

Introduction :

According to survey study, malware encounter rates in ASEAN region are very high. In order to make it a real-world public testbed for cyber-security studies, this project is going to enhance the functions of the monitoring devices provided by LAN-security monitoring project by installing around hundred newly-developed security devices across ASEAN countries. To that end, we are going to develop (i) vulnerability assessment of remote local-area networks, (ii) visualization of data for useful security operation, (iii) improvement of detection algorithms and statistical analysis including the application of federated learning, and (iv) anonymization of captured data for publicizing the data.

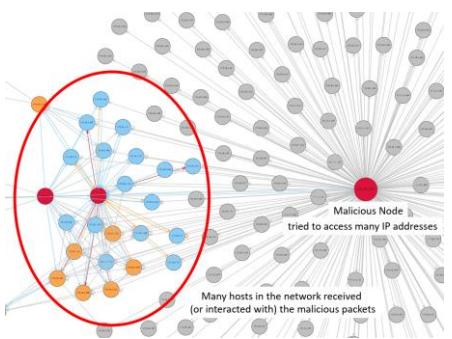
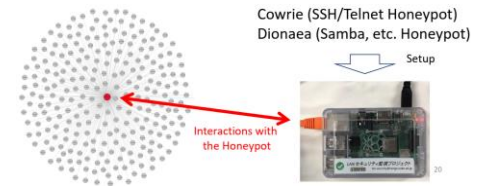


Fig 1. Visualized connection graph of a LAN. In this case, it is easier to read the node's IP addresses. However, sometimes it become too complex to read them.



Fig. 2: Monitoring node of LAN-security monitoring project



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