EdgeX Tech Talks

EdgeX Foundry community members have provided a series of Tech Talks / Educational Spin Up Calls. Hosts have included Jim White, James Butcher, Lenny Goodell and many others. See the full list of recordings below.

- Calls are recorded and posted to this Wiki page (along with any presentation material)

Additional resources to learn more

- EdgeX Foundry Slack: https://join.slack.com/t/edgexfoundry/shared_invite/enQtNDgyODM5ODUyODY0LWVhY2VmOTcyOWY2NjZhOWJjOGI1YzQ2NzYzZmIxYzAzN2IzYzY0NTVmMWZhZjNkMjVmODNiZGZmYTkzZDE3MTA
- EdgeX Foundry Mail Lists: https://lists.edgexfoundry.org/g/main/subgroups

Future Tech Talks will be added over time

- Be sure to subscribe to the TSC mail list, where calls will be announced
- You may also email info@edgexfoundry.org to be added directly to meeting invitations for upcoming talks

Recorded Sessions

EdgeX is a constantly evolving platform. As such, some content contained in these video tutorials might have changed since being recorded. Please refer to the relevant Wiki pages for updates to various elements of EdgeX.

- **2022 Talk Talk Series**
  - May 31, Getting Started with EdgeX - how to start your journey using EdgeX Foundry for your IoT/edge solutions
    - Jim White (IOTech)
    - Presentation Deck
    - Session Recording
    - YouTube Link
  - June 7, Build an Application Service - learn how to build a custom EdgeX application service using the EdgeX application functions SDK. Application services help get edge data to your enterprise applications, databases, cloud systems, etc.
    - Lenny Goodell (Intel)
    - Presentation Deck
    - Session Recording
    - YouTube Link
  - June 14, Build a Device Service - learn how to build a custom EdgeX device service using EdgeX device service SDKs. Device services allow you to connect all sorts of devices and sensors to EdgeX.
    - Jim White (IOTech)
    - Presentation Deck
    - Example Code (in a zip file)
    - Session Recording
    - YouTube Link
  - June 21, Building a Device Profile - Device Profiles define sensors and devices for EdgeX. Learning to write a device profile allows you to connect new sensors or devices to EdgeX with code
    - James Butcher (IOTech)
    - Presentation Deck
    - Example Config (in a zip file)
    - Session Recording
    - YouTube Link
  - June 28, Getting Started with EdgeX Foundry Snaps - Getting started with Snaps presented by Canonical. Learn how to deploy and orchestrate EdgeX with snaps
    - by Farshid Tavakolizadeh and David Beamonte (Canonical)
    - Presentation Deck
    - Session Recording
    - YouTube Link

- **EdgeX Foundry Community DevKit** (James Butcher)
  - **When:** February 1, 2019 (15:00 Presentation Deck/ 10am EST / 7am PST)
  - **Slide Deck:** TechTalk12-EdgeX DevKits.pdf
  - **Node Red workflow:** SmartFactoryFlows.json
  - **Recording:** https://www.youtube.com/watch?v=mNGQMV4Pcn0
- **EdgeX Foundry Snap packge** (Ian Johnson)
  - **When:** January 18, 2019 (15:00 UTC / 10am EST / 7am PST)
  - **Slide Deck:** EdgeX Foundry Snap Package.pdf
  - **Recording:** https://zoom.us/recording/share/DuNIdPghn19O7LJQ-W8FK8qrrmtvaHzhsWoqAwty-0mwIumekTziMw
- January 11, 2019 (10am EST) **Device Profiles Q&A** (Tyler Cox)
  - **Recording:** https://zoom.us/recording/share/z0IxsMZJOs9e8ClxBlMxRSwz1gv31Ua0tugK1d2_SLuwIumekTziMw
  - **Document:** https://docs.google.com/document/d/1OdEEU2q82jJ3NIWdQF6QdYN6Qwfe-e6TAOIP7u_Fxwc/
- September 18, 2018 (18:30 UTC / 2:30pm EDT / 11:30am PDT) **Walking through the EdgeX APIs** (Jim White)
  - **Recording:** https://zoom.us/recording/share/EXe3CJc-A6H3oTV6LS9d1L6_ORQcveyKEZ1L5B1kX8-wIumekTziMw

- September 4, 2018 (2:30pm EDT/11:30am PDT) **Getting setup with EdgeX Foundry** (Jim White)
  - **Recording**: https://zoom.us/recording/share/L8ifopQTGLfukYtKCOqPANbDYEJNPPj5-OK-7IKdWASwIumekTziMw
  - **Slide deck:** 2018 Tech Talk Series-UsersGettingStarted.pdf

- May 31, 2018 (7am PDT): **Creating and Updating EdgeX Documentation** (Slides; Meeting Recording)
  - Training for all EdgeX Contributors who may have to create or update EdgeX product documentation

- September 14, 2017 (9am EDT): **Device Service SDK Deep Dive** (Slides(PPTX); Meeting Recording)
  - Generating a Device Service
    - Service Configuration File
  - Generated DS Components
    - Features
    - Service Coverage
  - Developer Implementation
  - Device Profile Recap
  - Further References
  - Upcoming Tech Talks
  - Q&A

- September 7, 2017 (6pm EDT): **Logging Service** (Slides(PPTX); Meeting Recording)
  - What and Why a Logging Microservice?
  - Logging Service Technology
    - Spring/Java core
    - Logback Wrapped
    - Persistence options
    - Basics of how it works
  - Adding Logging to your microservice
    - Configuration
    - Logging objects
  - REST API
    - Adding log entries
    - Query the logs
  - Upcoming Tech Talks
  - Q&A

- August 24, 2017 (6pm EDT): **Export Services** (Slides (PPTX); Meeting Recording)
  - Export Services = Export Client Registration and Export Distribution microservices
    - With connectors to rules engine, analytics, etc.
  - Export Services Technology
    - Basics of how it works
    - Web application with a Spring Integration application
  - Export Client
    - Client Registration Data Model
    - Export Client API
  - Export Distribution
    - EAI model and design patterns
    - Message copy, filter, transformation, etc.
    - Potential extension points
  - Demos
  - Export Services Barcelona MVP changes
  - Configuration Settings
  - Upcoming Tech Talks
  - Q&A

- August 17, 2017 (9am EDT): **Configuration and Registry (C&R) Micro Service** (Slides (PPTX); Meeting Recording)
  - C&R's general purposes
  - C&R's makeup - Consul and additions
    - Config Seed
    - Config Watchers
  - Integration with other micro services
    - How micro services bootstrap with C&R
    - Configuration in micro services
    - Default settings in development versus deployment (docker)
  - Configuration data organization and naming conventions
    - key/value pairs
    - association to microservice id namespace
    - profiles
  - Consul Web Interface
  - Registry and service health
  - Dynamic reloading of config data
    - Watchers
  - Future Considerations and additions
    - registry
    - more with watchers
    - Consul or ? (Consul's architecture)

- August 10, 2017 (6pm EDT): **Command Micro Service** (Slides (PPTX); Demo API Walk Through shown in the talk; Meeting Recording)
  - Command general purpose
    - Why a command micro service

    - Command makeup - including technologies/libraries/tools/etc.
    - REST API outline
        - Command's API relationship to the Device Profile
    - Configuration settings
    - Quick update on ongoing project work

- August 3, 2017 (9am EDT): **Meta Data Micro Service Part 2** (Slides (PPTX); Meeting Recording)
    - Meta Data Profile Details
        - Commands
        - Resources
        - Device Resources
    - Provisioning from a Meta Data perspective
    - Provisioning from a Device Service perspective

- July 27, 2017 (6pm EDT): **Meta Data Micro Service Part 1** (Slides (PPTX); Meeting Recording)
    - Meta Data's general purpose
    - Meta Data's makeup
    - REST API outline
    - Meta Data object model
        - Device, Device Service
        - Addressable
    - Some important configuration settings
    - Meta Data Part 2 (in upcoming call, will cover Device Profile and Provisioning)

- July 20, 2017 (9am EDT) - Meeting canceled (EdgeX MVP meeting)

- July 13, 2017 (6pm EDT): **Core Data Micro Service - Deep(er) Dive** (Slides (PPTX); Meeting Recording)
    - Core Data's general purpose
    - Core Data's makeup – including technologies/libraries/tools used in Core Data
    - REST API outline (categorizing the APIs by purpose)
    - Core Data object model
        - Event's and Readings
        - Value Descriptors - what are they and how they are used in EdgeX
    - Some important configuration settings
        - Metadata check
        - Persistence via Mongo
        - "streamed" option
        - Message push to export services and/or rules engine

- July 6, 2017 (9am EDT): **Getting and Running EdgeX Docker Containers** (Slides (PPTX); Meeting Recording)
    - Where to get the EdgeX Foundry micro service Docker Containers
    - Using Docker Compose to get the EdgeX Containers
    - Running the EdgeX containers
    - How to use EdgeX containers in development (hybrid native and Docker development)
    - Eventual container build process
    - Open Q&A

- June 29, 2017 (9am EDT): **Getting set up as an EdgeX developer** (Slides (PPTX); Meeting Recording)

    - What you need to start working with the existing code
    - How to get and run the code in your environment
    - Explore how to test that what you have running is working correctly