This work focuses on relative comparisons of individual methods performance. It is based on Stochastic Performance Logic, which allows to express, for example, that one method runs at most two times longer than another method. This results are more portable than absolute values. It extends standard unit tests with performance assumptions, which are evaluated during actual run-time of a released application. Dynamically added and removed instrumentation is used for automatic modification of the production code. Instrumentation part uses DiSL framework to be able to seamlessly measure even Java system classes. Methods are measured sequentially, number of concurrently measured method is dynamically changed and measurement code is removed as soon as required data are obtained to avoid high overhead. The results show that for processor demanding application this approach may bring up to 3-times lower overhead peaks than measuring all methods at once.