

Centralized Print Server Using CUPS

CS 16L2 Mini Project

Abstract

Printing is something every user needs to do. Even in this digital era hardcopies are still required for various purposes like documentation, safekeeping etc. In present day heterogeneous computing environment, providing a centralized printing solution can be hard. Those days of having a large, dedicated printer for only UNIX systems are gone. Today we have to make our systems print to printers from desks that are scattered throughout the college.

The project aims to develop and implement a centralized print server for a Local Area Network (here College LAN). The host server will be setup at the office and will be running CUPS. Host accepts print jobs from client computers, process them, and send them to the printer. The print service is monetized using print vouchers which can be availed from the office. This restricts the possibility of abuse of resources as well as enables to assign quotas and budgets and furthermore to keep track of the printing activities.

Such a situation exists where in our college. A number of printers are scattered throughout the college, with UNIX systems sitting on different LANs and basic firewalls in between. Most of the systems can talk directly to the LAN to which the printers are connected. So it is important to ensure the reliable and flexible sharing of the print h/w with all the nodes. Another important problem that needs to be resolved is the waste and abuse of resources. Today we have 100s of pages being printed out daily without anyone to control, track or limit it. No logging is done and its nearly impossible to determine who is printing what?

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