

Simon Thurman Architect

## Agenda

- Strategy
- Problem Space
- Where's the Bus?
  - BizTalk Services
  - 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** 
  - Address
    - uri
  - Binding
    - how it communicates with the outside world
    - E.g. TCP, Reliable Messaging, Security considerations, ...
  - Contract
    - what operations are supported
    - Behavior, extends functionality

# WCF Overview Client

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

# Internet Service Bus ISB

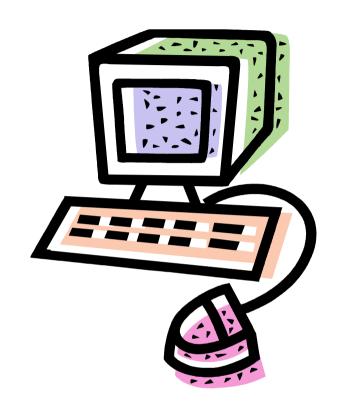
- Foundation in the cloud
- Simply Internet naming, e.g. url
- Internet protocols
- Enable developers to build cross-organisation, cross-device, Internet composite applications

#### BizTalk Services

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

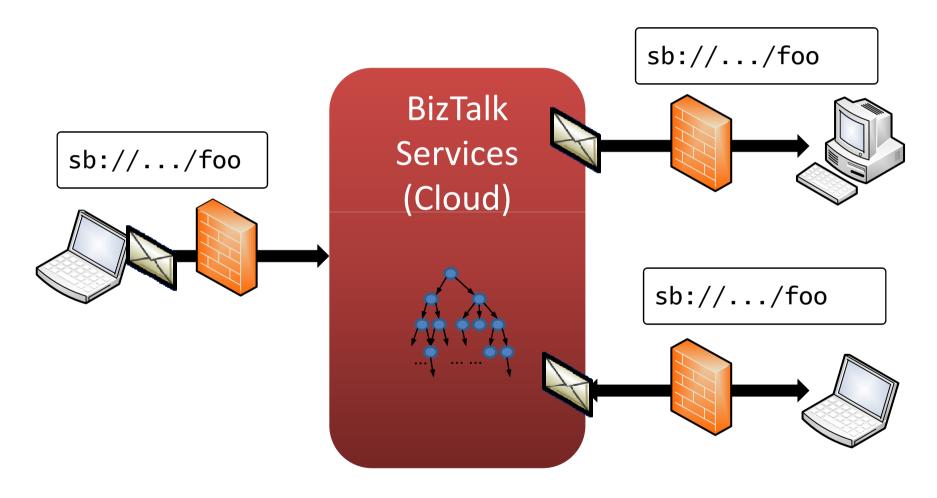
#### BizTalk Services

- 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



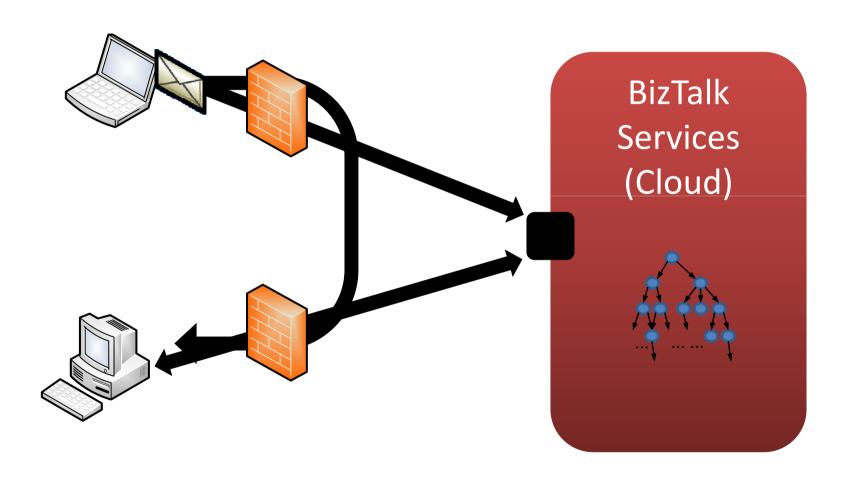
Hello World ©

# Technologies Pub / Sub via URIs



## **Technologies**

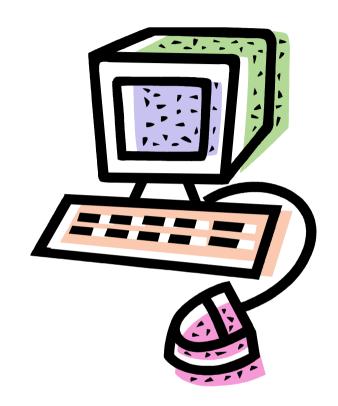
#### **Direct Connections**



Pub/Sub *MultiCast* 

## BizTalk Services: Identity Service

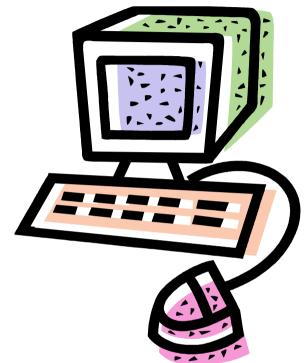
- Publicly-accessible Security Token Service (STS) (WS:Trust)
- Applications and users can obtain secure authentication tokens from the Identity Provider Service.
- These tokens can then be exchanged, to allow communicating parties to provide proof of their identities.
- "offload" authentication functions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