**Attack Types**

|  |  |  |
| --- | --- | --- |
| **S/N** | **Name** | **Type** |
|  | back | dos |
|  | buffer\_overflow | u2r |
|  | ftp\_write | r2l |
|  | guess\_passwd | r2l |
|  | imap | r2l |
|  | ipsweep | probe |
|  | land | dos |
|  | loadmodule | u2r |
|  | multihop | r2l |
|  | neptune | dos |
|  | nmap | probe |
|  | perl | u2r |
|  | phf | r2l |
|  | pod | dos |
|  | portsweep | probe |
|  | rootkit | u2r |
|  | satan | probe |
|  | smurf | dos |
|  | spy | r2l |
|  | teardrop | dos |
|  | warezclient | r2l |
|  | warezmaster | r2l |
|  | normal | normal |

**Field Names/ Feature Description**

duration: continuous.

protocol\_type: symbolic.

service: symbolic.

flag: symbolic.

src\_bytes: continuous.

dst\_bytes: continuous.

land: symbolic.

wrong\_fragment: continuous.

urgent: continuous.

hot: continuous.

num\_failed\_logins: continuous.

logged\_in: symbolic.

num\_compromised: continuous.

root\_shell: continuous.

su\_attempted: continuous.

num\_root: continuous.

num\_file\_creations: continuous.

num\_shells: continuous.

num\_access\_files: continuous.

num\_outbound\_cmds: continuous.

is\_host\_login: symbolic.

is\_guest\_login: symbolic.

count: continuous.

srv\_count: continuous.

serror\_rate: continuous.

srv\_serror\_rate: continuous.

rerror\_rate: continuous.

srv\_rerror\_rate: continuous.

same\_srv\_rate: continuous.

diff\_srv\_rate: continuous.

srv\_diff\_host\_rate: continuous.

dst\_host\_count: continuous.

dst\_host\_srv\_count: continuous.

dst\_host\_same\_srv\_rate: continuous.

dst\_host\_diff\_srv\_rate: continuous.

dst\_host\_same\_src\_port\_rate: continuous.

dst\_host\_srv\_diff\_host\_rate: continuous.

dst\_host\_serror\_rate: continuous.

dst\_host\_srv\_serror\_rate: continuous.

dst\_host\_rerror\_rate: continuous.

dst\_host\_srv\_rerror\_rate: continuous.