ENC Designer Enterprise

- ENC Designer Version 4.7.0

- ENC Manager Version 2.5.5

- ENC Referencer Version 1.12.5

Release Notes

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Preface

These release notes provide information about extensions, modifications and bug fixes that have been implemented in the current software version of *ENC Designer Package* since its previous release.

The current version of *ENC Designer 2.7.0* was released in in August 2019.

Note:

For a detailed description of specific functions or a description of 7Cs Analyzer functionality in general, please refer to the product documentation or contact the SevenCs support department (support@sevencs.com).

The product website provides a quick overview about feature highlights and supported standards / formats (https://www.sevencs.com/enc-production-tools/enc-designer/).

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1 Introduction

The *ENC Enterprise Package* comprises *ENC Designer*, *ENC Manager* and *ENC Referencer*.

ENC Designer is the central application of the SevenCs *ENC Tools* production suite. It is a software tool that has been developed for production and maintenance of S-57 charts (ENC, IENC, AML, and custom products).

ENC Manager is an S-57 ENC production workflow tool. It is also used to control S-57 update creation and to compile Exchange Sets for data distribution.

ENC Referencer can be used for interactive geo-referencing of image files containing geo-spatial data. Geo-referenced images can serve as raster backdrops in *ENC Designer*.

1.1 Related Documentation

The documents are enclosed with this delivery:

- *ENC Designer*, Version 4.7.0, User's Guide, 2019, Document Version 1.0
- *ENC Manager*, Version 2.5. User's Guide, 2019, Document Version 1.0
- *ENC Referencer*, Version 1.12 User's Guide, 2019, Document Version 1.0

2 General

2.1 How to Install

The default installation path is used. It is not required to de-install older software versions of the *ENC Designer Enterprise* package. To install the new software please run the installation script (`encdesigner-4.7.x-32bit.msi`) and follow the instructions on the screen.

2.2 Supported Operating Systems

ENC Designer Enterprise and its components can be operated under Windows 7, (32bit/64bit), Windows 8 (32bit/64bit), and Windows 10 (64 bit)

2.3 Installation Path

The installation script will suggest the following default installation paths:

`C:\Program Files\ ENC_Tools\ENC_Designer` (32 bit system) or

`C:\Program Files (x86)\ ENC_Tools\ENC_Designer` (64 bit system).

However, you are free to install the software under any other directory. It is recommended to use an administrator account to install the software.

2.4 Library Path

ENC Designer and *ENC Manager* use a variety of different resource files (e.g. feature dictionaries, lookup tables, symbol files, user preferences, product lists, etc.). The resource files are stored in a dedicated path – the so-called library path.

Library path location:

Windows 7 and higher `C:\ProgramData\SevenCs\ENC_Designer`

3 Release Version 4.7.0

The following notes will give an overview of the major changes and bug fixes implemented in the current released version.

3.1 New Features and Functions

This section gives an overview of all new features and functions that have been implemented in this *ENC Designer Enterprise Package*.

3.1.1 Incorporation of 7cs Analyzer - 7Cs new S100 ready validation tool

ENC Designer and *ENC Manager* now incorporate the *7cs Analyzer 4.X.X* by means of appearance in the tools-menu, calling the application from the GUI and recognition of validation log files. The tool can be used in parallel with other older 7cs Validation solutions.

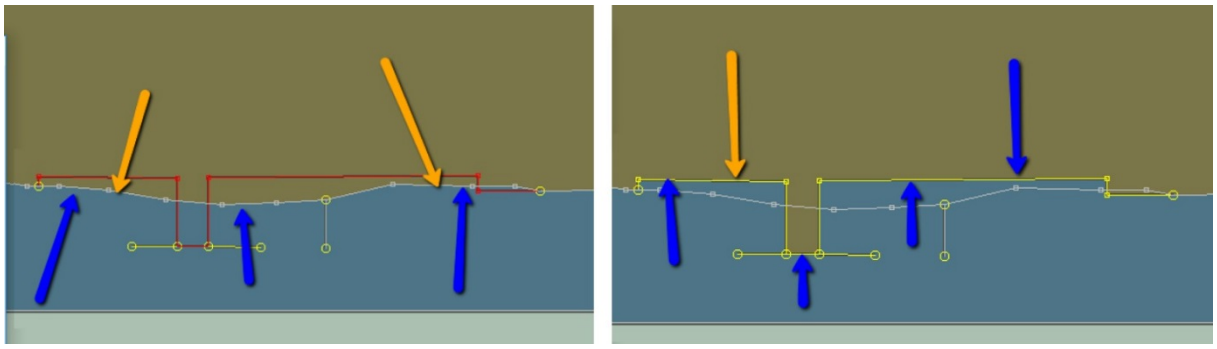
3.1.2 Support of BIENC1.0 on IENC2.4 and AML 3.0

ENC Designer supports the new edition of BIENC 1.0 standard for bathymetric inland ENCs based on the European Inland ECDIS Standard Edition 2.4, Section 2in April 2015 (Section 2). Furthermore, *ENC Designer* implements the edition of the Presentation Library 2.0 of NATO AML 3.0.

3.1.3 Geometry swapping function

A function to allow easy integration of new line features replacing existing line features – for example where a new shoreline construction replaces the old coastline.

Changes along a coastline during construction can be incorporated easily by compiling the new geometric elements (see below)



The new function allows to swap the related feature elements according to the change in geometry to ease the updating process.

3.1.4 Geometry optimization functions

ENC Designer now supports functions to delete partially redundant edges and delete duplicate geometries from a spatial dataset.

3.1.5 New command line tool CopyCell.exe

This tool can only be executed from the Windows command line. It can be used to quickly copy the entire content from one dataset to another. This can be extremely useful in case users need to perform such operations frequently and/or regularly.

3.1.6 New command line tool ClipCell.exe

The tool can be executed from the ENC Designer tools menu or from the Windows command line. It can be used to specify a particular area feature (e.g. M_COVR) which then will be used as clipping boundary. Both, i.e. clipping outside and inside this clipping boundary is supported. The command line mode is useful for integration into automated batch processes.

3.1.7 Extended versions of Cut/Delete (outside/inside) functions

Traditionally the functions *Cut/Delete inside* and *Cut/Delete outside* can be used to delete **all features** (incl. geometry) that are located inside or outside a defined polygon. Parts of features overlapping this polygon are clipped accordingly inside / outside the polygon. The new function allows users to

1. select a specific area feature that will be used for clipping and

2. to define which feature types will be affected by the clipping process and which will not be clipped.

3.1.8 New function “Copy to work cell”

This new function can be used to quickly copy the entire content of selected datasets (that have been loaded into ENC Designer) to the work cell (i.e. the cell that is currently being edited).

It works similarly to the command line tool *CopyCell.exe.* The difference is that it comes not as command line tool. Instead, it has been integrated into the ENC Designer Graphical User Interface as a separate function.

It is recommended to use command line tool CopyCell.exe if you want to integrate the functionality into an automated routine.

3.1.9 Improved Geometry snapping

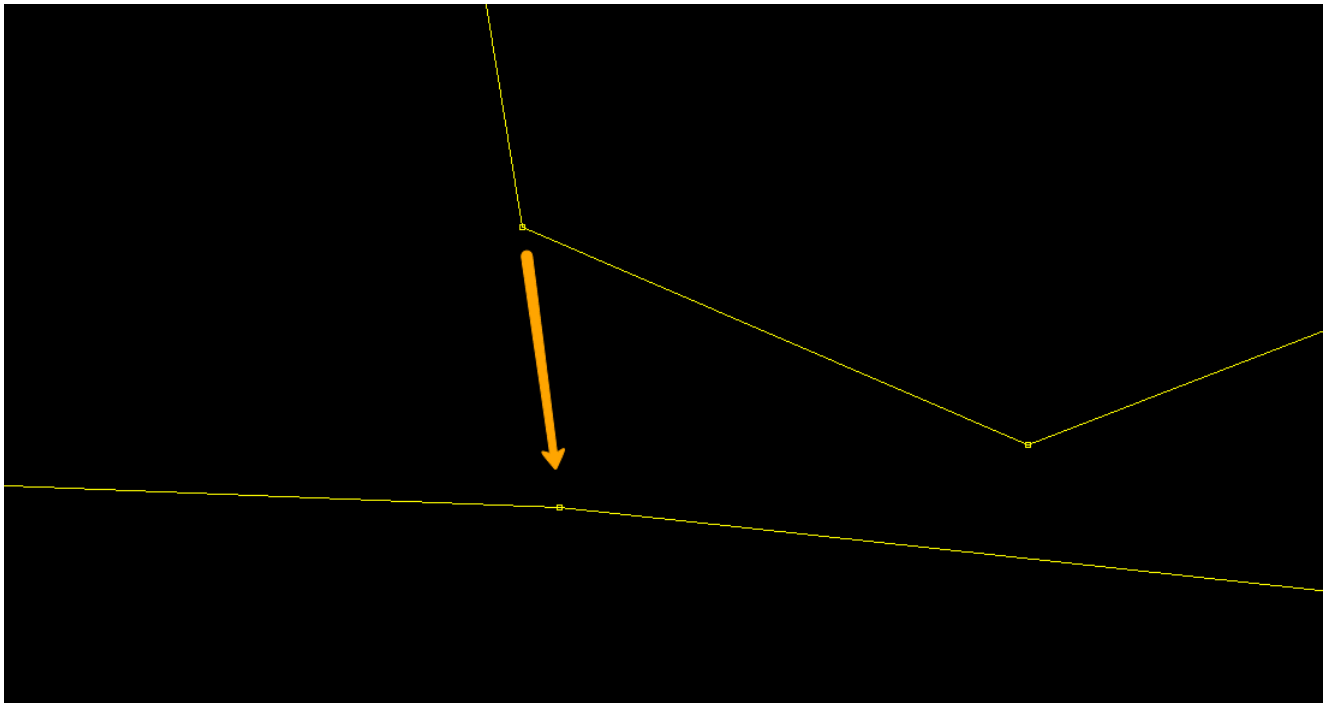
Geometry snapping as such was already supported in previous versions of ENC Designer. However, to make use of it users had to switch back and forth between different geometry editing functions.

This was significantly improved – now geometry snapping is supported by all the geometry editing functions.

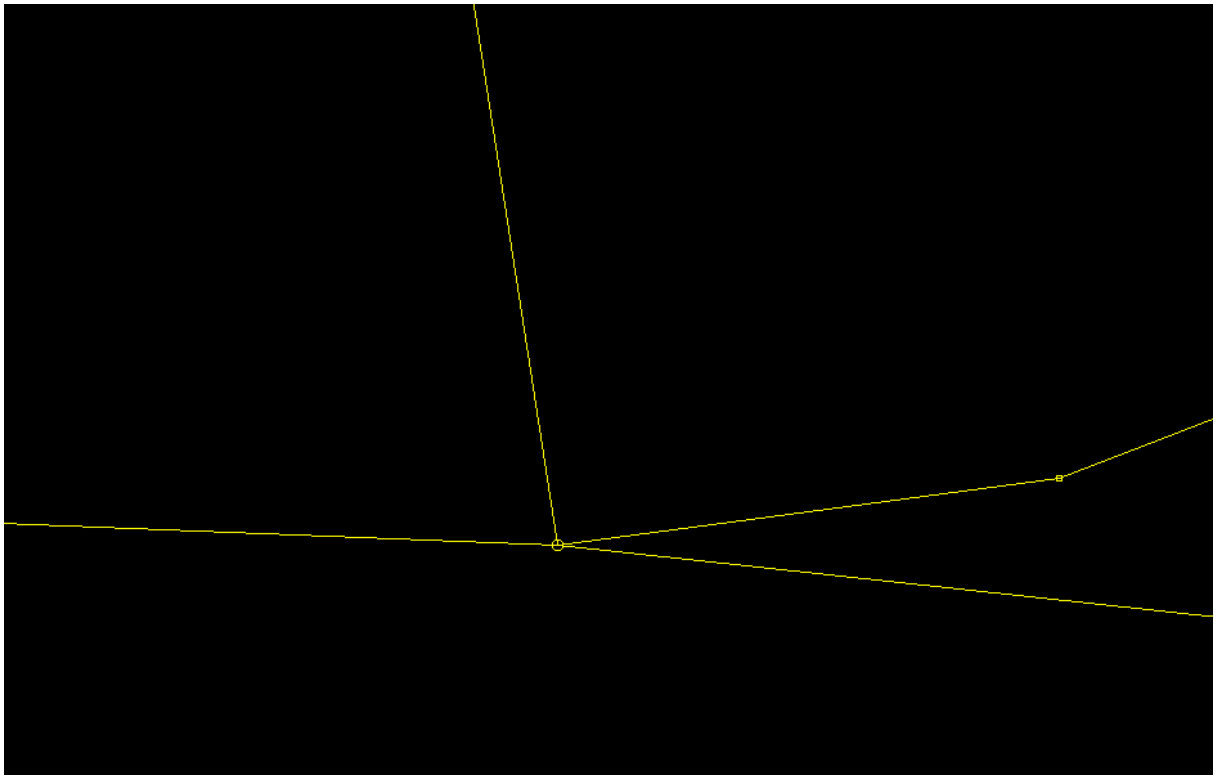
Moreover, two different snapping modes have been introduced:

1. Real snapping: Existing lines are split up at the vertex that is used for snapping and the vertex is replaced with a new node. Then new/additional lines are connected to this node.
2. Pseudo snapping: The existing line is not split up at the vertex used for snapping. The respective vertex or node of the geometry that is currently being edited just adopts the coordinate from the vertex that is used for snapping.

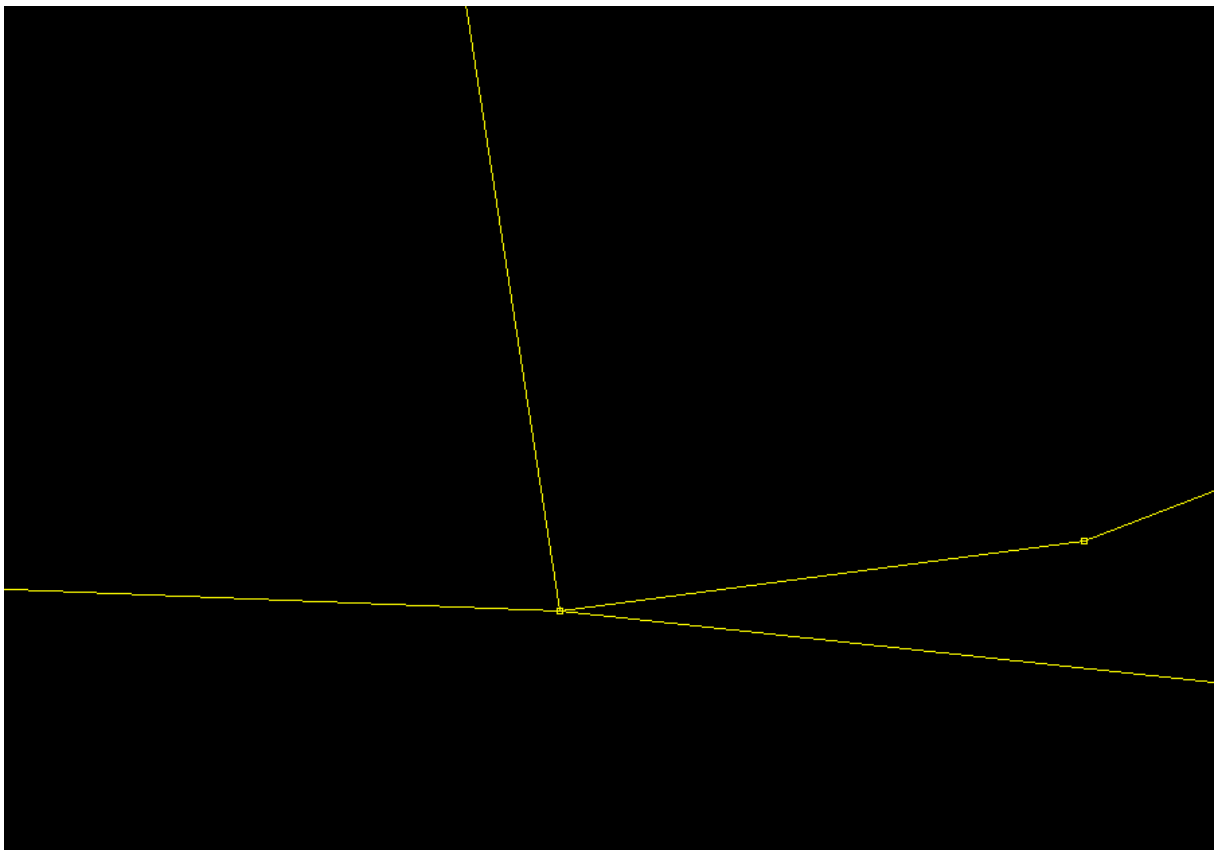
Before Snapping



After Real Snapping



After Pseudo Snapping



3.1.10 Enhanced editing function of Data Set properties

Editing of data set properties used to be somewhat restrictive to avoid users accidentally entering invalid dataset parameters.

An advanced dataset parameter editing mode has been introduced to allow for more flexibility.

3.1.11 New Backup strategy

The new backup strategy makes sure that backup files are automatically created after ENC Designer has been idle for a specific length of time (default 300 sec).

The user can configure the backup interval. Backup files are automatically deleted when ENC Designer dataset save functions are used. The backup interval starts again when the user starts editing.

3.1.12 Multi-User Support in ENC-Manager

In order to avoid conflicts while several users are working simultaneously Multi-User support was implemented in ENC-Manager.

3.1.13 UTM coordinates, associated geodetic datum

The previous versions of ENC Designer and ENC Referencer always associated the UTM coordinate system with the International ellipsoid 1924 (Hayford). The new software versions allow linking UTM to any of the supported ellipsoids.

3.2 General changes and Bugfixes

The following section gives a brief overview of general changes and bugfixes applied to this release version of the *ENC Designer Enterprise Package*.

3.2.1 Import of S-57 dataset caused instable software behaviour

Under specific circumstances the second import of the same S-57 datasets caused the software to become instable or to crash. This was fixed.

3.2.2 Logical Operators in the Geo-Manager caused software to crash

Some logical operators in the GEO-Manager Module of the software caused the software to crash while executing them. This was fixed.

3.2.3 Validation logfile not recognized and displayed incorrectly

The display of the validation logfile and its naming was not correct- This was fixed.

3.2.4 Set Group could not be set to 255 in Object Manager for AML products

Setting a Group to the value 255 was not valid in the previous version of this software. This was fixed.

3.2.5 Missing cell header information

Under specific circumstances the cell header information for the Cell Code and the geographic positions were not displayed correctly in the context menu of a dataset. This was fixed.

4 Contacting SevenCs

4.1 SevenCs

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4.2 Technical Support

With a software support agreement, you will be participating in all technical development and innovations at SevenCs and you will have direct access to us via phone or Email if you have any queries.

Email contact: support@sevencs.com

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