

RabbitMQ for .Net Developers – Part 2

Messaging Frameworks

Michael Stephenson
@michael_stephen
Michael_stephensonuk@yahoo.co.uk



pluralsight
hardcore developer training

Agenda

- WCF
- Spring
- Summary

WCF & RabbitMQ

Overview

- **What is it?**
- **Why would you use it?**
- **Messaging Patterns**
 - One way
 - Two way RPC
 - Duplex
- **WCF Usage**
 - Code driven
 - Configuration Driven

WCF ABC's

- Address

- soap.amp:///<ServiceName>

- Binding

```
<bindings>
  <rabbitMQBinding>
    <binding name="rabbitMQConfig"
      protocolversion="AMQP_0_9_1"
      hostname="localhost"
      port="5672"
      username="guest"
      password="guest"/>
  </rabbitMQBinding>
```

- Contract

```
<client>
  <endpoint address="soap.amqp:///Test"
    binding="rabbitMQBinding"
    bindingConfiguration="rabbitMQConfig"
    contract="Contract.ITestContract"
    name="TestService" />
</client>
```

```
[ServiceContract]
public interface ITestContract
{
    [OperationContract]
    string TestPing(string message);
}
```

Limitations

- **Direct Exchange Only**
 - `amq.direct`
- **Dynamic Queues Only**
- **Non persistent queues**
- **Two Way Doesn't really work with multiple listeners**

Demo – WCF & RabbitMQ

Spring.net AMQP

Overview

- **What is it?**
- **Why use it?**
 - Messaging Patterns
 - All
 - Usage
 - Configuration Driven
 - Removes lots of code

Key Elements

■ Client

- Connection Factory
- Rabbit Template
- Message Converter
- Type Mapper
- Service Gateways

■ Server

- Connection Factory
- Message Listener
- Message Adapter/Handler
- Message Converter
- Type Mapper

Demo – Spring.net AMQP

Summary

- **Frameworks → Simplify messaging**
 - Serialization
 - Message Identification
 - Message format
- **There are many frameworks**
 - WCF
 - Spring.net AMQP
- **Others to note**
 - NServiceBus
 - EasynetQ
 - Rebus
 - RabbitBus
 - Burrow.net
 - Mass Transit