Vestima

Investment Funds Services

SYSOP Guide

June 2023

Vestima - Investment Funds Services - SYSOP Guide

Foreword

This guide is to help the system administrator to access and create users for CFCL's Vestima system and to provide guidelines for client system administrators in accessing Vestima.

Vestima is CFCL's automated electronic order routing service giving Order Issuers (OIs) and Order Handling Agents (OHAs) a single entry point for domestic third-party, cross-border and off-shore funds.

Note: This guide describes direct access to the Vestima system. For access through CFCL's proprietary web-based connectivity channel Xact Web Portal, please refer to the associated documents listed below.

Associated documents

General and browser:

Vestima User Guide for Order Issuers	Information for OIs (participants who want to buy or sell investment fund units).
Software requirements recommendations for Vestima participants	

Swift:

Vestima Swift User Guide	Details of ISO 15022 and ISO 20022 message format specifications for use with Vestima.

Xact Web Portal:

Xact Web Portal User Manual	User administration through Xact Web Portal

Foreword

A word about security and accessibility

The Vestima web-browser based interface is available through the public internet or on CFCL's Virtual Private Network (VPN). Access is restricted to authorised users only and is controlled by the use of certificates that are supplied by CFCL. Security is further enhanced by the employment of unique ID and password combinations and the encryption of all communications.

The Vestima web-browser based interface allows an unlimited number of users to be defined. CFCL has validated that the performance meets acceptance criteria for 50 concurrent users per participant. Please note that end-to-end performance will vary, as this is highly dependent on your installed office IT infrastructure and internet connectivity.

Rules for passwords

Passwords must be made up of between 8 and 24 characters with at least one taken from each of the following character sets:

Alphabetics (upper case)	A-Z	Numbers	0-9
Alphabetics (lower case)	a-z	Special characters (including special symbols)	

All your login attempts are stored for six months and the older records are removed daily from the database. Your login history is displayed for the last six months but with a maximum of twenty records. The date, time and login result (successful or failed) are displayed.

As an external user administrator, you can configure the validity period of time passwords (up to 90 days).

For all Vestima users a system message will be displayed (after a successful login) if the password is due to expire in the coming five days. Moreover, please note that passwords for new users (initial) or reset passwords are valid for a maximum of 10 days and consequently the passwords expire after 10 days if not changed. Users are not able to re-use any of their previous 12 passwords.

Hardware and software requirements

You can access the Vestima system from a modern personal computer with a connection to the internet or to CFCL's VPN. Your computer's operating system and browser software must support Secure Socket Layer (SSL) communication with 128-bit encryption using imported (software) certificates.

For further details of compatibility and configuration, please refer to the relevant documents for your operating system and browser software.

For the best user experience, the monitor resolution should be 1280 x 1024 pixels or more.

Contact details

For further information or if you have specific questions regarding the Vestima system and/or communications with CFCL, you can contact Client Services in Luxembourg as follows:

Telephone:	+352-243-38110	Connectivity Support for access/configuration issues
	+352-243-32833	Vestima Client Services for business queries
	+352-243-32555	Vestima Product information
Fax:	+352-243-638110	Connectivity Support
Email:	csvestima@clearstream.com	Vestima Client Services for business queries
	connect@clearstream.com	Connectivity Support
Website:	www.clearstream.com	Clearstream Fund Centre website

If you need assistance with a specific Vestima problem, it would be helpful if you have the following information to hand before contacting CFCL:

- Your organisation name and Vestima Identity (ID);
- Your name, telephone and fax numbers and your email address;
- The make and model of your PC;
- Your connection type: via Xact Web Portal or directly through the public internet;
- The type and version of your operating system and web browser software;
- Details of the problem (please have full details available);
- If you receive an error message, full details of the error, with any error message number.

Please note that - as is normal practice within financial organisations - CFCL has implemented telephone line recording to ensure that the interests of CFCL and of its clients are protected against misunderstandings or miscommunications.

Areas subject to telephone line recording include Client Services. The recorded lines are the subject of an ongoing formal maintenance and quality control programme to ensure their continued effective and appropriate deployment and operation.

Foreword

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Contents

Contents

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1. Guidelines for client side implementation

This chapter provides guidelines for the client side implementation of CFCL's Vestima.

Security policy

Vestima has been designed to be as flexible as possible with respect to the requirements of the local site security policy. In particular:

- The security of the underlying operating system can be configured in accordance with local security baselines.
- The client deploys software certificates and keys stored in the user web browser and protected by the client operating system.
- Implementing Vestima has minimal impact on local browser security and security administration procedures.

Integrating with firewalls

Vestima is implemented using internet technologies. It is therefore highly recommended that clients using Vestima protect their interior networks from the outside world using a Firewall architecture.

In order to run Vestima through a firewall, the following protocols must be allowed to traverse the firewall:

- HTTPS uses port 443 for interaction with the application. Depending on browser capability, either a 128-bit or a 256-bit key size is used in the encryption algorithm.
- HTTP uses port 80 to redirect to the HTTPS Vestima web server.

Only outbound sessions are required to be enabled for these ports.

Use of a proxy server

Vestima uses a Secure Sockets Layer (SSL) secured session for session authentication, confidentiality and session integrity protection.

SSL employs a security **handshake** to initiate the TCP/IP connection, resulting in an agreement between the client and the server as to the level of security to be used. After the handshake, SSL encrypts and decrypts the bytestream of the application protocol being used (that is, HTTPS).

When a client requests an SSL connection to a secure web server through a proxy server, the proxy opens a connection to the web server and then copies data in both directions without intervening in the secure transaction. In order to do this, the client must send a **CONNECT** SSL packet to the proxy server instead of trying to initiate the SSL handshake directly with the web server.

A direct connection to Vestima can be made with any topology and means of authentication that allow an SSL connection between the browser software and the web server.

For access to Vestima through Xact Web Portal, additional configuration may have to be performed.

Guidelines for client side implementation

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2. SYSOP activities

This chapter outlines the connectivity setup and initial configuration procedures that you must follow, as local system administrator (SYSOP), to access CFCL's Vestima.

Note: The illustrations used in this chapter are based upon Windows Internet Explorer; the dialog boxes may differ in appearance according to other web browsers.

These procedures include:

- "Importing your certificate" on page 2-2;
- "Importing the root certificate" on page 2-4;
- "Accessing the system" on page 2-5;
- "Creating a deputy system administrator" on page 2-5;
- "Creating users" on page 2-6.

As local system administrator, you will have received the following via email from CFCL:

- Vestima ID;
- User ID;
- The one-time password to access Vestima;
- A certificate;
- The password for this certificate;
- An authentication code (required by Vestima users that you have created when they request certificates).

Your first task is to import your certificate into your internet browser.

Client side login

As local system administrator, you will have received the following login details via express mail from CFCL:

- Your Participant ID;
- Your user ID as System Administrator ID: SYSOP;
- Your one-time password to access Vestima;
- Your authentication code;
- The certificate password.

The certificate for one local system administrator will be sent to you via email.
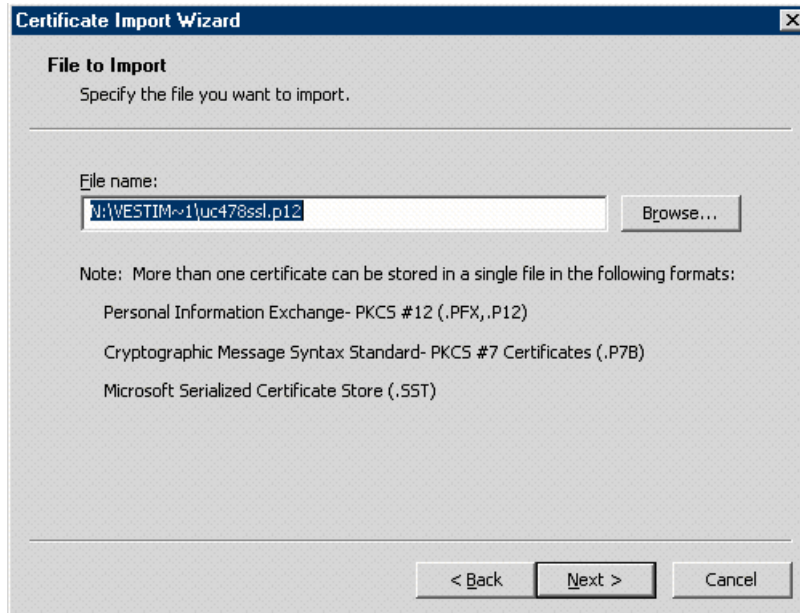
SYSOP activities

Importing your certificate

Perform the following procedure to import the certificate.

1. Open the email that contains the certificate and double-click on the certificate to start the internet browser certificate wizard.

2. Click on Next to display the certificate File to Import dialog box.

3. Click on Next to display the Password dialog box.
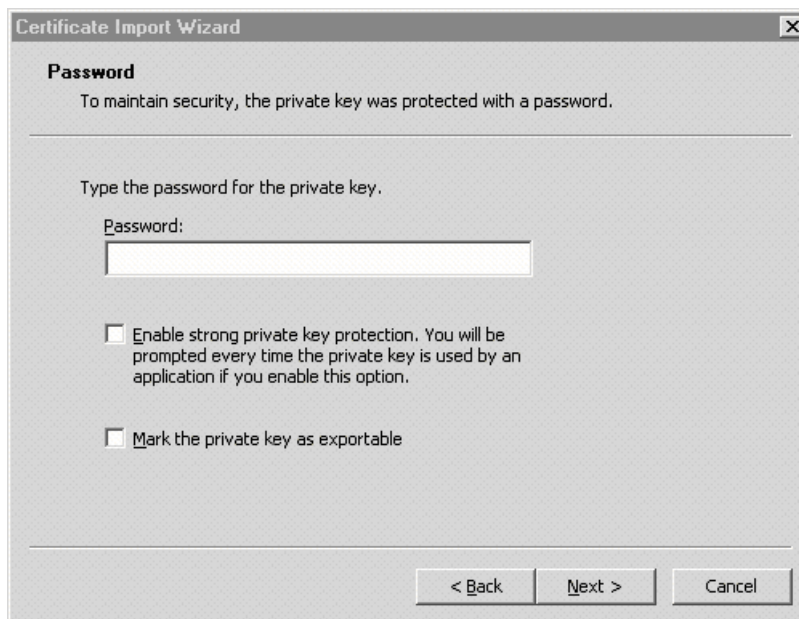
4. Enter the certificate password (sent to you via express mail) but CFCL recommends leaving the checkboxes unchecked.

5. Click on Next to display the Certificate Store dialog box.
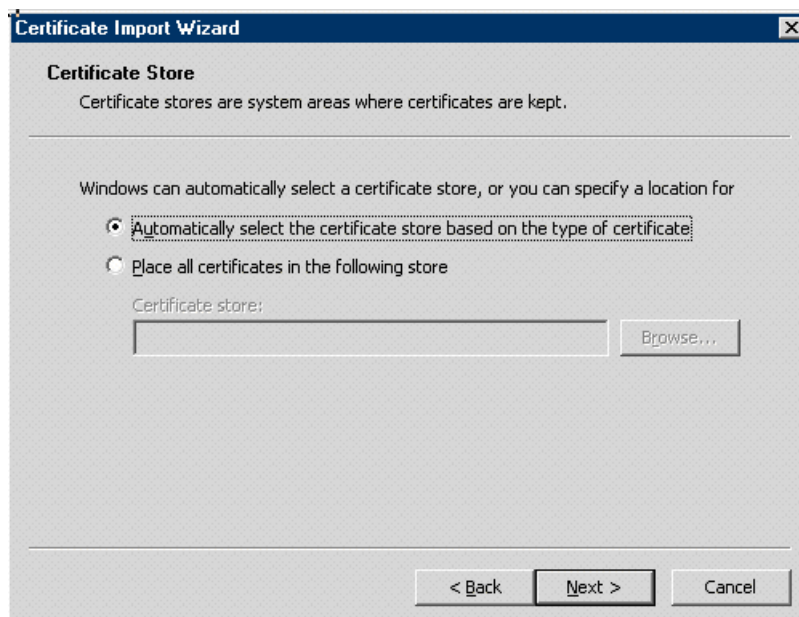
6. Specify how and/or where you want the certificate to be stored and click on Next to display the final Certificate Import Wizard dialog box.

7. Click on Finish to complete the certificate import process. A confirmation alert is displayed.

8. Click on OK.

The certificate has been successfully imported into your internet browser. You can now access Vestima as a system administrator and create your users.

Importing the root certificate

At the end of importing a certificate for yourself or for your users, as described in the previous section, you may have been prompted to import a root certificate.

Clearstream International Root CA, the certificate authority (CA) of Vestima, has issued a root certificate that you should ensure is imported for each Vestima user, including yourself.

Note: To import the root certificate, you may need to have administrator privileges in your local computer environment.

If your organisation has existing users of Vestima or CreationOnline, the appropriate root certificate may already have been imported for everyone.

If you need a root certificate to import, CFCL recommends that you obtain it from the Connectivity Help Desk (see "Contact details" on page iii).

Accessing the system

Perform the following procedure to access Vestima.

1. In your internet browser, enter the following URL in the address line:

    https://www.vestimaplus.clearstream.com

    No user ID or password is required at this point; authentication will be automatic within your browser.

2. Select the certificate named "External system administrator" and click on OK to gain access to the Vestima login screen.

    The validity of the CFCL web server hosting the Vestima application can be verified as follows:

    a) Open the browser's security report/site information (a padlock icon in Internet Explorer) to view the server certificate.

    b) Select the root certificate level in the certification path. It should be identified as "VeriSign" and "VeriSign Class 3 Public Primary Certification Authority - G5".

    c) Select Details. The thumbprint/fingerprint value (4e b6 d5 78 49 9b 1c cf 5f 58 1e ad 56 be 3d 9b 67 44 a5 e5) can be found in the displayed screen.

3. Enter your Vestima ID, your User ID (SYSOP) and the one-time password (sent to you via express mail to the address mentioned in the contract).

4. Click on Submit to log in to Vestima.

    You will be requested to change your password immediately following successful login.

Once you have changed this password, you can go to the next step of Creating your users.

Login History	
Date/Time	**Result**
05 Sep 2016 08:00	Login Successful
05 Sep 2016 07:50	Login Successful
29 Aug 2016 08:16	Login Successful
22 Aug 2016 14:19	Login Successful

Then, at each new login, the history of your login is displayed.

Creating a deputy system administrator

It is important that a deputy be available as a backup in the absence of the formal system administrator.

Perform the following procedure to create a deputy system administrator.

1. In Vestima, select New from the User Management menu to display the New User form.

2. Specify the user ID, for example, "JSMITHADMIN-02".

3. Enter and confirm a one-time password for this administrator's first login.

4. Select the User type "Administrator".

5. Ensure that the appropriate check boxes are checked for the required privileges or click on the Select All button to give the user all administrator privileges.

6. Click on Submit and then on Confirm to create the administrator.

SYSOP activities

Creating users

Perform the following procedure to create a user for the Vestima.

1. In Vestima, select New from the User Management menu to display the New User form.

2. Specify the user ID, for example, "JSMITHUSER-01".

3. Enter and confirm a one-time password for this user's first login.

4. Select the User type "Normal User".

5. Ensure that the appropriate check boxes are checked for the required privileges or click on the Select All button to give the user all user privileges.

6. Click on Submit and then on Confirm to create the user.

Perform the above procedure again to create each required user with a unique user ID.

Note: The appropriate User IDs and Passwords must be communicated to the people who will log in as users of Vestima.

Each of these test users must request a valid certificate for Vestima (see).

Modifying user profiles

Perform the following procedure to modify any details of a user profile.

1. In Vestima, select Search/Edit in the User Management menu to display the list of users.

2. Select the user you want to modify the profile of by clicking on the Modify button on the left side of the user row. Users are displayed on several pages in the user list. Please use the links First, Prev, Next and Last to navigate in the user list.

3. Once on the Modify User page, change the profile attribute(s) you want to modify.

4. Enter your password in the Temporary Password field and then in the Confirm Password field.

5. Click on Submit and then on Confirm to modify user profile.

Search, view and download list of users

Perform the following procedure to download the user list in a CSV file.

1. In Vestima, select Search/Edit in the User Management menu to display the list of users.

2. In the Search/Edit User list screen, select Download at the bottom of the user list.

3. Depending of the internet options you have set-up, a pop-up window may open to ask you if you want to open or save the document. Select the appropriate option.

4. Once the CSV file is open, the list displays all the users with the same information as in the Vestima screen.

Note: The whole list of users is downloaded even if the users are listed on several pages in Vestima.

3.   User activities

This chapter outlines the access request and login procedures that each user must follow to access CFCL's Vestima.

These procedures include:

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User activities

Obtaining user certificates

As a user, you must have received the following information (sent to your local system administrator via email):

- Company Identifier (Vestima ID);
- Authentication code.

You must perform the following procedure to obtain the requisite Vestima certificate.

1. In the internet browser, enter the following URL in the address line:

    https://certgateway.clearstream.com

    This displays the Clearstream Certificate Request Gateway screen[1].

Clearstream Certificate Web Gateway

Welcome to the Clearstream Certificate Web Gateway. You can make a request for the certificate type that you require by clicking on one of the buttons below.

Xact File Transfer	This option is available to non-customer agents only. In order for your request to be processed, you must be a registered Xact File Transfer via Internet participant and be in possession of an authentication code and company identifier. These should have been sent to you by Clearstream Banking Security Administration. Please email connectlux@clearstream.com in case of any problems.
Vestima	In order to create Vestima users, you must be a registered Vestima participant and have the required Authentication code to make a request. This should have been given to you by your Local System Administrator. Please email connectlux@clearstream.com in case of any problems.
Secure e-Mail	In order for your request to be processed, you must print and return the secure email customer agreement document. The request page includes a link to download the document in pdf format. This document requires the signature of two authorised signatories.

Please note that the certificate will not be issued until the necessary checks on the information provided have been carried out successfully at Clearstream. This process may take a number of working days.

2. Click on Vestima request to display the Certificate Request application details screen.

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1. Remains applicable to CFCL.

Clearstream Vestima Certificate Request

Welcome to the Vestima Certificate Web Gateway.

In order to create a Vestima user, you must be a registered Vestima participant and have the required authentication code in order to make a request. This should have been given to you by your local system administrator.

Please email connectlux@clearstream.com in case of any problems.

Participant ID		*
Institution name, location		*
Auth code		*
First name		*
Surname		*
User type	external standard user ▼	
Email address		*
Confirm email address		
fax number eg. +352 4623567	please include country code	*

Submit Reset   Cancel Help

3. Complete all fields, including:

  - Company identifier, which is the Vestima participant ID of your institution;

  - Authentication Code, which was sent you as local system administrator via express mail.

Once you have submitted the request, the certificate will be sent via email and the password for the certificate will be sent separately by fax to the number specified in their Certificate Request.

You must now import the certificate (as described in "Importing your certificate" on page 2-2) and you can then log in to Vestima.

User activities

Logging in as a user

Your users must perform the following procedure to log in to Vestima.

1. In the internet browser, enter the following URL in the address line:

   https://www.vestimaplus.clearstream.com

   No user ID or password is required at this point; authentication will be automatic within the browser.

2. Select the required certificate named "External Standard User". If there is more than one certificate named "External Standard User", do the following:

   a) Highlight one of the certificates in the list and click on the View Certificate button to display the View Certificate dialog box.

   b) Select the Details tab and click on the Subject field to display its details.

   c) Check whether the value in the third line of the displayed details is the participant ID of the required certificate.

   If the required certificate is not indicated, then repeat these sub-steps for each of the other "External Standard User" entries until successful.

3. Click on OK to gain access to the Vestima login screen.

4. Enter the Vestima participant ID, User ID and one-time password immediately following successful login.

5. Click on Submit to log in to Vestima.

   The user will be requested to change the password immediately following successful login.

Once the password has been changed, the user can begin to use Vestima.