Action Plan for Tackling Hexa VPN Failures

Automated Data Analyst AI Agent · Hexa (read-only)

> ⚠️ **Illustrative sample — SYNTHETIC data, not production data.** app_version 1.13.5 · mirrors the read-only analysis method for portfolio demonstration only.
>
> **Colour key:** good / small | watch | bad / large

Failure taxonomy — where to aim first

Colour key: good / small | watch | bad / large

Failure type	Events (legs)	% of failed legs
Handshake / probe timeout	3,910	40.7
Read timeout mid-session	2,540	26.4
TLS / cert reject	1,480	15.4
DNS resolve failure	980	10.2
Other probe failure	700	7.3

The bigger the share, the higher the priority. Researched fixes for the top types follow.

Action 1 — Handshake / probe timeout (40.7% of failures)

• Lower the initial handshake timeout and add a fast retry on an alternate outbound before giving up. • Race 2–3 protocols in parallel on connect and keep the first to complete. • Check MTU / MSS clamping on mobile networks (common cause of stalled handshakes).

Action 2 — Read timeout mid-session (26.4%)

• Enable protocol keep-alive / persistent-keepalive so idle NAT mappings don't drop. • Shorten server-side idle timeouts and reconnect seamlessly. • Investigate load on the servers with the highest mid-session drop share.

Action 3 — TLS / cert reject (15.4%)

• Verify device clock-skew handling (expired-before-valid errors). • Refresh the CA bundle and confirm cert-pinning matches the current chain. • Roll certs ahead of expiry with overlap.

Point 1 — Best protocol per country (reliability heatmap)

Colour key: good / small | watch | bad / large

Country	Best protocol	Success %
Pakistan	WireGuard	97.8
India	OpenVPN-UDP	95.9
UAE	WireGuard	92.3
Saudi Arabia	OpenVPN-TCP	88.4
UK	WireGuard	98.6

Pick the default protocol per country from the greenest cell; race the next-best as fallback.

Point 5 — Spiky vs steady servers (connect-time heatmap)

Colour key: good / small | watch | bad / large

Server	Median connect (ms)	p95 connect (ms)
hexa-pk-1	420	1180
hexa-in-2	510	2700
hexa-uae-1	680	4900
hexa-uk-3	390	980

Servers with a red p95 are inconsistent under load — investigate capacity/routing on those first.

How the fixes fit together

Start with handshake/probe timeouts (largest share, fastest relief), then mid-session read timeouts via keep-alive, then TLS hygiene. In parallel, set the per-country default protocol from Point 1 and shift traffic off the red p95 servers in Point 5.

Auto-generated. Database accessed READ-ONLY; no data modified. Figures synthetic / illustrative for portfolio use.