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DR. ANESTIS DALGKITSIS



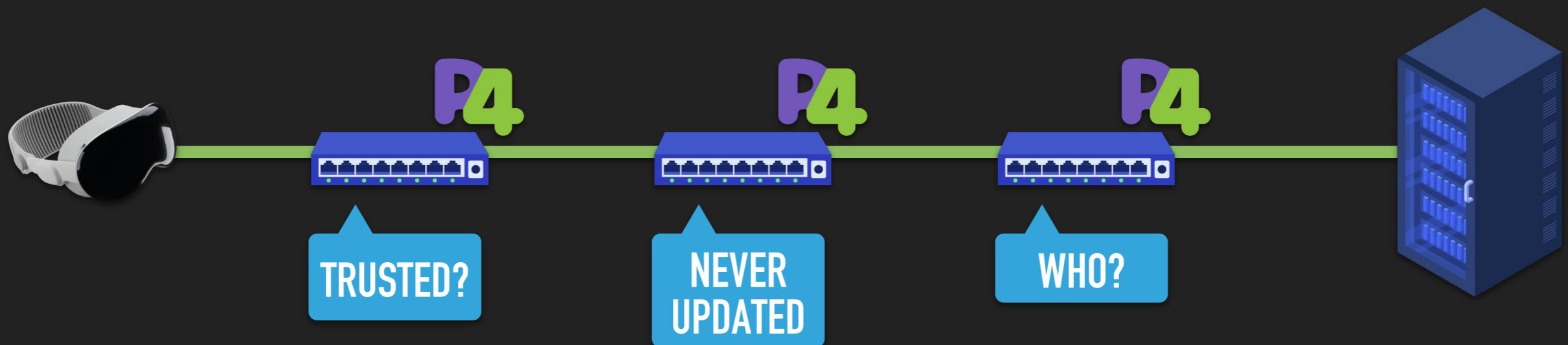
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IN-NETWORK CONTROL FOR TRUSTED FLOW STEERING

THE USERS SHOULD BE ASSURED THAT THEIR DATA ARE ROUTED EFFICIENTLY IN TERMS OF QOS THROUGH A TRUSTED COMMUNICATION PATH.

Main Principle

NETWORK ELEMENT TRUST LEVEL



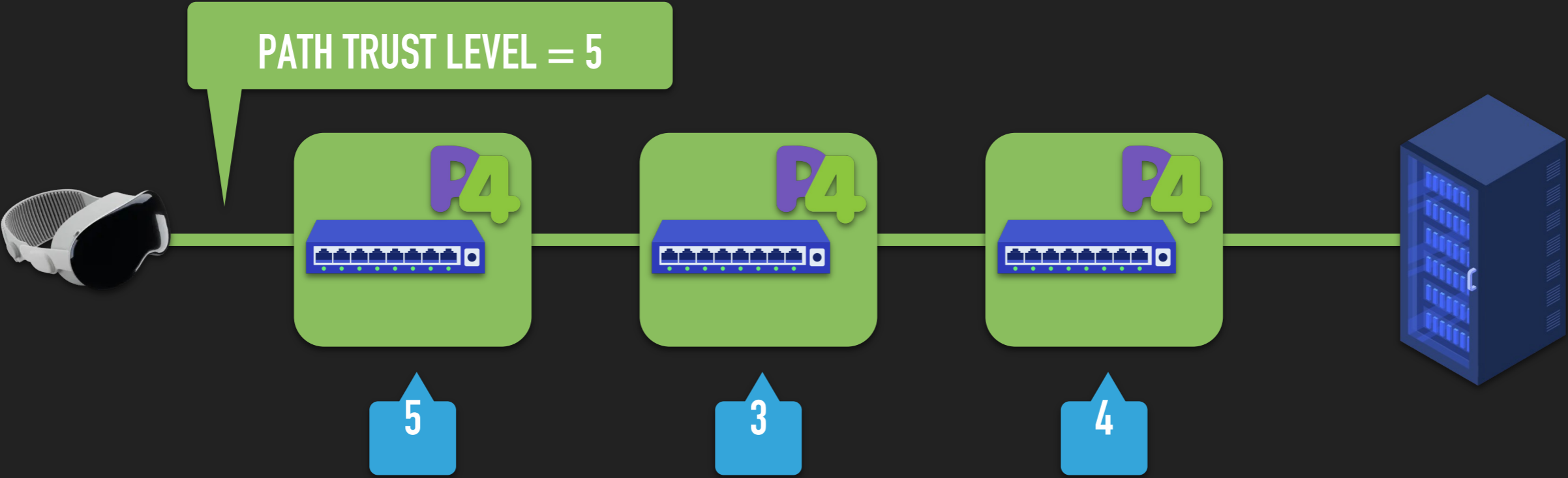
NETWORK ELEMENT TRUST LEVEL



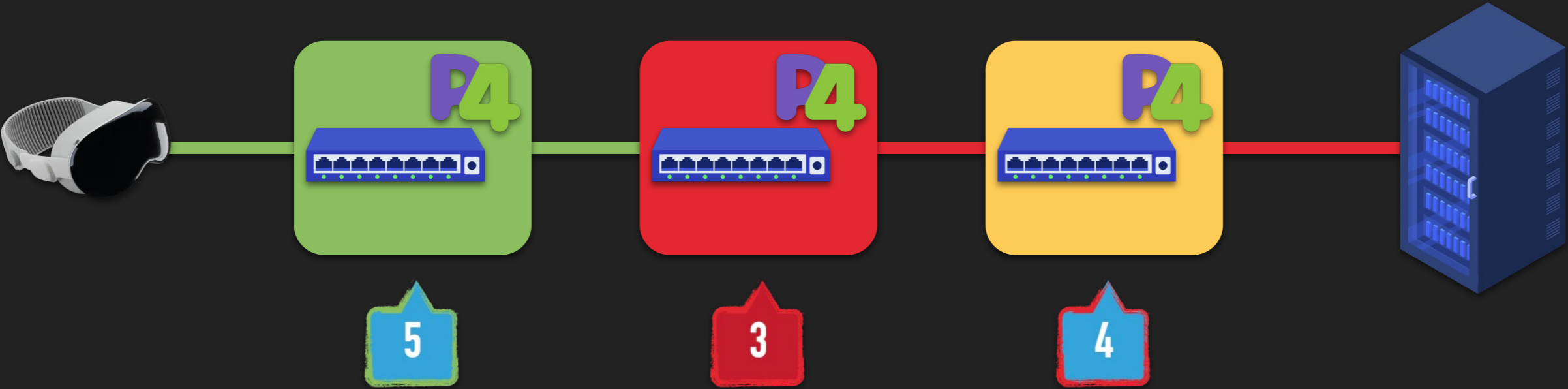
TRUST LEVEL

- ✓ INTERACTIONS WITH THE OTHER NETWORK ENTITIES
- ✓ LOCATION
- ✓ FIRMWARE VERSION
- ✓ LEVEL OF HARDWARE HARDENING
- ✓ ETC

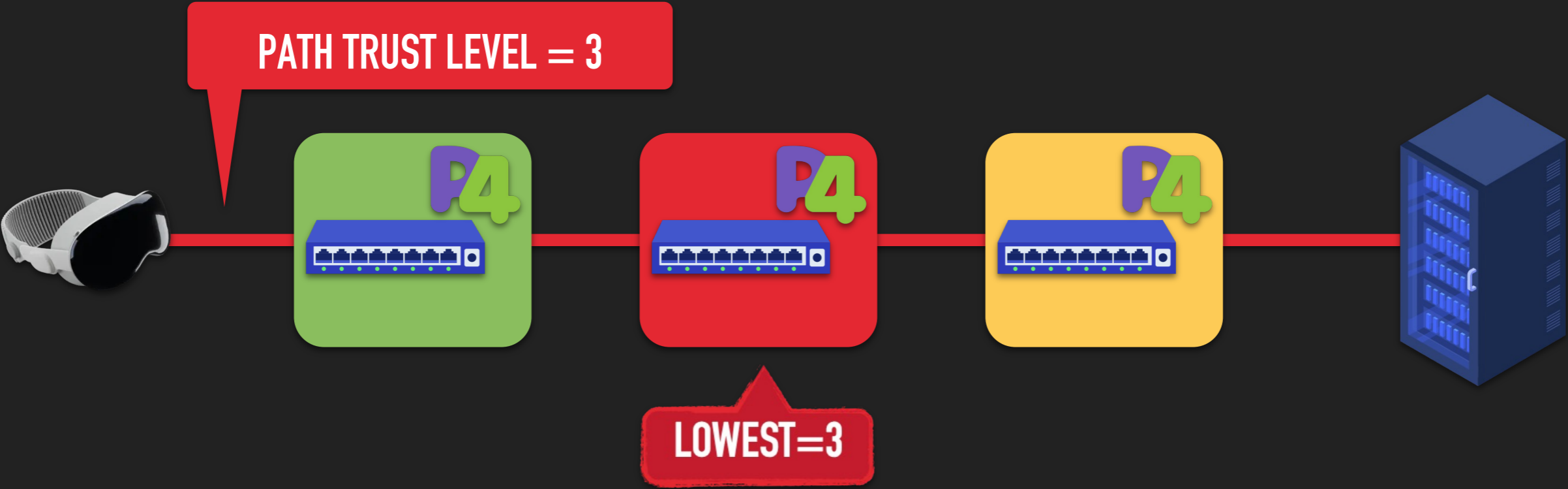
PATH TRUST LEVEL



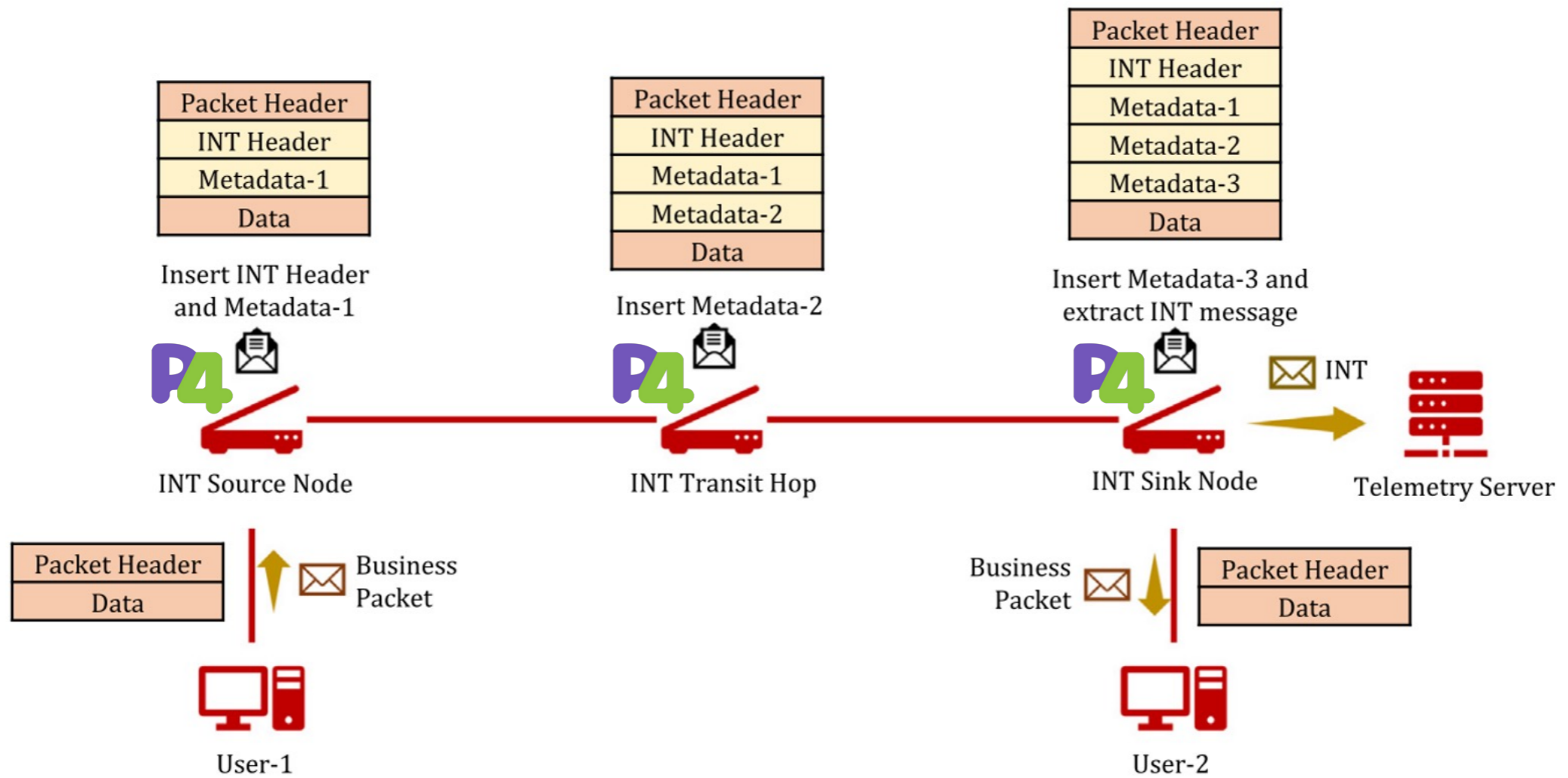
PATH TRUST LEVEL



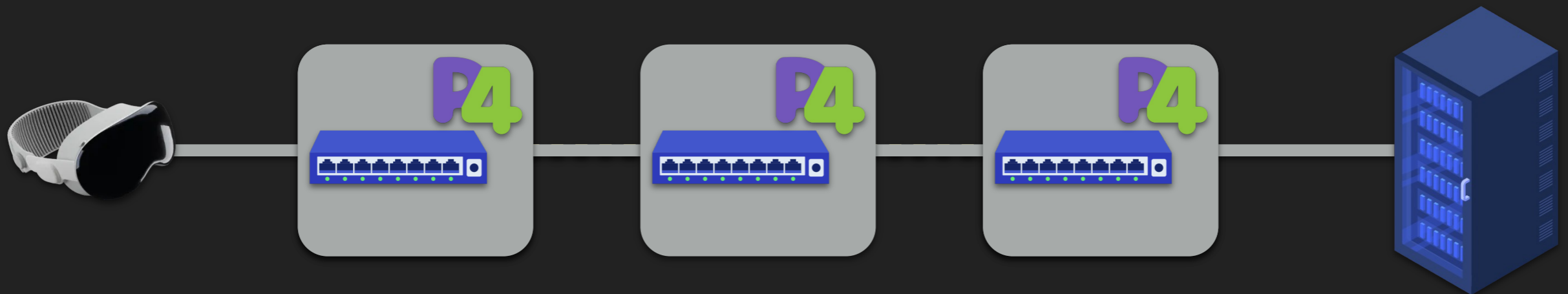
PATH TRUST LEVEL



IN-BAND NETWORK TELEMETRY

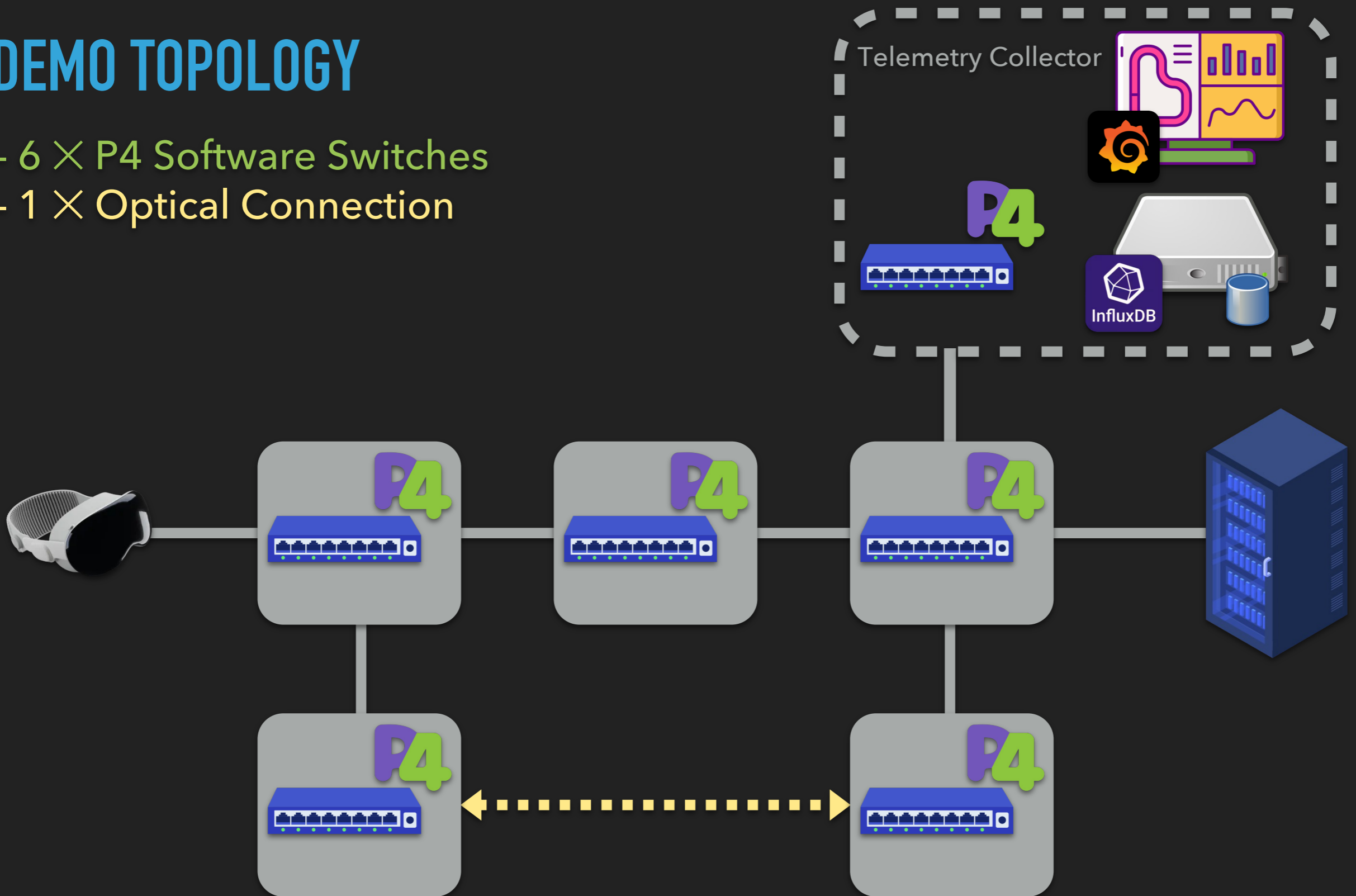


DEMO TOPOLOGY



DEMO TOPOLOGY

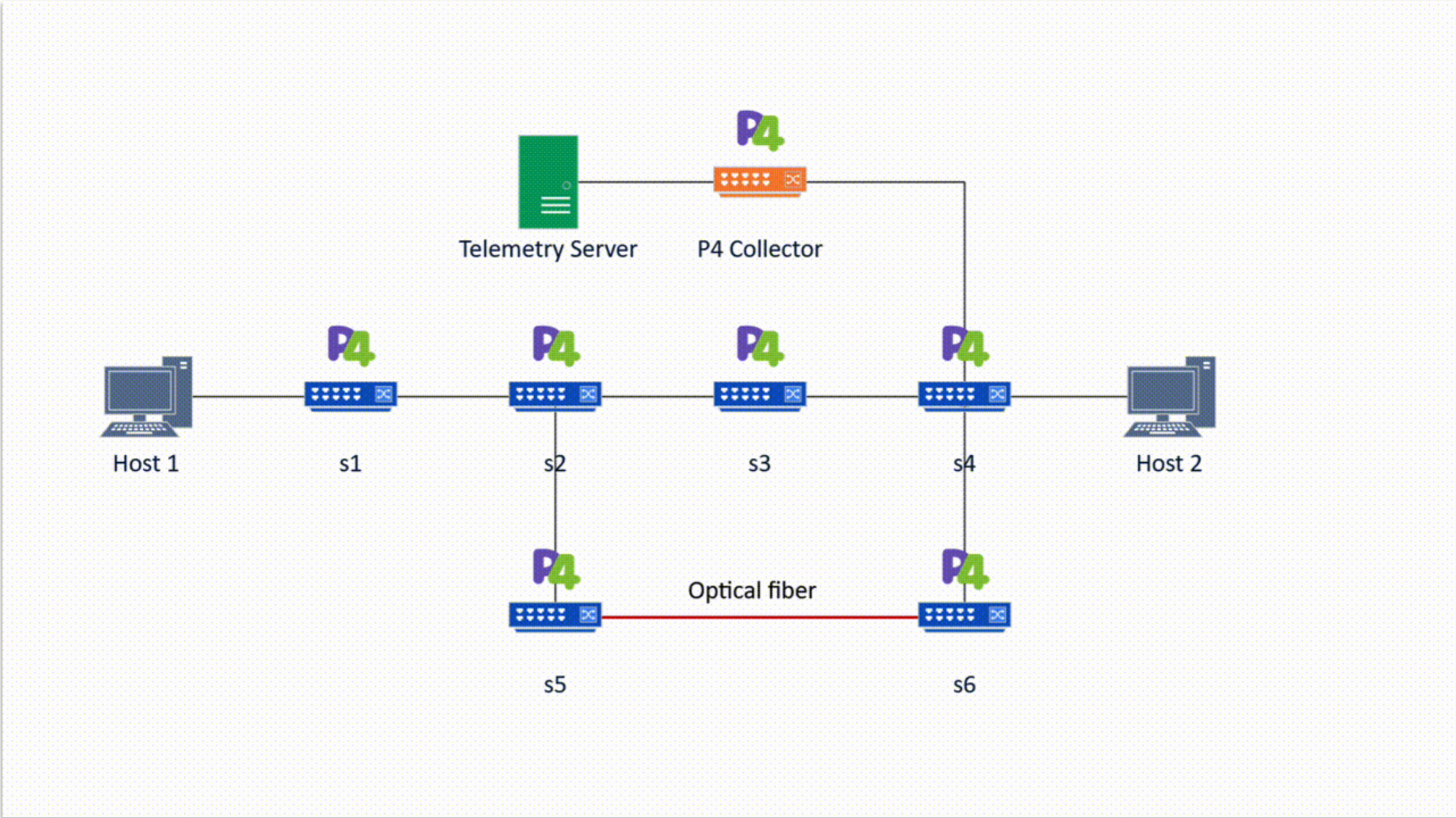
- 6 × P4 Software Switches
- 1 × Optical Connection



TELEMETRY COLLECTOR



DEMONSTRATION



CONCLUSION

- ▶ Significantly reduces the reaction time by the infrastructure elements
- ▶ Improves the accuracy
- ▶ Promotes Transparency and Accountability

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QUESTIONS?