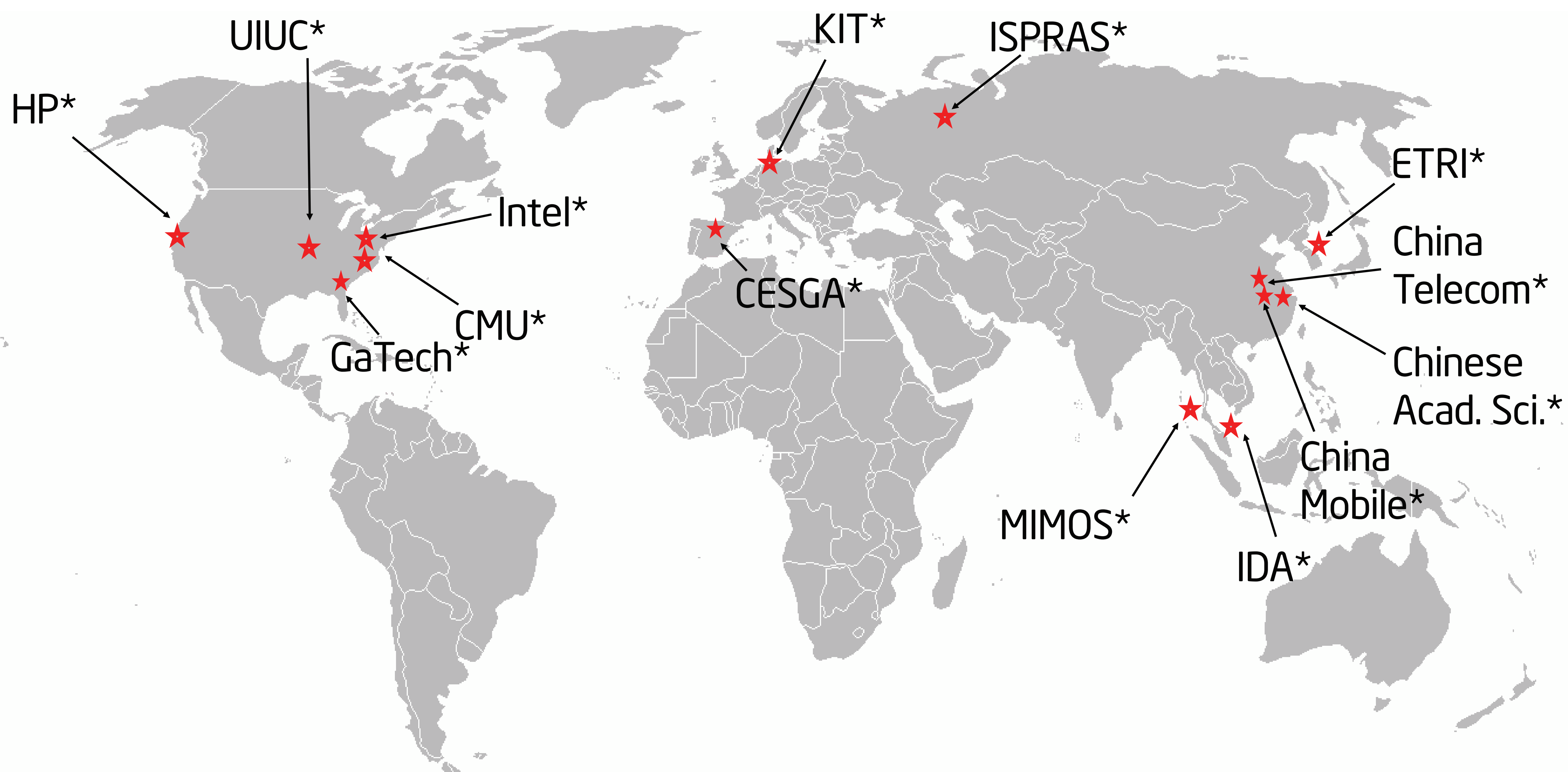


OPEN CIRRUS™ RESEARCH TESTBED



OPEN INTERNET-SCALE TESTBED FOR CLOUD COMPUTING RESEARCH

- Focus on data center management and cloud services
- Support for both systems-level and application-level research
- Emphasis on both using and contributing to open source software

Intel Labs Pittsburgh OpenCircus cluster:

- > 200 servers
- 1500 cores
- 2.3 TB of DRAM
- 640 TB of disk
- 200-1500 VM creates/month
- >38000 VM creates to date

COLLABORATION BETWEEN INDUSTRY AND ACADEMIA, SHARING

- | | |
|---------------------------------------|--------------------------|
| ▪ Hardware infrastructure | ▪ Research |
| ▪ Software infrastructure (see below) | ▪ Applications/data sets |

CMU OpenCircus cluster:

- 78 servers
- 624 cores
- 1.2 TB of DRAM
- 300 TB of disk
- 9328 VM creates 04/11 to 11/11

RESEARCH PROPOSALS WELCOME

In the following areas:

- Datacenter federation
- Datacenter management
- Web services
- Data-intensive systems
- Hadoop applications

OPEN CIRRUS™ SOFTWARE SERVICES

- Application Services
(e.g. Hadoop, Maui-Torque)
- Virtual Machine Allocation
(e.g. Tashi)
- Cluster Storage
(e.g. HDFS, Rabbit)
- Physical Machine Allocation
(e.g. Zoni)

