

GÉANT Security Innovation Lab

An Incubator for Security Research &
Community

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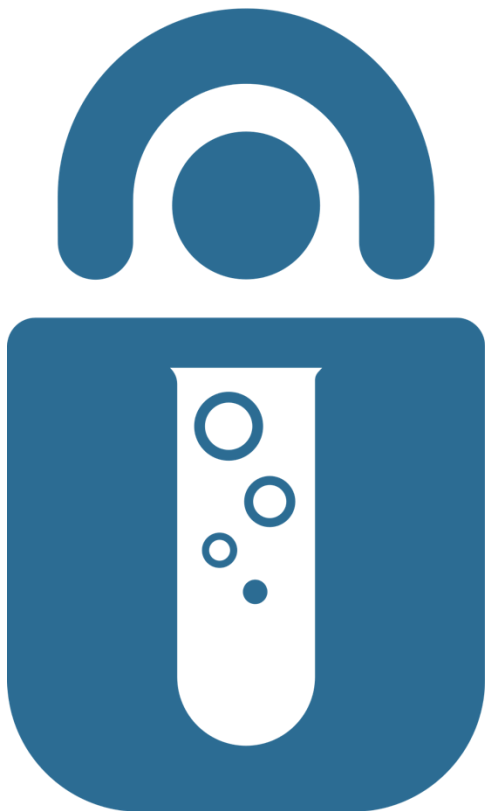


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Agenda

- GÉANT Security Innovation Lab
 - Incubator for Security Innovation
 - Lab architecture
 - Hardware
 - High speed connection
 - Services
 - Social & Community
- Example Projects
 - Not only hardware Lab -> "Soft" Projects: Honeypots
 - Hardware near projects: Resilient IPFIX Monitoring
- How to reach us





A home for security research

- Initiated and maintained by GN5.2 Task 5
- All GÉANT security projects welcome

Security Innovation Incubator

- Discover fellow projects and be discovered
- Offers help in navigating GÉANT

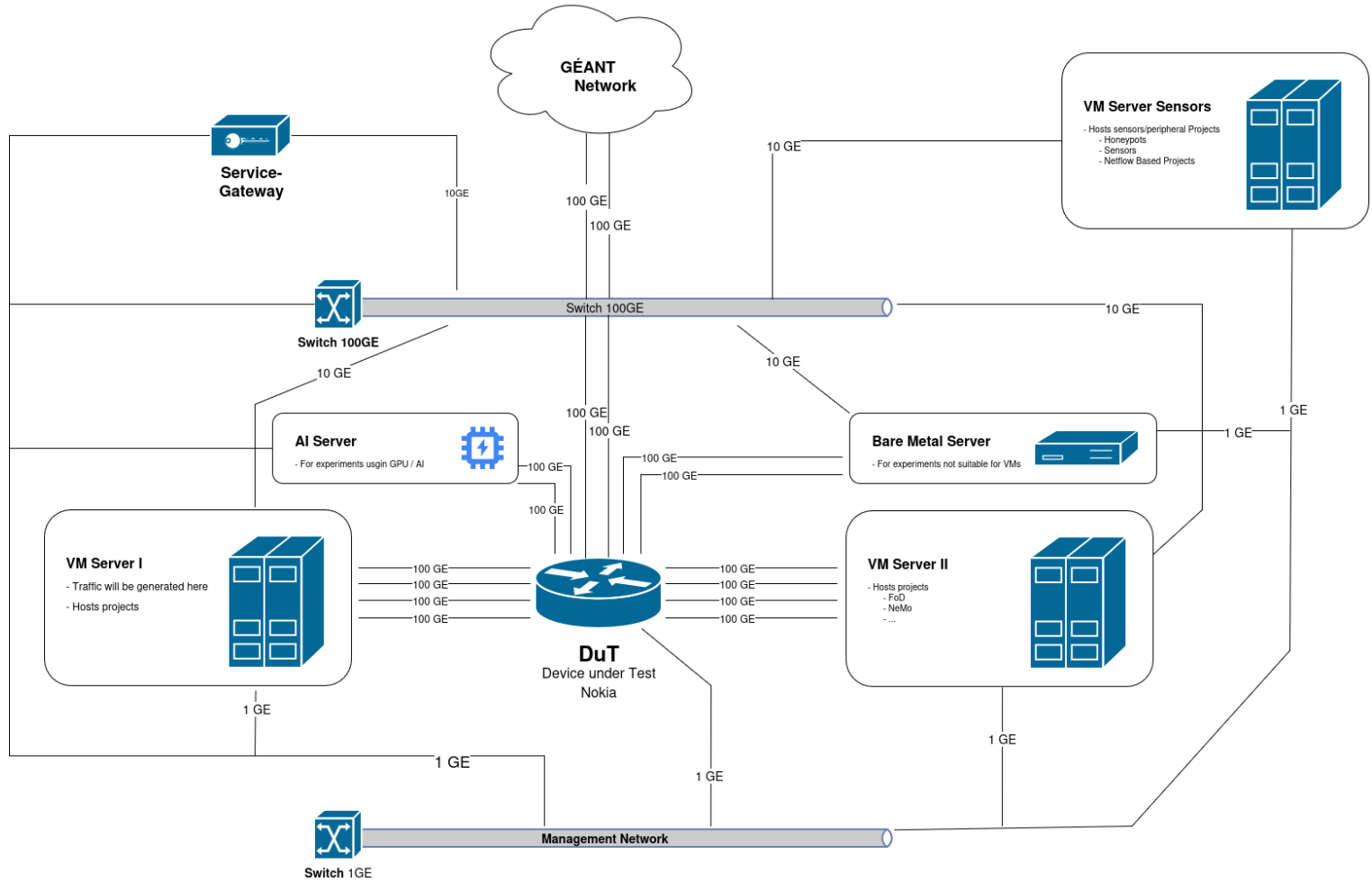
Community Building

- Bring together security researchers of GÉANT
- What do you want as a community? How can we help?

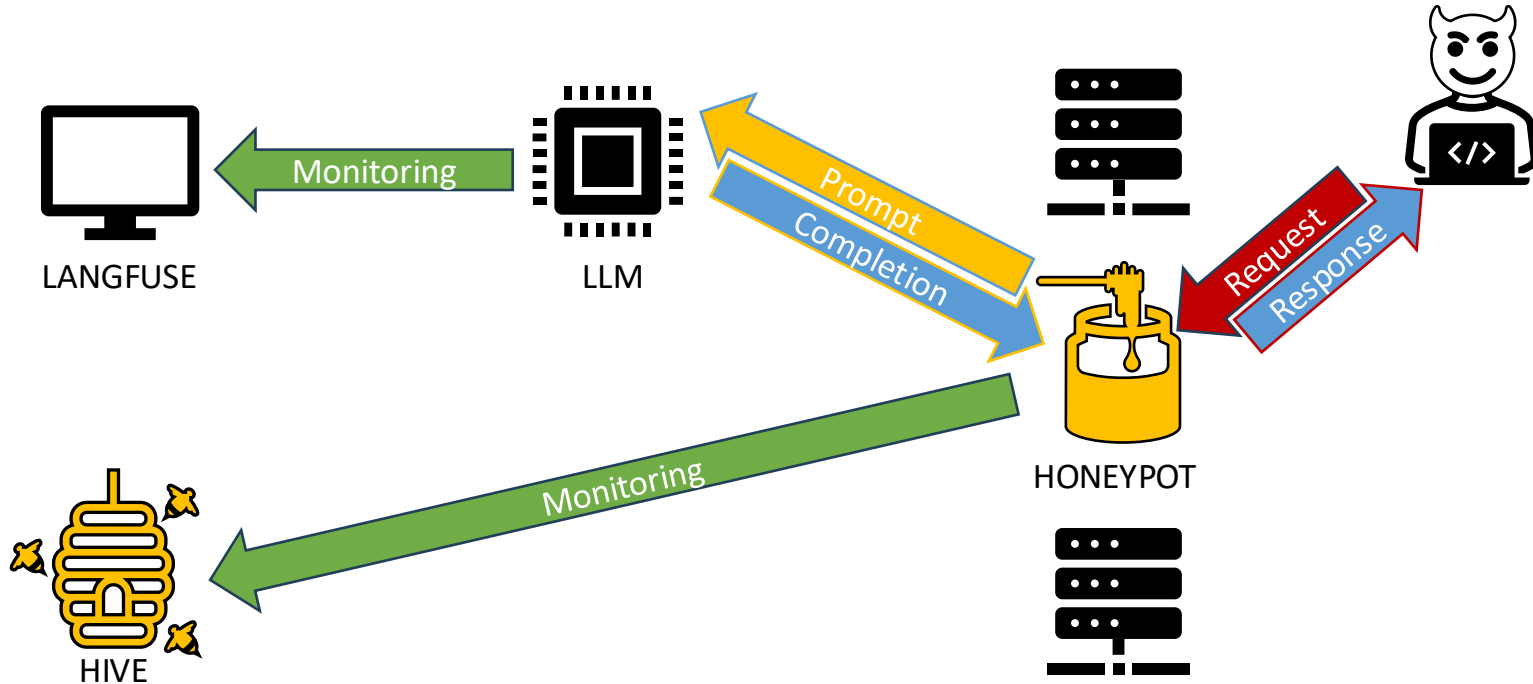
Hardware Lab

- For experiments with hardware on GÉANT core network level
- For innovation without fear of breaking things

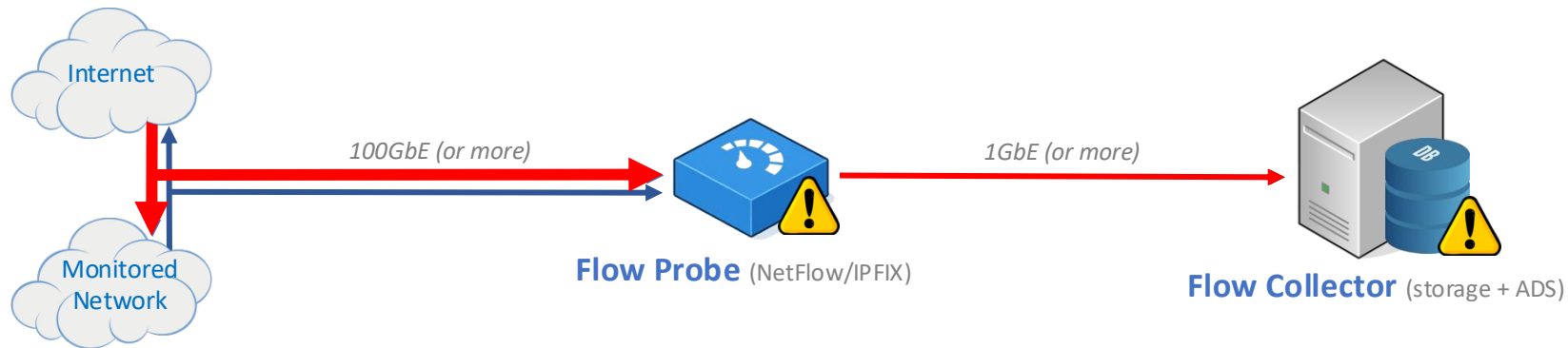




#1 Lab Project: LLM-based Honeypot

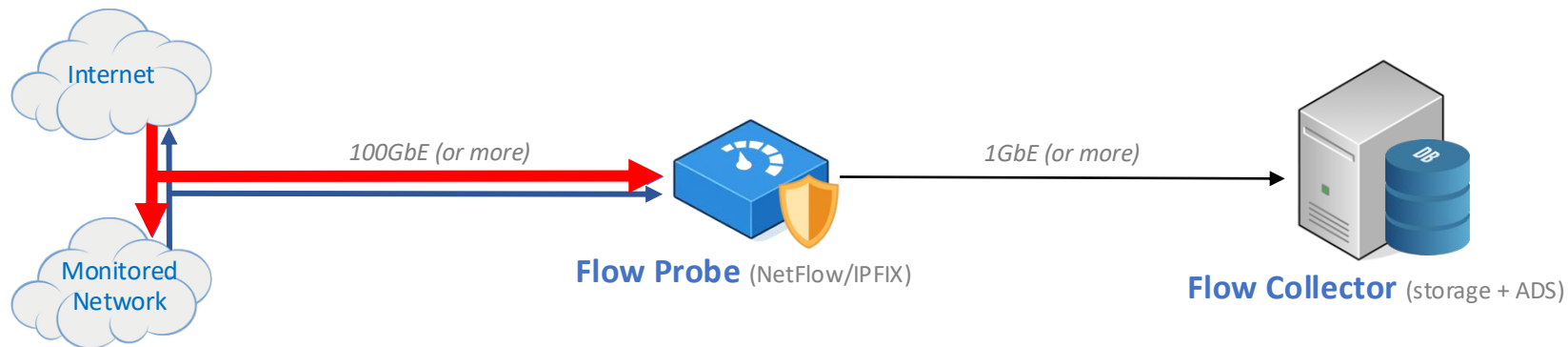


#2 Lab Project: Resilient IPFIX Monitoring

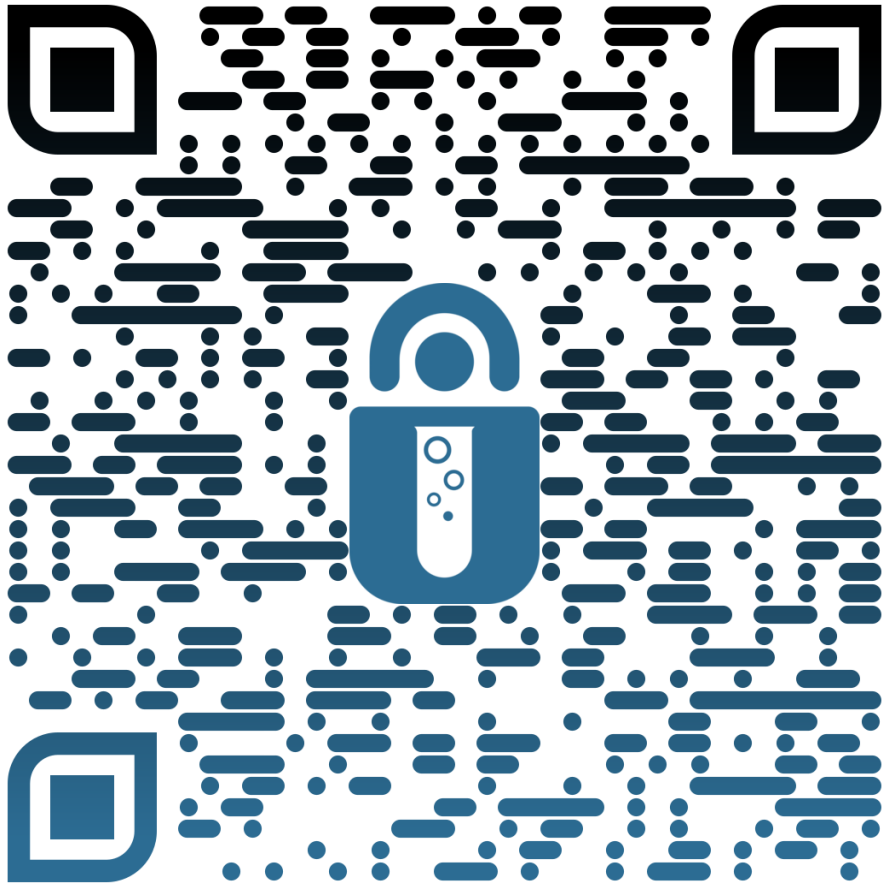


- Flow probes (NetFlow/IPFIX) & ADS (anomaly detections systems)
 - the backbone of network monitoring/defense
- Under DDoS or mass scans, connection counts explode
 - Probes get overwhelmed
- Output degrades: flows fragmented, missing, or wrong
 - A blind spot opens precisely where visibility matters most

#2 Lab Project: Resilient IPFIX Monitoring



- **GOAL:** Make the probe adapt, not collapse
 - Detect overload in real time, within probe resource limits
 - Mark & prioritize traffic to preserve flows under load
e.g. drop or aggregate attack traffic
 - Payoff: higher-fidelity data → better visibility, fewer false alarms
- **LAB:** Generating network traffic and testing the probe in various scenarios



Thank you

Any questions?

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Discussion

How to build community?
How to encourage participation?
What would draw your attention?

