HODOR: Shrinking Attack Surface on Node.js via System Call Limitation

Wenya Wang
Shanghai Jiao Tong University
Shanghai, China
ducky_97@sjtu.edu.cn

Xingwei Lin
Ant Group
Hangzhou, China
xwlin.roy@gmail.com

Jingyi Wang[*]
Zhejiang University
ZJU-Hangzhou Global Scientific and
Technological Innovation Center
Hangzhou, China
wangjyee@zju.edu.cn

Wang Gao
Shanghai Jiao Tong University
Shanghai, China
gaowang.sjtu@gmail.com

Dawu Gu
Shanghai Jiao Tong University
Shanghai, China
dwgu@sjtu.edu.cn

Wei Lv
Ant Group
Hangzhou, China
huaxing.lw@antgroup.com

Jiashui Wang
Zhejiang University, Ant Group
Hangzhou, China
jiashui.wjs@antgroup.com

[*]Corresponding authors: Jingyi Wang and Dawu Gu

Table 10: Critical system calls.

Type	Critical System Call
Cmd Execuion	clone; execveat; execve; munmap; fork;
Permission	chmod; mprotect; setgid; setreuid; setuid
Network	accept4; accept; bind; connect; listen; recvfrom; socket