Service Bus for Windows Server

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Overview of ESB's

- Enterprise Service Buses
  - IBM MQSeries
  - BizTalk
  - NServiceBus

- Components of an ESB:
  - Guaranteed Delivery
  - Routing
  - Messaging
  - Replay-ability
  - Message Format Adaptability
  - Network Protocol Adaptability
  - Platform Agnosticism
Comparing SBWS to Other Products:

NServiceBus
- Provides support for different Message Types
- Provides WebSphere, BizTalk, and WCF adapters

SBWS is really a Message Queue manager with some Service-Bus-like features such as publish/subscribe and REST/Java-AMQP adapters.
First Look at SB Explorer

• (Although, keep in-mind that Chad has modified the source-code for this presentation.)
Administer the Service Bus

- **Power-Shell reference guide:**

- **Demo:**
  - Adding and removing users from the ‘Manage Users’ role
  - Authorizing Users at the Queue/Topic Level
  - Working with NT Groups
### Service Bus PowerShell

```
DnsEntry: BZRXKz1W+xkaudUvg6sLcq3onYJip+THNtka1cH1Cmo=
PrimarySymmetricKey: BZRXKz1W+xkaudUvg6sLcq3onYJip+THNtka1cH1Cmo=
SecondarySymmetricKey: 
PS C:\Program Files\Service Bus\1.1> Set-SBNamespace -Name ServiceBusDefaultNamespace -ManageUsers chads_000
SubscriptionId: 0000000000000000000000000000000000000000
State: Active
Name: ServiceBusDefaultNamespace
AddressingScheme: Path
CreatedTime: 3/6/2014 9:56:06 PM
IssuerName: ServiceBusDefaultNamespace
IssuerUri: ServiceBusDefaultNamespace
ManageUsers: \{chads_000\}
DnsEntry: BZRXKz1W+xkaudUvg6sLcq3onYJip+THNtka1cH1Cmo=
PrimarySymmetricKey: BZRXKz1W+xkaudUvg6sLcq3onYJip+THNtka1cH1Cmo=
SecondarySymmetricKey: 
PS C:\Program Files\Service Bus\1.1>
```
Go to:
- C:\Program Files\Service Bus\1.1\Microsoft.ServiceBus.Gateway.exe.config
- Change the NETTCP Binding with name “NetMessagingProtocolHead”
- Set:
  - maxReceivedMessageSize="2147483647"
  - maxBufferSize="2147483647"
- Save the config file
- Restart all Service Bus windows services
Creating your first Topic/Queue

- Demo on Topic creation
  - Using the namespace manager
  - Which version of the ServiceBus DLL are we working with...
  - Understanding the “connection string”

```csharp
ServiceBusConnectionStringBuilder connBuilder = new ServiceBusConnectionStringBuilder(_sbConnString);
NamespaceManager nsManager = NamespaceManager.Create();
MessagingFactory msgFactory = MessagingFactory.Create();
```
• Demo on Pub/Sub Scenario:
  ◦ Asynchronous Programming Techniques
  ◦ Handling a message
  ◦ Deserializing the content of a message
  ◦ Handling errors
  ◦ Complete() the message

Handling the Subscription Model
• REST is a particular combination of TCP and Message-Type format for communicating with servers
• Useful for collaborating across network boundaries
• Default time-out for WRAP token is 20 minutes
• More options exist in Azure Service Bus
REST allows a programmer to interface with the Service-Bus by utilizing JSON formats and AJAX requests.

- CORS (Cross Origin Resource Sharing)
- Understanding Azure vs On-Premise
- WRAPv0.9 – vs - $STS/OAuth/

http://www.html5rocks.com/en/tutorials/cors
Working with Message Forwarding