

# CERIAS 10<sup>th</sup> Annual Symposium

Lorenzo D. Martino  
Purdue University



# Cloud computing

- Computation can be hosted and/or moved “on demand” in large data centers
- HPC clusters
- Virtualization techniques

# Other “forms” of cloud computing

- Pervasive computing
  - sensors and nano sensors networks
  - bodynets
  - intelligent energy grid
  - domotics

# Security challenges

- increasing scale of participating computational nodes
- decreasing knowledge not only of their locality but also of their trustworthiness
- accountability
- who is liable of what?

# Security challenges

- What is “right balance” between network security and end-point security in the “cloud”?
- Attack models?
- Trust models?
- Risk models?

# Position statement

- Increased need of information assurance
- Need to take into account QoP policies, SLA and Contracts (terms & conditions)