

10 Ways to Build Web Services in .NET

Review

Chad McCallum
@ChadEmm



Services Covered

- **ASMX**
 - One of the first ways to create a web service in .NET, but currently deprecated
- **WCF**
 - Current standard in .NET to create RPC/SOAP-based services
- **WCF AJAX**
 - Generates a JavaScript proxy to easily access the Web API service
- **WCF REST**
 - Enables custom routes over a Web API service
- **WCF Data**
 - Accepts OData queries against your own data sets

Services Covered

- **MVC3**
 - Returning data from the web application framework
- **MVC4**
 - A more refined approach to Web APIs in MVC
- **FubuMVC**
 - Open source library that focuses on behaviors and customization
- **ServiceStack**
 - Open source framework that provides a complete set of services and serializers
- **Nancy**
 - Open source library built to make web service development easy

Clients Covered

- **Add Service Reference**

- Adding a reference to RPC/SOAP based services via Visual Studio

- **JavaScript Proxy**

- Generated as part of WCF AJAX, creates a proxy file for use in JavaScript applications

- **WebClient / HttpWebRequest**

- .NET 2.0 way of making HTTP requests in .NET applications

- **OData Client**

- Uses LINQ to send OData queries to web service

- **HttpClient**

- .NET 4.0 way of making asynchronous HTTP requests in .NET applications

Clients Covered

- **EasyHTTP**
 - Open source client library that supports static and dynamic deserialized objects
- **Spring.NET REST Client**
 - Open source application library for sending and receiving HTTP Requests
- **ServiceStack Client**
 - Open source client library that can reuse request models from a ServiceStack web service
- **RestSharp**
 - Open source client library for sending restful requests to a web service

Things We Didn't Talk About

- **Authorization and Authentication**
- **Caching**
- **Transactions**
- **Security**
- **Error Handling**
- **Testing**
- **Documentation**

Additional Resources

- **Aaron Skonnard – WCF Fundamentals**
- **Jon Flanders – Introduction to the ASP.NET Web API**
- **Howard Dierking – REST Fundamentals**
- **John Sonmez – Using ServiceStack to Build APIs**
- **msdn.microsoft.com**
- **mvc.fubu-project.org**
- **servicestack.net**
- **nancyfx.org**