RIAPS

Description

The Resilient Information Architecture Platform for Smart Grid (RIAPS) is a software platform for building distributed real-time embedded applications using a component-oriented approach. RIAPS provides core infrastructure and services for building effective, secure and powerful distributed Smart Grid applications. Applications include, but are not limited to: monitoring and control, data collection and processing, energy management, and safety applications.

The goal of RIAPS is to provide a run-time and design-time software environment for building applications that executes on the Smart Grid. The main distinguishing characteristic of RIAPS is the completely distributed computing model: software applications are distributed across a multitude of computing nodes on a communication network, and each node has access to local measurements and actuators. An application consists of actors that run concurrently on one node and in parallel on many nodes. The functionality of an application is realized by the network of interacting actors.

still to import

- Detailed feature descriptions, usage models (e.g. microgrid islanding and resync) from https://riaps.isis.vanderbilt.edu/
- Publications from https://riaps.isis.vanderbilt.edu/papers.html

Technical Information

- RIAPS Architecture
- Project roadmap
- Code repositories via GitHub
- RIAPS Integration via GitHub
- Documentation via Github.io
- How to Contribute via Github.io
- License via GitHub.io

Community

- Project Governance and TSC
- Mailing list
- Regular meetings
- Contributors
- RIAPS Code of Conduct

Important Links

- Project Charter
- Web page on lfenergy.org
- RIAPS Demonstrations videos
- RIAPS Usage Models