



# 4D Development - Programming Web Integration

Level 2 Course

Course Duration : 2 days

Course Code : 4D-DEV5

## About the Course

4D provides a rich set of web integration alternatives. This course evaluates the options for 4D database integration with the web. It examines the 4D technologies that support high performance web based systems.

## Benefits

- Understand the 4D Web architecture and integration options.
- Learn how to use the built in web server in 4D.
- See how 4D can be integrated with other Web Servers including 4D WebStar and Microsoft IIS.
- Learn how to develop semi-dynamic web pages.
- Learn about 4D's powerful image handling.
- Understand the security options and issues.
- Learn how to manage web sessions effectively.
- Learn about client side scripting with JavaScript.
- Understand the different browser implementations and their impact on the web development process.

## Prerequisites

A working understanding of HTML is required as provided by our Level 1 Web Development Course (WEB-DEV1). It is recommended that you have attended our Level 2 4D Development - Programming Introduction course (4D-DEV2) or that you are familiar with the 4D Programming environment.

## What Next ?

- 4D Development - Programming Advanced (4D-DEV3)
- 4D Development - Programming Multi-User (4D-DEV3)
- Web Development - Programming Advanced (WEB-DEV2)
- Bespoke Training

## Course Content

**4D Web Architectures** • 4D as a Web Server • 4D WebStar • 4D as a CGI • 4DISAPI • 4D Internet Tool Kit • Active 4D • Dreamweaver • GoLive • Licensing • RFC's.

**4D Web Server** • HTTP • Web Settings • Non-Contextual Mode • Static Pages • Frames • Semi-Dynamic Pages • On Web Connection • 4DACTION • 4DCGI • HTTP Parsing • Form Processing • Compiler Considerations • Compiler\_Web • 4DSTATS • 4DHTMLSTATS.

**4D Webstar** • When to use • WebStar v5 • 4D Link • 4D Connect • Web Rewrite • Future Options.

**Semi-Dynamic Pages** • What are they • Mixing semi-dynamic and static pages • 4DSCRIPT • 4DVAR 4DHTMLVAR • 4DLOOP • 4DIF • 4DINCLUDE • Templates.

**Image Handling** • Picture Formats • Converting Pictures • QuickTime • 4D Picture Commands • Resizing • Caching • Serving Pictures.

**Security** • 4D Web Security Options • Security Issues • Web Security Settings • On Web Authentication • Passwords • Logging • Encryption • SSL.

**Session Management** • Managing State • Using Cookies • Using the URL • Using Hidden Fields • Client Side Cache Expiry • State Expiry • Active 4D • Contextual Mode.

**Contextual Mode** • How it works • When to use it • 4DMETHOD • Pictures in a Contextual Mode • Do's and Don'ts.

**Javascript** • When to use it • Script Structure • Example Scripts.

**Active 4D** • What is it • Libraries • Session Management • Embedded Scripting • Extended Functions • Built in Web Server • Licensing.

**Browser Considerations** • Internet Explorer • Netscape Browsers.

To make a course booking or to discuss your training requirements, please call us on **020 8245 4545**

or email [training@mehdiward.com](mailto:training@mehdiward.com).

