IMPLEMENTASI SLEEP STATE UNTUK EFISIENSI TENAGA LISTRIK PADA HIGH AVAILABILITY SERVER

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ABSTRAK

High availability server dengan sistem cluster server mengakibatkan konsumsi tenaga listrik meningkat dan banyak yang terbuang percuma. Untuk meningkatkan efisiensi pemakaian tenaga listrik dapat diterapkan metode sleep state, yaitu dengan mengubah server ke kondisi sleep ketika jumlah server yang diperlukan untuk menangani request kurang dari jumlah server yang ada dan mengubahnya ke kondisi up ketika server tersebut diperlukan kembali untuk menangani request dari client. Untuk mengetahui seberapa efisien penerapan sleep state maka dilakukan uji coba untuk mendapatkan perbandingan konsumsi tenaga listrik antara server sebelum diterapkan sleep state dan sesudah penerapan sleep state. Dari hasil uji coba tersebut diperoleh hasil bahwa dengan menerapkan sleep state pada load balancing cluster server mampu menghemat pemakaian listrik sebesar 29.62%.

Kata Kunci : high availability server, sleep state, efisiensi, listrik

IMPLEMENTATION OF SLEEP STATE CONDITION FOR POWER EFFICIENCY ON HIGH AVAILABILITY SERVER

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ABSTRACT

High availability server with server cluster system results in increased power consumption and a lot of wasted. To improve the efficiency of electric power consumption can be applied method of sleep state, by changing the server to the sleep state when the number of servers required to handle the request is less than the number of existing server and convert it into the condition required up when the server is back to handle the client request. To find out how efficient the implementation of the sleep state, the trials conducted to obtain the power consumption comparison between the server before it is applied after the application of the sleep state and sleep state. From the results of these tests showed that the sleep state by applying the load balancing server cluster is able to save electricity consumption amounted to 29.62%.

Keyword : high availability server, sleep state, efficiency, electric