**Intrusion Detection using Naive Bayes Classifier with Feature Reduction**

**Summary:**

Intrusion Detection System (IDS) is use to used to monitor and analyze the events occur in any machine in order to detect signs of known attacks and anonymous Behavior. The IDS is computationally effective and efficient as it uses three standard feature selection methods that are Correlation-based Feature Selection, Gain Ratio and Information Gain. We propose the new feature selection method **Feature Vitality Based Reduction Method (FVBRM)** by using the Naive Bayes Classifier for Intrusion detection on reduced data sets. We perform the Experiments on NSL-KDD labeled Datasets then by using three standard method and our proposed method, we found that the Feature reduction performed on 41 features and in this 41, 10 using CFS, 14 using GR, 20 using IG and 24 using FVBRM. In this way we found this (FVBRM) faster and more efficient.

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**Problems:**  To monitor and analyze the events in order to detect signs of security problems, the three standard feature selection methods use but they are not found too efficient.

**Tools: Feature- Vitality Based Reduction Method (FVBRM)**

**Result:** As a result, by using Naive Bayes Classifier technology the IDS is become more efficient. From No. of Experiments we found that the Feature reduction performed on 41 features and in this 41, 10 using CFS, 14 using GR, 20 using IG and 24 using FVBRM on NSL-KDD dataset. This made this faster and more efficient.