



OCP SUMMIT

March 20-21
2018
San Jose, CA

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Next Generation Cloud Infrastructure in the Age of AI
**Wiwynn OCP/Project Olympus, RSD
Enabled Hardware, and Cluster Manager on
OCP 12/48v Racks**

Ethan Yang / Deputy Manager / Wiwynn

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OCP Ecosystem Grows into an Age of AI



DEMANDS

Fundamental Demands
For Various Applications

APPLICATIONS

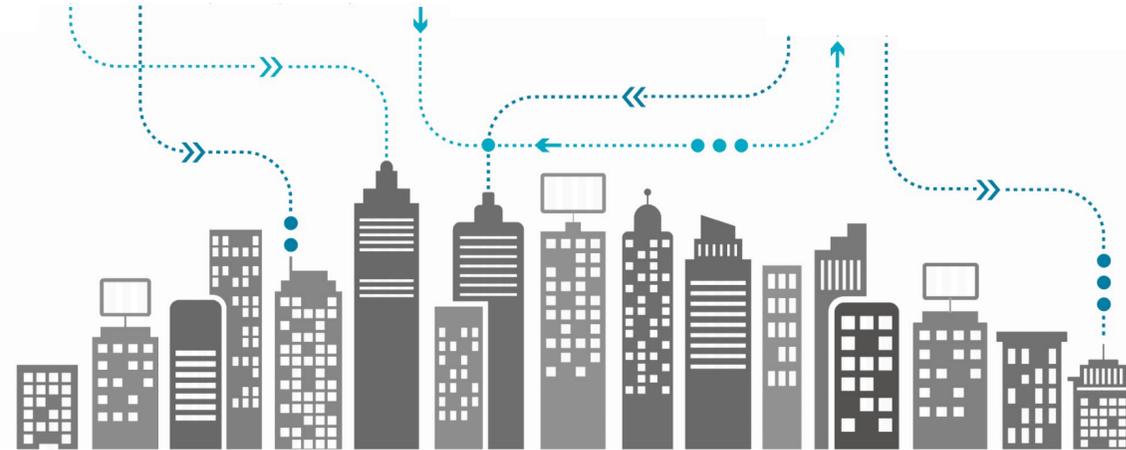
Various Evolving
Applications

INFRASTRUCTURES

Building Blocks and IT
Gears on Advanced
Technologies

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Wiwynn Updates 3 Cloud Infrastructures



INFRASTRUCTURES

Building Blocks and IT
Gears on Advanced
Technologies



**OCP Rack
Infrastructure**



**Project Olympus
Infrastructure**



**Compute
Accelerator**

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Updated Building Blocks of the Infrastructures



**OCP Rack
Infrastructure**



**Project Olympus
Infrastructure**



**Compute
Accelerator**



Tioga Pass
(SV7220G3)



Yosemite V2
(SV7100G2)



Bryce Canyon
(ST7000G2)



Project Olympus
Compute Server
(SV5100G3)



Project Olympus
All-Flash Storage
(ST5100)



Dr.Know G1
(XC200)



Dr.Know G2
(XC200G2)

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Wiwynn Booth Visualization

Cluster Manager
with RSD

48V
Solutions

 **wiwynn**
IGNITING NEXT GENERATION DATA CENTER

 **intel**

Compute
Accelerators

Project
Olympus

OCP Products

 **wiwynn**



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Live Demo of 48V 2 stage solutions

The screenshot displays the MEGARAC SP-X web interface. The browser address bar shows the URL `10.34.135.29/#sensors/52`. The page title is "Sensor detail" with the subtitle "All information about this sensor".

The main content area is titled "MB_DC_IN_VOLT Sensor Information". It features a line graph showing the voltage reading over time. The y-axis is labeled "Volts" and ranges from 0.00 to 49.35. The x-axis is labeled "Time (HH:MM:SS)" and shows timestamps from 09:04:13 to 09:17:37. The current reading is 48.47 Volts.

To the right of the graph is a table of thresholds:

48.47 Volts	
Upper Non-Recoverable	NA
Upper Critical	52.91 Volts
Upper Non-Critical	NA
Lower Non-Critical	NA
Lower Critical	42.92 Volts
Lower Non-Recoverable	NA

A "Change Thresholds" button is located at the bottom right of the table.

Below the graph is a section titled "Sensor Events" which is currently empty.

The left sidebar contains navigation links: Dashboard, Sensor, FRU Information, Logs & Reports, Settings, Remote Control, Image Redirection, Power Control, Maintenance, and Sign out. The top right of the interface shows user information for "admin" and navigation links for Home, Sensor Reading, and Sensor detail.

The First PCIe 4.0 Disaggregated Compute Accelerator for AI and HPC

Wiwynn XC200G2 (4U16B Compute Accelerator)

224T⁺
FLOPS

4

HOST CONNECTIONS

Support 1, 2, 4 hosts

16x

GPGPU / FPGA

Up to 16 PCIe 4.0 Slots

5K_w

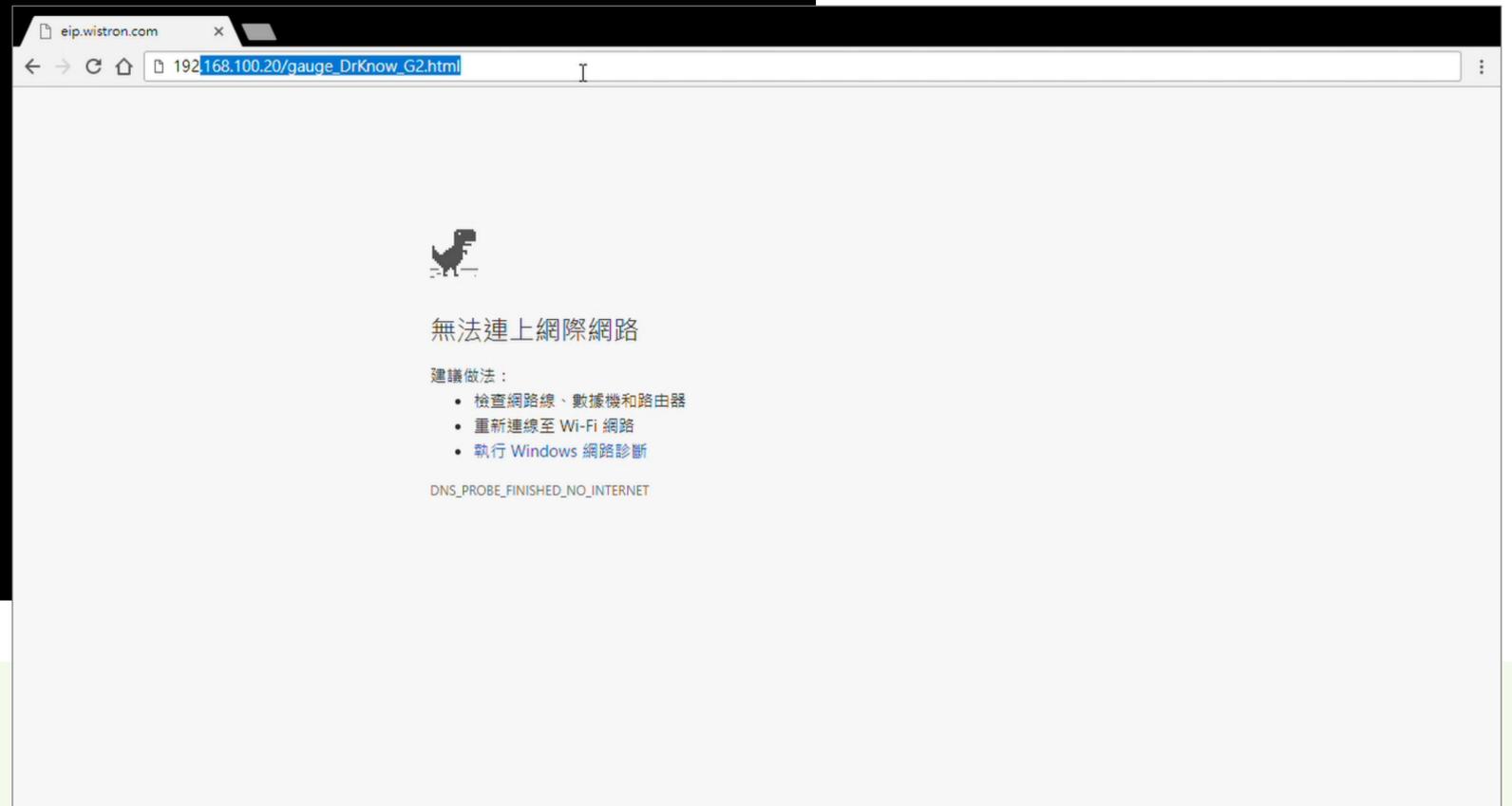
Efficient
Thermal Solutions

By Single-precision
floating-point



Live Demo of PCIe Gen4

```
[root@localhost html]#
```



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28 GB/s

THROUGHPUT
by 128K Sequential Read

24 B

DENSITY
16Bays in 1U space

10PS
>5 Millions

500 W

POWER CONSUMPTION

by 4K Random Read



The Best Disaggregated Storage for Storage and Data-Intensive Applications
Wiwynn ST5100 (1U16B NVMe JBOD)

RSD Enabled Building Blocks



OCP 12V



OCP 48V



EIA 19"



RSD Enabled



Interoperability



21" Tioga Pass
(SV7220G3/H3)



21" Bryce Canyon
(ST7000G2/H2)



21" Lightning
(ST7200/H)



19" Multi-purpose Server
(ST300G3)



19" Compute Accelerator
(XC200G2)

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Software Defined Data Center



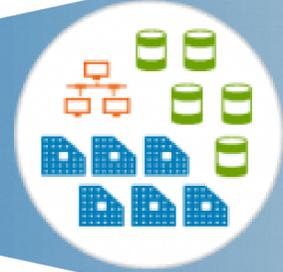
Disaggregated and Composable Rack Solution

Physical Infrastructure

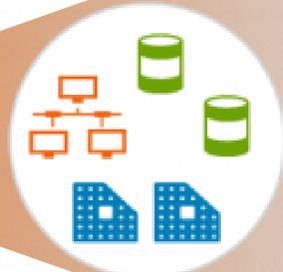


BIG DATA ANALYTICS

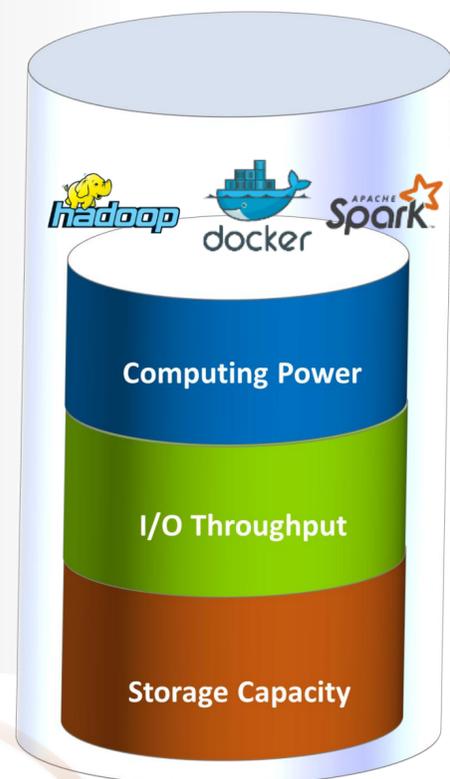
Scale Up Dynamically



CLOUD SERVICE

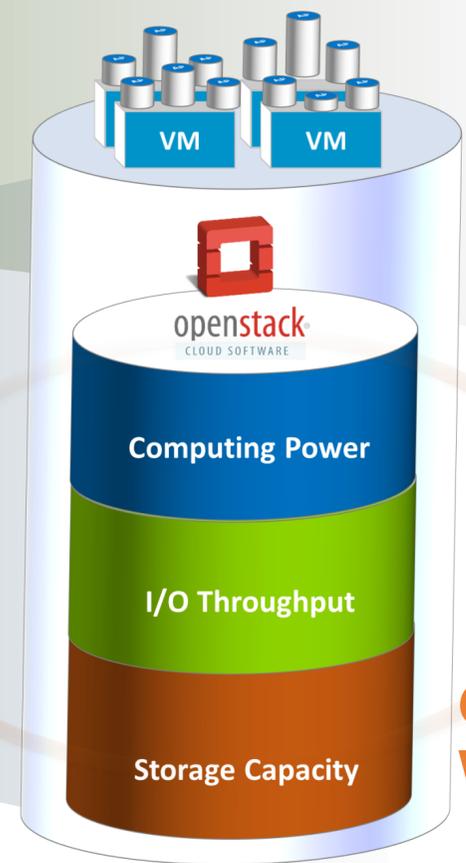


AI



Logical Infrastructure

Optimize for Workload



Logical Infrastructure



Logical Infrastructure

Fundamental Demands in the Age of AI



OCP U.S. SUMMIT 2018

March 20-21 | San Jose, CA

March 20 / 3:10 – 3:35pm

210 GH Executive Talks

Satisfying Future Data Center Needs with Latest Technology



Sunlai Chang,
Senior VP
and CTO,
Wiwynn





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