



AIC Solution for OpenStack Building Block

Ichiro Lin 林 世強
Sales Div.2
Oct/2016

AIC

AIC 会社紹介



会社沿革



CA



NJ



EU



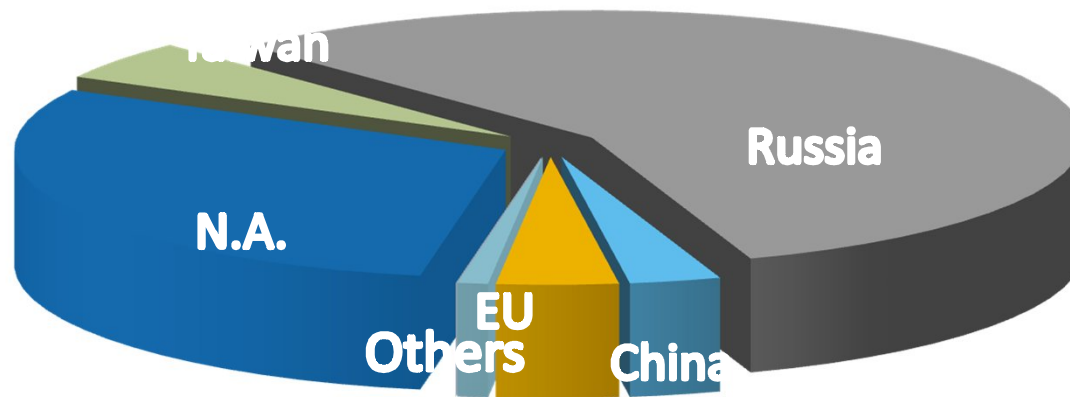
TW

- 1996** 台湾桃園に本社 設立
- 2000** 生産能力増強のため、本社事務所が工場とともに蘆竹（台湾桃園）に移転
- 2001** カリフォルニア（アメリカ）子会社設立
- 2004** オランダ子会社（ヨーロッパ）設立
- 2007** 大竹（台湾桃園）に第二工場を竣工
- 2008** 中国上海に営業拠点を設立
- 2011** インテルと最初の「クラウド・イン・ア・ボックス」というソリューションを発表
- 2012** ハードディスクパートナーとクラウドストレージ戦略をアライアンスし、省電力と超高密度JBODを導入
- 2013** 台湾証券グレタイ売買センター（TPEX）に上場
- 2015** 本社事務所を青埔（台湾桃園）に移転

AIC



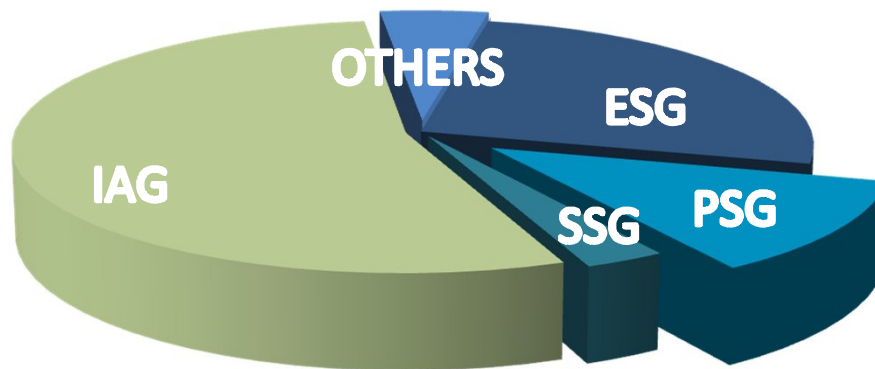
売り上げ地域別シェア



Products	N.A.	EU	Russia	Taiwan	China	Others
2015	30%	5%	57%	3%	4%	1%



売り上げ製品別シェア



Products	ESG	PSG	SSG	IAG	OTHERS
2015	26%	12%	3%	54%	5%

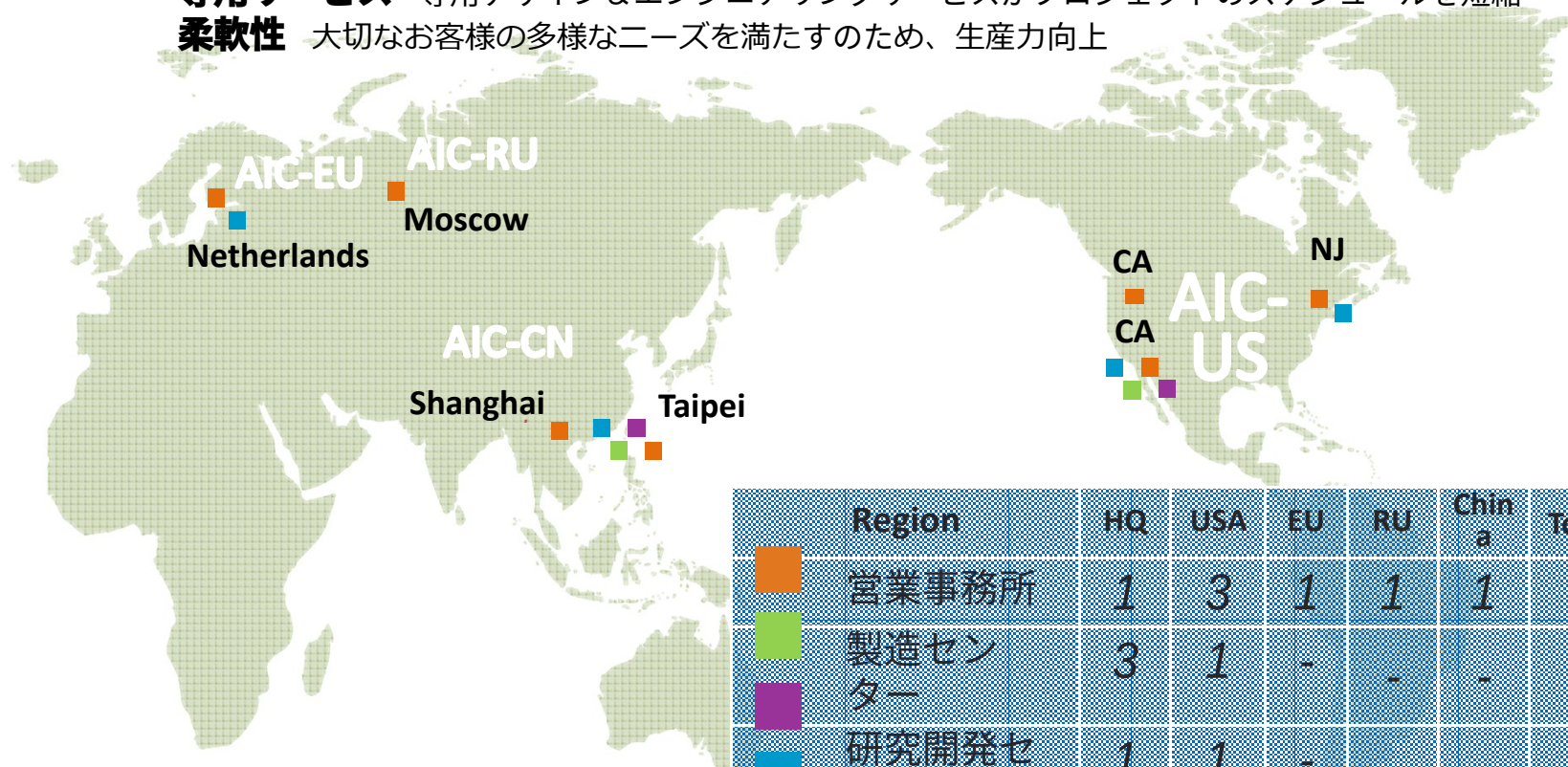


グローバルな事業展開モデル

海外現地対応 営業が地元の顧客と直接に会話し、ビジネスニーズを収集

専用サービス 専用デザイン&エンジニアリングサービスがプロジェクトのスケジュールを短縮

柔軟性 大切なお客様の多様なニーズを満たすため、生産力向上



	Region	HQ	USA	EU	RU	China	Total
	営業事務所	1	3	1	1	1	5
	製造センター	3	1	-	-	-	4
	研究開発センター	1	1	-	-	-	2
	倉庫	1	2	1	-	-	4
	Employee	39	54	5	2	5	460
		4					

Updated at May. 2015



ミッションとビジョン

ミッション

競争上の優位性を維持のため、品質駆動、高効率動作を維持しながら、最新の技術を利用して、優れたサービスとサポートを提供

ビジョン

中ロットのOEM/ODMソリューションの変更も対応可能なトッププロバイダを目指せ

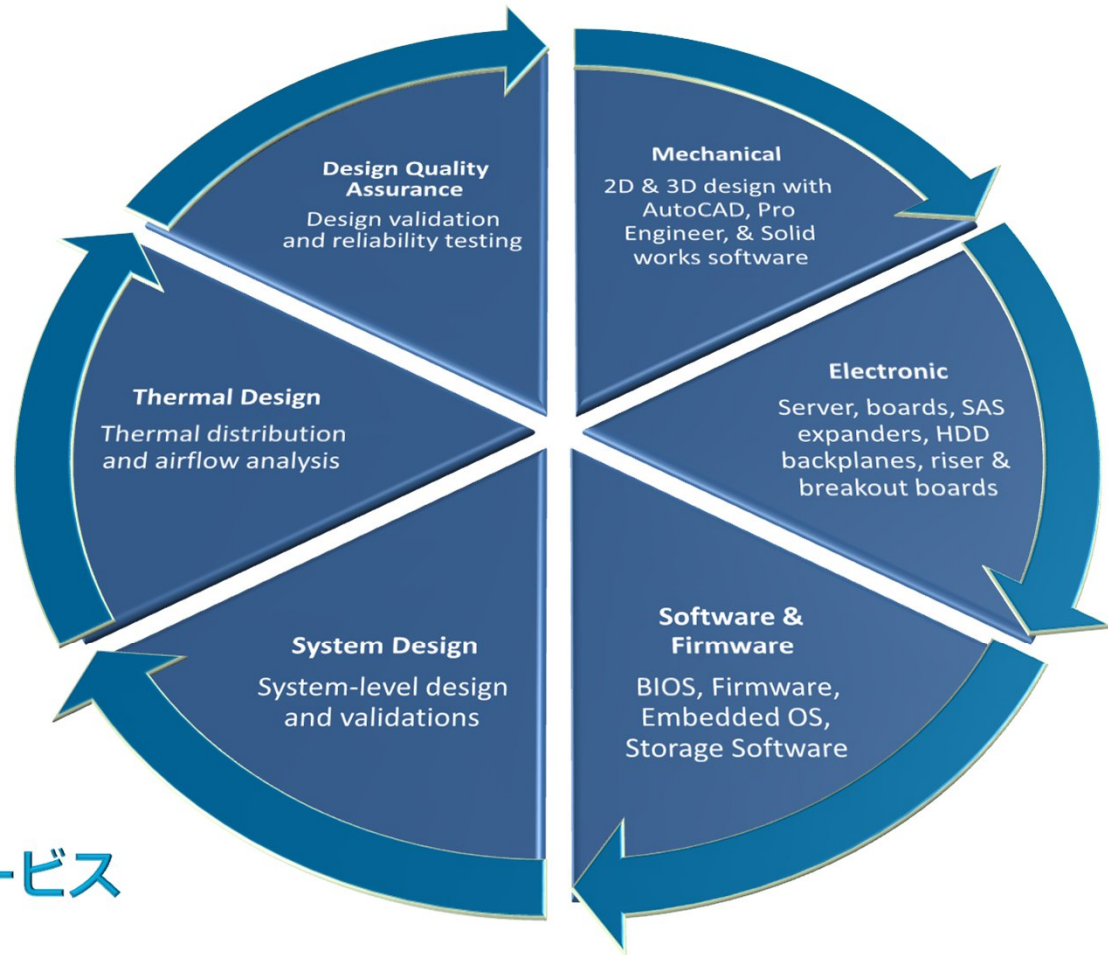


完全な製品ラインが様々な市場に対応

ターゲット垂直市場



完全なデザイン能力



ワンストップのデザインサービス



生産能力

- **柔軟性** 生産能力と組み立てライン
- **機台** 生産、エンジニアリング、デザイン
- **専用バーンイン ルーム** (150セットのフルロード)
- **RoHS** – 6/6 2006年6月より
- **UL** 生産設備認証を取得





Openstack Solution Reference Architecture



Cloud Ecosystem

CHIEF | 是方電訊

Cloud Industry Chain

- ✓ Cloud OS
- ✓ Cloud Storage
- ✓ SDN
- ✓ Data center powered by renewable energy
- ✓ OCP cloud infrastructure
- ✓ Enterprise Application
- ✓ Big Data、EC、O2O、Mobile APP
- ✓ IoT application、Industrial 4.0
- ✓ Mobile games
- ✓ Digital content、Media Streaming

Strategy

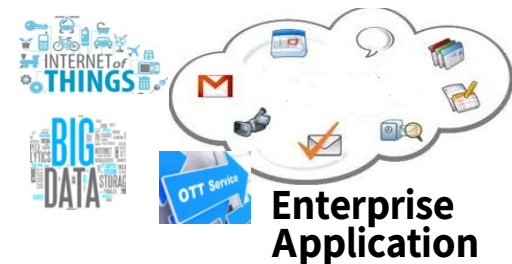
Industrial Upgrading

In line with international practices



Co-Sale Biz model

brings more opportunities



Enterprise Application

Turnkey solution



Cloud Ecosystem



Industry Chain+ Startups

- Cloud Service Certification
- Startup Accelerator

Revenue Sharing
Cooperation



Chief
Cloud Data Center

Operation



Marketing



Billing



Ecosystem Alliance

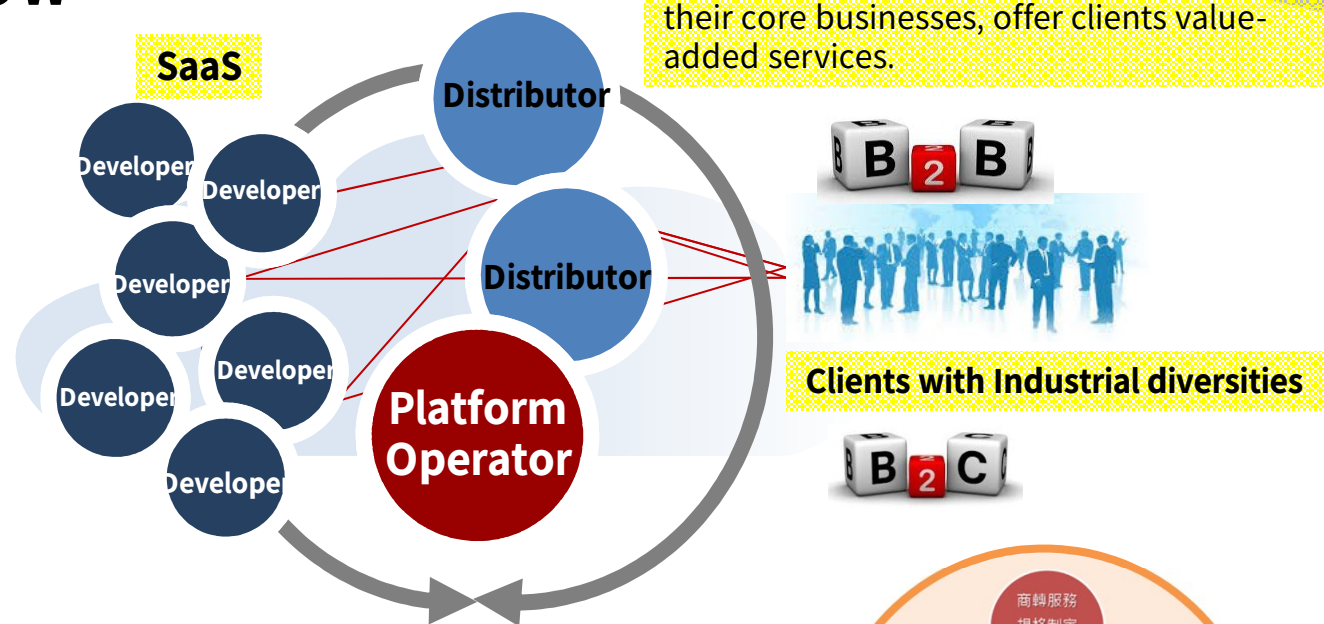
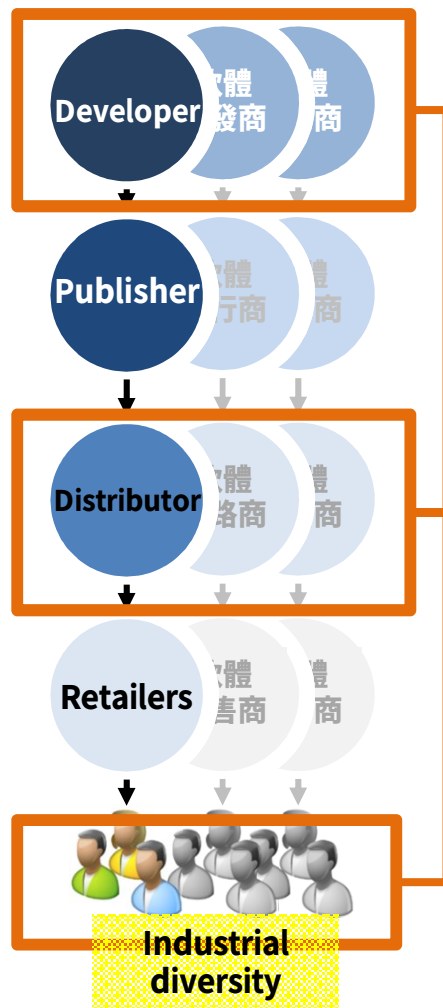
CHIEF | 是方電訊

Linear Supply Chain → OUT

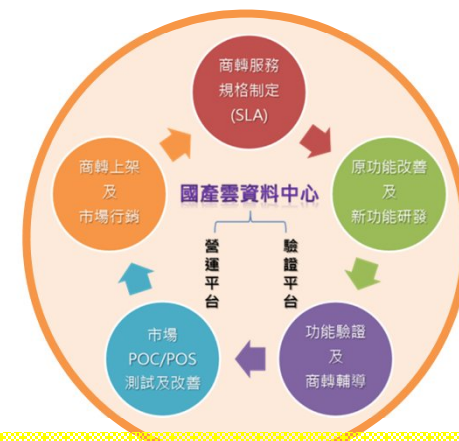
Supply Network → IN

PAST

NOW

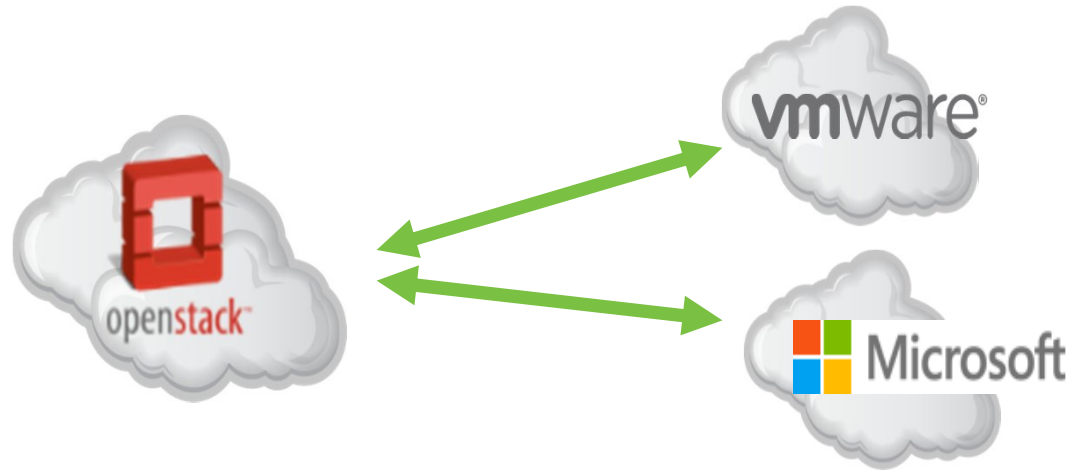


Chief AppCloud – the first cloud data center offers cloud certification, launching, promotional marketing services.



Market research, Development, Certification, Service Launch

Comparison between OpenStack, Vmware, M/S

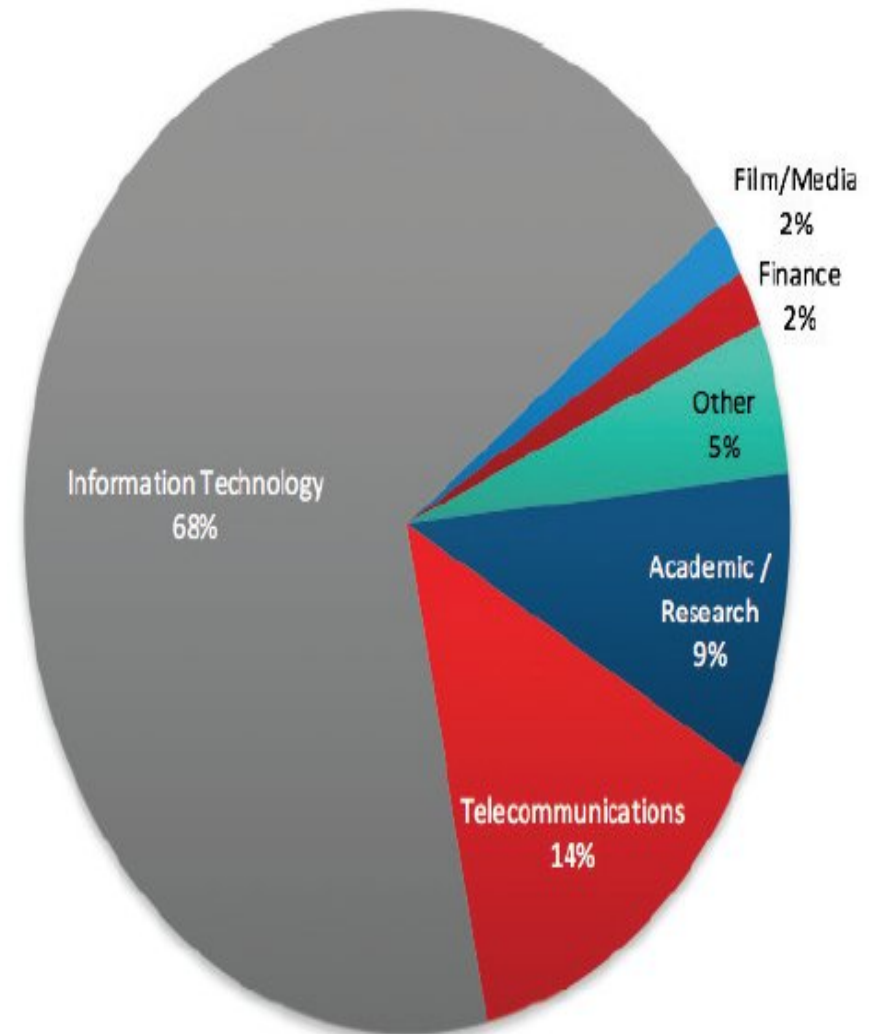
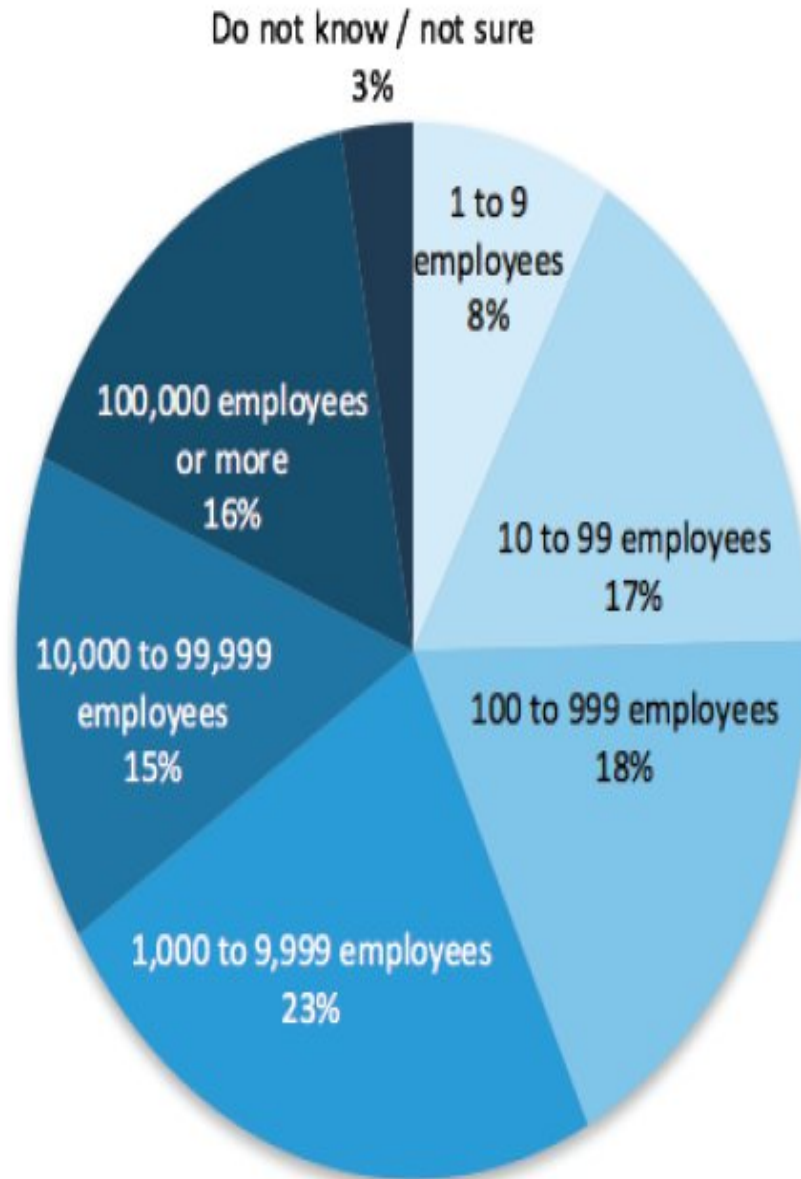


OpenStack still support
VMware & Microsoft
Hypervisor

	Open Stack	VMware	Microsoft
Vendor Lock-In	No	Yes	Yes
Cost	low	high	medium
Open technology	Yes	No	No
Performance	Good	Good	average

AIC

What size org. and Who are using OpenStack?



Select what you need

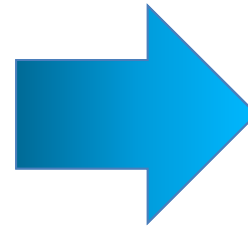


ORACLE®

SOLARIS



SUSE
OpenStack Cloud

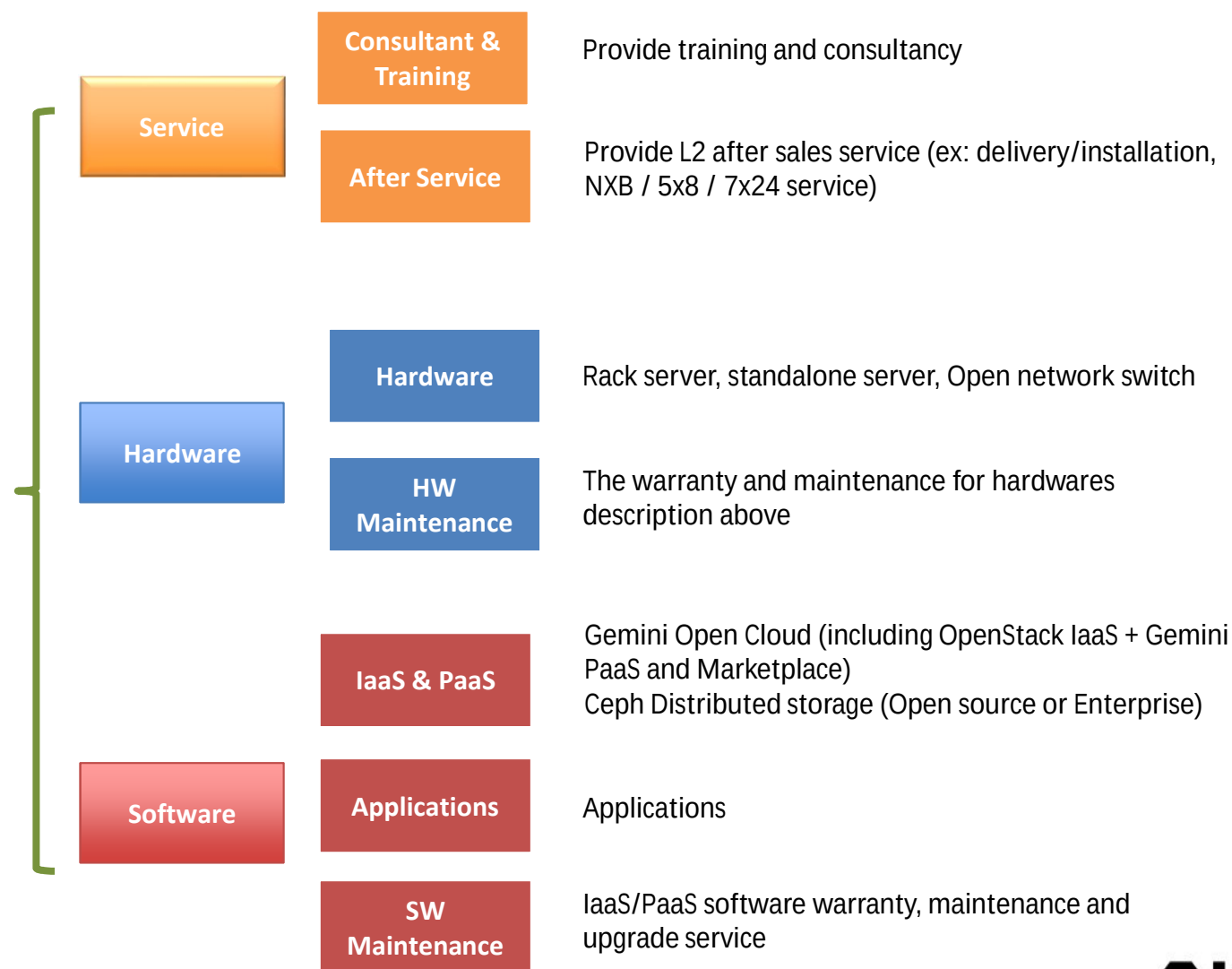
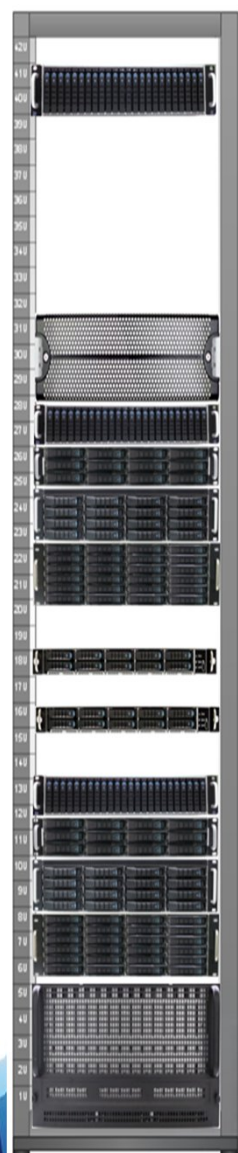


AIC



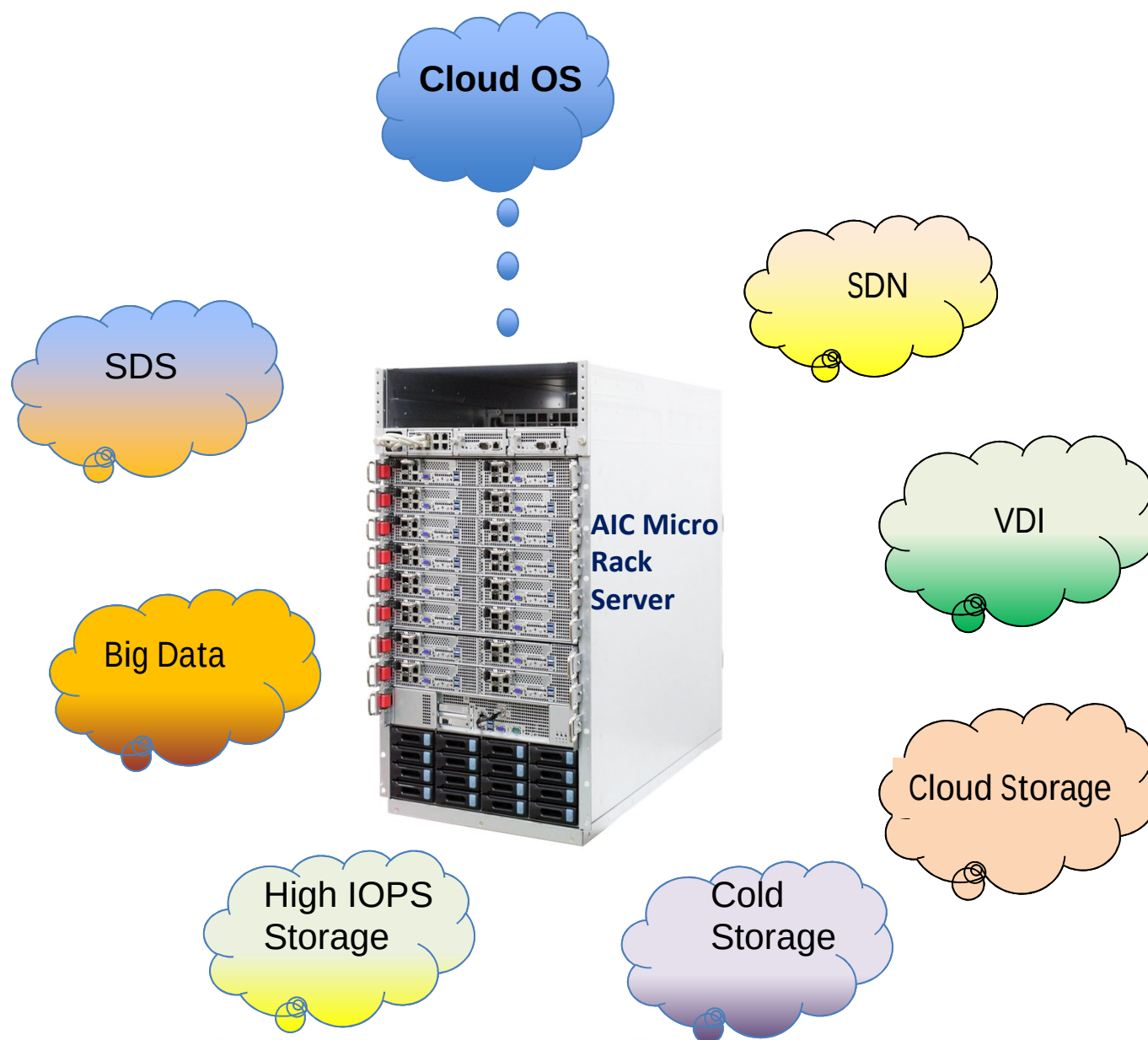
AIC

What Integrate Solution provided by AIC?



AIC

AIC OpenStack Echo System



Gemini Open Cloud



- “Cloud Service Management” on Openstack
Orchestration, Manage, Monitor, and Continuous Integration
- Enable ISVs to quickly move Legacy applications to Cloud and operate as Services
- Installed on premise as Private Cloud as well as in public cloud IDC to host Cloud Services



Gemini Open Cloud Marketplace

The screenshot displays the Gemini Open Cloud Marketplace interface. At the top, there's a navigation bar with the Gemini logo, 'Overview', and links for 'Dashboard', 'Help', and 'Account'. Below the navigation bar, the main content area is titled 'Total servers on Gemini Open Cloud'. This section features a bar chart showing the count of servers for different categories: Drupal (0), IaaS-VM (2), and Wordpress (0). To the right of the chart, there's a grid of application icons including Alfresco, Drupal, Wordpress, Matlab, NxWitness, PowerONE, FileCruiser, MongoDB, and HadoopCluster. Below the chart, there's a section titled 'Applications' which contains a table of servers.

	Solution	Name	Public IP	Status
☐	Matlab	wirMatlab	10.15.2.52	Ready
☐	Matlab	linxMatlab	10.15.2.53	Ready
☐	IaaS-VM	linxVM	10.15.2.58	Ready
☐	IaaS-VM	wir2008	10.15.2.59	Ready
☐	Matlab	license	10.15.2.66	Ready

At the bottom left, there is a red button labeled 'Delete server'. On the right side of the interface, there are additional application icons like HEPPA, OrcaCenter, Jenkins, DevOps, and OpenEMM.

Gemini Distribution Benefit

GEMINI

Resource Input

Private/Public Cloud
Turnkey H/W & S/W
Solution

Outcome

VSaaS Ready
Easy for End User
Easy for IT Staff
Good ROI

Benefits

Time to Market
Less Resource Input
Less Resource Input
Lower TCO

VS

OTHERS

HW

Cloud System SW

SI Customization

Integration Test

Complicated system

Customization will take
more time and cost

Poor ROI

Long way to go

More resource input

Higher TCO

AIC

AIC server scale solution for Open Stack deployment

AIC Standard Server

Control (Deployment) /
Compute Nodes



GB109-PH



SB121-PH



SB122A-PH



HP201-AD



SB202-LB

Switch Node(Open Networking)



AS5712-54X

Storage Nodes &
Extension Box (JBOD)



SB201-LB/J2024-01



SB202-LB/J2012-01



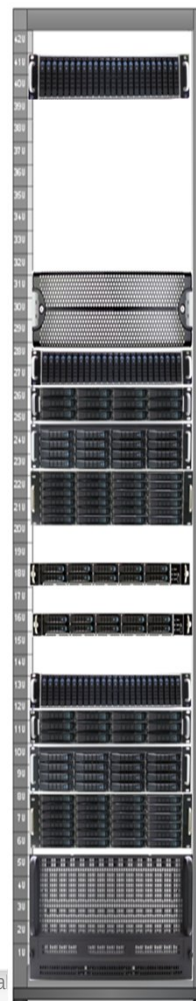
SB302-LB/J3016-01



SB401-LB/SB402-LB
/J4024-01



SB403-LB/J4060-01



AIC Smart Rack Server



Control (Deployment)
/ Compute Nodes
1U2N E52600 E3/E4 DP



Storage Nodes
1U1N E52600 V3/V4 DP



Storage Node
ext.
2U30B/20B JBOD



16U/600mm



25U/800mm



48U/800mm



About App Cloud

CHIEF | 是方電訊

App Cloud offers a stable, secure, high-efficiency platform to SaaS developers to built-up, certify, launch, and marketing their solutions.

THE MOST COMPETITIVE CLOUD PLATFORM at both service level and cost efficient. adopted OpenStack as service framework, leverage rich global/domestic network resources and stable infrastructure environment.

App Cloud Platform Providers



AppCloud

AppCloud

AppCloud

AppCloud

APPCloud

Business Case



Hospital DevOps Cloud (1)

- Rush migration request for 21 ESXi VMs to KVM VMs
- Fast deployment: Automatic launch and configure network for 22 VMs (21 app/DB VMs + 1 gateway VM)
- Network Isolation between Tenants



Hospital DevOps Cloud (2)

- Hardware: AIC 25U Smart Rack Server



AIC



■ H/W Configuration:



www.aici.it

I. All spec

Hospital DevOps Cloud (4)

■ Implementation:

- Convert 21 ESXi VMs to KVM VMs

Host Name	VM name	OS	IP 192.168.200	# CPU Core	Memory size(MB)	Volume	nic model	hw bus
apserver	APSERVER_VM_1	Microsoft Windows Server 2003	201	4	4096	30G 46G		VirtIO
blade8	Blade8(1)	Microsoft Windows Server 2003	237	4	4096	40G	virtio	VirtIO
client	client	XP	10	4	1024	40G		IDE
DB	DB	Red Hat Enterprise Linux 5 (64-bit) Cent5.7	33	16	65536	700G		IDE
DNS	dns	Microsoft Windows Server 2003	1	4	2048	60G	virtio	VirtIO
dotnetweb	dotnetweb	Microsoft Windows Server 2003	15	2	2048	20G 10G	virtio	VirtIO
DRG	drgserv	Microsoft Windows Server 2003	47	2	1024	15G	virtio	VirtIO
分散式 (IDMS02P)	IDMS02P	Microsoft Windows Server 2000	81	4	4096	29.3G 39.06G	VirtIO	IDE
LDAP	ITDS6	Microsoft Windows Server 2003	211	4	4096	60G	virtio	VirtIO
mars-t	mars-t	Microsoft Windows Server 2003	76	2	2048	20G	virtio	VirtIO
MGTWEB	mgtweb	Microsoft Windows Server 2008	157	4	4096	80G	VirtIO	VirtIO
node02	node02	Red Hat Enterprise Linux 5 (64-bit) Cent6.2	118	4	8192	80G		VirtIO
oracleas	ORACLEAS_VM	Microsoft Windows Server 2003	117	4	4096	70G 70G	VirtIO	VirtIO
path	PATH	Microsoft Windows Server 2000	77	2	2048	60G	virtio	IDE
portal	portal	Microsoft Windows Server 2003	106	2	3072	20G 40G	VirtIO	VirtIO
tomcatap	tomcatap_1	Microsoft Windows Server 2000	43	4	1024	20G	virtio	IDE
tomcatap02	tomcatap02	Microsoft Windows Server 2003	44	2	2048	20G 20G 10G	VirtIO	VirtIO
新版分散式 (VGHTCIDMS01P)	VGHTCIDMS01P	Microsoft Windows Server 2003	85	4	4096	60G 60G	VirtIO	VirtIO
mq_SERVER	W2KQPBK	Microsoft Windows Server 2000	111	4	1024	20G	virtio	IDE
report_server	wasap05	Microsoft Windows Server 2000	236	4	1024	40G 40G 60G	virtio	IDE



IDC/CSP APP Cloud (1)

- Require Multi Tenant, Virtual Network & Resource management
- Require more new SaaS service could be implemented immediately (fast deployment)
- Should provide the same web ordering menu as current environment (AWS Like service)
- HA for Service, Networking & Storage
- Scalable architecture
- Mechanism to monitor, log, and alert all hardware status and infrastructure software status
- Highly S/W & H/W integration rather than own resource involving



IDC/CSP APP Cloud (2)

- Hardware: **AIC 48U Smart Rack Server**



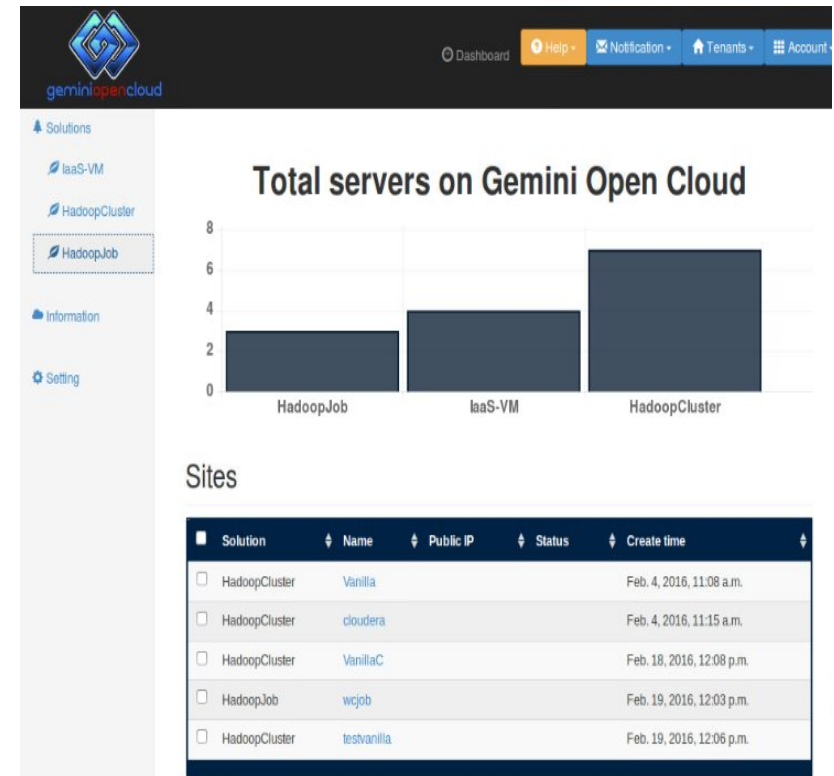
AIC



IDC/CSP APP Cloud (3)

■ Solution Platform: Gemini Open Cloud

- ❑ Multi-Tenancy management integrated with Openstack
- ❑ Convert legacy applications into cloud services
- ❑ Enable data center to provide cloud services according to Tenants' needs
- ❑ Solution VM orchestration, monitor and life cycle management
- ❑ Hadoop, VSaaS, VDI and many other services available

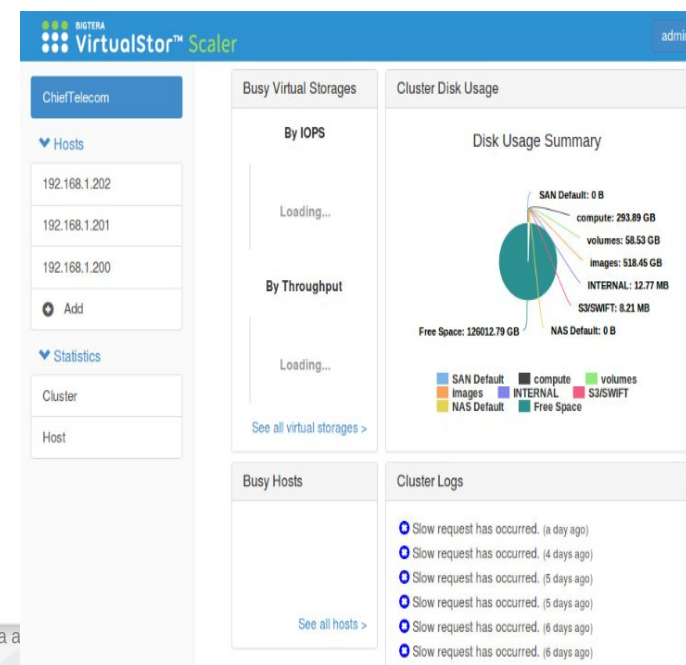
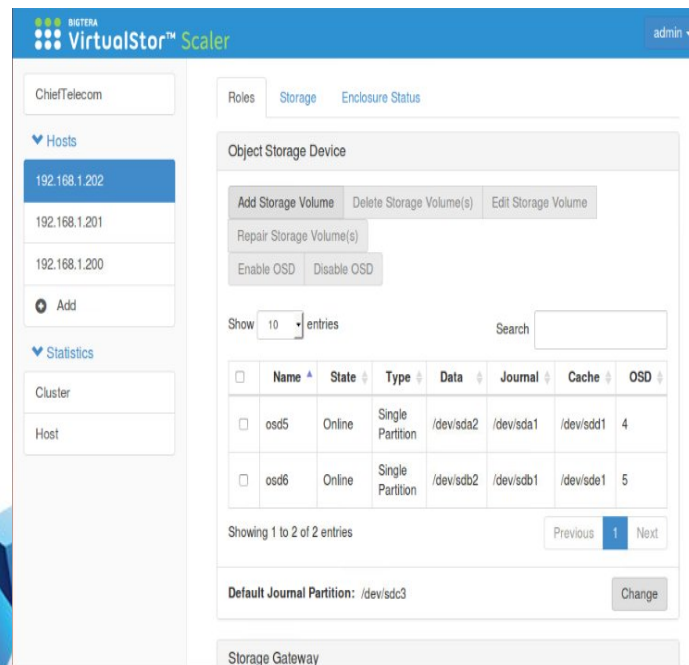


IDC/CSP APP Cloud (4)

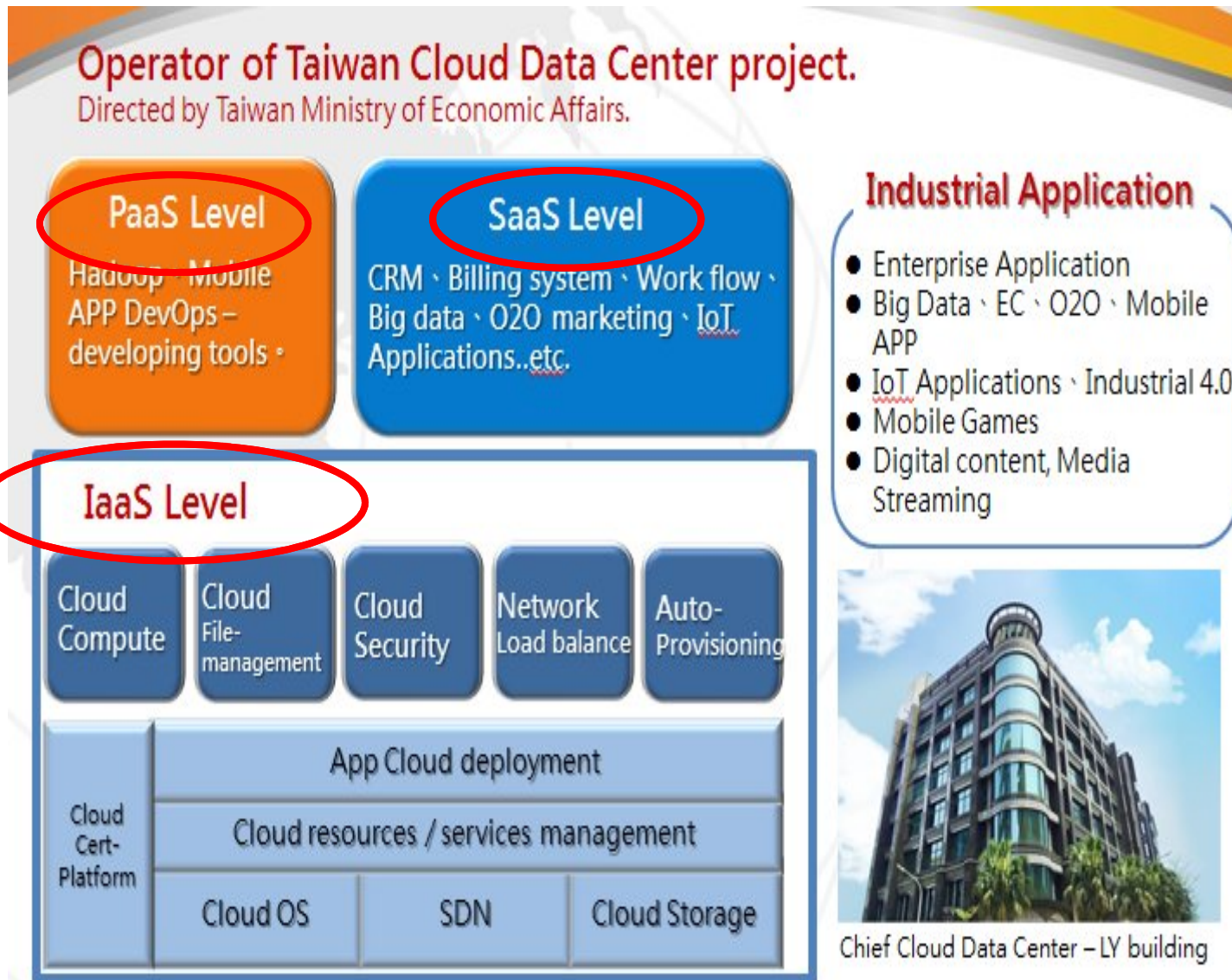
■ Implementation

□ Openstack Storage : Bigtera VirtualStor

- Single management portal for the storage cluster
- Scale-out architecture, no single point of failure
- SSD caching supported
- Replica and Erasure code supported
- NFS, CIFS, FC, iSCSI WebDAV and S3 all supported



IDC/CSP APP Cloud (5)



AIC

WHY AIC?



- サーバー/HPC/冗長化/JBOD/ストレージに関連デザイン、生産など15年以上経験を持つ
- メカニカルに関してデザイン、生産など20年以上経験を持つ
- BIOS,BMC,エキスパンダーファームウェアなどをカスタマイズ可能
- 製品のサプリメント/ライフサイクル5年以上保証可能
- 回転振動指数試験も対応可能(RVI report)
- 完全な熱シミュレーションを提供可能 (LS-Dyan/ Flotherm)
- 中小ロットでカスタマイズ対応可能 (スマートラック1台でも対応可能！)
- ハードウェアだけではなく、ソリューションプロバイダを目指せ

＊顧客の要件を満たすため、最適化されたソリューションを提供します！





Cloud Data Center



Networking Security



Broadcasting



Industrial PC

amazon

Yandex

OVH.com

金山云

@mail.ru

CISCO

CITRIX® f5

SONICWALL®

DiaLogic

SafeNet

EditShare™

EVS Instant Tapeless Technology

SeaChange®

DAYANG®

中科曙光
Sugon

Honeywell

unis inspur

ZTE中兴 DVS
A Rohde & Schwarz Company

Uit DataDirect
NETWORKS

SIEMENS

kontron

ADVANTECH

GE Healthcare

ViewSonic

HARRIS
HATTELAND®
DISPLAY

AIC



ご清聴ありがとうございました

CHIEF

CHIEF
TELECOM



geminiopecloud

AIC

www.aicpc.com

AIC Confidential. All specification and data are subject to change without notice.