=== 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,last

Instances: 25192

Attributes: 6

src\_bytes

service

diff\_srv\_rate

flag

dst\_bytes

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: 2.81 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24525 97.3523 %

Incorrectly Classified Instances 667 2.6477 %

Kappa statistic 0.9533

Mean absolute error 0.0106

Root mean squared error 0.1029

Relative absolute error 4.6258 %

Root relative squared error 30.4179 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

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

0.989 0.027 0.976 0.989 0.983 0.963 0.981 0.972 normal

0.989 0.018 0.969 0.989 0.979 0.967 0.986 0.963 dos

0.144 0.000 0.857 0.144 0.246 0.349 0.572 0.130 r2l

0.897 0.002 0.976 0.897 0.935 0.930 0.948 0.885 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.974 0.021 ? 0.974 ? ? 0.976 0.953

=== Confusion Matrix ===

a b c d e <-- classified as

13304 106 5 34 0 | a = normal

82 9137 0 15 0 | b = dos

175 3 30 1 0 | c = r2l

54 181 0 2054 0 | d = probe

10 0 0 1 0 | e = u2r