Tracer® Ensemble® On-Premise IT & Cyber Security Summary

What is Tracer® Ensemble® On-Premise?

Tracer Ensemble is a graphical front end for managing building and BAS (Building Automation System) controllers across an enterprise, campus or single building. Users access Ensemble through a web interface. It runs as a Microsoft® Windows® application and uses Microsoft® SQL® Server for data storage. Ensemble On-Premise is installed on a server that is hosted and managed by the customer. When configuring the network, it is recommended to isolate Ensemble and other BAS (Building Automation System) equipment from the rest of the network. A customer can transition their Ensemble installation On-Premise to our Tracer Ensemble Cloud Server. Ensemble Cloud is hosted in an AWS® (Amazon Web Services) environment. Ensemble Cloud simplifies maintenance and upgrades, and typically improves security vs. the On-Premise offering.
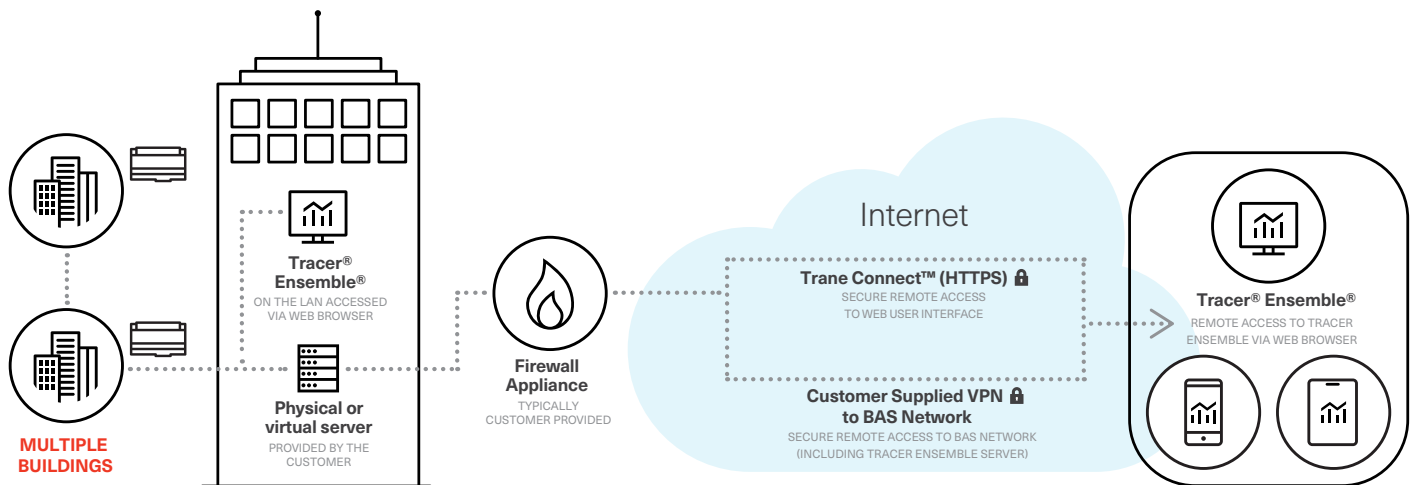
Endpoint Security

Ensemble web interface can be accessed using most modern web browsers. For access from outside your facility, it is recommended to use Trane Connect™ Remote Access over HTTPS. Trane Connect is an initial outbound-only connection via port 443 that uses WebSocket protocol to connect to the Ensemble server. Although not recommended, users may also access Tracer Ensemble after creating a VPN connection to the BAS network.

Tracer Ensemble's web user authentication and authorization are managed in the Ensemble application, an Identity Provider that supports SAML 2.0, or through an Active Directory server integration. A specific application-level permission can be assigned to individual users to limit access and abilities. As an example, individual permissions can allow a user to view, edit, add or delete data associated with specific equipment or specific buildings.

Network Security

Ensemble should be installed behind the customer's firewall. The server can be a physical or virtual server. Connectivity between Ensemble On-Premise and BAS controllers is via BACnet/IP and HTTP or HTTPS. BACnet/IP is a data communication protocol for building automation and control networks that use specified UDP ports. The port designation is configurable; the default port is UDP/47808.

MULTIPLE BUILDINGS

Tracer® Ensemble®
ON THE LAN ACCESSED VIA WEB BROWSER

Physical or virtual server
PROVIDED BY THE CUSTOMER

Firewall Appliance
TYPICALLY CUSTOMER PROVIDED

Internet

Trane Connect™ (HTTPS) 🔒
SECURE REMOTE ACCESS TO WEB USER INTERFACE

Customer Supplied VPN 🔒 **to BAS Network**
SECURE REMOTE ACCESS TO BAS NETWORK (INCLUDING TRACER ENSEMBLE SERVER)

Tracer® Ensemble®
REMOTE ACCESS TO TRACER ENSEMBLE VIA WEB BROWSER

Data Privacy

Trane Technologies™ Company, LLC ("Trane Technologies") respects individual privacy and values the confidence of its customers, employees, vendors, consumers, business partners and others. To learn more about Trane Technologies Privacy Policies, please visit https://www.tranetechnologies.com/en/index/privacy-policy.html.

Data Security

Tracer Ensemble uses a Microsoft® SQL® database for data storage. Ensemble's utilization of data is limited to *HVAC Machine Data* only. HVAC Machine Data is data generated and collected from the product or furnished service without manual entry. HVAC Machine Data is data relating to the physical measurements and operating conditions of a HVAC system, such as but not limited to, temperatures, humidity, pressure, HVAC equipment status. HVAC Machine Data does not include Personal Data and, for the purposes of this document, the names of users of Trane's controls products or hosted applications shall not be Personal Data, if any such user chooses to use his/her name(s) in the created accounts within the controls product (e.g.,firstname.lastname@address.com).

HVAC Machine Data may be used by Trane: (a) to provide better support services and/or products to users of its products and services; (b) to assess compliance with Trane terms and conditions; (c) for statistical or other analysis of the collective characteristics and behaviors of product and services users; (d) to backup user and other data or information and/or provide remote support and/or restoration; (e) to provide or undertake: engineering analysis; failure analysis; warranty analysis; energy analysis; predictive analysis; service analysis; product usage analysis; and/or other desirable analysis, including, but not limited to, histories or trends of any of the foregoing; and (f) to otherwise understand and respond to the needs of users of the product or furnished service.

Data can be exported from Tracer Ensemble via emailed reports. The reports and recipients are configurable inside the Tracer Ensemble application.

Maintenance Considerations

The customer is responsible of the server maintenance, backups, and security patches for the server. New features are released semi-annually, while hotfixes and Service Packs are released as necessary. Trane recommends updating firmware frequently to have the latest features and the latest cyber security updates. These updates can be installed by the local Trane office, or provided to IT to install. With Tracer Ensemble On-Premise, the customer manages security including Microsoft security patches for the server.

Customer Responsibility

The customer's IT staff is responsible for the configuration, security, and maintenance of the server.