



TAC Meeting

8 June 2021

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# Agenda

## Opening (5 Minutes)

- **Summary of last TAC meeting & Updates from the Board Meeting**

## TAC Business (60 Minutes)

- RIAPS Annual Review

## Events & Marketing Update (5 Minutes)

## Open Discussion

# Summary of last TAC meeting

## Updates from the Board

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Annual Review for  
RIAPS

# RIAPS

## **Brief Description:**

The Resilient Information Architecture Platform for the Smartgrid is designed for distributed control, security, and resiliency. Applications that run on the platform can manage microgrids, implement blockchain energy trading, and a wide variety of other functions.

## **TSC Chairperson:**

Gabor Karsai, [gabor.karsai@vanderbilt.edu](mailto:gabor.karsai@vanderbilt.edu)

## **TSC Members and Affiliations:**

Srdjan Lukic, NC State; Mary Metelko, Vanderbilt

## **Contributed by:**

Vanderbilt University and NC State University

# RIAPS

## Key Links:

**Github:** [github.com/RIAPS](https://github.com/RIAPS)

**Website:** [riaps.isis.vanderbilt.edu](https://riaps.isis.vanderbilt.edu)

**Artwork:** N/A

## Mailing lists:

- [riaps](#)
- [riaps-announce](#)
- [riaps-dev](#)
- [riaps-tsc](#)

**CII Badge URL:** N/A



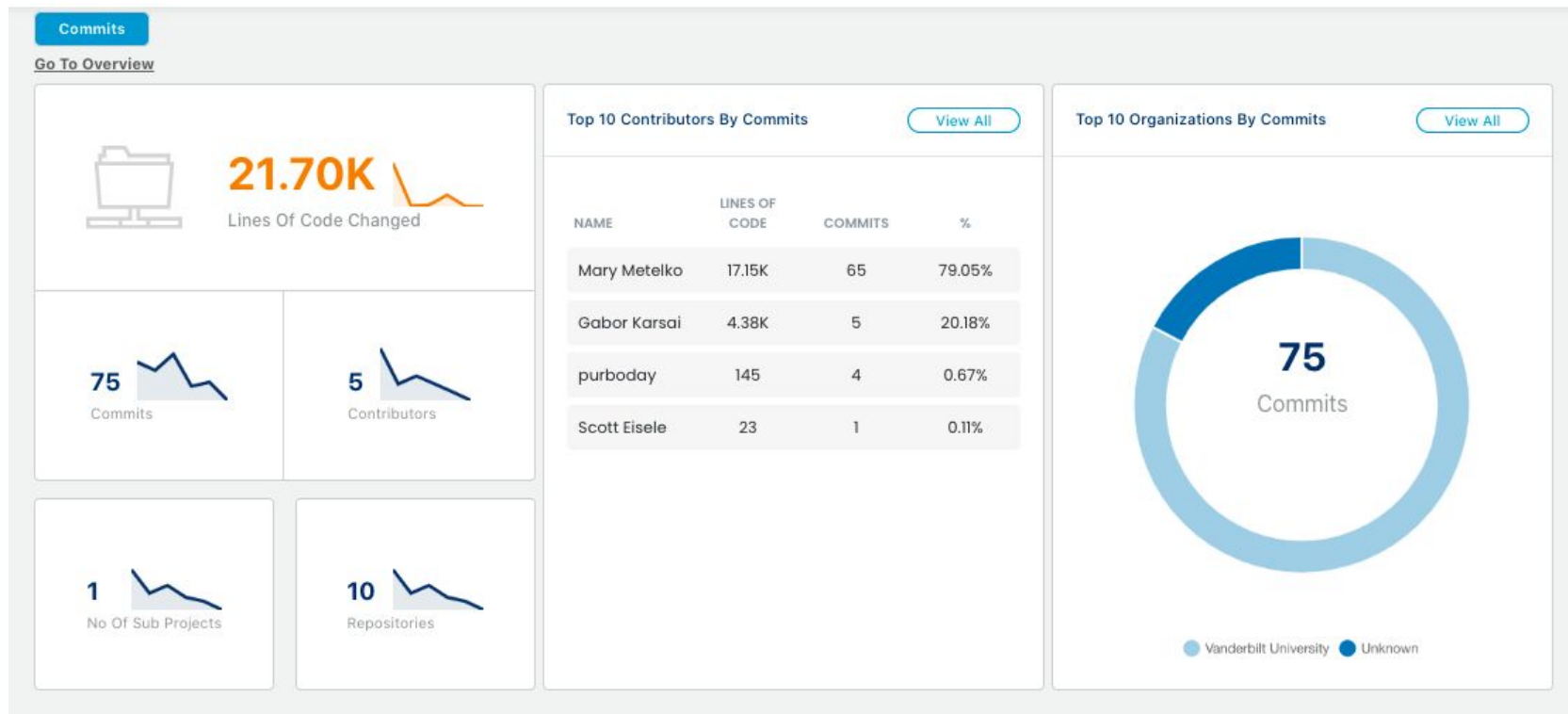
# RIAPS Community

- Not growing fast. Mostly the original developers from two universities.
- Technical development continues with additional research funding from US DOE and US DOD.
- Planned pilot deployment on DOD base next year.

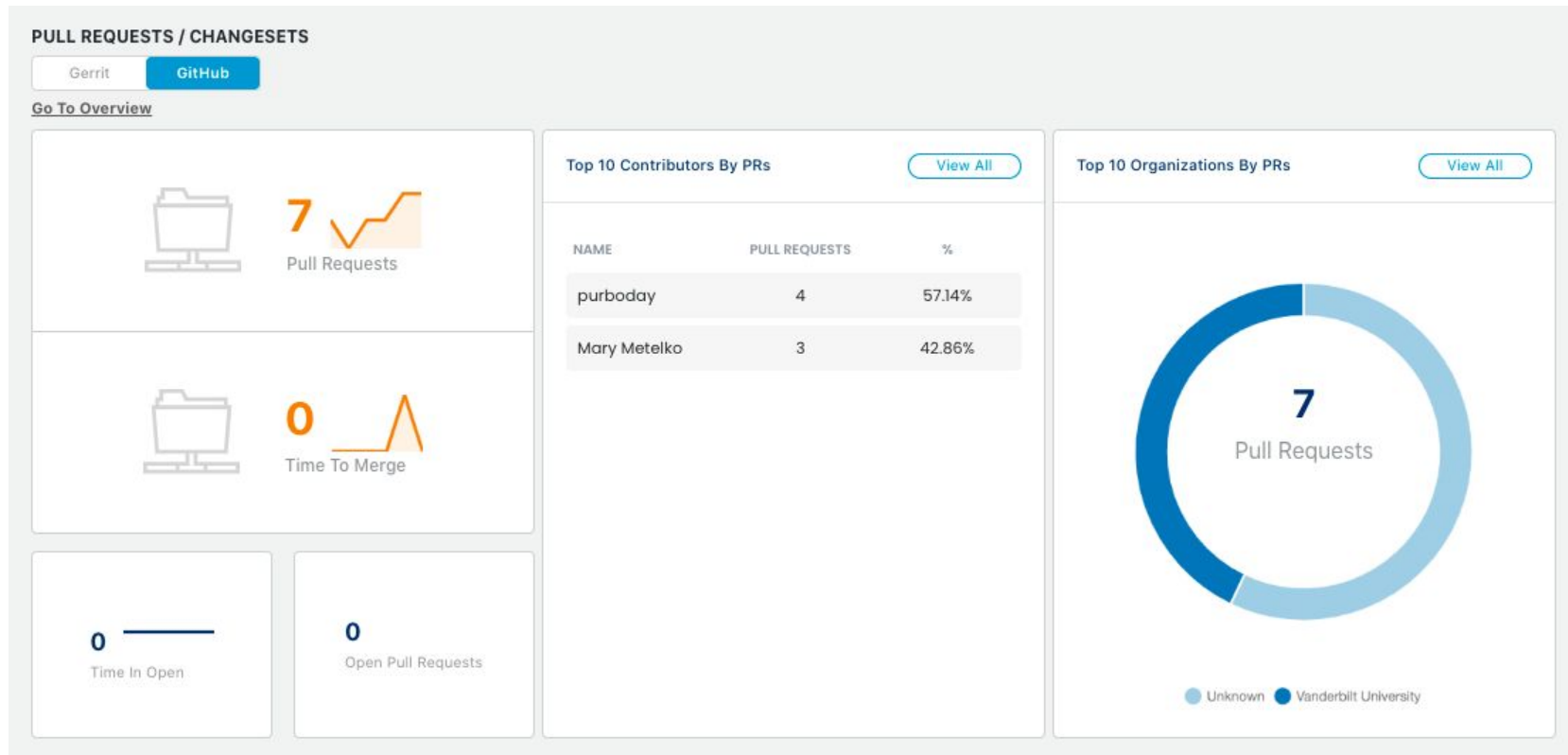
# Technical Governance

- TSC has fewer than 5 members
- Not yet pursuing CII badge

# Commits



# Pull Requests



# Organizations contributing and/or using in production



# Growth Plan

- Release Plans
  - U20.04 release: Jun 2021
  - Updates for additional security controls: Aug 2021
  - Regular updates: 2x year
- Target End Users
  - Software developers in 'Power OT' industry
- Regulations and Standards for Deployment
  - Platform: Ubuntu 20.04
  - NIST 800-82 (ICS Security)
- Growth in Contributors and Committer
  - Current developers supported by university project until 12/2022

# Key Achievements in the past year

- New interfaces developed:
  - Simulators: OpenDSS, GRIDLAB-D, Simulink/Stateflow
  - Physical protocols: MODBUS, NCSU/FREEDM (web)
  - Generic interface to archive time-series data
  - Generic web-based GUI
- Energy management application for microgrid (example)
  - Loads: ChargePoint EV Charger, Building Management System, Battery Energy Storage System
  - Machine-learning based predictive models
  - Control algorithm based on optimization algorithm

# Key Achievements in the past year

- RIAPS discovery service
  - Distributed version reimplemented in Python
- RIAPS desktop development environment
  - Based on Mininet (for emulating RIAPS nodes)
- Ubuntu 20.04 release
  - Target platforms:
    - Beaglebone Black, Raspberry Pi{3,4}: armhf
    - Jetson Nano: aarch64



# Areas the project could use help on

Need large corporation to adopt

# Feedback on working with LF Energy

Excited by the potential

Unable to meet time commitments

# TAC Open Discussion

# Scheduling future project reviews

Project	Current Level	Last Review Date	Next Review Date
RIAPS	Early Adoption		June 8, 2021
CoMPAS	Incubation		June 29, 2021
SOGNO	Early Adoption	March 16, 2021	March 8, 2022
GXF	Early Adoption		October 12, 2021
PowSyBI	Early Adoption		
OperatorFabric	Early Adoption		
OpenEEmeter	Incubation		
EM2	Early Adoption		
OpenLEADR	Incubation		
SEAPATH	Incubation		
Hyphae	Incubation		
FledgePOWER	Incubation		

Next meeting will be the CoMPAS review.

Will start scheduling other projects this week - please reach out with any preferences you might have.

Tracked at <https://wiki.lfenergy.org/display/HOME/Project+Review+Cycle>

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