Thinx Internet Exchange

**Resources of Thinx IX
& ATMAN network**
Akamai, CDN, GG,
Google Cache, ipla,
nk.pl, tvn player

**Polish Internet
exchange points**
EPIX, KIX, PLIX, TPIX

**Tier 1 operators & other
non-peering networks**
Level 3, NTT, Tata,
TeliaSonera, TP

Thinx IX

Data centers
Thinx Poland DC
ATMAN DC
Altus DC

Access nodes of Thinx IX
Białystok, Gdańsk, Gliwice, Katowice,
Kraków, Lublin, Łódź, Poznań,
Szczecin, Warszawa, Wrocław

**European Internet
exchange points**
AMS-IX, DE-CIX, LINX
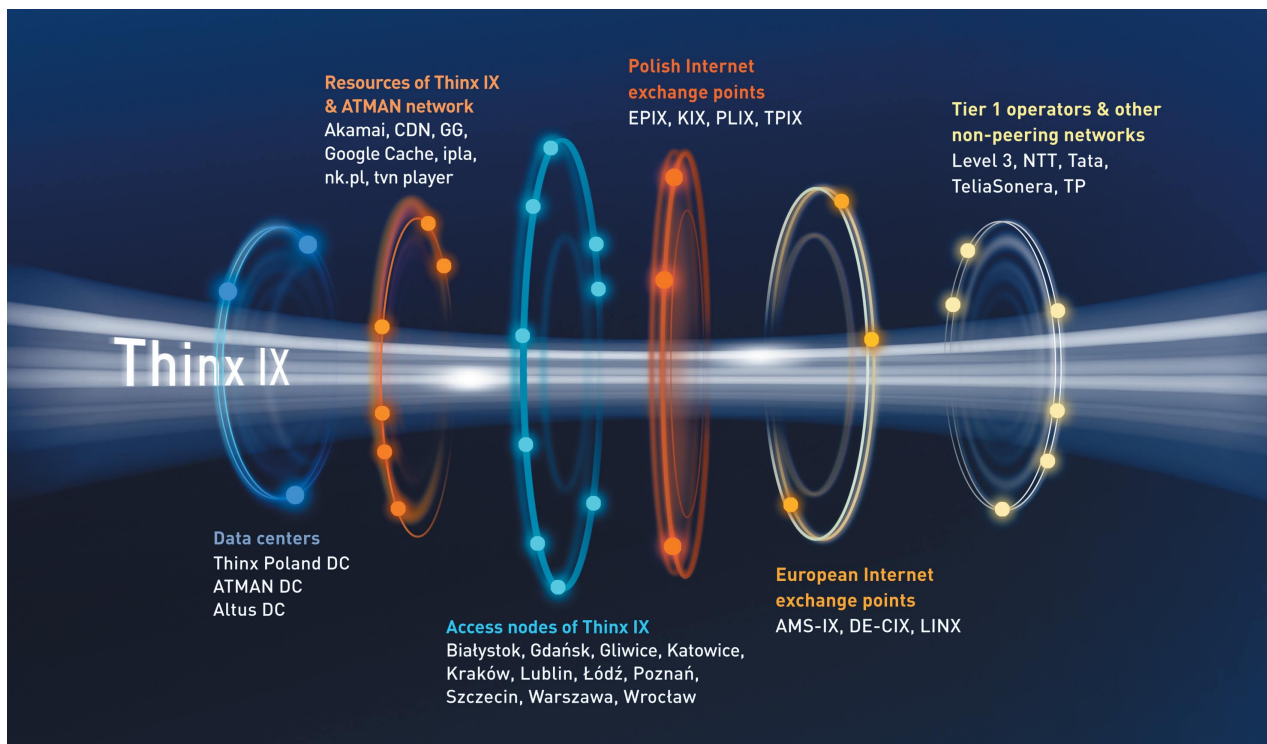
An Internet exchange point (Internet Exchange, IX) is an alternative path of development for the Internet, which relies on peer cooperation of many networks instead of the traditional customer- -provider arrangement. An IX connects networks using simple network architecture (an Ethernet switch), supplemented by mechanisms that facilitate and automate routing configuration in members' networks.

Thinx IX is not only a traditional IX that offers ports in an Ethernet switch, which are used for local IP traffic exchange between members, but also a broader idea for the development of Internet networks. Under one roof at Thinx Poland Data Center, we created a neutral telecommunications node, providing access to many carriers (IP providers, optical fiber lines and data transfer services providers) in the ISO OSI network layers 1–3. The neutrality ensures competitiveness of offers and complete freedom of provider selection.

Thinx IX is another undertaking by ATM S.A., the ATMAN network carrier and the owner of ATMAN, Thinx Poland and Altus data centers. We have created the first Internet exchange in Poland (GIX, 1997) and the first dispersed IX, i.e. a dozen access nodes connected with a wide-area network (AC-X, 2009). Thinx IX is a combination of AC-X resources and a neutral data center (previously Telehouse.Poland, currently Thinx Poland). It is a reflection of the belief that cooperation between Internet networks does not end at IP traffic exchange but also denotes offering competitive colocation and network infrastructure.

Thinx Poland stands out as the largest neutral telecommunications data center in Poland, at the same time being an Internet exchange point. Located in the very business center of Warsaw, with its 3,700 sq m (39,800 sq ft) of colocation space and uninterrupted power supply with a total power of 16 MW, Thinx Poland DC provides its customers with excellent technical conditions and long-term availability of colocation space, power and optical fiber links.

Thinx Internet Exchange is a network of access nodes in 11 Polish cities and 3 nodes abroad, connected by long-haul broadband links ($N\times10$ Gbps). Thinx IX nodes are located in Amsterdam, Frankfurt, London, Białystok, Gdańsk, Gliwice, Katowice, Kraków, Lublin, Łódź, Poznań, Szczecin, Warsaw and Wrocław; the main node is located in Thinx Poland Data Center. Thinx IX provides access not only to networks and resources of its direct members but also of other domestic and European Internet exchange points.
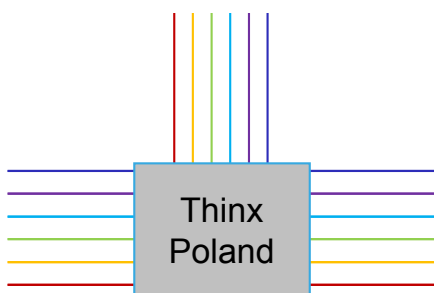
6 degrees of freedom

One of key assumptions made during development of the new offer was ensuring that customers enjoy maximum flexibility. We achieved that by opening our network, data center and Internet exchange to services and offers of other providers.
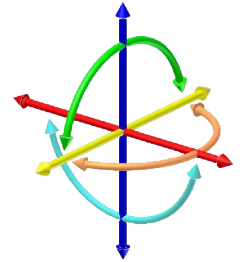
Neutral colocation center

Thinx Poland is the first and largest carrier-neutral data center in Poland, located in the very business center of Warsaw.

- Free entry of own fibers by carriers (three independent ducts enter the building)
- Unrestricted provision of services to other Thinx Poland users
- Low and equal for all prices of connectors (SMF, MMF, UTP)
- Links to major telecommunications nodes in Warsaw via Telco.Ring

Meet Me Rooms
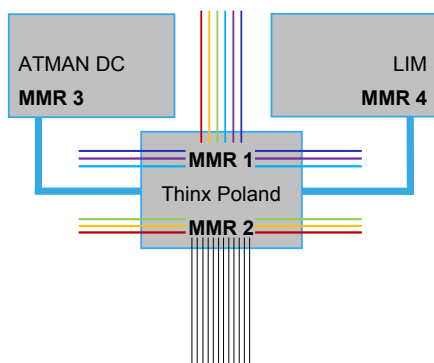
Meet Me Rooms in Thinx Poland Data Center:

- All external lines enter MMR1 and/or MMR2
- Internal lines from all Thinx Poland DC users enter MMR1 and/or MMR2
- Links between Thinx Poland DC users are created in one of the MMRs (patchcord MMF, SMF or UTP)

Virtual Meet Me Room 3 at ATMAN DC:

- Easy access to Thinx IX for customers using ATMAN Data Center (Warsaw, Grochowska 21a)
- For Gigabit Ethernet ports only

Virtual Meet Me Room 4 at LIM:

- Easy access to Thinx IX for customers using the LIM building (Warsaw, Al. Jerozolimskie 65/79)
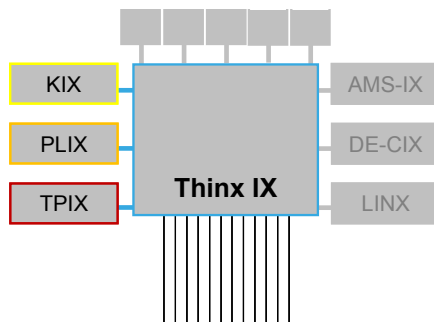- For Gigabit Ethernet ports only

Thinx IX
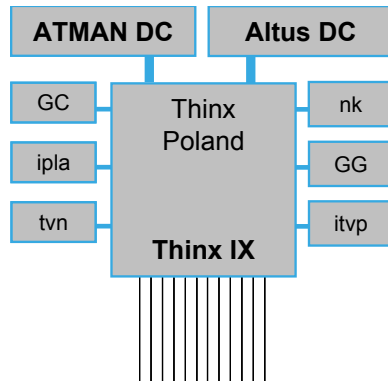
Free, unlimited IP traffic exchange with Thinx Poland Data Center, ATMAN Data Center and Altus Data Center users, including:
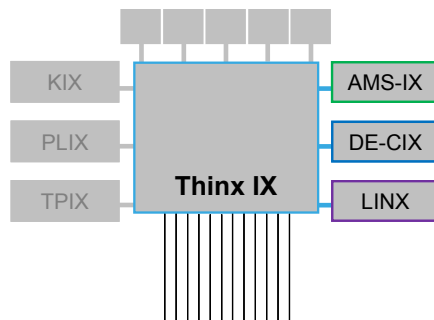
- Google Cache
- ipla
- tvn player
- Nasza Klasa (nk.pl)
- GG
- itvp

Domestic IXs

- Free, unlimited links to all friendly domestic networks
- Thinx IX port price reduction for members of other Internet exchanges

European IXs

- Optional links with friendly networks located in the AMS-IX (Amsterdam), DE-CIX (Frankfurt), LINX (London)
- Thinx IX port price reduction for members of European Internet exchanges

Tier 1 networks, Orange/TP and other networks that do not use peering
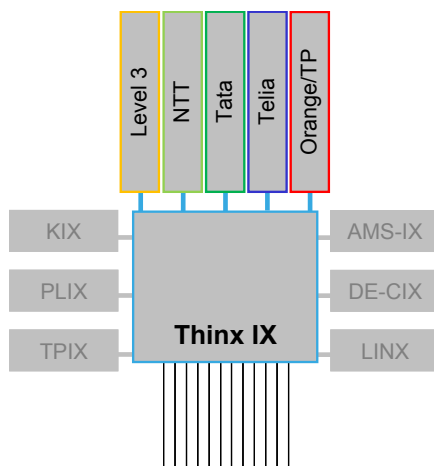
- Full IP transit over networks of several Tier 1 carriers
- Paid peering with the Orange/TP network using redundant uplinks

Resources offered by Thinx IX

Thinx IX members are offered open and unlimited access to all friendly domestic networks (those that accept peering), regardless of whether these resources are located in Thinx Poland Data Center, in the ATMAN network or in other Internet exchanges (including KIX, PLIX and TPIX).

A new feature is access to the resources of the largest global traffic exchange nodes (AMS-IX, DE-CIX and LINX).

In the case of resources which are available only through Tier 1 carriers and other networks that do not allow peering (Orange/TP, Pionier), we provide a possibility to select providers present in Thinx Poland Data Center or in other telecommunications hubs. We also offer our own IP transit services, based on four independent Tier 1 carriers and direct uplinks with Orange/TP.

Thinx IX services

Gigabit Ethernet port of 1 Gbps or 10 Gbps

OpenPeering.LAN

- Free of charge, unlimited peering with other Thinx IX members
- Lowest cost
- Lowest latency (under 1 ms)
- Lowest loss (0%)
- Easy routing configuration (single BGP session)

OpenPeering.PL

- Free of charge transit to all friendly domestic networks (apart from Orange/TP and Pionier networks)
- Free of charge transit to all networks present in KIX, PLIX and TPIX
- Unlimited traffic for members using the Warsaw central node

Peering.Global

- IP transit to all friendly foreign networks present in AMS-IX, DE-CIX and LINX
- No extra charges for a port

Transit.Global

- IP transit to all Internet networks
- Use of the ATMAN network foreign links, presently N×10 Gbps (TATA Communications, TeliaSonera, NTT, Level 3, DE-CIX, AMS-IX, LINX)
- No extra charges for a port
- Possibility of establishing an open port and charging based on the 95th percentile

Transit.Orange(TP)

- IP transit to Orange/TP network
- No extra charges for a port
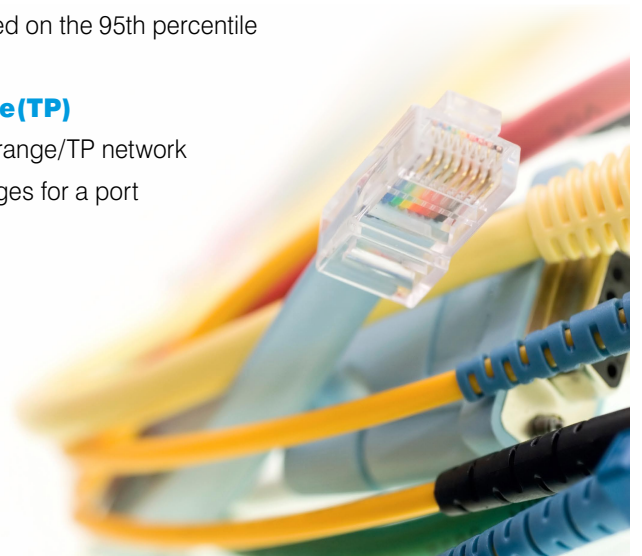
Best offer on the market
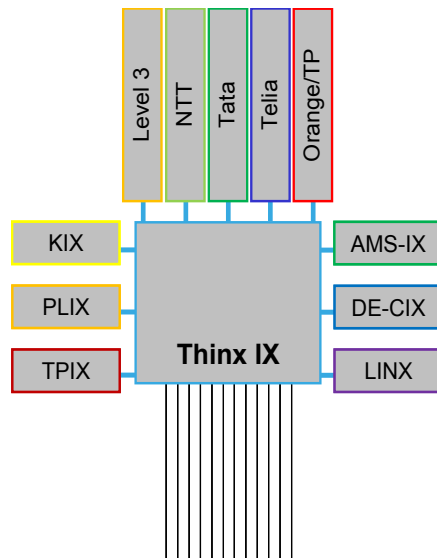
- Lowest prices for 1G and 10G ports
- Discount for members of other IXs (AMS-IX, DE-CIX, KIX, LINX, PLIX, TPIX) for each node the carrier is present in
- Colocation in Thinx Poland Data Center
- Free of charge entry of fibers into Thinx Poland DC

Level 3 | NTT | Tata | Telia | Orange/TP

KIX | PLIX | TPIX | **Thinx IX** | AMS-IX | DE-CIX | LINX

With Thinx IX customers are fully flexible as regards their choice of IP services:

- One port — many services
- Free of charge peering, optional transit
- Domestic and international IP traffic

Access nodes in fourteen cities:

- Amsterdam, Frankfurt, London, Białystok, Gdańsk, Gliwice, Katowice, Kraków, Lublin, Łódź, Poznań, Szczecin, Warsaw, Wrocław

Contact us:

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ATM S.A. is a public company operating in the information and communication technology industry, quoted at the Warsaw Stock Exchange. Under the ATMAN and Thinx Poland brands the company provides for enterprises and other institutions telecommunications services based on its own fiber networks and data centers. Prime elements of ATM's offer include: Internet access, broadband data transmission, colocation and hosting. The company provides telephony services and telecommunications outsourcing. Major consumers of the services are carriers, traditional media, Internet portals and enterprises from finance, manufacturing and retail market sectors.

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