

The logo for NIC.br features the text 'nic.br' in a bold, sans-serif font. The '.br' is a vibrant green color, while 'nic' is black. Below the logo, the full name 'Brazilian Network Information Center' is written in a smaller, black, sans-serif font.

nic.br
Brazilian Network
Information Center

The logo for EGI.br features the text 'egi.br' in a bold, sans-serif font. The '.br' is a vibrant green color, while 'egi' is black. Below the logo, the full name 'Brazilian Internet Steering Committee' is written in a smaller, black, sans-serif font.

egi.br
Brazilian Internet
Steering Committee

A row of six logos for various Brazilian internet services, all in a white sans-serif font with a green '.br' domain extension. From left to right: 'registro.br', 'cert.br', 'cetic.br', 'ceptro.br', 'ceweb.br', and 'ix.br'.

registro.br cert.br cetic.br ceptro.br ceweb.br ix.br

IXFORUM - CE - 2026

INFRAHUB
Source of Truth para Datacenters

William Prado <wprado@nic.br>

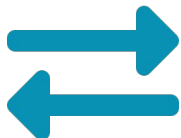
nic.br

Agenda



- **O que é Infracore?**
- **Arquitetura**

Source of Truth de nova geração



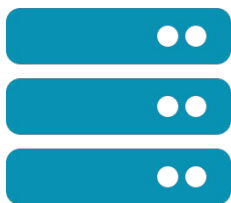
- **Desafios no Gerenciamento de Infraestrutura**

Gestão de infraestrutura física e lógica



- **Recursos Principais**

Versionamento, Artifacts, GraphQL, Generators e Schema



- **Casos de Uso**

Exemplo prático de implementação



INFRAHUB

O que é InfracHub?

InfracHub é uma plataforma de [Source of Truth](#) de nova geração desenvolvida pela OpsMill. Combina gestão de dados de infraestrutura com controle de versão nativo, APIs modernas e automação integrada.



Git-Native

Versionamento de dados
como código



GraphQL API

API moderna e flexível

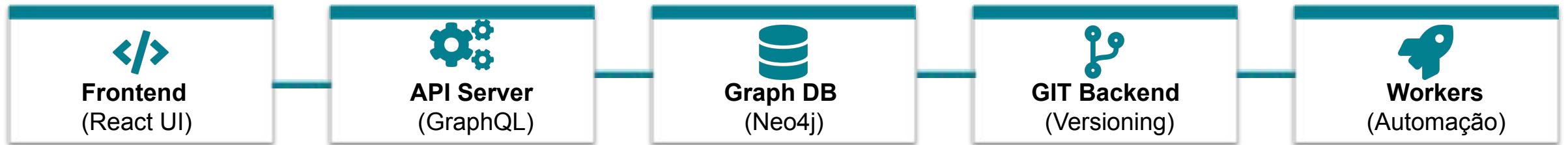


Schema-Driven

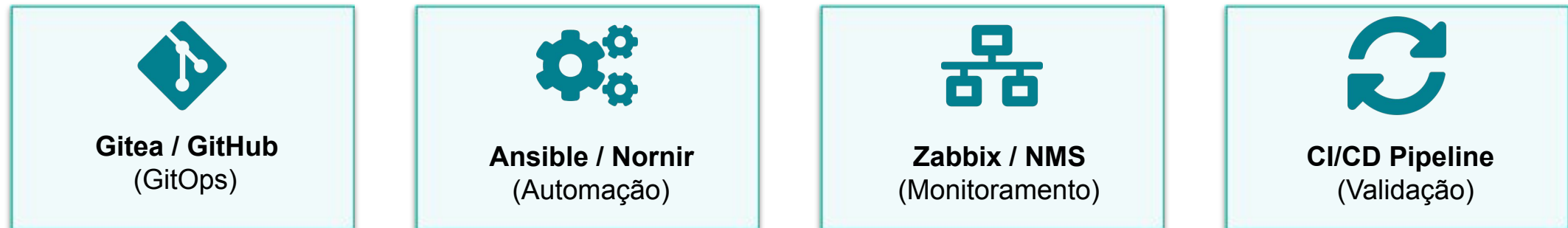
Modelo de dados
customizável

Arquitetura do Infracore

Componentes internos



Integrações Externas



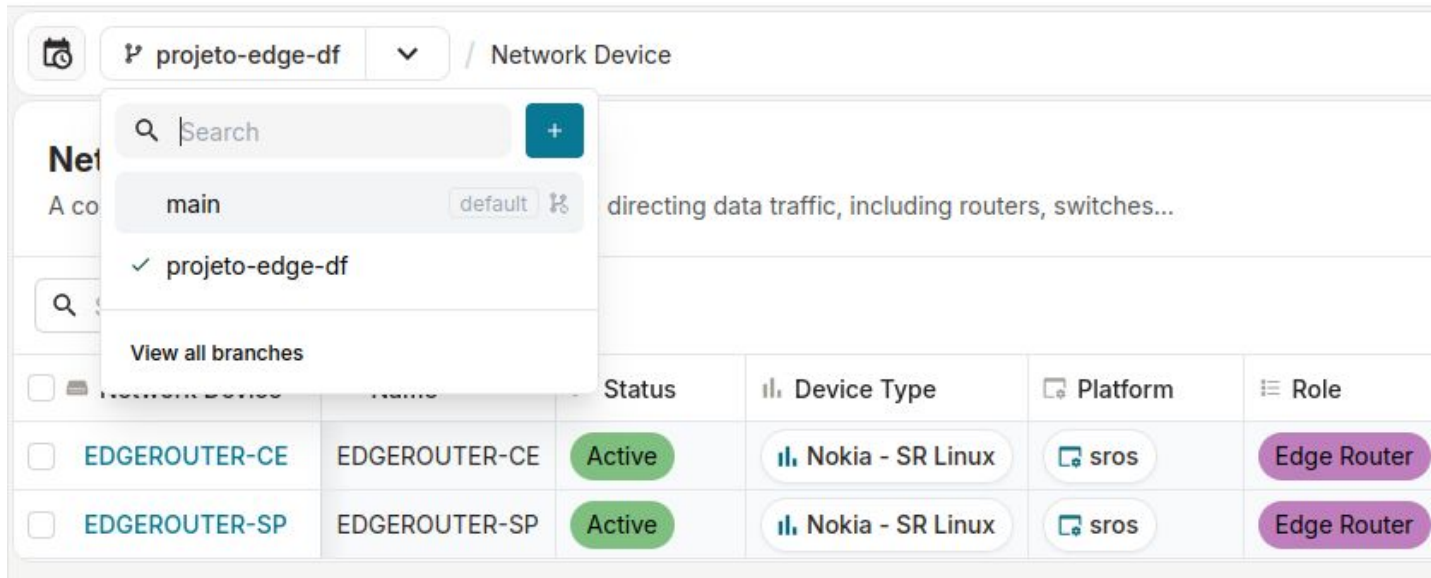
Desafios na Gestão de Infraestrutura

- > Inventário de milhares de ativos (servidores, switches, storage, racks).
- > Gestão de IPs, VLANs, sub-redes e conectividade física.
- > Rastreabilidade de mudanças e compliance de configurações.
- > Integração com sistemas de monitoramento e automação.
- > Documentação de cabling, topologia e dependências.
- > Planejamento de capacidade e alocação de recursos.

Versionamento de Dados - Branches

Como Git, mas para dados de infraestrutura:

- Cada mudança é rastreada com commit
- Branches para testar mudanças isoladamente
- Diff visual entre versões
- Rollback para qualquer ponto no tempo
- Merge com detecção de conflitos



The screenshot shows a web interface for managing network devices. At the top, there's a breadcrumb trail: "projeto-edge-df" > "Network Device". Below this is a search bar and a dropdown menu for selecting a branch. The dropdown menu is open, showing "main" (marked as "default") and "projeto-edge-df". Below the dropdown is a table with columns: "Name", "Status", "Device Type", "Platform", and "Role".

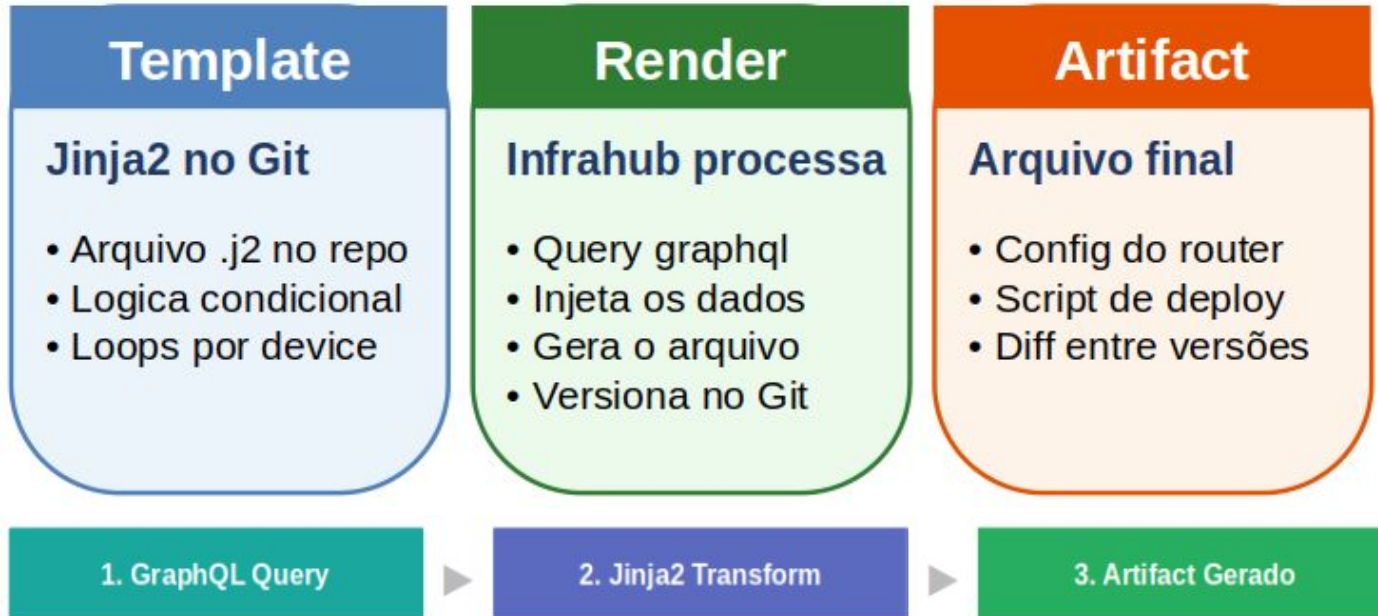
Name	Status	Device Type	Platform	Role
EDGEROUTER-CE	Active	Nokia - SR Linux	sros	Edge Router
EDGEROUTER-SP	Active	Nokia - SR Linux	sros	Edge Router

Workflow Example

1. Criar Branch para novo device
2. Adicionar todos os dados: IP, VLAN, etc.
3. Validar com CI/CD checks
4. Review via Merge Request
5. Merge para branch main
6. Deploy automatico via GitOps

Artifacts - O que são Artifacts?

Arquivos gerados automaticamente a partir dos dados do infrahub — configs de roteadores, scripts, etc — versionados e auditáveis.



srlinux_config.j2 — template Jinja2 para Nokia

```
{# Artifact: configuracao Nokia SR LINUX #}
```

```
configure
system
  name {{ device.hostname }}

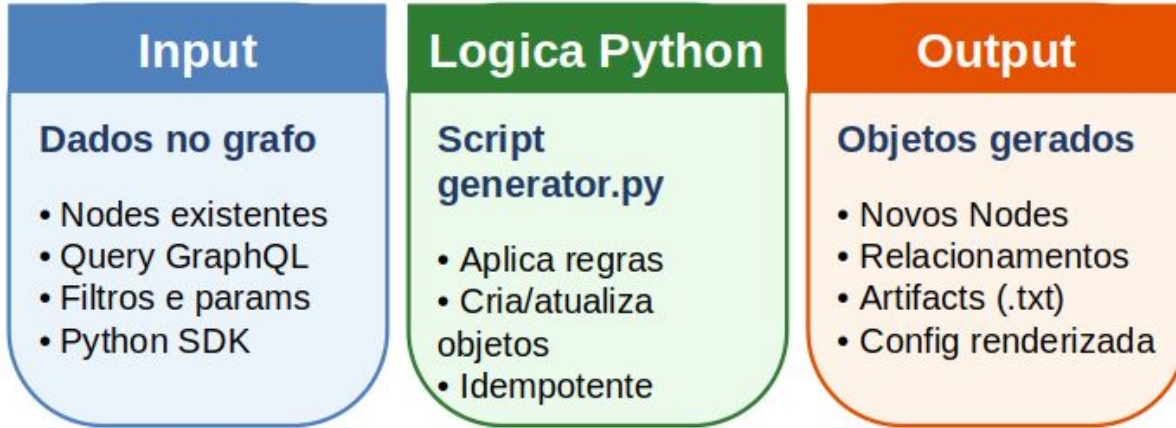
  {% for iface in device.interfaces %}
  port {{ iface.name }}
    {% if iface.ip_address %}
    address {{ iface.ip_address }}
    {% endif %}
  {% endfor %}
```

Exemplo: config Nokia SR LINUX

1. Dados do Device ficam no grafo (IP, ASN, interfaces)
2. Template Jinja2 define a estrutura da config
3. Infrahub renderiza e armazena o Artifact
4. Config pronta para deploy — com histórico completo

Generators - O que são Generators?

Scripts Python que criam objetos no Infracore automaticamente a partir de dados existentes.



Exemplo pratico: Device -> Interfaces

1. Consulta todos os Devices no Infracore
2. Para cada Device, cria Interfaces automaticamente
3. Associa IPs, VLANs e relacionamentos
4. Resultado: topologia completa no grafo

generator.py — exemplo de Generator no Infracore

```
from infracore_sdk import InfracoreGenerator

class InterfaceGenerator(InfracoreGenerator):

    async def generate(self, data):

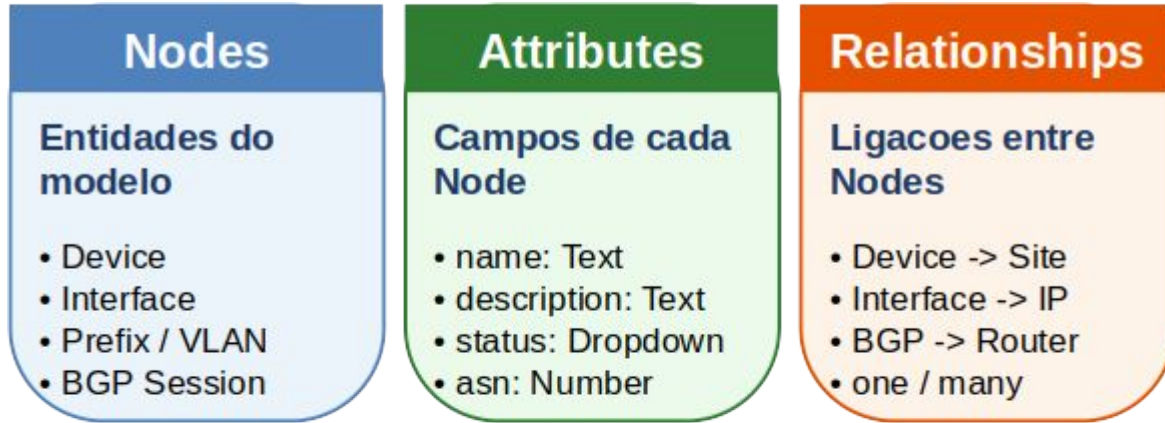
        # Para cada Device
        for device in data["DcimDevice"]:

            # Cria Interface loopback no Infracore
            iface = await self.client
                .create("DcimInterface",
                    name=f"lo0",
                    device=device.id)

            await iface.save()
```

Schemas - O que é um Schema?

Define a estrutura de dados que o Infracore vai gerenciar — escrito em YAML e versionado no Git.



Como funciona na pratica?

1. Escreva o Schema em YAML no Git
2. Infracore carrega e valida automaticamente
3. GraphQL e interface web gerados automaticamente
4. Dados ficam versionados e auditaveis

schema.yaml — exemplo de Schema no Infracore

```
version: "1.0"
```

```
nodes:
```

- name: NetworkDevice
namespace: Infra
- attributes:
 - name: hostname
kind: Text
unique: true
 - name: status
kind: Dropdown

```
relationships:
```

- name: site
peer: InfraSite
cardinality: many
kind: Attribute

E na Prática?

Docker · Sandbox · Schemas · Artifacts · Generators · Checks

Infrahub - Docker

> `git clone https://github.com/opsmill/infrahub.git`


> `docker compose up -d`

```
root@infrahub:/opt/infrahub# docker ps
CONTAINER ID   IMAGE                                     COMMAND                                     CREATED        STATUS
43a8890faa17   registry.opsmill.io/opsmill/infrahub:1.7.6  "tini -g -- prefect ..."             4 days ago    Up 4 days
d66d6c486984   registry.opsmill.io/opsmill/infrahub:1.7.6  "tini -g -- prefect ..."             4 days ago    Up 4 days
33d034ad76fd   registry.opsmill.io/opsmill/infrahub:1.7.6  "tini -g -- gunicorn..."              4 days ago    Up 4 days (healthy)
632230e8cac7   registry.opsmill.io/opsmill/infrahub:1.7.6  "tini -g -- uvicorn ..."              4 days ago    Up 4 days (healthy)
8cdc5c45a349   pgautoupgrade/pgautoupgrade:18-alpine      "/usr/local/bin/dock..."              4 days ago    Up 4 days (healthy)
61521a2d19b2   rabbitmq:4.2.1-management                 "docker-entrypoint.s..."              4 days ago    Up 4 days (healthy)
d4f8d6db0634   redis:8.4.0                                "docker-entrypoint.s..."              4 days ago    Up 4 days (healthy)
6cac05fb7fe9   neo4j:2025.10.1-community                  "tini -g -- /startup..."              4 days ago    Up 4 days (healthy)
```

> `curl http://localhost:8000`

> `acesso: admin/infrahub`

Infrahub - Front End

main

- Network Device
- Device Type
- Platform
- Layer 2 Domain
- Cable
- Circuit
- Cross-Connect
- Physical Server
- Optical Multiplexer
- Patch Panel
- Physical Disk
- WDM Channel

- Proposed Changes
- Branches
- Object Management
- Actions
- Integrations
- Activity
- Admin

Open Proposed changes View all >

You don't have any open proposed changes
Once you create or review a branch, changes will appear here.



Git repositories View all >

No git repository connected
Connect a Git repo to sync changes.

Recent Activities View all >

- Admin created the branch [development](#)
4 days ago
- Admin updated - [EDGEROUTER-SP](#)
4 days ago main
- Admin created - [interface1](#)
4 days ago main
- Admin updated - [RACK_CE](#)
4 days ago main
- Admin updated - [sros](#)
4 days ago main
- Admin created - [EDGEROUTER-CE](#)
4 days ago main

Branches View all >

main <small>default</small> Default Branch		last rebase: 4 days ago last update: 4 days ago	created at: 4 days ago created by: -
development		last rebase: 4 days ago last update: 4 days ago	created at: 4 days ago created by: Admin


Tasks overview View all >

COMPLETED	RUNNING	PENDING	FAILED	MORE
<p>Setup human friendly ids in task-manager main 6 Mar 2026 13:42:22</p> <p>Setup computed attributes for Python transforms in task-manager</p>				

Infrahub - SANDBOX




sandbox.infrahub.app

 Documentação

docs.infrahub.app

 GitHub

github.com/opsmill/infrahub

 Python SDK

docs.infrahub.app/python-sdk

Versionamento de Dados - Branches

main / Network Device

Network Device 2

A configurable network device for managing and directing data traffic, including routers, switches...

Search Network Device + Add Network Device

Network Device	Name	Status	Device Type	Platform	Role	Position (U)	Serial	Location	Rack Face	Asn	IP
<input type="checkbox"/> EDGEROUTER-CE	EDGEROUTER-CE	Active	Nokia - SR Linux	srlinux	Edge Router	10	SERIAL102040	RACK_CE	Front	AS 65534: ISP WILLIAM	IP 1
<input type="checkbox"/> EDGEROUTER-SP	EDGEROUTER-SP	Active	Nokia - SR Linux	srlinux	Edge Router	1	SERIAL102030	RACK_SP	Front	AS 65534: ISP WILLIAM	IP 1

projeto-edge-df / Network Device



Network Device 3



A configurable network device for managing and directing data traffic, including routers, switches...

Search Network Device + Add Network Device

Network Device	Name	Status	Device Type	Platform	Role	Position (U)	Serial	Location	Rack Face	Asn	IP
<input type="checkbox"/> EDGEROUTER-CE	EDGEROUTER-CE	Active	Nokia - SR Linux	srlinux	Edge Router	10	SERIAL102040	RACK_CE	Front	AS 65534: ISP WILLIAM	IP 1
<input type="checkbox"/> EDGEROUTER-DF	EDGEROUTER-DF	Provisioning	Nokia - SR Linux	srlinux	Edge Router	30	SERIAL102050	RACK_DF	Front	AS 65534: ISP WILLIAM	IP 1
<input type="checkbox"/> EDGEROUTER-SP	EDGEROUTER-SP	Active	Nokia - SR Linux	srlinux	Edge Router	1	SERIAL102030	RACK_SP	Front	AS 65534: ISP WILLIAM	IP 1

Versionamento de Dados - Branches



📅 main  



Network Device 2  

A configurable network device for managing and directing data traffic, including routers, switches...

🔍 Search Network Device + Add Network Device

<input type="checkbox"/>	Network Device	Name	Status	Device Type	Platform	Role	Position (U)	Serial	Location	Rack Face	Asn	IP	Port
<input type="checkbox"/>	EDGEROUTER-CE	EDGEROUTER-CE	Active	Nokia - SR Linux	srlinux	Edge Router	10	SERIAL102040	RACK_CE	Front	AS 65534: ISP WILLIAM	IP	:
<input type="checkbox"/>	EDGEROUTER-SP	EDGEROUTER-SP	Active	Nokia - SR Linux	srlinux	Edge Router	1	SERIAL102030	RACK_SP	Front	AS 65534: ISP WILLIAM	IP	:

📅 projeto-edge-df  

Network Device 3  

A configurable network device for managing and directing data traffic, including routers, switches...

🔍 Search Network Device + Add Network Device

<input type="checkbox"/>	Network Device	Name	Status	Device Type	Platform	Role	Position (U)	Serial	Location	Rack Face	Asn	IP	F
<input type="checkbox"/>	EDGEROUTER-CE	EDGEROUTER-CE	Active	Nokia - SR Linux	srlinux	Edge Router	10	SERIAL102040	RACK_CE	Front	AS 65534: ISP WILLIAM	IP	:
<input type="checkbox"/>	EDGEROUTER-DF	EDGEROUTER-DF	Provisioning	Nokia - SR Linux	srlinux	Edge Router	30	SERIAL102050	RACK_DF	Front	AS 65534: ISP WILLIAM	IP	:
<input type="checkbox"/>	EDGEROUTER-SP	EDGEROUTER-SP	Active	Nokia - SR Linux	srlinux	Edge Router	1	SERIAL102030	RACK_SP	Front	AS 65534: ISP WILLIAM	IP	:

Versionamento de Dados - Proposed Change

Create a proposed change

A proposed change lets you compare two branches, run tests, and finally merge one branch into another.

Source Branch *

projeto-edge-df

Destination Branch *

main

Name *

Projeto EDGE DF

Description

Preview

B **I** **U**

Adicionando novo device no POP DF

Reviewers

Manager x

Cancel

Open

Proposed change

ID

189dcbbe-10e3-3e6d-35d5-c51c35a3e7b7

State

open

Source branch

projeto-edge-df

Destination branch

main

Created by

W

Created at

less than a minute ago

Updated by

W

Updated at

less than a minute ago

Reviewers

M

Approved by

Rejected by

Approve

Merge

Versionamento de Dados - Proposed Change

Create a proposed change

A proposed change lets you compare two branches, run tests, and finally merge one branch into another.

Source Branch *

projeto-edge-df

Destination Branch *

main

Name *

Projeto EDGE DF

Description

Preview

B **I** **U**

Adicionando novo device no POP DF

Reviewers

Manager x

Cancel

Open

Proposed change

ID

189dcbbe-10e3-3e6d-35d5-c51c35a3e7b7

State

open

Source branch

projeto-edge-df

Destination branch

main

Created by

W

Created at

less than a minute ago

Updated by

W

Updated at

less than a minute ago

Reviewers

M

Approved by

Rejected by

Approve

Merge

Versionamento de Dados - Diff entre branches

Projeto EDGE DF ?

William wants to merge `projeto-edge-df` into `main`

Overview **Data** Files Artifacts Schema Checks Tasks 17

⊕ 51 ⊖ 0 ↻ 3 ▲ 0 Updated less than a minute ago [Refresh diff](#) [Rebase](#)

- Network Device
 - EDGEROUTER-DF
- Platform
 - sros
- Rack
 - RACK_DF

> **Added** Device EDGEROUTER-DF

> **Added** Physical 1/1/3

> **Added** Physical 1/1/2

> **Added** Physical 1/1/1

> **Updated** Platform sros

> **Updated** Rack RACK_DF

Versionamento de Dados - Artifacts (config generation)

projeto-edge-df / Proposed changes / Projeto EDGE DF

Projeto EDGE DF

Manager wants to merge projeto-edge-df into main

Overview Data Files **Artifacts** Schema Checks Tasks 7

EDGEROUTER-DF - sr-linux-interface-config

Storage id: 189e44c8-a0d6-b769-3931-c51380bda329

```
1 set /system hostname EDGEROUTER-DF
2 set /interface 1/1/1 admin-state enable
3 set /interface 1/1/2 admin-state enable
4 set /interface 1/1/3 admin-state enable
```

Versionamento de Dados - Artifacts (config generation)

projeto-edge-df / Proposed changes / Projeto EDGE DF

Projeto EDGE DF
Manager wants to merge projeto-edge-df into main

Overview Data Files Artifacts Schema Checks Tasks 9

EDGEROUTER-DF - sr-linux-interface-config

Storage id: 189e44c8-a0d6-b769-3931-c51380bda329

Configuração renderizada usando templates jinja

```
1 set /system hostname EDGEROUTER-DF
2 set /interface 1/1/1 admin-state enable
3 set /interface 1/1/2 admin-state enable
4 set /interface 1/1/3 admin-state enable
```



Versionamento de Dados - Artifacts (jinja)



The screenshot shows a Gitea repository interface. At the top, the repository path is `infrahub-network-repo / templates / sr_linux_interfaces.j2`. Below the path, the commit hash `2d6fd6e5cc` and the commit message `Update templates/sr_linux_interfaces.j2` are displayed, along with the time `20 hours ago`. The file is identified as `16 lines | 733 B | Django/Jinja`. The code content is as follows:

```
1  {% for dev in data["DcimDevice"]["edges"] %}
2  {% set device = dev["node"] %}
3  set /system hostname {{ device.name.value }}
4  {% for iface in device.interfaces.edges %}
5  set /interface {{ iface.node.name.value }} admin-state enable
6  {% endfor %}
7  {% for tacacs in data["NetworkservicesTacacsserver"]["edges"] %}
8  {% for dev in tacacs.node.device_tacacs_servers.edges %}
9  {% if dev.node.id == device.id %}
10 set /system tacplus server {{ tacacs.node.address.value }} address {{ tacacs.node.address.value }}
11 set /system tacplus server {{ tacacs.node.address.value }} port {{ tacacs.node.port.value }}
12 set /system tacplus server {{ tacacs.node.address.value }} secret "{{ tacacs.node.key.value }}"
13 {% endif %}
14 {% endfor %}
15 {% endfor %}
16 {% endfor %}
```

Versionamento de Dados - Checks

Projeto EDGE DF 

William wants to merge  projeto-edge-df into  main

?

Overview Data Files Artifacts Schema **Checks** Tasks 77

Retry all 



Artifact



Data



Generator



Repository



Schema



User

>  Data Integrity - 2 seconds 

>  Artifact Validator: sr_linux_interface_config - 48 seconds 

>  Schema Integrity - 2 seconds 


>  Check: check_device_name - 18 seconds 

Versionamento de Dados - Checks

Projeto EDGE DF 

William wants to merge  projeto-edge-df into  main

Overview Data Files Artifacts Schema **Checks** Tasks 77

Retry all 



Artifact



Data



Generator



Repository




Schema



User

>  Data Integrity - 2 seconds 

>  Artifact Validator: sr_linux_interface_config - 48 seconds 

>  Schema Integrity - 2 seconds 

>  Check: check_device_name - 18 seconds 



Versionamento de Dados - Checks

main infrahub-network-repo / checks / meu_check.py


gitea 68ac1ffa9f Update checks/meu_check.py 10 hours ago

14 lines | 507 B | Python

```
1 from infrahub_sdk.checks import InfrahubCheck
2
3 class DeviceNameCheck(InfrahubCheck):
4     query = "get_device"
5
6     async def validate(self, data):
7         for device in data["DcimDevice"]["edges"]:
8             name = device["node"]["name"]["value"]
9             if "EDGE" not in name:
10                self.log_error(
11                    message=f"Device '{name}' não contém 'EDGE' no nome",
12                    object_id=device["node"]["id"],
13                    object_type="DcimDevice",
14                )
```

Raw Permalink Blame History

Versionamento de Dados - Proposed Change

Proposed change 

ID 189dcbbe-10e3-3e6d-35d5-c51c35a3e7b7

State open

Source branch projeto-edge-df

Destination branch main

Created by W

Created at 5 minutes ago



Updated by W

Updated at less than a minute ago


Reviewers M

Approved by

Rejected by

Approve  Merge 



Proposed change 

ID 189dcbbe-10e3-3e6d-35d5-c51c35a3e7b7

State open

Source branch projeto-edge-df

Destination branch main

Created by W

Created at 6 minutes ago



Updated by M

Updated at less than a minute ago



Reviewers M

Approved by M

Rejected by

Cancel Approve  Merge 

 An error occurred while approving 

 You cannot review your own proposed changes 

Versionamento de Dados - Merge Request

Projeto EDGE DF

William wants to merge into

[Overview](#) [Data](#) [Files](#) [Artifacts](#) [Schema](#) [Checks](#) [Tasks](#) 33

William 12 minutes ago

Adicionando novo device no POP DF

Manager approved the proposed change
3 minutes ago [View more](#)

Manager merged the proposed change
1 minute ago [View more](#)

Proposed change

ID	189dcd0d-08e9-dec0-35d8-c51923ea034b
State	merged
Source branch	
Destination branch	
Created by	
Created at	11 minutes ago
Updated by	
Updated at	less than a minute ago
Reviewers	
Approved by	
Rejected by	

[Cancel Approve](#) [Merge](#)

Versionamento de Dados - Merge Request

main / Network Device

Network Device 3

A configurable network device for managing and directing data traffic, including routers, switches...

Search Network Device + Add Network Device

<input type="checkbox"/> Network Device	Name	Status	Device Type	Platform	Role	Position (U)	Serial	Location	Rack Face	Asn	
<input type="checkbox"/> EDGEROUTER-CE	EDGEROUTER-CE	Active	Nokia - SR Linux	srlinux	Edge Router	10	SERIAL102040	RACK_CE	Front	AS 65534: ISP WILLIAM	
<input type="checkbox"/> EDGEROUTER-DF	EDGEROUTER-DF	Provisioning	Nokia - SR Linux	srlinux	Edge Router	30	SERIAL102050	RACK_DF	Front	AS 65534: ISP WILLIAM	
<input type="checkbox"/> EDGEROUTER-SP	EDGEROUTER-SP	Active	Nokia - SR Linux	srlinux	Edge Router	1	SERIAL102030	RACK_SP	Front	AS 65534: ISP WILLIAM	

Schemas - TACACS - tacacs.yaml

26 lines | 495 B | YAML

Raw

Permalink

Blame

History



```
1  version: "1.0"
2
3  nodes:
4    - name: Tacacsserver
5      namespace: Networkservices
6      human_friendly_id: ['address__value']
7      attributes:
8        - name: address
9          kind: Text
10         unique: true
11
12        - name: key
13          kind: Text
14
15        - name: port
16          kind: Number
17
18        - name: description
19          kind: Text
20          optional: true
21
22      relationships:
23        - name: device_tacacs_servers
24          source: DcimDevice
25          target: Tacacsserver
26          cardinality: one_to_many
```

Schemas - Import

```
> root@infrahub:/opt/infrahub# docker exec -it infrahub-infrahub-server-1 /bin/bash
```

```
> root@53cfb1c6e86c:/source# git clone http://192.168.246.190:3000/gitea/infrahub-network-repo.git
```

```
> root@53cfb1c6e86c:/source# cd infrahub-network-repo/schemas/
```

```
> root@53cfb1c6e86c:/source/infrahub-network-repo/schemas# infrahubctl branch create tacacs-schema
```

```
root@53cfb1c6e86c:/source/infrahub-network-repo/schemas# infrahubctl branch create tacacs-schema  
Branch 'tacacs-schema' created successfully (189df7bb-353d-53bd-3683-c51caca36447).
```

```
> root@53cfb1c6e86c:/source/infrahub-network-repo/schemas# infrahubctl schema load --branch tacacs-schema tacacs.yaml
```

tacacs-schema / Tacacsserver

Tacacsserver 2

Search Tacacsserver + Add Tacacsserver

<input type="checkbox"/> Tacacsserver	Address	Key	Port	Description
<input type="checkbox"/> tacacs1.fortaleza.br	tacacs1.fortaleza.br	Mudar123!	49	SERVIDOR TACACS 1 - FORTALEZA
<input type="checkbox"/> tacacs2.fortaleza.br	tacacs2.fortaleza.br	Mudar123!	49	SERVIDOR TACACS 2 - FORTALEZA

Schemas - TACACS

Calendar icon | tacacs-schema | Tacacsserver tacacs1.fortaleza.br

tacacs1.fortaleza.br

Edit | Schema | Actions

Details | Device Tacacs Servers 1

+ Add Device Tacacs Servers

Network Device	Name	Status	Device Type	Platform	Role	Position (U)	Serial	Location	Rack Face	Asn	Pr
<input type="checkbox"/>	EDGEROUTER-CE	Active	Nokia - SR Linux	srlinux	Edge Router	10	SERIAL102040	RACK_CE	Front	AS 65534: ISP WILLIAM	1

Calendar icon | tacacs-schema | Tacacsserver tacacs2.fortaleza.br

tacacs2.fortaleza.br

Edit | Schema | Actions

Details | Device Tacacs Servers 1

+ Add Device Tacacs Servers

Network Device	Name	Status	Device Type	Platform	Role	Position (U)	Serial	Location	Rack Face	Asn	Pr
<input type="checkbox"/>	EDGEROUTER-CE	Active	Nokia - SR Linux	srlinux	Edge Router	10	SERIAL102040	RACK_CE	Front	AS 65534: ISP WILLIAM	1

Schemas - Teste com GraphQL

```
1 query {
2   NetworkservicesTacacsserver {
3     edges {
4       node {
5         address {
6           value
7         }
8         port {
9           value
10        }
11        description {
12          value
13        }
14        key {
15          value
16        }
17        device_tacacs_servers {
18          edges {
19            node {
20              name {
21                value
22              }
23            }
24          }
25        }
26      }
27    }
28  }
29 }
```



```
"data": {
  "NetworkservicesTacacsserver": {
    "edges": [
      {
        "node": {
          "address": {
            "value": "tacacs1.fortaleza.br"
          },
          "port": {
            "value": 49
          },
          "description": {
            "value": "SERVIDOR TACACS 1 - FORTALEZA"
          },
          "key": {
            "value": "Mudar123!"
          },
          "device_tacacs_servers": {
            "edges": [
              {
                "node": {
                  "name": {
                    "value": "EDGEROUTER-CE"
                  }
                }
              }
            ]
          }
        }
      }
    ]
  }
}
```

Conclusão

Infrahub traz **Git-Native**, **Schemas** flexíveis, **GraphQL** e automação **GitOps** para redes e datacenters com rastreabilidade completa de dados.

✦ Infrahub — Diferenciais

Git-Native Dados versionados como código, branches e merge requests

Schema-Driven Modelo de dados flexível em YAML, sem código

GraphQL API Queries modernas, geradas automaticamente pelo Schema

Generators Scripts Python que populam o grafo automaticamente

Artifacts Configurações renderizadas via Jinja2 e versionadas



⚖️ Ecossistema — Considere Também

NetBox Mais maduro, maior comunidade open-source, amplamente adotado em produção

Nautobot Foco em automação, ecossistema rico de plugins, base NetBox

Infrahub Plataforma mais recente — inovadora, mas com comunidade ainda em crescimento

A melhor escolha depende da maturidade da sua equipe, dos requisitos de automação e do tamanho da infraestrutura.

Obrigado
www.ix.br

Março, 25, 2026

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