« DEVELOP METHODS AND ALGORITHMS TO PROTECT WEBSITES FROM ATTACKS SUCH AS DDOS »

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Annotation

The article focuses on the study of attacks on websites and the analysis of DDoS attacks. Development of algorithms for protection of websites from threats and security. Based on the developed algorithms, the methods of achieving the desired result are shown.

Keywords:

DDOS, algorithm, website, internet, operating system, network, program.

Introduction

An informed society is rapidly evolving. In the world of information, the concept of state borders is disappearing. The global computer network is revolutionizing public administration. Regardless of the region, a variety of information enters our daily lives through the Internet, an international computer network. Therefore, it is important to protect existing information from problems such as illegal access, use and alteration, loss. The state policy in the field of information and information resources, information technology and information systems development and improvement of the modern world, taking into account the principles of the creation of a national information system.

Computer networks, including the Internet, are currently developing rapidly. Accordingly, computer networks are also divided into several large groups according to their structure. Depending on the number of computers, networks are divided into local, regional and global networks.

A local area network is a network that allows computers located in the same building or in adjacent buildings to exchange information. In such networks, information is exchanged over communication cables (sometimes a telephone or radio channel). This allows users to share and exchange data on computers connected to the network and share software, printers, modems and other devices.

A regional network is a network of computers in a district, region, or republic. Such a network consists of several centralized (for example, a local network) high-capacity servers, and information between such servers is transmitted using a communication cable, fiber-optic or satellite radio channels.

The global network of the world any combination of computers in the country with an opportunity to network. This network is called the Internet. Along with the Internet, the concept of intranet is also used. Intranet and Internet technology, software, and established on the basis of the protocols, database and spreadsheet allows you to work with a team, or an enterprise wide information environment of the computer network.

Any form of attack is dangerous, DDoS can cause you not only material damage, but also damage to the brand. There are many options for you to protect your website, so let’s look at some basics:

1.Use Proxy Protection - A proxy is a buffer that protects your website from the Internet. This offers an extra layer of protection that can help you prevent an attack in advance. It also hides your real IP address, although not all of it is visible to your legitimate website.

2. Resist Spoofed IP Addresses - Cybercriminals like to hide their real IP addresses by running away to others to use for themselves. Many popular addresses can be protected by storing an Access Control List (ACL) to block access from certain IP addresses.

3.Schedule bandwidth - Although bandwidth is expensive, many hosts today offer extensive plans to help you. DDoS works by trying to overcome your existing bandwidth, so by holding the buffer zone a little longer, you can prevent an attack in advance.

```
# Увеличение максимального количества используемых файлов
 worker_rlimit_nofile 80000;
 events
{ # Увеличение максимального количества соединений
    worker_connections 65536;
    # Использование эффективного метода epoll для обработки соединений
  use epoll;
 }http { gzip off;
    # Отключение таймаута на закрытие keep-alive соединений
    keepalive_timeout 0;
    # Скрытие версии nginx в заголовке ответа
    server_tokens off;
    # Сбрасывание соединения по таймауту
    reset_timedout_connection on;
 }server {
    listen 111.111.111.111 default deferred;
    server_name host.com www.host.com;
    log_format IP $remote_addr;
    location / {
       proxy_pass http://127.0.0.1/;
    }location ~* \.(jpeg|jpg|gif|png|css|js|pdf|txt|tar)$ {
      root /home/www/host.com/httpdocs;
```

To prevent DDOS attacks, a protection system is provided in HTTP-flu.

Conclusion

This article describes the types of attacks that can be found on websites, each of which is divided into separate groups according to their classification. The age of modern technology has made it possible to take advantage of as many positive aspects as possible of systems that require rapid development, especially computer systems. At the same time, ensuring that such systems are not used for any negative purpose is to ensure that they are used only by the right people, for the right purpose.

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