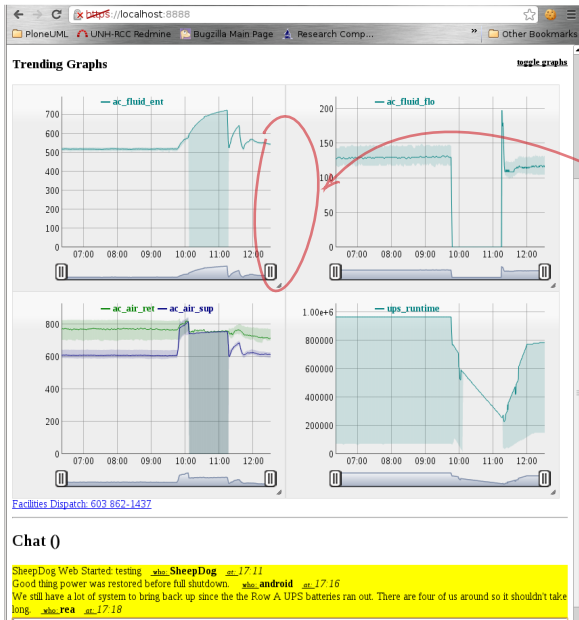


SheepDog

Overview

Modern data centers are equipped with a multitude of sensors that monitor a variety of environmental conditions including: power, incoming chilled water temperature, air temperatures, UPS runtime, and fluid flow. SheepDog constantly monitors these sensors and provides alerts 24/7 when any of these environmental conditions indicate potential problems. A rule-based progressive response system automatically responds to escalating conditions while simultaneously providing accurate status and environment trends to authorized personnel. When preset thresholds are exceeded, SheepDog will initiate automated shutdowns to insure the safety of the hardware. Throughout each event a web view provides a single rally point for situational awareness and staff communication.



Key Features

- Progressive rule-based response to changing conditions, allowing unmanned system shutdown.
- Dynamic real-time updates and interactive plotting of current environmental data allows for intuitive predictive trending.
- Priority ranking shuts down less important systems to extend the up-time of those systems deemed critical.
- Capability to multi-thread, multi-process, or be distributed. Configured for each environment to be as fault-tolerant as possible.
- Stores all operational data to insulate against failure of services during the degraded conditions where SheepDog is expected to perform.
- Historical environmental data is stored when outside of the normal range. This data may be interactively plotted at a later date.



- Alert mode allows authenticated users to monitor the situation and coordinate their responses using secure online chat (including remotely via smart phone).
- Verbose, accurate time stamped logs for post-event evaluation.
- Unix and Mac OSX directly supported via SSH.
- Secure Windows Client provides shutdown capabilities across all Windows Operating Systems.
- Email and SMS text alerts when a data center environment leaves the normal range.
- Multi-threaded non-blocking design for resilience to multiple communications failures.
- One source code tree for all functionality. Minimal requirements and library dependencies on the host system. May be configured as a single stand-alone, executable at run time, or distributed across multiple systems.
- Efficient web monitoring/graphing tools allow interactive plotting, even on smart phones with low network bandwidth.