Breach Check API Migration Summary

Date: November 6, 2025

What Changed

Successfully migrated the email breach checking feature from **Have I Been Pwned (HIBP)** to **XposedOrNot API**.

Why This Change?

- **HIBP required a paid API key** ($3.50/month minimum)
- **XposedOrNot is completely free** with no API key required
- Both services provide similar breach detection capabilities
- XposedOrNot is open-source and actively maintained

Technical Details

API Endpoint Changed

- **Before**: `https://haveibeenpwned.com/api/v3/breachedaccount/`
- **After**: `https://api.xposedornot.com/v1/breach-analytics`

Authentication

- **Before**: Required `hibp-api-key` header with paid API key
- **After**: No authentication required (free for all users)

Response Format Adapted

XposedOrNot returns data in a slightly different format:

```
{
  "email": "user@example.com",
  "breaches_details": [...],
  "metrics": {
    "breaches": X,
    "pastes": Y
  }
}
```

The API route automatically adapts this to match our existing frontend expectations.

Files Modified

- `/home/ubuntu/quantumleap_io/nextjs_space/app/api/breach-check/route.ts`
- Updated API endpoint URL
- Removed API key authentication requirement
- Adapted response parsing for XposedOrNot format

  • Maintained backward compatibility with existing UI

Environment Variables

No environment variables are needed anymore! The old `HIBP_API_KEY` can be removed if present.

Testing

✅ App builds successfully
✅ TypeScript compilation passes
✅ API route updated and functional
✅ Deployed to production at https://quantumleapai.abacusai.app

User Impact

Zero impact - The breach check tool on the Cyber Intelligence page works exactly the same way from the user's perspective, but now:
- ✅ No monthly API costs
- ✅ No API key management required
- ✅ Open-source backend for transparency

Service Comparison

XposedOrNot (Current)

  • ✅ **Free forever**
  • ✅ No authentication required
  • ✅ Open-source (MIT license)
  • ✅ Real-time breach alerts
  • ✅ Checks emails, domains, and pastes
  • ✅ Actively maintained on GitHub

Have I Been Pwned (Previous)

  • ❌ Paid API ($3.50/month minimum)
  • ❌ Requires API key management
  • ✅ Large breach database
  • ✅ Well-established service

Next Steps

No additional configuration is required. The breach check feature is fully operational with the free XposedOrNot API.

Deployed: November 6, 2025
Status: ✅ Production Ready
Location: https://quantumleapai.abacusai.app/cyber-intelligence