

Facts about Bryn Mawr College Networking and Infrastructure
January 2009

- College possesses Class B address space (165.106.0.0/16) and AS Number
- Internet routing via BGP4
- Campus routing via EIGRP
- Tri-Co routing via static routes
- 97 Networks (VLANs) spread across campus
 - Class C subnet of Class B address space
 - Limited to 150-200 hosts per segment
- Networks connected to core via Gigabit Ethernet over multi-mode fiber optic cable plant
- No significant investment in single-mode fiber
- Bryn Mawr's core is capable of handling 76-Gbps.
- The Internet feed is currently 100-Mbps
 - Internet traffic is shaped
 - 60-Mbps for ResNet
 - 30-Mbps for Academic and Administrative
 - 10-Mbps for housekeeping.
- Tri-College traffic is handled via an additional 30-Mbps private network
 - Tri-Co traffic is separated from Internet traffic.
 - Tri-Co traffic is not shaped.
- Students consume all the bandwidth we can provide and more.
- Packeteer Packet Shaper manages Internet bandwidth.
 - No minimum amount of bandwidth is guaranteed
 - Students – ~2-Mbps Max per host
 - Faculty/Staff – ~10-Mbps Max per host
 - Housekeeping (router updates, etc) – not shaped
- No shaping of internal network traffic
- Tri-Co Dark Fiber Project
 - Currently negotiating installation of dark fiber between members
 - Currently negotiating installation of dark fiber to POP in Center City Philadelphia.
 - 3701 North Broad
 - Redundant Tri-Co connectivity
 - Redundant Internet connectivity
 - Access to inexpensive Internet bandwidth
 - Looking to jointly purchase 400-Mbps to 600-Mbps of additional Internet
 - Bandwidth split evenly between the members.
 - Bryn Mawr bandwidth primarily for ResNet