amsix
amsterdam
internet exchange

what do we do?

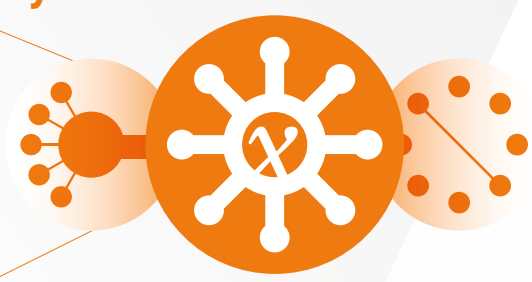
Explaining the web and the role of an Internet Exchange

Internet access can be considered today as essential. For many activities within our daily lives we depend on it. However, how the Internet is built, what role an Internet Exchange plays within the Internet infrastructure and how AMS-IX fits in this is still unclear to many. This infographic aims to explain this.

1. The Internet

± 50.000
unique **IP networks** worldwide

3 ways IP networks interconnect

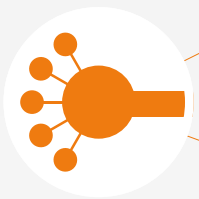


Transit

Public peering

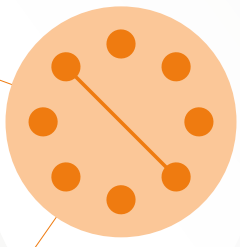
Private peering

2. The Interconnection



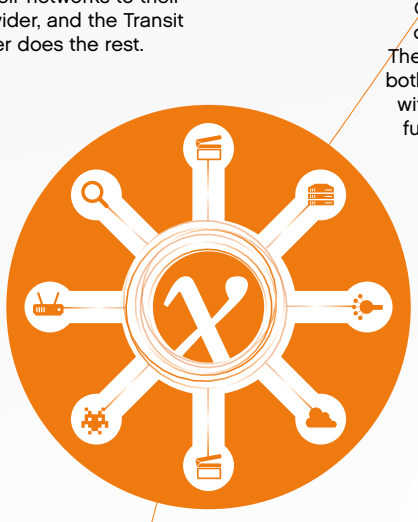
Transit

Internet transit is the business relationship whereby an Internet Service Provider (ISP), the 'Transit Provider', provides (usually sells) access to the global Internet. From a high-level perspective, Internet Transit can be thought of as a pipe in the wall that says "Internet this way". Customers connect their networks to their Transit Provider, and the Transit Provider does the rest.



Private peering

Only two parties interconnect directly to exchange IP traffic. The interconnection is beneficial to both networks and usually happens without the exchange of financial funds. Hence the term 'peering'.



Public peering

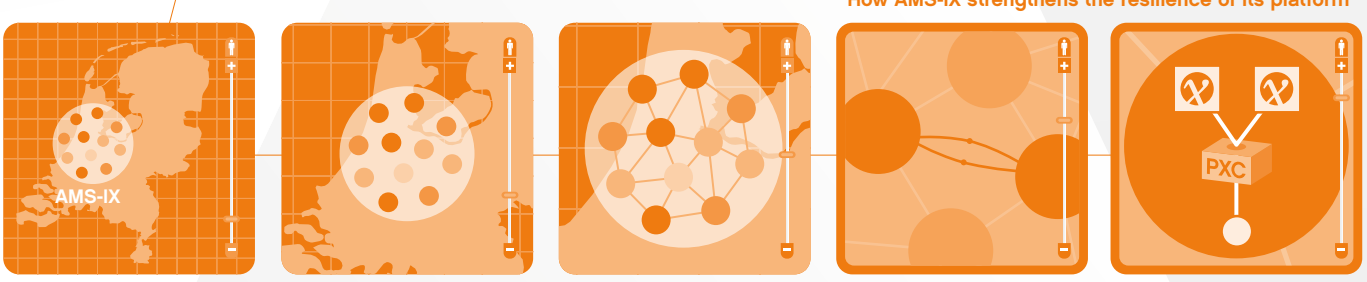
The interconnection of networks at an Internet Exchange platform for the purpose of exchanging IP traffic ('peering') between each other. It depends on the peering policy of each connected network with whom they peer.

Examples of parties that peer

- **Transit** Provider
- **Cloud** Provider
- **Gaming** Company
- **Internet Service Provider** (ISP)
- **Search Engine**
- **Web Hoster**
- **Content** Provider

3. The Amsterdam Internet Exchange (AMS-IX)

How AMS-IX strengthens the resilience of its platform



The AMS-IX platform is distributed over several data centres in the greater Amsterdam area.

Multiple physical routes connect the data centres.

If one route fails between two data centres where AMS-IX has a presence, traffic can be redirected via another route.

A network connects to the AMS-IX platform through a Photonic Cross Connect (PXC). If one connection fails, the PXC can move the network's traffic to the backup connection within milliseconds.

Benefits of peering at AMS-IX

- **Peer at high-quality platform**. AMS-IX uses cutting-edge technology and cooperates closely with its suppliers to guarantee the scalability, stability and security of its platform in order to continuously serve customer demands.
- Keep **local** traffic local, resulting in less latency for networks.
- **Reduce connectivity costs.** Peering allows for the direct exchange of traffic with multiple networks. This reduces the need to send traffic through a transit provider.
- Connect to an **international community**. Around 80% of the networks connected to AMS-IX come from abroad.
- **Increase redundancy** in network by adding multiple routes to the exchange.
- Get more **control** of the network's data transport.
- Choose the data centre location that **fits** best the company's needs.

About AMS-IX

AMS-IX manages Internet Exchanges throughout the world

- Amsterdam, the Netherlands
- Curaçao
- Hong Kong
- Mombasa, Kenya
- Chicago, IL, United States
- New York/New Jersey, United States
- San Francisco/San Jose, United States

Services of AMS-IX

GRX facilitates mobile data roaming for end-customers of mobile network operators. At the AMS-IX GRX exchange point hundreds of these operators interconnect to each other via a select group of carriers.

A single point for mobile operators to securely exchange multiple services (voice, video, messaging, signaling & GRX) with each other.

Organisation

AMS-IX Organisation structure

AMS-IX bodies	Association	Corporation
Meeting acts as	General Assembly	Shareholders meeting
Board acts as	Executive Board	Supervisory Board
Management act as		Management

Established in 1994, AMS-IX (Amsterdam Internet Exchange) is a neutral, independent and not-for-profit Internet Exchange based in Amsterdam, the Netherlands. The AMS-IX platform provides a peering service for all types of IP traffic, be it regular IP data such as email and web content or video/TV, voice and games. AMS-IX additionally hosts the first mobile peering points worldwide: the Global GPRS Roaming Exchange (GRX), the Mobile Data Exchange (MDX) and the first interconnection facility for IPX networks (Inter-IPX).

Since 1994

Neutral, independent & not-for-profit

The AMS-IX Association holds all the shares of the AMS-IX B.V.

The IXP connecting the most IP networks in the world

1st to offer 10GE & 100GE port services, a Service Level Agreement (SLA) & reseller program

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