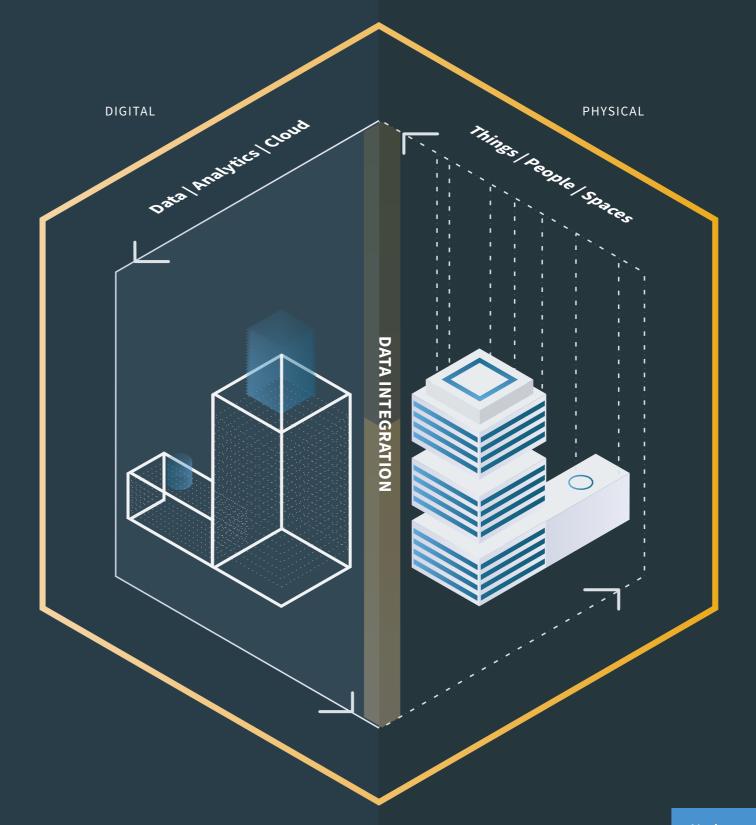


## Your Data Digital Twin.

A DIGITAL REPLICA OF THE PHYSICAL WORLD



The Intelligent Buildings Software Stack (IBSS) platform is a virtual data-driven replication of the physical built world. The Azure-based software stack models the relationships between people, places, and devices into a unique semantic data digital twin.



→ LEARN MORE

Native azure cloud environment

Microsoft

## Future-proof Your Real Estate.

WITH HARDWARE-AGNOSTIC SOFTWARE YOU CAN TRUST



Gold Application Development Gold Application Integration Gold Application Lifecycle Management Silver Data Analytics

#### **Independantly Certified**

IBSS has independently been certified against the a number of industry-leading benchmarks that assess future-readiness and specific smart building outcomes:







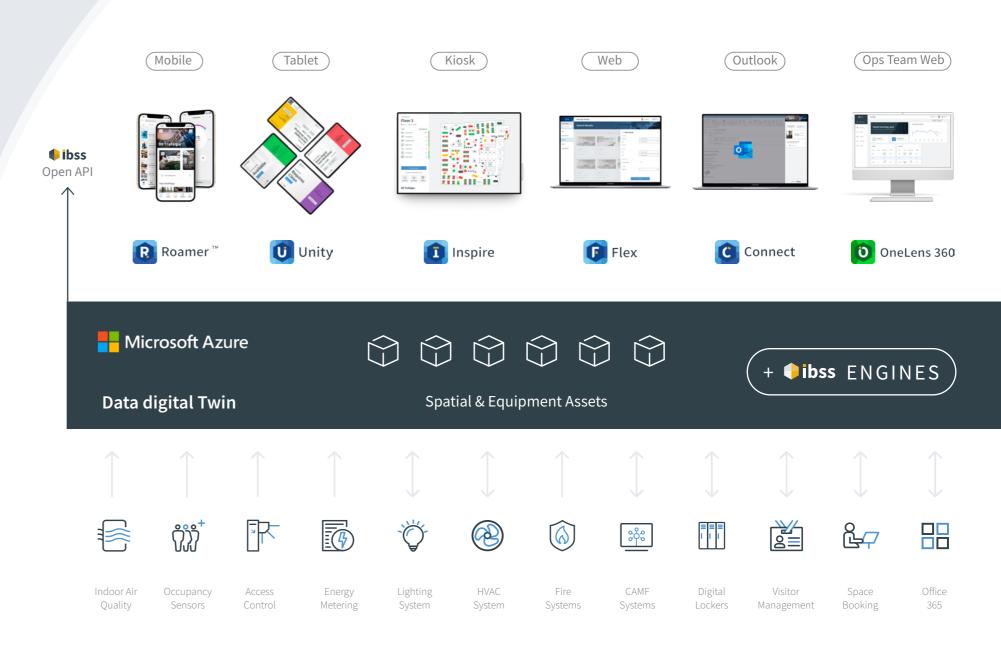
## Bring your building to life.

A DATA-DRIVEN BLUEPRINT FOR THE BUILT WORLD



#### STACK HIGHLIGHTS

- √ Semantic Data Digital Twin
- ✓ Pre-built Software Connectors
- ✓ Configurable Data Engines and Policies
- ✓ Out-of-the-Box PropTech Integrations for Best-in-class Sensors
- ✓ Convergence of IT, OT and IoT via open standard interoperable protocols
- ✓ Cloud Scalability with Azure Digital
  Twin
- ✓ User Experience Apps for Workplace and Landlord
- ✓ Historical and Real-time Data Analytics
- ✓ Data Historian for long-term data storage and analysis
- √ Edge IoT Connectivity
- ✓ Data Normalization & Workflow Technology
- ✓ Outcome-based Visualization Dashboards & Analytics
- ✓ Open API

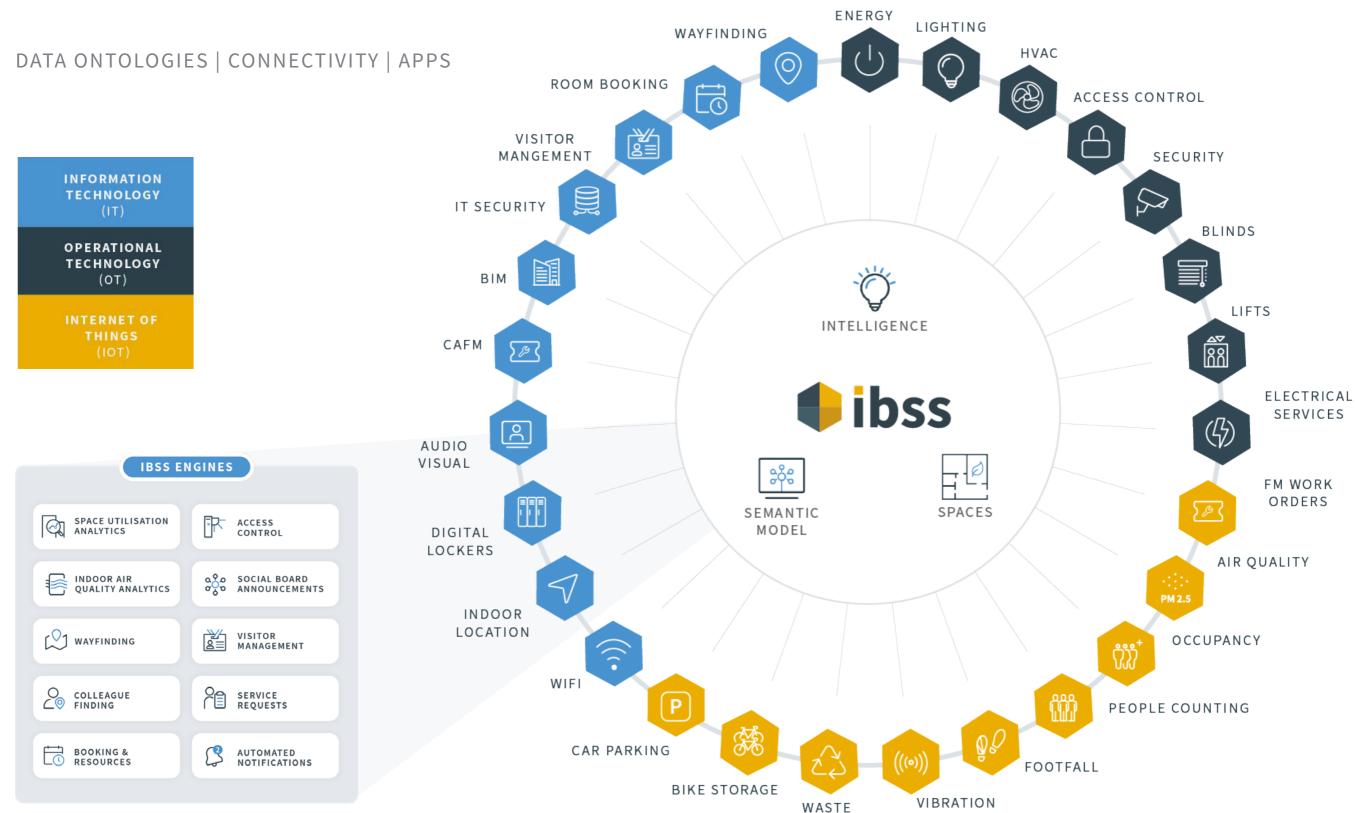




INTERGRATIONS - CONNECT REAL TIME OT, IT & IOT DATA SOURCES



## Create a Digital Fabric that Scales.



# Our Plug & Play Approach.

GET THERE FASTER WITH PRE-BUILT CONNECTORS

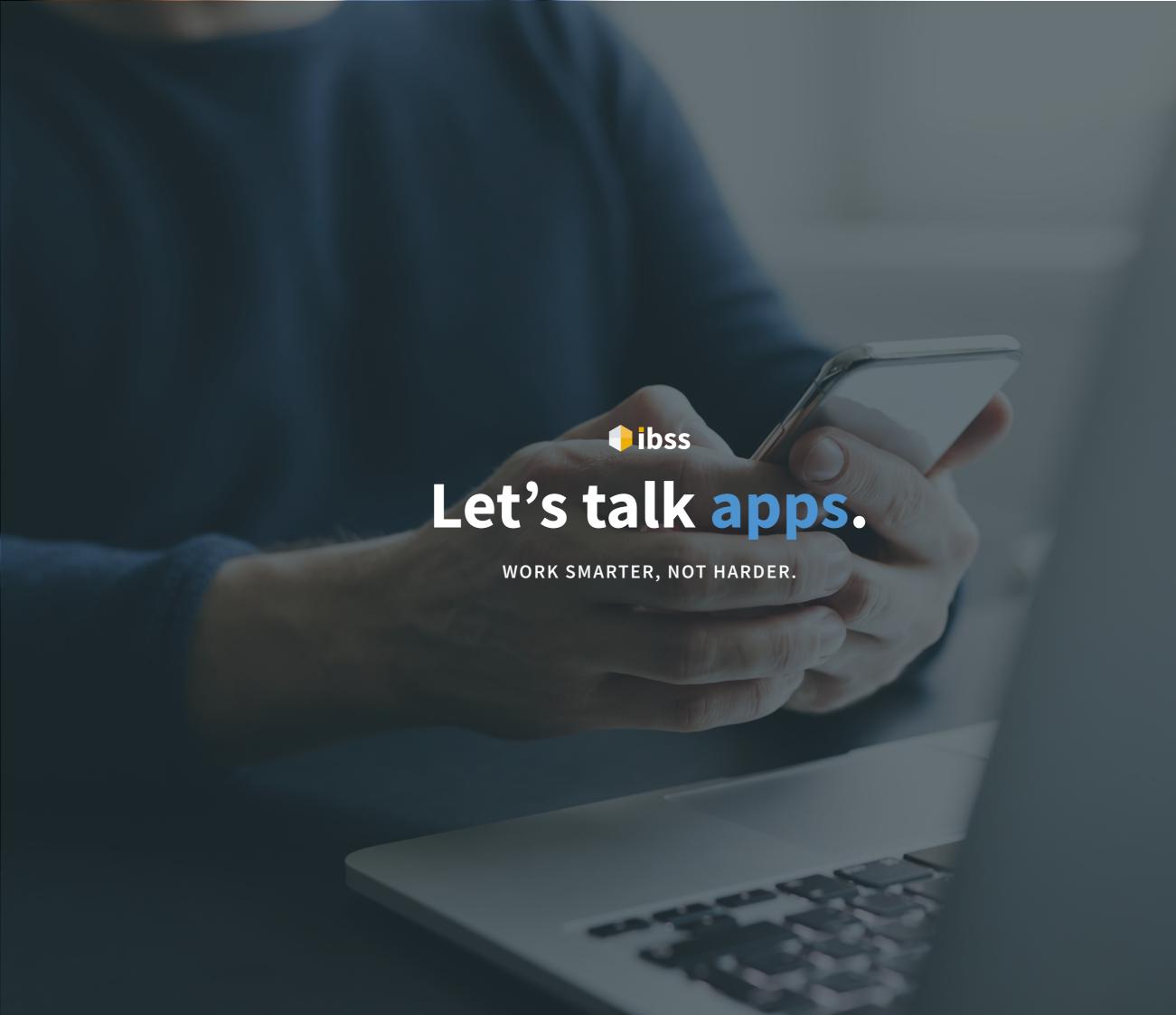
### **Interoperable System Connectors**

IBSS comes pre-built with many vendor-specific communication protocols and APIs that make it fast, easy and secure to onboard your chosen PropTech. Yes, we support a rich array of IT, OT and IoT protocols for secure data sharing, but IBSS also comes with out-of-the-box connectors for plug-and-play connectivity.

## Our Growing Marketplace of IoT Connectors and API Integrations

From top-drawer occupancy sensing (from the likes of PointGrab™, Irisys and VergeSense), and real-time Indoor Air Quality (IAQ) sensing (from companies like Awair, Elsys and Synetica). IBSS also has many pre-built software integrations, such as Office 365 and mainstream booking and visitor management systems for when IBSS bridges digital eco-systems. IBSS supports all of these PropTech vendors – with more coming online every month. Don't see your favourite system, sensor or app? Don't worry there's a good chance we have it in our roadmap, or can connect to it via one of our open standards.

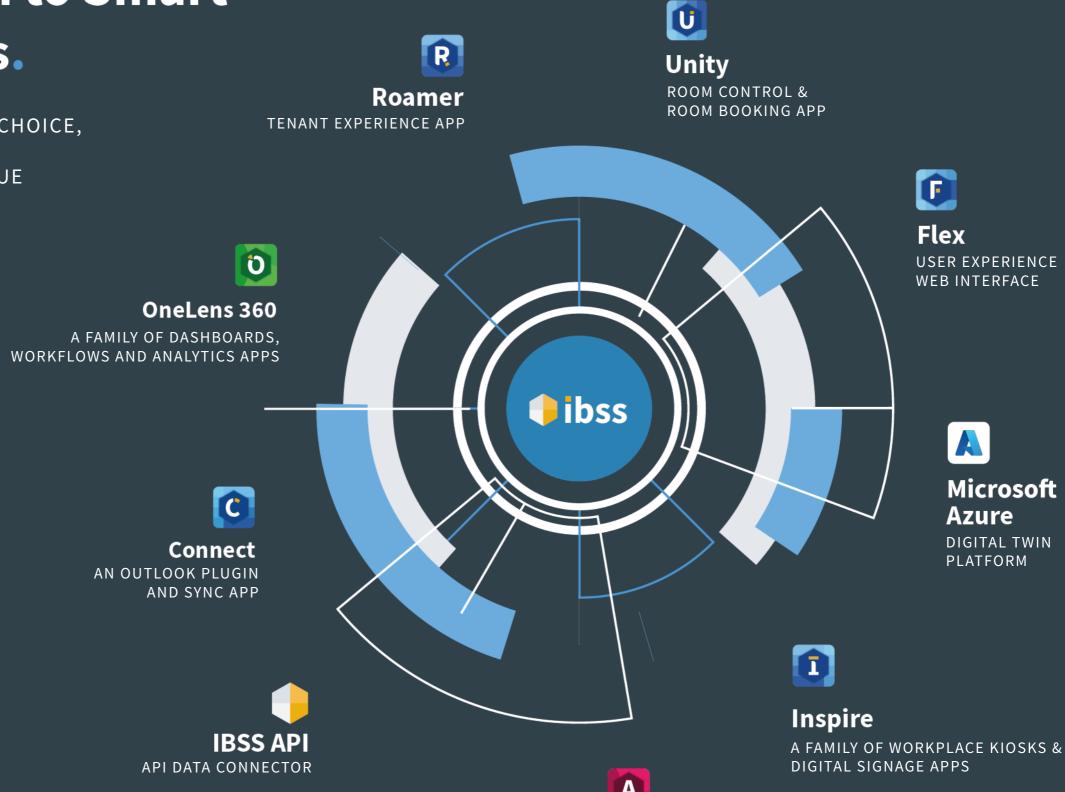




### A full-stack

## approach to Smart Buildings.

BRINGING YOU APP CHOICE, FLEXIBILITY, AND UNPARALLELED VALUE



**Admin Portal** 

BACK-END CONFIGURATION AND ROLE-BASED ADMINISTRATION





## Our App Suite.

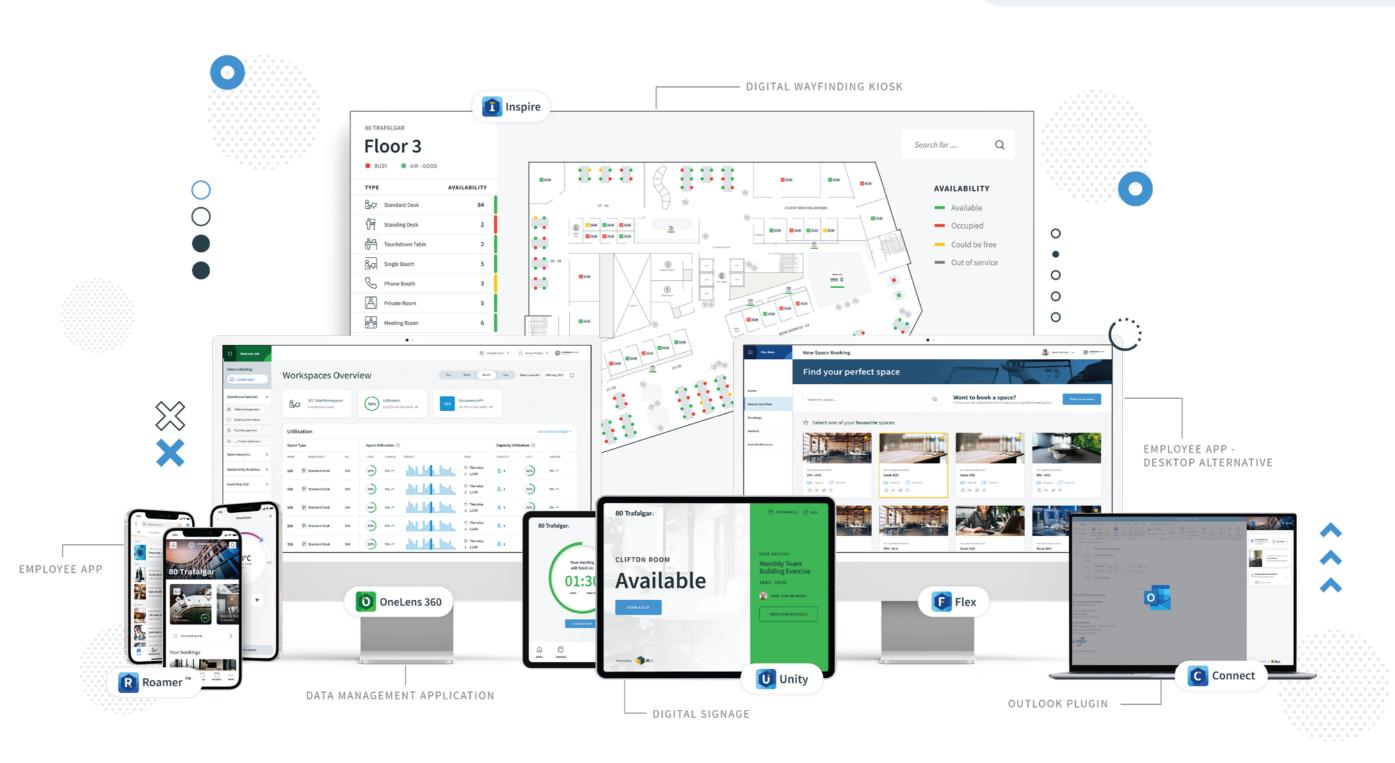
A CONSISTENT USER INTERFACE & CROSS-APP EXPERIENCE

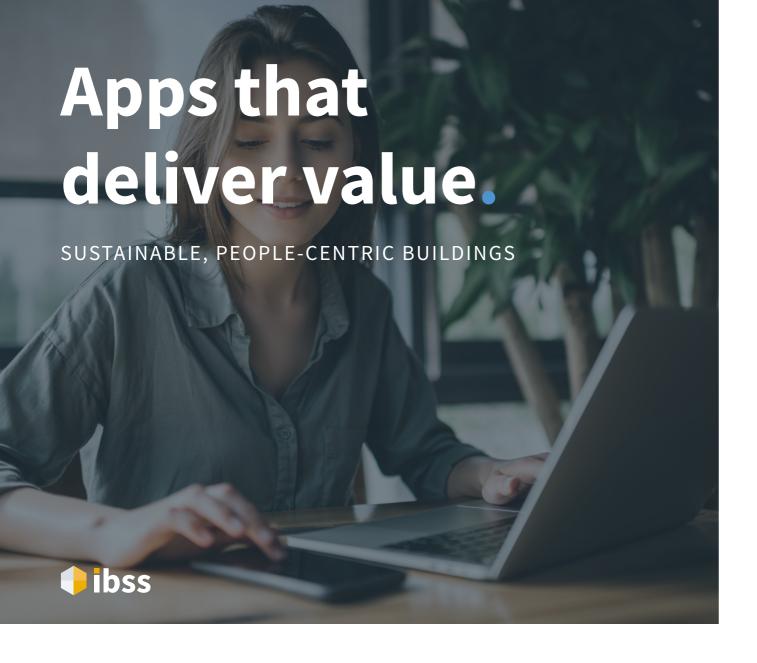
### World-class Apps Powered by a Cloud-Scalable Digital Twin

Roamer, Unity, Inspire, Flex, Connect, OneLens and our Admin Portal are all part of a family of UX, operational and self-administrative IBSS applications.

All of these applications are underpinned by –secure and resilient IBSS Data Digital Twin.

LEARN MORE







#### **Data-led Insights**

Digitization is all about data; good, secure, highspeed data. Whether you're a developer wanting to deliver, commission and witness a better building, or you're an operator wanting to supercharge your service models, optimize task performance and predictive thinking. IBSS unifies all spatial, static and live system data into a centralised and secure data digital twin. The IBSS twin has apps, workflows, analytics and visualizations tailored to help you do your best work.







#### **Unparalleled User Experience**

Buildings are designed for people. If a building can flexibly meet the ever-evolving expectations of its occupants and tenants, people will occupy that space happy, healthy, productive and eager to return. As a landlord, this means catering to your tenants digital needs to empower experiences within both the communal aspects of a building, as well as ensuring each tenant demise is 'digitally ready'. As a tenant and workplace team, user experience is about inspiring collaboration, fostering creativity and attracting and retaining the best talent on the market – our post-pandemic expectations of a high-quality working environment have changed, and therefore our spaces need to catch up and exceed those new standards. We're here to help.













### **Healthier, More Sustainable Building Assets**

Yes - User experience (UX) starts with a better performing building, but when we combine that with a digitized operational support model, we can create a fabric for healthier, more inclusive and more environmentally friendly buildings. From optimized Facilities Management (FM), to Net Zero Analytics and reporting (carbon, energy, water and waste management) – scalable, cloud-based, digital platforms like IBSS can take large complex data from operational technology (OT) and apply machine intelligence to identify hidden performance matters, asset inefficiencies and ultimately increase return on investments.







PAGE 20  $\rightarrow$  LEARN MORE

### • ibss

## Application Capabilities.

**OUT-OF-BOX VALUE** 



#### User Experience & Workplace

- **√** Wayfinding
- ✓ Space Booking
- ✓ Space Control
- ✓ Real-time Building Information
- ✓ Colleague-finding
- √ Visitor Management
- ✓ Cognitive Concierge
- ✓ Mobile-as-a-Pass Access Control
- √ Smart Catering
- ✓ Digital Locker Integration



### Sustainability, ESG & Space Management

- ✓ Indoor Air Quality (RESET certified)
- ✓ Energy Management
- ✓ Waste Management
- ✓ Water Quality & Usage
- ✓ Demand-side Response
- ✓ Carbon Reporting
- ✓ Space Utilization
- ✓ Occupancy Sensing
- √ IoT Asset Control



#### **Operational Exellence**

- ✓ Predictive Maintenance / Fault Detection & Diagnostics
- ✓ Anomaly Detection and Performance Regressions
- ✓ CAFM Integration
- ✓ Energy Management
- ✓ Hard FM Dashboards and Workflows
- ✓ Soft FM Dashboards and Workflows
- ✓ Soft FM Service Worker Mobile App
- **✓** BMS Alarm Management



## Trusted & Secure.

WHEN IT COMES TO DATA PRIVACY, WE'VE GOT YOU COVERED



#### **App Security**

#### Single Sign On (SSO)

Azure Active Directory Single Sign-On (SSO) automatically signs IBSS app users in when they are on their corporate-approved devices.

#### Multi-Factor Authentication (MFA)

IBSS natively supports MFA, granting users access to apps only after successfully supplying two or more pieces of evidence.

#### Role-based Access Control (RBAC)

Manage precise access to specific data, resources and actions through Azure Active Directory.

#### **Data Encryption**

All IBSS connections adopt a TLS-1.2 or higher communication protocol for secure data transactions.



#### **Edge-to-Cloud Protection**

#### **Secure Edge Gateway Technology**

Securely publish the right messages to the cloud via low-latency edge gateway and analytics technology from ICONICS.

#### **Rapid Cloud Connectivity**

All edge data pushed to and controlled by the IBSS cloud is TLS encrypted with x.509 certificates, delivering state-of-the-art technology to combat eavesdropping and data theft.



#### **Cloud Security**

#### Role-based Access Control (RBAC)

Authorize the right access requests through OAuth2.0 tokens.

#### **End-to-end Security**

The Azure-based IBSS platform has been developed to SDLC standards ensuring availability, validity and integrity across every layer of the twin architecture.

#### **Native Azure Security**

Safeguard workflows and scan for vulnerabilities via Microsoft's Azure Security Centre (ASC).

#### **Secure Industry-standard Protocols**

Securely communicate to sensors, systems and things via our extensive library of open-standard communication protocols and drivers. Think OPC, OPC UA, Modbus, BACnet, Web Services and much more.



#### **Secure Managed Services**

#### **IT Security Standards**

The IBSS public cloud benefits from market-leading and independently acclaimed IT security standards from ICONICS UK. Our business holds ISO-2700, Cyber Essentials Plus, ISO9001 and many more security related certifications.

#### **World-class Support**

Our global expert team of engineers, IT specialists, project managers and developers will be on hand to all IBSS clients – giving your smart building projects piece of mind, scalability and security.



# Subscription Plans Made Simple.

SUBSCRIBE | ONBOARD | DEPLOY | SCALE

Get up and running fast with our tailored IBSS subscription plans. Available at essential, pro and premium levels, we have built a number of market-specific 'bundles' that aim to group technology, apps and outcomes into easy-to-consume pricing plans. From high-performing buildings to barely-automated listed buildings, our bundles can scale to outcomes, budgets and real estate strategies.

#### **Landlord**

DELIVER WORLDCASS TENANT EXPERIENCES THROUGH DIGITAL CONNECTIVITY



#### Workplace

ENTER A NEW ERA OF IN-STORE EXPERIENCES



#### Facilities Management

STAY AHEAD OF THE FM GAME



#### Retail

ENTER A NEW ERA OF IN-STORE EXPERIENCES



#### Residential

UNLEASH INTER-CONNECTED & ECO-FRIENDLY COMMUNITIES



#### **Education**

ATTRACT AND RETAIN THE WORLDS BEST



#### **Airport**

SMART, SUSTAINABLE & RELIABLE TERMINALS



#### **Healthcare**

ENTER THE NEXT-GENERATION OF CONNECTED HOSPITALS AND LABS



#### **Science**

**BEYOND INTEGRATED LABS** 



#### Construction

TRANSFORM THE BUILT WORLD





#### **ICONICS UK**

Opening in 1991, ICONICS UK brings worldclass service and support for ICONICS software tools to the UK marketplace. Acting as a support and delivery centre of excellence, ICONICS UK provide a full suite of services from product and partner support and training, design and implementation consultancy, through to full project delivery and software development. Our team have many years of experience in the software automation industry, with a strong track record of successful project delivery.

#### **IBSS Platform and Apps**

ICONICS UK have taken their robust solution delivery experiences in the Smart Buildings marketand combined that with the latest platform capabilities of ICONICS and Microsoft Azure to form a cloud-based Intelligent Buildings Software Stack (IBSS). Acting as a semantic digital twin, IBSS natively comes with suite of user experience and operational excellence applications that support a variety of outcomes for the Built World. From sustainability and net zero initiatives, to digital workplace and real estate optimisation projects – we've got you covered.

#### **ICONICS Global Company Culture and Partners**

ICONICS promote an international culture of innovation, creativity and software excellence in product design, development, technical support, training, sales and consulting services. This applies to end users, systems integrators, OEMs and Channel Partners. ICONICS has over 300,000 applications installed in multiple vertical industries worldwide. ICONICS world headquarters is located in Foxborough, Massachusetts, USA, and the company has offices located throughout the U.S., Europe, Asia, and Australia.



