

# Technical requirements

Proper functioning of the Web-client requires components, which are external in relation to web-browser software. This is due to the encryption of the transferred data and it's signing with digital signature. For the application to operate the client workstation should have the following software:

## With ActiveX (recommended)

1. Internet Explorer
2. [install the ActiveX plugin](#)
3. .NET Framework 4.5
4. [install](#) the Certificates storage

## With Java

- [Compatible browser](#)
- [Java](#) (the latest version) (32-bit)
- Java API (32-bit)
- Certificate storage

More details are given below (Fig. 1). Table 1 lists the minimum computer requirements to run the Web-client successfully.

**Table 1 – Technical requirements**

| Type of requirements | Parameter value                                                                                                                                                                                                                                                                    |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating systems    | Windows version 7.0 and higher<br>Performance on <b>Windows XP</b> cannot be guaranteed due to the restrictions on the use of the <b>TLS-tunnel</b>                                                                                                                                |
| Compatible browsers  | Internet Explorer version 9.0 and above. Version 8.0 is not currently supported officially, the system is being tested<br>Firefox version 20.0 and higher<br>Google Chrome version 20.0 and to the version 42.0. Java applet is not enabled in the Chrome web browser version 42.0 |
| Java                 | Java version 1.7 and higher                                                                                                                                                                                                                                                        |

Software is interconnected (in general and not only with the Web-client) with CSP indirectly through API provided by the Certificate storage that is also used to manage user certificates including their placing in the systemic certificate storage. To ensure interconnection as described above a user should take the following actions depending on the CSP before launching the Web-client.



### If non-qualified certificates (RSA) used:

- Certificate Storage (RCS) (download [english version](#));
- certificates ([Test keys, RSA, Production environment keys, NSD certificate](#));
- [Java](#) and [Java API Software "MICEX Client"](#).  
We recommend to [install the ActiveX plugin](#) for working with the Web-client via Internet Explorer. In this case, you do not need to download and install Java and Java API.



### If qualified certificates (GOST) used:

- Validata CSP (download on the [Moscow stock exchange website](#), russian version), full installation;
- Software Certificate storage (XCS) (download on the [Moscow stock exchange website](#), russian version);
- certificates;
- Internet Explorer  
[Java](#) and [Java API Software "MICEX Client"](#). We recommend to [install the ActiveX plugin](#). In this case, you do not need to download and install Java and Java API.

The software can be downloaded via the links above or obtained at the office of the Moscow Exchange.

[Software installation, RSA](#)