HalSail FAQ

What is the technical background to HalSail?

The following are the key technologies used to build HalSail.

Server

HalSail runs on a virtual machine hosted in the UK by [Fasthosts](#) running Windows Server 2022. The data is held in a SQL Server 2022 database running on the same machine.

Server-side programming

HalSail is an [ASP.Net MVC](#) web site programmed in [C#](#). It uses the [Razor view engine](#) and produces [HTML5](#) output.

Client-side programming

Pages are written in [HTML5](#) and [CSS3](#) with extensive scripting in [javascript](#) and [jQuery](#). Key jQuery plugins used are [DataTables](#) and [FullCalendar](#).

Much use is made of [Ajax](#) to bring data from the server to the client without replacing the entire page.

Styling is based on [Bootstrap 5](#).

Content Delivery Network

The public result pages of HalSail get a lot of use, especially during large regattas. There is a tendency for everybody to go online with their phones immediately after crossing the finish line to see how they have done. This puts a heavy peak load on the server.

To spread the load, HalSail uses the [KeyCDN](#) content delivery network. Calls to the public result pages are diverted to KeyCDN which remembers pages it has already delivered. If it has a copy of the result that is less than five minutes old, it serves it to the user. If it does not have a copy of the particular result, or its copy is more than five minutes old, it requests a new one from HalSail.

This has the inevitable effect that users may not see results input by the race officer, or other official, during the last five minutes.

Tools used by HalSail

[Links to websites](#)
[Help index](#)