

## 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](#)