

Canon

CANON MEDICAL SYSTEMS DO BRASIL



UNIVERSIDADE
FEDERAL
DE PERNAMBUCO

DCM Uploader: um sistema de informação para garantia de confidencialidade, integridade e disponibilidade no tráfego de imagens médicas baseadas no padrão DICOM

Resultados da Sprint 04

11/04/2023

Time Greenfield

Contexto da Sprint 04

- Ampliação dos cenários de testes
- Construção de uma base de testes baseada nos cenários propostos
- Realização de testes comparativos (Sonador vs. DCM uploader) para os cenários propostos
- Implantar um servidor de autenticação na AWS

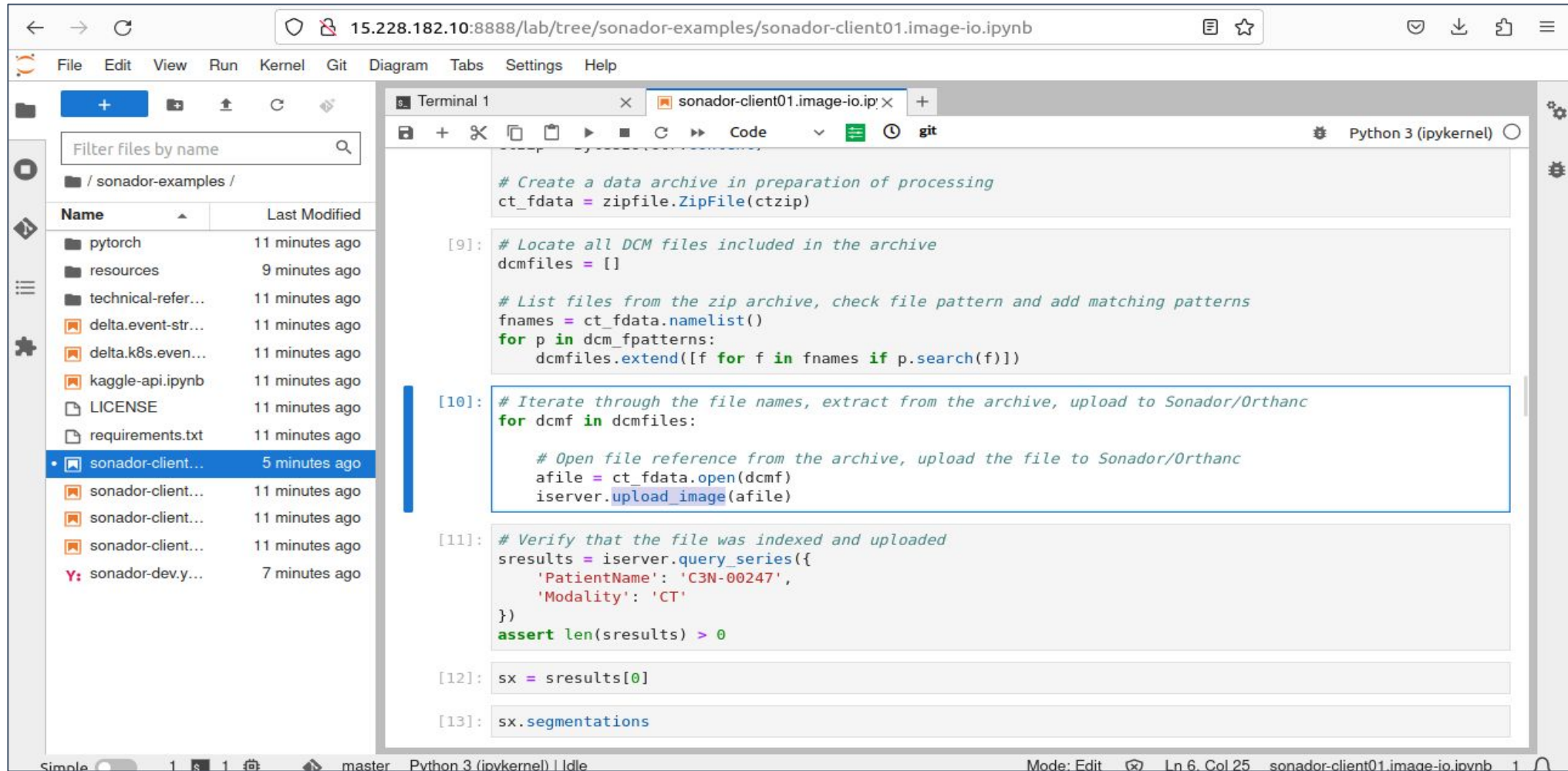
Time Greenfield

Resultados

- Colocamos a infraestrutura para funcionar na AWS
- Configuração do servidor de autenticação (Cognito na AWS e Acorn)
- Transferência de estudos para a nuvem através da API do Sonador utilizando um *Jupyter Notebook*.
- Transferência de estudos para a instância Sonador do Orthanc na nuvem através do Horos.
- Identificamos a necessidade de fazer um deploy do Sonador em https
- Estudo do deploy em K8s
 - necessidade de um domínio
 - portar parte do deploy de GCP para AWS

Time Greenfield

Resultados



The screenshot displays a JupyterLab environment. On the left, the file explorer shows the directory structure of `/sonador-examples/`. The files listed include `pytorch`, `resources`, `technical-refer...`, `delta.event-str...`, `delta.k8s.even...`, `kaggle-api.ipynb`, `LICENSE`, `requirements.txt`, and `sonador-client01.image-io.ipynb` (highlighted). The right pane shows the code editor for `sonador-client01.image-io.ipynb`, which contains the following Python code:

```
[9]: # Create a data archive in preparation of processing
ct_fdata = zipfile.ZipFile(ctzip)

# Locate all DCM files included in the archive
dcmfiles = []

# List files from the zip archive, check file pattern and add matching patterns
fnames = ct_fdata.namelist()
for p in dcm_patterns:
    dcmfiles.extend([f for f in fnames if p.search(f)])

[10]: # Iterate through the file names, extract from the archive, upload to Sonador/Orthanc
for dcmf in dcmfiles:

    # Open file reference from the archive, upload the file to Sonador/Orthanc
    afile = ct_fdata.open(dcmf)
    iserver.upload_image(afile)

[11]: # Verify that the file was indexed and uploaded
sresults = iserver.query_series({
    'PatientName': 'C3N-00247',
    'Modality': 'CT'
})
assert len(sresults) > 0

[12]: sx = sresults[0]

[13]: sx.segmentations
```

The status bar at the bottom indicates the current mode is 'Edit', the file is `sonador-client01.image-io.ipynb`, and the kernel is 'Python 3 (ipykernel)'.

Time Greenfield

Resultados

The screenshot displays the MINIO Object Store web interface. The left sidebar contains navigation links: Object Browser, Access Keys, Documentation, Buckets, Policies, Identity, Monitoring, Events, Tiering, Site Replication, and Settings. The main content area shows the 'images' bucket, created on Sun, Dec 31 0000 21:40:24 (GMT-2:19:36), with PRIVATE access and 50.2 MiB of 198 objects. A table lists the objects in the bucket, including their names, last modified times, and sizes.

Name	Last Modified	Size
03f88a2b-3e18-4d5a-86b4-03e3f3f371a5	Today, 15:06	3.5 KiB
0421778a-302b-4fec-b460-704db7a77743	Today, 15:06	3.5 KiB
04a31f27-9d73-45df-a7b3-ac9737b9ef0b	Today, 15:06	3.5 KiB
06526e90-1857-4758-9cce-8201efa4d22e	Today, 15:06	3.5 KiB
06599c80-529f-4fd9-8adb-6d399359ac09	Today, 15:06	3.5 KiB
0a250b59-4732-4bbe-bfb7-fb1106bcee49	Today, 15:06	3.5 KiB
0b59ef30-6fb0-4a68-a688-6de09f1e36b7	Today, 15:06	515.5 KiB
0c78b7ab-5c1e-4ce9-ae4b-4b55fbdcc6cb	Today, 15:06	3.5 KiB

Time Greenfield

Resultados

Database 1

Cases with comments 0

Interesting Cases 0

Just Acquired (last hour) 0

Just Added (last hour) 0

Just Opened 0

Today CR 0

Today CT 0

Today MG 0

Today MR 0

Today RF 0

Today US 0

Today XA 0

Yesterday CR 0

Yesterday CT 0

Documents DB

DICOM DB

Vitreia-2023...30164115 DB

Description

This is an example

Albums	Patient name	Report	Lock	Patient ID	Age	Accession Number	Study Description	Modality	ID	Comments	Status	Date Acquired	Stent Planning
	Stent Planning			A/P CTA AAA	43/38 y		Endovascu...ning - Evsp	CT	999999			26/07/18 14:1	Endovascular Stent Pla... CT 26/07/18 1.025 images

SUMMARY 2 2 Images

Vol. CTA 1.0 503 Images

Vol. CTA 1.0 1 Image

Vol. CTA 1.0 1 Image

Vol. CTA 1.0 1 Image

Sagittal 515 Images

Localizers 2 Images

Image size: 512 x 512

View size: 1406 x 468

WL: 12 / WW: 255

X: 0 px Y: 0 px Value: R:0 G:0 B:0

Zoom: 91% Angle: 0

Im: 1//

Uncompressed

1.CTA ABDOMEN 3 PHASES

No.	Protocol	Ref scan(s)	kVp	Range (mm)	CTDIvol (mGy)	DLP (mGy·cm)
1	DualScan	1	120	---		
2	DualScan	1	120	---		
3	S&V	1	120	2.0	7.30 (Body)	1.50 (Body)
4	Low Start	1	100	---	23.60 (Body)	4.70 (Body)
5	GG-Hel	1	100	402.0	4.30 (Body)	191.10 (Body)
6	GG-Hel	1	120	405.0	4.90 (Body)	215.30 (Body)

SUM Exposure

No.	Name	SD	Surround	Image Thickness	Recon FC	Recon Process	XY
5	Standard	12.50	Body:Std.Antal	5.5	FC18	ADR10 sStd	3D
6	Standard	12.50	Body:Std.Antal	5.5	FC18	ADR00 sStd	3D

Images may represent all or part of the entire acquisition.
Dose values apply only to the entire acquisition
and may include exposure unrelated to this set of reconstructed images.

P.2/2

Activity

Sending... Stent Planning

507 files

Local Database: Vitrea-20230130164115 DB / No album selected / Res...

26/07/18 16:09:52

Made in Horos

Time Greenfield

Resultados

Não seguro | orthanc:8842/app/explorer.html?token=h%3a2232786a326d703136383475653935336f6b397435767a6932616b356d... | VPN

administração disciplinas orientações cursos projetos estudo referências publicações editais

Lookup Plugins orthanc-s3 » All studies Upload Query/Retrieve Jobs

Filter items...

C3N-00247 - CT CHEST W IV CONTRAST
PatientID: C3N-00247
PatientBirthDate: ?
PatientSex: F
StudyDate: Saturday, February 27, 2010
AccessionNumber: 1598252606449858
ReferringPhysicianName:
StudyInstanceUID: 1.3.6.1.4.1.14519.5.2.1.7085.2626.258626612405225511766549337110
StudyID:
RequestedProcedureDescription: CT CHEST W IV CONTRAST

CARDIAC CA SCORE^DLP 50 - CANON CACS ANALYSIS
PatientID: AA1G-CV-007
PatientBirthDate: Friday, January 1, 1960
PatientSex: M
StudyDate: Thursday, September 29, 2016
AccessionNumber: GEN_CARDIAC
InstitutionName: CANON
ReferringPhysicianName:
StudyInstanceUID: 1.2.392.200036.9116.2.6.1.3268.2054276606.1476299250.733362
StudyID: 999999

STENT PLANNING - Endovascular Stent Planning - EVSP
PatientID: A/P CTA AAA
PatientBirthDate: Tuesday, January 1, 1980
PatientSex: M
OtherPatientIDs:
StudyDate: Thursday, July 26, 2018
AccessionNumber:
InstitutionName: Canon Medical
ReferringPhysicianName:
StudyInstanceUID: 1.2.392.200036.9116.2.6.1.3268.2054276606.1534823344.429172
StudyID: 999999

Time Greenfield

Próximos Passos

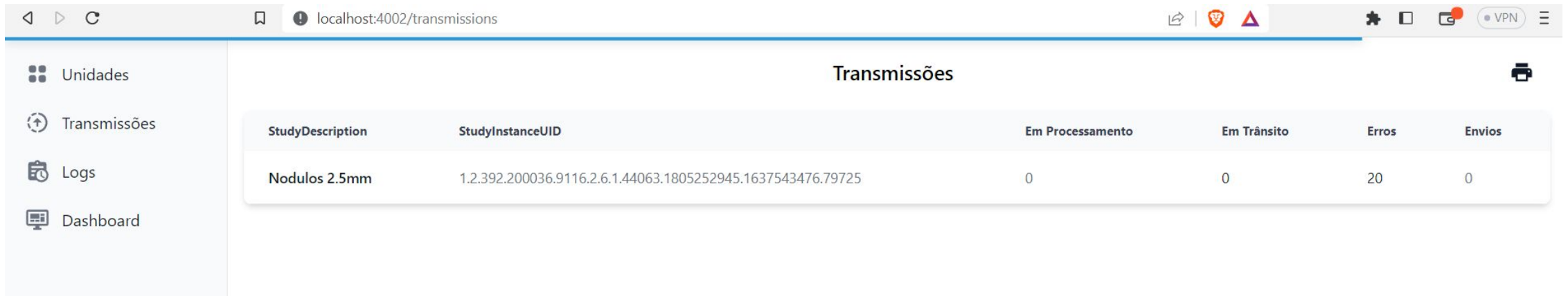
- Analisar e aplicar a melhor alternativa para fazer deploy via docker que responda com HTTPS
- Realizar o deploy via k8s

Time Brownfield

Contexto da Sprint 04

11/04/2023

Reunião técnica 03/04/2023



The screenshot shows a web application interface. At the top, there is a browser-like header with navigation icons and a URL bar displaying 'localhost:4002/transmissions'. Below the header is a sidebar menu with four items: 'Unidades', 'Transmissões', 'Logs', and 'Dashboard'. The main content area is titled 'Transmissões' and contains a table with the following data:

StudyDescription	StudyInstanceUID	Em Processamento	Em Trânsito	Erros	Envios
Nodulos 2.5mm	1.2.392.200036.9116.2.6.1.44063.1805252945.1637543476.79725	0	0	20	0

Time Brownfield

Contexto da Sprint 04

11/04/2023

Debug

```
phoenix_1 | ssh: connect to host localhost port 3022: Cannot assign requested address
phoenix_1 | rsync: connection unexpectedly closed (0 bytes received so far) [sender]
phoenix_1 | rsync error: unexplained error (code 255) at io.c(228) [sender=3.2.3]
phoenix_1 | [debug] emqtt(emqtt-f3a49724607f-d9897f6698a305db5dfb): SEND Data: {:mqtt_packet, {:mqtt_packet_header, 3, false, 2, false}, {:mqtt_packet_publish, "transmission", 11, %{}},
{"end\\":\\"2023-04-05T01:07:24.792729Z\\",\\"status\\":\\"T - ERROR\\",\\"uuid\\":\\"775DE522116548AAB1F5185D6068BB81\\""}
phoenix_1 | "Error while storing file"
phoenix_1 | "Input Path: /app/observable/SC.1.2.840.113747.6377327108688.11704.13.215938450104910.2"
phoenix_1 | [debug] emqtt(emqtt-f3a49724607f-d9897f6698a305db5dfb): RECV Data: <<80, 2, 0, 11>>
phoenix_1 | [debug] emqtt(emqtt-f3a49724607f-d9897f6698a305db5dfb): SEND Data: {:mqtt_packet, {:mqtt_packet_header, 6, false, 1, false}, {:mqtt_packet_puback, 11, 0, :undefined}, :undefined}
phoenix_1 | Traceback (most recent call last):
phoenix_1 |   File "/app/lib/uploader_t/core/py/get_ae_title.py", line 10, in <module>
phoenix_1 |     dcm = pydicom.dcmread(filename)
phoenix_1 |   File "/usr/local/lib/python3.9/dist-packages/pydicom/filereader.py", line 993, in dcmread
phoenix_1 |     fp = open(fp, 'rb')
phoenix_1 | FileNotFoundError: [Errno 2] No such file or directory: 'observable/SC.1.2.840.113747.6377327108688.11704.13.215938450104910.2'
```

```
root@447a39a95a88:/app# ssh -p 3022 uploader_t_1@localhost
ssh: connect to host localhost port 3022: Cannot assign requested address
root@447a39a95a88:/app# ssh -p 22 uploader_t_1@localhost
ssh: connect to host localhost port 22: Cannot assign requested address
```

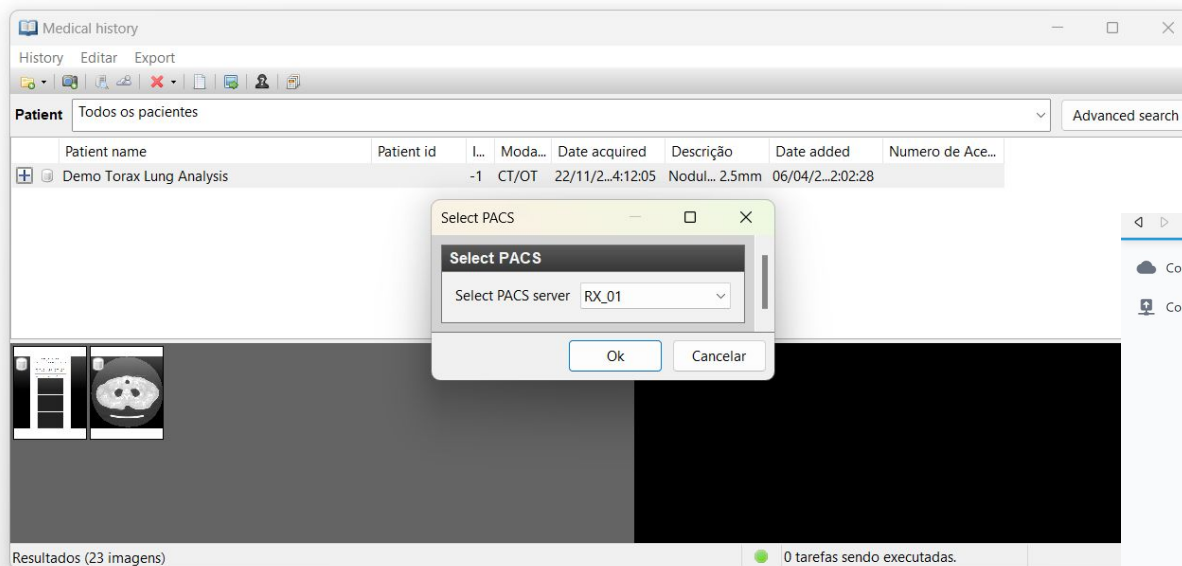
Time Brownfield

Contexto da Sprint 04

11/04/2023

Ginkgo CADx

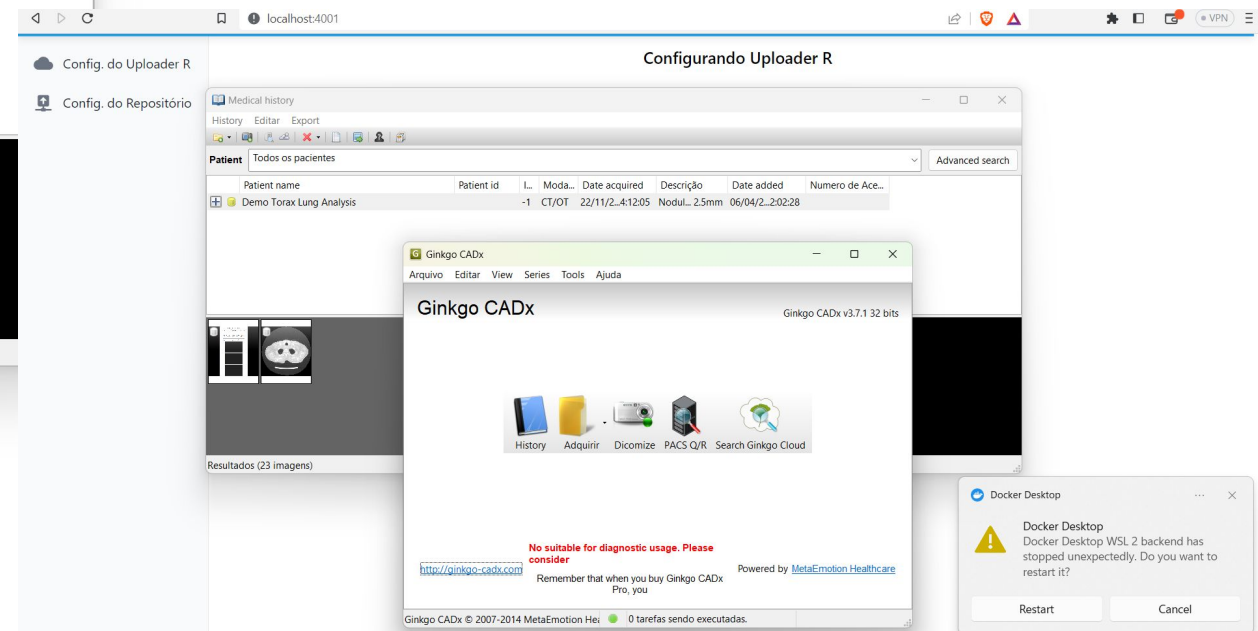
Ginkgo CADx v3.7.1 32 bits



<http://ginkgo-cadx.com>

No suitable for diagnostic usage. Please consider [Ginkgo CADx Pro](#) upgrade to

Remember that when you buy Ginkgo CADx Pro, you are contributing to development efforts



Time Brownfield

Contexto da Sprint 04

11/04/2023

Retomamos após duas horas e não foi enviado todos os estudos.

Um de 502 deu certo.

1.839 não deu certo – travou o sistema:

```
1650894625.43859", :pending}, {"observable/PI.1.2.840.113704.7.1.0.17016968251162171.1650894623.43547", :pending}, {"observable/PI.1.2.840.113704.7.1.0.17016968251162171.1650894622.43483", :pending}, {"observable/PI.1.2.840.113704.7.1.0.17016968251162171.1650894630.44443", :pending}, {"observable/CT.1.2.392.200036.9116.2.1.3218034811.1536214514.981555.1.287", :pending}, {"observable/PI.1.2.840.113704.7.1.0.17016968251162171.1650894632.44683", :pending}, {"observable/PI.1.2.840.113704.7.1.0.17016968251162171.1650894606.41680", :pending}, {"observable/CT.1.2.392.200036.9116.2.1.3218034811.1536671369.127521.1.241", :pending}, {"observable/CT.1.2.392.200036.9116.2.1.3218034811.1536671369.127521.1.425", :pending}, {"observable/PI.1.2.840.113704.7.1.0.17016968251162171.1650894612.42364", :pending}, {"observable/PI.1.2.840.113704.7.1.0.17016968251162171.1650894631.44520", :pending}, {"observable/PI.1.2.840.113704.7.1.0.17016968251162171.1650894609.41941", :pending}, {"observable/PI.1.2.840.113704.7.1.0.170169682 (truncated)
phoenix_1 | [notice] Application uploader_t exited: shutdown
```

```
5039", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544153.34658", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544153.304841", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544152.832219", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544154.501972", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544152.739108", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544153.459143", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544154.551147", :pending}, {"observable/SC.1.2.840.113747.6377327108688.11704.13.215938450104910.2", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544153.171013", :pending}, {"observable/CT.1.2.392.200036.9116.2.6.1.44063.1805252945.1637544152.874705", :pending}], watcher_pid: #PID<0.855.0>}, [file: 'lib/uploader_t/core/core_list.ex', line: 75]}, {:gen_server, :try_dispatch, 4, [file: 'gen_server.erl', line: 695]}, {:gen_server, :handle_msg, 6, [file: 'gen_server.erl', line: 771]}, {:proc_lib, :init_p_do_apply, 3, [file: 'proc_lib.erl', line: 226]}]}}
phoenix_1 | State: %{port: #Port<0.214>, worker_pid: #PID<0.855.0>}
phoenix_1 | [notice] Application uploader_t exited: shutdown
```


Time Brownfield

Contexto da Sprint 04

11/04/2023

Transmissões						
StudyDescription	StudyInstanceUID	Em Processamento	Em Trânsito	Erros	Envios	
Nodulos 2.5mm	1.2.392.200036.9116.2.6.1.44063.1805252945.1637543476.79725	9	0	59	0	

Time Brownfield

Contexto da Sprint 04

11/04/2023

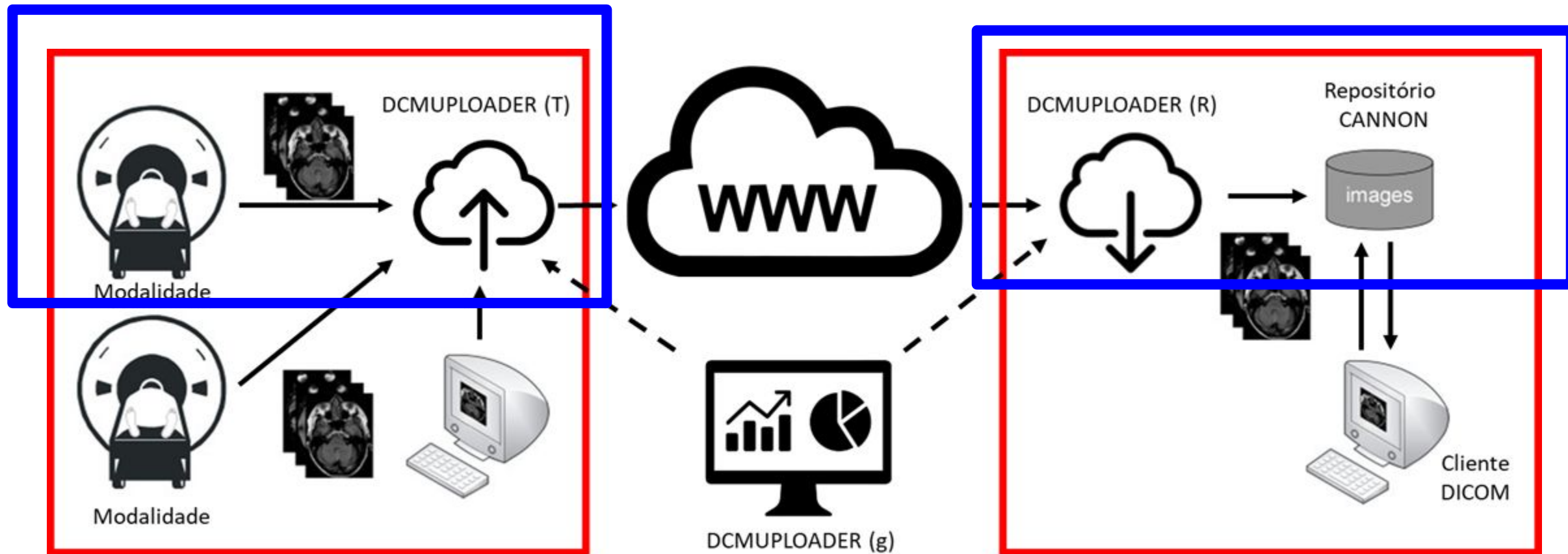
```
root@apt-virtualbox: /home/apt/Documents/76-11/uploader_1
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.338",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.337",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.336",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.335",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.334",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.333",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.332",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.331",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.330",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.329",
phoenix_1      :completed},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.328", :pending},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.327", :pending},
phoenix_1      {" /app/observable/MR.1.2.392.200045.8842.5.999999.20160513.2.326", :pending},
```

[illegible]

Time Brownfield

Contexto da Sprint 04

11/04/2023



Time Brownfield

Contexto da Sprint 04 - Ambiente de testes 2

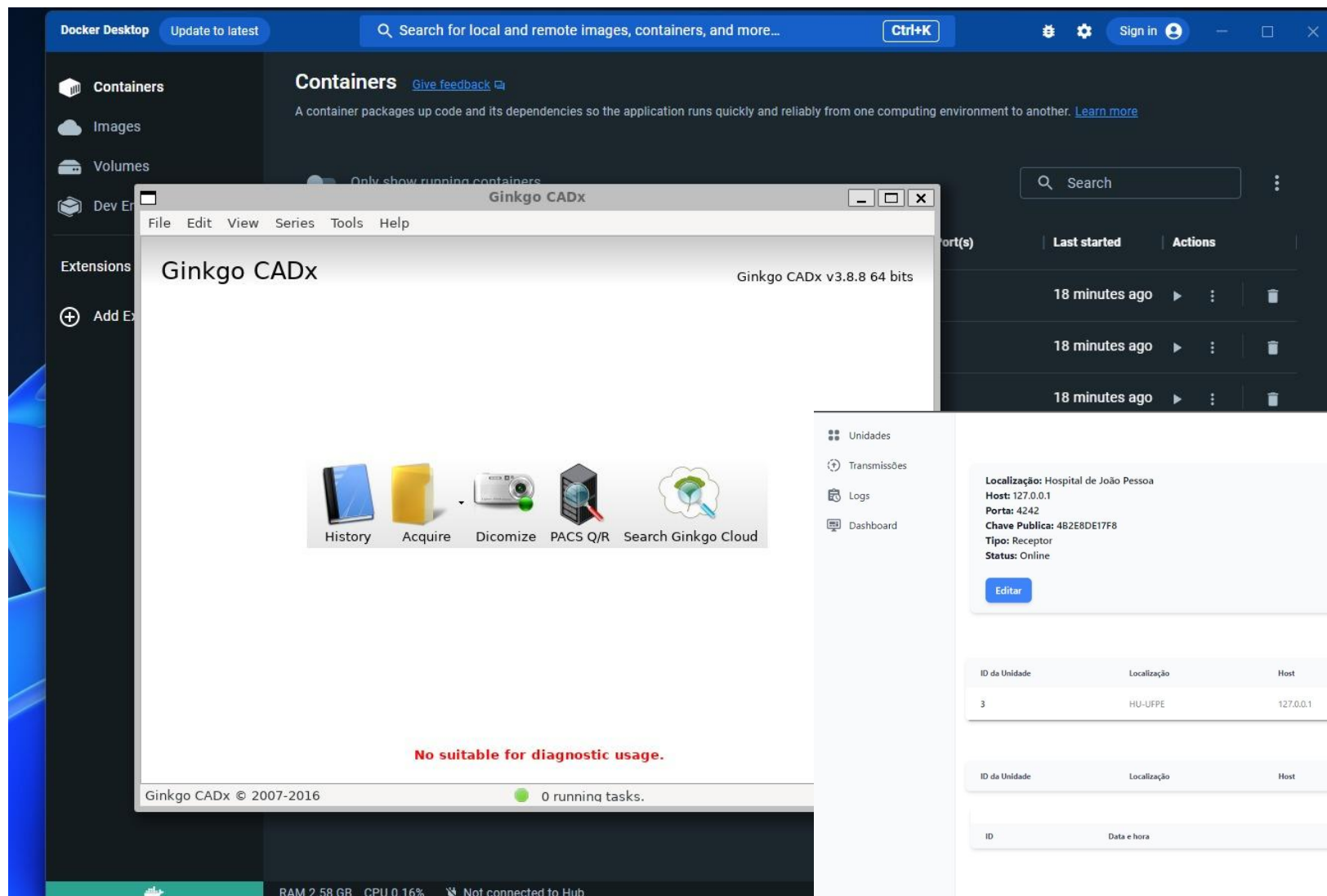
11/04/2023

```
Selecinar brunodantas@bruno-dantas: ~/imagem/estudos/Vitrea-20230227104301/DICOM/ST00001/SE00002
brunodantas@bruno-dantas:~/imagem$ cd estudos
brunodantas@bruno-dantas:~/imagem/estudos$ dir
Vitrea-20230227104301  Vitrea-20230227104705  Vitrea-20230227104750  Vitrea-20230227104907  Vitrea-20230227105335
Vitrea-20230227104516  Vitrea-20230227104717  Vitrea-20230227104800  Vitrea-20230227104920  Vitrea-20230227105346
Vitrea-20230227104637  Vitrea-20230227104726  Vitrea-20230227104823  Vitrea-20230227104938
brunodantas@bruno-dantas:~/imagem/estudos$ cd Vitrea-20230227104301
brunodantas@bruno-dantas:~/imagem/estudos/Vitrea-20230227104301$ dir
DICOM  DICOMDIR  DicomViewer
brunodantas@bruno-dantas:~/imagem/estudos/Vitrea-20230227104301$ cd DICOM
brunodantas@bruno-dantas:~/imagem/estudos/Vitrea-20230227104301/DICOM$ dir
ST00001
brunodantas@bruno-dantas:~/imagem/estudos/Vitrea-20230227104301/DICOM$ cd ST00001
brunodantas@bruno-dantas:~/imagem/estudos/Vitrea-20230227104301/DICOM/ST00001$ dir
SE00001  SE00002  SE00003
brunodantas@bruno-dantas:~/imagem/estudos/Vitrea-20230227104301/DICOM/ST00001$ cd SE00002
brunodantas@bruno-dantas:~/imagem/estudos/Vitrea-20230227104301/DICOM/ST00001/SE00002$ dir
IM00001  IM00005  IM00009  IM00013  IM00017  IM00021  IM00025  IM00029  IM00033  IM00037  IM00041  IM00045
IM00002  IM00006  IM00010  IM00014  IM00018  IM00022  IM00026  IM00030  IM00034  IM00038  IM00042  IM00046
IM00003  IM00007  IM00011  IM00015  IM00019  IM00023  IM00027  IM00031  IM00035  IM00039  IM00043  IM00047
IM00004  IM00008  IM00012  IM00016  IM00020  IM00024  IM00028  IM00032  IM00036  IM00040  IM00044
brunodantas@bruno-dantas:~/imagem/estudos/Vitrea-20230227104301/DICOM/ST00001/SE00002$ storescu 127.0.0.1 6000 IM00005 -
v
I: checking input files ...
I: Requesting Association
I: Association Accepted (Max Send PDV: 16372)
I: Sending file: IM00005
I: Converting transfer syntax: Little Endian Implicit -> Little Endian Explicit
I: Sending Store Request (MsgID 1, CT)
XMIT: .....
I: Received Store Response (Success)
```

localhost:4002/units						
Unidades						
Transmissões						
Logs						
Dashboard						
ID da Unidade	Localização	Host	Porta	Tipo	Status	

Contexto da Sprint 04 - Ambiente de testes 2

11/04/2023



Configuração Utilizada:

- Uploader R:
 - Porta 4242
- Uploader T:
 - Origem: 6000
 - Destino: 3022

Localização: Hospital de João Pessoa

Host: 127.0.0.1

Porta: 4242

Chave Pública: 4B2E8DE17F8

Tipo: Receptor

Status: Online

Editar

ID da Unidade	Localização	Host	Porta	Tipo	Status	
3	HU-UFPE	127.0.0.1	6000	Transmissor	Online	Detalhes Editar Aceitar Recusar

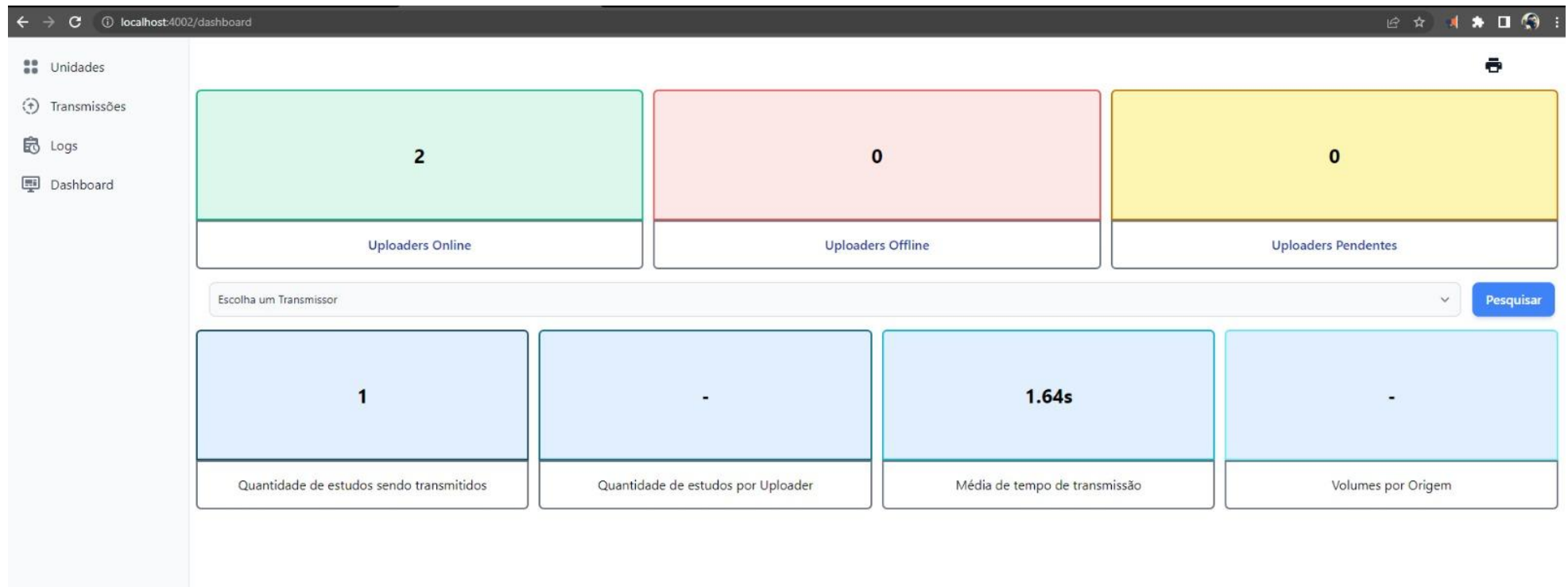
ID	Data e hora	Origem	Evento	Mensagem
----	-------------	--------	--------	----------

Time Brownfield

Contexto da Sprint 04 - Ambiente de testes 2

11/04/2023

```
392 brunodantas@bruno-dantas:~/imagem/estudos$ dir
Vitreia-20230227104301 Vitrea-20230227104705 Vitrea-20230227104750 Vitrea-20230227104907 Vitrea-20230227105335
Vitreia-20230227104516 Vitrea-20230227104717 Vitrea-20230227104800 Vitrea-20230227104920 Vitrea-20230227105346
Vitreia-20230227104637 Vitrea-20230227104726 Vitrea-20230227104823 Vitrea-20230227104938
brunodantas@bruno-dantas:~/imagem/estudos$ cd Vitrea-20230227104301
brunodantas@bruno-dantas:~/imagem/estudos/Vitreia-20230227104301$ dir
DICOM DICOMDIR DicomViewer
brunodantas@bruno-dantas:~/imagem/estudos/Vitreia-20230227104301$ cd DICOM
```



Time Brownfield

Contexto da Sprint 04 - Ambiente de testes 2

11/04/2023

Unidades

Transmissões

Logs

Dashboard

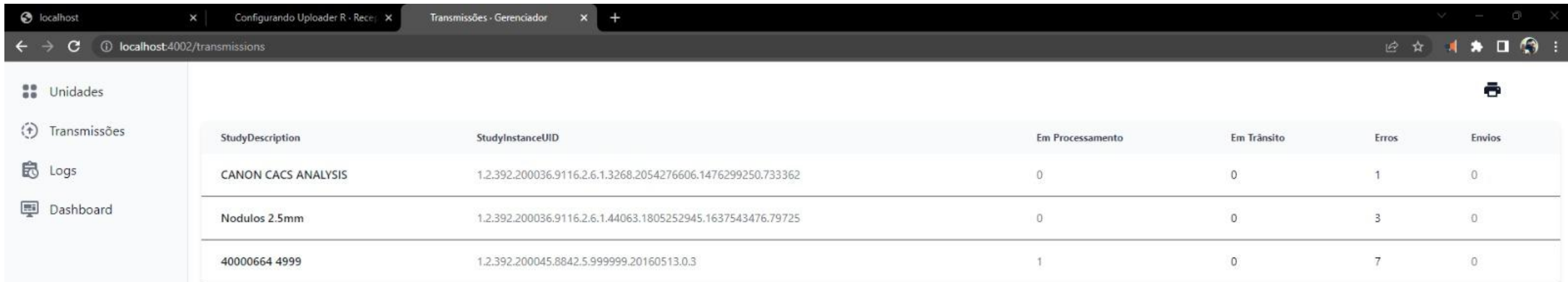
StudyDescription	StudyInstanceUID	Em Processamento	Em Trânsito	Erros
CANON CACS ANALYSIS	1.2.392.200036.9116.2.6.1.3268.2054276606.1476299250.733362	0	0	1
Nodulos 2.5mm	1.2.392.200036.9116.2.6.1.44063.1805252945.1637543476.79725	0	0	3
40000664 4999	1.2.392.200045.8842.5.999999.20160513.0.3	0	0	3

```
brunodantas@bruno-dantas: ~  
(ginkgocadx:976): Gtk-CRITICAL **: 19:52:06.212: gtk_box_gadget_distribute: asse  
rtion 'size >= 0' failed in GtkNotebook  
(ginkgocadx:976): Gtk-CRITICAL **: 19:52:06.225: gtk_box_gadget_distribute: asse  
rtion 'size >= 0' failed in GtkNotebook  
(ginkgocadx:976): Gtk-CRITICAL **: 19:52:06.257: gtk_box_gadget_distribute: asse  
rtion 'size >= 0' failed in GtkNotebook  
(ginkgocadx:976): Gtk-CRITICAL **: 19:52:06.291: gtk_box_gadget_distribute: asse  
rtion 'size >= 0' failed in GtkNotebook  
(ginkgocadx:976): Gtk-CRITICAL **: 19:52:06.330: gtk_box_gadget_distribute: asse  
rtion 'size >= 0' failed in GtkNotebook  
(ginkgocadx:976): Gtk-CRITICAL **: 19:52:06.365: gtk_box_gadget_distribute: asse  
rtion 'size >= 0' failed in GtkNotebook  
(ginkgocadx:976): Gtk-CRITICAL **: 19:52:06.389: gtk_box_gadget_distribute: asse  
rtion 'size >= 0' failed in GtkNotebook  
(ginkgocadx:976): Gtk-CRITICAL **: 19:52:06.570: gtk_box_gadget_distribute: asse  
rtion 'size >= 0' failed in GtkNotebook  
^E: Unable to initialize network, check port 6000 is not in use  
I: Enviando al PACS MT_0210: MT_0210@localhost:6000 PDU=16382, TLS=0, User =  
0000:0000 Normal  
I: Enviando al PACS MT_0210: MT_0210@localhost:6000 PDU=16382, TLS=0, User =  
0000:0000 Normal  
^[[
```

Time Brownfield

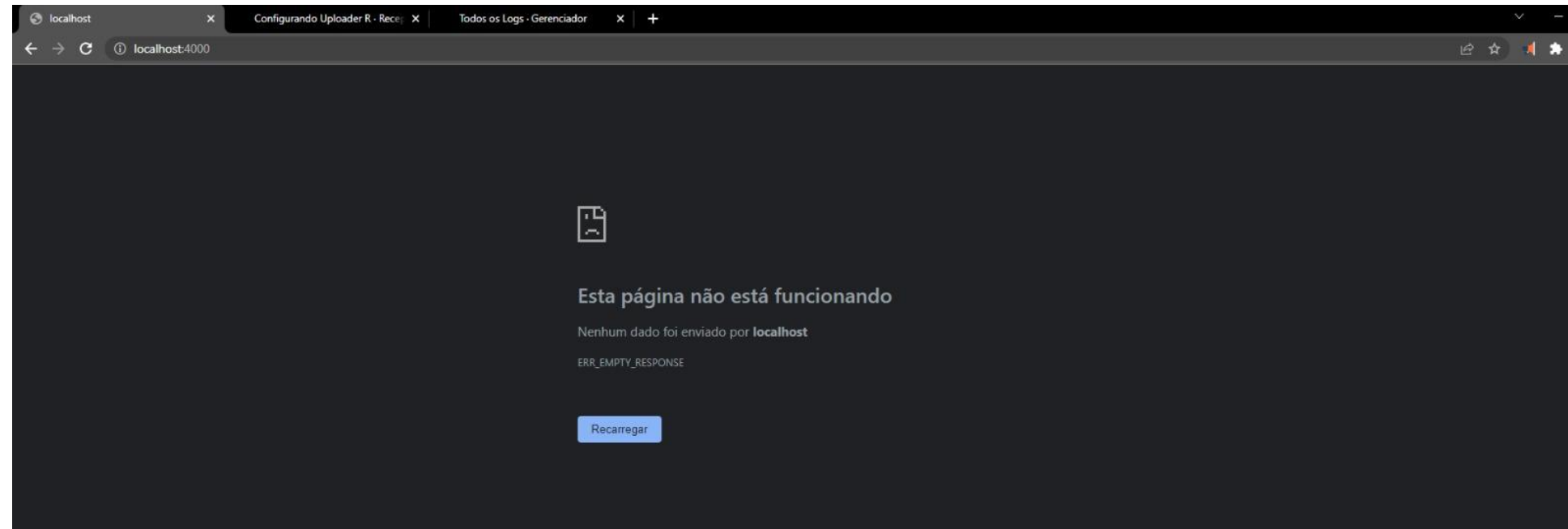
Contexto da Sprint 04 - Ambiente de testes 2

11/04/2023



The screenshot shows a web browser window with the address bar displaying 'localhost:4002/transmissions'. The browser has three tabs open: 'localhost', 'Configurando Uploader R - Rece...', and 'Transmissões - Gerenciador'. The page features a sidebar on the left with a menu containing 'Unidades', 'Transmissões', 'Logs', and 'Dashboard'. The main content area displays a table with the following data:

StudyDescription	StudyInstanceUID	Em Processamento	Em Trânsito	Erros	Envios
CANON CACS ANALYSIS	1.2.392.200036.9116.2.6.1.3268.2054276606.1476299250.733362	0	0	1	0
Nodulos 2.5mm	1.2.392.200036.9116.2.6.1.44063.1805252945.1637543476.79725	0	0	3	0
40000664 4999	1.2.392.200045.8842.5.999999.20160513.0.3	1	0	7	0



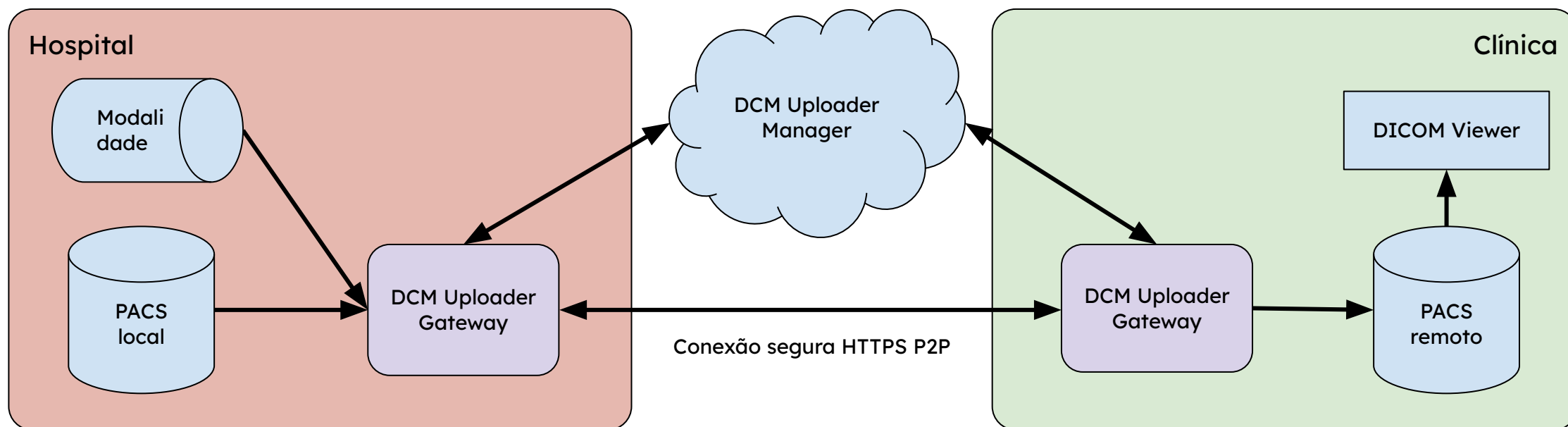
Time Integrado

Resultados

- Abandonar implementações no contexto do DCM Uploader legado
- Compreensão mais detalhada das potencialidades, limitações e desafios do uso do Sonador

Time Integrado

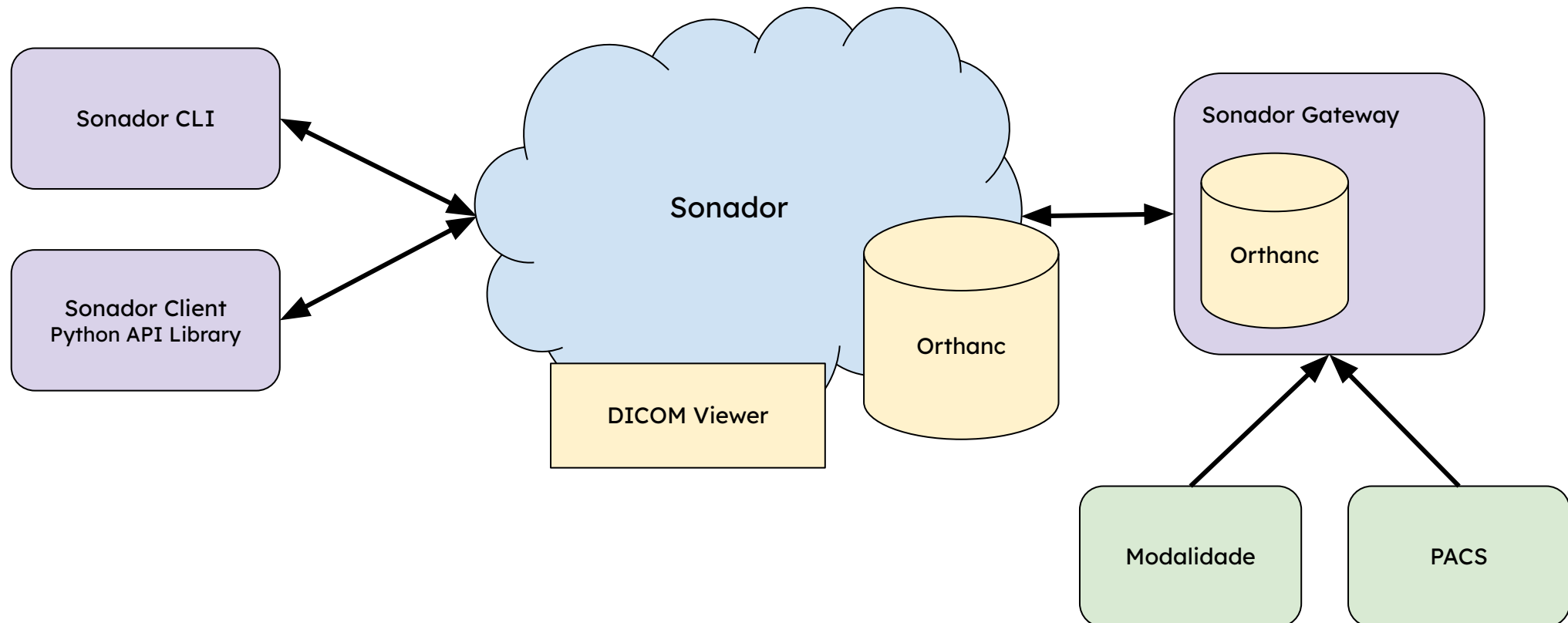
Resultados



Time Integrado

Resultados

- Arquitetura do Sonador



Time Integrado

Próximos Passos

- Fundir as equipes e alocá-las na definição das tecnologias empregadas na arquitetura proposta
- Alguns dos integrantes da equipe irão atuar na busca e teste de alternativas
- Definir perfis dos novos contratados