greymatter.io
how microservices are managed

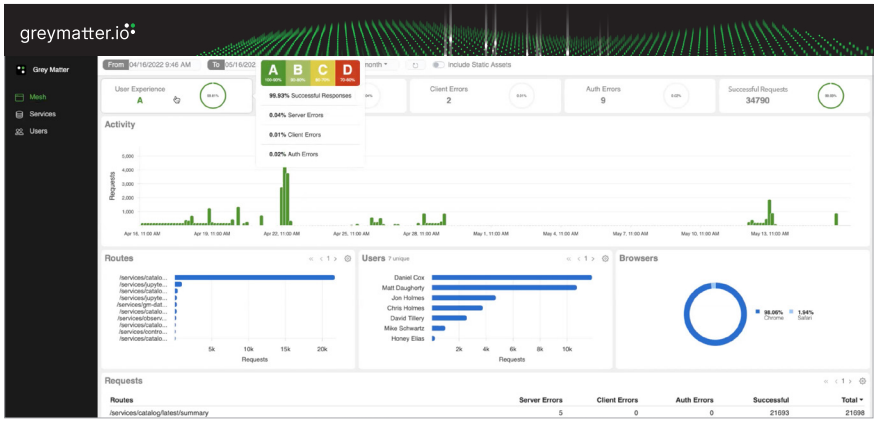
Observability Overview

Gain Deep Visibility Across Decentralized Applications

As modern software architectures grow more complex, enterprises have more difficulty observing the health of decentralized applications. Too much information is generated across too many cloud-native applications, APIs, containers, services, and data sources for DevOps and platform engineering teams to make sense of these sprawling, opaque, distributed software application environments. Unlike stand-alone service mesh solutions narrowly focused on service connectivity, greymatter.io's enterprise application networking platform is purpose-built to capture telemetry from our underlying service mesh to surface heuristic insights, deliver operational intelligence and highlight the key points of light and insights that matter most to make informed business, operations, and infrastructure decisions.

View Distributed App Data in One Place

Greymatter.io aggregates metrics, events, logs and traces across hybrid, multi-cloud and on-premise environments into a single, centralized location to provide enterprises with real-time visibility into the health of decentralized software applications. Our platform provides Network Operations Center (NOC) teams with real-time dashboards, scorecards and analytics to easily identify service status (stable, down, or warning), filter by business impact (critical, high, medium or low), view continuous health check alerts (pass, fail, or misconfigured), and more. These capabilities help DevOps engineers detect potential performance issues at scale across a chain of hundreds or thousands of microservices, without needing to access, correlate, and analyze data from multiple siloed cloud monitoring and observability tools.



Provide DevOps teams with real-time dashboards, scorecards and analytics to easily identify service status, filter by business impact, view continuous health check alerts, and more.

Analyze Metrics

Continuously collect, aggregate, and analyze all application network traffic, data and usage patterns to gain real-time visibility across modern software applications.

Surface Insights

Leverage AI and machine learning to automatically detect anomalies, conduct health checks, and surface heuristic insights to identify potential performance issues.

Optimize Performance

Run applications more efficiently across hybrid, multi-cloud and on-premise environments by understanding how users interact with data and services in real time.

"Exceptional Layer 3, 4, and 7 visibility."
2021 GigaOm Radar Report for Evaluating Service Mesh

GIGAOM

"Enables network overwatch."
451 Research Report

451 Research®

Analyze Hundreds of App Metrics

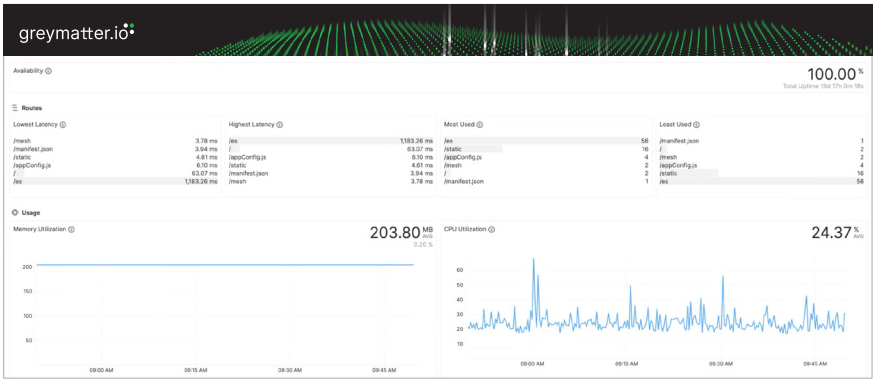
Greymatter.io continuously collects, aggregates, and analyzes more than 100+ default Envoy metrics and dozens of proprietary metrics across Layers 3, 4, and 7 (Network, Transport, and Application), reducing the need for manual log collection, analysis, and troubleshooting. Our platform automatically captures every single network transaction flowing between all users, systems, and services down to the route level, providing a real-time audit trail of who is using what services, when, where and how to enforce compliance with FIPS, PCI, HIPAA, GDPR, and other industry regulations.

Surface AI Insights for IT Operations

Greymatter.io then leverages AI and machine learning to analyze the vast amount of application traffic, data and usage patterns generated across the service mesh to observe healthy network traffic, establish normal baseline thresholds, and automatically detect anomalies. Continuous health checks provide an early warning of traffic bottlenecks, service failures, or application downtime. Our platform uses built-in AIOps to surface heuristic insights to help DevOps teams conduct root cause analysis, pinpoint performance issues and take corrective action to reduce Mean Time to Recovery (MTTR).

Optimize Application Performance

Our platform goes beyond statistics, counters, and telemetry by correlating operational cues and recommending actionable insights to optimize performance. Developers discover which services are available, even in non-Kubernetes, bare-metal VM, or legacy environments. Software architects use actual traffic, data, and usage to design more efficient applications, improve performance, reduce latency, and optimize utilization. DevOps engineers monitor traffic, scale workloads, identify bottlenecks, and troubleshoot issues to continuously meet or exceed service level objectives (SLOs).



Aggregate decentralized software application metrics into a single-pane-of-glass dashboard, with memory and CPU utilization, percentile latencies, error rates, request rates, and more.

Service Summary

- Uptime
- Average Response Time
- Error % Across All Requests
- CPU & Memory Utilization
- Chart of Requests Over Time

Historical Metrics

- Service-Level Latency
- Route-Level Usage
- Host Performance
- Request Rate
- Error Rate
- Route-Level Performance
- Instances

Instance Metrics

- Route View
- Heap (Runtime)
- Explorer Time-Series Metrics

Statistics

- HTTP/3 Protocols
- Health Checks
- Outlier Detection
- Circuit Breakers
- Timeout Budget
- Load Balancers
- Request Response Size
- And more ...

Integrations:

Easily export data to observability and visualization tools for further analysis:

Prometheus
splunk>
Grafana
DATADOG
elastic
ZIPKIN
JAEGER
Lightstep

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106 N Lee St., Alexandria, VA 22314
www.greymatter.io | info@greymatter.io
(887) 356-3011