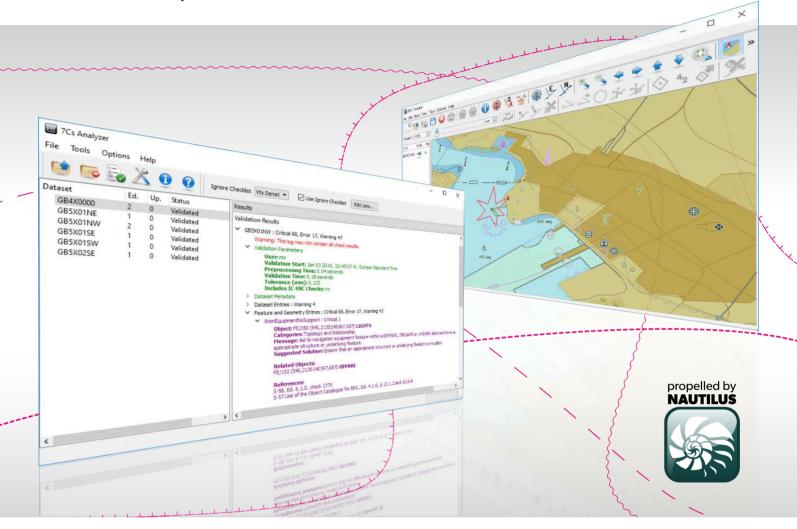
# 7Cs ANALYZER

The most comprehensive validation tool on the market.



## PRODUCT DESCRIPTION:

7Cs Analyzer Version 4.0 is SevenCs new generation solution for validation of S-57 and S-100/S-101 nautical chart products.

It integrates SevenCs powerful S-100 Kernel Nautilus which guarantees fast data access, great performance and future-proofness.

7Cs Analyzer performs hundreds of individual checks and uses the same validation engine for both S-57 and S-101 data products. This makes the transition easy and has a big benefit to customers who will have both S-57 and S-101 based product streams - the validation results will always be consistent between the standards.

#### **PRODUCT HIGHLIGHTS:**

- Validation of S-57 and S-10X hydrographic-related data products
- Compliant with latest Edition of IHO S-58 ENC Validation Checks
- Compliant with Recommended Inland ENC Validation Checks 2.4
- Integrated command line mode for batch processing
- Advanced editor for definition of checks users want to ignore
- Simplified validation log output
- Improved consistency in check naming and log messages
- Verified against the new IHO S-58 Critical Test Datasets.
  Every test case presented by these test datasets has been passed.

## 7Cs ANALYZER

### **FUNCTIONAL OVERVIEW**

During the Quality Control Procedure data producers and reviewers can use 7Cs Analyzer to validate base files sequential updates and exchange sets.

### VALIDATION IS BASED ON THE FOLLOWING STANDARDS:

- IHO S-100 Universal Hydrographic Data Model (December 2018)
- IHO Publication S-101 Edition 1.0.0 (December 2018)
- IHO S-57 Transfer Standard for Digital Hydrographic Data Edition 3.1
- S-57 ENC Product Specification 2.0
- S-57 APPENDIX B.1 Annex A Use of the Object Catalogue for ENC Edition 4.1.0
- IHO S-58 ENC Validation Checks Edition 6.1 (September 2018)
- Product Specifications for Inland ENCs Editions 2.1,
  2.2, 2.3, 2.4
- Recommended Inland ENC Validation Checks 2.4
- bENC/bIENC 1.0

## **VALIDATION CHECKS AND RESULTS:**

7Cs Analyzer integrates hundreds of individual checks to identify errors on data files, chart features, and geometries.

#### **VALIDATION RESULTS INCLUDE:**

- Validation parameters (e.g. tolerances, configurations)
- Dataset Metadata (Name, Edition, Dates, Reference Datum, Units, etc.)
- Dataset Entries (e.g. messages on erroneous record fields)
- Feature and Geometry Entries (e.g. erroneous feature attributes, corrupt topology, data model errors, etc.)
- Indication of S-58 severity categories (critical error, error, warning)

The validation results along with dataset information are presented to the reviewer in a hierarchical tree structure in the order of their importance. Also, the results are automatically exported to XML log files.

#### **IGNORE CHECKS EDITOR:**

Temporarily users may want to focus on particular checks only.

To do so they can suppress the presentation of defined checks. With the Ignore Checks Editor respective configurations can be easily set up:

- Overview of all tests in alphabetical order
- Function to filter tests by name
- Straight forward selection of validation checks users want to add to the ignore list
- Easy management of multiple user or organization specific configurations

### **OPERATION MODES:**

7Cs Analyzer can be operated in different modes and even interact with other applications of the SevenCs chart production suite

- Use as standalone desktop application
- Command Line Mode for batch processing
- Integration in ENC Designer and ENC Manager

#### **CUSTOMIZABLE APPLICATION OPTIONS:**

- Editable tolerances for distances
- Export of full or abridged validation Log
- Specification of maximum number of CPU cores that will be used
- Option to export log files in ESRI format
- IC-ENC specific checks

## **SUPPORTED OPERATING SYSTEMS:**

- Windows 7
- Windows 8.x
- Windows 10

Supports 32bit, 64bit

