



# OSIsoft Cloud Services PaaS & Partner Applications

Laurent Garrigues – Strategic Product Manager



# Agenda

OCS Overview

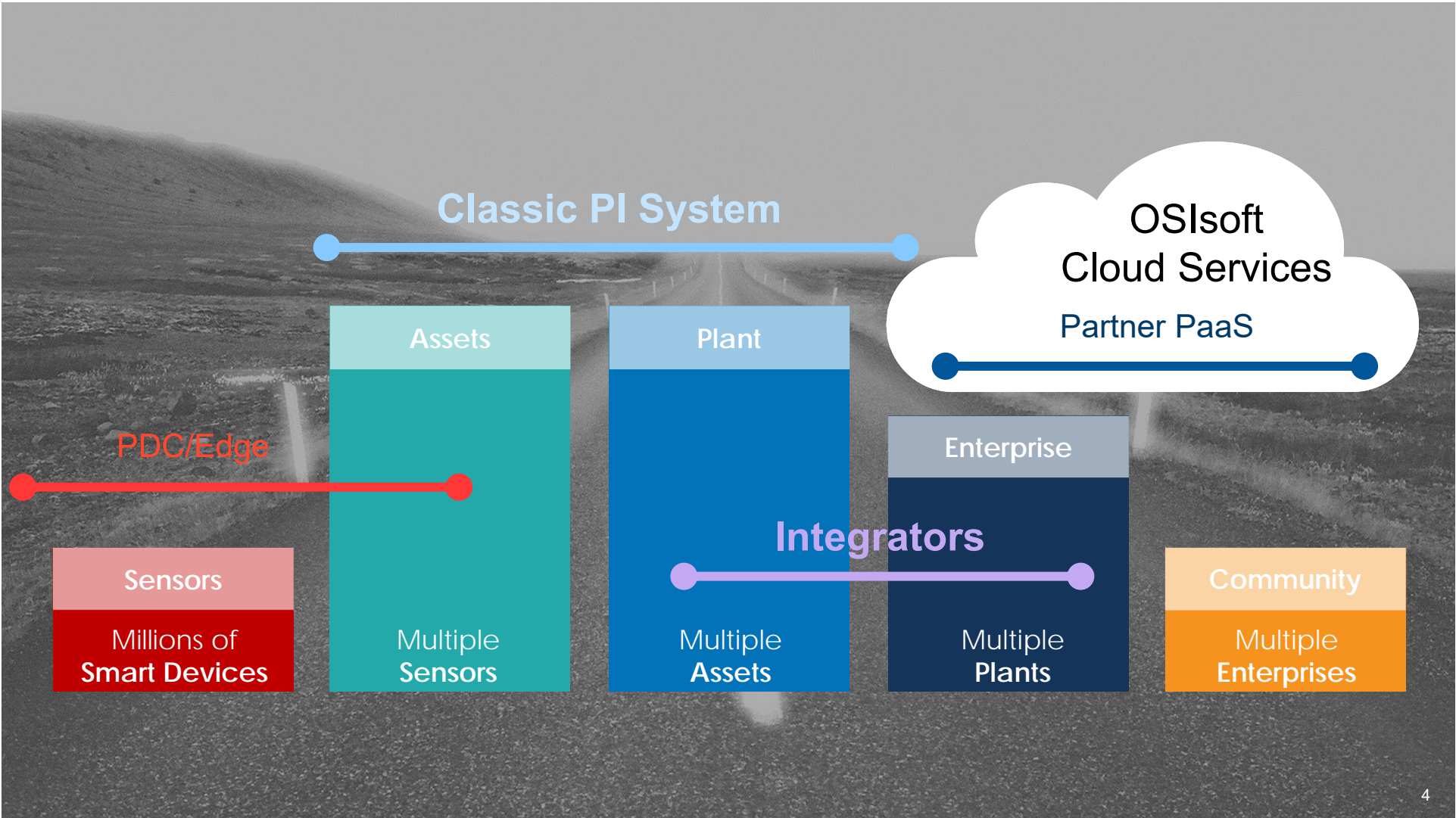
Demos

Data Flow

Security

Wrap-Up

# OCS Overview





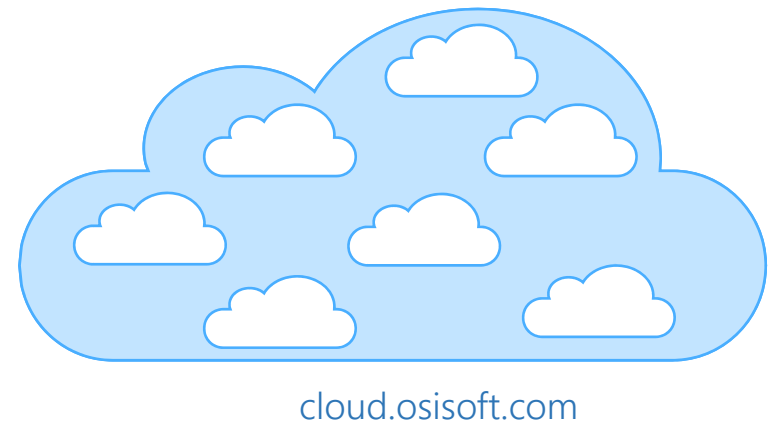
# Cloud enablement beyond Operations



- Simplifying operations data at scale
- Extending to new data consumers

# Serverless Real Time Platform for Operational Data

- Managed, secure, multi-tenant platform
- Operated & maintained by  **OSI**soft.
- High speed, scalable, elastic & resilient
- Modern, secure REST APIs
- Built & deployed on  **Microsoft Azure**
- Generally Available (GA) since June 2019



# OSIsoft Cloud Services complement PI

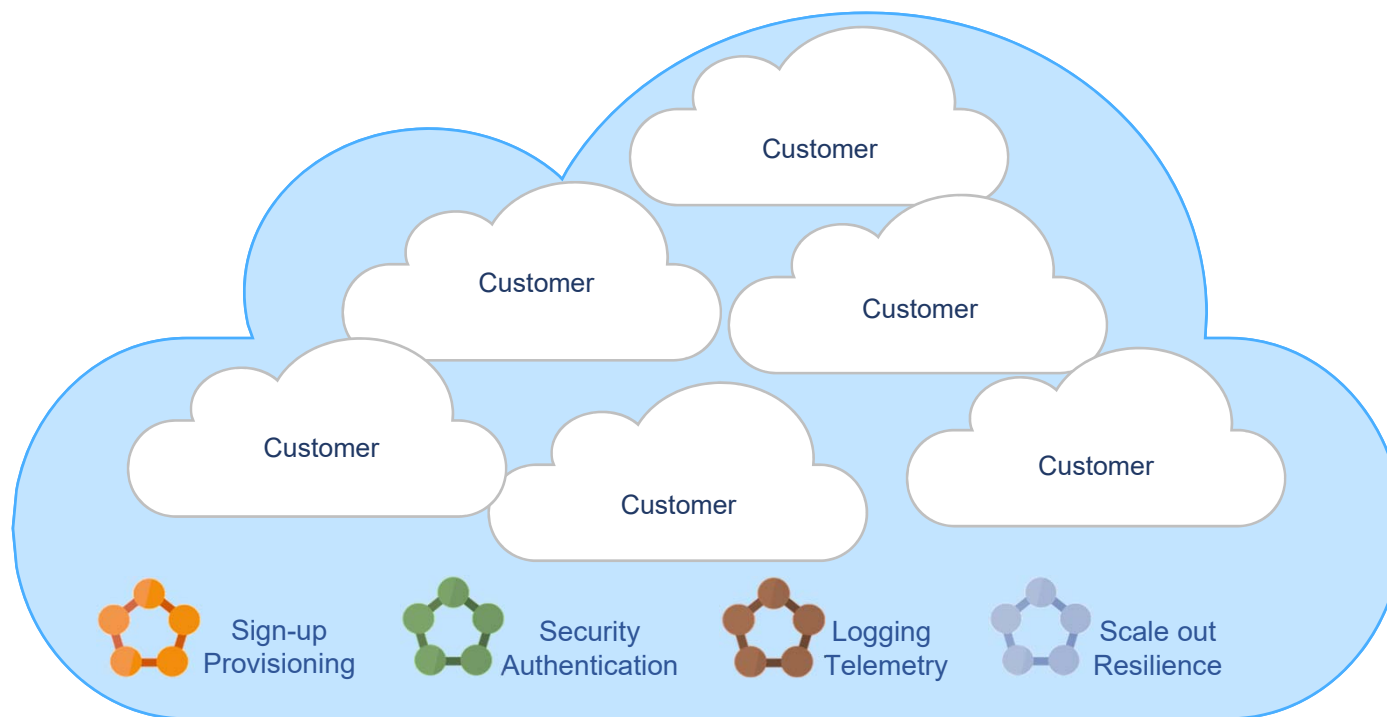


Operational data is transferred between PI Systems and OCS  
... and also between Edge components and OCS.

# OCS Infrastructure Components



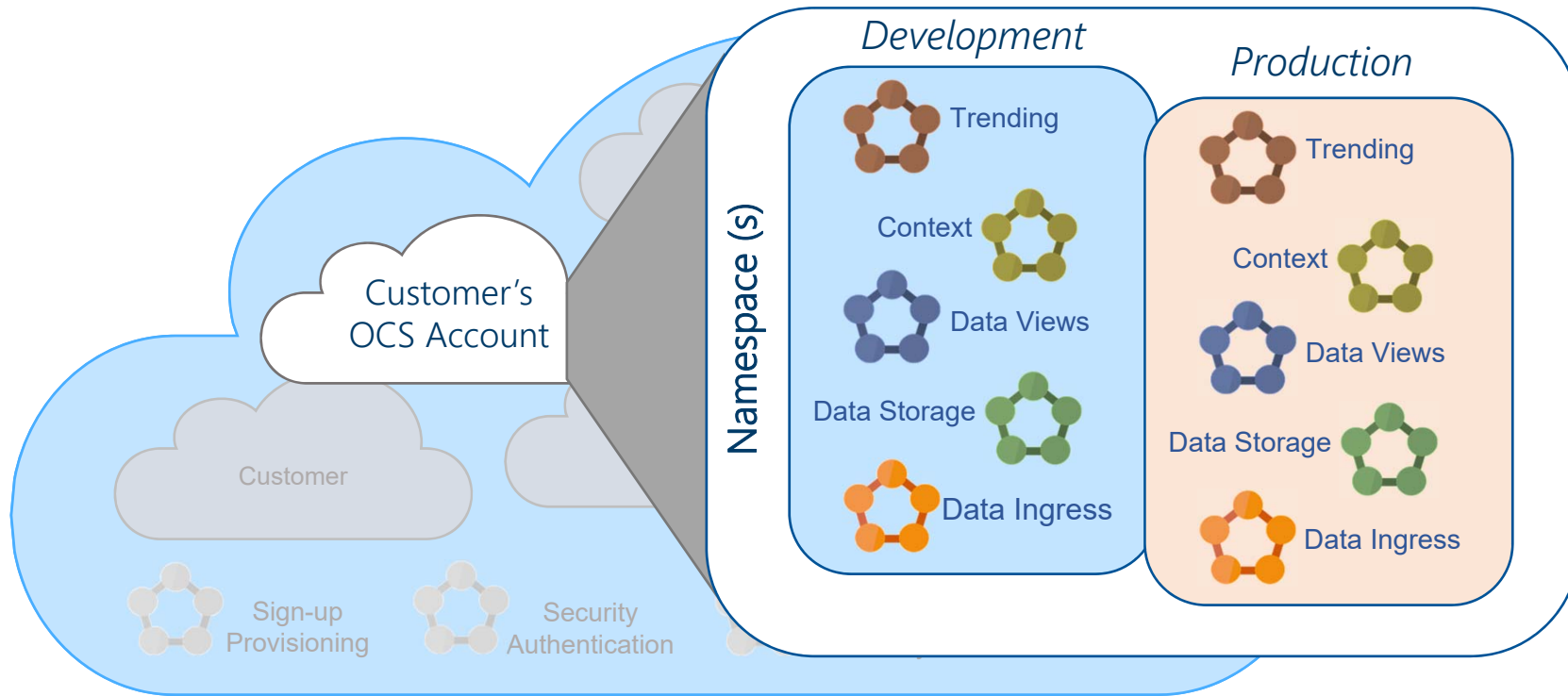
micro services



Cloud Services Infrastructure

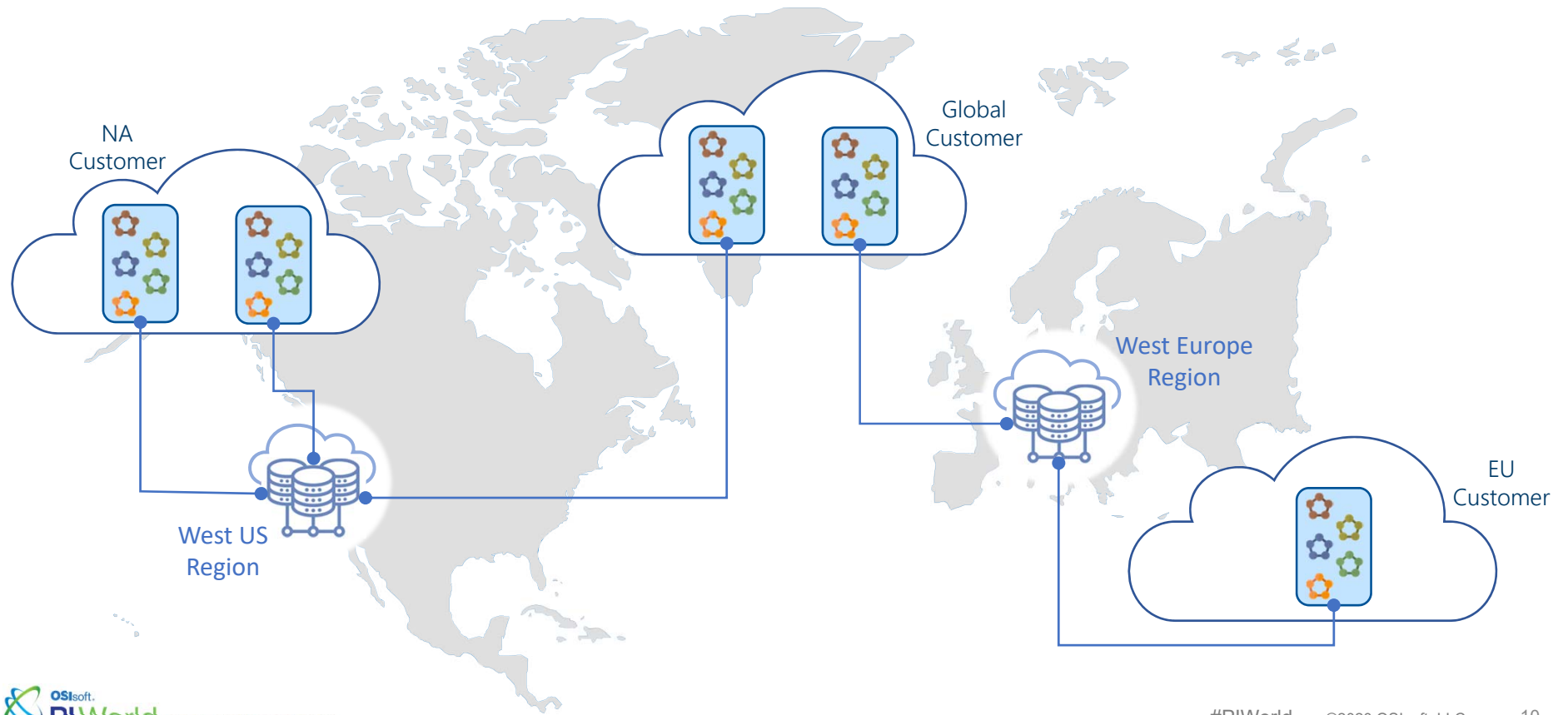


# OCS Accounts – Services

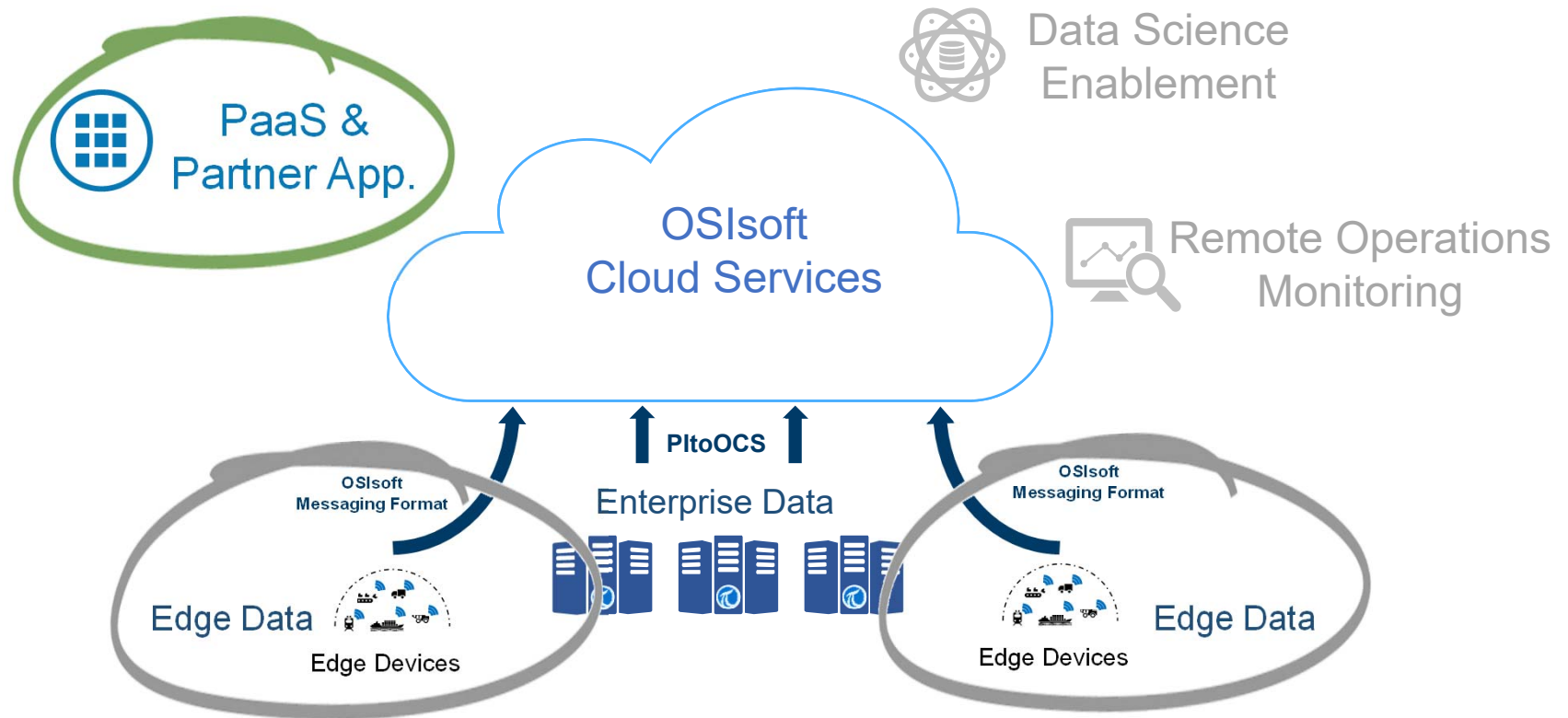


Cloud Services Infrastructure

# OCS Accounts – Deployments

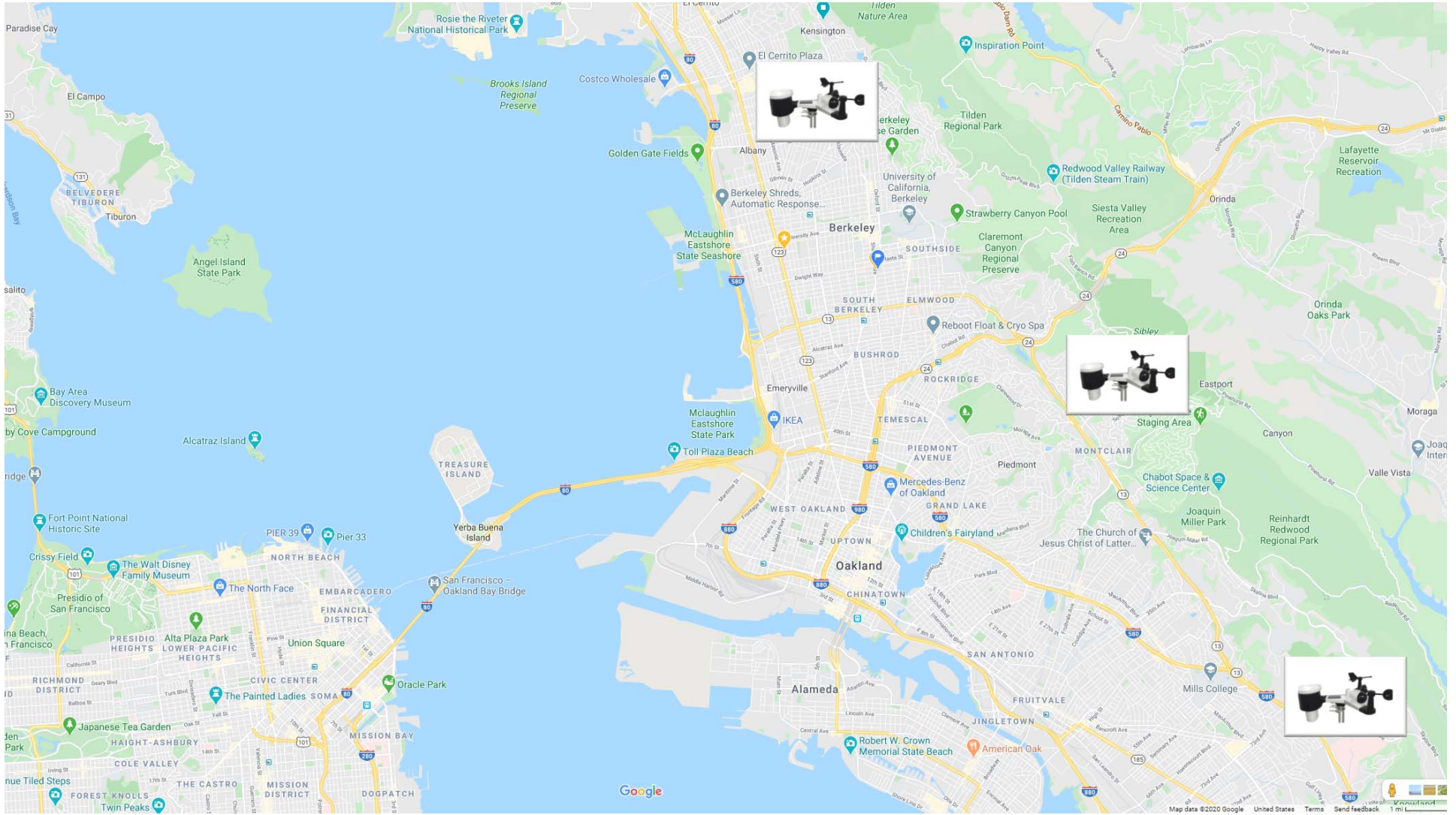


# OCS – Initial Scenarios



# First Use Case





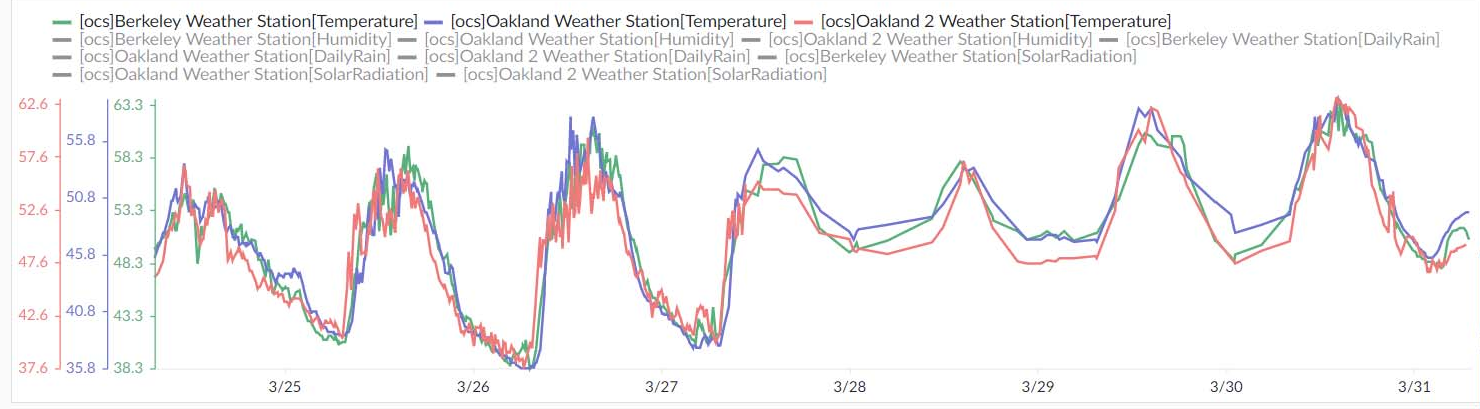
Search dashboards

MY DASHBOARDS

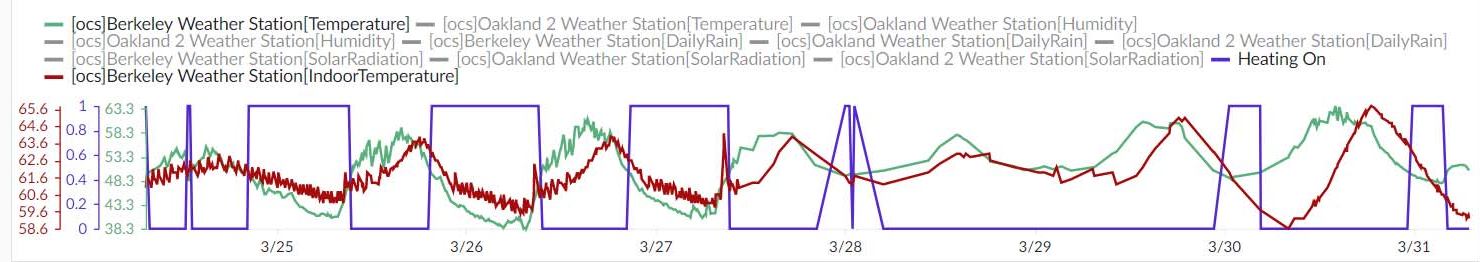
# My Weather Dashboard

Edit (0) Actions

## Outdoor Temperature in the Bay



## Heating the house in Berkeley



Help

# DEMO

First demo with Trendminer

# Second Use Case





Data Tools Journal

floor\_4  
 Reset More filters Search

OSisoft Cloud Services Connection

Production Search results

- Floor\_4.Humidity Floor Average
- Floor\_4.Floor Temp Average.62050532-352c-562e-1da0-a5989a6d010d
- Floor\_4.Floor Level Cooling Signal Average.b130a33f-a53f-516d-3d08-d19ad48b8039
- Floor\_4.Humidity Floor High
- Floor\_4.Floor Level Max Heating.39ea1be3-b658-5ac2-0818-66f6b587a835
- Floor\_4.Floor Airflow Actual\_Sum.3dc37faa-bef5-5ca6-2f5d-9f88fcd7e43d
- Floor\_4.Floor Temp\_Maximum.64d56ba0-7804-5582-000d-8e6105c6f235
- Floor\_4.Floor Temp\_Minimum.3ac72d8f-42bf-5153-14bc-6caf2142b8c5
- Floor\_4.Floor Airflow Desired\_Sum.c0005f4d-55f5-58ff-17ca-0b82a393fd16
- Floor\_4.Floor Level Max Cooling.7ce88131-343e-5295-09f4-90480a1e4200
- Floor\_4.Sum of Manual Control

Calendar Chain Capsule One Lane One Y-Axis Spread Labels Dimming Zoom Export Annotate



7/13/2019 2:22 AM PDT 8/13/2019 12:57 AM PDT  
 Mar '19 Apr '19 May '19 Jun '19 Jul '19 Aug '19 Sep '19 Oct '19 Nov '19 Dec '19 2020 Feb '20  
 2/21/2019 1 year 2/21/2020

Details			Assets	Lane
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Floor_4.CO2 Floor Average	Production	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Floor_4.Floor Temp_Maximum.64d56ba0-7804-5582-000d-8e6105c6f235	Production	2
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Floor_4.Floor Temp_Minimum.3ac72d8f-42bf-5153-14bc-6caf2142b8c5	Production	3

# DEMO

Second demo with Seeq

# Data Flow

cloud.osisoft.com

PIWorld.trendminer.cloud



portal.azure.com



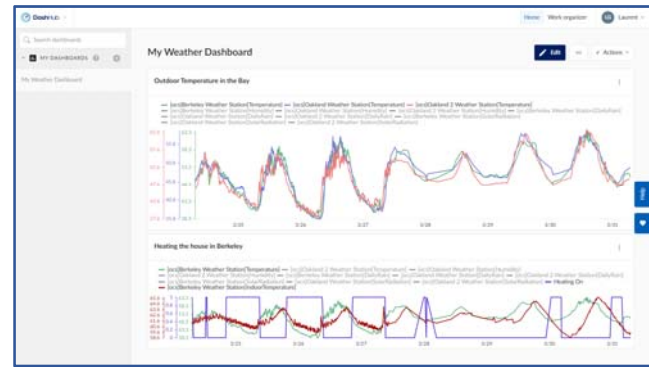
Azure Function



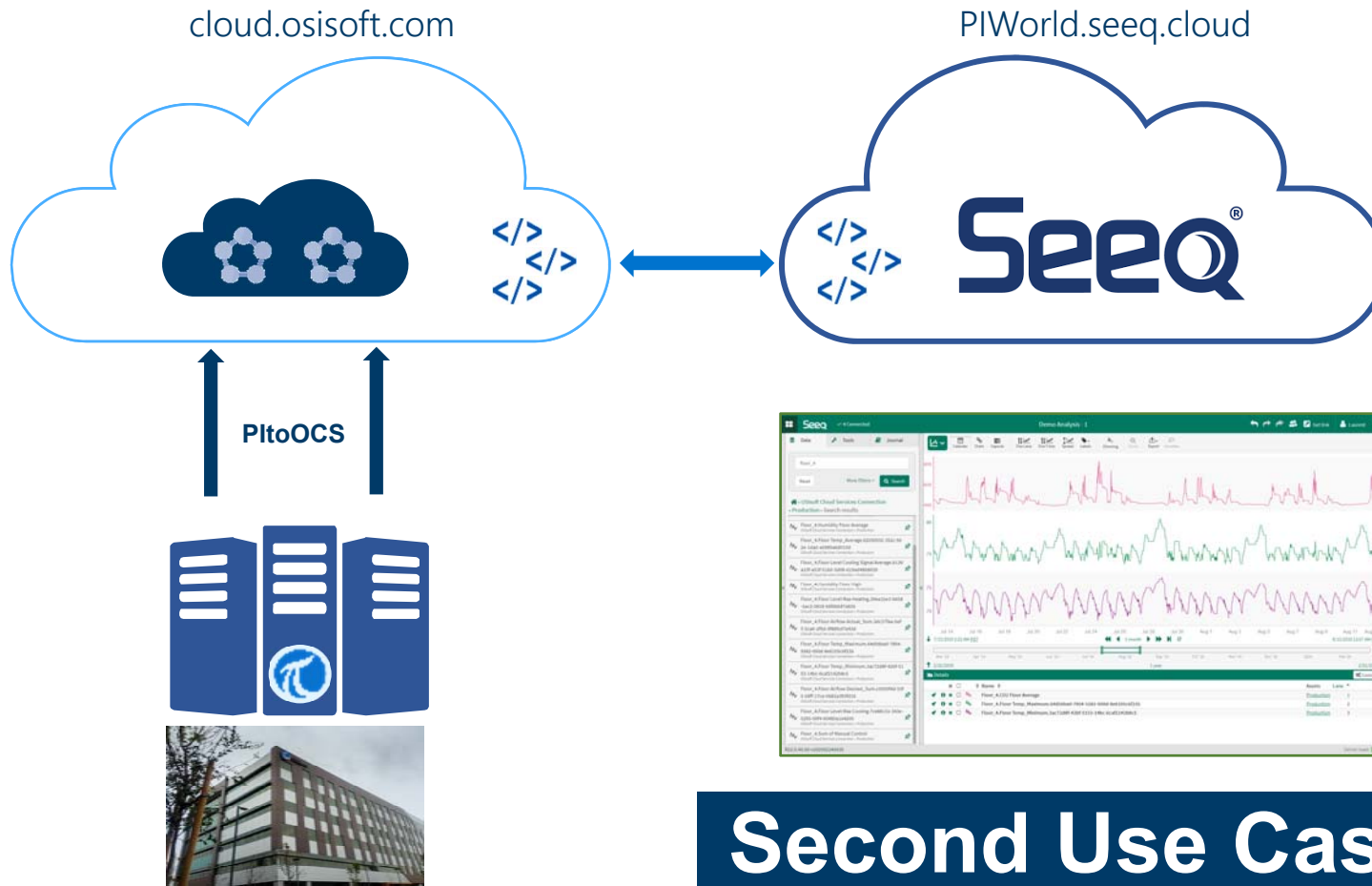
Ambient Weather Station



ambientweather.net



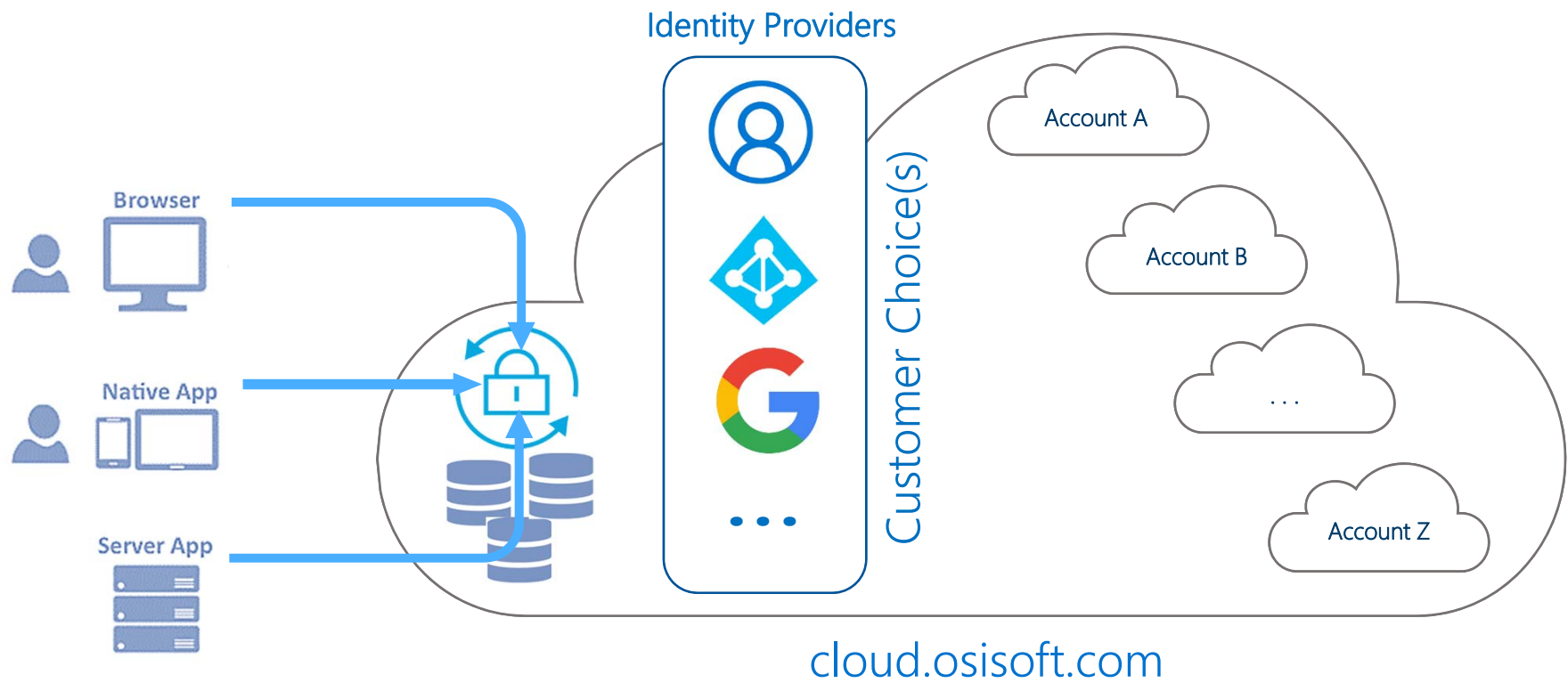
# First Use Case



# Second Use Case

# Security

# OCS Authentication



# OCS Authorization

## Roles:

- Engineer,
- Admin





### OSIsoft Cloud Services

#### Manage Clients

Client Type: **Client-Credentials** | **Account** | Filter Client-Credentials... | [+ Add Client](#) | [Edit Client](#)

[x Remove Client](#)

Displaying 56 of 56 Client-Credentials

Name	Id
Uxie	15ceb764-459c-4045-8c74-b3d7b3ec156e
<b>TrendMiner</b>	<b>1c1df035-4acd-4e0b-a63f-b03dbea275e3</b>
<a href="#">Edit Client</a>	-a7de-342b79ce4e79
	-bf6d-e5f92466fe95
	-8c3c-1da5ce3eaf5d
	-89ed-cbb2c043472a
	-bf2e-edae0fdacabb
	-b5ce-afdd6f204ab3
	-863a-8d326eeb83a0
	-89f1-1ce32adce8ff
	-88ae-48055e2020d6
	-b216-5fd828725765
	-adcf-8828abf6602f
	-8752-a9e9c5d742aa
	-87b4-79edb13366eb
	-b4b6-15dc77607040

DI To CCS - d94067aa-41ef-48aa-929a-448a2cedadab? 66b60060-0fa5-417a-040a-06f776aa55a0

#### Details | Code Example | Information

##### Client Details

Client Id	1c1df035-4acd-4e0b-a63f-b03dbea275e3	<a href="#">Copy</a>
Account Id	fd328631-61dc-4b31-86cb-42501786abc5	<a href="#">Copy</a>
Name	TrendMiner	
Token Lifetime	3600 seconds	
Status	Enabled	<a href="#">Edit</a>

A Client Id and Client Secret are used to authenticate and retrieve a token that provides access to OSIsoft Cloud Services. Any client that presents the Client Id and Client Secret will be able to authenticate and access data, assuming the Client Id and Client Secret are valid. A Client Id is not confidential but a Client Secret is. Hence, it is imperative that the Client Secret be stored in a secure location that is accessible only to the client that needs to use it to authenticate and access OSIsoft Cloud Services. If the Client Secret is ever compromised, it would be possible for an unauthorized application to impersonate the client and gain access to data.

#### Client Secrets

Displaying 1 of 1 Secrets | [+ Add Secret](#) | [Edit Secret](#) | [x Remove Secret](#)

Status	Description	Expiration Date
<span style="color: green;">●</span> Active	WebApp	Jun 12, 2020, 9:17:00 AM

**Warning:** Secret values are only accessible during creation time.

# Wrap Up

# OCS as PaaS & for Partners Apps

- Serverless solution
- Tightly integrated with others OSIsoft products
- Lots of data ingress options
- Developers friendly



# Contact me for more information



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OSIsoft, LLC

## Questions?

Please wait for  
the **microphone**

State your  
**name & company**



## Save the Date...



AMSTERDAM  
October 26-29, 2020



