



Soham Technologies

©2016-2021, Soham Technologies Pvt. Ltd. All Rights Reserved. Version 1.0.0.0

GEOCLOCKIFY

USER GUIDE



This salesforce native app calculates time zone and local time from any salesforce record's address. See real-time clocks on record pages. Make informed time-aware decisions without leaving your CRM.

FEBRUARY 6, 2026

VERSION -1.0

GeoClockify@sohamtechnologies.in

Table of Content

1.	Introduction	4
1.1.	What is GeoClockify?	4
1.2.	The Problem It Solves	4
1.3.	How GeoClockify Works	4
1.4.	Key Benefits	5
1.5.	Core Value Proposition	6
1.6.	Use Cases	6
2.	System Requirements	7
2.1.	Salesforce Compatibility	7
2.1.1.	Supported Salesforce Editions	7
2.1.2.	Supported Salesforce Environments	7
2.2.	User Permissions Required	8
2.3.	API Limitations and Considerations	9
3.	Installation Guide	11
3.1.	Installing from AppExchange	11
3.2.	Post-Installation Configuration	12
4.	Configuration Guide	18
4.1.	Initial Setup	18
4.1.1.	Setting Up Address Fields Mapping	18
4.1.2.	Object Configuration	19
4.1.3.	Supported Objects	20
4.1.4.	User-Specific Settings	20
5.	User Guide	20
5.1.	Navigating the Interface	20
5.1.1.	Record Page Components	20
5.1.2.	List Views	23
5.2.	Using Time zone Features	23
5.2.1.	Automatic Time zone Detection	23
5.2.2.	Time Display Formats	23
5.3.	Advance Features	24

5.3.1.	Batch Processing	24
5.3.2.	Time zone Validation	24
6.	Administration Guide	24
6.1.	Managing Settings	24
6.1.1.	Security Settings.....	24
6.1.2.	Custom Metadata Settings	24
6.2.	Monitoring and Maintenance	25
6.2.1.	Usage Reports	25
6.2.2.	Error Logs.....	25
6.2.3.	Performance Monitoring	26
6.3.	Data Management	26
6.3.1.	Data Storage Considerations	26
6.3.2.	Backup and Recovery.....	26
7.	Integration Guide	27
7.1.	Salesforce Native Integrations	27
7.1.1.	Flow Integration	27
7.1.2.	Integration With Salesforce AI Agent	27
7.2.	External Integrations	28
7.2.1.	Time zone API Configuration	28
7.2.1.1.	Create a project from Google Cloud Console.....	28
7.2.1.2.	Enable the relevant APIs	29
7.2.1.3.	Create the API Key	29
7.2.1.4.	Update the Custom Metadata with google API Key	31
8.	Troubleshooting.....	32
8.1.	Common Issues and Solutions	32
8.1.1.	Installation Issues.....	32
8.1.2.	Configuration Problems	32
8.1.3.	Time zone Detection Errors	32
8.2.	Error Messages Reference	32
8.3.	Performance Optimization	33
9.	Best Practices	33
9.1.	Implementation Best Practices	33

9.2.	Usage Best Practices	34
9.2.1.	Initial address Data Assessment	34
9.2.2.	Maintaining Accurate Address Data	34
9.3.	Maintenance Best Practices	34
10.	FAQ (Frequently Asked Questions).....	35
10.1.	General Questions.....	35
10.2.	Technical Questions	35
10.3.	Accessibility Questions.....	36
11.	Support Information	36
11.1.	How to Get Support	36
11.2.	Support Hours and SLAs	37
11.3.	Community Resources	37
12.	Company Information.....	37
13.	Appendix.....	39
13.1.	Release Notes.....	39
13.2.	Current Version Details	39
13.3.	Version History.....	39
13.4.	Glossary of Terms.....	40
13.5.	Compliance and Security Information	41

1. INTRODUCTION

1.1.WHAT IS GEOCLOCKIFY?

GeoClockify is an intelligent Salesforce application that automatically detects time zones and calculates local time for your records based on their address information. In today's global business environment, where teams interact with customers and partners worldwide with different time zones, GeoClockify eliminates the guesswork and manual calculations that often leads to missed meetings, delayed communications, and scheduling errors.

1.2.THE PROBLEM IT SOLVES

Managing international business relationships requires constant time zone awareness, but traditional approaches are fraught with challenges:

- **Manual Calculations:** Sales and support teams waste valuable time calculating time differences
- **Scheduling Errors:** Mistakes in time zone conversions lead to missed appointments and frustrated customers
- **Address Confusion:** Uncertainty about which time zone a contact or account belongs to
- **Productivity Loss:** Constant context-switching between Salesforce and external time zone tools

GeoClockify solves the above challenges by seamlessly integrating accurate, automatic time zone intelligence directly into your Salesforce workflow, empowering teams to work globally with confidence and precision.

1.3.HOW GEOCLOCKIFY WORKS

GeoClockify seamlessly integrates with your Salesforce instance to provide:

Automatic Time zone Detection

- Analyzes address fields on your records (Accounts, Contacts, Leads objects etc.)

- Converts geographic location information to accurate time zone data
- Displays local time instantly without manual input

Smart Time Display

- Shows current local time for each record directly in Salesforce
- Updates automatically for daylight saving time changes
- Provides clear time zone information and offsets

1.4.KEY BENEFITS

GeoClockify is designed to benefit anyone dealing with customers, partners or anyone globally.

Let's see few benefits for different teams/personas -

For Sales Teams

- Never miss another international sales call due to time zone confusion
- Schedule meetings with confidence, knowing the customer's local time
- Improve customer relationships with timely, considerate communication

For Support Teams

- Provide support during customers' local business hours
- Quickly identify optimal contact times for different regions
- Reduce scheduling conflicts and avoid Service Level Agreements (SLAs) violation

For Administrators

- Zero-maintenance solution with automatic updates

- Easy installation and configuration
- Dedicated permission set for access control

For Entire Organizations

- Increased productivity through reduced administrative overhead
- Enhanced global collaboration and coordination
- Professional image with punctual international communications

1.5.CORE VALUE PROPOSITION

GeoClockify transforms how your organization manages global time by bringing intelligent, automated time zone awareness directly into your Salesforce workflow. Instead of juggling multiple time zone tools or performing manual calculations, your team can focus on what matters most—building strong global relationships and driving business growth.

By making accurate time zone information instantly accessible, GeoClockify ensures that your team always operates in your customers' time, no matter where they are located in the world.

1.6.USE CASES

GeoClockify delivers critical time intelligence across various business functions, ensuring that global operations run smoothly and customer interactions are perfectly timed.

Sales Teams: Optimizing Customer Contact Strategies

Sales representatives can instantly view the local time for leads and contacts before making calls or sending emails. This prevents contacting customers outside of business hours, which increases connection rates and improves customer satisfaction. For example, a salesperson in New York can immediately see that it's 9:00 AM in San Francisco and 6:00 PM in London, allowing them to prioritize calls to the West Coast while scheduling an email for their London contact to receive first thing the next morning.

Support Teams: Streamlining International Client Scheduling

Support agents scheduling callback requests or demos with international clients can use the time zone difference visible with Digital time on clock component to quickly identify mutually agreeable meeting times. This eliminates the back-and-forth emails to determine availability and reduces scheduling errors, leading to faster resolution times and more professional client experience. The dynamic clock on the contact's record page provides an immediate visual confirmation of the current local time at the moment of interaction.

Global Business Operations: Enhancing Coordination and Efficiency

Managers and operations teams overseeing international workforce, partners, or projects can maintain awareness of local working hours across different regions. This facilitates better coordination for deadline setting, virtual meetings, and system updates, ensuring that communications and tasks are aligned with the standard business hours of each location. This fosters a more inclusive and efficient global workflow, minimizing delays and miscommunication between international offices.

2. SYSTEM REQUIREMENTS

2.1. SALESFORCE COMPATIBILITY

2.1.1. SUPPORTED SALESFORCE EDITIONS

GeoClockify is compatible with the following Salesforce editions:

- Enterprise Edition
- Unlimited Edition
- Performance Edition
- Developer Edition
- Professional Edition (TODO - confirm with managed release)

2.1.2. SUPPORTED SALESFORCE ENVIRONMENTS

- Lightning Experience (Full support)
- Salesforce Mobile App (Full support)
- Salesforce Classic (Full support except Visual animated Clock)

2.2.USER PERMISSIONS REQUIRED

Proper configuration of user permissions is essential for the secure and effective operation of the GeoClockify solution. The following permissions must be correctly assigned to ensure users can access features, and administrators can manage the application.

System Administrator Privileges:

The initial installation and configuration of the GeoClockify package requires full System Administrator permissions in the target Salesforce org. This level of access is necessary to install the managed package, assign permission sets, modify Custom Metadata Types, schedule Apex jobs, and configure Google API settings.

GeoClockify Permission Set:

Following installation, the “GeoClockify” Permission Set must be assigned to all users who need to view or interact with the time zone data. This permission set grants specific, controlled access to the application’s components without requiring full administrative rights.

- **For End-Users (e.g., Sales Reps, Support Agents):** The permission set provides read and update access to the custom GeoClockify fields (Time zone__c, CalculateTime zone__c) on the objects they use. It also grants access to view the Lightning Web Component on record pages. Users will be able to see the local time information and check the CalculateTime zone__c box to trigger calculations for new or updated records.
- **For Specific Administrators or Power Users:** If certain users need to configure Custom Metadata Types for new objects, they will require additional permissions to modify Custom Metadata Records, which is typically an administrative function.

Object-Level and Field-Level Security:

The GeoClockify solution respects the Salesforce native security model. Users must already have the necessary “Read” and “Edit” permissions on the standard or custom objects (e.g., Lead, Contact, Custom Object) and their underlying address fields (e.g., Street, City, Country) through their Salesforce profile or permission sets. If a user cannot see an address, the system cannot calculate a time zone for that record. Similarly, if the user lacks edit access to the CalculateTime zone__c field, they will be unable to trigger a new calculation.

2.3.API LIMITATIONS AND CONSIDERATIONS

GeoClockify uses external services i.e. Google API for detecting Geo Location and Timezone for given address and does respect platform limitations. Understanding and planning for these considerations is crucial for maintaining system performance and managing costs.

Google API Quotas and Costs:

The solution makes calls to two Google APIs: the Geocoding API and the Time Zone API. It is critical to be aware that these services are subject to usage quotas and pricing.

- **Usage-Based Pricing:** Google charges per request for these APIs. The cost is incurred for every record processed, both for initial population and for any updates that re-trigger the geocoding process. Organizations must actively monitor their usage in the Google Cloud Console to forecast and manage costs. That’s the reason - we are calling these services wisely, consciously, at point where really required and giving the user control wherever possible -
 - To (re) trigger the API callout, through the “Calculate Time Zone” checkbox (check to calculate Geo location and/or time zone).
 - On standard Address fields, Salesforce automatically populates Geo Location information, for such records, GeoClockify does not try to calculate Geo Location, but only detects Time zone.
 - Local Time does not need any API call; we calculate Local Time based on Time Zone which is already detected.

- **Request Quotas:** Google imposes daily quotas and rate limits (requests per second). For high-volume data loads, the built-in batch Apex class is designed to respect these rate limits. However, administrators must schedule Batch jobs appropriately to avoid hitting these limits, which could temporarily disable the service.

Salesforce Platform Limits:

The solution operates within the standard constraints of the Salesforce platform.

- **Apex Governor Limits:** The batch Apex processing is subject to Salesforce's governor limits, including limits on total execution time and callouts (HTTP requests) per transaction. The GeoClockifyBatch class is engineered to chunk records appropriately to stay within these limits, but performance can be impacted during very large data volumes or if other processes are consuming resources.
- **Asynchronous Processing:** The time zone calculation for individual records is processed asynchronously to avoid slowing down interactions. This means there may be a slight delay (typically a few seconds to minutes) between a user checking the CalculateTime zone__c box and the fields being populated.

Data Quality and API Success:

The accuracy and success of the service are directly tied to data quality.

- **Garbage In, Garbage Out:** The precision of the time zone result is entirely dependent on the completeness and accuracy of the source address data. Incomplete, incorrect, or ambiguous addresses will lead to geocoding failures or inaccurate time zone lookups, resulting in errors and empty fields (not being able to get Time zone) in Salesforce.
- **Handling API Unavailability:** In the rare event that Google's services are unavailable, the system will log errors, and the time zone fields will not be updated for affected records. The application is designed to handle errors gracefully, leaving existing data intact and continuing to process other records.

- When State and Country/Territory Picklists are enabled in your org, Salesforce's default state code mappings for Japan may cause inconsistencies. To ensure Geoclockify processes locations accurately, please enter the full address when working with Japan-based address data.

For example, when an address in **Fukuoka, Japan** is entered, Salesforce may send the value as **40, JP** to the API due to its internal picklist mapping. This can result in failed responses for certain Japan addresses.

3. INSTALLATION GUIDE

3.1. INSTALLING FROM APPEXCHANGE

This section provides comprehensive instructions for installing and configuring the GeoClockify application in your Salesforce environment.

3.1.1. Prerequisites VERIFICATION

Before beginning the installation process, ensure you have met all mandatory prerequisites:

- Verify you have **System Administrator privileges** in your target Salesforce org
- Confirm that you have a valid **Google Maps API Key** with Geocode API and Time Zone API enabled.
- Have **required minimum of address data** available in your target objects (Country, State, City, Street, Zip)

3.1.2. STEP-BY-STEP INSTALLATION PROCESS

TODO Add Screenshots after Public listing

1. Access the AppExchange Listing

- For production orgs: Click **Get It Now** from the GeoClockify AppExchange listing
- For sandbox orgs: Click **Try It** (recommended for initial testing)

- You will be redirected to authenticate with your Salesforce org credentials

2. Security Review Acceptance

- Review and accept the terms and conditions
- Click **Confirm and Install** to proceed with the package installation

3. Installation Configuration

Select **Install for All Users** to ensure all relevant users can access GeoClockify features

Click **Install** to begin the deployment process

Monitor the installation progress until completion

3.2. POST-INSTALLATION CONFIGURATION

Post installation, need to assign GeoClockify permission set to required users, teams, setup your Google API key and configure objects and address fields for timezone auto detection and schedule GeoClockifyBatch.

3.2.1. USER PERMISSIONS ASSIGNMENT

Assign Permission Sets

1. Navigate to **Setup** → Quick Find → “Permission Sets”
2. Locate and select the **GeoClockify Permission Set**
3. Click **Manage Assignments** → **Add Assignments**
4. Select all users who need access to GeoClockify functionality and time zone data
5. Click **Assign** to grant permissions

3.2.2. GOOGLE API CONFIGURATION

1. Store API Key in Salesforce

1. Navigate to **App Launcher** → Search for → “Geoclockify”

2. You see **Geoclockify App Config** App Page
3. Paste your Google API Key in the placeholder
4. Click on Save Key

3.2.3. OBJECT CONFIGURATION STRATEGY

1. For Standard Objects (Account, Contact, Lead) with Data Integration Rules

1. If you use Data Integration Rules for geocodes in Salesforce, our address fields will have Geo location auto calculated by Salesforce and you will need the Time Zone API only
2. For such Address fields, for which records have Geo location information already available, do not map Address field components of Street, City, State, Country, Zip etc, i.e. keep these fields blank and specify only Geo location related fields in the Setting for the same, maintain all other field mappings (Time zone, Local Time, etc.)

2. For Other Objects (Standard or Custom)

- a. You can make use of the Custom Address fields. Please note -
 - i. Data integration rules do not work with custom Address fields
 - ii. Custom Address fields' Geo location fields can be reused; however, those are not auto populated as with standard Account, Contact and Lead Address fields
- b. Both Geocode API and Time Zone API are required
- c. Configure field mappings in GeoClockify Custom Metadata for these objects address:
 - i. Navigate to **Custom Metadata Types** → **GeoClockify** → **Manage Records**
 - ii. Create new records for each of the object's address fields to auto calculate Geo location and time zone
 - iii. Map all address fields and time zone-related fields

iv. Save each configuration

The screenshot shows the Salesforce Setup interface. On the left, the 'Setup' menu is open, and 'Custom Metadata Types' is selected. The main content area displays the 'GeoClockify Edit' page. The 'Information' section includes the following fields:

- Label:** A text input field.
- GeoClockify Name:** A text input field with a dropdown arrow.
- Active:** A checkbox that is currently checked.
- Object:** A text input field.
- Street:** A text input field.
- City:** A text input field.
- State:** A text input field.
- Country:** A text input field.
- Zip:** A text input field.
- Protected Component:** A checkbox that is currently unchecked.
- Latitude:** A text input field.
- Longitude:** A text input field.
- TimeZone:** A text input field.
- CalculateTimeZone:** A text input field.

At the bottom of the form, there are three buttons: 'Save', 'Save & New', and 'Cancel'. A red error message 'Required Information' is visible in the top right corner of the form area.

3.2.4. BATCH PROCESSING SETUP

1. Prepare Records for Processing

1. Ensure target records have complete address data
2. Make sure the CalculateTimezone, TimeZone, fields are included on the page layout for the relevant objects.
3. Verify the **CalculateTime zone__c** checkbox is selected on records to be processed

2. Schedule for Batch Job

1. Navigate to **Setup** → Quick Find → “Apex Classes”
2. Locate **GeoClockifyBatch** class
3. Click **Schedule Apex**
4. Configure appropriate schedule (recommend during off-peak hours)
5. Save the scheduled job

3.2.5. DEPLOYING THE CLOCK COMPONENT TO RECORD PAGES

The GeoClockify Lightning Component provides a dynamic, real-time display of local time that can be added to any supported object's record page. This visual clock enhances user experience by offering an immediate, at-a-glance understanding of the business entity's current local time.

Supported Objects and Prerequisites

The component can be deployed to any standard or custom object that has been properly configured in the GeoClockify Custom Metadata Type. While commonly used with Leads, Contacts, and Accounts, it will function on any object where time zone fields have been successfully populated through the GeoClockify calculation process.

Installation Process

1. Access Lightning App Builder

- Navigate to the Salesforce Setup menu
- In the Quick Find box, search for "Lightning App Builder"
- Select Lightning App Builder from the results

2. Select Target Record Page

- Choose the object you wish to enhance from the list of available pages
- Locate the specific record page where the clock should appear
- Click the "Edit" button to enter page customization mode

3. Add GeoClockify Component

- From the components panel on the left, locate "GeoClockify" in the Custom section
- Drag the component onto the page canvas in your desired location
- Place the component at an appropriate location. Common placement areas can be the sidebar, above the activity timeline, or in a dedicated time zone section

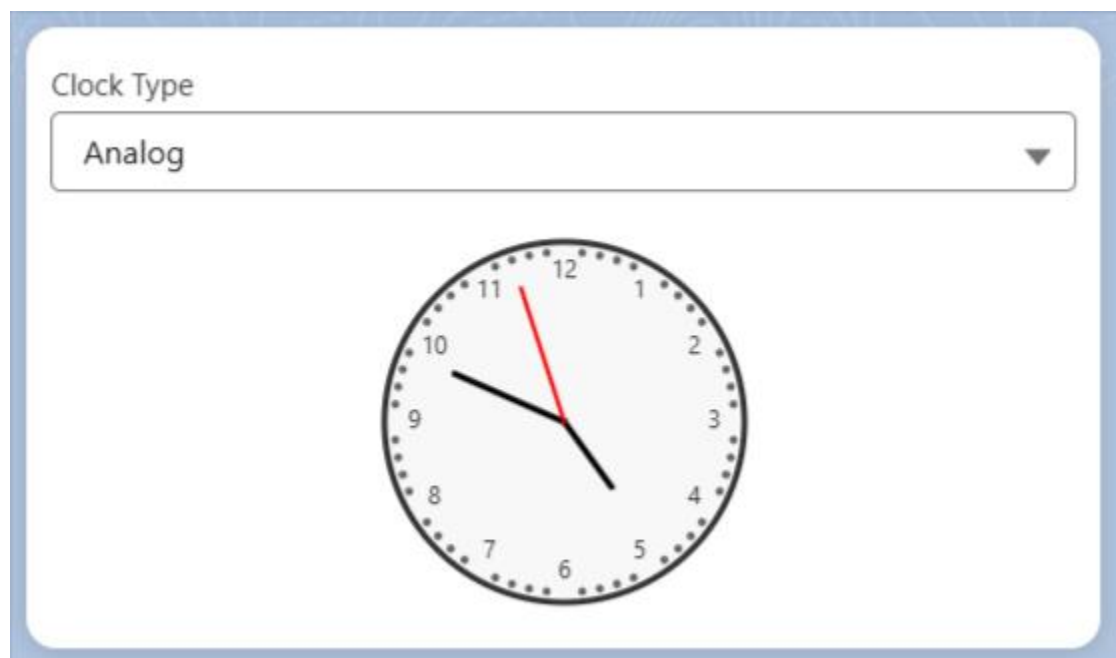
4. Save and Activate

- Click “Save” to preserve your changes
- Activate the page to make it available to all users
- The component will now display live local time for all records of this object type

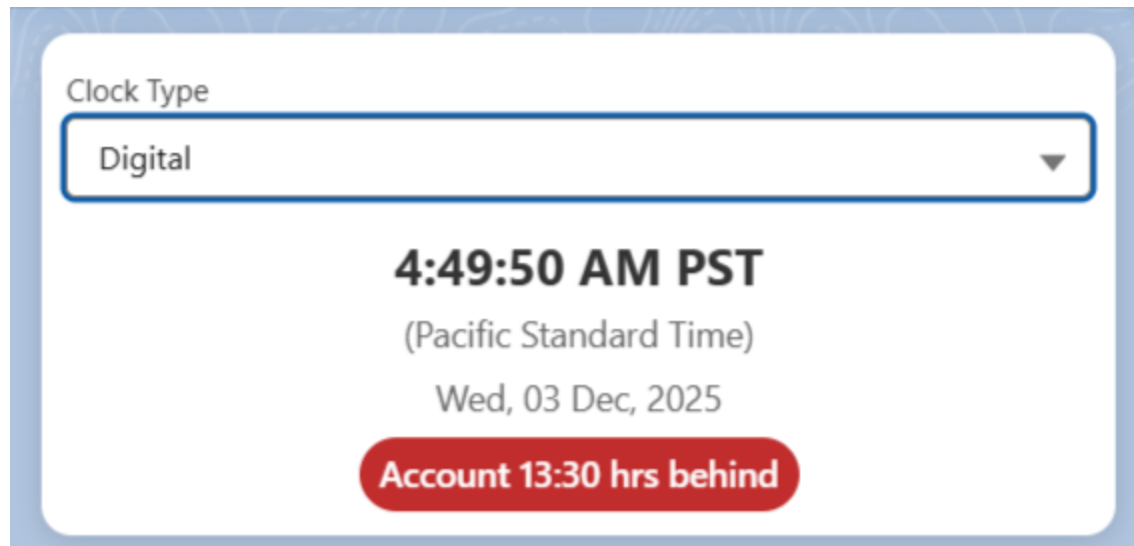
5. View Record Local Time in Different Format

Once GeoClockify has populated Time zone data on required record, we can see record's local time displayed in Analog format.

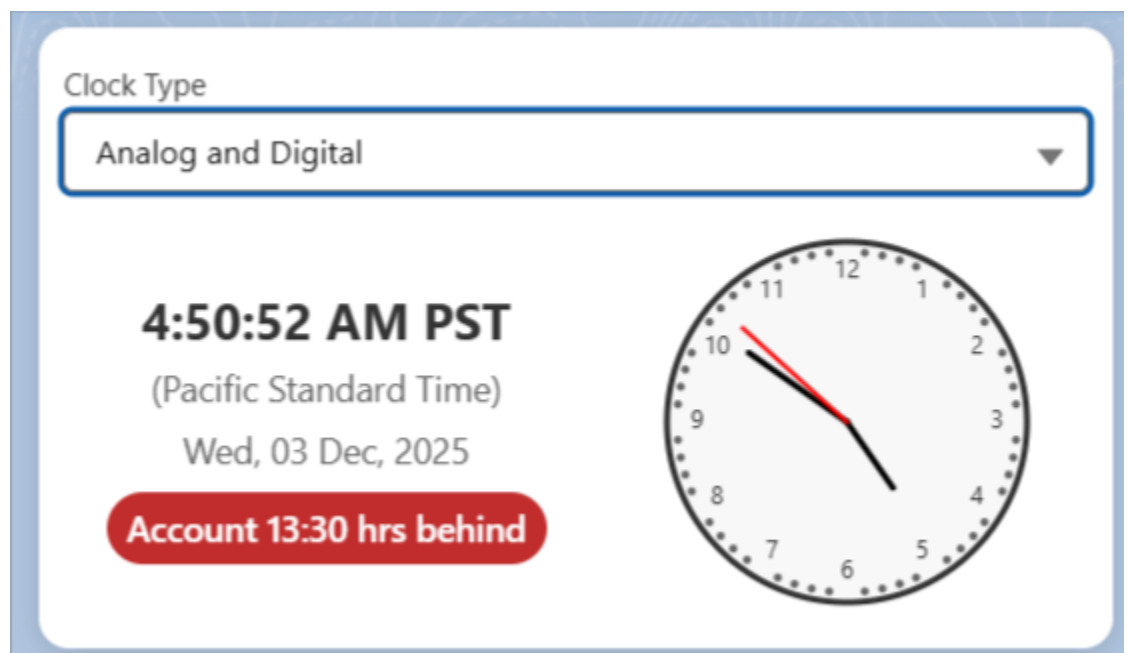
- If you want to view Local time in a different format, click on the ‘Clock Type’ dropdown.
- Select your preferred display format:
 - **Analog:** Traditional clock face for quick visual reference



- **Digital:** Numerical display showing time, time zone, and date



- **Combined:** Both analog and digital clocks side by side along with time zone data and time difference



User Experience

Once deployed, users will see the clock component automatically updates to show the current local time for each record they view. The display refreshes in real-time, providing an accurate time reference that accounts for daylight saving changes and time zone differences. The visual nature of the component helps sales and support teams quickly assess appropriate time to contact leads or customers or any business entity in different geographic regions.

3.2.6. VERIFICATION AND TESTING

1. Validate Installation

1. Create a test record with complete address information
2. Check the **CalculateTime zone__c** checkbox
3. Run/schedule Batch to process Addresses
4. Verify time zone fields populate within expected timeframe
5. Confirm Lightning component displays correctly on record pages

2. Troubleshooting Initial Setup

1. If time zone fields don't populate, check Error Log for respective record (Id)
2. Check API key configuration
3. Verify address data quality and completeness
4. Confirm user permission set assignments
5. Check error logs for any processing errors

This installation and configuration process ensures GeoClockify is properly integrated into your Salesforce environment and ready to provide accurate time zone intelligence across your organization.

4. CONFIGURATION GUIDE

4.1. INITIAL SETUP

4.1.1. SETTING UP ADDRESS FIELDS MAPPING

Define the connection between your Salesforce data and GeoClockify's processing engine. For objects to enable GeoClockify timezone and local time detection, map specific fields containing address components, Geolocation and timezone field. This includes identifying which field represents the street address, city, state/province, country, and postal code. The system uses this mapping to construct properly formatted address queries for Google's

Geocoding API, ensuring accurate location detection and populates Geo location and time zone field accordingly.

4.1.2. OBJECT CONFIGURATION

Enable and customize GeoClockify for required Salesforce objects individually. Create a dedicated configuration record in the GeoClockify Custom Metadata Type for every object you want to support. Each configuration must specify the complete set of target fields: the Time zone field for storing the time zone, and the Calculate Time zone checkbox that triggers the process.

Field Name	Description
Active	Checkbox to enable/disable processing Geo Coding and/or Time zone
Object	API Name of the object for which to enable GeoClockify for
Street	API Name of the Street field to use for detecting Geo Location and timezone
City	API Name of the City field to use for detecting Geo Location and timezone
State	API Name of the State field to use for detecting Geo Location and timezone
Country	API Name of the Country field to use for detecting Geo Location and timezone
Zip	API Name of the Zip field to use for detecting Geo Location and timezone
Latitude	API Name of the Geo Location --> Latitude field to use for calculating timezone
Longitude	API Name of the Geo Location --> Longitude field to use for calculating timezone
CalculateTimeZone	API Name of the checkbox field to trigger timezone calculation

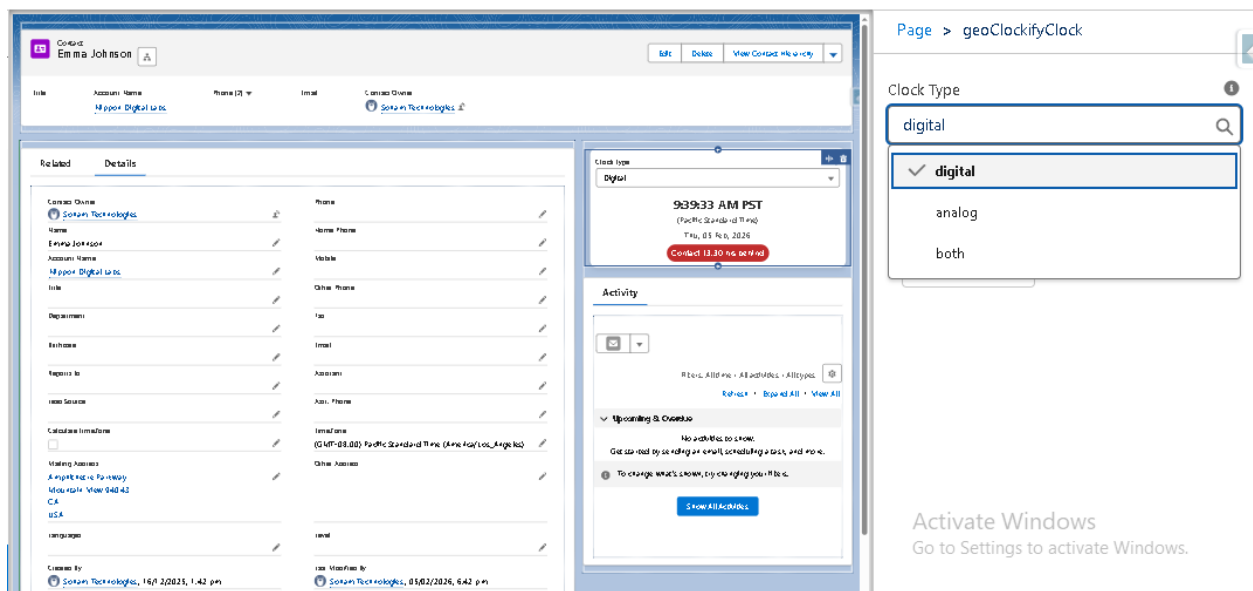
TimeZone	Calculated timezone label for the record.
----------	---

4.1.3. SUPPORTED OBJECTS

GeoClockify provides flexible object support across your Salesforce environment. Standard objects like Accounts, Contacts, and Leads work immediately with minimal configuration. Any other Standard object with Standard or custom Address field can be set up for GeoClockify time zone detection. The solution also extends to any custom object containing address information, enabling time zone intelligence for business-specific objects such as Properties, Vendor records, Store Locations, or Event Venues etc. without additional development. Also, any managed package object with required fields for Address, location and time zone can be enabled for GeoClockify.

4.1.4. USER-SPECIFIC SETTINGS

Set default clock display format for different objects.

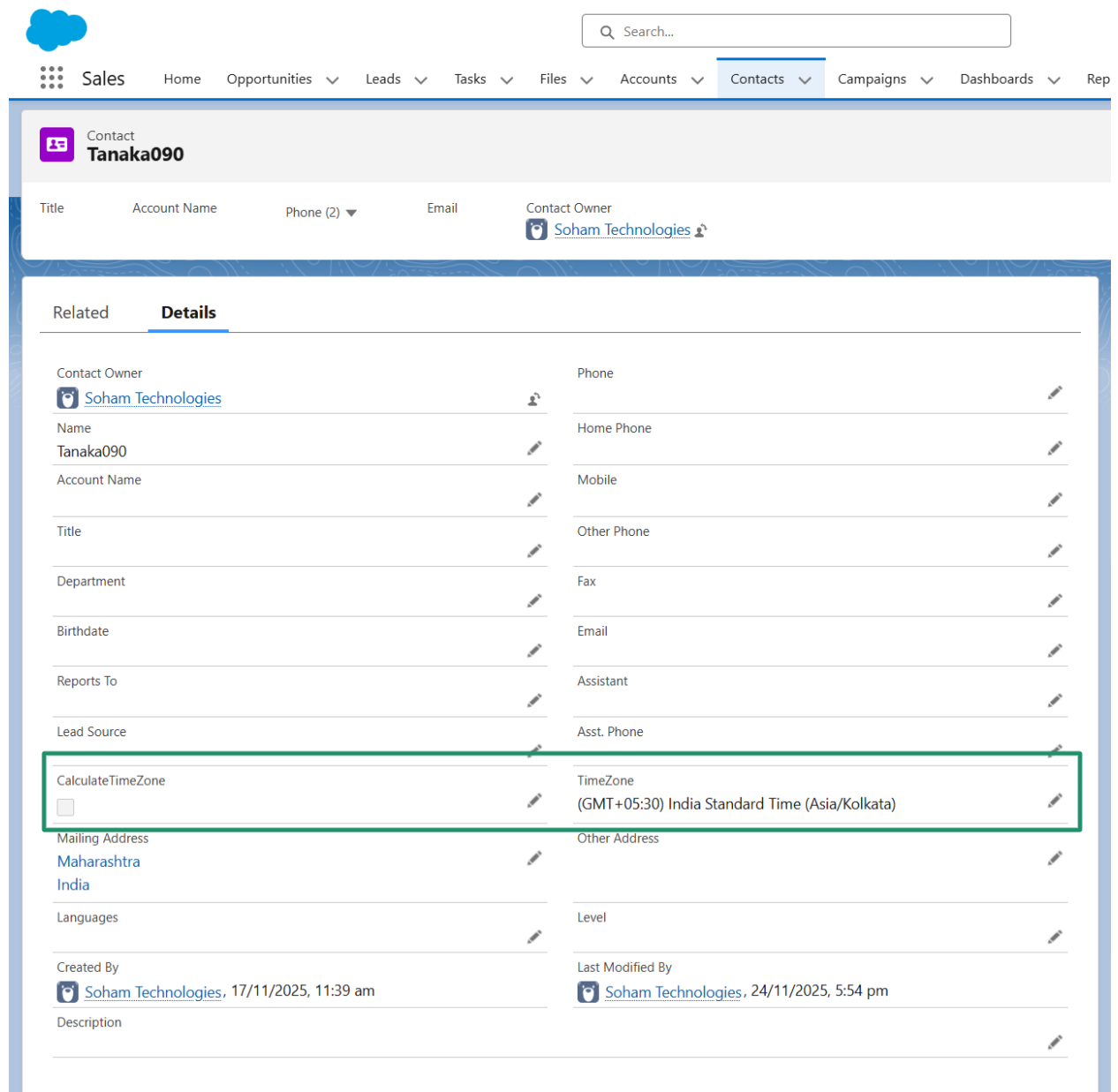


5. USER GUIDE

5.1. NAVIGATING THE INTERFACE

5.1.1. RECORD PAGE COMPONENTS

The GeoClockify interface integrates seamlessly into Salesforce record pages. The time display appears in the configured format (Analog, Digital, or Combined) within the Lightning component you've placed. Time zone information displays both within the clock component and in the individual time zone field on the record, showing the time zone string, current local time, and time difference from your timezone.

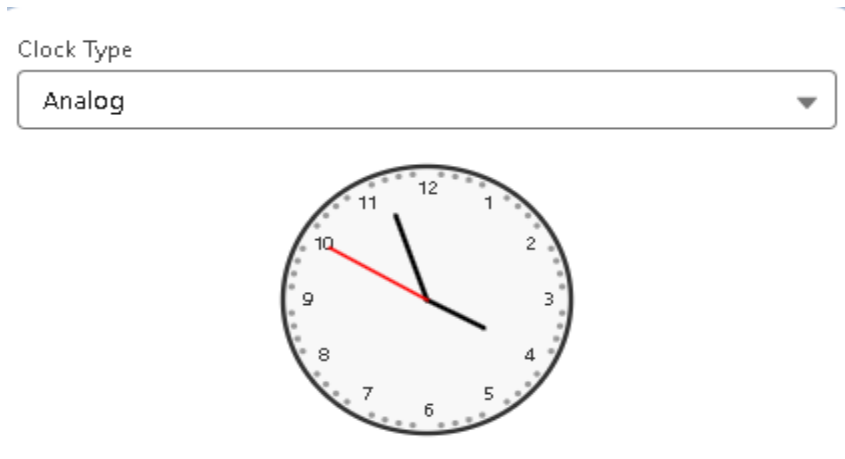


The screenshot shows a Salesforce record page for a Contact named Tanaka090. The page is in the 'Details' tab. A green box highlights the 'CalculateTimeZone' checkbox and the 'TimeZone' field. The 'CalculateTimeZone' checkbox is checked. The 'TimeZone' field displays '(GMT+05:30) India Standard Time (Asia/Kolkata)'.

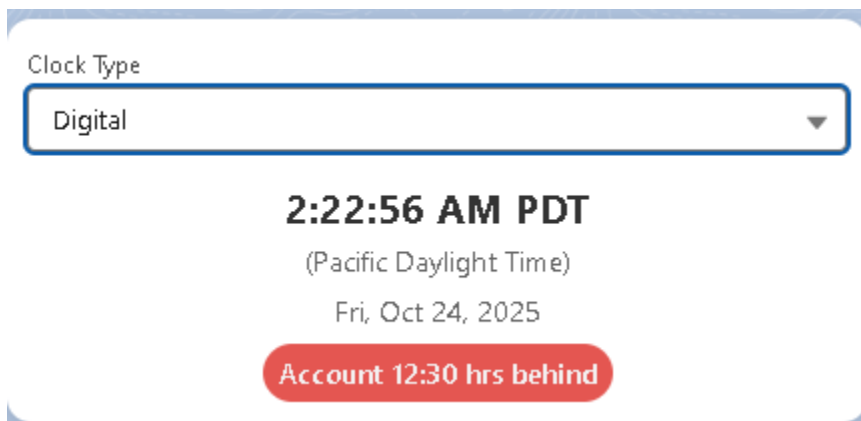
Title	Account Name	Phone (2)	Email	Contact Owner
				 Soham Technologies

Related	Details
Contact Owner	Phone
 Soham Technologies	
Name	Home Phone
Tanaka090	
Account Name	Mobile
Title	Other Phone
Department	Fax
Birthdate	Email
Reports To	Assistant
Lead Source	Asst. Phone
CalculateTimeZone	TimeZone
☒	(GMT+05:30) India Standard Time (Asia/Kolkata)
Mailing Address	Other Address
Maharashtra	
India	
Languages	Level
Created By	Last Modified By
 Soham Technologies, 17/11/2025, 11:39 am	 Soham Technologies, 24/11/2025, 5:54 pm
Description	

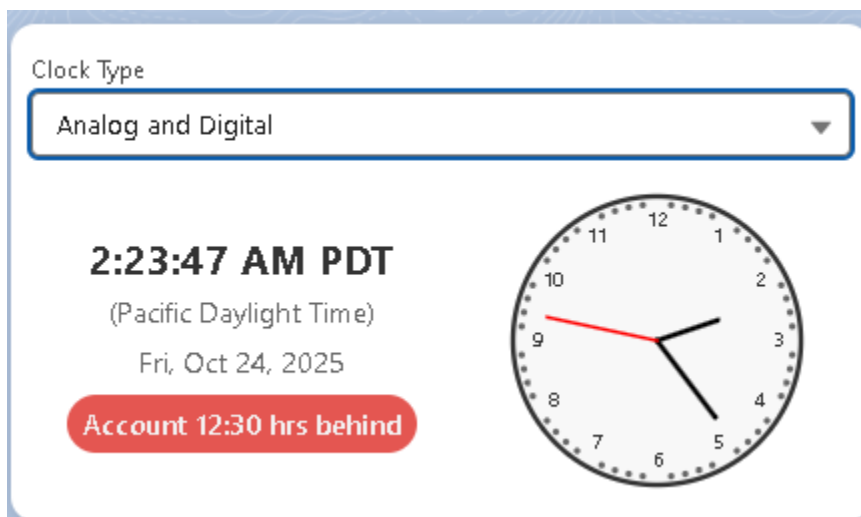
Analog Clock: Here is how Analog Clock is displayed.



Digital Clock: Here is how Digital Clock is displayed.



Digital and Analog Clock: Here both are displayed side by side.



5.1.2. LIST VIEWS

In list views, you can add GeoClockify fields to see time zone information across multiple records simultaneously. Add the Time zone and field.

to columns for quick scanning. You can sort records by to group records in similar time zones together, or filter to show only records in specific time zone ranges for targeted outreach.


Leads
All Open Leads

[New](#)
[Intelligence View](#)
[Import](#)
[Add to Campaign](#)
[Change Status](#)

26 items • Sorted by Name • Filtered by Lead Status • Updated a minute ago

☐	Name ↑	TimeZone	Company	Cou...	Cal...	Stat...	Email	Lead Status	Created ...
1	☐ Bertha Boxer	(GMT-05:00) Eastern Standard Time (America/New_York)	Farmers Coop. ...	USA		FL	bertha@fcf...	Working - ...	17/09/2025,...
2	☐ Betty Bair	(GMT-05:00) Eastern Standard Time (America/New_York)	American Bankin...	USA		PA	bblair@aban...	Working - ...	17/09/2025,...
3	☐ Brenda McClure	(GMT-06:00) Central Standard Time (America/Chicago)	Cadinal Inc.	USA		IL	brenda@car...	Working - ...	17/09/2025,...
4	☐ David Monaco	(GMT+09:00) Japan Standard Time (Asia/Tokyo)	Blues Entertainm...	Japan			david@blues...	Working - ...	17/09/2025,...
5	☐ Gonzalez	(GMT+05:30) India Standard Time (Asia/Kolkata)	Individual	India		Ma...		Open - Not...	09/10/2025,...
6	☐ Gonzalez123	(GMT+05:30) India Standard Time (Asia/Kolkata)	ST	India		Ma...		Open - Not...	15/10/2025,...
7	☐ Jeff Glimpse	(GMT+08:00) Taipei Standard Time (Asia/Taipei)	Jackson Controls	Taiwan			jeffg@jackso...	Open - Not...	17/09/2025,...
8	☐ John Doe	(GMT+05:30) India Standard Time (Asia/Kolkata)	Example Corp	India		Ma...	johndoe@ex...	Open - Not...	15/10/2025,...
9	☐ John Doe	(GMT+05:30) India Standard Time (Asia/Kolkata)	Example Corp	India		Ma...	johndoe@ex...	Open - Not...	16/10/2025,...
10	☐ Kathy Snyder	(GMT-05:00) Eastern Standard Time (America/New_York)	TNR Corp.	USA		CT	ksnyder@tnr...	Working - ...	17/09/2025,...

5.2.USING TIME ZONE FEATURES

5.2.1. AUTOMATIC TIME ZONE DETECTION

Time zone detection triggers automatically when you populate address fields and check the ‘Calculate Time zone’ checkbox and run the batch. The system sends the complete address to Google’s API, to determine the precise time zone. Supported address formats include complete street addresses, city-state-country combinations, and postal codes with country information. If you update the address data on record, make sure to again repeat the process to get the updated timezone data.

5.2.2. TIME DISPLAY FORMATS

The component follows a 12-hour (AM/PM) format. Date formats automatically follow your Salesforce locale settings, showing month-day-year or day-month-year accordingly.

5.3.ADVANCE FEATURES

5.3.1. BATCH PROCESSING

Process existing records in bulk by scheduling the GeoClockify Batch class `'GeoClockifyBatch'`. Select records based on criteria like “all Contacts with country populated” or “Leads created in the last 30 days.” Schedule these batches to run during off-peak hours to minimize system impact while updating thousands of records overnight.

Before scheduling, ensure

- The CalculateTimezone__c checkbox is selected for records to process as per your criteria discussed above
- Valid address data is present on the records

5.3.2. TIME ZONE VALIDATION

The system validates addresses during processing and flags records where geocoding fails. Invalid addresses trigger error messages. The system logs any errors (e.g., invalid address or failed API call) to **Errorlogs** Object.” Failed validations don’t stop batch processing - other records continue while errors log for later review.

6. ADMINISTRATION GUIDE

6.1.MANAGING SETTINGS

6.1.1. SECURITY SETTINGS

Control access through field-level security and object permissions. Restrict time zone calculation triggers to specific user profiles while allowing broader view access to time display fields. Manage API credential security through protected custom metadata types.

6.1.2. CUSTOM METADATA SETTINGS

Modifying Existing Metadata Configurations

You can edit any existing configuration by clicking on the record name. Common modifications include:

- Updating field mappings when field names change
- Adding new objects after initial implementation
- Correcting mappings
- Disabling configurations for objects no longer needing time zone features

6.2.MONITORING AND MAINTENANCE

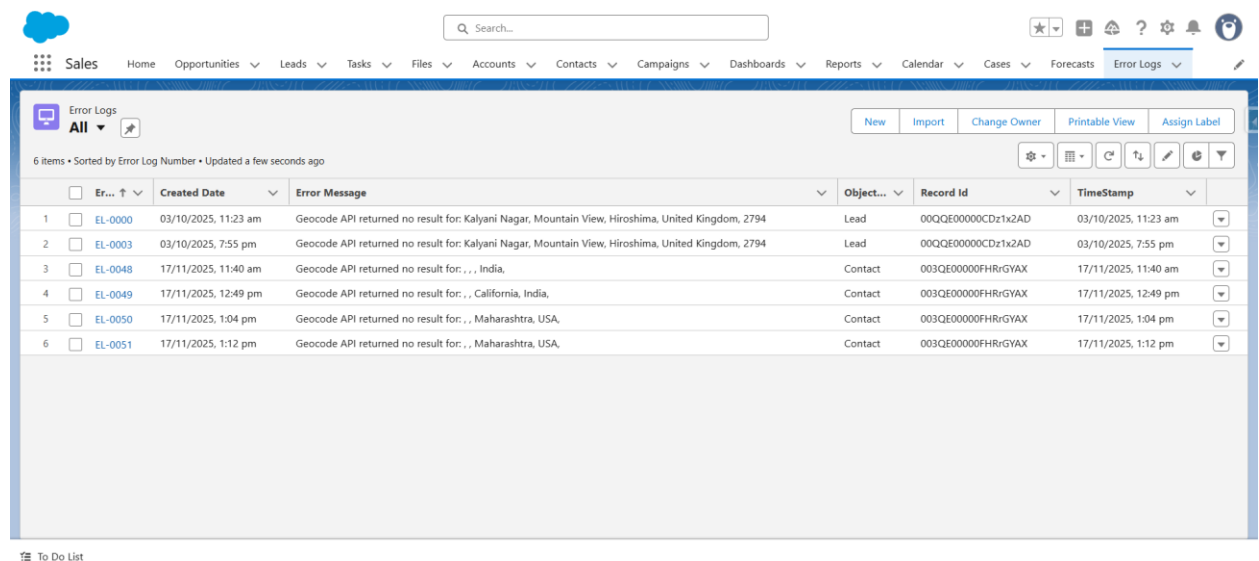
6.2.1. USAGE REPORTS

Monitor API consumption, user activity, and record processing volumes through reports. Track costs by viewing geocoding request counts and identify peak usage periods for capacity planning.

6.2.2. ERROR LOGS

Access detailed error logs showing failed address conversions. Logs include four fields

- Record Id, Object Name, Error Message and Timestamp for troubleshooting.



Er...	Created Date	Error Message	Object...	Record Id	TimeStamp
1 EL-0000	03/10/2025, 11:23 am	Geocode API returned no result for: Kalyani Nagar, Mountain View, Hiroshima, United Kingdom, 2794	Lead	00QQE0000CDz1x2AD	03/10/2025, 11:23 am
2 EL-0003	03/10/2025, 7:55 pm	Geocode API returned no result for: Kalyani Nagar, Mountain View, Hiroshima, United Kingdom, 2794	Lead	00QQE0000CDz1x2AD	03/10/2025, 7:55 pm
3 EL-0048	17/11/2025, 11:40 am	Geocode API returned no result for: , , , India,	Contact	003QE00000FHRrGVAX	17/11/2025, 11:40 am
4 EL-0049	17/11/2025, 12:49 pm	Geocode API returned no result for: , , California, India,	Contact	003QE00000FHRrGVAX	17/11/2025, 12:49 pm
5 EL-0050	17/11/2025, 1:04 pm	Geocode API returned no result for: , , Maharashtra, USA,	Contact	003QE00000FHRrGVAX	17/11/2025, 1:04 pm
6 EL-0051	17/11/2025, 1:12 pm	Geocode API returned no result for: , , Maharashtra, USA,	Contact	003QE00000FHRrGVAX	17/11/2025, 1:12 pm

6.2.3. PERFORMANCE MONITORING

As part of routine Salesforce Administration activities, we recommend monitoring GeoClockify performance and API usage. To optimize system efficiency, "Calculate Time Zone" only for required records and only when needed.

6.3.DATA MANAGEMENT

6.3.1. DATA STORAGE CONSIDERATIONS

GeoClockify does not consume Data Storage beyond logging error if any during processing records.

Optimization Strategies:

1. Use selective calculations by only enabling GeoClockify for active records.
2. Regularly purge old error logs.
3. Monitor storage usage through Setup → Company Information → Data Storage Usage

6.3.2. BACKUP AND RECOVERY

Critical Components to Backup:

Configuration Data (Highest Priority)

Backup Recommendations:

- Configuration Data: Backup immediately after any configuration changes
- Time zone Data: Include in data exports and backups as needed
- Processing Logs: Timely archival for compliance requirements

Integration with Existing Backup Solutions:

- Coordinate with IT teams to include GeoClockify components in existing backup schedules
- Ensure third-party backup tools are configured to capture Custom Metadata Types

7. INTEGRATION GUIDE

7.1.SALESFORCE NATIVE INTEGRATIONS

7.1.1. FLOW INTEGRATION

GeoClockify does automate Time zone detection for any record and populates the same in any field of your choice. We can have further automation and integration based on the same through Flow or Trigger like any other field.

7.1.2. INTEGRATION WITH SALESFORCE AI AGENT

Out-of-the-Box Integration

Salesforce AI Agents can immediately leverage GeoClockify data without any additional configuration. The integration works seamlessly because both systems operate on the Salesforce native platform and share the same data model.

How AI Agents Automatically Access GeoClockify Data:

- AI Agents inherently have read access to all standard and custom fields on objects where they have permissions
- GeoClockify's timezone fields (TimeZone__c) are treated like any other Salesforce field
- When an AI Agent is having access to an object (like Contact or Lead), it automatically recognizes and can utilize GeoClockify fields
- No special configuration or setup is required to give AI Agents basic read access to timezone data

AI Agents can automatically reference local time in conversations.

Some Use Cases:

1. Fetch all contact records and automatically identify each contact's timezone.

2. Retrieve and filter records based on the Timezone field to segment contacts effectively.
3. Display only the contacts belonging to a specific timezone when performing targeted outreach.

7.2.EXTERNAL INTEGRATIONS

7.2.1. TIME ZONE API CONFIGURATION

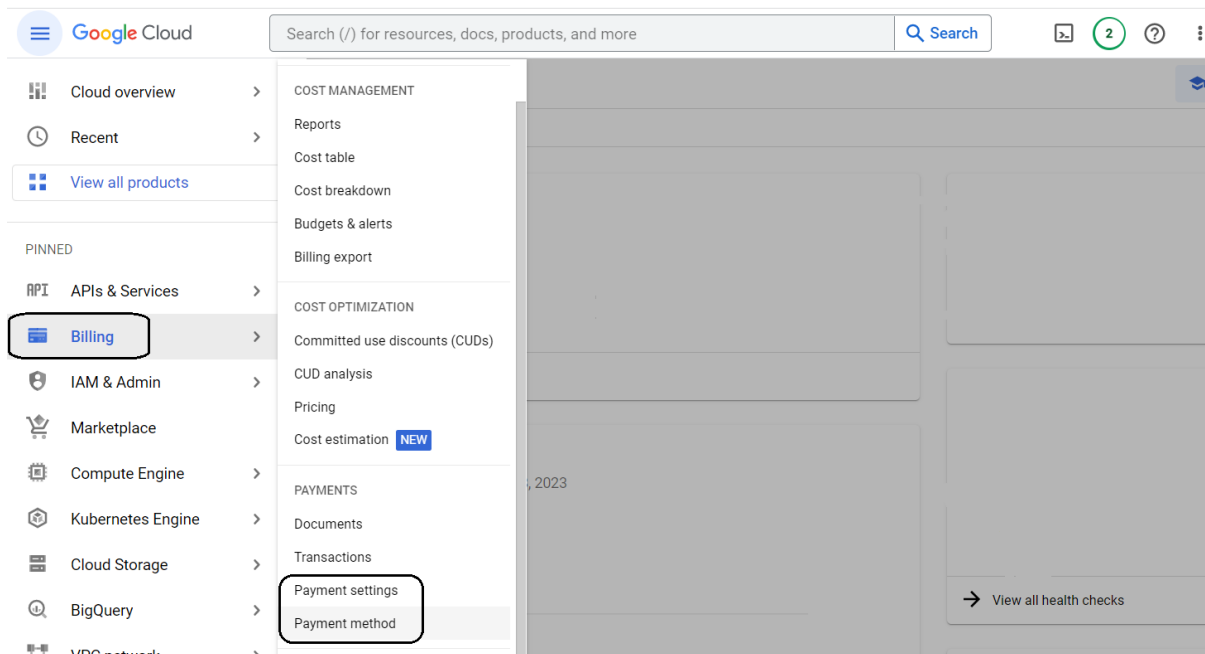
GeoClockify uses the Google Maps Platform to get time zone information. To use this platform, you need a Google Maps API Key. This document describes how to create this key for your organization.

Pre-requisite

It is assumed that you have installed the package in your Sandbox and/or Production environment(s) as required.

7.2.1.1. CREATE A PROJECT FROM GOOGLE CLOUD CONSOLE

Login to your Google Cloud Console. Click Create Project to begin creating a new Cloud project. If you already created a project before, you could decide to re-use this project instead of creating a new one.

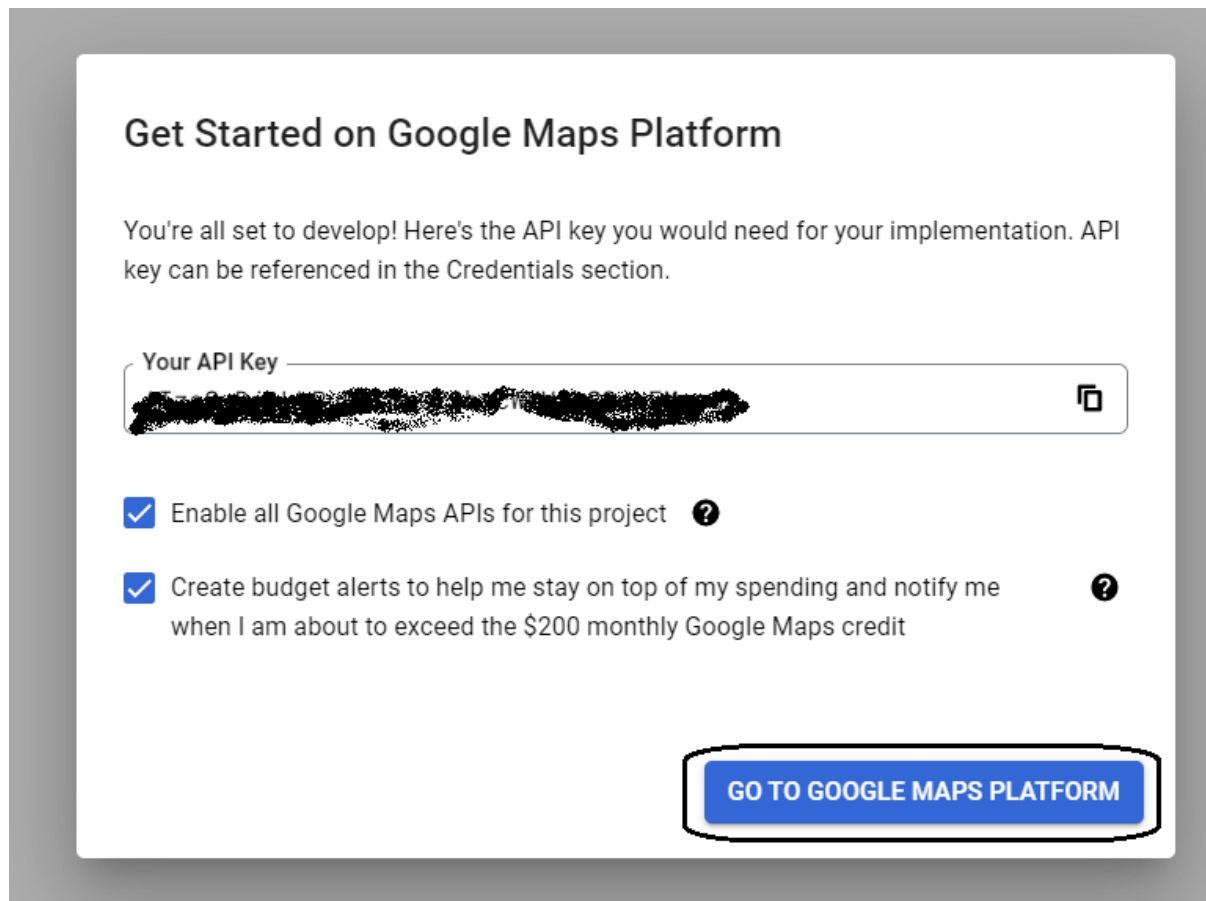


7.2.1.2. ENABLE THE RELEVANT APIS

From the Navigation Menu located in the top left corner, select the APIs & Services menu option and click Enable APIs and Services. Search and add the following APIs.

- **Geocode API**
- **Time Zone API (Note: this might be automatically added when you added the Places API)**

When you have added the APIs the Console may automatically create an API Key and you might see a prompt like the following screenshot.



7.2.1.3. CREATE THE API KEY

If the API Key creation prompt did not appear in the prior steps,

--> Select the Navigation Menu located in the top left corner,

--> Select the Credentials sub menu.

--> Click Create Credentials and then

--> Select the API key option.

The API Key is then created automatically.

Google Cloud test Search (/) for resources, docs, products, and more Search

API & Services Credentials + CREATE CREDENTIALS DELETE RESTORE DELETED CREDENTIALS

Enabled APIs & services Library Credentials OAuth consent screen Page usage agreements

Create credentials to access your project

Remember this credential

API Keys

☐	Name	Creation date	Restrictions	Actions
☐	Maps API Key	Feb 9, 2023		SHOW KEY

API Keys

OAuth 2.0 Client IDs

☐	Name	Creation date	Type	Client ID	ACTIONS
--------------------------	------	---------------	------	-----------	---------

Edit API key
Delete API key

Add restrictions to reduce security risk and prevent unauthorized use. [Learn more](#)

Application restrictions ?

- ☒ None
- ☐ Websites
- ☐ IP addresses
- ☐ Android apps
- ☐ iOS apps

API restrictions ?

- ☐ Don't restrict key
This key can call any API
- ☒ Restrict key

2 APIs

Selected APIs:

Geocoding API
Time Zone API

7.2.1.4. UPDATE THE CUSTOM METADATA WITH GOOGLE API KEY

Update the Custom Metadata Google API Config with API Key.

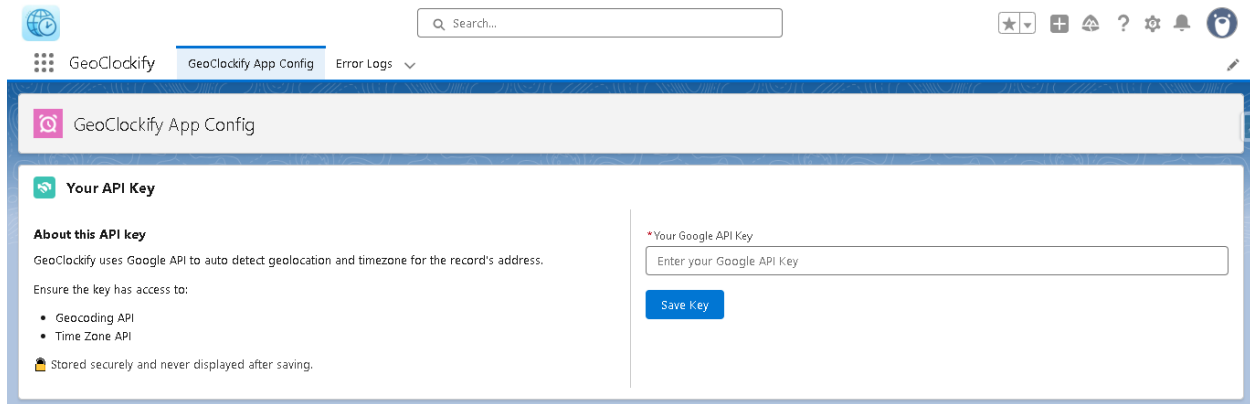
→ Go to App Launcher

➔ Geoclockify app

→ Go to Geoclockify App Config

→ Add API key in “Your Google API Key”

→ Save



8. TROUBLESHOOTING

8.1.COMMON ISSUES AND SOLUTIONS

8.1.1. INSTALLATION ISSUES

Common installation problems include missing dependencies and permission errors. Solutions typically involve verifying package dependencies and ensuring System Administrator privileges during installation.

8.1.2. CONFIGURATION PROBLEMS

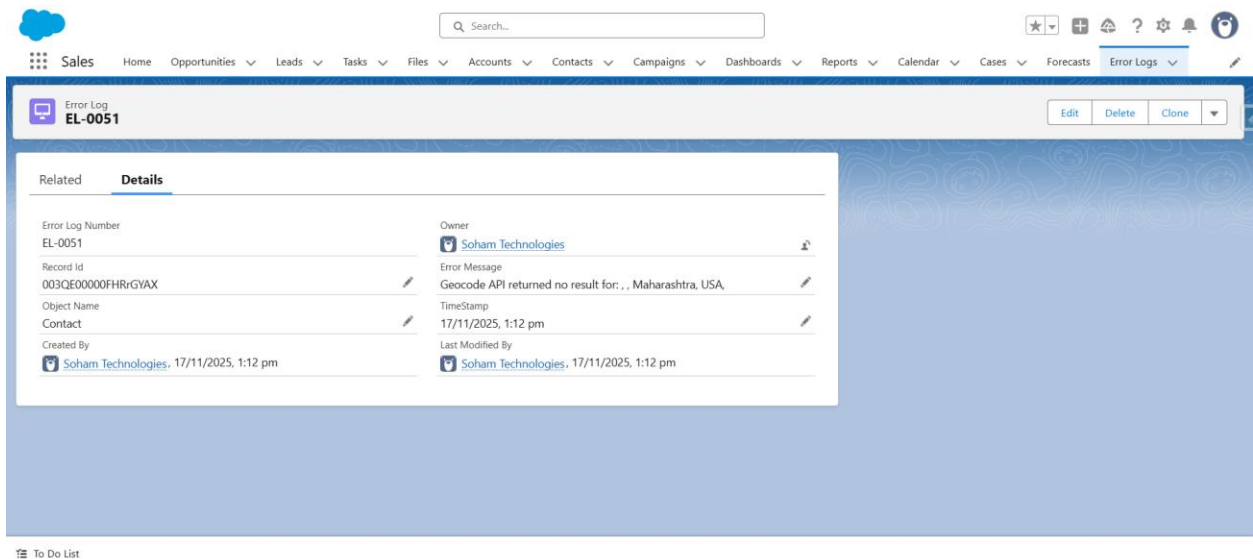
Typical configuration issues involve incorrect field mappings and API key errors. Resolution requires validating field API names and checking Google Cloud Console for API key status.

8.1.3. TIME ZONE DETECTION ERRORS

Detection failures usually stem from incomplete addresses or API quota limits. Address by ensuring complete address data and monitoring Google API usage metrics.

8.2.ERROR MESSAGES REFERENCE

The error log object includes four fields Record Id, Object Name, Error Message, Timestamp for troubleshooting.



For API limit warnings, please check the Google cloud console and for metadata configuration issues, refer to the configuration section of this guide.

8.3.PERFORMANCE OPTIMIZATION

GeoClockify automating Google API calls can be resource intensive. GeoClockify Batch is designed to comply with Salesforce governor limits and platform best practices. To optimize performance, we recommend -

- i. "Calculate Time Zone" selectively - only for records that need recalculation (e.g., new records, address changes, Daylight Saving Time adjustments).
- ii. Process large data volumes during off-peak hours to minimize contention with other Salesforce processes, reduce system load and avoid performance bottlenecks.

9. BEST PRACTICES

9.1.IMPLEMENTATION BEST PRACTICES

1. Place the LWC component in a consistent location across different object pages.
2. Consider user workflows when choosing between analog, digital, or combined displays.
3. Test the component with sample data to ensure proper configuration before releasing to end users - Sales and Service and Operations and applicable teams.

4. Train users on how to interpret the time display and time zone information for maximum effectiveness.

9.2.USAGE BEST PRACTICES

9.2.1. INITIAL ADDRESS DATA ASSESSMENT

- Conduct audit of all existing records with address data
- Identify records with incomplete or inconsistent address information
- Use Salesforce reports to analyze data quality across different objects
- Prioritize records based on business criticality (e.g., active accounts first)

9.2.2. MAINTAINING ACCURATE ADDRESS DATA

- Implement validation rules requiring complete address fields (country, state, city) before record save
- Standardize on full geographic names (“United States”) rather than codes (“US”) for better API recognition
- Use automated address verification tools to correct spelling errors and formatting inconsistencies
- Establish data quality standards for all international address entries
- Train users on proper address formatting during data entry

9.3.MAINTENANCE BEST PRACTICES

- Timely review error logs for failed geocoding attempts and API timeouts.
- Monitor Google API consumption and costs through Google Cloud Console
- Track batch processing times and success rates
- Monitor data storage consumption from time zone fields and logs

10. FAQ (FREQUENTLY ASKED QUESTIONS)

10.1. GENERAL QUESTIONS

Q: How accurate is the time zone detection?

A: Accuracy depends on address completeness. With full addresses, accuracy exceeds 99% using Google's geocoding services.

Q: Can I use my existing geocoding data?

A: Yes, if you maintain latitude/longitude data, configure GeoClockify to use only the Time zone API.

Q: I just updated the address field on a record, still the time zone is not updated, is anything wrong?

A: You need to check the checkbox 'Calculate Timezone' again and run the batch process to get the updated time zone data.

10.2. TECHNICAL QUESTIONS

Q: What happens during Google API outages?

A: The system continues using available time zone data in the org and queues new requests for processing when services resume. We need Google API only for detecting record's time zone. If this information is available on record, GeoClockify will show the record's local time based on the same. You will not be able to detect the time zone. In such a scenario, in case of emergency, you can manually enter Time zone data in the field on record. Local Time and Clock will automatically display current local time correctly.

Q: How are daylight saving time changes handled?

A: Google's Time zone API takes care of DST schedules. For any regions when DST changes, you can mark corresponding records for "Calculate Time Zone" and process. GeoClockify will recalculate the current time zone for specified records and update time zone and local time accordingly.

10.3. ACCESSIBILITY QUESTIONS

Q: Is the app accessible for users with disabilities?

A: Yes, GeoClockify is fully compliant with WCAG 2.1 AA standards and Salesforce accessibility requirements.

Q: How does the analog clock work for visually impaired users?

A: The analog clock includes ARIA labels and screen reader support that announces the current time in text format. Digital clock display is recommended for low-vision users.

Q: Are keyboard-only users supported?

A: Yes, all components can be navigated using keyboard controls, including tab navigation and keyboard-activated controls.

Q: Is there sufficient color contrast for low-vision users?

A: Yes, all color schemes meet WCAG contrast ratio requirements of 4.5:1 for normal text and 3:1 for large text.

Q: How are time zone differences communicated to screen readers?

A: Time zone differences are announced clearly with context, for example: “Time zone difference: plus 3 hours” or “Local time: 2:30 PM Pacific Daylight Time.”

Q: Can users adjust the clock display to their accessibility needs?

A: Yes, users can switch between analog and digital displays based on their preferences, and text sizes scale according to browser zoom settings.

11. SUPPORT INFORMATION

11.1. HOW TO GET SUPPORT

Primary Support Channels**Customer Support**

- **URL:** <https://www.sohamtechnologies.in/geosupport.php>
- **Response Time:** Within 24 business hours

Email Support

- **General/Technical Support:** support@sohamtechnologies.in
- **Sales Inquiries:** sales@sohamtechnologies.in

Phone Support

- **US/Canada:** +1 803 797 4545
- **India:** +91 98232 30015

Self-Service Resources

Documentation & Knowledge Base

- **User Manual:** <https://www.sohamtechnologies.in/userguide.php>
- **Video Tutorials:** <https://www.youtube.com/watch?v=B2khJNbSlA>
- **FAQ Section:** <https://www.sohamtechnologies.in/faq.php>

11.2. SUPPORT HOURS AND SLAS

- **Support Hours:** 10:00 AM - 7:00 PM IST, Monday-Friday

11.3. COMMUNITY RESOURCES

- **Release Notes:**

Support Scope

What We Support

- Installation and configuration issues
- Feature functionality questions
- Troubleshooting time zone calculation errors
- Performance Optimization
- Integration assistance with google API

12. COMPANY INFORMATION

About Our Company

Company Name: Soham Technologies

Founded: 2004

Headquarters: Pune, India

Our Story

We started in 2004 with one goal: to make technology simple for businesses. Over the years, we have evolved into a full-scale Salesforce implementation partner and Salesforce development services provider. Today, we work with clients in the USA, Australia, Dubai, Canada, and India, providing advanced Salesforce cloud consulting that drives measurable results.

Leadership Team

Prakash Galinde - With 20+ years of experience in Salesforce ecosystem and global business operations, Prakash leads our vision for simplifying international business communications.

Sujata Galinde - Bringing 20+ years of expertise in Salesforce, integration and enterprise software development, Sujata ensures our platform remains cutting-edge and reliable.

Salesforce Partnership

- **Salesforce Consulting Partner** since 2022
- **Security Reviewed** managed package
- **Salesforce Consulting Partner Program** member since 2022

Contact Information

General Inquiries

- **Website:** <https://www.sohamtechnologies.in>
- **Email:** GeoClockify@sohamtechnologies.in

- **Phone:**
 - **India:** +91 98232 30015
 - **US:** +1 803 797 4545
- **Address:** Soham Technologies
Office No. 2322
Bramha Corp Business Park
Wadgaon Sheri Rd, New Kalyani Nagar,
Wadgaon Sheri, Pune, Maharashtra 411014
Pune, Maharashtra, India

Social Media

- **LinkedIn:** <https://www.linkedin.com/company/soham-technologies/>

13. APPENDIX

13.1. RELEASE NOTES

Release	Notes
1.0	Initial release

13.2. CURRENT VERSION DETAILS

Current Version: 1.0

First Release Date: 6-Feb-2026

13.3. VERSION HISTORY

This section will maintain a chronological record of all GeoClockify releases.

Version	Release Date	Key Changes
1.0	6-Feb-2026	Initial release with core functionality

Future versions will be documented here

13.4. GLOSSARY OF TERMS

Term	Category	Definition
Analog Clock	Component	A visual clock display showing the time with moving hour, minute, and second hands on a circular face.
API Key	Technical	A unique code used to authenticate and authorize requests made to the Google Geocoding and Time zone APIs.
Batch Apex	Salesforce	A Salesforce feature that processes large numbers of records asynchronously in manageable groups or “batches.”
Calculate Time zone Field	Field	A checkbox that, when checked, triggers the system to calculate or recalculate the time zone for that specific record.
Custom Metadata Type	Salesforce	A Salesforce configuration object used to store application settings and field mappings that can be deployed between environments.
Daylight Saving Time (DST)	Concept	The seasonal practice of advancing clocks during warmer months to make better use of natural daylight in the evening.
Digital Clock	Component	A clock display that shows the time numerically, often including the date and time zone name.
Geocoding	Process	The computational process of converting a street address into precise geographic coordinates (latitude and longitude).

Term	Category	Definition
Google Geocoding API	Service	Google's external service that performs geocoding, calculating coordinates for given address.
Google Time zone API	Service	Google's external service that returns time zone data for a specific set of latitude and longitude coordinates.
Governor Limits	Salesforce	Runtime limits are enforced by the Salesforce platform to ensure efficient and fair shared use of resources.
IANA Time zone	Concept	A standardized time zone identifier from the Internet Assigned Numbers Authority (e.g., America/New_York).
Lightning Web Component	Component	A modern, standards-based programming model for creating dynamic and reusable user interfaces in Salesforce Lightning.
Permission Set	Salesforce	A collection of settings and permissions that grant users access to various tools and functions without changing their profile.
Time zone Detection	Process	The automated end-to-end process of determining a location's time zone from its address data.
Time zone Field	Field	The field that stores the IANA-standard time zone identifier (e.g., Europe/London) for a record.
UTC	Concept	Coordinated Universal Time; the primary global time standard from which all time zones are calculated as offsets.

13.5. COMPLIANCE AND SECURITY INFORMATION

Security and data privacy are critical when adding a new application to your Salesforce environment. This overview explains how GeoClockify handles data protection and complies with relevant standards.

Data Protection & Privacy Approach

GeoClockify is designed with a core principle: **customer data belongs to the customer**. The application acts as a temporary processor, not a data owner.

- **Data Minimization:** To calculate timezones, only necessary address components (city, state, country) are sent to external APIs. No other sensitive information from records is referred or transmitted.
- **Data Residency:** All generated results—timezone data is stored directly in your Salesforce org in record's custom fields. No external database maintains customer information.
- **Purpose Limitation:** Address data is used exclusively for timezone determination, not for analytics, marketing, or other secondary purposes.

Data Lifecycle:

1. **Collection:** Address data is read from configured standard or custom fields.
2. **Processing:** Address information is sent to Google's secure APIs for coordinate and timezone lookup.
3. **Storage:** Results are written directly back to the Salesforce record.
4. **Deletion:** When records are deleted, all associated GeoClockify data is permanently removed, following org retention policies.

Security Architecture

Access and Authentication:

- GeoClockify leverages **Salesforce's native security model**, supporting existing MFA, SSO, and user permission settings. Record-level security is fully maintained.

- **Google API keys** are stored in Protected Custom Metadata Types, accessible only to authorized System Administrators.

Encryption:

- **Data in Transit:** All communications between Salesforce and Google's APIs use TLS encryption.
- **Data at Rest:** Information stored in Salesforce fields is protected by platform encryption capabilities.

External Service Compliance

Google's Geocoding and Timezone APIs are utilized for their accuracy and reliability.

- **Google's Security:** Google infrastructure maintains SOC 2 and ISO 27001 certifications, providing a trusted foundation for data processing.
- **Data Handling:** Address data sent to Google is processed transiently and not persistently stored for GeoClockify operations.

Salesforce Platform Compliance

- **Security Review:** The application has passed the mandatory **Salesforce Security Review**, meeting all platform security standards for AppExchange listings.
- **Best Practices:** Development follows Salesforce guidelines, enforcing CRUD/FLS and integrating with org security settings.

Compliance Statements

GDPR Compliance:

- GeoClockify functions as a "**Data Processor**" while customers act as "**Data Controllers.**"

- All GeoClockify data resides natively in Salesforce records, manageable through standard data management tools for subject access requests and deletion.

Operational Security

- **Monitoring:** System logging provides visibility into API usage and errors.
- **Administrative Controls:** Configuration is managed within Salesforce, with user access governed by permission sets.
- **Backup Integration:** GeoClockify data is included in standard Salesforce data exports and backup routines.

GeoClockify is engineered to operate as a secure component within your Salesforce org, leveraging platform strengths without creating additional data management overhead or compliance complexity.