

# Hybrid Observability for AI Workloads

Businesses are innovating with Artificial Intelligence (AI), and leaders are moving quickly to deploy AI services. Blending AI into business operations has transformed modern data centers, and advanced observability solutions are needed to manage complex AI workloads. This puts a strain on ITOps teams as they expand visibility into a new domain.

## The modern data center landscape

AI workloads demand immense computing power, leading to surging capacity requirements and cost overruns. To effectively run these workloads, businesses need distributed data center infrastructure, spanning public and private clouds, edge locations, and on-premises hardware.

LogicMonitor empowers ITOps organizations to stay proactive, manage costs, and handle complex modern data center infrastructure that forms the backbone of AI workloads.

In partnership with OpenAI, LogicMonitor delivers scalable and intelligent IT operations, enhancing AI infrastructure management and driving business efficiency.

## Full AI workload observability

LogicMonitor offers end-to-end monitoring for AI-driven workloads, for deep visibility into AI infrastructure, models, and applications across on-premises and multi-cloud environments.

### 1. AI Infrastructure Monitoring

- **Compute and Storage Resources:** Track utilization, memory, temperature, and power consumption of GPUs, CPUs, and accelerators to prevent bottlenecks and ensure optimal performance.
- **Hybrid Environments:** Monitor AI workloads across cloud platforms (AWS, Azure, GCP) and on-premises servers, to gain unified visibility into diverse infrastructure.

### 2. AI Model and Application Monitoring

- **Performance Metrics:** Monitor latency, throughput, and error rates of AI models, to facilitate proactive optimization and maintenance.
- **Reliability Assurance:** Track the health and availability of AI applications, to deliver consistent and dependable user experiences.

### 3. Business Operations Visibility

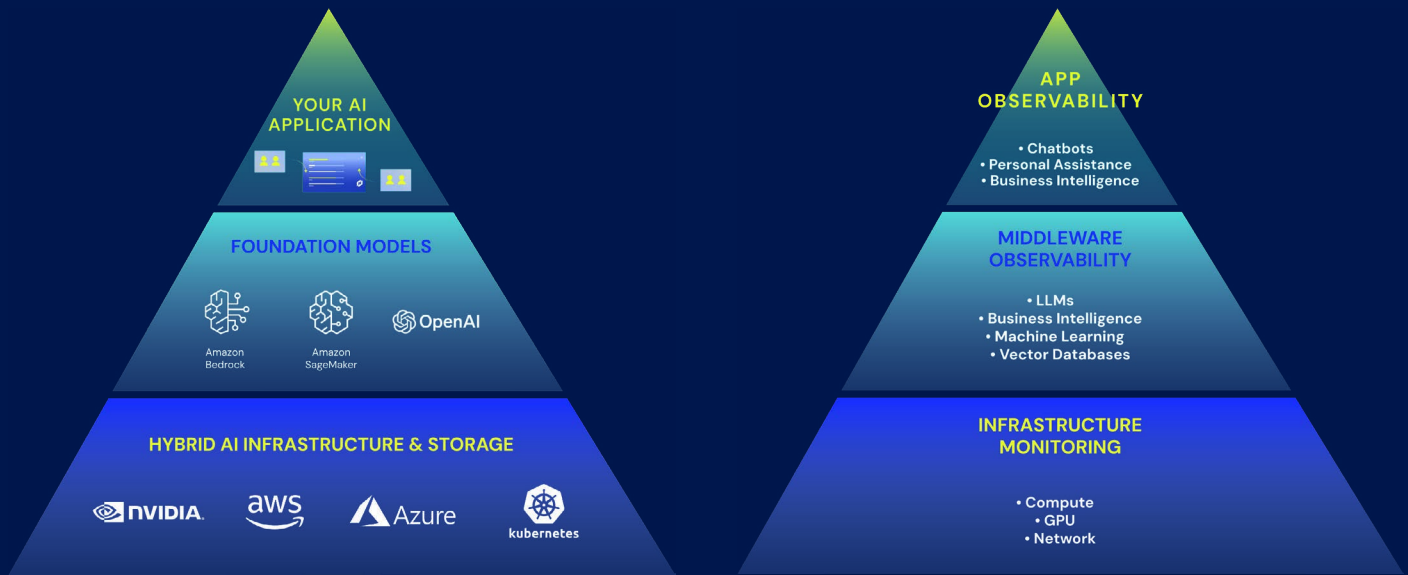
- **User Experience Monitoring:** Assess responsiveness and uptime of AI-driven applications, such as chatbots and predictive analytics tools, to maintain optimal service delivery.
- **Microservices and API Oversight:** Observe containerized AI workloads for anomaly detection and rapid issue resolution.

## AI-driven cloud cost optimization

LogicMonitor provides intelligent recommendations to balance AI resources with associated costs.

- **Resource Optimization:** Identify underutilized compute, storage, and memory resources, with adjustment recommendations that align with demand and prevent overspending.

- **Sustainability Initiatives:** Monitor energy consumption of AI hardware, with suggestions to reduce energy consumption and reduce carbon footprint.



## LogicMonitor provides observability across AI workloads

### Infrastructure Monitoring:

Track utilization, memory, temperature, and power

Supported technologies include:

- NVIDIA GPU
- Kubernetes
- AWS, Azure, and GCP compute services

### Middleware Insights:

Track number of queries

Enhance model performance and ensure seamless operations by tracking AI platforms and vector databases.

### Vector Databases

- **Metrics:** Number of queries for Get, Add, Create Index operations
- **Supported Vendors:** MongoDB Atlas, Pinecone\*, ChromaDB\*

### LLM Monitoring and Framework Visibility:

Monitor Tokens Usage and Cost, Request Volume, Response Time

- **Supported Platforms:** OpenAI, Ollama, AWS Bedrock, AWS Sagemaker, Amazon Q Business, Google VertexAI\*

### Application Observability

Real-time monitoring to guarantee optimal user experiences with AI-powered applications.

- **Metrics:** Application latency, Error rates, Query processing time, token consumption
- **Workloads:** Chatbots, Personal Assistance, Customer Service, Business Intelligence

\* Coming soon

## Get confident with your AI initiatives

LogicMonitor is the trusted partner for CIOs navigating the AI era, with a unified, AI-powered hybrid observability platform that simplifies monitoring, automates anomaly detection, and accelerates response times. As AI reshapes data center

infrastructure, LogicMonitor delivers the visibility and automation needed to optimize performance and enhance operations in an increasingly complex digital landscape.



Want to learn more about observing AI workloads with LogicMonitor?

Contact your CSM or Account Manager today for personalized assistance.