Arelion

Customer FAQ

Internet Services by Arelion

Arelion Internet
Frequently Asked Questions

Where are Arelion's Points of Presence located?

Arelion has over 320 PoPs globally in 120 cities and 35 countries with a very strong presence in Europe and North America, but also in Asia. We are in most of the prime suspect carrier colocation sites — and we are also in the middle of rolling out many more metro PoPs. Those are all our 'on-net' locations, but we can also make use of our connection partners to extend to other locations via NNI or dedicated local tails.

The PoP maps are available for download at www.arelion.com.

For more details, see:

Our Global Fiber Network, AS1299 | Arelion

Network News | Arelion

How much bandwidth can Arelion hand off?

Arelion can offer 1Gb services. For some enterprise locations with CPE, we can go down to FE 100Mb, if needed. For IP Transit, 10Gb and 100Gb ports are the current standard.

Arelion can offer 400Gb ports in many locations, as many as 50 at the moment.

We pride ourselves on serving most of the world's biggest content providers, CDNs and eyeball networks, while still being just as capable and willing to connect small local enterprises or independent ISPs.

You refer to Arelion as "the world's largest ISP." What do you mean by that?

Measuring the size of a provider of an Internet backbone is always hard and quite subjective, however, it is based on defined parameters, including number of PoPs, directly connected ASNs, prefixes announced, and traffic carried. The claim to be the number 1 Internet backbone is based on an industry recognized measurement service known as Kentik Market Intelligence.

We are ranked as number 1 in several different areas. We are more than proud that we are still in the top and that we made it there through 100% organic growth.

What are the benefits, compared to other IP / DIA providers, of a Tier 1?

Being a Tier 1 essentially means we don't buy Internet access from anyone else, as we do not have any upstream providers. Networks connected to us are either customers or peers and we operate our own global backbone, designed for scale and resilience.

We don't only own the IP layer, but also the underlying fiber and DWDM layers. This means we can control and upgrade the network as needed. For example, we were able to handle

significant traffic growth extremely quickly during the COVID pandemic. This control allows us to stand by our industry leading SLAs.

Besides the above, Arelion continues to lead the way with new technologies such as RPKI OV or rolling out 400G interfaces, whilst also a continuously <u>awarded company</u> for a great customer care.

Why is Arelion's latency better than that of the competition's?

Arelion's fiber ownership is a mix of fully-owned, long-term IRU fiber and some long-term leases. Our approach is to always look for new and unique routes that add value and reliability to the network. We are not in the ultra-low-latency market, but rather looking for short unique routes that give us and our Wavelength customers diversity from the typical bulk routes.

This strategy allows us to build our resilient IP backbone on top and ensure that under modelled failure, we not only have the capacity to reroute the traffic, but also to keep any incremental RTD to a minimum.

Could you explain the difference between IP Transit, Dedicated Internet Access (DIA), and IP Connect?

Historically we have primarily been a wholesale provider, so those are our biggest products:

- <u>IP Transit</u> — Arelion's flagship product
    - Full access to the whole Internet with BGP giving you a full routing table
    - Users must have an ASN number and use BGP
    - Typically used by those with connections to multiple ISP's with need to have a control over their routing, like Service Providers, Content and Cloud Providers
- <u>DIA</u> - a known product name across the industry
    - Previously known as IP Connect in Arelion, the name has been changed to avoid confusion, but is still aimed at Enterprises and providers without an AS Number
    - Provides the same full access to the Internet, but does not mandate BGP as a connectivity protocol. It can be a simple as a static route
    - "Bring your own IP Addresses" — and we can originate them as AS1299 — provide your table to authorize us to do so (via RIR Route Objects and RPKI ROAs)
    - Main use-case is enterprise connectivity, it is perfect for SD-WAN underlay, for example, as it is backed by our carrier grade SLA. It is also perfect for web-hosting or content delivery.

Pricing models — please explain the options and the differences

Arelion has flexible pricing options. Our charging is directly based on usage, i.e., there is a $/Mb rate applied to your measured monthly usage.

1. Looking at the 3 most common options, which count for more than 95% of our billing arrangements:
   a. Burstable / Pure usage
      - Zero commit – monthly charge is based on the 95th percentile usage

   b. Around 75% of our IP billing is based on CDR and burst
      - CDR is Committed Data Rate. This is the customer's minimum usage commitment and billed at the agreed rate. This is not a cap; customers can burst over this usage
      - Usage is still measured and any usage over the CDR is billed as 'burst'

   c. Flat port – as the name suggests; you're invoiced a fixed MRC for the port regardless of how much you actually use

2. There are a few other more niche options such as Volume or Term Commits. Account managers with the support of our pricing desk team can assist further

I need an IP address; can Arelion provide it?

Yes. IPv4 space is limited, and as an LIR we have a responsibility to use and allocate these finite resources efficiently. On the wholesale side, the requirement to provide IPs hasn't been that pressing, but we are seeing customers require this now.

We can provide PA space; this is Provider Aggregate-able. That means this is purely for use with Arelion Services and these IP addresses should not be seen behind other ASNs. They remain assigned to and owned by Arelion. The sizes of subnet that Arelion can provide are /29 - /24 with justification and there is a charge for this.

In addition to IP Transit, I want to have proper AS number and IPs range, can Arelion help us with that?

We can help with obtaining an ASN, if needed, and also as a Sponsoring LIR, we can help with the application for IPv6 space.

Could Arelion provide us a BGP service on my behalf if I do not have an AS number or do not want to manage an AS number?

This is not a service we offer, unfortunately. Managing an ASN and BGP does require technical expertise and time. If this is not something you are able to do in-house, then our non-BGP services are available.

If I have two DIA services with Arelion, am I able to manage them using a BGP session from my side?

Yes. As stated above, DIA itself is a non-BGP product, meaning we don't use BGP to control routing to and from the Internet. However, we can use BGP, in conjunction with a private ASN for local failover. This works in both a single and dual CPE set up.

In addition, Arelion can provision many other options for redundancy and backup links. The immediate options will vary between locations, so best is to directly engage an account manager and solutions engineer.

What are Arelion's peering agreements per region with your AS1299?

We peer with around 27 key peers and maintain great working relationships through our team of dedicated Global Peering Managers.

Globally, we have over 37 Tb of installed peering capacity. As you'd expect, most of this is fairly evenly split between Europe and North America.

The best way to see who we are connected to in each region is to look at our BGP Communities page on www.arelion.com.

Does Arelion have peering agreements in Asia with regional providers?

Arelion has some agreements, and we are always looking to improve our local connectivity. We have made great progress and hope to continue to improve there.

Does Arelion have a dedicated AS number in Asia or in US?

No. Arelion has a single global ASN, and that is AS1299.