

Abstract

Personal Data Assistant, mobile phone, and another type of mobile devices rely on synchronization protocol to keep the consistency of it's data with the PC or server. This protocol work on the environment where the memory resources, network resources and processing abilities are still limited. Now days are introduced a new protocol for data synchronization between PC and Mobile devices CPISync (Characteristic Polynomial Interpolation) that using polynomial interpolation method for increasing the efficiency and speed on data synchronization process .The CPISync Protocol itself is divide by two methods, the deterministic and probabilistic method. Because of this protocol is a new protocol and still hasn't a standard, so on this final assignment will be tested the accuracy of the data synchronized using CPISync Protocol.

On this final assignment also will be analyzed the performance of CPISync Protocol compared with Standard Palm Protocol, that covers time performance and memory utilization. From the accuracy test results, the CPISync Protocol accuracy is known true for all test scenario that have been set in this final assignment. And for the performance test, the CPISync Protocol is only influenced by the number of differences from Computer and Palm Devices data set.

Keyword: *Mobile devices, Characteristic Polynomial Interpolation, Differences.*