



Tracer[™] XT

Better data, better buildings, better business



Gain an integrated view of your data – and better control over your facility

Is your facility a cost liability...or an asset to your operations?

The conditions inside your building impact your business in countless ways. Environmental factors can weigh heavily into productivity and even quality. Meanwhile, requirements for missioncritical and process cooling, comfort cooling, air filtration, dehumidification, lighting and other energy-consuming requirements can drive up operating costs excessively—chipping away profit margin—if they are not well-managed.

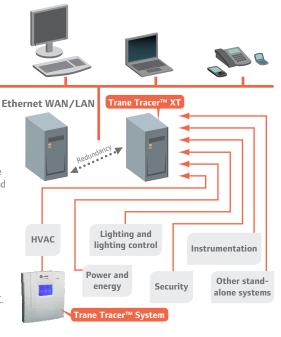
Tracer[™] XT is a software solution that provides a powerful approach to integrating data from stand-alone systems—HVAC, power, lighting, safety and more—into a common single user interface. Easy-to-read dashboards that can be tailored to specific user groups provide a holistic, real-time view that enables you to balance energy use and cooling requirements with energy efficiency to optimize building performance.

System architecture

Web enabled: Customize dashboards, provide remote operations and easily identify and manage alarms through secure communication links.

Operations control and visualization: Normalize disparate data sources and enable trending of real-time and historical data to drive insight and actions.

Controls and equipment: Low-cost integration of multiple protocols including: LonTalk, BACnet, MODBUS, OPC.



Delivers systems analytics that allow you to manage energy use and cooling requirements to optimize building performance.

Enhancing business results

Tracer XT supports industries where indoor environmental conditions are critical, such as data centers, food and beverage production, pharmaceutical manufacturing and other industrial facilities. It enables data-driven decision-making at all levels of your organization. Bottom line: Tracer XT improves building efficiency. It provides actionable views and analytics that allow you to manage energy wisely and optimize indoor environmental conditions to enhance business results.

Accelerating the speed of information

- Collects real-time data from equipment, meters, controls and software systems throughout the facility
- Robust data repository collects and archives data and provides *actionable* information at incredible speeds
- Tailored user-specific interfaces provide you key performance indicators that enable faster decision-making across the organization

Tracer[™] XT is part of the full portfolio of controls solutions from Trane. From chiller plant controls to Web-based solutions for multiple locations, Trane has a way to make any building better.



Raise performance with powerful, practical tools

High performance technologies and powerful features translate real-time data and high-level analytics into practical information.

- Tracer[™] XT supports multiple open protocols including BACnet[™], OPC, MODBUS, and many others to enable low-cost integration of your operational and production systems
- Web-based interface allows you to easily view, control and troubleshoot your system with full functionality from anywhere
- Dynamic and historical trending enables you to analyze issues, identify root causes and take actions to avoid future problems
- Integrated alarm management allows you to define, group, display, acknowledge, send email notifications and log alarms
- Scalable solution that can grow as the size of your businesses and systems expand
- Redundancy capability allows your system to continue to operate in the event of a hardware or software failure
- Sophisticated trending, graphical presentation and statistical analysis of all of your historical and real-time data enables better decisionmaking

Make better decisions-faster

Get a birds-eye view of your operations: The vast connectivity capabilities of Tracer XT can collect data from hundreds of different systems and devices around the world—even third party devices.

Tracer XT analyzes the constant stream of data and continuously updates PC-accessible dashboards that are customized with relevant information for each user in your facility. You don't need an analyst to interpret the screens; the visual user interface clearly communicates the status quo.

Move closer to zero downtime

Tracer XT enables you to identify—and resolve building system malfunctions faster than ever by constantly comparing current trends to historical data. Furthermore, you can use the data flow to avoid unnecessary downtime and reduce costs by scheduling maintenance based on current performance data.

The digital graphical replay lets you review past events in slow motion, making it easier to analyze issues so they do not happen again. And in the event of a system failure, "host redundancy" automatically shifts Tracer XT operation from the primary computer to a secondary computer, so you are never without mission-critical information.

Protect data integrity

Advanced security features virtually eliminate the risk of unauthorized file or program access. For example, you can map users to roles and specific data resources to strictly control access to critical information. An audit trail enables you to track any modification to the system, identifying who initiated the action and pinpointing the exact time of change.

An example of the solid payback for a data center

A planned conversion of outdated equipment at an existing data center evolved into a comprehensive cooling plant refresh and a long-term strategy leveraging Tracer[™] XT technology.

Value delivered:

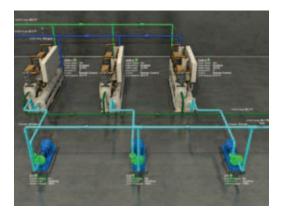
- More than 11% reduction of the annual energy used for cooling
- 50% reduction in chemicals
- Complete facility visualization, insight into prioritized actions
- Automated power utilization effectiveness (PUE) and EPA compliance data
- Multiple maintenance contracts eliminated

Stream usable information throughout your organization

Tracer[™] XT provides both global and granular views of your facilities infrastructure and operations. Performance snapshots are tailored to specific functions, such as IT, facilities management and production managers.



Site summary: At the site level, Tracer XT gives you a snapshot of both current status and performance trends.



Chiller overview: At the equipment level, Tracer XT enables you to tie maintenance to real-time data to optimize performance and improve uptime.

Specifications

Tracer[™] XT Server

Hardware requirements

- 2.4 GHz Intel Core family
- 2 GB RAM
- 500 MB of hard drive space for installation,
 250 MB of additional free drive space

Software requirements

Operating System

- Windows Server 2003 SP2 (32-bit or 64-bit)
- Windows Server 2003 R2 (32-bit or 64-bit)
- Windows Server 2008 (32-bit or 64-bit)
- Windows Server 2008 R2

Web server

- Microsoft Internet Information Services web server 6.0, 7.0 or 7.5
- OR
- Apache web server 2.2.15

Virtual machines

Supported on the following virtual machines:

- VMWare ESX 3.5
- VMWare ESX 4.0

Tracer[™] XT Client

Hardware requirements

- 2.4 GHz Intel Core family
- 1 GB RAM
- 250 MB of hard drive space for installation

Software requirements

Operating System

- Windows XP Professional SP3 (32-bit)
- Windows 7 Professional (32-bit or 64-bit)
- Windows Vista[®] Professional (32-bit or 64-bit)
- Support for Java v6.0 (provided)
- Additional software
- Microsoft Internet Explorer 7.0 or 8.0
- Adobe[®] Acrobat[®] Reader 8.0 or 9.0



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