



Beginner's Quest :

Satellite

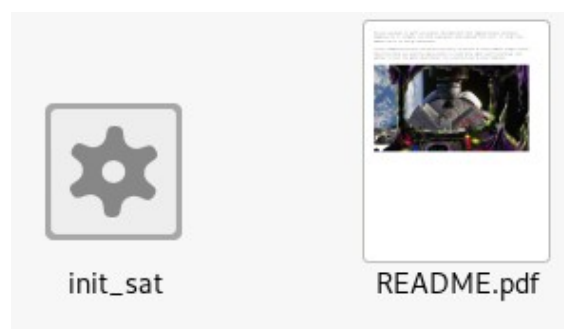
Satellite **task** networking [+]

Placing your ship in range of the Osmiums, you begin to receive signals. Hoping that you are not detected, because it's too late now, you figure that it may be worth finding out what these signals mean and what information might be "borrowed" from them. Can you hear me Captain Tim? Floating in your tin can there? Your tin can has a wire to ground control?

Find something to do that isn't staring at the Blue Planet.

[\[📎 Download Attachment\]](#)

1. Download the attachment and extract it, you will see two files.



2. The « README.pdf » have this content.

On your way down to earth you almost collided with that communications satellite. Stepping out to inspect, you find some space junk labeled "init_sat". It looks like humans run it to set up satellites.

Is the communication with the satellite really as secure as those humans always claim? Could this help you read the space-static to learn more about earth creatures, and whether to join the party down there? You load init_sat on your terminal.



3. Running the binnary show us those information.

```
0ab6f7dbf2fbf (1)# ./init_sat
Hello Operator. Ready to connect to a satellite?
Enter the name of the satellite to connect to or 'exit' to quit
osmium
Establishing secure connection to osmium
satellite...
Welcome. Enter (a) to display config data, (b) to erase all data or (c) to disconnect
a
Username: brewtoot password: ***** 166.00 IS-19 2019/05/09 00:00:00
Swath 640km Revisit capacity twice daily, anywhere Resolution panchromatic: 30
cm multispectral: 1.2m Daily acquisition capacity: 220,000km² Remaining config dat
a written to: https://docs.google.com/document/d/14eYPluD_pi3824GAFanS29tWdTcKxP_XUxx7e303
-3E
```

Link :

https://docs.google.com/document/d/14eYPluD_pi3824GAFanS29tWdTcKxP_XUxx7e303-3E/edit

4. The link show us, a base64 decode it.

VXNlcm5hbWU6IHdpcmVzaGFyay1yb2NrcwpQYXNzd29yZDogc3Rhcnc25pZmZpbmchCg==

```
root@nexus:~# echo 'VXNlcm5hbWU6IHdpcmVzaGFyay1yb2NrcwpQYXNzd29yZDogc3Rhcnc25pZmZpbmchCg==' | base64 -d
Username: wireshark-rocks
Password: start-sniffing!
```

Not really useful... as password said, start-sniffing !

5. Using strace against the ELF, show us a connection, against an ipv4.

```
fbf (1)# strace ./init_sat
execve("./init_sat", ["/init_sat"], 0x7ffef17291e0 /* 46 vars */) = 0
brk(NULL)                               = 0x1e55000
access("/etc/ld.so.preload", R_OK)      = -1 ENOENT (Aucun fichier ou dossier de ce type)
```

```
getpeername(3, {sa_family=AF_INET, sin_port=htons(1337), sin_addr=inet_addr("34.76.101.29")}, [112->16]) = 0
getsockname(3, {sa_family=AF_INET, sin_port=htons(34818), sin_addr=inet_addr("192.168.1.101")}, [112->16]) = 0
```

IP/Port : 34.76.101.29 1337

6. Trying a netcat connection against this ip, show us the flag.

```
root@nexus:~# nc 34.76.101.29 1337
Welcome. Enter (a) to display config data, (b) to erase all data or (c) to disconnect
a
Username: brewtoot password: CTF{4efcc72090af28fd33a2118985541f92e793477f}      166.00 IS-19
2019/05/09 00:00:00 Swath 640km      Revisit capacity twice daily, anywhere Resolution panc
hromatic: 30cm multispectral: 1.2m      Daily acquisition capacity: 220,000km² Remaining
config data written to: https://docs.google.com/document/d/14eYPluD_pi3824GAFanS29tWdTcKxP
XUxx7e303-3E
```

Submit the flag for this task

CTF{4efcc72090af28fd33a211898554 ▶

Correct flag

Solved!

Flag : CTF{4efcc72090af28fd33a2118985541f92e793477f}