

The BitBox IoT Platform.

BitBox USA eliminates the challenge of collecting, organizing, and delivering IoT and facility data from geographically diverse locations.

The BitBox Platform as a service (PaaS) allows businesses to use their IoT infrastructure to generate meaningful business outcomes through technologically enabling synergy between data analytics providers and geographically/technically diverse data sources. The BitBox Platform can be found globally in the following applications:

- Edge Data Centers
- Mass Retail Location Roll-outs
- Enterprise Property Management
- Healthcare
- Industrial Monitoring

How it works.

The BitBox USA platform uses a single remotely configurable BitBox appliance per facility that harvests all IoT data from disjointed systems and then securely funnels and organizes everything in the cloud. With the organized data secured, third party applications can mine the organized enterprise data collection via a single-source API to turn data-driven business outcomes and applications into reality.

The Bitbox Platform is sold as a monthly service per BitBox. One site, one Bitbox.



Collect.

One **BitBox** per building gathers data from Modbus, BacNet, SNMP, IoT, serial devices, or other connected sub-systems. Wire and go. Zero on-site software configuration. Add or change equipment as needed and configure it in the cloud.



Organize.

Provision, monitor and manage all BitBox equipped sites in the cloud, and organize all your data in the **BitEngine** into a unified data-collection. Additionally, you can choose to house your data in AWS, Azure, GCP, Digital Ocean, or company-owned infrastructure.

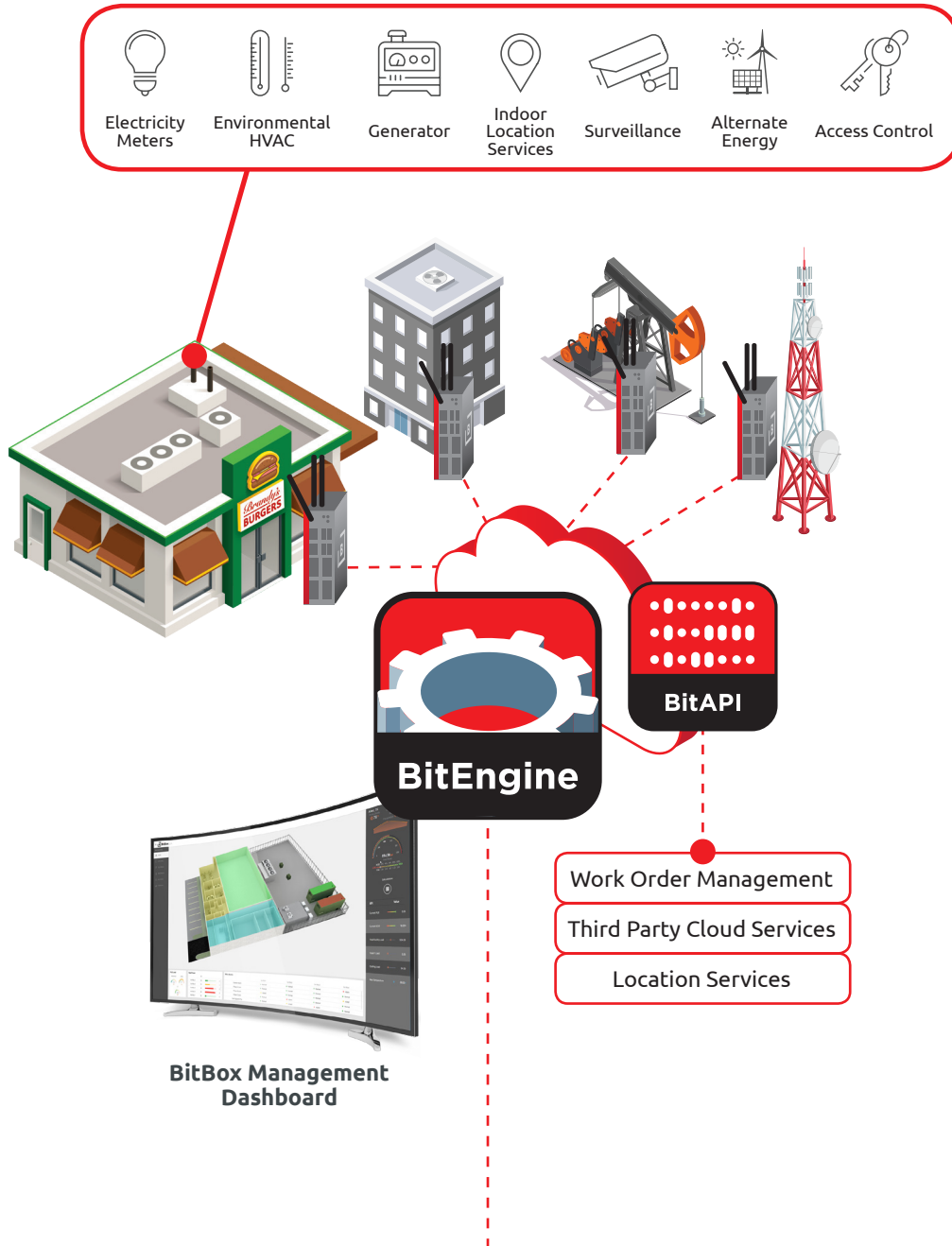
The BitEngine allows for a web-accessed dashboard allowing for a centralized view of all sites and performance criteria with simple to configure reporting and alarming capable of sending SMS and email messages of out of bounds conditions that need to be addressed.



Deliver.

The **BitAPI** allows for a secure GRPC or REST API connection to any third party applications, analytics providers, or cloud platform allowing for tight automated workflow integration as well as custom application development.

Typical Distributed Architecture



Operational Expense Mitigation

A full portfolio view of all systems allows for a clear picture of out of tolerance equipment detection, and remote troubleshooting limiting HOT/COLD calls and needless truck-rolls. Additionally, capital improvement projects can be more accurately provisioned based on trended energy spend and maintenance history.



Smart Building Data Integration

Smart Building technology generates a significant amount of data, but the value of the data can only be harnessed when fully integrated with other systems. Technology, like location services and personal control easily can be combined with services like wayfinding, and environmental systems.



Sustainability Benchmarking

Sustainability monitoring often involves consolidating many sources of data into a report or consolidated view. Whether for compliance or green initiatives, the BitBox PaaS handles this with ease by collecting all information and allowing report generation or dashboard visualization through UX tools via the BitAPI.



Micro Service Integration

The field of building AI and analytics tools has grown in mass over the last few years. These software tools have the power to perform tasks such as space utilization analysis, energy benchmarking, and consistent commissioning and optimizing; to name just a few. The struggle to use these tools, however, is having the data on hand to feed to these services. The BitBox PaaS via the BitAPI allows for hundreds of these microservices to feed off of this data-collection to generate actionable outcomes.

Regional Facilities Manager

- Hot/cold call mitigation
- Excess energy spend through outlier detection
- Work order management
- Alternative / emergency energy management
- Space utilization

Employees

- Monitoring and managed access control
- Personal workspace identification
- Parking finder

Sustainability Manager

- Sustainability dashboarding
- Compliance monitoring
- O+M activities

Service Contractors

- Work order dispatch
- Remote diagnostics and troubleshooting
- Asset management and work order allocation