



## Customer Overview

PT Cemindo Gemilang is a cement manufacture that was established in 2011 and the brand holder of Semen Merah Putih. Currently, with 4 plants located in Java and Kalimantan, PT Cemindo Gemilang has a total production capacity of 6,75-million-ton cement per year. The integrated cement plant in Bayah (Banten) is equipped with latest technology including a complete supply chain process, starting from the production to the inclusion of an independent port itself with total production of 4 million tons of cement per year.



## Customer Requirement

### Business Aspects

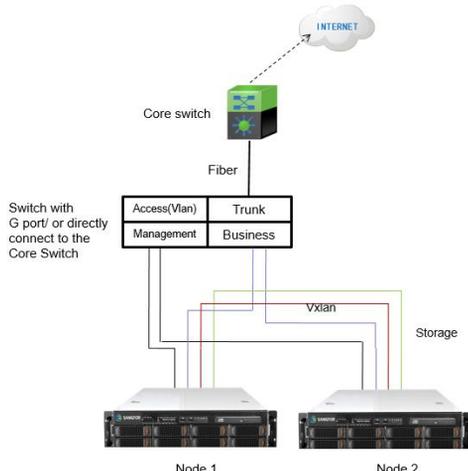
- Customer prioritizes the Click Square Mall project in Bandung at the beginning of this year, the whole project including infrastructure construction, supply chain collaborations, and data center, etc. Due to the time constrains, fast IT deployment is big issue. It takes long time to deploy all the server-based applications.
- Meanwhile, the cost of building an entire data center from scratch did give PT. Cemindo Gemilang a headache. What's more, the purchase of assets, the training of skilled staff, the extended hours in maintenance together would raise the cost while lower the working efficiency. Therefore, they are eager to find a reliable but lower TCO solution.

### Technical Aspect

- New business Mobile APP will be online. Due to the IO bottleneck of traditional data center, which cannot satisfy the thousands of concurrent users in peak time so that users cannot get fast web response. Fast deployment and high performance solution of HCI matched CTO Pak Agus' requirements.

## Solution

Deployment



## Executive Summary

- Customer: PT Cemindo Gemilang
- Industry: Manufacturing
- Location: Indonesia



## Challenges

- Fast IT Deployment
- High Cost of Building A Data Center from Scratch
- IO Bottleneck of Traditional Data Center



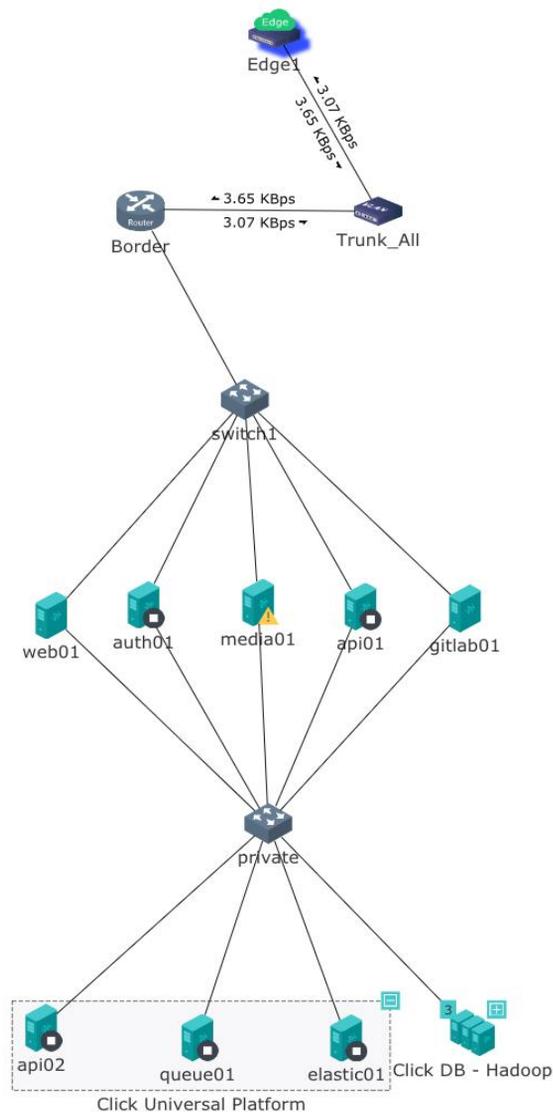
## Sangfor Solutions

- HCI software solution based on SUPERMICRO servers

## Customer Success Story

- **Cluster Management Network**, is used to transfer data of beats, management, VM cloning, migration, backup among clusters.
- **Storage Communication Network**, particularly for the data communication of aSAN, all the write disk data and part of the read disk are transferred through this network. If the storing network is unstable, may cause the storage fissures.
- **Overlay Network Interface (vxLAN)**, west-east direction flow transmission. If all the network interface of the VM are connected to the edges, there will be no west-east direction flow, vxLAN network is not actually used. If the network card of the VM is connected to the switch of VM, when it is communicating with outside, it has to use the vxLAN network, then transfer to the VM router or edge.
- **Business Communication Network**, north-south flow transmission, as the edges, connect the core switch or router, carrying the business flow accessed from outside.

### Solution Details



## Customer Success Story

- Hadoop VM group were migrated from existing IBM server to HCI
- Static routing policies between CBN and VM on vRouter
- Web-server connected with Database like Hadoop, MySQL by vSwitch
- Visible network virtualization (aNET) simplifies the network topology

### Values

#### ✓ Simplified DC Architecture

Sangfor HCI can provide a comprehensive data center architecture, traditional 5-tier data center architecture will be simplified into few switches and X86 servers after deploying HCI.

Massive TCO reduction will be brought by Sangfor HCI:

1. Shrinking data center footprint with much less hardware to be purchased and deployed
2. Much easier to do O&M, IT department can spend more time on business innovation

#### ✓ Scale Out on Demand

Another advantage brought by HCI is flexibility, when expand traditional architecture, legacy low performance hardware will be phased out and replaced by high performance new hardware. Sangfor HCI uses standardized hardware and software, the performance and capacity can be expanded linearly through stacking more nodes.

#### ✓ Fast and Easy Business Deployment

Business deployment on HCI doesn't require loads of test on hardware in DC house, engineers can deploy compute, storage and network resources at ease with Sangfor HCI console remotely in the office.