

Grupo de Resposta a Incidentes de Segurança

Segurança em WebMessengers

Por:

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**Grupo de Resposta a Incidentes de Segurança
Departamento de Ciência da Computação
Instituto de Matemática
Universidade Federal do Rio de Janeiro**



Introdução

- O que são WebMessengers?
 - São mensageiros que funcionam sem depender de instalação local. Geralmente se aproveitam de tecnologias como o AJAX e JavaScript para sua execução

GRIS



Introdução

- Por que usar webmessengers?
 - Não precisa instalar
 - Só precisa do navegador
 - Independe do SO
 - Acessível em qualquer lugar
 - Seguro



Introdução

- Por que usar webmessengers?
 - Não precisa instalar
 - Só precisa do navegador
 - Independe do SO
 - Acessível em qualquer lugar
 - Seguro ???



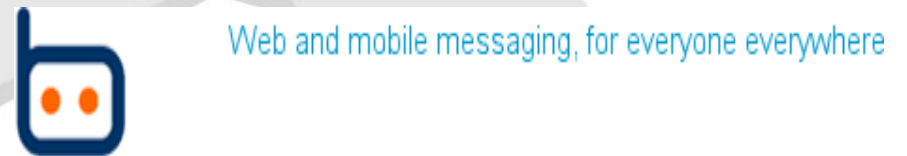
Análise

- WebMessenger escolhidos:

- Meebo



- Ebuddy

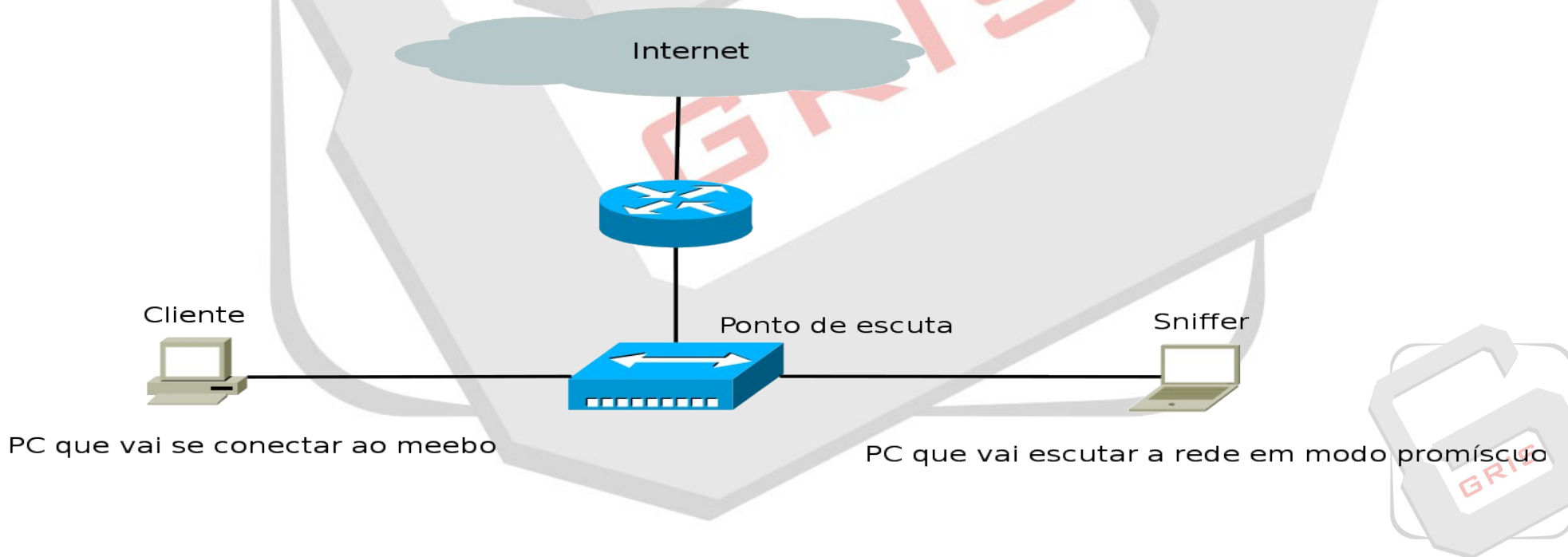


- Windows Live
Messenger Web



Ambiente dos Experimentos

- Cliente:
 - Mozilla Firefox 3.5 e Opera 10.00
- Sniffer:
 - Wireshark 1.2.3



O Meebo

- URL principal:
<http://www.meebo.com>
- Segundo a documentação, o login e a senha do usuário são criptografados e depois enviados ao servidor.
- Possui versão totalmente criptografada
<https://www.meebo.com>





instant messaging everywhere

sign on to meebo

meebo id

password

[forgot password?](#)

☐ remember me

Sign On

... or register now

One login to access all your accounts.
IM from any browser, anywhere.

email

full name

Register



msn

login

password

[forgot password?](#)



google talk

login

password

[forgot password?](#)



myspace

login

password

[forgot password?](#)



yahoo!

login

password

[forgot password?](#)

By clicking Sign On, you agree to our [terms of service](#) and [privacy policy](#)



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icq



jabber



myyearbook

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Sign On

English



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msn

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password

[forgot password?](#)



google talk

login

password

[forgot password?](#)

[... or sign on to any of these](#) [rooms for sites](#) [meebo community im](#) [jobs](#) [terms of use](#)

One login
IM from any

[forgot password?](#)

[privacy policy](#)

as invisible ☐

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English



[help translate!](#)

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meebo account security

password encryption and website security

What do we do?

At Meebo, we take security very seriously. We never send your login credentials in the clear and ensure that whenever we do send that data across the internet, it's always encrypted.

We achieve this security standard in two ways.

If your browser supports SSL, some IFrame magic occurs! When you first load up the Meebo homepage (<http://www.meebo.com>), the content served to your browser is insecure, which is okay. :) What we've done is embed another mini-webpage with an empty form in a hidden IFrame on the page. When you enter your name(s) and password(s), the hidden IFrame fills out that information into its form fields and submits it to an SSL-version of Meebo (<https://www.meebo.com>). Because the submission occurs over HTTPS, all the data is encrypted and protected. Success or failure is messaged back to your browser, and if you've entered your credentials correctly, the event loop is initiated and your Meebo session begins.

If your browser does not support SSL, we fall back to our original method of encrypting your login information. The public key of our server is embedded in the JavaScript that gets loaded by your Web browser. When you type in your login credentials and hit the "Sign On" button, the passwords are encrypted in the JavaScript using the RSA key and sent across the wire. Upon reaching the server, the CGI scripts use the corresponding private key stored only on the server to decrypt the password using OpenSSL. This way, your password is never sent across in the clear.

[Meebo privacy](#)

The philosophy behind our privacy policy

Meebo security

Security measures we have implemented

[Meebo Me privacy](#)

Privacy information specific to Meebo Me

[full privacy policy](#)

[meebo.com terms of use](#)

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password encryption and website security

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We achieve this

If your browser
Meebo home
insecure, whi
empty form in
password(s),
submits it to
submission o

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[Meebo privacy](#)

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Security measures we have implemented

[Meebo Me privacy](#)

Privacy information specific to Meebo Me

“No Meebo, nós levamos a segurança muito a sério. Nós nunca enviamos suas credenciais de login em texto puro e garantimos que sempre que nos envie os dados através da internet, sempre será codificado.”

Testando o Meebo

No. .	Time	Source	Destination	Protocol	Info
59	1.874325	208.81.191.110	10.10.10.197	TCP	https > 38354 [SYN, ACK] Seq=0 Ack=1 Win=5840 Len=0 MSS=1460
60	1.874396	10.10.10.197	208.81.191.110	TCP	38354 > https [ACK] Seq=1 Ack=1 Win=5840 Len=0
61	1.875054	10.10.10.197	208.81.191.110	SSL	Client Hello
62	2.061507	208.81.191.110	10.10.10.197	TCP	https > 38354 [ACK] Seq=1 Ack=195 Win=6432 Len=0
63	2.063836	208.81.191.110	10.10.10.197	TLSv1	Server Hello,
64	2.063884	10.10.10.197	208.81.191.110	TCP	38354 > https [ACK] Seq=195 Ack=1461 Win=8760 Len=0
65	2.065072	208.81.191.110	10.10.10.197	TCP	[TCP segment of a reassembled PDU]
66	2.065103	10.10.10.197	208.81.191.110	TCP	38354 > https [ACK] Seq=195 Ack=2921 Win=11680 Len=0
67	2.168095	10.10.10.197	208.81.191.110	HTTP	GET /mcmd/events?sessionKey=00000000000000000000000009d70ffa8221Jtlik
68	2.253750	208.81.191.110	10.10.10.197	TCP	[TCP segment of a reassembled PDU]
69	2.253799	10.10.10.197	208.81.191.110	TCP	38354 > https [ACK] Seq=195 Ack=4381 Win=14600 Len=0
70	2.254105	208.81.191.110	10.10.10.197	TLSv1	Certificate, Server Hello Done
71	2.254139	10.10.10.197	208.81.191.110	TCP	38354 > https [ACK] Seq=195 Ack=5031 Win=17520 Len=0
72	2.258755	10.10.10.197	208.81.191.110	TLSv1	Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
73	2.395359	208.81.191.110	10.10.10.197	TCP	http > 44045 [ACK] Seq=714 Ack=2599 Win=10524 Len=0
74	2.446216	208.81.191.110	10.10.10.197	TLSv1	Change Cipher Spec, Encrypted Handshake Message
75	2.447232	10.10.10.197	208.81.191.110	TLSv1	Application Data
76	2.642375	208.81.191.110	10.10.10.197	TLSv1	Application Data
77	2.681784	10.10.10.197	208.81.191.110	TCP	38354 > https [ACK] Seq=1470 Ack=5303 Win=20440 Len=0
78	2.742882	208.81.191.110	10.10.10.197	HTTP	HTTP/1.1 200 OK (text/plain)
79	2.742954	10.10.10.197	208.81.191.110	TCP	44045 > http [ACK] Seq=2599 Ack=1493 Win=9348 Len=0
80	2.786090	10.10.10.197	208.81.191.110	HTTP	GET /mcmd/events?sessionKey=00000000000000000000000009d70ffa8221Jtlik
81	2.972953	208.81.191.110	10.10.10.197	TCP	http > 44045 [ACK] Seq=1493 Ack=3476 Win=12278 Len=0
82	2.979817	208.81.191.110	10.10.10.197	HTTP	HTTP/1.1 200 OK (text/plain)
83	2.979861	10.10.10.197	208.81.191.110	TCP	44045 > http [ACK] Seq=3476 Ack=1880 Win=10906 Len=0

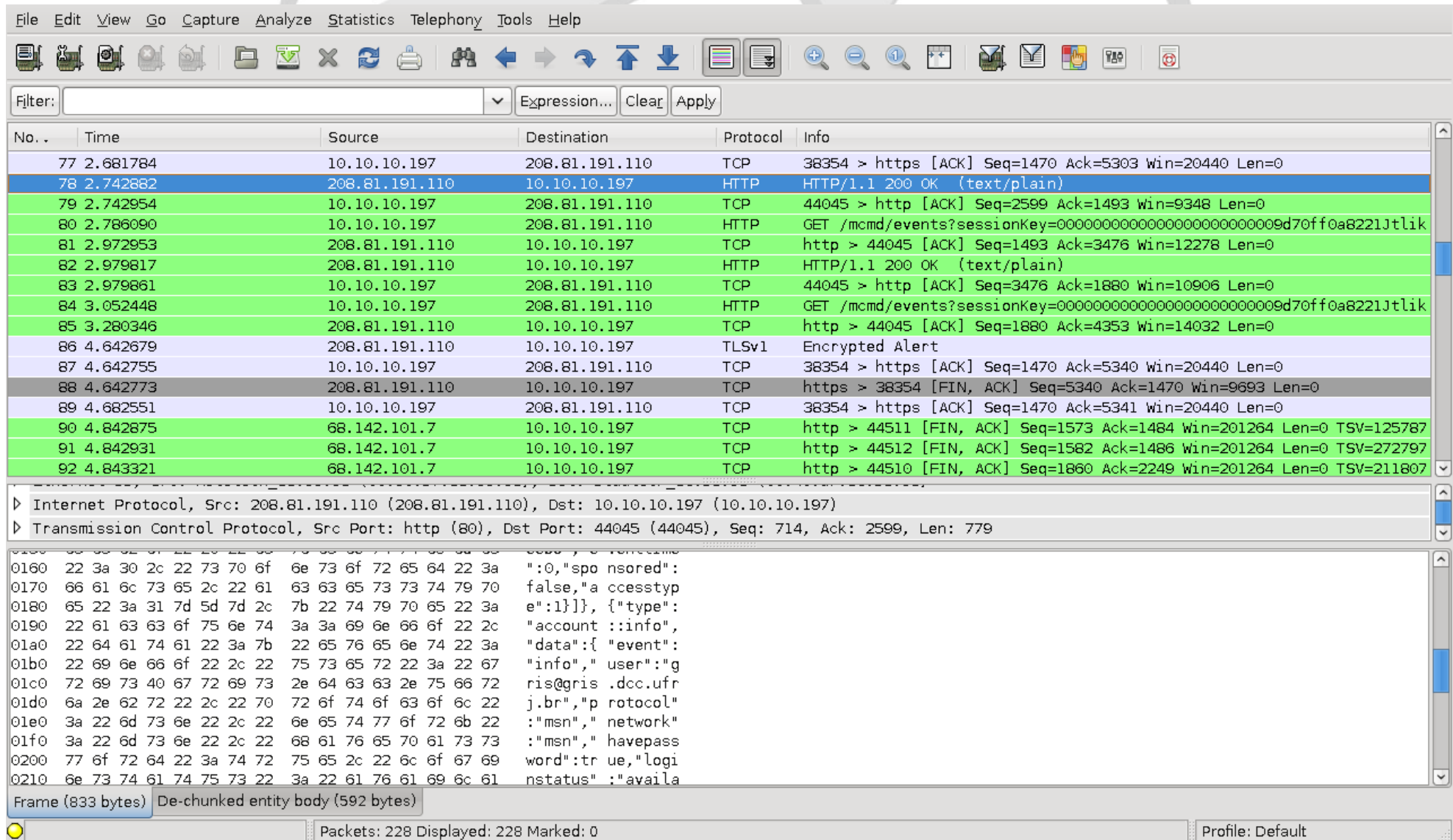
0000	00 50 bf 38 e5 5d 00 40	a7 16 bd e1 08 00 45 00	.P.8.]@E.
0010	00 ea 24 dd 40 00 40 06	70 a2 0a 0a 0a c5 d0 51	..\$.@.@. p.....Q
0020	bf 6e 95 d2 01 bb 42 84	c8 59 8b 38 eb db 50 18	.n....B. .Y.8..P.
0030	16 d0 a5 6b 00 00 16 03	01 00 bd 01 00 00 b9 03	...k....
0040	01 4a 9e 47 70 31 f5 d5	71 b3 a3 6f 1f 44 10 0d	.J.Gp1.. q..o.D..
0050	4c c1 f2 83 36 71 07 ef	a2 6c 81 b3 98 e5 8e 84	L...6q.. .l.....
0060	2e 20 5d 25 30 9b ab 86	c4 bc 85 9d 82 7a a3 89	.]%0...z..

Packets: 228 Displayed: 228 Marked: 0 Profile: Default

Transação de pacotes com SSL e TLS ativos no navegador

GRIS

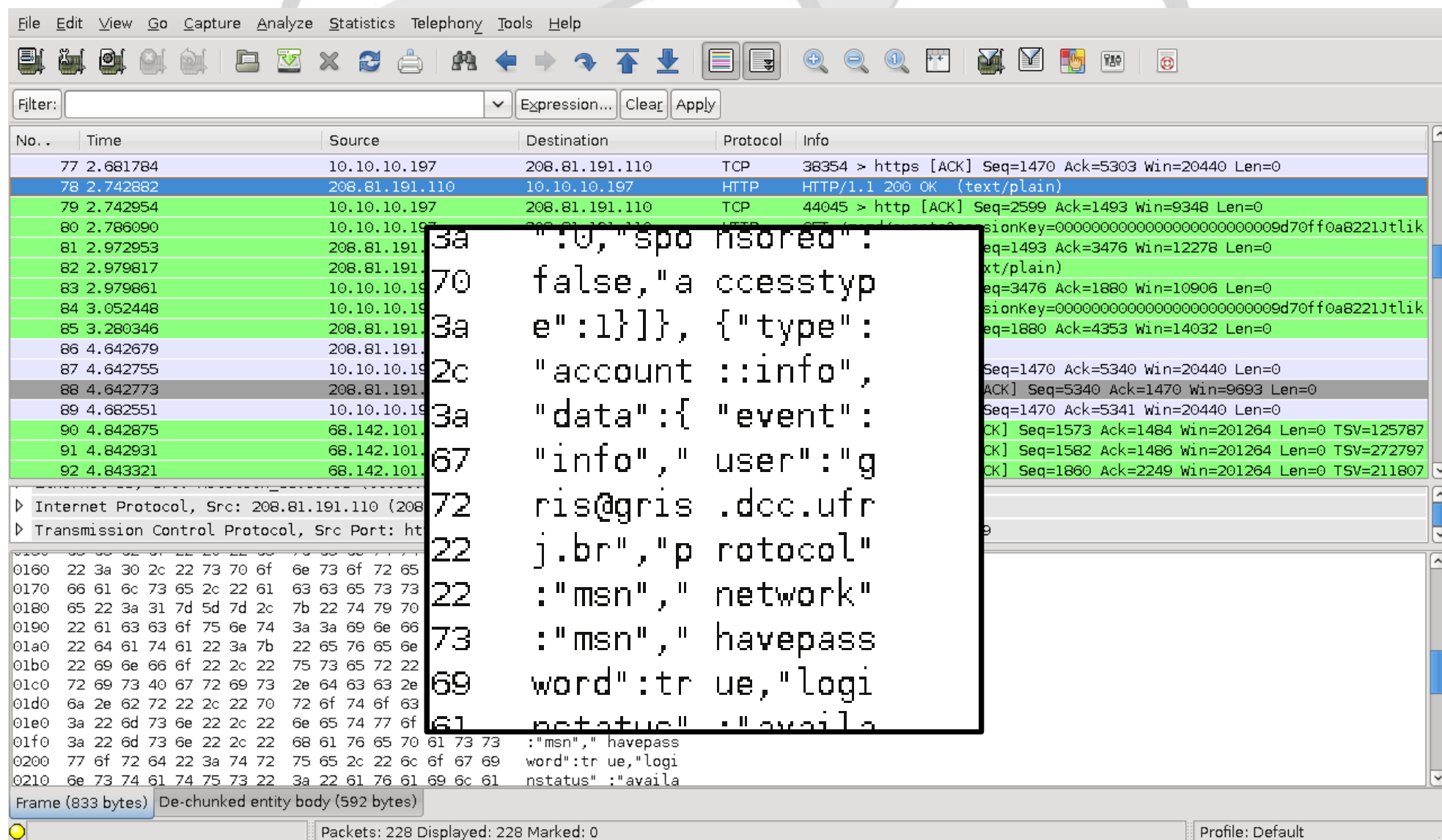
Testando o Meebo



Resposta não esperada do servidor



Testando o Meebo



Resposta não esperada do servidor



Testando o Meebo

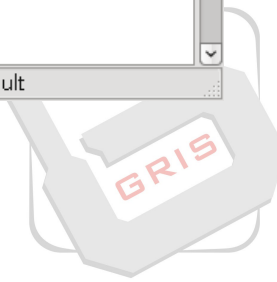
Filter: Expression... Clear Apply

No.	Time	Source	Destination	Protocol	Info
29	2.802801	10.10.10.197	208.81.191.110	TCP	54902 > http [ACK] Seq=1 Ack=1 Win=5840 Len=0
30	2.802926	10.10.10.197	208.81.191.110	HTTP	POST /mcmd/login HTTP/1.1 (application/x-www-form-urlencoded)
31	2.952564	208.81.191.110	10.10.10.197	TCP	http > 54901 [ACK] Seq=713 Ack=2593 Win=11008 Len=0 TSV=1171572512 TS
32	2.992455	208.81.191.110	10.10.10.197	TCP	http > 54902 [ACK] Seq=1 Ack=1406 Win=8430 Len=0
33	2.998523	208.81.191.110	10.10.10.197	HTTP	HTTP/1.1 200 OK (text/plain)
34	2.998568	10.10.10.197	208.81.191.110	TCP	54902 > http [ACK] Seq=1406 Ack=236 Win=6432 Len=0
35	3.099391	208.81.191.110	10.10.10.197	HTTP	HTTP/1.1 200 OK (text/plain)
36	3.116528	10.10.10.197	208.81.191.110	HTTP	GET /mcmd/events?sessionKey=000000000000000000000000ad70ff0a5f53UJrAY
37	3.138697	10.10.10.197	208.81.191.110	TCP	54901 > http [ACK] Seq=2593 Ack=1402 Win=9472 Len=0 TSV=2297012 TSER=
38	3.305176	208.81.191.110	10.10.10.197	HTTP	HTTP/1.1 200 OK (text/plain)
39	3.305266	10.10.10.197	208.81.191.110	TCP	54902 > http [ACK] Seq=2281 Ack=623 Win=7504 Len=0

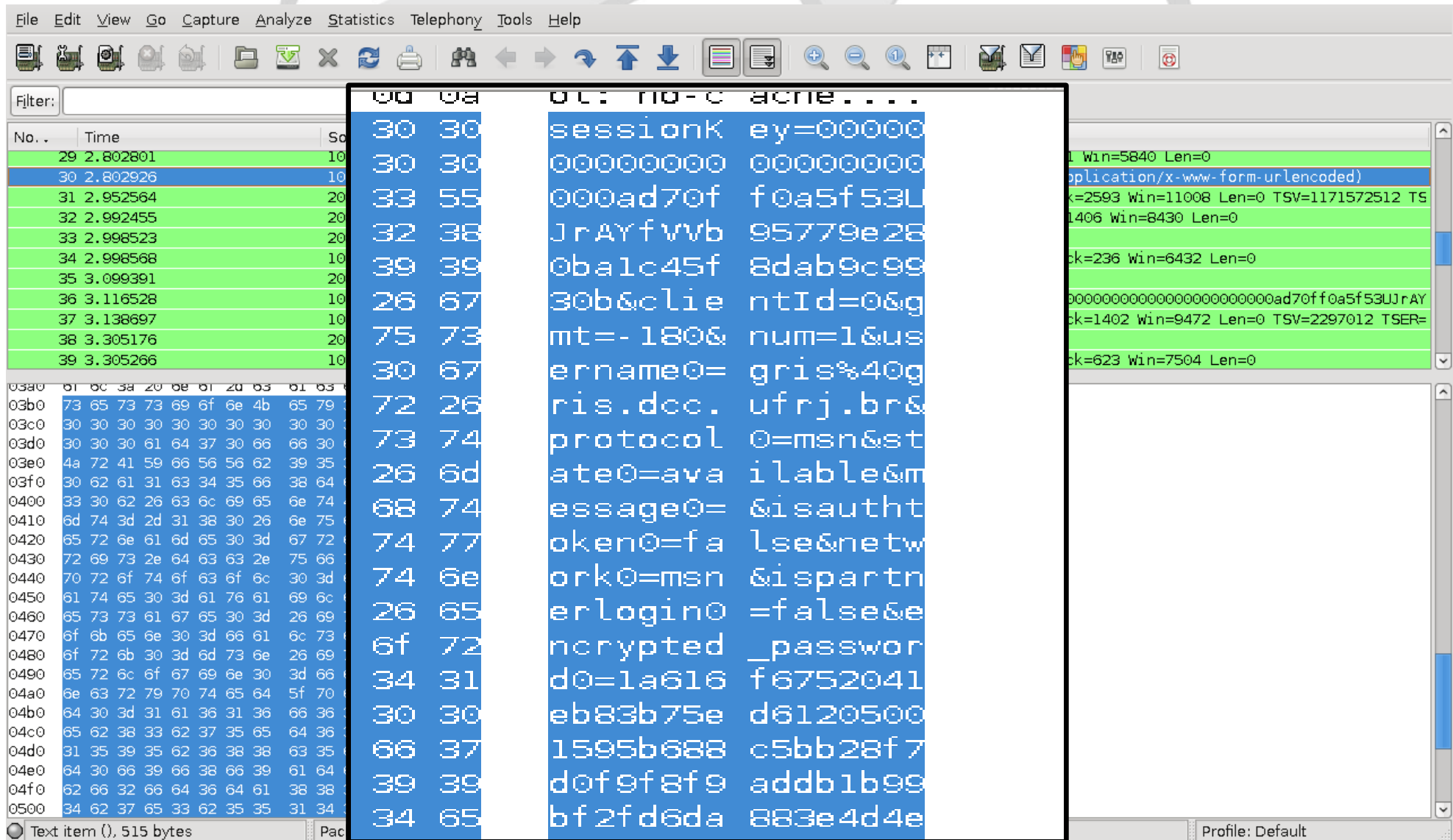
03a0 01 0c 3a 20 0e 01 20 03 01 03 08 03 00 0a 0d 0a 01: no-c acme...
03b0 73 65 73 73 69 6f 6e 4b 65 79 3d 30 30 30 30 30 sessionK ey=00000
03c0 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 00000000 00000000
03d0 30 30 30 61 64 37 30 66 66 30 61 35 66 35 33 55 000ad70f f0a5f53U
03e0 4a 72 41 59 66 56 56 62 39 35 37 37 39 65 32 38 JrAYfVvb 95779e28
03f0 30 62 61 31 63 34 35 66 38 64 61 62 39 63 39 39 0ba1c45f 8dab9c99
0400 33 30 62 26 63 6c 69 65 6e 74 49 64 3d 30 26 67 30b&clie ntId=0&g
0410 6d 74 3d 2d 31 38 30 26 6e 75 6d 3d 31 26 75 73 mt=-180& num=1&us
0420 65 72 6e 61 6d 65 30 3d 67 72 69 73 25 34 30 67 ername0= gris%40g
0430 72 69 73 2e 64 63 63 2e 75 66 72 6a 2e 62 72 26 ris.dcc. ufrj.br&
0440 70 72 6f 74 6f 63 6f 6c 30 3d 6d 73 6e 26 73 74 protocol 0=msn&st
0450 61 74 65 30 3d 61 76 61 69 6c 61 62 6c 65 26 6d ate0=ava ilable&m
0460 65 73 73 61 67 65 30 3d 26 69 73 61 75 74 68 74 essage0= &isautht
0470 6f 6b 65 6e 30 3d 66 61 6c 73 65 26 6e 65 74 77oken0=fa lse&netw
0480 6f 72 6b 30 3d 6d 73 6e 26 69 73 70 61 72 74 6eork0=msn &ispartn
0490 65 72 6c 6f 67 69 6e 30 3d 66 61 6c 73 65 26 65erlogin0 =false&e
04a0 6e 63 72 79 70 74 65 64 5f 70 61 73 73 77 6f 72ncrypted _passwor
04b0 64 30 3d 31 61 36 31 36 66 36 37 35 32 30 34 31d0=1a616 f6752041
04c0 65 62 38 33 62 37 35 65 64 36 31 32 30 35 30 30eb83b75e d6120500
04d0 31 35 39 35 62 36 38 38 63 35 62 62 32 38 66 371595b688 c5bb28f7
04e0 64 30 66 39 66 38 66 39 61 64 64 62 31 62 39 39d0f9f8f9 addb1b99
04f0 62 66 32 66 64 36 64 61 38 38 33 65 34 64 34 65bf2fd6da 883e4d4e
0500 34 62 37 65 33 62 35 35 31 34 35 66 64 30 37 644b7e3b55 145fd07d

Text item (), 515 bytes Packets: 65 Displayed: 65 Marked: 0 Profile: Default

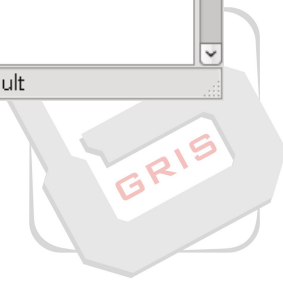
Transação de pacotes com SSL e TLS desativados no navegador
Utiliza uma implementação de RSA em JavaScript



Testando o Meebo



Transação de pacotes com SSL e TLS desativados no navegador
Utiliza uma implementação de RSA em JavaScript



JavaScript

```
// Copyright 2005-2009 Meebo, inc.
//
// RSA javascript implementation Copyright 1998-2005 David Shapiro
// please see http://www.ohdave.com/rsa/
// SHA256 javascript implementation Copyright 2003-2004 Angel Marin
// please see http://anmar.eu.org/
// dom offset javascript implementation Copyright 2009 John Resig
// please see http://docs.jquery.com/Source_Code
//
// interested in joining meebo? we have positions for back-end software engineer, front-end software engineer, and visual designer
// email your resume and cover letter to secretjobs at meebo dot com!
var lib={};
function Class(b,e,d){var a=(d?Class.extend(e,d):Class.create(e));
if(b){var c=b.lastIndexOf(".");
Class.getObject(b.slice(0,Math.max(c,0)))[b.slice(c+1)]=a
}return a
}function Singleton(b,a){return new (Class(null,b,a))()
}Class.create=function(a){function b(){if(typeof this.initialize=="function"){return this.initialize.apply(this,arguments)
}}b.prototype=new a(function(e,f,d){var c=a;
if(!d){d=[]
}while(c=c.prototype){if(c[f]){return c[f].apply(e,d)
}}throw new Error("method does not exist")
});
b.prototype.constructor=b;
return b
};
Class.extend=function(a,b){b.prototype=a.prototype;
return Class.create(b)
};
Class.getObject=function(pkg){var parts=pkg.split(".");
if(typeof window=="undefined"){var object=eval(parts[0]+" = typeof "+parts[0]+' == "undefined" ? {} : '+parts[0]+'");
parts.shift()
}else{var object=window
}while(parts.length){var part=parts.shift();
if(!part){continue
}if(!object[part]){object[part]={}
}object=object[part]
}return object
};
```

Testando o Meebo

- Segundo a documentação do Meebo, toda transferência de dados (login e senha) são criptografadas.
- Na realidade não é bem assim, já que através da página padrão, é possível obter o login em TEXTO PURO.



O eBuddy

- URL principal:
<http://www.ebuddy.com>
- Não possui documentação acerca de criptografia
- Política de privacidade assegura que as informações são transmitidas de forma segura





Mensagens via Internet e Telemóvel para todos e em qualquer lugar



Iniciar sessão no MSN

Passaporte

Senha

A sua senha vai ser enviada de forma segura.

Estado Inicial

Iniciar sessão

ao iniciar sessão concorda com os nossos [termos](#)

Publicidade

Coloca o eBuddy no teu blog ou website. [Clica aqui para saber como!](#)

Bem-vindo ao eBuddy, o seu web messenger para MSN, Yahoo, Gtalk, Facebook, ICQ, MySpace e AIM (AOL). Esteja em casa, na escola, no trabalho ou a viajar; com o eBuddy pode conversar a qualquer hora em qualquer lugar. O eBuddy está disponível na versão Web e também para o telemóvel. O eBuddy permite enviar mensagens instantâneas em qualquer computador, e ainda funciona quando você está protegido por uma firewall! O eBuddy não necessita de descarregamentos de ficheiros, instalações de software, actualizações e não requer inscrições. O melhor de tudo é que é gratuito .. aproveite :-)



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TELEMÓVEL PARA TODOS E
EM QUALQUER LUGAR

Terms

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- [Copyright](#)
- [Links to 3rd Parties](#)
- [Legal Disclaimer](#)
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You are here: [Home](#) / [Privacy Statement](#)

EBUDDY PRIVACY STATEMENT

eBuddy takes your privacy seriously and will process and use information about you in a secure manner. Therefore eBuddy has established and implemented this Privacy Statement in which we describe what information we collect about you and how we use it. We therefore recommend that you read this Privacy Statement carefully.

AFTER READING THIS PRIVACY STATEMENT YOU WILL HAVE LEARNED THAT:

- We use your personal information to offer you the eBuddy service and to keep you informed about any news regarding eBuddy;
- We use your personal information to enhance and make your use of eBuddy easier;
- We use non-personal information such as your age and gender to serve you relevant advertisements;
- We will not share personal information about you with third parties without your prior consent
- We take security measures to safeguard your personal information.

1. WHAT IS EBUDDY?

eBuddy is an online web based messenger that allows you to chat online anytime and everywhere. eBuddy's mobile products allows you to chat anytime, everywhere on your mobile phone; additional charges may apply depending on product version and operator subscriptions. eBuddy is established at Keizersgracht 585 in (1017 DR) Amsterdam and is listed at the Chamber of Commerce under number 34211186. The manner in which your personal details are saved and used has been reported to the Dutch Data Protection Authority.

2. WHAT INFORMATION IS COLLECTED AND PROCESSED BY EBUDDY?

USE WITHOUT EBuddy ID



MENSAGENS VIA INTERNET E
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Terms

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- Legal Disclaimer
- Limitation of Liability

You are here: Home / Privacy Statement

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AFTER READING THIS PRIVACY STATEMENT YOU WILL HAVE LEARNED THAT:

“Nós tomamos as medidas de segurança
para proteger suas informações pessoais. “

consent

- We take security measures to safeguard your personal information.

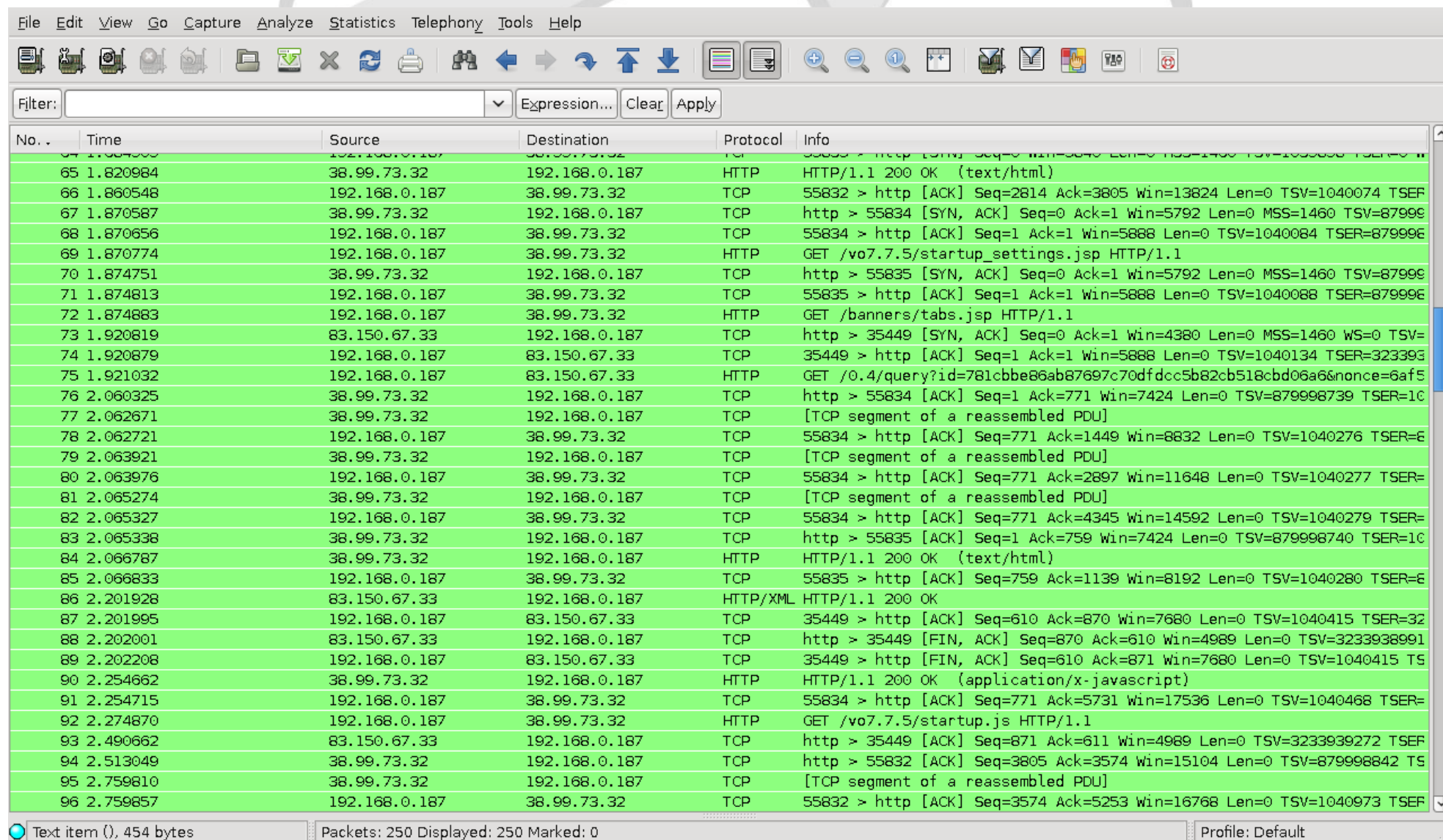
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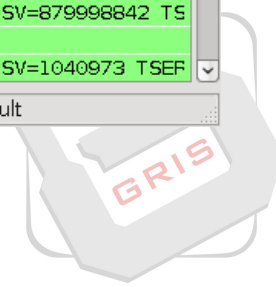
Testando o eBuddy



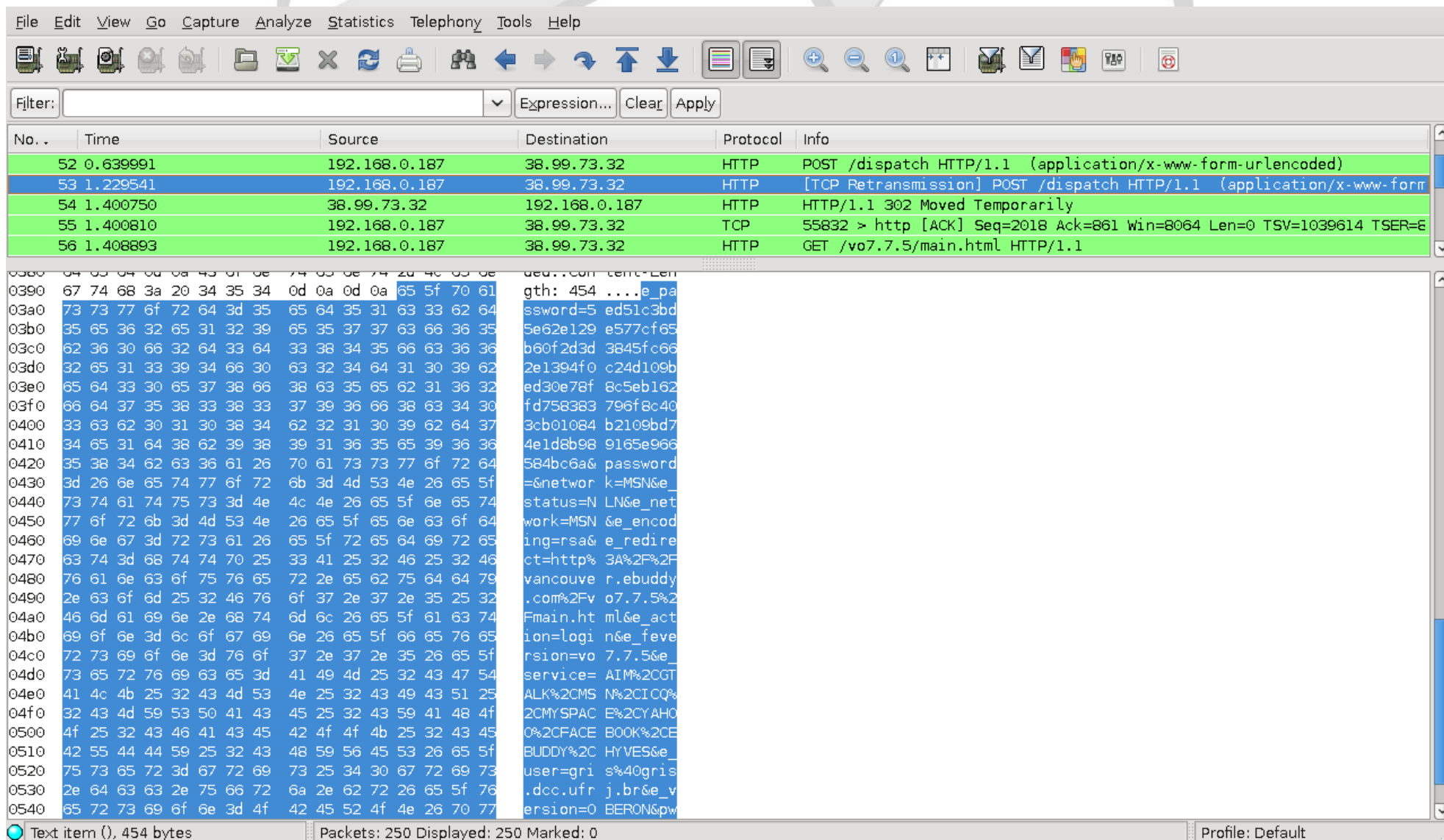
No.	Time	Source	Destination	Protocol	Info
65	1.820984	38.99.73.32	192.168.0.187	HTTP	HTTP/1.1 200 OK (text/html)
66	1.860548	192.168.0.187	38.99.73.32	TCP	55832 > http [ACK] Seq=2814 Ack=3805 Win=13824 Len=0 TSV=1040074 TSEF
67	1.870587	38.99.73.32	192.168.0.187	TCP	http > 55834 [SYN, ACK] Seq=0 Ack=1 Win=5792 Len=0 MSS=1460 TSV=87999
68	1.870656	192.168.0.187	38.99.73.32	TCP	55834 > http [ACK] Seq=1 Ack=1 Win=5888 Len=0 TSV=1040084 TSEF=87999
69	1.870774	192.168.0.187	38.99.73.32	HTTP	GET /vo7.7.5/startup_settings.jsp HTTP/1.1
70	1.874751	38.99.73.32	192.168.0.187	TCP	http > 55835 [SYN, ACK] Seq=0 Ack=1 Win=5792 Len=0 MSS=1460 TSV=87999
71	1.874813	192.168.0.187	38.99.73.32	TCP	55835 > http [ACK] Seq=1 Ack=1 Win=5888 Len=0 TSV=1040088 TSEF=87999
72	1.874883	192.168.0.187	38.99.73.32	HTTP	GET /banners/tabs.jsp HTTP/1.1
73	1.920819	83.150.67.33	192.168.0.187	TCP	http > 35449 [SYN, ACK] Seq=0 Ack=1 Win=4380 Len=0 MSS=1460 WS=0 TSV=
74	1.920879	192.168.0.187	83.150.67.33	TCP	35449 > http [ACK] Seq=1 Ack=1 Win=5888 Len=0 TSV=1040134 TSEF=323393
75	1.921032	192.168.0.187	83.150.67.33	HTTP	GET /0.4/query?id=781cbb86ab87697c70dfdcc5b82cb518cbd06a6&nonce=6af5
76	2.060325	38.99.73.32	192.168.0.187	TCP	http > 55834 [ACK] Seq=1 Ack=771 Win=7424 Len=0 TSV=879998739 TSEF=10
77	2.062671	38.99.73.32	192.168.0.187	TCP	[TCP segment of a reassembled PDU]
78	2.062721	192.168.0.187	38.99.73.32	TCP	55834 > http [ACK] Seq=771 Ack=1449 Win=8832 Len=0 TSV=1040276 TSEF=
79	2.063921	38.99.73.32	192.168.0.187	TCP	[TCP segment of a reassembled PDU]
80	2.063976	192.168.0.187	38.99.73.32	TCP	55834 > http [ACK] Seq=771 Ack=2897 Win=11648 Len=0 TSV=1040277 TSEF=
81	2.065274	38.99.73.32	192.168.0.187	TCP	[TCP segment of a reassembled PDU]
82	2.065327	192.168.0.187	38.99.73.32	TCP	55834 > http [ACK] Seq=771 Ack=4345 Win=14592 Len=0 TSV=1040279 TSEF=
83	2.065338	38.99.73.32	192.168.0.187	TCP	http > 55835 [ACK] Seq=1 Ack=759 Win=7424 Len=0 TSV=879998740 TSEF=10
84	2.066787	38.99.73.32	192.168.0.187	HTTP	HTTP/1.1 200 OK (text/html)
85	2.066833	192.168.0.187	38.99.73.32	TCP	55835 > http [ACK] Seq=759 Ack=1139 Win=8192 Len=0 TSV=1040280 TSEF=
86	2.201928	83.150.67.33	192.168.0.187	HTTP/XML	HTTP/1.1 200 OK
87	2.201995	192.168.0.187	83.150.67.33	TCP	35449 > http [ACK] Seq=610 Ack=870 Win=7680 Len=0 TSV=1040415 TSEF=32
88	2.202001	83.150.67.33	192.168.0.187	TCP	http > 35449 [FIN, ACK] Seq=870 Ack=610 Win=4989 Len=0 TSV=3233938991
89	2.202208	192.168.0.187	83.150.67.33	TCP	35449 > http [FIN, ACK] Seq=610 Ack=871 Win=7680 Len=0 TSV=1040415 TS
90	2.254662	38.99.73.32	192.168.0.187	HTTP	HTTP/1.1 200 OK (application/x-javascript)
91	2.254715	192.168.0.187	38.99.73.32	TCP	55834 > http [ACK] Seq=771 Ack=5731 Win=17536 Len=0 TSV=1040468 TSEF=
92	2.274870	192.168.0.187	38.99.73.32	HTTP	GET /vo7.7.5/startup.js HTTP/1.1
93	2.490662	83.150.67.33	192.168.0.187	TCP	http > 35449 [ACK] Seq=871 Ack=611 Win=4989 Len=0 TSV=3233939272 TSEF
94	2.513049	38.99.73.32	192.168.0.187	TCP	http > 55832 [ACK] Seq=3805 Ack=3574 Win=15104 Len=0 TSV=879998842 TS
95	2.759810	38.99.73.32	192.168.0.187	TCP	[TCP segment of a reassembled PDU]
96	2.759857	192.168.0.187	38.99.73.32	TCP	55832 > http [ACK] Seq=3574 Ack=5253 Win=16768 Len=0 TSV=1040973 TSEF

Text item (), 454 bytes Packets: 250 Displayed: 250 Marked: 0 Profile: Default

Processo de captura com o SSL e TLS habilitados



Testando o eBuddy



File Edit View Go Capture Analyze Statistics Telephony Tools Help

Filter: Expression... Clear Apply

No.	Time	Source	Destination	Protocol	Info
52	0.639991	192.168.0.187	38.99.73.32	HTTP	POST /dispatch HTTP/1.1 (application/x-www-form-urlencoded)
53	1.229541	192.168.0.187	38.99.73.32	HTTP	[TCP Retransmission] POST /dispatch HTTP/1.1 (application/x-www-form-urlencoded)
54	1.400750	38.99.73.32	192.168.0.187	HTTP	HTTP/1.1 302 Moved Temporarily
55	1.400810	192.168.0.187	38.99.73.32	TCP	55832 > http [ACK] Seq=2018 Ack=861 Win=8064 Len=0 TSV=1039614 TSER=E
56	1.408893	192.168.0.187	38.99.73.32	HTTP	GET /vo7.7.5/main.html HTTP/1.1

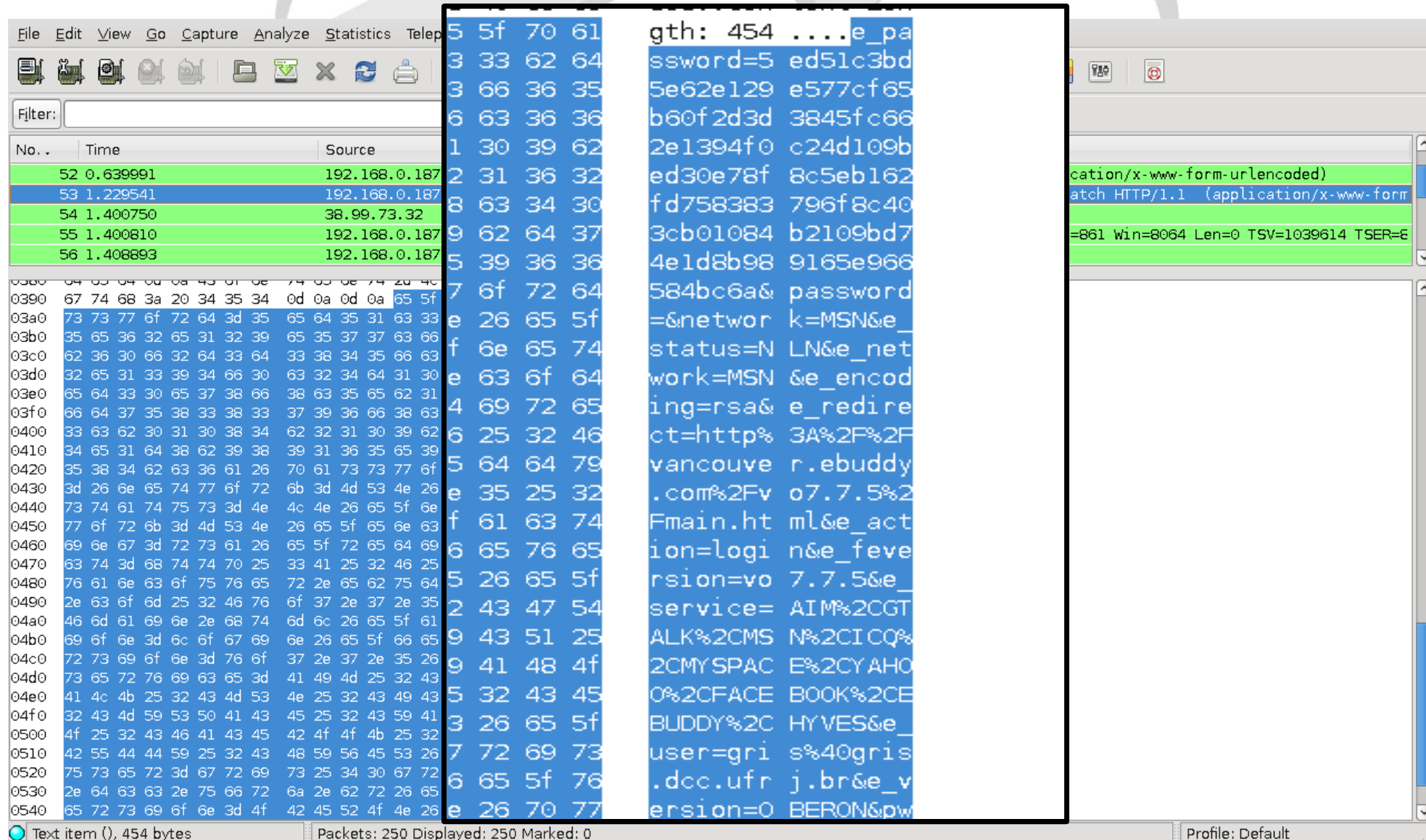
0390 67 74 68 3a 20 34 35 34 0d 0a 0d 0a 65 5f 70 61 gth: 454e_pa
03a0 73 73 77 6f 72 64 3d 35 65 64 35 31 63 33 62 64 ssword=5 ed51c3bd
03b0 35 65 36 32 65 31 32 39 65 35 37 37 63 66 36 35 5e62e129 e577cf65
03c0 62 36 30 66 32 64 33 64 33 38 34 35 66 63 36 36 b60f2d3d 3845fc66
03d0 32 65 31 33 39 34 66 30 63 32 34 64 31 30 39 62 2e1394f0 c24d109b
03e0 65 64 33 30 65 37 38 66 38 63 35 65 62 31 36 32 ed30e78f 8c5eb162
03f0 66 64 37 35 38 33 38 33 37 39 36 66 38 63 34 30 fd758383 796f8c40
0400 33 63 62 30 31 30 38 34 62 32 31 30 39 62 64 37 3cb01084 b2109bd7
0410 34 65 31 64 38 62 39 38 39 31 36 35 65 39 36 36 4e1dab98 9165e966
0420 35 38 34 62 63 36 61 26 70 61 73 73 77 6f 72 64 584bc6a& password
0430 3d 26 6e 65 74 77 6f 72 6b 3d 4d 53 4e 26 65 5f =&network k=MSN&e
0440 73 74 61 74 75 73 3d 4e 4c 4e 26 65 5f 6e 65 74 status=N LN&e_net
0450 77 6f 72 6b 3d 4d 53 4e 26 65 5f 65 6e 63 6f 64 work=MSN &e_encod
0460 69 6e 67 3d 72 73 61 26 65 5f 72 65 64 69 72 65 ing=rsa& e_redire
0470 63 74 3d 68 74 74 70 25 33 41 25 32 46 25 32 46 ct=http% 3A%2F%2F
0480 76 61 6e 63 6f 75 76 65 72 2e 65 62 75 64 64 79 vancouve r.ebuddy
0490 2e 63 6f 6d 25 32 46 76 6f 37 2e 37 2e 35 25 32 .com%2Fv o7.7.5%2
04a0 46 6d 61 69 6e 2e 68 74 6d 6c 26 65 5f 61 63 74 Fmain.ht ml&e_act
04b0 69 6f 6e 3d 6c 6f 67 69 6e 26 65 5f 66 65 76 65 ion=Logi n&e_feve
04c0 72 73 69 6f 6e 3d 76 6f 37 2e 37 2e 35 26 65 5f rsion=vo 7.7.5&e
04d0 73 65 72 76 69 63 65 3d 41 49 4d 25 32 43 47 54 service= AIM%2CGT
04e0 41 4c 4b 25 32 43 4d 53 4e 25 32 43 49 43 51 25 ALK%2CMS N%2CICQ%
04f0 32 43 4d 59 53 50 41 43 45 25 32 43 59 41 48 4f 2CMYSPAC E%2CYAH0
0500 4f 25 32 43 46 41 43 45 42 4f 4f 4b 25 32 43 45 0%2CFACE BOOK%2CE
0510 42 55 44 44 59 25 32 43 48 59 56 45 53 26 65 5f BUDDY%2C HYVES&e
0520 75 73 65 72 3d 67 72 69 73 25 34 30 67 72 69 73 user=gri s%40gris
0530 2e 64 63 62 2e 75 66 72 6a 2e 62 72 26 65 5f 76 .dcc.ufr j.br&e_v
0540 65 72 73 69 6f 6e 3d 4f 42 45 52 4f 4e 26 70 77 version=0 BERON&pw

Text item (), 454 bytes Packets: 250 Displayed: 250 Marked: 0 Profile: Default

Login em texto puro e senha criptografada



Testando o eBuddy



File Edit View Go Capture Analyze Statistics Teleport

Filter:

No.	Time	Source
52	0.639991	192.168.0.187
53	1.229541	192.168.0.187
54	1.400750	38.99.73.32
55	1.400810	192.168.0.187
56	1.408893	192.168.0.187

0390 67 74 68 3a 20 34 35 34 0d 0a 0d 0a 65 5f
03a0 73 73 77 6f 72 64 3d 35 65 64 35 31 63 33
03b0 35 65 36 32 65 31 32 39 65 35 37 37 63 66
03c0 62 36 30 66 32 64 33 64 33 38 34 35 66 63
03d0 32 65 31 33 39 34 66 30 63 32 34 64 31 30
03e0 65 64 33 30 65 37 38 66 38 63 35 65 62 31
03f0 66 64 37 35 38 33 38 33 37 39 36 66 38 63
0400 33 63 62 30 31 30 38 34 62 32 31 30 39 62
0410 34 65 31 64 38 62 39 38 39 31 36 35 65 39
0420 35 38 34 62 63 36 61 26 70 61 73 73 77 6f
0430 3d 26 6e 65 74 77 6f 72 6b 3d 4d 53 4e 26
0440 73 74 61 74 75 73 3d 4e 4c 4e 26 65 5f 6e
0450 77 6f 72 6b 3d 4d 53 4e 26 65 5f 65 6e 63
0460 69 6e 67 3d 72 73 61 26 65 5f 72 65 64 69
0470 63 74 3d 68 74 74 70 25 33 41 25 32 46 25
0480 76 61 6e 63 6f 75 76 65 72 2e 65 62 75 64
0490 2e 63 6f 6d 25 32 46 76 6f 37 2e 37 2e 35
04a0 46 6d 61 69 6e 2e 68 74 6d 6c 26 65 5f 61
04b0 69 6f 6e 3d 6c 6f 67 69 6e 26 65 5f 66 65
04c0 72 73 69 6f 6e 3d 76 6f 37 2e 37 2e 35 26
04d0 73 65 72 76 69 63 65 3d 41 49 4d 25 32 43
04e0 41 4c 4b 25 32 43 4d 53 4e 25 32 43 49 43
04f0 32 43 4d 59 53 50 41 43 45 25 32 43 59 41
0500 4f 25 32 43 46 41 43 45 42 4f 4f 4b 25 32
0510 42 55 44 44 59 25 32 43 48 59 56 45 53 26
0520 75 73 65 72 3d 67 72 69 73 25 34 30 67 72
0530 2e 64 63 63 2e 75 66 72 6a 2e 62 72 26 65
0540 65 72 73 69 6f 6e 3d 4f 42 45 52 4f 4e 26

gth: 454e_pa
ssword=5 ed51c3bd
5e62e129 e577cf65
b60f2d3d 3845fc66
2e1394f0 c24d109b
ed30e78f 8c5eb162
fd758383 796f8c40
3cb01084 b2109bd7
4e1d8b98 9165e966
584bc6a& password
=&network k=MSN&e_
status=N LN&e_net
work=MSN &e_encod
ing=rsa& e_redire
ct=http% 3A%2F%2F
vancouve r.ebuddy
.com%2Fv o7.7.5%2
Fmain.ht ml&e_act
ion=logi n&e_feve
rsion=vo 7.7.5&e_
service= AIM%2CGT
ALK%2CMS N%2CICQ%
2CMYSPAC E%2CYAHO
0%2CFACE BOOK%2CE
BUDDY%2C HYVES&e_
user=gri s%40gris
.dcc.ufr j.br&e_v
ersion=0 BERON&pw

Text item (), 454 bytes Packets: 250 Displayed: 250 Marked: 0 Profile: Default

Login em texto puro e senha criptografada



Testando o eBuddy

- A política de privacidade diz que transmite os dados (login e senha) de forma segura.
- Na realidade, o login e senha não são transportados de forma segura, para isso é recomendável utilizar SSL.



O Windows Live Messenger Web



The screenshot shows the UOL website interface. At the top, there's a navigation bar with links like "HOSPEDAGEM DE SITES 0800 723 6000", "LOJA VIRTUAL", "SERVIDOR DEDICADO", and "REGISTRE SEU DOMÍNIO .COM R\$5,90/ano". Below this is a green banner with the "olhar digital" logo. A secondary navigation bar includes "Home", "Central de vídeos", "Digital news", "Laboratório digital", "TI Verde", "Trend makers", "Downloads", "Podcasts", "Links", and "Blogs". The date "Terça-feira, 10 de novembro de 2009" and a Google search bar are visible. The main content area features a news article titled "Microsoft tira Web Messenger do ar" dated "Sexta-feira, 03 de julho de 2009 às 14h23". The article discusses Microsoft's decision to remove the Web Messenger service, replacing it with Windows Live Messenger. A sidebar on the right titled "Sugestões do editor" lists various links like "Boas notícias para fãs de air guitar!", "Adobe Flash para celulares", "Twitter Lists", "Google Profile", and "DailyPerfect".

UOL HOSPEDAGEM DE SITES 0800 723 6000 LOJA VIRTUAL SERVIDOR DEDICADO REGISTRE SEU DOMÍNIO .COM R\$5,90/ano

olhar digital

Home Central de vídeos Digital news Laboratório digital TI Verde Trend makers Downloads Podcasts Links Blogs

Terça-feira, 10 de novembro de 2009 Busca: Google Pesquisa Personalizada Newsletter RSS Quem somos Fale conosco

Sexta-feira, 03 de julho de 2009 às 14h23

Microsoft tira Web Messenger do ar

A Microsoft tirou do ar o MSN Web Messenger. A empresa pretende substituir o serviço por outro semelhante no Hotmail e no Windows Live.

O Web Messenger funciona como uma alternativa aos usuários que não podem, ou não querem, acessar a versão instalada do mensageiro instantâneo do MSN. Ele dá acesso à lista de contatos, e permite que sejam estabelecidas conversas por mensagens instantâneas.

No lugar do Web Messenger, a Microsoft pretende criar um sistema de mensagens dentro do próprio Hotmail e também no Windows Live People, com a lista de contatos do Windows Live. A intenção da MS parece ser agrupar os serviços online dentro da marca Windows Live.

Para ativar o serviço no WL People é necessário selecionar uma opção no canto superior direito da janela, clicar na imagem de algum contato e escolher "Send na Instant Message". Como no WL Messenger, o status dos contatos são exibidos por meio de molduras coloridas.

Dentro do mensageiro do People, não é possível agrupar os contatos em categorias, no entanto, ainda assim a ferramenta é

Sugestões do editor

Boas notícias para fãs de air guitar!
Interface identifica movimentos de músculos e transfere sinais para computadores e videogames

Adobe Flash para celulares
Veja-o em ação

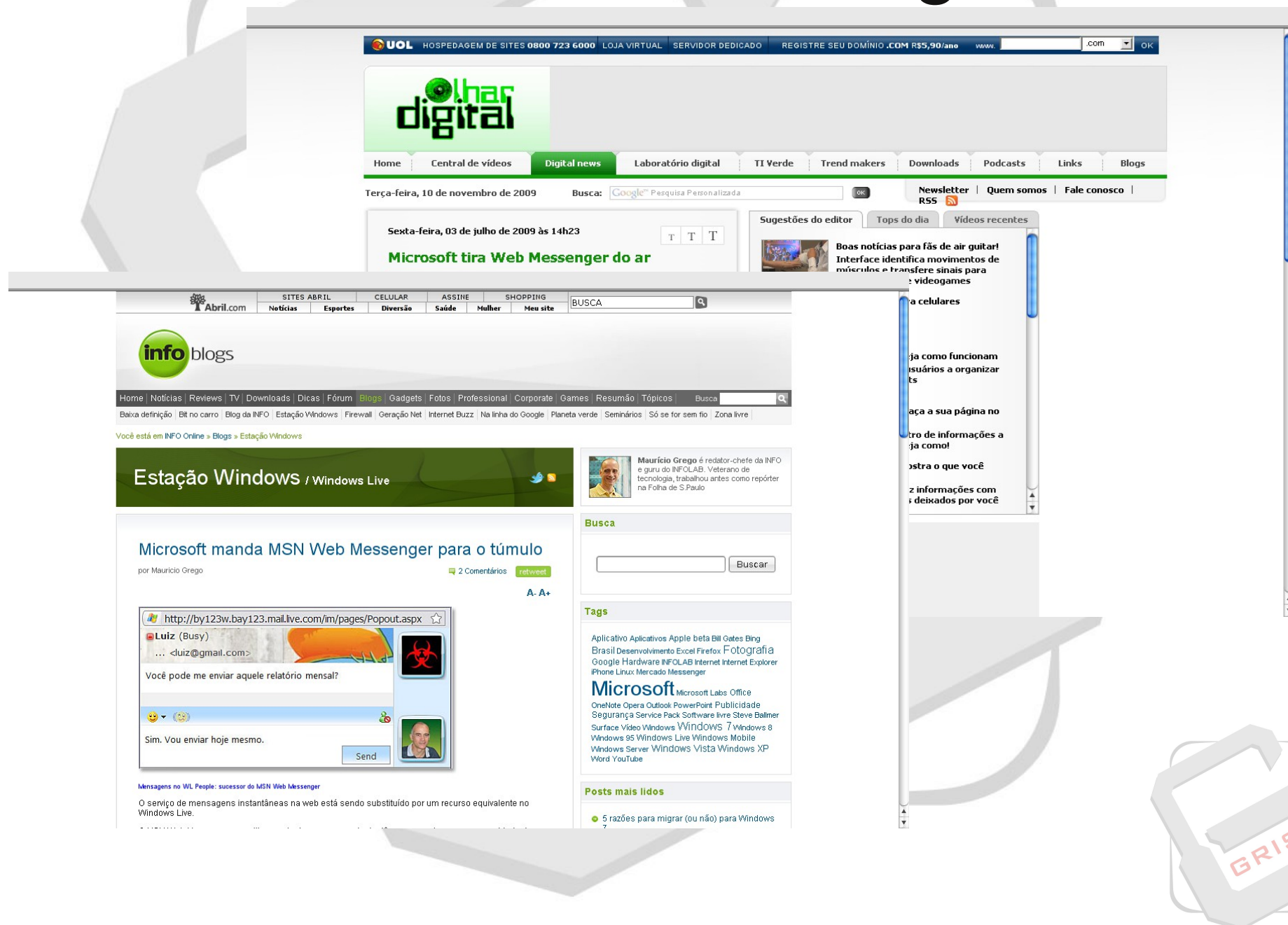
Twitter Lists: veja como funcionam
Recurso ajuda usuários a organizar timeline de twitts

Google Profile: faça a sua página no Google!
Facilite o encontro de informações a seu respeito. Veja como!

O site que só mostra o que você gostou
DailyPerfect traz informações com base em rastros deixados por você



O Windows Live Messenger Web



O Windows Live Messenger Web



O Windows Live Messenger na Web foi movido!

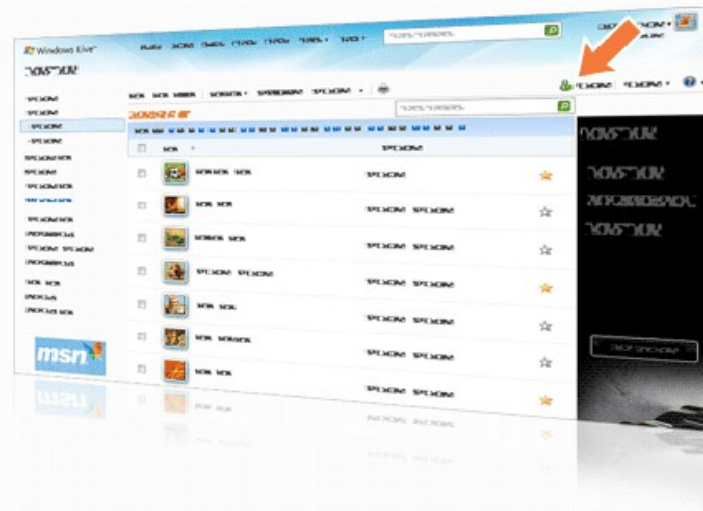
O foco do Messenger são as pessoas - por isso, a versão para a Web agora é embutida no Hotmail e no resto do Windows Live. Vá para <http://people.live.com> e veja quem está online.

Você também pode ver se seus amigos estão online vendo rapidamente a sua caixa de entrada. Você também pode transformar emails em conversas por Mensagens Instantâneas.

Para entrar no Messenger na Web, vá para o Hotmail ou para <http://people.live.com> e procure por Messenger na barra de ações.

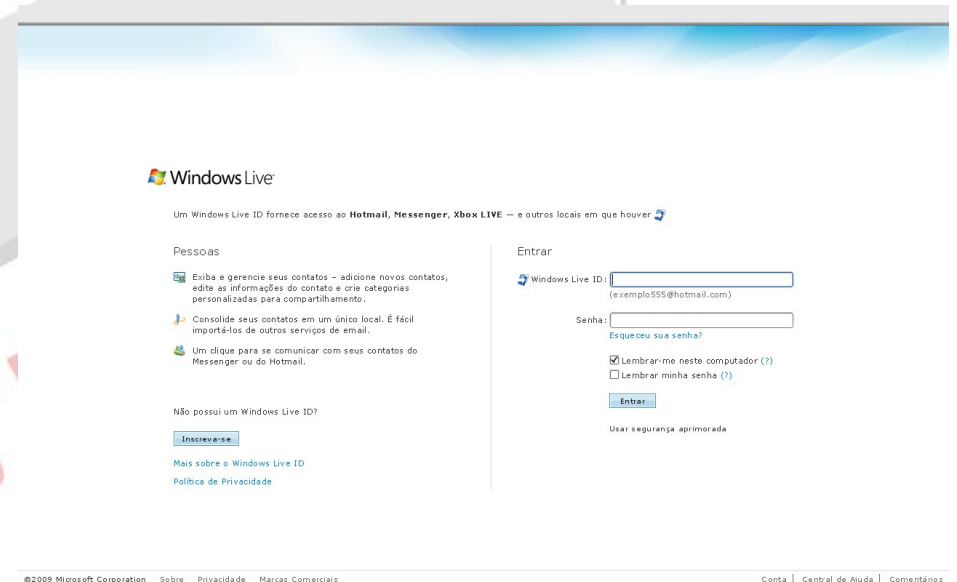
Comece agora

Obrigado por usar o Messenger na Web. Talvez você também goste do [versão para desktop do Messenger](#) mais recente.



O Windows Live Messenger Web




- URL principal:
<http://people.live.com>
- Possui uma detalhada política de privacidade.
- Só é compatível com um protocolo
- Possui integração com e-mail





Um Windows Live ID fornece acesso ao **Hotmail**, **Messenger**, **Xbox LIVE** — e outros locais em que houver 

Pessoas

-  Exiba e gerencie seus contatos – adicione novos contatos, edite as informações do contato e crie categorias personalizadas para compartilhamento.
-  Consolide seus contatos em um único local. É fácil importá-los de outros serviços de email.
-  Um clique para se comunicar com seus contatos do Messenger ou do Hotmail.

Não possui um Windows Live ID?

[Inscreva-se](#)

[Mais sobre o Windows Live ID](#)

[Política de Privacidade](#)

Entrar

 Windows Live ID:
(exemplo555@hotmail.com)

Senha:
[Esqueceu sua senha?](#)

- ☒ Lembrar-me neste computador (?)
- ☐ Lembrar minha senha (?)

[Entrar](#)

Usar segurança aprimorada

Testando o WLM Web

The image shows a Wireshark network traffic capture interface. The top menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Tools, and Help. Below the menu is a toolbar with various icons for file operations, navigation, and analysis. A filter bar is present with a text input field and buttons for Expression..., Clear, and Apply.

The main packet list displays the following data:

No.	Time	Source	Destination	Protocol	Info
51	3.911791	192.168.0.187	65.54.186.17	TCP	[TCP segment of a reassembled PDU]
52	3.911815	192.168.0.187	65.54.186.17	TLSv1	Application Data
53	3.929070	199.7.58.72	192.168.0.187	TCP	http > 49294 [ACK] Seq=1813 Ack=581 Win=7040 Len=0 TSV=3555075801 TSE
54	4.123875	65.54.186.17	192.168.0.187	TCP	https > 36952 [ACK] Seq=4364 Ack=1844 Win=65535 Len=0 TSV=12924616 TS
55	4.139573	65.54.186.17	192.168.0.187	TLSv1	Application Data
56	4.139623	65.54.186.17	192.168.0.187	TLSv1	Application Data
57	4.140026	192.168.0.187	65.54.186.17	TCP	36952 > https [ACK] Seq=1844 Ack=5063 Win=17536 Len=0 TSV=3774341 TSE
58	4.327628	65.54.186.17	192.168.0.187	TCP	[TCP segment of a reassembled PDU]
59	4.328339	65.54.186.17	192.168.0.187	TLSv1	Application Data
60	4.328384	192.168.0.187	65.54.186.17	TCP	36952 > https [ACK] Seq=1844 Ack=7524 Win=23296 Len=0 TSV=3774530 TSE
61	4.328397	65.54.186.17	192.168.0.187	TCP	https > 36952 [FIN, ACK] Seq=7524 Ack=1844 Win=65535 Len=0 TSV=129246
62	4.328813	192.168.0.187	65.54.186.17	TLSv1	Encrypted Alert
63	4.328849	192.168.0.187	65.54.186.17	TCP	36952 > https [FIN, ACK] Seq=1867 Ack=7525 Win=23296 Len=0 TSV=377453
64	4.340691	192.168.0.187	65.54.186.17	TCP	36955 > https [SYN] Seq=0 Win=5840 Len=0 MSS=1460 TSV=3774542 TSER=0
65	4.344410	192.168.0.187	65.54.186.17	TCP	36956 > https [SYN] Seq=0 Win=5840 Len=0 MSS=1460 TSV=3774546 TSER=0
66	4.516969	65.54.186.17	192.168.0.187	TCP	https > 36952 [ACK] Seq=7525 Ack=1868 Win=65512 Len=0 TSV=12924619 TS
67	4.528447	65.54.186.17	192.168.0.187	TCP	https > 36955 [SYN, ACK] Seq=0 Ack=1 Win=16384 Len=0 MSS=1460 WS=0 TS
68	4.528523	192.168.0.187	65.54.186.17	TCP	36955 > https [ACK] Seq=1 Ack=1 Win=5888 Len=0 TSV=3774730 TSER=0
69	4.530471	192.168.0.187	65.54.186.17	SSL	Client Hello
70	4.543530	65.54.186.17	192.168.0.187	TCP	https > 36956 [SYN, ACK] Seq=0 Ack=1 Win=16384 Len=0 MSS=1460 WS=0 TS
71	4.543590	192.168.0.187	65.54.186.17	TCP	36956 > https [ACK] Seq=1 Ack=1 Win=5888 Len=0 TSV=3774745 TSER=0
72	4.543991	192.168.0.187	65.54.186.17	SSL	Client Hello

The detailed view of packet 52 (114 bytes on wire, 114 bytes captured) shows the following structure:

- Ethernet II, Src: ItauteCP_16:bd:e1 (00:40:a7:16:bd:e1), Dst: D-Link_01:a3:48 (00:15:e9:01:a3:48)
- Internet Protocol, Src: 192.168.0.187 (192.168.0.187), Dst: 65.54.186.17 (65.54.186.17)
- Transmission Control Protocol, Src Port: 36952 (36952), Dst Port: https (443), Seq: 1796, Ack: 4364, Len: 48
- [Reassembled TCP Segments (1496 bytes): #51(1448), #52(48)]

The packet bytes are displayed in hexadecimal and ASCII format:

```
0000 00 15 e9 01 a3 48 00 40 a7 16 bd e1 08 00 45 00 .....H.@ .....E.
0010 00 64 5b 91 40 00 40 06 22 58 c0 a8 00 bb 41 36 .d[. @. "X....A6
0020 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 x.....
```

The status bar at the bottom indicates: File: "/home/mdjunior/ufrrj/Inicição ... Packets: 303 Displayed: 303 Marked: 0 Profile: Default

Processo de captura (Segurança Padrão)



Testando o WLM Web

The image shows a Wireshark network traffic capture. The main packet list displays various protocols including TCP, SSL, and DNS. Two DNS packets (29 and 30) are highlighted in blue, showing a standard query response for CNAME search.ms.com.edgesuite.net. The packet details pane shows the structure of the captured frame, including Ethernet II, Internet Protocol, and Transmission Control Protocol. The packet bytes pane shows the raw hex and ASCII data.

No.	Time	Source	Destination	Protocol	Info
22	1.590482	65.54.165.179	192.168.0.187	TCP	https > 51924 [SYN, ACK] Seq=0 Ack=1 Win=16384 Len=0 MSS=1460 WS=0 TS
23	1.596553	192.168.0.187	65.54.165.179	TCP	51924 > https [ACK] Seq=1 Ack=1 Win=5888 Len=0 TSV=3919661 TSER=0
24	1.597246	192.168.0.187	65.54.165.179	SSL	Client Hello
25	1.787257	65.54.165.179	192.168.0.187	TCP	[TCP segment of a reassembled PDU]
26	1.787330	192.168.0.187	65.54.165.179	TCP	51924 > https [ACK] Seq=198 Ack=1449 Win=8832 Len=0 TSV=3919851 TSER=
27	1.788484	65.54.165.179	192.168.0.187	TCP	[TCP segment of a reassembled PDU]
28	1.788523	192.168.0.187	65.54.165.179	TCP	51924 > https [ACK] Seq=198 Ack=2897 Win=11648 Len=0 TSV=3919853 TSEF
29	1.847683	146.164.10.2	192.168.0.187	DNS	Standard query response CNAME search.ms.com.edgesuite.net CNAME a134.
30	1.851790	146.164.10.2	192.168.0.187	DNS	Standard query response CNAME search.ms.com.edgesuite.net CNAME a134.
31	1.976297	65.54.165.179	192.168.0.187	TLSv1	Server Hello, Certificate, Server Hello Done
32	1.976355	192.168.0.187	65.54.165.179	TCP	51924 > https [ACK] Seq=198 Ack=4321 Win=14592 Len=0 TSV=3920041 TSEF
33	1.983148	192.168.0.187	65.54.165.179	TLSv1	Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
34	2.173113	65.54.165.179	192.168.0.187	TLSv1	Change Cipher Spec, Encrypted Handshake Message
35	2.198266	192.168.0.187	65.54.165.179	TCP	[TCP segment of a reassembled PDU]
36	2.198281	192.168.0.187	65.54.165.179	TLSv1	Application Data
37	2.385931	65.54.165.179	192.168.0.187	TCP	https > 51924 [ACK] Seq=4364 Ack=2296 Win=65535 Len=0 TSV=13053444 TS
38	2.394385	65.54.165.179	192.168.0.187	TLSv1	Application Data
39	2.394429	65.54.165.179	192.168.0.187	TLSv1	Application Data
40	2.394854	192.168.0.187	65.54.165.179	TCP	51924 > https [ACK] Seq=2296 Ack=5180 Win=17536 Len=0 TSV=3920459 TSE
41	2.586056	65.54.165.179	192.168.0.187	TCP	[TCP segment of a reassembled PDU]
42	2.586771	65.54.165.179	192.168.0.187	TLSv1	Application Data
43	2.586813	192.168.0.187	65.54.165.179	TCP	51924 > https [ACK] Seq=2296 Ack=7630 Win=23296 Len=0 TSV=3920651 TSE

Frame 1 (60 bytes on wire, 60 bytes captured)
Ethernet II, Src: D-Link_01:a3:48 (00:15:e9:01:a3:48), Dst: ItautecP_16:bd:e1 (00:40:a7:16:bd:e1)
Internet Protocol, Src: 64.14.123.178 (64.14.123.178), Dst: 192.168.0.187 (192.168.0.187)
Transmission Control Protocol, Src Port: http (80), Dst Port: 57656 (57656), Seq: 1, Ack: 1, Len: 0

0000 00 40 a7 16 bd e1 00 15 e9 01 a3 48 08 00 45 00 .@..... ..H..E.
0010 00 28 90 dd 40 00 eb 06 81 ce 40 0e 7b b2 c0 a8 .(..@... ..@{...
0020 00 bb 00 50 e1 38 4a 47 84 a4 57 5e 97 31 50 14 ...P.8JG ..W^.1P.
0030 12 da 80 ce 00 00 59 6f fc c7 d1 d1Yo

File: "/home/mdjunior/ufjf/Inicição ... Packets: 69 Displayed: 69 Marked: 0 Profile: Default

Utilizando forma opcional de acesso (Segurança Aprimorada), não recomendada por ser mais lenta



Testando o WLM Web

- A política de privacidade diz que transmite os dados (login e senha) de forma segura.
- E assim ele faz, em todas as opções de segurança.

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Conclusões

- Meebo
 - SSL e TLS em modo seguro (ineficiente)
 - JavaScript em modo padrão (ineficiente)
- Ebuddy
 - JavaScript em modo padrão (ineficiente)
 - Não há modo de segurança avançada
- WLM Web
 - HTTPS em modo seguro (eficiente)
 - SSL e TLS em modo padrão (eficiente)



Dúvidas?

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Referências

- Meebo
 - <http://www.meebo.com/security/>
 - <http://www.meebo.com/privacy/full/>
- Ebuddy
 - <http://www.ebuddy.com/privacy.php>
- WLM Web
 - <http://privacy.microsoft.com/pt-br/default.mspx>
- JavaScript
 - http://js.meebo.com/script/meebo_v82.js
 - <http://www.ohdave.com/rsa/>
 - <http://anmar.eu.org/>
 - http://docs.jquery.com/Source_Code

