SEED
STANDARD ENERGY EFFICIENCY DATA PLATFORM

SEED: Why Open Source?

WHAT IS OPEN SOURCE?

Open source means that the base software code is publically available so that anyone has the ability to access and contribute to the code

OPEN SOURCE BENEFITS

- Platform is flexible and adaptable
- Developers can create proprietary platform add-ons while still maintaining an inter-operable system
- A national brand and standard is created
- Local jurisdiction officials can have input on the direction and maintanence of the core code
- The code base is platform-neutral and objective

MAINTAINING A DEMOCRATIC AND ROBUST SOLUTION FOR DATA

Bringing the energy efficiency market to scale will require a common data standard and platform for local jurisdictions to use when implementing building performance initiatives. A common platform can minimize staff time and cost, while facilitating the sharing of information and best practices. When building energy data is stored and processed in the same format nationally, then the full picture of a building can be captured for real estate listings, energy efficiency incentives, and other private market applications.

Creating the National Standard

The Standard Energy Efficiency Data (SEED) Platform™, developed by the U.S. Department of Energy (DOE) in partnership with Lawrence Berkeley National Laboratory (LBNL), is an open-source code package designed to be a common, low-cost, standardized tool that all jurisdictions can use. Its core function is to allow users to merge multiple sources of building energy data into one dataset that can be centrally stored and shared with other organizations and tools, such as the Buildings Performance Database. The Application Programming Interface (API) built into SEED allows for developers to create additional tools that can be added on to the core code to increase platform functionality, as well as to facilitate different levels of access to building data for outside organizations and the public.

Inherent Flexibility

The SEED Platform's open-source nature gives it flexibility. By building off of a common core code, software developers can create proprietary add-ons specific to their service offerings that enhance the capabilities of the platform as well as ensure its quality and longevity through bug fixes. The centralized brand maintained by the Department of Energy is intended to serve as a "center of gravity" that encourages developers to contribute code fixes to the main repository from which all users will benefit, and maintains a high quality platform with each contribution. The open-source code also prevents vendor lock-in and lowers overall program cost for the users who no longer have to develop their own individual solutions, and gives users the ability to submit feedback and suggestions about the platform through online forums. SEED is democratically managed so that this feedback can be incorporated in the code and the platform does not depend on a single entity with a potential bias when determining development goals.

The continuous cycle of improvement offered by an open-source platform is already underway. LBNL is collaborating with in-house and external developers to improve the core SEED code, based on feedback from current users. LBNL has also developed a protocol for developers who would like to contribute code improvements and become hosting providers.

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