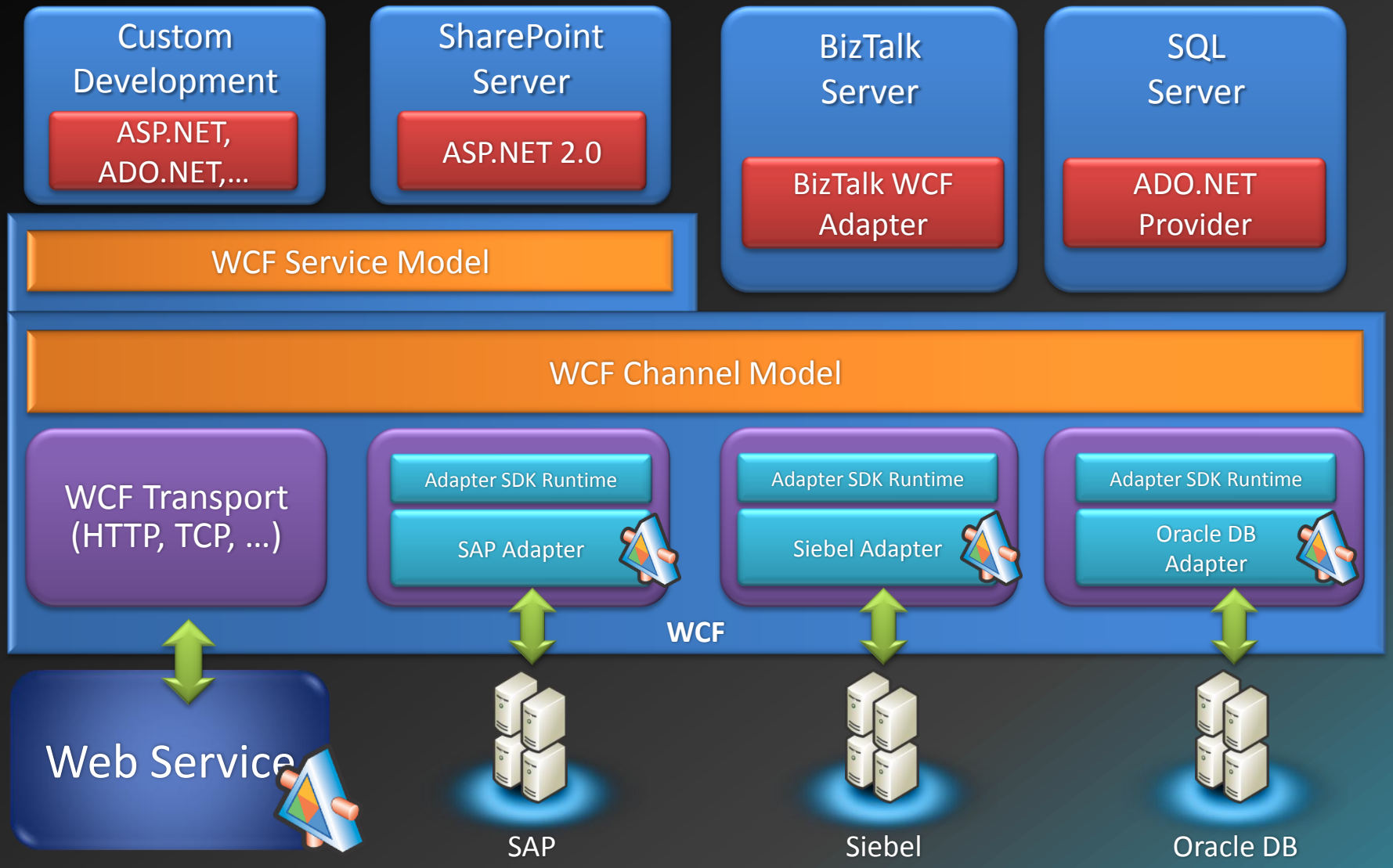
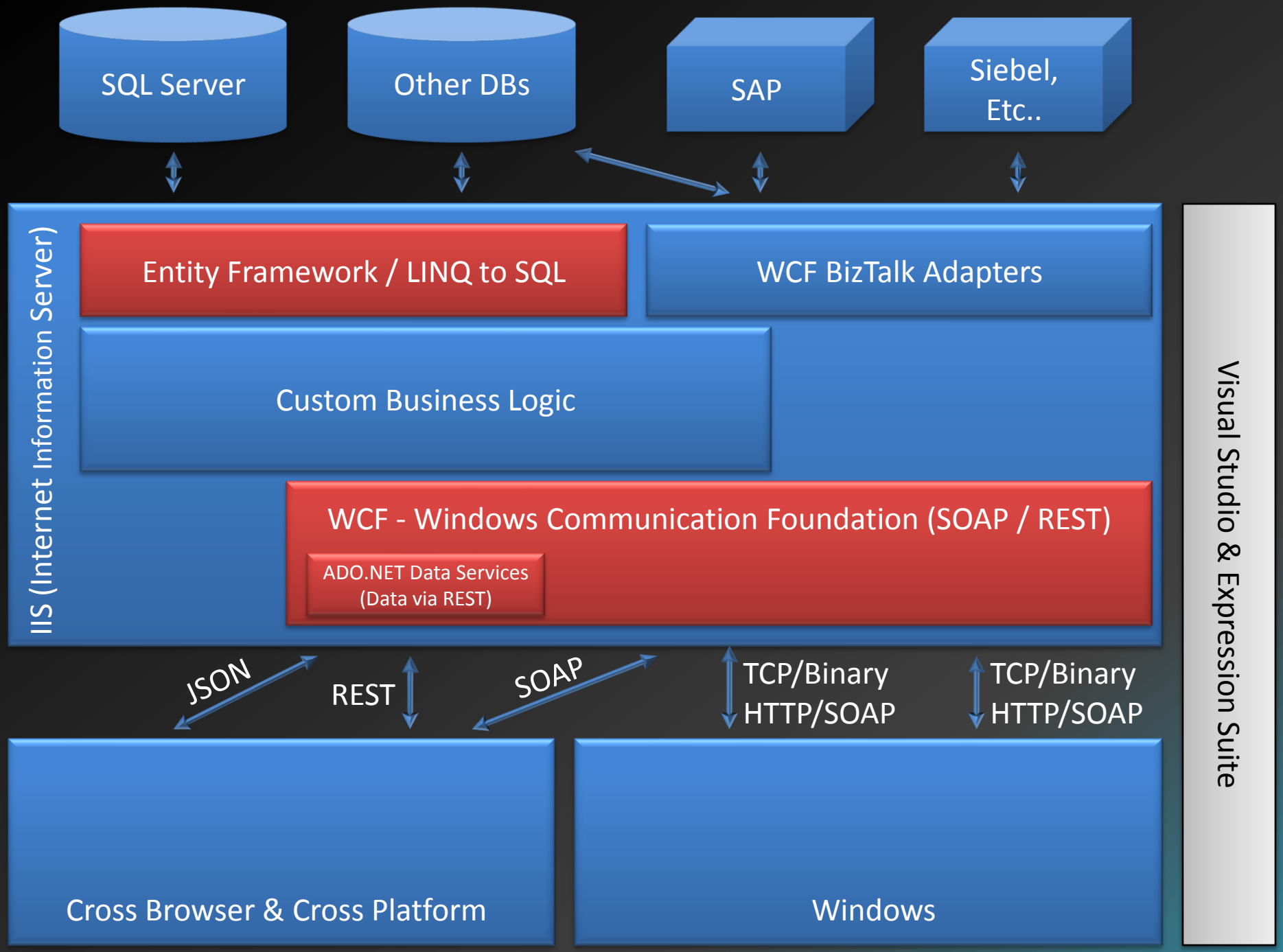
ADAPTER LANDSCAPE

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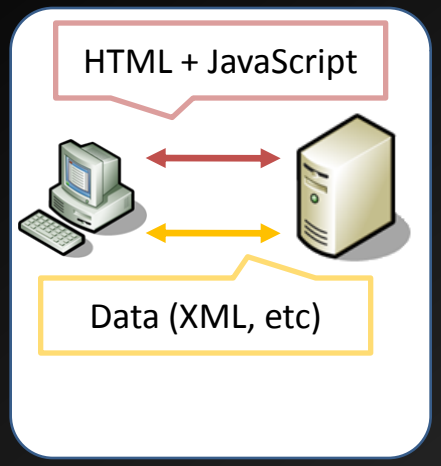
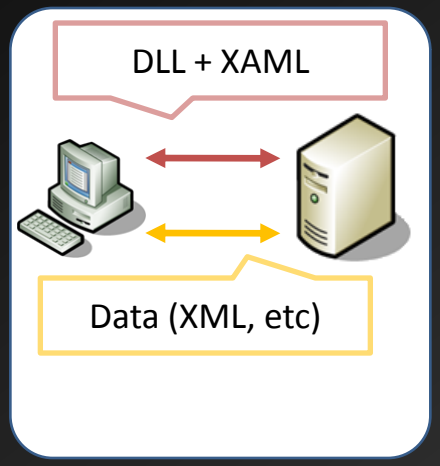
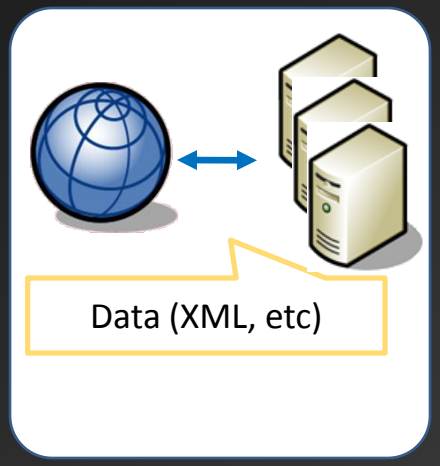
ADO.NET DATA SERVICES



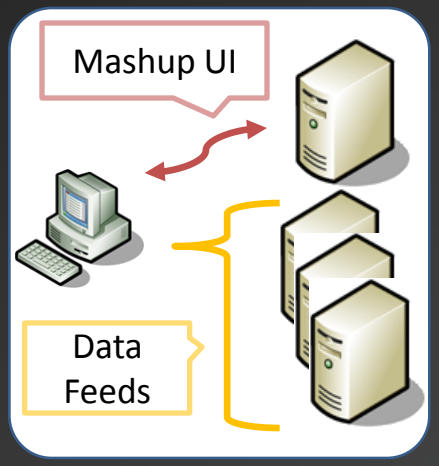
AJAX Applications



Silverlight Applications



Online Services

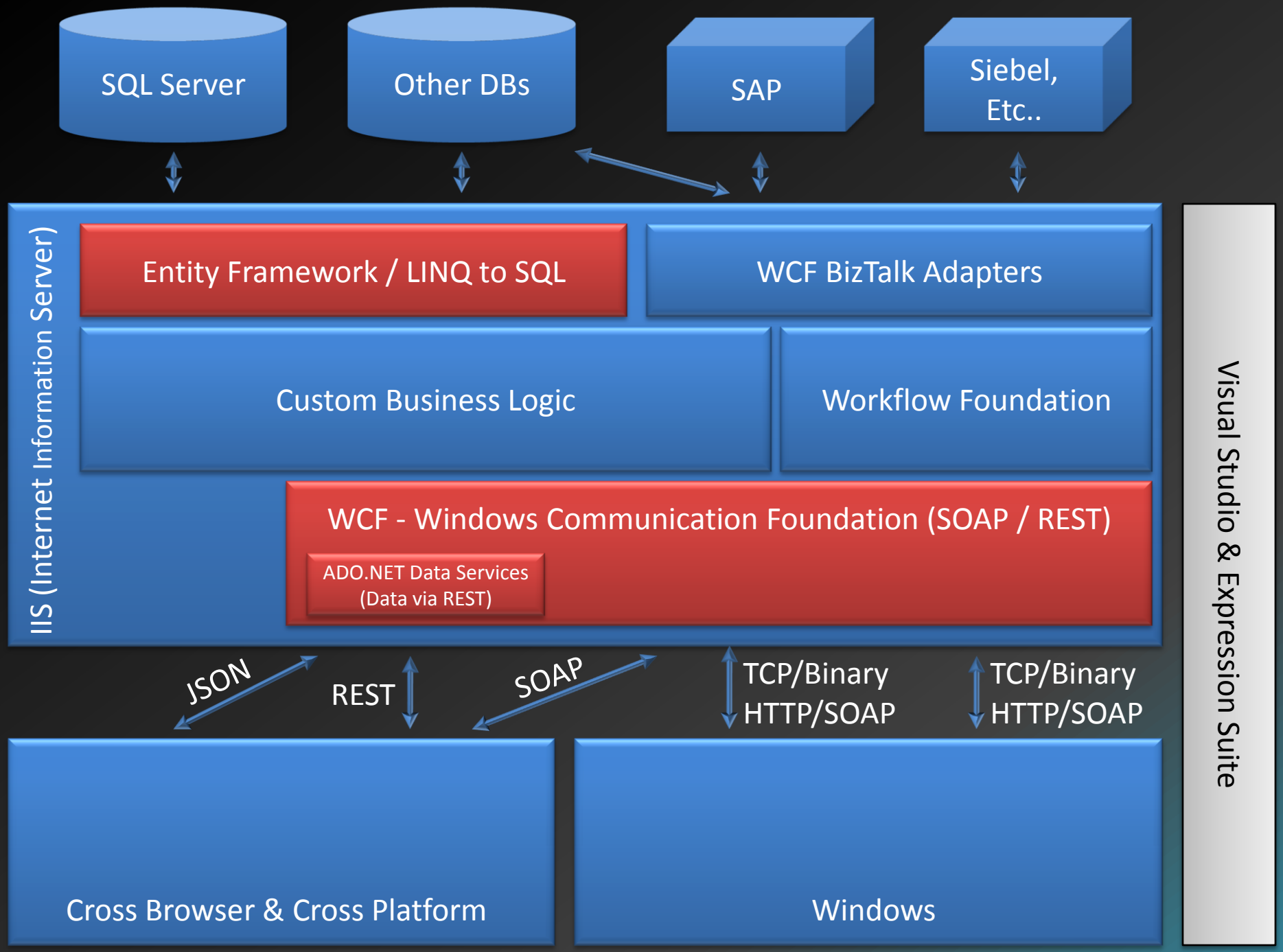


Mashups

- DATA exposed as REST

DEMO

ADO.NET Data Services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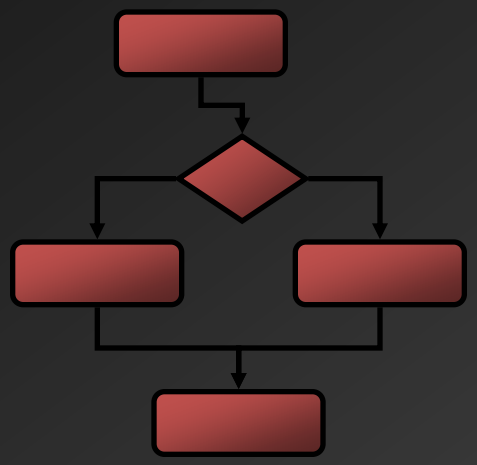
WINDOWS WORKFLOW FOUNDATION

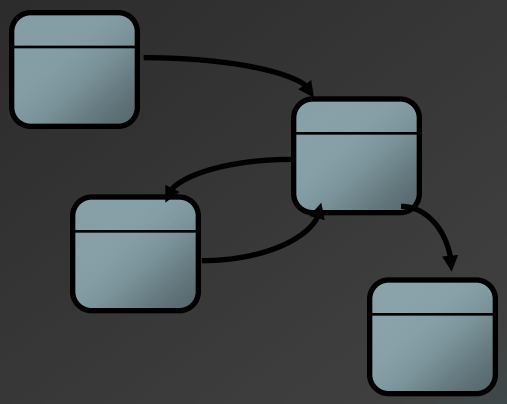
- *A 360° Framework for building Workflows into apps*
- *A single workflow technology for Microsoft (Office Sharepoint Server 2007, BizTalk Server v.Next, …)*
- *Makes declarative workflow a mainstream paradigm*

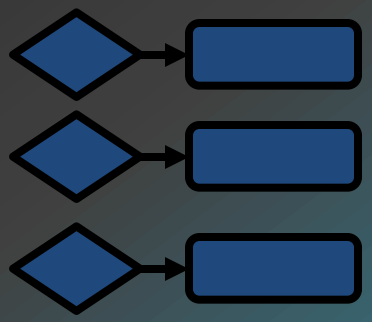
WINDOWS WORKFLOW FOUNDATION

- A program declared as set of activities
  - Coordinates people and software
  - Has real-world control flow
  - Runs durably and transparently
  - Tolerates dynamic change

Like a flowchart…. or a state diagram…. or based on rules.







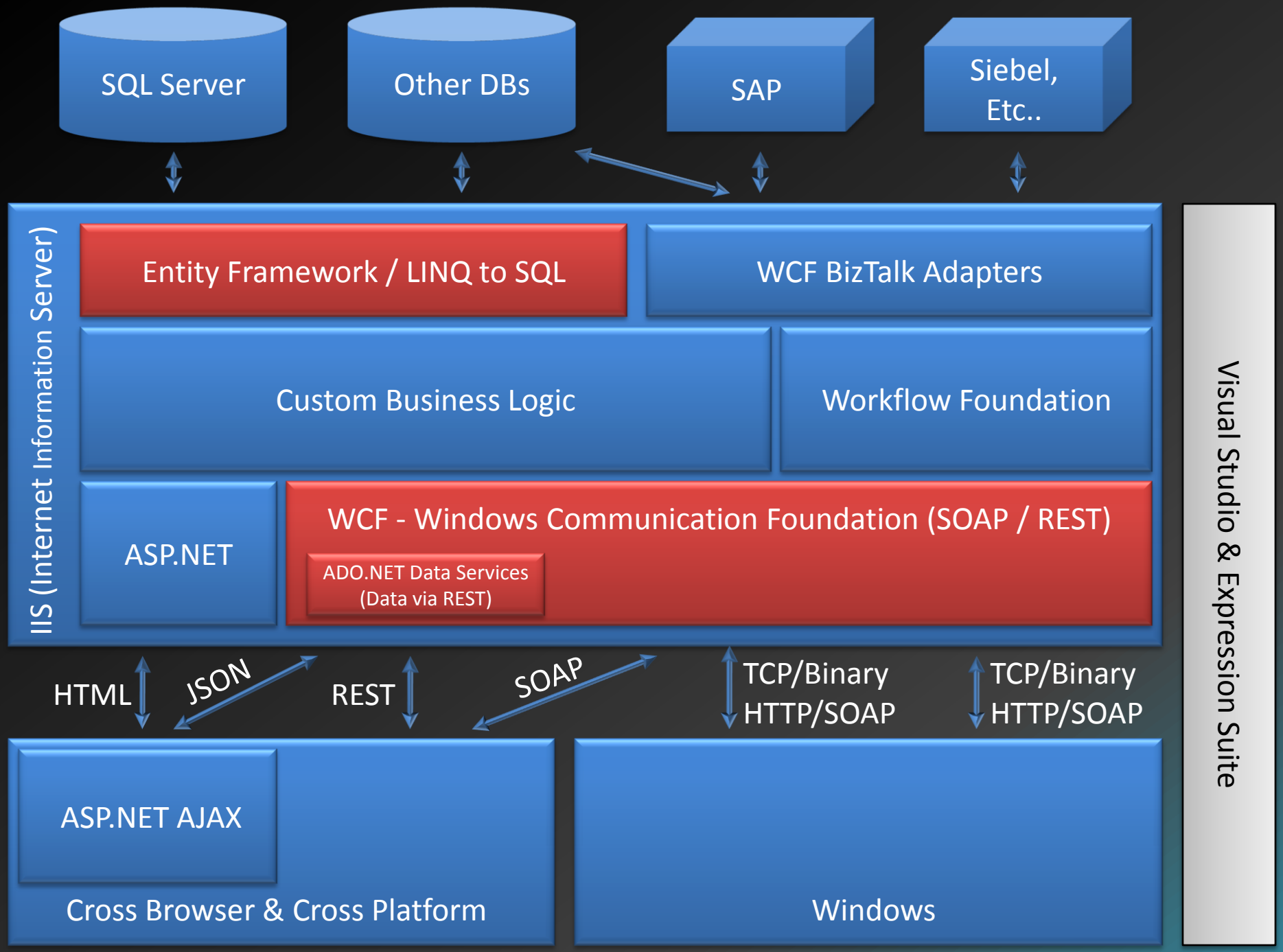
UI TECHNOLOGIES

Overview

UI TECHNOLOGIES COMPARED

Rich

	ASP.NET AJAX	SILVERLIGHT	WPF
Highlights	Remove flickering Allow partial roundtrip Enable (more) client-side processing	**.NET in the browser** (Controls, DataGrid, WS Support,…) **XAML** (Vector Graphic, 2D Animations, Overlays, Transparencies,…) Rich Video/Audio (incl. HD) DRM Inking	**3D Animations** Use GPU **Full Trust** (Complex) Printing **„High Responsiveness“** ***Offline***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ASP.NET AJAX: PARTIAL RENDERING

- <asp:UpdatePanel> control
  - Easily define “updatable” regions of a page
  - Server roundtrips become asynchronous
  - ASP.NET AJAX handles all the infrastructure
  - Supports Triggers that allow other controls to fire the Postback

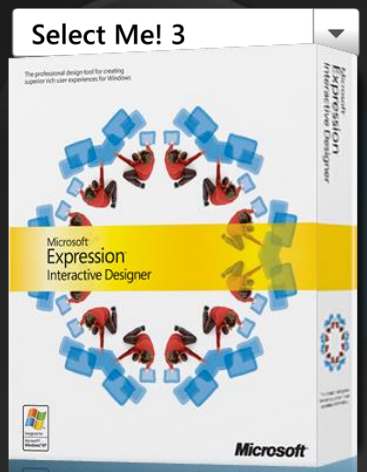
```
<asp:UpdatePanel id=“updatepanel1” runat=“server”>
    <ContentTemplate>
        <!-- This content will be dynamically updated! --
    >
        <asp:Calendar id=“calndr1” runat=“server”/>
    <ContentTemplate>
</asp:UpdatePanel>
```

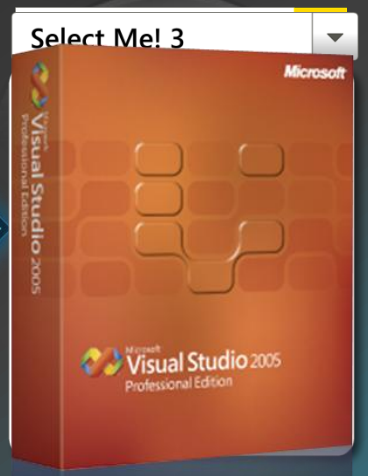
DEMO

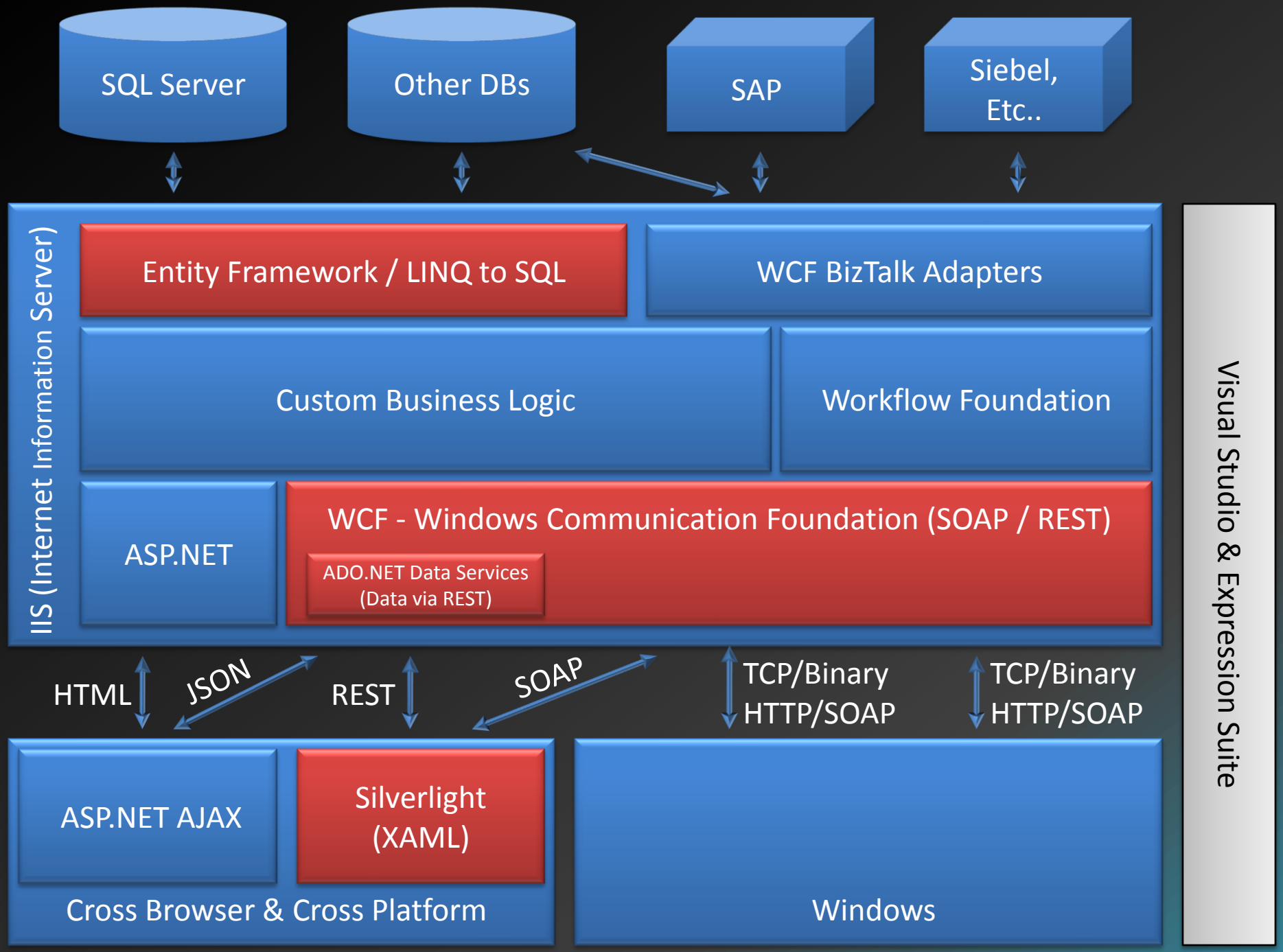
ASP.NET AJAX

XAML & DESIGNER-DEVELOPER PRODUCTIVITY

With XAML designers & developers can streamline their collaboration



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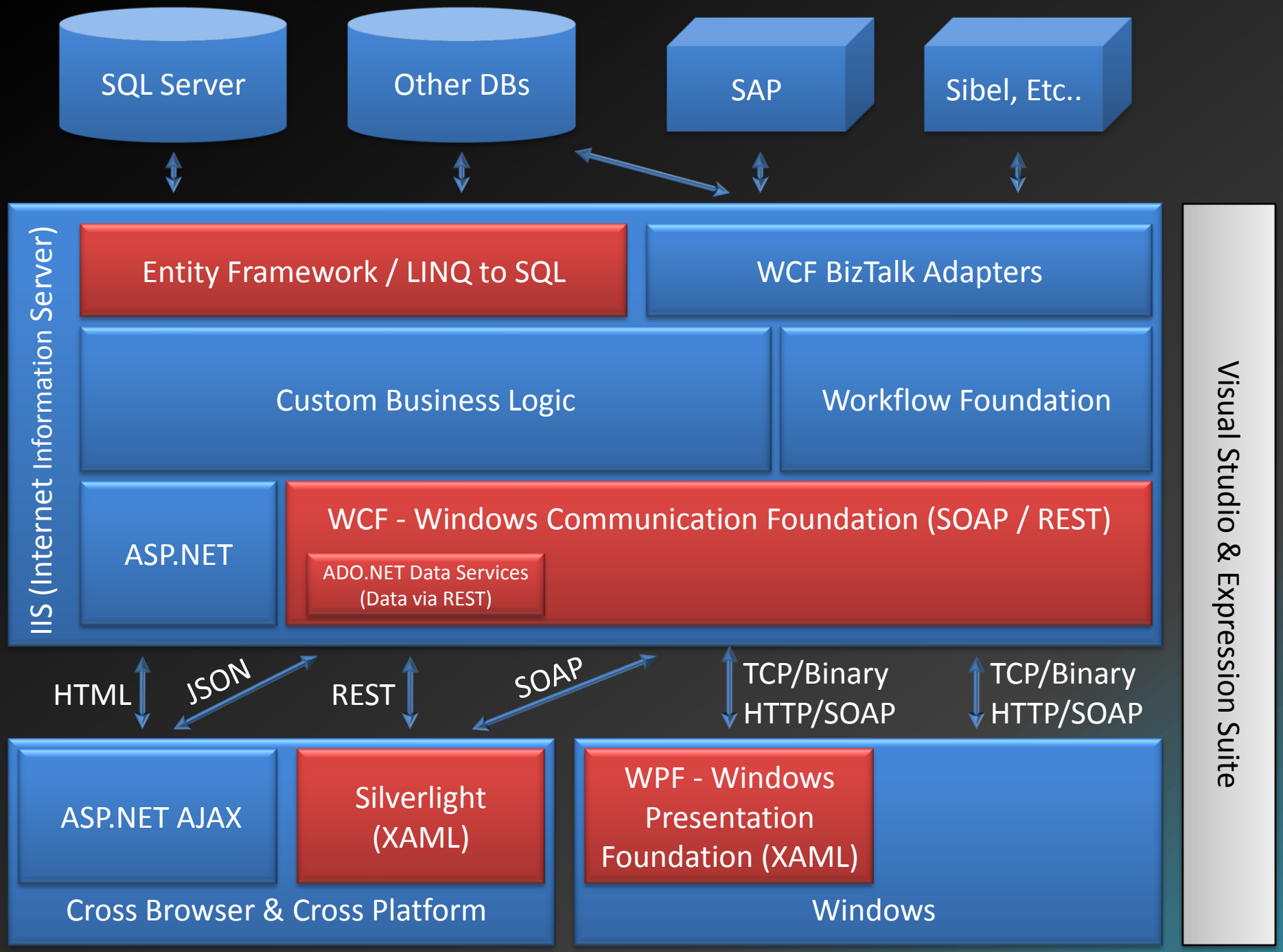
SILVERLIGHT

- Is a browser plug-in that allows to renders UI defined with XAML in several browsers and operating systems (Mac OS, Win, Linux)
- Brings the power of .NET in to the browser
- is small, easy and quick to install
  - 4mb download, self updating, no reboot.

DEMO

Silverlight Stock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FORM FACTORS & HARDWARE ACCELERATION

Sony VAIO U71

- 6”
- 800 x 600

CPU

Toshiba M200

- 12”
- 1400 x 1050

GPU

Toshiba 72MX195

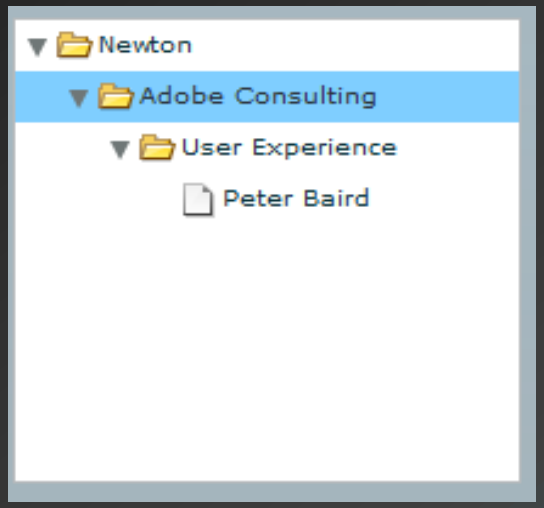
- 72”
- PixelPure AT™

DEMO

WPF

STYLE / TEMPLATE

- Customize the look of an application without changing it's behavior
- 3 levels of customization: default



STYLE / TEMPLATE

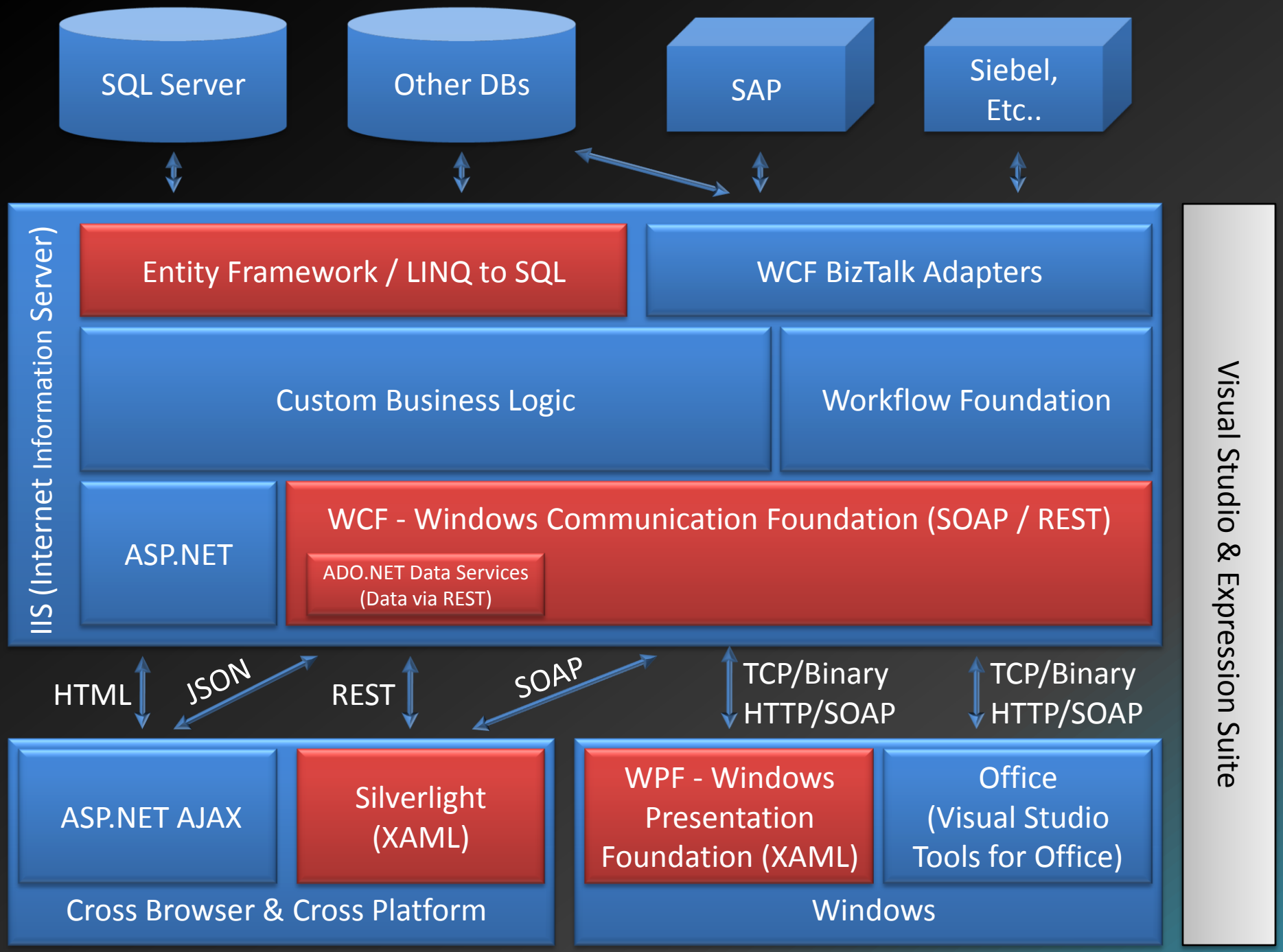
- Customize the look of an application without changing it’s behavior
- 3 levels of customization: style

STYLE / TEMPLATE

- Customize the look of an application without changing it’s behavior
- 3 levels of customization: template

DEMO

XAML Template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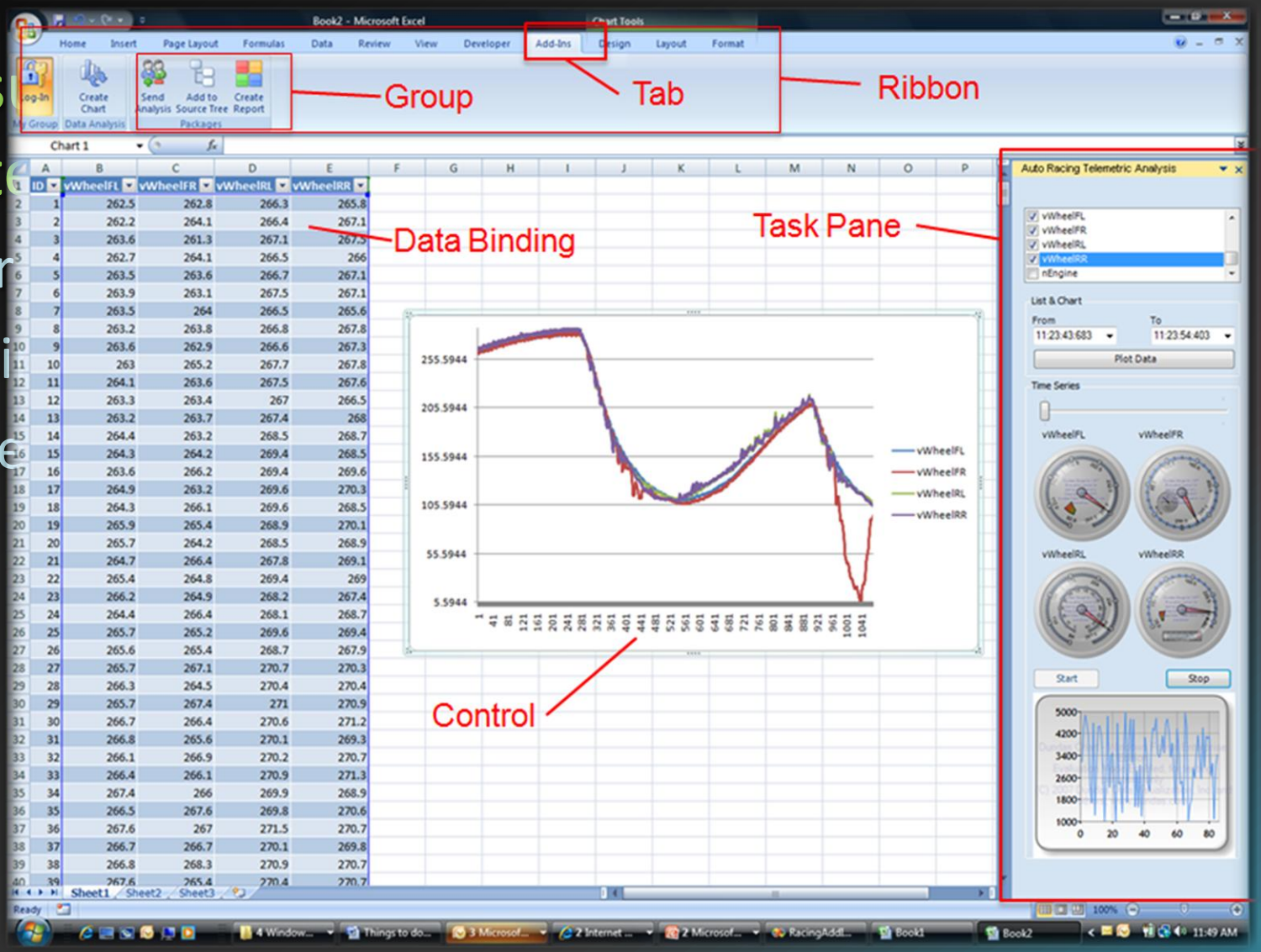
OFFICE PROGRAMMABILITY

VSTO

VSTO IS…

- …Visu
  strate
  - for
  - usi
  - the



DEMO

VSTO with Excel

Microsoft®

Your potential. Our passion.™

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