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بیش از ۲ میلیون مقاله فارسی در این سایت موجود میباشد

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طراحی و پیاده‌سازی یک کارگزار ناظر وب با قابلیت سرند هوشمند

. Filtering
. Proxy Server

Designing and Implementation of a Proxy Server with Intelligent Filtering Capability

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Abstract

Recently the number of the Internet users has increased rapidly, and various traffic types are emerged as well. As such, the need for a method for traffic filtering has turned out to be very crucial. An effective method for this purpose is to investigate the traffic content in application layer. To provide such filtering, a proxy server can be utilized. A proxy server performs numerous duties which include network access control and traffic filtering.

This paper considers a proxy server with rule based intelligent traffic filtering. To evaluate its performance, the proposed proxy server has been implemented and tested in real situation. The test results show that the server has acceptable performance toward recognizing the content and categorizing of browsed web pages.

Keywords: Traffic, Filtering, Proxy server, Intelligence

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(... WWW, FTP, SMTP)

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IP

.() LDAP LSA NTLM Basic

Basic NTLM

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- . Access Control
 - . Authentication
 - . Gateway
 - . Virtual IP Addresses
 - . Caching
 - . Logging
 - . NT Lan Manager Method (NTLM)
 - . Local Security Authority (LSA)
 - . Lightweight Directory Access Protocol (LDAP)

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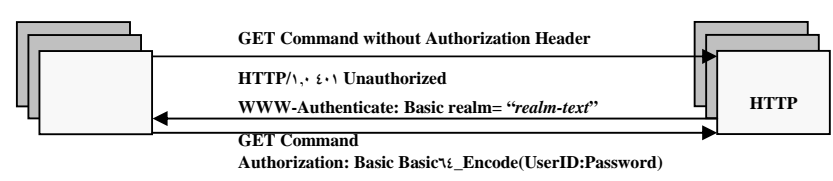
XP NT LSA LDAP

NTLM Basic

Basic

)
(Proxy-Authentication
(Proxy-Authenticate: Basic)

Basic_ User ID : Password
(Proxy-Authentication: Basic UP_Code)



-
- . Work Stations
 - . Header
 - . User ID
 - . Password

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Basic :

NTLM
Basic

NT NTLM .

XP

(Proxy-Authorization)

)

(Proxy-Authenticate: NTLM

NTLM

(Rec_Code) Basic_

Proxy-Authorization: NTLM Rec_Code

(DES) NTLM

) (Rec_Code) Basic_

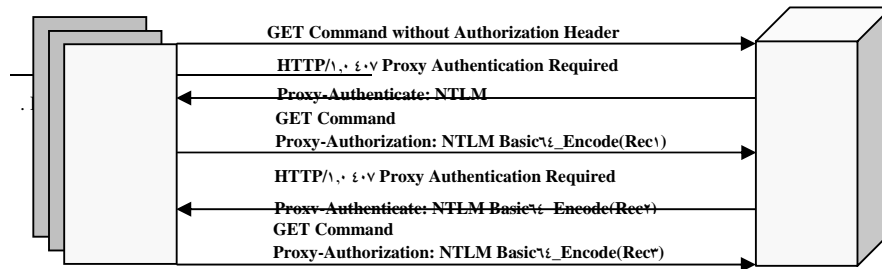
Proxy-Authenticate: NTLM Rec_Code (

(NT_Key) NT (LM_Key) LM

LM_Key NTLM

(Rec_Code) Basic_ NT_Key

Proxy-Authorization: NTLM Rec_Code



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NTLM :

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I-Net Filtering Server

Smart Filter

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-
- . Rule Base Expert System
 - . Knowledge Base
 - . Inference Engine
 - . Content
 - . Uniform Resource Location (URL)
 - . Title

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Rule : If URL contain word “sport” then :
this page is BANNED PAGE with CF= ,

:

Rule : If CONTENT OF PAGE contain word “footbal” then :
this page is ALLOWED PAGE with CF= ,

:

Rule : If request come from site “WWW.SPORT.COM” then :
requested page is BANNED PAGE with CF= ,

:

Rule : If request from site “WWW.SPORT.COM” then :
requested page is ALLOWED PAGE with CF= ,

:

Rule : If subject of page is “sport” then :
this page is BANNED PAGE with CF= ,

: NOT OR AND

Rule : If Rule AND Rule then :
this page is BANNED PAGE with CF= ,

Rule : If NOT Rule OR Rule then :
this page is ALLOWED PAGE with CF= ,

Rule : If Rule AND NOT Rule then :
this page is BANNED PAGE with CF= ,

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Subject is "Sport" with MEAN OF CFs= ,

Word : Sport , CF= ,

Word : Football , CF= ,

Word : Basketball , CF= ,

Word : Tennis , CF= ,

Word : Racket , CF= ,

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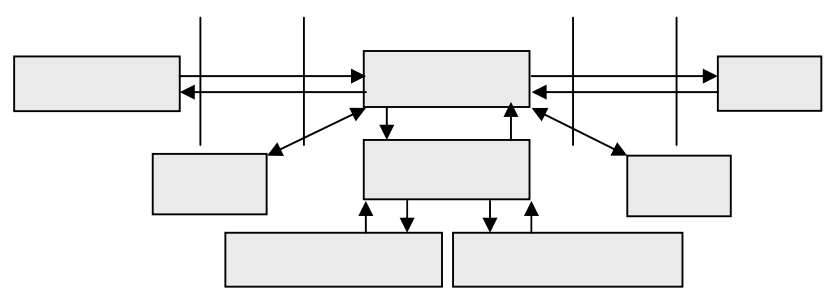
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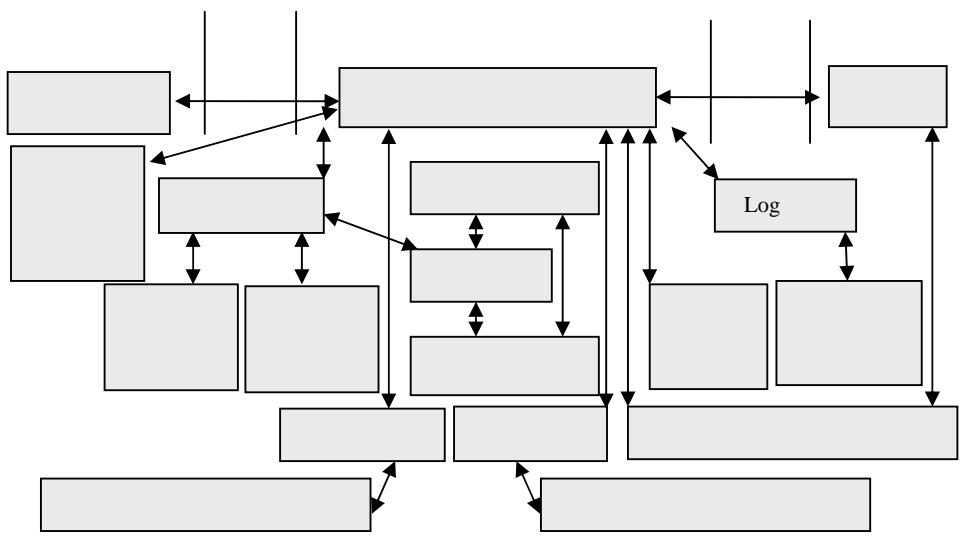


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“ ”

. Uncertainty Factor (CF)

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Pentium II

Visual C++

“COMPUTER”

“COMPUTER”

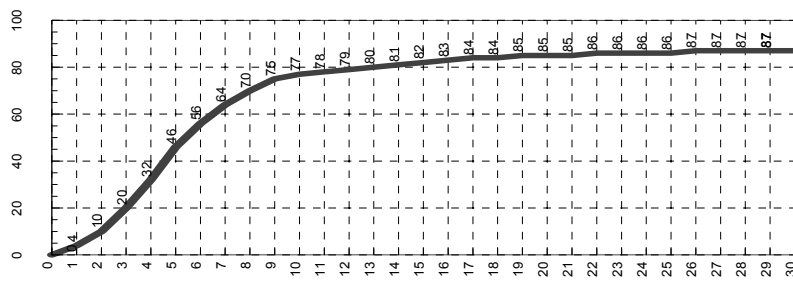
ARTICLE	CF= ,	ARTICLE	CF= ,
BOOK	CF= ,	BOOK	CF= ,
COMPUTER	CF= ,	COMPUTER	CF= ,
ENGINEERING	CF= ,	CPU	CF= ,
GAME	CF= ,	ENGINEERING	CF= ,
GLASS	CF= ,	FACULTY	CF= ,
KEY	CF= ,	GAME	CF= ,
LIGHT	CF= ,	HARDWARE	CF= ,
MOBILE	CF= ,	KEY	CF= ,
MONITORING	CF= ,	MOBILE	CF= ,
NOTE	CF= ,	MONITORING	CF= ,
PAD	CF= ,	MOUSE	CF= ,
SCIENCE	CF= ,	NOTE	CF= ,
UNIVERSITY	CF= ,	SCIENCE	CF= ,
		SOFTWARE	CF= ,
		UNIVERSITY	CF= ,
		ARTICLE	CF= ,
		AUTOMATE	CF= ,
		BOOK	CF= ,
		CDROM	CF= ,
		COMPUTER	CF= ,
		CPU	CF= ,
		DRIVE	CF= ,
		ENGINEERING	CF= ,
		FACULTY	CF= ,
		FLOPPY	CF= ,
		GAME	CF= ,
		HARDWARE	CF= ,
		INTERNET	CF= ,
		KEY	CF= ,
		MOBILE	CF= ,
		MONITORING	CF= ,
		NOTE	CF= ,
		RAM	CF= ,
		SCIENCE	CF= ,
		SOFTWARE	CF= ,
		SOUND	CF= ,
		UNIVERSITY	CF= ,

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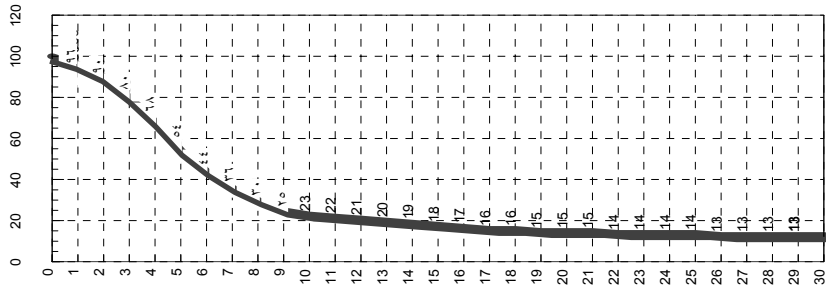
“COMPUTER”

ARTICLE	CF= ,	FLOPPY	CF= ,	PACKET	CF= ,
AUTOMATE	CF= ,	GAME	CF= ,	PUSH	CF= ,
BOOK	CF= ,	HARDWARE	CF= ,	RAM	CF= ,
BOUND	CF= ,	INTERNET	CF= ,	SATELLITE	CF= ,
CLASS	CF= ,	KEY	CF= ,	SCIENCE	CF= ,
CLIENT	CF= ,	LAN	CF= ,	SERVER	CF= ,
CDROM	CF= ,	MESSAGE	CF= ,	SERVICE	CF= ,
COMPUTER	CF= ,	METHOD	CF= ,	SOFTWARE	CF= ,
CPU	CF= ,	MOBILE	CF= ,	UNIVERSITY	CF= ,
DATA	CF= ,	MONITORING	CF= ,	WEB	CF= ,
DRIVE	CF= ,	NOTE	CF= ,	WINDOWS	CF= ,
EVENT	CF= ,	OBJECT	CF= ,	WWW	CF= ,



“COMPUTER”

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“COMPUTER”

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