=== 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-R5,3,28,4,6,27,33,21,31,32,36,23,37,24,12,last

Instances: 25192

Attributes: 16

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

serror\_rate

dst\_host\_srv\_serror\_rate

srv\_serror\_rate

logged\_in

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: 8.93 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24174 95.959 %

Incorrectly Classified Instances 1018 4.041 %

Kappa statistic 0.9284

Mean absolute error 0.0162

Root mean squared error 0.1271

Relative absolute error 7.0601 %

Root relative squared error 37.5786 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

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

0.986 0.070 0.942 0.986 0.963 0.920 0.958 0.936 normal

0.960 0.001 0.999 0.960 0.979 0.967 0.979 0.973 dos

0.129 0.000 1.000 0.129 0.229 0.358 0.565 0.136 r2l

0.887 0.008 0.917 0.887 0.902 0.892 0.940 0.823 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.960 0.038 ? 0.960 ? ? 0.961 0.932

=== Confusion Matrix ===

a b c d e <-- classified as

13254 11 0 184 0 | a = normal

372 8862 0 0 0 | b = dos

182 0 27 0 0 | c = r2l

257 1 0 2031 0 | d = probe

10 0 0 1 0 | e = u2r