=== Run information ===

Scheme: weka.classifiers.functions.LibSVM -S 0 -K 2 -D 3 -G 0.0 -R 0.0 -N 0.5 -M 40.0 -C 1.0 -E 0.001 -P 0.1 -model "C:\\Program Files\\Weka-3-8-5" -seed 1

Relation: KDDTrain20P\_05A.arff-weka.filters.unsupervised.attribute.Remove-R42-weka.filters.unsupervised.attribute.RemoveUseless-M99.0-weka.filters.unsupervised.attribute.SortLabels-R2-SNON-CASE-weka.filters.unsupervised.attribute.OrdinalToNumeric-R2-4-weka.filters.unsupervised.attribute.MathExpression-E(A-MEAN)/SD-weka.filters.unsupervised.attribute.Remove-V-R5,3,28,4,6,27,33,21,31,32,36,last

Instances: 25192

Attributes: 12

src\_bytes

service

diff\_srv\_rate

flag

dst\_bytes

same\_srv\_rate

dst\_host\_diff\_srv\_rate

count

dst\_host\_srv\_count

dst\_host\_same\_srv\_rate

dst\_host\_serror\_rate

class

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

LibSVM wrapper, original code by Yasser EL-Manzalawy (= WLSVM)

Time taken to build model: 7.66 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 23856 94.6967 %

Incorrectly Classified Instances 1336 5.3033 %

Kappa statistic 0.9065

Mean absolute error 0.0212

Root mean squared error 0.1456

Relative absolute error 9.2656 %

Root relative squared error 43.0497 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class

0.973 0.075 0.937 0.973 0.955 0.901 0.949 0.926 normal

0.955 0.001 0.999 0.955 0.976 0.964 0.977 0.970 dos

0.129 0.000 0.931 0.129 0.227 0.345 0.565 0.128 r2l

0.841 0.019 0.813 0.841 0.827 0.809 0.911 0.698 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.947 0.042 ? 0.947 ? ? 0.952 0.915

=== Confusion Matrix ===

a b c d e <-- classified as

13085 10 2 352 0 | a = normal

338 8818 0 78 0 | b = dos

172 0 27 10 0 | c = r2l

363 0 0 1926 0 | d = probe

7 0 0 4 0 | e = u2r