Dynamic Authentication for Phishing E-mail Spam Filtering using Cloud based SAAS Pattern

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Abstract: This paper is related to mass generated emails. Many number of email systems are not register in server. These un-authentication email systems are forward the unnecessary mails of content and store into inbox. These emails are dangerous. These types of emails we are call as a spam or phishing emails. Particularly looks at the view of merging spam filtering with cloud computing and is one of the earliest studies done in this area. Cloud based Saas is used for the web content filtering, email filtering, and vulnerability management. Saas is a on demand processing and it is the largest, quickly growing cloud marketing. Saas is used for web developing applications, games, emails. The mainly used for Saas pattern low cost, remove spam emails before they enter our network and spam filtering quickly.

Key words: Cloud computing, phishing attacks, Sass Pattern and Spam filter.

I. INTRODUCTION

A. Cloud Computing
Cloud computing is a information technology and the data being accessed is originate in "the cloud". Cloud computing is the transferring of data and computing the queries and storing them which are given to end-users. Now a day’s Cloud security is really important. It is the use of latest technologies and security techniques to protect our data application and infrastructure associated with cloud computing. Cloud computing can be classified in to three type's services models:
1) Software as a Service (SaaS): Saas is a on demand processing and it is the largest, quickly growing cloud marketing. Saas is used for web developing applications, games, emails.
2) Platform as a service (Paas): Paas is a platform based service and it is used for increasing the developer productivity, software development tools, website hosting.
3) Infrastructure as a service (Iaas): Iaas is a self service model and it is used for accessing the data storage networking, servers, other computing resources in the cloud.

B. Deployment Models
The four deployment models present in cloud computing are:
1) Public cloud / Internet cloud: In the public cloud, the cloud is made available in a pay per use manner to general public. Any user can make use of the resources; it is unrestricted with the help of internet.
2) Private cloud / Enterprise cloud: The cloud here acts as internal data center of a business or other organization not made available to all users
3) Hybrid Cloud / Mixed Cloud: This cloud is the combination of both private and public clouds. Some of the resources are provided and managed by public cloud and others as a private cloud.

C. Desired Features of a Cloud
1) Self Service: Cloud allows self service so that the users can request, customize, pay and use services without intervention of human operators.
2) Per usage metering and Billing: Services must be priced on a short time basis allowing users to release and will not pay for the resources as soon as they are not need. Bandwidth is one of the examples.
3) Elasticity: We can add the resources or delete the resources as per our requirement.
4) Customization: According to the user environment changes can also updated based on the application.
D. Spam or Phishing E-Mail

Many number of emails are not register in the server. These un-authentication email systems are forward the unnecessary mails of content and store into inbox. This type of emails is very dangerous. Such types of emails are called as a spam or phishing emails. Now a day’s spam mails become more and more serious in email communications. The main definitions of spam usually include the aspects that email is unsolicited and sent in bulk. Spammers collect email addresses from chat rooms, websites, customer lists, address books, and are sold to other spammer. Most of the email spam messages are commercial. Email spam is also known as scrap email. scrap email is a type of electronic spam where unwanted messages are sent by email. Spam email may also include malware as scripts or other executable file attachments. The primary reason that the detection algorithms work as well as they do with spam and phishing emails is because these types of emails are mass generated and sent to millions of addresses.

E. Classification of Spam-Filtering Methods

Spam filtering methods generally classified in to two categories:

1) Methods to avoid spam sharing in their origins

2) Methods to avoid spam at end point.

Methods to Avoid Spam sharing measurement is the spam allocation and improvement of e-mail protocols using sender validation, blocking mail servers which allocate spam are the methods which avoid spam sharing in origin. These two methods using doesn’t give considerable results. For example there are many of the reasons is an reality of high level broadband Internet access in USA. There are number of considerations to offering and to make spam sending inexpensively unprofitable, and each of the single statement to make sending of each e-mail paid. The payment for one e-mail should be the extremely insignificant. Methods to Avoid Spam Receiving Methods and which filter spam in end point can be classified into the following categories:

F. Design Goals and Different Approaches

1) Results in Real-time: some services like social networking and many others are working I real time. So it is needed that spam filtering can be done with small delay.

2) Accuracy of decision: the system or technique should give exact result within the time in order to fault

3) Cloud based Spam filtering Architecture: Cloud-based spam filtering is better to on-site applications. Cloud-based filtering is low cost and spam filtering quickly. Cloud based SaaS provides email purification services to phishing mails, spam and malwares. Email backups and archiving services are also included in SaaS for email services. Cloud based SaaS is used for the web content filtering, email filtering, and vulnerability management.

Cloud based spam protection

![Cloud based spam filtering architecture](image)

G. Benefits of cloud based spam filtering:

1) Low Cost Of Ownership
2) Remove Threats Before They Enter our Networ
3) Spam Filtering fast
II. SPAM FILTER SOFTWARE AS A SERVICE PATTERN

The SaaS pattern can vary greatly depending on which protocols, standards, and architectural approaches.

The business problem arises from the fact that spam is constantly changing, which makes it difficult to detect and flag. Spam is typically sent from a variety of spoofed email addresses, and the specific text patterns are changed frequently. If we want to detect any spam that had the word “Drugs”. We can use Perl’s regular expression matching syntax:

```perl
if ($email String =~ m/Drugs/;)
{
    $Spam Score += 1;
}
```

In some cases spammers use some of the letters to prevent this detection, as in the following: “Drugs”

You could counter this in Perl by adding an `i` flag to ignore case, as follows:

```perl
if ($email String =~ m/Drugs/i;)
{
    $Spam Score += 1;
}
```

The software retailer needs to write and share out new patches to detect the latest variations to each client, possibly on a daily or even hourly basis. In this case, the Perl syntax could be changed to:

```perl
if ($email String =~ m/d*gs/i;)
{
    $Spam Score += 1;
}
```

A. Dynamic Behavior

The energetic behavior of the SaaS pattern can be different greatly depending on which protocols, values, and architectural approaches are chosen. Figure 3. “A dynamic view of one way to visualize SaaS” shows a common description of the pattern.
Saas pattern by means of to filtering the spam e mails. Cloud based Saas provides email purification services to phishing mails, spam and malwares. Email backups and archiving services are also included in SaaS for email services. Cloud based Saas is used for the web content filtering, email filtering, and vulnerability management. The Saas pattern can vary greatly depending on which protocols, standards, and architectural approaches. The mainly used for Saas pattern low cost, remove spam emails before they enter our network and spam filtering quickly.

REFERENCES
