The Ayla Agile IoT Platform

The Ayla Agile IoT Platform is a complete solution for OEMs to transform existing devices into cloud-connected devices with full remote control, management and provisioning features. By providing an end-to-end solution, the Ayla Agile IoT Platform removes the need for OEMs to invest in networking stack development, cloud infrastructure and testing in order to bring connected products to market. Easily scaling to deployments of millions of devices, the Ayla Agile IoT Platform is the ideal solution for bringing products into the Internet age.

The Ayla Agile IoT Platform provides an easy-to-use provisioning mechanism for end customers to connect their devices to the Internet. Able to operate with any NAT firewall, the Ayla Agile IoT Platform provides two-way communication between an Ayla-enabled device and a smartphone, tablet, and or a web browser application. All communications are fully encrypted using SSL, and a public/private key infrastructure guarantees that only authorized users are able to access an Ayla-enabled device. OAuth authentication allows users to sign in to access their devices using their Google or Facebook accounts.

The Ayla Agile IoT Platform offers a full suite of services including location-based services, weather feeds, utility cost feeds and more. With these services, Ayla-enabled devices can become aware of and react to the external environment. Over-the-air upgrade capabilities allow new behaviors to be defined and uploaded to Ayla-enabled devices in the field. And RESTful APIs enable Ayla-enabled devices to be managed and controlled by trusted third party applications.

Features

- End-to-end platform eliminates unnecessary development and testing cycles for fastest time-to-market
- Easy device-side configuration and connection to the network without a user interface
- Platform service architecture efficiently scales from tens to millions of devices under control
- Simple device-side drivers and APIs work with any microcontroller and enable cloud-control to be added to legacy products
- Ayla Application Libraries (AAL) provide templates for smartphone control apps (iOS, Android)
- LAN Connect™ ensures devices can be controlled even when Internet access is unavailable
- Certificate-based security and 128-bit encrypted SSL tunnels
- OAuth-based user authentication
- Support for third-party services and data mining applications
- Configurable messaging and alerts (SMS, email, push notifications)
- Over-the-Air (OTA) firmware upgrades
- Analytics package that helps OEMs better understand consumer behavior
Ayla Cloud Services

Ayla Cloud Services (ACS) is the heart of the Ayla Agile IoT Platform. The distributed cloud architecture of ACS makes it fault-tolerant and enables pay-as-you-grow scalability. ACS manages user registration, device provisioning, control and notifications, and provides logging and analytics services as well as access to external data feeds.

Ayla Embedded Agents

Ayla Embedded Agents run on IoT devices or IoT device gateways. They incorporate a fully-optimized networking stack along with additional protocols to connect devices to Ayla Cloud Services. Developers using nearly any microcontroller can choose to use Ayla-enabled connectivity modules, which provide cloud connectivity while shortening the arduous software quality-assurance and hardware verification cycles typically required for designs based on standard off-the-shelf connectivity modules. Likewise, developers with designs using Linux or other operating systems can integrate Ayla Embedded Agents into their designs to enable cloud capabilities over any type of networking media.

Ayla Application Libraries

Ayla Application Libraries (AAL) contain the necessary APIs to implement a smartphone or tablet application to control an Ayla-enabled device, as well as template applications that can be used as an implementation reference. AAL supports both iOS and Android devices.

Design Support Kits

Design support kits are available to allow designers to test drive the Ayla Agile IoT Platform. In just a few hours, a designer can register, set up and control parameters remotely, and start prototyping their cloud-connected devices.

About Us

Ayla Networks is a leader in software and solutions that enable the Internet of Everything. Based on the premise that any device should be accessible from any location, the company has developed an end-to-end platform that allows any device to be managed remotely. Headquartered in Sunnyvale, Calif., the company has partnered with major electronics manufacturers, leading venture capital firms and investors who share this vision.

For more information, contact Ayla Networks at www.aylanetworks.com.