

— Software need to be reliable in order to be trustworthy and dependable. Reliability analysis is one of the most important factors in software development since analyzing reliability of software during design and prior to release significantly save cost of failure testing activities. To this end, most of the method used for Software reliability analysis focused on product of large server in which the reliability is measured in terms of failure only, in this case, failure data is collected manually by service organization. Such method cannot be used to analyze reliability of operating system since it run on many operational profiles and manual data collection will be inadequate. Software reliability analysis requires thorough integration of set of reliability modeling, allocation, estimation, prediction and test task. In this research, we present three approaches that we can use to analyze Operating system; systematic quality assurance process, quantitative measurement and reliability feedback data. These are collectively used for analyzing reliability. We realized that when these three approaches are used collectively to analyze reliability of operating systems, it will lead to improvement in quality, dependability, reliability, usability, confidentiality, performance and durability.