Presentation Goals

- Help surface unspoken **fears about major infrastructure changes**

- Share **vulnerable moments** amongst technical leadership

- Connect **team growth** with technical outcomes

> show version and haiku
Model: ex4300-32f

My session is dead:
Forgot to commit confirm.
Where are my car keys?

Router RFP (2022)

2022 Canarie network supported a maximum of 100G per interface. Router upgrades were required to achieve 400G

Router equipment vendor provided end of life notification for existing network equipment

Establish new routing equipment VOR

- *"What was the gut reaction after seeing the end-of-life notification, before starting to think about solutions?"*

- *"How did it feel making a decision that would impact the network for the next decade?"*

```
> show version and limerick
Model: ex4600-40f
          back to four code drops per year
          returned to our cadence so dear
           a promising future
          of shiny new features
          now go and upgrade all your gear
```
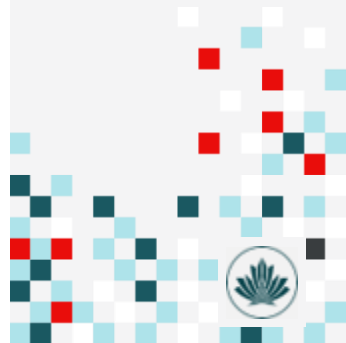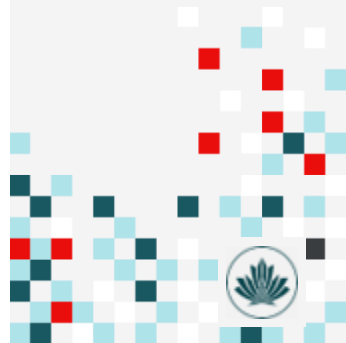
Evaluation

- Values
  - Complete routing features
  - Pricing Model
  - Vendor supported silicon(?)
  - Local support

- Fit
  - Physical size / Power / Expected life-cycle
  - Licensing Structure
  - Equipment longevity
 - Egg-head MBA maintenance contracts

- *"How did you handle the pressure of knowing your peers would judge your vendor choice?"*

- *"What aspects of the equipment longevity evaluation caused the most debate within the team?"*

- *"What concerns about the team's readiness did you keep to yourself during the evaluation process?"*

> show version and limerick
Model: mx204
    i once ran a hidden command
    it voided my warranty, man
    and filled up my screen
    with words, not obscene
    just all the limericks I could stand
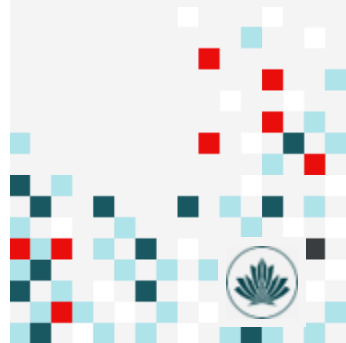
Quick Elimination (of some) Vendor Solutions

- No-Brainers
  - Incomplete feature set
    - No RPKI
  - Equipment size (Too small / Too Big)
    - DC power supply only

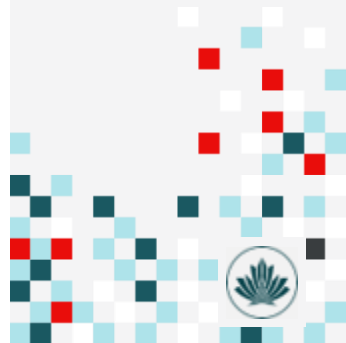- *"What made the team most uncomfortable about eliminating solutions?"*

show version and haiku
Model: mx480
        No icons; no mouse
        No drop down menus or fonts
   CLIs are cool

Transition Justification

NOKIA

- ESNET has very successfully interoperated Juniper / Nokia in the same network

- Low Maintenance Costs

- Simple / Perpetual license model

- Latest technologies, demonstrated platform longevity

- 20 week delivery time

JUNIPER NETWORKS

- NREN and GREN partners moving away from Juniper

- Escalating maintenance cost driving premature hardware churn and high OpEx

- Different license model every time we order hardware

- Purpose built platforms that do not support future cards

- 9 months or more projected delivery, "Best Effort"
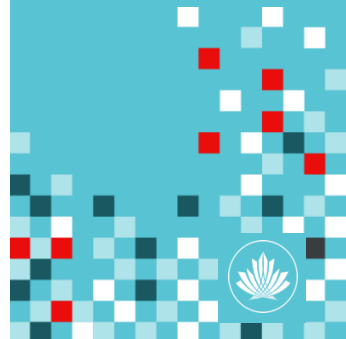
- *"How to address concerns about moving away from familiar vendor relationships and technologies?"*

- *"What feels worse: sticking with a known problem, or risking everything on a new solution?"*

- *"How would a person validate advantages that translate to real financial benefits?"*

```
> show version and haiku
Model: mx10003
        IS-IS sleeps.
        BGP peers are quiet.
        Something must be wrong.
```
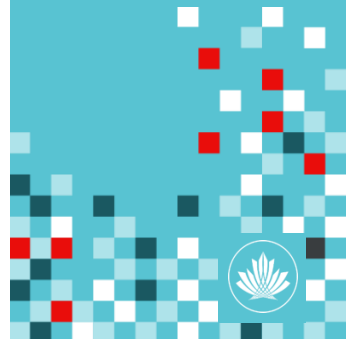
Retrospective (2024)

- Transition completed
  - Fears of the new and unexpected are fading
    - Continued to use/train/build trusted relationships with new Vendor

- Outcomes matched expectations
  - Opportunity for team members
    - Not first rodeo anymore... a personal ownership and excitement

- Measures of success
  - Less than 3 angry email to CEO per summer equipment deployment (P1/P2)

- *"What surprising successes or challenges emerged during the transition that weren't part of the initial risk assessment?"*

- *"Looking back, which fears turned out to be well-founded, and which ones do you now laugh about?"*

- *"How has this transition affected your team's confidence in tackling future major infrastructure changes?"*

```
> show version and haiku
Model: MX10008
        A little lightning
        A fiber-seeking back-hoe
        There goes my weekend
```