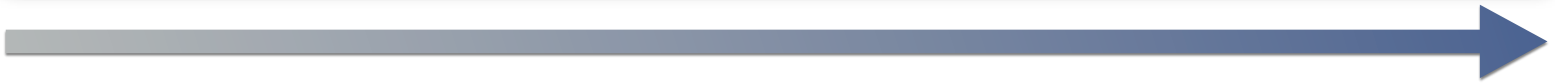
Deepfield

Stefan Meinders
stefan@deepfield.net

Operational Intelligence
For Internet Service Providers

Internet Services Evolution

Traditional	2016
Web Browsing	Apps
SMTP / POP3	Apps / WebMail
FTP	http Downloads
SMS	Instant Messanger
P2P Filesharing	Streaming
Reactive	Proactive
Local Software	SaaS
Local Games	Online Games
USB Drives	Cloud Drives

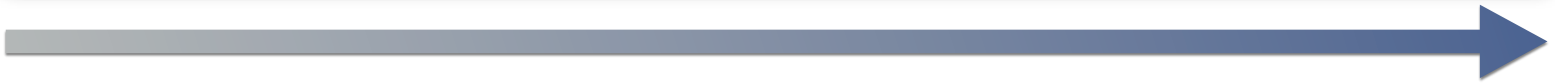


deepfield

Confidential — Do Not Redistribute

Monitoring Evolution

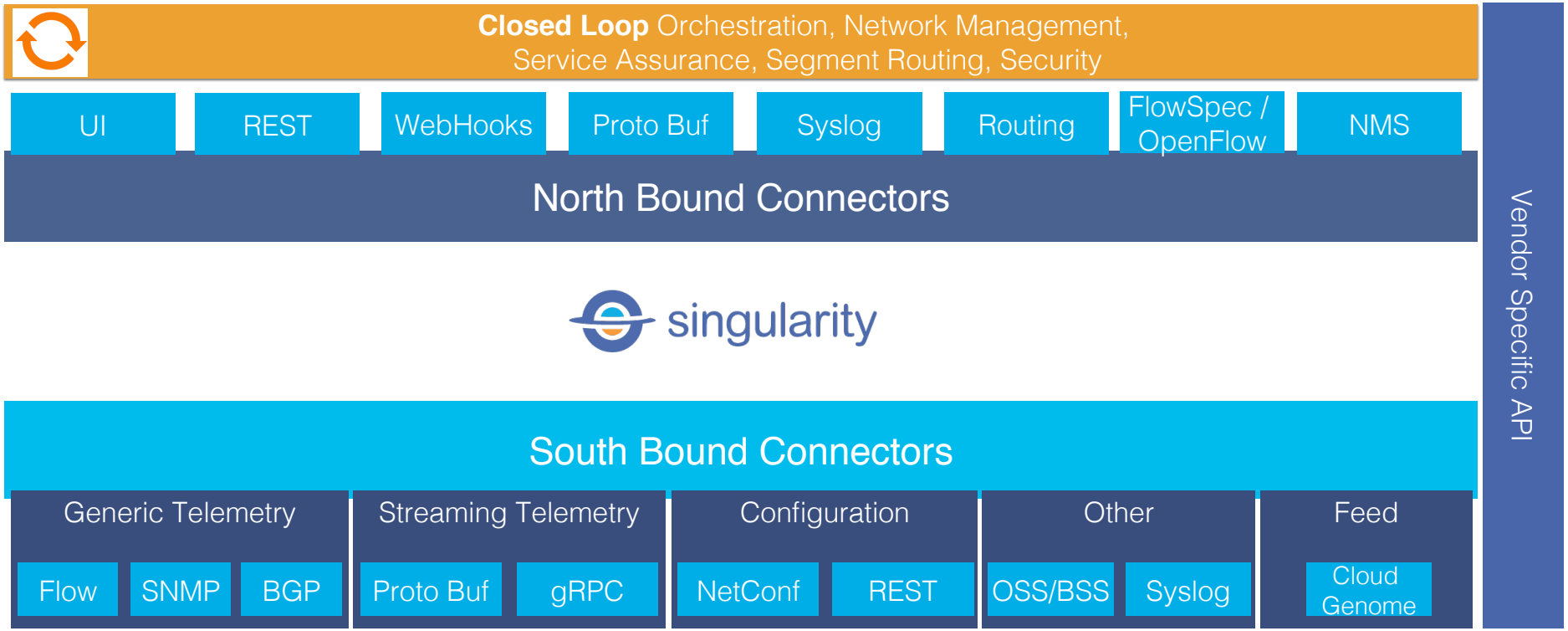
Traditional	2016
Device	Service / Micro-Service
SNMP	100s of Connectors
Polling	Streaming
5 Minutes	Real Time
Reporting	Analytics
Reactive	Proactive
Closed	Open
Point Monitoring	Holistic
Limited Search	Multi-Dimensional Queries
Limited Visualization	Data Exploration



deepfield

Confidential — Do Not Redistribute

Deepfield Connectors - Any API



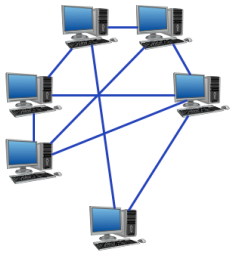
Confidential — Do Not Redistribute

Deepfield Logic Engines

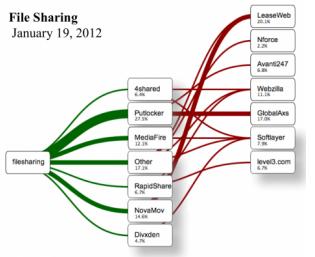
Correlate Data Sets and Measure Network

Performance

Topology Map



Service Map

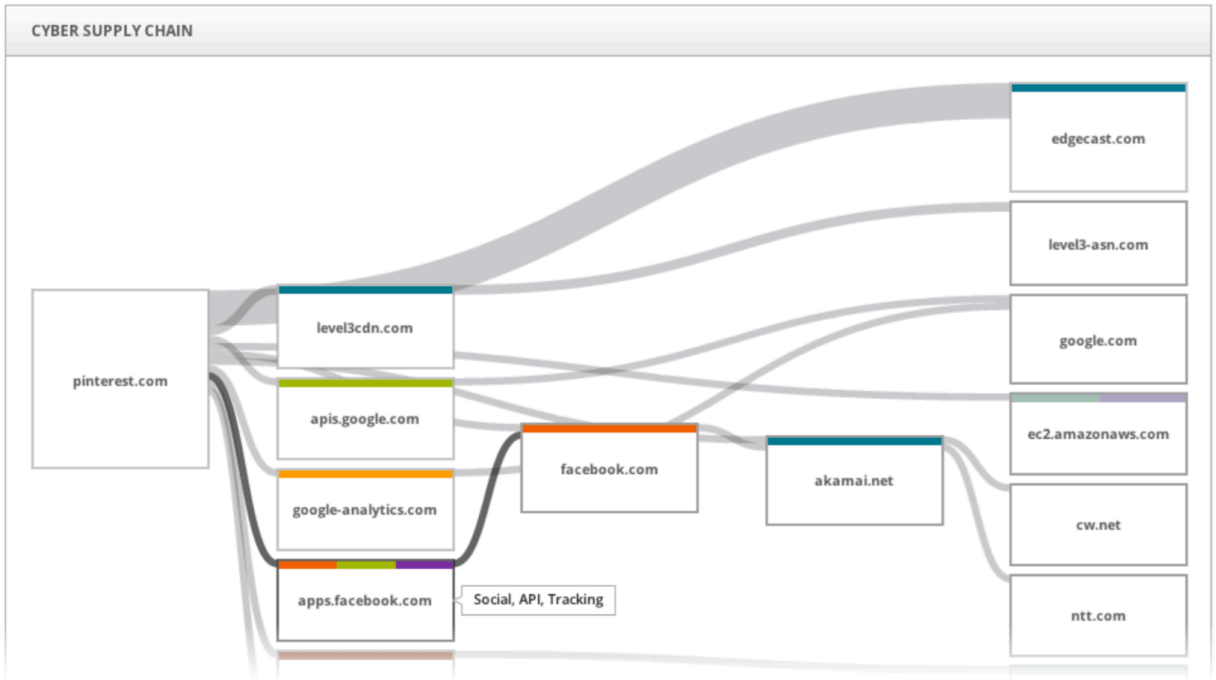


deepfield

Confidential — Do Not Redistribute

Service Map Logic Engines

Our patented service map logic discovers the supply chain of every OTT service on the Internet



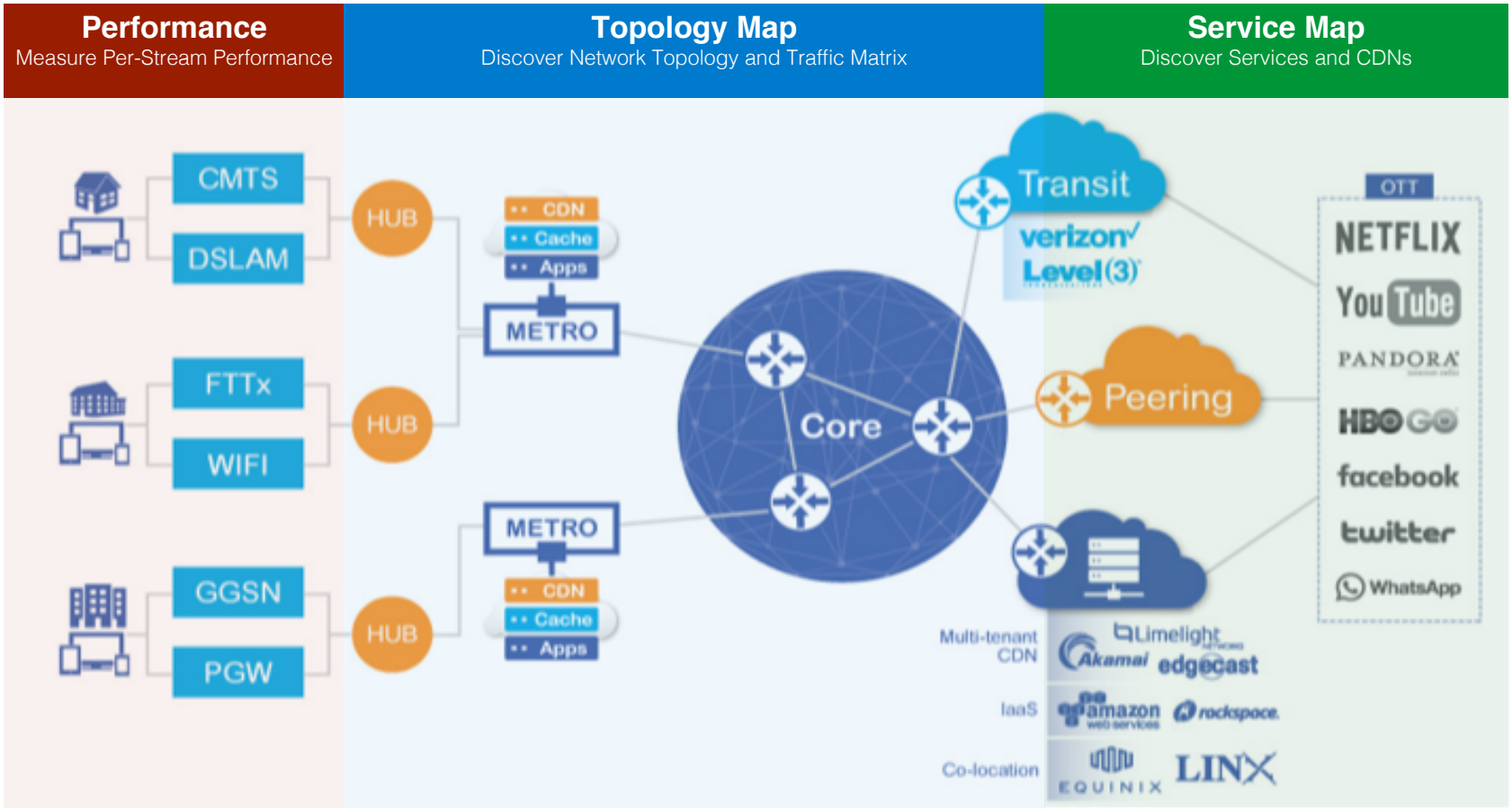
Provides DPI+ visibility by providing not just services but also CDN awareness

Since Service Map discovers end points, it discovers encrypted services as well

deepfield

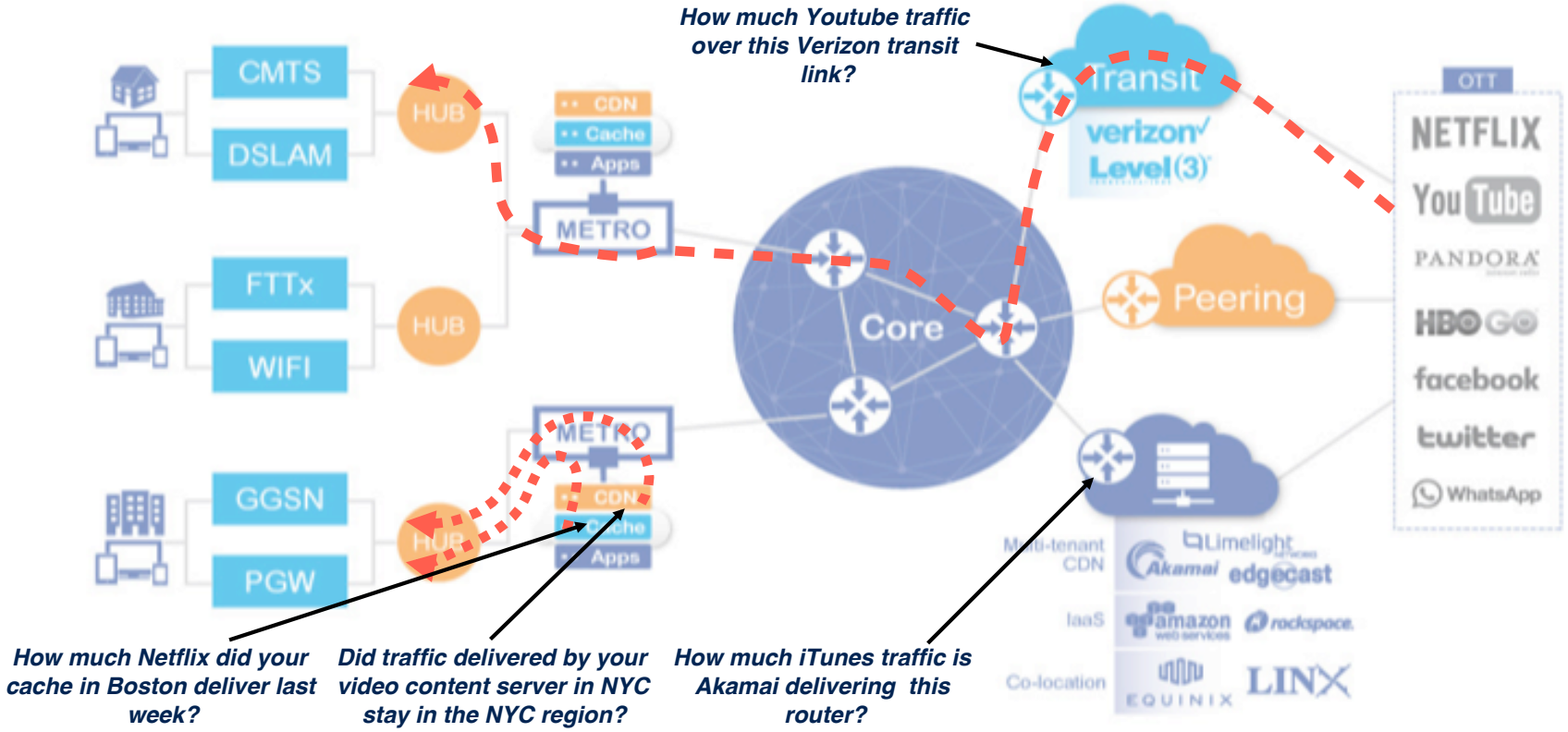
Confidential — Do Not Redistribute

Wide Angle Correlation



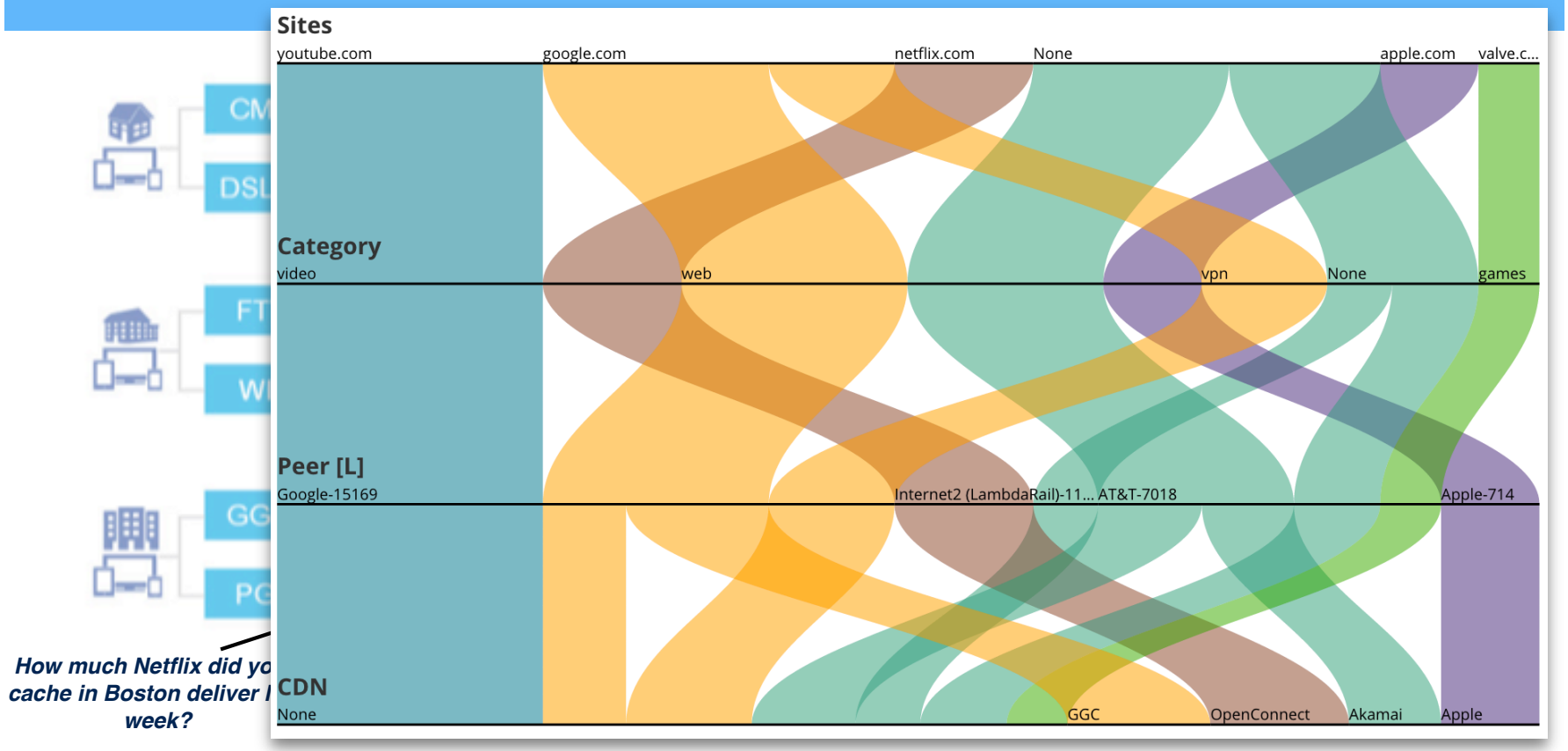
Traffic Engineering Questions

Correlate per service volumes with any network component



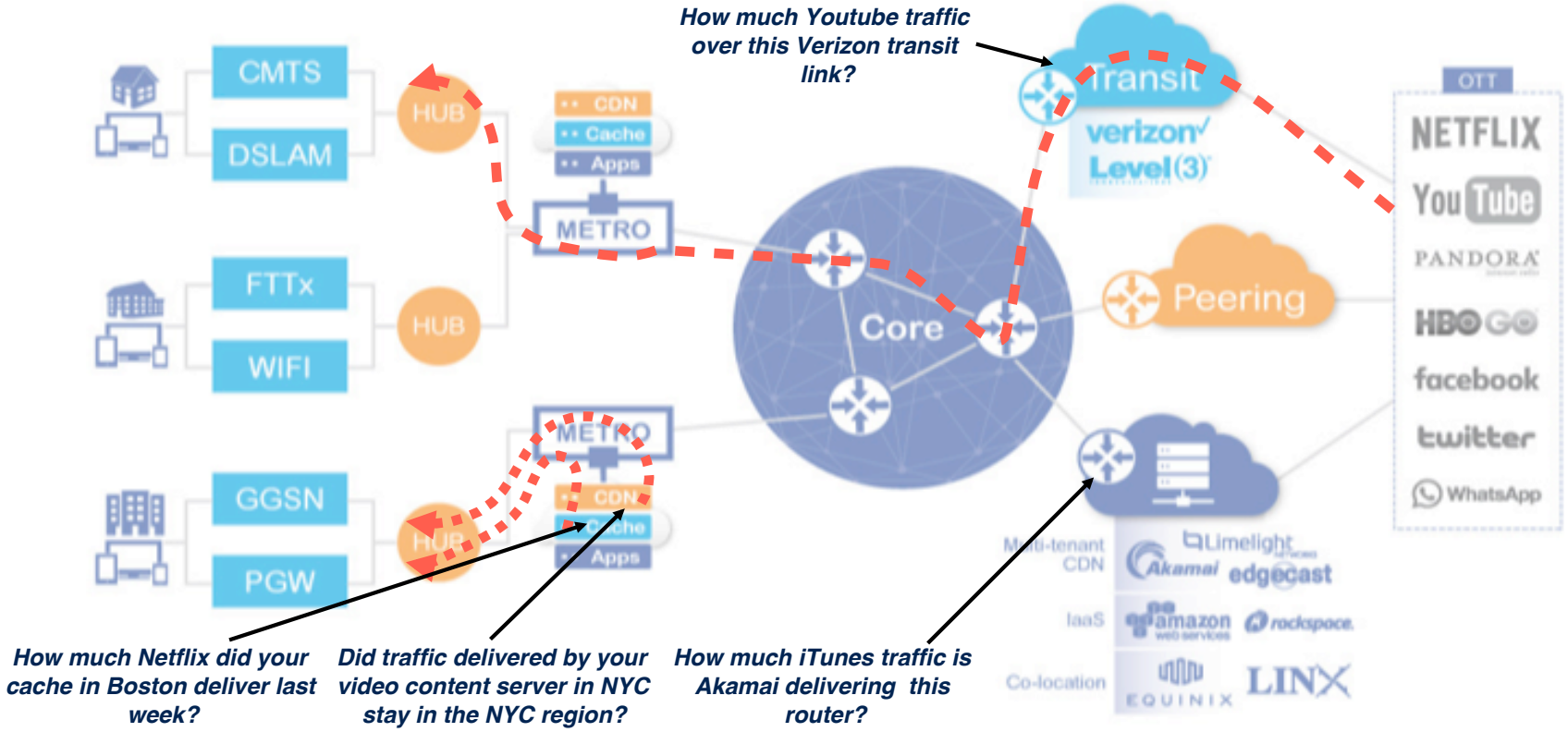
Traffic Engineering Questions

Correlate per service volumes with any network component

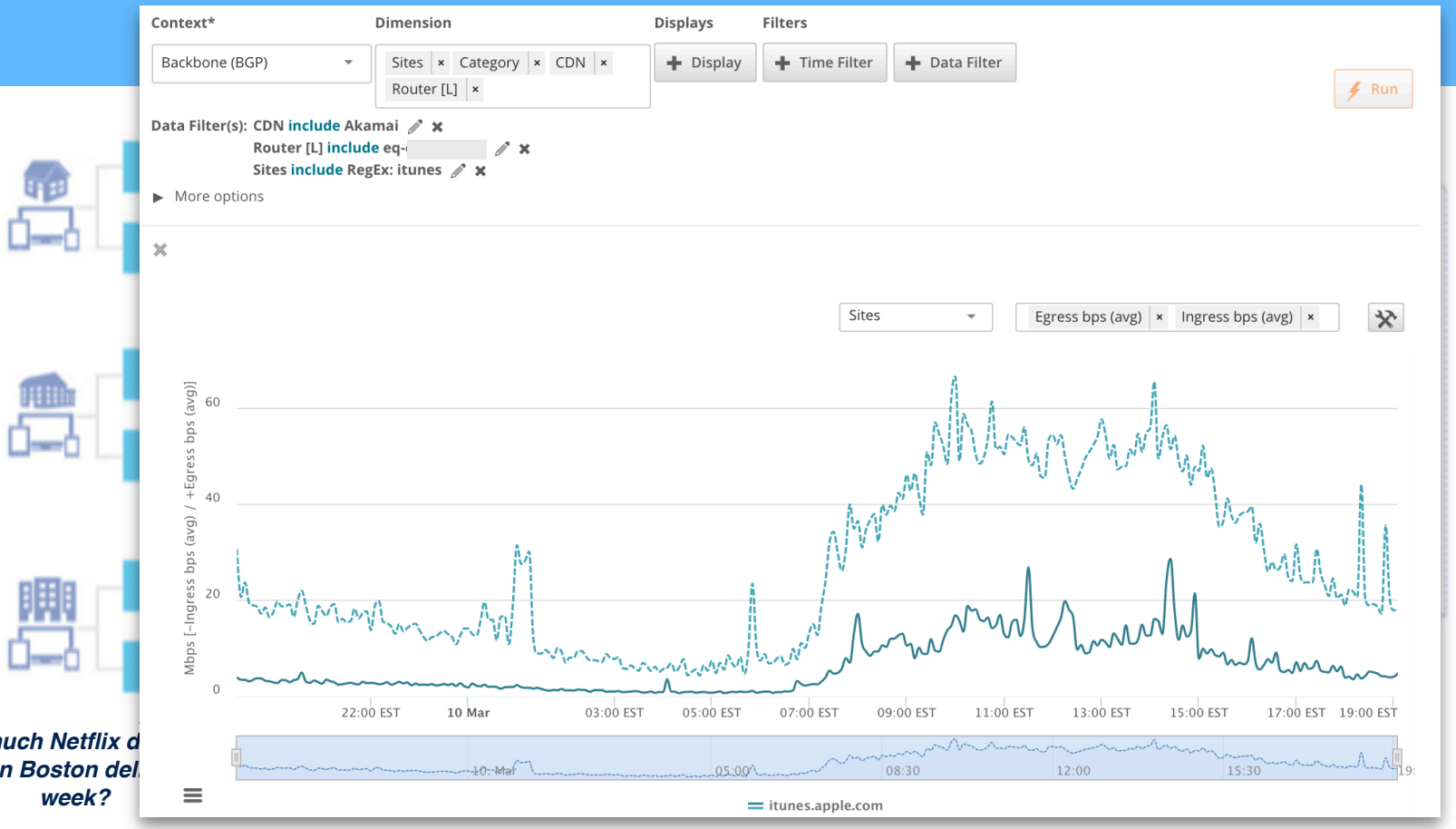


Traffic Engineering Questions

Correlate per service volumes with any network component



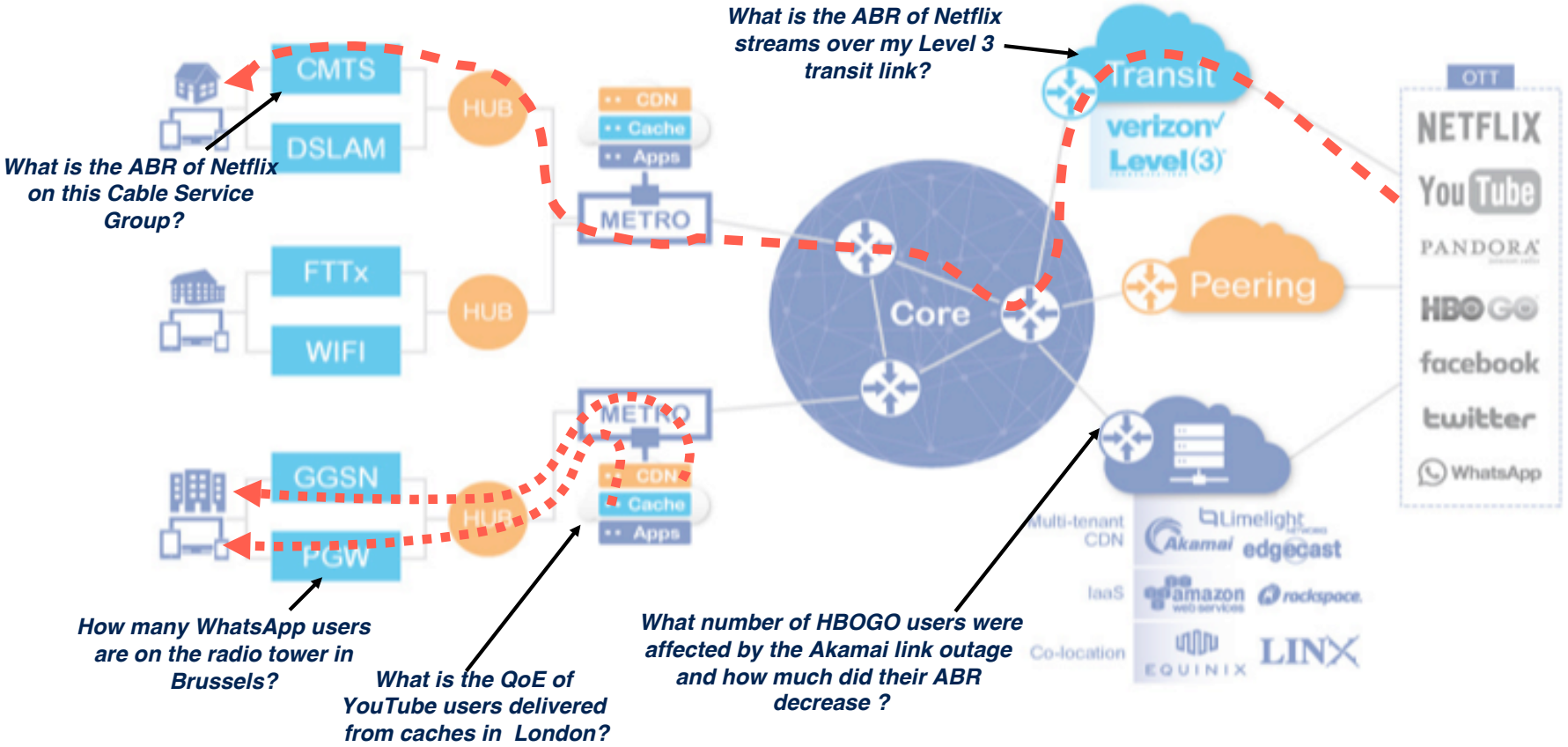
Traffic Engineering Questions



How much Netflix d cache in Boston del week?

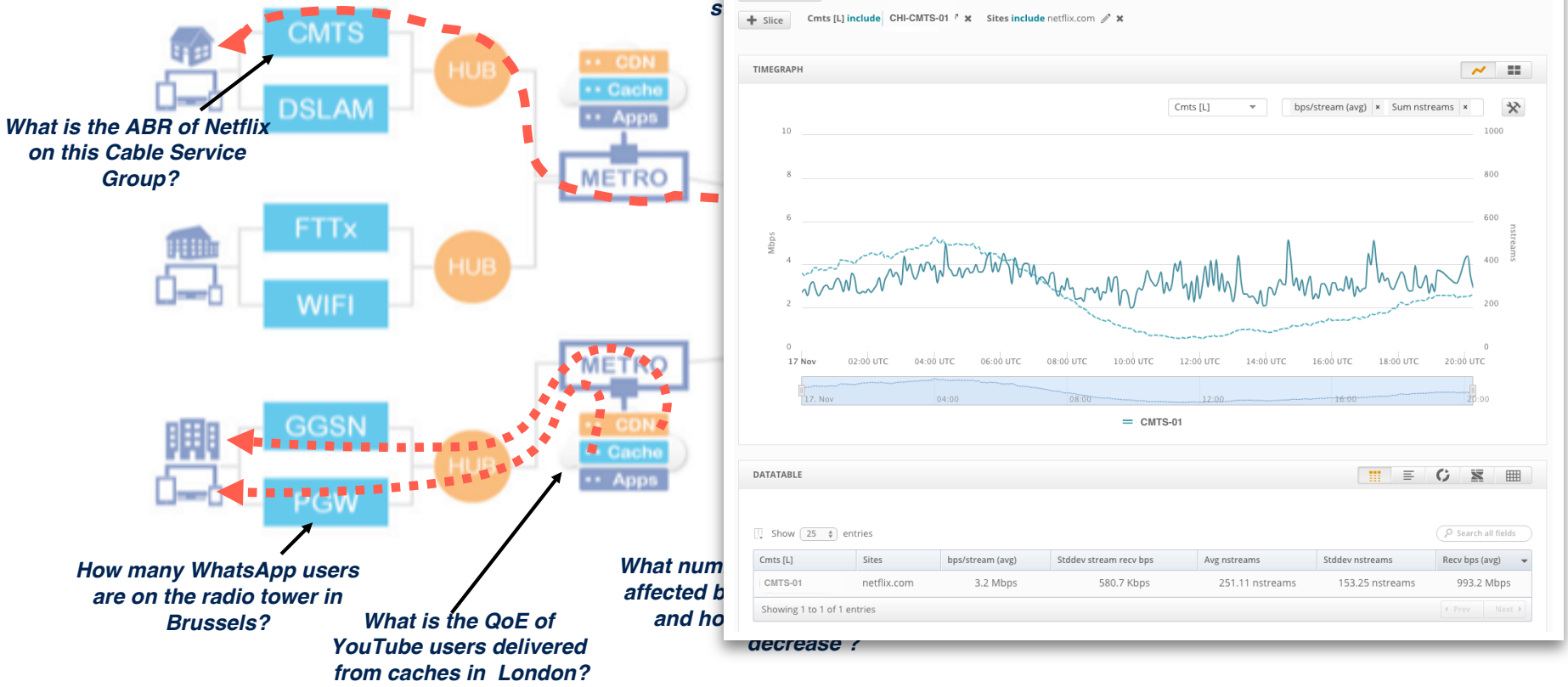
Service Assurance Questions

- **Performance -** Correlate per-service Average Bit Rate (ABR) or Latency with any network component
- **Business Impact -** Correlate per-service stream counts with any network component



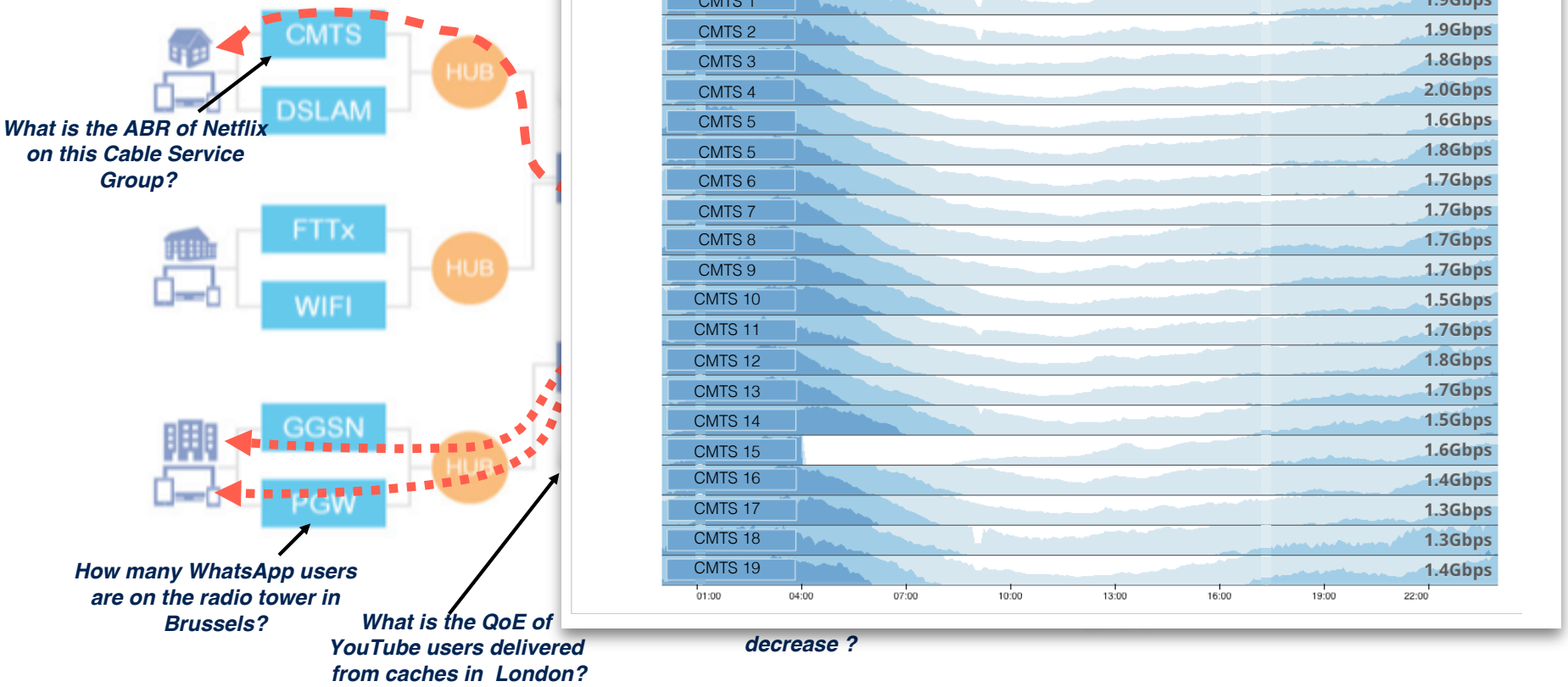
Service Assurance Questions

- **Performance -** Correlate per-service Avera
- **Business Impact -** Correlate per-s



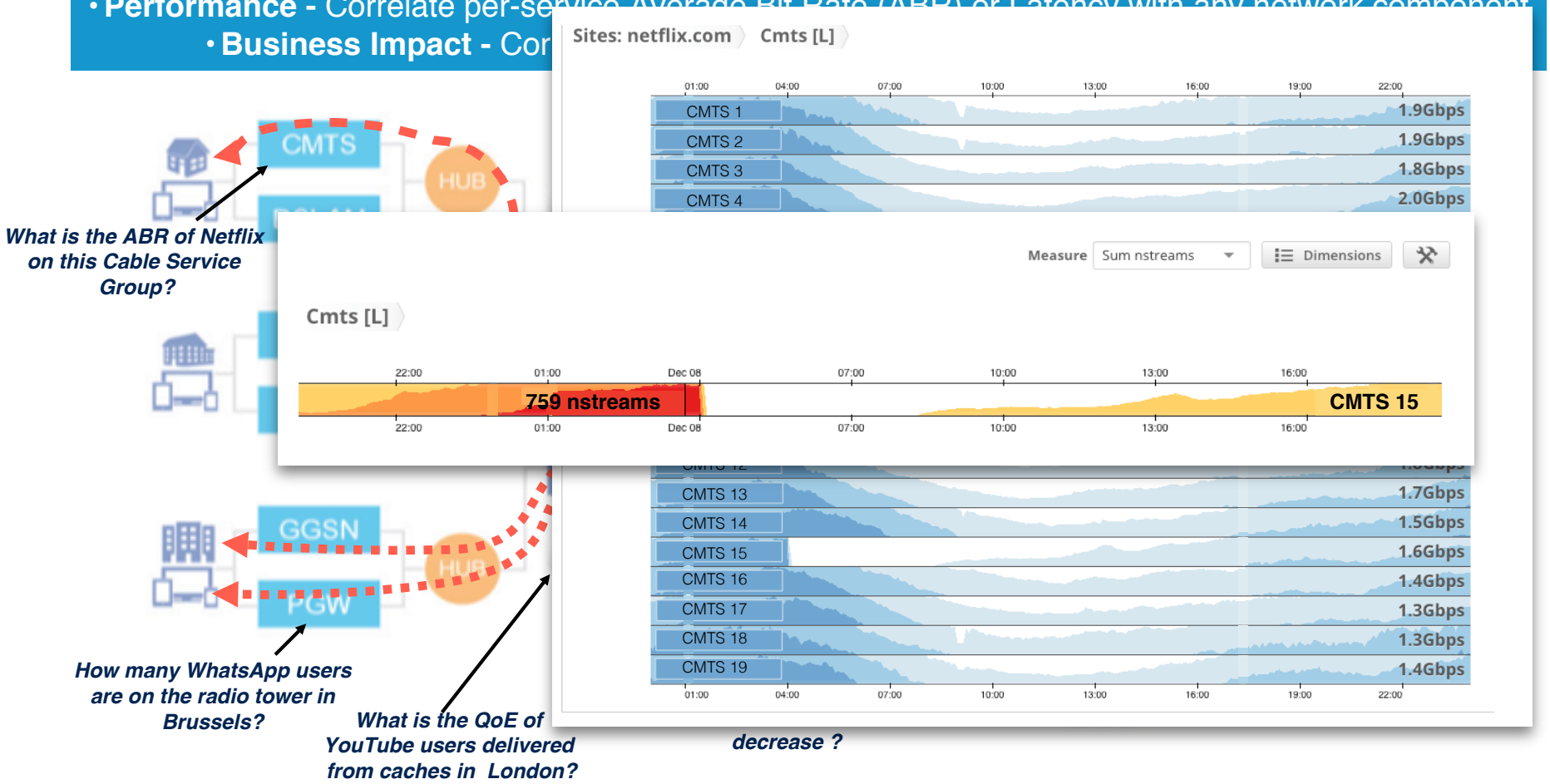
Service Assurance Questions

- **Performance -** Correlate per-service Average Bit Rate (ABR) or Latency with any network component
- **Business Impact -** Cor



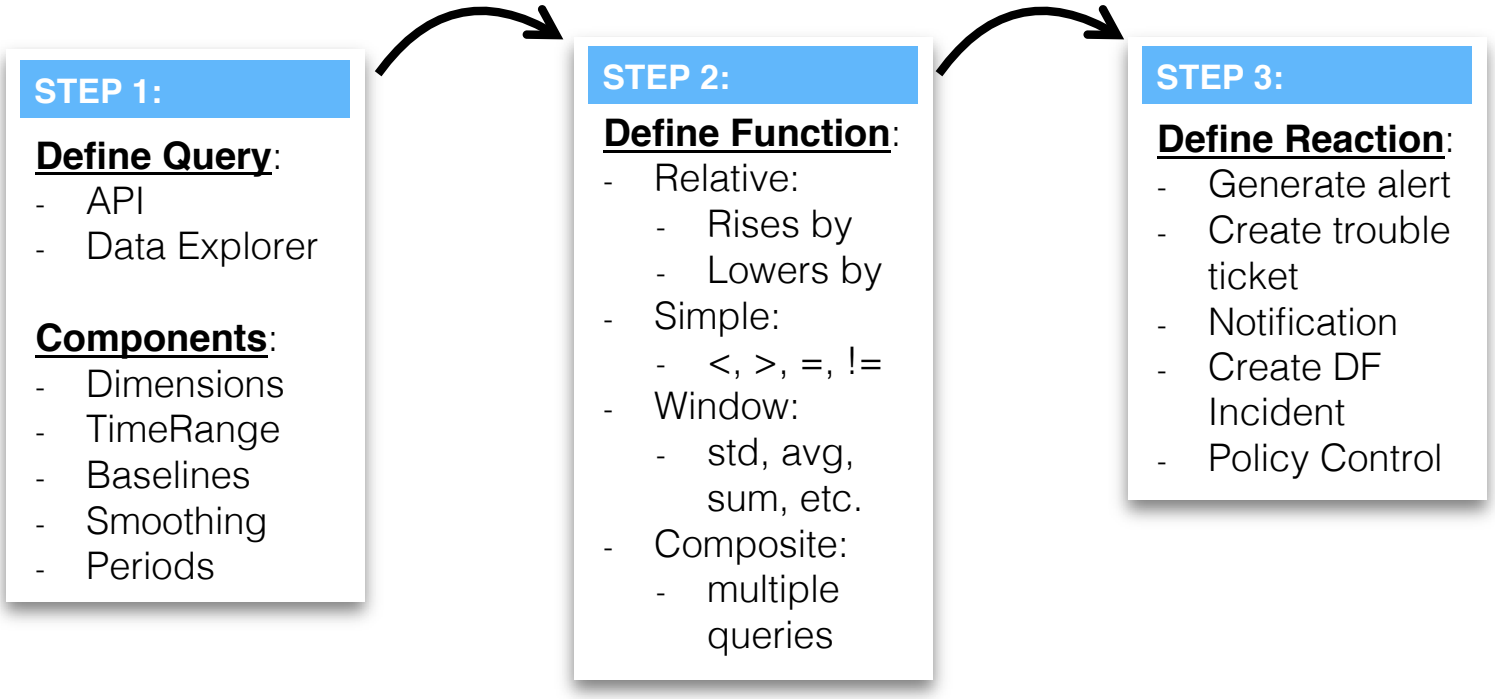
Service Assurance Questions

- **Performance -** Correlate per-service Average Bit Rate (ABR) or Latency with any network component
- **Business Impact -** Cor



Operational Intelligence

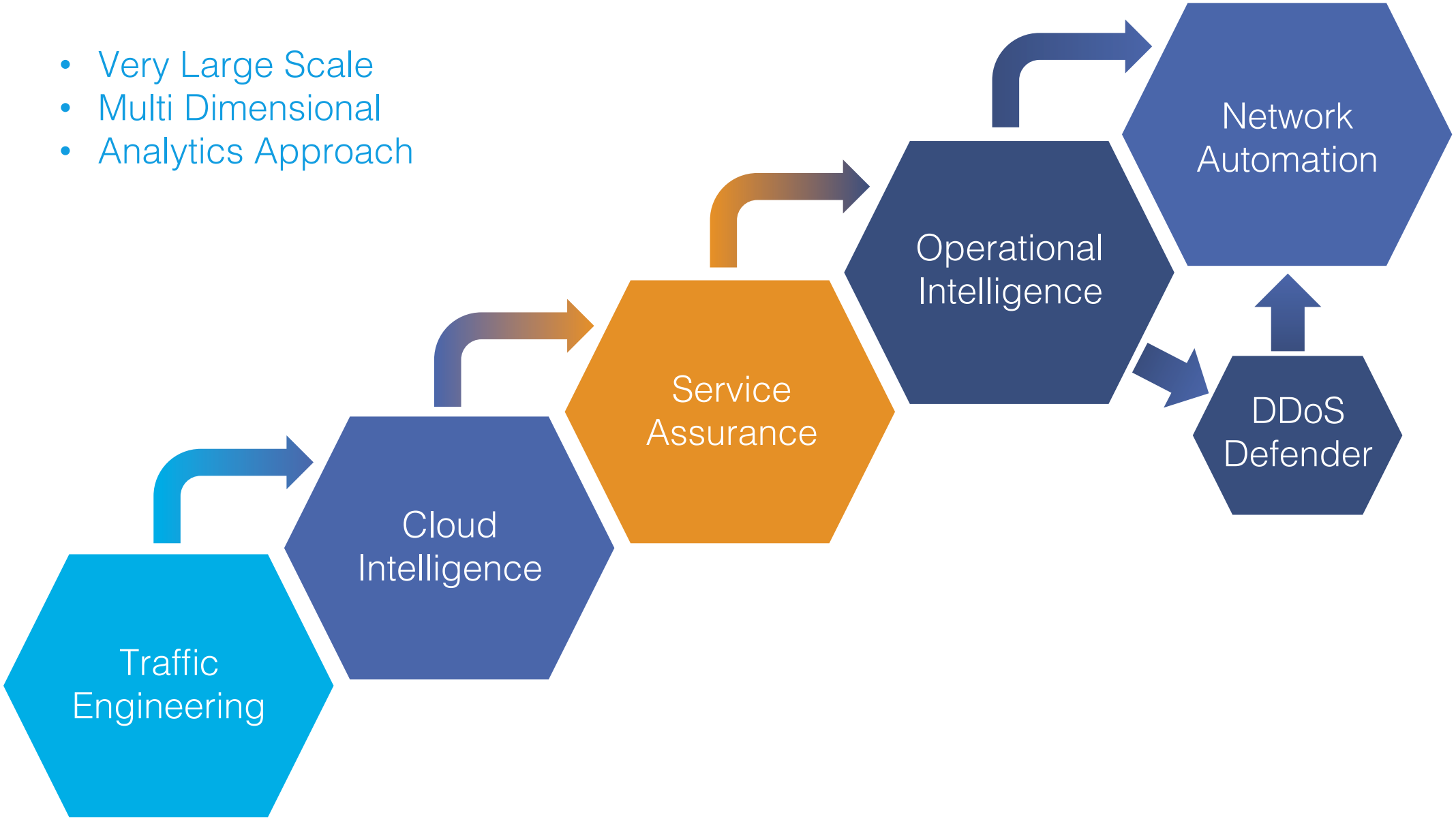
Leverage power of Deepfield platform to utilize any high-level real-time dimension/metric for alerting and correlation



Closed-Loop Actions, Alarming, Thresholds

deepfield

Confidential — Do Not Redistribute

Thank You

- Very Large Scale
- Multi Dimensional
- Analytics Approach