

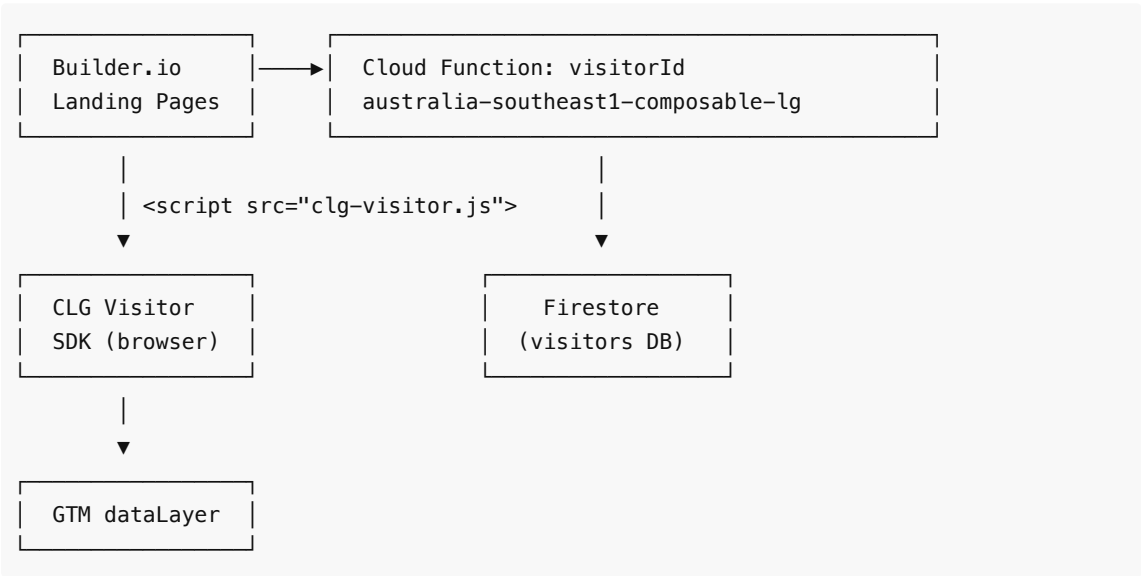
CLG Visitor ID System

A serverless visitor identification and behavioral tracking system for Builder.io landing pages.

Overview

Property	Value
GCP Project	composable-lg
Region	australia-southeast1
Database	Firestore (database: visitors)
Collection	visitors

Architecture



Endpoints

Endpoint	Method	Description
<code>https://australia-southeast1-composable-lg.cloudfunctions.net/visitorId</code>	GET	Get or create visitor profile
<code>https://australia-southeast1-composable-lg.cloudfunctions.net/visitorId</code>	POST	Track events and update behavior

Visitor ID Format

UUID v4 generated server-side using the `uuid` package.

Example: `a1b2c3d4-e5f6-7890-abcd-ef1234567890`

How It Works

First Visit

- 1. SDK (`clg-visitor.js`) loads on page
- 2. SDK calls Cloud Function API
- 3. Cloud Function generates UUID v4
- 4. Visitor document created in Firestore
- 5. ID returned to browser and stored in cookie + localStorage

Return Visit

- 1. SDK reads existing ID from cookie (`clg_vid`) or localStorage (`clg_visitor`)
- 2. SDK sends ID to Cloud Function
- 3. Cloud Function looks up existing profile
- 4. `pageViews` counter incremented
- 5. Updated profile returned

Persistence

Storage	Key	Duration
Cookie	<code>clg_vid</code>	365 days
localStorage	<code>clg_visitor</code>	Permanent

Firestore Document Structure

Collection: `visitors` **Document ID:** UUID (e.g., `a1b2c3d4-e5f6-7890-abcd-ef1234567890`)

```
{
  id: "a1b2c3d4-e5f6-7890-abcd-ef1234567890",
  createdAt: "2025-01-15T10:30:00.000Z",
  lastSeen: "2025-01-20T14:22:00.000Z",
  pageViews: 12,
  sessions: 3,
  source: "google",
  referrer: "https://google.com/...",
  userAgent: "Mozilla/5.0...",
  behaviors: [
    { event: "cta_click", properties: {}, timestamp: "2025-01-18T09:00:00.000Z" },
    { event: "form_complete", properties: {}, timestamp: "2025-01-20T14:20:00.000Z" }
  ],
  segments: ["high_intent", "equipment_rental"],
  leadScore: 45
}
```

Lead Scoring

Events automatically update the visitor's `leadScore` :

Event	Points
page_view	+1
video_play	+2
cta_click	+3
form_start	+5
video_complete	+5
download	+10
form_complete	+20
contact	+25

SDK Usage

Installation

Add the script to your Builder.io page or GTM:

```
<script src="https://clg-ten.vercel.app/clg-visitor.js" async></script>
```

JavaScript API

```
// Get visitor ID
const visitorId = CLGVisitor.getVisitorId();

// Get full profile
const profile = CLGVisitor.getProfile();

// Track custom event
await CLGVisitor.track('cta_click', { button: 'hero-cta' });

// Add to segment
await CLGVisitor.addSegment('high_intent');
```

GTM Integration

The SDK automatically pushes to `window.dataLayer` :

```
{
  event: 'visitor_identified',
  visitor_id: 'a1b2c3d4-...',
  visitor_type: 'new' | 'returning',
  visitor_page_views: 12,
  visitor_sessions: 3,
  visitor_lead_score: 45,
```

```
  visitor_segments: 'high_intent,equipment_rental'
}
```

A custom event `clg:visitor:ready` is also dispatched on the window.

Source Files

Component	Location
Cloud Function	clg/functions/index.js
Browser SDK	clg/public/clg-visitor.js

Deployment

Cloud Function

```
cd clg/functions
npm run deploy
```

Or manually:

```
gcloud functions deploy visitorId \
  --runtime nodejs20 \
  --trigger-http \
  --allow-unauthenticated \
  --project=composable-lg \
  --region=australia-southeast1
```

SDK

The SDK is served from `clg-ten.vercel.app/clg-visitor.js` - it deploys automatically with the CLG Next.js app.

GCP Console Links

- [Cloud Function](#)
- [Firestore Database](#)