## See your sonar data like never before

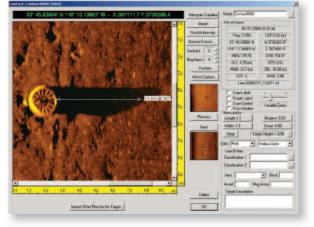
SonarWiz 5 is a complete data acquisition and survey management system. It's made up of powerful yet easy to use tools that will help surveyors increase productivity, simplify the process, and produce high quality outputs.



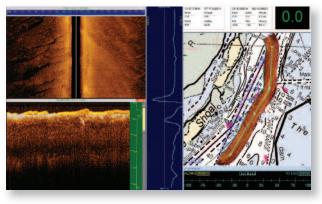
- Learn just one powerful, easy to use software application to complete any sonar survey
- Ensure time on the water is efficient and cost effective with our advanced interactive planning tools
- Reduce costs by using real-time data acquisition to confirm quality and coverage before leaving operation area
- Customize desktop to meet job requirements; save and recall for easy setup of subsequent missions
- Speed set-up with intuitive interface that follows standard survey workflow methodology



SonarWiz 5 builds high fidelity sidescan sonar mosaics in any map projection with a broad range of base map options. This example covers 25 square miles made from approximately 30 passes highlighting the build up outside the mouth of a river.



Sonar contacts and all of their measurements and attributes are stored in a relational database to allow unlimited report generation options. Use the Contact Report Generator to search on any data field, such as all contacts with a height greater than 3.0 meters. The results might include the cable spool shown in the image at left that otherwise would be very hard to pinpoint as an object of interest.



Flexible viewing options in SonarWiz 5 enable you to see simultaneously what each of several devices is capturing during the survey mission. This example shows the results of sidescan (upper left), sub-bottom (lower left), magnetometer (center), along with your route overlaid onto the appropriate chart (right).





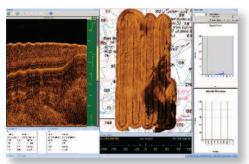
# SonarWiz 5 is designed to work the way you do

SonarWiz 5 includes many key features that make it extremely easy for surveyors to learn to use. Designed to follow your existing survey workflow methodology, it's easy to start using the system immediately.

### **Layout Manager**

Use the Layout Manager to customize your desktop to match your preferred configuration. Position windows, status displays and indicators right where you want them, and then save them to use again for subsequent surveys. Save time by easily switching between different data displays for different surveyors or types of surveys.

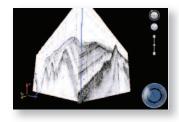




Layout Manager makes mission setup easy—each and every time. Here are two examples showing how different surveyors might customize their desktops to suit the survey, showing everything from your planned route to mosaics to sidescan and sub-bottom output.

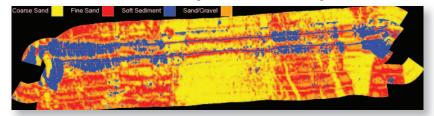
### 3D Sub-Bottom Images

View sub-bottom profiles and intersections in 3D to confirm tides, draft and tie lines. (See example at right.)



### Seabed Classification

Classify seabed sediment, such as gravel and sand, for use in a wide range of sonar mapping missions including habitat studies, dredging projects,



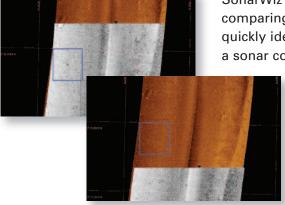
military assessment of risk and trafficability, pipe and cable laying projects, and at-sea platform construction.

#### color-coded map where each color represents a class of seafloor material or aggregate.

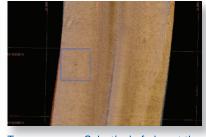
SonarWiz 5 generates a

### **Change Detection**

SonarWiz 5 offers several time-saving options for simplifying the process of comparing a new data set to a baseline data set to help sonar analysts quickly identify bottom changes. In these examples, the blue box highlights a sonar contact in the current data that was not present in the original data.



Swipe—Peel back the current data to reveal the historical by dragging the Swipe tool.



Transparency—Selectively fade out the transparency of the new data over the old data to locate an object of interest.



Line Shift—Drag the historical data to the side to visualize both the current and the historical data simultaneously.

## From mission planning to data acquisition and post processing, you won't find a more complete system.

### Survey and Mission Planning

Advanced and interactive planning tools lead to efficient and cost effective survey time on the water.

- Load background maps from almost any map type to provide some geographical context.
- Use the automated survey line generator to create survey grid patterns in several different ways:
  - Parallel to a reference line
  - Fill a polygon with lines at user specified spacing and bearing automatically and trimmed to the edges of polygon.
  - Fill a rectangle and then stretch or rotate the rectangle to adjust the lines.
  - Choose from conventional or efficient survey line patterns.
- Estimate and report on how much time various survey line patterns will take.
- Export your preplanned survey to your GIS or CAD system using the Survey Line Export tools.
- Generate a planned survey map image in several different formats including: GeoPDF, GeoTiff, ECW, JPEG 2000 and Google Earth.

### **Data Acquisition**

Verify the quality and coverage of your survey before leaving operation area.

- Use the new Layout Manager to position windows, status displays and indicators right where you want. Save and recall favorite window layouts.
- Decide which parameters to display and monitor with the userconfigurable System Info Display window. Name and save different configurations so you can easily switch between different data

- displays when conducting different types of surveys.
- Integrate and monitor all of your sensors.
- The real-time Mosaic Mode control gives you full control over how to manage the real-time mosaic generation process. If you are working on a very large survey with hundreds of sonar files, this feature lets you tune the system for the best performance while displaying only the data that you need to see.
- Record in industry standard XTF format or raw vendor specific Edgetech JSF and GeoAcoustics GCF raw file formats allowing you to preserve the full fidelity of the sonar data that go beyond the limits of the XTF file format.
- Monitor the positioning quality with the GPS Quality parameter indicators for HDOP, Positioning Mode, DGPS Correction Age, Number of Satellites and more.
- Detect changes between old and new surveys by using the transparency, swipe or line shift tools.
- View targets in real-time using the new Target Strip window to display the most recently captured contacts in a filmstrip-style window.
- Left-right survey line steering indicator makes the helmsman's job easy.
- Display dual frequency sidescan sonar channels and sub-bottom simultaneously using the Real-time QC-sonar waterfall display.
- Supports simultaneous acquisition of sonar, navigation sensor, depth sensor, payout meter and magnetometer.
- Contact capture and feature digitizing tools allow features to be located and classified on the mosaic during or after data acquisition.
- Comprehensive real-time signal processing and gain controls including Auto Gain, Auto TVG,

- Manual Linear Gain and Manual TVG. All gains affect only the display and never the raw recorded data.
- Real-time bottom tracker automatically tracks towfish height above the seafloor saving time in the post-processing phase.

### **Post Processing**

Easily combine different data formats to create sophisticated reports.

- Supports over 20 sidescan data formats, 10 sub-bottom data formats and unlimited magnetometer data formats so you can post-process data collected from most third-party sonar data acquisition systems.
- Generates crisp, dynamic mosaics quickly using the new 32-bit display.
- Excels at large mosaics. And with the new export formats like Erdas Imagine and JPEG 2000 you'll no longer be bound by the 4G pixel limit of GeoTiff.
- Generate sonar contact reports direct to PDF, Open Office, Microsoft Word and HTML with more control over content and formatting.
- Display and report on any subset of your contact database using the SQL-based query engine. Now you can build a report and a matching mosaic image with only the contacts that match your specified query.
- Supports basemaps and overlays in raster and vector formats including BSB, S-57, VPF/VMAP, ECW, DXF, Shape files, GeoTiff and many more charting, GIS and CAD formats.
- Export sonar mosaics, digitized features, contour lines and more to many raster and vector file types such as: GeoTiff, ESRI Shape files and Google Earth KML/KMZ.
- Use the advanced navigation editor ZEdit to edit CSF or XTF files directly.



# Everything you need in one application

SonarWiz 5 is an all-in-one real-time acquisition suite of programs that will meet all of your sonar mapping needs, save you time, and minimize your training costs.

SonarWiz 5 helps you streamline the survey process and simplify the number of software programs you need to learn. It operates with almost all sonar manufacturers, so you won't need to re-familiarize yourself with different software each time you need to use different equipment.

SonarWiz 5 interfaces with all brands of commercially available sidescan sonars, sub-bottom profilers, magnetometers and echo sounders.

System interfaces that currently are available include:

- Analog Sonars
- C-Max
- DSME
- Edgetech
- GeoAcoustics
- Humminbird
- Imagenex
- Innomar
- Klein
- Knudsen

- Marine Sonic Ltd.
- SonarBeam
- SyQwest
- Teledyne Benthos & Odom
- Tritech

### Training and Customer Support

We offer comprehensive training programs tailored to meet your specific needs.

- Hands-on training is offered at customer sites on demand.
- Or you can attend our pre-scheduled hands-on workshops offered up to four times a year in locations throughout the world.

More information about upcoming workshops is available on our website.



John Gann (at right), founder of Chesapeake Technology, provides on-board training during a course offered in Rio de Janeiro, Brazil.

Experience unmatched customer support, and benefit from product improvements that are influenced by our customer needs.



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Ready to see how SonarWiz 5 can make your sonar mapping missions easier and more productive?

Download a free trial version today at www.chesapeaketech.com/sw5trial.