

Moving Toward a Self-Healing Network

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What is a Self-Healing Network?

Benefits



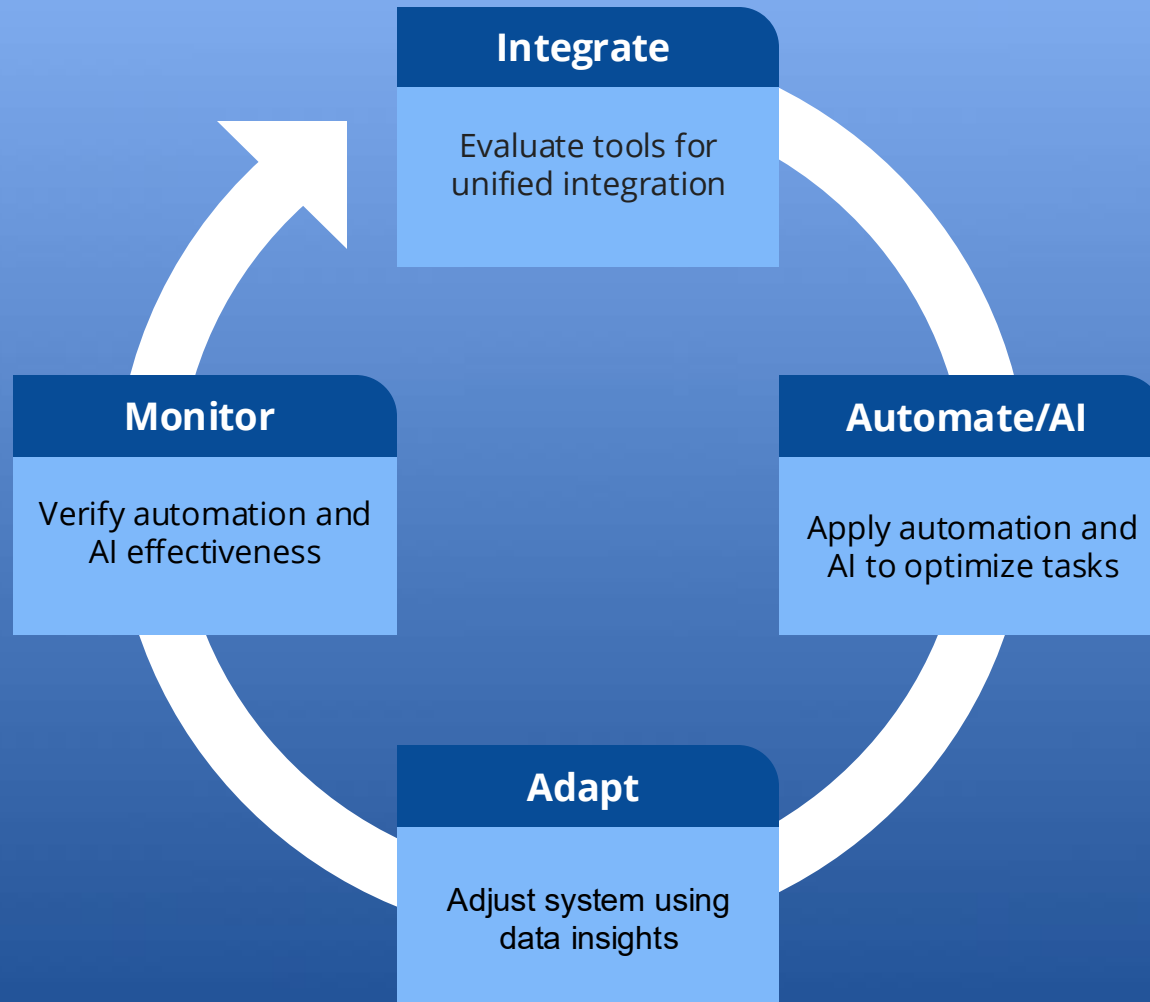
For Subscribers

A more dependable network with fewer interruptions, translating to higher satisfaction.



For You

Reduced time troubleshooting means more bandwidth for strategic priorities, such as network expansion or new service rollouts.



Core
Global Search

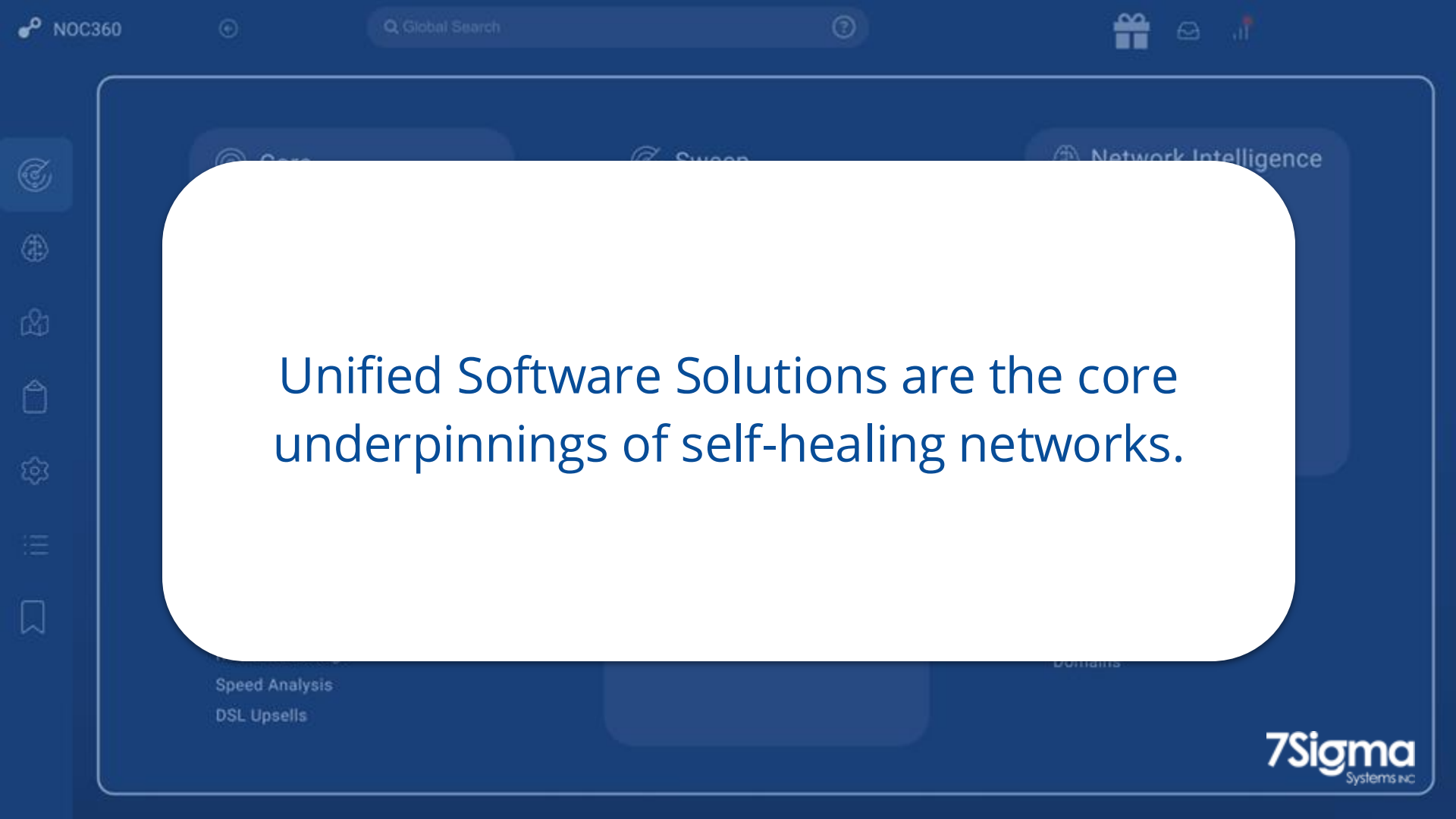
Sweep
Fiber Clarity

Network Intelligence
Performance Dashboard
Port State Audit
Replacement
Capacity Planning
Ice Drift
atched IPs
udit
istory
Attainable DSL

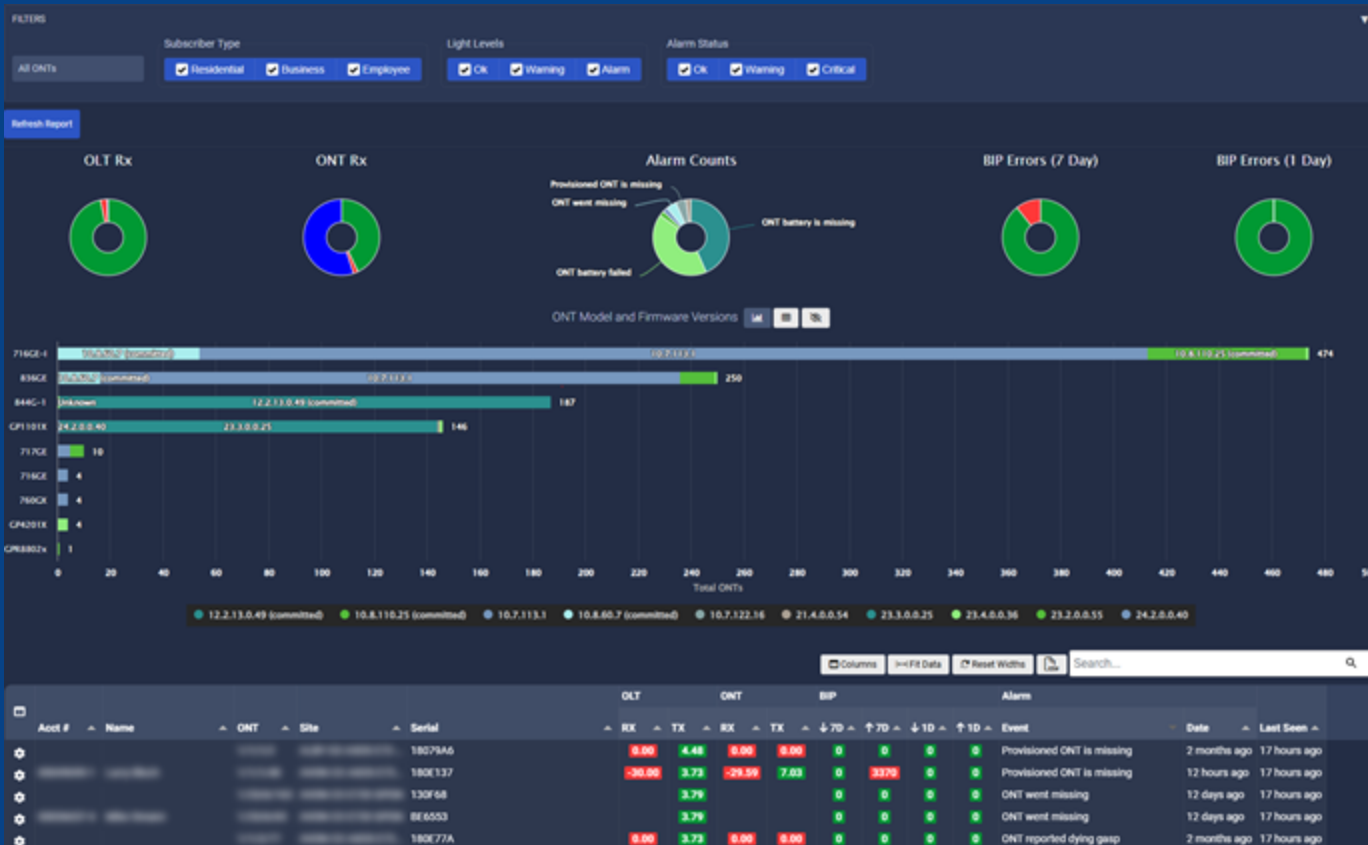
Service Explorer
Service Explorer
Wired Broadband
Cable Broadband
Domains

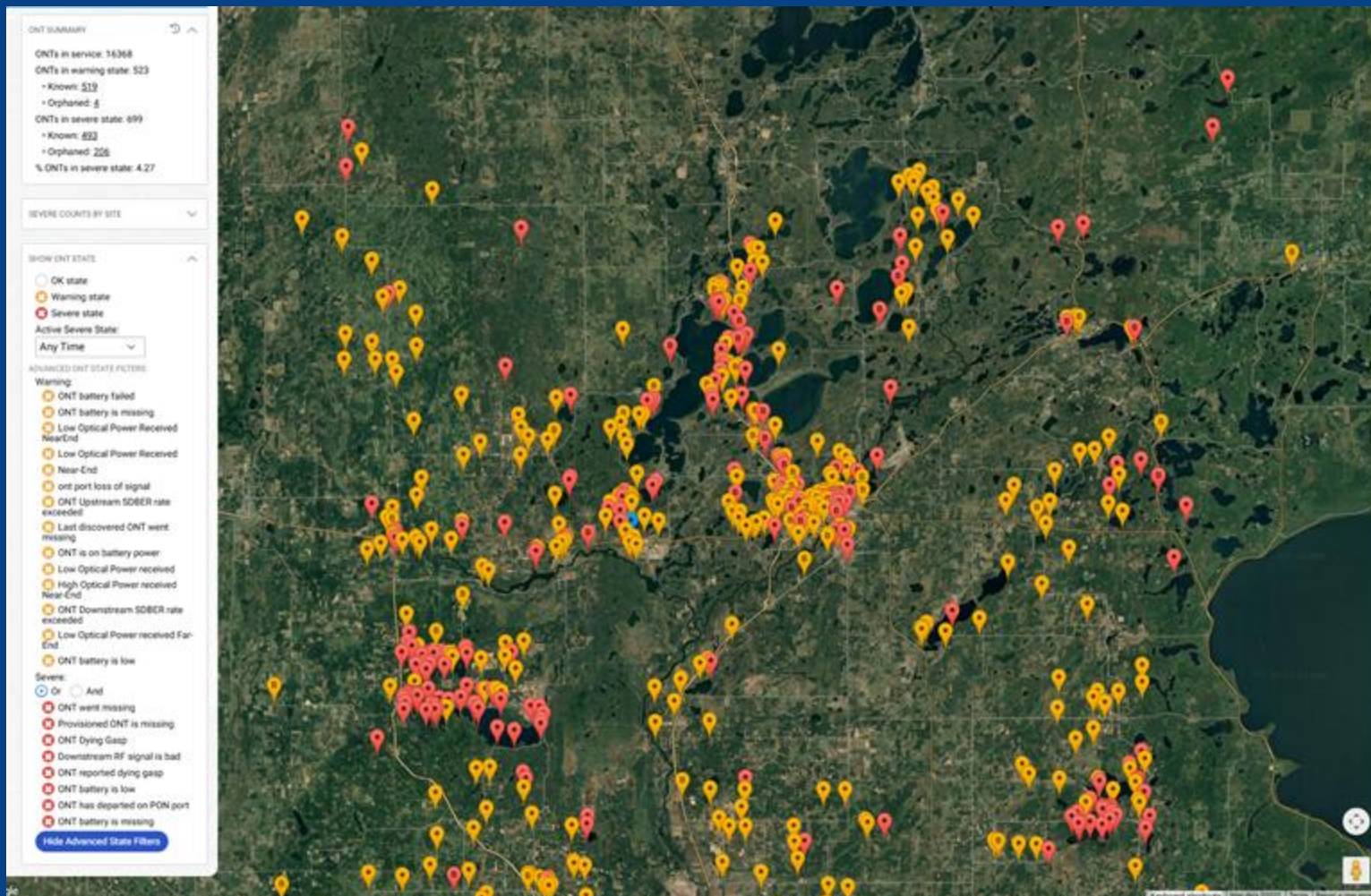
Suffer Report
Revenue Leakage
Speed Analysis
DSL Upsells

Step 1: Integrate



Unified Software Solutions are the core underpinnings of self-healing networks.





ONT SUMMARY

ONTs in service: 13034
 ONTs in warning state: 3519
 • Known: 2088
 • Orphaned: 453
 ONTs in severe state: 785
 • Known: 226
 • Orphaned: 329
 % ONTs in severe state: 6.02

SEVERE COUNTS BY SITE

SHOW ONT STATE

- ☐ OK state
☐ Warning state
☒ Severe state

Active Severe State:

Any Time

Show Advanced State Filters

ADVANCED

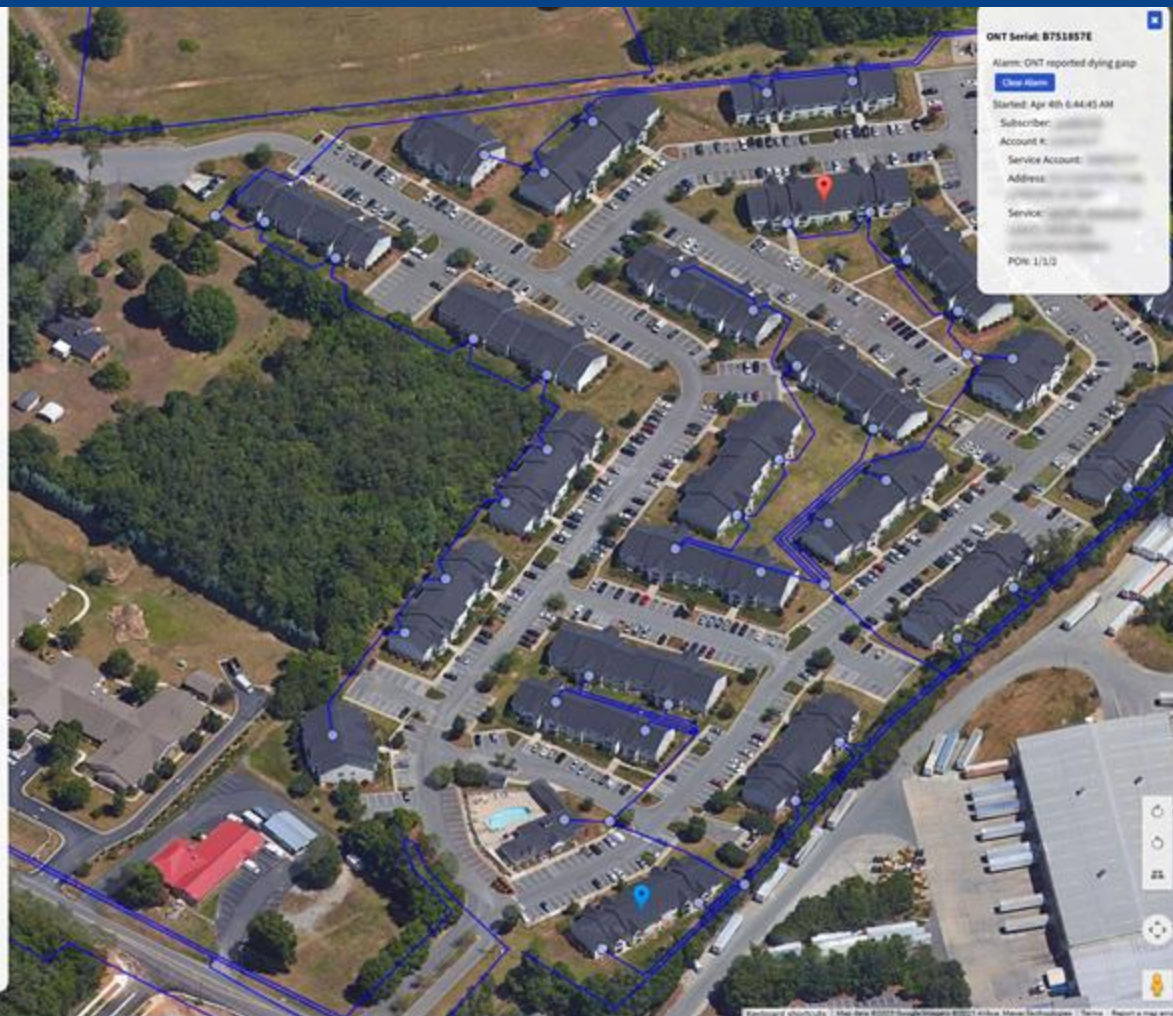
- ☒ Filter Overlay
☐ Show Sites

NO ONGOING ONT ALARMS

Re-open Alarms for Selected Site

Re-open Alarms for ALL Sites

Set Location/Zoom as Default



ONT Serial: BT51857E

Alarm: ONT reported dying gasp

Clear Alarm

Started: Apr 4th 6:44:43 AM

Subscriber:

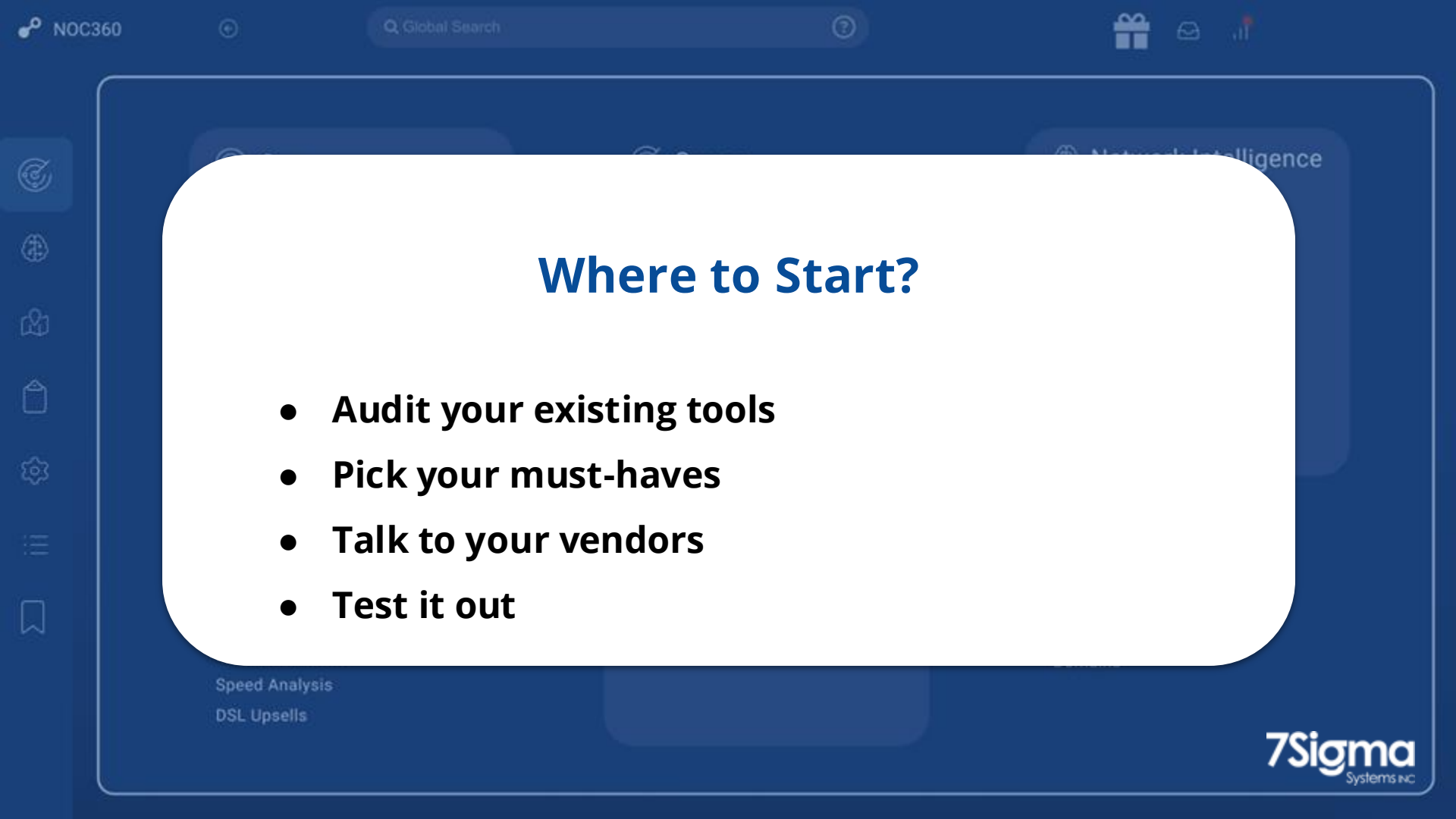
Account #:

Service Account:

Address:

Service:

PON: 1/3/3



Where to Start?

- **Audit your existing tools**
- **Pick your must-haves**
- **Talk to your vendors**
- **Test it out**

Speed Analysis

DSL Upsells

Step 2: Automate/AI

Iris [X]

Summarized [X] Extended

The fiber optic connection seems to have no immediate issues, as there are no alarms and all light levels are within acceptable ranges. However, the 1284 Bit Interleaved Parity (BIP) errors could indicate some level of degradation in the connection, which may not be immediately noticeable but should be monitored.

Regarding the poor Wi-Fi signal strength for the devices:

1. BFROS_WIFI (192.168.99.87) and
2. A0D0DCEFB77C (192.168.99.161)

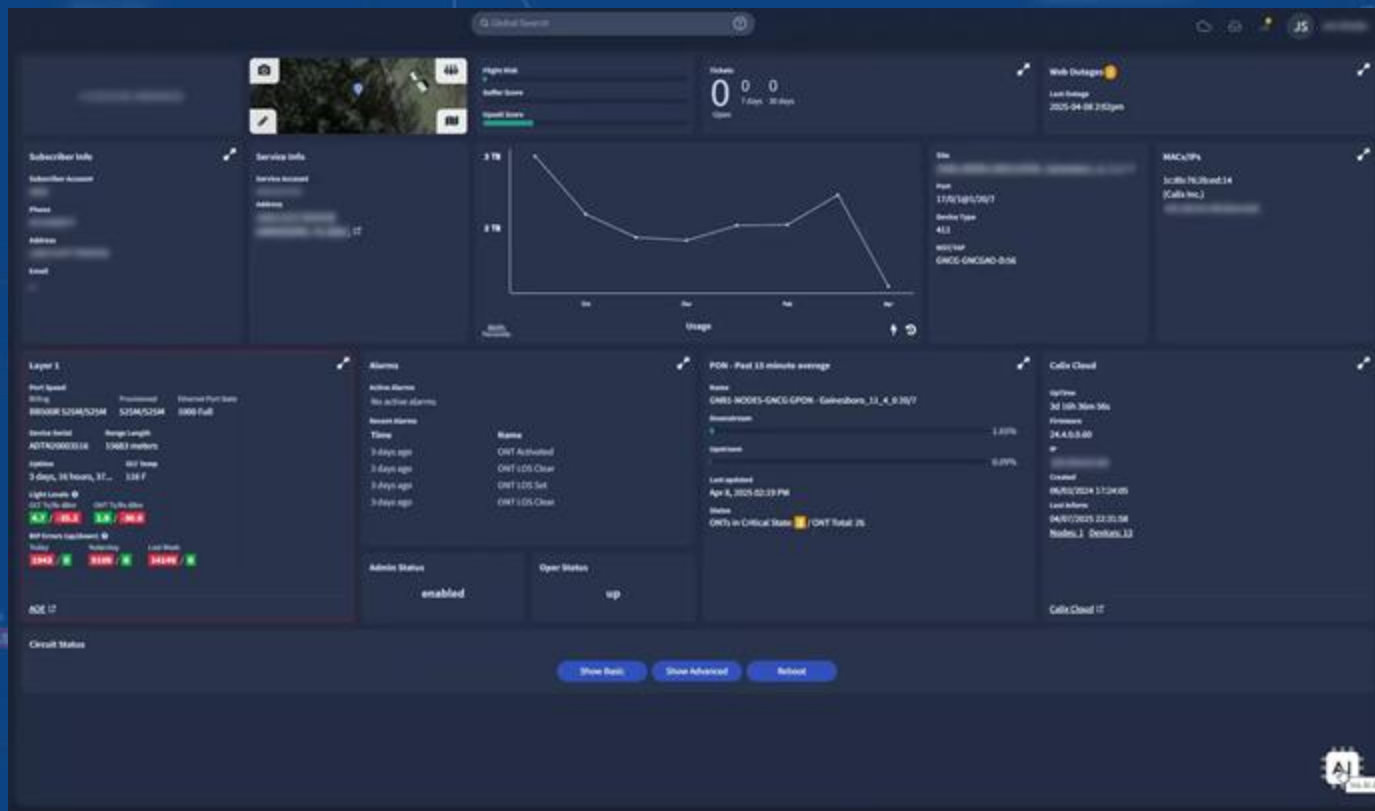
To improve their connection:

- Move the router closer to the devices or vice versa.

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Automated troubleshooting, powered by AI, instantly detects and resolves issues, reducing downtime and complexity, while enabling self-healing networks.

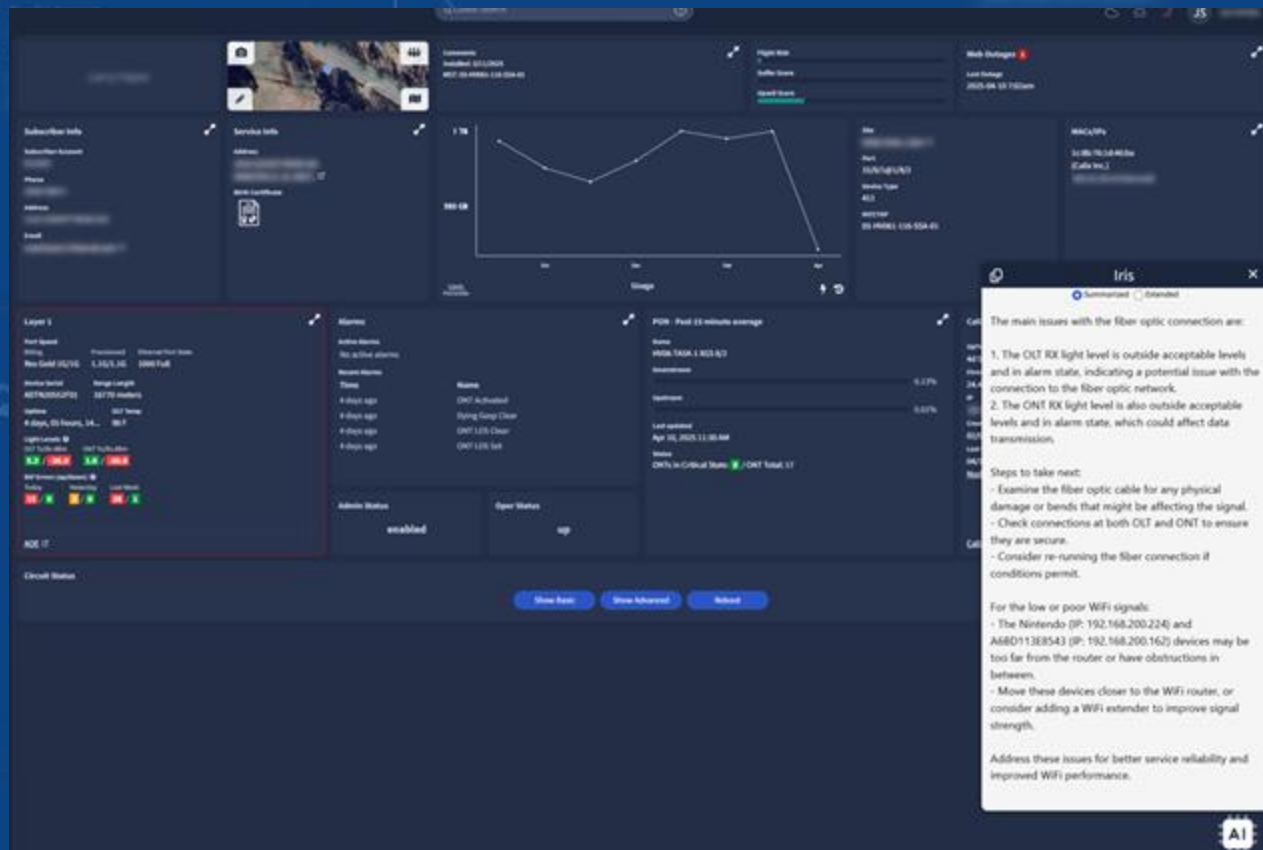
What this Looks Like



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Move the router closer to the systems or vice versa.

What this Looks Like



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their connection to the router closer to the Systems or

vice versa.



Get Ahead of the Curve

60% of businesses expect to have AI enabled predictive automation in place across all domains to manage and simplify network operations within the next two years, according to a report by Cisco Systems.

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Where to Start?

- Target the Pain Points
- Leverage What You've Got
- Keep It Simple (at first)

Step 3: Adapt

Adapt your tooling, automations, and platforms using feedback from your automations and AI, and strive for refined efficiencies.

What this looks like



Fewer Repeat Issues



Smoother Peak Hours



Faster, Smarter Tools



Leaner Operations



Savings and Efficiency

By using predictive automation, Deutsche Telekom has reported a **30%** reduction in network downtime and a **25%** decrease in maintenance costs.



System Performance

Major telecommunications companies and ISPs have reported a **15%** increase in network performance after adopting predictive automation technologies.

Where to Start?

- **Monitor Automation**
- **Leverage AI Insights**
- **Refresh Tools**
- **Trim Waste**
- **Expand Successes**

Step 4: Monitor

Monitor the accuracy of automation and AI as they detect anomalies and automate fixes, ensuring enhanced network performance, resiliency, and reliability with minimal manual intervention.

What this Looks like

Automation Health



Reduced
Network
Failures by **75%**

Advanced AI algorithms continuously monitor network health, automatically implementing preventive measures when potential issues are detected.

AI Defense



Reducing
security incidents
by **40%**

AI provides real-time threat detection, automated response protocols, and continuous network monitoring.

Efficiency Gains



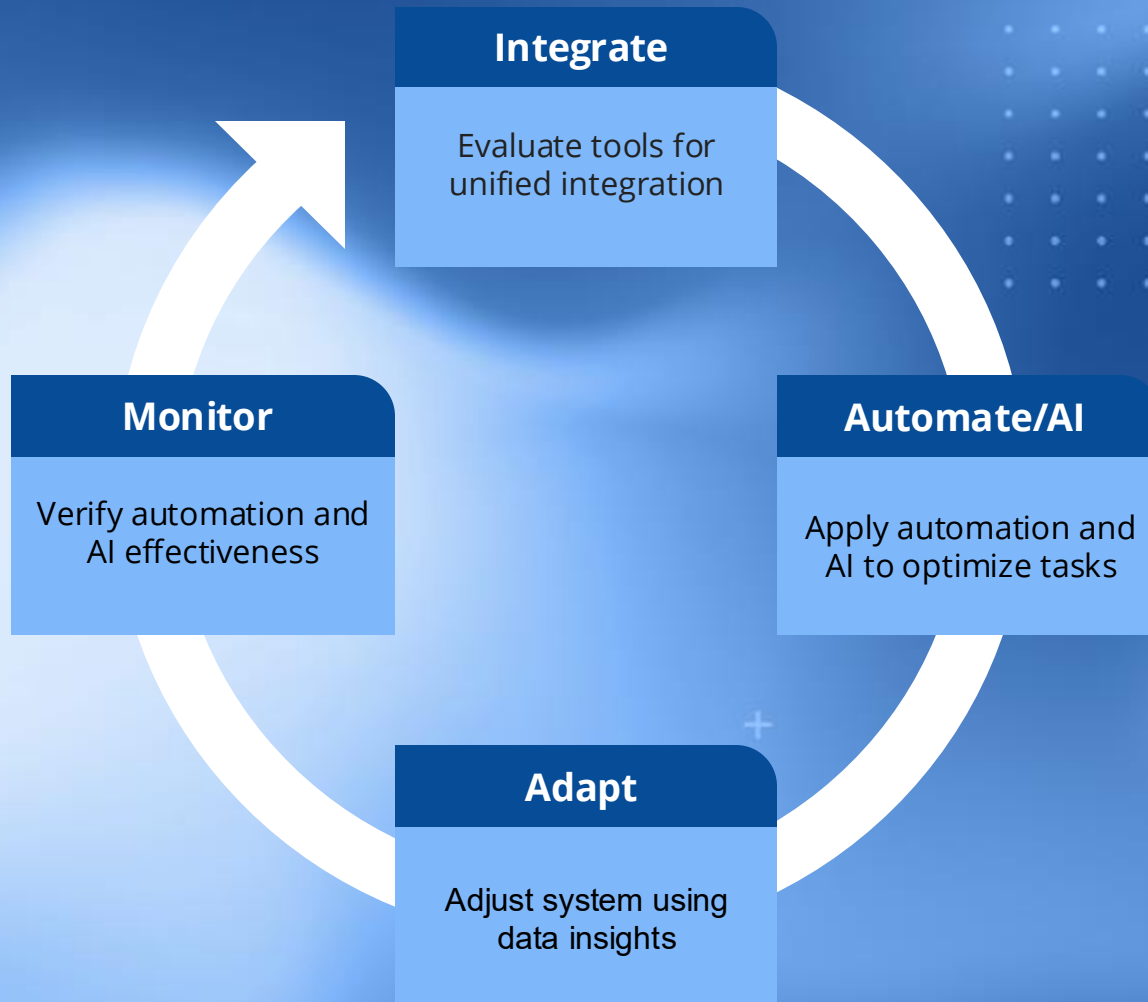
Manual
Interventions
Down **40%**

Shows the reduction in human effort, highlighting the tangible efficiency improvements from automation and AI

Where to Start?

- **Automation Health**
- **AI Performance**
- **Network Performance**
- **Reliability Monitoring**

Bringing It All Together



Thank you!
Jon Scheler
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**Talk to you
soon!**



**Or schedule
time to talk**

