$$C(t) = \frac{E[B(t), B(-t)]}{E[B(t)^2]} = 2^{2H-1} \tag{5}$$

Flooding DDoS attacks, the most important feature is the distributed architecture, collaborative attack and a large number of attack packets to the annihilation of the target machine. With the attack technology development, flooding DDoS attacks no longer just targeted to the nodes in the network, the network congestion has gradually become a new target for flooding DDoS attacks. The traditional flooding DDoS attacks can cause network congestion to some extent. The use of the programming language is as the standard C++ language, as is shown by figure2.

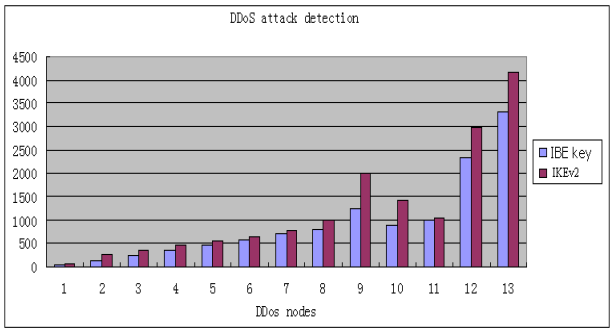

Fig.2. Compare of DDoS attack detection and prevention based on the IKEv2 protocol with IBE key algorithm

The paper proposes using IBE key distribution strategies to development of DDoS attack detection and prevention. The DDoS attacks performer, can be any type of network node. Attack aircraft controlled by the host computer, and install specific attack procedures received attack instructions from the host computer to send a large number of attack packets to the target machine.

Conclusion

DDoS attack can be any type of initiator, nodes in the network. Attack the host first control puppet machine much, and install the control program in the puppet machine. Based on the certificate system and it is the need for a directory to store the user's certificate (public key). Based on the identity of the system, because the public key calculated by ID, without requiring a separate directory to store user certificate.

References

[1] Hossein HADDAD, Hadi MIRMOHAMADI, “Comparative Evaluation of Successor Protocols to Internet Key Exchange (IKE)”, IEEE Intemational Conference on Industrial Informatics (INDIN), 2005 3rd.

[2] MontMC, Bramhall P. IBE applied to privacy and identity management. Trusted Systems Laboratory. HP Laboratories Bristol, 2003.

[3] Li-Chiou Chen, Thomas A. Longstaff, Kathieen M. Carley.Charterization of defense mechanisms against distributed denial of service attacks.Computer & Security, 2004,(23):665-678.

[4] Park K., Lee H..On the effectiveness of routebased packet filtering for distributed DoS attack prevention in PowerLaw internets.presented at the ACM SIGCOMM, San Diego, CA, 2001

[5]Do-Yoon Ha, Chang-Yong Lee, Hyun-Cheol Jeong, Bong-Nam Noh, "Design and Implementation of SIP-aware DDoS Attack Detection System", AISS, Vol. 2, No. 4, pp. 25 ~ 32, 2010

[6] Jiqiang Zhai, Keqi Wang, "A Distributed Method for DDoS Attack Tree Construction", IJACT, Vol. 4, No. 23, pp. 538 ~ 545, 2012.