The Poly² Project
(Poly-Computer ★ Poly-Network)

Implementation
- Commodity Hardware
- Application Specific O/S
- Customized Kernel
- Separation of Internal Traffic
- Stripped Library Calls
- Minimal Software

Impact
- Improved Performance
- Data Diode
- Attack Isolation
- Intrusion/Anomaly Detection
- Forensics
- High Availability

Evaluation
- Metrics-based assessment of assurance in comparison with:
  - Virtualized server architecture (SODA)
  - Traditional server architecture

Design Goals
- Modularity
- Fault Tolerance
- Scalability
- Service Isolation
- Least Privilege
- Economy of Mechanism
- Least Common Mechanism
- Defense in Depth

Phases
1) Default O/S
2) System Profiling
3) Multi-system
4) Reduced Libraries
5) Reduced Kernel
6) Burn to CD

http://www.cerias.purdue.edu/homes/poly2/