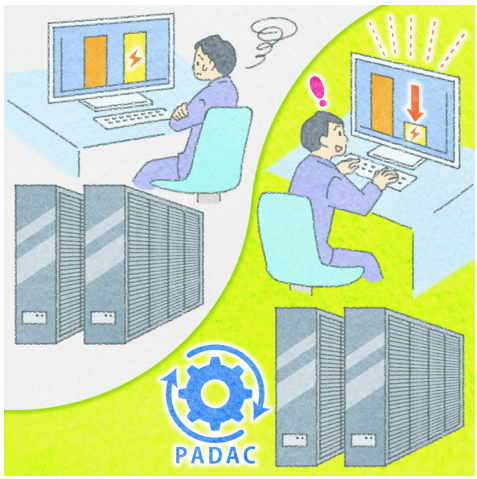
N08

Reduce server-power consumption while maintaining application performance

Power-Aware Dynamic Allocation Control (PADAC)

IOWN Now

Next-Generation Computing Infrastructure

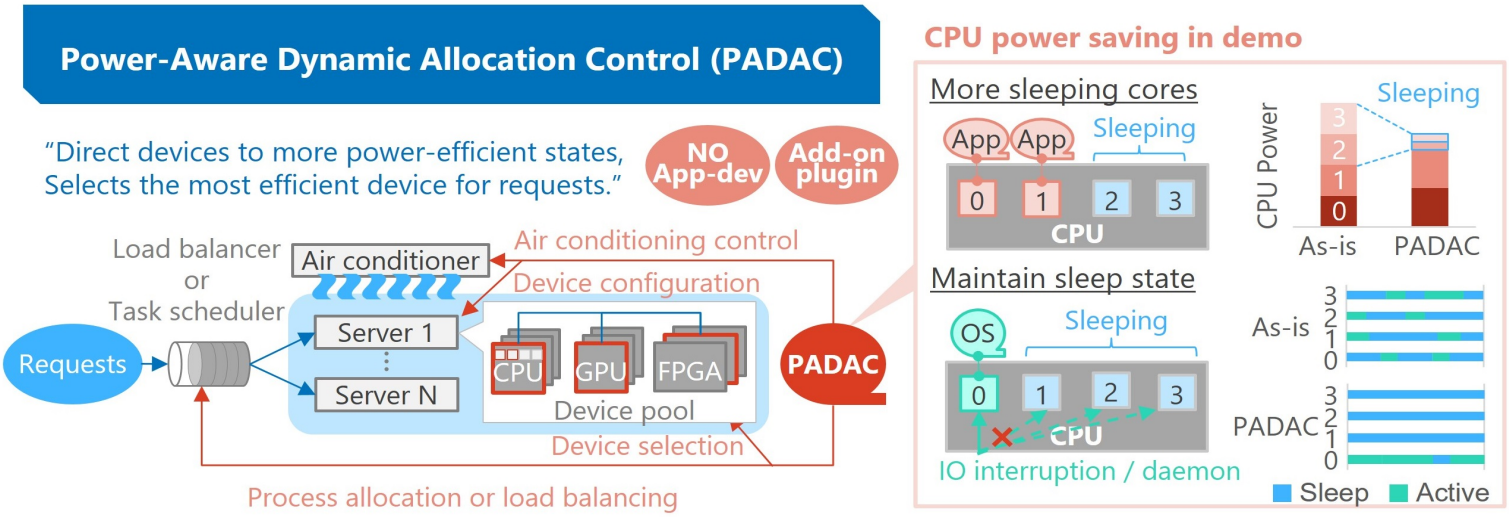


Background

Achieving power-efficient computers is one of the critical challenges for the IOWN vision. Although many servers running in data centers have power-saving functionality, they risk degrading application performance.

Summary

PADAC maximizes the power efficiency of the IOWN vision of disaggregated computing by delivering both high application performance and server power savings. This exhibit shows that PADAC reduces CPU power consumption by approximately 20% without degrading application performance.



Features

- Execute applications on dedicated cores so that other cores can be put to sleep
- Keep CPU cores power efficient by isolating OS, IO interruption, or daemon processes so that they do not violate the sleep state
- Generally applicable to servers with Linux OS without modification to the application

Future_benefits

PADAC will reduce environmental impact and business costs by maximizing the power efficiency of the IOWN vision of disaggregated computing and servers in data centers.

Collaboration partners

Fujitsu Limited

Exhibiting Company

NIPPON TELEGRAPH AND TELEPHONE CORPORATION

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