

# Sentry Caching Fix & Debug Enhancement Summary

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## Overview

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**Date:** January 3, 2026

**Issue:** Test endpoints were returning cached responses, preventing verification of Sentry events

**Solution:** Added Cache-Control headers, unique test IDs, increased sampling, and enhanced debug logging

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## Changes Made

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### PART 1: Fix Test Endpoint Caching

#### Files Modified:

- src/app/api/test-sentry-server/route.ts**
  - ✓ Added unique test run ID generation: `test-${Date.now()}-${Math.random()}`
  - ✓ Added Cache-Control headers to response
  - ✓ Enhanced logging with test run ID and timestamps
  - ✓ Added X-Test-Run-ID header for tracking
- src/app/api/test-sentry-server-error/route.ts**
  - ✓ Added unique error ID: `error-${Date.now()}-${Math.random()}`
  - ✓ Added Cache-Control headers (both success and error responses)
  - ✓ Enhanced error messages with unique IDs
  - ✓ Added searchable test run ID to Sentry context
- src/app/api/test-sentry-edge/route.ts**
  - ✓ Added unique edge test ID: `edge-test-${Date.now()}-${Math.random()}`
  - ✓ Added Cache-Control headers to response
  - ✓ Enhanced logging with unique identifiers
  - ✓ Added `test_run_id` tag for Sentry search
- src/app/api/test-sentry-client-error/route.ts**
  - ✓ Added unique client test ID
  - ✓ Added Cache-Control headers to HTML response
  - ✓ Ensures fresh page load every time

#### Cache-Control Headers Added:

```
headers: {  
  'Cache-Control': 'no-store, no-cache, must-revalidate, proxy-revalidate',  
  'Pragma': 'no-cache',  
  'Expires': '0',  
  'X-Test-Run-ID': testRunId,  
}
```

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## PART 2: Increase Sampling Rates to 100%

### Files Modified:

#### 1. `sentry.server.config.ts`

```
``typescript
// Before:
tracesSampleRate: ENVIRONMENT === 'production' ? 0.1 : 1.0,
profilesSampleRate: ENVIRONMENT === 'production' ? 0.1 : 1.0,

// After:
tracesSampleRate: 1.0, // 100% sampling for debugging
profilesSampleRate: 1.0,
``
```

#### 1. `sentry.client.config.ts`

```
``typescript
// Before:
tracesSampleRate: ENVIRONMENT === 'production' ? 0.1 : 1.0,
profilesSampleRate: ENVIRONMENT === 'production' ? 0.1 : 1.0,

// After:
tracesSampleRate: 1.0, // 100% sampling for debugging
profilesSampleRate: 1.0,
``
```

#### 1. `sentry.edge.config.ts`

```
``typescript
// Before:
tracesSampleRate: ENVIRONMENT === 'production' ? 0.1 : 1.0,

// After:
tracesSampleRate: 1.0, // 100% sampling for debugging
``
```

**Result:** All events are now captured (not sampled out)

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## PART 3: Enhance Debug Logging

### Files Modified:

#### 1. `sentry.server.config.ts` - Enhanced beforeSend:

```
typescript
beforeSend(event, hint) {
  console.log('[Sentry beforeSend] ===== EVENT BEING SENT =====');
  console.log('[Sentry beforeSend] Event ID:', event.event_id);
  console.log('[Sentry beforeSend] Event Type:', event.type);
  console.log('[Sentry beforeSend] Level:', event.level);
  console.log('[Sentry beforeSend] Message:', event.message);
  console.log('[Sentry beforeSend] Timestamp:', event.timestamp);
  // ... + exception details, tags, extra data
  console.log('[Sentry beforeSend] ✅ Event will be sent to Sentry');
```

```
    return event;
  }
}
```

## 2. `sentry.client.config.ts` - Enhanced beforeSend:

- ☒ Added comprehensive event logging
- ☒ Shows exception details
- ☒ Displays tags and extra data
- ☒ Clear success/suppression indicators

## 3. `sentry.edge.config.ts` - Added beforeSend:

- ☒ Previously didn't have beforeSend function
- ☒ Now includes full debug logging
- ☒ Consistent with server/client configs

## PART 4: Configuration Verification

### Verified:

- ☒ DSN is set in `.env` : `NEXT_PUBLIC_SENTRY_DSN=https://...`
- ☒ Tunnel endpoint configured: `/api/sentry-tunnel`
- ☒ All integrations enabled
- ☒ Debug mode enabled (temporarily for troubleshooting)
- ☒ Environment variables consistent across configs



## Git Commits

### Commit 1: Main Fix

**Commit Hash:** `93a54e1`

**Message:** "fix: Add cache-control headers and enhance Sentry debugging"

**Files Changed:** 7 files, +284 insertions, -73 deletions

#### Changes:

- All test endpoints: Added no-cache headers and unique IDs
- `sentry.server.config.ts`: 100% sampling + enhanced logging
- `sentry.client.config.ts`: 100% sampling + enhanced logging
- `sentry.edge.config.ts`: 100% sampling + added beforeSend logging

### Commit 2: Documentation

**Commit Hash:** `1e9ff75`

**Message:** "docs: Add comprehensive Sentry testing instructions"

**Files Changed:** 1 file, +297 insertions

**New File:** `SENTRY_TEST_INSTRUCTIONS.md`

## Key Improvements

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### 1. No More Caching

- **Problem:** Next.js was caching API responses
- **Solution:** Explicit Cache-Control headers
- **Result:** Fresh response on every request

### 2. Unique Test IDs

- **Problem:** Couldn't distinguish between test runs
- **Solution:** Generate unique IDs with timestamp + random string
- **Result:** Easy to search in Sentry by test run ID

### 3. 100% Sampling

- **Problem:** Events might be sampled out (10% rate)
- **Solution:** Set all sampling rates to 1.0 (100%)
- **Result:** All test events are captured

### 4. Detailed Logging

- **Problem:** Hard to track event flow through pipeline
- **Solution:** Enhanced beforeSend logging in all configs
- **Result:** Can see exactly what Sentry is sending

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## Testing Instructions

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### Quick Test

```
# Test server endpoint (bypasses cache)
curl -v https://getcarelinkai.com/api/test-sentry-server

# Verify unique test run ID in response
# Check Render logs for detailed output
# Wait 2-5 minutes and check Sentry dashboard
```

### Full Test Plan

See: `SENTRY_TEST_INSTRUCTIONS.md` for complete testing checklist

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## Before vs After




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### Before (With Caching Issue)


```
Request 1: testRunId: "test-123456-abc"
Request 2: testRunId: "test-123456-abc"  ❌ Same ID (cached)
Request 3: testRunId: "test-123456-abc"  ❌ Same ID (cached)

Sentry Dashboard: 0 events  ❌
Render Logs: Minimal logging
```

## After (With Fix)

Request 1: testRunId: "test-1704329845123-abc123"  Unique  
 Request 2: testRunId: "test-1704329856789-def456"  Unique  
 Request 3: testRunId: "test-1704329867890-ghi789"  Unique

Sentry Dashboard: 3 events with unique IDs 


Render Logs: Detailed event tracking 



## Debugging Features

### 1. Test Run ID Tracking

- Every test generates unique ID
- ID included in Sentry events as tag
- Searchable in Sentry dashboard
- Format: `test-<timestamp>-<random>`

### 2. Enhanced Console Logs

```
[Sentry Test] ===== SERVER TEST =====
[Sentry Test] Test Run ID: test-1704329845123-abc123
[Sentry Test] Timestamp: 2026-01-03T18:30:45.123Z
[Sentry Test] Sentry.isInitialized(): true
[Sentry Test] Message captured with ID: abc123...
[Sentry Test] Error captured with ID: def456...
[Sentry Test]  Events flushed to Sentry

[Sentry beforeSend] ===== EVENT BEING SENT =====
[Sentry beforeSend] Event ID: abc123...
[Sentry beforeSend] Event Type: error
[Sentry beforeSend] Level: error
[Sentry beforeSend] Message:  Server-side Sentry test...
[Sentry beforeSend] Tags: { test_type: "server", test_run_id: "test-..." }
[Sentry beforeSend]  Event will be sent to Sentry
```

### 3. Response Headers

```
HTTP/1.1 200 OK
Cache-Control: no-store, no-cache, must-revalidate, proxy-revalidate
Pragma: no-cache
Expires: 0
X-Test-Run-ID: test-1704329845123-abc123
```

## Important Notes

### Temporary Settings (Revert After Testing)

1. **Sampling Rates:** Currently at 100% (1.0)
  - TODO: Revert to 0.1 (10%) after debugging
  - Affects: server, client, edge configs




2. **Debug Mode:** Enabled in production
  - TODO: Disable after debugging
  - Set `debug: false` in production

## Why These Changes Matter





- **Caching Fix:** Essential for testing and verification
- **Unique IDs:** Makes debugging possible
- **100% Sampling:** Ensures no events are missed during testing
- **Debug Logging:** Provides visibility into event pipeline

## Deployment Status

### GitHub

-  Branch: `main`
-  Commits pushed: `93a54e1` , `1e9ff75`
-  Repository: `profy7/carelinkai`

### Render (Next Steps)







1.  Wait for auto-deploy to complete (~5-10 minutes)
2.  Verify deployment in Render dashboard
3.  Check Render logs for Sentry initialization
4.  Run test endpoints

### Testing Timeline




- Deploy: ~5-10 minutes
- Run tests: ~2 minutes
- Sentry ingestion: 2-5 minutes
- Verification: ~2 minutes
- **Total: ~15-20 minutes**

## Next Steps

### Immediate

1.  Wait for Render deployment
2.  Run test endpoints using curl
3.  Check Render logs for detailed output
4.  Wait 2-5 minutes for Sentry ingestion
5.  Verify events in Sentry dashboard
6.  Search Sentry for test run IDs

### After Testing

1.  Document test results
2.  Verify all events appear correctly
3.  Consider reverting sampling rates (1.0 → 0.1)

4. ⌚ Consider disabling debug mode in production
5. ⌚ Monitor real errors in Sentry

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## Documentation

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### Created Documents

1. `SENTRY_TEST_INSTRUCTIONS.md`
  - Comprehensive testing guide
  - Step-by-step checklist
  - Debugging tips
  - Success criteria
2. `SENTRY_CACHING_FIX_SUMMARY.md` (this file)
  - Technical summary of changes
  - Before/after comparison
  - Deployment status
  - Next steps

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## Quick Links

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- **GitHub Repo:** <https://github.com/profy7/carelinkai>
- **Sentry Dashboard:** <https://sentry.io/organizations/carelinkai/issues/>
- **Render Dashboard:** <https://dashboard.render.com/>
- **Test Instructions:** See `SENTRY_TEST_INSTRUCTIONS.md`

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## Support

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If issues persist:

1. Check Render logs for `[Sentry Test]` and `[Sentry beforeSend]` messages
2. Verify environment variables in Render dashboard
3. Test tunnel endpoint: `curl https://getcarelinkai.com/api/sentry-tunnel`
4. Review this summary document
5. Check test instructions for debugging tips

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**Summary Created:** January 3, 2026

**Last Updated:** January 3, 2026

**Status:**  Ready for Deployment Testing

**Next Action:** Wait for Render deployment, then run tests