WEBSCALE

DATASHEET

Webscale CloudFlow

AI-driven Orchestration for Smarter Cloud Computing

Accelerate Application Performance. Optimize Cloud Cost. Simplify Cloud Operations.

Whether it's CFOs seeking a streamlined path to cloud cost optimization or CTOs in pursuit of precision and intelligence for optimizing location strategies, CloudFlow presents its AI/ML-Driven Backbone as the cornerstone of innovation tailored for data-centric enterprises.

CloudFlow redefines the landscape of cloud computing through a harmonious fusion of Artificial Intelligence (AI) and Machine Learning (ML). This integration has ushered in an era of superior performance, minimal latency, and cloud resource utilization efficiency. At the heart of this innovation stands the Adaptive Edge Engine (AEE), a pioneering technology that propels distributed edge computing to new heights. One hallmark of CloudFlow is its commitment to operational simplicity. Users are required to input only the application container and strategy definitions into the interface. Once these parameters are defined, CloudFlow's zero-ops Adaptive Edge Engine takes the reins, automating complex processes with ease.

Moreover, CloudFlow introduces the concept of one-click multi-cloud through its Composable Edge Cloud (CEC). This transformative feature integrates various cloud computing providers, including AWS, Lumen, GCP, Akamai, and more, into a unified mesh network at the click of the button from within our CloudEdge console. This enables our users to liberate themselves from vendor lock-in and embrace a world of simultaneous high performance and least-cost routing. CloudFlow empowers applications to operate origins as close to end-users as possible, unleashing the full potential of edge native cloud networks for the most efficient and cost-effective performance.

Webscale CloudFlow PaaS

Unlock the Power of Cloud-Native K8s Excellence

At first glance, CloudFlow may seem like just another Kubernetes management platform, but beneath the surface, it harnesses the power of three patented models working in perfect synergy: the Kubernetes Edge Interface, the Adaptive Edge Engine, and the Composable Edge Cloud. These pioneering innovations are the driving force behind CloudFlow's capability to usher in a new era of zero-ops distributed cloud computing, delivering unmatched performance, cost-efficiency, and resource management. Let's dive deeper into how these groundbreaking technologies converge to revolutionize the cloud landscape.

CloudFlow Interface

Interact via

CloudFlow UI console	API	KubeCtl

Bring your app(s): Introduce your container to CloudFlow

Bring your intentions: Introduce your strategy on how it should operate

Example Strategies

- Default CloudFlow rules
- Least cost routing
- GDPR
- PCI
- Multi Cloud HA
- Lowest Latency Routing

AI/ML - Driven Adaptive Edge Engine

CloudFlow will continuously ingest real-time data feeds and machine learning forecasts to automate intelligent distribution and resource optimization across containers, pods and clusters

Key Features

- Endpoint Controller
- Location Optimizer
- Traffic Director
- HPA/VPA & HCA

Composable Edge Cloud

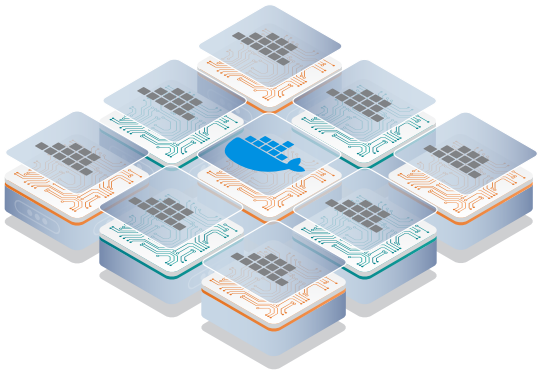
To CloudFlow, clusters distributed across cloud locations and/or private data centers appear as one mesh network creating a truly edge native cloud network for your applications to operate as close to end users as possible.

Key Features

- One-click Multi-Cloud
- AWS, GCP, Azure, Akamai, Lumen, Digital Ocean, RackCorp & Equinix

Kubernetes Edge Interface (KEI)

Kubernetes Edge Interface (KEI) is a foundational component of CloudFlow that revolutionizes how organizations manage their application workloads across a custom, decentralized cloud edge. It offers a unified cluster experience across multiple locations and cloud vendors while preserving developers' existing tools and workflows, such as kubectl or Helm. KEI simplifies user access through various interfaces, ensuring seamless integration into existing processes. This powerful feature streamlines application deployment and management across the cloud edge while maintaining flexibility and control.



Key Highlights

- **Unified Cluster Experience:** KEI treats multiple edge locations as a single cluster, providing a cohesive approach to managing distributed workloads.
- **Seamless Developer Experience:** Development teams can continue using familiar tools and workflows, including kubectl and Helm.
- **Simple User Access:** KEI supports various user interfaces, including the CloudFlow console UI, API, and kubectl. Easy Migration: Developers can introduce existing containers to CloudFlow without disruption.
- **Customizable Strategies:** Define strategies for application operation, including routing preferences, compliance, performance, and latency awareness.
- **Zero-Ops Automation:** Once strategies are defined, CloudFlow's automation takes over, simplifying deployment and management.

Adaptive Edge Engine (AEE)

CloudFlow's AI-Enhanced Adaptive Edge Engine (AEE) is a dynamic component that orchestrates resource allocation, scaling, and cost optimization for peak performance and cloud cost savings. It relies on continuous data fed decision-making, including cloud vendor pricing updates, traffic forecasts, real-time endpoint latency metrics and AI/ML capabilities, to make sophisticated choices about when, where, and how to run applications. AEE enhances cloud cost optimization for organizations leveraging CloudFlow to manage their Kubernetes cluster operations.

Key Highlights

- **Efficient Resource Allocation:** AEE's Endpoint Controller manages resource allocation for application endpoints, ensuring efficient utilization based on workload demands. It prevents overprovisioning and minimizes cloud infrastructure costs.
- **Scaling Responsiveness:** AEE incorporates Horizontal Pod Autoscaling (HPA) and Vertical Pod Autoscaling (VPA) for dynamic scaling. HPA adjusts pod counts to match workload requirements, while VPA optimizes resource allocation within pods, reducing resource waste and associated costs.
- **Optimized Endpoint Management:** Horizontal Cluster Autoscaling (HCA) complements HPA by automatically adjusting the cluster's size based on workload changes. It ensures optimal performance during workload fluctuations, reducing cloud resource expenses.
- **Dynamic Endpoint Management:** AEE's ability to create and destroy endpoints on demand prevents over-provisioning and cost escalation. It quickly scales endpoints to handle increased workloads and efficiently terminates unnecessary ones during low demand periods.
- **Location Optimization:** The Endpoint Controller optimizes endpoint placement, considering factors like traffic patterns, latency, and resource availability. This strategic placement minimizes data transfer costs and latency while maximizing performance.
- **Resource Size Control:** AEE efficiently manages resource allocation within endpoints, matching them to workload requirements to avoid overcommitting resources and reduce cloud infrastructure costs.
- **Dynamic Cost Management:** AEE continuously monitors the cloud environment and adjusts resource allocation and cluster size in real-time through coordination with Endpoint Controller, HPA, VPA, and HCA. This ensures judicious resource usage, contributing to cost savings without performance compromise.
- **Cost-Aware Workload Scheduling:** AEE considers cost-aware workload scheduling, taking cloud provider pricing models, data transfer costs, and resource availability into account when deciding endpoint placement for cost-efficient workload distribution.

Composable Edge Cloud (CEC)

CloudFlow's Composable Edge Cloud (CEC) redefines multi-cloud capabilities with one-click simplicity. Integrating leading vendors like AWS, Azure, GCP, Akamai, Digital Ocean, Lumen, Equinix, and RackCorp, CEC liberates organizations from vendor lock-in. It empowers efficient, cost-effective high-availability multi-cloud computing and offers unmatched flexibility.

Key Highlights

- **One-Click Multi-Cloud:** CEC enables effortless multi-cloud computing through a single click in the CloudFlow console, making the move to alternate cloud vendors easier than ever.
- **Diverse Vendor Support:** Supporting AWS, Azure, GCP, Akamai, Digital Ocean, Lumen, Equinix, and RackCorp, CEC offers extensive vendor choice.
- **Freedom from Vendor Lock-In:** Organizations can break free from vendor lock-in, simultaneously leveraging multiple cloud providers for agility and cost-efficiency.
- **Reliability and High Availability:** CEC can ensure applications always operate in multiple cloud vendor locations to bring applications closer to end-users, maximizing performance, minimizing latency, while ensuring high availability and the ultimate multi-cloud reliability.
- **Efficient Cost-Performance Balance:** CloudFlow's CEC enables cost-efficient, low latency computing across diverse cloud environments, empowering organizations to maintain performance while minimizing cost impact.

Benefits

Application Performance

Accelerate application performance by **35%** by intelligently delivering containers closer to end-users. CloudFlow uses advanced location optimization to deploy the containers, reduces latency and ensures faster response times for end-users.

Cloud Cost Optimization

Cut cloud expenses by up to **50%** by leveraging AI-driven cluster and pod autoscaling, location optimization, and cost-aware workload scheduling. Control your cloud spending with CloudFlow and redirect your savings towards innovation and growth.

ZeroOps Kubernetes

Reduce Kubernetes operations by **40%** by automating critical cluster management tasks and optimizing engineering overhead. CloudFlow's platform-driven automations ensure ZeroOps so you can refocus your resources on application development.

Bullet-proof Security

Ensure **100%** protection from the edge to the origin with advanced AI-led security features. The CloudFlow platform is SOC2 Type II, PCI-DSS and HIPAA compliant, so your customers' personal and financial data is safe from all threats.

For Ecommerce and Digital Experience

Intelligent CloudOps for Modern Commerce

WEBSCALE ONE

Webscale One Intelligent CloudOps Platform empowers ecommerce merchants, and their developers, with the world's most advanced suite of observability, performance and security software and services built on top of CloudFlow, to accelerate, secure and manage their storefronts. Whether you're looking to bring your own cloud environment and manage it yourself, or you'd like us to allocate and manage the resources for you – Webscale One has a solution to fit.

For Independent Software Vendors (ISVs)

Unlock the Potential of AI-Enhanced Cloud Computing

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CloudFlow is the ultimate solution for Independent Software Vendors (ISVs) looking to supercharge their applications with AI-infused cloud capabilities. Harness the power of AI-driven cloud optimization to take your software to the next level. With CloudFlow, you'll experience optimized cloud costs, enhanced application performance, streamlined resource management, zero-ops convenience, and multi-cloud agility. Elevate your software's performance, cut costs, and streamline operations, all while staying at the forefront of AI-driven cloud innovation.

For Enterprise Kubernetes

Intelligent Kubernetes Lifecycle Management for Enterprises

WEBSCALE CloudFlow
Powered by Section.io

CloudFlow takes the complexity out of Kubernetes adoption for enterprises, enabling seamless orchestration across diverse environments, from cloud to data centers and the edge. Developers benefit from rapid application deployment, while operations teams automate essential tasks like patch management, backups, cost control, and security scans, freeing up valuable time for driving product innovation. CloudFlow provides unmatched flexibility, handling scalability, availability zones, patches, updates, and delivers native monitoring capabilities to ensure cluster availability and peak performance. With intelligent automation at its core, CloudFlow streamlines Kubernetes lifecycle management, delivering substantial reductions in time, effort, and operational costs, giving enterprises the edge they need in their industry.

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