

# IV Workshop do PoP-RS

## Infraestrutura e Gerência do Backbone do PoP-RS

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# Infraestrutura

- Sediado no CPD-UFRGS
  - O POP-RS/RNP está instalado no CPD/UFRGS desde 1994/1995
  - Ocupa uma sala no segundo andar(36 m<sup>2</sup>)
  - Compartilha sala de equipamentos(220 m<sup>2</sup>)



# Infraestrutura

- Equipe de 9 pessoas (7 em tempo parcial)
  - Regime de Plantões(noite e final de semana)
- Operação em conjunto com a UFRGS
  - 6 pessoas em turno de 6h/dia
  - Atendimento 24x7
- Administração exclusiva ou compartilhada de:
  - 46 roteadores(PoP e clientes)
  - 30 Switches: 7 (PoP-RS), 7 (PTT-RS), 16 (Metropoa)

# Infraestrutura de Telecom

- **522 fibras de operadoras**

- BrasilTelecom (48 vias)
- CEEE (12 vias)
- Embratel (48 vias)
- GVT (36 vias)
- Net Virtua (6 vias)
- Datavag (4 vias)

- **Rádio Enlace**

- Datavag
- Techmediaweb
- INB

- Procempa (16 vias)
- Procergs (12 vias)
- Soultech (24 vias)
- Compuline (12 vias)
- Commcorp (52 vias)
- Level3 (12)
- Metropoa (240 vias)

- **Torre disponível no prédio**
  - Capacidade 8 antenas



# Infraestrutura Elétrica

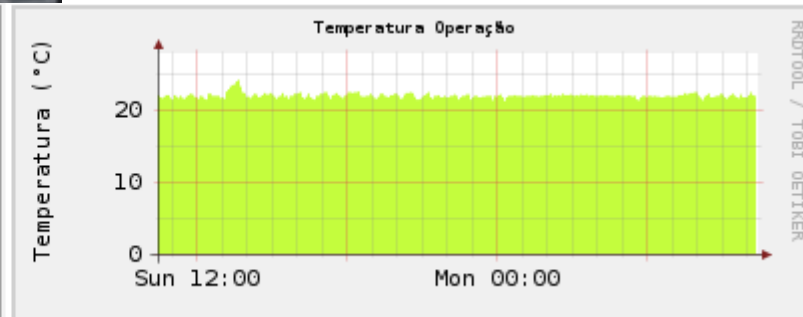
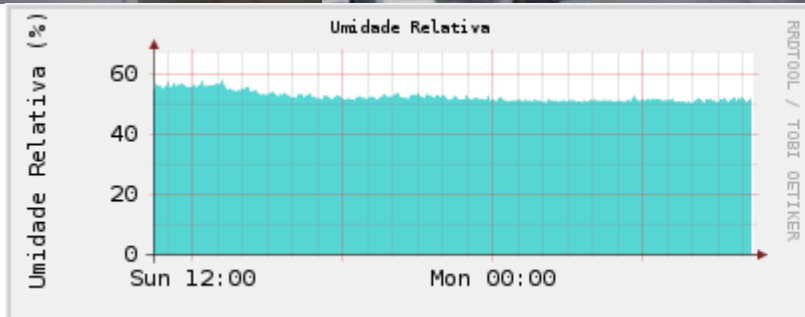


## Nobreak & Gerador

- Autonomia de 12h sem reabastecimento

## Refrigeração

- ~540mil BTUs



# Infraestrutura de Equipamentos



Foundry RX-8



Foundry FastIron



Alpine 3804



Cisco 12406



Cisco 6506



Cisco 3560

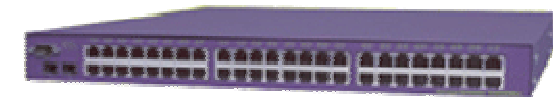


Brocade MLX-4

Juniper MX480



Extreme x450

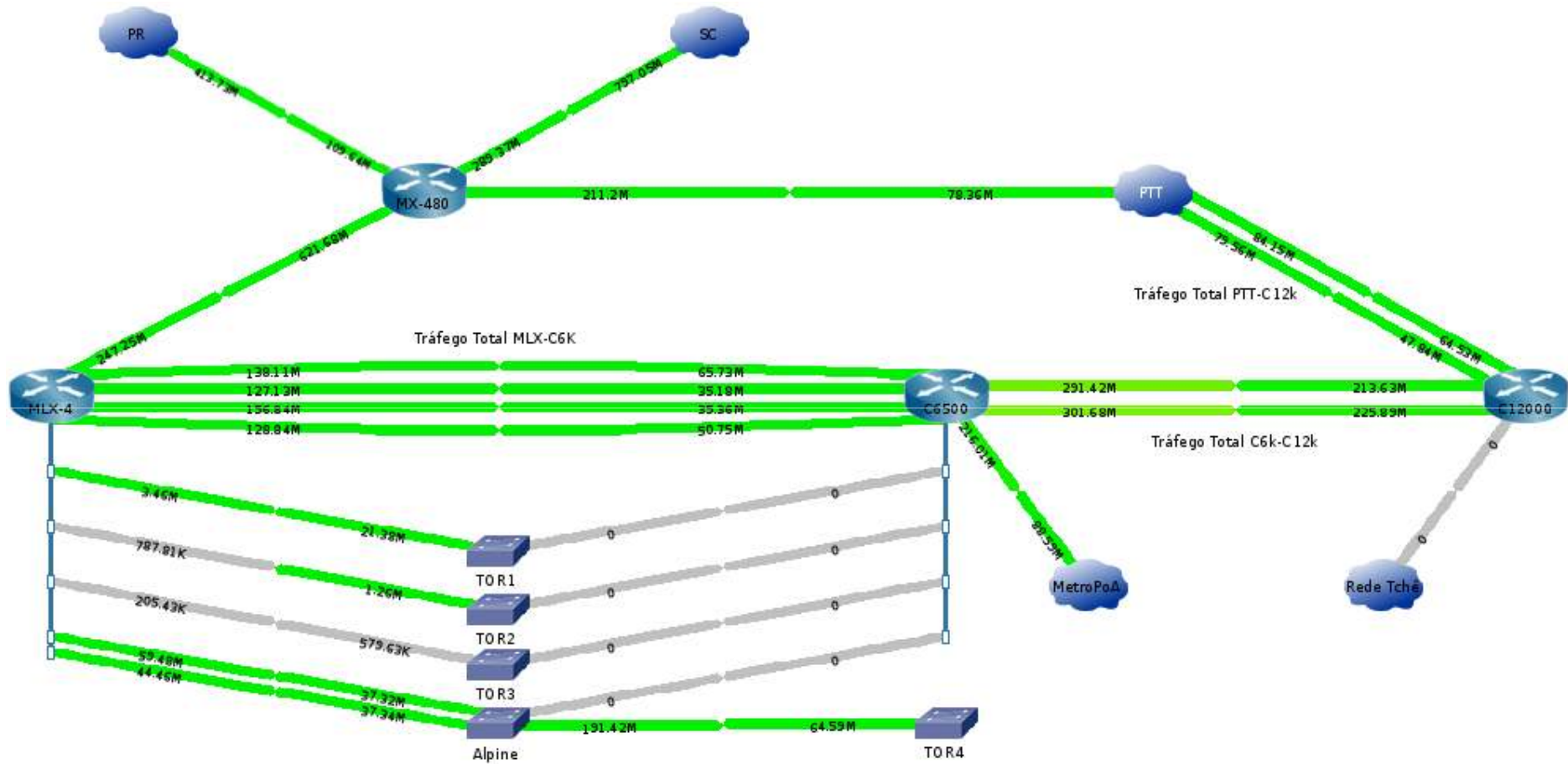


Summit 48si





# Backbone PoP-RS



<http://rrd.pop-rs.rnp.br/>



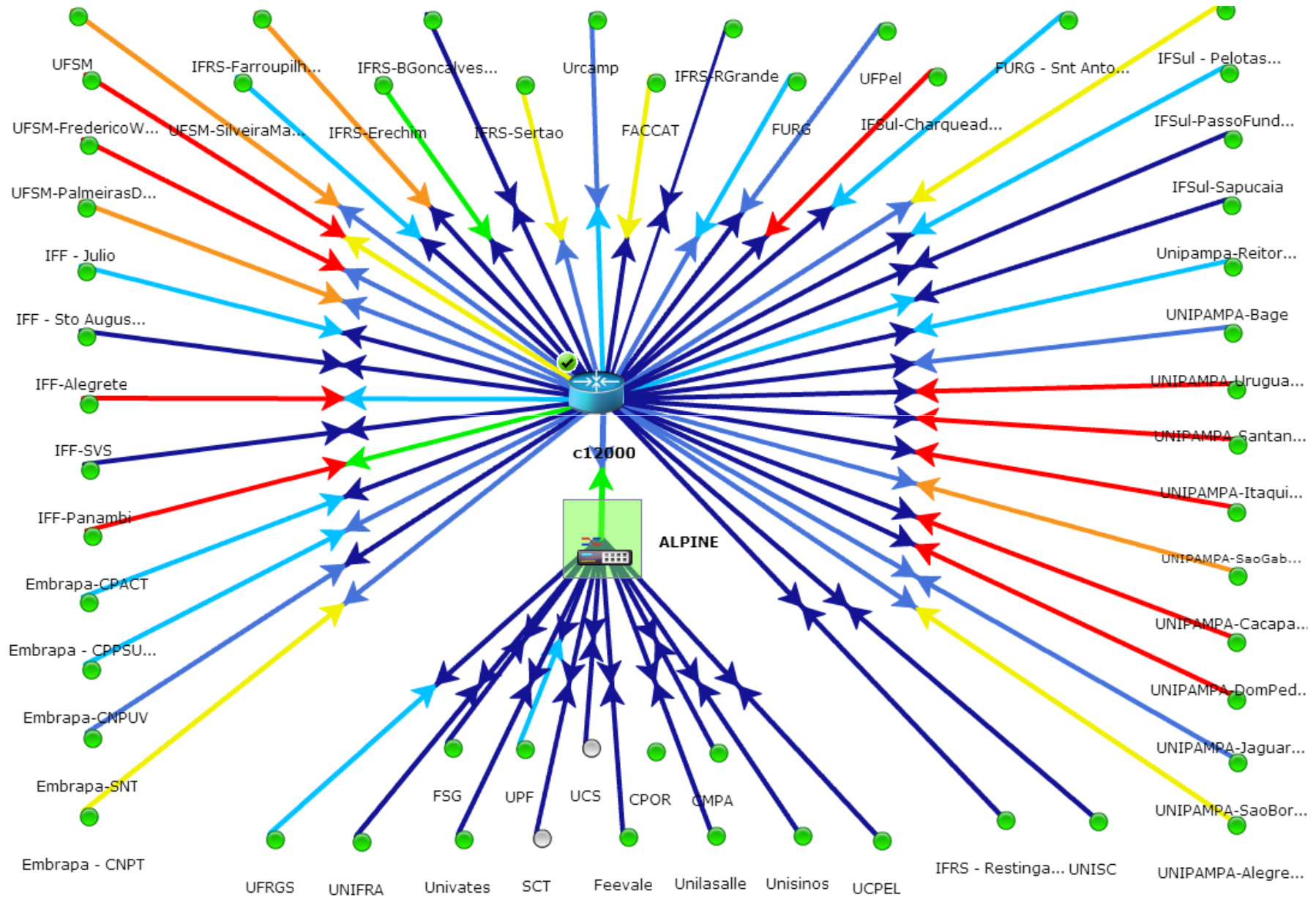
# Rede Tchê



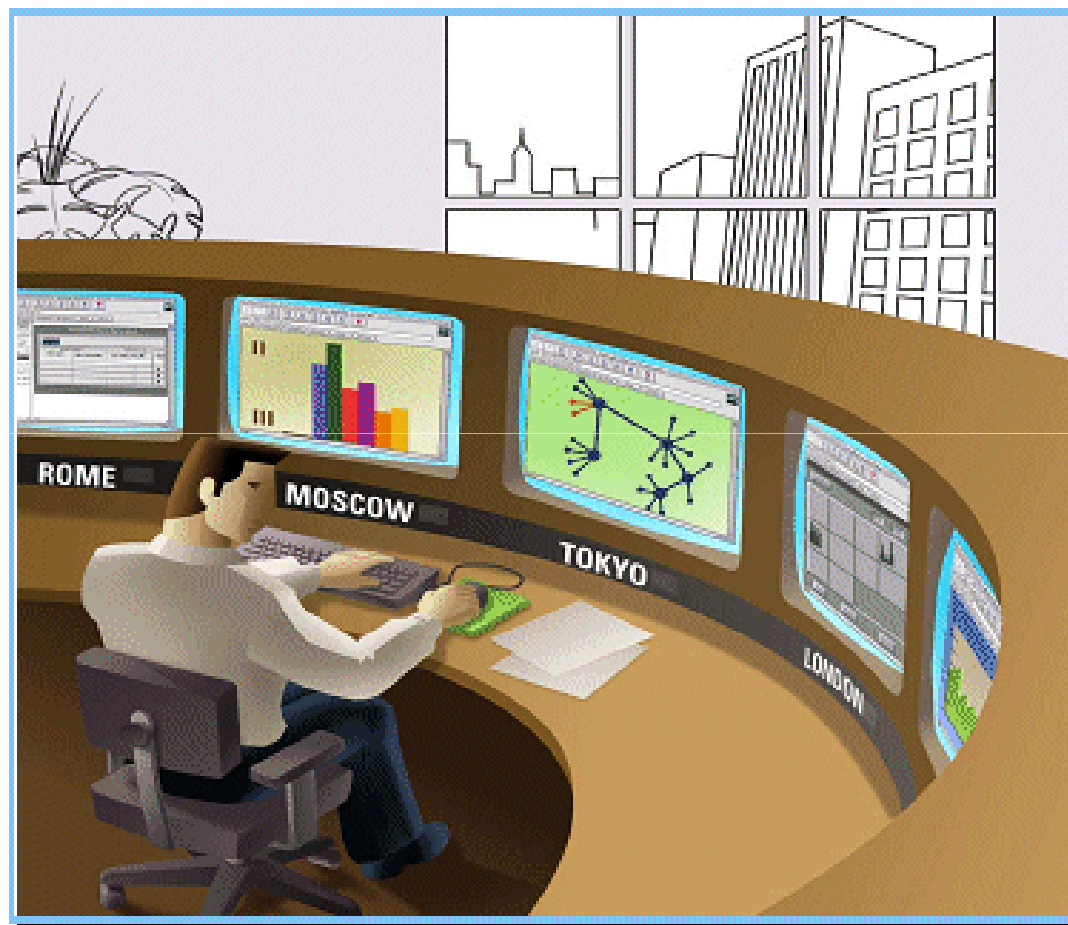
[http://tche.br/ins\\_conectadas.php](http://tche.br/ins_conectadas.php)



# Rede Tchê



# Gerência do PoP-RS

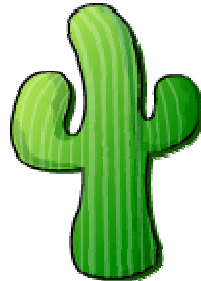


# Gerência do PoP-RS

- Disponibilidade e Conectividade



- Tráfego



- Interfaces de Equipamentos



# Gerência do PoP-RS

## Disponibilidade e Conectividade

- OpManager (9200)
  - 236 dispositivos gerenciados
  - 8 mapas da rede
  - Envio de e-mail e SMS
  - Relatórios de Disponibilidade





# Gerência do PoP-RS

ManageEngine OpManager

Home Network Server Virtualization **Alarms** Maps Workflows Admin Reports

Active Alarms: **All Alarms** | Devices to watch | Event Log Alarms | Unacknowledged Traps | Syslog Alarms | Web Alarms | Alarm Calibration | Notification Profiles

26 Sep 2012 10:59 AM

Device Search...

**All Alarms** RGS All Alarms

Show: All Alarm | Acknowledge | Unacknowledge | Clear | Delete Page size: 25 | 1 to 25 of 1388 | [1] 2 3 4 5 > <

Source	Alarm Message	Status	Technician	Category	Date / Time
dns.ort.tche.br	Interface 'eth1-eth1' is now back to normal, current IN traffic is 558.445 (0.01%) and OUT traffic is 0 bps(0%).	Clear	UnAssigned	Server	26 Sep 2012 09:04:18 PM
rt2000	Interface 'GigabitEthernet0/20/218-UNIVATESIThiap01hu(1118714-7000:Comoline111-05-18UDS' with circuit ID 151-05-10/08 is now back to normal, current IN traffic is 9.441 M(2.88%) and OUT traffic is 36.737 Mbps(73.69%).	Clear	UnAssigned	Router	26 Sep 2012 08:52:20 PM
IPX1-Cashal	Interface 'GigabitEthernet2/2-Remad (AS200217) is now back to normal, current IN traffic is 5.142 M(5.14%) and OUT traffic is 18.865 Mbps(18.87%).	Clear	UnAssigned	Switch	26 Sep 2012 06:22:23 PM
rt2000	Errors rate for Interface 'Serial1/0/11-Embrega-SMT-Rbio Cacaba(3303273-8291:O:0285382' with circuit ID 0285382 is now back to normal, current value is 0%.	Clear	UnAssigned	Router	26 Sep 2012 06:21:31 PM
rt2000	Interface 'Serial1/0/0-Unicampa-Megrete(Diego Kreutz: (553471-8400:O:730614' with circuit ID 730614 is now back to normal, current IN traffic is 4.05 M(1.91%) and OUT traffic is 25.267 Mbps(74.32%).	Clear	UnAssigned	Router	26 Sep 2012 03:07:22 PM
SubInternet(11833)(PTT)	Device Active and Responsive	Clear	UnAssigned	Unknown	26 Sep 2012 02:20:14 PM
cmep.orted	GoldBert : cmep.orted.ufps.br 1.3.6.1.4.1.8072.3.2.10 Urx cmep.orted.ufps.br 2.6.26-24-server #1 BHP F6 3/1 24.23:27:35 UTC 2009 1885	Clear	UnAssigned	Server	26 Sep 2012 11:59:57 AM
cmep.orted	Web Service is Up	Clear	UnAssigned	Server	26 Sep 2012 11:52:44 AM
cmep.orted	The URL http://cmep.orted.ufps.br/service/586e6d8resourceService?xml is Up	Clear	UnAssigned	URL	26 Sep 2012 11:52:23 AM
habe (263001)(PTT)	Device Active and Responsive	Clear	UnAssigned	Unknown	26 Sep 2012 06:13:57 AM
Sec Paulo	Device Active and Responsive	Clear	UnAssigned	Router	26 Sep 2012 04:38:09 AM
rt2000	Errors rate for Interface 'Multis0/0/0/11-Unicampa-Cacaba(44141/551-9999-2630:O:umip0) is now back to	Clear	UnAssigned	Router	26 Sep 2012 04:27:52 AM

# Gerência do PoP-RS

**Alarm Details:**

Actions: Acknowledge | Delete | Add Notes | Execute Workflow | Test Actions | More »

Source: Embrapa - CPPSUL  
Severity: Clear  
Last Updated: Nov 23, 2012 10:53:31 AM  
Message: Device Active and Responding

Event History | Workflow Logs | Notes

User	Last Modified	Notes
admin	Mar 05, 2010 04:56:33 PM	tentativa de ligação no dia 05/03 para verificação do problema as 8h, 12h e 16 h
admin	Sep 13, 2011 07:12:17 PM	Falha elétrica às 14:54:03
admin	Sep 19, 2012 05:08:41 PM	feito contato com Guilherme Santos mesmo informou que teve queda de energia na instituição e que queimou alguns equipamentos e so voltará a normalidade na sexta feira 21/09
admin	Oct 08, 2012 06:43:56 PM	feito contato mas ninguém atendeu o telefone as 17:30 e 17:42
admin	Nov 23, 2012 09:21:49 AM	Tentativa de ligação as 09:21 e os telefones so davam ocupados. Provavel falta de energia no local.

# Gerência do PoP-RS



SMS enviados pelo OpManager

Name	Up	On Hold	Maintenance	Dependent Unavailable	Down	Not Monitored	Availability (%)
CEITEC	30d 23h	0s	0s	0s	0s	0s	100
CEPA	29d 23h 19m 1s	0s	0s	0s	23h 40m 59s	0s	98.813
CESE	30d 23h 55m 17s	0s	0s	0s	4m 43s	0s	99.989
Emater	30d 23h	0s	0s	0s	0s	0s	100
Embrapa - CNFT	27d 19h 37m 53s	0s	0s	0s	3d 3h 23m 7s	0s	88.856
Embrapa - CPRUL	30d 13h 41m 48s	0s	0s	0s	9h 18m 14s	0s	98.748
Embrapa-CREMV	30d 4h 46m 7s	0s	0s	0s	18h 13m 53s	0s	97.546
Embrapa-CPACT	30d 23h	0s	0s	0s	0s	0s	100
Embrapa-SEI	30d 15h 41m 59s	0s	0s	0s	7h 18m 1s	0s	99.017
FACCAT	29d 20h 9m 18s	0s	0s	0s	1d 2h 50m 44s	0s	98.387
FAPA	30d 23h	0s	0s	0s	0s	0s	100
PEE	30d 23h	0s	0s	0s	0s	0s	100
Desuata	30d 21h 38m 59s	0s	0s	0s	1h 21m 1s	0s	99.818
ESG	30d 23h	0s	0s	0s	0s	0s	100
ELBG	29d 7h 28m 1s	0s	0s	0s	4d 15h 31m 59s	0s	84.989
ELBG - Snt Antonio	30d 21h 51m 11s	0s	0s	0s	1h 8m 49s	0s	99.846
IFF - Julia	29d 11h 39m 8s	0s	0s	0s	2d 11h 20m 52s	0s	92.012
IFF - Sto Augusto	30d 23h 18m 38s	0s	0s	0s	41m 22s	0s	99.907
IFF-Alcântara	30d 23h	0s	0s	0s	0s	0s	100
IFF-Petropolis	30d 22h 8m 18s	0s	0s	0s	53m 42s	0s	99.88
IFF-Santa	30d 21h 45m 22s	0s	0s	0s	1h 14m 38s	0s	98.833
IFRS-BOconaves	29d 15h 55m 4s	0s	0s	0s	1d 7h 4m 58s	0s	98.817
IFRS-Crasium	30d 11h 55m 18s	0s	0s	0s	11h 4m 42s	0s	98.509
IFRS-Farmopolha	21d 7h 54m 10s	0s	0s	0s	48m 13s	17m 28s	99.843
IFRS-SGrande	1d 9h 23m 1s	2s	0s	0s	0s	36m 57s	100
IFRS-Sertão	30d 20h 33m 8s	0s	0s	0s	2h 29m 54s	0s	99.664
IFRS - Palotas	30d 22h 15m 8s	0s	0s	0s	44m 52s	0s	99.899
IFRS-Charqueadas	30d 10h 32m 5s	0s	0s	0s	12h 37m 35s	0s	98.3
IFRS-FloresVieira	30d 21h 23m 27s	0s	0s	0s	1h 36m 33s	0s	99.783
IFRS-Souessa	30d 19h 9m 10s	0s	0s	0s	3h 50m 50s	0s	99.483
INMETRA	30d 23h 32m 10s	0s	0s	0s	27m 50s	0s	99.938
PUC-RR	30d 23h	0s	0s	0s	0s	0s	100
Socasa-Socsa	30d 23h	0s	0s	0s	0s	0s	100
SGT	0s	30d 23h	0s	0s	0s	0s	100
UCPEL	30d 23h 35m 17s	0s	0s	0s	24m 43s	0s	99.948
UCE	30d 23h	0s	0s	0s	0s	0s	100
UCSFA	30d 23h	0s	0s	0s	0s	0s	100
UFPA	30d 23h	0s	0s	0s	0s	0s	100
UFVGE	30d 23h	0s	0s	0s	0s	0s	100
UFVJ	30d 23h	0s	0s	0s	0s	0s	100
UFVJM-FredricoWestphalen	30d 22h 45m 8s	0s	0s	0s	14m 54s	0s	99.967
UFVJM-FalmeirasCardenas	30d 20h 50m 50s	0s	0s	0s	2h 9m 10s	0s	99.71
UFVJM-SilveiraMartins	30d 18h 17m 57s	0s	0s	0s	4h 42m 5s	0s	99.367
UNIRBA	30d 23h	0s	0s	0s	0s	0s	100
Unisaite	30d 23h	0s	0s	0s	0s	0s	100
UNIPAMPA-Alcântara	30d 23h 54m 10s	0s	0s	0s	5m 50s	0s	99.987
UNIPAMPA-Bom	30d 23h 10m 35s	0s	0s	0s	49m 25s	0s	99.889
UNIPAMPA-CasapovaDoSul	30d 23h	0s	0s	0s	0s	0s	100
UNIPAMPA-DomPedrito	30d 23h 45m 17s	0s	0s	0s	14m 43s	0s	99.967
UNIPAMPA-Itaqui	30d 23h	0s	0s	0s	0s	0s	100
UNIPAMPA-ItaquiNovo	29d 23h 36m 59s	0s	0s	0s	1d 23m 1s	0s	98.718
Unisaipa-Sabona	30d 20h 56m 42s	0s	0s	0s	2h 3m 18s	0s	99.723
UNIPAMPA-SantaCruzUrbamento	30d 23h	0s	0s	0s	0s	0s	100
UNIPAMPA-SantaRosa	30d 23h	0s	0s	0s	0s	0s	100
UNIPAMPA-SaoGabriel	30d 18h 11m 35s	0s	0s	0s	6h 48m 5s	0s	99.083
UNIPAMPA-Uruaçu	30d 7h 4m 33s	0s	0s	0s	15h 55m 7s	0s	97.858
Unisinos	30d 23h	0s	0s	0s	0s	0s	100
Univas	30d 22h 45m 6s	0s	0s	0s	14m 54s	0s	99.967
UPF	30d 23h 50m 12s	0s	0s	0s	9m 48s	0s	99.978
Upampa	30d 22h 7m 1s	0s	0s	0s	52m 59s	0s	99.881

# Manutenção Programada

## Edit Schedule

Name:

Description:

Status:  Enabled  Disabled

**Downtime Frequency**

Once  Every Day  Every Week  Every Month

From:   :  Hrs

To:   :  Hrs

**Devices Scheduled for Maintenance**

Infrastructure Categories  Business Views  Select Devices  Select URL Monitors

**All Devices**

- 143.54.0.4
- 192.168.1.9
- 200.132.1.43
- 200.132.1.45
- 200.132.43.1
- 200.132.43.1
- 200.132.73.26
- 200.143.254.65
- 200.219.243.29
- Adylnet (28283) [PTT]
- agrius (flows)
- AlfaInfNet(262883) [PTT]
- alpha
- ALPINE
- backup
- Barricud(28631) [PTT]

Select All

**Selected Devices**

- [MetroPOA] Unisinos
- Unisinos(19611) [PTT]
- Unisinos
- [Ger] Unisinos-Poa
- [Ger] Unisinos

Select All



# Relatórios Detalhados

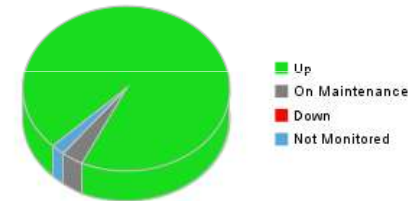
## Availability Report for Unisinos

From (Sat, 01 Sep 2012 09:00 AM to Mon, 26 Nov 2012 21:00 PM)

### Availability Statistics

Options	Uptime(%)
Today	100.0
Yesterday	100.0
Last 7 days	100.0
Last 30 days	100.0
This week	100.0
Last week	100.0
This month	100.0
Last month	100.0

### Availability Chart For Custom Period



### Outage History

From	To	Reason
Sep 13,2012 17:09:42	Sep 13,2012 18:04:29	Sem energia

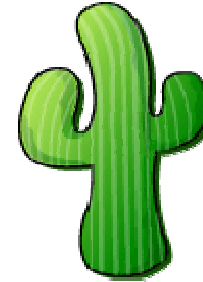
### On Maintenance History

From	To	Reason
Oct 12,2012 00:01:00	Oct 13,2012 06:00:00	Manutencao Eletrica Unisinos. [RT 447260]
Oct 15,2012 22:58:11	Oct 16,2012 02:00:14	Manutencao Unisinos
Oct 21,2012 14:31:05	Oct 22,2012 13:46:00	Manutencao Unisinos
Nov 02,2012 00:01:00	Nov 02,2012 12:00:00	Manutencao Unisinos [RT #451623]

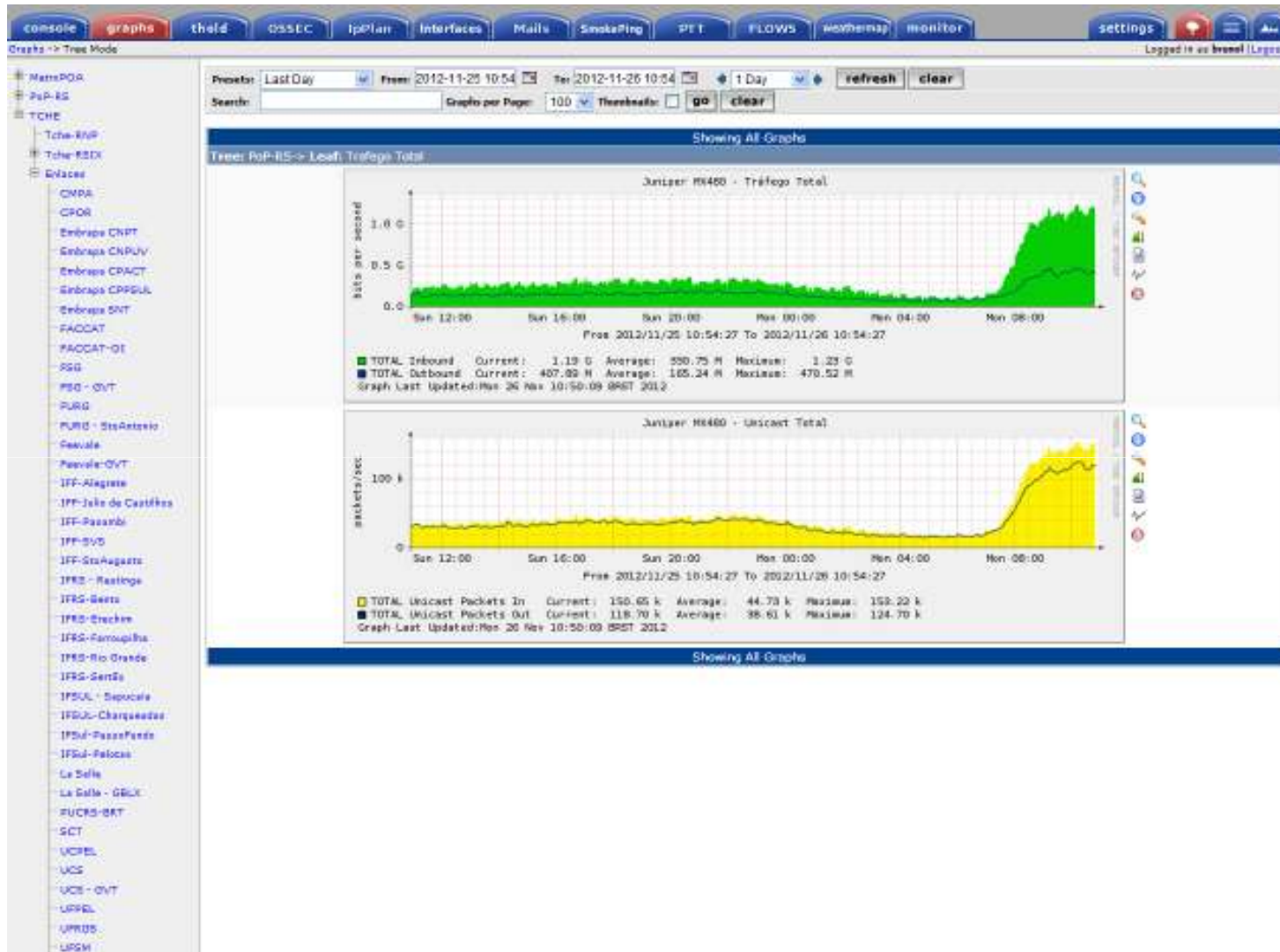
# Gerência do PoP-RS

## Tráfego

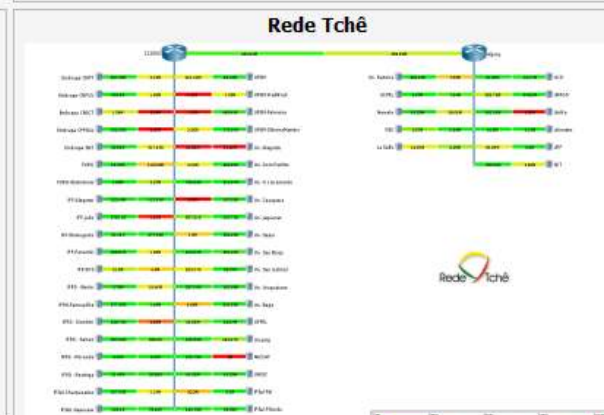
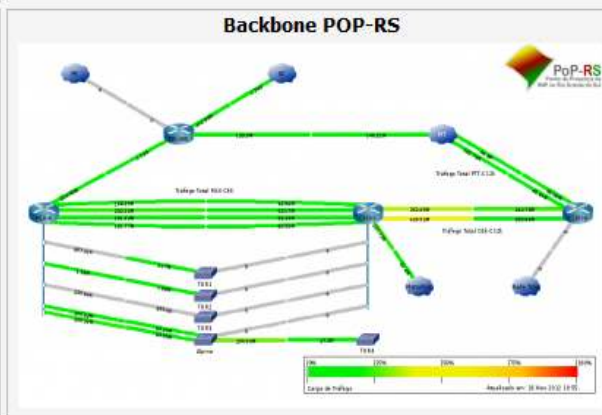
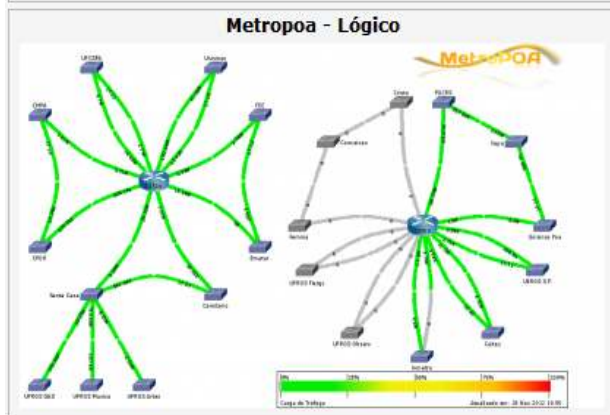
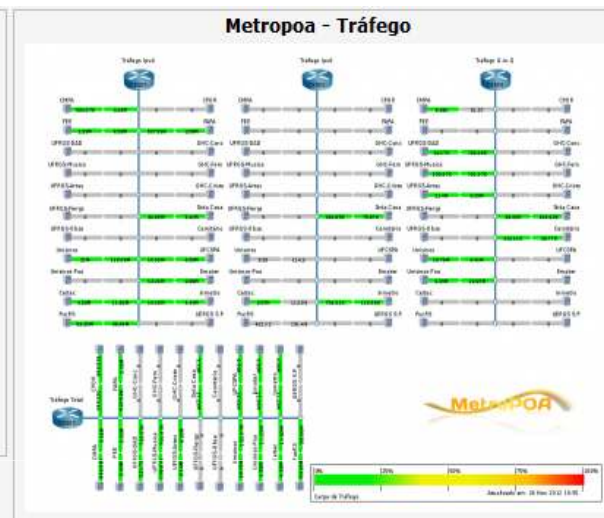
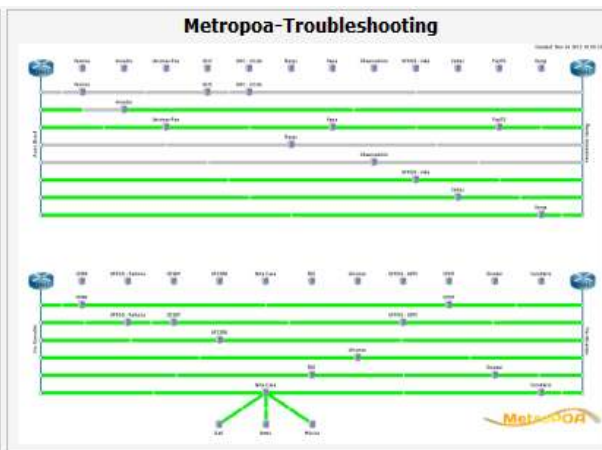
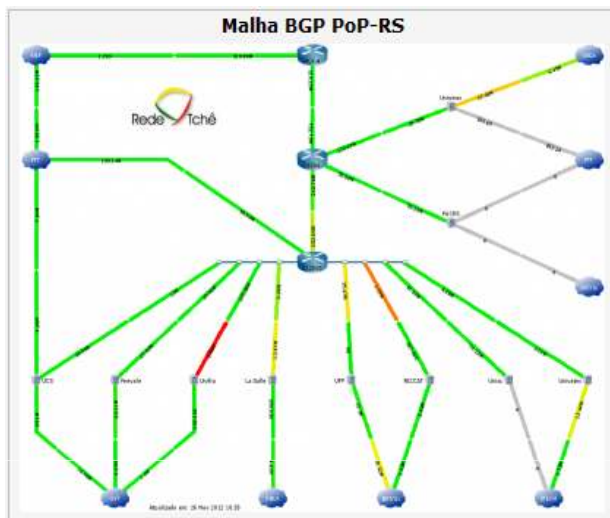
- Cacti
  - 93 dispositivos gerenciados
  - 1.829 gráficos
    - Tráfego, pacotes, erros CPU, Memória, temperatura...
  - 6 mapas de rede
  - Thresholds



# Gerência do PoP-RS - Cacti



# Cacti – Mapas de rede



# Gerência do PoP-RS

## Thresholds

<< Previous		Showing Rows 31 to 60 of 163 [1,2,3,4,5,6]					Next >>
Actions	Name**	ID	Type	High	Low	Current	Enabled
	MetroPOA - CMRA - Fonte Principal Status [ciscocat2_fpstat]	241	High/Low	1	1	1	Enabled
	MetroPOA - CMRA - Fonte Redundante Status [ciscocat2_rpstat]	245	High/Low	2	2	1	Disabled
	MetroPOA - CMRA - Traffic - Gi0/26 [PoP-RS 6k:Gi2/5] [traffic_in]	417	High/Low		1	4721.9467	Enabled
	MetroPOA - CPOR - 5 Minute Temperature [ciscocat2_tempcur]	192	High/Low	50		35	Enabled
	MetroPOA - CPOR - Fonte Principal Status [ciscocat2_fpstat]	242	High/Low	1	1	1	Enabled
	MetroPOA - CPOR - Fonte Redundante Status [ciscocat2_rpstat]	245	High/Low	2	2	1	Enabled
	MetroPOA - Cristo - 5 Minute Temperature [ciscocat2_tempcur]	194	High/Low	50			Enabled
	MetroPOA - Cristo - Fonte Principal Status [ciscocat2_fpstat]	242	High/Low	1	1		Enabled
	MetroPOA - Cristo - Fonte Redundante Status [ciscocat2_rpstat]	266	High/Low	2	2		Enabled
	MetroPOA - Emater - 5 Minute Temperature [ciscocat2_tempcur]	195	High/Low	50		37	Enabled
	MetroPOA - Emater - Fonte Principal Status [ciscocat2_fpstat]	244	High/Low	1	1	1	Enabled
	MetroPOA - Emater - Fonte Redundante Status [ciscocat2_rpstat]	267	High/Low	2	2	2	Enabled
	MetroPOA - Emater - Traffic - Gi0/25 [PoP-RS 6k:Gi1/2] [traffic_in]	418	High/Low		1	54661.9767	Enabled
	MetroPOA - Emater - Traffic - Gi0/26 [FEE] [traffic_in]	419	High/Low		1	567.0267	Enabled
	MetroPOA - FARA - 5 Minute Temperature [ciscocat2_tempcur]	196	High/Low	50		32	Enabled
	MetroPOA - FARA - Fonte Principal Status [ciscocat2_fpstat]	245	High/Low	1	1	1	Enabled
	MetroPOA - FARA - Fonte Redundante Status [ciscocat2_rpstat]	268	High/Low	2	2	2	Enabled
	MetroPOA - FARA - Traffic - Gi0/25 [PUCRS] [traffic_in]	420	High/Low		1	2652267	Enabled
	MetroPOA - FARA - Traffic - Gi0/26 [UNISINOS-POA] [traffic_in]	421	High/Low		1	1779.9722	Enabled
	MetroPOA - FEE - 5 Minute Temperature [ciscocat2_tempcur]	197	High/Low	50		26	Enabled
	MetroPOA - FEE - Fonte Principal Status [ciscocat2_fpstat]	246	High/Low	1	1	1	Enabled
	MetroPOA - FEE - Fonte Redundante Status [ciscocat2_rpstat]	269	High/Low	2	2	2	Enabled
	MetroPOA - FEE - Traffic - Gi0/25 [EMATER] [traffic_in]	422	High/Low		1	2.1222	Enabled
	MetroPOA - FEE - Traffic - Gi0/26 [PoP-RS 6k:Gi2/3] [traffic_in]	422	High/Low		1	21518.4567	Enabled
	MetroPOA - Femina - 5 Minute Temperature [ciscocat2_tempcur]	198	High/Low	50			Enabled
	MetroPOA - Femina - Fonte Principal Status [ciscocat2_fpstat]	247	High/Low	1	1		Enabled
	MetroPOA - Femina - Fonte Redundante Status [ciscocat2_rpstat]	270	High/Low	2	2		Enabled
	MetroPOA - Hospital Conceicao - 5 Minute Temperature [ciscocat2_tempcur]	199	High/Low	50		37	Enabled
	MetroPOA - Hospital Conceicao - Fonte Principal Status [ciscocat2_fpstat]	248	High/Low	1	1		Enabled
	MetroPOA - Hospital Conceicao - Fonte Redundante Status [ciscocat2_rpstat]	271	High/Low	2	2		Enabled



# Gerência do PoP-RS



Posso ter uma comunidade?



# Latência - Smokeping

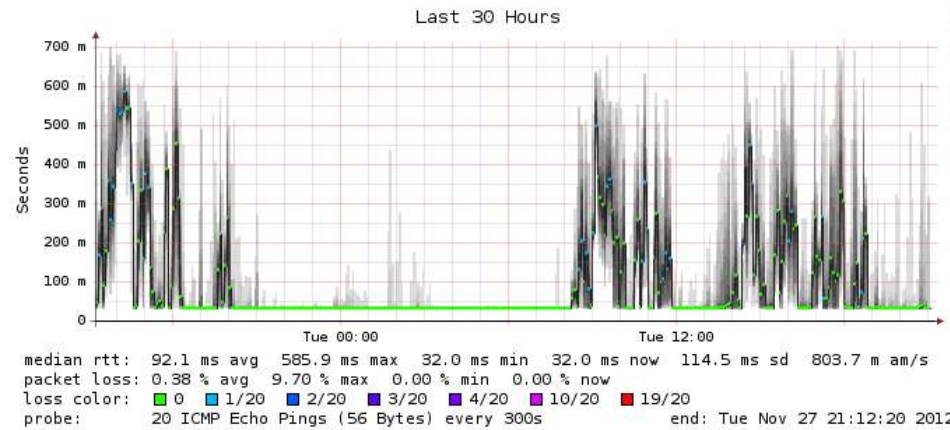
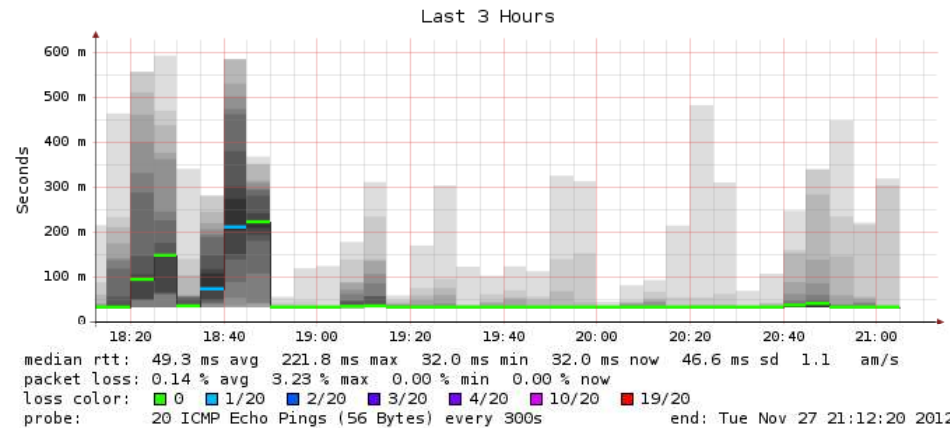
## Universidade Federal do Pampa - Campus Itaqui

**SmokePing Targets:**

Hierarchy:

Filter:

- Charts
- Sites
- RNP
- Tchê
- CMPA
- CPOR
- Embrapa-CNPT
- Embrapa-CNPUV
- Embrapa-CPACT
- Embrapa-CPPSUL
- Embrapa-SNT
- FACCAT
- FSG
- FURG
- FURG - Snt Antonio
- Feevale
- IFF-Alegrete
- IFF-JulioCastilhos
- IFF-SantoAugusto
- IFF-SVS
- IFRS-BG
- IFRS-Farroupilha
- IFRS-RGrande
- IFRS-Sertao
- IFSUL-Charqueadas
- IFSUL-Passo Fundo
- IFSUL-Pelotas
- IFSUL-Sapucaia
- LaSalle
- PUCRS
- SCT
- UCPEL
- UCS
- UFPEL
- UFRGS
- UFSM
- UFSM-FredericoWestphalen
- UFSM-PalmeiraMissoes
- Unifra
- UNISC
- UPF
- Urcamp
- Unisinos



# Gerência do PoP-RS

Login

## Sistema Interfaces




Instituições   Equipamentos   Operadoras   Relatórios

Alpine  
192.168.1.3

#Index	#Name #Description	#Asas	#Bandwidth	ipv4	ipv6
3005	3/5 Alpine3804/GM-16T3-Port 3:5	UCPEL	1Gbps		
3005	3/5 Alpine3804/GM-16T3-Port 3:5	UCPEL	1Gbps		
3005	3/5 Alpine3804/GM-16T3-Port 3:5	UCPEL	1Gbps		
3005	3/5 Alpine3804/GM-16T3-Port 3:5	UCPEL	1Gbps		
3005	3/5 Alpine3804/GM-16T3-Port 3:5	UCPEL	1Gbps		
3005	3/5 Alpine3804/GM-16T3-Port 3:5	UCPEL	1Gbps		
3006	3/6 Alpine3804/GM-16T3-Port 3:6	FSG	100Mbps		
3006	3/6 Alpine3804/GM-16T3-Port 3:6	FSG	100Mbps		
3006	3/6 Alpine3804/GM-16T3-Port 3:6	FSG	100Mbps		
3006	3/6 Alpine3804/GM-16T3-Port 3:6	FSG	100Mbps		
3006	3/6 Alpine3804/GM-16T3-Port 3:6	FSG	100Mbps		
3006	3/6 Alpine3804/GM-16T3-Port 3:6	FSG	100Mbps		
3007	3/7 Alpine3804/GM-16T3-Port 3:7	LASALLE	100Mbps		
3007	3/7 Alpine3804/GM-16T3-Port 3:7	LASALLE	100Mbps		
3007	3/7 Alpine3804/GM-16T3-Port 3:7	LASALLE	100Mbps		
3007	3/7 Alpine3804/GM-16T3-Port 3:7	LASALLE	100Mbps		
3007	3/7 Alpine3804/GM-16T3-Port 3:7	LASALLE	100Mbps		

# Gerência do PoP-RS

Login

## Sistema Interfaces



**Instituições**   **Equipamentos**   **Operadoras**   **Relatorios**  

### Perfil

Sigla:  
PoP-RS

Nome:  
Ponto de Presença da RNP - POP-RS

Website:  
[www.pop-rs.rnp.br](http://www.pop-rs.rnp.br)

Endereço:  
Centro de Processamento de Dados da UFRGS  
Ramiro Barcelos, 2574 Santana Porto Alegre -  
RS - Brasil CEP: 90035-003

Coordenadas:  
-30.040975086084373, -51.206022799015045  
([ver no mapa](#))

Data de ativação:  
00

### Contatos



**Leandro Bertholdo**  
(51) 3308-5039 (51) 3308-5042 (51)  
3308-5046  
[suporte@pop-rs.rnp.br](mailto:suporte@pop-rs.rnp.br)



**Leandro Bertholdo**  
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**Liane Tarouco**  
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3308-5072  
[suporte@tche.br](mailto:suporte@tche.br)



# Onde buscar informações?

<http://www.pop-rs.rnp.br>

The screenshot shows the homepage of the PoP-RS website. At the top left is the PoP-RS logo with the text 'Ponto de Presença da RNP no Rio Grande do Sul'. To its right is a 'menu' box containing 'POP-RS', 'estatísticas', and 'SERVIÇOS'. On the top right, there are icons for globe, person, and network, followed by the text 'Disponibilidade do PoP-RS em outubro de 2012' and a large '99,70%' figure. Below this is the IP address 'Seu IP:2804::cafe1dca8:cfce:b414:76f4'. The main content area is divided into several sections: a 'Home' section with a paragraph about the Network Operation Center and a bar chart icon; a section with a map of Rio Grande do Sul and text about 40 connected institutions; a section about the 'Rede Tchê' network with its logo; and a section about 'Cert-RS' with its logo and text about incident response. On the right side, there is a 'Notícias' section with a red border, containing several news items with dates and titles like 'IV Workshop do POP-RS e Reunião da Rede Tchê', '15/10/2012 Queda no acesso à internet', 'Queda no acesso à internet', 'Queda no acesso à internet', and 'Queda no acesso a Internet'. At the bottom right, there is contact information including an email address and phone numbers.

menu

POP-RS  
estatísticas  
SERVIÇOS

Disponibilidade do PoP-RS em outubro de 2012

99,70%

Seu IP:2804::cafe1dca8:cfce:b414:76f4

Home

O PoP-RS possui seu Network Operation Center, um site de controle de tráfego, no qual é possível visualizar as estatísticas das instituições a ele conectadas e controlar os backbones da rede.

O PoP-RS possui mais de 40 instituições conectadas. O mapa de clientes possibilita uma visão geral e dinâmica dessas instituições dentro do Estado do Rio Grande do Sul.

A Rede Tchê é uma rede de computadores que integra universidades e centros de pesquisa localizados no Rio Grande do Sul. O nodo de Porto Alegre é a porta de entrada da rede no Estado e ponto de conexão com o resto do país através do PoP-RS.

O CERT-RS é o grupo de resposta a incidentes de segurança mantido pelo PoP-RS/RNP e pela Universidade Federal do Rio Grande do Sul (UFRGS). É responsável por receber, analisar e responder a incidentes de segurança envolvendo redes conectadas à Rede Tchê.

Se o globo na figura estiver girando é porque você usa IPv6.

**Notícias**

[IV Workshop do POP-RS e Reunião da Rede Tchê](#)  
PoP-RS 27-11-2012-12H

[15/10/2012 Queda no acesso à internet](#)  
PoP-RS 15-10-2012-17H

[Queda no acesso à internet](#)  
PoP-RS 08-09-2012-13H

[Queda no acesso à internet](#)  
PoP-RS 21-06-2012-16H

[Queda no acesso a Internet](#)  
PoP-RS 28-12-2011-14H

Para entrar em contato mande um e-mail para [suporte@pop-rs.rnp.br](mailto:suporte@pop-rs.rnp.br) ou ligue

(51)3308-5039  
(51)3308-5042  
(51)9775-8777





# Dúvidas?



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