=== 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 "D:\\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-Elog(1+A)-Rlast-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,last

Instances: 25192

Attributes: 21

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

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: 2.96 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24929 98.956 %

Incorrectly Classified Instances 263 1.044 %

Kappa statistic 0.9817

Mean absolute error 0.0042

Root mean squared error 0.0646

Relative absolute error 1.824 %

Root relative squared error 19.1005 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

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

0.997 0.018 0.985 0.997 0.991 0.980 0.990 0.983 normal

0.998 0.001 0.998 0.998 0.998 0.997 0.999 0.997 dos

0.560 0.001 0.880 0.560 0.684 0.700 0.780 0.496 r2l

0.958 0.001 0.988 0.958 0.973 0.970 0.978 0.950 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.990 0.010 ? 0.990 ? ? 0.990 0.981

=== Confusion Matrix ===

a b c d e <-- classified as

13405 5 16 23 0 | a = normal

18 9215 0 1 0 | b = dos

91 0 117 1 0 | c = r2l

87 10 0 2192 0 | d = probe

10 0 0 1 0 | e = u2r