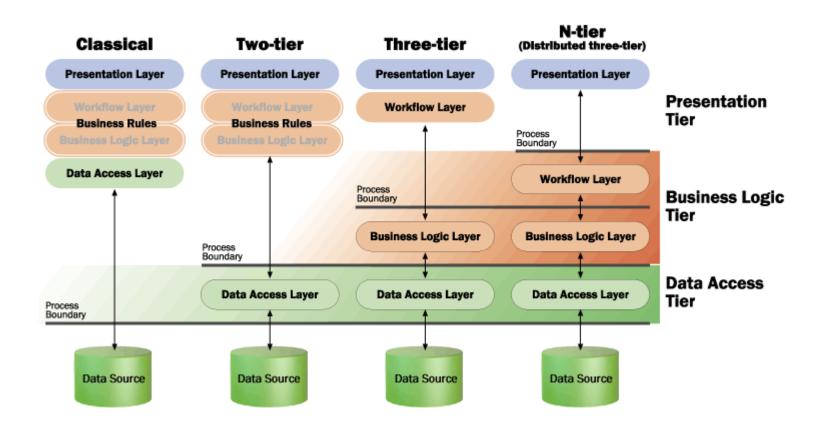
# Windows Communication FoundationEvaluation Demo and FAQ

### Agenda

- Background : N-Tier Architecture
- Background : SOA Architecture
- Background : Web Service Software Factory ( WSSF)
- Background : .NET Framework 3.0
- Overview of WCF
- FAQ: WCF Hosting
- FAQ: WCF Communication
- WCF Usage scenarios
- WCF programming model
- WCF Demo
- Further Reading

### N-Tier Architecture



### **SOA Architecture**

**Web Service Web Framework** Framework **Presentation Tier Web Services Tier** Core Framework Command Workflow **Application Tier Service Interface Rules Engine** Security **Business Tier Domain Object Data Access Data Tier** 

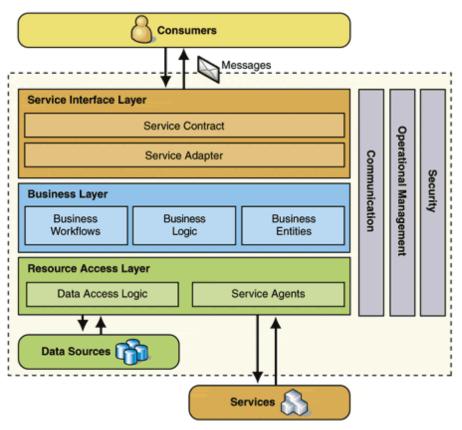
XML Tasks

Logging

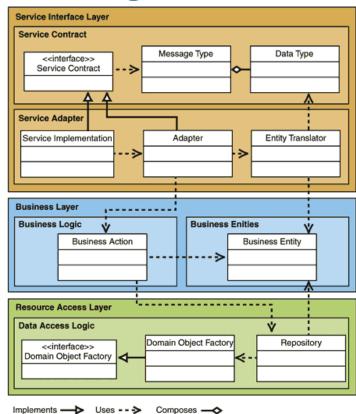
Common Tier

### WSSF – Service Factory

#### **Architectural View**



#### **Logical View**



### • • NET Framework 3.0

Windows Presentation Foundation Next generation user experience

Windows Communication
Foundation
Service-oriented development

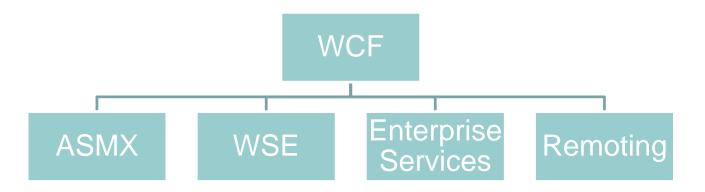


Windows Workflow Foundation Business process modeling

"InfoCard"
Digital identity management

## • • Overview – What is WCF?

- Formerly named "Indigo"
- ASMX, WSE, Enterprise Services & Remoting



## • • FAQ: WCF Hosting

#### Where can it be hosted?

- Windows Service
- > IIS
- Dedicated application
- Windows Activation Service

## • • • FAQ:WCF Communication

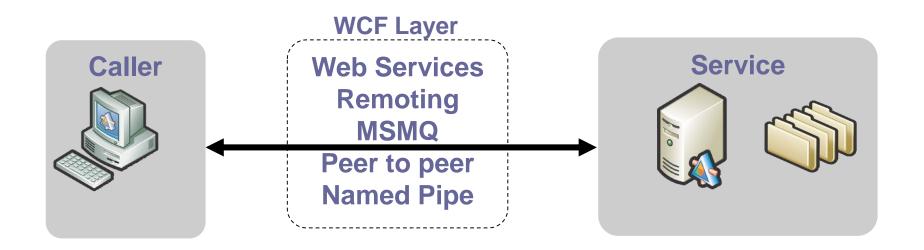
#### What communication methods does

#### WCF support?

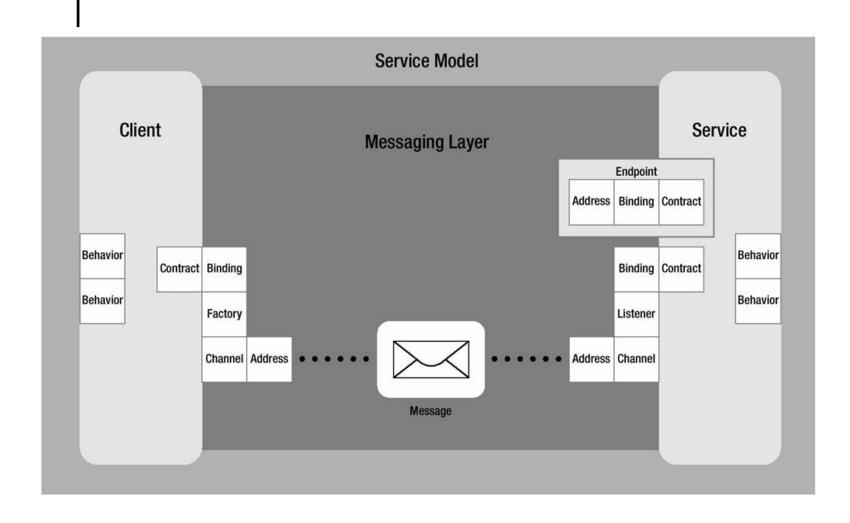
- Web Services
- Remoting
- MSMQ
- Named Pipe
- Peer to Peer

### WCF Usage Scenarios

- > Typically used for long running processes.
- > Provides the communication Layer.
- Suited for disparate environments and systems.
- > Reuse existing applications and legacy systems.
- Good for asynchronous processing and transaction based systems.



## • • WCF Programming Model



## WCF DemoBuilding WCF application

#### Service

- Define Contracts
- > Implement Contracts
- Define Endpoints
- Host & Run Service

#### Client

- Generate Proxy from Metadata
- Implement & Run Client

## • • Further Reading

#### Resources

Web Services Enhancement
Web Services Security

- ► <a href="http://msdn.microsoft.com/en-us/library/aa480534.aspx">http://msdn.microsoft.com/en-us/library/aa480534.aspx</a>
- http://msdn.microsoft.com/en-us/library/cc268283.aspx
- http://msdn.microsoft.com/en-us/library/aa302390.aspx