

# Evaluation of Grid Services in Large-Scale Environments

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# Grid Services on EverLab

- validate service implementations
  - not "just" simulation of inter-service communication
- evaluate them:
  - scalability, performance, resource utilization etc.
- but also:
  - the role of Grid middleware
  - the impact of multi-tasking/resource sharing/limited resources
  - the impact of realistic WAN interconnections

# Required EverLab Properties

- Globus GT4 infrastructure
  - including the security part
    - CA, host/user certificates
- tools for accessing/managing [everlab] nodes
  - ability to run shell commands on all cluster nodes

# *Beneficial* EverLab Properties

- linux "traffic shaping tools"
- time (user/system time, process scheduling latencies) accounting
- network traffic (volume, distribution in time) accounting
- in case of multitasking:
  - clear and accurate model of resource sharing
  - accounting of resource sharing
  - ability to run "controlled experiments" with different levels of resource sharing