

EdgeX Foundry Project Wiki



Getting Started with EdgeX

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This Wiki is owned by the EdgeX Community. Contributions are always welcomed to help make it better!

In upper right, select Log In. You will need a Linux Foundation Account (can be created at <http://myprofile.linuxfoundation.org/>) to log-in. For a Wiki tutorial, please see [Confluence Overview](#). Thank you!



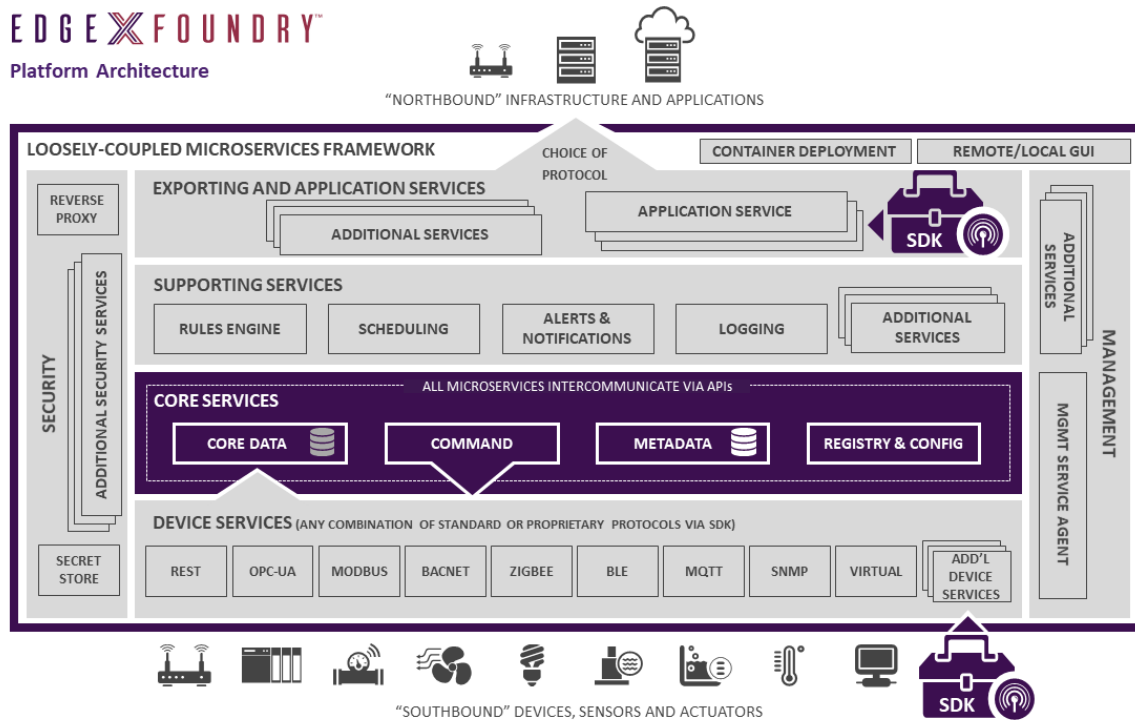
The open interop platform for the IoT edge.

LF Edge Stage 3 (Impact Stage) Project

EdgeX Foundry is an impact stage project under the [LF Edge](#) umbrella project. LF Edge aims to establish an open, interoperable framework for edge computing independent of hardware, silicon, cloud, or operating system. [Stage 3 projects](#) in LF Edge are those that have reached their growth goals and are now on a self-sustaining cycle of development, maintenance, and long-term support.

Introducing EdgeX Foundry

The vendor-neutral [EdgeX Foundry Project](#) has been launched under the Linux Foundation. The initiative is aligned around a common goal: the simplification and standardization of the foundation for edge computing architectures in the Industrial IoT market, while still allowing the ecosystem to add significant value. The seed for the new project is a fully-functional, Alpha-grade edge platform based on over 125,000 lines of code donated by Dell with references to other open source projects and developed with feedback from their partners, customers, and even competitors. The EdgeX project has already garnered a diverse and experienced membership base of supporting companies that is continuing the development of the architecture and code base.



Key tenets for the EdgeX Foundry Project include:

- Provide a flexible microservices architecture that can support the use of any combination of heterogeneous ingredients plugged into a common interoperability foundation
- Be agnostic to hardware CPU (e.g., x86, ARM), OS (e.g., Linux, Windows, Mac OS), and application environment (e.g., Java, JavaScript, Python, Go Lang, C/C++) to support customer preferences for differentiation
- Allow services to scale up and down based on device capability and use case
- Enable support for any combination of device interfaces to normalize connectivity protocols (both existing standards and proprietary) into a common API
- Allow functionality to be distributed across multiple edge hardware nodes or across processors within a given node
- Enable reference microservices (e.g., northbound message bus, rules engine, database) to be quickly replaced with a preferred open source or proprietary alternative
- Support best-in-class industrial-grade security, manageability, performance, and reliability while still maintaining extensibility
- Support drop-in replacements of microservices or entire subsections with more performant versions without requiring architectural changes (e.g., enabling a developer to replace a Java-based microservice with one written in Go Lang while not having to replace the entire solution)
- Allow for additional community improvements that enable performance metrics (e.g., to support hard real-time operation)

Developer Resources

See below to begin participating in the next wave of edge computing!

- How to Get Started: <https://www.edgexfoundry.org/community/#HowToGetStarted>
- Attend an upcoming Tech Talk (learning session): [EdgeX Tech Talks](#)
- Access the Code: <https://github.com/edgexfoundry>
- Join the Discussion on Slack: <https://slack.edgexfoundry.org/>
- Participate on EdgeX Foundry Mailing Lists: <https://lists.edgexfoundry.org/g/main>
- Follow us on Twitter: <https://twitter.com/EdgeXFoundry>
- Connect with us on LinkedIn: <https://www.linkedin.com/company/edgexfoundry/>
- Become a Member of LF Edge: <https://www.lfedge.org/members/join/>
- Contact us for more information: <https://www.lfedge.org/about/contact-us/>

Other Resources

- [Confluence Overview](#)
- The full Confluence User's Guide can be read here: <https://confluence.atlassian.com/doc/confluence-user-s-guide-139509.html>

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