Stripe Webhook Testing Guide

✅ Webhook Status: FIXED AND DEPLOYED

Deployment URL: https://sop-marketplace-2xsu5a.abacusai.app
Webhook Endpoint: https://sop-marketplace-2xsu5a.abacusai.app/api/webhooks/stripe
Status: Live and operational

Quick Verification

Endpoint Accessibility Test

```
curl -X POST https://sop-marketplace-2xsu5a.abacusai.app/api/webhooks/stripe \
  -H "Content-Type: application/json" \
  -d '{"test": "data"}'
```

Expected Response:

```
{"error":"No signature provided"}
```

✅ **VERIFIED:** Endpoint is accessible and responding correctly!

End-to-End Purchase Testing

Step 1: Access the Application

1. Open browser and navigate to: https://sop-marketplace-2xsu5a.abacusai.app
2. Sign in with existing account or create a new one
3. Email verification may be required for new accounts

Step 2: Browse and Select SOP

1. Click "Marketplace" in the header
2. Browse available SOPs
3. Find a **paid SOP** (price > $0)
4. Click on the SOP to view details
5. Click "Add to Cart" or "Buy SOP"

Step 3: Proceed to Checkout

1. Click the cart icon in the header
2. Review items in cart
3. (Optional) Apply a promo code if available
4. Click "Proceed to Checkout"
5. You'll be redirected to Stripe Checkout

Step 4: Complete Payment

Use Stripe Test Card:

```
Card Number: 4242 4242 4242 4242
Expiry: Any future date (e.g., 12/25)
CVC: Any 3 digits (e.g., 123)
ZIP: Any 5 digits (e.g., 12345)
```

Other Test Cards:

- **Successful payment:** 4242 4242 4242 4242
- **Payment declined:** 4000 0000 0000 0002
- **Insufficient funds:** 4000 0000 0000 9995
- **3D Secure required:** 4000 0025 0000 3155

Step 5: Verify Purchase Completion

After successful payment:

1. You should be redirected to the cart or SOP page
2. Success message should appear: "Payment successful!"
3. Navigate to "Dashboard" or profile menu
4. Click "My Purchases" tab
5. The purchased SOP should be listed

Step 6: Verify Access

1. Click on the purchased SOP from "My Purchases"
2. You should have full access to all steps
3. No "locked" blur effect on steps
4. "Run SOP" button should be available
5. Can view attachments and downloads

Webhook Verification

Check Stripe Dashboard

1. Go to: https://dashboard.stripe.com/test/webhooks
2. Select your webhook endpoint
3. Look for recent events
4. Find the `checkout.session.completed` event
5. Check the status:
   - ✅ **200 OK** = Success
   - ❌ **4xx/5xx** = Failed

Expected Webhook Data

Event Type: `checkout.session.completed`

Metadata (in session object):

```
{
  "purchaseIds": "clxxx...,clyyy...",
  "sopIds": "clxxx...,clyyy...",
  "userId": "clxxx..."
}
```

Expected Response from Webhook:

```json
{
  "received": true
}
```

Check Server Logs

If you have access to server logs, look for these log messages:

```
🔔 Webhook received
📝 Webhook body length: XXXX
🔑 Signature present: true
🔐 Verifying webhook signature...
✅ Signature verified successfully
📋 Event type: checkout.session.completed
🆔 Event ID: evt_XXXXXXXXXX
💳 Processing checkout.session.completed
📦 Session metadata: {...}
🔄 Starting handleCheckoutCompleted
📊 Metadata received:
   - purchaseIds: clxxx...,clyyy...
   - sopIds: clxxx...,clyyy...
   - userId: clxxx...
📋 Processing X purchase(s)
   ➡️  Processing purchase 1/X: clxxx...
      ✅ Purchase updated to completed
      💰 Amount: $XX.XX
      🧑 Seller: Name (clxxx...)
      💵 Revenue record created for seller
         Seller revenue: $XX.XX
         Platform fee: $XX.XX
✅ All purchases processed successfully
✅ Webhook processed successfully
```

Database Verification

If you have database access, verify the purchase was created:

```sql
-- Check recent purchases
SELECT
  p.id,
  p.status,
  p.amount,
  p."stripePaymentId",
  p."createdAt",
  s.title as sop_title,
  u.email as buyer_email,
  u.name as buyer_name
FROM "Purchase" p
JOIN "SOP" s ON p."sopId" = s.id
JOIN "User" u ON p."userId" = u.id
WHERE p.status = 'completed'
ORDER BY p."createdAt" DESC
LIMIT 10;
```

Expected:

- Status: "completed"
- stripePaymentId: Should contain payment intent ID (pi_xxxxx...)
- amount: Should match the purchase price

```sql
-- Check revenue records
SELECT
  r.id,
  r.amount as seller_revenue,
  r."platformFee",
  r.status,
  s.title as sop_title,
  u.name as seller_name
FROM "Revenue" r
JOIN "SOP" s ON r."sopId" = s.id
JOIN "User" u ON r."sellerId" = u.id
ORDER BY r."createdAt" DESC
LIMIT 10;
```

Expected:

- Revenue record exists for each completed purchase
- amount: 70% of purchase price
- platformFee: 30% of purchase price
- status: "pending"

Troubleshooting

Issue: "Payment successful" but SOP not in purchases

Possible Causes:

1. Webhook not received by server
2. Webhook signature verification failed
3. Metadata mismatch
4. Database error

Solution Steps:

1. **Check Stripe Dashboard:**
   - Go to Webhooks section
   - Find the event
   - Check response status
   - If 4xx/5xx, review error message

2. **Check Server Logs:**
   - Look for webhook logs
   - Check for error messages with ❌ emoji
   - Look for stack traces

3. **Verify Webhook Secret:**
   ```bash
   # In .env file
   echo $STRIPE_WEBHOOK_SECRET
   # Should match the secret in Stripe dashboard
   ```

4. **Manual Purchase Completion:**
   If webhook failed, you can manually complete the purchase:
   ```sql
   UPDATE "Purchase"
   SET status = 'completed',
       "stripePaymentId" = 'pi_xxxxxx'
   WHERE id = 'purchase_id_here';
   ```

Issue: Webhook signature verification failed

Check:
1. STRIPE_WEBHOOK_SECRET is correct
2. Environment variables are loaded
3. No extra spaces in secret

Solution:

```
# Verify secret matches Stripe dashboard
echo $STRIPE_WEBHOOK_SECRET

# Should start with: whsec_
```

Issue: Metadata not found

Check:
1. Checkout session creation includes metadata
2. Metadata keys match webhook expectations:
- purchaseIds (plural)
- sopIds (plural)
- userId

Solution:
Review `/api/checkout/create-session/route.ts` to ensure metadata is set correctly.

Issue: Multiple purchases, only one completed

Check:
1. Server logs for errors on specific purchases
2. Database constraints
3. SOP/seller existence

Solution:
Review server logs for the specific purchase that failed. The webhook handler continues processing even if one purchase fails.

Test Scenarios

Scenario 1: Single SOP Purchase

1. Browse marketplace
2. Select one paid SOP
3. Click "Buy SOP"
4. Complete checkout

5. Verify purchase appears in dashboard

Expected Result:

- 1 purchase created
- Status: completed
- 1 revenue record created
- SOP accessible in "My Purchases"

Scenario 2: Cart with Multiple SOPs

1. Browse marketplace
2. Add 2-3 paid SOPs to cart
3. Go to cart
4. Click "Proceed to Checkout"
5. Complete payment
6. Verify all purchases appear

Expected Result:

- Multiple purchases created
- All status: completed
- Multiple revenue records
- All SOPs accessible

Scenario 3: Promo Code Applied

1. Add SOP to cart
2. Enter valid promo code
3. Verify discount is applied
4. Complete checkout
5. Verify promo code usage incremented

Expected Result:

- Purchase amount reflects discount
- PromoCode.usedCount incremented by 1
- Revenue split calculated on discounted price

Scenario 4: Payment Failure

1. Add SOP to cart
2. Proceed to checkout
3. Use failing test card: 4000 0000 0000 0002
4. Payment should fail
5. User returned to cart with error message

Expected Result:

- Purchase remains "pending" or updated to "failed"
- User not charged
- No revenue record created
- Can retry checkout

Success Criteria

✅ **Webhook endpoint is accessible**
✅ **Signature verification works**

✅ **Purchases are completed automatically**
✅ **Revenue records are created**
✅ **Users get immediate access to purchased SOPs**
✅ **Promo codes are tracked correctly**
✅ **Multiple purchases in cart work**
✅ **Error handling prevents crashes**
✅ **Logging provides clear troubleshooting info**

Performance Monitoring

Key Metrics to Track

1. **Webhook Delivery Success Rate**
   - Target: >99%
   - Monitor in Stripe dashboard

2. **Purchase Completion Time**
   - Target: <5 seconds from payment to completion
   - Check timestamp difference

3. **Error Rate**
   - Target: <1%
   - Monitor server logs for ❌ errors

4. **Database Query Performance**
   - Purchase update queries
   - Revenue creation queries
   - Monitor slow query logs

Support Information

Webhook Endpoint: https://sop-marketplace-2xsu5a.abacusai.app/api/webhooks/stripe
Stripe Dashboard: https://dashboard.stripe.com/test/webhooks
Documentation: See `STRIPE_WEBHOOK_FIX.md` for technical details

Test Cards: https://stripe.com/docs/testing#cards
Webhook Events: https://stripe.com/docs/api/events/types

Quick Test Checklist

- [ ] Webhook endpoint is accessible
- [ ] Test purchase with 4242 4242 4242 4242
- [ ] Payment completes successfully
- [ ] Redirected with success message
- [ ] SOP appears in "My Purchases"
- [ ] Can access SOP content
- [ ] Webhook shows 200 OK in Stripe dashboard
- [ ] Revenue record created in database
- [ ] Test with multiple SOPs in cart

- [ ] Test with promo code
- [ ] Test failed payment handling

Status: ✅ Ready for Testing!
Date: December 13, 2025
Version: 1.0