

## Leveraging your Cisco Installed Base with Skylight

How You Can Work Better with Skylight and Cisco

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Cisco Data in Skylight

Skylight on Cisco Platforms

## 1: Automation

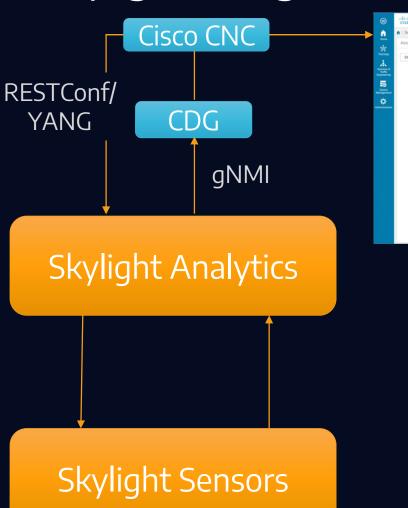
### Automation with Skylight and Cisco

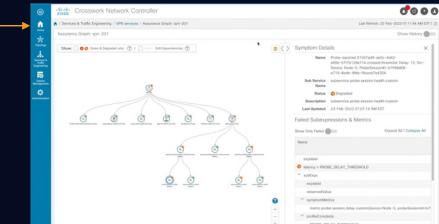
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- If you are using Cisco Crosswork automation products (CNC, NSO) then you can build Skylight into your automation workflows
- Benefits include:
  - Reduced time & cost to deploy assurance in your network
  - Network assurance automatically follows network changes
  - Enable closed loop automation use-cases by feeding Skylight data back to Crosswork to automate remediation actions

# Skylight Integration with Cisco CNC







**Cisco Dependency:** Crosswork Network Controller Customer

#### • What

 Integration with Crosswork Network Controller (Cisco IP Network Controller) Service Health

```
• Why
```

- Automate provisioning of assurance with an L3 VPN
- Provide Skylight L3 PM data inside of CNC
- How
  - RESTConf APIs, gNMI streaming
- When
  - POC Now, 23.08 / Q4 2023 with CNC

# Skylight Integration with Cisco NSO



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Skylight Analytics

#### **Skylight Sensors**

**Cisco Dependency:** NSO Customer, Skylight NED

#### • What

- Integration with Crosswork **Network Services Orchestrator** (NSO)
- Why
  - Integrate Skylight assurance provisioning into multi-vendor automated provisioning workflows in NSO
  - Send assurance alerts to NSO for closed loop automation
- How
  - RESTConf APIs
- When
  - POC Now, Planned 23.11

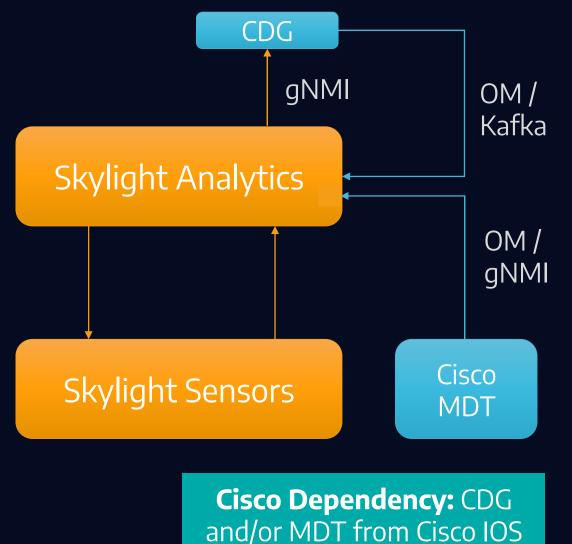
# 2: Cisco Data in Skylight

#### Cisco Data in Skylight

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- If you use Cisco routing platforms, they are generating a wealth of performance monitoring data
- You can consolidate this data into one place with Skylight, providing a single pane of glass for assurance
- Benefits include:
  - Single pane of glass for Skylight assurance data plus Cisco assurance data and Cisco device data allow teams to see performance data in a single place
  - Improve network visibility, reduce time to determine root cause
  - Single source to integrate performance data and alerts into your broader monitoring ecosystem (ITSM, etc.)

### Skylight with Cisco Telemetry



Routers

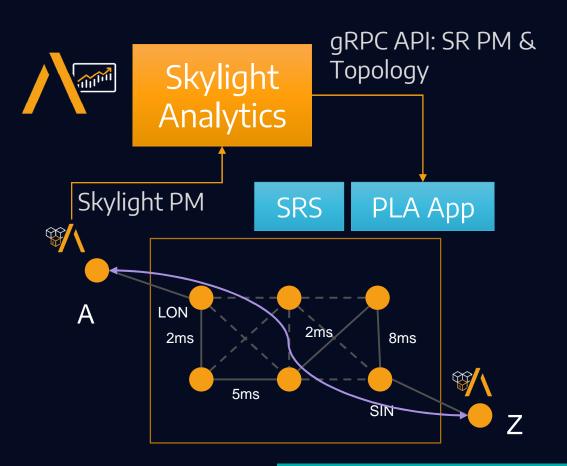
#### • What

- Integration with Cisco Model-Driven Telemetry (MDT) and Crosswork Data Gateway (CDG)
- Why
  - Today this requires PS development and using open-source tools; we want to make this simpler and faster to implement to allow Skylight to be easier to deploy when ingesting various Cisco data sources

#### • How

- Pre-build mediation into OpenMetrics for common Cisco data sources (MDT, CDG)
- When
  - Available today, improvements planned 23.11

## Skylight SRS Apps/PLA Integration

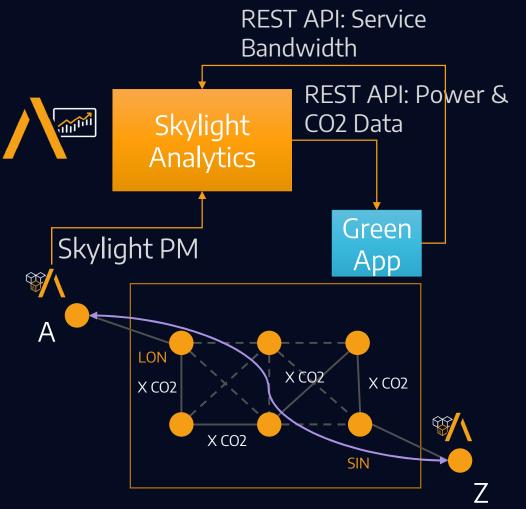


**Cisco Dependency:** Cisco SR/Routing Customer

#### • What

- Integration with Cisco Segment Routing Services (SRS) for SR-PM and SR Path Data
- Why
  - Provide a single pane of glass with both end-toend service visibility and hop-by-hop segment routing performance visibility correlated together
- How
  - gRPC API to Cisco PLA application for SRv6 PM & topology, integration with other SRS applications
- When
  - POC Now, Planned 23.11 for PLA, further enhancements TBD

## Skylight with Cisco Green VPN



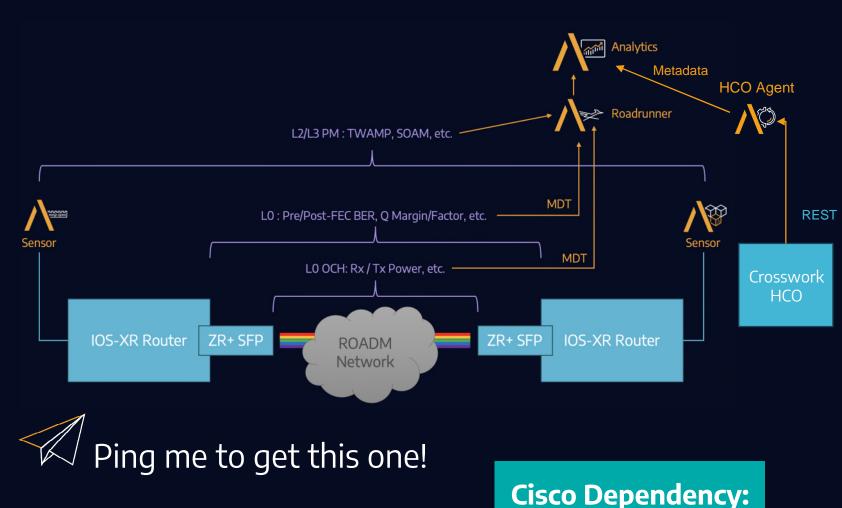
#### What

- $\mathbf{\Lambda}$
- Integration with Cisco Green App to extract power/ carbon usage on a per-service basis
- Why
  - Provide customers with a power/carbon KPI on a per service basis, correlated with our other performance KPIs
- How
  - REST API to Cisco Green App for Power & CO2 data on a per-service basis
- When
  - Prototyping now, TBD for availability

**Cisco Dependency:** Cisco Green VPN App

## Skylight RON/HCO Integration





RON, HCO/HCH

#### • What

• Integration with Cisco Routed Optical Networking (RON) and Crosswork Hierarchical Controller (HCO/CHC)

• Why

• Single pane of glass for LO-L3 performance assurance, and path diversity assurance

How

- Integrate RON data via MDT, HCO via APIs
- When
  - Prototyping now, TBD
  - Cisco/Vodafone MWC 2024

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## 3: Skylight on Cisco Platforms

2500

2000

1500

1000

11

.48

216

1863.4

1345.76

1542.84

1661.121704.96

1069.32

#### Skylight on Cisco Platforms



- If you use Cisco routing platforms, you can deploy Skylight sensors on these platforms directly
  - Sensor agents (software)
  - SFP compute (hardware)
- Benefits include:
  - Leverage your existing Cisco deployed base as a platform to host assurance sensors/probes, reducing cost and simplifying deployment
  - Supported by Cisco

## Skylight Agents on IOS



• What

- Formal support of agents on IOS-XR / IOS-XE in the third-party application (TPA) runtime
- (Future) Skylight agents as IOS native applications

• Why

- Allow Skylight sensor agents to be deployed anywhere there is a Cisco router
- Be able to have our agents deployed on any Cisco router, and have this be formally be supported by Cisco

#### • How

- Cisco app manager for TPA
- When
  - Prototype now, Cisco certification TBD

**Cisco Dependency:** IOS-XR/XE with TPA

# Skylight SFPs on IOS



• Formal support for our SFP compute in Cisco IOS routers

#### • Why

- Insert an SFP anywhere there is a Cisco router, for accurate and granular performance visibility
- So our SFPs are certified and supported by Cisco
- How
  - Certification testing
- When
  - Works now (over 15k deployed in the field today), Cisco certification TBD

**Cisco Dependency:** IOS Devices with SFPs





#### Skylight and Cisco are Better Together



Single pane of glass for Cisco telemetry data and Skylight performance data, reducing cost and improving network performance visibility

# Sensors

Data

Deploy Skylight sensors on Cisco routing platforms, leveraging your existing investment in Cisco platforms to host performance assurance

Automation /

Automate assurance deployment, reducing cost and improving outcomes



#### Thank You!

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