oueees-202006 topic 08:
Cloud computing basics

Kenji Rikitake

10-JUN-2020
School of Engineering Science, Osaka University
On the internet
@jj1bdx

CAUTION

Osaka University School of Engineering Science prohibits copying/redistribution of the lecture series video/audio files used in this lecture series.

大阪大学基礎工学部からの要請により、本講義で使用するビデオ/音声ファイルの複製や再配布は禁止されています。
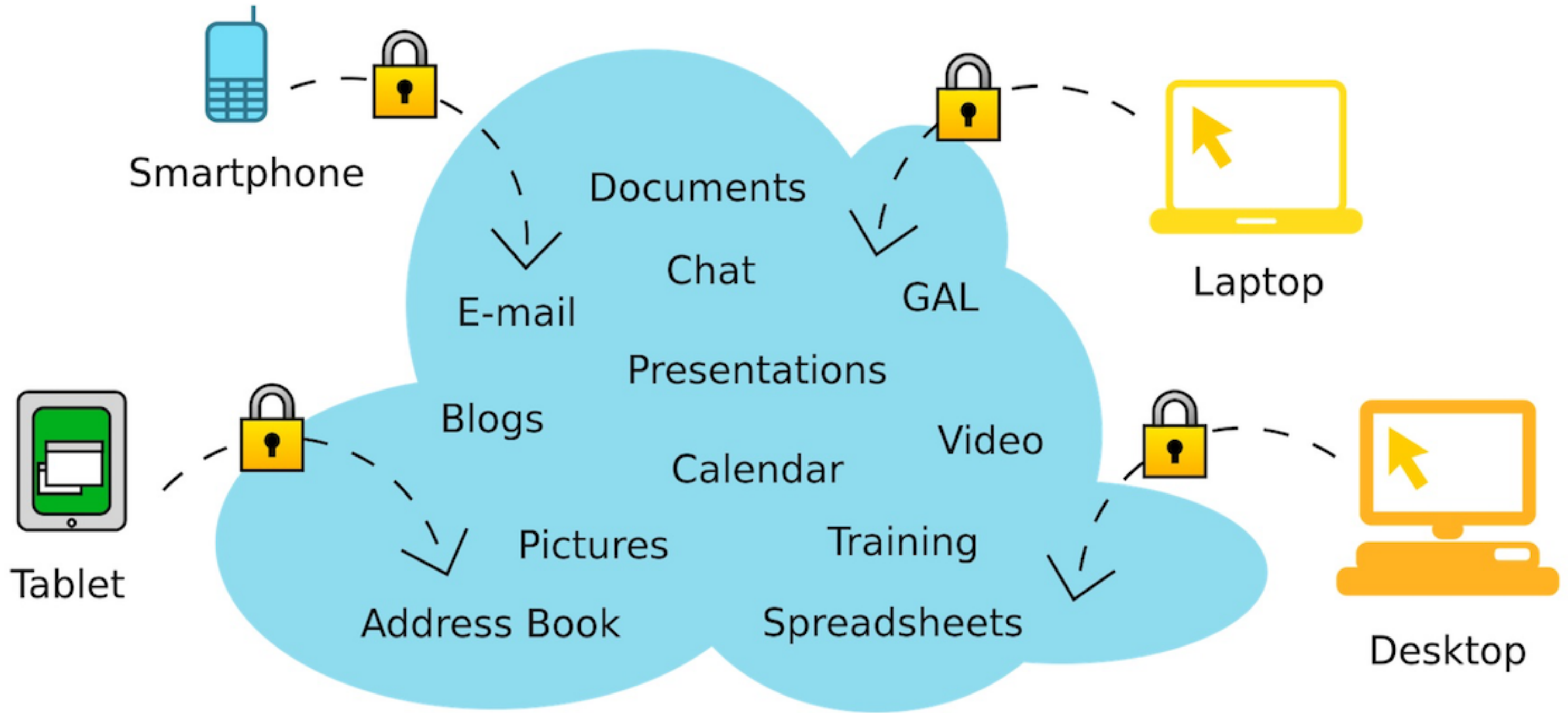
Lecture notes and reporting

- https://github.com/jj1bdx/oueees-202006-public/

- Check out the README.md file and the issues!

- Keyword at the end of the talk

- URL for submitting the report at the end of the talk

Topic of this video:
Cloud computing basics

Modern computing *is cloud computing*

Smartphone

Documents

Chat

E-mail

GAL

Presentations

Blogs

Video

Calendar

Pictures

Training

Laptop

Tablet

Address Book

Spreadsheets

Desktop

Cloud Computing

Having secure access to all your applications and data from any network device

Is cloud really a uniform and single entity?

Absolutely not: it's an intertwined *network* of computers
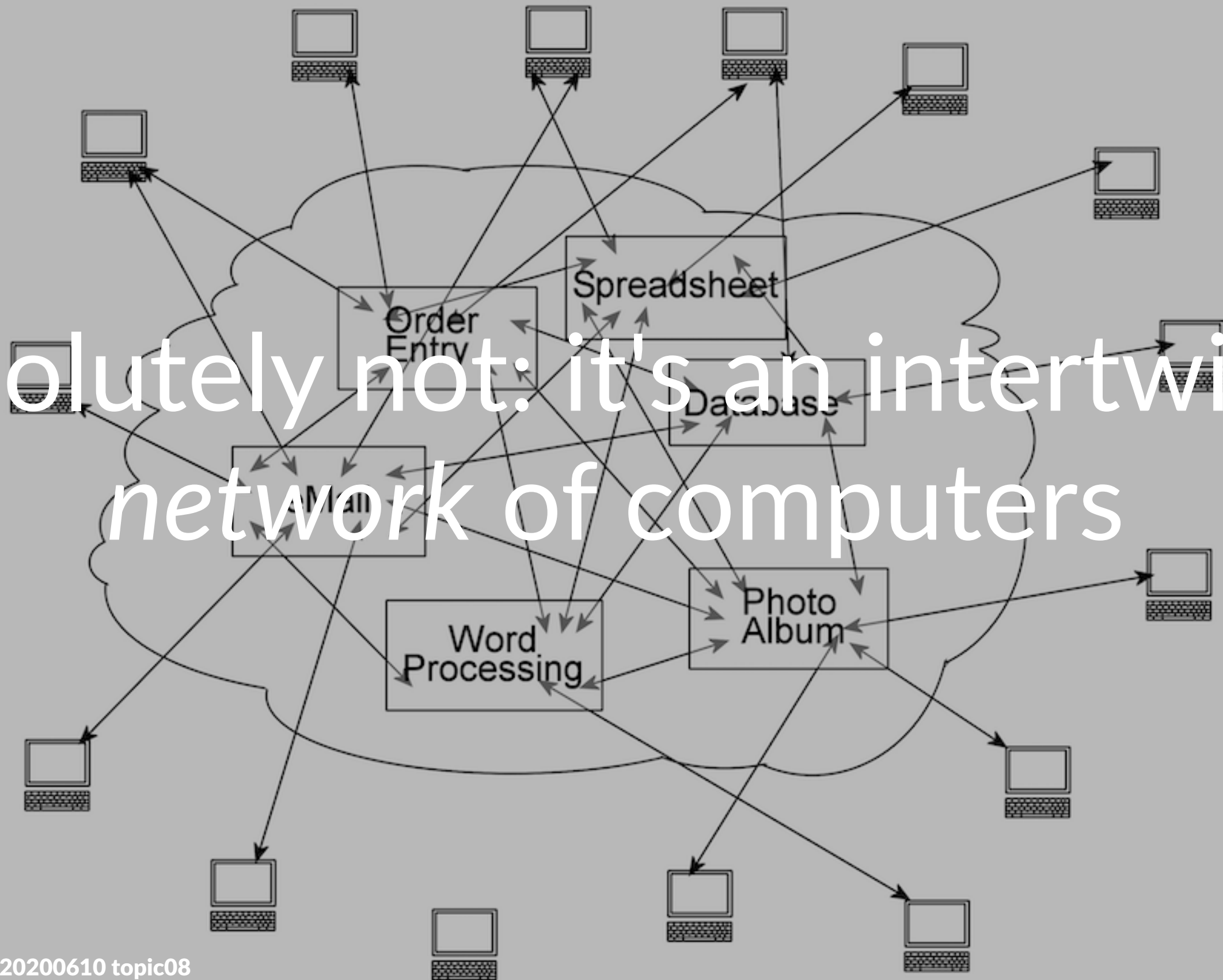
Web services are clusters of computers and networks

Thousands or millions of servers connected together

A physical server is separated into multiple virtual machines

Cloud computing *is* centralization

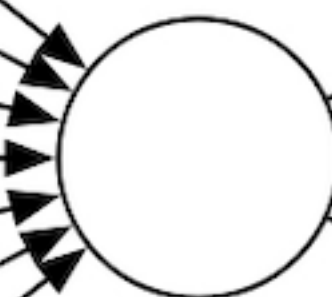# An example of cloud computing: Internet of Things (IoT) and telemetering

"Things" or devices

Servers in the cloud

internet

Transport

Collecting data

Data analytics,
visualization,
and storage

Telemetering

- Mostly unidirectional (not really *the true and genuine internet*)

- Sensors/devices gathering data through internet and feed them to the servers in the cloud computing platforms

- *The servers compute*

- *Extremely centralized*

Photo and image credits

- All photos and images are modified and edited by Kenji Rikitake

- Photos are from Unsplash.com unless otherwise noted

- Modern Computing is Cloud Computing: Rayi Christian Wicaksono

- Cloud Computing: https://commons.wikimedia.org/wiki/File:Cloud_applications_SVG.svg, licensed under Creative Commons CC0 1.0 Universal Public Domain Dedication

- Intertwined network of computers: https://en.wikipedia.org/wiki/File:Cloud_Computing.jpg, licensed under Creative Commons CC0 1.0 Universal Public Domain Dedication

- Web services are clusters of computers: Kenji Rikitake, at Kyoto University ACCMS, April 2017