

## - Week 5 -

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### 1. Power Provisioning for a Warehouse-sized Computer

The server infrastructure should be able to account for the warehouse-sized maximum power appropriately for each cluster. Determining how safe and efficient computing equipment can be hosted within a given power budget requires an effective power supply strategy. This paper presents the results of six months of sampling of several large servers according to their power usage characteristics. As a result, the peak power increased by nearly 40% than usual. However, this paper did not provide a concrete solution. Therefore, I propose a scheme that proposes how to automate power consumption specifically in a clustering environment.

### 2. Where is the energy spent inside my app? Fine Grained Energy Accounting on Smartphones with Eprof

This paper proposes a fine-grained energy profiler, called eprof, for smartphone applications. Profiling result has shown that Eprof is used in advertising for 65% -75% of the energy of free applications. In addition, Eprof uncovered wakelock bugs and energy bugs. In particular, it revealed that a lot of energy is consumed especially during I/O. However, the scheme of this paper, which is used instead of bundle, is questionable in terms of performance because the I / O path is longer each time. Therefore, I propose an energy efficient scheme considering performance.