

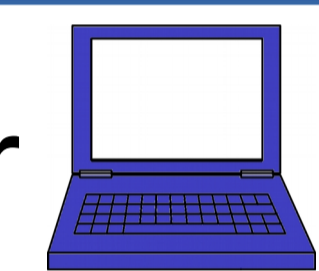
ANAN: ANalyse And Navigate Debugging Compute Clusters

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ALICE

ALICE — A Large Ion Collider Experiment

- find reasons for unexpected behaviour (“bugs”)
- optimise **performance**
- debug clusters like software:
 - **breakpoints**
 - watch variables
 - **invariants**


server 

`{enabled={awk}, ...}`

compression

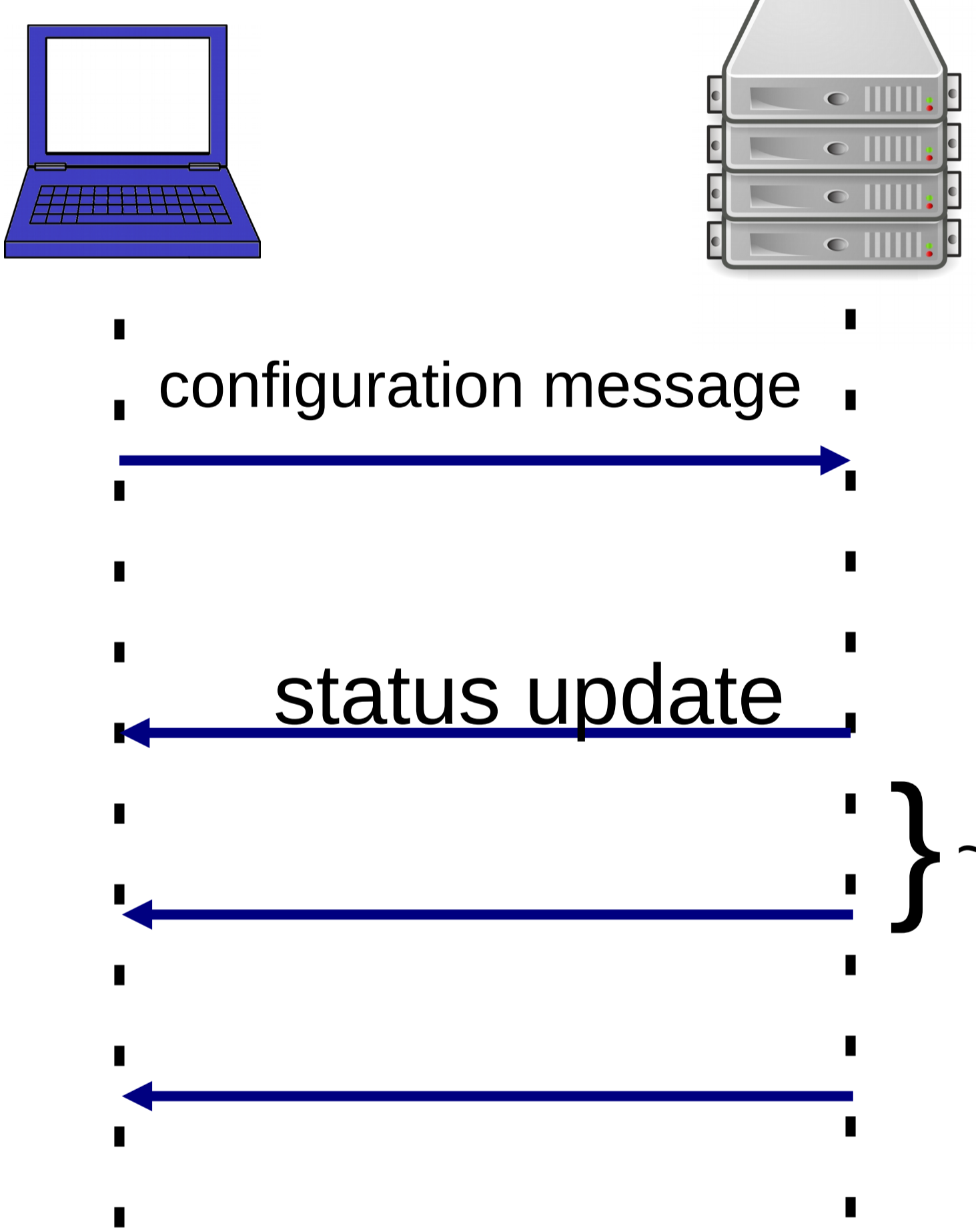
encryption; authentication

UDP socket

client  `sensor1`
`sensor2`
`sensor3`

simplicity leads to

- **scalability** (easily 1000 machines)
- reliability
- extensibility (via **lua** code)



Some Example Code

```
-- connect to hosts
-- alice-hlt-1, ..., alice-hlt-55
add_hostname(template("alice-hlt-#", iota(1, 55)))

-- find idle time for each host
idle = once{files={"/proc/uptime"},
            rules={"", "yield(F[2])"}}

idle:finalize() -- gather data; may fail
-- yields something like {{h1, {result1}}, {h2, {result2}}}
x = fromhash(idle.result)
y = sort(x, compareBy "[2][1]")
```

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