## **Abstract**

Along with the growth of Islamic religion in Indonesia, the need for information of Hadits becomes very important. Hadith as the second source of law in Islam after Al-Quran has a high position. In this thesis carried out research on the application of thesaurus for query expansion in information retrieval systems Hadith in Bahasa Indonesia. Vector Space Model (VSM) methode is used as the term weighting of the information retrieval system. Thesaurus construction will be done automatically using co-coccurence analysis followed by manualy construct. The thesaurus documents will be used in the process of query expansion when searching process take place. Analysis performed includes precision, Mean Average Precision (MAP) and recall generated by the system after applying the thesaurus for query expansion. From the results, the accuracy for Precisison at 10 (P@10) increased by 34% between searches with query expansion using a thesaurus and without query expansion using thesaurus. As for the MAP value increased by 16% and 34% for recall.

**Kata kunci:** query expansion, thesaurus, information retrieval, VSM.