Bootstrapping Olive

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Internet Ecosystem

10/100/1G Ethernet

WiMax

3G/4G wireless

802.11 a/b/g/n

IP TCP UDP DNS HTTP...

Internet Ecosystem

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Linux Ecosystem
Global Olive

- Few instances
  - 1 to 10 worldwide
  - librarian viewpoint
  - ~10 to 100 year timescale
  - no execution capability
  - archiving & preservation concerns foremost
  - provenance tracking critical
  - rigorous licensing scrutiny and enforcement
  - heavyweight publication process
  - not in mission-critical path

Cloud Olive

- Numerous instances
  - 10 to 1000 worldwide
  - cloud operator viewpoint
  - ~1 to 5 year timescale
  - reliability and availability concerns foremost
  - usage metering important (for some licenses)
  - revocation of licenses possible
  - lightweight publication process
    (within cloud and from edge to cloud)

Edge Olive

- Myriad instances
  - $10^2$ to $10^6$ per cloud
  - end user viewpoint
  - crisp interaction foremost
  - availability important
  - disconnected operation possible
  - “disposable” computing hardware

VCL instances:
- vcl.ncsu.edu, vcl.gmu.edu,
  - watson.rc2.ibm.com,
    - zurich.rc2.ibm.com,
      - almaden.rc2.ibm.com, ...

few to many relationship

one to many relationship