

DataX

RNP new initiative about data sharing

Michael Prieto Hernandez - R&D Coordinator

XVI workshop DPDI/DEO/GTI

Team

- Michael Hernandez (GCI)
- Marcos Schwarz (GCI)
- Daniel Neto (GCI)
- Alex Magno (GCI)
- Rodrigo Bongers (GER)
- André Lemos (GO)
- Alessandro Pedrozo (GTI)

TOGETHER
EVERYONE
ACHIEVES
MORE

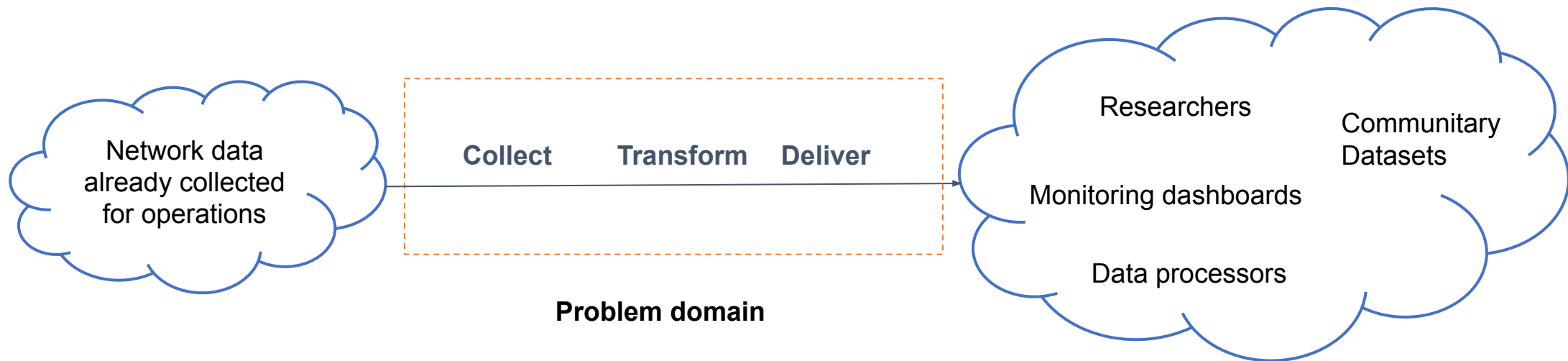
Team

- Michael Hernandez (GCI)
- Marcos Schwarz (GCI)
- Daniel Neto (GCI)
- ~~Alex Magno (GCI)~~
- Lucas Borges (GCI - 01/09/2022)
- João Vicente (Bolsista - 01/09/2022)
- Rodrigo Bongers (GER)
- André Lemos (GO)
- Alessandro Pedrozo (GTI)

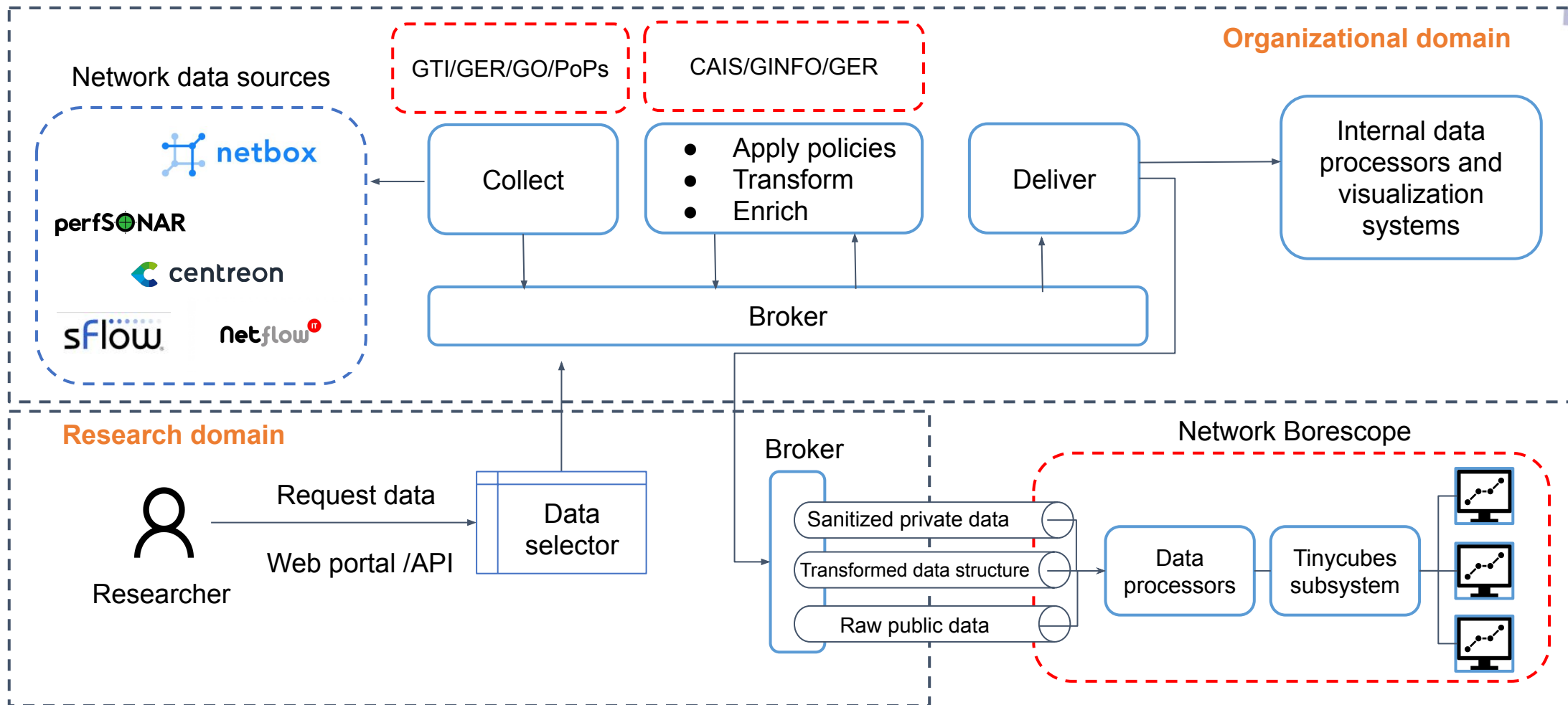
TOGETHER
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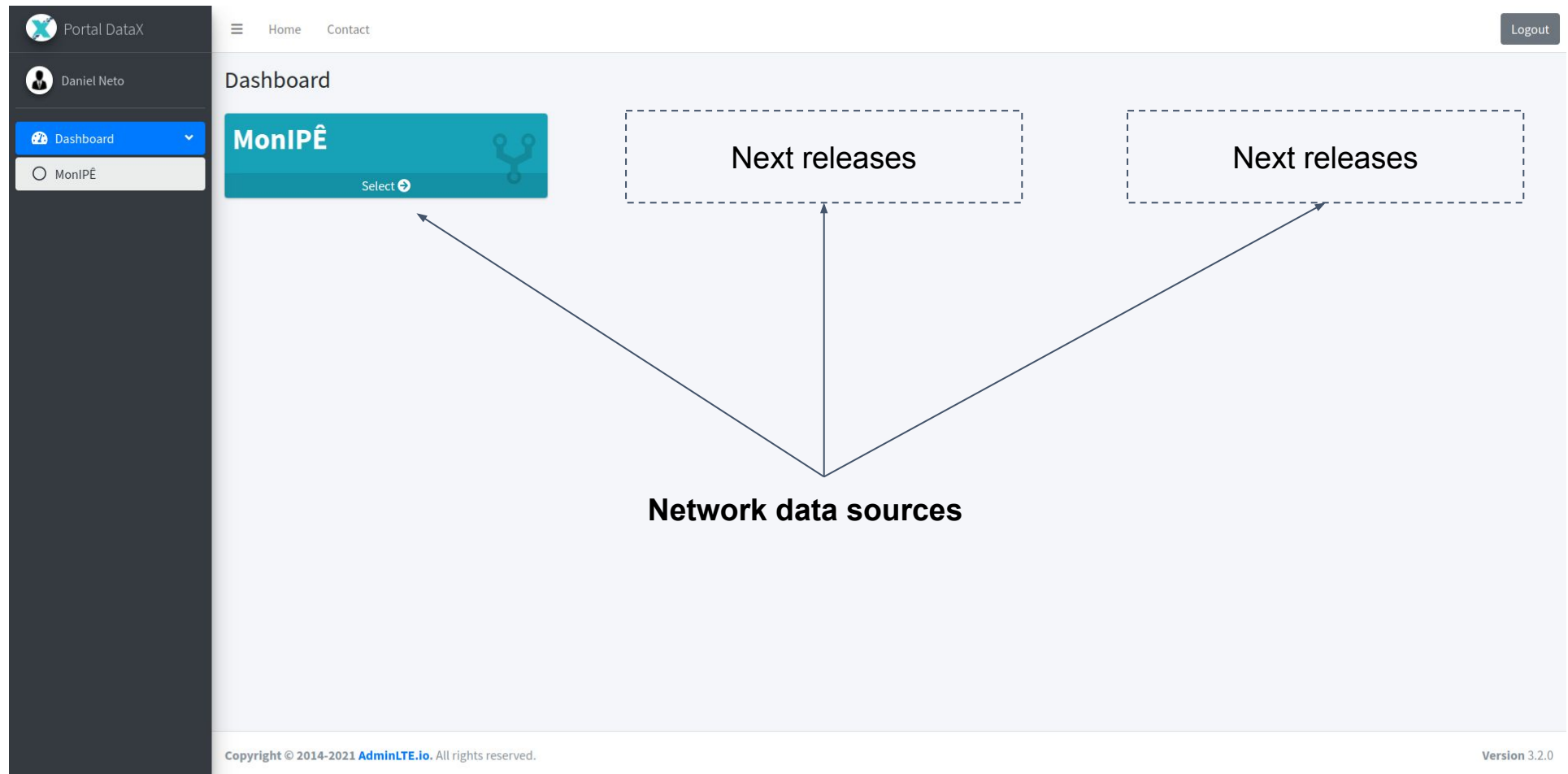
What are we building:

- A system for sharing network data between different teams inside our organization and with the community
- A system based on a well known simple architecture, but powerful enough to grow over time with different data sources, policies and use cases.



Architecture with Network Borescope as system client and validator





Portal DataX

Daniel Neto

Dashboard

MonIPÊ

Home Contact

Logout

Dashboard

MonIPÊ

Select

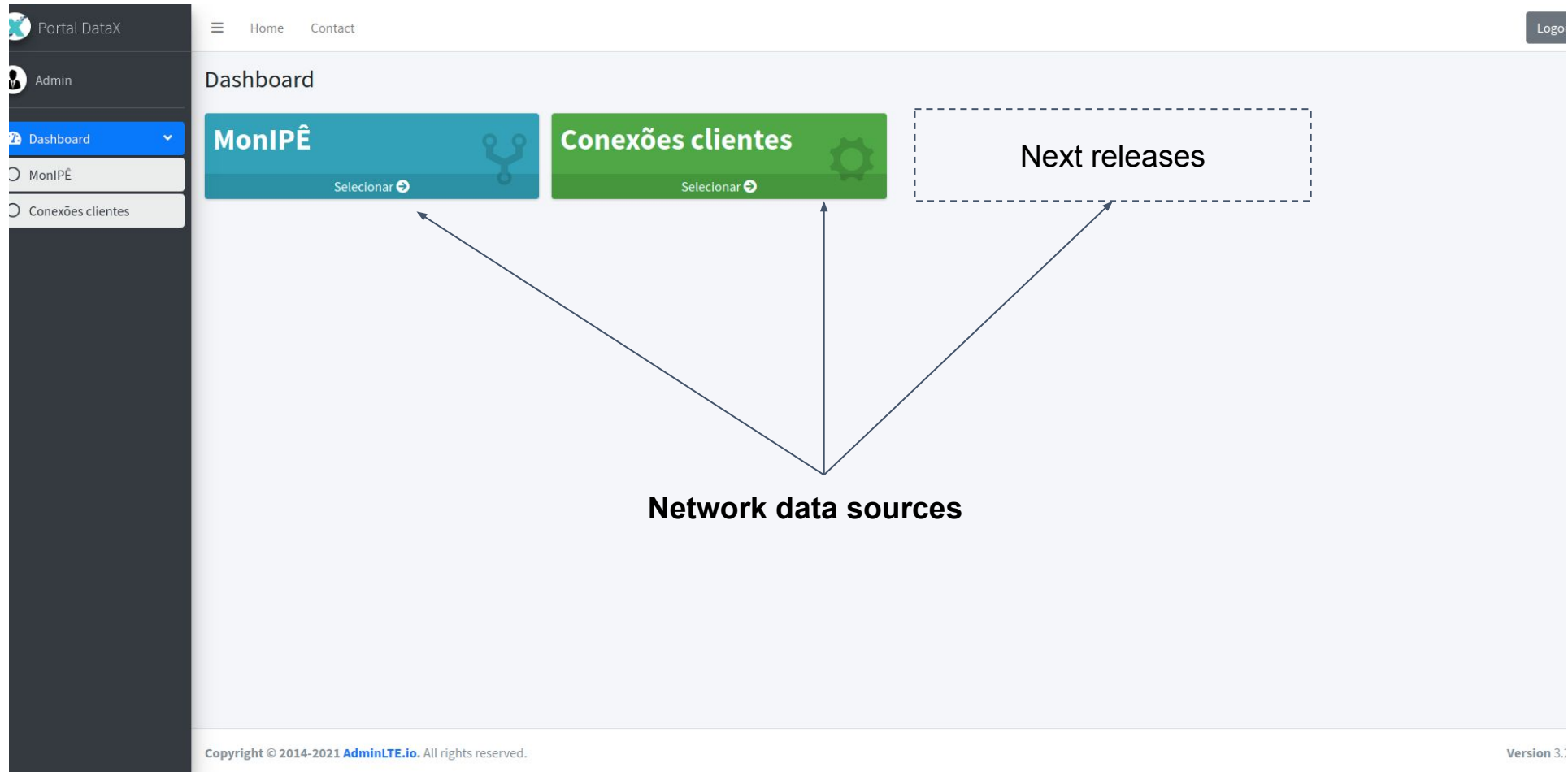
Next releases

Next releases

Network data sources

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Version 3.2.0



The image shows a screenshot of a web dashboard interface. On the left is a dark sidebar with a menu containing 'Portal DataX', 'Admin', 'Dashboard', 'MonIPÊ', and 'Conexões clientes'. The main content area has a top navigation bar with 'Home' and 'Contact' links, and a 'Logout' button in the top right. The dashboard title is 'Dashboard'. Below the title are three main sections: a teal card for 'MonIPÊ' with a 'Selecionar' button, a green card for 'Conexões clientes' with a 'Selecionar' button, and a dashed box labeled 'Next releases'. Three arrows originate from the text 'Network data sources' at the bottom center and point to the 'MonIPÊ' card, the 'Conexões clientes' card, and the 'Next releases' box. At the bottom of the page, there is a copyright notice: 'Copyright © 2014-2021 AdminLTE.io. All rights reserved.' and the text 'Version 3.1'.

Portal DataX

Daniel Neto

Dashboard

MonIPÉ

Home Contact

Logout

Test Type

Throughput (BBR)

Test Data

- failures
- packet-retransmits
- packet-retransmits-subintervals
- throughput
- throughput (averages 86400)
- throughput-subintervals

Source

PoP-CE

Destination

PoP-RJ

Interval

86400 (24H)

Sink Server

http://data-server.com:1234

Generate

Portal Datax

Home Contact

Logout

Admin

Dashboard

MonIPÉ

Conexões clientes

PoP: PoP-AL

Cliente: IFAL - Arapiraca

Dados do teste

- packet loss (%)
- rt average (ms)
- rt max (ms)
- rt minimum (ms)
- traffic in (bps)
- traffic out (bps)

Intervalo de tempo dos dados: 15/08/2022 09:00 - 16/08/2022 09:00

Servidor de destino dos dados: http://data-server.com:1234

Gerar

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Next steps (Six month)

Use cases:

- Access Circuits performance metrics
- Network data from RNP Backbone (exported routers flows with sensitive information)

Portal

- Federated access
- Scheduled data requests

Next steps (Six month)(12/04/2022 - 12/09/2022)

Use cases:

- Clients metrics (95%)
- Access Circuits performance metrics (10%)
- Network data from RNP Backbone (exported routers flows with sensitive information) (60%)

Portal

- Clients metrics (100%)
- Federated access (0%)
- Scheduled data requests (0%)

Thank you



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