

# Expway FastLane

EXPWAY

Solution Sheet

## The Ultimate Mobile CDN



**Expway FastLane** is a Mobile CDN solution used by Content Delivery Networks (CDN), to deliver premium content over wireless networks. It uses Long-Term Evolution (LTE) Broadcast and automated Multicast Dynamic Switching driven by device utilization metrics, to optimize the delivery from the network antennas to the mobile devices.

Expway FastLane helps content providers, CDNs, and Mobile Network Operators (MNO) provide a crystal clear video experience to their end-users, leading to new revenue opportunities and massive savings, while addressing challenges inherent to mobile networks such as limited network capacity during peak hours.

Video Platforms Providers and CDNs can integrate a Mobile CDN solution like FastLane to their services portfolio and take advantage of MNOs' LTE Broadcast capabilities. MNOs can also offer a last mile Mobile CDN as an additional service to their portfolio.

Expway is the only company able to offer a complete end-to-end Mobile CDN. Expway has already commercially deployed all the components with Tier-1 MNOs, leading device makers and chip manufacturers worldwide.

### Key Benefits

- MNOs can reduce their network traffic while benefiting from new revenue opportunities.
- CDNs can offer a consistent high video experience to their users and reduce churn.

### Key Products

- Expway BMSC
- Expway BPM
- Expway Middleware
- Expway CDN Agent



## How it Works

Expway FastLane optimizes the delivery of live and on demand video by the dynamic and surgical use of LTE Broadcast.

LTE Broadcast is used automatically when several users are interested in the same video stream at the same time (season final of a popular TV show, premier of a movie, breaking news, sports, concerts...).

It also works for any sort of downloadable content by caching the content to thousands of mobile end-users simultaneously, in anticipation of the consumption.

## Expway FastLane Key Products

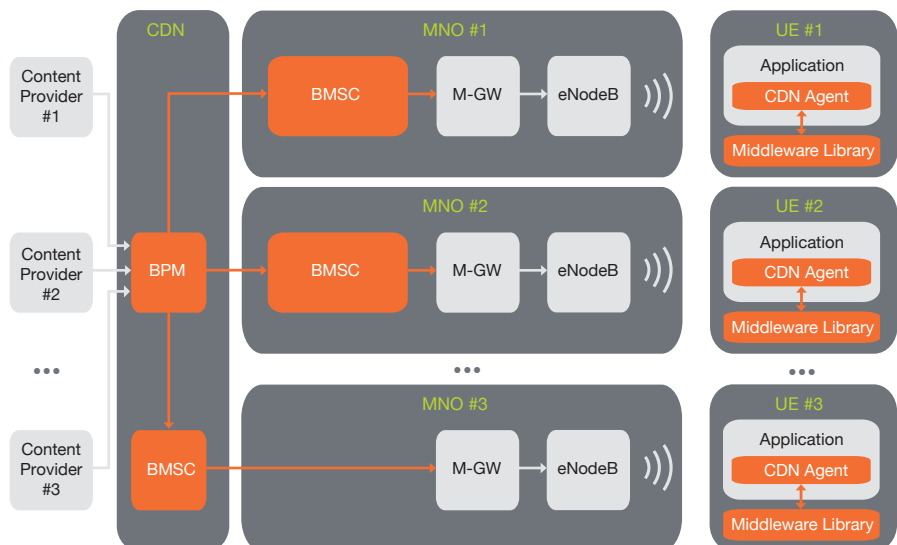
- **Expway BMSC** is a server that generates multicast streams automatically, switches from Multicast to Unicast and collects usage data from the devices.
- **Expway BPM** is another server that controls and orchestrates several BMSCs. It centralizes device utilization intelligence to help determine the right delivery strategy.
- **Expway Middleware** resides on the end-user mobile devices. It decodes Multicast and Unicast streams, and reconstructs video and content files. It also collects device metrics such as location along with experience and reception quality.
- **Expway CDN Agent** is installed in the application. It is used by the App to manage the device cache and control the video streaming functionality of the device.

## Expway Fastlane Key Functionalities

Expway's FastLane solution provides the core functionality of a modern and efficient Mobile CDN:

- **Multicast delivery of DASH and HLS** video (Dynamic Adaptive Streaming over HTTP and HTTP Live Streaming) using LTE Broadcast standards including highly efficient error correction algorithms, and operating in Single Frequency Mode between the various eNodeBs.
- **Dynamic Switching between Unicast to Multicast** based on the 3GPP-13 MOOD specifications and guided by CDN analytics.
- **Quality-of-Experience Metrics** for evaluating total end-user video experience, using quality data collected by the Expway Middleware.
- **Audience Measurement Metrics** to implement business models by the content providers or MNOs.

## Expway FastLane Architecture



## Contact Us

[www.expway.com](http://www.expway.com)

China +86 13910526950

Europe +33 1 44 54 29 28

Japan +81 3 5251 4021

Korea +82 10 5212 5700

USA +1 (408) 501 8816

**EXPWAY**