

What can Ethernet provide for Big Data Systems?

Ideas for getting more out of an Ethernet fabric

Casey Miles

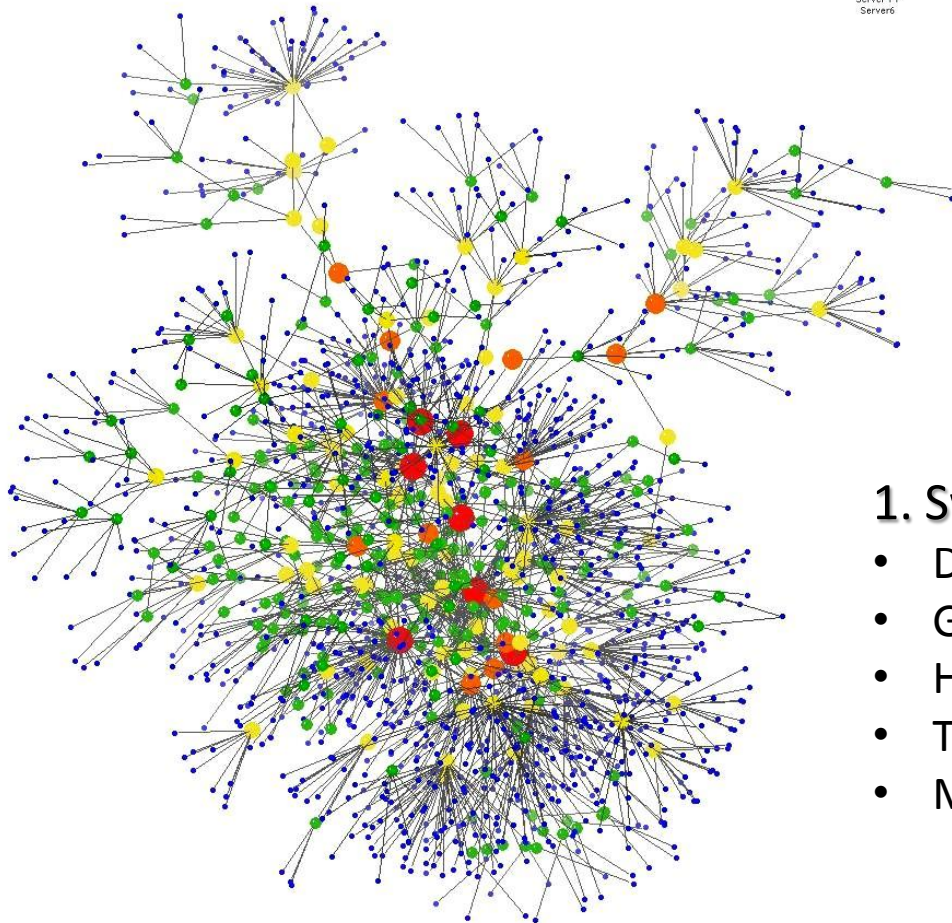
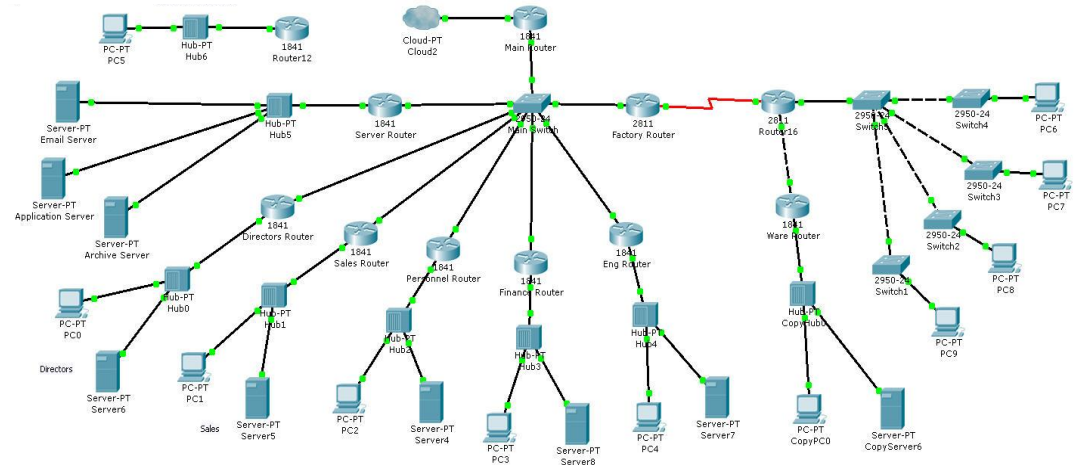
Focus Areas

- Sensor Networks
 - What data can the network provide?
- Adaptive Fabrics
 - How can the fabric adjust to changing requirements?



BROCADE

Sensor networks can be highly structured or very unstructured.

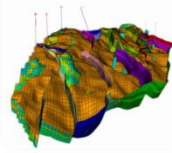
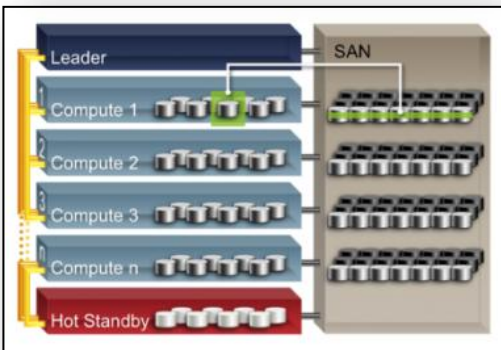
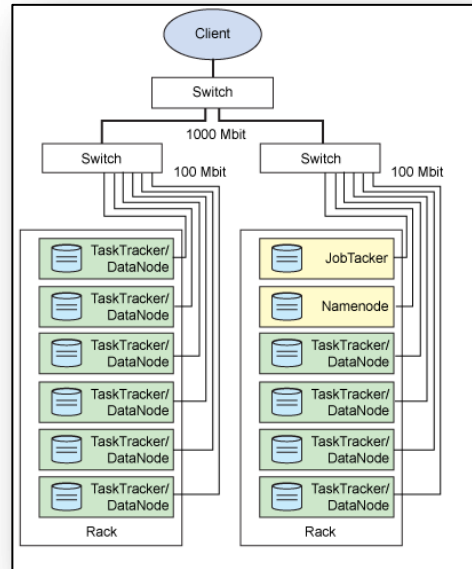


Data collection nodes and sensors are centralized on Ethernet switches.

1. Switches can provide data separated by:

- Department
- Geography
- Historical Rates
- Type
- More...

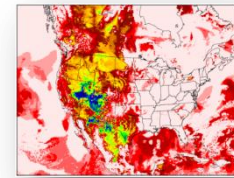
No two structures nor applications have the same requirements



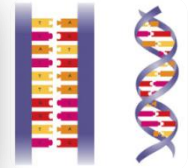
Seismic



eCommerce



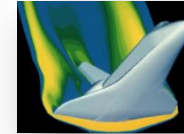
Weather Modeling



Genome



Risk Analysis



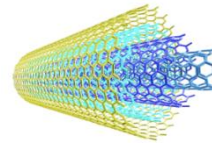
AeroSpace



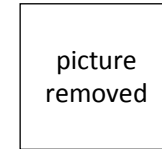
Particle Physics



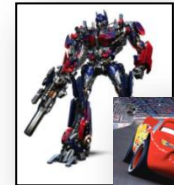
Retail Transactions



Material Science

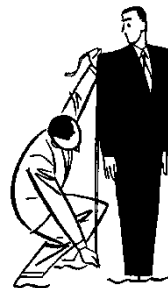


DoD/Intel



Rich Media

2. Fabrics need to be able to adapt instantly to changing requirements.



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Smart Fabrics