

Cloud Computing - Roteiro 2

Arthur Barreto e Enrico Gemha

CheckPoint 1

1. Dê um print da tela do Dashboard do MAAS com as 2 Máquinas e seus respectivos IPs.
2. Dê um print da aplicação Django, provando que você está conectado ao server 2.

Machines 5 machines available Add hardware Take action

5 Machines 1 Resource pool 1 Tag

Filters Search Group by status

<input type="checkbox"/> FQDN MAC IP	POWER	STATUS	OWNER TAGS	POOL NOTE	ZONE SPACES	FABRIC VLAN	CORES ARCH	RAM	DISKS	STORAGE
<input type="checkbox"/> Ready 3 machines										
<input type="checkbox"/> server5.maas 172.16.11.4 (PXE) (+1)	Off Amt	Ready	- -	default	default	fabric-0 Default VL...	4 amd64	32 GIB	2	248.1 GB
<input type="checkbox"/> server4.maas 172.16.11.3 (PXE) (+1)	Off Amt	Ready	- -	default	default	fabric-0 Default VL...	4 amd64	32 GIB	2	240.1 GB
<input type="checkbox"/> server3.maas 172.16.11.2 (PXE) (+1)	Off Amt	Ready	- -	default	default	fabric-0 Default VL...	4 amd64	32 GIB	2	240.1 GB
<input type="checkbox"/> Deployed 2 machines										
<input type="checkbox"/> server2.maas 172.16.15.7 (PXE)	On Amt	Ubuntu 22.04 LTS	cloud -	default	default	fabric-0 Default VL...	4 amd64	16 GIB	2	240.1 GB
<input type="checkbox"/> server1.maas 172.16.15.0 (PXE)	On Amt	Ubuntu 22.04 LTS	cloud -	default	default	fabric-0 Default VL...	4 amd64	12 GIB	1	128 GB




Django administration

WELCOME, **CLOUD**. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#) 


Site administration

AUTHENTICATION AND AUTHORIZATION

Groups + Add  Change

Users + Add Change

TASKS

Tasks + Add  Change

Recent actions

My actions

None available



3. Explique como foi feita a implementação manual da aplicação Django e banco de dados.

CheckPoint 2

1. Dê um print da tela do Dashboard do MAAS com as 3 Máquinas e seus respectivos IPs.
2. Dê um print da aplicação Django, provando que você está conectado ao server 2.
3. Dê um print da aplicação Django, provando que você está conectado ao server 3.

Machines 5 machines available

Add hardware

Take action

5 Machines

1 Resource pool

1 Tag

Filters

Search

Group by status

<input type="checkbox"/> FQDN MAC IP	POWER	STATUS	OWNER TAGS	POOL NOTE	ZONE SPACES	FABRIC VLAN	CORES ARCH	RAM	DISKS	STORAGE
<input type="checkbox"/> Ready 2 machines										
<input type="checkbox"/> server5.maas 172.16.11.4 (PXE) (+1)	Off Amt	Ready	- -	default	default	fabric-0 Default VL...	4 amd64	32 GIB	2	248.1 GB
<input type="checkbox"/> server4.maas 172.16.11.3 (PXE) (+1)	Off Amt	Ready	- -	default	default	fabric-0 Default VL...	4 amd64	32 GIB	2	240.1 GB
<input type="checkbox"/> Deployed 3 machines										
<input type="checkbox"/> server3.maas 172.16.15.8 (PXE)	On Amt	Ubuntu 22.04 LTS	cloud -	default	default	fabric-0 Default VL...	4 amd64	32 GIB	2	240.1 GB
<input type="checkbox"/> server2.maas 172.16.15.7 (PXE)	On Amt	Ubuntu 22.04 LTS	cloud -	default	default	fabric-0 Default VL...	4 amd64	16 GIB	2	240.1 GB
<input type="checkbox"/> server1.maas 172.16.15.0 (PXE)	On Amt	Ubuntu 22.04 LTS	cloud -	default	default	fabric-0 Default VL...	4 amd64	12 GIB	1	128 GB

Activities

Tilix

set 15 11:38

en

1/1

+

Tilix: ubuntu@server2: ~

1/1

+

Tilix: ubuntu@server2: ~

localhost:8001/admin/

Django administration

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Site administration

AUTHENTICATION AND AUTHORIZATION

Groups [+ Add](#) [Change](#)

Users [+ Add](#) [Change](#)

TASKS

Tasks [+ Add](#) [Change](#)

Recent actions

My actions

None available

1: ubuntu@server2: ~

cloud@cloud:~\$ ssh ubuntu@server2

Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-83-generic x86_64)

* Documentation: <https://help.ubuntu.com>

* Management: <https://landscape.canonical.com>

* Support: <https://ubuntu.com/advantage>

System information as of Fri Sep 15 14:37:30 UTC 2023

System load: 0.26025390625 Temperature: 51.0 C

Usage of /: 7.4% of 108.99GB Processes: 138

Memory usage: 1% Users logged in: 0

Swap usage: 0% IPv4 address for eth0: 172.16.15.7

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s just raised the bar for easy, resilient and secure K8s cluster deployment.

<https://ubuntu.com/engage/secure-kubernetes-at-the-edge>

Expanded Security Maintenance for Applications is not enabled.

6 updates can be applied immediately.

To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.

See <https://ubuntu.com/esm> or run: sudo pro status

Last login: Fri Sep 15 14:32:27 2023 from 172.16.0.3

ubuntu@server2:~\$

Activities

Tilix

set 15 11:40

en

localhost:8001/admin/

Django administration

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Site administration

AUTHENTICATION AND AUTHORIZATION

Groups

+ Add

Change

Users

+ Add

Change

TASKS

Tasks

+ Add

Change

Recent actions

My actions

None available

Tilix: ubuntu@server3: ~

1/1

+

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1: ubuntu@server3: ~

* Support: <https://ubuntu.com/advantage>

System information as of Fri Sep 15 02:39:00 PM UTC 2023

System load: 0.0341796875

Temperature: 45.0 C

Usage of /: 32.3% of 53.21GB

Processes: 203

Memory usage: 12%

Users logged in: 0

Swap usage: 0%

IPv4 address for enp3s0: 172.16.0.3

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s just raised the bar for easy, resilient and secure K8s cluster deployment.

<https://ubuntu.com/engage/secure-kubernetes-at-the-edge>

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

1 additional security update can be applied with ESM Apps.
Learn more about enabling ESM Apps service at <https://ubuntu.com/esm>

Last login: Fri Sep 15 14:37:21 2023 from 10.102.29.222

cloud@cloud:~\$ ssh ubuntu@server3

Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-83-generic x86_64)

* Documentation: <https://help.ubuntu.com>

* Management: <https://landscape.canonical.com>

* Support: <https://ubuntu.com/advantage>

System information as of Fri Sep 15 14:40:14 UTC 2023

System load: 0.03564453125

Temperature: 46.0 C

Usage of /: 10.5% of 108.99GB

Processes: 125

Memory usage: 1%

Users logged in: 0

Swap usage: 0%

IPv4 address for eth0: 172.16.15.8

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s just raised the bar for easy, resilient and secure K8s cluster deployment.

<https://ubuntu.com/engage/secure-kubernetes-at-the-edge>

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See <https://ubuntu.com/esm> or run: `sudo pro status`

Last login: Fri Sep 15 14:23:18 2023 from 172.16.0.3

ubuntu@server3:~\$

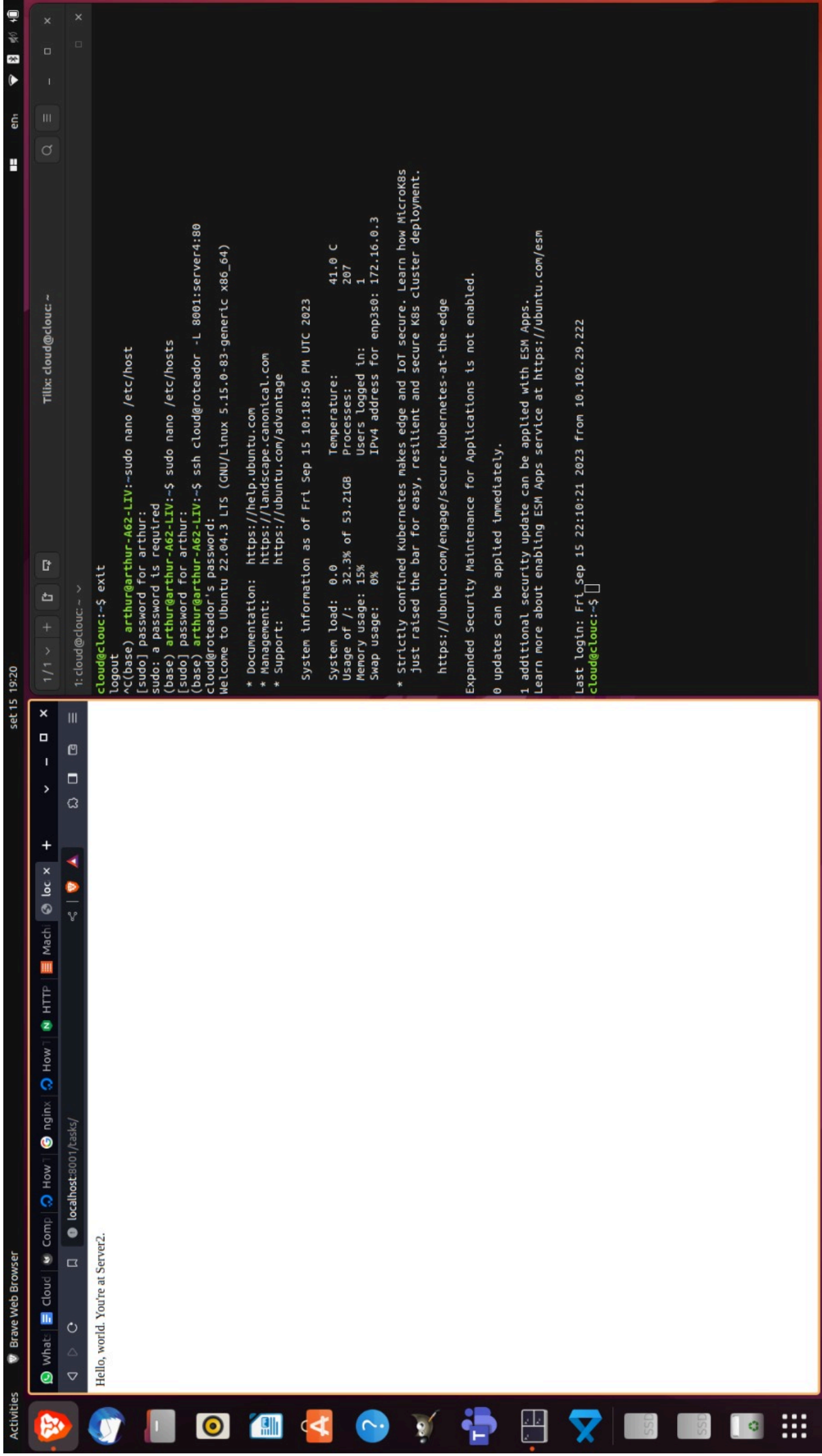
4. Explique qual diferença entre instalar manualmente a aplicação Django e utilizando o Ansible.

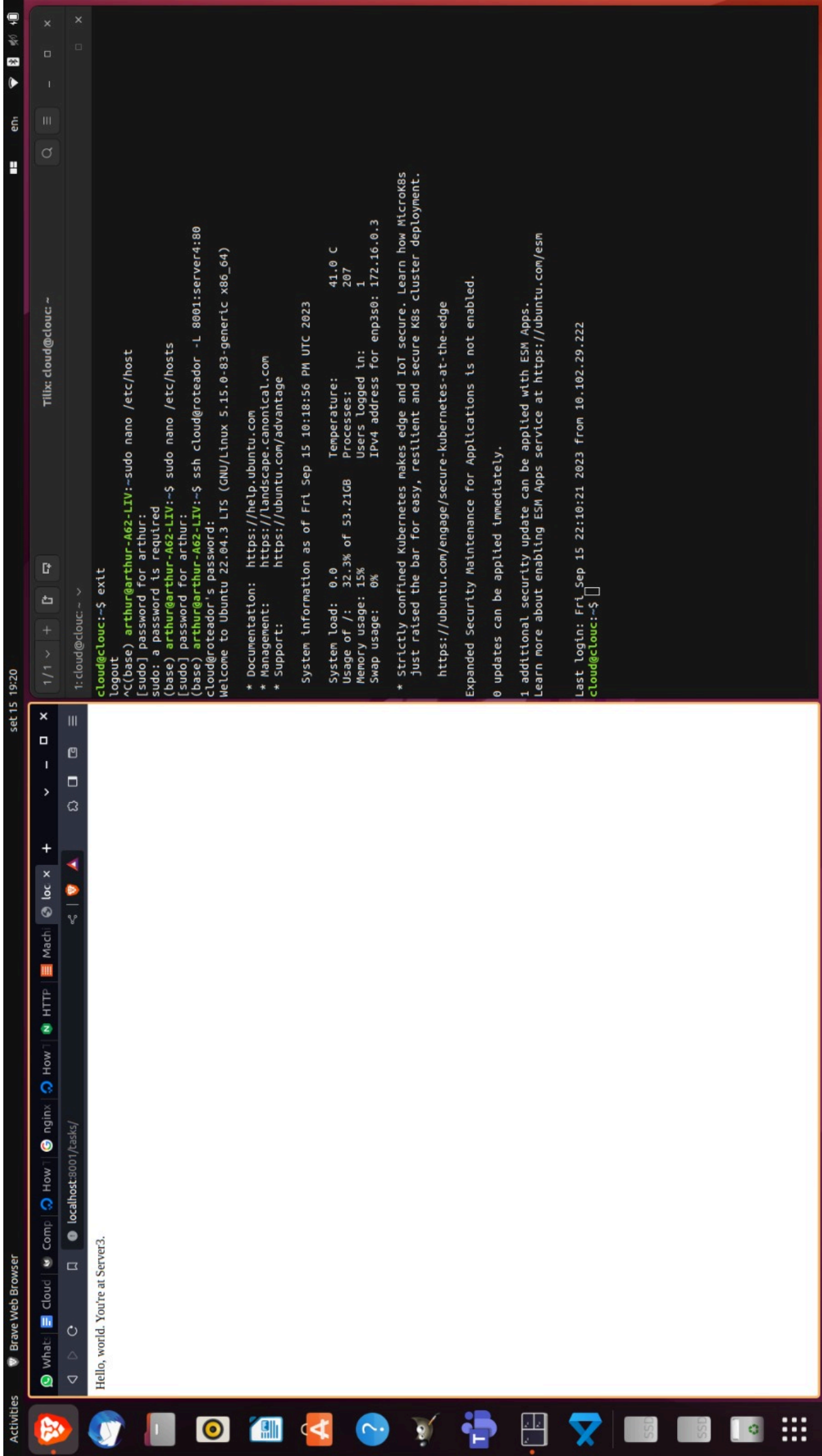
CheckPoint 3

1. Dê um print da tela do Dashboard do MAAS com as 4 Máquinas e seus respectivos IPs.
2. Altere o conteúdo da mensagem contida na função index do arquivo `tasks/views.py` de cada server para distinguir ambos os servers.
3. Faça um GET request para o path que voce criou em `urls.py` para o Nginx e tire 2 prints das respostas de cada request, provando que você está conectado ao server 4, que é o Proxy Reverso e que ele bate cada vez em um server diferente Server2 e Server3.

CheckPoint 4

1. Dê um print da tela do Dashboard do MAAS com as Máquinas e seus respectivos IPs.
2. Dê um print de tela do comando `"juju status"` depois que o Grafana estiver "active".
3. Dê um print da tela do Dashboard do Grafana com o Prometheus aparecendo como source.





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Log out

Machines

5 machines available

Add hardware ⌵

Take action ⌵

5 Machines

1 Resource pool

1 Tag

Filters ⌵

Search

🔍

Group by status ⌵

<input type="checkbox"/> FQDN ⌵ MAC IP	POWER	STATUS	OWNER TAGS	POOL NOTE	ZONE SPACES	FABRIC VLAN	CORES ARCH	RAM	DISKS	STORAGE
<input type="checkbox"/> Ready 2 machines										—
<input type="checkbox"/> server5.maas 172.16.11.4 (PXE) (+1)	⏻ Off Amt	Ready	- -	default	default	fabric-0 Default VL...	4 amd64	32 GiB	2	248.1 GB
<input type="checkbox"/> server4.maas 172.16.11.3 (PXE)	⏻ Off Amt	Ready	- -	default	default	fabric-0 Default VL...	4 amd64	32 GiB	2	240.1 GB
<input type="checkbox"/> Deployed 3 machines										—
<input type="checkbox"/> server3.maas 172.16.15.33 (PXE)	🟢 On Amt	Ubuntu 20.04 LTS	cloud -	default	default	fabric-0 Default VL...	4 amd64	32 GiB	2	240.1 GB
<input type="checkbox"/> server2.maas 172.16.15.31 (PXE)	🟢 On Amt	Ubuntu 22.04 LTS	cloud -	default	default	fabric-0 Default VL...	4 amd64	16 GiB	2	240.1 GB
<input type="checkbox"/> server1.maas 172.16.15.10 (PXE)	🟢 On Amt	Ubuntu 22.04 LTS	cloud -	default	default	fabric-0 Default VL...	4 amd64	12 GiB	1	128 GB

cloud MAAS: 3.3.4

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16:44


```
cloud@cloud:~$ juju status --relations
Model    Controller  Cloud/Region  Version  SLA          Timestamp
default  main        maas          2.9.44   unsupported   20:15:27Z

App              Version  Status  Scale  Charm          Channel  Rev  Exposed  Message
grafana          active   1       grafana          7       yes   Ready
prometheus2     active   1       prometheus2     12      no    Ready

Unit              Workload  Agent  Machine  Public address  Ports              Message
grafana/6*        active    idle   20       172.16.15.33    3000/tcp           Ready
prometheus2/10*   active    idle   18       172.16.15.31    9090/tcp,12321/tcp Ready

Machine  State    Address      Inst id  Series  AZ        Message
18       started  172.16.15.31 server2  jammy   default   Deployed
20       started  172.16.15.33 server3  focal   default   Deployed

Relation provider      Requirer          Interface      Type      Message
prometheus2:grafana-source grafana:grafana-source grafana-source regular
```

cloud@cloud:~\$ |

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Google Age

Cloud - Rot

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Games - Ex

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Inseguro | 10.103.0.27:3000/connections/datasources

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Home > Connections > Data sources

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🔗 Connections

Add new connection

Data sources

Data sources

+ Add new data source

View and manage your connected data source connections

🔍 Search by name or type

⌵ Sort by A-Z ▾

🔥

prometheus2 - Juju generated source

Prometheus | http://172.16.15.31:9090

🧩 Build a dashboard

🔗 Explore

10.103.0.27:3000/connections/datasources/edit/2857619332

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17:18