

Compliance Portal: Connecting New Building Design and Performance with Building Performance Standards

Compliance Portal: Vision

- **Connecting** new building design and construction **codes** with **Building Performance Standards**. (tracking building characteristics and performance across the lifecycle of the building by leveraging structured databases and data schemas).
- **Support data persistence and make it available to users** (jurisdictions, designers, researchers, utilities) **to support decision making**. Provide a complete data workflow to seamlessly connect various stages of building analysis and provide data from each of these stages.

Use Cases

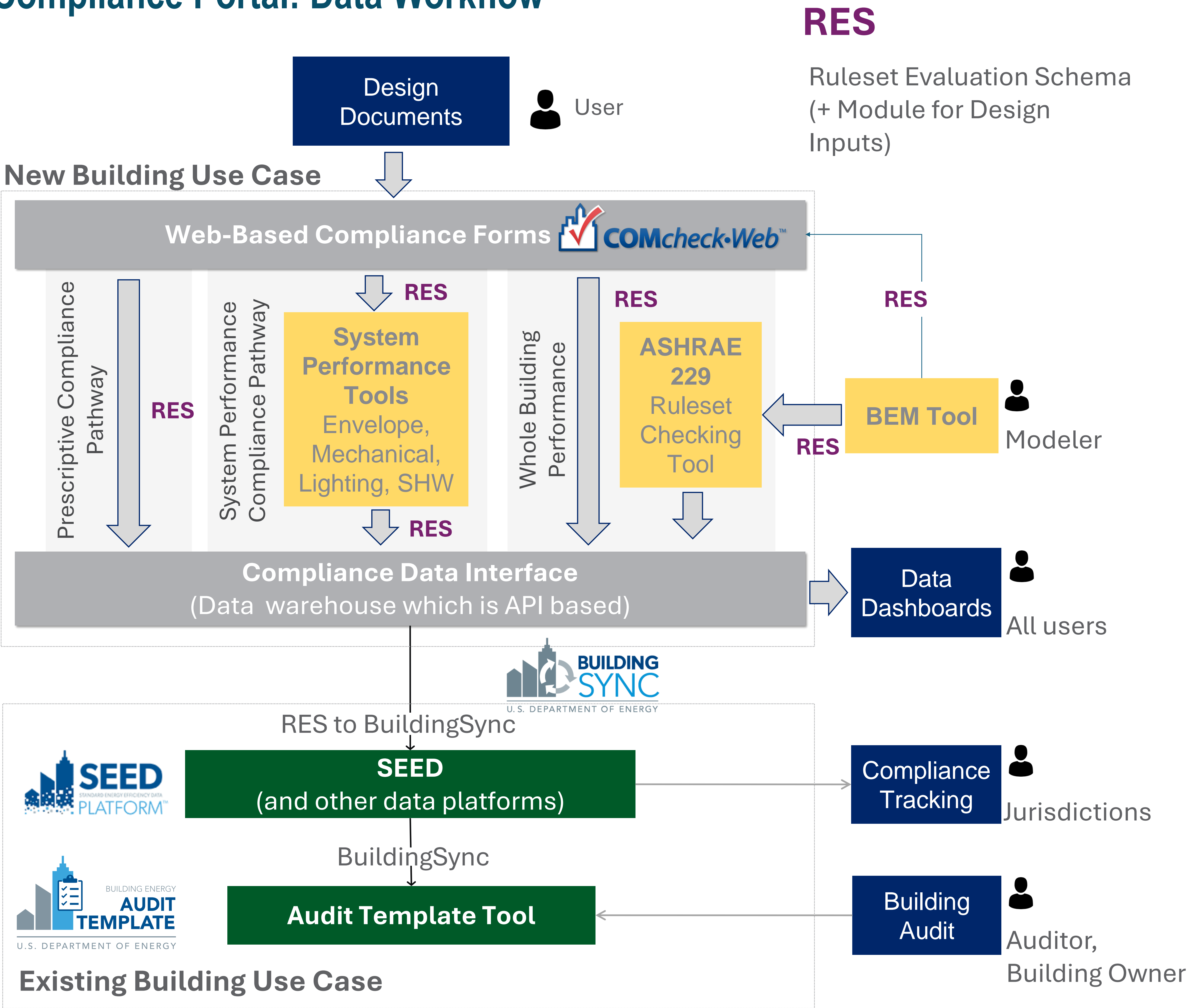
New Construction Use Case Integration of Code Compliance Workflows

- Compliance Portal **integrates all compliance pathways** (prescriptive, system performance and whole building performance).
- It would allow **anonymized and aggregate data** submitted for any of the compliance pathways, or through the web-based Compliance Forms, to be accessed through a **'Compliance Data Interface'**.
- Researchers, jurisdictions could access the 'Compliance Data Interface' to **develop dashboards to understand building stock**, compliance pathways and technology solutions.

Existing Building Use Case Connecting with New Construction Workflows

- Using a Ruleset Evaluation Schema (RES) to BuildingSync translator, data submitted for new construction compliance evaluation could be **shared with the SEED platform** and with Audit Template for existing building evaluation.
- Data sharing between new construction + existing building tools would allow **tracking of predicted performance against actual building performance**.
- Data sharing would allow data to persist and **reduce data collection effort**.

Compliance Portal: Data Workflow



Streamlining Workflows

Ruleset Evaluation Schema

A summary level Open-Source schema for representing modeling inputs and outputs in machine-readable format. An additional module for 'Design Inputs' would be added to RES to support the data workflow.

BuildingSync Schema

is a common schema for energy audit data that can be utilized by different software and databases involved in the energy audit process. It allows data to be more easily aggregated, compared, and exchanged between different databases and software tools.

SEED Platform

SEED is an open-source secure, enterprise data platform for managing portfolio scale building performance data from a variety of sources. SEED can import data from tools such as ENERGY STAR Portfolio Manager®, Green Button, and Audit Template.

Audit Template

Web-based tool to support data collection and reporting for energy audit data. It is used by jurisdictions for data reporting and compliance with audit ordinances and alternative compliance pathways in BPS.

COMcheck: COMcheck simplifies compliance for building officials, plan checkers, and inspectors by allowing them to quickly determine if a building project meets the code.

HVAC System Performance: Provides a capability to evaluate HVAC system performance against a code defined reference/baseline system.

ASHRAE Standard 229P Ruleset Checking Tool: Evaluates energy models represented in RES format to verify implementation of ruleset requirements in energy models.



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