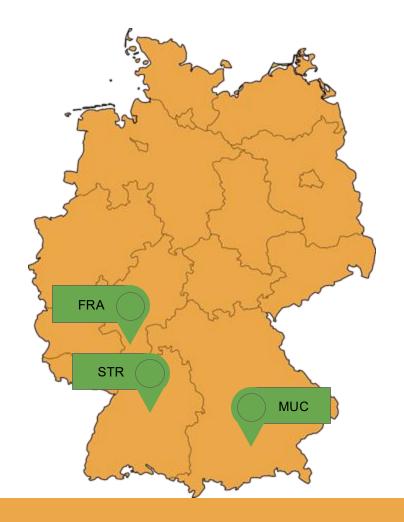
## **Stuttgart-IX Update**

Moritz Frenzel LINX125, London November 20th, 2025







## By the numbers

35

Peers

159,63 GBit/s

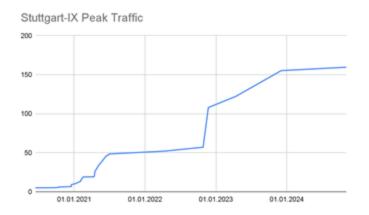
Peak Traffic

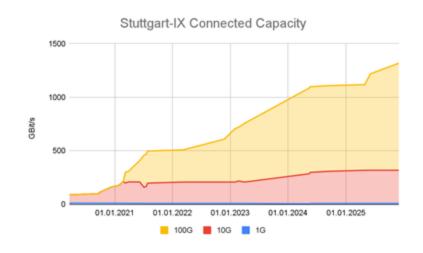
1.310 GBit/s

**Connected Capacity** 

6

Connected Sites







## About Stuttgart and the region

- Home to some of the world's best cars (Mercedes, Porsche), great Engineers (Bosch, Mahle, Festo), supporting industries, and the best soccer club in the world (I may be biased).
- Largest fiber carriers in the city: Globalways (now Zayo Europe), COLT, NetcomBW
- Largest DCs: AtlasEdge (STR001, GRP10), nLighten (STR1)
- Telco PoPs: euNetworks, Arelion, Telia, Zayo EU, Nepustil.net
- No real interconnection hubs



#### What's our mission?

- Stuttgart-IX is a marketplace for the region.
- Stuttgart-IX is supporting small and medium sized ISPs in the region by reducing costs and lowering latencies.
- Stuttgart-IX is developing an open and inclusive community.
- Stuttgart-IX is increasing the region's independence and resilience.
- Stuttgart-IX is not interested in world domination.



## Re-launching the IXP

- Stuttgart-IX was founded by André Scholz and Winfried Haug in 2005, and remained a single switch ever since.
- Winfried left the project after a few years, and André passed away too early in 2017, thereafter, the switch was still switching, but everything slowly degraded.
- In 2019, the community met and decided if they want to a) abandon the IX b) ask one of the big guys to run it or c) do it themselves.
  - They chose option c)
- In 2020, I had some time, so I re-built the tech stack
  - See my talk at DENOG12 (Re-)Building an IXP from scratch



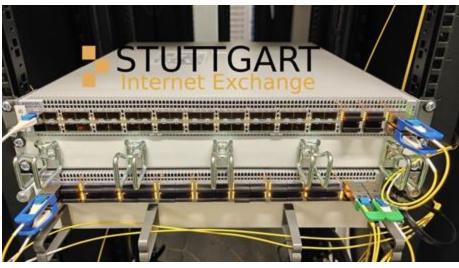
## Growing the IXP

- We were peaking at ~5G, mostly through private VLANs
- Our Nexus kept crashing, so Arista donated an old decommissioned switch
- We approached CDNs to join and offered racks, cache-fill and IXP-ports
  - Akamai was the first to step up
  - Meta, Cloudflare and PCH/Quad9 joined soon after
- We partnered with DE-CIX to provide cloud connectivity to the region
  - Our peering LAN remains local and under our exclusive control
- Peers upgraded, which attracted national Tier2s
  - Transit Pricing decreased from ~1EUR/MBit/s to ~20-30ct/MBit/s (@1G commit)
- In 2024 the first Tier1 Carrier joined
- Growing revenue allowed us to invest in Hardware



#### First MPLS/EVPN IXP in EU on Arista

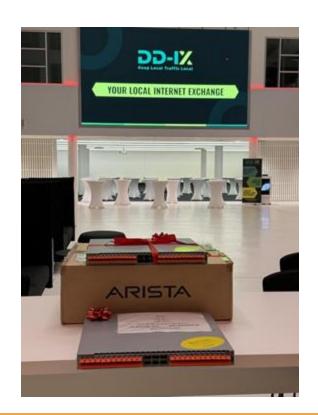




Arista DCS-7280CR3-36A Arista DCS-7280SR3-40YC6



## We gave back







#### On CDN caches

- Except Akamai, all our CDNs joined after conversations at PeeringDays, EPF, RIPE, DENOG or similar.
- Public information on CDN-Caches (or similar) is sparse, most of the details are covered by NDAs and you need to trust the CDN that the cache will attract traffic.
- Some CDNs simply have no "IXP caches" and require IXPs to become transit providers.
- Regional IXPs are here to support CDNs in serving the long-tail

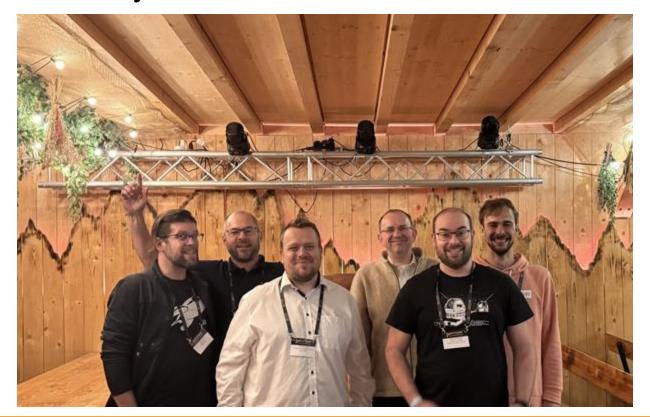


## The (near) future

- We're in the final touches of connecting AtlasEdge STR001.
- One of the largest fiber operators in the region is connecting with 100G.
- One of Germany's Top 3 eyeball networks is connecting with 100G.
- Join us for a great beering in 2026!



## This IXP is run by volunteers, and we love it!



# Thank you! Happy Peering!

Questions? moritz@stuttgart-ix.de / ops@stuttgart-ix.de