

# **VPN** Connection

PRODUCTION CONNECTIVITY

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# DOCUMENT SERIES

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#### **OVERVIEW**



VPN connection is a way of organizing network access to the services of Derivatives, Equity, Bond and FX markets of the Moscow Exchange via the public Internet. The service provides the ability to connect from any place in the world via the Internet connection.

Since the Internet is not a guaranteed medium of data transmission, the stability of a VPN connection is inferior to connections over dedicated circuits. However, the service makes it easy to implement access reservation if there is more than one Internet connection.

The Cisco AnyConnect software is used to organize the connection.

VPN connection is included in the list of telecom services provided by the MOEX Information Security LLC operator.

#### TECHNICAL DIAGRAM



**Cisco AnyConnect client** is installed on a client PC or server and is available for most modern operating systems.



**VPN connection server** is redundant at the equipment level and at the level of the Internet connection.

**MOEX services.** The services of the Derivatives, Equity, Bond and FX markets are available via a VPN connection. The addresses of the Moscow Exchange services are published at <u>https://www.moex.com/s397</u>, and can also be provided upon request to the technical support service.

#### SUPPORTED HARDWARE

The Cisco AnyConnect VPN Client is supported on the following operating systems:

- Windows 7 Service Pack (SP) 1
- Windows 8
- Windows 8.1
- Windows 10 x86 (32-bit) and x64 (64-bit)
- Windows 11 x86 (32-bit) and x64 (64-bit)
- Linux Red Hat 6
- Linux Red Hat 7
- Ubuntu 12.04 Long Term Support (LTS)
- Ubuntu 14.04 (LTS)
- Ubuntu 16.04 (LTS) (64-bit only)
- Mac OS X 10.15

Depending on the trading software used, the client's computer must meet the minimum requirements for that software.

#### NETWORK CONNECTIONS REQUIREMENTS

The bandwidth Client needs is the sum of the following values depending on the number of the services in use and the amount of FAST UDP Multicast feeds:

• 4 Mbit/s multiplied by the number of the gateways/terminals in use

For further details, please read the Load Test Report.

# ADDRESSING PLAN

Segment	Subnet address	Prefix	Subnet mask
Tunnel	10.197.248.0	/22	255.255.252.0
WAN	At the discretion of the client		

The client is provided with a /32 address from the specified subnet during the service setup. The address should be indicated in applications for ordering logins and other technological services. The WAN address of the Client from which the VPN connection is established is not considered in any way and is not regulated by the MOEX Information Security Operator.

The addresses of the Moscow Exchange services are published at: <u>https://www.moex.com/a1961</u>, and can also be provided upon request to the <u>technical support service</u>.

# EQUIPMENT SETUP

The Cisco AnyConnect Client software is used to establish a connection on the client equipment

- 1. To install Cisco AnyConnect, you must have administrator rights;
- 2. Please note that Cisco AnyConnect may not work correctly through Proxy connections.

Installation files can be downloaded directly from the MOEX VPN server at https://anc.moex.com

To access the download, you must enter the username and password from the document received along with the confirmation of the VPN connection service delivery.

Ответ на заявление № 0000	0 к договору №0000	
URL для загрузки Cisco Any Описание и инструкции: <u>ConnectivityGuide.pdf</u>	Connect Client: <u>https://anc.moex.com</u> ftp://ftp.moex.com/pub/ConnectivityGuides	s/ru/MCG5001-RU-VPN-
Адрес сервера для Cisco Ar	nyConnect Client: anc.moex.com	
Логин (Username):	IP-адрес в сети Московской Биржи	Пароль (Password):
1 User123	10.197.248.1	Password123
	Login Please enter your username and password. GROUP: MicexVPh USERNAME: PASSWORD: Login	

Depending on the operating system used, a window with a selection of components may appear at the beginning of the installation. In this window, you must select the items **Core & VPN** and **Diagnostic And Reporting Tool** 



After successful installation and launch of the Cisco AnyConnect to establish a connection, enter the address of the VPN gateway **anc.moex.com** in the window that opens up:

Sisco AnyConnect Secure Mobility Client		-		$\times$
	VPN: Ready to connect. anc.moex.com	×	Connect	
<b>¢</b> (i)				altalta cisco

After clicking the Connect button in the credentials window, enter the username and password from the document received along with the VPN service confirmation.

Note: Username and password are case sensitive.

S Cisco AnyConnect   anc.moex.com			×		
Ω	Please enter your username and password.				
_	Group:	MicexVPN ~			
	Username:	User 123			
	Password:	*****	]		
		OK Cancel			

After successful connection, the Cisco AnyConnect icon with a closed padlock on it (for Windows OS) will appear in the notification area.



# HOW TO GET STARTED

To get started, client must perform the following steps:

- Consult a manager from the technology service sales team by phone on +7 (495) 363-3232, ext. 5656 or email at <u>itsales@moex.com</u> to make sure that the chosen solution best suits client needs, find out what paperwork is required and which next steps should be taken.
- Sign a CLZ agreement with MOEX Information Security LLC (perhaps it already exists!) And order the VPN connection service. Exchange managers will tell you how to fill out the forms correctly.
- Choose connectivity protocols and software (the choice might depend on the current trading software in use).
- Get a new VPN login with connection instructions, which will be sent to the client through the file gateway.
- Fill out an application for login registration <u>https://www.moex.com/a1819</u>
- Switch to the production mode.

# HOW TO GET TECHNICAL SUPPORT

If client experiences a malfunction of the Service or have a question regarding the connection to MOEX, the technical support service should be contacted with the following information:

- Company name;
- Connectivity option to MOEX: VPN connection;
- VPN connection login;
- IP-addresses used to connect;
- Short issue description;
- (Optional) Results of your tests.

Technical support contacts: T +7 (495) 733-9507, +7 (495) 287-7691, T +7 (495) 363-3232, ext. 2345 E-mail: <u>help@moex.com</u>

# AUTHORIZED NETWORK SERVICE PROVIDERS

Any network service provider might be used.

#### FREQUENTLY ASKED QUESTIONS

#### What is the speed and type of connection you are using?

This connection scheme assumes the use of the public Internet, therefore, there is no guarantee of speed or service availability.

#### How to set up automatic connection after disruption?

Automatic reconnection in Cisco AnyConnect is enabled by default and works when the connection is disconnected for less than 30 minutes. For longer interruptions, you will need to re-enter the password to establish the VPN connection.