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User Manual

# ENC Signature Service

Version 1.0

Service operated by:



# 1 Introduction

This User Manual describes how to connect and use the ENC Signature Service provided by the International Hydrographic Bureau (IHB).

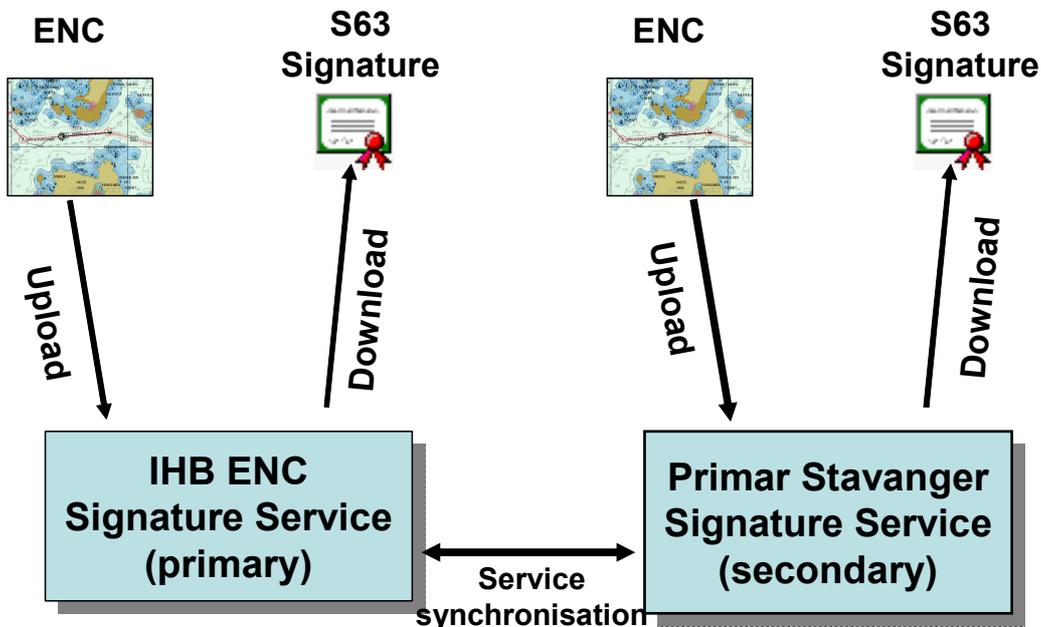
## 1.1 References

[1] IHO S-63 Data Protection Scheme, International Hydrographic Organization

# 2 Introduction to ENC Signature Services

## 2.1 Content of Services

The objective of the ENC Signature Service is to enable IHO S-63 Data Servers an option to sign their ENC data with the Primar Stavanger Private Key during the transitional period to set IHO S-63 in full operation.



A primary ENC signature service will be operated under control by IHB, with a secondary ENC signature service operated by Primar Stavanger. The servers will be synchronised and together deliver a 24/7-service availability.

A new Data Server will be provided with a web address and a Username/Password to access both the primary and secondary signature servers. The web address will be unique for each Data Server to separate the traffic and operation of each Data Server. Access to the services require authentication.

The ENC signature service accepts as input individual ENC files (cells or updates) which are copied to an Upload directory. There is no support for upload of complete ENC Exchange Sets. The signature service returns S-63 compliant signature files to a

Download directory for all uploaded ENC files. All signatures are created with the Primar Stavanger Private Key.

The uploaded ENC files will be automatically and permanently deleted after a signature has been created. The Data Server is responsible for deleting the signature files from the signature server.

## 2.2 Signature Service Technology

The signature services are made available using the WebDav "Web-based Distributed Authoring and Versioning" technology. It is a set of extensions to the HTTP protocol, which allows users to collaboratively edit and manage files on remote web servers. The signature service is mounted as a fileserver and becomes available as a share. All traffic uses HTTPS.

## 3 Connecting to the ENC Signature Service

### 3.1 Prerequisites

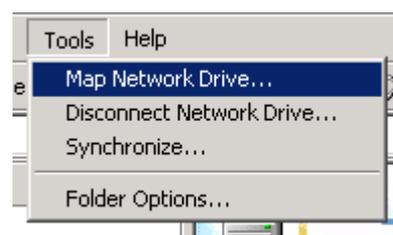
IHB will issue a Username and Password to be used to access the ENC Signature Services. A different domain name will be provided which is unique for each Data Server. Only approved S-63 Data Servers will be eligible to access the signature services.

The latest versions of Microsoft Windows operating systems have built in support for WebDav. Earlier versions and other operating systems can find free WebDav clients at [www.webdav.org](http://www.webdav.org). All examples in the User Manual will show how the services are used in a Microsoft Windows operating system.

The computer used to transfer the ENC data to the signature servers must be connected to internet. The speed of your internet connection determines how long time it will take to transfer your ENC files to the servers.

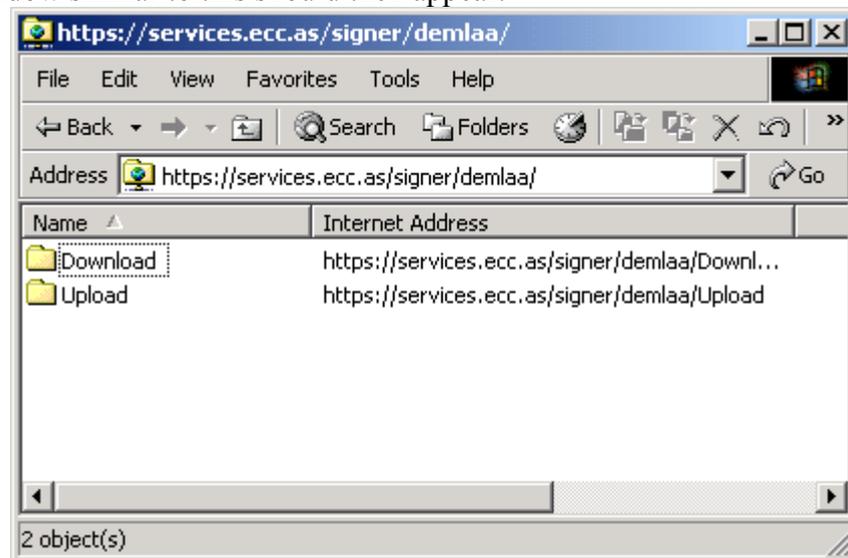
### 3.2 Connecting to Services by Mapping a Folder in Explorer

1. Start the Windows Explorer application in Microsoft Windows.



2. Select "Tools" and "Map Network Drive" (see figure above)

3. Choose “Create a shortcut to a web folder or FTP site”. (If you enable “Reconnect at logon” the signature service will always be available in Explorer when the PC is turned on).
4. Type in the web address provided by IHB:  
[https://ihb.chart-services.net/signer/\[username\]](https://ihb.chart-services.net/signer/[username]) for the primary service or  
[https://services.ecc.as/signer/\[username\]](https://services.ecc.as/signer/[username]) for the secondary service  
 [username] should be replaced with the username provided by IHB and the domain name is not case sensitive.
5. Logon using the Username and Password provided by IHB. Username and password are case sensitive.
6. Press “Finish”
7. A window similar to this should then appear:



## 4 Operating the ENC Signature Service

The following procedure is common and independent of how you connect to the ENC services.

1. Move your individual ENC files (cells or updates) to the `UPLOAD` directory using drag and drop in Windows. There is no support for upload of complete ENC Exchange Sets. All the ENC files must be stored directly in the `UPLOAD` directory since there is no support for storing ENC files in subdirectories. The signing of the ENC data will start immediately. There is no error checking on the files
2. The signature service returns S-63 compliant signature files for all ENC files in the `DOWNLOAD` directory.

3. The signature service will permanently delete all ENC files in the UPLOAD directory when the S-63 signature is created.
4. It is the responsibility of the Data Server to download the S-63 signature files from the DOWNLOAD directory to a local folder and to delete the signature files after its use and before the next upload of ENC data.

## 5 ENC Signature Service Support

Support for the Signature Service can be provided by sending an e-mail with a description of your problem to: [helpdesk@ecc.as](mailto:helpdesk@ecc.as) or contacting the Service Delivery Manager in the Electronic Chart Centre AS [www.ecc.as](http://www.ecc.as).

A Data Server can periodically receive information by e-mail about the technical status or availability of the signature servers. If the primary signature server is unavailable, try connecting to the secondary signature server, ref. Chapter 3.2 item 4.

## 6 Frequently Asked Questions

Question	Response
I am not using the Windows operating system. How can I use the signature services?	Read chapter 3.1 on where you can obtain Webdav clients for other operating systems or early Microsoft Windows systems. Follow their installation instructions.
Why does it take so long time to create the signatures?	The signature process consist of the following elements: <ol style="list-style-type: none"> <li>1. Transfer of your ENC data to the signature server. A fast internet line will reduce this time.</li> <li>2. Signing of data. Operational experience is that the signing of 2550 ENC files takes 38 seconds.</li> <li>3. Download of ENC signature files. Should be much faster than step 1 above since the files are much smaller in size.</li> </ol>
Why can I not sign an ENC exchange set?	The signature service only accepts individual ENC files (base cells or updates). Send the ENC files without the catalogue file, readme.txt file, any text or picture files.

Question	Response
Why can I not sign ENC files uploaded in a hierarchical directory structure?	The application will only sign files stored directly in the <code>UPLOAD</code> directory. There is no support for traversing any subdirectories.
Why is the filename of the signature file erroneous and not compliant with the S-63 standard?	Verify that the filename of the ENC file (base cell or update) is compliant with the naming convention defined in the S-57 standard. There is no error checking on file names.