

# aryaka ai>perform™

## Ensure High-Performance Access to AI Workloads

Globally at Scale integrated with Aryaka Unified SASE as a Service



### Solution Brief

AI, including Generative AI (or GenAI), offers numerous possibilities for companies across various industries. It helps organizational functions and employees to increase efficiency, reduce costs, enhance productivity, responsiveness, analytics, decision-making, and more. It can lead to significant gains across the entire organization. The flip side of that coin is that, like any technology, it can be exploited for malicious purposes and introduces substantial new risks.

Aryaka Unified SASE (Secure Access Service Edge) as a Service is a purpose-built solution for modern, distributed enterprises that focuses on three pillars: networking, security, and observability.

This solution brief document focuses on the first pillar, networking and access to AI workloads, and how Aryaka Unified SASE as a Service provides an integrated solution to ensure the reliability and high performance of AI workloads worldwide.

Let's first look at the many ways AI can help:



#### Automation

AI can automate repetitive tasks, increasing efficiency and reducing costs. This includes automating customer service inquiries, data entry, and manufacturing processes.



#### Content Creation

Generative AI can be used to create high-quality content at scale, such as articles, videos, and images.



#### Customer Service

AI-powered chatbots and virtual assistants can handle customer inquiries, provide support, and streamline customer interactions, improving satisfaction and reducing response times.



#### Decision Support

AI-powered systems can provide decision support by analyzing data and generating insights to aid human decision-making.



#### Generative AI

Generative AI, a subset of AI, focuses on creating new content, such as images, text, music, or even entire designs and product prototyping.



#### Process Optimization

AI algorithms can optimize complex processes, such as supply chain management, logistics, and resource allocation.



#### Predictive Analytics

AI can analyze large datasets to identify patterns and make predictions. This is valuable for businesses in areas such as sales forecasting, demand planning, network traffic bandwidth planning, and users' application access behavior.



#### Security

AI can enhance cybersecurity by detecting and mitigating real-time threats, identifying suspicious behavior patterns, and strengthening network defenses.

These are just a few examples. The future possibilities are vast and continually expanding as AI technologies advance.

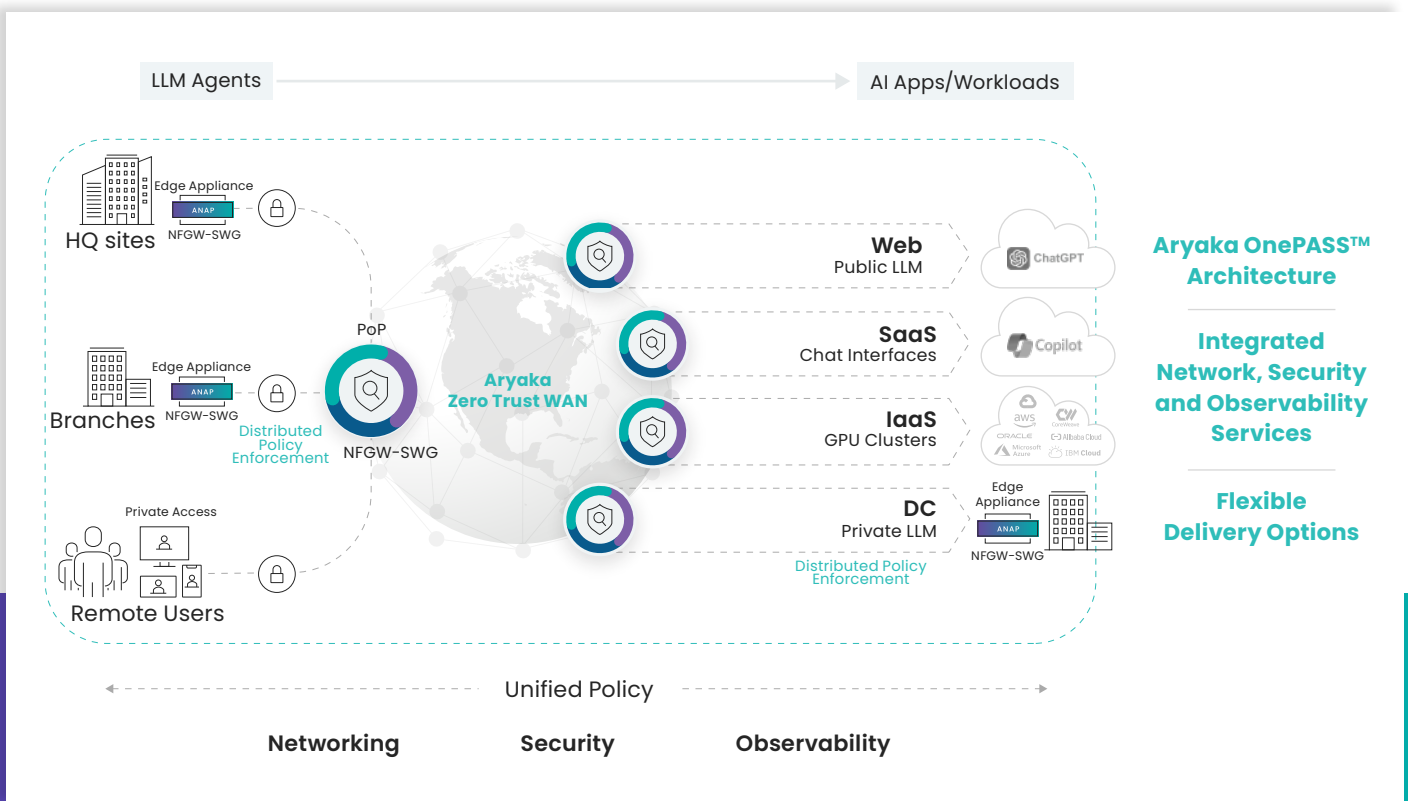
# Demand for AI Workloads is Soaring

In today's digital environment, the demand for AI workloads is soaring. The number of cloud providers that have invested, and the investments in dedicated GPU and CPU clusters is soaring along with the demand. Next to the leading cloud providers AWS, Microsoft Azure, Google Cloud, IBM Cloud, Oracle Cloud, or Alibaba Cloud, newer companies like CoreWeave and numerous others offer services to handle a variety of AI workloads and applications. As enterprises increasingly embrace digital transformation and cloud use, they rely more heavily on AI and machine learning to derive insights, enhance customer experiences, and drive innovation. However, delivering these AI workloads efficiently and securely presents significant challenges, especially regarding networking and security.

## Aryaka AI>Perform integrated with Aryaka Unified SASE as a Service

Aryaka Unified SASE as a Service is the only solution combining the agility, simplicity, and flexibility of software-defined networking, WAN Optimization, accelerated cloud and private apps access, and a global private core network with comprehensive security capabilities. It is designed and built as a cloud-based service to streamline the delivery of high-performant AI workloads while ensuring robust security and compliance measures are in place.

As mentioned, AI opens massive possibilities for companies, provided they have the network bandwidth to activate the benefits. Large language models (LLMs) like ChatGPT, Co-Pilot, or LaMDA, to name a few, require massive amounts of data transfer and, thus, massive amounts of bandwidth. The burden falls on the network to transfer this data, and when the network capacity falls short, it can harm the core functions of the business. Anecdotes of companies flying hard disc data storage on a plane across continents because their WAN connection and bandwidth are too slow and unreliable to transfer LLM data confidently make a good story but are bad for business. Flying hard discs around the world is not a sustainable business practice; having a network that an organization can rely on and trust to process all the data is the first and crucial step to unlocking the many benefits of AI.



**Aryaka OnePASS™ Architecture**

**Integrated Network, Security and Observability Services**

**Flexible Delivery Options**

## Aryaka AI>Perform ensures high-performant AI workloads globally



**Optimized Performance:** Aryaka's global core network, the Aryaka Zero Trust WAN, ensures optimal network performance by leveraging a private, low-latency backbone. This backbone provides predictable performance for AI workloads, regardless of the user's location. By minimizing latency, jitter, and packet loss and using technologies like de-duplication, compression, queuing, and load-balancing, Aryaka ensures that AI algorithms can process data rapidly and deliver real-time insights and deliverables.



**Global Reach:** Enterprises often operate across multiple regions, making it essential to have a solution that can deliver AI workloads efficiently worldwide. Aryaka's global Points of Presence (PoPs) and optimized network routes ensure that AI workloads can be accessed from anywhere with consistent performance and reliability.



**Scalability and Flexibility:** As AI workloads grow in complexity and scale, enterprises need a solution that can adapt to their evolving needs. Aryaka's cloud-based single-pass architecture, Aryaka OnePASS™, enables seamless scalability, allowing organizations to expand their AI initiatives without worrying about infrastructure constraints. Moreover, Aryaka's Unified SASE as a Service offers flexible deployment options, including integrated access to public cloud, private cloud, or hybrid setups, catering to diverse enterprise requirements.



**Simplified Management:** Managing a distributed AI infrastructure can be complex, requiring extensive expertise and resources. Aryaka simplifies this process with a centralized management portal (MyAryaka) that provides visibility and control over the entire network and security infrastructure. Enterprises can monitor performance, detect anomalies, and troubleshoot issues in real-time through intuitive dashboards and analytics, ensuring optimal and high-performing AI workload delivery.

Integrated Security is part of the Aryaka Unified SASE as a Service solution. Security is paramount when dealing with distributed applications, workloads, and data. Aryaka's Unified SASE as a Service, based on the Aryaka OnePASS™ architecture, integrates essential security features such as a next-gen firewall as a service (Next-Gen FWaaS), Secure Web Gateway (SWG), Intrusion Detection and Prevention System (IDPS), Cloud Access Security Broker (CASB), and more in the future including for AI workloads and sensitive data including for LLM and Retrieval-augmented generation (RAG). These features provide end-to-end encryption, threat protection, access control, safeguarding against cyber threats, and compliance with regulations.

*"Unlike many SASE products on the market that consist of awkwardly combined products, Aryaka has built its SASE from the ground up as a unified offering the company delivers via an as-a-service model."*

Aryaka Unified SASE as a Service is ideal for enterprises looking to accelerate their AI initiatives while ensuring performance, agility, simplicity, and security with elasticity and scalability. By leveraging Aryaka's single platform with Aryaka AI>Perform, organizations can unlock the full potential of AI workloads and applications without compromising on performance and reliability.



+1.888.692.7925



info@aryaka.com

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Aryaka is the leader and first to deliver Unified SASE as a Service, the only SASE solution designed and built to deliver performance, agility, simplicity and security without tradeoffs. Aryaka meets customers where they are on their unique SASE journeys, enabling them to seamlessly modernize, optimize and transform their networking and security environments. Aryaka's flexible delivery options empower enterprises to choose their preferred approach for implementation and management. Hundreds of global enterprises, including several in the Fortune 100, depend on Aryaka for cloud-based software-defined networking and security services. For more on Aryaka, please visit [www.aryaka.com](http://www.aryaka.com)

About Aryaka