

Assignment 5

Specification / Design of Guest OS and Hypervisor

Currently visualisation technology is quite complex as it is tries to virtualise the existing Operating systems which were not designed keeping virtualisation in mind.

If we were to Design Guest OS and hypervisor from scratch so that virtualisation efforts and overheads are minimised, what will be the specification of the (1) Guest OS (2) Hypervisor.

For example, if we decide to allocate continuous chunk of RAM to each Guest OS, it could avoid two level of memory virtualisation.

If we could provide virtual device interfaces for all devices which are supported by the hypervisor, then these will be simply invoked by the guest OS and device virtualisation would become very simple.

You may have many more ideas which can help in simplification of virtualisation.. Discuss your ideas in your group in two meetings of 2 hours each; document it and submit it as a report. (You may be creating the technology of tomorrow, by 30th of Oct.