

OpenFIDO

Joint CPR #1 (May 2020)

EPC 17-043

GLOW

EPC 17-046

HiPAS

EPC 17-047

OpenFIDO

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Provide framework for three utility data/model management use-cases

1. Data/model acquisition - collect from various tools and databases
Include support for all HiPAS and NRECA import converters
2. Data/model curation - clean and collate, plot and report
Include viewers and HiPAS-developed post-processing tools
3. Data/model delivery - send back to various tools and databases
Include support for all HiPAS and NRECA export converters

1. Data/model acquisition
 - a. Existing tools are being transferred from GridLAB-D to OpenFIDO
 - b. New tools are being developed by HiPAS for active use-cases
2. Data/model curation
 - a. Workflow manager prototype operational
 - b. Plot viewer prototype operational
3. Data/model delivery
 - a. Tools transfer from HiPAS to OpenFIDO pending

Prototype workflow tool

<

Dashboard

History

Execute Algorithms

▶

 rbsa

▶

 ceus

▶

 mix

Dashboard

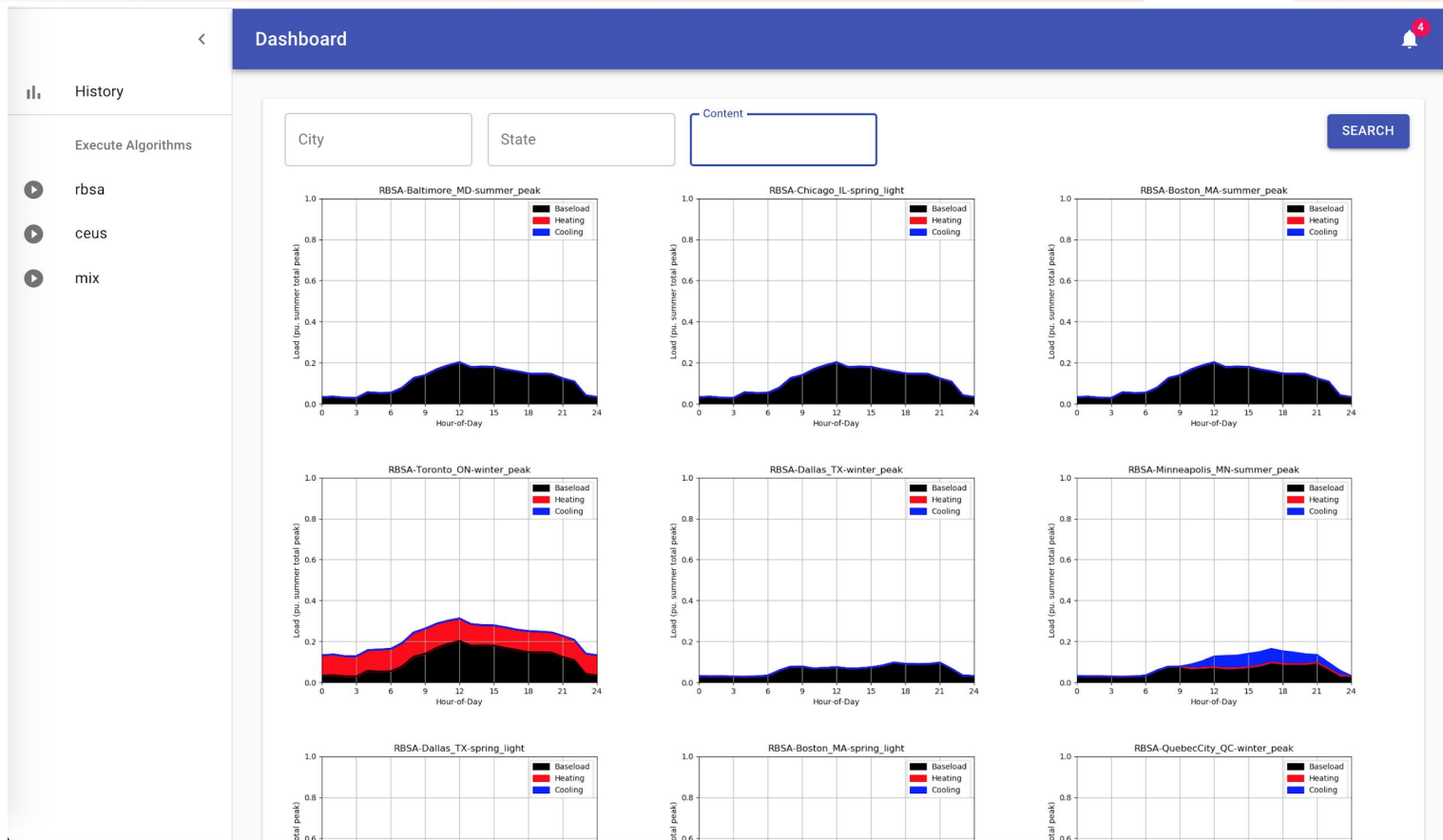
Recent Executions

Id	Started Time	Algorithm	Status
1	2020-03-26 10:07:21	rbsa	succeeded
2	2020-03-26 10:18:17	ceus	running
3	2020-03-26 10:38:34	rbsa	running

Configure rbsa

```
{
  "root": {
    "DAYTYPE_DEFINITIONS.json": {
      "version": 1
      "application": "loadinsight"
      "name": "DAYTYPE_DEFINITIONS"
      "WECC": {
        "summer": "July 20"
        "winter": "January 20"
        "spring": "April 20"
      }
      "ERCOT": { }
      "PJM": { }
      "SERC": { }
      "NPCC": { }
      "MRO": { }
    }
    "SENSITIVITY_TEMPERATURES.json": {
      "version": 1
      "application": "loadinsight"
      "name": "SENSITIVITY_TEMPERATURES"
      "residential": {
        "theat": 15
        "tcool": 25
      }
      "commercial": { }
    }
    "EXCLUDED_LOCATIONS.json": { }
    "GAS_FRACTIONS.json": { }
  }
}
```

Plot-viewer tool



DOE OTT Commercialization Phase 1: LoadInsight



Platform for utility data/model integration and analysis

- Based on NERC LMTF use-case (generate load models from data)

Subcontract for platform deployment

- PresencePG subcontractor (developer of GRIP UX)
- MVP delivery scheduled for 30 June 2020
- White-labelled version basis for OpenFIDO
- OpenFIDO requires additional effort by PresencePG (new subcontract)

Addressing the data for validation problem

Coordination with DOE projects

- Enabled by GRIP deployment/validation activities (SCE and NRECA)
- Based on LoadInsight commercialization task (PresencePG)

Access to full-scale utility data

- SCE cloud deployment of HiPAS and OpenFIDO
- Access to SCE data within SCE cloud environment
- Formal validation scheduled to begin Oct 2020

Do TAC members wish to participate in validation?

- SCE is hosting GRIP validation exercise and will provide feedback
- SCE is working on new use cases for OpenFIDO and HiPAS
 - Managing workplace charging (EV parking load model)
 - Storage resilience (like Green Mountain Power)

Status Update: Rebudget Request

1. **Hiring stopped due to COVID-19 response**
 - a. Key staff attrition in December
 - b. Currently all staff working from home
 - c. Lab reopen will take several months
2. **Plan to onboard PresencePG as subcontractor**
 - a. Relabeling of LoadInsight platform
 - b. Redeploy HiPAS data import/export converters to OpenFIDO
 - c. Deploy OpenFIDO on AWS
3. **Shift of SLAC labor to Subcontract**
 - a. Requires rebudget ok from CEC (in progress)

Thank You

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Project Focus Area

