

Importance of Network Visibility

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What is Network Visibility

(and why do we need it?)



Network Blind Spots exist

| Lots of Organizations Involved | | | Vast Array of Tools in Use | | |
|--------------------------------|-----------------|-----------------|----------------------------|-----------|---------------------|
| Network Ops | Application Ops | Security Admin | NPMD | APM | Customer Experience |
| Server Admin | Forensics | Privacy & Audit | Forensics | IDS, SIEM | Firewall, IPS |

Increasingly Complex Environment to Manage



Endpoints



Network



Data Center



Cloud



Applications

Basic Visibility Architecture Data Flow

Monitoring Layer

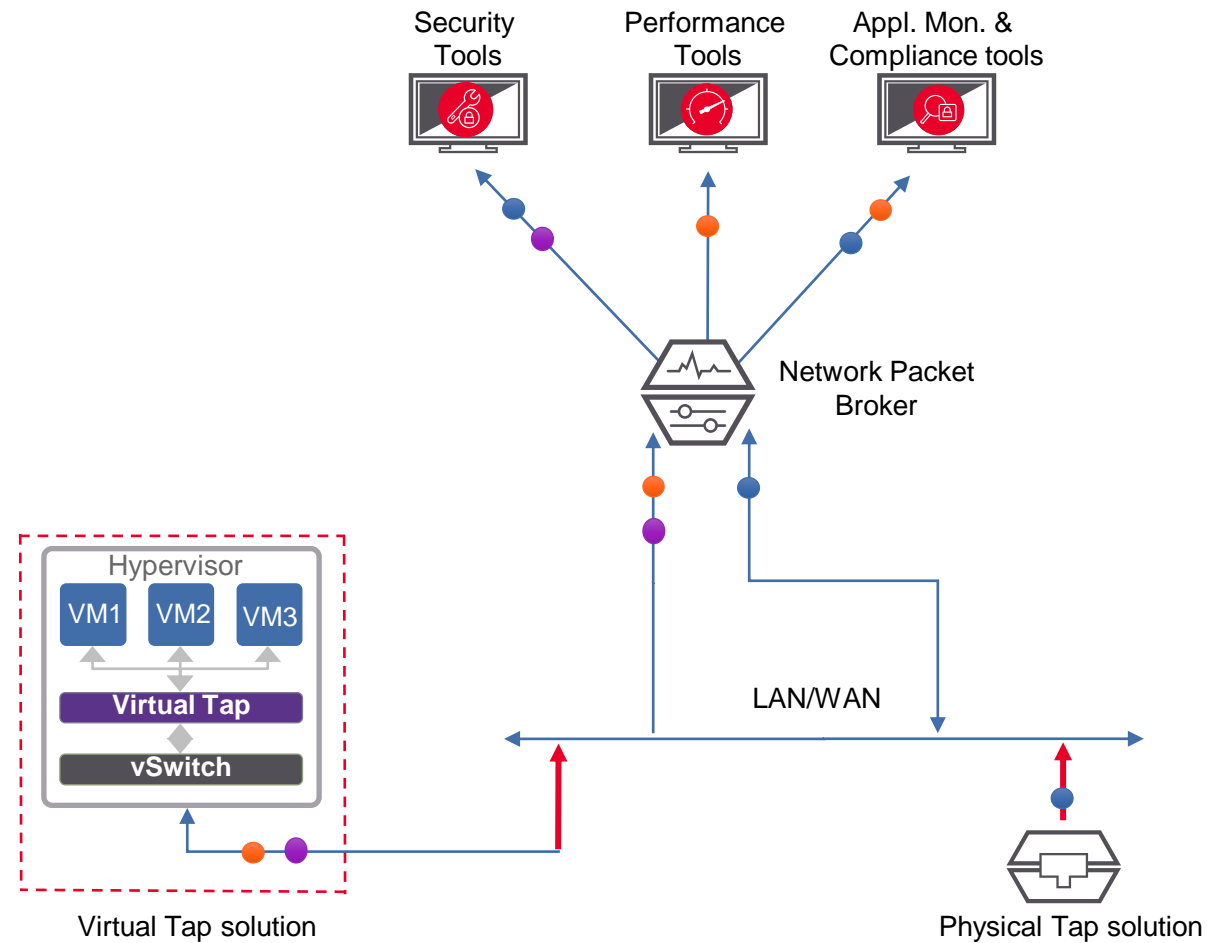
tools provide analytics and perf. metrics

Control Layer

NPBs for filtering, load balance, aggregation, regeneration

Access Layer

Virtual Taps
Physical Taps
Bypass Switch
SPAN Ports



Intelligent Visibility

NETWORK PACKET BROKER

**Intelligent
Visibility**



App & Geo Filtering
NetFlow / Contextual Metadata

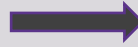


Much more intelligent tools

**Advanced
Visibility**



Deduplication, Trimming,
Burst Protection, etc.



Much greater tool efficiency

**Basic
Features**



L2-4 Filters,
Load Balancing

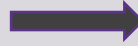


**More efficient tool usage
More scalable**

**Network
TAP/SPAN**

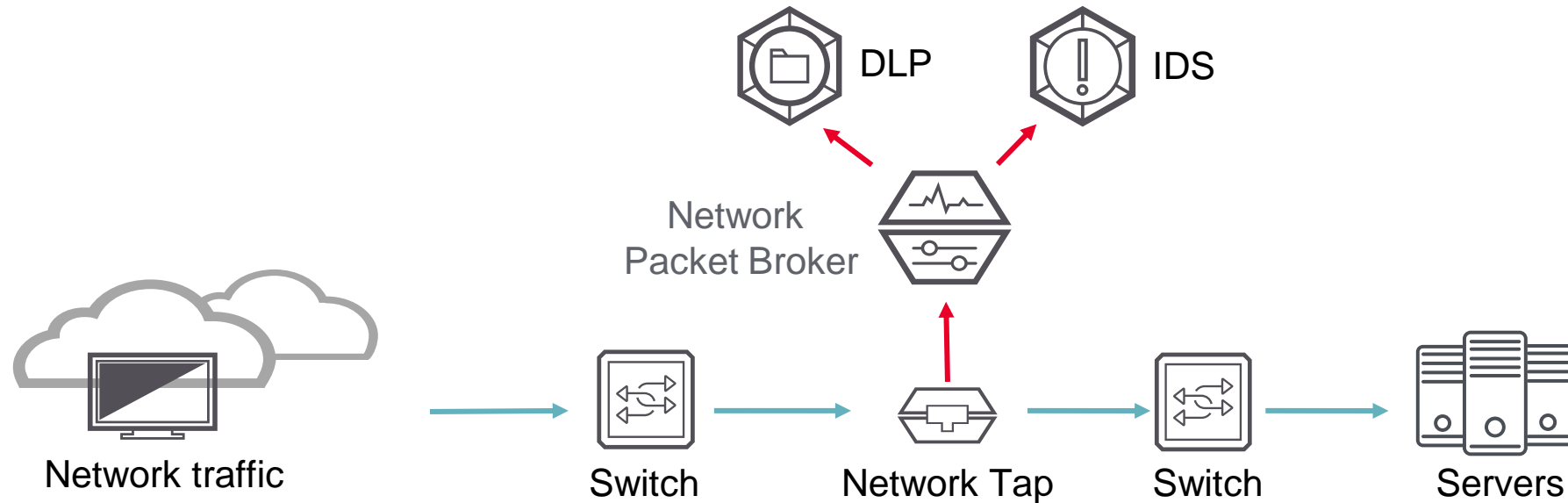


Mirrored, Raw Data



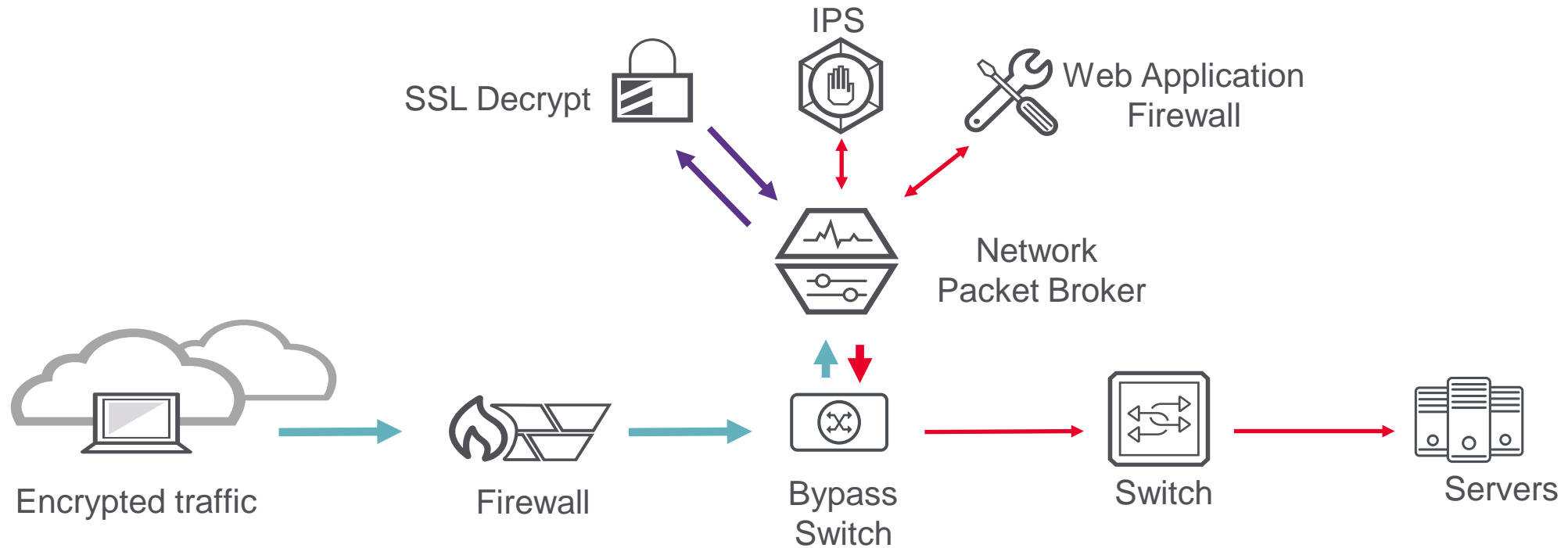
**Quickly overwhelms tools
Limited tool ingress ports**

Rapid Forensic Investigation Limits Breach Damage



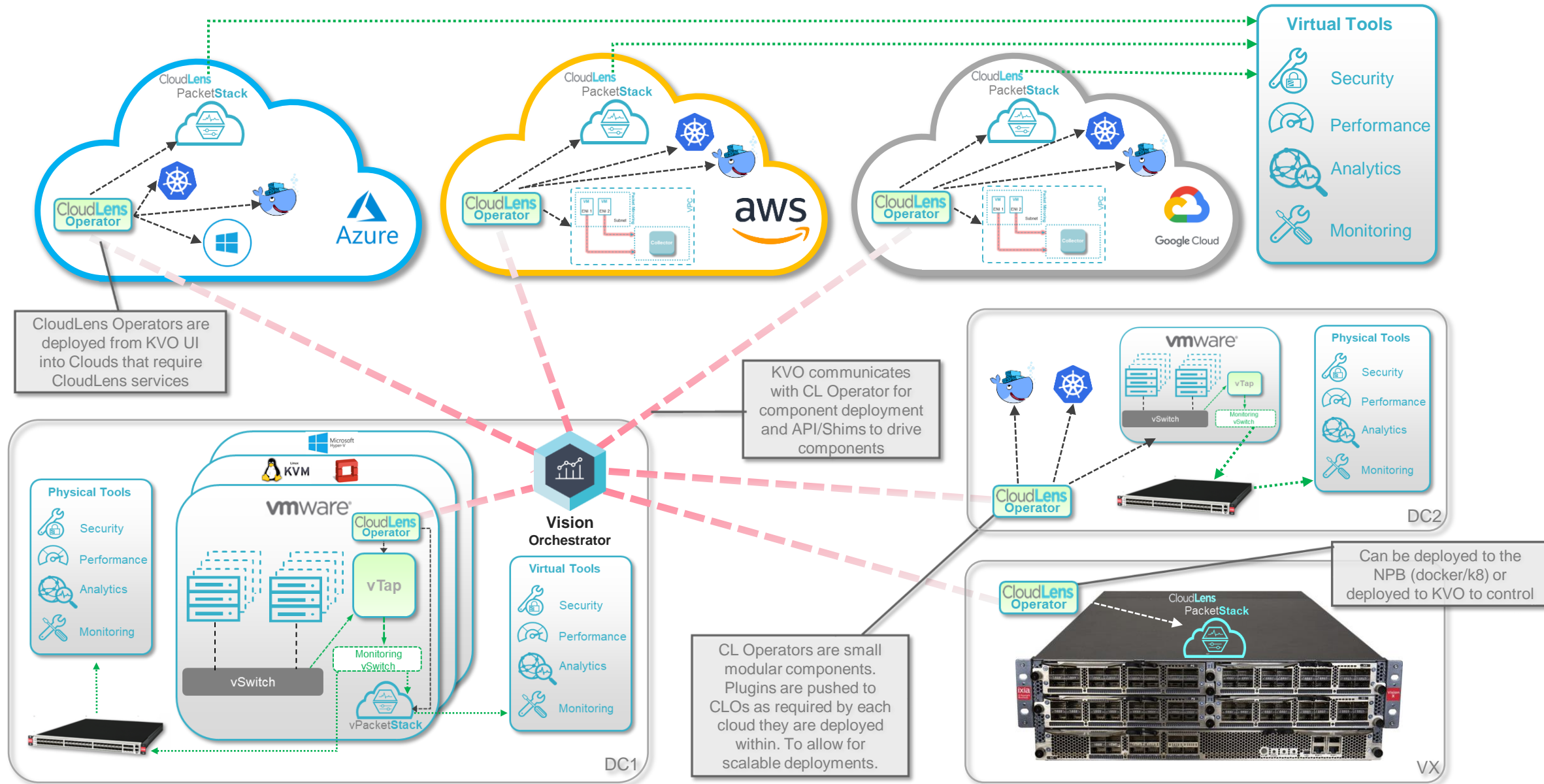
- In 2016, only 43% of breaches were self-detected
- Create NPB filters to collect L2 – L4 data and send it to DLP, IDS, log file tools, and other security tools for analysis
- Perform forensic analysis to see data exfiltration attempts and limit data loss

Appliance-based TLS Decryption With an NPB

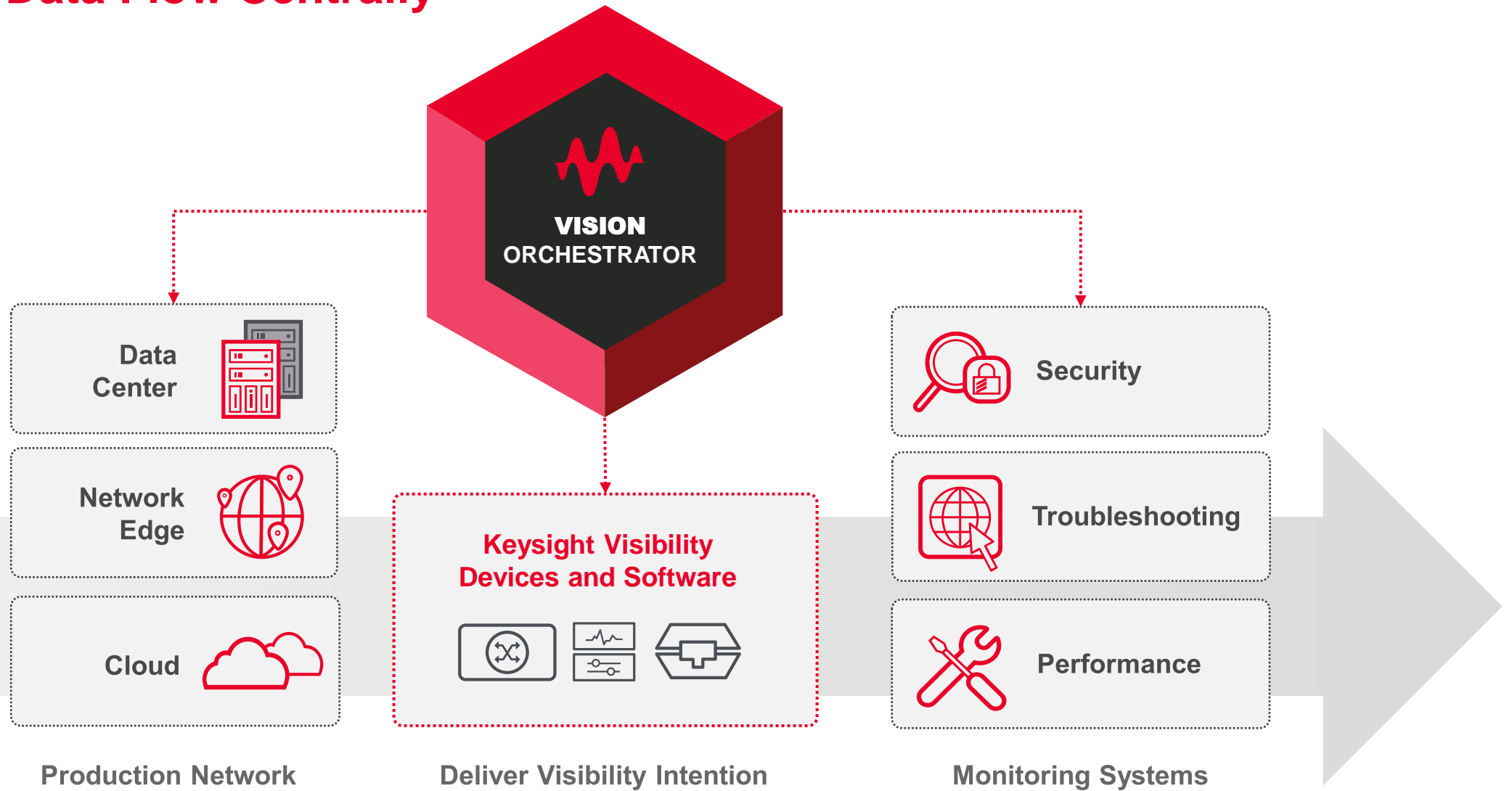


- Up to 50% of all network security attacks in 2017 will use encrypted traffic to bypass security controls
- Expose hidden threats with active decryption technology like A10 and Bluecoat
- NPBs allow for distribution of encrypted data to decryption devices and then the distribution of the now unencrypted data to various tools (NGFW, IPS, DLP, etc.)

CloudLens Deployment Model – High Level Architecture



Manage Data Flow Centrally



Visibility Architecture Summary

Maximize Network Visibility and Get Real Results

Use cases based upon a visibility architecture will allow you to do the following:

- Self detect breaches and cyber intrusions
- Eliminate blind spots where threat actors thrive
- Secure your network inside the perimeter
- Meet regulatory compliance for your environment
- Reduce cost of security tools
- Reduce the cost of a breach by connecting tools to the network faster and decreasing the associated mean time to repair

Thank you