Taking the Pulse of the Planet

Our Mission: Taking the Pulse of the Planet*

After two decades of listening to the Earth’s climate through an extensive network of weather sensors, Earth Networks has chartered a new mission to “take the pulse of the planet” by measuring the key atmospheric elements affecting the overall health of the Earth.

Experts agree that with better measurement comes better science and information. With a vast established infrastructure and expertise in networking and operations, Earth Networks is uniquely positioned to become one of the world’s primary privately funded sources for climate information.

Earth Networks (formerly AWS Convergence Technologies) operates the world’s largest proprietary weather observation and lightning detection networks and is building what will become the largest greenhouse gas monitoring network. Observations from Earth Networks inform and alert consumers, enterprises and governments around the world, providing advanced environmental intelligence and early warning for decision making and safety.

Earth Networks has been a trusted, reliable provider of precise and timely weather information for twenty years. The company began in 1993 by installing and networking weather stations at schools for science and math curriculum and has grown school-by-school, country-by-country to become the largest global weather network with integrated environmental intelligence.

Our Approach: An Integrated Network of Networks

The core differentiator of Earth Networks is its unique dense network of thousands of professional-grade weather stations and lightning instruments placed throughout the world. This enables the company to provide precise detail into local conditions and numerical weather prediction.

The network combines data from other sources, such as the National Weather Service and the World Meteorological Organization, allowing Earth Networks to serve as a global baseline source of atmospheric and environmental information.

This “network of networks” empowers the company and its team of meteorologists to observe, analyze and provide detailed insight into climate conditions worldwide. The company has advanced its technology through Internet networking and cloud computing to provide weather information online, on-air and through mobile and enterprise applications.

Earth Networks Intelligent Infrastructure
From the Sensor to the App, Providing Weather Intelligence for Timely Decisions

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*SM: Symbol for the trademark Earth Networks®
What’s the Weather Like?

Our Consumer Applications

Earth Networks’ popular WeatherBug website, desktop application and mobile apps provide over 40 million consumers with real-time, local weather information and severe weather alerts.

Consistently ranked as top web and mobile properties, WeatherBug is the preferred and primary weather information provider for Verizon Wireless and also partners closely with every major wireless developer and consumer electronics manufacturer including Apple, Google, Microsoft, RIM, Nokia, and Samsung.

Our Enterprise Solutions

Enterprise solutions from Earth Networks enable organizations, including governments, energy and utilities, agriculture, schools, sports and recreation and public safety entities to safeguard lives, prepare for weather and climate events and improve business operations.

The Earth Networks Total Lightning Network launched in 2009, introducing state-of-the-art in-cloud lightning detection and advanced alerting to dangerous thunderstorms and severe weather.

In early 2011, Earth Networks extended its mission to fulfill the need for advanced, integrated climate intelligence by deploying the world’s first privately owned greenhouse gas measurement network, the largest of its kind, with 100 sensors being deployed worldwide to measure carbon dioxide and methane at a granular, local level.

Earth Networks Enterprise Solutions offer organizations critical intelligence for real-time weather and climate information; hourly to monthly forecast intelligence; and advanced alerting of severe weather to safeguard lives and improve business operations. Earth Networks offers a broad portfolio of enterprise solutions through integrated offerings that:

Observe: through our global network of networks of integrated weather, lightning, cameras, GHG and other environmental instruments that connect and monitor the climate in real time.

Analyze: through sophisticated interpretation and modeling of data for understanding atmospheric processes, forecasting, environmental trends and establishing measurement standards.

Inform: by providing weather and climate intelligence to empower decisions with the most precise data and proactively warn of severe conditions.

Alert: through advanced alerting infrastructure and applications on mobile, Web, applications, on-air and through SMS messaging where and how it is needed.

Should we evacuate? Should we seek shelter? Should I go long on energy? Should we get the kids off the field?
Earth Networks offers solutions for all business that are impacted by weather.

**Agriculture:** Utilizing live, local weather information and sophisticated models to optimize irrigation schedules, fertilization, disease/pest control applications and harvesting that result in reduced costs and improved yields.

**Climate Adaptation/Mitigation:** Providing comprehensive weather and climate intelligence to help people, businesses and governments prepare for extreme weather through early warnings and decision support tools; measuring carbon emissions at local-to-global scales.

**Education:** Utilized by thousands of schools in the United States for integrating live, local weather data into the schools’ science, math and technology curriculum.

**Energy and Utilities:** Utilizing real-time local weather intelligence to enable increased efficiencies across smart grids and electric utilities through load balancing, demand forecasting, demand response, consumer engagement, outage management, grid visualization and insight for energy traders.

**Government:** Federal, state and local governments throughout the world turn to Earth Networks for mission-critical and life-saving weather information and alerts for operations and emergency response management.

**Media:** Over 60 NBC, ABC, CBS and FOX broadcast partners in the United States use Earth Networks - WeatherBug information during newscasts that inform millions daily.

**Sports and Recreation:** Major sports organizations, facilities, recreational parks and resorts use Earth Networks - WeatherBug information to support operational and contingency planning for events and player/spectator safety.

**Transportation:** Local, state and regional transportation authorities use Earth Network tools to manage roadways and logistics/operational crews during developing storms and severe weather.
Solutions Spotlight

Climate Adaptation Program

Earth Network provides the critical infrastructure required to develop national or regional networks of automated surface weather and climate observation points, or “mesonets”. These observations are used to provide the weather information necessary for the early warning of severe weather; food security and agriculture optimization; water resource management and numerical weather prediction.

The mesonets include a number of climate observation stations that enable countries to fulfill international obligations to the World Meteorological Organization (WMO) for reporting the national climate record. In addition, a number of real-time, Earth Networks’ stations power more accurate local weather forecasts through Numerical Weather Prediction (NWP) technology.

Early Warning System for Severe Weather

The Earth Networks Total Lightning Network provides patent-pending advanced technology enabling earlier warnings of severe weather for public and industry safety via efficient and streamlined applications.

The network detects in-cloud (IC) lightning flashes, a significant precursor to the onset of severe storms. Measuring Total Lightning, both in-cloud and cloud-to-ground, provides a comprehensive picture of developing storm systems.

Detecting and measuring Total Lightning enables earlier warnings of severe weather. Dangerous Thunderstorm Alerts are automatically produced and distributed via applications, mobile devices, web properties and SMS in real-time to protect lives and livelihoods.

Real-Time Local Data
Faster Alerts
Better Forecasts

Early Warning for Severe Weather
Numerical Weather Prediction
Food Security & Agriculture
Water Resource Management

6.1.11 - Springfield, MA Tornado
Earth Networks issued alerts 38 minutes prior to when a tornado touched ground and injured 200.
Technology Solutions Spotlight

With Better Measurements Comes Better Science and More Informed Decisions

Smart Energy Framework
Earth Networks combines its vast data processing infrastructure, information from more than 10,000 live real-time weather stations, and a solutions set of products and services to provide the energy industry with information and tools for driving optimal long-term forecasting, load balancing, successful demand response and consumer energy management initiatives.

The results enable smarter forecasts and provide the real-time intelligence necessary for optimizing energy consumption and reducing costs.

Environmental Data Empowering Decision Makers
The data gathered from the Earth Networks GHG network, in addition to other environmental networks the company plans to deploy will:

- Provide independent measurement, reporting and verification (MRV) data for context and clarification regarding environmental concerns.
- Facilitate discussions within the research and policy-making communities.
- Provide MRV foundations for emerging market-based carbon trading programs.
- Inform and educate the public about major environmental trends and impacts for reducing community emissions.
- Establish new baseline measurement standards for atmospheric and environmental elements, such as greenhouse gases.
- Provide total carbon footprints and balances, including emissions and sequestration, and provide detailed measurements of natural sources and sinks, plus man-made fossil-fuel emissions.

Earth Networks Greenhouse Gas Forecast Model
Operational forecast showing vertical distribution of CO₂ in the air.
Sound Science Behind the Earth Networks Greenhouse Gas Data

To develop its GHG network, Earth Networks is collaborating with the world’s preeminent climate and environmental science institution, Scripps Institution of Oceanography at UC San Diego, which will oversee:

- Network design
- Instrument selection
- Instrument placement
- Data reliability

Earth Networks will use gas calibration standards from the National Oceanic and Atmospheric Administration (NOAA) that ensure compatibility with the World Meteorological Organization (WMO) scales for CO2 and CH4.

Recent Awards and Distinctions

- Boardroom Magazine Award for Weather Alerting Technology (October 2011)
- CTIA Best of the Web – Hot for the Holidays Mobile Award (October 2011)
- 2011 d:TechSource Technology Leadership Awards (June 2011)
- Washingtonian Magazine Tech Titans Award (May 2011)
- GigaOM: GreenNet 10 Big Ideas Winner (April 2011)
- MediaPost – OMMA Appy Awards (February 2011)

Company Profile

- 170 Employees
- Investors: Polaris Venture Partners, Harbour Vest Partners, Sequoia Capital
- Offices in Washington, DC area, Mountain View, CA, New York, NY, and Milan, Italy with local presence in 50 countries worldwide
- Year Founded: 1993
- Corporate Headquarters: 12410 Milestone Center Drive, Suite 300, Germantown, MD 20876
- Phone: (301) 250-4207 or (800) 544-4429

Senior Executives

Robert S. Marshall, President and CEO
Christopher D. Sloop, Senior Vice President and Chief Technology Officer
John J. Doherty, Global Development Officer
Richard M. Spaulding, Senior Vice President and Chief Financial Officer
Lex Crosett, Vice President and Chief Information Officer
Amena Ali, Chief Marketing Officer

Professional Affiliations

- American Meteorological Society (AMS)
- World Meteorological Society (WMO)
- American Geophysicists Union (AGU)
- Alliance for Earth Observations
- Clinton Global Initiative

Select Partners

Earth Networks partners with leading organizations and more than one hundred state and local government agencies including the National Weather Service, to provide live local weather data to millions of consumers via the Internet, broadcast and mobile devices.

Government and Research

- National Weather Service
- NOAA
- National Nuclear Security Administration
- Scripps Oceanography
- National Institute of Standards and Technology
- International Council on Security and Development

International

- Katrion
- The Republic Group
- INPE - National Institute For Space Research

Media

- ABC
- CBS
- NBC
- ESPN
- The CW
- UNIVISION

Mobile

- Verizon
- Apple
- Google
- Nokia
- Samsung
- RIM
“Our mission is to take the ‘pulse of the planet’ by measuring key global environmental data on an unprecedented scale, utilizing the latest measurement and networking technologies. As a company, we have spent nearly 20 years monitoring weather on a more local scale than anyone has before. We have proven that the best decisions result not from limited data sets, but from thousands of data sources that are linked together to tell a much more detailed and intricate story. We are bringing the same level of operational expertise we have gained in managing the largest weather network in the world to provide insight into other areas of the environment.”

- Robert S. Marshall, President & CEO of Earth Networks