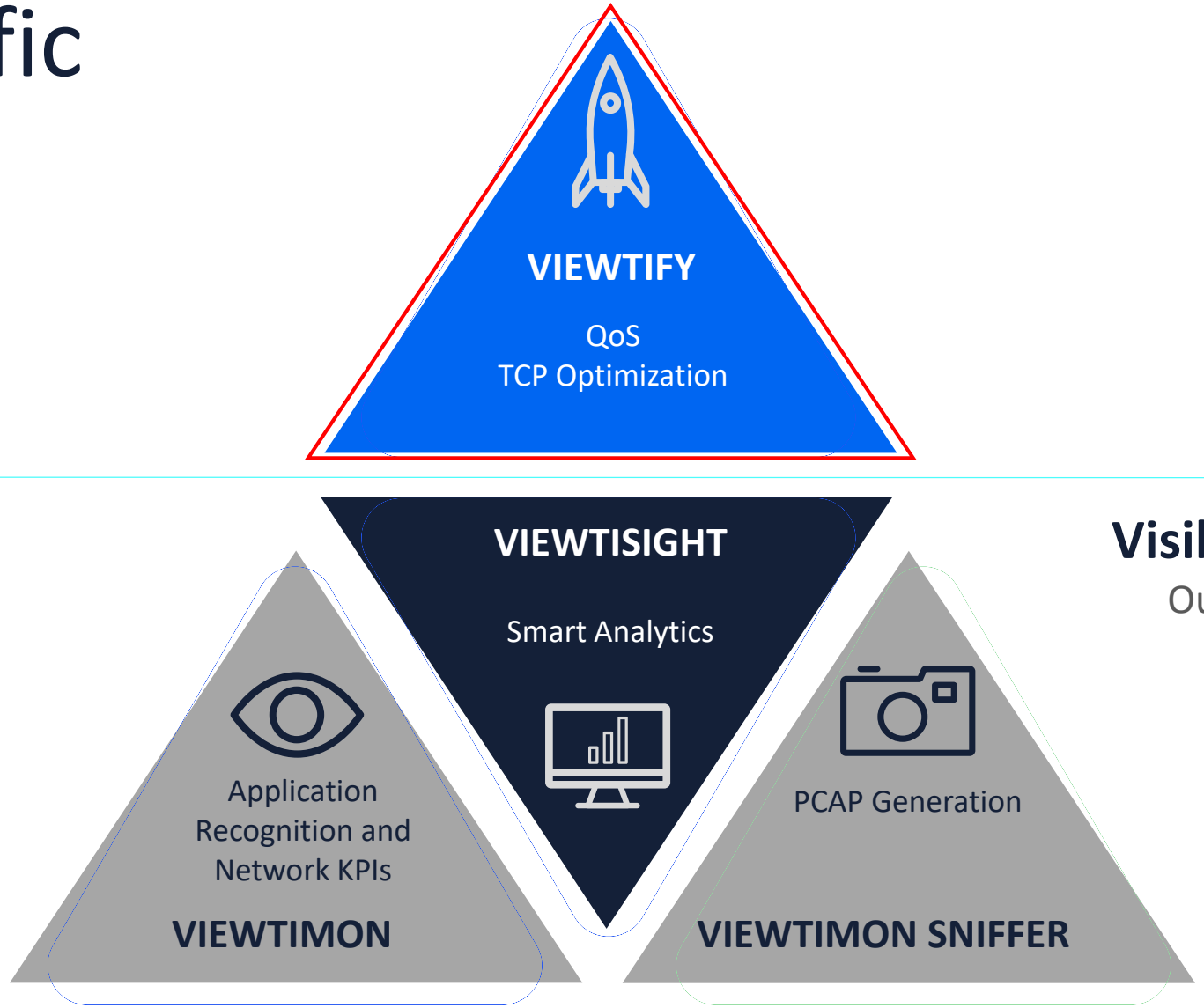
viewtinet

Viewtify QoS & OPT

Viewtinet Ecosystem for IP Traffic

Control

Inline deployment



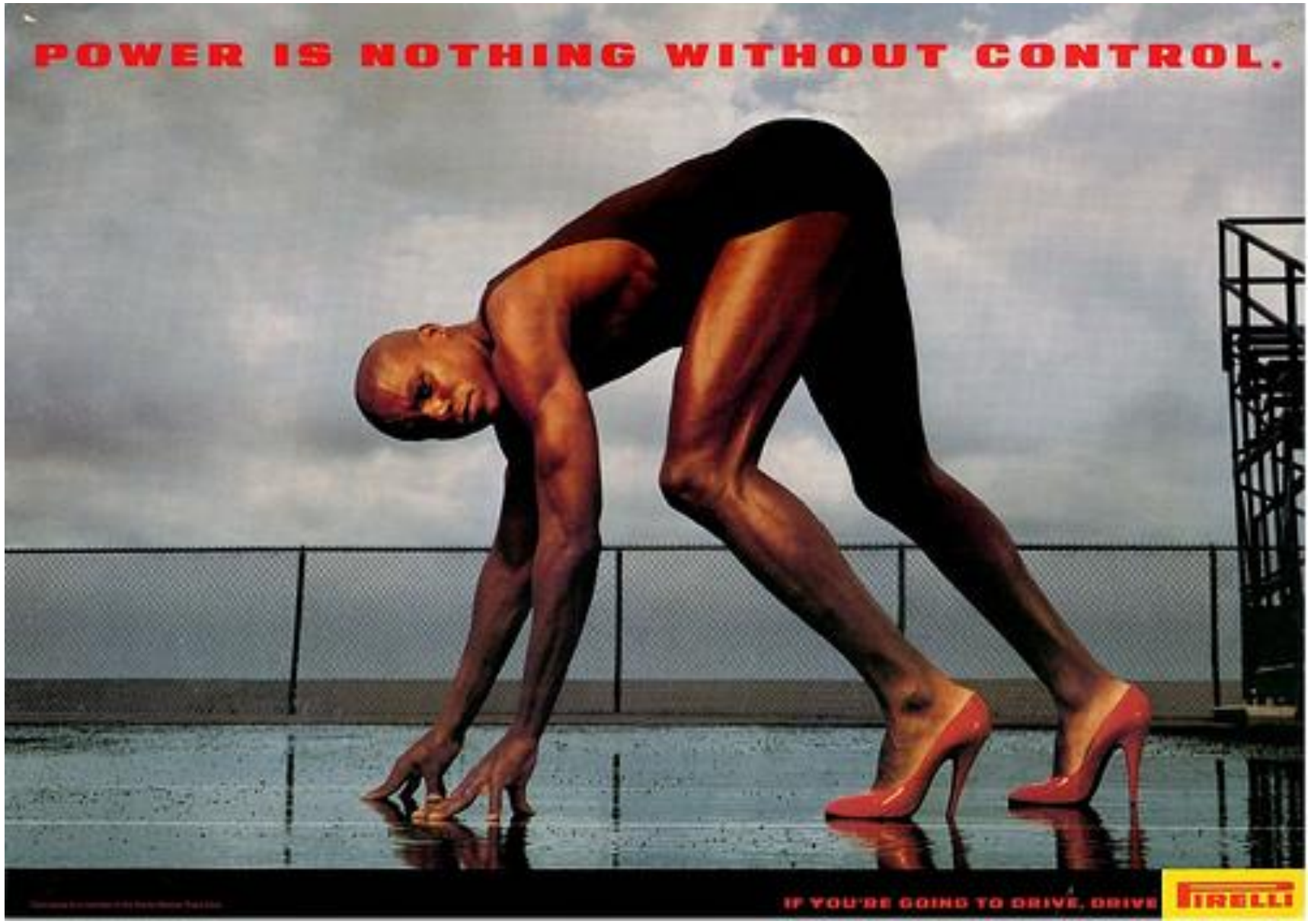
Visibility & Analytics

Out of band deployment

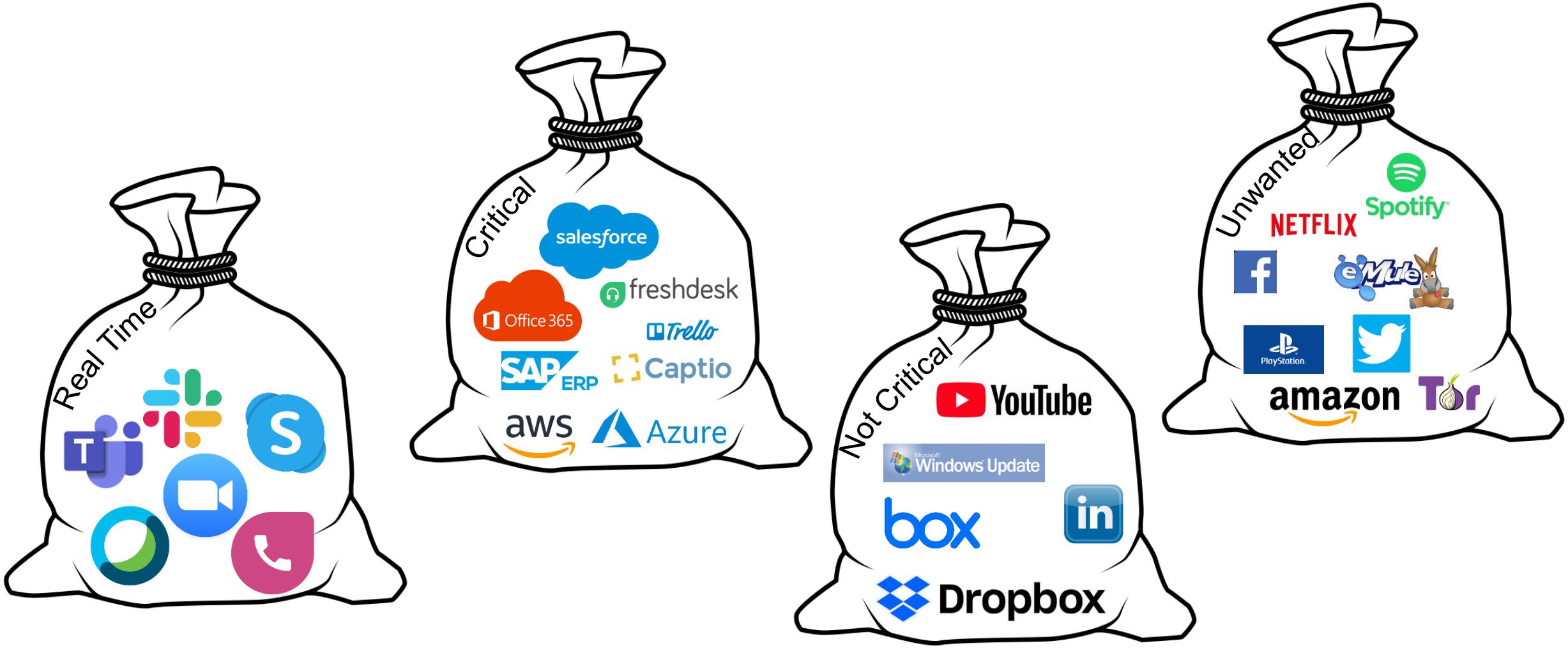
Viewtify

It is important to understand…

… but also to act



Not all the applications are the same…



Not all the departments have the same needs

Marketing

YouTube

Accounting

SAP ERP

Captio

Office 365

salesforce

Sales

salesforce

Office 365

YouTube

Captio

Performance Challenges

North – South

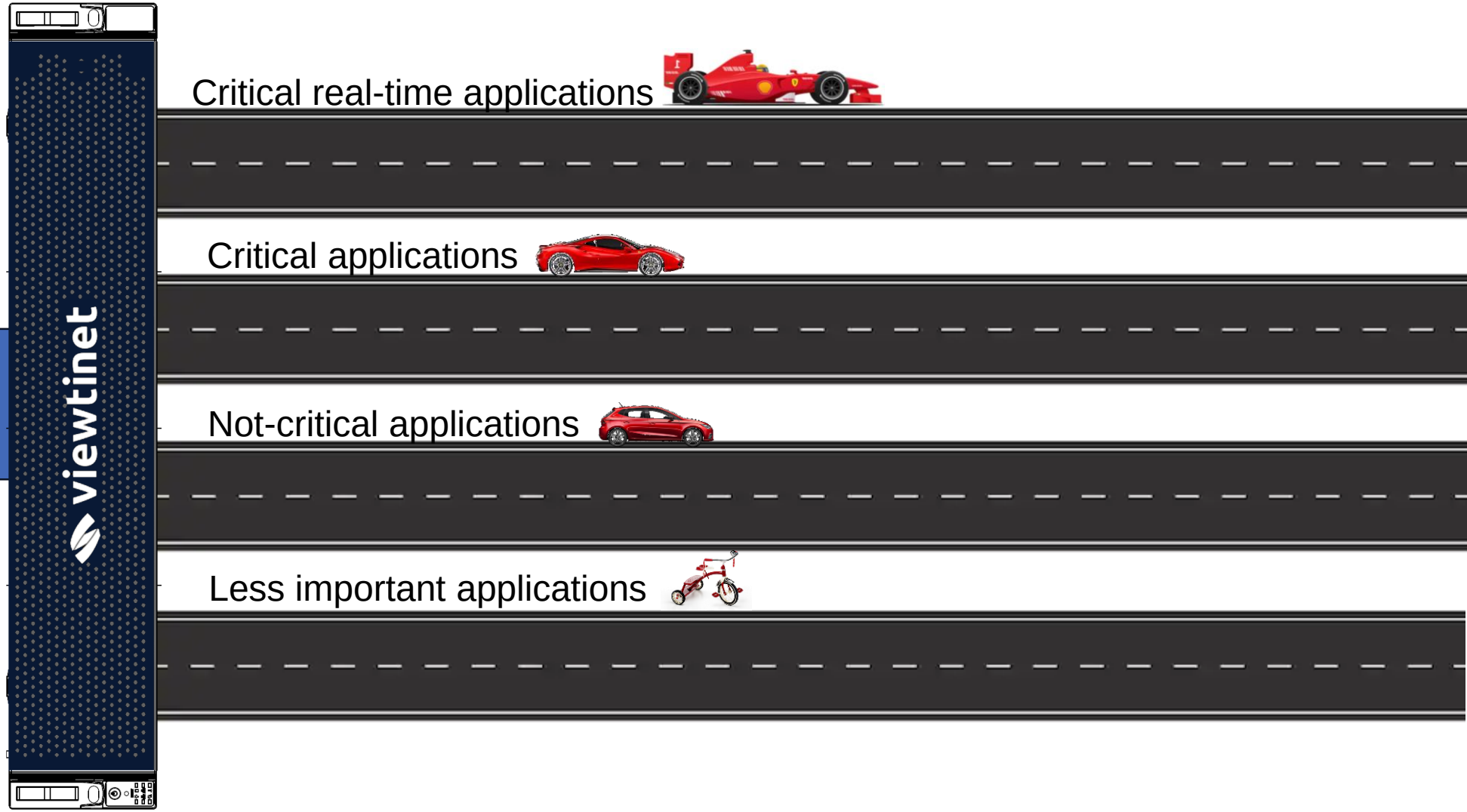
- Bidirectional rules (inbound and outbound)
- Multiple QoS policies
- Avoid Firewall overloading
- High-Rate application recognition

East – West

- Improve internal business critical applications
- Avoid network bottlenecks
- Manage the traffic of all branches

How a Smart Network should work

With Viewtify QoS we can assign different policies and priorities to different applications, subnets, etc.



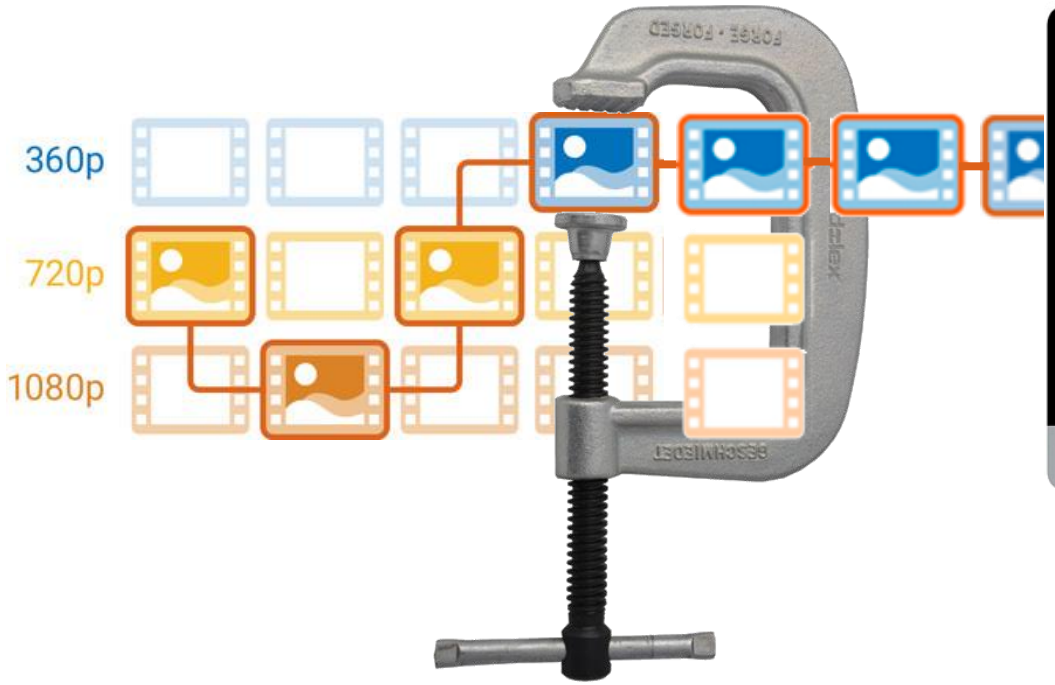
Adaptive Bit Ratio: savings with traffic shaping

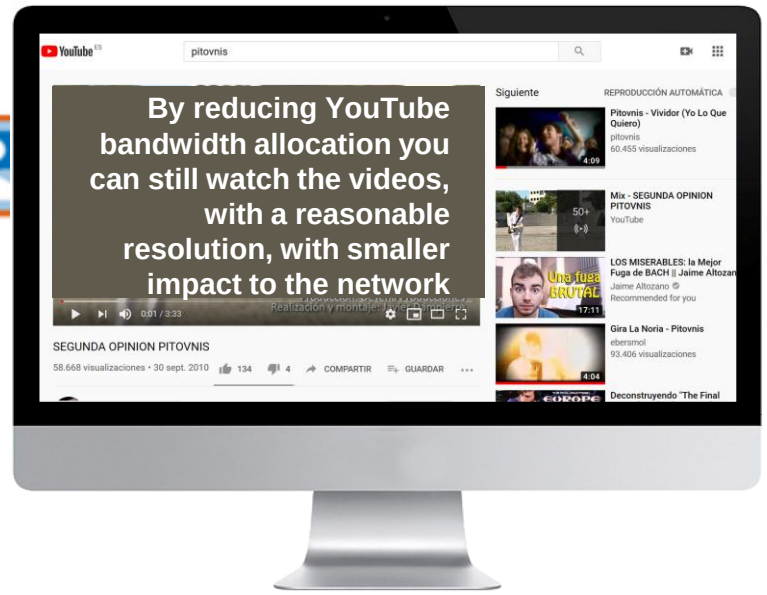
YouTube

Quality	Quality Resolution	Video Bitrate
LOW	480 X 270	400kbps
Medium	640 X 360	800 - 1200kbps
High	960 X 540/854 X 480	1200 - 1500kbps
HD	1280 x 720	1500 - 4000kbps
HD1080	1920 x 1080	4000 - 8000kbps
4K	3840 X 2160	8000- 14000kbps

NETFLIX

vimeo

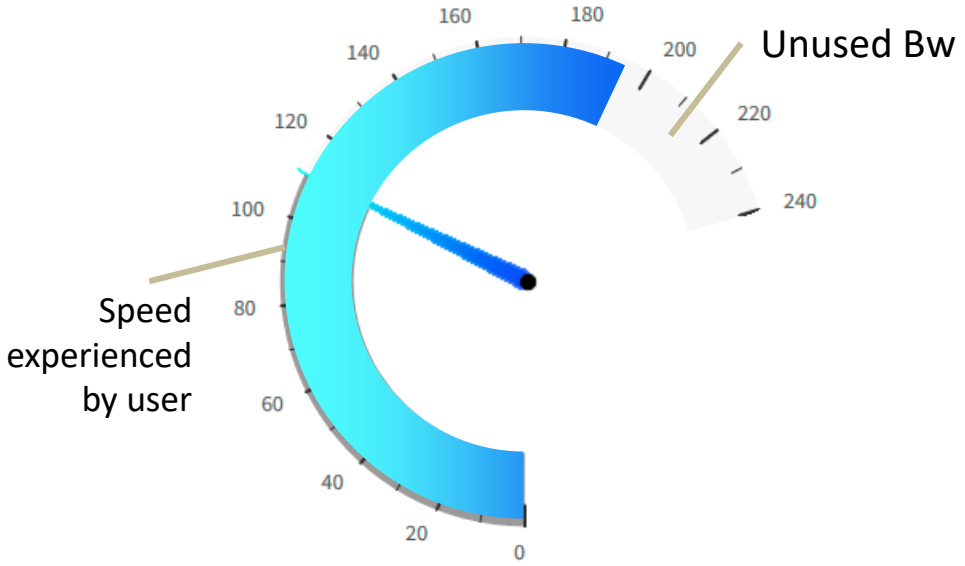




TCP Optimization

In networks with packet loss and latency, transport protocols leave capacity unused

With TCP Optimization we can help and improve the user experience



TCP Optimization: Faster TCP Stack

More Efficient use of Bandwidth

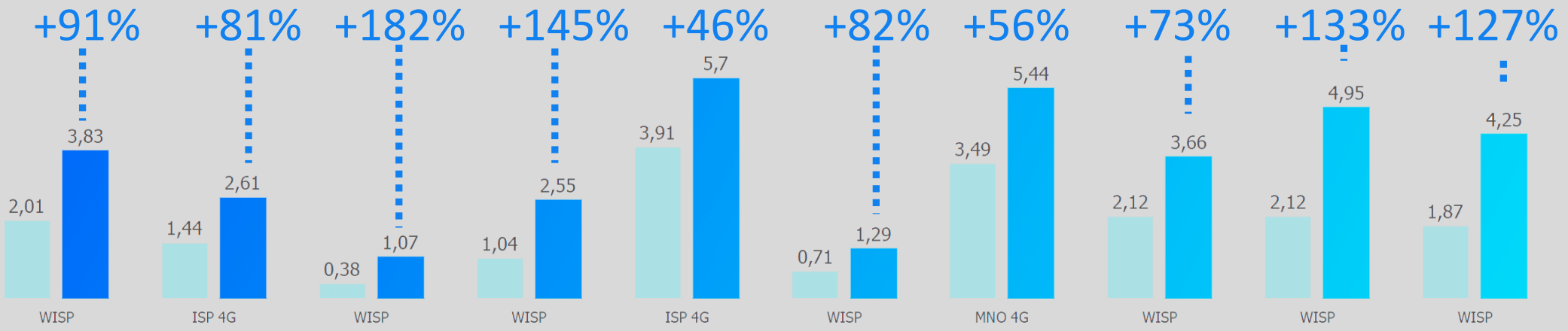
Impact reduction of long round trip times

Faster recovery from packet loss

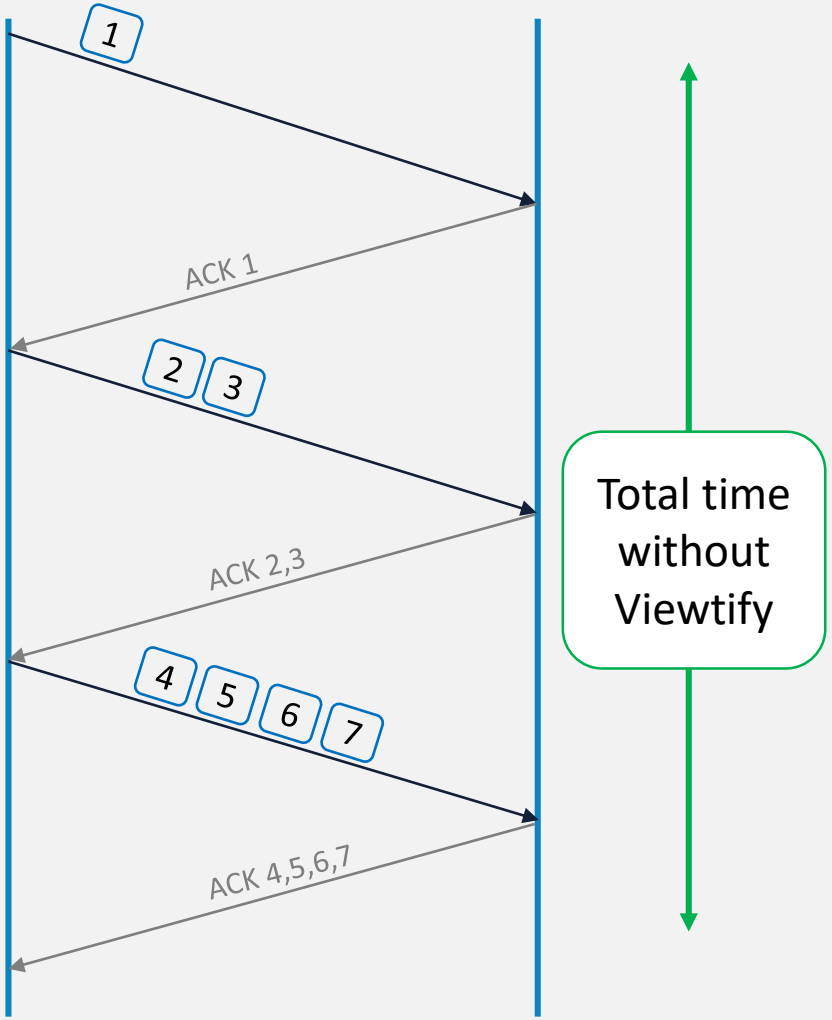
Reduction of dropped connections

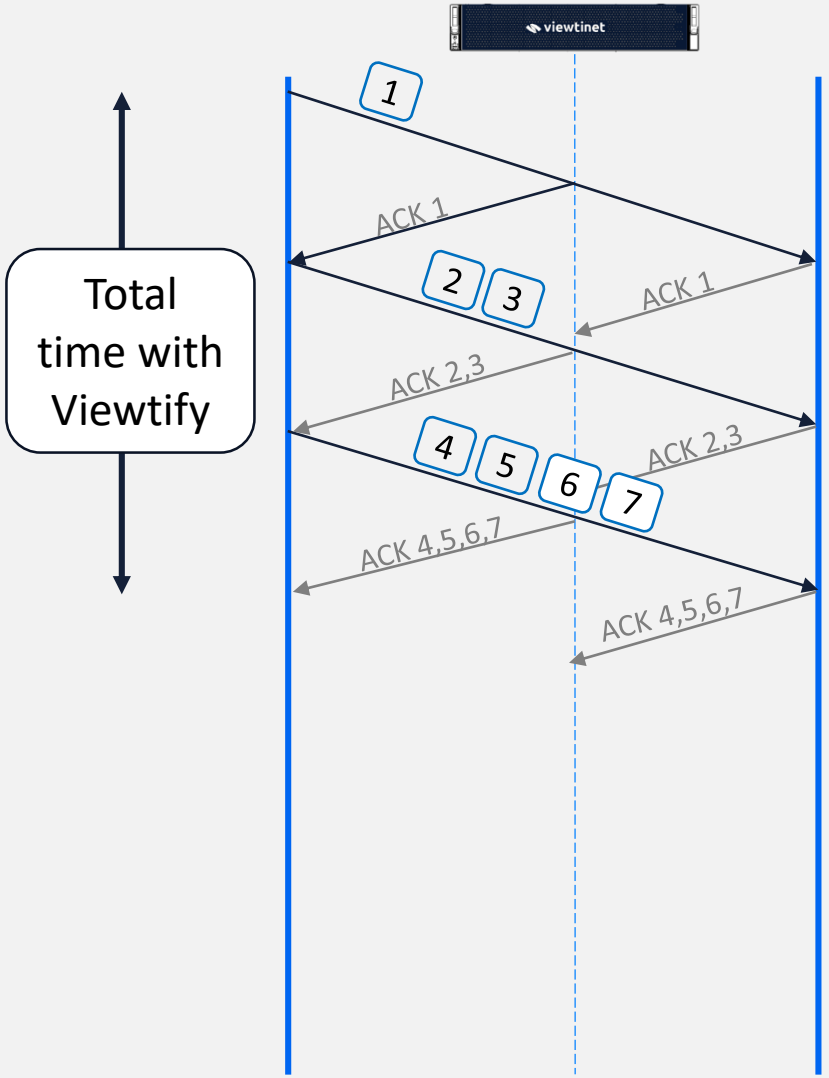
Distinguishes radio glitches from congestion & handles both

Reduces the impact of packet losses early in a transfer on overall transfer speed



TCP Optimization: Transparent Proxy





TCP Optimization

Top-of-the-Class acceleration

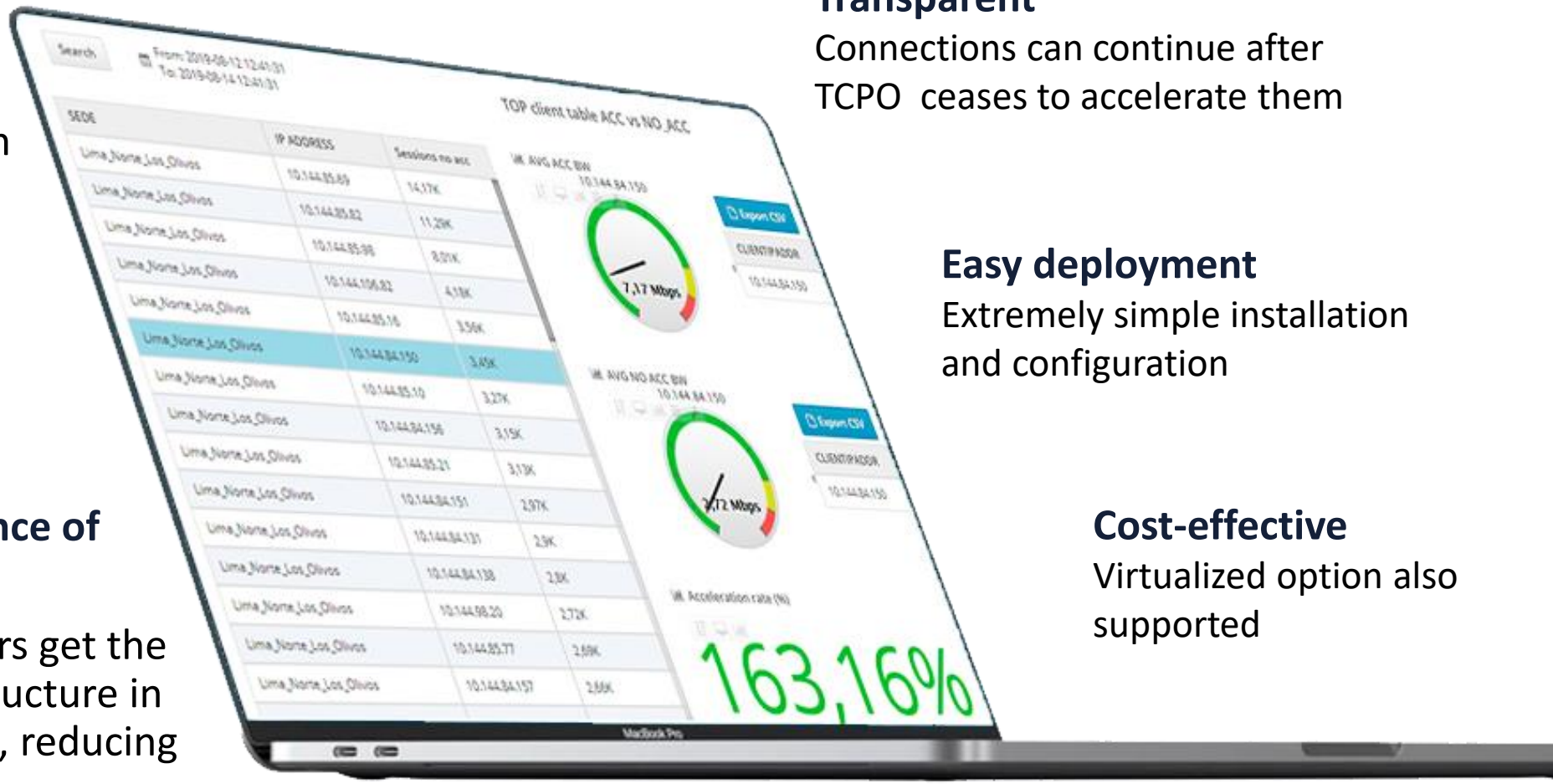
TCP traffic speed increase from 20% to over 100%

Bandwidth savings

Web and Image compression

Maximizes Quality of Experience of users

Operators and Service providers get the best of their expensive infrastructure in terms of customer satisfaction, reducing Churn



Transparent

Connections can continue after TCPO ceases to accelerate them

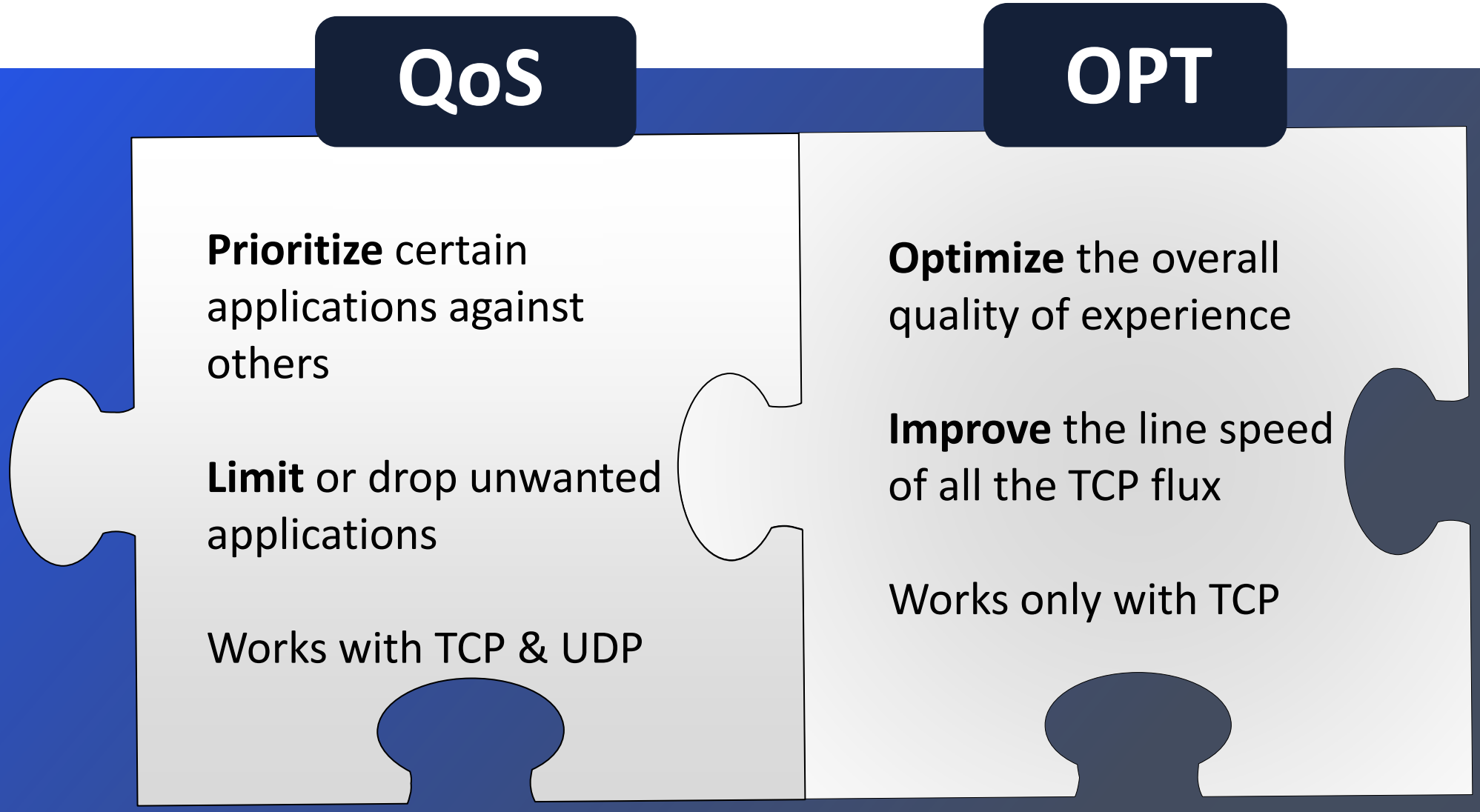
Easy deployment

Extremely simple installation and configuration

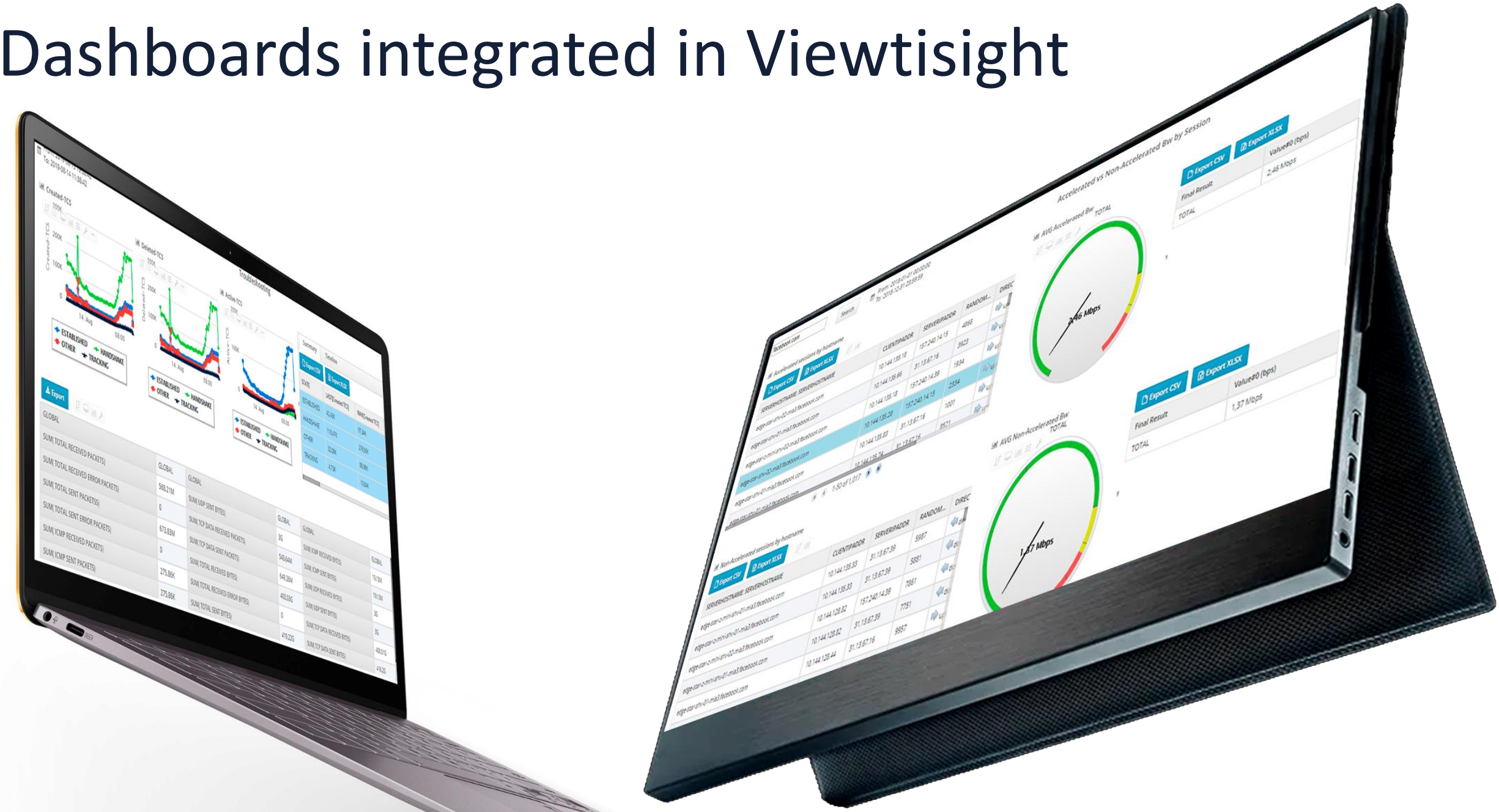
Cost-effective

Virtualized option also supported

QoS vs OPT


QoS
Prioritize certain applications against others
Limit or drop unwanted applications
Works with TCP & UDP
OPT
Optimize the overall quality of experience
Improve the line speed of all the TCP flux
Works only with TCP

Dashboards integrated in Viewtisight



Architecture

Scalable, physical and virtual

Passive bypass

Failsafe Protection

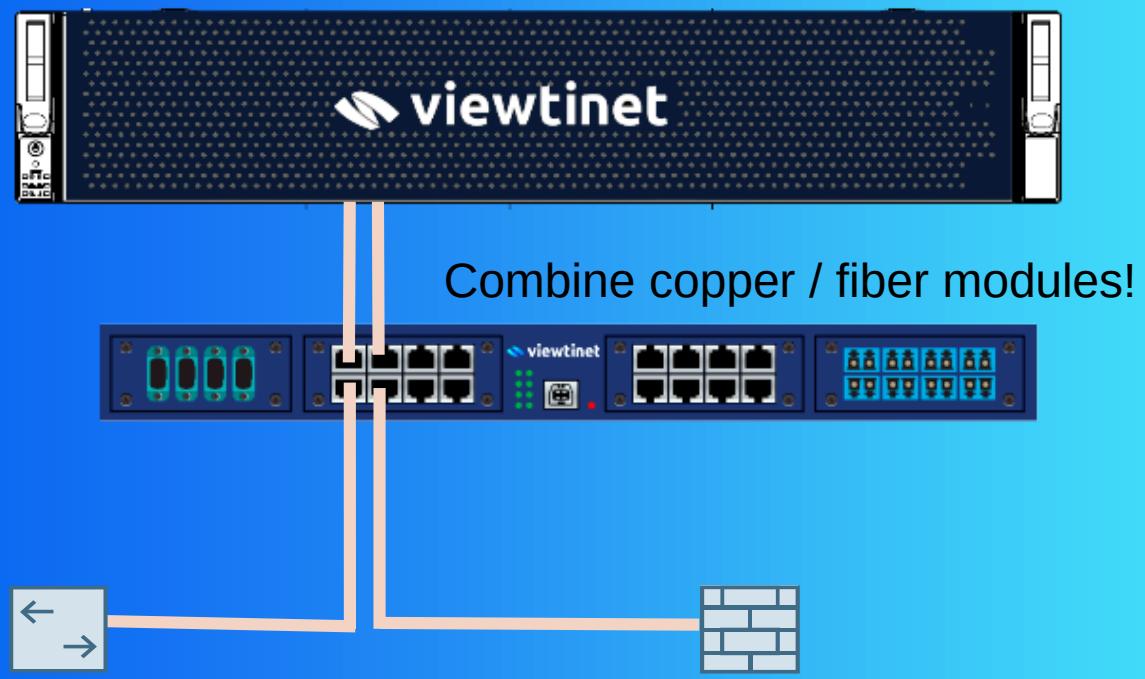
When power fails, the optical-relays ensure that the network flow continues uninterrupted.

Heartbeat Protection

In the event of an appliance malfunction it bypasses the traffic intended for the Viewtify to the network ports, allowing it to continue to flow.

High Density and flexibility (4 modules)

Network Links	Type	Segments per module
10 / 100 / 1000M	Copper	2
1, 10, 40, 100G	Single Mode LX, LR, LR4	2
1, 10G	Multimode SX, SR	2
40, 100G	Multimode SR4	1
10 Gb	Copper	1



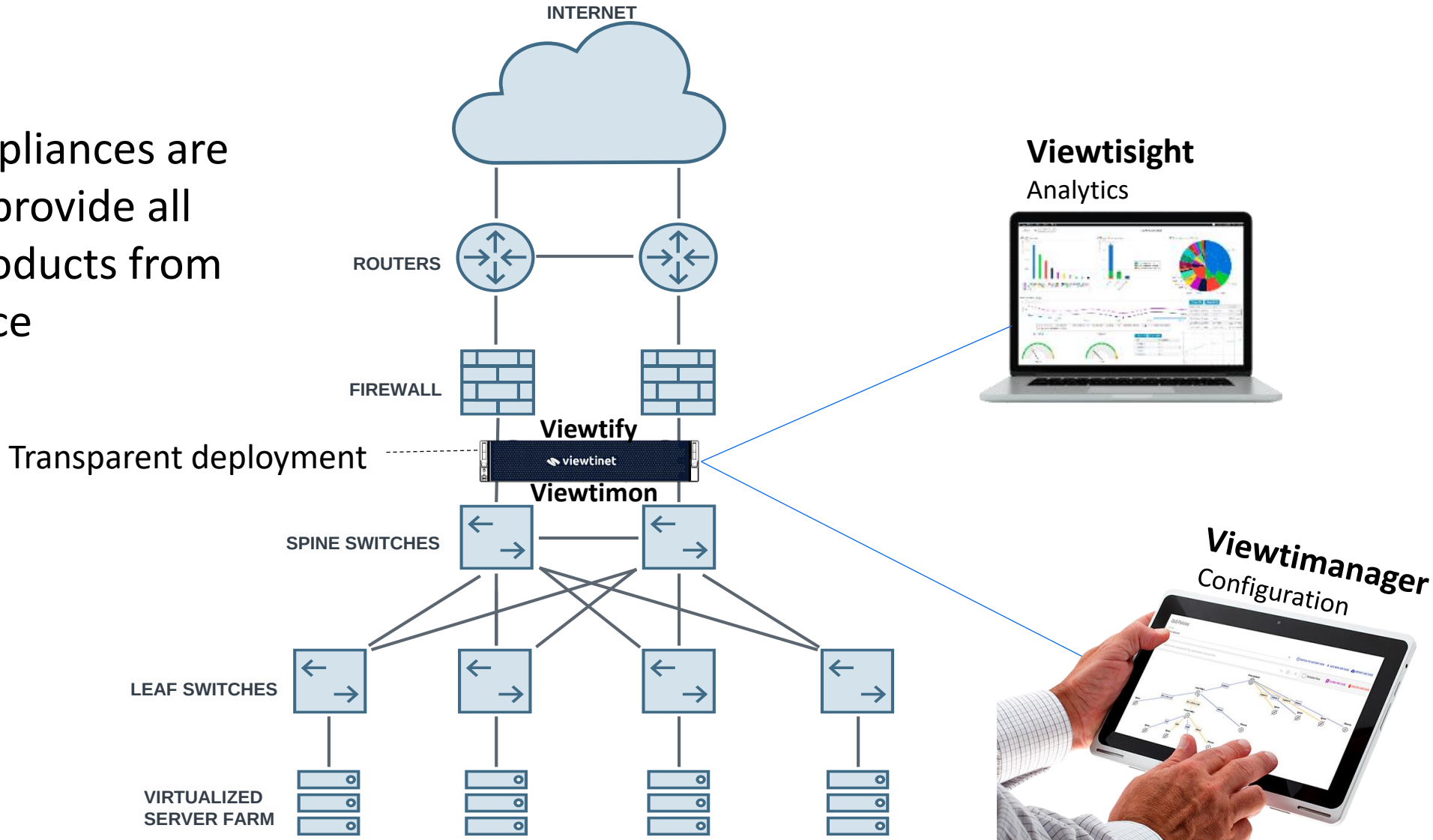
Appliances and SW licenses

	VN-100	VN-1000	VN-2000	VN-10000
HW DEVICES				
INTERFACES	4 x GE	Up to 12 x 1GE / 10GE	Up to 24 x 1GE / 10GE	Up to 24 x 1GE / 10GE & 2 x 25G/100G
THROUGHPUT	200 Mbps	5 Gbps	20 Gbps	100 Gbps

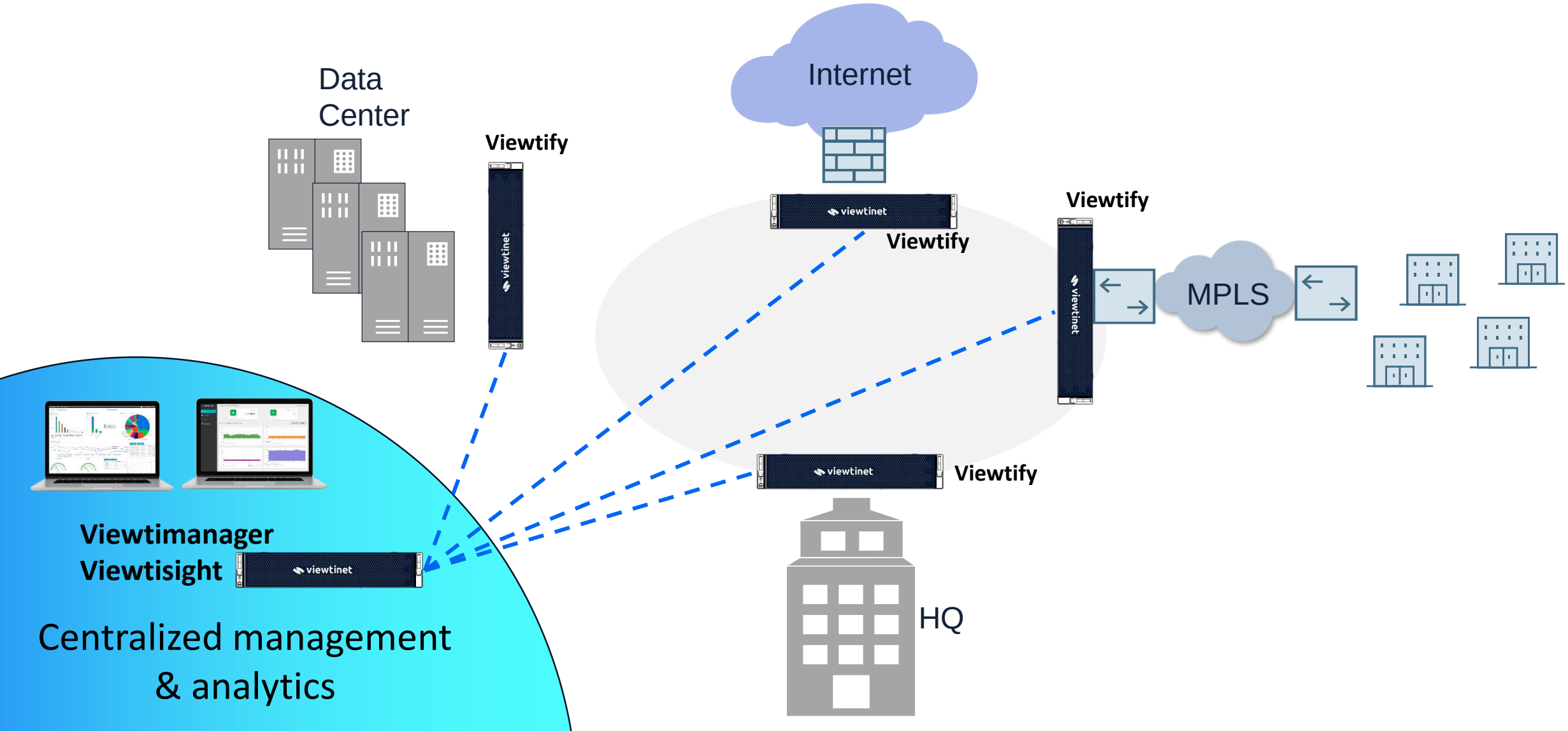
SW LICENSES	Viewtisight Management: Centralized Analytics and management
	Viewtify QoS (Licensed by Bw)
	Viewtimon Probe: DPI, Qoe KPI, PCAPS (Licensed by Bw)
	Viewtify TCPO: Acceleration (Licensed by Bw)

Architecture – All in one

Viewtinet appliances are designed to provide all the set of products from a single device



Architecture

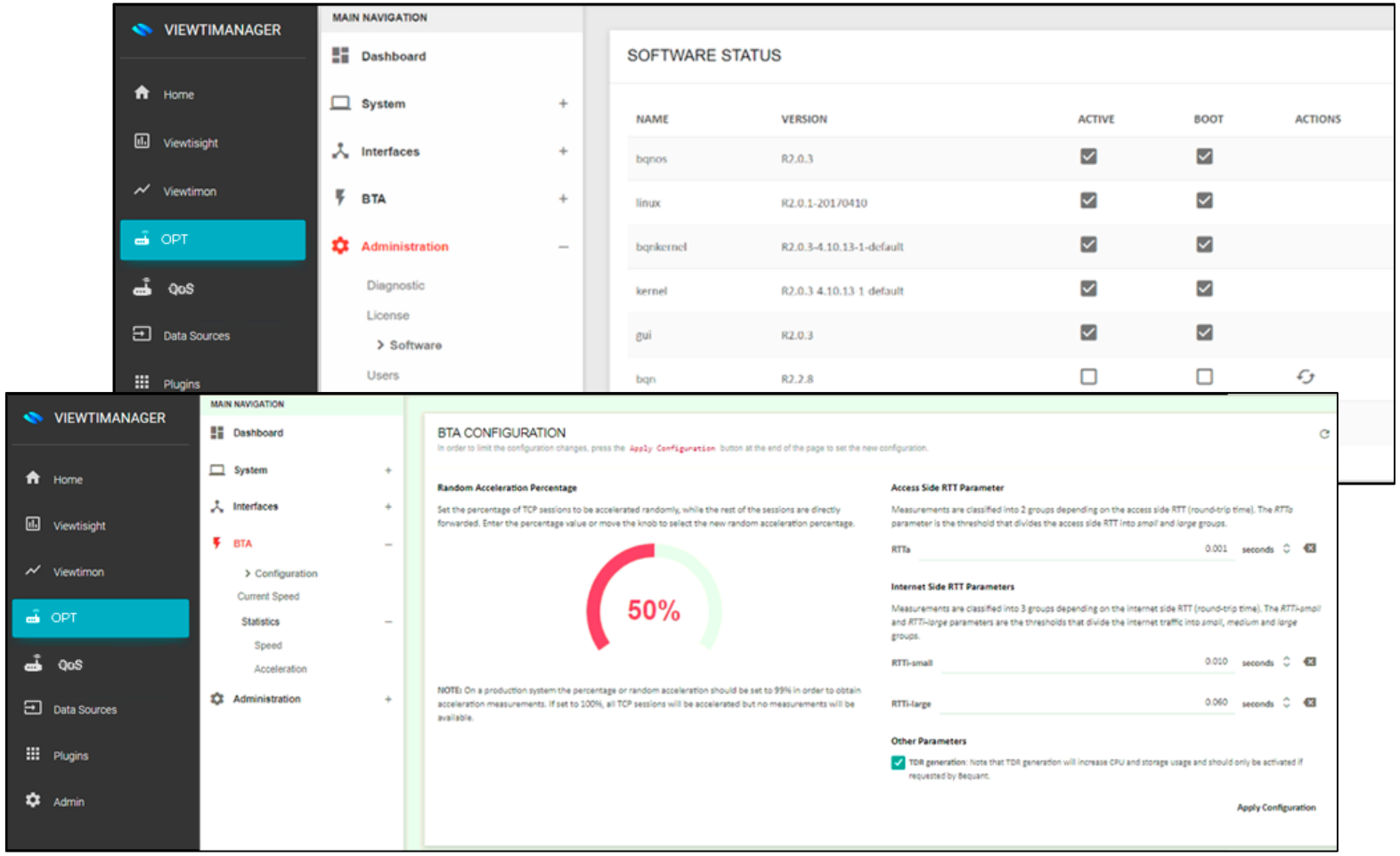


Configuration

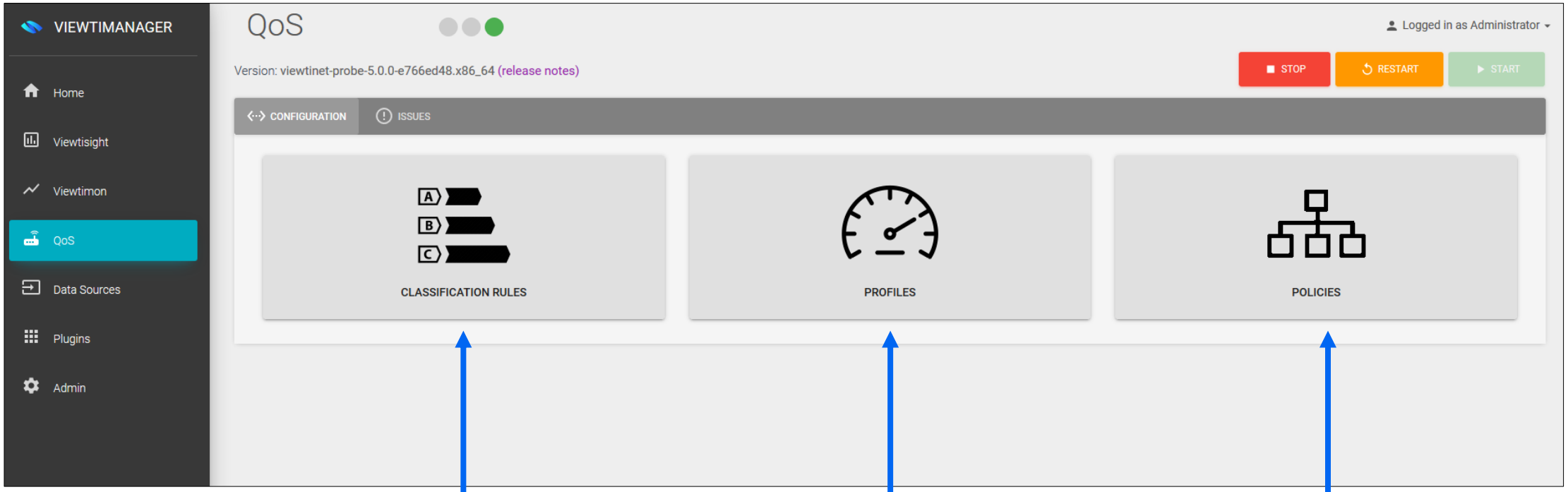
Solutions per vertical

Configuration - Viewtify TCPO

Very simple and visual configuration from Viewtimanager.



Configuration - Viewtify QoS

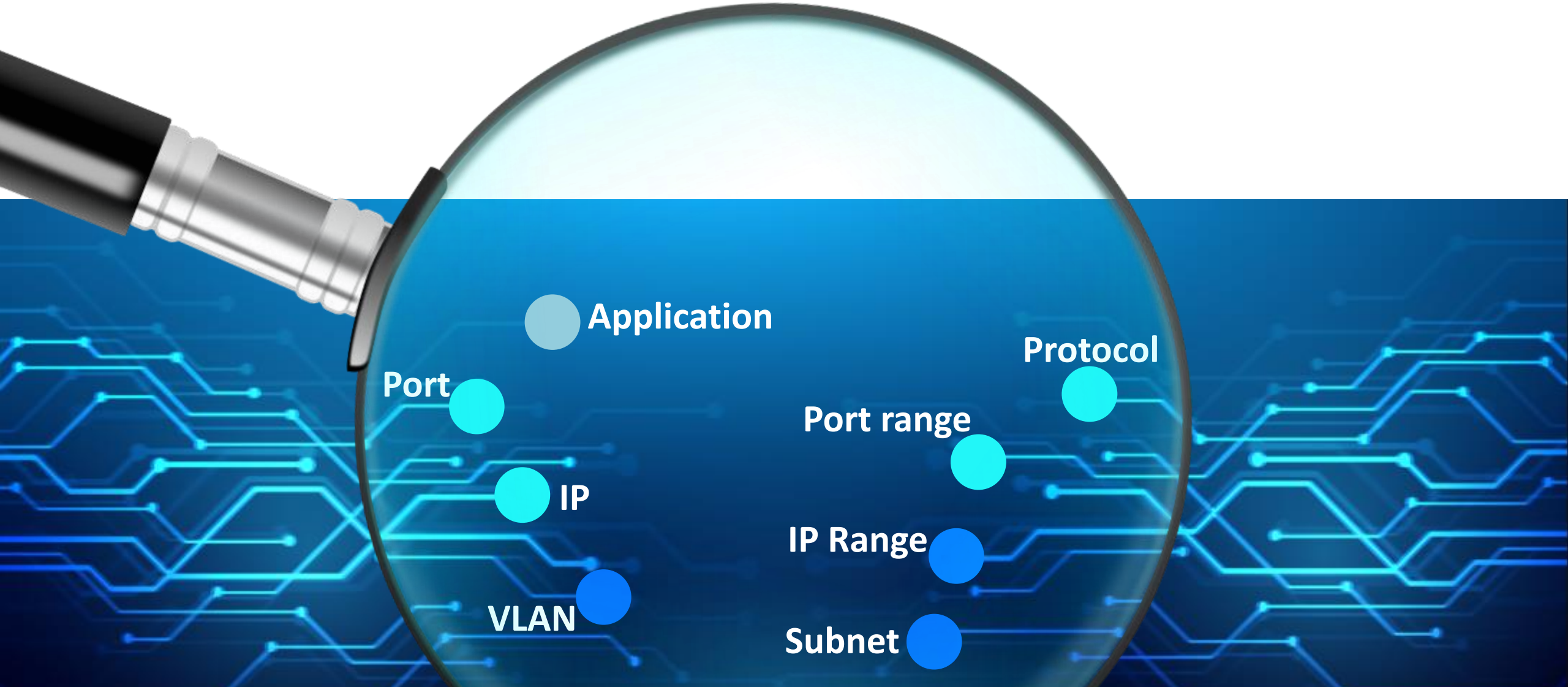


What?

How?

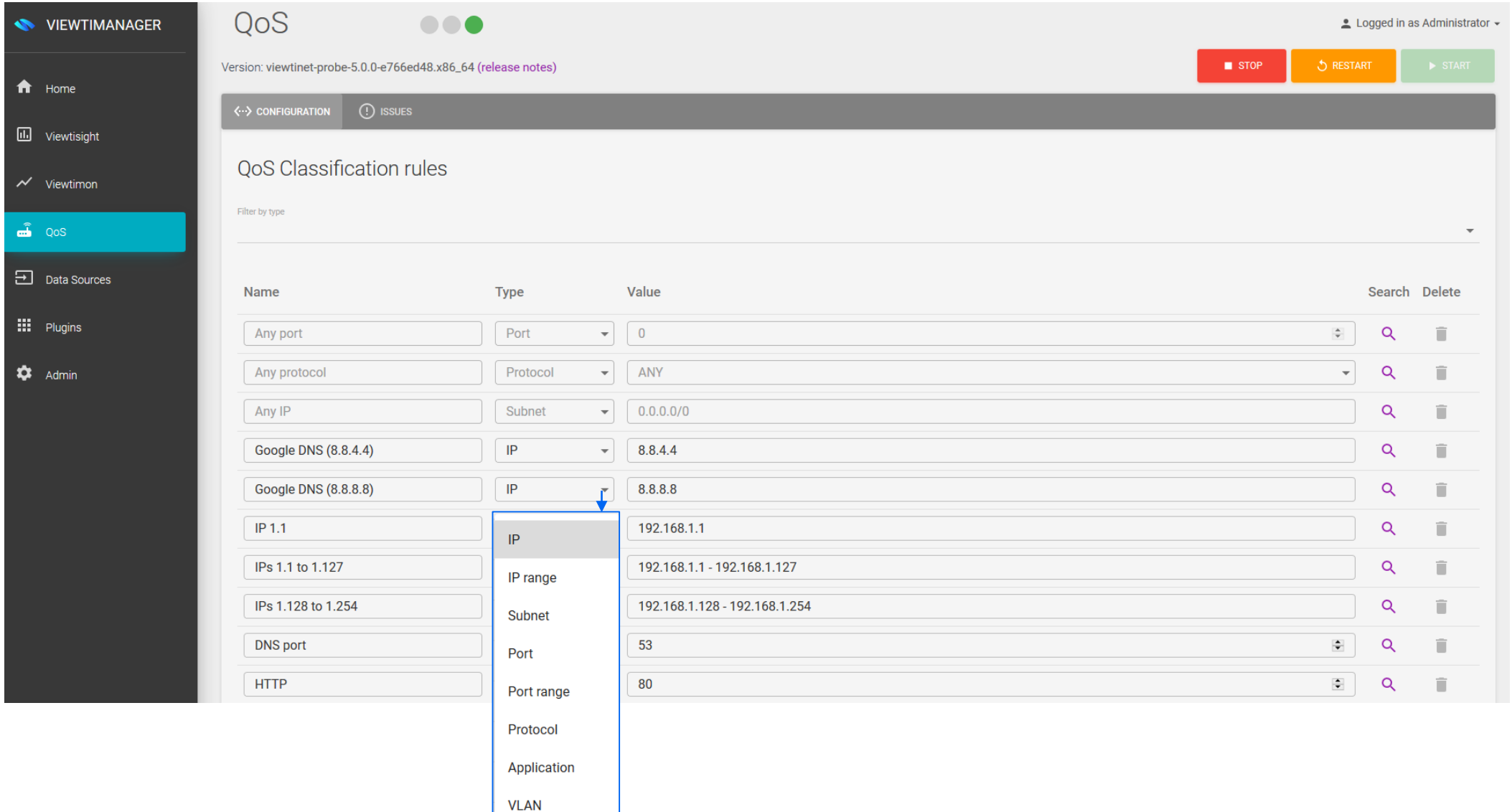
Match each of the classification rules to the desired profile

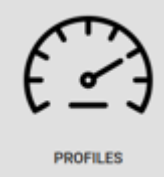
Viewtify QoS - Classification Rules



CLASSIFICATION RULES

Viewtify QoS - Classification Rules





Viewtify QoS Profiles

Min Rate

Allocate a minimum quantity of bandwidth to critical applications

Max Rate

Set a maximum throughput to non-critical or heavy applications

Priority Queue

Set different priorities according to the sensitivity of the flows

Drop

Drop the packets of undesired flows

Normal QoS

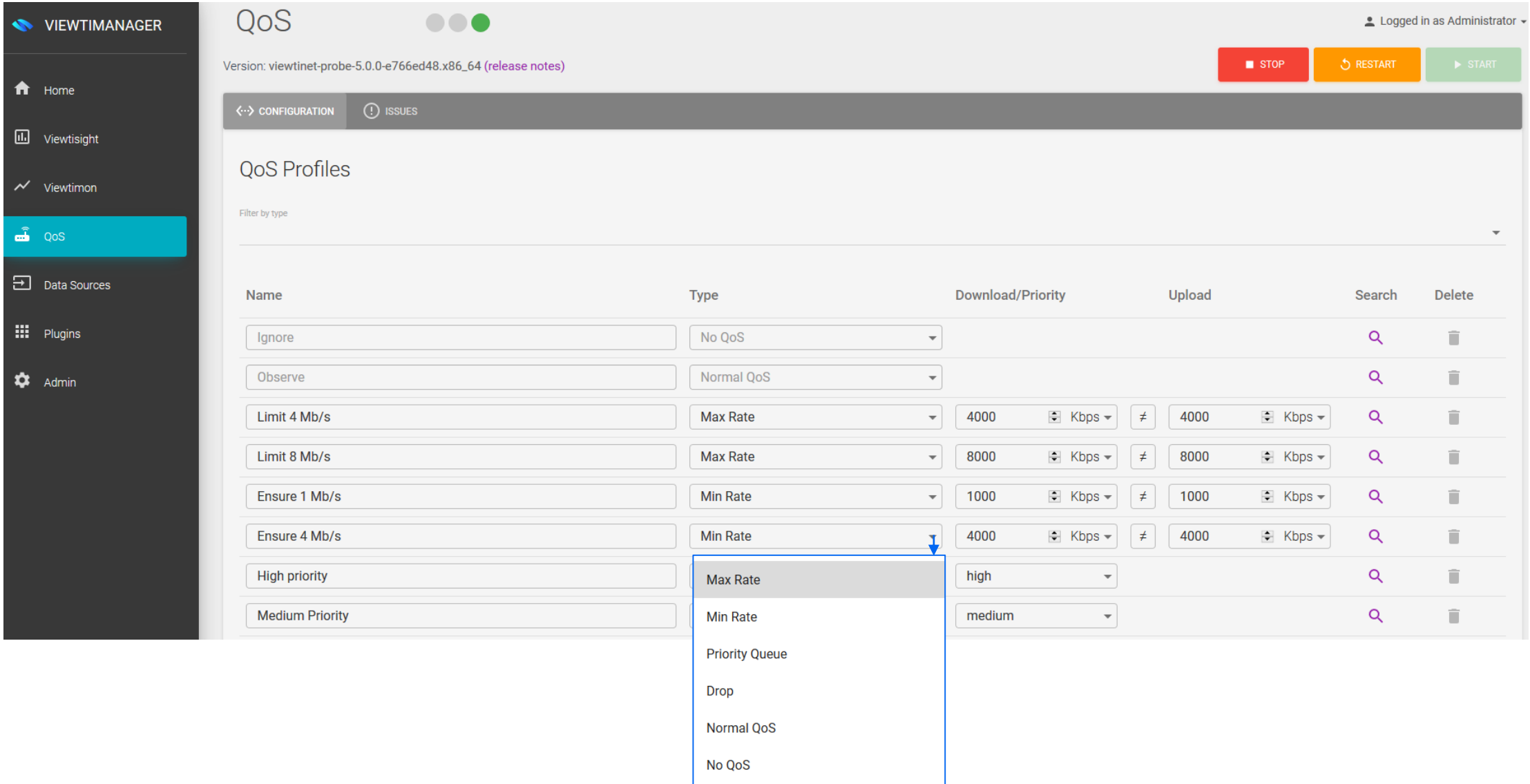
Leave the inherited QoS

No QoS

No QoS set. In case of saturation more likely to be dropped

PROFILES

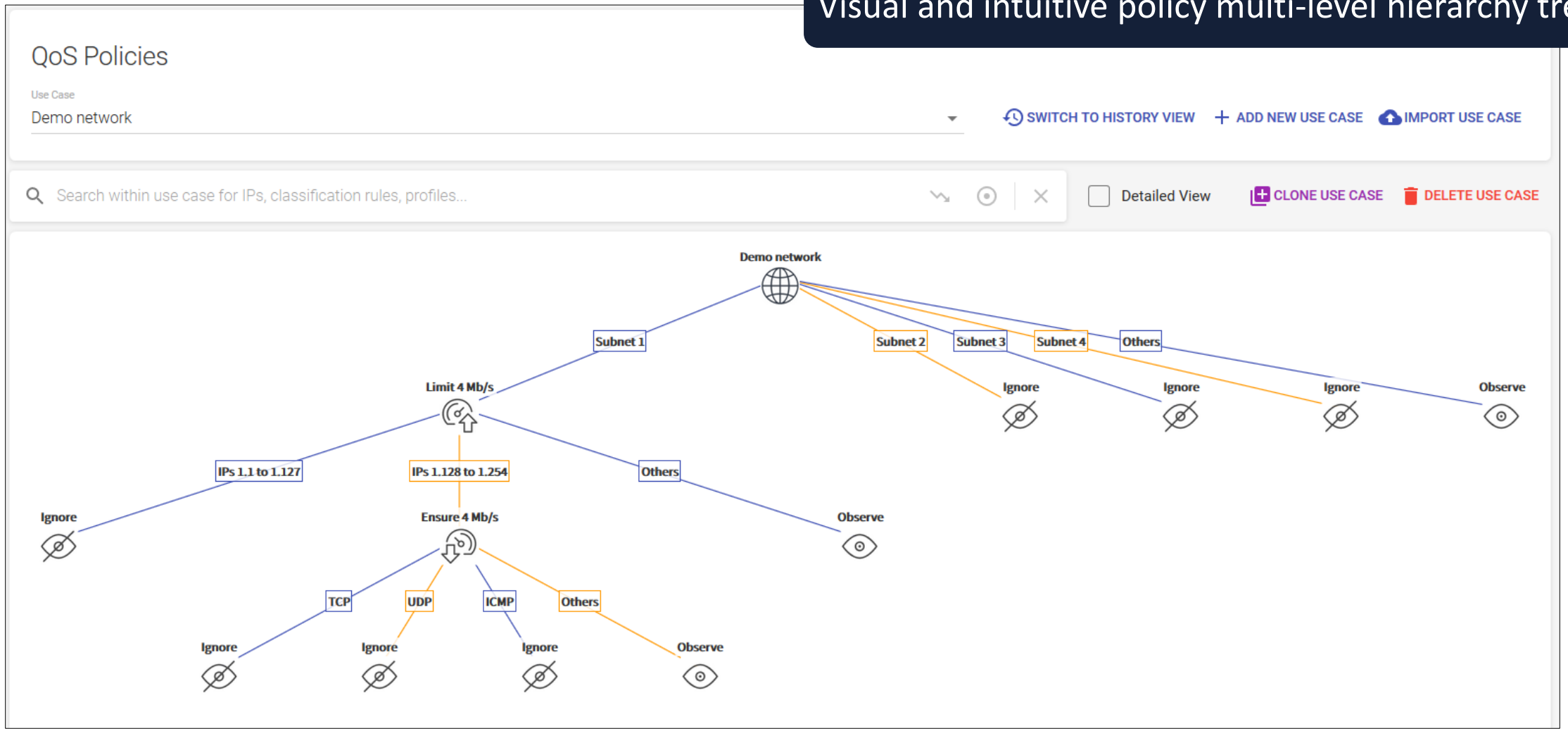
Viewtify QoS - Profiles



Viewtify QoS - Policies

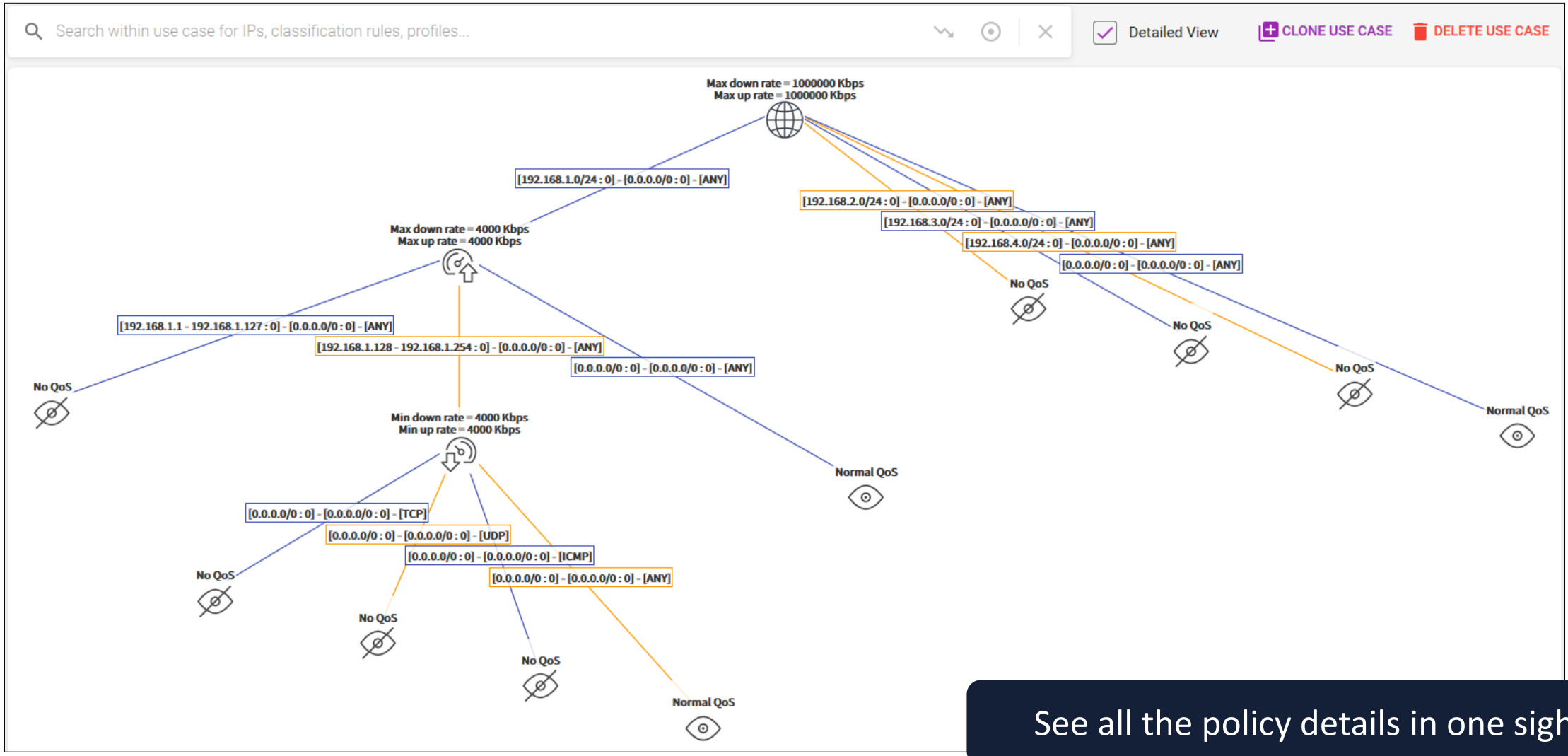
POLICIES

Visual and intuitive policy multi-level hierarchy tree



POLICIES

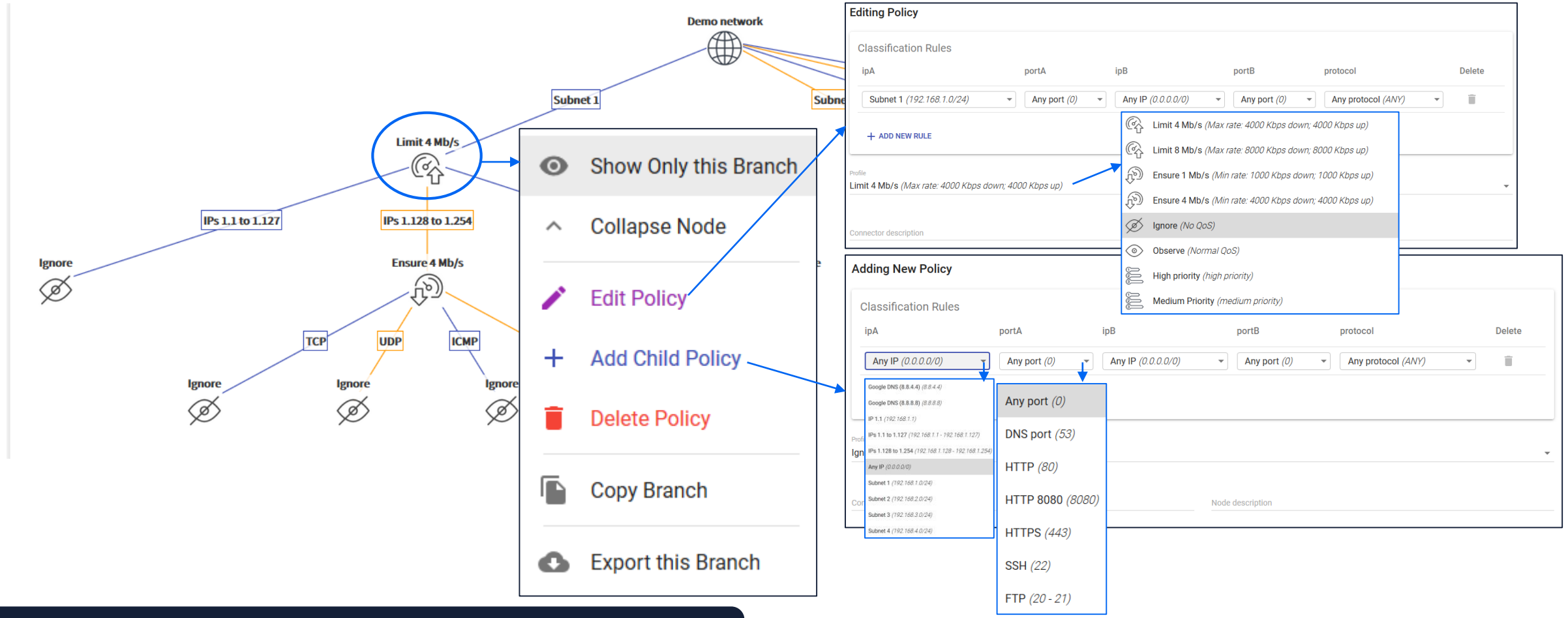
Viewtify QoS – Policies (detailed view)



See all the policy details in one sight

POLICIES

Viewtify QoS – Policies (adding a policy)

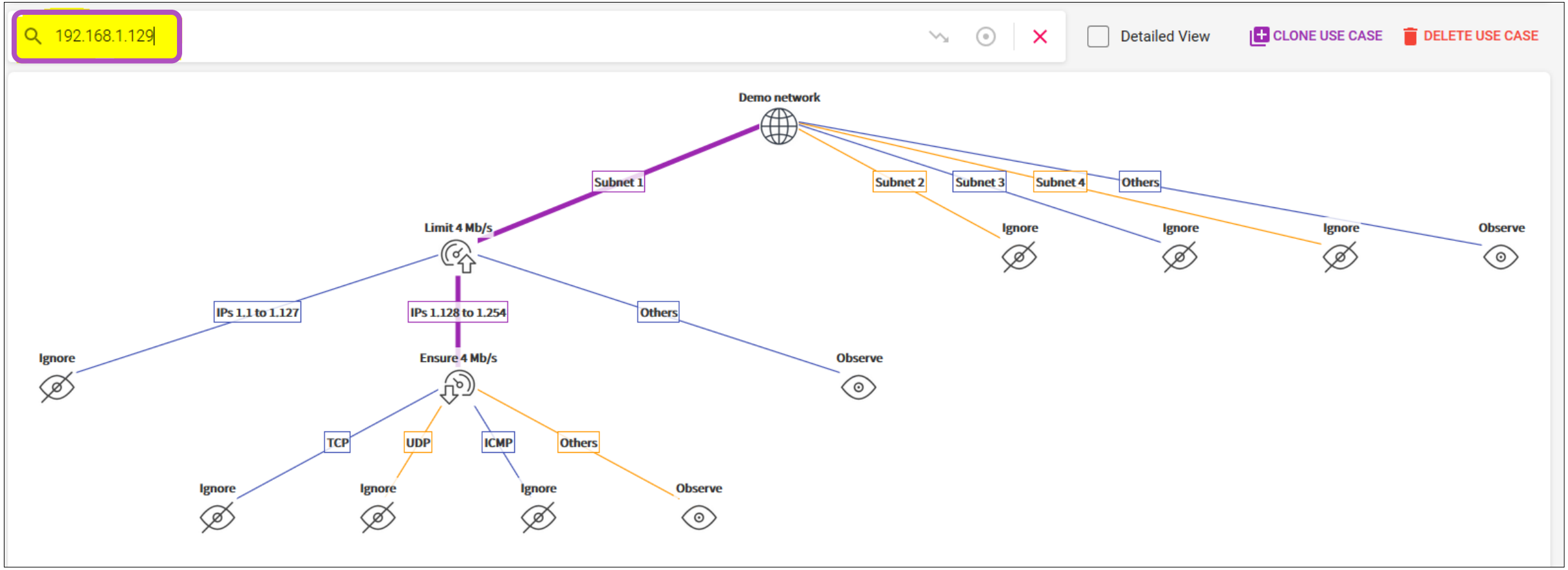


Add policies with few clicks. Fast learning curve.

POLICIES

Viewtify QoS – Policies (search tool)

Search for any rule or profile and see the path



Use Cases

Solutions per vertical

Solutions for every vertical

Finance

Data Centers

Education

Government

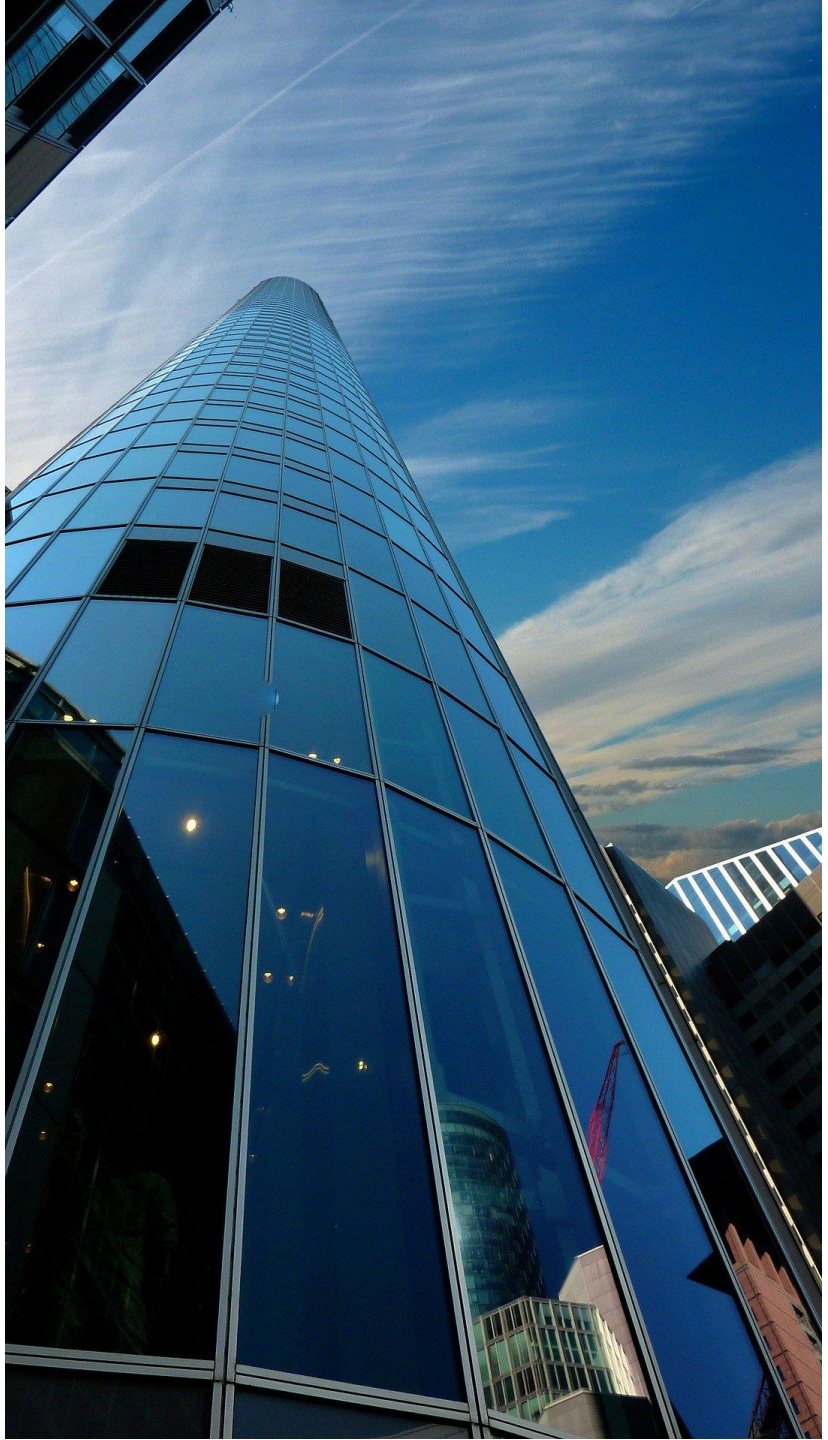
Hospitality

Transportation

Finance

Challenges

- Critical network elements and applications
- Multiple branches and regional offices with different needs
- Internet banking
- International links
- Employees wasting resources



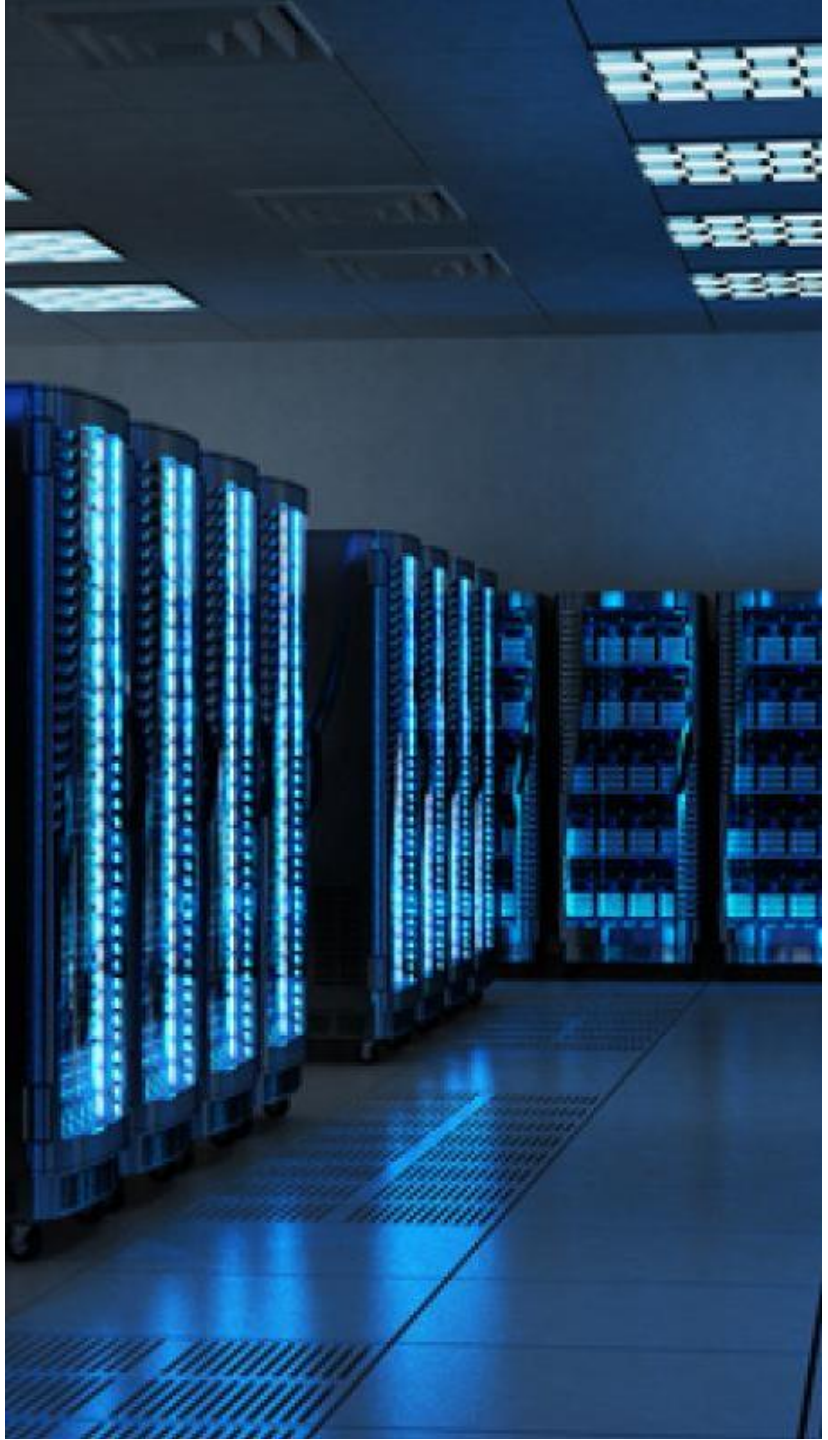
The Viewtinet Edge

- 360° visibility at application layer with QoE and KPIs
- Prioritize business critical applications
- Control of unwanted traffic
- Accelerate WAN & international links
- Manage & optimize critical links

Data Center

Challenges

- Exponential growth of volume and customer base
- High-demanding SLA
- Minimize time to market for new services
- Avoid high cost of WAN & Internet links
- Poor QoE with high-latency customers



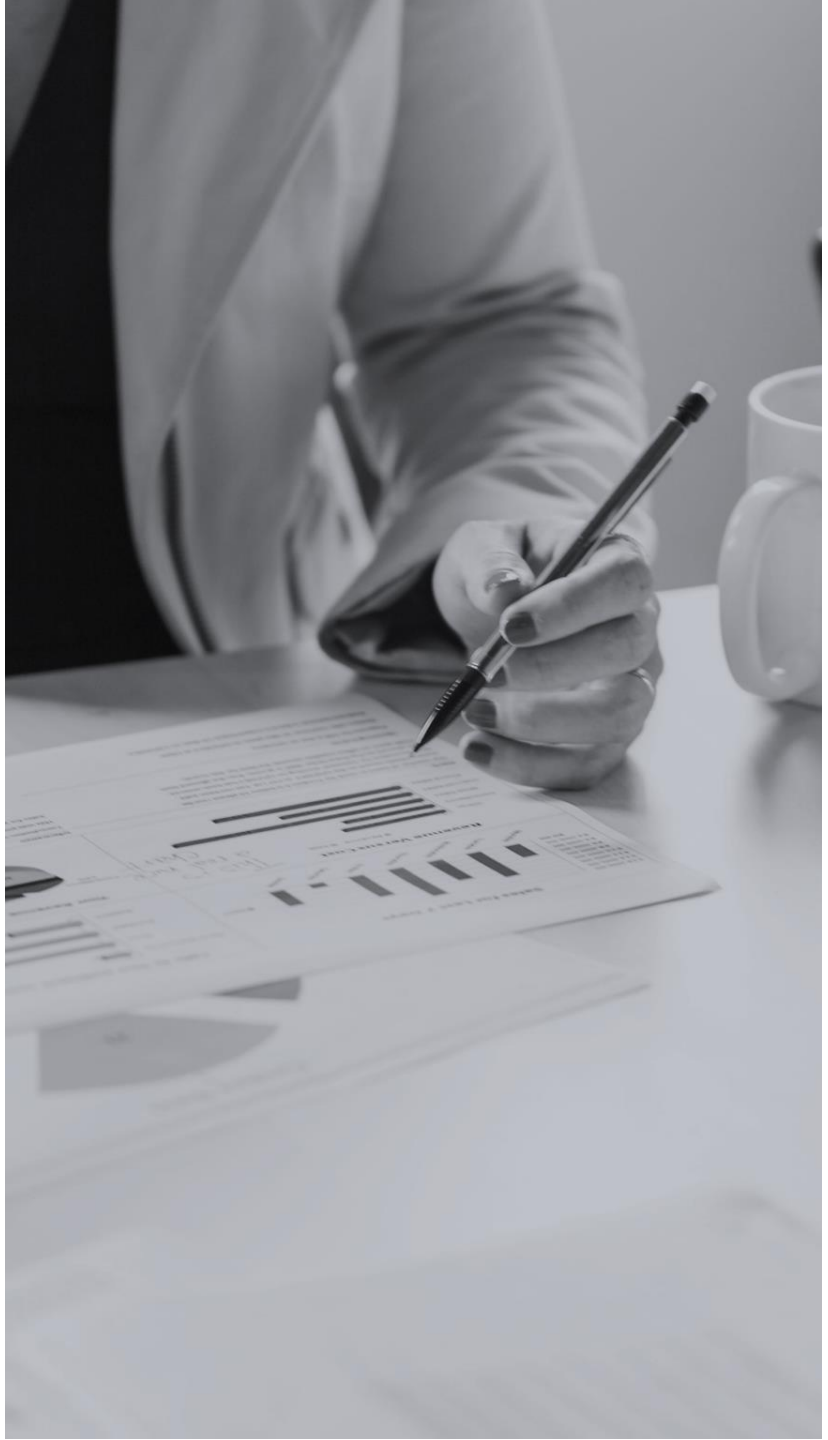
The Viewtinet Edge

- 360° visibility at application layer with QoE and KPIs for SLA management
- Enforce traffic policy to avoid congestion
- Multi-tenant for self reporting
- High-performance platforms
- TCP acceleration

Education

Challenges

- Thousands of users
- Lack of control between types of users (pupils and corporate)
- Frequent P2P downloading
- Poor Wi-Fi QoE



The Viewtinet Edge

- 360° visibility at application layer with QoE and KPIs
- Prioritize academic and admin applications
- Control of unwanted traffic
- Improved Wi-Fi QoE with TCP optimization

Government

Challenges

- Critical ad-hoc applications
- Multiple branches and regional government offices
- High-demanding data centers
- Legal problems due to the

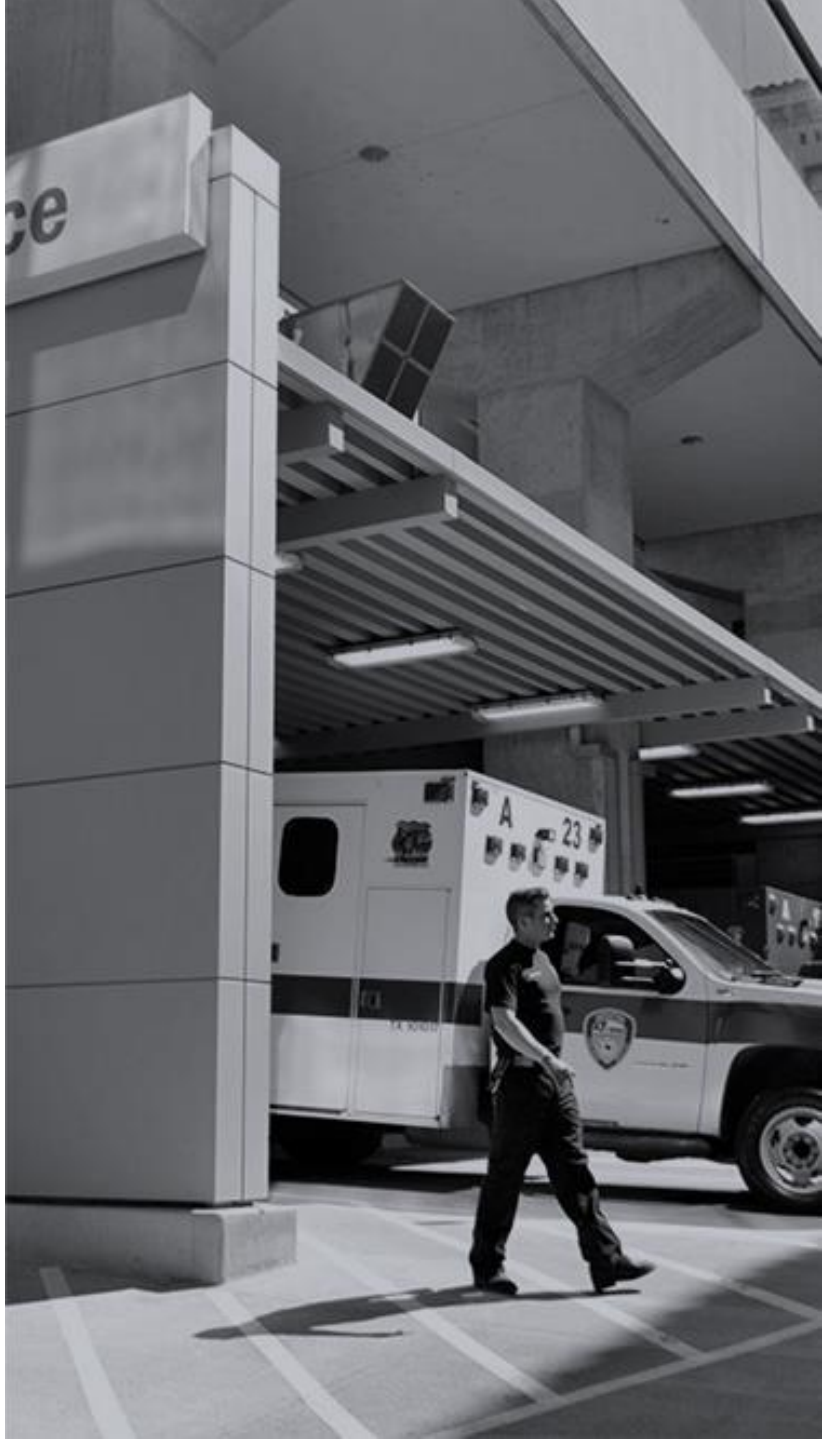
The Viewtinet Edge

- 360º visibility at application layer with QoE and KPIs
- Prioritize mission critical applications and optimize data center performance
- Control of unwanted traffic
- Definition of multiple rules per office

Hospitality

Challenges

- Lack of network visibility
- Bottlenecks
- Lack of control between different users (guests, employees)
- Wi-Fi service and BYOD
- Employees wasting resources



The Viewtinet Edge

- 360º visibility at application layer with QoE and KPIs
- Control of unwanted traffic
- Wi-Fi policy controls. Tiered service and fair usage.
- Improve QoE with TCP optimization

Transportation

Challenges

- Poor network visibility
- Bottlenecks
- Multiple branches and regional offices with different needs
- International links
- Employees wasting resources
- Wi-Fi service

The Viewtinet Edge

- 360° visibility at application layer with QoE and KPIs
- Prioritize business critical applications
- Control of unwanted traffic
- Accelerate WAN & international links.
- Wi-Fi policy controls

thank you

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