

## What are web services?

Web services are interfaces that exchange information between your application and remote data sources. They do this through open standard protocols (XML, SOAP, etc.) that are widely accessible and relatively easy to code to. Web services allow your software applications to leverage functionality and data that has been created by another provider. They can be accessed from both web and desktop applications written in any language that supports web services including Java, C# .NET, ASP .NET, PHP, ColdFusion. While SOAP protocol uses XML, most development languages, including the ones above, include toolkits which make it easy for developers to integrate web services into their applications.

## What are the advantages of web services?

Web services offer the benefits of reusing existing functionality while still allowing the freedom to choose what and how information is integrated into your application. With data-intensive applications, web services allow you to focus on your core competency—how your application manipulates and enhances that data—rather than structuring, warehousing, and updating the source data itself. As compared to data-oriented solutions, web services-based solutions free your development team from processing and storing data updates.

In addition, using web services reduces the development cost and shortens the development cycle because there is no need for time-consuming custom coding. By leveraging VIN description, configuration, and pricing technology from Chrome Data, your development team will have more time to development functionality that is core to your business.

Unlike “canned” or framed-in applications, web services still allow you the freedom to customize your look and feel and your workflow.

## How do I know if web services are right for my business?

There are some cases where web services may not be the best solution for your company. If your application has restricted access to the internet or if your implementation requires a unique use of the data that is not satisfied by the current interfaces, then Chrome Data has solutions based on data and configuration logic that may work better for your company.

## What skills are required to use web services?

In order to integrate a web service, your development or IT team will need to modify your application to connect to our service. This requires a developer with experience in the programming language in which your application is written. If your development team has not used web services, it is recommended that you validate whether or not your application's development supports web services.

Many developers have successfully integrated with Chrome Data Solutions as their first experience using a web service. Generally, we recommend that developers new to web services allow themselves a few days to a week to acclimate themselves to the technology.

Note that web services cannot be framed-in or accessed directly through a browser; however, there are products on the market that allow users to connect to web services using applications that they may already be using today.

## How long will it take to implement a solution using web services?

The duration of a web service implementation will depend on the overall project requirements. Since web services implementation require software modifications, the implementation will generally require a project. As a guideline, the web service will replace a substantial amount of the data storage and business logic implementation for the functionality it provides.

For example, if your developer was writing a simple VIN decoding application, he/she may hypothetically allocate the following schedule:

- 1 week for designing the VIN decoder
- 1 week for implementing database design/data loading process
- 1 week for implementing the VIN decoder
- 1 week for UI implementation

With the web service, the implementation may be:

- 2 days - 1 week for designing how best to use the web service
- 1 week for UI implementation

As another example, a large automotive portal recently switched from a data-driven configuration system for their high-volume site to one completely based on Chrome Data's web services. This switch saved them two to three months of development time and even allowed them to operate more efficiently after the initial deployment.

Note that the primary savings of the web service is in the hidden cost of data tier and middle tier functionality. As such, using web services allows your team to focus on developing the parts of the application with which your users interact.