Simplifying the Internet of Things
## Intel® Intelligent Systems Framework

Intel (logo)

Intelligent Systems

The rise of machine-to-machine communication—the Internet of Things

The world is in the midst of a dramatic shift from an era of computers to one of computing. Today, billions of devices are poised to make more than a trillion connections, and in the process, generate enormous volumes of data. A huge portion of the growth of "Big Data" comes from intelligent systems—machines that communicate with each other directly and through the cloud and make up what is frequently called the Internet of Things.

Analyst firm IDC predicts that by 2015 more than a third of the billions of connected devices will be intelligent systems—a market representing 4 billion units and more than $2 trillion in potential revenue.[1] In addition, there is immense value to be extracted from data from the Internet of Things. Harnessing and combining both machine-generated and user-created data holds the potential to improve lives, spur incredible advances in productivity, and create new, industry-shifting services.
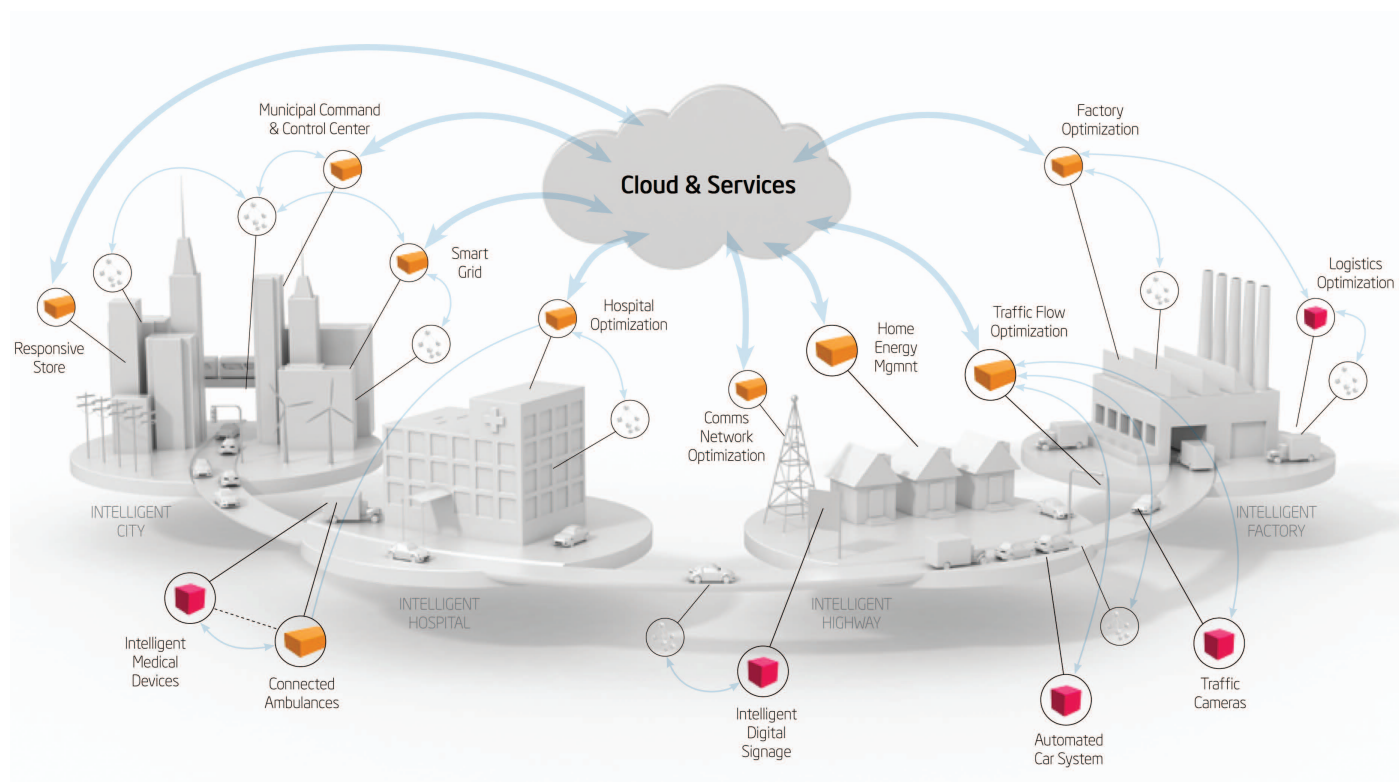
Discovering the value in Big Data

The ultimate potential of the Internet of Things will be realized with the ability to derive value from data captured at every step in the system—from sensor controllers to edge gateways to cloud to client. To capitalize on this opportunity, enterprises require tools, technologies, and platforms able to convert the massive volumes of data into value-added information and integrate the multitudes of disparate systems in a common, scalable way.

Intel® Intelligent Systems Framework

Intel is driving to simplify the deployment of the Internet of Things and empower customers to extract greater value from their data. To that end, Intel has introduced the Intel Intelligent Systems Framework, a set of interoperable solutions designed to address connecting, managing, and securing devices in a consistent and scalable manner.

The Intelligent Systems Framework enables OEMs to shift their investments from achieving interoperability to unlocking the value of data. The framework features fundamental capabilities, delivered by components from Intel and ecosystem partners, that address connectivity, manageability, and security including software and middleware from Wind River and McAfee. Intel processors supported in the framework include Intel® Xeon® processors, 2nd and 3rd Generation Intel® Core™ processors with Intel® vPro™ technology, and Intel® Atom™ processors.

Ecosystem support

Intel is also assembling an ecosystem of system vendors, ISVs, system integrators, and cloud-to-device services that build upon this framework with interoperable solutions that reduce fragmentation and speed time to market. This ecosystem will work closely with the Open Data Center Alliance to ensure seamless integration of intelligent systems with the data center and cloud.

INTEL® INTELLIGENT SYSTEMS FRAMEWORK

- A consistent framework for connectivity, security, and manageability

- Provides flexible recipes utilizing scalable, off-the-shelf elements

- Enables vertical specialization

- Shifts resource investment from interoperability to extracting value from data

Advancing the Internet of Things

Intel has a long history of supporting scalable technologies and ecosystems that drive transformations in computing—from PCs to the Internet to the data center. Intel is now focusing its robust ecosystem, research and development, and portfolio of silicon and technologies on enabling businesses and consumers to benefit from the Internet of Things and the emerging intelligent systems economy.

Learn more: **Intel.com/intelligentsystemsframework**

Integrated solutions of the Intel® Intelligent Systems Framework

Connectivity	Manageability	Security
Multiple protocol ▪ Wired ▪ Wireless ▪ Mobile ▪ Local	**Reliability** ▪ Improved system uptime ▪ Out-of-band detect, diagnose, and repair ▪ Device management	**Platform protection** ▪ BIOS and firmware ▪ Platform hardware ▪ System reliability
Simple integration with Intel® solutions ▪ Combine X-Intel ▪ Components	**Efficiency** ▪ Remote power management ▪ Off-peak maintenance ▪ Inventory and asset management	**Software protection** ▪ Operating system ▪ Applications ▪ Pre-OS
Flexible combinations ▪ Easy integration	**Hardening** ▪ McAfee integration ▪ Compliance management	**Data protection** ▪ System/App Data