

Economic conditions, tighter budgets and a more competitive marketplace have made the efficient management of building performance more important than ever for commercial real estate owners and operators. Property managers and facility teams must work to improve system performance and reduce energy and maintenance costs, all while consistently managing demands related to occupant comfort. When multiple building systems are involved and facilities are spread across many locations, this becomes an even greater challenge.

Tracer[™] ES, the Trane[®] Web-based building automation solution, can help overcome the complex management, operational and occupant comfort challenges of multiple-property environments.

Operating cost challenges:

- For commercial property owners, energy costs represent a significant operating expense, and fluctuating costs make forecasting difficult. Property owners and operators must find a way to control energy consumption and develop energy reduction strategies.
- Multiple properties often mean various and incompatible systems
 controlling the different buildings. This can make it difficult to
 integrate the systems or make upgrades to technology. Additionally,
 the use of proprietary systems means you may be locked into a
 single vendor for system upgrades or changes.
- Purchasing, licensing and maintaining hardware, software and upgrades are a continuous drain on IT budgets and personnel.
- Evolving working conditions that accommodate many needs can make it hard to manage spaces effectively and efficiently, as more workers expect flexible workspaces and hours.

Operating cost solution:

Tracer ES offers a single, open platform that allows integration and communication between multiple, existing systems like lighting, fire and

security, no matter their age or brand. No more proprietary systems that don't play well with others, or that lock you into their technology with expensive upgrades. Tracer ES makes it easy to integrate, operate and maintain all your systems — even connecting your HVAC systems with other building controls — with a Web-based, scalable platform. With Tracer ES, you can manage all your properties as a single enterprise to help achieve greater energy savings and improve operational efficiencies.

The integration platform allows you to protect your existing infrastructure investment, while providing the flexibility and adaptability to positon you for future changes or expansion as your budget allows. Because Tracer ES resides on a central server, all of this can be done while using your existing IT infrastructure, saving you the cost of purchasing and maintaining multiple software and hardware platforms.

Occupant comfort challenges:

- Ensuring tenant comfort and satisfaction and ultimately tenant retention — are top priorities for real estate owners and property managers. Tenant dissatisfaction and turnover can be costly and time consuming problems for property managers or owners; providing a comfortable environment can help mitigate these issues.
- Finding ways to maintain optimal indoor air conditions, such as humidity, temperature and ventilation, for tenants and their employees is a concern for real estate owners and property managers.
- Studies have shown clear associations between office worker
 performance and indoor environmental conditions, such as
 temperature, humidity and carbon dioxide. Improving these
 conditions can be a major challenge for organizations that lack the
 systems to effectively monitor, control and track their environments
 on an enterprise level.

Occupant comfort solution:

Tracer™ ES can help organizations effectively and efficiently maintain comfortable, quality environments. Tracer ES will monitor and control temperature, humidity and carbon dioxide levels — within a single building or multiple facilities — to detect variances before they affect comfort and indoor air quality. Tools such as industry-leading graphics, intuitive navigation and easy-to-use dashboards help significantly reduce response time to address occupant issues across a large enterprise. The advanced reporting capabilities of Tracer ES, along with the ability to track and store long-term data, means you can monitor and review specific building and system performance information. Performance comparisons across your portfolio show where your systems are working, and where they may need to be improved for greater occupant comfort and efficiency.

Staff productivity challenges:

- · Facility and maintenance departments are asked to do more with fewer employees as operating budgets are tightened. Your staff may be spending significant time responding to service and maintenance calls — and they often have no way to know the severity of the issue when they're off-site or away from the building.
- · Many organizations lack the tools to simplify the management of multiple facilities. As a result, building managers and operators are forced to spend time dealing with varying building management systems that may operate quite differently in order to change a schedule, manage alarms or make lighting adjustments, for example. This issue is worsened when facilities are distributed throughout large properties or across geographic areas.
- A building automation system can provide a lot of valuable information about performance and ways to improve operational efficiency, but if the system is too difficult to understand and operate, it can be misused or underused by building personnel.

Staff productivity solution:

Tracer ES offers remote access via the Web and mobile devices, so your whole enterprise can be effectively managed from nearly anywhere, at any time. Instead of running from building to building, just log in to view your entire operation and instantly see all of your building systems. Manage and respond to alarms, change setpoints and modify schedules with just a few clicks from a single access point — an efficient solution that eliminates much of the inefficient use of time that consumes facility management and building operators. You are no longer tied to a specific workstation to access and manage your building systems.

An easy-to-understand user interface makes navigation easy, with all the necessary information just a click away. Use this readily accessible information to easily make changes to a building system. And with Tracer ES, user preferences can be tailored to your specific needs for complete customization of the building management experience.

The Trane solution:

Tracer ES is a powerful building management solution that gives you an enterprise-wide view into all your building control systems — whether you operate two commercial properties or hundreds. The Tracer ES software can be accessed from any secure Internet connection, offering the ability to easily view, monitor and make changes to your building systems from nearly any location.

The single user interface for multiple building systems allows operations staff to connect diverse systems and equipment vintages — both Trane and non-Trane brands — to easily integrate existing equipment with new technologies and capabilities throughout your real estate portfolio.

Facility management staff can use Tracer ES to remotely monitor and control energy management, lighting and HVAC systems, resulting in greater productivity and occupant comfort. Tracer ES can help reduce costs, improve efficiency and increase building performance over your entire portfolio.



To learn more, scan the code, visit Trane.com/TracerES or contact your local Trane account manager.



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