license. If you are looking for a way to call Java methods from your Web pages, DWR will help you do it. You can find more information at getahead.ltd.uk/dwr/index.

**SWATO**

Shift Web Applications TO (SWATO) is another Java-based Ajax framework solution. SWATO works in any Servlet 2.3 or higher container and, like DWR, requires some configuration file updates. Interestingly, SWATO utilizes JSON to marshal data between the client and server and, like some of the other options discussed in this appendix, allows you to call server-side Java from a browser. To aid developers, SWATO includes a number of reusable components such as autocomplete text boxes.

Using SWATO is a bit more involved than using other frameworks—the classes you want to make accessible implement a SWATO interface; however, the documentation is more than complete enough to get you started. SWATO is designed to use Spring to wire up the services, but you are not required to do so. You can find more information at https://swato.dev.java.net/doc/html/.

**Java BluePrints**

The BluePrints team at Sun has been busy adding Ajax to its catalog. The Solutions Catalog includes good documentation on using basic Ajax, implementing autocomplete, creating a progress bar, and validating forms. It also includes JavaServer Faces components. The code developed for the BluePrints Solutions Catalog is available at the www.java.net site.

**Ajax.Net**

Ajax.Net is to Microsoft .NET as SAJAX, DWR, and SWATO are to Java—they allow you to call .NET methods from a JavaScript client. Ajax.Net involves a single DLL that can be used with either VB .NET or C#. The documentation for Ajax.Net does an excellent job showing solutions for various scenarios. The source is available; however, the licensing of Ajax.Net is ambiguous. You can find more information at ajax.net.

**Microsoft’s Project Atlas**

Microsoft has been active with Ajax for some time; after all, Microsoft did invent the XMLHttpRequest object and has used it in the Web version of Outlook since 1998. Microsoft is focusing on making things easier for developers by providing a more robust development environment. Microsoft wants to deliver quite a bit, including a client-side scripting framework, ASP.NET controls, and Web Service integration. It should release Project Atlas as part of the preview release of ASP.NET 2.0. With Microsoft entering the fray, expect developer toolsets to drastically improve from where they are today. You can find more information at beta.asp.net/default.aspx?tabindex=7&tabid=47.