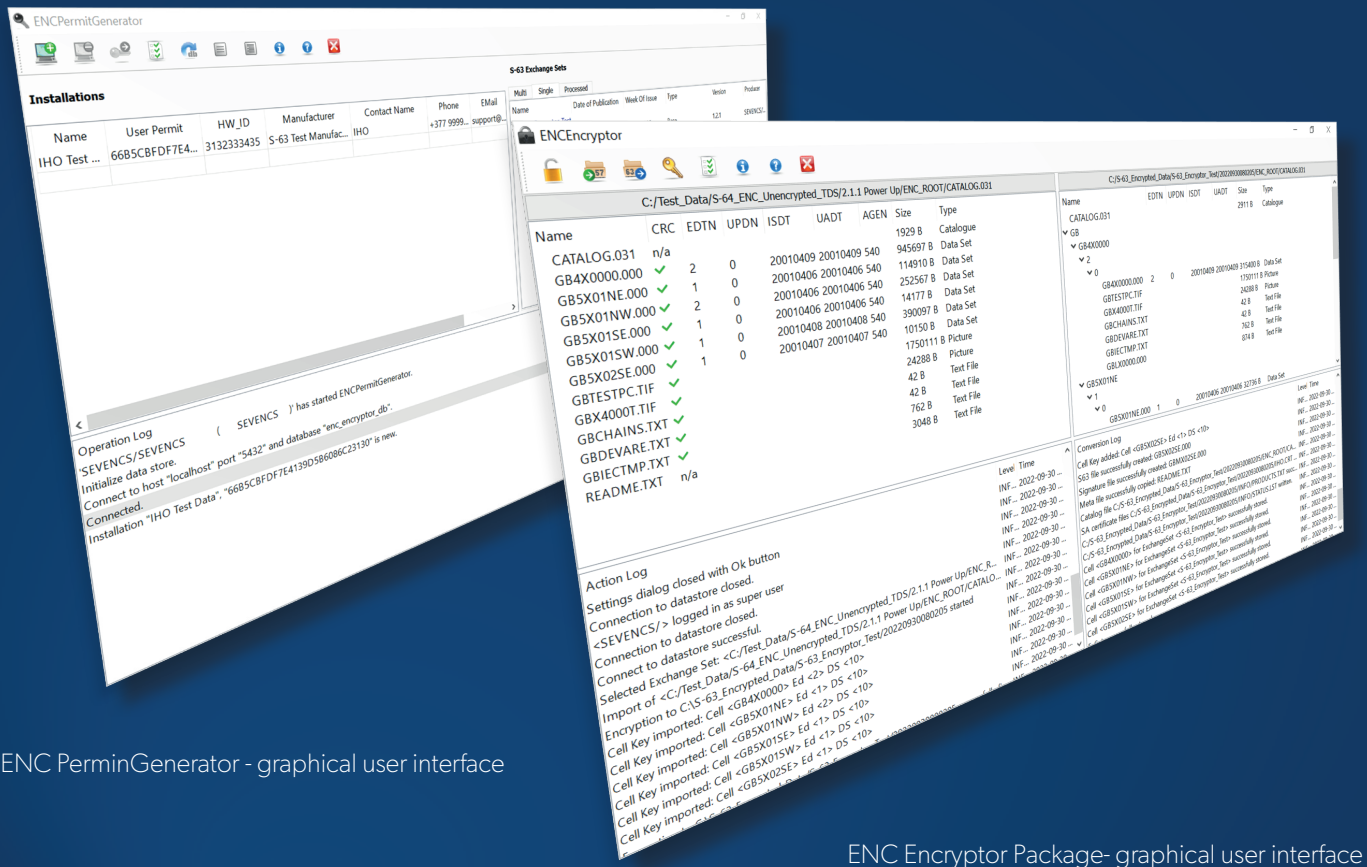


# ENC ENCRYPTOR PACKAGE



ENC PerminGenerator - graphical user interface

ENC Encryptor Package- graphical user interface

## PRODUCT DESCRIPTION

The ENC Encryptor Package comprises ENC Encryptor and ENC Permit Generator. The package allows S-57 ENC producers to encrypt and sign their data according to the IHO S-63 Data Protection Scheme, and to generate the respective keys needed by data users to access the data. Digital signatures are also created to ensure data integrity and origin. Thus the ENC Encryptor Package provides Piracy Protection, Selective Access, and Source Authentication for your ENCs all in one.

## PRODUCT HIGHLIGHTS

- S-63 Encryption of ENC Exchange Sets (base cells and update files)
- User management control (super user and restricted user) Storage of encrypted data in S-63 Exchange Sets
- Easy handling of S-63 specific keys and certificates (import, key generation, export, secure storage)
- All essential information is presented at a glance
- Generation of Cell Permits (chart access keys) for individual end-user systems like ECDIS or ECS
- Display and storage of detailed action logs

## FUNCTIONAL OVERVIEW

### S-63 SPECIFIC KEYS AND CERTIFICATES

The S-63 encryption scheme makes use of a variety of keys and certificates. ENC Encryptor makes handling all of them easy for you.

- Supports generation of new Data Server private/ public key pair and creates respective self-signed key for submittal to the Scheme Administrator (IHO)
- Also supports import of existing private/ public key pair of Data Server
- Reads and installs IHO certificate and IHO signed Data Server Certificate
- Imports ECDIS Manufacturer Keys and Manufacturer Ids. Data of single manufacturers can be added manually Allows export of Cell Keys

### DATA ENCRYPTION AND DIGITAL SIGNATURES

S-63 encryption and ENC signature file creation are the main tasks of ENC Encryptor.

- Encryption of imported S-57 Exchange Sets (S-57 base and update files) according to the IHO S-63 Protection Scheme including cell key generation  
Verification of imported S-57 Exchange Sets
- Generation of digital signature files for individual ENC's
- Creation of detailed action logs for each encryption session

### CELL PERMIT GENERATION

ENC Permit Generator creates individual Cell Permits (i.e. chart access keys) that are required to access S-63 encrypted ENC's.

- Generation of Cell Permits for individual ECDIS/ ECS end user installations

- Processing of multiple Exchange Sets for various end user installations with one click
- Calendar function to set expiration date of Cell Permits
- Creation of detailed action logs for each permit generation session
- Management of Cell Permits and installations
- Quick overview of created permits

### INTEGRATED DATABASE

The integrated database is the core component. It is used to manage and store all information and data required for the S-63 encryption process and the cell permit generation.

- Secure storage and management of Data Server keys, certificates, and S-63 Cell Keys
- Manages Cell Permit information, ECDIS manufacture data, and relevant information about destination systems
- Storage of information about the individual data sets that have been S-63 encrypted
- Control of user access handling

### IMPORT OF NEW CELL KEYS FROM EXTERNAL FILE

- Externally created cell keys can be utilized

### SUPPORTED FORMATS AND PRODUCTS

- Input: S-57 Exchange Sets (S-57 3.1, ENC 2.0)
- Output: S-63 Exchange Set  
(encryption according to S-63 1.0 and 1.2.0)

### SUPPORTED OPERATING SYSTEMS

Win 7/8/10 (32 Bit, 64 Bit)

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