



Coverage and CoverageNet Drivers

By Lazar Pevac

COVERAGE DRIVER

The Coverage driver is created to allow you to display the area covered by your survey. There are a few items to configure in the setup dialog.

If HYSWEEP® or HYSCAN (SIDE SCAN TARGETING AND MOSAICKING) is running parallel with the SURVEY program, check **Hysweep/Hyscan**. In this case, the port and starboard limit comes externally.

If SURVEY runs alone, you can check **Depth Controlled Swath**. In this case, the swath is calculated from the current nadir depth and swath angle. Otherwise, the swath size is any number of your choice.

With **Save Coverage Data**, the coverage data can be saved in a DIG format chart file named using the format *RawFileName* + *DeviceID* + ".DIG".

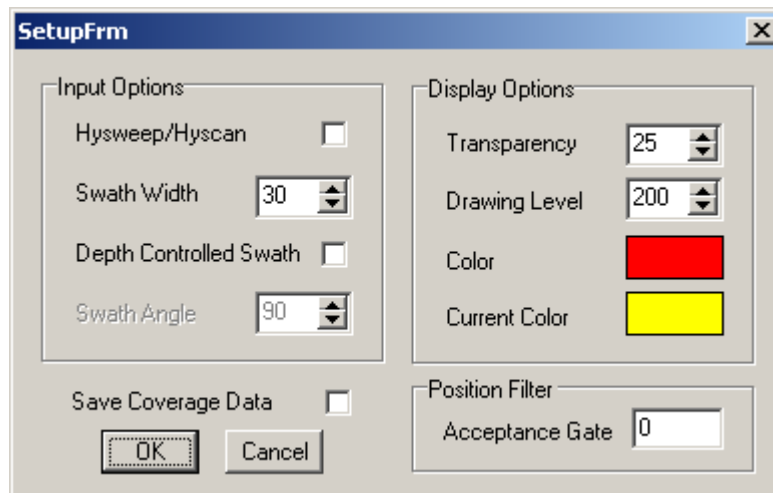
Set the **Transparency** value low to see more details below the coverage indicator.

Set the **Drawing Level** low to move the coverage below other chart layers.

Color boxes will allow you to distinguish the current coverage from previous coverage. Current coverage is visible in logging mode only.

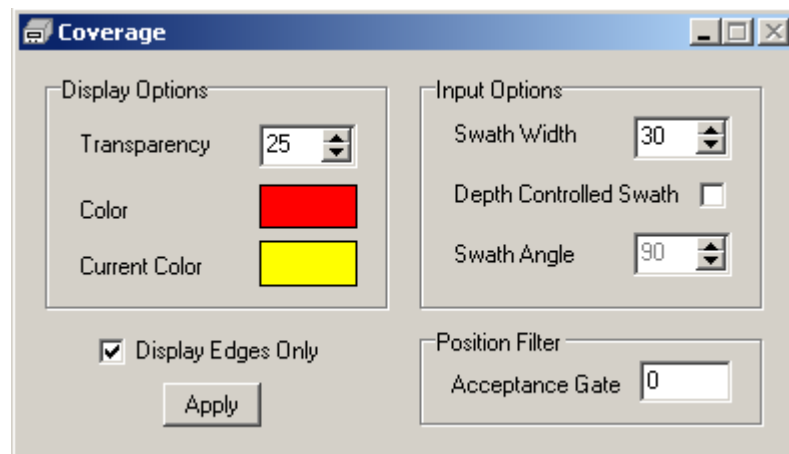
Position Filter rejects all data closer to the last recorded position than the **Acceptance Gate**. A value of '0' for the Acceptance Gate disables this filtering.

FIGURE 1. Coverage.dll Driver Setup



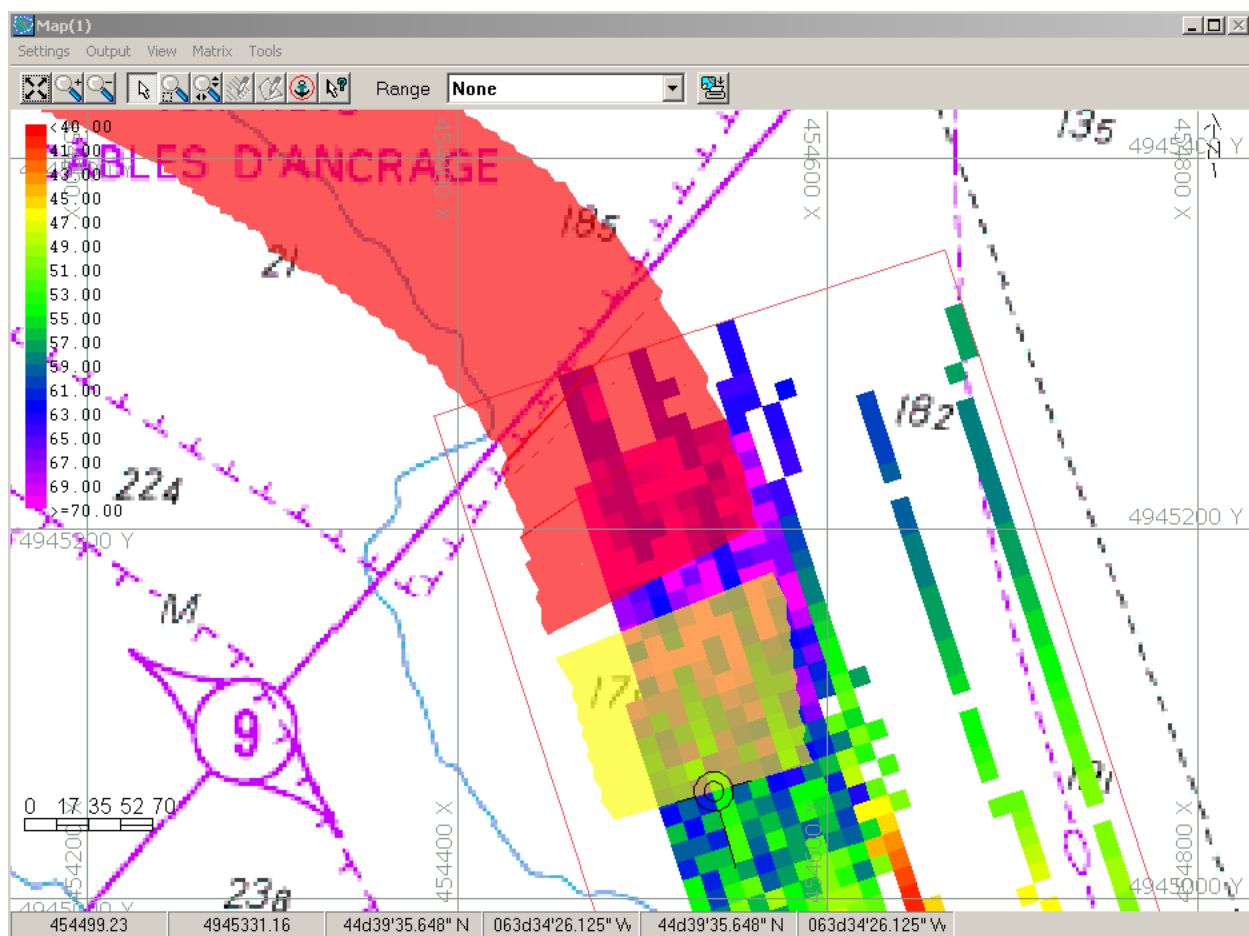
The Coverage driver is connectionless. (You do not need a COM port or Network port.) The runtime Device window allows you to change most of the input parameters.

FIGURE 2. Coverage.dll Device Window



Display Edges Only disables the solid area presentation.

FIGURE 3. Coverage in Action

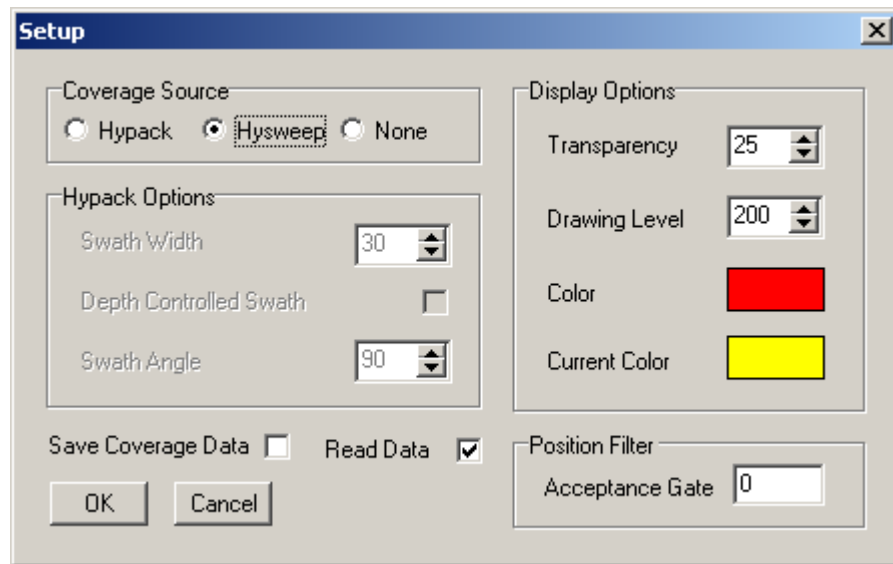


COVERAGENET DRIVER

CoverageNet has similar interface, but it is much more complex. It is designed to work on multiple Survey instances on multiple network connected computers.

In a very simple case, we will have two vessels surveying the same area. To minimize gaps and overlaps, we want each vessel “to see” the coverage of the other vessel.

FIGURE 4. CoverageNet Setup



TWO VESSEL SETUP

- Set the **Coverage Source** to “HYPACK®” or “HYSWEEP®” and check the **Read Data** option.
- Cross-assign the **Port** and **Write Port**.
- **Host** is the address of the target computer.

MULTIPLE (N) VESSELS

On each computer, install one instance of the driver with the following settings:

- **Coverage Source:** Set to HYPACK® or HYSWEEP®.
- Uncheck **Read Data**.

- **Network parameters:**
 - **UDP** server,
 - **Port** is unused (any number)
 - **Write port** must be different on each computer. It will broadcast to all computers in the network.

Install on each computer N-1 instances of the driver with the following settings:

- **Coverage Source** must be set to 'None'.
- **"Read Data"** must be checked.
- **Network parameters:**
 - **UDP** client,
 - **Host** = target computer,
 - **Port** = target computer port,
 - **Write port** is unused (any number). It will receive data from the specified port.

Connect: Network Port

Network Parameters

Protocol: UDP Role: Client

Host: 192.168.1.135

Port: 10001 Write Port: 10000

FIGURE 5. CoverageNet in Action Computer1:

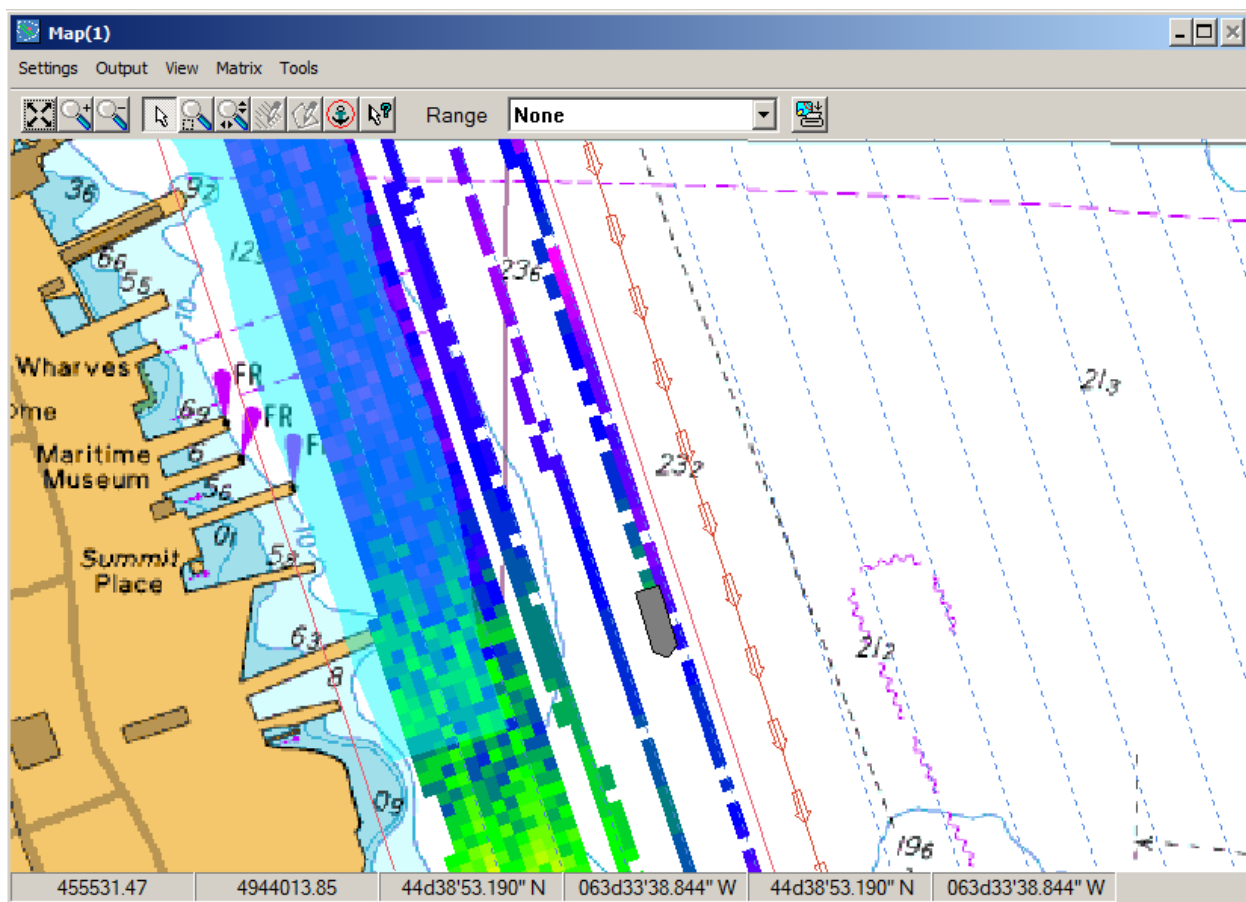


FIGURE 6. CoverageNet in Action Computer2:

