



# Recent Skylight Innovations in Review + What's Coming Next!

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**ACCEDIAN**

# Fresh Skylight Innovations



# Over the Past Year...



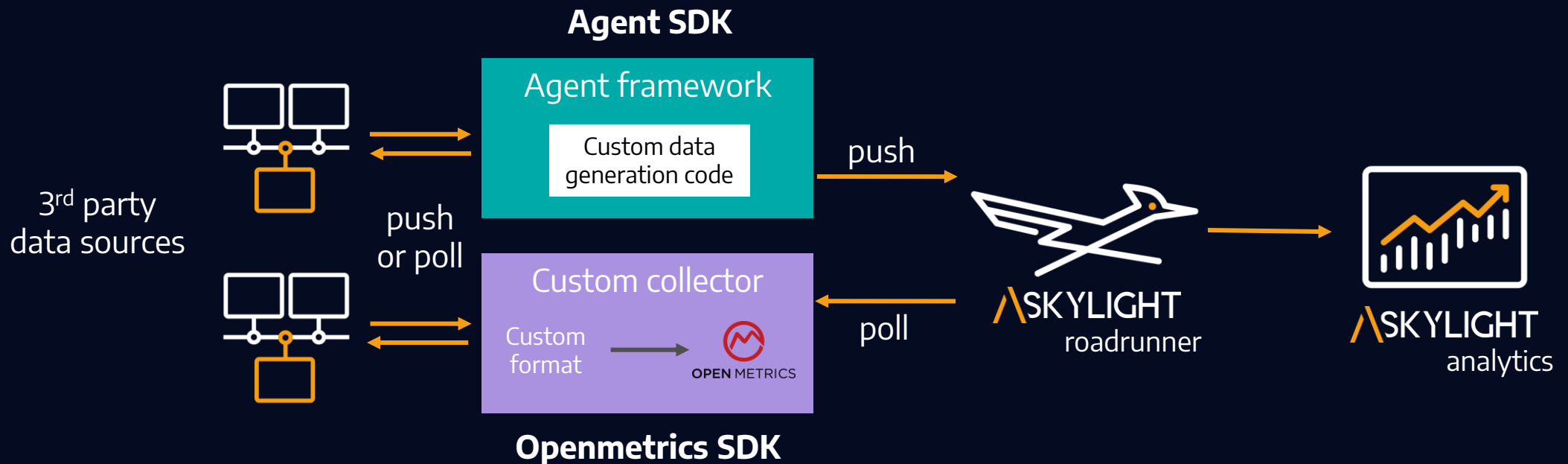
Let's review some of them!



# 3<sup>rd</sup> Party Data

Improved correlation capabilities by being in a single tool

- Accedian performance data is great for identifying problems
- Metadata can point you in the right direction for investigation
- What if, for the next step, you didn't need to leave the same tool?
  - 3<sup>rd</sup> party data sources can now be onboarded by Accedian





# Dynamic Metadata

Leverage contextual data from directly from the network

- Keeping network-based metadata up to date can be challenging
- Analytics allows you to map non-metric data coming in alongside your PM stream to a metadata category
- Powerful tool for onboarding of 3rd party data and retaining network context of the PM

The screenshot displays the 'Settings' page for Dynamic Metadata Management (DMM) in the Accedian interface. The 'Metadata' tab is selected, showing a 'Session Capture' overview with 15 categories used out of 50 and 0 dynamic mappings out of 48 datasources. A table lists existing mappings for the 'DMM' datasource, including fields like 'deviceId', 'errorCode', 'objectType', and 'oneWayDelayValid'. A '+ Custom mapping' button is visible, which has triggered a dropdown menu for selecting a category. The dropdown menu lists various categories such as 'bandwidth', 'circuit\_id', 'cloud\_provider', 'dest\_city', 'deviceId', 'equipment\_type', 'equipment\_vendor', 'node\_id', and 'region', with 'deviceId' currently selected.

Datasource	Fields	Mappings
DMM	deviceId	Add mapping
DMM	errorCode	
DMM	objectType	
DMM	oneWayDelayValid	

Categories dropdown menu items:

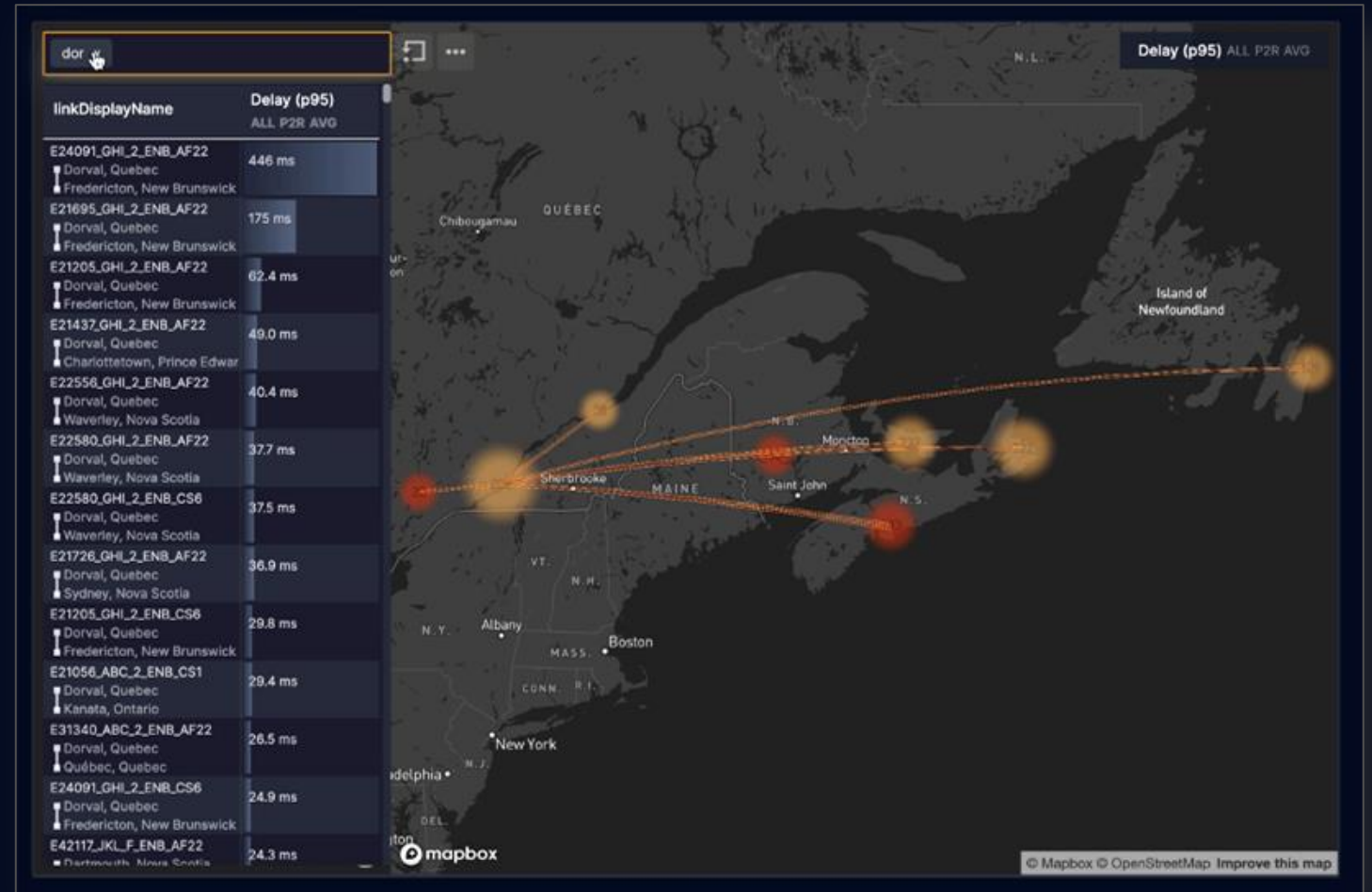
- bandwidth
- circuit\_id
- cloud\_provider
- dest\_city
- deviceId
- equipment\_type
- equipment\_vendor
- node\_id
- region

# Geo Map with Link Health

## Monitor performance between sites



- Toggle the ability to see lines between session locations
- Table view of link performance with search terms
- Ability to apply a filter from geo widget





# Time Interval Offset

Spot differences between periods of time quickly

- Knowing historical data helps identify issues early
- Dashboards now allow you to run certain cards or sections offset from the main time picker
- Easily compare performance hour over hour, day over day, or week over week

**TIME INTERVAL OFFSET** Private (Chris Fridgen) ...

**One week earlier** Mar 29, 2023 13:38 - Mar 29, 2023 21:38

10.6 Mbps

9.0

6.0

2.8

13:38 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00

**Two intervals earlier** Apr 04, 2023 21:38 - Apr 05, 2023 05:38

24 ms

20

15

10

4

21:38 22:00 23:00 Apr 05, 2023 01:00 02:00 03:00 04:00 05:00

**Card detail**

Title: One week earlier Section: Default

Linked Dashboards: Mar 29, 2023 13:38 - Mar 29, 2023 21:38

Current Interval: Apr 05, 2023 13:38 - Apr 05, 2023 21:38

Offset by steps: 1 Offset by days: 7

Region	Delay (p95)
Paris	55.4 Kbps
Lyon	49.9 Kbps
AWS US	49.3 Kbps

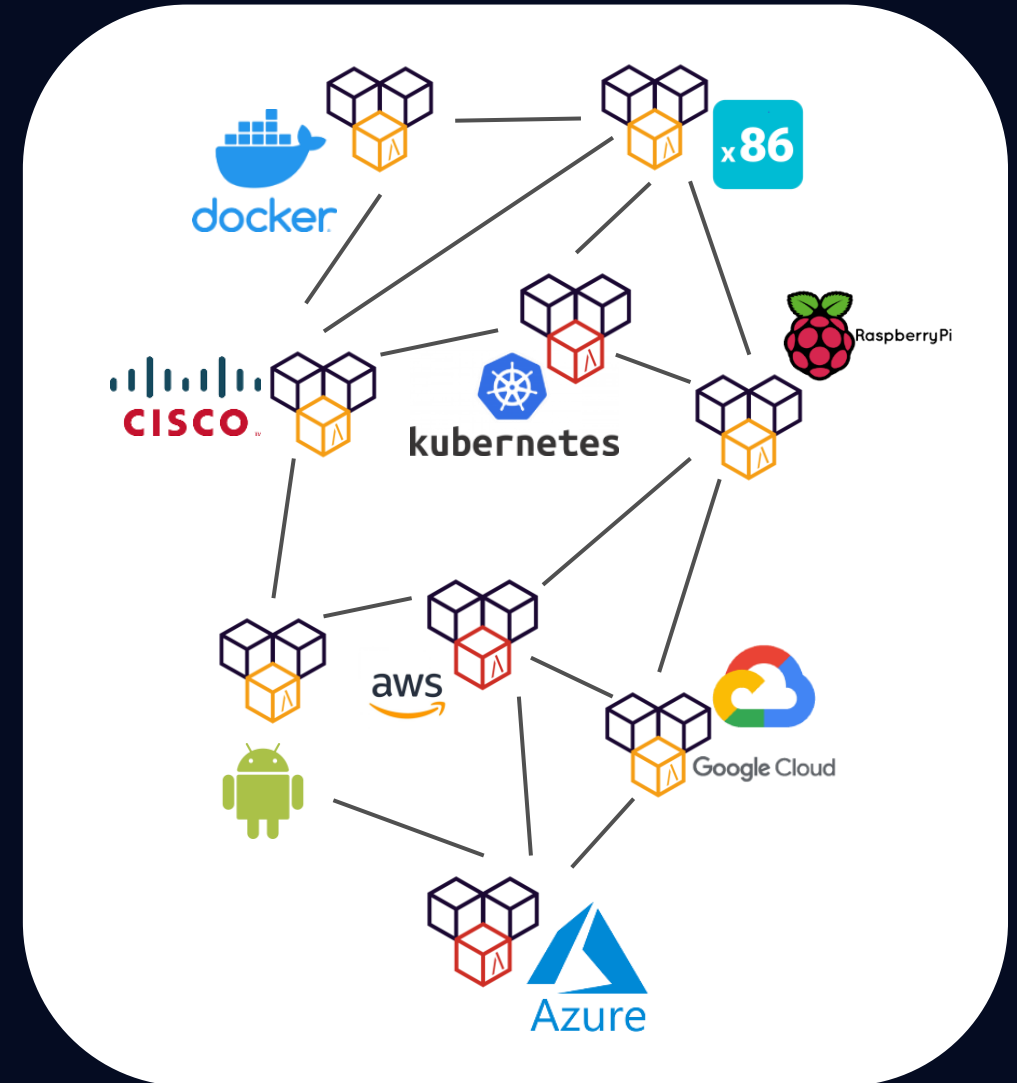
region	P2R	AVG
ALL		7.12 ms
east [2105]		5.05 ms
north east [1463]		4.92 ms
north [37]		2.98 ms
west [321]		2.18 ms
central [25]		



# What are Skylight Sensor Agents?

Next-generation Skylight service assurance

- Software, containerized (docker/kubernetes) on-demand network, service and application assurance
- Cloud-native architecture
- Built for scale and automation
- Primary focus on active Layers 3-7 PM and testing



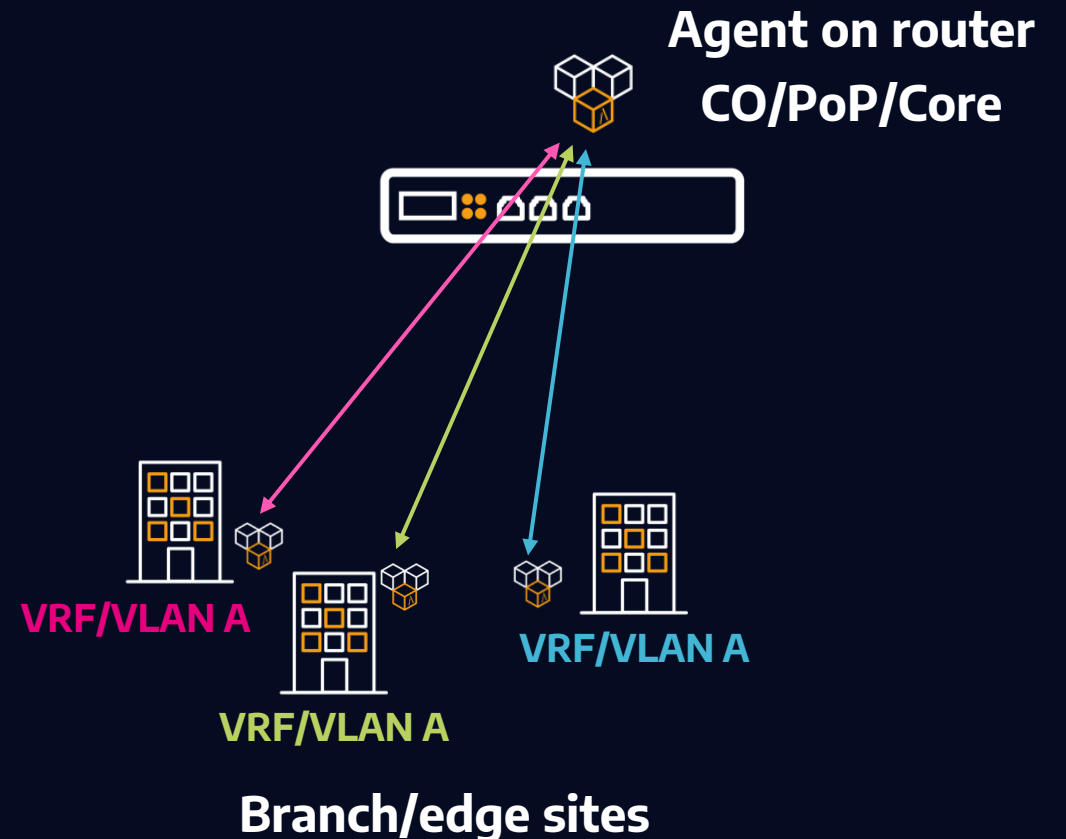
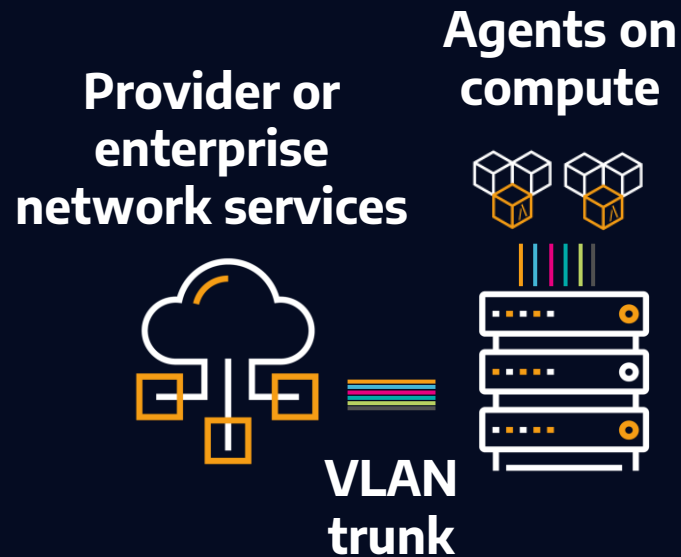




# Multi Namespace / VRF Support

## Single agent testing across service layers

- Keeping measurement and management/reporting networks separate
- Centralized probing in multi-service networks
- VPN monitoring at aggregation sites





# Traceroute

Visualize and compare path performance

- Run alongside continuous Layer 3 tests to help understand if performance issues are due to path change events

The screenshot displays the Accedian Traceroute interface. At the top, there are navigation tabs for Inventory, Sessions, Assets, and Security Assets. The main header shows the target 'driver4-trace-accedian.com' and its status as 'Inactive TRACE'. Below this, the 'Traceroute' section is active, showing 'Trace route tests (3)'. A table lists the tests with columns for Test Date, RTT (avg), and Hops. Test A (16:31 Oct 24, 2022) shows 12.5 ms RTT and 4 hops. Test B (20:33 Oct 21, 2022) shows 8.38 ms RTT and 6 hops. To the right, a graph shows RTT (avg) and Hops over time. Below the graph, two test results are compared: A (16:31 Oct 24, 2022) with 12.5 ms - 4 hops, and B (20:33 Oct 21, 2022) with 8.38 ms - 6 hops. At the bottom, a detailed table shows RTT Max, RTT (min), Element, Hops, and RTT (min) for each hop. The hops are: TraceAgent, 192.168.144.1, 141.101.73.4, 141.101.73.18, and 104.22.0.192. A network diagram in the center shows the path between these elements.

Test Date	RTT (avg)	Hops
16:40 Oct 24, 2022	8.47 ms	5
<b>A</b> 16:31 Oct 24, 2022	12.5 ms	4
<b>B</b> 20:33 Oct 21, 2022	8.38 ms	6

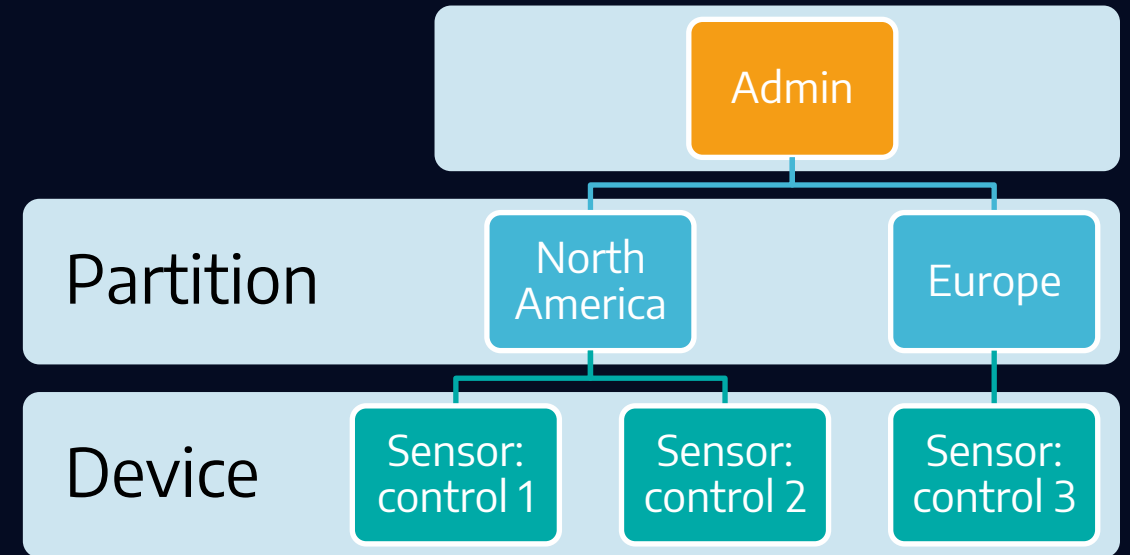
RTT Max	RTT (min)	Element	Hops	Element	RTT (min)
		TraceAgent		TraceAgent	
0.035 ms	0.035 ms	192.168.144.1		192.168.144.1	0.034 ms
11.5 ms	11.5 ms	141.101.73.4		*	*
				74.125.251.241	10.5 ms
				*	*
27.1 ms	27.1 ms	141.101.73.18		141.101.73.18	11.4 ms
11.3 ms	11.3 ms	104.22.0.192		104.22.1.192	11.6 ms



# Network Partitioning

## Orchestrator access controls for device management

- Networks responsibilities are often segmented across teams
- Now you can partition devices and assign permissions to control access
  - Commissioning and scheduled jobs
  - SAT tests and session management
- Partitioning is done at the device level. The Control Sensor (VCX) is considered to be one device. All modules and SFPs managed by a sensor control instance are in the same partition.





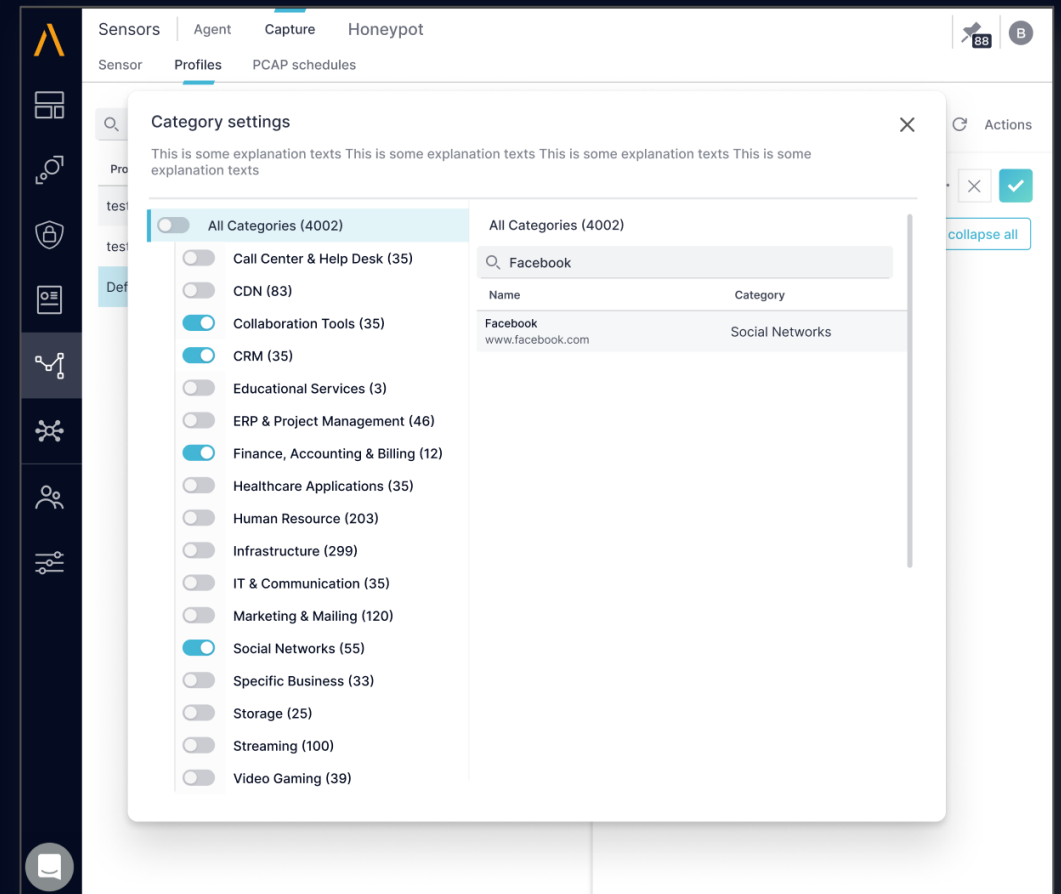
Works in Progress



# SaaS Definition Database

Capture Sensor will move from 100s to 1000s of application detections

- Users can pick and choose from a large web service list to have performance monitored
  - Enabled by category for convenience
- This is in addition to existing custom application definitions





# Flex 25

Higher throughput demarcation and business service monitoring

- Physical Interface
  - 4 x 10G/25G SFP+/SFP28 ports
  - DC (Dual) and Single AC Powered (internal)
  - Small footprint: 1/2 U rack space
  - Field replaceable fans (3X)
- Features
  - Same content as Flex 100
  - Initially Y.1731
  - TWAMP coming in Q1 2024
  - 40K PPS for PM

Flex 25



Flex 25 with sync option





# Session Scheduling

Build statical models by run non-continuous tests at regular cadences

- Trace and throughput test session types are traditional run as one-off requests when configuring or troubleshooting a network problem
- There is also value in running these on a re-occurring schedule so that there is a history to look back on

The screenshot displays a 'Session schedules' interface with a search bar and a table of existing schedules. A 'New session schedule' dialog box is open in the foreground, showing configuration options for a new schedule.

Name	Next run	Sessions
assumenda est quis	Fri Jun 21 1996 06:32:53 GMT-0	4
autem eveniet error	Wed May 07 2070 10:40:51 GMT	17

**New session schedule**

Schedule name \*  
Tue, Feb 21, 2023 16:38:23 EST

Run once  Repeat

Custom

Repeat every 8 Weeks on...

S M T W **T** F S

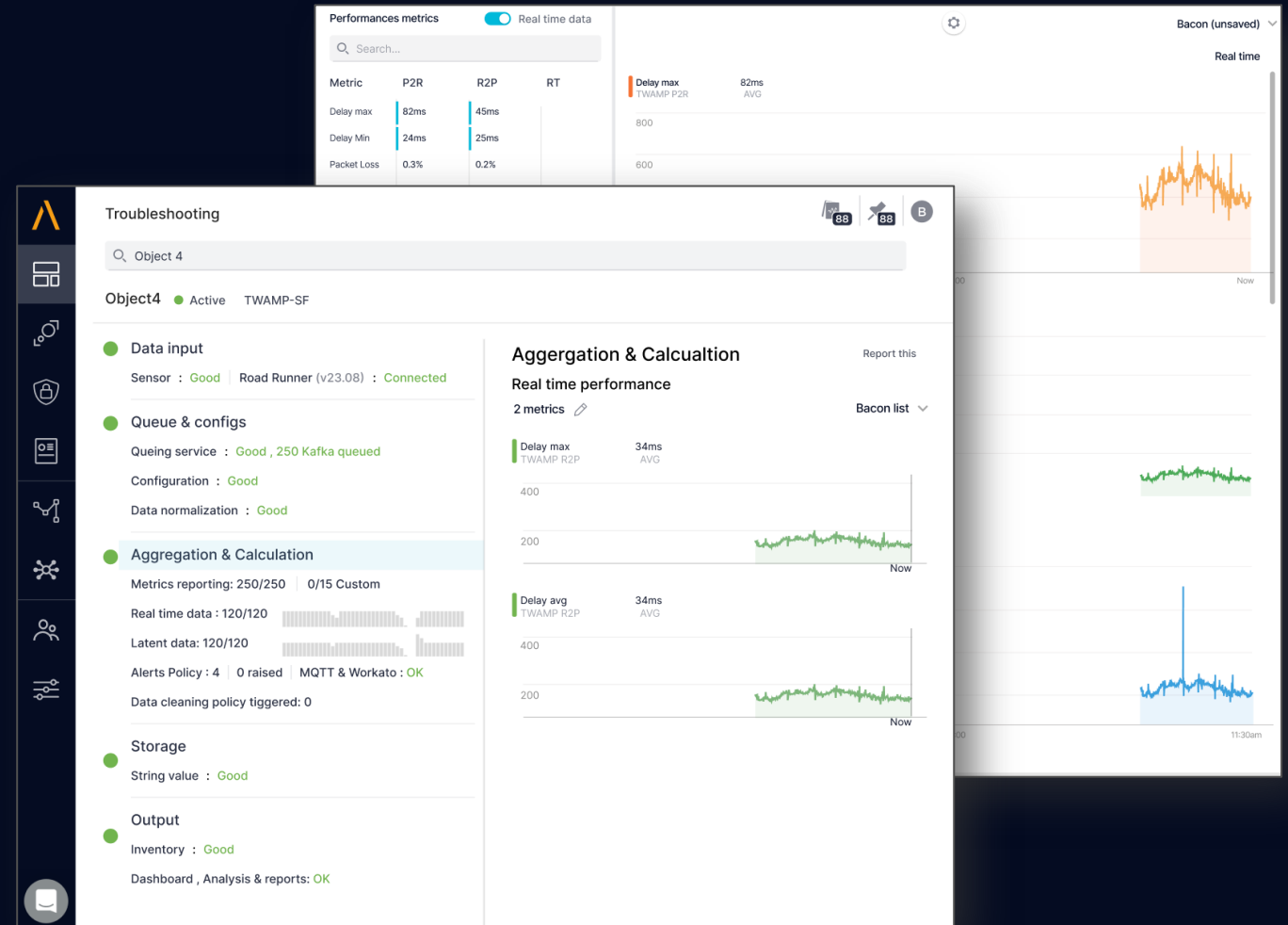
Starting at 16:38 EST



# Real-Time View of Session Data

Avoid delays for a more expedient troubleshooting workflow

- Short cut data processing flows to see the raw data collected by Skylight
- Great for troubleshooting specific session performance
- Bonus – provides visibility into where your data is in the Skylight pipeline





Questions?





Additional  
questions  
and feedback!



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