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# AJAX Toolkit Developer's Guide

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# CHAPTER 1 The AJAX Toolkit

## In this chapter ...

- [When to Use the AJAX Toolkit](#)
- [AJAX Toolkit Support Policy](#)
- [Other Resources](#)
- [AJAX Typographical Conventions](#)
- [Sample Visualforce Page Using the AJAX Toolkit](#)

The AJAX Toolkit is a JavaScript wrapper around the API:

- The AJAX Toolkit is available for any organization that has API access.
- The AJAX Toolkit supports Microsoft® Internet Explorer® versions 7, 8, 9, 10, and 11 with the latest Microsoft hot fixes applied, and Mozilla® Firefox®, most recent stable version.
- The AJAX Toolkit is based on the partner WSDL. Because there is no type checking in JavaScript, the type information available in the enterprise WSDL is not needed.
- You can execute any call in the API, and access any API object that you normally have access to.
- You can issue asynchronous calls, and use callback functions to handle the results. For more information, see [API Calls and the AJAX Toolkit](#).
- You can use header options with a different syntax than in the API. For more information, see [Using SOAP Header Options with the AJAX Toolkit](#).
- You can handle errors with the AJAX Toolkit. For more information, see [Error Handling with the AJAX Toolkit](#).
- The AJAX Toolkit supports relationship queries. See [Synchronous Examples](#) for examples of relationship queries.

 **Note:** Before you use the AJAX Toolkit, you should be familiar with JavaScript and with the information about the API in the [SOAP API Developer's Guide](#).

This document explains how to use the AJAX Toolkit in JavaScript to embed API calls and processes, such as within a Visualforce page.

## When to Use the AJAX Toolkit

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For best performance, use the AJAX Toolkit when working with small amounts of data.

Because information is delivered via a browser, AJAX works best with relatively small amounts of data (up to 200 records, approximately six fields with 50 characters of data each). The larger the data set returned, the more time it will take to construct and deconstruct a SOAP message, and as the size of an individual record gets larger, the impact on performance becomes greater. Also, as more HTML nodes are created from the data, the potential for poor performance increases. Because browsers are not efficient, careful consideration needs to be given to browser memory management if you intend to display a large amount of data.

The following are examples of appropriate uses:

- Display or modify a single record.
- Display two or three fields from many records.
- Perform one or more simple calculations, then update a record.

The following are examples of scenarios that require case-by-case analysis:

- Update more than 200 records.
- Update records that are unusually large. For example, what happens if the user clicks the browser stop button?
- Recalculate a complex value for more than 200 records.

An example of inappropriate usage is providing a sortable grid of many records. This would require too much processing time, and browser rendering would be too slow.

## AJAX Toolkit Support Policy

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The current release of the AJAX Toolkit is the only version that receives bug fixes and enhancements. When a new version is released, the previous version continues to be available, but is not supported.

## Other Resources

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In addition to the content of this document, there are other resources available for you as you learn to use the AJAX Toolkit:

- Eclipse plug-in: [Force.com IDE](#)
- Message boards: [Salesforce Developers](#)

## AJAX Typographical Conventions

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Topics about the AJAX Toolkit use the following typographical conventions:

Convention	Description
<code>&lt;script src="/soap/ajax/32.0/connection.js" type="text/javascript"&gt;&lt;/script&gt;</code>	In an example, Courier font indicates items that you should type the information as shown. This includes sample code, literals, methods, calls, functions, and events from a variety of languages.
<code>sforce.connection.<i>header_option_name</i>="value";</code>	In an example or syntax statement, italics represent variables. You supply the actual value.

**This is a sample, click download link to get the full Tutorial**

**CLICK BELOW**

