Effectual Collaborative Research in Zimbabwean Universities Through Grid Computing

Abstract

This article seeks to propose a Grid computing architecture that will enable effective collaborative research among researchers in Zimbabwean universities. Zimbabwean universities employ different types of networks, from wired to wireless through the use of VSATs, and also rely extensively of optic fibre to support the huge demands placed on access to the internet by the institution users. Various brands of computers are connected to the network with different specifications. Grid computing environments can enable integration of instruments, displays, computational and information resources across many institutions that are geographically dispersed. Various organisations can share computing power, databases, and other tools securely across corporate, institutional and geographical boundaries without compromising local autonomy.