

Is Your Assurance Strategy Ready for the AI-Native Network?

- AI is changing how networks operate.
 - Assurance needs to change with it.

Networks Are No Longer Static

AI workloads, enterprise SLAs, and real-time services are pushing networks beyond manual operations.

What this means:

- Higher complexity
- Faster change
- Less margin for error

From Connectivity to Intelligence

Monitoring alone isn't enough anymore. AI-native networks need assurance that can anticipate and act.

What's driving the shift:

- AI-driven traffic growth
- Enterprise performance guarantees
- Distributed, multi-domain architectures

Where Most CSPs Are Today

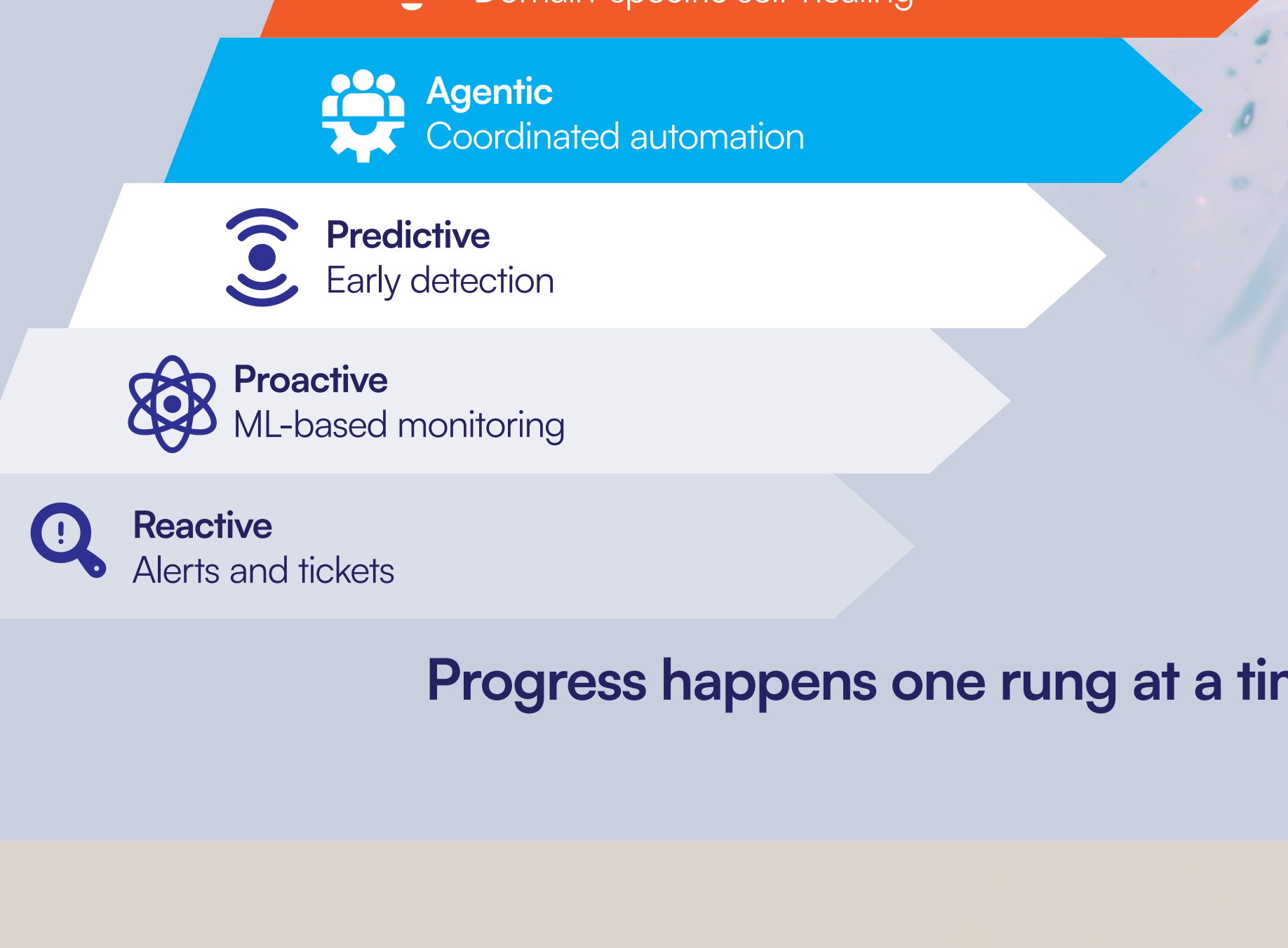
Many CSPs still rely on:

- Reactive alarms
- Manual troubleshooting
- Limited visibility across the network

Early results are already clear

Faster issue resolution. Fewer alerts. Fewer site visits.

The Path to Intelligent Network Assurance



Progress happens one rung at a time.

Agentic Does Not Mean Hands-Off

Autonomy works best where strong context and trust already exist.

Early agentic network assurance focuses on:

- Narrow, well-defined decisions
- Low-risk, high-impact workflows
- Human-guided learning

Why Autonomy Takes Time

Agentic assurance depends on foundations that many networks are still building.

Common challenges:

- Multi-vendor data silos
- Massive data volumes with gaps
- High cost of real-time telemetry
- Rare failures that are hard to predict
- New skills and operational models

The Foundations of AI-Driven Network Assurance

- Data**
Quality, federation, cost control
- Knowledge**
Context, inventories, relationships
- Intelligence**
ML, GenAI, domain expertise
- Operations**
Governance, AgentOps, oversight

Without these, autonomy stalls.

Why CSPs Are Investing

AI-driven network assurance delivers measurable gains:

- 50-60% faster issue resolution
- 90% failure prediction accuracy
- 65% fewer alerts
- 85% fewer on-site visits

Where CSPs Are Starting

- Start with existing automated workflows
- Deploy small, hierarchical AI agents
- Limit agent decision scope
- Improve real-time data selectively
- Build knowledge alongside models

So - Is Your Network Assurance Strategy Built for the AI Era?

AI-native networks demand assurance that can anticipate issues, coordinate intelligence, and scale with complexity. Independent analyst research takes a closer look at how CSPs are approaching this shift.

Explore the Analyst Research

Two independent perspectives on how network assurance is evolving in the AI era:

Frost & Sullivan: Building AI networks with intelligent assurance.

STL Partners: The realities of agentic and autonomous assurance.

Independent analyst research, supported by Enghouse Networks