A Distributed Grid Analytics Platform for Residential Phasor Measurements

Andrew Stillwell
Department of Electrical and Computer Engineering
University of Illinois at Urbana-Champaign

Abstract

There is a growing demand for low cost, 120V-250V phasor measurements for industry and research purposes. These phasor measurements can be utilized in residences or businesses and give an advantage to the existing infrastructure (power and internet) to lower the cost of deployment. This talk presents a distributed grid analytics platform (DGAP) for fast, accurate, and low cost phasor measurements. The DGAP provides an ideal platform for grid distribution-level research projects since the open source code can be configured for specific research interests, including frequency analysis, disturbance detection, remote logging and distributed algorithm deployment.