

BATEM Control Systems Guide

Overview

BATEM provides a comprehensive control system framework for building energy management, including temperature control, HVAC systems, and simulation orchestration. This guide covers the key components and usage patterns.

The data used by the BATEM core control mechanism are stored in a `DataProvider` instance. The `DataProvider` is a dictionary of symbols that each could refer to a variables or vectors of values corresponding to the reference hour time slots (denoted by `TIMESTAMPS` in the next), to parameters that are time-invariant and can be seen as a constant value all along the `TIMESTAMPS`, and to parameterized variables that are computed from parameters and data and updated during a simulation. The symbols are named according to the [naming convention](#). The way of naming a symbol matters because it will be used to identify the variable in the model and in the data provider.

This guide provides comprehensive information about BATEM's control systems. For API details, see `API_DOCUMENTATION.md`. For variable naming, see `naming_convention.md`.