

# US Ignite: America's Network for Next-gen Applications

## White House Office of Science and Technology Policy

### Project Details for Calix Customers

The NSF's Global Environment for Network Innovations (GENI) testbed is an interconnected network of service provider networks and universities. Initially, US Ignite is looking to peer 10 to 20 communities that have already deployed networks capable of 100 megabits per second (Mbps) services to consumers and small business subscribers. These interconnected communities will become part of the testbed, where novel applications will be tested and run. Prize competitions targeting researchers will be run to create new applications. Training and funding to support application start-ups and spin-offs created through this program will be made available.

Interested service providers will be required to install GENI racks in their networks to connect to other GENI-enabled research networks.

US Ignite participants will include:

- **Academia:** Top universities across the country will contribute new applications in the areas of smart grid, healthcare, distance learning, manufacturing, and education. In addition, they will conduct research on the adoption and utilization of these applications.
- **Service providers:** Participating service providers will provide high-capacity networks and access to their subscribers to evaluate and research the applications.
- **Industry partners:** A variety of equipment and content providers from across the service delivery ecosystem will be involved, providing expertise and support for the study.
- **Government:** Oversight will be provided by the White House Office of Science and Technology Policy in conjunction with the National Science Foundation (NSF).

**Calix will host a webinar in conjunction with the White House Office of Science and Technology Policy on Friday, June 10, 11:00 AM PDT** to go over the details of this program and answer your questions about taking part. You can [register for the webinar here](#).

Two documents from the White House Office of Science and Technology Policy that provide more details on the program:

- 1) A summary of the program and its goals [Click here to view](#) (PDF)
- 2) Sample questions that the program will need to answer in evaluating if your company is a good fit [Click here to view](#) (PDF)

Listed below are examples of applications proposed for testing under US Ignite include the following:

- **University of Missouri:** Proactive health management focused on integrated sensor networks for monitoring and assessing behavior (including gait and activity level), recognizing pattern changes, and detecting early signs of decline for intervention.
- **Case Western Reserve:** Health and wellness (chronic disease monitoring and management: patient-to-clinician, clinician-to-clinician, common view with markup; several patients-to-educator; support groups; cooking classes; exercise classes), home energy management (measuring gas, electricity, air quality, connected devices (thermostats), conservation), public safety and STEM education (streaming HD video; help people with cognitive disabilities live more independently and stay in homes).
- **Purdue:** Advanced manufacturing tools (modeling, computation, and simulation applications and services allowing small firms to compete with big firms).
- **Wayne State:** Smart grids (hybrid alternative energy systems; smart metering and control with numerous sources for energy), transportation (sensing and control; active safety; autonomous driving), infotainment (mobile theater, caravanning).
- **University of Southern California:** Participatory learning apps combining audio, video, and graphics of all sorts from different locations; collaborative project creation.
- **Portland State:** Applications focused on smart transportation, energy efficient buildings, urban sustainability and metrics, pollution, and health.
- **Stanford:** Applications focused on making data and video stream better via software defined networking.