

# RUMSTIX

Remote Sensor Network Manager



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# Overview

- Project Background
- Proposed System
- Deliverables
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- Resources
- Technology
  - Hardware
  - Software
- Major Risk
- Team Organization



# Project Background



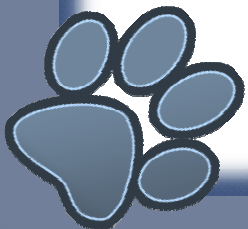
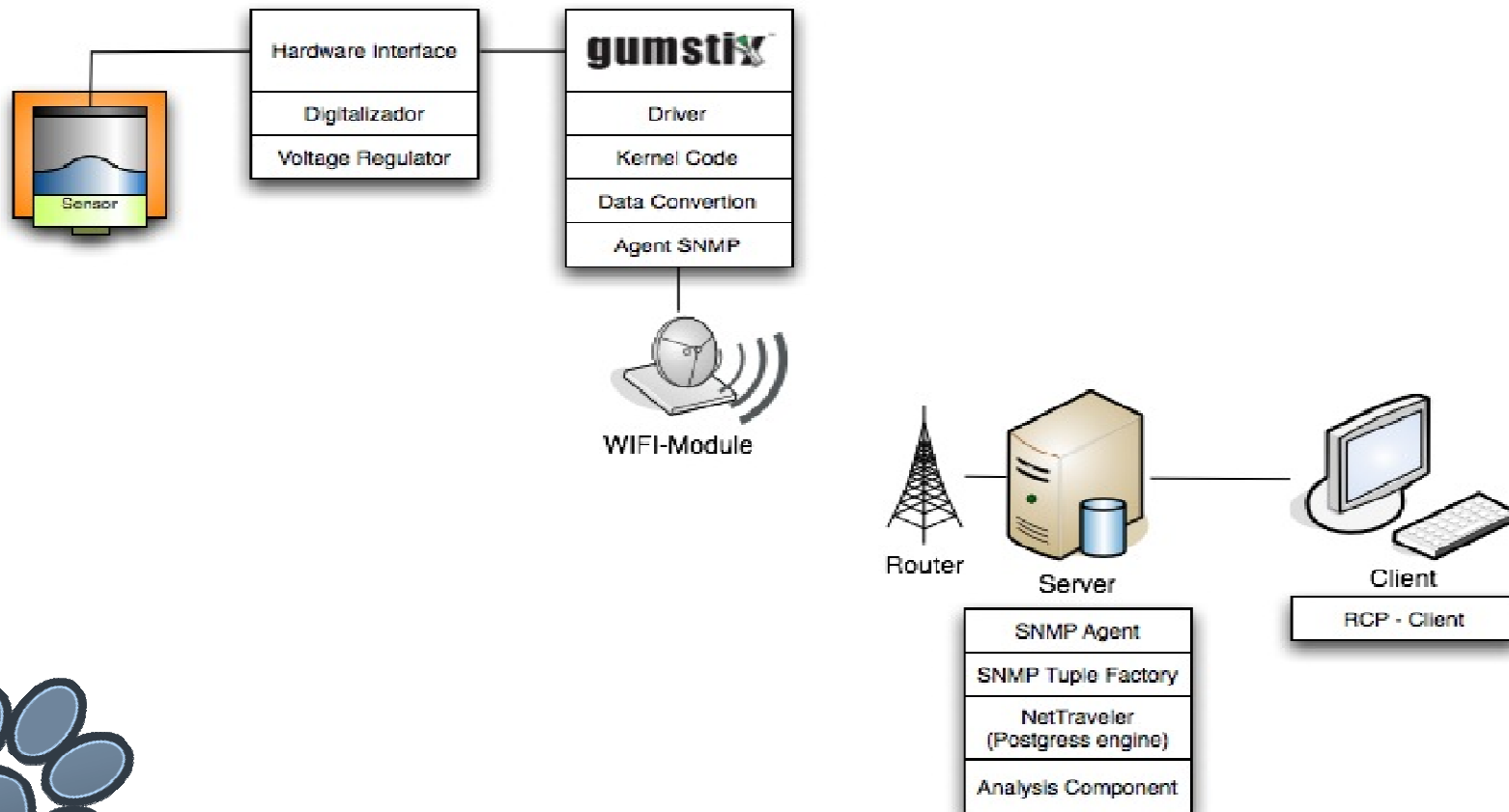
- Need to gather data from environment.
- Current Solution are specific for one type.
- Agency like NOAA need to collect data.
- Distributed database can provide advantages.
- Need for plug&play connection.



# Proposed System



## RUMStix Project Block Diagram





# Deliverables



- Proposal
- Progress Report
- Final Report
- Hardware and Software
  - Functional Specs





# Deliverables

- Client Application
- Gumstix Firmware Image
- USB Sensor Interface
- GumStix
- Software Source Code



# Schedule



Phase Name	Start	Finish
Documentation	1/21/2008	5/2/2008
Analysis & Design	1/9/2008	3/26/2008
Development	1/18/2008	4/14/2008
Testing	2/29/08	4/28/2008



# Resources



Resources	Expenses
Resources	\$56,780.76
Materials	\$1,523 .00
Indirect Cost	\$52,473.38
Total	\$110,777.16







# Hardware

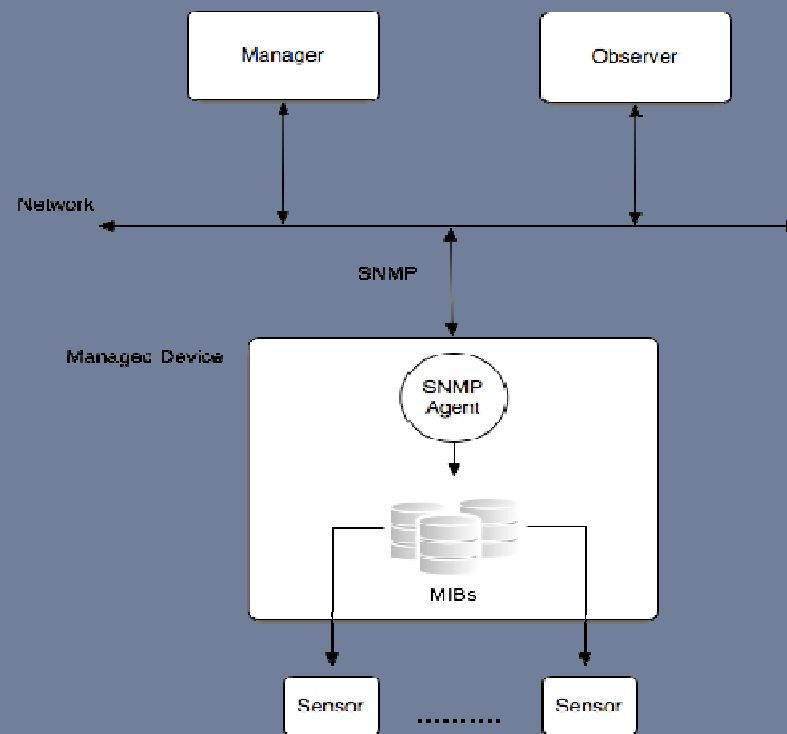
- GumSTIX
  - Full miniature computer
- Sensor Interface
  - Signal conditioning, USB Interface
- Servers





# Communication

- SNMP Protocol
  - Standard on network management



# Software



- **Driver**

- Be implemented inside the Gumstix
- Recognizes the Sensor USB Interface

- **Client**

- The client will be developed using the eclipse RCP. The client will be divided in different views.



# NetTraveler



- Distributed Database System
- Provides fault tolerance
- Access to multiple client
- Internet Available
- Use SQL syntax





# Major Risk

**Risk:** Database Middleware Component Problems

**Probability:** High

**Business Impact:** Will affect the storage of data on distributed databases.

**Mitigation:** Access data directly to the database







# Team Organization

- Vicente Rivera, Project Manager
  - Project Management
  - NetTraveler
- Alexs Peña, Quality Assurance
  - Documentation
  - RCP Client
- Jose A Ortiz, Computer Engineer
  - Communication
  - Hardware





# Team Organization

- Jonathan Torres, Computer Engineer
  - Driver Development
  - Hardware
- Alfredo Alvarez, Computer Engineer
  - Data Formatter
  - Driver Development



# Questions

