Dissect

The open-source framework for large-scale host investigations

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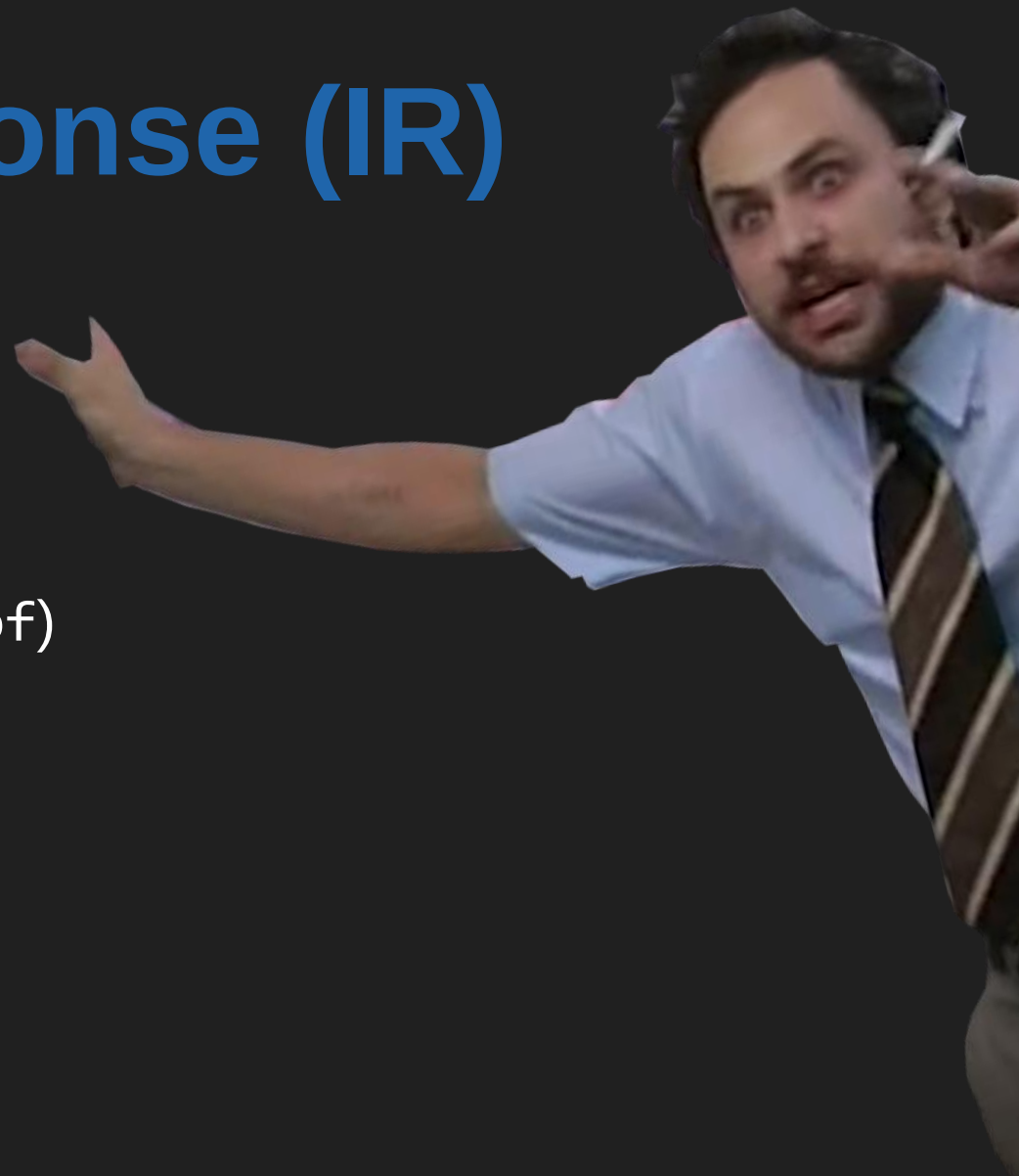
Incident Response (IR)



You're hacked, now what?

Year 2000:

- Look at processes (`ps`, `lsof`)
  - IRC bot (using BitchX)!
- `cron` jobs!
- `.bash_history`
- `auth.log` / `syslog` / `wtmp`

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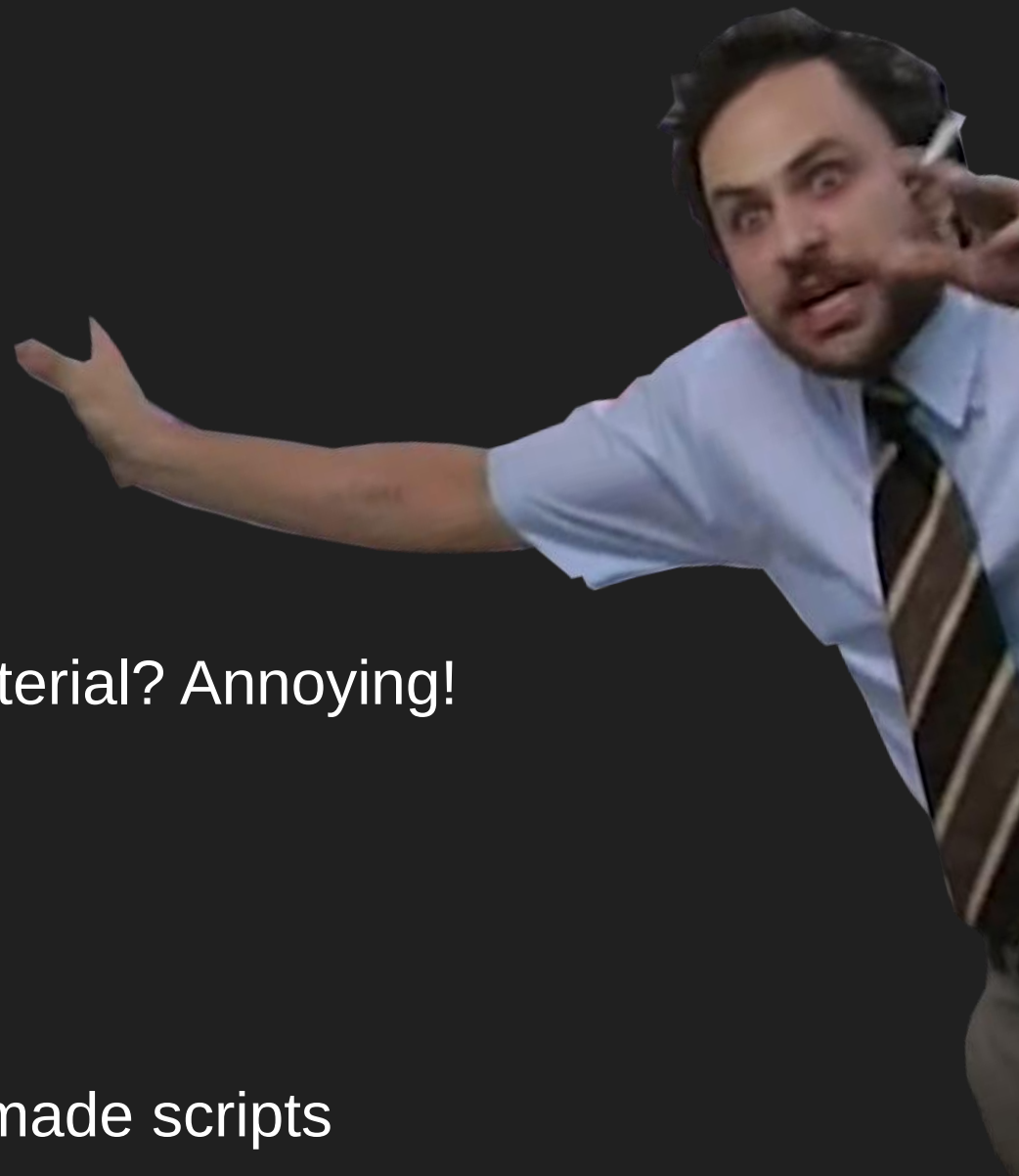
10 years ago



Investigating at scale? Hard!

Sophisticated IOCs? Difficult!

Non-standard investigative material? Annoying!

Large teams? Chaos!

Result: home dirs full of tailor-made scripts

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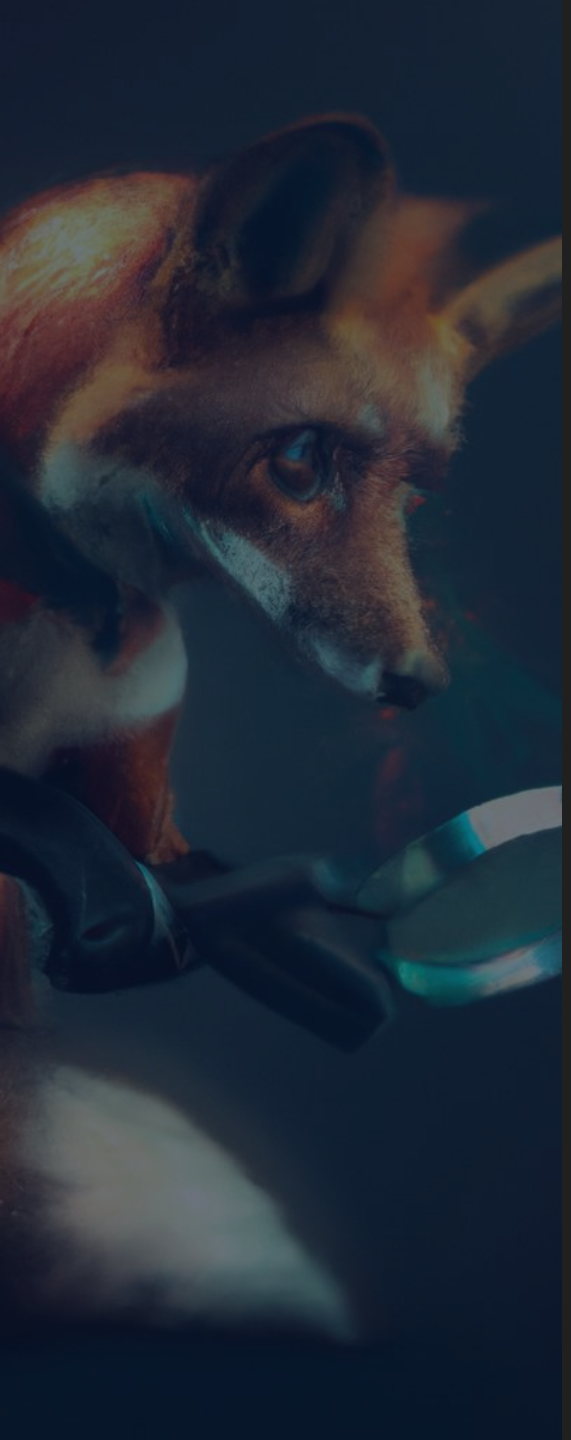

Our goal

Size doesn’t matter

No data beyond our reach

No actor beyond our reach

Team distribution doesn’t matter

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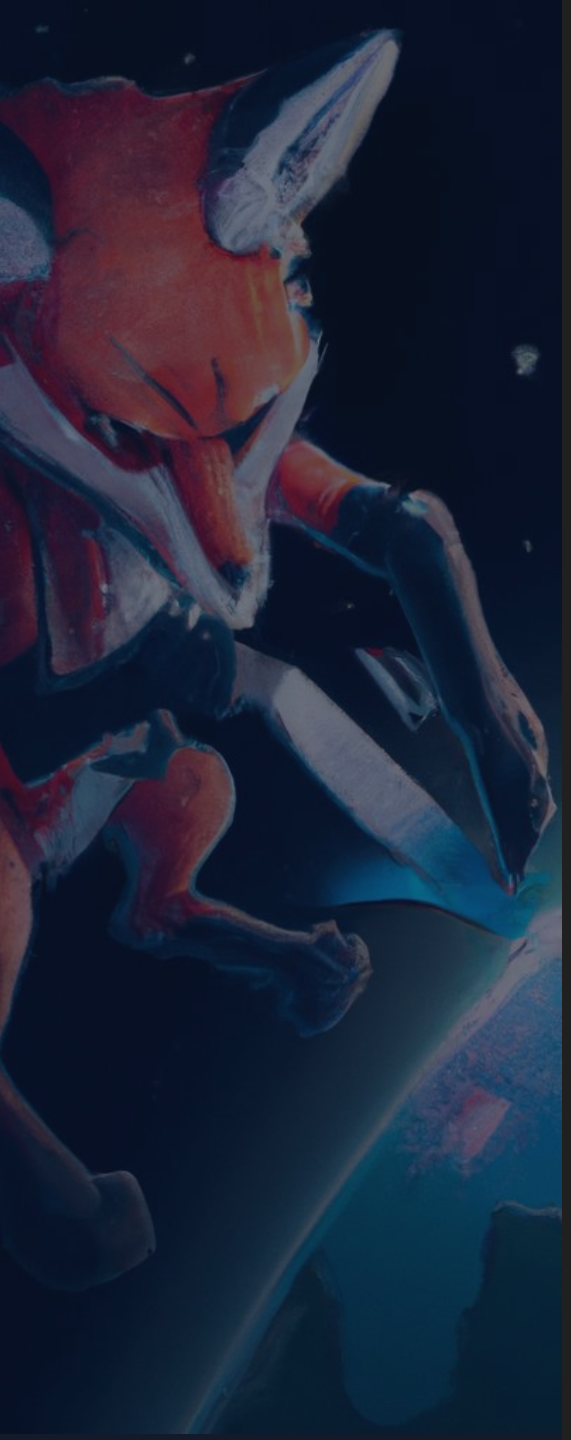

Introducing Dissect

A decade of development and IR

Modular Python framework with libraries and analyst tooling

Complex IR with ease and efficiency

We love it, we hope you do too!

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Size doesn’t matter

Shotgun approach in data collection

Streamlined data ingestion

Collect instead of interpret

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No data beyond our reach

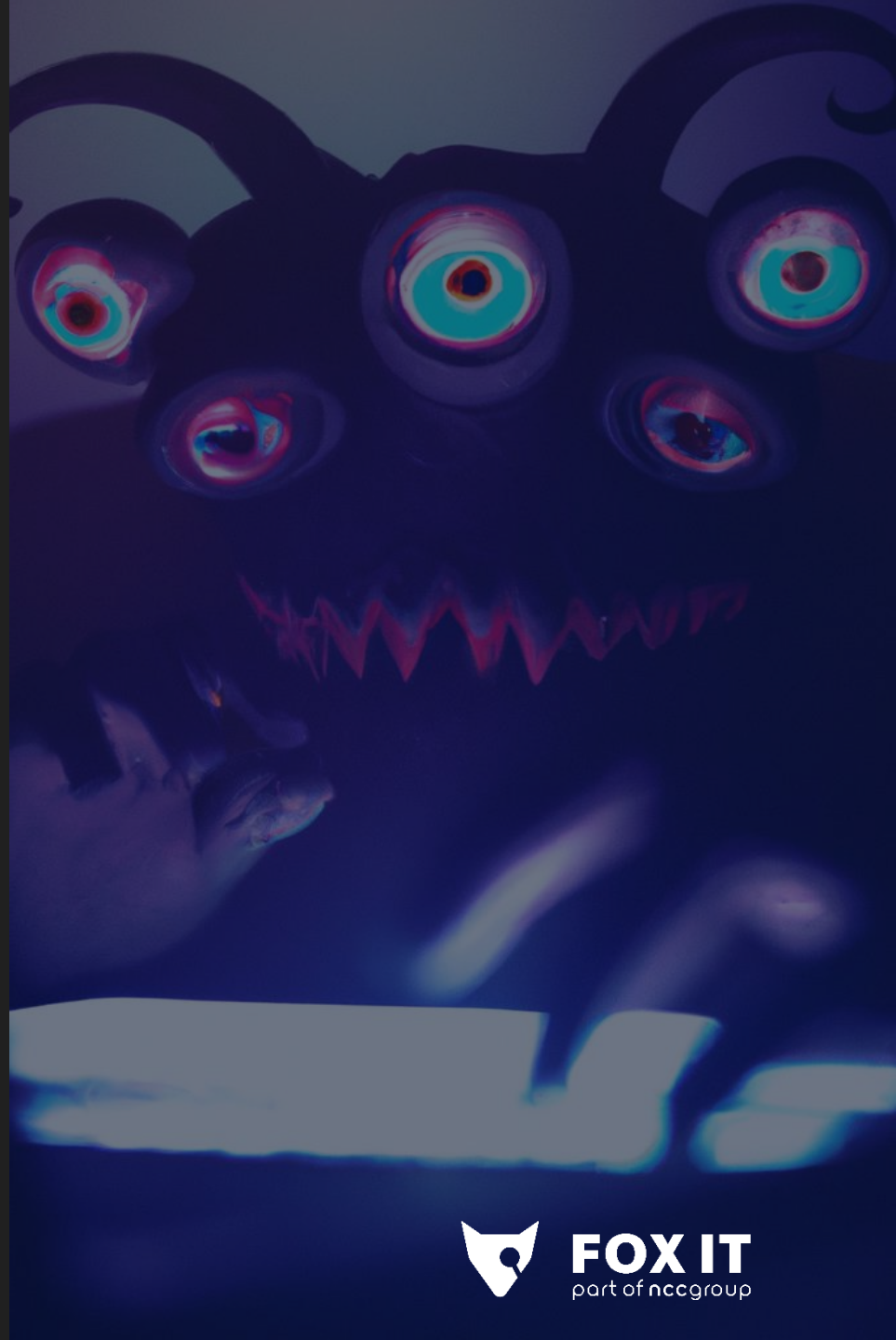
Analyse any type of data a case throws at us

Easily extendable for new data sources

- No change required to existing artefact parsers

Flexibility creates opportunities

- E.g. hypervisor data acquisition



No actor beyond our reach

Detect any technique an advanced threat actor throws at us

- Equation group, Turla, Lambert
- NTFS ACE persistence, post partition data, hidden filesystems

Possible without Dissect, but now effortlessly at scale from any source

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Team distribution doesn’t matter

Uniform tooling, usage and output

Use different workflows, whatever suits your style

Easily allow different skill levels to work together

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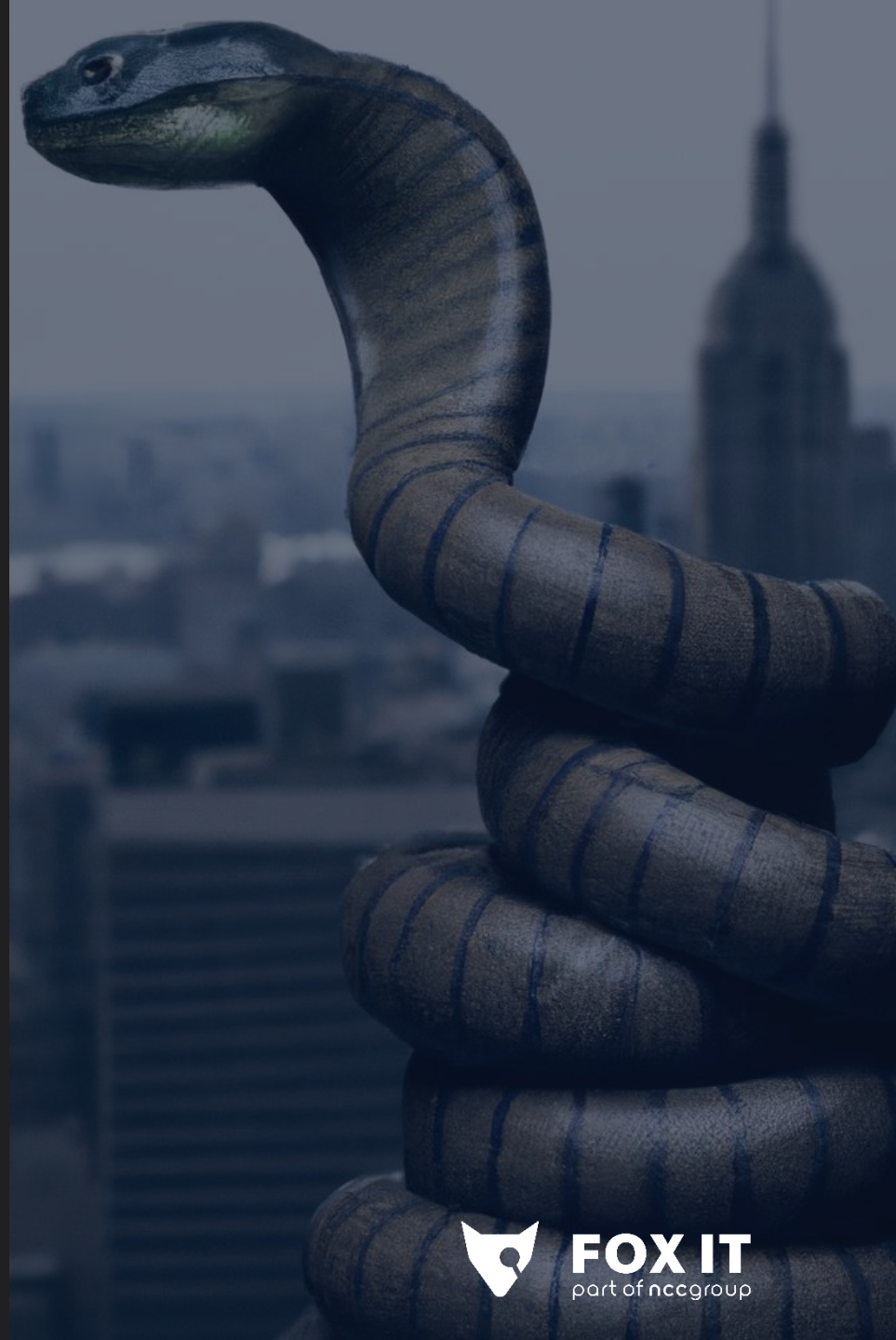
The details: What makes it tick?

Multiple abstraction layers

- Loader => Target
  - container/volume/fs implementation
    - abstract fs layer

Python `pathlib.Path` compatible implementation

- `TargetPath`



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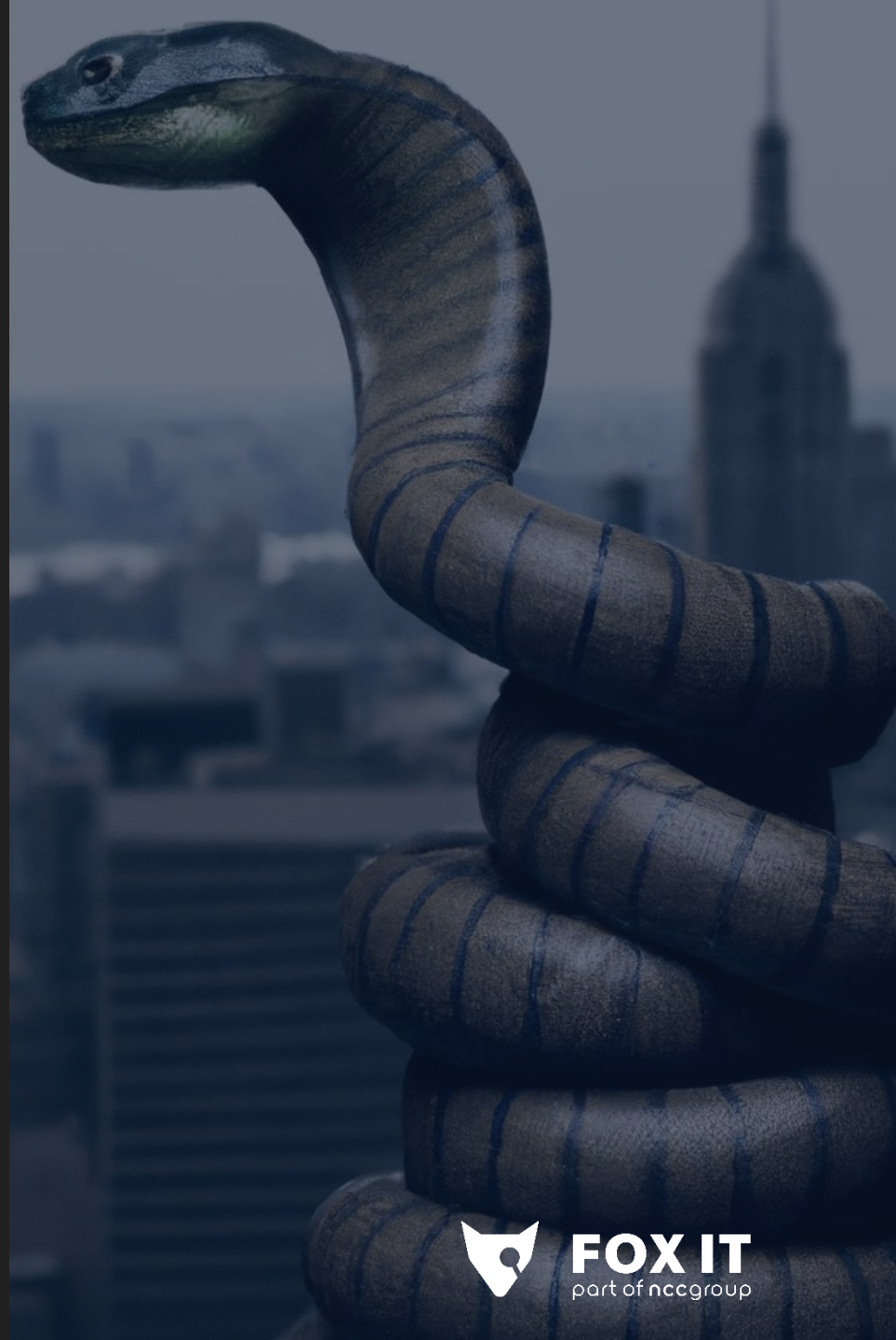
Useful tool:

- `target-shell`



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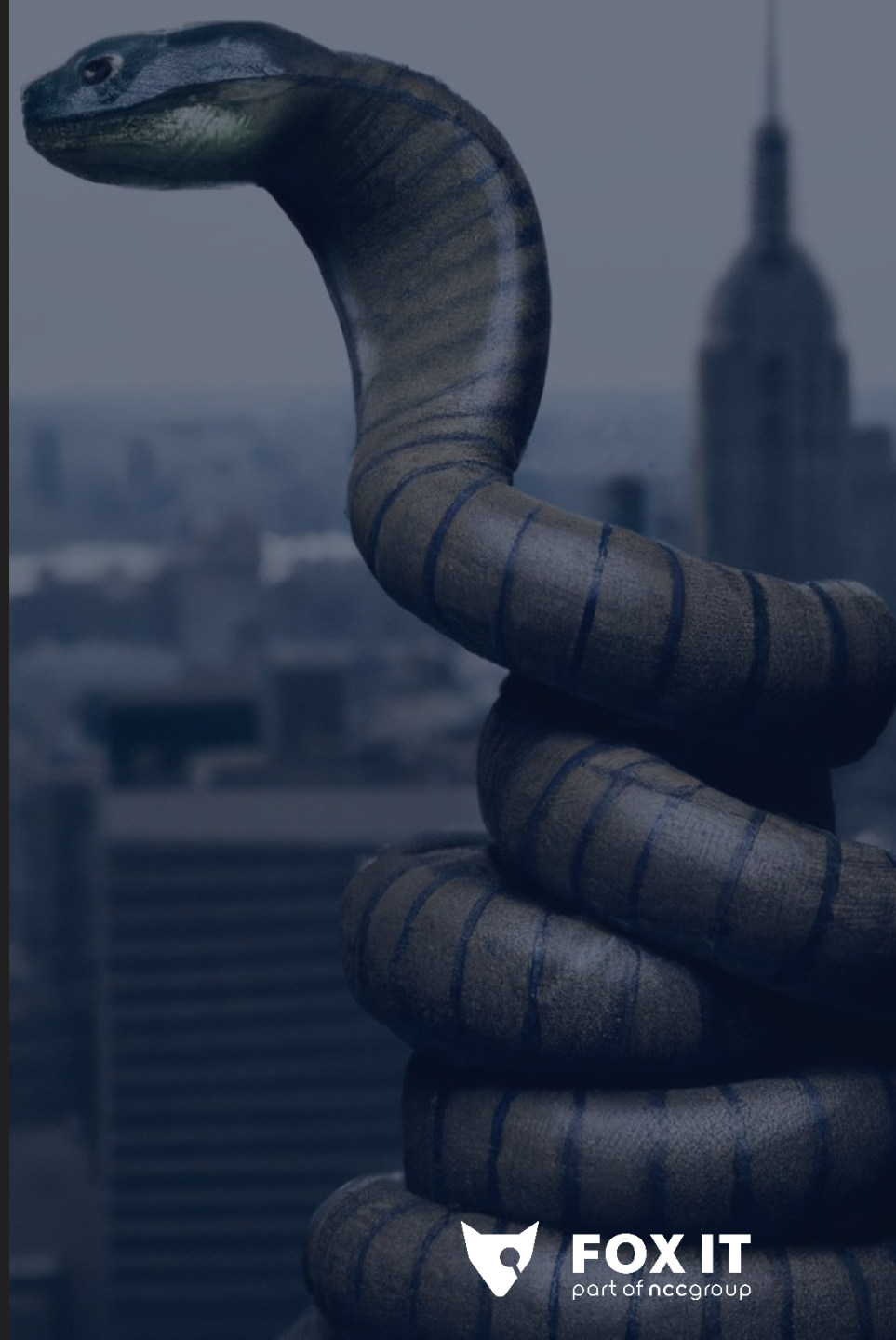
      - OS detection (plugin)

bsd
bsd/ios
bsd/openbsd
bsd/osx
bsd/freebsd

linux
linux/fortigate
linux/redhat
linux/esxi
linux/android
linux/suse
linux/debian
linux/debian/vyos



The details: What makes it tick?

Multiple abstraction layers

- Loader => Target
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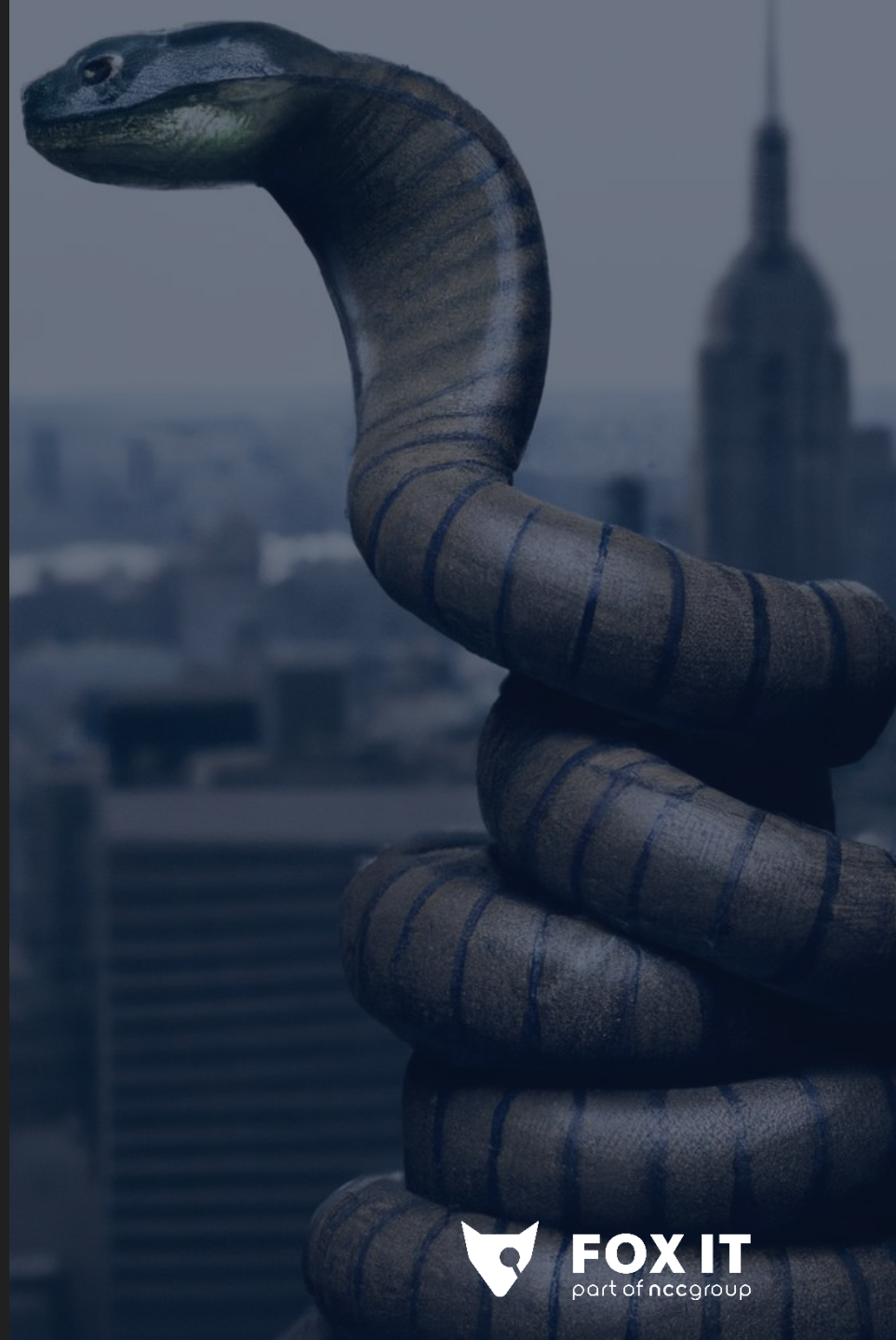
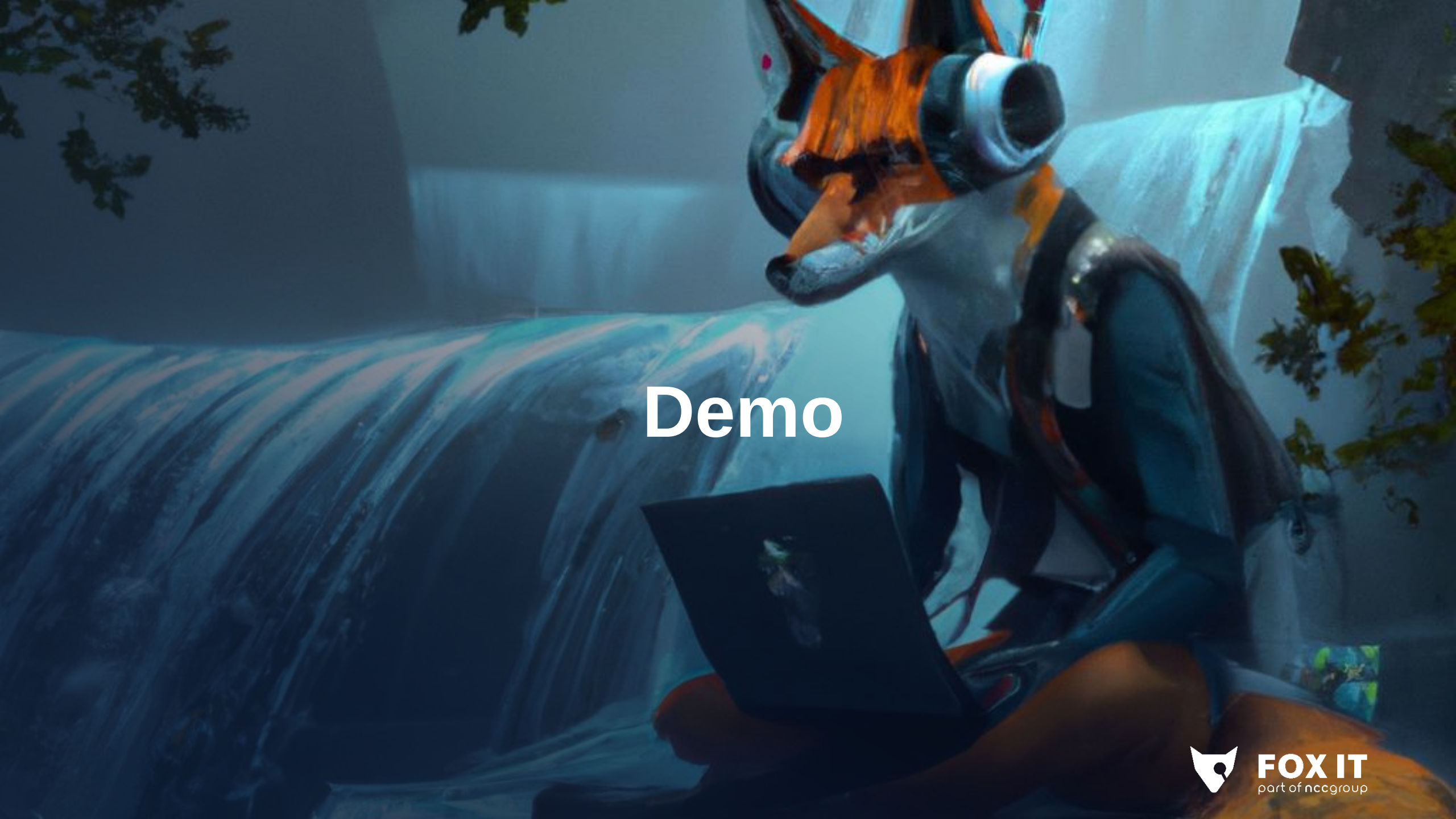
    - abstract fs layer
      - OS detection (plugin)
        - Plugins

Analysis plugins written on top

- Write once, run anywhere
- Internal: e.g. registry hive abstraction
- External: extract useful data to a structured format





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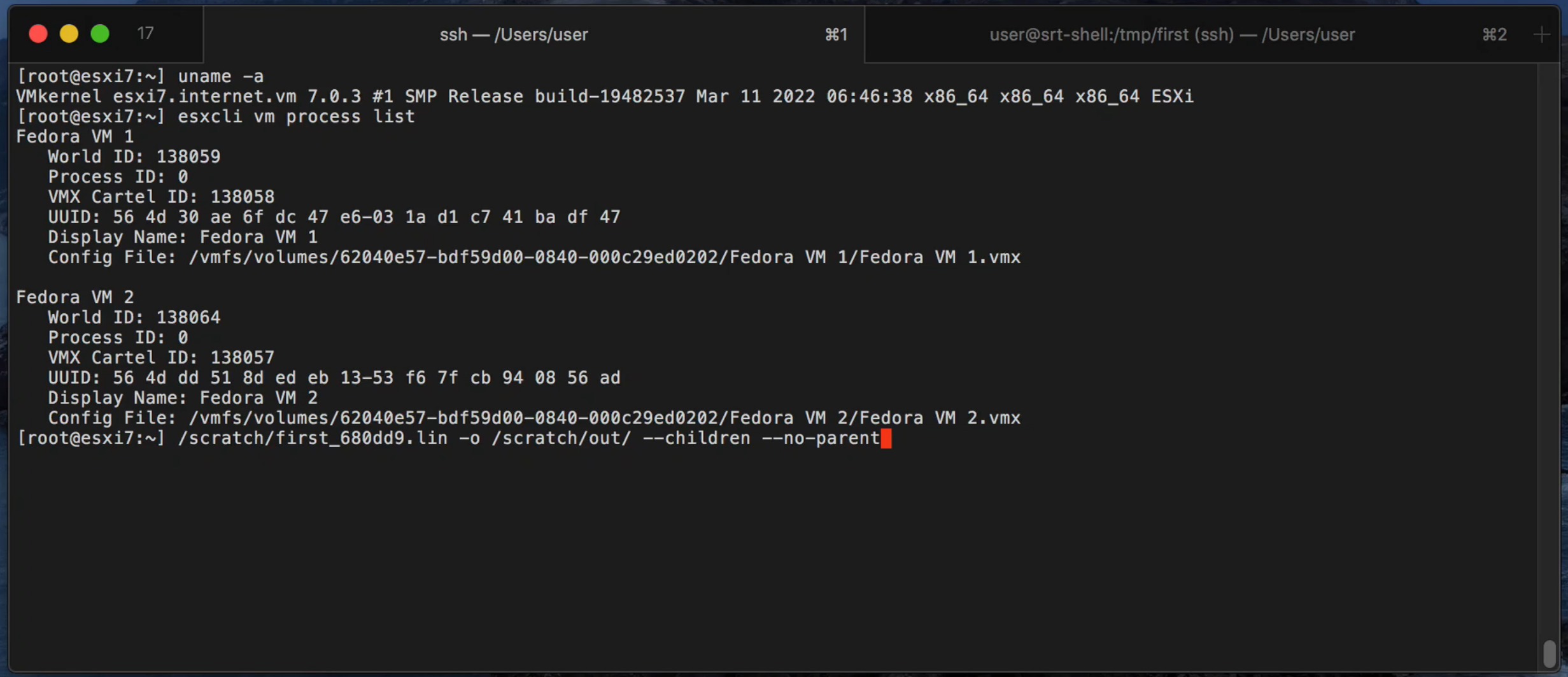
```
(v3.1) stefan.dereuver@lwp5 ~/fef/t $
```

```
(v3.1) stefan.dereuver@lwp5 ~/fef $
```

```
[fef] 1:bash*                                                    02 Dec 22 -- 10:44
```



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Why open-source?

For a more secure society

We’ve depended on great open-source tools

Time to give back to the community

Encouraging contributions

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Summary

Size doesn’t matter

No data beyond our reach

No actor beyond our reach

Faster and easier investigations benefits both analysts and clients

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$ pip install dissect

Want to contribute?
Submit a PR at https://github.com/fox-it

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```
$ pip install dissect
```

Documentation

https://docs.dissect.tools/

Try for yourself

https://try.dissect.tools/

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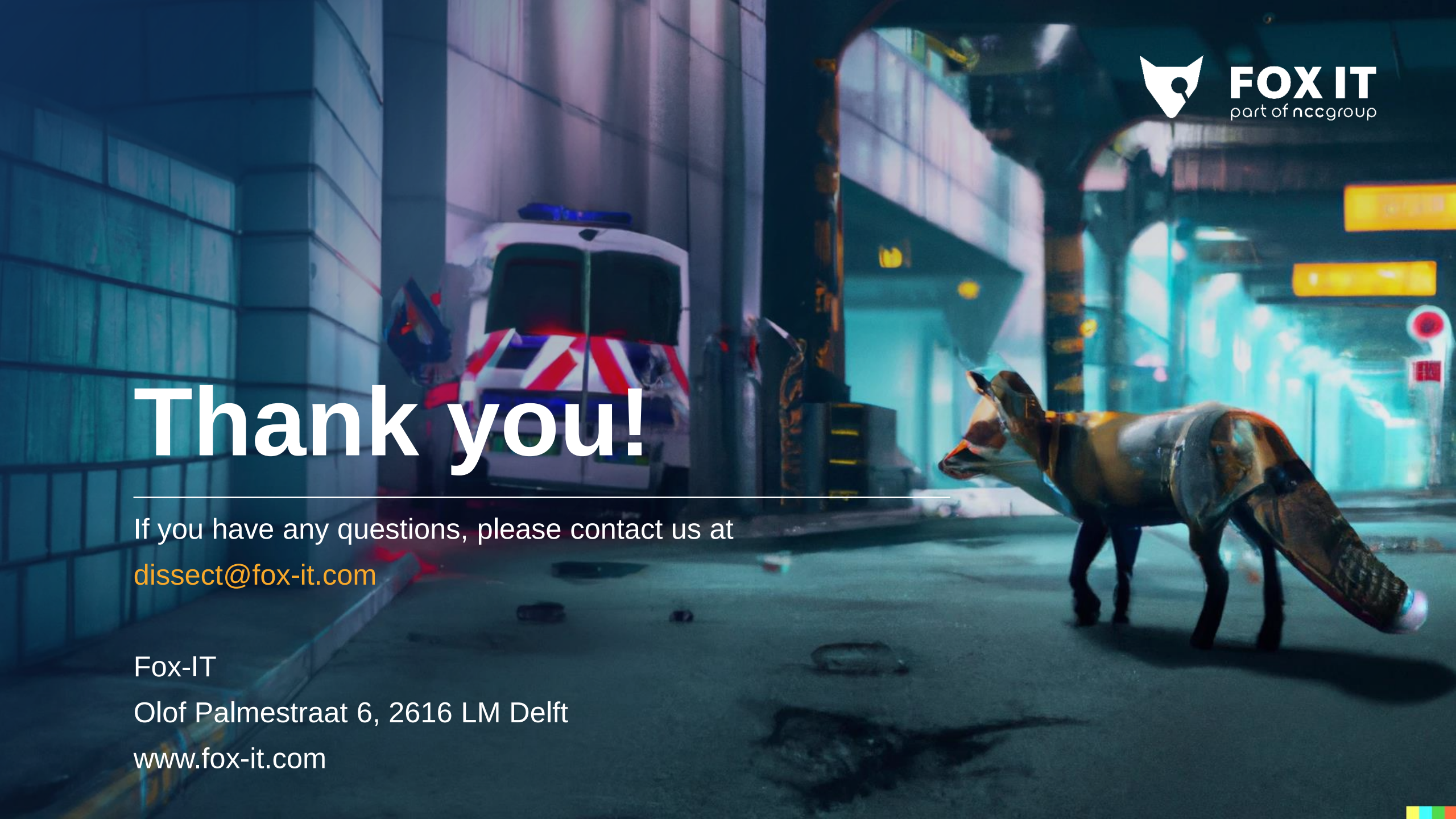

Thank you!

If you have any questions, please contact us at
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