

sodaCON 2020

DATA CONNECTED

STATE OF THE OPEN DATA AUTONOMY

Steven Tan

SODA Foundation Chair

VP & CTO Cloud Solution – Storage, Futurewei

 stevenptan



#sodacon2020



PRESENTS

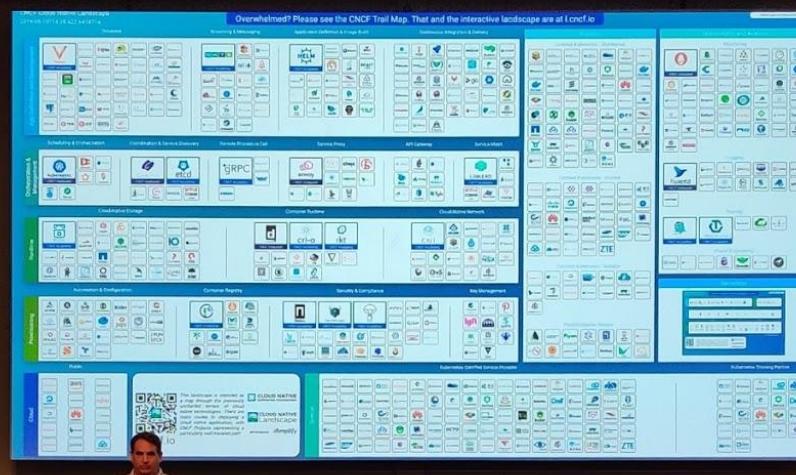
2020

DATA CONNECTED

sodacon 2020

#sodacon2020

REMEMBERING DAN



DAN KOHN 1972~2020

<https://www.linuxfoundation.org/in-memoriam-dan-koh>

n/ sodacon 2020

#sodacon2020



HOW WILL YOU REMEMBER 2020?

sodacon 2020

#sodacon2020



#sodacon2020



sodacon 2020

#sodacon2020



#sodacon2020



sodacon 2020

#sodacon2020



#sodacon2020



THERE IS ONE THING IN COMMON

sodacon 2020

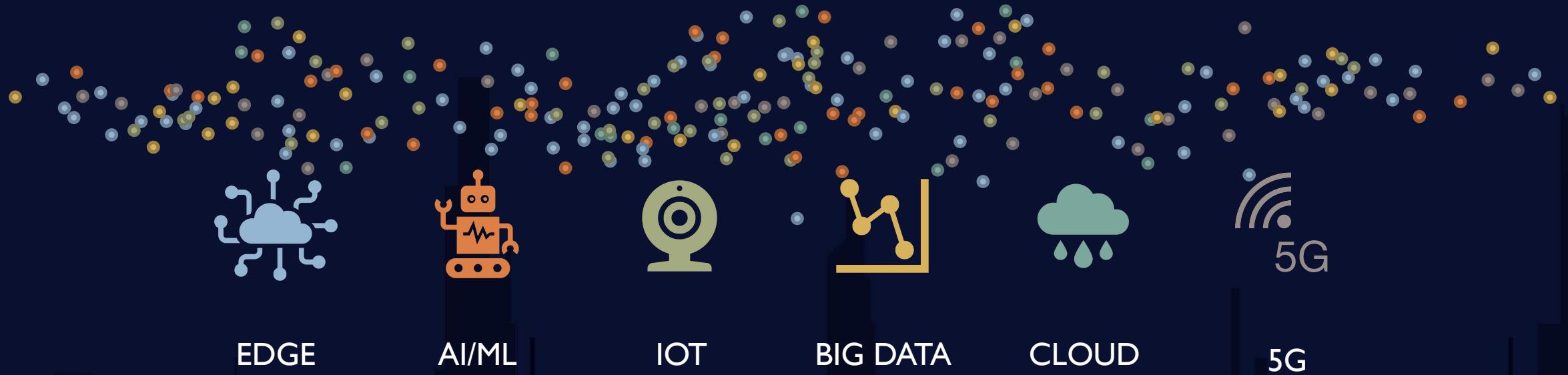
#sodacon2020

ALL ABOUT DATA

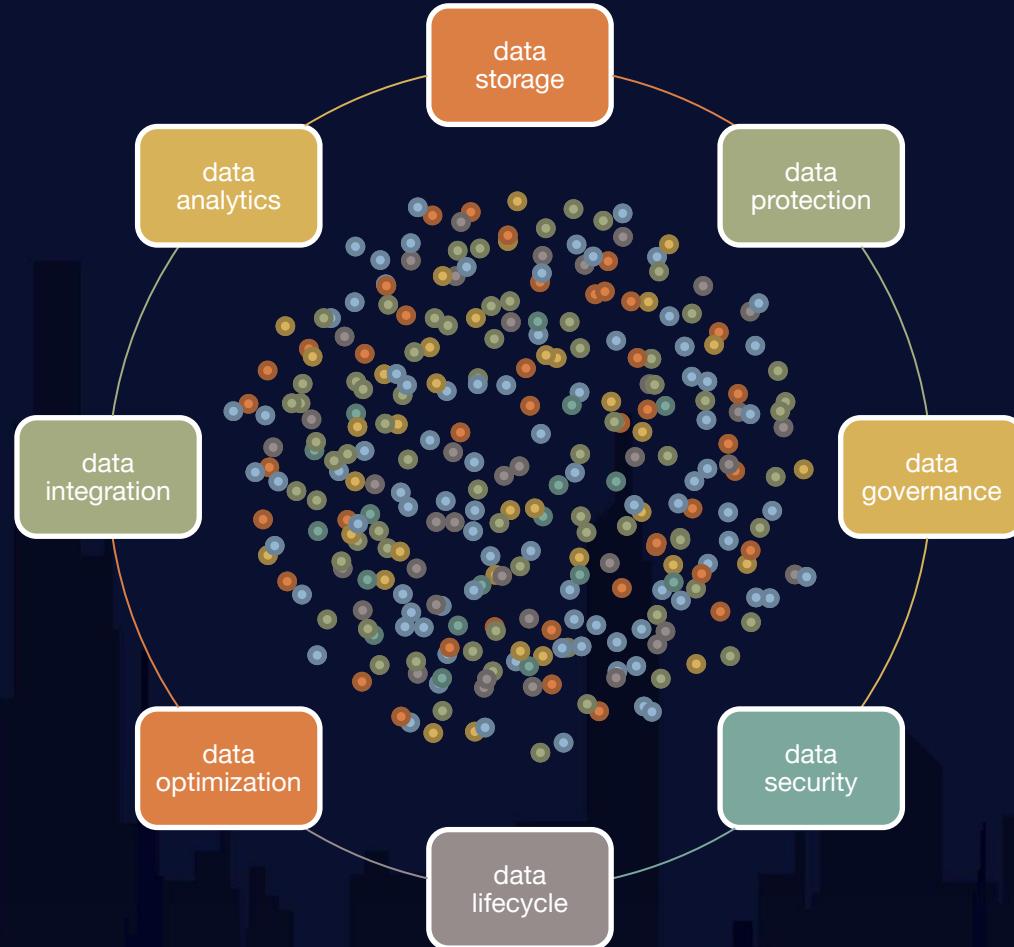
sodacon 2020

#sodacon2020

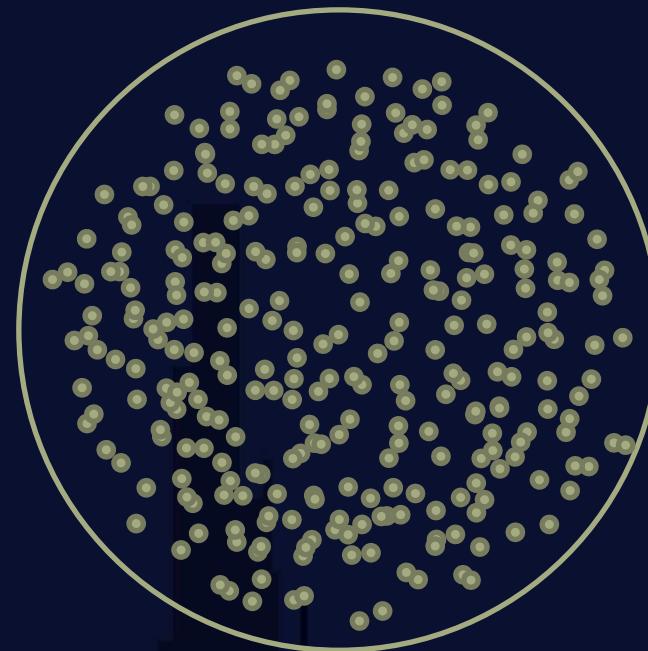
ENABLING TECHNOLOGIES



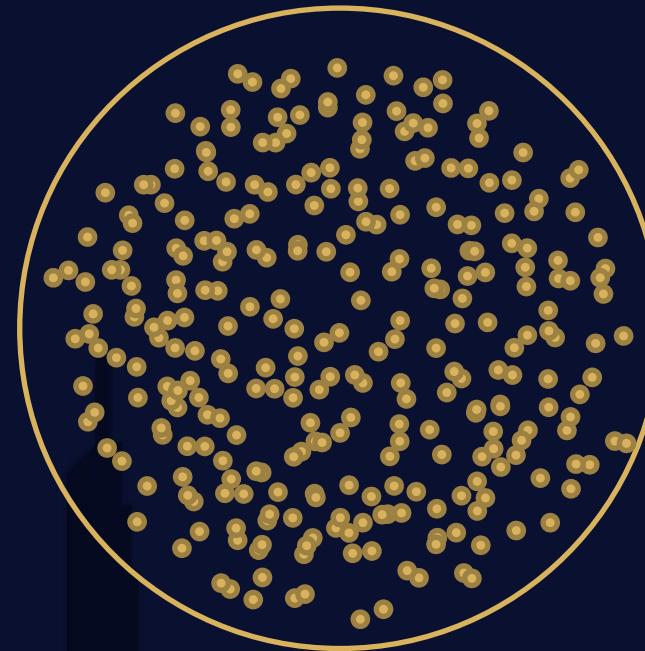
DATA CONTROL FRAMEWORK



PAIN POINT



vendor A

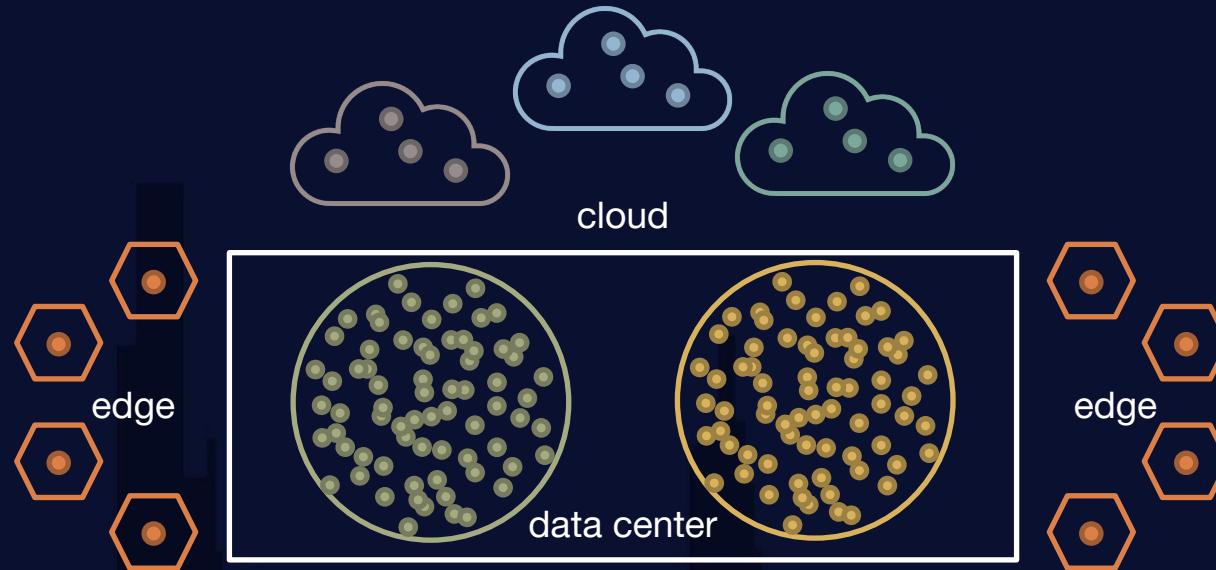


vendor B

vendor proprietary
not interoperable
data silos

proprietary frameworks increases management complexity

DEPLOYMENT CHALLENGES

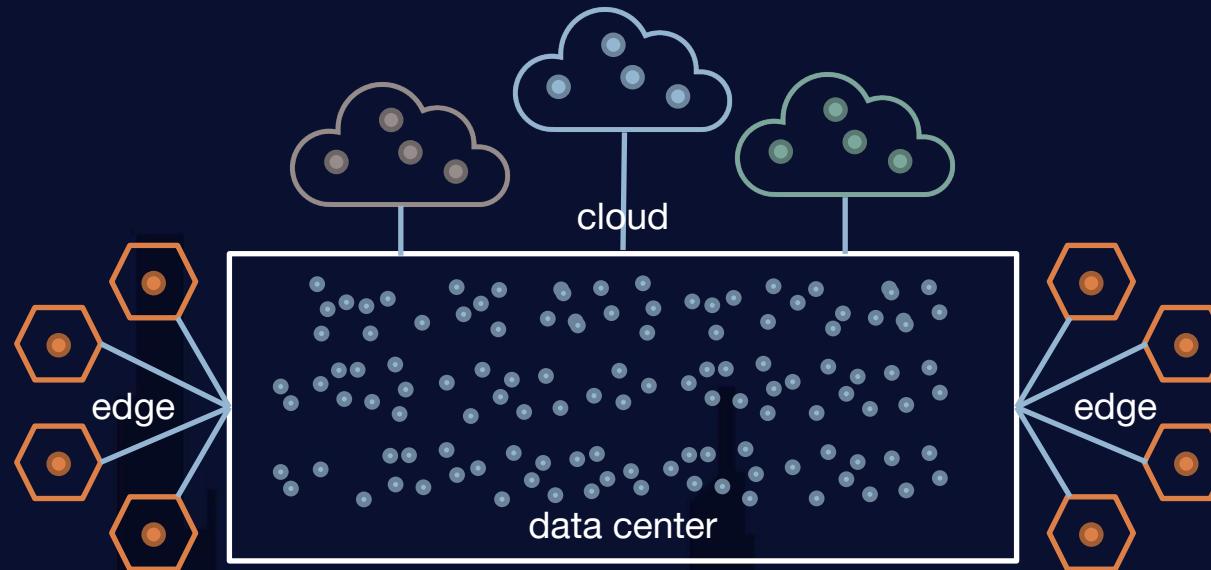


multiple frameworks
multiple data silos
complex management

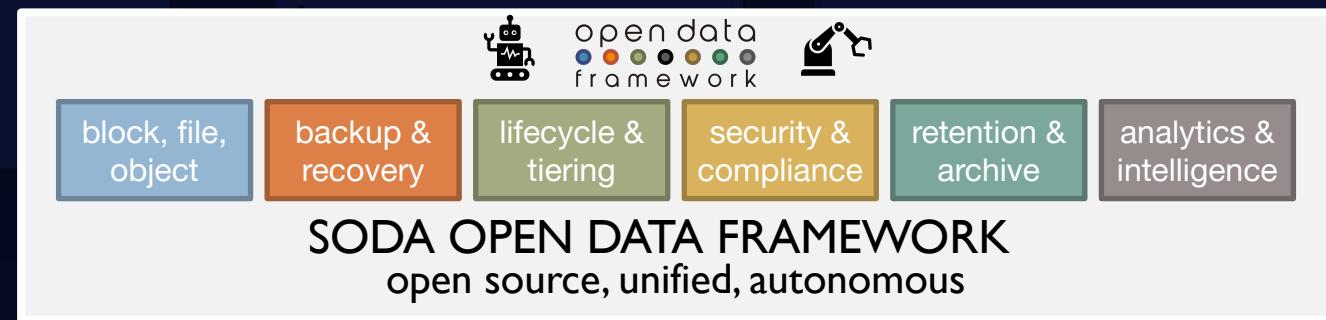
data center, cloud and edge adds to complexity

SOLUTION

unify frameworks with
standard data policies



simplify operations
through ML & automation



addressing challenges through open source innovation

HOW DO WE DO THAT ?

OPEN SOURCE OPEN STANDARD

sodacon 2020

#sodacon2020

OPEN SOURCE

open design, open development



<https://github.com/sodafoundation>

OPEN STANDARD

collaborate on open standards development

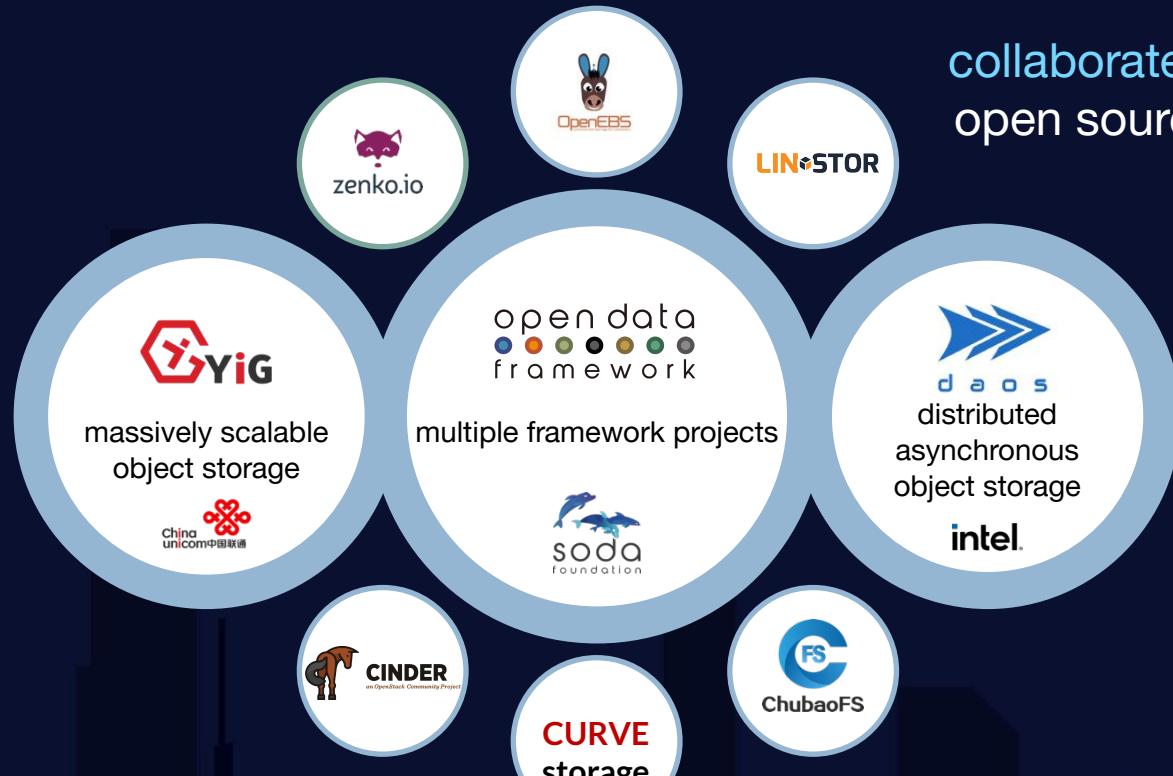


open data
framework

WHAT DEFINES SODA?

HOME FOR DATA & STORAGE PROJECTS

incubate & grow data
and storage projects



collaborate with other
open source projects

daos joins the
soda incubator

soda^{incubator}

<https://sodafoundation.io/incubator>
or

sodacon 2020

#sodacon2020

HOME FOR END USERS



Yuji Yazawa
Toyota Motor Corp



Cosimo Rossetti
Vodafone



Zhong Xin
China Unicom



Kei Kusunoki
NTT Communications



Tomoko Kondo
Softbank



Zhan Shu
China Construction Bank Fintech



Yusuke Sato
Yahoo! JAPAN



Wim Jacobs
KPN



Michiharu Nakazawa
Sakura Internet



Mitchitaka Terada
Internet Initiative Japan



Wei Rao
China Railway



Shinya Tsunematsu
GMO Pepabo

focus on needs of
users, big and small

address real world
issues together

END USER ADVISORY COMMITTEE

HOME FOR DEVELOPERS

sodaacademy



BOOTCAMP



INTERNSHIP



TRAINING



CERTIFICATES



BOUNTY

helping developers learn, grow, & lead

HOME FOR THE COMMUNITY



connecting people who are passionate about open source

sodacon 2020

#sodacon2020

HOME FOR COLLABORATION



working together to bring open source innovation



LAUNCHED
2020

sodacon 2020

#sodacon2020

SODA - HOME FOR DATA AND STORAGE

Anjaneya “Reddy” Chagam

SODA Foundation Board Member

Chief Architect SDS, Intel

HOME FOR DATA & STORAGE PROJECTS



soda**incubator**

<https://sodafoundation.io/incubator>
or

soda**con** 2020

#sodacon2020

STORAGE - DATA PLANE



ChubaoFS is a cloud-native storage platform that provides both POSIX-compliant and S3-compatible interfaces



DAOS: an open-source software-defined scale-out object store

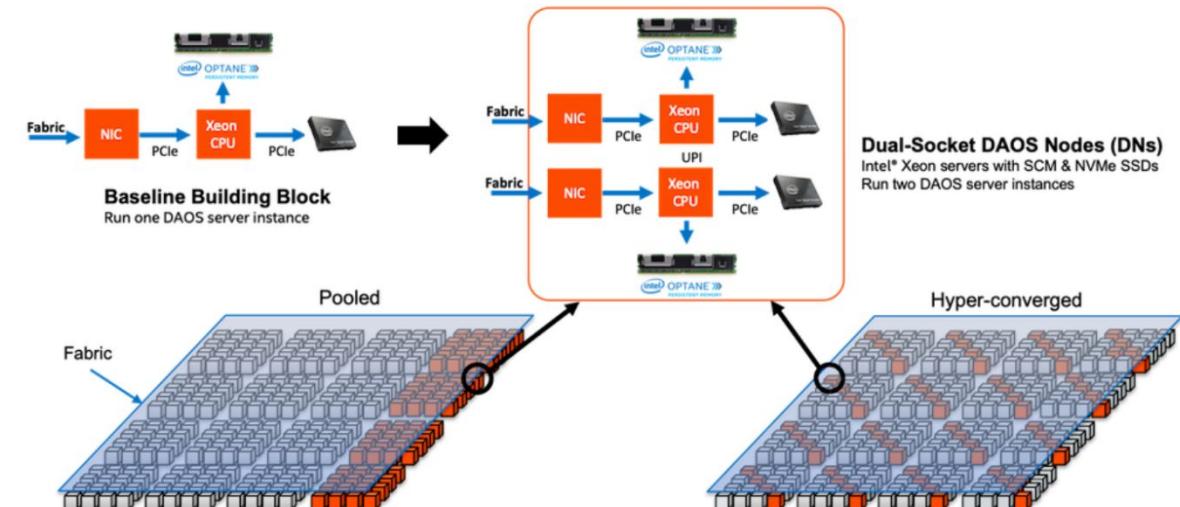
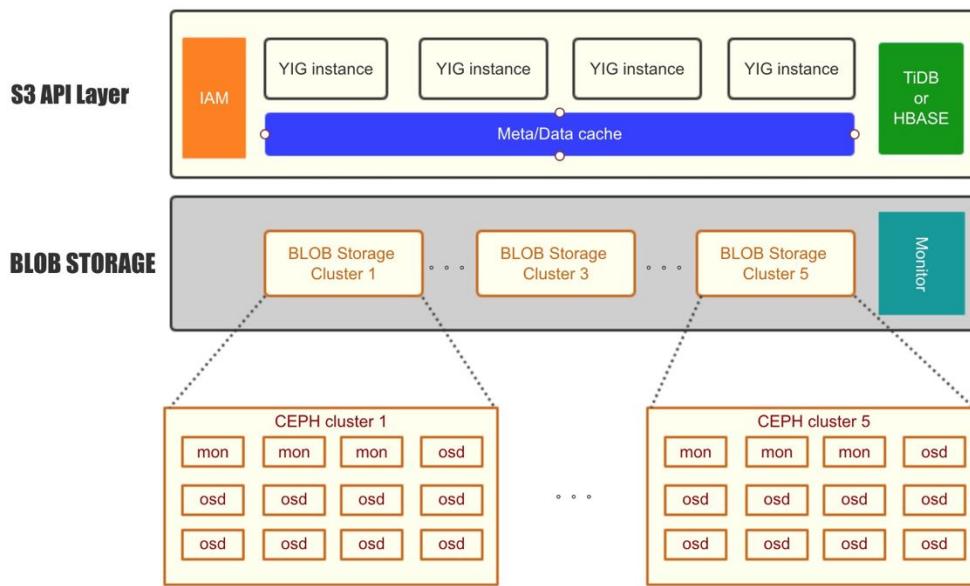


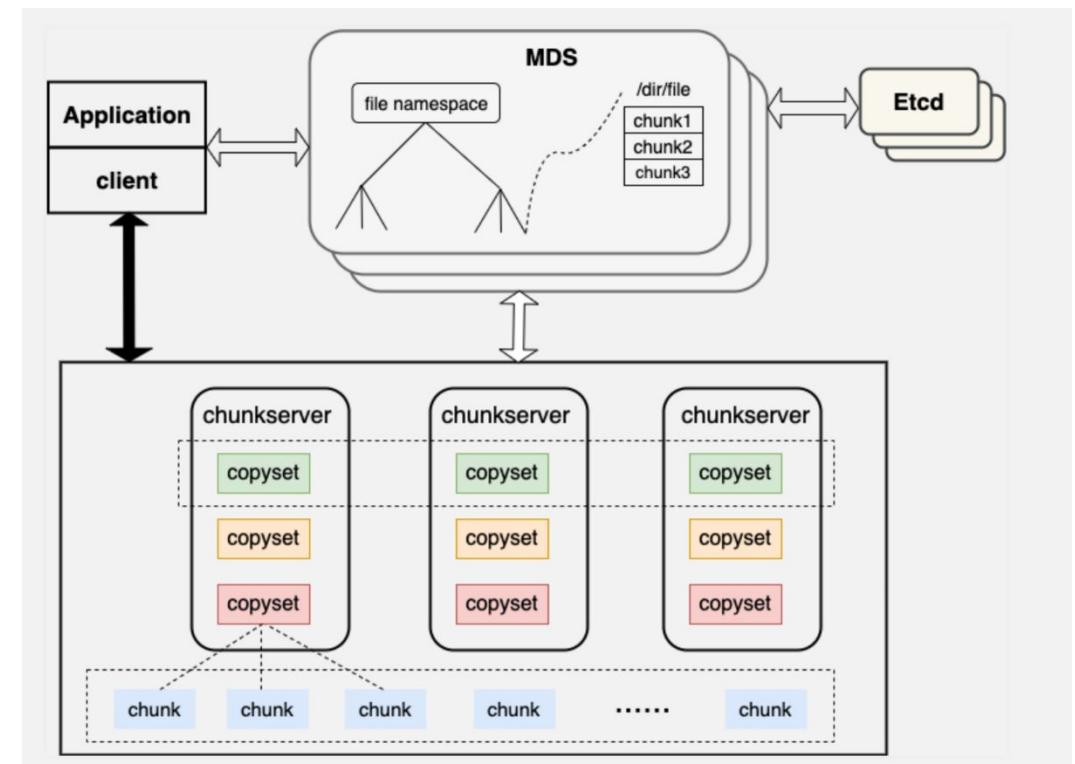
Figure 2-1. DAOS Storage

STORAGE - DATA PLANE

YIG: A completely new designed object storage gateway framework that fully compatible with Amazon S3

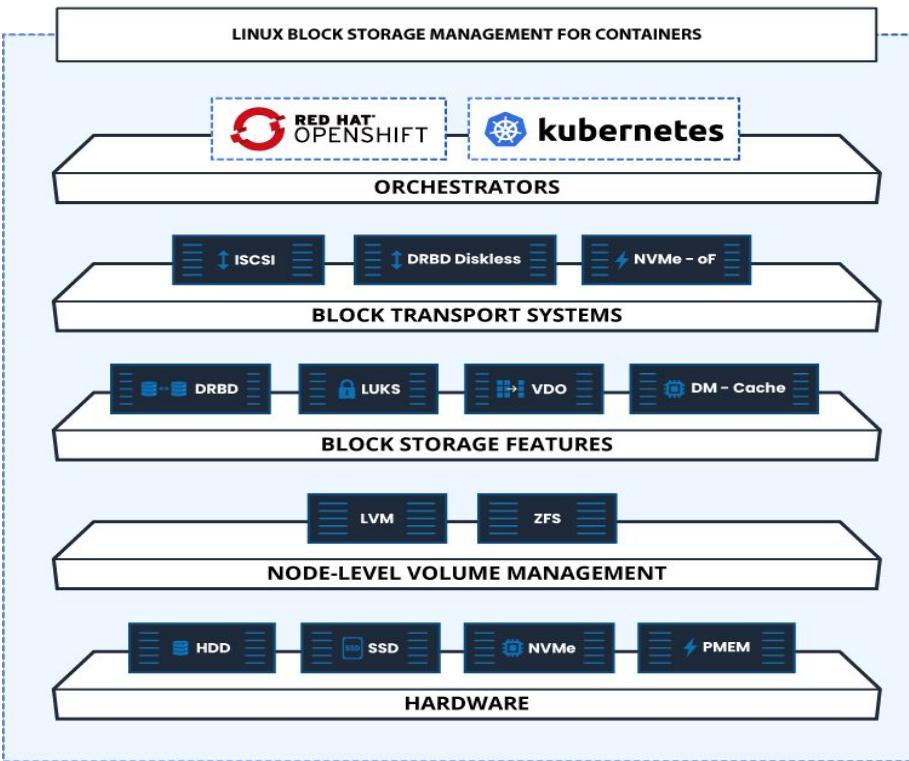


- **NetEase Curve:** CURVE is a high-performance, highly available, and highly reliable distributed storage system

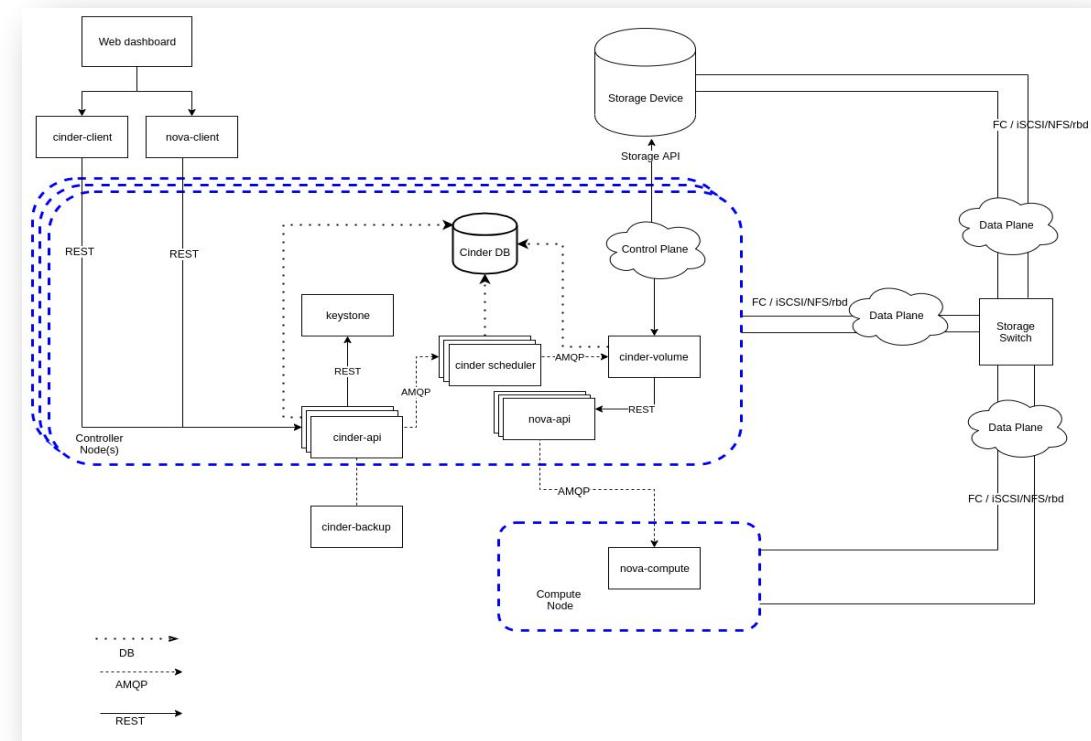


CONTROL PLANE FOR BLOCK

LIN³STOR



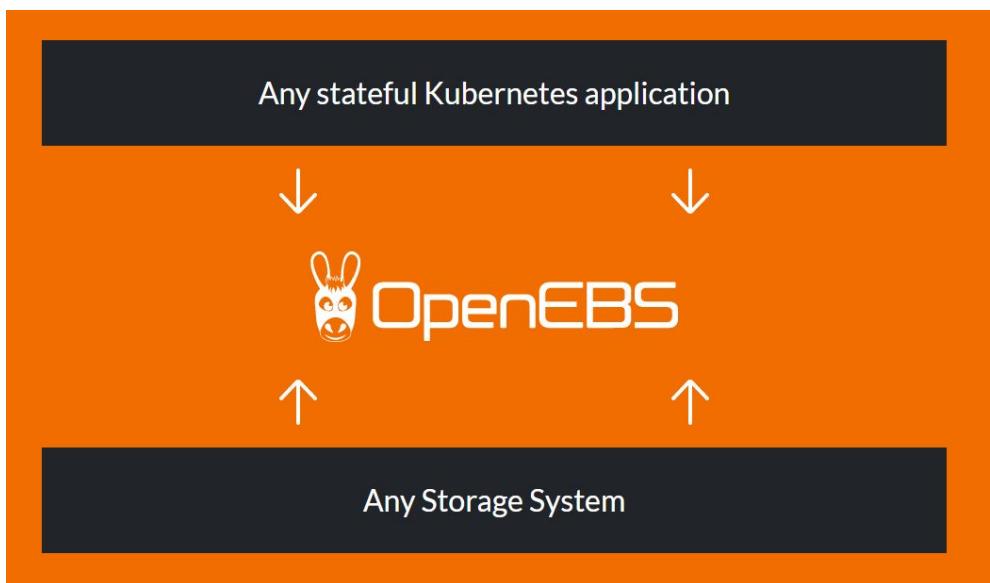
openstack CINDER



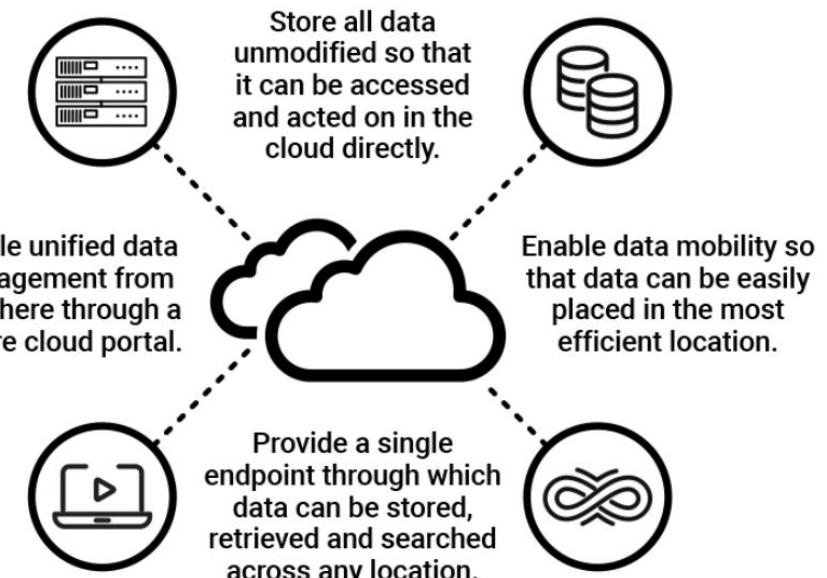
MULTI CLOUD ORCHESTRATION



Kubernetes native; runs in userspace
Open Source
multi cloud storage solution



- **ZENKO.IO: THE OPEN-SOURCE WAY TO CONTROL YOUR DATA ACROSS MULTIPLE CLOUDS**



sodacon 2020

DATA CONNECTED

December 9-10, 2020 PST

The open source event dedicated to advancing standards
and technologies in data and storage.

SODA INCUBATOR PROJECTS UPDATE: DAOS AND YIG



ZHENG LIANG

Intel
Technical Architect



SUN FANG CHEN

China Unicom
Senior Engineer, China Unicom

sodacon 2020

DATA CONNECTED

December 9-10, 2020 PST

The open source event dedicated to advancing standards
and technologies in data and storage.

CLOUD NATIVE DATA MANAGEMENT USING ZENKO



**PAUL
SPECIALE**

Scality
Chief Product Officer at Scality



**NICOLAS
TRANGEZ**

Scality
Principal Architect at Scality

sodacon 2020

DATA CONNECTED

December 9-10, 2020 PST

The open source event dedicated to advancing standards
and technologies in data and storage.

CURVE : A NEXT-GEN HIGH-PERFORMANCE DISTRIBUTED STORAGE SYSTEM



XIAOCUI LEE

NetEase DigitalSail
Senior Software Engineer,
NetEase DigitalSail



sodacon 2020

DATA CONNECTED

December 9-10, 2020 PST

The open source event dedicated to advancing standards and technologies in data and storage.

ECOSYSTEM PROJECTS FOR DATA MANAGEMENT CHALLENGES



YUSUF YILDIZ

LinBit
Solutions Architect, LinBit
Member, SODA TOC.



BRIAN ROSMAITA

RedHat
Principal Software Engineer
at Red Hat



SHUORAN LIU

OPPO
Technical Lead of distributed file
storage at OPPO Cloud



UMASANKAR MUKKARA

MayaData
Co-Founder, COO, MayaData



SODA - OPEN SOURCE INNOVATION

Yoshiya Eto

SODA Foundation Advisory Board

Linux Foundation Fellow

Principal Architect, Fujitsu



WHO AM I?

Principal Architect, Fujitsu Processor Systems BU. Fellow, The Linux Foundation

- **2002 – Start working in Linux with dedicated OSS dev. team**
- **2010 - The Linux Foundation, Vice Chair of the Board (2012-)**
2018 - Linux Foundation Fellow
- **Working for FUGAKU processor business with OSS**



WHAT IS OPEN SOURCE?

- License: Defined by OSI
- Unique development process compared with proprietary software
 - Process and Source Code: Open to the public
 - Development opportunity: also Open to the public

WHAT “DEVELOPMENT” MEANS

- **Contribute code to the community..**
- **Completely different development method I have seen**
- **Famous example: Vinod Kutty invited to Kernel Summit 2008**

Showing real business operations to maintainers



GOOD “DEVELOPMENT” OPPORTUNITY

- **SODA looking for the feedbacks from End users, Service operators, Service providers..**
- **SODA is providing good opportunities to vendors to hear them**

Please come to join the SODA Foundation

<https://sodafoundation.io/join>

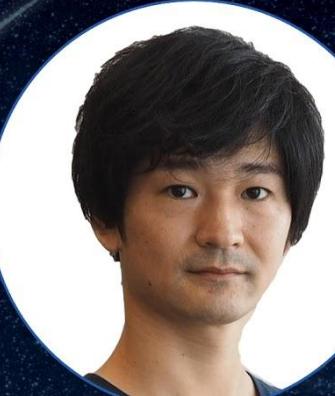
n/

IN THIS SODACON 2020

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

YUJI YAZAWA

Toyota Motor Corporation
Principal Engineer / Group Manager,
Toyota Motor Corporation Vice-chair,
SODA Foundation Governing Board.



Keynote Speaker:

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

KEI KUSUNOKI

NTT Communications
Innovation Center, Manager,
NTT Communications TOC Co-chair,
Member Governing Board,
SODA Foundation.



Keynote Speaker:

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

YUSUKE SATO

Yahoo! JAPAN
Engineer, Yahoo! JAPAN



Speaker:

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

XION LAI

CCB Fintech
Cloud Platform R&D Department,
General Manager China Construction
Bank Fintech



Keynote Speaker:
Data Connected for AI,
Cloud Native, Edge and 5G

<https://bitly.com/sodacon2020> [@sodafoundation](#)

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

DR ZIA SAQUIB

Reliance JIO
Senior Vice President- Technology
Innovation & Development at Reliance Jio



Keynote Speaker:
Data and Storage Challenges :
Use Cases

<https://bitly.com/sodacon2020> [@sodafoundation](#)

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

XIN ZHONG

China Unicom
CTO, China Unicom Cloud Data Company
Treasurer, SODA Foundation Governing Board.



Keynote Speaker:
Data and Storage Challenges :
Use Cases

<https://bitly.com/sodacon2020> [@sodafoundation](#)

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

JUNWEI LIU

China Mobile
GM of IaaS Product Division at
China Mobile Cloud Capability Center,
Director of Open Infrastructure Foundation.



Keynote Speaker:
Data Connected for AI,
Cloud Native, Edge and 5G

<https://bitly.com/sodacon2020> [@sodafoundation](#)

sodacon 2020

#sodacon2020

THANK YOU

sodacon 2020
DATA CONNECTED



SODA - OPEN SOURCE INNOVATION

Yoshiya Eto

SODA Foundation Advisory Board

Linux Foundation Fellow

Principal Architect, Fujitsu



WHO AM I?

Principal Architect, Fujitsu Processor Systems BU. Fellow, The Linux Foundation

- **2002 – Start working in Linux with dedicated OSS dev. team**
- **2010 - The Linux Foundation, Vice Chair of the Board (2012-)**
2018 - Linux Foundation Fellow
- **Working for FUGAKU processor business with OSS**



WHAT IS OPEN SOURCE?

- License: Defined by OSI
- Unique development process compared with proprietary software
 - Process and Source Code: Open to the public
 - Development opportunity: also Open to the public

WHAT “DEVELOPMENT” MEANS

- **Contribute code to the community..**
- **Completely different development method I have seen**
- **Famous example: Vinod Kutty invited to Kernel Summit 2008**

Showing real business operations to maintainers



GOOD “DEVELOPMENT” OPPORTUNITY

- **SODA looking for the feedbacks from End users, Service operators, Service providers..**
- **SODA is providing good opportunities to vendors to hear them**

Please come to join the SODA Foundation

<https://sodafoundation.io/join>

n/

IN THIS SODACON 2020

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

YUJI YAZAWA

Toyota Motor Corporation
Principal Engineer / Group Manager,
Toyota Motor Corporation Vice-chair,
SODA Foundation Governing Board.



Keynote Speaker:

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

KEI KUSUNOKI

NTT Communications
Innovation Center, Manager,
NTT Communications TOC Co-chair,
Member Governing Board,
SODA Foundation.



Keynote Speaker:

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

YUSUKE SATO

Yahoo! JAPAN
Engineer, Yahoo! JAPAN



Speaker:

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

XION LAI

CCB Fintech
Cloud Platform R&D Department,
General Manager China Construction
Bank Fintech



Keynote Speaker:
Data Connected for AI,
Cloud Native, Edge and 5G

<https://bitly.com/sodacon2020> [@sodafoundation](#)

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

DR ZIA SAQUIB

Reliance JIO
Senior Vice President- Technology
Innovation & Development at Reliance Jio



Keynote Speaker:
Data and Storage Challenges :
Use Cases

<https://bitly.com/sodacon2020> [@sodafoundation](#)

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

XIN ZHONG

China Unicom
CTO, China Unicom Cloud Data Company
Treasurer, SODA Foundation Governing Board.



Keynote Speaker:
Data and Storage Challenges :
Use Cases

<https://bitly.com/sodacon2020> [@sodafoundation](#)

sodacon 2020
DATA CONNECTED
December 9-10, 2020 PST

JUNWEI LIU

China Mobile
GM of IaaS Product Division at
China Mobile Cloud Capability Center,
Director of Open Infrastructure Foundation.



Keynote Speaker:
Data Connected for AI,
Cloud Native, Edge and 5G

<https://bitly.com/sodacon2020> [@sodafoundation](#)

sodacon 2020

#sodacon2020

THANK YOU

sodacon 2020
DATA CONNECTED