



# Trane Connected Services

Step up remotely to equipment health

TRANE  
TECHNOLOGIES

# Trane Connected Services Solutions

Monitoring equipment and systems through network connectivity

## Level 1: Connect

Access critical data remotely

View equipment status wherever you are

Enable staff to access data, view log files, draw customized dashboards



Local Web UI

The Client can monitor their equipment through Web Pages using any computer equipped with a web browser, connected to the Local Network. Trane Tracer SC+ controller serves as a web Gateway.



Remote Web UI

The gateway is securely connected to the internet. The client can now access their assets from any remote location. Trane Tracer SC+ is setup to secure a connection to the Trane Connect server, using VPN / Web Sockets technologies and double level login Security.



Remote Maintenance

Based on level 1 features, Trane offers a blend of onsite and remote equipment inspections providing in-depth insights on equipment and system health status. Detailed Inspection Reports are delivered after each intervention. Trane experts will also make recommendations for improvements.



Active Monitoring

Trane Services Experts use the secured connection to monitor and diagnose the client's assets 24/7. This means optimized interventions leading to faster issue resolution. This feature also offers operator coaching during virtual interventions.

## Level 2: Maintain

Receive an expert assessment of your equipment status "on the fly"

Have Trane experts provide suggestions for equipment upgrades

Let Trane perform 24/7 alarm monitoring and diagnostics

Benefit from a professional maintenance plan at a competitive price

## Level 3: Optimize

Save energy while meeting all your KPI's

Monitor system operation continuously

Use critical performance reports and action plans to maximize productivity and minimize running costs



Operational Performance

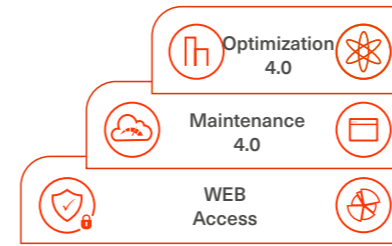
The Tracer SC+ controller harvests data about HVAC component performance and stores them on Trane Cloud. Trane Experts use this data to evaluate your HVAC system performance. A monthly report is sent to you and a quarterly face to face is set up to look at the findings and establish potential improvements.



Energy Performance

With meters in place on HVAC equipment, Trane Energy engineers will analyze the overall system consumption. They compare it to similar systems in other locations, monitor the client's KPI's, and prepare an evaluation of the system's energy performance and proposals for improvement.

Client



- Enhancement proposals based on real data
- Improved maintenance agreements  
Quicker reaction time
- Comfortable access to equipment running parameters

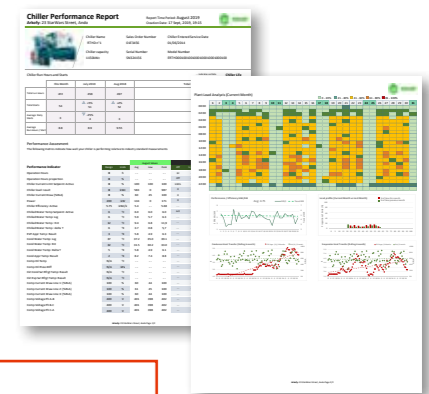
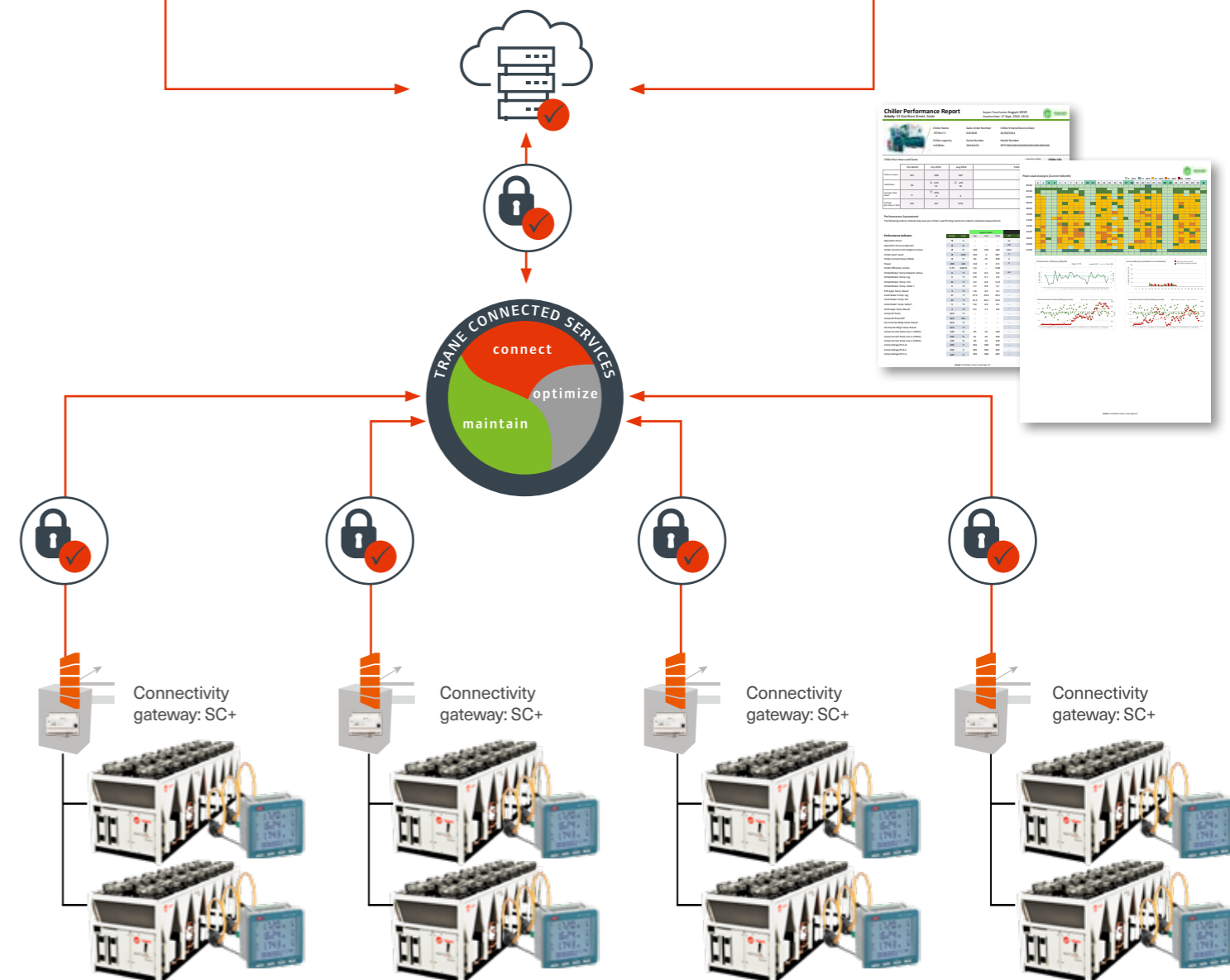


Trane



- Issue Analysis
- Proactive On-site Service
- Issues Repaired Remotely
- Service Response Rules
- Remote Monitoring

## Trane Cloud Servers



# Trane Connected Services

	WEB Access		Maintenance 4.0		Optimization 4.0	
	Local Web UI	Remote Web UI	Remote Maintenance	Active Monitoring	Operational Performance	Energy Performance
Local monitoring of equipment main parameters: Client	●	●	●	●	●	●
Remote monitoring of equipment main parameters: Client		●	●	●	●	●
Remote monitoring of equipment main parameters: Trane			●	●	●	●
Remote monitoring of equipment energy consumption: Trane				○	○	○
Remote monitoring of HVAC Plant main parameters: Trane			●	●	●	●
Control of equipment parameters: Client	●	●	●	●	●	●
Control of equipment parameters: Trane			●	●	●	●
Control HVAC Plant Controller parameters: Client	●	●	●	●	●	●
Control HVAC Plant Controller parameters: Trane			○	●	●	●
Trend Logs definition and visualization: Client	●	●	●	●	●	●
Trend Logs definition and visualization: Trane			○	●	●	●
Remote alarming through email	○	○	○	○	○	○
Remote Inspection: Trane			●	●	●	●
Equipment or HVAC plant active monitoring				○	●	●
Equipment preventive maintenance and monthly reports					●	●
HVAC Plant preventive maintenance and monthly reports					●	●
Equipment HVAC Performance monitoring					●	●
HVAC Plant HVAC Performance monitoring					●	●
Equipment HVAC Performance Improvement report					●	●
HVAC Plant HVAC Performance Improvement Report					●	●
Equipment Energy Performance monitoring						●
HVAC Plant Energy Performance monitoring						●
Equipment Energy Performance Improvement report						●
HVAC Plant Energy Performance Improvement report						●

○ = option



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.eu](http://trane.eu) or [tranetechnologies.com](http://tranetechnologies.com).