=== 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,last

Instances: 25192

Attributes: 15

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

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: 10.76 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 23774 94.3712 %

Incorrectly Classified Instances 1418 5.6288 %

Kappa statistic 0.9011

Mean absolute error 0.0225

Root mean squared error 0.1501

Relative absolute error 9.8343 %

Root relative squared error 44.3511 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

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

0.969 0.070 0.941 0.969 0.955 0.902 0.950 0.929 normal

0.953 0.000 0.999 0.953 0.976 0.963 0.976 0.970 dos

0.129 0.000 1.000 0.129 0.229 0.358 0.565 0.136 r2l

0.834 0.026 0.763 0.834 0.797 0.776 0.904 0.651 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.944 0.040 ? 0.944 ? ? 0.952 0.911

=== Confusion Matrix ===

a b c d e <-- classified as

13036 7 0 406 0 | a = normal

351 8802 0 81 0 | b = dos

82 0 27 100 0 | c = r2l

380 0 0 1909 0 | d = probe

4 0 0 7 0 | e = u2r