# WCF 2012, Part 3 of 3: Securing and Deploying

page 1

**Meet the expert:** Joe Mayo is an author, independent consultant, and instructor specializing in Microsoft .NET and Windows 8 technology. He has several years of software development experience and has worked with .NET since July 2000. Joe has written books and contributes to magazines such as CODE Magazine. He has been an active contributor to the .NET community for years, operating the C# Station Web site, authoring the LINQ to Twitter open source project, and speaking regularly at user groups and code camps. For his community contributions, Microsoft has honored Joe with several Most Valuable Professional (MVP) Awards through the years.

**Prerequisites:** This course assumes that students have a strong programming background. This course assumes intermediate knowledge of using C# in Visual Studio 2012 and building libraries (DLLs) and Console applications.

**Runtime:** 02:08:24

**Course description:** In this course, you will learn about Security and Deployment. When learning about security, you will work with Transfer modes, such as Transport and Message. You will learn how to perform authentication and authorization. You will also learn how to configure auditing and handle exceptions via faults. When deploying, you will need to determine the lifetime of a service, which can be singleton, per session, or per call. Messaging patterns specify the interaction between your service and a client and you will learn how to define one-way, duplex, and publish/subscribe patters. There is even a section on how to configure Web Sockets. The section on Azure shows you how to use the Service Bus Relay, secured through Access Control Services (ACS). You will also learn how to deploy a WCF service as a WebRole in a Cloud Service.

**Course outline:**

**Configure Security**
- Introduction
- Transfer Modes
- Hosting a Service in IIS
- Demo: Service in IIS
- Setting up SSL for a Web Site
- Demo: Setting up SSL
- Configure Transport Security
- Demo: Configure Security
- Demo: Inspect Binding
- Configure Message Security
- Demo: Message Security
- Demo: Configure Transfer Mode
- Demo: Configure Client
- Summary

**Authorizing and Authentication**
- Introduction
- Windows Credentials
- Demo: Authentication
- Demo: Configure Client
- Demo: Who Am I
- Configuring X509 Certificate
- Demo: X509 Certificate
- Username Credentials
- ASP.NET Authorization
- Demo: ASP.NET Membership
- Demo: Username Credentials
- Demo: Cert Authorization
- Demo: Service Permission
- Demo: Run the Service
- Summary

**Auditing and Faults**
- Introduction
- Auditing via Config File
- Audit via API
- Demo: Configuring Auditing
- Fault Handling
- Demo: Using Faults
- Demo: Handling Faults
- Demo: Exception Details
- Summary

**Application Lifetime**
- Introduction
- Singleton
- Demo: Using Singletons
- Per Session
- Demo: Per Session Service
- Per Call
- Demo: Per Call
- Summary

**Patterns**
- Introduction
- One Way (Datagram)
- Demo: One Way
- Callbacks (Duplex)
- Demo: Callbacks
- Demo: Subscribe Patterns
- Web Sockets (Push)
- Demo: Web Sockets
- Summary

**Azure**
- Introduction
- Service Bus Relay
- Demo: Azure Service Bus Relay
- Demo: Service Bus Extensions
- Web Role
- Demo: WCF Web Role
- Demo: Deploy to Azure
- Summary