=== 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-R5,3,28,4,6,27,33,21,31,32,36,23,37,24,12,35,34,30,22,29,38,2,last

Instances: 25192

Attributes: 23

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

dst\_host\_srv\_diff\_host\_rate

dst\_host\_same\_src\_port\_rate

dst\_host\_count

srv\_count

srv\_diff\_host\_rate

dst\_host\_rerror\_rate

protocol\_type

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: 10.37 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24725 98.1462 %

Incorrectly Classified Instances 467 1.8538 %

Kappa statistic 0.9674

Mean absolute error 0.0074

Root mean squared error 0.0861

Relative absolute error 3.2388 %

Root relative squared error 25.4522 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

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

0.994 0.030 0.974 0.994 0.984 0.965 0.982 0.971 normal

0.978 0.002 0.996 0.978 0.987 0.979 0.988 0.982 dos

0.584 0.000 0.910 0.584 0.711 0.727 0.792 0.535 r2l

0.967 0.003 0.973 0.967 0.970 0.967 0.982 0.944 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.981 0.017 ? 0.981 ? ? 0.982 0.969

=== Confusion Matrix ===

a b c d e <-- classified as

13362 18 11 58 0 | a = normal

203 9027 0 4 0 | b = dos

86 1 122 0 0 | c = r2l

59 16 0 2214 0 | d = probe

10 0 1 0 0 | e = u2r