

# What are people doing in/on/with/around PlanetLab?

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(and many, many others)  
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In no particular order...



# 1. Network measurement

- ScriptRoute (UWashington)
- PlanetProbe (Cambridge)
- I3 (UCBerkeley)
- Network Weather Service (UTK)
- BGP multiviews (Princeton)
- NetBait (Intel Berkeley)
- Ping (*everyone*)



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## 2. Application-level multicast

- End-System Multicast (CMU)
- Scribe (Rice)
- TACT (Duke)
- Internet Backplane (UTK)

# 3. Distributed Hash Tables

- Chord / Koorde (MIT)
- Tapestry (UCB)
- Pastry (Rice)
- Kademlia (NYU)
- + cast of thousands using them

# 4. Storage

- Oceanstore (UCB)
- SFS, CFS, Ivy (MIT)
- Logistical Network (UTK)
- Palimpsest (IRB/Cambridge)

# 5. Resource Allocation

- SHARP (Duke, Intel Berkeley)
- Slices (Intel Berkeley, Princeton)
- Automated Contracts (UCB)
- DSlice (Intel Berkeley, Princeton)
- XenoCorp (Cambridge)

# 6. Distributed Query Processing

- PIER (UCB, ICIR, IRB)
- Sophia (Princeton)
- IrisNet (Intel Pittsburgh/CMU)
- TAG (Intel Berkeley)
- Distributed Search (MIT)



# 7. Content Distribution Networks

- CoDeeN (Princeton)
- Infranet/IRIS (MIT)
- ESM (CMU)
- UltraPeer emulation (UCB)
- Gnutella mapping (UWash)
- Gnutella measurement (UChicago)

# 8. Management and Monitoring

- Ganglia (UCB, Intel Berkeley)
- InfoSpect (Intel Berkeley)
- Scout Monitor (Intel SSL, Princeton)
- BGP Sensors (Princeton)
- Service Utilities (Duke)
- PlanetLab NMS (IRB/UWash)



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# 9. Overlay Networks

- RON (MIT)
- RON++ (Princeton)
- XBone (ISI)
- ABone (ISI)
- ESM (CMU)



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# 10. Virtualisation and Isolation

- Xen (Cambridge)
- Denali (UWash)
- Vservers (Intel Berkeley)
- Mgmt VMs (Intel SSL)
- SILK/Scout (Princeton)
- DSlice (Intel Berkeley)

# 11. Router Design

- NetBind (Columbia)
- Scout/SILK (Princeton)
- NewArch (MIT)
- Icarus (UWash)

# 12. Testbed Federation

- PlanetLab (IRB, Princeton, UW)
- Emulab/Netbed (Utah)
- RON (MIT)
- Grid (you know)
- Xenoservers (Cambridge)



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# Question:

- What is HP doing that could be usefully done over PlanetLab?