

Trimble Connect Security Whitepaper

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DISCLAIMER

This document summarizes relevant topics for customer data and application security in Trimble Connect. The content is subject to change without notice. By using Trimble Connect the customer agrees that Trimble Connect services and related products are subject to the Trimble Connect <u>Terms of Service</u>. The content of this document is informational only and does not supersede the Terms of Service in any part.

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Trimble Connect Overview

Trimble Connect enables cloud-based collaboration for engineering and construction projects. Accessible via Desktop, Mobile, and Web, Trimble Connect allows users to view, share, and access project information from anywhere, at any time. Our mission is to create scalable, cloud-based systems that enable our customers to become more productive, efficient and environmentally conscious by enabling digital construction workflows.

Scope

This document discusses some of the security, privacy and software development topics that we value as important to us as well as to our customers. The scope of this document is limited to **Trimble Connect core services** and software.

Out of Scope

Trimble Connect services are powered by the following Trimble Cloud Core Services. Details are available under NDA.

• Trimble Identity service (TID)

Centralized authentication service that manages user authentication. Trimble Identity provides single sign-on capability and handles the responsibility of authenticating the identity of the users across multiple applications, products, and APIs.

• Trimble User Profile service

Centralized service for managing user profiles.

• Trimble Data Ocean service

Centralized service that provides secure, reliable, and flexible file management capabilities.

• Trimble Processing Framework service

Centralized service for managing processing workflows such as file conversions.

• Trimble Entitlement Management Service (EMS)

Centralized service for entitlement management.

• Tekla Online Licensing

Centralized service for entitlement management (Tekla users). Available here

Trimble Connect Security

Security Standards Compliance

Trimble Connect is 3rd-party certified compliant with the following security standards:

- ISO/IEC 27001:2013 certified
- Compliant with NIST 800-171 standards

Trimble Secure Development Life Cycle

The Trimble Secure Development Lifecycle (TSDLC) framework was established to ensure Trimble employees and applicable contractors build and operate secure applications, platforms and products, which meet industry standard security controls and dynamic privacy requirements.

TSDLC policy defines security control requirements for the identification of assets and products and to establish expectations for compliance with Cybersecurity control standards defined by the framework. Compliance metrics around security monitoring, vulnerability scanning, intrusion detection, dynamic and static analysis, and open-source analysis are reported and tracked in a security portal dashboard, and to Trimble management.

Data Center and Cloud Security

Trimble Connect service is operating on Amazon Web Services (AWS) and partly on Microsoft Azure services. Data Center security is managed by the cloud providers (AWS and Azure), in accordance with the Shared responsibility model. We ensure infrastructure security by following AWS and Azure security best practices defined by TSDLC, and maintaining 24x7 Security Operations Team monitoring system alerts.

Production and development environments are separated, and production environment access is limited only for dedicated engineering resources.

Service and Software Security

Trimble Connect user authentication and credential management are managed by Trimble Identity service that follows industry standards including OAuth 2.0, OpenID Connect, and SAML 2.0 for storing and protecting such information. Access to the Trimble Connect services is protected by token-based authentication and all network communication is secured in transit by using industry standard encryption protocols.

Data Storage and Security

Trimble Connect takes the protection of user information seriously and follows best practices to comply with data protection legislation guidelines, including GDPR and CCPA. One of these practices is to limit the storage of user Personally Identifiable Information (PII) to a centralized Trimble user profile management service which serves multiple Trimble applications. The following PII is collected by Trimble Connect and stored in the Trimble user profile service except optional "Employer Name" field which is stored in Trimble Connect:

Personally Identifiable Information	
Email Address	Required
First Name	Required
Last Name	Required
Job Title	Optional
Employer Name	Optional
Country	Required
State/Province/Region	Required
Street address	Required when purchasing products
City	Required when purchasing products
Zip code	Required when purchasing products
Telephone	Optional
Photo	Optional

All user information is stored and managed in centralized Trimble services which are hosted in North America.

User PII (including any optional fields which the user has completed) is visible to other members of all projects to which a user belongs.

Trimble Connect uses the Trimble File Management service for secure file storage. File data persistence is secured by standard AWS file storage data durability practices. Project data storage location is defined by the user upon project creation. Currently the regional options include North America (USA), Europe (Ireland), Asia (Singapore), and Australia (Australia). Project databases are backed up daily.

By default, all users in a project can access all data in the project. Project admins can restrict data access to certain data for specific users or groups via Trimble Connect team management capabilities.

A limited number of Trimble staff have access to customer projects and user data, for the purpose of providing customer support.

Information about the Trimble Privacy Policy can be found **here**.

Continuity and Disaster Recovery

Trimble Connect service data resiliency and physical data center disaster recovery capabilities are powered by AWS/Azure Availability Zones. Deployments to multiple Availability Zones ensure service continuation in case of physical data center disaster.

Software Development

Source Code Protection

Ensuring that source code cannot be altered from outside Trimble is critical for the security of our software. To guarantee this, various measures are in place. All code is stored using version control systems. Access is strictly limited to development teams and named stakeholders.

Secure Development Environment

Code for Trimble Connect software is developed by Trimble Employees or authorized personnel with access defined according to zero trust policy. Trimble's own premises are secure and require access permissions from all staff members and visitors. Similar requirements are in place for partners to ensure that they follow equally strict guidelines.

Development and testing is performed either locally on workstations, or within specially set up development environments.

Code Review

Trimble Connect teams perform code review in the form of peer review. This allows us to ensure that the code is of high quality, and to spread the best practices within the teams.

Trimble Connect Software is based on a wide range of technologies. Different teams use and follow industry guidelines and best practices when developing. Code review processes aim to identify deviations from guidelines or best practices. The deviations can then be addressed before deploying the code in production.

Testing and Quality

At Trimble, we want to ensure that our software and services are of the highest quality. To achieve this goal, all systems go through rigorous testing before being deployed into production.

All new Trimble Connect software versions and service updates are tested and validated according to our quality assurance processes. The processes consist of various test levels and test types, for example unit, functional, system, performance, and load testing. Updates or changes are usually tested using both automated and manual test methods. Any regressions in the testing are addressed before the changes are deployed or released.

Test cases and other test assets are continuously improved to cover new development. Testing processes and tools are continuously developed by testing professionals following the industry best practices. Various types of metrics, monitoring, and checkpoints are in place to know the testing coverage and to ensure high quality level.

Various quality assurance activities are in place during development as well as after Releases. Continuous issue and defect management is in place and when needed, new production updates are made to ensure our customers and end users can work efficiently without interruptions.

Conclusion

Trimble recognizes the value of our customers and their data. With Trimble Connect software and services, we have taken the steps necessary to protect both your privacy and the designs that are at the core of your business. While using the software and services, you can be assured that your data is protected.

We will continue to work on maintaining and improving the security of our software and services by taking advantage of new developments in industry best practices. Our efforts allow you to focus on your core business without letting security concerns stop you.

If you have any questions or concerns regarding Trimble Connect services and/or software security, privacy, or quality, do not hesitate to contact **connect-support@trimble.com**.