# EdgeX Tech Talk Getting started with Snaps

June 2022



### Agenda







#### What are you learning today?

- What are snaps
- What is Ubuntu Core
- Why EdgeX as snaps on Ubuntu Core
- Getting started with EdgeX as snaps

What are we learning today?

Q&A + Feedback

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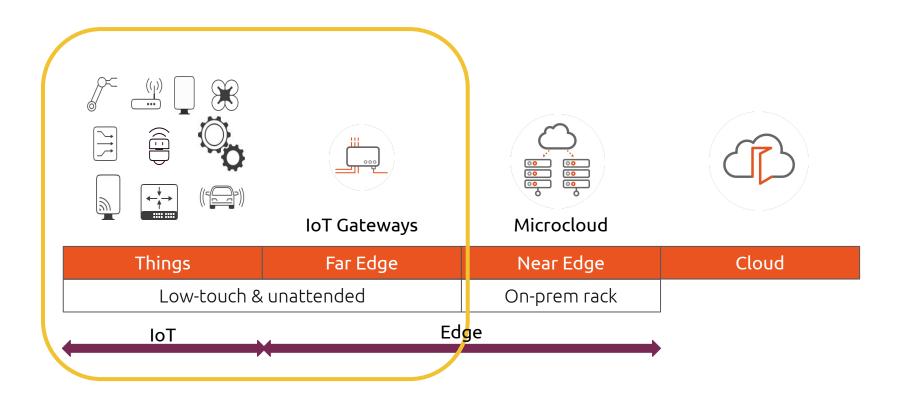
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Why is it so hard to have a successful IoT and Edge device?

### Where is the Edge?



Trusting a reliable and secure underlying framework

For the whole (long) life of their devices on the field

Developers and manufacturers just want to focus on their application

#### Key challenges in IoT and Edge



Time To Market & Development Cost

85% of IoT initiatives not launched after a year of development



Technology Talent
Shortage

45% of IoT initiatives are struggling to meet requirements



Unattended & reliable hardware

Unplanned OpEx ruin 40% of the IoT projects



Meeting Security
Requirements

77% of companies say IoT has created huge security gaps

#### More challenges to create edge devices



"Things" integration



Edge intelligence



Cloud agnostic



High Performance Low Latency



Modularity Scalability



Developer Friendly





## What is EdgeX Foundry?



#### EdgeX Foundry is a

highly flexible, scalable and vendor-neutral Open Source software framework

that facilitates interoperability between devices and applications

at the **IoT Edge** 

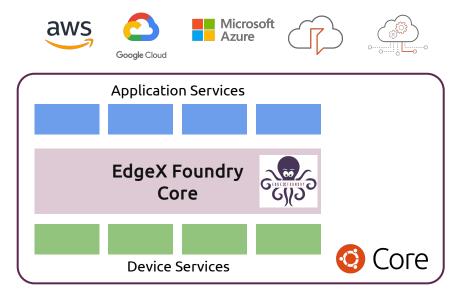






#### EdgeX is a middleware

























## What is Ubuntu Core?



## ubuntu<sup>®</sup> optimised for embedded devices



Lean Ubuntu



Fully containerised



Out-of-the-box security



Large ecosystem of applications



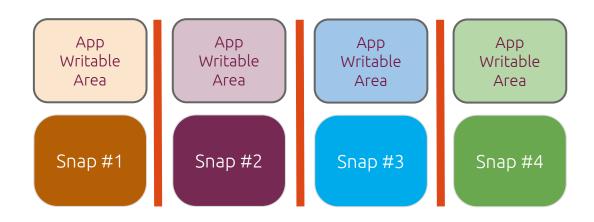
Bullet-proof updates



Certified



Snaps
Fully contained,
immutable
packages
for OS
and apps



Base snap (core22, core20, ..)

Kernel snap



#### As easy as Ubuntu Desktop





Develop and test your applications (snaps) with Ubuntu Desktop

Publish your applications to the Store





Deploy your applications on Ubuntu Core



Соге





# Why EdgeX as snaps on Ubuntu Core?

## EdgeX + Ubuntu Core





Develop easily high performance, modular, vendor-neutral edge applications



Focus on your edge application  $\Rightarrow$  Accelerate TTM



Security and reliability



Reduce operations & maintenance costs



Long Term support

A technical intro to EdgeX as snaps

## Walkthrough: EdgeX for Ambient Sensing

②

- 1. Setting up the platform
- 2. Setting up a device service to collect sensor data
- 3. Interacting with the APIs, visualizing sensors data
- 4. Creating an OS image preloaded with the above stack

Wrap



#### Recap



What Ubuntu Core and snaps are





Why EdgeX as snaps on Ubuntu Core





How to get started with EdgeX as snaps on Ubuntu Core



#### Coming soon





Thank you. Questions?



#### Further reading

#### EdgeX Foundry upstream documentation

- <u>EdgeX Foundry web page</u>
- Why EdgeX?
- Case studies
- Platform description
- Getting started with EdgeX Snaps

#### Other content

- Tutorial: <a href="https://ubuntu.com/tutorials/get-started-with-edgex-as-snaps">https://ubuntu.com/tutorials/get-started-with-edgex-as-snaps</a>
- Webinar: Running enterprise-grade edge applications with EdgeX on Ubuntu Core
- Canonical video in Adopter's Series