The **BESOS** Platform

Building and **E**nergy **S**imulation, **O**ptimization and **S**urrogate Modeling

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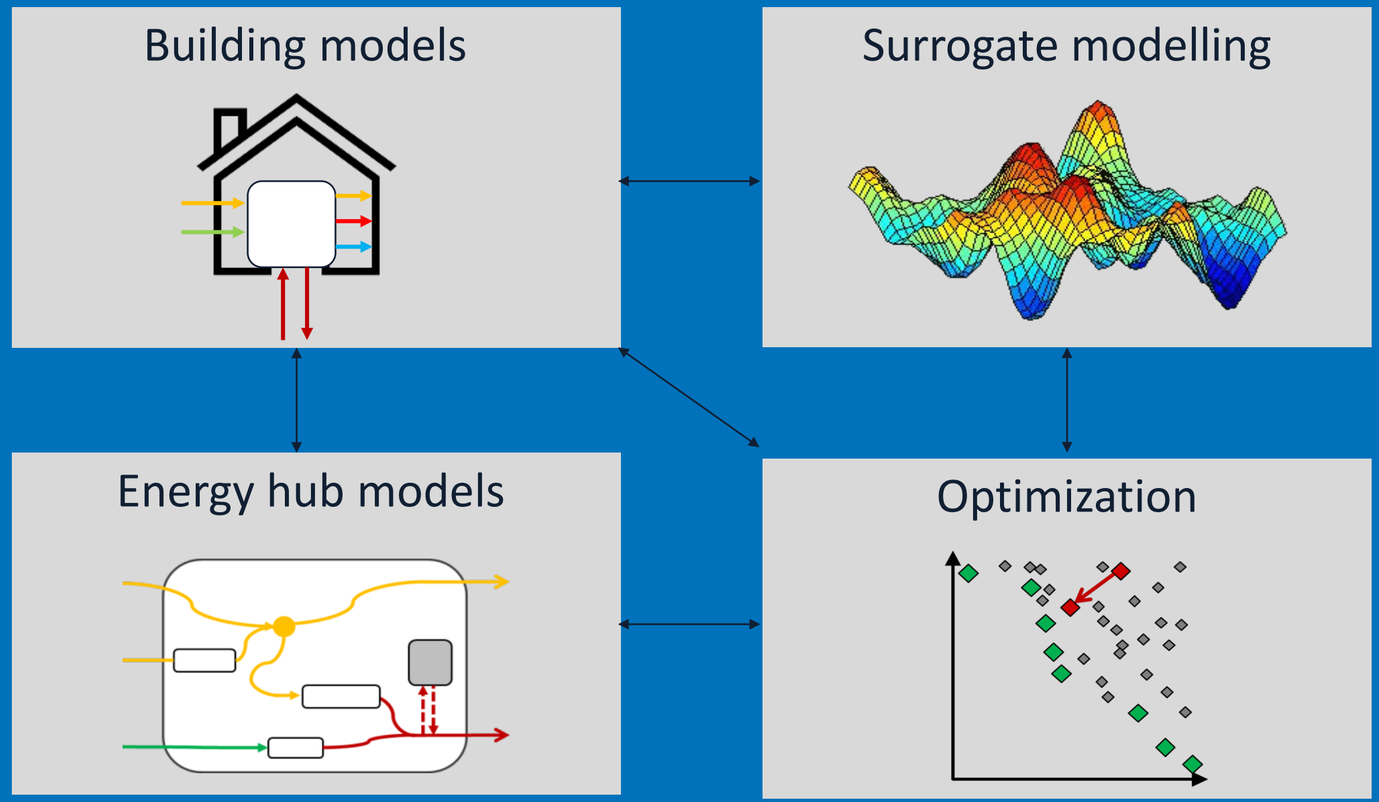
What is BESOS?

Energy Plus Building Simulation

Energy hub modelling that balances demand, supply and sizes of converters and storages in multi-energy systems



Machine learning tools with scikit-learn to fit surrogate models, rapidly exploring large parameter spaces

Multi-objective optimization with Platypus provides 10+ different algorithms

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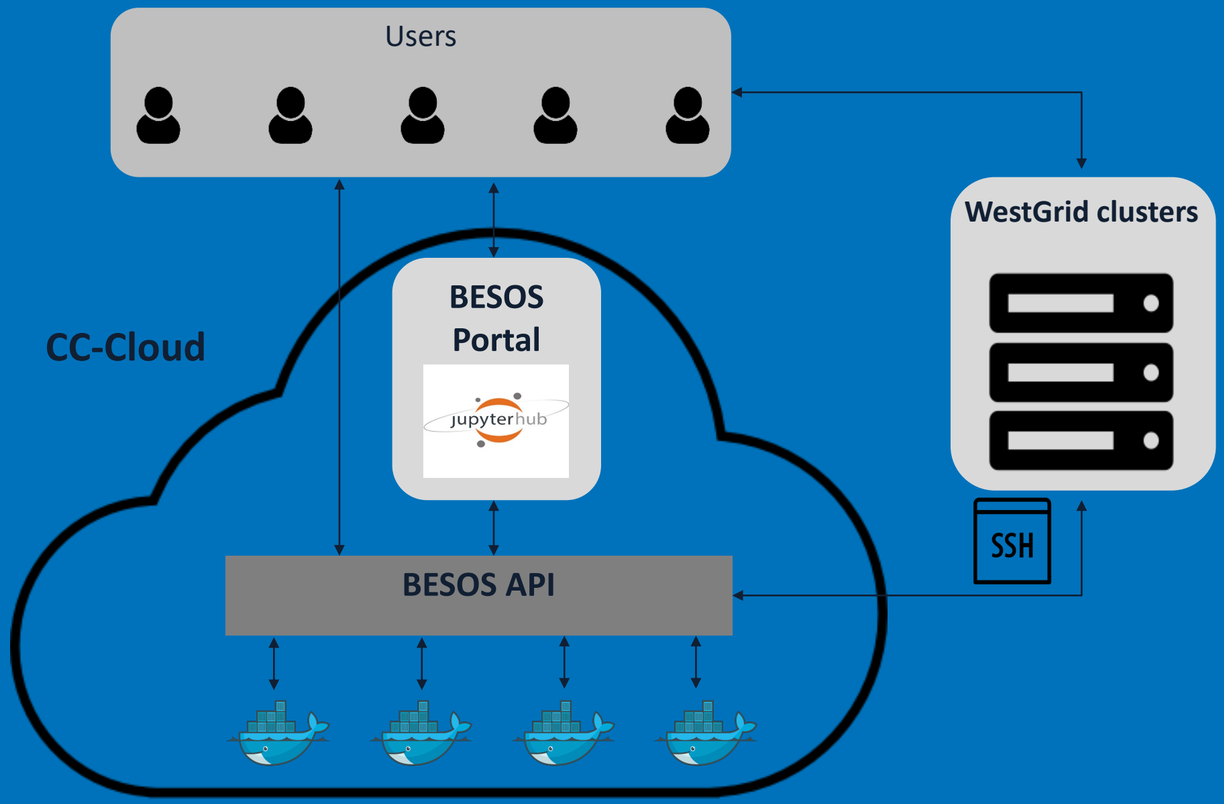
Access to the Platform



Technologies:

- Code base built Python
- The platform will be hosted by a jupyter hub, spinning up docker containers with jupyter notebooks for each user
- Mybinder.org will make tutorial notebooks publically available for anyone
- Compute Canada clusters resources for large jobs

Accessibility:

- Interactive tools in the online portal
- Using jupyter notebooks on the portal, giving ease of use for non-programmers
- Querying an API for integration in existing workflows
- Clone our open-source Python repository

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