

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

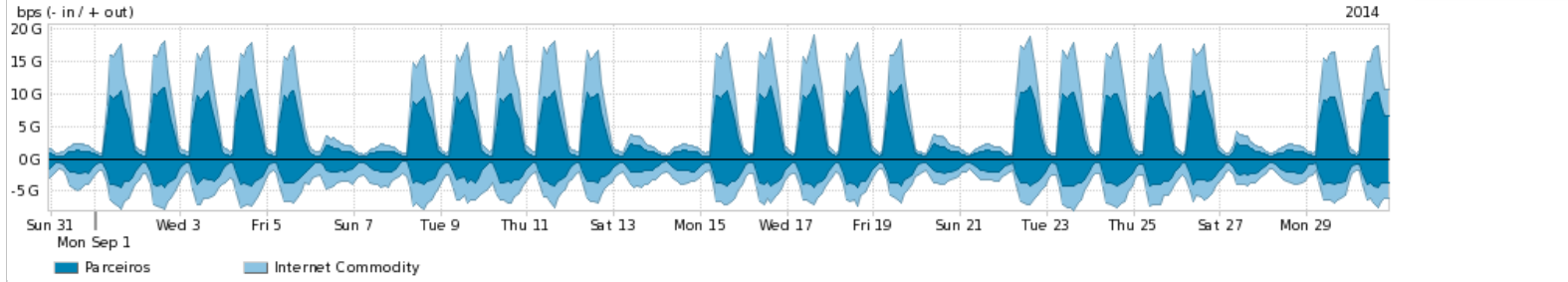
Internet Acadêmica - Acesso às redes acadêmicas internacionais, serviço atualmente provido pela RedClara

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)

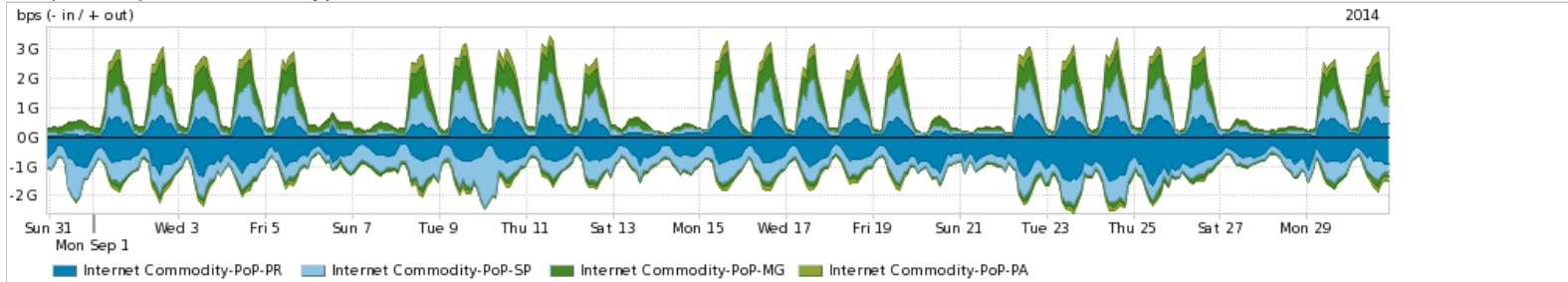
Tráfego agregado dos acessos comerciais da RNP



Average | Max | PCT95

| PROFILE  | IN | OUT       | TOTAL     |           |
|--|----|-----------|-----------|-----------|
| <input checked="" type="checkbox"/> Parceiros          |    | 2.26 Gbps | 4.15 Gbps | 6.41 Gbps |
| <input checked="" type="checkbox"/> Internet Commodity |    | 2.15 Gbps | 2.88 Gbps | 5.03 Gbps |

Utilização do serviço de Internet Commodity pelos PoPs da RNP

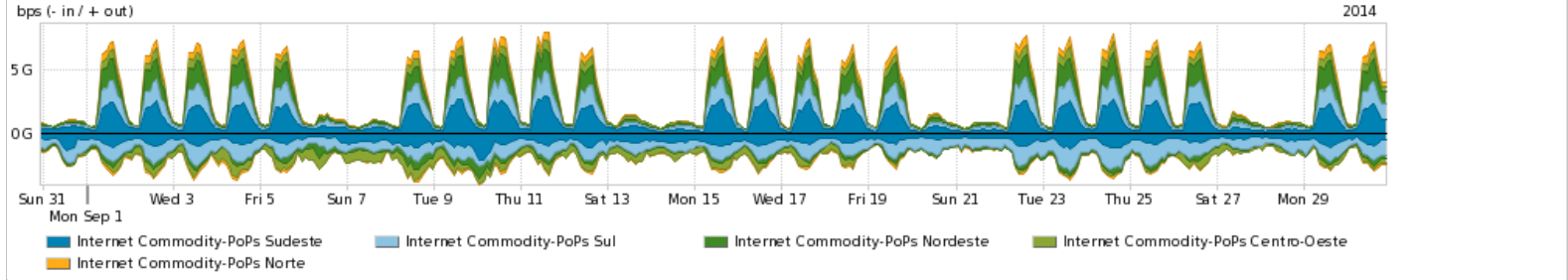


Average | Max | PCT95

| PROFILE                             | PROFILE            | IN     | OUT         | TOTAL       |             |
|-------------------------------------|--------------------|--------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | Internet Commodity | PoP-PR | 702.86 Mbps | 285.70 Mbps | 988.56 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoP-SP | 459.82 Mbps | 414.31 Mbps | 874.13 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoP-MG | 93.59 Mbps  | 368.01 Mbps | 461.60 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-SC | 112.36 Mbps | 182.78 Mbps | 295.14 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-RS | 31.70 Mbps  | 224.86 Mbps | 256.56 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-MS | 210.84 Mbps | 34.35 Mbps  | 245.19 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-DF | 63.21 Mbps  | 181.42 Mbps | 244.63 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-RJ | 69.84 Mbps  | 145.71 Mbps | 215.55 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-CE | 37.74 Mbps  | 146.08 Mbps | 183.82 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoP-PA | 53.07 Mbps  | 128.87 Mbps | 181.94 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-PB | 60.99 Mbps  | 81.59 Mbps  | 142.58 Mbps |
| <input type="checkbox"/>            | Internet Commodity | PoP-GO | 57.24 Mbps  | 63.28 Mbps  | 120.52 Mbps |

| PROFILE                  | PROFILE            | IN     | OUT        | TOTAL      |             |
|--------------------------|--------------------|--------|------------|------------|-------------|
| <input type="checkbox"/> | Internet Commodity | PoP-BA | 26.70 Mbps | 86.44 Mbps | 113.14 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-PE | 29.42 Mbps | 83.54 Mbps | 112.96 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-RN | 5.96 Mbps  | 91.38 Mbps | 97.34 Mbps  |

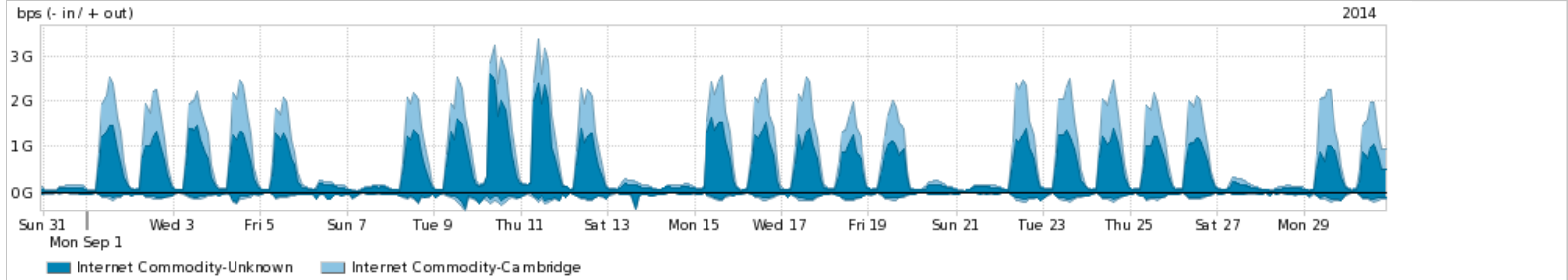
Utilização do serviço de Internet Commodity pelos PoPs da RNP agrupados por região



Average | Max | PCT95

| PROFILE                             | PROFILE            | IN                | OUT         | TOTAL       |             |
|-------------------------------------|--------------------|-------------------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Sudeste      | 647.85 Mbps | 971.51 Mbps | 1.62 Gbps   |
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Sul          | 846.92 Mbps | 693.34 Mbps | 1.54 Gbps   |
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Nordeste     | 224.42 Mbps | 664.68 Mbps | 889.10 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Centro-Oeste | 339.15 Mbps | 312.84 Mbps | 651.98 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | PoPs Norte        | 81.95 Mbps  | 240.28 Mbps | 322.23 Mbps |

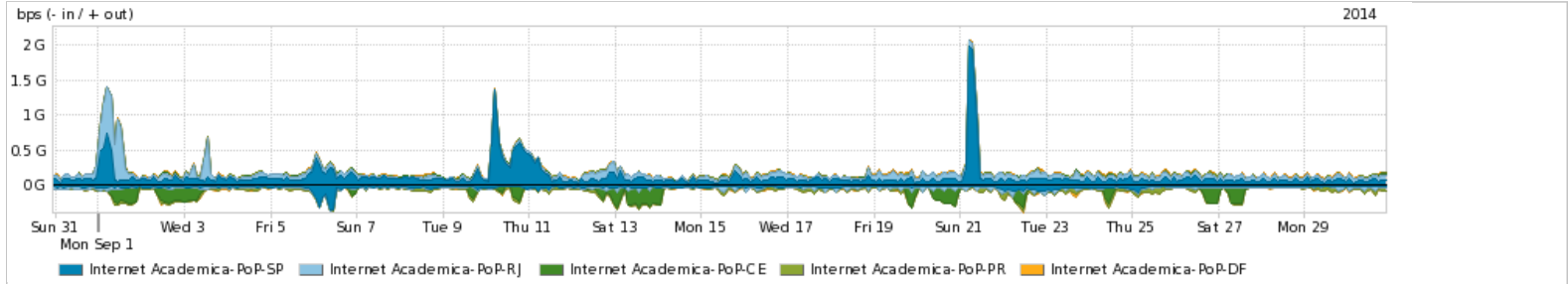
Interesse de tráfego do serviço de Internet Commodity por cidade



Average | Max | PCT95

| PROFILE                             | CITY               | IN            | OUT         | TOTAL       |             |
|-------------------------------------|--------------------|---------------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | Internet Commodity | Unknown       | 73.28 Mbps  | 504.57 Mbps | 577.85 Mbps |
| <input checked="" type="checkbox"/> | Internet Commodity | Cambridge     | 21.69 Mbps  | 322.78 Mbps | 344.47 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Unknown       | 15.11 Mbps  | 178.88 Mbps | 193.99 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Unknown       | 17.90 Mbps  | 137.36 Mbps | 155.26 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Unknown       | 29.18 Mbps  | 96.94 Mbps  | 126.12 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Guangzhou     | 124.54 Mbps | 975.82 Kbps | 125.52 Mbps |
| <input type="checkbox"/>            | Internet Commodity | Englewood     | 1.46 Mbps   | 93.37 Mbps  | 94.84 Mbps  |
| <input type="checkbox"/>            | Internet Commodity | Tempe         | 895.67 Kbps | 81.58 Mbps  | 82.48 Mbps  |
| <input type="checkbox"/>            | Internet Commodity | Unknown       | 12.24 Mbps  | 50.11 Mbps  | 62.35 Mbps  |
| <input type="checkbox"/>            | Internet Commodity | San Francisco | 11.32 Mbps  | 48.60 Mbps  | 59.92 Mbps  |

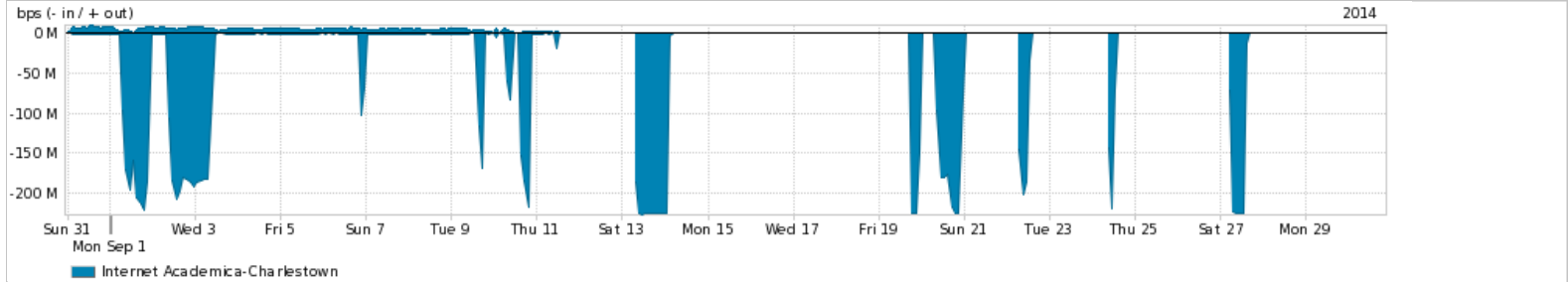
Distribuição do uso do serviço de Internet acadêmica internacional pelos PoPs da RNP



Average | Max | PCT95

| PROFILE                             | PROFILE            | IN     | OUT         | TOTAL       |             |
|-------------------------------------|--------------------|--------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | Internet Acadêmica | PoP-SP | 27.91 Mbps  | 122.73 Mbps | 150.64 Mbps |
| <input checked="" type="checkbox"/> | Internet Acadêmica | PoP-RJ | 18.15 Mbps  | 68.70 Mbps  | 86.85 Mbps  |
| <input checked="" type="checkbox"/> | Internet Acadêmica | PoP-CE | 35.04 Mbps  | 2.40 Mbps   | 37.44 Mbps  |
| <input checked="" type="checkbox"/> | Internet Acadêmica | PoP-PR | 21.19 Mbps  | 8.02 Mbps   | 29.21 Mbps  |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-MG | 2.69 Mbps   | 12.97 Mbps  | 15.66 Mbps  |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-RS | 1.44 Mbps   | 11.20 Mbps  | 12.64 Mbps  |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-SC | 1.82 Mbps   | 8.52 Mbps   | 10.34 Mbps  |
| <input checked="" type="checkbox"/> | Internet Acadêmica | PoP-DF | 2.54 Mbps   | 6.43 Mbps   | 8.97 Mbps   |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-PE | 874.59 Kbps | 4.62 Mbps   | 5.50 Mbps   |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-BA | 914.05 Kbps | 4.02 Mbps   | 4.94 Mbps   |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-PA | 541.40 Kbps | 3.76 Mbps   | 4.30 Mbps   |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-GO | 659.25 Kbps | 1.44 Mbps   | 2.10 Mbps   |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-ES | 657.88 Kbps | 1.22 Mbps   | 1.88 Mbps   |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-AM | 223.14 Kbps | 1.44 Mbps   | 1.66 Mbps   |
| <input type="checkbox"/>            | Internet Acadêmica | PoP-PB | 664.87 Kbps | 901.13 Kbps | 1.57 Mbps   |

Interesse de trafego do serviço de Internet acadêmica internacional por cidades

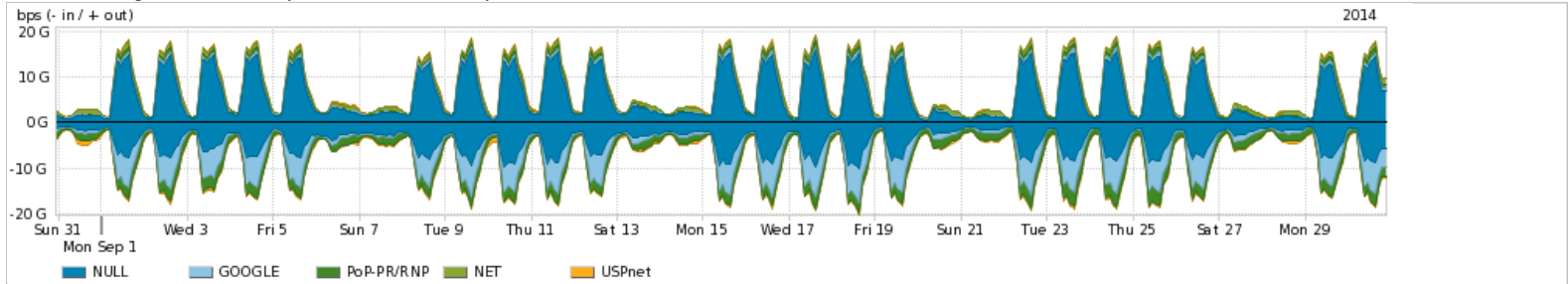


Average | Max | PCT95

| PROFILE                             | CITY               | IN          | OUT        | TOTAL      |            |
|-------------------------------------|--------------------|-------------|------------|------------|------------|
| <input checked="" type="checkbox"/> | Internet Acadêmica | Charlestown | 30.26 Mbps | 1.55 Mbps  | 31.81 Mbps |
| <input type="checkbox"/>            | Internet Acadêmica | Unknown     | 2.05 Mbps  | 29.01 Mbps | 31.06 Mbps |
| <input type="checkbox"/>            | Internet Acadêmica | Sioux Falls | 2.75 Mbps  | 23.56 Mbps | 26.31 Mbps |
| <input type="checkbox"/>            | Internet Acadêmica | Geneva      | 4.89 Mbps  | 18.12 Mbps | 23.01 Mbps |
| <input type="checkbox"/>            | Internet Acadêmica | Appleton    | 1.01 Mbps  | 20.19 Mbps | 21.20 Mbps |

| PROFILE                  | CITY               | IN             | OUT         | TOTAL      |            |
|--------------------------|--------------------|----------------|-------------|------------|------------|
| <input type="checkbox"/> | Internet Academica | Cambridge      | 352.13 Kbps | 15.56 Mbps | 15.92 Mbps |
| <input type="checkbox"/> | Internet Academica | New Orleans    | 8.18 Mbps   | 6.54 Mbps  | 14.71 Mbps |
| <input type="checkbox"/> | Internet Academica | Unknown        | 95.90 Kbps  | 13.49 Mbps | 13.59 Mbps |
| <input type="checkbox"/> | Internet Academica | Gradignan      | 1.31 Mbps   | 11.27 Mbps | 12.58 Mbps |
| <input type="checkbox"/> | Internet Academica | West Lafayette | 412.73 Kbps | 11.91 Mbps | 12.33 Mbps |

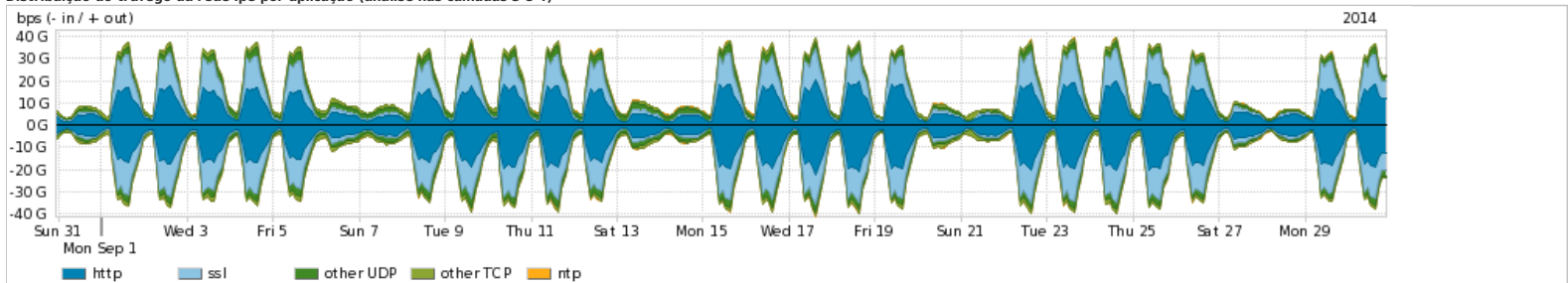
Redes (AS's de origem) mais acessadas pelos clientes da RNP sob o ponto de vista do AS1916



Average | Max | PCT95

| AS NAME                             | ASN         | IN     | OUT         | TOTAL       |             |
|-------------------------------------|-------------|--------|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | NULL        | 0      | 4.05 Gbps   | 5.73 Gbps   | 9.78 Gbps   |
| <input checked="" type="checkbox"/> | GOOGLE      | 15169  | 2.43 Gbps   | 332.41 Mbps | 2.76 Gbps   |
| <input checked="" type="checkbox"/> | PoP-PR/RNP  | 10881  | 1.59 Gbps   | 381.13 Mbps | 1.98 Gbps   |
| <input type="checkbox"/>            | FACEBOOK    | 32934  | 856.39 Mbps | 70.31 Mbps  | 926.70 Mbps |
| <input checked="" type="checkbox"/> | NET         | 28573  | 65.39 Mbps  | 753.68 Mbps | 819.08 Mbps |
| <input type="checkbox"/>            | RedeRio     | 2715   | 188.23 Mbps | 614.13 Mbps | 802.36 Mbps |
| <input type="checkbox"/>            | RedeTche    | 2716   | 98.67 Mbps  | 558.78 Mbps | 657.46 Mbps |
| <input type="checkbox"/>            | 263300      | 263300 | 262.47 Mbps | 280.31 Mbps | 542.78 Mbps |
| <input type="checkbox"/>            | AKAMAI-ASN1 | 20940  | 509.69 Mbps | 30.32 Mbps  | 540.01 Mbps |
| <input checked="" type="checkbox"/> | USPnet      | 28571  | 339.52 Mbps | 173.21 Mbps | 512.74 Mbps |
| <input type="checkbox"/>            | UFDCS       | 10715  | 87.71 Mbps  | 399.44 Mbps | 487.15 Mbps |
| <input type="checkbox"/>            | PoP-BA/RNP  | 53164  | 120.22 Mbps | 334.97 Mbps | 455.19 Mbps |
| <input type="checkbox"/>            | QWEST-US    | 209    | 435.35 Mbps | 13.67 Mbps  | 449.02 Mbps |
| <input type="checkbox"/>            | AMAZON-AES  | 14618  | 252.62 Mbps | 161.28 Mbps | 413.90 Mbps |
| <input type="checkbox"/>            | Oi          | 7738   | 40.83 Mbps  | 359.61 Mbps | 400.44 Mbps |

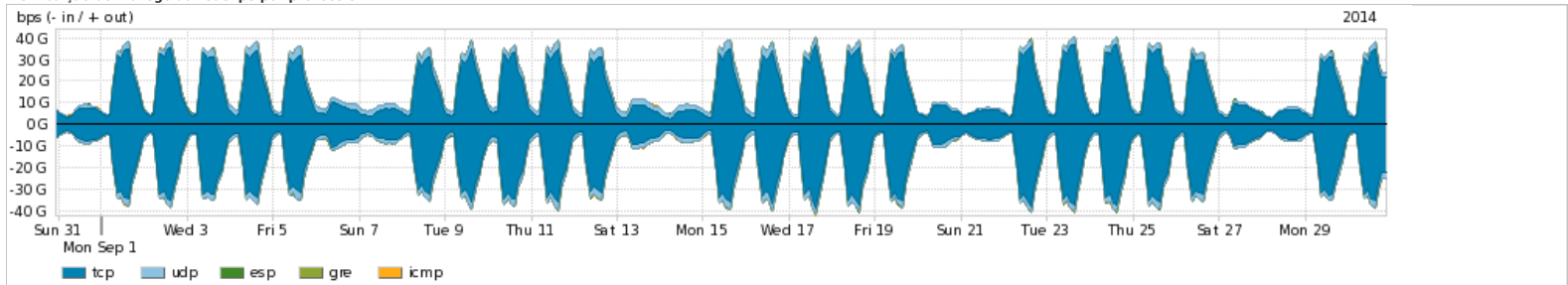
Distribuição do tráfego da rede Ipê por aplicação (análise nas camadas 3 e 4)



Average | Max | PCT95

|                                     | APPLICATION    | IN | OUT         | TOTAL       |             |
|-------------------------------------|----------------|----|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | http           |    | 8.40 Gbps   | 8.04 Gbps   | 16.45 Gbps  |
| <input checked="" type="checkbox"/> | ssl            |    | 5.18 Gbps   | 5.06 Gbps   | 10.25 Gbps  |
| <input checked="" type="checkbox"/> | other UDP      |    | 1.79 Gbps   | 2.01 Gbps   | 3.79 Gbps   |
| <input checked="" type="checkbox"/> | other TCP      |    | 1.29 Gbps   | 1.24 Gbps   | 2.53 Gbps   |
| <input type="checkbox"/>            | rsync          |    | 177.50 Mbps | 161.83 Mbps | 339.34 Mbps |
| <input type="checkbox"/>            | macromedia-fcs |    | 127.75 Mbps | 126.16 Mbps | 253.91 Mbps |
| <input checked="" type="checkbox"/> | ntp            |    | 70.81 Mbps  | 114.07 Mbps | 184.87 Mbps |
| <input type="checkbox"/>            | ssh            |    | 64.69 Mbps  | 66.28 Mbps  | 130.96 Mbps |
| <input type="checkbox"/>            | dns            |    | 63.05 Mbps  | 64.77 Mbps  | 127.82 Mbps |
| <input type="checkbox"/>            | smtp           |    | 60.59 Mbps  | 59.57 Mbps  | 120.17 Mbps |

Distribuição do tráfego da rede Ipê por protocolo



Average | Max | PCT95

|                                     | PROTOCOL  | IN | OUT         | TOTAL       |             |
|-------------------------------------|-----------|----|-------------|-------------|-------------|
| <input checked="" type="checkbox"/> | tcp       |    | 15.48 Gbps  | 14.90 Gbps  | 30.38 Gbps  |
| <input checked="" type="checkbox"/> | udp       |    | 1.93 Gbps   | 2.19 Gbps   | 4.12 Gbps   |
| <input checked="" type="checkbox"/> | esp       |    | 31.83 Mbps  | 28.85 Mbps  | 60.68 Mbps  |
| <input checked="" type="checkbox"/> | gre       |    | 22.23 Mbps  | 22.84 Mbps  | 45.08 Mbps  |
| <input checked="" type="checkbox"/> | icmp      |    | 13.79 Mbps  | 13.34 Mbps  | 27.13 Mbps  |
| <input type="checkbox"/>            | ipv6      |    | 4.44 Mbps   | 4.47 Mbps   | 8.91 Mbps   |
| <input type="checkbox"/>            | ah        |    | 215.74 Kbps | 215.91 Kbps | 431.64 Kbps |
| <input type="checkbox"/>            | ipv6-icmp |    | 68.72 Kbps  | 92.87 Kbps  | 161.58 Kbps |
| <input type="checkbox"/>            | pim       |    | 20.90 Kbps  | 875.00 bps  | 21.78 Kbps  |
| <input type="checkbox"/>            | ipv6-frag |    | 9.75 Kbps   | 7.25 Kbps   | 17.00 Kbps  |

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