

# IBPSA Project 2: BOPTEST

## Repository Refactor

DTU, Denmark

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(based on Project 2 meeting in Aachen 2023)

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# Current Structure

## **BOPTEST (ibpsa/project1-boptest)**

- Software (Framework Python modules, Dockerfile)
- Test Cases (FMUs, Modelica models, docs, resources)
- Documentation (User Guide, Design Guide)
- Flask API for local deployment
- BACnet Interface
- Website content (branch *gh-pages-custom*)
- DOPTEST (fork branch **JavierArroyoBastida/project1-boptest doptest**)
- Tutorials/workshops

## **Gym Interface (ibpsa/project1-boptest-gym)**

- Gym environment for BOPTEST
- Gym environment for BOPTEST-Service (branch *boptest-gym-service*)

## **BOPTEST-Service (NREL/boptest-service)**

- Extend BOPTEST into web-service
- Web API for web-service usage (needs “/select” and “testid”)
- Helm chart for Kubernetes deployment

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1. BOPTEST is overloaded
2. DOPTEST is far-removed
3. Interfaces need to maintain two slightly APIs
4. Updates to BOPTEST need to be tested and aligned in BOPTEST-Service

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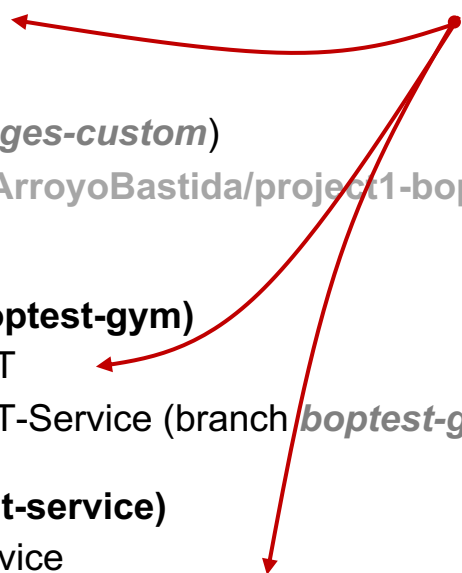
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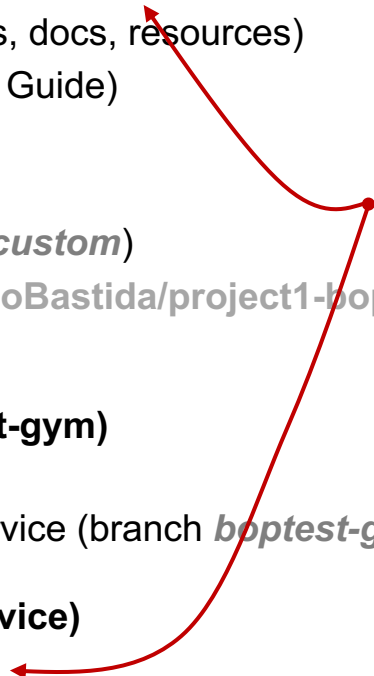
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# One Proposed Structure

## **BOPTTEST (ibpsa/boptest)**

- Software (Framework Python modules, Dockerfile)
- Deployment and API always as web-service
- Documentation Source Code (User/Design Guide)
- Tutorials/workshops?

## **Test Cases (ibpsa/boptest-testcases)**

- Test Cases (FMUs, Modelica models, docs, resources)

## **Gym Interface (ibpsa/boptest-gym)**

- Gym environment interface for BOPTTEST

## **BACnet Interface (ibpsa/boptest-bacnet)**

- BACnet interface for BOPTTEST

## **Website (ibpsa/boptest-website)**

- Website content

## **DOPTEST (ibpsa/boptest-doptest)**

- Machinery specific for DOPTEST

## The good:

- More organized
- Smaller repos
- Single deployment infrastructure for local and web-service
- Template for "test case repositories"


## The downsides:

- Distributed management
- Separated CI testing
- Will take some time and effort for transition

# Progress and Needs

## **BOPTTEST (ibpsa/boptest)**



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- Test Cases (FMUs, Modelica models, docs, resources)

## **Gym Interface (ibpsa/boptest-gym)**



- Gym environment interface for BOPTTEST

## **BACnet Interface (ibpsa/boptest-bacnet)**



- BACnet interface for BOPTTEST

## **Website (ibpsa/boptest-website)**



- Website content

## **DOPTTEST (ibpsa/boptest-doptest)**



- Machinery specific for DOPTTEST

- Change name of existing
- Move user guide from branch:gh-pages-custom
- Tutorials/workshop material in ibpsa/boptest-website?

- Create new and move code
- Set up unit tests
- Lots more thinking

- Change name of existing
- Adapt to web-service merge

- Create new and move code
- Set up unit tests

- Create new and move code from branch:gh-pages-custom
- Set up pull from ibpsa/boptest and ibpsa/boptest-testcases

- Create new
- Lots more thinking



# ibpsa/boptest-testcases

## Version Control and Unit Testing

- If PR change in ibpsa/bopest, how unit test with ibpsa/boptest-testcases? And vice-versa.
- In unit test configuration, need to specify commit of other repo to use for each unit test run?

## FMUs are large files:

- Previous suggestion to post as assets rather than files tracked in git – but, version control between releases?
- Should we post development-versions of assets?