MIDDLEWARE FOR DATA STREAMS

Knowing When to Slide - Efficient scheduling for Sliding Window Processing

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http://gsn.sf.net http://nextick.org







ARCHITECTURE

Problems:

- Sensor network deployment is time consuming.
- * Heterogeneous devices, different abstractions.
 - Data integration is challenging.
- Changes after the deployment are expensive.
- Applications have common requirements.

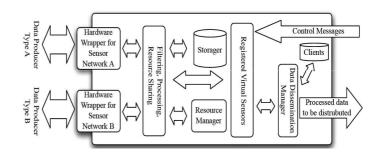
Our Solution:

- Zero-programming sensor network setup.
- Declarative deployment configuration.
- Supports latest platforms and hardware:

 $\label{thm:continuous} TinyOS\,(1.x\!/2.x),\,BTNodes,\,WiseNodes,\,HTTP,\,RFID\,readers,\,Networked\,cameras,\,\,USB\,cameras\,and\,many\,more\,\dots$

Designed for scalability and flexibility:

Less than 1 ms processing time per client while handing 500 clients concurrently.









Plug & Play deployment



On-the-fly reconfiguration, sensor "mobility"

DEPLOYMENTS: SURVEILLANCE, SENSOR NETWORKS, FINANCIAL MARKETS

