The Energy Mashup Lab™

EML FOUNDATIONAL PRINCIPLES

# The Smart Energy Problem
Principles of The Lab

Smart energy refers to IT-based approaches to achieve energy efficiency, encompass distributed energy generations, and manage growing volatility of power supply.

In essence, smart energy addresses the local problems of momentary shortage and surplus over time.
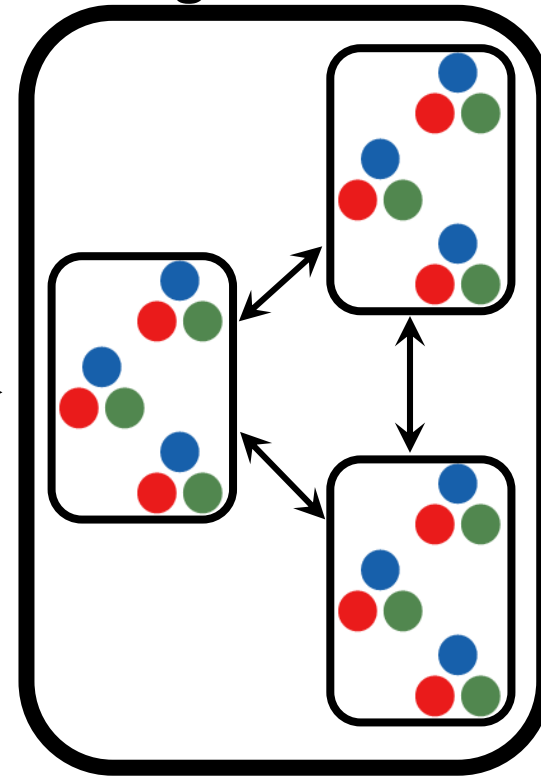
The Lab believes these problems can best be solved locally to meet local needs and desires.

Microcells 1-n
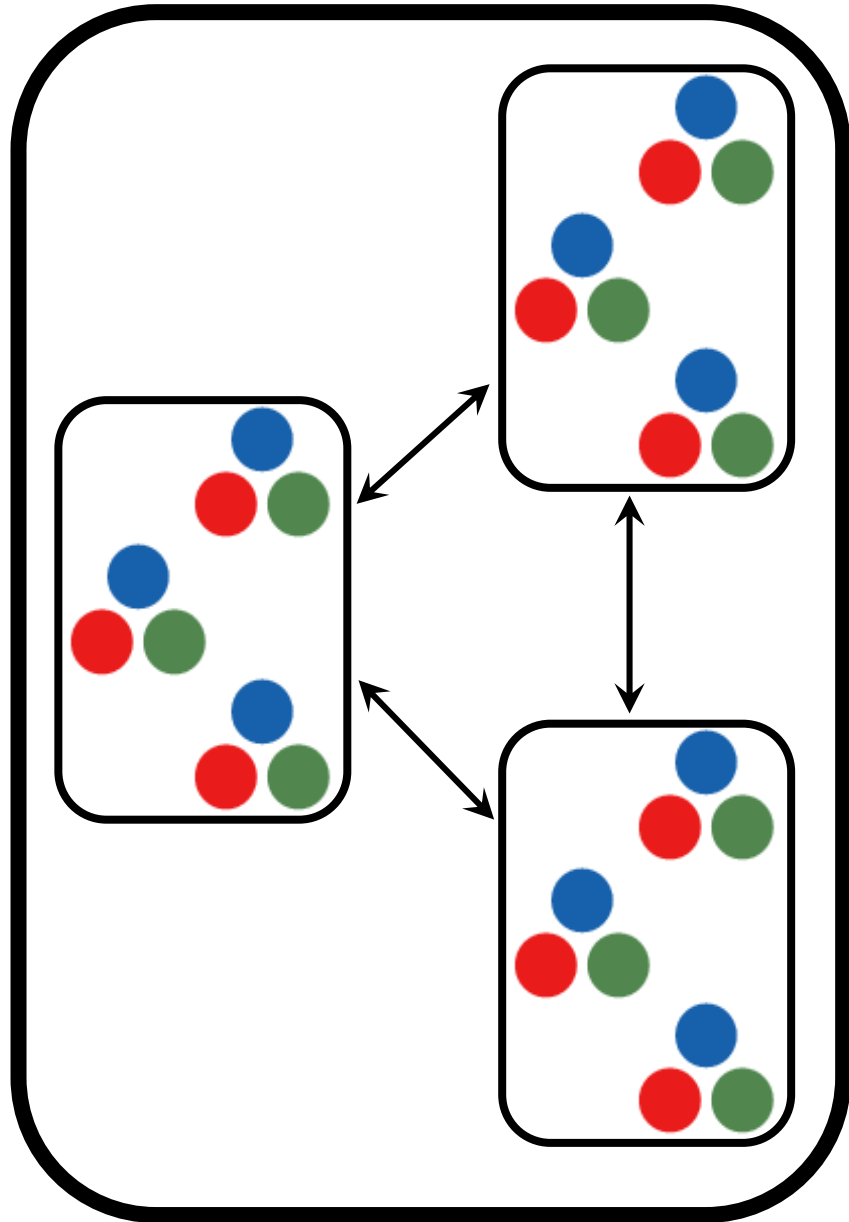
Microgrid

● Energy Generating Device

● Energy Control Device

● Energy Consuming Device

Goals of The Lab: Develop Open Source to Create an Open Platform that will:

Accommodate any Energy Generating Device, Energy Control Device, and Energy Consuming Device protocol or inter-networking function interoperate as a Microcell.

Enable the members of any Microcell to coordinate to achieve locally defined objectives.

Enable collections of Microcells to interoperate as a Microgrid able to support smart energy goals whether or not connected to the Electrical Grid.

Support Microgrid communications with the Electrical Grid to support Grid functions while remaining under local control.

Support easy integration of smart energy device OEMs into Microcells and Micregrids in home and commercial environments.

Value of The Lab
Open Platform to Support

Unbounded scalability

Ready acceptance of evolving device protocols

Interaction with any IoT or IoE frameworks

Applications

1. Home and Commercial Automation

2. Microgrids

3. Integration of Multi-Vendor Regional Microgrids

4. SmartGrid Management

5. 1-n

Questions?