

Asterisk ?????????? 2010-12-02

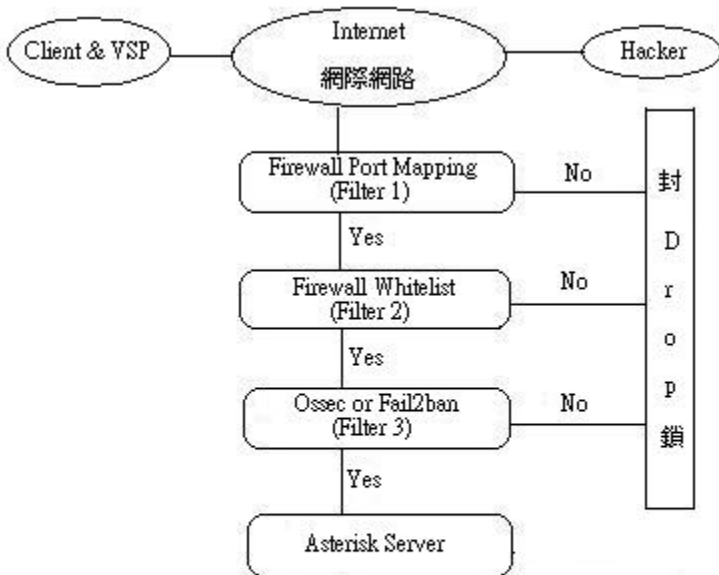
????

?? Asterisk ?????????? Asterisk ?????????? Asterisk ?????????? Asterisk ??????????

????? Asterisk ?????????? Asterisk ?????????? Asterisk ??????????

????? PBX in a Flash ?????????? ?????????? ?????????? ?????????? ??????????

Asterisk ?????????



??Asterisk ??????????

1Firewall Port Mapping?

- ?????????????????????????????????
- ?????????? Router ?????? IP ?????????????? IP ????? Firewall Whitelist????
- Asterisk ?????????? IAX ??? 4569 ? SIP ??? 5060 ? SIP-RTP? 10000-20000?
- ??? Asterisk ?? bindport ????? 4569 ? 5060 ??????????????????????????????

2Firewall Whitelist?? The SunshineNetworks Knock ?????

- ?????????????????????????????????
- ?????????????????? IPTables ???

- ????? Client ?? Voip Service Provider ??? IP?
- ???
- PIAF ??????? Firewall Blacklist ?????????????????????????????
- ????????? IP ? Client ????? Client ????? IP ??????? The SunshineNetworks Knock?

<http://www.pbxinaflash.com/forum/sho...ead.php?t=8735>

3.The SunshineNetworks Knock??? Firewall Whitelist ?????

- ????????????????????? The SunshineNetworks Knock ?????????????????????
- ????? The SunshineNetworks Knock ??????? IPTables ???
- The SunshineNetworks Knock ??????? Voip ?? Display Name ?????????????????????
- ????????????????????? The SunshineNetworks Knock ?????????????????????
- ??????????? IP ? Client ????????? Firewall Whitelist ???????????
- ?? Voip ?? Display Name ????????????????????? Internet ????????????? PIAF ???

<http://www.sunshinenetworks.com.au/h...rks-knock.html>

4.Ossec or Fail2ban?

- ????? Firewall Whitekist ?? The SunshineNetworks Knock???????????? Asterisk ?????????????????????
- Asterisk ????????????????????????????????? IP???????
- Ossec ? Fail2ban ????????????????????? IP ???????????
- Ossec ? Fail2ban ? Asterisk ?????????????????????

[OSSLab][OSSEC & FreePBX](#)

[OSSLab][fail2ban for Asterisk](#)

<http://www.voip-info.org/wiki/view/F...9+And+Asterisk>

5.Asterisk Server?

- Asterisk ??? IP ???
- ? Client ????? IP ??? FreePBX -> Extensions ? permit ??????0.0.0.0/0.0.0.0???????????????????? The SunshineNetworksKnock?Ossec ? Fail2ban ????????
- ?? Asterisk ?????????????[OSSLab] [?? Asterisk ?????security??](#)

??IPTables ???

1.?? IPTables?

Code?

apt-get install iptables

IPTables ???

Code?

```
iptables -nL
```

```
???????
```

```
Chain FORWARD (policy ACCEPT)
```

```
target  prot opt source          destination
```

```
Chain INPUT (policy ACCEPT)
```

```
target  prot opt source          destination
```

```
Chain OUTPUT (policy ACCEPT)
```

```
target  prot opt source          destination
```

```
2.????? IPTables?
```

```
?????? iptables_script ????
```

Code?

```
cd /root
```

```
nano -w iptables_script
```

```
????????????????
```

```
#!/bin/bash
```

```
# ?????????????????????????????????????????????????????????????
```

```
# ??? IP ??? TCP/UDP ???
```

```
LANA="127.0.0.0/8"
```

```
LANB="10.0.0.0/8"
```

```
LANC="172.16.0.0/12"
```

```
LAND="192.168.0.0/16"
```

```
TCPPORTS="22,80,139,443,445,4445,5038,9001,9022,9080,10000"
```

```
UPDPORTS="53,69,123,137:138,1514,4520,4569,5060,10000:20000"
```

```
# ?????? (filter) ?????? INPUT ??? DROP ??????????????????????
```

```
iptables -F
```

```
iptables -X
```

```
iptables -Z
```

```
# ????????? (policy) ????????????????????????????????????????? Policy ????
```

```
iptables -P INPUT DROP
```

```
iptables -P OUTPUT ACCEPT
```

```
iptables -P FORWARD ACCEPT
```

```
# ????????????????????? Asterisk ?????
```

```

iptables -A INPUT ! -i eth0 -j ACCEPT
iptables -A INPUT -p tcp -m tcp --tcp-flags ACK ACK -j ACCEPT
iptables -A INPUT -m state --state ESTABLISHED -j ACCEPT
iptables -A INPUT -m state --state RELATED -j ACCEPT
iptables -A INPUT -p udp -m udp --dport 1024:65535 --sport 53 -j ACCEPT
iptables -A INPUT -p icmp -m icmp --icmp-type echo-reply -j ACCEPT
iptables -A INPUT -p icmp -m icmp --icmp-type destination-unreachable -j ACCEPT
iptables -A INPUT -p icmp -m icmp --icmp-type source-quench -j ACCEPT
iptables -A INPUT -p icmp -m icmp --icmp-type time-exceeded -j ACCEPT
iptables -A INPUT -p icmp -m icmp --icmp-type parameter-problem -j ACCEPT
iptables -A INPUT -p tcp -m multiport --dports $TCPPORTS -s $LANA -j ACCEPT
iptables -A INPUT -p tcp -m multiport --dports $TCPPORTS -s $LANB -j ACCEPT
iptables -A INPUT -p tcp -m multiport --dports $TCPPORTS -s $LANC -j ACCEPT
iptables -A INPUT -p tcp -m multiport --dports $TCPPORTS -s $LAND -j ACCEPT
iptables -A INPUT -p udp -m multiport --dports $UPDPORTS -s $LANA -j ACCEPT
iptables -A INPUT -p udp -m multiport --dports $UPDPORTS -s $LANB -j ACCEPT
iptables -A INPUT -p udp -m multiport --dports $UPDPORTS -s $LANC -j ACCEPT
iptables -A INPUT -p udp -m multiport --dports $UPDPORTS -s $LAND -j ACCEPT

```

????????

```
iptables-save > /etc/iptables.up.rules
```

???????????????? IPTables?

Code?

```

chmod +x iptables_script
./iptables_script

```

3.?? IPTables ??? Firewall Whitelist ????????

- ?? whitelist ??? whitelist ??????????? IP ?? 4569 ? 5060 ??????? Google Voice????????????????????????????????????
- ?????????????????????

Code?

```

iptables -A INPUT -p udp -m udp --dport 10000:20000 -j ACCEPT
iptables -N whitelist
iptables -A INPUT -p udp -m multiport --dports 4569,5060 -j whitelist
iptables -A whitelist -s 66.54.140.46 -j ACCEPT
iptables -A whitelist -s 66.54.140.47 -j ACCEPT
iptables -A whitelist -s 210.202.244.130 -j ACCEPT
iptables -A whitelist -s 210.244.221.240 -j ACCEPT
iptables-save > /etc/iptables.up.rules

```

???? /etc/iptables.up.rules ????????????????????? IPTables ??????

```

# Generated by iptables-save v1.4.8 on Wed Dec 15 18:12:29 2010
*nat
:PREROUTING ACCEPT [101:50660]
:POSTROUTING ACCEPT [104:17692]
:OUTPUT ACCEPT [104:17692]
COMMIT
# Completed on Wed Dec 15 18:12:29 2010
# Generated by iptables-save v1.4.8 on Wed Dec 15 18:12:29 2010
*mangle
:PREROUTING ACCEPT [1294:303173]
:INPUT ACCEPT [1294:303173]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [1194:333833]
:POSTROUTING ACCEPT [1236:339950]
COMMIT
# Completed on Wed Dec 15 18:12:29 2010
# Generated by iptables-save v1.4.8 on Wed Dec 15 18:12:29 2010
*filter
:INPUT DROP [0:0]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [185:88716]
:redlist - [0:0]
-A INPUT ! -i eth0 -j ACCEPT
-A INPUT -p tcp -m tcp --tcp-flags ACK ACK -j ACCEPT
-A INPUT -m state --state ESTABLISHED -j ACCEPT
-A INPUT -m state --state RELATED -j ACCEPT
-A INPUT -p udp -m udp --sport 53 --dport 1024:65535 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 0 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 3 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 4 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 11 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 12 -j ACCEPT
-A INPUT -s 127.0.0.0/8 -p tcp -m multiport --dports 22,80,139,443,445,4445,5038,9001,9022,9080,10000 -j
ACCEPT
-A INPUT -s 10.0.0.0/8 -p tcp -m multiport --dports 22,80,139,443,445,4445,5038,9001,9022,9080,10000 -j
ACCEPT
-A INPUT -s 172.16.0.0/12 -p tcp -m multiport --dports 22,80,139,443,445,4445,5038,9001,9022,9080,10000 -j
ACCEPT
-A INPUT -s 192.168.0.0/16 -p tcp -m multiport --dports 22,80,139,443,445,4445,5038,9001,9022,9080,10000
-j ACCEPT
-A INPUT -s 127.0.0.0/8 -p udp -m multiport --dports 53,69,123,137:138,1514,4520,4569,5060,10000:20000 -j
ACCEPT
-A INPUT -s 10.0.0.0/8 -p udp -m multiport --dports 53,69,123,137:138,1514,4520,4569,5060,10000:20000 -j
ACCEPT
-A INPUT -s 172.16.0.0/12 -p udp -m multiport --dports 53,69,123,137:138,1514,4520,4569,5060,10000:20000
-j ACCEPT
-A INPUT -s 192.168.0.0/16 -p udp -m multiport --dports
53,69,123,137:138,1514,4520,4569,5060,10000:20000 -j ACCEPT
-A INPUT -p udp -m udp --dport 10000:20000 -j ACCEPT
-A INPUT -p udp -m multiport --dports 4569,5060 -j whitelist

```

```
-A whitelist -s 66.54.140.46/32 -j ACCEPT
-A whitelist -s 66.54.140.47/32 -j ACCEPT
-A whitelist -s 210.202.244.130/32 -j ACCEPT
-A whitelist -s 210.244.221.240/32 -j ACCEPT
COMMIT
# Completed on Wed Dec 15 18:12:29 2010
```

4??? IPTables ??? The SunshineNetworks Knock ?????????

- ????????? "mysecretpass" ????????????????? SIP message ?? "SIP-Header-Request" ? "Info-SIP-Message"???????????? Voip ??? Display Name ????????
- ??????? "mysecretpass" ????????????? "mysecretpass" ????????? "mysecretpass" ????? Google Voice????????????????????
- ?????????????????

Code?

```
iptables -A INPUT -p udp -m udp -s 66.54.140.46/32 --dport 4569 -j ACCEPT
iptables -A INPUT -p udp -m udp -s 66.54.140.47/32 --dport 4569 -j ACCEPT
iptables -A INPUT -p udp -m udp --dport 10000:20000 -j ACCEPT
iptables -N door
iptables -I door 1 -p udp --dport 5060 -m string --string "mysecretpass" --algo bm -m recent --set --name portisnowopen
iptables -A INPUT -p udp --dport 5060 --source 210.202.244.130/32 -j ACCEPT
iptables -A INPUT -p udp --dport 5060 --source 210.244.221.240/32 -j ACCEPT
iptables -A INPUT -p udp --dport 5060 -m recent --rcheck --seconds 4000 --name portisnowopen -j ACCEPT
iptables -A INPUT -p udp --dport 5060 -j door
iptables -A INPUT -p udp --dport 5060 -j DROP
iptables-save > /etc/iptables.up.rules
```

???? /etc/iptables.up.rules ????????????????? IPTables ?????

```
# Generated by iptables-save v1.4.8 on Fri Dec 17 14:15:15 2010
```

```
*nat
```

```
:PREROUTING ACCEPT [67:8613]
:POSTROUTING ACCEPT [3076:226290]
:OUTPUT ACCEPT [3076:226290]
```

```
COMMIT
```

```
# Completed on Fri Dec 17 14:15:15 2010
```

```
# Generated by iptables-save v1.4.8 on Fri Dec 17 14:15:15 2010
```

```
*mangle
```

```
:PREROUTING ACCEPT [41440:9679999]
:INPUT ACCEPT [41440:9679999]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [38953:11437844]
:POSTROUTING ACCEPT [39131:11476397]
```

```
COMMIT
```

```

# Completed on Fri Dec 17 14:15:15 2010
# Generated by iptables-save v1.4.8 on Fri Dec 17 14:15:15 2010
*filter
:INPUT DROP [0:0]
:FORWARD ACCEPT [0:0]
:OUTPUT ACCEPT [58:52600]
:door - [0:0]
-A INPUT ! -i eth0 -j ACCEPT
-A INPUT -p tcp -m tcp --tcp-flags ACK ACK -j ACCEPT
-A INPUT -m state --state ESTABLISHED -j ACCEPT
-A INPUT -m state --state RELATED -j ACCEPT
-A INPUT -p udp -m udp --sport 53 --dport 1024:65535 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 0 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 3 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 4 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 11 -j ACCEPT
-A INPUT -p icmp -m icmp --icmp-type 12 -j ACCEPT
-A INPUT -s 127.0.0.0/8 -p tcp -m multiport --dports 22,80,139,443,445,4445,5038,9001,9022,9080,10000 -j
ACCEPT
-A INPUT -s 10.0.0.0/8 -p tcp -m multiport --dports 22,80,139,443,445,4445,5038,9001,9022,9080,10000 -j
ACCEPT
-A INPUT -s 172.16.0.0/12 -p tcp -m multiport --dports 22,80,139,443,445,4445,5038,9001,9022,9080,10000 -j
ACCEPT
-A INPUT -s 192.168.0.0/16 -p tcp -m multiport --dports 22,80,139,443,445,4445,5038,9001,9022,9080,10000
-j ACCEPT
-A INPUT -s 127.0.0.0/8 -p udp -m multiport --dports 53,69,123,137:138,1514,4520,4569,5060,10000:20000 -j
ACCEPT
-A INPUT -s 10.0.0.0/8 -p udp -m multiport --dports 53,69,123,137:138,1514,4520,4569,5060,10000:20000 -j
ACCEPT
-A INPUT -s 172.16.0.0/12 -p udp -m multiport --dports 53,69,123,137:138,1514,4520,4569,5060,10000:20000
-j ACCEPT
-A INPUT -s 192.168.0.0/16 -p udp -m multiport --dports
53,69,123,137:138,1514,4520,4569,5060,10000:20000 -j ACCEPT
-A INPUT -s 66.54.140.46/32 -p udp -m udp --dport 4569 -j ACCEPT
-A INPUT -s 66.54.140.47/32 -p udp -m udp --dport 4569 -j ACCEPT
-A INPUT -p udp -m udp --dport 10000:20000 -j ACCEPT
-A INPUT -s 210.202.244.130/32 -p udp -m udp --dport 5060 -j ACCEPT
-A INPUT -s 210.244.221.240/32 -p udp -m udp --dport 5060 -j ACCEPT
-A INPUT -p udp -m udp --dport 5060 -m recent --rcheck --seconds 4000 --name portisnowopen --resource -j
ACCEPT
-A INPUT -p udp -m udp --dport 5060 -j door
-A INPUT -p udp -m udp --dport 5060 -j DROP
-A door -p udp -m udp --dport 5060 -m string --string "mysecretpass" --algo bm --to 65535 -m recent --set
--name portisnowopen --resource
COMMIT
# Completed on Fri Dec 17 14:15:15 2010

```

??Ossec or Fail2ban ???

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[OSSLab][OSSEC & FreePBX](#)

[OSSLab][fail2ban for Asterisk](#)

<http://www.voip-info.org/wiki/view/F...9+And+Asterisk>

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http://linux.vbird.org/linux_server/...e_firewall.php

<http://www.pbxinaflash.com/forum/sho...?t=7560&page=2>

<http://www.pbxinaflash.com/forum/sho...ead.php?t=8735>

<http://www.sunshinenetworks.com.au/h...rks-knock.html>

<http://nerdvittles.com/?p=709>

<http://www.voip-info.org/wiki/view/F...9+And+Asterisk>