



NNENIX
NORTHERN NEW ENGLAND
NEUTRAL INTERNET EXCHANGE

Getting Connected Quick Checklist

Here is a quick list of what your organization needs & the estimate costs to connect to your local Internet Exchange Point (IXP) in Portland or Orono, Maine.

1. You need an Autonomous System Number assignment

- Paperwork to fill out with ARIN (www.arin.net)
- \$550 one time cost, \$100/year afterwards

OR

- Paperwork to fill out with RIPE (www.ripe.net)
- €2000 one time cost, €1400/year afterwards (but can include IP address space)

2. You need some sort data transport circuit from you to NNENIX

- Can be a purchased “lit service” from a telecom carrier like Fairpoint, Spectrum, FirstLight, or Otelco, from you location to NNENIX, for a monthly cost:
- Options include:
 - Ethernet ELINE (100Mbit up to 1GigE)
 - Wavelength transport (1 GigE or 10 GigE)
 - One time costs are negotiable, but estimate at least \$2000+
 - Monthly starting costs from about \$700+ and up
- “dark fiber” service from an open access provider like Maine Fiber Company or MaineCom, if you are near enough to existing fiber builds
 - One strand of fiber recommended to save costs, can be up to 80km distance
 - Estimate one time costs of \$2500+ for fiber into your building
 - Monthly costs starting around \$30/mile for fiber.

3. You need some IPv4 addresses space (255, or a /24 minimum) of your own (IPv6 also encouraged, but you still need IPv4 for now)

- Paperwork to fill out with ARIN and \$250/year (or get a /22 with RIPE)
- You may be able to obtain a /24 for little charge if very lucky, but generally ARIN is “exhausted” and out of IPv4 space
- You can “go to market” with a broker and buy a /24 of IPv4 space for about ~\$4000 one time cost (around \$16 per IP addresses of as 2/2018), once approved
- You can also rent IPs for \$1/month/IP (\$256/month = \$3072/year)

4. You need membership and an access port at NNENIX

- \$500 one time cost
- \$250/month for 1 GigE port, billed quarterly
- \$750/month for 10 GigE port, billed quarterly
- you provide the fiber optic SFP/SFP+ for NNENIX (under \$200 one time cost)

5. BGP Router for your organization

- This equipment can cost you between \$1000 to \$25,000 one time, depending on brand/make/model and your requirements for redundancy, reliability, and power

- Can be done on some existing Firewalls you may have already
- You may need technical assistance in configuration
 - Some help available via NNENIX
 - Fee based consultants available, including Systems Engineering in Portland, who can also sell you the equipment

6. IP Transit service

- You probably will also wish to contract with a telecom carrier into your building (for redundancy), or just a carrier through NNENIX for IPv4 transit services to get the entire Internet and not just other NNENIX members
- Hurricane Electric now offers the following standard pricing in Portland
 - 10Gbps-on-10GE: \$2,200/mo (3yr); \$3,000/mo (1yr)
 - 1Gbps-on-10GE: \$1,300/month + \$1.30/Mbps (3-year term); \$1,500/mo + \$1.50/Mbps (1yr)
 - 1Gbps-on-GigE: \$380/mo (3yr); \$440/mo (1yr)
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