



## **Makani Networks rolls out global-scale smart distributed computing platform**

**“New technologies from Makani Networks enables automated deployment of thousands of servers around the globe”**

**Jan 24, 2011 – San Francisco, California –** Makani Networks today announced new technologies that enables distributed computing on a global-scale. These new technologies from Makani Networks enable rapid deployment of wide variety of services spanning numerous cloud- and edge- computing providers, exploit diverse computing architectures and platforms, and scale services both horizontally and vertically to potentially thousands of servers located around the globe.

At the core of Makani Networks' solution is a proprietary Domain Name System that enables state-of-the-art features such as geo- load balancing, geo- directional IP, industry's lowest time-to-live (including Zero), IPv6 as well as DNSSEC. The geo-directional IP technology can classify any source IP based on pre-defined continent-maps, country-maps, region-maps and city-maps to respond with servers that are located closest to the source. The DNS system is also augmented with a server failover technology that can remotely detect server failure in less than 20 seconds, and coupled with the “hot-standby” technology enables, in the event of a server failure, automated introduction of an alternate server on “hot-standby”.

A sophisticated distributed remote monitoring and alerting infrastructure classifies events to successfully infer “noise” events from a server undergoing packet loss effects or DDoS attacks. Once the inference about the “noise” event is made, the problematic server is temporarily suspended from the Domain Name System in less than 10 minutes. The suspended server automatically resumes operation with the Domain Name System once the server noise levels subside. New updates for the Domain Name System are propagated globally in less than 60 seconds using native database replication.

Another key technology from Makani Networks enables fast periodic monitoring of services internal to a server. Internal health checks are enforced for system-critical services, dependencies automatically resolved, and services quickly restarted on any local failure or problem event. These internal health checks ensure that services are “always-on” and any problems encountered are automatically resolved locally. Only in the unusual case when the server problems can not be resolved locally, will the problems be resolved globally through the proprietary Domain Name System.

The smart infrastructure from Makani Networks is deployed across three continents and is capable of handling thousands of servers and on-aggregate 10 billion unique queries per month. The infrastructure represents one of the most sophisticated distributed computing platform built on planet earth and augments Makani Networks' vision of global-scale services.

## About Makani Networks

Makani Networks ([makaninetworks.com](http://makaninetworks.com)) offers high-performance, easy-to-use and technically innovative solutions for next-gen wide-area networked data services. Makani Mobilizer™ appliances are deployed in the customer's network for blazing-speed data access over a wide-range of access networks. Makani Enhancers™ are deployed for wide-area network ("WAN") optimization and application acceleration. Founded in 2006, Makani is HQ'ed in San Francisco USA.