

Design and Implementation of
Computer Assistance Software for an Electronic
Private Branch Exchange

(Voice Box Application)



MCS Final Project

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Abstract

The purpose of this document is to summarize the development process of a PC-Based telephone exchange with the capability of recording voice messages and delivering the messages via mail. Furthermore, the project also involves multithreaded application development over dedicated telephony hardware using specialized programming environments and APIs.

The development of electronics industry has extremely encouraged the conversion of conventional systems towards more powerful and sophisticated personal computer based systems. The major advantage being the degree of control that one has on a PC. Although, from the past few decades, the telephone industry has also gone through these changes, but a full PC based solution has never been very successful because of the vulnerability of PC towards heavy processing.

The project under discussion suggests the development of a hybrid system that works in the collaboration of conventional telephone exchanges and a personal computer. The project is considered to be most productive and powerful under office environments that are running conventional low-tech digital telephone exchanges.