

Huawei IT Channel Connections  
Make IT Simple, Make Business Agile

# Channel Connections

The Largest Enterprise-Class Server SAN Project-FusionStorage in Huawei BP&IT

## Huawei BP&IT Department Has Deployed Cloud Resource Pools With Over 12000+ Nodes and 550+ PB of Capacity

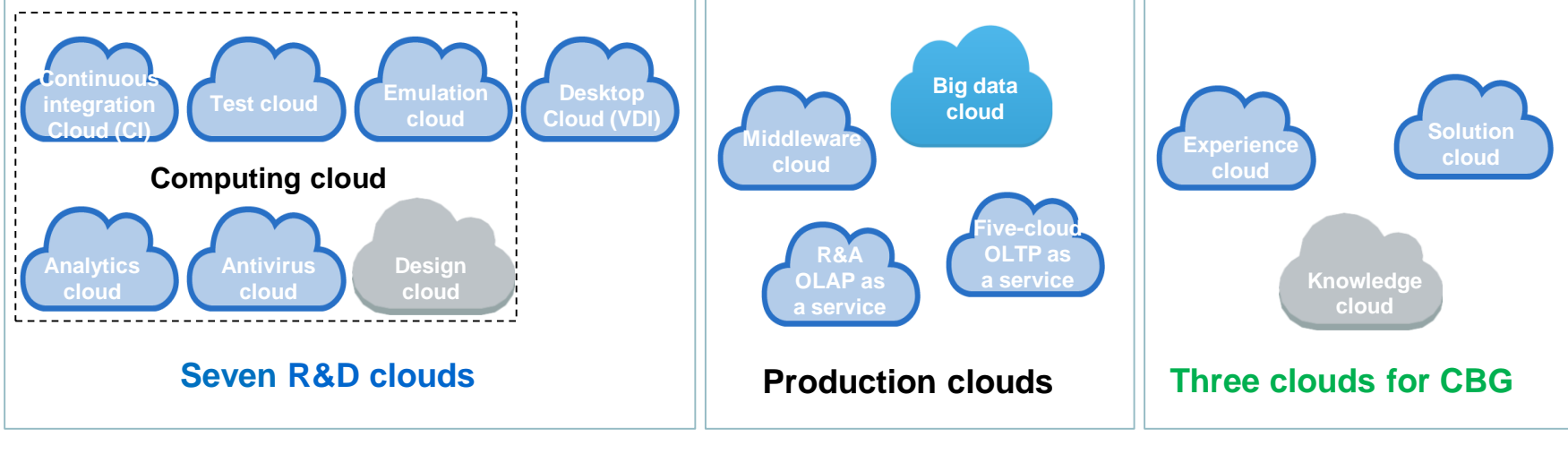
550+ PB > the total shipment of EMC, NetApp, and HDS in China market in 2014! (538 PB, from Gartner)

FusionStorage shows its high performance, high reliability, high scalability, and easy maintenance after being rigorously tested by a lot of large scale projects.

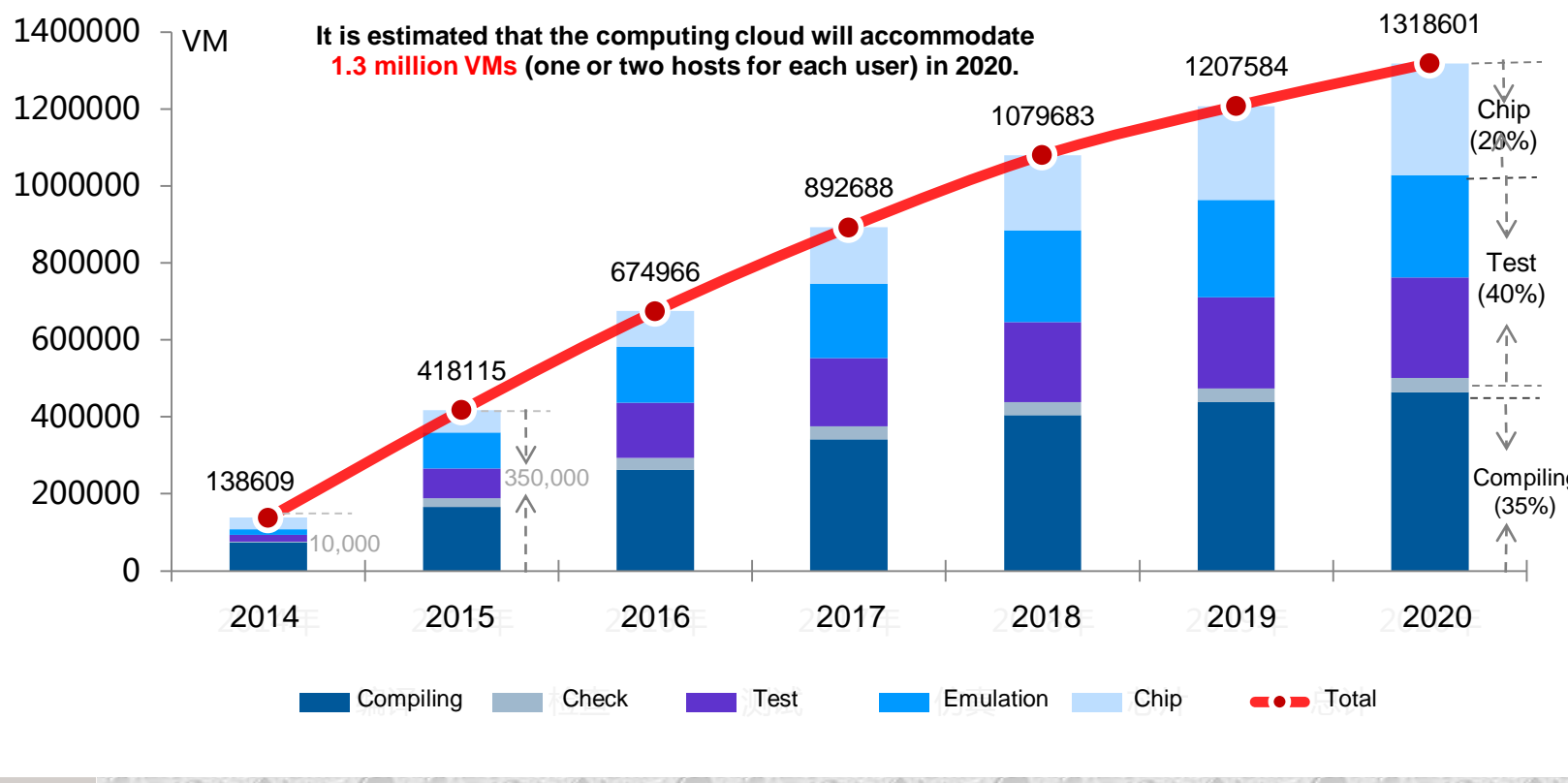
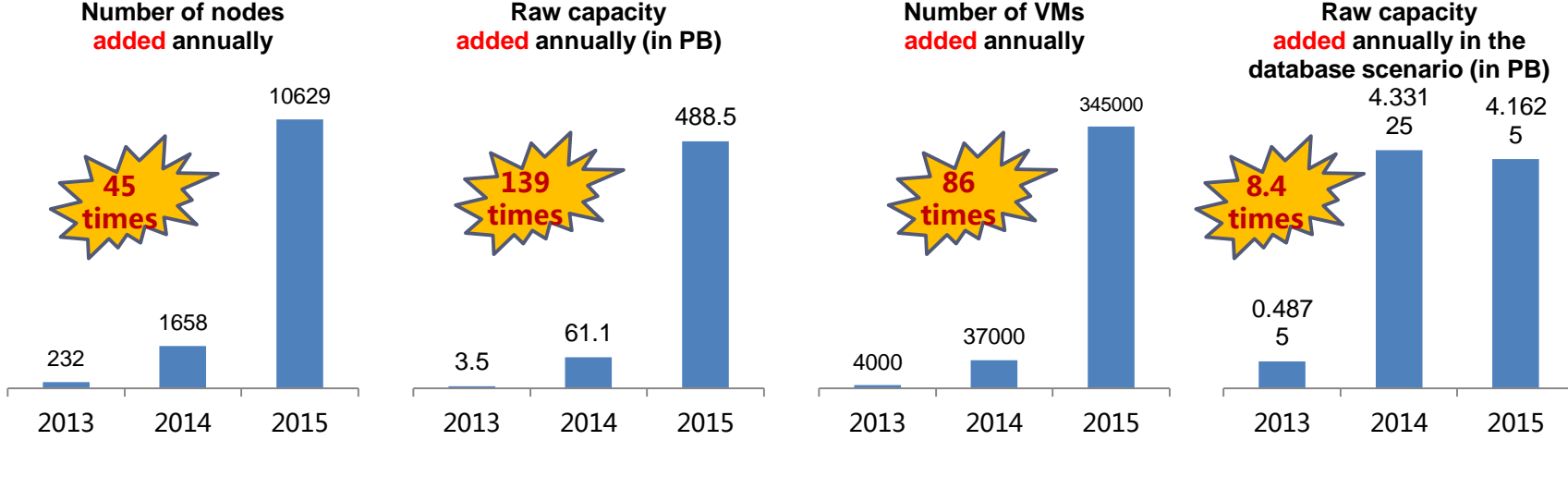


### FusionStorage Supports 3 Cloud Resource Pools in Huawei BP&IT Department and Up to 12,000+ Nodes, 553 PB of Capacity and 680-Days' Stable Operating

Huawei BP&IT Department has implemented FusionStorage since 2013, supporting three cloud resource pools (7 R&D clouds, production clouds, and 3 clouds for CBG). So far, FusionStorage has provided up to 553 PB of raw storage capacity for 12,519 nodes that accommodate 450,000 VMs (544 PB) and tens of database systems (9 PB). These figures keep increasing 10 times annually. The number of VMs will grow up to 1.3 million in 2020!

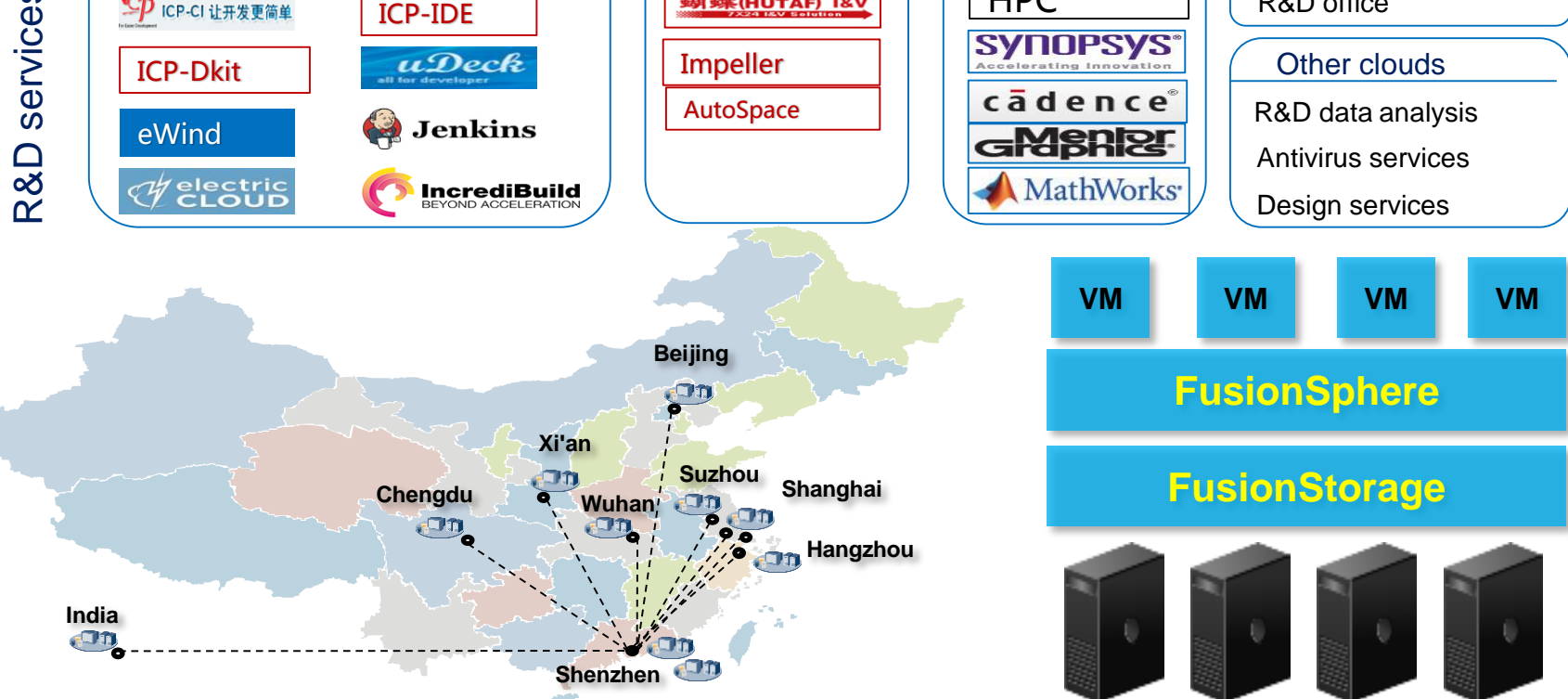


Note: All the clouds build data stores using FusionStorage except for the big data cloud. Design cloud and knowledge cloud are in construction.

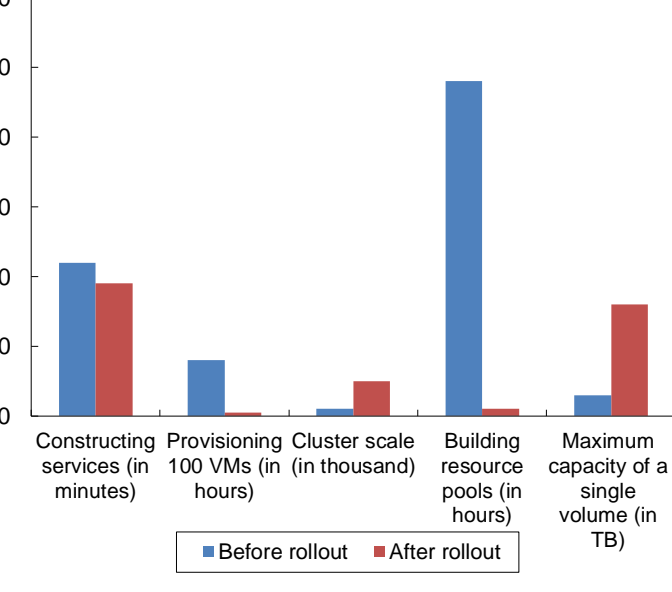
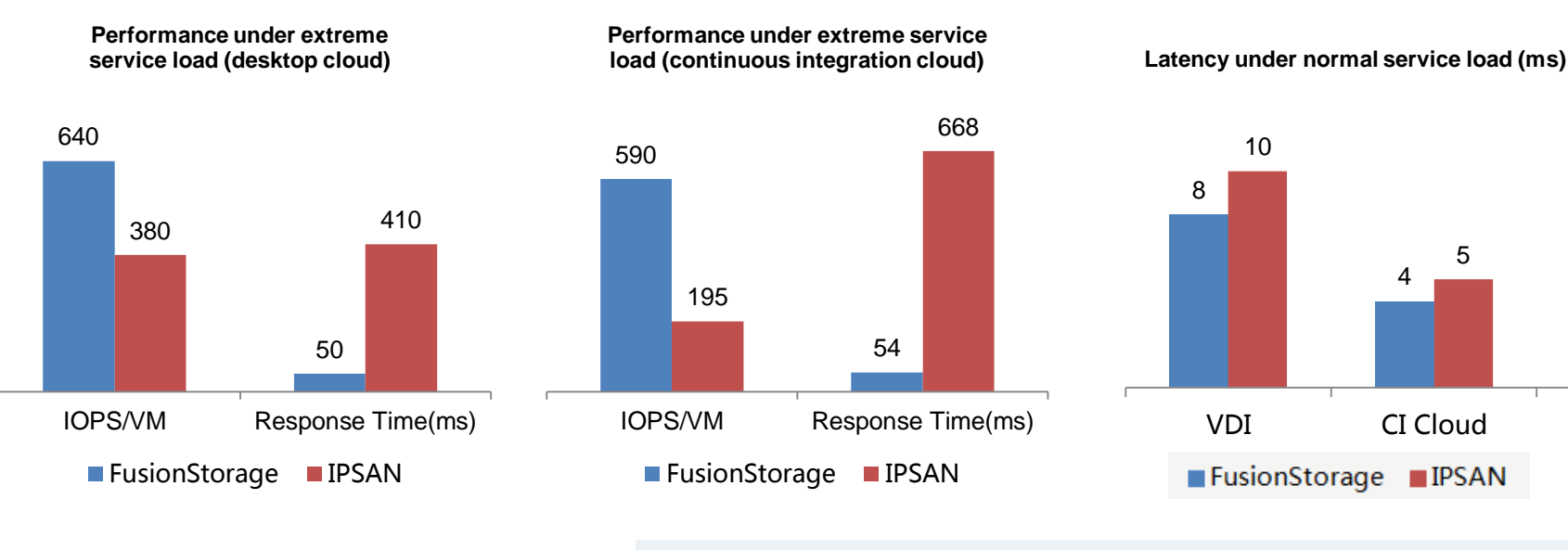


### Main Application Scenarios: Supports Cloud Resource Pools and Databases for R&D, Purchase, Supply, Financial, Sales Departments

**Seven R&D clouds:** Use Huawei RH2288 servers as the hardware infrastructure, and use Huawei FusionStorage and FusionSphere virtualization software to build cloud resource pools and to create 100,000 desktop VMs and 350,000 computing cloud VMs, providing services for eight R&D institutes in mainland China, including Huawei's headquarters, as well as International research institutes such as Huawei India R&D Center.



Under the same service conditions (with the same number of hard disks on servers and heavy service load), FusionStorage outperforms IPSAN storage by 1.7 to 3 times and provides a stable latency at only about 50 ms. Under normal service load, the latency of FusionStorage is a bit longer than that of the IP SAN storage, but the latency within 10 ms can totally meet the application requirements.



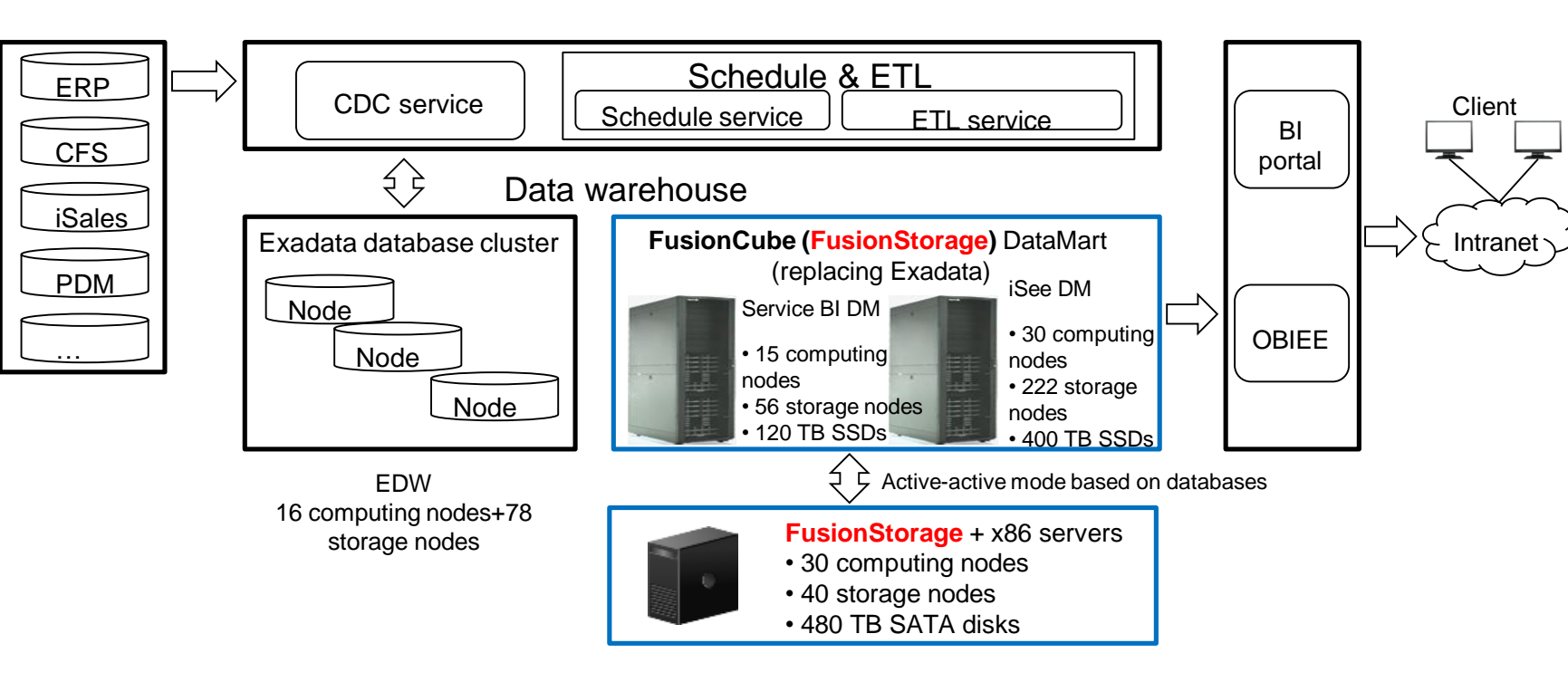
#### Customer Benefits

- 10% service performance improvement:** FusionStorage improves single task performance by 10%, therefore, improving overall performance by 2 to 8 times based on FusionStorage's concurrent capabilities.
- 16 times service provisioning efficiency improvement:** FusionStorage reduces time required for provisioning 100 VMs from one day to 30 minutes.
- Scalability improvement:** FusionStorage allows a single volume to have 5 TB capacity, easily meeting customers' requirements for scalability.
- Simple maintenance:** FusionStorage improves maintenance efficiency by 48 times and requires only one hour to build a PB-level storage pool.
- Bigger clusters:** One resource pool supports up to 5000 VMs.
- Lower costs:** FusionStorage reduces costs by 25%.

### Production clouds

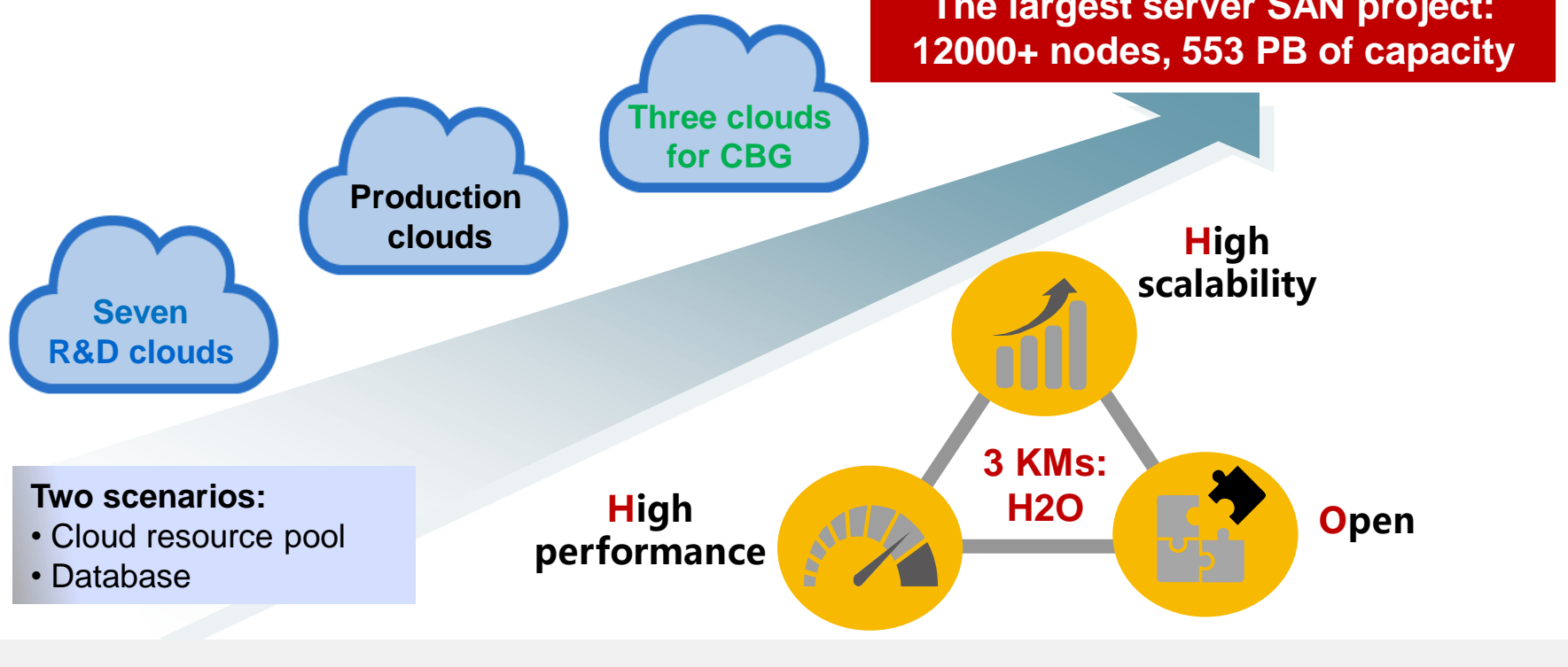
- The **middleware cloud** is used in the **cloud resource pool scenario** and provides virtualized cloud operations for the Huawei internal operations, production, OA and maintenance operations.
- The **R&A OLAP as a service** was used to replace Exadata in 2013 and provides monthly, quarterly, and annual report services for Huawei.
- The **five-cloud OLTP as a service** provides services for the sales cloud, delivery cloud, supply cloud, procurement cloud, and finance cloud.

R&A OLAP as a service and five-cloud OLTP as a service are used in the **database scenario**. With the deployment of FusionStorage, the performance of R&A OLAP as a service is improved by 3 to 9 times and the performance of five-cloud OLTP as a service is improved by 1.75 times.



**Three clouds for CBG** consist of the experience cloud, solution cloud, and knowledge cloud. Experience cloud and solution cloud are both used in the **cloud resource pool scenario**. The experience cloud provides services for data centers and branch offices in 56 regions and countries, covering Shenzhen, Dusseldorf (Germany), Malaysia, and others.

## Conclusion



## About HICC (Huawei IT Channel Connections)

Huawei IT Channel Connections is a one-stop platform Huawei builds to train and support our IT channel partners. Partners can obtain marketing materials, certification, training, and product support resources on the platform, which significantly improves the cooperation efficiency between Huawei and partners.

