Invoking Web Service using AJAX

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Abstract

This paper gives practical solutions for implementing Ajax, JavaScript, and Representational State Transfer (REST)–based Web services and functionality. We need to develop applications that are decoupled that are client code is separate from the server code. Using these approach applications can be easily tested and maintained. In some situations, responses to web service requests are not provided immediately, but rather sometime after the initial request transactions complete. Such asynchronous operations aren't explicitly supported by web services specifications and standards; however, those standards do include the infrastructure and mechanisms on which asynchronous operations can be based. Calling a web service asynchronously instead of performing a complete post back has several advantages, including less network traffic and generally elevated performance. Also with the support of DOM model and XMLHttp Object in major popular browsers, numerous client side AJAX libraries are
available to make these calls. The paper examines and compares the typical and Ajax based invocation of web services with remedies to improve the performance of web services.

References

- Brett McLaughlin, Mastering Ajax, Part 2: Make asynchronous requests with JavaScript and Ajax, IBM developerWorks, Jan 2006
- Erik Christensen, Francisco Curbera, Greg Meredith, Sanjiva Weerawarana, Web Services Description Language (WSDL) 1.1, http://www.w3.org/TR/wSDL
- M. Brambilla, S. Ceri, S. Comai, P. Fraternali, Model driven development of Web Services and hypertext applications. SCII03, June 2003, Orlando
- Mark Pruett, Ajax and Web Services, O'Reilly Media, August 2006
- Matt Powell, Asynchronous Web Service Calls over HTTP with the .NET Framework, Microsoft Corporation, 2009
- Xiao-yang Guo; Xue-song Qiu; Ying-hui Chen; Fan Tang; , &quot;Design and implementation of performance testing model for Web Services,&quot; Informatics in Control, Automation and Robotics (CAR), 2010 2nd International Asia Conference on, vol. 1, no., pp. 353-356, 6-7 March 2010

- ZhenXing Chen; , &quot;Using AJAX to Optimize Web Services Performance,&quot;
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Index Terms

Computer Science  Emerging Trends in Technology

Keywords

Ajax  Rest  Request/reply Operations  Web Service  Wsdl