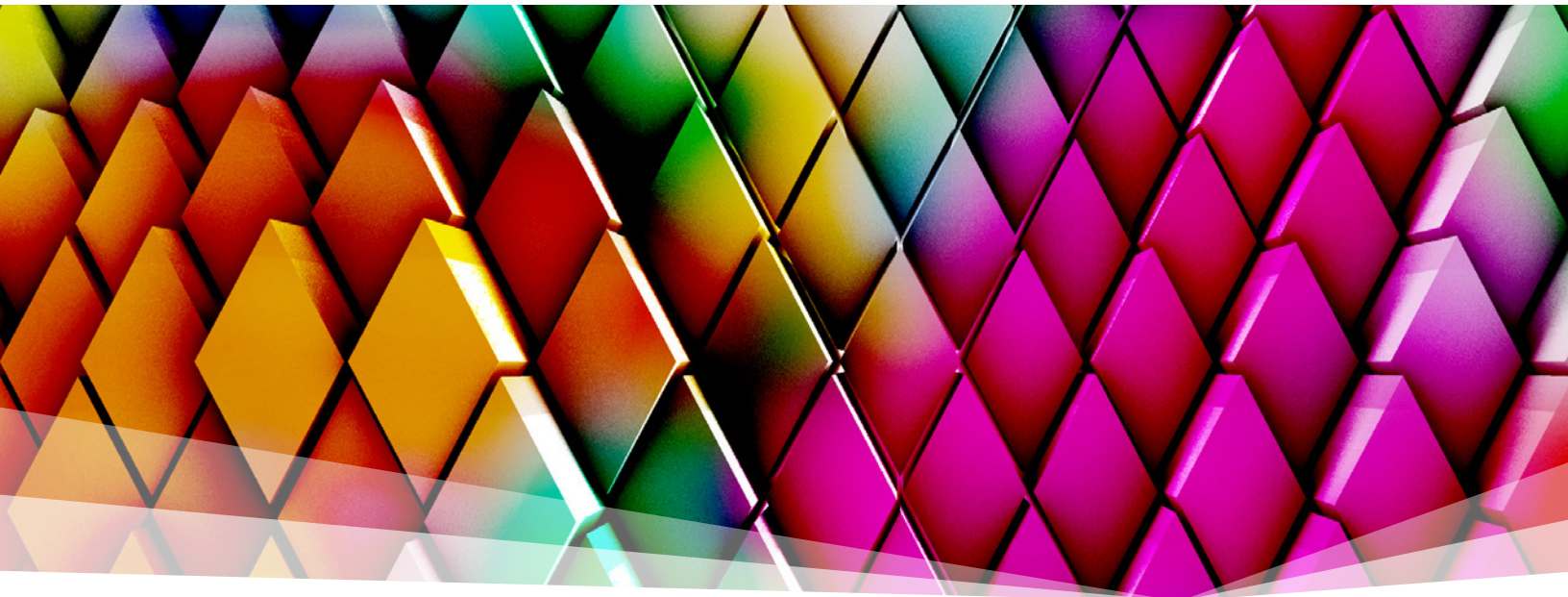


## AMP Overview

The AERIS MOBILITY PLATFORM (AMP) is a modular software platform offering technical and functional building blocks for IoT solutions related to motorized moving things, such as cars, trucks, and motorcycles.



**Value.** IoT can make it easier, more enjoyable, and more profitable to make, own, or use motorized moving things. But IoT infrastructure is hard to build. AMP provides critical building blocks for large, complex IoT programs, enabling OEMs and enterprises to stay focused on their core competencies—delivering enhanced customer experiences and implementing strategies to increase revenue.

## COMPONENTS:

At the highest level, AMP can be broken into three areas:



### The Services Platform

Provides the tools to create and centrally administer connected services and deliver those services to the right devices, to the right users, at the right time.

The Services Platform includes a robust library of pre-built Business Services for motorized moving things (such as remote engine start, remote health and status check, GPS tracking, etc.); a Services Factory to create or enable new services; a Product Catalog to package those services into a wide variety of products (for different regions, brands, models, etc.); Lifecycle Management to correctly deliver services across the entire user and device lifecycles (including vehicle/thing registration, customer enrollment,

mobile device pairing, transfer of ownership, TCU swap, etc.); and Billing, Payments, and Taxation services to charge customers for services rendered.

On the administrative side, the Services Platform also includes User Relationship Management (URM) to manage and analyze data about users and their behavior and send targeted messages; operational reporting to monitor system health; business intelligence reporting to track progress; debugging services to identify and address issues anywhere on the platform; over-the-air (OTA) software updates; and an administrative portal to centrally control access to the entire platform.



### The Device Platform

Connects and controls the information flow between each device and all other endpoints in your system.

Purpose-built for IoT and globally tested at scale, the Device Platform enables OEMs to securely and efficiently deliver services to any number of devices. Architecturally separated from the Services Platform, the Device Platform automates device configuration as services evolve, improving operational efficiency and enabling advanced business models where users can carry connected services from machine to machine. It also integrates a number of tools to increase responsiveness, including a real-time publish and subscribe communications bus (MQTT), event management, state management, and authorization and authentication. Finally, it includes a smart edge client that enables maximum service flexibility while reducing both connectivity and cloud computing costs.



### Infrastructure Services

Provide the tools and analytics to help OEMs manage and monitor their entire system—from infrastructure to applications—at any scale.

Infrastructure Services integrate advanced tools, including a container deployment orchestrator (Kubernetes), rule-based anomaly detection, trend analysis, and a full audit trail to detect security threats. The entire system is GDPR-compliant by design and incorporates security best practices at network, transportation, and application levels.

Security protections at the network level include firewalls; DMZ (safe zones); reverse proxy; VPN; and dedicated private IP range. The transportation level includes moving data. And the Application level includes data at rest; multi-factor authentication and role-based access control; either four- or six-eyed principles; and a full audit trail.



## Modular and Scalable

AMP is optimized for complex, global programs that will grow and evolve over time.

The entire platform is cloud agnostic and can be deployed anywhere in the world, with any provider—public or private—now or in the future. It features capsule farm architecture to facilitate scaling, enable product variation (for different brands, models, model years, geographies, etc.), and provide protection as programs grow and evolve.

It also is cost-optimally redundant, with repeated availability in three zones (for local high availability) and in three countries (for disaster resilience).

Finally, and perhaps the most important, AMP is modular down to the component level. Every micro-service in AMP includes a well-defined API so that OEMs can leverage the entire stack, or “pick and choose” just the components they want, and then integrate them into existing or third-party systems.

Indeed, Aeris’ specialty lies in working with OEMs and enterprises to identify and integrate needed components—whether just the Device Platform, or parts of the Services Platform, such as OTA, or just a few Business Services, or any combination therein. Our goal is to take care of whatever infrastructure companies need so they can stay focused on their core competencies.

## ABOUT AERIS:

Aeris is a technology partner with a proven history of helping companies unlock value through IoT. For more than a decade, we’ve powered critical projects for some of the most demanding customers of IoT services today. We strive to fundamentally improve their businesses by dramatically reducing costs, accelerating time-to-market, and enabling new revenue streams. Built from the ground up for IoT and road tested at scale, Aeris IoT Services are based on the broadest technology stack in the industry, spanning connectivity up to vertical solutions. As veterans of the industry, we know that implementing an IoT solution can be complex, and we pride ourselves on making it simpler.

Visit [www.aeris.com/india](http://www.aeris.com/india) or follow us on Twitter @AerisM2M to learn how we can inspire you to create new business models and to participate in the revolution of the Internet of Things.

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