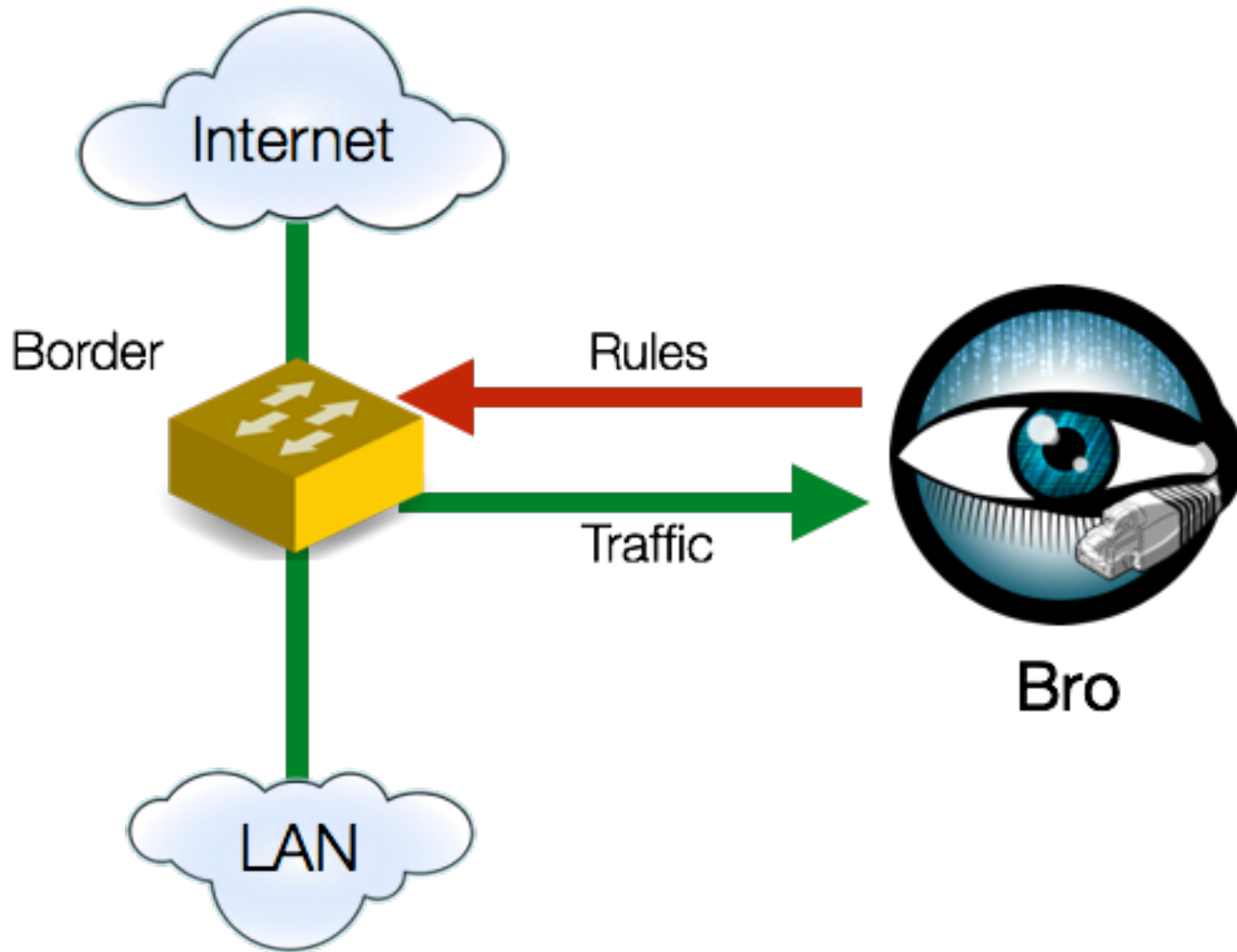


Effective and Economical Protection for High-Performance Research and Education Networks

Johanna Amann

johanna@icir.org

Typical Network Monitoring Setup



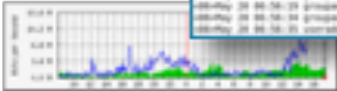
What is Bro?

TCPDUMP

WIRESHARK



NetFlow



syslog



Packet Capture

Traffic Inspection

Attack Detection

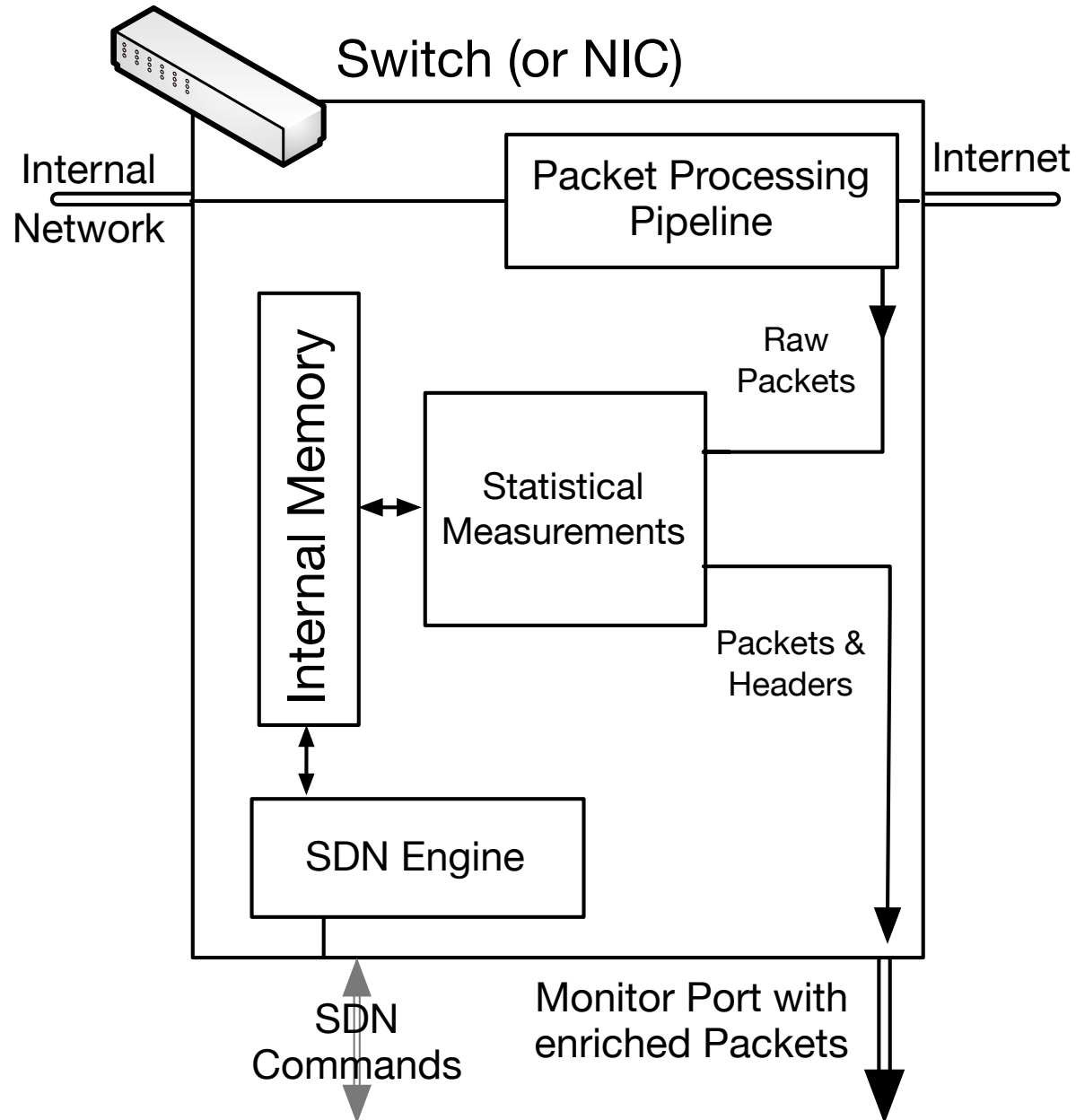
Log Recording

Flexibility



"Domain-specific Python"

Hard/Software Co-Design for Network Monitoring



Domain-Specific Security Monitoring

- Domain-specific protocols
- User authentication
- Network activity profiling
- Security policy enforcement
- DOS Protection