

# ARC Mobile

Bridge the Gap Between Wi-Fi and Cellular



## Is Inefficient Traffic Routing Impacting Your Bottom Line?

When Wi-Fi network connectivity and quality are poor, user experience suffers. Disrupted connections often result in customer frustration, manual switching to cellular networks, and higher operator costs. Lack of operator control over how their customer traffic is routed between Wi-Fi access points and mobile networks creates poor experience when connectivity is slow or interrupted, which impacts customer churn. In addition, when customers turn off Wi-Fi and route traffic over LTE, operators incur higher costs, which affects profitability and cash flow.

## Improve User Experience with Seamless Connectivity

Kyrio's ARCMobile solves these problems by bridging the connectivity gap between Wi-Fi and cellular networks. Our efficient, scalable traffic routing solution delivers seamless connectivity and operational agility that lowers costs and reduces customer churn. ARC Mobile frees users from the need to troubleshoot their own network connectivity, creating happier, more loyal customers—all without requiring additional hardware equipment.

## Automated, Flexible Operator Control

ARCMobile's efficient, scalable traffic routing solution delivers seamless connectivity and operational agility that ensures operators use networks effectively, lowers costs and reduces customer churn. With ARC Mobile, operators can automatically route traffic over the best-performing, lowest-cost network for a particular scenario in a particular location.

## Customer Reactions from Trials

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*"I noticed ARC enables the device to switchover to LTE sooner when it is enabled on this latest version. This is a major benefit and could combat issues experienced with fringe connections."*  
-iOS User

*"I do not remember having to pause and wait while my phone transitions from Wi-Fi to LTE, or back again. Or even turning my Wi-Fi off anymore in some cases."* -Android User

*"When I'm on a Zoom call and transition from Wi-Fi to cellular, I don't have 20 second disruption in the call (which occurs when I'm not running ARC.)"* -Android User

# How ARC Mobile Works

ARC Mobile delivers smart network routing that gives operators the flexibility they need. Here's how:

- **Identifies best-performing network:** ARC Mobile uses network-probing algorithms and a crowd-sourced approach to find the best network at all times based on traffic measurements. Using the combined information from all users connected to the system, ARC Mobile decides whether, how and when to switch traffic to any available network. The solution works on existing 4G/LTE networks and 5G networks.
- **Provides application-type policy control:** Operators can set ARC Mobile traffic routing policies for each application type's traffic. This is done by applying classification algorithms to categorize application traffic without requiring deep packet inspection. This module builds application traffic profiles that let operators craft unique per-application policies.
- **Creates continuity:** As routing policies dynamically adapt to changing network performance, traffic is seamlessly routed from one network to another. This implements a make-or-break approach that provides session continuity to real-time applications like video calling.
- **Contains lightweight client components:** ARC Mobile leverages a client-server architecture where an application is installed on the mobile device and the server is hosted wherever it is convenient for the operator. Server components can be hosted on the same hardware, on separate hardware, in the operator data center or in a third-party cloud. ARC Mobile is built to work in any of these environments. Plus, it is designed for efficiency (battery consumption and data overhead), scalability and security.
- **Provides flexible operator customization:** The ARC Mobile architecture leverages a scalable modular design. It can accommodate any operator's needs because the policies are designed so that new modules can be developed as needed. Operators can define routing policies based on application or application type, product offering, service tier or application requirement. They can also embed business rules in the policies, such as "If Wi-Fi is good enough, use Wi-Fi for streaming apps when on a roaming network."
- **Future-proofs for new standards:** Although it's still an over-the-top solution, ARC Mobile's flexible architecture allows for integration with emerging wireless standards as they become available.

## About Kyrio:

Kyrio, a subsidiary of CableLabs, works with network operators and their suppliers around the world to deliver software solutions and testing services that build stronger networks and enable exceptional user experiences. Learn More at [www.kyrio.com](http://www.kyrio.com)