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Agenda

- Strategy
- Problem Space
- Where's the Bus?
 - BizTalk Services
 - Demos, Demos, Demos, ...

Strategy Codename 'Oslo'

The Vision: Significantly simplify the effort required to design, build, deploy and manage distributed applications within and across organizations.

- SOA Platform
 - Spans across Client, Server and Cloud
 - Simplify through Modelling
 - General purpose modelling language, tools and a repository
- Capabilities delivered through traditional offerings:
 - E.g. BizTalk Server, BizTalk Services, VS, .Net Fx, ...

Problem Space

- Crossing Boundaries
 - Technology, business, people...
- Some required capabilities:
 - Federated Naming
 - Distributed Identity and Access Control
 - WAN Messaging, and message patterns
 - Discovery
- Appropriate programming model support

WCF Overview Service

- Endpoint
 - <u>Address</u>
 - uri
 - <u>Binding</u>
 - how it communicates with the outside world
 - E.g. TCP, Reliable Messaging, Security considerations, ...
 - <u>Contract</u>
 - what operations are supported
 - <u>Behavior</u>, extends functionality

WCF Overview Client

- <u>Channel</u>
 - mechanism for sending messages to endpoints
 - <u>Behavior</u>
 - Endpoints, just represent target endpoint
 - <u>Address</u>
 - Binding
 - <u>Contract</u>

Internet Service Bus ISB

- Foundation in the cloud
- Simply Internet naming, e.g. url
- Internet protocols
- Enable developers to build cross-organisation, cross-device, Internet composite applications

BizTalk Services

- Cloud Based Services
 - BizTalk is not used in the cloud, nor is it required on either side
 - BizTalk branding
- Here today
 - <u>http://biztalk.net</u>
 - No idea on how it will be commoditized

BizTalk Services

- Connectivity (http://connect.biztalk.net)
 - Applications create public addresses
 - Identity provides simple access control
- Identity (http://identity.biztalk.net)
 - Delegate identity and access control
 - Federated identity (CardSpace, ADFS)
 - Username and password
- Workflow (coming soon)
 - Pre-defined activities, very early stage development



Hello World 😳

Technologies Pub / Sub via URIs



Technologies Direct Connections





Pub/Sub *MultiCast*

BizTalk Services: Identity Service

- Publicly-accessible Security Token Service (STS) (WS:Trust)
- Applications and users can obtain secure authentication tokens from the Identity Provider Service.
- These tokens can then be exchanged, to allow communicating parties to provide proof of their identities.
- "offload" authentication functions and eliminate the overhead of creating and maintaining an authentication and identity subsystem.



Authorisation Calculator

RESTful Model

- Utilises extensibility mechanism in WCF
- Decorate resource with attributes
 - WebGet, operation callable via HTTP GET
 - WebInvoke, for other verbs, e.g. PUT, DELETE,
 POST, ...
 - webHttpBinding, binding for REST services
 - webServiceHost, hosting class for REST services
 - webServiceHostFactory, hosting without config file



Rest Basic Web Programming

Summary

- Oslo
- ISB
- BizTalk Services
 - Connection
 - Identity / Access Control
 - Web Programming

Thank You 🙂