



AI-Driven Carrier SLA & Service Assurance for Network Operators

SLA Assurance • Service Intelligence • Root-Cause Precision

WHEN SLAS DEFINE THE BUSINESS

For network operators, SLAs are more than performance targets—they are contracts, revenue, and reputation. Every millisecond of latency, every dropped packet, and every unresolved dispute directly impacts customer trust and long-term value.

As carrier networks evolve toward 5G, cloud-native cores, virtualization, and edge-based service delivery, maintaining deterministic performance has become exponentially harder. Services now traverse complex, multi-domain paths spanning access, transport, core, cloud, and third-party networks. Yet most assurance tools were built for simpler architectures. They provide partial metrics, siloed dashboards, or after-the-fact reports—often leaving operators unable to explain why an SLA was breached or where responsibility truly lies.

A NEW STANDARD FOR CARRIER SERVICE ASSURANCE

Cirries DART AI™ was built to solve this problem at carrier scale. It is an AI-driven service assurance platform that helps network operators continuously measure, validate, and defend against SLA breaches in real time.

By combining packet-derived intelligence with AI-assisted correlation across multi-domain environments, DART AI delivers an authoritative, evidence-based view of service performance—one that operators can rely on during outages, customer escalations, and regulatory reviews.

SEEING THE ENTIRE SERVICE PATH

DART AI validates SLAs across the full delivery path, from access to core, transport, edge, and cloud. Instead of relying on inferred metrics, it measures real service behavior under live traffic conditions.

Latency, jitter, packet loss, retransmissions, and throughput are captured at flow and session level, allowing operators to understand how services actually perform—not just how devices report they should perform. This continuous, end-to-end visibility enables operators to detect degradation early and prove compliance with confidence

DETECTING SLA RISK BEFORE CUSTOMERS FEEL IT

Rather than reacting after an SLA is breached, DART AI continuously baselines normal behavior for each service, slice, or customer. Its AI-driven analytics identify subtle deviations that signal emerging risk—before they escalate into customer-visible failures.

Related symptoms are intelligently correlated into a single SLA event, dramatically reducing alert noise and false positives. Operations teams see fewer alarms, clearer context, and earlier warnings that allow proactive intervention.

EXPLAINING WHY AN SLA WAS VIOLATED

When an SLA violation does occur, DART AI goes beyond detection to deliver carrier-grade root cause analysis. Using session-aware, packet-derived evidence, it isolates exactly where the fault occurred—whether in the access network, transport layer, core, cloud infrastructure, or an upstream partner domain.

DART AI clearly differentiates between network issues, application behavior, congestion, routing changes, and external dependencies. The result is defensible, data-backed proof that supports customer communications, partner discussions, and vendor accountability—eliminating ambiguity and finger-pointing.

AI BUILT FOR CARRIER OPERATIONS

DART AI applies machine learning and AI reasoning directly to SLA and service telemetry. It automatically detects anomalies across services and slices, groups related violations, and correlates performance degradation with routing changes, congestion, or configuration events.

Rather than overwhelming engineers with raw data, DART AI explains what changed, where it happened, and why it matters to the SLA—accelerating MTTR, reducing escalations, and strengthening SLA defensibility.

ASSURING REACHABILITY ACROSS DYNAMIC NETWORKS

Carrier networks are dynamic by design. DART AI continuously validates reachability and service paths across multi-vendor, multi-domain environments, detecting asymmetric routing, black holes, and misrouting conditions that silently degrade performance.

By correlating reachability issues directly with SLA impact, operators gain clarity on how topology changes affect real services—not just network diagrams.

WHERE AWS TELEMETRY MEETS PACKET TRUTH

AWS services such as VPC Flow Logs, CloudWatch, CloudTrail, and Transit Gateway metrics provide essential operational signals—but they describe what changed, not why performance was affected. DART AI bridges this gap by correlating AWS telemetry with packet-derived evidence, creating a single, authoritative view of cause and effect.

When a security rule blocks traffic, a route changes, or a cloud resource is modified, DART AI links the event directly to the impacted sessions and services. The result is not another alert, but a clear explanation of what happened, where it occurred, and how it affected users

AI THAT EXPLAINS, NOT JUST DETECTS

DART AI continuously baselines normal behavior across hybrid service paths, detecting anomalies before they escalate into SLA breaches. Its AI-driven behavioral analytics identify early signs of degradation—such as rising latency or intermittent loss—long before customers feel the impact.

Powered by generative AI reasoning, DART AI transforms raw telemetry and packet data into human-readable insights. Instead of manual packet analysis or prolonged war-room sessions, teams receive natural-language explanations and actionable recommendations that accelerate resolution and reduce operational fatigue.

COMPLETING AWS'S FCD MODEL

DART AI aligns directly with—and completes—AWS's Fault-Configuration-Diagnostics (FCD) operational model for hybrid cloud environments.

- Fault: Real-time detection of service degradation using live traffic
- Configuration: Correlation of cloud and network changes to service impact
- Diagnostics: Packet-level proof and AI-assisted root cause determination
- This closes a critical gap between cloud monitoring and real-world service behavior.

ABOUT CIRRIES TECHNOLOGIES

Cirries Technologies delivers AI-driven network intelligence solutions that help carriers assure SLAs, protect revenue, and operate complex, multi-domain networks with confidence.

Cirries DART AI™ — When SLAs matter, proof matters more.