

ZONES™

Reduce cost, improve security
and efficiency. Today.

Intelligent Facilities



The Situation

Buildings are complex systems that serve large diverse populations with many different purposes. Until recently, the systems used in both newly constructed and existing buildings

required separate networks and controls that are difficult (and costly) to maintain. Each system is typically installed, operated, and managed completely independently from the other systems.

Today, technology is rapidly changing how we design, construct, operate, commission, and upgrade buildings. Building services can now be converged and delivered over centralized IP-based networks. The result? cost reduction, better efficiency and a backbone for creating facilities with better monitoring, analysis, automation, and control.

Zones is leading the way in combining IT technologies and traditional building systems into an integrated solution to meet the challenges of the 21st century; working closely with businesses in every industry to help transform buildings into **intelligent facilities**.

Zones is your single source for technology solutions and services. Visit zones.com or call 800.408.ZONES.

The Challenge

The construction industry is facing a series of fundamental challenges that affect every player in the building lifecycle – from architects to owners to tenants. Despite technology advances, the majority of new commercial facilities in North America are not addressing the changing business needs of their occupants. Owners continue to focus their attention on up-front costs and are not adequately considering the inevitable: increased building lifecycle costs.

Existing buildings are undergoing similar challenges. Internal control systems for heating, ventilation, air-conditioning (HVAC), fire and safety (alarms, video surveillance and access control), lighting, elevators, parking systems, and other sensors and controls are historically standalone and proprietary in nature. Communication and IT infrastructures such as telephones, computer networks (both wired and wireless), and location tracking systems are often on discrete networks. In the absence of a centralized infrastructure, these individual systems become barriers to collaboration and agility resulting in increases to the building lifecycle costs of design, construction, operations, commissioning and renovation.

The Solution

Zones can help you address the challenges of rising building costs and create long term sustainable solutions that deliver positive business outcomes with attractive return on investment (ROI). By integrating all of the previously disparate systems onto a high speed, centralized, wired and wireless Internet Protocol (IP) network core, Zones brings an environment where all of the previously disparate systems can share information. Zones will apply the appropriate technology and service; various protocols, wiring types, and languages will be converted to standardized, secure and



non-proprietary open networks. Additional sensors will be added to ensure availability of the data needed to manage and control the environment. Analytics software will interpret the information for additional levels of automation and control.

The new fully converged environment transforms the building into a fully secure, intelligent facility. Interoperability across all systems creates options for the systems to work together in ways that improve operations, reduce energy cost, and enhance safety and security. Just as important, it allows for the addition of new interactive services in the building that create a more productive, responsive environment for everyone involved.



How secure is your building's Security System?

With intelligent building automation systems, you'll integrate and manage core systems that can ...

- Initiate policy-based actions that will automatically lock doors and illuminate targeted areas.
- Increase video surveillance with high resolution cameras positioned strategically around the premises.
- Provide advanced analytic capabilities (E.g., facial recognition) for better identification.

Working with Zones, facility owners can develop a comprehensive and cost effective implementation plan to achieve their goals for an intelligent facility:

The Executive Envisioning Session

We recommend that every organization start with an Executive Envisioning Session. It's a strategic collaboration session facilitated by Zones IoT solution specialists and industry experts who will work directly with your key stakeholders to develop an understanding of how IoT solutions can solve your problems. The Executive Envisioning Session also provides the output of a holistic, strategic lifecycle plan for transforming and evolving your building into an intelligent facility.

The Readiness Assessment

Performed by Zones IoT specialists and engineers, the Readiness Assessment follows the Executive Envisioning Session and will ...

- Create a single comprehensive solution to implement at once for maximum benefit.
- Provide a roadmap of multiple phases and projects that meet investment/ROI strategy and budget constraints.
- Address a specific project to resolve an urgent need, and help you develop a long-term transformation strategy.
- Provide a repeatable foundation to periodically refresh the organization's strategy as technologies evolve.

In addition to providing an on-site evaluation to determine capability and readiness for new IoT solutions, the Readiness Assessment is primarily a technological assessment that will address current capabilities and capacity, but takes goals, objectives, budget constraints, and high-level changes applicable to process and staff into account.



Accelerated Prototype

Our Accelerated Prototype service combines an Executive Envisioning Session, a Readiness Assessment, and a proof of concept prototype. Following the Executive Envisioning Session, our specialists will join you in selecting a single IoT project that will address a specific business need. The Zones team then performs a Readiness Assessment to ensure compatibility before deploying the IoT Gateway Platform to ensure project goals will be achieved. This entire process – from concept to measured results – is typically accomplished within two months and is designed to meet long-term objectives.

Time to act: Put intelligent facilities to work for you

The transformation to intelligent facilities is underway. Organizations are already reaping the value promised by the Internet of Things (IoT) and intelligent facilities. Why risk losing competitive advantage as costs continue to rise and change continues to accelerate? Focus on moving forward with the implementation of proven IoT solutions.

Case Study:

Pennzoil Place creates dramatic cost savings by integrating building systems onto a single network.

The Challenge:

- Reduce energy costs in the two 35-story glass tower buildings
- Provide better visibility and control of energy loads and usage for management
- Free-up staff time for higher-value work by eliminating the need to monitor and maintain multiple systems

The Solution:

- Facility-wide single wired and wireless converged IP network
- Data from over 100,000 sensors collected from all building systems and presented for monitoring and analysis
- A single dashboard for round-the-clock management of building systems from a single location

The Benefits:

- Reduced energy costs from \$4.2 million per year to \$2.0 million per year (\$2.2 million savings in yearly energy costs)
- Increased staff efficiency and building management
- A future-proof foundation where incremental building services may be continually added for incremental revenue streams for the building owners



See our Pennzoil Place YouTube video.

Intelligent Facilities Benefits

Energy costs are reduced

By connecting all systems into a centralized management system, your facilities staff can provide more comprehensive monitoring and management of the environment from a single pane of glass. The additional data collection and analysis of energy demand and load provide important insight into how to adjust and tune the systems for the greatest efficiency. This information provides valuable insight into how to reduce operating costs and scheduled run times.

Greater control and reduced response time allow staff to reduce operating costs for energy by taking advantage of utility rebates – and generate revenue streams – from utility driven, demand side management programs.

Building safety and security are increased

Intelligent facilities provide better, cost effective video surveillance that can monitor the environment from anywhere in the world, and converged solutions provide greater access control. For example, when a security or safety event occurs, security staff can have the system automatically trigger additional lighting, open and lock doors, ground elevators, and automatically communicate status and instructions to occupants through digital signage, intercoms, or IP-based telephones – all automatically or from a single centralized location.

Work environments are more productive and efficient

The time and cost required to locate an individual is reduced when a worker's location is tracked based on where they access the network, or through integrated building sensors. Intelligent facilities can automatically respond, shifting phone numbers to new locations, granting authorized access to resources, adjusting lighting and temperature outside normal schedules, and automatically providing instructions or notifications via communication systems. Automatic moves, add-ons, and changes will reduce work flow and response, and help eliminate manual reconfiguration and management across any system tied into intelligent facilities infrastructure.

Why Zones is your go-to source for IT solutions:

- Zones offers a comprehensive set of life cycle services to help our clients with intelligent facilities strategy, architecture, design, implementation, and support.
- We develop long-term strategic partnerships focused on delivering proven value and excellent return on investment.
- While other suppliers focus on a single technology or building system, and deliver only a portion of the solution, Zones delivers an integrated intelligent facility where the value of the entire solution greatly exceeds the sum of stand-alone systems and components.
- Our approach takes a holistic view of building management including the facility owner's business goals, objectives and investment strategy, historical data, age and condition of the facility, budget limitations and operating requirements, and geographical and local utility variations.
- Our unique interconnect IoT platform integrates all disparate systems onto a single IP enabled network – and Zones will apply the appropriate technology and services. Zones will create interactive scenarios across and between all building systems to create incremental value, cost savings, safety, and build experiences to improve productivity and efficiency.
- Zones leverages technology from strategic partnerships with many leading OEM manufacturer. We've built an extensive ecosystem of partners who provide the best-of-breed components, equipment, and services required for integrated IT and building solutions.



Get Connected!

For more information about Zones IoT and intelligent facilities visit zones.com/IoT or contact your local Zones solutions specialist or account executive.