

ARC

Adaptive Route Control

In today's world, people are increasingly mobile. They expect exceptional and uninterrupted connectivity to everything, everywhere, all the time. However, the reality of wireless communications is much different. Users often struggle to maintain good network performance as they move between overlapping Wi-Fi access points and LTE/5G mobile coverage. When Wi-Fi isn't performing well, users might turn off Wi-Fi and forget to turn it back on later, creating a frustrating hassle. This kind of bad experience can also increase costs for both the user and the service provider. And until now, the service provider has had no control over the user experience.

With **Adaptive Route Control** (ARC), service providers finally have a way to deliver an optimal user experience—without needing to perform complex integration or upgrades to their 4G/5G core or Wi-Fi access points. With ARC, some operators may even be able to save money through the additional Wi-Fi offload that ARC makes possible.

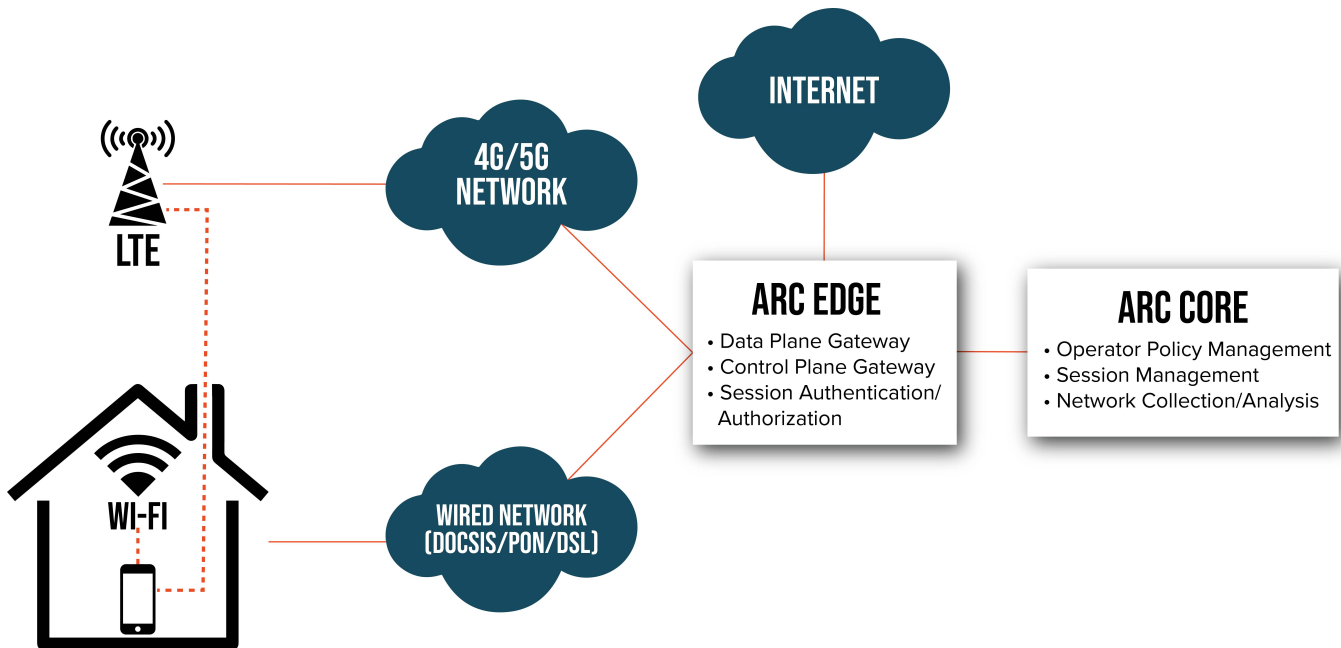
ARC Tackles the Hard Challenges

- **Identifies the best-performing network:** Combines multiple network-probing algorithms with a crowd-sourced approach to determine the best network.
- **Creates seamless connectivity and session continuity:** Updates its traffic-routing policies in real time as network conditions change and instantly routes traffic from one network to another without any service interruption.
- **Builds lightweight client components:** Easy to integrate into the provider's customer care app (both Android and iOS) and is designed for efficiency in terms of battery consumption and data overhead.
- **Provides flexible network control:** Operators can define routing policies based on application or application type, product offering, service tier or application throughput requirements.

ARC is differentiated from other solutions because it's designed by network operators for network operators. ARC's application awareness and network awareness features are unique and robust. In addition, ARC's ability to accommodate operator-specific needs through the use of operator-defined business rules and policies sets ARC apart from other solutions.

ARC Architecture

Architecturally, ARC is based on an over-the-top client-server model that requires no change to the mobile device's operating system or to the provider's 4G/5G core networks or Wi-Fi access points.



ARC is also ready for the future of traffic management. As a converged multi-access technology for both mobile and fixed-network traffic, ARC accommodates gateway and home router integration. ARC also addresses 5G Access Traffic Steering, Switching and Splitting (ATSSS) integration and will seamlessly integrate with 3GPP standards-based mobile device implementations when they become available.

The Benefits of ARC

The value proposition and benefits for mobile service providers (MNOs, MVNOs, MVNEs) are straightforward. ARC optimizes the customer experience, alleviating user frustrations associated with poor Wi-Fi experience. As a result, providers can offer a superior product to gain market share and reduce churn. Simultaneously, ARC may provide cost savings by allowing providers to route traffic to lower-cost networks and achieve the most efficient utilization of deployed wireless assets.

To get a feel for ARC, you can conduct a trial to evaluate customer experience improvements and cost savings. To support your trial, Kyrio provides reference implementations and SDKs for integration with your client apps, your server hosting environment and simple integration tools that give you control over user authentication. Service providers can host the ARC solution themselves or use a Kyrio-hosted deployment.

Whatever your business model, Kyrio is easy to do business with. We have standard annual licensing models for ARC but can also be creative and develop the right solution for you.

For more information, please visit our website at <https://kyrio.com/> or contact us at info@kyrio.com.