

Before moving to production

When testing is finished, before moving server to production, it is necessary to check and do the following:

1. Disable web interface if there's no plan to use it

```
http_enable_paths=rest,action,shared,embed_player,empty
```

2. Make sure that admin and demo users default passwords are changed to more secure
3. Expand media ports range, check if this range is not interfering with [another server ports](#)

```
media_port_from      =20001
media_port_to         =40000
```

4. Check [Linux dynamic ports range](#) and change it if necessary
5. Set up firewall by opening ports needed only:

- iptables

iptables setup script example

```
#!/bin/bash
#
export IPT="iptables"

# WAN interface
export WAN=eth0

# Clean iptables chains
$IPT -F
$IPT -F -t nat
$IPT -F -t mangle
$IPT -X
$IPT -t nat -X
$IPT -t mangle -X

# Set default policy
$IPT -P INPUT ACCEPT
$IPT -P OUTPUT ACCEPT
$IPT -P FORWARD ACCEPT

# Allow loopback traffic
$IPT -A INPUT -i lo -s 127.0.0.0/8 -d 127.0.0.0/8 -j ACCEPT
$IPT -A OUTPUT -o lo -s 127.0.0.0/8 -d 127.0.0.0/8 -j ACCEPT

# Allow outgoing connections
$IPT -A OUTPUT -o $WAN -j ACCEPT

# Set up already initiated connections rules
$IPT -A INPUT -p all -m state --state ESTABLISHED,RELATED -j ACCEPT
$IPT -A OUTPUT -p all -m state --state ESTABLISHED,RELATED -j ACCEPT
$IPT -A FORWARD -p all -m state --state ESTABLISHED,RELATED -j ACCEPT

# Drop all invalid packets
$IPT -A INPUT -m state --state INVALID -j DROP
$IPT -A FORWARD -m state --state INVALID -j DROP

$IPT -A INPUT -p tcp ! --syn -m state --state NEW -j DROP
$IPT -A OUTPUT -p tcp ! --syn -m state --state NEW -j DROP

# Allow pings
$IPT -A INPUT -p icmp --icmp-type echo-reply -j ACCEPT
$IPT -A INPUT -p icmp --icmp-type destination-unreachable -j ACCEPT
$IPT -A INPUT -p icmp --icmp-type time-exceeded -j ACCEPT
$IPT -A INPUT -p icmp --icmp-type echo-request -j ACCEPT

# Open SSH port
$IPT -A INPUT -p tcp --dport 22 -j ACCEPT

# Open WCS ports
$IPT -A INPUT -p tcp --dport 80 -j ACCEPT
$IPT -A INPUT -p tcp --dport 443 -j ACCEPT
$IPT -A INPUT -p tcp --dport 8888 -j ACCEPT
$IPT -A INPUT -p tcp --dport 8443 -j ACCEPT
$IPT -A INPUT -p tcp --dport 1935 -j ACCEPT
$IPT -A INPUT -p udp --dport 1935 -j ACCEPT
$IPT -A INPUT -p tcp --dport 554 -j ACCEPT
$IPT -A INPUT -p tcp --dport 8080 -j ACCEPT
$IPT -A INPUT -p tcp --dport 8081 -j ACCEPT
$IPT -A INPUT -p tcp --dport 8084 -j ACCEPT
$IPT -A INPUT -p tcp --dport 8082 -j ACCEPT
$IPT -A INPUT -p tcp --dport 8445 -j ACCEPT
$IPT -A INPUT -p tcp --dport 8444 -j ACCEPT
$IPT -A INPUT -p tcp --dport 20001:40000 -j ACCEPT
$IPT -A INPUT -p udp --dport 20002:40000 -j ACCEPT

$IPT -A INPUT -j DROP
$IPT -A FORWARD -j DROP

# Store rules to the file
/sbin/iptables-save > /etc/sysconfig/iptables
```

- firewalld

firewalld setup script example

```
#!/bin/bash
#
systemctl start firewalld
firewall-cmd --permanent --zone=public --add-port=8888/tcp
firewall-cmd --permanent --zone=public --add-port=8443/tcp
firewall-cmd --permanent --zone=public --add-port=1935/tcp
firewall-cmd --permanent --zone=public --add-port=1935/udp
firewall-cmd --permanent --zone=public --add-port=554/tcp
firewall-cmd --permanent --zone=public --add-port=8080/tcp
firewall-cmd --permanent --zone=public --add-port=8081/tcp
firewall-cmd --permanent --zone=public --add-port=8084/tcp
firewall-cmd --permanent --zone=public --add-port=8082/tcp
firewall-cmd --permanent --zone=public --add-port=8445/tcp
firewall-cmd --permanent --zone=public --add-port=8444/tcp
firewall-cmd --permanent --zone=public --add-port=34001-35000/tcp
firewall-cmd --permanent --zone=public --add-port=30000-33000/udp
firewall-cmd --permanent --zone=public --add-port=30000-33000/tcp
firewall-cmd --reload
```

6. Adjust maximum [number of files opened](#)

7. Check [REST client setup](#)

8. Disable client logs in flashphoner.properties file

```
enable_extended_logging=false
```

9. Decrease server log output in log4j.properties file

```
log4j.rootLogger=error, stdout, fAppender
```

10. Clean up server logs

```
sudo rm -rf /usr/local/FlashphonerWebCallServer/logs/*
```

11. Check [Java heap memory](#) volume

12. Update JDK to 12 or 14 and set up [ZGC garbage collector](#)

13. Set up [jemalloc library usage](#) to allocate native memory (not Java heap)