Thus, total optimization of hardware resources of multiple systems using virtualization technology can maximize the utilization rate with less hardware resources required for each system.

In terms of cost for using virtualization technology, the representative advantages are the following three:

1. Total cost reduction on maintenance and replacement due to the extension of software update cycle
2. Cost reduction on hardware procurement due to the economies of scale
3. Management cost reduction by collectively managing the hardware resources

What should be noted in 1), particularly, is that, as shown in Fig. 2, with virtualization software (software for virtualization technology) intervening between hardware and software, it became possible for software to be updated to its original replacement cycle, which has conventionally been replaced to the maintenance cycle of hardware. This will help reduce the maintenance and update cost.

Fig. 1: Image of hardware resource utilization

Fig. 2: Separation of software and hardware replacement cycle

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