

[Linux Reef Controller](#)

The Linux Reef Controller Project:

The objective of this project is to create a sensor network that uses [Dallas 1-wire sensors](#) and [OWFS \(One Wire File System\)](#) to monitor environmental parameters of an aquarium. The sensors are attached to hubs connected to [Linksys NSLU2](#) devices that have been converted to run linux and owfs. The sensors are polled by scripts that run as cron jobs every five minutes on a main Gentoo Linux server, and the data collected is used to generate meaningful graphs with [RRDTool](#). The graphs are then displayed on a web page hosted by an Apache web server on the main Gentoo Linux server. The project focuses on using Linux as an Operating System along with Perl and Bash as the scripting languages to create an open source, low cost aquarium monitoring solution.

- [How to setup the Web Server to poll sensor servers on your network](#)
- [How to use a Linksys NSLU2 network storage device as a sensor server](#)
- [Example Script & Cron Entry](#)