

Os gráficos apresentados neste relatório de tráfego estão em formato *stack*, o que significa que seu valor é uma composição da soma dos componentes listados nas legendas localizadas logo abaixo dos gráficos. Os gráficos estão em "bps x tempo" e possuem dois eixos verticais, Out (positivo) e In (negativo).

A primeira coluna da tabela define o ponto de referência para entendimento dos valores de In e Out.

A contabilização do tráfego é sob o ponto de vista do AS da RNP, AS1916.

**Legenda:**

PoP - Ponto de presença da RNP

Parceiros - Provedores comerciais que a RNP mantém acordos de troca de tráfego

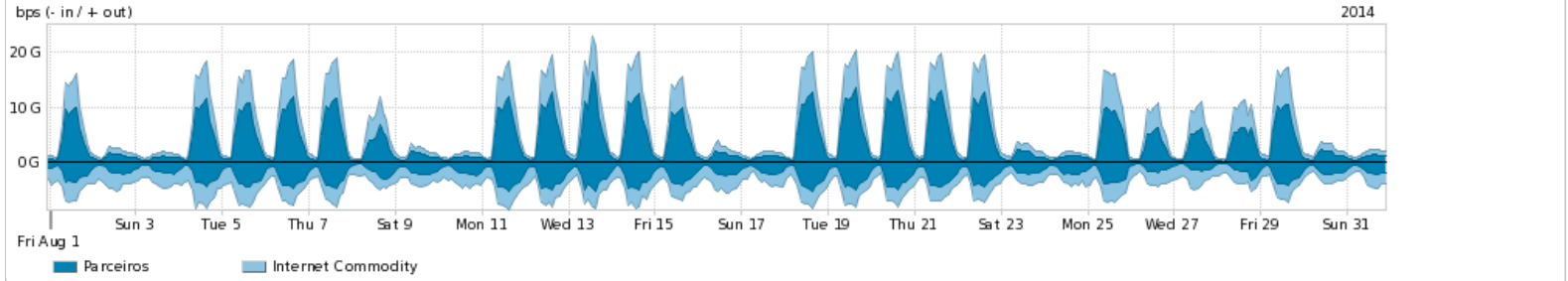
Internet Acadêmica - Acesso às redes acadêmicas internacionais, serviço atualmente provido pela RedClara

Internet commodity - Acesso pago à Internet global que é oferecido gratuitamente pela RNP aos seus clientes

ASN - Número do sistema autônomo

Profile - Objeto gerenciável definido arbitrariamente no Peakflow através de diversos parâmetros (ex: bloco cidr, peer-as, as-path, bgp community, interface, etc)

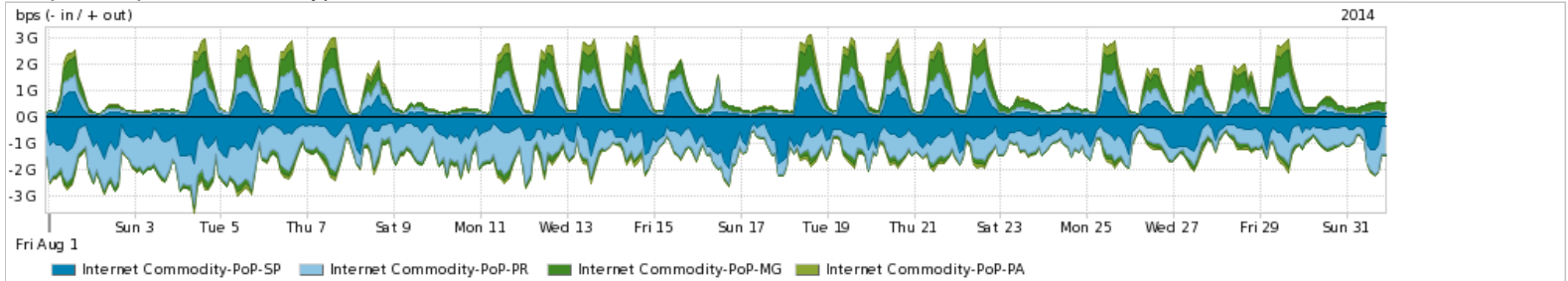
**Tráfego agregado dos acessos comerciais da RNP**



Average | Max | PCT95

| PROFILE  | IN | OUT       | TOTAL     |           |
|--|----|-----------|-----------|-----------|
| <input checked="" type="checkbox"/> Parceiros          |    | 2.24 Gbps | 3.75 Gbps | 5.99 Gbps |
| <input checked="" type="checkbox"/> Internet Commodity |    | 2.33 Gbps | 2.47 Gbps | 4.81 Gbps |

**Utilização do serviço de Internet Commodity pelos PoPs da RNP**

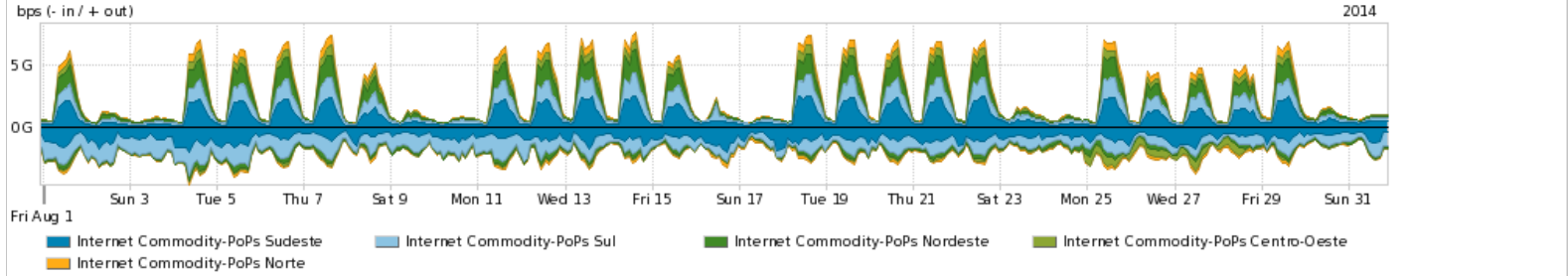


Average | Max | PCT95

| PROFILE                             | PROFILE            | IN     | OUT         | TOTAL       |             |
|-------------------------------------|--------------------|--------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | Internet Commodity | PoP-SP | 695.63 Mbps | 360.89 Mbps | 1.06 Gbps   |
| <input checked="" type="checkbox"/> | Internet Commodity | PoP-PR | 731.06 Mbps | 255.14 Mbps | 986.21 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoP-MG | 114.26 Mbps | 301.64 Mbps | 415.90 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-SC | 113.14 Mbps | 151.61 Mbps | 264.75 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-DF | 106.85 Mbps | 139.59 Mbps | 246.45 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-RS | 35.12 Mbps  | 196.46 Mbps | 231.58 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-RJ | 65.89 Mbps  | 128.30 Mbps | 194.19 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-CE | 44.91 Mbps  | 122.68 Mbps | 167.59 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoP-PA | 47.66 Mbps  | 110.48 Mbps | 158.13 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-PB | 60.74 Mbps  | 73.97 Mbps  | 134.71 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-PE | 26.46 Mbps  | 78.26 Mbps  | 104.71 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-BA | 24.48 Mbps  | 79.49 Mbps  | 103.97 Mbps |

| PROFILE                  | PROFILE            | IN     | OUT        | TOTAL      |            |
|--------------------------|--------------------|--------|------------|------------|------------|
| <input type="checkbox"/> | Internet Commodity | PoP-RN | 6.31 Mbps  | 72.55 Mbps | 78.86 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-GO | 24.38 Mbps | 52.53 Mbps | 76.91 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-MA | 13.91 Mbps | 54.97 Mbps | 68.88 Mbps |

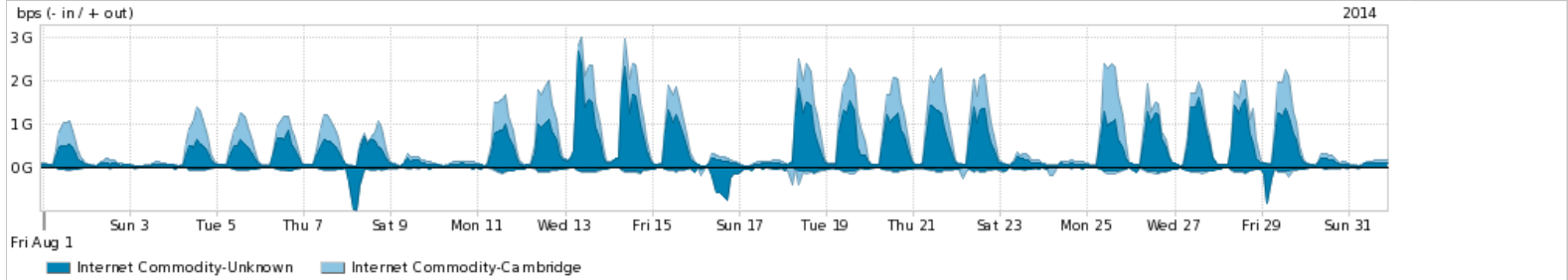
Utilização do serviço de Internet Commodity pelos PoPs da RNP agrupados por região



Average | Max | PCT95

| PROFILE                             | PROFILE            | IN                | OUT         | TOTAL       |             |
|-------------------------------------|--------------------|-------------------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Sudeste      | 902.16 Mbps | 826.67 Mbps | 1.73 Gbps   |
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Sul          | 879.33 Mbps | 603.21 Mbps | 1.48 Gbps   |
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Nordeste     | 207.15 Mbps | 581.47 Mbps | 788.63 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Centro-Oeste | 150.15 Mbps | 248.38 Mbps | 398.53 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Norte        | 95.18 Mbps  | 213.60 Mbps | 308.78 Mbps |

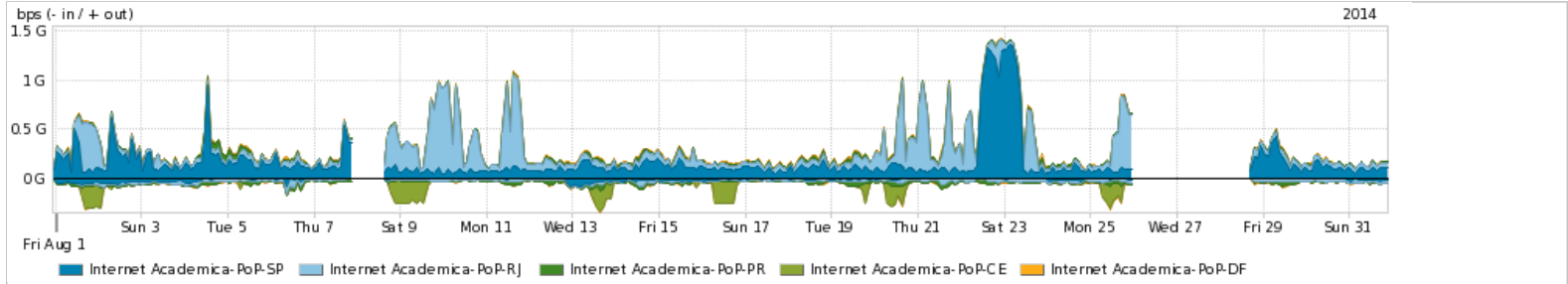
Interesse de tráfego do serviço de Internet Commodity por cidade



Average | Max | PCT95

| PROFILE                             | CITY               | IN            | OUT         | TOTAL       |             |
|-------------------------------------|--------------------|---------------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | Internet Commodity | Unknown       | 61.99 Mbps  | 401.00 Mbps | 462.99 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | Cambridge     | 21.57 Mbps  | 237.53 Mbps | 259.10 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Guangzhou     | 215.72 Mbps | 655.00 Kbps | 216.37 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Unknown       | 12.96 Mbps  | 170.09 Mbps | 183.05 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Unknown       | 14.11 Mbps  | 104.10 Mbps | 118.21 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Mountain View | 95.16 Mbps  | 7.24 Mbps   | 102.41 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Unknown       | 49.20 Mbps  | 49.16 Mbps  | 98.36 Mbps  |
| <input type="checkbox"/>            | Internet Commodity | Englewood     | 1.21 Mbps   | 91.81 Mbps  | 93.02 Mbps  |
| <input type="checkbox"/>            | Internet Commodity | Beijing       | 81.11 Mbps  | 3.62 Mbps   | 84.73 Mbps  |
| <input type="checkbox"/>            | Internet Commodity | Tempe         | 964.54 Kbps | 68.56 Mbps  | 69.53 Mbps  |

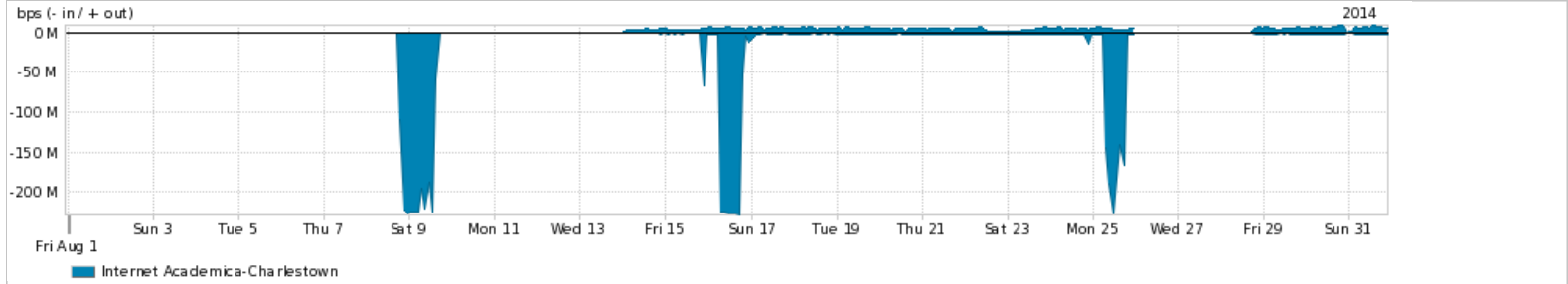
Distribuição do uso do serviço de Internet acadêmica internacional pelos PoPs da RNP



Average | Max | PCT95

| PROFILE                             | PROFILE            | IN     | OUT         | TOTAL       |             |
|-------------------------------------|--------------------|--------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | Internet Academica | PoP-SP | 16.92 Mbps  | 140.17 Mbps | 157.09 Mbps |
| <input checked="" type="checkbox"/> | Internet Academica | PoP-RJ | 20.23 Mbps  | 122.05 Mbps | 142.28 Mbps |
| <input checked="" type="checkbox"/> | Internet Academica | PoP-PR | 13.43 Mbps  | 11.17 Mbps  | 24.60 Mbps  |
| <input checked="" type="checkbox"/> | Internet Academica | PoP-CE | 22.20 Mbps  | 1.93 Mbps   | 24.13 Mbps  |
| <input type="checkbox"/>            | Internet Academica | PoP-MG | 1.55 Mbps   | 14.80 Mbps  | 16.35 Mbps  |
| <input type="checkbox"/>            | Internet Academica | PoP-RS | 585.20 Kbps | 8.81 Mbps   | 9.40 Mbps   |
| <input checked="" type="checkbox"/> | Internet Academica | PoP-DF | 1.50 Mbps   | 6.48 Mbps   | 7.98 Mbps   |
| <input type="checkbox"/>            | Internet Academica | PoP-SC | 1.81 Mbps   | 3.22 Mbps   | 5.02 Mbps   |
| <input type="checkbox"/>            | Internet Academica | PoP-PA | 698.79 Kbps | 4.04 Mbps   | 4.74 Mbps   |
| <input type="checkbox"/>            | Internet Academica | PoP-BA | 470.39 Kbps | 1.61 Mbps   | 2.08 Mbps   |
| <input type="checkbox"/>            | Internet Academica | PoP-PE | 627.57 Kbps | 1.27 Mbps   | 1.89 Mbps   |
| <input type="checkbox"/>            | Internet Academica | PoP-GO | 202.56 Kbps | 1.15 Mbps   | 1.35 Mbps   |
| <input type="checkbox"/>            | Internet Academica | PoP-PB | 284.34 Kbps | 958.79 Kbps | 1.24 Mbps   |
| <input type="checkbox"/>            | Internet Academica | PoP-RN | 52.33 Kbps  | 1.17 Mbps   | 1.22 Mbps   |
| <input type="checkbox"/>            | Internet Academica | PoP-ES | 478.76 Kbps | 654.98 Kbps | 1.13 Mbps   |

Interesse de trafego do serviço de Internet acadêmica internacional por cidades

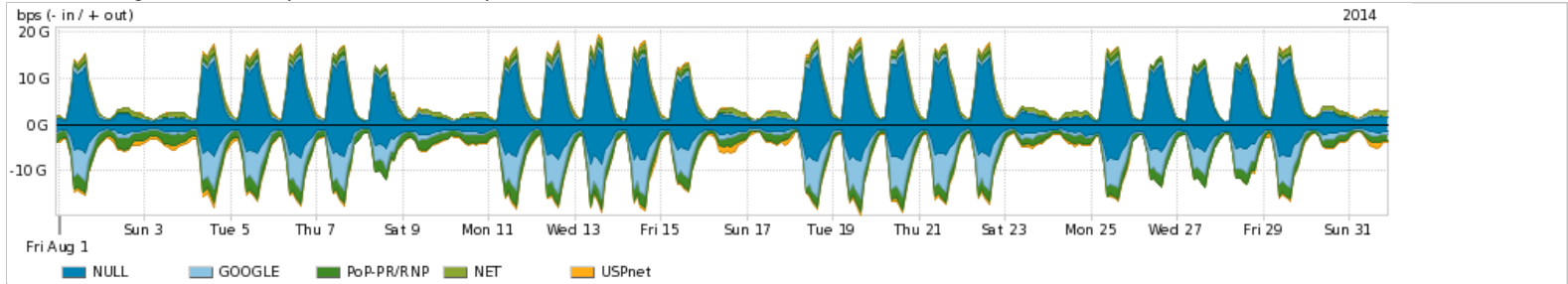


Average | Max | PCT95

| PROFILE                             | CITY               | IN          | OUT        | TOTAL      |            |
|-------------------------------------|--------------------|-------------|------------|------------|------------|
| <input type="checkbox"/>            | Internet Academica | Geneva      | 3.39 Mbps  | 79.17 Mbps | 82.56 Mbps |
| <input type="checkbox"/>            | Internet Academica | Unknown     | 3.25 Mbps  | 38.77 Mbps | 42.02 Mbps |
| <input type="checkbox"/>            | Internet Academica | Unknown     | 1.55 Mbps  | 16.97 Mbps | 18.52 Mbps |
| <input checked="" type="checkbox"/> | Internet Academica | Charlestown | 13.50 Mbps | 2.28 Mbps  | 15.78 Mbps |
| <input type="checkbox"/>            | Internet Academica | Appleton    | 1.35 Mbps  | 13.94 Mbps | 15.28 Mbps |

| PROFILE                  | CITY               | IN             | OUT         | TOTAL      |            |
|--------------------------|--------------------|----------------|-------------|------------|------------|
| <input type="checkbox"/> | Internet Academica | Sioux Falls    | 1.71 Mbps   | 13.08 Mbps | 14.79 Mbps |
| <input type="checkbox"/> | Internet Academica | West Lafayette | 47.25 Kbps  | 11.83 Mbps | 11.88 Mbps |
| <input type="checkbox"/> | Internet Academica | Alexandria     | 249.56 Kbps | 10.73 Mbps | 10.98 Mbps |
| <input type="checkbox"/> | Internet Academica | Unknown        | 541.43 Kbps | 10.34 Mbps | 10.88 Mbps |
| <input type="checkbox"/> | Internet Academica | Unknown        | 944.03 Kbps | 9.78 Mbps  | 10.73 Mbps |

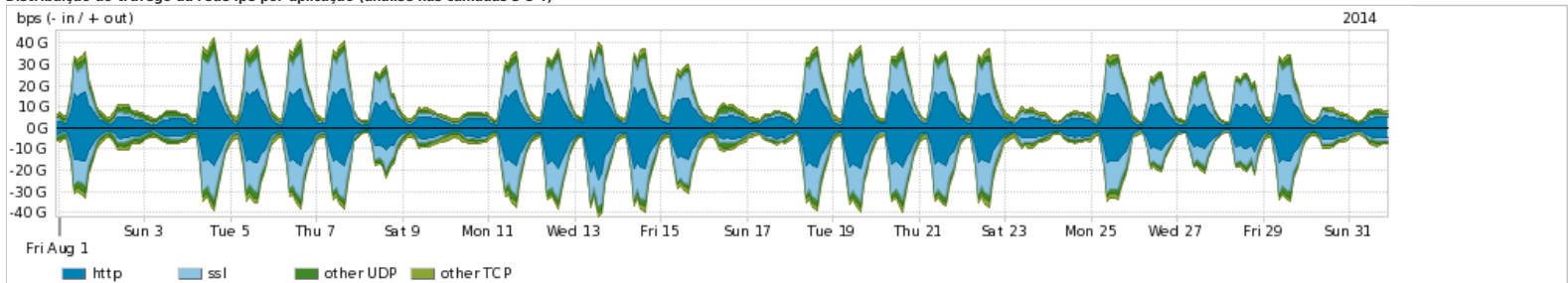
Redes (AS's de origem) mais acessadas pelos clientes da RNP sob o ponto de vista do AS1916



Average | Max | PCT95

| AS NAME  | ASN    | IN | OUT         | TOTAL       |             |
|--|--------|----|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> NULL       |        | 0  | 3.06 Gbps   | 4.84 Gbps   | 7.90 Gbps   |
| <input checked="" type="checkbox"/> GOOGLE     | 15169  |    | 2.24 Gbps   | 312.28 Mbps | 2.55 Gbps   |
| <input checked="" type="checkbox"/> PoP-PR/RNP | 10881  |    | 1.68 Gbps   | 340.21 Mbps | 2.02 Gbps   |
| <input checked="" type="checkbox"/> NET        | 28573  |    | 63.74 Mbps  | 763.84 Mbps | 827.57 Mbps |
| <input type="checkbox"/> FACEBOOK              | 32934  |    | 687.23 Mbps | 59.31 Mbps  | 746.54 Mbps |
| <input type="checkbox"/> RedeRio               | 2715   |    | 188.13 Mbps | 521.31 Mbps | 709.44 Mbps |
| <input type="checkbox"/> RedeTche              | 2716   |    | 87.06 Mbps  | 478.27 Mbps | 565.34 Mbps |
| <input checked="" type="checkbox"/> USPnet     | 28571  |    | 398.56 Mbps | 128.48 Mbps | 527.04 Mbps |
| <input type="checkbox"/> Oi                    | 7738   |    | 36.90 Mbps  | 436.83 Mbps | 473.72 Mbps |
| <input type="checkbox"/> CHINANET-BACKBONE     | 4134   |    | 13.55 Mbps  | 451.71 Mbps | 465.26 Mbps |
| <input type="checkbox"/> UNIVERSIDADE          | 53187  |    | 278.75 Mbps | 183.12 Mbps | 461.87 Mbps |
| <input type="checkbox"/> 263300                | 263300 |    | 208.65 Mbps | 189.59 Mbps | 398.24 Mbps |
| <input type="checkbox"/> ANSP                  | 1251   |    | 129.74 Mbps | 263.53 Mbps | 393.27 Mbps |
| <input type="checkbox"/> AKAMAI-ASN1           | 20940  |    | 369.75 Mbps | 21.95 Mbps  | 391.70 Mbps |
| <input type="checkbox"/> UFDSC                 | 10715  |    | 71.69 Mbps  | 295.70 Mbps | 367.40 Mbps |

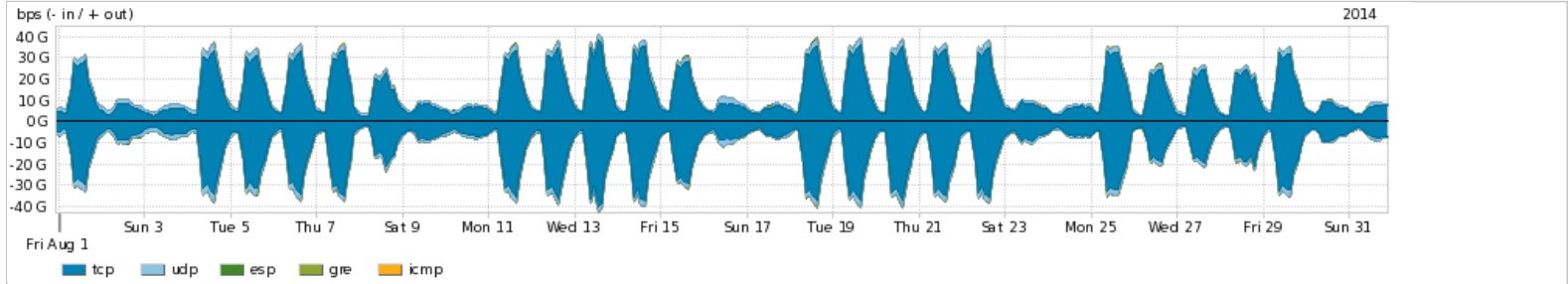
Distribuição do tráfego da rede Ipê por aplicação (análise nas camadas 3 e 4)



Average | Max | PCT95

|                                     | APPLICATION    | IN | OUT         | TOTAL       |             |
|-------------------------------------|----------------|----|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | http           |    | 7.14 Gbps   | 7.14 Gbps   | 14.28 Gbps  |
| <input checked="" type="checkbox"/> | ssl            |    | 4.53 Gbps   | 4.77 Gbps   | 9.30 Gbps   |
| <input checked="" type="checkbox"/> | other UDP      |    | 1.49 Gbps   | 1.61 Gbps   | 3.10 Gbps   |
| <input checked="" type="checkbox"/> | other TCP      |    | 1.46 Gbps   | 1.43 Gbps   | 2.88 Gbps   |
| <input type="checkbox"/>            | rsync          |    | 141.57 Mbps | 138.17 Mbps | 279.74 Mbps |
| <input type="checkbox"/>            | dns            |    | 119.00 Mbps | 132.76 Mbps | 251.76 Mbps |
| <input type="checkbox"/>            | macromedia-fcs |    | 116.58 Mbps | 120.64 Mbps | 237.22 Mbps |
| <input type="checkbox"/>            | rdp            |    | 56.97 Mbps  | 59.97 Mbps  | 116.94 Mbps |
| <input type="checkbox"/>            | smtp           |    | 55.34 Mbps  | 57.76 Mbps  | 113.10 Mbps |
| <input type="checkbox"/>            | ssh            |    | 46.59 Mbps  | 47.49 Mbps  | 94.08 Mbps  |

Distribuição do tráfego da rede Ipê por protocolo



Average | Max | PCT95

|                                     | PROTOCOL  | IN | OUT         | TOTAL       |             |
|-------------------------------------|-----------|----|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | tcp       |    | 13.50 Gbps  | 13.40 Gbps  | 26.90 Gbps  |
| <input checked="" type="checkbox"/> | udp       |    | 1.60 Gbps   | 1.81 Gbps   | 3.42 Gbps   |
| <input checked="" type="checkbox"/> | esp       |    | 27.21 Mbps  | 26.94 Mbps  | 54.16 Mbps  |
| <input checked="" type="checkbox"/> | gre       |    | 22.81 Mbps  | 23.73 Mbps  | 46.54 Mbps  |
| <input checked="" type="checkbox"/> | icmp      |    | 14.20 Mbps  | 13.60 Mbps  | 27.80 Mbps  |
| <input type="checkbox"/>            | 255       |    | 6.06 Mbps   | 5.67 Mbps   | 11.72 Mbps  |
| <input type="checkbox"/>            | ipv6      |    | 2.74 Mbps   | 2.75 Mbps   | 5.49 Mbps   |
| <input type="checkbox"/>            | ah        |    | 341.48 Kbps | 341.48 Kbps | 682.96 Kbps |
| <input type="checkbox"/>            | ipv6-icmp |    | 60.74 Kbps  | 125.82 Kbps | 186.56 Kbps |
| <input type="checkbox"/>            | ipv6-frag |    | 5.37 Kbps   | 18.93 Kbps  | 24.30 Kbps  |

For assistance with this product, please contact [support@arbornetworks.com](mailto:support@arbornetworks.com).