Axway API Gateway and the Connected Car

Deliver the ultimate mobile device with infotainment and telematics solutions



Axway API Gateway is an industryleading API delivery and governance solution that enables organizations to capitalize on those opportunities by connecting back-end applications and third-party systems with cars to create the ultimate mobile device.

Driver-centric infotainment and vehicle-centric telematics systems help to create the ultimate mobile device, delivering a rich and personalized environment that keeps the driver both connected and safe behind the wheel. In today's hyper-competitive automotive industry, the "connected car" is more than a convenience or even a luxury—it is fast becoming a standard checklist item for car buyers. According to Gartner, 47% of consumers want to be able to access wireless apps in their future vehicles, and by 2016 the connected car is expected to be a common desire for drivers and their passengers.

The safety, convenience and business value this innovative technology brings to the market has the automotive value chain — including manufacturers, service providers, and transportation, insurance, rental car and aftermarket electronics companies — racing to introduce best-in-class solutions in their product and services.

The road is paved with APIs

The same lightweight Web API (Application Programming Interface) technology that is powering the cloud, social and mobile application revolution is key to delivering infotainment and telematics solutions to connected cars. These APIs are the messengers between applications and vehicles.

Car manufacturers such as Ford, Audi, Toyota, and BMW are leading the automobile API race, and the momentum is only going to grow as car companies increasingly join forces with external application developers. In fact, cars are on track to soon outnumber mobile apps as API consumers. The sheer amount of data sent to APIs by sensors in cars is staggering.

Axway API Gateway is an industry-leading API delivery and governance solution that connects back-end applications and third-party systems with devices, including vehicles, over the Internet. Axway API Gateway:

With the evolution of automobile APIs and developer ecosystems around car communities, new opportunities to deliver content, services and real-time value to car drivers and passengers are abundant for both automotive OEMs and third-party product and service providers.



Axway API Gateway and Agero

In the U.S., Axway helped Agero – the leading provider of roadside assistance and claims management services – build a complete, turnkey solution for connecting vehicles to the Internet of Things.

This solution enables Agero's automotive and insurance clients to put connectivity and advanced technology services at the fingertips of their end consumers – the drivers.

Through embedded technologies, timely alerts and automatic notifications, Agero can facilitate a real-time digital conversation between the vehicle, the driver and the insurers.

- Provides the must-have security, management and access control capabilities
 required to protect APIs that handle sensitive data, and prevent the kind of attacks
 and breaches that can result in dangerous situations, legal challenges and
 compliance penalties
- Makes it easy to integrate and aggregate partner APIs, no matter what interface protocols or authentication schemes they use.
- Delivers the reporting and monitoring tools required to ensure API reliability and performance, and gain insight into how, when, and by whom APIs are being used.

Driver-centric infotainment systems

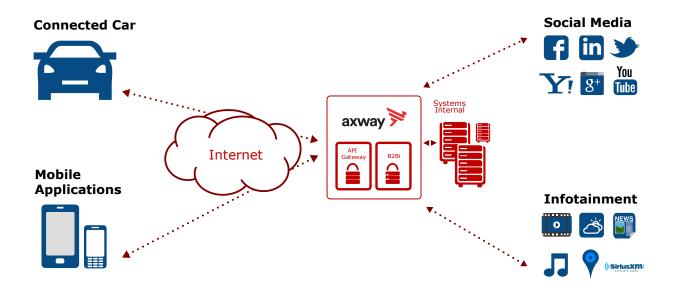
People rely on mobile devices to communicate with each other, share experiences, conduct business, and program their DVRs, thermostats and refrigerators.

And they don't want to go without these digital conveniences when they hit the road — drivers want infotainment options that combine traditional on-board entertainment components with in-dash touch screens, hands-free voice control and stereo streaming of music and video.

With Axway API Gateway, manufacturers and service providers can deliver connected car infotainment systems, including:

- Telephony Enables drivers and passengers to make hands-free calls using cellular or wi-fi networks.
- Messaging Enables transmission and receipt of messages via SMS, IM and other common messaging formats.
- Social Provides a connection between cars and social networks
- Music The classic car radio is disappearing radio is increasingly moving to satellite and the Internet, with many proven streaming music services competing for attention in our cars.
- Navigation Way-finding is essential in most vehicles today. Embedding navigation into a car's platform and providing real-time Internet connectivity improves navigational performance.
- Location The location of a car is essential not only for navigation, but also for a
 whole other level of application around tracking rental or fleet vehicles (or even our
 children's cars).
- Weather Knowledge of weather can influence any trip, making it a natural fit for an on-board resource.





Axway API Gateway enables OEMs and service providers to deliver audio - and voice-enabled content and information to drivers, as well as video and deeper engagement for passengers.

Vehicle-centric telematics solutions

Telematics solutions are revolutionizing vehicle safety, design and driver experience by capturing and delivering massive amounts of data via web APIs. With Axway API Gateway, manufacturers and third parties can use this "big data" to improve customer safety and satisfaction, deliver innovative new services, improve operational efficiency and create new revenue streams.

Vehicle command — Along with sensors, a vehicle is filled with switches, which can be accessed through a central system. Many automobile platforms are using APIs to provide the ability to send commands to most vehicle functions.

For example, a car owner can use a mobile application to remotely lock/unlock the doors and activate the air conditioning or heater five minutes before getting in.

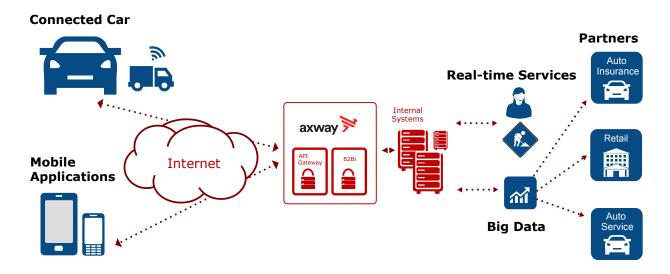
Vehicle data — Every aspect of a modern vehicle is plugged in to a central system, allowing a wealth of data to be gathered and providing essential information for developers of in-car or Internet automobile applications.

For example:

Transportation companies can improve customer service, drive down costs and increase product security and quality control by providing fleet managers with real-time information on routing/tracking, fuel consumption, trailer temperature, door status and more. Axway API Gateway enables one of North America's leading logistics firms to remotely monitor its large fleets to ensure that its drivers are not driving for longer periods of time than are permitted.



- OEMs can combine data from all of the monitored systems on a vehicle (i.e. engine performance, traction control, breaking and steering) with GPS-specific weather conditions to help engineers improve performance and safety.
- Local traffic authorities can use vehicle GPS location data to provide real-time traffic condition information, allowing drivers to decide if they need to take an alternate route due to an accident or traffic congestion.
- Dealerships can monetize big data with a mobile app that alerts owners when their vehicles are in need of scheduled or immediate service and enables them to schedule an appointment with the nearest service center.
- Businesses can combine real-time GPS location data with owner demographics to provide special offers, like a discount on lunch at a favorite restaurant just around the corner.
- Auto insurance companies can tailor policies and rates based on driver habits for "usage-based insurance."



Axway API Server enables telematics solutions — including interactive safety systems and real-time collection and analysis of performance and tracking data — that are fuel innovation across the automotive value chain, from supply chain and fleet management to insurance adjustment and claims processing.

