Abstract: The main subject of this thesis is a change point detection in stationary vector autoregressions. Various test statistics are proposed for the retrospective break point detection in the parameters of such models, in particular, the derivation of their asymptotic distribution under the null hypothesis of no change. Testing procedures are based on the maximum likelihood principle and are derived under normality, nevertheless the asymptotic results are valid for broader class of distributions and involve also the models with certain form of dependence. Simulation studies document the quality of the results.