

# JStorm Based Network Analytics Platform

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# Overview of Alibaba Cloud



**18** Regions

**150+** Products

**1 Million+** Customers



# Comprehensive Networking Product Family

12 products for 5 scenarios



Self-Defined Cloud  
Networking Environment

VPC



Internet Access

SLB  
NAT Gateway  
EIP



Saving BGP Cost

Shared Flow Package  
Shared Bandwidth Package



Building Hybrid Cloud

Express Connect  
Cloud Hosting  
VPN Gateway  
Smart Access Gateway



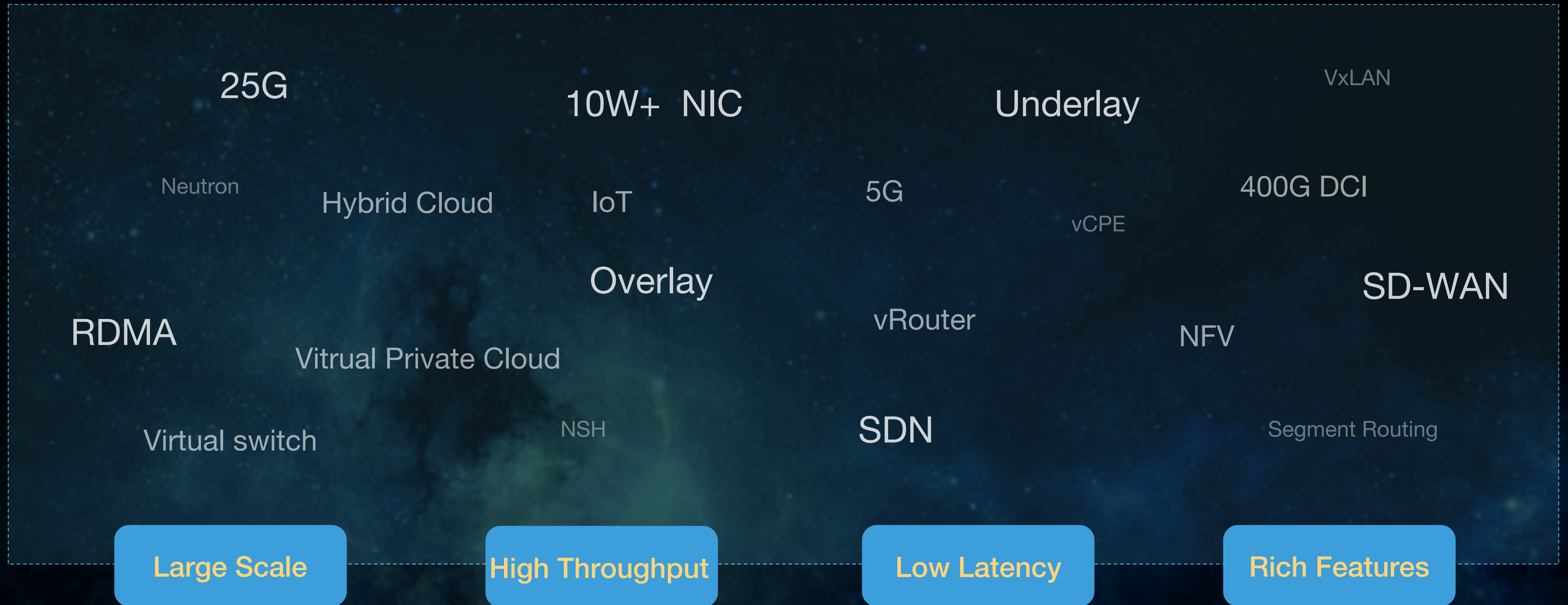
Global Connection

Cloud Enterprise Network  
Global Acceleration

From Data Center to Global Connection,  
for every enterprise networking scenarios



# Networking is getting complicated





## Challenges from Growing Scale

Tenants

Servers

VMs

1,000,000,000

1,000,000,000

10,000,000,000

Random Failures

Daily Maintenance

Multi-Dimension  
Profiling



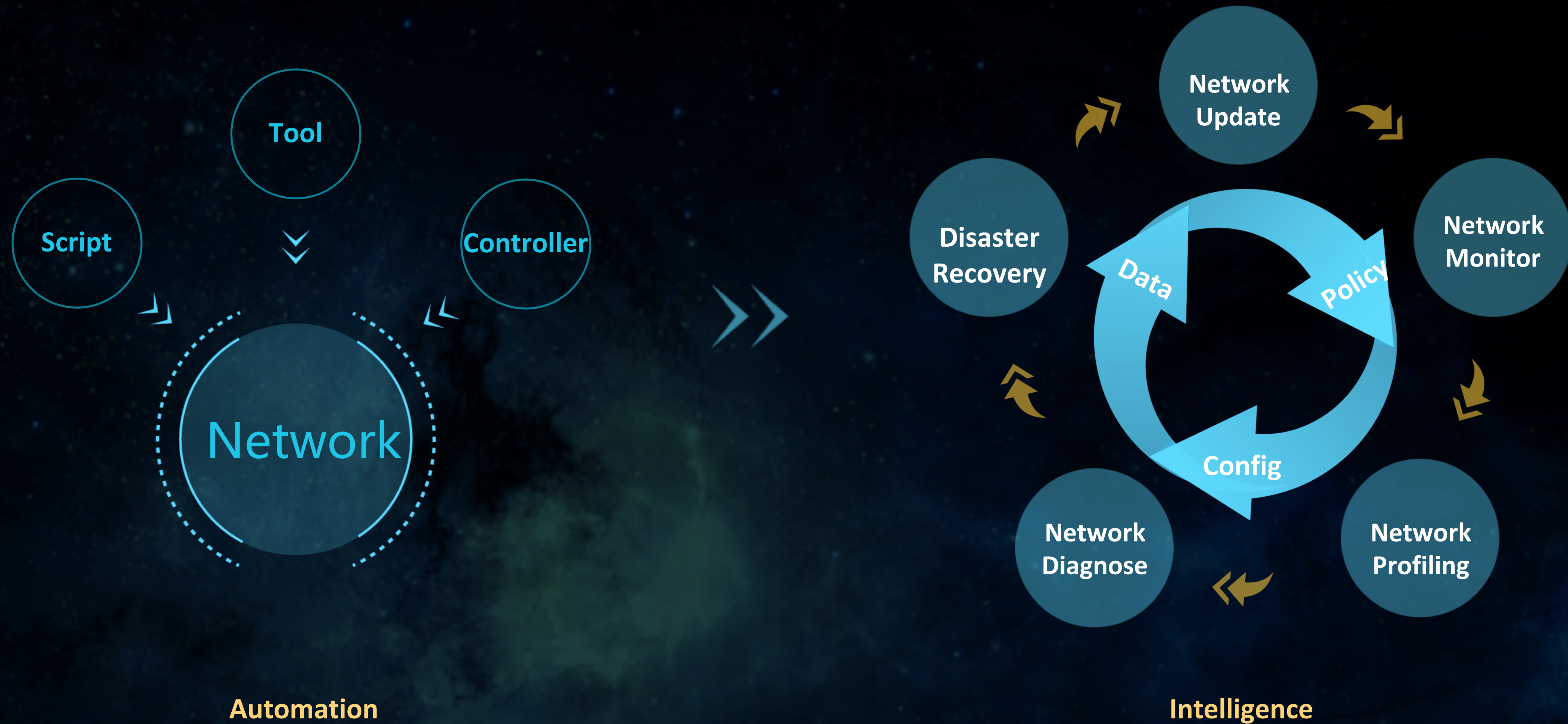
# What we want to achieve

## Network as a Service



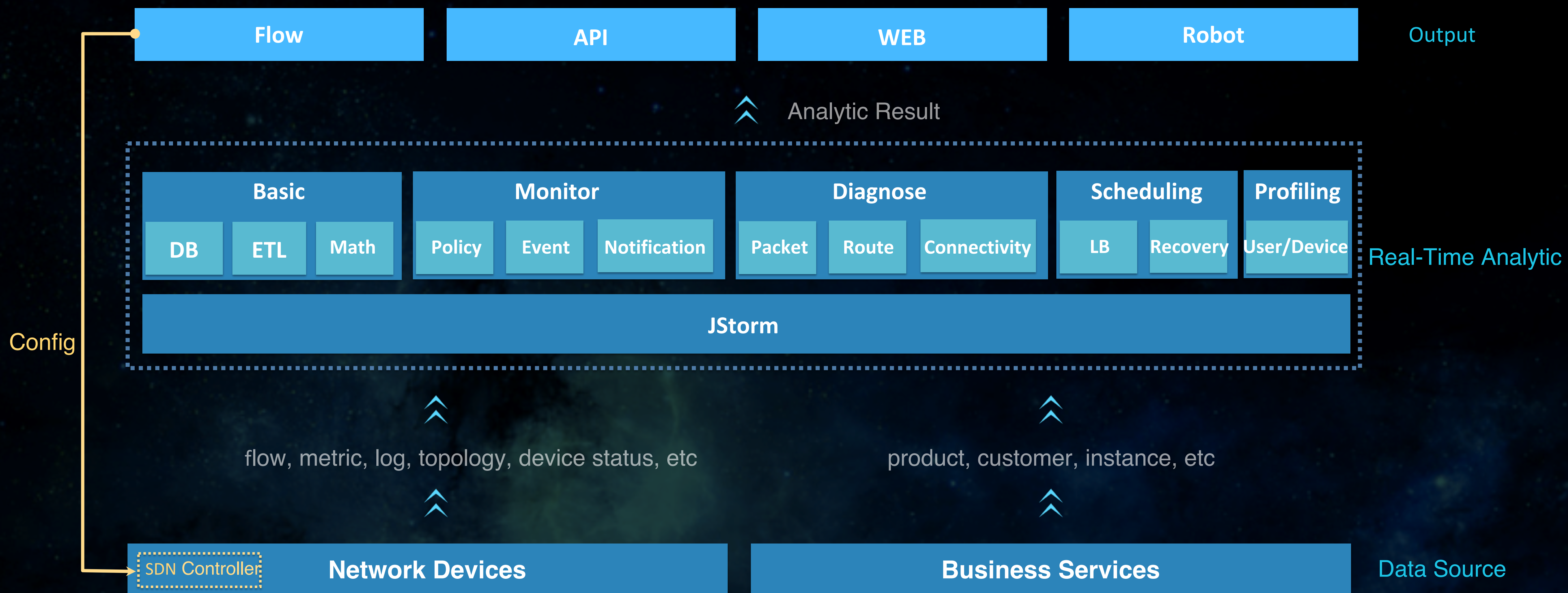


# Automation to Intelligence



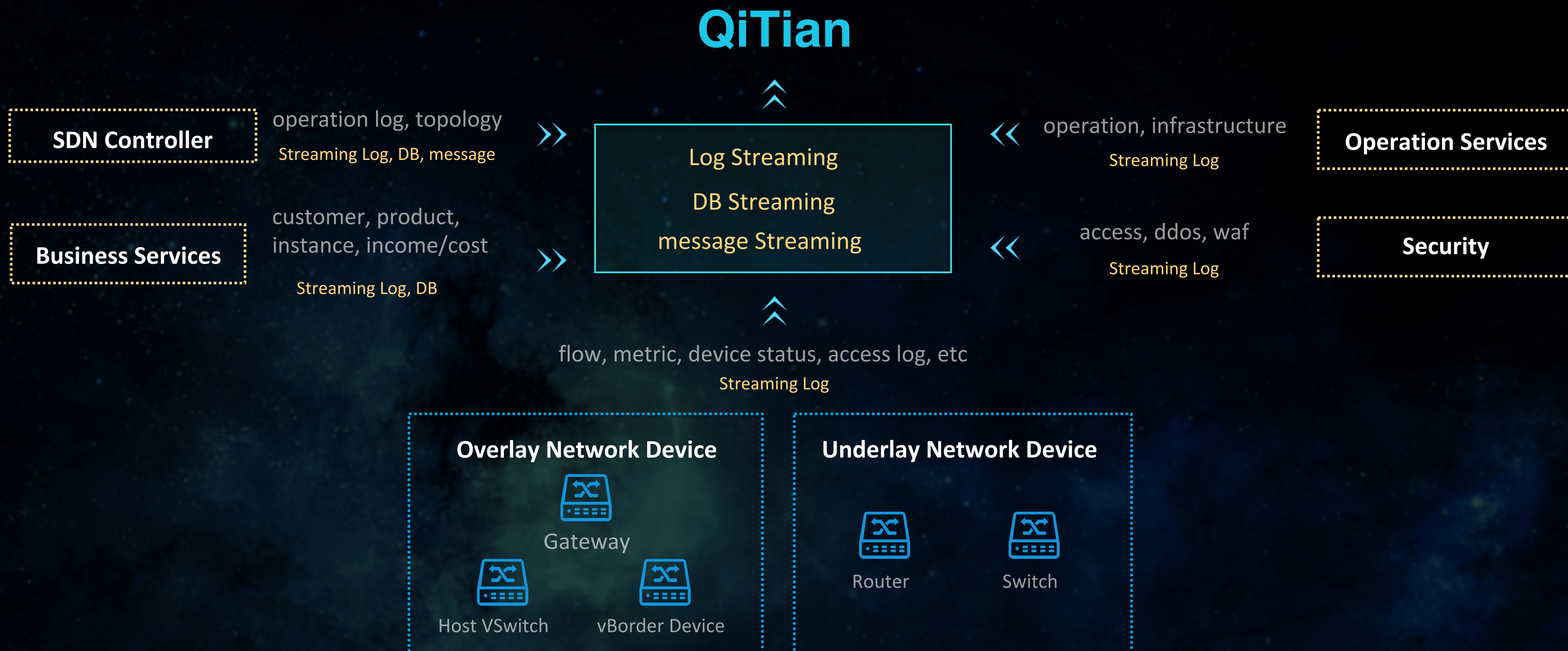


# QiTian - JStorm Based Network Analytic Platform





# QiTian - Data Sources & Types





# QiTian - High Performance Network Analytics





# QiTian - High Performance Network Analytics

Metrics

TPS

Data

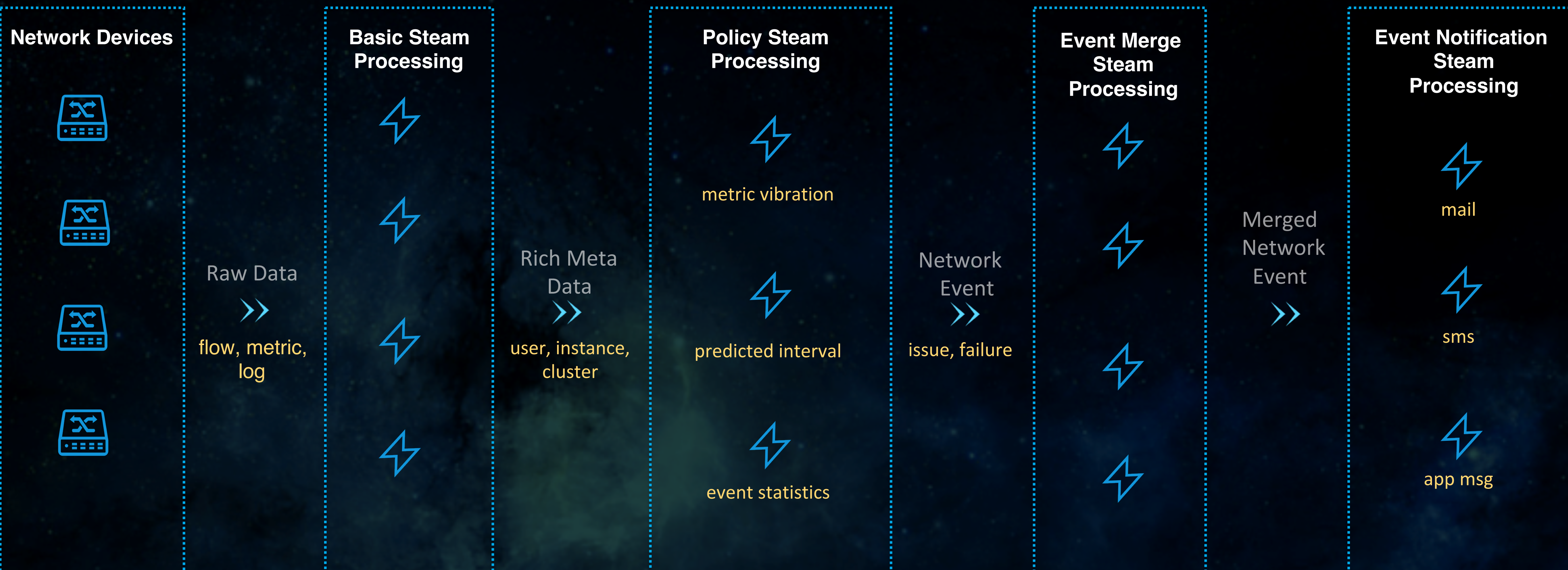
500+ Metrics

2,000,000  
Tuples/Sec

100T/Day



# QiTian - Real-Time Network Monitor



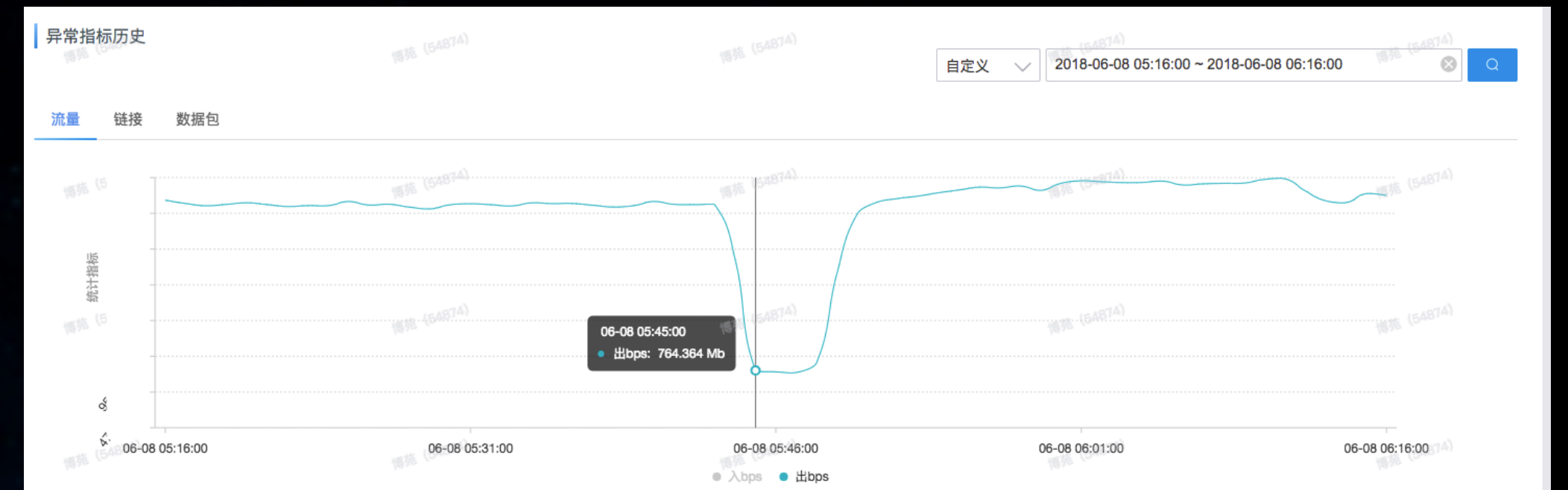


# QiTian - Real-Time Network Monitor

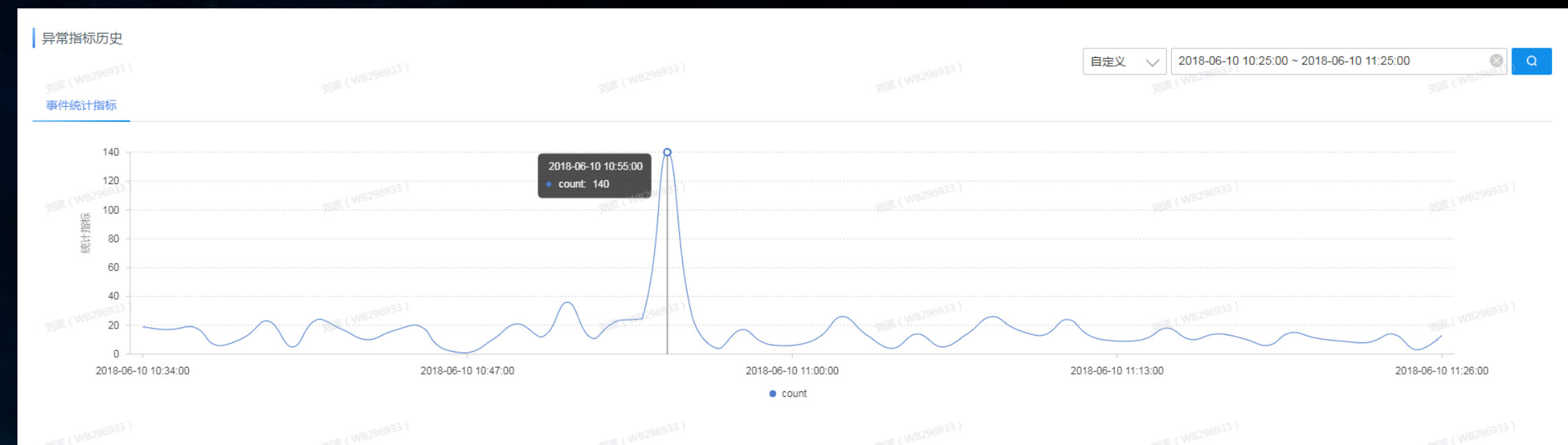
## Major Network Issue Detection

90%

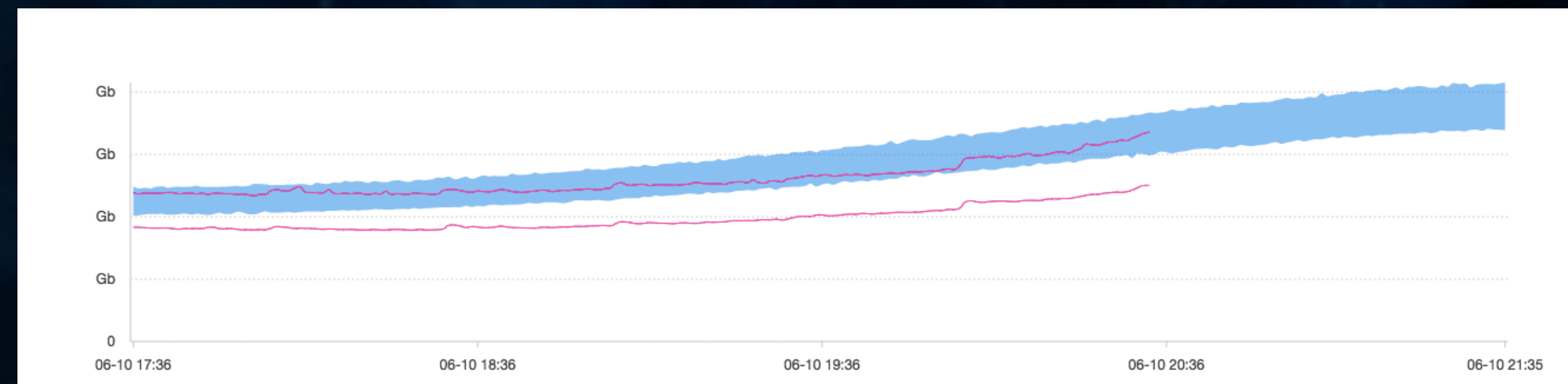
metric vibration



abnormal event statistics

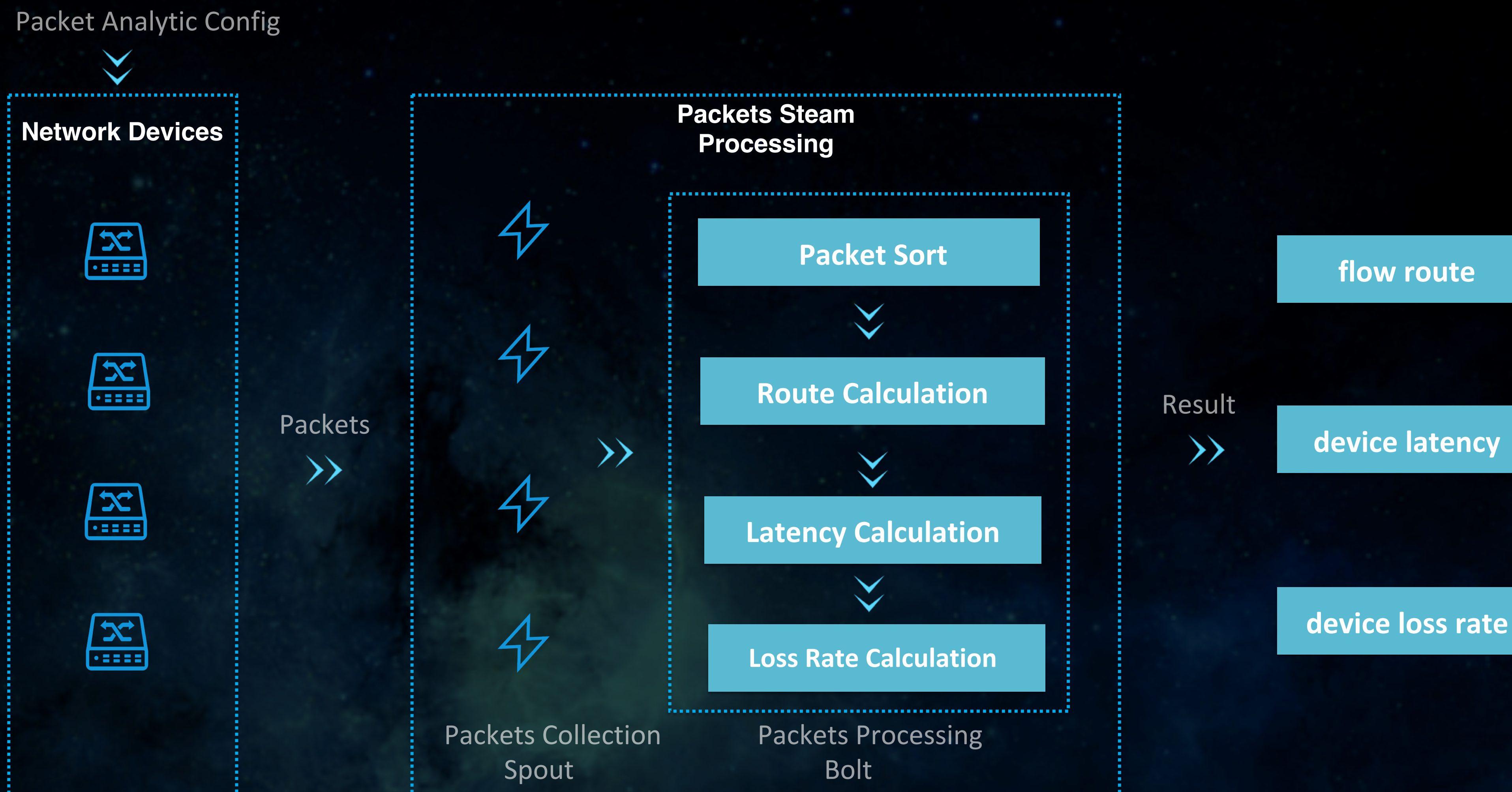


predicted interval





# QiTian - Streaming Based Network Diagnose





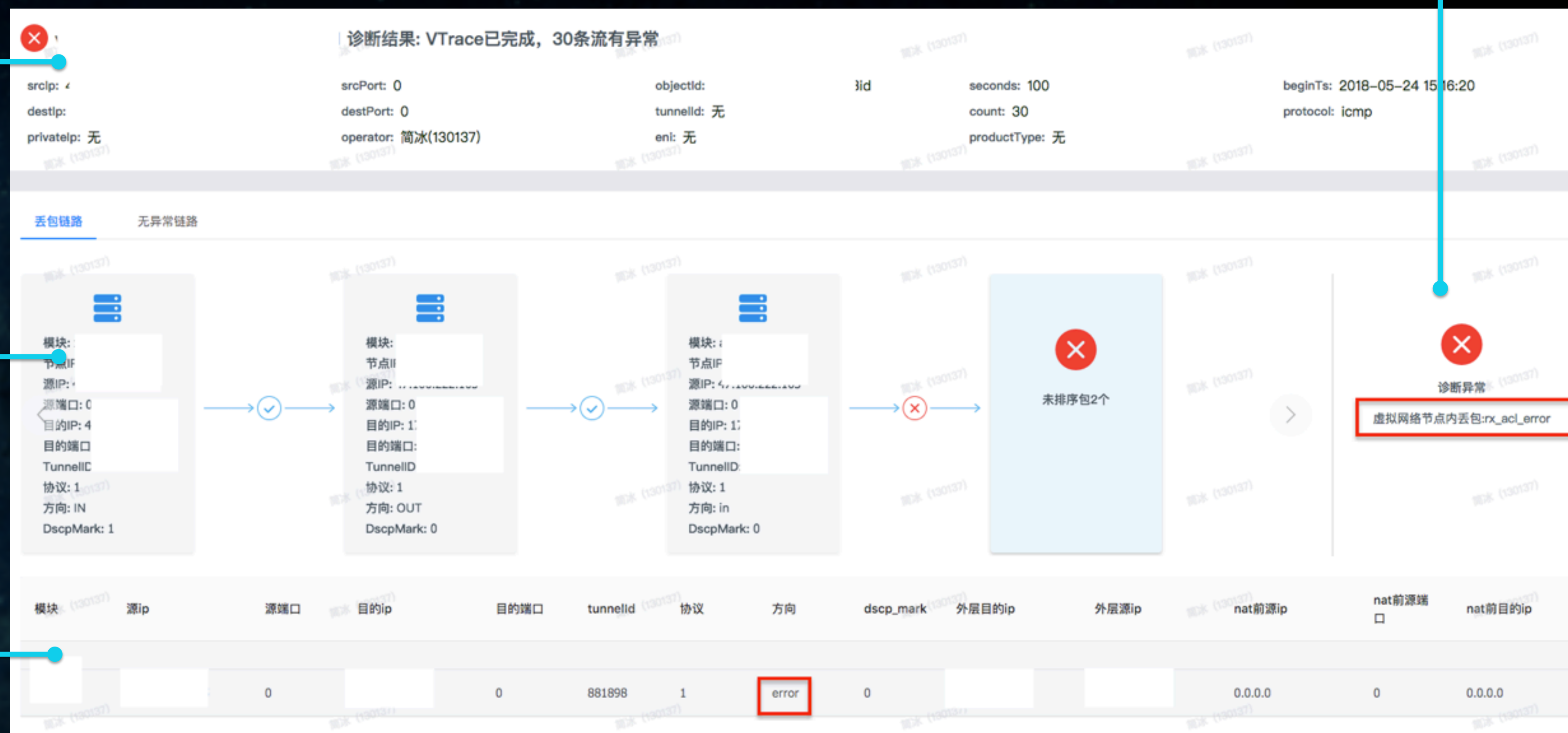
# QiTian - Streaming Based Network Diagnose

Packet Loss/Latency Diagnose

Package Analyze Config

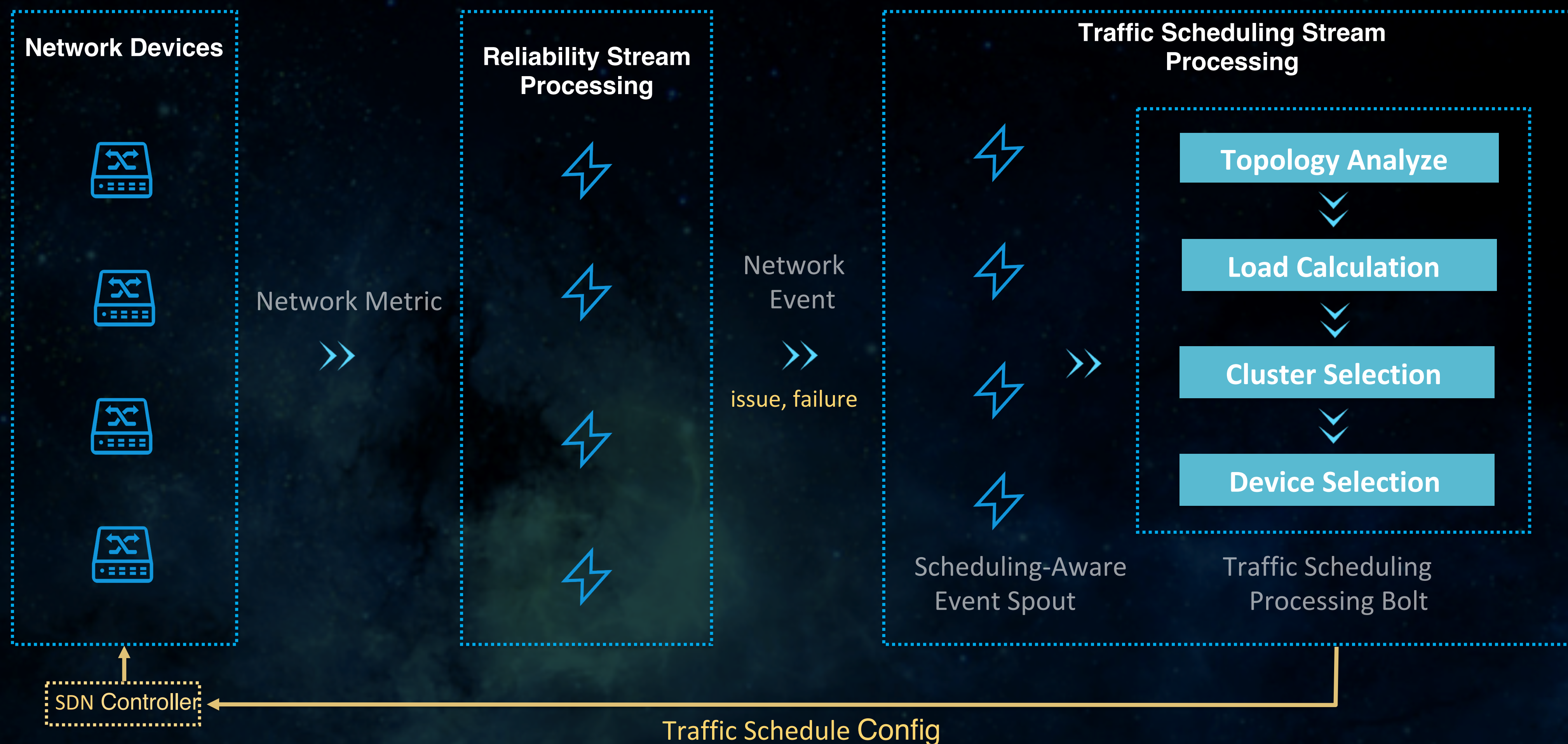
Flow Route

Packet Analyze



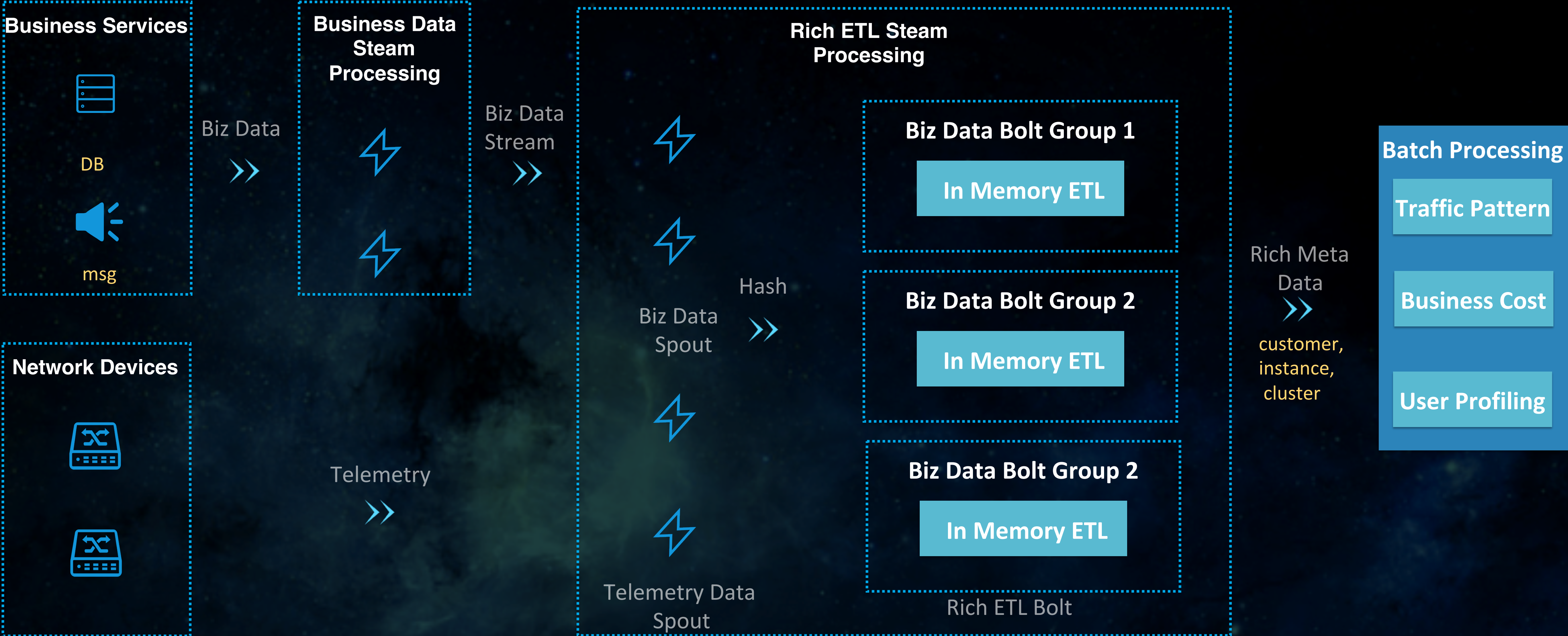


# QiTian - Intelligent Network Traffic Scheduling





# QiTian - Multi-Dimension Network Profiling





# QiTian - Multi-Dimension Network Profiling



Income Analyze by Industries



Customer Resource Layout



BGP Cost



# What's Next

## Deployment

real-time network deployment  
policy

## Elastic

real-time network expansion  
policy

## Monitor

new detection policy  
based on machine-  
learning integrated



# Thanks