

Network Monitoring

Dynatrace Training Module

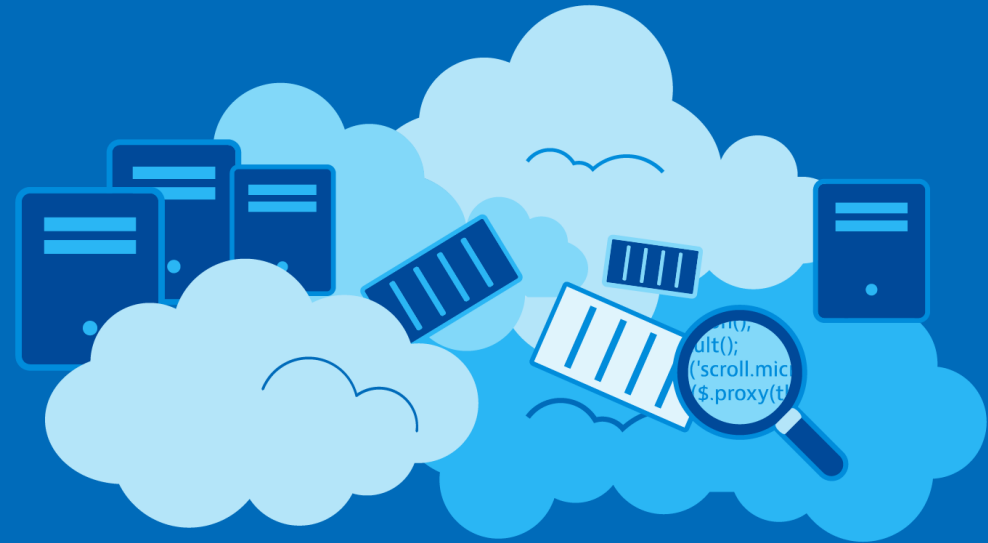


Agenda

- Network Monitoring – What is it?
- Use cases
- Some technical background
- Network Monitoring – What is it NOT?
- Network Monitoring From Host Infographic
- Network Monitoring Overview

Network Monitoring

- Traffic volume per host
- Traffic volume per process
- Interface errors
- TCP errors
- Quality
- Connectivity



Network Monitoring – What is it ?

- Top down Monitoring: Apps to Infrastructure
- Network is part of the infrastructure and an important fault domain
- Network needs to perform for an application to deliver
- Network problems affect user experience in the same way as server side problems
- Operations need to cover both server and network domains

Network Monitoring – What is it ?

- Covers 3 fundamental aspects of network communication
 - Which processes consume most of my network resources?
 - Network utilization breakdown
 - Which processes experience network degradation problems?
 - Network quality – retransmissions
 - Can everyone talk and connect to their parties?
 - Process network connectivity
- Environment agnostic – any TCP/Ethernet communication can be monitored:
 - physical, virtual, cloud

Network Monitoring – Use Cases

- User experience/service response slowdowns due to:
 - Network congestion
 - Interface overutilization
 - Interface errors
- User experience/service faults due to connectivity problems caused by:
 - Server process overload
 - Server process misconfiguration

Network Monitoring – Technical Background

- Dynatrace agent installs pcap/winpcap library (open source)
 - If pcap is installed – we use what's already there
 - Pcap allows listening to all packets on Ethernet interface(s)
- Network monitoring is executed as separate service (process): "OneAgent network monitoring" service
- OneAgent intelligence allows matching observed traffic to running processes to provide unique value

Network Monitoring – Capacity

- Network monitoring process has negligible overhead, depending on the traffic
- Customers with up to 100-150Mbps of traffic have seen 0.5% CPU consumption
- Internal throttling mechanisms disable functionality in case of problems (> 5% CPU overhead observed)

Network Monitoring – What is it NOT?

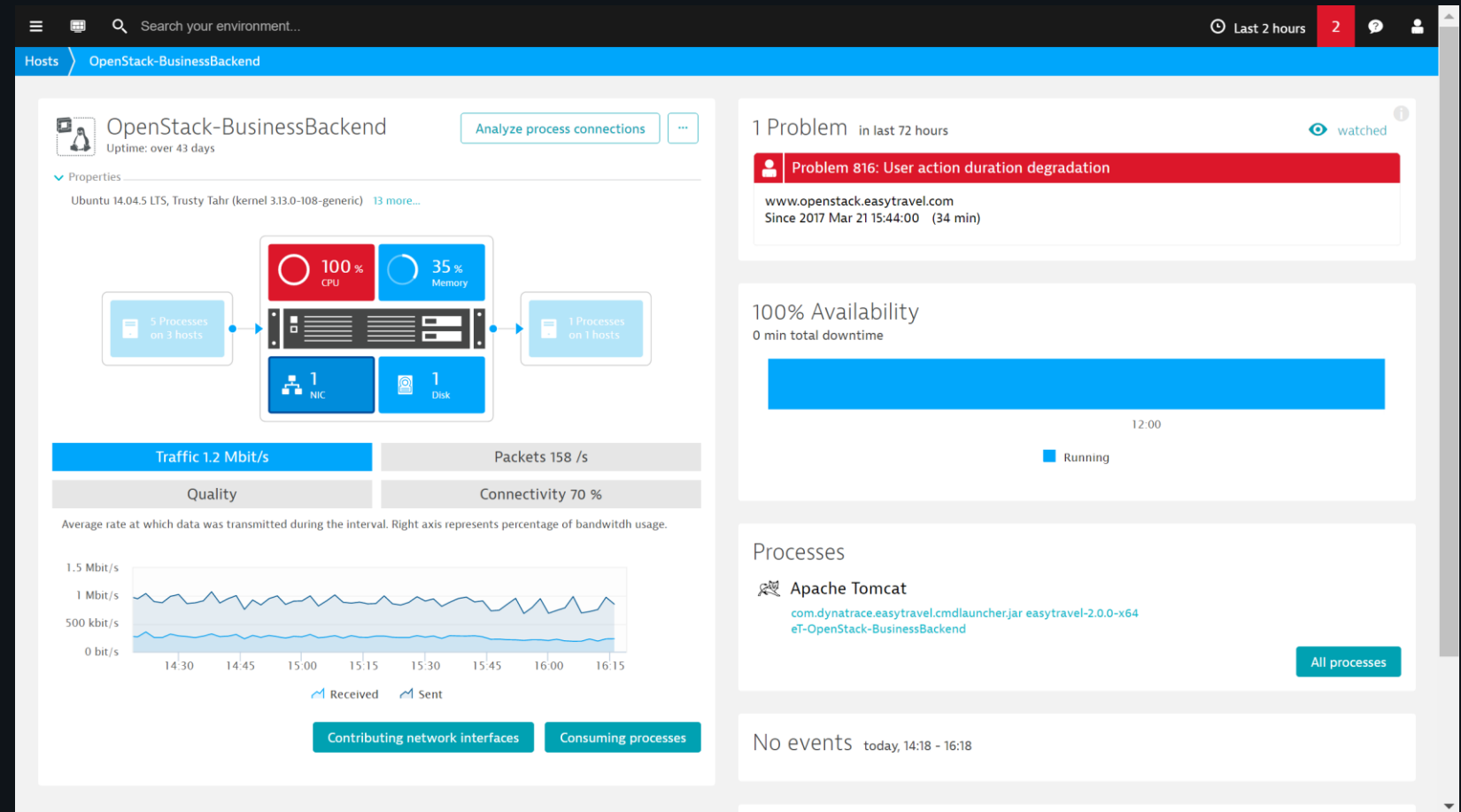
- NOT an NPM/aaNPM solution
- NOT a network forensics solution
- NOT a network tool for network engineers
- NOT a monitoring solution for network equipment (switches, routers, etc.)

Network

Host Drilldown

Overview

Host Drilldown

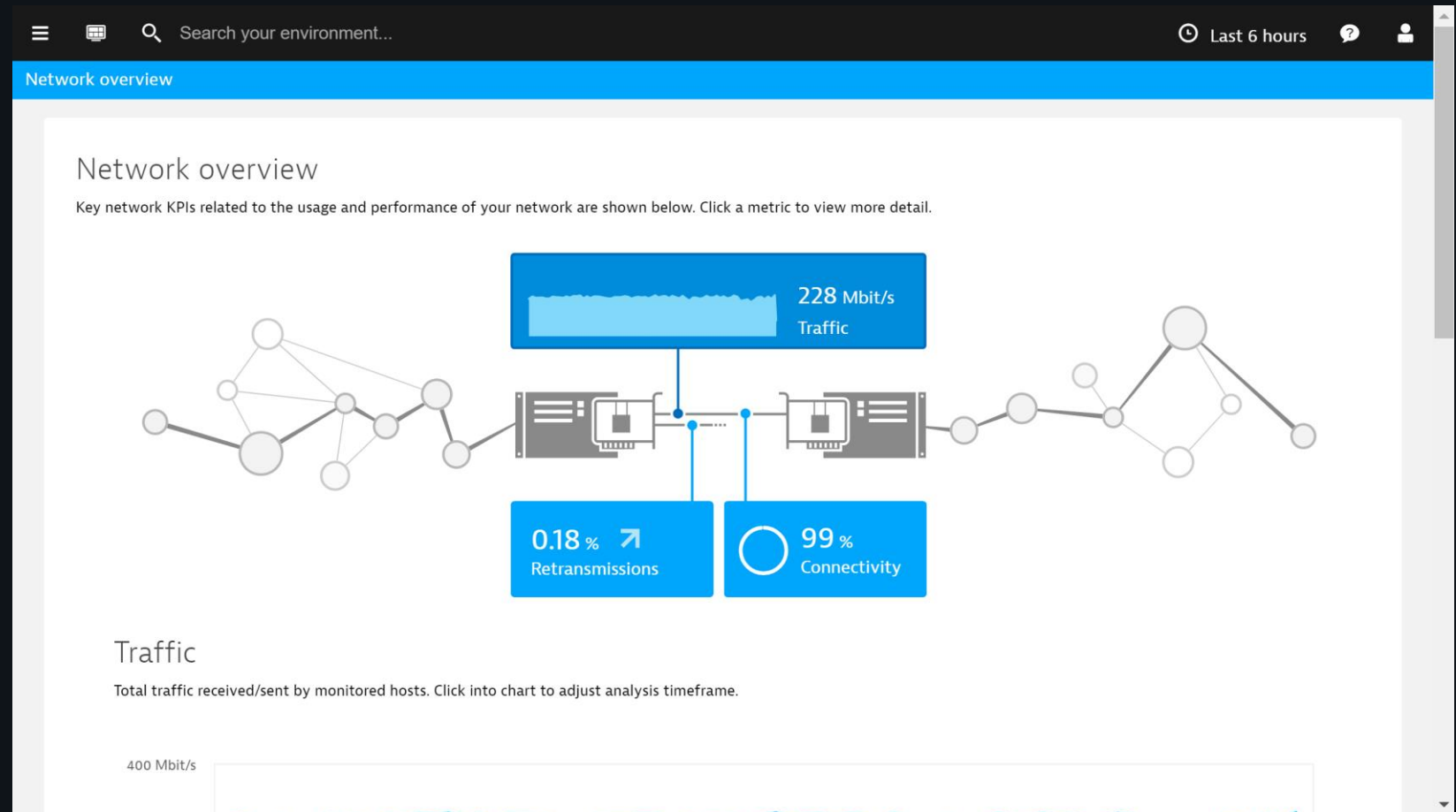


Network

Host Drilldown

Overview ◀

Overview



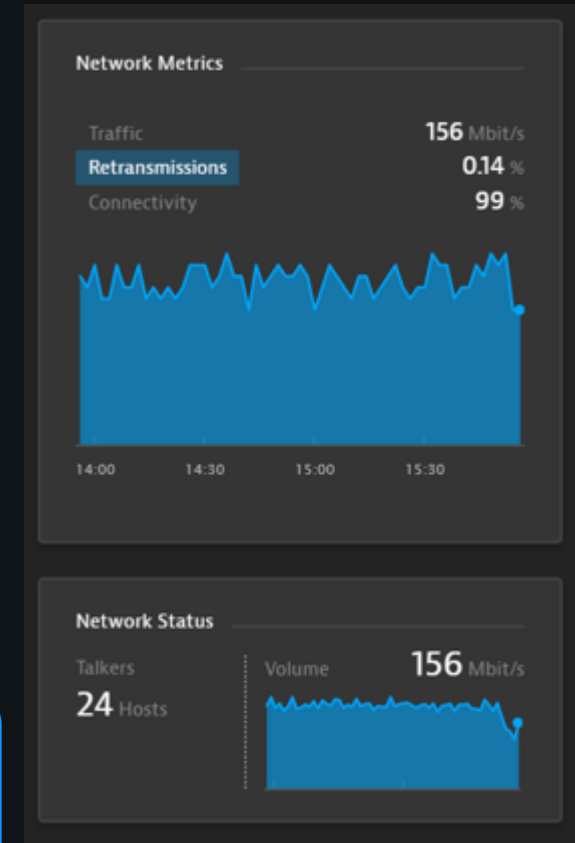
How to Access the Network Overview

Main menu

Transactions & services
Databases
Hosts
Network

OR

As a dashboard tile



Questions?



Simply smarter clouds