

# SCA Testing

## 1) CentOS 7

### cis\_rhel7\_linux\_rcl

**Pass: 95** **Fail: 9** **Score: 91%**

#### 6505:

```
condition: any
rules:
- 'f:/etc/fstab -> !r:^# && !r:/var/tmp;'
```

#### 6506:

```
condition: any
rules:
- 'f:/etc/fstab -> !r:^# && !r:/var/log;'
```

#### 6507:

```
condition: any
rules:
- 'f:/etc/fstab -> !r:^# && !r:/var/log/audit;'
```

They pass as being in a separate partition, even though /var itself does not exist as a separate partition, which doesn't make sense as they are located in it.

*etc/fstab:*

```
#
# /etc/fstab
# Created by anaconda on Thu Feb 28 20:50:01 2019
#
```

```
# Accessible filesystems, by reference, are maintained under '/dev/disk'  
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info  
#  
UUID=f52f361a-da1a-4ea0-8c7f-ca2706e86b46 /                xfs  defaults    0 0  
/swapfile none swap defaults 0 0
```

## 6508:

```
condition: any  
rules:  
- 'f:/etc/fstab -> !r:^# && !r:/home;'
```

It passes even though /home does not exist as a separate partition.

*etc/fstab:*

```
#  
# /etc/fstab  
# Created by anaconda on Thu Feb 28 20:50:01 2019  
#  
# Accessible filesystems, by reference, are maintained under '/dev/disk'  
# See man pages fstab(5), findfs(8), mount(8) and/or blkid(8) for more info  
#  
UUID=f52f361a-da1a-4ea0-8c7f-ca2706e86b46 /                xfs  defaults    0 0  
/swapfile none swap defaults 0 0
```

## 6560:

```
condition: any  
rules:  
- 'f:/etc/ssh/sshd_config -> !r:^# && !r:LogLevel\..+INFO;'
```

It passes the check because it is set to INFO, but it's commented so it does not take effect.

/etc/ssh/sshd\_config:

```
# $OpenBSD: sshd_config,v 1.100 2016/08/15 12:32:04 naddy Exp $

# This is the sshd server system-wide configuration file.  See
# sshd_config(5) for more information.

# This sshd was compiled with PATH=/usr/local/bin:/usr/bin

# The strategy used for options in the default sshd_config shipped with
# OpenSSH is to specify options with their default value where
# possible, but leave them commented.  Uncommented options override the
# default value.

# If you want to change the port on a SELinux system, you have to tell
# SELinux about this change.
# semanage port -a -t ssh_port_t -p tcp #PORTNUMBER
#
#Port 22
#AddressFamily any
#ListenAddress 0.0.0.0
#ListenAddress ::

HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_dsa_key
HostKey /etc/ssh/ssh_host_ecdsa_key
HostKey /etc/ssh/ssh_host_ed25519_key

# Ciphers and keying
#RekeyLimit default none

# Logging
#SyslogFacility AUTH
SyslogFacility AUTHPRIV
#LogLevel INFO
```

**system\_audit\_ssh**

**Pass: 3** **Fail: 6** **Score: 33%**

**1500:**

```
condition: any
rules:
- 'f:$sshd_file -> !r:^# && r:Port\.+22;'
```

It passes the check even though the port is never changed in the configuration file.

/etc/ssh/sshd\_config:

```
# $OpenBSD: sshd_config,v 1.100 2016/08/15 12:32:04 naddy Exp $

# This is the sshd server system-wide configuration file. See
# sshd_config(5) for more information.

# This sshd was compiled with PATH=/usr/local/bin:/usr/bin

# The strategy used for options in the default sshd_config shipped with
# OpenSSH is to specify options with their default value where
# possible, but leave them commented. Uncommented options override the
# default value.

# If you want to change the port on a SELinux system, you have to tell
# SELinux about this change.
# semanage port -a -t ssh_port_t -p tcp #PORTNUMBER
#
#Port 22
#AddressFamily any
#ListenAddress 0.0.0.0
#ListenAddress ::
```

**system audit rcl**

**Pass: 76** **Fail: 0** **Score: 100%**

## 2) SUSE 11

### cis\_sles11\_linux

**Pass: 82** **Fail: 9** **Score: 90%**

First of all there were a couple of issues in the requirements and variables sections of the policy file:

```
requirements:
  title: "Check Suse 11 version"
  description: "Requirements for running the SCA scan against SUSE Linux Enterprise Server 11"
  condition: "any required"
  rules:
    - 'f:/etc/os-release -> r:^PRETTY_NAME="SUSE Linux Enterprise Server 11";'
    - 'f:/etc/os-release -> r:^PRETTY_NAME="SUSE Linux Enterprise Server 11 SP1";'
    - 'f:/etc/os-release -> r:^PRETTY_NAME="SUSE Linux Enterprise Server 11 SP2";'
    - 'f:/etc/os-release -> r:^PRETTY_NAME="SUSE Linux Enterprise Server 11 SP3";'
    - 'f:/etc/os-release -> r:^PRETTY_NAME="SUSE Linux Enterprise Server 11 SP4";'

variables:
  $src_dirs: /etc/rc.d/rc2.d,/etc/rc.d/rc3.d,/etc/rc.d/rc4.d,/etc/rc.d/rc5.d;
```

- The requirements are extracted from the `/etc/os-release` file, when that file does not exist. It should be extracted from `/etc/issue`.

- The variable “`$sshd_file: /etc/ssh/sshd_config;`” is missing, hindering the rules that depend on it.

### 7005:

```
condition: any
rules:
  - 'f:/etc/fstab -> ^# && !r:/var/log;'
```

### 7006:

```
condition: any
rules:
```

```
- 'f:/etc/fstab -> ^# && !r:/var/log/audit;'
```

They pass as being in a separate partition, even though /var itself does not exist as a separate partition, which doesn't make sense as they are located in it.

*etc/fstab:*

```
devpts /dev/pts      devpts mode=0620,gid=5 0 0
proc /proc          proc defaults      0 0
sysfs /sys          sysfs noauto          0 0
debugfs /sys/kernel/debug debugfs noauto      0 0
tmpfs /run          tmpfs noauto          0 0
/dev/sda1 / ext3 defaults 1 1
```

## 7007:

```
condition: any
rules:
- 'f:/etc/fstab -> ^# && !r:/home;'
```

It passes even though /home does not exist as a separate partition.

*etc/fstab:*

```
devpts /dev/pts      devpts mode=0620,gid=5 0 0
proc /proc          proc defaults      0 0
sysfs /sys          sysfs noauto          0 0
debugfs /sys/kernel/debug debugfs noauto      0 0
tmpfs /run          tmpfs noauto          0 0
/dev/sda1 / ext3 defaults 1 1
```

## 7043:

```
condition: any
```

rules:

- 'f:/proc/sys/net/ipv4/conf/all/send\_redirects -> 0;'
- 'f:/proc/sys/net/ipv4/conf/default/send\_redirects -> 0;'

Since we want it to be disabled, the rules should check if it has a value of 1, not 0.

**7053:**

condition: any

rules:

- 'f:/etc/ssh/sshd\_config -> !r:^# && !r:LogLevel\.+INFO;'

It passes the check because it is set to INFO, but it's commented so it does not take effect.

/etc/ssh/sshd\_config:

```
# Logging
# obsoletes QuietMode and FascistLogging
#SyslogFacility AUTH
#LogLevel INFO
```