

# Smart Power Management for Idle PCs (aka “Sleep-Server”)

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## TECHNOLOGY DESCRIPTION

This invention allows desktop and laptop computers that are idle and connected over a wired network to be turned off—or put into a low-power mode, such as sleep (called S3 in Windows/ACPI)—and later woken up transparently when a user-specified event occurs. This event can be anything, such as a remote login request (remote desktop, SSH, file access), etc. The computers under sleep maintain their accessibility (ICMP ping responses, answer ARP requests, maintain DHCP leases) even though they are in a low-power mode. Since the computers are effectively in a low-power state and can be woken up “on demand,” the energy savings are substantial. The scheme does not require any changes to the routers, switches, or any of the hardware additions to the desktop computers themselves that want to use the scheme and only needs software on the computers that want to use it, as well as the addition of a “sleep-server.”

## ADVANTAGES

The estimated power savings for idle computers running “sleep-server” is greater than 90 percent.

## INTELLECTUAL PROPERTY INFORMATION

“Sleep-server” is currently patent pending with commercial licensing rights available.

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	8,898,493	11/25/2014	2008-321

## CONTACT

University of California, San Diego  
Office of Innovation and Commercialization  
[innovation@ucsd.edu](mailto:innovation@ucsd.edu)  
tel: 858.534.5815.



## OTHER INFORMATION

### CATEGORIZED AS

- Computer
- Software

### RELATED CASES

2008-321-0