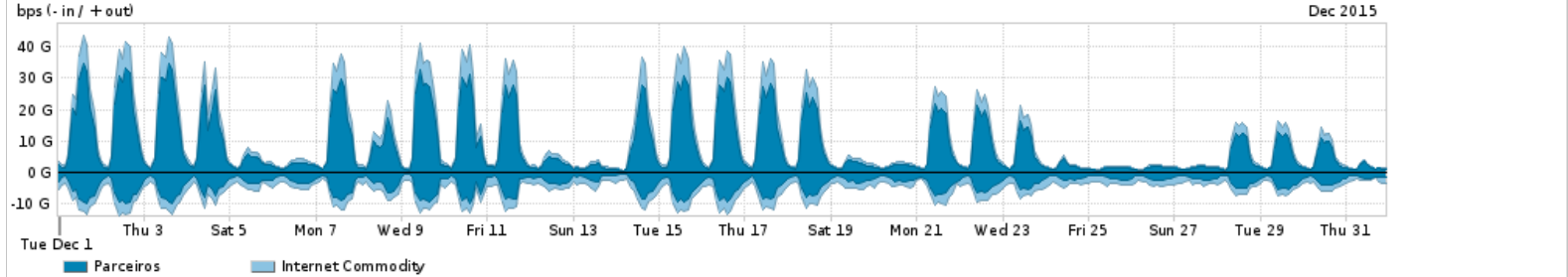


Os gráficos apresentados neste relatório de tráfego estão em formato stack, o que significa que seu valor é uma composição da soma dos componentes listados nas legendas localizadas logo abaixo dos gráficos. Os gráficos estão em "bps x tempo" e possuem dois eixos verticais, Out (positivo) e In (negativo).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

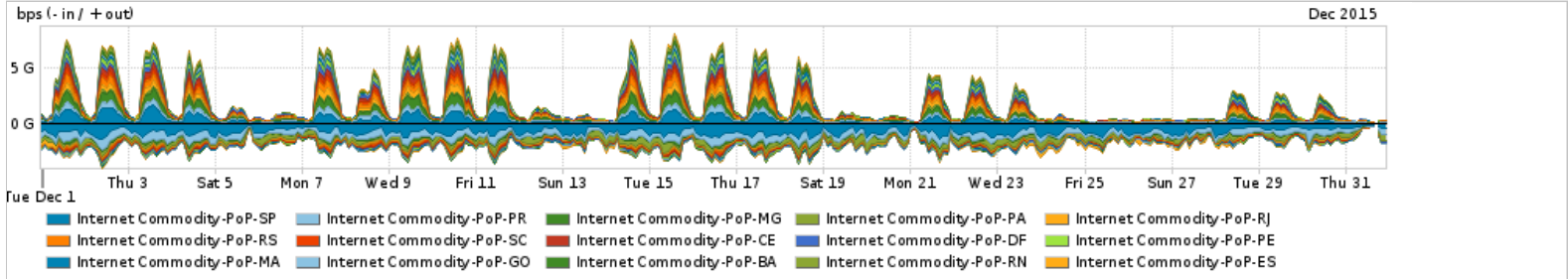
Tráfego agregado dos acessos comerciais da RNP



Average | Max | PCT95

| PROFILE                                     | IN | OUT       | TOTAL     |            |
|---|----|-----------|-----------|------------|
| <input type="checkbox"/> Parceiros          |    | 3.57 Gbps | 8.08 Gbps | 11.65 Gbps |
| <input type="checkbox"/> Internet Commodity |    | 2.23 Gbps | 2.39 Gbps | 4.62 Gbps  |

Utilização do serviço de Internet Commodity pelos PoPs da RNP

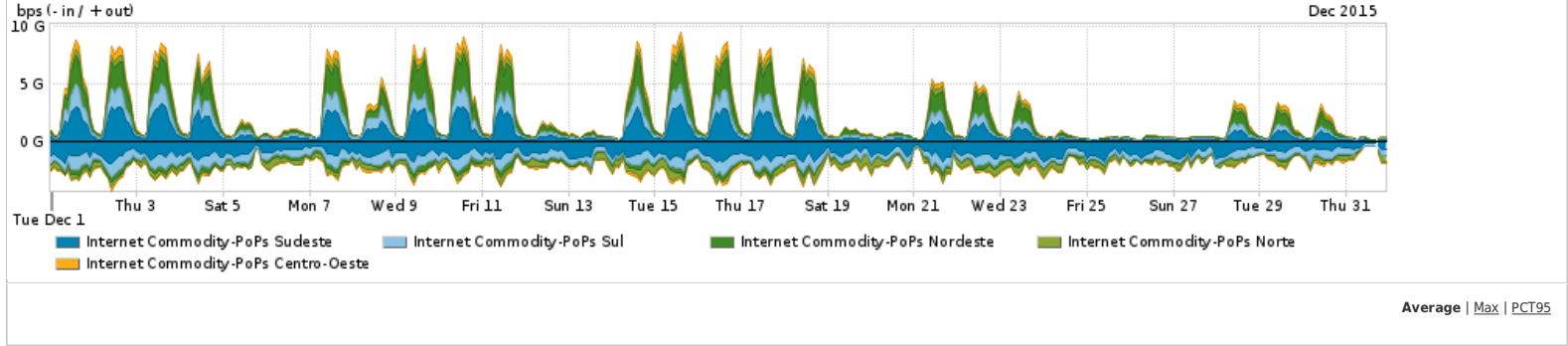


Average | Max | PCT95

| PROFILE                  | PROFILE            | IN     | OUT         | TOTAL       |             |
|--------------------------|--------------------|--------|-------------|-------------|-------------|
| <input type="checkbox"/> | Internet Commodity | PoP-SP | 699.89 Mbps | 312.24 Mbps | 1.01 Gbps   |
| <input type="checkbox"/> | Internet Commodity | PoP-PR | 475.47 Mbps | 170.68 Mbps | 646.15 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-MG | 96.90 Mbps  | 247.89 Mbps | 344.79 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-PA | 264.27 Mbps | 55.28 Mbps  | 319.55 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-RJ | 92.64 Mbps  | 173.19 Mbps | 265.83 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-RS | 43.57 Mbps  | 194.29 Mbps | 237.86 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-SC | 86.15 Mbps  | 105.47 Mbps | 191.62 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-CE | 26.68 Mbps  | 142.90 Mbps | 169.58 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-DF | 50.33 Mbps  | 110.09 Mbps | 160.42 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-PE | 50.76 Mbps  | 107.14 Mbps | 157.90 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-MA | 54.98 Mbps  | 74.73 Mbps  | 129.71 Mbps |

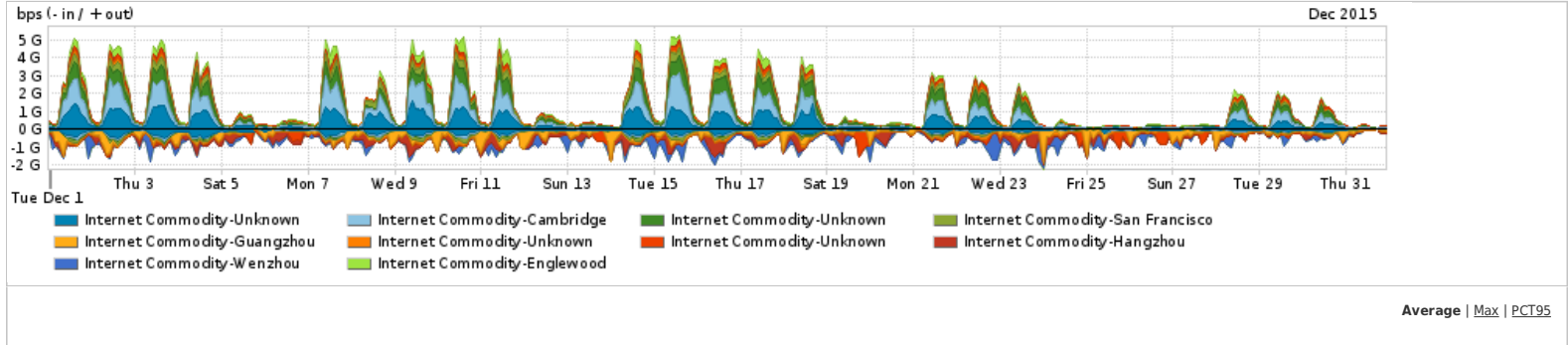
| PROFILE                  | PROFILE            | IN     | OUT        | TOTAL       |             |
|--------------------------|--------------------|--------|------------|-------------|-------------|
| <input type="checkbox"/> | Internet Commodity | PoP-GO | 67.87 Mbps | 51.44 Mbps  | 119.31 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-BA | 22.48 Mbps | 94.59 Mbps  | 117.07 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-RN | 6.87 Mbps  | 105.04 Mbps | 111.91 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoP-ES | 59.27 Mbps | 49.90 Mbps  | 109.16 Mbps |

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



| PROFILE                  | PROFILE            | IN                | OUT         | TOTAL       |             |
|--------------------------|--------------------|-------------------|-------------|-------------|-------------|
| <input type="checkbox"/> | Internet Commodity | PoPs Sudeste      | 948.70 Mbps | 783.22 Mbps | 1.73 Gbps   |
| <input type="checkbox"/> | Internet Commodity | PoPs Sul          | 605.18 Mbps | 470.45 Mbps | 1.08 Gbps   |
| <input type="checkbox"/> | Internet Commodity | PoPs Nordeste     | 220.49 Mbps | 694.36 Mbps | 914.85 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoPs Norte        | 292.49 Mbps | 171.73 Mbps | 464.22 Mbps |
| <input type="checkbox"/> | Internet Commodity | PoPs Centro-Oeste | 130.08 Mbps | 206.46 Mbps | 336.54 Mbps |

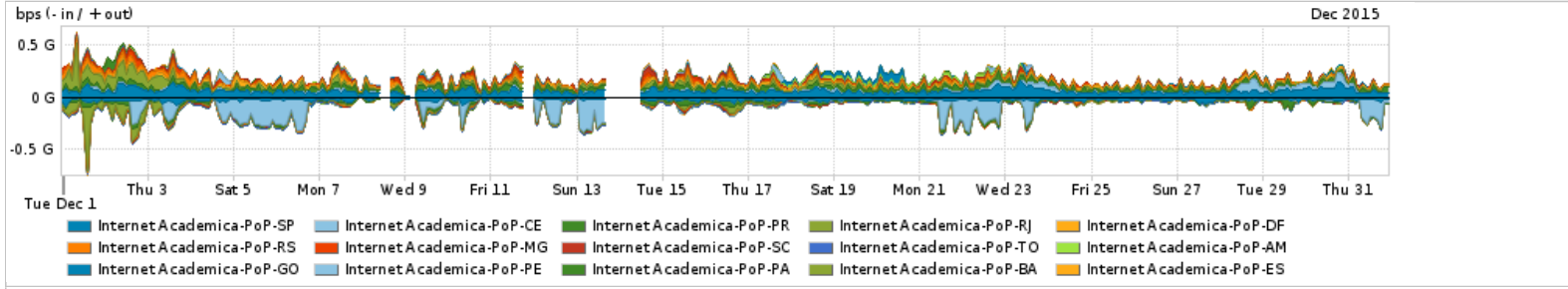
Interesse de tráfego do serviço de Internet Commodity por cidade



| PROFILE                  | CITY               | IN            | OUT         | TOTAL       |             |
|--------------------------|--------------------|---------------|-------------|-------------|-------------|
| <input type="checkbox"/> | Internet Commodity | Unknown       | 121.75 Mbps | 324.05 Mbps | 445.80 Mbps |
| <input type="checkbox"/> | Internet Commodity | Cambridge     | 27.45 Mbps  | 338.22 Mbps | 365.66 Mbps |
| <input type="checkbox"/> | Internet Commodity | Unknown       | 13.59 Mbps  | 239.58 Mbps | 253.16 Mbps |
| <input type="checkbox"/> | Internet Commodity | San Francisco | 47.19 Mbps  | 120.83 Mbps | 168.02 Mbps |
| <input type="checkbox"/> | Internet Commodity | Guangzhou     | 159.84 Mbps | 1.09 Mbps   | 160.92 Mbps |
| <input type="checkbox"/> | Internet Commodity | Unknown       | 91.73 Mbps  | 53.59 Mbps  | 145.31 Mbps |
| <input type="checkbox"/> | Internet Commodity | Unknown       | 60.21 Mbps  | 84.53 Mbps  | 144.74 Mbps |
| <input type="checkbox"/> | Internet Commodity | Hangzhou      | 141.47 Mbps | 1.14 Mbps   | 142.61 Mbps |
| <input type="checkbox"/> | Internet Commodity | Wenzhou       | 134.01 Mbps | 61.30 Kbps  | 134.07 Mbps |

| PROFILE            | CITY      | IN        | OUT         | TOTAL       |
|--------------------|-----------|-----------|-------------|-------------|
| Internet Commodity | Englewood | 1.33 Mbps | 115.04 Mbps | 116.37 Mbps |

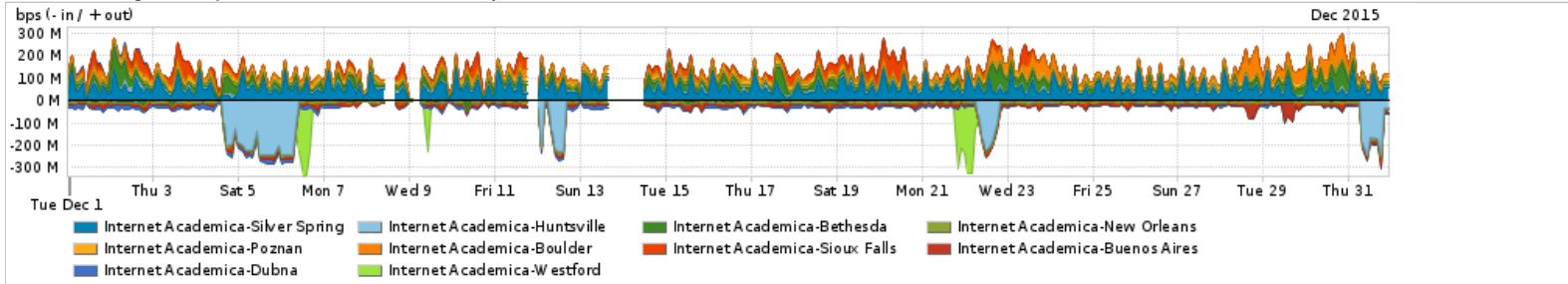
Distribuição do uso do serviço de Internet acadêmica internacional pelos PoPs da RNP



Average | Max | PCT95

| PROFILE            | PROFILE | IN          | OUT         | TOTAL      |
|--------------------|---------|-------------|-------------|------------|
| Internet Acadêmica | PoP-SP  | 27.17 Mbps  | 54.36 Mbps  | 81.53 Mbps |
| Internet Acadêmica | PoP-CE  | 40.72 Mbps  | 8.46 Mbps   | 49.18 Mbps |
| Internet Acadêmica | PoP-PR  | 14.67 Mbps  | 29.94 Mbps  | 44.61 Mbps |
| Internet Acadêmica | PoP-RJ  | 11.26 Mbps  | 22.25 Mbps  | 33.50 Mbps |
| Internet Acadêmica | PoP-DF  | 1.65 Mbps   | 19.27 Mbps  | 20.92 Mbps |
| Internet Acadêmica | PoP-RS  | 1.25 Mbps   | 13.47 Mbps  | 14.72 Mbps |
| Internet Acadêmica | PoP-MG  | 1.94 Mbps   | 8.35 Mbps   | 10.30 Mbps |
| Internet Acadêmica | PoP-SC  | 1.68 Mbps   | 6.27 Mbps   | 7.95 Mbps  |
| Internet Acadêmica | PoP-TO  | 7.33 Mbps   | 278.61 Kbps | 7.60 Mbps  |
| Internet Acadêmica | PoP-AM  | 287.24 Kbps | 5.26 Mbps   | 5.55 Mbps  |
| Internet Acadêmica | PoP-GO  | 222.82 Kbps | 5.11 Mbps   | 5.34 Mbps  |
| Internet Acadêmica | PoP-PE  | 1.60 Mbps   | 3.42 Mbps   | 5.01 Mbps  |
| Internet Acadêmica | PoP-PA  | 157.30 Kbps | 2.16 Mbps   | 2.32 Mbps  |
| Internet Acadêmica | PoP-BA  | 664.10 Kbps | 1.47 Mbps   | 2.13 Mbps  |
| Internet Acadêmica | PoP-ES  | 334.44 Kbps | 1.43 Mbps   | 1.77 Mbps  |

Interesse de trafego do serviço de Internet acadêmica internacional por cidades

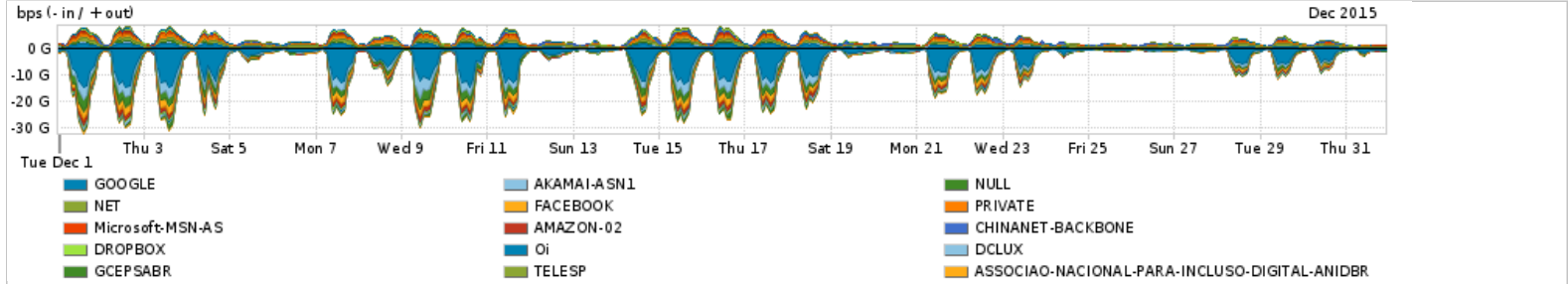


Average | Max | PCT95

| PROFILE            | CITY          | IN          | OUT        | TOTAL      |
|--------------------|---------------|-------------|------------|------------|
| Internet Acadêmica | Silver Spring | 648.78 Kbps | 49.77 Mbps | 50.42 Mbps |
| Internet Acadêmica | Huntsville    | 20.83 Mbps  | 3.80 Mbps  | 24.63 Mbps |

| PROFILE                  | CITY               | IN           | OUT         | TOTAL       |            |
|--------------------------|--------------------|--------------|-------------|-------------|------------|
| <input type="checkbox"/> | Internet Academica | Bethesda     | 587.59 Kbps | 18.90 Mbps  | 19.49 Mbps |
| <input type="checkbox"/> | Internet Academica | New Orleans  | 7.17 Mbps   | 11.52 Mbps  | 18.69 Mbps |
| <input type="checkbox"/> | Internet Academica | Poznan       | 280.74 Kbps | 16.61 Mbps  | 16.89 Mbps |
| <input type="checkbox"/> | Internet Academica | Boulder      | 428.44 Kbps | 16.45 Mbps  | 16.88 Mbps |
| <input type="checkbox"/> | Internet Academica | Sioux Falls  | 1.78 Mbps   | 11.20 Mbps  | 12.98 Mbps |
| <input type="checkbox"/> | Internet Academica | Buenos Aires | 11.70 Mbps  | 350.79 Kbps | 12.05 Mbps |
| <input type="checkbox"/> | Internet Academica | Dubna        | 7.46 Mbps   | 424.94 Kbps | 7.88 Mbps  |
| <input type="checkbox"/> | Internet Academica | Westford     | 6.81 Mbps   | 53.00 bps   | 6.81 Mbps  |

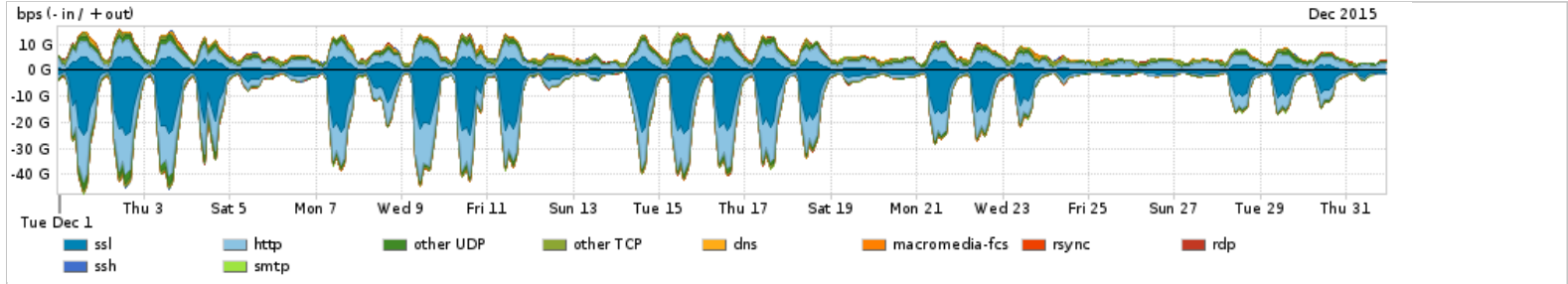
Redes (AS's de origem) mais acessadas pelos clientes da RNP sob o ponto de vista do AS1916



Average | Max | PCT95

| AS NAME                  | ASN   | IN    | OUT         | TOTAL       |             |
|--------------------------|---|-------|-------------|-------------|-------------|
| <input type="checkbox"/> | GOOGLE  | 15169 | 3.53 Gbps   | 553.69 Mbps | 4.08 Gbps   |
| <input type="checkbox"/> | AKAMAI-ASN1                                   | 20940 | 850.19 Mbps | 34.15 Mbps  | 884.34 Mbps |
| <input type="checkbox"/> | NULL  | 0     | 710.65 Mbps | 106.32 Mbps | 816.97 Mbps |
| <input type="checkbox"/> | NET   | 28573 | 89.71 Mbps  | 661.63 Mbps | 751.34 Mbps |
| <input type="checkbox"/> | FACEBOOK                                      | 32934 | 599.50 Mbps | 87.26 Mbps  | 686.76 Mbps |
| <input type="checkbox"/> | PRIVATE                                       | 65011 | 45.00 bps   | 412.34 Mbps | 412.34 Mbps |
| <input type="checkbox"/> | Microsoft-MSN-AS                              | 8075  | 181.93 Mbps | 188.24 Mbps | 370.17 Mbps |
| <input type="checkbox"/> | AMAZON-02                                     | 16509 | 271.06 Mbps | 79.46 Mbps  | 350.52 Mbps |
| <input type="checkbox"/> | CHINANET-BACKBONE                             | 4134  | 3.94 Mbps   | 312.36 Mbps | 316.29 Mbps |
| <input type="checkbox"/> | DROPBOX                                       | 19679 | 164.57 Mbps | 112.00 Mbps | 276.57 Mbps |
| <input type="checkbox"/> | Oi  | 7738  | 33.58 Mbps  | 227.84 Mbps | 261.42 Mbps |
| <input type="checkbox"/> | DCLUX   | 24611 | 247.33 Mbps | 13.29 Mbps  | 260.62 Mbps |
| <input type="checkbox"/> | GCEPSABR                                      | 28604 | 228.49 Mbps | 15.94 Mbps  | 244.44 Mbps |
| <input type="checkbox"/> | TELESP  | 27699 | 45.69 Mbps  | 196.42 Mbps | 242.11 Mbps |
| <input type="checkbox"/> | ASSOCIAO-NACIONAL-PARA-INCLUSO-DIGITAL-ANIDBR | 28135 | 185.50 Mbps | 6.38 Mbps   | 191.88 Mbps |

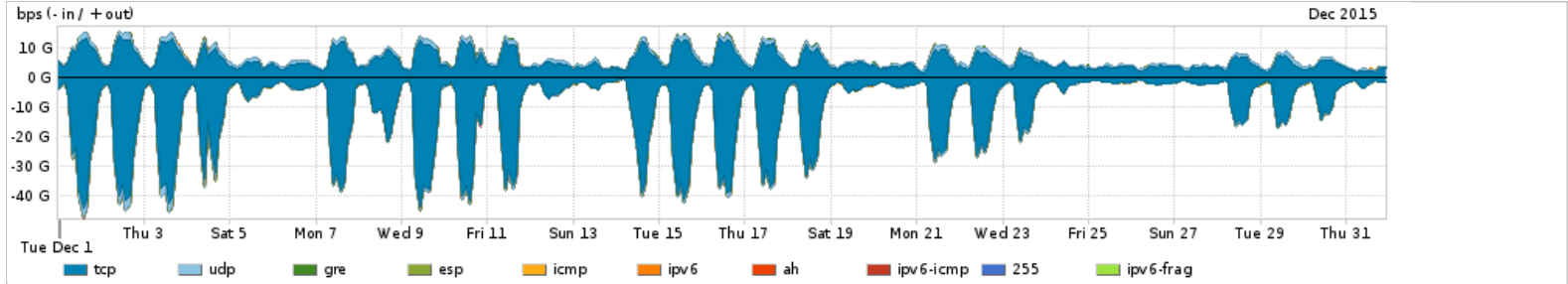
Distribuição do tráfego da rede Ipê por aplicação (análise nas camadas 3 e 4)



Average | Max | PCT95


| APPLICATION                             | IN | OUT         | TOTAL       |
|---|----|-------------|-------------|
| <input type="checkbox"/> ssl            |    | 6.10 Gbps   | 1.40 Gbps   |
| <input type="checkbox"/> http           |    | 3.90 Gbps   | 2.91 Gbps   |
| <input type="checkbox"/> other UDP      |    | 484.39 Mbps | 799.13 Mbps |
| <input type="checkbox"/> other TCP      |    | 389.18 Mbps | 788.92 Mbps |
| <input type="checkbox"/> dns            |    | 25.43 Mbps  | 204.17 Mbps |
| <input type="checkbox"/> macromedia-fcs |    | 53.50 Mbps  | 61.75 Mbps  |
| <input type="checkbox"/> rsync          |    | 69.87 Mbps  | 39.05 Mbps  |
| <input type="checkbox"/> rdp            |    | 12.55 Mbps  | 79.45 Mbps  |
| <input type="checkbox"/> ssh            |    | 22.19 Mbps  | 40.24 Mbps  |
| <input type="checkbox"/> smtp           |    | 27.05 Mbps  | 27.24 Mbps  |

Distribuição do tráfego da rede Ipê por protocolo



Average | Max | PCT95

| PROTOCOL                           | IN | OUT         | TOTAL       |
|------------------------------------|----|-------------|-------------|
| <input type="checkbox"/> tcp       |    | 10.65 Gbps  | 5.45 Gbps   |
| <input type="checkbox"/> udp       |    | 517.80 Mbps | 988.53 Mbps |
| <input type="checkbox"/> gre       |    | 10.32 Mbps  | 42.16 Mbps  |
| <input type="checkbox"/> esp       |    | 34.30 Mbps  | 6.00 Mbps   |
| <input type="checkbox"/> icmp      |    | 5.11 Mbps   | 7.20 Mbps   |
| <input type="checkbox"/> ipv6      |    | 3.60 Mbps   | 2.55 Mbps   |
| <input type="checkbox"/> ah        |    | 397.95 Kbps | 733.73 Kbps |
| <input type="checkbox"/> ipv6-icmp |    | 155.19 Kbps | 66.96 Kbps  |
| <input type="checkbox"/> 255       |    | 1.00 bps    | 11.57 Kbps  |

|  | PROTOCOL  | IN | OUT       | TOTAL                  |
|---|-----------|----|-----------|------------------------|
| <input type="checkbox"/>  | ipv6-frag |    | 83.00 bps | 4.11 Kbps<br>4.20 Kbps |

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