



Solution Brief: Video Enablement

Enhance your Video Solutions 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.



Enhance your Video Solutions with the Software-Defined Mobile Edge

In the world today, there are six core video types that Enterprises leverage in their day to day communications. Employees leverage them every day in their working lives and in their personal lives.

Industry Challenges

The current video market is fractured and disaggregated. There are different types of video with different use cases used by different people throughout your Enterprises.

Independent content companies are building their own applications for internal and external consumption. This creates industry wide problems that can only be addressed by providing technology solutions to Enterprises, allowing them to focus on what they do best – creating, consuming and using video.

Benefit of the SD-ME

Video on Demand - The Software-Defined Mobile Edge can dramatically improve the performance and usability of Video on Demand Streaming for Enterprises. We have tested a variety of Video on Demand Streaming applications for the Edge and have found the below results:

- 2.1x better HD resolution at 1080p and 1.7x better startup time (80 percentile) for Media & Entertainment applications;
- 12.6x better HD resolution at 1080p and 1.8x better startup time (80 percentile) for advertising applications;

- 2x better in PDF and 360 Degree HD Images throughput and 1.7 better download response times (80 percentile) for learning applications; and
- 1.4x better HD resolution at 1080p, and 1.5x better startup time (80 percentile) for virtual reality applications.

Stream Processing - By processing streams at the Edge of the Enterprise Network, solutions can be significantly enhanced to create a secure and manageable intelligent solution that creates actionable insights in real-time for Enterprises. The Software-Defined Mobile Edge can enable the uplink streams to be processed creating actionable insights out of the data. To do this, part of the stream is processed at the Edge of the Enterprise Network and the rest of the stream is sent to the Cloud for storage and Machine Learning.

Live Streaming - By incorporating the Edge into Live Streaming, the available throughput and bandwidth smoothens out to create a more reliable stream. The Edge can not only enhance the performance of the Live Video Stream, but also enhance the product through other application features while being open with the ecosystem.

Collaborative Video - By leveraging intelligent tools and enhanced performance, employees can increase their

productivity. The Edge not only dramatically increases the performance of videos for employees, but gives them intelligent tools to be successful. Tools in Artificial Intelligence, Machine Learning, Multi-Cast, Augmented and Virtual Reality, etc. can all enable the work force to become more productive, but also integrate their solutions into their Software-Defined Mobile Edge Collaborative Video solution.

Video Notifications - Using open APIs and solutions, Video Notifications can be dramatically enhanced for Enterprises. We have seen in multiple campaigns how dramatically the Edge impacts video delivery, performance, click through rate, calls to action and message retention. Video Notifications at the Edge can be enhanced from a simple SMS to a Video embedded within the file matched with intelligent features such as location finders and chatbots.

Interactive Video Messaging - By giving employees a frictionless tool to share and interactive with each other through video, Enterprises can increase the productivity levels within their culture. The Software-Defined Mobile Edge offers Enterprises tools to enable secure sharing, collaborative working environments, ease to use content onboarding and notification systems. These tools can dramatically increase the usage of video and the ingenuity within Enterprises.

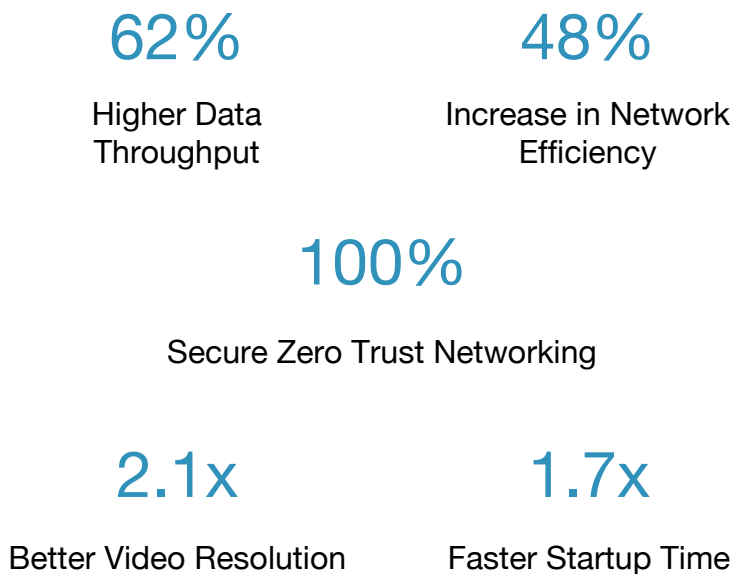


Enhance your Video Solutions with the Software-Defined Mobile Edge

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

