Hypervisor IDPS: DDoS Prevention Tool for Cloud Computing

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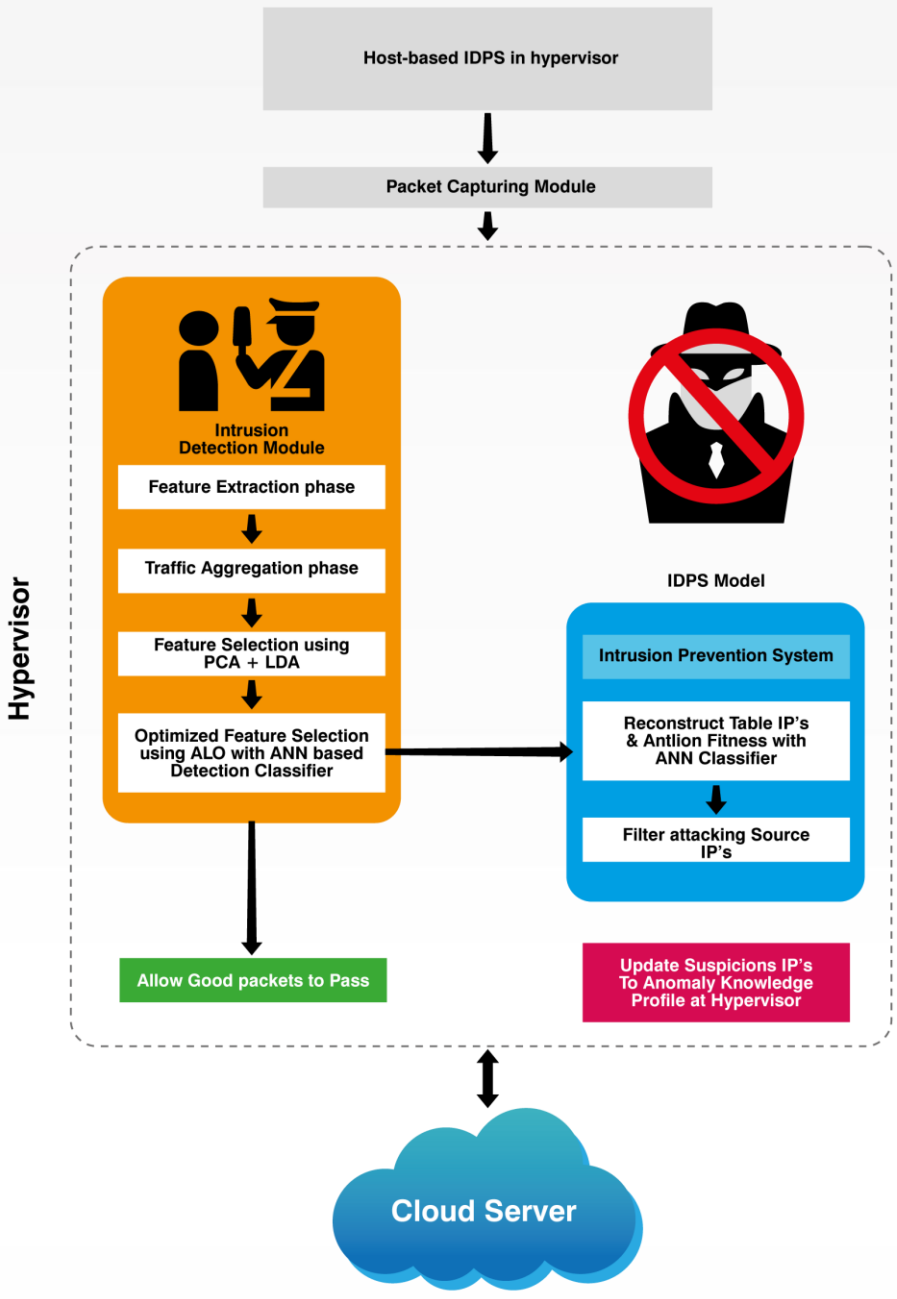
Universiti Malaysia PAHANG
Engineering • Technology • Creativity

PROJECT LEADER : DR. MOHAMAD FADLI ZOLKIPLI
FACULTY : FACULTY OF COMPUTER SYSTEMS AND SOFTWARE ENGINEERING
EMAIL : fadli@ump.edu.my
TEAM MEMBER : AWS NASER JABER

www.ump.edu.my



Introduction

- Cloud IDPS was provided by one-third of the tools, while almost all the tools are scalable for small to large cloud sources.
- Further, all cloud monitoring tools are capable of monitoring cloud resource services and even user based services, which are used for billing, rescheduling, and maintenance.

Benefits

- Low cost.
- Support large infrastructure.
- Green cloud
- High level management
- Enable "virtual patching" of network vulnerabilities through vulnerability-targeted IDPS rules until permanent fixes can be deployed

Marketability

- Network Security Services Company.
- Cloud Service Provider.
- Banking Institutions.

Achievements

- Malaysia Technology Expo (MTE 2017).
- Creation, Innovation, Technology & Research Exposition (Citrex 2016).
- Innovation award presented at European Intelligence and Security Informatics Conference 2016, Sweden Uppsala.

Publication

1. A Framework for Preventing DDoS Attacks in Cloud Computing. Advanced Science Letters (Scopus)

2. A study in data security in cloud computing. Paper presented at the Computer, 2014 International Conference on Communications, and Control Technology (I4CT), IEEE Xplore

3. An Intensive Review of DoS and DDoS Attacks in Cloud Computing. IEEE Xplore

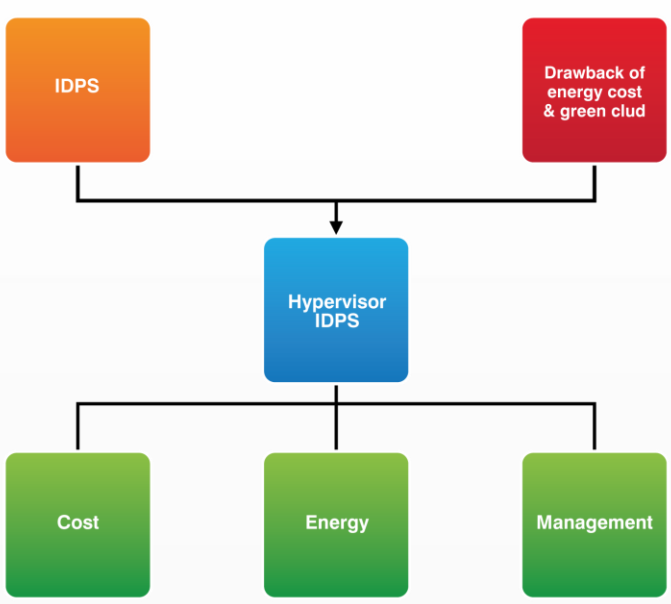
Novelty

Advanced threat protection
Address known and unknown threats through a fully integrated advanced malware protection and sandbox solution.

An Intelligent green cloud security automation
CPU, memory consumption as well as packet loss would be reduced to improve the overall efficiency of green cloud IDPS.

Result

Reduce the surface area for attack through precise control of more than 4000 applications and hundreds of millions of URLs in over 80 categories



Collaboration

Sysarmy Sdn Bhd
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