

TeraFlow
SDN
by ETSI

SFT

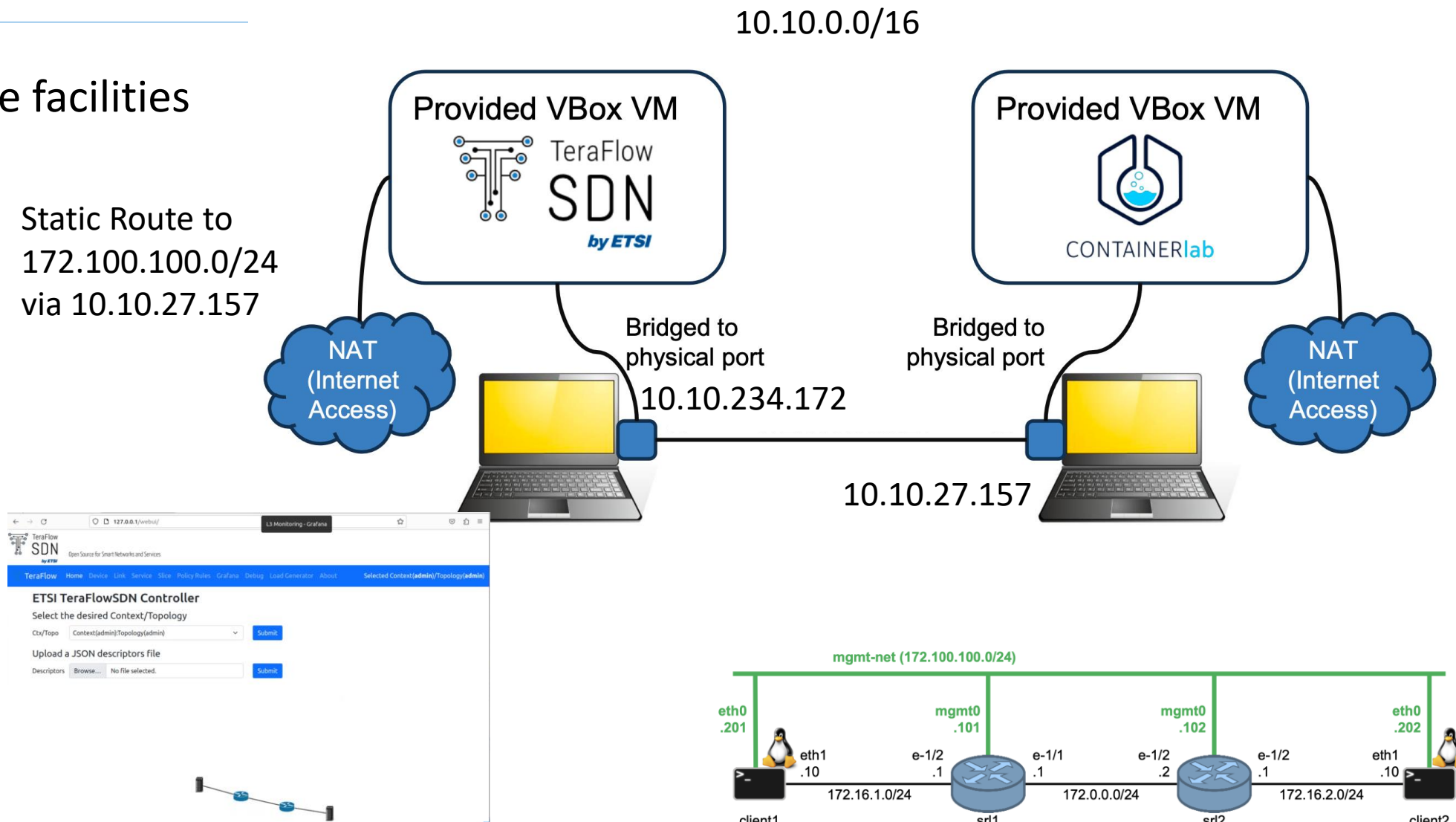
{SegmentationFaultTeam}

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21/06/2022

Our remote architecture

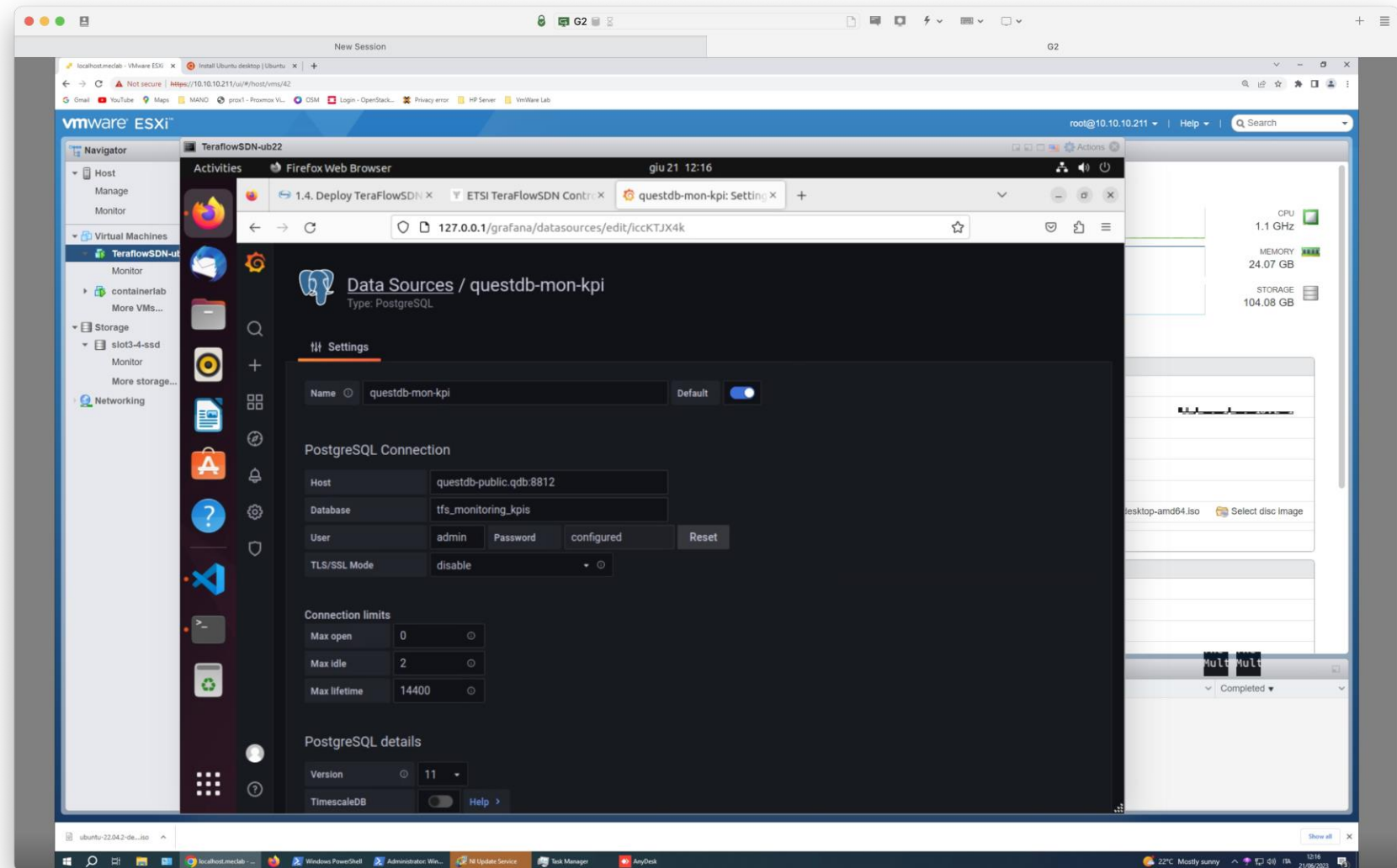
We used remote facilities



First fix to ~~DNS Segmentation~~ Resolution fault

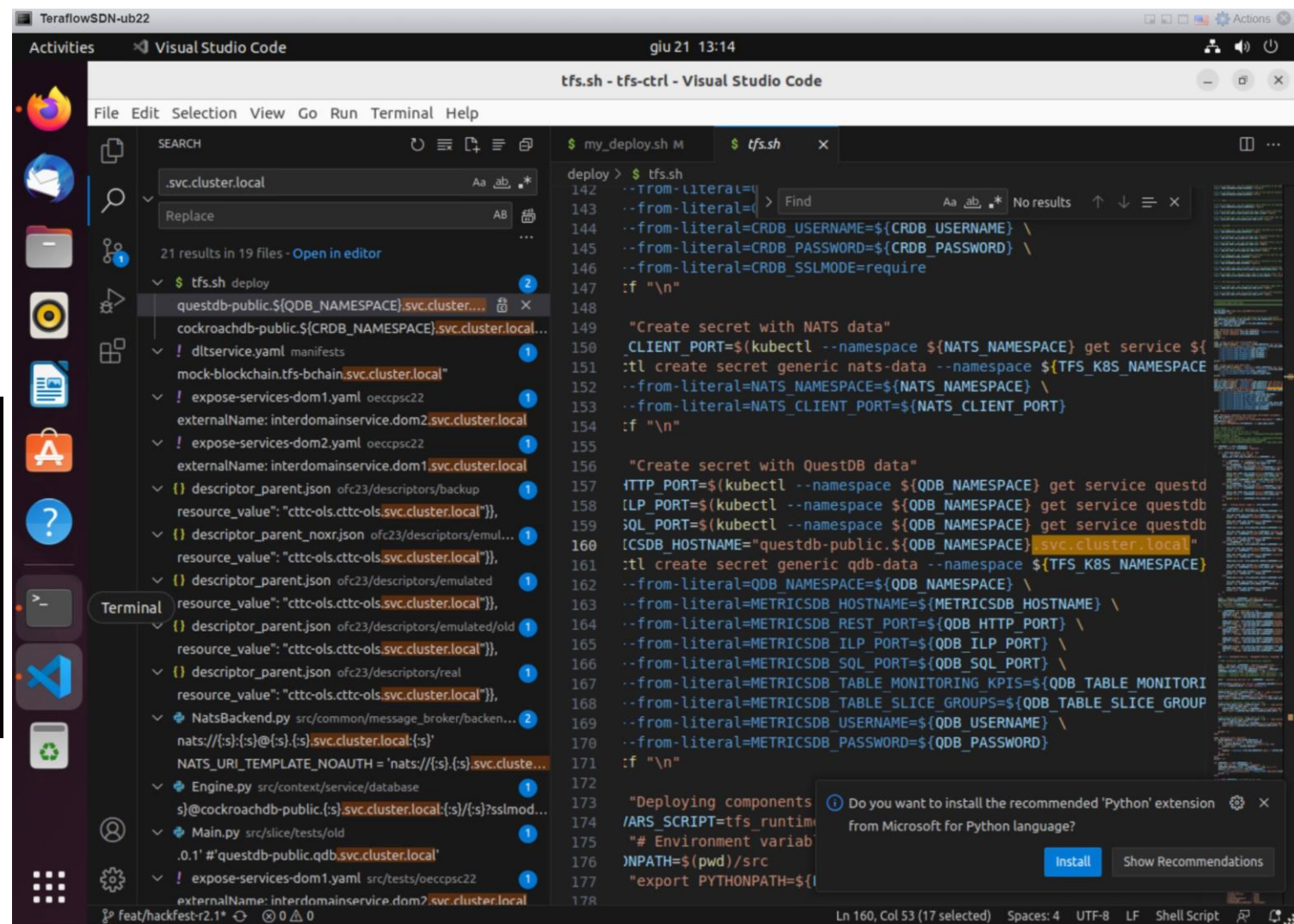
Grafana is now connected

No data incoming



A permanent solution to fix DNS

One word to find them,
One word to bring them all,
and in the darkness delete them

```

tfs.sh - tfs-ctrl - Visual Studio Code
File Edit Selection View Go Run Terminal Help
SEARCH
.svc.cluster.local
Replace
21 results in 19 files - Open in editor
$ tfs.sh deploy
questdb-public.${QDB_NAMESPACE}.svc.cluster.local
cockroachdb-public.${CRDB_NAMESPACE}.svc.cluster.local
! dltservice.yaml manifests
mock-blockchain.tfs-bchain.svc.cluster.local
! expose-services-dom1.yaml oeccpsc22
externalName: interdomainservice.dom2.svc.cluster.local
! expose-services-dom2.yaml oeccpsc22
externalName: interdomainservice.dom1.svc.cluster.local
! descriptor_parent.json ofc23/descriptors/backup
resource_value: "cttc-ols.cttc-ols.svc.cluster.local"},
! descriptor_parent_noxr.json ofc23/descriptors/emul...
resource_value: "cttc-ols.cttc-ols.svc.cluster.local"},
! descriptor_parent.json ofc23/descriptors/emulated
resource_value: "cttc-ols.cttc-ols.svc.cluster.local"},
! descriptor_parent.json ofc23/descriptors/emulated/old
resource_value: "cttc-ols.cttc-ols.svc.cluster.local"},
! descriptor_parent.json ofc23/descriptors/real
resource_value: "cttc-ols.cttc-ols.svc.cluster.local"},
! NatsBackend.py src/common/message_broker/backen...
nats://{s}:{s}@{s}.svc.cluster.local:{s}
NATS_URI_TEMPLATE_NOAUTH = 'nats://{s}:{s}.svc.cluste...
! Engine.py src/context/service/database
s}@cockroachdb-public.{s}.svc.cluster.local:{s}/f:{s}?sslmod...
! Main.py src/slice/tests/old
.0.1' # questdb-public.qdb.svc.cluster.local'
! expose-services-dom1.yaml src/tests/oecpcsc22
externalName: interdomainservice.dom2.svc.cluster.local

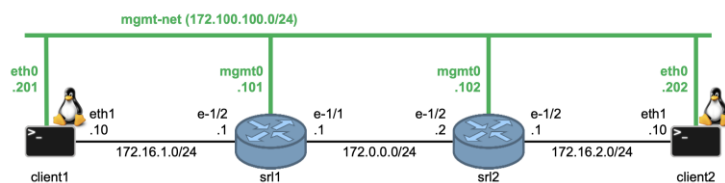
Terminal
$ my_deploy.sh M $ tfs.sh x
deploy > $ tfs.sh
142 --from-literal=
143 --from-literal=
144 --from-literal=CRDB_USERNAME=${CRDB_USERNAME} \
145 --from-literal=CRDB_PASSWORD=${CRDB_PASSWORD} \
146 --from-literal=CRDB_SSLMODE=require
147 :f "\n"
148
149 "Create secret with NATS data"
150 _CLIENT_PORT=$(kubectl --namespace ${NATS_NAMESPACE} get service ${
151 :tl create secret generic nats-data --namespace ${TFS_K8S_NAMESPACE
152 --from-literal=NATS_NAMESPACE=${NATS_NAMESPACE} \
153 --from-literal=NATS_CLIENT_PORT=${NATS_CLIENT_PORT}
154 :f "\n"
155
156 "Create secret with QuestDB data"
157 HTTP_PORT=$(kubectl --namespace ${QDB_NAMESPACE} get service questd
158 ILP_PORT=$(kubectl --namespace ${QDB_NAMESPACE} get service questdb
159 SQL_PORT=$(kubectl --namespace ${QDB_NAMESPACE} get service questdb
160 [CSDB_HOSTNAME="questdb-public.${QDB_NAMESPACE}.svc.cluster.local"
161 :tl create secret generic qdb-data --namespace ${TFS_K8S_NAMESPACE}
162 --from-literal=QDB_NAMESPACE=${QDB_NAMESPACE} \
163 --from-literal=METRICSDB_HOSTNAME=${METRICSDB_HOSTNAME} \
164 --from-literal=METRICSDB_REST_PORT=${QDB_HTTP_PORT} \
165 --from-literal=METRICSDB_ILP_PORT=${QDB_ILP_PORT} \
166 --from-literal=METRICSDB_SQL_PORT=${QDB_SQL_PORT} \
167 --from-literal=METRICSDB_TABLE_MONITORING_KPIS=${QDB_TABLE_MONITORI
168 --from-literal=METRICSDB_TABLE_SLICE_GROUPS=${QDB_TABLE_SLICE_GROUP
169 --from-literal=METRICSDB_USERNAME=${QDB_USERNAME} \
170 --from-literal=METRICSDB_PASSWORD=${QDB_PASSWORD}
171 :f "\n"
172
173 "Deploying components
174 /ARS_SCRIPT=tfs_runtime
175 # Environment variab
176 NPATH=$(pwd)/src
177 "export PYTHONPATH=${I
178

Do you want to install the recommended 'Python' extension
from Microsoft for Python language?
# Environment variab
NPATH=$(pwd)/src
"export PYTHONPATH=${I
Install Show Recommendations
Ln 160, Col 53 (17 selected) Spaces: 4 UTF-8 LF Shell Script

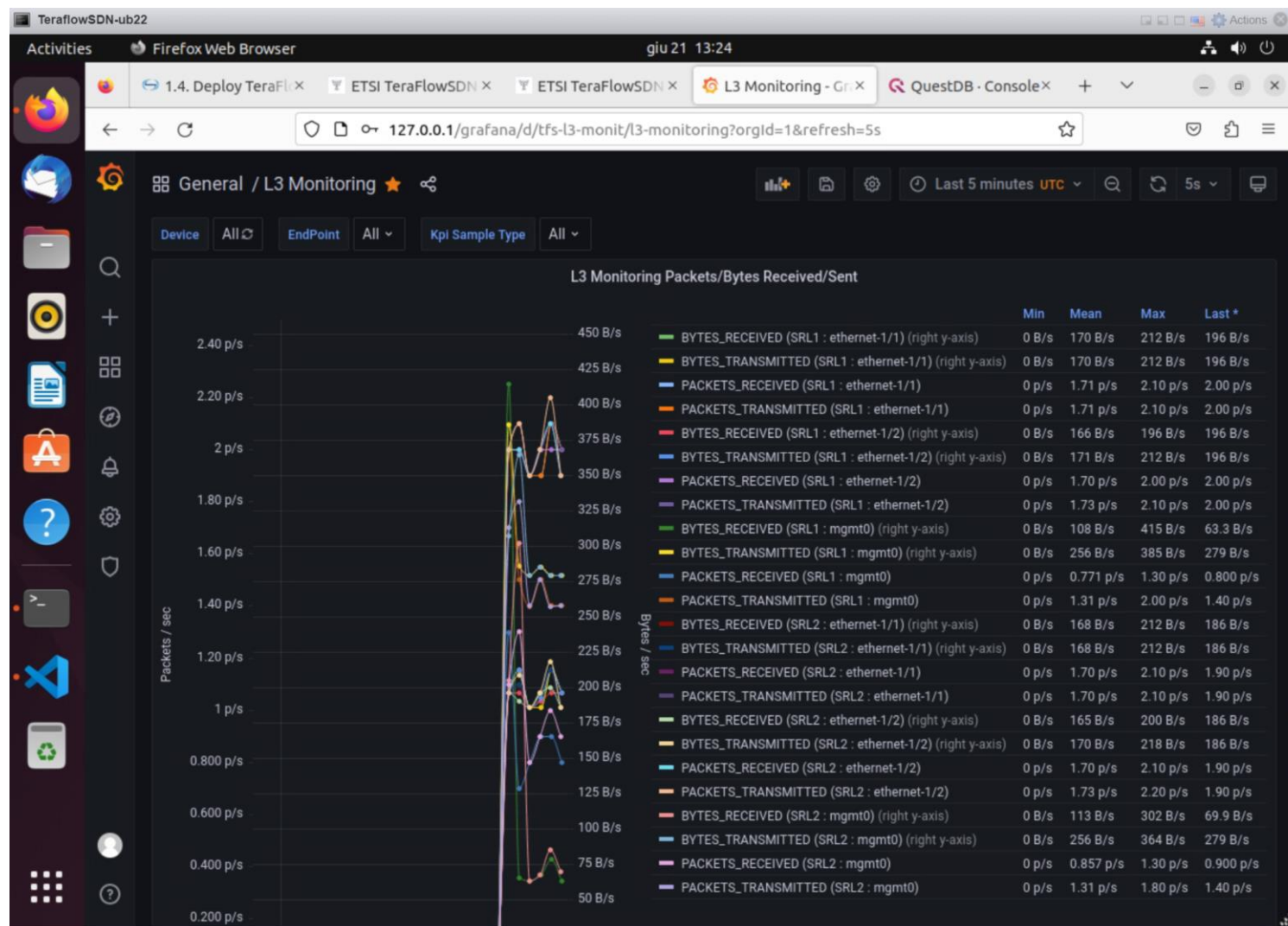
```


Data is coming {NoSegmentationFaultFoundException}

We start collecting metrics running PING

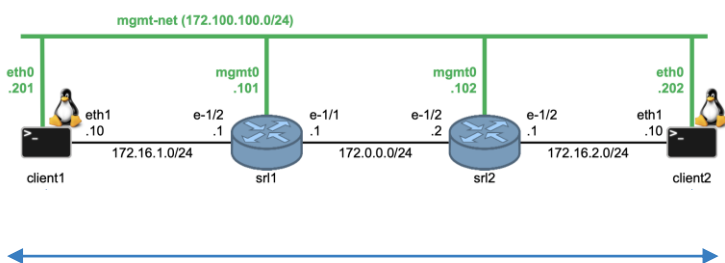


ICMP

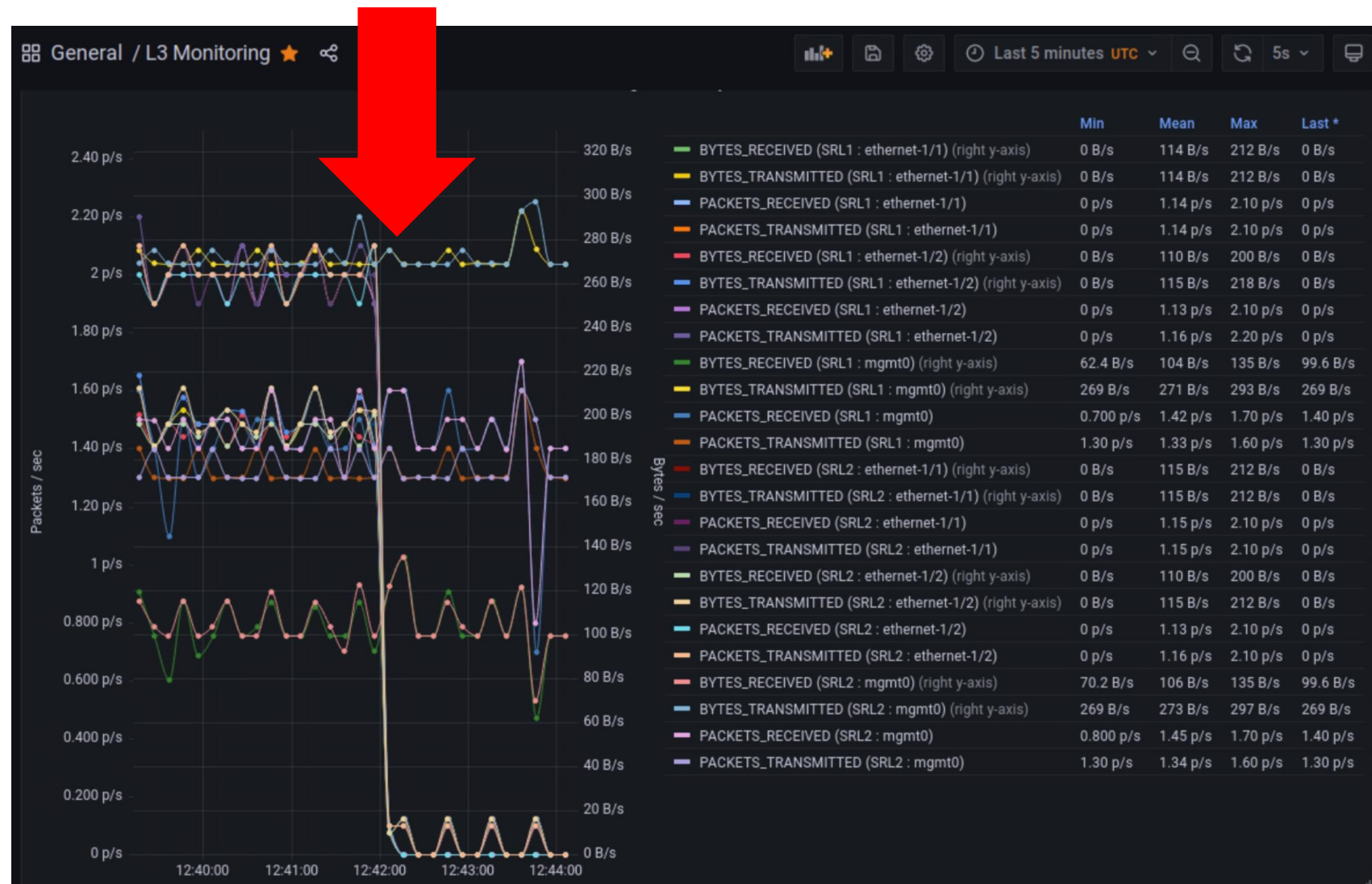


Data is coming {NoSegmentationFaultFoundException}

Then stop pinging



ICMP



Please take care of MTU{PacketSegmentationFault}

We found a MTU mismatch.

- Client1 and Client2 have MTU set to 9500
- Router1 and Router2 have MTU set to 1500

We set the right MTU into Client1 and Client2

Final experiments {NoSegmentationFileFault}

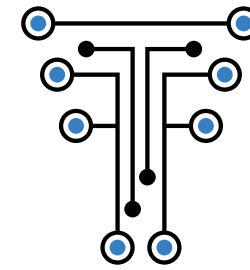
Then we do our production-grade experiments

```
bash-5.0# truncate -s 500M testfile
```



```
bash-5.0# curl 172.16.1.10:30000/testfile > mytf
```

```
% Total    % Received % Xferd  Average Speed   Time    Time     Time    Current
   3    500M    3 17.4M    0     0    622k    0    0:13:42  0:00:28  0:13:14  692k
```

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Thank You!