Introduction

- ZET.NET is a fast-growing network with PoPs in all major Internet hubs in Europe and the US East Coast

- Main focus: IP transit, Layer 2 transport, 100G/400G Wavelengths, and Colocation

- Own 100G/400G DWDM backbone within Europe, as well as redundant transatlantic circuits

- Proud to be the diamond sponsor of RONOG

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From Hosting to Global Backbone

- Founded in 2010 as ZetServers, with a single PoP in Bucharest
- Became members of InterLAN
- Expanded to Amsterdam, Frankfurt, and across Europe
- Connected to 28 major Internet Exchanges
- Built strong direct peering relationships to keep traffic local
- Developed our own international backbone to support growth
- Trusted by the community, ZetServers became a preferred choice for performance-driven hosting

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Evolving into a Global Network Provider

- Launched ZET.NET IP Transit to give customers flexible access to our high-performance network

- Built a fully automated AI-based route selection system for optimal end-to-end packet delivery

- Expanded to the US East Coast (Ashburn) and built a geo-redundant backbone between Europe and the US

- Established direct peering with Tier 1 networks to ensure low-latency delivery even in regions without our PoPs

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Services

- AI-optimized IP Transit

- L2 Connectivity (point to point, point to multi-point)

- DWD Wavelengths

- Colocation

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IP Transit (AS6204)

ZET.NET Network Snapshot

- 80% of traffic via direct peering

- ~3,500 direct peers (incl. Google, Cloudflare, Netflix, TikTok, Vodafone, etc.)

- AS cone: ~1,000 downstream ASNs

- Edge capacity: 50+ Tbps and growing

- Backbone: 100G / 400G DWDM

- 43 PoPs across Europe & the US

- Geo-redundancy: N+1 path design

- AI-driven routing engine optimizes paths in real time based on latency, jitter & loss

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Network Resilience at ZET.NET

What happens during fiber cuts?

Our system immediately detects the outage, checks recent bandwidth usage on the affected link, and reroutes the traffic through the next most optimal path(s) — all within seconds.

Thanks to available spare capacity across all paths, service continuity is maintained even during fiber cuts.

What happens if a link is congested?

No internal link should ever be congested. Our system proactively detects that link usage exceeds the internal thresholds and distributes the excess traffic via the next most optimal path(s).

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What happens if a path is congested in a 3rd party network?

Our system is proactively monitoring all the available paths for all subnets we exchange traffic with and detects anomalies immediately. If congestion is detected, even if it occurs deep within a third-party network, a different optimal path is selected immediately.

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IP Transit (AS6204)

Proactive or Reactive?

- At ZET.NET, we believe in controlling the full path experience — not just passing traffic off at the first opportunity.

- Our NOC is trained to intervene before impact. Combined with predictive analytics, this helps us maintain path stability even in fast-changing conditions like DDoS attacks or fiber cuts.

- Traffic engineering policies are reviewed and updated weekly based on anomaly reports and traffic distribution metrics.

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IP Transit (AS6204)

AI optimized inbound capacity for ISPs and DDoS protection

- With over 50Tbps available edge capacity, we support inbound–heavy networks

- Excellent for residential ISPs as well as DDoS mitigation providers

- Ready for inbound traffic bursts

- Direct access to content providers and CDNs: Netflix, Meta, Google, Amazon, Akamai, TikTok, Cloudflare, OVH, Hetzner, Apple, Microsoft, Edgecast, Fastly, Cachefly, etc

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IP Transit (AS6204)

AI optimized outbound capacity for content providers

- Never miss a packet. Your content is delivered in all world corners

- Excellent for content providers, CDNs and hosting providers

- Up to 400G ports

- Available in 43 PoPs from Europe and US

- Direct access to eyeball networks: Vodafone, Liberty Global, Digi (RCS&RDS), Orange, BT, Sky, TalkTalk (UK), Bell (Canada), Comcast (US)

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IP Transit (AS6204)

We support startups with free IP transit.

- Small networks can start using our IP transit service for free. We include 1Gbps inbound and 100Mbps capacity 100% free of charge

- Great opportunity for startups

- Great opportunity to start testing our services before upgrading to a commercial solution

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Why Internet Exchanges?

Pros
- The Internet Exchanges are a fast and good way to directly reach hundreds and even thousands of networks with a single cross-connect at relatively smaller price than IP transit (with exceptions)
- Less chance of failure if they offer redundant connectivity Transparent, no 3rd party networks
- Route servers offer direct peering with all open-to-peering networks

Cons
- No control on the 3rd party network ports congestion
- Some IXPs charge even higher prices than transit

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Why Internet Exchanges?

Peering Policy

To maintain high-quality interconnections:

- We handle large traffic volumes and prioritize selective, controlled peering
- For peers exceeding 10 Gbps over an IXP, we require a private interconnect to ensure stability and dedicated capacity
- Private peering ports are monitored closely and upgraded proactively — we aim to keep utilization below 50% to avoid saturation

This approach ensures predictable performance and operational control across our expanding network.

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Future Plans: Global Expansion

- Cover all European countries
- Extend to more US states (beyond Ashburn)
- Deploy PoPs across Asia and the Middle East

This continued growth allows us to:

- Minimize reliance on 3rd-party upstreams
- Improve end-to-end control over routing and performance
- Offer better reach, lower latency, and higher reliability across regions

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What's Next at ZET.NET

🔄 Infrastructure Upgrades

We've begun migrating our backbone to 400G. As traffic grows, we're scaling the entire network accordingly.

🆕 Service Expansion

New services will be introduced based on customer demand — designed to support modern infrastructure needs.

🛡️ Enhanced DDoS Detection

Our AI routing engine will also power advanced DDoS detection & classification, leveraging real-time network analytics.

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Our Partners

- **Tier 1 and eyeballs networks:** Arelion, Colt (Lumen), GTT, NTT, PCCW, Vodafone, Liberty Global, Orange, Tata, Telxius, Telecom Italia Sparkle, Comcast, Bell, Wind, HE, Ooredoo, STC, etc.

- **Datacenter Partners:** Equinix, Digital Realty, Telehouse, Telepoint, Voxility etc.

- **Internet exchanges:** 1-IX, AMS-IX, BIX.BG, DE-CIX, Equinix Ashburn, ERA-IX, Espanix, Frys-iX, GNM-IX, INEX, INTERIX, InterLAN, IXPlay, LINX, MIX-IT, NIX.CZ, NIX.SK, NL-ix, Peering.CZ, TPIX PL, VIX

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Empowering Global Connectivity Together

The ZET.NET and Orange story.

What DDoS Mitigation Providers Need

And how ZET.NET helps them deliver

How ZET.NET Empowers DDoS Protection Networks

NexonHost x ZET.NET case study

- Multi-terabit backbone ensures performance and uptime
- Advanced DDoS protection powering secure hosting
- Trusted partnership built on reliability and scale

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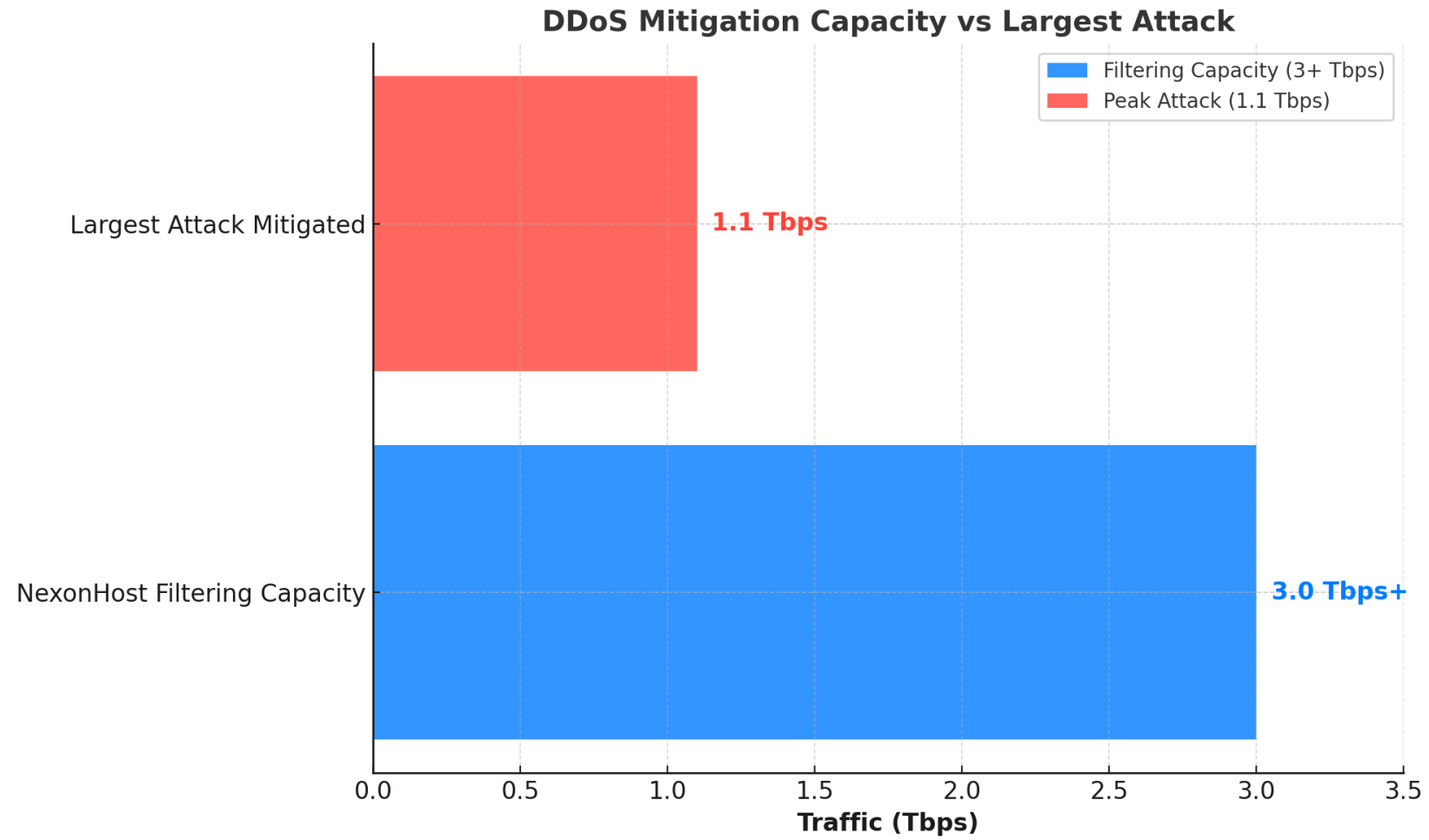# How ZET.NET Empowers DDoS Protection Networks

NexonHost's DDoS protection solution

- 3Tbps+ real filtering capacity

- Multi-tier scrubbing with in-line & off-ramp mitigation

- Granular filtering: ASN, Geo, User-Agent, Referrer, Custom rules
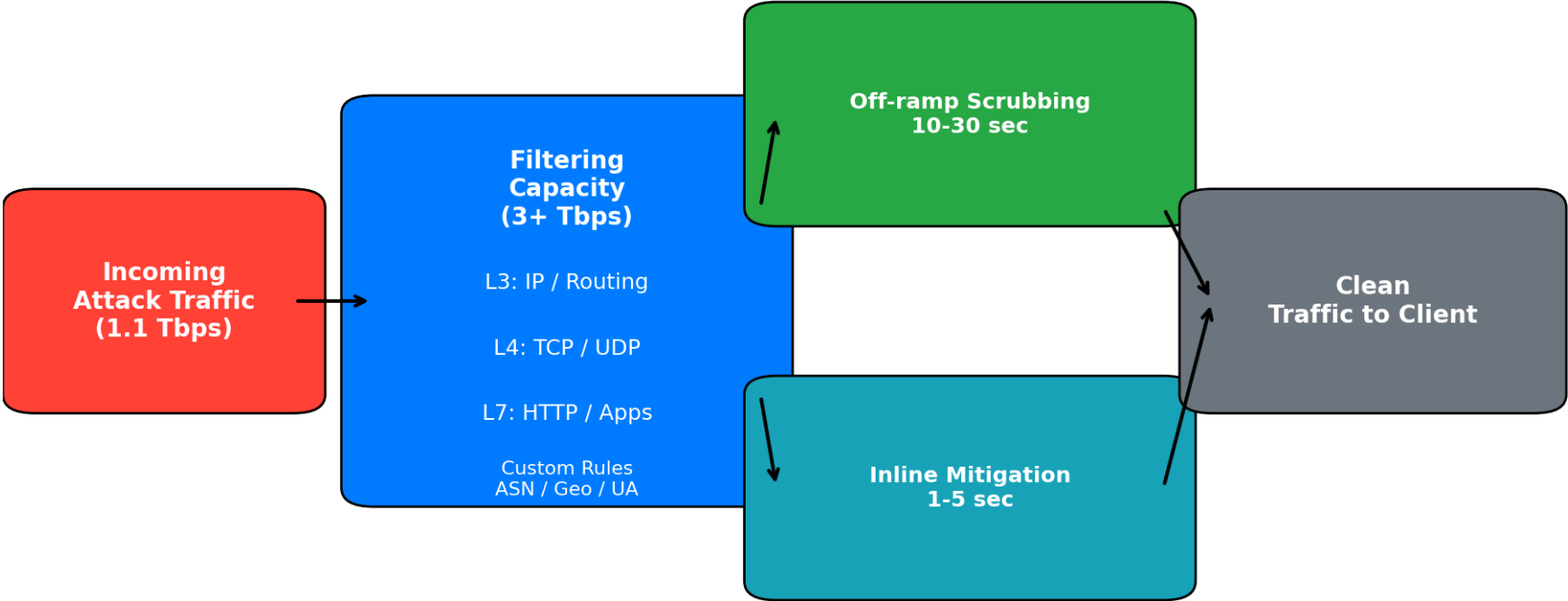
- Multi-layer protection: L3/L4/L7

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How ZET.NET Empowers DDoS Protection Networks

NexonHost's Real-World Attack Data

- Real attack sizes ranged: 1Gbps – 1.1Tbps

- Volumetric attack types: SYN floods, UDP floods, SYN-ACK floods, Multi-vector campaigns

- Major attack source: Mirai botnets

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DDoS Mitigation Capacity vs Largest Attack

NexonHost DDoS Mitigation Flow

Incoming Attack Traffic (1.1 Tbps)

Filtering Capacity (3+ Tbps)

L3: IP / Routing

L4: TCP / UDP

L7: HTTP / Apps

Custom Rules
ASN / Geo / UA

Off-ramp Scrubbing 10-30 sec

Inline Mitigation 1-5 sec

Clean Traffic to Client

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ZET.NET - Built for Inbound-Heavy Networks

- With 3500+ peers, ZET.NET attracts ingress traffic, ensuring clean paths and avoiding congestion on your other uplinks during large-scale attacks.

- Our dual business model (IAAS + IP transit) gives us massive free Inbound capacity — making us the ideal upstream for inbound-heavy networks.

- This helped NexonHost mitigate a 1.1 Tbps DDoS attack with no manual intervention required and with no impact on their budget.

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Thank you!
Questions?

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