=== 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,last

Instances: 25192

Attributes: 17

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

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: 7.42 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24376 96.7609 %

Incorrectly Classified Instances 816 3.2391 %

Kappa statistic 0.9426

Mean absolute error 0.013

Root mean squared error 0.1138

Relative absolute error 5.6592 %

Root relative squared error 33.6443 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

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

0.993 0.061 0.949 0.993 0.970 0.936 0.966 0.946 normal

0.960 0.001 0.998 0.960 0.979 0.968 0.980 0.973 dos

0.411 0.001 0.819 0.411 0.548 0.578 0.705 0.342 r2l

0.903 0.003 0.971 0.903 0.936 0.931 0.950 0.886 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.968 0.033 ? 0.968 ? ? 0.967 0.945

=== Confusion Matrix ===

a b c d e <-- classified as

13357 13 18 61 0 | a = normal

368 8866 0 0 0 | b = dos

123 0 86 0 0 | c = r2l

221 1 0 2067 0 | d = probe

10 0 1 0 0 | e = u2r