This bachelor thesis is about development of a tool for comparison and evaluation of machine translation called MT-ComparEval. With this tool it is possible to compare translations according to several criteria, such as automatic metrics of machine translation quality computed on whole documents or single sentences, quality comparison of single sentence translation with highlighting confirmed, improving and worsening n-grams or summaries of the most improving and worsening n-grams for the whole document. When comparing two translations, MT-ComparEval also plots a chart with absolute differences of metrics computed on single sentences and a chart with values obtained from paired bootstrap resampling.