Project Overview

Virtual Integrated Data System VIDS-V2 University of Miami, RSMAS Marine Technology Group

Project Goals

Portability

Design for multiple operating systems and hardware platforms. O/S Windows, Linux, Mac Hardware PC, Mac, Embedded Systems, PDA, Tablet PC

Dependability

Redundancy, Data Security, Error trapping and notification Auto Recovery from certain problems.

Flexibility

Plug n Play Instrumentation using standard drivers. Stand Alone or System Managed data collection. Multiple methods of Communicating with Instruments. Safe, Full access to real time and archived data by science.

Standard Data Formats

Description

- VIDS V2 is a total re-write of the current VIDS software package in use for 8 years, updated with new features introduced in National Instruments LabView 8.
- The VIDS V2 design model will be determined by RVTECHS interested in improving and standardizing data collection.
- VIDS V2 will be a highly modular system designed to allow variations of the system based on individual needs.

Design Guidelines

- The failure of any given VI will not impede the performance of another VI.
- Any collection VI can function in a stand alone capacity or as a member of a larger collection system.
- All VIs can use one of several methods to communicate with an instrument.
- Allow for older software based on serial communications to participate in a network environment.
- If an error is detected, tell somebody.

Typical VIDS GUI

