

# 运维平台渗透&PPTV安全架构 分享

---PPTV security –向红阳  
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安全不是看你做了多少，而是看你漏了多少！  
给我一个支点，我能撬起整个地球！

图片(木桶原理)

# 运维安全

- 人是懒的，无论是运维工程师还是黑客！
- 如今运维逐步走向标准化,自动化,模块化，zabbix，puppet，open ldap，CTL，cmdb，cacti等各种开源工具，极大的方便了上规模的运维工作，节约运维成本。黑客也可以利用这些控制线上所有服务器。
- 自动化运维后面也突显了很多的安全问题，你的访问控制做好了吗？你的口令足够强吗？版本漏洞都补了吗？

# 原本方面运维的工具，出现问题后？

- 1、zabbix 添加监控项，执行任意命令？
- 2、puppet配置文件管理，执行任意命令？
- 3、open ldap 无敌权限？
- 4、CTL 执行任意脚本？
- 5、cmdb/cacti 等大量敏感信息泄露？
- 任意一个环节都有可能导致线上所有服务器沦陷

# 58.Com从web漏洞到线上所有服务器沦陷

- 漏洞源头Struts2命令执行

<http://211.151.74.126/> root权限(省去了提权)

```
[root/]# netstat -antupl
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name      Timer
tcp        0      0 0.0.0.0:98              0.0.0.0:*                LISTEN      18867/r               off (0.00/0/0)
tcp        0      0 0.0.0.0:10050           0.0.0.0:*                LISTEN      11629/zabbix_agentd   off (0.00/0/0)
tcp        0      0 0.0.0.0:5668            0.0.0.0:*                LISTEN      4138/nrpe              off (0.00/0/0)
tcp        0      0 0.0.0.0:99              0.0.0.0:*                LISTEN      18867/r               off (0.00/0/0)
tcp        0      0 0.127.0.0:199           0.0.0.0:*                LISTEN      3332/snmpd             off (0.00/0/0)
tcp        0      0 0.192.168.11.131:22     0.0.0.0:*                LISTEN      3384/sshd              off (0.00/0/0)
tcp        0      0 0.0.0.0:65532           0.0.0.0:*                LISTEN      15768/nc               off (0.00/0/0)
tcp        0      0 0.211.151.74.126:43399  0.0.0.0:*                ESTABLISHED 16533/perl             off (0.00/0/0)
tcp        0      0 0.192.168.11.131:10050  192.168.9.35:61071     TIME_WAIT   -                      timewait (57.52/0/0)
tcp        0      0 0.127.0.0:199           127.0.0.1:33335        ESTABLISHED 3332/snmpd             keepalive (65.75/0/0)
tcp        0      0 0.192.168.11.131:10050  192.168.9.35:57788     TIME_WAIT   -                      timewait (22.37/0/0)
tcp        0      0 0.127.0.0:1:33335       127.0.0.1:199          ESTABLISHED 4078/dsm_sa_snmpd      off (0.00/0/0)
tcp        0      0 0.192.168.11.131:10050  192.168.9.35:59885     TIME_WAIT   -                      timewait (45.38/0/0)
tcp        0      0 0.192.168.11.131:10050  192.168.9.35:59651     TIME_WAIT   -                      timewait (42.40/0/0)
tcp        0      0 0.192.168.11.131:10050  192.168.9.35:58378     TIME_WAIT   -                      timewait (29.15/0/0)
tcp        0      0 0.192.168.11.131:10050  192.168.9.35:60205     TIME_WAIT   -                      timewait (49.06/0/0)
tcp        0      0 0.192.168.11.131:10050  192.168.9.35:56883     TIME_WAIT   -                      timewait (12.49/0/0)
tcp        0      0 0.192.168.11.131:10050  192.168.9.35:53092     TIME_WAIT   -                      timewait (8.02/0/0)
tcp        0      0 :::ffff:127.0.0.1:8005  :::*                   LISTEN      6005/java              off (0.00/0/0)
tcp        0      0 :::8009                 :::*                   LISTEN      6085/java              off (0.00/0/0)
tcp        0      0 :::42000                 :::*                   LISTEN      6085/java              off (0.00/0/0)
tcp        0      0 :::80                    :::*                   LISTEN      6085/java              off (0.00/0/0)
tcp        0      0 :::ffff:192.168.11.131:80  :::ffff:10.2.0.174:4229 TIME_WAIT   -                      timewait (49.08/0/0)
tcp        0      0 :::ffff:127.0.0.1:42000  :::ffff:127.0.0.1:33195 CLOSE_WAIT  6085/java              off (0.00/0/0)
tcp        1      0 :::ffff:211.151.74.126:80  :::ffff:222.65.60.1:4229 CLOSE_WAIT  6085/java              off (0.00/0/0)
tcp        0      0 :::ffff:192.168.11.131:44455  :::ffff:10.3.12.11:27017 ESTABLISHED 6085/java              off (0.00/0/0)
tcp        0      0 :::ffff:192.168.11.131:44458  :::ffff:10.3.12.11:27017 ESTABLISHED 6085/java              off (0.00/0/0)
tcp        0      0 :::ffff:192.168.11.131:44457  :::ffff:10.3.12.11:27017 ESTABLISHED 6085/java              off (0.00/0/0)
tcp        0      0 :::ffff:192.168.11.131:44456  :::ffff:10.3.12.11:27017 ESTABLISHED 6085/java              off (0.00/0/0)
tcp        0      0 :::ffff:192.168.11.131:44460  :::ffff:10.3.12.11:27017 ESTABLISHED 6085/java              off (0.00/0/0)
tcp        0      0 :::ffff:192.168.11.131:45019  :::ffff:10.3.12.11:27017 ESTABLISHED 6085/java              off (0.00/0/0)
```

```

412 2012-03-31 15:51:35 kill 5722
413 2012-03-31 15:51:45 ps -ef | grep tomcat
414 2012-03-31 15:51:57 /opt/soft/tomcat/bin/startup.sh
415 2012-03-31 15:51:59 ps -ef | grep tomcat
416 2012-03-31 15:52:29 ps -ef | grep tomcat
417 2012-03-31 15:52:35 netstat -ntl
418 2012-03-31 15:52:57 tail -300 /opt/soft/tomcat/logs/catalina.out
419 2012-04-04 02:47:44 netstat -ntl
420 2012-04-10 19:00:42 sh /home/gx_58op.sh;exit 0
421 2012-04-11 15:54:30 cd /home/ @@ wget http://192.168.9.35/matl.tar.gz @@ tar -xvf matl.tar.gz -C /home @@ cd /home/matl @@ sh client.sh;exit 0
422 2012-04-11 17:03:21 cd /home/ @@ wget http://192.168.9.35/zabbix/matl.tar.gz @@ tar -xvf matl.tar.gz -C /home @@ cd /home/matl @@ sh client.sh;exit 0
423 2012-04-11 18:05:39 top
424 2012-04-11 18:05:42 ls
425 2012-04-11 18:05:44 ext
426 2012-04-11 18:05:45 exit
427 2012-04-12 10:22:28 rm -rf /home/matl.tar.gz* @@ wget http://192.168.9.35/zabbix/matl.tar.gz -P /home @@ tar -xvf /home/matl.tar.gz -C /home @@ cd /home/ma
anduan.sh;exit 0
428 2012-04-16 17:50:30 ls
429 2012-04-16 17:50:37 ls /opt/web/
430 2012-04-16 17:51:07 cd /opt/web/
431 2012-04-16 17:51:07 ls
432 2012-04-16 17:51:21 cd /opt/soft/tomcat/logs/catalina.out
433 2012-04-16 17:51:25 cd /opt/soft/tomcat/logs/
434 2012-04-16 17:51:27 ll -h
435 2012-04-16 17:51:55 ls

```

zabbix 其实端口就能看出来，但是我curl  
下返回一个404，因为我不知道路径，上面  
history貌似告诉我了； nmap -sV -open  
192.168.9.35

```

[root@CT11131 ~]#
[root@CT11131 ~]# nmap -sU -open 192.168.9.35

Starting Nmap 4.11 ( http://www.insecure.org/nmap/ ) at 2012-10-13 05:28 CST
Interesting ports on 192.168.9.35:
Not shown: 1677 closed ports
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      (protocol 2.0)
80/tcp    open  http?
3306/tcp  open  mysql    MySQL (unauthorized)
2 services unrecognized despite returning data. If you know the service/version,
please submit the following fingerprints at http://www.insecure.org/cgi-bin/ser
vicefp-submit.cgi :
=====NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)=====
SF-Port22-TCP:U=4.11%I=7%D=10/13%Time=50788B86%P=x86_64-redhat-linux-gnu%r
SF:<NULL,15,"SSH-2.0-OpenSSH_5.8\r\n">;
=====NEXT SERVICE FINGERPRINT (SUBMIT INDIVIDUALLY)=====
SF-Port80-TCP:U=4.11%I=7%D=10/13%Time=50788B86%P=x86_64-redhat-linux-gnu%r
SF:<GetRequest,157,"HTTP/1.1\x20403\x20Forbidden\r\nServer:\x20nginx\r\nD
SF:ate:\x20Fri,\x2012\x20Oct\x202012\x2021:28:38\x20GMT\r\nContent-Type:\x
SF:20text/html;\x20charset=utf-8\r\nContent-Length:\x20162\r\nConnection:\x

```



- curl <http://192.168.3.95/zabbix/> 返回了 zabbix 的登陆界面

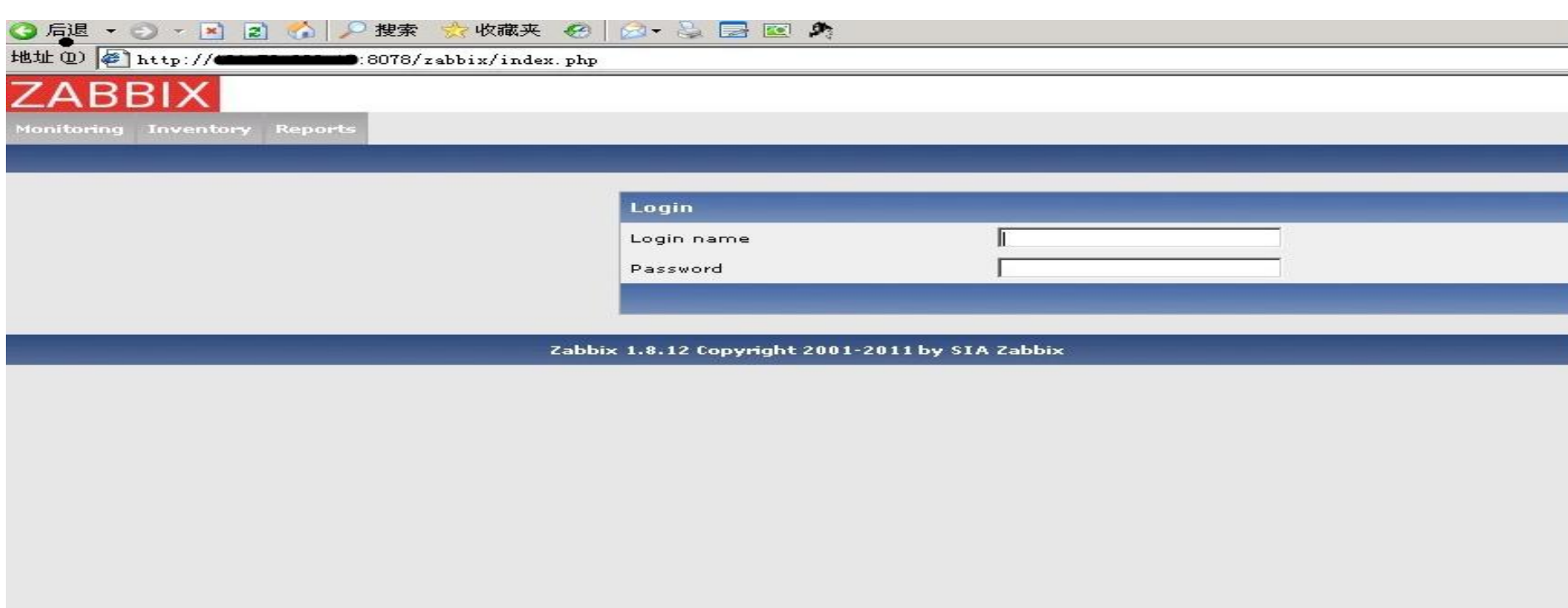
```

root@CT11131:~# curl http://192.168.9.35/zabbix/
% Total    % Received % Xferd  Average Speed   Time    Time     Time    Current
           %             %         Dload  Upload  Total      Spent      Left     Speed
0         0    0     0    0     0      0  0 --:--:-- --:--:-- --:--:--    0<?
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>ZABBIX</title>
    <meta name="Author" content="ZABBIX SIA" />
    <link rel="shortcut icon" href="images/general/zabbix.ico" />
    <link rel="stylesheet" type="text/css" href="css.css" />
<!--[if IE 6]>
  <script type="text/javascript" src="js/ie6fix.js"></script>
  <link rel="stylesheet" type="text/css" href="styles/ie.css" />
<![endif]>

<link rel="stylesheet" type="text/css" href="styles/css_ob.css" />
<script type="text/javascript"> var PHP_TZ_OFFSET = 28800;</script>
<script type="text/javascript" src="jsLoader.php?ver=1.8.12&lang=en_gb"></script>
</head>
<body onload="zbxCallPostScripts(<>);">
<table class="page_header" cellpadding="0" cellspacing="5"><tr><td class="page_h
eader_l"><a class="image" href="http://www.zabbix.com/" target="_blank"><div cla
ss="zabbix_logo">&nbsp;</div></a></td><td class="page_header_r" width="100%"><a
class="small_font" href="http://www.zabbix.com/documentation/" target="_blank">H
elp</a>:<a class="small_font" href="http://www.zabbix.com/support.php" target="_
blank">Get support</a>:<a class="small_font" href="/zabbix/?sid=aa35d508609d2d44
&print=1">Print</a>:<a class="small_font" href="index.php?reconnect=1">Login</a>
</td></tr></table><div id="mmenu"><table cellpadding="0" cellspacing="0" style="

```

- 机器是内网无外网IP,iptables做nat显然不太现实，最后选择了端口转发
- 推荐工具lcx(linux),或者rtcp.py(python)。





- Zabbix Default login  
User:admin Pass:zabbix

名称	#	成员
admin_servers	模板 (14) 主机 (3)	check http page, check ip_port, hardware, http80, infolist WEB, Linux, Linux 2G mem, Linux 400processes, Linux 400processes 50load 10.4.10.27, 192.168.9.35, 192.168.9.35 test
check_ip_port	模板 (0) 主机 (18)	10.4.11.20, 192.168.11.11, 192.168.11.12, 192.168.11.21, 192.168.11.72, 192.168.11.79, 192.168.11.90, 192.168.11.97, 192.168.11.192.168.11.172, 192.168.14.21, 192.168.14.208, 192.168.14.209, 192.168.14.210, 192.168.14.211 Linux, Linux 2G mem, Linux 400processes, Linux 400processes 50load
DBSERVER	模板 (4) 主机 (148)	10.3.11.11, 10.3.11.12, 10.3.11.13, 10.3.11.14, 10.3.11.15, 10.3.11.16, 10.3.11.17, 10.3.11.18, 10.3.11.19, 10.3.11.20, 10.3.11.21, 10.3.13.16, 10.3.13.17, 10.3.13.26, 10.4.12.11, 10.4.12.12, 10.4.12.13, 10.4.12.14, 10.4.12.15, 10.4.12.16, 10.4.12.17, 10.4.12.18, 10.4.12.24, 10.4.12.25, 10.4.12.26, 10.4.12.27, 10.4.12.28, 10.4.12.29, 10.4.12.30, 10.4.12.31, 10.4.12.32, 10.4.12.33, 10.4.12.34, 10.4.12.35, 10.4.12.36, 10.4.12.37, 10.4.12.38, 10.4.12.39, 10.4.12.40, 10.4.12.41, 10.4.12.42, 10.4.12.43, 10.4.12.44, 10.4.12.45, 10.4.12.46, 10.4.12.47, 10.4.12.48, 10.4.12.49, 10.4.12.50, 10.4.12.51, 10.4.12.52, 10.4.12.53, 10.4.12.54, 10.4.12.55, 10.4.12.56, 10.4.12.57, 10.4.12.58, 10.4.12.59, 10.4.12.60, 10.4.12.61, 10.4.12.62, 10.4.12.63, 10.4.12.64, 10.4.12.65, 10.4.12.66, 10.4.12.67, 10.4.12.68, 10.4.12.69, 10.4.12.70, 10.4.12.71, 10.4.12.72, 10.4.12.73, 10.4.12.74, 10.4.12.75, 10.4.12.76, 10.4.12.77, 10.4.12.78, 10.4.12.79, 10.4.12.80, 10.4.12.81, 10.4.12.82, 10.4.12.83, 10.4.12.84, 10.4.12.85, 10.4.12.86, 10.4.12.87, 10.4.12.88, 10.4.12.89, 10.4.12.90, 10.4.12.91, 10.4.12.92, 10.4.12.93, 10.4.12.94, 10.4.12.95, 10.4.12.96, 10.4.12.97, 10.4.12.98, 10.4.12.99, 10.4.13.1, 10.4.13.2, 10.4.13.3, 10.4.13.4, 10.4.13.5, 10.4.13.6, 10.4.13.7, 10.4.13.8, 10.4.13.9, 10.4.13.10, 10.4.13.11, 10.4.13.12, 10.4.13.13, 10.4.13.14, 10.4.13.15, 10.4.13.16, 10.4.13.17, 10.4.13.18, 10.4.13.19, 10.4.13.20, 10.4.13.21, 10.4.13.22, 10.4.13.23, 10.4.13.24, 10.4.13.25, 10.4.13.26, 10.4.13.27, 10.4.13.28, 10.4.13.29, 10.4.13.30, 10.4.13.31, 10.4.13.32, 10.4.13.33, 10.4.13.34, 10.4.13.35, 10.4.13.36, 10.4.13.37, 10.4.13.38, 10.4.13.39, 10.4.13.40, 10.4.13.41, 10.4.13.42, 10.4.13.43, 10.4.13.44, 10.4.13.45, 10.4.13.46, 10.4.13.47, 10.4.13.48, 10.4.13.49, 10.4.13.50, 10.4.13.51, 10.4.13.52, 10.4.13.53, 10.4.13.54, 10.4.13.55, 10.4.13.56, 10.4.13.57, 10.4.13.58, 10.4.13.59, 10.4.13.60, 10.4.13.61, 10.4.13.62, 10.4.13.63, 10.4.13.64, 10.4.13.65, 10.4.13.66, 10.4.13.67, 10.4.13.68, 10.4.13.69, 10.4.13.70, 10.4.13.71, 10.4.13.72, 10.4.13.73, 10.4.13.74, 10.4.13.75, 10.4.13.76, 10.4.13.77, 10.4.13.78, 10.4.13.79, 10.4.13.80, 10.4.13.81, 10.4.13.82, 10.4.13.83, 10.4.13.84, 10.4.13.85, 10.4.13.86, 10.4.13.87, 10.4.13.88, 10.4.13.89, 10.4.13.90, 10.4.13.91, 10.4.13.92, 10.4.13.93, 10.4.13.94, 10.4.13.95, 10.4.13.96, 10.4.13.97, 10.4.13.98, 10.4.13.99, 10.4.14.1, 10.4.14.2, 10.4.14.3, 10.4.14.4, 10.4.14.5, 10.4.14.6, 10.4.14.7, 10.4.14.8, 10.4.14.9, 10.4.14.10, 10.4.14.11, 10.4.14.12, 10.4.14.13, 10.4.14.14, 10.4.14.15, 10.4.14.16, 10.4.14.17, 10.4.14.18, 10.4.14.19, 10.4.14.20, 10.4.14.21, 10.4.14.22, 10.4.14.23, 10.4.14.24, 10.4.14.25, 10.4.14.26, 10.4.14.27, 10.4.14.28, 10.4.14.29, 10.4.14.30, 10.4.14.31, 10.4.14.32, 10.4.14.33, 10.4.14.34, 10.4.14.35, 10.4.14.36, 10.4.14.37, 10.4.14.38, 10.4.14.39, 10.4.14.40, 10.4.14.41, 10.4.14.42, 10.4.14.43, 10.4.14.44, 10.4.14.45, 10.4.14.46, 10.4.14.47, 10.4.14.48, 10.4.14.49, 10.4.14.50, 10.4.14.51, 10.4.14.52, 10.4.14.53, 10.4.14.54, 10.4.14.55, 10.4.14.56, 10.4.14.57, 10.4.14.58, 10.4.14.59, 10.4.14.60, 10.4.14.61, 10.4.14.62, 10.4.14.63, 10.4.14.64, 10.4.14.65, 10.4.14.66, 10.4.14.67, 10.4.14.68, 10.4.14.69, 10.4.14.70, 10.4.14.71, 10.4.14.72, 10.4.14.73, 10.4.14.74, 10.4.14.75, 10.4.14.76, 10.4.14.77, 10.4.14.78, 10.4.14.79, 10.4.14.80, 10.4.14.81, 10.4.14.82, 10.4.14.83, 10.4.14.84, 10.4.14.85, 10.4.14.86, 10.4.14.87, 10.4.14.88, 10.4.14.89, 10.4.14.90, 10.4.14.91, 10.4.14.92, 10.4.14.93, 10.4.14.94, 10.4.14.95, 10.4.14.96, 10.4.14.97, 10.4.14.98, 10.4.14.99, 10.4.15.1, 10.4.15.2, 10.4.15.3, 10.4.15.4, 10.4.15.5, 10.4.15.6, 10.4.15.7, 1

# Tom在线,远程管理卡问题, 全部核心服务器沦陷

<http://www.wooyun.org/bugs/wooyun-2010-014101>

```
... install
ir -p /etc/zabbix
..
[ -f /etc/SuSE-release ]
then
  cp zabbix-1.8/misc/conf/zabbix_agentd.conf /etc/zabbix/
  cp zabbix-1.8/misc/init.d/suse/9.3/zabbix_agentd /etc/init.d/
  sed -i "s/\\opt\\zabbix\\bin\\/usr\\local\\sbin\\/g" /etc/init.d/zabbix_agentd
  sed -i "s/Server\\=127\\.0\\.0\\.1/Server\\=172\\.24\\.162\\.38/g" /etc/zabbix/zabbix_agentd.conf
  chkconfig --add zabbix_agentd

[ -f /etc/debian_version ]
then
  cp zabbix-1.8/misc/conf/zabbix_agentd.conf /etc/zabbix/
```

zabbix\_Server

www.wooyun.org

```
root@yypdtelecomweb01:~# ping -c5 172.24.162.38
ping -c5 172.24.162.38
PING 172.24.162.38 (172.24.162.38) 56(84) bytes of data:
64 bytes from 172.24.162.38: icmp_req=1 ttl=62 time=0.686 ms
64 bytes from 172.24.162.38: icmp_req=2 ttl=62 time=0.571 ms
64 bytes from 172.24.162.38: icmp_req=3 ttl=62 time=0.650 ms
64 bytes from 172.24.162.38: icmp_req=4 ttl=62 time=0.606 ms
64 bytes from 172.24.162.38: icmp_req=5 ttl=62 time=0.671 ms

--- 172.24.162.38 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 3997ms
rtt min/avg/max/mdev = 0.571/0.636/0.686/0.053 ms
root@yypdtelecomweb01:~#
```

www.wooyun.org

- curl http://172.24.162.38/zabbix/ #返回的是zabbix登陆页

```

root@yypdtelecomweb01:~# curl http://172.24.162.38/zabbix/
curl http://172.24.162.38/zabbix/
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
100  3465  100  3465    0     0  23664      0 --:--:-- --:--:-- --:--:-- 23896
<?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>ZABBIX</title>
    <meta name="Author" content="ZABBIX SIA" />
    <link rel="shortcut icon" href="images/general/zabbix.ico" />
    <link rel="stylesheet" type="text/css" href="css.css" />
  <!--[if IE 6]>
    <script type="text/javascript" src="js/ie6fix.js"></script>
    <link rel="stylesheet" type="text/css" href="styles/ie.css" />
  <![endif]>

  <script type="text/javascript"> var PHP_TZ_OFFSET = 28800;</script>
  <script type="text/javascript" src="jsLoader.php?ver=1.8.6&lang=en_gb"></script>
</head>
<body onload="zbxCallPostScripts(<);">
<table class="page_header" cellspacing="0" cellpadding="5"><tr><td class="page_header_1"><a class="image" href="http://www.zabbix.com/" target="_blank"><div class="zabbix_logo">&nbsp;</div></a></td><td class="page_header_r" width="100%"><a class="small_font" href="http://www.zabbix.com/documentation/" target="_blank">Help</a>:<a class="small_font" href="http://www.zabbix.com/support.php" target="_blank">Get support</a>:<a class="small_font" href="/zabbix/?print=1">Print</a>:<

```

先启一个端口，实现一个nat功能

```

root@yypdtelecomweb01:/tmp# netstat -antupl | grep 98
netstat -antupl | grep 98
tcp        0      0 0.0.0.0:98          0.0.0.0:*          LISTEN
26405/rinetd  off (0.00/0/0)
tcp6       0      0 172.24.203.157:80  115.215.164.45:35980 ESTABLISHED
28818/java   off (0.00/0/0)
tcp6       0      0 172.24.203.157:7985 172.24.203.162:21201 ESTABLISHED
28818/java   off (0.00/0/0)
tcp6       0      0 127.0.0.1:9889     127.0.0.1:80       ESTABLISHED
28818/java   off (0.00/0/0)
tcp6       0      0 127.0.0.1:80       127.0.0.1:18986    ESTABLISHED
28818/java   off (0.00/0/0)
tcp6       0      0 172.24.203.157:14843 172.24.203.160:1098 ESTABLISHED
28818/java   keepalive (9.28/0/0)
tcp6       0      0 127.0.0.1:80       127.0.0.1:27987    ESTABLISHED
28818/java   off (0.00/0/0)
tcp6       0      0 127.0.0.1:18986    127.0.0.1:80       ESTABLISHED
28818/java   off (0.00/0/0)
tcp6       0      0 127.0.0.1:62981    127.0.0.1:80       ESTABLISHED
28818/java   off (0.00/0/0)

```





主机组		
<input type="checkbox"/> pkg_vidong_db	模板 (2) 主机 (2)	check_3306, pkg_vidong_db 172.24.210.200, 172.24.210.201
<input type="checkbox"/> pkg_vidong_web	模板 (2) 主机 (5)	check_port_80, pkg_vidong_web 172.24.210.11, 172.24.210.12, 172.24.210.13, 172.24.210.14, 172.24.210.21
<input type="checkbox"/> Templates	模板 (44) 主机 (0)	Template_3COM_3824, Template_3COM_4400, Template_AIX, Template_APC_Automatic Transfer Switch, Template_APC_Battery, Template_App_MySQL, Template_C375, Template_Cisco_837, Template_Cisco_877, Template_Cisco_2960, Template_Cisco_PIX, Template_Cisco_PIX515E, Template_Cisco_PIX_525, Template_Dell_OpenManage, Template_Dell_PowerConnect_5224, Template_Dell_PowerConnect_5324, Template_Dell_PowerConnect_6248, Template_Dell_PowerEdge, Template_FreeBSD, Template_Hibernate, Template_HPUX, Template_HP_ColorLaserJet, Template_HP_InsightManager, Template_HP_Procurve, Template_IPMI_Sun_Fire_X4100_M2, Template_Linux, Template_MacOS_X, Template_Microsoft_Exchange_2003, Template_Microsoft_Exchange_2007, Template_Microsoft_SQLServer_2005, Template_NetScreen, Template_Netware, Template_OpenBSD, Template_Oracle, Template_pfSense, Template_SNMPv1_Device, Template_SNMPv2_Device, Template_Solaris, Template_Standard, Template_Tomcat, Template_Tru64, Template_Windows, test_oracle
<input type="checkbox"/> test	模板 (1) 主机 (0)	test
<input type="checkbox"/> testa	模板 (3) 主机 (1)	check_port_80, mysqlping, testa 192.168.50.14
<input type="checkbox"/> Tomlog	模板 (4) 主机 (11)	test, tomlog_default, tomlog_default_80, tomlog_tmp log_172.24.148.177, log_172.24.148.215, log_172.24.149.241, log_172.24.180.67, log_172.24.190.49, log_172.24.190.50, log_172.24.202.50, log_172.24.202.106, log_172.24.202.131, log_172.24.202.132, log_172.24.202.180
<input type="checkbox"/> webmail	模板 (1) 主机 (18)	webmail webmail_172.24.165.43, webmail_172.24.165.44, webmail_172.24.173.117, webmail_172.24.173.118, webmail_172.24.173.119, webmail_172.24.173.215, webmail_172.24.173.216, webmail_172.24.173.217, webmail_172.24.173.218, webmail_172.24.180.126, webmail_172.24.180.127, webmail_172.24.201.219, webmail_172.24.201.220, webmail_172.24.201.221, webmail_172.24.201.222, webmail_172.24.201.223, webmail_172.24.202.206, webmail_172.24.202.207
<input type="checkbox"/> Windows servers	模板 (0) 主机 (0)	-
<input type="checkbox"/> Zabbix servers	模板 (0) 主机 (0)	192.168.14.16, Zabbix Server

# 远程管理卡问题

- 远程管理很大意义解决了很多运维方面各种问题，节约维护成本
- 但是你的远程管理卡有没有直接跑公网上面？
- 你的远程管理卡默认口令改了吗？
- 联想远程管理卡跳过验证漏洞！

近期机房封网,很多企业都使用设备上的远程管理模块并设置复杂的密码进行安全的远程管理。但乌云白帽发现某厂商设备漏洞,即使更改了远程管理密码,黑客与管理员还是能携手登陆远程服务器,我此刻又相信爱情了, 联想服务器可能都会被入侵?

### 漏洞过程重放:

默认口令本身是一个问题,但是联想远程管理卡还有一处问题,基本上无解,口令无论怎么改都可以绕过。

这个是一台联想自己的服务器,核心业务,什么联想网盘,等等之类的东西都在上面。访问此接口可以开启java 管理客户端,无需密码,管理卡的权限吗。。。至高无上了,除了拥有系统权限外,还可以控制服务器硬件,比如远程装个操作系统啥的





# 奇艺几百台VOD服务器沦陷

<http://www.wooyun.org/bugs/wooyun-2010-010166>

问题出在远程管理卡这里，默认口令没有改tty timeuot时间没有设置！下面我发一部分可能不是很全，你们自己找吧

```
111.1.39.231 root tty2 Wed Jun 27 20:49 still logged in
111.1.39.230 root pts/1 repo.qiyi.domain Tue Jun 26 17:52 - 17:53 (00:01)
111.1.39.98 root pts/1 repo.qiyi.domain Wed Jun 28 17:56 - 18:00 (00:03)
111.1.39.100 root pts/1 repo.qiyi.domain Wed Jun 28 15:22 - 15:57 (00:34)
113.57.232.116 root pts/1 repo.qiyi.domain Wed Jun 28 15:19 - 15:21 (00:01)
113.57.232.117 root pts/1 repo.qiyi.domain Wed Jun 28 14:23 - 14:53 (00:29)
113.57.232.118 root pts/1 repo.qiyi.domain Mon Jun 18 21:01 - 22:01 (01:00)
113.57.232.119 root tty1 Mon Jun 18 16:37 still logged in
113.57.232.120 reboot system boot 2.6.18-164.el5 Mon Jun 18 16:37 (37+21:29)
113.57.232.121 root tty1 Mon Jun 18 16:28 - down (00:04)
113.57.232.122 root pts/0 202.108.14.9 Mon Jun 18 23:38 - 16:05 (-7:-33)
113.57.232.123 root pts/0 202.108.14.9 Mon Jun 18 23:17 - 23:37 (00:19)
113.57.232.124 root pts/0 202.108.14.9 Mon Jun 18 22:57 - 23:16 (00:18)
113.57.232.125 root pts/0 202.108.14.9 Mon Jun 18 22:50 - 22:55 (00:05)
113.57.232.126 root pts/1 202.108.14.9 Mon Jun 18 22:48 - 22:49 (00:00)
113.57.232.127 root pts/0 202.108.14.9 Mon Jun 18 22:41 - 22:49 (00:07)
113.57.232.128 reboot system boot 2.6.18-164.el5 Sat Jun 16 04:34 (2+11:58)
113.57.232.129 root pts/1 :0.0 Sat Jun 16 04:24 - down (00:07)
113.57.232.130 root :0 Sat Jun 16 04:24 - down (00:07)
113.57.232.131 root :0 Sat Jun 16 04:24 - 04:24 (00:00)
113.57.232.132 reboot system boot 2.6.18-164.el5 Sat Jun 16 04:22 (00:08)
113.57.232.133 reboot system boot 2.6.18-164.el5 Sat Jun 16 04:14 (00:04)
113.57.232.134 wtmp begins Sat Jun 16 04:14:20 2012
```

```
211.161.151.77 [root@localhost ~]# df -h
211.161.151.89 Filesystem Size Used Avail Use% Mounted on
211.161.151.80 /dev/sda2 29G 3.8G 24G 14% /
211.161.151.81 /dev/sda6 211G 37G 163G 19% /data
211.161.151.82 /dev/sda3 29G 23G 4.8G 83% /var
211.161.151.83 /dev/sda1 99M 12M 83M 13% /boot
211.161.151.84 tmpfs 16G 0 16G 0% /dev/shm
211.161.151.85 /dev/sdb 932G 807G 125G 87% /data1
211.161.151.86 /dev/sdc 932G 808G 124G 87% /data2
211.161.151.87 /dev/sdd 932G 810G 123G 87% /data3
211.161.151.88 /dev/sde 932G 807G 126G 87% /data4
211.161.151.89 /dev/sdf 932G 824G 108G 89% /data5
211.161.151.90 /dev/sdg 932G 809G 124G 87% /data6
211.161.151.91 /dev/sdi 932G 806G 127G 87% /data7
211.161.151.92 /dev/sdj 932G 807G 125G 87% /data8
211.161.151.93 /dev/sdk 932G 809G 124G 87% /data9
211.161.151.94 /dev/sdl 932G 808G 124G 87% /data10
211.161.151.95 /dev/sdh 149G 125G 24G 84% /ssd
/dev/scd0 3.4G 3.4G 0 100% /R
[root@localhost ~]#
```

(需要该脚本可邮件我。)

远程管理卡https协议， curl或wget 抓返回值,得到正确返回值  
后保存log,

破解密码很简单,按照破解常规ssh口令破解即可,远程管理卡跑公网的应该不多,打入内网之后渗透应该是条好渠道

Wget -S <http://test>

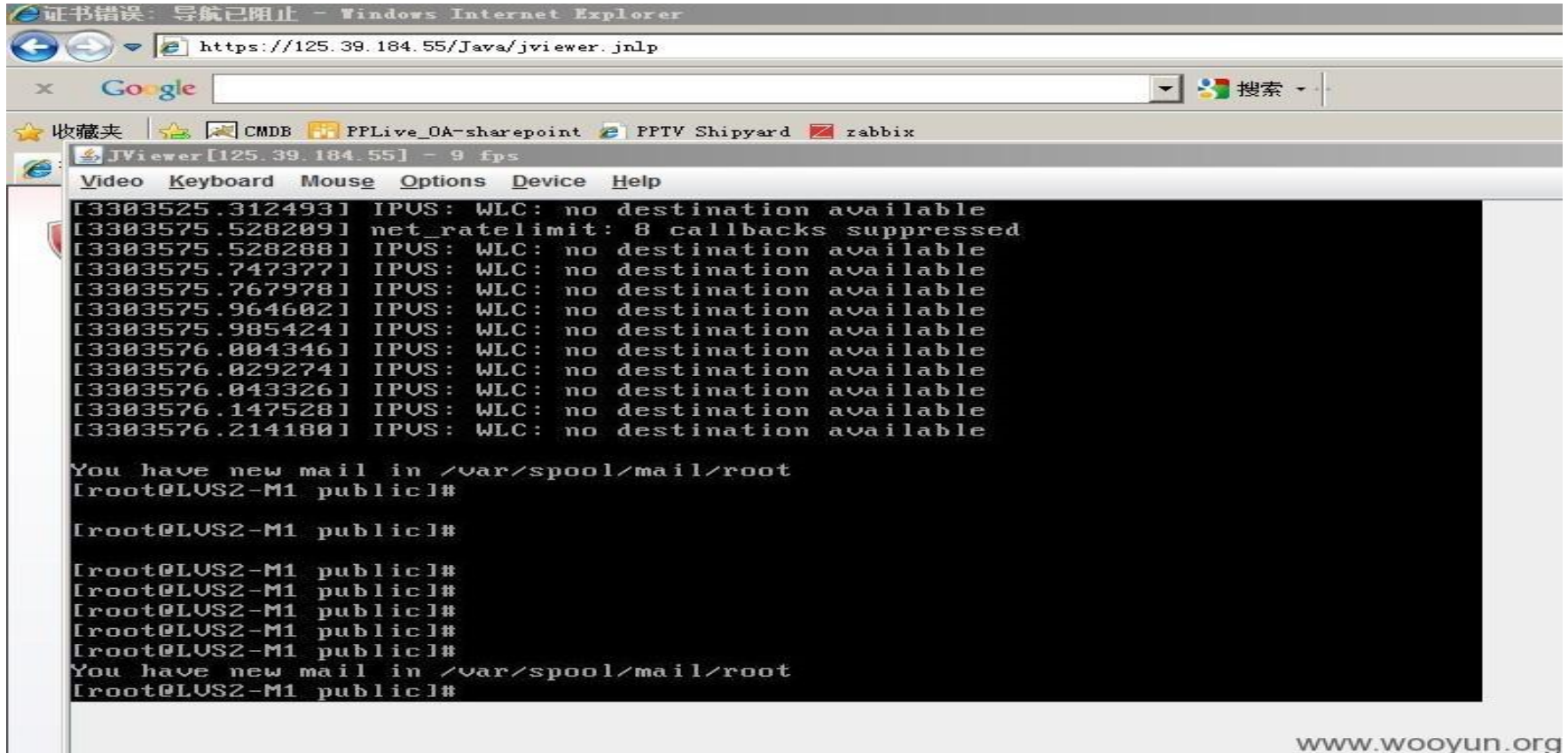
```
--2012-12-17 14:16:29-- https://10.000.004.140/
Connecting to 10.000.004.140... connected.
ERROR: cannot verify 10.000.004.140's certificate, issued by '/C=CN/ST=BEIJING/L=BEIJING/O=LENOVO/OU=LENOVO/CN=lenovo'
Self-signed certificate encountered.
ERROR: certificate common name 'lenovo' doesn't match requested host name '10.000.004.140'.
To connect to 10.000.004.140 insecurely, use '--no-check-certificate'.
Unable to establish SSL connection.
```

```
Mon Dec 17 14:15:28 CST 2012 100.100.100.101 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default certi
ificate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.103 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default certi
ificate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.107 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default certi
ificate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.108 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default cert
ificate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.109 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default cert
ificate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.115 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default certifi
cate':
Mon Dec 17 14:15:27 CST 2012 100.100.100.119 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default certifi
cate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.117 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default cert
ificate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.111 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default cert
ificate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.113 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default cert
ificate':
Mon Dec 17 14:15:28 CST 2012 100.100.100.112 /C=US/ST=Texas/L=Round Rock/O=Dell Inc./OU=Remote Access Group/CN=iDRAC6 default cert
ificate':
```

# 利用联想远程管理卡漏洞成功入侵联想核心服务器

<http://www.wooyun.org/bugs/wooyun-2010-012007>

<https://125.39.184.55/Java/jviewer.jnlp> (简单跳过验证) 加上tty time没有设置直接直接获取到root 如下图:



很多人都是一样,使用了远程管理卡登陆之后不退出的,当这种情况遇到联想的远程管理卡漏洞,那就很无敌了(还是建议设置tty timeout 10分钟左右)

这个问题应该是联想忽略的一个问题,联想已出patch 但是更新此path比较麻烦估计没有几个人更新的



```
JViewer[125.39.184.55] - 8 fps
Video Keyboard Mouse Options Device Help
527 ls
528 vi fixroute.sh
529 ls
530 top
531 ssh lvs1
532 ip rule show
533 exit
534 ssh 10.5.3.1
535 ssh 10.5.3.2
536 ssh 10.5.4.100
537 ssh 10.4.4.100
538 ssh 10.3.4.100
539 ssh 10.2.4.100
540 ssh 10.3.4.100
541 ssh 10.3.5.30
542 ssh 10.5.5.30
543 ssh 10.5.30.1
544 ssh 10.5.30.1
545 ssh 10.5.3.1
546 ip rule show
547 ssh lvs1
548 ssh 10.5.3.1
549 ps auxigrep nginx
550 crontab -e
--More--
```

```
JViewer[125.39.184.55] - 9 fps
Video Keyboard Mouse Options Device Help
root pts/1 sg92.lenovo.com Thu Feb 24 00:48 - down (02:04)
root pts/0 sg92.lenovo.com Wed Feb 23 23:22 - 02:49 (03:26)
root pts/0 10.100.149.50 Sat Feb 19 01:15 - 02:11 (00:55)
reboot system boot 2.6.37.1-lenovo Sat Feb 19 01:12 (5+01:39)
root pts/0 10.100.149.50 Sat Feb 19 01:08 - down (00:01)
reboot system boot 2.6.37.1-lenovo Sat Feb 19 01:07 (00:03)
root pts/0 10.100.149.50 Sat Feb 19 01:00 - down (00:04)
reboot system boot 2.6.37.1-lenovo Sat Feb 19 00:33 (00:31)
root pts/2 10.100.149.50 Fri Feb 18 22:20 - 22:21 (00:00)
root pts/1 10.100.149.50 Fri Feb 18 19:47 - down (04:43)
root pts/0 10.100.149.50 Fri Feb 18 19:45 - down (04:45)
root pts/0 10.100.149.50 Fri Feb 18 19:38 - 19:44 (00:05)
reboot system boot 2.6.18-194.32.1. Fri Feb 18 19:37 (04:53)
root pts/0 10.100.149.50 Fri Feb 18 19:03 - down (00:31)
root pts/2 10.100.149.186 Thu Feb 17 18:29 - 00:52 (06:22)
root pts/1 10.100.149.186 Thu Feb 17 18:25 - 00:52 (06:26)
root pts/3 10.100.149.186 Thu Feb 17 02:31 - 03:07 (00:35)
root pts/2 10.100.149.186 Thu Feb 17 02:30 - 03:07 (00:36)
root pts/1 10.100.149.186 Thu Feb 17 02:13 - 02:31 (00:18)
root pts/0 10.100.149.186 Thu Feb 17 01:01 - 02:12 (01:11)
root tty1 Thu Feb 17 00:59 - down (1+18:35)
reboot system boot 2.6.18-194.el5 Thu Feb 17 00:58 (1+18:37)

wtmp begins Thu Feb 17 00:58:09 2011
[root@LVS2-M1 public]#
```

## 入侵种代理或squit代理的灵活运

- 入侵的过程当中会遇到多种多样的情况, 下面的这种比较多见,
- Web漏洞直接得到后端server的权限, 后端server为内网无法访问互联网, 想端口转发或其他操作都拒绝访问, 这个时候, 代理会起到很大的作用。

# PPTV安全架构

整体架构；

- 1、LB日志实时分析
- 2、核心服务器跳板机机制
- 3、ossec agent 监控
- 4、open ldap 登陆策略
- 5、系统日志分析



## LB日志实时分析

- LB日志实时分析,(每个LB每天几百G的日志压缩前, 从中分析出可能会纯在入侵行为的日志并发送告警邮件)
- LB实时日志直接进入mogoDB,匹配安全正则(如:裸日志含有"20%select%20"等、、、)
- 实时日志分析在mongoDB完成, 历史日志进入hadoop

## LB访问日志实时监控,发现注入,命令执行,上传等问题

- 访问日志实时进入mongoDB匹配安全正则发现潜在威胁.历史日志直接进入hadoop.

正在被攻击。  
攻击访问都是 500.

[illegible]

已成功执行sleep,

# Tty timeout&远程卡系统层面统一修改密码

```
tty | grep pts >/dev/null
if [[ $? -eq 0 ]];then
    export TMOUT=3600
else
    export TMOUT=1200
fi
```

- Tty timeout统一设置时间10分钟,
  - 统一使用ipmitool 修改远程管理卡口令
- 服务器启动时间少于5分钟实时告警  
(这些主要应对远程管理带来的危害)

# 核心服务器跳板机制

## cas统一认证

- 应对可批量管理服务器的后端服务统一加强各方面安全需求，采用跳板机制，拒绝运维网直接登陆服务器现象，**user login**严格控制。
- **Cas**统一认证，拒绝**zabbix**,等后端服务，后台使用默认口令，弱口令等

## Zabbix和puppet配合使用实时查找webshell,rootkit后门检测

- 实时监控(任何websehll,变异web后门及时发现)

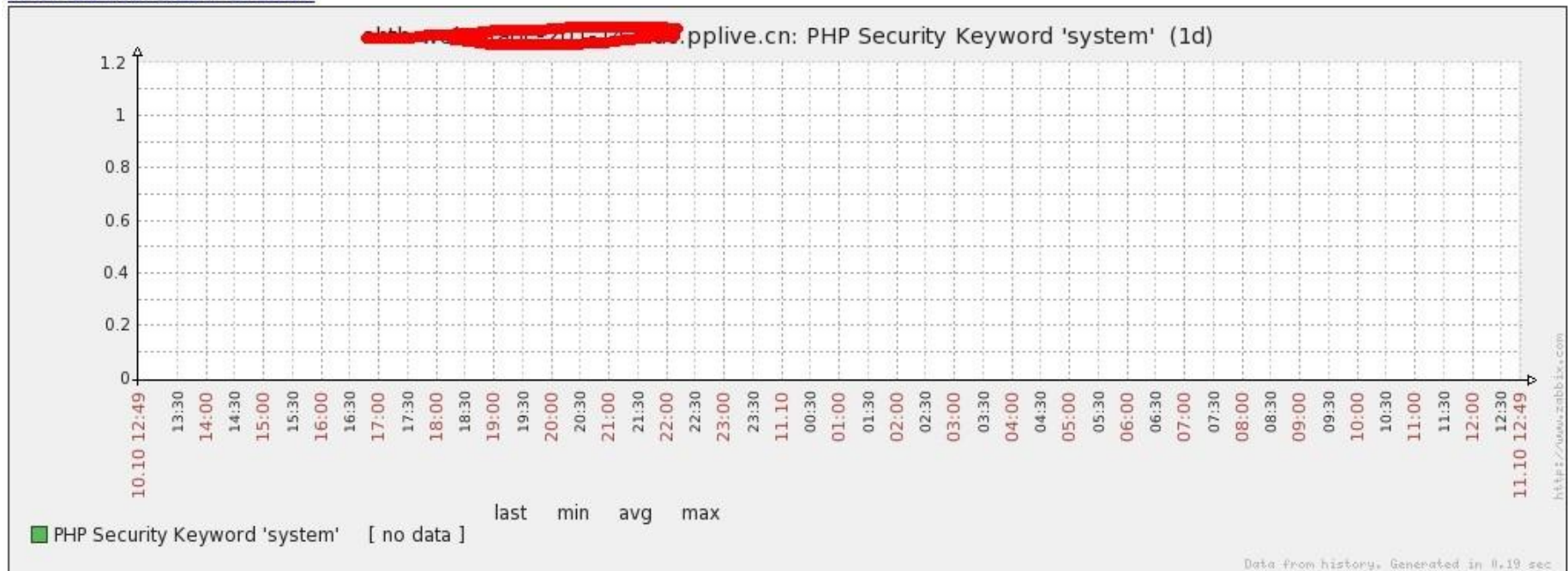
Host: ~~145 web-statis-201-148.148.pplive.cn~~

IP: ~~145 208 208 148~~

Issue: Keyword system in PHP

Date: Thu Oct 11 12:49:20 2012

[View zabbix chart details](#)

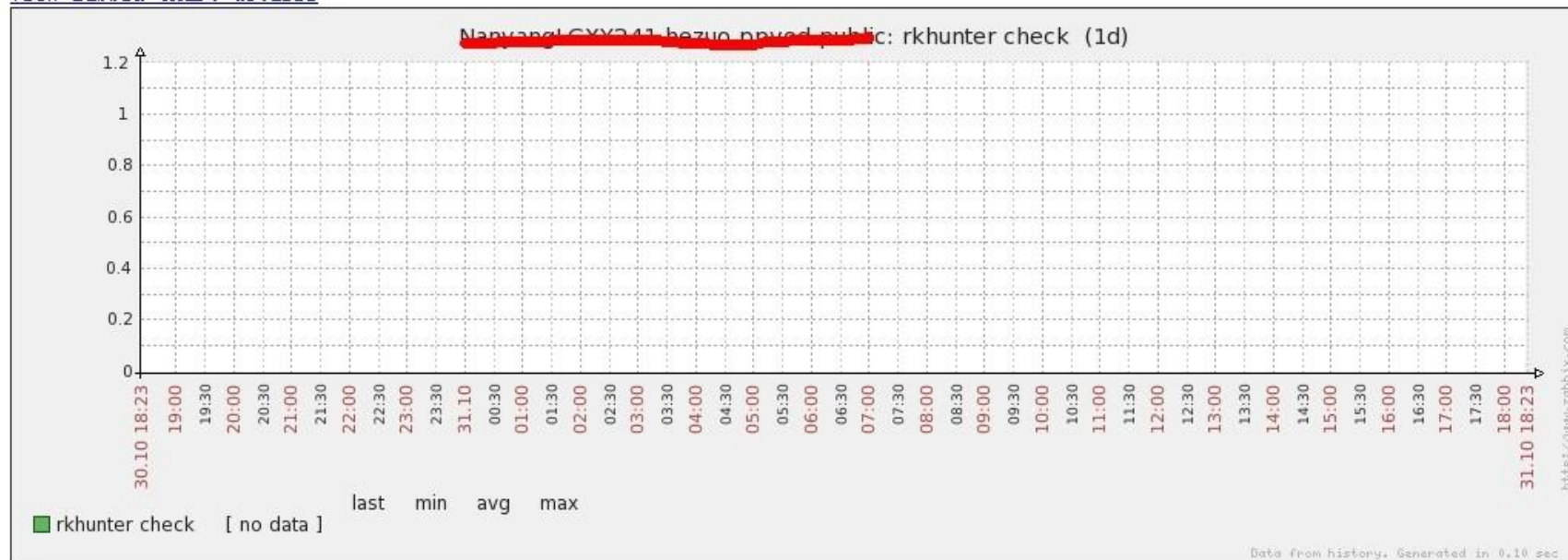


主题: [Notify][P2]rkhunter find issue

IP: ~~200.120.245.241~~

Date: Wed Oct 31 18:23:29 2012

[View zabbix chart details](#)





# ossec agent 监控

- Ossec 目前涵盖端口(匹配黑白名单)监控,rootkit监控,关键文件监控(/bin/\* 等),user login&sudo动作告警(匹配黑白名单)等、、、其他常规监控,实时告警

Received From: (SUNIL WEB [192.168.1.107] 222) [192.168.1.107:222]->netstat -tan |grep LISTEN |grep -v 127.0.0.1 | sort  
Rule: 533 fired (level 7) -> "Listened ports status (netstat) changed (new port opened or closed)."  
Portion of the log(s):

ossec: output: 'netstat -tan |grep LISTEN |grep -v 127.0.0.1 | sort':

tcp	0	0.0.0.0:10050	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:10051	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:21	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:80	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:8080	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:*	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:*	0.0.0.0:*	LISTEN

Previous output:

ossec: output: 'netstat -tan |grep LISTEN |grep -v 127.0.0.1 | sort':

tcp	0	0.0.0.0:10050	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:10051	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:80	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:8080	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:*	0.0.0.0:*	LISTEN
tcp	0	0.0.0.0:*	0.0.0.0:*	LISTEN

新端口开放21端口定义在黑名单。原则该服务器不应该开放21端口

# Open ldap

- 明细open ldap 分组,防止跨越权限访问服务器,
- 自助密码服务,首次登陆修改密码,密码要求满足复杂度需求

# 系统日志分析

服务器,交互机,防火墙

- 配合日志分析查找可能存在的问题,如:密码暴力破解(交互机ACL可能存在问题)
- 一天一报告,全面排查可能存在的问题
- 用色标记(一部分)

主题: [Security Report] password audit result 2012-12-19

=====~~/home/ftp1110/Security/121219/accepted121219.log.rst~~ Details=====

fromhost host

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

~~110.120.201.110 110.120.201.110 110.120.201.110 110.120.201.110 110.120.201.110~~

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

~~10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100 10.80.80.100~~

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