

# FTP connection

## *A global file transfer protocol*

File Transfer Protocol (FTP) is a standard network protocol used to transfer files from one server to another server. FTP is built on a client-server architecture and utilises separate control and data connections between the client and server.

Virtual Private Network (VPN) is mandatory together with FTP.

### Benefits

- Easy, automatic and low cost transferring of files
- Handling of large files
- High security and encryption with VPN
- Covers global and local file formats
- FTP is available 24/7 except for planned maintenance.
- Support during business hours CET

### What is needed

- FTP client for sending files.
- FTP server to receive files.
- Nordea does not provide any software or hardware.
- Technical competence at the customer's side is needed in order to set up a server-to-server connection.

### Supported formats

- ISO 20022 XML
- EDIFACT D96A
- SWIFT messages
- Some local file types

### Technical information

It is required that the clients and servers behind the VPN use public IP addresses. The settings required to establish VPN are agreed between Nordea and the customer in a way that ensures that the equipment at both ends of the tunnel uses the same methods, e.g. encryption, authentication.

The FTP details are exchanged between the partner and the bank during the setup.

Parameter	Options
Encryption	N/A, VPN is mandatory for FTP transfers
Transport protocol	FTP
Port	21
Automatic retry	Software dependent
Physical connectivity	Internet or Leased line
Security	Password, VPN
Receipt of reporting and acknowledgements Push/Pull (Put/Get)	Push
Software client options	Any FTP capable software options
File name retention	File names are exchanged during the setup

### Security

The FTP connection's security is done by VPN. VPN is a method for establishing secure and encrypted point-to-point communication, a so-called VPN tunnel.

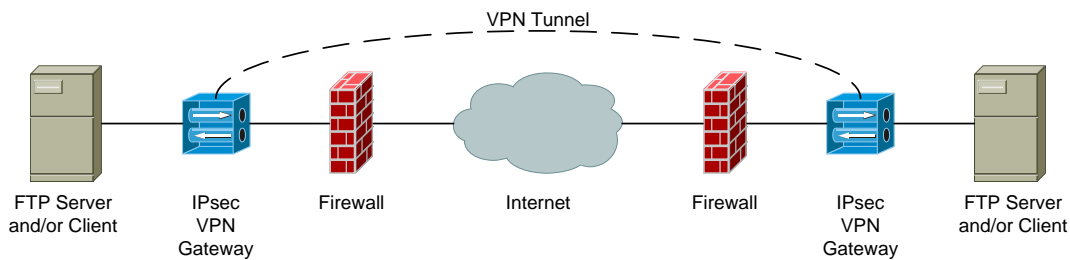
There are solutions for establishing VPN in both hardware and software. Usually firewalls have built-in VPN functionality.

The VPN protocol used is IPsec. Each VPN Gateway has a public IP address that is routed over the Internet. Between these addresses the VPN tunnel is activated.

Shared keys are used for authentication (pre-shared secret).

Abbreviations	Explanation
IPsec	Internet Protocol Security
ISO 20022 XML	Message type, based upon ISO standard and is CGI (Common Global Implementation) compliant <a href="http://www.iso20022.org">www.iso20022.org</a>
S2S	Server to server
FTP	File Transfer Protocol
VPN	Virtual Private Network

## FTP Connection with VPN Tunnel



### How to proceed

Contact your local account manager or cash management specialist to get further information and details about the FTP connection.

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