

# The Auto Industry's Key to New Mobility Services

**Bringing the driver's digital life into the connected car.**

*What will the New Mobility look like? Take a look at 'Car-as-a-Service' and other usage models.*

## Identity Use Cases in New Mobility

As the industry moves beyond connected cars to fully realized New Mobility services, federated digital identities will play an increasingly important role, as illustrated in this next set of examples.

Bring the end-user's digital life to a connected car. One of the most important targets of the industry is to bring the digital life of the user into a connected car—to enable the same set of services during physical mobility as at home or in the office. To make this simple and frictionless, carmakers need to provide a version of single sign-on into the “car-as-a-service,” linking the authenticated sessions of various digital services to the car for the duration of the journey. Digital identity will provide the mechanism for this seamless yet secure experience.

## Enable the Best User Experience for Car Sharing or Ride Hailing Services

User experience is a prime factor in people's willingness to use shared vehicles rather than their own personal car. Federated mobility services will allow people to handle every part of the journey using a single app, from summoning their vehicle of choice to payment at their destination, with streaming media, GPS, and other connected services along the way. The same app even works across fleet providers—no more separate apps for each car sharing or ride hailing service.

## Make the Connected Car Interact with the Smart City.

The examples above illustrate the links between users, services, and preferences. As a next step, the car and the driver need to securely interact with the

infrastructure of a smart city, such as identifying the car and payment at the charging station, autonomous parking, tolls, and so on. Here, digital identity goes beyond the relationship between the car and the driver to manage the interaction of the car and driver with the world around them based on secure authentication.

As we see, digital identity is more than just a mechanism to secure and authenticate cars and devices; it's also a tool to enable the entire New Mobility and smart city ecosystem. Service providers offering digital experiences from the connected car to payment can collaborate on and co-create New Mobility services based on the security, trust, and interoperability of digital identities across business domains.

## ForgeRock Innovation Labs

As a leading innovator in CIAM, ForgeRock works at the forefront of New Mobility and other secure digital experiences. ForgeRock Innovation Labs is dedicated to advancing digital transformation and customer trust through identity and relationships, helping companies achieve competitive advantage through technology innovation. Areas of focus for ForgeRock Innovation Labs include:

- » **Identity Relationship Management (IRM) and graph technology.** Graph technology makes it possible to capture a 360-degree view of customers based on their relationships with other individuals and systems. This can reveal insights about the customer to guide recommendations, as well as helping detect threats through anomalous behaviors. However, graph technology also raises implications for privacy and consent, as user data is used in new and different ways. ForgeRock Innovation Labs works to unlock the full value of these innovations while applying the control, security, and privacy made possible by digital identity.
- » **Connected car.** ForgeRock joined the Automotive Grade Linux (AGL) community in 2016, joining a diverse set of member companies collaborating to enable the next generation of in-vehicle software systems. Our vision is to bring digital identity to the connected vehicle ecosystem to help OEMs build strong relationships with their customers, whether for online customer identity management, personalized in-vehicle experiences, or trusted transactions based on the secure digital identity of the vehicle. AGL is already solving the software development issues associated with high-tech

## /AUTOMOTIVE GRADE LINUX



Automotive Grade Linux (AGL) is a collaborative open source project bringing together automakers, suppliers and technology companies to build a Linux-based, open software platform for automotive applications that can serve as the de facto industry standard. Adopting a shared platform across the industry reduces fragmentation and allows automakers and suppliers to reuse the same code base, leading to rapid innovation and faster time-to-market for new products. As a “code first” organization, AGL’s goals are to:

- » Build a single platform for the entire industry
- » Develop 70-80% of the starting point for a production project
- » Reduce fragmentation by combining the best of open source
- » Develop an ecosystem of developers, suppliers, expertise all using a single platform

Automotive Grade Linux is a Project at The Linux Foundation. ForgeRock is a member of AGL, and leads the AGL Vehicle-to-Cloud Experts Group that is exploring use cases such as telematics, personalization, authentication and authorization.

infotainment systems in modern vehicles, and we believe this same group of passionate members can create solutions to other pressing issues that OEMs are facing, such as monetizing services through their vehicle platform to create a key revenue stream in addition to selling vehicle units.

» **Internet of Things (IoT) and device management.**

ForgeRock Innovation Labs is working to create a single, unified security domain for all types of users, including consumers, customers, partners, contractors, and employees, as well as devices and things of all types. ForgeRock IoT technology helps enable trusted device identities, secure connections, lifecycle management, and data transport and transformation wherever and however digital identities interact.

- » **Edge Computing.** The ForgeRock Identity Edge Controller makes it possible to build trust into IoT systems from end to end. Data management at the edge will make it possible for data to be aggregated, tagged, and enriched by the devices that capture it, as it is being captured, exponentially increasing its value for big data analytics. This includes the consent, context, identity, and security data points that are essential to maintain compliance and consumer privacy protection.

» **Machine learning and artificial intelligence.**

As new modes of user interaction and customer engagement gain widespread adoption, ForgeRock Innovation Labs is working with technologies around voice control, natural language processing (NLP), virtual assistants and chatbots, visual recognition, and recommendation engines.

## The ForgeRock Vision for Identity in the New World of Mobility

A car that identifies its user, adjust to their preferences, plays their favorite music, and knows where they want to go and how best to get there. It's not science fiction—the technology is available today. Built into a vehicle right from the design phase, digital identity enables the seamless and secure interactivity that powers New Mobility services, as well as the personalization, consistency, privacy, and trust that will make this new world so appealing for consumers. For an automotive industry in transition, this is an exciting time to be working at the leading edge of innovation.

To learn more about how ForgeRock is mobilizing digital identity, check out [Connected Cars](#) on the ForgeRock website.

### /ABOUT FORGEROCK

ForgeRock® is the Digital Identity Management company transforming the way organizations interact securely with customers, employees, devices, and things. Organizations adopt the ForgeRock Identity Platform™ as their digital identity system of record to monetize customer relationships, address stringent regulations for privacy and consent (GDPR, HIPAA, FCC privacy, etc.), and leverage the internet of things. ForgeRock serves hundreds of brands, including Morningstar, Vodafone, GEICO, Toyota, and Pearson, as well as governments like Norway, Canada, and Belgium, securing billions of identities worldwide. ForgeRock has offices across Europe, the USA, and Asia.

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