

INTEL INSIDE® SMART IOT STANDARDS OUTSIDE

ARDIC IoT Ignite*: HTML5-powered IoT platform

The HTML5 standards recommendation from the main international standards organization, the World Wide Web Consortium (W3C)¹, was a major milestone and a significant achievement for Web-based platforms and services. This recommendation rectifies the previously inadequately addressed Web applications, confirms that the defined standards have reached the required maturity after extensive reviews and testing, and indicates the readiness for mass deployment.

The first new HTML standard to reach this stage since 2000 has been used by Web developers for a number of years to build responsive and content-rich applications that are suited for cross-platform and mobile device use. The ecosystem for the Internet of Things (IoT)—millions of interconnected and embedded devices which generate data at an astonishing rate—predicted to be used in applications that can improve our golf swings, monitor our vital signs, or manage the traffic in our cities, can now use the power of HTML5².

“There isn’t any question about the adaption of HTML5. It’s already the de facto standard.”

Janel Garvin, CEO, Evans Data – a market research firm that found 75 percent of developers are supporting HTML5³.

ARDIC IoT Ignite and Intel® IoT Gateways

ARDIC’S reliable, scalable and distributed IoT platform, ARDIC IoT Ignite*, comes with a rich feature set including HTML5 support, multi-tenancy, secure end-to-end network connectivity, usage statistics, mediation, and complex event processing.

Intel® IoT Gateways enable the IoT services and applications to the clients within a variety of market segments by connecting edge devices—including mobile devices, sensors, and actuators—to the ARDIC IoT Ignite platform.

The three major pillars of the ARDIC IoT Ignite platform are:

- **CO⁵: connect, configure, collect, control, and compute**
ARDIC IoT Ignite APIs enable service providers to easily connect, configure, manage, and monitor the edge devices within their network. Data collection, access, and analysis are provided via a secure and distributed platform.
- **Rich user interface and experience**
ARDIC IoT Ignite facilitates the use of HTML5-based technologies with a rich user interface and experience for both sides of the IoT ecosystem, the clients, and the service providers.

- **Ease of integration**

Different entities, including third parties, can easily be integrated and become part of the ARDIC IoT Ignite ecosystem.

Figure 1 shows ARDIC IoT Ignite platform components, its pillar services, and HTML5 integration.

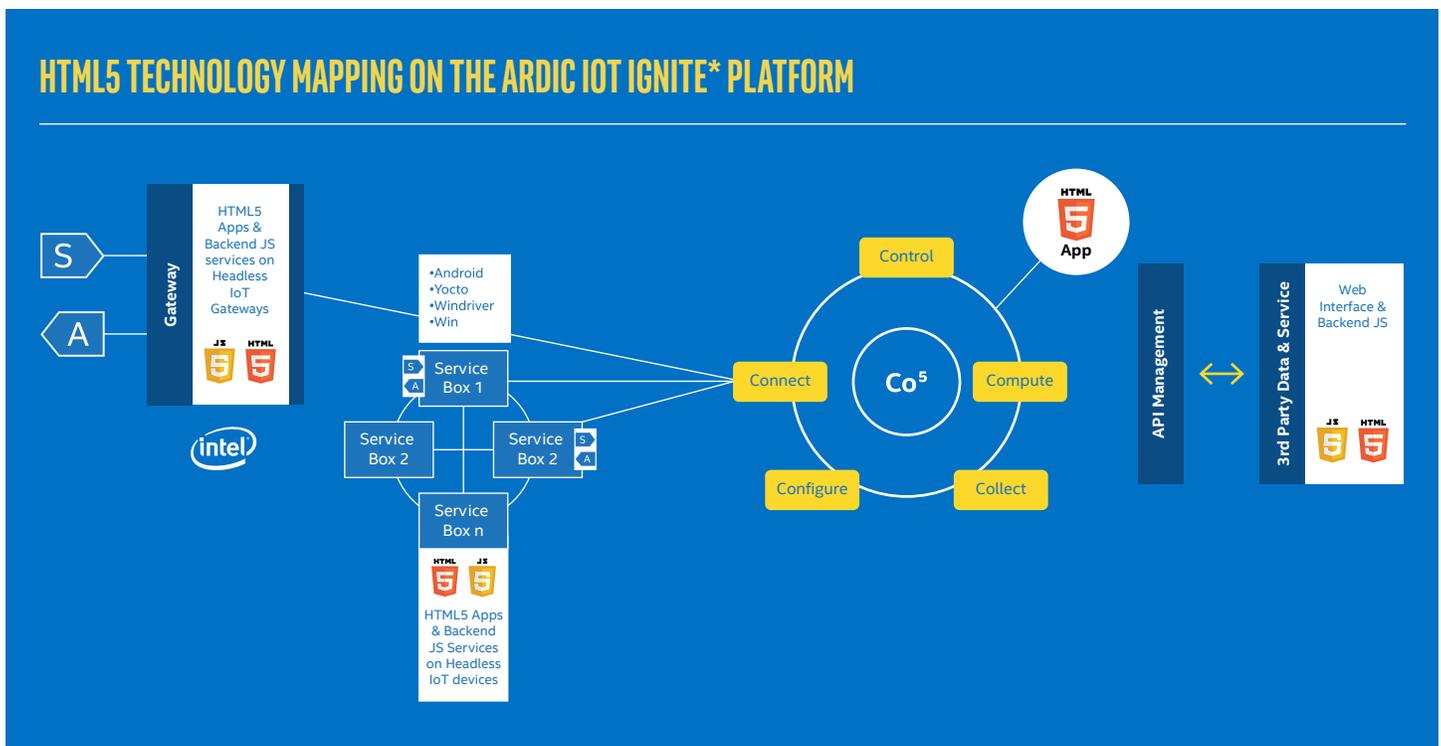


Figure 1: ARDIC IoT Ignite Platform and HTML5 Support

Clients and service providers

The ARDIC IoT Ignite platform provides an end-to-end solution set for both sides of the IoT eco-system, the clients and the service providers.

On the client side, the edge devices, sensors, and actuators can be connected via either a direct or gateway-based connection. While direct connectivity provides an easy interface to ARDIC IoT Ignite's rich feature set, gateway connectivity provides the same technology and services at the nearest point to a client. Some of the ARDIC IoT Ignite functions for a client are:

- WebSocket, HTTP/S, TCP, UDP, XMPP, and ARCSXP
- HTML5 runtime for HTML5 applications (with or without UI)

- Common JS libraries support (Node.JS*, Angular*, and Meteor*)
- Complex event processing and data aggregation for HTML5 applications
- JS-based peripheral (USB, serial, Bluetooth, and Wi-Fi devices) APIs
- HTML5 application store
- HTML5 compliant IPC for HTML5 applications

The ARDIC IoT Ignite platform enriches service providers' capabilities. Its extensive APIs offer easy access to the ArCloud*-based rich feature set while providing customer data isolation; security between services, applications, and edge devices; and statistics and monetization for customer usage. Service providers have the opportunity for wide deployment and benefit from these services, including:

- Multi-tenancy support for single tenant services
- ARDIC IoT Ignite CO5 APIs for edge management
- Secure communication between services and applications
- API management and monetization
- Big data computing APIs
- HTML5-based Web services and Web interfaces

Learn more about Intel and the Internet of Things [here](#).

Learn more about ARDIC IoT Ignite Services [here](#).

Intel technologies' features and benefits depend on system configuration and may require enabled hardware, software or service activation. Performance varies depending on system configuration. Check with your system manufacturer or retailer or learn more at www.intel.com

¹www.w3.org/TR/html5/

²www.intermec.com/public-files/white-papers/en/wp-HTML5-mobile-enterprise-applications.pdf

³www.gaditek.com/blog/the-state-of-html5-today-tomorrow/

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