Aarna Networks brings Zero-Touch Orchestration as a service to edge computing with Aarna Edge Services (AES)

SAN JOSE, CALIFORNIA, UNITED STATES, February 23, 2023 /EINPresswire.com/ -- Aarna Networks, which solves enterprise edge and 5G management complexity through zero-touch edge orchestration at scale, today announced Aarna Edge Services (AES), a zero-touch orchestrator for

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AES

Aarna Edge Services (AES)

designing, provisioning, and managing infrastructure, network services, and applications at the edge. AES supports multi-cloud strategies connecting the edge to public clouds; empowers users with ongoing lifecycle management, optimization, and service assurance; and simplifies management from a single pane of glass. In a typical configuration, AES can slash between 2-26 weeks of manual labor (depending on the use case) to less than an hour.

The Challenge
Edge orchestration is a two-stage process. It first requires orchestration of infrastructure consisting of tens of heterogeneous vendors across tens of thousands of sites. Next it requires the orchestration of hundreds of network services and applications across these sites. All of this occurs in a very dynamic environment requiring constant reconfiguration, management, optimization, and service assurance. The resulting orchestration complexity explodes by 100x, and current solutions are unable to scale.

Market Trends
AES currently addresses the cloud edge and meets the convergence of several compelling market trends:

• Multi-Cloud Networking: The use of public and private clouds to improve costs, performance, and workload portability requires on-demand, flexible connectivity at the cloud edge.

• Cloud Repatriation: Multi-cloud networking is enhanced by moving storage and state to a neutral site such as the cloud edge.

• Middle Mile Digital Transformation: The evolution of the portion of the network that connects

aggregation points to the nearby POPs on an operator's core network now includes on-demand elastic computing, storage, and networking.

• Edge Applications: The number of applications that need to reside on the cloud edge for lower latency, bandwidth management, and compliance is on the rise.

Initial Cloud Edge Environment: Equinix
Based on over a year of open-source collaboration with Equinix®, the first release of AES simplifies the orchestration of Equinix's three digital services – Equinix Metal®, Equinix Network Edge, and Equinix Fabric® along public cloud resources such as Azure ExpressRoute, AWS Direct Connect, and more. Subsequent releases are expected to include other digital products at Equinix such as Red Hat OpenShift. AMCOP is a vendor validated cloud-native network function (CNF) on Red Hat OpenShift, the industry's leading enterprise Kubernetes platform. Once the infrastructure is orchestrated, AES is used to deploy applications and network services on that infrastructure. Aarna Networks is also part of the Equinix Metal Startup program.

Industry Quotes
"Equinix has been leading the Linux Foundation Edge Akraino Public Cloud Edge Interface (PCEI) open-source blueprint to drive collaboration on common interfaces for the infrastructure orchestration and application deployment at cloud edge. The blueprint is in its fourth release and has won the first prize in the recent ETSI and LF Edge MEC Hackathon. I am delighted to see that Aarna Networks is commercializing the blueprint, leveraging Equinix digital services to enable DevOps driven infrastructure orchestration for the edge." – Oleg Berzin, Distinguished Engineer, Technology and Architecture, Office of the CTO, Equinix

"Red Hat OpenShift offers a powerful cloud-native platform for network operations and 5G capabilities based on a standard open source foundation. We are pleased to collaborate with Aarna Networks to validate cloud-native functions for AMCOP and future iterations of AES to continue to support operators in fueling 5G networks at scale on Red Hat OpenShift." – Honoré LaBourdette, Vice President, Telco, Media, Entertainment & Edge Ecosystem, Red Hat

"Extreme automation and a zero-touch orchestration framework are critical to any significant edge roll-out. A combined approach to managing computing and connectivity resources like what Aarna is doing with AES can help drive edge uptake." – Roy Chua, Analyst, AvidThink

"As the demand for applications that take advantage of modern networking technologies like 5G grows it has become increasingly critical to make the management and operation of Edge infrastructure simpler. AES reduces the complexity, and provides more intuitive tools for operators so that they can better serve application developers and ensure visibility of the entire infrastructure." – Shaun O'Meara, Field CTO, Mirantis

Read the full list of Industry Quotes.

AES Cloud Edge Use Cases

1. NaaS: Automated multi-cloud connectivity for cloud edge users, colo users, or SD-WAN service providers such as Aryaka Networks.

2. Cloud Edge Storage: Primary storage or secondary/object storage such as Seagate® Lyve™ Cloud. Can be shared across public cloud and edge applications without having to incur egress costs.

3. ML: Machine learning applications at the edge to reduce the amount of traffic to the public cloud or eliminate the need to procure and manage expensive on-prem hardware.

4. Software Defined CDN: CDN instances on-demand at the edge, from partners such as picoNETS, improve the performance of rich media applications.

5. Multi Access Edge Computing (MEC): A MEC site can host cloud software such as Mirantis Kubernetes Engine and applications such as IoT, the metaverse, and distributed databases such as AnyLog for 5G networks.

6. 5G: Enterprises and operators run 5G Core and O-RAN workloads on the cloud edge. Our partners include Capgemini Engineering, Keysight, Amantya Technologies, and i2i Systems.

7. vPOP: Virtual or cloud native network functions (VNF/CNF) such as routers, firewalls, SD-WAN, load balancers, and more offered by CSPs to enterprise customers.

Access Aarna Edge Services (AES)
Aarna Networks brings years of experience in orchestration to bear by creating a SaaS version of its Aarna Networks Multi Cluster Orchestration Platform (AMCOP) software with AES. Aarna Networks welcomes you to learn more about AES and request a free trial.

ABOUT AARNA NETWORKS
Aarna Networks solves enterprise edge and 5G management complexity through zero-touch edge orchestration at scale. We're on a mission to help enterprises and network operators unlock previously unimagined new services and drastically slash operational costs and improve time to market. Aarna's software and SaaS solutions leverage open source, cloud native, and DevOps methodologies to provide zero-touch edge and 5G service orchestration and management services. Visit us at https://www.aarnanetworks.com.

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Brandon Wick
Aarna Networks, Inc.
+1 917-282-0960