



Solution Brief: Alef Media Streaming

Create Interactive, Intelligent and Immersive OTT Applications with the Software-Defined Mobile Edge

The communications and digital markets are under massive, synchronized transformations. Edge Internet is a distributed Internet architecture combined with a programmable paradigm where computing and connectivity are provided in close proximity to the point of consumption to meet the demands of current and future applications and services.

The synchronized transformations of the communications and digital markets are impacting every trillion-dollar industry in our economy. The next wave of mobile connectivity (5G and next gen wireless networks) and Edge computing is here bringing new applications and services the current infrastructure cannot handle.

“We are at the cusp of a seismic paradigm shift wherein computing and communications will move from a core network with a centralized cloud architecture to the Edge. The reasons are manifold but the basic premise is that in order to serve the data computing and communications demand of objects, sensors, people, resources, compute, and intelligence have to move to the Edge to not only operate in the most cost-effective way but to enable new use cases that can’t be supported by traditional cloud architectures.” – Chetan Sharma, Industry Analyst.

The Edge Internet is a distributed overlay Internet architecture – public and private – with programmable Edge API’s, creating new computing and communications paradigms.

With the rise of 5G and computing environments, AlefEdge is key to unleashing the convergence of networking and computing. AlefEdge’s Software-Defined Mobile Edge platform enables a new set of mobility, cloud and applications APIs that unleash Enterprises and application developers to leverage the full power of the Edge. By utilizing our unique APIs, Enterprises can deploy, orchestrate and manage Edge applications and services.



Create Interactive, Intelligent and Immersive OTT Applications with the Software-Defined Mobile Edge

Key Challenges

Content providers and content aggregators are focused on outreach and technology capabilities instead of what they do best – content. The problem is due to an inability to reach the consumers on a wide scale.

For content providers, they are not technology companies which creates difficulties in innovating and creating market differentiation. Their content may be the greatest, but they cannot reach the consumer and therefore cannot monetize their content.

For content aggregators, they have similar issues. They own significant assets and have phenomenal relationships with third parties, but it is difficult to monetize their assets.

New Approach

Alef Media Streaming is a next generation Video Platform for short form, long form, live form, live social, etc for the content providers and advertisers. With Alef Media Streaming, you can make content and content aggregation with streaming technology allowing the content providers to focus on what they do best.

Possible New Products

Once connected to Alef Media Streaming Backend, application developers can rapidly create new products:

- **Enhance Existing Apps** - Enhancing OTT offerings through the edge with

immersive features. Brining the ability to provide an enhanced user experience through a variety of features.

- **Video Crunch** - Entertainment and content are mobile. With mobile, content must be quick and enjoyable. With Alef Media Streaming, you can create digestible short form content chosen and specified for end users to consume.
- **"My TV"** - Leveraging big data is key to a personalized and engaging experience. Using Telco Big Data, OTT's can create personalized/suggested content chosen by/for you to consume.
- **Car.TV** - Screens in the back of cars faded out due to technical limitations. With Car.TV, you can now stream content to the screen without any issues with application handoff providing passengers with new forms of entertainment.
- **Enterprise Apps** - Enabling enterprise to communicate with employees through video. The content is chosen by enterprises for employees to consume and are only available to the employees.
- **Venue Tube** - . Dependent on the venue, conferences, keynotes, sporting events, concerts, etc. venues can provide a stream of content available for attendees to view at the location.
- **Smart Surveillance** - Today, facial recognition is done through image-based

machine learning. With Alef Media Streaming, the image-based machine learning can be turned into video-based machine learning. This turns video surveillance streams into intelligent video streams where continuous processing can be done at the edge.

- **Venue Replay** - Providing fans at venues a VoD experience on their phones of what is happening at the game. The replays are stored at the edge and available to fans through stadium applications for their viewing.

Providing a micro-backend to content providers and content aggregators allowing them to focus on the content – not the technology. The Edge enables content providers to innovate, without worrying about if the network can handle it.

Capabilities:

- Discovery, Delivery and Distribution
- "A La Carte" Offerings
- Sponsored Content and Rating Groups
- Enhanced OTT Offerings
- Live and VoD Channels
- Live Upload and Live Viewing for Social
- Immersive Edge Delivery
- Leverage Telco Big Data
- Edge Advertising Insertion

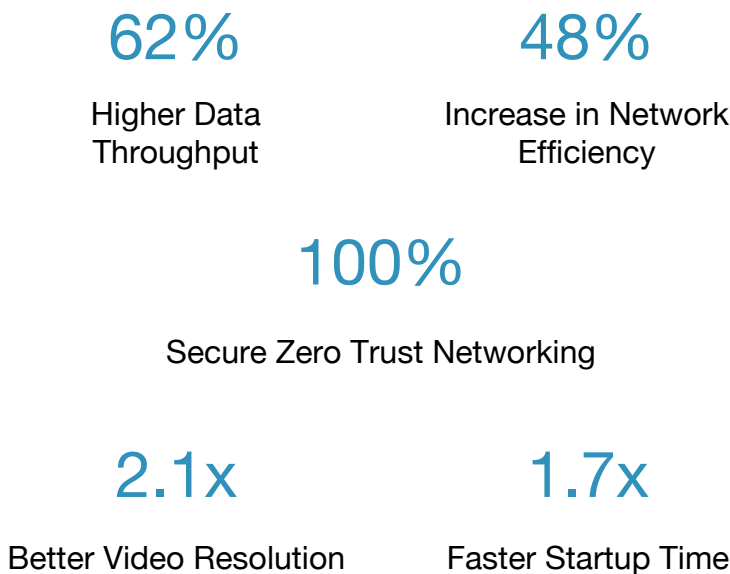


Create Interactive, Intelligent and Immersive OTT Applications with the Software-Defined Mobile Edge

Alef EdgeNet is a collection of interconnected Mobile Private Networks driven by Alef’s invention – a programmable Software-Defined Mobile Edge (SD-ME) platform that orchestrates applications, devices and network services seamlessly.

Alef’s SD-ME delivers on the long-awaited promise of a distributed Internet and the power of a new high-speed Edge Economy to application developers and Enterprises alike through open Edge APIs, products and services. By delivering the power of a 5G-like Edge Internet through its platform’s easily adaptable plug-and-play overlay architecture, Alef EdgeNet can enable Enterprises to upgrade and futureproof their network without the need for costly upgrades, and ready themselves for the massive Digital Transformation that lies ahead.

Benefits of SD-ME



Alef’s Software Defined Mobile Edge stack interconnects, automates, orchestrates and manages the next generation of cloud native digital services at the Edge.

AlefEdge’s unique SD-ME innovation creates value across the ecosystem.

Areas of Innovation:

- Edge Automation
- Edge Routing
- Edge App Enablement
- Edge Mobility
- Edge Roaming
- Edge Orchestration
- Edge Elasticity

Our 80+ ecosystem relationships span tower companies, hypercloud providers, network operators, application providers, application developers and enterprises.

For more information, visit alefedge.com

