

A low-angle, perspective shot of a modern building's glass facade. The glass panels are dark and highly reflective, mirroring the surrounding environment. The reflection shows a lush green field with a single, large, leafy tree on a slight rise. The sky is a clear, bright blue. The overall composition is clean and minimalist, emphasizing the building's sleek design and its integration with nature.

Improve services. Reduce costs.
Leave a smaller footprint...

CitectFacilities

Facilities Manager

CitectFacilities is an open and integrated solution for facilities management. It is specifically designed to manage large-scale environments, connecting multiple sites and multiple functions. CitectFacilities helps you lower operating costs, improve tenant services and reduce energy consumption. What more could you ask for!

CitectFacilities integrates all the various building automation systems such as heating, ventilation and air-conditioning (HVAC), lighting, access control, elevators, video security, fire and smoke control, electrical distribution, energy use and reporting and preventative maintenance across your entire enterprise.

With all of these functions neatly managed “under one roof,” so to speak, the costs of operator training, ongoing maintenance and energy usage are all reduced. The only thing that is increased is your control over your environments!

CitectFacilities provides centralized visibility to control all facilities systems, whether they are from multiple vendors, in a single building or across large, multiple-site contexts. Its open architecture, system flexibility and unrivalled connectivity, combined with easy-to-use configuration tools, mean that it will integrate seamlessly with your existing systems, preserving your investments while increasing productivity.

In the past, proprietary systems and networks were used to operate individual functions such as HVAC, lighting etc. Combining the data from these disparate systems, even from within a single building, could be a complex and cumbersome process as each building system had its own communications protocols. CitectFacilities does away with all that inefficiency so that you can now achieve round-the-clock reliability and regulatory compliance, even across wide area networks.

CitectFacilities can be used in office buildings, retail shopping centers, sporting venues, airports, hospitals, industrial complexes (business parks), data centers, school/university campuses, hotels/resorts, amusement parks....

ENTERPRISE-WIDE MONITORING AND CONTROL

CitectFacilities integrates all of your existing facilities systems into a convenient, single facilities management system from which you can centrally access and oversee control. This integration is achieved by connecting to open protocols, such as BACnet, LONWorks, EIB and OPC, which are favored within the building automation and facilities management industries. So, you are still free to select the best-in-class solution for each function but all your systems will work together smoothly.

INCREASE RELIABILITY

Reliability is a key characteristic of the CitectFacilities solution. It is designed with multi-level, hardware-independent redundancy. Optional dual servers and dual networking can provide an additional level of reliability.

IMPROVE BUILDING AUTOMATION EFFICIENCY

Operators can use PC-based displays anywhere on the network to change set points and override equipment operation. CitectFacilities permits flexible 24/7 monitoring of multiple sites, reducing staffing requirements and improving the productivity of building maintenance and security personnel.

PRESERVE CAPITAL INVESTMENTS

CitectFacilities protects your existing and future investments because it works with what you already have. No need to throw out systems you have already invested in and start from scratch. Rather, CitectFacilities integrates with all networks commonly used in building automation, such as BACnet, LONWorks, Johnson Control and others. CitectFacilities works with what you have to make it even better. And, because it incorporates open standards, you can continue to add new building automation technologies of your choice. All this means that CitectFacilities offers low risk and a low entry cost.



What it means for you

Property Owners

- Lower your overall operating costs.
- Improve and reduce the cost of tenant services.
- Protect your existing and future facilities investments by using a highly flexible system with unrivalled connectivity that enables you to expand while still retaining your existing facilities equipment.
- Experience a low risk, low entry cost solution.

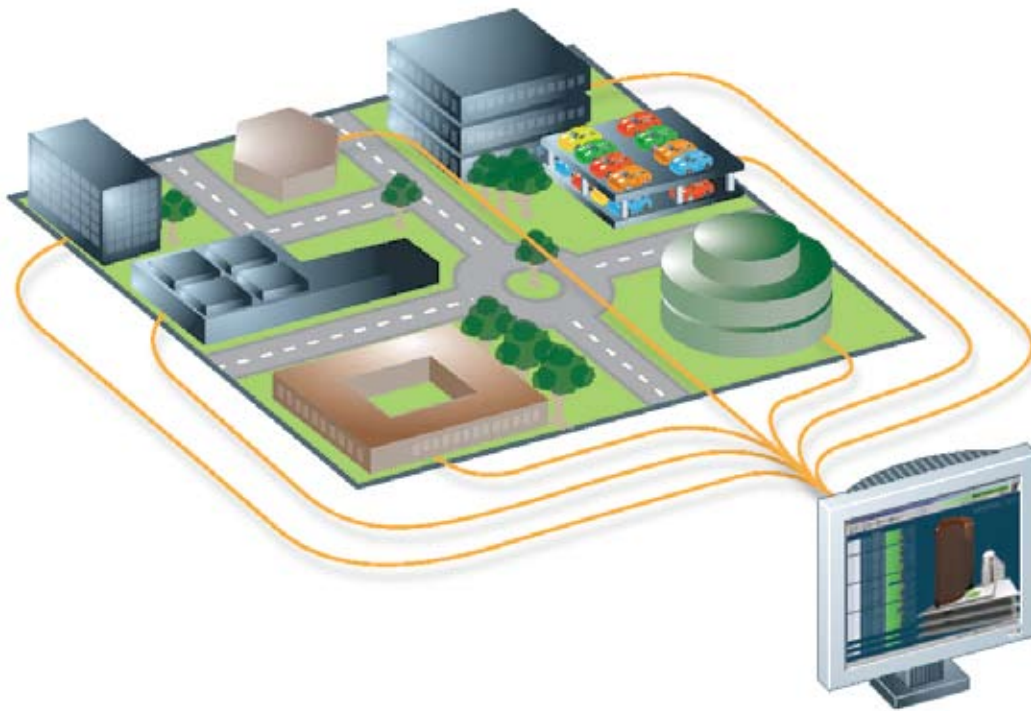
Facility Managers

- Improve staff utilization and effectiveness.
- Increase responsiveness to tenants through real-time visibility of all facilities systems, including central alarm management.
- Reduce energy costs.
- Comply with energy utilization regulations through energy reporting options.

Operators

- Enjoy the flexibility of being able to operate and control all your integrated facilities systems from one location, be it central, local or on the move, through advanced clustering options.

Central Visibility and Control



ENTERPRISE-WIDE MONITORING AND CONTROL

Distributed facilities systems management with buildings spread across a campus or city.

RELIABILITY PROVIDES “PEACE OF MIND”

CitectFacilities’ design is centered on reliability. A reliable system provides building managers with the peace of mind that their building systems are being monitored and are manageable even in the event of a system failure. Each level of the facilities system provides the option for at least one level of redundancy.

For high availability or distributed facilities systems (with buildings spread across a campus or city), CitectFacilities delivers communications between the facilities monitoring systems and the controllers in remote locations. Communications are strengthened by the ability to specify multiple communications channels. Ethernet or dial-up over telephone lines can be used alone or in combination to define as many communications links as required. Each link can be prioritized to enable the selection of the most cost-effective communications path.

FLEXIBILITY ENABLES “THE RIGHT PEOPLE”

CitectFacilities channels all the information from each building or controller within the system into a single visualization environment. Access to all of this data is provided via user security within CitectFacilities. In this way, a single tenant with space in multiple buildings can have a single view for alarms and system control. At the same time, a separate view of the building, regardless of the tenant, is available for building services or security.

REMOTE ACCESS AND MOBILITY

With CitectFacilities’ remote access and mobility solution, you can monitor your system remotely via the Internet.

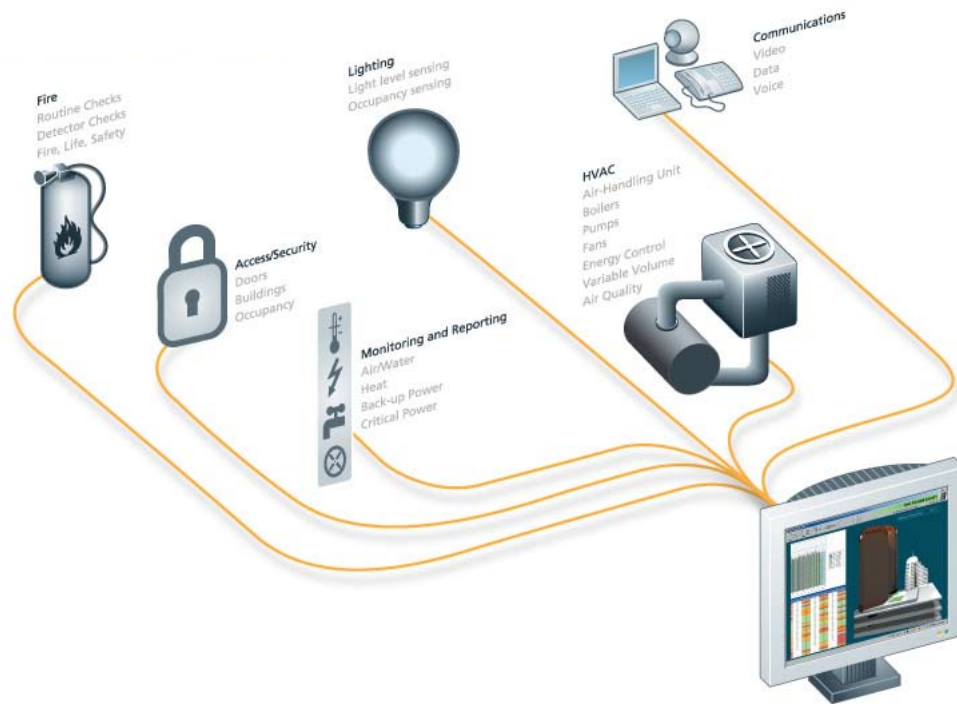
Traditionally, if a facility manager had to respond to a system alarm or maintain equipment within a building, they would have to physically go to that building to assess the situation. If issues arose in more than one site simultaneously, the



“The CitectFacilities platform provides the Council with records of equipment breakdown histories for their buildings, enabling the Council to perform trending to anticipate and obviate longer-term problems.”

LES MOON
Engineering Director, Entech,
on the London Borough
Council project

System Connectivity



OPEN ACCESS DELIVERS "INTEGRATED SYSTEMS"
CitectFacilities' open interfaces, delivering a complete picture.

manager would be unable to prioritize which one required more urgent attention. Facility managers and operators now have maximum mobility to remotely monitor all their facilities' systems, even when travelling, with our Mobility solution. Mobility provides a flexible, easy-to-use operator interface with full access to system alarms and variable tags. It allows users to make informed decisions and prioritize the actions required regardless of their location.

OPEN ACCESS DELIVERS "INTEGRATED SYSTEMS"

CitectFacilities provides open interfaces to integrate the many systems required for a complete facilities monitoring system.

While it is traditional for building automation projects to include different systems for HVAC, access control, fire detection or lighting, this leaves the user with a number of different systems that they need to manage and reconcile in order to get a

complete picture of their facility. CitectFacilities' open interfaces enable information from all these systems to be combined and delivered through a single interface to the user, resulting in a simpler and more manageable system.

Whether you are a multi-building campus or just a growing company, it is normal for your facilities monitoring needs to change. As building space increases, you will inevitably end up with a number of different building controllers. The open interfaces of CitectFacilities combine data from each of these systems to create a single, unified view, allowing customers to preserve the capital investments in their existing building control systems, while reducing the training costs for staff on multiple monitoring systems.

CitectFacilities' open interfaces also provide the ability to integrate with other systems. Camera systems and security can all be combined and provided through a single point. If you are a

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“Combining the different systems into an integrated concept is smooth and easy with CitectFacilities. This ensures the long-term protection of our investments as we are free to implement additional multi-user applications as needed, with seamless interoperability.”

STEFAN WINKELMANN
Technical Coordinator
Nuremberg Exhibition
Center

Energy Efficiency



Energy comparison reports



Energy usage reports using Tag Grouping

manufacturing site, then plant operations can be monitored and facilities and production information shared. This is becoming increasingly important as modern, green buildings start to integrate manufacturing automation systems, such as electrical power generation, within the scope of the facilities system.

The facilities market is large and covers many different applications. By integrating with additional systems, CitectFacilities can improve automation efficiency or provide a simpler interface to the building users.

Take the example of a hotel, for instance, where the ability of the reservations system to communicate with the facilities management system (CitectFacilities) can optimize energy consumption, security monitoring and overall guest services. By knowing when rooms will be occupied or vacated, the HVAC system, elevators, even the entertainment systems can be automatically adjusted to ensure optimum service to the guest while maximizing savings for the hotel.

BENEFITS

- Save money through more efficient utilities usage.
- Improve decision making and control of centralized, easy-to-access facility systems.
- Increase the reliability of your system.
- Maximize your mobility by using wireless

technology to monitor and control your facility from anywhere at any time.

- Lower your Total Cost of Ownership through more efficient use of existing staff.

ENERGY EFFICIENCY

Conserving energy has become a crucial challenge globally as natural resources are close to exhaustion, energy costs are rising, power grids are reaching capacity and environmental concerns are increasingly prevalent. It is estimated that over 60% of operations and maintenance expenses are for energy use alone and **can be reduced by up to 20% through more efficient monitoring and maintenance.**

CitectFacilities closely monitors and controls energy usage, resource consumption and emissions increases, thereby helping to reduce operating costs and the environmental impact.

CitectFacilities allows buildings to operate more efficiently by:

- centralizing all the data for energy usage.
- providing analysis tools to easily identify the cause of excess energy consumption or peak demand in real time.

The first step in understanding energy consumption is the ability to access all the data – CitectFacilities does exactly that. How? By being able to access all



“The big advantage with CitectFacilities is the ease of use and future maintenance. Citect ensures that customers like Mori Building encourage customer management of the systems and provide systems that can grow with them. Maintenance and design for future expansion is ensured in all Citect systems.”

TOSHIHIKO TATSUKI
General Manager
Fuji Electric Systems

Powerful Reporting



Kremlin Cathedral, Moscow

the major industry standard networks and many of the legacy controllers used in building automation systems.

To get the most mileage out of all of this data, you may want to take it to the next level by being able to collect it into a single database, generate reports and analyze your energy usage over time. This is where you can benefit from CitectHistorian. For example, CitectHistorian's array of industry standard reports enables you to analyze your energy efficiency.

The analysis of energy consumption over a specific time period allows different time periods to be overlaid, making changes in the consumption easily visible. Analyzing consumption over the past five days, the past five Mondays or the equivalent day in the previous year provides valuable clues to the causes of changes in energy consumption.

POWERFUL REPORTING

CitectHistorian is a powerful reporting and historizing tool that helps you manage the insight provided by CitectFacilities. Its reports can be delivered by email as a PDF or a spreadsheet to any user within the business. Making energy

consumption figures available in real time gives tenants a chance to instantly adjust usage and understand how their behavior affects energy costs.

SCHEDULER

Scheduling is another important feature in the building automation industry, where optimized energy usage is a key factor in saving money. CitectFacilities' integrated Scheduler tool ensures that after hours, heating and lighting are automatically switched off and room temperatures are lowered. Also, with configured "special days," the Scheduler can automatically control certain parts of your building during holidays or other irregular events.

CitectFacilities' connectivity with a large number of different device manufacturers (e.g. Johnson Controls, Landis & Staefa, Honeywell and TAC) used in the building automation industry, enables the Scheduler to act as a single point of configuration for all your equipment.

To find out more about how CitectFacilities can make your job easier and your systems more efficient, contact your local Citect office.

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CitectFacilities is now controlling the climate control automation system for the Uspenskaya church bell tower, Ivan the Great Church and the museum office. This system was chosen due to its open architecture and reliability. It was important for us to install a system with the ability to expand at a later stage and CitectFacilities provides an opportunity for integrating other monitoring and control systems.”

IGOR SERGEEV
Chief Engineer
Kremlin Museum

Contact Citect today at www.citect.com