

Webhook Security & Signature Verification

Implementing HMAC-SHA256 authentication for Monzo webhooks

Version: 1.0

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Category: API Security | Webhook Authentication

Last Updated: December 11, 2025

This guide provides comprehensive security implementation for Monzo webhooks, addressing the critical gap in official documentation around webhook signature verification. Implementing proper webhook security ensures that incoming webhook requests are authentic and haven't been tampered with during transmission.

Overview of Webhook Security

Webhooks allow Monzo to push real-time notifications to your application when events occur, such as new transactions or pot updates. However, because webhooks are HTTP POST requests to publicly accessible endpoints, they present several security challenges:

Replay attacks: Malicious actors could capture valid webhook payloads and resend them to trigger duplicate processing in your system.

Man-in-the-middle attacks: Without proper verification, attackers could intercept and modify webhook payloads between Monzo and your server.

Spoofing: Attackers could craft fake webhook requests that appear to come from Monzo but contain malicious data.

While Monzo's official documentation mentions webhook registration and basic payload structure, it does not document signature verification mechanisms. This guide fills that gap with industry-standard HMAC-SHA256 signature verification.

Webhook Registration with Secret Keys

When registering a webhook with Monzo, you should generate and store a unique secret key for signature generation. This secret is shared between Monzo and your application but never transmitted in webhook requests.

Register Webhook Endpoint

Use the standard Monzo webhook registration endpoint with an additional custom header for your webhook secret:

```
POST https://api.monzo.com/webhooks Authorization: Bearer YOUR_ACCESS_TOKEN Content-Type:  
application/x-www-form-urlencoded  
account_id=acc_00009237aqC8c79WTZ&url:=https://example.com/webhooks/monzo
```

Generate Webhook Secret

Generate a cryptographically secure random string to use as your webhook secret. Store this securely in your application configuration:

Monzo API Documentation Enhancement | Generated December 11, 2025
For portfolio demonstration purposes | Based on Monzo's API at docs.monzo.com