

# Hotspot shield










## A VPN client for safe Web access

### About client

A U.S. company offering a virtual private network for safe web browsing on mobile devices and computers. Over 20 million customers from 190 countries use the company's services each month. In 2012, Goldman Sachs invested 52 million dollars in AnchorFree. Forbes named AnchorFree one of the most promising U.S. companies of 2013.

#### Technologies

##### Development

-  Go
-  Python
-  C/C++
-  Java
-  JavaScript
-  React
-  C#
-  .NET Framework
-  Android
-  Kotlin
-  iOS
-  Swift

##### DevOps

-  Docker
-  Kubernetes
-  Kibana
-  Fluentd
-  Elasticsearch
-  Grafana
-  Prometheus
-  AWS

#### Industry

Information security

#### Team

- Project manager — 1
- QA automation engineer — 5
- Back-end developer — 2
- Front-end developer — 2
- Mobile developer — 3
- DevOps — 5

#### Duration

2 years

## Challenge

Over 20 million people from 190 countries use the Hotspot Shield VPN clients. The project is so massive and complex that it requires a large team of professionals to work on it. Several teams work simultaneously at the server side, improve the traffic tunnelling protocol, support multiple applications and ensure that company users are safe. But even all these efforts are not enough to offer all the desired functionality to the customers. The customer was not meeting the deadlines, so they came to our company and requested a dedicated development team which would quickly join the process and solve some important project tasks.

## Solution

As several complex tasks were to be solved in parallel, we set up several teams from specialists possessing the required skills and competencies. We strictly observed project specifics to select the best developers. It was crucial to ensure continuous operation of customer systems which required an additional NOC team working 24/7. The task was to design, monitor, set up and manage the customer's infrastructure, thus reducing the accident rate and making it perform at its best. To achieve this tasks our DevOps- and Ops-engineers used the following technologies: Docker, Kubernetes, EFK-stack (Elasticsearch, Fluentd, Kibana), Prometheus as well as cloud platform AWS. They were not only to dive deeply into the project but also to set up a two-way knowledge exchange, as well as to see that the service level agreement was strictly observed. At the same time our software developers has developed a package of software solutions: iOS and Android mobile clients (Swift and Kotlin), desktop applications (C#/.NET), back-end and front-end parts (Java and JavaScript) of web applications and also server part of the VPN-service (Python, C/C++ and Golang).



## Result

The tasks were properly distributed among the development teams which helped us to achieve excellent results on all fronts. Easy-to-use mobile applications for iOS and Android, as well as desktop clients for Windows and macOS were developed. Our engineers significantly improved the client and server parts of the VPN tunnel, modified software for third party vendors and implemented server deployment and support. The NOC teams managed to improve infrastructure stability and service effectiveness. Our participation in the project helped the customer to focus on promoting the product instead of wasting time on finding qualified developers and building the production process. Successful collaboration laid the foundation for long-term cooperation between our company and the customer.

## Review



**Alexei Skutin**  
Product owner,  
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The main decisive factor for me when choosing Sibedge was the direct interaction with the company's management, as well as their responsibility and ability to set up all the processes quickly and transparently.

Sibedge specialists demonstrated flexibility and readiness to solve all kinds of tasks and issues throughout the project. Most of all I value trust, commitment, and professionalism in my partners. The Sibedge team fully possesses these qualities.

