# Organising sensors & storing data

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### Project goals

- Networking multiple wired & wireless sensors trees
- Providing access to sensed data:
  - Real time streaming
    - On demand
    - Event-triggered
  - Archives

## Sensor types

- Wireless sensors (Ambient-Systems [1])
  - SmartTags
  - MicroNode
- Wired sensors
  - Lab Jack [2]
  - 1-Wire Bus
  - Power subsystem
  - Motherboard sensors
  - MW Link





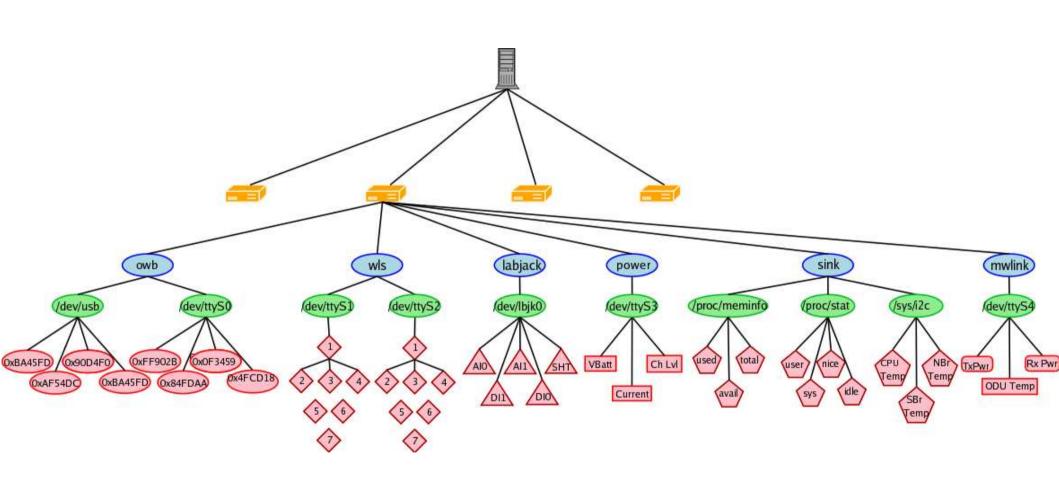




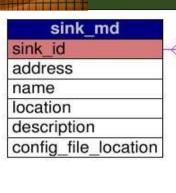
#### Challenges

- Organising heterogeneous devices for simple access & probing
  - Device instance
  - Naming scheme
    - Wireless sensors
    - Labjack
    - 1-wire sensors
  - Physical interface
- Single sensor configuration interface

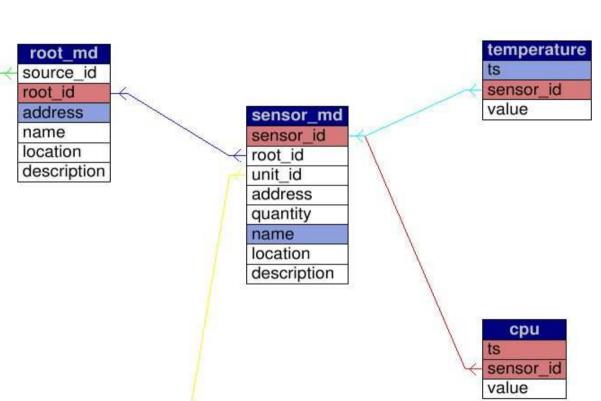
#### Hierarchical view



#### Database design



source\_md source\_id sink\_id name



units unit\_id unit

#### References

- [1] SmartTag and MicroNode pictures taken from http://www.ambient-systems.net
- [2] Labjack pictures taken from http://www.labjack.com