BalanceCx ANALYTICS

Insights for Smart Building Commissioning & Operations

EEIBuildingPerformance.com

BalanceCx ANALYTICS

By combining data collection with engineering strategies, building analytics provides a proactive way to improve and maintain building operations—maximizing energy savings and helping O&M staff keep facilities performing at their best.

Using building analytics software, EEI compiles data from a building's automation system to identify issues and assess overall system performance. Our team uses this data to determine ideal methods for resolving problems and maximizing energy cost savings.

EEI is revolutionizing the industry through our software, BalanceCx. Our technicians, engineers, and software team created BalanceCx specifically for Cx services, eliminating the clunky mechanics they experienced using other platforms. Because BalanceCx is curated explicitly for Cx, it delivers significant cost savings to owners in terms of efficiency and ease-of-use.

WHY CHOOSE BALANCECx

BalanceCx is a powerful software platform developed by EEI, an award-winning consulting firm with deep expertise in building performance and environmental reporting. Designed to help building owners and operators achieve long-term efficiency, BalanceCx leverages advanced analytics to deliver actionable insights for optimizing energy use and reducing emissions.

With its intuitive interface, BalanceCx makes it easy to monitor building operations, streamline maintenance, and track performance trends. By choosing BalanceCx, you gain a data-driven solution that supports smarter decision-making, lowers operational costs, and helps you meet your sustainability goals.

NEW CONSTRUCTION

During functional performance testing, we use BalanceCx to functionally test 100% of building systems. Automated functional testing accelerates issue resolution, circumventing problems before they require expensive solutions. BalanceCx also shows owners and their O&M staff exactly how each system operates through the first year of occupancy.

EXISTING BUILDINGS

During Re/Retro-Cx, applying MBCx strategies avoid destructive testing and other invasive methods to evaluate existing systems. BalanceCx automatically evaluates all building systems and provides a clear picture of current building operations. From this information, we make improvement recommendations and help the O&M staff achieve peak facility function.

BEYOND Cx: DAY-TO-DAY USE

Many building owners choose to keep BalanceCx in their facilities long-term. We work with their O&M staff to identify and resolve issues as they arise, and BalanceCx alerts us to them. This generates long-term cost savings by preventing system degradation that erodes energy cost savings and requires expensive repairs or replacements. Simple weekly emailed reports keep operators up to speed and ensure they do not miss key events.

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ANALYTICS FOR NEW CONSTRUCTION

BalanceCx is our most widely deployed analytics program for new construction projects. It is the only analytics software with a user interface that is purpose built for the construction process.

Integration

Experience in a wide range of integration scenarios needed for new construction, hardware gateways, virtual machines, cellular connectivity, API integrations, and more.

Automated Functional Testing

Our flagship feature that validates data integration and equipment sequence of operations. Enables digital testing of all of your equipment, saving money by reduced warranty callbacks.

Controls Readiness

Controls Readiness dashboard gives clear visibility into when devices are brought online, and if they are functioning as designed.

Reporting

Simple results reporting & Integrations with CxAlloy and Smartsheet to enable you to use existing reporting procedures.

Commissioning Benefits

IMPROVED QUALITY ASSURANCE

BalanceCx is an add-on to the traditional commissioning process, it enables a more thorough validation that all equipment is operating as designed.

100% DIGITAL SYSTEMS TESTING

Typical commissioning scope of work will include sampling rates for many equipment (ie. Only 20% of fan coil units are commissioned). This leaves room for mistakes across the building to go unnoticed, and causes operating teams headaches as they uncover and resolve issues over several years. BalanceCx validates 100% of systems are operating as expected.

CONTROLS READINESS

Controls Readiness dashboard gives clear visibility into when devices are brought online, and if they are functioning as designed in a single webpage.

DATA CHARTING

Setting up data charting on most control systems is very time consuming. BalanceCx provides out of the box charting for all the data commissioning agents, owners, and operators typically review.

BACK CHECKS & SEASONAL TESTING

Tuning automated functional testing to each equipment's sequence of operations provides a future test that teams can run in future years to validate proper operation. For example, at the start of heating seasons, an operator can check the heating sequence of operations tests to quickly diagnose any failed devices for repair.

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ANALYTICS FOR EXISTING BUILDINGS

BalanceCx helps engineers detect and diagnose a variety of issues on HVAC, metering, and other building systems data. It is a highly customizable M&V platform making it easy to validate successful implementation and operation of energy saving projects.

Integration

Experience in a wide range of integration scenarios needed for existing building, hardware gateways, virtual machines, cellular connectivity, API integrations, and more.

Energy Savings Calculations

Our flagship feature that validates data integration and equipment sequence of operations. Enables digital testing of all of your equipment, saving money by reduced warranty callbacks.

Fault Detection & Diagnostics

A large library of fault detection and diagnostics algorithms are automatically applied to your data.

Building Performance Tracking

Simple results reporting & Integrations with CxAlloy and Smartsheet to enable you to use existing reporting procedures.

Ongoing & Retro-Commissioning Benefits

FAULT DETECTION & DIAGNOSTICS

BalanceCx comes out of the box with a full suite of FDD algorithms vetted by our engineering staff on projects since 2015.

INTEGRATION EXPERIENCE

EEI has implemented BalanceCx on a wide variety of systems and through the phases of new construction projects. BalanceCx has flexible data acquisition options that can meet the needs of any commercial project.

LIBRARY OF CALCULATIONS

BalanceCx comes out of the box with a full suite of calculations for making calculated virtual points and energy savings estimating.

DATA CHARTING

Setting up data charting on most control systems is very time consuming. BalanceCx provides out of the box charting for all the data commissioning agents, owners, and operators typically review.

BUILDING PERFORMANCE TRACKING

Tuning automated functional testing to each equipment's sequence of operations provides a future test that teams can run in future years to validate proper operation. For example, at the start of heating seasons, an operator can check the heating sequence of operations tests to quickly diagnose any failed devices for repair.

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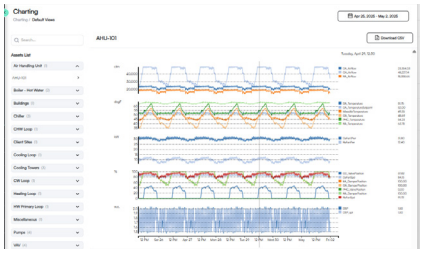
BalanceCx FEATURES

Charting & Dashboards

Charts and dashboards are all configured once data is mapped into BalanceCx.



Equipment Charting

No configuration needed, all data is automatically in organized charts once data is mapped.

One Line Diagram History Viewer

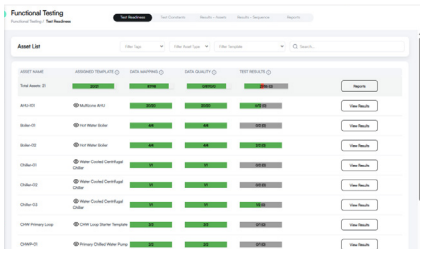
One-line diagrams can make it easier to digest complex system information.

System Heat Maps

Visualize a whole buildings worth of data at a glance with customizable and colorized heat maps.

Automated Functional Testing

FDD helps engineers identify a variety of performance issues.

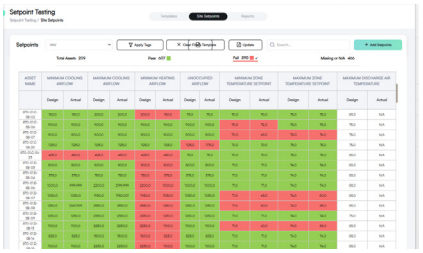


System Readiness Dashboard

Visualize results from data quality testing, and functional testing to get a glance if any equipment is currently failing functional tests.

Sequence Of Operations Testing

Compare complex analytics performed on similar equipment against each other, to see if it's a common or unique issue.



Setpoint Validation

Visualize results from data quality testing, and functional testing to get a glance if any equipment is currently failing functional tests.

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BalanceCx FOR LEED V5 CREDITS

BalanceCx helps teams meet LEED requirements for Energy & Atmosphere prerequisites and credits.

LEED FOR OPERATIONS & MAINTENANCE: 1 YEAR SCOPE

Energy & Atmosphere Prerequisite EAp4

- Utility Meter Data Reporting
- If Applicable: Electric Submetering

Energy & Atmosphere Credit: EAc5 Enhanced Commissioning Path2 Option 2

- Path 1 Basic Software
- BalanceCx EIS
- Path 2 Enhanced Software
- BalanceCx

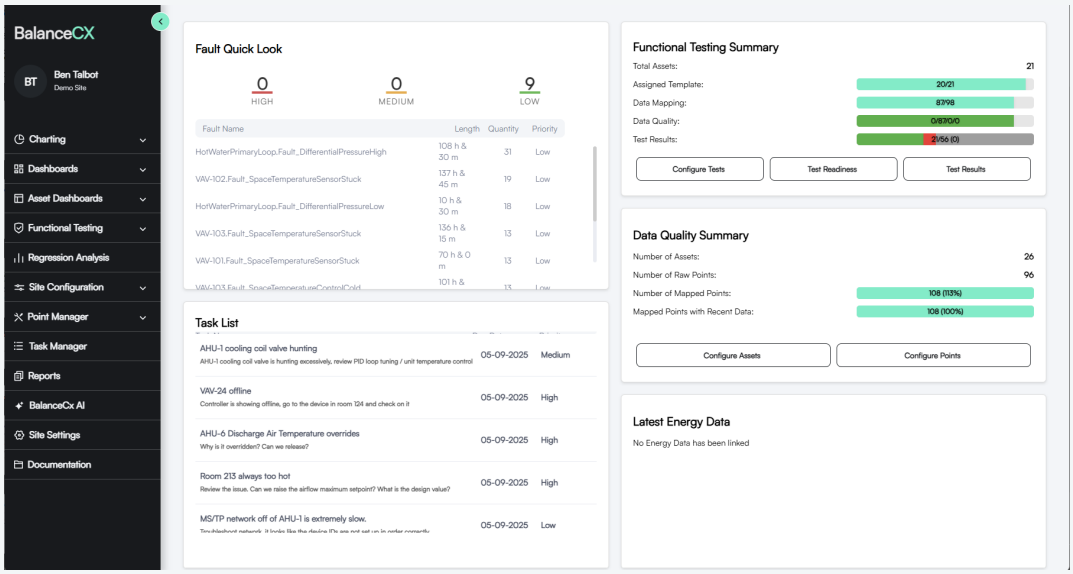
LEED FOR BUILDING DESIGN & CONSTRUCTION: 3 YEAR SCOPE

Energy & Atmosphere Prerequisite EAp2

- Utility Meter Data Reporting
- If Applicable: Electric Submetering

Energy & Atmosphere Credit: EAc7Commissioning Option 2

- Path 1 Basic MBCx
- BalanceCx EIS
- Path 2 Enhanced Software
- BalanceCx



BALANCECX INCLUDES ALL OF THE EIS AND ANALYTICS FEATURES NEEDED TO COMPLY WITH LEED V5

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