Abstract

The present research do a comparison bandwidth availability as measured by Pathload and pathChirp at the 5G network-based Femtocell Backhaul to determine which are the most accurate of them. To determine the accuracy between them using the formula Mean Absolute Percentage Error (MAPE), which will generate an relative error of pathChirp and Pathload. Both programs are part of the active measurement that applies the probe rate model method. Tests were conducted to determine the accuracy in measuring the bandwidth availability is done by using the topology simulations that represent the role of each devices contained in the actual topology femtocell backhaul. In conducting the test, there are two scenarios that will be run by pathChirp and Pathload, the office and the public scenario. So, we can know in what scenario Pathload and pathChirp be more accurate to use, based on the relative error have generated. From the results of tests performed, pathChirp would be more appropriate to use in the office and public scenario. While Pathload would be more appropriate to use the office scenario.

Kata kunci : *Probe Rate Model*, Femtocell, Pathload*,* pathChirp*, bandwidth.*