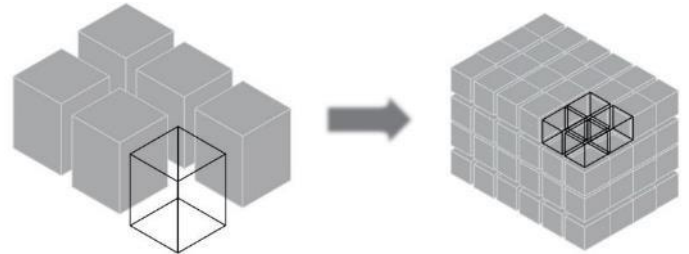


SynQuacer use case update

Apr. 2019
SynQuacer project
Socionext

For easy bare-metal provisioning

- New DDT feature
- External connection via NIC
- Network boot via NIC



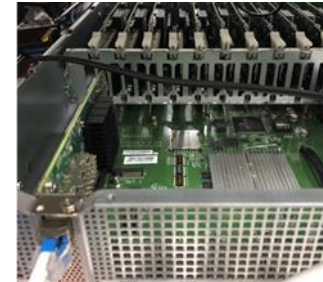
Many LAN cables are no longer necessary!!

	Original DDT	New
Node to node connection	Available	Available
External connection	LAN port/CPU	NIC/mother board
Network boot	LAN port/CPU	NIC/mother board

Coming soon

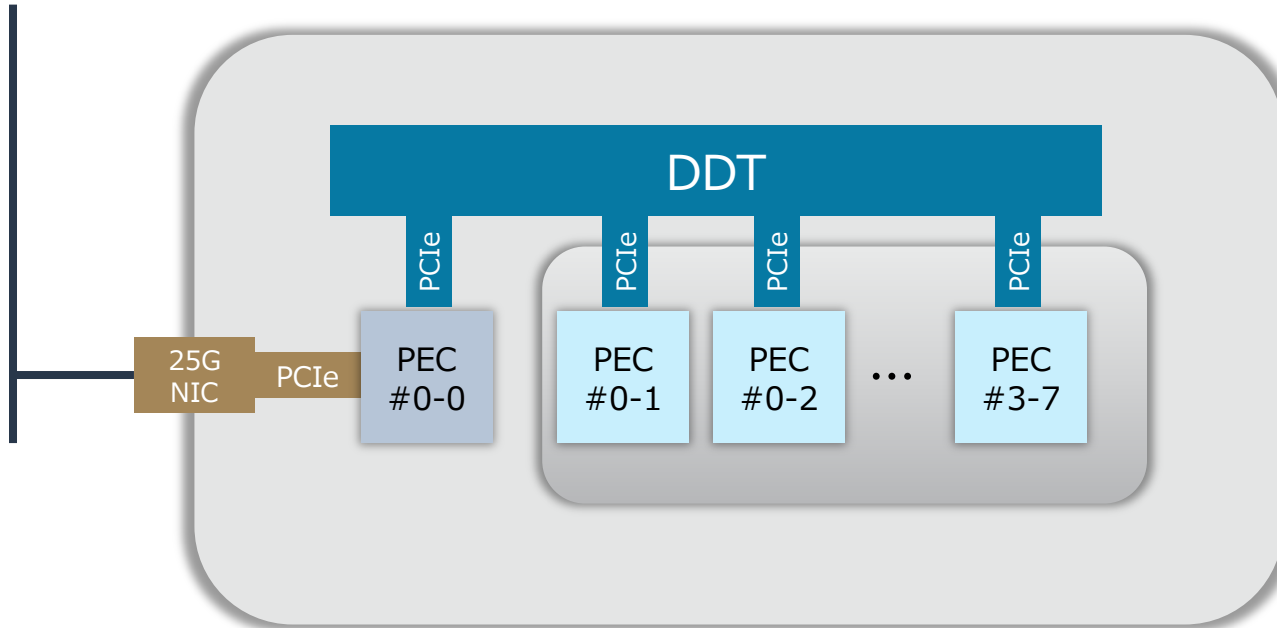


Before

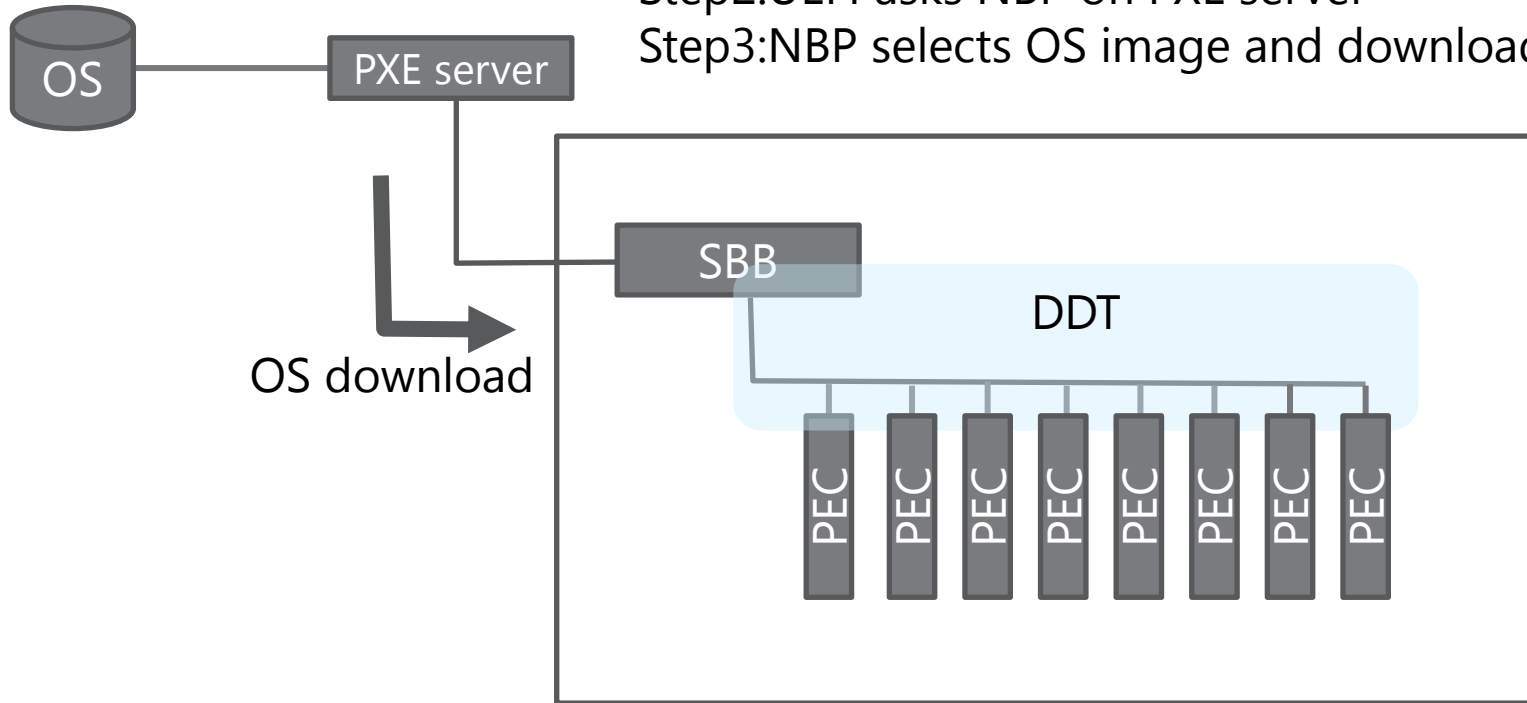


After

NIC HOST is assigned to 1x CPU card by New Firmware

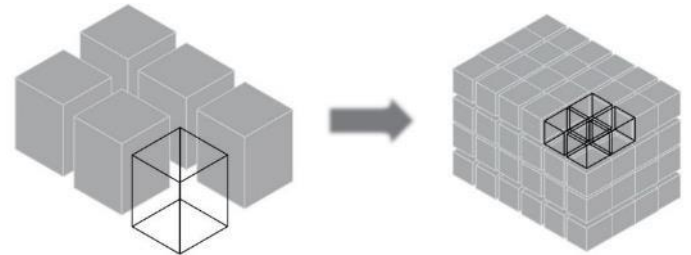


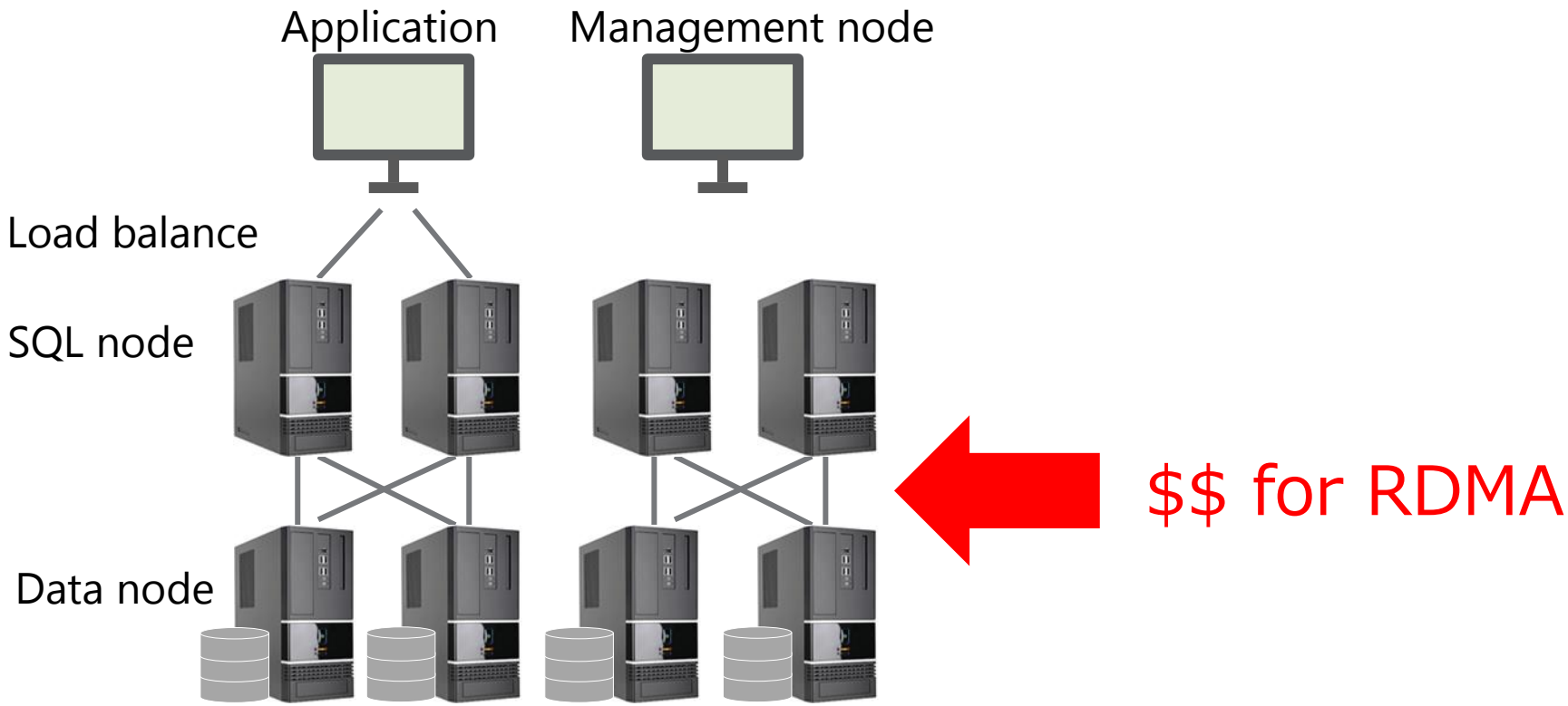
- Step1: PEC wakes up
- Step2: UEFI asks NBP on PXE server
- Step3: NBP selects OS image and downloads to PEC

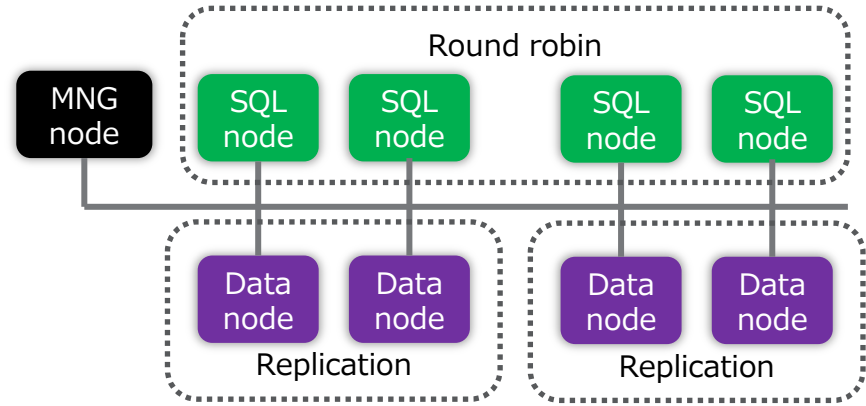
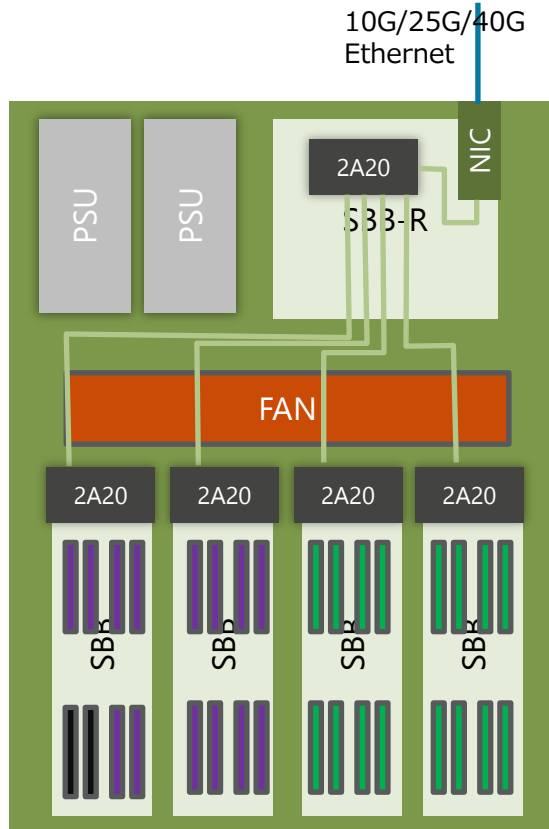


Cost effective DB system

- For scalable DB system
- All nodes connected via DDT
- Sysbench

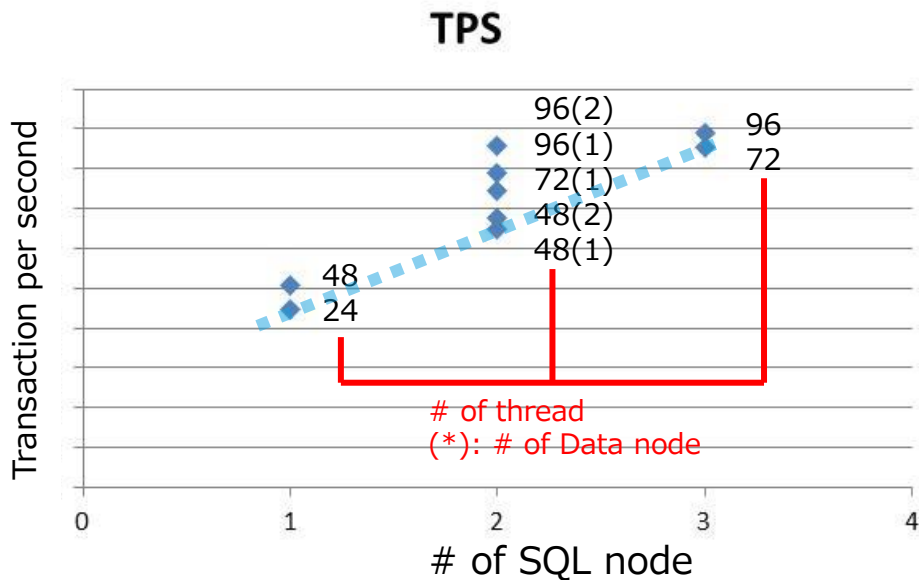




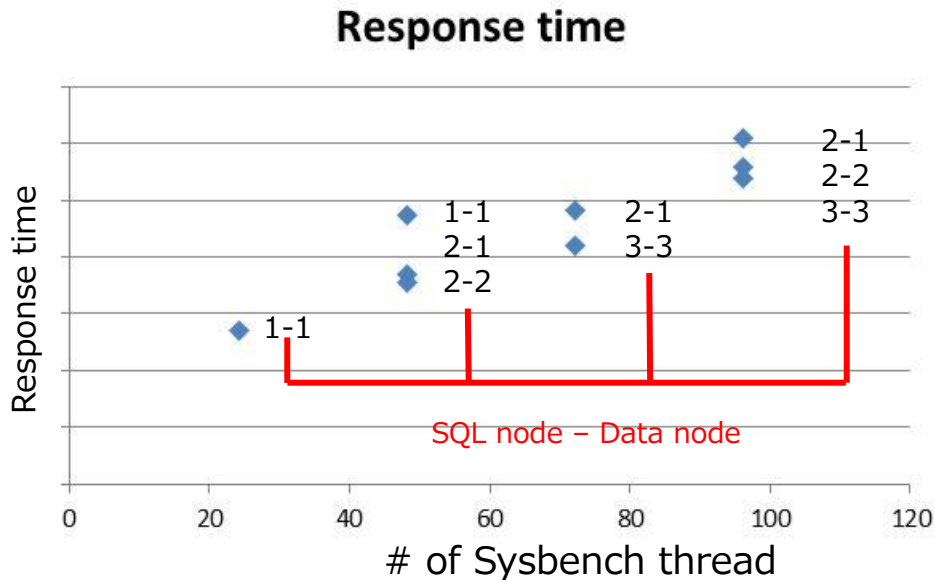


High density
High availability
Low latency
Low cost

TPS vs # of SQL node



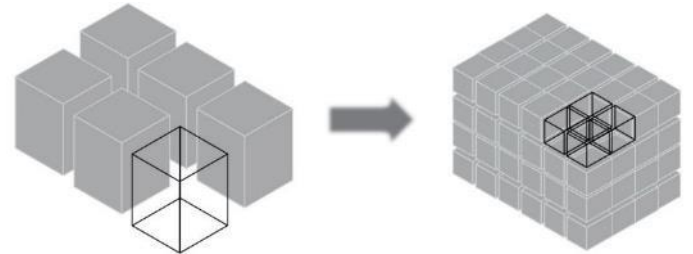
Response Time vs Threads



TPS or Response time must be balanced.
No network bottleneck increasing # of nodes

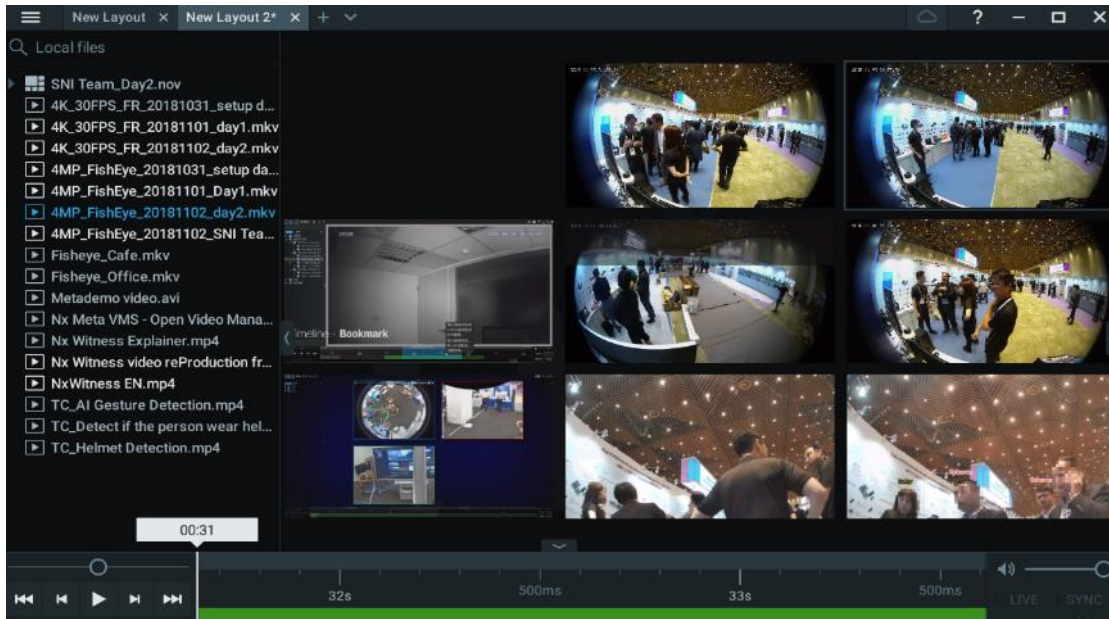
Commercial Software on SynQuacer

- Three examples of VMS(Video Management Software)
- VMS+AI/Demo Friday

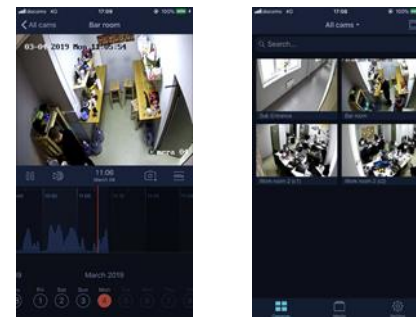


Three VMS applications are up & running

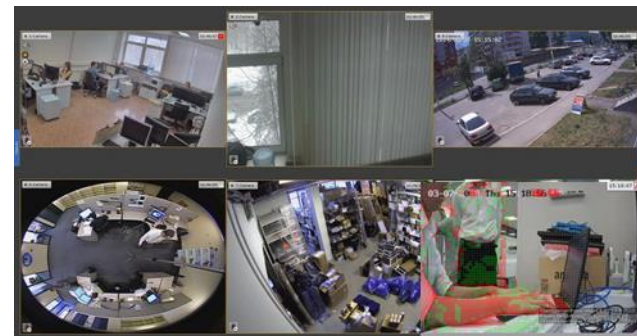
NxWitness by NetworkOptix
: Flexibility by Add-On Software Plug-In



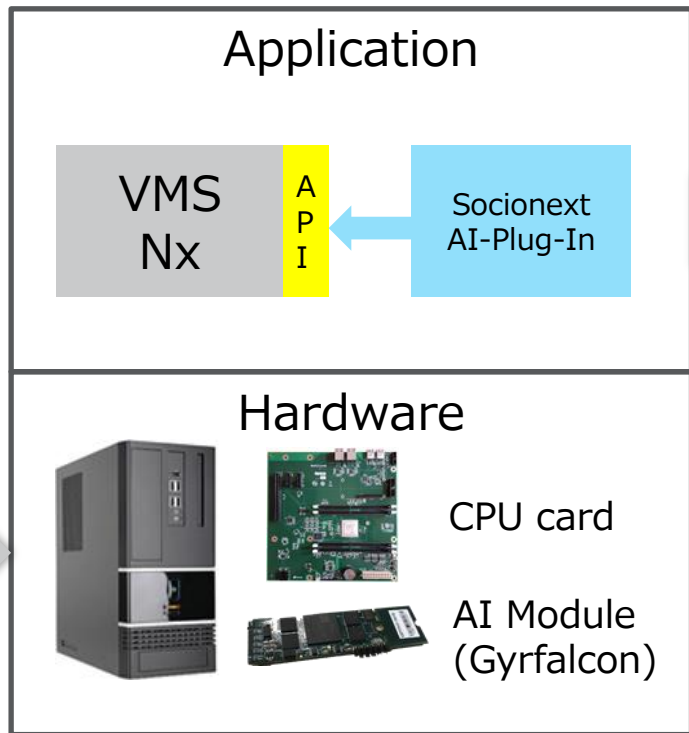
Errai by Zorachka: Low latency



AxxoNext by Axxonsoft:
Many Channels



NxWitness VMS + Gyrfalcon Technology AI Accelerator on Socionext SynQuacer
~~ Commercial SW on Arm Linux



SOCIONEXT™

for better quality of experience