# timetoreply

# Security and Privacy Document

TIMETOREPLY.COM

#### **General Information**

Timetoreply is a cloud-based email analytics tool that shows businesses how long it takes their staff to respond to emails, the volumes of email which they are dealing with and a whole range of productivity and workload related metrics

The system works by ingesting email header information and processing this information to produce email reply time, productivity and workload management reports.

Timetoreply Limited is SOC 2 Type II compliant. SOC 2 is a voluntary compliance standard for service organizations, developed by the American Institute of CPAs (AICPA), which specifies how organizations should manage customer data. The standard is based on the following Trust Services Criteria: security, availability, processing integrity, confidentiality, privacy.

**Timetoreply Limited is ISO 27001 certified**. ISO/IEC 27001 is an information security standard, part of the ISO/IEC 27000 family of standards, of which the last version was published in 2013, with a few minor updates since then. It is published by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) under the joint ISO and IEC subcommittee. ISO 27001 is comparable to the United States SOC 2 certification. We are in the process of recertifying with Vanta.com as of April 2023.

Timetoreply is an approved app on Microsoft and Google's app marketplaces. In addition, Timetoreply has undergone an independent security audit by Netsentries (one of Google's nominated cyber security auditing companies). The official testing letter can be viewed

https://timetoreply.com/wp-content/uploads/2023/04/NetSentries LOA Timetoreply 690320043 607.pdf



| Comparative           | SOC 2   | ISO 27001   |
|-----------------------|---|---|
| Governing Body        | American Institute of Certified Public Accountants (AICPA)  | ANSI-ASQ National Accreditation Board (ANAB)  |
| Origination           | USA   | UK  |
| Assessor Requirements | Certified Public Accountant (CPA)   | Qualified Security Assessor (QSA)   |
| Structure             | Principles and Criteria   | Information Security Framework  |
| Scope                 | The Services Provided to End Users; Includes Infrastructure, Software, Data, People & Procedures Relevant to those Services   | The Information Security Management System (ISMS)   |
| Focus                 | Controls to meet Trust Services Criteria based on design (Type 1) and operation (Type 2)  | Policy and Processes to establish, implement, maintain and improve an ISMS based on design only   |
| Assurance Coverage    | Security; Optionally includes Availability, Privacy,<br>Confidentiality & Processing Integrity  | Security Only   |
| Assurance Approach    | Flexible; The Service Organisation (you) decides on<br>the attestation audits to report on control design<br>(Type 1) and operating effectiveness (Type 2) for a<br>chosen date or period of time. This is usually<br>influenced by the end user requesting the SOC 2<br>report(s)  | 3-year period of surveillance audits to maintain the  |
| Period                | Point in time or period of time   | Point in time only  |
| Deliverable           | A Report including the System Description, controls to meet the Trust Services Criteria, tests performed by the auditor (Type 2 only) and the auditor and service organisation attestations.  |   |
| Practitioner Opinions | SOC 2 provides a higher level of assurance by confirming the operating effectiveness of controls over a period of time.   | ISO 27001 follows best practice, in contrast to SOC 2 which follows good practice.  |
|                       | SOC 2 is more relevant to customers as its scope is focused on the systems and services provided to those customers.  | ISO 27001 certification is harder to achieve than a SOC 2 Report.   |
|                       | There's a higher level of quality in the SOC review process as it requires a CPA certified firm completing the assessment.  |   |
|                       | The flexibility with SOC 2 Scope, timing and approach can limit the assurance provided to customers.  |   |
| Period  Deliverable   | (Type 1) and operating effectiveness (Type 2) for a chosen date or period of time. This is usually influenced by the end user requesting the SOC 2 report(s)  Point in time or period of time  A Report including the System Description, controls to meet the Trust Services Criteria, tests performed by the auditor (Type 2 only) and the auditor and service organisation attestations.  SOC 2 provides a higher level of assurance by confirming the operating effectiveness of controls over a period of time.  SOC 2 is more relevant to customers as its scope is focused on the systems and services provided to those customers.  There's a higher level of quality in the SOC review process as it requires a CPA certified firm completing the assessment.  The flexibility with SOC 2 Scope, timing and approach can limit the assurance provided to | Point in time only A 1-2-page certification document confirming organisation has met the requirements for certification.  ISO 27001 follows best practice, in contrast 2 which follows good practice.  ISO 27001 certification is harder to achieve |

ISO/IEC 27001 specifies a management system that is intended to bring information security under management control and gives specific and detailed requirements which need to be met. Organizations that meet the requirements may be certified by an accredited certification body following successful completion of an audit.

To view Timetoreply Limited's SOC 2 Type II Letter of Attestation, follow this link: https://timetoreply.com/wp-content/uploads/2023/05/Timetoreply-Limited\_Letter-of-Attestation-SOC-2-Type-2.pdf



To view Timetoreply Limited's ISO 27001 certificate, follow this link: <a href="https://timetoreply.com/wp-content/uploads/2022/02/Time-To-Reply-ISO27001-2013.pdf">https://timetoreply.com/wp-content/uploads/2022/02/Time-To-Reply-ISO27001-2013.pdf</a> (in the process of recertifying with Vanta.com as of April 2023).

For detailed information on our risk and information security policies please view: ISMS INFORMATION SECURITY MANUAL https://timetoreply.com/001-information-security-manual/

To view our Data Protection Policy please view:

DATA PROTECTION POLICY

<a href="https://timetoreply.com/data-protection-policy-mss-dp-doc-11-1/">https://timetoreply.com/data-protection-policy-mss-dp-doc-11-1/</a>

#### How Timetoreply works at the data level

Timetoreply works with o365, Gmail/GSuite,, MS Exchange and Mimecast. Depending on which one of these options is chosen, Timetoreply works differently in terms of how it ingests the data, the procedure required to add a mailbox, and how it connects to those mailbox(es). Each option is explained in this document.

Once the data has been ingested, the data resides on Timetoreply's Amazon Web Services (AWS) servers. The data is stored in a database that is not accessible via the public internet. Data is encrypted and the keys are stored in a separate database. Data that is transferred between Timetoreply and 3rd parties such as the Gmail API, o365 API, Mimecast API or Nylas API is done so over SSL.

Timetoreply only views and stores the header information of emails. Timetoreply does not view, or store the body or attachments of any email.

The email header information includes the following:

- TO, FROM, CC
- Subject line
- Timestamps
- Message ID, Conversation ID used to link conversations
- Other non-sensitive META information

#### o365

In order to ingest email from an o365 mailbox Timetoreply connects via the MS Graph API using OAuth 2.0 protocol (https://graph.microsoft.com).

To add a mailbox, the user simply enters an Agent's name and email address, and then clicks "Add". Note: no password is required.

An email will be sent to the email address that has been added, and which includes an "activation" link. The owner of the email address would be required to click the activation link, follow the steps to grant permission to Timetoreply, and Timetoreply's software begins tracking their email performance.

An alternative option is to use Timetoreply's o365 Bulk Add option. This allows the user to authenticate once with an o365 admin user's credentials, "tick" the mailboxes they would like to track, and then add them to Timetoreply without each mailbox needing to authenticate one-by-one.

#### The scopes timetoreply requests for adding mailboxes one-by-one are:

offline access User.Read Mail.ReadBasic (for paid o365 accounts)

Or

offline\_access User.Read Mail.Read for "free Microsoft" accounts

#### For o365 Bulk-Add (adding multiple mailboxes in one go) Permissions

timetoreply™ asks for: offline\_access User.ReadBasic.All Directory.Read.All Mail.Read

Permission reference: https://docs.microsoft.com/en-us/graph/permissions-reference

User.read.all: Allows the app to read the full set of profile properties, reports, and managers of other users in your organization, on behalf of the signed-in user.

Directory.read.all: Allows the app to read data in your organization's directory, such as users, groups and apps, without a signed-in user.



Mail.Read: Read mail in all mailboxes. Allows the app to read mail in all mailboxes without a signed-in user.

#### **Gmail / GSuite**

In order to ingest email from a Gmail/Gsuite mailbox Timetoreply connects via the Gmail REST API using OAuth 2.0 protocol (https://developers.google.com/gmail/api/guides/).

To add a mailbox, the user simply enters the Agent's name and email address and then clicks "Add". Note: no password is required.

An email will be sent to the email address that has been added, and which includes an "activation" link. The owner of the email address would be required to click the activation link, follow the steps to grant permission to Timetoreply, and Timetoreply's software begins tracking their email performance.

The scope that Timetoreply uses from the Gmail API is:

https://www.googleapis.com/auth/gmail.metadata

Read resources metadata including labels, history records, and email message headers, but not the message body or attachments.

https://developers.google.com/gmail/api/auth/scopes

#### Microsoft (MS) Exchange

In order to connect to MS Exchange mailboxes (self hosted or cloud hosted) Timetoreply uses a 3rd party service called Nylas. Nylas is an API service that allows services such as Timetoreply to access MS Exchange mailboxes securely. Their security document can be found here: https://www.nylas.com/security/.

To add an MS Exchange mailbox, a user would need to enter their mailbox username, password and mail server address. These credentials are entered into the Nylas system and are stored by Nylas and not by Timetoreply. Timetoreply has no access to these credentials which are securely stored within the Nylas secure environment.

Once the mailboxes have been added, Timetoreply polls the MS Exchange mailboxes and analyses the email header information.

#### Mimecast



In order to ingest email header information from Mimecast, Timetoreply connects to Mimecast via their API.

This connection option is currently in invite-only beta. Please contact support@timetoreply.com for more information.

# **Security Overview**

Enterprise-grade security and privacy controls are at the heart of the Timetoreply's infrastructure and cloud platform. Timetoreply strives to earn customer trust by enforcing world-class security practices and standards. We keep customer data both private and secure through a multi-layered physical and network-level security hierarchy. This document details all of these platform security procedures and processes. For direct inquiries, please contact <a href="mailto:support@timetoreply.com">support@timetoreply.com</a>

Timetoreply is in no way involved in the email flow and has no effect on the successful or unsuccessful delivery of emails. User's email will continue to perform as normal, and independently of Timetoreply.

# **Transparency**

Timetoreply adheres to a high level of operational excellence. Timetoreply has multiple interlocking policies for incident response, audits, and privacy. We believe security practices should be transparent to customers, and these measures are outlined below.

**Incident Response Policy:** As part of our basic service to all customers, all Severity Level 1 and Business Critical incidents are closely monitored and responded to 24/7, 365 days a year. Our dedicated Infrastructure Security teams are constantly monitoring both our infrastructure, as well as alerts from upstream vendors, throughout all our Operation Centers. We use notification and alert systems to immediately identify and manage risks and threats. Timetoreply network status and incidence reports are posted on the live site and on the dashboard should we experience any Severity Level 1 and Business Critical incidents

**Privacy Policy:** The Timetoreply Privacy policy is publically accessible at https://timetoreply.com/privacy-policy and strictly adhered to by all Timetoreply agents and employees. All Timetoreply employees undergo a rigorous background check, and are given job-specific scoped access to our private VPN and backend infrastructure. No root credentials for backend infrastructure are ever assigned. Only Timetoreply employees that require customer data access as a necessary part of their job function are permitted access to encrypted customer data, and only upon manager approval. These groups include our customer support,



development, and infrastructure security teams. All Timetoreply employees are trained on our policies, and notified of ongoing updates.

**Audit Policy:** Timetoreply uses <a href="https://portswigger.net/burp">https://portswigger.net/burp</a> to scan our systems for security vulnerabilities. All access to production clusters is logged and audited regularly. The production cluster is accessible only to Timetoreply operational staff and engineers, whose primary responsibility is the construction and maintenance of the Timetoreply software system. We also perform regular security audits of our own code, third-party libraries, and our infrastructure automation. We update any software dependencies we have, so as to remain up to date with all the latest security patches at all times.

# **Encryption and Access Control**

Timetoreply utilizes multiple application-level security mechanisms and features to ensure customer data safety. Each account's data set is isolated with multi-level permission checks. All API calls require OAuth2 authentication tokens only granted by Microsoft, Google or Nylas, and user data is encrypted.

**OAuth:** Timetoreply ensures user information and identity protection through our adherence to the OAuth protocol. User Authentication to email back-ends (i.e. Gmail, Microsoft Exchange) is completed via OAuth2 where possible, and encrypted password-based Auth otherwise. OAuth2 is the top industry-standard secure authentication protocol that provides developers with individual revocable tokens per e-mail account.

**SSL:** Timetoreply uses TLS 1.2 to encrypt bidirectional session traffic between our application and our end users' browser.

**Customer Data Backups:** Timetoreply does not keep backups of customer data. In the event of a loss of data Timetoreply will re-ingest your account data directly from your mail server. It is the customers' responsibility to backup their own mail server data. As long as the data is on their mail server Timetoreply will be able to restore users' email analytics data on Timetoreply.

**Role-Based Access:** Timetoreply has procedures and controls in place to appropriately limit access to customer data and mitigate the risk of insider threats. Access is granted on a least-privilege basis and all requests require management approval. All access is logged and regularly audited to ensure policies are followed. Customer data may be accessed in the event that a customer account enters a failure state that requires accessing email data for debugging purposes. This data is not accessed for debugging unless an error cannot be resolved without doing so; all private data is excluded from system logs.



# **Network Transport and Storage**

Timetoreply implements best practices for maintaining service-wide network security. We deploy the latest technology to provide uninterrupted service and guard against attack. Internal sync infrastructure is isolated from the public Internet within separate VPCs, blocking all inbound connections and persistence and storage layers are encrypted and secured behind VPN and firewalls.

**Network Firewalls:** Timetoreply adheres to industry standard practices for securing and maintaining our infrastructure, with additional protection being afforded by our firewalls. Each system uses firewalls to restrict access from external networks and between systems internally. To mitigate both internal and external risk, access is restricted to only the ports and protocols required for specific business needs.

**Denial-of-Service (DOS) Prevention:** Timetoreply implements best practices for preventing DoS attacks and uses Cloudflare to assist in preventing DoS attacks: <a href="https://www.cloudflare.com/ddos/">https://www.cloudflare.com/ddos/</a>

**Distributed Denial-of-Service (DDOS) Prevention:** Timetoreply data centers are hosted at AWS, and AWS uses a variety of proprietary DDoS mitigation techniques to guard against the risk of attacks. In addition, AWS's networks are multi-homed across a number of providers to achieve Internet access diversity and to ensure network availability and Timetoreply makes use of Cloudflare for additional protection: https://www.cloudflare.com/ddos/

**Clustered Infrastructure:** Automated systems deploy new code to Timetoreply clusters in real time, to ensure smooth transitions between software updates with no downtime.

**TLS Encryption:** All web traffic between the user's mail server and Timetoreply is encrypted using TLS (Transport Layer Security) to protect customer data. Timetoreply's systems enforce TLS communication channels over public networks, and only support certificates signed by well-known CAs. The TLS protocol provides data encryption and authentication between customer mail server and Timetoreply servers and prevents third parties from gaining illegitimate access to information.



# **Infrastructure and Physical Security**

All Timetoreply physical infrastructure and data centers are housed in state-of-the-art secure facilities with industry standard access controls and physical security measures.

Timetoreply is hosted at Amazon Web Services (AWS) data centers, which are highly scalable, secure, and reliable. AWS complies with leading security policies and frameworks, including SSAE 16, SOC framework, ISO 27001, and PCI DSS Level 1.

SSAE 16, or more formally, Statement on Standards for Attestation Engagements No.16, is key guidance for reporting on internal controls for service organizations. SSAE 16 is used for reporting on the Service Organization Control (SOC) framework, which consists of SOC 1, SOC 2 and SOC 3. SOC 1 is focused toward an organization's internal controls over financial reporting, while SOC 2 and SOC 3 cover reporting for the security, availability, processing integrity, confidentiality and privacy for service organizations, including cloud and data center providers.

AWS is certified to ISO 27001, which describes a systematic approach to managing sensitive information so that it remains secure. ISO 27001 covers a risk management process that encompasses people, processes, and IT systems. AWS is also Level 1 compliant under the Payment Card Industry (PCI) Data Security Standard (DSS), enabling customers to run applications on AWS's PCI-compliant infrastructure for storing, processing, and transmitting credit card information in the cloud.

#### Additional AWS physical security measures include:

**24x7 Surveillance:** At each AWS hosting site, Timetoreply servers are secured at all times by trained security guards, and access is authorized strictly on a least privileged basis. The data centers use state-of-the-art electronic surveillance to monitor any suspicious activity.

**Security Logs:** AWS CloudTrail provides logs of all user activity to the Timetoreply servers. Timetoreply employees can monitor and track what actions were performed on each of the Timetoreply resources, and by whom.

**SSH Access:** Timetoreply have no access using username and password, and can only access the server through SSH by using a security key. Any other SSH access is disabled.



**Multiple Redundancy Zones:** AWS spans multiple geographic regions and Availability Zones, which allow Timetoreply servers to remain resilient in the event of most failure modes, including natural disasters or system failures. In addition, each AWS data center has independent power grids, as well as redundant power, HVAC and fire suppression systems. The AWS data centers use state-of-the-art practices for fault tolerance at each level of the system infrastructure, including Internet connectivity, power and cooling.