

Multi-Cloud Observability

AI-Driven Intelligence for Hybrid Cloud Operations

Solution Brief



Cloud Operations Have Changed. Observability Has Not.

Cloud environments no longer operate as isolated systems. Applications now span regions, providers, hybrid networks, and distributed dependencies that continuously interact in ways traditional operational models were never designed to understand.

Yet most observability approaches still evaluate signals independently, metrics in one tool, logs in another, and network telemetry elsewhere. When incidents occur, teams are forced to manually reconstruct context across dashboards, alerts, and consoles just to understand what is happening.

As cloud architectures have evolved into interconnected systems, operational challenges have shifted. Outages rarely originate from a single component; they emerge from relationships between services, infrastructure, and connectivity. The key challenge with cloud observability is no longer about visibility, but context.

Traditional observability can explain *what* changed, but effective modern operations require an understanding of *why* it changed across the entire environment.

A New Operational Approach to Cloud Observability

Meeting this challenge requires more than adding another observability tool. It requires an operational model that preserves relationships between signals rather than analyzing telemetry in isolation.

Selector delivers on the needs of the cloud through AI-powered full-stack observability — correlating telemetry across cloud, network, and infrastructure domains within a shared operational context.

By maintaining environmental awareness throughout data ingestion and analysis, Selector enables teams to investigate incidents as complete operational events rather than as disconnected symptoms.

CloudOps, NetOps, and operations teams gain a unified understanding of:

- ✓ What changed
- ✓ What is impacted
- ✓ Why it matters to services and users

Cloud Observability Within a Unified Full-Stack Platform

Cloud observability becomes actionable only when viewed as part of a larger operational ecosystem. Selector integrates cloud telemetry into a unified full-stack observability platform that understands how infrastructure, connectivity, and applications behave together.

Selector operationalizes this model through a topology-aware understanding of hybrid environments.

One Operational View Across the Hybrid Stack

Selector connects cloud assets, accounts, regions, VPCs/VNets, subnets, gateways, and load balancers with hybrid connectivity and infrastructure signals into a single contextualized environment view. Teams investigate incidents end-to-end without pivoting between tools.

Unify Telemetry Across Domains

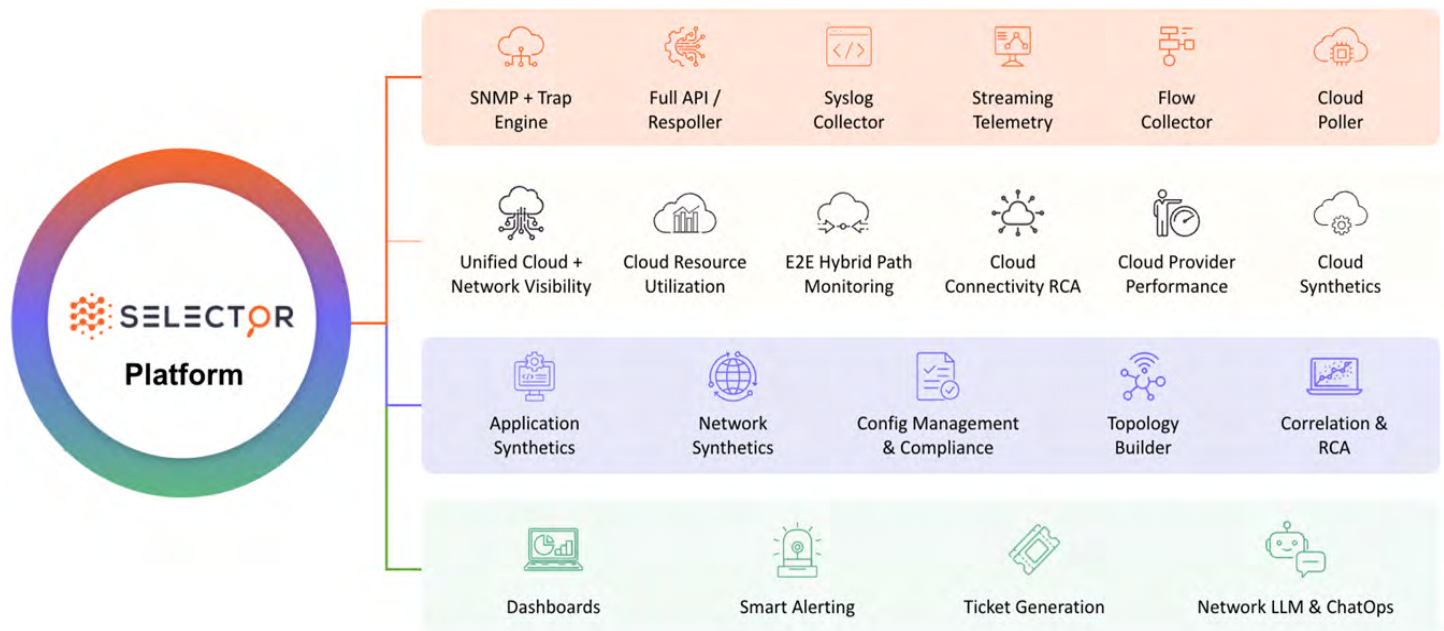
Cloud platforms generate massive signal volumes that were never designed to work together. Selector consolidates and normalizes telemetry across cloud services and automatically correlates it with network and infrastructure data, ensuring context is already available when incidents occur.

Correlated Incidents Instead of Alert Noise

Routing failures, latency spikes, and application degradations are rarely independent events. Selector groups related signals into a single investigation enriched with topology and dependency awareness, accelerating root cause analysis.

Operational Intelligence Where Teams Work

Selector integrates directly into collaboration platforms like Slack and Teams, allowing operators to ask questions directly within workflows and receive context-aware answers in plain language without switching tools.



Operational Impact: What Changes for Cloud Teams

When context is preserved across telemetry sources, cloud operations fundamentally change. Instead of reacting to alerts and manually validating assumptions, teams investigate guided by dependency awareness and correlated insight.

Organizations using Selector can:



Diagnose cloud routing and reachability issues faster across regions and providers

Isolate cross-region connectivity gaps, routing breaks, and peering failures with topology-aware context and path-level visibility.



Continuously validate application paths with synthetic monitoring

Run ongoing "over-the-top" probes to verify app reachability, path health, and SLA behavior across cloud regions and providers.



Maintain unified visibility of cloud assets and dependencies

Eliminate fragmented views with a holistic topology and inventory model of cloud assets, dependencies, and relationships.



Optimize cloud capacity using real usage intelligence

Identify underused or overutilized constructs and connections to right-size cloud capacity and improve planning decisions.



Evaluate provider performance and improve resilience strategies

Compare provider and partner performance over time to reduce risk, diversify critical paths, and improve service reliability.

Applying Operational Intelligence to Real Cloud Challenges

The value of this approach becomes clear when applied to common hybrid cloud scenarios

End-to-End Hybrid Path Monitoring

The Challenge

Teams often detect issues only after users are impacted, as native cloud metrics can appear healthy while real application paths degrade across regions, ISPs, or provider interconnects. Without end-to-end visibility, intermittent connectivity and performance issues are difficult to isolate.

The Selector Approach

Selector runs continuous synthetic probes across critical application paths to validate reachability, latency, and SLA performance across hybrid environments. Path-level telemetry is correlated with infrastructure and network context to expose degradation across the full delivery path.

Operational Outcome

Teams identify performance risks before outages occur and quickly pinpoint where degradation originates. Incident response shifts from reactive troubleshooting to proactive service assurance.

The screenshot shows the SelectorAI chat interface. The chat history includes a user request: "Show me application paths reachability, latency, and SLA performance across hybrid environment". The AI response includes a "Thinking process explanation" and a "Hybrid environment reachability stable, except for Tokyo (EqTO) outage." section. Below this is a "Reachability and SLA Performance Summary" table:

Source Site (Location)	Target Application	Status	Latency (Load Time)
Chicago (On-Prem)	s2analytics.selector.ai	Up	9.0 ms
GCP-US-East (Cloud)	s2analytics.selector.ai	Up	10.0 ms
EqDC2 (DC)	aws-east.finance.com	Up	18.6 ms
EqDA1 (Dallas)	aws-east.finance.com	Up	36.8 ms
EqFR6 (Frankfurt)	aws-eu.finance.com	Up	39.4 ms
EqLD6 (London)	aws-eu.finance.com	Up	43.2 ms
EqSY3 (Sydney)	aws-east.finance.com	Up	200.1 ms
EqSG2 (Singapore)	aws-east.finance.com	Up	220.4 ms
EqTO2/EqTO3 (Tokyo)	aws-east.finance.com	DOWN	0.0 ms

Below the table, "Key Insights" are listed:

- **Critical Outage:** Tokyo (EqTO2/3) sites DOWN to all applications.
- **Low-Latency:** Chicago & GCP connections to s2analytics exceptional (~10ms).
- **Regional Corridors:** SLA-compliant within healthy ranges for EU and Dallas corridors.
- **High Latency:** AP to US-East cross-regional paths show high latency (200ms+).
- **Internet Benchmarking:** Paths to public engines (Google/Yahoo) show higher overhead (up to 300ms).

The interface also shows a "Message Chat" input field at the bottom.

Cloud Capacity Planning

The Challenge

Capacity decisions are often based on fragmented usage data, leading to overprovisioning, underutilizing resources, or hidden bottlenecks across regions and provider paths. Limited visibility into how resources are actually consumed makes optimization difficult.

The Selector Approach

Selector analyzes utilization across cloud constructs and connectivity paths within a unified operational context, revealing inefficiencies and performance constraints. Usage analytics highlight high-demand resources and low-value capacity to support informed planning decisions.

Operational Outcome

Teams right-size infrastructure with greater confidence and reduce unnecessary cloud spend. Capacity planning shifts from reactive adjustment to data-driven optimization.

The screenshot shows the SelectorAI chat interface. At the top, the chat title is "SelectorAI" and there is a "New chat" button. The chat history shows a message from 2026-03-31 09:49:52 asking for a sorted view of heavily utilized DXCS. The AI response is "Show me a sorted view of the most heavily utilized DXCS across regions and the partners". Below this, there is a "Thinking process explanation" section that says "Top AWS DXC links ranked". This is followed by a table with 8 columns: Rank, Connection Name, Partner, Region, Total Bandwidth, Combined Throughput, Egress, and Ingress. The table lists the top 5 links. Below the table, there are "Key Insights" which include: "us-west-2 secondary over 100G (113G), high burst.", "us-west-2 other links high use; secondary unhealthy.", and "us-east-1 traffic: 42-62 Gbps on primary 100G.". At the bottom, there are icons for copy, like, and dislike, and a "Message Chat" input field.

Rank	Connection Name	Partner	Region	Total Bandwidth	Combined Throughput	Egress	Ingress
1	us-west-2-packetfabric-100gbps-secondary	PacketFabric	us-west-2	100 Gbps	113.93 Gbps	42.31 Gbps	71.63 Gbps
2	us-west-2-equinix-100gbps-secondary	Equinix	us-west-2	100 Gbps	95.58 Gbps	66.39 Gbps	29.19 Gbps
3	us-west-2-equinix-100gbps-primary	Equinix	us-west-2	100 Gbps	62.46 Gbps	39.44 Gbps	23.02 Gbps
4	us-east-1-packetfabric-100gbps-primary	PacketFabric	us-east-1	100 Gbps	62.24 Gbps	39.24 Gbps	23.00 Gbps
5	us-east-1-megaport-100gbps-primary	Megaport	us-east-1	100 Gbps	42.95 Gbps	37.73 Gbps	5.23 Gbps

AI-Driven Correlation and Root Cause Analysis

The Challenge

Cloud operations teams face alert floods across tools and domains, with each signal showing only a partial symptom of an incident. Siloed telemetry forces teams to manually reconstruct context to identify root cause.

The Selector Approach

Selector correlates telemetry across all domains in a shared operational context, automatically grouping related signals into a single, topology-aware incident view. Contextual summaries identify affected services, impacted regions, and the likely root cause.

Operational Outcome

Alert noise collapses into actionable incidents, enabling faster investigation and resolution. Teams move from manual correlation to instant root cause analysis.

The screenshot shows the SelectorAI interface with a chat window titled "Show me correlated telemetry across all domains". The chat content includes a "Thinking process explanation" and a summary of system status: "Stable overall. Tokyo outage; EU/Sing link issues." The analysis is structured into three main sections: Critical Incidents, Domain-Specific Summary, and Infrastructure Health Matrix.

1. Critical Incidents.

- Tokyo: VPN/optical errors.
- SE Asia: Latency & loss.

2. Domain-Specific Summary.

Domain	Key Findings	Status
Synthetics	Tokyo outage.	Healthy / Regional Outage
Cloud (AWS/GCP)	TGW issues. Link errors. (ap-northeast-1, eu-west-1, us-east1).	Degraded
Providers	Minor physical.	Healthy
Anomalies	No major.	None

3. Infrastructure Health Matrix.

- AWS TGWs: 25 Available.
- Unhealthy Links: eu-west-1 (AWS), ap-northeast-1 (AWS), us-east1 (GCP).
- Routing: BGP flap (us-west1), Route limits (us-east1).

Summary Conclusion.
NA/EMEA healthy. Tokyo: Multi-layer failure. SE Asia: Intermittent.

At the bottom of the chat window, there is a "Message Chat" input field.

Fix Routing Breaks In Minutes

The Challenge

Cross-region reachability and routing failures are difficult to isolate, requiring teams to navigate routing tables, cloud consoles, and network tools to trace the problem. Limited visibility into connectivity dependencies slows investigation and prolongs outages.

The Selector Approach

Selector maps routing and connectivity relationships across hybrid environments and correlates failures directly to affected path components and dependencies. Topology-aware context reveals where routes break and what services are impacted.

Operational Outcome

Teams pinpoint root causes faster without manual cross-tool investigation. Incident response accelerates, reducing downtime and operational disruption.

The screenshot shows the SelectorAI chat interface. The chat title is "Map routing and connectivity relationships across hybrid environments". The content includes a "Thinking process explanation" and a structured report on network architecture and key hybrid links.

Architecture leverages Equinix, cloud providers, and partners.

- Physical Connectivity & Partners**
 - Equinix:** Terminates uplinks for AWS DXC and GCP Interconnect.
 - Partners:** Provide high-bandwidth links; Megaport, PacketFabric, Zayo.
- Cloud Networking Hubs (AWS/GCP)**
 - Gateways:** Central production routing via DXGWs.
 - Hubs:** Manage hundreds of VPCs and backup VPNs (TGWs).
- Logical Routing & Environment Segregation**
 - Status:** Mostly healthy; outages in Tokyo (EqTO2/3) and specific London links.
- Summary of Key Hybrid Links**

Partner	Region/Site	Circuit ID	Connection Type
PacketFabric	US-East (EqDA2)	dxcon-00000008e4	100Gbps AWS DX
Megaport	US-East (EqDC2)	dxcon-00000003e8	10Gbps AWS DX
Zayo	APAC (EqTO3)	dxcon-0000001887	100Gbps AWS DX
Equinix	EMEA (EqLD6)	dxcon-00000005f6	100Gbps AWS DX (Down)

Message Chat

Unified Cloud and Network Visibility

The Challenge

Cloud assets and dependencies span accounts, regions, and providers, making it difficult to maintain an accurate operational view. Fragmented visibility slows architectural planning and increases operational risk.

The Selector Approach

Selector creates a unified topology and inventory model that maps assets and their relationships across hybrid environments. Teams gain visibility into dependencies without aggregating data across tools.

Operational Outcome

Teams operate from a shared, accurate view of their environment, improving planning and reducing configuration risk.

The screenshot shows a chat window titled "SelectorAI" with a "New chat" button. The user's question is "What are the SLAs to each cloud providers?". The AI response includes a "Thinking process explanation" and provides specific details for AWS and GCP connectivity, including link locations and SLA contexts. At the bottom, there is a "Message Chat" input field.

What are the SLAs to each cloud providers?

> Thinking process explanation

Contracted SLA percentages (e.g., 99.9%) are not stored in inventory.

AWS Connectivity (Direct Connect)

- **Primary Link:** EqLD6 (London), Equinix.
- **Secondary Link:** EqDA1 (Dallas), PacketFabric.
- **SLA Context:** AWS provides 99.9% or 99.99% SLA depending on architecture redundancy.

GCP Connectivity (Cloud Interconnect)

- **Primary & Secondary Links:** Both from EqTO1 (Toronto), Equinix.
- **SLA Context:** GCP Interconnect SLAs (99.9% or 99.99%) require specific redundant configurations.

If you have issues, I can check latency or packet loss.

Message Chat

Cloud Provider Health & Performance Insights

The Challenge

Cloud resilience depends on provider and connectivity performance, yet organizations often lack consolidated visibility into SLA behavior across critical service paths. Without comparative insight, reliability risks remain difficult to identify and migrate.

The Selector Approach

Selector tracks performance across cloud providers and connectivity partners, correlating reliability data with operational context over time. Comparative analytics reveal performance trends across paths, regions, and providers.

Operational Outcome

Teams make data-driven decisions to improve resilience and reduce dependency risk. Critical workloads can be routed toward higher-performing providers with greater confidence.

The screenshot shows the SelectorAI chat interface. The user's query is: "Which partners server does have the most DXC connections?". The AI response includes a "Thinking process explanation" and a list of top DXC partners with their connection counts. The response also mentions that connections are globally distributed across various regions.

Which partners server does have the most DXC connections?

> Thinking process explanation

Top DXC partners are tied at the highest count.

Partner list (and connection counts):

- **Megaport:** 6 connections
- **Equinix:** 6 connections
- **AT&T:** 6 connections
- **PacketFabric:** 6 connections
- **Zayo:** 6 connections
- **Colt:** 2 connections
- **Lumen:** 1 connection

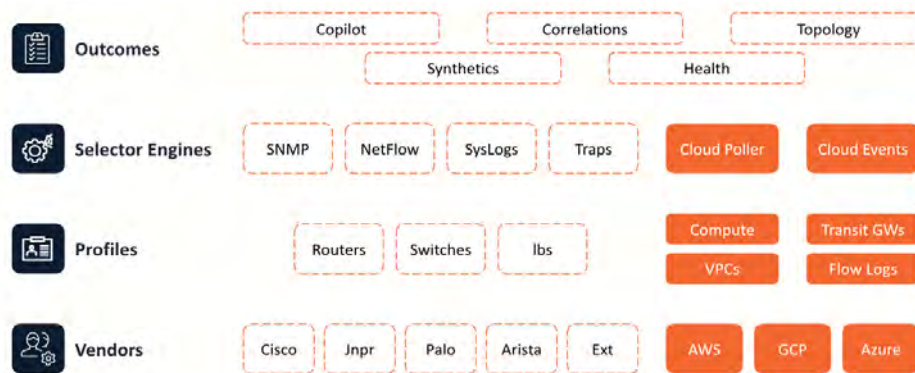
Connections are globally distributed across regions including: `us-east-1`, `us-west-2`, `eu-west-1`, `eu-central-1`, `ap-southeast-1`, `ap-northeast-1`, `ap-south-1`, and `sa-east-1`.

Message Chat

Designed for Adoption Without Disruption

A new operational model succeeds only if it integrates seamlessly into existing environments. Selector deploys across hybrid cloud infrastructures using cloud APIs, VM performance metrics, flow logs, and third-party telemetry sources.

Organizations can enhance observability without replacing established tooling or workflows, enabling incremental adoption aligned with operational priorities.



From Observability to Understanding Operations

Hybrid cloud environments will continue to grow in complexity. Operational success increasingly depends on understanding how systems interact rather than monitoring them independently.

Selector provides Cloud, Network, and operations teams with continuous operational context across every layer of the hybrid stack. Instead of stitching together signals after incidents occur, teams gain ongoing insight into how their environment behaves as a connected system, enabling faster resolution, improved resilience, and more predictable service performance.

Contact Selector Today:

Web: www.selector.ai

Email: sales@selector.ai

Book a Demo: www.selector.ai/request-a-demo/

See how Selector delivers AI-driven operational intelligence across your hybrid cloud environment