

some thoughts about

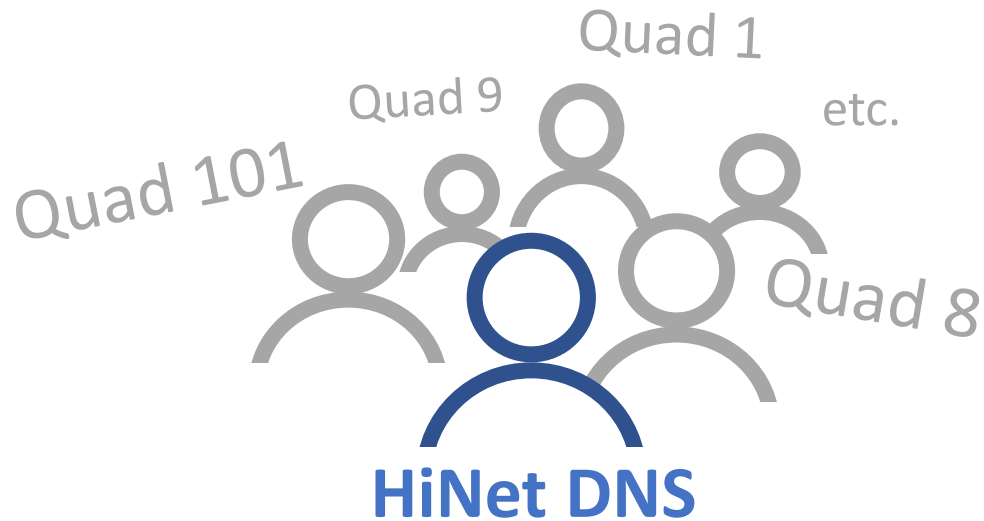
HiNet DNS

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2022-05-12

The session description mentions ...

“landscape”

“best practice”

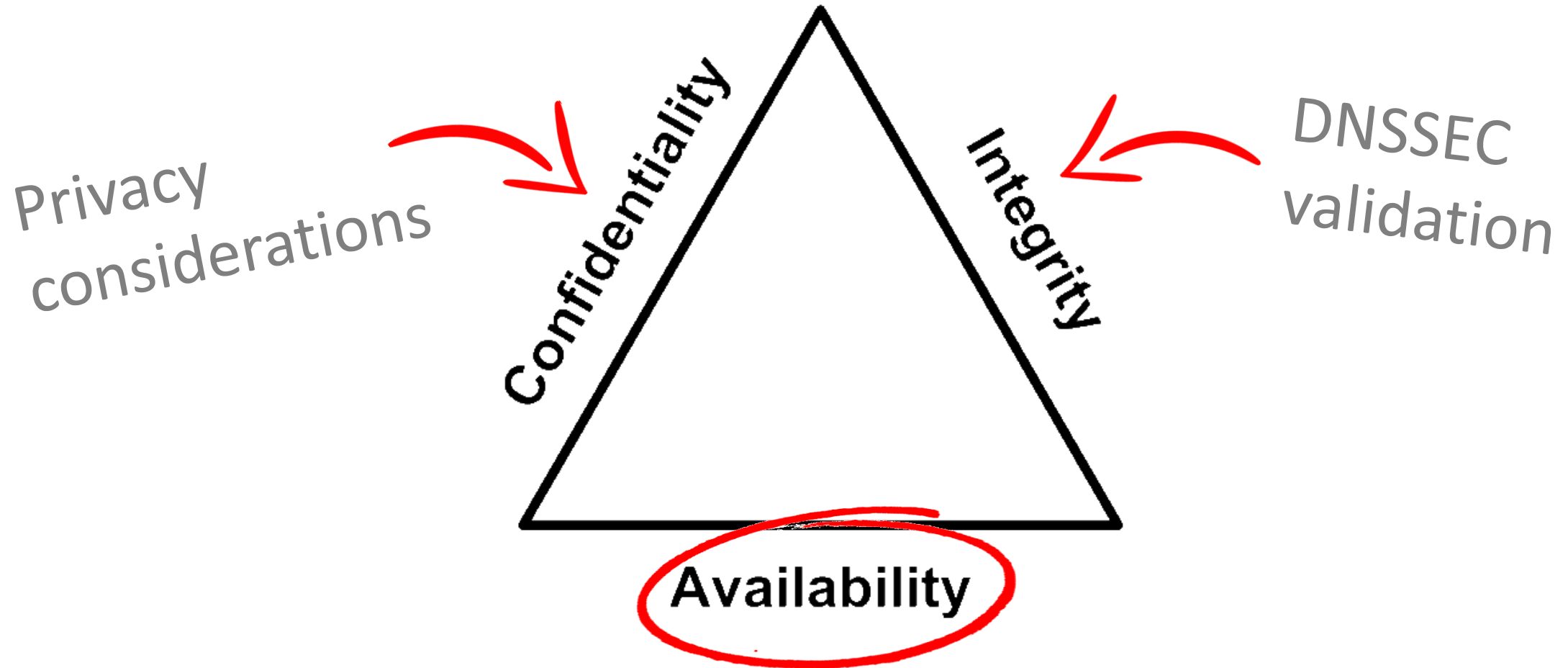


of what?

as MECE as possible?
(mutually exclusive collectively exhaustive)

The CIA triad

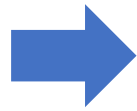
fundamental and crucial cybersecurity needs



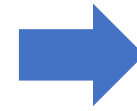
Confidentiality

DoH is for protecting DNS transactions' privacy

lab



production



monitor

- **Try and assess** solutions
(*for stability, maintainability*)
- **Accumulate** know-how
(*for installation, tuning, maintenance, trouble shooting...*)

- since 2019/10/1
(*deploy in batches*)

- **QoE**
(*user's point of view*)
- **QPS + session count**
(*admin's point of view*)
- **resource utilization**
(*DNS resolution + HTTP handling included*)
- **Notification of abnormal events**
(*fail rate too high...*)

Integrity

DNSSEC is for protecting DNS data's integrity

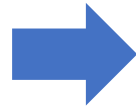
We tried to activate DNSSEC validation in a “progressive” way

preparation

- as few
[known DNSSEC-SERVFAIL-to-be]
as possible

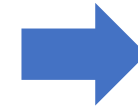
edu.tw

- better **technical readiness**
(*academic background*)
- **manageable number** of domains
(*vs. com.tw for example*)



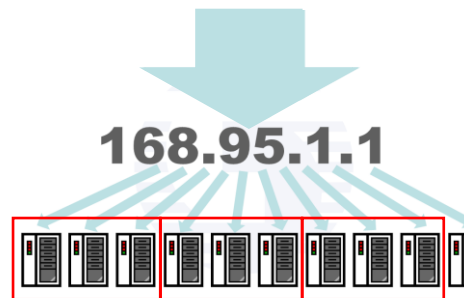
execute

- rollback plan
- deploy in batches



monitor

- periodical lookup
(*selected representative test cases,
alert if SERVFAIL*)
- increased customer complaints(?)



complexity → cost
readiness of the public

Availability

HiNet DNS is one of the CII
(*Critical Information Infrastructure*)

HA structure + Remote backup + etc.
plus anycast routing
extreme cases

Thank You