buildingsIOT

SOLUTION BRIEF

Adaptive Building Technology

Data access, normalization and visualization for optimization from top to bottom.

How reliable access to real-time and historized data can be a game changer for your business.

In traditional energy engineering firms or service provider organizations who specialize in helping clients meet sustainability targets or reduce consumption across portfolios, a lot of contract hours are used up on manual data tasks. From collecting countless CSV exports to normalizing data sets one by one, highly skilled engineers are blocked from their real jobs until they do a lot of data clean-up. And by the time all that administrative effort is complete, the data is outdated anyway.

Your customers are looking for recommendations they can put into action now, based on the dynamic operations of their diverse assets. If your team is spending too much time getting the data ready for analysis, they don't have enough time left to perform that analysis, so energy conservation measures are missed, recommendations aren't followed and customers go elsewhere.

Use Cases

Data access
Connect to and securely stream real-time data from customer buildings of different sizes, types and systems.

Data normalization
Normalize data against an open-source data model and present it through a GraphQL API with read/write capabilities.

Analytics
Apply AI/ML and building-data-specific algorithms for fault detection and diagnostics to automate and streamline recommendation capacity.

Reporting
Automate reporting for internal and customer audiences to show continuous progress toward client-specific goals.

Ongoing value
Maintain the connection so recommendations can continue cost-effectively to support long-term relationships.

Introducing the Buildings IOT Technology Stack

Data Acquisition

Capable of processing data from up to 1,000 connected equipment, the Buildings IOT LaunchPad is a gateway device for secure access to building data. With a cybersecurity framework built upon an edge-to-cloud architecture, the Arcbeam protocol acts as a bridge between the Buildings IOT cloud and the on-site LaunchPad, facilitating secure outbound communication across the network.

Leveraging HTTPs and establishing encrypted connections, data is transmitted from LaunchPad-connected devices to the cloud in a protected protocol that is inaccessible to unauthorized parties. To enable communication, the protocol requires valid and verified certificates on both ends, establishing mutual TLS authentication.

To safeguard data during transit, all communications within the LaunchPad ecosystem are encrypted. This encryption in transit ensures that information exchanges between devices and the cloud remains confidential. LaunchPad is currently compatible with BACnet and Niagara 4 data and available pre-configured on Buildings IOT-provided hardware or packaged in a docker container for virtualization on a customer server.

LaunchPad

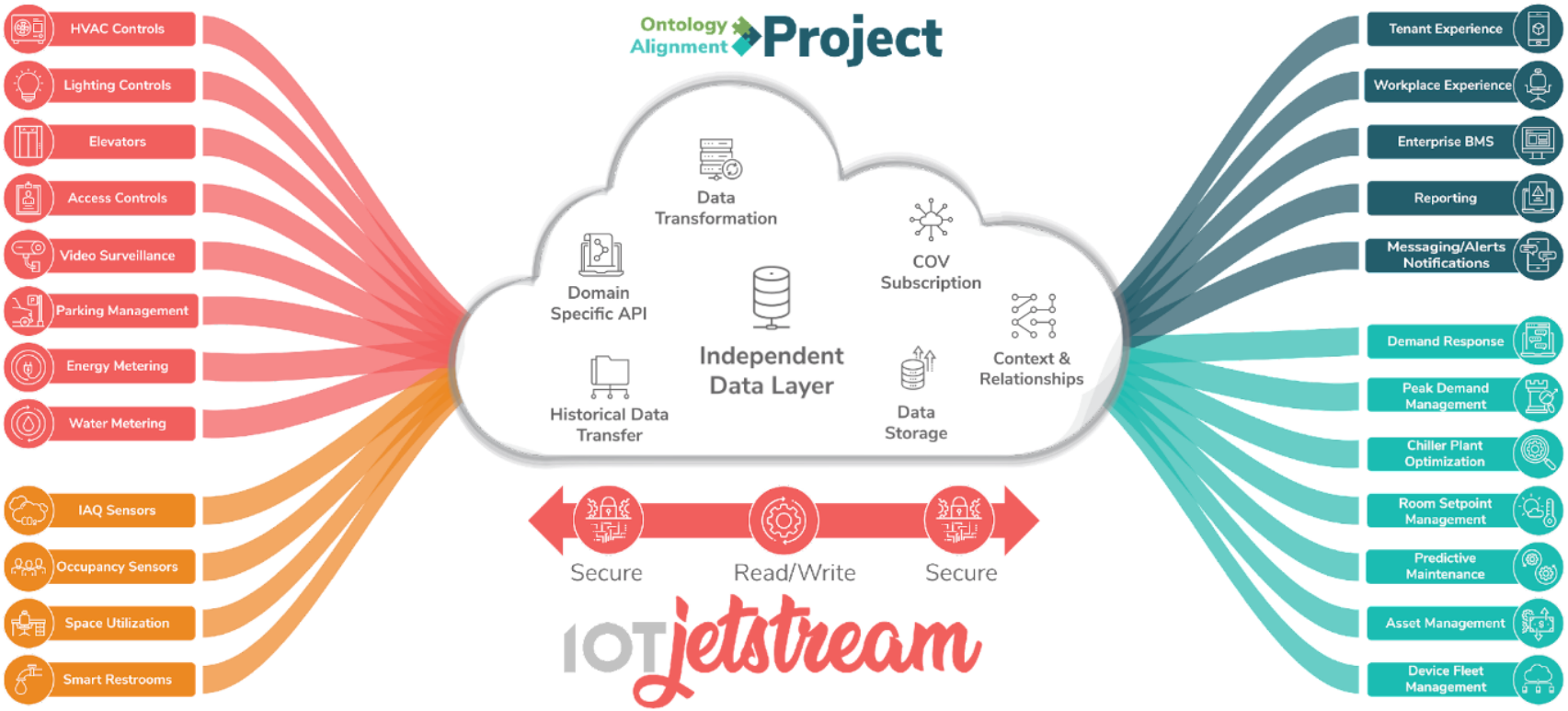
Data Normalization and Availability

An independent data layer for access, reliability and control, IOT Jetstream houses normalized, real-time and historical data from disparate systems. Complete with identities, relationships, locations, KPIs and analytics, data in IOT Jetstream is available through a GraphQL API that can be accessed with simple queries and connected to myriad applications.

Available with both read and write capabilities, Jetstream enables command of equipment beyond simple on/off changes so you can optimize your systems from anywhere, with all the data you need to make informed decisions. Easy-to-structure queries result in structured data responses and easy-to-compile mutations make it possible to push commands or collate changes.

GraphQL is a self-documenting API and Jetstream is supported by an extensive Help Center with details on how to authenticate, how to write queries, how to structure mutations and more. Competent developers create connections into Jetstream for their applications in less than four hours, even if they have never worked with GraphQL before.

IOT jetstream



onPoint

Data Visualization and Analysis

Buildings IOT's application layer, onPoint brings all your operational data into one place so you can monitor, manage and maintain your building systems without hopping from interface to interface. With navigation for portfolios, buildings and individual equipment as well as configurable dashboards and user-generated charts, onPoint makes building data visual and useful for a variety of user personas.

The standard onPoint package includes visualizations of both real-time and historical data, fault detection and diagnostics in various categories, a dynamic library of data tiles to place on user-generated dashboards, interactive charts, monthly reports and work requests to give specific and data-backed direction to team members and vendors.

Add-ons include command-and-control for remote building management, visual floorplans and spatial modeling for equipment relationships to physicals spaces, alarms and schedules, and automated demand management and demand response tooling to transform a building's demand curve at the click of a button to reduce load and save energy.

Onboarding and Digital services process

From the point of sale, the Buildings IOT technology onboarding process begins with configuring the LaunchPad to your specifications and either shipping or working with you to install the VM on your local machine. With hardware kept in stock and the virtualization process a breeze, the connectivity method can be deployed to your site within one week of purchase. Once connected and confirmed, data modeling and loading typically takes 2-4 weeks. And analytics go live with just two weeks of data.

All Buildings IOT subscription customers are assigned a Customer Success Manager who will host a kick-off call as soon as the system is completely onboarded and ready to be put into the workflows of all users. Following the kick-off, your Customer Success Manager will work with you to determine a training program and cadence that suits your and your team's needs. The Customer Success team is also available via live chat during local business hours and will respond to any submitted tickets within 24 hours.

Service and support when you need it

We are building system experts. At Buildings IOT, we're changing the way the built environment understands, reacts and adapts through technology. Our software and services increase the longevity of building assets, improve the comfort of building occupants and help building owners achieve greater efficiency across North America, Europe, and APAC.We develop and deploy cloud-based building analytics software, we implement complex Integrated Building Management Systems, we design and install controls systems, we maintain building assets and we provide IT managed services.

We excel at all of our efforts because we know buildings. By focusing on the highest energy consuming equipment and the greatest operational efficiencies, we've helped customers around the world take control of their buildings to reduce costs and improve efficiency for more than 60 years.

Corporate offices and Customer Success team locations

Buildings IOT Headquarters
1200 Concord Ave. Suite 290
Concord, CA 94520

Buildings IOT Canada – Product & Technology
Ontario, 950 Gladstone Avenue, Suite 200
Ottawa, ON K1Y 3E6

Buildings IOT UK – Sales and Business Development
Forge, Studio One, Great Exhibition Wy
Kirkstall, Leeds LS5 3BF

Buildings IOT team member locations
San Diego, California, USA
Atlanta, Georgia, USA
Charlotte, North Carolina, USA
Vancouver, BC, Canada
Toronto, Ontario, Canada