Protocol Metadata Generation

Identify, access and extract detailed metadata on network protocols

WHY THIS MATTERS

The challenges with cloud-native network monitoring:

 Topology (virtual and physical) is hidden

 Interfaces (network namespace) are hidden

 Data flows (packets, octets and protocols) are hidden

The MantisNet CVF architecture is an innovative combination of network sensor agents, and cloud-native technologies that efficiently processes and produces all the information necessary for real-time monitoring needs:

- Application Performance Monitoring (APM)
- Network Performance Monitoring (NPM)
- Continuous Discovery/ Inventory
- Security Assurance

PROTOCOL SPECIFIC

Provides real-time monitoring in the network when and where it is needed with intelligence to decode and parse any protocol and interrogate any payload type.

Containerized Visibility Fabric (CVF) - Generating Protocol Metadata

The MantisNet CVF agents, deployed as daemon-sets or containers in the cloud infrastructure, can monitor network events as they occur, down to the kernel level. Agents, deployed throughout the infrastructure have unique machine-level visibility, providing extremely detailed end-to-end observability. CVF agents can be tasked with identifying, filtering, capturing and decoding traffic for specific protocols or traffic types; generating metadata continuously, and in real-time. Learn more about the CVF at MantisNet.com



Protocol Metadata Generation

The CVF provides the ability to programmatically search for, extract, and deliver detailed metadata for any or specific protocols in real-time, providing an unmatched level of situational awareness, traffic visibility, and control. Using an in-memory, programmable decoder and metadata publishing engine the CVF is the foundation for enabling streaming analytic workflows and infrastructure management processes; providing the ability to programmatically search for, and extract detailed information about network traffic patterns, payloads, protocols and behaviors and deliver information in the form of highly efficient serialized metadata at wire-speed.



Identify, Access, Inspect and Organize

Once installed, CVF sensor agents have machine-level visibility into all the interfaces, regardless of namespace. The CVF monitors, filters, parses, or otherwise captures, decodes and publishes any of the selected protocol(s) it has been instructed to process. The resulting serialized metadata (key:value:pairs) are continuously streamed in real-time via an open message bus for follow-on stream processing, analytic workflows or storage.

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Benefits of MantisNet CVF

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Cloud-native

• Flexible architecture that can be deployed anywhere and scale, on-demand, with cloud-native infrastructure

Flexible, Intelligent and Extensible

- Sensor agents can be programmed to filter, parse, capture, decode and publish any protocol or traffic type
- Sensor agents publish telemetry into well-known, PCAP, serialization and metadata formats (JSON, Avro, Protobuf) into distributed message buses (NATS, Kafka) optimized for streaming analytic workflows or data-at-rest (block, file, or object) storage
- Agents are capable of identifying encrypted session and common crypto libraries (OpenSSL, TLS, GNU)
- Additional plug-ins and worker applications can be deployed to provide a wide-variety of functions; such as indexing and correlation for enrichment and time-series processing for deeper contextual and situational awareness.

High-resolution, precise and accurate

- o Deep machine-level visibility into all container interfaces and traffic
- Capture, filter and analyze traffic of interest
- o Dynamically extract and generate telemetry

Efficient, highly scalable and performant

- o Real-time and continuous
- Extremely lightweight, in-memory, microservices-based architecture- designed for minimal resource utilization
- o Scalable, fast and efficient delivering predictable, deterministic performance

ABOUT MANTISNET

MantisNet solutions provide organizations the real-time network monitoring and processing solutions they need. MantisNet's advanced technology enables organizations to better monitor and manage network traffic as compared to legacy hardware and software solutions.

MantisNet combines end-to-end visibility, monitoring and control (from L2 to L7) with the ability to perform realtime processing and remediation to detect and respond to potential operational issues, security threats, fraud, and malicious activities with advanced interfaces and machine-to-machine controls. Our solutions are deployed at leading telecom, service providers, NEM labs and government installations. We work to make network intelligence actionable for a broad range of DevOps, network and application performance testing, streaming analytics, and cyber security applications.



For more information, visit www.MantisNet.com